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Product Manual

Crestron Home® OS

Crestron Home® OS Setup and Operation

Crestron Electronics, Inc.

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Contents

What's New? 15

January 27 2026 (4.09) 15
December 16, 2025 (4.08) 15
September 30, 2025 (4.07) 15
June 1, 2025 (4.06) 16
April 8, 2025 (4.05) 16
January 7, 2025 (4.04.02) 16
December 3, 2024 (4.04) 17
August 27, 2024 (4.03) 17
March 19, 2024 (4.0) 18
July 24, 2023 (3.21) 19
May 23, 2023 20
May 15, 2023 (3.20) 20
April 4, 2023 21
March 29, 2023 (3.19) 21
March 17, 2023 22
February 8, 2023 (3.18) 22
November 15, 2022 (3.17) 23
September 22, 2022 (3.16) 24
August 11, 2022 (3.15) 24
June 22, 2022 (3.14) 26
May 10, 2022 (3.13) 26
March 21, 2022 (3.12) 27
February 22, 2022 (3.11) 28
February 4, 2022 28
January 26, 2022 (3.11) 28
January 14, 2022 30
December 20, 2021 30
December 14, 2021 30
November 19, 2021 31
October 25, 2021 31
September 8, 2021 32
August 11, 2021 33
July 8, 2021 33
June 10, 2021 33
May 6, 2021 34
April 15, 2021 35
March 31, 2021 35
March 4, 2021 36
January 23, 2021 36

January 16, 2021 37
January 11, 2021 38
December 8, 2020 39
November 12, 2020 39

Overview 40

Crestron Home Processors 41
CP4-R Processor 41
DIN-AP4-R Processor 41
MC4-R Processor 42
PC4-R Processor 42
Crestron Home Software 43
Crestron Home Setup App 43
Crestron Home App 43
myCrestron Services 44
myCrestron Residential Monitoring Service 44
myCrestron Dynamic DNS 44
Crestron Home® Configurator 44
Supported Devices 45
Works with Crestron Home® OS 45
Crestron Drivers 45
Partner Products 45
Design Support 46

System Design 47

Operating System Features 48
Maximum System Size 51
Quick Action and Scene Limits 53
Works with Crestron Home OS 55
Audio 56
Cameras 61
Climate Control 85
Control Systems 86
Drivers 87
Gateways and Expanders 90
I/O Expanders 92
Intercoms 94
Keypads 95
Lighting 98
Pool Controllers 105
Networking and Power Control 106
Hand-held Remotes 107
Security and Door Locks 108
Sensors 112

Shading 113
Touch Screens 116
Video 118

Configure a System 123

Crestron Home Setup App 124
Crestron Home Setup App for Desktops 125
Crestron Home® Setup App for iPad 134
User Names and Passwords 135
Password Rules 136
Reset Passwords 137
Initialize the Processor 138
Build Your House 144
Rooms 144
Room Groups 146
Voice Control 150
Pair Devices 151
Secure Device Connections 153
User Interface Devices 156
Crestron Wireless Devices 188
Crestron Wired and Wi-Fi Devices 193
Sonos® Devices 201
DALI Groups and Individual DALI Loads 211
Tunable Lights 213
Crestron Driver Devices 228
Other Devices 271
Gateways and Processors 280
Multiple Processors 292
Pair DM NAX Devices 300
Pair Third-Party Keypads 324
Pair Apple TV with Apple HomeKit 329
Pair and Configure a Lutron System with a Crestron Home® System 338
Build System 355
Shade Groups 356
Source Routes 361
Create Scenes 395
Light Scenes 396
Shade Scenes 402
Media Scenes 406
Climate Scenes 410
Customize and Schedule 413
Quick Actions 414
Customize Interface Buttons 445
Button Actions 456

Customize Actions & Events 514
Schedule Events 546
Vacation Scheduler 548
Schedule Climate Control 553
Set the Touch Screen Language 555
Put a Touch Screen Display to Sleep 557

Control Processor Settings - Installer 558

System Configuration 559
System Settings 560
System Detail and Password Configuration 566
Ethernet Settings 571
myCrestron RMS Services 574
myCrestron Deploy Code Import 579
Lighting and Keypad Settings 590
Restart the Control Processor 592
Reset to Factory Defaults 593
Diagnostics 595
Devices 595
Gateways and Processors 598
Services 600
Logs 600
Crestron Driver Logs 602
System Control Options 603
myCrestron DNS Settings 604
Web Settings 606
Voice Control Settings 607
Web API Settings 615
Apple HomeKit Settings 616
Local Connection Settings 618
Privacy Controls 621
Software Update 622
Update the Crestron Home Processor Software 622
Update Device Firmware 624

myCrestron Residential Monitoring Service 626

Accessing myCrestron Residential Monitoring Service 626
Subscribing to myCrestron RMS 626
Setting Employee Permissions 627
Configuration Backups 628
Managed Devices 628
Status 628
Firmware Update 630
Crestron Home Configurator 631

Add the Crestron Home Processor 632
Generate a Deploy Code 634
Download Backup Files 635
Restart the Processor 636
Troubleshooting 636
Offline or Missed Communications 636
Does not come online after restart 637
Partially Online 637
Integration Report 637

Remote System Access 639

Create a myCrestron Domain Name 639
Link the Processor with a myCrestron Domain Name 640
Configure Port Mapping on a Router 641

Crestron Home Configurator 642

Requirements 642
Open the Crestron Home Configurator 642
Create and Manage Configurations 643
Add a Configuration 643
Open a Configuration 643
Copy a Configuration 644
Delete a Configuration 644
Configuration Tab 645
Rooms Tab 646
Add a Room 647
Add a Room Group 648
Rename a Room or Room Group 648
Delete a Room or Room Group 649
Loads Tab 650
Create a Fixture 651
Add a Load using the Fixture Library 652
Add a Load using Manual Entry 652
Edit a Load 653
Delete a Load 653
Equipment Tab 654
Add Devices with Smart Search 654
Room Management 657
Control Processor 658
Enclosures 659
Wired Gateways 666
Wireless Gateways 670
Accessory 672
Modules 676

Assign Loads to Modules 680
Shade Groups 682
Thermostats 683
Sensors 688
Room Settings 690
Module and Load-Type Compatibility 692
Shading Tab 696
Add a Shade or Drape 696
Edit Shade or Drape Settings 697
Shade Groups 697
Room Settings 698
Scenes Tab 700
Create a Lighting or Shading Scene 700
Create a Climate Scene 701
Edit a Scene 703
Delete a Scene 703
Interfaces Tab 704
Interfaces 704
Control Stations 709
Load Derating 714
Actions Tab 715
Assign Actions to an Interface 715
Button Modes 715
Assign Actions to Occupancy Events 733
Quick Actions 735
Create a Quick Action 735
Scheduler 740
Import Tab 743
Import a Configuration 743
Synchronize Fixture Serial Numbers 743
Remove the Import 743
Reports Tab 744
Engravings Order Tab 746
Deploy Tab 749
Validation Results 749
Create a New Code 749
Deploy Code Usage 749
Deploy a Configuration 750
Load Configuration onto a New Processor 750
Replace Configuration on a Processor (Erase Data) 758
Update a Configuration (Redeploy) 758
Pair Imported Devices 759
Replace a Virtual Gateway 760
Replace a Virtual Device 765

Operation 768

Crestron Home® OS User Interface 769
Light and Dark Mode 770
My Homes 772
Home Tab 777
Room Selection Tab 820
Edit Actions 938
Put a Display to Sleep (Touch Screens Only) 942
Settings 943
Define Baseline Settings 992
Lock Adjustments 995
Set the Circadian Light Mode 998
Set the Light Intensity 1000
Set the Transition Time and Color Temperature 1001
Preview the Circadian Cycle 1003
Change Rooms 1004
Paging Groups 1026
User Interface for TSR-310 Touch Screen Remotes 1051
Now Playing 1054
Control Media 1059
Control Quick Actions 1070
Control Lighting 1073
Control Shades 1076
Control Climate 1079
Hard Button Controls 1082
System Screens 1092
Voice Commands 1098
Configuration 1105
UC-MM30-R Volume and Microphone Control 1123
Adjust the Volume 1123
Mute the Built-in Microphone 1123

End User Configuration 1124

Setup Scenes 1125
Light Scenes 1126
Shade Scenes 1132
Media Scenes 1137
Climate Scenes 1141
System Scheduling 1144
Create a Scheduled Event 1144
Configure a Scheduled Event 1144
Delete a Scheduled Event 1145
Climate Scheduling 1146
Create a Thermostat Event 1146

Configure a Thermostat Event 1147
Enable or Disable a Thermostat Event 1148
Delete a Thermostat Event 1148

Control Processor Settings - End User 1149

System Settings 1151
Current Time and Date 1152
Current Location Settings 1153
Current Times of Day 1154
Current Language 1155
BACnet Settings 1156
Password Configuration 1157
Software Update 1158
Update Software 1158
Check for Device Updates 1160
Diagnostics 1161
Devices 1161
Gateways 1164
Logs 1166
myCrestron RMS Services 1168
Configuration Backups 1169
Show System Usage Metrics 1169
Create Backups 1169
Restore a System Configuration 1170
Advanced Configuration 1171

Crestron Home SIMPL Integration Modules 1172

myCrestron Residential Monitoring Service 1173
Accessing myCrestron Residential Monitoring Service 1173
Subscribing to myCrestron RMS 1173
Setting Employee Permissions 1174
Obtain the Processor MAC Address and Registration Code 1175
Add the Crestron Home Processor 1176
Build a Crestron Home System 1177
Generate Integration Report 1178
Program SIMPL Modules 1180
Module List 1180

Appendix 1182

Upgrade Crestron Pyng OS 2 to Crestron Home OS 1183
Upgrade the Operating System 1184
Set the User Interface Device Password 1187
Update the Firmware for Connected Devices 1189
Device Settings 1191
Audio Settings 1192

Camera Settings 1197
Child Processor Settings 1202
Display Settings 1204
Gateway Settings 1220
Input Device Settings 1236
Keypad Settings 1239
Lighting Load Controller Settings 1262
Occupancy Sensor Settings 1278
Photo Sensor Settings 1283
Pool and Spa Settings 1286
Power Controller Settings 1289
Relay-Controlled Device Settings 1298
Security System Settings 1311
Sensor Controlled Device Settings 1321
Service Settings 1325
Shade Motor and Motor Controller Settings 1328
Thermostat Settings 1339
Video Source Settings 1362
Lutron Device Settings 1372
Health Settings 1380
Interrupt Settings 1381
Advanced Settings 1383
Sonos and Crestron Home Integration 1385
Sonos Troubleshooting 1387
Speaker Pairs 1395
Surround Speakers 1399
Line-Out Configuration 1399
Best Practices 1401
Migrate Crestron Wireless Devices to a Different Gateway 1402
Restore a Crestron Home Processor to Factory Settings 1405
Restore Crestron Control Processor 1405
Restore PC Control Processor 1406
Reset Passwords 1407
Crestron Control Processor 1407
PC Control Processor 1408
Source Routing Behavior for Media Sources 1409
Control System Integration 1410
Trigger and Listen Module Example 1411
Enable Trigger and Listen Modules 1411
Connection Configuration Module 1412
Trigger Module 1413
Listen Module 1416
Keypad Button Programming 1420
Keypad Button Press Support 1420

Keypad Button Modes and Button Functions ... 1423
Connect a Door Station ... 1427
2N® Door Station ... 1428
CAME Door Station with AVLINKPRO ... 1437
CAME Door Station ... 1466
Doorbird Door Station ... 1488
HR-CV-MINI Remote ... 1489
Discover in Crestron Home ... 1489
Customization ... 1492
Configure Light and Shade Control ... 1496
Configure Source/Service Selection ... 1498
Migrate System Data to a Different Processor ... 1500
Transfer Data using a Deploy Code (Recommended) ... 1501
Copy Data between Control Processors ... 1515
Copy Data from a myCrestron Cloud Backup File ... 1527
Migrate Cresnet® Wired Devices to an Ethernet-to-Cresnet Bridge ... 1536
Replace the Processor Associated with a myCrestron Domain ... 1537
Downgrade MC4-R Firmware Version to 3.003.0035 or Earlier ... 1539
How to Create Images for the Crestron Home App ... 1541
Security System Configuration ... 1542
Honeywell Security System ... 1543
Interlogix Security System ... 1548
Texecom Security System ... 1550
DSC Security System ... 1553
Conditionals and Variables: Feedback, Commands, and Events ... 1555
Lighting ... 1555
Shading ... 1556
Third Party Entry Devices ... 1557
Sensors and IO/Relay Inputs ... 1558
Media ... 1559
Climate ... 1561
Security ... 1564
Keypads ... 1567
Driver ... 1567
Video and Audio Sensing ... 1567
Ports Used by Crestron Home ... 1571
Supported Languages ... 1572
Engravings ... 1573
Order Engravings ... 1573

Troubleshooting ... 1574

Cannot Establish Communication with the Crestron Home Processor ... 1575
Cannot Connect to the Crestron Home System after Firmware Downgrade ... 1576
Cannot Discover Cresnet® Devices ... 1579

Cannot Discover a CHV-THSTAT3F Thermostat 1580
Cannot Add a CSA-PWS10S-HUB-ENET Gateway 1581
Cannot Discover a Security System 1582
Cannot Discover the CNAMPX-16X60 or CNAMPX-12X60 1583
Possible Cause(s) 1583
Corrective Action(s) 1583
Cannot Set or Change the Passwords 1584
Cannot Enter Advanced User Settings 1585
Cannot Connect User Interface Device to the System 1586
The Web XPanel Interface is Unresponsive 1587
Crestron Driver Version is Out of Date 1588
Possible Cause(s) 1588
Corrective Action(s) 1588
Unexpected Audio and Video Routing 1589
Disabled Autonomic® MMS Sources are Displayed in the Source List 1590

Resources 1591

Crestron Support and Training 1591
Programmer and Developer Resources 1591
Product Certificates 1591
Related Documentation 1591

What's New?

This section provides a summary, with links to topics, of the updates made to the Crestron Home® OS Product Manual.

For a complete list of updates, see the release note for the processor:

- CP4-R Release Notes
- DIN-AP4-R Release Notes
- MC4-R Release Notes
- PC4-R Release Notes

January 27 2026 (4.09)

- Refer to the release notes for information.

December 16, 2025 (4.08)

- The following devices were added to Works with Crestron Home OS on page 55:
  - Hand-held Remotes on page 107: HR-CV-MINI. For more information on the HR-CV-MINI, refer to HR-CV-MINI Remote on page 1489.
- Added information about Whole House Shade Control on page 788.
- Added list of Supported Languages on page 1572.
- Added list of Ports Used by Crestron Home on page 1571.
- Added information on using a Doorbird Door Station on page 1488.

September 30, 2025 (4.07)

- Added information about Sonos authentication. For details, refer to Authentication on page 201.
- The following devices were added to Works with Crestron Home OS on page 55:
  - Lighting on page 98: Cameo® 2 switches and dimmers
  - Keypads on page 95: Cameo® 2 keypads
  - Video on page 118: DM Essentials® transmitters and receivers
- Added Uncontrolled DM Inputs and Outputs sources. For details, refer to Other Devices on page 271.

- Added Uncontrolled AES67 sources. For details, refer to Other Devices on page 271.
- This is the final feature update supported by Version 1 hardware. For details, refer to the following:
  - Crestron CP4-R and MC4-R Version 1 Hardware: End of Active Development in Crestron Home® OS
  - Crestron PC4-R: End of Active Development in Crestron Home® OS

June 1, 2025 (4.06)

- The following devices were added to Works with Crestron Home OS on page 55:
  - DM NVX® Encoders and Decoders on page 119: DM-NVX-385 and DM-NVX-385C
  - Autonomic on page 60: Autonomic M3 and M5-PRO-1TB
  - Crestron DALI Gateways on page 98: DIN-DLI
  - Yale® Locks on page 108: Additional Yale locks
- Updated the listing of currently available feedback, commands, and events to be used with conditions and variables. For details, refer to Security on page 1564 and Video and Audio Sensing on page 1567.
- Individual DALI ballasts can now be added to the system. For details, refer to DALI Groups and Individual DALI Loads on page 211.
- Updated Music controls. For details, refer to Music on page 880.
- Added font size options. For details, refer to Display on page 1036.
- Added new Paging and Intercom features:
  - Replying to a Page on page 905
  - Selectable ringtones. For details, refer to Calling on page 1026.
- Refer to the release notes for additional bug fixes.

April 8, 2025 (4.05)

- PhaseX® lighting support. For details, refer to Lighting on page 98 and PhaseX Fixture (Loads) on page 1275.
- Recurring and temporary access added to Smart Access. For details, refer to Smart Access on page 815.
- Refer to the release notes for additional bug fixes.

January 7, 2025 (4.04.02)

- This update is required to use TSR-310 firmware version 3.000.0010 or later with Crestron Home.

- Refer to the release notes for additional bug fixes.

December 3, 2024 (4.04)

- The following devices were added to Works with Crestron Home OS on page 55:
  - Audio on page 56: DM-NAX-4ZSA-50, DM-NAX-BTIO-1G, DM-NAX-2XLRI-1G, DM-NAX-AUD-USB, DM-NAX-AUD-IO
  - Video on page 118: HD-MD-2x1-8K, DM-NAX-XSP, DM-NVX-384
  - Drivers on page 87: Garages, gates
  - Keypads on page 95: Meljac keypads
  - Security and Door Locks on page 108: CLK-YL-YRD614-CR2, CLK-YL-YRD624-CR2, CLK-YL-YRD634-CR2, CLK-YL-YRD654-CR2
  - Touch Screens on page 116: DGE-1000
- Added a listing of currently available feedback, commands, and events to be used with conditions and variables. For details, refer to Conditionals and Variables: Feedback, Commands, and Events on page 1555.
- **Shared Gateways:** Added support for gateway sharing between multiple processors. For details, refer to Shared Gateways on page 289.
- **Home Search:** Added the ability to search the list of homes. For details, refer to My Homes on page 772.
- **Branding:** With the branding feature, a logo or other image can be displayed through the Crestron Home interface. For details, refer to Branding on page 1012.
- **Touch Screen PIN:** Crestron Home can be configured to require a PIN code when accessing the system with a touch screen. For details, refer to Interface Access PIN on page 987.
- **Use IP Address in IP Table:** Added the option to use the IP address of the processor instead of the host name when commissioning devices. For details, refer to Use IP Address in IP Table on page 619.
- **Black Nova Keypads**: Expanded support. For details, refer to Actions for Black Nova Keypads on page 1256.
- **SIMPL Integration**: For details, refer to Crestron Home SIMPL Integration Modules on page 1172

August 27, 2024 (4.03)

- **If Statements and Variables:** Added support for conditional actions. For details, refer to Add an If Statement on page 433 and Variables on page 541.
- **Smart Access:** New controls and options for supported locks. For details, refer to Smart Access on page 815.

- The following devices were added to Works with Crestron Home OS on page 55:
  - Audio on page 56: SAROS DM-NAX-IC4A-W and SAROS IC4P
  - I/O Expanders on page 92: Axxess Industries devices.
- **Calling functionality:** Added calling for touch panels. For details, refer to Intercom on page 902.
- **Multiple Processors and Shades:** Updated maximum system size for shades and drapes. For instructions on setting up multiple processors, refer to Maximum System Size on page 51 and Multiple Processors on page 292.
- **Lutron load types:** New load types supported. For details, refer to Lighting on page 98.
- **Lighting Raise and Lower Rate:** Rates are now adjustable. For details, refer to Lighting and Keypad Settings on page 590.

March 19, 2024 (4.0)

- **Crestron Home® OS 4 user interface updates:** Updated documentation to include the redesigned user interface for the Crestron Home OS. For details, refer to Crestron Home® OS User Interface on page 769.
- **Multiple processor Quick Action support:** Updated documentation for multiple processors to include Quick Actions in a multiple processor Crestron Home® OS system. For details, refer to Multiple Processors on page 292.
- **Phillips Hue and third-party lighting drivers:** Added documentation to include native support for Phillips Hue and third-party lighting drivers. For details, refer to Lighting on page 98.
- **HZ2-AUX support:** Added documentation for HZ2-AUX device support. For details, refer to Crestron Wireless Devices on page 188, Customize Interface Buttons on page 445, and Keypads on page 95.
- **Touchscreen paging (intercom):** Added documentation for the paging (intercom) feature. For details, refer to Crestron Home® OS User Interface on page 769.
- **Scheduled events:** Added documentation for the hide scheduled event feature. For details, refer to Schedule Events on page 546.
- **Audio routing updates:** Added documentation for the mute and audio routing options added to the source routes configuration page. For details, refer to Source Routes on page 361.
- **Driver device upgrades:** Update a driver-based device with the latest version and maintain all programming. For details, refer to Update Crestron Drivers on page 238 and Add Driver Devices on page 229.
- **Crestron Home Configurator:** Updated documentation to include use of sensors and thermostats in the online configurator. For details, refer to Crestron Home Configurator on page 642.
- **BACnet enhancements:** Updated documentation for the new BACnet thermostat features. For details, refer to BACnet Thermostat and Device Settings on page 1191.

- **DMX-C Multi gateway support:** Updated documentation to include support for multiple DIN-GWDL DMX-C gateways. For details, refer to Maximum System Size on page 51.
- **Hide scheduled events:** Updated documentation for scheduled events to include the ability to hide events from the Crestron Home app. For details, refer to Schedule Events on page 546.
- **Documentation Updates:**
  - **Tunable light settings:** Tunable lighting settings screens updated. See Lighting Load Controller Settings on page 1262.
  - **DIN-GWDL device discovery:** DIN-GWDL rescan may be necessary to see all changes. For details, see Pair Tunable Light Fixtures on page 216.
  - **Voice control:** Updated Amazon Alexa command to Global Voice Commands. Quick Actions on page 414
  - **BACnet thermostats:** Moved BACnet thermostat configuration information from the Appendix to configuration section.
  - **Spotify connect:** Updated documentation for Spotify connect to match updated functionality implemented by Spotify. For details, refer to Spotify Connect on page 913.
  - **Local device port:** Updated documentation to clarify the function of the Local Device Port. For details, refer to Local Connection Settings on page 618.
  - **HomeKit compatibility with PC4-R:** Updated Apple HomeKit™ technology documentation to indicate that the PC4-R is not compatible. For details, refer to Maximum System Size on page 51 and Pair Apple TV with Apple HomeKit on page 329.
  - **Device engravings:** Updated engraving ordering documentation to include additional ordering information. For details, refer to myCrestron RMS Services on page 574.
  - **Multiple processor configurations:** Update multiple processor documentation to recommend use of the processor with the best performance as the parent processor. For details, refer to Multiple Processors on page 292.

July 24, 2023 (3.21)

- **Multiple processor support:** Add multiple Crestron Home® OS processors to a system. This provides the ability to add devices to a dedicated processor as well as increase in the max system. size. For details, refer to Multiple Processors on page 292 and Maximum System Size on page 51.
- **Horizon® 2 support:** Updated documentation to include support for the HZ2-DIMUEX, HZ2-DIMLVEX, HZ2-DIMEX, HZ2-SWEX, HZ2-KPEX, HZ2-KPCN. For details, refer to Keypad Settings on page 1239, Button Actions on page 456, and Works with Crestron Home OS on page 55.

- **IP device discovery on multiple subnets:** Updated documentation to include device discovery on more than one subnet. For details, refer to Gateways and Processors on page 280 and Crestron Wired and Wi-Fi Devices on page 193.
- **TST-1080 support:** Updated documentation to include support for the TST-1080.
- **Crestron Home Configurator:** Updated documentation to include shades and drapes in the Smart Search function on the Equipment tab. For details, refer to Equipment Tab on page 654.

May 23, 2023

- **Crestron Home Configurator:** Updated documentation to include the Smart Search function on the Equipment tab. For details, refer to Equipment Tab on page 654.

May 15, 2023 (3.20)

- **Max System Size:** Updated the system size information. For details, refer to Maximum System Size on page 51.
    - Updated the max system information for the PC4-R.
    - Updated the number of streaming cameras for each control processor.
    - Updated the Whole House and Room-Level Quick Action limits to clarify that 20 Quick Actions can be displayed.
- **Migrating system Data:** For details, refer to Migrate System Data to a Different Processor on page 1500.
    - Added topic for migrating Cresnet® wired devices to an Ethernet-to-Cresnet bridge.
    - Updated migration topics to include requirement that Cresnet® wired devices must be migrated to an Ethernet-to-Cresnet bridge prior migrating the system data.
    - Added PC4-R migration paths.
- **Crestron Home Setup App:**
    - **Volume Control Enhancements:** Updated documentation for volume control on touch screens. Drag anywhere on the volume slider to adjust the volume or tap the slider to increase or decrease the volume. For details, refer to Control Media on page 862.
    - **Persistent Passwords:** Added documentation for the frequency in which the Advanced User password needs to be entered. For details, refer to Advanced User Password on page 987.
- **Crestron Home Configurator:** Updated documentation to include the ability to import projects from the Light Fixture Configuration Tool. For details, refer to Import Tab on page 743.

- **HD-CTL-101 support:** For details, refer to Video on page 118 and Video Source Settings on page 1362.
- **Documentation Updates:**
  - Added considerations for 20 Quick Action limit per room. For details, refer to Quick Actions on page 414.
  - Updated Illumivue by Mstr camera specifications to add audio compatibility. For details, refer to Camera Compatibility Specifications on page 65.
  - Updated the manual data migration methods to clarify the folders that need to be deleted or created and to clarify where to put the system data. For details, refer to Copy Data between Control Processors on page 1515 and Copy Data from a myCrestron Cloud Backup File on page 1527.

April 4, 2023

- **Crestron Home Configurator:** Updated documentation to include the PC4-R control processor. For details, refer to Configuration Tab on page 645.

March 29, 2023 (3.19)

- **Hot-swappable extension drivers:** Updated documentation for updating hot-swappable extension drivers. For details, refer to Crestron Driver Devices on page 228.
- **Added device support:**
  - **PC4-R:** Updated documentation to include support for the PC4-R control processor. For details, refer to System Design on page 47 and Control Systems on page 86
  - **CEN-SWPOE series network switches:** Updated documentation to include support for Crestron® managed network switches. For details, refer to Networking and Power Control on page 106.
  - **Arkadia keypads:** Updated documentation to include support for additional Arkadia keypads. Arkadia keypads were previously listed as Eutech keypads. For details, refer to Keypads on page 95 and Third-Party Keypad Settings on page 1247.

March 17, 2023

- **Crestron Home Configurator:**
  - Updated documentation to include Horizon® 2 devices and the Override Feedback Color option for Horizon 2 devices. For details, refer to Actions Tab on page 715.
  - Updated documentation to show Horizon 2 devices in the Interfaces tab. For details, refer to Interfaces Tab on page 704.
  - Updated documentation to include Engraving Only or Engraving and Device options in the Engravings Order tab. For details, refer to Engravings Order Tab on page 746.
- **Illumivue camera compatibility:** Added Illumivue cameras to the list of compatible devices. For details, refer to Cameras on page 61.
- **Documentation Updates:**
  - Removed note about Apple TV® connections to TV and network extenders when using Apple HomeKit™ technology.
  - Added a note to clarify that Crestron Connected devices are not supported in a Crestron Home system. For details, refer to Drivers on page 87.

February 8, 2023 (3.18)

- **Crestron Home Configurator:**
  - Updated documentation to include Quick Actions and Scheduler in the Actions tab. For details, refer to Actions Tab on page 715.
  - Updated documentation to include On-demand firmware updates. For details, refer to myCrestron Residential Monitoring Service on page 626.
- **DM-NAX-AMP-X300 support:** For details, refer to Audio on page 56.
- **User Interface and Operation:**
  - Added documentation for the time format setting. For details, refer to Display on page 1036.
  - Added documentation for running Quick Actions and Scenes from an Apple Watch. For details, refer to Apple Shortcuts to Run Quick Actions and Scenes on page 917.
- **Documentation Updates:**
  - Added major release versions next to documentation release dates.
  - Changed the name of Eutech keypads to Arkadia keypads.
  - Reorganized documentation for Crestron Home UI Settings

November 15, 2022 (3.17)

- **Quick Action Improvements:** Change the Icon and reorder quick actions. For details, refer to Edit Actions on page 938.
- **Volume control enhancements:** Control the volume of audio and video sources using the volume up and down keys on a mobile device. For details, refer to Control Media on page 862.
- **DIN-1TSTAT8 temperature offset:** Updated documentation to include the temperature offset for the DIN-1TSTAT8. For details, refer to Thermostat Settings on page 1339.
- **Device Health Dashboard touch screen restart:** Added touch screens to the list of devices that display and can be restarted in the Device Health Dashboard. For details, refer to Settings on page 943.
- **Line out enhancements:** Updated documentation for startup volume and volume control for line outputs. For details, refer to Line Out Connections on page 393.
- **Local connection settings (device port):** Updated documentation to show the new location for the Device Port settings. For details, refer to Local Connection Settings on page 618.
- **Quick Actions on intercom call screen:** Added documentation for displaying or hiding Quick Actions on the intercom call screen. For details, refer to Quick Actions on page 414.
- **Documentation Updates:**
    - **Lighting Override mode:** Updated documentation for systems that support Override mode. For details, refer to Control Lights on page 829.
    - **Maximum system size:** Updated the system size to include Apple TV® Devices with Apple HomeKit™ Technology. For details, refer to Maximum System Size on page 51.
    - **Deploy code updates:** Updated documentation to clarify that re-import should not be performed using different configurations. For details, refer to myCrestron Deploy Code Import on page 579.
    - **Removing devices from wireless gateways:** Updated documentation for removing devices from wireless gateways while the control system is offline or not connected to the gateway. For details, refer to Gateways and Processors on page 280.
    - **Lutron Migration:** Added note that data cannot be migrated for certain Lutron processors. For details, refer to Transfer Data using a Deploy Code (Recommended) on page 1501, Copy Data between Control Processors on page 1515, and Copy Data from a myCrestron Cloud Backup File on page 1527.

September 22, 2022 (3.16)

- **Tunable lights:** Adds support for the DIN-GWDL gateway, tunable light fixtures and the GLS-LCCT SolarSync® sensor. For details, refer to Tunable Lights on page 213.
    - **SolarSync® Sensor:** Adds support for the GLS-LCCT and the SolarSync scene. Refer to Light Scenes on page 396.
    - **Circadian lighting:** Adds support for Circadian cycles with tunable lights. For details, refer to Control Lights on page 829 and .
    - **Color temperature button mode:** Adds the Color Temperature button mode to control the color temperature of tunable lights using a keypad or button. For details, refer to Customize Interface Buttons on page 445.
- **Crestron Home Configurator:** Updated documentation to include DMX-C light fixtures and DMX-C report. For details, refer to Crestron Home Configurator on page 642.
- **Whole house light control:** Added documentation for the whole house light controls. For details, refer to Whole House Light Control on page 782.
- **Security system zone support:** View and control security system zones. For details, refer to Control Security Systems on page 795.
- **Uniview camera support:** Added Uniview cameras to the Works with Crestron Home list. For details, refer to Cameras on page 61 and Camera Compatibility Specifications on page 65.
- **Apple HomeKit support:** Control Apple TV devices using Apple HomeKit control. For details, refer to Pair Apple TV with Apple HomeKit on page 329.
- **Documentation Updates:**
    - **Television providers in Panama:** Updated list of television providers to indicate that a space must be entered to search for providers in Panama. For details, refer to Add a Television Provider on page 235.

August 11, 2022 (3.15)

- **Updated Crestron wireless gateway functionality:** Devices that are acquired to a gateway before it is added to Crestron Home will remain acquired to the gateway. Online devices can be assigned to a room without being re-paired. For details, refer to Gateways and Processors on page 280.
- **DIN-AP4-R support:** Updated documentation to include the DIN-AP4-R control processor. For details about the processor and system sizes, refer to Crestron Home Processors on page 41, Control Processor Features, Maximum System Size on page 51, and Control Systems on page 86. For details about migrating data, refer to Copy Data between Control Processors on page 1515, Transfer Data using a Deploy Code (Recommended) on page 1501, and Copy Data from a myCrestron Cloud Backup File on page 1527.

- **Crestron Home Configurator:** Updated documentation to include the DIN-AP4-R. For details, refer to Configuration Tab on page 645.
- **myCrestron Restore firmware versions:** Updated documentation to show firmware version of control processor and configuration. For details, refer to Initialize the Processor on page 138 and myCrestron RMS Services on page 574.
- **GUDE PDU support:** Updated documentation to include the GUDE PDU devices. For details, refer to Networking and Power Control on page 106.
- **Audio return to DM NVX® receivers:**
  - Added documentation for using a DM NVX® receiver to accept audio on the Audio I/O port and then route the audio over the network. For details, refer to Audio Return to DM NVX Receiver on page 392.
  - Updated documentation for the Advanced tab for Displays to that require stereo input. For details, refer to Advanced Settings on page 1383.
- **Device reboot and power cycle:**
  - Updated documentation for the Health Dashboard to include the reboot function. For details, refer to Settings on page 943.
  - Added documentation for the Health tab in device settings. For details, refer to Health Settings on page 1380.
- **Device Health update:** Access the Device Health dashboard from the Home Chooser. For details, refer to My Homes on page 772.
- **Black Nova keypad support:** Added support for Aria M1, Aria TT, and Alba M1 keypads. For details, refer to Pair Third-Party Keypads on page 324, Keypads on page 95, and Third-Party Keypad Settings on page 1247.
- **DSC security system interface module:** Updated documentation for DSC security systems to note that the DSC IT-100 Data Interface Module is only required for serial communication. For details, refer to DSC Security System on page 1553.
- **Documentation Updates:**
  - **Added Customize Interface Buttons topic:** Added the topic to combine similar procedures for setting the color, layout, and engravings for buttons on user interface devices such as keypads and handheld remotes. For details, refer to Customize Interface Buttons on page 445.
  - **Added Button Actions topic:** Added the topic to condense similar procedures for assigning actions to buttons on Cameo® keypads, Horizon® keypads, handheld remotes, third-party keypads, and contact closure keypads. For details, refer to Button Actions on page 456.
  - **Device events:** Grouped device event documentation into a common Device Events folder.
  - **Removed topics:** Removed topics for Configure Keypads, Configure Horizon Keypads, Configure Other Keypads, and Configure Third-Party Keypads. These topics were replaced with Customize Interface Buttons on page 445 and Button Actions on page 456.

June 22, 2022 (3.14)

- **Circadian lighting preview time:** Updated the duration for the circadian cycle preview. For details, refer to and .
- **Crestron Home Configurator shade support:** Use the Crestron Home Configurator to add shades and drapes to a configuration.
    - Additionally, create Shade scenes and add shade functions to buttons, and create shading reports. For details, refer to Shading Tab on page 696, Scenes Tab on page 700, Actions Tab on page 715, and Reports Tab on page 744.
    - Added Crestron Home Configurator Shades and Shade Groups section to describe the functionality of deployed shade groups. For details, refer to Shade Groups on page 356.
- **myCrestron Residential Monitoring Service updates:** The Device List was updated to display the Crestron Home OS firmware for the control processor and to display the last restart time. Updated the myCrestron Residential Monitoring Service on page 626 topic to include accessing the portal, managing devices, Crestron Home Configurator, and restarting the processor.
- **Spotify Connect:** Use Spotify Connect™ to play and control Spotify favorites from within the Crestron Home app or the Spotify® app on a third-party device. For details, refer to Spotify Connect on page 913.
- **Device Health updates:** Updated the descriptions for the Unknown health icon, Control Status, and Last Seen properties. Added the Unknown Control Status. For details, refer to Settings on page 943.
- **Documentation updates:**
    - Update the data migration topics that use an FTP program to transfer data to clarify the user folder. For these procedures, Perform these procedures in the **user** folder that is spelled with all lowercase letters. For details, refer to Migrate System Data to a Different Processor on page 1500.
    - Added the Pair DM NAX Devices on page 300 topic that outlines the options that are available in the Crestron Home Setup app.

May 10, 2022 (3.13)

- **Circadian Lighting:** Adds support for Circadian cycles for legacy lighting devices. Provides ability to setup intensity for different times of day. For details, refer to Control Lights on page 829. and .
- **Additional log backups:** Log backups include plogs to provide more detailed system information. For details, refer to myCrestron RMS Services on page 574.

- **Documentation updates:**
  - Updated the Works with Crestron Home OS on page 55 section to include the IP Style 2N® video intercom (refer to Intercoms on page 94) and to remove links to product pages for Sonos® devices (refer to Audio on page 56).
  - Updated the organization of the document.
    - Created the System Design on page 47 section which includes Control Processor Features, Operating System Features on page 48, Maximum System Size on page 51, and Works with Crestron Home OS on page 55.
    - Updated the Overview on page 40 section.
  - Removed RAM and CPU specifications from the Control Processor Features topic. For RAM and CPU specifications, refer to the control processor specifications.
  - Added Trademarks (online version only) and Resources on page 1591 sections.

March 21, 2022 (3.12)

- **Amazon® connected speakers:** Added documentation for controlling music using Amazon connected speakers. For details, refer to Amazon Connected Speakers on page 304.
- **Device Port updates:** Updated documentation in the Control Processor Settings - Installer on page 558 section to include updates to the Device Port configuration. Sonos® devices no longer use the Legacy Device port and the Legacy Device Port is automatically disabled if there are no legacy devices in the system. For details, refer to System Detail and Password Configuration on page 566.
- **Device health filtering:** Updated documentation in the Settings on page 943 section to include filtering for room groups and device warnings. For details, refer to Settings on page 943.
- **Show system usage metrics:** Updated documentation for the removal of the system usage metrics option on the myCrestron RMS Services on page 574 screen for the dealer and the myCrestron RMS Services on page 1168 screen for the end-user.
- **Hide rooms:** Updated documentation to include the ability to hide a room from the end-user Crestron Home Setup app. For details, refer to Build Your House on page 144.
- **One audio or video source user experience:** Updated documentation in the Operation on page 768 section to include the updated user experience for Audio and Video sources. If there is only one audio or video source in a room, selecting Audio or Video tile will immediately start playing the source. For details, refer to Control Media on page 862.
- **Increased the number of Crestron speaker zones:** Updated the number of Crestron speaker zones for the MC4-R and CP4-R control processors. For details, refer to System Design on page 47.
- **DIN-TSTAT-FCU support:** Updated documentation to include support for the DIN-TSTAT-FCU. For details, refer to Climate Control on page 85 and Thermostat Settings on page 1339.

- **PC-200 and PC-300 support:** Updated documentation to include support for the PC-200 and PC-300. For details, refer to Power Controller Settings on page 1289.
- **Documentation updates:**
  - Updated the Works with Crestron Home OS on page 55 section to indicate recently discontinued products and to include the CLK-YL-NTB620-CR2 Yale® door lock.
  - Crestron Home is now a registered trademark! Updated documentation to use the registered trademark symbols.
  - Updated myCrestron Residential Monitoring Service on page 626 to add the Configuration Backups section.
  - Added the User Names and Passwords on page 135 section to add updates to the password rules and also consolidate information about user names and passwords.

February 22, 2022 (3.11)

- **Crestron Home Configurator room group support:** Updated documentation in the Crestron Home Configurator on page 642 section to include room groups. For details, refer to Rooms Tab on page 646.

February 4, 2022

- **Multiple language support:** Added documentation for multiple language support on Crestron touch screens. For details, refer to Set the Touch Screen Language on page 555.
- **Documentation updates:**
  - Updated the Works with Crestron Home OS on page 55 section to include the CLK-YL-YRL226-CR2 lock. For details, refer to Security and Door Locks on page 108.
  - Updated the Web API Settings on page 615 topic to correct the link to the Crestron Home REST API.

January 26, 2022 (3.11)

- **Power controller support:** Added support for the PC-350V-12 and PC-350V-18.
  - Added Power Controller Settings on page 1289 topic to include device configuration.
  - Updated the Pair Devices on page 151 section to include the new Uncontrolled Device device type. For details, refer to Other Devices on page 271.
  - Updated the Crestron Home® OS User Interface on page 769 section to include the power-cycle function for media devices in the user interface. For details, refer to Control Media on page 862.

- **Device health dashboard:** Updated documentation in the Settings on page 943 section to include the device health dashboard. For details, refer to Settings on page 943.
- **Basalte Auro motion sensor support:**
  - Updated documentation in Occupancy Sensor Events on page 526 to include note that grace occupancy events are not supported.
  - Updated the Works with Crestron Home OS on page 55 section to include Basalte Auro motion sensors. For details, refer to Sensors on page 112.
- **Lutron RadioRA3 support:**
  - Updated documentation in the Pair and Configure a Lutron System with a Crestron Home® System on page 338 section to include Lutron RadioRA 3 control system.
- **Home Chooser list in the Crestron Home app:** Updated documentation in the Operation on page 768 section to include List view in addition to Tile view for homes. For details, refer to My Homes on page 772.
- **Device Port updates:** Updated documentation in the Control Processor Settings - Installer on page 558 section to include updates to the Device Port configuration. For details, refer to System Detail and Password Configuration on page 566.
- **Documentation updates:**
  - Updated the Works with Crestron Home OS on page 55 section to clarify device types that are supported by Crestron Drivers and Extension Drivers. For details, refer to Drivers on page 87.
  - Updated the Works with Crestron Home OS on page 55 section to include the Satel security systems and DSC Neo security systems. For details, refer to Security and Door Locks on page 108.
  - Changed the title of the Processor Setup topic to Initialize the Processor on page 138.
  - Updated the organization of the document.
    - Moved the Works with Crestron Home OS on page 55 and System Design on page 47 sections to the Overview on page 40 section.
    - Moved the Crestron Home Setup App on page 124 topics to the Configure a System on page 123 section.
    - Moved the User Interface Devices on page 156 topic to the Pair Devices on page 151 section.

January 14, 2022

- **Battery-powered shade support:** Added support for Crestron shades that use the battery-powered shade motors (CSM-QMTDC-163-1-SG) and the CEN-GW1 wireless gateway.
  - To configure the devices, refer to Gateway Settings on page 1220 and Shade Motor and Motor Controller Settings on page 1328.
  - Updated documentation in the Migrate System Data to a Different Processor on page 1500 section to identify valid migration paths. For details, refer to Transfer Data using a Deploy Code (Recommended) on page 1501, Copy Data between Control Processors on page 1515, and Copy Data from a myCrestron Cloud Backup File on page 1527.
  - Updated documentation in the Migrate Crestron Wireless Devices to a Different Gateway on page 1402 topic to identify valid migration paths.
  - Updated documentation in the Works with Crestron Home OS on page 55 section to include the new devices. For details, refer to Shading on page 113 and Gateways and Expanders on page 90.

December 20, 2021

- **Upcoming device support:** Added the PC-350V-12 and PC-350V-18 to the Works with Crestron Home OS on page 55 list in the Networking and Power Control on page 106 section.

December 14, 2021

- **Lighting scene editing:** Create and edit lighting scenes from within the Crestron Home app. To create or edit a scene, refer to Create a Scene on page 834.
- **Secure remote connection:** Pair mobile devices and control a home outside of the wireless network using the secure remote connection. For details, refer to User Interface Devices on page 156 and Remote System Access on page 639.
- **Apple® AirPlay® streaming:** Use Apple AirPlay to stream music to a DM-NAX-8ZSA 8-zone streaming amplifier. For details, refer to Apple AirPlay Control on page 911.
- **New device support:** Added support for Basalte Fibonacci keypads. For details, refer Keypads on page 95.

November 19, 2021

- **Crestron Home Configurator:** Added support for Ethernet to Cresnet® network bridges and ceiling fan actions.
    - **Ethernet to Cresnet bridge:** Add Ethernet to Cresnet® network bridges to a configuration and assign Cresnet devices. For details, refer to Add a Wired Gateway on page 666.
    - **Ceiling Fan actions:** Assign actions for ceiling fans. For details, refer to Actions Tab on page 715.
- **New television provider locations:** Added support for television providers in Latin American countries. To see all supported locations, refer to Add a Television Provider on page 235.
- **Works with Crestron Home:** Added Lilin Z3R6522X to the Works with Crestron Home list. Added note for h.265 support for older Apple® mobile devices. For details, refer to Cameras on page 61 and Camera Compatibility Specifications on page 65.

October 25, 2021

- **Crestron Home Configurator:** Added support for new devices and serial number import.
    - **New devices:** Add CLCI-1DIMFLV2EX, CLCI-1SW2EX, CLCI-DIMUEX, CLF-LDIMUEX, and CLF-LDIMUEX-W-CORD. To select the correct module based on the load type, refer to Module and Load-Type Compatibility on page 692.
    - **Serial number import:** Import serial numbers from the Crestron Home Configurator into the Crestron Home Setup app. For details, refer to Pair Imported Devices on page 759
- **Control processor feature update:** The Crestron Home® system supports up to 8 DALI® gateways. For details, refer to Control Processor Features.
- **Pool tile on home screen:** Access pool controls from the Home tab. For details, refer to Crestron Home® OS User Interface on page 769 and Control Pools and Spas on page 931.
- **New device support:** The DM-NAX-16AIN is now supported. To configure source routes or the device settings, refer to Configure DM NAX™ Audio Routing on page 372 or DM-NAX-16AIN on page 1194.
- **Works with Crestron Home:** Updated the list of products to indicate the discontinued products. For details, refer to Works with Crestron Home OS on page 55.

September 8, 2021

- **Streaming service presets:** Access streaming service presets when creating Sequence Quick Actions and Media Scenes.
    - **Sequence Quick Actions:** Select an account profile and preset when creating a sequence. For details, refer to Select a Streaming Service Account Profile and Preset on page 441.
    - **Media scenes:** Select an account profile and preset when creating a media scene. For details, refer to Media Scenes on page 406.
- **DALI integration updates:** Updated documentation for configuring DALI ballasts and adding and configuring DALI gateways and DALI groups.
    - **DALI ballast configuration:** Added DALI ballast configuration and how to add the DALI gateway. For details, refer to Add a DALI Gateway on page 284.
    - **DALI group settings:** Updated the settings for the DALI group. For details, refer to DIN-DALI-2 Groups (Loads) on page 1268.
    - **DALI gateway settings:** Updated the settings for the DALI gateway. For details, refer to DIN-DALI-2 Settings on page 1229.
    - **Add DALI Groups (Loads):** Updated the process for adding DALI groups (loads). For details, refer to DALI Groups and Individual DALI Loads on page 211.
- **Display Fan Controls:** Show or hide thermostat fan controls in the Crestron Home and Crestron Home Setup app.
    - **Hide fan controls:** Hide fan controls using the thermostat settings screen. For details, refer to Thermostat Settings on page 1339.
    - **Configure Climate Scene:** Updated the Climate Scene configuration to note that fan controls may not be shown if fan controls are disabled. For details, refer to Climate Scenes on page 410.
- **Control System Integration:** Added Control System Integration section for including a SIMPL Windows program in the system. For details, refer to Control System Integration on page 1410.
- **New device support:** Added support for the DM-NVX-E10, DM-NVX-E20, DM-NVX-D10, and DM-NVX-D20.

August 11, 2021

- **Crestron Home Configurator Improvements:** Wireless gateways, serial numbers, and room settings.
    - **Wireless gateways:** Add and configure wireless gateways. Assign wireless modules to gateways or move them between gateways to organize the configuration. Additionally, create a Gateways Report that displays the gateways in the system and their associated devices. For details, refer to Wireless Gateways on page 670 and Reports Tab on page 744.
    - **Serial numbers:** Add the serial numbers for devices in the configuration.
    - **Room settings:** View all devices in the room and change room settings. Shortcuts are provided to add enclosures, modules, and gateways to the room and edit device serial numbers. For details, refer to Room Settings on page 690.
- **Josh.ai voice control:** Use Josh.ai voice control to control the Crestron Home system. For details, refer to the josh.ai website, Web API Settings on page 615, and Josh.ai and Crestron Home Integration (PDF).
- **Works with Crestron Home:** Added the CLK-YL-YRL216-CR2 to the list of door locks. For details, refer to Security and Door Locks on page 108.

July 8, 2021

- **Additional support for the DM-NAX-8ZSA:** Simplified streaming service provider setup and enabled support for Media scenes.
    - To set up streaming media players using the DM-NAX-8XSA web UI, refer to Streaming Music Services on page 971.
    - Select streaming service profiles while creating Media scenes. For details, refer to Media Scenes on page 406.

June 10, 2021

- **Added support for the DM-NAX-8ZSA:** The DM-NAX-8ZSA is now supported in the Crestron Home® system.
    - To configure the DM-NAX-8XSA, refer to Audio Settings on page 1192.
    - Set up streaming services using the DM-NAX-8XSA web UI. To set up streaming media players, refer to Streaming Music Services on page 971.
    - Use Sequence Quick Actions to recall Media scenes that utilize streaming service profiles.

- **Added speakers to Works with Crestron Home:** Added the latest speakers to the Works with Crestron Home list. For details, refer toAudio on page 56.
- **Media Zone Sleep event:** Added Scene, Quick Action, Button Emulation, and External Function modes to the Media Zone Sleep event. For details, refer to Media Zone Events on page 528.
- **Extension events:** Added Scene, Quick Action, Media Function, Button Emulation, and External Function modes to extension device events. For details, refer to Extension Device Events on page 520.
- **MC4-R and CP4-R Processor Migration:** Updated the available migration paths to transfer data between the MC4-R and CP4-R control processors. For details, refer to Migrate System Data to a Different Processor on page 1500.
- **Added support for new cameras:** Added Dahua, Digital Watchdog, and Uniview cameras to the Works with Crestron Home list. For details, refer to Cameras on page 61.
- **Web Settings screen:** The Crestron Home Setup app is no longer served by a web browser or server. The Web Settings screen was removed from the System Control Options settings. For details, refer to System Control Options on page 603 and Web Settings on page 606.
- **Updated Best Practices for Deploy code redeploy:** Updated the Best Practices section to include additional information. For details, refer to Update the Current Configuration on page 582.

May 6, 2021

- **Redeploy a configuration:** Update the configuration on your Crestron Home processor with the changes made in the Crestron Home Configurator. Updated the myCrestron Deploy Code Import topic to document the latest Deploy code update methods. Erase the current configuration and Deploy a myCrestron configuration backup or update the current configuration and merge changes made in the Crestron Home Configurator. For details, refer to myCrestron Deploy Code Import on page 579.
- **Crestron Home Configurator:**
    - **Actions Tab:** Updated documentation to include the **Preserve Crestron Home Settings** check box. The **Preserve Crestron Home Settings** option prevents changes made in the Crestron Home Setup app from being overwritten during a redeploy. For details, refer to Actions Tab on page 715.
    - **Deploy a configuration:** Updated documentation to include to available methods to deploy a configuration. For details, refer to Deploy a Configuration on page 750.
- **Logging for Crestron Driver devices:** Turn on driver logging to view logs for Crestron Driver devices. For details, refer to Diagnostics on page 595.
- **Automatic system recovery:** If there is an issue with the Crestron Home processor configuration, the processor will automatically reload the last known good configuration and keep the system up and running.

- **Custom LED colors for Horizon® keypads:** Added documentation to change the colors for Horizon keypads. For details, refer to Custom LED Colors.
- **myCrestron Residential Monitoring Service:** Consolidated documentation for the myCrestron Residential Monitoring Service and added details on how to add a processor to the service, generate a deploy code, and download backups. For details, refer to myCrestron Residential Monitoring Service on page 626.
- **Remote system access:** Consolidated documentation for remote system access. Updated details on how to create a myCrestron domain name, pair the processor with the domain, and to manage ports on the router. For details, refer to Remote System Access on page 639.

April 15, 2021

- **Crestron Home Configurator Improvements:**
  - **Equipment Tab:** The Equipment tab has been added to the configurator. The Equipment tab consolidates the functions of the Enclosures, Modules, and Assignments tab into one simple interface. For details, refer to Equipment Tab on page 654.
  - **Deploy Tab:** The Deploy tab has been updated to optimize the information that is provided. A single Deploy code is provided along with a notes section and the Deploy code history. For details, refer to Deploy Tab on page 749.
  - Moved the Crestron Home Configurator documentation from the Appendix to the main content area of the manual.
    Permalink: docs.crestron.com/en-us/8525/index.htm#cshid=CHC-About

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March 31, 2021

- **Added support for the DM-NVX-E760 and DM-NVX-E760C:** The DM-NVX-E760 and DM-NVX-E760C are now supported in Crestron Home systems. For details, refer to Video on page 118.
- **Added support for Black Nova keypads and Rhombus Keypads:** The Black Nova and Rhombus Crestron Connected® keypads are now supported in Crestron Home systems. For details, refer to Keypads on page 95 and Third-Party Keypad Settings on page 1247.
- **Added support for HZ-THSTAT:** Add the HZ-THSTAT to a system. For details, refer to Climate Control on page 85 and Thermostat Settings on page 1339.
- **Removed Smart Graphics runtime pages:** The Smart Graphics® runtime pages have been removed from the Crestron Home Setup app. As a result, the Crestron Pyng® OS style (Smart Graphics) control screens will no longer display in the Crestron Home Setup app.

- **Voice Commands for the TSR-310:** Added a list of voice commands that can be used with TSR-310 handheld remote to control the Crestron Home system. For details, refer to Voice Commands on page 1098.
- **Texecom security system configuration:** Use the Premier Elite PC-COM cable (model JAA-0001) to connect between the security system and the Crestron Home control processor. Updated the Wiring section for connection between the security system and the Crestron Home processor and added connection information between the security system and a PC. Updated the Setup section to include the baud rate and COM port and added configuration using a security system keypad. For details, refer to Texecom Security System on page 1550.
- **Update the Common Device credentials:** Updated the Secure Device Connections section to provide additional details about the Common Device credentials and how to add or update devices that use the credentials. For details, refer to Secure Device Connections on page 153.
- **Grouping improvements:** If a room is in an audio group and video source is selected in the room, the room will leave the audio group and the video source will play in the room.
- **Updated the look of the radial gauge:** The look of the radial gauge was updated. The radial gauge is commonly used to display thermostats and timers in the Crestron Home user interface. For details, refer to the Crestron Home Extension Driver documentation at the Crestron Drivers: Developer Microsite and Control Climate on page 848.

March 4, 2021

- **Create a Control Station in the Crestron Home Configurator:** Group several interfaces into a multi-gang control station in the Crestron Home Configurator. You can view the assigned and derated wattage, arrange the interfaces within the control station, and pick the color of the control station. For details, refer to Interfaces Tab on page 704.

January 23, 2021

- **Downgrade MC4-R infiNET EX radio firmware prior to control processor firmware downgrade:** Revised the procedure to downgrade the MC4-R and infiNET EX radio firmware. Only perform this procedure if instructed by Crestron Technical Support. For details, refer to Downgrade MC4-R Firmware Version to 3.003.0035 or Earlier on page 1539.
- **Product page links added to the Works with Crestron Home list:** The Works with Crestron Home list was updated to include links to product pages. For details, refer to Works with Crestron Home OS on page 55.

January 16, 2021

- **TV tuner support:** Display the TV tuner in the Crestron Home User Interface by enabling it (when supported by the Crestron Driver) in the Media Services tab in the display settings page. The TV tuner can be enabled for standard displays and Smart TVs. For details, refer to Display Settings on page 1204.

  > **NOTE:** Favorites are not currently supported.

- **Hide a mirrored display:** Hide a display from the Crestron Home User Interface when it is mirrored with other displays in the room by selecting **Hide this display** in the **Advanced** tab in the display settings page. For details, refer to Display Settings on page 1204.
- **Use digital inputs as a button:** Connect a contact closure keypad to a digital input in the system and use it like a native Crestron keypad. To configure, go to **Pair Devices > Other**, add a **Button**, and then program the button like a keypad. For details, refer to Other Devices on page 271 and Configure Contact Closure Keypads.
- **Crestron Driver update:** Drivers downloaded from drivers.crestron.io that are tested by Crestron display the Crestron swirl logo. Included legacy security system drivers also display the Crestron swirl logo. For details, refer to Add Driver Devices on page 229 and Side-Load Crestron Drivers on page 237.
- **Added security for CEN-IO and DM NVX® devices:** The Common Device credentials are now used when adding CEN-IO and DM NVX® devices to the system. For a list of devices that use the Common Device credentials and minimum firmware versions, refer to Secure Device Connections on page 153.
- **Randomized delays in sequences:** Add a delay to a sequence that ends at a random time. Set the minimum and maximum length of the delay and the system will make sure that the delay ends at a random time within that range. For details, refer to Quick Actions on page 414.

  > **NOTE:** If upgrading from Crestron Home version 3.003.00037 to 3.004.0071, the **Add Random Delay** button may not display when creating a sequence quick action. Please restart the Crestron Home Setup app to display the button.

- **Vacation scheduler:** Mimic a lived-in environment when the homeowner is away by creating a vacation schedule. Additionally, use the vacation scheduler features to create a lived-in environment during everyday events. For details, refer to Vacation Scheduler on page 548.
- **Media zone sleep event:** Use the Media Zone Sleep event to trigger an event. For details, refer to Media Zone Events on page 528.
- **Added support for CHV-TSTAT-FCU:** The CHV-TSTAT-FCU is now supported in Crestron Home® systems. For details, refer to Climate Control on page 85 and Thermostat Settings on page 1339.

- **Custom dimming curves:** Use a custom dimming curve with CLX-1DIMU4, CLX-1DIMU4-HP, CLX-2DIMU8, CLX-2DIMU8-277, CLXI-2DIMU8, CLW-DIMUEX-P, CLW-DIMFLVEX-P, HZ-DIMEX, HZ-DIMFLVEX, HZ-DIMUEX, DIN-2LEDPWM8 dimmers. For details, refer to Lighting Load Controller Settings on page 1262.
- **Trigger events using an Extension Device event:** Trigger a Sequence Quick Action when an Extension Device event occurs. For details, refer to Extension Device Events on page 520.
- **Autoupdate folder removed from User folder:** When connecting to a Crestron Home processor using an FTP program, the User folder no longer contains the Autoupdate folder. This may be noticed when migrating data between control processors. For details, refer to Copy Data between Control Processors on page 1515 and Copy Data from a myCrestron Cloud Backup File on page 1527.
- **Source routes for CNAMPX series amplifiers:** Added procedure for configuring source routes with CNAMPX series amplifiers. For details, refer toCNAMPX Series Amplifier Power Control on page 383.
- **Mirror displays:** Added procedure for configuring mirrored displays. For details, refer to Mirror Displays on page 380.
- **Bosch cameras:** Added Bosch cameras to the Works with Crestron Home list. For details, refer to Cameras on page 61 and Camera Compatibility Specifications on page 65.
- **Source routes for SmartTV audio routed to an AVR:** Added procedure for configuring source routes when the SmartTV audio is connected to an AVR. For details, refer to SmartTV Audio Routed to an AVR on page 387.
- **Downgrade MC4-R infiNET EX radio firmware prior to control processor firmware downgrade:** If instructed by Crestron Technical Support to downgrade an MC4-R control processor that is running Crestron Home firmware 3.004.0071 or higher to 3.003.0035 or lower, downgrade the infiNET EX radio firmware prior to the control processor. For details, refer to Downgrade MC4-R Firmware Version to 3.003.0035 or Earlier on page 1539.

January 11, 2021

- **Removing and updating Crestron Drivers:** Restart the Crestron Home processor after removing Crestron Driver devices from the system. For details, refer to Update Crestron Drivers on page 238 and Delete Crestron Drivers on page 270.
- **Added support for UC-MM30R:** Added the UC-MM30-R and UC-MM30-R-I to the 70 Series Touch Screens section of the Works with Crestron Home® list and added configuration information. For details, refer to Touch Screens on page 116 and Settings on page 943.
- **Touch screen settings:** Updated and moved touch screen setting documentation. For details, refer to Settings on page 943.
- **Crestron Home Configurator:** Add and configure DIN lighting modules and DIN enclosures to a configuration. Added support to include DIN modules and Enclosures. For details, refer to Crestron Home Configurator on page 642 and Equipment Tab on page 654.

December 8, 2020

- **Migrating system data:** Updated Migrate System Data to a Different Processor on page 1500 to clarify the supported and unsupported migration paths.

November 12, 2020

- **CEN-GWEXER:** Added important note in Migrate Crestron Wireless Devices to a Different Gateway on page 1402 and Transfer Data using a Deploy Code (Recommended) on page 1501 that a Virtual Gateway can be migrated to a CEN-GWEXER once per gateway, and that it is recommended that all CEN-GWEXERs added to the system be factory fresh.
- **Crestron Drivers:** The name for driver devices was changed to Crestron Drivers.

Overview

A Crestron Home® OS system makes it easy to access and control every aspect of a home.

This section provides the following information:

- Crestron Home Processors
- Crestron Home Software
- myCrestron Services
- Supported Devices
- Design Support

Crestron Home Processors

Crestron Home processors are the core of a Crestron Home system. They deliver remarkable speed and performance that is appropriate for homes of varying sizes.

The Crestron Home OS is controlled using CP4-R, MC4-R, PC4-R, and DIN-AP4-R control processors.

> **NOTE:** The Crestron Pyng OS 1 and Crestron Pyng OS 2 operating systems are controlled using the legacy control processors (PYNG-HUB and CP3-R, respectively).

CP4-R Processor

The CP4-R is a rack-mountable control processor that is designed for larger Crestron Home systems such as large home automation, home theater, multiroom video, and MDU (multidwelling unit) applications.



DIN-AP4-R Processor

The DIN-AP4-R is a control processor that is designed specifically for DIN rail mounting applications. It is ideal for small to medium sized home automation, home theater, multiroom video, and MDU (multidwelling unit) applications.



MC4-R Processor

The MC4-R is a small and versatile control processor that is ideal for smaller Crestron Home systems such as single-room systems, small to medium-sized homes, and MDU (multidwelling units) applications.



PC4-R Processor

The PC4-R is a PC-based control processor that is embedded with the Crestron Home® operating system. It is designed exclusively to function as the core of a Crestron Home system. It is designed for larger Crestron Home systems such as large home automation, home theater, multiroom video, and MDU (multidwelling unit) applications.

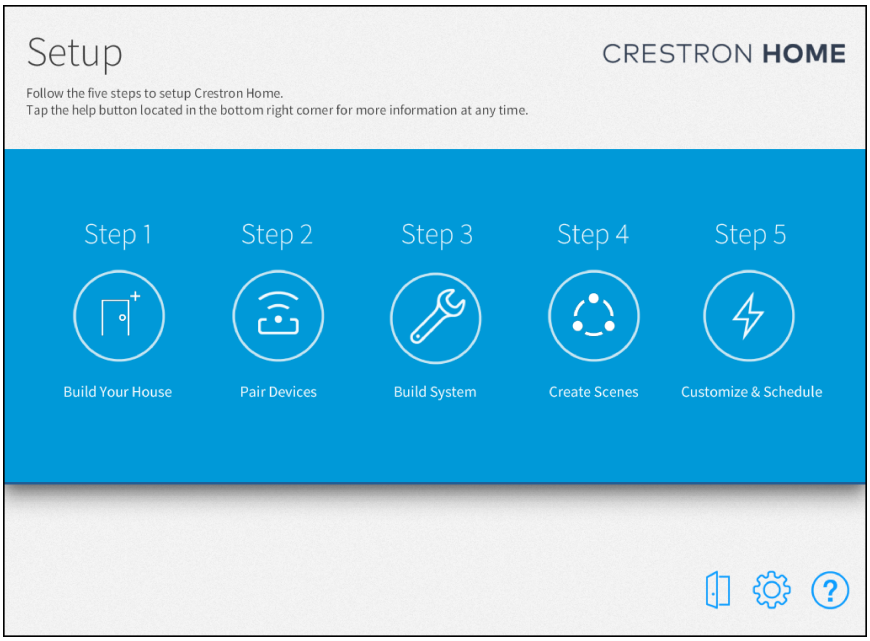


Crestron Home Software

Set up the Crestron Home system with the easy-to-use Crestron Home Setup app and control it with the intuitive Crestron Home app.

Crestron Home Setup App

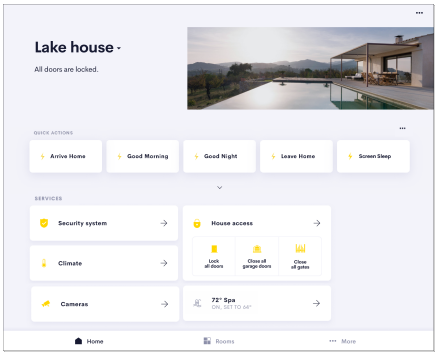
Use the Crestron Home Setup app to configure the Crestron Home system. The Crestron Home Setup app can be used on an Apple® iPad® device or a Mac® or Windows® PC.

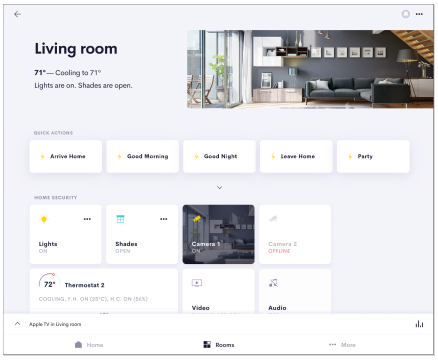


Crestron Home App

Use the Crestron Home app to control audio, video, lighting, shading, climate, a security system, door locks, cameras, and more throughout your home.

The Crestron Home app provides the same look and feel on Crestron Home user-interface devices such as Crestron touch screens, Apple® iOS® devices, and Android™ devices.





myCrestron Services

Use myCrestron services to monitor, enable remote system access, and to create a Crestron Home configuration.

myCrestron Residential Monitoring Service

Powered by the cloud, the myCrestron Residential Monitoring Service enables you to centrally monitor and manage Crestron Home systems with ease, identify issues, and resolve them faster. Crestron Home systems are displayed on an online dashboard to provide a comprehensive status update at a single glance. System-level information is available as well as device-level event logs that the Crestron Home system automatically sends to the cloud. True Blue Support and your technicians can access log files to eliminate many troubleshooting truck rolls.

myCrestron Dynamic DNS

The myCrestron.com Dynamic DNS (DDNS) service furnishes a URL for the system to enable remote control and monitoring of a Crestron Home system. This enables control of a home's lighting, climate and security system from any location.

Crestron Home® Configurator

Use the Crestron Home Configurator to create a system configuration with a computer. Unlike the Crestron Home Setup app, the configuration can be created before arriving on-site and can be used to generate a variety of detailed configuration reports. After the system is installed, use a Deploy code to transfer the configuration onto the Crestron Home processor.

Supported Devices

The Crestron Home system supports a wide variety of Crestron and third-party devices and controls them all from one user interface.

Works with Crestron Home® OS

Crestron Home® OS is designed to work with a wide variety of devices to provide control of audio, video, lighting, shading, climate, security systems, door locks, cameras, I/O devices, and third-party AV devices.

> **NOTE:** For a list of devices that are supported by Crestron Home® OS, refer to Works with Crestron Home OS on page 55.

Crestron Drivers

The Crestron Home system utilizes Crestron Drivers to expand the functionality of the system. Crestron Drivers are available for AV receivers, AV switchers, Blu-ray® disc players, cable boxes, flat panel displays, garages, gates, lights, platform devices, pool controllers, power controllers, projectors, security systems, speakers, and video servers.

To view the complete list of drivers, visit the Crestron Driver Portal at drivers.crestron.io.

> **NOTE:** Crestron Connected devices are not compatible with Crestron Home systems.

Partner Products

Crestron works with our partners to offer the best smart home solution for you and your clients. Some of these partners include 2N video intercom door stations, Amazon® Alexa® voice control, Apple® iOS® devices and Siri® voice commands, Cool Automation, Android devices™ and Google Assistant™ voice control, Josh.ai voice control, Sonos® speakers and amplifiers, Yale® door locks, and more.

Design Support

For system design questions or additional information, email our Crestron Home subject matter experts at homedesign@crestron.com. They will make sure all of your questions are answered quickly and thoroughly.

System Design

The Crestron Home® OS system is capable of controlling homes of different sizes.

This section provides the following information:

- Operating System Features
- Maximum System Size
- Works with Crestron Home OS

Operating System Features

The Crestron Home® OS and Crestron Pyng® OS operating systems support different control processors and features. Refer to the comparison below to view the differences between each operating system.

NOTE: For a list of devices that are supported by Crestron Home® OS, refer to Works with Crestron Home OS on page 55.

Crestron Home OS and Crestron Pyng OS Operating System Features

Feature Class	Feature	Crestron Pyng OS 1	Crestron Pyng OS 2	Crestron Home OS
Control Processor	CP4-R	✗	✓	✓
	PC4-R	✗	✗	✓
	DIN-AP4-R	✗	✗	✓
	MC4-R	✗	✗	✓
	CP3-R	✗	✓	✗
	PYNG-HUB	✓	✗	✗
Multi-Home Support	Multi-Home Support	✗	✗	✓
Home and Room Images	Home and Room Images	✗	✗	✓
iPad Split View	iPad Split View	✗	✗	✓
Room Favorites	Room Favorites	✗	✗	✓

Crestron Home OS and Crestron Pyng OS Operating System Features

Feature Class	Feature	Crestron Pyng OS 1	Crestron Pyng OS 2	Crestron Home OS
Audio	Sonos® CONNECT™ Wireless Receivers	✓	✓	✓
	Sonos CONNECT:AMP Devices	✗	✓	✓
	All Sonos Speakers (including Sound Bars)	✗	✓	✓
	Audio Grouping	✓ Simple Audio Source Sharing	✓ Hybrid Grouping of Sonos and Sonnex	✓ Hybrid Grouping of Sonos and Sonnex
	Crestron Distribution Amplifiers	✓	✓	✓
	Remote Media Control (Mobile device using a cellular network)[1]	✓	✓	✓ Source selection and Basic Control
Video	Custom TV Presets (Favorites)	✗	✓	✓
	Handheld Remotes	✗	✓	✓
	Source Control	✗	✓	✓
	Display Control	✗	✓	✓
	A/V Receivers	✗	✓	✓
	DigitalMedia™ Devices	✗	✓	✓
	DM NVX® Devices	✗	✓	✓
	Remote Media Control (Mobile device using a cellular network)[1]	✓	✓	✓

[1]Remote media control is performed when a mobile device is connected to a cellular network or a different Wi-Fi® network than the controlled home.

Crestron Home OS and Crestron Pyng OS Operating System Features

Feature Class	Feature	Crestron Pyng OS 1	Crestron Pyng OS 2	Crestron Home OS
myCrestron Residential Monitoring Service	Automatic Backups	✓	✓	✓
	Monitoring	✓	✓	✓
	Preconfiguration	✓	CP4-R: ✓ CP3-R: ✗	✓
Lighting	Lighting	✓	✓	✓
Climate	Thermostats	✓	✓	✓
	BACnet Thermostats	✗	✗	✓
Shades	Shades	✓	✓	✓
Security	Door Locks	✓	✓	✓
	Security Systems	✓	✓	✓
Sensors	Sensors	✓	✓	✓
Keypads	Keypads	✓	✓	✓
Touch Screens	Touch Screens	✓	✓	✓
Cameras	2N Video Intercom Door Stations	✗	✓	✓
	Streaming Cameras	✗	✓	✓
Editing	Scene Editing	✓	✓	Future Release
	Scheduling	✓	✓	Future Release
Quick Actions	Per Room Quick Actions	✗	✗	✓
	Whole House Quick Actions	✓	✓	✓
Multi-Language Support	End-User Interface	✓	✓	✓
	Setup App	✓	✓	✓
Mobile Platform Support	iOS® Phones	✓	✓	✓
	iOS® Tablets	✓	✓	✓
	Android™ Phones	✓	✓	✓
	Android™ Tablets	✓	✓	✓
	PC	✓	✓	Future Release

Maximum System Size

The CP4-R, MC4-R, PC4-R, and DIN-AP4-R control processors are capable of controlling homes of different sizes. The maximum system size recommendation is listed below.

NOTES:

- For a list of devices that are supported by Crestron Home OS, refer to Works with Crestron Home OS on page 55.
- The Multiple Processors column on the right below indicates the maximum number of devices available across all processors. The individual processor system size recommendations should be followed when using multiple processors.

System Size Recommendations

	MC4-R	DIN-AP4-R	CP4-R	PC4-R	Multiple Processors
Multiple Processors					
Parent Processors	1	1	1	1	-
Child Processors	4	4	4	4	-
Keypads and User Interface Devices					
Touch Screens or TSR-310s	12	12	24	24	40
Remotes (HR series)	16	16	24	24	24
Remotes per Room	1	1	2	2	2
Keypads	60	60	120	120	240
Audio					
Audio Sources	24	24	24	24	48
Crestron Speaker Zones	32	32	56	56	72
Active Audio Groups	4	4	4	4	4

	MC4-R	DIN-AP4-R	CP4-R	PC4-R	Multiple Processors
Rooms in an Audio Group	10	10	20	20	20
Sonos Speaker Zones or Players	8	8	16	16	16
Video					
Video Sources	16	16	32	32	54
Video Zones	16	16	32	32	40
Displays in a Room	7	7	7	7	7
AV Receivers	3	3	6	6	6
Apple TV® Devices with Apple HomeKit™ Technology[1]	5	5	5	-	5
Gateways					
Crestron Wireless (External)	14	15	15	15	15
Crestron Wired (External)	14	14	14	14	14
DMX-C	3	3	3	3	3
DALI	15	15	15	15	15
Philips Hue Bridge	1[2]	1	1	1	1
Lutron Processors	1	1	1	1	1
Lights and Shades					
Shades and Drapes	50	50	100	150	200
Lighting Loads (total)	100	100	300	600	600

	MC4-R	DIN-AP4-R	CP4-R	PC4-R	Multiple Processors
DMX-C Lights	255	255	255	255	600
Climate Control					
Thermostats	12	12	32	32	40
BACnet Objects[3]	500	500	2,000	2,000	2,000
Security and Locks					
Security Systems	2	2	2	2	2
Locks	4	4	6	6	6
Streaming Cameras	25	25	25	40	40
Other Devices					
Sensors	16	16	32	32	32
Rooms	99	99	99	99	99

1. Refer to Pair Apple TV with Apple HomeKit on page 329 for detailed configuration and pairing details. The PC4-R does not support Apple HomeKit.
2. Use the Phillips Hue driver with MC4-R processors that are version 2 or later. MC4-R V2 processors have a serial number greater than 2211JBH14341 or greater or the model number report as "MC4-R (HW Ver 2) Cntrl Eng" when running the "ver -v" command in Crestron Toolbox Software.
3. The full BACnet network/IP license is included with Crestron Home processors to support the maximum number of BACnet objects. No additional purchase required.

Quick Action and Scene Limits

Maximum Quick Actions and Scenes

Limit Type	Qty.
Whole House Limits	
Quick Actions	50
NOTE: The Crestron Home app displays up to 20 Quick Actions on the Home tab.	
Climate Scenes	150
Room-Level Limits	
Quick Actions	50

Limit Type	Qty.
NOTE: The Crestron Home app displays up to 20 Quick Actions per room.	
Lighting Scenes	50
Shade Scenes	50
Media Scenes	200

Works with Crestron Home OS

Crestron Home® OS is designed to work with many Crestron and third-party products.

Additional devices can be added via drivers. To view all available drivers, visit the Crestron Driver Portal at drivers.crestron.io.

The following device types work with Crestron Home OS.

- Audio
- Cameras
- Climate Control
- Control Systems
- Drivers
- Gateways and Expanders
- I/O Expanders
- Intercoms
- Keypads
- Lighting
- Pool Controllers
- Networking and Power Control
- Hand-held Remotes
- Security and Door Locks
- Sensors
- Shading
- Touch Screens
- Video

Audio

The following audio devices work with Crestron Home OS.

Crestron Audio

The following Crestron® audio devices work with Crestron Home OS.

Multiroom Audio

- C2N-AMP-6X100 - 6 Room + 2 Audio System, Discontinued
- C2N-AMP-4X100 - 4 Room Audio System, Discontinued
- C2NI-AMP-6X100 - 6 Room + 2 Audio System – International Version, 230V, Discontinued
- C2NI-AMP-4X100 - 4 Room Audio System - International Version, 230V, Discontinued
- CNAMPX-16X60 - 16-Channel Multi-Room Amplifier, 12 x 60 W, Discontinued
- CNAMPX-12X60 - 12-Channel Multi-Room Amplifier, 12 x 60 W, Discontinued
- CNX-BIPAD8 - CAT5 Audio Distribution Processor, Discontinued
- CNX-PAD8A - Audio Distribution Processor, Discontinued

  > **NOTE:** The CNX-PAD8 is not supported.

- DM-NAX-16AIN- DM NAX™ Audio-over-IP Network Encoder with 16 Stereo Inputs
- DM-NAX-4ZSA-50 - DM NAX™ 4-Zone Streaming Preamplifier
- DM-NAX-8ZSA - DM NAX™ 8-Zone Streaming Amplifier
- DM-NAX-4ZSP - DM NAX™ 4-Zone Streaming Preamplifier
- DM-NAX-AMP-X300- DM NAX™ X-Series Flexible Output Amplifier, 300W
- SWAMP-24X8 - Sonnex® Multiroom Audio System, Discontinued
- SWAMPE-8 - Sonnex® Multiroom Audio Expander, 8-Zone, Discontinued
- SWAMPE-4 - Sonnex® Multiroom Audio Expander, 4-Zone, Discontinued
- SWAMPI-24X8 - Sonnex® Multiroom Audio System - International Version, 220-240V, Discontinued
- SWAMPIE-8 - Sonnex® Multiroom Audio Expander - International Version, 8-Zone, Discontinued
- SWAMPIE-4 - Sonnex® Multiroom Audio Expander - International Version, 4-Zone, Discontinued
- SWE-8 - Sonnex® Multiroom Audio Unamplified Expander, 8-Zone, Discontinued

DM NAX™ Wall Plates

- DM-NAX-BTIO-1G - DM NAX® Audio-over-IP Wall Plate with Bluetooth® Audio Support, Analog Audio Input and Output, 1-Gang

  > **NOTE:** The DM-NAX-BTIO-1G is only supported in RX mode.

- DM-NAX-2XLRI-1G - DM NAX® Audio-over-IP Wall Plate with XLR, Black, 1-Gang
- DM-NAX-AUD-USB - DM NAX® Audio-over-IP Converter with USB-C® Audio Input and Output
- DM-NAX-AUD-IO - DM NAX® Audio-over-IP Converter with Balanced/Unbalanced Line-Level Audio Input and Output

Surround Sound

- HD-XSP - High-Definition 7.1 Surround Sound Processor, Discontinued
- HD-XSPA - 4K Ultra High-Definition 7.1 Surround Sound AV Receiver, US/NA, 120V, Discontinued
- HDI-XSPA - 4K Ultra High-Definition 7.1 Surround Sound AV Receiver, International, 220-240V, Discontinued

Tuners and Streaming

- ATC-AMFM2 - Dual AM/FM Radio Tuner Card, Discontinued

  > **NOTE:** Only ATC-AMFM2-REV2 (Part Number: 6505307; Firmware 2.0 and higher) is supported.

- ATC-AMFMXMD - AM/FM and XM® Satellite Radio Tuner Card, Discontinued
- ATC-AUDIONET - Internet Radio Tuner Card, Discontinued
- CEN-NSP-1 - Network Stream Player, Discontinued
- CEN-TRACK-AMFM2 - Tuner Rack Chassis with ATC-AMFM2 (Rev 2) Tuner Card, Discontinued
- CEN-TRACK-AMFMXMD - Tuner Rack Chassis with ATC-AMFMXMD Tuner Card, Discontinued
- CEN-TRACK-AUDIONET - Tuner Rack Chassis with ATC-AUDIONET Tuner Card, Discontinued
- CEN-TRACK - Tuner Rack Chassis for ATC-Series Tuner Cards, Discontinued

  > **NOTE:** The CEN-TRACK does not support ATC-AMFMSR, ATC-AMFMSRD, ATC-AMFM2 (Rev 1), and ATC-AMFMXM (Rev 1) tuner cards in Crestron Home systems.

Speakers

The following speakers work with Crestron Home OS.

In-Ceiling

- ASPIRE IC8-W-T - Aspire® 8 in. 2-Way In-Ceiling Speakers, White Textured, Pair, Discontinued
- ASPIRE IC6-W-T - Aspire® 6.5 in. 2-Way In-Ceiling Speakers, White Textured, Pair, Discontinued
- ASPIRE IC5-W-T - Aspire® 5.25 in. 2-Way In-Ceiling Speakers, White Textured, Pair, Discontinued
- ASPIRE IC6DT-W-T-EACH - Aspire® 6.5 in. 2-Way Single-Point Stereo In-Ceiling Speaker, White Textured, Single, Discontinued
- ASPIRE IC8DT-W-T-EACH - Aspire® 8 in. 2-Way Single-Point Stereo In-Ceiling Speaker, White Textured, Single, Discontinued
- EXCITE IC8-W-T - Excite® 8 in. 2-Way In-Ceiling Speakers, White Textured, Pair, Discontinued
- EXCITE IC6-W-T - Excite® 6.5 in. 2-Way In-Ceiling Speakers, White Textured, Pair, Discontinued
- EXCITE IC5-W-T - Excite® 5.25 in. 2-Way In-Ceiling Speakers, White Textured, Pair, Discontinued
- EXCITE IC6DT-W-T-EACH - Excite® 6.5 in. 2-Way Single-Point Stereo In-Ceiling Speaker, White Textured, Single
- REFERENCE IC8-W-T-EACH - Reference 8 in. 2-Way In-Ceiling Speaker, White Textured, Single
- REFERENCE IC6-W-T-EACH - Reference 6.5 in. 2-Way In-Ceiling Speaker, White Textured, Single
- SAROS DM-NAX-IC4A-W - Saros® 3 in. Active Full-Range In-Ceiling PoE+ Speaker with DM NAX® Audio-over-IP Support, White, Textured
- SAROS IC4P- Saros® 3 in. Passive Full-Range In-Ceiling Speaker, White, Textured
- ULTIMATE IC8-W-T-EACH - Ultimate 8 in. 2-Way In-Ceiling Speaker, White Textured, Single, Discontinued
- ULTIMATE IC6-AW-W-T-EACH - Ultimate 6.5 in. 2-Way All Weather In-Ceiling Speaker, White Textured, Single
- ULTIMATE IC6-W-T-EACH - Ultimate 6.5 in. 2-Way In-Ceiling Speaker, White Textured, Single, Discontinued

In-Wall

- ASPIRE IW5-W-T - Aspire® 5.25 in. 2-Way In-Wall Speakers, White Textured, Pair, Discontinued
- ASPIRE IW6-W-T - Aspire® 6.5 in. 2-Way In-Wall Speakers, White Textured, Pair, Discontinued

- ASPIRE IW8-W-T - Aspire® 8 in. 2-Way In-Wall Speakers, White Textured, Pair, Discontinued
- ASPIRE IWLCR52-W-T-EACH - Aspire® In-Wall Dual 5.25" 2-Way LCR Speaker, White Textured, Single, Discontinued
- ASPIRE IWS82-W-T-EACH - Aspire® In-Wall Dual 8" Subwoofer, White Textured, Single, Discontinued
- EXCITE IW5-W-T - Excite® 5.25 in. 2-Way In-Wall Speakers, White Textured, Pair, Discontinued
- EXCITE IW6-W-T - Excite® 6.5 in. 2-Way In-Wall Speakers, White Textured, Pair, Discontinued
- EXCITE IW8-W-T - Excite® 8 in. 2-Way In-Wall Speakers, White Textured, Pair, Discontinued
- REFERENCE IW4X8-W-T-EACH - Reference 4 in. x 8 in. In-Wall Speaker
- ULTIMATE IWLCR62-W-T-EACH - Low Profile In-Wall LCR Speaker, Ultimate Series

Subwoofers

- ULTIMATE IWS82-AW-W-T-EACH - Ultimate In-Wall Dual 8 in. Subwoofer, All Weather, White Textured, Single
- ULTIMATE ICS8-W-T-EACH - 8 in., Passive In-Ceiling Subwoofer, Marine Grade All Weather
- ULTIMATE ASUB10-B-T-EACH - Ultimate 10 in. Active Subwoofer, Black Textured, Single

Landscape

- AIR IGS82T-BRZ-T-EACH - AIR® Dual 8 in. In-Ground Subwoofer, Bronze Textured, Single, Discontinued
- AIR LS4T-BRZ-T - AIR® 4 in. Landscape Speakers, Bronze Textured, Pair, Discontinued
- AIR LS6T-BRZ-T - AIR® 6.5 in. Landscape Speakers, Bronze Textured, Pair, Discontinued
- AIR SR4 - AIR® 4 in. 2-Way Surface Mount Outdoor Speakers, Pair, Discontinued
- AIR SR6 - AIR® 6.5 in. 2-Way Surface Mount Outdoor Speakers, Pair, Discontinued
- AIR SR8 - AIR® 8 in. 2-Way Surface Mount Outdoor Speakers, Pair, Discontinued
- REFERENCE OD4-BRZ-T-EACH - Reference 4 in. 2-Way Outdoor Speaker, Bronze Textured, Single
- REFERENCE OD4.1-4-S10-BRZ-T KIT - Reference 4.1 Landscape Solution, Bronze Textured, Four 4 in. Satellites, One 10 in. Subwoofer
- ULTIMATE OD6T - 6 in. Landscape Satellite Speaker
- ULTIMATE IGS12 - 12 in. Burial Landscape Subwoofer

Unsupported Audio Devices

- CNX-PAD8 - Professional Audio Distribution Processor

Autonomic

The following Autonomic devices work with Crestron Home OS.

- MMS-1E - Single Source Music Streamer
- MMS-3E - Three Source Music Streamer
- MMS-5E - Five Source Music Streamer
- MMS-2A - Two Source Mirage Audio Server
- MMS-5A - Five Source Mirage Audio Server
- M3 - M3 Music Server
- M5-PRO-1TB - M5 Pro Music Server

Sonos Speakers and Amplifiers

Current Sonos® devices work with Crestron Home OS.

Cameras

The following cameras work with Crestron Home OS.

For a list of camera features and settings that have been confirmed to function properly within a Crestron Home OS system, refer to Camera Compatibility Specifications on page 65.

> **NOTE:** To view h.265 on iOS devices, use an iPhone 7/7 Plus, iPad (6th generation), iPad Air (3rd generation), iPad mini (5th generation), iPad Pro (10.5/11 inch), or iPad Pro 12.9-inch (2nd generation) or later that is running iOS 11 or later. For details, refer to Using HEIF or HEVC media on Apple devices.

Axis Cameras

The following Axis cameras work with Crestron Home OS.

- M1065-L - Full-Featured HDTV 1080p Camera with PoE and Edge Storage
- M3045-V - HDTV 1080p fixed mini dome with HDMI
- M4206-V - Varifocal Mini Dome with HDMI® Output
- M5065 - Palm-sized PTZ camera with 5x optical zoom and Wireless I/O
- P3225-LV Mk II - Streamlined HDTV 1080p Fixed Dome for any Light Conditions
- P3245-V - Streamlined HDTV 1080p fixed dome

Axis cameras that use the same firmware as the tested camera models are also compatible. For a complete list, refer to the webpage Works with Crestron Home - Cameras.

Bosch Cameras

The following Bosch cameras work with Crestron Home OS.

- NDI-5503 - FLEXIDOME IP Starlight 5000i IR

Dahua Cameras

The following Dahua cameras work with Crestron Home OS.

- 22204UENI - 2MP 4x Mini PTZ
- 1A404XBNR - 4MP Starlight Mini Network PTZ with Analytics+
- N82AL32 - 8MP 2.8mm Starlight Dome
- N45DJ62 - 4MP IR Eyeball Starlight+ 2.8mm ePoE Network Camera
- IPC-HDW3449TM-AS-LED - 4MP Full-color Warm LED Fixed-focal Eyeball WizSense Network Camera
- 5A445XANR - 4MP 45x IR Starlight PTZ Network Camera with Smart Motion Detection

Digital Watchdog Cameras

The following Digital Watchdog® cameras work with Crestron Home OS.

- DWC-MVA2WiAT - MEGApix® 2.1MP/1080P VANDAL BALL IP CAMERA
- DWC-MV72Wi28ATW - MEGApix® 2.1MP/1080P ULTRA LOW-PROFILE VANDAL DOME IP CAMERA
- DWC-MVA5Wi28T - MEGApix® 5MP VANDAL BALL IP CAMERA

Hikvision Cameras

The following Hikvision cameras work with Crestron Home OS.

- DS-2CD2743G1-IZS - 4 MP Outdoor IR Varifocal Dome Camera
- DS-2CD2E20F-W - Recessed Mount Dome IP camera 2MP, 2.8 mm (106°) fixed lens, Wi-Fi Communication
- DS-2CD5146G0-IZS - 4MP DarkFighter Indoor Moto Varifocal Dome Network Camera
- DS-2DE2204IW-DE3 - 2 MP Indoor 4x Network IR PTZ Camera

  > **NOTE:** A momentary flash may be seen when entering the stream view.

- DS-2DF6A236X-AEL - 6 in. 2 MP 36X DarkFighter Network Speed Dome
- DS-2CD2745FWD-IZS - 4 MP Powered-by-DarkFighter Varifocal Dome Network Camera
- DS-2DE2A404IW-DE3 - 2-inch 4 MP 4X Powered by DarkFighter IR Network Speed Dome
- DS-2CD2645G1-IZS - 4 MP Powered-by-DarkFighter Varifocal Bullet Network Camera

Hikvision cameras that use the same firmware as the tested camera models are also compatible. For a complete list, refer to the webpage Works with Crestron Home - Cameras.

IC Realtime Cameras

The following IC Realtime cameras work with Crestron Home OS.

- ICIP-P2012T - 2MP 12x Starlight PTZ Network Camera

  > **NOTE:** Allows up to three simultaneous connections.

- ICR-D4732Z - 4MP WDR IR Dome Network Camera
- IPEL-E80F-IRW1 - 8MP IR Eyeball Network Camera
- IPFX-B20V-IRW1 - 2MP IR Bullet Network Camera
- IPMX-D20F-IRW1 - 2MP IP Indoor/Outdoor Small Size Vandal Dome
- IPFX-D40V-IRW1 - 4MP IP Indoor/Outdoor Mid Size Vandal Dome

IC Realtime cameras that use the same firmware as the tested camera models are also compatible. For a complete list, refer to the webpage Works with Crestron Home - Cameras.

Illumivue Cameras

The following Illumivue cameras work with Crestron Home OS.

- IP8B-NL - 8MP IP Bullet Camera with NightLight
- IP5PTZ-NL - 5MP IP PTZ Camera with NightLight and NightColor
- IP5VD-NC - 5MP Vandal Dome Camera with NightColor
- IP4MVD-NC - IP Vandal Mini Dome Camera with NightColor
- IP5T-NL - IP Turret with NightLight Camera
- IP4T-NC - 4MP IP Turret camera with NightColor

Lilin Cameras

The following Lilin cameras work with Crestron Home OS.

- MR652B - 1080P Day & Night Fixed IR Vandal Resistant IP Dome Camera
- MR6822E2 - 1080P Day & Night Fixed IR IP Mini Dome Camera
- PZD6422EX3 - 3X Day & Night 1080P HD Vandal Resistant Mini Fast Dome IP Camera
- SD2222E2 - 1080P Fixed IP Dome Camera
- Z2R6522X - 1080P Day & Night Auto Focus IR Vandal Resistant IP Dome Camera
- Z2R8052EX25 - 5MP Day & Night Vari-Focal IR Vandal Resistant IP Bullet Camera
- Z3R6522X - 1080P Day & Night Auto Focus IR Vandal Resistant Dome IP Camera
- ZHR6482EX2 - 4K Day & Night Auto Focus IR Vandal Resistant IP Dome Camera
- ZMR8442X - 4MP Day & Night Auto Focus IR Vandal Resistant IP Bullet Camera

SnapAV Cameras

The following SnapAV cameras work with Crestron Home OS.

- VI-M-4340-VT - Visualint™ 4MP IP Dome Outdoor Camera with Motorized Lens + Virtual Technician

  > **NOTE:** Add the camera manually to allow snapshot to work. Use the following URI format: http://<IP addres of camera>/ snapshot.jpg?user=<username>&pwd=<password>&strm=0

- LUM-500-FISH-IP-WH - Luma Surveillance™ 500 Series Fisheye IP Outdoor Camera

  > **NOTE:** Set configuration to use Fish Cam and 1 PTZ cam in order for snapshot preview to work. There will be a 10+ second delay before stream appears.

- LUM-510-DOM-IP-WH - Luma Surveillance™ 510 Series Dome IP Outdoor Camera

SnapAV cameras that use the same firmware as the tested camera models are also compatible. For a complete list, refer to the webpage Works with Crestron Home - Cameras.

Uniview Cameras

The following Uniview cameras work with Crestron Home OS.

- IPC6322LR-X22-C - 22X IR Network PTZ Dome Camera
- IPC3615SB-ADF28KM-I0 - 5MP HD LightHunter IR Fixed Eyeball Network Camera
- IPC2225SE-DF40K-WL-10 - 5MP HD Intelligent ColorHunter Fixed Bullet Network Camera
- IPC3615ER3-ADUPF28M - 5MP WDR LightHunter Network IR Fixed Dome Camera
- IPC2128SB-ADF28KMC-10 - 8MP HD Intelligent Light and Audible Warning Fixed Bullet Network Camera

Uniview cameras that use the same firmware as the tested camera models are also compatible. For a complete list, refer to the webpage Works with Crestron Home - Cameras.

Camera Compatibility Specifications

The following features and settings have been confirmed to function properly within a Crestron Home system.

NOTE: To view h.265 on iOS devices, use an iPhone 7/7 Plus, iPad (6th generation), iPad Air (3rd generation), iPad mini (5th generation), iPad Pro (10.5/11 inch), or iPad Pro 12.9-inch (2nd generation) or later that is running iOS 11 or later. For details, refer to Using HEIF or HEVC media on Apple devices.

Axis Cameras

Axis Camera Specifications

User Interface Device	Specifications				
	Model	M1065-L	M3045-V	P3245-V	M5065 Z-WAVE
	Firmware	8.40.1.1	8.40.1.1	9.25.1	6.53.2.2
iOS Device	Codec	H264	H264	H264	H264
	Snapshot	✓	✓	✓	✓
	Audio	N/A	N/A	N/A	N/A
	PTZ	✓	N/A	N/A	N/A
	Resolution (max)	1080p	1080p	1080p	1080p
	FPS (max)	60	60	60	60
Android Device	Codec	H264	H264	H264	H264
	Snapshot	✓	✓	✓	✓
	Audio	N/A	N/A	N/A	N/A
	PTZ	N/A	N/A	N/A	✓
	Resolution (max)	1080p	1080p	1080p	1080p
	FPS (max)	60	60	60	60

Axis Camera Specifications

User Interface Device	Specifications				
	Model	M1065-L	M3045-V	P3245-V	M5065 Z-WAVE
	Firmware	8.40.1.1	8.40.1.1	9.25.1	6.53.2.2
TSW-XX60 Series Touch Screen	Codec	H264	H264	H264	H264
	Snapshot	✓	✓	✓	✓
	Audio	N/A	N/A	N/A	N/A
	PTZ	N/A	N/A	N/A	✓
	Resolution (max)	1080p	1080p	1080p	1080p
	FPS (max)	60	60	60	60
TSW-XX70 Series Touch Screen	Codec	H264	H264	H264	H264
	Snapshot	✓	✓	✓	✓
	Audio	N/A	N/A	N/A	N/A
	PTZ	N/A	N/A	N/A	✓
	Resolution (max)	1080p	1080p	1080p	1080p
	FPS (max)	60	60	60	60

Bosch Cameras

Bosch Camera Specifications

User Interface Device	Specifications	
	Model	FLEXIDOME IP Starlight 5000i IR (NDI-5503)
	Firmware	6.41.0037 (37500641)
iOS Device	Codec	H264/H265
	Snapshot	✔
	Audio	✘
	PTZ	✘
	Resolution (max)	1080p
	FPS (max)	60
Android Device	Codec	H264/H265
	Snapshot	✔
	Audio	✘
	PTZ	✘
	Resolution (max)	1080p
	FPS (max)	60
TSW-XX60 Series Touch Screen	Codec	H264
	Snapshot	✔
	Audio	✘
	PTZ	✘
	Resolution (max)	1080p
	FPS (max)	60

Bosch Camera Specifications

User Interface Device	Specifications	
	Model	FLEXIDOME IP Starlight 5000i IR (NDI-5503)
	Firmware	6.41.0037 (37500641)
TSW-XX70 Series Touch Screen	Codec	H264/H265
	Snapshot	✔
	Audio	✘
	PTZ	✘
	Resolution (max)	1080p
	FPS (max)	60

Digital Watchdog Cameras

Digital Watchdog Camera Specifications

User Interface Device	Specifications			
	Model	DWC-MVA2WiAT	DWC-MV72Wi28ATW	DWC-MVA5Wi28T
	Firmware	A7.02.01._20191213	A7.02.01_20200421	A13.02.01_20200413
iOS Device	Codec	H264/H265	H264/H265	H264/H265
	Snapshot	✔	✔	✔
	Audio	✘	✘	✘
	PTZ	✘	✘	✘
	Resolution (max)	1080p	1080p	1080p
	FPS (max)	60	60	60

Digital Watchdog Camera Specifications

User Interface Device	Specifications			
	Model	DWC-MVA2WiAT	DWC-MV72Wi28ATW	DWC-MVA5Wi28T
	Firmware	A7.02.01._20191213	A7.02.01_20200421	A13.02.01_20200413
Android Device	Codec	H264/H265	H264/H265	H264/H265
	Snapshot	✓	✓	✓
	Audio	✗	✗	✗
	PTZ	✗	✗	✗
	Resolution (max)	1080p	1080p	1080p
	FPS (max)	60	60	60
TSW-XX60 Series Touch Screen	Codec	H264	H264	H264
	Snapshot	✓	✓	✓
	Audio	✗	✗	✗
	PTZ	✗	✗	✗
	Resolution (max)	1080p	1080p	1080p
	FPS (max)	60	60	60
TSW-XX70 Series Touch Screen	Codec	H264/H265	H264/H265	H264/H265
	Snapshot	✓	✓	✓
	Audio	✗	✗	✗
	PTZ	✗	✗	✗
	Resolution (max)	1080p	1080p	1080p
	FPS (max)	60	60	60

Dahua Cameras

Dahua Camera Specifications

User Interface Device	Specifications						
	Model	22204UENI	1A404XBNR	N82AL32	N45DJ62	IPC-HDW3449TM-AS-LED	5A445XANR
	Firmware	v2.800.0000000.5.R	V2.810.0000001.3.R	V2.800.0000000.16.R	V2.800.0000000.19.R	V2.800.0000000.8.R	V2.800.0000009.3.R
iOS Device	Codec	H264	H264/H265	H264/H265	H264/H265	H264/H265	H264/H265
	Snapshot	✓	✓	✓	✓	✓	✓
	Audio	✗	✓	✗	✓	✓	✗
	PTZ	✓	✓	✗	✗	✗	✓
	Resolution (max)	1080p	1080p	1080p	1080p	1080p	1080p
	FPS (max)	60	60	60	60	60	60
Android Device	Codec	H264	H264/H265	H264/H265	H264/H265	H264/H265	H264/H265
	Snapshot	✓	✓	✓	✓	✓	✓
	Audio	✗	✓	✗	✓	✓	✗
	PTZ	✓	✓	✗	✗	✗	✓
	Resolution (max)	1080p	1080p	1080p	1080p	1080p	1080p
	FPS (max)	60	60	60	60	60	60

Dahua Camera Specifications

User Interface Device	Specifications						
	Model	22204UENI	1A404XBNR	N82AL32	N45DJ62	IPC-HDW3449TM-AS-LED	5A445XANR
	Firmware	v2.800.0000000.5.R	V2.810.0000001.3.R	V2.800.0000000.16.R	V2.800.0000000.19.R	V2.800.0000000.8.R	V2.800.0000009.3.R
TSW-XX60 Series Touch Screen	Codec	H264	H264	H264	H264	H264	H264
	Snapshot	✓	✓	✓	✓	✓	✗
	Audio	✗	✓	✗	✓	✓	✗
	PTZ	✓	✓	✗	✗	✗	✓
	Resolution (max)	1080p	1080p	1080p	1080p	1080p	1080p
	FPS (max)	60	60	60	60	60	60
TSW-XX70 Series Touch Screen	Codec	H264	H264/H265	H264/H265	H264/H265	H264/H265	H264/H265
	Snapshot	✓	✓	✓	✓	✓	✓
	Audio	✗	✓	✗	✓	✓	✗
	PTZ	✓	✓	✗	✗	✗	✓
	Resolution (max)	1080p	1080p	1080p	1080p	1080p	1080p
	FPS (max)	60	60	60	60	60	60

Hikvision Cameras

Hikvision Camera Specifications

User Interface Device	Specifications					
	Model	DS-2DF6A236X-AEL	DS-2CD5146G0-IZS	DS-2CD2745FWD-IZS	DS-2DE2A404IW-DE3	DS-2CD2645G1-IZS
	Firmware	V5.6.0 build 190130	V5.591 build 181128	V5.6.2build 190701	V5.5.6build 180529	V5.6.2build 190701
iOS Device	Codec	H264(H265)	H264(H265)	H264(H265)	H264(H265)	H264(H265)
	Snapshot	✓	✓	✓	✓	✓
	Audio	✗ Audio not tested	✗ Audio not tested	✗	✗	✗
	PTZ	✓	Zoom Only	N/A	✓	N/A
	Resolution (max)	1080p	1080p	1080p	1080p	1080p
	FPS (max)	60	60	60	60	60
Android Device	Codec	H264(H265)	H265	H265	H265	H265
	Snapshot	✓	✓	✓	✓	✓
	Audio	✗ Audio not tested	✗ Audio not tested	✗	✗	✗
	PTZ	✓	Zoom Only	N/A	✓	N/A
	Resolution (max)	1080p	1080p	1080p	1080p	1080p
	FPS (max)	60	60	60	60	60

Hikvision Camera Specifications

User Interface Device	Specifications					
	Model	DS-2DF6A236X-AEL	DS-2CD5146G0-IZS	DS-2CD2745FWD-IZS	DS-2DE2A404IW-DE3	DS-2CD2645G1-IZS
	Firmware	V5.6.0 build 190130	V5.591 build 181128	V5.6.2build 190701	V5.5.6build 180529	V5.6.2build 190701
TSW-XX60 Series Touch Screen	Codec	H264	H264	H264	H264	H264
	Snapshot	✓	✓	✓	✓	✓
	Audio	✗ Audio not tested	✗ Audio not tested	✗	✗	✗
	PTZ	✓	Zoom Only	N/A	✓	N/A
	Resolution (max)	1080p	1080p	1080p	1080p	1080p
	FPS (max)	60	60	60	60	60
TSW-XX70 Series Touch Screen	Codec	H265	H265	H265	H265	H265
	Snapshot	✓	✓	✓	✓	✓
	Audio	✗ Audio not tested	✗ Audio not tested	✓	✓	✓
	PTZ	✓	Zoom Only	N/A	✓	N/A
	Resolution (max)	1080p	1080p	1080p	1080p	1080p
	FPS (max)	60	60	60	60	60

IC Realtime Cameras

IC Realtime Camera Specifications

User Interface Device	Specifications				
	Model	IPFX-B20V-IRW1	IPEL-E80F-IRW1	IPMX-D20F-IRW1	IPFX-D40V-IRW1
	Firmware	V2.800.00KL000.0.R	V2.800.00KL005.0.R	V2.800.00KL005.0.R	V2.800.00KL005.0.R
iOS Device	Codec	H265	H265	H265	H265
	Snapshot	✓	✓	✓	✓
	Audio	✓ Audio heard via Line In	✗	✓ Audio heard via Line In	✗
	PTZ	N/A	N/A	N/A	N/A
	Resolution (max)	1080p	1080p	1080p	1080p
	FPS (max)	60	60	60	60
Android Device	Codec	H265	H265	H265	H265
	Snapshot	✓	✓	✓	✓
	Audio	✓ Audio heard via Line In	✗	✓ Audio heard via Line In	✗
	PTZ	N/A	N/A	N/A	N/A
	Resolution (max)	1080p	1080p	1080p	1080p
	FPS (max)	60	60	60	60
TSW-XX60 Series Touch Screen	Codec	H264	H264	H264	H264
	Snapshot	✓	✓	✓	✓
	Audio	✓ Audio heard via Line In	✗	✓ Audio heard via Line In	✗
	PTZ	N/A	N/A	N/A	N/A
	Resolution (max)	1080p	1080p	1080p	1080p
	FPS (max)	60	60	60	60

IC Realtime Camera Specifications

User Interface Device	Specifications				
	Model	IPFX-B20V-IRW1	IPEL-E80F-IRW1	IPMX-D20F-IRW1	IPFX-D40V-IRW1
	Firmware	V2.800.00KL000.0.R	V2.800.00KL005.0.R	V2.800.00KL005.0.R	V2.800.00KL005.0.R
TSW-XX70 Series Touch Screen	Codec	H265	H265	H265	H265
	Snapshot	✓	✓	✓	✓
	Audio	✓ Line In	✗	✓ Line In	✗
	PTZ	N/A	N/A	N/A	N/A
	Resolution (max)	1080p	1080p	1080p	1080p
	FPS (max)	60	60	60	60

Illumivue Cameras

Illumivue by Mstr™ Camera Specifications

User Interface Device	Specifications						
	Model	IP8B-NL	IP5PTZ-NL	IP5VD-NC	IP4MVD-NC	IP5T-NL	IP4T-NC
	Firmware	GIPC-B6203.3.95.NB.220418	GIPC-B6203.3.95.NB.220418	GIPC-B6203.3.95.NB.220418	GIPC-B6203.3.95.NB.220418	GIPC-B6203.3.95.NB.220418	GIPC-B6203.3.95.NB.220418
iOS Device	Codec	H264/H265	H264/H265	H264/H265	H264/H265	H264/H265	H264/H265
	Snapshot	✓	✓	✓	✓	✓	✓
	Audio	✓	✓	✓	✓	✓	✓
	PTZ	✗	✓	✗	✗	✗	✗
	Resolution (max)	1080p	1080p	1080p	1080p	1080p	1080p
	FPS (max)	60	60	60	60	60	60
Android Device	Codec	H264/H265	H264/H265	H264/H265	H264/H265	H264/H265	H264/H265
	Snapshot	✓	✓	✓	✓	✓	✓
	Audio	✓	✓	✓	✓	✓	✓
	PTZ	✗	✓	✗	✗	✗	✗
	Resolution (max)	1080p	1080p	1080p	1080p	1080p	1080p
	FPS (max)	60	60	60	60	60	60

Illumivue by Mstr™ Camera Specifications

User Interface Device	Specifications						
	Model	IP8B-NL	IP5PTZ-NL	IP5VD-NC	IP4MVD-NC	IP5T-NL	IP4T-NC
	Firmware	GIPC-B6203.3.95.NB.220418	GIPC-B6203.3.95.NB.220418	GIPC-B6203.3.95.NB.220418	GIPC-B6203.3.95.NB.220418	GIPC-B6203.3.95.NB.220418	GIPC-B6203.3.95.NB.220418
TSW-XX60 Series Touch Screen	Codec	H264	H264	H264	H264	H264	H264
	Snapshot	✓	✓	✓	✓	✓	✓
	Audio	✓	✓	✓	✓	✓	✓
	PTZ	✗	✓	✗	✗	✗	✗
	Resolution (max)	1080p	1080p	1080p	1080p	1080p	1080p
	FPS (max)	60	60	60	60	60	60
TSW-XX70 Series Touch Screen	Codec	H264/H265	H264/H265	H264/H265	H264/H265	H264/H265	H264/H265
	Snapshot	✓	✓	✓	✓	✓	✓
	Audio	✓	✓	✓	✓	✓	✓
	PTZ	✗	✓	✗	✗	✗	✗
	Resolution (max)	1080p	1080p	1080p	1080p	1080p	1080p
	FPS (max)	60	60	60	60	60	60

Lilin Cameras

Lilin Camera Specifications

User Interface Device	Specifications								
	Model	ZHR6482EX2	SD2222E2	PZD6422EX3	MR652B	MR6822E2	ZMR8442X	Z2R6522X	Z2R8052EX25	Z3R6522X
	Firmware	2.7.92.8249a	2.7.92.8113a	4.2.94.7403	4.2.92.7137a	4.2.92.7137	5.2.92.7137a	7.1.94.7953	7.1.94.7863	8.1.94.9737
iOS Device	Codec	H264	H264	H264	H264	H264	H264	H264 (H265)	H264(H265)	H264/H265
	Snapshot	✓	✓	✓	✓	✓	✓	✓	✓	✓
	Audio	✗	✓	✗	✗	✓	✗	✗	✓	✗
	PTZ	N/A	N/A	✓	N/A	N/A	N/A	N/A	N/A	✓
	Resolution (max)	1080p	1080p	1080p	1080p	1080p	1080p	1080p	1080p	1080p
	FPS (max)	60	60	60	60	60	60	60	60	60
Android Device	Codec	H264	H264	H264	H264	H264	H264	H265	H265	H264/H265
	Snapshot	✗	✓	✗	✗	✓	✗	✓	✓	✓
	Audio	N/A	N/A	✓	N/A	N/A	N/A	✗	✓	✗
	PTZ	✗	✓	✗	✗	✓	✗	N/A	N/A	✓
	Resolution (max)	1080p	1080p	1080p	1080p	1080p	1080p	1080p	1080p	1080p
	FPS (max)	60	60	60	60	60	60	60	60	60

Lilin Camera Specifications

User Interface Device	Specifications									
	Model	ZHR6482EX2	SD2222E2	PZD6422EX3	MR652B	MR6822E2	ZMR8442X	Z2R6522X	Z2R8052EX25	Z3R6522X
	Firmware	2.7.92.8249a	2.7.92.8113a	4.2.94.7403	4.2.92.7137a	4.2.92.7137	5.2.92.7137a	7.1.94.7953	7.1.94.7863	8.1.94.9737
TSW-XX60 Series Touch Screen	Codec	H264	H264	H264	H264	H264	H264	H264	H264	H264
	Snapshot	✗	✓	✗	✗	✓	✗	✓	✓	✓
	Audio	N/A	N/A	✓	N/A	N/A	N/A	✗	✓	✗
	PTZ	✗	✓	✗	✗	✓	✗	N/A	N/A	✓
	Resolution (max)	1080p	1080p	1080p	1080p	1080p	1080p	1080p	1080p	1080p
	FPS (max)	60	60	60	60	60	60	60	60	60
TSW-XX70 Series Touch Screen	Codec	H264	H264	H264	H264	H264	H264	H265	H265	H264/H265
	Snapshot	✗	✓	✗	✗	✓	✗	✓	✓	✓
	Audio	N/A	N/A	✓	N/A	N/A	N/A	✓	✓	✗
	PTZ	✗	✓	✗	✗	✓	✗	N/A	N/A	✓
	Resolution (max)	1080p	1080p	1080p	1080p	1080p	1080p	1080p	1080p	1080p
	FPS (max)	60	60	60	60	60	60	60	60	60

Uniview Cameras

Uniview Camera Specifications

User Interface Device	Specifications						
	Model	IPC6322LR-X22-C	IPC3615SB-ADF28KM-I0	IPC2225SE-DF40K-WL-10	IPC675LFW-AX4DUPKC-VG	IPC3615ER3-ADUPF28M	IPC2128SB-ADF28KMC-10
	Firmware	IPC_HCMN 2108-B0011P20D1904	IPC_G6202-B0001P75D1911	GIPC-B6202.2.97.210508	GIPC-B6202.2.68.210111	GIPC-B6202.2.97.210508	IPC_G6203-B0001P98D1911
iOS Device	Codec	H264	H264/H265	H264/H265	H264/H265	H264/H265	H264/H265
	Snapshot	✓	✓	✓	✓	✓	✓
	Audio	✗	✗	✗	✗	✗	✗
	PTZ	✓	✗	✗	✓	✗	✗
	Resolution (max)	1080p	1080p	1080p	1080p	1080p	1080p
	FPS (max)	60	60	60	60	60	60
Android Device	Codec	H264	H264/H265	H264/H265	H264/H265	H264/H265	H264/H265
	Snapshot	✓	✓	✓	✓	✓	✓
	Audio	✗	✗	✗	✗	✗	✗
	PTZ	✓	✗	✗	✓	✗	✗
	Resolution (max)	1080p	1080p	1080p	1080p	1080p	1080p
	FPS (max)	60	60	60	60	60	60

Uniview Camera Specifications

User Interface Device	Specifications						
	Model	IPC6322LR-X22-C	IPC3615SB-ADF28KM-I0	IPC2225SE-DF40K-WL-10	IPC675LFW-AX4DUPKC-VG	IPC3615ER3-ADUPF28M	IPC2128SB-ADF28KMC-10
	Firmware	IPC_HCMN 2108-B0011P20D1904	IPC_G6202-B0001P75D1911	GIPC-B6202.2.97.210508	GIPC-B6202.2.68.210111	GIPC-B6202.2.97.210508	IPC_G6203-B0001P98D1911
TSW-XX60 Series Touch Screen	Codec	H264	H264	H264	H264	H264	H264
	Snapshot	✓	✓	✓	✓	✓	✓
	Audio	✗	✗	✗	✗	✗	✗
	PTZ	✓	✗	✗	✓	✗	✗
	Resolution (max)	1080p	1080p	1080p	1080p	1080p	1080p
	FPS (max)	60	60	60	60	60	60
TSW-XX70 Series Touch Screen	Codec	H264	H264/H265	H264/H265	H264/H265	H264/H265	H264/H265
	Snapshot	✓	✓	✓	✓	✓	✓
	Audio	✗	✗	✗	✗	✗	✗
	PTZ	✓	✗	✗	✓	✗	✗
	Resolution (max)	1080p	1080p	1080p	1080p	1080p	1080p
	FPS (max)	60	60	60	60	60	60

Climate Control

The following climate control devices work with Crestron Home OS.

Crestron

The following Crestron® climate control devices work with Crestron Home OS.

- C2N-RTHS - Cresnet Remote Temperature and Relative Humidity Sensor
- CHV-THSTAT - Heating, Cooling and Relative Humidity Thermostat, Discontinued
- CHV-TSTAT-FCU-PIR-10 - 0-10V Heating/Cooling Fan-Coil Thermostat
- CHV-TSTAT-FCU - Heating/Cooling Fan-Coil Thermostat
- CHV-TSTAT - Heating and Cooling Thermostat, Discontinued
- CHV-TSTATEX-FCU - infiNET EX® Wireless Thermostat, Fan Coil Unit
- CHV-TSTATEX - infiNET EX® Wireless Thermostat, Discontinued
- DIN-1TSTAT8 - 8-Zone Radiant Heat Thermostat, DIN Rail Mount
- DIN-THSTAT - Heating, Cooling, and Relative Humidity Thermostat, DIN Rail Mount
- DIN-TSTAT-FCU - DIN Rail Heating & Cooling Fan-Coil Thermostat
- HZ-THSTAT - Horizon® Wireless Thermostat

Cool Automation

The following Cool Automation climate control devices work with Crestron Home OS.

> **NOTE:** BACnet over IP allows control and feedback of BACnet enabled HVAC systems.

- CoolMasterNet - Universal HVAC Bridge

Control Systems

The following control systems work with Crestron Home OS.

- CP4-R - 4-Series™ Control Processor for Crestron Home® OS, for Mid-sized to Large Homes
- DIN-AP4-R - 4-Series™ DIN Rail Control Processor for Crestron Home® OS, for Small to Mid-sized Homes
- MC4-R - 4-Series™ Control Processor for Crestron Home® OS, for Small to Mid-sized Homes
- PC4-R - PC Control Processor for Crestron Home® OS, for Small, Mid-sized, and Large Homes

Drivers

The following driver device types work with Crestron Home OS.

Crestron Drivers

The following Crestron Driver types work with Crestron Home OS.

Type	Description
AV Receiver	Home theater AVR, surround sound processor
AV Switcher	HDMI® switcher, Multizone amplifier
Bluray Player	Blu-ray Disc™ player, DVD player
Cable Box	Cable box
Flat Panel Display	TV, monitor
Gate	Smart gate openers
Lights	Light bulb
Platform	A platform is a device ecosystem consisting of a gateway and paired devices. The paired devices will each define their own device type from this list.
Pool Controller	Automated pool system
Power Controller	PDU, UPS
Projector	Projector
Security System	Security system
Garage Door	Smart garage door opener
Speaker	Smart speaker, soundbar
Video Server	Media streaming device

NOTE: Crestron Connected devices are not compatible with Crestron Home systems.

Extension Drivers

The following extension driver types work with Crestron Home OS.

NOTES:

- To view the complete list of drivers, visit the Crestron Driver Portal at drivers.crestron.io.
- Version 1 MC4-R does not support third-party drivers.

Device Type	Description
Amplifier	Stereo amplifier
Appliance	Refrigerator, oven, coffee maker
Audio Conference	Audio-only conferencing system control
Audio Processor	Preamp, DAC, DSP
AV Receiver Helper	Extends an AVR to add additional functionality
Camera	Camera, PTZ camera
Custom Conferencing	Conferencing codecs that permit adding a custom UI to the conferencing system
Custom Device	Generic devices (such as a generic HTTP request)
Date-Time	Extension for calendars and clocks
Document Camera	Document camera
Door Access	RFID scanners, fingerprint scanners
Door Station	Video doorbell
Driveway Heater	Driveway heater
Energy Automation	Energy automation systems
Fan	Ceiling fan, bathroom exhaust fan
Fireplace	Fireplace
Game Console	Video game consoles
HVAC	Air conditioner, heater, dehumidifier **NOTE:** Thermostats are not of type **Hvac**. They are of type **Thermostat**.
Interactive Whiteboard	Smartboard
Intercom	SIP calling
IO Device	Device with relays, digital inputs and outputs, and so forth
iPad Dock	Docking station for iPad® device
Irrigation System	Sprinkler controller
KVM Switch	Keyboard and mouse switch
License Manager	Extension for managing driver licenses
Lift	A projector or TV lift
Lights	Light switch, light bulb
Lock	Door lock

Device Type	Description
Logic	Extension for logical operators (AND, OR, and so forth)
Masking	Projector screen masking
Media Player	Audio-only media player **NOTE:** Video media players are of native type **Video Server**.
Microphone	Microphone device
Network Switch	Ethernet switch
NVR	Network video recorder (for security cameras)
Notifications	Extension for adding notifications
Outlet	Smart outlets
Projection Screen	Projector screens
Recorder	Lecture recorder
Router	Network router
Scheduler	Extension for adding scheduling logic
Sensor	Any type of generic sensor device (temperature, humidity, motion, and so forth)
Shades	Motorized window coverings (shades, blinds, curtains, and so forth)
Shower	Smart shower
Thermostat	Smart thermostat
UI Tiles	Extension for generic user interface tiles
Utility	Extension that adds any utility (essentially a catch-all type)
Vacuum	Robotic vacuum
Vehicle	Car or truck
Video Conference	Video-based conferencing system control
Video Wall Processor	Video processor used to create video tile grids from multiple inputs (such as 2x2, 3x3, and so forth)
Weather Station	Weather reporting device

Gateways and Expanders

Crestron® Wireless Gateways and Wireless Expanders

The following Crestron® Wireless Gateways and Wireless Expanders work with Crestron Home OS.

- CEN-GWEXER - infiNET EX® Network and ER Wireless Gateway
- CEN-GWEXER-PWE - infiNET EX® Network and ER Wireless Gateway with PoE Injector
- CENI-GWEXER - infiNET EX® Network and ER Wireless Gateway - International Version
- CENI-GWEXER-PWE - infiNET EX® Network and ER Wireless Gateway with PoE Injector - International Version
- CLW-EXPEX-GD-W-T - infiNET EX® Wireless Expander, Ground Pin Down, White Textured
- CEN-GW1 - Universal Wireless Gateway, ER Wireless, SG Wireless, and infiNET EX® Wireless Gateway
- CENI-GW1 - Universal Wireless Gateway, ER Wireless, SG Wireless, and infiNET EX® Wireless Gateway, International Version

Cresnet® Wired Hub

The following Cresnet® wired hubs work with Crestron Home OS.

- CSA-PWS10S-HUB - 10-Motor Power Supply and Cresnet® Network Hub, Discontinued
- CSA-PWS10S-HUB-ENET - 10-Motor Power Supply with Ethernet to Cresnet® Network Bridge and Cresnet Hub
- CAEN-BLOCK-CENCN-2-POE - Ethernet to Cresnet® Bridge for CAEN Automation Enclosures
- DIN-CENCN-2-POE - Ethernet to Cresnet® Network Bridge with PoE
- DIN-CENCN-2 - Ethernet to Cresnet® Network Bridge, Discontinued

Lighting

The following Crestron® lighting gateways work with Crestron Home OS.

- DIN-GWDL - Digital Lighting Gateway, DIN Rail Mount

  > **NOTE:** DMX-C Crestron loads and DMF loads are not simultaneously supported on the same DIN-GWDL.

- DIN-DALI-2 - DIN Rail 2-Channel DALI® Interface, Discontinued
- DIN-DLI: DALI® Interface, DIN Rail Mount

Lutron Gateways

The following Lutron® gateways work with Crestron Home OS.

Control Lutron load types, including switched, dimming, shades, and fans from within the Crestron Home user interface.

- HomeWorks QS - HomeWorks QS 1-Link Processor (HQP6-1)
- HomeWorks QS - HomeWorks QS 2-Link Processor (HQP6-2)
- RA2 Select - RA2 Select Main Repeater (RR-SEL-REP2)
- RadioRA 2 - RadioRA 2 Main Repeater (RR-MAIN-REP)
- RadioRA 3 - RadioRA 3 All-in-One Processor (RR-PROC3)

Lutron with Ketra Lighting

Control Lutron load types, including switched, dimming, Lumaris® lighting, Ketra® lighting, shades, and fans from within the Crestron Home user interface.

- HomeWorks QSX - HomeWorks QSX 1-Link Processor (HQP7-1)
- HomeWorks QSX - HomeWorks QSX 2-Link Processor (HQP7-2)
- Philips Hue

I/O Expanders

The following I/O expansion devices work with Crestron Home OS.

Modules

- C2N-IO - Control Port Expansion Module
- CEN-IO-COM-102 - Wired Ethernet Module with 2 COM Ports
- CEN-IO-COM-202 - Wireless Ethernet Module with 2 COM Ports
- CEN-IO-DIGIN-104 - Wired Ethernet Module with 4 Digital Inputs
- CEN-IO-DIGIN-204 - Wireless Ethernet Module with 4 Digital Inputs
- CEN-IO-IR-104 - Wired Ethernet Module with 4 IR Ports
- CEN-IO-IR-204 - Wireless Ethernet Module with 4 IR Ports
- CEN-IO-RY-104 - Wired Ethernet Module with 4 Relay Ports
- CEN-IO-RY-204 - Wireless Ethernet Module with 4 Relay Ports
- GLS-SIM - Crestron Green Light® Sensor Integration Module
- INET-IOEX-IRCOM - infiNET EX® Wireless IR/RS-232 Control Module
- INET-IOEX-RYIO - infiNET EX® Wireless Relay/Digital Input Control Module

Control Cards and Interfaces

The following control card and interface devices work with Crestron Home OS.

Control Card Interface

- CEN-CI3-1 - 3-Series® Control Processor Card Interface – 1 Slot, Discontinued
- CEN-CI3-1-POE - 3-Series® Control Processor Card Interface – 1 Slot, with PoE Injector
- CEN-CI3-3 - 3-Series® Control Processor Card Interface – 3 Slot

Control Card

- C3COM-3 - 3-Series® Control Card – 3 COM Ports
- C3IO-16 - 3-Series® Control Card – 16 Versiport I/O Port
- C3IR-8 - 3-Series® Control Card – 8 IR Ports
- C3RY-16 - 3-Series® Control Card – 16 Relay Ports
- C3RY-8 - 3-Series® Control Card – 8 Relay Ports

Axxess Industries Devices

The following Axxess Industries devices work with Crestron Home OS.

- CCMD-4.2-CRZB-MG-1
- CCMD-4.3-CRZB-MG-1
- GRM-4.2-QT-CRZB-MG-1

- GRM-4.3-QT-CRZB-MG-1
- HCM-4.2-CRZB-MG-1
- HCM-4.2-CRZB-MG-1
- HCMCM-4.2-CRZB-MG-1
- HCMCM-4.3-CRZB-MG-1
- WCT-PIC-CRZB-MG-1
- ADA-HCM-WALL-CRZB-MG-1

Intercoms

The following intercom devices work with Crestron Home OS.

2N Video Intercom Door Stations

The following 2N® video intercom door station devices work with Crestron Home OS.

- IP Audio Kit
- IP Audio Kit Lite
- IP Base
- IP Force
- IP One
- IP Safety
- IP Solo
- IP Style
- IP Uni
- IP Vario
- IP Verso
- IP Video Kit

CAME Door Stations

The following CAME door station devices work with Crestron Home OS.

- DVC/IP - Video Intercom Entry Panel for IP360 Systems
- MTMV/IP - Intercom Video Modules for IP360 Systems

AVLINKPRO Intercom Bridge

The following AVLINKPRO™ intercom bridge devices work with Crestron Home OS.

- CH-100 - AVLINKPRO Micro SIP CH-100
- LP-200 - AVLINKPRO Scout Ranger 200

Keypads

The following keypad devices work with Crestron Home OS.

Crestron Keypads

The following Crestron® keypad devices work with Crestron Home OS.

Wired

- C2N-CBD-E - Cameo® Express Keypad, Standard Mount
- C2N-CBD-P - Cameo® Keypad, Standard Mount
- C2N-CBF-P - Cameo® Keypad, Flush Mount
- C2N-UNI8IO - Universal Keypad Interface
- C2NI-CB - Cameo® Keypad - International Version
- CLWI-KPLCN - In-Wall Keypad, Cresnet
- CLWI-KPLEX - In-Wall Wireless Keypad, 230VAC
- CNX-B12 - Designer Keypad, 12-Buttons, Discontinued
- CNX-B8 - Designer Keypad, 8-Buttons, Discontinued
- CNX-B6 - Designer Keypad, 6-Buttons, Discontinued
- CNX-B4 - Designer Keypad, 4-Buttons, Discontinued
- CNX-B2 - Designer Keypad, 2-Buttons, Discontinued
- HZ2-AUX - Horizon® 2 In-Wall Multiway Remote, Standard Engraved
- HZ2-AUX ENGRAVED - Horizon® 2 In-Wall Multiway Remote, Custom Engraved
- HZ2-KPCN- Horizon® 2 Keypad with Cresnet® Communications, Standard Engraved
- HZ2-KPCN ENGRAVED- Horizon® 2 Keypad with Cresnet® Communications, Custom Engraved
- HZ-KPCN - Horizon® Keypad, Cresnet® Network, Discontinued
- CM2-KPCN ENGRAVED - Cameo® 2 Keypad with Cresnet® Communications, Custom Engraved Keypad
- CM2-KPCN-W-S - Cameo® 2 Keypad with Cresnet® Communications, Standard Engraved Keypad, White Smooth

infiNET EX® Wireless

- CLWI-KPLEX-BATT - On-Wall Wireless Lighting Keypad, Battery Powered
- CLWI-KPLEX - In-Wall Wireless Keypad, 230VAC Line Powered
- CM2-KPEX ENGRAVED - Cameo® 2 In-Wall Keypad with infiNET EX® Wireless Communication, 100-240VAC, Custom Engraved
- CM2-KPEX-W-S - Cameo® 2 In-Wall Keypad with infiNET EX® Wireless Communication, 100-240VAC, Standard Engraved, White Smooth

- CM2-KPEX-RKR ENGRAVED - Cameo® 2 In-Wall Keypad with infiNET EX® Wireless Communication, 100-240VAC, Custom Engraved, Rocker Only
- CM2-KPEX-RKR-W-S - Cameo® 2 In-Wall Keypad with infiNET EX® Wireless Communication, 100-240VAC, Standard Engraved, Rocker Only, White Smooth
- HTT-B2EX-BATT - Battery-Powered infiNET EX® Wireless 2-button Wireless Keypad
- HTT-B10EX - Wireless Tabletop Keypad
- HZ2-KPEX- Horizon® 2 In-Wall Keypad with infiNET EX® Wireless Communication, 120 VAC, Standard Engraved
- HZ2-KPEX ENGRAVED-Horizon® 2 In-Wall Keypad with infiNET EX® Wireless Communication, 120 VAC, CustomEngraved
- HZ-KPEX - Horizon® In-Wall Keypad with infiNET EX® Wireless Communication, 120VAC, Discontinued
- INET-CBDEX-277-P - Cameo® Wireless Keypad, infiNET EX® Wireless, 277V, Discontinued
- INET-CBDEX-230-E - Cameo® Express Wireless Keypad, infiNET EX® Wireless, 230V, Discontinued
- INET-CBDEX-230-P - Cameo® Wireless Keypad, infiNET EX® Wireless, 230V, Discontinued
- INET-CBDEX-E - Cameo® Express Wireless Keypad, infiNET EX® Wireless, 120V, Discontinued
- INET-CBDEX-P - Cameo® Wireless Keypad, infiNET EX® Wireless, 120V

Third-Party Keypads

The following third-party keypad devices work with Crestron Home OS.

> **NOTE:** Crestron Connected® third-party keypads are supported.

Basalte Keypads

- Enzo - 2-/4-Button Keypad
- Fibonacci - 2-/4-Button Keypad
- Sentido - 2-/4-Button Keypad

Black Nova Keypads

> **Note:** Keypads with a display will show the temperature of the device's temperature sensor. The display is not configurable.

- Aria 9 - 9-Button Keypad with 9 Addressable Buttons
- Aria 12 - 12-Button Keypad with 12 Addressable Buttons
- Aria M1 - 6-Button Keypad with 6 Addressable Buttons with Temperature Display
- Aria TT - 10-Button Keypad with 6 Addressable Buttons with Temperature Display
- Alba 2 - 2-Button Keypad with 4 Addressable Buttons

- Alba 4 - 4-Button Keypad with 12 Addressable Buttons
- Alba 8 - 8-Button Keypad with 12 Addressable Buttons
- Alba M1 - 4-Button Keypad with 6 Addressable Buttons with Temperature Display

Arkadia Keypads

> **Note:** Supports Arkadia keypads that report as "Prolight" and "Prolight V2."

- Prolight - 1 to 6 Button Keypad
- Prolight v2 - 3 or 6 Button Keypad

Meljac Keypads

- One Button Keypad
- Two Button Horizontal Keypad
- Two Button Vertical Keypad
- Three Button Keypad
- Six Button Keypad

Rhombus Keypads

- 8-Button Keypad

Vitrea Keypads

- VT-G Series - 1 to 8 Button Keypad

  > **NOTE:** Use 2 keypads with double gang faceplate for up to 16 buttons.

Lighting

The following Lighting devices work with Crestron Home OS.

Crestron Lighting

The following Crestron lighting devices work with Crestron Home OS.

Crestron DALI Gateways

- DIN-DALI-2 - DIN Rail 2-Channel DALI® Interface, Discontinued
- DIN-DLI: DALI® Interface, DIN Rail Mount

Crestron DMX-C and DMF Phase X Gateway

- DIN-GWDL - Digital Lighting Gateway, DIN Rail Mount

> **NOTE:** DMX-C Crestron loads and DMF loads are not simultaneously supported on the same DIN-GWDL.

In-Wall Lighting Control

- CLC-1DIMFLV2EX-24V - Wireless In-Ceiling 0-10V Dimmer for 24VDC Applications, Discontinued
- CLC-1LEDPWM-RGBW-EX - RGBW LED Controller
- CLC-FANDELVEX - Wireless Lighting and Fan Controller
- CLCI-1DIMFLV2EX - Wireless In-Ceiling 0-10V Dimmer, 230VAC
- CLCI-1SW2EX - Wireless In-Ceiling Switch, 230VAC
- CLCI-DIMUEX - Wireless In-Ceiling Dimmer, 230VAC
- CLF-LDIMUEX-W-CORD - Wireless Lamp Dimmer with Lamp Switch Control Input, 120V
- CLF-LDIMUEX - Wireless Lamp Dimmer, 120V
- CLFI-LDIMUEX-230 - Universal Lamp Dimmer, 230VAC
- CLW-DELVEX-277-P - Cameo® Wireless In-Wall Dimmer, ELV, 277V, Discontinued
- CLW-DELVEX-230-E - Cameo® Express Wireless In-Wall Dimmer, ELV, 230V, Discontinued
- CLW-DELVEX-230-P - Cameo® Wireless In-Wall Dimmer, ELV, 230V, Discontinued
- CLW-DELVEX-E - Cameo® Express Wireless In-Wall Dimmer, ELV, 120V, Discontinued
- CLW-DELVEX-P - Cameo® Wireless In-Wall Dimmer, ELV, 120V, Discontinued
- CLW-DIMEX-277-P - Cameo® Wireless In-Wall Dimmer, 277V, Discontinued
- CLW-DIMEX-230-E - Cameo® Express Wireless In-Wall Dimmer, 230V, Discontinued
- CLW-DIMEX-230-P - Cameo® Wireless In-Wall Dimmer, 230V, Discontinued
- CLW-DIMEX-E - Cameo® Express Wireless In-Wall Dimmer, 120V, Discontinued
- CLW-DIMEX-P - Cameo® Wireless In-Wall Dimmer, 120V

- CLW-DIMFLVEX-P - In-Wall 0-10V Dimmer, 120V
- CLW-DIMSWEX-E - Cameo® Express Wireless In-Wall Dimmer/Switch Combo, 120V, Discontinued
- CLW-DIMSWEX-P - Cameo® Wireless In-Wall Dimmer/Switch Combo, 120V
- CLW-DIMUEX-P - Cameo® In-Wall Universal Phase Dimmer, 120VAC
- CLW-LDIMEX-2GD - Dual-Channel Wireless Lamp Dimmer, Ground Pin Down
- CLW-LDIMEX-1GD - Single-Channel Wireless Lamp Dimmer, Ground Pin Down
- CLW-LDIMEX-1GU - Single-Channel Wireless Lamp Dimmer, Ground Pin Up
- CLW-LSWEX-2GD - Dual-Channel Wireless Lamp Switch, Ground Pin Down
- CLW-LSWEX-1GD - Single-Channel Wireless Lamp Switch, Ground Pin Down
- CLW-LSWEX-1GU - Single-Channel Wireless Lamp Switch, Ground Pin Up
- CLW-SLVU-230-P - Cameo® In-Wall Remote Dimmer, 230V
- CLW-SLVU-P - Cameo® In-Wall Remote Dimmer, 120V
- CLW-SWEX-277-P - Cameo® Wireless In-Wall Switch, 277V, Discontinued
- CLW-SWEX-230-E - Cameo® Express Wireless In-Wall Switch, 230V, Discontinued
- CLW-SWEX-230-P - Cameo® Wireless In-Wall Switch, 230V
- CLW-SWEX-E - Cameo® Express Wireless In-Wall Switch, 120V, Discontinued
- CLW-SWEX-P - Cameo® Wireless In-Wall Switch, 120V
- CLWI-1SW2EX - In-Wall 2-Channel Switch, 230VAC
- CLWI-DIMFLVEX - In-Wall 0-10V Dimmer, 230VAC
- CLWI-DIMUNEX - Universal Phase In-Wall Dimmer with Neutral Wire, 230VAC
- CLWI-SWEX - In-Wall Switch, 230VAC
- CM2-AUX-RKR ENGRAVED - Cameo® 2 In-Wall Multiway Remote, Custom Engraved, Rocker Only Keypad
- CM2-AUX-RKR-W-S - Cameo® 2 In-Wall Multiway Remote, Standard Engraved, Rocker Only Keypad, White Smooth
- CM2-DIMEX ENGRAVED - Cameo® 2 In-Wall Forward-Phase Dimmer with infiNET EX® Wireless Communication, 100-240VAC, Custom Engraved Keypad
- CM2-DIMEX-W-S - Cameo® 2 In-Wall Forward-Phase Dimmer with infiNET EX® Wireless Communication, 100-240VAC, Standard Engraved Keypad, White Smooth
- CM2-DIMEX-RKR ENGRAVED - Cameo® 2 In-Wall Forward-Phase Dimmer with infiNET EX® Wireless Communication, 100-240VAC, Custom Engraved, Rocker Only Keypad
- CM2-DIMEX-RKR-W-S - Cameo® 2 In-Wall Forward-Phase Dimmer with infiNET EX® Wireless Communication, 100-240VAC, Standard Engraved, Rocker Only Keypad, White Smooth
- CM2-DIMUEX ENGRAVED - Cameo® 2 In-Wall Universal Phase Dimmer with infiNET EX® Wireless Communication, 100-240VAC, Custom Engraved Keypad

- CM2-DIMUEX-W-S - Cameo® 2 In-Wall Universal Phase Dimmer with infiNET EX® Wireless Communication, 100-240VAC, Standard Engraved Keypad, White Smooth
- CM2-DIMUEX-RKR ENGRAVED - Cameo® 2 In-Wall Universal Phase Dimmer with infiNET EX® Wireless Communication, 100-240VAC, Custom Engraved, Rocker Only Keypad
- CM2-DIMUEX-RKR-W-S - Cameo® 2 In-Wall Universal Phase Dimmer with infiNET EX® Wireless Communication, 100-240VAC, Standard Engraved, Rocker Only Keypad, White Smooth
- CM2-SWEX ENGRAVED - Cameo® 2 In-Wall Switch with infiNET EX® Wireless Communication, 100-240VAC, Custom Engraved Keypad
- CM2-SWEX-W-S - Cameo® 2 In-Wall Switch with infiNET EX® Wireless Communication, 100-240VAC, Standard Engraved Keypad, White Smooth
- CM2-SWEX-RKR ENGRAVED - Cameo® 2 In-Wall Switch with infiNET EX® Wireless Communication, 100-240VAC, Custom Engraved, Rocker Only Keypad
- CM2-SWEX-RKR-W-S - Cameo® 2 In-Wall Switch with infiNET EX® Wireless Communication, 100-240VAC, Standard Engraved, Rocker Only Keypad, White Smooth
- HZ2-AUX - Horizon® 2 In-Wall Multiway Remote, Standard Engraved
- HZ2-AUX ENGRAVED - Horizon® 2 In-Wall Multiway Remote, Custom Engraved
- HZ2-DIMEX - Horizon® 2 In-Wall Forward-Phase Dimmer with infiNET EX® Wireless Communication, 120 VAC, Standard Engraved
- HZ2-DIMEX ENGRAVED - Horizon® 2 In-Wall Forward-Phase Dimmer with infiNET EX® Wireless Communication, 120 VAC, Standard Engraved
- HZ2-DIMLVEX - Horizon® 2 In-Wall 0-10 V Dimmer with infiNET EX® Wireless Communication, 120 VAC, Standard Engraved
- HZ2-DIMLVEX ENGRAVED - Horizon® 2 In-Wall 0-10 V Dimmer with infiNET EX® Wireless Communication, 120 VAC, Custom Engraved
- HZ2-DIMUEX - Horizon® 2 In-Wall Universal Phase Dimmer with infiNET EX® Wireless Communication, 120 VAC, Standard Engraved
- HZ2-DIMUEX ENGRAVED - Horizon® 2 In-Wall Universal Phase Dimmer with infiNET EX® Wireless Communication, 120 VAC, Custom Engraved
- HZ2-SWEX - Horizon® 2 In-Wall Switch with infiNET EX® Wireless Communication, 120 VAC, Standard Engraved
- HZ2-SWEX ENGRAVED - Horizon® 2 In-Wall Switch with infiNET EX® Wireless Communication, 120 VAC, Custom Engraved
- HZ-AUX - Horizon® In-Wall Multiway Remote, Discontinued
- HZ-DIMEX - Horizon® In-Wall Forward Phase Dimmer with infiNET EX® Wireless Communication, 120VAC, Discontinued
- HZ-DIMLVEX - Horizon® In-Wall 0-10V Dimmer with infiNET EX® Wireless Communication, 120VAC, Discontinued
- HZ-DIMUEX - Horizon® In-Wall Universal Phase Dimmer with infiNET EX® Wireless Communication, 120VAC, Discontinued

- HZ-SWEX - Horizon® In-Wall Switch with infiNET EX® Wireless Communication, 120VAC, Discontinued

Centralized Lighting Control

- CLX-4HSW4 - 4 Channel High-Inrush Switch Module, 4 Feeds, 120V
- CLX-4IND - 4 Channel Inductor Module, Discontinued
- CLX-2DIM8 - 8 Channel Dimmer Module, 2 Feeds, 120V
- CLX-2DIM2 - 2 Channel Dimmer Module, 2 Feeds., Discontinued
- CLX-2DIMFLV8-277 - 8 Channel 0-10V Dimmer Module, 2 Feeds, 277V
- CLX-2DIMFLV8 - 8 Channel 0-10V Dimmer Module, 2 Feeds, 120V
- CLX-2DIMU8-277 - 8 Channel Universal Dimmer Module, 2 Feeds, 277V
- CLX-2DIMU8 - 8 Channel Universal Dimmer Module, 2 Feeds, 120V
- CLX-2IND - 2 Channel Inductor Module, Discontinued
- CLX-1DELV4 - 4 Channel Electronic Low-Voltage Dimmer Module, Single Feed, Discontinued
- CLX-1DIM8 - 8 Channel Dimmer Module, Single Feed, Discontinued
- CLX-1DIM4 - 4 Channel Dimmer Module, Single Feed, Discontinued
- CLX-1DIMU4 - 4 Channel Universal Dimmer Module, 1 Feed, 120V, Discontinued
- CLX-1DIMU4-HP - 4 Channel Universal Dimmer Module, High Power, 1 Feed, 120V
- CLX-1FAN4 - 4 Channel Fan Speed Control Module, Single Feed
- CLX-1MC4 - 4 Channel Motor Control Module, 1 Feed, 120V
- CLXI-4HSW4 - 4 Channel High-Inrush Switch Module, 4 Feeds - International Version, 230V
- CLXI-4IND - 4 Channel Inductor Module - International Version, 230V, Discontinued
- CLXI-2DIM8 - 8 Channel Dimmer Module, 2 Feeds - International Version, 230V
- CLXI-2DIM2 - 2 Channel Dimmer Module, 2 Feeds - International Version, 230V
- CLXI-2DIMFLV8 - 0-10V 8-Channel Dimmer Module, 2 Feeds, 230V
- CLXI-2DIMU8 - 8 Channel Universal Dimmer Module, 2 Feeds, 230V
- CLXI-2IND - 2 Channel Inductor Module - International Version, 230V, Discontinued
- CLXI-1DELV4 - 4 Channel Electronic Low-Voltage Dimmer Module, Single Feed - International Version, 230V, Discontinued
- CLXI-1DIM4 - 4 Channel Dimmer Module, Single Feed - International Version, 230V., Discontinued
- CLXI-1MC4 - 4 Channel Motor Control Module, Single Feed - International Version, 230V
- DIN-8SW8 - DIN Rail High-Voltage Switch, 8 feeds, 8 channels, Discontinued
- DIN-8SW8-I - DIN Rail High-Voltage Switch with Digital Inputs
- DIN-4DIMFLV4 - DIN Rail 0-10V Dimmer Module, 4 feeds, 4 channels
- DIN-2LEDPWM8 - 2 Channel RGBW LED Dimmer, DIN Rail Mount

- DIN-2MC2 - DIN Rail Motor Control, 2 feeds, 2 channels
- DIN-1DIM4 - DIN Rail Dimmer, 1 feed, 4 channels
- DIN-1DIMU4 - DIN Rail Universal Dimmer, 1 feed, 4 channels
- GL-CAEN-2DIM8 KIT - 8 Channel Dimmer Module with Terminal Block, 2 Feeds, 120V
- GL-EXP-DIM-CN - Crestron Green Light® Dimmer Expansion Module, Cresnet® Network
- GL-EXP-DIMFDB-CN - Crestron Green Light® 3-Wire Fluorescent Dimmer Expansion Module, Cresnet® Network
- GL-EXP-DIMFLV-CN - Crestron Green Light® 0-10V Dimmer Expansion Module, Cresnet® Network
- GL-EXP-DIMU-CN - Crestron Green Light® Universal Dimmer Expansion Module, Cresnet® Network
- GL-EXP-SW-CN - Crestron Green Light® Switching Expansion Module, Cresnet® Network
- GLPP-1DIMFLV2CN-PM - Crestron Green Light® Power Pack, 2-Channel 0-10V Dimmer with Cresnet® Network and Built-in Power Monitoring, Discontinued
- GLPP-1DIMFLV2EX-PM - Crestron Green Light® Power Pack, 2-Channel 0-10V Dimmer with infiNET EX® Wireless and Built-in Power Monitoring, Discontinued
- GLPP-1DIMFLV3CN-PM - Crestron Green Light® Power Pack, 3-Channel 0-10V Dimmer with Cresnet® Network and Built-in Power Monitoring, Discontinued
- GLPP-1DIMFLV3EX-PM - Crestron Green Light® Power Pack, 3-Channel 0-10V Dimmer with infiNET EX® Wireless and Built-in Power Monitoring
- GLPP-1SW2CN - Crestron Green Light® Power Pack, 2-Channel Switch with Cresnet® Network, Discontinued
- GLPP-1SW2EX - Crestron Green Light® Power Pack, 2-Channel Switch with infiNET EX® Wireless, Discontinued
- GLPP-1SW3CN - Crestron Green Light® Power Pack, 3-Channel Switch with Cresnet® Network, Discontinued
- GLPP-1SW3EX - Crestron Green Light® Power Pack, 3-Channel Switch with infiNET EX® Wireless, Discontinued
- GLPP-DIMFLVCN-PM - Crestron Green Light® Power Pack, 1-Channel 0-10V Dimmer with Cresnet® Network and Built-in Power Monitoring
- GLPP-DIMFLVEX-PM - Crestron Green Light® Power Pack, 1-Channel 0-10V Dimmer with infiNET EX® Wireless and Built-in Power Monitoring, Discontinued
- GLPP-SWCN - Crestron Green Light® Power Pack, 1-Channel Switch with Cresnet® Network
- GLPP-SWEX - Crestron Green Light® Power Pack, 1-Channel Switch with infiNET EX® Wireless, Discontinued
- GLX-DIM6 - 6 Channel Dimmer Module, Discontinued
- GLX-DIMFLV8 - 8-Channel 0-10V Dimmer Module, Discontinued
- GLX-HSW8 - 8 Channel High-Inrush Switch Module, Discontinued

- GLXP-DIMFLV8 - 8 Channel 0-10V Dimmer Module, Discontinued
- GLXP-DIMFLV8-LP - 8 Channel 0-10V Dimmer Module, Low Profile
- GLXP-HSW12 - 12 Channel High-Inrush Switch Module, Discontinued
- GLXP-HSW12-LP - 12-Channel High-Inrush Switch Module, Low Profile
- GLXP-HSW8 - 8 Channel High-Inrush Switch Module
- GLXP-SW16 - 16 Channel Switch Module, Discontinued
- GLXP-SW16-LP - 16-Channel Switch Module, Low Profile
- GLXP-SW10 - 10 Channel Switch Module, Discontinued
- GLXX-2DIM8 - 8 Channel Dimmer Module

Centralized Lighting Accessories

- DIN-AO8 - DIN Rail Analog Output Module
- DIN-IO8 - DIN Rail Versiport Module
- GLXX-CTRL - Cresnet® Network Control Module

Centralized Lighting Enclosures

- CAEN-1X1 - Automation Enclosure, 1 modules high x 1 module wide
- CAEN-2X1 - Automation Enclosure, 2 modules high x 1 module wide
- CAEN-4X1 - Automation Enclosure, 4 modules high x 1 module wide
- CAEN-4X2 - Automation Enclosure, 4 modules high x 2 module wide
- CAEN-7X1 - Automation Enclosure, 7 modules high x 1 module wide
- CAEN-7X2 - Automation Enclosure, 7 modules high x 2 module wide
- DIN-EN-2X18 - Enclosure for DIN Rail Devices, 2 DIN Rails, 18 Units Wide
- DIN-EN-3X18 - Enclosure for DIN Rail Devices, 3 DIN Rails, 18 Units Wide
- DIN-EN-3X18-MMOE - Enclosure for DIN Rail Devices, 3 DIN Rails, 18 Units Wide, Rough-In Enclosure, Discontinued
- DIN-EN-3X18-MMP - Enclosure for DIN Rail Devices, 3 DIN Rails, 18 Units Wide, Lay-In Panel
- DIN-EN-6X18 - Enclosure for DIN Rail Devices, 6 DIN Rails, 18 Units Wide
- DIN-EN-6X18-MMOE - Enclosure for DIN Rail Devices, 6 DIN Rails, 18 Units Wide, Rough In Enclosure, Discontinued
- DIN-EN-6X18-MMP - Enclosure for DIN Rail Devices, 6 DIN Rails, 18 Units Wide, Lay-In Panel, Discontinued

Lutron Lighting

The following Lutron devices work with Crestron Home OS.

Control Lutron load types, including switched, dimming, shades, and fans from within the Crestron Home user interface.

- HomeWorks QS - HomeWorks QS 1-Link Processor (HQP6-1)
- HomeWorks QS - HomeWorks QS 2-Link Processor (HQP6-2)
- RA2 Select - RA2 Select Main Repeater (RR-SEL-REP2)
- RadioRA 2 - RadioRA 2 Main Repeater (RR-MAIN-REP)
- RadioRA 3 - RadioRA 3 All-in-One Processor (RR-PROC3)

Lutron with Ketra Lighting

Control Lutron load types, including switched, dimming, Lumaris® lighting, Ketra® lighting, shades, and fans from within the Crestron Home user interface.

- HomeWorks QSX - HomeWorks QSX 1-Link Processor (HQP7-1)
- HomeWorks QSX - HomeWorks QSX 2-Link Processor (HQP7-2)

Philips Hue Lighting

The following Philips Hue devices work with Crestron Home OS.

- Bridge - Philips Hue Bridge (version 1948086000 or later)
- Smart Lights - Philips Hue Smart Lights

PhaseX Lighting

The following PhaseX devices work with Crestron Home OS. In the model names below, replace ** with any Artafex beam spread option.

- ART-GWX
- ART2D10TT1**X: Artafex 2 in. Downlight 1000lm, 1800-4000k
- ART2A07TT1**X: Artafex 2 in. Adjustable 750lm, 1800-4000k
- ART4D10TT1**X: Artafex 4 in. Downlight 1000lm, 1800-4000k
- ART4A07TT1**X: Artafex 4 in. Adjustable 750lm, 1800-4000k, Black
- ART4A07TT1**WX: Artafex 4 in. Adjustable 750lm, 1800-4000k, White

Third-Party Lighting

Additional Lighting devices can be added via drivers. To view the available lighting drivers, visit the Crestron Driver Portal at drivers.crestron.io.

Pool Controllers

The following Pool devices work with Crestron Home OS.

Hayward Pools

The following Hayward® devices work with Crestron Home OS.

- HLBASE - OmniLogic® 4 Relay Base Panel

Jandy Pools

The following Jandy® devices work with Crestron Home OS.

- IQ900 - iAquaLink™ Web Connect Device

Pentair Pools

The following Pentair® devices work with Crestron Home OS.

- IntelliTouch® Control System

Networking and Power Control

The following networking and power control devices work with Crestron Home OS.

Networking

The following networking devices work with Crestron Home OS.

- CEN-SWPOE-48 - 48 Port PoE+ Managed Switch
- CEN-SWPOE-30 - 30 Port PoE+ Managed Switch
- CEN-SWPOE-10 -10 Port PoE+ Managed Switch
- CEN-SWPOE-ULTRA-12 - 12 Port Ultra POE Managed Switch

Power Control

The following power control devices work with Crestron Home OS.

Crestron Power Control

The following Crestron® power control devices work with Crestron Home OS.

- PC-350V-18 - 18-Outlet Vertical Networked Power Controller and Conditioner with Surge Protection and Metering
- PC-350V-12 - 12-Outlet Vertical Networked Power Controller and Conditioner with Surge Protection and Metering
- PC-300 - Energy Monitoring Power Conditioner & Controller 300
- PC-200 - Energy Monitoring Power Conditioner & Controller 200
- PC-TS - Temperature Sensor for PC-350V Networked Power Controllers

> **NOTE:** The PC-TS is an accessory for the PC-350V-12 and PC-350V-18 power controllers. It does not communicate with the Crestron Home system.

GUDE Systems

The following GUDE Systems power control devices work with Crestron Home OS.

- Expert Power Control 8031: 8-fold switched and metered PDU
- Expert Power Control 8045: 12-fold switched and outlet-metered PDU
- Expert Power Control 8291-1: 21-fold switched AC/DC PDU

Hand-held Remotes

The following hand-held remote devices work with Crestron Home OS.

- HR-100 - Handheld Remote, 34 Button, Discontinued
- HR-150 - Handheld Remote, 50 Button
- HR-310 - Handheld Remote, US and Canada
- HR-310-I - Handheld Remote, International
- TSR-310 - Handheld Touch Screen Remote
- HR-CV-MINI - Cevo Mini Handheld Remote

Security and Door Locks

The following Security and Door lock devices work with Crestron Home OS.

Door Locks

The following door lock devices work with Crestron Home OS.

Yale® Locks

InfiNET EX® Wireless Communication

- CLK-YL-YRD614-CR2: Yale Pro® 2 Deadbolt with Push Button Keypad and infiNET EX® Wireless Communication
- CLK-YL-YRD624-CR2: Yale Pro® 2 Deadbolt with Touchscreen Keypad and infiNET EX® Wireless Communication
- CLK-YL-YRD634-CR2: Yale Pro® 2 Key Free Deadbolt with Push Button Keypad and infiNET EX® Wireless Communication
- CLK-YL-YRD654-CR2: Yale Pro® 2 Key Free Deadbolt with Touchscreen Keypad and infiNET EX® Wireless Communication
- CLK-YL-NTB620-CR2 - Yale® nexTouch™ Lever Lock with Touchscreen Keypad and infiNET EX® Technology
- CLK-YL-YRD256-CR2 - Yale Real Living® Assure Lock™ SL – Key Free Touchscreen Deadbolt with infiNET EX® Wireless Technology, Discontinued
- CLK-YL-YRD246-CR2 - Yale® Assure Lock™ Key-Free Wireless Deadbolt with infiNET EX® Wireless and Touchscreen Keypad, Discontinued
- CLK-YL-YRD240-CR - Yale® Key-Free Wireless Deadbolt Lock with infiNET EX® Wireless and Touch Screen Keypad, Discontinued
- CLK-YL-YRD226-CR2 - Yale® Assure Lock™ Wireless Deadbolt with infiNET EX® Wireless and Touchscreen Keypad
- CLK-YL-YRD220-CR - Yale® Wireless Deadbolt Lock with infiNET EX® Wireless and Touch Screen Keypad, Discontinued
- CLK-YL-YRD216-CR2 - Yale® Assure Lock™ Wireless Deadbolt with infiNET EX® Wireless and Pushbutton Keypad
- CLK-YL-YRD210-CR - Yale® Wireless Deadbolt Lock with infiNET EX® Wireless and Pushbutton Keypad, Discontinued
- CLK-YL-YRL226-CR2 - Yale® Assure Lever Lock, Touchscreen Keypad with infiNET EX® Technology
- CLK-YL-YRL220-CR - Yale® Wireless Lever Lock with infiNET EX® Wireless and Touch Screen Keypad, Discontinued
- CLK-YL-YRL216-CR2 - Yale® Assure Lever Lock, Pushbutton Keypad with infiNET EX® Technology
- CLK-YL-YRL210-CR - Yale® Wireless Lever Lock with infiNET EX® Wireless and Pushbutton Keypad, Discontinued

Baldwin® Locks

- CLK-BD-8252-003-AC5 - Baldwin® Boulder Wireless Deadbolt with infiNET EX® Wireless, Pushbutton Keypad, Polished Brass, Discontinued
- CLK-BD-8252-003-AC5X - Baldwin® Boulder Wireless Deadbolt with infiNET EX® Wireless, No Keypad, Polished Brass, Discontinued
- CLK-BD-8252-102-AC5 - Baldwin® Boulder Wireless Deadbolt with infiNET EX® Wireless, Pushbutton Keypad, Oil-Rubbed, Discontinued
- CLK-BD-8252-102-AC5X - Baldwin® Boulder Wireless Deadbolt with infiNET EX® Wireless, No Keypad, Oil-Rubbed Bronze, Discontinued
- CLK-BD-8252-112-AC5 - Baldwin® Boulder Wireless Deadbolt with infiNET EX® Wireless, Pushbutton Keypad, Venetian Bronze, Discontinued
- CLK-BD-8252-112-AC5X - Baldwin® Boulder Wireless Deadbolt with infiNET EX® Wireless, No Keypad, Venetian Bronze, Discontinued
- CLK-BD-8285-056-AC5 - Baldwin® Soho Wireless Deadbolt with infiNET EX® Wireless, Pushbutton Keypad, Satin Nickel, Discontinued
- CLK-BD-8285-056-AC5X - Baldwin® Soho Wireless Deadbolt with infiNET EX® Wireless, No Keypad, Satin Nickel, Discontinued
- CLK-BD-8285-260-AC5 - Baldwin® Soho Wireless Deadbolt with infiNET EX® Wireless, Pushbutton Keypad, Polished Chrome, Discontinued
- CLK-BD-8285-260-AC5X - Baldwin® Soho Wireless Deadbolt with infiNET EX® Wireless, No Keypad, Polished Chrome, Discontinued
- CLK-BD-8285-264-AC5 - Baldwin® Soho Wireless Deadbolt with infiNET EX® Wireless, Pushbutton Keypad, Satin Chrome, Discontinued
- CLK-BD-8285-264-AC5X - Baldwin® Soho Wireless Deadbolt with infiNET EX® Wireless, No Keypad, Satin Chrome, Discontinued

Kwikset® Locks

- CLK-KW-914TRL-ZB-11P-UL - Kwikset® SmartCode™ 914 Wireless Deadbolt with infiNET EX® Wireless, Pushbutton Keypad, Venetian Bronze, Discontinued
- CLK-KW-914TRL-ZB-15-UL - Kwikset® SmartCode™ 914 Wireless Deadbolt with infiNET EX® Wireless, Pushbutton Keypad, Satin Nickel, Discontinued
- CLK-KW-914TRL-ZB-L03-UL - Kwikset® SmartCode™ 914 Wireless Deadbolt with infiNET EX® Wireless, Pushbutton Keypad, Polished Brass, Discontinued
- CLK-KW-916TRL-ZB-11P-UL - Kwikset® SmartCode™ 916 Wireless Deadbolt with infiNET EX® Wireless, Touch Screen Keypad, Venetian Bronze, Discontinued
- CLK-KW-916TRL-ZB-CR-15-UL - Kwikset® SmartCode™ 916 Wireless Deadbolt with infiNET EX® Wireless, Touch Screen Keypad, Satin Nickel, Discontinued
- CLK-KW-916TRL-ZB-CR-L03-UL - Kwikset® SmartCode™ 916 Wireless Deadbolt with infiNET EX® Wireless, Touch Screen Keypad, Polished Brass, Discontinued

Security Systems

The following Security System devices work with Crestron Home OS.

Crestron

- PYNG-CONNECT-COM - COM Port Expander

> **NOTE:** Any device that is compatible with a Crestron Home system and has a COM port can be used to interface with a security system.

Honeywell® Vista® Security

- VISTA-128FBPT
- VISTA-128BPT
- VISTA-128BPTSIA
- VISTA-15P
- VISTA-15PSIA
- VISTA-20P
- VISTA-20PSIA
- VISTA-21iP
- VISTA-21iPSIA
- VISTA-250BPT
- VISTA-250FBPT

Interlogix® Security

- NetworX NX-4
- NetworX NX-4V2
- NetworX NX-6
- NetworX NX-6V2
- NetworX NX-8
- NetworX NX-8E
- NetworX NX-8V2

DSC® Security

- HS2128 - PowerSeries Neo Control Panel
- HS2064 - PowerSeries Neo Control Panel
- HS2032 - PowerSeries Neo Control Panel
- HS2016-4 - PowerSeries Neo Control Panel
- HS2016 - PowerSeries Neo Control Panel
- PC1864 - PowerSeries Control Panel

- PC1832 - PowerSeries Control Panel
- PC1616 - PowerSeries Control Panel

Satel® Security

- INTEGRA 128 - Advanced Control Panel with 16 up to 128 Zones
- INTEGRA 24 - Advanced Control Panel with 4 up to 24 Zones
- INTEGRA 256 - Alarm Control Panel Mainboard, from 16 to 256 Zones and Outputs
- INTEGRA 32 - Advanced Control Panel with 8 up to 32 Zones
- INTEGRA 64 - Advanced Control Panel with 16 up to 64 Zones

Texecom® Security

- Premier Elite 48
- Premier Elite 88
- Premier Elite 168

Sensors

The following sensor devices work with Crestron Home OS.

Crestron Sensors

The following Crestron® sensor devices work with Crestron Home OS.

- CEN-ODT-C-POE - Dual-Technology Occupancy Sensor, PoE, 2,000 Sq Ft
- GLS-ODT-C-CN - Dual-Technology Occupancy Sensor with Cresnet®, 2,000 Sq Ft
- GLS-OIR-C-CN - Passive Infrared Occupancy Sensor with Cresnet®
- GLS-OIR-CSM-EX-BATT - Wireless Passive Infrared Occupancy Sensor, infiNET EX® Wireless, Battery-Powered
- GLS-OIRLCL-C-CN - Ceiling Mount Passive Infrared Occupancy and Daylight Sensor, Cresnet®
- INETS-IOEX-DOOR-BATT - infiNET EX® Wireless Door Sensor

Basalte Sensors

The following Basalte sensor devices work with Crestron Home OS.

- Auro - Motion Sensor

Shading

The following Shading devices work with Crestron Home OS.

Crestron Shades and Drapes

The following Crestron® shade and drape devices work with Crestron Home OS.

Shade Motors

- CSM-QMT50-DCCN - Crestron® QMT® Motor for 38 in. Roller Shades and Larger, Cresnet® Network, Discontinued
- CSM-QMT50-DCEX - Crestron® QMT® Motor for 38 in. Roller Shades and Larger, infiNET EX® Wireless, Discontinued
- CSM-QMTDC-275-4-CN - Digital QMT® Shade Motor for QMT5 Series, 4 Nm, Cresnet® Network
- CSM-QMTDC-275-4-EX - Digital QMT® Shade Motor for QMT5 Series, 4 Nm, infiNET EX® Wireless
- CSM-QMTDC-256-2-CN - Digital QMT® Shade Motor for 21 in. Roller Shades and Larger, 2 Nm, Cresnet® Network, Discontinued
- CSM-QMTDC-256-2-EX - Digital QMT® Shade Motor for 21 in. Roller Shades and Larger, 2 Nm, infiNET EX® Wireless, Discontinued
- CSM-QMTDC-250-4-CN - Digital QMT® Shade Motor for QMT5 Series, 4 Nm, Cresnet® Network
- CSM-QMTDC-250-4-EX - Digital QMT® Shade Motor for QMT5 Series, 4 Nm, infiNET EX® Wireless
- CSM-QMTDC-250-2-CN - Digital QMT® Shade Motor for QMT5 Series, 2 Nm, Cresnet® Network, Discontinued
- CSM-QMTDC-250-2-EX - Digital QMT® Shade Motor for QMT5 Series, 2 Nm, infiNET EX® Wireless, Discontinued
- CSM-QMTDC-163-1-CN - Digital QMT® Shade Motor for QMT3 Series, 3/4 Nm, Cresnet® Network
- CSM-QMTDC-163-1-EX - Digital QMT® Shade Motor for QMT3 Series, 3/4 Nm, infiNET EX® Wireless
- CSM-QMTDC-163-1-SG - Universal Wireless Gateway - ER, SG, and infiNET EX® Wireless Networks

Drape Motors

- CSM-QMTDC-DRP-3-CN - Digital QMT® Drapery Motor for CSS-DRAPERY, Cresnet® Network
- CSM-QMTDC-DRP-3-EX - Digital QMT® Drapery Motor for CSS-DRAPERY, infiNET EX® Wireless

Modules

- CLX-1MC4 - 4 Channel Motor Control Module, 1 Feed, 120V
- CLXI-1MC4 - 4 Channel Motor Control Module, Single Feed - International Version, 230V
- C2N-SDC - Shade and Drape Controller, 2 outputs for 120VAC 3-wire bidirectional motors
- C2N-SDC-DC - Shade and Drape Controller, 2 outputs for 24 VDC 2-wire bidirectional motors
- CSC-ACEX - infiNET EX® Wireless Interface to Somfy® ST50 ILT2 Motor, Discontinued
- CSC-DCCN - Cresnet® Network Interface to Crestron® CSM-QMT30 Shades, Discontinued
- CSC-DCEX - infiNET EX® Wireless Interface to Crestron® CSM-QMT30 Shades, Discontinued

Motor Controller

- CLCI-MCEX-W - Wireless Motor Controller, 230VAC
- DIN-2MC2 - DIN Rail Motor Control, 2 feeds, 2 channels

Power Supplies

> **NOTE:** The power supplies listed below are counted as Gateways in the Crestron Home system.

- CSA-PWS10S-HUB - 10-Motor Power Supply and Cresnet® Network Hub, Discontinued
- CSA-PWS10S-HUB-ENET - 10-Motor Power Supply with Ethernet to Cresnet® Network Bridge and Cresnet Hub

Accessories

- CSS-ARCH3 - QMT3 Series Architectural Shade Hardware
- CSS-ARCH5 - QMT5 Series Architectural Shade Hardware
- CSS-DECOR3 - QMT3 Series Décor Shade Hardware
- CSS-DECOR5 - QMT5 Series Décor Shade Hardware
- CS-SHADE-ROLLER-CABLEGUIDED - Cable-Guided Option for QMT5 Series Shade Hardware
- CSS-DRAPERY - Crestron® Drapery System Hardware
- CS-SHADE-ROLLER-HSHEER - Crestron® Horizontal Sheers

Lutron Shading

The following Lutron devices work with Crestron Home OS.

Control Lutron load types, including switched, dimming, shades, and fans from within the Crestron Home user interface.

- HomeWorks QS - HomeWorks QS 1-Link Processor (HQP6-1)
- HomeWorks QS - HomeWorks QS 2-Link Processor (HQP6-2)

- RA2 Select - RA2 Select Main Repeater (RR-SEL-REP2)
- RadioRA 2 - RadioRA 2 Main Repeater (RR-MAIN-REP)
- RadioRA 3 - RadioRA 3 All-in-One Processor (RR-PROC3)

Lutron with Ketra Lighting

Control Lutron load types, including switched, dimming, Lumaris® lighting, Ketra® lighting, shades, and fans from within the Crestron Home user interface.

- HomeWorks QSX - HomeWorks QSX 1-Link Processor (HQP7-1)
- HomeWorks QSX - HomeWorks QSX 2-Link Processor (HQP7-2)

Touch Screens

The following touch screen devices work with Crestron Home OS.

Digital Graphics Engines

- DGE-1000 - Digital Graphics Engine 1000

80 Series Touch Screens

- TST-1080 - 10.1 in. Wireless Touch Screen

70 Series Touch Screens

- TS-1070 - 10.1 in. Tabletop Touch Screen
- TS-1070R - 10.1 in. Tabletop Touch Screen, Crestron Home® OS
- TS-770 - 7 in. Tabletop Touch Screen
- TS-770R - 7 in. Tabletop Touch Screen, Crestron Home® OS
- TSW-1070 - 10.1 in. Wall Mount Touch Screen
- TSW-1070R - 10.1 in. Wall Mount Touch Screen, Crestron Home® OS
- TSW-770 - 7 in. Wall Mount Touch Screen
- TSW-770R - 7 in. Wall Mount Touch Screen, Crestron Home® OS
- TSW-570 - 5 in. Wall Mount Touch Screen
- TSW-570P - 5 in. Wall Mount Touch Screen, Portrait
- TSW-570PR - 5 in. Wall Mount Touch Screen, Portrait, Crestron Home® OS
- UC-MM30-R-I - Tabletop Conference Device for Crestron Home® OS, International
- UC-MM30-R - Tabletop Conference Device for Crestron Home® OS

60 Series Touch Screens

- TSW-1060 - 10.1 in. Touch Screen, Discontinued
- TSW-1060-NC - 10.1 in. Touch Screen without Camera, Microphone, or PinPoint™ Beacon, Discontinued
- TSW-760 - 7 in. Touch Screen, Discontinued
- TSW-760-NC - 7 in. Touch Screen without Camera, Microphone, or PinPoint™ Beacon, Discontinued
- TSW-560 - 5 in. Touch Screen, Discontinued
- TSW-560-NC - 5 in. Touch Screen without Camera, Microphone, or PinPoint™ Beacon, Discontinued
- TSW-560P - 5 in. Touch Screen, Portrait, Discontinued

Unsupported Touch Screens

- TS-1542 Series - 15.6 in. HD Touch Screen, Wall Mount or VESA

  > **NOTE:** All touch screens in the TS-1542 series are unsupported, including the -C, -TILT, and -C-TILT models.

- TSD-2020-B - 20 in. HD Touch Screen Display, Black
- TSW-xx52 Series - Touch Screen

  > **NOTE:** The TSW-x52 series touch screens are supported in Crestron Pyng OS 1 only. For Crestron Home OS, use TSW-xx60 series touch screens.

Video

The following video devices work with Crestron Home OS.

DigitalMedia™

The following DigitalMedia™ video devices work with Crestron Home OS.

DigitalMedia Switchers

- DM-MD6x6 - 6x6 DigitalMedia™ Distribution Center
- DM-MD6x4 - 6x4 DigitalMedia™ Distribution Center
- DM-MD8X8 - 8x8 DigitalMedia™ Switcher, Discontinued
- DM-MD8X8-CPU3 - 8x8 DigitalMedia™ Switcher
- DM-MD16X16 - 16x16 DigitalMedia™ Switcher, Discontinued
- DM-MD16X16-CPU3 - 16x16 DigitalMedia™ Switcher
- DM-MD32X32 - 32x32 DigitalMedia™ Switcher, Discontinued
- DM-MD32X32-CPU3 - 32x32 DigitalMedia™ Switcher

DigitalMedia Cards

- DMC-4K-CO-HD-HDCP2 - 2-Channel HDBaseT® Certified 4K DigitalMedia 8G+® Output Card for DM® Switchers, Discontinued
- DMC-4K-CO-HD - 2-Channel HDBaseT® Certified 4K DigitalMedia 8G+® Output Card for DM® Switchers, Discontinued
- DMC-4K-HD-DSP-HDCP2 - 4K HDMI® Input Card with Downmixing for DM® Switchers, Discontinued
- DMC-4K-HD-DSP - 4K HDMI® Input Card with Downmixing for DM® Switchers, Discontinued
- DMC-4K-HD-HDCP2 - 4K HDMI® Input Card w/Downmixing for DM® Switchers, Discontinued
- DMC-4K-HD - 4K HDMI® Input Card for DM® Switchers, Discontinued
- DMC-4K-HDO - 2-Channel 4K Scaling HDMI® Output Card for DM® Switchers, Discontinued
- DMC-4KZ-C-DSP - DigitalMedia 8G+® 4K60 4:4:4 HDR Input Card with Downmixing for DM® Switchers, HDBaseT® Compatible
- DMC-4KZ-C - DigitalMedia 8G+® 4K60 4:4:4 HDR Input Card for DM® Switchers, HDBaseT® Compatible
- DMC-4KZ-CO-HD - 2-Channel DigitalMedia 8G+® 4K60 4:4:4 HDR Output Card for DM® Switchers
- DMC-4KZ-HD-DSP - HDMI® 4K60 4:4:4 HDR Input Card with Downmixing for DM® Switchers
- DMC-4KZ-HD - HDMI® 4K60 4:4:4 HDR Input Card for DM® Switchers

- DMC-4KZ-HDO - 2-Channel 4K Scaling HDMI® 4K60 4:4:4 HDR Scaling Output Card for DM® Switchers
- DMC-CO-HD - 2-Channel DigitalMedia 8G+™ Output Card for DM® Switchers, Discontinued
- DMC-CPU3 - CPU Card for 8X8, 16X16, and 32X32 DigitalMedia™ Switchers
- DMC-DVI - DVI/VGA Input Card for DM® Switchers
- DMC-HD-DSP - HDMI® Input Card with Downmixing for DM® Switchers, Discontinued
- DMC-HD - HDMI® Input Card for DM® Switchers, Discontinued
- DMC-HDO - 2-Channel HDMI® Output Card for DM® Switchers

DigitalMedia Room Boxes

> **NOTE:** DigitalMedia Room Boxes require a DigitalMedia Switcher to work with Crestron Home.

- DM-RMC-200-C - DigitalMedia 8G+® Receiver and Room Controller 200
- DM-RMC-100-C - DigitalMedia 8G+® Receiver and Room Controller 100, Discontinued
- DM-RMC-4K-100-C-1G - Wall Plate 4K DigitalMedia 8G+® Receiver and Room Controller 100
- DM-RMC-4K-100-C - 4K DigitalMedia 8G+® Receiver and Room Controller 100, Discontinued
- DM-RMC-4K-SCALER-C-DSP - 4K DigitalMedia 8G+® Receiver and Room Controller with Scaler and Downmixing, Discontinued
- DM-RMC-4K-SCALER-C - 4K DigitalMedia 8G+® Receiver and Room Controller with Scaler, Discontinued
- DM-RMC-4KZ-100-C - DigitalMedia 8G+® 4K60 4:4:4 HDR Receiver and Room Controller 100
- DM-RMC-4KZ-SCALER-C - DigitalMedia 8G+® 4K60 4:4:4 HDR Receiver and Room Controller with Scaler
- DM-RMC-SCALER-C - DigitalMedia 8G+® Receiver and Room Controller with Scaler

DM NVX® Encoders and Decoders

- DM-NVX-384 - DM NVX® 5K 4x1 AV-over-IP Switcher with HDMI® and USB-C® Connectivity
- DM-NVX-363 - DM NVX® 4K60 4:4:4 HDR Network AV Encoder/Decoder with Downmixing and Dante® Audio
- DM-NVX-363C - DM NVX® 4K60 4:4:4 HDR Network AV Encoder/Decoder Card with Downmixing and Dante® Audio
- DM-NVX-360 - DM NVX® 4K60 4:4:4 HDR Network AV Encoder/Decoder
- DM-NVX-360C - DM NVX® 4K60 4:4:4 HDR Network AV Encoder/Decoder Card

- DM-NVX-352 - DM NVX® 4K60 4:4:4 HDR Network AV Encoder/Decoder with Dante® Audio, Discontinued
- DM-NVX-352C - DM NVX® 4K60 4:4:4 HDR Network AV Encoder/Decoder Card with Dante® Audio, Discontinued
- DM-NVX-351 - DM NVX® 4K60 4:4:4 HDR Network AV Encoder/Decoder with Downmixing
- DM-NVX-351C - DM NVX® 4K60 4:4:4 HDR Network AV Encoder/Decoder Card with Downmixing
- DM-NVX-350 - DM NVX® 4K60 4:4:4 HDR Network AV Encoder/Decoder, Discontinued
- DM-NVX-350C - DM NVX® 4K60 4:4:4 HDR Network AV Encoder/Decoder Card, Discontinued
- DM-NVX-D200 - DM NVX® 4K60 4:2:0 Network AV Decoder with Scaler
- DM-NVX-D30 - DM NVX® 4K60 4:4:4 HDR Network AV Decoder
- DM-NVX-D20 - DM NVX® 4K60 4:2:0 Network AV Decoder
- DM-NVX-D10 - DM NVX® 1080p60 4:4:4 Network AV Decoder
- DM-NVX-D30C - DM NVX® 4K60 4:4:4 HDR Network AV Decoder Card
- DM-NVX-E760 - DM NVX® 4K60 4:4:4 HDR Network AV Encoder with DM® Input
- DM-NVX-E30 - DM NVX® 4K60 4:4:4 HDR Network AV Encoder
- DM-NVX-E20 - DM NVX® 4K60 4:2:0 Network AV Encoder
- DM-NVX-E10 - DM NVX® 1080p60 4:4:4 Network AV Encoder
- DM-NVX-E30C - DM NVX® 4K60 4:4:4 HDR Network AV Encoder Card
- DM-NVX-E760C - DM NVX® 4K60 4:4:4 HDR Network AV Encoder Card with DM® Input
- DM-NVX-385 - DM NVX® 4K60 4:4:4 Network AV Encoder/Decoder
- DM-NVX-385C - DM NVX® 4K60 4:4:4 Network AV Encoder/Decoder

DigitalMedia Transmitters

- DM-TX-201-C - DigitalMedia 8G+® Transmitter 201
- DM-TX-401-C - DigitalMedia 8G+® Transmitter 401, Discontinued
- DM-TX-4K-100-C-1G - Wall Plate 4K DigitalMedia 8G+® Transmitter 100, Discontinued
- DM-TX-4KZ-100-C-1G - DigitalMedia 8G+® 4K60 4:4:4 HDR Wall Plate Transmitter 100
- DM-TX-4KZ-202-C - DigitalMedia 8G+® 4K60 4:4:4 HDR Transmitter 202, Discontinued
- DM-TX-4KZ-302-C - DigitalMedia 8G+® 4K60 4:4:4 HDR Transmitter 302

DM Essentials

HDR Presentation Systems

- HD-PS401 - 4x1 4K60 4:4:4 HDR Presentation System
- HD-PS402 - 4x2 4K60 4:4:4 HDR Presentation System
- HD-PS622 - 8x2 4K60 4:4:4 HDR Presentation System

DM Essentials Transmitters

- HD-TX-301-C-E - DM Lite® Transmitter and 3x1 Auto-Switcher for HDMI®, VGA, and Analog Audio Signal Extension over CATx Cable
- HD-TX-4KZ-201 - DM® Essentials 4K60 4:4:4 Transmitter and 2x1 Auto-Switcher for HDMI® Signal Extension over CATx Cable
- HD-TX-4KZ-211-2G - DM® Essentials 4K60 4:4:4 Transmitter and 2x1 Auto-Switcher for HDMI® and USB-C® DisplayPort™ Signal Extension over CATx Cable, Wall Plate
- HD-TX-4KZ-211-CHGR - DM Lite® 4K60 4:4:4 Transmitter and 2x1 Auto-Switcher for HDMI® and USB-C® DisplayPort™ Signal Extension over CATx Cable, Discontinued
- HD-TX-4KZ-401 - DM® Essentials 4K60 4:4:4 Transmitter and 4x1 Auto-Switcher for HDMI® Signal Extension over CATx Cable
- HD-TX-4KZ-421-CHGR - DM® Essentials 4K60 4:4:4 Transmitter and 4x1 Auto-Switcher for HDMI® and USB-C® DisplayPort™ Signal Extension over CATx Cable
- HD-TXA-4KZ-101 - DM Lite® 4K60 4:4:4 Transmitter for HDMI® and Analog Audio Signal Extension over CATx Cable, Discontinued
- HD-TXA-4KZ-101-1G - DM Lite® 4K60 4:4:4 Transmitter for HDMI® and Analog Audio Signal Extension over CATx Cable, Wall Plate, Discontinued
- HD-TXC-4KZ-101 - DM® Essentials 4K60 4:4:4 Transmitter for HDMI®, RS-232, and IR Signal Extension over CATx Cable
- HD-TXC-4KZ-101-1G - DM® Essentials 4K60 4:4:4 Transmitter for HDMI®, RS-232, and IR Signal Extension over CATx Cable, Wall Plate
- HD-TXCA-4KZ-101 - DM® Essentials 4K60 4:4:4 Transmitter for HDMI®, RS-232, IR, and Analog Audio Signal Extension over CATx Cable
- HD-TXU-4KZ-111-E - DM® Essentials 4K60 4:4:4 Transmitter for USB-C® DisplayPort™, USB 2.0, and Ethernet Signal Extension over CATx Cable
- HD-TXU-4KZ-111-2G - DM® Essentials 4K60 4:4:4 Transmitter for USB-C® DisplayPort™ and USB 2.0 Signal Extension over CATx Cable, Wall Plate
- HD-TXU-4KZ-211 - DM® Essentials 4K60 4:4:4 Transmitter and 2x1 Auto-Switcher for HDMI®, USB-C® DisplayPort™, and USB 2.0 Signal Extension over CATx Cable
- HD-TXU-4KZ-211-CHGR - DM® Essentials 4K60 4:4:4 Transmitter and 2x1 Auto-Switcher for HDMI®, USB-C® DisplayPort™, and USB 2.0 Signal Extension over CATx Cable with Device Charging

DM Essentials Receivers

- HD-RXC-4KZ-101 - DM® Essentials 4K60 4:4:4 Receiver for HDMI®, RS-232, and IR Signal Extension over CATx Cable
- HD-RXC-4KZ-101-1G - DM® Essentials 4K60 4:4:4 Receiver for HDMI®, RS-232, and IR Signal Extension over CATx Cable, Wall Plate
- HD-RXCA-4KZ-101 - DM® Essentials 4K60 4:4:4 Receiver for HDMI®, RS-232, IR, and Analog Audio Signal Extension over CATx Cable

- HD-RXU-4KZ-101-E - DM® Essentials 4K60 4:4:4 Receiver for HDMI®, USB 2.0, and Ethernet Signal Extension over CATx Cable
- HD-RXU-4KZ-101-2G - DM® Essentials 4K60 4:4:4 Receiver for HDMI® and USB 2.0 Signal Extension over CATx Cable, Wall Plate
- HD-RXU-4KZ-202 - DM® Essentials 4K60 4:4:4 Receiver and 2x2 Auto-Switcher for HDMI® and USB 2.0 Signal Extension over CATx Cable

HDMI Switchers

The following HDMI® switcher devices work with Crestron Home OS.

- HD-MD4X1-4K-E - 4x1 4K HDMI® Switcher, Discontinued
- HD-MD4X1-4KZ-E - 4x1 4K60 4:4:4 HDR AV Switcher
- HD-MD4X2-4K-E - 4x2 4K HDMI® Switcher, Discontinued
- HD-MD4x2-4KZ-E - 4x2 4K60 4:4:4 HDR AV Switcher
- HD-MD4X4-4KZ-E - 4x4 4K60 4:4:4 HDR AV Switcher
- HD-MD6X2-4K-E - 6x2 4K HDMI® Switcher
- HD-MD8X4-4KZ-E - 8x4 4K60 4:4:4 HDR AV Switcher
- HD-MD8X8-4KZ-E - 8x8 4K60 4:4:4 HDR AV Switcher
- HD-MD-2x1-8K - 2x1 8K AV Switcher and Smart Display Controller

HDMI Distribution Amplifiers

The following HDMI® distribution amplifier devices work with Crestron Home OS.

- HD-DA8-4KZ-E - 1:8 HDMI® Distribution Amplifier with 4K60 4:4:4 and HDR Support
- HD-DA4-4KZ-E - 1:4 HDMI® Distribution Amplifier with 4K60 4:4:4 and HDR Support
- HD-DA-2 - 1-to-2 HDMI® Distribution Amplifier and Audio Converter
- HD-DA-2-QUAD - Quad 1-to-2 HDMI® Distribution Amplifier
- HD-DA2-4KZ-E - 1:2 HDMI® Distribution Amplifier with 4K60 4:4:4 and HDR Support

HDMI Display Controller

The following HDMI® controller devices work with Crestron Home OS.

- HD-CTL-101 - 8K Smart Display Controller with HDMI® Connectivity
- DM-NAX-XSP - DM NAX® 8K Smart Display Controller and Network Audio Encoder/Decoder with eARC Support

Configure a System

To set up a Crestron Home system, download the Crestron Home Setup app, set up the Crestron Home processor, and then configure the Crestron Home® OS system.

Use the Crestron Home Setup app to configure the Crestron Home system.

> **NOTES:**
>
> - To upgrade from Crestron Pyng OS 2 to Crestron Home OS, refer to Upgrade Crestron Pyng OS 2 to Crestron Home OS on page 1183.
> - To set up using a deployment code, refer to Transfer Data using a Deploy Code (Recommended) on page 1501.

This section provides the following information:

- Crestron Home Setup App
- User Names and Passwords
- Initialize the Processor
- Build Your House
- Pair Devices
- Build System
- Create Scenes
- Customize and Schedule

Crestron Home Setup App

Use the Crestron Home Setup app to configure the Crestron Home system. The Crestron Home Setup app can be used on an Apple® iPad® device or a Mac® or Windows® PC.
This section provides the following information:

- Crestron Home Setup App for Desktops
- Crestron Home® Setup App for iPad

Crestron Home Setup App for Desktops

Use the Crestron Home Setup app for desktop to configure a Crestron Home system on a Mac® or Windows® PC.

Download the Crestron Home Setup App

To download the Crestron Home Setup app for PC or Mac, go here.

Launch the Crestron Home Setup App

The Crestron Home Setup app can be launched from the desktop application or from a web browser.

NOTES: The Crestron Home Setup app must be launched from the desktop when:

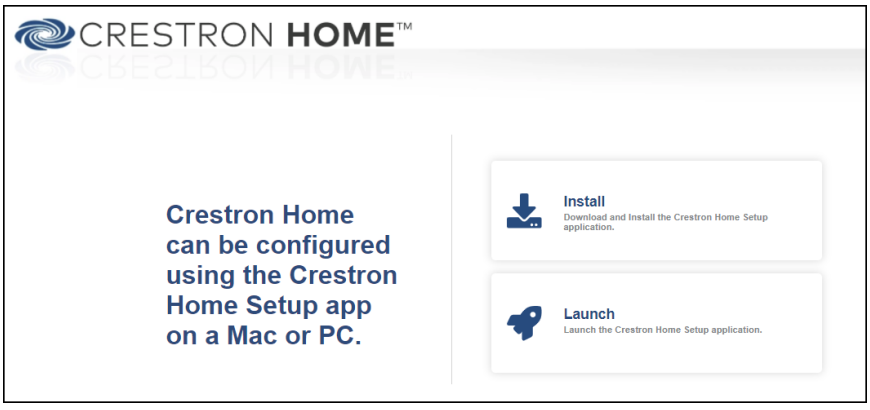
- The Crestron Home processor is running firmware version 3.002.0031 or earlier.
- The processor is a PYNG-HUB or CP3-R and running Pyng OS 1 or Pyng OS 2.

Launching from Web Browser

Enter the IP address of the Crestron Home processor into a web browser. The web page will prompt you to launch the Crestron Home Setup app.

NOTES:

- If the Crestron Home Setup app is installed on your computer you will be prompted to launch the Crestron Home Setup app.
- If the Crestron Home Setup app is not installed on your computer, you will be prompted to download and install the app.
- The Crestron Home Setup app can also be downloaded from the Crestron website.



Launching from Desktop

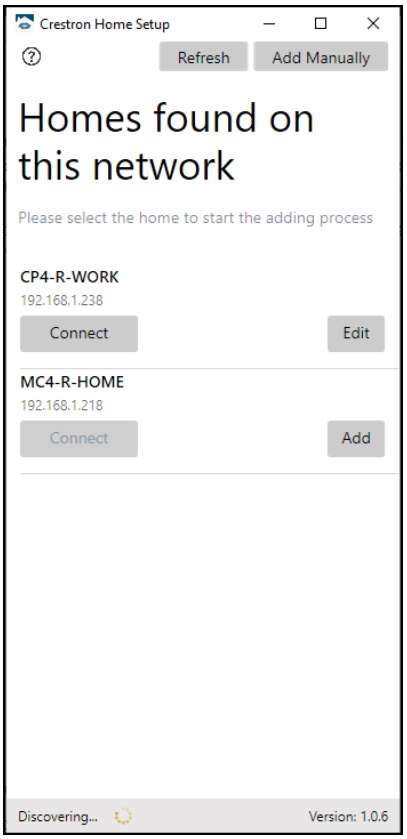
Double-click the Crestron Home Setup app to launch the app from the desktop.

> **NOTE:** The Crestron Home Setup app can be downloaded from the Crestron website.

Discover Crestron Home Processors

The Crestron Home Setup app discovers and displays a list of all Crestron Home processors on the local network when the app is launched. Newly discovered systems will have the **Add** button, the **Connect** button will be disabled.

> **NOTE:** If no Crestron Home processors are found, click **Refresh** to update the list or **Add Manually** to manually add the Crestron Home processor. For details, refer to Add or Edit a Crestron Home Processor on page 128.



The main screen consists of the following components:

- **Home List:** Displays the list of discovered and saved Crestron Home processors. Saved processors are displayed first, followed by discovered processors.

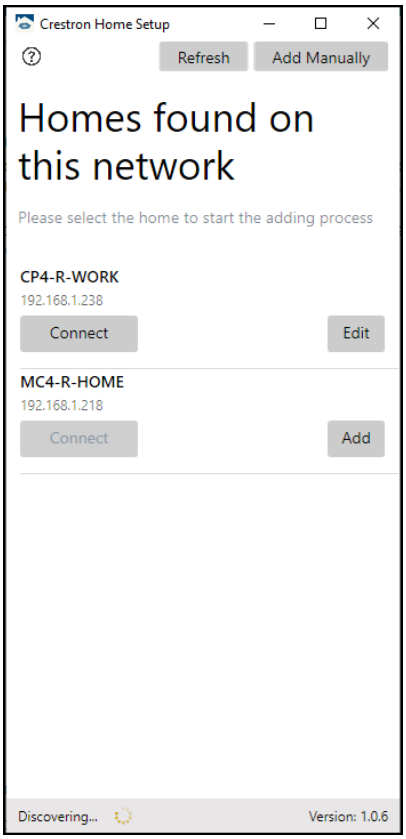
- **Refresh:** Initiates auto-discovery to scan the network and detect new Crestron Home processors. The application scans for new processors every 90 seconds.

  > **NOTE:** If the Crestron Home processor is discovered and then disconnected from the network, the processor is displayed in the Home List until the Crestron Home Setup app is closed and then restarted.

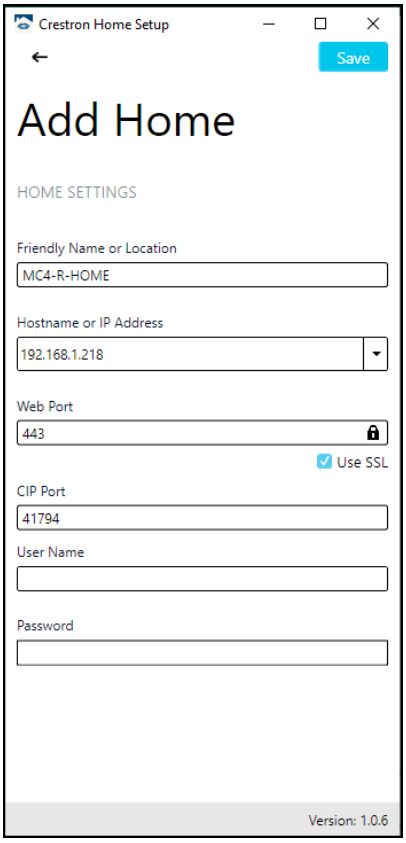
- **Add:** Saves the Crestron Home processor in the system list. Available for discovered processors that are not saved. For details, refer to Add or Edit a Crestron Home Processor on page 128.
- **Add Manually:** Add a Crestron Home processor that was not found during auto-discovery. For details, refer to Add or Edit a Crestron Home Processor on page 128.
- **Edit:** Changes the connection information for the Crestron Home processor. For details, refer to Add or Edit a Crestron Home Processor on page 128.
- **Connect:** Retrieves the configuration files from the Crestron Home System and launches the configuration screen. Enabled for processors that are saved. For details, refer to Launch a Configuration on page 130.
- **Status Bar:** Displays the status of the auto-discovery process and status of retrieving the configuration files from the Crestron Home System.

Add or Edit a Crestron Home Processor

1. Add or edit the Crestron Home processor.
   a. To add a Crestron Home processor that was discovered, click **Add**.
   b. To manually add a Crestron Home processor, click **Add Manually**.
   c. To edit the configuration for a Crestron Home processor, click **Edit**.



2. Enter the following information in the **Add Home** or **Edit Home** screen.



- **Friendly Name or Location:** Enter a name to help identify the Crestron Home processor. If the processor was found during auto-discovery, the field is populated with the host name.
- **Host Name or IP Address:** Enter the host name or IP address for the Crestron Home processor. If the processor was found during auto-discovery, the field displays a drop-down menu to select the host name or IP address of the processor.

  NOTES:

  - For discovered processors, this value will update if the discovery response indicates a change. Discovered systems are tracked by serial number.
  - The same host name or IP address cannot be used for multiple Crestron Home processors.

- **Web Port:** The port used to connect to the Crestron Home processor. The value can be changed to work with forwarded ports. The value must be between 1 and 65535. The default value is 443 when SSL is enabled and 80 when SSL is disabled.

- **CIP Port:** The CIP (Crestron Internet Protocol) port number used to connect to the Crestron Home processor. The value can be changed to work with forwarded ports. The value must be between 1 and 65535. The default value is 41796 when Secure CIP is enabled and 41794 when Secure CIP is disabled.
- **User Name:** The Admin User Name for the Crestron Home processor. The Admin User Name is used to connect to the Crestron Home processor.
- **Password:** The Admin Password for the Crestron Home processor. The Admin Password is used to connect to the Crestron Home processor.
- **Reset this home to default values:** Displayed when editing a configuration. Removes the stored values for the Crestron Home processor and removes the processor from the saved Home List.

  > **NOTE:** If the Crestron Home processor is disconnected from the network, the processor is displayed in the Home List until the Crestron Home Setup app is closed and then restarted.

3. Click **Save** to add the home.

Remove a Crestron Home Processor

To remove a Crestron Home processor from the Home List, use the procedures below.

Remove a Saved Processor

To remove a saved Crestron Home processor, follow these steps:

1. Select a Crestron Home processor to removed, and then click **Edit**.
2. Click the **Reset this home to default values**. The stored values for the Crestron Home processor are removed and the processor is removed from the saved Home List.
3. To remove the processor from the Home List, refer to Remove a Discovered Processor on page 130.

Remove a Manually Added Processor

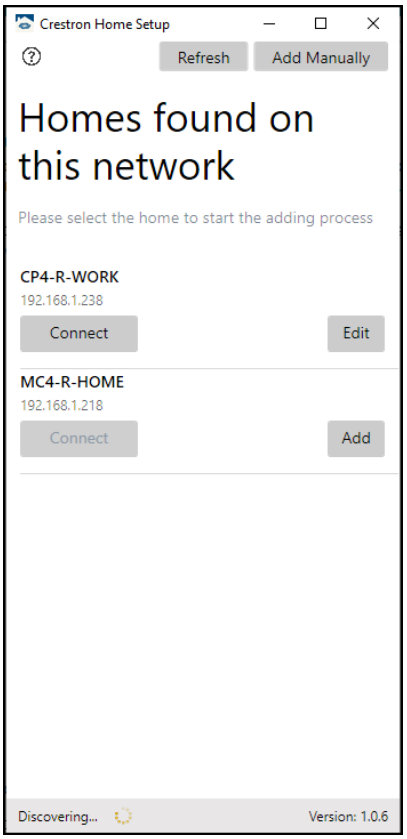
To delete a manually added Crestron Home processor, click **Edit > Delete this home**. The Crestron Home processor is removed from the Home List

Remove a Discovered Processor

To remove a Crestron Home processor that was discovered and is displayed in the Home List, disconnect the processor from the network and then restart the Crestron Home Setup app.

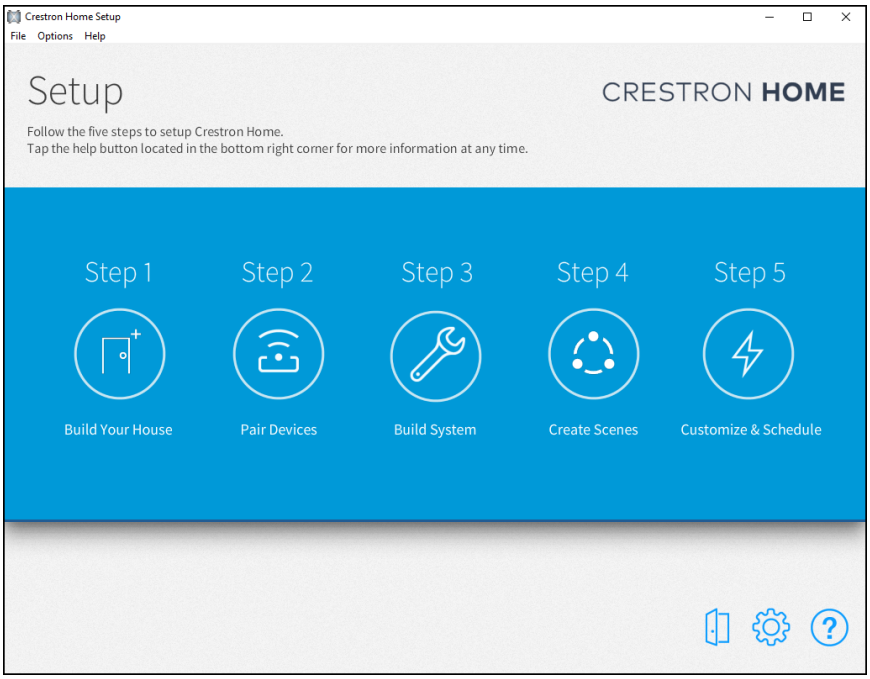
Launch a Configuration

Click **Connect** to launch a configuration. The Crestron Home Setup app connects to the Crestron Home processor, retrieves the configuration files, and then launches the configuration screen.



Configure the Crestron Home System

Configure the Crestron Home system with the Crestron Home Setup app. For details, refer to Configure a System on page 123.



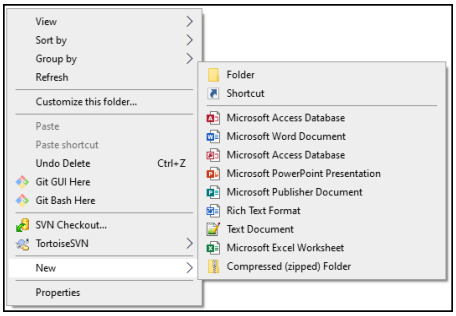
Shortcuts

Create a shortcut to open the configuration for a specific Crestron Home processor.

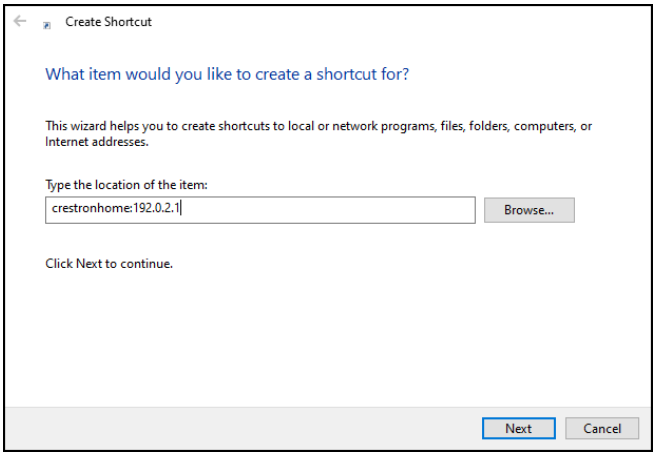
Create a Shortcut on a Windows PC

To create a shortcut in Windows:

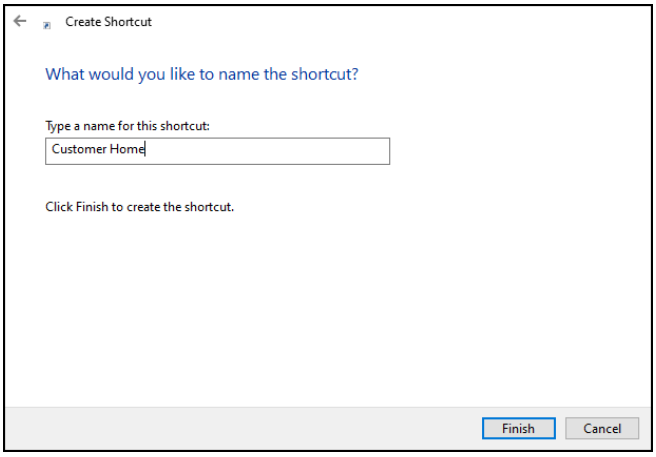
1. Open a folder. For example, the Desktop.
2. Right-click and then select **New > Shortcut**.



3. Enter `crestronhome:[ipadddress]` into the address bar (for example, crestronhome:192.0.2.1) and then select **Next**.



4. Enter a name for the shortcut.



5. Select **Finish**.

Create a Shortcut on a Mac

To create a shortcut in MacOS:

1. Enter the IP address or hostname into a web browser.
2. The Crestron Home splash screen displays.
3. Select the URL in the browser and then drag it to a folder on your computer.

Troubleshooting

Adobe AIR Encounters Error

Adobe® AIR® displays an "Adobe AIR.framework is damaged and can't be opened" message.

Possible Cause(s)

A quarantine flag is placed on AIR.framework which prevents the framework from running. This occurs when Adobe AIR is installed on macOS® Catalina.

Corrective Action(s)

Remove the quarantine flag from the AIR.framework using the Terminal app.

1. Open the Terminal app.
2. Run the following command:

```
sudo xattr -r -d com.apple.quarantine /Library/Frameworks/Adobe\
AIR.framework
```

Crestron Home® Setup App for iPad

Use the Crestron Home Setup app for iPad to configure a Crestron Home system on a tablet.

NOTES:

- For a comprehensive list of mobile hardware and software versions that are compatible with Crestron Home, refer to Supported iOS Hardware and Software Versions (OLH Answer ID: 5655).
- The Crestron Home Setup app is not available for Android™ devices.

Download the Crestron Home® Setup App

Find the Crestron Home Setup app on the App Store® online store.

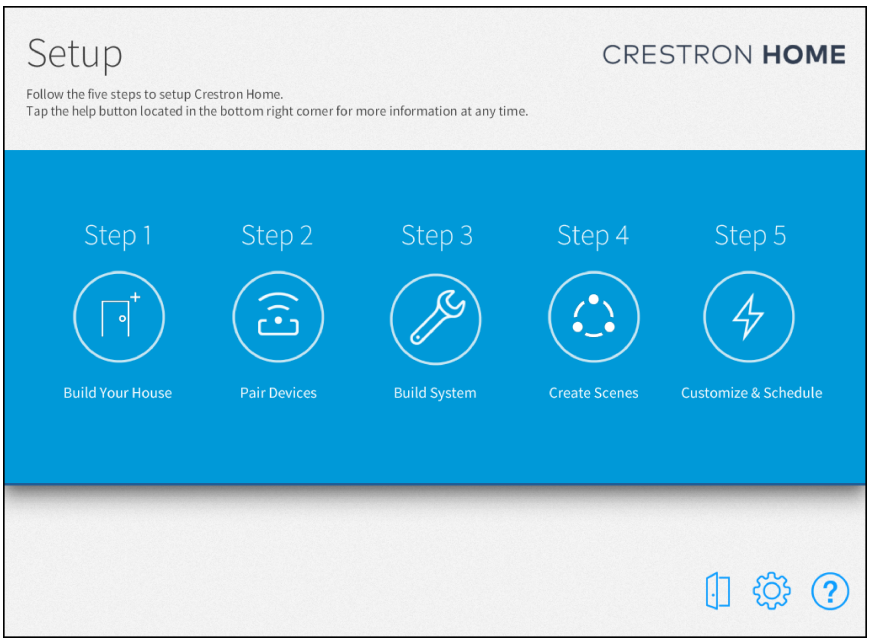
NOTE: An Apple ID is required to download the Crestron Home Setup. To create an Apple ID, refer to How to create a new Apple ID (external link).

Launch the Crestron Home Setup App

To launch the Crestron Home Setup, tap **Crestron Home Setup** .

Configure the Crestron Home System.

Configure the Crestron Home system with the Crestron Home Setup app. For details, refer to Configure a System on page 123.



User Names and Passwords

The Crestron Home system uses several sets of credentials to allow access to different areas of the Crestron Home system.

Crestron Home Setup app usernames and passwords:

- **Admin Credentials:** Used to sign into the Crestron Home Setup app. The **Admin** username and password is set up using the Crestron Home Setup app.
- **Common Device Credentials:** The common device credentials are stored in the Crestron Home system and assigned to devices that connect to the system using the Common Device credentials.

  > **NOTE:** To connect to the device using Crestron Toolbox™ software and the device is connected to the Crestron Home system using the Common Device credentials, use the Common Device credentials to log in.

  - **Common Device Username:** Assigned to a device by the Crestron Home processor. The common device username is "chdevice".
  - **Common Device Password:** Set using the Crestron Home Setup app. The common device password is assigned to the device by the Crestron Home processor.
- **Advanced User Credentials:** Used to access the setup and configuration screens for the system. The Advanced User credentials give the homeowners limited access to the setup and configuration screens on the system.
  - **Advanced User Username:** The advanced user username is "advanceduser". This username cannot be changed.
  - **Advanced User Password:** Set using the Crestron Home Setup app.

Crestron Home Setup app password:

- **User Interface Device Password:** Allows user interface devices (Crestron touch screens, TSR-310 handheld remotes, iOS® devices, and Android™ devices) to join the Crestron Home system. User interface devices cannot connect to the Crestron Home system if the User Interface Device Password is not set. To set the User Interface Device Password, refer to Advanced User Password on page 567.

NOTES:

- After several unsuccessful login attempts, the IP address of the device is blocked from joining the Crestron Home system for 1 hour. Other devices are allowed to join during this period.
- Create passwords using any combination of letters, numbers and symbols (ASCII-standard characters only, accents and accented characters are not supported).
- All passwords must be unique.
- Use Crestron Toolbox™ software to manage blocked IP addresses, change the password policy, and change the maximum login attempts.
- To reset passwords, refer to Reset Passwords on page 1407.

Password Rules

To maintain a secure system, passwords must meet certain requirements. The minimum character password requirements changed with the release of Crestron Home version 3.012.0125.

To avoid disruptions, systems upgraded from 3.011.0070 or earlier to 3.012.0125 or later will maintain the 3.011.0070 password rules. If the processor is restored to factory default settings, the updated minimum character count is enforced.

Password rules apply to the Admin, Advanced User, User Interface Device, and Common Device passwords.

Password Rules

	Version 3.011.0070	Version 3.012.0125 Without System Restore	Version 3.012.0125 After System Restore
Minimum Characters	6	6	8
Login Attempts	3	5	5

NOTES:

- Resetting the passwords as described in Reset Passwords on page 1407 does not change the password rules.
- A space is not a valid character. In Crestron Home version 3.012.0125, if a password with a space is entered the password will not be saved, even though a success message displays.

Reset Passwords

Reset the passwords if a password is lost or if the system is transferred to a new owner.

NOTES:

- The Admin username and all other users are removed from the system.
- When the passwords are reset, the system displays a prompt to enter a new Admin username and password.
- After the password reset, the Advanced User, User Interface Device, and Common Device passwords must be set.

To reset the passwords:

1. Press and hold the **SW-R** button on the Crestron Home processor (about 15 seconds) until the **MSG** LED flashes rapidly.
2. Set the Admin username and password in the **Create Admin Account** dialog box.
3. Set the Advanced User, User Interface Device, and Common Device passwords:

   NOTE: To change the Admin password, refer to Admin Password on page 566.

   - **Advanced User password:** Refer to Advanced User Password on page 567.
   - **User Interface Device password:** Refer to User Interface Device Password on page 568.
   - **Common Device password:** Refer to Common Device Password on page 569.

Initialize the Processor

Initialize the processor the first time the processor boots or after a factory reset.

> **NOTE:** To install the Crestron Home processor, refer to the 4-Series™ Control Systems product manual.

> **TIP:** Load a Crestron Home Configurator or myCrestron backup configuration during the initialization process.
>
> - To load a Crestron Home Configurator configuration during initialization, refer to Deploy a Configuration on page 750.
>
> > **NOTE:** To update (redeploy) a configuration, refer to Update the Current Configuration on page 582.
>
> - To restore a myCrestron Residential Monitoring Service backup configuration during initialization, refer to Migrate System Data to a Different Processor on page 1500.

To initialize the processor:

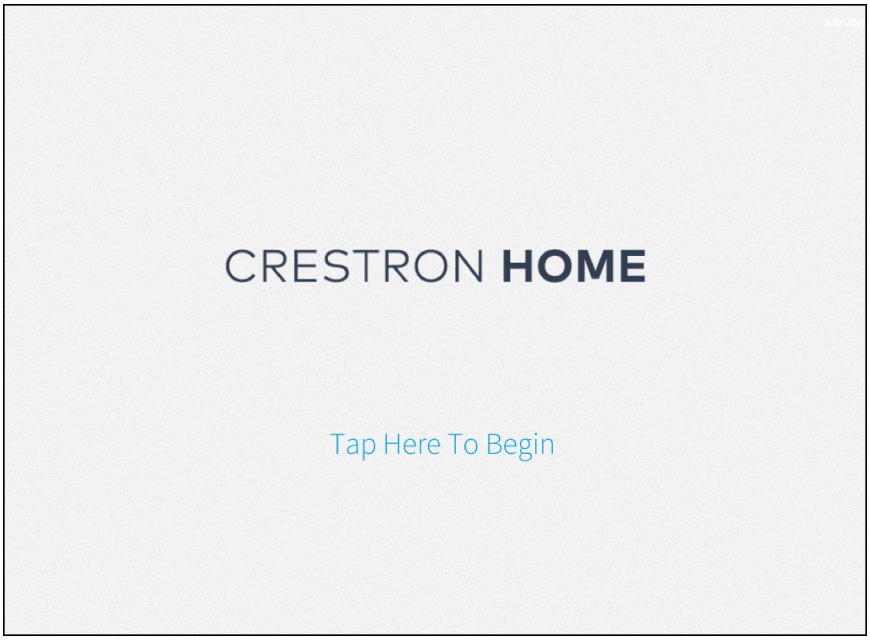
1. Open the Crestron Home Setup app and then connect to the Crestron Home processor.

   > **NOTES**
   >
   > - The Crestron Home processor and the device running the Crestron Home Setup app must be placed on the same subnet prior to setting up the system.
   > - If the Crestron Home Setup app does not connect to the Crestron Home processor automatically, enter the Crestron Home processor's hostname and select **Connect**. The default hostname for a Crestron Home processor is "[Product-Name]-[MAC Address]" (excluding punctuation). For example, "CP4-R-123A567B91C3." The MAC address label is located on the bottom or rear of the device.

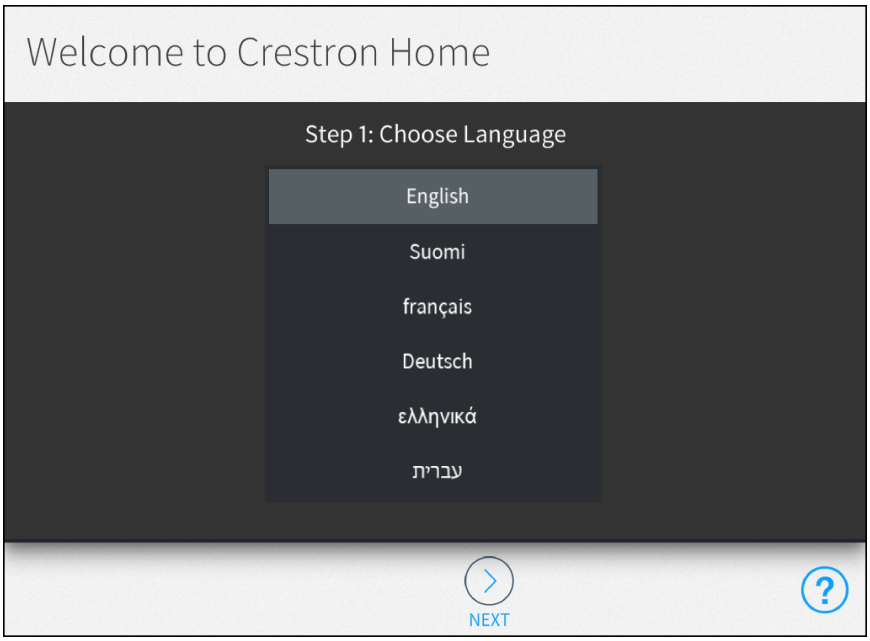
2. Set the Admin username and password in the **Create Admin Account** dialog box.

   > **NOTE:** If security was enabled before the upgrade, the credentials are retained. Use the credentials set previously to log in.

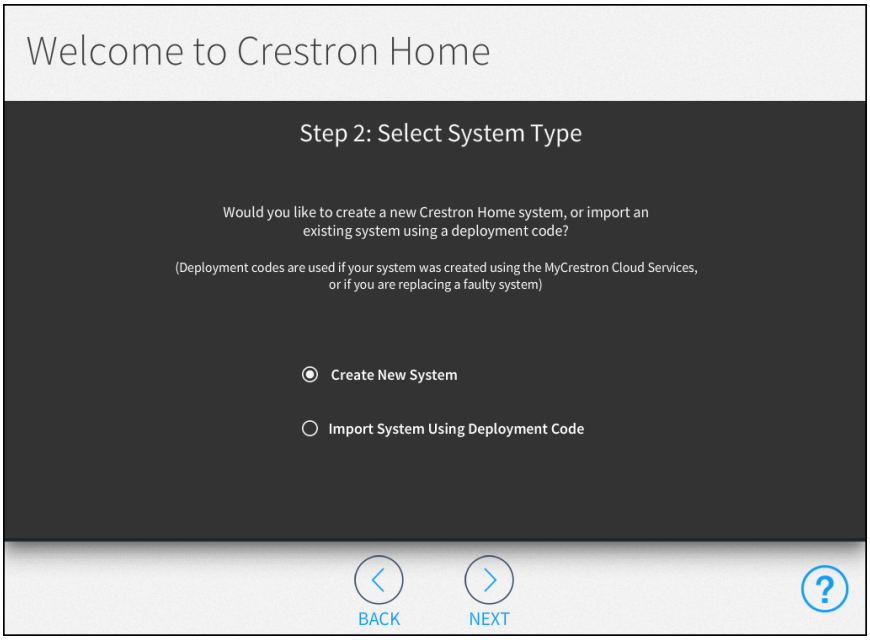
3. The Crestron Home Setup splash screen is displayed. Select **Tap Here to Begin**.



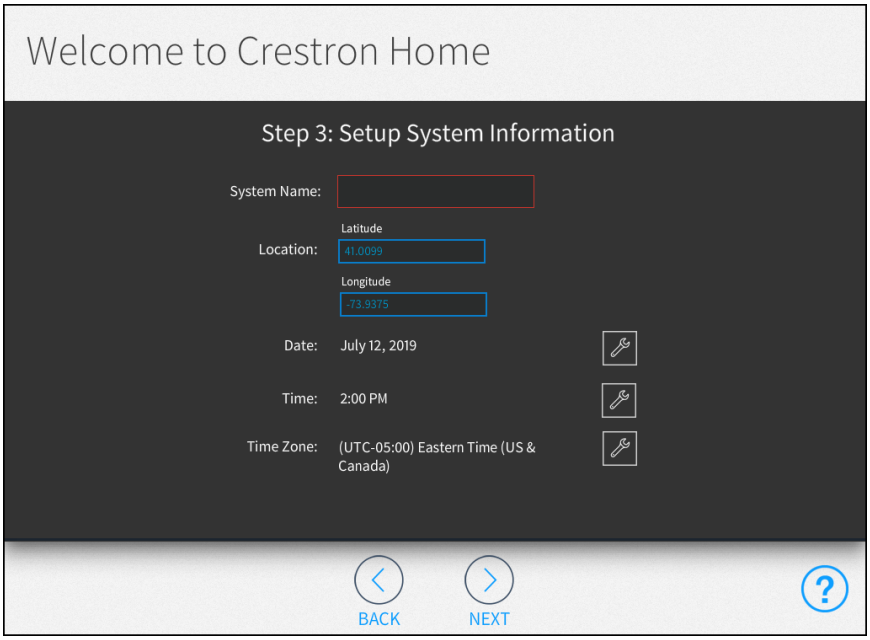
4. Select the language for the Crestron Home Setup app and then **NEXT**.



5. Select **Create New System** and then **NEXT**.



6. Enter the system information and then select **NEXT**.

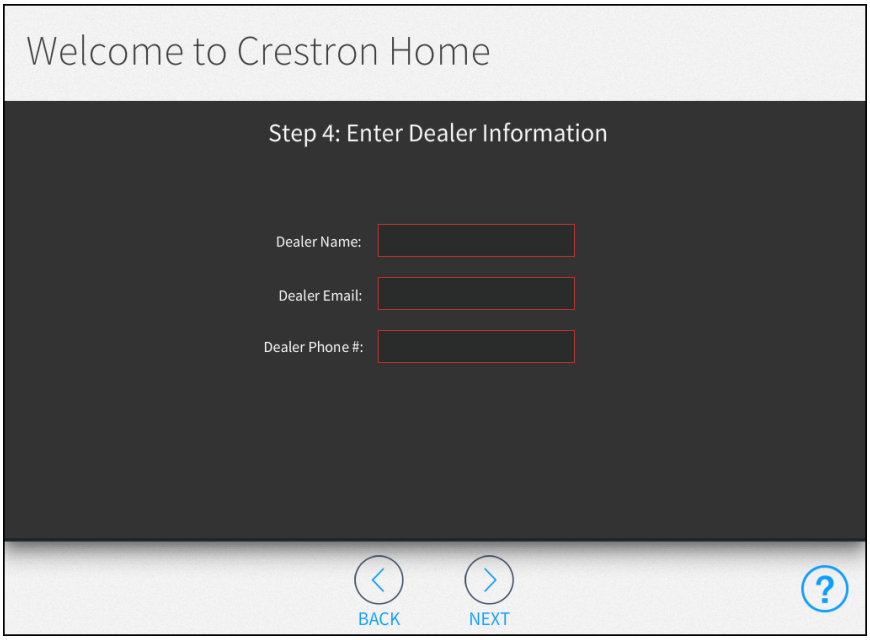


- **System Name:** Enter a descriptive system name.
- **Location:** Enter the latitude and longitude of the system.

  > **NOTE:** If setting up the Crestron Home system with an iPad device, tap the **Synchronize with iPad** button to synchronize the time zone, longitude, and latitude automatically with the iPad device's location services.

- **Date:** Tap **Configure Date** to display spinners for selecting the month, day, and year.
- **Time:** Tap **Configure Time** to display spinners for selecting the hour and minute buttons, and for selecting **AM** or **PM**.
- **Time Zone:** Tap **Configure Time Zone** to display a menu for selecting the time zone used by the system.

7. Enter the dealer information and then select **NEXT**.

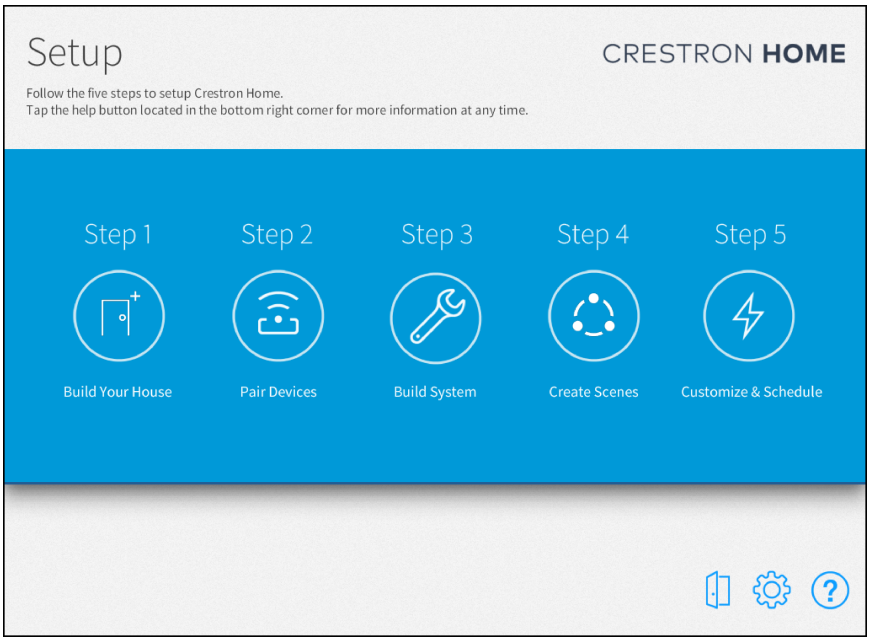


- **Dealer Name:** Enter the Crestron dealer responsible for the installation.
- **Dealer Email:** Enter the email address of the Crestron dealer responsible for the installation.
- **Dealer Phone #:** Enter the phone number of the Crestron dealer responsible for the installation.

8. Tap the **Privacy Statement**, **myCrestron Residential Monitoring Service Terms of Use**, **Mobile Apps Terms of Use**, **Software License Agreement**, and **Legal Information** links to review Crestron's legal terms regarding the setup, configuration, and use of the Crestron Home system. Tap the **I agree to the above terms** check box to accept these legal terms.



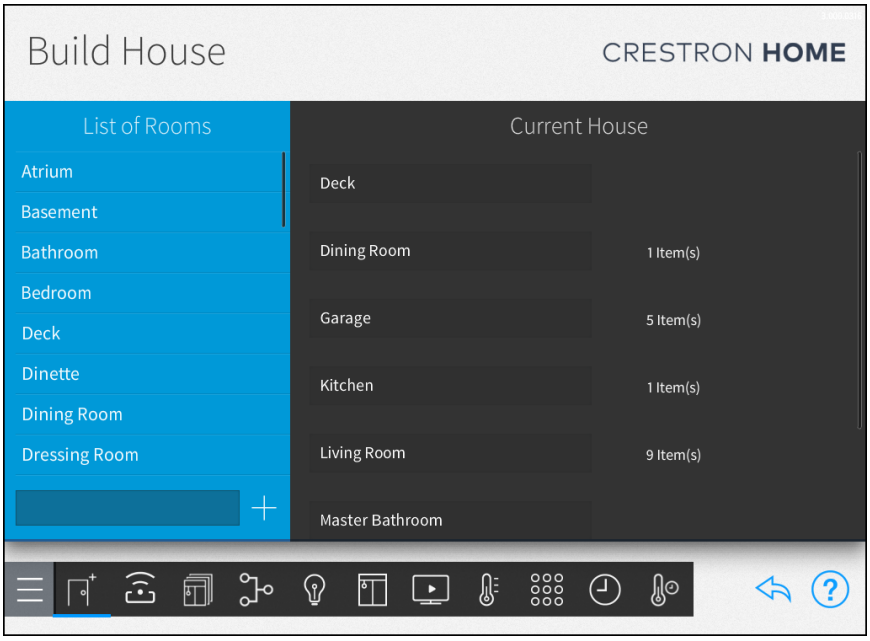
9. To complete the initial setup, select **Get Started**.



Build Your House

Use the **Build House** screen to add and manage rooms in the Crestron Home system. Rooms can be added, renamed, and deleted; placed in room groups; and controlled using voice control. The **Build House** screen also displays the number of devices in each room.

To view the **Build House** screen, select **Build Your House** on the **Setup** screen or on the setup menu.



Use the **Build House** screen to add and configure:

- Rooms
- Room Groups
- Voice Control

To return to the previous screen, tap **Back**.

Rooms

Add rooms to the Crestron Home system. Rooms can also be renamed and deleted.

> **NOTES:**
>
> - Room names must be unique.
> - Room names and room groups cannot use the same name.

Add a Room

To add a room:

1. In the **List of Rooms** menu, do either of the following:
   - Select a room name from the list.

     > **TIP:** If necessary, modify the room name in the text box.

   - Enter a room name in the text box.
2. Select **Add**.

Rename a Room

To edit the room name:

1. In the **Current House** menu, select a room.
2. Enter a room name. The room name is saved automatically.

Delete a Room

To delete a room:

1. In the **Current House** menu, select a room.
2. Select **Delete**.

Hide a Room

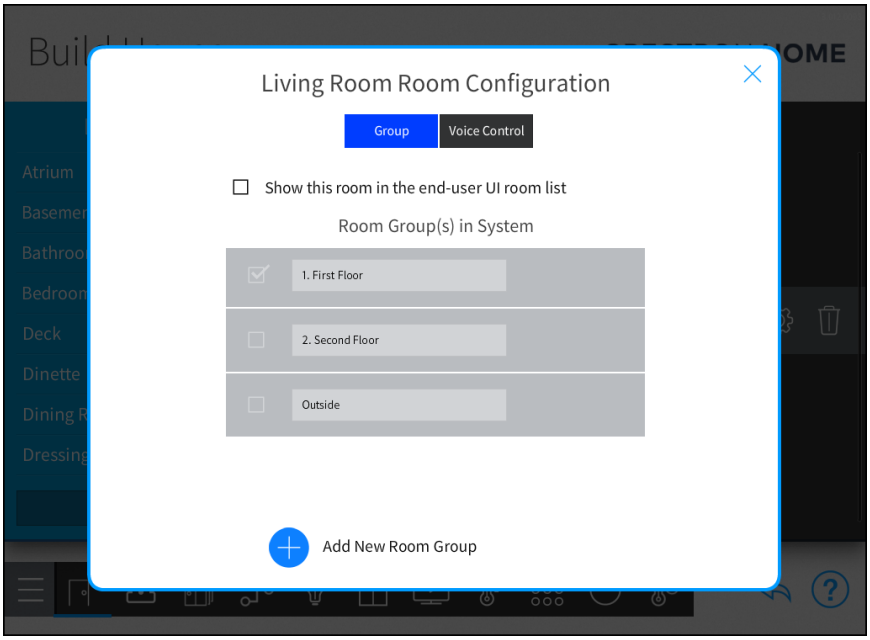
Hide a room from the end-user Crestron Homeapp. The Crestron Home app will not display the hidden room on the Rooms tab. Devices that are added to the hidden room are accessible in the Device Health dashboard.

All rooms are visible by default.

> **TIP:** Hide rooms that contain devices not directly controlled by the home owner. For example, an Equipment room that contains server equipment, gateways, and lighting enclosures.

To hide a room:

1. In the **Current House** menu, select a room and then **Settings**.
2. To hide the room, deselect **Show this room in the end-user UI room list**.



Room Groups

Use room groups to organize rooms within the Crestron Home user interface. Creating room groups helps the user find rooms in the Crestron Home user interface.

To see room groups in the Crestron Home user interface, refer to Room Selection Tab on page 820.

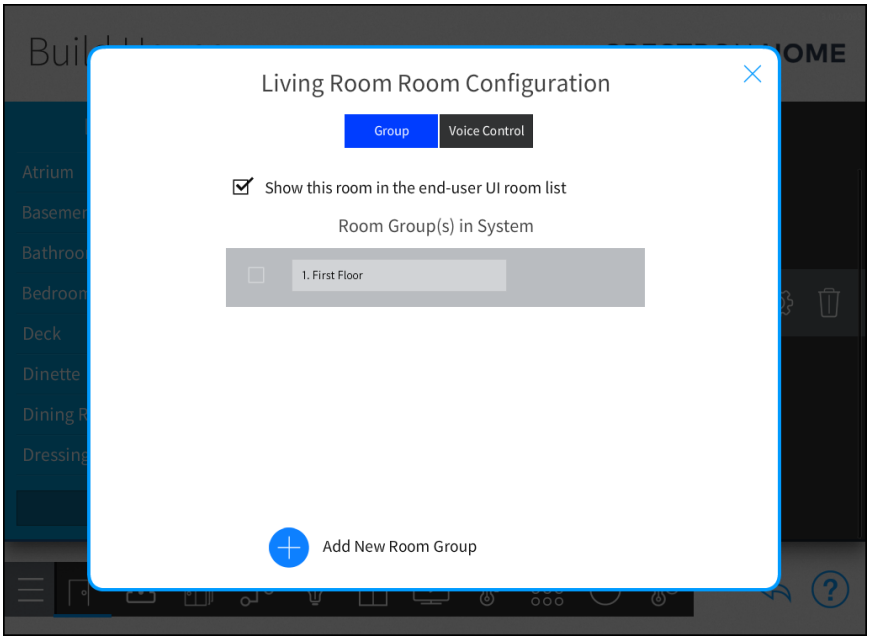
Create a Room Group

NOTES:

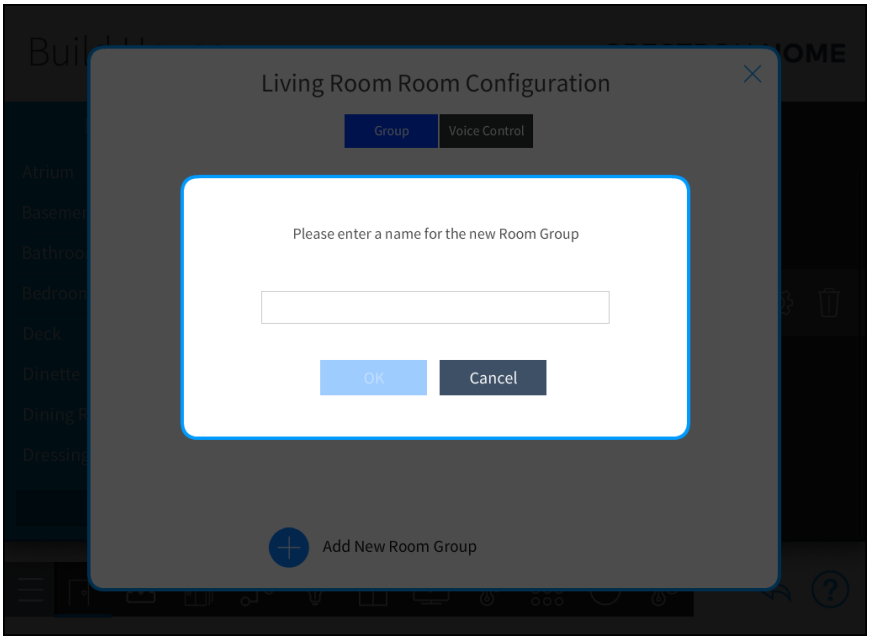
- When a room group is created, the selected room is automatically added to the group.
- To view all rooms in the room group, select **Information**.

To create a room group:

1. In the **Current House** menu, select a room and then **Settings**.
2. Select **Add New Room Group**.



3. Enter a name for the room group.



4. Select **OK**.

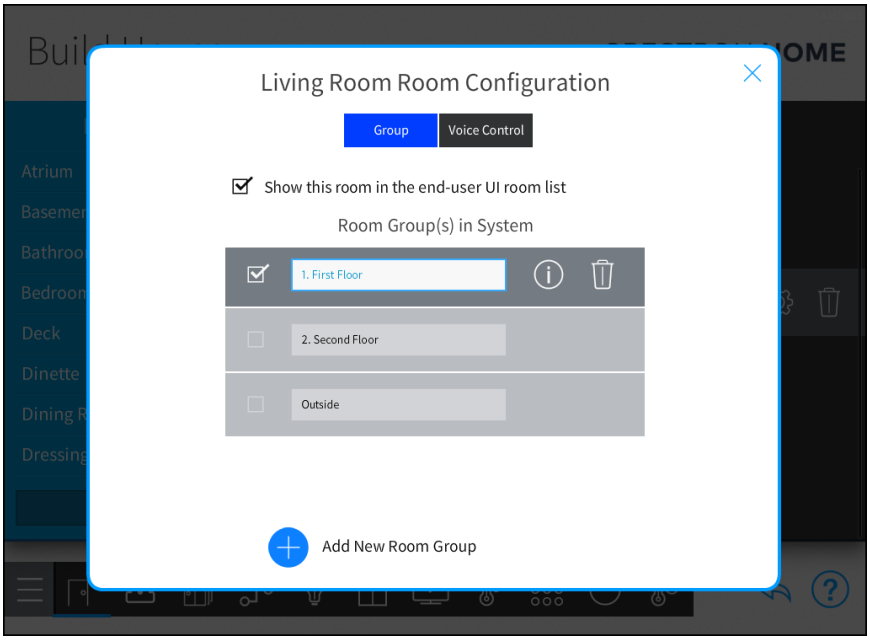
Add a Room to a Room Group

NOTES:

- When a room group is created, the selected room is automatically added to the group.
- To view all rooms in the room group, select **Information**.

To add a room to a room group:

1. In the **Current House** menu, select a room and then **Settings**.
2. In the **Room Group(s) in System** list, select one or more a room groups for the room.



Rename a Room Group

To rename a room group:

1. In the **Current House** menu, select a room and then **Settings**.
2. Select a room group.
3. Enter a room group name. The room group name is saved automatically.

Delete a Room Group

To delete a room group:

> **NOTE:** Deleting a room group does not delete the assigned rooms from the system.

1. In the **Current House** menu, select a room and then **Settings**.
2. Select **Delete**.

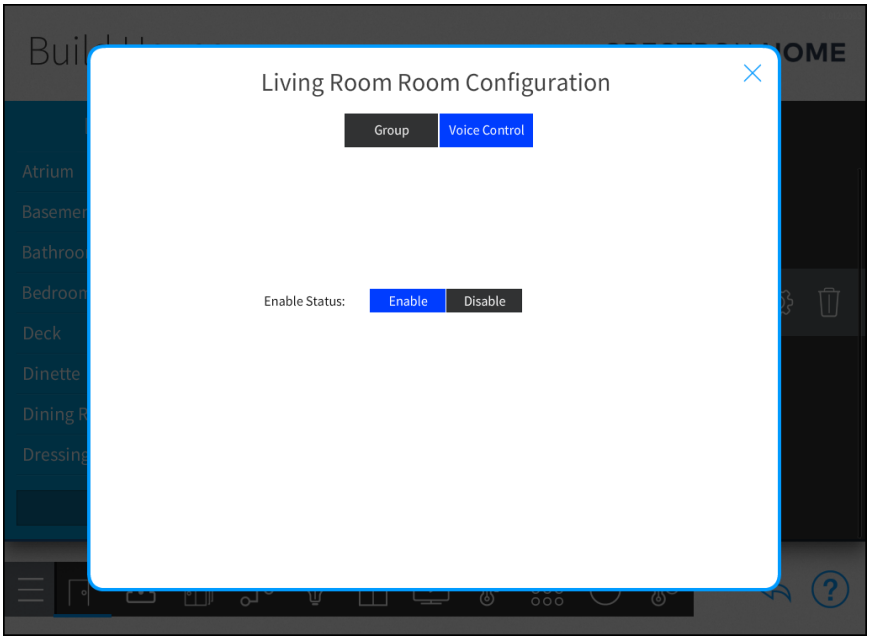
Voice Control

Use the **Voice Control** tab to configure the voice control settings.

> **NOTE:** Voice control services must be turned on prior to use. To turn on voice control services, refer to Voice Control Settings on page 607.

To turn voice control on or off:

1. In the **Current House** menu, select a room and then **Settings**.
2. Select the **Voice Control** tab.



3. Select **Enable** or **Disable** to turn voice control services on or off.

Pair Devices

Use the **Pair Devices** screen to add and configure devices in the Crestron Home system. Devices are added to the rooms in the system and then configured.

NOTES:

- For a list of devices that are supported by Crestron Home® OS, refer to Works with Crestron Home OS on page 55.
- New device support is added through device and control processor firmware updates.
- Pair user interface device (Crestron touch screens, TSR-310 handheld remotes, iOS® devices, and Android™ devices) to the Crestron Home system using the UI on the device. For details, refer to User Interface Devices on page 156.

To view the **Pair Devices** screen, select **Pair Devices** on the **Setup** screen or on the setup menu.



This section provides the following information:

- Secure Device Connections
- User Interface Devices
- Crestron Wireless Devices
- Crestron Wired and Wi-Fi Devices
- Sonos® Devices
- DALI Groups and Individual DALI Loads
- Tunable Lights

- Crestron Driver Devices
- Other Devices
- Gateways and Processors
- Multiple Processors
- Pair DM NAX Devices
- Pair Third-Party Keypads
- Pair Apple TV with Apple HomeKit
- Pair and Configure a Lutron System with a Crestron Home® System

Secure Device Connections

Select Crestron Home compatible devices utilize the Common Device credentials to connect to the system. The Common Device password keeps your system and the connected devices secure. Using one system-wide set of device credentials eliminates the need to manage unique credentials for each supported device in the system.

> **IMPORTANT NOTE:** When using Crestron Toolbox™ software or a web interface to connect to a device that has been assigned the Common Device credentials, enter chdevice for the Common Device username and the password that is set on the Crestron Home processor.
>
> To learn more about credentials used in the Crestron Home system, refer to System Detail and Password Configuration on page 566.

Requirements

To add a device that uses the Common Device credentials:

- The Common Device password must be set on the control processor. To set the Common Device password, refer to Common Device Password on page 569.

  > **NOTES:**
  > - The Common Device Password must be at least 8 characters.
  > - Confirm all connected Crestron Ethernet devices are online before changing the Common Device Password.
  > - Wait at least ten minutes after a processor reboot before changing the Common Device Password.

- The firmware for the device and the Crestron Home processor must both support the Common Device credentials. To update firmware, refer to Software Update on page 622.

Connect with the Common Device Credentials

Connect to a device that uses the Common Device credentials. The connection process is different for new devices, new devices with default credentials, and devices in the Crestron Home system, and devices with existing credentials.

- **New Device:** A device that is unused or reset to factory defaults. Credentials are set on the device during the first connection attempt.

  To add a new device, refer to New Device on page 154.

- **New Device with Default Credentials:** A device that is unused or reset to factory defaults and uses default admin credentials. The admin credentials are set by the firmware.

  To add a new device with admin credentials, refer to New Device with Default Credentials on page 154.

- **Device in Crestron Home System:** A device that is part of the current Crestron Home system. Firmware for the device and the Crestron Home system support the Common Device credentials.

  To update the connection to the device in the Crestron Home system, refer to Device in a Crestron Home System on page 155.
- **Device with Existing Credentials:** A device that has been used in a system and transferred to a Crestron Home system. The admin credentials have been set on the device and the device has not been reset to factory defaults.

  To add an existing device, refer to Device with Existing Credentials on page 155.

New Device

To add a new device using the Common Device credentials, follow these steps:

1. Verify that the firmware for the device and the Crestron Home processor meet the minimum firmware version. If necessary, upgrade firmware.
2. Add the device to the system. To add a device, refer to Pair Devices on page 151 or Gateways and Processors on page 280.
3. The Common Device credentials are assigned to the device and the device is added to the system.

New Device with Default Credentials

To add a new device that has default credentials assigned by the device firmware, follow these steps:

1. Upgrade the firmware for the device or the Crestron Home processor.
2. Add the device to the system. To add a device, refer to Pair Devices on page 151 or to add a gateway, refer to Gateways and Processors on page 280.
3. When the device is added to the system, you will be prompted to enter admin credentials for the device. The admin credentials are required to create the Common Device credentials on the device.
4. Enter the admin credentials for the device and then select **OK**.
5. The Common Device credentials are assigned to the device and the device is added to the system.

Device in a Crestron Home System

To update the connection settings for a device that is part of the Crestron Home system, follow these steps:

1. Upgrade the firmware for the device or the Crestron Home processor.
2. To update the connection to use the Common Device credentials, open the device settings and then select **Repair Connection**.

   > **NOTE:** If credentials were assigned to the device before it was upgraded, you will be prompted to enter admin credentials for the device. The admin credentials are required to create the Common Device credentials on the device.

Device with Existing Credentials

To add a device that was previously removed from a Crestron Home system, a device that was part of a different Crestron system, or a device with existing credentials, follow these steps:

1. Upgrade the firmware for the device or the Crestron Home processor.
2. Add the device to the system. To add a device, refer to Pair Devices on page 151 or to add a gateway, refer to Gateways and Processors on page 280.
3. When the device is added to the system, you will be prompted to enter admin credentials for the device. The admin credentials are required to create the Common Device credentials on the device.

   > **NOTE:** If the device is being added back to the Crestron Home system that it was removed from and the Common Device credentials were used with the device prior to removal, you can enter the Common Device credentials that were last used with the device.

4. Enter the admin credentials for the device and then select **OK**.
5. The Common Device credentials are assigned to the device and the device is added to the system.

   > **NOTE:** If the Common Device credentials were set on the device and they do not match the Crestron Home processor, the common device password on the device is updated.

User Interface Devices

User interface devices (Crestron® touch screens, TSR-310 handheld remotes, iOS® devices, and Android™ devices) run the Crestron Home app and must be paired to the Crestron Home system using the device's user interface. The pairing process creates a secure connection between the user interface device and the Crestron Home processor.

> **NOTE:** The User Interface Device password must be set before pairing. To set the User Interface Device password, refer to User Interface Device Password on page 568.

The following User Interface Devices can be paired:

- Pair a Mobile Device
- Pair a Crestron Touch Screen
- Pair a TSR-310 Handheld Remote

Pair a Mobile Device

Pair a mobile iOS® Device or Android™ Device using the Secure Remote Connection on page 157 (recommended) or the User Interface Devices on page 156.

Secure Remote Connection

The remote connection is secure and does not require port-forwarding. Use the secure remote connection to do the following:

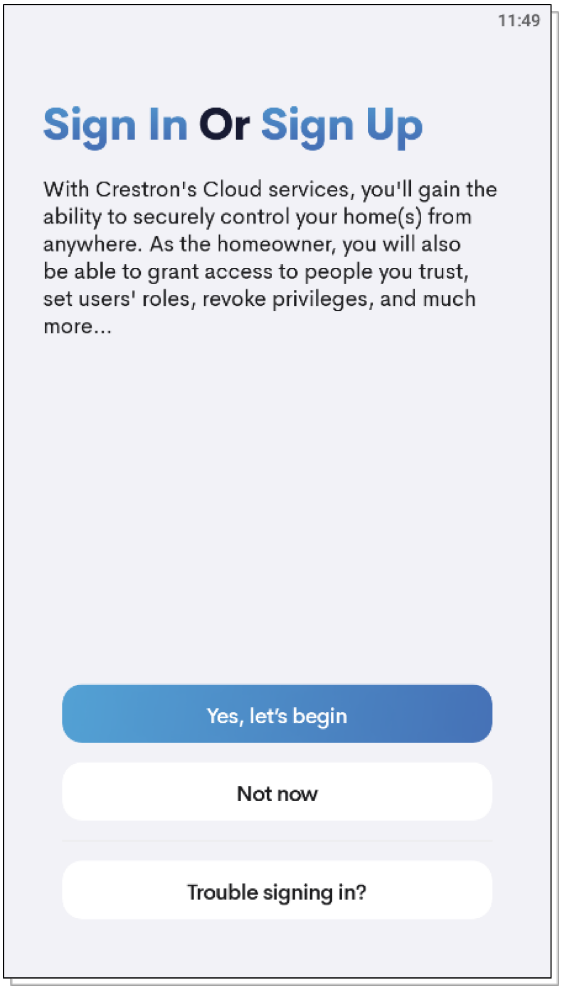
- Create an account and sign in.
- Claim a home.
- Invite and manage users.
- Manage account settings.

Create an Account using an Email Address

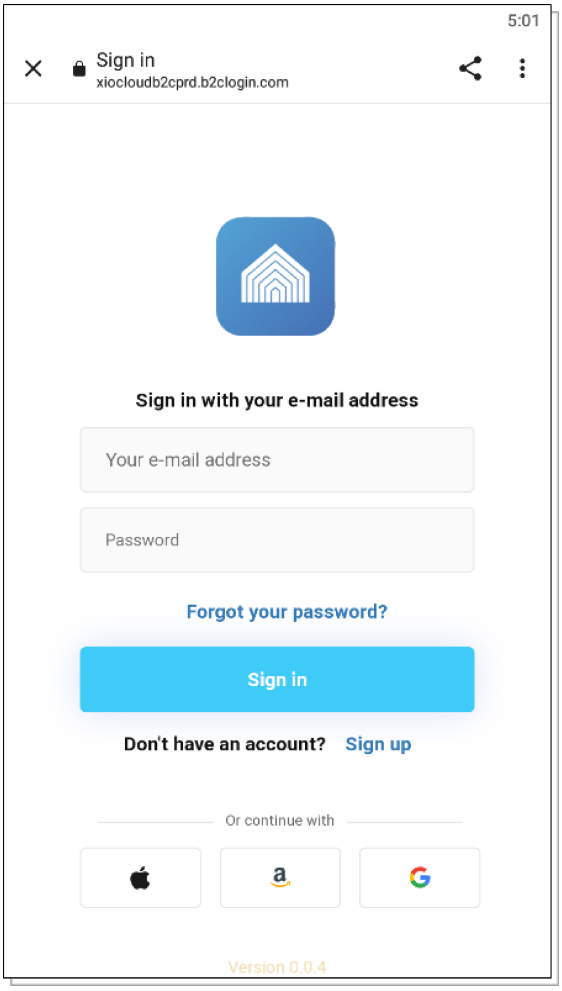
Create an account to control the home from outside the wireless network.

To sign up using an email address:

1. Select **Yes, let's begin**.



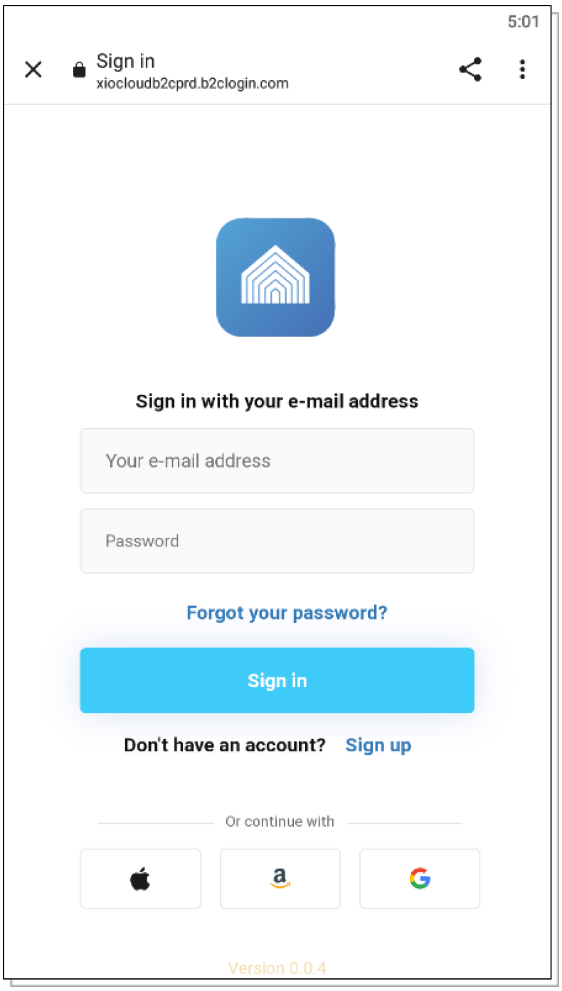
2. Select **Sign up**.



3. Follow the on-screen prompts to create an account. An email address and phone number is required to create an account. Two-factor authentication is used to verify the email address and phone number that is provided. Additionally, a display name and password will be selected.

Sign In with Email Address

1. Select **Yes, let's begin**.
2. Enter your e-mail address and password.

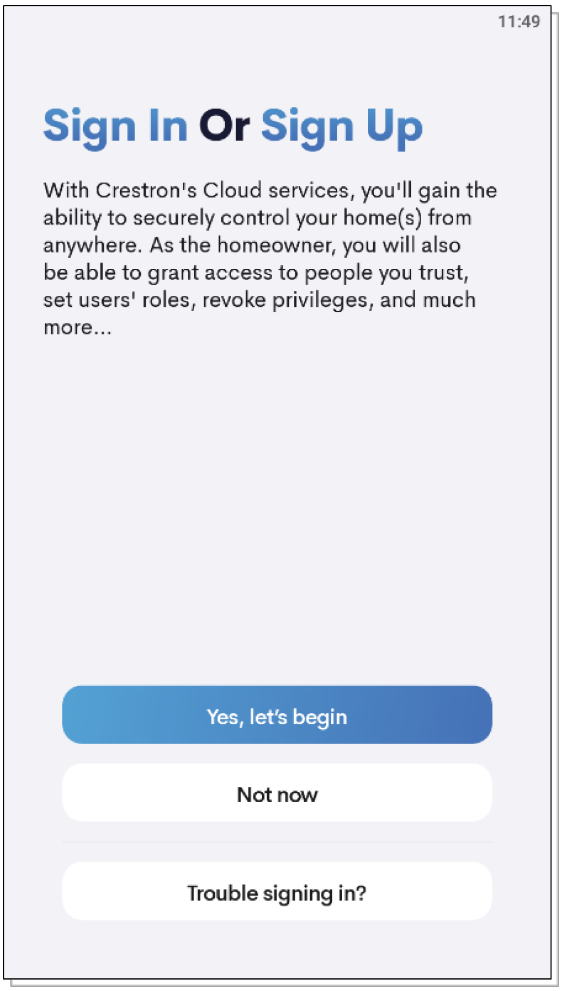


3. Select **Sign in** and then follow the prompts. For security, two-factor authentication is used to verify the email address used when signing up.

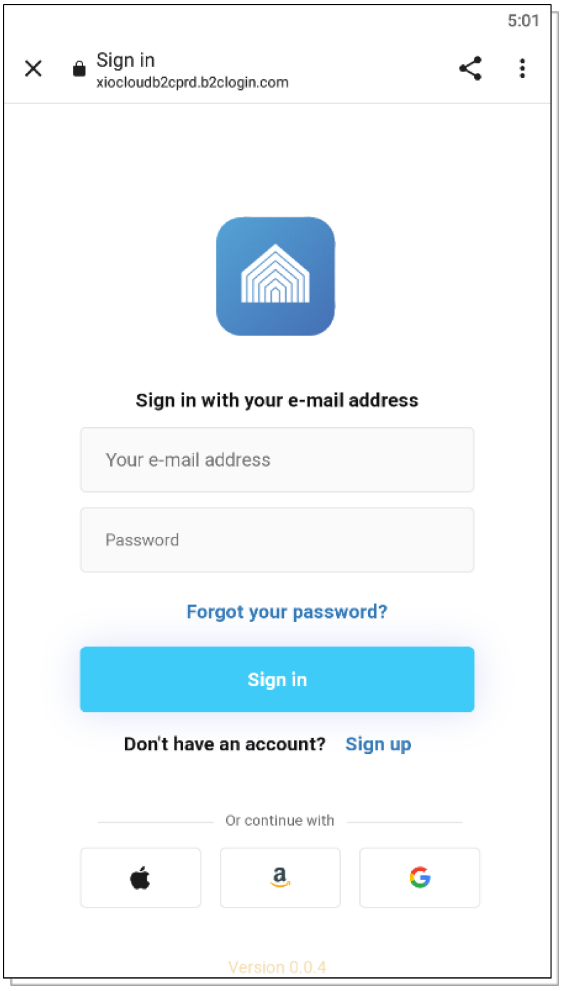
Create Account and Sign In Using a Third-party Service

To create an account and sign in using an Apple, Amazon, or Google account:

1. Select **Yes, let's begin**.



2. Select a third-party service.



3. Select **Apple**, **Amazon**, or **Google** and then follow the prompts to sign up and sign in.

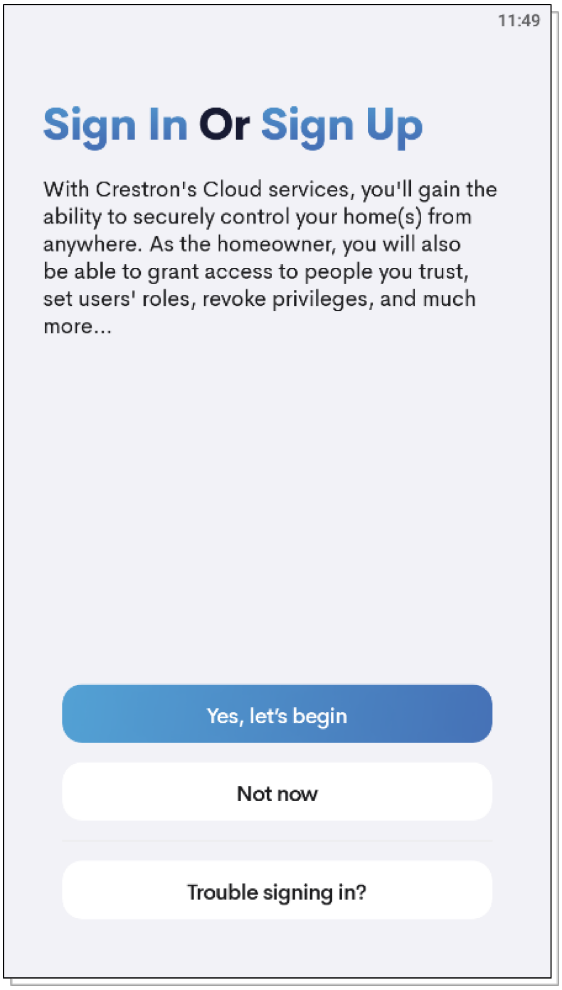
> **NOTE:** For assistance, visit How to use Sign in with Apple, Use Login with Amazon, or Use your Google Account to sign in to other apps or services.

Trouble Signing In

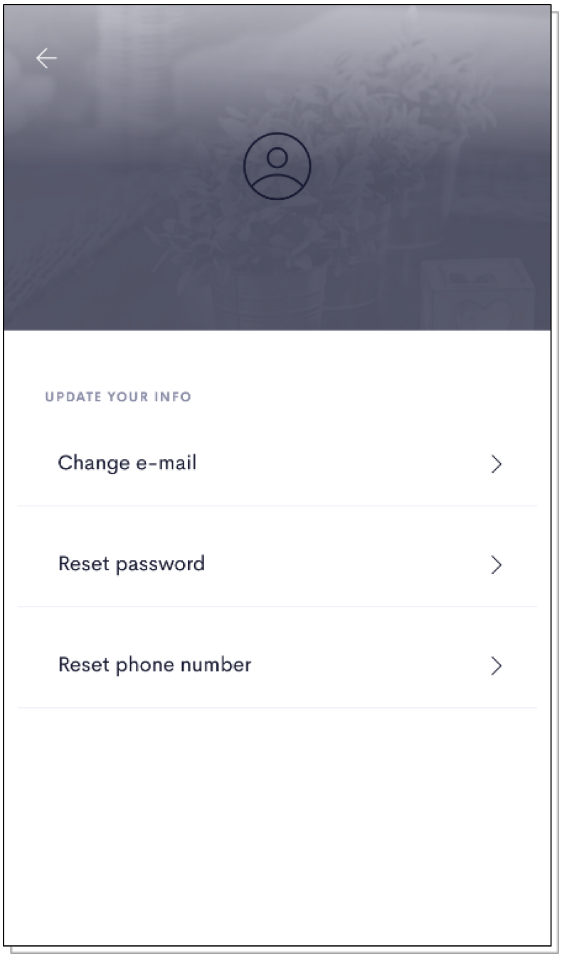
If unable to sign in, change the email address, password, or the phone number for the account.

To change the email address, password, or phone number:

1. Select **Trouble Signing in?**



2. Change the email, password, or phone number.



- To change the email address, select **Change e-mail** and then follow the prompts to change the email address. For security, two-factor authentication is used to verify the phone number used when signing up. Two-factor authentication is also used to verify the new email address.
- To reset the password, select **Reset password** and then follow the prompts to change the password. For security, two-factor authentication is used to verify the phone number and email address used when signing up.
- To change the phone number, select **Reset phone number** and then follow the prompts to change the phone number. For security, two-factor authentication is used to verify the email address used when signing up. Two-factor authentication is also used to verify the new phone number.

Claim a Home

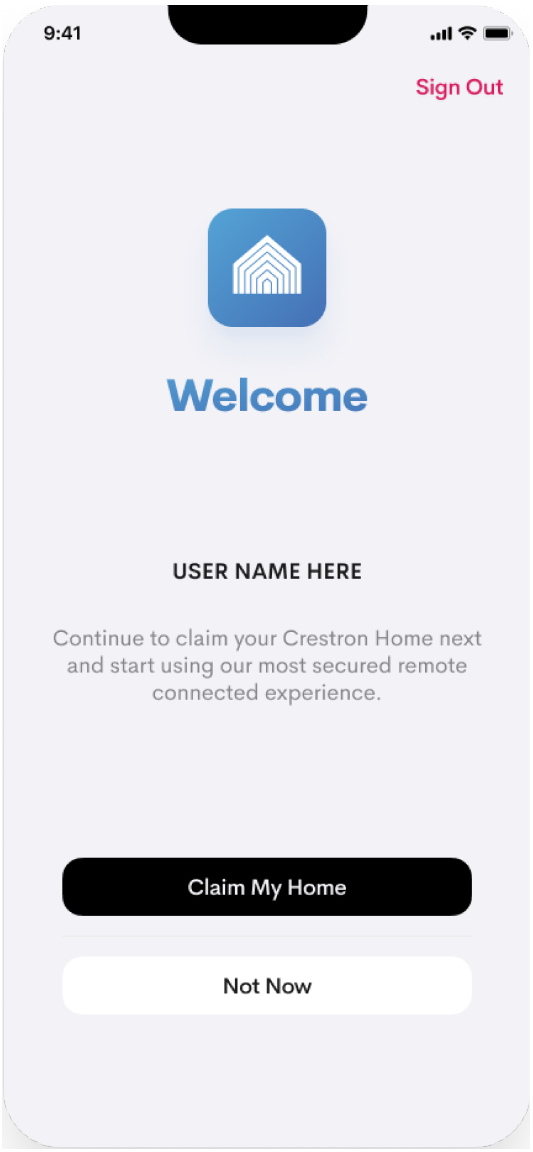
Claim the home to connect with secure remote access and acquire the Owner user role. For new Crestron Home systems, refer to Claim a New Home on page 165. For existing systems, refer to Claim an Existing Home on page 168.

> **NOTE:** The Advanced User Password must be turned on for the Crestron Home system in order to use the secure remote connection. If the Advanced User Password is not turned on, contact your Crestron dealer.

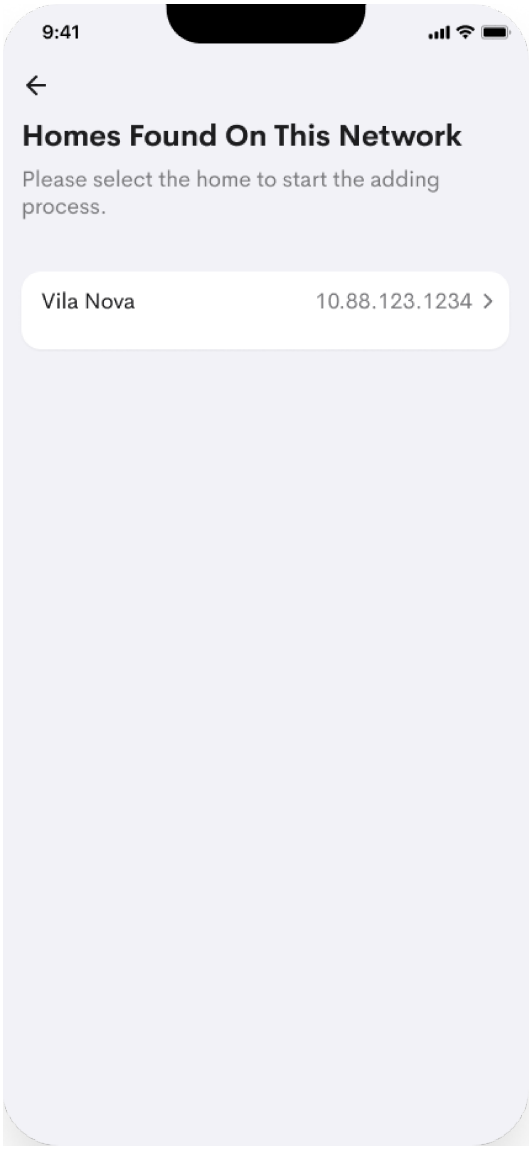
Claim a New Home

To claim a new home:

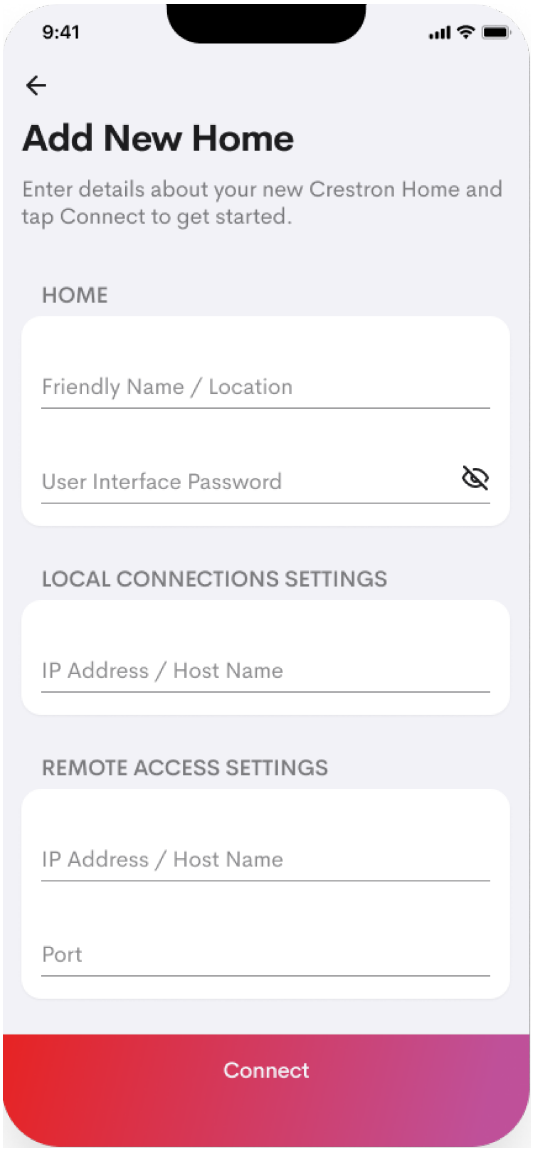
1. Select **Claim My Home**.



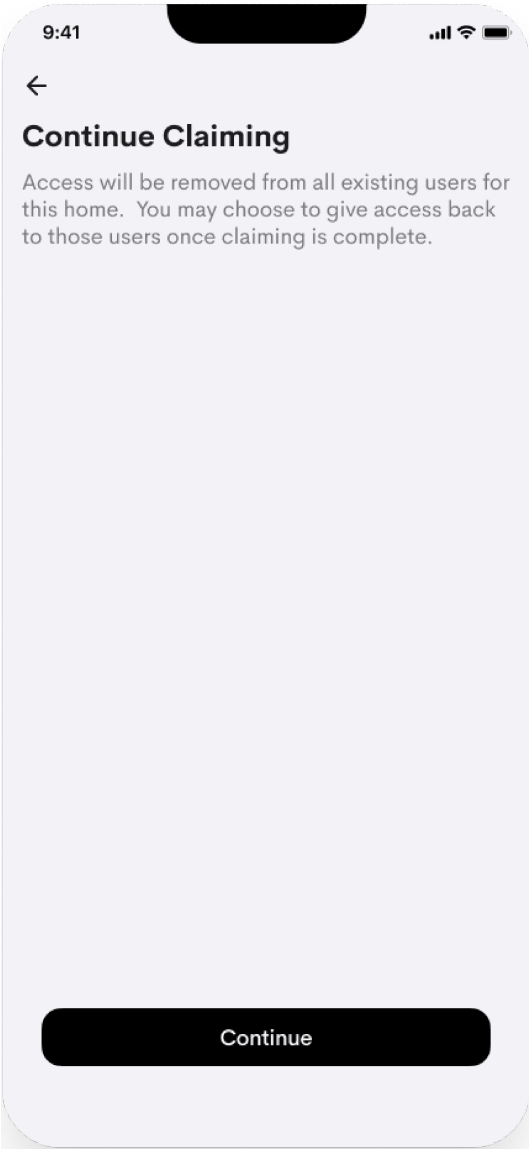
2. Select a home from the list



3. Enter the connection information for your home and then select **Connect**.



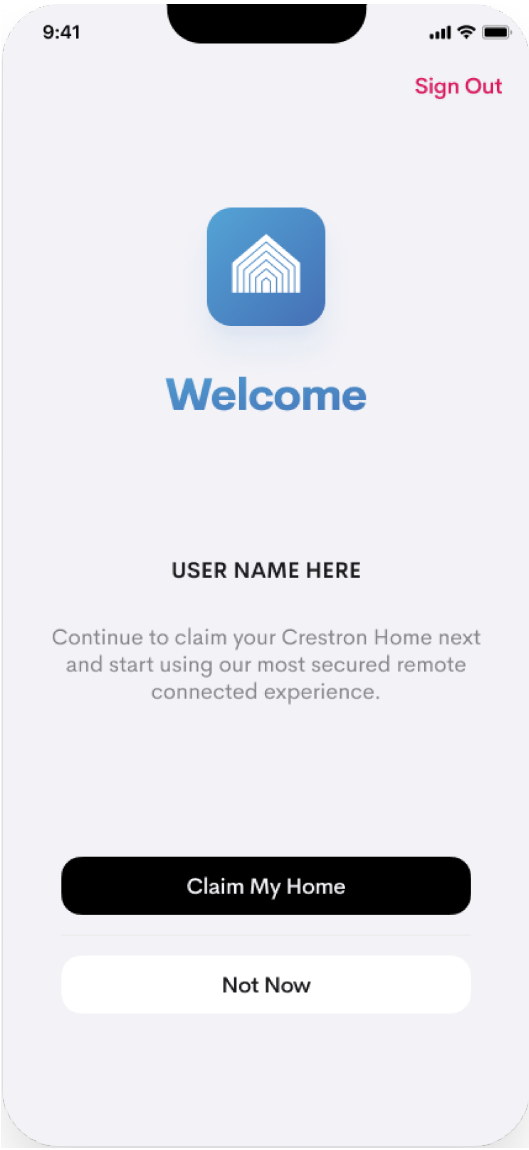
4. Select **Continue**.



Claim an Existing Home

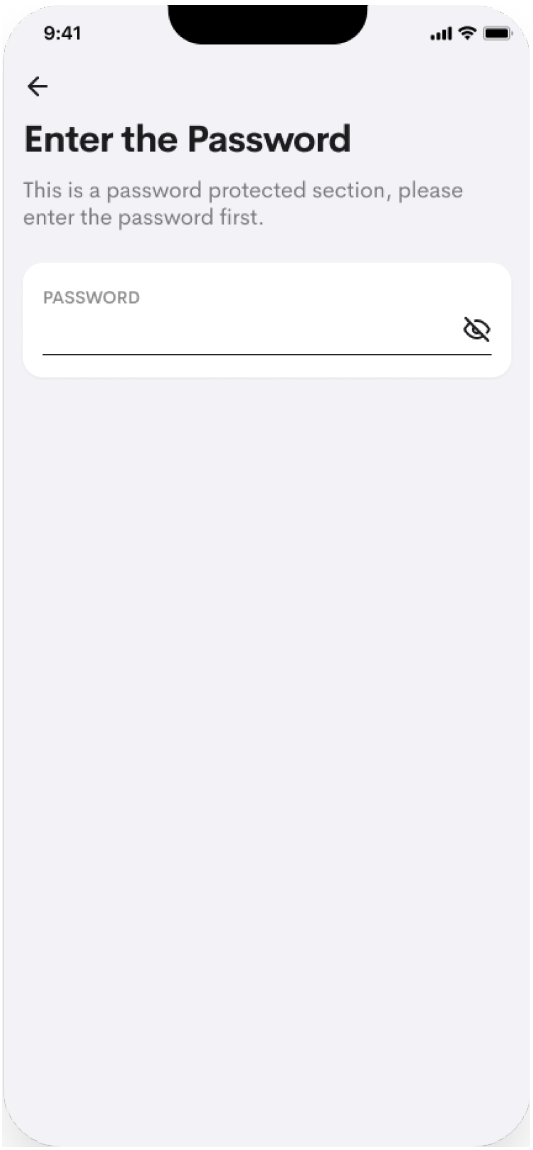
1. Go to **Settings > Users**.
2. If necessary, create an account or sign in. For details, refer to Create an Account using an Email Address on page 158 and Sign In with Email Address on page 160 or Create Account and Sign In Using a Third-party Service on page 161.

3. Select **Claim My Home**.

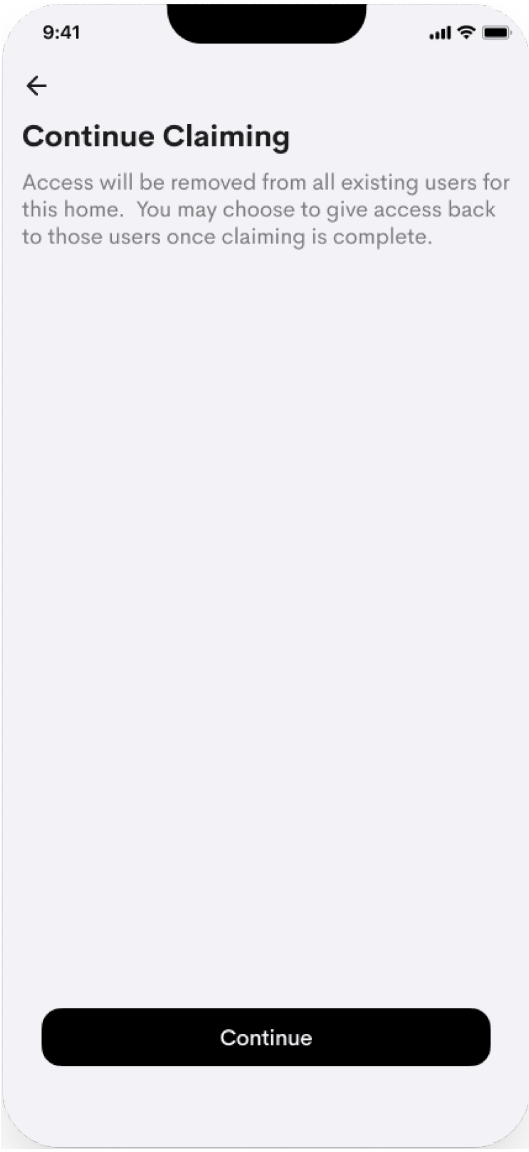


4. Enter the Advanced User Password.

> **NOTE:** Skipping this step is not recommended. If **skip this step** is selected, the home will be added but it will not be claimed.



5. To claim the home, select **Continue**.



User Roles

There are two user-roles, Owner and User.

- **Owner:** The Owner can edit their account information, reclaim the home, sign out, and delete their account. The Owner can also invite and remove members and assign their user roles.
- **User:** The User can edit their account information, reclaim the home, sign out, and delete their account.

Invite Users

Invite Users with a Remote Connection

1. Select **Add new user**.
2. Enter a User Name and e-mail address and then select a User Role.

   > **NOTE:** The user is able to change the user name.

3. Tap **Send invite**. **Invite Pending** is displayed next to a user name until they accept the invite.

Invite Users with a Local Connection

> **NOTE:** The user is able to change the user name.

1. Select **Add new user**.
2. Deselect **Invite to connect from anywhere** and then enter a user name.
3. Tap **Add user**.

Accept Invite

1. Open email on your mobile device.
2. In the invite email from Crestron Home, select **Accept**.
3. If the Crestron Home app is not installed, the app store for the device will open. Download the app.
4. If necessary, create an account and/or sign in.

Reclaim Home

1. Select **Reclaim this home**.
2. Enter the Advanced User password.
3. Select **Continue**.

Account Settings

To change the account name, email, password, or phone number and to sign out or delete an account, go to **More > Users**.

Edit Name

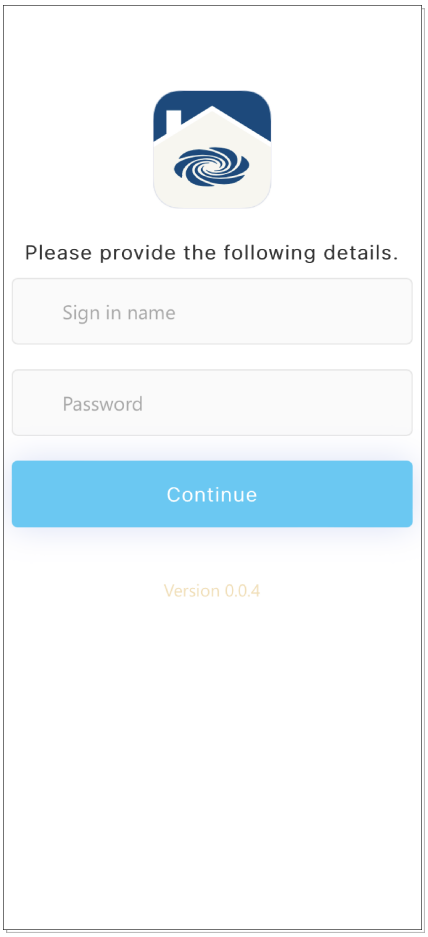
1. Select **Edit Name**.
2. Enter a new name and then select **Done**.

Change E-mail

To change the email address for the account:

> **NOTE:** To exit without saving the changes, select **Cancel**.

1. Select **Change e-mail**.
2. Enter the current email address and password, and then press **Continue**. Follow the prompts to change the email address. For security, two-factor authentication is used to verify the phone number used when signing up. Two-factor authentication is also used to verify the new email address.

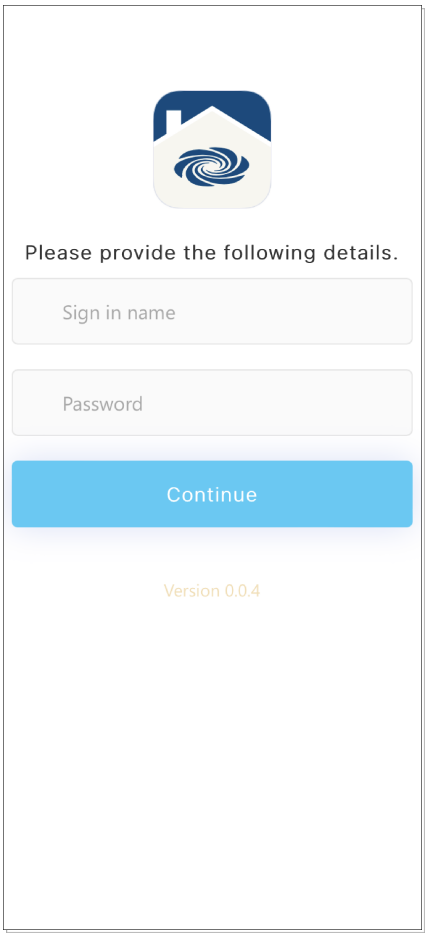


Change Password

To change the password for the account:

> **NOTE:** To exit without saving the changes, select **Cancel**.

1. Select **Change password**.
2. Enter the email address and password, and then press **Continue**. Follow the prompts to change the password. For security, two-factor authentication is used to verify the phone number used when signing up.

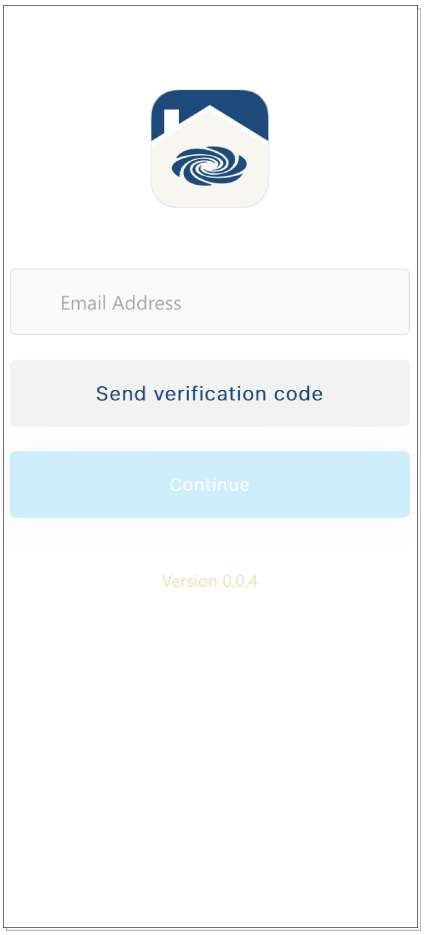


Change Phone Number

To change the phone number for the account:

> **NOTE:** To exit without saving the changes, select **Cancel**.

1. Select a user and then **Change phone number**.
2. Enter the email address and then press **Send verification code**. Follow the prompts to change the phone number. For security, two-factor authentication is used to verify the email address used when signing up. Two-factor authentication is also used to verify the new phone number.



Change User Role

The user role can be changed by an Owner.

1. Go to **Settings > Users** and then select a user.
2. To select a user role, select **Owner** or **User**.

Remove User

A user can be removed by an Owner.

> **NOTE:** The user will be signed out and won't be able to connect using the secure remote connection. Any lock codes created for the user will be deleted. The removed user will be prompted to connect using a local connection and will be prompted to enter the User Interface password.

1. Go to **More > Settings > Users**. and then select a user.
2. Select **Remove user** and then select **Remove** to confirm.

Sign Out

1. Select **Sign out** or **Sign out from all devices**.
   - **Sign out:** Sign out of the account on the current device.
   - **Sign out from all devices:** Sign out of the account on all devices. This process may take up to one hour.
2. Select **Yes**.

Delete Account

> **NOTE:** After an account is deleted, a new account can be created using the same email address.

1. Select **Delete account**.
2. Select **Yes**.

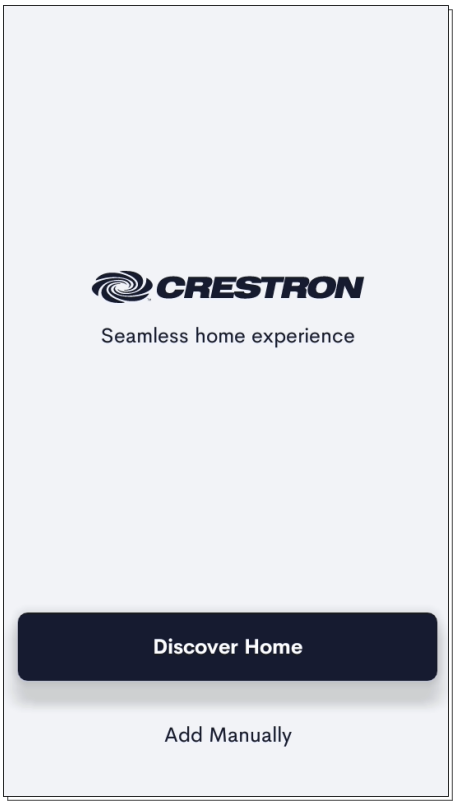
Pair a Crestron Touch Screen

> **NOTES:**
>
> - The Crestron Home app runs on the Crestron touch screen and must be enabled within the device.
> - The TSW-xx60 series touch screen must be using firmware version 2.05.xx or higher. To upgrade the firmware, refer to Update Device Firmware on page 624.

Enable the Crestron Home app on the TSW-xx60 Series Touch Screen:

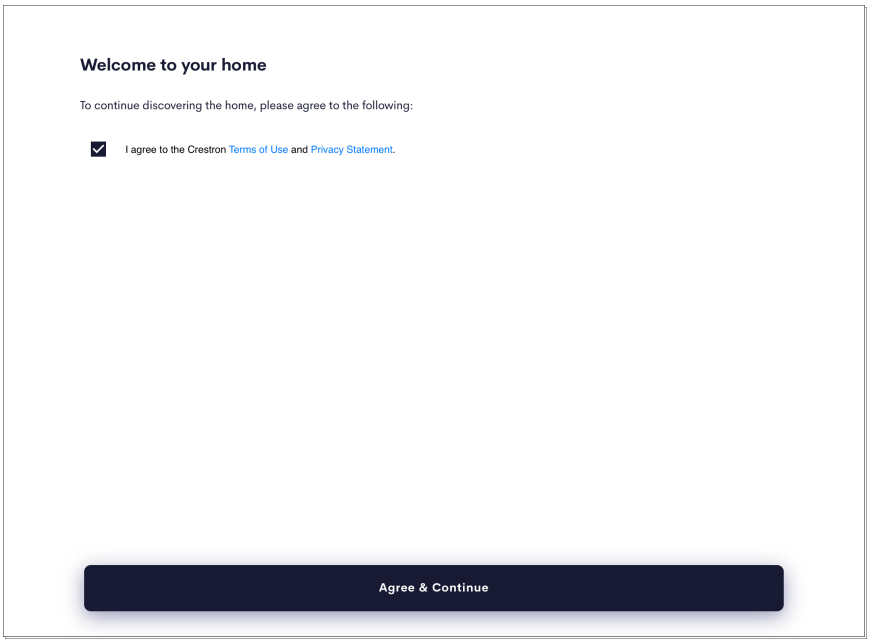
1. Enter the TSW-xx60 settings. The TSW-xx60 settings can be accessed from the touch screen or from a PC connected to the TSW-xx60's web page.

a. From the TSW-xx60:
    i. Place five fingers on the display and hold for 15 seconds.
    ii. Tap **Application Selection** to bring up the **Application Selection** screen.
    iii. Tap **Crestron Home**.
    iv. Tap **Confirm Selection**. The touch screen reboots with the Crestron Home application running and then displays the landing page.
b. From the TSW-xx60's Web Page:
    i. Enter the IP address or host name of the touch screen into a web browser.
    ii. Click **Settings** and then **Applications**.
    iii. Select **Crestron Home** from the **Application Mode** drop-down.
    iv. Click **Save Changes**. A pop-up dialog is displayed stating that the touch screen must be rebooted for the new application to take effect. Click **Yes** to reboot the touch screen now or **No** to reboot the touch screen later. The touch screen reboots with the Crestron Home application running and then displays the landing page.



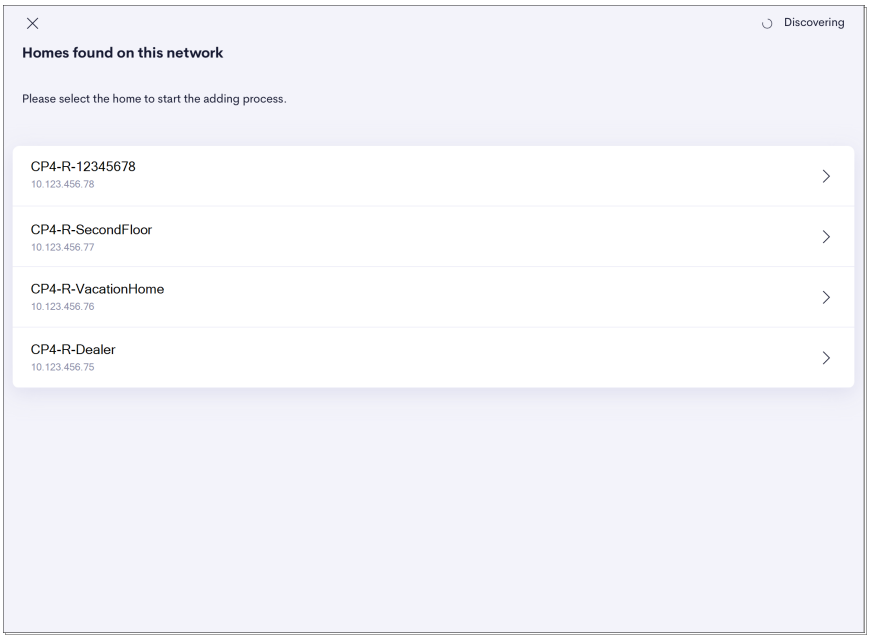
To pair a TSW-xx60 Series Touch Screen:

1. The first time the Crestron touch screen is launched, the **Welcome to your home** screen is displayed.

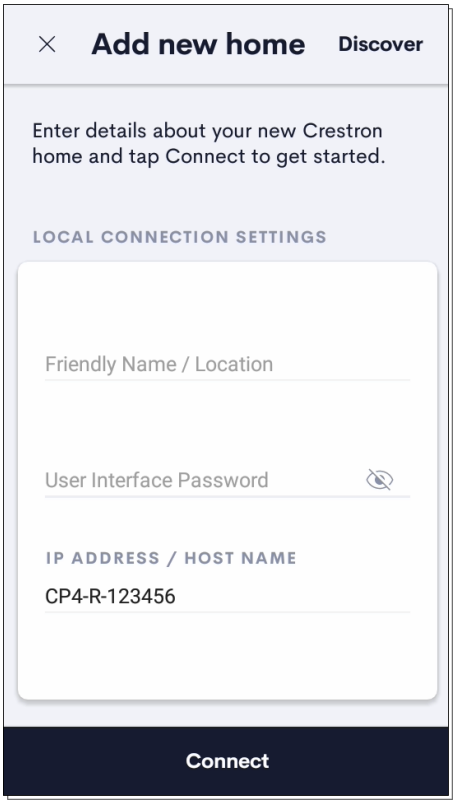


2. Tap **Discover Home** to scan the network for the Crestron Home processor. The **Homes found on this network** screen is displayed and shows the list of available Crestron Home processors on the network. The Hostname and IP Address for each Crestron Home processor is displayed.

   > **NOTE:** The Crestron touch screen and the Crestron Home processor must be on the same wireless network for the device to be found.



3. Tap on the home you would like to connect to. The **Add New Home** screen is displayed.

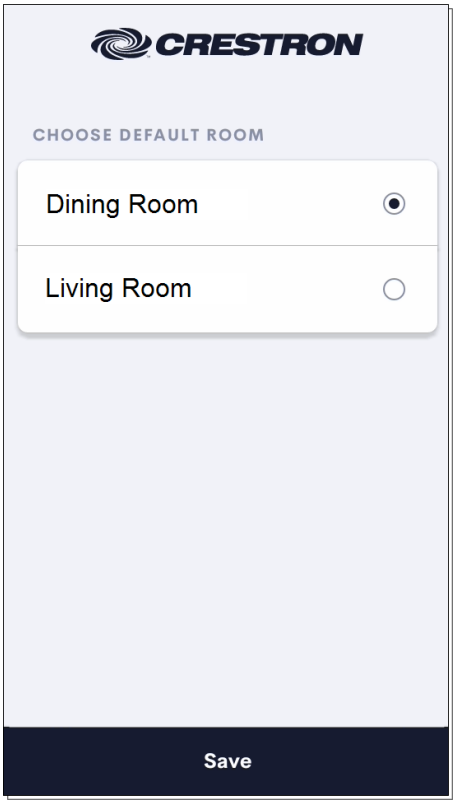


4. Enter the following information for **LOCAL CONNECTION SETTINGS** on the **Add New Home** screen:
    - **Friendly Name / Location:** Enter a name or location of the Crestron Home processor. The name is displayed on the TSW-xx60 and will be used to identify the Crestron Home processor on the My Homes screen.
    - **User Interface Password:** Enter the User Interface Password. For details, refer to Set the User Interface Device Password on page 1187 and System Detail and Password Configuration on page 566.

      > **NOTE:** After three unsuccessful login attempts, the IP address of the device is blocked from joining the Crestron Home system for 1 hour. Other devices are allowed to join during this period.

    - **IP ADDRESS / HOST NAME:** The Host name is entered by the system during discovery.

5. Tap **Connect** to add the Crestron touch screen to the Crestron Home system. If the information is valid, the room selection screen is displayed.



6. Select the room that the Crestron touch screen is in and then tap **Save**.
7. Press the "Home" hard key on the TSW-xx60 series touch screen to display the **Room** screen.

NOTE: If the TSW-xx60 series touch screen was previously discovered and added to the Crestron Home system during Pair Devices on page 151, it will now appear as "TSW-xx60 (Legacy)" in the Crestron Home system. The TSW-xx60 series touch screen can be removed from the system. For details, refer to Pair Devices on page 151.

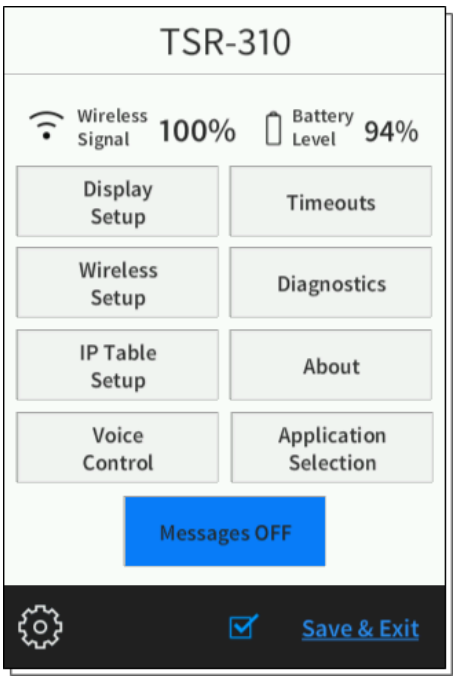
Pair a TSR-310 Handheld Remote

NOTES:

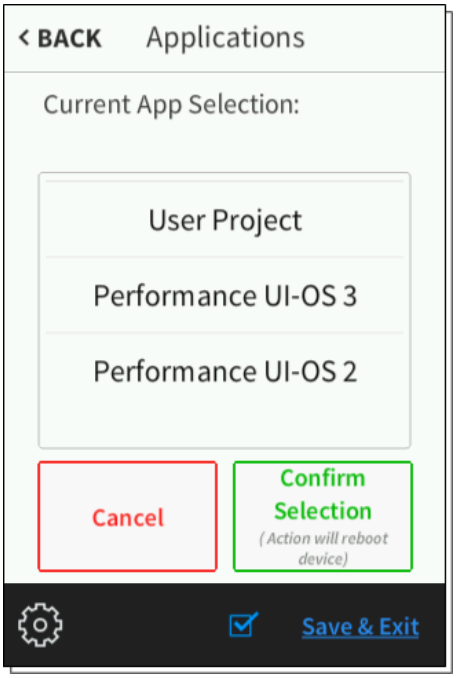
- The Crestron Home app runs on the TSR-310 handheld remote and must be enabled within the device.
- The TSR-310 handheld remote must be using the latest firmware. To upgrade the firmware, refer to Update Device Firmware on page 624.

Enable the Crestron Home app on the TSR-310 Handheld Remote:

1. Press the power, microphone, home, and raise buttons twice in sequence within five seconds. The **TSR-310** main setup screen is displayed.



2. Tap **Application Selection** from the main setup screen. The **Applications** screen is displayed.



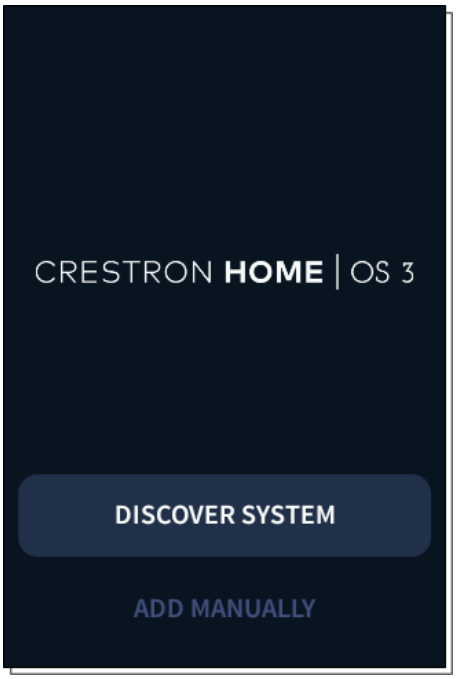
3. Select **Performance UI-OS 3** from the **Applications** screen.

> **NOTES:**
>
> - When **Confirm Selection** is pressed, the TSR-310 handheld remote reboots immediately. No confirmation dialog is displayed.
> - If the selected app is already running, no actions are taken when **Confirm Selection** is pressed.

4. Select **Confirm Selection** from the **Applications** screen. The TSR-310 handheld remote reboots with the Performance UI-OS 3 application running.

To pair a TSR-310 Handheld Remote:

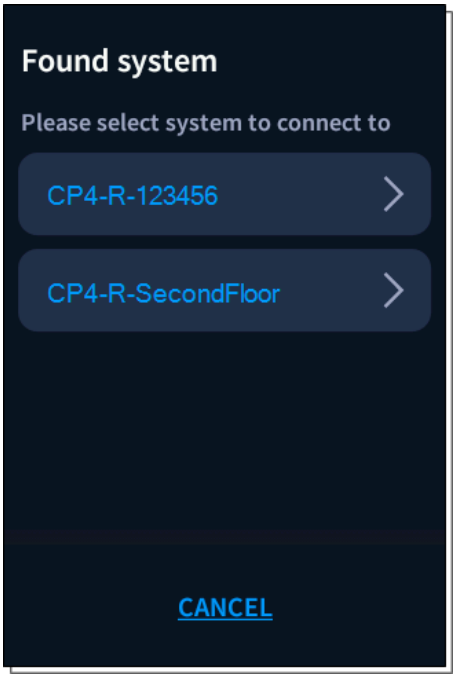
1. The first time the TSR-310 handheld remote is launched, the splash screen is displayed.



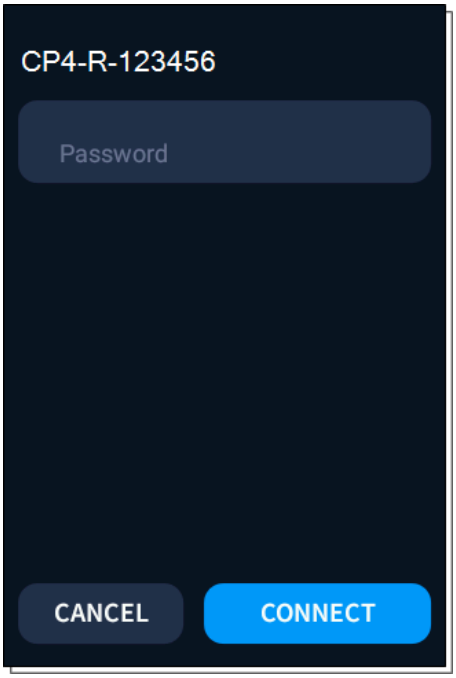
2. Tap **Discover Home** to scan the network for the Crestron Home processor. The **Homes found on this network** screen is displayed and shows the list of available Crestron Home processors on the network. The Hostname and IP Address for each Crestron Home processor is displayed.

   NOTES:

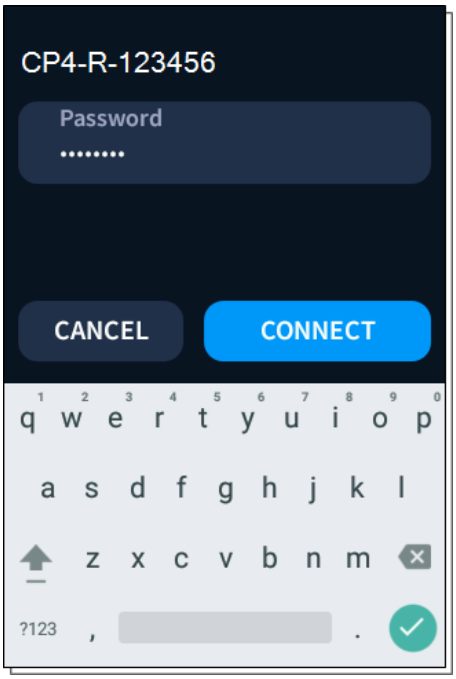
   - The TSR-310 handheld remote and the Crestron Home processor must be on the same wireless network for the device to be found.
   - Tap **Add Manually** if the Crestron Home system uses a device port other than 50001.



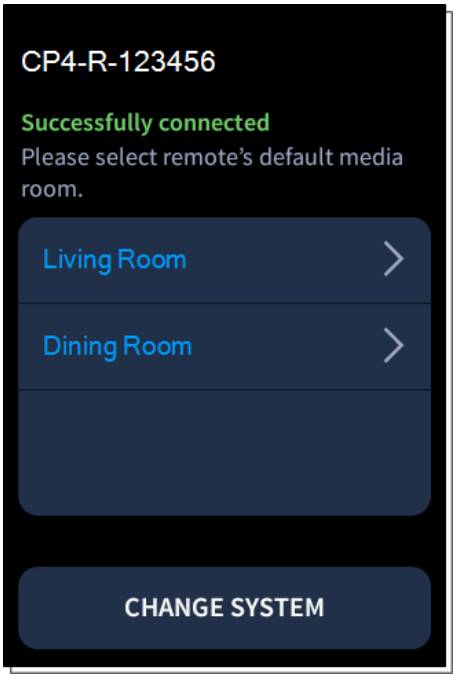
3. Tap the system that you would like to connect to. The password entry screen displays.



4. Enter the User Interface Device Password into the **Password** field using the on-screen keyboard.



5. Tap **Connect** to add the TSR-310 handheld remote to the Crestron Home system. If the information is valid, the room selection screen is displayed.



6. Select the room that the TSR-310 handheld remote is in. The TSR-310 handheld remote displays the **Home** screen when it is successfully added to the system.

NOTE: If the TSR-310 handheld remote was previously discovered and added to the Crestron Home system during Pair Devices on page 151, it will now appear as "TSR-310(Legacy)" in the Crestron Home system. The TSR-310 handheld remote can be removed from the system. For details, refer to Pair Devices on page 151.

Crestron Wireless Devices

Add Crestron infiNET EX® wireless and SG wireless devices to the Crestron Home system. To add a Crestron Wireless device, pair the device with a wireless gateway and then add the device to a room.

Add a Crestron Wireless Device to a Room

NOTES:

- Add a wireless gateway, such as the CEN-GWEXER or CEN-GW1 to the Crestron Home system before adding wireless device. To add a wireless gateway, refer to Gateways and Processors on page 280.
- For best practices regarding the installation and setup of Crestron RF (radio frequency) products, refer to the Installation and Setup of Crestron RF Products Best Practices Guide (Doc. 6689) at crestron.com/docs/6689.
- If a TSR-310 handheld remote will be added to the system, ensure that it is connected to a WAP (Wireless Access Point) that is in Crestron's list of recommended WAP brands. For more information and a complete list of brands, refer to the TSR-310 Supplemental Guide at crestron.com/docs/8226.

To add a Crestron Wireless device to a room:

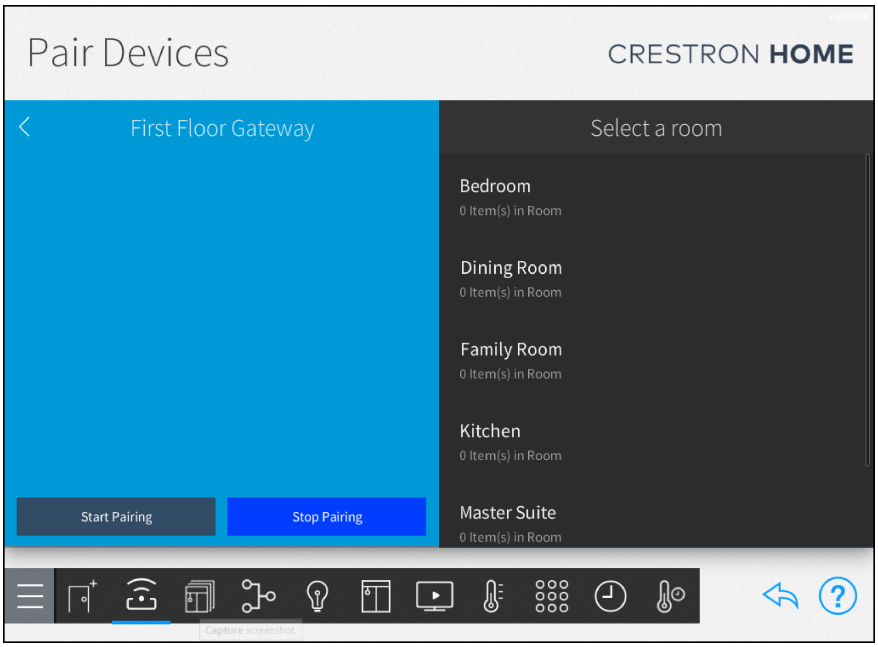
1. In the **Device Types** menu, select **Crestron Wireless**.



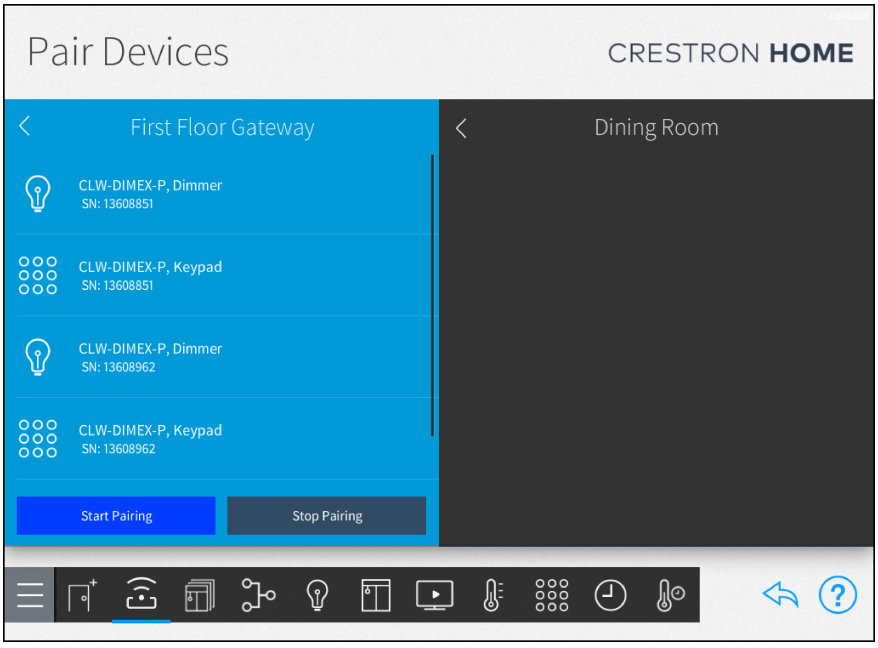
2. If there is more than one wireless gateway, select a wireless gateway from the **Select Gateway Below** menu.

3. Select **Start Pairing** to place the gateway into acquire mode.

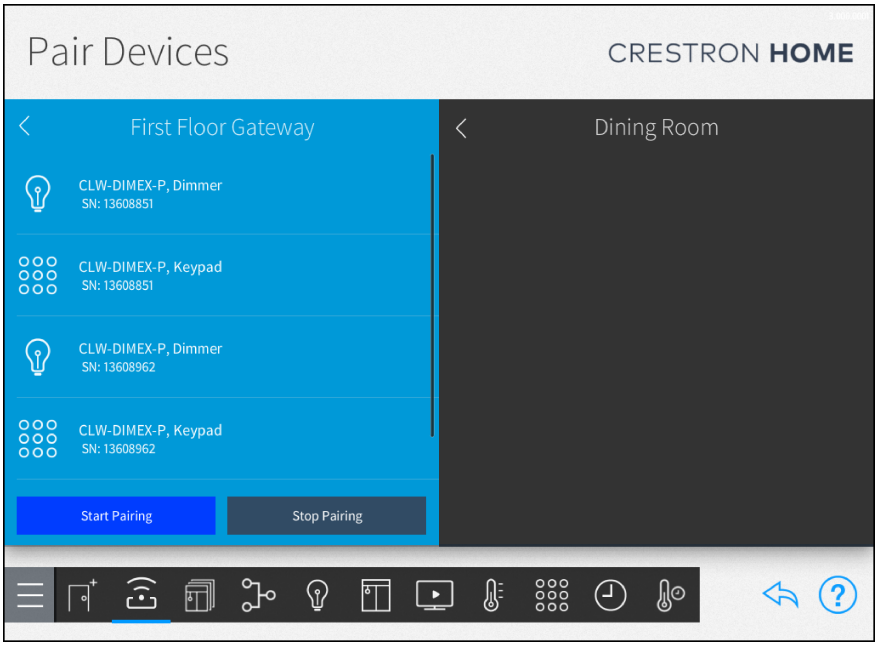
> **TIP:** The **Acquire** button on the gateway or Crestron Toolbox™ software can also be used to enter **Acquire** mode when using Crestron Home firmware 3.014.0087 or higher.



4. Place the wireless device into **Acquire** mode. Follow the instructions that are provided with the device. The device is displayed on the gateway's device list when it is acquired.



5. In the **Select a room** menu, select a room for the device.



6. In the wireless gateway's menu, select a device and then select **Add**.



NOTES:

- To identify the location of a device (if supported), select **Locate**. The device will flash its LED or screen to identify its location.
- To identify paired TSR-310 handheld remotes using the locator feature, ensure that the TSR-310 is awake and placed on its charging dock before tapping the location button.

7. Enter a name for the device and then select **OK**.
8. To exit Acquire mode, select **Stop Pairing**.
9. Configure the device after it is added to the room. Tap **Settings** next to the device name to display a Settings dialog box. For details, refer to Device Settings on page 1191.

Pair Remote Keypads

When devices with supported remote keypads are discovered by the system, the option to add the remote keypad is provided. For a list of supported multi-way remote keyads, refer to Keypads on page 95.

When a remote keypad is added to the system, consider the following:

- One remote keypad will display in the list of devices for each device that supports a remote keypad. Even though one remote keypad can be added to the program, up to 4 remote keypads can be physically connected to the device.
- The remote keypad is configured in a similar manner as other keypads in the system.

- When configuring the remote keypad, all devices associated with the primary Horizon 2 device will perform the same function.

Remove a Crestron Wireless Device from a Room

When a Crestron Wireless device is removed from a room, it is placed in the gateway's device list.

To remove a Crestron Wireless device from a room:

1. Select a Crestron Wireless device.
2. Select **< Remove**.

Delete a Crestron Wireless Device from a Gateway

> **NOTE:** The device must be reacquired if it needs to be added back to the system.

To delete Crestron Wireless devices from the gateway:

1. In the gateway's device list, select a device.
2. Select  **Delete** and then **OK**.

Crestron Wired and Wi-Fi Devices

Add Crestron Wired and Wi-Fi® devices to the Crestron Home system.

NOTES: When adding SONNEX and DigitalMedia switchers, endpoints and expanders cannot be added to the system after the Crestron Home system discovers the switcher.

- **SONNEX:** Verify that all endpoints, expanders, and SWAMP extenders are connected, wired, and powered on before adding the Audio Switcher to the system. Endpoints, expanders, and SWAMP extenders cannot be added to the system after the Audio Switcher is discovered.

  If an endpoint or expander is connected after the Audio Switcher is added to the system: The Audio Switcher must be deleted from the system and then re-added. All programming for the Audio Switcher will be lost and will need to be reprogrammed.
- **DM Switchers:** Verify that all DM input cards, output cards, and room boxes are connected, wired, and powered on before adding the DigitalMedia Switcher to the system. DM input cards, output cards, and room boxes cannot be added after the Crestron Home system discovers the DigitalMedia switcher.

  If a DM Input Card, Output Card, or Room Box is Added after the DM Switcher is Added to the System: The DM Switcher must be deleted from the system and then re-added. All programming for the DigitalMedia Switcher will be lost and will need to be reprogrammed.

Add Crestron Wired and Crestron Wi-Fi Network Device to a Room

To add Crestron wired and Crestron Wi-Fi® network devices to a room:

NOTES:

- Cresnet devices are automatically assigned a Cresnet ID when they are discovered by the Crestron Home system.
- Cresnet devices that require the Cresnet ID to be set manually using dials on the device (for example, the C2N-IO and GLS-SIM) must have their Cresnet ID set manually. A dialog is displayed that lists the device name, serial number, and the Cresnet ID that the device should be set to.
- After a TSW-xx60 series touch screen or compatible handheld remote is added to the system, the Crestron Home user interface is loaded to the device.

1. In the **Select a room** menu, select a room for the device.
2. In the **Device Types** menu, select **Crestron Wired and Wi-Fi**.



3. Select **Ethernet and Wi-Fi** or **Internal Cresnet Gateway** from the **Crestron Wired and Wi-Fi** menu. The system scans the network for unpaired devices and displays the devices in the **Ethernet and Wi-Fi** or **Internal Cresnet Gateway** menu.

   To add a device from a different VLAN or subnet, refer to Crestron Wired and Wi-Fi Devices on page 193.

   > **NOTE:** If necessary, tap **Rescan** to rescan the selected network for any unpaired devices.



4. In the **Ethernet and Wi-Fi** or **Internal Cresnet Gateway** menu, select a device and then select **Add**.



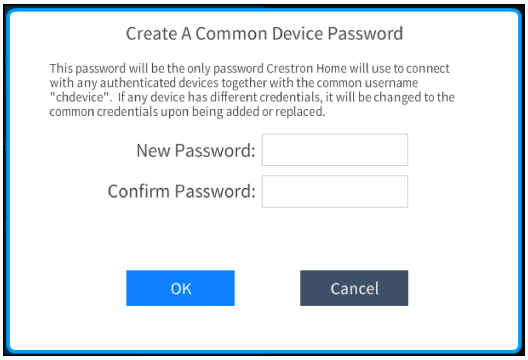
NOTES:

- Tap **Locate** to turn on the location feature for the device (if supported), which is used to locate the device in the room.
- To discover and add Legacy Devices (TSW-xx52 touch screens, CEN-TRACK AM/FM/XM devices, and Remote Trigger and Listen modules), the Legacy Device Port must be enabled. For details, refer to Local Connection Settings on page 618.
- Some Crestron wired and Crestron Wi-Fi® network devices require a static IP address. A popup displays when this is required.

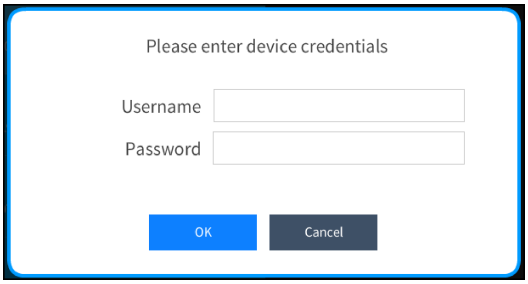
- If adding a wired device with connected outputs, such as a SWAMP series audio expander or a DM-MD series video switcher, tap the device (represented by a folder icon) to view all of the available outputs that may be added to a room.



5. If prompted, create a Common Device Password for the Crestron Home processor and then select **OK**. The username is "chdevice". The **Create a Common Device Password** dialog is displayed when the Common Device password is not created in the control processor settings.



6. If prompted, enter admin credentials for the device and then select **OK**. The **Please Enter Device Credentials** dialog is displayed when an administrator-level user exists on the gateway. The credentials are required to add the "chdevice" user to the device.



NOTES:

- Entering device credentials is typically required for devices where the first connection was made using Crestron Toolbox™ software or the Web UI and login credentials were created.
- If the "chdevice" user exists on the device, consider the following:
  - The device password **matches** the Common Device Password set in the Crestron Home system, there will not be a prompt for device credentials.
  - The device password **does not match** the Common Device Password set in the Crestron Home system, the password on the device will be changed to the password set on the Crestron Home system.

7. Enter a name for the device and then select **OK**.

NOTES: When adding a DM NVX® device:

- A pop-up dialog box is displayed that prompts the user to enter the device username and password. Enter the required credentials, and then tap **OK**. For new DM NVX® devices, the default username and password are both "admin."
- Select whether the device will be configured as a receiver (audio input or output) or as a transmitter (audio input or output).
- For more information on configuring a DM NVX® device on the network, refer to https://support.crestron.com/app/answers/answer_view/a_id/5861/loc/en_US.

8. Configure the device after it is added to the room. Tap **Settings** next to the device name to display a Settings dialog box. For details, refer to Device Settings on page 1191.

Discoverable Addresses

Use the **Discoverable Addresses** to add devices from a different VLAN or subnet. A single address or an address range can be added.

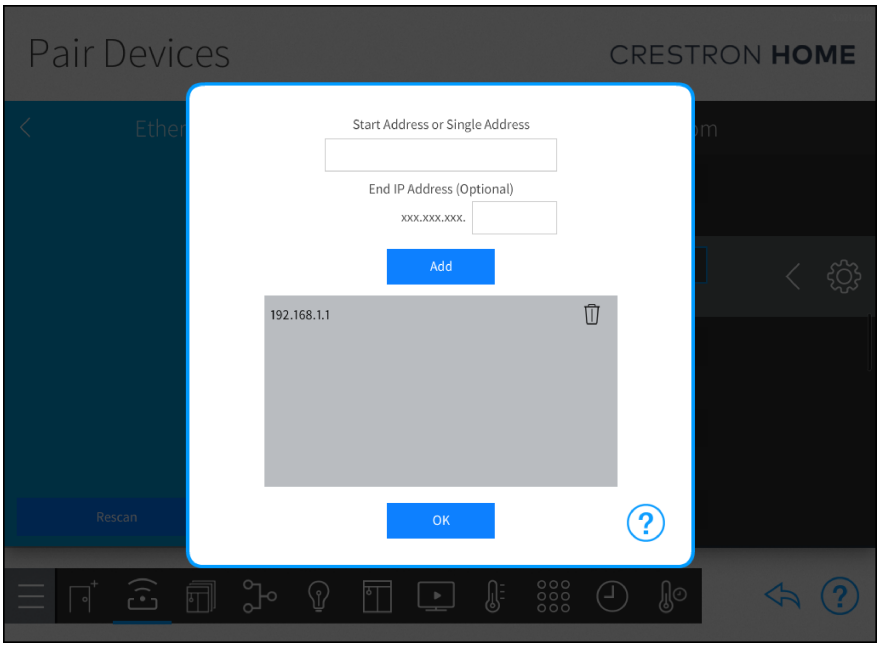
Add an IP Address

To add an address:

1. In the **Ethernet and Wi-Fi** menu, select **Discoverable Addresses**.



2. Enter the IP Address details for the VLAN or subnet and then select **Add**.



   - **Address:** Enter an IP address. The IP address can be a single address or the start of an IP address range. To add a single IP address, do not enter an **End IP Address**.
   - **End IP Address:** Enter the last octet in the IP address range.

3. Select **OK**.

Delete an IP Address

To delete an address, select an address and then  **Delete**.

Remove a Crestron Wired and Crestron Wi-Fi Network Device

To remove a Crestron Wired and Crestron Wi-Fi device from a room:

1. Select a Crestron Wired or Crestron Wi-Fi device.
2. Select **< Remove**.

Sonos® Devices

Add Sonos® speakers and amplifiers to the Crestron Home system.

Requirements

To add Sonos devices:

- Ungroup all speakers in the Sonos app prior to performing a system scan.
- Discover and configure all Sonos® speakers and amplifiers using the Sonos app before adding them to the Crestron Home system.
- Turn on Autoplay in the Sonos app when adding a Sonos AMP, ARC, PLAY:5®, CONNECT:AMP, Sonos Beam, PLAYBAR®, PLAYBASE® devices.
- When adding a Sonos CONNECT device:
    - When adding as a **Source**, set the Line Out configuration to Fixed.
    - When adding as a **Speaker**, set the Line Out configuration to Variable.
    - Do not add as a speaker with an input as this device does not support Autoplay in the Sonos app.

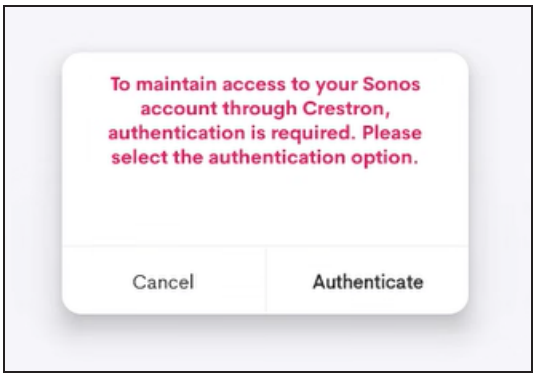
> **NOTE:**For best practices, troubleshooting, and general information regarding integrating Sonos devices within the Crestron Home system, refer to Sonos and Crestron Home Integration on page 1385.

Authentication

Sonos devices running recent firmware have the ability to communicate with 3rd party devices via an authenticated version of the existing protocol. New and existing Crestron Home installs running version 4.07 or later require Authentication.

> **NOTE:** At this time, SIMPL systems and Crestron Home systems running version 4.06 or earlier do not need to authenticate.

When attempting to use Sonos without authentication, the following prompt appears:



In the Crestron Home Setup app, **Authentication Required** shows next to the Sonos device:



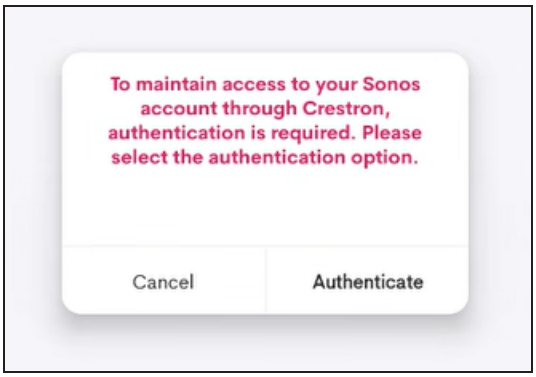
Authentication can be accomplished using the Crestron Home app or the Crestron Home setup app.

> **NOTE:** Sonos authentication is not supported on the TSR-310 or touch panels.

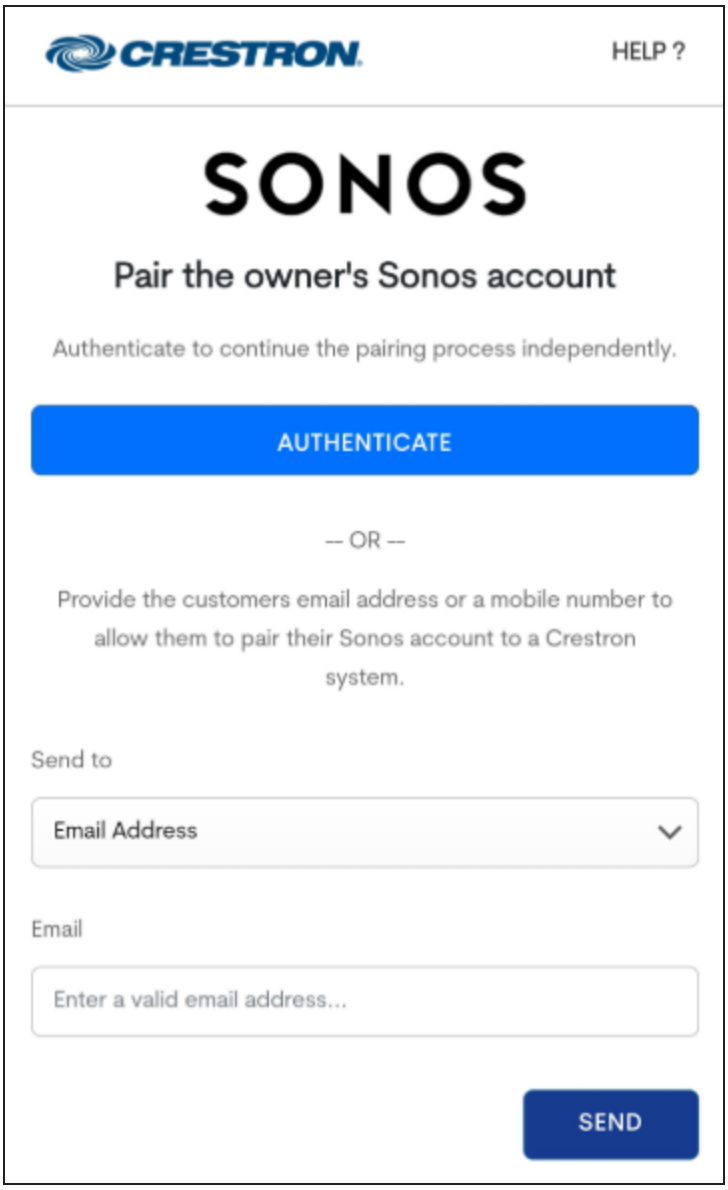
Crestron Home App

To authenticate with the Crestron Home app, follow the steps below.

1. From the Crestron Home app, route Sonos to a room and select **Authenticate** from the pop-up.



   The following screen appears:



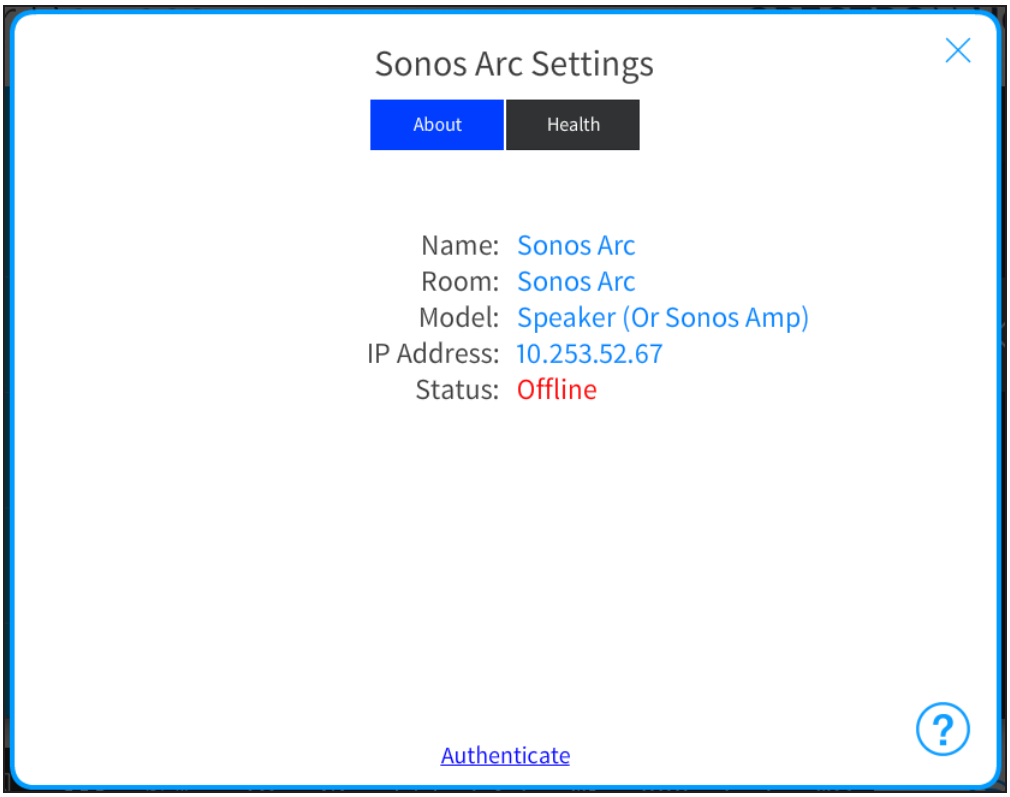
2. Select **Authenticate** and sign in with your Sonos account or forward the authentication link to your customer by completing the fields below and selecting **SEND**.
3. Follow the steps on the Sonos page to sign in and authenticate.

Crestron Home Setup App

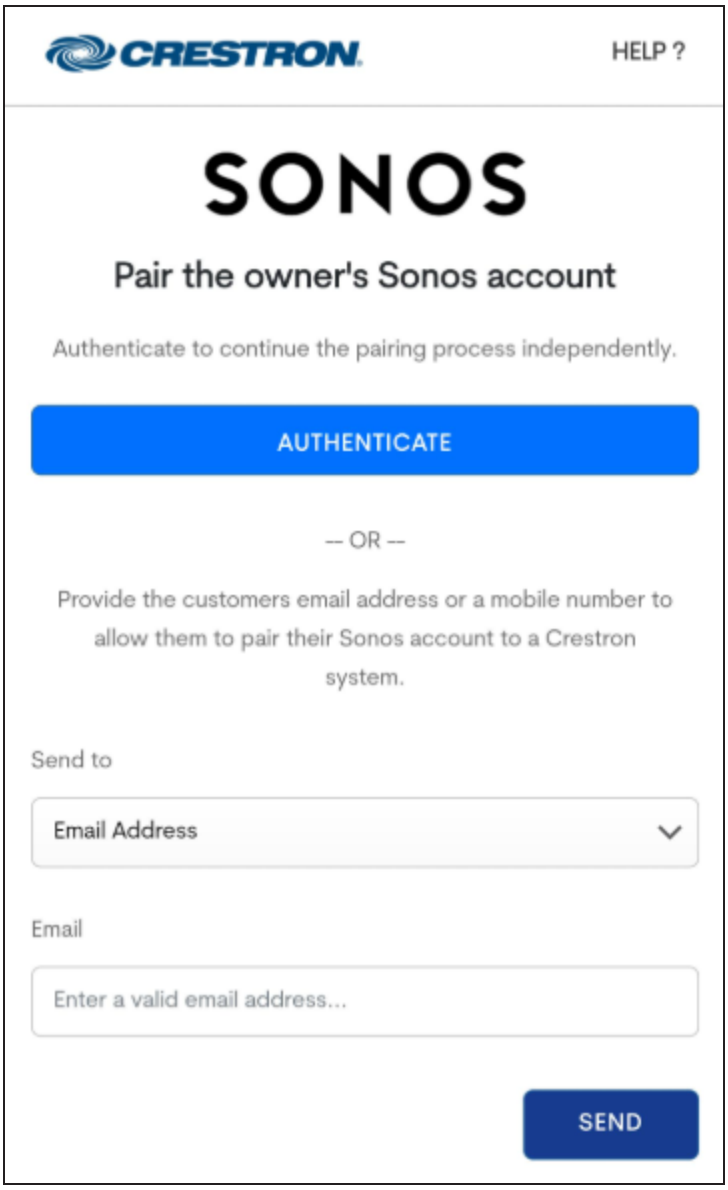
To authenticate with the Crestron Home Setup app, follow the steps below.

1. Navigate to the Sonos device settings page.

2. Select **Authenticate** .



The following screen appears:



3. Select **Authenticate** and sign in with your Sonos account or forward the authentication link to your customer by completing the fields below and selecting **SEND**.
4. Follow the steps on the Sonos page to sign in and authenticate.

Add a Sonos Speaker or Amplifier

To add a Sonos speaker or amplifier to a room:

> **NOTE:** To search the network for unpaired Sonos devices, tap **Rescan**.

1. In the **Select a room** menu, select a room for the device.
2. In the **Device Types** menu, select **Sonos**. The Crestron Home system scans the local network for Sonos devices.



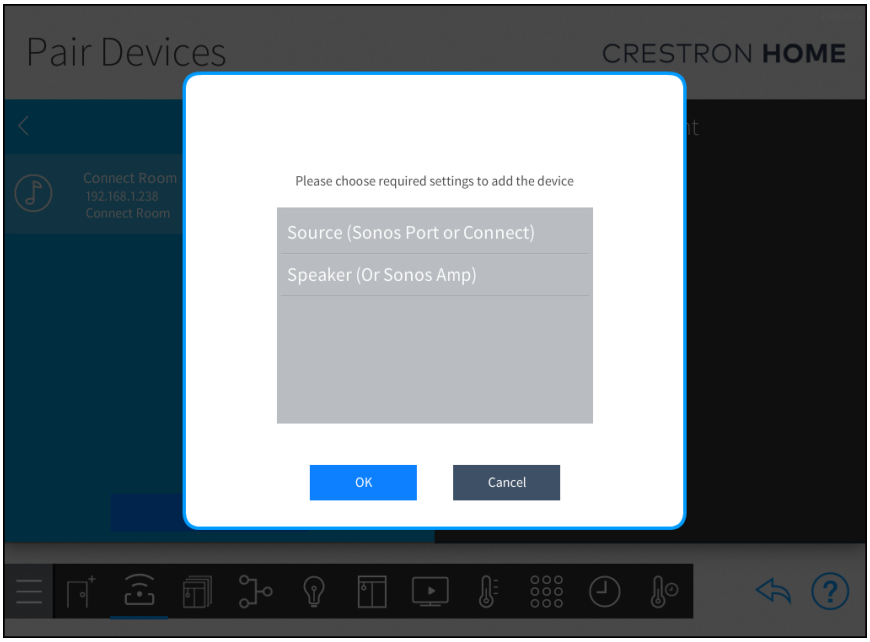
3. Discovered Sonos devices are displayed in the **Sonos** menu.



4. In the **Sonos** menu, select a device and then select **Add**.



5. In the pop-up menu, select the device type:
    - **Source:** Select **Source (Sonos Port or Connect)** for source devices such as the Sonos Port and Connect.
    - **Speaker:** Select **Speaker (or Sonos Amp)** for speaker devices such as the Sonos One®, PLAY:1®, PLAY:3®, and CONNECT devices or speaker devices with an input such as the AMP, ARC, PLAY:5®, CONNECT:AMP, Sonos Beam, PLAYBAR®, PLAYBASE® devices.



6. Select **OK**.

> **NOTE:** When the first Sonos device is added to the system, it may take up to a minute to display.

7. Configure the device after it is added to the room. Tap **Settings** next to the device name to display a Settings dialog box. For details, refer to Device Settings on page 1191.

Remove a Sonos Device from a Room

To remove a Sonos device from a room:

1. Select a Sonos device.
2. Select **< Remove**.

DALI Groups and Individual DALI Loads

Add DALI® groups and individual loads to the Crestron Home system.

NOTES:

- The **DALI** option is not displayed in the **Device Types** menu until a DALI gateway is added to the system. To add one, refer to Add a DALI Gateway on page 284.
- DALI groups or loads should be configured in the DALI gateway web interface prior to adding those groups or loads to a Crestron Home system.

TIP: For best performance, add DALI groups rather than individual loads whenever possible.

Add a DALI Group or Load to a Room

To add a DALI group to a room:

1. In the **Select a room** menu, select a room for the device.
2. In the **Device Types** menu, select **DALI**.



3. In the DALI menu, select a DALI group or load and then select **Add**.

> **NOTES:**
>
> - If multiple DALI gateways exist in the system, they are placed in folders. The folder names match the name provided to the gateway when it is added to the system.
> - Groups 0 through 15 for both Loop 1 and Loop 2 on the DIN-DALI-2 are listed as available loads even if loads are not assigned to the group. Refer to the Devices tab in the DIN-DALI-2 settings to view the load assignments. For details, refer to DIN-DALI-2 Settings on page 1229.
> - The menu lists the loop name, group name, and the name of the DIN-DALI-2 when it is added to the system. To view the name of the loads in the DALI group, refer to DIN-DALI-2 Settings on page 1229.



4. Enter a name for the device and then select **OK**.
5. Configure the device after it is added to the room. Tap **Settings** next to the device name to display a Settings dialog box. For details, refer to Device Settings on page 1191.

> **NOTE:** After adding a DIN-DLI and associated groups/loads to Crestron Home, do not readdress DALI Drivers.

Remove a DALI Group or Load from a Room

When a DALI group or load is removed from a room, it is placed in the gateway's device list.

To remove a DALI group or load from a room:

1. Select a DALI group or load.
2. Select **< Remove**.

Tunable Lights

Add tunable light fixtures to the Crestron Home system.

This section provides the following information:

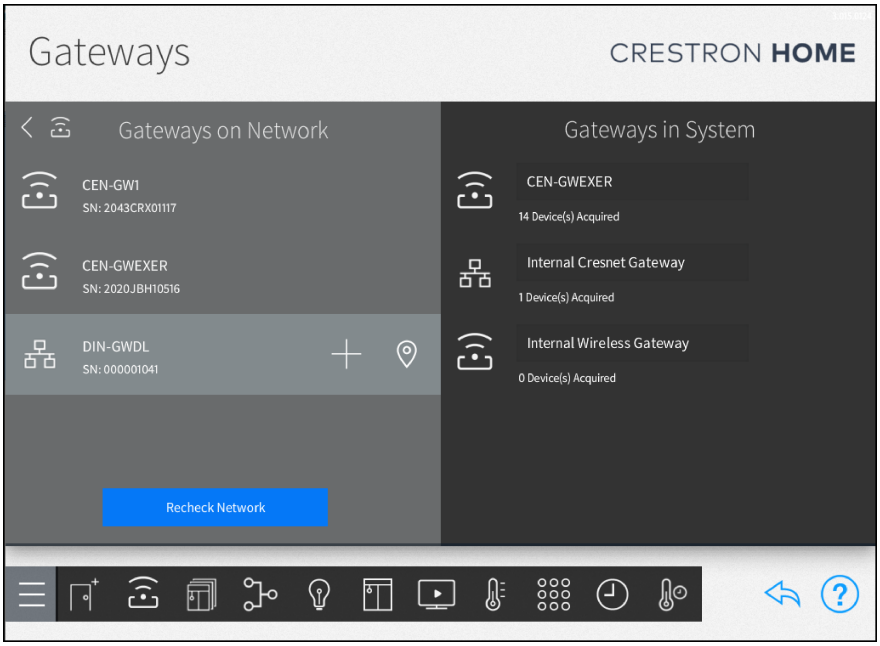
Pair DIN-GWDL Gateway

Add a DIN-GWDL gateway and DMX-C light fixture to the Crestron Home system.

Add a DIN-GWDL

To add a DIN-GWDL, from the **Setup** screen go to **Pair Devices > Manage Gateways**, select a device and then select **Add**. For additional information, refer to Gateways and Processors on page 280.

> **NOTE:** The DIN-GWDL-SPLTR, if included in the system, is not discoverable and cannot be configured.



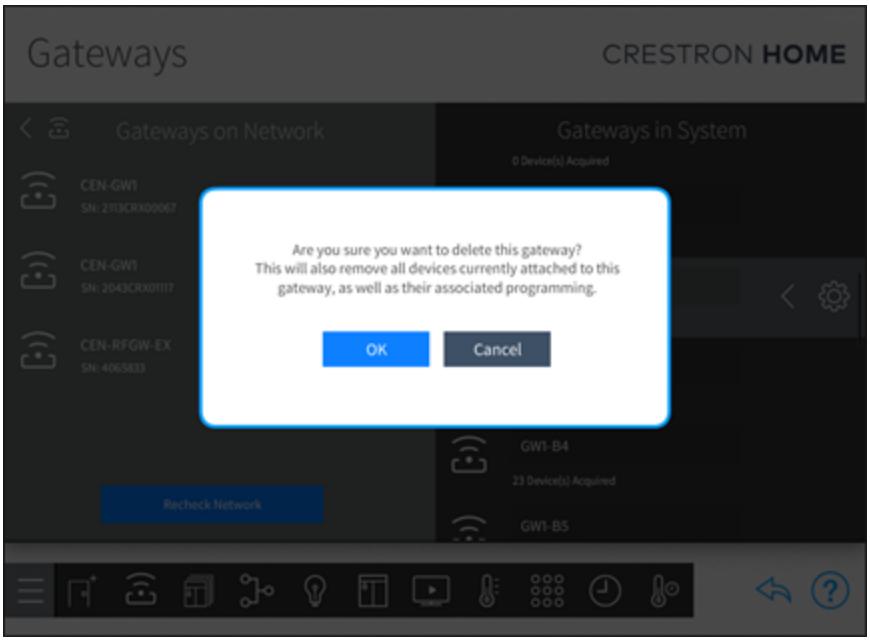
Remove Gateway

NOTES:

- Removing a gateway also removes all devices acquired by that gateway.
- Internal Gateways cannot be removed.

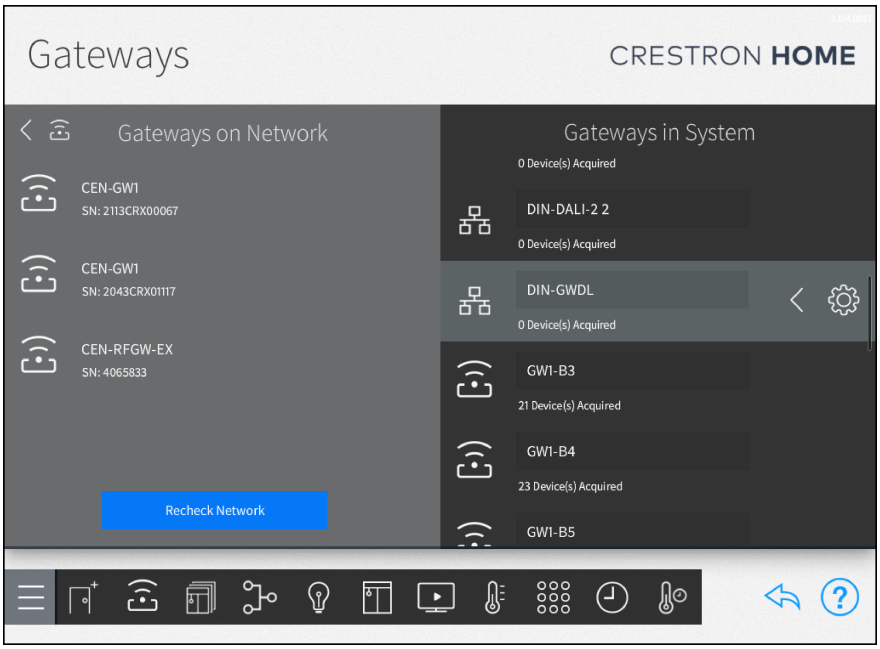
To remove a gateway from the system:

1. Select a gateway and then select **Remove**.
2. Select **OK** to confirm.



DIN-GWDL Settings

View and configure settings for the gateway, select the DIN-GWDL and then select **Settings**. For details, refer to Gateway Settings on page 1220.



Pair Tunable Light Fixtures

Add a tunable light fixture to the Crestron Home system.

Use the **Digital Lighting** device type in the Pair Devices screen to add tunable light fixtures. The **Digital Lighting** device type is displayed after a DIN-GWDL gateway is added to the system.



Tunable Light Fixtures and Light Groups

Light fixtures can be added and controlled individually or as a light group. A Light Group allows a collection of Fixtures to operate as a single entity that replicates a typical lighting circuit, where many lights that are on the same circuit and are controlled in unison with a single point of control.

Use Light Groups to create zoned lighting systems. For example, create two zones of lights in a kitchen, one over the food preparation area and one over the dining area. Each zone of lights will be controlled in unison. In the Crestron Home app, the Lights control screen will show two controllable loads.

If the light fixtures are added individually, each light fixture will display in the Crestron Home app as a controllable load.

NOTE: Consider the following:

- Light groups can contain Crestron light fixtures.
- Light groups cannot span rooms.
- Light groups cannot span DMX Universes.
- A Fixture can exist in only one Light Group.
- All Fixtures in the Light Group must have the same control capabilities.
- All fixtures in the Light Group will operate in unison.

- The End User of the system will only be able to access Light Groups, not the individual fixtures.
- When configuring scenes or keypad button programming, only Light Groups, not the individual fixtures, will be accessible.

Add Tunable Light Fixtures

To add tunable light fixtures:

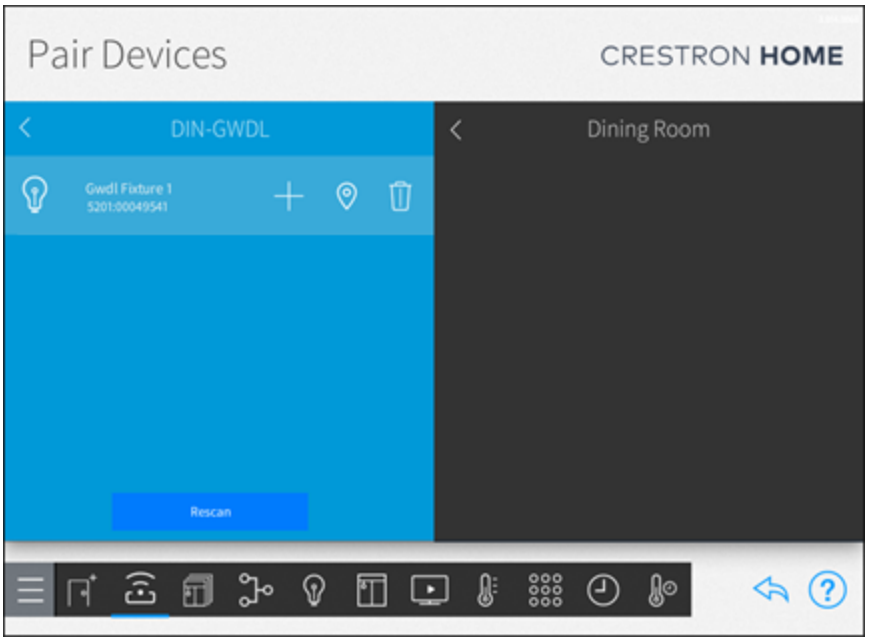
1. Go to **Pair Devices** on the **Setup** screen or on the setup menu.
2. Select the **Digital Lighting** device type.

   NOTE: When there are multiple DIN-GWDL devices in the system, you must select a gateway to view the list of light fixtures that are connected to it. If there is one DIN-GWDL in the system, the list of light fixtures for the gateway is opened automatically.



3. The system searches for light fixtures and then displays them in the list.

> **NOTE:** If a light fixture is not found, select **Rescan**. It may be necessary to scan multiple times.

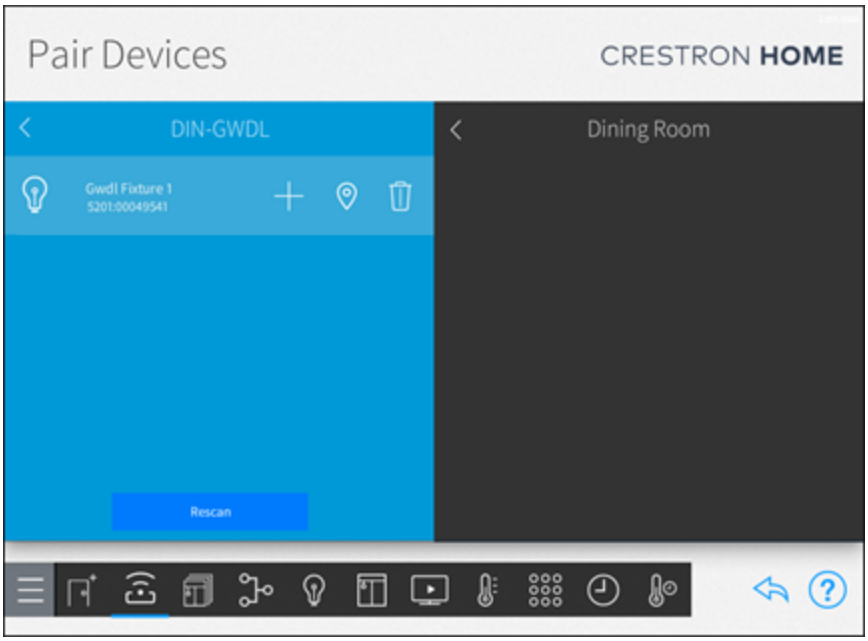


4. Create a light group or add a light fixture to a group:

   > **NOTE:** A light group is created when the first fixture is added to the room.

   - **Create a Light Group:** Select a light fixture from the list and then select **Add**. Enter a name for the light group and then select **OK**.

     > **TIP:** If a light group in the room is selected you will be asked if you want to add the light fixture to the selected light group. Select **No** to create the new light group.

   - **Add a Fixture to a Light Group:** First, select a fixture in the room. Then, select a light group and then select **Add**. When prompted to add the fixture to the light group, select **Yes**. To create a new light group, select **no**.

5. Enter a name for the light group and then select **Enter**.

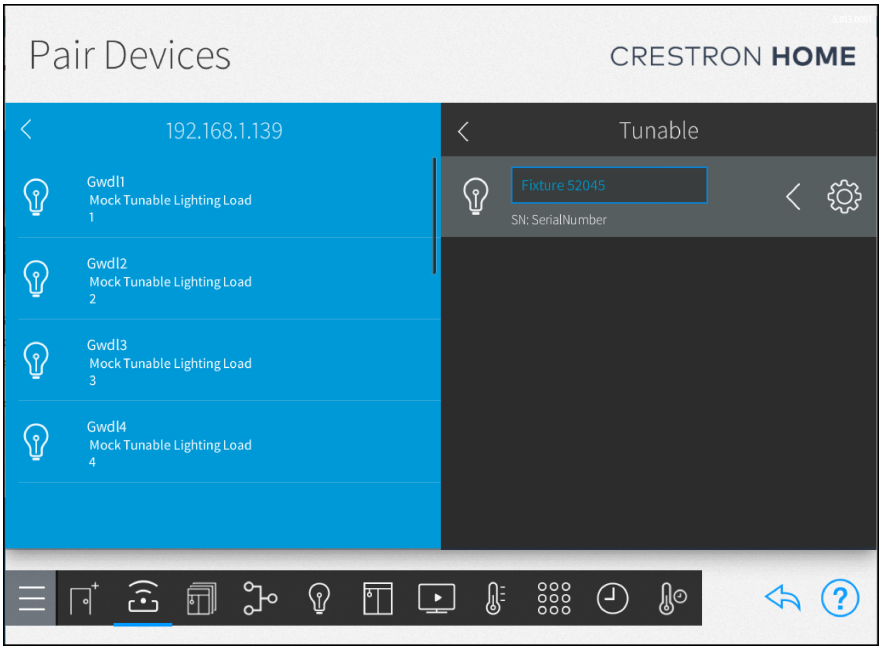
Remove a Light Fixture or Light Group

NOTE:

- Deleting a Light Group will cause all Fixtures in the group to also be deleted
- If all light fixtures in a Light Group are deleted, the Light Group will be automatically deleted.

To remove a fixture or light group:

- **Fixture:** Go to **Light Group >** **Enter Group >** **Select a Fixture** and then select **Remove**.



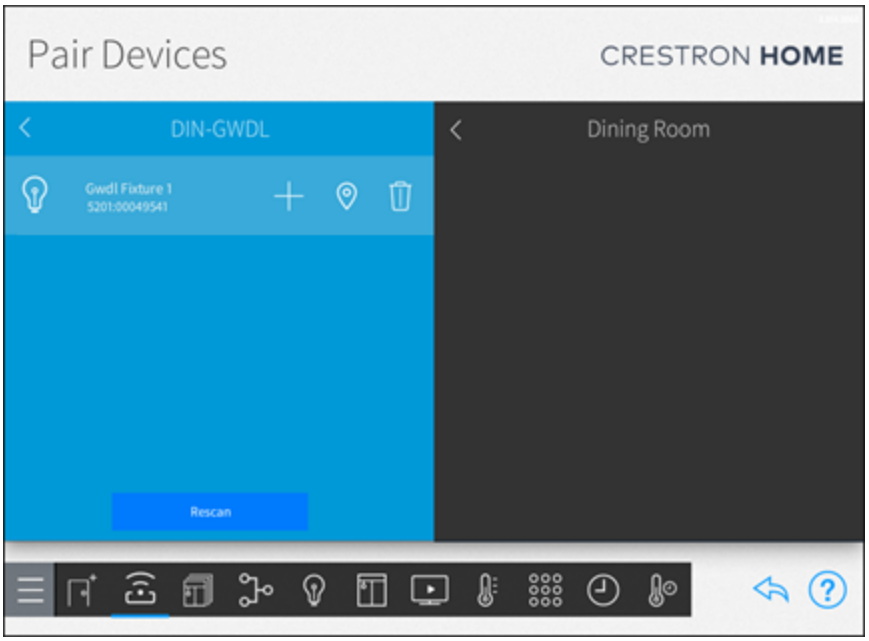
- **Light Group:** Select a **Light Group** and then select **Remove**.



Forget a Tunable Light Fixture

When a fixture is removed from a room, or is not discovered again during a rescan, the light fixture will remain in the list of devices.

To remove a light fixture from the list of devices, select a light fixture and then select **Delete**.



Settings

View and configure settings for a light group or tunable light fixture.

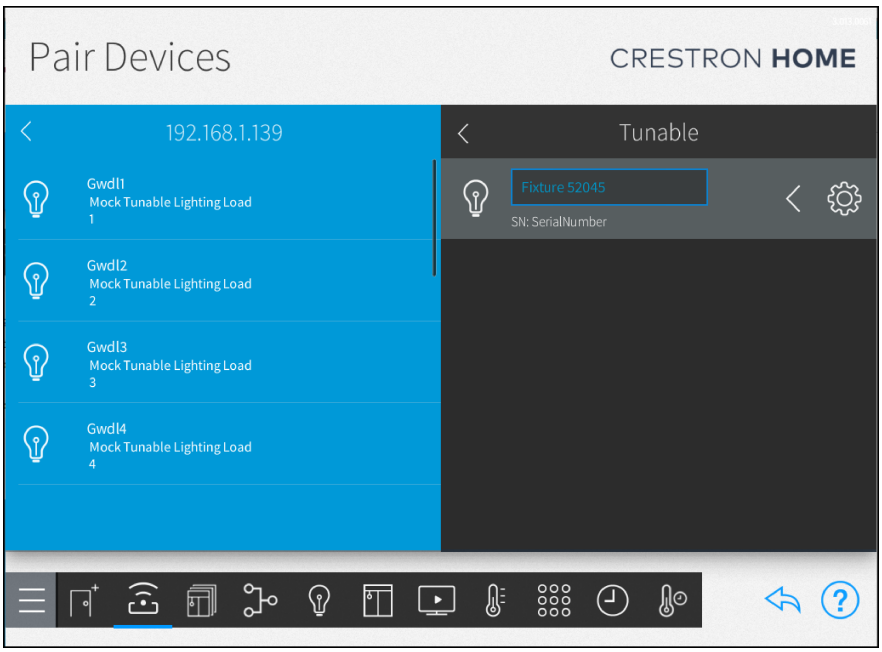
Light Group Settings

View and configure settings for a light group, select a **Light Group** and then select **Settings**. For details, refer to Lighting Load Controller Settings on page 1262.



Tunable Light Fixture Settings

View and configure settings for a tunable light fixture, go to **Light Group** > **Enter Group** > **Select a Fixture** and then select **Settings**. For details, refer to Lighting Load Controller Settings on page 1262.

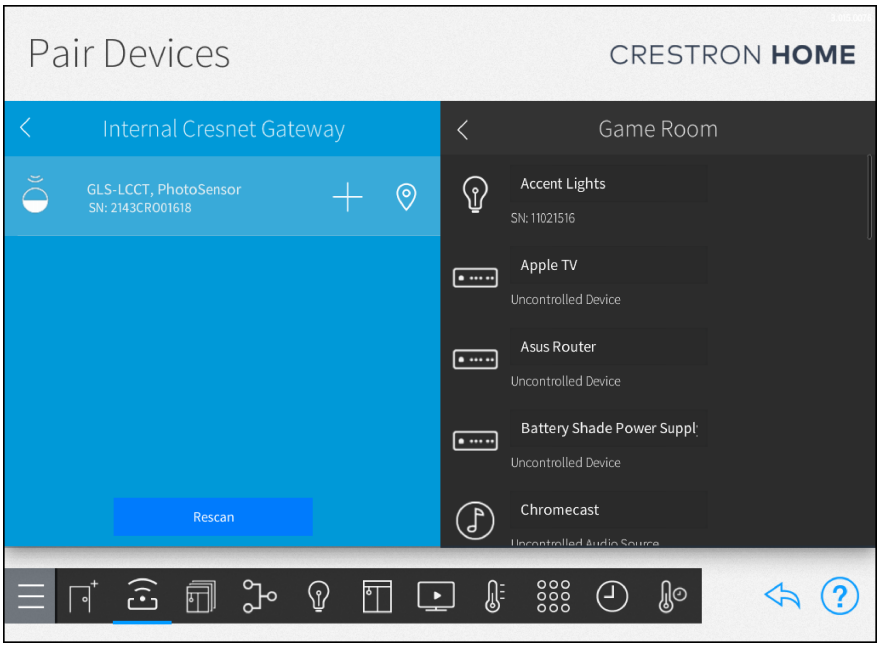


Pair SolarSync Sensor

Add a SolarSync® Outdoor Daylight and Color Temperature Sensor to the Crestron Home system. The SolarSync Sensor (GLS-LCCT) enables regulation of indoor lighting to match the actual natural sunlight outdoors.

Add a GLS-LCCT

To add a GLS-LCCT, from the **Setup** screen go to **Pair Devices > Crestron Wired and Wi-Fi > Cresnet® Gateway**, select a device and then select **Add**. For additional information, refer to Crestron Wired and Wi-Fi Devices on page 193.



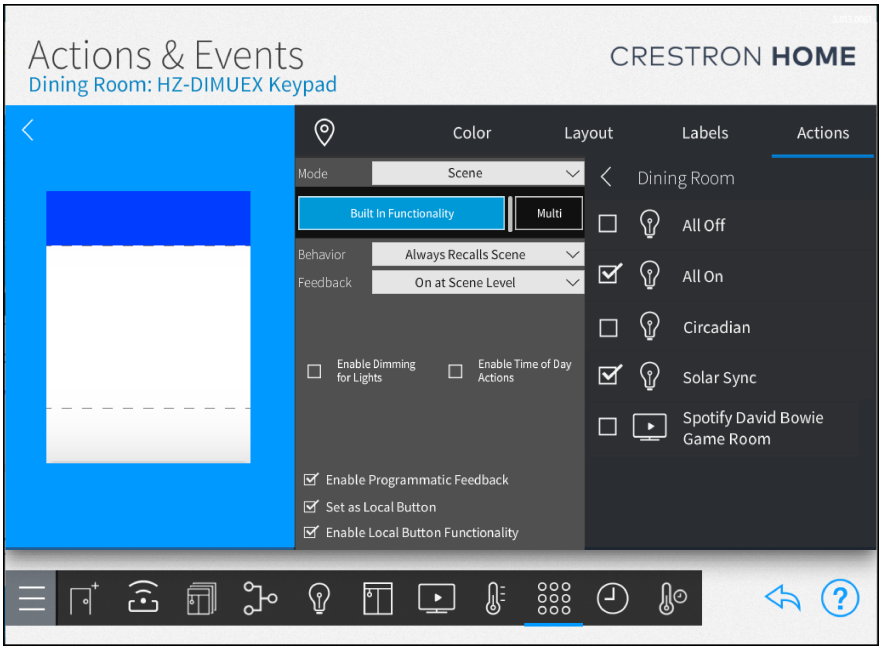
SolarSync Scene

The **All Off**, **All On**, and **SolarSync** scene is added to all rooms when a SolarSync sensor is add to the system. For details, refer to Light Scenes on page 396.

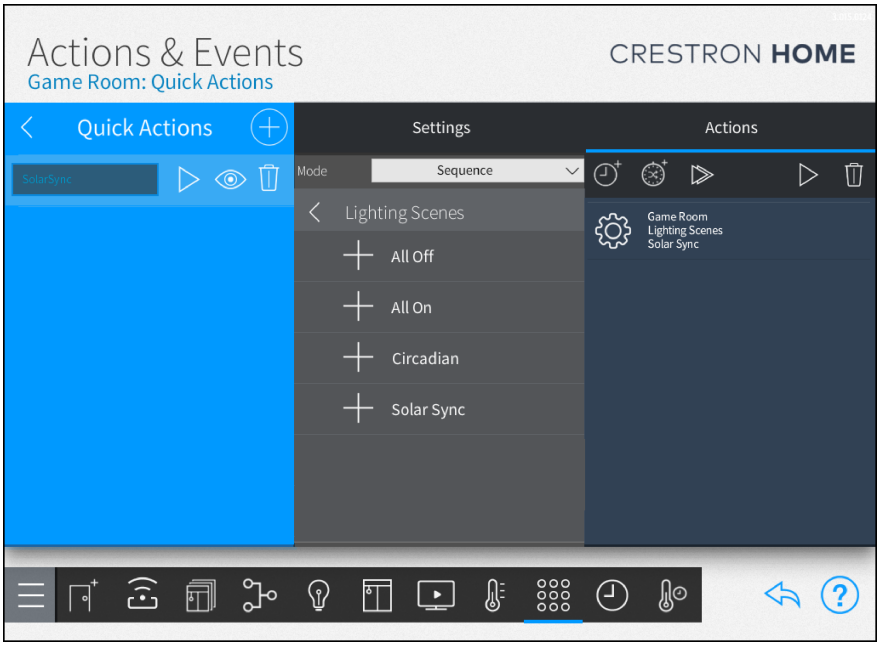


The SolarSync scene can be included in Quick Actions and Sequence Quick Actions and recalled using button actions and device events. For details, refer to Customize and Schedule on page 413.

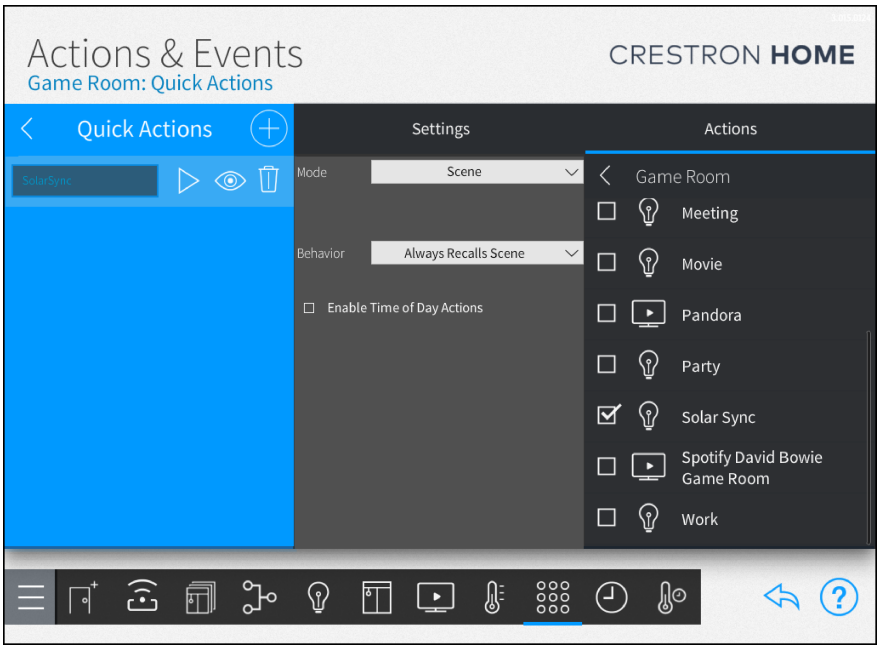
SolarSync Scene Recall using Button Action



SolarSync Scene in Sequence Quick Action



SolarSync Scene in Quick Action



Remove a GLS-LCCT

To remove a GLS-LCCT from the system:

1. Select the GLS-LCCT and then select **Remove**.



2. Select **OK** to confirm.

GLS-LCCT Settings

View and configure settings for the SolarSync sensor, select the GLS-LCCT and then select **Settings**. For details, refer to Photo Sensor Settings on page 1283.



Crestron Driver Devices

The Crestron Home system utilizes Crestron Drivers to expand the functionality of the system. Crestron Drivers are available for AV receivers, AV switchers, Blu-ray® disc players, cable boxes, flat panel displays, garages, gates, lights, platform devices, pool controllers, power controllers, projectors, security systems, speakers, and video servers.

To view the complete list of drivers, visit the Crestron Driver Portal at drivers.crestron.io.

> **NOTE:** Crestron Connected devices are not compatible with Crestron Home systems.

Crestron Drivers can be downloaded from the Crestron driver portal or side-loaded using an FTP program.

This section provides the following information:

- Add Driver Devices
- Side-Load Crestron Drivers
- Update Crestron Drivers
- Pools
- Create Crestron Drivers
- Delete Crestron Drivers

Add Driver Devices

Add Crestron Driver devices to the Crestron Home system to control devices that are manufactured by other companies. Crestron Drivers are used to add Crestron and third-party devices to the Crestron Home system.

The devices displayed on the **Drivers** screen consist of Crestron Drivers that are downloaded from the Crestron Driver portal or side-loaded onto the Crestron Home processor.

To create, update, and delete Crestron Drivers, refer to Crestron Driver Devices on page 228.

NOTE:

- Crestron Drivers that are tested by Crestron, and legacy security system drivers, are marked with the Crestron swirl logo.
- Only devices with discrete on and off commands should be paired with the system. If a device with an auto-off timer is added to the system, the device may turn itself off while the room remains on. This behavior causes the device to power on and become out of sync with the room after the room is powered off.
- When using serial and IR devices, more than one device can be connected per port.

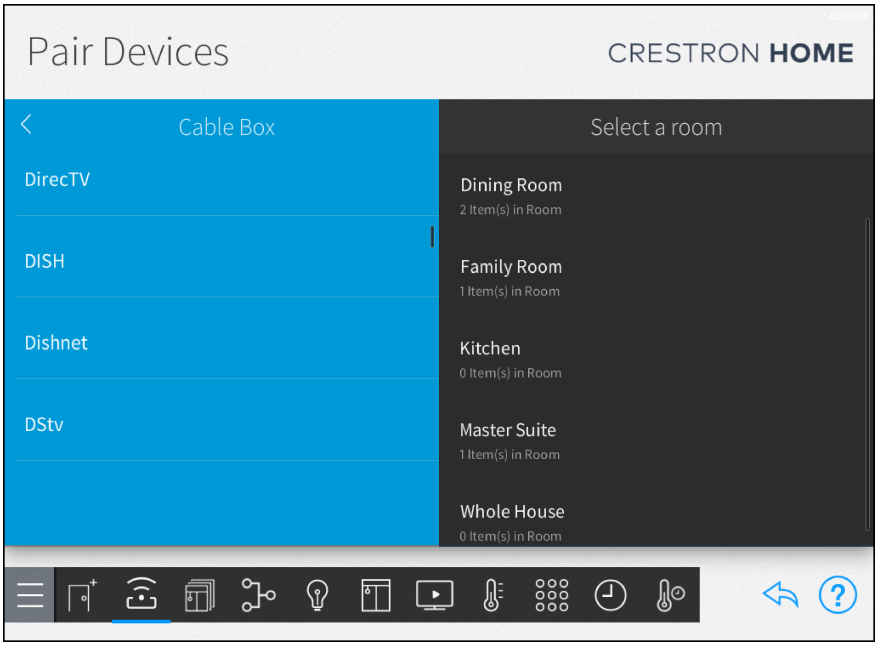
Add a Driver Device to a Room

To add a Crestron Driver device to a room:

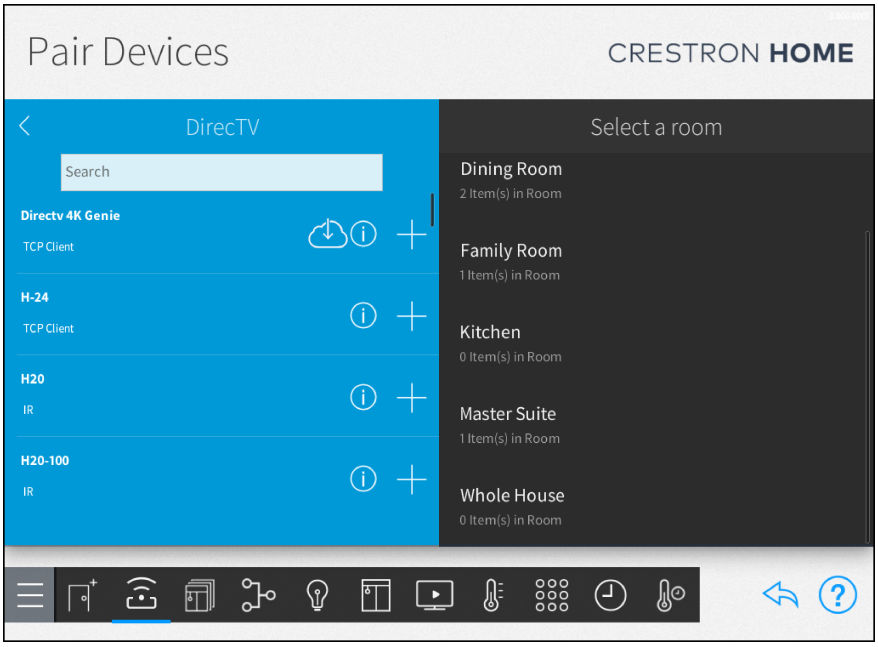
1. In the **Select a room** menu, select a room for the device.
2. In the **Device Types** menu, select **Drivers**. The Crestron Home processor updates the list of Crestron Drivers.



3. In the **Drivers** menu, navigate to a driver.



4. Select a driver and then select **Add**. The device driver is downloaded if not already in the system. If the driver was originally side-loaded and an updated version of the driver is available at the Crestron Driver Web Portal, select **Update with Cloud Version**.

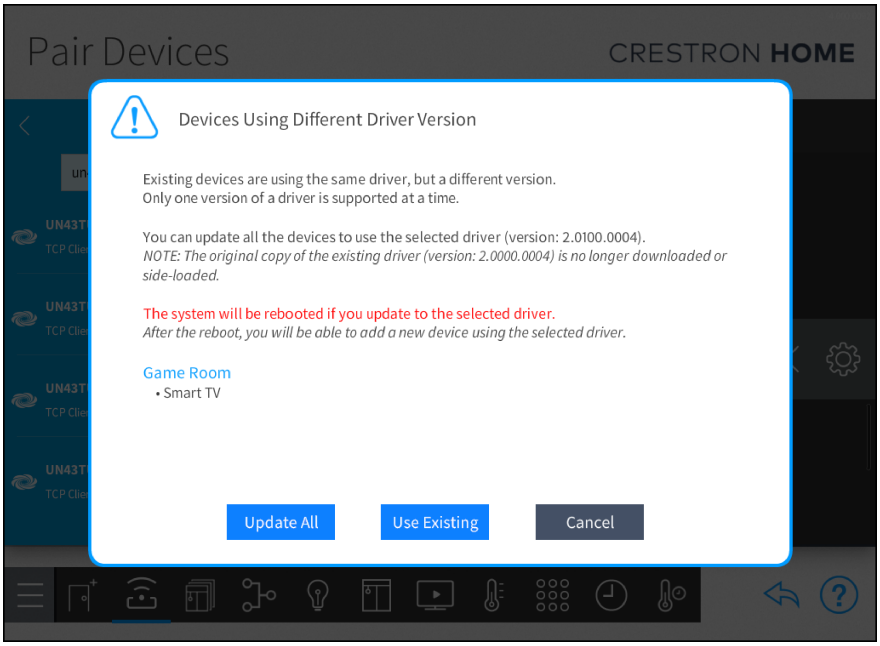


NOTE: In Crestron Home version 3.21.0214 and earlier, when a device is added to the system using a Crestron Driver, the device driver does not update automatically in the system when a new version is released in the cloud. For instructions on installing an updated Crestron Certified device driver, refer to Crestron Driver Devices on page 228.

5. If the device is already added to the system and an updated version of the driver is available, a **Driver Version Conflict** screen is displayed.

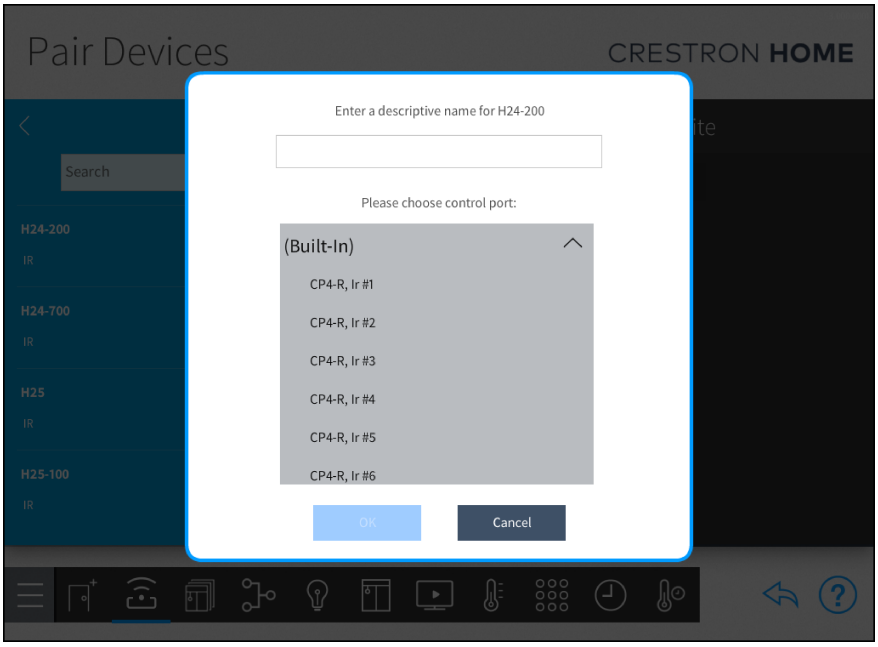
   NOTE: If an updated driver version is side-loaded or downloaded from Crestron Driver Web Portal, the existing version driver is removed from the system. Also, the driver is removed from the system if the system was restored from a backup. If the existing driver is not available, the **Use Existing** option is not available. To add a device using the existing driver version, side-load the driver onto the system. For details, refer to Side-Load Crestron Drivers on page 237.

   - To update all devices to the new driver version, select **Update All**. After the system starts up, add the device to the system.
   - To keep the existing driver version, select **Use Existing**.

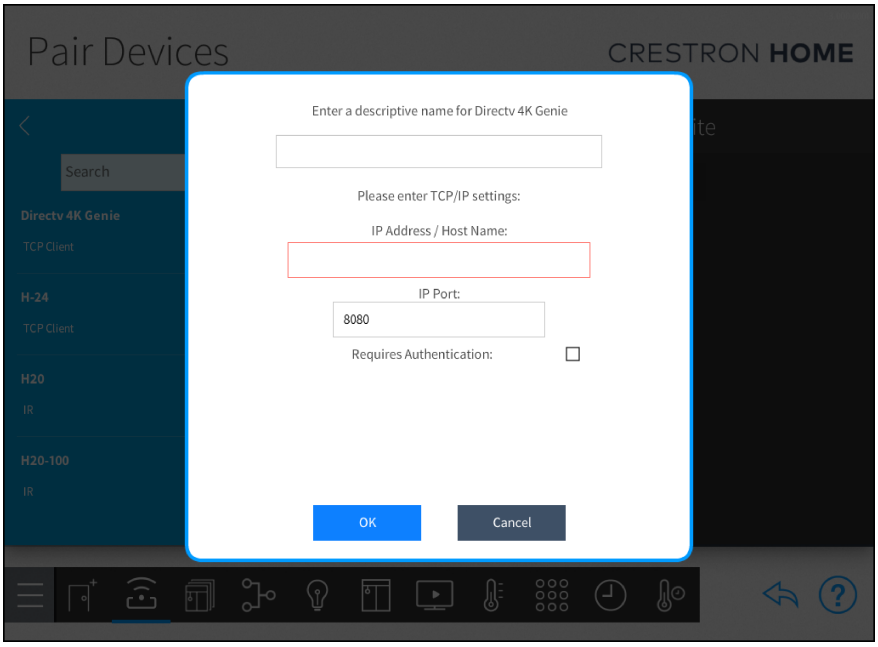


6. Enter a descriptive name for the device in the pop-up dialog box that is displayed.

7. Configure the provided transport settings used for device communication:
    - **IR, Serial, and CEC Devices:** Select a control port from the list of available ports.

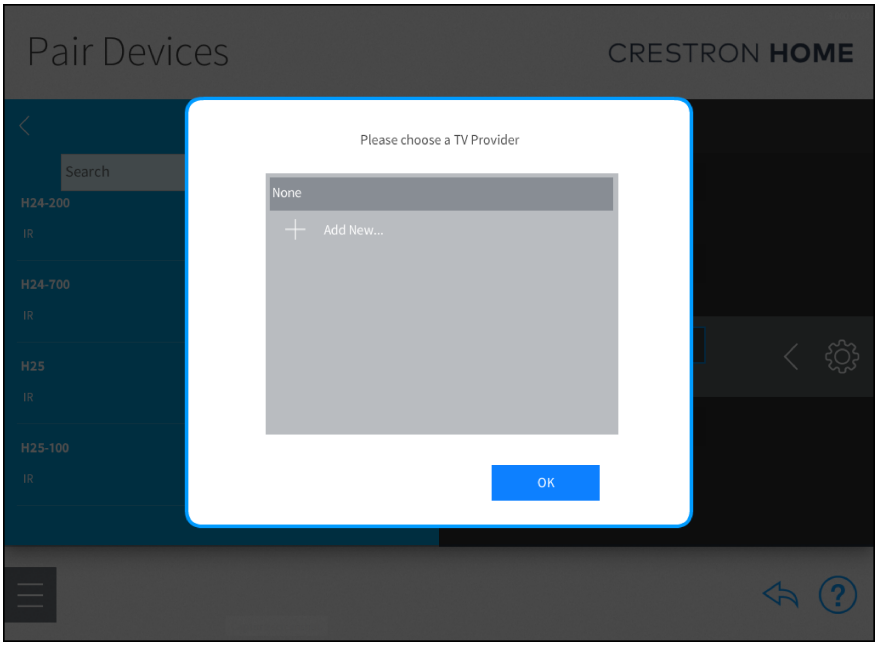


    - **TCP Devices:** Enter the device IP address or hostname, IP port, and (if required) authentication credentials.



> **NOTE:** IP devices must be configured with a static IP address. The system will no longer be able to detect the device if its IP address changes.

- **Cable Boxes** Select a television provider from the list or tap **+ Add New** to add a new provider. To add a television provider, refer to Add a Television Provider on page 235.



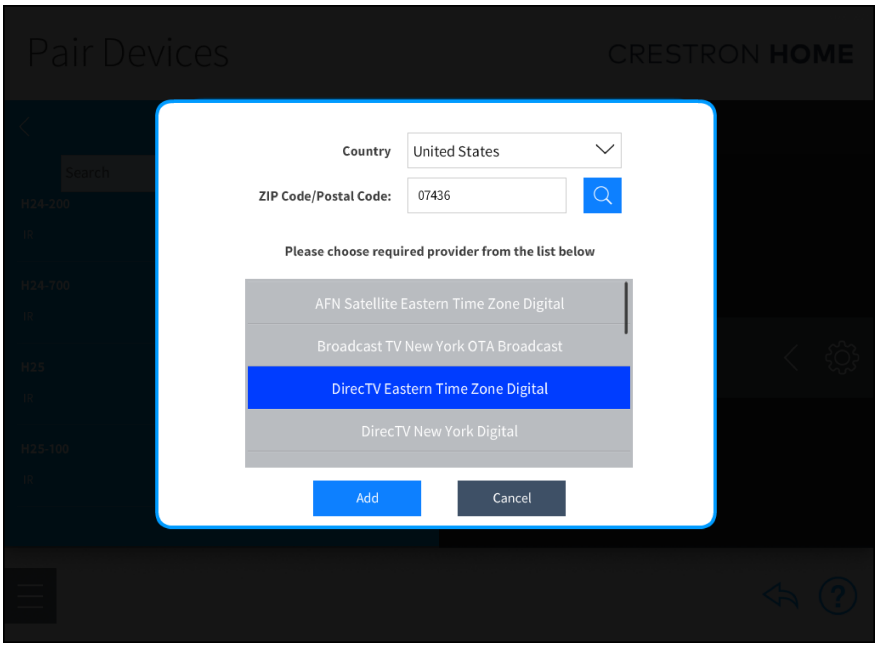
8. Select **OK**.
9. Configure the device after it is added to the room. Tap **Settings** next to the device name to display a Settings dialog box. For details, refer to Device Settings on page 1191.

Add a Television Provider

To add a television provider:

1. Select a country from the **Country** drop-down menu.
2. Enter the zip or postal code in the **ZIP Code/Postal Code** box.

   > **NOTE:** Use uppercase letters and include spaces when entering the postal code. For example, enter "N0M 1C0" for a postal code for Canada.



3. Select a provider from the list and then select **Add**.

Television providers are available in these locations:

- Andorra
- Austria
- Bahamas*
- Belgium
- Bermuda
- Brazil
- Canada
- Chile
- Colombia
- Costa Rica
- Denmark
- Ecuador
- El Salvador*
- Finland
- France
- Germany
- Gibraltar
- Guatemala
- Honduras
- Iceland
- Ireland
- Italy
- Liechtenstein
- Luxembourg
- Malta
- Mexico
- Monaco
- Netherlands
- Nicaragua
- Norway
- Panama*
- Paraguay*
- Peru
- Poland
- Portugal
- Spain
- Sweden
- Switzerland
- United Kingdom
- United States

* This location does not use ZIP or Postal codes. To search for television providers, enter a space in the search box.

Remove a Crestron Driver Device from a Room

To remove a Crestron Driver device from a room:

> **NOTE:** Removing the Crestron Driver device from the room does not remove the downloaded driver from the Crestron Home system. For details, refer to Update Crestron Drivers on page 238 and Delete Crestron Drivers on page 270.

1. Select a driver device.
2. Select **< Remove**.

Side-Load Crestron Drivers

Side-load Crestron Drivers using an FTP program. If the Crestron Driver was created using the Device Learner tool, use the Device Learner Tool to side-load the Crestron Driver.

Side-Load Using FTP

To side-load Crestron Drivers using an FTP program, follow these steps:

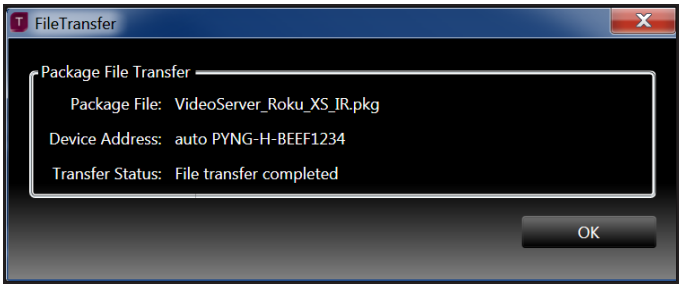
1. Connect to the Crestron Home processor over FTP or by using the File Manager tool in Crestron Toolbox.
2. Upload the Crestron Driver package file into the Crestron Home processor's \User\ThirdPartyDrivers\Import directory.

Side-Load Using the Device Learner Tool (IR Devices Only)

To side-load Crestron Drivers using the Device Learner Tool, follow these steps:

1. Open the Device Learner tool in Crestron Toolbox™ software.
2. Go to **File > Send PKG to Device**.
3. Save the driver package file to the User Database.
4. Select the Crestron Home processor using the **Address Book** tool, and then click **OK**. Once the transfer is complete, a pop-up dialog is displayed showing the package file, the device hostname/IP address, and the transfer status.

> **NOTE:** The side-loaded Crestron Driver will overwrite existing drivers on the Crestron Home processor if the drivers share the same ID (manufacturer, model name, and communication type)



Update Crestron Drivers

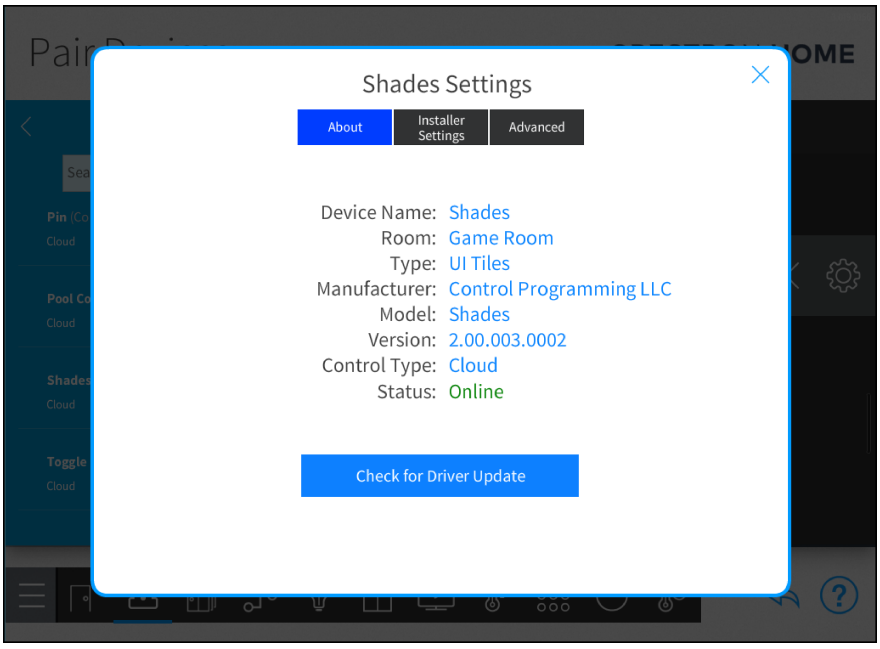
Update Crestron Drivers to enable new functionality that was implemented when the driver was updated.

NOTES:

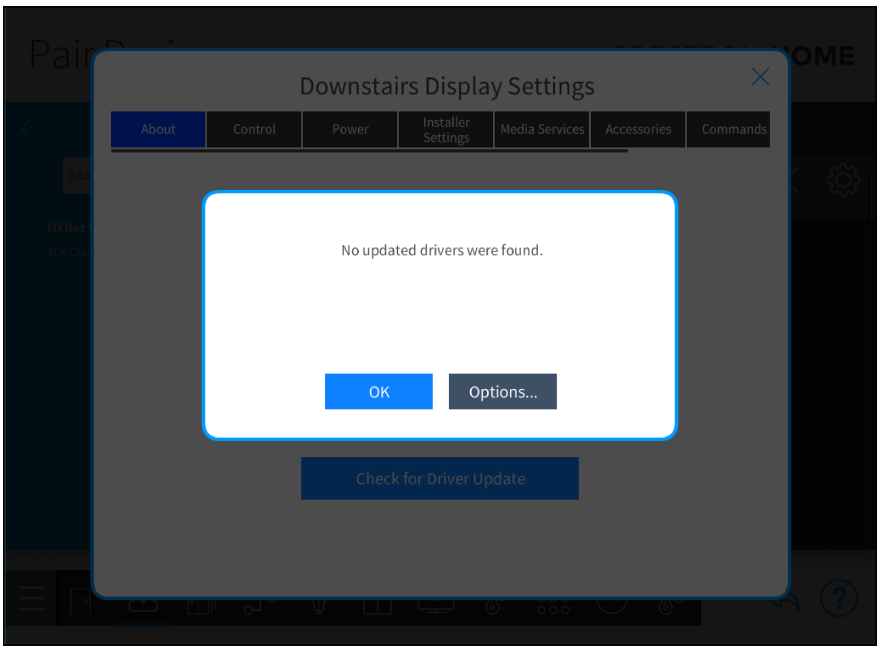
- A side-loaded driver can be downgraded if the version that is loaded is lower than the active version. The downgrade procedure is the same as the upgrade procedure, but you will be prompted to downgrade instead of upgrade.
- All devices in the system must use the same driver.
- A side-loaded driver can be replaced with the version on the Crestron Driver Web Portal. For details, refer to Add Driver Devices on page 229.

To update, reload, or disable a Crestron Driver:

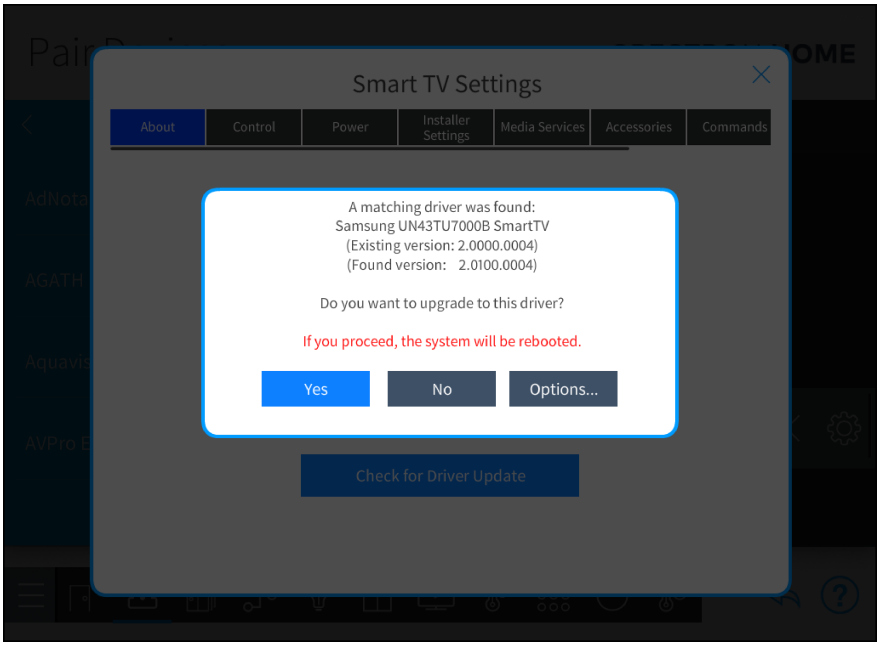
1. If updating the driver, side-load the Crestron Driver onto the Crestron Home processor. For details, refer to Side-Load Crestron Drivers on page 237.
2. Tap the gear button next to the device name to display a Settings dialog box for the device.
3. Select **Check for Driver Update**. The system will search for an updated version of the driver.



4. Perform one of these actions:
    - If no updated drivers are found, select **OK**.

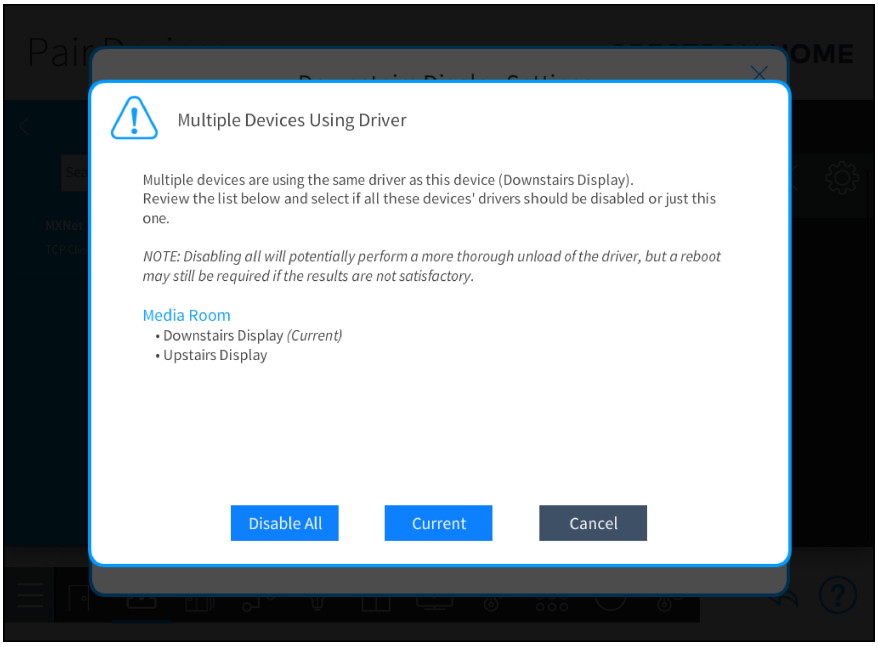


    - To update the driver, select **Yes**. You may be prompted to reboot the Crestron Home processor.



    - To reload or re-enable the diver, select **Options** and then **Reload**.

- To disable the driver, Select **Options** and then **Disable**. If more than one device uses the same driver, select **Current** to disable the currently selected device or **Disable All** to disable all devices using the driver.



5. If a previous configuration value or programming cannot be reconnected after updating, a message will be displayed. Note the items and reprogram after the update.

Update a Downloaded Crestron Driver (Legacy Procedure)

> **TIP:** The procedure below applies to Crestron Home version 3.21.0214 and lower. When using a higher firmware version, use the procedure above.

When a Crestron Driver device is added to the system, a copy of the driver is stored in the Crestron Home processor. The driver is not updated automatically when an updated version of the Crestron Driver is available on the Crestron Driver portal.

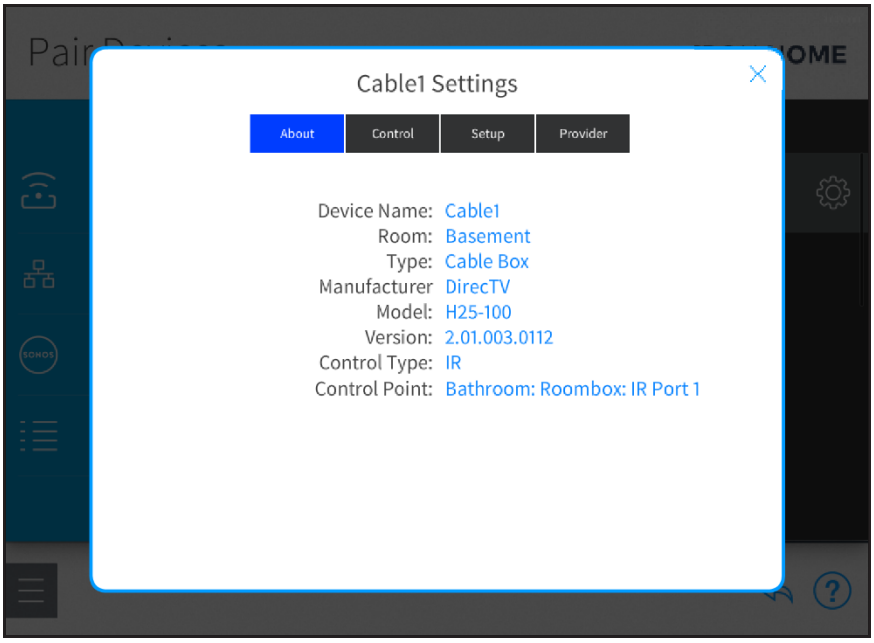
To update a downloaded Crestron Driver, follow these steps:

1. Remove all devices in the Crestron Home system that use the Crestron Driver.

   > **NOTE:** If a device that uses the driver remains in the system, the updated driver will not be downloaded.

2. Restart the Crestron Home processor. The Crestron Driver is removed from the system after the processor restarts.
3. Go to **Pair Devices > Third Party**. Wait for the Crestron Home processor to update the list of Crestron Drivers.
4. Add the device to a room. For details, refer to Add a Driver Device to a Room on page 229.

5. Tap **Settings** next to the device name to confirm that the device was added with the updated driver. The **About** tab displays the driver version.



Update a Side-Loaded Crestron Driver (Legacy Procedure)

> **TIP:** The procedure below applies to Crestron Home version 3.21.0214 and lower. When using a higher firmware version, use the procedure above.

To update a side-loaded Crestron Driver:

1. Delete the side-loaded Crestron driver from the Crestron Home system. For details, refer to Delete Crestron Drivers on page 270.
2. Restart the Crestron Home processor. The Crestron Driver is removed from the system after the processor restarts.
3. Side-load the Crestron Driver onto the Crestron Home processor. For details, refer to Side-Load Crestron Drivers on page 237.

Pools

Add a pool or pool controllers to the Crestron Home system.

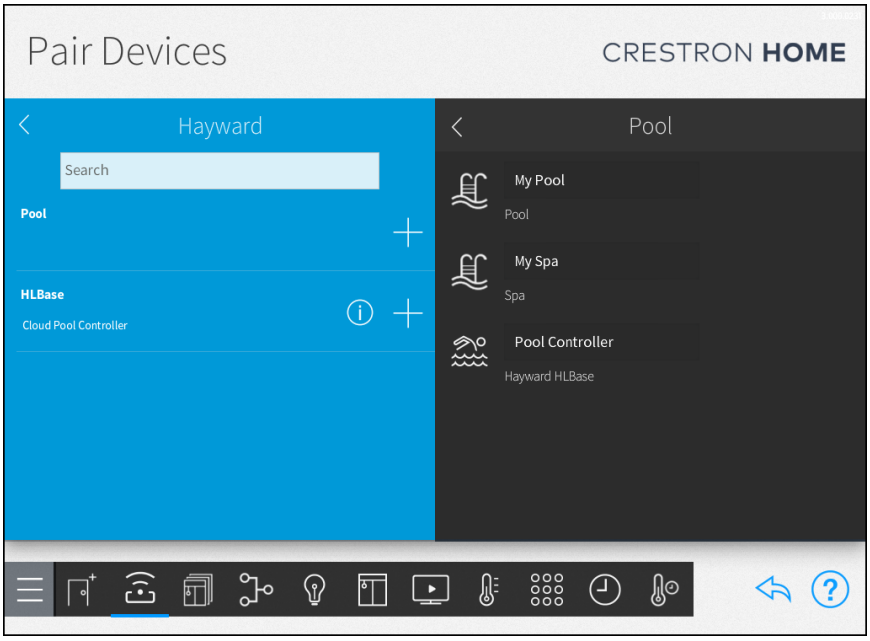
Add a Pool

To add a pool to the system, add the pool controller to the system and then add the pool:

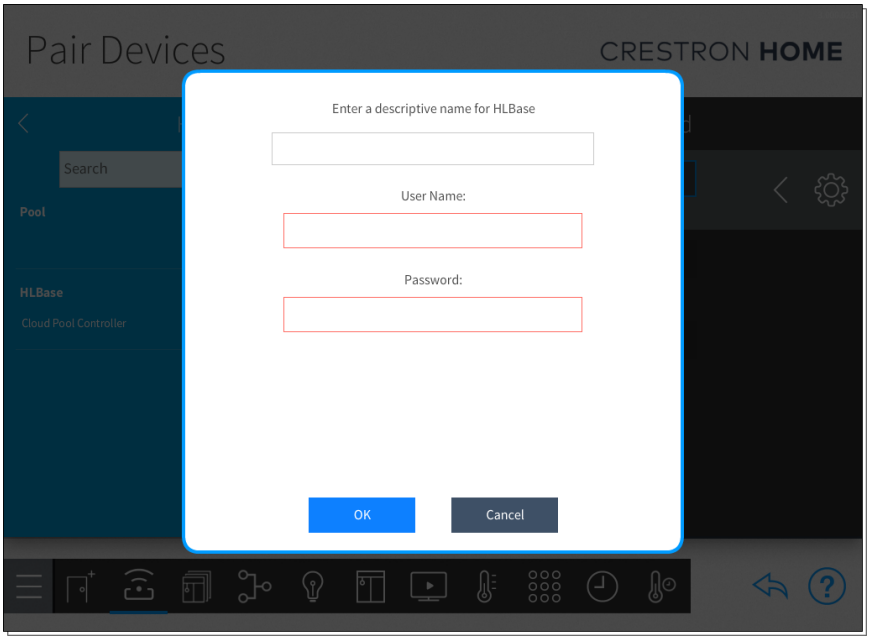
1. In the **Select a room** menu, select a room for the device.
2. In the **Device Types** menu, go to **Drivers > Pool Controller** and then select the manufacturer of the pool controller.



3. Select a pool controller and then select **Add**.

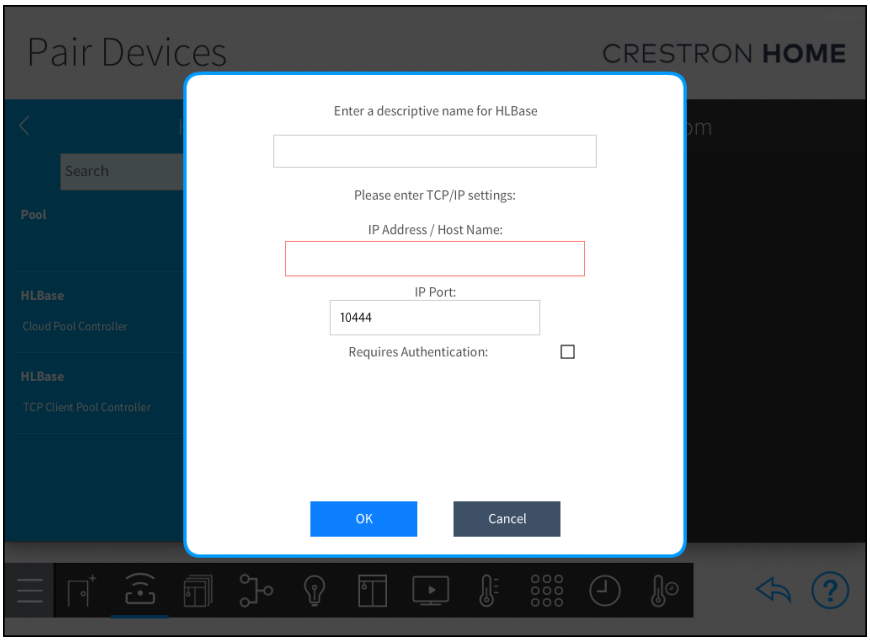


4. Enter a descriptive name and connection details for the pool controller.
   - **Cloud-based Controllers:** Enter the **User Name** and **Password** for the pool controller.

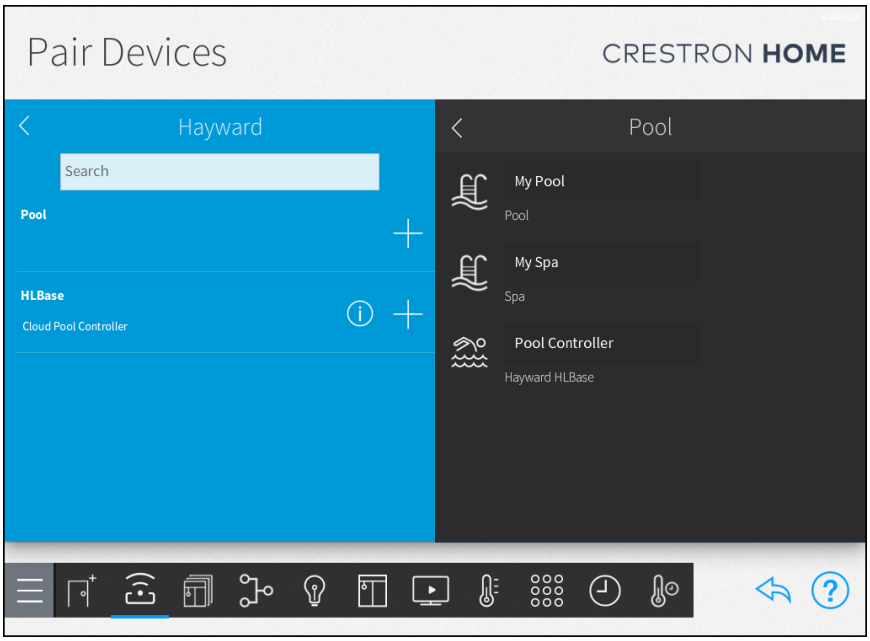


- **IP-based controllers:** Enter the **IP Address/Hostname** and **IP Port** for the pool controller. If authentication is required, select **Requires Authentication** and then enter the **User Name** and **Password** for the pool controller.

  > **NOTE:** All pool controllers in the system must use a static or reserved IP address.

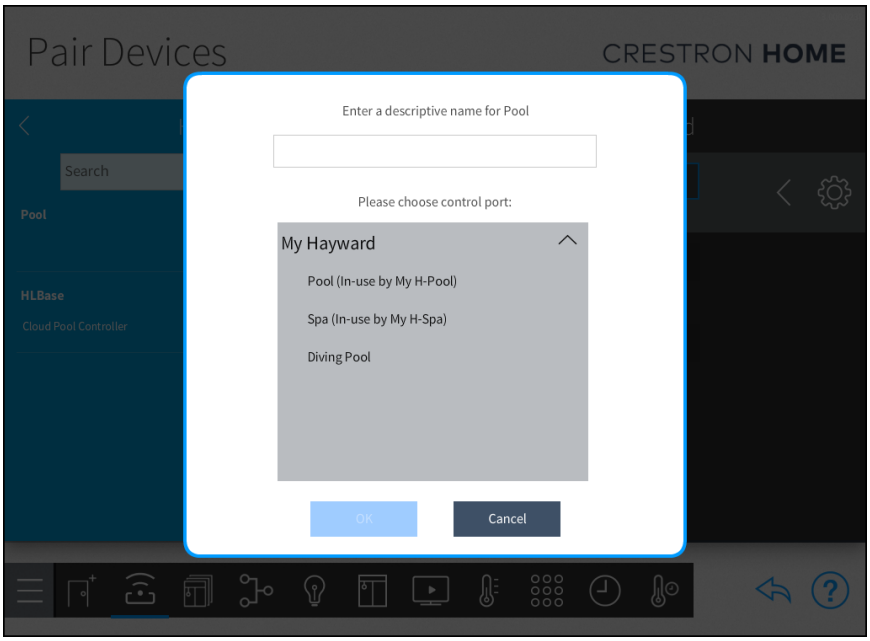


5. Tap **OK**. The pool controller is added to the room. The pool controller information is loaded into the system.
6. Select **Pool** from the menu and then select **Add**.



7. Enter a descriptive name for the pool and select a control port.

   > **NOTE:** The pool controller must be fully loaded before the pool can be added.



8. Select **OK**. The pool is added to the room.
9. Configure the pool controller and the pool after they are added to the room. Tap **Settings** next to the device name to display a Settings dialog box. For details, refer to Device Settings on page 1191.

Remove a Pool Controller or a Pool from a Room

To remove a pool controller or a pool from a room:

1. Select a pool controller or pool.
2. Select **< Remove**.

Create Crestron Drivers

Create Crestron Drivers for Extension Devices

Create Crestron Drivers for Extension devices using the Crestron Drivers software development kit (SDK). For details, refer to the Crestron Drivers SDK.

Create Crestron Drivers for IR Devices

To create Crestron Drivers for IR devices, use the Device Learner tool in Crestron Toolbox™ software. For more information on using the Device Learner tool to create device drivers, refer to the embedded Crestron Toolbox help file.

Create Crestron Drivers for Serial, IP, and CEC Devices

To create Crestron Drivers for serial, IP, and CEC devices, use the Drivers software development kit (SDK). For details, refer to the Crestron Drivers SDK.

Mapping Buttons for IR Crestron Drivers

Refer to the following tables for each supported device class when mapping buttons to device controls.

A standard command table is also provided for each device class that includes the following information:



- **Standard Command:** The name of the standard command in the Device Learner tool
- **Aliased Command List:** A list of aliased commands for the standard command

  Aliasing is used when a command does not exist for a certain device. In this scenario, the driver moves to the next command in the list, and repeats the process for each subsequent command that does not exist.

- **Required/Optional:** Indicates whether the command is required or optional (**Required** commands must be included to build the driver package file.)

Each button mapping table (except for remote controls) includes the following information:

- **Button:** A button used by the device class that may be mapped to a command
- **Crestron Home Command:** The command that is sent from the Crestron Home system to the device when the button is activated
- **Driver Command:** The command that is sent from the device driver to the device when the button is activated
- **Standard Command:** The standard command that is associated with the button in the Device Learner tool

Apple TV® User Interface Digital Media Extender Button Mapping



Apple TV Button Mapping

Button	Crestron Home Command	Driver Command	Standard Command
▶||	FirstPlayPause[1]	Not supported	Play_Pause
MENU	Menu	Menu	Menu
^	Up	Up	Up_Arrow
>	Right	Right	Right_Arrow
v	Down	Down	Dn_Arrow
<	Left	Left	Left_Arrow
OK	Select	Select	Select

[1] If this command does not exist for the device, this button is mapped to the **Play** command instead.

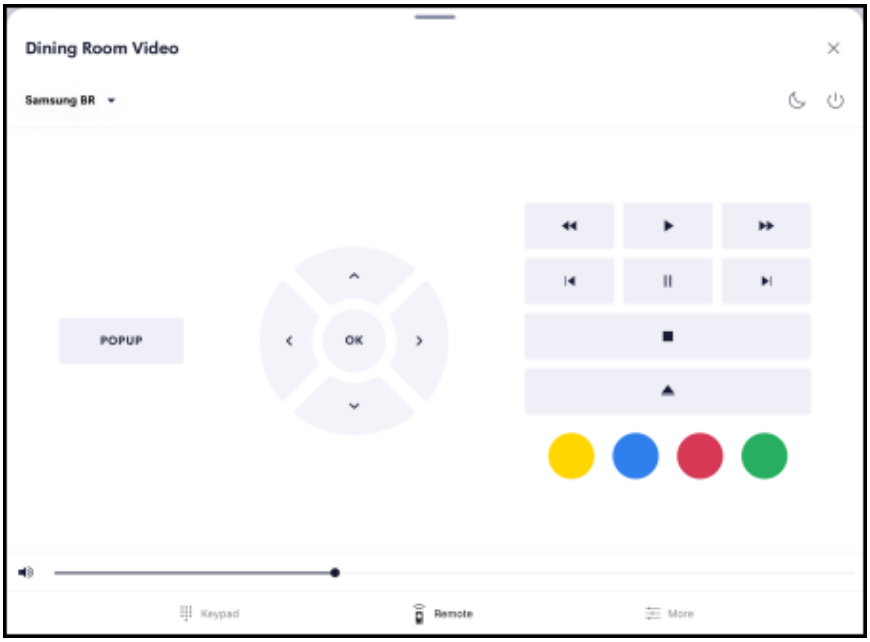
Apple TV Standard Commands

Standard Command	Aliased Command List	Required/Optional
Play_Pause		**Required**

Apple TV Standard Commands

Standard Command	Aliased Command List	Required/Optional
Dn_Arrow	Down, DN, Dw_Arrow, Navigation_Down, Menu_Down, Cursor_Down, v, -, tilt_down, tilt_dn, tilt-down, tilt-dn, tiltdown	**Required**
Left_Arrow	Left, Navigation_Left, Menu_Left, Cursor_Left, <, Track-, pan_left, pan_lt, l, LT, panleft	**Required**
Right_Arrow	Right, Navigation_Right, Menu_Right, Menu_RT, Cursor_Right, >, pan_right, pan_rt, pan-right, pan-rt, rt, panright	**Required**
Up_Arrow	Up, Navigation_Up, Menu_Up, Cursor_Up, ^, +, tilt_up, tilt-up	**Required**
Select	OK, Navigation_Select, Select	**Required**
Menu	Root_Menu, Disc_Menu, DiscMenu/List, DVD_Menu, DVD-Menu, DVDMenu	**Required**

Blu-ray Disc Player Device Button Mapping



Blu-ray Disc Player Button Mapping

Button	Crestron Home Command	Driver Command	Standard Command
◀◀	Rewind	ReverseScan	Rscan
▶	Play	Play	Play
▶▶	FastForward	ForwardScan	Fscan
⏮	PreviousTrack	ReverseSkip	Track-
⏸	Pause	Pause	Pause
⏭	NextTrack	ForwardSkip	Track+
■	Stop	Stop	Stop
⤮	ToggleShuffle	Not supported	Shuffle
⏏	Eject	Eject	Eject
↺	ToggleRepeat	Repeat	Repeat_1

Blu-ray Disc Player Button Mapping

Button	Crestron Home Command	Driver Command	Standard Command
BACK	Back	Back	Back
TOP MENU	TopMenu	TopMenu	TopMenu
EXIT	Exit	Exit	Exit
POP-UP MENU	PopUpMenu	PopUpMenu	PopUpMenu
SETTINGS	Settings	Options	Options
HOME	Home	Home	Home
+	NextDisc	Not supported	Disc+
-	PreviousDisc	Not supported	Disc-
^	Up	Up	Up_Arrow
>	Right	Right	Right_Arrow
v	Down	Down	Dn_Arrow
<	Left	Left	Left_arrow
OK	Select	Select	Select
	Red	Red	Red
	Green	Green	Green
	Yellow	Yellow	Yellow
	Blue	Blue	Blue



Blu-ray Disc Player Button Mapping - Numbers

Button	Crestron Home Command	Driver Command	Standard Command
1	Digit1	Digit1	1
2	Digit2	Digit2	2
3	Digit3	Digit3	3
4	Digit4	Digit4	4
5	Digit5	Digit5	5
6	Digit6	Digit6	6
7	Digit7	Digit7	7
8	Digit8	Digit8	8
9	Digit9	Digit9	9
0	Digit0	Digit0	0
ENTER	Enter	Enter	Enter
CLEAR	Clear	Not supported	Not supported

Blu-ray Disc Player Standard Commands

Standard Command	Aliased Command List	Required /Optional
Rscan	Rscan, Rew, Rewind, Review, Reverse_Scan, Rewind_Scan, Previous_ Scan, Prev_Scan, R_Srch, Rsrch, Scan-, <<, &Rscan, A_Rew, ReverseScan	**Required**

Blu-ray Disc Player Standard Commands

Standard Command	Aliased Command List	Required /Optional
Play	Play_Pause, Play/Pause, A_PLAY, >, PLAY/SLOW, VOD-PLAY, PLAY_MODE	**Required**
Fscan	FFWD, F_SCAN, SCAN, FF, >>, F_Srch, FSRCH, FFW, Forward, Fast_Forward, SCAN+, SEARCH, A_FFWD, SEARCH>>, SEARCH_MODE, &Fscan	**Required**
Pause	A_PAUSE, Pse, PAUSE_STEP, VOD-PAUSE, Play_Pause, Play/Pause	**Required**
Dn_Arrow	Down, DN, Dw_Arrow, Navigation_Down, Menu_Down, Cursor_Down, v, -, tilt_down, tilt_dn, tilt-down, tilt-dn, tiltdown	**Required**
Left_Arrow	Left, Navigation_Left, Menu_Left, Cursor_Left, <, Track-, pan_left, pan_lt, l, LT, panleft	**Required**
Right_Arrow	Right, Navigation_Right, Menu_Right, Menu_RT, Cursor_Right, >, pan_right, pan_rt, pan-right, pan-rt, rt, panright	**Required**
Up_Arrow	Up, Navigation_Up, Menu_Up, Cursor_Up, ^, +, tilt_up, tilt-up	**Required**
Select	OK, Navigation_Select, Select	**Required**
TopMenu	Top, Top_Menu, Tmenu	**Required**
Exit	ESC, CANCEL/OSD, CANCEL, Navigation_MenuBack_F11	**Required**
Track+	Track/Chapter_+, Advance, Jump, Skip_Fwd, Chapter/Track_Fwd, Next, F_Srch/Skip, FF, NextTrack, TRK+, Track_+, NEXT_TRK, F_TRK, F_TRACK, NEXT_SCENE, SCENE+, >>|, F_Scene, FTRK, >>	**Required**
Track-	Track/Chapter_-, Chapter/Track_Rev, Skip_Rev, Previous, PreviousTrack, TRK-, Track_-, PREV_TRK, R_TRK, R_TRACK, PREV_SCENE, SCENE-, |<<, R_Scene	**Required**
Back		**Required**
Disc+	Disc_+, Disc_Skip+, NEXT_DISC_ F_DISC	Optional
Disc-	Disc_-, Disc_Skip-, PREV_DISC, R_DISC	Optional
PopUpMenu	PopUp_Menu	Optional
0	Disc_Key_0, Direct_Channel_Entry_0, 0_Space, Number_0_or_Number_10, Keyboard_0, NUM_0, kpd_0, kpd-0, key_0, key-0, Dial_0, Dial0, Key0	Optional
1	Disc_Key_1, Direct_Channel_Entry_1, Number_1, Keyboard_1, NUM_1, kpd_1, kpd-1, key_1, key-1, Dial_1, Dial1, Key1	Optional
2	Disc_Key_2, Direct_Channel_Entry_2, 2_ABC, Number_2, Keyboard_2, NUM_2, kpd_2, kpd-2, key_2, key-2, Dial_2, Dial2, Key2	Optional
3	Disc_Key_3, Direct_Channel_Entry_3, 3_DEF, Number_3, Keyboard_3, NUM_3, kpd_3, kpd-3, key_3, key-3, Dial_3, Dial3, Key3	Optional

Blu-ray Disc Player Standard Commands

Standard Command	Aliased Command List	Required /Optional
4	Disc_Key_4, Direct_Channel_Entry_4, 4_GHI, Number_4, Keyboard_4, NUM_4, kpd_4, kpd-4, key_4, key-4, Dial_4, Dial4, Key4	Optional
5	Disc_Key_5, Direct_Channel_Entry_5, 5_JKL, Number_5, Keyboard_5, NUM_5, kpd_5, kpd-5, key_5, key-5, Dial_5, Dial5, Key5	Optional
6	Disc_Key_6, Direct_Channel_Entry_6, 6_MNO, Number_6, Keyboard_6, NUM_6, kpd_6, kpd-6, key_6, key-6, Dial_6, Dial6, Key6	Optional
7	Disc_Key_7, Direct_Channel_Entry_7, 7_PQRS, Number_7, Keyboard_7, NUM_7, kpd_7, kpd-7, key_7, key-7, Dial_7, Dial7, Key7	Optional
8	Disc_Key_8, Direct_Channel_Entry_8, 8_TUV, Number_8, Keyboard_8, NUM_8, kpd_8, kpd-8, key_8, key-8, Dial_8, Dial8, Key8	Optional
9	Disc_Key_9, Direct_Channel_Entry_9, 9_WXYZ, Number_9, Keyboard_9, NUM_9, kpd_9, kpd-9, key_9, key-9, Dial_9, Dial9, Key9	Optional
Stop	A_STOP, [], VOD-STOP, Stop_Presenting, StopPresenting	Optional
F_Step	NEXT, NEXT_STEP, FORWARD, FWD, STEP, SLOW, ||>, STEP_FORWARD, FRAME_FORWARD, FRAME_+, FRAME+	Optional
R_Step	Prev, PREV_STEP, REVERSE, REV, STEP_BACK, STEP_<, <||, FRAME_BACK, FRAME_-, FRAME-	Optional
Replay	REPLAY_GUIDE, INSTANT_REPLAY, REPLAY/BACK, REPLAY_ZONES	Optional
Enter	#, Disc_Key, Enter, Direct_Channel, Enter, #_Enter, Partition_1_Keypad_Enter, Keyboard_Enter, ENT	Optional
Eject	OPEN, OPEN/CLOSE	Optional
Blue	F1_Blue	Optional
Green	F3_Green	Optional
Red	F2_Red	Optional
Yellow	F4_Yellow	Optional
Options		Optional
Repeat_1	REPEAT, RPT, RPT_A, RPT_1, LOOP, A-B, AB	Optional
Shuffle		Optional

Digital Video Server Button Mapping

Digital Video Server Button Mapping

Button	Crestron Home Command	Driver Command	Standard Command
◀◀	Rewind	ReverseScan	Rscan
▶	FirstPlayPause[1]	Not supported	Play
▶▶	FastForward	ForwardScan	Fscan
|◀	PreviousTrack	ReverseSkip	R_Step
❚❚	Pause	Pause	Pause
▶|	NextTrack	ForwardSkip	F_Step
⮌	Replay	Replay	Replay
HOME	Home	Home	Home
MENU	Menu	Menu	Menu
BACK	Back	Back	Back
EXIT	Exit	Exit	Exit
^	Up	Up	Up_Arrow
>	Right	Right	Right_Arrow
v	Down	Down	Down_Arrow
<	Left	Left	Left_Arrow
OK	Select	Select	Select

[1] If this command does not exist for the device, this button is mapped to the Play command instead.

Digital Video Server Standard Commands

Standard Command	Aliased Command List	Required/Optional
Rscan	Rscan, Rew, Rewind, Review, Reverse_Scan, Rewind_Scan, Previous_Scan, Prev_Scan, R_Srch, Rsrch, Scan-, <<, &Rscan, A_Rew, ReverseScan	Required

Digital Video Server Standard Commands

Standard Command	Aliased Command List	Required/Optional
Play_Pause	Play_Pause, Play/Pause, A_PLAY, >, PLAY/SLOW, VOD-PLAY, PLAY_MODE	Required
Fscan	FFWD, F_SCAN, SCAN, FF, >>, F_Srch, FSRCH, FFW, Forward, Fast_Forward, SCAN+, SEARCH, A_FFWD, SEARCH>>, SEARCH_MODE, &Fscan	Required
Pause	A_PAUSE, Pse, PAUSE_STEP, VOD-PAUSE, Play_Pause, Play/Pause	Required
Dn_Arrow	Down, DN, Dw_Arrow, Navigation_Down, Menu_Down, Cursor_Down, v, -, tilt_down, tilt_dn, tilt-down, tilt-dn, tiltdown	Required
Left_Arrow	Left, Navigation_Left, Menu_Left, Cursor_Left, <, Track-, pan_left, pan_lt, l, LT, panleft	Required
Right_Arrow	Right, Navigation_Right, Menu_Right, Menu_RT, Cursor_Right, >, pan_right, pan_rt, pan-right, pan-rt, rt, panright	Required
Up_Arrow	Up, Navigation_Up, Menu_Up, Cursor_Up, ^, +, tilt_up, tilt-up	Required
Select	OK, Navigation_Select, Select	Required
Menu	Root_Menu, Disc_Menu, DiscMenu/List, DVD_Menu, DVD-Menu, DVDMenu	Required
Back		Required
Stop	A_STOP, [], VOD-STOP, Stop_Presenting	Optional
F_Step	NEXT, NEXT_STEP, FORWARD, FWD, STEP, SLOW, ||>, STEP_FORWARD, FRAME_FORWARD, FRAME_+, FRAME+	Optional
R_Step	Prev, PREV_STEP, REVERSE, REV, STEP_BACK, STEP_<, <||, FRAME_BACK, FRAME_-, FRAME-	Optional
Replay	REPLAY_GUIDE, INSTANT_REPLAY, REPLAY/BACK, REPLAY_ZONES	Optional
Exit	ESC, CANCEL/OSD, CANCEL, Navigation_MenuBack_F11	Optional

DVR and AVR Button Mapping



DVR and AVR Button Mapping

Button	Crestron Home Command	Driver Command	Standard Command
◀◀	Rewind	ReverseScan	Rscan
▶	Play	Play	Play
▶▶	FastForward	ForwardScan	Fscan
|◀	PreviousTrack	ReverseSkip	Track-
❚❚	Pause	Pause	Pause
■	Stop	Stop	Stop
⟲	Replay	Replay	Replay
◉	Record	Record	Record
PG+	PageUp	PageUp	Page_Up

DVR and AVR Button Mapping

Button	Crestron Home Command	Driver Command	Standard Command
PG-	PageDown	PageDown	Page_Down
CH+	ChannelUp	ChannelUp	CH+
CH-	ChannelDn	ChannelDn	CH-
GUIDE	Guide	Guide	Guide
MENU	Menu	Menu	Menu
BACK	Back	Back	Back
INFO	Info	Info	Info
ON DEMAND	OnDemand	Not supported	On_Demand
FAV	ToggleFavorite	Not supported	Favorite
EXIT	Exit	Exit	Exit
^	Up	Up	Up_Arrow
>	Right	Right	Right_Arrow
v	Down	Down	Down_Arrow
<	Left	Left	Left_Arrow
OK	Select	Select	Select
	Red	Red	Red
	Green	Green	Green
	Yellow	Yellow	Yellow
	Blue	Blue	Blue
A	LetterA	A	A
B	LetterB	B	B
C	LetterC	C	C

DVR and AVR Button Mapping

Button	Crestron Home Command	Driver Command	Standard Command
Thumb Down	UserFeedbackNegative	ThumbsDown	Thumbs_Down
Thumb Up	UserFeedbackPositve	ThumbsUp	Thumbs_Up
LAST	LastChannel	Last	Last
LIVE	Live	Live	Live

DVR and AVR Button Mapping - Numbers

Button	Crestron Home Command	Driver Command	Standard Command
1	Digit1	Digit1	1
2	Digit2	Digit2	2
3	Digit3	Digit3	3
4	Digit4	Digit4	4
5	Digit5	Digit5	5
6	Digit6	Digit6	6
7	Digit7	Digit7	7
8	Digit8	Digit8	8
9	Digit9	Digit9	9
0	Digit0	Digit0	0
ENTER	Enter	Enter	Enter

DVR and AVR Standard Commands

Standard Command	Aliased Command List	Required/Optional
Rscan	Rscan, Rew, Rewind, Review, Reverse_Scan, Rewind_Scan, Previous_Scan, Prev_Scan, R_Srch, Rsrch, Scan-, <<, &Rscan, A_Rew, ReverseScan	Required
Play	Play_Pause, Play/Pause, A_PLAY, >, PLAY/SLOW, VOD-PLAY, PLAY_MODE	Required
Fscan	FFWD, F_SCAN, SCAN, FF, >>, F_Srch, FSRCH, FFW, Forward, Fast_Forward, SCAN+, SEARCH, A_FFWD, SEARCH>>, SEARCH_MODE, &Fscan	Required
Pause	A_PAUSE, Pse, PAUSE_STEP, VOD-PAUSE, Play_Pause, Play/Pause	Required
Dn_Arrow	Down, DN, Dw_Arrow, Navigation_Down, Menu_Down, Cursor_Down, v, -, tilt_down, tilt_dn, tilt-down, tilt-dn, tiltdown	Required
Left_Arrow	Left, Navigation_Left, Menu_Left, Cursor_Left, <, Track-, pan_left, pan_lt, l, LT, panleft	Required
Right_Arrow	Right, Navigation_Right, Menu_Right, Menu_RT, Cursor_Right, >, pan_right, pan_rt, pan-right, pan-rt, rt, panright	Required
Up_Arrow	Up, Navigation_Up, Menu_Up, Cursor_Up, ^, +, tilt_up, tilt-up	Required
Select	OK, Navigation_Select, Select	Required
Menu	Root_Menu, Disc_Menu, DiscMenu/List, DVD_Menu, DVD-Menu, DVDMenu	Required
CH+	CH_+, CHANNEL+, Channel_Up, CHAN_UP, CHAN+, CHAN-UP, CH_UP, CH-UP, TUNE+	Required
CH-	CH_-, Channel_Down, CHAN_DOWN, CHAN-, CHANNEL_DN, CHAN_DN, CHANNEL-, CHAN-DOWN, CHAN-DN, CH_DN, CH-DN, TUNE-	Required
Back		Required
Last	RECENT, JUMP, LC, PC	Required
Guide	Channel_Guide, Electronic_Program_Guide	Required
Info		Required
0	Disc_Key_0, Direct_Channel_Entry_0, 0_Space, Number_0_or_Number_10, Keyboard_0, NUM_0, kpd_0, kpd-0, key_0, key-0, Dial_0, Dial0, Key0	Required
1	Disc_Key_1, Direct_Channel_Entry_1, Number_1, Keyboard_1, NUM_1, kpd_1, kpd-1, key_1, key-1, Dial_1, Dial1, Key1	Required

DVR and AVR Standard Commands

Standard Command	Aliased Command List	Required/Optional
2	Disc_Key_2, Direct_Channel_Entry_2, 2_ABC, Number_2, Keyboard_2, NUM_2, kpd_2, kpd-2, key_2, key-2, Dial_2, Dial2, Key2	Required
3	Disc_Key_3, Direct_Channel_Entry_3, 3_DEF, Number_3, Keyboard_3, NUM_3, kpd_3, kpd-3, key_3, key-3, Dial_3, Dial3, Key3	Required
4	Disc_Key_4, Direct_Channel_Entry_4, 4_GHI, Number_4, Keyboard_4, NUM_4, kpd_4, kpd-4, key_4, key-4, Dial_4, Dial4, Key4	Required
5	Disc_Key_5, Direct_Channel_Entry_5, 5_JKL, Number_5, Keyboard_5, NUM_5, kpd_5, kpd-5, key_5, key-5, Dial_5, Dial5, Key5	Required
6	Disc_Key_6, Direct_Channel_Entry_6, 6_MNO, Number_6, Keyboard_6, NUM_6, kpd_6, kpd-6, key_6, key-6, Dial_6, Dial6, Key6	Required
7	Disc_Key_7, Direct_Channel_Entry_7, 7_PQRS, Number_7, Keyboard_7, NUM_7, kpd_7, kpd-7, key_7, key-7, Dial_7, Dial7, Key7	Required
8	Disc_Key_8, Direct_Channel_Entry_8, 8_TUV, Number_8, Keyboard_8, NUM_8, kpd_8, kpd-8, key_8, key-8, Dial_8, Dial8, Key8	Required
9	Disc_Key_9, Direct_Channel_Entry_9, 9_WXYZ, Number_9, Keyboard_9, NUM_9, kpd_9, kpd-9, key_9, key-9, Dial_9, Dial9, Key9	Required
Record	REC, A_RECORD, O	Required
Stop	A_STOP, [], VOD-STOP, Stop_Presenting, StopPresenting	Optional
F_Step	NEXT, NEXT_STEP, FORWARD, FWD, STEP, SLOW, ||>, STEP_FORWARD, FRAME_FORWARD, FRAME_+, FRAME+	Optional
R_Step	Prev, PREV_STEP, REVERSE, REV, STEP_BACK, STEP_<, <||, FRAME_BACK, FRAME_-, FRAME-	Optional
R_Skip		Optional
Enter	#, Disc_Key, Enter, Direct_Channel, Enter, #_Enter, Partition_1_Keypad_Enter, Keyboard_Enter, ENT	Optional
Track+	Track/Chapter_+, Advance, Jump, Skip_Fwd, Chapter/Track_Fwd, Next, F_Srch/Skip, FF, NextTrack, TRK+, Track_+, NEXT_TRK, F_TRK, F_TRACK, NEXT_SCENE, SCENE+, >>|, F_Scene, FTRK, >>	Optional

DVR and AVR Standard Commands

Standard Command	Aliased Command List	Required/Optional
Track-	Track/Chapter_-, Chapter/Track_Rev, Skip_Rev, Previous, PreviousTrack, TRK-, Track_-, PREV_TRK, R_TRK, R_TRACK, PREV_SCENE, SCENE-, |<<, R_Scene	Optional
Blue	F1_Blue	Optional
Green	F3_Green	Optional
Red	F2_Red	Optional
Yellow	F4_Yellow	Optional
Replay	REPLAY_GUIDE, INSTANT_REPLAY, REPLAY/BACK, REPLAY_ZONES	Optional
Page_Up	PGUP, PREV_PAGE, PAGE+, Page_+	Optional
Page_Down	PGDN, NEXT_PAGE, PAGE-, PAGE_ND, Page_-	Optional
Thumbs_ Down	Th_down, Thumb_DN	Optional
Thumbs_Up	Th_up, Thumb_Up	Optional
Live	RETURN_TO_LIVE	Optional
A		Optional
B		Optional
C		Optional
D		Optional
Exit	ESC, CANCEL/OSD, CANCEL, Navigation_MenuBack_F11	Optional
Favorite	FAV	Optional
On_Demand	OnDemand	Optional
List		Optional
Tivo		Optional
DVR	List, TIVO, TV-DVR, TV/DVR	Optional

Remote Control Button Mapping

Remote Control Button Mapping

Button	Crestron Home Command	Driver Command	TSR-310 Support	HR-310 Support	HR-150 Support	HR-100 Support
0	Digit0	Digit0	Yes	No	Yes	No
1	Digit1	Digit1	Yes	Nuo	Yes	No
2	Digit2	Digit2	Yes	No	Yes	No
3	Digit3	Digit3	Yes	No	Yes	No
4	Digit4	Digit4	Yes	No	Yes	No
5	Digit5	Digit5	Yes	No	Yes	No
6	Digit6	Digit6	Yes	No	Yes	No
7	Digit7	Digit7	Yes	No	Yes	No
8	Digit8	Digit8	Yes	No	Yes	No
9	Digit9	Digit9	Yes	No	Yes	No
	Clear	Not Supported	Yes	Yes	Yes	Yes
ENTER	Enter	Enter	Yes	Yes	Yes	Yes
	TogglePower	PowerToggle	Yes	Yes	Yes	Yes
	(Turns on the remote's keypad backlight)	Not applicable	No	No	Yes	Yes
	NextFavorite (for all devices except for Roku)For Roku, acts the same as the Menu button	Not applicable	Yes	No	No	No
	The first of these available commands for the device: Home, Menu, TopMenu	Home, Menu, TopMenu	Yes	Yes	No	No
	VolumeUp	VolumeUp	Yes	Yes	Yes	Yes
	ToggleMute	Mute	Yes	Yes	No	No
MUTE	ToggleMute	Mute	No	No	Yes	Yes
	VolumeDown	VolumeDown	Yes	Yes	Yes	Yes

Remote Control Button Mapping

Button	Crestron Home Command	Driver Command	TSR-310 Support	HR-310 Support	HR-150 Support	HR-100 Support
▲	ChannelUp	ChannelUp	Yes	Yes	Yes	Yes
ⓘ	Info	Info	Yes	Yes	No	No
INFO	Info	Info	No	No	Yes	Yes
▲	ChannelDown	ChannelDown	Yes	Yes	Yes	Yes
MENU	The first of these available commands for the device: Menu, Home, TopMenu	Home, Menu, TopMenu	Yes	Yes	Yes	Yes
GUIDE	The first of these available commands for the device: Guide, Home, TopMenu	Guide, Home, TopMenu	Yes	Yes	Yes	Yes
Directional pad, normal (non-color button) mode	Up, Right, Down, Left	Up, Right, Down, Left	Yes	Yes	Yes	Yes
Directional pad, color button mode	Green, Red, Yellow, Blue	Green, Red, Yellow, Blue	Yes	Yes	No	No
Directional pad, center button	Select	Select	Yes	Yes	No	No
Directional pad, SELECT	Select	Select	No	No	Yes	Yes
EXIT	The first of these available commands for the device: Exit, Back	Exit, Back	Yes	Yes	Yes	Yes
	(Turns on the directional pad's color button mode)	Not applicable	Yes	Yes	No	No

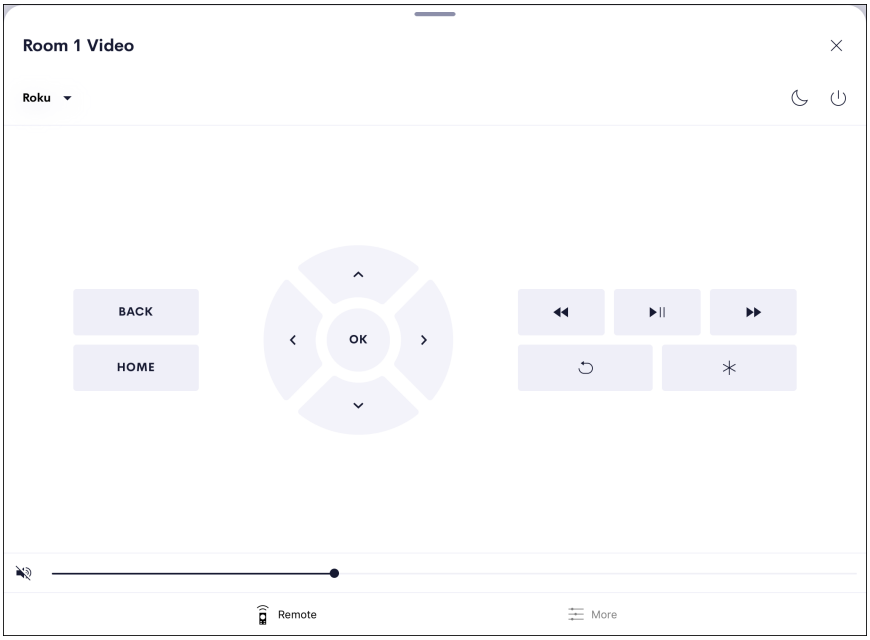
Remote Control Button Mapping

Button	Crestron Home Command	Driver Command	TSR-310 Support	HR-310 Support	HR-150 Support	HR-100 Support
LAST	The first of these available commands for the device: LastChannel, Back	Last, Back	Yes	Yes	Yes	Yes
	Rewind	ReverseScan	Yes	Yes	Yes	Yes
	Play (if available)Otherwise, sends TogglePlayPause	Play, PlayPause	Yes	Yes	Yes	Yes
	FastForward	ForwardScan	Yes	Yes	Yes	Yes
	The first of these available commands for the device: PreviousTrack, Replay, PreviousTunerPreset, PreviousDisc	ReverseSkip, Replay, Not supported, PreviousDisc	Yes	Yes	No	No
	The first of these available commands for the device: PreviousTrack, Replay, PreviousTunerPreset, PreviousDisc	ReverseSkip, Replay, Not supported, PreviousDisc	No	No	Yes	Yes
	Pause (if available)Otherwise, sends TogglePlayPause	Pause, PlayPause	Yes	Yes	Yes	Yes
	The first of these available commands for the device: NextTrack, Advance, NextTunerPreset, NextFavoriteChannel, PreviousDisc	ForwardSkip, ForwardSkip, Not supported, Not supported, Not supported	Yes	Yes	No	No

Remote Control Button Mapping

Button	Crestron Home Command	Driver Command	TSR-310 Support	HR-310 Support	HR-150 Support	HR-100 Support
⏮	The first of these available commands for the device: NextTrack, Advance, NextTunerPreset, NextFavoriteChannel, PreviousDisc	ForwardSkip, ForwardSkip, Not supported, Not supported, Not supported	No	No	Yes	Yes
■	Stop	Stop	Yes	Yes	Yes	Yes
DVR	RecordingMenu	Not applicable	Yes	Yes	Yes	Yes
●	ToggleRecord	Record	Yes	Yes	Yes	Yes
🎤	Press and hold button while speaking to issue a voice command	Not applicable	Yes	No	No	No

Roku® Streaming Player User Interface Button Mapping



Roku Button Mapping

Button	Crestron Home Command	Driver Command	Standard Command
◀◀	Rewind	ReverseScan	Rscan
▶	FirstPlayPause[1]	Not supported	Play_Pause
▶▶	FastForward	ForwardScan	Fscan
✳	Asterisk	Asterisk	*
↺	Replay	Replay	Replay
HOME	Home	Home	Home
MENU	Menu	Menu	Menu
BACK	Back	Back	Back
^	Up	Up	Up_Arrow
>	Right	Right	Right_Arrow
v	Down	Down	Down_Arrow

Roku Button Mapping

Button	Crestron Home Command	Driver Command	Standard Command
<	Left	Left	Left_Arrow
OK	Select	Select	Select

[1] If this command does not exist for the device, this button is mapped to the Play command instead.

Roku Standard Commands

Standard Command	Aliased Command List	Required/Optional
Rscan	Rscan, Rew, Rewind, Review, Reverse_Scan, Rewind_ Scan, Previous_Scan, Prev_Scan, R_Srch, Rsrch, Scan-, <<, &Rscan, A_Rew, ReverseScan	Required
Play_Pause	Play_Pause, Play/Pause, A_PLAY, >, PLAY/SLOW, VOD-PLAY, PLAY_MODE	Required
Fscan	FFWD, F_SCAN, SCAN, FF, >>, F_Srch, FSRCH, FFW, Forward, Fast_Forward, SCAN+, SEARCH, A_FFWD, SEARCH>>, SEARCH_MODE, &Fscan	Required
Dn_Arrow	Down, DN, Dw_Arrow, Navigation_Down, Menu_Down, Cursor_Down, v, -, tilt_down, tilt_dn, tilt-down, tilt-dn, tiltdown	Required
Left_Arrow	Left, Navigation_Left, Menu_Left, Cursor_Left, <, Track-, pan_left, pan_lt, l, LT, panleft	Required
Right_Arrow	Right, Navigation_Right, Menu_Right, Menu_RT, Cursor_Right, >, pan_right, pan_rt, pan-right, pan-rt, rt, panright	Required
Up_Arrow	Up, Navigation_Up, Menu_Up, Cursor_Up, ^, +, tilt_up, tilt-up	Required
Select	OK, Navigation_Select, Select	Required
Menu	Root_Menu, Disc_Menu, DiscMenu/List, DVD_Menu, DVD-Menu, DVDMenu	Required
Back		Required
Replay	REPLAY_GUIDE, INSTANT_REPLAY, REPLAY/BACK, REPLAY_ZONES	Required
Home	Tivo, Options	Required
*	Kpd-*, key_*, key-*, Dial_*, Dial*, Dial_Star, DialStar, Key*, Asterisk	Required

Related Information

Create Crestron Drivers 246

Mapping Virtual Sources

Certain A/V receivers use virtual sources, which require mapping on the A/V receiver itself (and not through the Crestron Home system) to map switching commands to connectors. For these A/V receivers, the source selections on the handheld remote are mapped to a physical connection on the back of the receiver using the receiver's web-based or on-screen configuration interface.

Receivers that use virtual mapping behave in the Crestron Home system as follows:

- The source selections in the Crestron Home system mimic the selections on the handheld remote.
- The receiver's physical connectors (such as HDMI) will always be labeled as "GenericAV" in the Crestron Home interface. This is done to allow the mapping in the receiver to be changed without requiring an update to the Crestron Home interface.

For example, if a Blu-ray Disc player source is mapped to the Component 1 input, and the mapping was changed to use the HDMI 1 input, the Blu-ray Disc player is still selected as the source in the Crestron Home interface. The connection label will show GenericAV even though the connector has been changed to HDMI 1.

Additionally, if a Sonos CONNECT is mapped to the Audio In 5 (CD) input, and the mapping was changed to use the Optical 1 (CD) input, the Sonos CONNECT is still selected as the audio source in the Crestron Home interface. The connection label will show GenericAV even though the connector has been changed to Optical 1 (CD).

Related Information

Create Crestron Drivers 246

Delete Crestron Drivers

Delete Crestron Drivers to remove them from the system or to update the Crestron Driver. Drivers that are downloaded from the Crestron Driver portal and drivers that are side-loaded are deleted differently.

Delete a Downloaded Crestron Driver

To delete a downloaded Crestron Driver, follow these steps:

1. Remove all devices in the Crestron Home system that use the Crestron Driver.

   > **NOTE:** If a device that uses the driver remains in the system, the driver will not be removed from the system and the updated driver will not be downloaded.

2. Restart the Crestron Home processor. The Crestron Driver is removed from the system after the processor restarts.

Delete a Side-Loaded Crestron Driver

Delete a side-loaded Crestron Driver to remove the driver from the system or to upgrade side-loaded drivers.

To delete a side-loaded Crestron Driver, follow these steps:

1. Connect to the Crestron Home processor over FTP or by using the File Manager tool in Crestron Toolbox.
2. Navigate to the Crestron Home processor's \User\ThirdPartyDrivers\Storage\Rad directory.
3. Delete the Crestron Driver from the directory.
4. Restart the Crestron Home processor. The Crestron Driver is removed from the system after the processor restarts.

Other Devices

Add components to the system that are not directly controlled through the Crestron Home system using the Other device type. The Other device type consists of cameras, uncontrolled A/V equipment, BACnet thermostats, relay controlled devices, sensor controlled devices, and input devices that are controlled with relays and digital inputs.

Other devices consist of the following:

- **Cameras:** Use to add security cameras to the system. For details, refer to Cameras on page 274.
    - **Manual Camera:** Use to add a camera by entering the Snapshot and Stream URI.
    - **Manual ONVIF Camera:** Use to add a camera by entering the ONVIF device URI.
- **Uncontrolled Audio Source:** Use when an audio source has no controls. For example, connecting a portable music player or computer using an Aux cord.
- **Uncontrolled A/V Source:** Use when an A/V source has no controls. For example, displaying A/V content from a computer.
- **Uncontrolled Amplifier:** Use when an amplifier does not have volume or switching controls. Volume control is set by the pre-amp levels.
- **Uncontrolled AES67 Input:** Use for routing third-party AES67 devices to Crestron devices that support AES67.
- **Uncontrolled DM Input** and **Output:** Use for connecting DM/HDBaseT devices that can not be discovered by Crestron devices supporting DM.
  The following uncontrolled DM devices can be added to the system:
    - HD-RX-101-C-E
    - HD-RX-4KZ-101
    - HD-RX-4KZ-101-1G
    - HD-RXC-4KZ-101
    - HD-RXC-4KZ-101-1G
    - HD-TX-101-C-E
    - HD-TX-4KZ-101
    - HD-TX-4KZ-101-1G
    - HD-TX-4KZ-111
    - HD-TX-4KZ-111-1G
    - HD-TXC-101-C-E
    - HD-TXC-4KZ-101
    - HD-TXC-4KZ-101-1G
- **Uncontrolled HDMI DA:** Use when an HDMI distribution amplifier is receiving one HDMI signal and distributing it to all HDMI outputs. The distribution amplifier can also be used to separate the audio and video from the HDMI feed and send the video to a television and the audio to a receiver.

- **Uncontrolled Generic A/V DA:** Use when a generic distribution amplifier is receiving a source and distributing it to all outputs. The generic AV and Audio connections can be connected to any port type when routing sources.
- **Uncontrolled A/V Display:** Use when connecting to a display that cannot be controlled. For example, to display video on a display that is always on or a computer monitor.
- **Universal A/V Adapter:** Use when a physical adapter is installed to convert the cable type; source routing only allows like ports to be connected. For example, a component video to HDMI adapter. The generic Audio, Video, and A/V connections can be connected to any port type when routing sources.
- **Uncontrolled Device:** Use to add a generic device to the system that cannot be controlled, such as a network switch or router. The Uncontrolled Device is displayed only in the health dashboard.
- **BACnet Thermostat:** Use when adding a BACnet thermostat to the system. For details, refer to Add a BACnet Thermostat on page 277.
- **Relay Controlled Device:** Use a relay controlled device to add a device that is controlled by a relay. Relay controlled devices do not have automatically generated control elements added to the user interface. Control the relay device using Quick Actions (Quick Actions on page 414) and Media Zone Events (Media Zone Events on page 528).

  The following relay controlled devices can be added to the system:

  - Fireplace
  - Fountain
  - Garage Door
  - Gate
  - Irrigation Zone
  - Lift
  - Screen
- **Sensor Device:** A sensor device monitors the state of the device and provides the feedback to the system. Depending on the programming, the system can play an interrupt or activate a Quick Action or Scene.

  The following sensor devices can be added to the system:

  - Burglary Alarm
  - Door Sensor
  - Doorbell
  - Driveway Sensor
  - Fire Alarm
  - Occupancy Sensor
  - Smoke Alarm
  - Water Alarm
  - Window Sensor

- **Button:** Use the Button input device to control the system using a contact closure remote keypad. Connect the contact closure remote keypads to a digital input in the system (for example, on a Crestron keypad or control processor), then program the button as if it was a keypad. For details, refer to Configure Contact Closure Keypads.

NOTES:

- Uncontrolled and relay-controlled devices must be connected to the appropriate hardware in order to function properly in the system. For example, the garage door and the garage door sensors must be connected to the Crestron Home processor or control module.
- When a garage door, gate, camera, or BACnet Thermostat is added to the system, control elements are added to the to the user interface device.

Add an Other Device to a Room

To add an other device to a room, follow these steps:

1. Select the room where the device is installed from the **Select a room** menu.
2. Select **Other** from the **Device Types** menu.



3. In the **Other** menu, select a device and then select **Add**.
4. Enter a name for the device and then select **OK**.
5. Configure the device after it is added to the room. Tap **Settings** next to the device name to display a Settings dialog box. For details, refer to Device Settings on page 1191.

Remove an Other Device from a Room

To remove an other device from a room:

1. Select an Other device.
2. Select **< Remove**.

Cameras

Add a camera to the Crestron Home system.

> **NOTE:** All cameras in the system must use a static or reserved IP address.

Add an ONVIF Camera

To add an ONVIF camera:

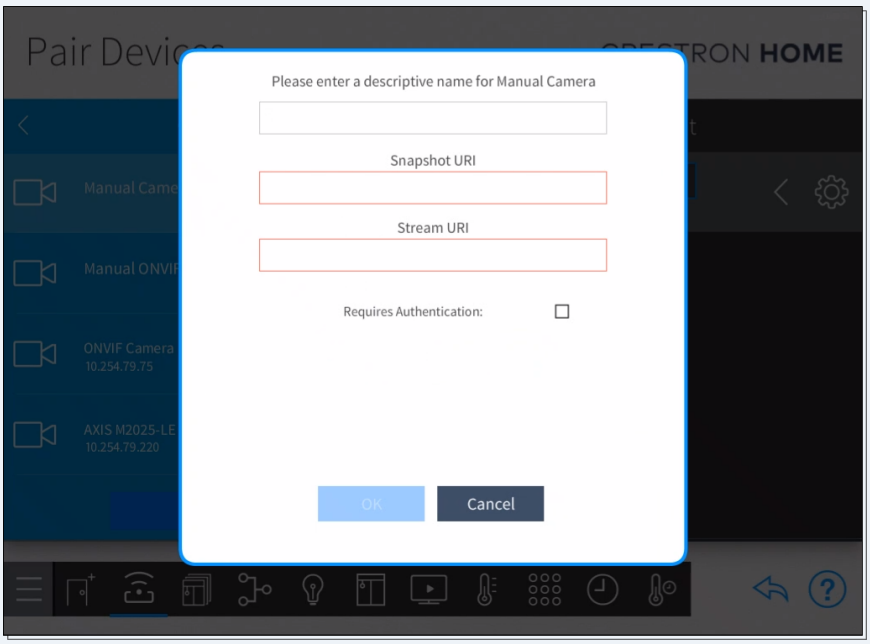
1. In the **Select a room** menu, select a room for the device.
2. In the **Device Types** menu, go to **Other > Cameras**. The system scans for ONVIF cameras and displays them in the **Cameras** menu.



3. Select a camera and then **+ Add**.

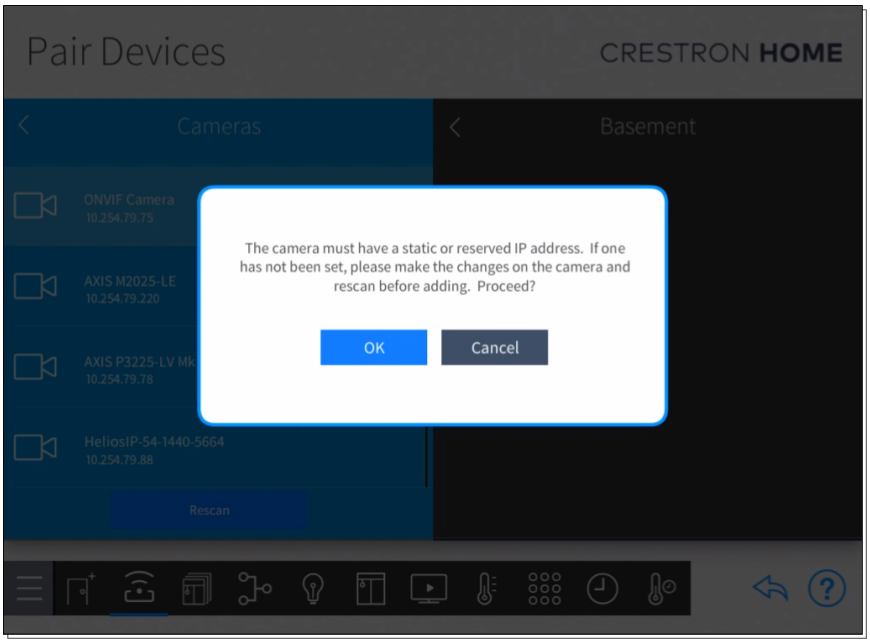


NOTE: If the ONVIF camera is not found, select **Manual ONVIF Camera** and then **+ Add**. Enter the required information.

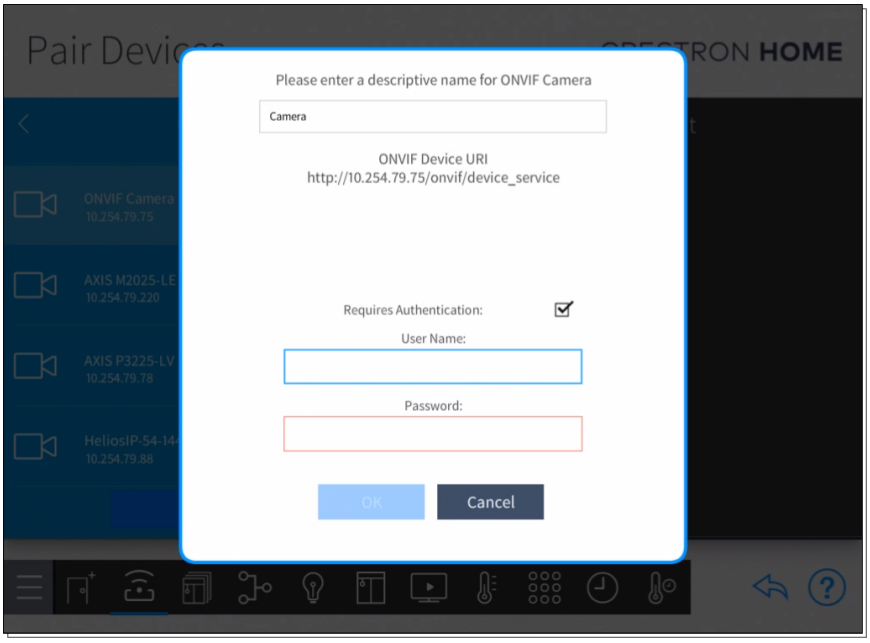


4. A dialog displays stating that the camera must have a static or reserved IP address. Tap **OK** to confirm.

   > **NOTE:** If a static or reserved IP address has not been set, tap **Cancel**, then configure the ONVIF camera with a static or reserved IP address, and then tap **Rescan**.



5. Enter a descriptive name and connection details for the ONVIF camera. If authentication is required, select **Requires Authentication** and then enter the **User Name** and **Password** for the camera.



6. Tap **OK**. The camera is added to the room.
7. Configure the ONVIF camera after it is added to the room. Tap **Settings** next to the device name to display a Settings dialog box. For details, refer to Device Settings on page 1191.

Remove an ONVIF Camera

To remove an ONVIF camera from a room:

1. Select the ONVIF camera that you would like to remove.
2. Tap the back arrow (**<**) next to the ONVIF camera to remove the device from the room. The device is removed from the room and is added back to the **Other** menu.

BACnet Thermostat

Add a BACnet thermostat to the Crestron Home system.

Add a BACnet Thermostat

To add a BACnet thermostat:

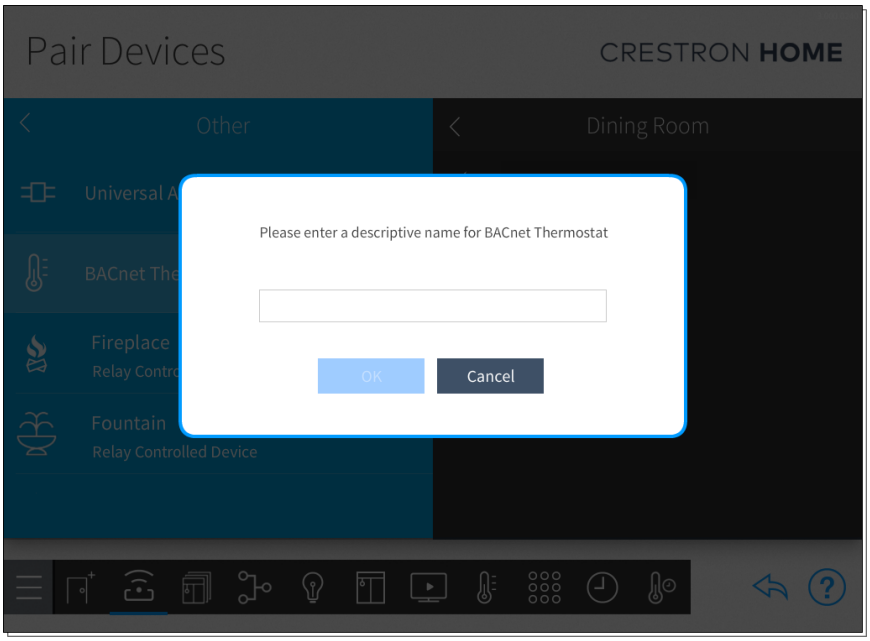
1. In the **Select a room** menu, select a room for the device.
2. Select **Other** from the **Device Types** menu.



3. Select **BACnet Thermostat** and then **+ Add**.



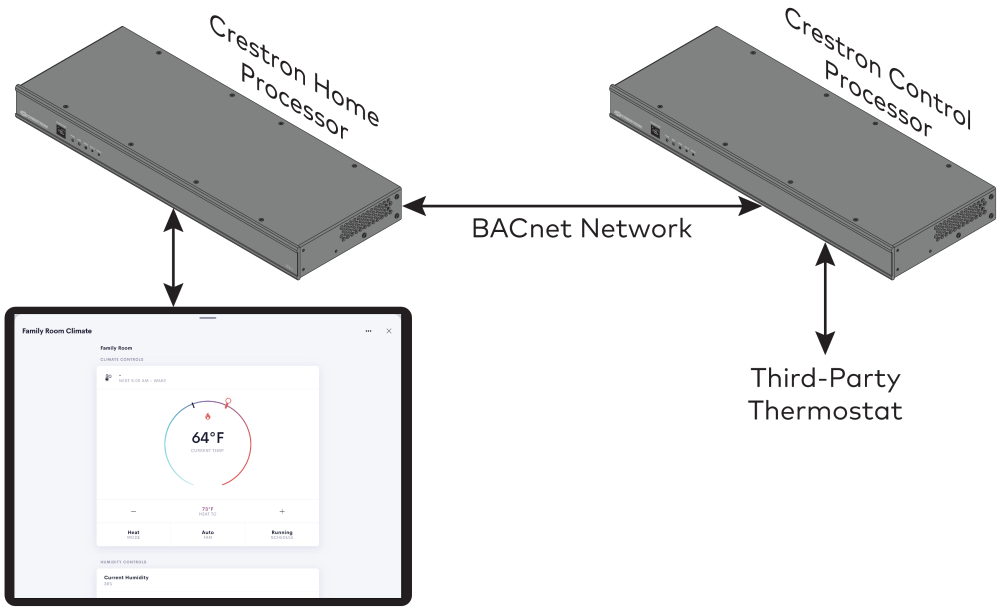
4. Enter a descriptive name for the BACnet thermostat and then select **OK**.



5. Tap **OK**. The BACnet thermostat is added to the room.
6. Configure the BACnet thermostat after it is added to the room. Tap **Settings** next to the device name to display a Settings dialog box. For details, refer to Device Settings on page 1191.

Add Third-Party Thermostat

Add a third-party thermostat that is controlled using a Crestron control processor that is programmed to control the third-party thermostat using a SIMPL module. The Crestron Home processor and the Crestron control processor communicate using the BACnet network to control the thermostat.



To add a third-party thermostat:

1. Register the Crestron control processor as a BACnet Remote Device.
2. Create a hosted BACnet object for the thermostat items that will be controlled.
3. Create a SIMPL program that ties tie the BACnet objects to the third-party thermostat controls. BACnet objects to the third-party thermostat controls is a 1-to-1 relationship. For example, you could create a hosted analog value object and tie it to the current temperature on the third party thermostat.
4. Add a BACnet network thermostat to the Crestron Home system. For details, refer to Add a BACnet Thermostat on page 277.
5. Configure the BACnet thermostat after it is added to the room. Tap the gear button next to the BACnet thermostat to display a Settings dialog box. For details, refer to Device Settings on page 1191.

Remove a BACnet Thermostat

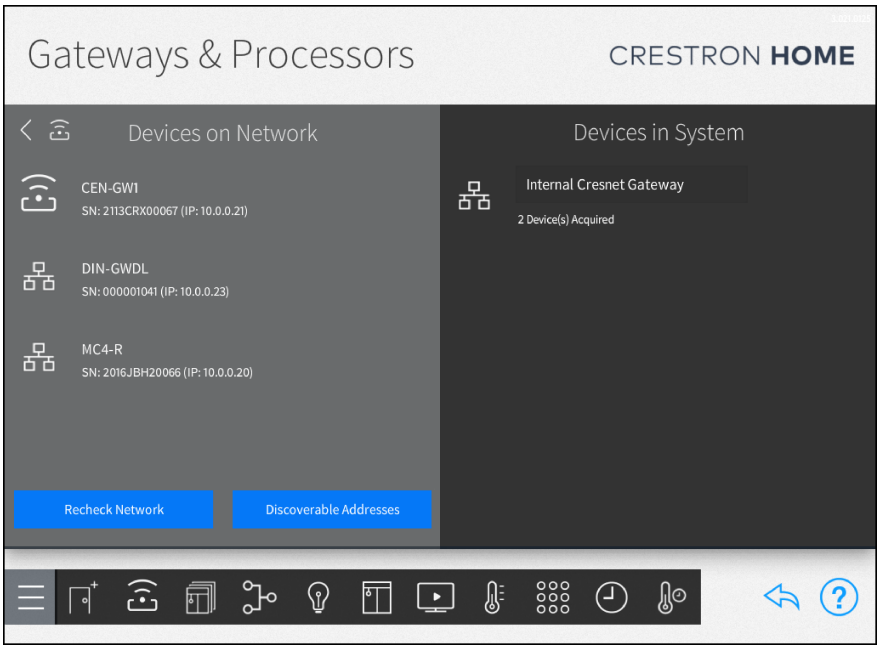
To remove a BACnet thermostat:

1. Select a BACnet thermostat device.
2. Select **< Remove**.

Gateways and Processors

Gateways are used to add additional devices to the system.

To view the **Gateways & Processors** screen, select **Pair Devices** on the **Setup** screen or on the setup menu and then select **Manage Gateways & Processors**.



NOTE: To migrate infiNET EX devices to a different gateway, refer to Migrate Crestron Wireless Devices to a Different Gateway on page 1402.

Add a Gateway

To add a gateway to the system:

1. In the **Device Types** menu, select **Manage Gateways**. The local network is scanned for gateways. Discovered gateways are displayed in the **Gateways on Network** menu.

   NOTE: To scan the network for new gateways, select **Recheck Network**.

2. In the **Gateways on Network** menu, select a gateway and then select **Add**.
3. Enter a name for the gateway and then select **OK**.
4. Configure the gateway after it is added to the system. Tap **Settings** next to the device name to display a Settings dialog box. For details, refer to Device Settings on page 1191.

Add a Crestron Wireless Gateway

TIP: With Crestron Home firmware 3.014.0087 or higher, the default actions for devices that were previously acquired to an external wireless gateway have changed. The following changes were made:

Acquired devices:

- Devices that are acquired by a gateway will remain acquired if these conditions are met:
  - The device was acquired before adding the gateway to the Crestron Home system.

    For example, devices were acquired by a gateway using Crestron Toolbox™ software in a custom programmed system and the devices and gateway from the custom system will then be converted to a Crestron Home system.
  - The device was acquired by a gateway that is part of the Crestron Home system while the system is offline.
- If a gateway is deleted from the system, acquired devices will be unacquired by the gateway.
- Acquired devices that have not been assigned to a room will be displayed in the Device List.
- If an acquired device is online, it can be assigned to a room without re-pairing.
- Devices that are unacquired by a gateway outside of Crestron Home (for example, using Crestron Toolbox, acquired by a gateway from another system, or the Crestron Home system is offline) will go offline and will function as follows:
  - **Not assigned to a room:** The device is displayed in the unassigned Device List but cannot be assigned to a room. The device should be acquired by the gateway again or removed from the device list. To acquire or delete devices, refer to Crestron Wireless Devices on page 188 and Device Settings on page 1191.
  - **Assigned to a room:** A device offline error message is displayed for the device in the room. The device should be acquired by the gateway again, replaced with a different device of the same model, or deleted from the system. To acquire, delete, or replace devices, refer to Crestron Wireless Devices on page 188 and Device Settings on page 1191.

Acquire mode:

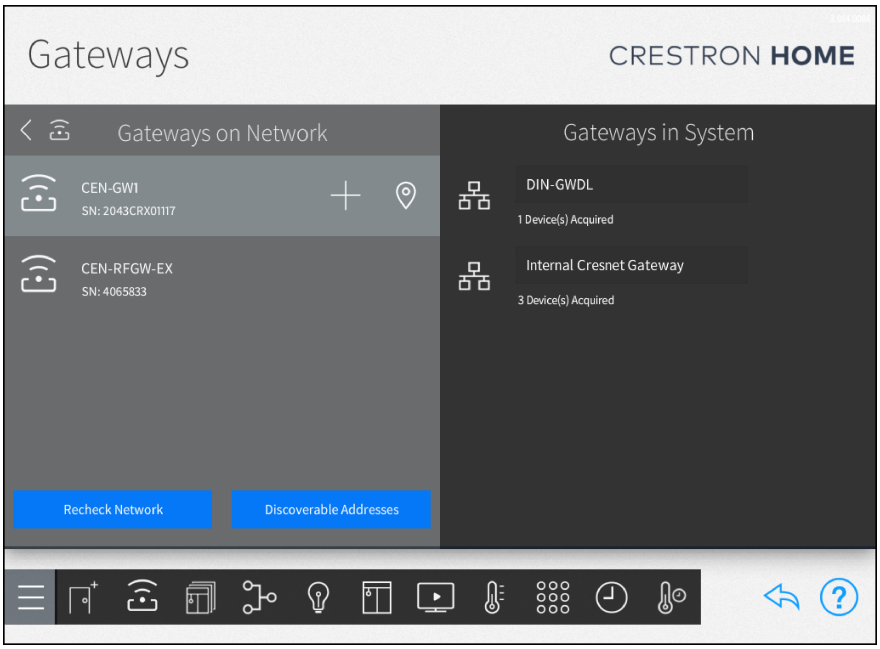
- A gateway can enter Acquire mode from outside of the Crestron Home Setup app. For example, using Crestron Toolbox™ software or the **Acquire** button on the gateway.
- Make sure that only one gateway is in Acquire mode at a time.

NOTE: Depending on Crestron Home firmware and gateway firmware versions, the gateway may connect using a secure connection and you may be prompted to create the Common Device Password and to enter credentials for the device. For details, refer to Secure Device

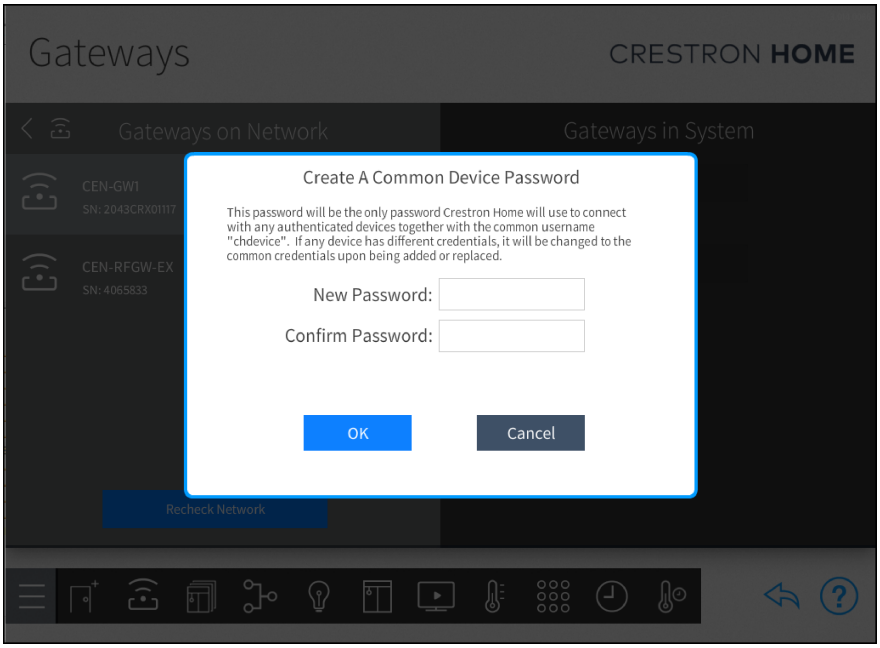
Connections on page 153 and System Detail and Password Configuration on page 566.

To add a wireless gateway:

1. In the **Gateways on Network** menu, select a wireless gateway and then select **Add**.



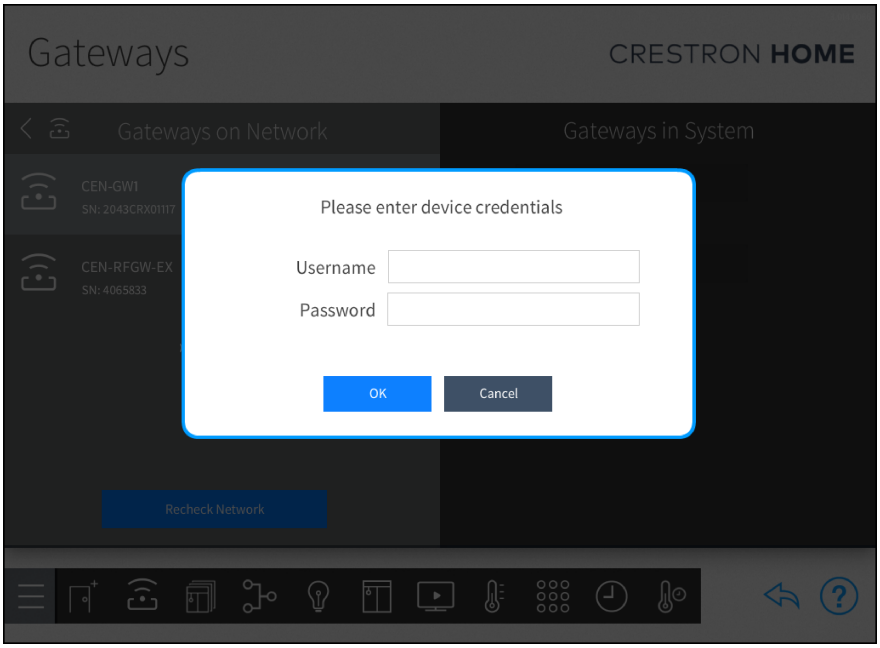
2. If prompted, create a Common Device Password for the Crestron Home processor and then select **OK**. The username is "chdevice". The **Create a Common Device Password** dialog is displayed when the Common Device password is not created in the control processor settings.



3. If prompted, enter admin credentials for the gateway and then select **OK**. The **Please Enter Device Credentials** dialog is displayed when an administrator-level user exists on the gateway. The credentials are required to add the "chdevice" user to the gateway.

   NOTES:

   - Entering device credentials is typically required for gateways where the first connection was made using Crestron Toolbox™ software or the Web UI and login credentials were created.
   - If the "chdevice" user exists on the gateway, consider the following:
     - The gateway password **matches** the Common Device Password set in the Crestron Home system, there will not be a prompt for device credentials.
     - The gateway password **does not match** the Common Device Password set in the Crestron Home system, the password on the gateway will be changed to the password set on the Crestron Home system.



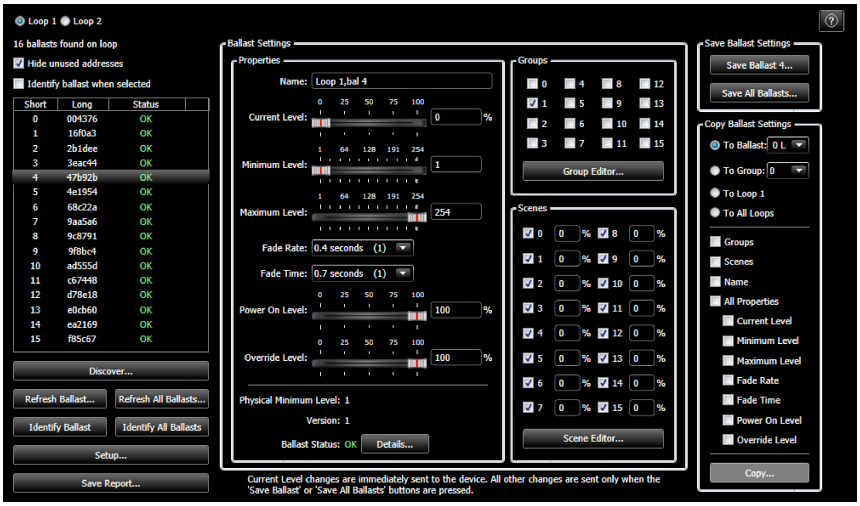
4. Enter a descriptive name for the gateway and then select **OK**.
5. Configure the device after it is added to the system. Tap the gear button next to the device name to display a Settings dialog box. For details, refer to Device Settings on page 1191.

Add a DALI Gateway

To use DALI loads in the system, refer to Gateways and Processors on page 280 and then Add the DALI Gateway on page 285.

Configure the DALI Gateway

Use the DALI Commissioning Tool in the Crestron Toolbox™ application to configure the DALI gateway. For more details, refer to the Crestron Toolbox help file at help.crestron.com/toolbox.



To configure the ballasts:

> **NOTES:**
>
> - The settings for **Current Level**, **Fade Rate**, **Fade Time**, **Power On Level**, **Override Level**, and **Scenes** are not utilized by the Crestron Home system. Even though these settings are not utilized, it may be desired to configure these settings.
> - Scenes and fade time are configured using the Crestron Home Setup app.
> - The settings for **Power On Level** and **Override Level** will affect ballast behavior from events that occur outside the Crestron Home system. For example, the DALI ballasts will turn on according to the **Power On Level** or **Override Level** settings after a power outage or if **Override** mode is activated.

1. In **Ballast Settings - Properties**, set these properties:
   a. **Name:** Enter a user-friendly name for the ballast. The name is displayed in the Crestron Home Setup app.
   b. **Minimum Level:** The lowest light level for the ballast.
   c. **Maximum Level:** The highest light level for the ballast.

2. In **Ballast Settings - Groups**, assign a group for the ballast. When configuring Groups, consider the following:
    - The Crestron Home system imports all DALI groups on Loop 1 and Loop 2 into the system.
    - DALI groups function as individual loads.
    - Ballasts cannot be controlled individually by the Crestron Home system.
    - Ballasts that are not part of a group cannot be controlled.
3. Save the ballast settings.

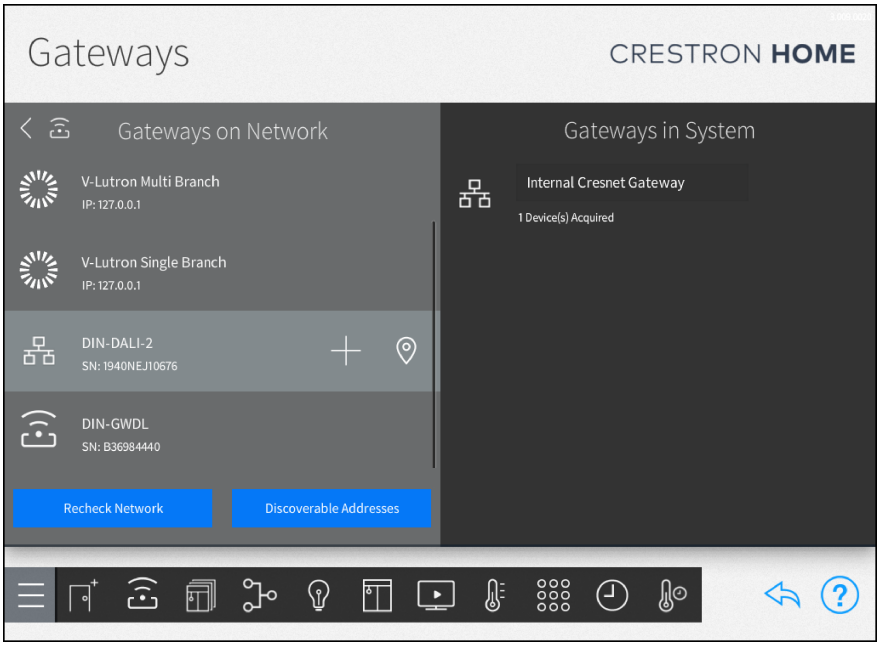
Add the DALI Gateway

Add the DALI gateway to the system. When the DALI gateway is added to the system, the configuration for the DALI groups is imported. It may take several minutes for the configuration to load.

> **NOTES:**
>
> - Use Ethernet to connect the DALI gateway to the Crestron Home system.
> - The Cresnet® communication port on the DALI gateway cannot be used in the Crestron Home system. Do not make connections to this port.

To add a DALI gateway:

1. In the **Gateways on Network** menu, select a DALI gateway and then select **Add**.



2. Enter a name for the DALI gateway and then select **OK**.
3. Configure the device after it is added to the system. Tap **Settings** next to the device name to display a Settings dialog box. For details, refer to Device Settings on page 1191.

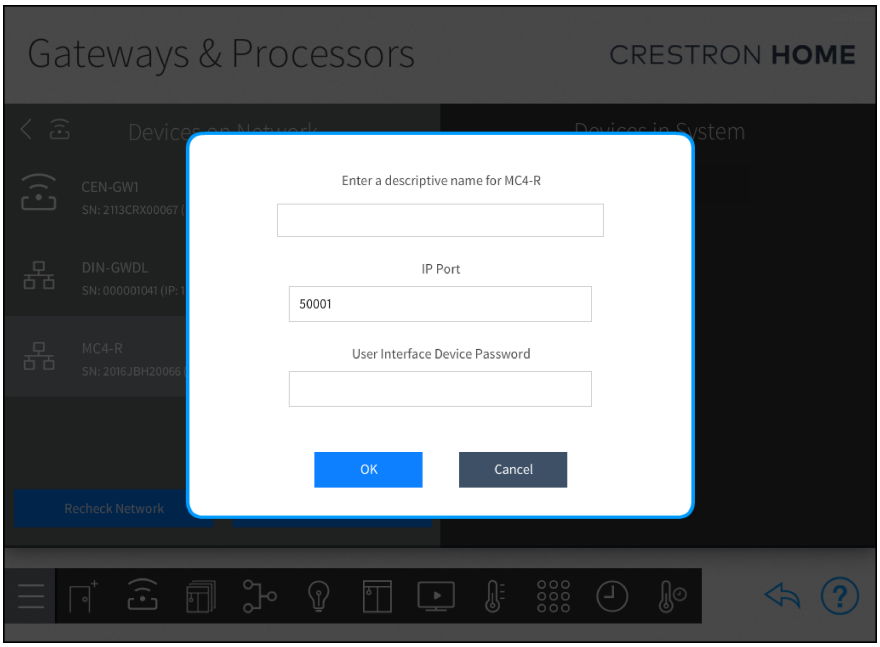
After the DALI gateway is added, add the DALI groups to rooms from the **Pair Devices** menu. For details, refer to DALI Groups and Individual DALI Loads on page 211.

Add a Control Processor

1. In the **Gateways on Network** menu, select a control processor and then select **Add**.



2. Enter the connection details for the child processor and then select **OK**.
    - **Name:** Enter a name to identify the child processor.
    - **IP Port:** Enter the IP port for the child processor. The default value is **50001**.
    - **User Interface Device Password:** Enter the User Interface Device password for the child processor.



3. Configure the device after it is added to the system. Tap **Settings** next to the device name to display a Settings dialog box. For details, refer to Device Settings on page 1191.

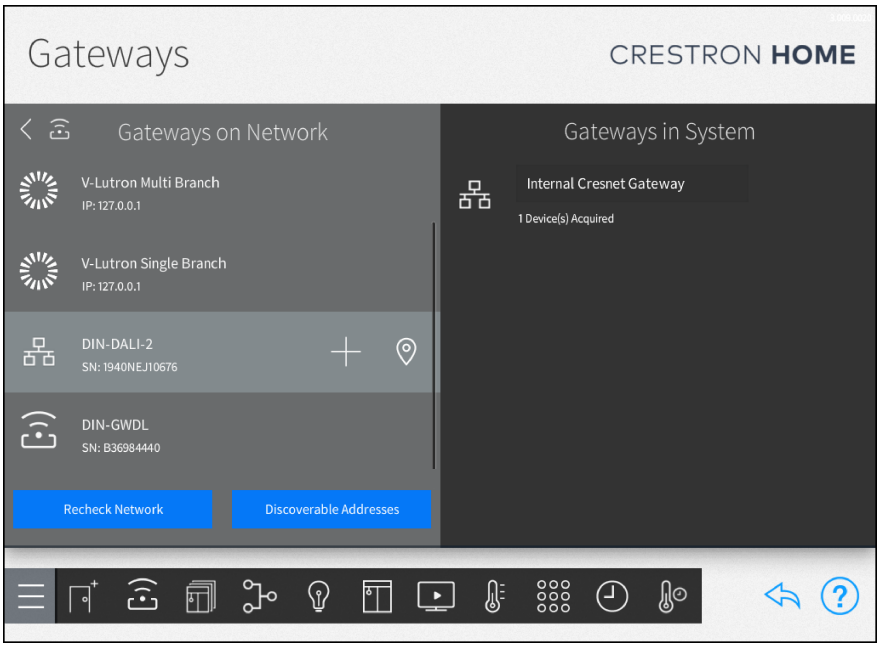
Discoverable Addresses

Use the **Discoverable Addresses** to add devices from a different VLAN or subnet. A single address or an address range can be added.

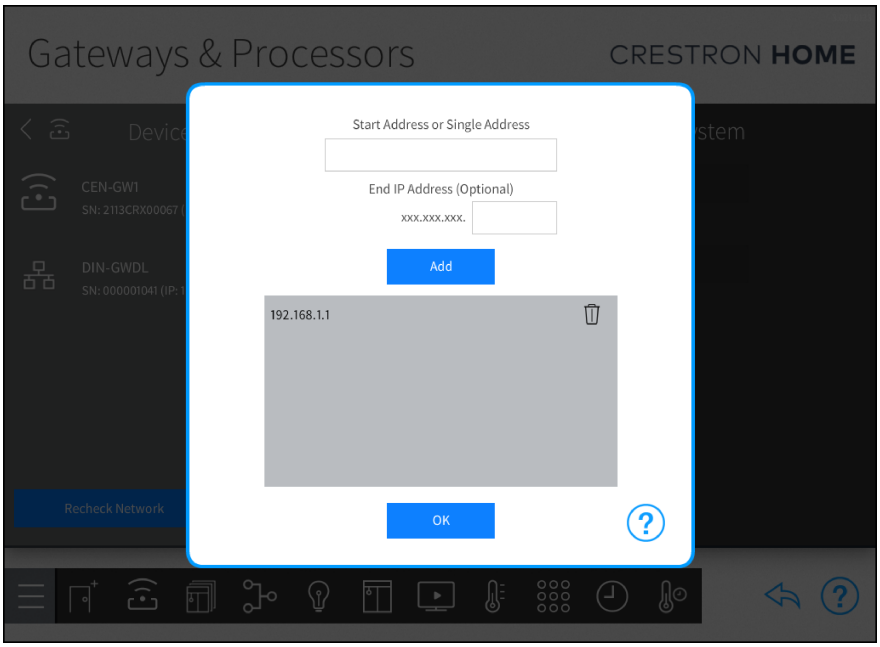
Add an IP Address

To add an address:

1. In the **Gateways on Network** menu, select **Discoverable Addresses**.



2. Enter the IP Address details for the VLAN or subnet and then select **Add**.



   - **Address:** Enter an IP address. The IP address can be a single address or the start of an IP address range. To add a single IP address, do not enter an **End IP Address**.
   - **End IP Address:** Enter the last octet in the IP address range.

3. Select **OK**.

Delete an IP Address

To delete an address, select an address and then **Delete**.

Remove a Gateway

> **NOTES:**
>
> - Removing a gateway also removes all devices acquired by that gateway.
> - Devices acquired by a wireless gateway will be unacquired.
> - Internal Gateways cannot be removed.

To remove a gateway:

1. Select a gateway device.
2. Select **< Remove**.

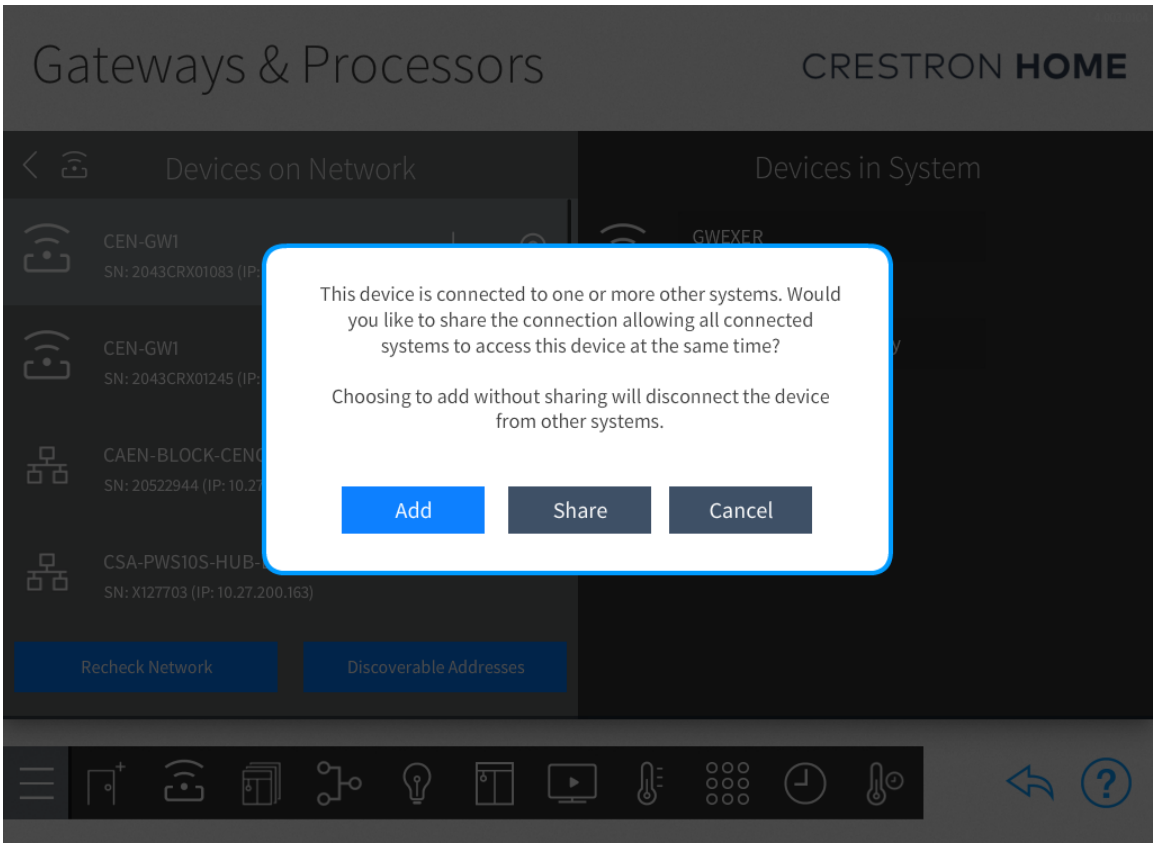
Shared Gateways

A CEN-GW1 (or CENI-GW1) gateway can be shared between up to five processors. For information on using multiple processors, refer to Multiple Processors on page 292.

> **NOTE:** Be aware of the following limitations and known issues when sharing a gateway:
>
> - When moving or deleting a device from a shared gateway, the device must be manually deleted from the other processor(s).
> - Temporary loss of control of a load may occur after moving it to a new gateway. This can be resolved with a control system reboot.
> - Devices added through a shared gateway bypass the minimum firmware version check. Devices that do not meet the minimum firmware requirements will not function in Crestron Home.
> - Devices paired through a shared gateway may appear offline for a short time. The device can not be added to a room during this time.
> - If replacing a shared gateway, it must be replaced on all connected systems.

Create a Shared Gateway

To create a shared gateway, add a gateway to an additional processor. The prompt below appears.

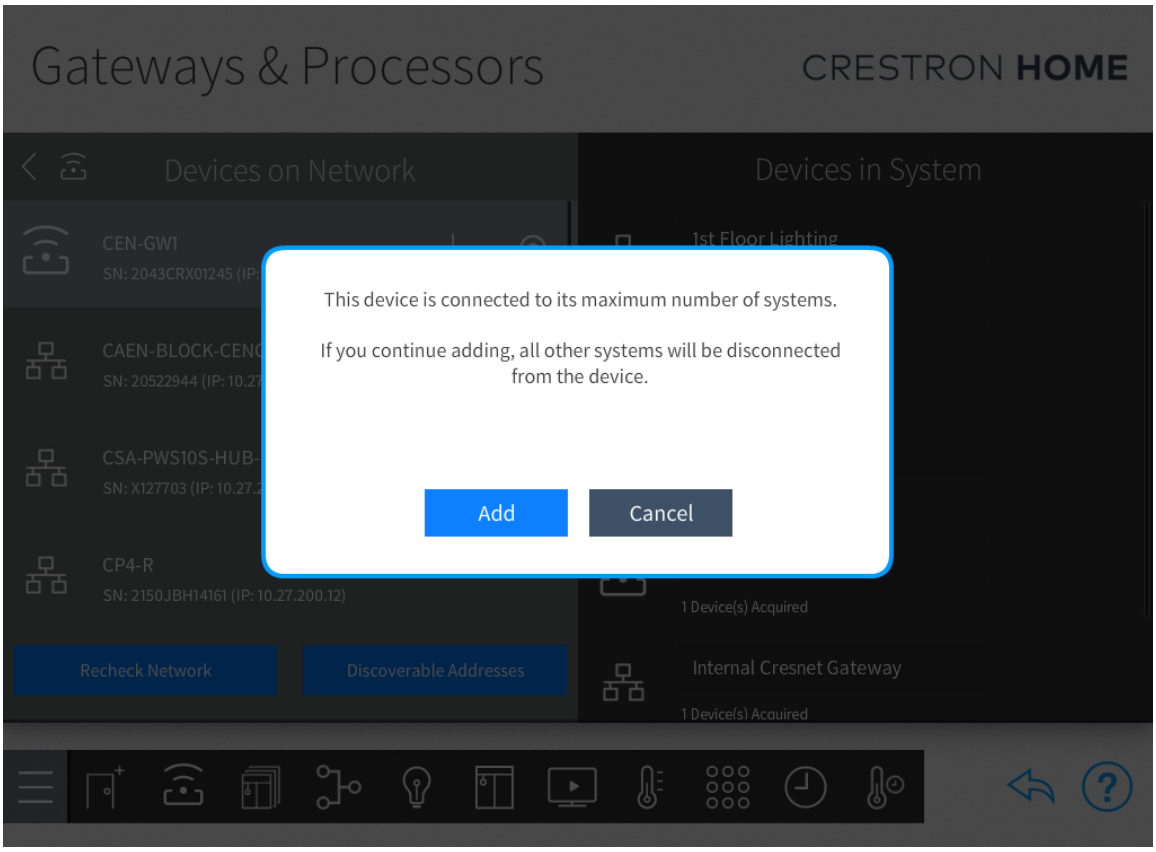


Add: Select to add the gateway to only this processor, disconnecting it from the other(s).

Share: Select to create a shared gateway.

Cancel: Cancel the action.

When adding a gateway that is already connected to the maximum number of systems (five), the prompt below appears.



Add: Add the gateway to the processor, disconnecting it from all other systems.

Cancel: Cancel the action.

Multiple Processors

Use multiple processors in the same Crestron Home OS system.

To use multiple processors in the same system, all processors must use Crestron Home firmware 3.21 or later. All processors should use the same firmware.

CAUTION: When configuring systems with multiple processors, all processors in the system must be online. If a processor is offline when changes are made using another processor in the system, the changes may be overwritten when the processor comes online and the system synchronizes.

Systems with multiple processors have a parent and child processor relationship. An overview of the relationship is described below.

- **Parent Processor:** The system can have only one parent processor.

  The parent processor claims additional processors as child processors and imports the configuration data required for operation. The parent processor only imports the data required to trigger actions on the child processors.

  The parent processor can claim up to four child processors.

  The parent processor communicates with child processors to control the system.
- **Child Processor:** A processor can be a child to one parent processor.

  The child processor controls the devices that are connected to it. The parent processor communicates with the child processor to trigger actions.

  The child processor must be online to be claimed by a parent processor and during configuration.

NOTE: The import process may take a while depending on the size of the system.

Pair Processors

To pair processors, to go Gateways and Processors on page 280.

For additional information, refer to:

- Maximum System Size on page 51
- Local Connection Settings on page 618
- Child Processor Settings on page 1202

Multiple Processor Configuration Overview

Supported Features

The parent processor is able to import the following from a child processor:

- Rooms
- Keypads

- HR-Series Remotes

  > **NOTE:** Only programmable buttons are imported.

- Lights and Light Scenes
- Fans and Fan Scenes
- Quick Actions
- Shades

User Interface Devices

Pair user interface devices (touch screens and handheld remotes) with parent processor only.

If a User Interface Device is paired with a child processor, it will only see the devices attached to the child processor. It will have full control of loads and scenes on the child processor but may not be able to trigger scenes on other child processors or the parent processor. If the User Interface Device that is paired with the child processor triggers a scene that also exists on other child processors or the parent processor, it will also be triggered on those processors.

Quick Actions

Quick Actions are imported from the child processors to the parent processor. After the import, they are displayed on the parent processor. When a Quick Action in the system is triggered, all Quick Actions with the same name are also triggered.

In the Crestron Home app, there is no visual difference between Quick Actions created on child or parent processors.

> **NOTE:** Quick Actions on parent and child processors that contain conflicting actions are not identified. For example, there will not be a notification if Relax Quick Action on a child processor turns off the lights and the Relax Quick Action on the parent processor turns the lights on.



Quick Action Merging

When a Quick Action is imported from a child processor, the imported Quick Action will display in the Quick Actions menu. When the Quick Actions are imported, Quick Actions may be created or merged with existing Quick Actions based on their names. When Quick Actions are imported, consider the following:

- **Matching name (merge):** If the name of a Quick Action on the child processor matches the name of a Quick Action on a parent processor, the Quick Actions will display as a merged Quick Action. A merged Quick Action will display the name of the parent Quick Action and the names of the child processors that contain the Quick Action. The programming for the Quick Action on the parent and child processor is maintained.

- **Unique name (create):** If the name of a Quick Action on the child processor does not match the name of a Quick Action on a parent processor, the Quick Action will be created on the parent processor and the Quick Action from the child processor will display as a merged Quick Action. The configuration for the Quick Action on the child processor is maintained, the Quick Action on the parent processor can be configured.

Quick Action Configuration

Quick Actions that are created on a child processor must be configured using the same child processor. A parent processor cannot be used to configure a Quick Action that was configured on a child processor.

To add more functions to a child Quick Action, configure the parent Quick Action to perform the additional functions. For example, to create a Quick Action for Watch TV in a system where the parent processor controls Audio and Video and a child processor controls lights:

- **Parent processor:** Configure the Quick Action on the parent processor to turn on the TV and select the video source.
- **Child processor:** Configure the Quick Action on the child processor to set the lights to the desired level.

To configure a Quick Action, refer to Quick Actions on page 414.

Rename a Quick Action

To change a Quick Action name, the name change can be made on any child or parent processor. The Quick Action name will be changed on all processors in the system.

> **NOTE:** When using the Crestron Home app, a Quick Action cannot be renamed if a processor is offline. An error message is displayed.

If a processor is offline when the Quick Action name is changed, consider the following:

- **Parent processor is offline:** the Quick Action name will be changed on the parent processor when it comes online.
- **Child processor is offline:** A warning is displayed indicating that the child processor is offline. If the Quick Action rename is accepted, the old Quick Action name from the child processor will be reimported to the parent processor with the original name in addition to the renamed Quick Action. To merge the Quick Action with the updated name you will need to create the Quick Action on the child processors.

Changing Icons

Icons for Quick Actions are assigned using the Crestron Home app and can be assigned while connected to the parent or child processor.

If the parent processor has a default icon assigned and the child processor has a non-default icon assigned, the icon assigned to the child processor will import into the parent. If the parent processor and child processor both have non-default icons assigned, the icon assigned on the parent processor will be used. Icons do not update between the parent and the child processor after import.

Reorder Quick Action

The order or the Quick Actions is assigned using the Crestron Home app. The Quick Actions for parent and child processors can be arranged in any order. The sorting order is stored on the parent processor.

When Quick Actions are initially imported, the Quick Actions for the parent processor are displayed before the Quick Actions on the child processor. The Quick Actions for each processor are displayed alphabetically.

Delete a Quick Action

Quick Actions can be deleted using the parent processor or the child processor. When deleting a Quick Action using the parent or child processor, consider the following:

- **Parent processor:** Deleting a Quick Action using the parent processor will delete the Quick Action from all processors in the system.
- **Child processor:** Deleting a Quick Action using the child processor will delete it from the child processor. It will also delete the Quick Action from the Parent processor if no programming was added on the Parent processor. If the Quick Action was created on the Parent processor or if programming was added using the Parent processor, the Quick Action will not be deleted on the Parent processor.

Scenes

When scenes are imported, consider the following:

- **Scene Names:** Scenes with the same name will be merged on the parent processor.

Scene Name	Child Processor	Parent Processor	Merged Scene Result
Entertainment	Light A set to 75%	Sconce 1 set to 40%	Light A set to 75%
	Light B set to 60%	Sconce 2 set to 20%	Light B set to 60%
			Sconce 1 set to 40%
			Sconce 2 set to 20%

- **Scene Fade Times:** If the parent processor has a default fade time assigned and the child processor has a non-default fade time assigned, the fade time assigned to the child processor will import into the parent. If the parent processor and child processor both have non-default fade times assigned, the fade time assigned on the parent processor will be used.
- **Scene Icons:** If the parent processor has a default icon assigned and the child processor has a non-default icon assigned, the icon assigned to the child processor will import into the parent. If the parent processor and child processor both have non-default icons assigned, the icon assigned on the parent processor will be used. Icons do not update between the parent and the child processor after import.

Creating Scenes

When a scene is created on the parent processor or a child processor, the scene is added to all processors in the system that have the room. For example if one of the child processors does not have the same room then it will not get the scene.

Scene Editing

When using the Crestron Home app the devices on Child and Parent processors function the same and are not identified to the end-user.

When editing scenes with the Crestron Home Setup app connected to the parent processor:

- Parent and Child loads can be added to a scene
- Child processor information is displayed for child loads
- When a load from a child processor is added to a scene, the scene is added to the child processor with that load. When additional child loads are added the scene on the child processor is updated to include those loads
- If the scene is deleted from the parent processor, it is deleted from all child processors

If the child processor is offline, the loads belonging to the child processor will display as offline in the Crestron Home Setup app connected to the parent processor. Changes made on the parent processor while the child is offline will be overwritten when the processor comes online.

When editing scenes with the Crestron Home Setup app connected to the parent processor:

- Changes on the child processor will automatically update the scene on the parent processor
- New scenes will be displayed on the parent processor
- If a scene is deleted on a child processor the loads will be removed from the parent processor scene. The scene will not be deleted from the parent processor.
- If the parent processor is offline, the scene will be imported when it comes online.

Scene Visibility

Scene visibility is imported with the child scene. If it is modified after import it does not stay in sync with the child.

Lighting Loads and Fans

If a parent and child have a load with the same name the child device will have a number appended to the end of the name to make them unique.

Delete or Rename a Light or Fan

The lighting load and fan can only be deleted or renamed by the processor that acquired it. To delete or rename a lighting load or fan, connect to the parent processor or child processor and then delete the device.

Ceiling Fan Button Mode

For fan controllers that are programmed on the same button using the Ceiling Fan button mode, fan speeds that are not common between the two devices will not be shown in programming. During operation and other programming, all fan speeds are displayed. For example, if two fan controllers are assigned to a button using the Ceiling Fan button mode and one fan controller supports four speeds and the other fan controller supports three speeds, only three speeds will be shown in programming.

Tunable Lights and Solar Sync Sensors

When using a solar sync sensor (GLS-LCCT) with tunable lights, the sensor should be connected to the parent processor. Tunable light settings are synchronized between the parent processor and child processors.

Rooms

If a room exists on a child processor only, the room will be imported to the parent processor.

If a room exists on both the parent and child processors the rooms will be merged. The merge is case insensitive. The Crestron Home app will display the room with the case that is set in the parent processor.

Delete a Room

To delete a room that was created on a child processor, the room should be deleted from the child processor. All deletion of child rooms should be done when connected to the child setup app.

To delete a merged room, the room must be deleted on the child processors and the parent processor. If the deletion is only performed on the parent processor, the room on the child processor will be imported to the parent processor when the processors restart and check for updates.

Rename a Room

To change a merged room name, the name change can be made on any child or parent processor. The room name will be changed on all processors in the system.

If a parent processor is offline when the name is changed, the room name will be changed on the parent processor when it comes online.

If a child processor is offline when the name is changed, a warning will display indicating that the child processor is offline. If the room rename is accepted, the old room name from the child processor will be reimported to the parent processor.

Keypads

Keypads can be connected to a parent control processor or a child processor and can trigger actions from any processor in the system. For example, if a parent processor controls AV and the child processor controls lighting, a keypad button connected to the child processor can trigger an AV action on the parent processor.

For best performance and continuous functionality in case a parent processor goes offline, connect keypads to the child processor.

Keypad Programming

Button presses on keypads from a child processor can be used to trigger actions on a parent processor. The parent processor can send feedback to a keypad on a child processor.

Keypad programming can be performed using any processor in the system. When changes are made on one processor, the programming is overwritten on the other processor. For example, if a button is programmed to trigger a Scene on the child processor and changes are made using the parent processor to control a Lighting Load instead, the button programming on the child processor will be lost.

Keypad Settings

The device settings for an imported keypad can be viewed and modified using the parent processor or the child processor. Changes to the settings are synchronized between the processors.

Keypad Operation

When the button is pressed, the action synchronized between the parent and child processor. For example, if a button controls lights on the parent processor and lights on a child processor, all lights will be controlled at the same time.

The parent processor can send feedback to a keypad on a child processor

Shade Groups

When using shade groups, be aware of the following:

- If a shade belongs to a shade group, only the group is imported.
- Shade groups cannot span across processors.
- Shade groups can only be edited from the processor that the group was created on.

Crestron Home Configurator

Multiple processors are treated independently in the Crestron Home Configurator. There is no association assigned when setting up the system. When deploying the system, use a deploy code on each processor separately. After the configurations are loaded onto all processors, the Crestron Home Setup app is used to designate the parent processor and claim child processors.

Backup and Restore

The parent processor and child processors in the system must be backed up and restored individually.

- Parent processor backups contain programming for the parent processor only which includes the ability to recall actions on the child processors. It does not contain the programming on the child processor.
- Child processor backups contain only the programming for the child processor. It does not contain programming for other child processors or the programming for the parent processor. If the child processor is not backed up it cannot be restored using the parent processor backup.

Tips:

- When restoring a configuration on a parent or child processor it is important to select configurations with timestamps that are as close to the other processors as possible. After restoring a configuration, verify the system functionality. Restoring configurations with significantly different timestamps may result in unexpected results.
- Create Golden Configuration Backups for all processors in the system at the same time. This may help when restoring a configuration.

Pair DM NAX Devices

Add Crestron DM NAX™ devices to the Crestron Home system.

NOTES:

- Before pairing, ensure that the time zone settings on the DM NAX device match the Crestron Home processor.
- When there are multiple DM NAX devices in the system, ensure that each one has either no profile or matching profiles. For details, refer to the DM NAX product manual.

Add a DM NAX Device

To add a DM NAX device:

1. In the **Device Types** menu, select **Crestron Wired and Wi-Fi**.



2. Select **Ethernet and Wi-Fi** from the **Crestron Wired and Wi-Fi** menu. The system scans the network for unpaired devices and displays the devices in the **Ethernet and Wi-Fi** menu.

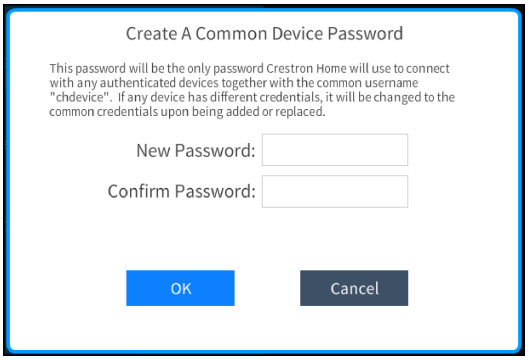
> **NOTE:** If necessary, tap **Rescan** to rescan the selected network for any unpaired devices.



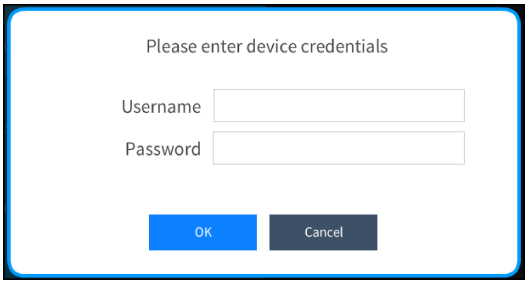
3. In the **Ethernet and Wi-Fi** menu, select a device and then select **Add**.



4. If prompted, create a Common Device Password for the Crestron Home processor and then select **OK**. The username is "chdevice". The **Create a Common Device Password** dialog is displayed when the Common Device password is not created in the control processor settings.



5. If prompted, enter admin credentials for the device and then select **OK**. The **Please Enter Device Credentials** dialog is displayed when an administrator-level user exists on the gateway. The credentials are required to add the "chdevice" user to the device.



NOTES:

- Entering device credentials is typically required for devices where the first connection was made using Crestron Toolbox™ software or the Web UI and login credentials were created.
- If the "chdevice" user exists on the device, consider the following:
  - The device password **matches** the Common Device Password set in the Crestron Home system, there will not be a prompt for device credentials.
  - The device password **does not match** the Common Device Password set in the Crestron Home system, the password on the device will be changed to the password set on the Crestron Home system.

6. Enter a name for the device and then select **OK**.
7. Configure the device after it is added to the room. Tap **Settings** next to the device name to display a Settings dialog box. For details, refer to Device Settings on page 1191.

DM-NAX-BTIO-1G

When using the DM-NAX-BTIO-1G with Crestron Home, audio automatically routes to the connected speakers. There is no need to select a source.

> **NOTE:** The DM-NAX-BTIO-1G is only supported in RX mode.

Streaming Services and Profiles

Create profiles and assign streaming services using the DM NAX™ device. For details, go to the DM NAX Product Manual at docs.crestron.com/en-us/9045.

Source Routes

Configure the source routes for each source input and speaker output. For details, refer to Source Routes on page 361.

Chimes

Enable chimes using the Crestron Home Setup app and configure chimes using the Crestron Home app.

Crestron Home Setup App

Enable Interrupts for the device in the Crestron Home Setup app. To play chimes in a room, select **Prefer Room Speakers**. For details, refer to Interrupt Settings on page 1381.

Crestron Home App

Configure the chime in the Crestron Home app. For each room and each event, turn on or off the chime and set the chime volume. The chime sound is set for all devices in the house. For details, refer to Settings on page 943.

Remove a DM NAX Device from a Room

When a DM NAX device is removed from a room, it is placed in the gateway's device list.

To remove a DM NAX device from a room:

1. Select a Crestron Wireless device.
2. Select **< Remove**.

Delete a DM NAX Device

> **NOTE:** The device must be reacquired if it needs to be added back to the system.

To delete DM NAX devices from the gateway:

1. In the gateway's device list, select a device.
2. Select **Delete** and then **OK**.

Amazon Connected Speakers

Use voice control on Amazon connected speakers to control music played on room speakers. The room speakers must be controlled by a DM NAX™ streaming amplifier.

> **TIP:** Music control using connected speakers is available in the North America region only.

Compatible Music Providers

Control music using these providers:

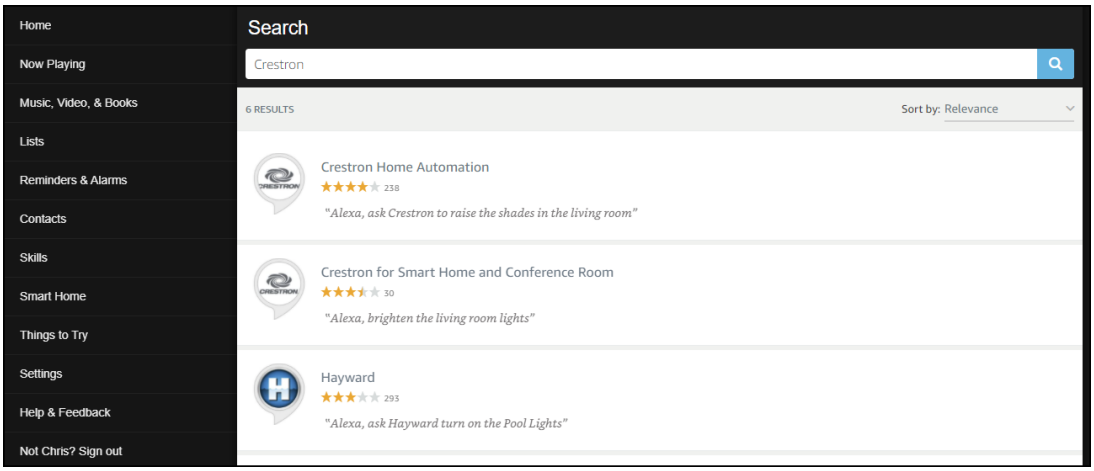
- Amazon Music
- Deezer
- iHeart Radio
- Pandora
- Sirius XM
- Tidal
- Tune In

To set up Amazon connected speakers:

> **NOTE:** Log in credentials for the homeowners Amazon account and the music provider accounts are required.

1. If necessary, turn on voice control for the system. For details, refer to Voice Control Settings on page 607.
2. If necessary, add the connected speakers to the homeowners Amazon account.

3. Enable the Crestron for Smart Home and Conference Room skill.
    a. Go to alexa.amazon.com and then select **Skills**.
    b. Search for the Crestron for Smart Home and Conference Room skill.



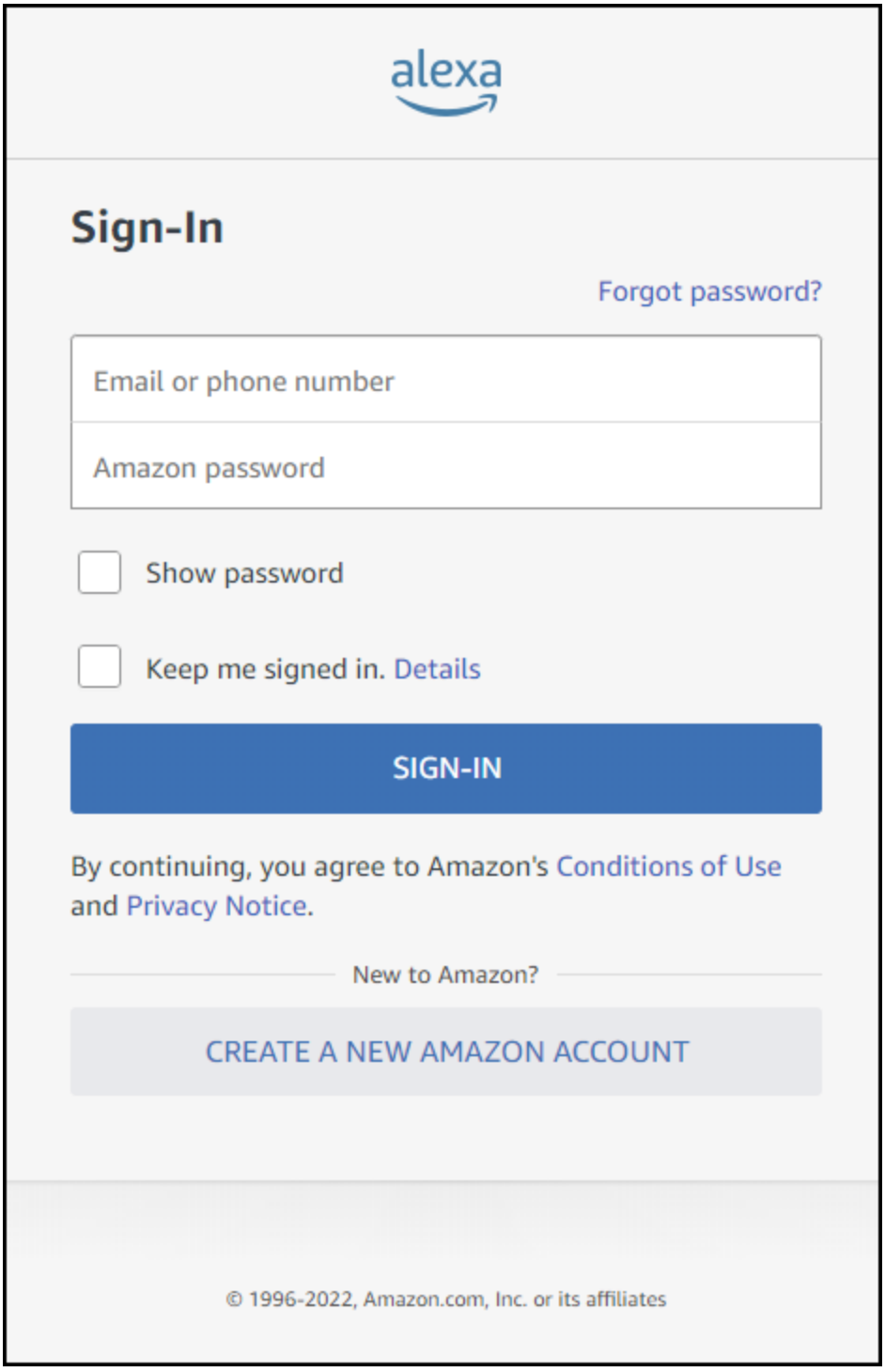
    c. Select **Crestron for Smart Home and Conference Room**.

> **NOTE:** Do not enable the Crestron Home Automation skill.

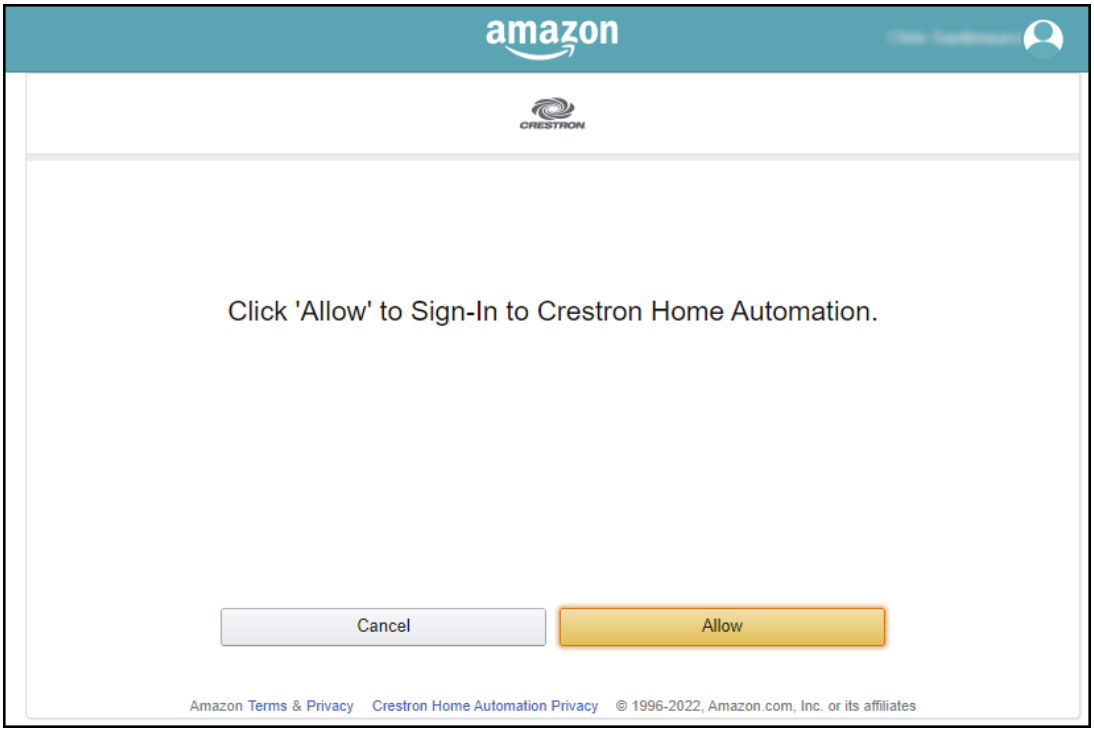
    d. Select **Enable**.



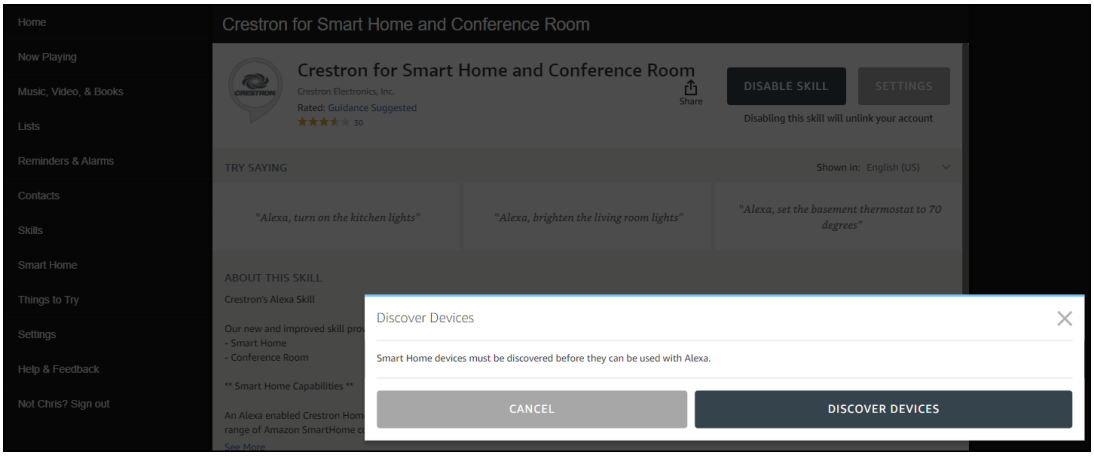
e. If necessary, sign in to the Amazon account.



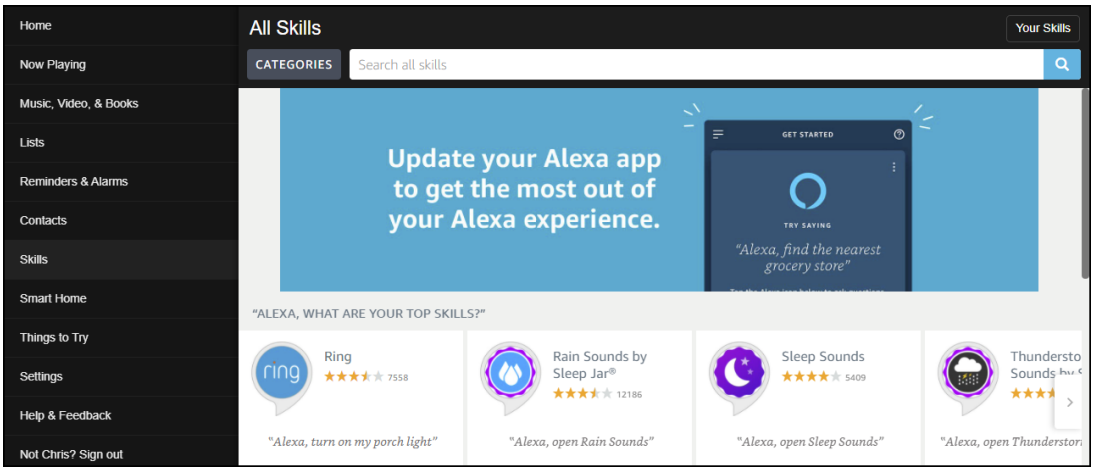
f. Select **Allow**.



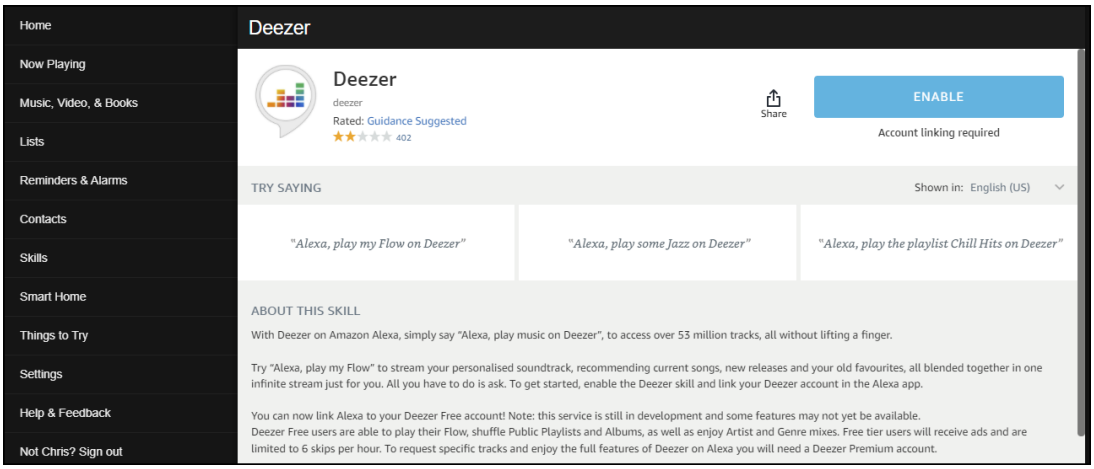
g. Select **Discover Devices**.



4. Enable music provider skills:
    a. Go to alexa.amazon.com and then select **Skills**.
    b. Search for a music provider.



    c. Select the music provider. Then, select **Enable** and sign in to link the accounts.



Voice Commands

TIPS:

- To play music in the home, include the room name in the command.
- It may be necessary to say "on [Room Name]" instead of "in [Room Name]" in the command. This is because Amazon considers rooms with NAX endpoints as speakers.
- Create a group with the connected speaker and the Crestron Home media room to avoid saying the room name in the command.

Play and Stop

- Alexa, play [band name/music provider] in [room name].
- Alexa, play [band name/album] on [music provider] in [room name].

- Alexa, play [song name].
- Alexa, resume.

Stop, Pause, or Wait

- Alexa, wait for 10 seconds.
- Alexa, pause.
- Alexa, stop.

Next Track

- Alexa, play the next song.
- Alexa, next.
- Alexa, previous.
- Alexa, skip.

Repeat, Shuffle, or Loop

- Alexa, [restart/repeat] this song.
- Alexa, loop [on/off].
- Alexa, shuffle [on/off].

Volume

- Alexa, [mute/unmute].
- Alexa, [raise/lower] the volume.
- Alexa, set the volume to [level] percent.

Feedback

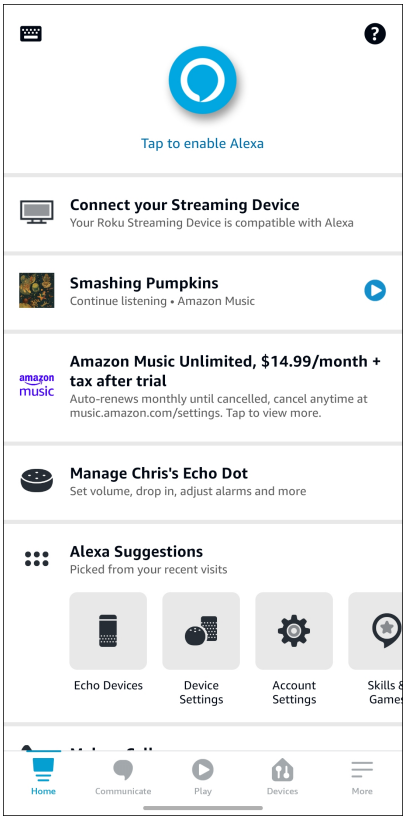
- Alexa, thumbs up.
- Alexa, thumbs down.

Create Groups

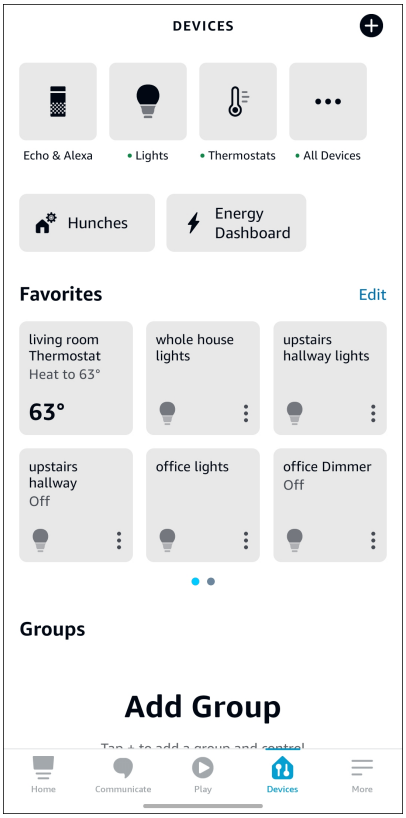
Add the connected speaker and a room in the Crestron Home system to avoid saying the name of the room in the command. When the command is given without a room name, it will start playing in the room speakers.

To create a group:

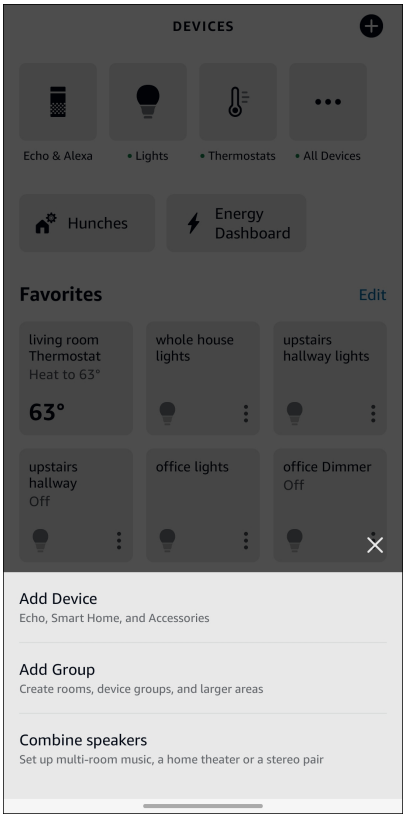
1. Open the Alexa app.



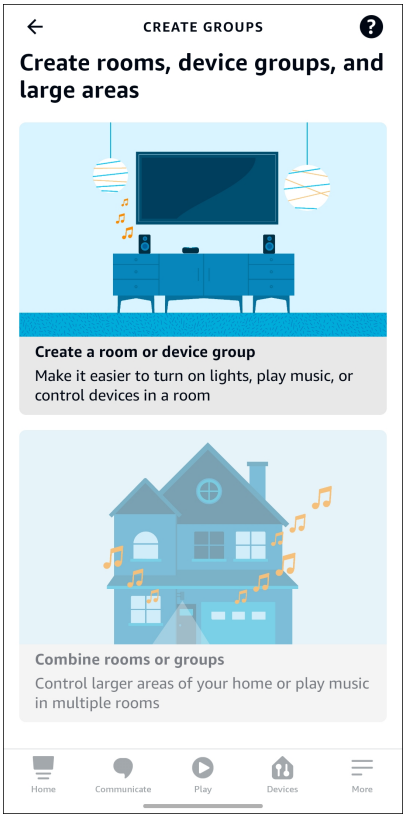
2. In the Alexa app, select **Devices** and then **Add**.



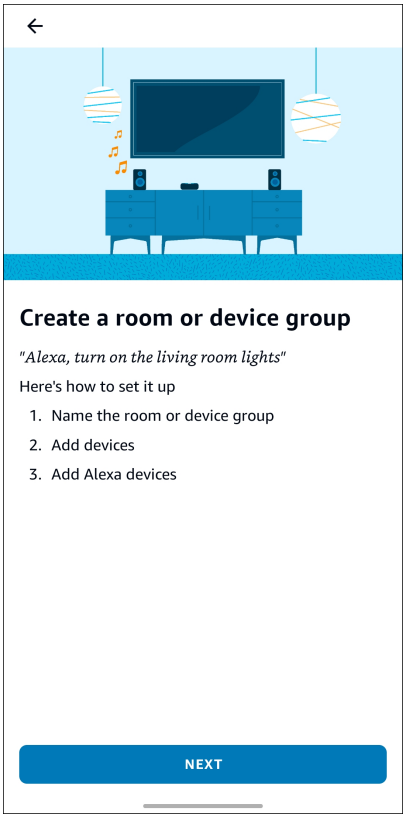
3. Select **Add Group**.



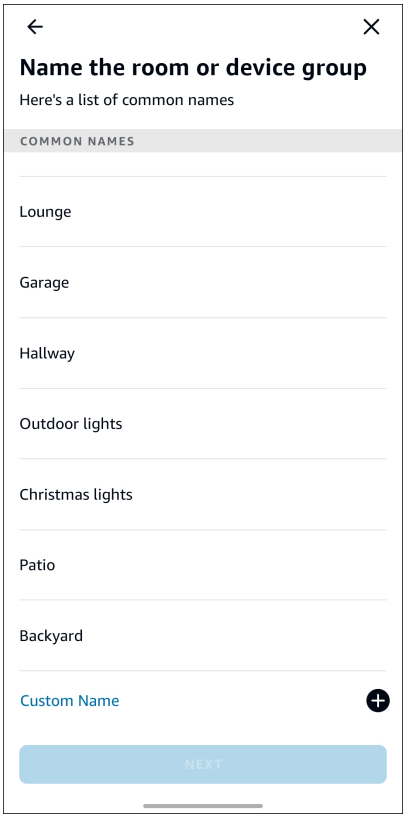
4. Select **Create a room or device group**.



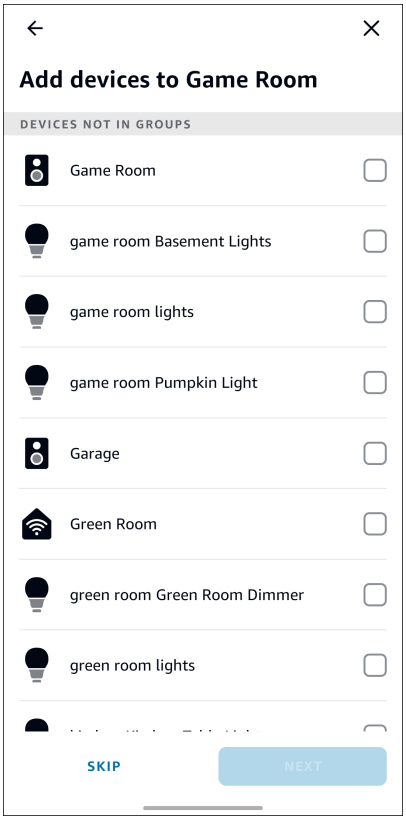
5. A create room or device group overview displays, select **Next**.



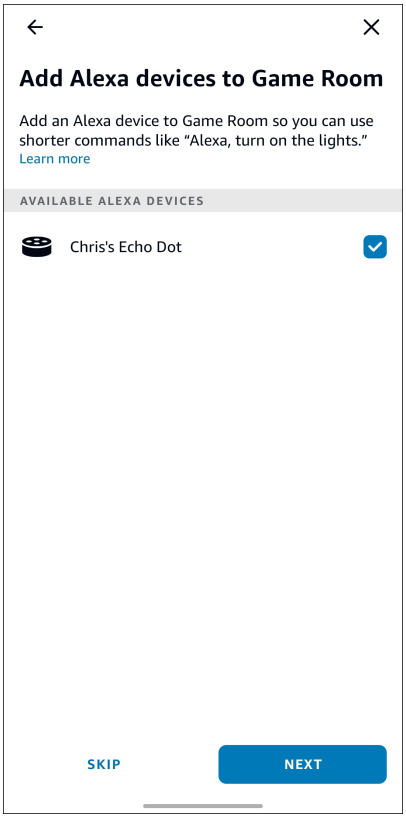
6. Select or enter a room name that matches the room name in the Crestron Home system. Either select a name from the Common Names list or select **Add a Custom Name** and then enter a name. Then, select **Next**.



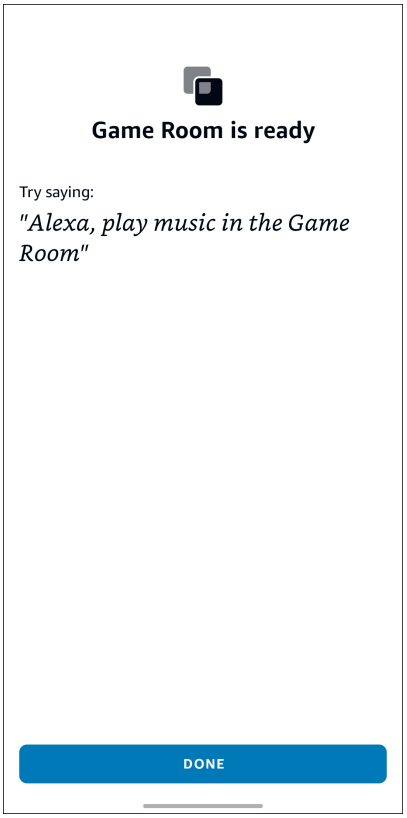
7. In **Add devices to**, select **Skip**.



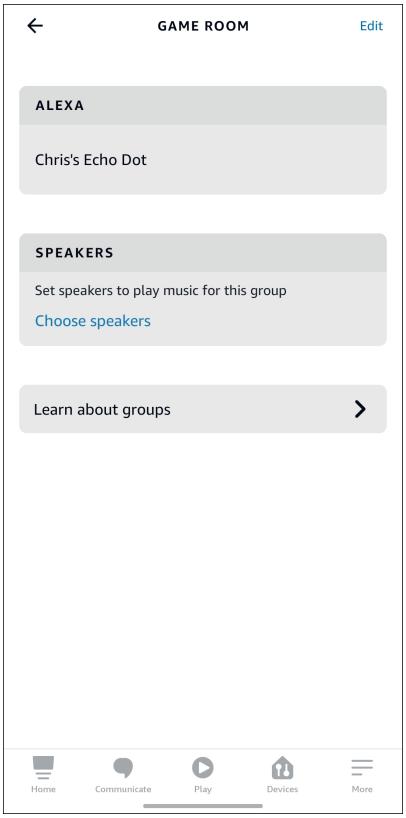
8. In **Add Alexa devices to**, select the connected speaker in the room and then **Next**.



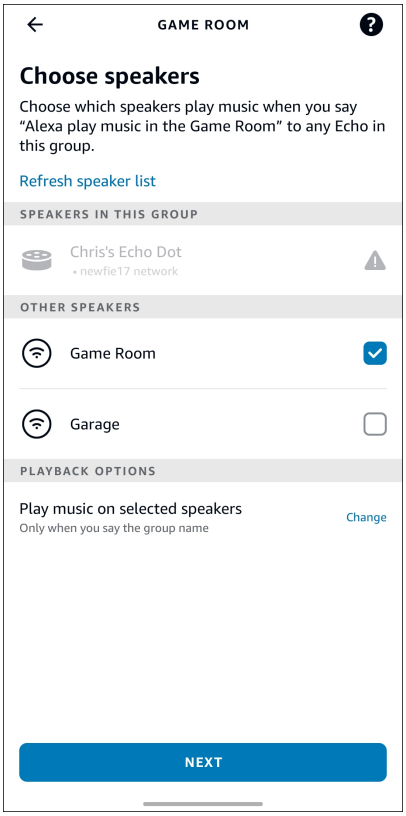
9. In the room is ready screen, select **Done**.



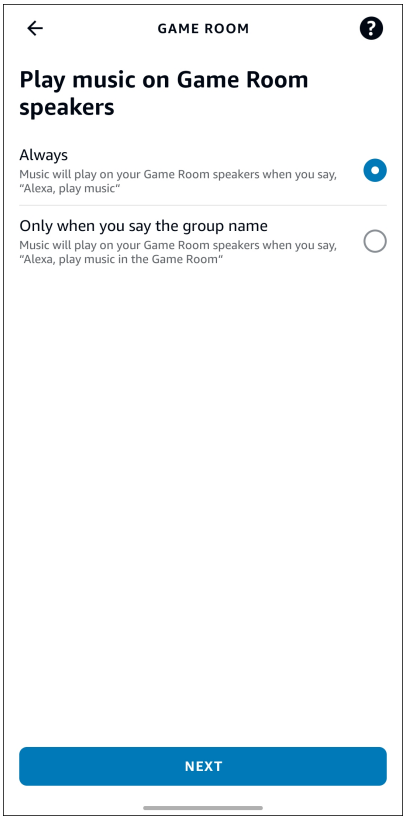
10. In **Speakers**, select **Choose speakers**.



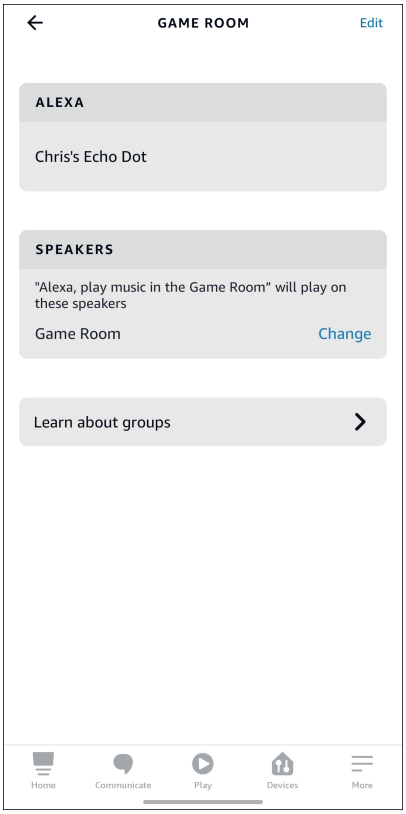
11. In **Other Speakers**, select the room in the Crestron Home with the connected speaker.



12. In **Playback Options**, select **Change** and then **Always**.



13. Select **Next** and then **Done**.



Troubleshooting

Music plays on connected speaker instead of room speakers.

- Include the room name that is assigned in the Crestron Home app.
- Create a room group. For details, refer to Create Groups on page 309.

The Alexa app displays rooms that are not in the system.

- A room name was changed in the Crestron Home system. Use the Alexa app to rediscover devices in the Alexa app.
    - Say "Alexa, discover new devices."
    - Go to **alexa.amazon.com > Smart Home > Devices** and then select **Discover**.

The Alexa app won't discover a renamed room.

- Do one of the following:
    - Go to **alexa.amazon.com > Smart Home > Devices** and then remove all devices and media rooms using the old room name and then select **Discover**.
    - If the previous procedure does not work, go to **amazon.com > Accounts & Lists > Content & Devices > Devices > Other Devices** and then select the room and then **Deregister**. Then, go to **alexa.amazon.com > Smart Home > Devices** and select **Discover**.
    - If the previous procedures do not work, go to **alexa.amazon.com > Smart Home > Devices** and then select **Remove All**. Then disable and then enable the Crestron for Smart Home and Conference Room skill, restart the control processor, reenable the Crestron for Smart Home and Conference Room skill and then discover devices.

Music plays using the wrong music provider.

- Include the name of the music provider with the command.
- Enable the music provider skill and then sign in to link the accounts.
- Change the default music provider in the Alexa app.

Pair Third-Party Keypads

Add third-party keypad devices to the Crestron Home system.

Add a Third-Party Keypad

Third-party keypads are paired in the same manner as native Cresnet® devices. For additional information, refer to Crestron Wired and Wi-Fi Devices on page 193.

> **NOTE:** Crestron Connected® third-party keypads are supported.

To add a third-party keypad device:

1. In the **Device Types** menu, select **Crestron Wired and Wi-Fi**.



2. Select a **Cresnet Gateway** from the **Crestron Wired and Wi-Fi** menu. The system scans the network for unpaired devices and displays the devices in the **Cresnet Gateway** menu.

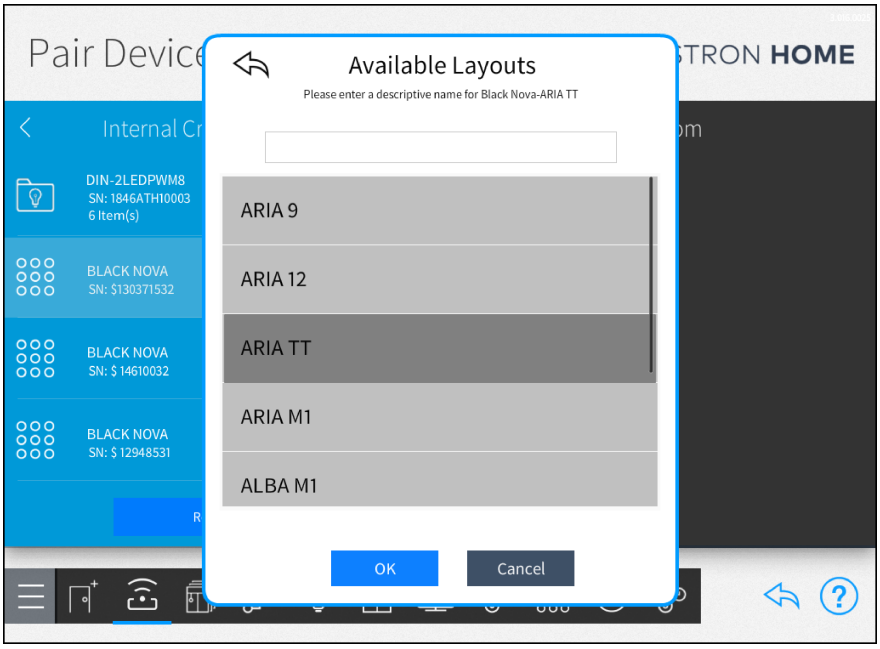
> **NOTE:** If necessary, tap **Rescan** to rescan the selected network for any unpaired devices.



3. In the **Cresnet Gateway** menu, select a device and then select **Add**.



4. Enter a name for the device and select a keypad layout.



5. Select **OK**.

Configure Third-Party Keypads

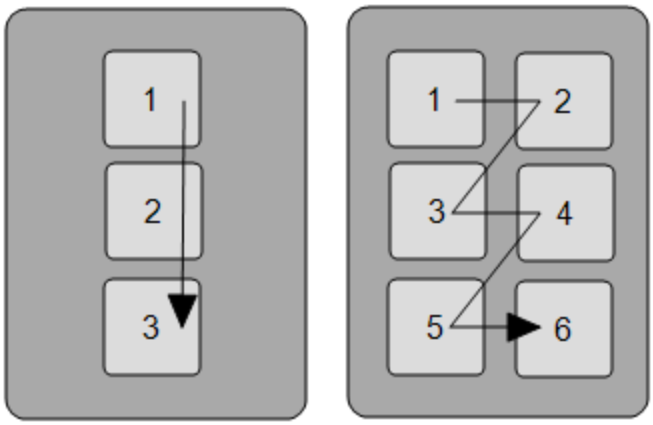
Tap **Settings** next to the device name to display a Settings dialog box. For details, refer to Third-Party Keypad Settings on page 1247.

Assign Actions to Buttons

Buttons on third-party keypads can be arranged in a variety of patterns. The **Actions & Events** screen displays the buttons for third-party keypads in a vertical list. Unlike Crestron keypads, the list does not represent the location of buttons on the keypad.

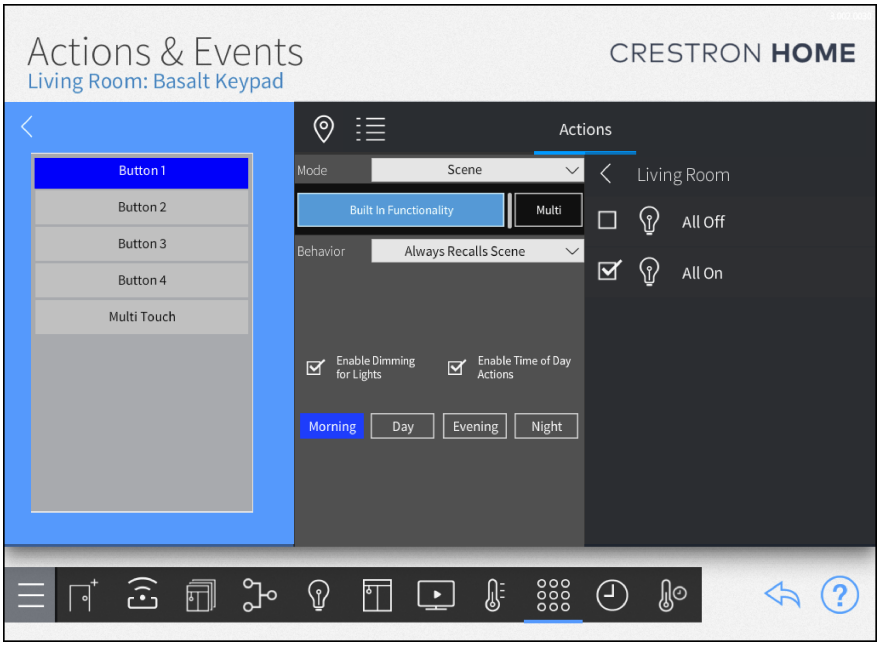
For simplicity, the buttons on third-party keypads with one column of buttons are ordered from top to bottom and keypads with two columns of buttons are ordered from left to right and then top to bottom.

Button Layout Examples - One Column of Buttons (Left) and Two Columns of Buttons (Right)



To assign actions to buttons on a third-party keypad:

1. Select a button.



2. Select a button mode from the **Mode** drop-down list and then configure the third-party keypad. For details, refer to Configure the Button Actions on page 458.

   > **NOTE:** The **Multi Touch** button is provided for third-party keypads that support multi-touch functionality. A multi-touch action occurs when multiple buttons on the keypad are pressed at the same time. Refer to the documentation provided by the manufacturer for details.

Remove a Third-Party Keypad from a Room

When a third-party keypad is removed from a room, it is placed in the gateway's device list.

To remove the keypad:

1. Select the device.
2. Select **< Remove**.

Pair Apple TV with Apple HomeKit

Use Apple HomeKit™ technology to pair and control an Apple TV® device. The TSR-310 handheld remote can be used to issue Siri® voice commands and to control an Apple TV.

NOTES:

- The PC4-R is not compatible with Apple HomeKit.
- For help with Apple devices, including configuration and operation, refer to Apple Support.

Configuration Requirements

- The Crestron Home processor, iPad, and Apple TV must use the following firmware:
  - **Crestron Home processor:** 3.16 or higher
  - **iPad:** iOS version 16 or higher.
  - **Apple TV:** tvOS version 16.0
- Connect up to five Apple TV devices in the system.
- For each room in the Crestron Home system:
  - Add only one Apple TV device in the room.
  - Add only one TSR-310 handheld remote in the room.
- For each Apple TV device:
  - Use the same connection type (wired or wireless) for all Apple TV devices. Do not mix wired and wireless connection types.
  - Disable the Sleep/Standby and HomeHub functions.
- The Crestron Home processor, iPad, and Apple TV must be connected to the same network and use the same subnet mask. For the best results, connect all devices to a private switch.
- The Crestron Home processor must be registered on myCrestron (http://portal.my.crestron.com) prior to performing this procedure. To add the Crestron Home processor to myCrestron, refer to myCrestron Residential Monitoring Service on page 626.

Set Up Apple HomeKit with Crestron Home

> **NOTE:** Use the customer's iPad and Apple TV to complete this procedure.

Configure the Apple TV

Configure the Apple TV device using the remote supplied with the device.

To configure the Apple TV device:

1. Go to **Settings > General** and configure these settings:
    a. In the **About** menu, set the name for the Apple TV. This name is used when adding the device in the Crestron Home Setup app.
    b. In the **Sleep After** menu, set the sleep (standby) time to **never**.
    c. In the **Users and Accounts** menu, sign in using the customer's Apple ID and password.
2. Go to **AirPlay and HomeKit** and configure these settings:
    a. In the **AirPlay** menu, turn AirPlay **On**.
    b. In the **HomeKit** menu, select the room that the Apple TV is in and make sure that the correct Apple TV name is displayed.
    c. In the **HomeHub** menu, select **Disable**.

Turn On iCloud Keychain

Configure the customer's Apple ID to use the iCloud Keychain.

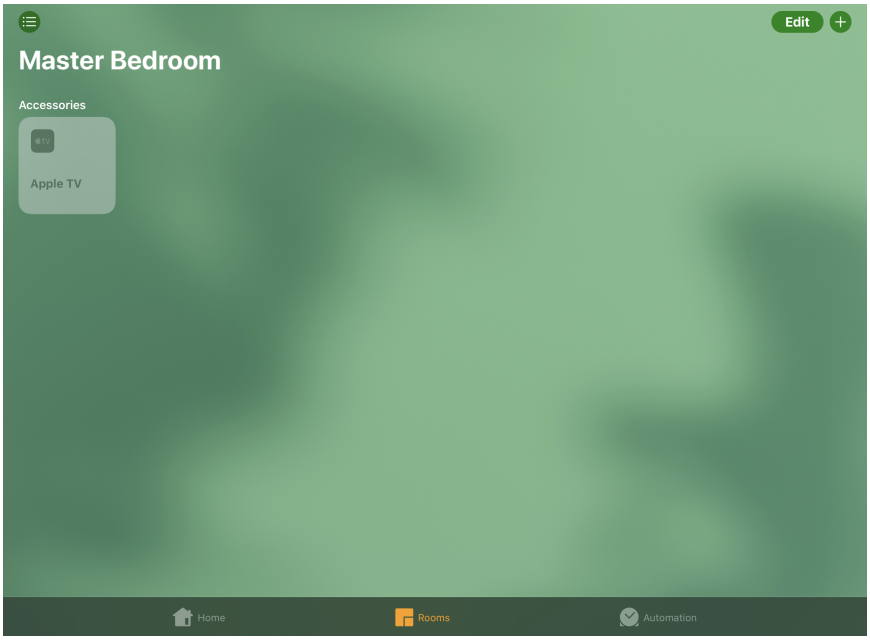
To turn on iCloud Keychain, tap the **Settings > [user name] > iCloud > Keychain** and then turn on **iCloud Keychain**.

Verify the Connection between the Apple TV and the iPad

The Apple TV is shown in the Apple Home app after the Apple TV and the iPad have been properly configured. Verify that the Apple TV is displayed within the Apple Home app and that the Apple TV can be controlled from within the Apple Home app.

1. Open the Apple Home app, the Apple TV should appear in the room defined while setting up the Apple TV.

   > **NOTE:** If the Apple TV does not appear, refer to the Troubleshooting steps that follow.



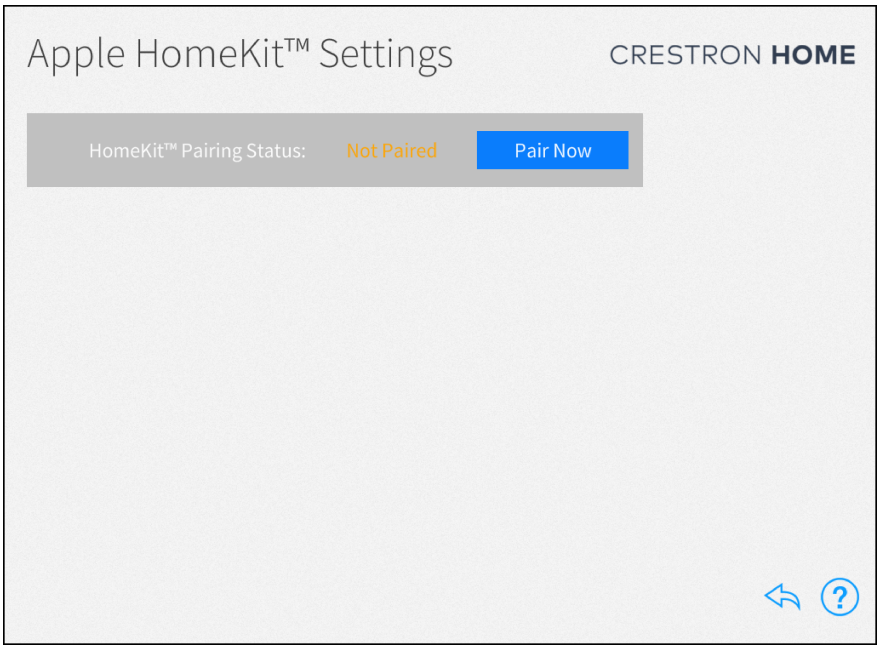
2. Use the remote control that is supplied with the Apple TV and start playing a video.
3. In the Apple Home app, the Apple TV icon should indicate that a video is playing.
4. Control the video using the Apple Home app:
   - Tap the icon to pause the video, the icon indicates that the video is paused. Verify that the video on the connected TV is paused.
   - Tap the icon again to play the video, the icon should indicate that the video is playing. Verify that the video on the connected TV is playing.

Pair the Crestron Home Processor with Apple HomeKit

The Crestron Home processor functions as a bridge device to facilitate communications between the Crestron Home system and the Apple TV device.

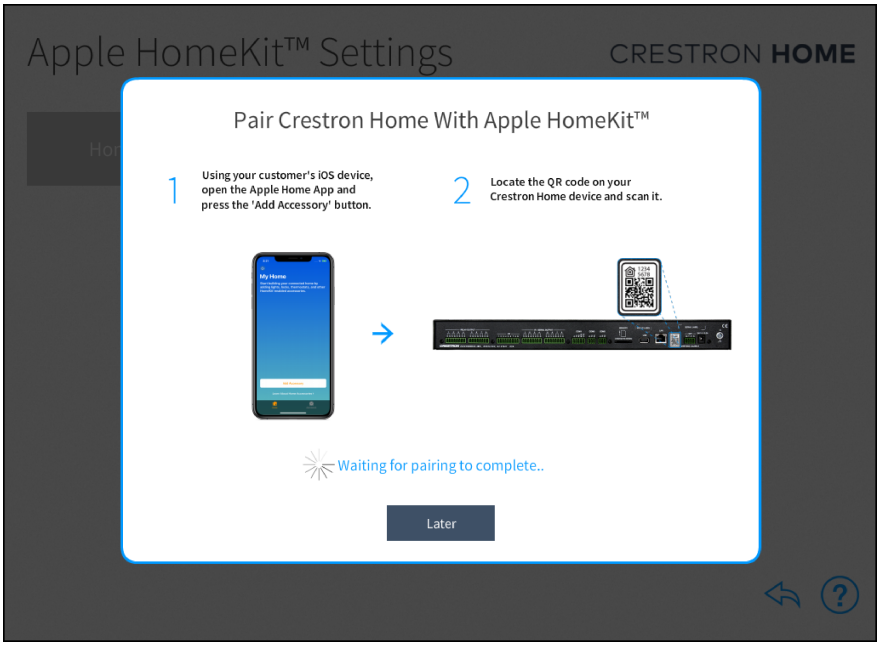
To pair the processor with Apple HomeKit:

1. In the Crestron Home Setup app, go to **Settings > System Control Options > HomeKit™ Settings** and then select **Pair Now**.

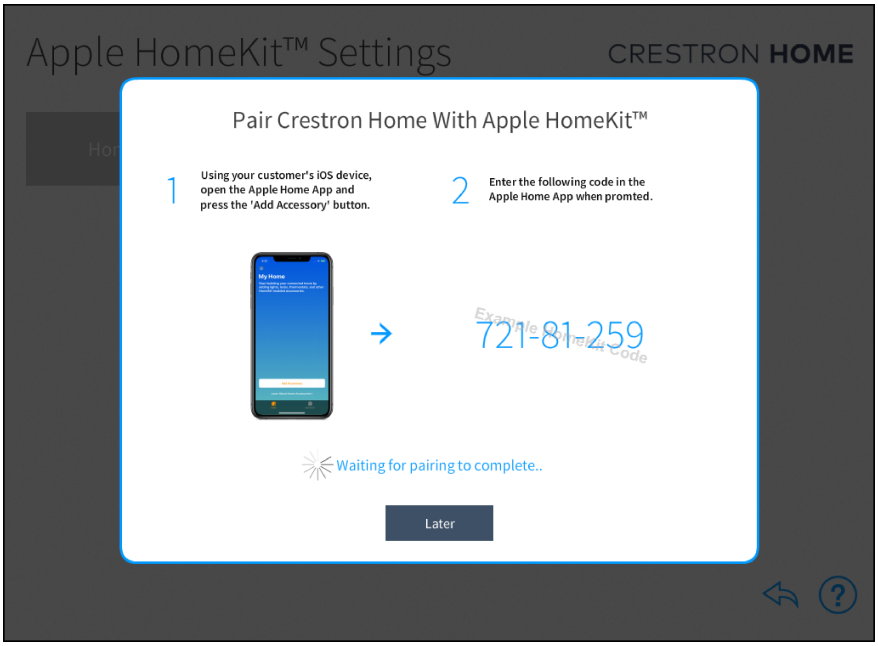


2. The pairing instructions are displayed. If the Crestron Home processor shipped without a QR code the HomeKit code is displayed.

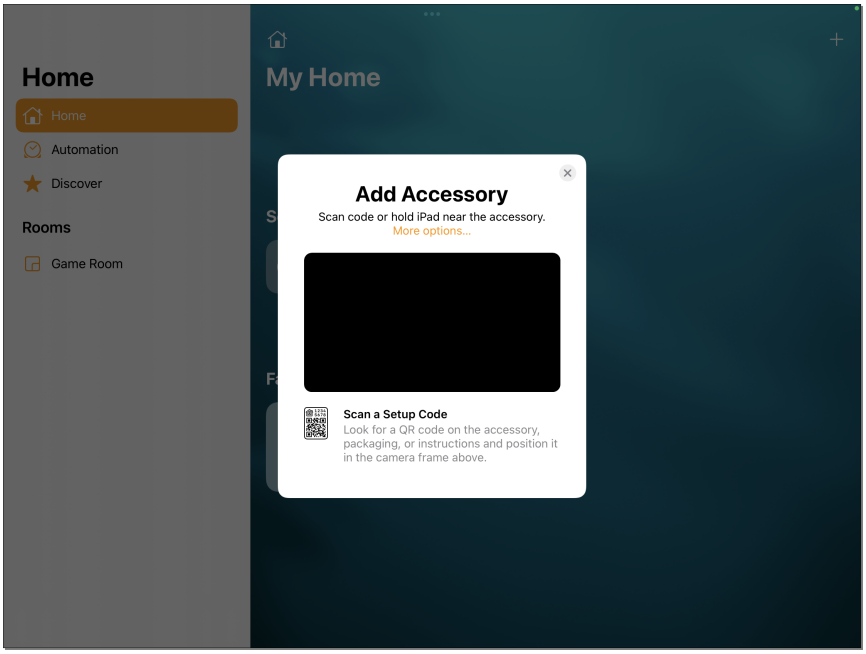
Crestron Home Processor with QR Code



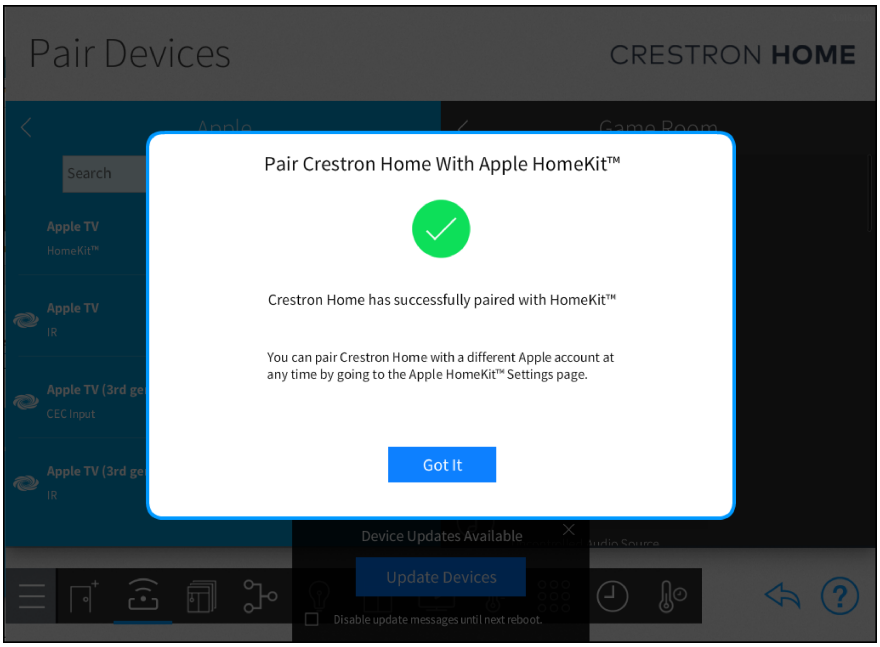
Crestron Home Processor without QR Code



3. On the Customer's iPad, enter the HomeKit setup code:
    - **Crestron Home processors with a HomeKit QR code:** In the Apple Home app, select **Add > Add Accessory** and then scan the QR code. The Apple HomeKit code is also supplied within the packaging for the Crestron Home processor.



    - **Crestron Home processors without a HomeKit QR code:** Select **Add > Add Accessory > More options** and then enter the setup code shown in the Crestron Home Setup app.
4. A success message is displayed when the pairing is complete. Select**Got it**.



Add the Apple TV

Use the Crestron Home Setup app to add the Apple TV device to the system.

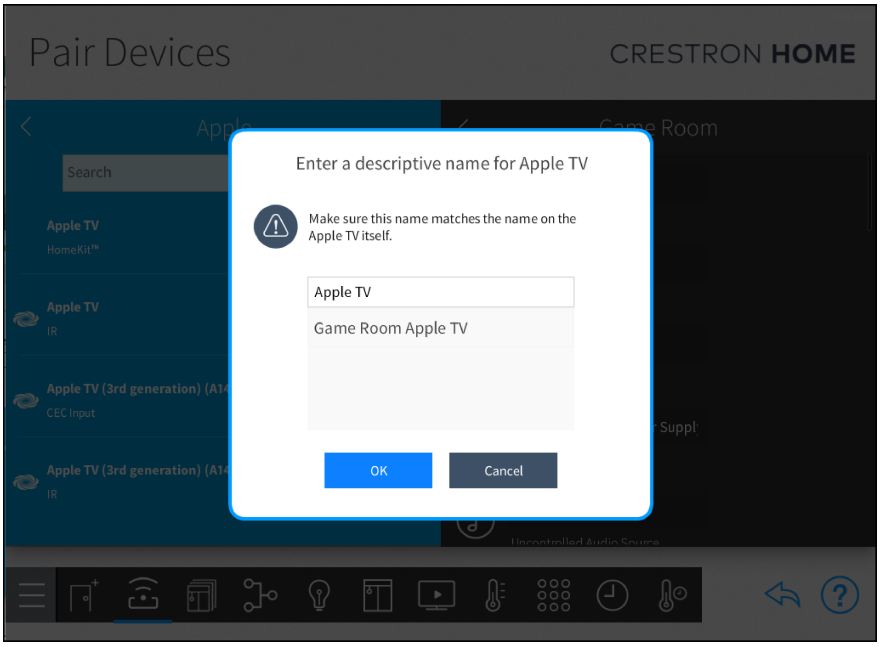
To add the Apple TV device:

1. In the **Device Types** menu, go to **Drivers** > **Streaming Player** > **Apple**.
2. In the **Select a room** menu, select the room where the Apple TV is installed.
3. In the **Apple** menu, select **Apple TV HomeKit** and then select **Add**.

> **NOTE:** If the control processor is not paired with Apple HomeKit, a dialog box is displayed to perform the pairing process. For details, refer to Pair the Crestron Home Processor with Apple HomeKit on page 332.



4. Select or enter the name assigned to the Apple TV device and then select **OK**. The name must match the name assigned in the Apple TV settings.



Select a Different Apple TV

To change select a different Apple TV for the room, select Edit and then select a new Apple TV.



Configure Settings

Configure the device after it is added to the room. Tap **Settings** next to the device name to display a Settings dialog box. For details, refer toVideo Source Settings on page 1362.

Source Routes

Configure the source routes for the Apple TV device. For details, refer to Source Routes on page 361.

Troubleshooting

> **NOTE:** If the connection to the Apple TV is lost after restarting the Crestron Home processor, restart the Apple TV to reestablish the connection

Apple TV devices cannot be controlled after power outage or after pairing the Crestron Home processor with HomeKit:

- Reboot the Apple TV device.

The TSR-310 handheld remote does not trigger Siri after pairing the Crestron Home processor with HomeKit:

- Reboot the Apple TV device.

The Crestron Bridge accessory does not appear on the iOS device for pairing:

- Make sure the Crestron Home system, iPad, and Apple TV on the same network.
- Force close the Apple Home app.
- Reboot the iPad.
- Reboot the Crestron Home system and try again.

The iPad device fails to pair with HomeKit:

- Reboot the Crestron Home system, Apple TV and the iPad.
- Remove the Apple TV from the iPad and add it again.

The media source is offline or clicks on the media control buttons are not reflected on the Apple TV:

- Restart the Apple TV.
- Make sure source routes are configured properly.
- Make sure the name of the Apple TV device matches the name selected in the Crestron Home Setup app.

Pair and Configure a Lutron System with a Crestron Home® System

Lutron HomeWorks QS, HomeWorks QSX, RadioRA 2, RadioRA 3, and RA2 Select systems can be integrated into a Crestron Home system to enable control of Lutron lights, shades, and fans. The Lutron devices can be controlled from a user interface device such as a Crestron touch screen, TSR-310 handheld remote, iOS® device, and Android™ device.

NOTES:

- Lutron RadioRA3, Homeworks QSX, and RA2 Select processors and their configurations cannot migrate to a different Crestron Home processor. During the pairing process, a unique certificate is created that allows communications between the two processors. If the system is migrated, the Lutron system must be paired and reconfigured.
- It is recommended that the names of the Lutron areas match the names of the rooms in the Crestron Home system. This will allow the Crestron Home system to automatically import the matching areas. Non-matching areas will need to be added individually on the Pair Devices screen.
- One Lutron system can be added to a Crestron Home system.
- Crestron Home allows 50 light scenes and 50 shading scenes per room. For details, refer to Quick Action and Scene Limits on page 53.
- Only Lutron areas that contain keypads that control lights, fans, or shades will be added to the Crestron Home system.
- Phantom Keypads that are part of a HomeWorks QSX system are imported and provide greater flexibility and functionality for the system.
- The Lutron area cannot be renamed.
- Creating groups of Ketra loads should be done in the Lutron software.
- Ketra lighting loads do not require any additional steps to add to Crestron Home. They import in the same manner as other Lutron load types.

Add a Lutron System

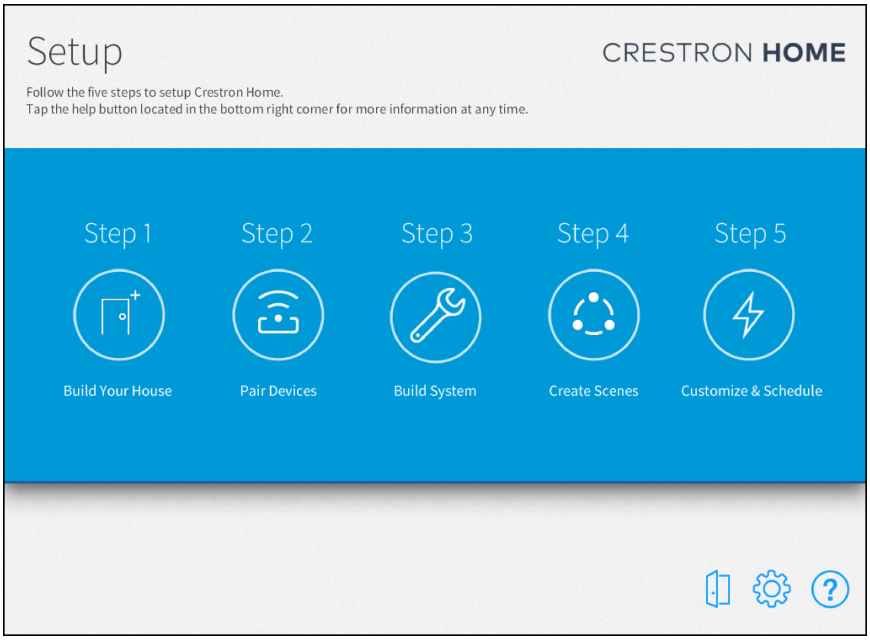
To add a Lutron system, complete the following procedures:

1. Discover and Pair the Lutron System on page 339
2. Add the Lutron Areas and Scenes on page 343
3. Rename Lutron Button on page 347
4. Configure the Lutron Scenes (RA2 Select Systems Only) on page 349

Discover and Pair the Lutron System

To discover the Lutron system and pair it with a Crestron Home system:

1. Tap the **Pair Devices** button on the **Setup** screen or the Pair Devices button on the setup menu to display the **Pair Devices** screen.

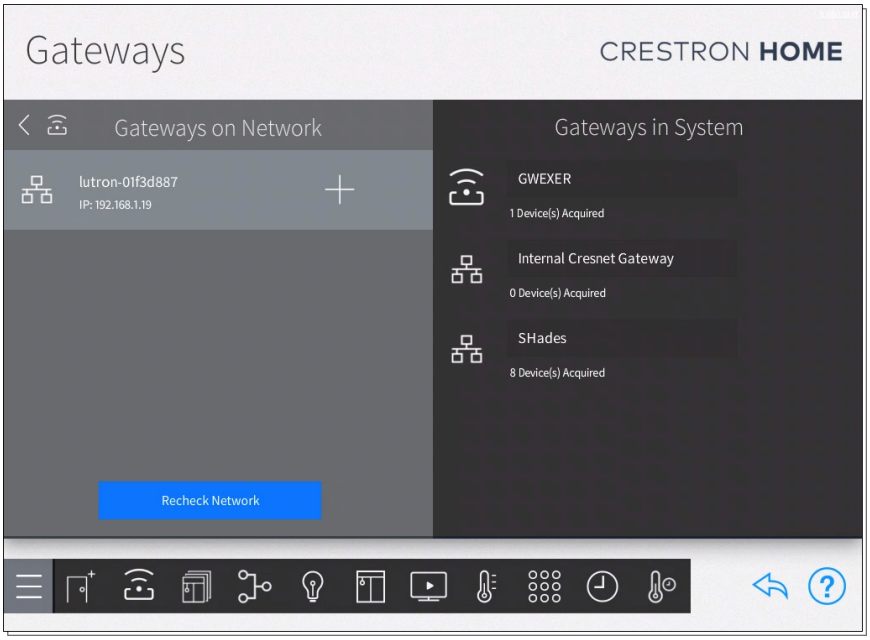


2. Tap **Manage Gateways** in the **Device Types** menu. The local network is scanned for gateways that can be added to the Crestron Home system. Discovered gateways appear under the **Gateways on Network** menu.

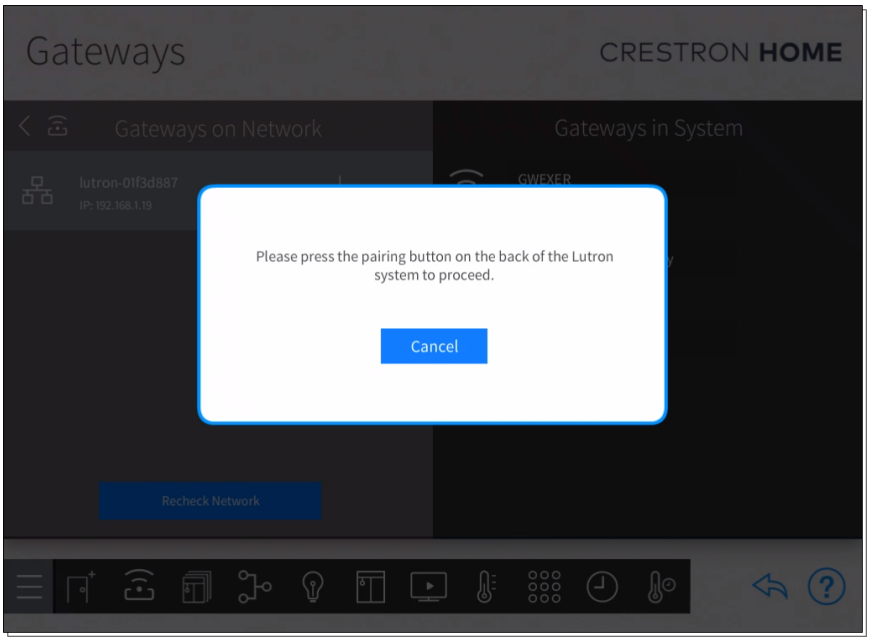
   > **NOTE:** If necessary, tap **Recheck Network** to rescan the network for available gateways.



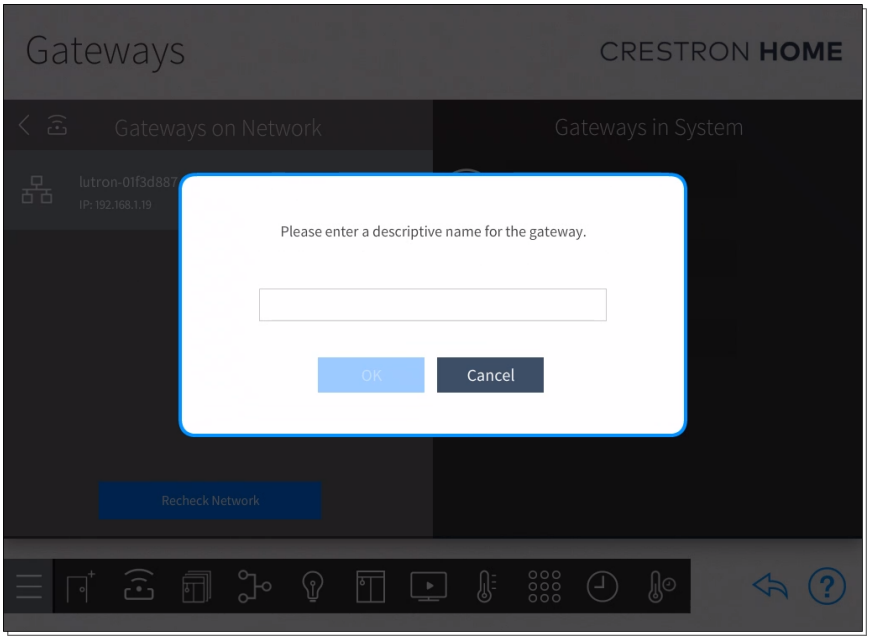
3. Select the Lutron system from the **Gateways on Network** menu and then tap the plus button (**+**) to add it to the system.



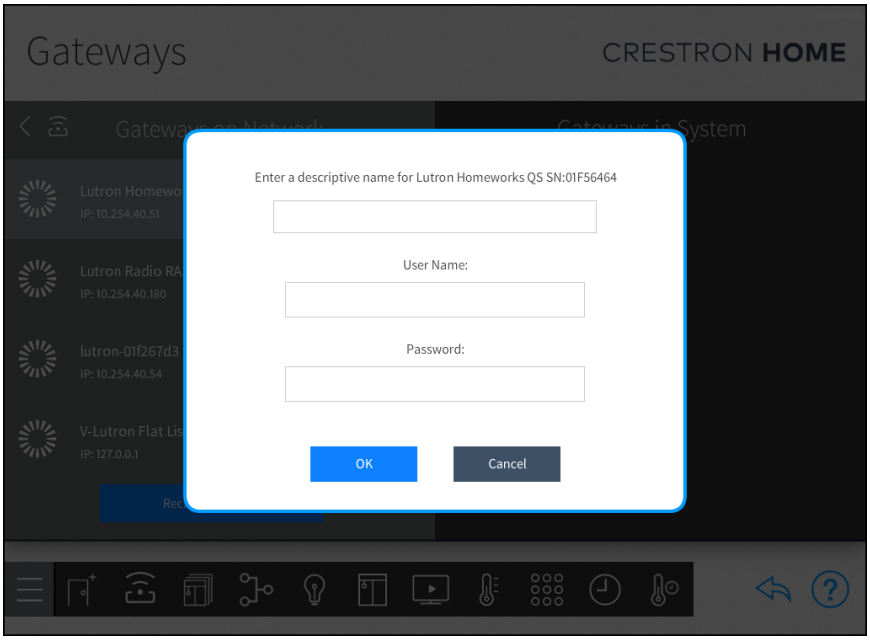
4. When the prompt appears:
    - **RA2 Select and HomeWorks QSX Systems**
        a. Press the **Add**, **Program**, or pairing button on the Lutron device. The Crestron Home system and the Lutron system will establish a connection. To stop the pairing process and return to the **Gateways** screen, select **Cancel**.



        b. Enter a descriptive name for the gateway and then tap **OK**.



- **HomeWorks QS and Radio RA2 Systems**
    a. Enter a descriptive name for the system along with the user name and the password for the system and then tap **OK**.



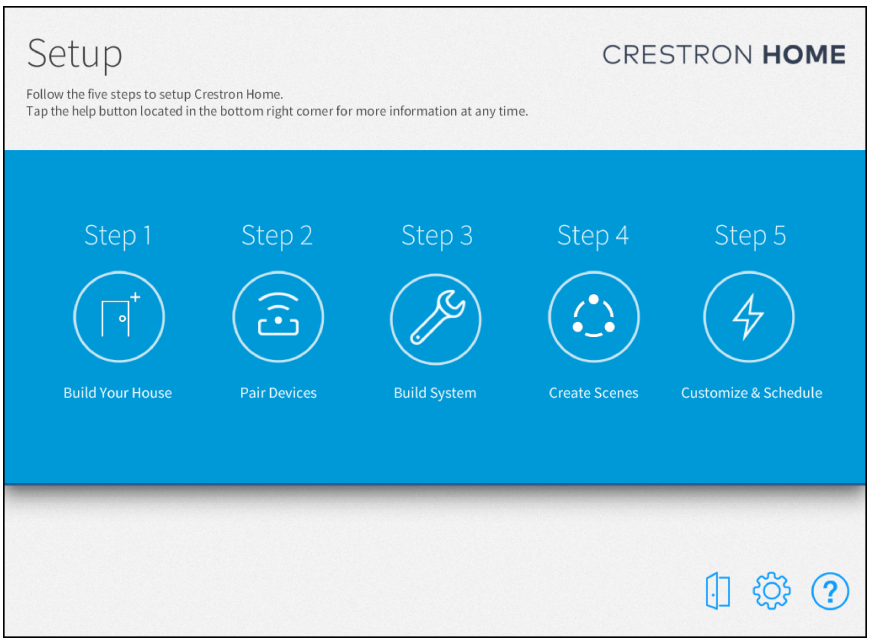
5. The Lutron system is added to the Crestron Home system and is displayed in the **Gateways in System** menu. Tap the gear button next to Lutron system to display the **About** tab.

> **NOTE:** When the Lutron system is added to the Crestron Home system, the **Lutron** folder becomes available in the **Device Types** menu on the **Pair Devices** screen.

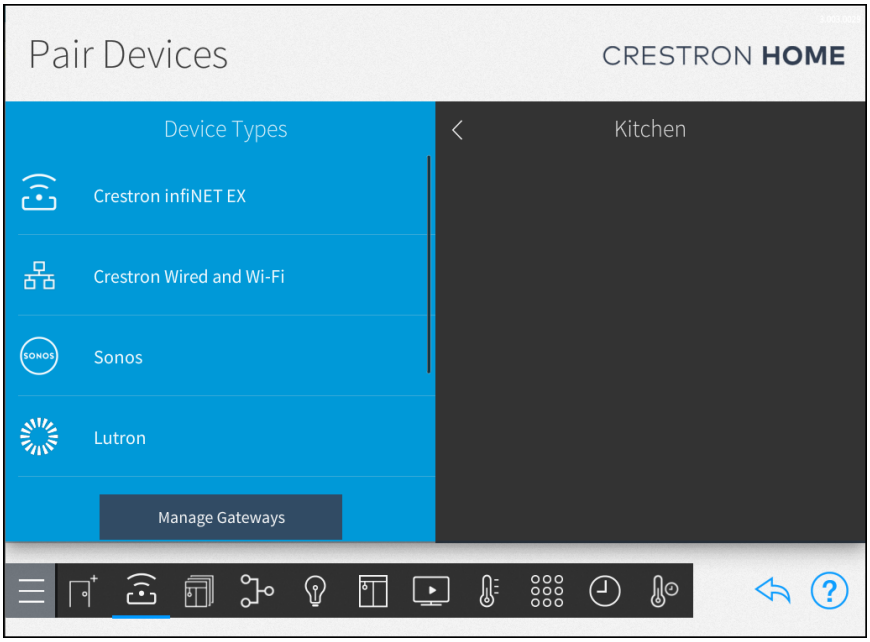
Add the Lutron Areas and Scenes

NOTE: Scenes are added for RA2 Select systems only.

1. Tap the **Pair Devices** button on the **Setup** screen or the Pair Devices button on the setup menu to display the **Pair Devices** screen.



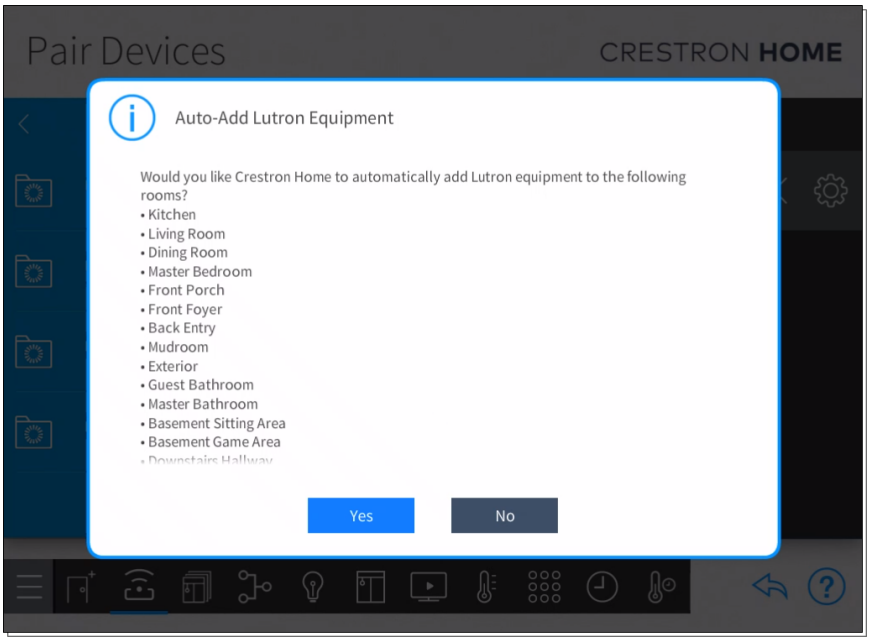
2. Tap **Lutron** in the **Device Types** menu.



3. The **Auto-Add Lutron Equipment** dialog box is displayed and lists Lutron Area names that match room names in the Crestron Home system. The Lutron areas with matching room names can be automatically added to the rooms in the Crestron Home system. To automatically add the Lutron Areas (and equipment) to the indicated rooms, tap **Yes**, or tap **No** to manually add the Lutron Areas to rooms.

   NOTES:

   - Lutron areas that do not have a matching Crestron Home room names are added to the **Lutron Area** menu and must be manually added to a room.
   - To manually add a Lutron area to a room, refer to Add Lutron Areas to Rooms on page 346.
   - Tap the **Rescan** button to scan the Lutron system for new Lutron areas and new equipment. For details, refer to Rescan the Lutron System on page 351.
   - The **Auto-Add Lutron Equipment** dialog box is displayed when the following events occur:
     - After the Lutron system is added and **Lutron** is selected from the **Device Types** menu for the first time.
     - After the **Rescan** button is pressed and matching room names are discovered.

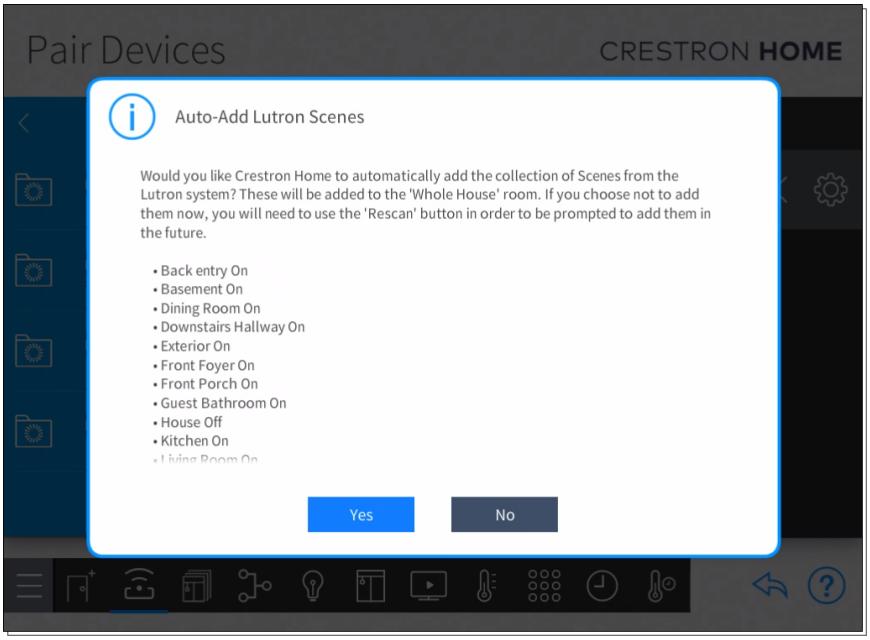


4. (For RA2 Select Systems Only) The **Auto-Add Lutron Scenes** dialog is displayed and lists the Lutron Scenes that can be imported. The Lutron Scenes are placed in the Whole House room in Light Scenes and Shade Scenes configuration pages. To add the Lutron Scenes to the Crestron Home system, tap **Yes**. Tap **No** to skip the Lutron Scene import process.

   If **No** is selected, the Lutron Scenes are not added to the Crestron Home system. To add the Lutron scenes, refer to Rescan the Lutron System on page 351.

   NOTES:

   - A Lutron scene cannot be imported if the scene name already exists in the Crestron Home system or matches a Crestron Home reserved scene name (All On, All Off, All Open, All Closed). The scene name is displayed in red text if a scene name conflict exists.
   - Lutron scenes that control both lights and shades are imported as separate light and shade scenes but retain control of all devices in the scene. For example, the lights and shades are adjusted to their scene levels if the Lutron shade scene or the Lutron light scene is recalled.
   - To scan the Lutron system for new Lutron Scenes, tap **Rescan**. For details, refer to Rescan the Lutron System on page 351.



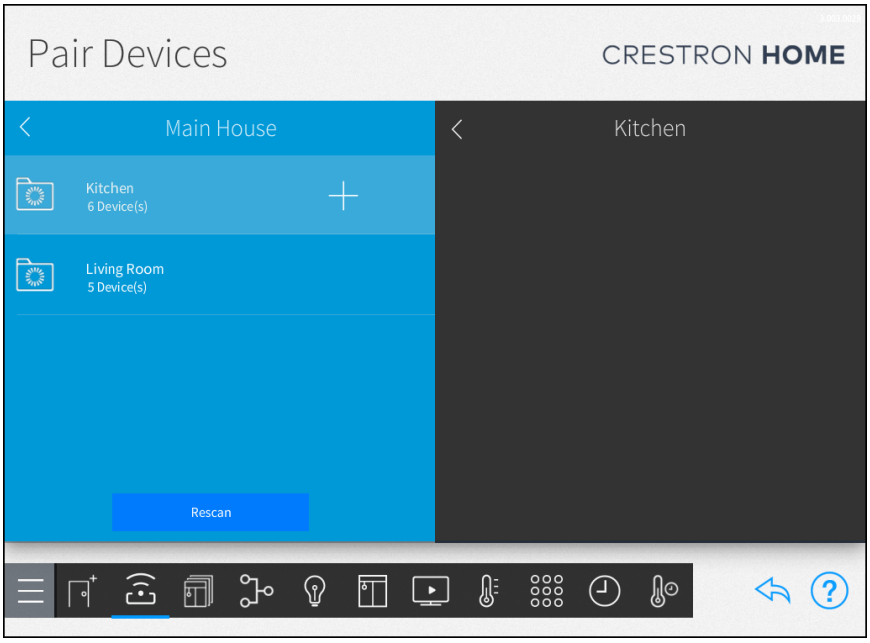
Add Lutron Areas to Rooms

This procedure is required for Lutron areas that must be manually added to the Crestron Home system.

> **NOTE:** Only one Lutron area can be added to each room in the Crestron Home system.

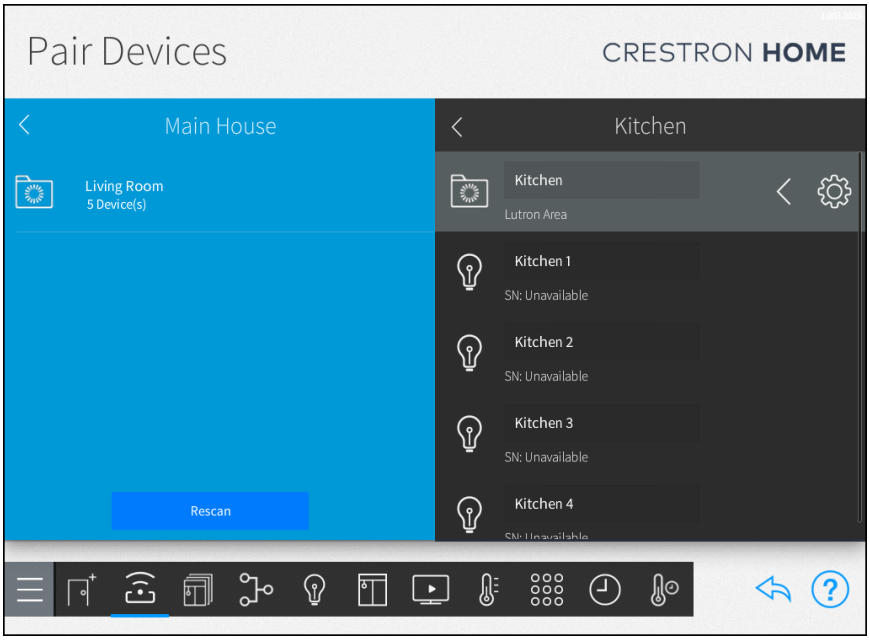
To add a Lutron area to a room:

1. Select the room where the Lutron area is installed from the **Select a room** menu.
2. Select the Lutron area from the **Lutron Area** menu and then tap the plus button (**+**) to add the Lutron area to the selected room.



3. The Lutron Area is added to the room and displayed as a Lutron Area folder in the room. Lutron loads (lights, shades, and fans) are also added to the room.

> **NOTE:** To view information about the Lutron Area and the devices that are placed within it, tap **Settings** next to the Lutron Area folder.



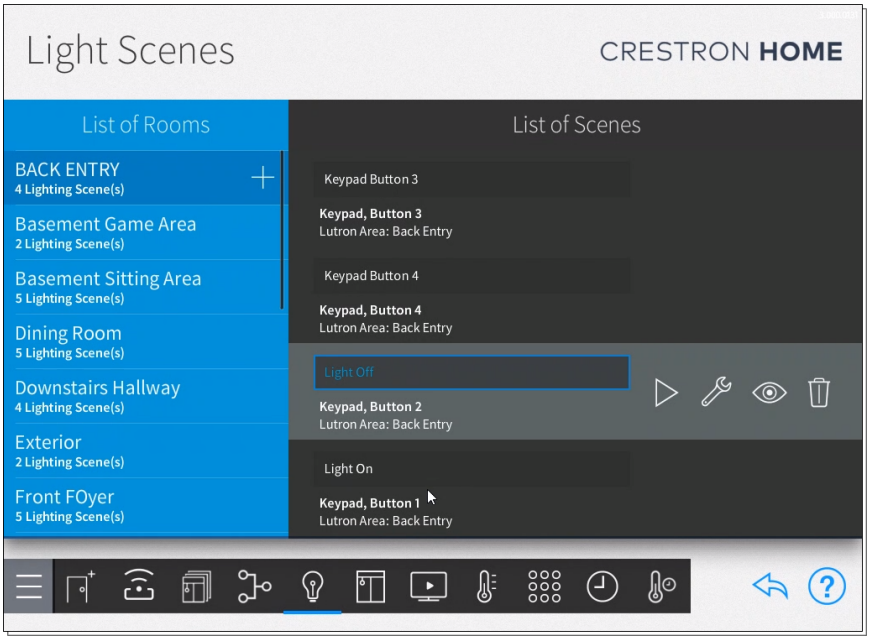
Rename Lutron Button

Rename Lutron buttons with user-friendly names. The name of the button is displayed in the Crestron Home user interface.

> **NOTE:** Lutron buttons are placed in the **Light Scenes** and **Shade Scenes** screens when the Lutron system is imported. The buttons function as scenes in the Crestron Home system.

1. Tap the **Configure Lighting Scenes** button or **Configure Shade Scenes** button on the **Setup Scenes** screen to display the **Light Scenes** or **Shade Scenes** screen.

2. Select a room from the **List of Rooms** menu.



3. Tap the Lutron button from the **List of Scenes** menu and then enter a new name for the button. The name assigned to the scene will be displayed in the Crestron Home user interface.

Configure the Lutron Scenes (RA2 Select Systems Only)

Rename Lutron Scenes and Enable Visibility

To view the scenes in the Crestron Home user interface, the scenes must be made visible in the desired room. The name of the scene is displayed in the Crestron Home user interface and must be provided a user-friendly name.

NOTES:

- Lutron scenes are stored in the Whole House room in the **Light Scenes** and **Shade Scenes** configuration screens.
- To access scenes, tap the **Configure Lighting Scenes** button on the **Setup Scenes** screen or the Light Scenes button on the setup menu to display the **Light Scenes** screen.

Rename Lutron Scenes

To rename the scene, tap the name of the scene in the **List of Scenes** menu and then enter a new name for the scene. The name assigned to the scene will be displayed in the Crestron Home user interface.

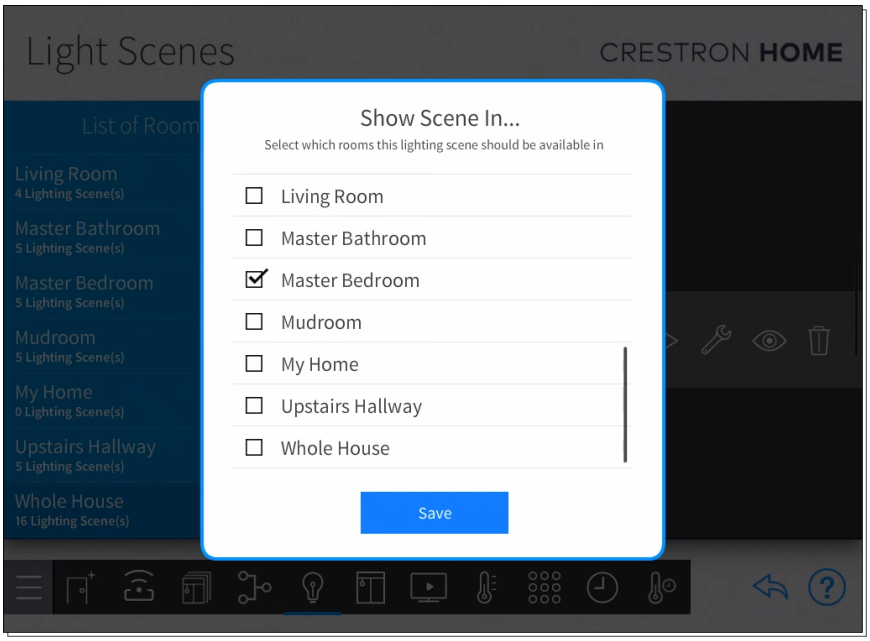


Configure Scene Visibility

Lutron scenes are hidden when they are imported into the Crestron Home system. To use the Lutron scene in the Crestron Home user interface, the scene must be enabled.

To enable the Lutron scene:

1. Tap the Lutron scene and then tap the eye icon. The **Show Scene In** dialog box is displayed.
2. Select the room(s) that should display the Lutron scene.



3. Tap the **Save** button to accept the changes.

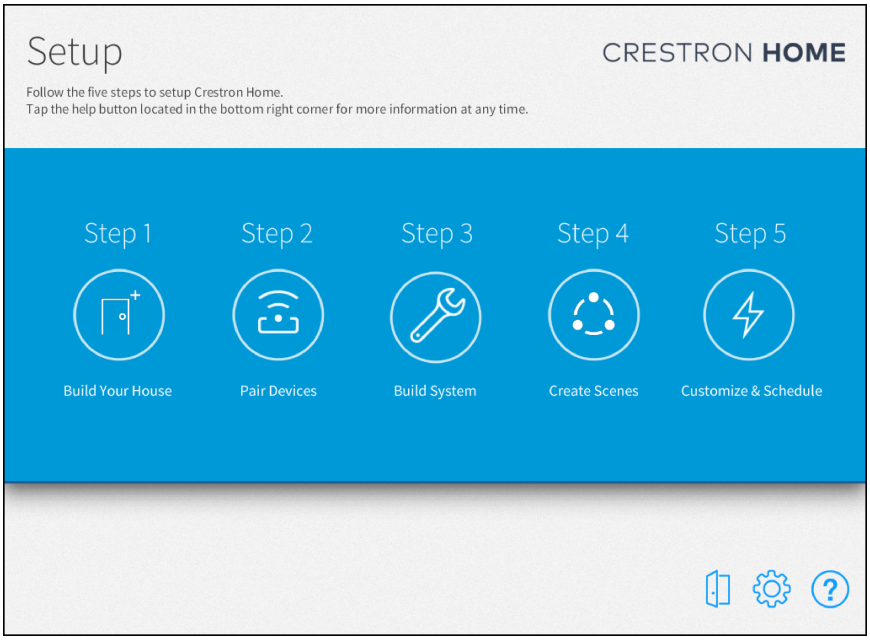
Rescan the Lutron System

Rescan the Lutron system to import changes that were made to the Lutron system or to import individual Lutron lights, shades, and fans into the system.

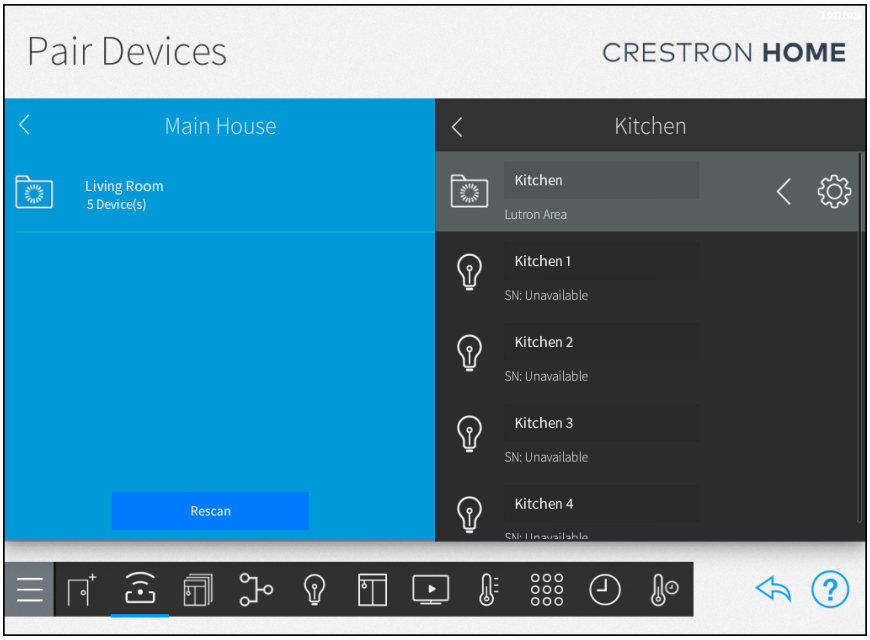
NOTES: When the Lutron system is rescanned, the Lutron system will be re-downloaded. Consider the following when rescanning the Lutron system.

- Devices that have been added to the Lutron system will become available to the Crestron Home system.
- Changes to Lutron scene names and keypad names will not be overwritten.
- If a Lutron device was added to the Lutron system, the device can be added to the Crestron Home system.
- If a Lutron area was deleted from the Lutron system, the device and its programming is deleted from the Crestron Home system.
- If a device in a Lutron system is moved to different Lutron area, the existing device is deleted from the Crestron Home system and is added to the Crestron Home system as a new device.

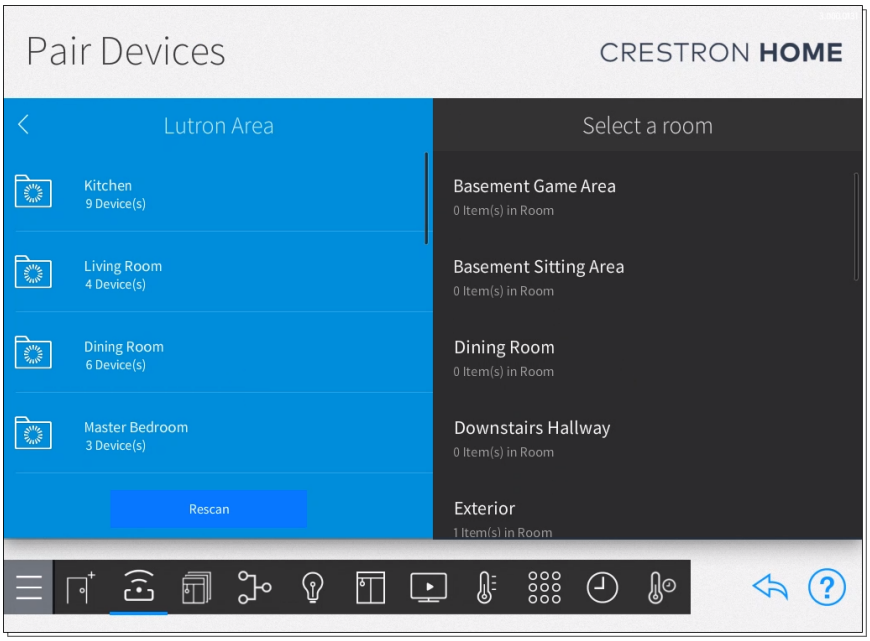
1. Tap **Pair Devices** on the **Setup** screen or **Pair Devices** on the setup menu to display the **Pair Devices** screen.



2. Tap **Lutron** in the **Device Types** menu.



3. Tap **Rescan** in the **Lutron Area** menu. The Crestron Home system scans the Lutron system for changes.



Best Practices for Lutron Systems

Keep the following in mind when integrating Lutron systems into your Crestron Home system.

- To discover the Lutron system, the Crestron Home processor and Lutron processor must be on the same network and use the same network switch.

- Use Lutron Designer Software to incorporate the desired functions in the Lutron system and then import those items into Crestron Home either as scenes or via button emulation. For example, use Lutron Designer Software to perform the following tasks:
    - Create Lutron button programming to control multiple Lutron lights, shades, or fans.
    - Create raise or lower events for multiple Lutron lights, shades, or fans.
- To import Lutron loads and enable individual load control, the Lutron system must be rescanned. Discovered loads are added to the Crestron Home room containing the Lutron Area.
- Individual Lutron lights, shades, and fans can be added to a Crestron Home scene or controlled using standard keypad programming. When creating scenes in the Crestron Home app, consider the following:

    > **NOTE:** Individual load control is available on HomeWorks QS, HomeWorks QSX, and Radio RA2 systems.

    - The Crestron Home system executes the scene by commanding each Lutron load to go to the specified level, one load at a time.
    - Lutron loads can be directly selected during keypad programming. Lutron loads can be selected for control when Lighting Load, Shade Load, Lighting Raise, Lighting Lower, Shade Raise, Shade Lower, and Ceiling Fan are selected from the Mode drop-down menu.
    - Although not directly selectable, Lutron loads can be selected for control through scene, quick actions (including sequences), room, and master selections when programming keypads. Lutron loads will be controlled when Scene, Quick Actions, Lighting Room, Shade Room, Master Raise, Master Lower are selected from the Mode drop-down menu. For details, refer to Button Actions on page 456.
    - Lutron fans can be turned on when Lighting Load is selected from the Mode drop-down menu. Set the On Speed for the fan in the fan settings screen. For details, refer to Lutron Fan Settings on page 1378.
    - Wired light load performance when controlling Lutron loads via Crestron Home keypad programming and Scenes:
        - Loads are controlled in the order that the cabinet is wired.
        - There is a 0.1 second delay between each load that is controlled.
        - Twenty loads in a cabinet can be controlled in approximately 1 to 2 seconds.
        - Loads in multiple cabinets are controlled one cabinet at a time. For example, if there are two cabinets installed, loads in Cabinet A are controlled and then loads in Cabinet B are controlled.

    - Wireless light load performance when controlling Lutron loads via Crestron Home keypad programming and Scenes:
        - There is a small delay (about 0.8 seconds) between each light load that is controlled.
        - Controlling five wireless lights will take about 4.5 seconds.
        - Controlling 27 wireless lights will take about 17 seconds.
    - Wired and wireless shade load performance when controlling Lutron loads via Crestron Home keypad programming and Scenes:
        - There is a small delay between each shade load that is controlled.
        - When controlling 20 shades, there will be a 1- to 3-second lag between when the first shade starts moving and the last shade starts moving.
- To emulate a Lutron button and a function within Crestron Home (for example, a Crestron Home scene), create a sequence that recalls the Lutron button and the Crestron Home function. For details, refer to Sequence on page 423.
- Lutron loads can be included in a Quick Action when Scene or Sequence is selected from the Mode drop-down menu.
    - To control the Lutron load when Scene is selected from the drop-down menu, create a scene that includes the Lutron load and then select the scene when configuring the Quick Action. For details, refer to Create Scenes on page 395 and Scene on page 419.
    - To control a Lutron load when Sequence is selected from the drop-down menu, add the Lutron load to the sequence and then configure it. For details, refer to Sequence on page 423.
- Lutron shades will be excluded from Crestron Home shade groups. Lutron shade groups should be setup in the Lutron Designer software. Crestron Home will create shade loads for Lutron shade groups, and ungrouped shades.
- Diagnostic and logging information is available for the Lutron loads. For details, refer to Diagnostics on page 595.
    - The Devices tab in the Diagnostics menu will include all Lutron loads in the same manner as Crestron loads.
    - The Lutron system does not report the online status of individual Lutron loads. The online and offline indicators reflect the state of the Lutron gateway, not the individual Lutron loads.
- Unlike Crestron loads, the feedback received from Lutron loads will behave as follows:
    - When a scene is recalled, Crestron Home receives and reports the feedback immediately. Keypads will not flash their LEDs or display a bargraph indicating that they loads are changing.
    - For ramping operations (raise or lower buttons), the feedback will not update until the raise or lower operations is complete.

Build System

Use the **Build System** screen to create shade groups and to configure the source routes in the Crestron Home system.

To view the **Build System** screen, select **Build System** on the **Setup** screen.



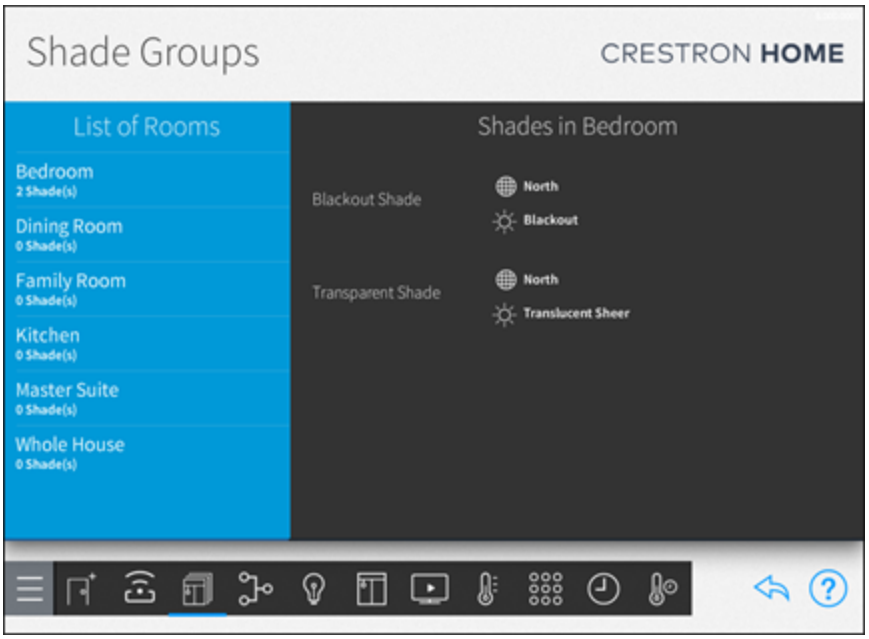
This section provides the following information:

- Shade Groups
- Source Routes

Shade Groups

Use the **Shade Groups** screen to group multiple shade motors together. When shade motors are grouped, all shade motors in the group are controlled as one.

To view the **Shade Groups** screen, select **Build System > Setup Shade Groups** on the **Setup** screen or **Setup Shade Groups** on the setup menu.



Naming Shades

To easily identify all shades in the room, provide descriptive names for each shade. Shades in a shade group cannot be controlled individually and may be difficult to identify.

The descriptive name will help identify battery-operated shades that have low battery and require battery replacement.

Assign Shade Groups

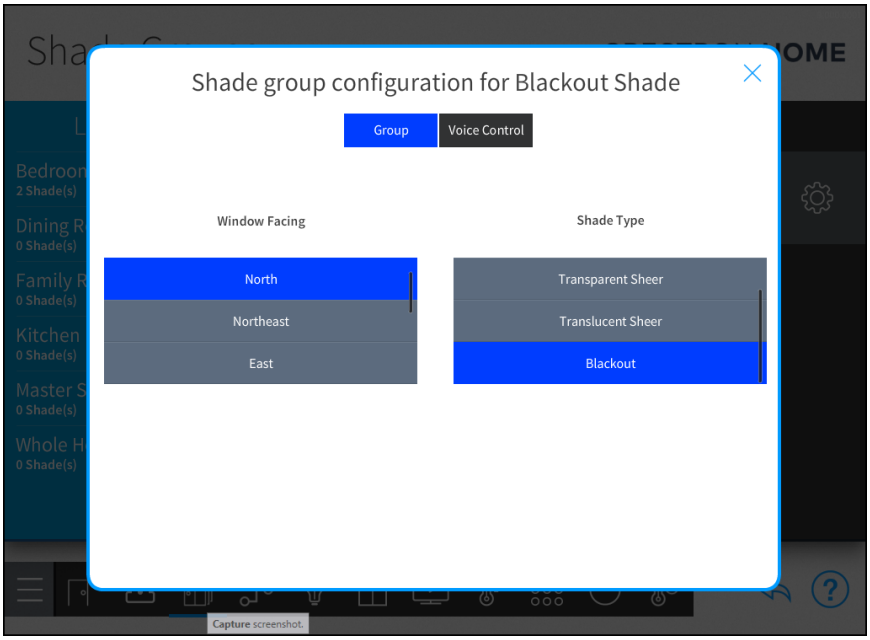
Shade motors with matching **Window Facing** and **Shade Type** settings are included in a shade group.

> **NOTE:**Shade groups do not span across multiple rooms. To control shade groups in different rooms at the same time, use shade scenes, Quick Actions, and events.

Group shade motors by **Window Facing** direction only, **Shade Type** only, or both **Window Facing** and **Shade Type**. For example, all shades that are assigned **Window Facing: North** and **Shade Type: None** are added to the **North** shade group and all shades assigned to **Window Facing: South** and **Shade Type: Blackout** are added to the **South Blackout** group.

To assign a shade to a shade group:

1. In the **List of Rooms** menu, select a room. The shade motors in the room are displayed with their name and shade group information.
2. Select a shade motor from the **Shades in [Room]** menu and then select **Settings**.
3. Select the **Group** tab.
4. Select the Window Facing and Shade Type setting for the shade. Shades that are assigned **Window Facing: None** and **Shade Type: None** will not be added to a shade group.



Crestron Home Configurator Shades and Shade Groups

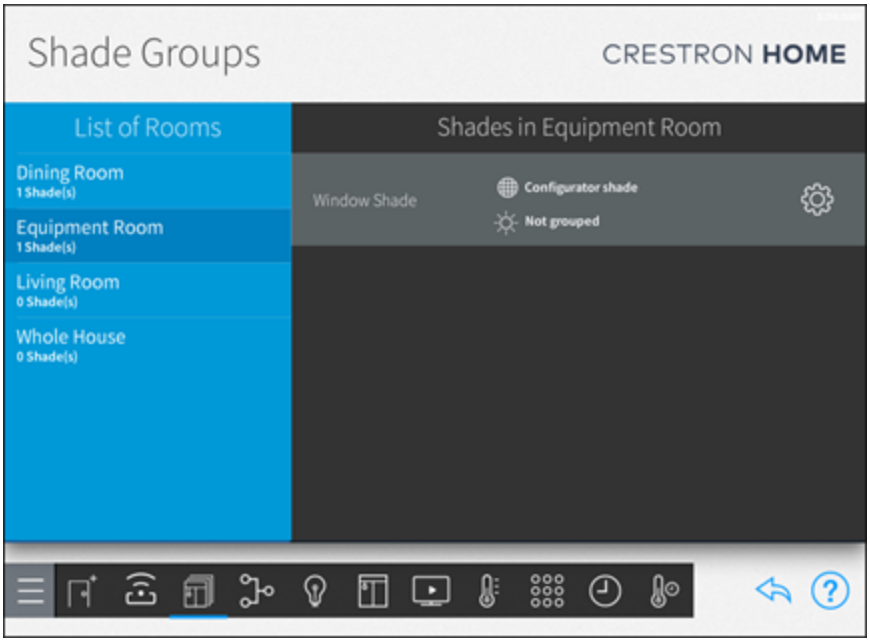
Shades and shade groups imported using a Crestron Home Configurator deploy code can not be edited using the Crestron Home Setup app. Shade groups that were assigned using the Crestron Home Configurator show Configurator Shade and the group name or status in the Window Facing and Shade Type fields.

> **NOTE:** If the room contains shades added through the Crestron Home Setup app and the Crestron Home Configurator, the shade groups operate independently even if they share matching shade group settings.

Crestron Home Configurator Shade in a Shade Group

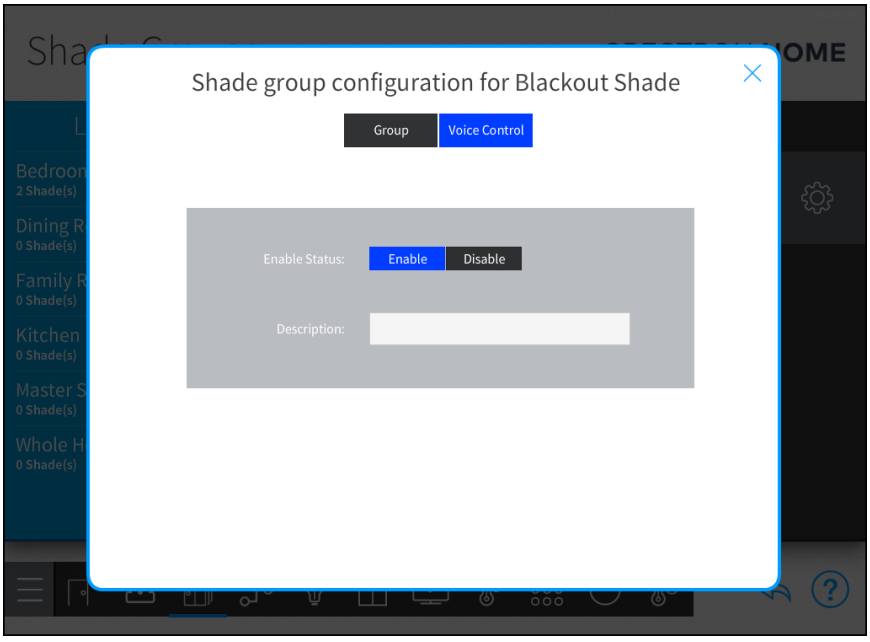


Crestron Home Configurator Shade Not Grouped



Voice Control

Tap the **Voice Control** tab to control the shade group with voice control.



NOTE: To use voice control, voice control services must be turned on and configured. For details, refer to Voice Control Settings on page 607.

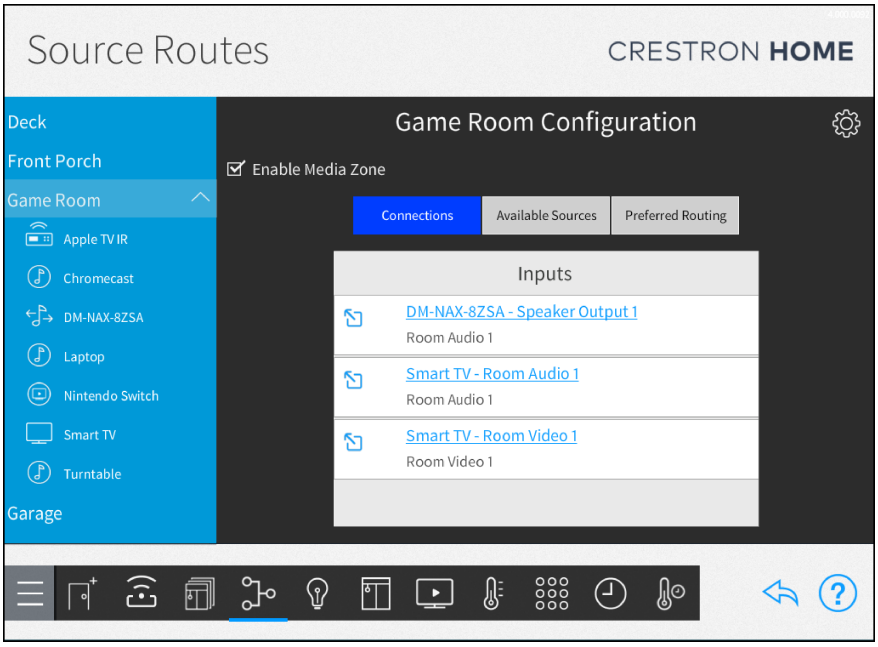
- **Enable Status:** Select **Enable** or **Disable** to turn voice control services on or off.
- **Description:** Enter a descriptive name. The name is used by the voice control services.

Source Routes

Use the **Source Routes** screen to configure audio and video source routing behavior for the Crestron Home system.

Media sources and content items may be routed to the appropriate endpoints in one or more rooms across the system. Rooms may also be defined as media zones so that the room's media sources may be controlled from the user control interface.

To view the **Source Routes** screen, select **Build System > Source Routes** on the **Setup** screen or **Source Routes** on the setup menu.



NOTES:

- The button to the left of an input channel name navigates to the input device's source routing selections.
- The button to the right of an output channel name navigates to the output device's source routing selections.

This section provides the following information:

- Enable or Disable a Media Zone
- Media Zone Settings
- Configure Source Routes
- Configure the Available Sources
- Reorder Sources
- Preferred Routing

- Audio Return to DM NVX Receiver
- Line Out Connections

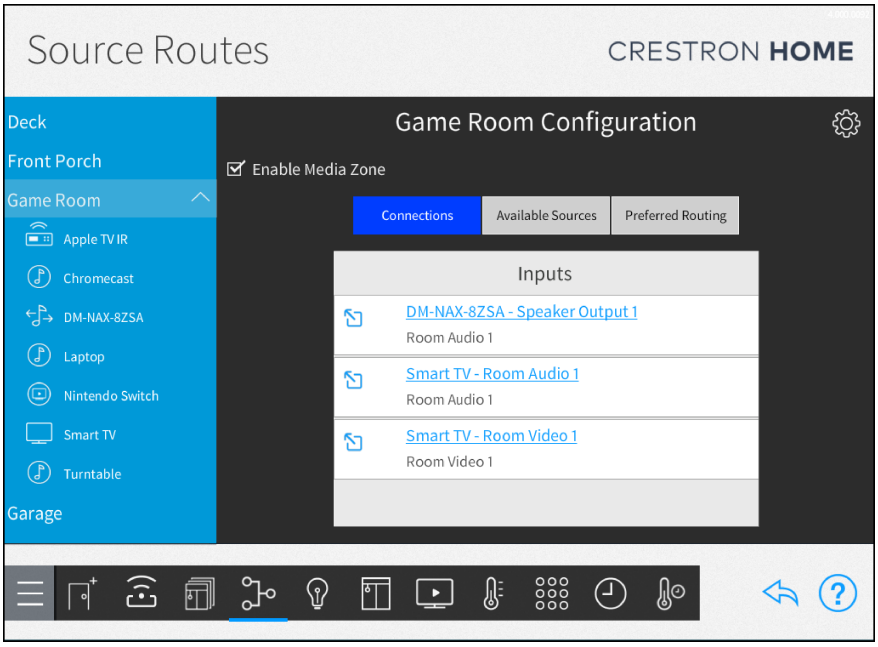
Enable or Disable a Media Zone

Enable the media zone feature for a room to configure source routing. When the media zone feature is enabled:

- Configure actions and events for the media zone. For details, refer to Media Zone Events on page 528.
- Control the room with a TSR-310 handheld remote. For details, refer to User Interface for TSR-310 Touch Screen Remotes on page 1051.

To enable or disable the media zone feature for a room:

1. Select a room from the left screen menu.
2. Select the **Enable Media Zone** checkbox to enable the media zone feature or clear the **Enable Media Zone** checkbox to enable the media zone feature.

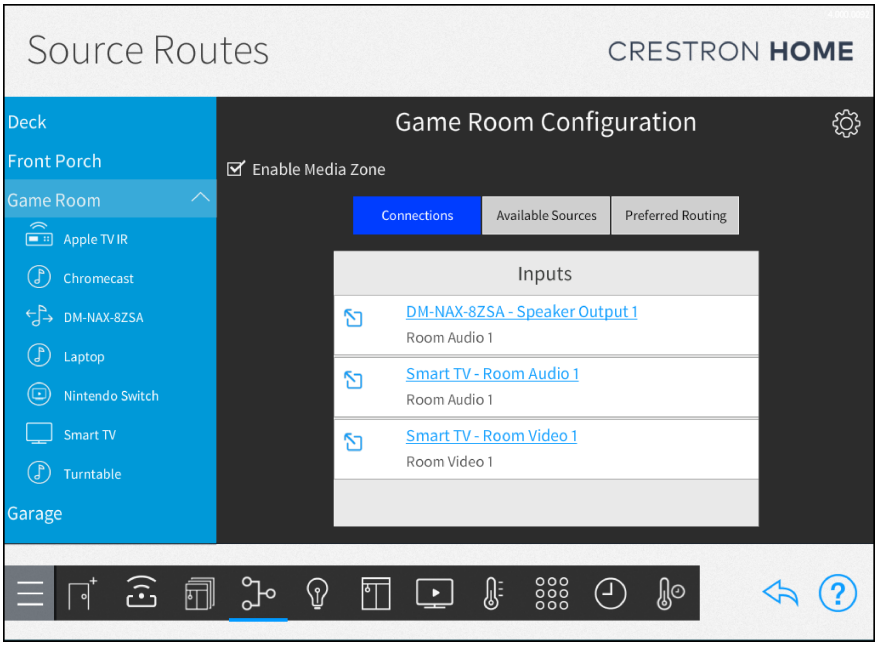


Media Zone Settings

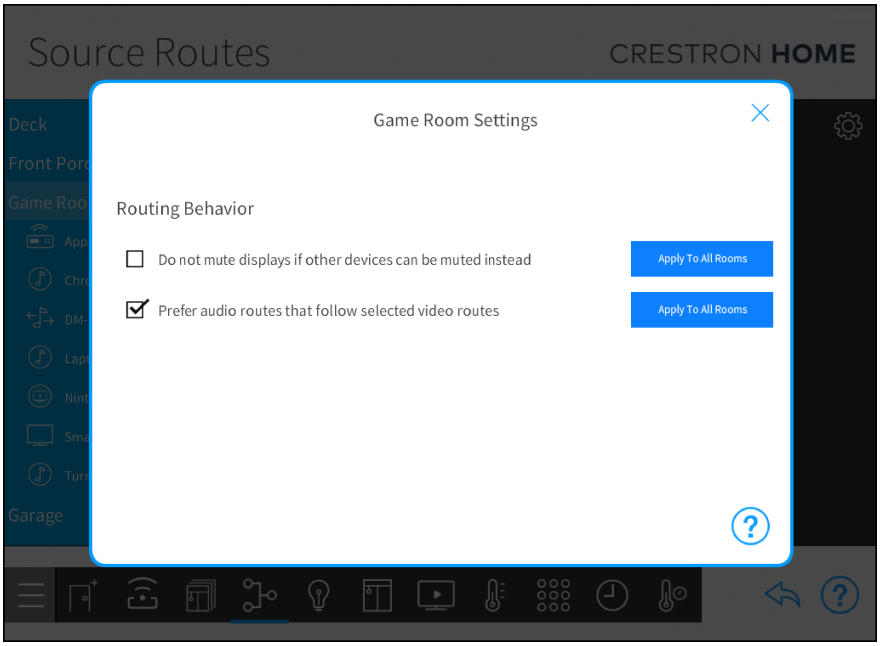
Use the Media Zone Settings to configure the routing behavior for the room audio and video. The Media Zone Settings are applied at the room level.

To access the Media Zone Settings for a room:

1. Select a room from the left screen menu.
2. Select **Media Zone Settings** next to the room name.



3. The Media Zone Settings screen is displayed.



Mute Control

Use the **Do not mute displays** option to stop the audio to a display using a device that is located before the display. This allows the audio associated with the display to be muted without displaying the mute icon on the display. Stopping the audio and hiding the mute icon may be desired for displays that always show the mute icon on their screen. If no devices are connected to the diplay that can stop the audio, the mute command is sent to the display and the mute icon may still be shown.

To mute the audio using a device other than the display, select **Do not mute displays**.

To use the same setting for all rooms in the system, select **Apply To All Rooms**.

Audio Route Control

Use the **Prefer audio routes** option to control how audio routes through a system. When **Prefer audio routes** is selected, the audio route will follow the video route for as long as possible. When deselected, the audio route follows the shortest path.

To use the same setting for all rooms in the system, select **Apply To All Rooms**.

Configure Source Routes

NOTES: Observe the following points when configuring source routes:

- If two media sources are routed to a DM NVX® device (via the Input 1 and Input 2 ports), they may not be used at the same time. For example, if switching from Input 1 to Input 2 in a media zone, all media zones where Input 1 is selected switch to Input 2.
- Route CEC devices to the HDMI® input that matches the Control Port that was assigned to the device.
- If the audio signal for a video source is routed to a SWAMP audio expander endpoint, the video will display but no audio will be heard. This behavior occurs because the SWAMP device is warming up and is corrected within a few seconds.

To configure source routing behavior for a media device:

1. Select a room from the left screen menu and then select a media device from the provided options.

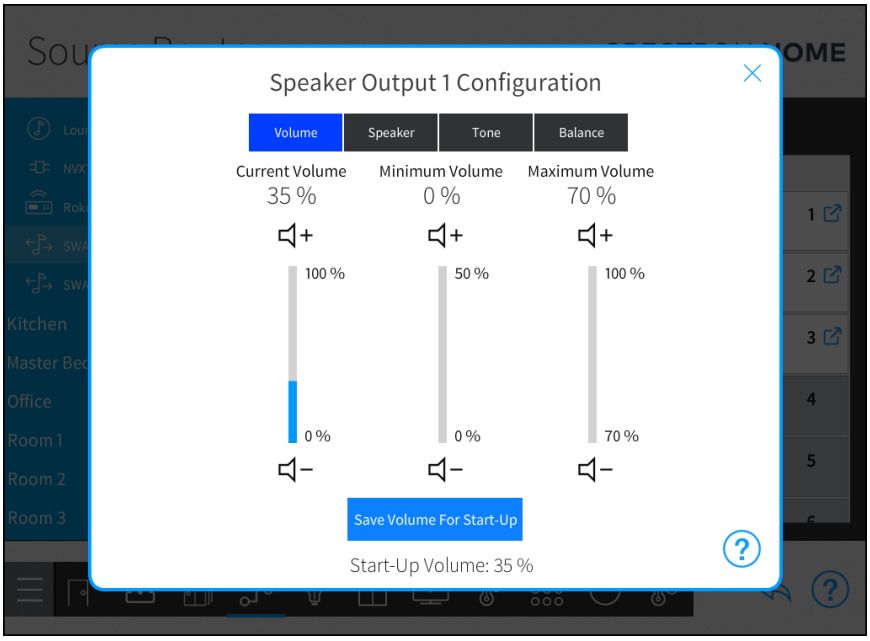


2. Assign an input source:
   a. Tap an input channel from the **Inputs** list. The available sources are displayed.
   b. Select the source connected to the input.

3. Assign an output source:
    a. Tap an output channel from the **Outputs** list. The available output destinations are displayed.
    b. Select the destination for the selected channel.

> **NOTE:** For devices with one audio or video output (such as the HD-MD4X1-4KZ or DM-NVX-363):
>
> - The default destination for the single audio or video output is the room where the device is added. For example, Living Room is assigned to the audio output for a DM-NVX-363 that is added to a room named Living Room.
> - For configurations that do not use the audio or video output, change the audio or video output to **None**.

4. Configure the audio input and output channels:
    a. Tap ⚙ **Settings** next to an audio input or output channel.
    b. Configure the available audio settings.



Audio Breakaway

Audio Breakaway is enabled when a room can play an audio source that is different than its video source. For example, watching a sporting event on the TV but listening to music instead of the sporting event.

NOTES:

- DM-NVX-D30, DM-NVX-E30, DM-NVX-360(C), and DM-NVX-363(C) devices do not support audio breakaway over the network stream.
- Audio breakaway is supported for DM-NVX-360(C) and DM-NVX-363(C) devices if the DM-NVX receiver is:
    - Receiving an audio stream over the network from a transmitter and a video source is connected to the receiver's HDMI input.
    - Receiving an video stream over the network from a transmitter and an audio source is connected to the receiver's HDMI input.

Configure Bridging and Bussing

Outputs for certain Crestron amplifiers and expanders can be bridged or bussed.

> **NOTE:** Crestron Home does not support high-impedance output or 2.1 audio output.

- **Bridging Outputs:** To bridge outputs, assign two output channels capable of bridging to the same output destination. If the channels can be bridged, a dialog is displayed asking if the channels should be bridged or bussed.
- **Bussing Outputs:** To buss outputs, assign output channels to the same output destination. A dialog is displayed asking if the channels should be bridged or bussed.

Bridged (Output 1 and 2) and Bussed (Output 3 and 4) Speaker Outputs



Configure CEC Devices

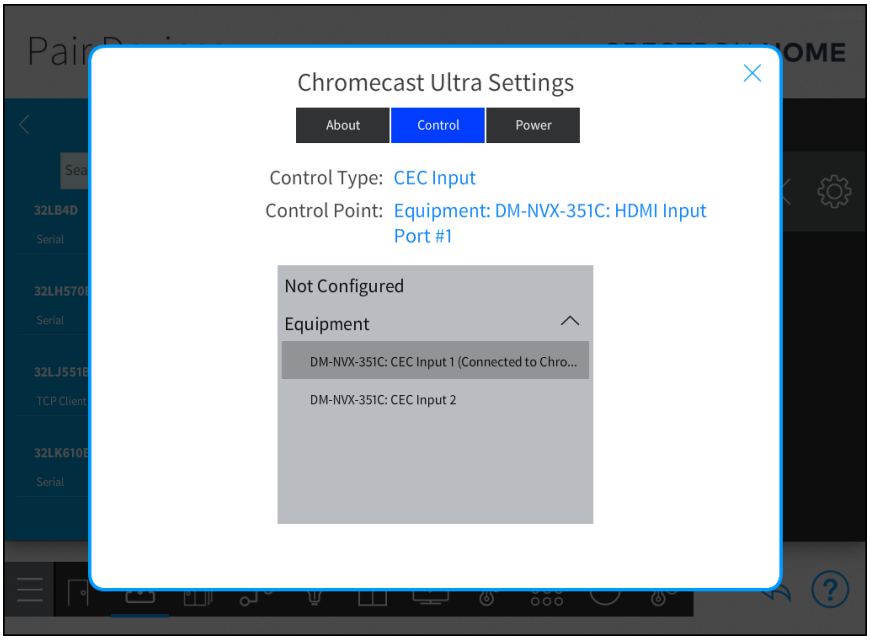
To configure source routes for CEC devices, perform the following steps:

1. Connect the CEC device to a device that provide CEC control:
   - DM Switchers (for example, the DM-MD8X8 or DM-MD16X16)
   - DM-NVX Devices (for example, the DM-NVX-351 and DM-NVX-360)
   - AV Switchers (for example, the HD-MD4x1-4KZ-E and HD-MD8X4-4KZ-E)

   > **NOTE:** The Crestron Driver based AV Switchers (HD-MD4X1-4K-E, HD-MD4X2-4K-E, and HD-MD6X2-4K-E) do not provide CEC control.

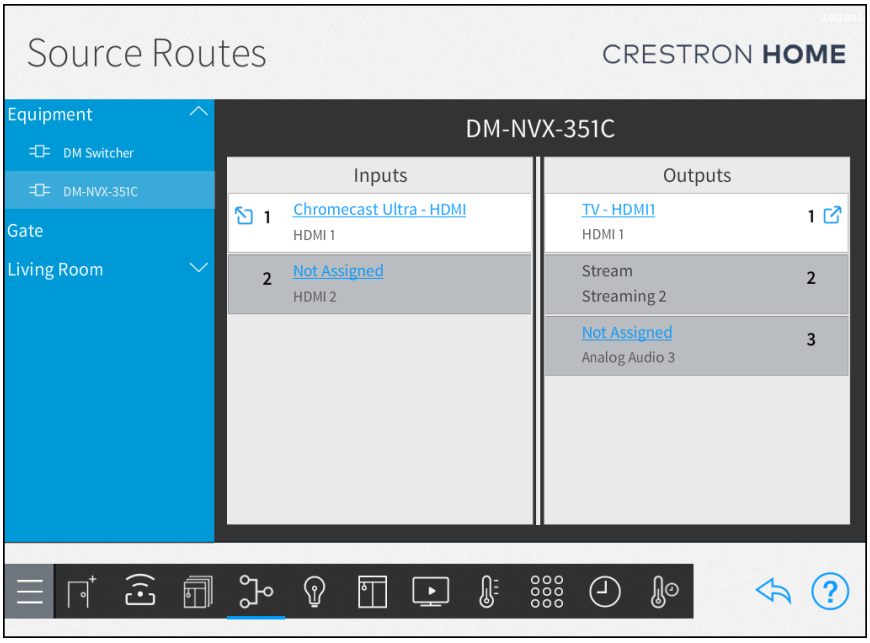
2. Select the Control Point on the device settings screen. The CEC device must be connected to the control point that is selected.

   CEC Device Assigned to CEC Input 1 on a DM-NVX-351C



3. Assign the CEC device to the HDMI® input that matches the Control Point assigned to the CEC device

CEC Device Connected to Input 1 on a DM-NVX-351C



Configure DM NAX™ Audio Routing

The DM NAX™ audio-over-IP devices have, depending on the model, source inputs for digital and analog audio and AES67, and outputs for speakers, line-level audio, and AES67. The AES67 input can receive audio from any DM NAX AES67 stream on the network, while the output transmits audio for all active sources to the network.

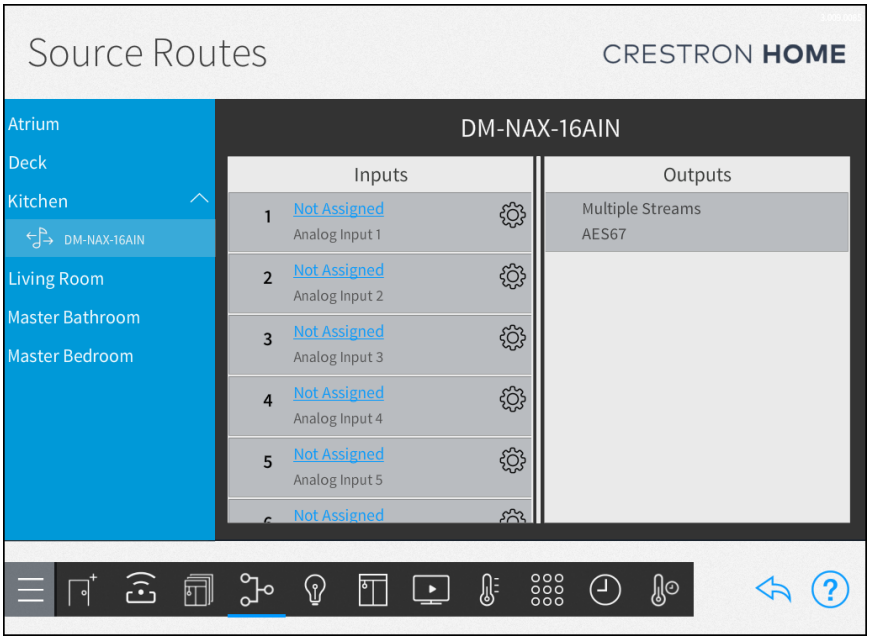
Assign Input and Outputs

1. To assign Inputs:
    a. Select an input to open the list of available audio inputs.
    b. Select the audio input device that is physically connected to the Input.
2. To assign Outputs:
    a. Select an output to open the list of available rooms and devices.
    b. Select the room or device that is physically connected to the output.

Available Inputs and Outputs for DM-NAX-8ZSA



Available Inputs and Outputs for DM-NAX-16AIN

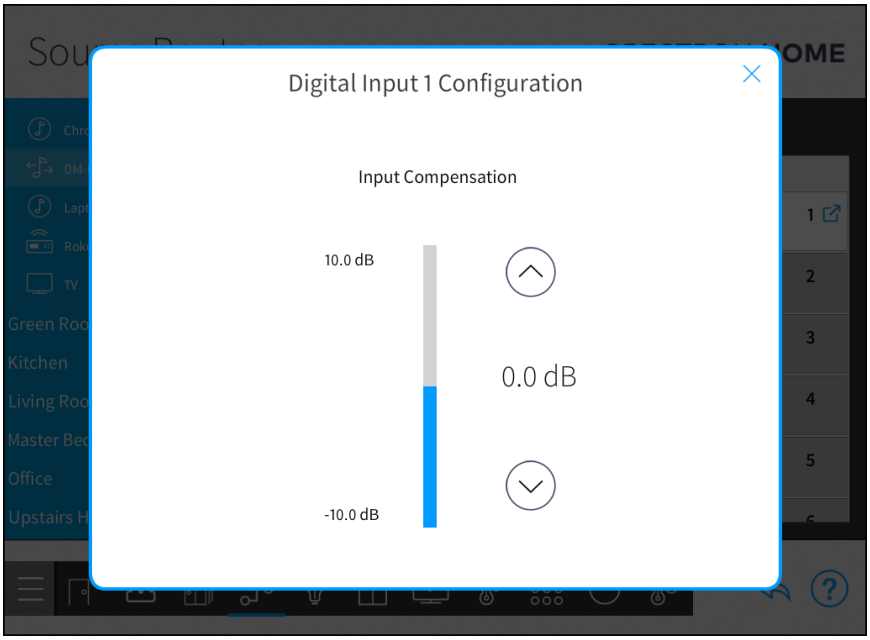


Input and Output Settings

Configure the audio settings for the input and outputs.

To configure the input settings:

1. Tap ⚙ **Settings** next to an audio input.
2. Use the up and down arrows to adjust the **Input Compensation**.

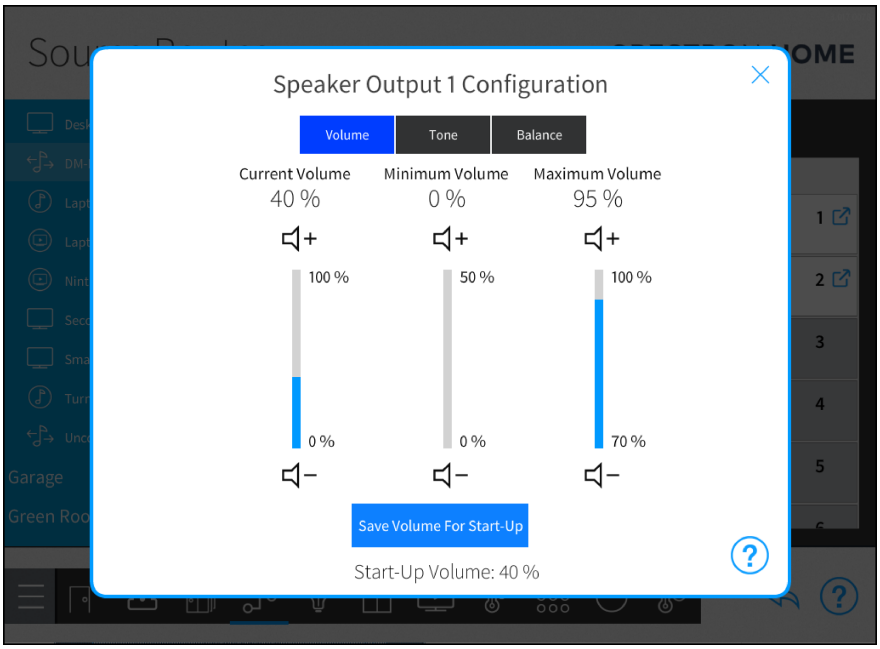


To configure the speaker output settings:

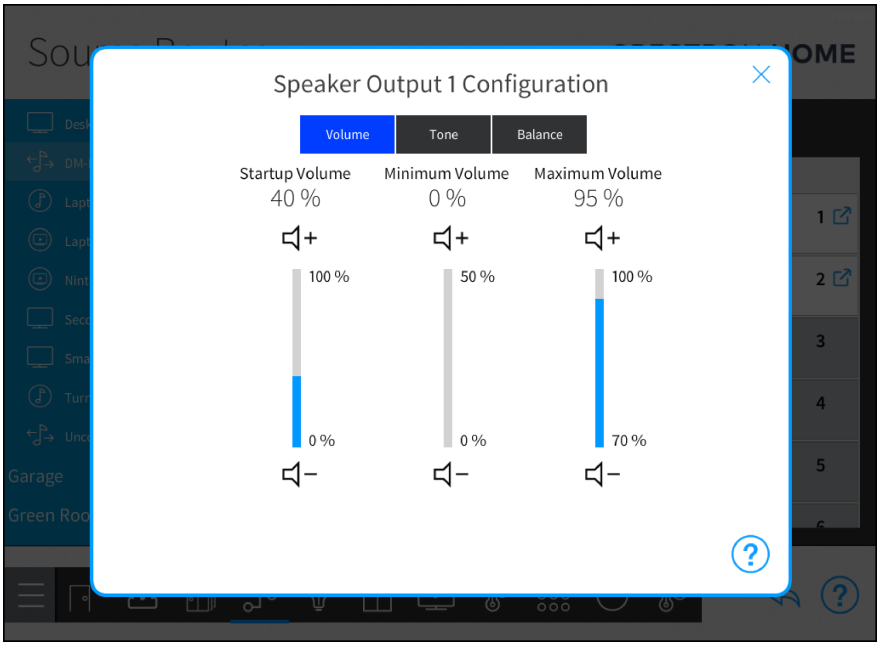
> **NOTE:** For Crestron Home version 3.016.0109 and earlier, a source must be routed to the speaker in order to configure the settings. Version 3.017.0098 and later allows speaker configuration when the zone is not powered on.

1. Tap ⚙ **Settings** next to a speaker output.
2. To set the volume levels, select **Volume**.

Speaker Output Configuration - Zone On



Speaker Output Configuration - Zone On



To adjust the volume levels, press + **Raise** or − **Lower**.

a. **Current Volume:** The current volume.

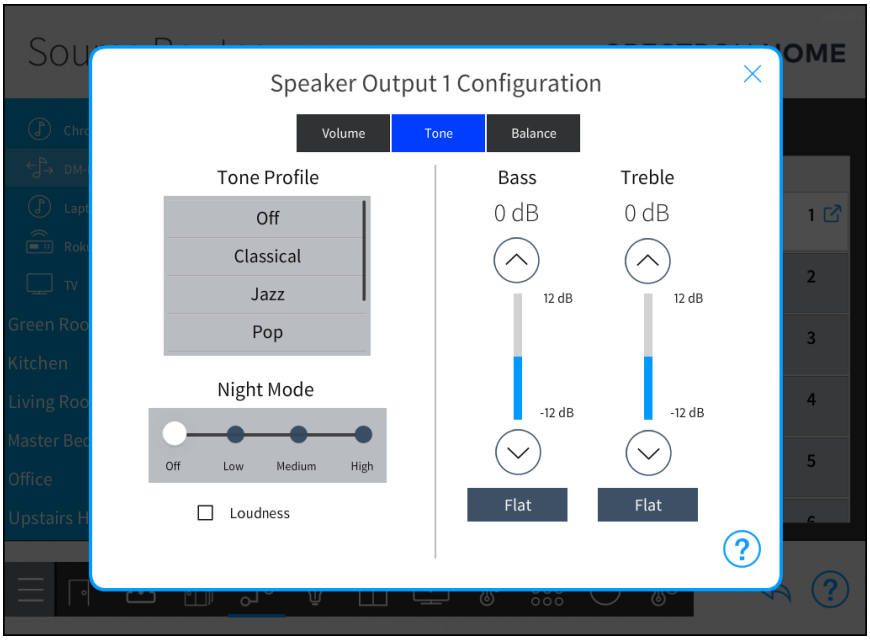
b. **Startup Volume:** Displays the volume used when the speakers are turned on. To save the current volume level as the start up volume, select **Set Volume For Start-Up**.

c. **Minimum Volume:** The minimum volume that allows audio to be heard.

d. **Maximum Volume:** The maximum volume of the speakers. Set the maximum volume to protect the speakers and the listener.

e. **Offset Volume:** (For bussed outputs only.) The volume added to the overall zone volume.

3. To set the sound profile, select **Tone**.



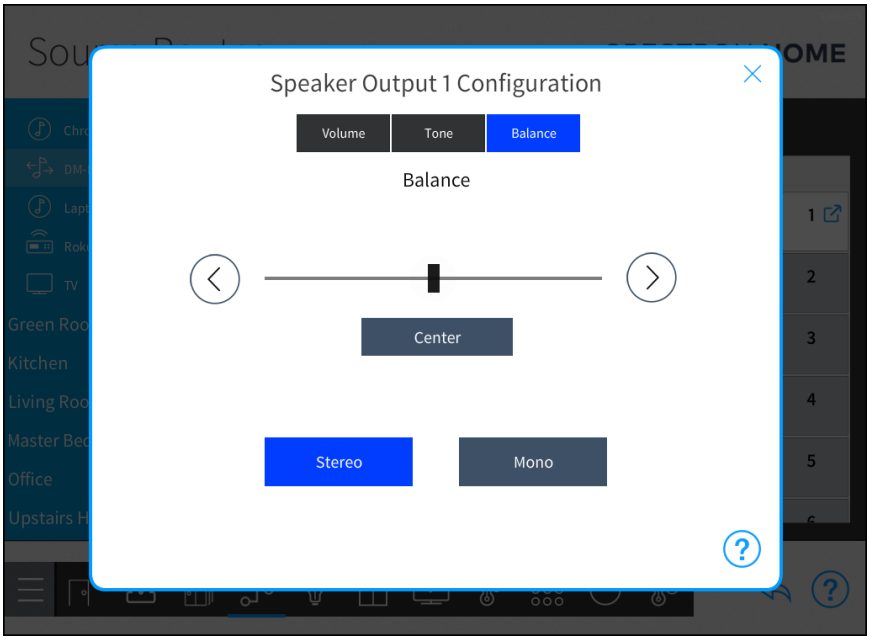
   a. **Tone Profile:** Select an audio profile for the speaker output.

   b. **Night Mode:** Lowers the audio levels for night listening so that the bass and treble are not too loud while allowing speech to be heard. To select the level setting, select **Low**, **Medium**, or **High**.

   c. **Loudness:** Select to increase the bass and treble levels.

   d. **Bass and Treble:** Select ⌃ **Raise** and ⌄ **Lower** to adjust the Bass and Treble levels. To set the level to 0, select **Flat**.

4. To set the speaker balance, select **Balance**.



   a. Use the left and right arrows to adjust the left-to-right balance of the speaker. To center the balance, press **Center**.

   b. Select **Stereo** or **Mono** to match the output configuration. When **Mono** is selected, the balance settings are not applied.

DGE-1000 Configuration

The DGE-1000 **Default Room** must be set to the same room as the video endpoint for the device in **Source Routes**.

Apple AirPlay Streaming Routes

To use Apple® AirPlay® to stream audio, use a DM-NAX-8ZSA 8-zone streaming amplifier. To turn on and configure airplay, use the DM NAX™ device's web user interface.

For information about the end-user experience, refer to Apple AirPlay Control on page 911.

When configuring Apple AirPlay streaming, consider the following:

- AirPlay turns on automatically when source routes connections are made.
- AirPlay is enabled for outputs that lead to a single room.
- To turn off AirPlay in a room, disable AirPlay using the DM NAX™ device's web user interface.
- AirPlay turns off automatically for a zone when a source routes connection is broken
- The casting name on the mobile device matches the name of the room in the Crestron Home system.

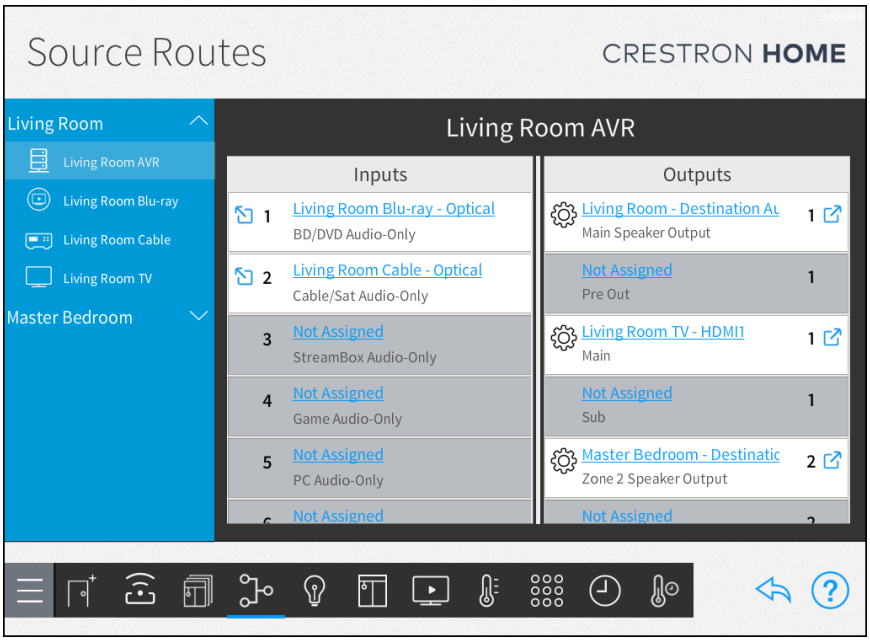
Configure Multizone AVRs

Multizone AVRs can be configured to use the additional zone outputs on the AVR and route audio to other rooms in the system. For audio sources, this allows audio to be output to the main room with the option to output audio to an additional room. For video sources, this allows audio and video to be output to the main room with the option to output audio to an additional room.

In the Crestron Home user interface, an audio tile is displayed in each room configured as an additional zone. The audio tile allows control of the main zone.

To configure an addition zone, configure the **Zone Speaker Output** to route the audio to the desired room.

In the image below, the **Living Room Blu-ray** and **Living Room Cable** media sources are routed to the **Inputs** on the **Living Room AVR**, the **Main** (video) is routed to the **Living Room TV**, the **Main Speaker Output** is routed to the **Living Room Destination Audio**, and the **Zone 2 Speaker Output** is routed to the **Master Bedroom Destination Audio**.



Mirror Displays

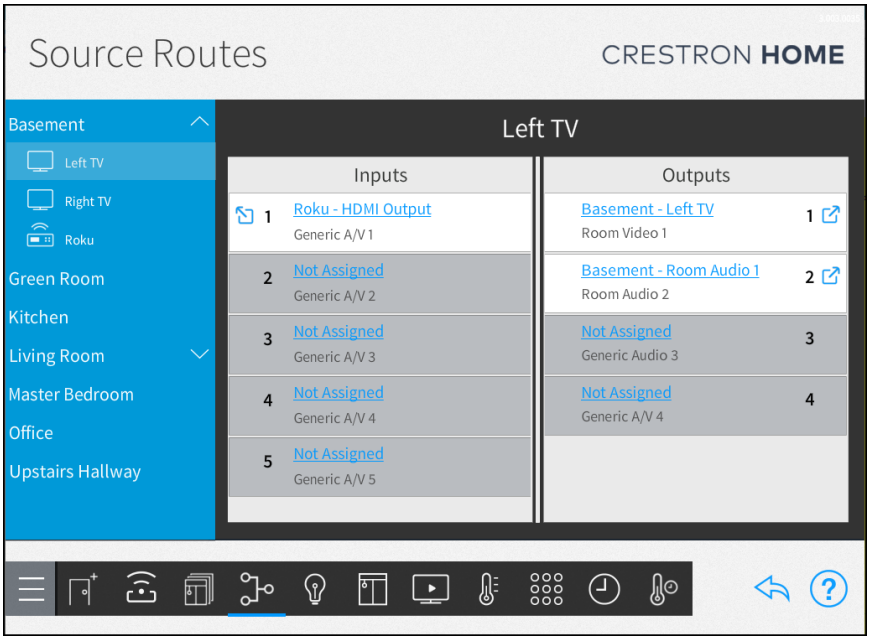
Mirror displays to view the same source on multiple displays at the same time. When a source is routed to a mirrored display, all mirrored displays show the source.

NOTES:

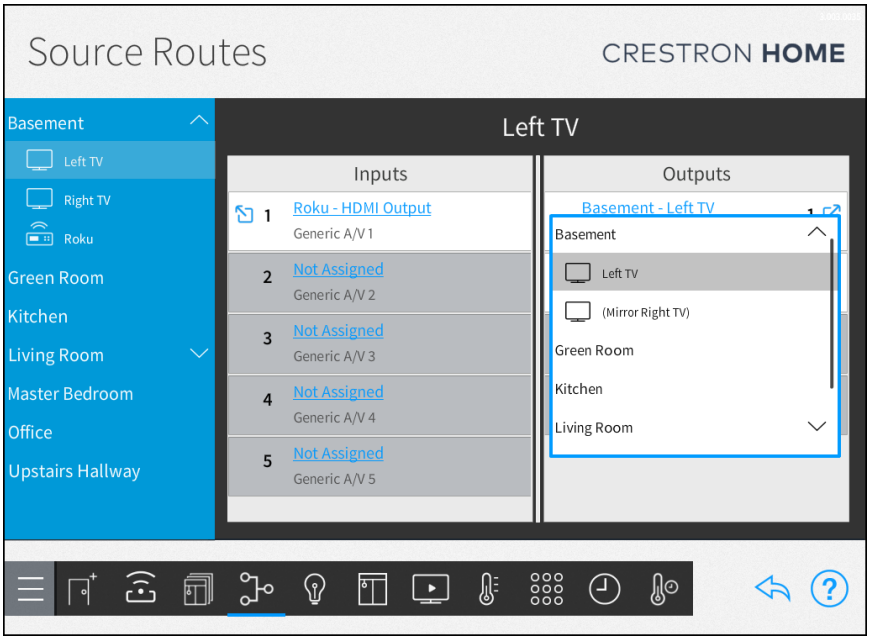
- Configure the source routes so that all displays in the mirrored display group can view the source.
- If a display in a mirrored display group can't display the active source, the display is turned off.
- All mirrored displays are shown in the Crestron Home user interface.
- Hide one or more mirrored displays to prevent duplicate controls from showing in the Crestron Home user interface. For details, refer to Display Settings on page 1204.

To mirror displays, follow these steps:

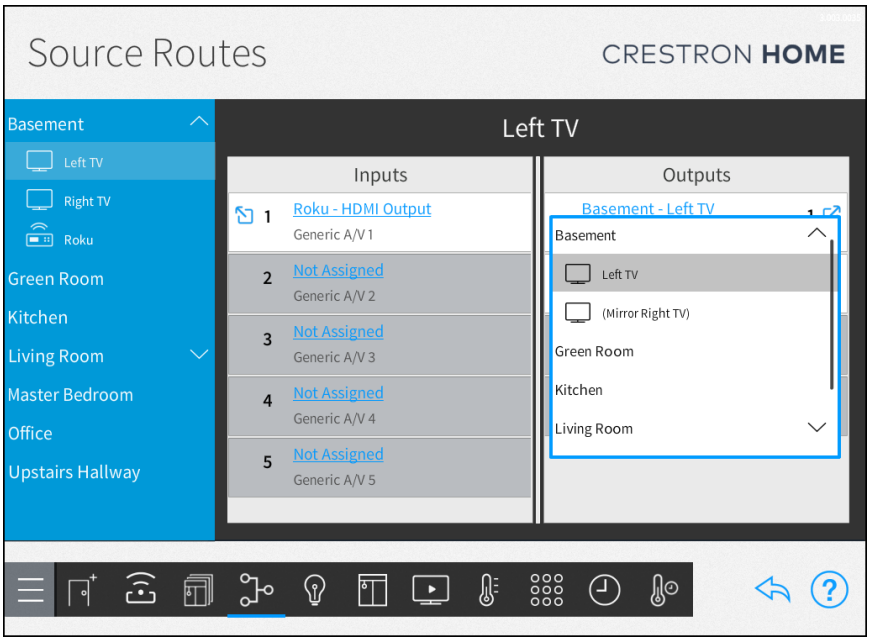
1. Select a display from the device menu.



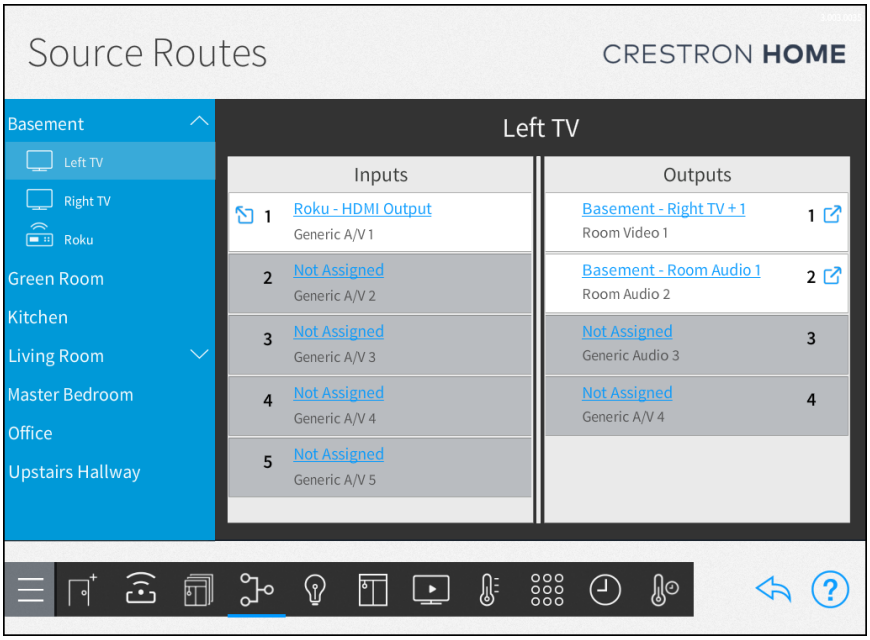
2. In the **Outputs** menu, select **Room Video**. The menu lists the available rooms and displays; the current display is selected.



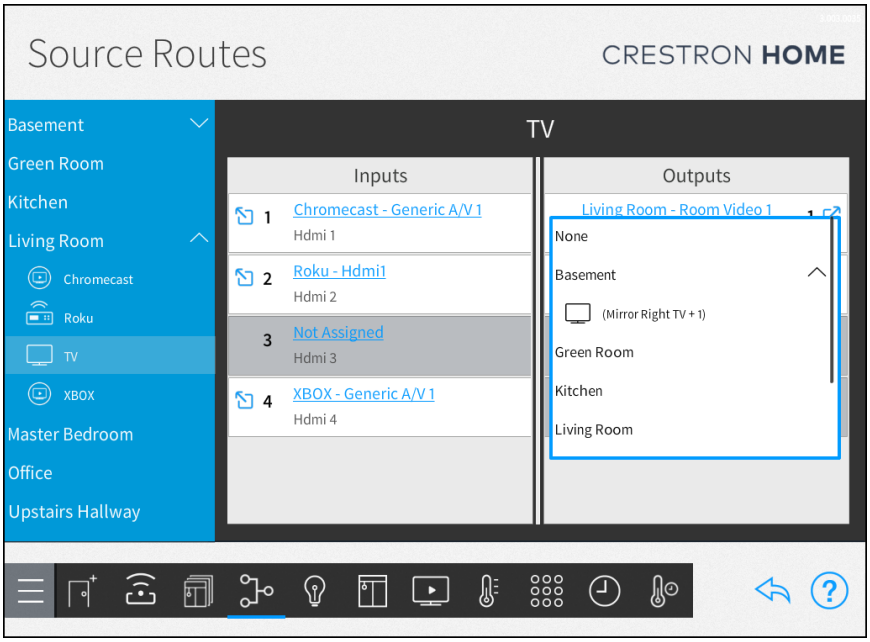
3. Select the display that you would like to mirror. Displays that can be mirrored are named (Mirror [Display Name]).



4. After a selection is made, the name of the connection updates to show the name of the mirrored display and the number of displays that are mirroring the display. For example, . [Current Display Name] + [Number of mirrored displays].



5. To add an additional display to the mirror group, perform the steps above using a different display and then select the mirror group. The name of the mirror group updates to show the number of additional displays in the mirror group.



CNAMPX Series Amplifier Power Control

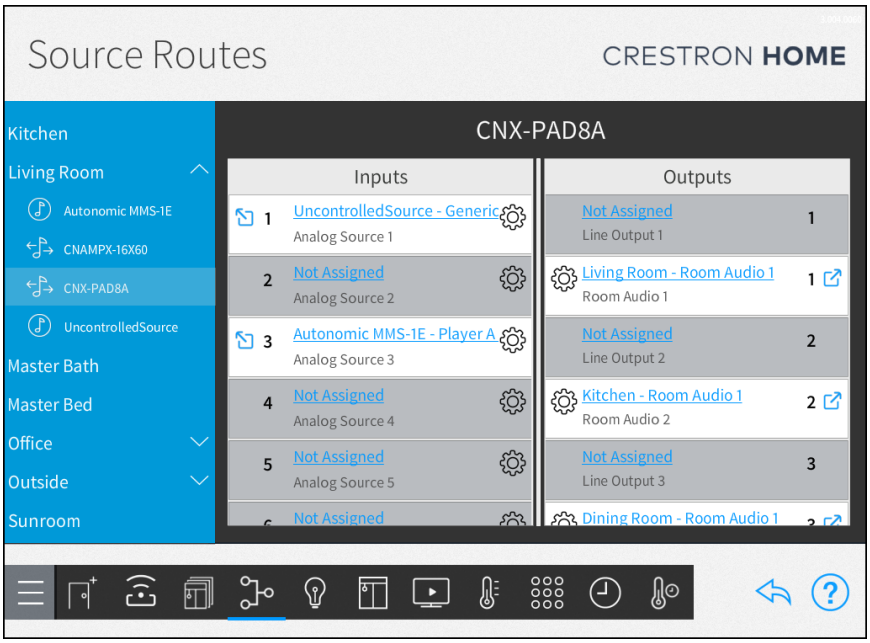
To make sure that CNAMPX series amplifiers' room outputs are turned on and off during audio grouping and after a power outage, turn on and off the outputs using Sequence Quick Actions and Media Zone Events.

Using the following configuration, when a source is routed to the CNX-PAD8A, Media Zone Events and Sequence Quick Actions turn on and off the outputs on the CNAMPX series amplifier. For an overview of this process, refer to the steps below:

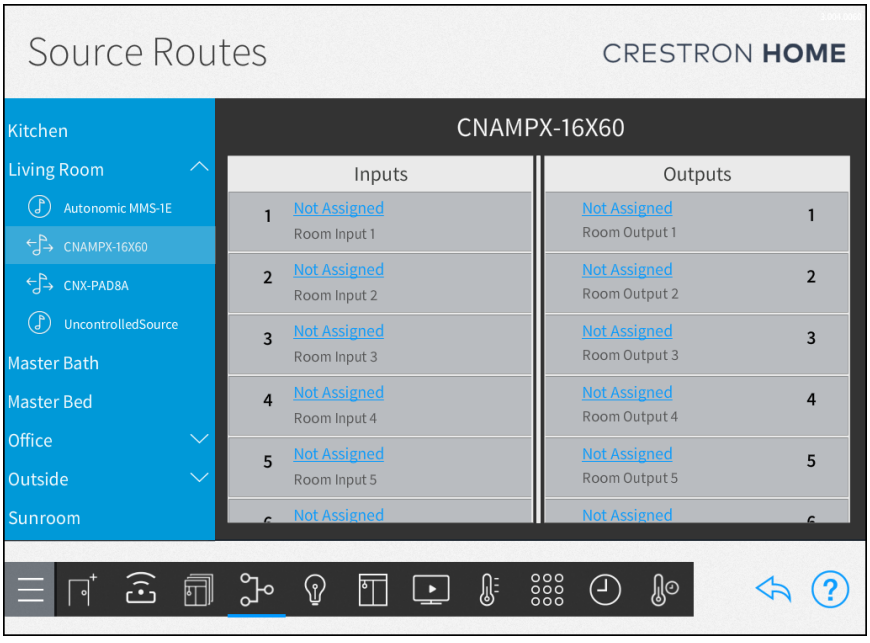
- Make all of the physical connections in system.
    - Connect the source that feeds the CNAMPX series amplifier. For example, connect the CNX-PAD8A's Line Outputs to the CNAMPX series amplifier's Room Inputs or connect multiple Sonos devices to the CNAMPX series amplifier's Room Inputs.
    - Connect the CNAMPX series amplifier's speaker outputs to the speakers in each room or audio zone.
- Create the source routes.
    - Route the audio to the Output for the device that sends audio the CNAMPX series amplifier. For example, select a room for Room Audio 1 in the Output on the CNX-PAD8A.
    - Do not assign inputs or outputs to the amplifier; although physical connections are made to the CNAMPX series amplifier, they are not modeled in the source route.
    - The room assignments on the device that sends audio to the CNAMPX series amplifier serve as the media zones, not the amplifier.
- Create sequence quick actions for each output on the CNAMPX series amplifier.
    - Create a sequence quick action that turns the channel on.
    - Create a sequence quick action that turns the channel off.
    - The sequence quick actions will be used to turn on and off the outputs on the amplifier when audio is routed to the zone or when audio is grouped using the Crestron Home user interface.
- Configure media zone events to turn the channel on and off when audio is routed to the channel.
    - The Media Zone On event triggers the sequence quick action to turn the channel on.
    - The Media Zone Off event triggers the sequence quick action to turn the channel off.

To create source routes that include a CNXAMPX series amplifier, follow these steps:

1. For each output that feeds the CNAMPX series amplifier, assign a room that corresponds to the amplifier for the Room Audio output.

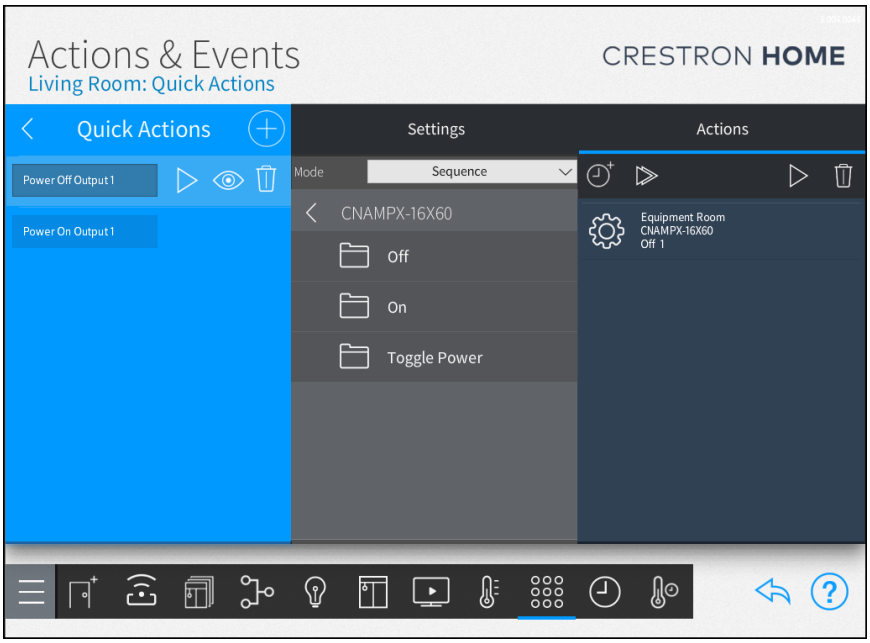


2. Do not assign source routes to the Input or Output on the CNAMPX series amplifier.

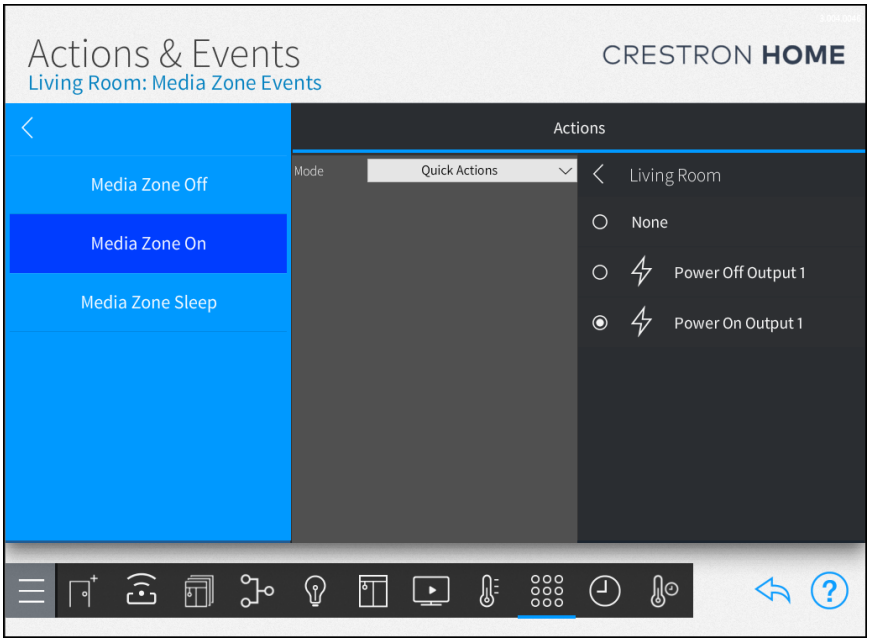


3. Create two Sequence Quick Actions for each output on the CNAMPX series amplifier; one to turn on the output and one to turn off the output.

> **NOTE:** Hide the Quick Actions to prevent them from displaying in the Crestron Home user interface.



4. Configure the Media Zone On and Off events in each room with a speaker output on the CNAMPX series amplifier. For details, refer to Media Zone Events on page 528.



   a. Go to **Step 5: Customize & Schedule > Customize Actions & Events > Select a Room > Media Zone Events** and then select **Media Zone On** or **Media Zone Off**.
   b. Select **Quick Actions** from the **Mode** drop-down menu.
   c. Go to the room and then select the power on or power off quick action.

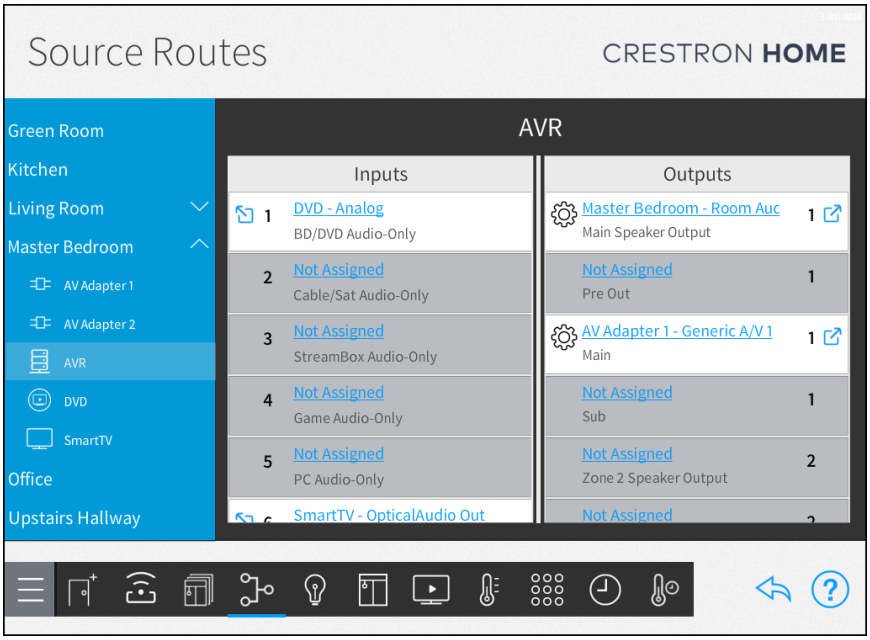
SmartTV Audio Routed to an AVR

When a Smart TV has its audio output connected to an audio input on an AVR, Crestron Home will route audio for AV sources directly connected to the AVR through the Smart TV and then back to the AVR. As a result, Crestron Home will use the Smart TV's audio input on the AVR instead of the AV source's audio input.

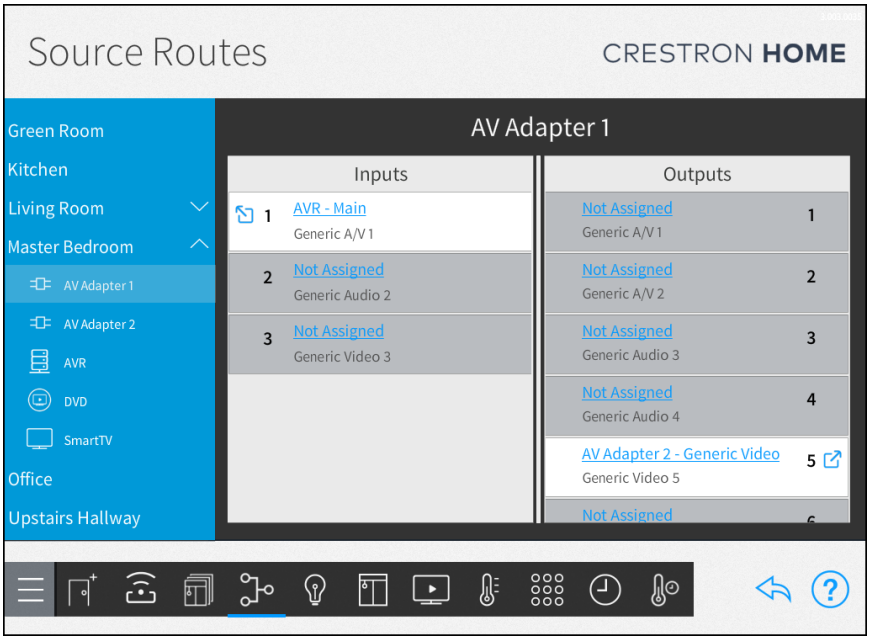
To make sure that audio from an AV source connected to an AVR does not route through a TV and back to the AVR, follow these steps:

1. Go to **Pair Devices > Other** and then add two **Universal A/V Adapter** devices to the room. Name the devices **AV Adapter 1** and **AV Adapter 2**. For details, refer to Other Devices on page 271.
2. Select the AVR and then assign **AV Adapter 1 - Generic A/V 1** to the AVR's HDMI Output.

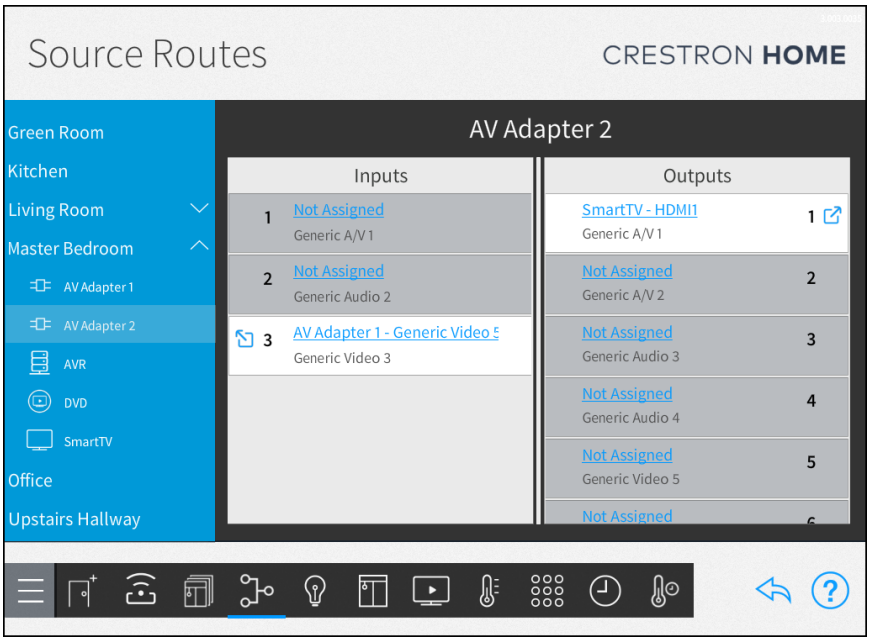
   > **NOTE:** In the image below, the AVR device is named AVR and the HDMI output for this device is labeled Main.



3. Select **AV Adapter 1** and then assign **AV Adapter 2 - Generic Video 3** to the **Generic Video 5 Output**.



4. Select **AV Adapter 2** and then assign a video input on the Smart TV to the **Generic A/V 1 Output**.



Configure the Available Sources

Use the **Available Sources** tab to assign the **Default Sources** and **Allowed Sources** for the room.

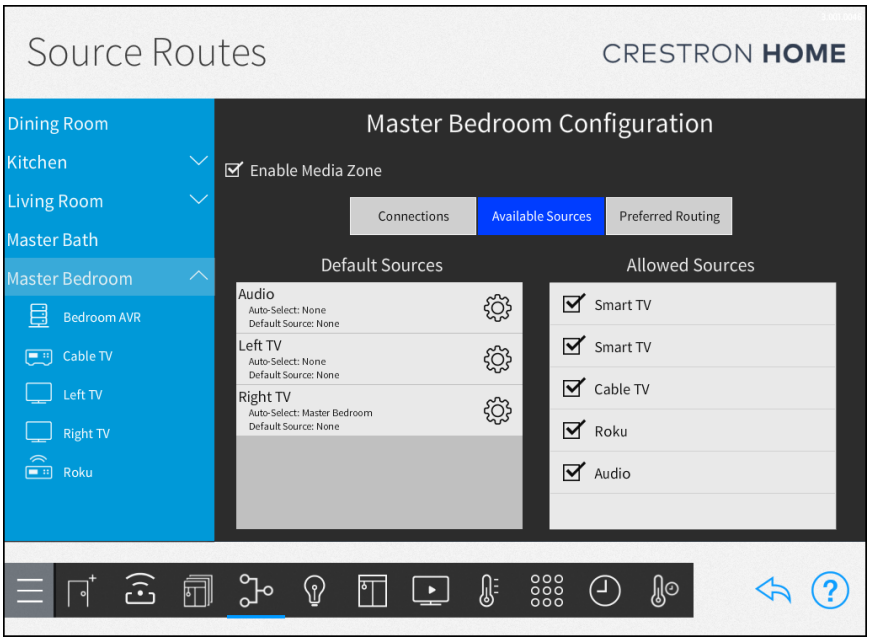
- **Default Sources:** Sets the default room on behavior. The auto-select source and default source can both be selected for the default room on behavior.
  - **Auto-Select Source:** A source that is playing in another room can be selected to play in the room currently occupied. The source will then play in both rooms.

    > **NOTES:**
    > - The **Auto-Select Source** takes precedence over the **Default Source** if a source is playing in another room when the current room is turned on.
    > - The rooms are not permanently linked. Changes to the source in the current room will not affect the source in the other room.

  - **Default Source:** The defined source that starts playing when the room is turned on. If the auto-select source is not playing media, the default source starts playing.
- **Allowed Sources:** The sources that are displayed in the Crestron Home user interface.

To configure the available sources in the room:

1. Select a room from the left screen menu and then tap the **Available Sources** tab. The **Default Sources** and **Allowed Sources** lists are displayed.



2. Tap the gear icon next to the source names in the **Default Sources** menu.

3. Select a room as the auto-select source from the **Auto-Select From** menu. The **Auto-select From Room** menu displays all rooms in the system that have devices that can be played in the current room. The default room is **None**.

   NOTES:

   - A source route broken icon () is displayed next to the selected room in the **Auto-select From Room** menu if the room selection no longer has a common source with the current room.
   - Multiple rooms can identify the same room in the **Auto-select From Room** drop down. For example, Kitchen, Dining Room, and Atrium rooms can select Living Room from the **Auto-select From Room** drop down.

4. Select the **Use audio of the source routed to this display when turning on the room** check box to make sure that the audio from the auto-select source associated with this display is routed to this room.
5. Select a device as the default source from the **Default Source** menu. The **Default Source** menu displays all media sources in the system that can be played in the current room. The default source is **None**. The default source can also be **None** or **Use last Source**.
   - **None:** No source is displayed by default. A blank screen is displayed.
   - **Use last Source:** The source that was last used is displayed.
6. Tap **Save** to save the current settings, or tap **Cancel**.
7. Select the sources that are displayed in the Crestron Home user interface device. The **Allowed Sources** menu displays all of the sources in the system that can be played in the current room. A filled check box indicates that the source will be displayed in the room.

Reorder Sources

The order of the sources in the **Allowed Sources** menu matches the order that the sources appear in the Crestron Home user interface.

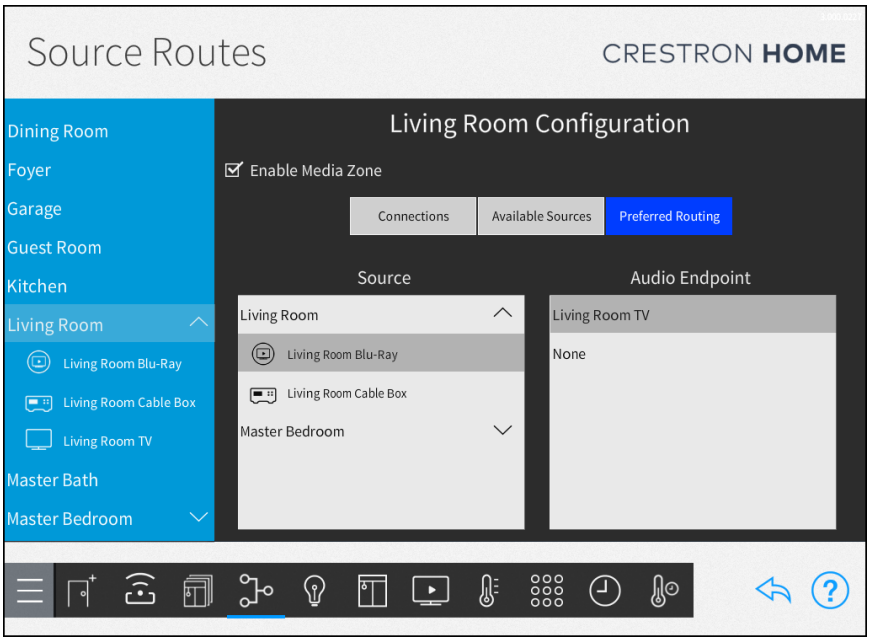
To reorder sources, tap and hold a source until it turns green and then drag it to a new location.

Preferred Routing

Set the audio endpoint for each audio source that can be routed to the room in the **Preferred Routing** tab.

To set the audio endpoint for a source, follow these steps:

1. From the left menu, select a room.
2. Tap the **Preferred Routing** tab. The **Source** menu displays the sources that can be routed to the room and the **Audio Endpoint** menu displays the audio endpoints that can play the selected source.



3. From the **Source** menu, select a source.

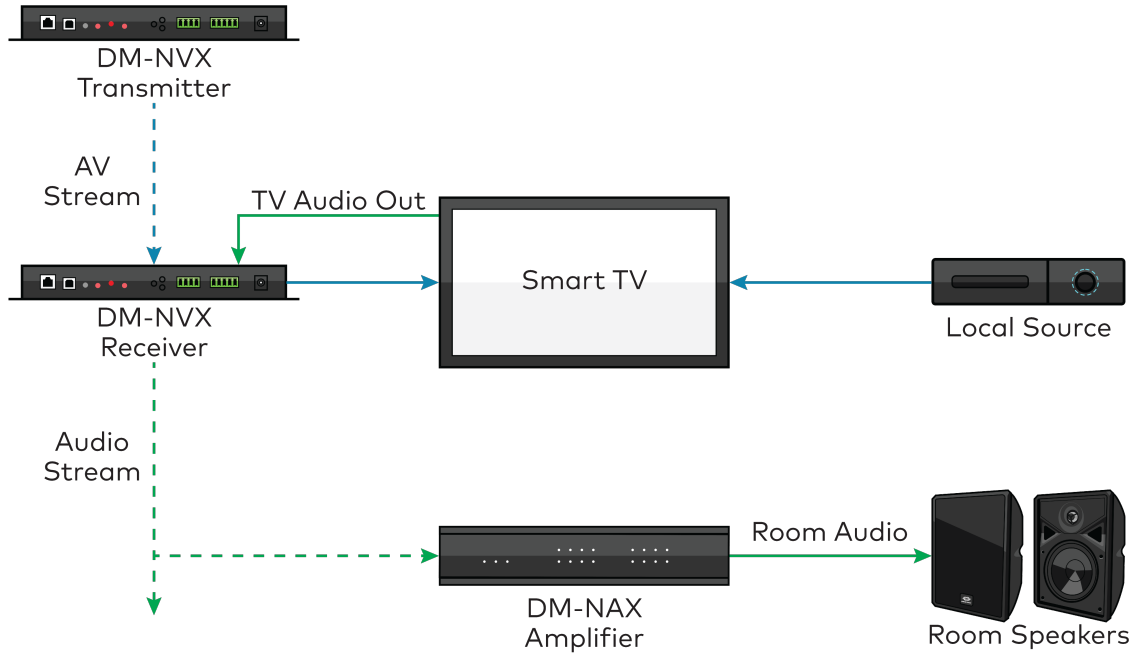
> **NOTE:** The Apple AirPlay source is displayed only when enabled and routed to a single room. For additional details, refer to Apple AirPlay Streaming Routes on page 378.

4. From the **Audio Endpoint** menu, select an audio endpoint to play the source.

Audio Return to DM NVX Receiver

Use a DM NVX® receiver to accept audio on the Audio I/O port and then route the audio over the network. This allows, for example, the audio output from a TV's local source (Smart TV app or a source directly connected to the TV) to be streamed over the network to other DM NVX and DM NAX™ devices.

Common Audio Return Application



> **NOTE:** DM NVX transmitters cannot receive audio from a TV.

When a TV is configured to play audio, the audio stream over the network can be configured so that the TV receives either surround sound or stereo audio. To receive stereo audio on the TV, go to the display settings, select the **Advanced** tab, and then select **Inputs require stereo signal**. The audio route will prefer devices that support multichannel downmixing. For details, refer to Advanced Settings on page 1383.

When a DM NAX device is configured to play audio, the DM NAX device must receive downmixed stereo audio.

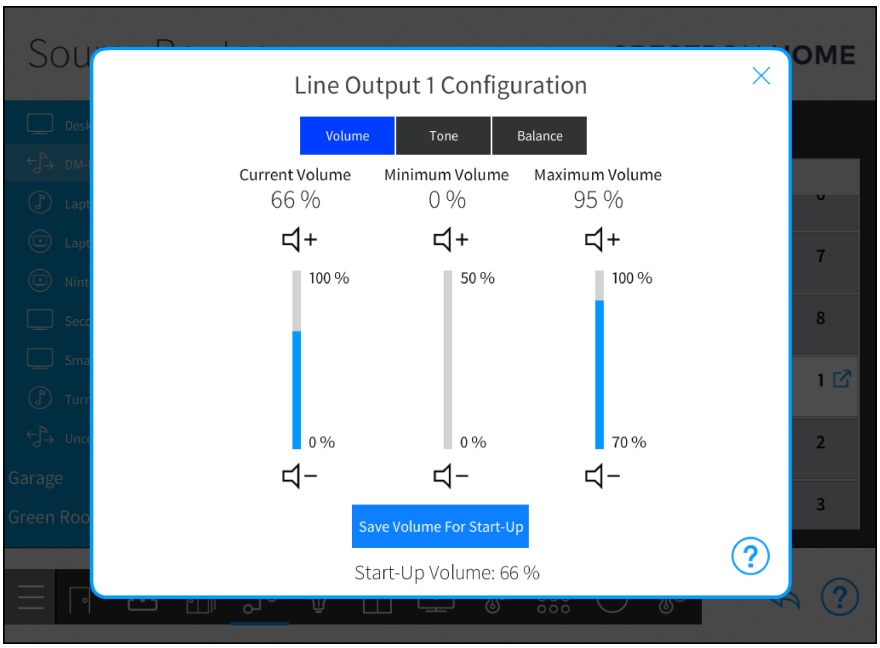
Line Out Connections

Use the line out connections to set the startup volume for the output. Connections made to an audio endpoint, such as an AVR or uncontrolled amp, offer volume controls in the user interface. If the endpoint does not offer audio control, the system controls the volume using the closest device in the audio route. Line out configuration is available for DM-NAX-8ZSA, DM-NAX-4ZSP, SWAMP-24x6, SWE-8, C2N-AMP-6x100, HD-XSPA, and HD-XSP.

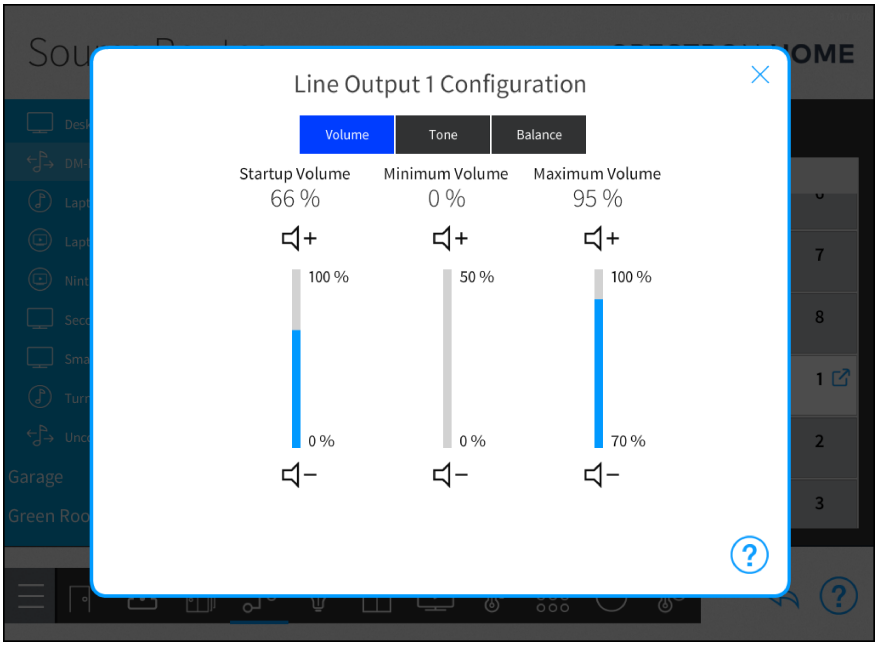
> **Note:** Startup volume control and volume control for uncontrolled endpoints are available on Crestron Home version 3.017.0098 or higher.

To save the startup volume, tap ⚙ **Settings** next to a line output.

Line Output Configuration - Zone On



Line Output Configuration - Zone Off

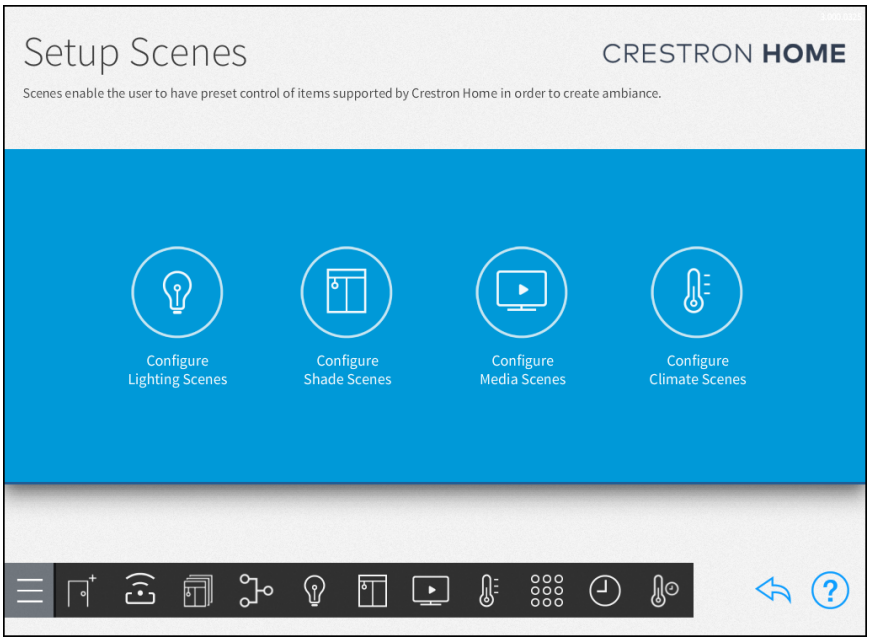


Create Scenes

Use the **Setup Scenes** screen to create and configure scenes for the Crestron Home system. Scenes are a programmed set of actions that can be recalled by a user interface device. Scenes can be created for lights, shades, media, and climate.

Scenes are recalled from a user interface device such as a touch screen, remote, keypad, time of day action, or mobile device. To program buttons and create events that recall scenes, refer to Customize and Schedule on page 413.

To view the **Setup Scenes** screen, select **Create Scenes** on the **Setup** screen.



This section provides the following information:

- Light Scenes
- Shade Scenes
- Media Scenes
- Climate Scenes

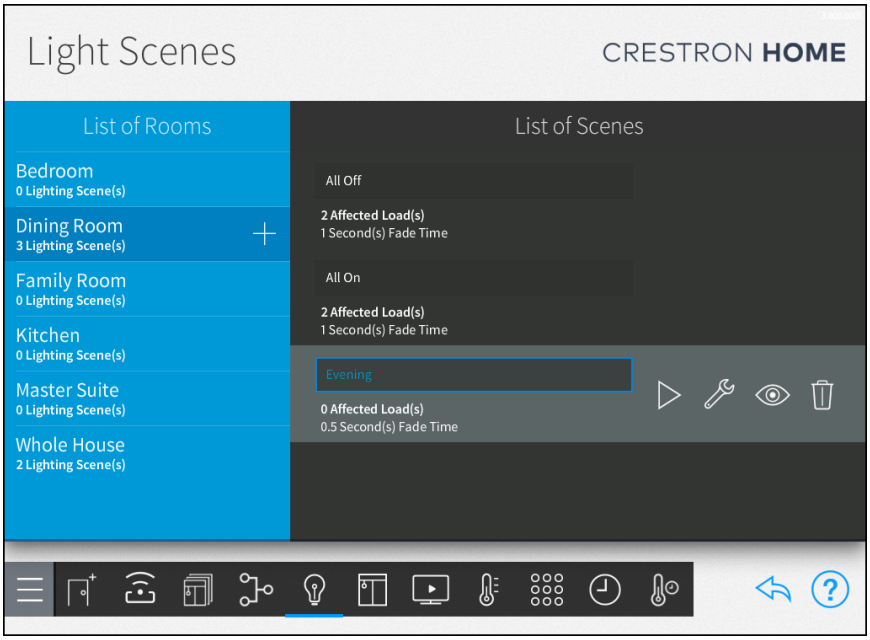
Light Scenes

Use the **Light Scenes** screen to create lighting scenes for one or more rooms or for the entire house.

Lighting scenes are used to set predefined light levels for multiple lighting loads. By default, the Crestron Home system creates **All On** and **All Off** scenes for all rooms with a lighting load. Additionally, an **All On** and **All Off** scene is created for the Whole House room when a lighting load is added to the system.

> **NOTE:** Tap the play button to recall the lighting scene in real time.

To view the **Light Scenes** screen, select **Create Scenes > Configure Light Scenes** on the **Setup** screen or **Configure Light Scenes** on the setup menu.



Default Scenes

Default lighting scenes:

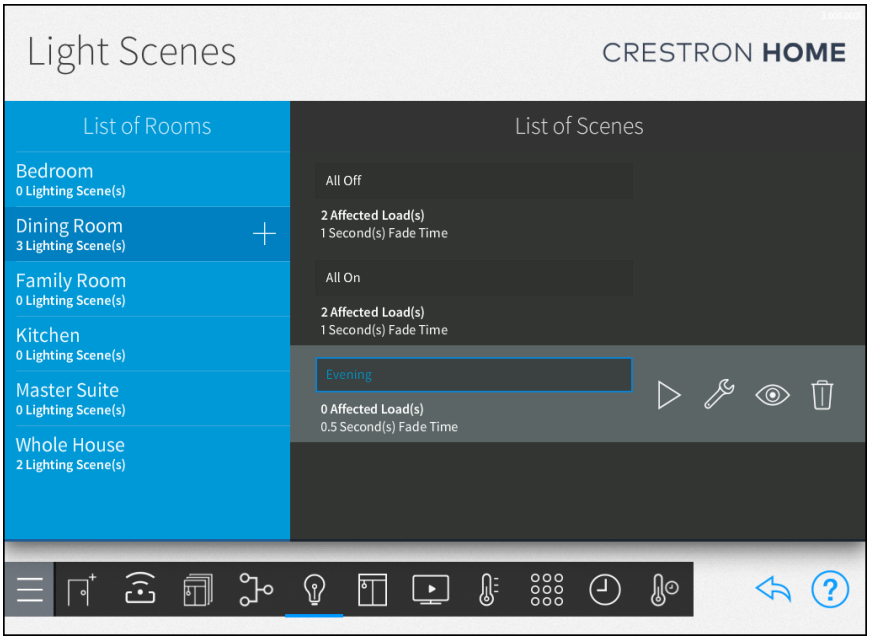
- **All On:** Created when any light is added to the room. The scene is also created for the Whole House room when a lighting load is added to the system.
- **All Off:** Created when any light is added to the room. The scene is also created for the Whole House room when a lighting load is added to the system.
- **Circadian:** Created when any light is added to the room. This scene cannot be edited or deleted.
- **SolarSync:** Created when a tunable light and GLS-LCCT are added to the system. This scene cannot be edited or deleted.

Create a Lighting Scene

> **NOTE:** When a scene is created, the current light state is saved as the scene setting and will be recalled by the scene. To adjust the levels, tap the wrench button next to the lighting scene name.

To create a lighting scene:

1. In the **List of Rooms** menu, select a room and then select **Add Scene**.

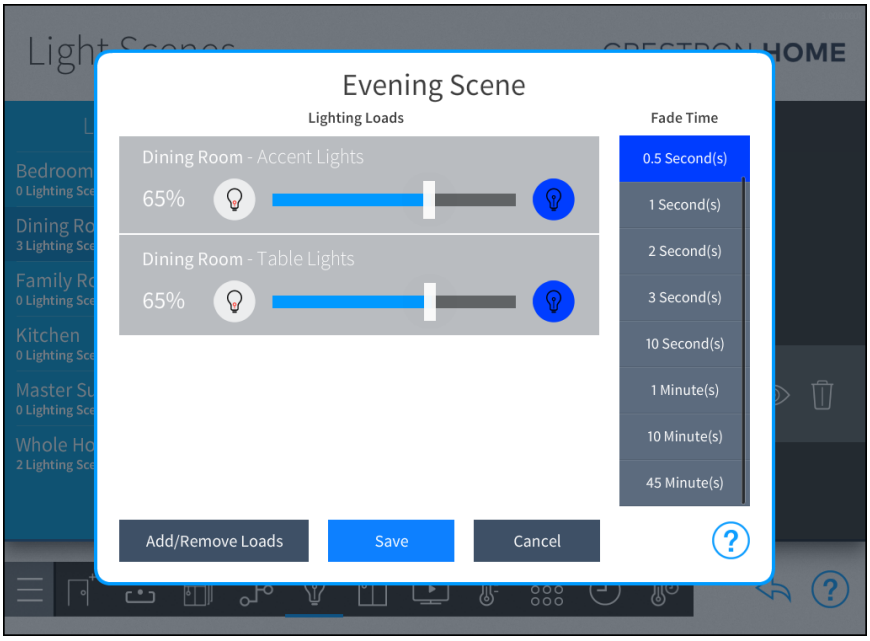


2. Enter a descriptive name for the lighting scene select **OK**.

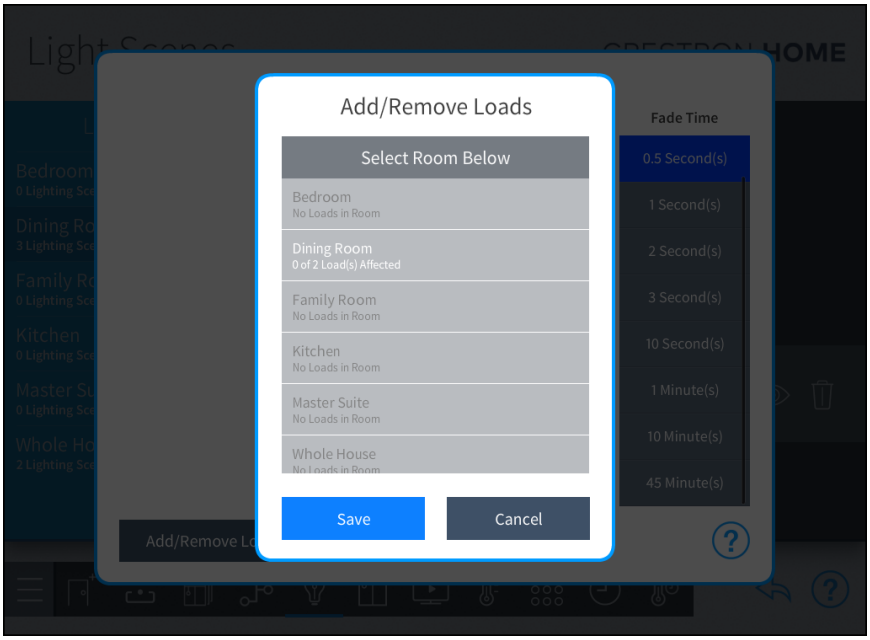
Configure a Lighting Scene

To configure a lighting scene:

1. In the **List of Scenes** menu, select a scene and then select **Configure Scene**. The scene configuration screen opens.



2. Select **Add/Remove Loads**.



3. Select a room from Select Room Below and then tap the check box next to the lighting loads that should be controlled in the lighting scene.

   > **NOTE:** The lighting loads can be from the same room or from different rooms in the house.

4. Configure the lighting scene:
   - **Lighting Loads:** Use the provided controls to adjust the brightness levels for any lighting loads that have been added to the scene. Lighting loads are adjusted in real time.
     - Tap the left lightbulb button to turn off a lighting load (0%).
     - Tap the right lightbulb button to set a lighting load to its maximum brightness (100%).
     - Use the slider to adjust the brightness level incrementally for lighting loads with dimmers.

     > **NOTE:** Lighting loads may also be adjusted using the dimmers or switches configured to control the lighting load. The load levels are updated in real-time in the Crestron Home system.

   - **Fade Time:** Select the duration that a lighting scene fades in after being recalled and fades out after the scene is completed.
5. Select **Save**.

Add or Remove a Lighting Load from a Scene

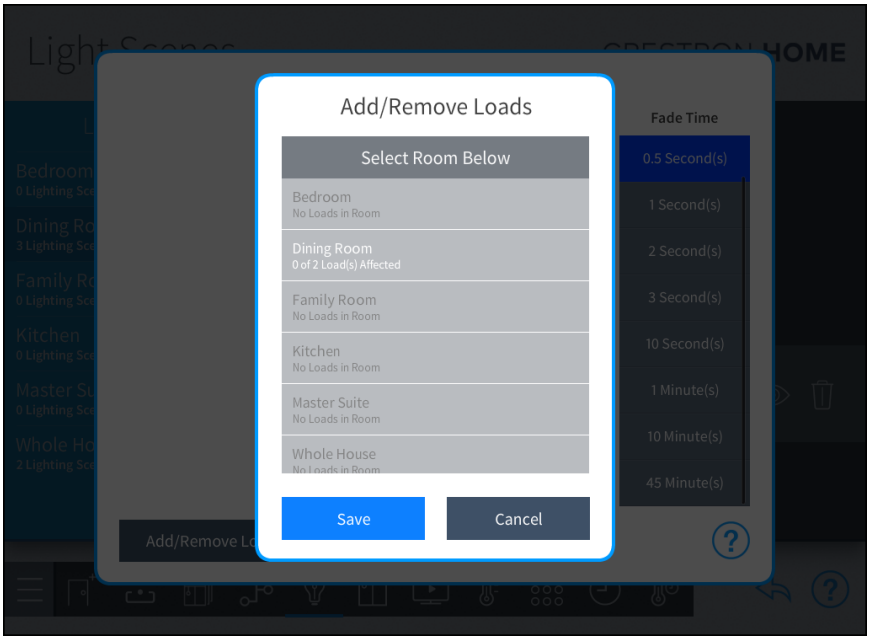
A scene can contain all devices that are located in a room or only a few devices. A scene can also contain a lighting load that is located in different rooms in the house.

To add or remove a lighting load from the scene:

> **NOTES:**
>
> - The DALI protocol allows ballasts to be added to multiple DALI groups.
> - Do not add multiple DALI groups to a scene if the DALI groups control a common ballast. This will cause unpredictable lighting control when a scene is recalled and unreliable feedback of the light levels in the user interface.

1. Tap the wrench button next to the lighting scene name. The scene configuration screen opens.
2. Tap **Add/Remove Loads**. The **Add/Remove Loads** dialog is displayed.

3. Select a room from Select Room Below and then tap the check box next to the lighting loads that should be controlled in the lighting scene.



4. Select **Save**.

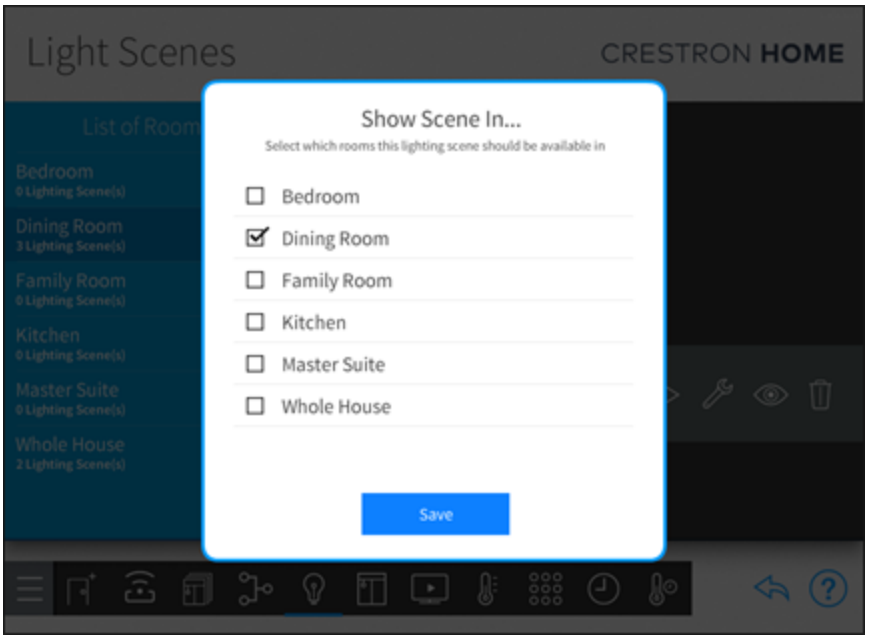
> **NOTE:** Adjust the lighting scene as necessary. Refer to the "Configure a Lighting Scene" section above.

Display Lighting Scenes in Different Rooms

The lighting scene can be configured so that it is available in different rooms around the house. When the scene is displayed in a different room, it can be recalled by a user interface device that is located in the selected room(s).

To display lighting scenes in other rooms:

1. In the **List of Scenes** menu, select a scene and then select **Show Scene**.
2. In the **Show Scene In** dialog box, select rooms to show the scene.



3. Select **Save**.

Delete a Light Scene

To delete a light scene:

1. In the **List of Rooms** menu, select a room and then select a scene.
2. Select **Delete** and then **OK** to confirm.

To return to the previous screen, tap **Back**.

Shade Scenes

Use the **Shade Scenes** screen to create shade scenes for one or more rooms or for the entire house.

Shade scenes are used to set predefined levels for multiple shade groups. By default, the Crestron Home system creates **All Open** and **All Closed** scenes for all rooms with a shade group. Additionally, an **All Open** and **All Closed** scene is created for the Whole House room when a shade motor is added to the system.

> **NOTE:** Tap the play button to recall the shade scene in real time.

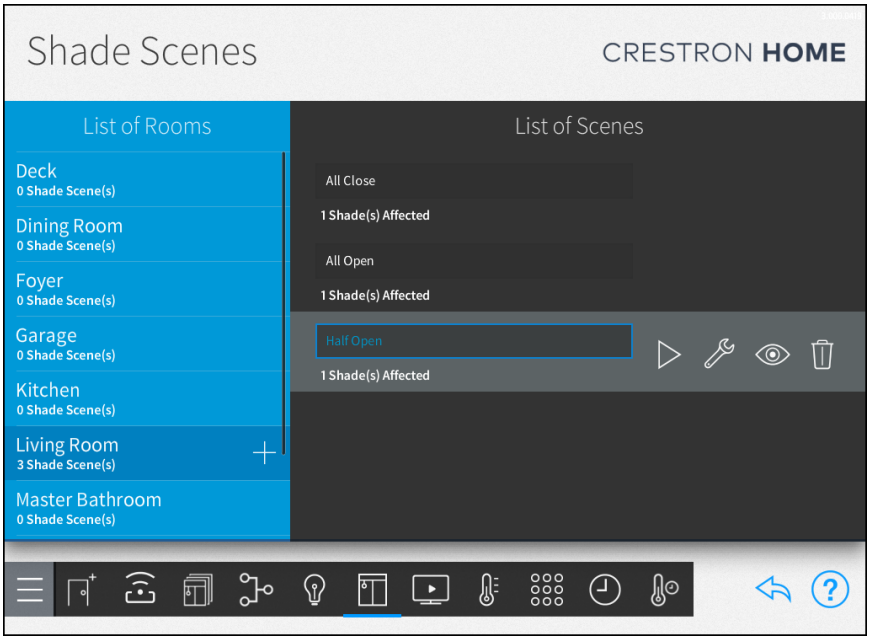
To view the **Shade Scenes** screen, select **Create Scenes > Configure Shade Scenes** on the **Setup** screen or **Configure Shade Scenes** on the setup menu.

Create a Shade Scene

> **NOTE:** When a scene is created, the current shade state is saved as the scene setting and will be recalled by the scene. To adjust the levels, tap the wrench button next to the shade scene name.

To create a shade scene:

1. In the **List of Rooms** menu, select a room and then select **Add Scene**.

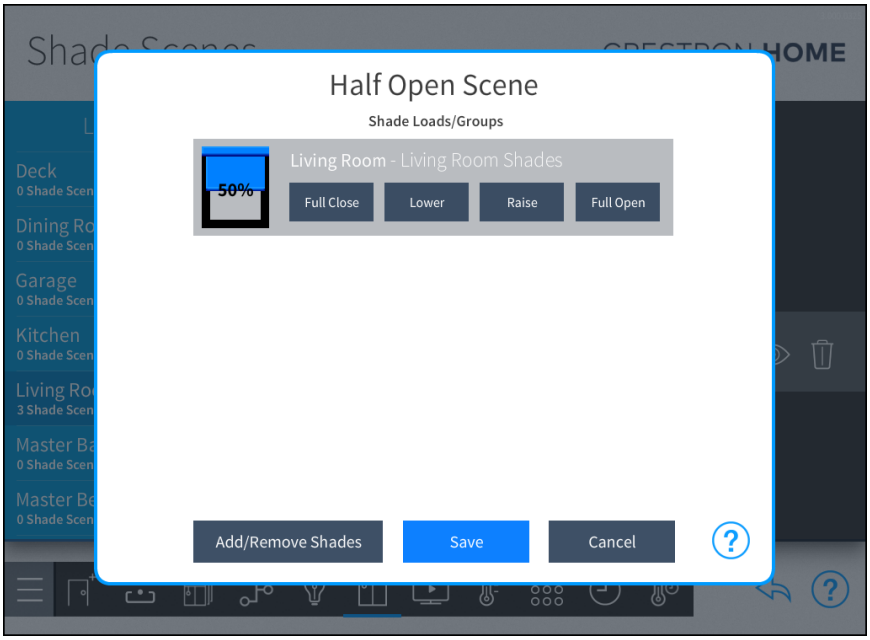


2. Enter a descriptive name for the shade scene select **OK**.

Configure a Shade Scene

To configure a shade scene:

1. In the **List of Scenes** menu, select a scene and then select **Configure Scene**. A notice is displayed stating that the shade scene will be recalled upon entering the scene configuration dialog box. Tap **OK** to display the dialog box or tap **Cancel** to cancel. The scene configuration screen opens.



2. Select **Add/Remove Loads**.
3. Select a room from Select Room Below and then tap the check box next to the shade that should be controlled in the shade scene.

> **NOTE:** The shades can be from the same room or from different rooms in the house.

4. Configure the shade scene:
   - **Raise** or **Lower:** Tap to raise or lower the shade incrementally.
   - **Full Open** or **Full Close:** Tap to open or close the shade fully.

> **NOTES:**
> - Shade loads may also be adjusted using the shade motor controls or using keypads configured to control the shade motors.
> - The icon to the left of each shade load shows the percentage that the shade group is open in real time.

5. Select **Save**.

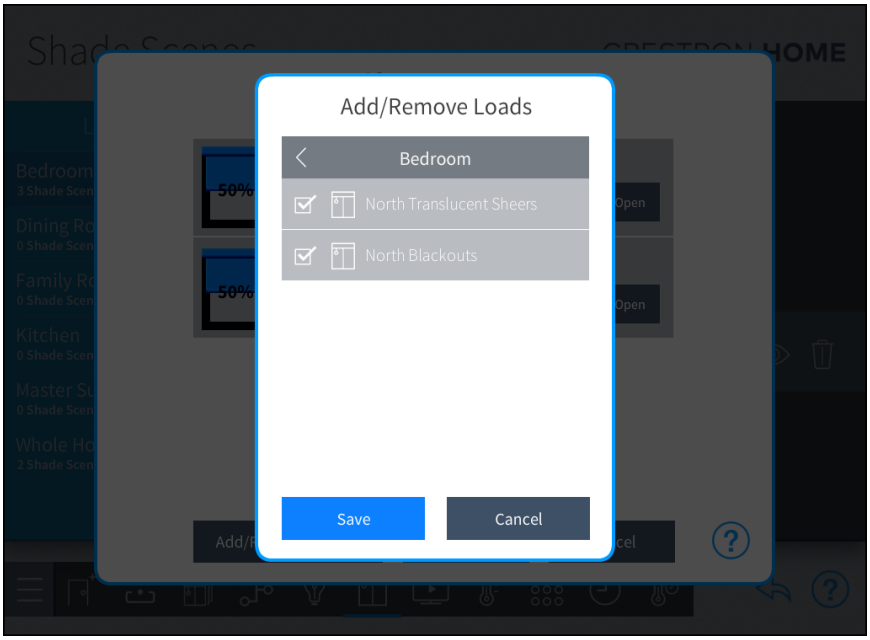
Add or Remove a Shade from a Scene

A scene can contain all devices that are located in a room or only a few devices. A scene can also contain a shade that is located in different rooms in the house.

To add or remove a shade from the scene:

> **NOTES:**
>
> - The DALI protocol allows ballasts to be added to multiple DALI groups.
> - Do not add multiple DALI groups to a scene if the DALI groups control a common ballast. This will cause unpredictable lighting control when a scene is recalled and unreliable feedback of the light levels in the user interface.

1. Tap the wrench button next to the lighting scene name. The scene configuration screen opens.
2. Tap **Add/Remove Loads**. The **Add/Remove Loads** dialog is displayed.
3. Select a room from Select Room Below and then tap the check box next to the shade that should be controlled in the shade scene.



4. Select **Save**.

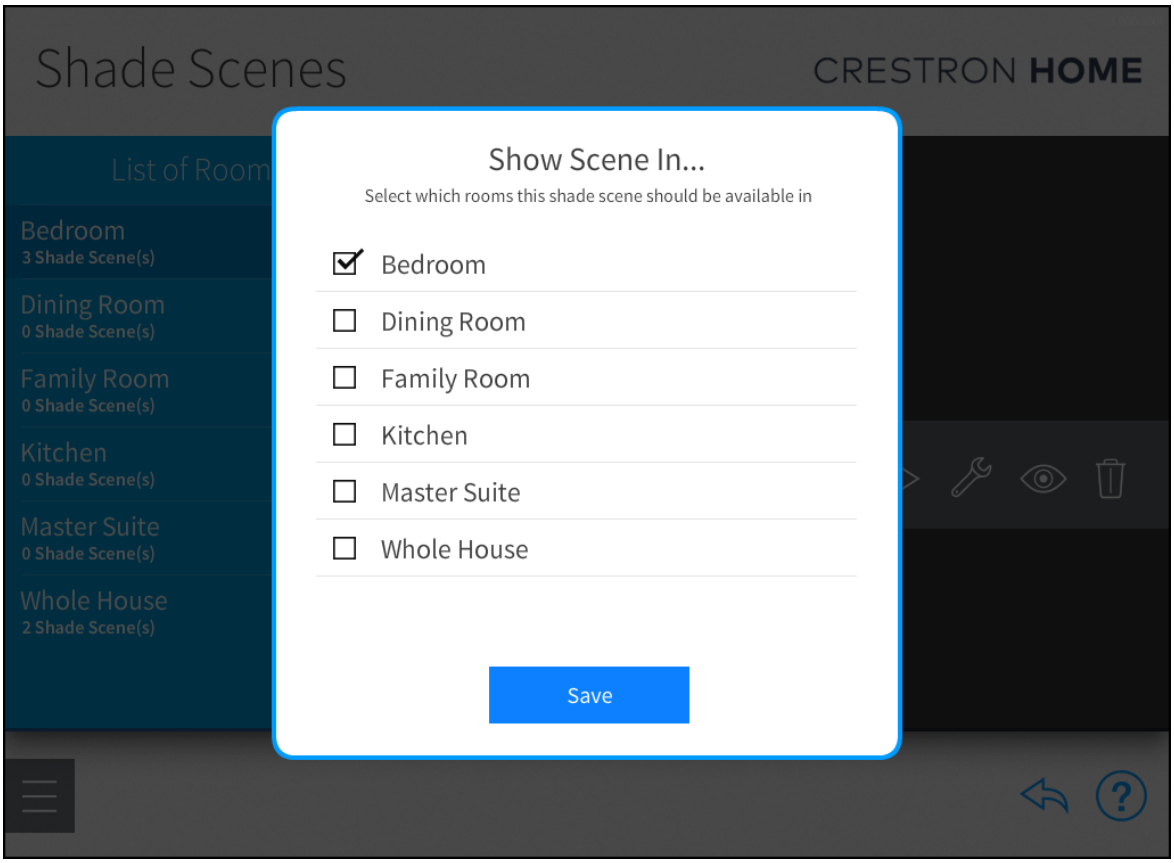
> **NOTE:** Adjust the shade scene as necessary. Refer to the "Configure a Shade Scene" section above.

Display Shade Scenes in Different Rooms

The shade scene can be configured so that it is available in different rooms around the house. When the scene is displayed in a different room, it can be recalled by a user interface device that is located in the selected room(s).

To display shade scenes in other rooms:

1. In the **List of Scenes** menu, select a scene and then select **Show Scene**.
2. In the **Show Scene In** dialog box, select rooms to show the scene.



3. Select **Save**.

Delete a Shade Scene

To delete a shade scene:

1. In the **List of Rooms** menu, select a room and then select a scene.
2. Select **Delete** and then **OK** to confirm.

To return to the previous screen, tap **Back**.

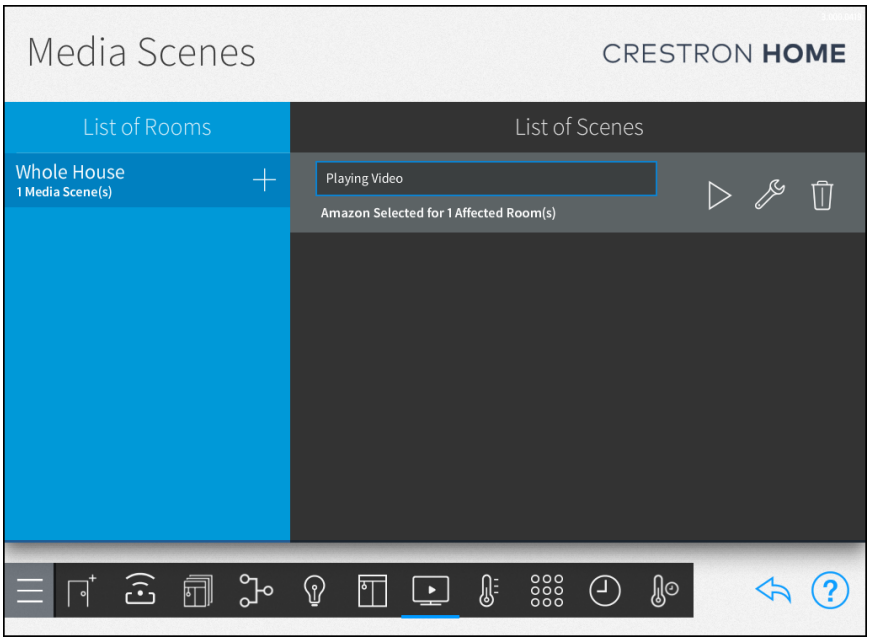
Media Scenes

Use the **Media Scenes** screen to create media scenes for the entire house. Media scenes are used to control source routing and on/off behavior for various media zones in the home.

NOTES:

- Tap the play button to recall the media scene in real time.
- Media scenes are added to the Whole House room.

To view the **Media Scenes** screen, select **Create Scenes > Configure Media Scenes** on the **Setup** screen or **Configure Media Scenes** on the setup menu.

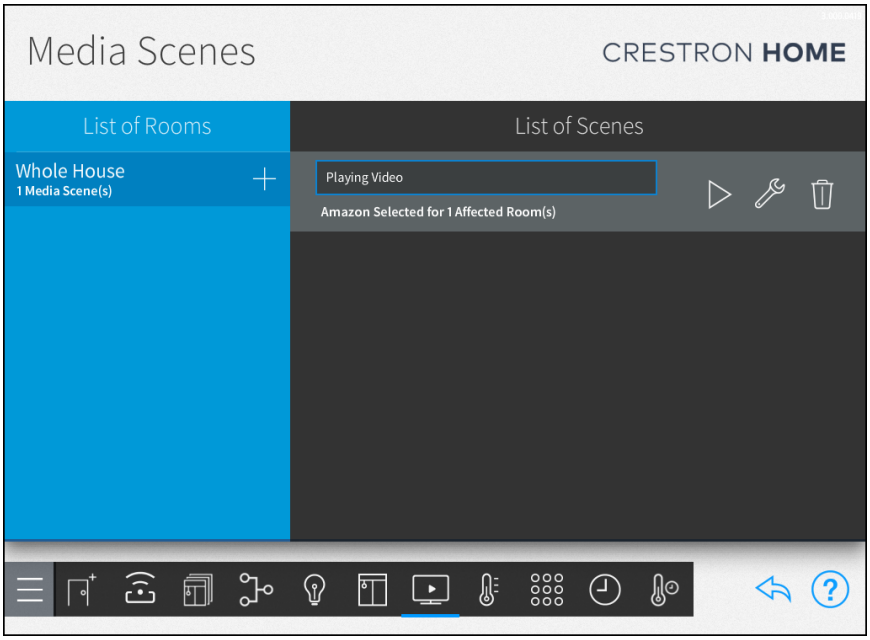


Create a Media Scene

> **NOTE:** When a scene is created, the current media state is saved as the scene setting and will be recalled by the scene. To adjust the levels, tap the wrench button next to the media scene name.

To create a media scene:

1. In the **List of Rooms** menu, select a room and then select **Add Scene**.

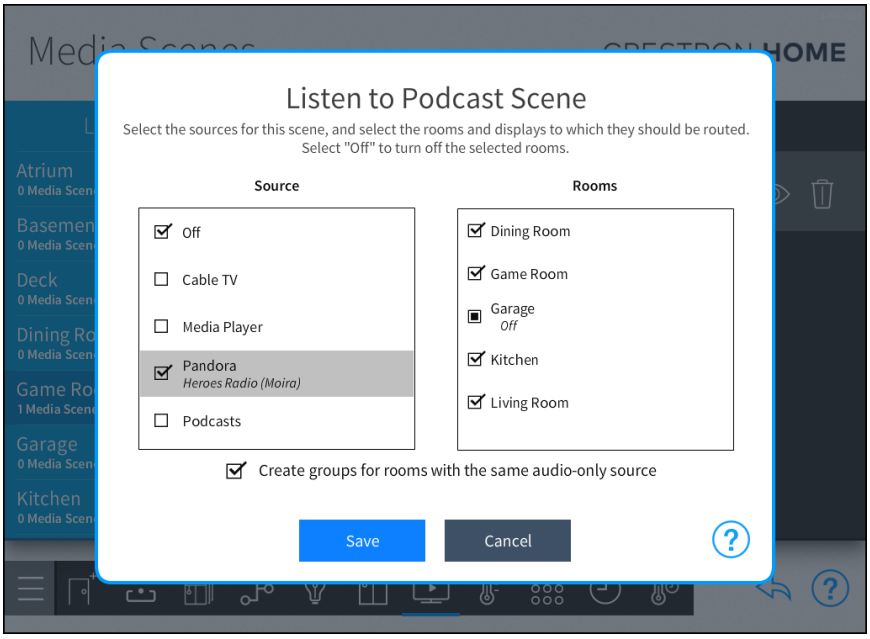


2. Enter a descriptive name for the media scene select **OK**.

Configure a Media Scene

To configure a media scene:

1. In the **List of Scenes** menu, select a scene and then select **Configure Scene**. The scene configuration screen opens.



2. Configure the media scene:
   a. In the **Source** list, select a media source.
      - To turn rooms off, select **Off**.
      - To select a streaming service profile and preset, select the name of an audio streaming service and then select a profile and preset.
        - **Profile:** Select a profile from the list. To select the profile that is currently playing or was last played, select **Current Profile**. The profile is displayed under the name of the streaming service.
        - **Preset:** Select a preset from the list. To select the preset that is currently playing or was last played, select **Currently Playing**. The preset is displayed under the name of the streaming service.
   b. In the **Rooms** list, select rooms for the source to play in. The selected rooms will turn on and play the selected source. If the **Off** source is selected, the room will turn off. When multiple sources are selected from the **Source** list, a filled check box indicates that the room is selected by a different source.

> **NOTE:** The **Rooms** list displays rooms that are media zones.

c. For audio-only sources, select a **Create Groups...** option:

i. **Selected:** The audio source starts as a group and plays in all rooms. Content controls (play, pause, etc) will affect all rooms. If the source is changed in any room, the source is changed for all rooms.

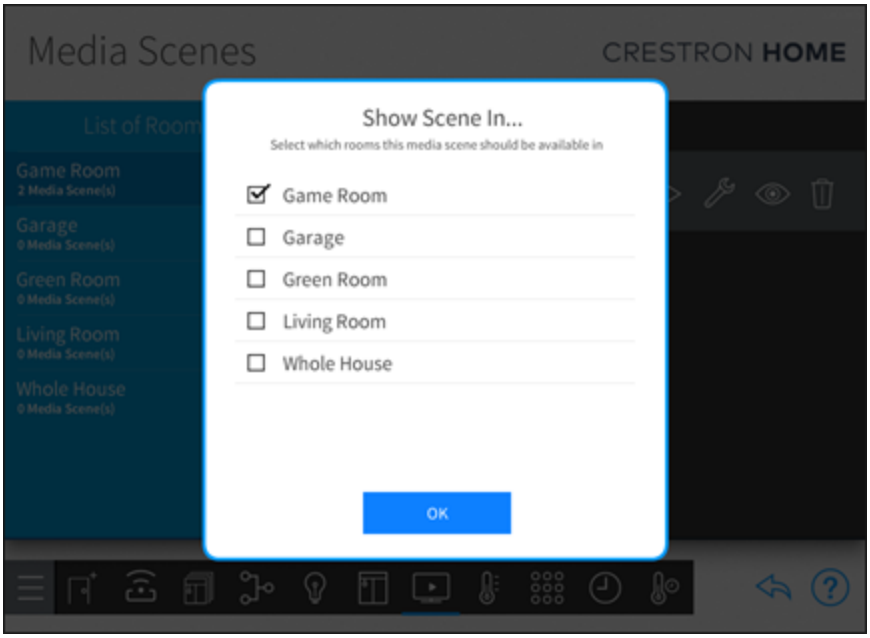
ii. **Deselected:** The source is played individually in each room. Content controls (play, pause, etc) will affect all rooms. If the source in a room is changed, the source change only affects that room.

3. Select **Save**.

The media scene can be configured so that it is available in different rooms around the house. When the scene is displayed in a different room, it can be recalled by a user interface device that is located in the selected room(s).

To display media scenes in other rooms:

1. In the **List of Scenes** menu, select a scene and then select **Show Scene**.
2. In the **Show Scene In** dialog box, select rooms to show the scene.



3. Select **Save**.

Delete a Media Scene

To delete a media scene:

1. In the **List of Rooms** menu, select a room and then select a scene.
2. Select **Delete** and then **OK** to confirm.

To return to the previous screen, tap **Back**.

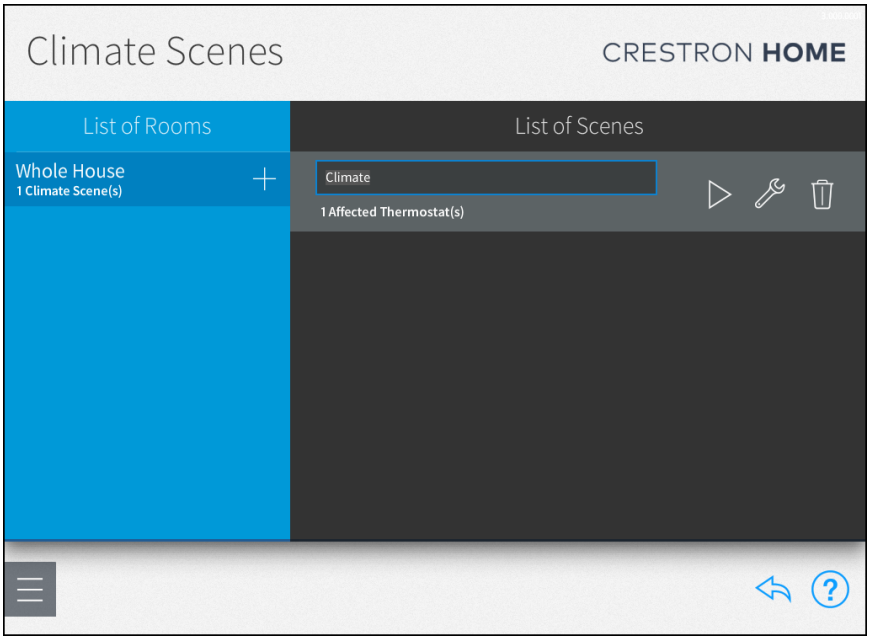
Climate Scenes

Use the **Climate Scenes** screen to create climate scenes for thermostats that have been added to the system.

Climate scenes are used to set predefined temperature set points or modes for a thermostat. Climate scenes are ideal for changing the HVAC system parameters during specified times of day.

> **NOTE:** Tap the play button to recall the climate scene in real time.

To view the **Climate Scenes** screen, select **Create Scenes > Configure Climate Scenes** on the **Setup** screen or **Configure Climate Scenes** on the setup menu.



Create a Climate Scene

> **NOTE:** When a scene is created, the current thermostat state is saved as the scene setting and will be recalled by the scene. To adjust the levels, tap the wrench button next to the climate scene name.

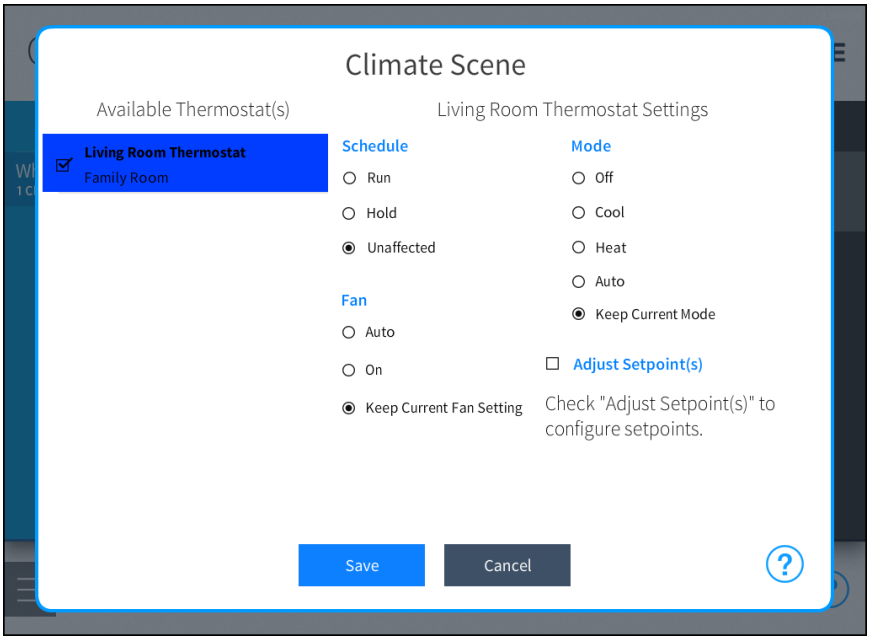
To create a climate scene:

1. In the **List of Rooms** menu, select a room and then select **Add Scene**.
2. Enter a descriptive name for the climate scene select **OK**.

Configure a Climate Scene

To configure a climate scene:

1. In the **List of Scenes** menu, select a scene and then select **Configure Scene**. The scene configuration screen opens.



2. Configure the climate scene:
   - **Available Thermostats:** Select thermostats from the list to include them in the climate scene. Select a thermostat to configure the scene settings.
   - **Schedule:** Select a scheduling option:

     NOTE: If the thermostat schedule is running because **Run** or **Unaffected** was triggered by the scene, the next scheduled climate event will overwrite the climate scene's set points.

     - **Run**: Starts the schedule.
     - **Hold**: Pauses the schedule.
     - **Unaffected**: Does not change the current thermostat schedule.
   - **Fan:** Select a fan behavior:

     NOTE: Fan controls are not displayed:
     - If the thermostat does not support fan control.
     - If fan controls are hidden in the thermostat settings. For details, refer to Thermostat Settings on page 1339.

        - **Auto**: Turns the fan on and off automatically.
        - **On:** Turns the fan on.
        - **Keep Current Fan Setting** : Does not change the fan setting.
    - **Mode:** Select a thermostat mode:
        - **Off**: Turns the thermostat off.
        - **Cool:** Sets the operating mode to cool.
        - **Heat:** Sets the operating mode to heat.
        - **Auto:** Sets the operating mode to auto.
        - **Keep Current Mode:** Does not change the current thermostat mode.
    - **Adjust Setpoint(s):** If this check box is selected, select a temperature set point for the **Heat**, **Cool**, and **Auto** modes.
3. Select **Save**.

Delete a Climate Scene

To delete a climate scene:

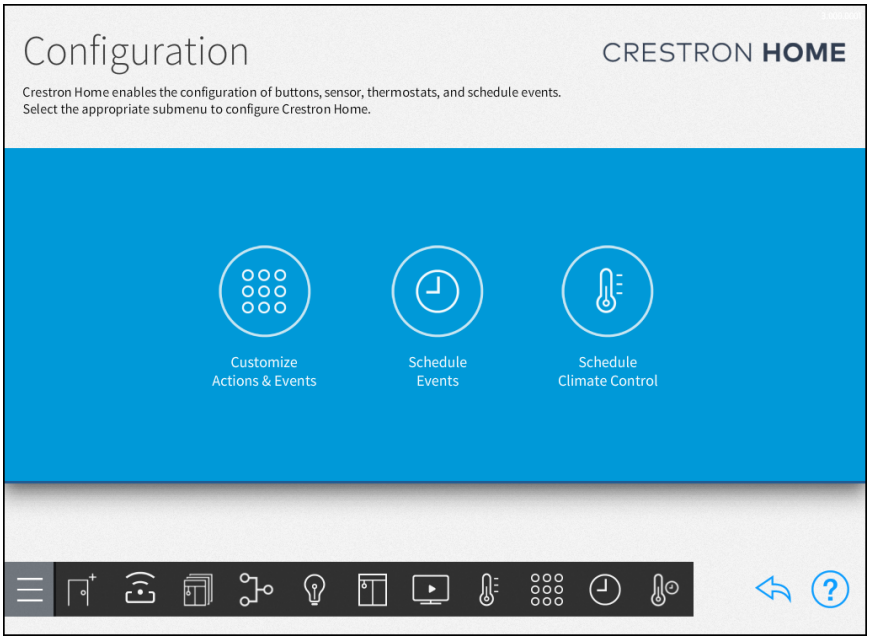
1. In the **List of Rooms** menu, select a room and then select a scene.
2. Select **Delete** and then **OK** to confirm.

To return to the previous screen, tap **Back**.

Customize and Schedule

Use the **Configuration** screen to create and schedule events that are triggered in the Crestron Home system. Events can be triggered by a button press, occupancy event, alarm, time of day, and more.

To view the **Configuration** screen, select **Customize & Schedule** on the **Setup** screen.



This section provides the following information:

- Quick Actions
- Customize Interface Buttons
- Button Actions
- Customize Actions & Events
- Schedule Events
- Vacation Scheduler
- Schedule Climate Control
- Set the Touch Screen Language
- Put a Touch Screen Display to Sleep

Quick Actions

Recall a series of scenes, media functions, Lutron button scenes, external functions, or sequences using Quick Actions.

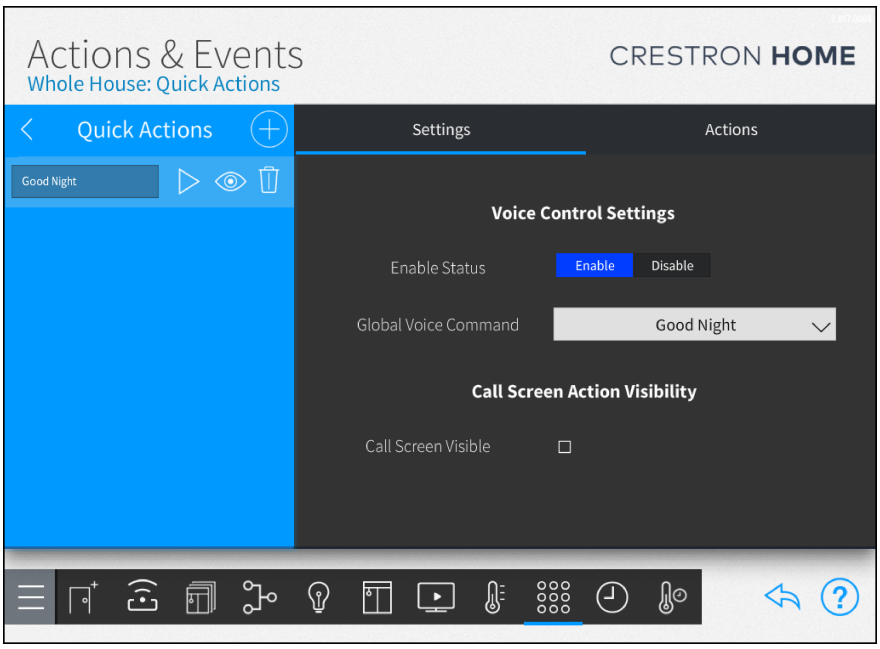
To configure Quick Actions, go to **Customize & Schedule > Customize Actions & Events > Select a Room > Quick Actions**.

NOTE: When creating Quick Actions, consider the following:

- The Crestron Home app displays 20 Quick Actions per room.
- The first 20 Quick Actions in the room, in alphabetical order, are displayed in the Crestron Home app.
- Quick Actions in the Whole House room are displayed on the Home tab of the Crestron Home app.
- If a room displays a Quick Action that was created in a different room, the Quick Action is displayed at the end of the list of Quick Actions. These Quick Actions are displayed in alphabetical order by room name and then by Quick Action name.

Quick Action Settings

Select the **Settings** tab to configure the voice control and call screen settings.



Voice Control Settings

Use the **Voice Control Settings** to configure the voice control settings.

> **NOTE:** To use voice control, voice control services must be turned on and configured. For details, refer to Voice Control Settings on page 607.

- **Enable Status:** Select **Enable** or **Disable** to turn voice control services on or off.
- **Global Voice Command:** Available for Whole House Quick Actions only. Recall the Quick Action using a voice command. To use a Global Voice Command, select **Home**, **Away**, **Good Morning**, or **Good Night**. A command can only be selected once in the system. The default selection is **None**. To use the Global Voice Command say, "Alexa, tell Crestron [Global Voice Command]". For example, "Alexa, tell Crestron Good Morning."

Call Screen

Add the Quick Action to an intercom call screen on a touch screen. The default setting for new Quick Actions is to not show the Quick Action.

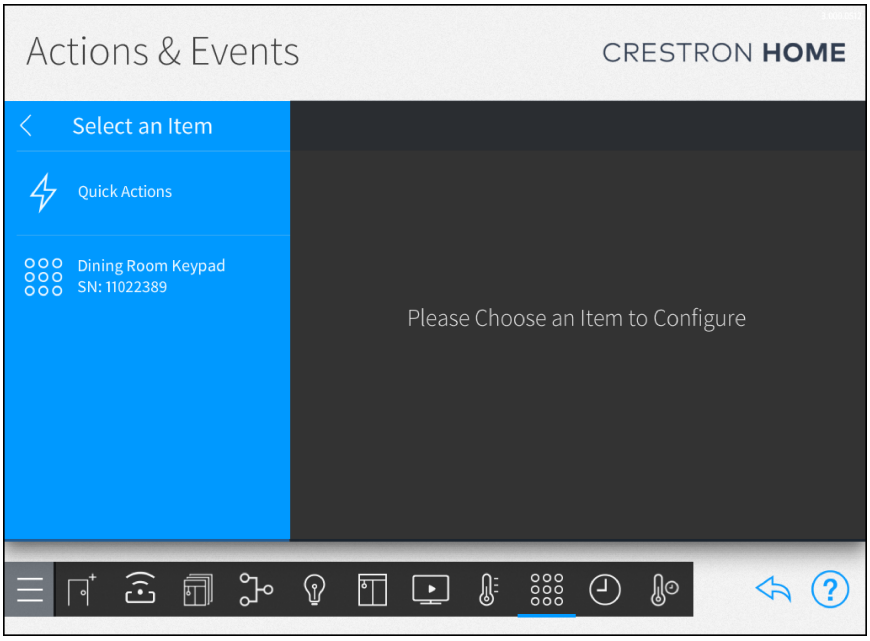
To show the Quick Action on an intercom call screen, select **Call Screen Visible**.

> **NOTE:** Quick Actions created in Crestron Home version 3.017.0098 and earlier will have **Call Screen Visible** selected to maintain the existing functionality in the system.

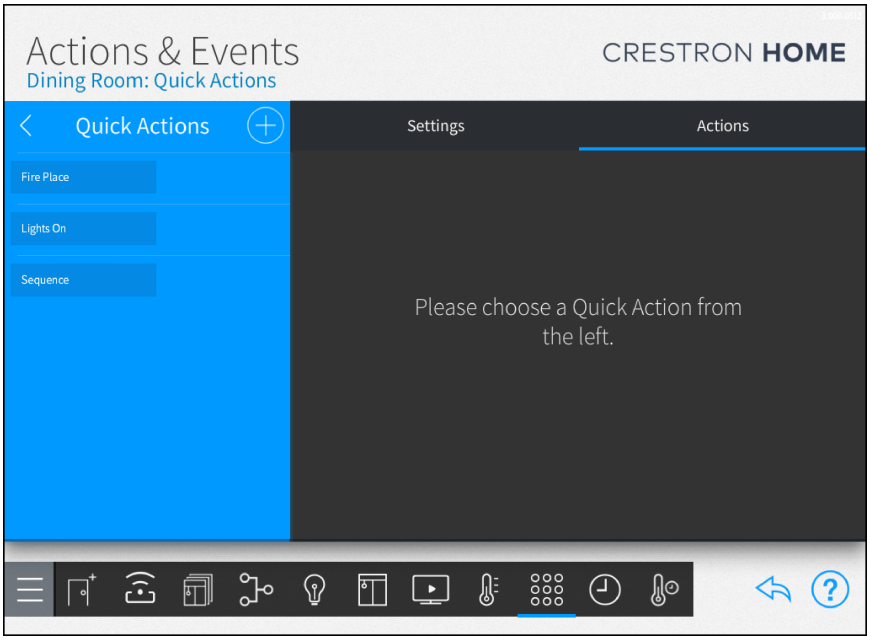
Create a Quick Action

Select **Quick Actions** from the **Select an Item** menu to display a configuration screen for the Quick Action.

1. Select a room from the **Select a Room** menu.
2. Tap **Quick Actions** from the **Select an Item** menu.



3. Tap ⊕ **Add Quick Action**.



4. Enter a name for the Quick Action.
5. Select **OK**.

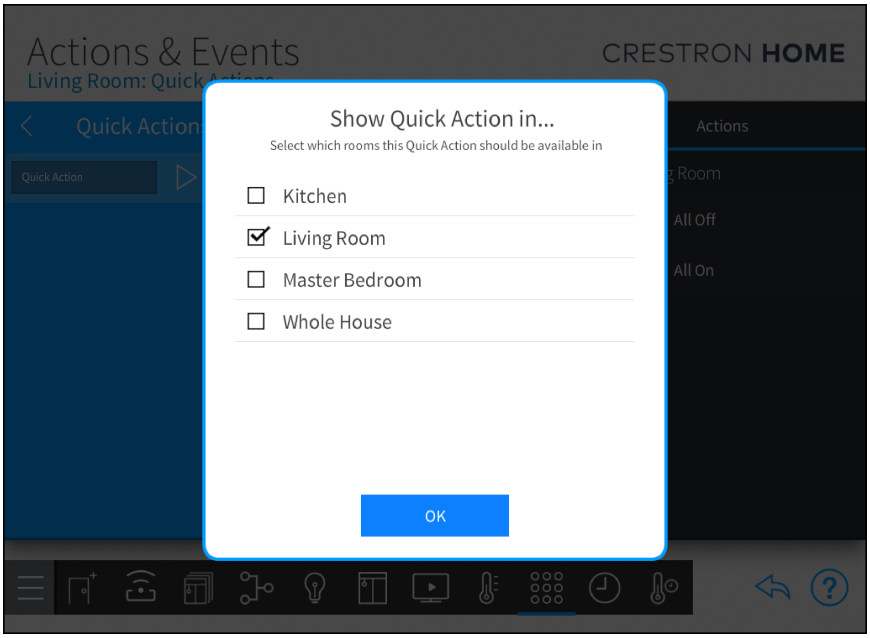
Display a Quick Action in Different Rooms

The Quick Action can be configured so that it is available in different rooms around the house. When the Quick Action is displayed in a different room, it can be recalled by a user interface device that is located in the selected room(s).

> **TIP:** To hide a Quick Action, deselect all rooms. A hidden Quick Action can be accessed by other programming features.

To display Quick Actions in other rooms:

1. Select a Quick Action and then select **Show Quick Action**.
2. Select the rooms that should display the Quick Action.



3. Tap **OK**.

Delete a Quick Action

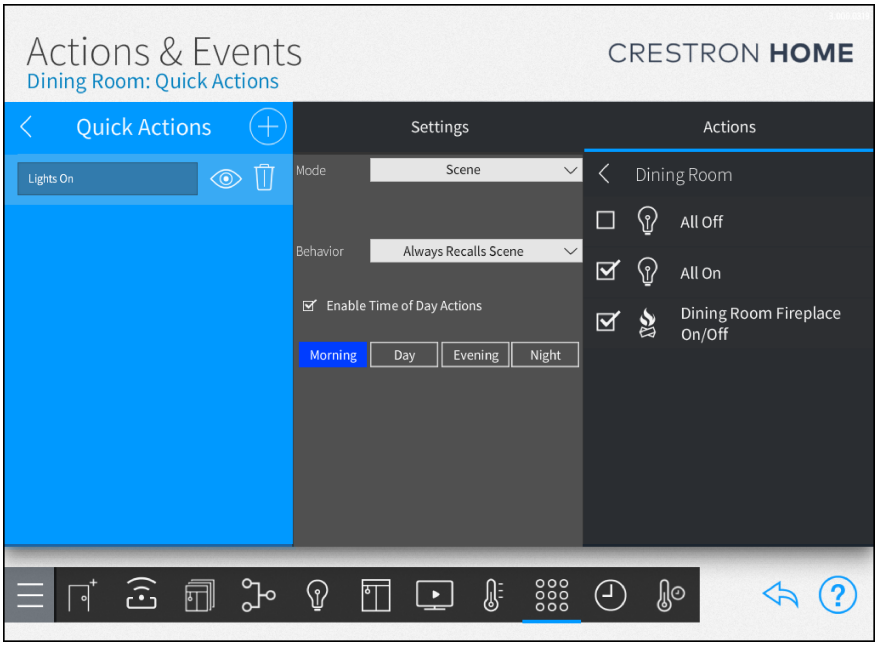
To delete a Quick Action:

1. In the **Quick Actions** menu, select a Quick Action.
2. Select **Delete** and then **OK** to confirm.

Configure a Quick Action

To configure a Quick Action:

1. In the **Quick Actions** menu, select a Quick Action and then select the **Actions** tab.



2. Select a mode from the **Mode** drop-down menu. The mode determines the type of action that is recalled by the Quick Action. For details, refer to Quick Action Modes on page 418.

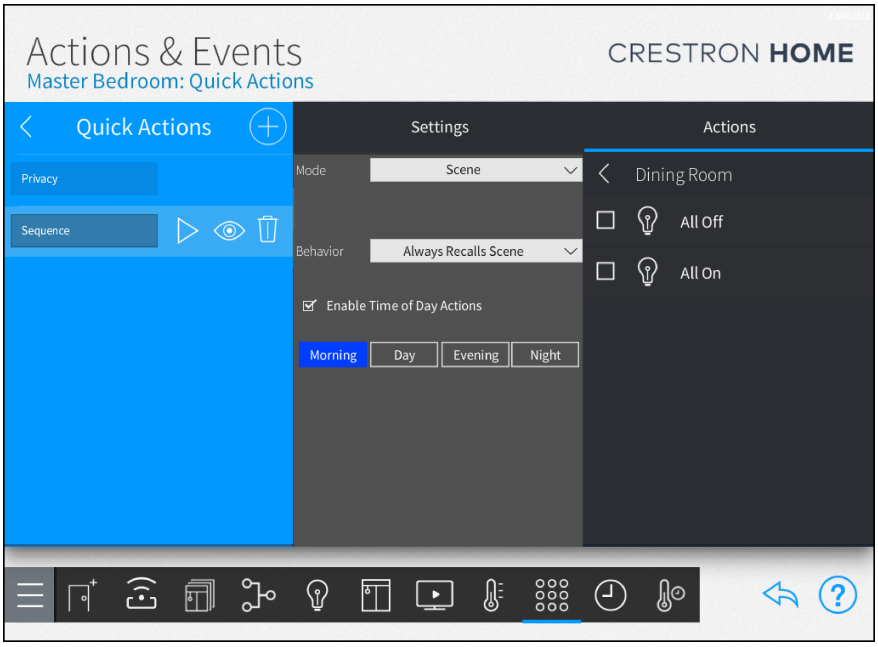
Quick Action Modes

These Quick Action modes are available:

Scene

Select **Scene** from the **Mode** drop-down menu to recall a scene when the Quick Action is recalled.

> **NOTE:** The **Toggles Scene/Off** and **Custom Toggle** options are disabled in the **Behavior** drop-down menu.



Enable Time of Day Actions: Recall a different scene based on the time of day.

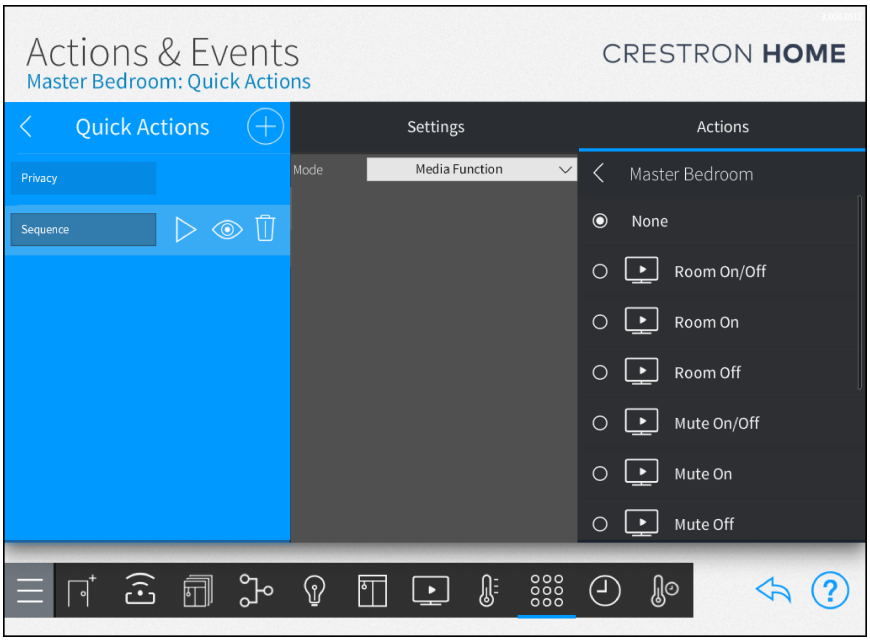
> **NOTE:** To configure the time periods, refer to Current Times of Day on page 563.

To assign a different scene for the morning, day, evening, and night time periods:

1. Select **Enable Time of Day Actions**.
2. Select **Morning**, **Day**, **Evening**, or **Night** and then select scenes from the **Actions** menu. Select a scene for all time periods. If scenes are not selected for a time period, no action will be performed when the Quick Action is recalled during the time period.

Media Function

Select **Media Function** from the **Mode** drop-down menu to recall a media function when the Quick Action is recalled.

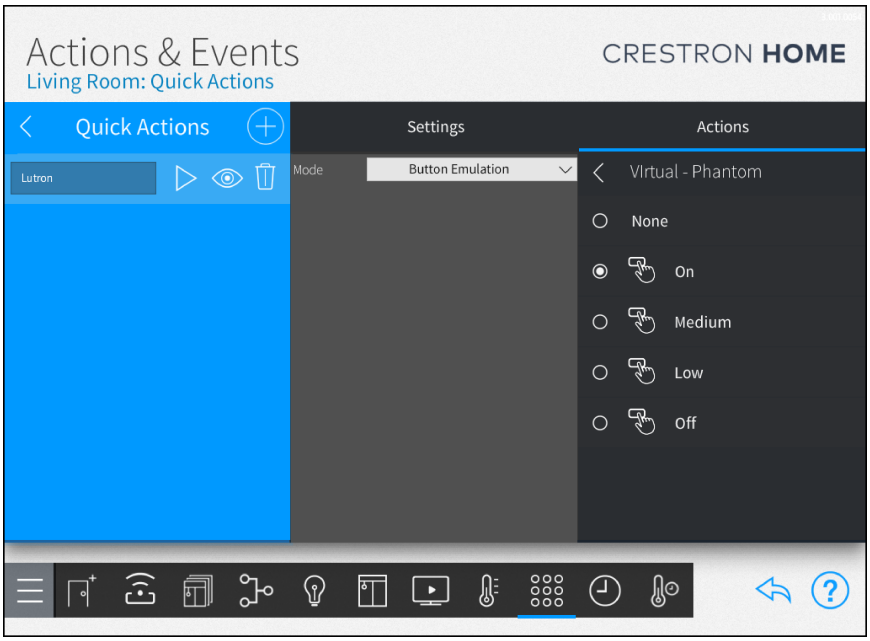


Button Emulation

Select **Button Emulation** from the **Mode** drop-down menu to emulate a button on a Lutron keypad when the Quick Action is recalled.

NOTE:

- To emulate multiple Lutron buttons, create a phantom button in the Lutron system that performs all of the required functions. Assign the phantom button to the Quick Action.
- To emulate a Lutron button and a function within Crestron Home, create a sequence that recalls the Lutron button and the Crestron Home function. For details, refer to Sequence on page 423.



External Function

Select **External Function** from the **Mode** drop-down menu to recall an external function when the Quick Action is recalled.

Sequence

Select **Sequence** from the **Mode** drop-down menu to recall a series of actions when the Quick Action is recalled.

Items that can be included in a sequence:

- Audio Servers
- AVRs
- Blu-ray Players
- Cable Boxes
- Displays
- Do Not Disturb
- Extension Drivers
- Horizon Keypads
- Lighting Loads
- Lighting Scenes
- Media Scenes
- Multiple Displays
- Streaming Service Profiles
- Quick Actions
- Relay Controlled Devices
- Scheduled Events
- Shade Groups
- Shade Loads
- Shade Scenes
- Video Servers

NOTES:

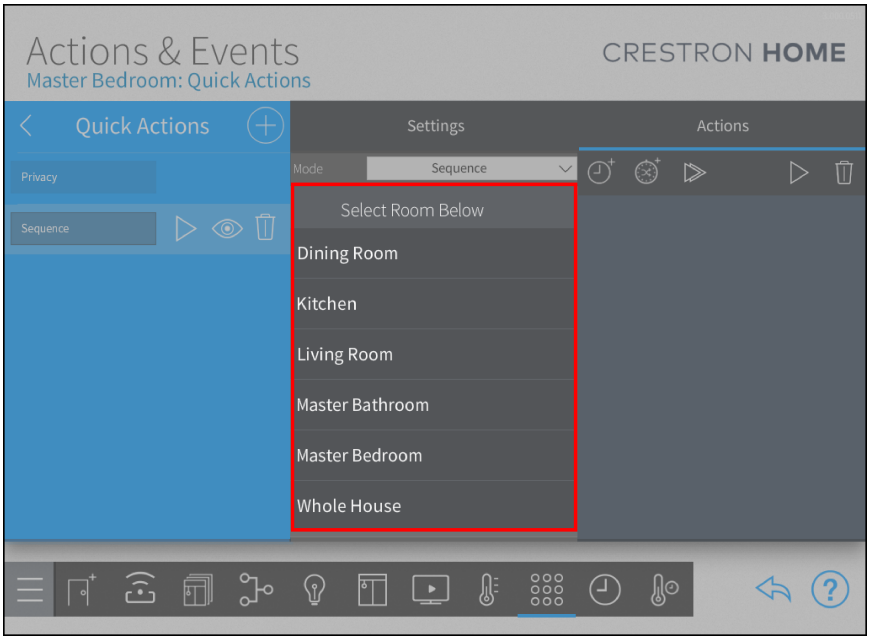
- If a device (or a room) is deleted from the system, all steps associated with the device (or room) in all sequences will be removed.
- An exclamation mark is displayed if the source route is broken after it is added to the sequence.

Select Room Below Menu

The **Select Room Below** menu displays rooms with items that can be included in a sequence. The configured rooms contain sequence items specific to the room and Whole House room contains sequence items specific to the whole house.

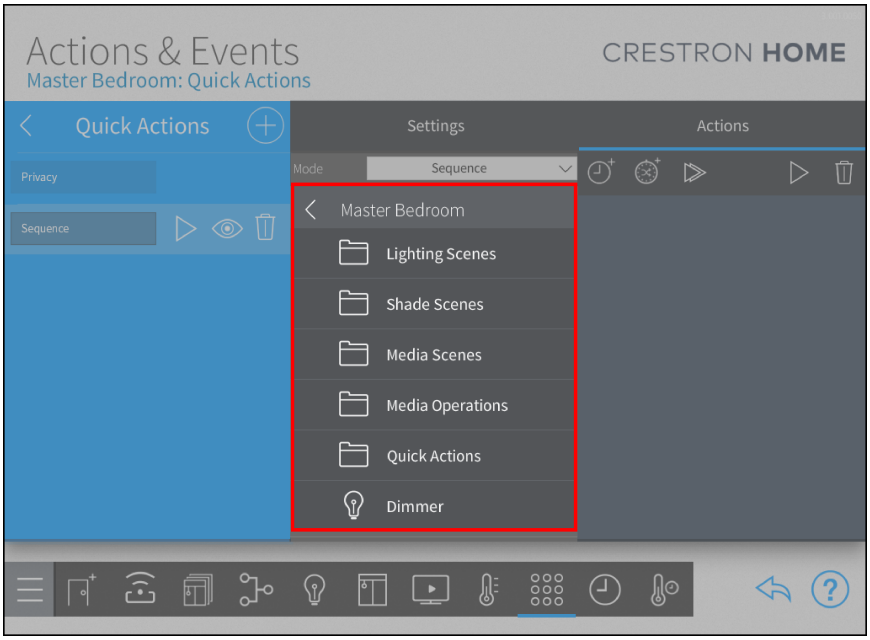
To add a step:

1. In the **Select Room Below** menu, select a room.

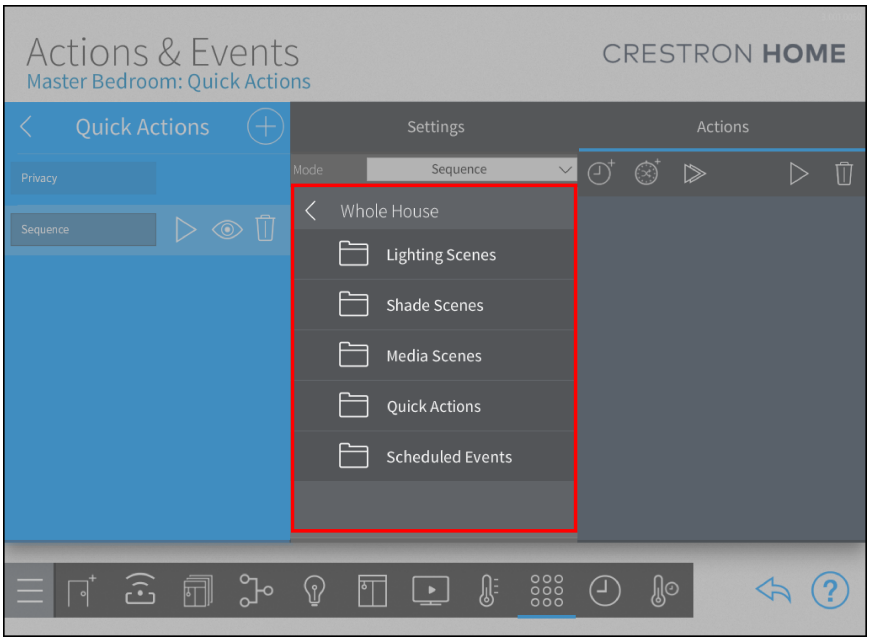


2. Select a function. The functions are organized by **Lighting Scenes**, **Shade Scenes**, **Media Scenes**, **Media Operations**, **Quick Actions**, and **Devices**. Tap the **Whole House** room to view the commands that are available for the whole house. The commands are organized by **Lighting Scenes**, **Shade Scenes**, **Media Scenes**, **Quick Actions**, and **Scheduled Events**.

Room Functions

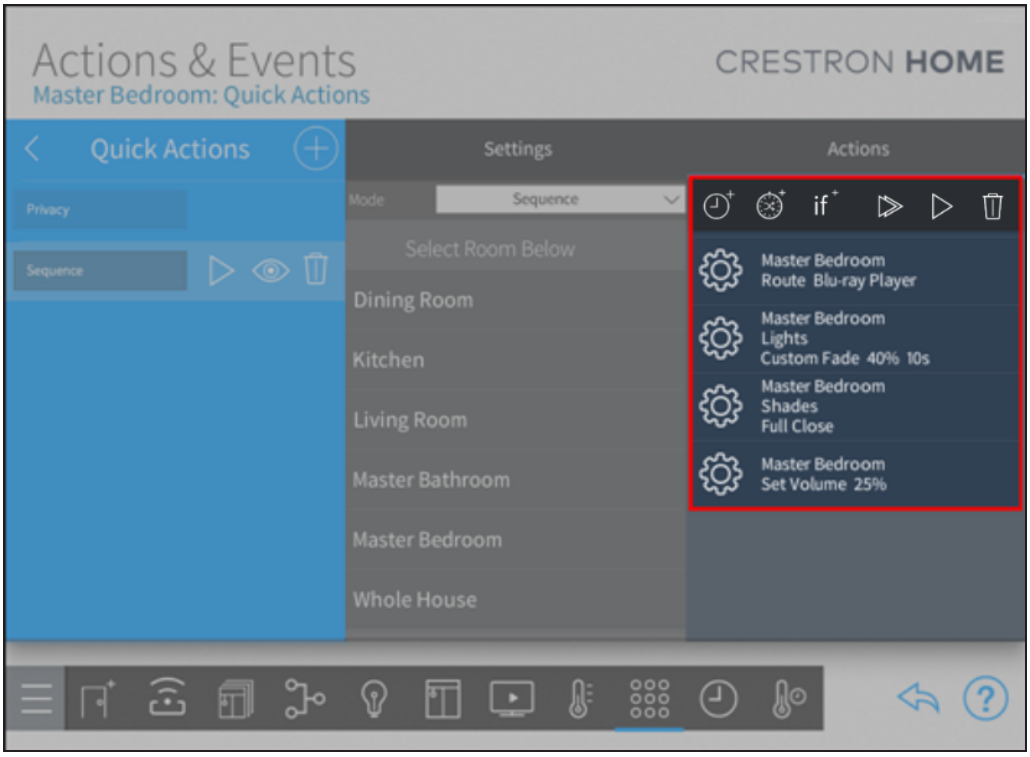


Whole House Functions



Sequence Lists Menu

Displays the steps in the sequence and provides sequence control options. Each step in the sequence displays information about step such as the room name, device type, settings, and the action that is performed.



Use the **Sequence List** menu to:

- Add a Step on page 427
- Edit a Step on page 430
- Add a Delay Step on page 431
- Reorder the Steps on page 443
- Delete a Step on page 444
- Test the Sequence on page 445

The **Sequence** menu provides the following sequence control buttons:

Add Delay: Add a delay step to the sequence.

Add Random Delay: Add a delay step to the sequence that lasts for a random period of time.

Add If Statement: Add step to the sequence that triggers if the specified conditions are met.

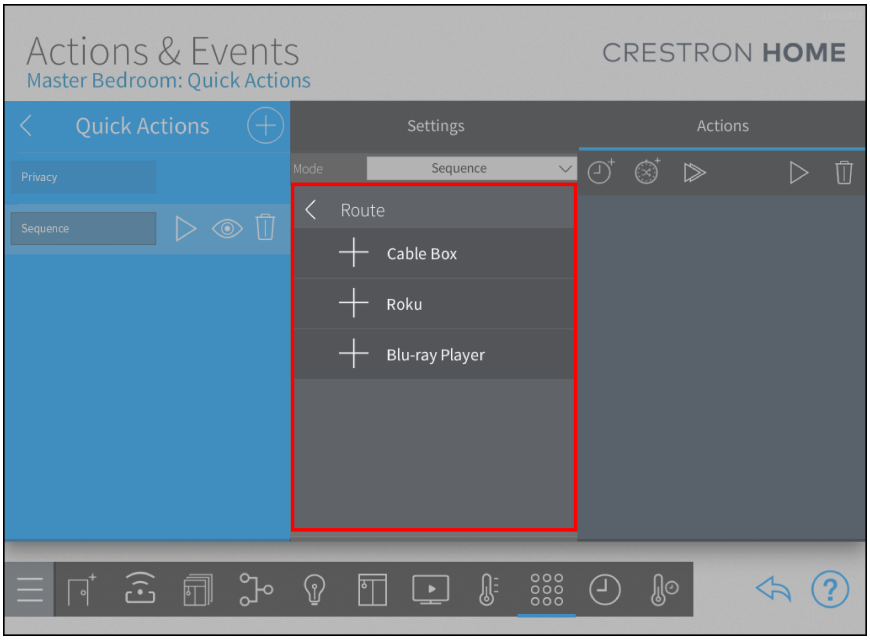
Play Sequence: Play the entire sequence.

Play Step: Play individual steps in the sequence.

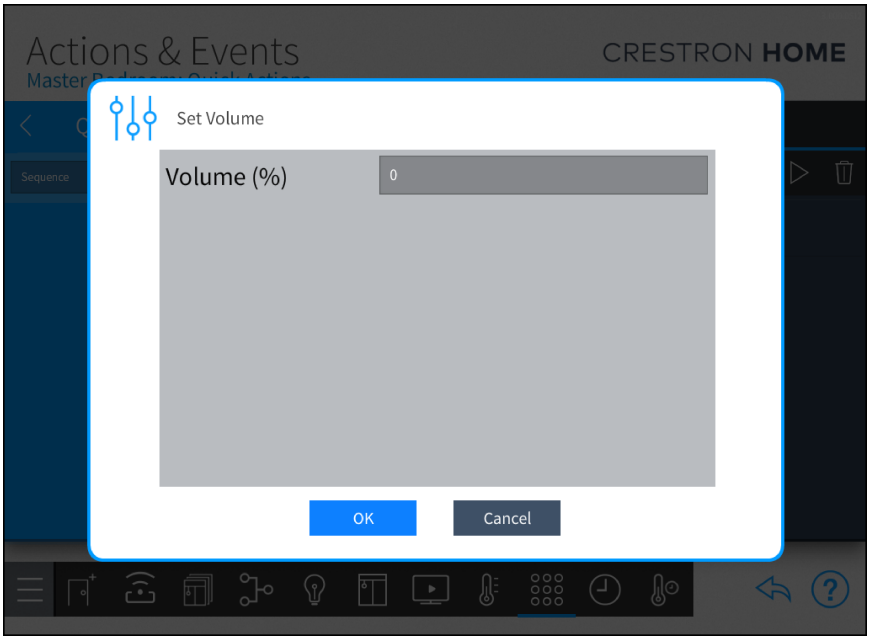
Delete Step: Delete a step in the sequence.

Add a Step

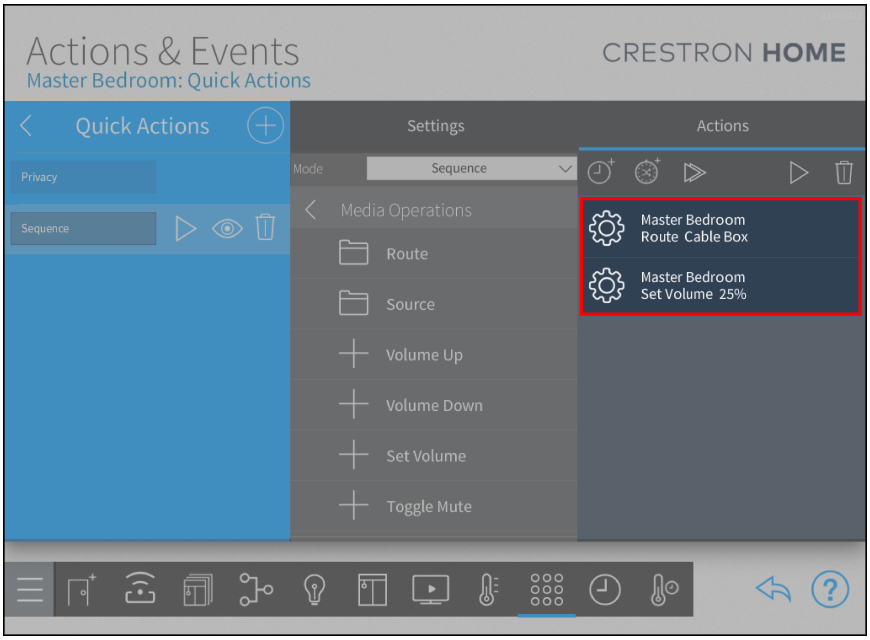
1. Select an action from the **Select Room Below** menu and then tap **Add Step**.



2. If the action requires a value to be set, enter the required data in the dialog that is displayed and then tap **OK**.



3. The step is added to the sequence. Each step displays information about the step such as the room name, device type, settings, and the action that is performed.



Sequence Functions

These sequence functions are available:

- **Lighting and Shade Scenes:** Displays the lighting or shade scenes that are available in the room.

  NOTES:

  - Scenes that are created in a room and hidden (no rooms selected in the Show Scenes In dialog) are displayed in the list.
  - Scenes are only displayed in the room that they are created. Scenes that are displayed in another room using the Show Scenes In dialog when creating the scene will not be shown.
  - The sequence that is being created is not displayed in the **Quick Actions** menu.

- **Media Scenes:** Displays the media scenes that are available in the room.

- **Media Operations:** Displays the media controls that are available in the room. Media operations include routing a source to a room, sending source commands to an active source, and sending room level commands to a room.
    - **Route:** Displays the sources that can be routed to the room. Media sources provided by Smart TVs are also displayed.

      > **NOTE:** Sources are displayed in the **Route** menu even if they are deselected in the **Allowed Sources** menu during **Source Route** configuration.

    - **Source:** Displays source commands that can be sent to the active media source. For example, commands can be sent for source control (for example, play, pause, shuffle), menu navigation (guide, menu, back, up/down/left/right), and channel control.

      > **NOTE:** The Crestron Home system directs the command to the active media source. If there are no active media sources, the command is not sent to any device.

    - **Room Commands:** Displays the room-level commands that are available for the room. For example, volume raise or lower, sleep timer, and room on or off commands.
- **Room Operations:** Displays the Do Not Disturb actions that are available in the room.
- **Quick Actions:** Displays the Quick Actions that are available in the room.

  > **NOTES:**
  > - Quick Actions that are created in a room and hidden (no rooms selected in the Show Quick Action In dialog) are displayed in the list.
  > - Quick Actions are only displayed in the room that they are created.
  > Quick Actions that are displayed in another room using the Show Quick Action In dialog when creating the Quick Action will not be shown.
  > - The sequence that is being created is not displayed in the **Quick Actions** menu.
  > - A sequence Quick Action can be added as a step in a different sequence Quick Action. For example, **Sequence Quick Action A** can be added as a step in **Sequence Quick Action B**.
  > - A sequence Quick Action cannot be added as a step in a different sequence Quick Action if a loop will occur. For example, if **Sequence Quick Action A** was added as a step in **Sequence Quick Action B**, **Sequence Quick Action B** cannot be added as a step in **Sequence Quick Action A**.

- **Scheduled Events:** Displays the scheduled events that can be enabled or disabled.

- **Devices:** Displays the devices in the room that can be directly controlled, such as lighting loads, shades, shade groups, Blu-Ray players, cable boxes, video servers, displays, Horizon keypads, relay controlled devices, and AVRs.

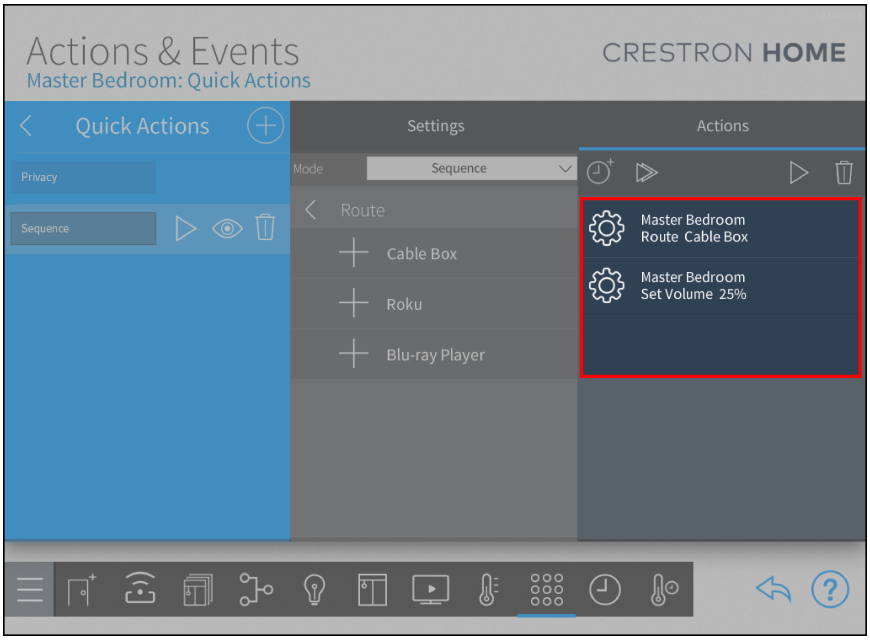
  NOTE:

  - The Crestron Home system always directs the command to the selected device even if it is not the active device. For example, you can issue the Send Keypad String command for a cable box even though the cable box is not the active source in the room.
  - Sources are displayed in the menu even if they are deselected in the **Allowed Sources** menu during **Source Route** configuration.
  - Relay controlled devices include fireplace, fountain, garage door, gate, irrigation, screen, and lift relays. The function available in the sequence (toggle open/close, toggle on/off, on, off, open, and close) is determined by the settings for the device.
  - The color and brightness settings can be changed on Horizon keypads.

Edit a Step

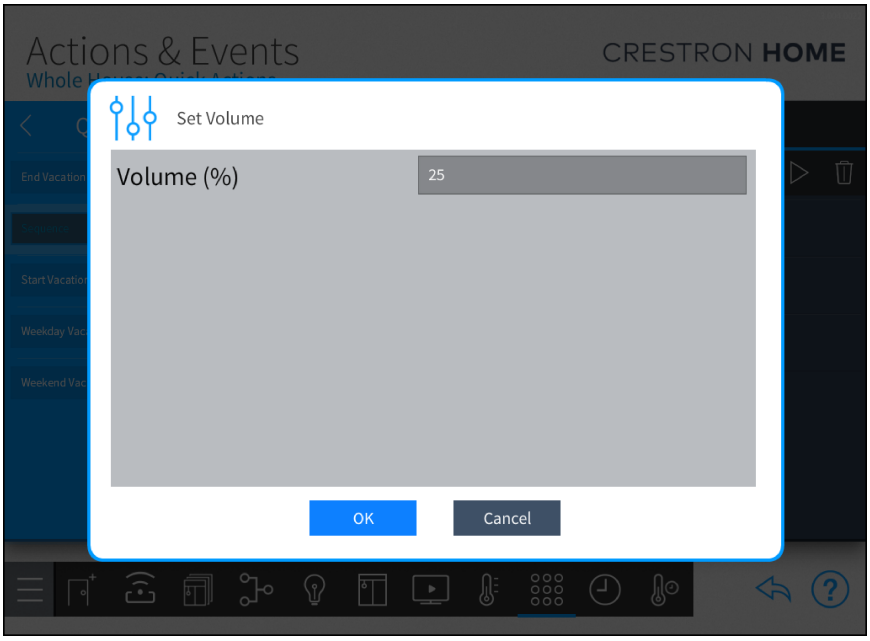
To edit a step in a sequence:

1. Tap a step in the in the **Sequence List** menu.



2. Enter the required data in the dialog that is displayed.

   Example Dialog Box - Set Volume



3. Tap **OK**.

Add a Delay Step

Use a delay to temporarily pause the sequence between steps for a defined amount of time. Use a Delay to pause the sequence for a set period of time or a Random Delay to pause the sequence for a variable amount of time between the minimum an maximum set time.

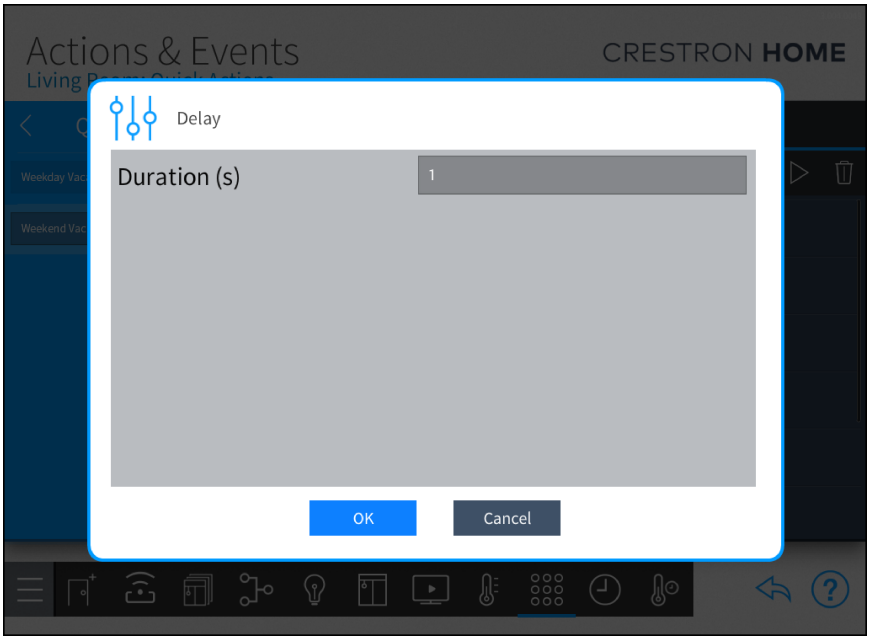
Random Delays can be used to create a Vacation mode. For details, refer to Vacation Scheduler on page 548.

> **NOTE:** Timed action steps and delays run concurrently. For example:
>
> - If two lighting load actions are added with 5 second fade times, the loads will fade to their brightness settings at the same time.
> - If two lighting load actions are added with 5 second fade times and a 10 second delay is added between the steps, the second lighting load action begins 10 seconds after the first lighting load starts to dim.

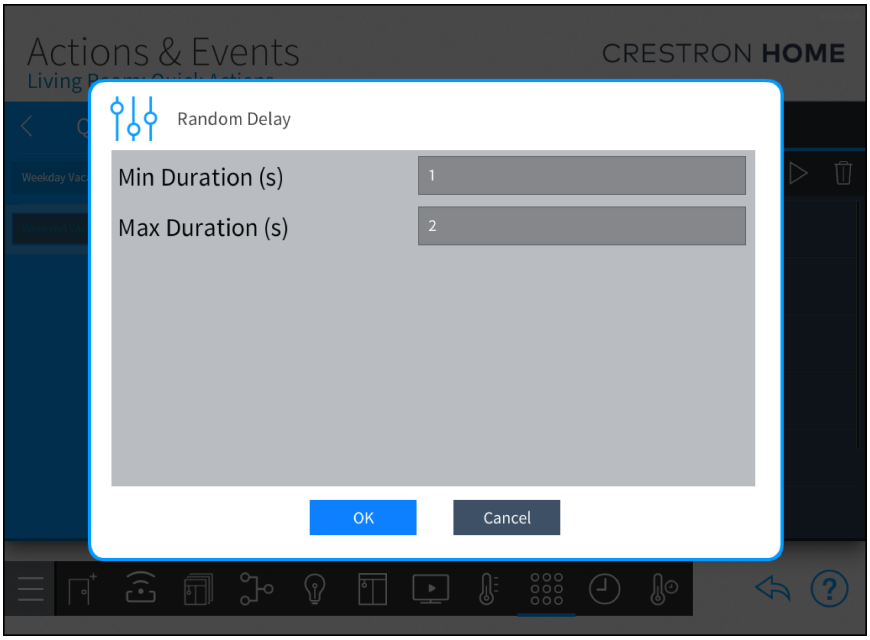
To add a delay step:

1. Tap **Add Delay** or **Add Random Delay**.
2. Enter the duration of the delay:

- **Delay:** The delay will occur for a defined period of time. Set the delay time in the **Duration (s)** box.

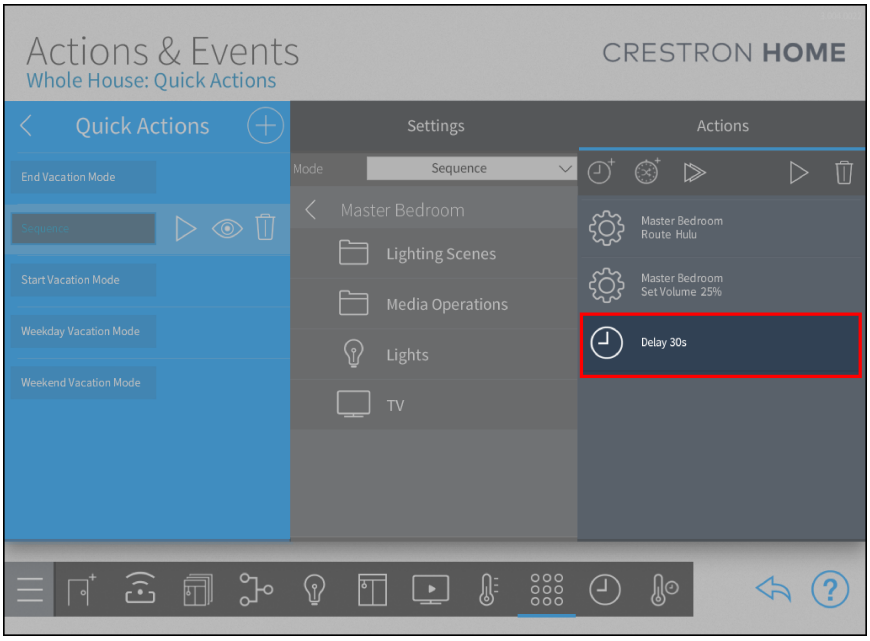


- **Random Delay:** The delay will occur for a variable amount of time between two defined points. Set the minimum and maximum delay time in the **Min Duration (s)** and **Max Duration (s)** boxes. The **Max Duration(s)** time must be greater than or equal to the **Min Duration (s)** time.

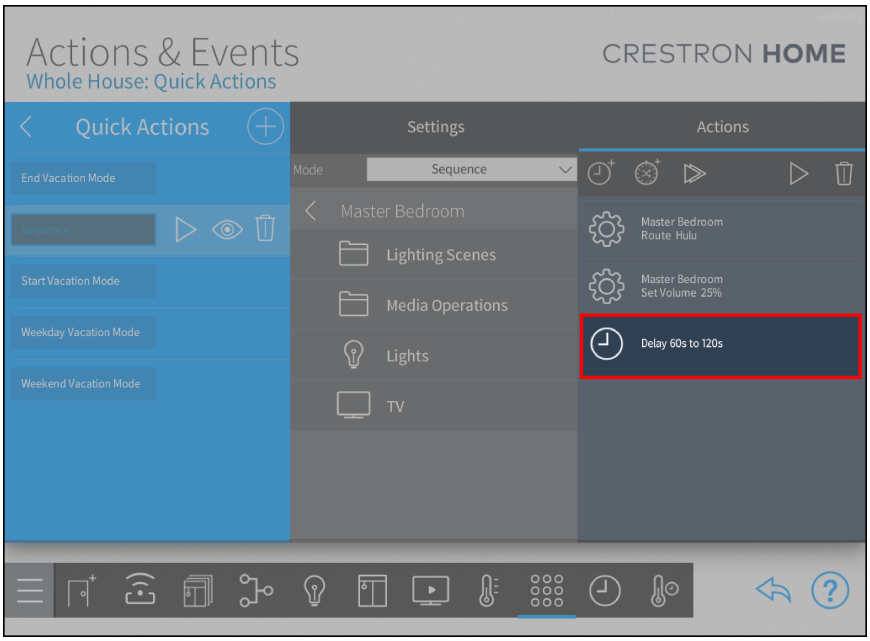


3. Tap **OK**. The random delay step is added to the sequence. The step displays the range for the length of the delay in seconds.

Delay in Sequence



Random Delay in Sequence



Add an If Statement

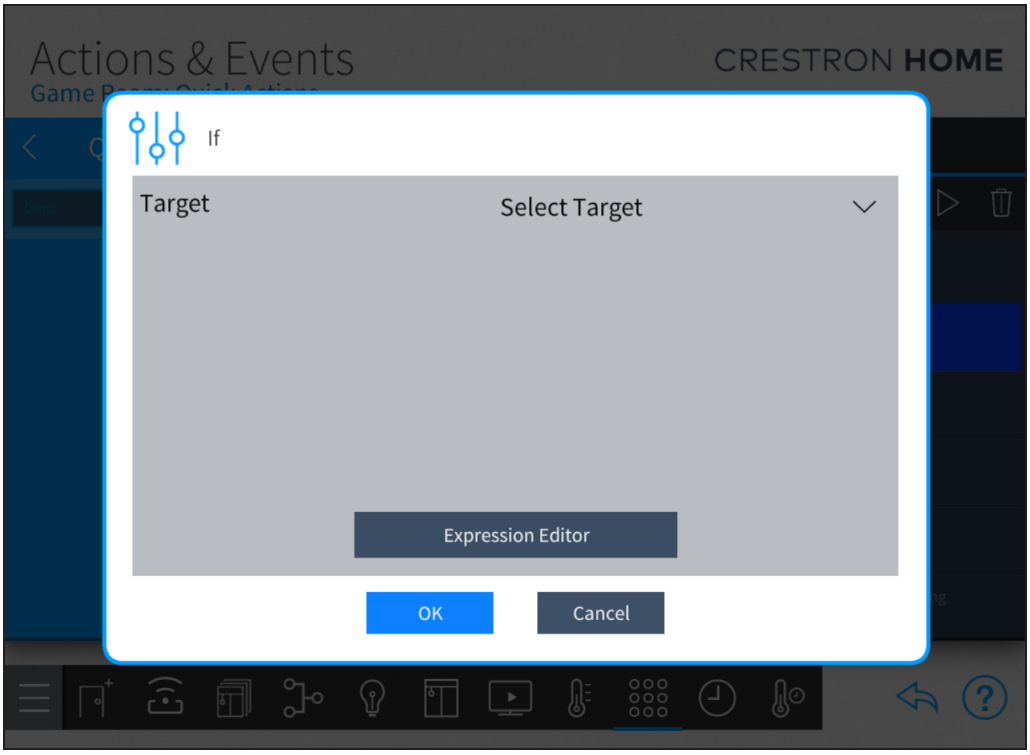
Use an If Statement to add an action to the sequence that only triggers if the specified conditions are met.

NOTES:

- If Statements often utilize Variables. For more information, refer to Variables on page 541.
- For example scenarios using these features, refer to the Conditional Use Cases Guide.

To add an If Statement:

1. Tap **If Statement**.
2. Select a condition from the **Select Target** drop-down menu

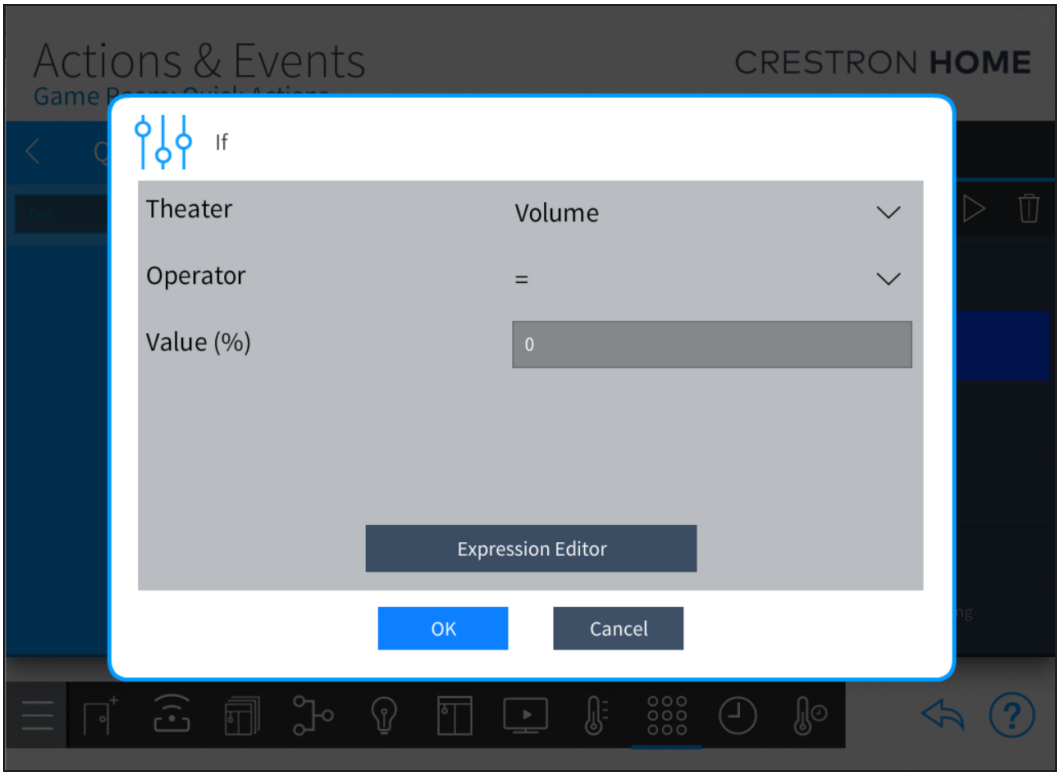


Options for conditions include Variables on page 541 and a wide array of events based on the devices in the system. Some examples include:

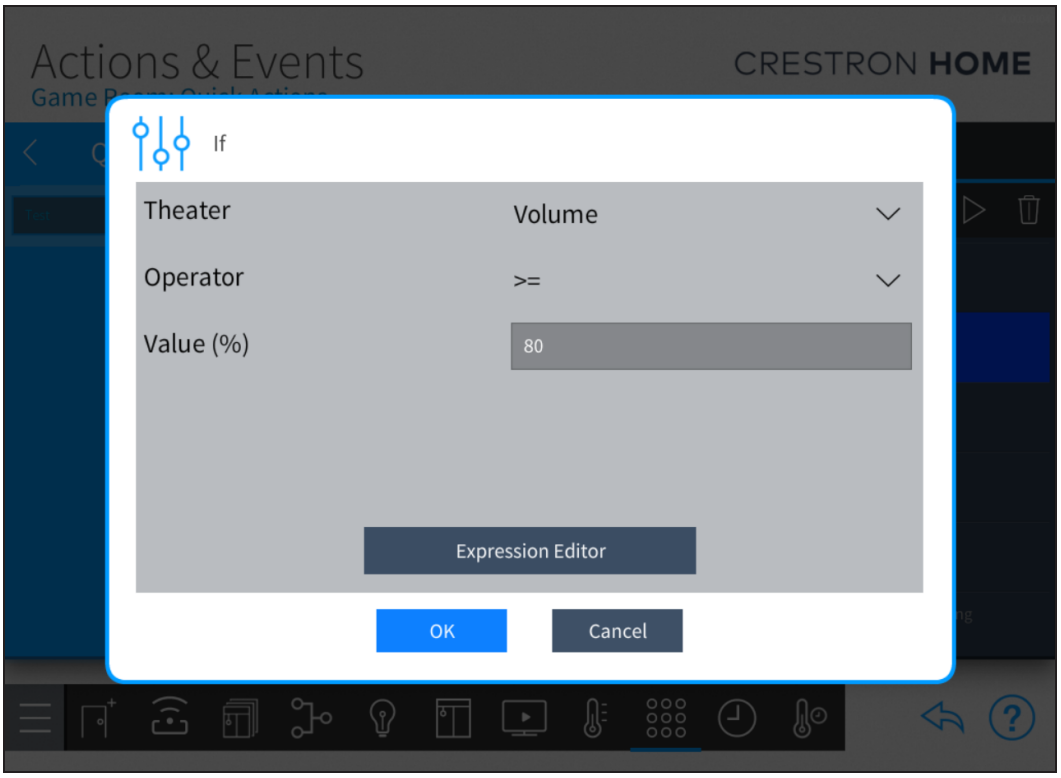
- Room occupancy status
- Light level
- Room temperature or humidity
- Media Zone Events
- Time of day

3. If present, use the **Operator** drop-down menu to select an operator from the following list:
    - **=:** Equals
    - **!=:** Does not equal
    - **<:** Less than
    - **<=:** Less than or equal to
    - **>:** Greater than
    - **>=:** Greater than or equal to

> **NOTE:** Some conditions do not have a selectable operator or may have a limited list of options.

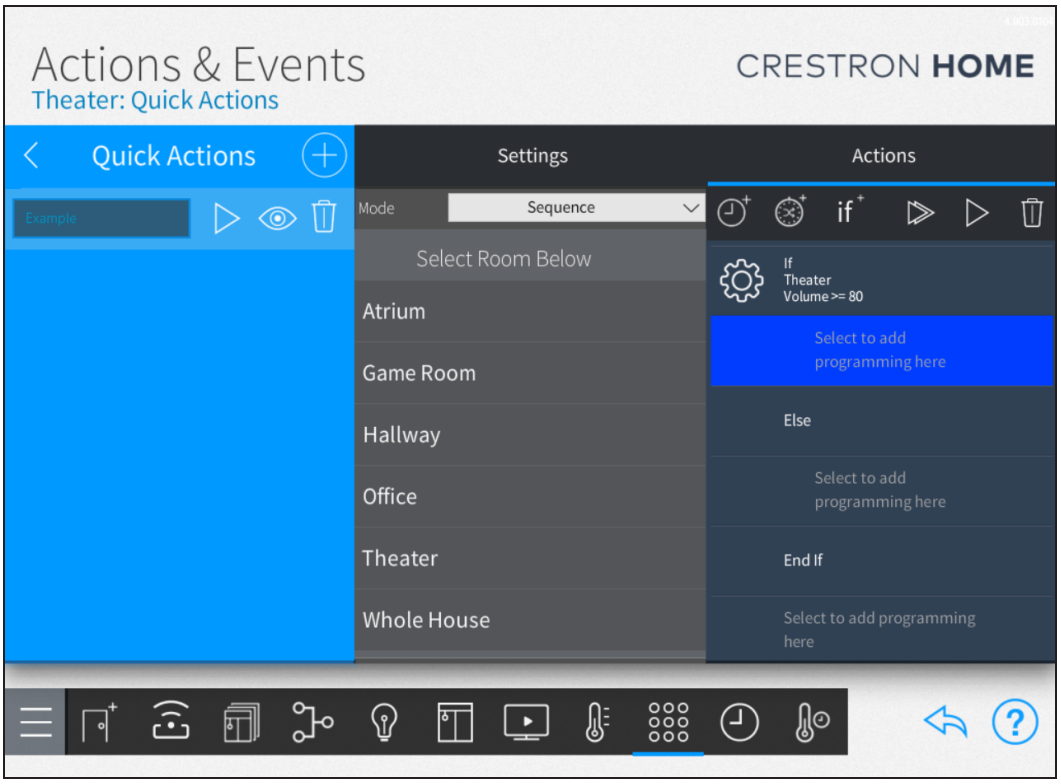


4. Enter or select a **Value**. Possible selections depend on the type of the condition. Common options include True/False and a numerical value.

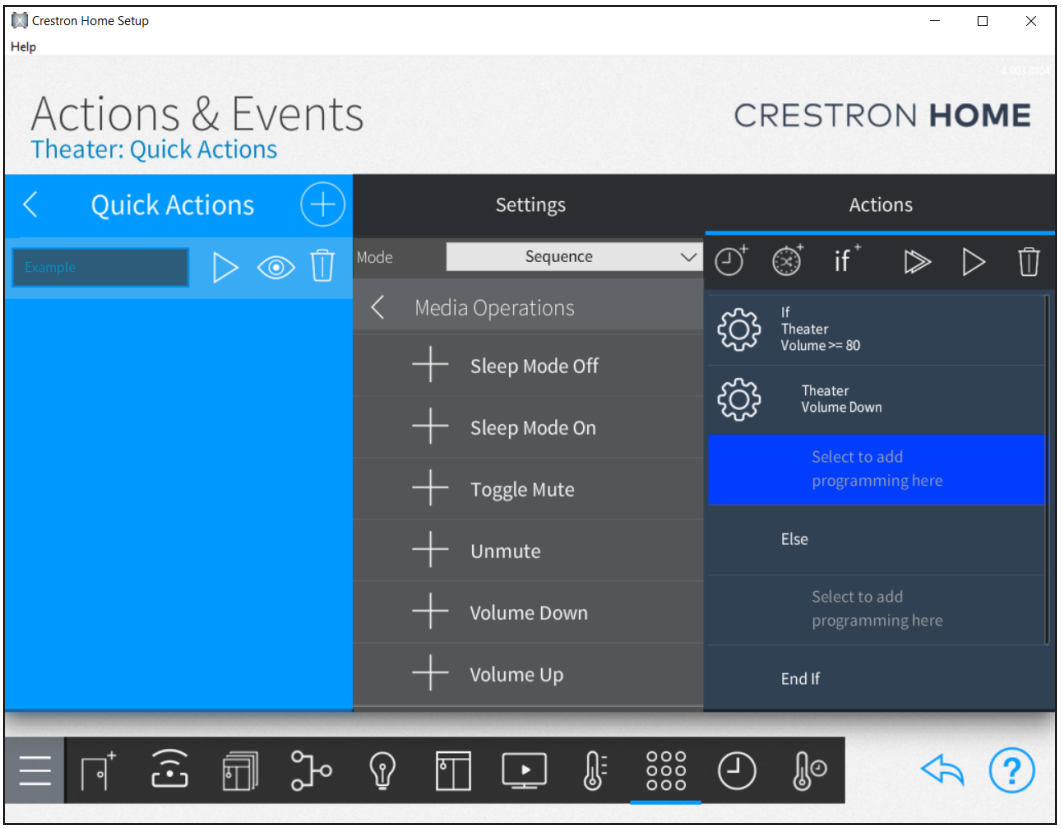


In the example above, the If Statement currently reads: If the **Volume** in the **Theater** is **greater than or equal to 80**...

5. Tap **OK** to return to the sequence with the If Statement added to it. More complex If Statements can be created with the Expression Editor on page 439.



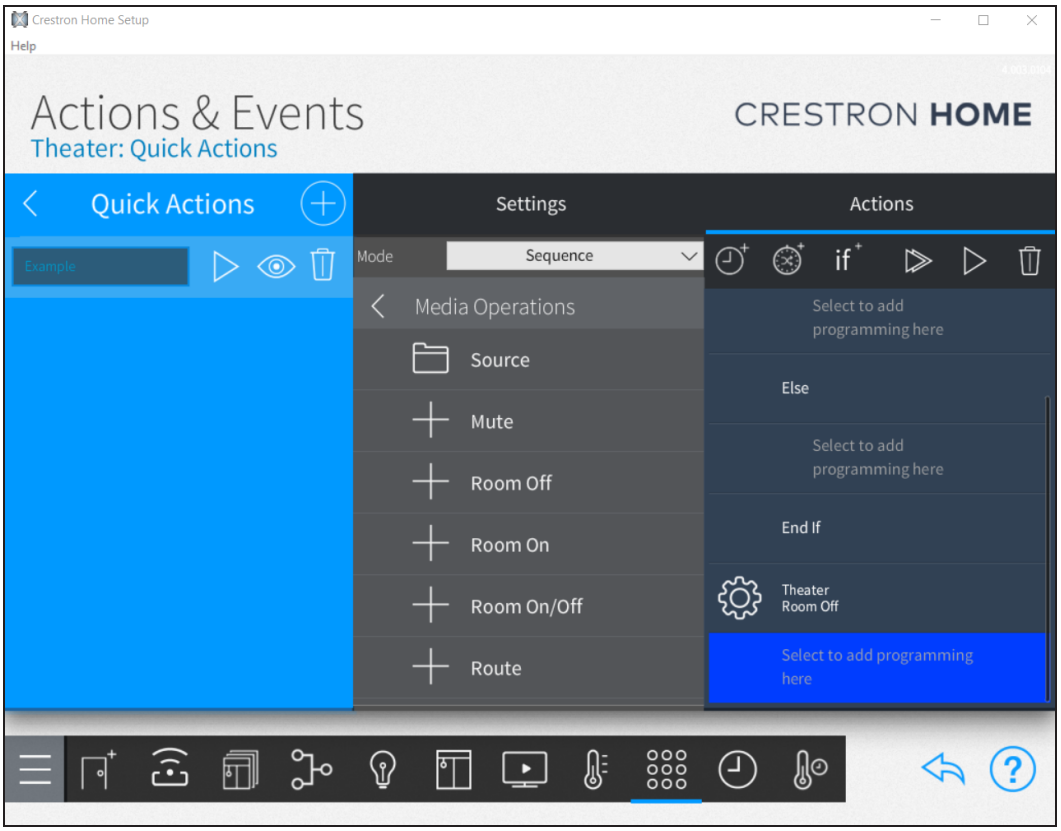
6. Under the If Statement, tap **Select to add programming here** and then tap the action that should trigger when the condition is met.



In the example above, if the **Volume** in the **Theater** is **greater than or equal to 80**, the volume will be lowered.

7. If desired, an **Else** action can added. Tap **Select to add programming here** under **Else** and then tap the action that should trigger when the condition is not met.

8. If desired, an **End If** action can be added. Tap **Select to add programming here** under **End If** and then tap the action that should cause this sequence to end.



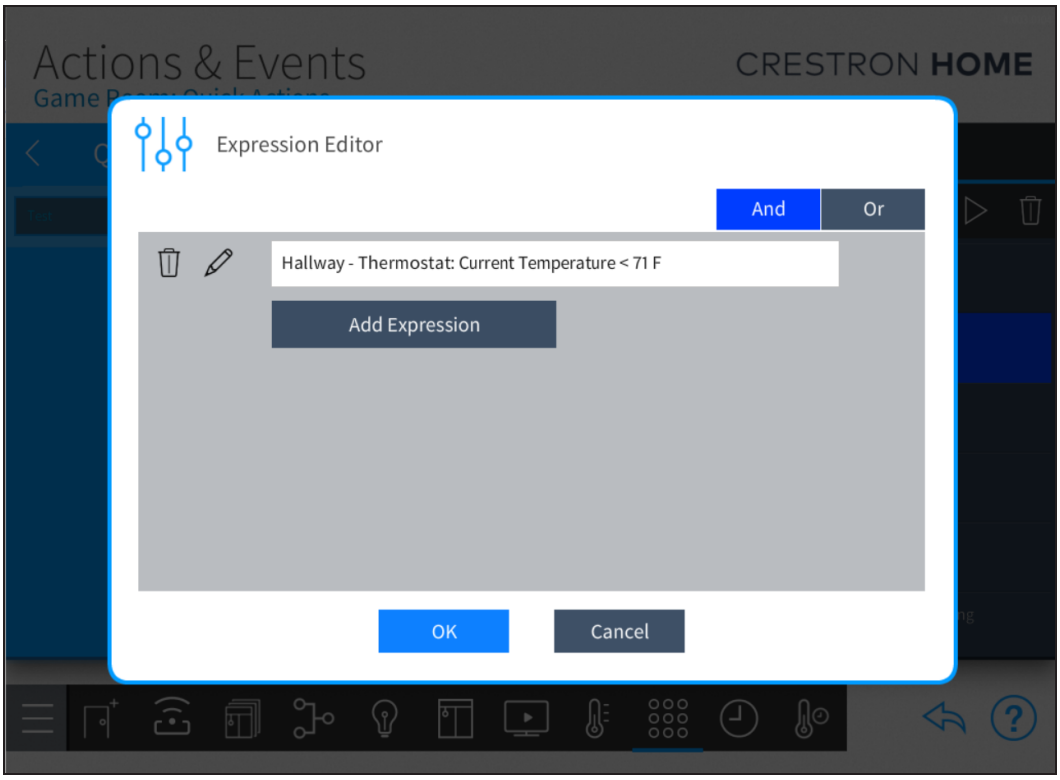
In the example above, this sequence will end if the **Theater Room Off** action is triggered.

Expression Editor

The **Expression Editor** can be used to make complex If Statements involving multiple conditions.

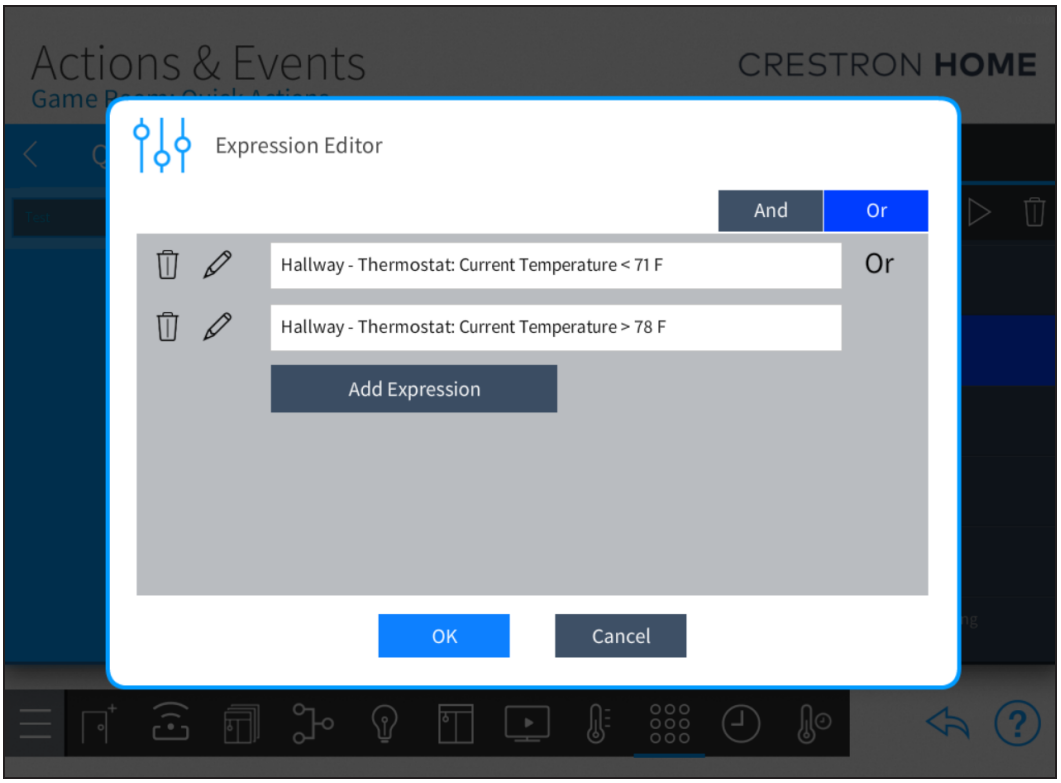
To use the **Expression Editor**:

1. After creating the first condition for the If Statement, select **Expression Editor**. The first condition appears the top of the list.
    - Tap the to delete the condition.
    - Tap the to edit the condition.



    In the example above, the If Statement currently reads: If the **Current Temperature** of the **Thermostat** is **less than 71**...
2. In the upper right of the screen, Tap **And** or **Or**.
    - **And:** The actions following the If Statement will only trigger if all of these conditions are met.
    - **Or:** The actions following the If Statement will trigger if any of these conditions are met.
3. Tap **Add Expression** to add additional conditions as described in Add an If Statement on page 433.

4. Tap **OK** to add the additional condition.



   In the example above, the If Statement currently reads: If the **Current Temperature** of the **Thermostat** is **less than 71 or** is **greater than 78**...

5. Tap **OK** to add the If Statement to the sequence.

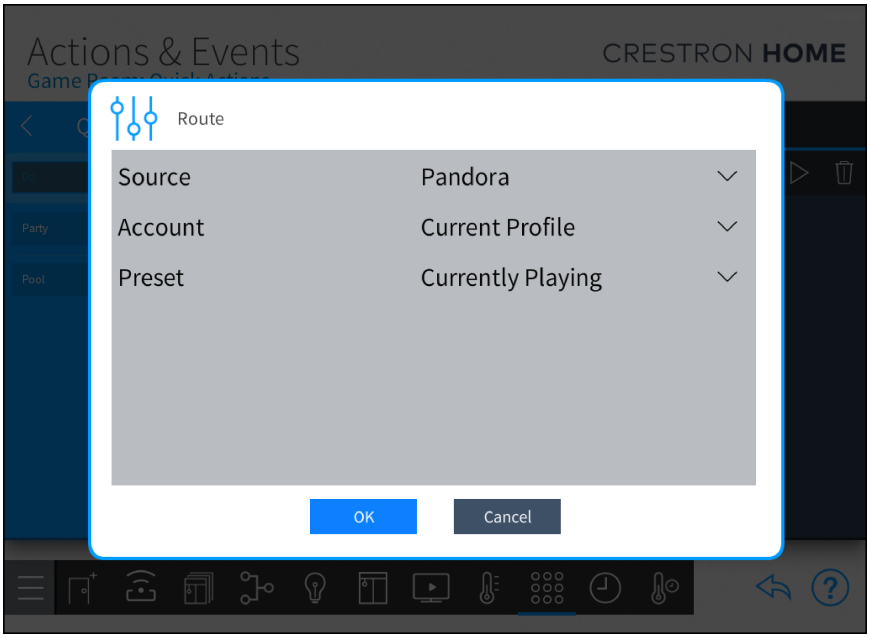
Select a Streaming Service Account Profile and Preset

Streaming service profiles are available for streaming services set up on a DM-NAX-8ZSA.

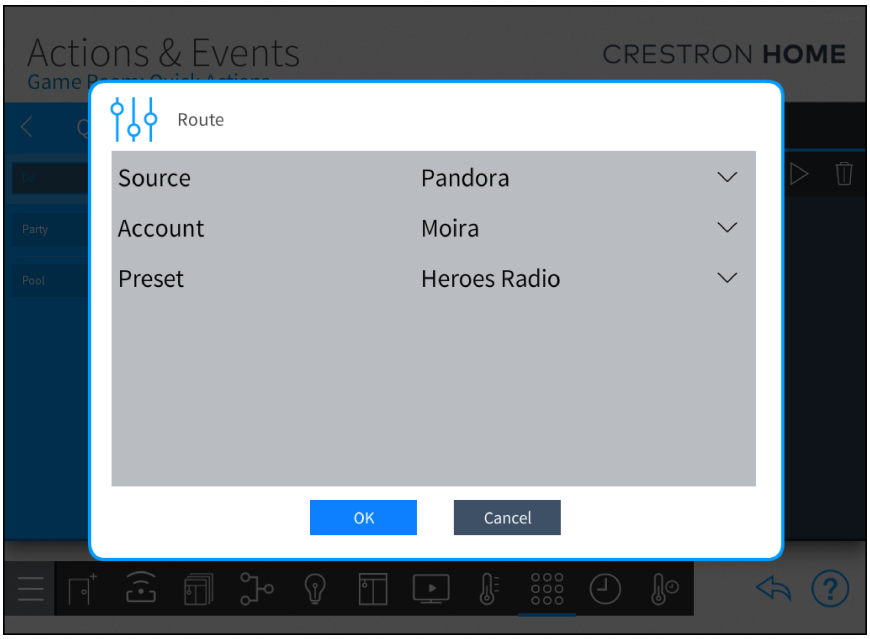
To select a streaming service account profile and preset:

1. Select a room and then select **Media Operations**.
2. Select **+ Route**.

3. Select a streaming service that uses profiles from the **Source** drop-down menu.



4. Select an account and preset from the **Account** and **Preset** drop-down menus. Select **Current Profile** from the **Account** drop-down to select the profile that is currently playing or was last played. Select **Currently Playing** from the **Preset** drop-down to select the preset that is currently playing or was last played.

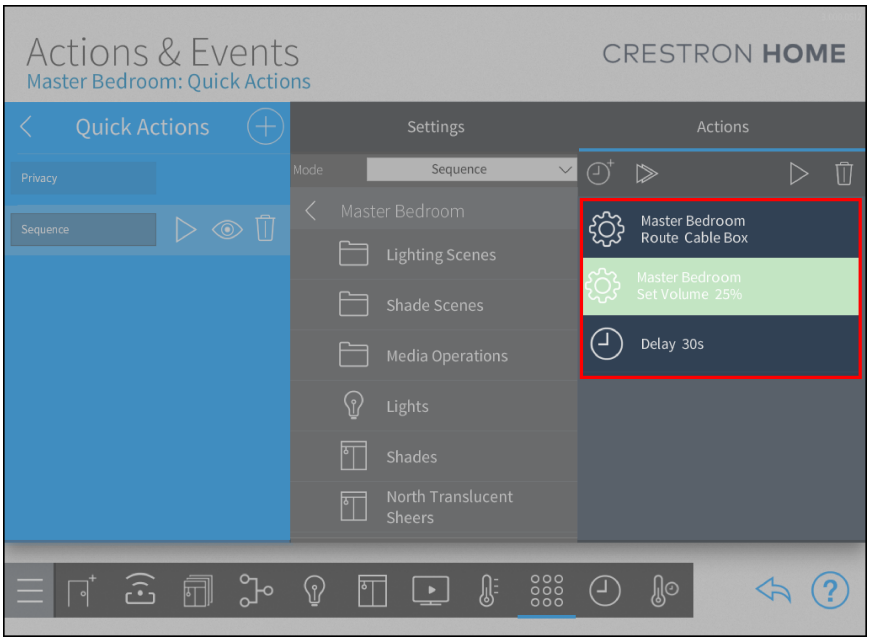


5. Select **OK**.

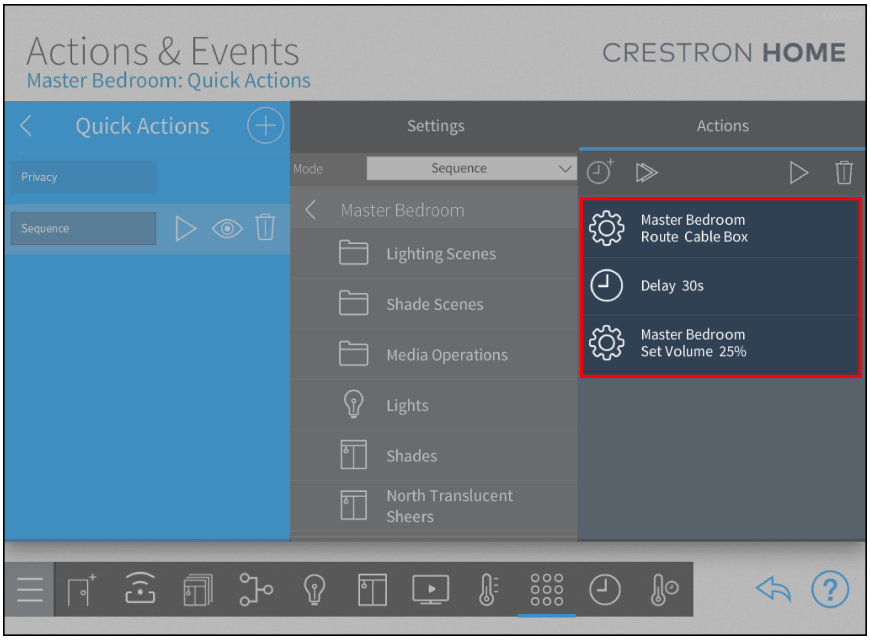
Reorder the Steps

To reorder the steps in a sequence:

1. Tap and hold a step until it turns green (about 3 seconds).



2. Drag the step to the desired location in the sequence and then release the step.



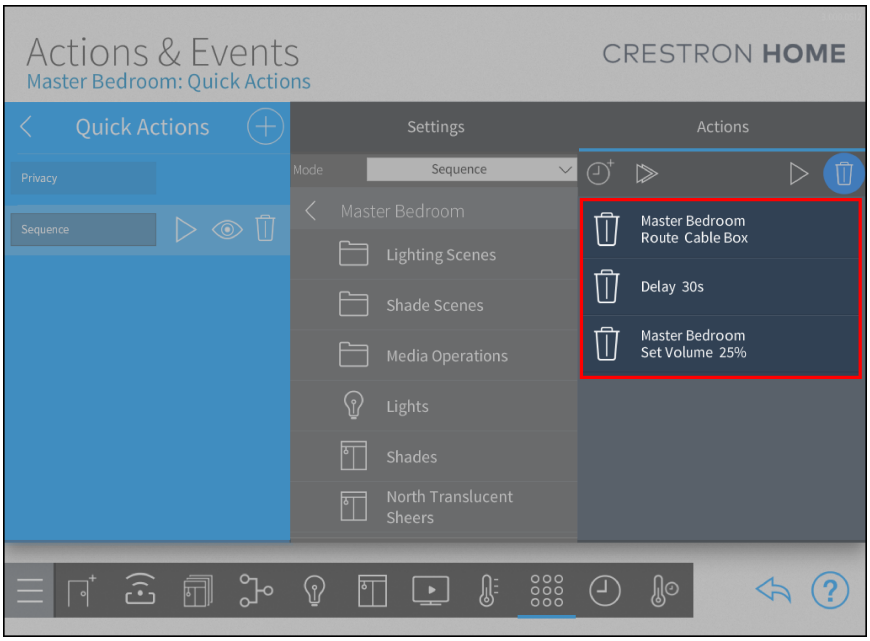
Delete a Step

To delete steps in a sequence:

1. To enter **Delete** mode, tap **Delete step**. The **Delete Step** button turns blue.



2. To delete a step, tap **Delete** and then tap **Yes**.



3. To exit Delete mode, tap **Delete**. The **Delete** button and the icons next to the sequence steps return to the original state.

Test the Sequence

Test the sequence to make sure that it functions properly. To test the sequence, you can play all steps in the sequence or individual steps in the sequence.

- To play all steps in the sequence, tap **Play Sequence**.
- To play a single step in the sequence, follow these steps:
  1. To enter **Play Step** mode, tap **Play Step**. The **Play Step** button turns blue.
  2. To play a step, tap **Play**.
  3. To exit **Play Step** mode, tap **Play Step**. The **Play Step** button and the icons next to the sequence steps return to the original state.

Customize Interface Buttons

Select the color, layout, and engravings for buttons on user interface devices such as keypads and handheld remotes. The information is used to fulfull an order when custom-engraved buttons are ordered through the Crestron Home Setup app.

To view the **Actions & Events** screen, select **Step 5: Customize & Schedule > Customize Actions & Events** on the **Setup** screen or on the setup menu.

NOTES:

- To identify the selected interface, select **Locate** to turn on the location feature of the device. The locate feature is not supported on all devices.
- When customizing the buttons for remote keypads, consider the following:
  - One remote keypad is programmed even if there are multiple remote keypads physically connected to the primary Horizon 2 device.
  - Remote keypads that are associated with the primary Horizon 2 device always have identical programming.
  - To order the correct number of button assemblies, select the number of remote keypads that are physically connected to the primary device.
  - Remote keypads do not have a backlight. Options to change feedback settings for the remote keypad will not be displayed.

Select a Color

To select a color:

NOTES:

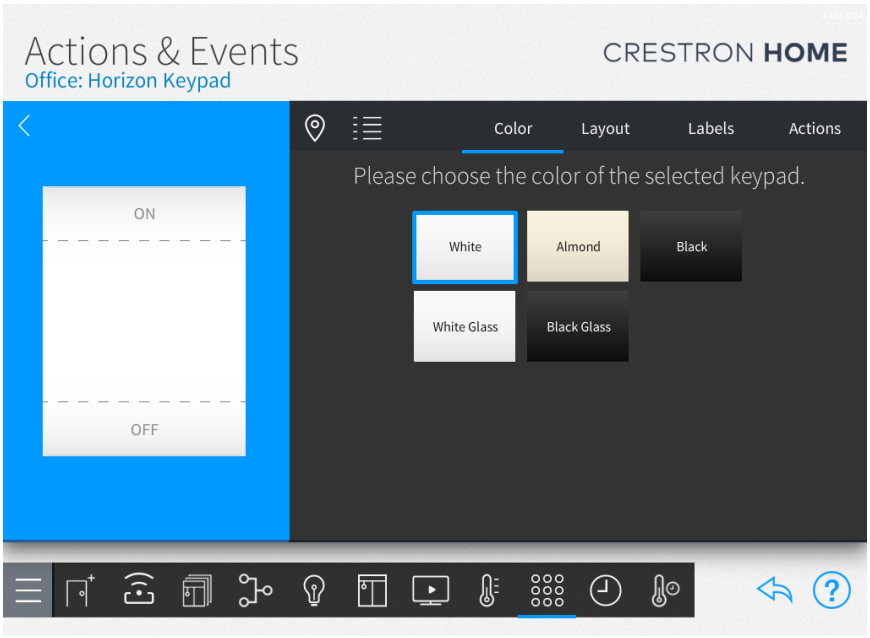
- Make sure that the color that is selected matches the color of the device before ordering buttons.
- Color selection is not available for all devices.

1. Select **Color**.

   Cameo Keypad, Select Color



Horizon Keypad, Select Color



2. Tap a color to choose the color of the selected keypad. The keypad on the left changes color and the selected color is highlighted.

Select a Button Layout

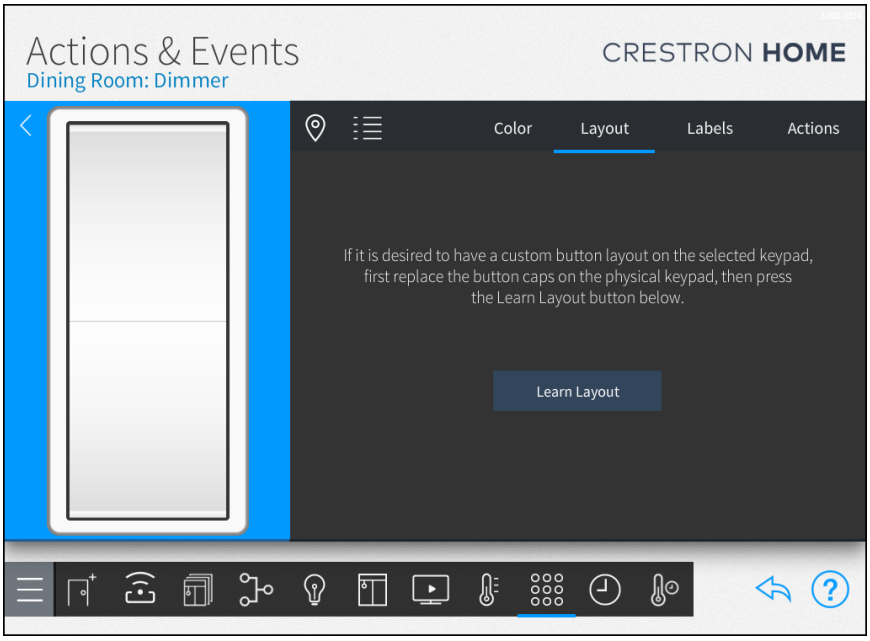
To select the button layout:

NOTES:

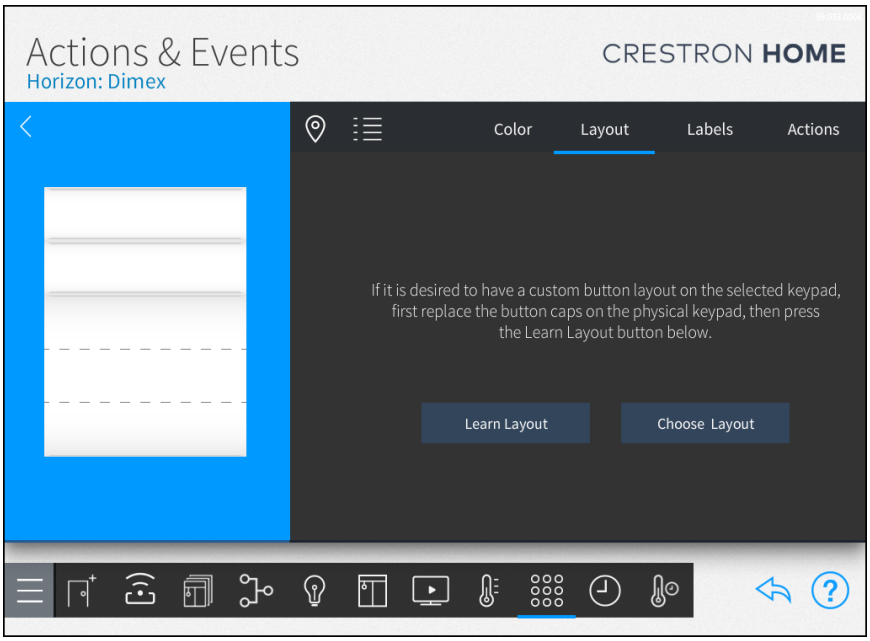
- Install the buttons on the device prior to selecting the layout.
- Layout selection is not available for all devices.

1. Select **Layout**.

Cameo Keypad, Select Layout



Horizon Keypad, Select Layout



2. To select the button layout, select **Learn Layout** or **Choose Layout**:

   > **NOTE: Choose Layout** is not available for all devices.

   - **Learn Layout**: Select **Learn Layout** and then press all of the buttons on the device.
   - **Choose Layout:** Select **Choose Layout** and then select the buttons that are used on the keypad.
3. Tap **Done**.

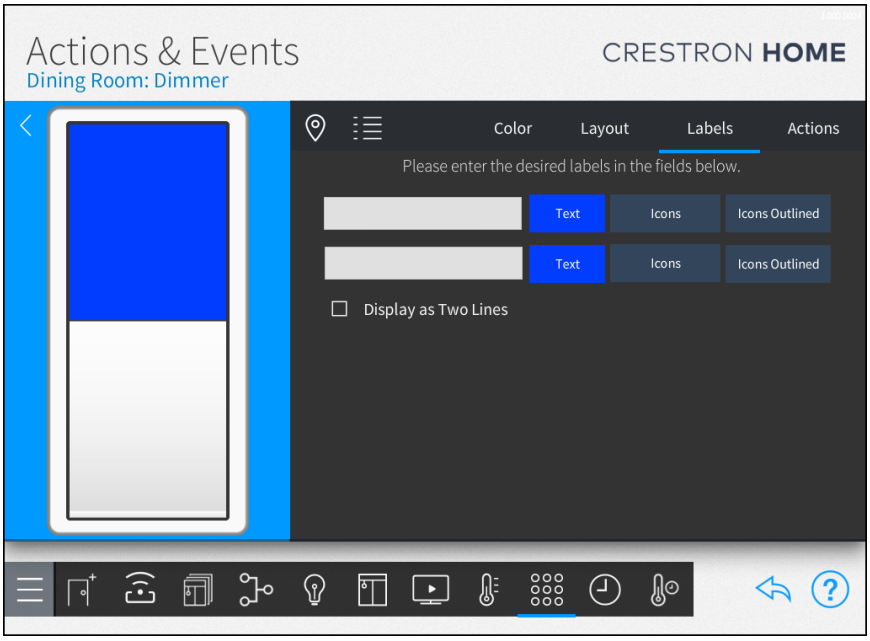
Assign Labels

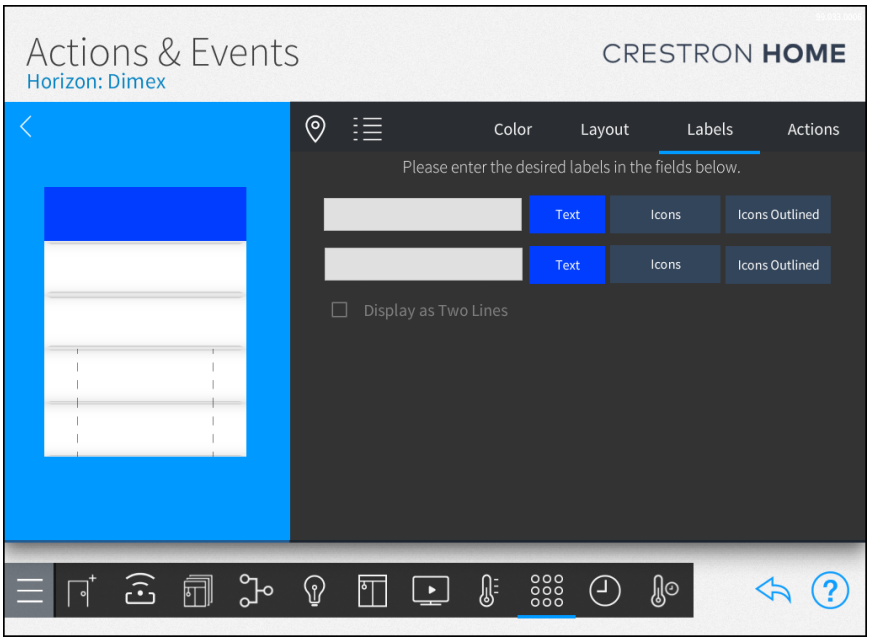
To create button labels:

> **NOTE:** The layout must be assigned prior to labeling the buttons.

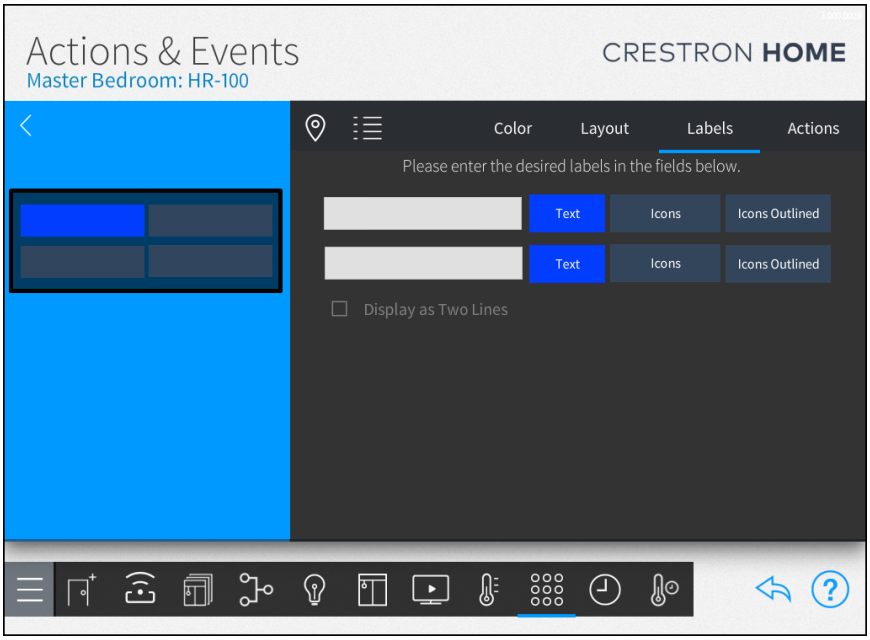
1. Select **Labels**.

Cameo Keypad, Create Labels





Handheld Remote, Create Labels



2. Select a button on the device. For select rocker buttons, the center of the button can be labeled.
3. Select **Text**, **Icons**, or **Icons Outlined** and then enter button label. To display the label on two lines, select **Display as Two Lines**. To use a button with an existing label, select **Use Pre-Labeled Button**.

> **NOTE: Icons** and **Icons Outlined** cannot be mixed on the same button.

Assign Button Actions

To assign actions to buttons, refer to Button Actions on page 456.

Order Engraved Buttons

To order engravings, use the myCrestron RMS Services settings screen. For details, refer to myCrestron RMS Services on page 574.

Button Actions

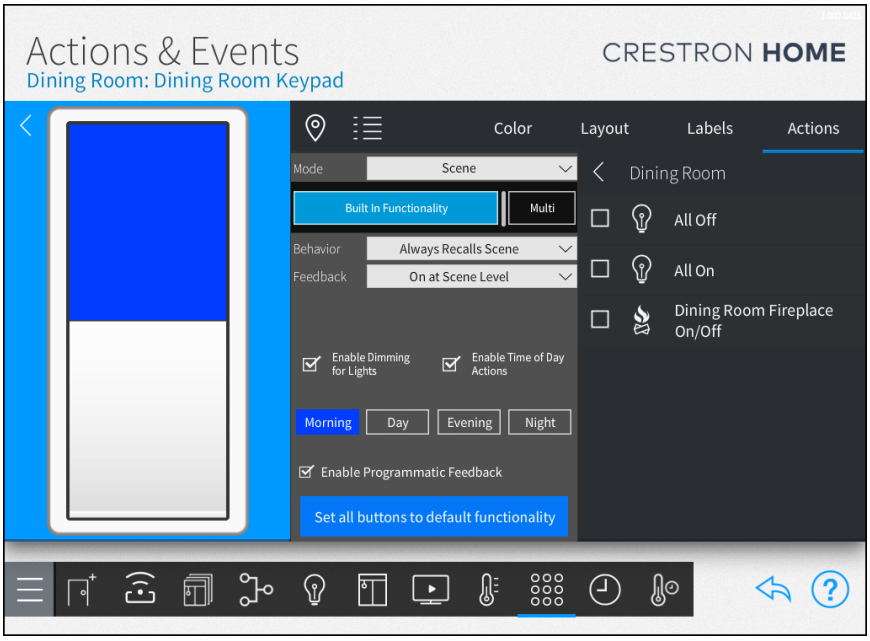
Assign actions to physical buttons on devices. The button action configuration process is similar for keypads, handheld remotes, contact closure keypads, third-party keypads, etc. Depending on the capability of the device, some options may not be available.

To view the **Actions & Events** screen, select **Step 5: Customize & Schedule > Customize Actions & Events** on the **Setup** screen or on the setup menu.

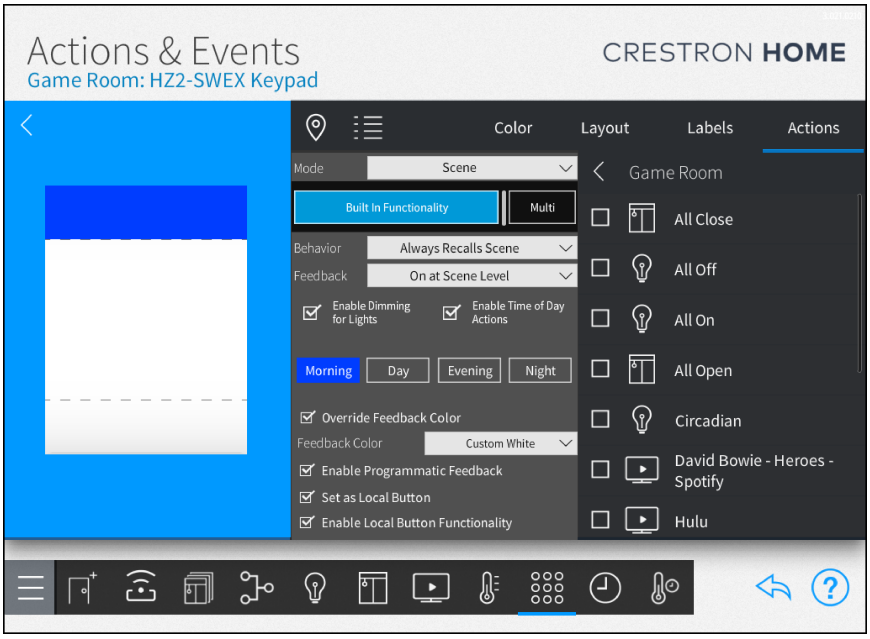
NOTES:

- To identify the selected interface (if supported), select **Locate** to turn on the location feature of the device. The locate feature is not supported on all devices.
- For additional information about keypad button presses and button modes, refer to Keypad Button Programming on page 1420.
- For Horizon keypads, dimmers, and switches:
  - To change the color of the LED, refer to the documentation provided with the device.
  - To assign custom LED colors, refer to Custom LED Colors for Horizon Keypads on page 508.
  - The LEDs on the HZ-KPEX and HZ-AUX keypads are disabled by default. To enable the LEDs, calibrate the light sensor. For details, refer to Horizon Keypads on page 1239.

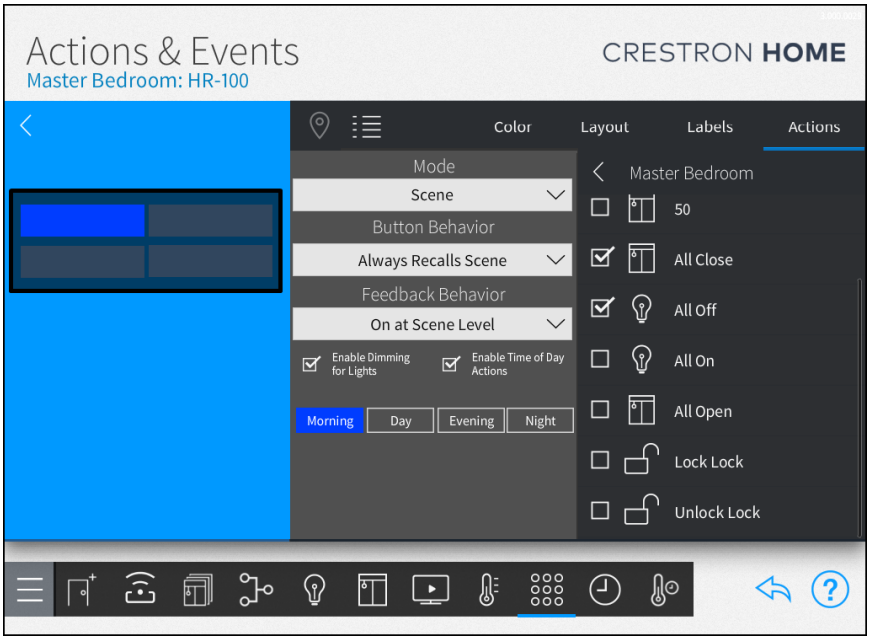
Cameo Keypad, Button Actions



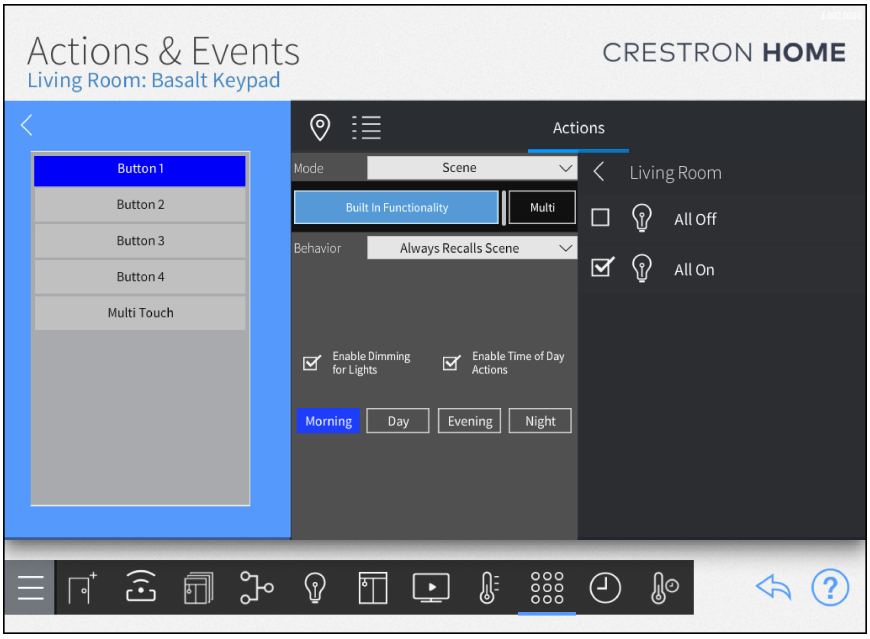
Horizon Keypad, Button Actions



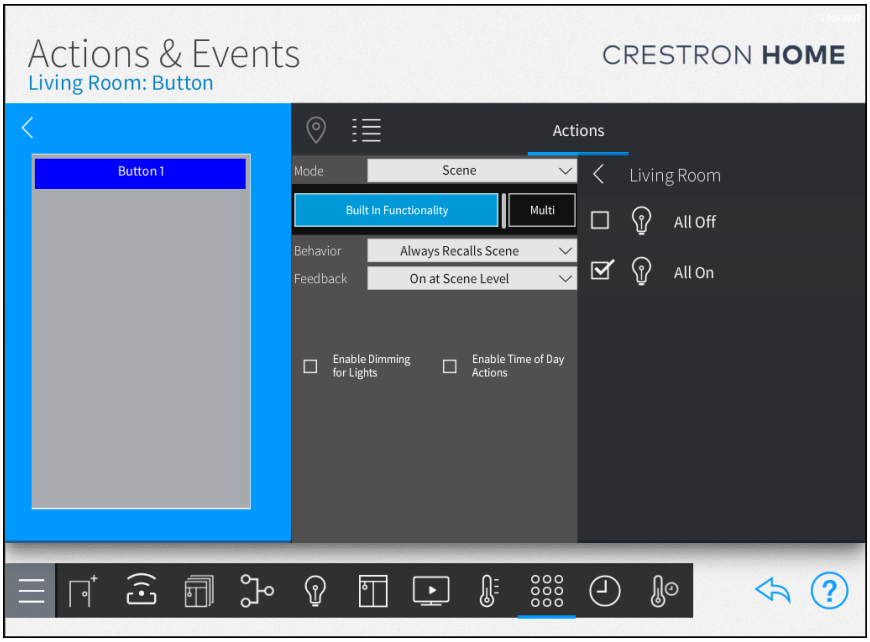
HR-100 Handheld Remote, Button Actions



Third-Party Keypad, Button Actions



Contact Closure Keypad, Button Actions

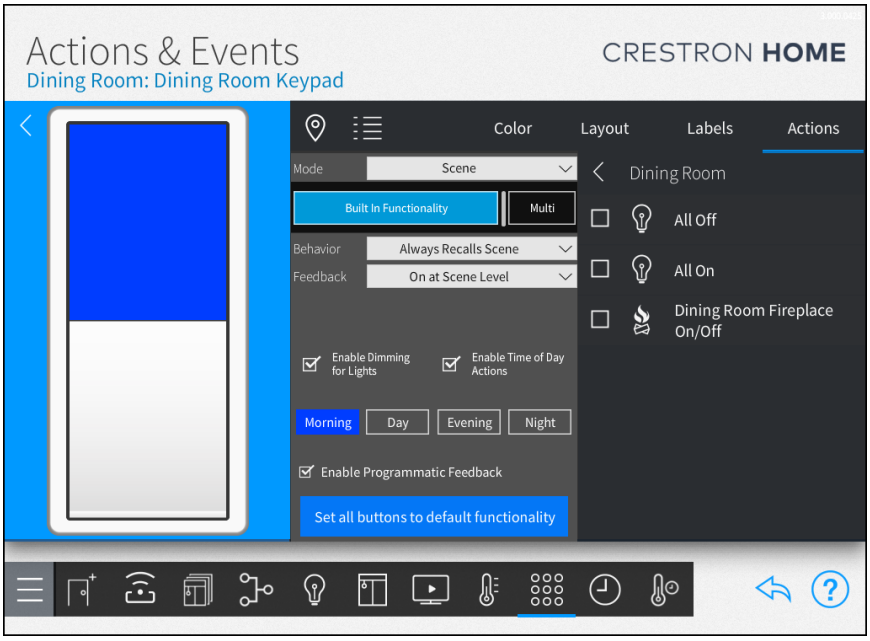


In the sections below, Cameo® keypads and Horizon® 2 keypads are used as examples.

Configure the Button Actions

1. On the **Setup** screen, go to **Step 5: Customize & Schedule > Customize Actions & Events** or on the setup menu.

2. Select a room and then select a keypad, handheld remote, contact closure keypad, third-party keypad, etc.
3. Select **Actions** and then select a button on the device. The selected button is highlighted.



4. In the **Mode** drop-down list, select a button mode. The mode determines the type of action that is recalled when the button is pressed.
5. Configure the action. For details, refer to Button Modes on page 460.

Button Modes

These Button Modes are available:

Scene

Select **Scene** from the **Mode** drop-down list to recall or switch a scene when the button is pressed. The scene can be recalled using the built-in or multi-press functionality.

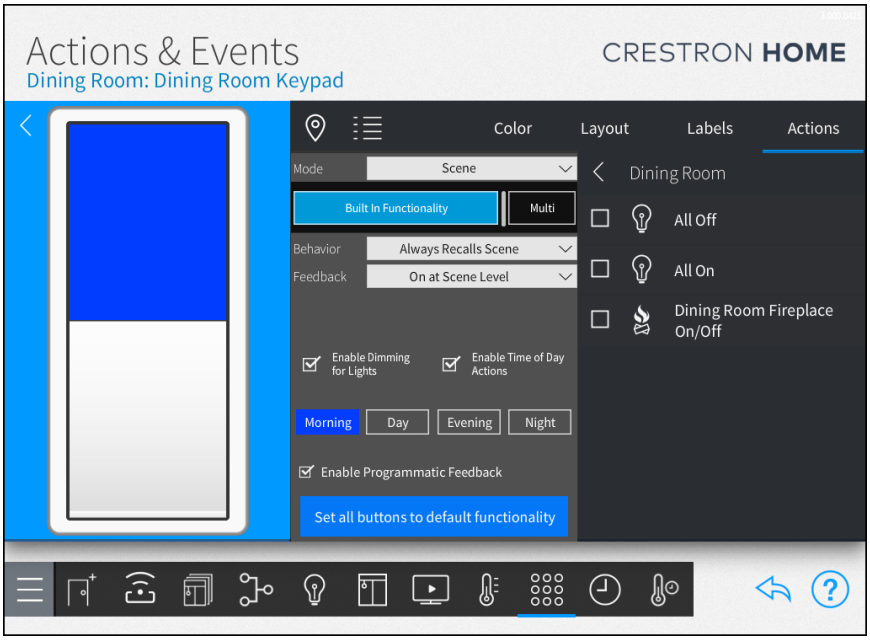
> **NOTE:** The **Built In Functionality** button function cannot be used in conjunction with the **Multi** button function. Settings applied to the function will be discarded when switching between the functions.

- **Built In Functionality:** One button press can recall or switch one scene.
- **Multi:** Multiple button presses can recall up to 10 scenes and provide the ability to cycle through scenes. Sequential button presses recall up to 10 scenes.

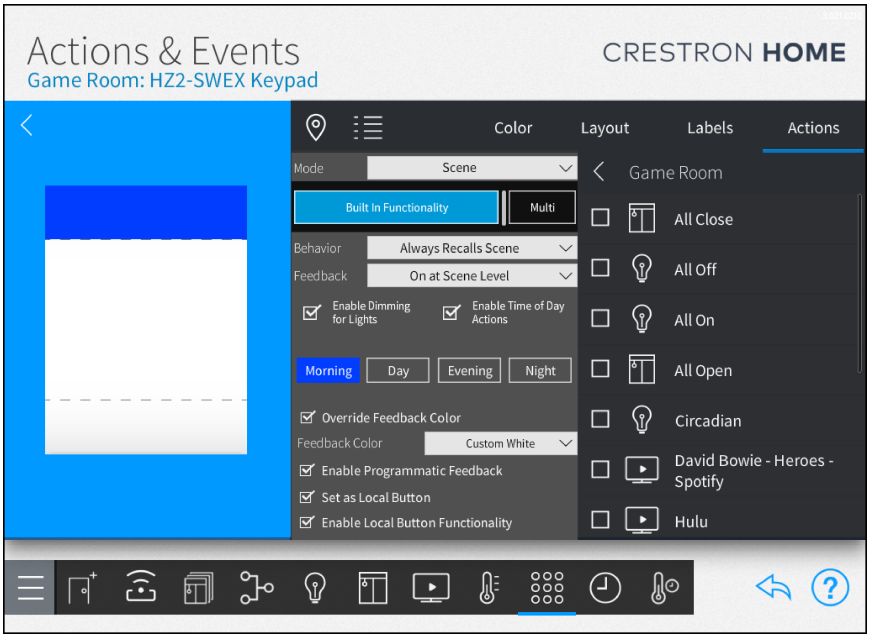
Built In Functionality

Tap the **Built In Functionality** button to configure using the built-in functionality.

Cameo Keypad, Scene



Horizon Keypad, Scene



Behavior: The behavior defines how the scene is recalled or toggled when the button is pressed. Select a behavior from the **Behavior** drop-down list:

- **Always Recalls Scene:** Recalls the scene.
- **Toggles Scene/Off:** Switches the scene on and off.
- **Custom Toggle:** Switches between the On Actions and Off Actions. Assign different scenes to the On Action and Off Action.

Built-in functions are assigned for the following button presses:

- **Tap:** Recalls the scene or the scene on or off with the defined fade time.
- **Double Tap:** Immediately recalls the scene or the scene on or off. The fade time for the scene is bypassed.
- **Press and Hold:** To use the button to raise or lower the lights, select **Enable Dimming for Lights**. The load raises or lowers based on the action that was performed last. If the load was turned on or raised, press and hold the button to lower the light level. To turn off the lights, continue holding the button after the minimum light level is reached.

Feedback: The LED feedback behavior defines the function of the LED that is associated with the button. Select an LED feedback behavior from the **Feedback** drop-down list:

- **On at Scene Level:** The LED lights when the scene is recalled.

  > **NOTE:** The LED turns off if the scene is modified. For example, the LED turns off if the lights or shades are raised or lowered.

- **On When any Light On:** The LED lights when any lighting load that is associated with the scene is on. For example, if a keypad button recalls the All On scene from the Whole House room, the LED lights when any light in the house is on and the LED turns off when all lights in the house are off.

Enable Dimming for Lights: When **Enable Dimming for Lights** is enabled, press and hold the button to raise or lower the lights. If the last action performed raised the lights, the lights will be lowered.

Enable Time of Day Actions: Assign a different action for each time of day. Tap the **Morning**, **Day**, **Evening**, or **Night** button and then select the action.

Enable Programmatic Feedback: When enabled, the LED provides feedback based on the status of other devices in the Crestron Home system. This allows the LED to light when another keypad in the system recalls the same action (for example, a different keypad recalls the same scene). When disabled, the LED provides no feedback.

Override Feedback Color: The color of the LED feedback associated with the button. Select an LED color from the **Override Feedback Color** drop-down list. The Alarm feedback color lights red when activated and is off when inactive.

> **NOTE:** For feedback purposes only, the center of a rocker button can be programmed to light and display programmatic feedback. For example, the LED can be programmed to mimic the function of the top button of the rocker by assigning the same settings used by the top button.

Enable Local Button Functionality: Select this option to turn on the Local Button functionality on the keypad.

Set as Local Button: Select this option to assign the selected button as the local button. A local button must always be selected on a load controller. Only one button can be set as the local button. The local button provides direct control of the connected load (without input from the control processor) and can also be programmed to perform other actions, such as turning on the TV.

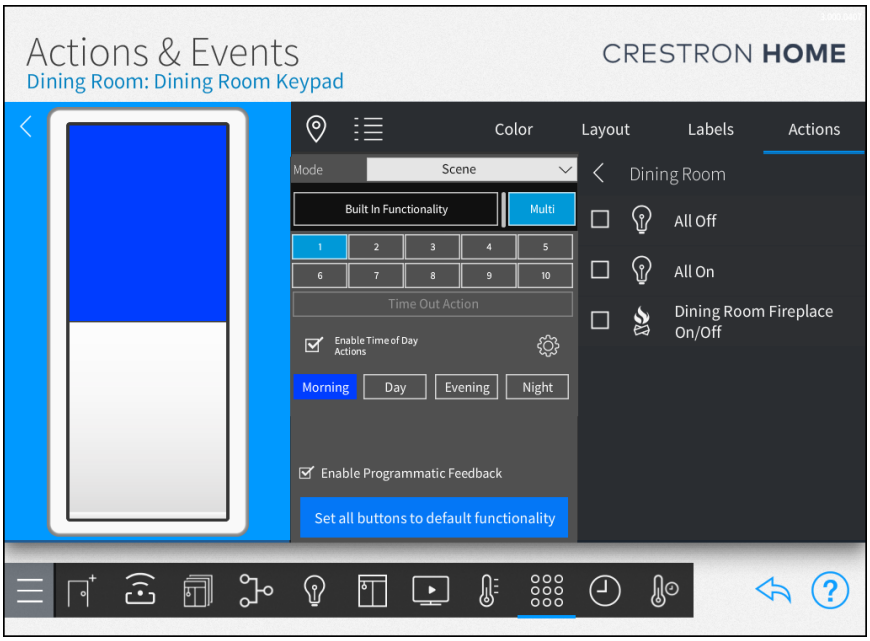
> **NOTES:**
>
> - An HZ-KPEX and HZ2-KPEX can be assigned a local button even though it cannot directly control a load.
> - When the local button on the HZ-AUX is pressed, the signal is transmitted using the "traveler" wire to the Horizon dimmer or switch and then the load attached to the Horizon dimmer or switch is turned on or off or dimmed up or down.
> - The HZ-DIMFLVEX does not support multiway control.

Multi

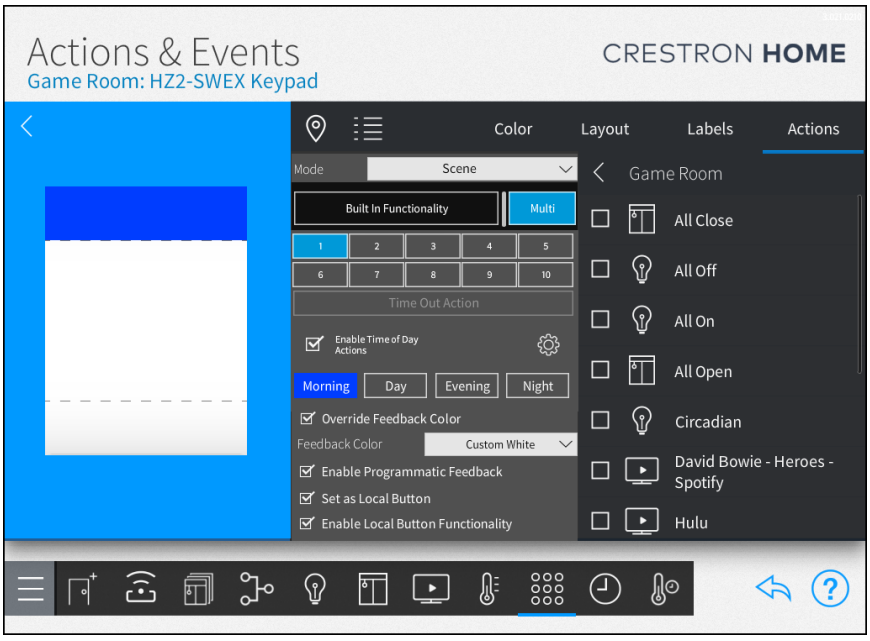
Tap the **Multi** button to configure using the multi tap functionality.

> **NOTE:** The **Built In Functionality** button function cannot be used in conjunction with the **Multi** button function. Settings applied to the function will be discarded when switching between the functions.

Cameo Keypad, Scene



Horizon Keypad, Scene



Button Press (1-10): Assign an action for each button press. To assign an action to a button press, tap a button press number and then assign the action.

NOTES:

- The Crestron Home system maintains a count of the button presses that have occurred. When the system count matches the button press number, the action associated with the button press number is performed.
- The system count resets after it reaches the end of the list. For example, if an action is assigned for button press 1 through 4, the fifth button press resets the system count and the action assigned to button press 1 is performed.
- Button presses can be skipped. For example, if an action is assigned for button presses 1 and 5 and no action is assigned for button presses 2, 3, and 4, no action is performed when button presses 2, 3, and 4 occur.

Time Out Action: A time out action can be performed when the time out period expires. To set the time out action, tap the **Time Out Action** button and then assign an action.

NOTES:

- A time out period begins after the last button press and is used to determine how long the Crestron Home system waits for an addition button press. The default timeout period is 24 hours.
- To configure the time out period for the keypad, tap **Settings** next to the **Enable Time of Day** button.
    - To set a custom time out period, deselect the **Use System Settings** check box and then enter the time out period in the **Hours**, **Minutes**, and **Seconds** text boxes.
    - To use the system wide settings, select the **Use System Settings** check box.
    - The maximum time out period is 24 hours. To set the time out period to 24 hours, type **0** in the **Hours**, **Minutes**, and **Seconds** text boxes.

Enable Time of Day Actions: Assign a different action for each time of day. Tap the **Morning**, **Day**, **Evening**, or **Night** button and then select the action.

Quick Actions

Select **Quick Actions** from the **Mode** drop-down list to recall a quick action when the button is pressed. The quick action can be recalled using the tap, double tap, press and hold, and multi-press functionality.

> **NOTES:**
>
> - Assign different actions to the **Tap**, **Double**, and **Hold** button functions to recall different actions with the same button.
> - The **Tap**, **Double**, and **Hold** button functions cannot be used with the **Multi** button function. Settings for the **Tap**, **Double**, and **Hold** button functions will be lost when the **Multi** button function is selected.

- **Tap:** One button press to recall the quick action.
- **Double:** Two button presses to recall the quick action.
- **Hold:** Press and hold the button to recall the quick action.
- **Multi:** Multiple button presses can recall up to 10 quick actions and provide the ability to cycle through quick actions.

Override Feedback Color: The color of the LED feedback associated with the button. Select an LED color from the **Override Feedback Color** drop-down list. The Alarm feedback color lights red when activated and is off when inactive.

> **NOTE:** For feedback purposes only, the center of a rocker button can be programmed to light and display programmatic feedback. For example, the LED can be programmed to mimic the function of the top button of the rocker by assigning the same settings used by the top button.

Enable Local Button Functionality: Select this option to turn on the Local Button functionality on the keypad.

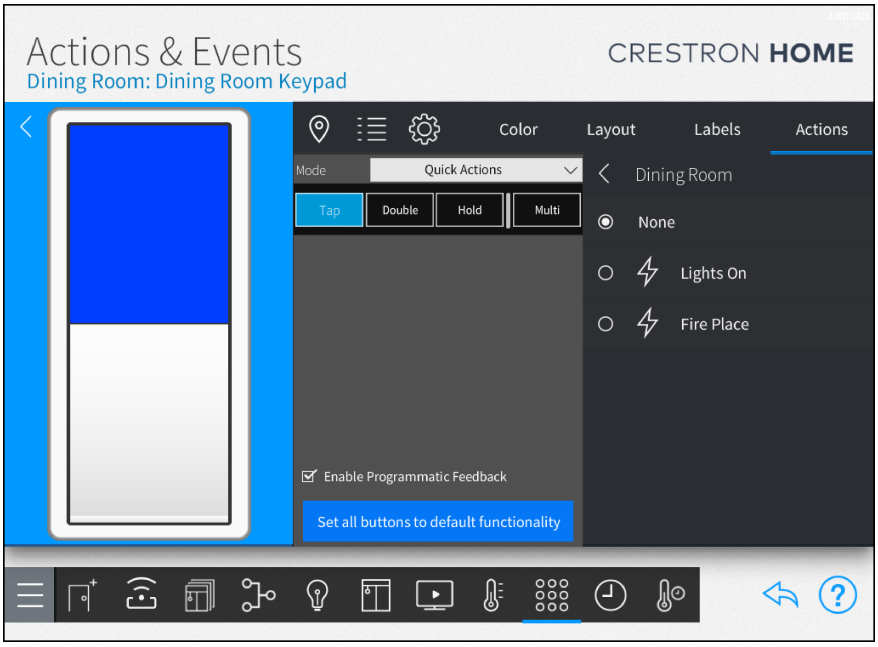
Set as Local Button: Select this option to assign the selected button as the local button. A local button must always be selected on a load controller. Only one button can be set as the local button. The local button provides direct control of the connected load (without input from the control processor) and can also be programmed to perform other actions, such as turning on the TV.

> **NOTES:**
>
> - An HZ-KPEX and HZ2-KPEX can be assigned a local button even though it cannot directly control a load.
> - When the local button on the HZ-AUX is pressed, the signal is transmitted using the "traveler" wire to the Horizon dimmer or switch and then the load attached to the Horizon dimmer or switch is turned on or off or dimmed up or down.
> - The HZ-DIMFLVEX does not support multiway control.

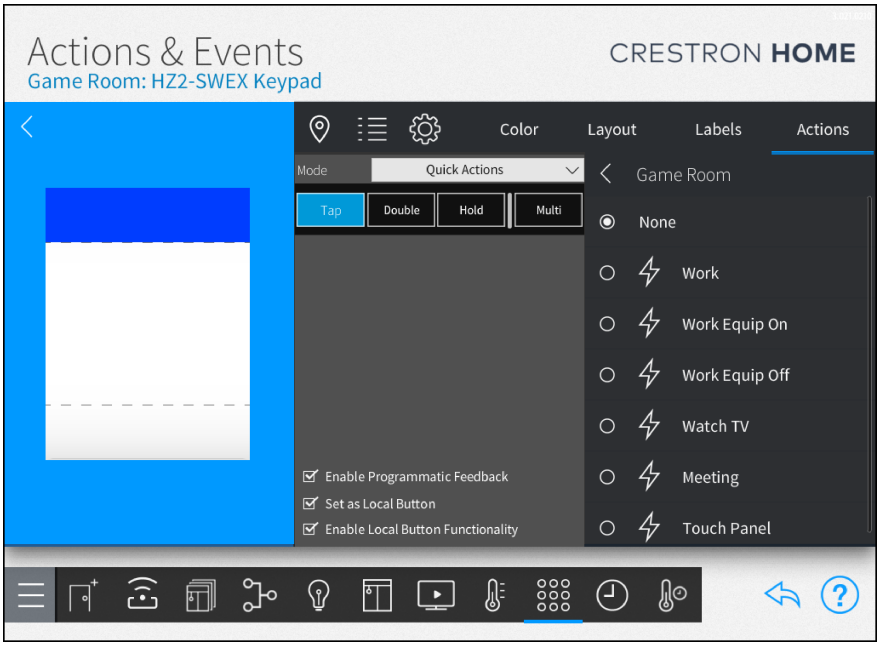
Tap

To assign a quick action to a single button press (single tap), tap the **Tap** button and then select a quick action.

Cameo Keypad, Quick Actions, Tap



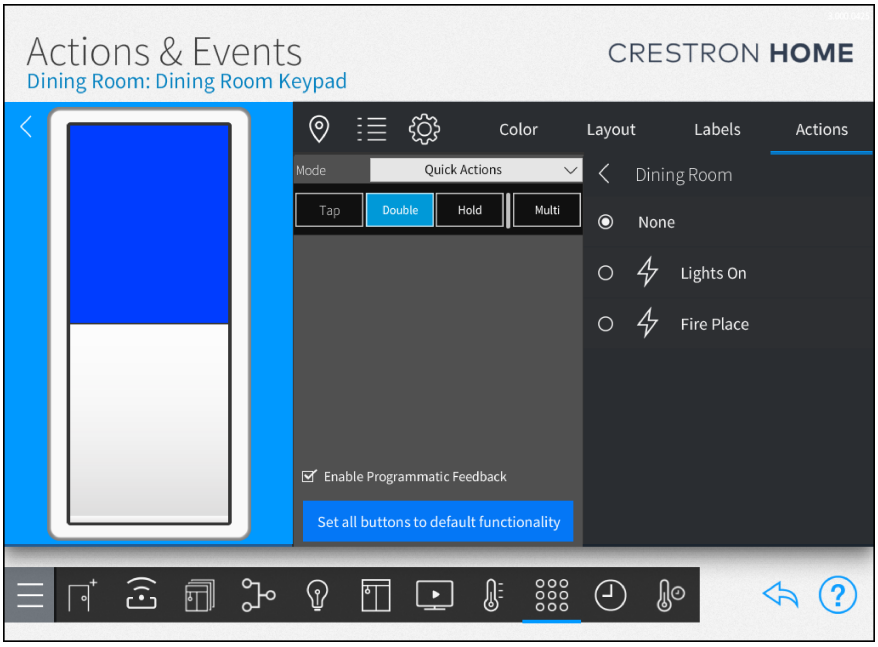
Horizon Keypad, Quick Actions, Tap



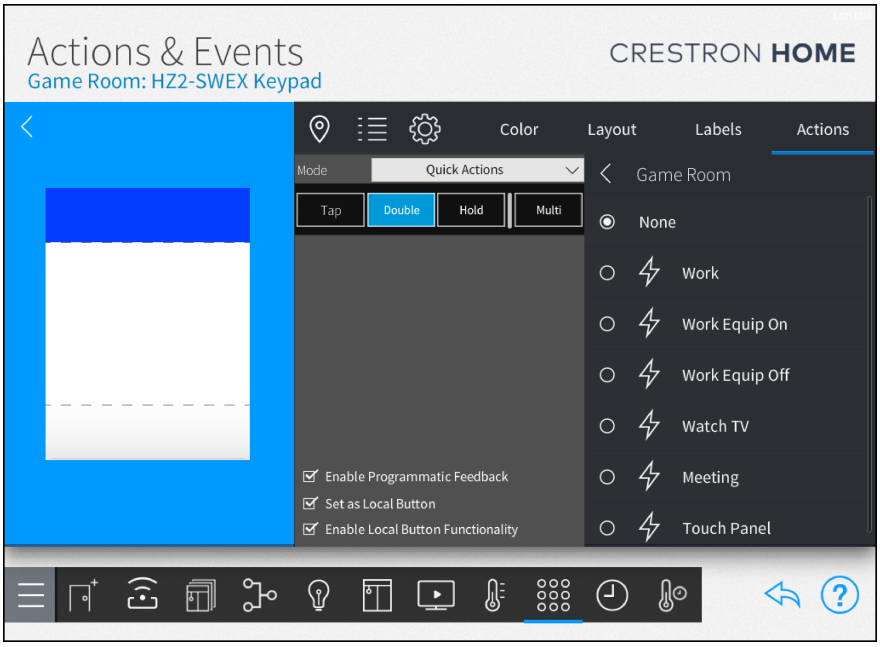
Double

To assign a quick action to a double button press (double tap), tap the **Double** button and then select a quick action.

Cameo Keypad, Quick Actions, Double



Horizon Keypad, Quick Actions, Double



Tap **Settings** next to the location button to configure the double tap settings for the keypad.

- **Use System Settings:** Tap the check box next to **Use System Settings** to use the delay that is set by the system. For details, refer to Lighting and Keypad Settings on page 590.
- **Wait For Double Tap:** Available when **Use System Settings** is not checked. Tap the check box next to **Wait For Double Tap** to enable the wait for double tap function. The Wait for Double Tap function determines if the Crestron Home system triggers the Double Tap button action. The delay is the amount of time (in seconds) that the system waits after a button press to determine if a subsequent button press is a double tap. The values can be set between 0.2 and 1 second.

  For example:
  - Tap button action is set to route video to a bedroom.
  - Double Tap button action is set to route audio to a bedroom.

  When Wait for Double Tap is enabled:

  > **NOTE:** The Tap button action is not triggered if the button is pressed twice within the delay time.

  - A single button press will route video to the bedroom if the room is off (Tap button action).
  - Two button presses will route audio to the bedroom (Double Tap button action).

  When Wait for Double Tap is disabled:

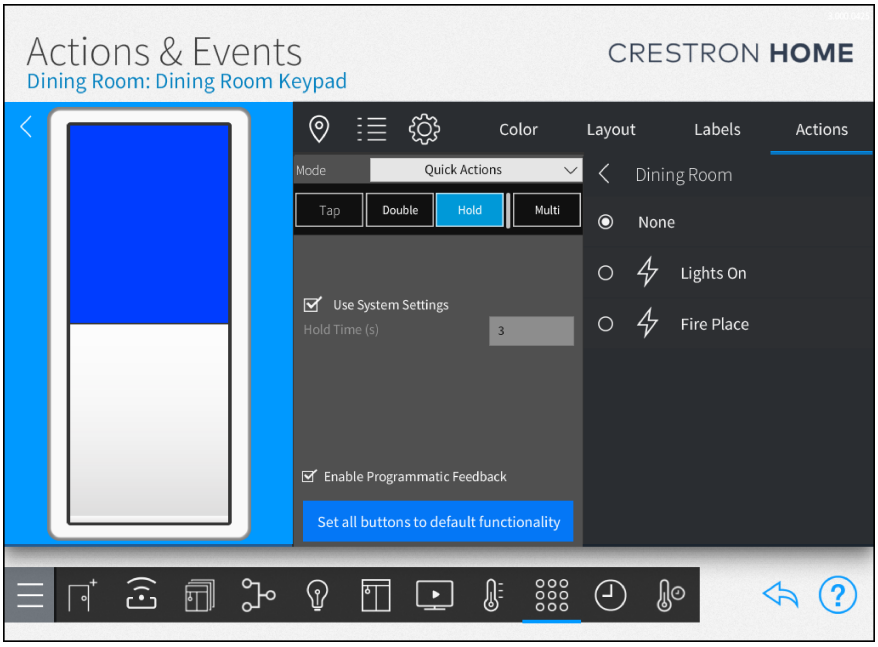
  > **NOTE:** The Crestron Home system registers both the single and double button presses and triggers both actions.

  - A single button press will route video to the bedroom if the room is off (Tap button action).
  - Two button presses will route video to the bedroom if the room is off (Tap button action) and then will route audio to the bedroom if the room is off (Double Tap button action).
- **Hold Time:** Available when **Use System Settings** is not checked. The amount of time (in seconds) that a button must be pressed during a press-and-hold operation before the Hold button action is performed.
- **Time Out:** Available when **Use System Settings** is not checked. The amount of time (in hours, minutes, and seconds) that the system waits to determine if the Double Tap button action is performed.

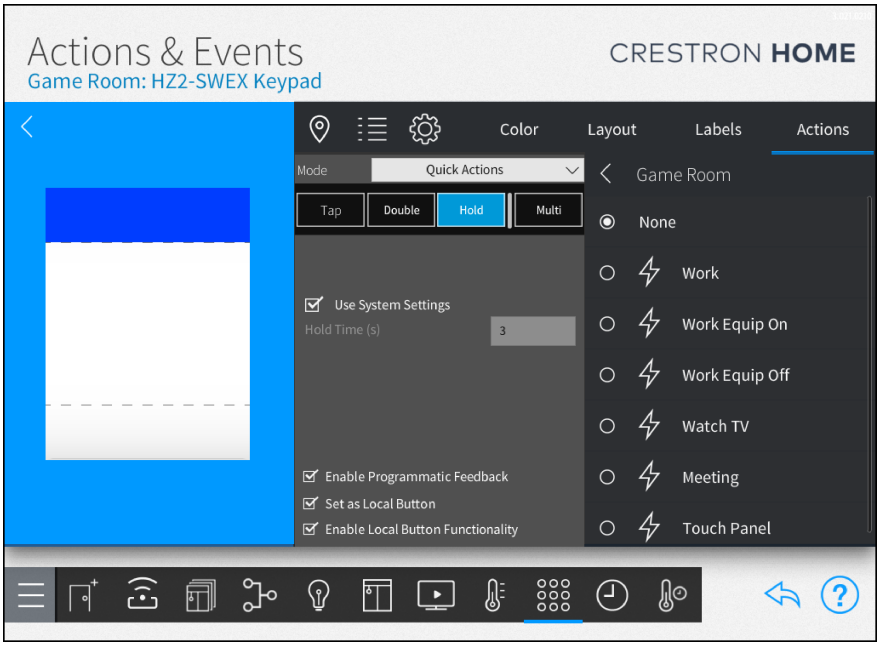
Hold

To assign a quick action to a press-and-hold button press, tap the **Hold** button and then select a quick action.

Cameo Keypad, Quick Actions, Hold



Horizon Keypad, Quick Actions, Hold



To set a custom hold time for the button, deselect the **Use System Settings** check box and then enter the hold time (seconds) in the **Hold Time** text box.

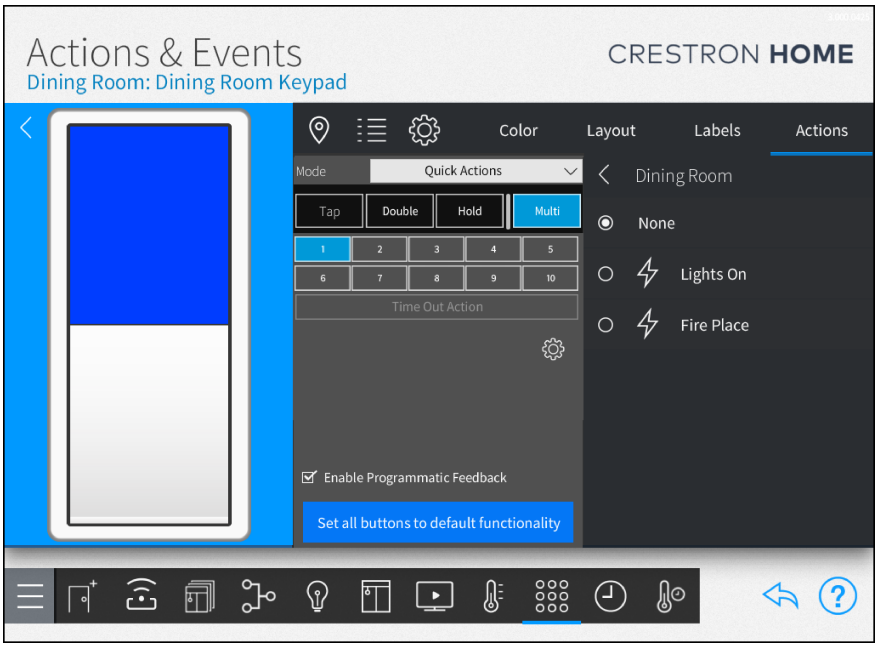
NOTE: A custom hold time can be set for each button on the keypad.

Multi

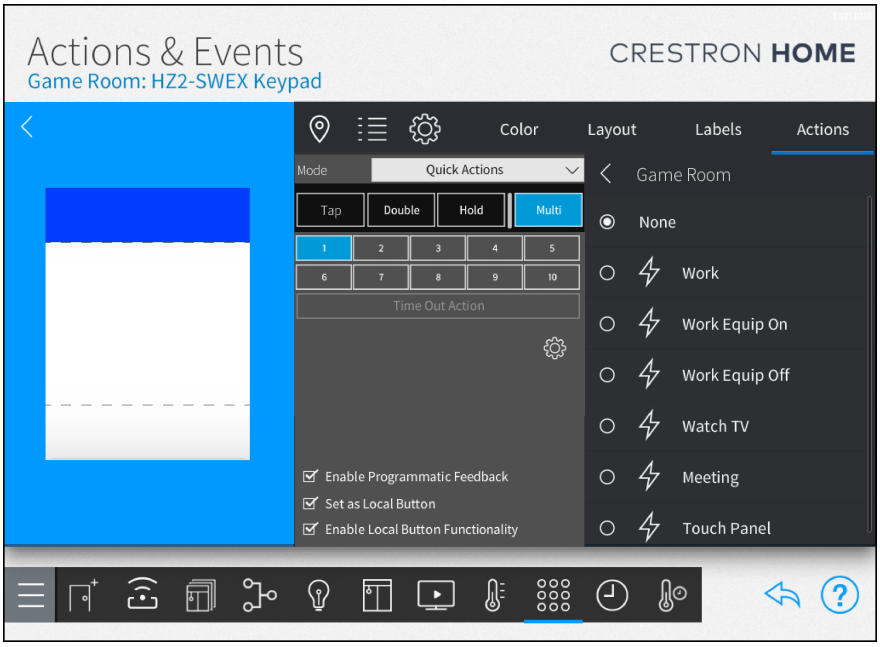
To assign multiple quick actions to a series of button presses, tap the **Multi** button and then select a quick action.

> **NOTE:** The **Multi** button function cannot be used with the **Tap**, **Double**, and **Hold** button functions. Settings for the **Tap**, **Double**, and **Hold** button functions will be lost when the **Multi** button function is selected.

Cameo Keypad, Quick Actions, Multi



Horizon Keypad, Quick Actions, Multi



Button Press (1-10): Assign an action for each button press. To assign an action to a button press, tap a button press number and then assign the action.

NOTES:

- The Crestron Home system maintains a count of the button presses that have occurred. When the system count matches the button press number, the action associated with the button press number is performed.
- The system count resets to one after it reaches the end of the list. For example, if an action is assigned for button press 1 through 4, the fifth button press resets the system count to one.and the action assigned to button press 1 is performed.
- Button presses can be skipped. For example, if an action is assigned for button presses 1 and 5 and no action is assigned for button presses 2, 3, and 4, no action is performed when button presses 2, 3, and 4 occur.

Time Out Action: A time out action can be performed when the time out period expires. To set the time out action, tap the **Time Out Action** button and then assign an action.

NOTES:

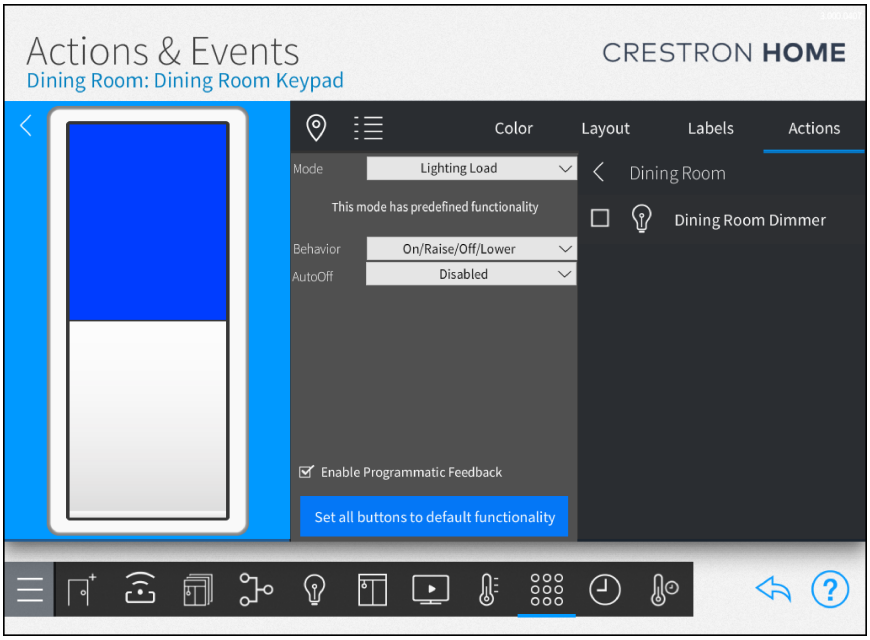
- A time out period begins after the last button press and is used to determine how long the Crestron Home system waits for an addition button press. The default timeout period is 24 hours.

- To configure the time out period.for the keypad, tap the gear button  next to the **Enable Time of Day** button.
    - To set a custom time out period, deselect the **Use System Settings** check box and then enter the time out period in the **Hours**, **Minutes**, and **Seconds** text boxes.
    - To use the system wide settings, select the **Use System Settings** check box.
    - The maximum time out period is 24 hours. To set the time out period to 24 hours, type **0** in the **Hours**, **Minutes**, and **Seconds** text boxes.

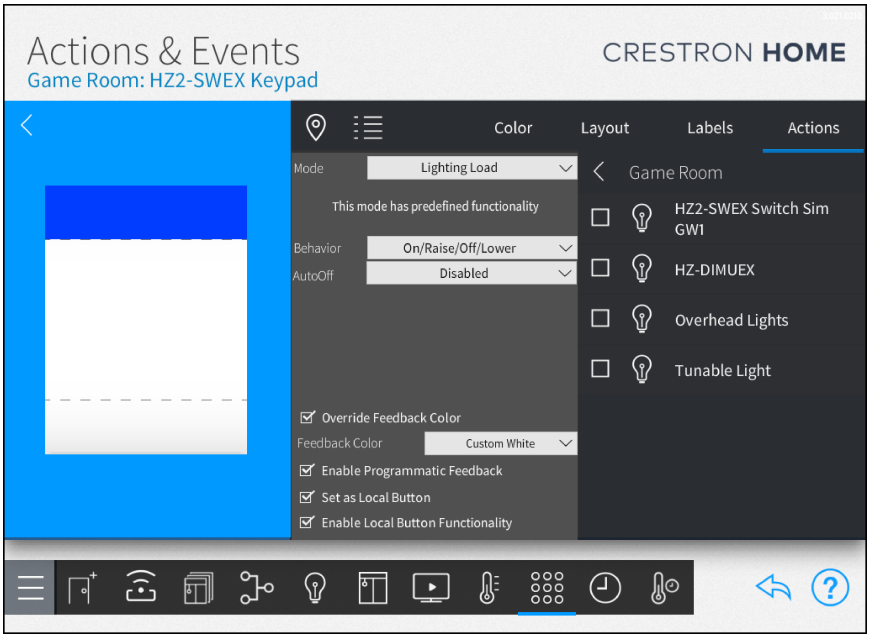
Lighting Load

Select **Lighting Load** from the **Mode** drop-down list to control a lighting load when the button is pressed.

Cameo Keypad, Lighting Load



Horizon Keypad, Lighting Load



Behavior: The behavior defines how the lights are controlled. Select a button behavior from the **Behavior** drop-down list:

- **On/Raise/Off/Lower:** Switches the load on or off or raises or lowers the lights. The lights turn on or off or raise or lower based on the action that was performed last. If the lights were turned on or raised, press the button to turn the lights off or press and hold the button to lower the lights.
- **On/Raise:** Turns the load on or raises the lights.
- **Off/Lower:** Turns the load off or lowers the lights.

Predefined functions are assigned for the following button presses:

- **Tap:** Increase or decrease (jog) the light level.
- **Double Tap:** Turns the lights on or off without fade time.
- **Press and Hold:** Raise or lower the light level until the button is released or the maximum or minimum light level is reached.

  > **NOTE:** To turn off the lights, continue holding the button after the minimum light level is reached.

Auto Off: Sets a timer to turn the lights off after a set period of time. To set the Auto Off time, select a time from the **Auto Off** drop-down list. The default auto off time is **Disabled**.

Override Feedback Color: The color of the LED feedback associated with the button. Select an LED color from the **Override Feedback Color** drop-down list. The Alarm feedback color lights red when activated and is off when inactive.

> **NOTE:** For feedback purposes only, the center of a rocker button can be programmed to light and display programmatic feedback. For example, the LED can be programmed to mimic the function of the top button of the rocker by assigning the same settings used by the top button.

Enable Local Button Functionality: Select this option to turn on the Local Button functionality on the keypad.

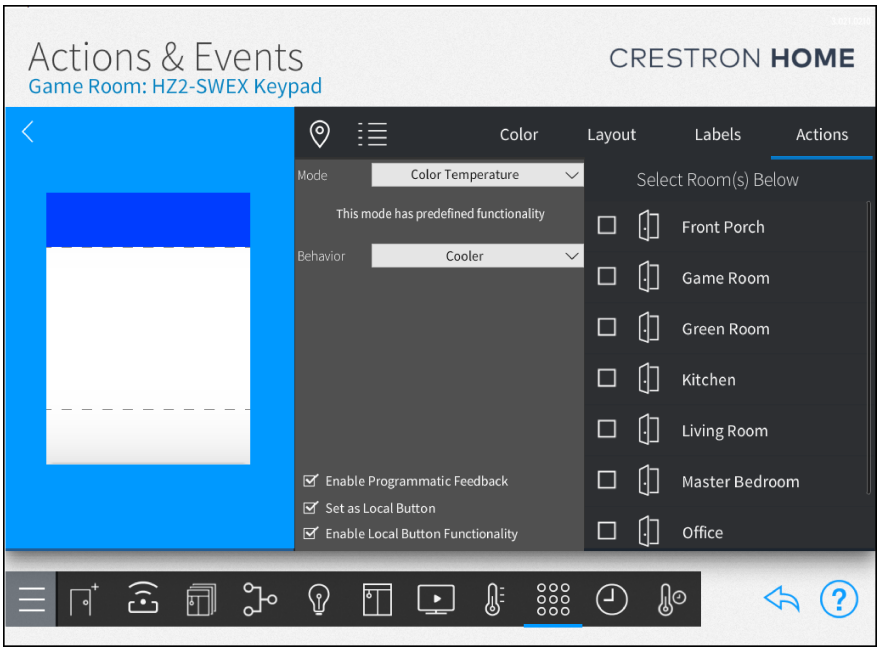
Set as Local Button: Select this option to assign the selected button as the local button. A local button must always be selected on a load controller. Only one button can be set as the local button. The local button provides direct control of the connected load (without input from the control processor) and can also be programmed to perform other actions, such as turning on the TV.

> **NOTES:**
>
> - An HZ-KPEX and HZ2-KPEX can be assigned a local button even though it cannot directly control a load.

- When the local button on the HZ-AUX is pressed, the signal is transmitted using the "traveler" wire to the Horizon dimmer or switch and then the load attached to the Horizon dimmer or switch is turned on or off or dimmed up or down.
- The HZ-DIMFLVEX does not support multiway control.

Color Temperature

Select **Color Temperature** from the **Mode** drop-down list to control the color temperature for the lights in the room.



Behavior: The behavior defines how the lights are controlled. Select a button behavior from the **Behavior** drop-down list:

- **Warmer:** Decrease the color temperature of the lights. When the color temperature decreases the lights produce warm white (amber) light. Tap the button to make small adjustments or tap and hold to ramp.
- **Cooler:** Increase the color temperature of the lights. When the color temperature increases the lights produce daylight(blue-white) light. Tap the button to make small adjustments or tap and hold to ramp.

Enable Programmatic Feedback: The LED associated with the button on the device can light to indicate that the mode is active. To use the LED to provide feedback, select **Enable Programmatic Feedback**. The LED will light if any device in the system activates the mode.

Override Feedback Color: The color of the LED feedback associated with the button. Select an LED color from the **Override Feedback Color** drop-down list. The Alarm feedback color lights red when activated and is off when inactive.

> **NOTE:** For feedback purposes only, the center of a rocker button can be programmed to light and display programmatic feedback. For example, the LED can be programmed to mimic the function of the top button of the rocker by assigning the same settings used by the top button.

Enable Local Button Functionality: Select this option to turn on the Local Button functionality on the keypad.

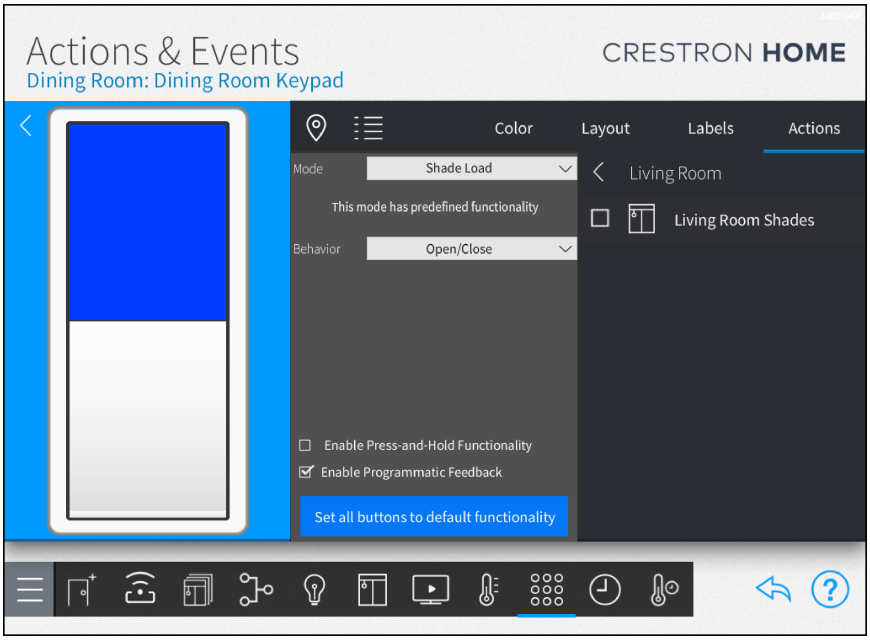
Set as Local Button: Select this option to assign the selected button as the local button. A local button must always be selected on a load controller. Only one button can be set as the local button. The local button provides direct control of the connected load (without input from the control processor) and can also be programmed to perform other actions, such as turning on the TV.

> **NOTES:**
>
> - An HZ-KPEX and HZ2-KPEX can be assigned a local button even though it cannot directly control a load.
> - When the local button on the HZ-AUX is pressed, the signal is transmitted using the "traveler" wire to the Horizon dimmer or switch and then the load attached to the Horizon dimmer or switch is turned on or off or dimmed up or down.
> - The HZ-DIMFLVEX does not support multiway control.

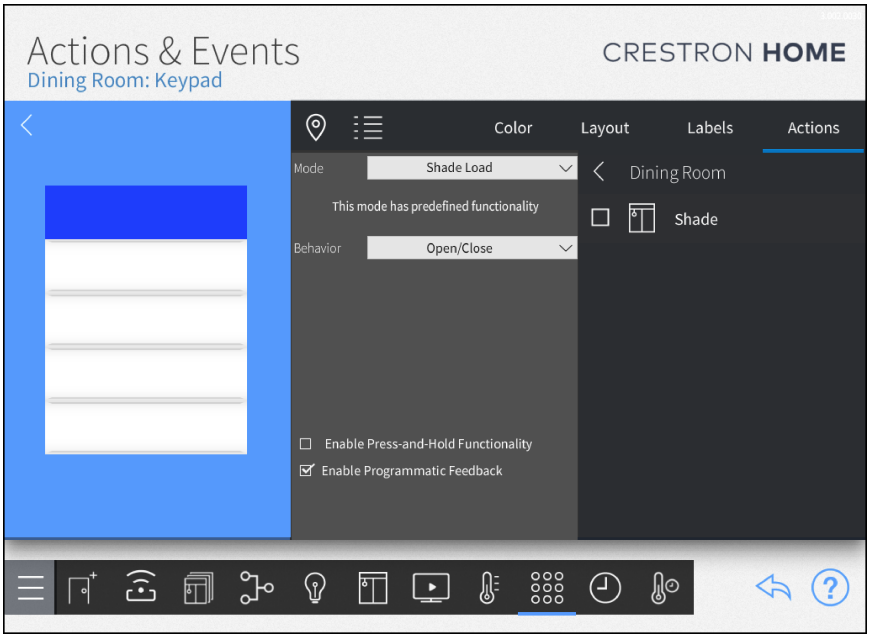
Shade Load

Select **Shade Load** from the **Mode** drop-down list to control a shade load when the button is pressed.

Cameo Keypad, Shade Load



Horizon Keypad, Shade Load



Behavior: The behavior defines how the shades are controlled. Select a button behavior from the **Behavior** drop-down list:

- **Open/Close:** Open or close the shades.
- **Open:** Open the shades.
- **Close:** Close the shades.

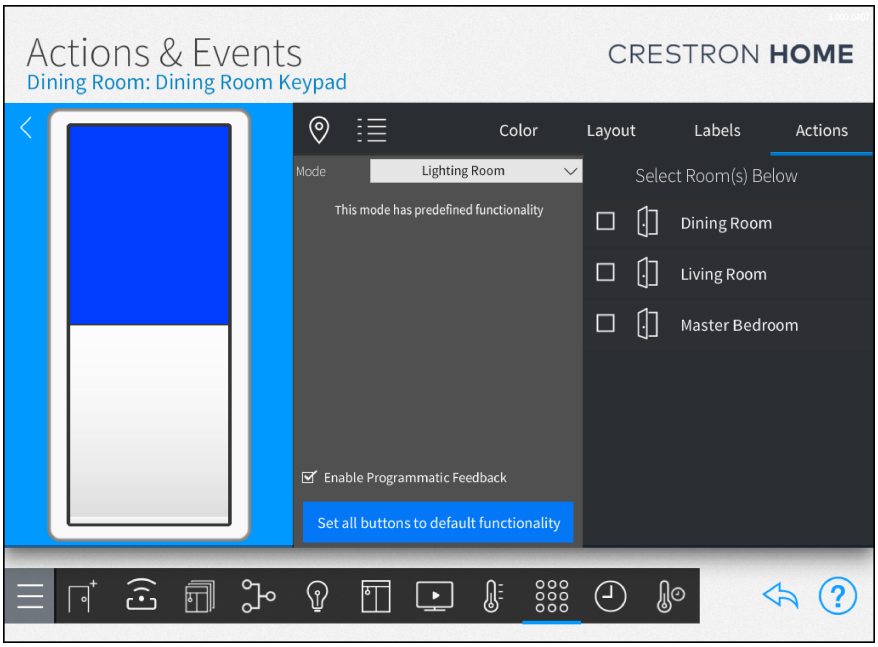
Predefined functions are assigned for the following button presses:

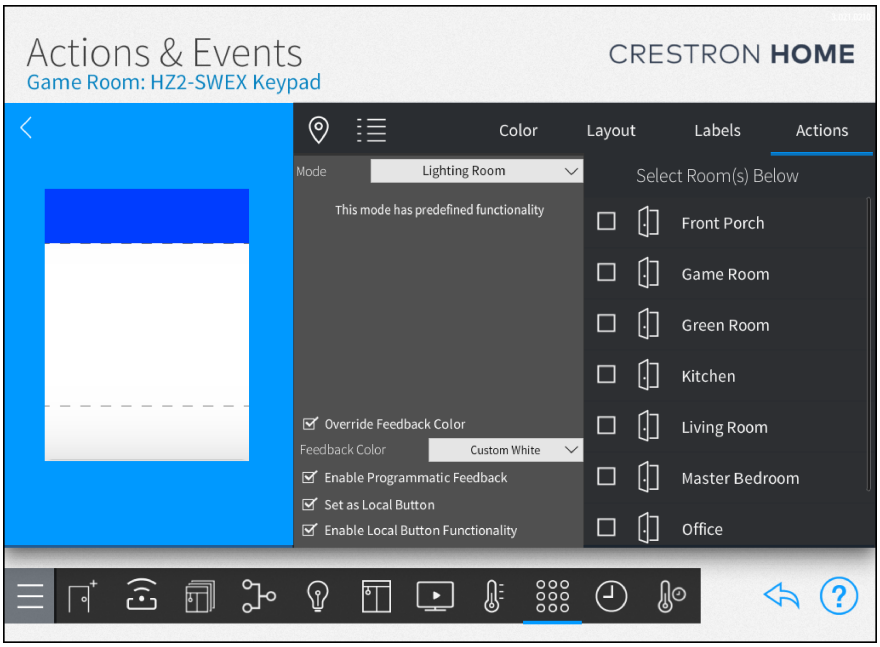
- **Tap:** Open or close the shades.
- **Press and Hold:** When **Enable Press-and-Hold Functionality** is enabled. Raise or lower the shades until the button is released or the upper or lower limit is reached.

> **NOTE:** To enable press-and-hold functionality, select the **Enable Press-and-Hold Functionality** check box.

Lighting Room

Select **Lighting Room** from the **Mode** drop-down list to control all of the lighting loads in the rooms.





Predefined functions are assigned for the following button presses:

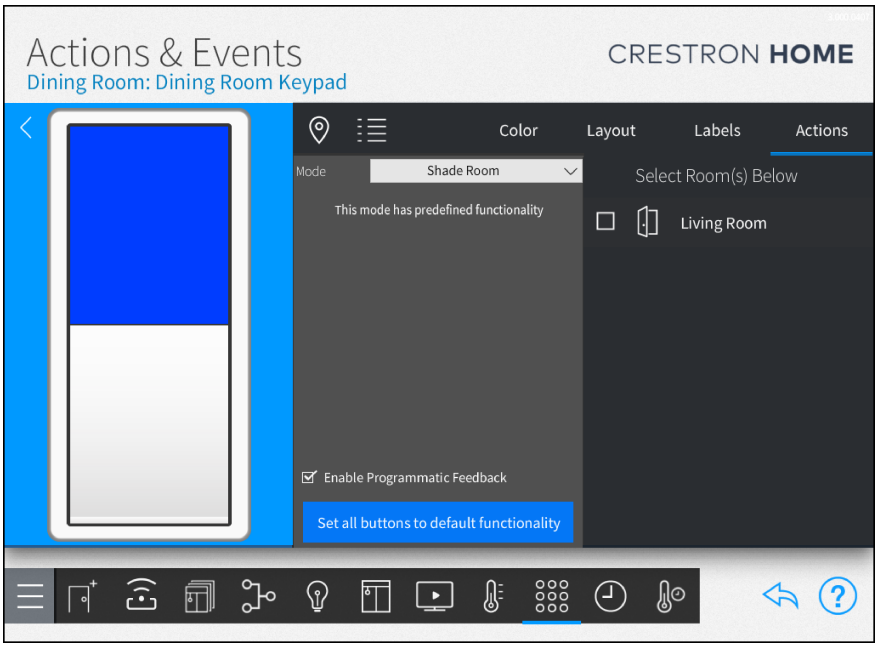
> **NOTE:** The lights are controlled based on the action that was performed last. If the lights were turned on or raised, the next button press will turn off or lower the lights.

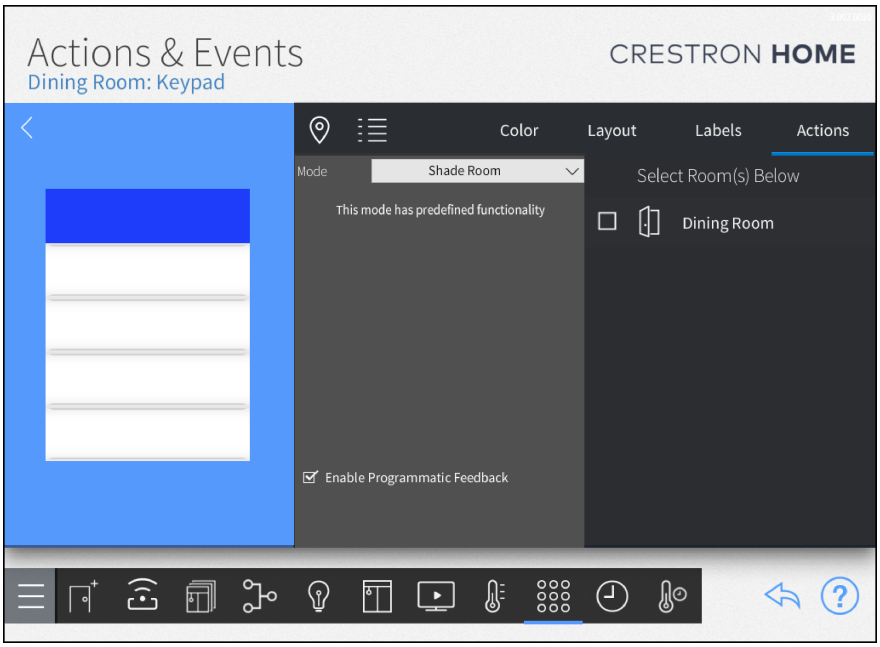
- **Tap:** Switches the lights on or off with the default fade time.
- **Double Tap:** Switches the lights on or off with no fade time.
- **Press and Hold:** Raise or lower the lights until the button is released or the maximum or minimum light level is reached.

  > **NOTE:** To turn off the lights, continue holding the button after the minimum light level is reached.

Shade Room

Select **Shade Room** from the **Mode** drop-down list to control all of the shades in the rooms.





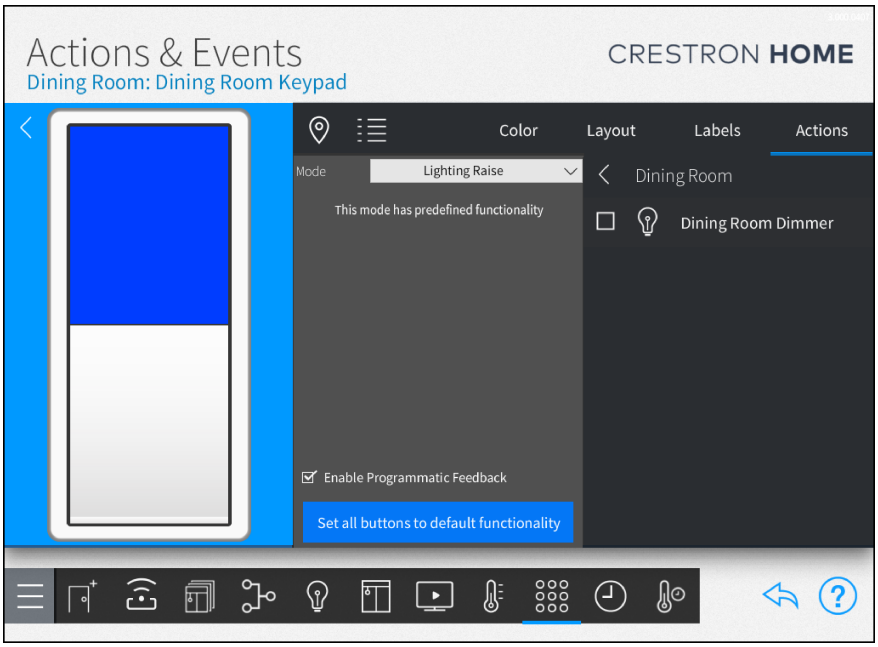
Predefined functions are assigned for the following button presses:

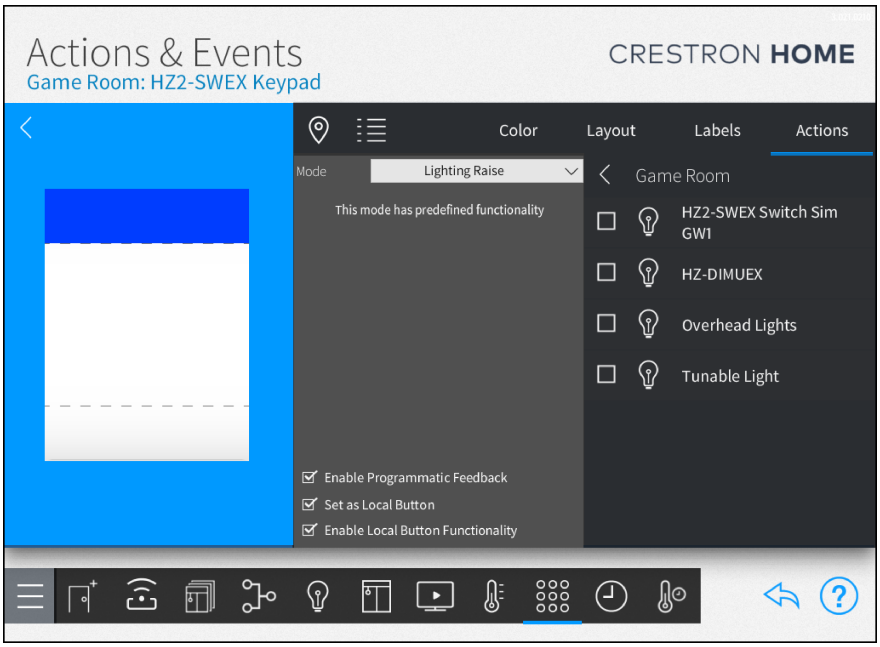
> **NOTE:** The shades are controlled based on the action that was performed last. If the shades were opened or raised, the next button press will lower or close the shades.

- **Tap:** Open or close the shades.
- **Press and Hold:** Raise or lower the shades until the button is released or the upper or lower limit is reached.

Lighting Raise and Lighting Lower

Select **Lighting Raise** or **Lighting Lower** from the **Mode** drop-down list to raise or lower the lights in the room.





Predefined functions are assigned for the following button presses:

- **Tap:** Increase or decrease (jog) the light level.
- **Double Tap:** Turns the lights on or off with no fade time.

- **Press and Hold:** Raise or lower the light level until the button is released or the maximum or minimum light level is reached.

  > **NOTE:** To turn off the lights, continue holding the button after the minimum light level is reached.

Override Feedback Color: The color of the LED feedback associated with the button. Select an LED color from the **Override Feedback Color** drop-down list. The Alarm feedback color lights red when activated and is off when inactive.

> **NOTE:** For feedback purposes only, the center of a rocker button can be programmed to light and display programmatic feedback. For example, the LED can be programmed to mimic the function of the top button of the rocker by assigning the same settings used by the top button.

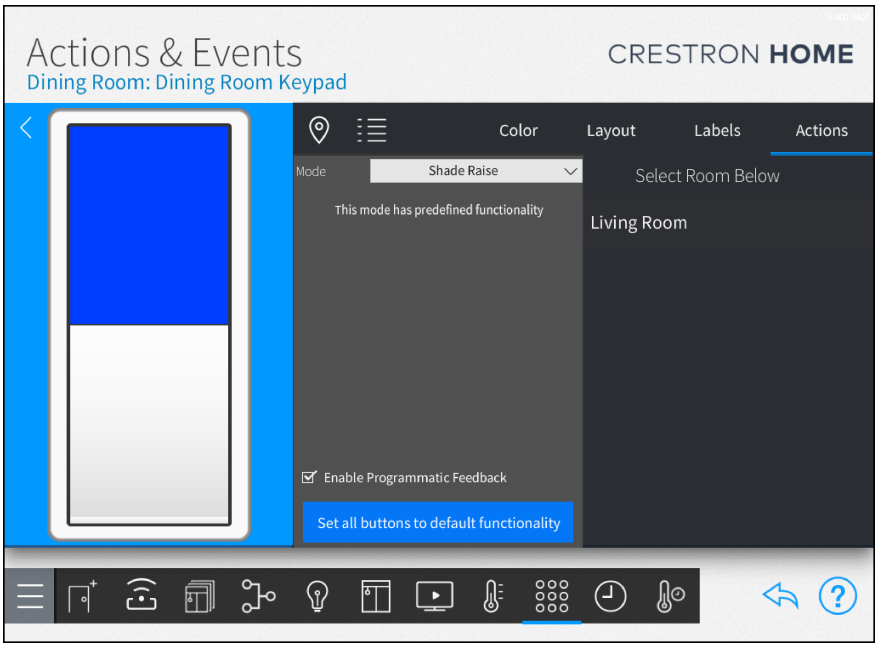
Enable Local Button Functionality: Select this option to turn on the Local Button functionality on the keypad.

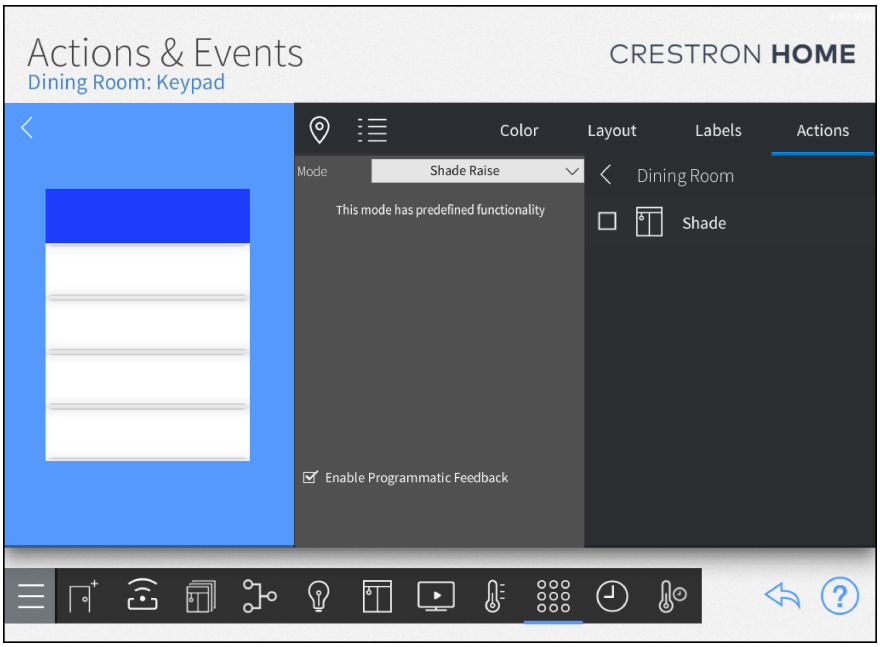
Set as Local Button: Select this option to assign the selected button as the local button. A local button must always be selected on a load controller. Only one button can be set as the local button. The local button provides direct control of the connected load (without input from the control processor) and can also be programmed to perform other actions, such as turning on the TV.

> **NOTES:**
>
> - An HZ-KPEX and HZ2-KPEX can be assigned a local button even though it cannot directly control a load.
> - When the local button on the HZ-AUX is pressed, the signal is transmitted using the "traveler" wire to the Horizon dimmer or switch and then the load attached to the Horizon dimmer or switch is turned on or off or dimmed up or down.
> - The HZ-DIMFLVEX does not support multiway control.

Shade Raise and Shade Lower

Select **Shade Raise** or **Shade Lower** from the **Mode** drop-down list to raise or lower the shades in the room.



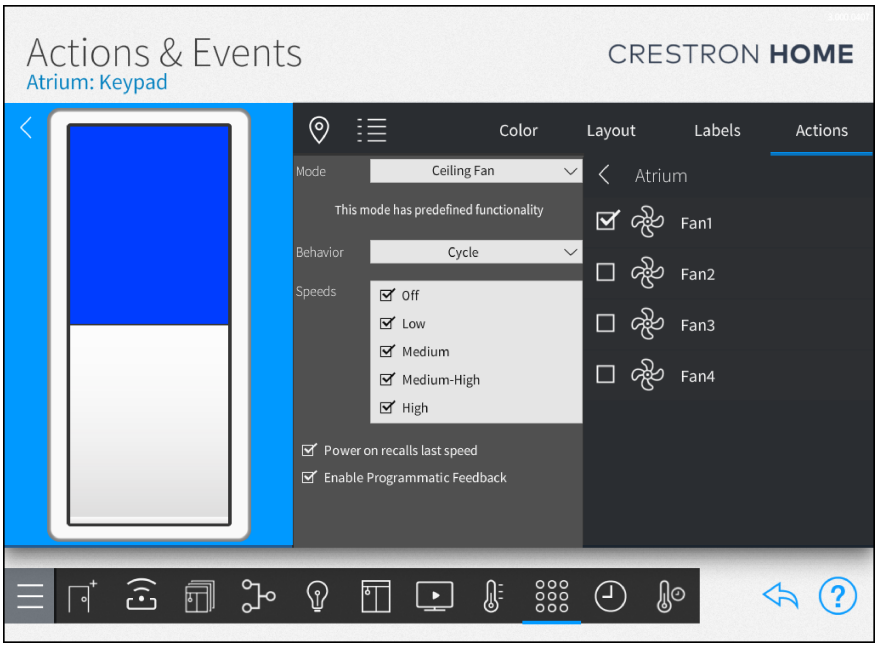


Predefined functions are assigned for the following button presses:

- **Tap:** Raise or lower (jog) the shades.
- **Press and Hold:** Raise or lower the shades until the button is released or the upper or lower limit is reached.

Ceiling Fan

Select **Ceiling Fan** from the **Mode** drop-down list to control a ceiling fan when the button is pressed.



Behavior: The behavior defines how the fans are controlled. Select a button behavior from the **Behavior** drop-down list:

- **Cycle:** Cycle through the available fan speeds. Each button press advances through the available fan speeds in the **Available Speeds** list. When the last speed in the list is reached, the next button press advances to the first option in the list.

  NOTES:

  - If multiple fans are controlled and they are operating at different speeds, a button press sets the fan speed for both fans to the first speed in the **Available Speeds** list.
  - If the **Off** speed is included in the **Available Speeds** list and five seconds pass since the last button press, a button press turns the fan off.
  - If **Power On Recalls Last Speed** is enabled and multiple fans are controlled and operating at different speeds when the room is turned off, the fans resume operating at their previously set speeds when the room is powered on.

- **Increase:** Increase the fan speed until the maximum fan speed in the list is reached.

  If the fans are operating at different speeds, pressing the button increases the fan speed for each fan independently. For example, if **High**, **Medium**, and **Low** fan speeds are available and Fan 1 is operating at **Low** and Fan 2 is operating the **Medium**, pressing the button increases the fan speed for Fan 1 to **Medium** and Fan 2 to **High**.

- **Decrease:** Decrease the fan speed until the lowest fan speed in the list is reached.

  If the fans are operating at different speeds, pressing the button decreases the fan speed for each fan independently. For example, if **High**, **Medium**, and **Low** fan speeds are available and Fan 1 is operating at **High** and Fan 2 is operating at **Medium**, pressing the button decreases the fan speed for Fan 1 to **Medium** and Fan 2 to **Low**.

Speeds: Displays the fan speeds that are available for the selected fan(s). The speeds available are populated based on the fan controller that is used and are listed in order from the slowest (Off) to the fastest fan speed. The default setting is to include all of the available fan speeds in the **Speeds** list.

To exclude a fan speed from the list, deselect a fan speed.

To reorder the fan speeds when **Cycle** is selected, tap and hold a fan speed until it turns green and then drag it to the desired position. The **Off** speed cannot be moved.

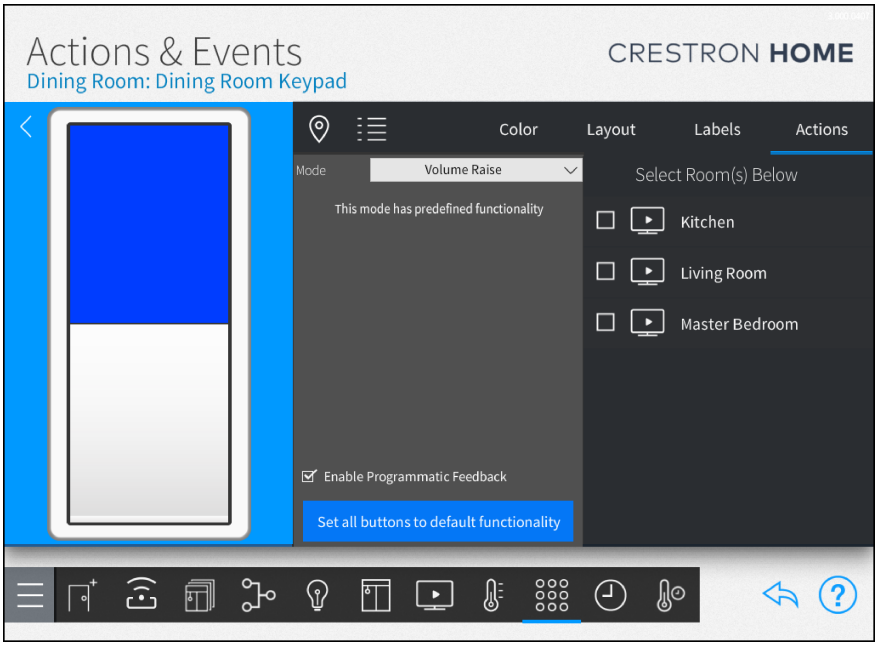
NOTES:

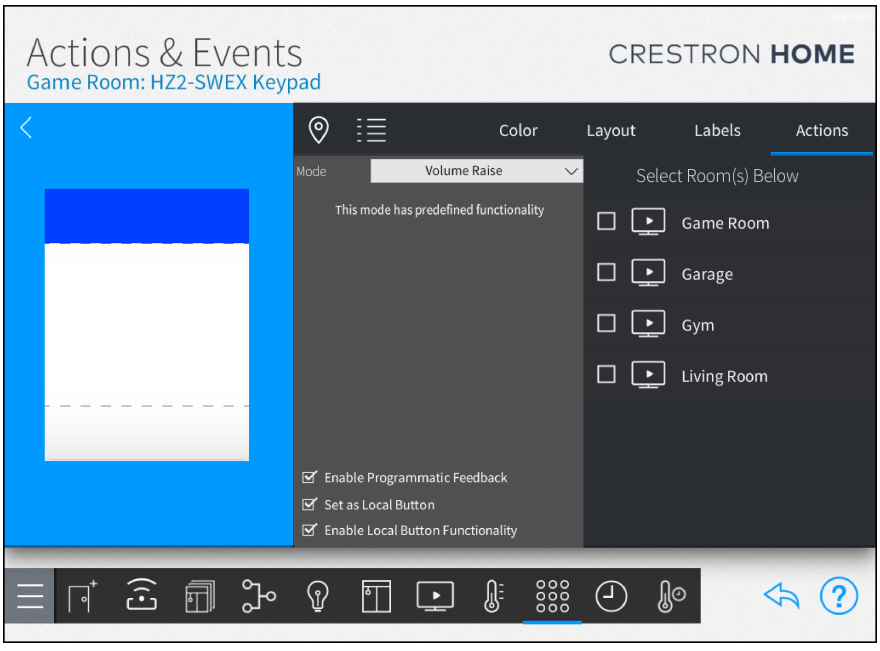
- If different fan controllers are used, only the fan speeds that are common between the fan controllers are displayed in the **Speeds** list.
- The **High** fan speed is not included in the **Speeds** list when **Decrease** is selected from the **Speeds** drop-down menu.
- The **Off** fan speed is not included in the **Speeds** list when **Increase** is selected from the **Speeds** drop-down menu.

Power On Recalls Last Speed: If enabled, the fans resume operating at their previously set speeds when the room is powered on. If disabled, the fans resume operating at the first speed option in the list. To disable, deselect the **Power On Recalls Last Speed** check box.

Volume Raise and Volume Lower

Select **Volume Raise** or **Volume Lower** from the **Mode** drop-down list to raise or lower the volume in the room.





Predefined functions are assigned for the following button presses:

- **Tap:** Raise or lower (jog) the volume.
- **Press and Hold:** Raise or lower the volume until the button is released or the maximum or minimum volume is reached.

Override Feedback Color: The color of the LED feedback associated with the button. Select an LED color from the **Override Feedback Color** drop-down list. The Alarm feedback color lights red when activated and is off when inactive.

> **NOTE:** For feedback purposes only, the center of a rocker button can be programmed to light and display programmatic feedback. For example, the LED can be programmed to mimic the function of the top button of the rocker by assigning the same settings used by the top button.

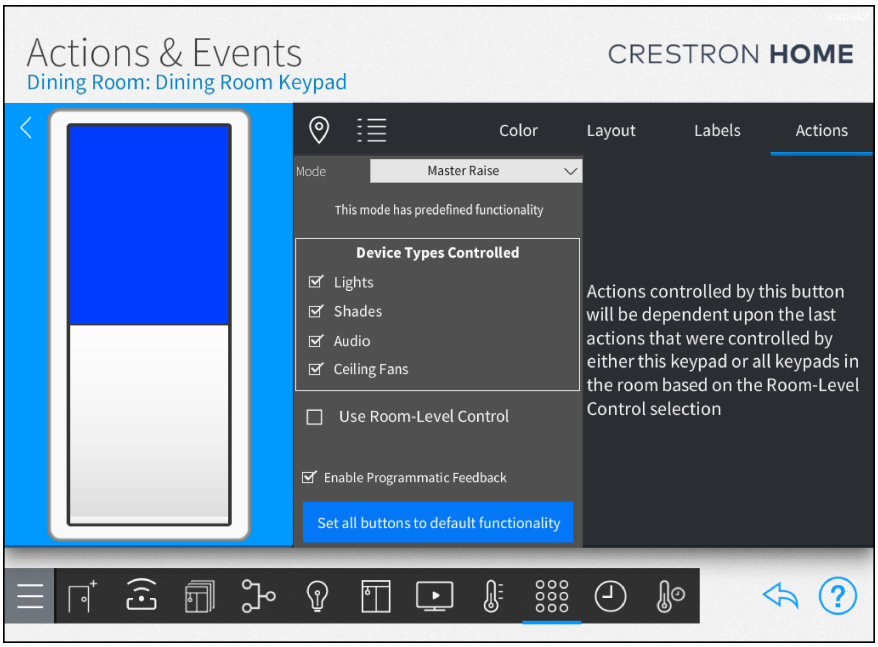
Enable Local Button Functionality: Select this option to turn on the Local Button functionality on the keypad.

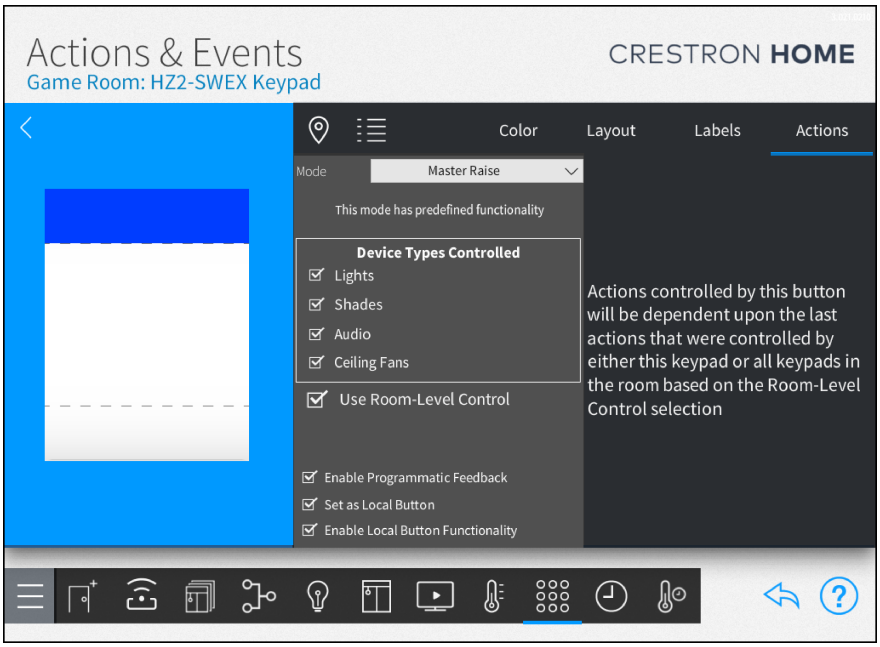
Set as Local Button: Select this option to assign the selected button as the local button. A local button must always be selected on a load controller. Only one button can be set as the local button. The local button provides direct control of the connected load (without input from the control processor) and can also be programmed to perform other actions, such as turning on the TV.

> **NOTES:**
>
> - An HZ-KPEX and HZ2-KPEX can be assigned a local button even though it cannot directly control a load.
> - When the local button on the HZ-AUX is pressed, the signal is transmitted using the "traveler" wire to the Horizon dimmer or switch and then the load attached to the Horizon dimmer or switch is turned on or off or dimmed up or down.
> - The HZ-DIMFLVEX does not support multiway control.

Master Raise and Master Lower

Select **Master Raise** or **Master Lower** from the **Mode** drop-down list to raise or lower the selected device types (lights, shades, audio, ceiling fans) in the room.





Predefined functions are assigned for the following button presses:

> **NOTE:** The device type that is controlled is based on the last device type that was controlled. For example, if the shades were controlled last, the shades will be raised or lowered.

- **Tap:** Raise or lower (jog) the level for the device type.
- **Press and Hold:** Raise or lower the level for the device type until the button is released or the maximum or minimum level is reached.

Override Feedback Color: The color of the LED feedback associated with the button. Select an LED color from the **Override Feedback Color** drop-down list. The Alarm feedback color lights red when activated and is off when inactive.

> **NOTE:** For feedback purposes only, the center of a rocker button can be programmed to light and display programmatic feedback. For example, the LED can be programmed to mimic the function of the top button of the rocker by assigning the same settings used by the top button.

Enable Local Button Functionality: Select this option to turn on the Local Button functionality on the keypad.

Set as Local Button: Select this option to assign the selected button as the local button. A local button must always be selected on a load controller. Only one button can be set as the local button. The local button provides direct control of the connected load (without input from the control processor) and can also be programmed to perform other actions, such as turning on the TV.

> **NOTES:**
>
> - An HZ-KPEX and HZ2-KPEX can be assigned a local button even though it cannot directly control a load.
> - When the local button on the HZ-AUX is pressed, the signal is transmitted using the "traveler" wire to the Horizon dimmer or switch and then the load attached to the Horizon dimmer or switch is turned on or off or dimmed up or down.
> - The HZ-DIMFLVEX does not support multiway control.

Media Function

Select **Media Function** from the **Mode** drop-down list to recall a media function when the button is pressed. The media function can be recalled using the tap, double tap, press and hold, and multi-press functionality.

> **NOTES:**
>
> - Assign different actions to the **Tap**, **Double**, and **Hold** button functions to recall different actions with the same button.
> - The **Tap**, **Double**, and **Hold** button functions cannot be used with the **Multi** button function. Settings for the **Tap**, **Double**, and **Hold** button functions will be lost when the **Multi** button function is selected.

- **Tap:** One button press to recall the media function.
- **Double:** Two button presses to recall the media function.
- **Hold:** Press and hold the button to recall the media function.
- **Multi:** Multiple button presses can recall up to 10 media functions and provide the ability to cycle through media functions.

Override Feedback Color: The color of the LED feedback associated with the button. Select an LED color from the **Override Feedback Color** drop-down list. The Alarm feedback color lights red when activated and is off when inactive.

> **NOTE:** For feedback purposes only, the center of a rocker button can be programmed to light and display programmatic feedback. For example, the LED can be programmed to mimic the function of the top button of the rocker by assigning the same settings used by the top button.

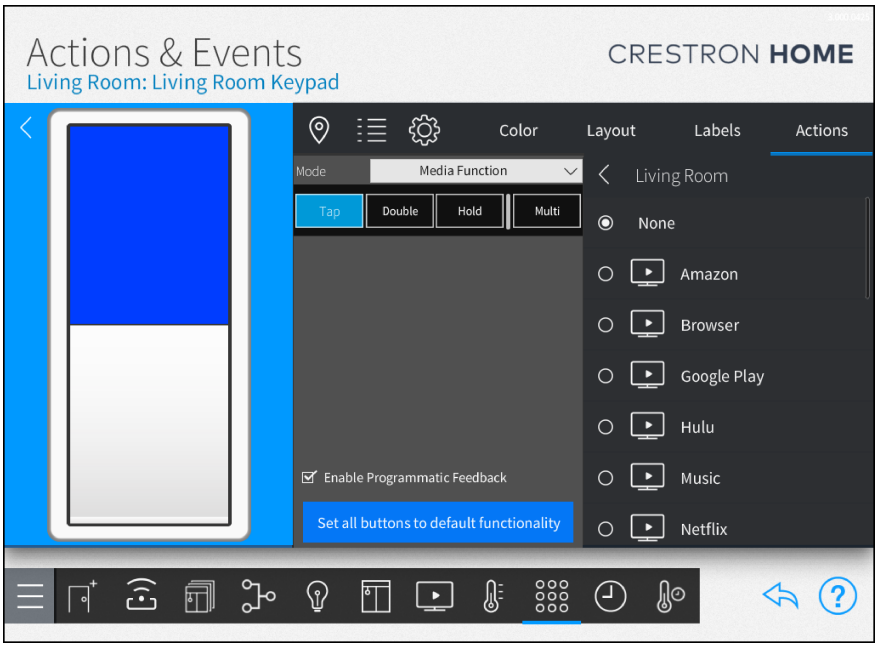
Enable Local Button Functionality: Select this option to turn on the Local Button functionality on the keypad.

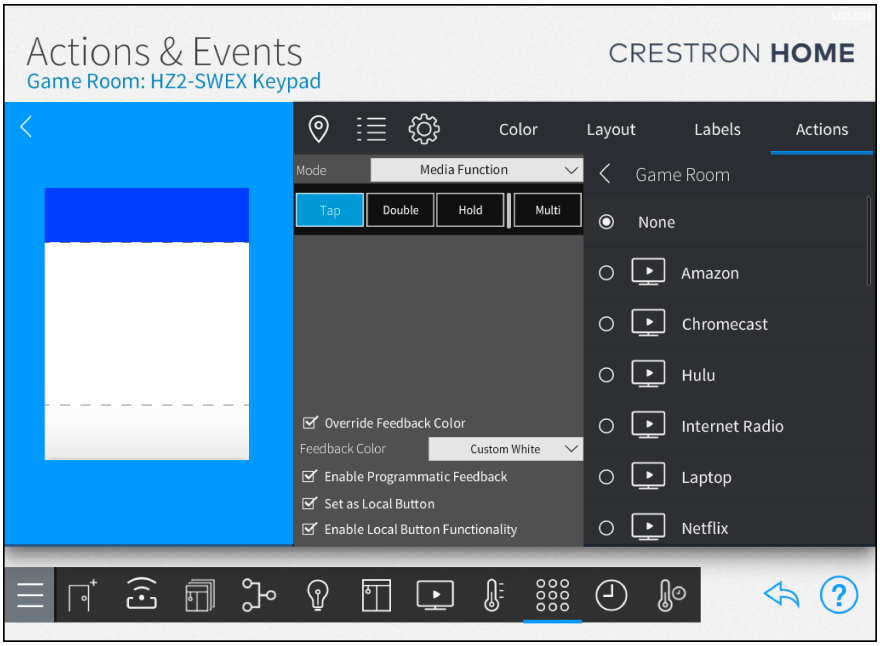
Set as Local Button: Select this option to assign the selected button as the local button. A local button must always be selected on a load controller. Only one button can be set as the local button. The local button provides direct control of the connected load (without input from the control processor) and can also be programmed to perform other actions, such as turning on the TV.

> **NOTES:**
>
> - An HZ-KPEX and HZ2-KPEX can be assigned a local button even though it cannot directly control a load.
> - When the local button on the HZ-AUX is pressed, the signal is transmitted using the "traveler" wire to the Horizon dimmer or switch and then the load attached to the Horizon dimmer or switch is turned on or off or dimmed up or down.
> - The HZ-DIMFLVEX does not support multiway control.

Tap

To assign a media function to a single button press (single tap), tap the **Tap** button and then select a media function.

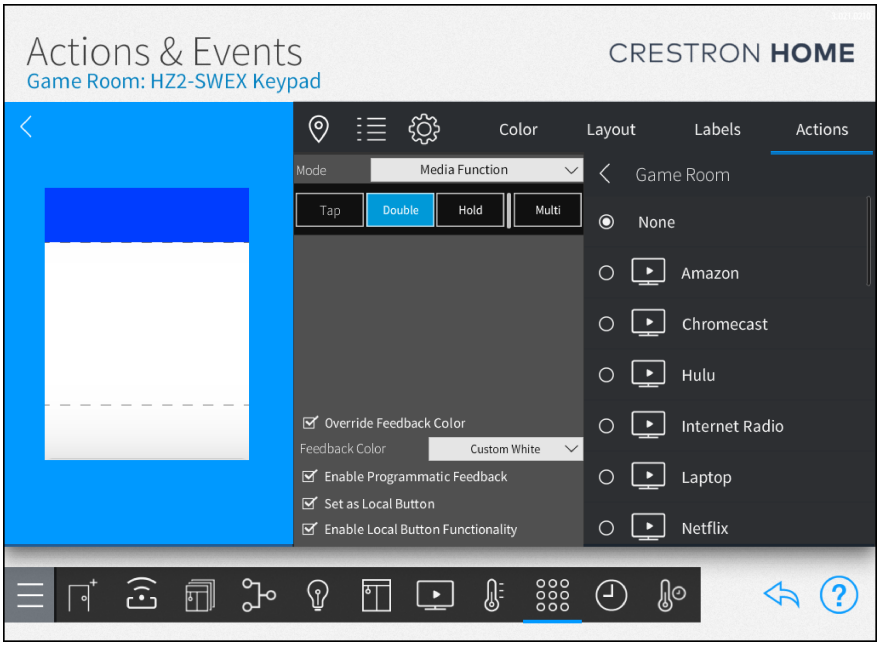




Double

To assign a media function to a double button press (double tap), tap the **Double** button and then select a media function.





Tap **Settings** next to the location button to configure the double tap settings for the keypad.

- **Use System Settings:** Tap the check box next to **Use System Settings** to use the delay that is set by the system. For details, refer to Lighting and Keypad Settings on page 590.

- **Wait For Double Tap:** Available when **Use System Settings** is not checked. Tap the check box next to **Wait For Double Tap** to enable the wait for double tap function. The Wait for Double Tap function determines if the Crestron Home system triggers the Double Tap button action. The delay is the amount of time (in seconds) that the system waits after a button press to determine if a subsequent button press is a double tap. The values can be set between 0.2 and 1 second.

  For example:

  - Tap button action is set to route video to a bedroom.
  - Double Tap button action is set to route audio to a bedroom.

  When Wait for Double Tap is enabled:

  > **NOTE:** The Tap button action is not triggered if the button is pressed twice within the delay time.

  - A single button press will route video to the bedroom if the room is off (Tap button action).
  - Two button presses will route audio to the bedroom (Double Tap button action).

  When Wait for Double Tap is disabled:

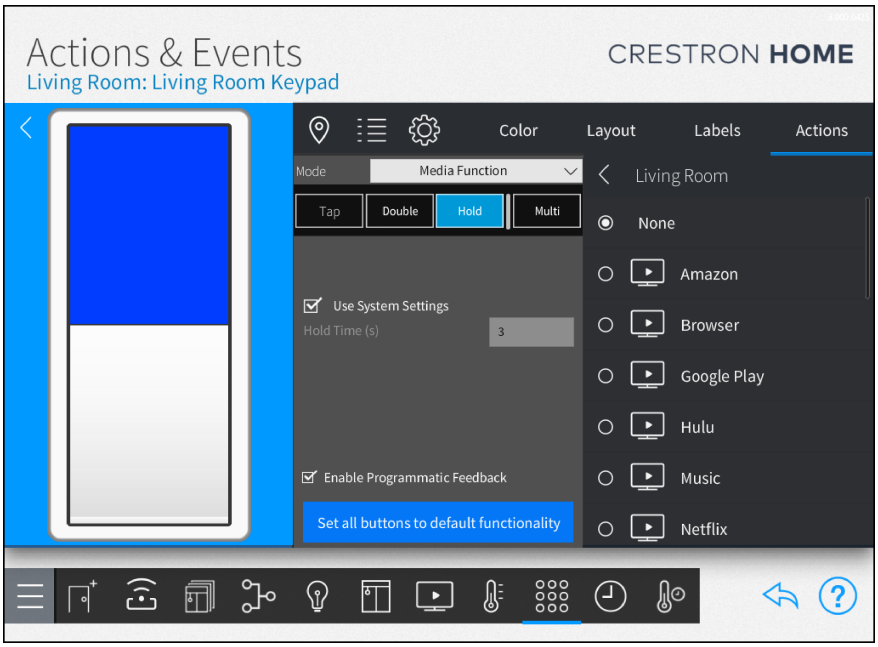
  > **NOTE:** The Crestron Home system registers both the single and double button presses and triggers both actions.

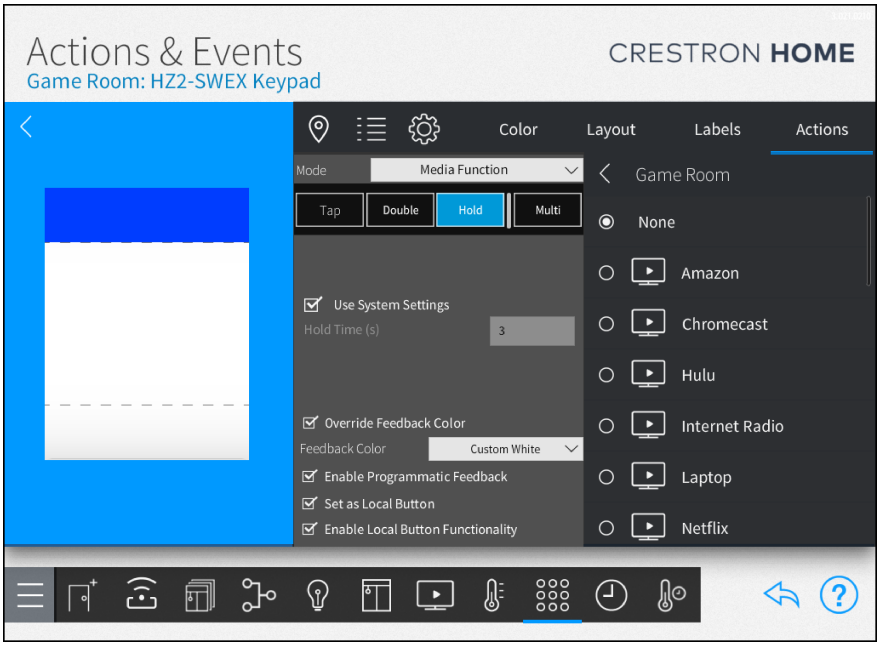
  - A single button press will route video to the bedroom if the room is off (Tap button action).
  - Two button presses will route video to the bedroom if the room is off (Tap button action) and then will route audio to the bedroom if the room is off (Double Tap button action).

- **Hold Time:** Available when **Use System Settings** is not checked. The amount of time (in seconds) that a button must be pressed during a press-and-hold operation before the Hold button action is performed.
- **Time Out:** Available when **Use System Settings** is not checked. The amount of time (in hours, minutes, and seconds) that the system waits to determine if the Double Tap button action is performed.

Hold

To assign a media function to a press-and-hold button press, tap the **Hold** button and then select a media function.





To set a custom hold time for the button, deselect the **Use System Settings** check box and then enter the hold time (seconds) in the **Hold Time** text box.

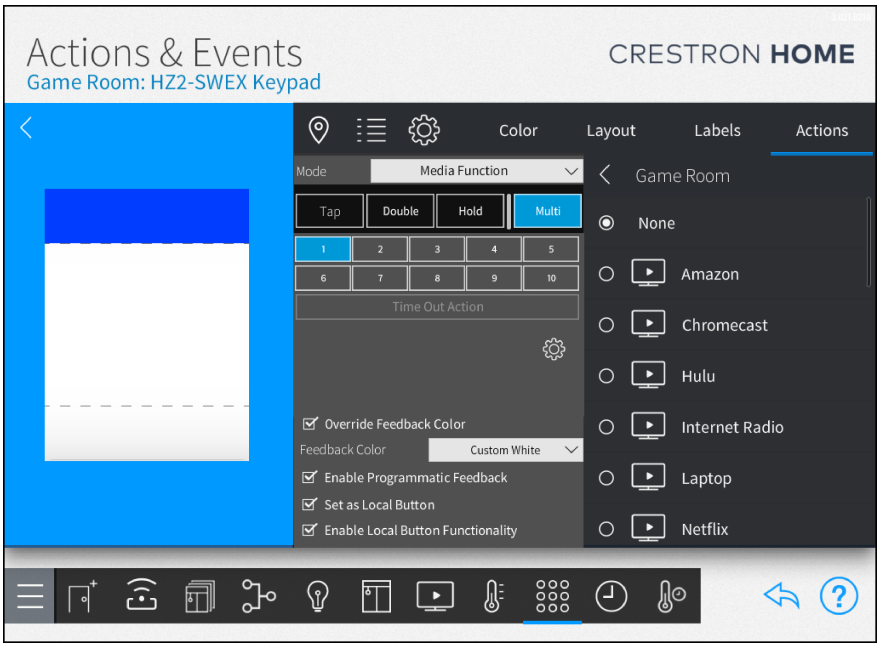
> **NOTE:** A custom hold time can be set for each button on the keypad.

Multi

To assign multiple media functions to a series of button presses, tap the **Multi** button and then select a media function.

> **NOTE:** The **Multi** button function cannot be used with the **Tap**, **Double**, and **Hold** button functions. Settings for the **Tap**, **Double**, and **Hold** button functions will be lost when the **Multi** button function is selected.





Button Press (1-10): Assign an action for each button press. To assign an action to a button press, tap a button press number and then assign the action.

NOTES:

- The Crestron Home system maintains a count of the button presses that have occurred. When the system count matches the button press number, the action associated with the button press number is performed.
- The system count resets to one after it reaches the end of the list. For example, if an action is assigned for button press 1 through 4, the fifth button press resets the system count to one.and the action assigned to button press 1 is performed.
- Button presses can be skipped. For example, if an action is assigned for button presses 1 and 5 and no action is assigned for button presses 2, 3, and 4, no action is performed when button presses 2, 3, and 4 occur.

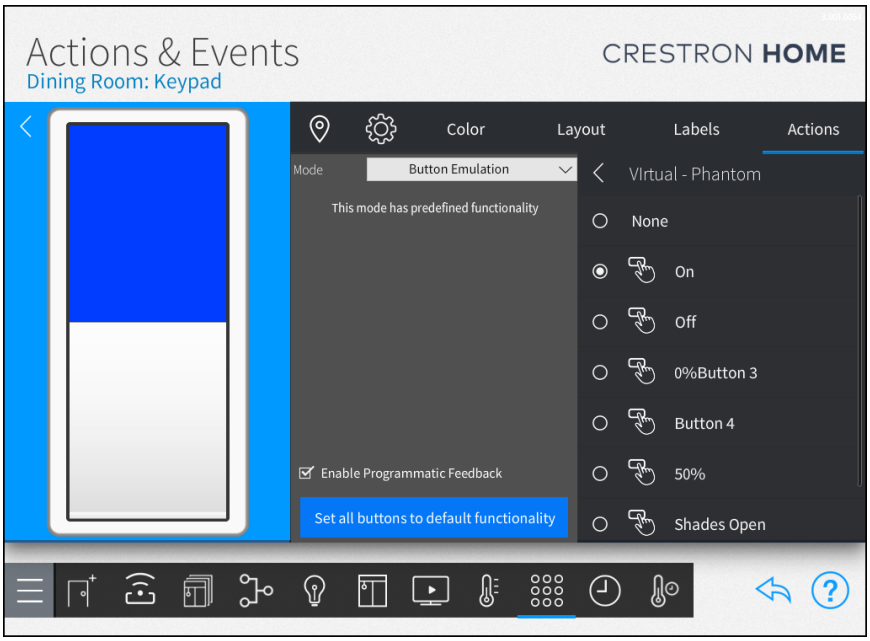
Time Out Action: A time out action can be performed when the time out period expires. To set the time out action, tap the **Time Out Action** button and then assign an action.

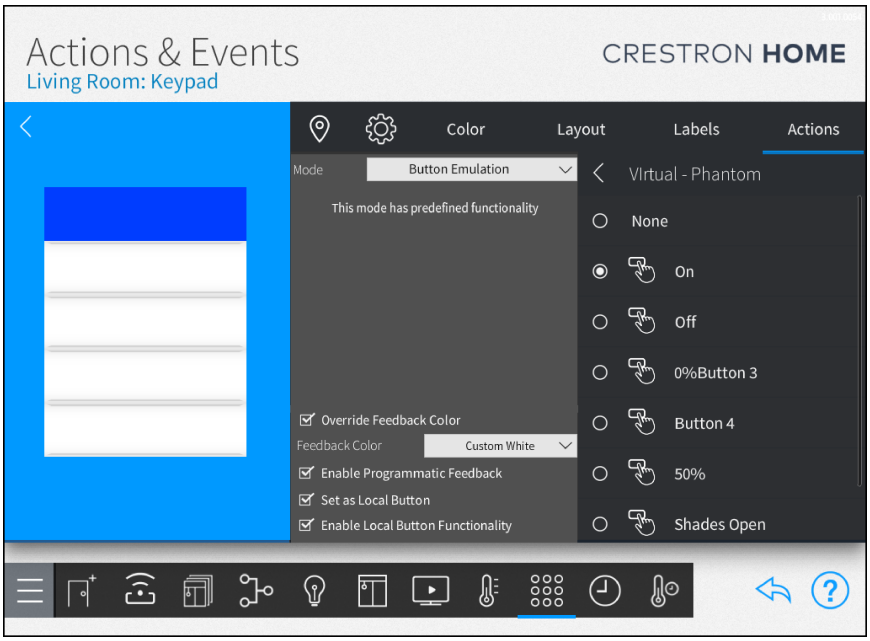
NOTES:

- A time out period begins after the last button press and is used to determine how long the Crestron Home system waits for an addition button press. The default timeout period is 24 hours.
- To configure the time out period.for the keypad, tap the gear button  next to the **Enable Time of Day** button.
    - To set a custom time out period, deselect the **Use System Settings** check box and then enter the time out period in the **Hours**, **Minutes**, and **Seconds** text boxes.
    - To use the system wide settings, select the **Use System Settings** check box.
    - The maximum time out period is 24 hours. To set the time out period to 24 hours, type **0** in the **Hours**, **Minutes**, and **Seconds** text boxes.

Button Emulation

Select **Button Emulation** from the **Mode** drop-down list to emulate a button on a Lutron keypad when the button is pressed.





NOTE:

- To emulate multiple Lutron buttons, create a phantom button in the Lutron system that performs all of the required functions. Assign the phantom button to the button.

- To emulate a Lutron button and a function within Crestron Home, create a sequence that recalls the Lutron button and the Crestron Home function. For details, refer to Sequence on page 423.
- Third-party keypads do not support the predefined double-tap function. To recall the double-tap function in the Lutron system, assign a separate button on the third-party keypad to recall the double-tap function using a Quick Action or Scene

Predefined functions are assigned for the following button presses:

- **Tap:** One button press to emulate the Lutron button.
- **Double:** Two button presses to emulate the Lutron button.
- **Press and Hold:** Press and hold the button to emulate the Lutron button.

Override Feedback Color: The color of the LED feedback associated with the button. Select an LED color from the **Override Feedback Color** drop-down list. The Alarm feedback color lights red when activated and is off when inactive.

NOTE: For feedback purposes only, the center of a rocker button can be programmed to light and display programmatic feedback. For example, the LED can be programmed to mimic the function of the top button of the rocker by assigning the same settings used by the top button.

Enable Local Button Functionality: Select this option to turn on the Local Button functionality on the keypad.

Set as Local Button: Select this option to assign the selected button as the local button. A local button must always be selected on a load controller. Only one button can be set as the local button. The local button provides direct control of the connected load (without input from the control processor) and can also be programmed to perform other actions, such as turning on the TV.

NOTES:

- An HZ-KPEX and HZ2-KPEX can be assigned a local button even though it cannot directly control a load.
- When the local button on the HZ-AUX is pressed, the signal is transmitted using the "traveler" wire to the Horizon dimmer or switch and then the load attached to the Horizon dimmer or switch is turned on or off or dimmed up or down.
- The HZ-DIMFLVEX does not support multiway control.

External Function

Select **External Function** from the **Mode** drop-down menu to recall an external function when the button is pressed. The external function can be recalled using the tap, double tap, press and release, and multi-press functionality.

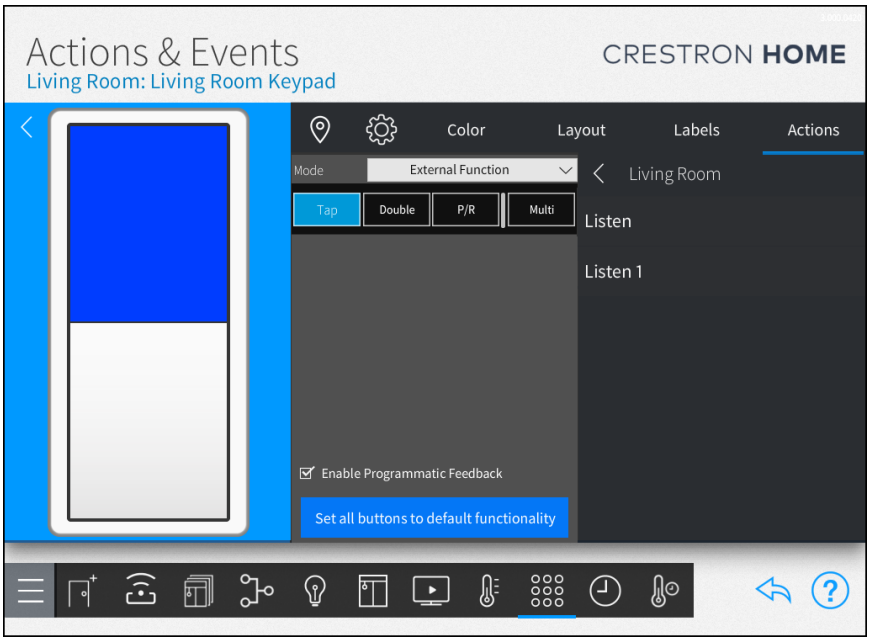
NOTES:

- Assign different actions to the **Tap**, **Double**, and **P/R** button functions to recall different actions with the same button.
- The **Tap**, **Double**, and **P/R** button functions cannot be used with the **Multi** button function. Settings for the **Tap**, **Double**, and **P/R** button functions will be lost when the **Multi** button function is selected.

- **Tap:** One button press to recall the external function.
- **Double:** Two button presses to recall the external function.
- **P/R:** Press and hold the button to recall the external function. The external function is stopped when the button is released.
- **Multi:** Multiple button presses can recall up to 10 external functions and provide the ability to cycle through external functions.

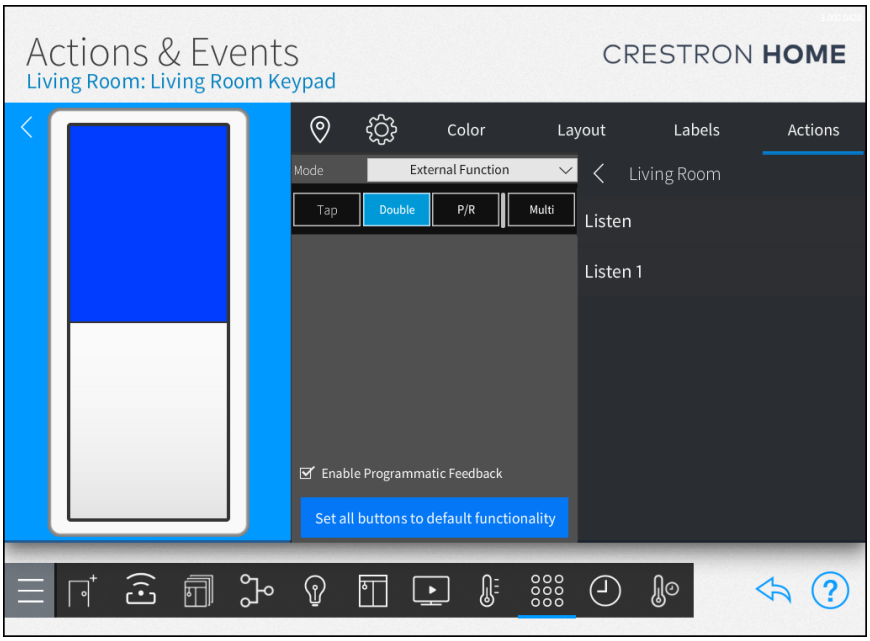
Tap

To assign an external function to a single button press (single tap), tap the **Tap** button and then select an external function.



Double

To assign an external function to a double button press (double tap), tap the **Double** button and then select an external function.



Tap **Settings** next to the location button to configure the double tap settings for the keypad.

- **Use System Settings:** Tap the check box next to **Use System Settings** to use the delay that is set by the system. For details, refer to Lighting and Keypad Settings on page 590.
- **Wait For Double Tap:** Available when **Use System Settings** is not checked. Tap the check box next to **Wait For Double Tap** to enable the wait for double tap function. The Wait for Double Tap function determines if the Crestron Home system triggers the Double Tap button action. The delay is the amount of time (in seconds) that the system waits after a button press to determine if a subsequent button press is a double tap. The values can be set between 0.2 and 1 second.

  For example:
  - Tap button action is set to route video to a bedroom.
  - Double Tap button action is set to route audio to a bedroom.

  When Wait for Double Tap is enabled:

  > **NOTE:** The Tap button action is not triggered if the button is pressed twice within the delay time.

  - A single button press will route video to the bedroom if the room is off (Tap button action).

- Two button presses will route audio to the bedroom (Double Tap button action).

When Wait for Double Tap is disabled:

> **NOTE:** The Crestron Home system registers both the single and double button presses and triggers both actions.

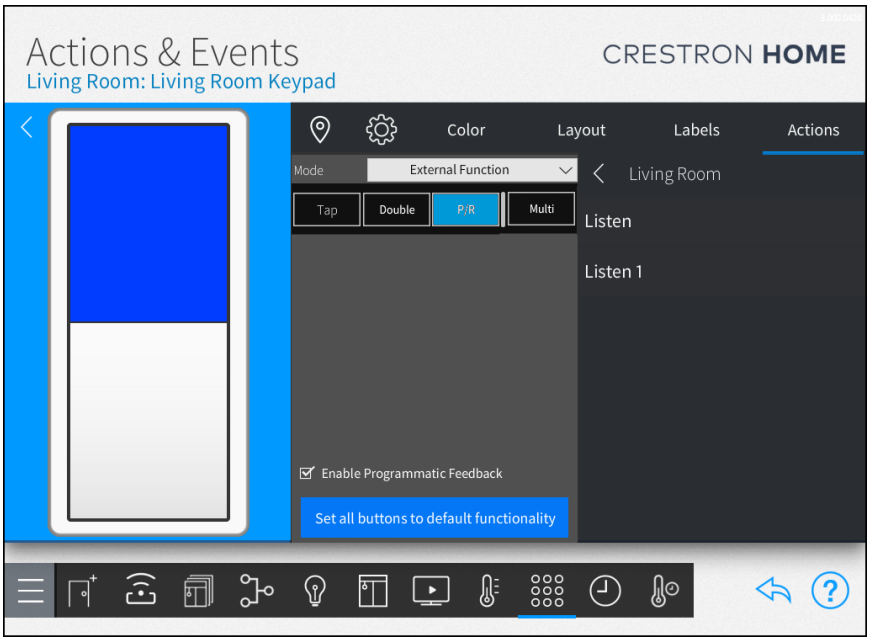
- A single button press will route video to the bedroom if the room is off (Tap button action).
- Two button presses will route video to the bedroom if the room is off (Tap button action) and then will route audio to the bedroom if the room is off (Double Tap button action).

- **Hold Time:** Available when **Use System Settings** is not checked. The amount of time (in seconds) that a button must be pressed during a press-and-hold operation before the Hold button action is performed.
- **Time Out:** Available when **Use System Settings** is not checked. The amount of time (in hours, minutes, and seconds) that the system waits to determine if the Double Tap button action is performed.

P/R

To assign an external function to a press and release, tap the **P/R** button and then select an external function.

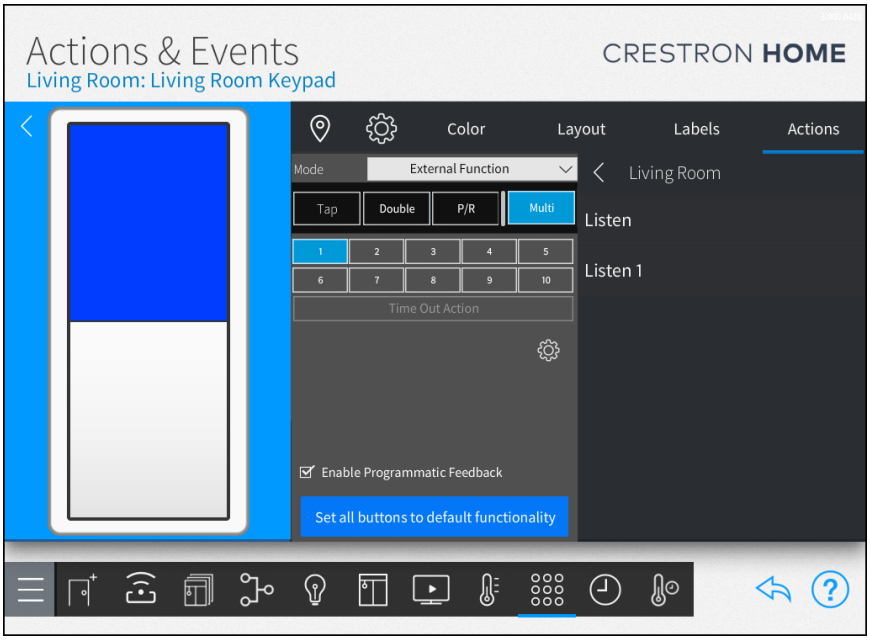
> **NOTE:** The P/R function is executed for however long the button is pressed for.



Multi

To assign multiple external functions to a series of button presses, tap the **Multi** button and then select an external function.

> **NOTE:** The **Multi** button function cannot be used with the **Tap**, **Double**, and **P/R** button functions. Settings for the **Tap**, **Double**, and **P/R** button functions will be lost when the **Multi** button function is selected.



Button Press (1-10): Assign an action for each button press. To assign an action to a button press, tap a button press number and then assign the action.

> **NOTES:**
>
> - The Crestron Home system maintains a count of the button presses that have occurred. When the system count matches the button press number, the action associated with the button press number is performed.
> - The system count resets to one after it reaches the end of the list. For example, if an action is assigned for button press 1 through 4, the fifth button press resets the system count to one.and the action assigned to button press 1 is performed.
> - Button presses can be skipped. For example, if an action is assigned for button presses 1 and 5 and no action is assigned for button presses 2, 3, and 4, no action is performed when button presses 2, 3, and 4 occur.

Time Out Action: A time out action can be performed when the time out period expires. To set the time out action, tap the **Time Out Action** button and then assign an action.

NOTES:

- A time out period begins after the last button press and is used to determine how long the Crestron Home system waits for an addition button press. The default timeout period is 24 hours.
- To configure the time out period.for the keypad, tap **Settings** next to the the **Enable Time of Day** button.
  - To set a custom time out period, deselect the **Use System Settings** check box and then enter the time out period in the **Hours**, **Minutes**, and **Seconds** text boxes.
  - To use the system wide settings, select the **Use System Settings** check box.
  - The maximum time out period is 24 hours. To set the time out period to 24 hours, type **0** in the **Hours**, **Minutes**, and **Seconds** text boxes.

Custom LED Colors for Horizon Keypads

NOTE: The procedures below are for the first generation of Horizon keypads. Horizon® 2 keypad LED colors are assigned in the keypad settings. For details, refer to Keypad Settings on page 1239.

Use a sequence to set custom LED colors for Horizon® keypad buttons and to revert the colors to their default settings. The color settings can be set from within the Sequence Quick Action or from another event in the Crestron Home system.

To assign custom LED colors for Horizon keypads:

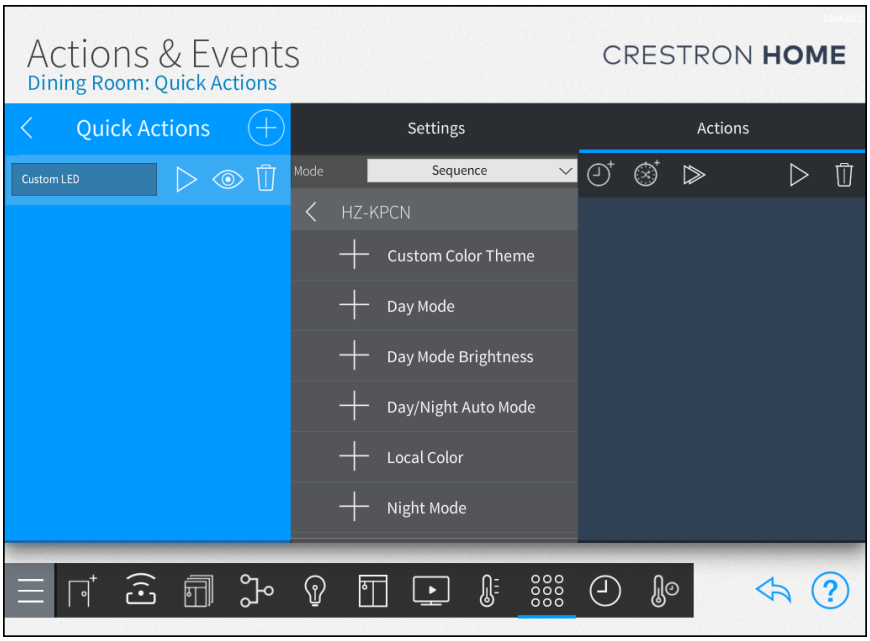
- Enable custom colors in the keypad settings. To enable custom colors, open the settings dialog for the keypad, go to the **Backlight** tab, and then select **Enable LED Backlight**. For details, refer to Keypad Settings on page 1239.
- Recall Sequence Quick Actions that assign custom LED colors with another Quick Action in the system. If the Crestron Home processor restarts, the custom LED colors will not be activated until the Sequence Quick Action is recalled.

Assign Custom Colors

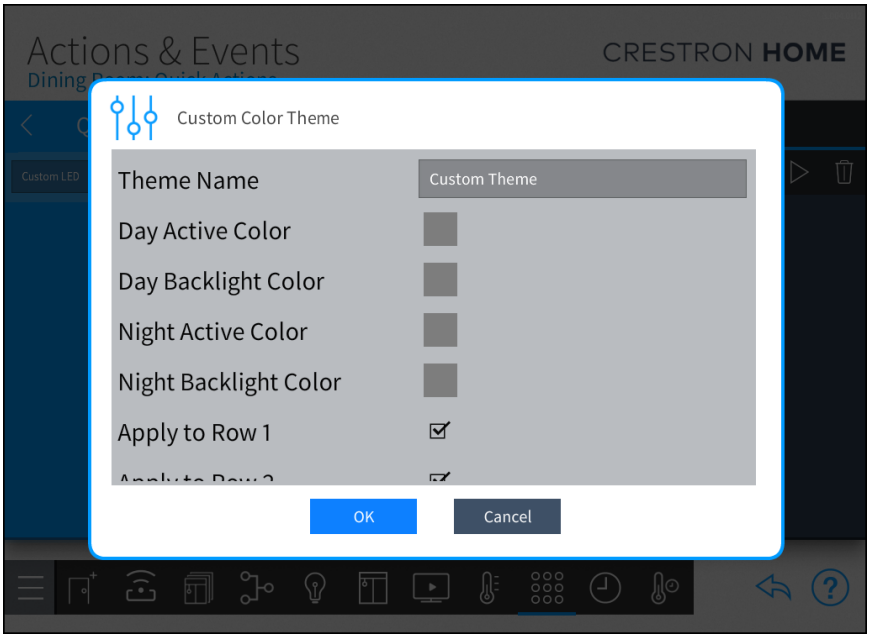
To set custom colors for Horizon® keypads:

1. In the keypad settings, enable custom colors. For details, refer to Keypad Settings on page 1239.

2. Create a Sequence Quick Action. For details, refer to Create a Quick Action on page 416.
    a. Go to **Step 5: Customize & Schedule > Customize Actions & Events** and then select a room.
    b. Select **Add Quick Action**.
    c. Enter a name for the Quick Action and then select **OK**.
    d. Select **Sequence** from the **Mode** drop-down menu.
3. In the **Select Room Below** menu, go to a room and then select the Horizon Keypad.
4. Select **Custom Color Theme**

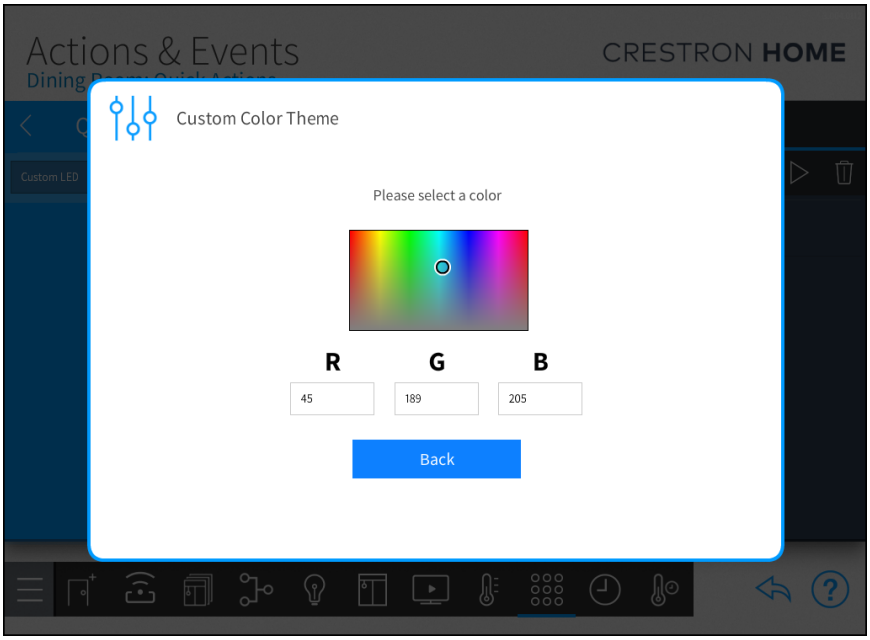


5. Enter a name in the **Theme Name** box.



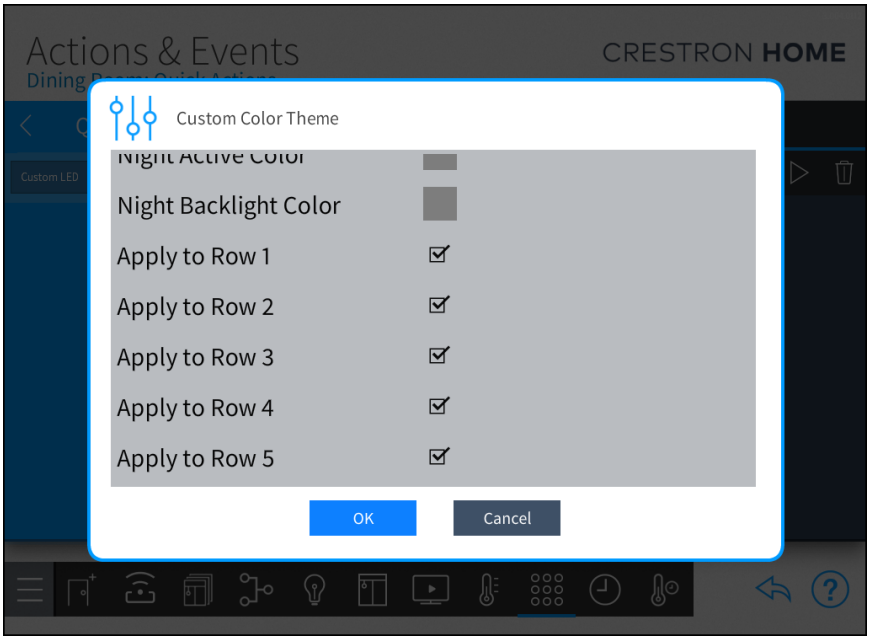
6. Select a custom color for the **Day Active Color**, **Day Backlight Color**, **Night Active Color**, and **Night Backlight Color** LED states.
    a. Select the color assignment box. The default LED color is unassigned, which uses the Local (default) LED color setting on the keypad.
    b. Select a color for the LED.

> **NOTE:**To set the LED color to unassigned, set the R, G, and B values to 125.



    c. Select **Back**.

7. Select buttons to use the custom color. To select the rows, select the desired **Apply to Row 1** to **Apply to Row 5** check boxes.



8. Tap **OK**.
9. To select a different color for other buttons, repeat steps 3 through 8 above for each custom color.
10. To apply the custom color, use a Quick Action to recall the Sequence Quick Action or tap **Play Sequence**.

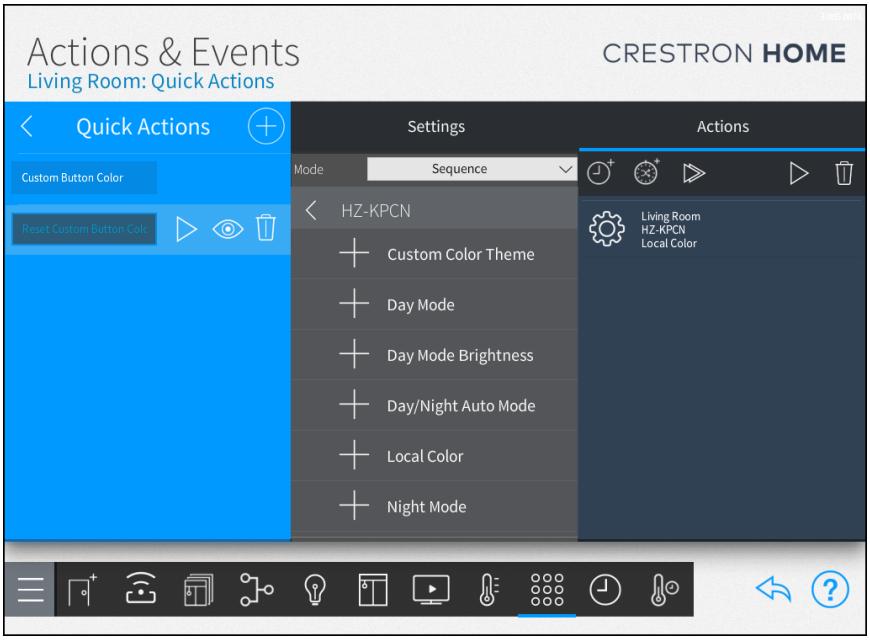
Remove Custom Colors

To remove the custom color from the keypad and revert to the Local (default) LED color setting, perform these steps:

> **NOTE:** This procedure removes the custom color theme from all buttons on the keypad.

1. Create a Sequence Quick Action. For details, refer to Create a Quick Action on page 416.
   a. Go to **Step 5: Customize & Schedule > Customize Actions & Events** and then select a room.
   b. Select **Add Quick Action**.
   c. Enter a name for the Quick Action and then select **OK**.
   d. Select **Sequence** from the **Mode** drop-down menu.
2. In the **Select Room Below** menu, go to a room and then select the Horizon Keypad.

3. Select **Local Color**



4. To remove the custom color, use a Quick Action to recall the Sequence Quick Action or tap **Play Sequence**.

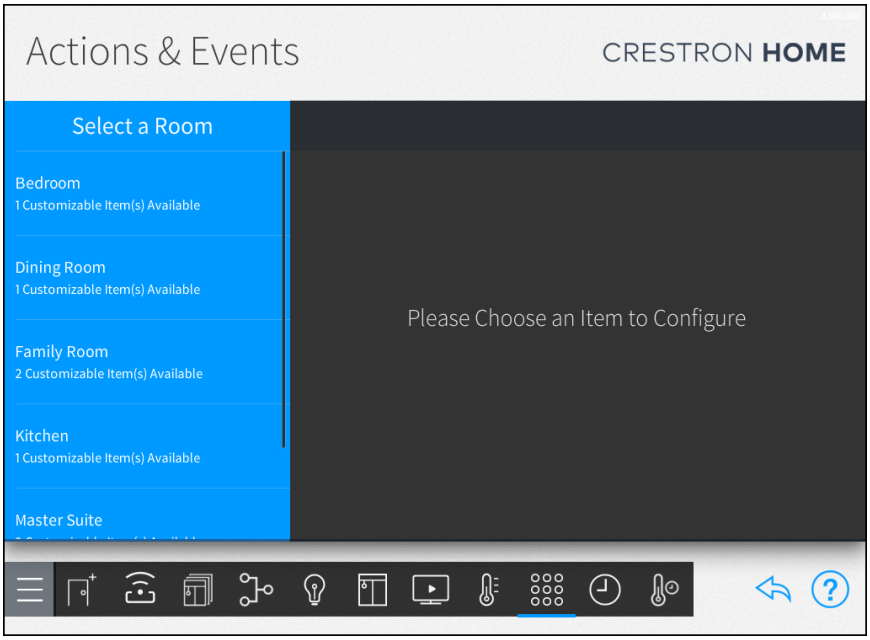
Customize Actions & Events

Assign actions to events using the **Actions & Events** screen. Actions can be assigned to Quick Actions, button presses on keypads and remotes, extension device events, and system events initiated by occupancy sensors, door locks, and alarms.

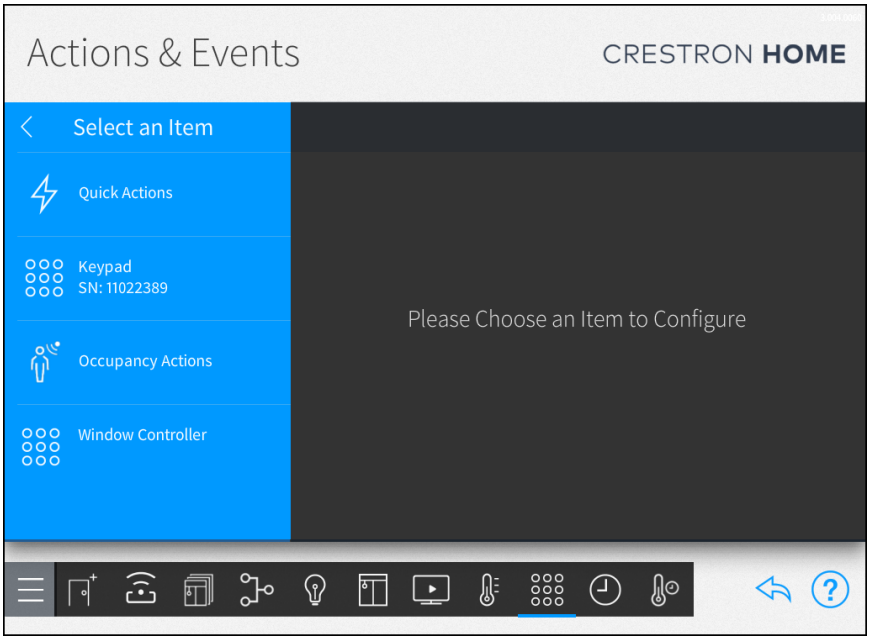
To view the **Actions & Events** screen, select **Step 5: Customize & Schedule > Customize Actions & Events** on the **Setup** screen or on the setup menu.

To assign actions to events, follow these steps:

1. Select a room from the **Select a Room** menu.



2. The **Select an Item** menu displays a list of items that can be assigned actions. Select an item from the menu.



3. Assign actions to the item. Actions can be assigned to the following items.

> **NOTE:** The following list contains devices that are common to systems and is not comprehensive. The process for configuring unlisted devices is similar.

- Alarm Events
- Door Lock Events
- Extension Device Events
- Occupancy Sensor Events
- Media Zone Events
- PDU (Power Distribution Unit) Device Events
- Security System Events
- Variables

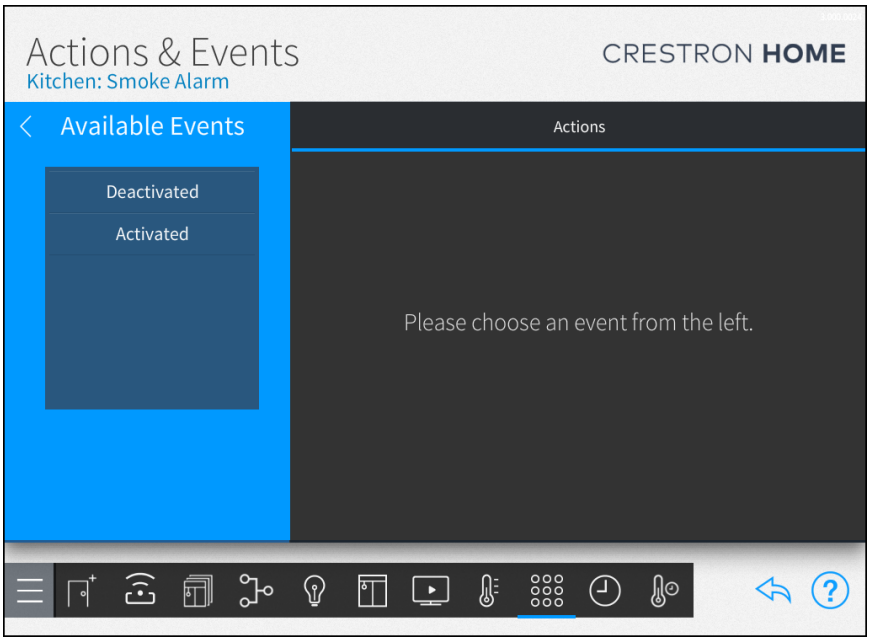
To return to the previous screen, tap **Back**.

Alarm Events

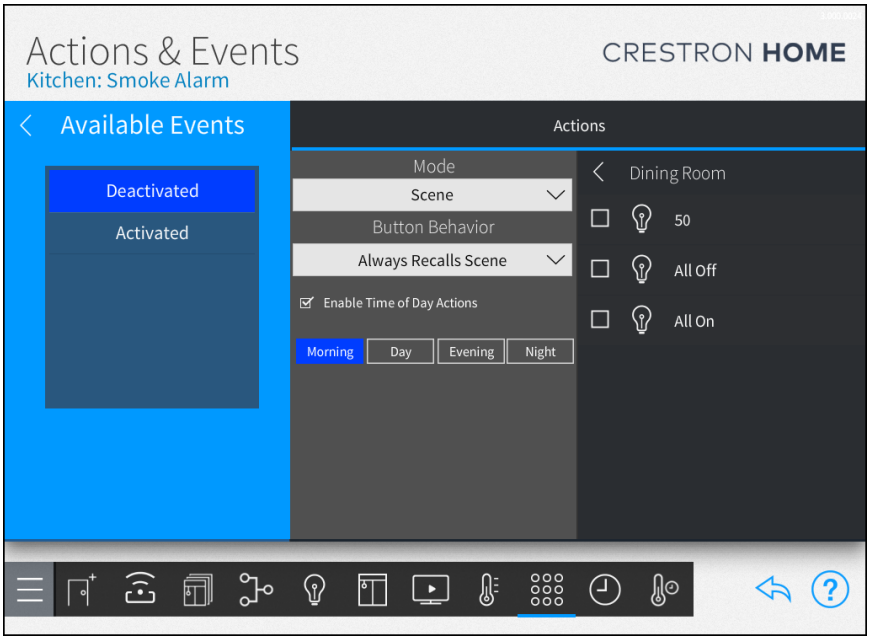
Use the alarm configuration screen to associate scenes and other actions with alarm events.

Select an alarm device from the **Select an Item** menu to display a configuration screen for the alarm.

1. Tap an **Available Events** button.



2. The following configuration options are provided:



- Use the center panel to select the type of action that will be associated with the alarm event and to configure action-related behavior.

  > **NOTE:** Other configuration options may be provided depending on the selected mode.

  - **Mode**: Select the type of action that is recalled by the alarm event (such as "Scene").
  - **Button Behavior**: (Available for compatible selection is selected for **Mode**) A drop-down menu to set the alarm event behavior for recalling the selected action.
  - **Enable Time of Day Actions**: (Available when **Scene** is selected for **Mode**) Enables different scenes to be recalled based on the time of the day. Set a scene for Morning, Day, Evening, and Night.
- Use the right screen panel to associate an action with the alarm event.

  > **NOTES:**
  > - The same action or scene may be assigned to multiple alarm events.
  > - Multiple actions or scenes may also be assigned to the same alarm event.

  - Use the **Select Room Below** menu to select the room that contains the desired action or scene.
  - Tap on a room name to display a list of actions that may be selected for the room. The type of action that is displayed is set using the **Mode** drop-down menu in the center panel.
  - Tap the check box next to an action to add or remove that action from the event. A checked box indicates that the action is set to occur during the alarm event.
  - Tap the back arrow (<) next to the room name to return to the **Select Room Below** menu.

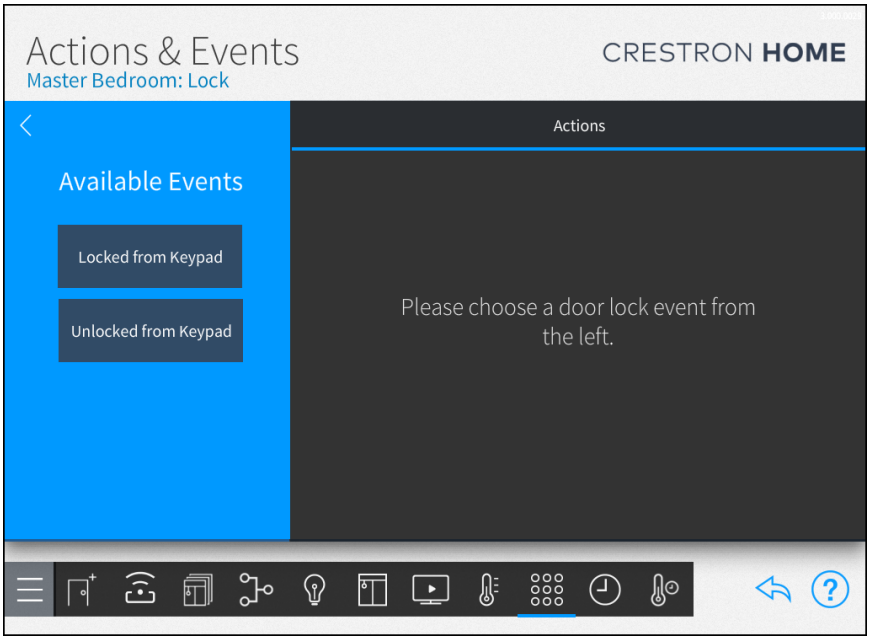
  > **NOTE:** Only rooms that contain selectable actions appear on the **Select Room Below** menu. Once an action is selected from a room, the room name is shown with blue text in the **Select Room Below** menu.

Door Lock Events

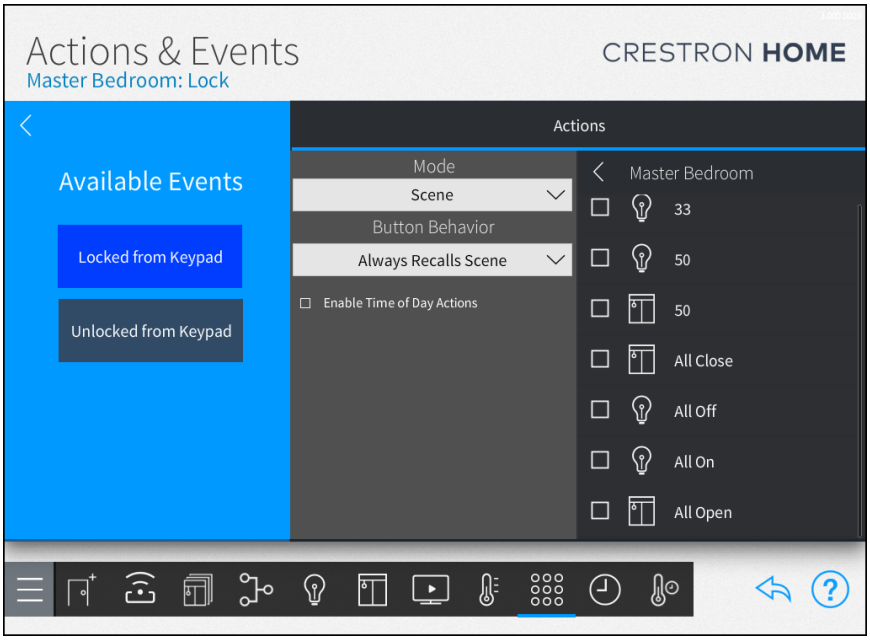
Use the door lock configuration screen to associate scenes and other actions with door lock events.

Select a door lock from the **Select an Item** menu to display a configuration screen for the door lock.

1. Tap an **Available Events** button.



2. The following configuration options are provided:



- Use the center panel to select the type of action that will be associated with the door lock event and to configure action-related behavior.

  > **NOTE:** Other configuration options may be provided depending on the selected mode.

  - **Mode**: Select the type of action that is recalled by the door lock event (such as "Scene").
  - **Button Behavior**: (Available for compatible selection is selected for **Mode**) A drop-down menu to set the door lock event behavior for recalling the selected action.
  - **Enable Time of Day Actions**: (Available when **Scene** is selected for **Mode**) Enables different scenes to be recalled based on the time of the day. Set a scene for Morning, Day, Evening, and Night.
- Use the right screen panel to associate an action with the door lock event.

  > **NOTES:**
  > - The same action or scene may be assigned to multiple door lock events.
  > - Multiple actions or scenes may also be assigned to the same door lock event.

  - Use the **Select Room Below** menu to select the room that contains the desired action or scene.
  - Tap on a room name to display a list of actions that may be selected for the room. The type of action that is displayed is set using the **Mode** drop-down menu in the center panel.
  - Tap the check box next to an action to add or remove that action from the door lock event. A checked box indicates that the action is set to occur during the door lock event.
  - Tap the back arrow (<) next to the room name to return to the **Select Room Below** menu.

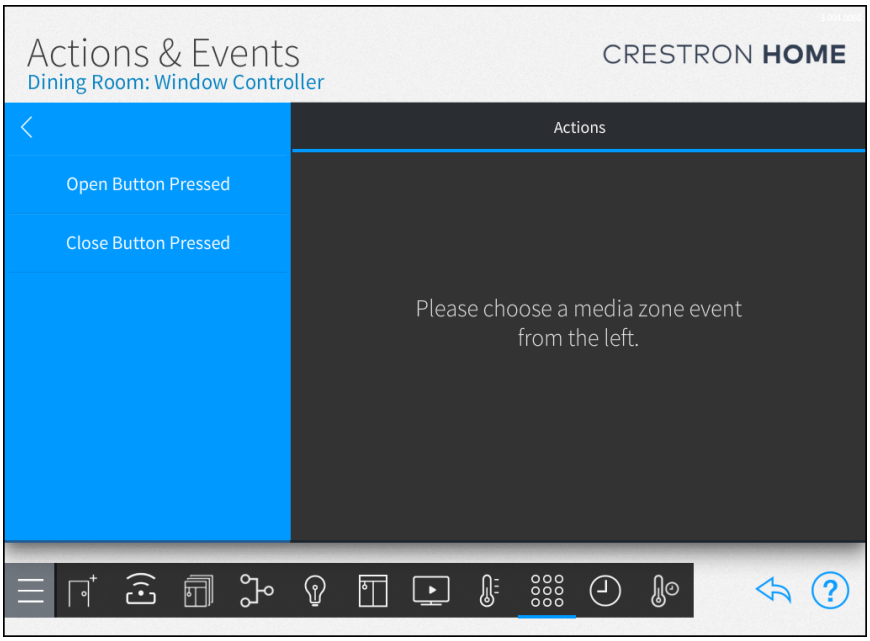
  > **NOTE:** Only rooms that contain selectable actions appear on the **Select Room Below** menu. Once an action is selected from a room, the room name is shown with blue text in the **Select Room Below** menu.

Extension Device Events

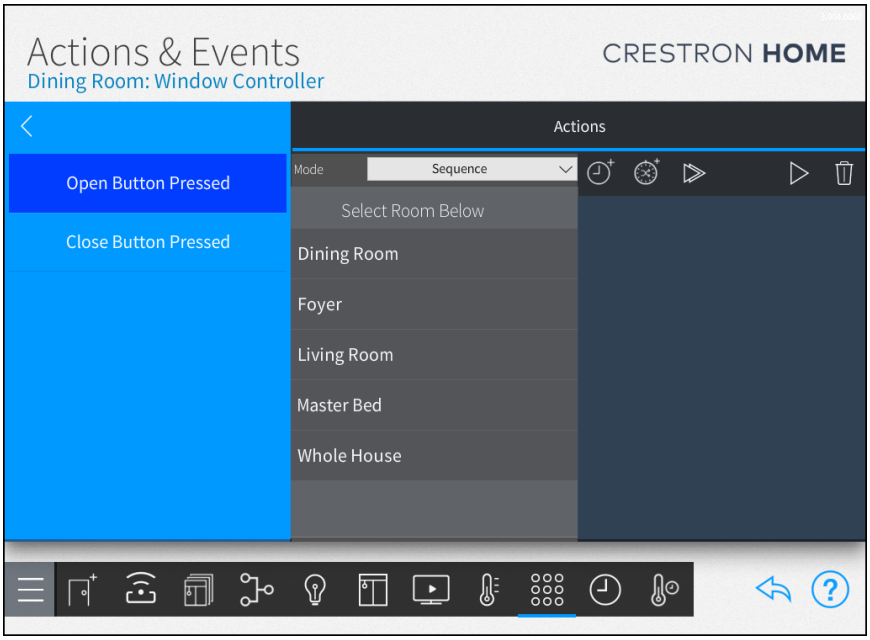
Use the extension device configuration screen to associate actions with extension device events.

To assign actions to extension device events, follow these steps:

1. Select an extension device from the **Select an Item** menu.
2. Select an event from the Available Events menu.



3. To assign an action to the event, select an option from the **Mode** drop-down menu.

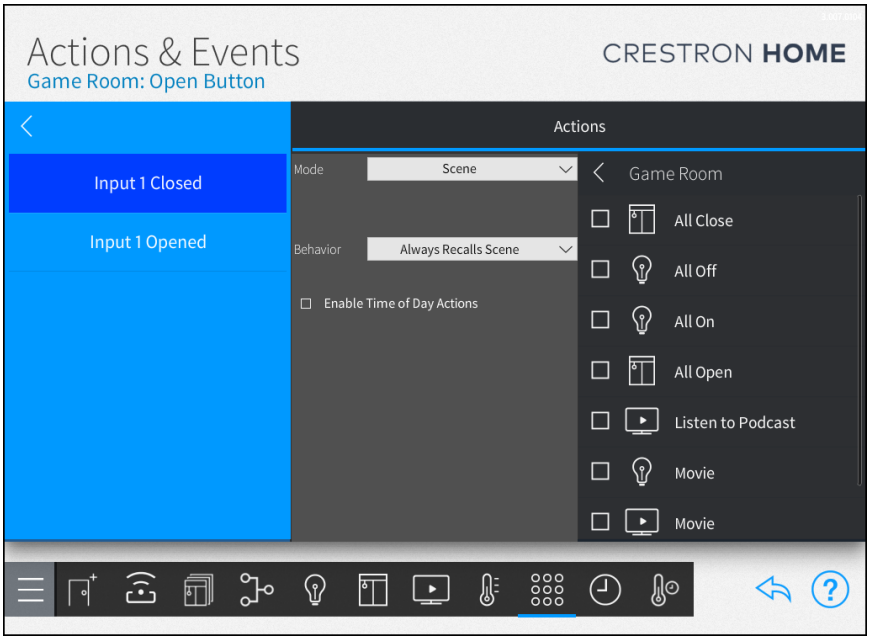


Configure the Extension Device Event Action

Scene

To recall a scene when the extension event occurs:

1. Select **Scene** from the **Mode** drop-down menu.



2. Select a room from the **Select Room Below** menu.

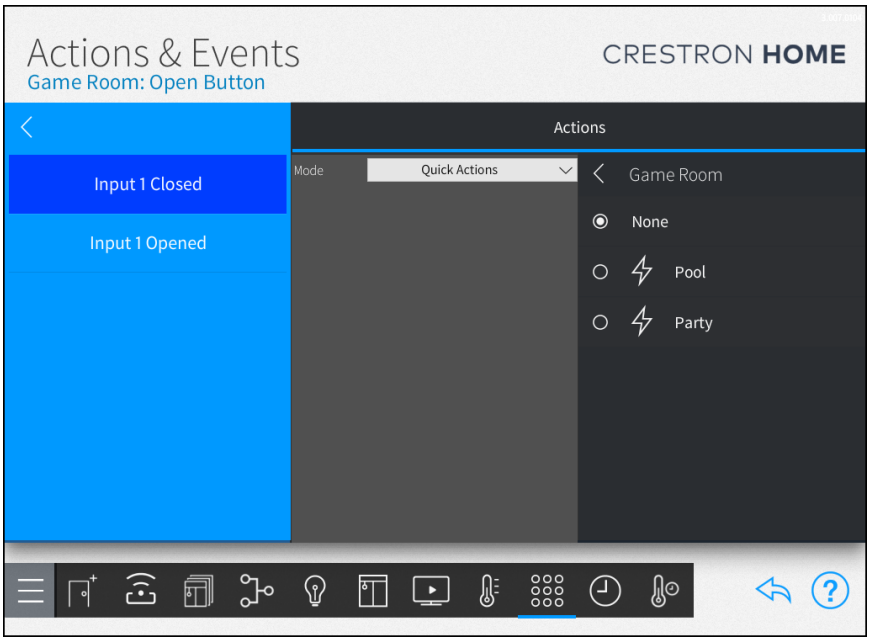
> **NOTE:** If the current room contains scenes, the room is selected automatically. To select a scene in a different room, tap **Back** and then select a room.

3. To assign a scene, select the check box next to the scene name.
4. To recall a different scene based on the time of day:
   a. Select the **Enable Time of Day Actions** check box.
   b. Select **Morning**, **Day**, **Evening**, or **Night** and then select a scene to recall during that time period.

Quick Action

To recall a quick action when the extension event occurs:

1. Select **Quick Actions** from the **Mode** drop-down menu.



2. Select a room from the **Select Room Below** menu.

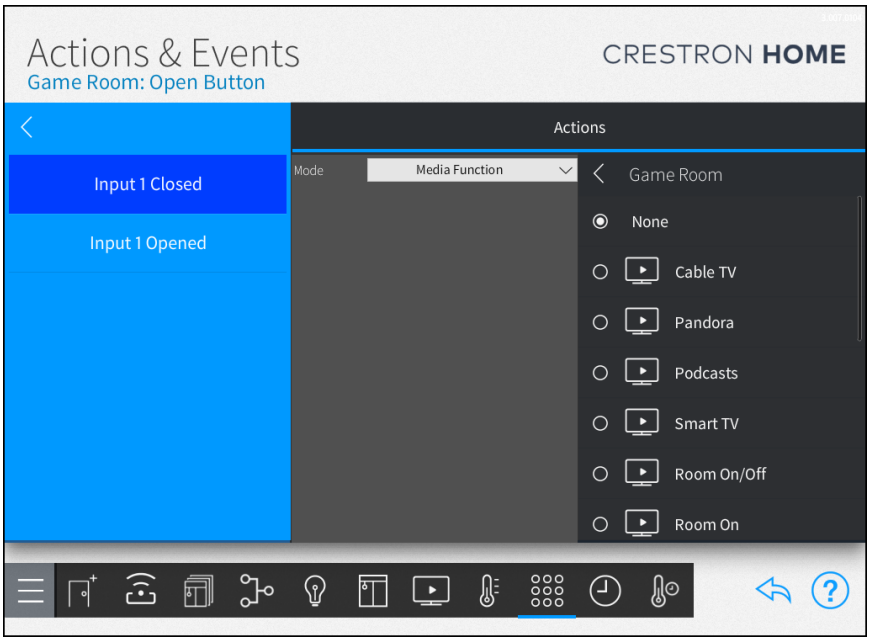
> **NOTE:** If the current room contains quick actions, the room is selected automatically. To select a quick action in a different room, tap **Back** and then select a room.

3. To assign a quick action, select the check box next to the quick action name.

Media Functions

To recall a media function when the extension event occurs:

1. Select **Media Function** from the **Mode** drop-down menu.



2. Select a room from the **Select Room Below** menu.

> **NOTE:** If the current room contains media functions, the room is selected automatically. To select a media function in a different room, tap **Back** and then select a room.

3. To assign a media function, select the check box next to the media function name.

Button Emulation

To recall a Lutron button press when the extension event occurs:

1. Select **Button Emulation** from the **Mode** drop-down menu.
2. Select a room from the **Select Room Below** menu.

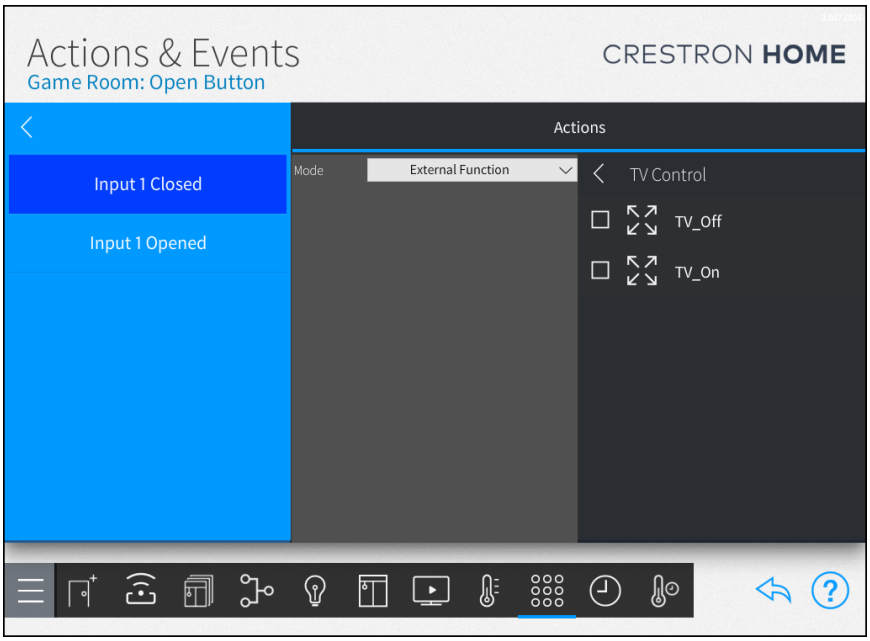
> **NOTE:** If the current room contains Lutron buttons, the room is selected automatically. To select a Lutron button in a different room, tap **Back** and then select a room.

3. To assign a Lutron button scene, select the check box next to the Lutron button scene name.

External Functions

To recall a external function when the extension event occurs:

1. Select **External Function** from the **Mode** drop-down menu.



2. Select a room from the **Select Room Below** menu.

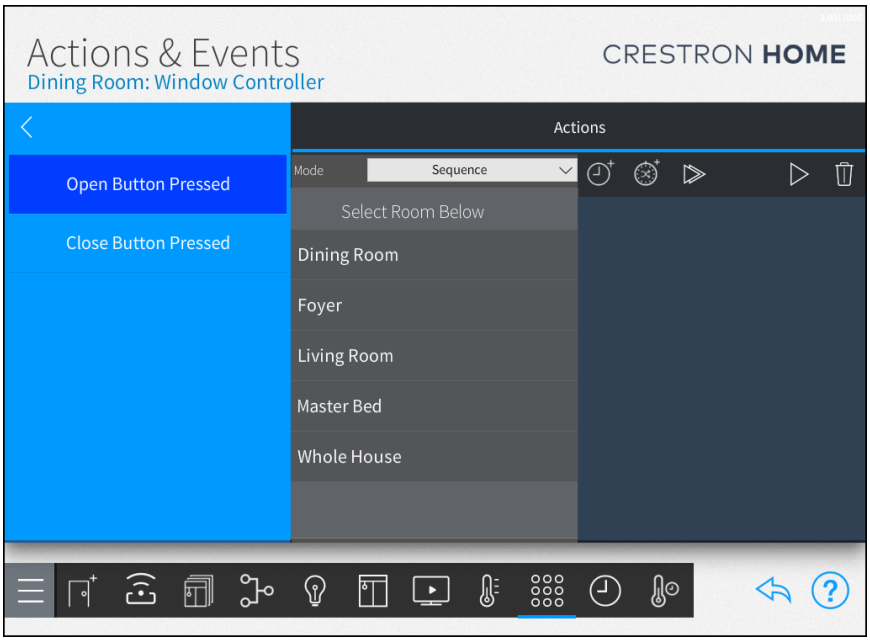
> **NOTE:** If the current room contains external functions, the room is selected automatically. To select a external function in a different room, tap **Back** and then select a room.

3. To assign a external function, select the check box next to the external function name.

Sequence Mode

To recall a sequence when the extension event occurs:

1. Select **Sequence** from the **Mode** drop-down menu.



2. Configure the sequence. Configuring the sequence uses the same procedure as creating a quick action sequence. For details, refer to Sequence on page 423.

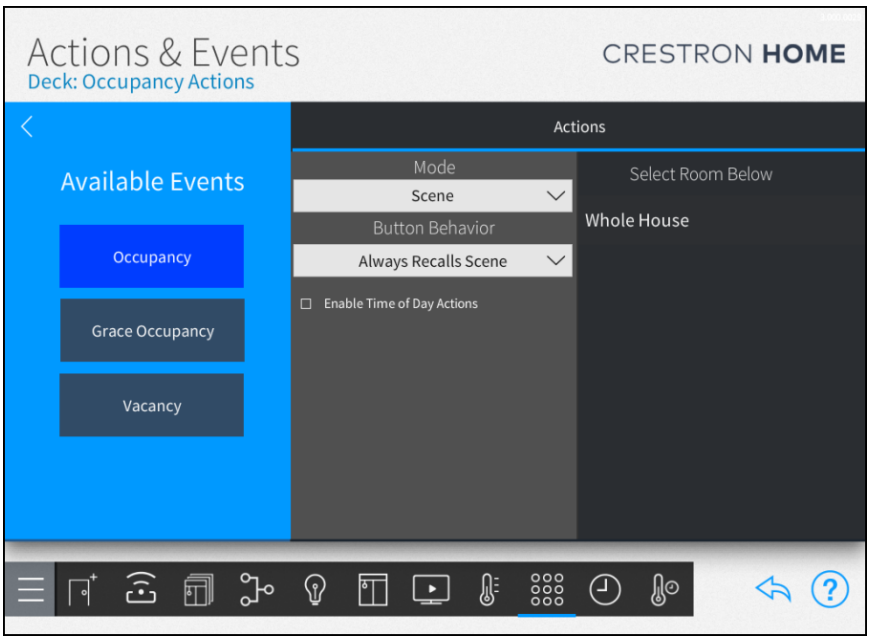
Occupancy Sensor Events

Configure the occupancy sensor to associate actions with occupancy events.

To assign actions to occupancy sensor events:

1. Select an occupancy sensor from the list of devices.
2. Tap the **Occupancy**, **Grace Occupancy**, or **Vacancy**.

> **NOTE:** The Basalte Auro occupancy sensor does not support **Grace Occupancy** programming events. If actions are assigned for the **Grace Occupancy** event, they will not trigger.



3. Select the action mode type from the **Mode** drop-down menu:

> **NOTE:** Other configuration options may be provided depending on the selected mode.

- **None:** No action is performed when the occupancy event occurs.
- **Scene:** A scene is recalled when the occupancy event occurs.
- **Quick Action:** A quick action is recalled when the occupancy event occurs.
- **Media Function:Audio Function:** Recalls a media function.
- **External Function:** Recalls a function that is defined by an external control system.

4. When **Scene** is selected from the **Mode** drop-down menu, select a function from the **Button Behavior** drop-down menu.
    - **Always Recalls Scene:** A scene is recalled when the event occurs.
    - **Toggles Scene/Off:** Press the button to turn the scene on or off.
    - **Custom Toggle:** Each button press switches between the on actions or off actions.
5. When **Scene** is selected from the **Mode** drop-down menu, select **Enable Time of Day Actions** to recall a different scene during the Morning, Day, Evening, and Night. Select a scene for each time period.
6. Select scenes to recall when the event occurs. When a room is expanded, the scenes in the room are displayed.

    Climate scenes are listed in the **Whole House** room.

    If **Enable Time of Day Actions** is selected, select scenes for the **Morning**, **Day**, **Evening**, and **Night** time periods.

    > **NOTE:** Only rooms that contain selectable actions appear on the **Select Room Below** menu. Once an action is selected from a room, the room name is shown with blue text in the **Select Room Below** menu.

Media Zone Events

Use an event that occurs in a media zone to trigger an action in the house. Media zone events occur when the media zone is turned on or off, a sleep timer has elapsed, or a display is turned on or off.

Media Zone Events are displayed on the **Actions & Events** page for rooms that contain media devices or when **Enable Media Zone** is selected in room's Source Routes page.

To configure media zone events, go to **Step 5: Customize & Schedule > Customize Actions & Events > Select a room > Media Zone Events**.

These media zone events are available:

- **Media Zone On and Media Zone Off:** An action occurs when the media zone is turned on or off. Use media zone on and off events to recall a scene, quick action, button emulation, external function, or sequence functions.
- **Media Zone Sleep:** An action occurs when a sleep timer has elapsed in the media zone. Use the media zone sleep event to recall a scene, quick action, button emulation, external function, or sequence functions.

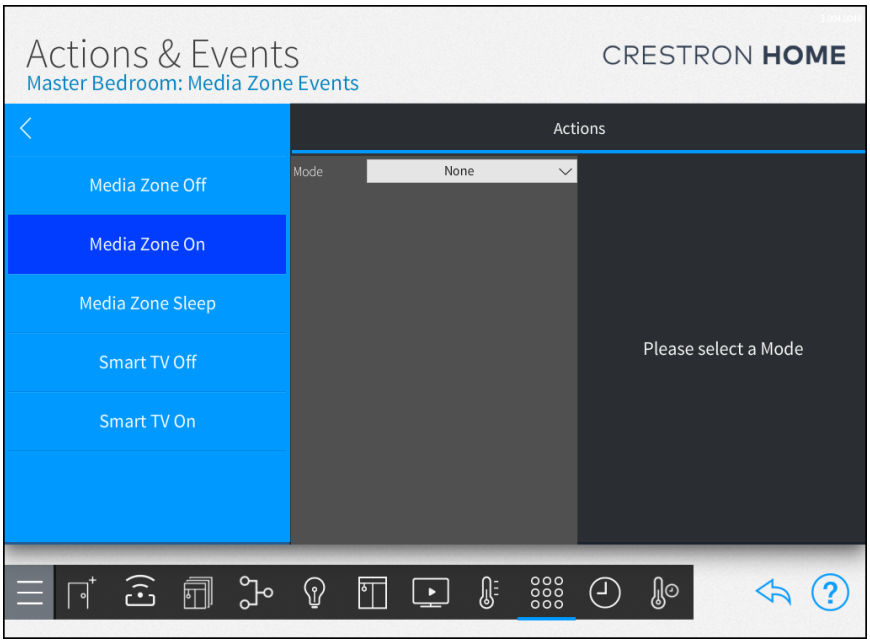
  > **NOTE:** Sleep timers turn off the media zone.

- **Display On and Display Off:** An action occurs when the display is turned on or off. Use display on and off events to recall a scene, quick action, button emulation, external function, or sequence functions.

Assign an Action to a Media Zone Event

To assign an action to a media zone event, follow these steps:

1. Select an event from the **Media Zone Events** menu.



2. To assign an action to the media zone event, select an option from the **Mode** drop-down menu.
3. Configure the media zone event. For details, refer to Configure the Media Zone Event Action on page 530.

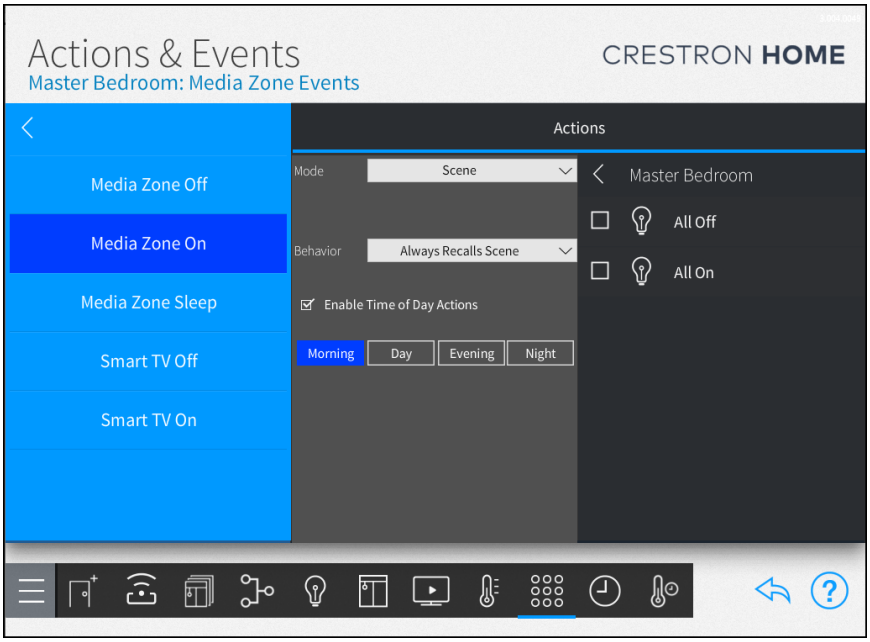
Configure the Media Zone Event Action

Scene Mode

Recall a scene when the media zone event occurs. You can recall more than one scene by selecting multiple scenes from the menu.

To recall a scene when the media zone event occurs, perform the following steps:

1. Select **Scene** from the **Mode** drop-down menu.



2. Select a room from the **Select Room Below** menu.

> **NOTE:** If the current room contains scenes, the room is selected automatically. To select a scene in a different room, tap **Back** and then select a room.

3. To assign a scene, select the check box next to the scene name.
4. To recall a different scene based on the time of day:
   a. Select the **Enable Time of Day Actions** check box.
   b. Select **Morning**, **Day**, **Evening**, or **Night** and then select a scene to recall during that time period.

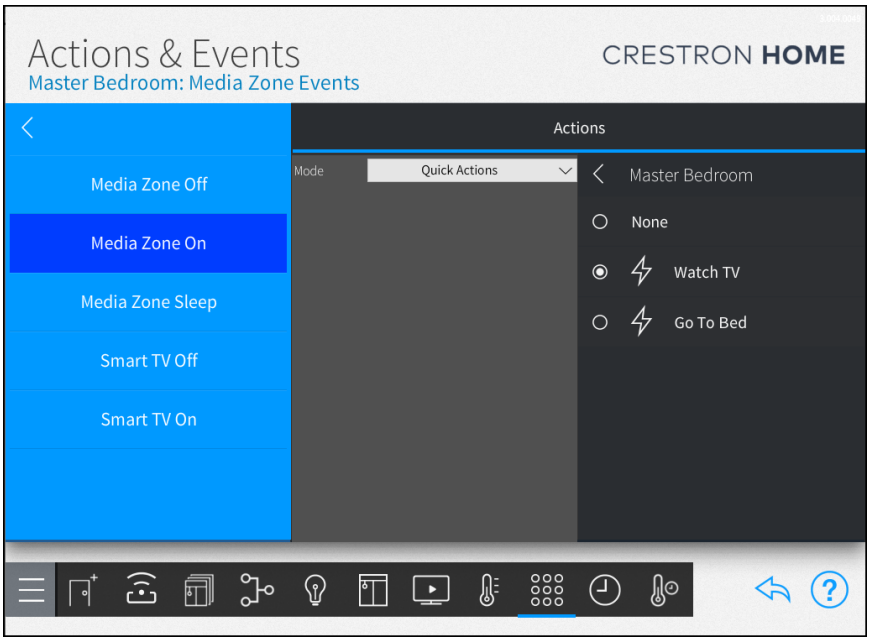
Quick Action Mode

Recall a quick action when the media zone event occurs. You can recall one quick action from the menu.

> **NOTE:** To recall more than one quick action, do either of the following:
>
> - Create a quick action that performs all of the required functions and then recall that quick action.
> - Create a sequence quick action that recalls multiple quick actions and then recall that sequence quick action.
> - Select **Sequence** from the Mode drop-down menu and then select the quick actions.

To recall a quick action when the media zone event occurs, perform the following steps:

1. Select **Quick Actions** from the **Mode** drop-down menu.



2. Select a room from the **Select Room Below** menu.

> **NOTE:** If the current room contains quick actions, the room is selected automatically. To select a quick action in a different room, tap **Back** and then select a room.

3. To assign a quick action, select the check box next to the quick action name.

Button Emulation Mode

Recall a Lutron® button press when the media zone event occurs.

To recall a Lutron button press when the media zone event occurs, perform the following steps:

1. Select **Button Emulation** from the **Mode** drop-down menu.
2. Select a room from the **Select Room Below** menu.

   > **NOTE:** If the current room contains Lutron buttons, the room is selected automatically. To select a Lutron button in a different room, tap **Back** and then select a room.

3. To assign a Lutron button scene, select the check box next to the Lutron button scene name.

External Function Mode

Recall an external function when the media zone event occurs.

To recall a external function when the media zone event occurs, perform the following steps:

1. Select **External Function** from the **Mode** drop-down menu.
2. Select a room from the **Select Room Below** menu.

   > **NOTE:** If the current room contains external functions, the room is selected automatically. To select a external function in a different room, tap **Back** and then select a room.

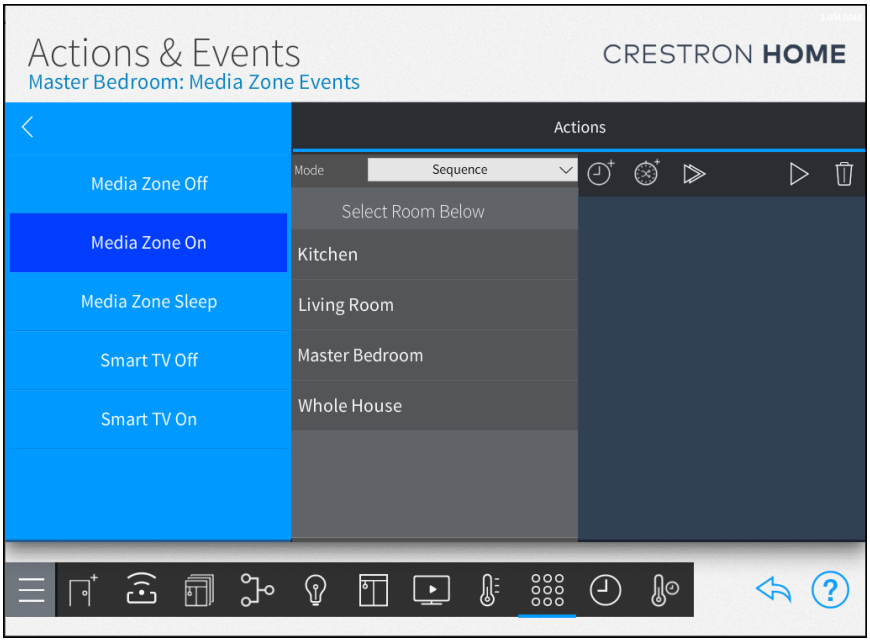
3. To assign a external function, select the check box next to the external function name.

Sequence Mode

Recall a sequence when the media zone event occurs.

To recall a sequence when the media zone event occurs, perform the following steps:

1. Select **Sequence** from the **Mode** drop-down menu.



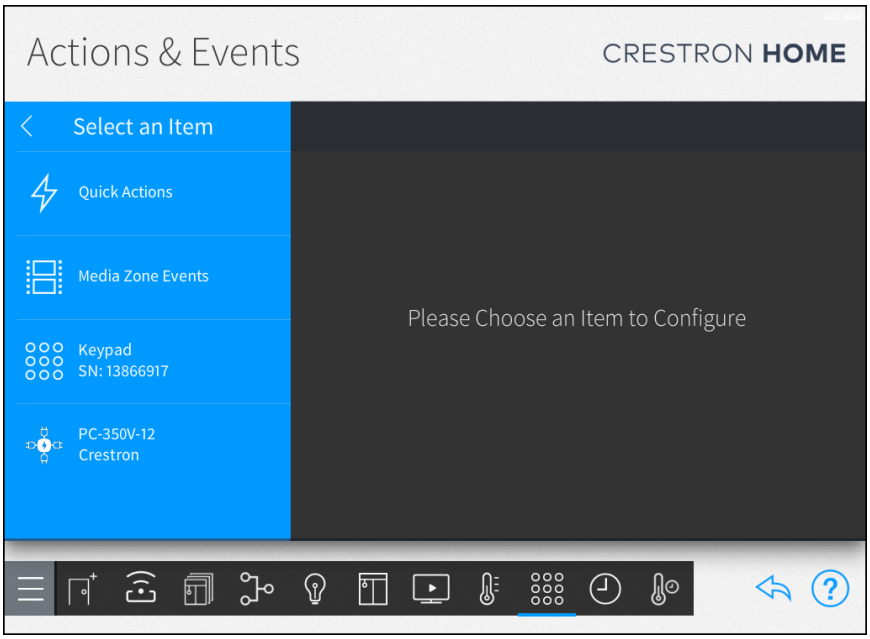
2. Configure the sequence. Configuring the sequence uses the same procedure as creating a quick action sequence. For details, refer to Sequence on page 423.

PDU (Power Distribution Unit) Device Events

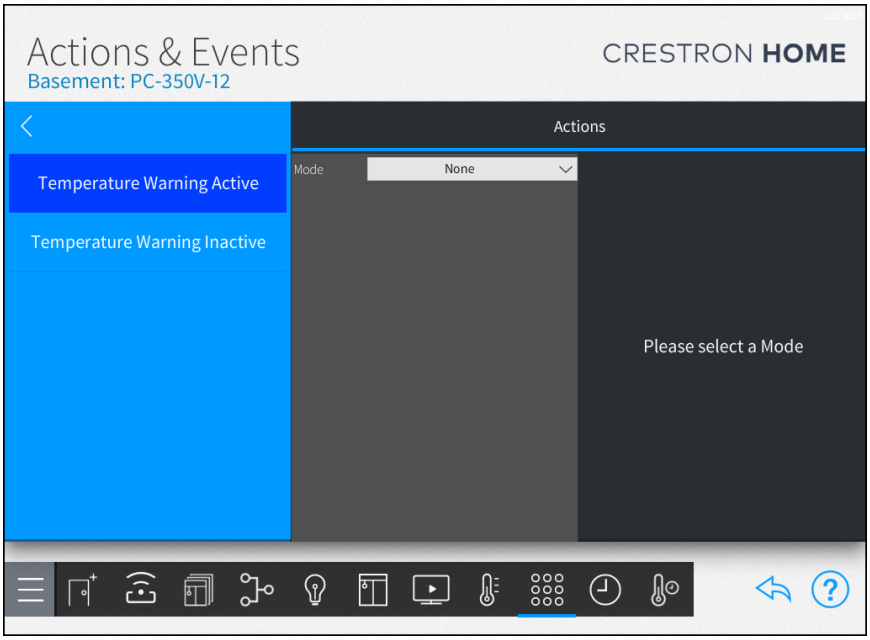
Use the PDU (Power Distribution Unit) device configuration screen to associate actions with extension device events.

To assign actions to PDU (Power Distribution Unit) device events, follow these steps:

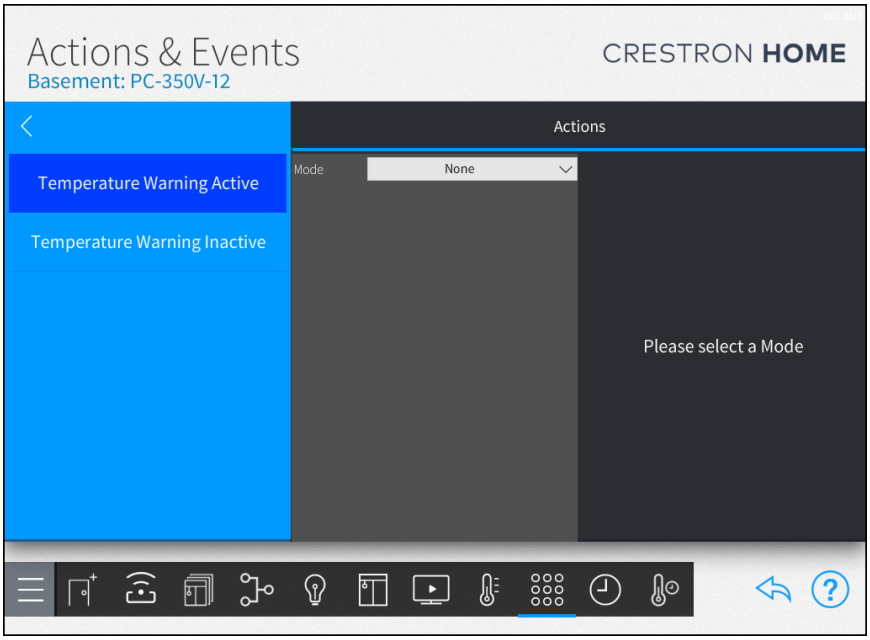
1. In the **Select an Item** menu., select a **PDU** device.



2. In the Available Events menu, select an event.



3. To assign an action to the event, select an option from the **Mode** drop-down menu.

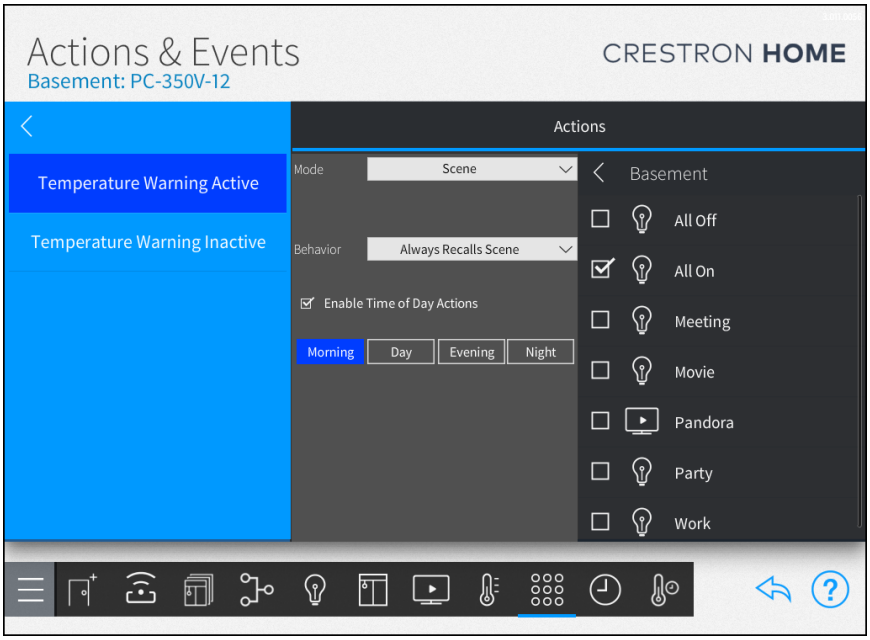


Configure the PDU (Power Distribution Unit) Device Event Action

Scene

To recall a scene when the PDU event occurs:

1. Select **Scene** from the **Mode** drop-down menu.



2. Select a room from the **Select Room Below** menu.

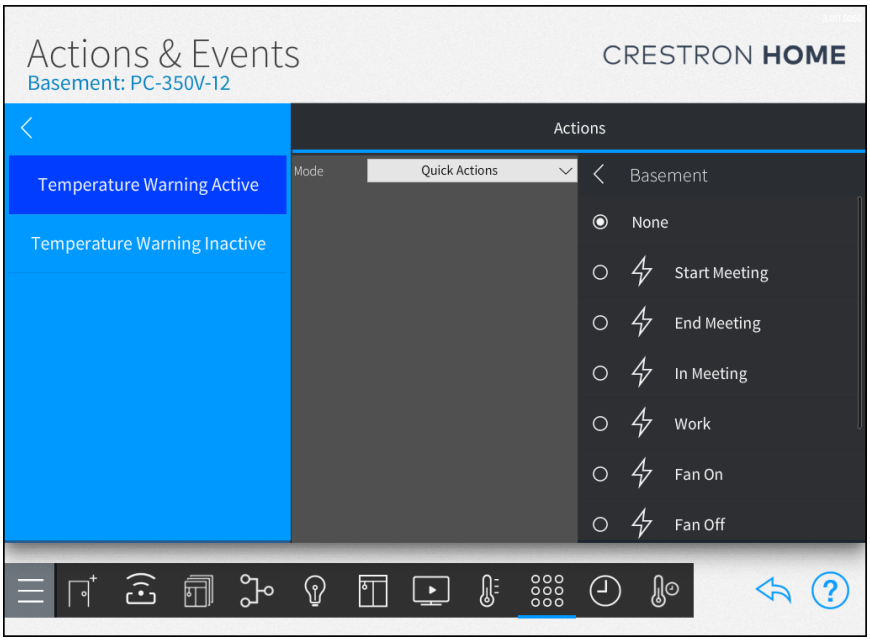
> **NOTE:** If the current room contains scenes, the room is selected automatically. To select a scene in a different room, tap **Back** and then select a room.

3. To assign a scene, select the scene name.
4. To recall a different scene based on the time of day:
    a. Select the **Enable Time of Day Actions** check box.
    b. Select **Morning**, **Day**, **Evening**, or **Night** and then select a scene to recall during that time period.

Quick Action

To recall a quick action when the PDU event occurs:

1. Select **Quick Actions** from the **Mode** drop-down menu.



2. Select a room from the **Select Room Below** menu.

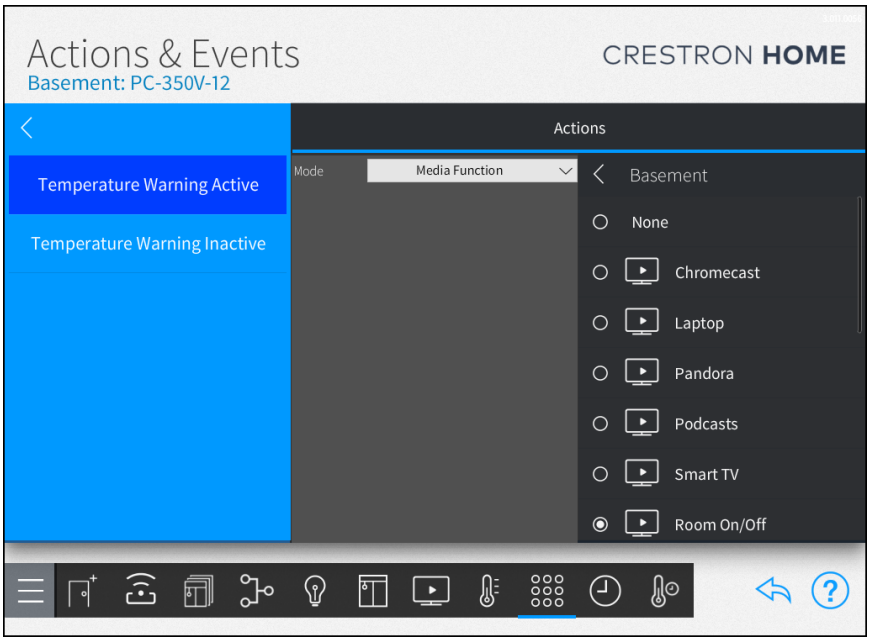
> **NOTE:** If the current room contains quick actions, the room is selected automatically. To select a quick action in a different room, tap **Back** and then select a room.

3. To assign a quick action, select the quick action name.

Media Functions

To recall a media function when the PDU event occurs:

1. Select **Media Function** from the **Mode** drop-down menu.



2. Select a room from the **Select Room Below** menu.

> **NOTE:** If the current room contains media functions, the room is selected automatically. To select a media function in a different room, tap **Back** and then select a room.

3. To assign a media function, select the media function name.

Button Emulation

To recall a Lutron button press when the PDU event occurs:

1. Select **Button Emulation** from the **Mode** drop-down menu.
2. Select a room from the **Select Room Below** menu.

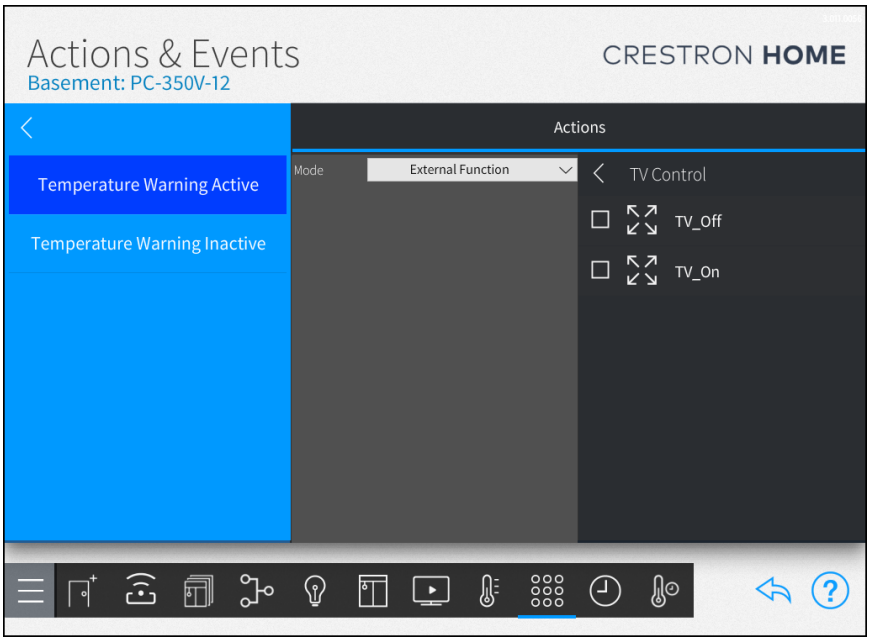
> **NOTE:** If the current room contains Lutron buttons, the room is selected automatically. To select a Lutron button in a different room, tap **Back** and then select a room.

3. To assign a Lutron button scene, select the Lutron button scene name.

External Functions

To recall a external function when the PDU event occurs:

1. Select **External Function** from the **Mode** drop-down menu.



2. Select a room from the **Select Room Below** menu.

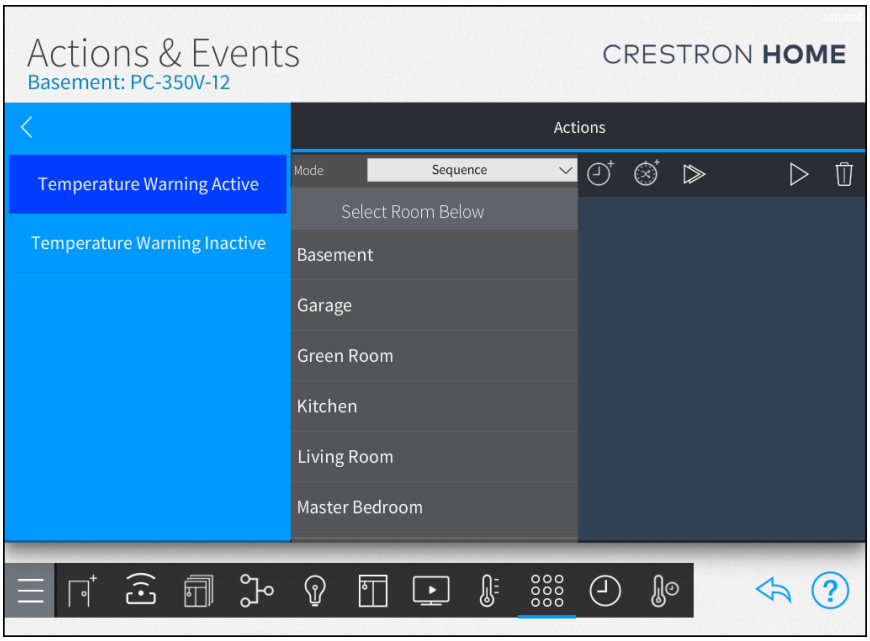
> **NOTE:** If the current room contains external functions, the room is selected automatically. To select a external function in a different room, tap **Back** and then select a room.

3. To assign a external function, select the external function name.

Sequence Mode

To recall a sequence when the PDU event occurs:

1. Select **Sequence** from the **Mode** drop-down menu.



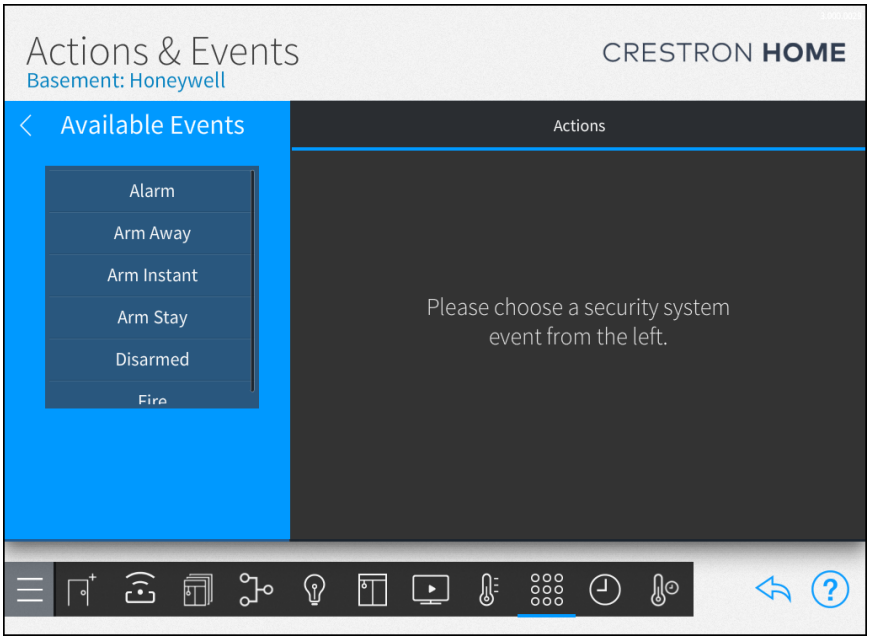
2. Configure the sequence. Configuring the sequence uses the same procedure as creating a quick action sequence. For details, refer to Sequence on page 423.

Security System Events

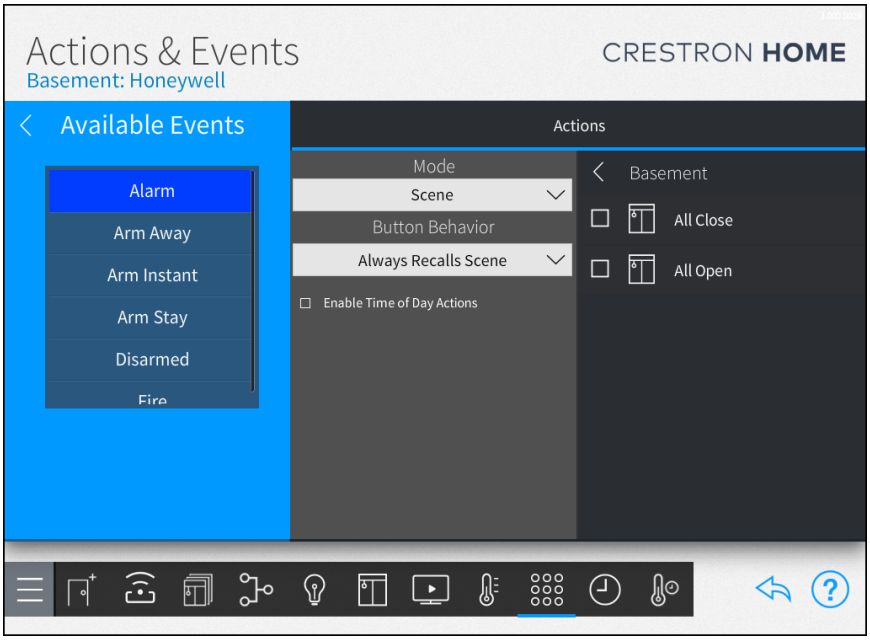
Use the security system configuration screen to associate scenes and other actions with security system events.

Select a security system from the **Select an Item** menu to display a configuration screen for the security system.

1. Tap an **Available Events** button.



2. The following configuration options are provided:



- Use the center panel to select the type of action that will be associated with the security event and to configure action-related behavior.

  > **NOTE:** Other configuration options may be provided depending on the selected mode.

  - **Mode**: Select the type of action that is recalled by the security event (such as "Scene").
  - **Button Behavior**: (Available for compatible selection is selected for **Mode**) A drop-down menu to set the security event behavior for recalling the selected action.
  - **Enable Time of Day Actions**: (Available when **Scene** is selected for **Mode**) Enables different scenes to be recalled based on the time of the day. Set a scene for Morning, Day, Evening, and Night.
- Use the right screen panel to associate an action with the security event.

  > **NOTES:**
  > - The same action or scene may be assigned to multiple security events.
  > - Multiple actions or scenes may also be assigned to the same security event.

  - Use the **Select Room Below** menu to select the room that contains the desired action or scene.

    > **NOTE:** Only rooms that contain selectable actions appear on the **Select Room Below** menu. Once an action is selected from a room, the room name is shown with blue text in the **Select Room Below** menu.

  - Tap on a room name to display a list of actions that may be selected for the room. The type of action that is displayed is set using the **Mode** drop-down menu in the center panel.
  - Tap the check box next to an action to add or remove that action from the event. A checked box indicates that the action is set to occur during the security event.
  - Tap the back arrow (<) next to the room name to return to the **Select Room Below** menu.

Variables

Variables are used to create adjustable values that can then be used as conditions in If Statements.

For example, a **Bedtime** variable can be created to indicate when the household has gone to sleep. A button press or automated event can be set to trigger the beginning and end of

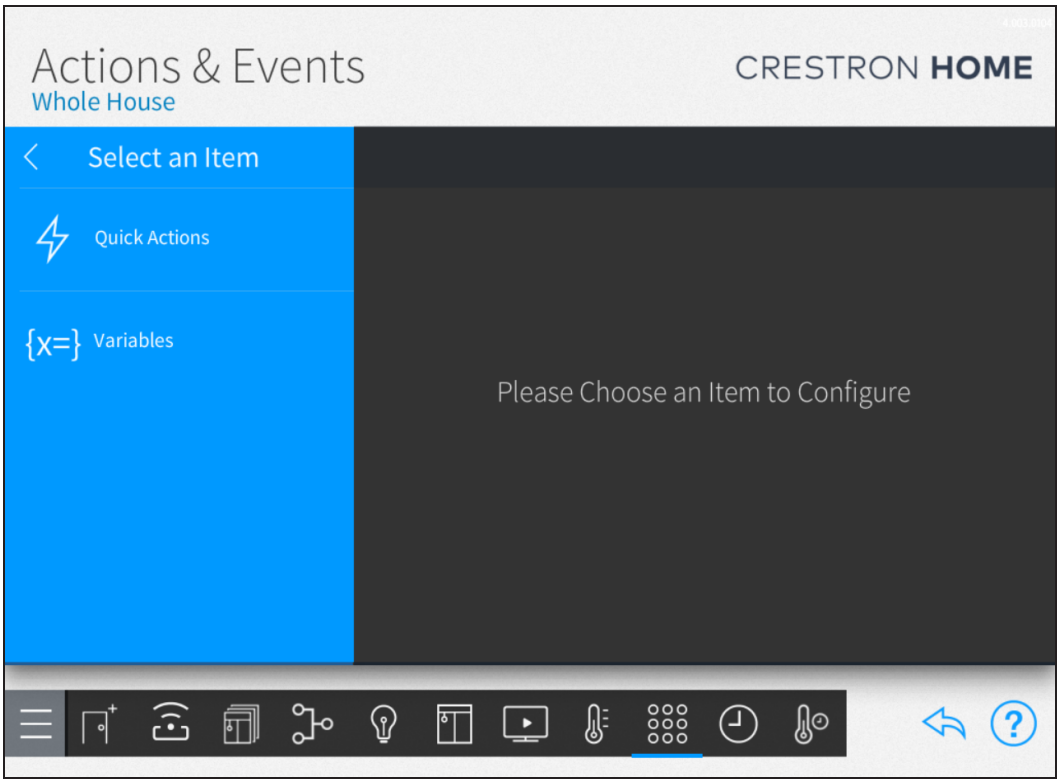
Bedtime. With If Statements, conditional actions can be set up to behave differently depending on if **Bedtime** is active or not. Actions such as TV On or Lights On can be configured to keep the light and volume levels low during **Bedtime**.

> **NOTE:** Variables alone do not have any function. Create actions or events to set the state of the variable and then use If Statements to create sequences that perform different actions based on the state of that variable. For instructions on If Statements, refer to Add an If Statement on page 433Add an If Statement on page 433.

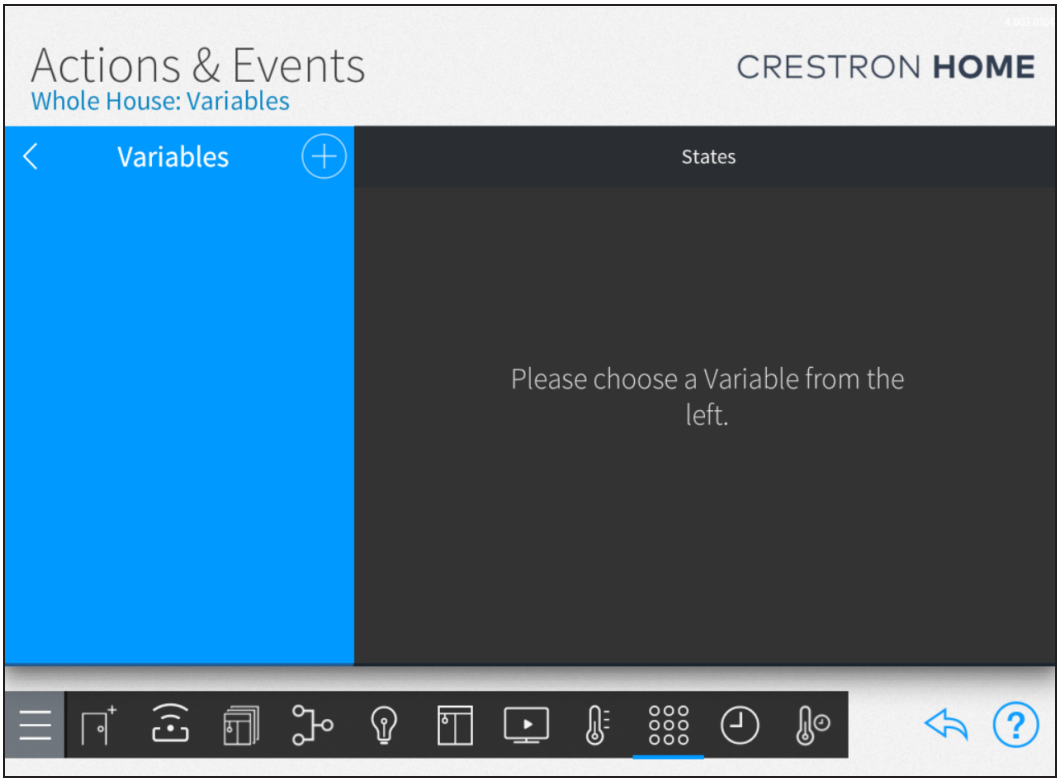
Create a Variable

To create a variable:

1. Tap **Variables**.

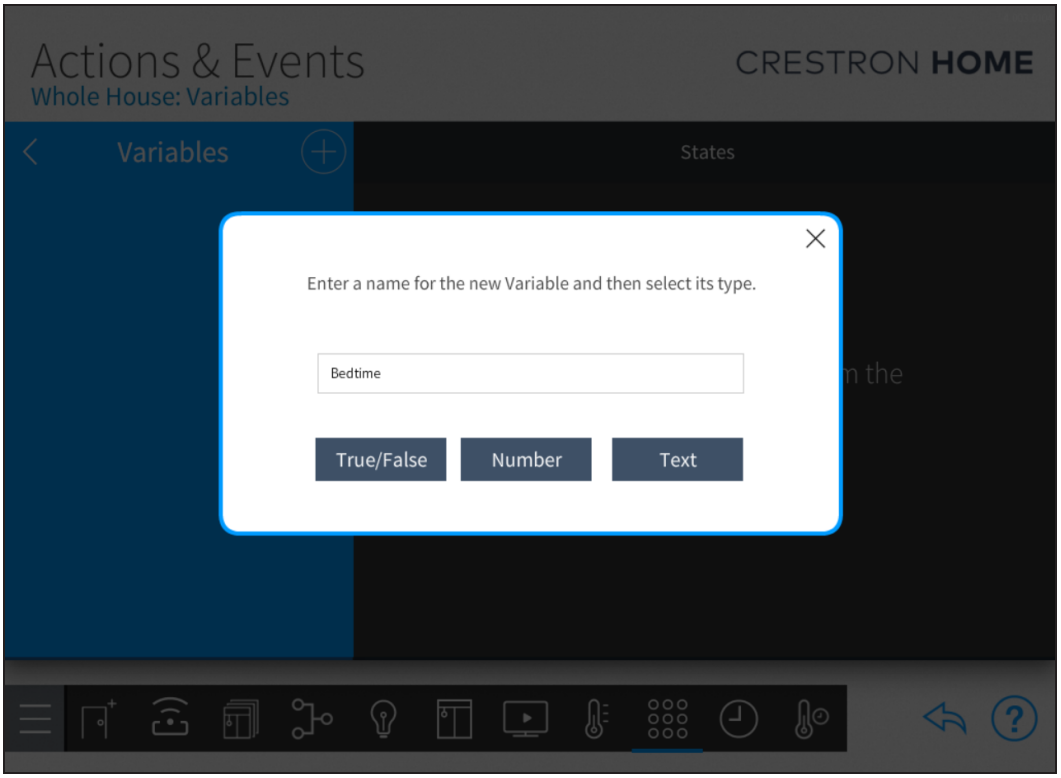


2. Tap ⊕.


Actions & Events
Whole House: Variables
CRESTRON HOME
Variables
States
Please choose a Variable from the left.

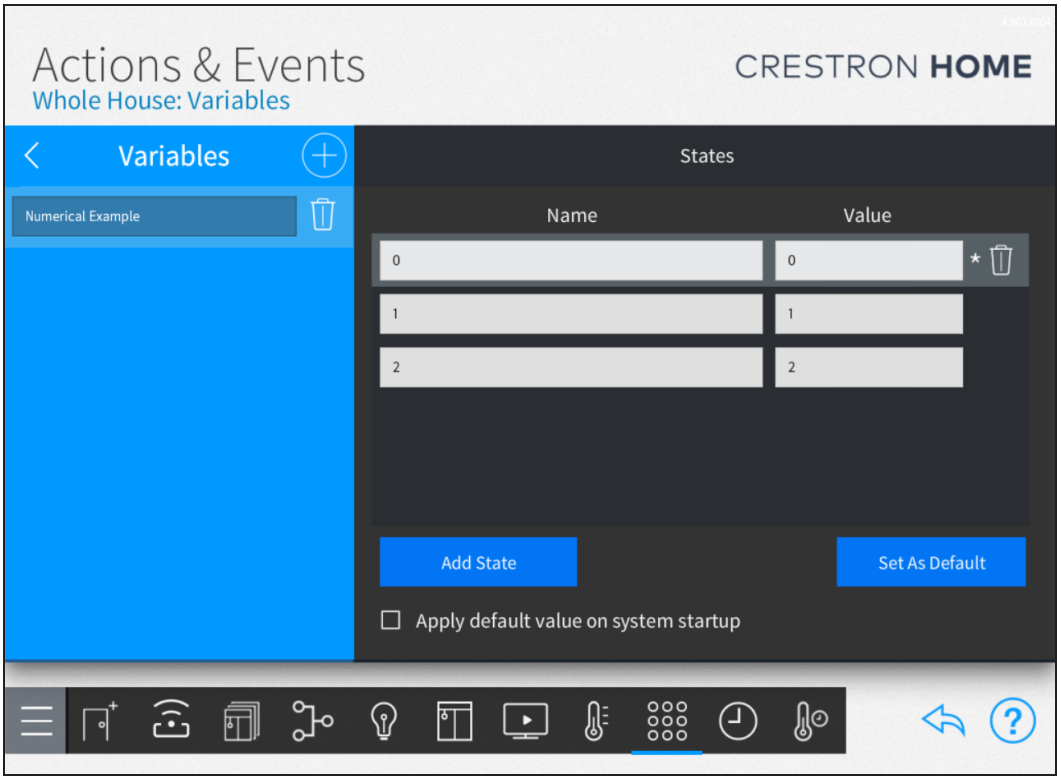
3. Enter a name for the variable and tap a type:
    - **True/False**: Use for variables with only two states, such as a mode being on (True) or off (False).
    - **Number**: Use for variables that track the state of a numerical value.
    - **Text**: Use for any other variables.

> **NOTE:** The **Type** selections are used to categorize the variable and to capture its available states within the UI. Selecting a type is for informational purposes only and does not apply any programming logic to the variable.



4. Add additional states for the variable as by tapping **Add State** and entering a friendly **Name** and **Value** for the new state. Unwanted states can be deleted by selecting the .

> **NOTES:**
>
> - The **Name** and **Value** fields are used to label the different states for a variable. Using the example above, **Bedtime** can be one of many states created for a single **Text** variable. Creating additional states is for informational purposes only and does not apply any programming logic to the variable.
> - **True/False** variables only have two states: **True** and **False**. The values cannot be changed.



5. Select a variable to be the default value by tapping the variable and then tapping **Set As Default**. Tap the **Apply default value on system startup** checkbox to force the variable to that value upon a system reboot. If **Apply default value on system startup** is not checked, the state of the variable will persist through a reboot.

Created variables appear in the list of Sequence actions.

Schedule Events

Schedule events to occur in the home at specific times using the **Scheduler** screen. Use the Scheduler to recall scenes, Quick Actions, and external events based on the day and the time.

To view the **Scheduler** screen, select **Step 5: Customize & Schedule > Schedule Events** on the **Setup** screen or **Scheduler** on the setup menu.



Create a Scheduled Event

To create a scheduled event:

1. Select **Add Scheduled Event**.
2. Enter a name for the event.
3. Select **OK**.

Configure a Scheduled Event

To configure a scheduled event:

- **Enabled:** Turn the scheduled event on or off. To turn a schedule event on, select **Enabled**.

  > **NOTE:** New scheduled events are turned off by default.

- **End-User Visible:** Select to show the scheduled event in the user interface.
- **Day of Week:** Select the days for the event to occur.
- **Time of Day**: Schedule the event to occur at a specific time of day. Set the time using the provided spinner menus.

- **Astronomical**: Schedule the event to occur at a time relative to sunrise or sunset (calculated by date and time zone). Select whether the event should occur at sunrise or sunset and then set when the event should occur relative to the sunrise or sunset time.
    - **Time Period:** Select **Sunrise** or **Sunset** to determine the time of day that the event should occur.
    - **Offset:** Select the time that the event should occur in relation to the time period. To assign an offset time before the **Time Period**, select **–** and to set an offset time after the **Time Period**, select **+**.The default offset is **00:00**. The maximum offset is 4 hours and 59 minutes.

    > **NOTE:** To adjust the default times for sunrise and sunset, navigate to **Installer Settings** > **System Configuration** > **System Settings**, and then tap the wrench button on the **Current Times of Day** panel. For more information, refer to Current Time and Date on page 561.

- **Select Room Below:** Select a room from the menu, and then select the scene(s) that will be triggered by the event.

    > **NOTE:** Only rooms that contain scenes display on the **Select Rooms Below** menu. Any room with a selected scene is shown with blue text on the **Select Rooms Below** menu.

To test a scheduled event, select an event and then select **Play**.

Delete a Scheduled Event

To delete a scheduled event:

1. Select a scheduled event.
2. Select **Delete** and then **OK** to confirm.

Vacation Scheduler

Create a vacation schedule (Vacation mode) to emulate normal daily routines when the homeowner is away. Vacation mode creates the illusion that the homeowner is present and discourage intrusions.

Turn Vacation mode on and off with Quick Actions on the home screen of the Crestron Home user interface.

Create a Vacation Mode

To create a Vacation mode, follow these steps:

1. Create Sequence Quick Actions (Vacation Quick Actions) that emulate normal daily activities. For details, refer to Quick Actions on page 414.

   For example, create a Sequence Quick Action that lowers the lights and shades and turns on the television at night.

   Use the following programming features to create the Sequence Quick Action:

   - **Delay:** Use a delay step to add time between actions. For example, to turn the lights on and then off 4 hours later, add an action to the sequence to turn the lights on, then add a delay action of 14,400 seconds (4 hours), and then add an action to turn the lights off.
   - **Randomized Delay:** Use a randomized delay to start events at random times. This prevents an action from occurring at the same time every day. For example, to turn the television on and then off 1-1/2 to 2 hours later, add an action to route a source to the television, then add a delay action with Minimum Delay set to 5,400 seconds (1-1/2 hours) and Maximum Delay set to 7,200 seconds (2 hours), and then add an action to turn the television off.
   - **Quick Actions:** Use Quick Actions that already exist in the system or create Quick Actions that are specific to Vacation mode.
   - **Hide Quick Actions:** To prevent the Vacation Quick Actions from showing in the Crestron Home user interface, hide the Vacation Quick Actions. For details, refer to Quick Actions on page 414.
2. Create Scheduled Events that recall the Sequence Quick Actions that were created in the previous step. Set the day or week and the time that the Vacation Quick Actions should occur.
3. Create a Sequence Quick Action that enables the Scheduled Event. This will turn on Vacation mode and Crestron Home will recall the Vacation Quick Actions (created in step 1 above) according to the scheduled event (created in step 2 above).

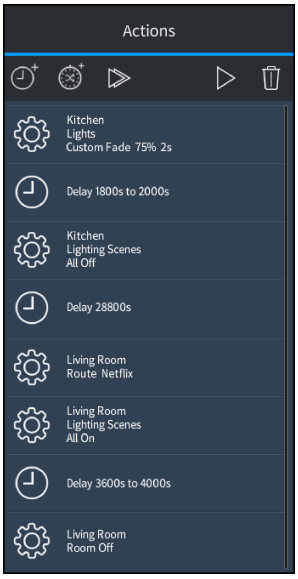
4. Create a Sequence Quick Action that disables the Scheduled Events. If the Sequence Quick Action is currently running, the Quick Action stops and steps that occur after it is disabled are not performed.

   > **NOTE:** If the Scheduled Event is disabled while a step in the Sequence Quick Action is in progress:
   >
   > - **Quick Action:** The Quick Action stops. Fade times associated with the Quick Action will continue until the fade time is complete.
   > - **Delay:** The delay or randomized delay is immediately stopped.

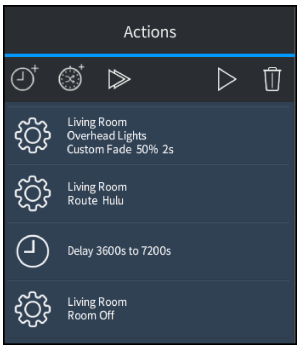
Vacation Mode Example

The following example shows how to create Vacation mode that emulates activities for weekdays and weekends. The weekday activities emulate a typical work day where activities occur earlier in the day and the weekend activities replicate a relaxed schedule where events occur later in the day.

1. Create a Sequence Quick Action to emulate weekday activities. The sequence below recalls the following actions:
   - The lights turn on and off early in the morning to emulate getting ready for work.
   - A randomized delay step is added to emulate being away for the day. The delay is 8 to 10 hours.
   - The lights and television turn on and off at night.
   - A randomized delay step is added to emulate watching television for a period of time. The delay is 1 hour to 1 hour and 6 minutes.
   - The room turns off.



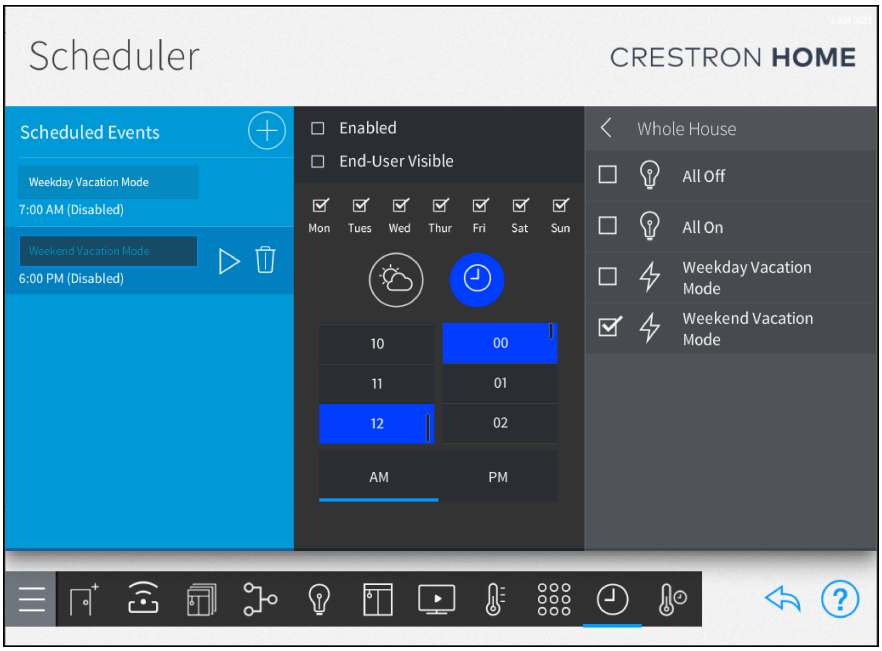
2. Create a Sequence Quick Action to emulate weekend activities. The sequence below recalls the following actions:
    - The lights and television turn on in the evening.
    - A randomized delay step is added to emulate watching television for a period of time. The delay is 1 to 2 hours.
    - The room turns off.



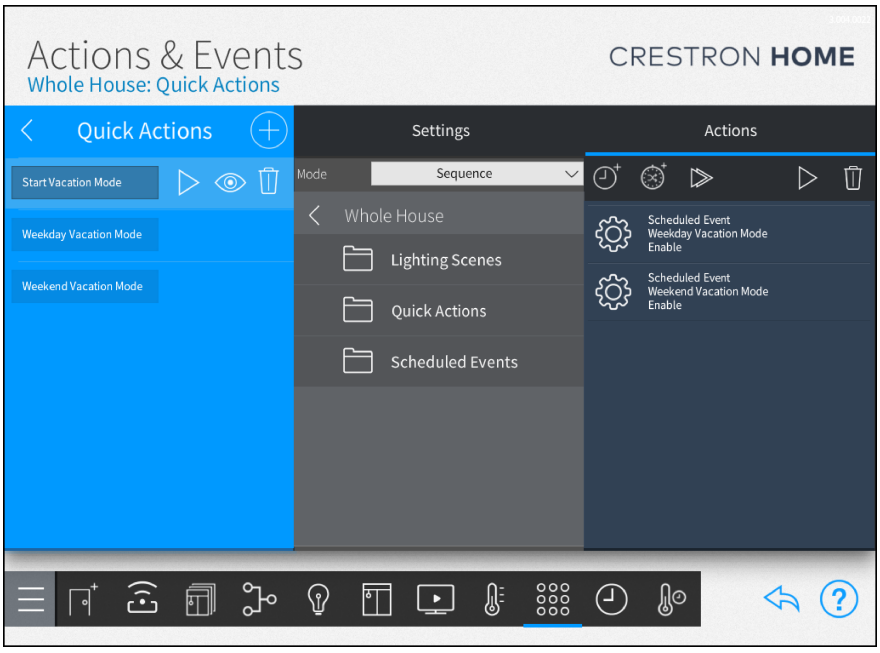
3. Create a scheduled event that recalls the Weekday Quick Action.
    - Do not select the Enabled check box to enable the schedule.
    - Since the Weekday Quick Action created earlier runs on weekdays, select the **Mon** through **Fri** check boxes and deselect the **Sat** and **Sun** check boxes.
    - Since the Weekday Quick Action created earlier starts early in the morning, the time is set to 7:00 AM.



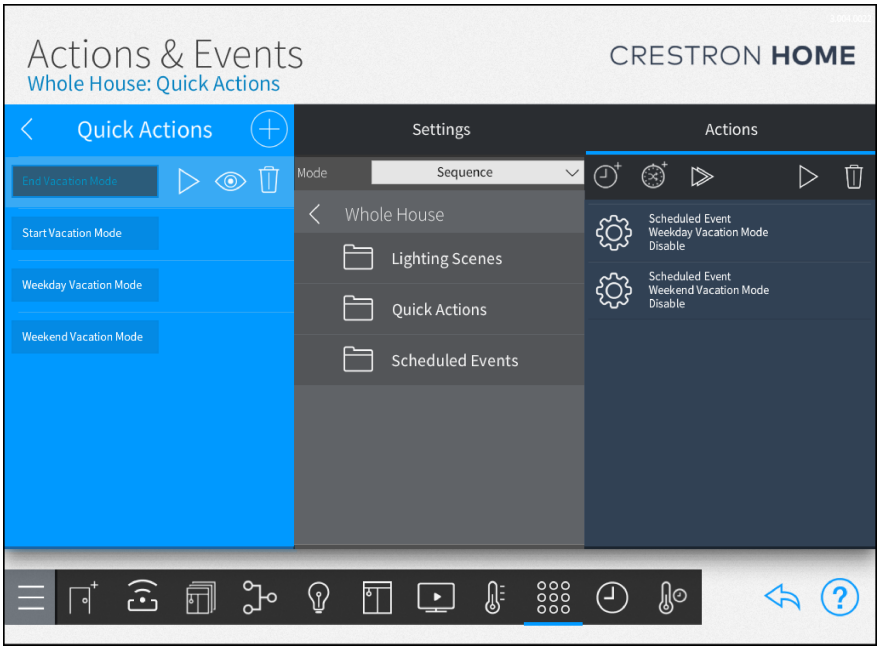
4. Create a scheduled event that activates the Weekend Quick Action.
    - Make sure that the **Enabled** check box is cleared.
    - Since the Weekend Quick Action created earlier runs on weekend days, select the **Sat** and **Sun** check boxes and deselect the **Mon** through **Fri** check boxes.
    - Since the Weekend Quick Action starts later in the day, the time is set to 6:00 PM.



5. Create a Sequence Quick Action to enable the Weekday Quick Action and Weekend Quick Action scheduled events.



6. Create a Sequence Quick Action to disable the Weekday Quick Action and Weekend Quick Action scheduled events.



Schedule Climate Control

Use the **Thermostat** screen to view and schedule events for the thermostats in the Crestron Home system.

When a thermostat is added to the Crestron Home system, events are created for **Sleep**, **Wake**, **Leave**, and **Return**. These events are disabled by default. To enable them, tap the event's check box to the left of the event name. A filled check box indicates that the scene is enabled.

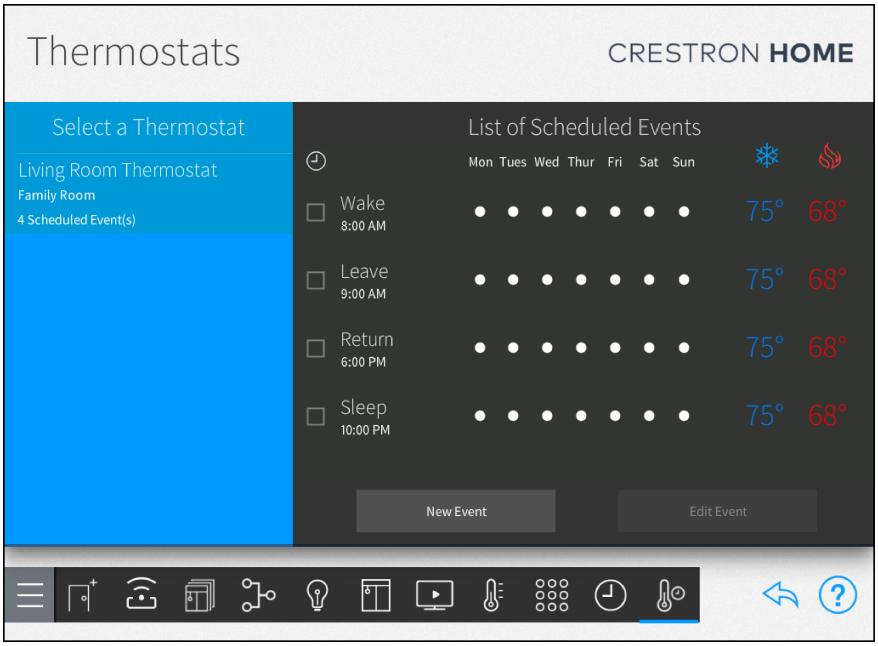
Tap the **Schedule Climate Control** button on the **Configuration** screen or the Thermostats button on the setup menu to display the **Thermostats** screen.

To view the **Thermostats** screen, select **Step 5: Customize & Schedule > Schedule Climate Control** on the **Setup** screen or on the setup menu .

Create a Thermostat Event

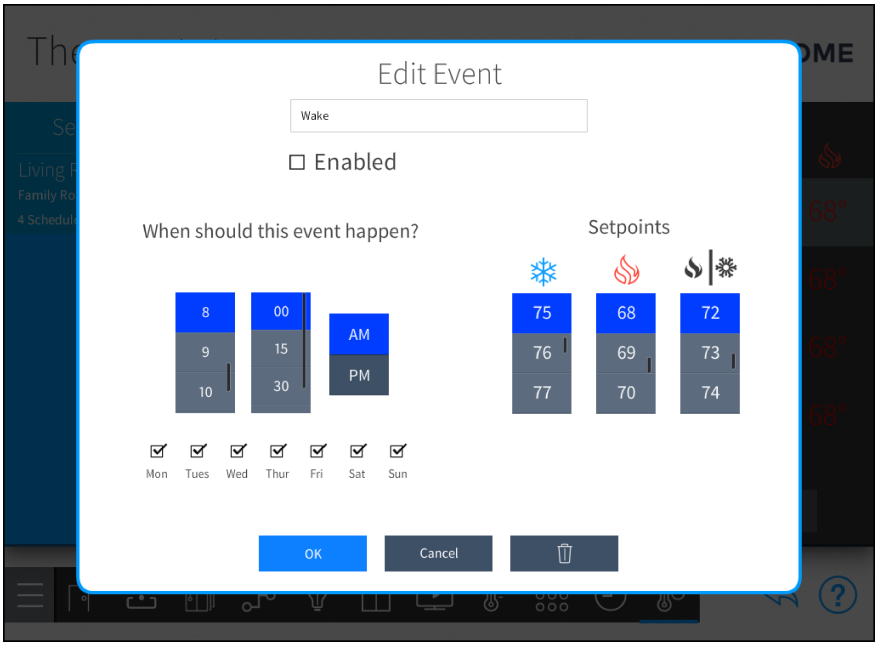
To create a scheduled thermostat event:

1. Select a thermostat from the **Select a Thermostat** menu. The list of scheduled events for the selected thermostat is displayed.



2. Select **Add Event**.

3. Configure the event settings:



   - **Event Name:** Enter a descriptive name for the event.
   - **Enable Event:** Select the box next to the Event Name to enable the event. New events are disabled by default.
   - **Time:** Set a time for the event.
   - **Days:** Select the days that the event should occur.
   - **Set points:** Select the temperature set points for Cool, Heat, and **Auto** modes using the appropriate spinner menu.
4. Select **OK**.

Configure a Thermostat Event

To configure an existing thermostat event:

1. Select a thermostat from the **Select a Thermostat** menu. The list of scheduled events for the selected thermostat is displayed.
2. Select a thermostat event from the **List of Scheduled Events**.
3. Tap **Edit Event** to display the **Edit Event** dialog box.
4. Configure the following event settings:
   - **Event Name:** Enter a descriptive name for the event in the text box at the top of the dialog box using the on-screen keyboard.
   - **Enable Event:** Tap the check box next to **Enabled** to enable the event and add it to the thermostat schedule. New events are disabled by default.
   - **Set the Time:** Set the time that the thermostat event should occur using the provided spinner menus.

- **Select the Days:** Tap the check box above each day of the week to select the days that the thermostat event should occur. A filled check box indicates that the event is scheduled to occur on the associated day.

5. Select **OK** to save.

Enable or Disable a Thermostat Event

To enable or disable an existing thermostat event, tap the check box next to the event name. A filled check box indicates that the scene is enabled.

Delete a Thermostat Event

To delete a thermostat event:

1. Select a thermostat from the **Select a Thermostat** menu. The list of scheduled events for the selected thermostat is displayed.
2. Select a thermostat event from the **List of Scheduled Events.**
3. Tap **Edit Event** to display the **Edit Event** dialog box.
4. Select **Delete**.

To return to the previous screen, tap **Back**.

Set the Touch Screen Language

Set the language for the Crestron Home app on Crestron touch screens. The default language is US English.

> **NOTES:**
>
> - The language on iOS and Android devices is set using the mobile device's settings.
> - The language on TSR-310 handheld remote is set using the remote's settings. For details, refer to Configuration on page 1105.

TSW-xx70 and TSW-xx60 Series Touch Screens

> **NOTE:** In Crestron Home version 3.019.0156 and later, language selection is available in the Settings menu. For details, refer to Display on page 1036.

To set the language on a TSW-xx70 or TSW-xx60 Series touch screen:

1. Open Crestron Toolbox™ software and then connect to the touch screen using the Text Console tool.

2. Use the `Language` command to change the language:
    - To display the current language, enter `Language`.
    - To display a list of languages with language codes, enter `Language List`.
    - To change the language, enter `Language [Language Code]`. For example, enter `Language es` to change the language to Spanish.

UC-MM30-R Touch Screen Tabletop Conference Device

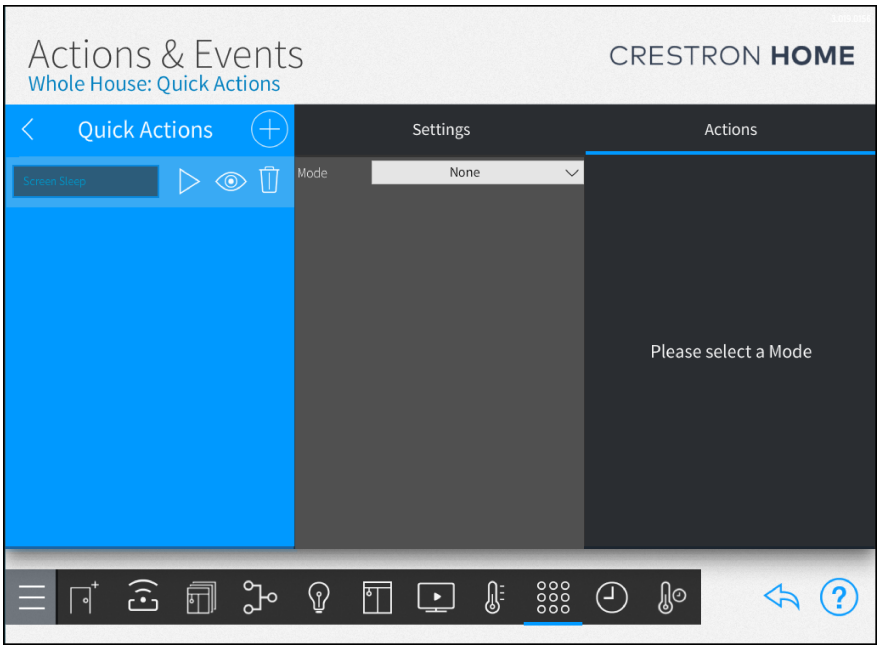
To set the language on a UC-MM30-R touch screen tabletop conference device:

1. In a web browser, enter the IP address of the device to open the WebUI and then log in.
2. Go to **Settings > System Setup**.
3. In the **Language** drop-down menu, select a language.

Put a Touch Screen Display to Sleep

Add a button to a touch screen that puts the display to sleep. The touch screen screensaver configuration determines if the display activates the screen saver or turns the display off. If the screen saver is enabled, the screen saver is displayed. To configure the screen saver, refer to Display on page 1036.

To create the button, create a Quick Action with the name `Panel Sleep`, `Screen Sleep`, or `Standby`. The Quick Action can be created in any room and recalled by any touch screen. Only the touch screen that recalls the Quick Action goes to sleep.



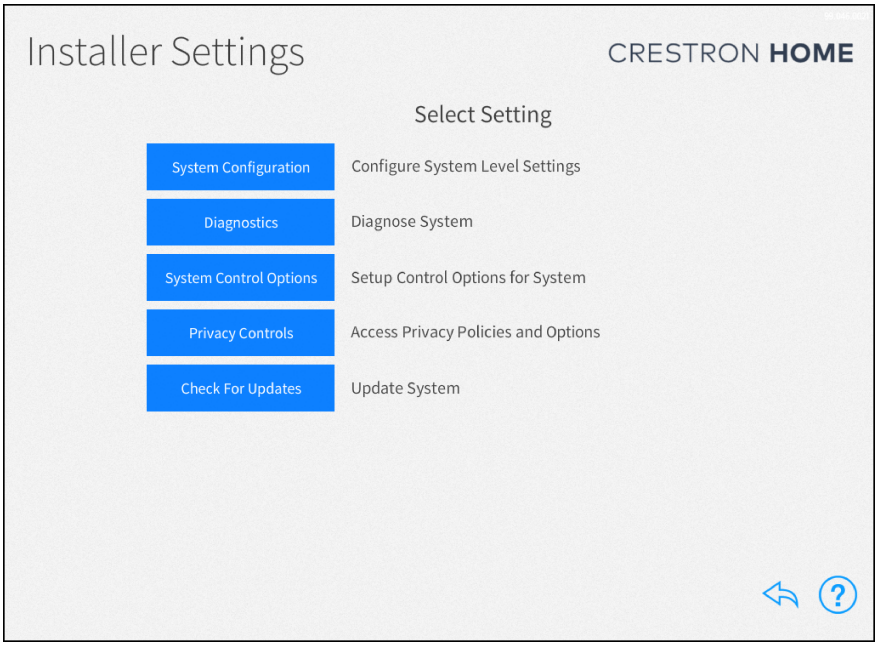
NOTES:

- The Quick Action does not require programming to put the touch screen display to sleep.
- The Quick Action name is not case sensitive.
- Use the Web UI interface for the touch screen to turn off the proximity sensor. Otherwise, the display will turn on it detects motion.
- Additional functions can be added to the Quick Action. For details, refer to Quick Actions on page 414.

Control Processor Settings - Installer

Use the **Installer Settings** screen to configure the Crestron Home system and the Crestron Home processor.

To view the **Installer Settings** screen, select **Settings** on the **Setup** screen.



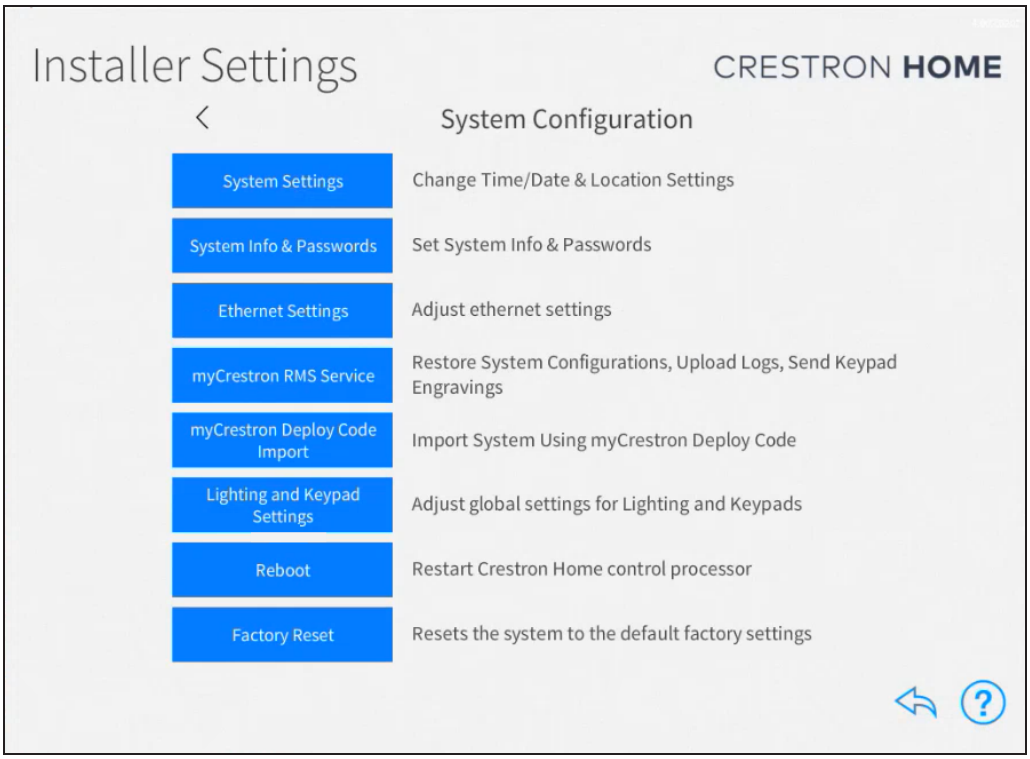
This section provides the following information:

- System Configuration
- Diagnostics
- System Control Options
- Privacy Controls
- Software Update

System Configuration

Use the **Installer Settings - System Configuration** screen to configure settings for the commissioning of the Crestron Home system.

To view the **System Configuration** screen, select **Settings > System Configuration**.



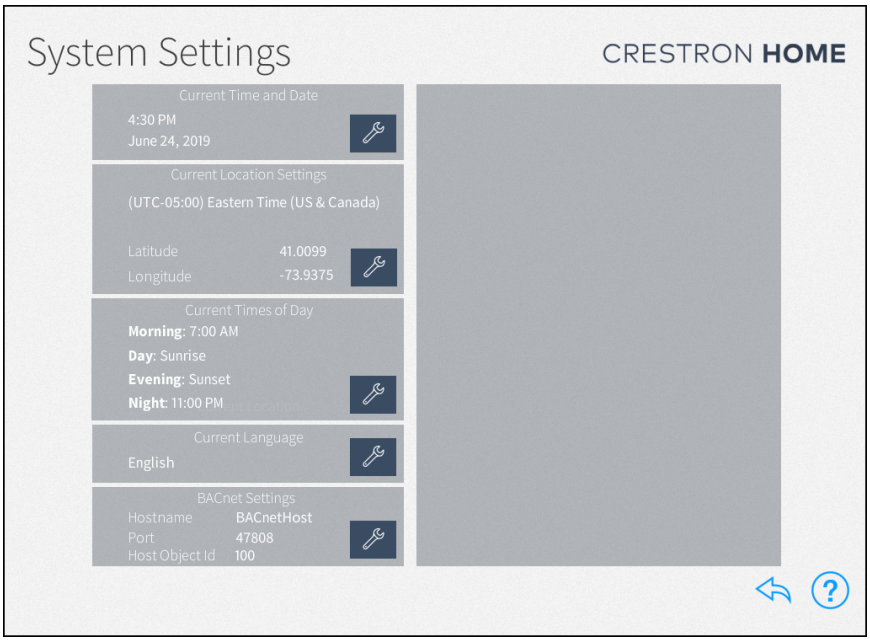
This section provides the following information:

- System Settings
- System Detail and Password Configuration
- Ethernet Settings
- myCrestron RMS Services
- myCrestron Deploy Code Import
- Lighting and Keypad Settings
- Restart the Control Processor
- Reset to Factory Defaults

System Settings

Use the **System Settings** screen to configure the time and date, the location settings, the current times of day used for events, the system language, and the BACnet Settings.

To view the **System Settings** screen, select **Settings** > **System Configuration** > **System Settings**.

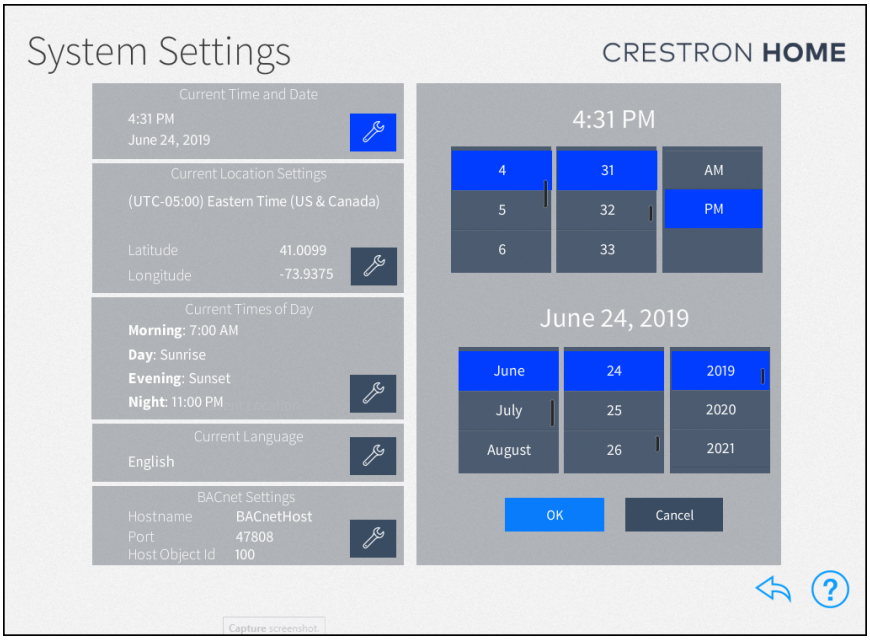


To return to the previous screen, tap **Back**.

Current Time and Date

To set the current time and date:

1. Tap the wrench button  next to **Current Time and Date**.



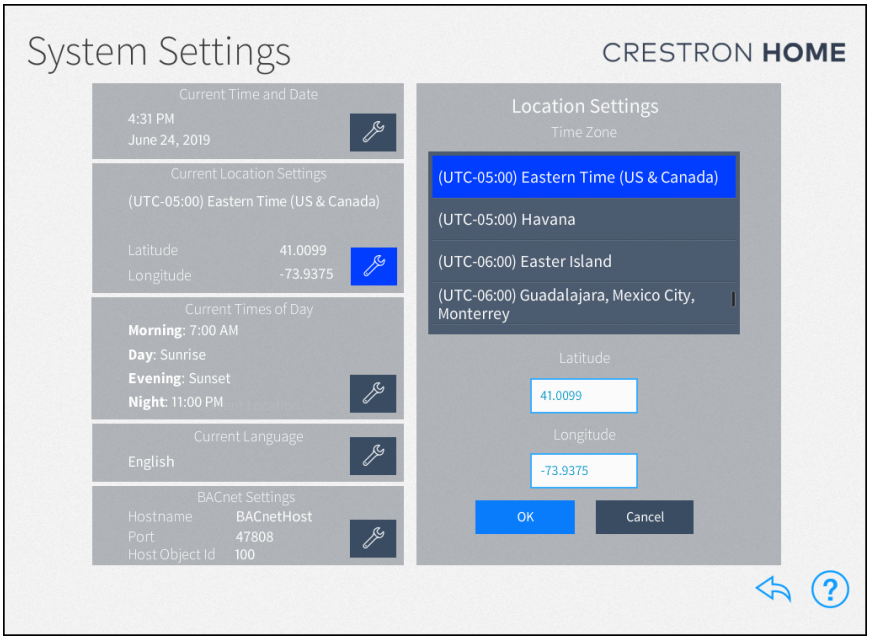
2. Use the spinner menus to set the hour and minute and **AM** or **PM**.
3. Use the spinner menus to set the month, day, and year.
4. Tap **OK** to save any changes. Tap **Cancel** to cancel any changes.

Current Location Settings

To set the Location Settings:

> **NOTE:** If configuring the system with an iPad, tap **Synchronize with iPad** to synchronize the time zone, longitude, and latitude with the iPad device's location services.

1. Tap the wrench button next to **Current Location Settings**.



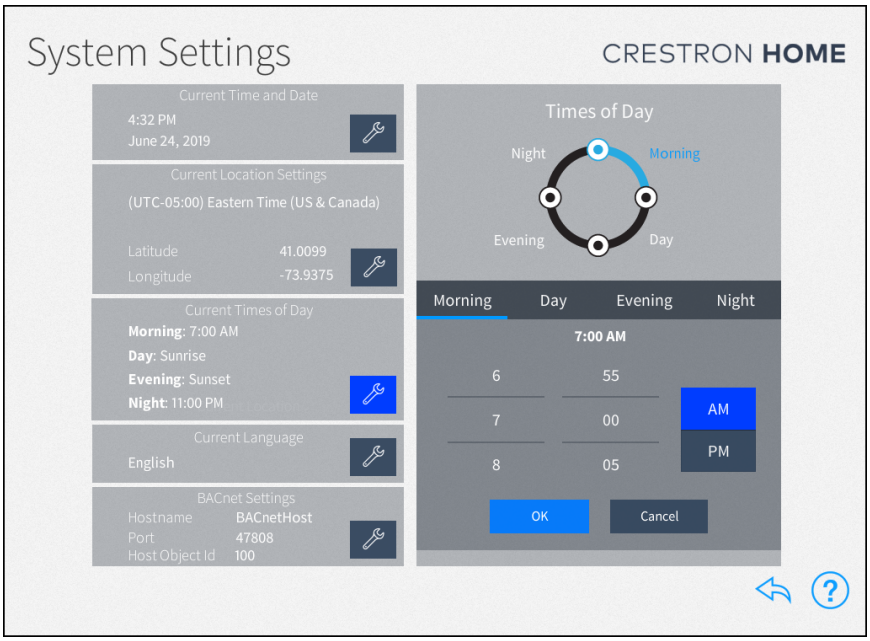
2. To set the time zone, select the location in the **Time Zone** field.
3. If necessary, the latitude and longitude can be fine-tuned. Adjust the latitude in the **Latitude** field and adjust the longitude in the **Longitude** field.
4. Tap **OK** to save any changes. Tap **Cancel** to cancel any changes.

Current Times of Day

Times of day are used to trigger different actions and events within the system when the preset clock time is reached. The Morning and Night Times of Day are static times that occur at the same time every day. The Day and Evening Times of Day are based on sunrise and sunset times and change during the course of the year.

To set the Morning and Night times.

1. Tap the wrench button  next to **Current Times of Day**.



2. Tap **Morning** or **Night**., and then set the time.
   - **Morning:** When the homeowner typically wakes up.
   - **Night:** When the homeowner typically goes to sleep.
3. Tap **OK** to save any changes. Tap **Cancel** to cancel any changes.

To set the Day and Evening times:

1. Tap the wrench button  next to **Current Times of Day**.
2. Tap **Day** or **Evening**, and then set the time.
   - **Day:** How long before or after sunrise (calculated by date and time zone) the Day preset occurs.

     > **NOTE:** In some cases (such as in the summer months), the time set for the Day preset may occur before the time set for the Morning preset. In these cases, any actions or events set for the Morning preset do not occur.

   - **Evening:** How long before or after sunset (calculated by date and time zone) the Evening preset occurs.

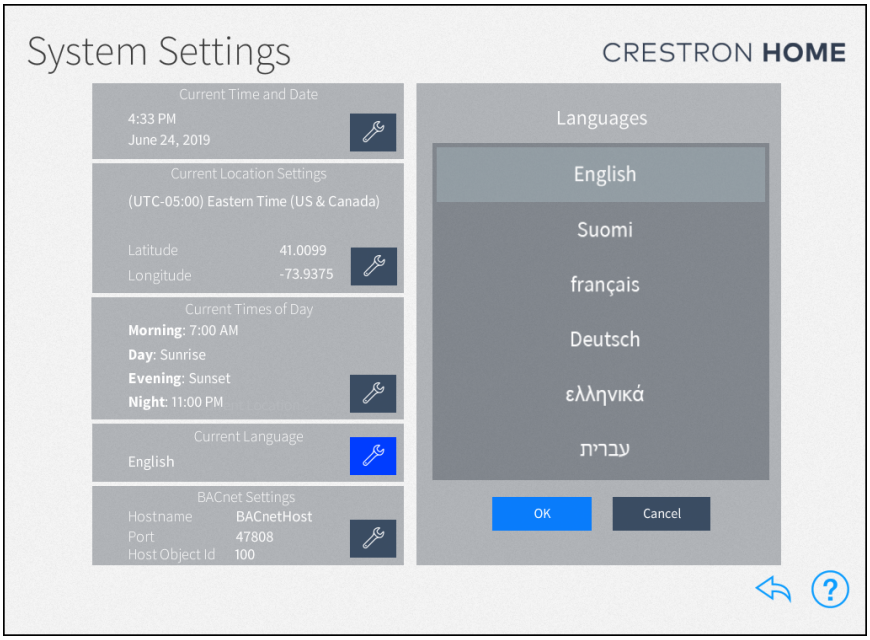
3. Tap **OK** to save any changes. Tap **Cancel** to cancel any changes.

Current Language

The Current Languages screen sets the language that is used in the setup app and the user interface devices.

To set the language:

1. Tap the wrench button  next to **Current Language**.



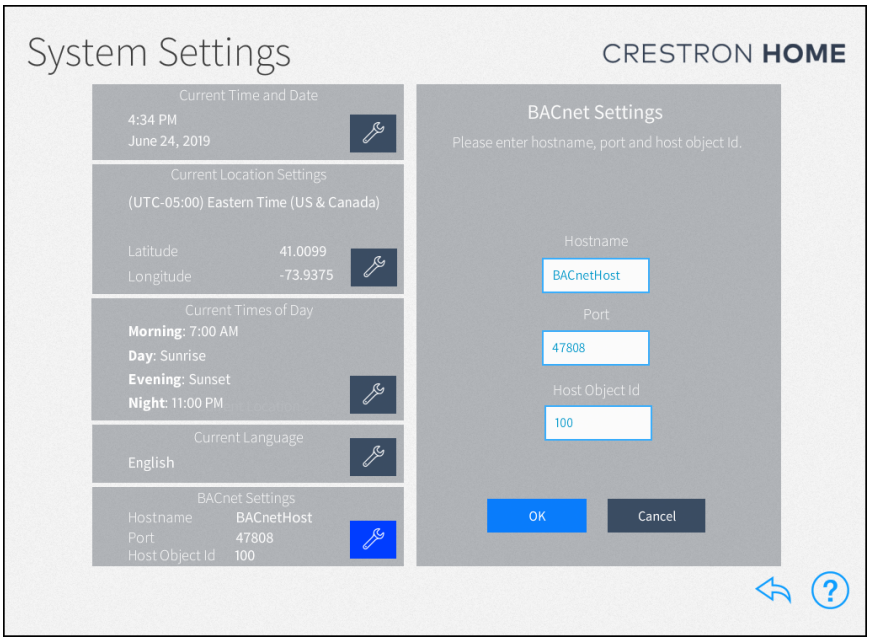
2. Select the system language from the menu provided under **Languages**.
3. Tap **OK** to save any changes. Tap **Cancel** to cancel any changes.

BACnet Settings

The **BACnet Settings** screen sets the information that is used for the BACnet.

To set the BACnet settings:

1. Tap the wrench button next to **BACnet Settings**. The **BACnet Settings** screen displays.



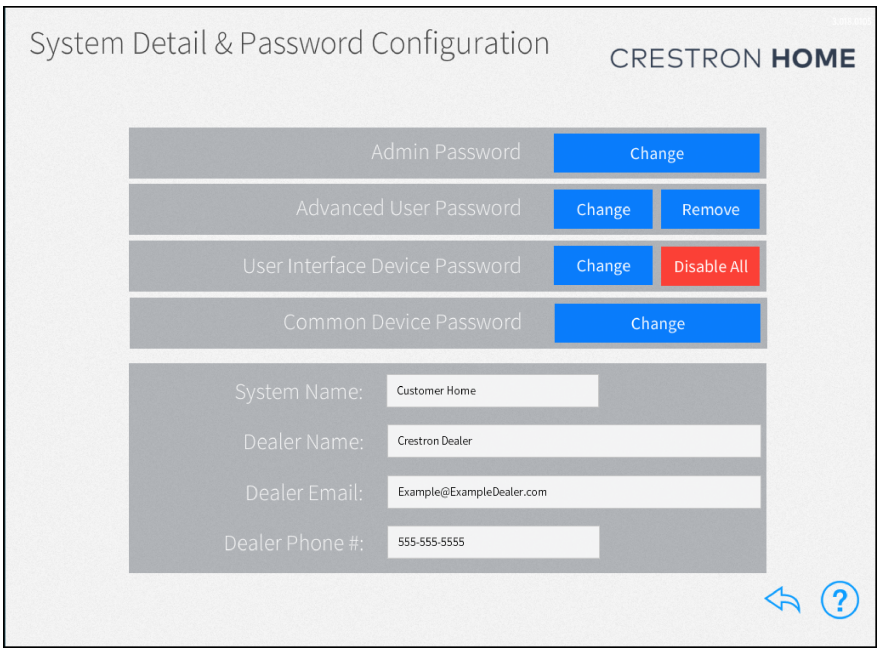
2. Configure the following settings:
   - **Hostname:** Enter the HostName for the BACnet system.
   - **Port:** Enter the port for the BACnet system.
   - **Host Object Id:** Enter the host object id for the BACnet system.
3. Tap **OK** to save any changes. Tap **Cancel** to cancel any changes.

System Detail and Password Configuration

Use the **System Detail & Password Configuration** screen to update the system information and to change the Advanced User Password and Admin password used to access the configuration screens.

To view the **System Detail & Password Configuration** screen, select **Settings > System Configuration > System Info & Passwords**.

> **NOTE:** The **Device Port** configuration was moved in Crestron Home version 3.017.0098 to the **Installer Settings - System Control Options** section. The functionality of the Secured Device Port and the Legacy Device Port remains the same. For details, refer to Local Connection Settings on page 618.



Admin Password

The Admin password is used to allow access to set up and configure the Crestron Home processor. The admin username and password are set by the dealer during the initial processor setup or after the passwords are reset.

To change the Admin password:

1. Tap **Change** to set a new Admin password. A pop-up dialog box is displayed.
2. Enter a new password.
3. Tap **OK** to confirm the change to the password.

CAUTION: Once an admin password is set, installer configuration mode may not be accessed without entering the password.

Advanced User Password

To set or change the Advanced User password:

NOTE: The Admin Password and the Advanced User Password may not be the same.

1. Tap **Set** to set the Advanced User password or **Change** to change the Advanced User password. A pop-up dialog box is displayed.
2. Enter the **Admin Username** and **Admin Password** and then enter the new **Advanced User** password.
3. Tap **OK** to confirm the password.

Remove the Advanced User Password

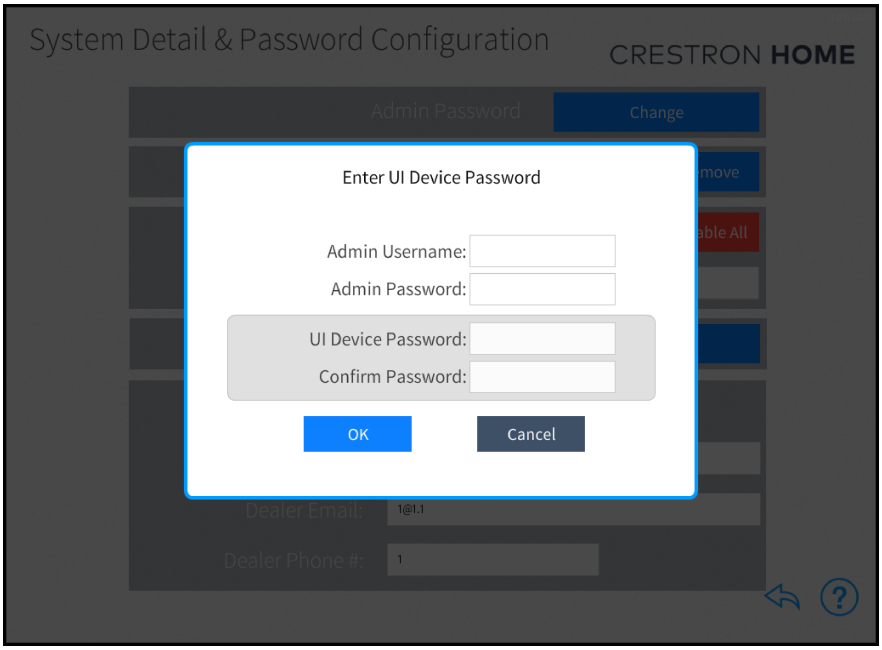
To remove the Advanced User password, tap **Remove** and then tap **OK**.

User Interface Device Password

The User Interface Device Password allows user interface devices (Crestron touch screens, TSR-310 handheld remotes, iOS® devices, and Android™ devices) to join the Crestron Home system. User interface devices cannot connect to the Crestron Home system if the User Interface Device Password is not set.

To change the User Interface Device password:

1. Tap **Enable** to set the User Interface Device Password or **Change** to change the User Interface Device Password. The **Enter UI Device Password** dialog displays.



2. Enter the required credentials for the Admin in the **Admin Username** and **Admin Password** fields and then enter the User Interface Device password in the **UI Device Password** and **Confirm Password** fields.
3. Tap **OK** to continue or **Cancel** to exit without saving changes.

Common Device Password

The Common Device Password allows devices that support authentication to be added to the Crestron Home system.

NOTES:

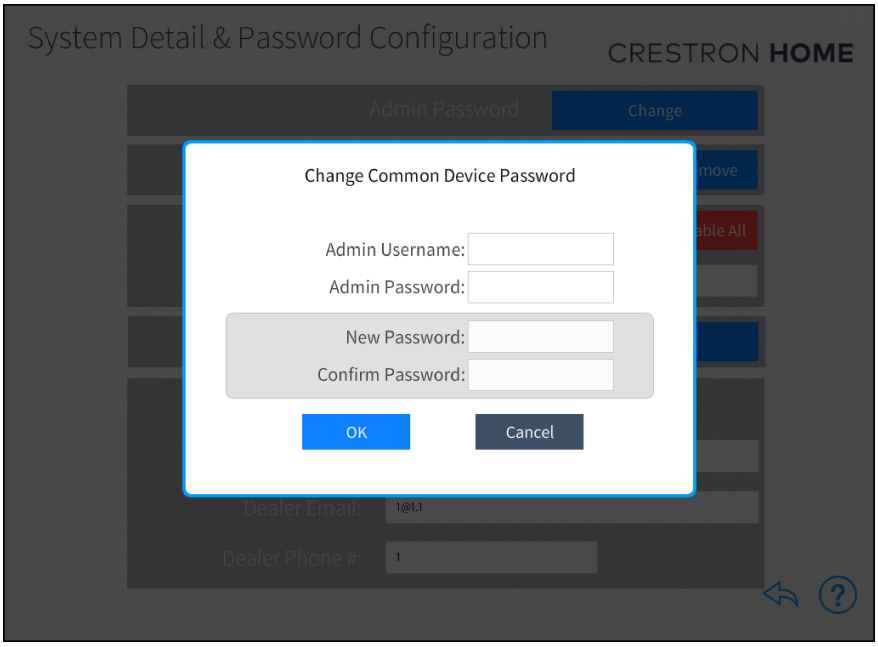
- The Common Device Password must be at least 8 characters.
- Confirm all connected Crestron Ethernet devices are online before changing the Common Device Password.
- Wait at least ten minutes after a processor reboot before changing the Common Device Password.

Set the Common Device Password using one of these methods:

- Use the System Detail & Password Configuration screen to set the password (recommended).
- Add a device that supports the Common Device Password to the system. You will be prompted to set the Common Device Password. For details, refer to Secure Device Connections on page 153.

To set or change the Common Device Password:

1. Tap **Set** to set the Common Device Password or **Change** to change the Common Device Password. The **Change Common Device Password** dialog displays.



2. Enter the required credentials for the Admin in the **Admin Username** and **Admin Password** fields and then enter the Common Device password in the **New Password** and **Confirm Password** fields.

   > **NOTE:** If the Common Device Password is changed, the password for all devices that use the Common Device Password is automatically updated.

3. Tap **OK**.

System Information

The system information is used to describe the name of the system and to provide information about the dealer that set up the system.

> **NOTE:** Ensure that the dealer information is kept up to date, as this information is needed to place custom engraving orders through the Crestron Home system.

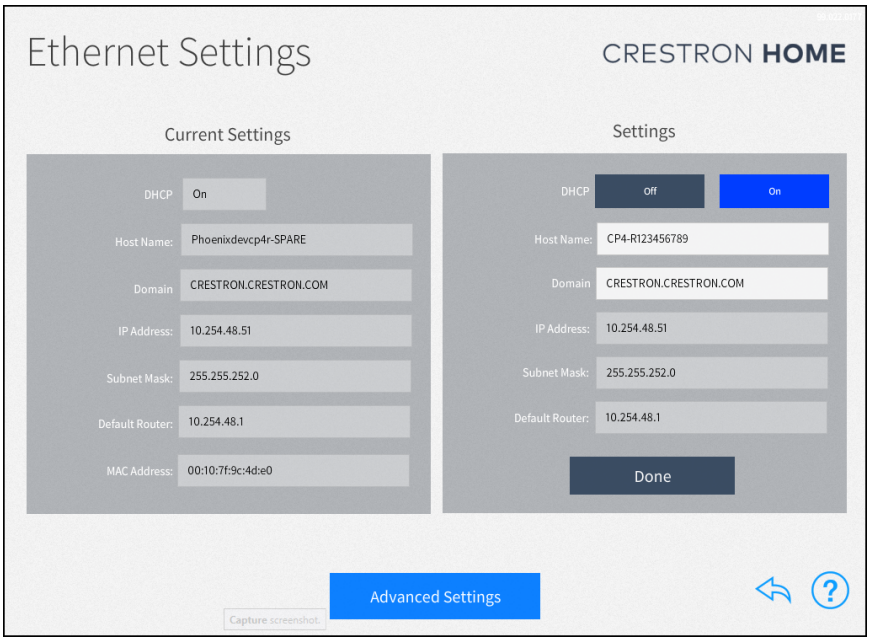
- **System Name:** Enter a name for the system. For example, the homeowners name or address.
- **Dealer Name:** Enter the Crestron dealer responsible for the system installation.
- **Dealer Phone #:** Enter the phone number of the Crestron dealer responsible for the system installation.
- **Dealer Email:** Enter the email address of the Crestron dealer responsible for the system installation.

To return to the previous screen, tap **Back**.

Ethernet Settings

Use the **Ethernet Settings** screen to view and modify the Ethernet settings for the Crestron Home processor.

To view the **Ethernet Settings** screen, select **Settings** > **System Configuration** > **Ethernet Settings**.



The **Current Settings** panel displays the following Ethernet settings:

- **DHCP:** Reports whether DHCP (Dynamic Host Configuration Protocol) is turned on or off.
- **Host Name:** The Crestron Home processor hostname.
- **Domain:** The Crestron Home processor domain name.
- **IP Address:** The Crestron Home processor IP address.

  > **NOTE:** If a static IP address is set for the Crestron Home processor, a DNS server must also be set to generate the IP address. DNS servers may be added or edited by tapping Advanced Settings.

- **Subnet Mask:** The Crestron Home processor subnet mask address.
- **Default Router:** The default gateway router address.
- **MAC Address:** The Crestron Home processor unique MAC (Media Access Control) address.

The following Ethernet settings may be edited in the **Settings** panel.

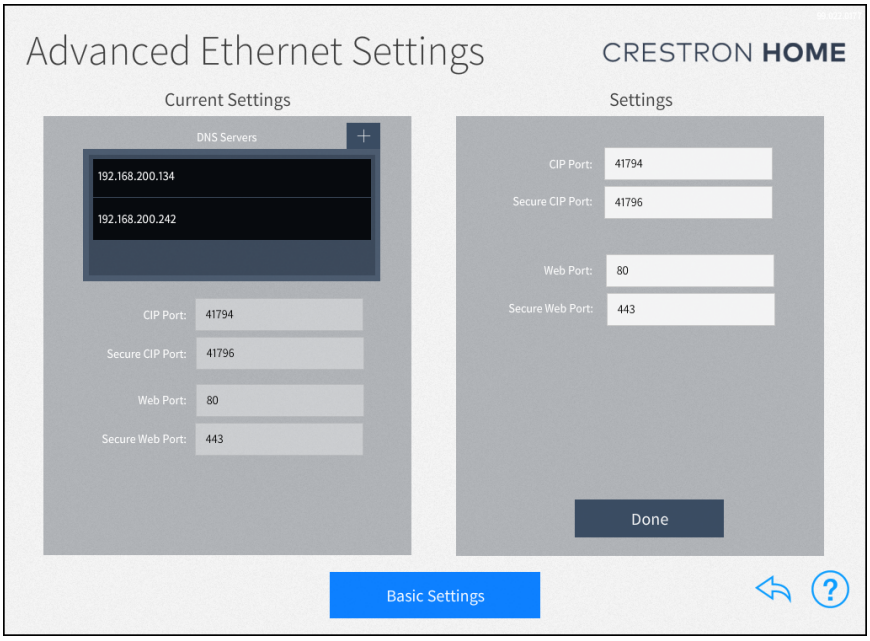
- **DHCP:** Tap **On** to turn DHCP on, or tap **Off** to turn DHCP off.

  > **NOTE:** If DHCP is turned on, the device IP address, the subnet mask, and the default router settings may not be changed manually.

- **Host Name:** Enter the Crestron Home processor hostname.
- **Domain:** Enter the Crestron Home processor domain name used for connection.
- **IP Address:** If DHCP is turned off, enter the Crestron Home processor IP address.
- **Subnet Mask:** If DHCP is turned off, enter the Crestron Home processor subnet mask address.
- **Default Router:** If DHCP is turned off, enter the default gateway router IP address.

After making any changes to the Ethernet settings, tap **Done**. A dialog box is displayed to confirm the changes. Tap **OK** to save the changes and to reboot the device using the new Ethernet settings. Tap **Cancel** to cancel the changes.

Tap **Advanced Settings** at the bottom of the screen to display the **Advanced Ethernet Settings** screen.



Use the **Advanced Ethernet Settings** screen to view and modify advanced Ethernet settings. This screen is also used to configure authentication for the device.

The following Ethernet settings may be viewed in the Current Settings panel.

> **NOTE:** Crestron recommends setting a local DNS server. For details, refer to OLH 3093: Setting Local DNS Servers as a Best Practice.

- **DNS Servers:** The DNS (Domain Name Servers) servers that are used to generate IP addresses for the Crestron Home processor.
    - Tap the plus button (**+**) at the top of the **DNS Servers** menu to display a dialog box for entering a new DNS server IP address.
    - Enter the new DNS server address in the provided text field.
    - Tap **OK** to save the new DNS server or tap **Cancel** to cancel the addition.
- **CIP Port:** The CIP (Crestron Internet Protocol) port number for the CIP routing protocol.
- **Secure CIP Port:** The secure CIP port number for the CIP routing protocol.
- **Web Port:** The web port number for the hypertext transfer protocol.
- **Secure Web Port:** The secure web port number for the hypertext transfer protocol.

The following Ethernet settings may be edited in the **Settings** panel.

- **CIP Port:** Enter the CIP port number for the CIP routing protocol.
- **Secure CIP Port:** Enter the secure CIP port number for the CIP routing protocol.
- **CTP Port:** Enter the CTP port number for the CTP routing protocol.
- **Secure CTP Port:** Enter the secure CTP port number for the CTP routing protocol.
- **Web Port:** Enter the web port number for the hypertext transfer protocol.
- **Secure Web Port:** Enter the secure web port number for the hypertext transfer protocol.

After making any changes to the advanced Ethernet settings, tap **Apply**. A dialog box is displayed confirming whether the changes should be submitted. Tap **OK** to save the changes and to reboot the device using the new advanced Ethernet settings. Tap **Cancel** to cancel the changes.

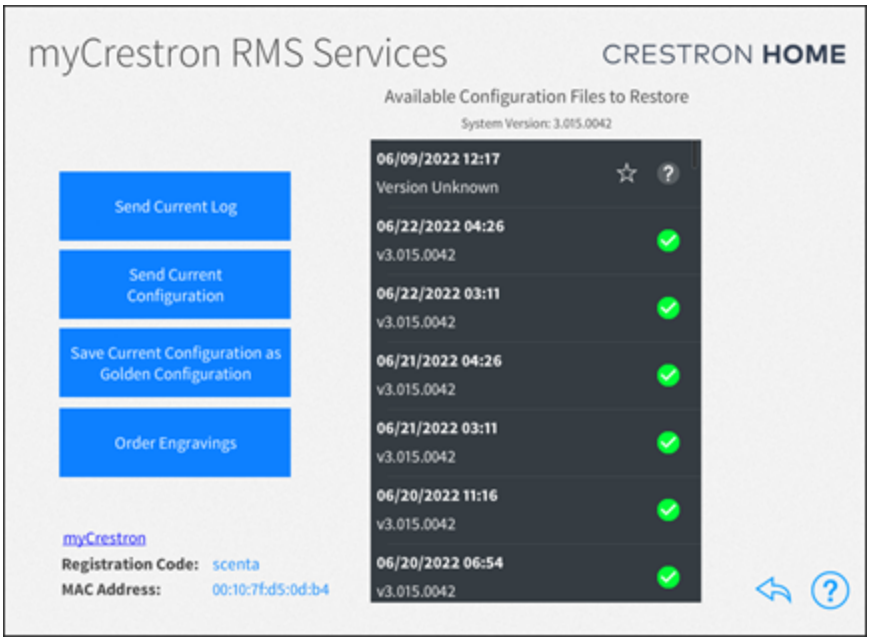
Tap **Basic Settings** to return to the main **Ethernet Settings** screen.

To return to the previous screen, tap **Back**.

myCrestron RMS Services

Use the **MyCrestron RMS Services** screen to manage saved configuration files, to send message logs to the cloud, and to order custom engravings.

To view the **myCrestron Services** screen, select **Settings > System Configuration > myCrestron RMS Services**.



TIP: The **Registration Code**, **MAC Address**, and a link to the myCrestron Residential Monitoring Service web page are provided to assist with registration. A registration code and MAC address is required to register the Crestron Home processor with the myCrestron Residential Monitoring Service.

To register the processor with the myCrestron Residential Monitoring Service, refer to myCrestron Residential Monitoring Service on page 626.

Configuration Backups

The Crestron Home system automatically backs up the system configuration and log files and stores them in the myCrestron Residential Monitoring Service.

System configuration backups contain settings for the control system, devices, and drivers that are required to completely restore the system; including third-party driver settings that are stored in the /user/Data/ThirdParty/ folder.

Show System Usage Metrics

> **NOTE:** This function is no longer supported. The **Show System Usage Metrics** option was removed in Crestron Home OS version 3.005.0074.

Create Backups

Create backups of the current system logs or system configuration or create a backup and save it as a Golden Configuration.

Send Current Log

Back up logs to the myCrestron Residential Monitoring Service. The log backup includes the system-level persistent logs (plogs) and Crestron Home app logs. The plogs include information related to the system, such as memory usage, processes, and system errors and the Crestron Home app logs include information related to the system usage, such as button presses and device reports.

To back up the logs, select **Send Current Log** and then **OK**.

> **NOTE:** To access logs, the Crestron Home processor must be added to the myCrestron Residential Monitoring Service. To add the processor, refer to Remote System Access on page 639.

Send Current Configuration

Send the current system configuration settings to the myCrestron Residential Monitoring Service. The configuration will be added to the **Available Configuration Files to Restore** menu

To send the current configuration, select **Send Current Configuration** and then **OK**.

> **NOTE:** To access the configuration, the Crestron Home processor must be added to the myCrestron Residential Monitoring Service. To add the processor, refer to Remote System Access on page 639.

Save Current Configuration as Golden Configuration

Creates a Golden Configuration and then uploads it to the myCrestron Residential Monitoring Service. Create Golden Configurations for a system that is known to be stable and working. Only one Golden Configuration can be active at a time; existing Golden Configurations are overwritten when a new one is created.

To create and upload a Golden Configuration, select **Save Current Configuration as Golden Configuration** and then **OK**.

> **NOTES:**
>
> - The Golden Configuration is marked with a star and appear at the top of the **Available Configuration Files to Restore** menu.
> - Use a Golden Configuration to restore the system to a known working state.
> - The Golden Configuration will not be deleted from myCrestron routine backups that are made by the system.

Order Engravings

Create a report that can be used to order engravings for devices in the system. The report is sent to the dealer using the email address entered on the myCrestron Residential Monitoring service. The report contains the device color, layout, and engraving information that was entered during device setup.

> **NOTES:**
>
> - The control processor must be registered on the myCrestron Residential Monitoring service before engravings can be ordered. For details, refer to Remote System Access on page 639.
> - To assign or modify engravings, refer to Customize Actions & Events on page 514.

To create an engravings report, select **Order Engravings** and then select **OK**.

To submit the order, use Impress Software. Refer to Import Crestron Home OS Engravings in the Impress Software manual for additional details.

> **NOTE:** To import a Crestron Home OS engravings file obtained from the Crestron Home Setup app, create a new project and then import the ZIP file.

Restore a System Configuration

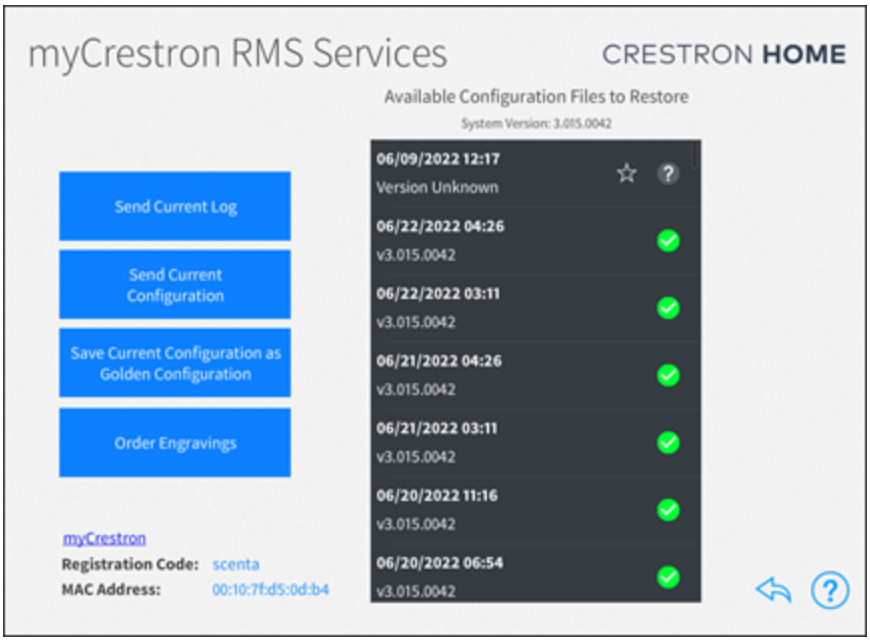
> **NOTE:** The backups are sorted by date and time. The Golden Configuration is marked with a star icon and appears at the top of the **Available Configuration Files to Restore** menu.

To restore a system configuration:

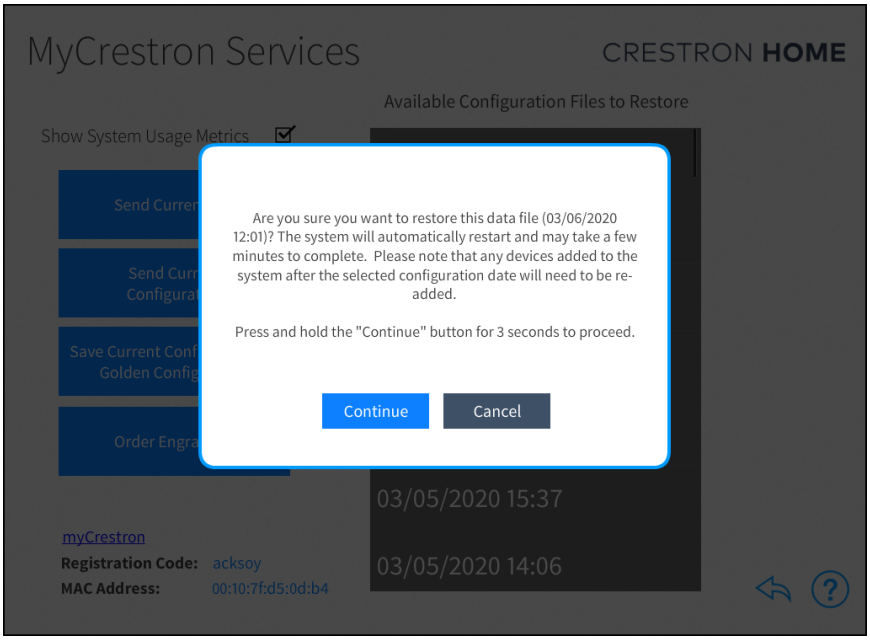
1. In the **Available Configuration Files to Restore** menu, select a configuration. The current firmware version of the control processor is displayed above the menu. Each configuration lists the date, time, and firmware version of the backup.

   To restore a backup, the firmware version of the backup must be equal to or lower than the system version. Firmware versions 3.014.0087 or lower are displayed as unknown.

   - **Green Check Icon:** Backup version is equal to or lower than the system version.
   - **Gray ? Icon:** Backup version is unknown.
   - **Red ! Icon:** Backup version is higher than the system version and cannot be restored until the system firmware is upgraded.



2. To restore the configuration, select and hold **Continue** for 3 seconds. The configuration is downloaded and then applied to the system. When complete, the control processor restarts.

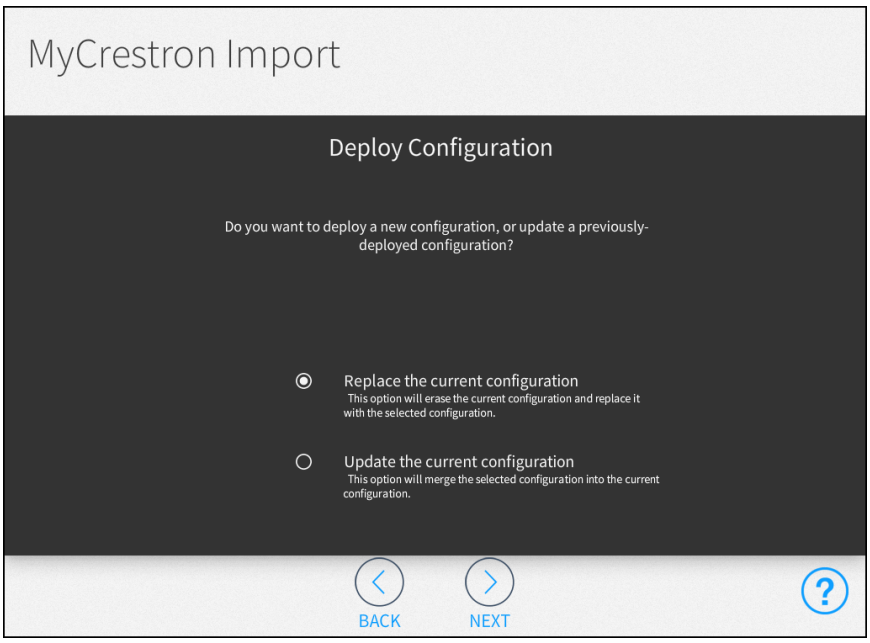


myCrestron Deploy Code Import

Use the **Deploy Configuration** screen to load or update a system configuration created using the Crestron Home Configurator.

TIP: To restore a backup configuration, factory reset the device and then transfer data using a deploy code. For details, refer to Reset to Factory Defaults on page 593 and Transfer Data using a Deploy Code (Recommended) on page 1501.

To view the **Deploy Configuration** screen, select **Settings > System Configuration > myCrestron Deploy Code Import**.



NOTES:

- The Crestron Home processor must be connected to the internet to use a Deploy code.
- Update the Crestron Home processor to the latest firmware. To update the firmware, refer to Software Update on page 622.

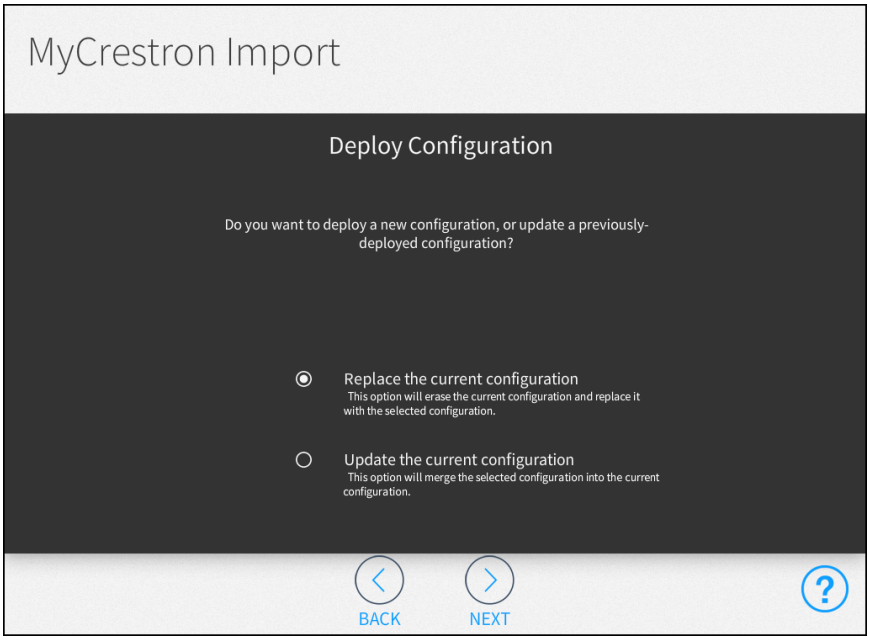
Replace the Configuration

Use **Replace the Configuration** when there is a configuration loaded on the Crestron Home processor that should be deleted before the new configuration is loaded.

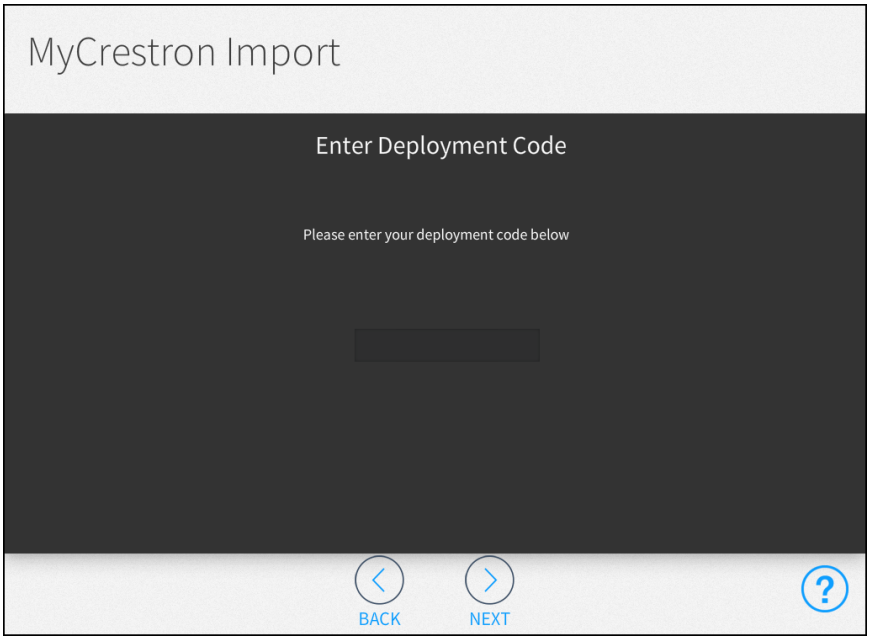
> **CAUTION:** Deploying a new configuration will erase the current configuration on the Crestron Home processor.

To replace the configuration:

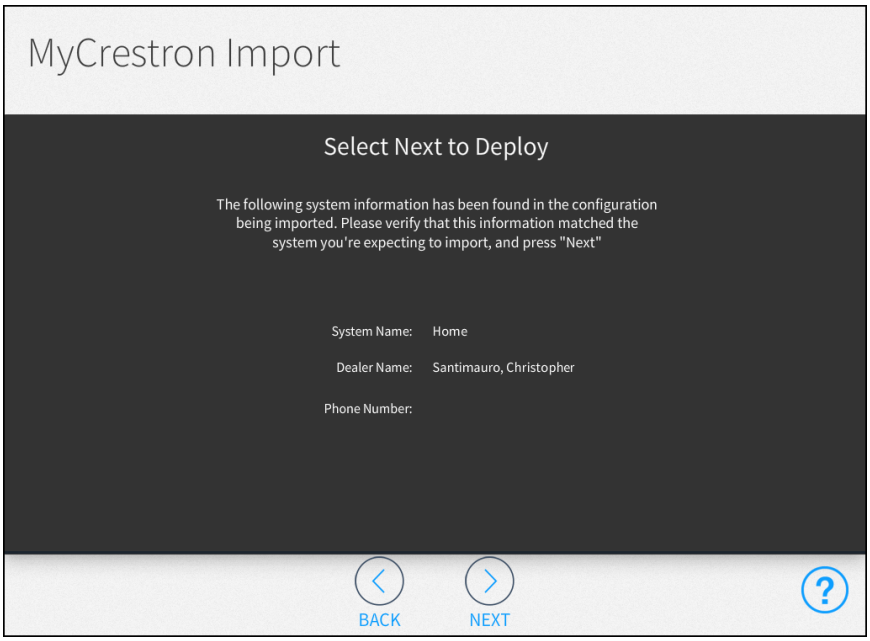
1. Select **Replace the current configuration** and then **NEXT**.



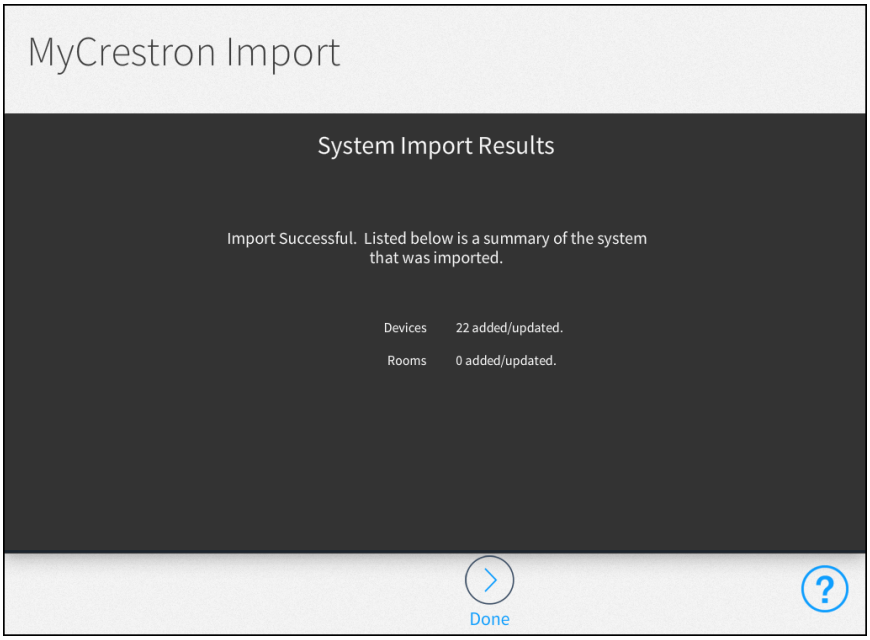
2. Enter the Deploy code and then select **NEXT**.



3. The server validates the deploy code and then displays the system information. Verify the system information and then select **NEXT**.



4. The current configuration is deleted and then the new configuration is imported. After the import completes, the import summary displays.



5. To complete the import, select **Done**.

Update the Current Configuration

Update a configuration with the latest Crestron Home Configurator configuration. The changes made in the Crestron Home Configurator are merged with the existing configuration.

Best Practice

- Deploy lighting systems made with the Crestron Home Configurator before adding AV components to the system. This will prevent conflicts with the room name.
- Create all rooms in the Crestron Home Configurator even if there are no lighting components added to it. This will prevent a conflict if lighting is added in the future and the system is redeployed.
- Use the Crestron Home Configurator to configure all aspects of the lighting system. This includes creating rooms and scenes, load assignments, and button actions.
- To assign non-lighting functions to a keypad button, select **None** from the **Button Mode** drop-down menu and then select **Preserve Crestron Home Settings**. For details, refer to Actions Tab on page 715. Changes made using the Crestron Home Setup app will not be overwritten during a Redeploy.

Redeploy Rules

The following import rules will be maintained each time the configuration is deployed on the processor.

> **NOTE:** For a list of example redeploy scenarios, refer to Redeploy Examples on page 583.

- **Items created using the Crestron Home Configurator:** If an imported item, such as a room, device, or scene, originates from an import using the Crestron Home Configurator, the imported item will be updated during future imports. For example, changes made to the configuration, such as renaming a room, moving a device to a different room, or deleting a device or scene, will also be made in the Crestron Home Setup app when the configuration is imported again.

  > **NOTE:** Load assignments made in the Crestron Home Configurator are considered to be part of the device. Adding, removing, or changing a load assignment in the configurator will overwrite the previous assignments after a redeploy.

- **Configuration is Copied in the Crestron Home Configurator:** If a configuration is copied in the Crestron Home Configurator and then the copy is imported, the association between the items in the Crestron Home Configurator and the Crestron Home Setup app is maintained. Changes made in the copy of the configuration will be made during an import. To copy a configuration, refer to Copy a Configuration on page 644.
- **Items created with the Crestron Home Setup app:** Items created in the Crestron Home Setup app will not be updated by an import. If a name conflict occurs, the item created locally using the Crestron Home Setup app will be renamed by prefixing "(local)" to the name and the item created in the configuration is added. For example, if a room named "Atrium" is created using the Crestron Home Setup app and a room named "Atrium" is imported, the room created using the Crestron Home Setup app will be renamed "(local) Atrium" and the room created in the configuration is added with the name "Atrium."
- **Imported and then modified in the Crestron Home Setup app:** If a device is imported and then modified using the Crestron Home Setup app, the changes will be overwritten if the import is performed again. The only exception is for keypad programming. To preserve changes to keypad programming made in the Crestron Home Setup app, select **Preserve Keypad Programming** in the Crestron Home Configurator.

Redeploy Examples

The examples that follow demonstrate common merge scenarios.

Rename a Room in Crestron Home

Original Deploy	myCrestron Changes	Crestron Home Changes	Crestron Home result after Redeploy
Room A		Rename: Room B	Renamed: Room: Room A
Load: Sconce 1 Device: CLW-DIMEX			Load: Sconce 1 Device: CLW-DIMEX
Load: Sconce 2 Device: CLW-DIMEX			Load: Sconce 2 Device: CLW-DIMEX

The following changes were made:

- **Crestron Home Configurator:** No changes.
- **Crestron Home Setup App:** Renamed "Room A" to "Room B".

Results after Redeploy:

- "Room B" is renamed to "Room A".

Add a Device in the Configurator and Crestron Home; Added to the Same Room; Device Names are the Same

Original Deploy	Configurator Changes	Crestron Home Changes	Crestron Home result after Redeploy
Room A			Room A
Load: Sconce 1 Device: CLW-DIMEX			Load: Sconce 1 Device: CLW-DIMEX
Load: Sconce 2 Device: CLW-DIMEX			Load: Sconce 2 Device: CLW-DIMEX
	Add: Load: Sconce 3 Device: CLW-DIMFLVEX		Added: Load: Sconce 3 Device: CLW-DIMFLVEX
		Add: Load: Sconce 3 Device: CLW-DIMFLVEX	Renamed: Load: (local) Sconce 3 Device: CLW-DIMFLVEX

The following changes were made:

- **Crestron Home Configurator:** Add load named "Sconce 3" controlled by a CLW-DIMFLVEX in "Room A".
- **Crestron Home Setup App:** Add load named "Sconce 3" controlled by a CLW-DIMFLVEX in "Room A".

Results after Redeploy:

- A load named "Sconce 3" controlled by the CLW-DIMFLVEX is added to "Room A".
- The load named "Sconce 3" controlled by the CLW-DIMFLVEX in "Room A" is renamed to "(local) Sconce 3".

Update Min/Max for a Load in the Configurator and Crestron Home

Original Deploy	Configurator Changes	Crestron Home Changes	Crestron Home result after Redeploy
Room A			Room A
Load: Sconce 1 Device: CLX-1DIMU4 (Output 1)			Load: Sconce 1 Device: CLX-1DIMU4 (Output 1)
Load: Sconce 2 Device: CLX-1DIMU4 (Output 2)	Update: Min: 20% Max: 90%	Update: Min: 35% Max: 85%	Updated: Min: 20% Max: 90%

The following changes were made:

- **Crestron Home Configurator:** Update the Min/Max level for the CLX-1DIMU4 to 20/90%.
- **Crestron Home Setup App:** Update the Min/Max level for the CLX-1DIMU4 to 35/85%.

Results after Redeploy:

- The Min/Max level for the CLX-1DIMU4 (Output 2) is updated to 20/90%.

A Device is Deleted in the Configurator and Crestron Home

Original Deploy	Configurator Changes	Crestron Home Changes	Crestron Home result after Redeploy
Room A			Room A
Load: Sconce 1 Device: CLW-DIMEX			Load: Sconce 1 Device: CLW-DIMEX
Load: Sconce 2 Device: CLW-DIMEX	Delete	Delete	

The following changes were made:

- **Crestron Home Configurator:** Delete load "Sconce 2" controlled by the CLW-DIMEX from "Room A".
- **Crestron Home Setup App:** Delete load "Sconce 2" controlled by the CLW-DIMEX from "Room A".

Results after Redeploy:

- The load "Sconce 2" controlled by the CLW-DIMEX is deleted from "Room A".

Add a Room with a Device in the Configurator and Crestron Home; Room Names Match; Load Names are Different

Original Deploy	myCrestron Changes	Crestron Home Changes	Crestron Home result after Redeploy
Room A			Room A
Load: Sconce 1 Device: CLW-DIMEX			Load: Sconce 1 Device: CLW-DIMEX
Load: Sconce 2 Device: CLW-DIMEX			Load: Sconce 2 Device: CLW-DIMEX
	Add: Room: Room C Load: Overhead Light Device: CLX-1DIM4 (Output 1)		Added: Room: Room C Load: Overhead Light Device: CLX-1DIM4 (Output 1)
		Add: Room: Room C Load: Ceiling Light Device: CLX-1DIM4 (Output 1)	Renamed: Room: (local) Room C No Change: Load: Ceiling Light Device: CLX-1DIM4 (Output 1)

The following changes were made:

- **Crestron Home Configurator:** Add "Room C" and then add a load named "Overhead Light" that is controlled by a CLX-1DIM4 (Output 1) in "Room C".
- **Crestron Home Setup Changes:** Add "Room C" and then add a load named "Ceiling Light" that is controlled by a CLX-1DIM4 (Output 1) in "Room C".

Results after Redeploy:

- "Room C" is added with load "Overhead Light" controlled by a CLX-1DIM4 (Output 1) in "Room C".
- "Room C" is renamed to "(local) Room C" and load named "Ceiling Light" that is controlled by a CLX-1DIM4 (Output 1) remains in the room.

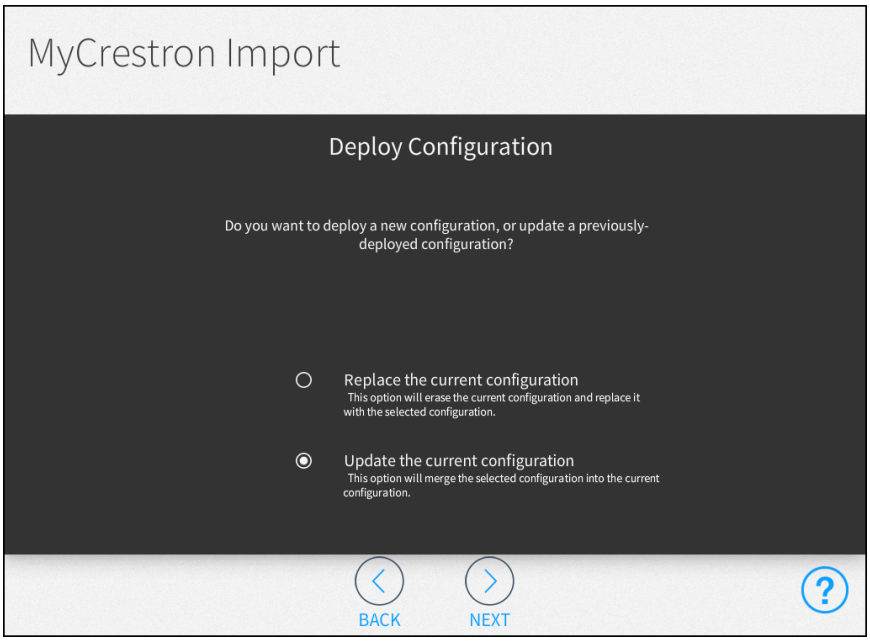
Update the Current Configuration

Use **Update the Current Configuration** when the original Crestron Home Configurator configuration is updated. The configuration on the processor will be updated to reflect the changes made using the Crestron Home Configurator. The configuration used for the original deploy and the update must be the same.

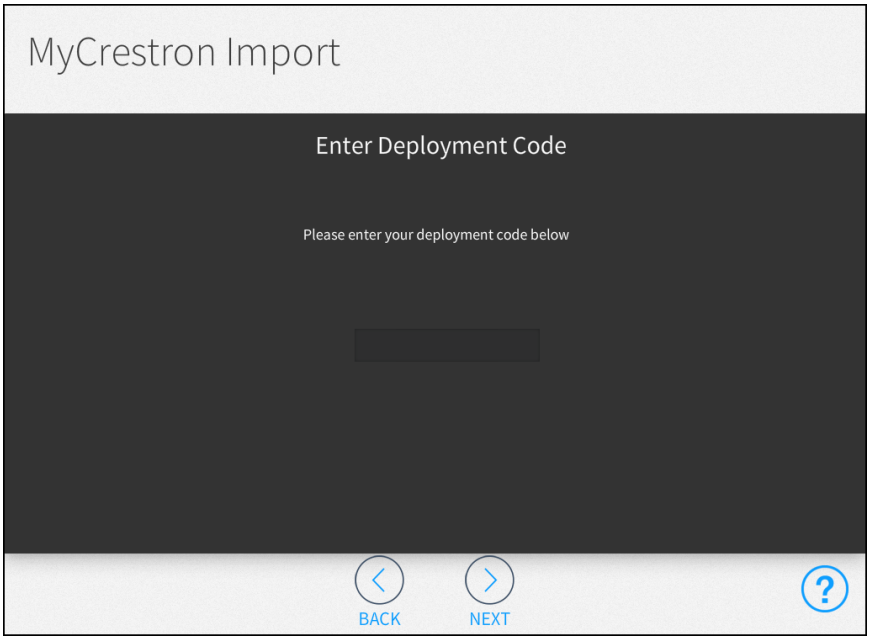
CAUTION: Using the **Update the Current Configuration** function with a different configuration than the original deploy will result in unexpected configuration changes.

To update the configuration:

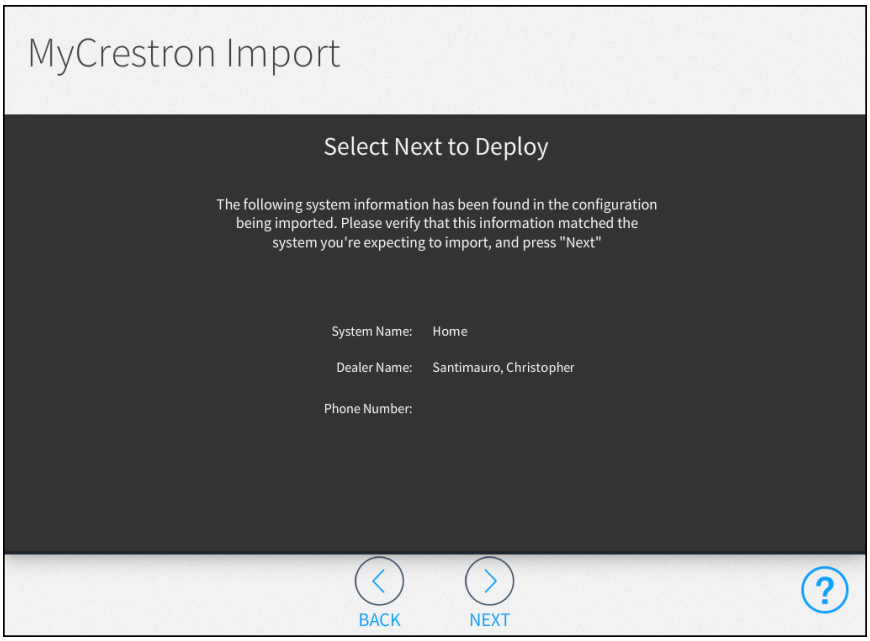
1. Select **Update the current configuration** and then **NEXT**.



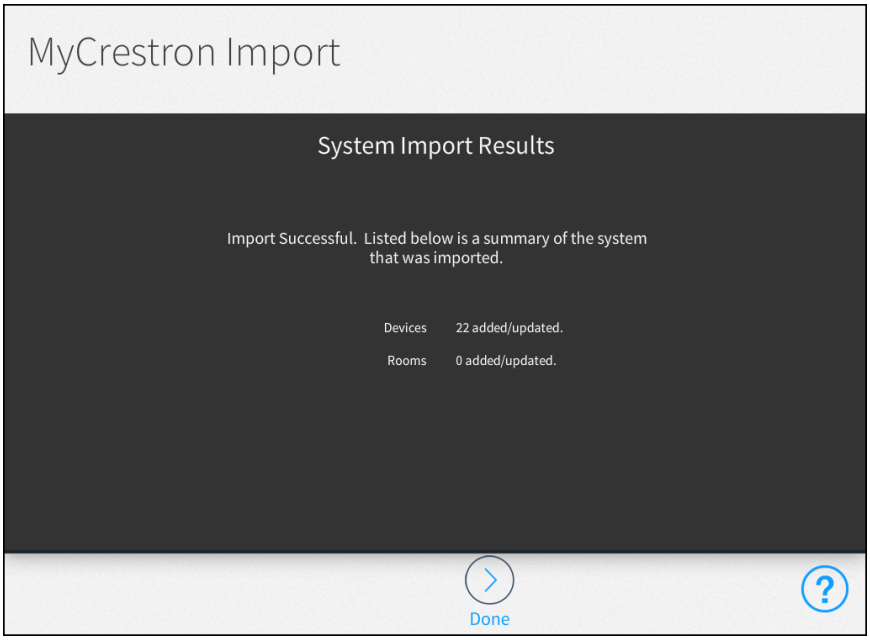
2. Enter the Deploy code and then select **NEXT**.



3. The server validates the deploy code and then displays the system information. Verify the system information and then select **NEXT**.



4. The configuration is imported and then displays the import summary.

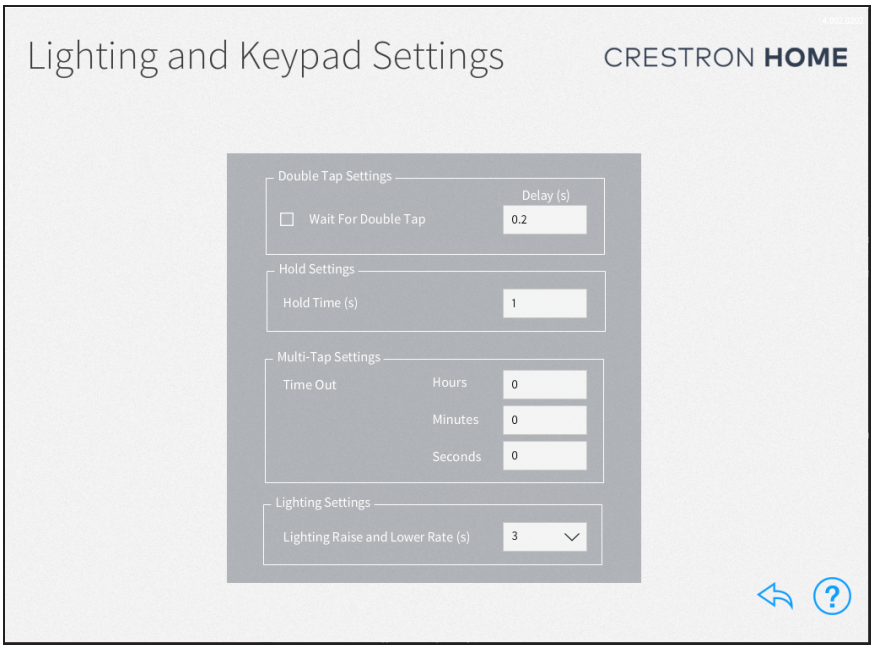


5. To complete the import, select **Done**.

Lighting and Keypad Settings

Use the **Lighting and Keypad Settings** screen to view and modify the global keypad settings for the double tap function.

To view the **Lighting and Keypad Settings** screen, select **Settings** > **System Configuration** > **Lighting and Keypad Settings**.



Button Press Settings

- **Wait For Double Tap:** Tap the check box next to **Wait For Double Tap** to enable the wait for double tap function. The Wait for Double Tap function determines if the Crestron Home system triggers the Double Tap button action. The delay is the amount of time (in seconds) that the system waits after a button press to determine if a subsequent button press is a double tap. The values can be set between 0.2 and 1 second.

  For example:

  - Tap button action is set to route video to a bedroom.
  - Double Tap button action is set to route audio to a bedroom.

  When Wait for Double Tap is enabled:

  > **NOTE:** The Tap button action is not triggered if the button is pressed twice within the delay time.

    - A single button press will route video to the bedroom if the room is off (Tap button action).
    - Two button presses will route audio to the bedroom (Double Tap button action).

When Wait for Double Tap is disabled:

> **NOTE:** The Crestron Home system registers both the single and double button presses and triggers both actions.

- A single button press will route video to the bedroom if the room is off (Tap button action).
- Two button presses will route video to the bedroom if the room is off (Tap button action) and then will route audio to the bedroom if the room is off (Double Tap button action).

- **Hold Time:** The amount of time (in seconds) that a button must be pressed during a press-and-hold operation before the Hold button action is performed.
- **Time Out:** The amount of time (in hours, minutes, and seconds) that the system waits to determine if the Double Tap button action is performed.

Lighting Settings

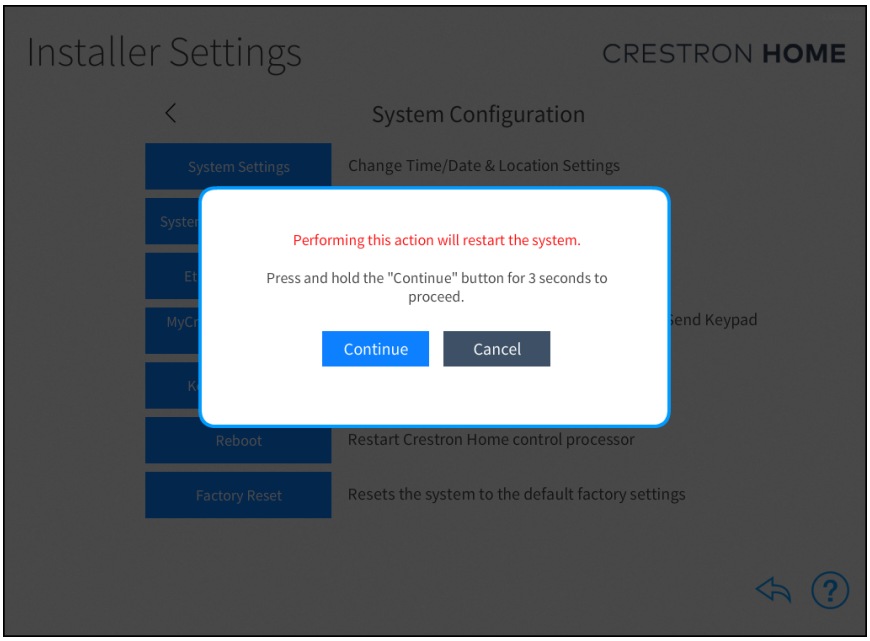
Lighting Raise and Lower Rate(s): The amount of time (in seconds) over which the Crestron Home system raises or lowers the current light level to a recalled scene or discrete level.

To return to the previous screen, tap **Back**.

Restart the Control Processor

To view the **Restart** screen, select **Settings** > **System Configuration** > **Reboot**.

To reboot the Crestron Home processor, select and hold Continue for 3 seconds.

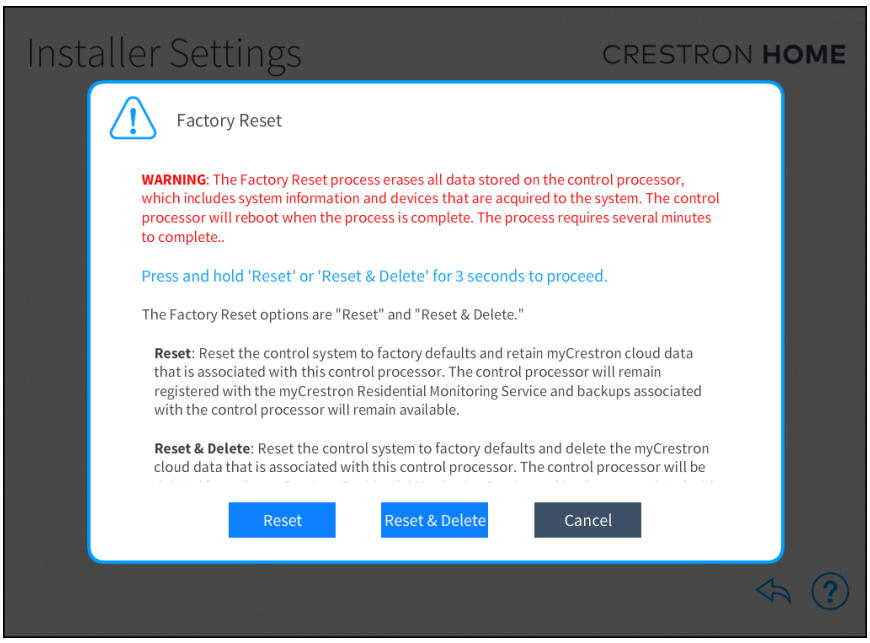


Reset to Factory Defaults

Use the **Factory Reset** screen to remove all settings from the Crestron Home processor and to reset it to the factory default settings. Data that is stored on the myCrestron Residential Monitoring Service is handled differently depending on the factory reset method used.

> **NOTE:** If the Crestron Home system is unresponsive, use the front panel controls to factory reset the Crestron Home processor. For details, refer to Restore a Crestron Home Processor to Factory Settings on page 1405.

To view the **Factory Reset** screen, select **Settings** > **System Configuration** > **Factory Reset**.



To reset the Crestron Home processor to its factory default settings:

> **NOTES:**
>
> - All configured settings and all devices that are paired with the Crestron Home processor are erased during a factory restore.
> - If required, download the backup files from the myCrestron Residential Monitoring Service before proceeding.
> - The Crestron Home processor reboots during the factory reset process.

- **Reset:** Tap and hold the **Reset** button for 3 seconds to reset the control processor to the factory default settings. The control processor will remain registered with the myCrestron Residential Monitoring service and system data, such as system backups, that is stored on the myCrestron Residential Monitoring Service is retained.

- **Reset & Delete:** Tap and hold the **Reset & Delete** button for 3 seconds to reset the control processor to the factory default settings, delete the control processor from the myCrestron Residential Monitoring Service, and delete system data, such as system backups, that is stored on the myCrestron Residential Monitoring Service.

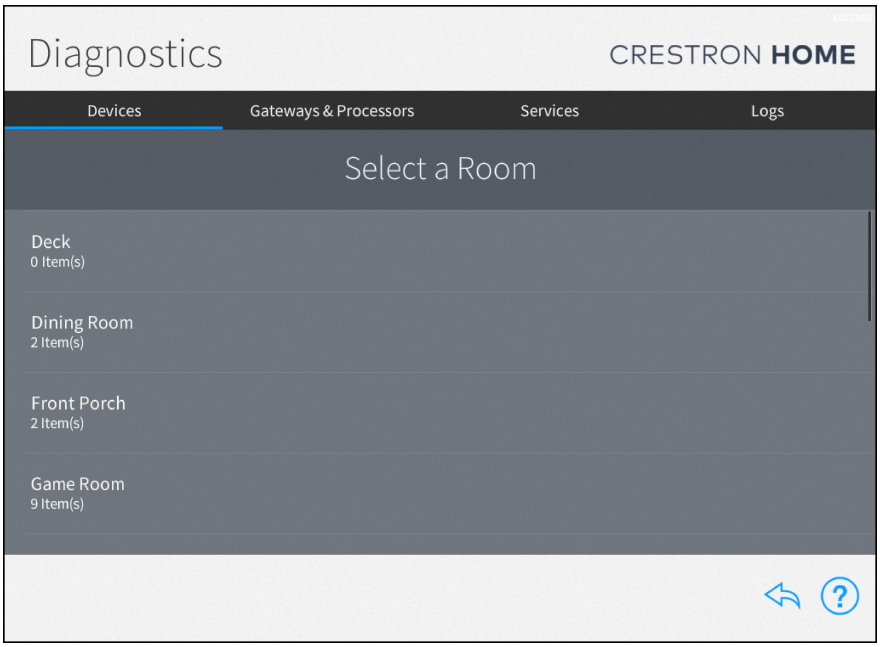
  > **CAUTION:** Data cannot be recovered after it is deleted from the myCrestron Residential Monitoring Service.

- **Cancel:** Cancel the factory restore and close the dialog.

Diagnostics

Use the **Diagnostics** screen to troubleshoot the system.

To view the **Diagnostics** screen, select **Settings > Diagnostics**.



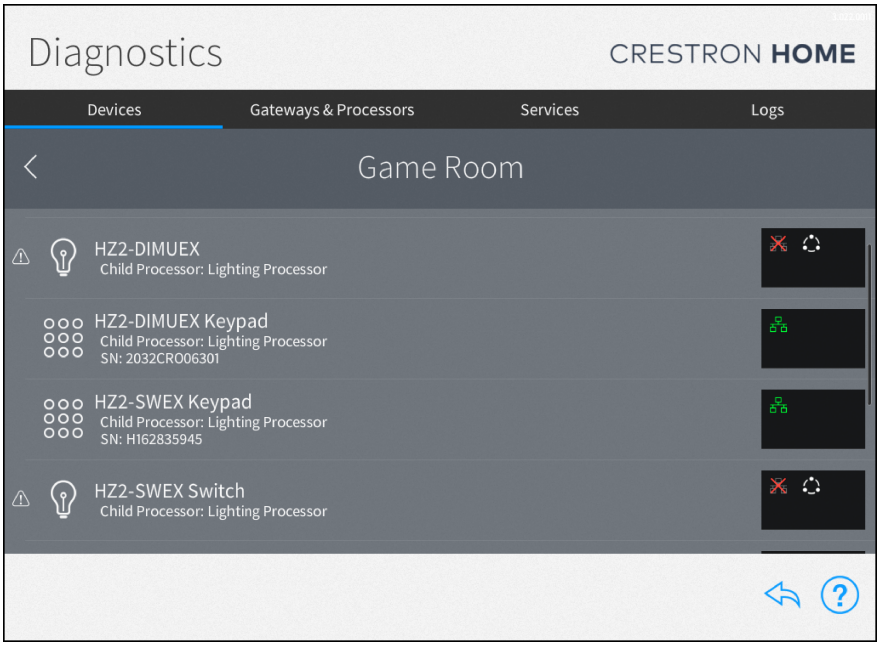
Devices

Tap the **Devices** tab to view all of the network devices that are paired with the Crestron Home system, organized by room. Each device reports its network status, firmware status, whether it is included in a scene, and whether it is affected by a scheduled event.

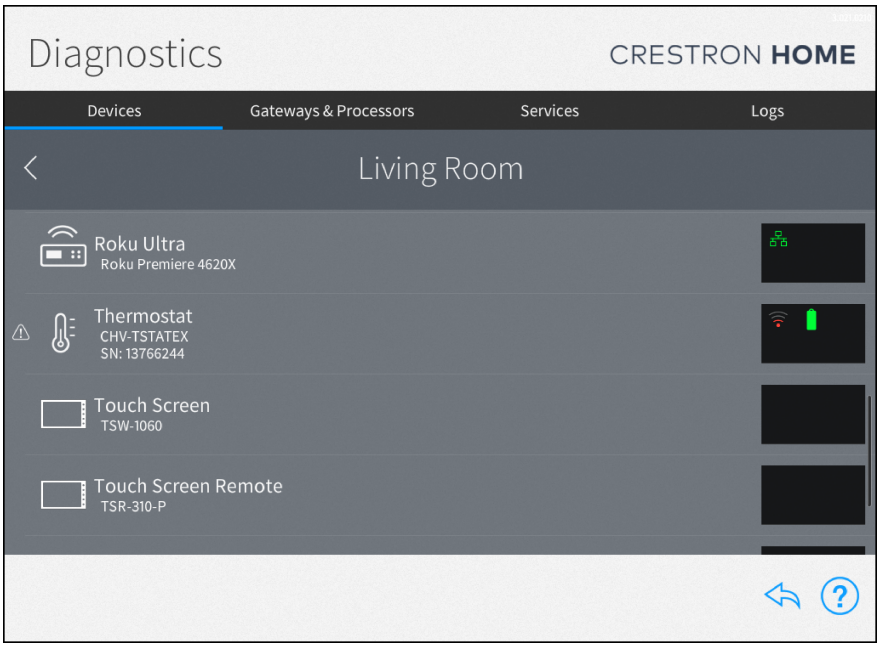
Select a room from the list to view the status of the devices configured for the room.

For multiprocessor systems, the Diagnostics screen on the parent processor displays the child processor name.

Parent Processor



Child Processor



The following status information is provided for each device in the room:

> **NOTE:** Devices that are not connected to the network, such as relay-controlled devices and uncontrolled audio sources, do not display any network connection information.

Wireless Device Status

-  The device is online and detected by the system.
- The device is offline or not detected by the system.
-  A network connection cannot be determined or if the device is being scanned.

Wired Device Status

- The device is online and detected by the system.
-  The device is offline or not detected by the system.

Serial Device Status

-  The device is functioning and is associated with a COM port in the system.
-  The device is functioning but is not associated with a COM port.

IR Device Status

-  The device is functioning and is associated with an IR port in the system.
-  The device is functioning but is not associated with an IR port.

CEC Device Status

-  The device is functioning and is associated with a CEC port in the system.
-  The device is functioning but it not associated with a CEC port in the system.

Battery Device Status

-  The battery level is OK.
-  The battery level is low. Replace the batteries soon.

> **NOTE:** For battery-operated shades:
>
> - The shade will operate normally.
> - When the battery level is very low, the shade operates at reduced speed.

- The battery level is too low to operate the device. Replace the batteries. The device will also report as offline.

  > **NOTE:** For battery-operated shades:
  >
  > - The shade cannot be operated.
  > - The shade can communicate with the system to perform firmware functions and report status. For example, report communications status, provide feedback, pair with a gateway, report battery level.
  > - When the usable battery-level is depleted, the shade motor will also report as offline.

Scenes

- The device is part of a scene.
- To view the scene(s) that a device is in, select **Scene**.

Firmware

- The device is running outdated firmware that is not supported by the system.

View Error Details

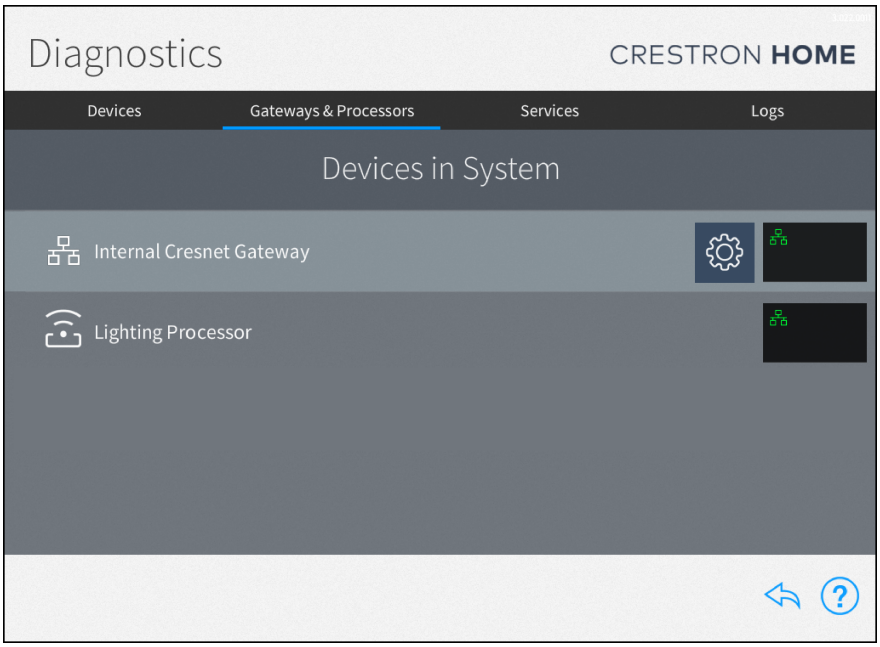
- The system detects an issue with the device.
- To view an error, select **Error**.

Device Settings

To view the device settings, select a device and then select **Settings**.

Gateways and Processors

Use the **Gateways & Processors** tab to view the gateways and processors that are in the system. The **Gateways & Processors** tab also provides an option for viewing the system of paired Sonos devices.



Gateway and Processor Status

The status is displayed for each gateway and processor:

- The device is online and detected by the system.
- The device is offline or not detected by the system.
- The device is running outdated firmware that is not supported by the system.

Sonos Gateway Status

The status is displayed for the Sonos System gateway:

> **NOTE:** For more information on troubleshooting the Sonos system, refer to Sonos and Crestron Home Integration on page 1385.

- The Sonos system has discovered devices from multiple households after a device from one household has been paired.
- The Sonos system is not detected by the system.
- The Sonos system is disabled.
- A paired Sonos device is not detected by the system.

View Error Details

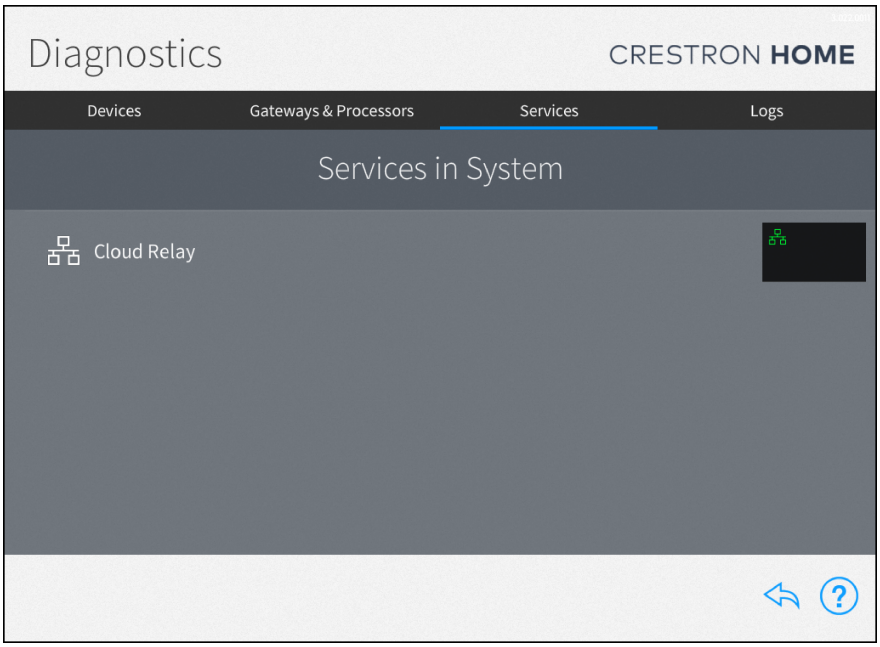
- The system detects an issue with the gateway.
- To view an error, select **Error**.

Gateway and Processor Settings

To view the device settings, select a gateway and then select **Settings**.

Services

Tap the **Services** tab to view the services that are paired with the system.



The status is displayed for each service:

Icon	Description
	The service is online and detected by the system.
	The service is offline or not detected by the system.
	The system detects an issue with the service

To view the service settings, select **Settings**.

To view an error, select **Error**.

Logs

Use the **Logs** tab to view system events that have occurred on the Crestron Home system.

To view logs for Crestron Driver devices turn on Driver Logging. For details, refer to Crestron Driver Logs on page 602.

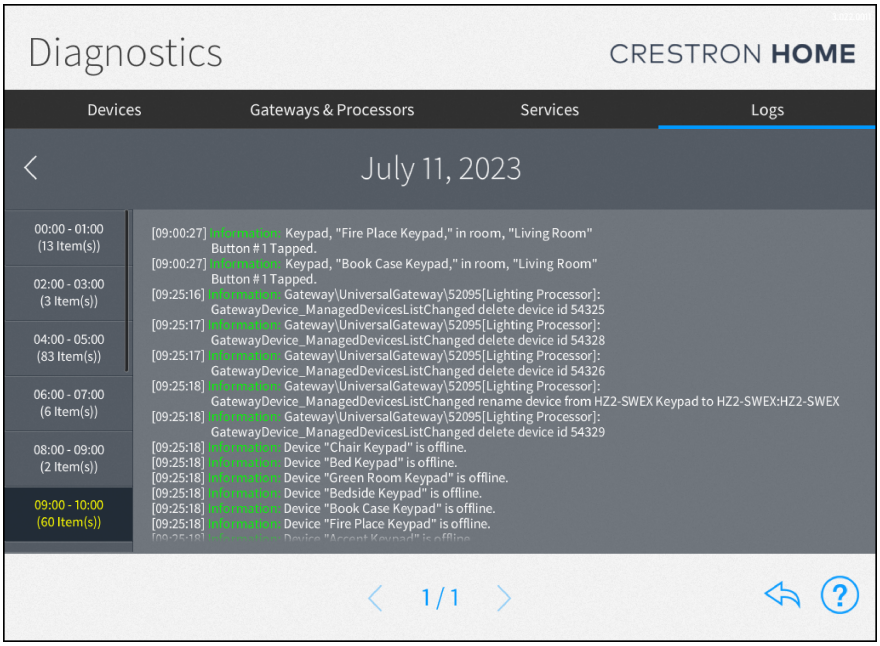
NOTE: If Driver Logging is off and a Crestron Driver device logs an event at the Error or Warning level, the event will display in the logs.

To view the system logs:

1. Select the **Logs** tab.
2. Select a date and then a specific time range. from the menu on the left.
3. The logs are displayed on the center of the screen. Use the **Left** and **Right** arrows to move through the log pages.

   The logs are displayed as: `[Time] [log severity] [Driver:][Device Name] in room [RoomName] [message]`

   - **Time:** The time of the log (hh:mm:ss).
   - **Log Severity:** The logging level.
   - **Driver:** Displayed for events related to Crestron Drivers.
   - **Device Name:** Displays the name of the device.
   - **RoomName:** Displays the room that the device is in.
   - **Message:** Displays the log message.



NOTE: An SD card must be loaded into the **MEMORY** slot on the Crestron Home processor to store log files.

Crestron Driver Logs

Turn on driver logging to view logs for Crestron Driver devices. Logging can be turned on for only one device at a time.

When driver logging is turned on:

- The Crestron Home system saves the logs for Crestron Driver devices.
- The logs are retained between reboots.
- Driver logging remains on between reboots.

IMPORTANT: Turn off logging when finished. Leaving driver logging on may cause system performance issues.

To turn on driver logging:

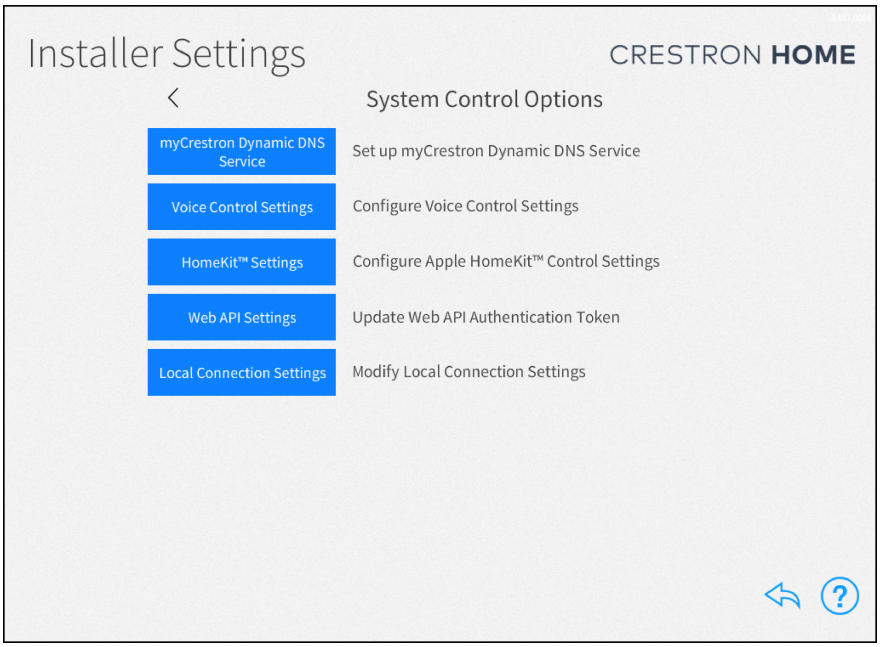
1. Select the **Devices** tab and then a device.
2. Select **Settings**.
3. Open the **Advanced** tab.
4. To turn on driver logging, select the **Enable logging**.

To view the logs, select the **Logs** tab. For details, refer to Logs on page 600.

System Control Options

Use the **Installer Settings - System Control Options** screen to configure settings for the operation of the Crestron Home system.

To view the **System Control Options** screen, select **Settings > System Control Options**.



This section provides the following information:

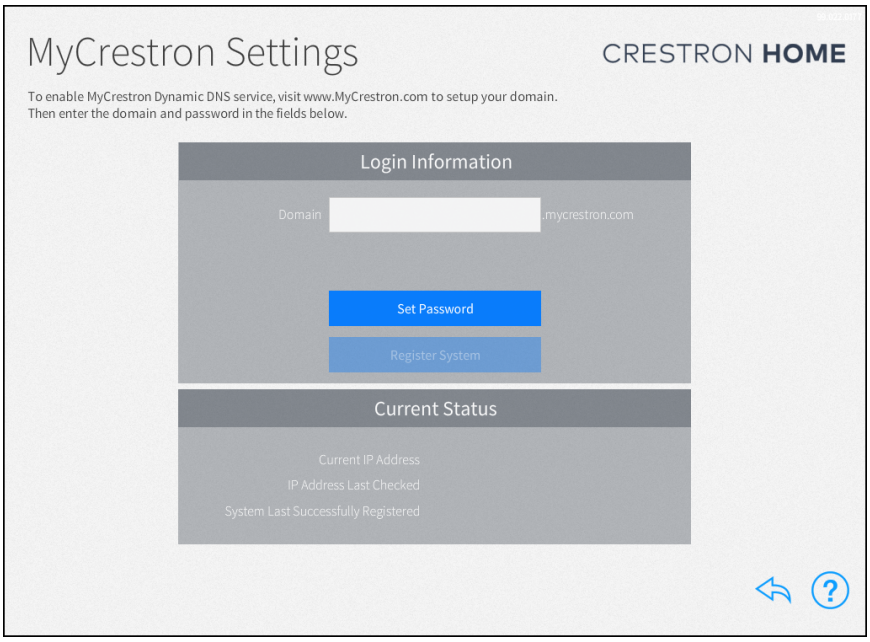
- myCrestron DNS Settings
- Web Settings
- Voice Control Settings
- Web API Settings
- Apple HomeKit Settings
- Local Connection Settings

myCrestron DNS Settings

Use the **MyCrestron Settings** screen to link a Crestron Home processor with a myCrestron domain name and enable remote access to the system.

> **NOTE:** A myCrestron domain name must be registered at mycrestron.com prior to registering the system with myCrestron.

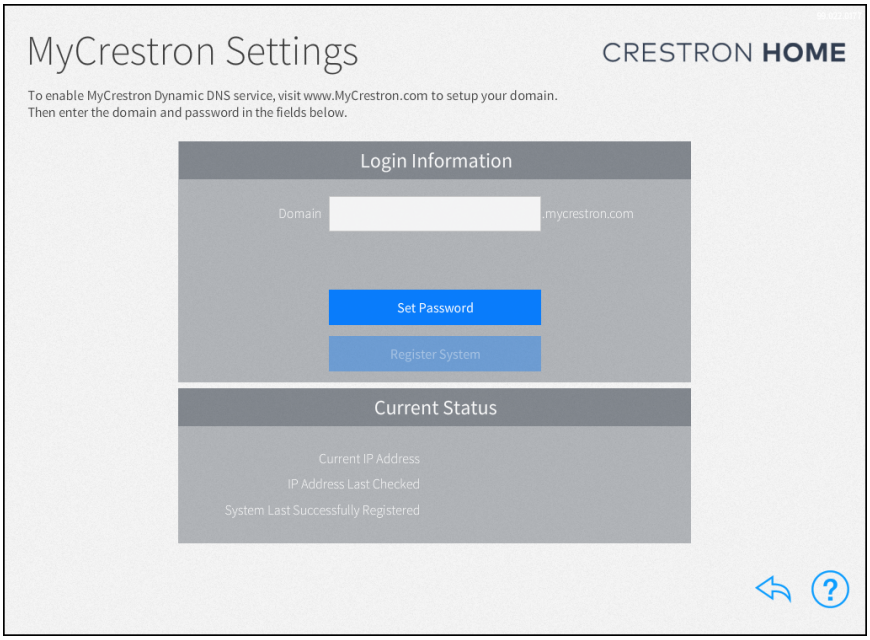
To view the **myCrestron Settings** screen, select **Settings** > **System Control Options** > **MyCrestron Dynamic DNS Service**.



Link the Processor to a myCrestron Domain Name

To link the Crestron Home processor with a myCrestron domain name:

1. Go to **Settings > System Control Options > MyCrestron Dynamic DNS Service**.



2. Enter the myCrestron domain name in the **Domain** box.
3. Select **Set Password** and then enter the admin credentials for the processor in the **Admin Username** and **Admin Password** box. Enter the password for the myCrestron domain name in the **New Password** and **Confirm Password** box and then select **OK**.
4. Select **Register System**.

Current Status

The **Current Status** panel displays the following information:

- **Current IP Address:** Displays the IP address associated with the myCrestron account domain name
- **IP Address Last Checked:** Displays the date and time that the myCrestron account IP address was last checked
- **System Last Successfully Registered:** Displays the date and time that the Crestron Home system was last successfully registered to a myCrestron account

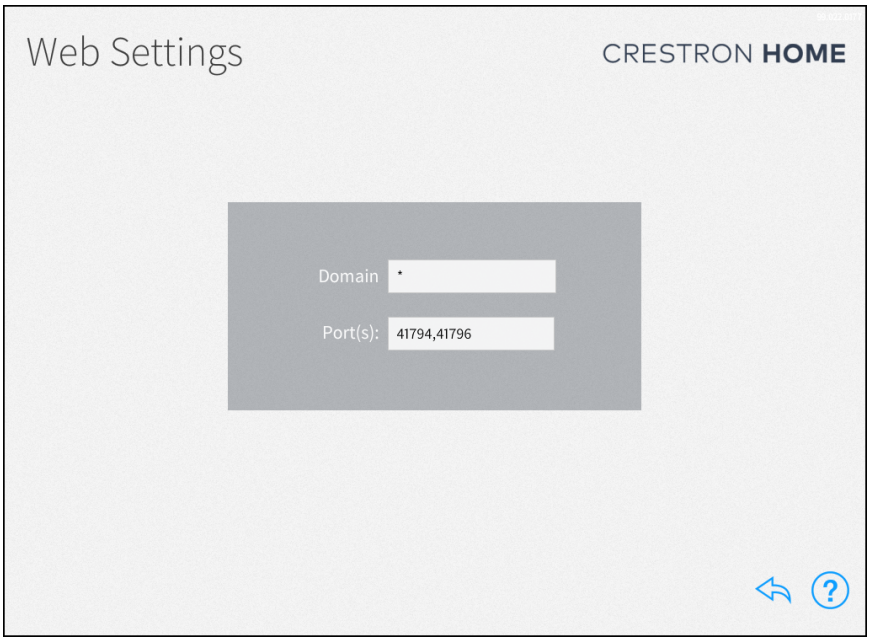
To return to the previous screen, tap **Back**.

Web Settings

> **NOTE:** Web Settings was removed in Crestron Home version 3.007.0070.

Use the **Web Settings** screen to enter a domain and port for accessing the Crestron Home processor's built-in web XPanel interface.

To view the **Web Settings** screen, select **Settings** > **System Control Options** > **Web Settings**.



Enter the following information:

- **Domain:** Enter the web XPanel interface web domain. For most applications, set **Domain** to "*".
- **Port(s):** Enter the web XPanel interface port(s). For most applications, set **Port(s)** to "41794,41796".

> **NOTE:** For more information on advanced web XPanel interface configurations, refer to OLH article 5793 at www.crestron.com/onlinehelp.

To return to the previous screen, tap **Back**.

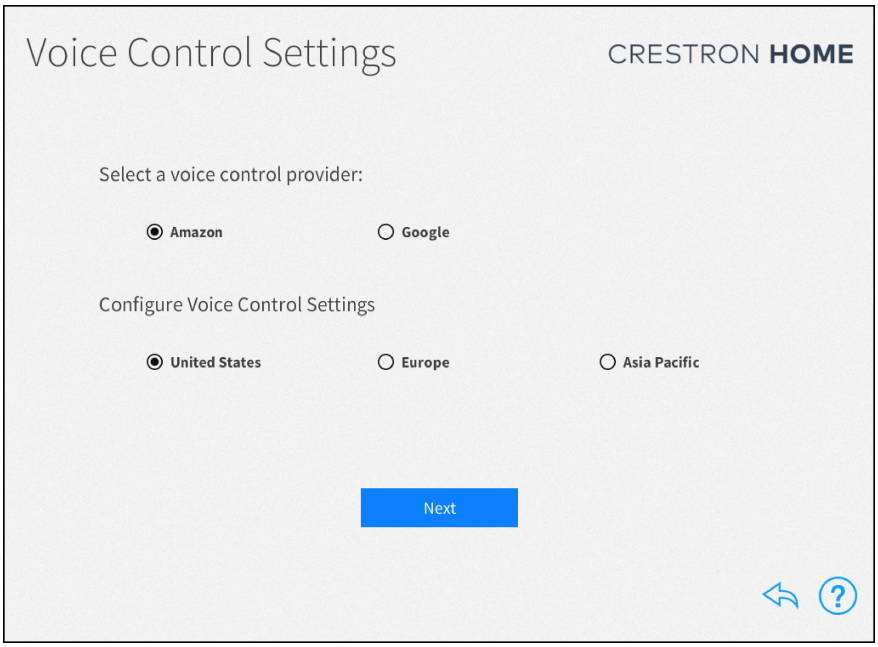
Voice Control Settings

Use the **Voice Control Settings** screen to enable voice control and connect the Crestron Home system with an Amazon® Alexa® voice control or the Google Assistant™ voice control account.

NOTES:

- The Google Assistant voice control service is only available in the United States.
- When using Amazon voice control services, no more than 300 voice enabled devices can be added to the Crestron Home system.
- Voice control using the TSR-310 is only available to systems that are registered in the United States.
- To integrate Josh voice control, use the built-in authentication token instead of the Voice Control Settings page. For details, refer to Web API Settings on page 615 and Josh.ai and Crestron Home Integration (PDF).

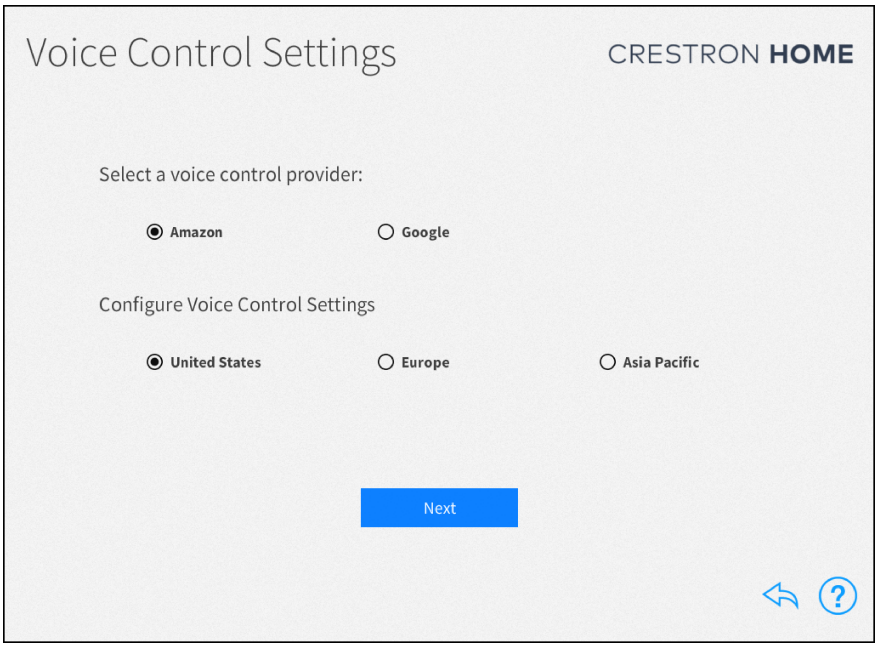
To view the **Voice Control Settings** screen, select **Settings > System Control Options > Voice Control Settings**.



Enable Voice Control Services

To configure voice control settings for the Crestron Home system:

1. Select the voice control provider (**Amazon** or **Google**) and the location of the Crestron Home system (**United States**, **Europe**, or **Asia Pacific**) and then tap **Next**.


Voice Control Settings
CRESTRON HOME
Select a voice control provider:
Amazon
Google
Configure Voice Control Settings
United States
Europe
Asia Pacific
Next

2. In a web browser, go to the URL displayed in the Crestron Home Setup app. The **Crestron Admin Portal for Voice Control Systems** page displays.

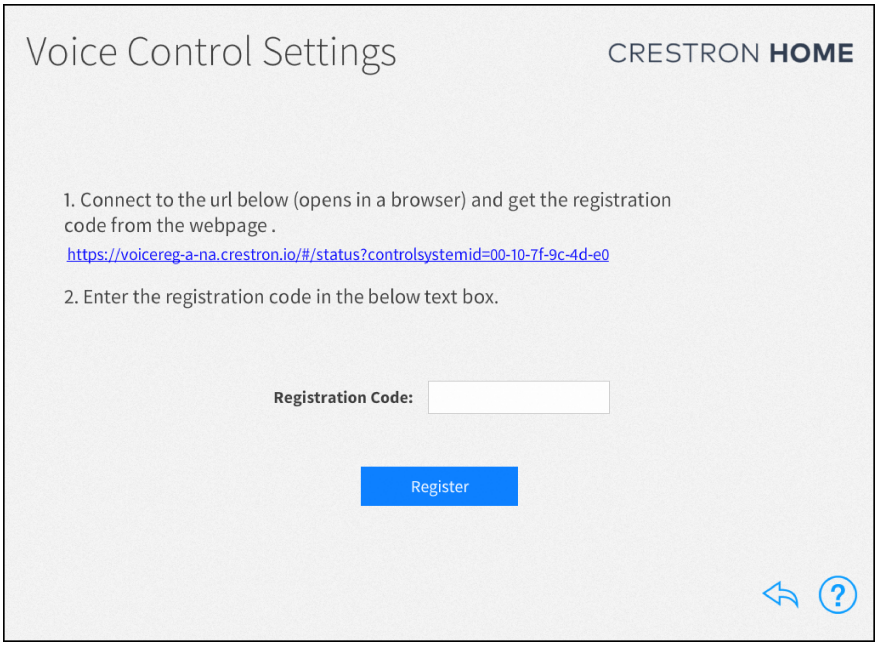
   NOTE: The URL displayed in the image below is for Amazon voice services in the United States. The URL displayed for registration changes based on the selected voice service and the region.

   Amazon voice services:

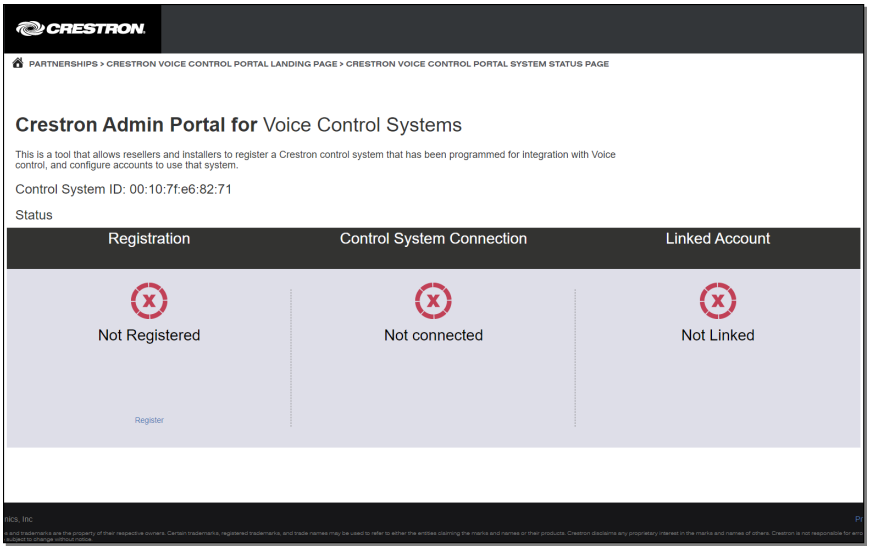
   - **United States:** voicereg-a-na.crestron.io/
   - **Europe:** voicereg-a-eu.crestron.io/
   - **Asia Pacific:** voicereg-a-apac.crestron.io/

   Google voice services:

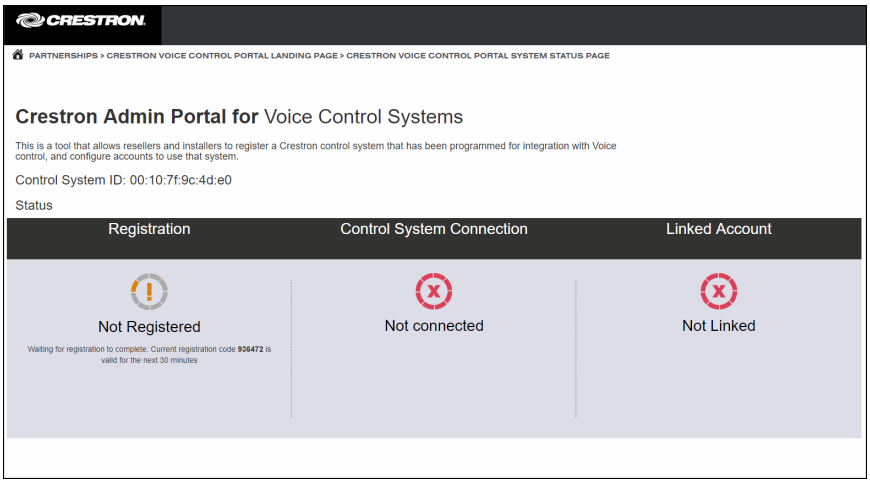
   - **United States:** voicereg-g-na.crestron.io/



3. In the web browser, perform these steps:
    a. In the **Registration** section, select **Register**.



    b. Record the registration code listed in the **Registration** section.

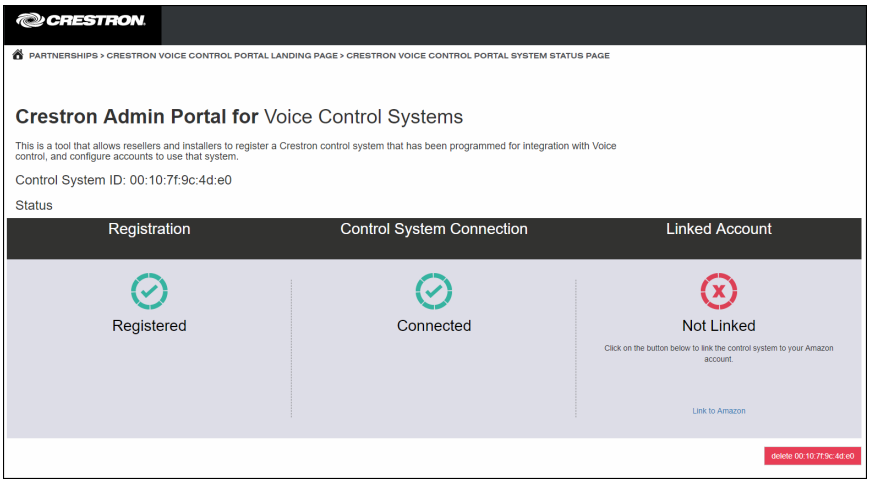


4. In the Crestron Home Setup app, enter the registration code in the **Registration Code** box and then select **Register**. If the registration credentials are valid, a dialog box is displayed stating that the registration was successful. Tap **OK** to continue.

> **NOTE:** In the web browser, the status in the **Control System Connection** section changes from **Not connected** to **Connected**.

5. In the web browser, sign in to link the voice control service with the control processor:

   NOTE: In the Crestron Home Setup app, a dialog box is displayed stating that the homeowner's Amazon® Alexa® voice control account or Google Assistant™ voice control account must be linked to the Crestron Home system. If the **Crestron Admin Portal for Voice Control Systems** page is not open, select the **Registration Portal** link to display the web page in a web browser.



   NOTE: To unlink the Crestron Home processor from the voice services provider, tap **delete [MAC Address]** (red button) at the bottom right of the page. The registration process must be completed again to relink the Crestron Home processor with the voice services provider.

   a. In the **Linked Account** section, select **Link to Amazon** or **Link to Google**.
   b. Follow the prompts to sign in to the homeowners Amazon or Google account.

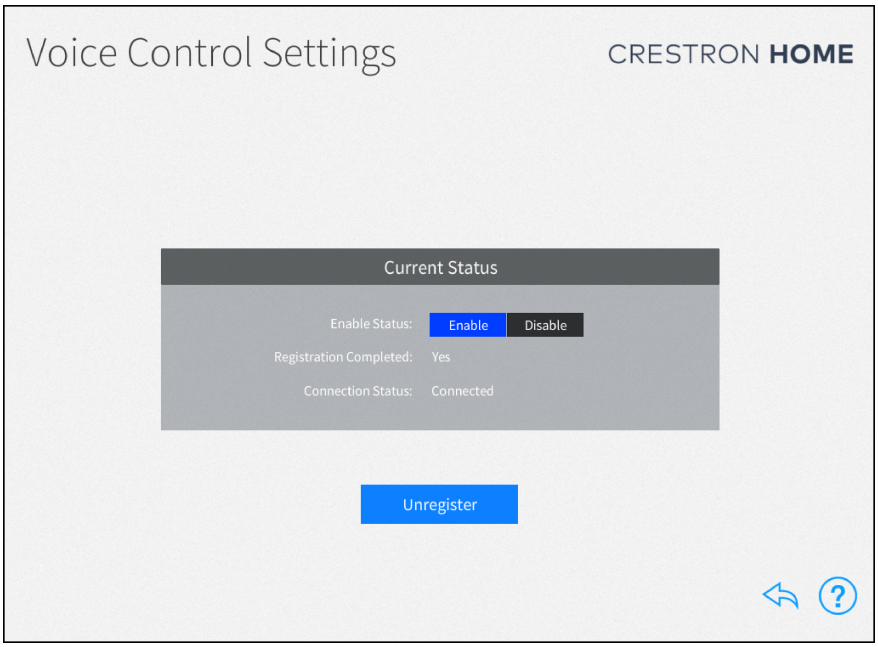
      NOTE:

      - For Amazon accounts, select the account type:
        - **Smart Home:** For most residential applications. If the account type is unknown, select **Smart Home**.
        - **Alexa for Business (AWS)** For Alexa for Business accounts. Alexa for Business accounts do not support the TSR-310 handheld remote.
      - In the web browser, the status in the **Linked Account** section changes from **Not Linked** to **Linked**.

6. The **Voice Control Settings** screen displays once the Crestron Home system is registered with a voice services account. The **Voice Control Settings** screen provides selections for viewing and configuring voice control settings. For details, refer to Configure Voice Control Services on page 612.

Configure Voice Control Services

Once the Crestron Home system is registered with a voice services account, the **Voice Control Settings** screen provides selections for viewing and configuring voice control settings.



The following settings may be viewed and configured:

- **Enable Status:** To turn on or off voice control, tap **Enable** or **Disable**.
- **Registration Completed:** Indicates whether or not the system is registered with the voice recognition service.
- **Connection Status:** Indicates the connection state between the system and the voice control service. If the system is enabled but unable to connect to the service, additional details are provided in the message logs.

> **NOTES:**
>
> - When the **Connection Status** is not **Connected**, the system is unable to connect to the voice control service. To fix this, navigate to the registration portal and delete the control system from the portal.
> - If the system is registered and connected, but voice commands are not working, ensure that Crestron is enabled on the voice service provider's app.

Remove Voice Control Services

Voice control services can be removed from the system and the voice control administration portal if the services are no longer used or if a Crestron Home processor is being replaced. Voice control services can be removed using the Crestron Home Setup app or a web browser.

NOTES:

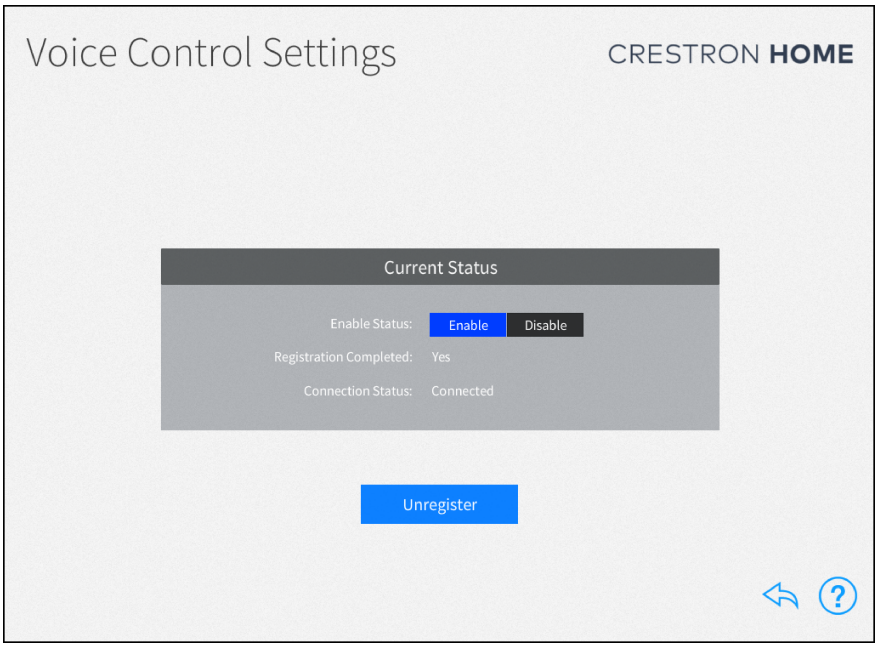
- The homeowner's Amazon or Google credentials may need to be entered to unregister the old processor.
- To enable or disable control of a specific room or load, navigate to the **Voice Control** tab in the configuration settings for the room or load. Loads without a **Voice Control** tab are not compatible with voice control.
- To enable voice services on a TSR-310 that has been added to the Crestron Home system, refer to the Performance UI for TSR-310 Operations Guide (Doc. 8410) at www.crestron.com/manuals.

Using the Crestron Home Setup App

Remove voice control services using the Crestron Home Setup app when the Crestron Home processor is available. The registration credentials are cleared from the system and the voice control administration portal.

To remove voice control services using the Crestron Home Setup app:

1. Select **Unregister**.



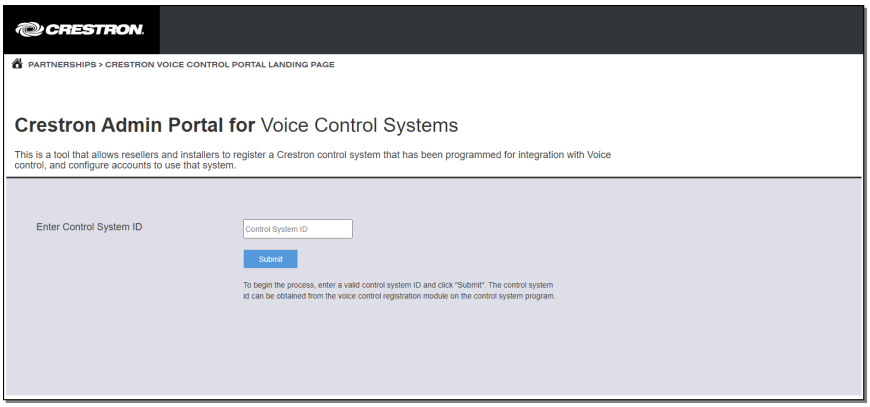
2. In the confirmation dialog, select **OK**.

Using a Web Browser

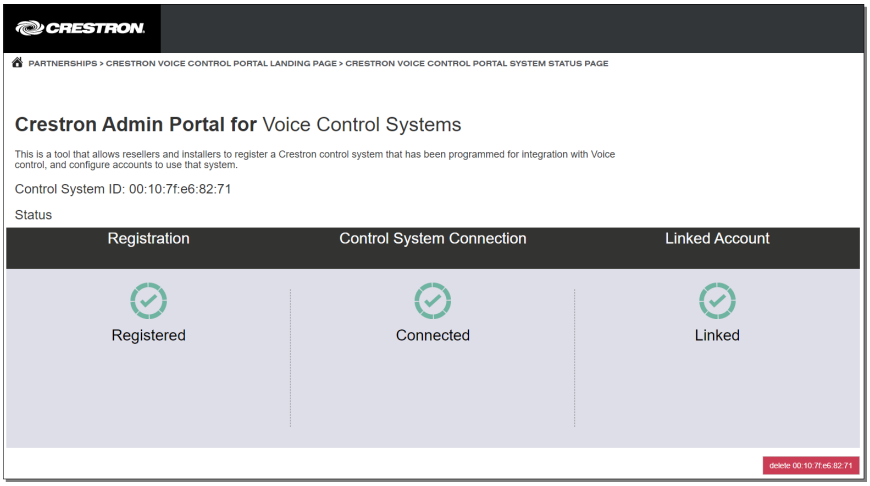
Use a web browser to remove voice control services when the Crestron Home processor is not available.

To remove voice control services using a web browser:

1. Go to the Crestron Admin Portal for Voice Control Systems:
   a. **Amazon® Alexa® Voice Control:** Go to https://voicereg-a-na.crestron.io.
   b. **Google Assistant™ Voice Control:** Go to https://voicereg-g-na.crestron.io.
2. Enter the control processor's MAC address into the **Enter Control System ID** box and then select **Submit**.



3. Select **Delete**.



4. In the confirmation dialog, select **Delete**.

To return to the previous screen, tap **Back**.

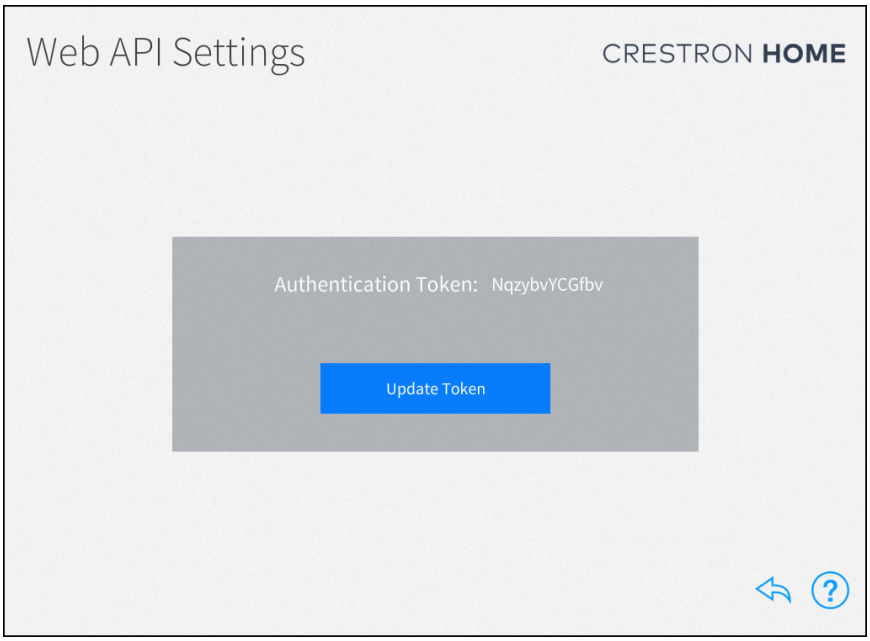
Web API Settings

Use the **Web API Settings** screen to view and update the Web API (Application Programming Interface) authentication token used to access the Crestron Home system's REST API interface. For details, refer to Crestron Shared Source Community / Code Blue (OLH ID 5651).

To view the **Web API Settings** screen, go to **Settings > System Control Options > Web API Settings**.

> **NOTE:** Use the authentication token to use the Josh voice control service with the Crestron Home system. To integrate Josh voice control, refer to Josh.ai and Crestron Home Integration (PDF).

To update the authentication token, select **Update Token** and then select **OK** to confirm the update. Devices that connect using the authentication token will need to be updated to use the new token.



To return to the previous screen, tap **Back**.

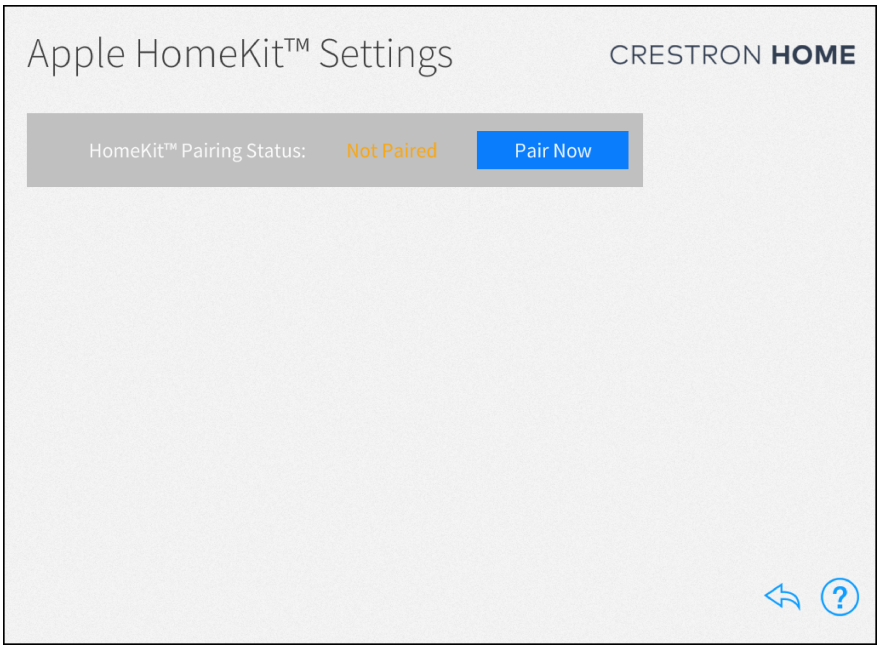
Apple HomeKit Settings

Use the **Apple HomeKit Settings** screen to control the pairing between the control processor and Apple HomeKit.

To view the **Apple HomeKit™ Settings** screen, select **Settings > System Control Options > HomeKit™ Settings**.

Pair

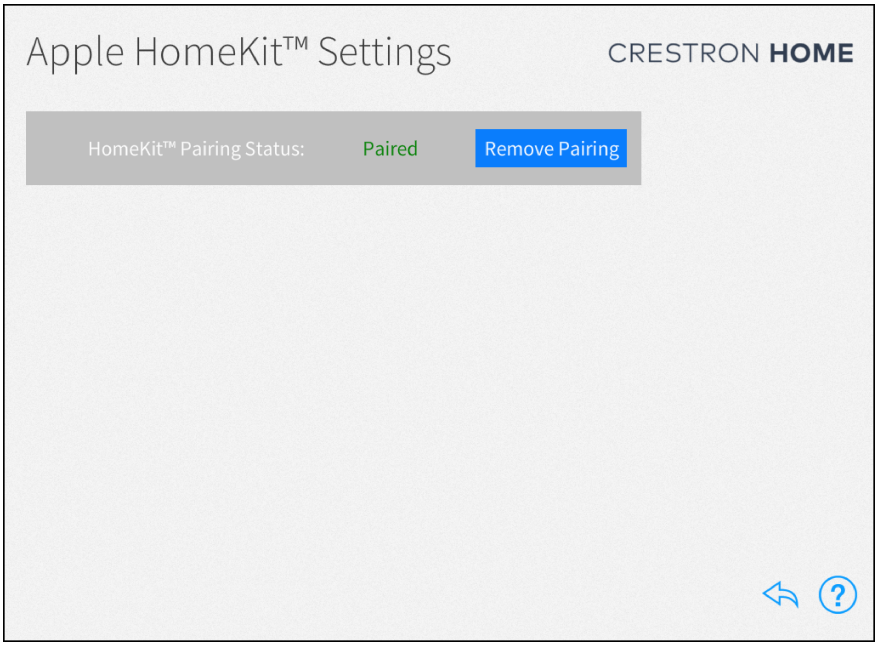
To pair the control processor with Apple HomeKit, select **Pair Now** and then follow the onscreen instructions. For details, refer to Pair Apple TV with Apple HomeKit on page 329.



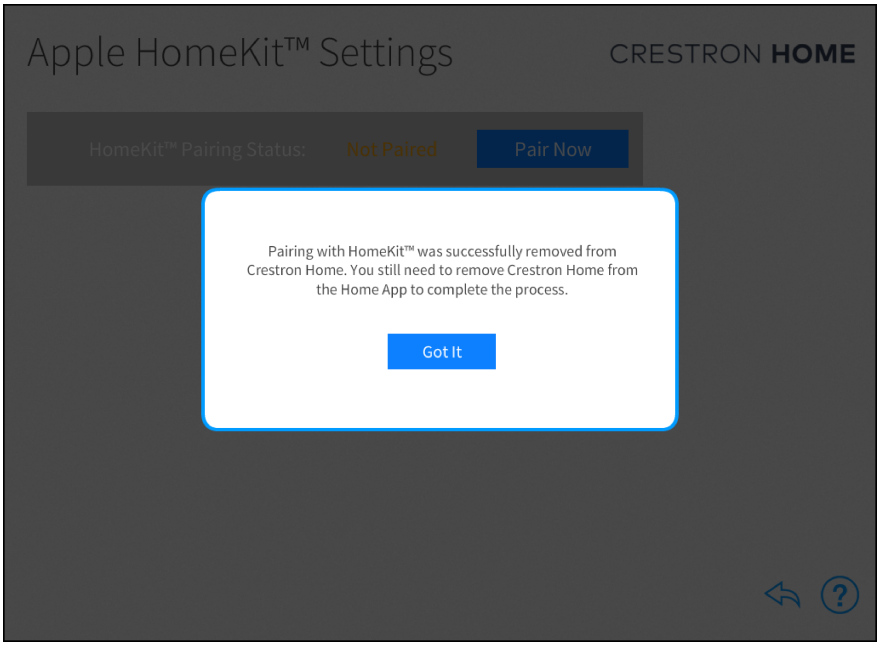
Remove Pairing

To remove the pairing between the control processor and Apple HomeKit:

1. Select **Remove Pairing**.



2. Use the Apple Home app to remove the Crestron Home bridge from and then select **Got it**.

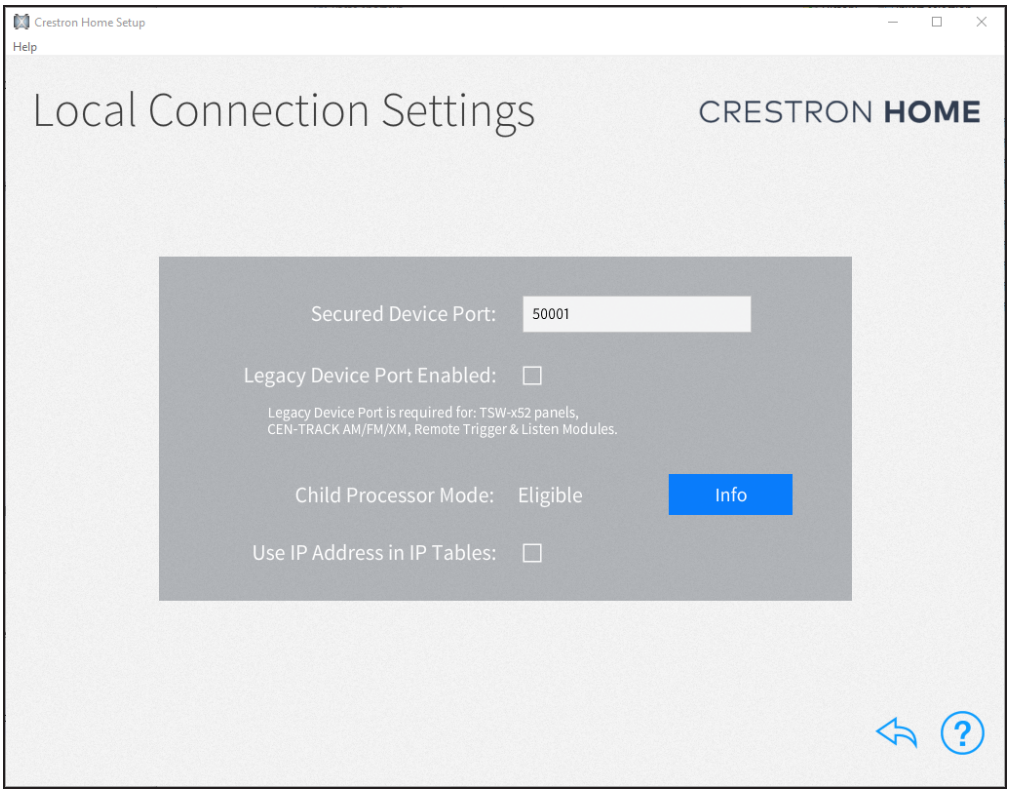


To return to the previous screen, tap **Back**.

Local Connection Settings

Use the **Local Connection Settings** screen to change the **Secured Device Port**, to turn on or off the **Legacy Device Port**., and to enable use of the IP Address in IP Tables.

To view the **Local Connection Settings** screen, select **Settings > System Control Options > Local Connection Settings**.



Secured Device Port

The Secured Device Port is used to communicate with Crestron User Interface Devices. The default port is 50001. Change the Secured Device Port if the default port is in use by the ISP and cannot be forwarded.

> **NOTE:** On User Interface Devices, the term Local Port is used in place of Secured Device Port.

To change the port:

1. Enter a port number in the Secured Device Port field.
2. Update the port on all Crestron User Interface Devices. For details, refer to User Interface Devices on page 156.

Legacy Device Port

The Legacy Device Port is used to communicate with Legacy Devices. The legacy devices are TSW-xx52 touch screens, CEN-TRACK AM/FM/XM devices, and Remote Trigger and Listen modules. The default setting for the Legacy Device Port is disabled in Crestron Home version 3.012.0125 and later.

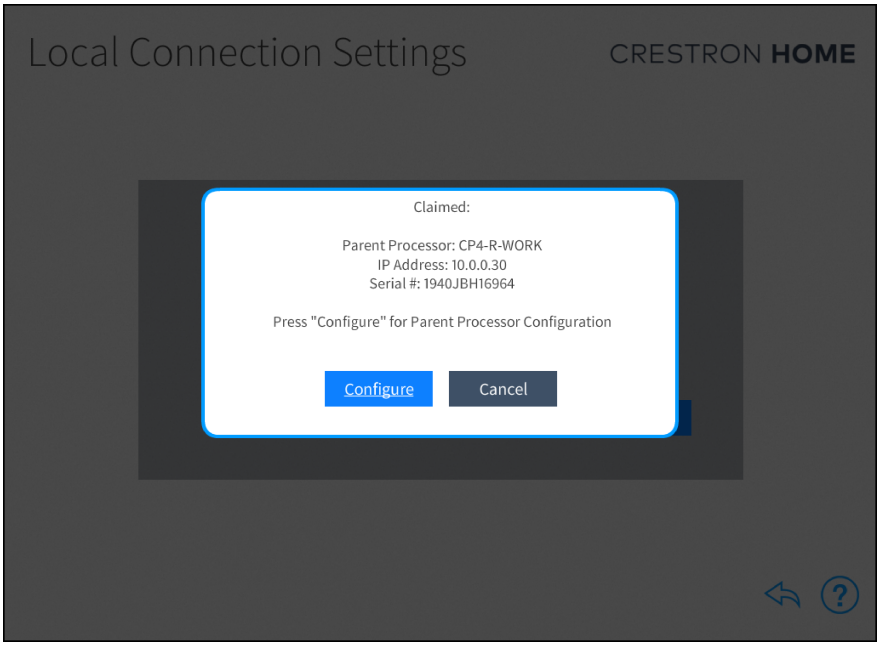
When upgrading systems with Legacy Devices to Crestron Home version 3.012.0125 and later, the Legacy Device Port is automatically enabled. If Legacy Devices are not in the system when upgrading, the Legacy Device Port is automatically disabled.

To turn the Legacy Device Port on or off, select or deselect **Legacy Device Port Enabled**.

Child Processor Mode

The **Child Processor Mode** indicates the status of the processor.

- **Eligible:** The control processor is not a parent processor and is not claimed as a child processor.
- **Ineligible:** The control processor is a parent processor or is claimed as a child processor.
- **Claimed:** The control processor has been acquired by a parent processor. Select **Info** to view the **Parent Processor** name, **IP Address**, and **Serial Number**. Additionally, select **Configure** to close the current configuration window and open a new configuration window for the other processor in the Crestron Home Setup app.



Use IP Address in IP Table

When commissioning a device, Crestron Home defaults to the Host Name of the processor in IP table entries.

Select the **Use IP Address in IP Table** box to use the IP Address instead.

NOTES:

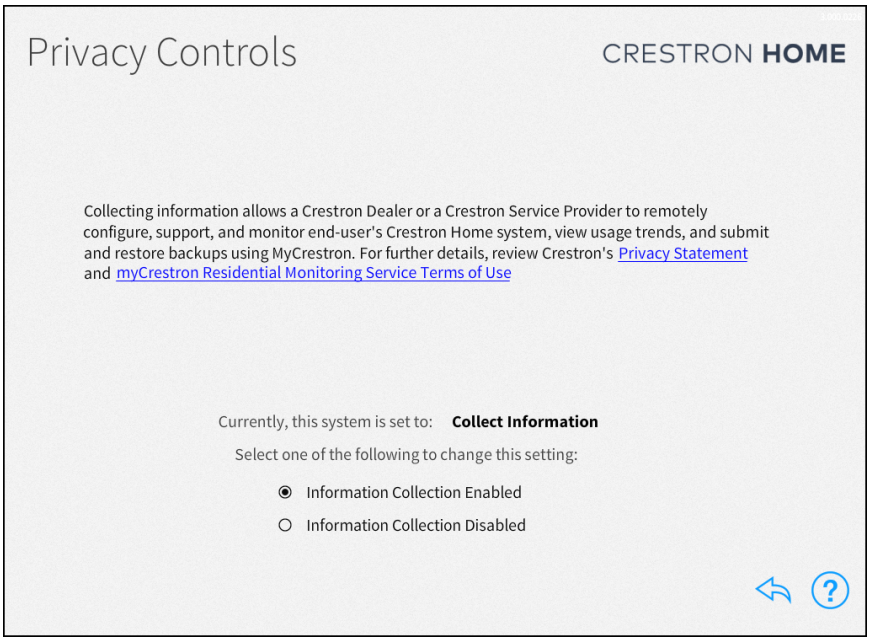
- Devices that do not use CIP cannot be used with this feature.
- Devices commissioned prior to modifying this setting will not change automatically. To change that device's IP table, **Repair** the device's connection settings. For details, refer to Device in a Crestron Home System on page 155

Privacy Controls

Use the **Privacy Controls** screen to view **Crestron's Privacy Statement** and **MyCrestron Residential Monitoring Service Terms of Use** and to enable or disable the collection of information.

Collecting information allows a Crestron Dealer or a Crestron Service Provider to remotely configure, support, and monitor a customer's Crestron Home system. Additionally, they can use the myCrestron Residential Monitoring Service to view usage trends, create system backups, and restore system backups.

To view the **Privacy Controls** screen, select **Settings** > **Privacy Controls**.



NOTES:

- myCrestron backups are erased when information collection is disabled.
- Disabling information collection prevents the Crestron Home processor from utilizing any backup capabilities, usage statistics, and preemptive system monitoring.

To change the information collection setting, select **Information Collection Enabled** or **Information Collection Disabled** and then select **Continue**. Information collection is enabled by default.

To return to the previous screen, tap **Back**.

Software Update

Update software for the Crestron Home control processor or the devices in the system using the Software Update screen.Use the **Software Update** screen to check for and download software updates for the Crestron Home system and connected devices. System updates must be initiated manually.

> **NOTE:** All software updates must be initiated manually.

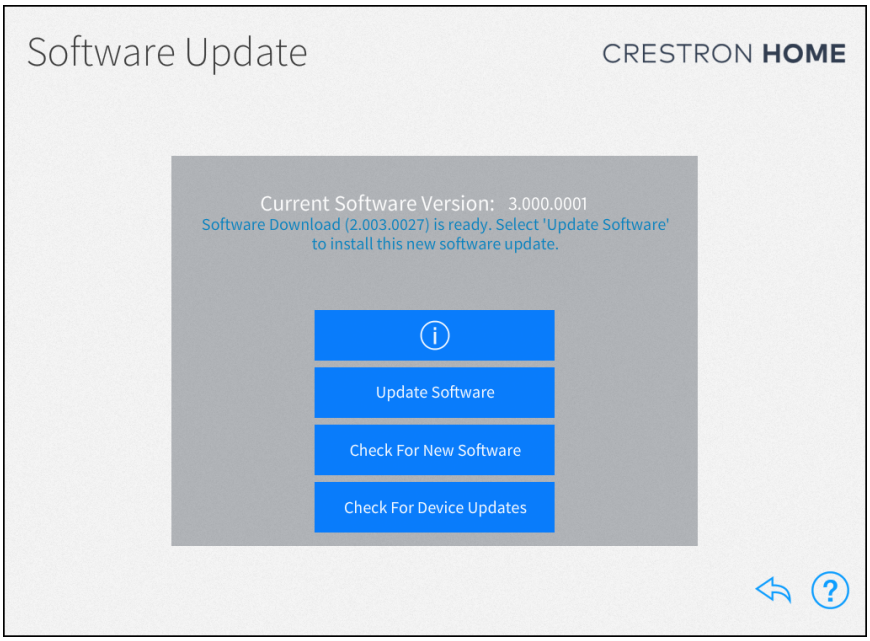
To view the **Software Update** screen, select **Settings** > **Check for Updates**.

Update the Crestron Home Processor Software

To update Crestron Home processor firmware, follow these steps:

> **NOTE:** A software update may take up to 30 minutes to complete, and the Crestron Home processor reboots several times throughout the update process. Therefore, updates should be performed when the system is not in use.

1. Tap **Check for Updates**. The **Software Update** screen displays.



2. To search for updates, tap **Check for New Software**. The control processor searches for software updates and indicates that updated software is available or that the software is up to date.

   > **NOTE:** Tap **i** to view the software release notes.

3. Tap **Download Update**, and then tap **OK** in the confirmation dialog.

   > **NOTE:** The update does not install automatically.

4. Tap **Update Software**. A confirmation dialog displays the release notes.
5. Tap **Update**. The Crestron Home processor reboots when the software update is complete.

   > **CAUTION:** Communication with the Crestron Home processor will be lost during the software update. Do not power down the Crestron Home processor during the software update.

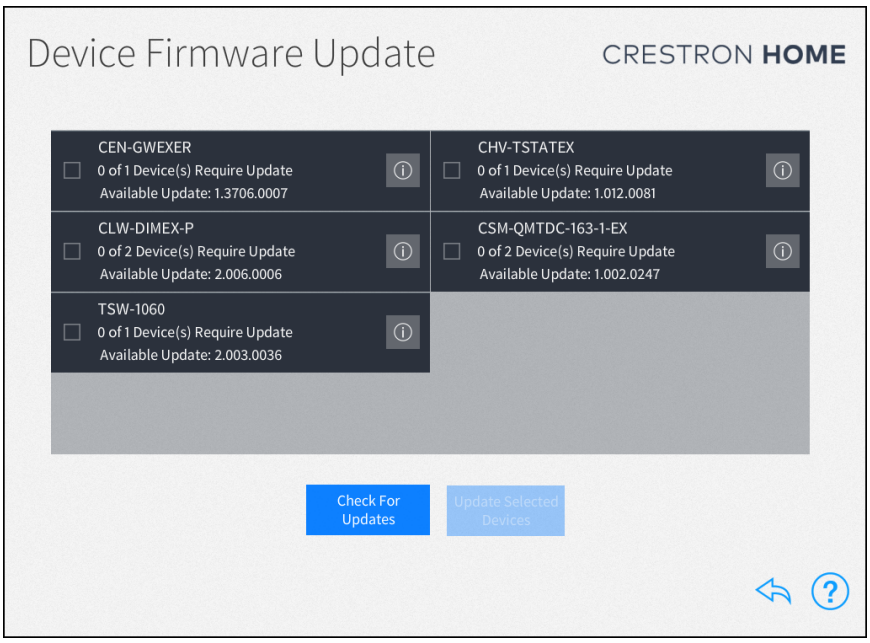
Update Device Firmware

> **NOTE:** To update Crestron Driver devices, refer to Update Crestron Drivers on page 238.

To update device firmware, follow these steps:

1. Tap **Check for Device Updates**. The Crestron Home system searches for available firmware updates. Once the scan is complete, the **Device Firmware Update** screen presents a list of devices with recommended firmware updates.

   > **NOTES:**
   >
   > - To rescan for new device firmware updates, tap **Check For Updates**.
   > - To view release notes for the firmware update, tap the information button ⓘ next to the device.



2. Select the devices you want to update.
3. Tap **Update Selected Devices**.

> **NOTES:**
>
> - The TSW-xx60 series touch screen running Smart Graphics mode will appear as "TSW-xx60(Legacy)" while the TSW-xx60 series touch screen running Crestron Home will appear as "TSW-xx60."

- The TSR-310 running Performance UI-OS 2S mode will appear as "TSR-310(Legacy)" while the TSR running Performance UI-OS 3 (Crestron Home) will appear as "TSR-310."

To return to the previous screen, tap **Back**.

myCrestron Residential Monitoring Service

Use the myCrestron Residential Monitoring Service (RMS) to back up configurations an, download configurations, view logs, and generate Deploy Codes for Crestron Home processors.

Accessing myCrestron Residential Monitoring Service

To access myCrestron RMS, go to portal.my.crestron.com.

Accessing myCrestron Residential Monitoring Service portal and the Crestron Home Configurator requires the following:

- The user must be a Crestron residential dealer.
- The dealer must be subscribed to the myCrestron Residential Monitoring Service.
- The dealer administrator must provide the user access to the myCrestron Residential Monitoring Service portal.

Subscribing to myCrestron RMS

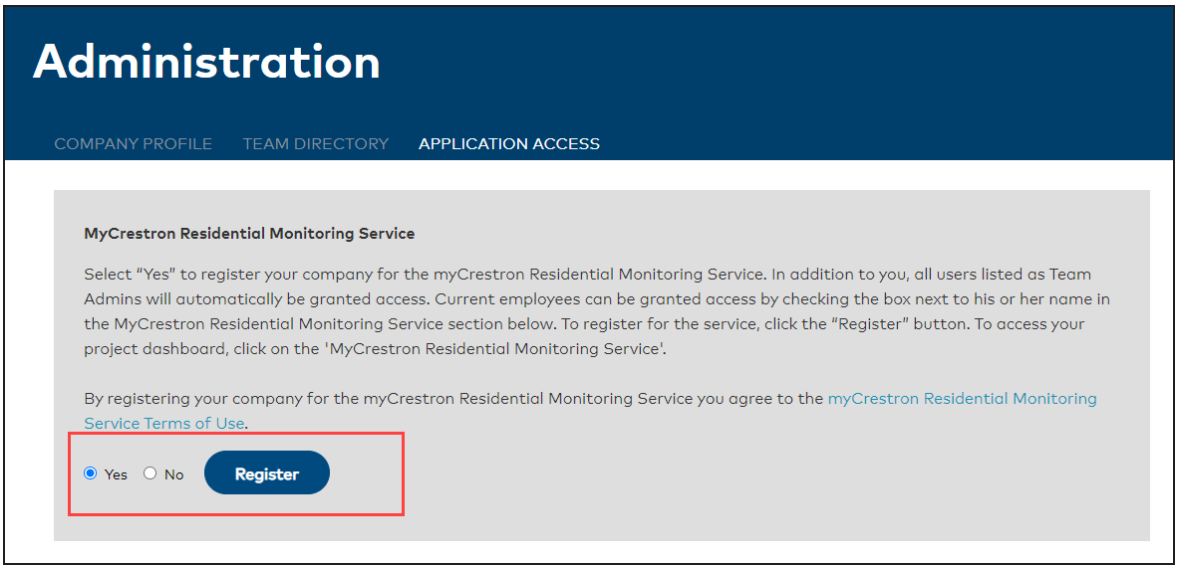
Dealer administrators can subscribe to myCrestron RMS by following the instructions below.

1. Log in to Crestron.com as an administrator.
2. Select .



3. Select **Administration**.
4. Select **Application Access**.
5. Review the terms of use and select **Yes**.

6. Select **Register**.



Your dealership is now subscribed to myCrestron RMS.

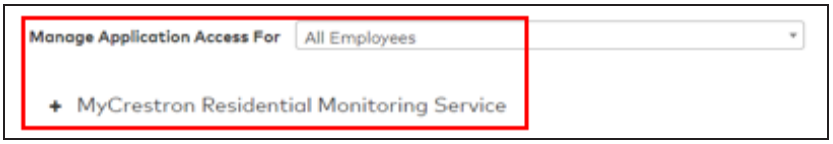
Setting Employee Permissions

Dealer administrators can provide myCrestron RMS access to other employees by following the instructions below.

1. Log in to Crestron.com as an administrator.
2. Select .



3. Select **Administration**.
4. Select **Application Access**.
5. Scroll down to **Manage Application Access For**.



6. Select the **+** to expand the list.

7. Select any employees that should have myCrestron RMS access.



The selected employees can now access myCrestron RMS.

Configuration Backups

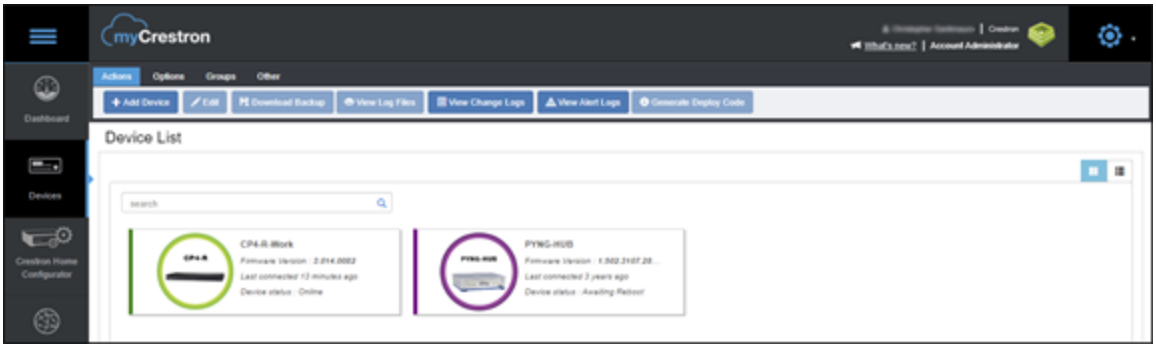
The Crestron Home system automatically backs up the system configuration and log files and stores them in the myCrestron Residential Monitoring Service.

System configuration backups contain settings for the control system, devices, and drivers that are required to completely restore the system; including third-party driver settings that are stored in the /user/Data/ThirdParty/ folder.

Managed Devices

Processors in the **Device List** display the Crestron Home OS firmware version, connection status, and device status.

To view the managed devices, select **Devices**.



Status

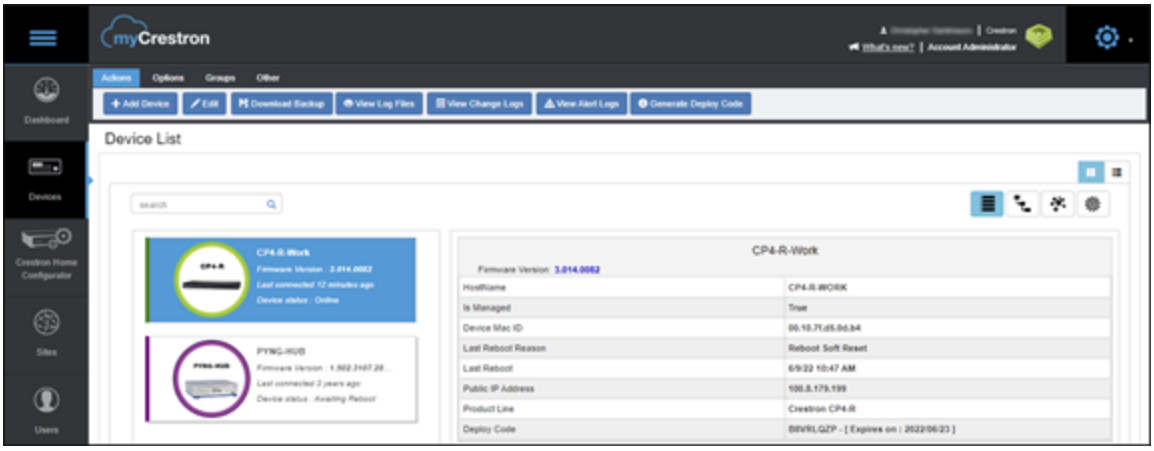
The processor status is indicated by the color of the device box in the device list:

- **Green:** The processor is online.
- **Red:** The processor is offline. Refer to Troubleshooting on page 636.

- **Purple:** The reboot command was initiated from the myCrestron Residential Monitoring Service and the processor is waiting to restart. The device status updates when the processor initiates communication with myCrestron.
    - **Firmware 3.015.0124 or later:** The processor will restart within 20 minutes.
    - **Firmware 3.014.0087 and earlier:** The processor will restart within 25 minutes.
- **Yellow (missed communication):** The processor has not communicated with myCrestron for 40 minutes. Refer to Troubleshooting on page 636.
- **Yellow (partially online):** The processor is online but an ancillary device is offline. Refer to Troubleshooting on page 636.
- **Blue:** The processor is not monitored.

Select a device in the Device List to view the device details. The device details such as the Crestron Home OS firmware version, hostname, MAC address, last reboot reason and time, IP address, and Deploy code.

> **NOTE:** The Deploy code is displayed after it is created. To generate a Deploy code, refer to Generate a Deploy Code on page 634.



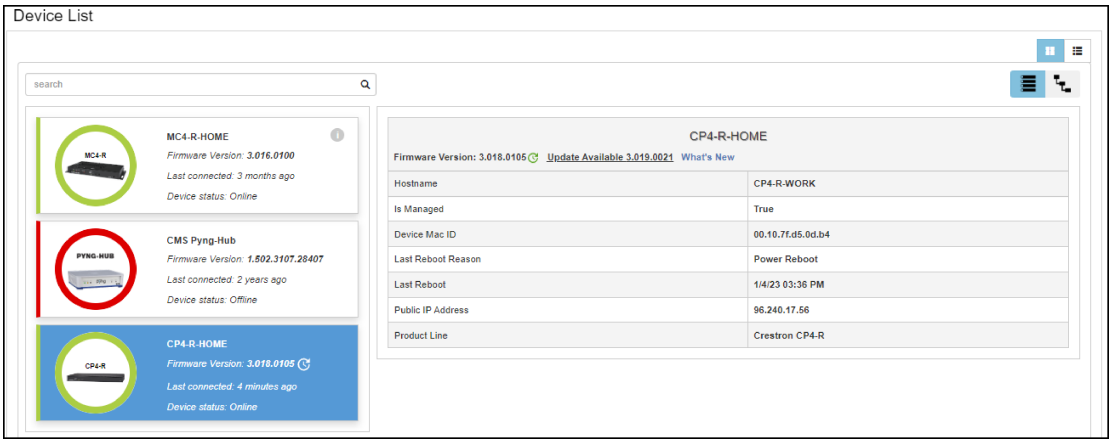
Firmware Update

Update the firmware for the Crestron Home processor through the myCrestron RMS. When an update is available, the **Update** is displayed and the available firmware is displayed in the device details.

> **NOTE:** Firmware updates are available for Crestron Home processors running firmware 3.018.0123 or later.

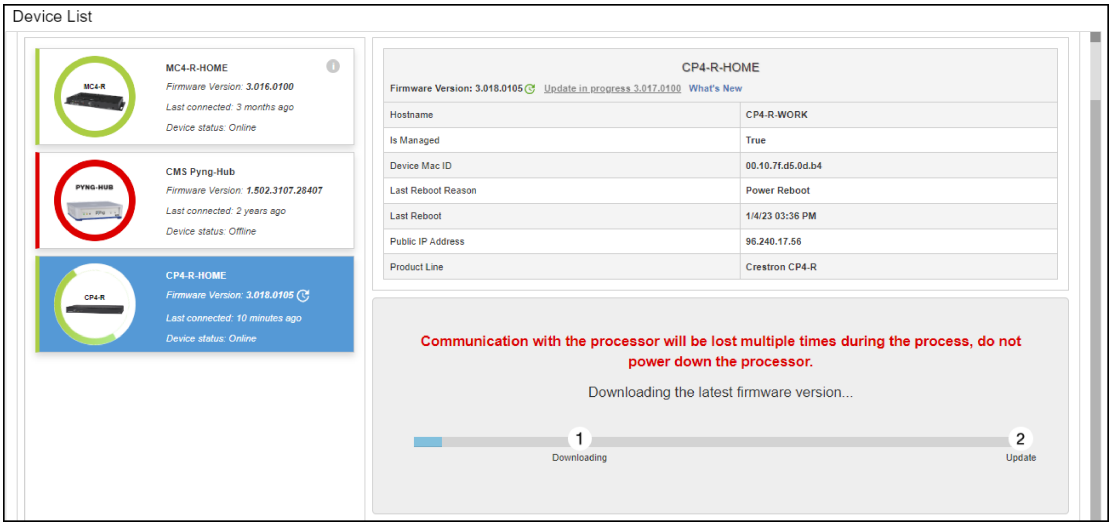
To update firmware:

1. Select a device in the **Device List**.



2. To view the release notes for the firmware, select **What's New**.
3. Select **Update Available** and then confirm the update.
    a. **Downgrade:** A notice is displayed indicating that the configuration on the processor is not compatible with the firmware and that the configuration will have to be recreated or restored. To downgrade the firmware, select Proceed.
    b. **Upgrade:** A notice is displayed indicating that the firmware will be updated. To update the firmware, select **Yes**.
    c. **Beta Firmware:** A notice is displayed indicating that prerelease firmware will be installed and that the software should not be installed on live systems. To update to beta firmware, select **Yes**.

4. The update status is displayed below the device details.



Crestron Home Configurator

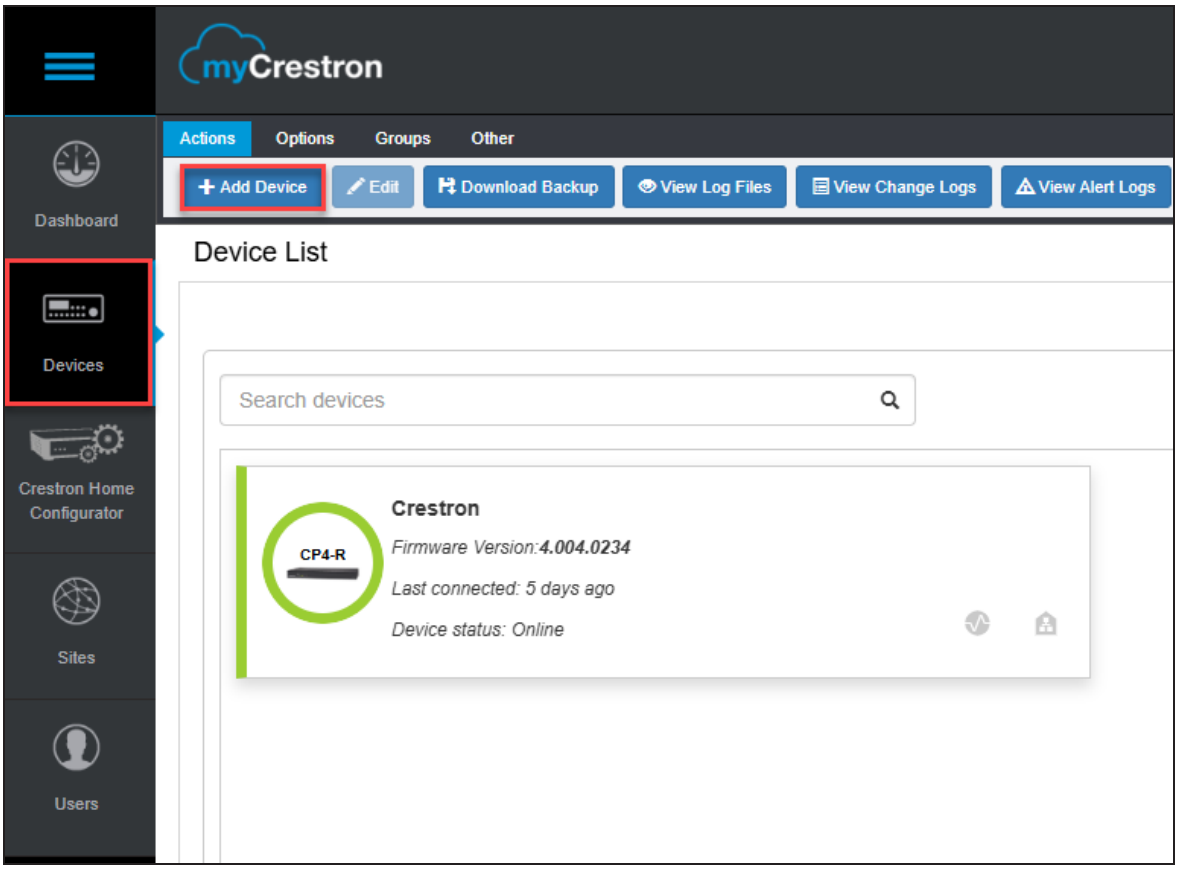
Use the Crestron Home Configurator to create a system configuration with a computer. Unlike the Crestron Home Setup app, the configuration can be created before arriving on-site and can be used to generate a variety of detailed configuration reports. After the system is installed, use a Deploy code to transfer the configuration onto the Crestron Home processor.

To create a configuration, select **Crestron Home Configurator**. For details, refer to Crestron Home Configurator on page 642.

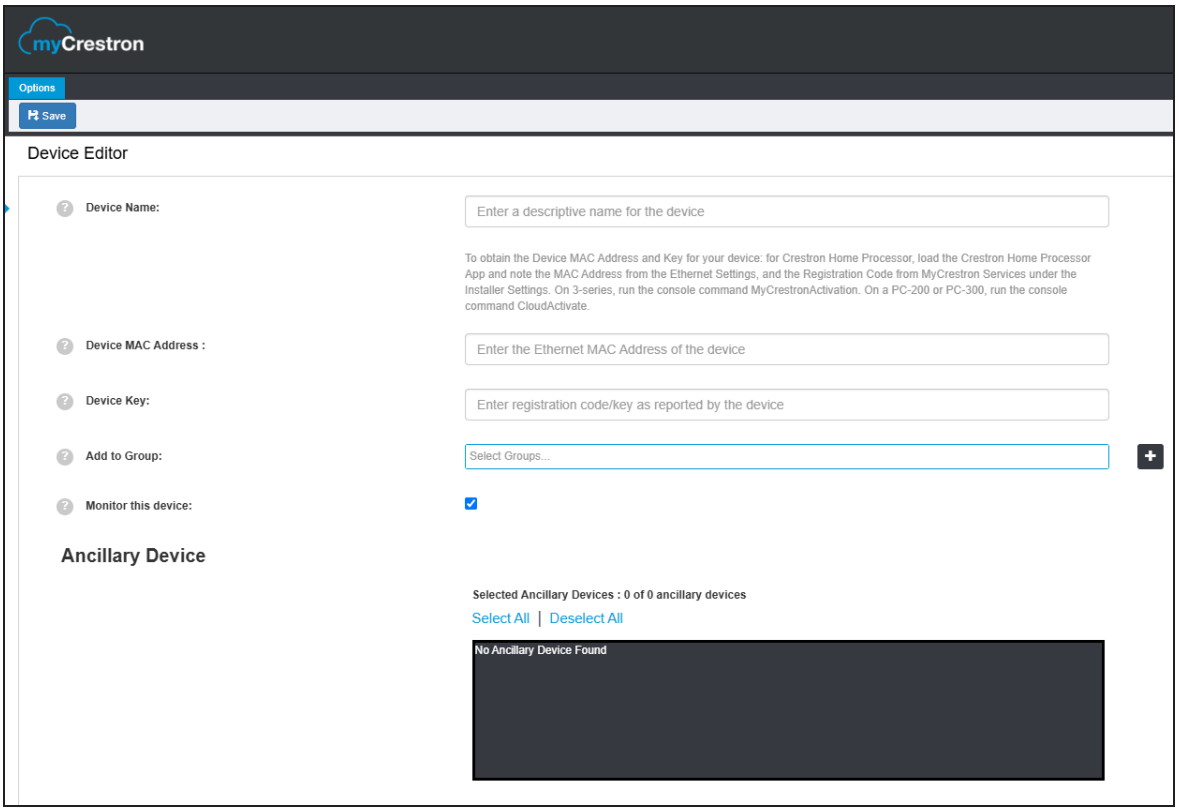
Add the Crestron Home Processor

To add the processor to the myCrestron Residential Monitoring Service:

1. Go to portal.my.crestron.com.
2. Select **Devices** and then **Add Device**.



3. Enter the required information.



- **Device Name:** Enter a descriptive name for the Crestron Home processor.

  > **NOTE:** To obtain the Device MAC Address and Device Key, select **Settings >System Configuration > myCrestron RMS Services**. For details, refer to myCrestron RMS Services on page 574.

- **Device MAC Address:** Enter the MAC address.
- **Device Key:** Enter the registration code.
- **Add to Group:** (Optional) To add the Crestron Home processor to a group, select a group or select **Add** and then create a group.
- **Monitor the device:** Select to turn on remote monitoring for the Crestron Home processor.
- **Ancillary Device:** (Optional) Select any ancillary devices that are connected to the Crestron Home processor.

4. Select **Save**.

The processor is now available in the RMS.

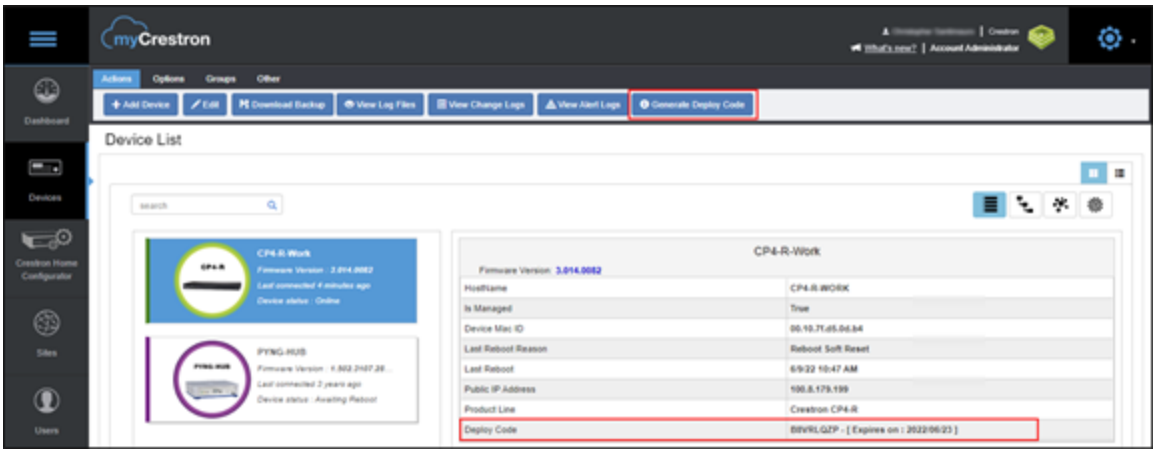
Generate a Deploy Code

Generate a Deploy Code that can be used when replacing or restoring a Crestron Home processor.

To generate a Deploy Code:

1. Go to portal.my.crestron.com.
2. Select  **Devices** and then select a processor.
3. The Deploy Code is displayed in the system information. If the deploy code is not shown or to create a new Deploy Code, select **Generate Deploy Code**.

   > **NOTE:** The deploy code expires after 14 days.



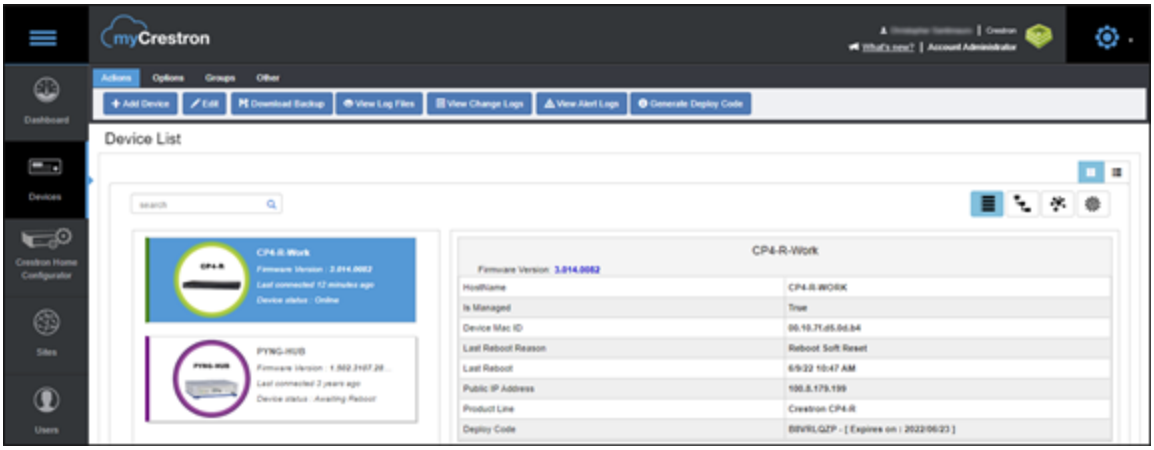
Download Backup Files

Download backups of system configurations, golden configurations, log files, and plog files from the myCrestron Residential Monitoring Service.

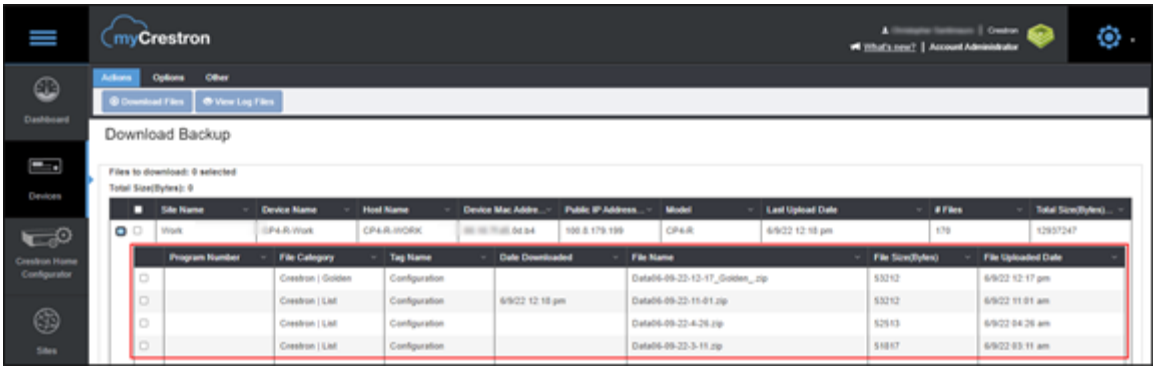
> **NOTE:** To manually back up configuration and log files, refer to myCrestron RMS Services on page 574.

To download backup files:

1. Go to portal.my.crestron.com.
2. Select **Devices** and then select a processor.



3. In the **Actions** menu, select Download Backup **Download Backup**.
4. Select **Expand** for the control processor to display the configurations and log files that are available for download.
5. Select configuration or log files to download.



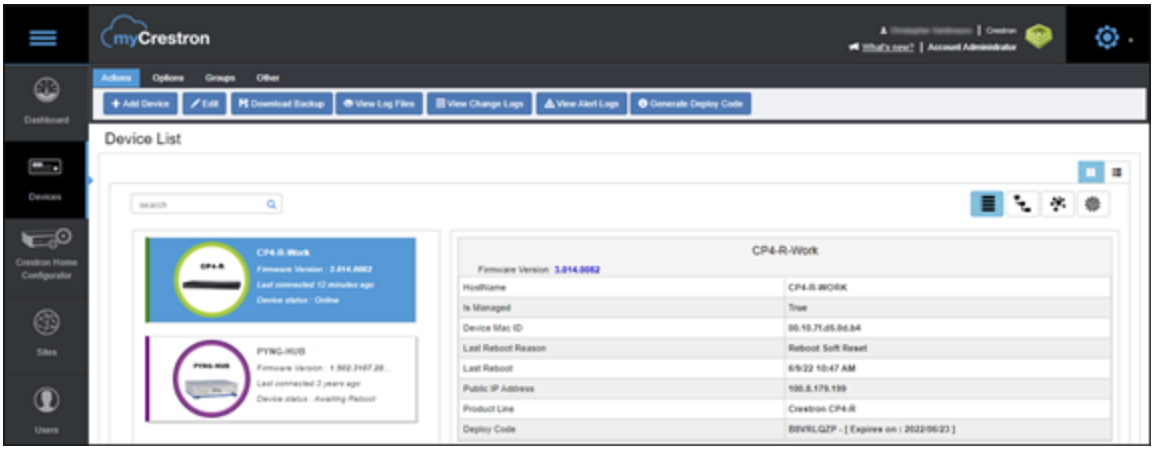
6. To download the files, select Download Files **Download Files** and then **Yes**.

Restart the Processor

> **NOTE:** For processors using Crestron Home version 3.015.0124 and later, the processor restarts within 20 minutes. For processors using Crestron Home version 3.014.0087 and earlier, the processor restarts within 25 minutes.

To restart a processor:

1. Select **Devices** and then select a processor.



2. Select **Other**.
3. Select **Reboot Device** and then select **Proceed** to confirm. A toast message displays the time that the device will restart.

Troubleshooting

This section contains troubleshooting steps to correct issues with the myCrestron Residential Monitoring Service. If further assistance is required, contact Crestron True Blue Support.

Offline or Missed Communications

The processor is not connected to the internet or the program is not running.

Cannot Connect to the Internet

- Check the connection to the DNS
- Ping a known

Program is Not Running

Restart the control processor.

Does not come online after restart

The processor is offline or missed communications. Go to Offline or Missed Communications on page 636.

Partially Online

The ancillary device is offline or there is a communications issue between the processor and the ancillary device.

Ancillary Device is Offline

- Check the network wiring.
- Restart the ancillary device.

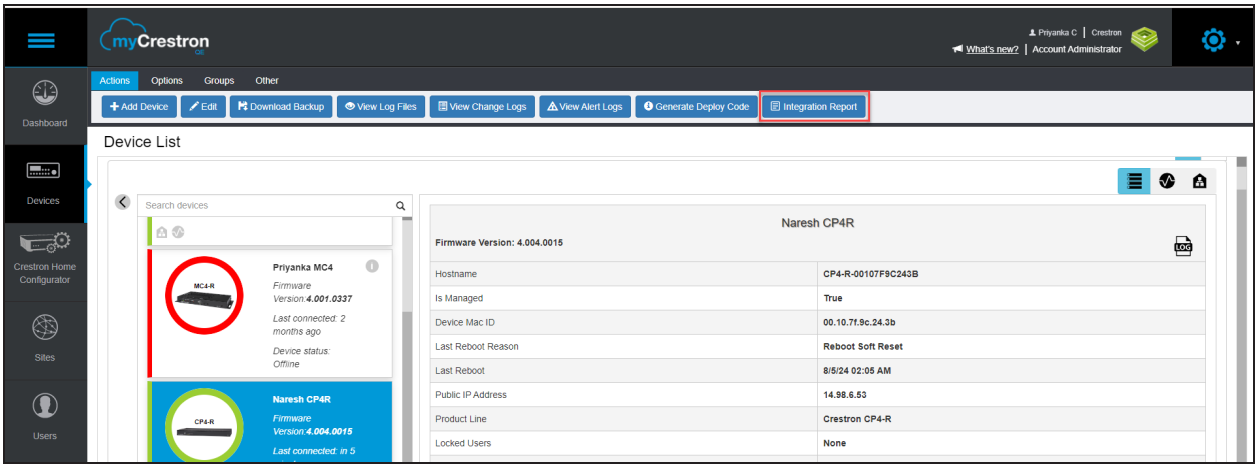
Communications Issue

- Check the network wiring.
- Restart the control processor.

Integration Report

Generate a complete system report, including all connected devices and functions, by selecting **Integration Report**. Allow all processor information to load before generating the report.

> **NOTE:** This report is required to program SIMPL Intregration Modules. For details, refer to Crestron Home SIMPL Integration Modules on page 1172.



To generate a PDF report, select **Export to PDF**.

To generate an XLS report, select **Export to XLS**.

The report can be filtered by rooms and device types. Select the **Rooms** or **Types** fields, then check the desired filters. Select **Generate Report** to create the filtered report.



Example Integration Report Page

LIGHTING LOADS

Name	Load ID	Room Name (ID)	Load Control Type	Gateway
Ceiling Light	52722	Amro's Room (52080)	Dimmable	CAEN-BLOCK 1
Tunable Light	57090	Amro's Room (52080)	Tunable	GWDL
C1 CN Dim Light 1	94916	Amro's Room (52080)	Dimmable	Child-1
C1 EX Dim Light 1	94917	Amro's Room (52080)	Dimmable	Child-1
C1 EX Sw Light 1	94918	Amro's Room (52080)	Switched	Child-1
C1 EX HZ Sw Light 1	94919	Amro's Room (52080)	Switched	Child-1
C1 DMX Sim-1 Light	94920	Amro's Room (52080)	Dimmable	Child-1
C1 DMX Sim-2 Light	94921	Amro's Room (52080)	Dimmable	Child-1
C1 DALI Light	94922	Amro's Room (52080)	Dimmable	Child-1

LIGHTING SCENES

Name	Scene ID	Room Name (ID)	Visible Room Name (ID)	Fade Time	Affected Loads
All On	53224	Amro's Room (52080)	Amro's Room (52080)	1 Sec.	Amro's Room / Ceiling Light (52722) Amro's Room / Tunable Light (57090)
All Off	53225	Amro's Room (52080)	Amro's Room (52080)	1 Sec.	Amro's Room / Ceiling Light (52722) Amro's Room / Tunable Light (57090)
Circadian	53226	Amro's Room (52080)	Amro's Room (52080)	0 Sec.	
Solar Sync	57495	Amro's Room (52080)	Amro's Room (52080)	0 Sec.	
All Dim Renamed Dimmer	59873	Amro's Room (52080)	Amro's Room (52080)	3 Sec.	Amro's Room / Ceiling Light (52722) Amro's Room / Tunable Light (57090)
Tunable New Tune	83889	Amro's Room (52080)	Amro's Room (52080)	4 Hr.	Amro's Room / Ceiling Light (52722) Amro's Room / Tunable Light (57090)

Remote System Access

Enable remote system access to control, update, and configure the system remotely.

IMPORTANT NOTE: Remote system access for the Crestron Home app on mobile devices has been replaced with a secure, cloud-based remote access service. Port mapping is not required.

- To connect a mobile device, refer to User Interface Devices on page 156.
- After setting up secure remote access, remove port mapping from the router.
- To connect remotely for system configuration, set up a secure VPN connection to the customers house. If necessary, port mapping can be used.

To enable remote system access, complete these procedures:

- Create a myCrestron Domain Name on page 639
- Link the Processor with a myCrestron Domain Name on page 640
- Configure Port Mapping on a Router on page 641

NOTE: To turn on remote access on the customer's mobile devices, refer to User Interface Devices on page 156.

Create a myCrestron Domain Name

To create a myCrestron domain name:

1. Go to mycrestron.com.
2. Select **Register Domain**.

3. Enter the required information in the **Add a new Subdomain** page.
    - **Domain Name**: The subdomain name that will be used for remote access to the system. The domain name is a subdomain of mycrestron.com, for example, the domain name "CustomerExampleHome" will use the URL CustomerExampleHome.mycrestron.com for remote access to the system.

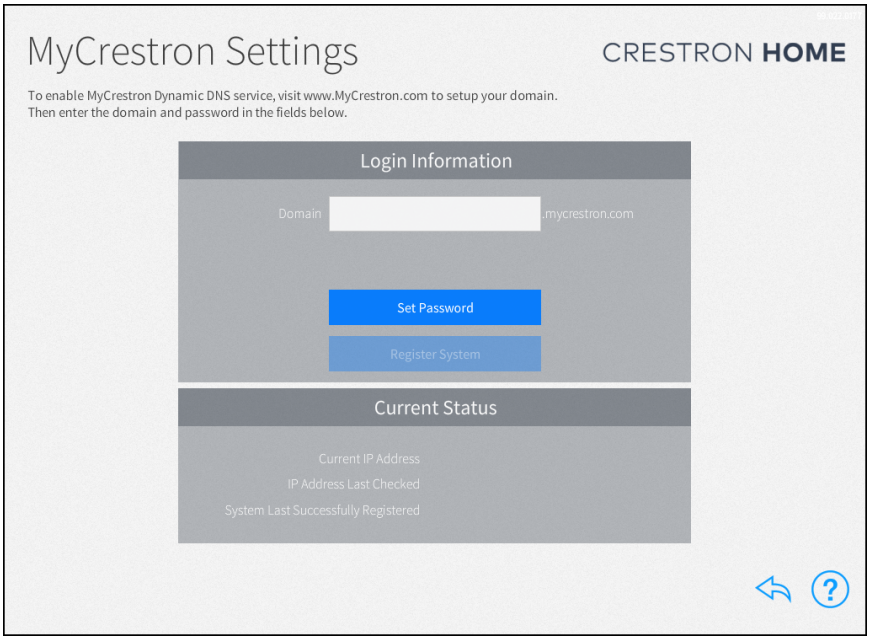
      > **NOTE:** A message is displayed if the domain name is already in use.

    - **Domain Password**: The password used to protect the system from access by others. For example, it prevents someone from updating the IP Address of the subdomain.
    - **Project Name**: The descriptive name of the project.
    - **Customer Name**: The name of the customer.
    - **Notes**: Information that may be important in the future and help differentiate different systems for the same customer.
4. To register the domain name, select **Submit**.

Link the Processor with a myCrestron Domain Name

To link the Crestron Home processor with a myCrestron domain name:

1. Go to **Settings > System Control Options > MyCrestron Dynamic DNS Service**.



2. Enter the myCrestron domain name in the **Domain** box.

3. Select **Set Password** and then enter the admin credentials for the processor in the **Admin Username** and **Admin Password** box. Enter the password for the myCrestron domain name in the **New Password** and **Confirm Password** box and then select **OK**.
4. Select **Register System**.

Configure Port Mapping on a Router

Many routers do not allow for direct port forwarding of common ports, including 80, 443, 23, and others. Port mapping is ideal in this scenario, as an arbitrary external port is forwarded to the internal port being used.

For example, port 80 (internal) to port 80 (external) may be blocked, but mapping from port 8080 to port 80 or port 8081 to port 80 is allowed.

Map the following ports to ensure proper functionality.

> **NOTE:** Only map ports that are required for the necessary functions.

- **50001:** Used to communicate with the Crestron Home App.
- **41796 (SCIP):** Secure Cresnet over Internet Protocol. Used to communicate with the Crestron Home Setup app.
- **443 (HTTPS):** Used to communicate with the Crestron Home Setup app.

  > **NOTE:** If the router is not capable of port mapping, change the processor's HTTP port using the `webport` command using the Text Console tool in Crestron Toolbox software.

Crestron Home Configurator

Use the Crestron Home Configurator to create a system configuration with a computer. Unlike the Crestron Home Setup app, the configuration can be created before arriving on-site and can be used to generate a variety of detailed configuration reports. After the system is installed, use a Deploy code to transfer the configuration onto the Crestron Home processor.

Requirements

To access the myCrestron Residential Monitoring Service portal and the Crestron Home Configurator:

- The user must be a Crestron residential dealer.
- The dealer must be subscribed to the myCrestron Residential Monitoring Service.
- The dealer administrator must provide the user access to the myCrestron Residential Monitoring Service portal.

Open the Crestron Home Configurator

To open the Crestron Home Configurator, perform these steps:

1. Go to portal.my.crestron.com.
2. Select **Crestron Home Configurator**.

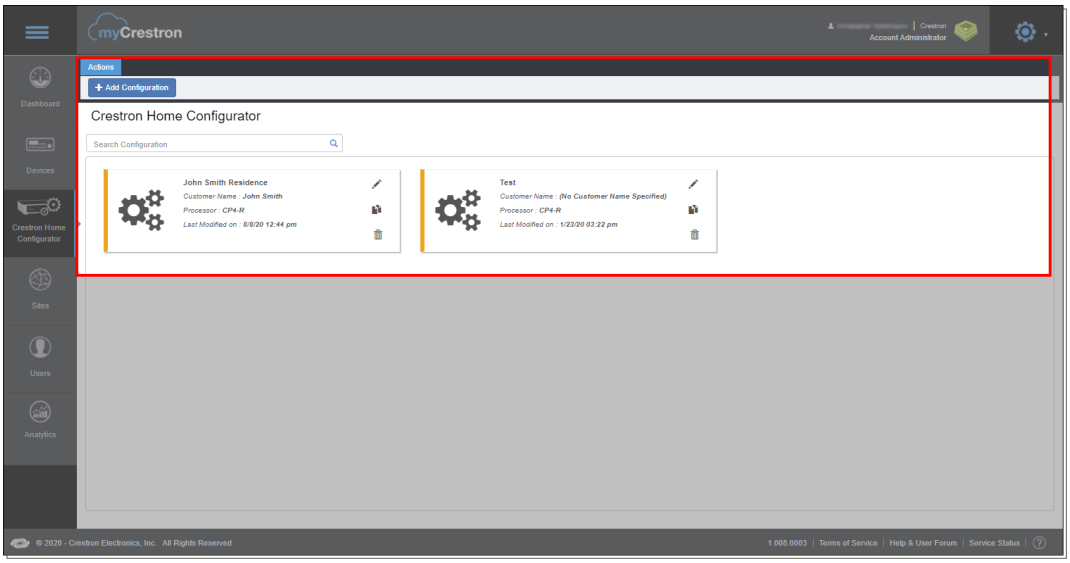


3. The **Crestron Home Configurator** screen is displayed. Each configuration displays the system name, customer name, processor type, and the date the configuration was last modified.

Create and Manage Configurations

The **Crestron Home Configurator** screen displays the created configurations. Each system configuration displays the system name, customer name, processor type and the date of the last modification.

For each configuration, **Edit**, **Make a copy**, and **Delete** functions are provided.



Add a Configuration

To create a new configuration, perform these steps:

1. Select **Add Configuration**.
2. The configuration is created and then opened. The **Configuration** tab is displayed. To edit the configuration, refer to Configuration Tab on page 645.

Open a Configuration

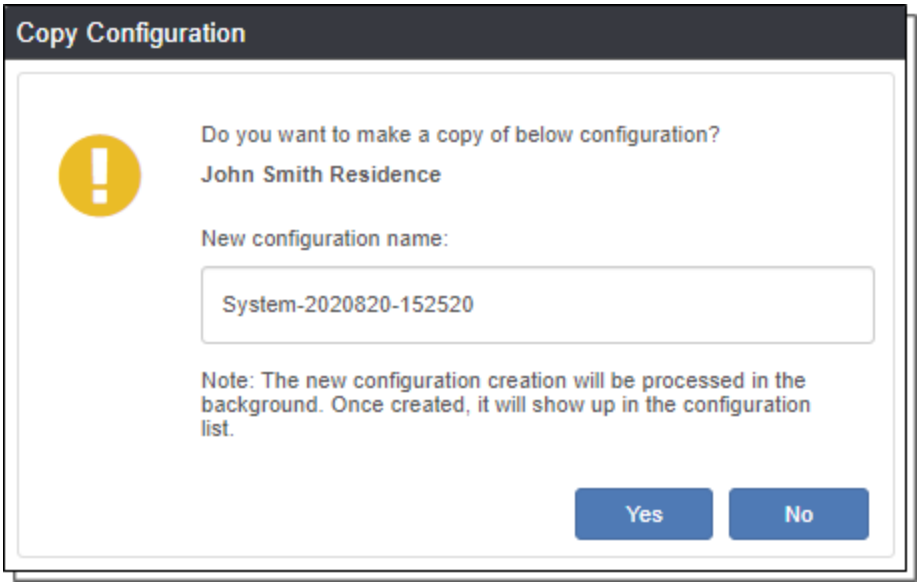
To open and then edit an existing configuration, perform these steps:

1. Select a configuration and then click **Edit**.
2. The configuration opens and displays the **Configuration** tab. To configure, refer to Configuration Tab on page 645.

Copy a Configuration

To make a copy of a configuration, perform these steps:

1. Select a configuration and then click **Copy**. A confirmation dialog is shown.
2. Enter a name in the **New configuration name** box and then select **Yes**.

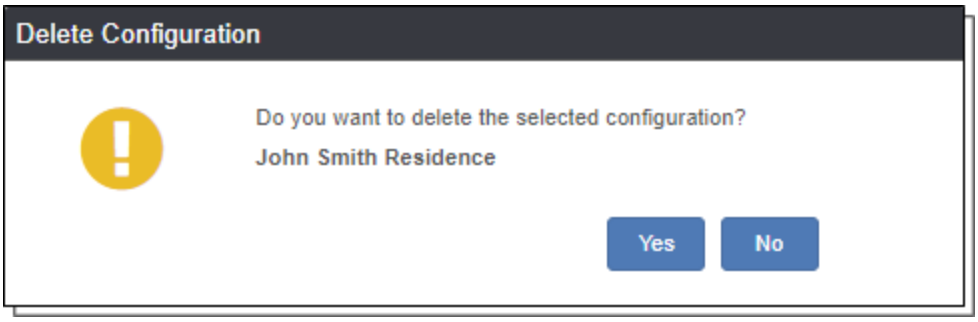


3. The configuration opens and displays the **Configuration** tab. To configure, refer to Configuration Tab on page 645.

Delete a Configuration

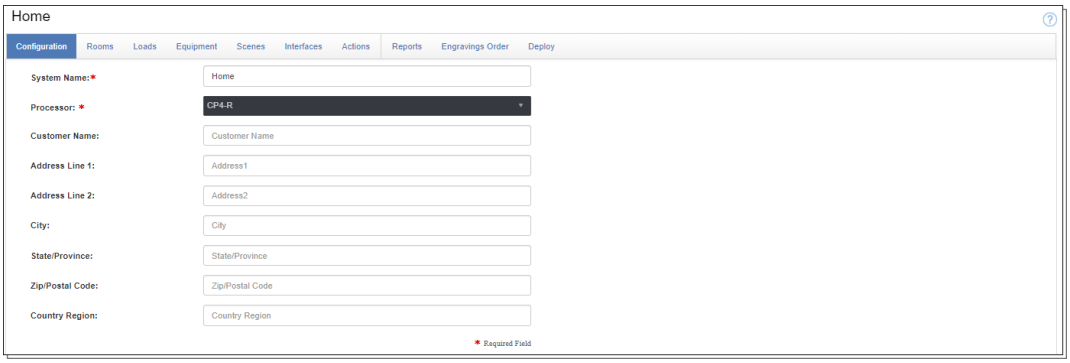
To delete an existing configuration, perform these steps:

1. Select a configuration and then click **Delete**. A confirmation dialog is shown.
2. To delete the configuration, click **Yes**.



Configuration Tab

Use the **Configuration** tab to name the configuration, select the control processor, and enter the customer information.



- **System Name:** Enter a descriptive name for the configuration. The system name is used to identify the configuration within myCrestron and also for the system name in the Crestron Home Setup app. The default system name is "System-[date]-[time]".
- **Processor:** Select a Crestron Home processor (CP4-R, MC4-R, PC4-R, or DIN-AP4-R) for the configuration. The processor type determines the validation settings used for the other tabs. Once the processor is selected, it cannot be changed.

  NOTES:

  - The configuration must be loaded onto a control processor that matches the selection. For example, if the MC4-R control processor is selected as the processor, the configuration cannot be loaded onto a CP4-R control processor.
  - The PYNG-HUB control processor cannot be selected for new configurations. Existing configurations for the PYNG-HUB will still be accessible.

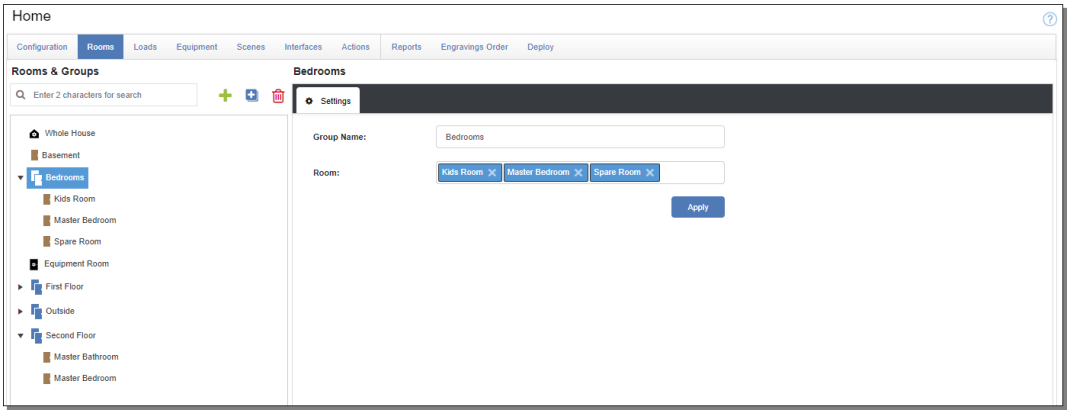
- **Customer Name:** Enter the name of the customer.
- **Customer Address:** Enter the **Address Line 1**, **Address Line 2**, **City**, **State/Province**, **Zip/Postal Code**, and **Country Region** of the customer.

Rooms Tab

Use the **Rooms** tab to add rooms to the configuration. The rooms are displayed in the **Rooms & Groups** menu.

NOTES:

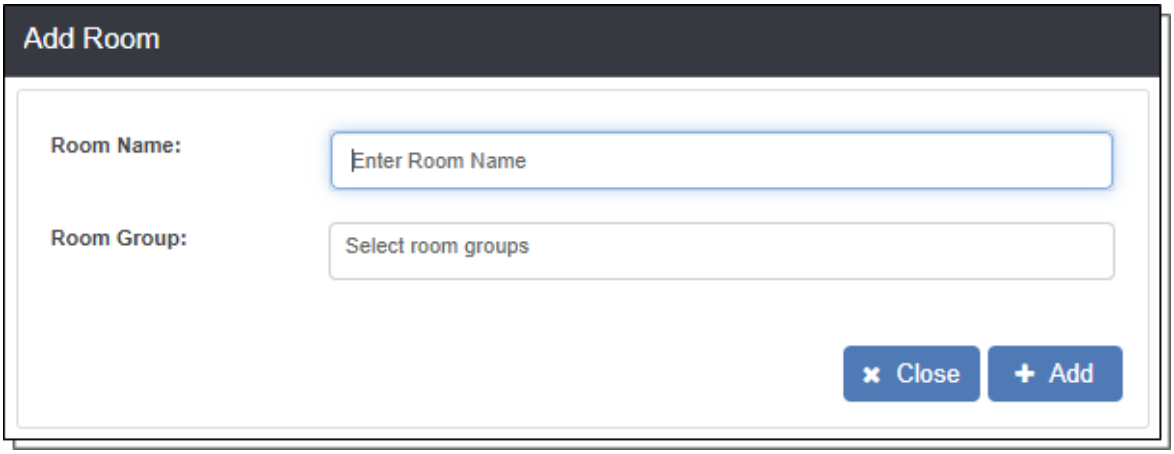
- When the configuration is transferred to the control processor, the rooms entered in the **Rooms** tab are transferred to the Build your House section of the Crestron Home Setup app.
- A Whole House and Equipment room is created by default.
- Devices cannot be added to the Whole House room in the Crestron Home Configurator.



Add a Room

To add a room:

1. Select ➕ **Add Room**.
2. Enter the required information in the **Add Room** dialog:



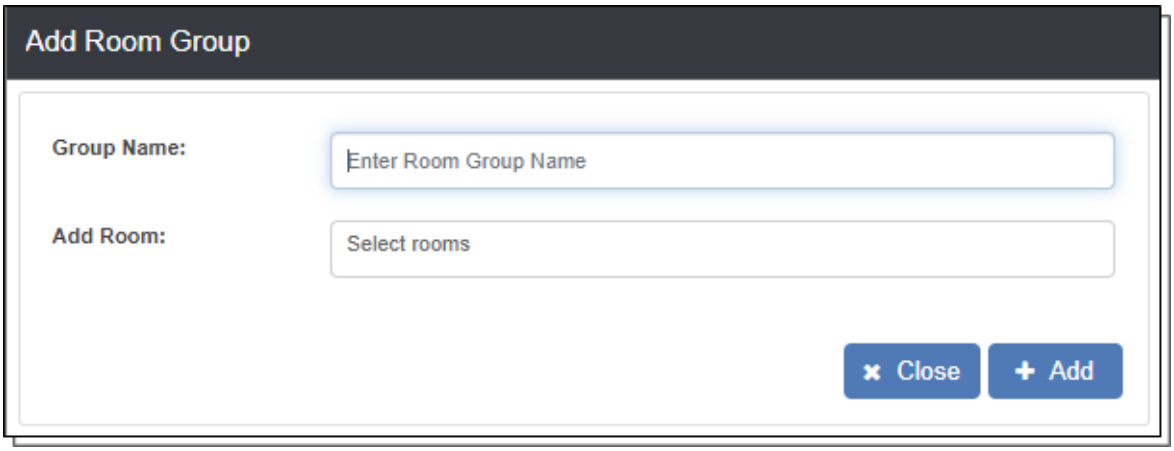
> **NOTE:** The names for all rooms and room groups must be unique.

   - **Room Name:** Enter a name for the room. A list of common room names is displayed based on the entered text.
   - **Room Group:** To add the room to a room group, select a room group from the **Room Group** drop-down menu.
3. Click **+ Add** or press **Enter** on your keyboard. The **Add Room** dialog remains open to add more rooms. To exit, select **Close**.

Add a Room Group

To add a room group:

1. Select **Add Room Group**.
2. Enter the required information in the **Add Room Group** dialog:



> **NOTE:** The names for all rooms and room groups must be unique.

   - **Group Name:** Enter a name for the room group.
   - **Add Room:** To add rooms to the room group, select rooms from the **Add Room** drop-down menu.
3. Click **+ Add** or press **Enter** on your keyboard. The **Add Room Group** dialog remains open to add more room groups. To exit, select **Close**.

Rename a Room or Room Group

To rename a room or room group:

1. Select a room or room group from the **Rooms & Groups** menu to display the room settings..
2. In the **Room Name** or **Group Name** box, enter a name.
3. Select **Apply**.

Delete a Room or Room Group

When deleting a room or room group, consider the following:

- **Room:** All data associated with the room (such as loads, enclosures, or modules) is removed from the configuration.

  > **NOTE:** The Whole House and Equipment rooms cannot be deleted.

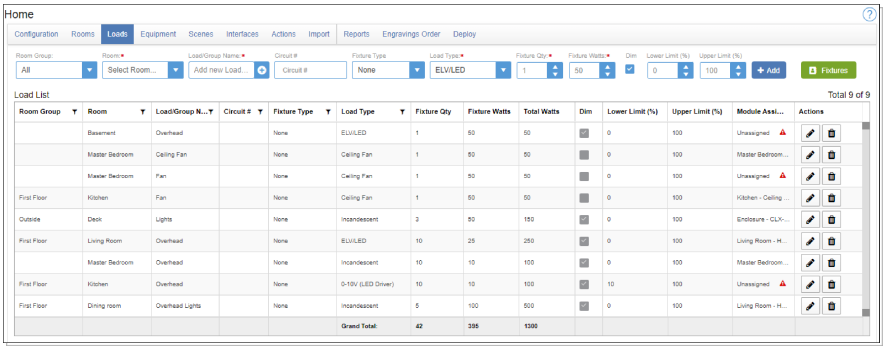
- **Room Group:** Rooms in the room group are not deleted. They are unassociated with the room group and remain in the **Rooms & Groups** menu.

To delete a room or room group:

1. Select a room or room group from the **Rooms & Groups** menu and then select **Delete**.
2. Click **Yes**.

Loads Tab

Use the **Loads** tab to add loads to the configuration and to display the load schedule. The load schedule displays the essential details of the load including the room, load name, electrical circuit, load and control type, enclosure, module, module output, number of fixtures, and fixture watts. The load schedule also lists the total watts for the load and provides a grand total for the number of fixtures, fixture watts, and total watts for the entire configuration.

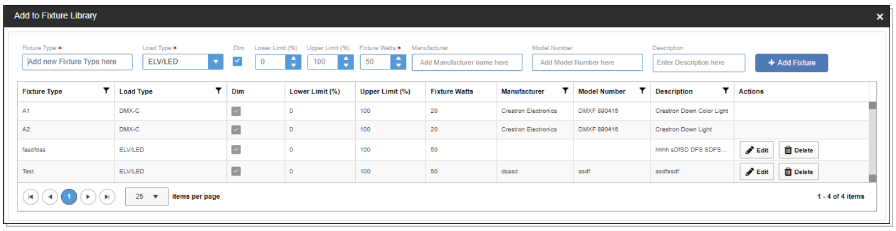


Create a Fixture

Add fixtures to the fixture library to quickly add loads to the configuration.

To add a fixture:

1. Click **Fixtures**.
2. Enter the information for the light fixture in the **Add to Fixture Library** dialog:



   a. Enter a name in the **Fixture Name** box.
   b. Select a load type from the **Load Type** drop-down menu. Select from **0-10V (Fluorescent Ballast)**, **0-10V (LED Driver)**, **Ceiling Fan**, **DMX-C**, **ELV/LED**, **Fluorescent (2-wire)**, **Incandescent**, **MLV**, **Motor**, **PWM LED (Single Color)**, **Shade Motor**, **Switched**, **DALI**, and **DALI Standard** load types. The default is **ELV/LED**.
   c. If the fixture is dimmable, select **Dim** and then enter the minimum and maximum dimming level of the fixture in the **Lower Limit (%)** and **Upper Limit (%)** boxes.
   d. Enter the watts of the fixture in the **Fixture Watts** box.
   e. Enter the type of fixture in the **Fixture Type** box.
   f. Enter the manufacturer name, model, and description in the **Manufacturer**, **Model Number**, and **Description** boxes.
3. Click **+ Add Fixture**.

Add a Load using the Fixture Library

To add a load to a room using the fixture library:

1. Select a room from the **Room Name** drop-down menu.
2. Enter a name for the load in the **Load Name** box. A list of common names is displayed as the name is typed. Press **Tab** on your keypad to choose the current selection.
3. Select a fixture from the **Fixture Type** drop-down menu. The remaining fields are populated using data stored in the fixture library.
4. To add the fixture, click **+ Add** or press **Enter** on your keyboard.

> **NOTE:** To quickly add several loads using the same fixture, select a room, enter a load name, and then press **Enter** on your keyboard.

Add a Load using Manual Entry

To add a load to a room, perform these steps:

1. To add a load directly to a room group, select a group from the **Room Group** drop-down menu.
2. Select a room from the **Room Name** drop-down menu.
3. Enter a name for the load in the **Load Name** box. A list of common names is displayed as the name is typed. Press **Tab** on your keypad to choose the current selection.
4. Enter label for the circuit in the **Circuit Number** box.
5. Select a load type from the **Load Type** drop-down menu. Select from **0-10V (Fluorescent Ballast)**, **0-10V (LED Driver)**, **Ceiling Fan**, **DMX-C**, **ELV/LED**, **Fluorescent (2-wire)**, **Incandescent**, **MLV**, **Motor**, **PWM LED (Single Color)**, **Shade Motor**, **Switched**, **DALI**, and **DALI Standard** load types. The default is **ELV/LED**.

   > **NOTE:** If DMX-C is selected, a DIN-GWDL and DIN enclosure will be added to the system if they do not already exist in the system.

6. Enter the number of fixtures on the load and the watts for each fixture in the **Fixture Qty** and **Fixture Watts** box.
7. If the fixture is dimmable, select **Dim** and then enter the minimum and maximum dimming level of the fixture in the **Lower Limit (%)** and **Upper Limit (%)** boxes.
8. To add the load, click **+ Add** or press **Enter** on your keyboard.

> **NOTE:** To quickly add several loads using the same values, select a room, enter a load name, and then press **Enter** on your keyboard.

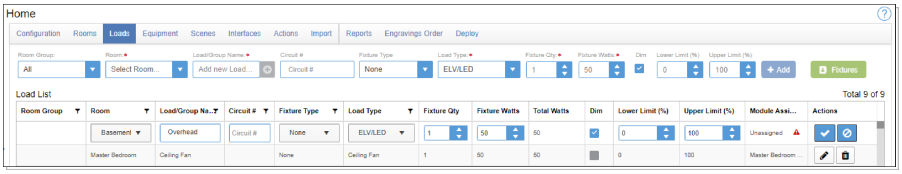
Edit a Load

The details of the load can be changed after the load is created.

To edit a load:

1. Select a load and then click **Edit**.
2. The line-item in the load schedule displays the fields that can be changed. Make the necessary changes to the load.

   > **NOTES:**
   >
   > - If the load was added using the fixture library, only the **Room**, **Load Name**, and **Fixture** can be changed.
   > - To change the Room Group, use the **Rooms** tab.



3. Select **Update**.

Delete a Load

The load can be deleted if it is no longer needed.

To delete a load:

1. Select a load and then click **Delete**. A confirmation dialog is shown.
2. Select **Yes**.

Equipment Tab

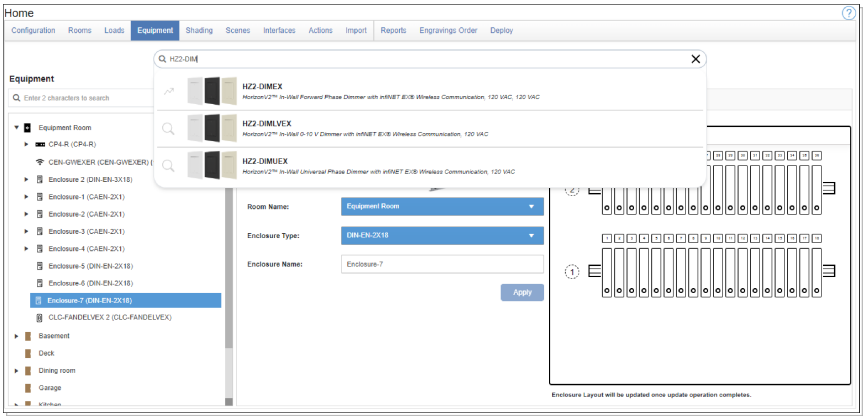
Add equipment to the configuration and configure them using the **Equipment** tab.

Add Devices with Smart Search

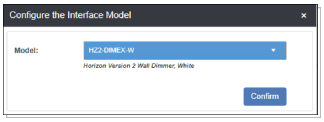
Use the Smart Search to quickly find and add devices to the configuration. Smart Search allows one or more devices to be added to the same or different rooms in the configuration.

To add a device using Smart Search:

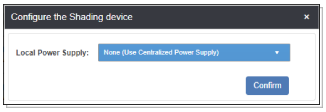
1. Enter a product name into the **Smart Search** bar. Devices that match the model, family, function, and communication type display as the search term is entered.



2. Select a device to add.
3. For devices with a color option, select the model with the desired color option and then select **Confirm**.



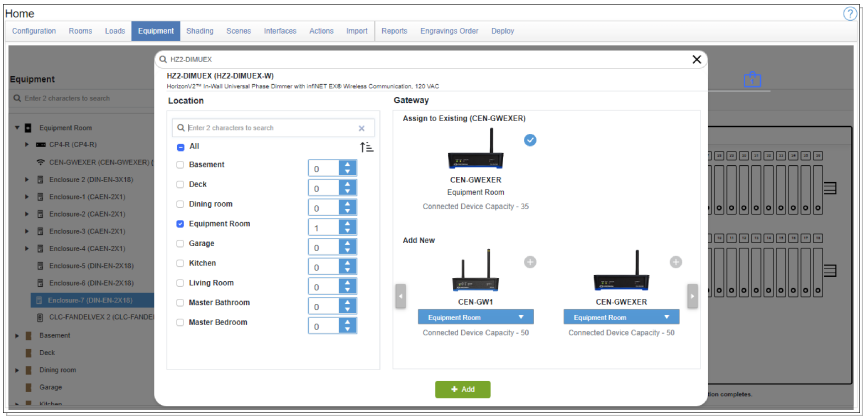
4. For wireless shade devices that require a power supply, select a power supply from the **Local Power Supply** drop-down menu and then select **Confirm**. To use a centralized power supply, select **None**.



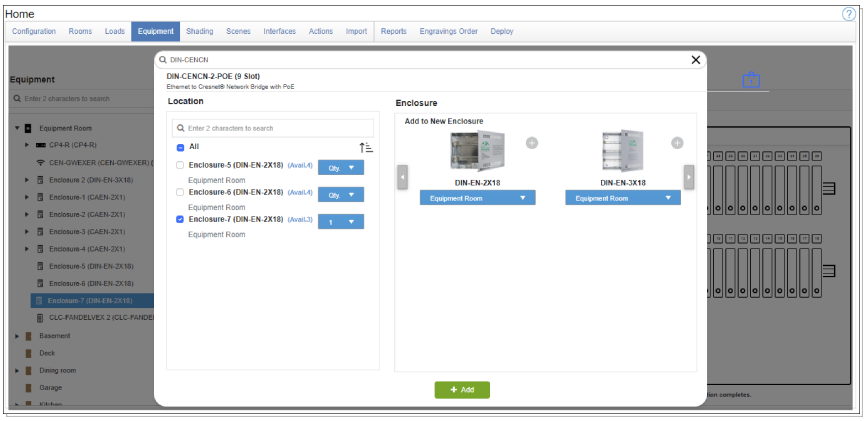
5. Enter the desired device information:
    - **Location:** The available rooms and enclosures are displayed. For devices that are placed in a room, select the room (or rooms) for the device. For devices that are placed in enclosures, select the enclosure (or enclosures) for the device.

      > **NOTE:** If an enclosure is not available, a prompt is displayed to add an enclosure.

      Place Device in Room

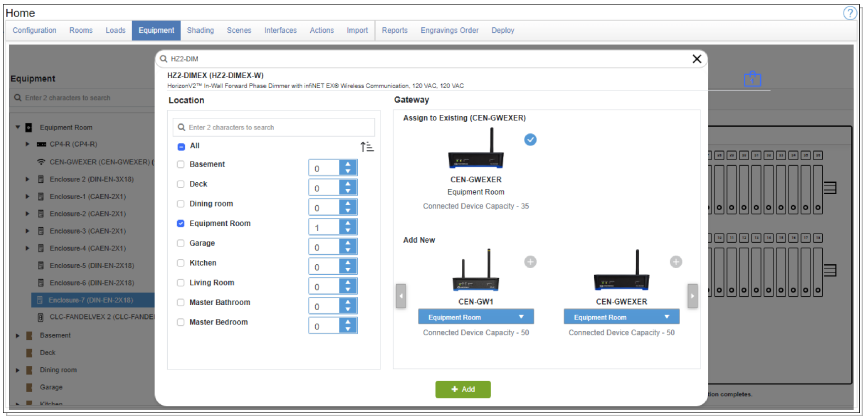
      Place Device in Enclosure

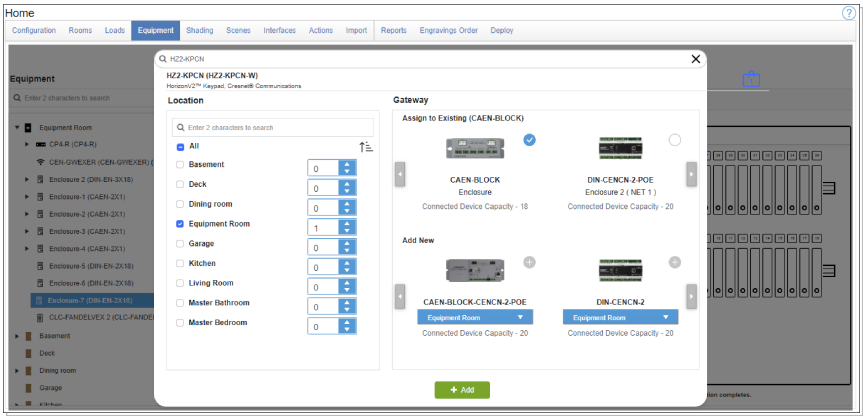
    - **Quantity:** For each room or enclosure, enter or select the number of devices to add.

- **Assign to Gateway:** To assign the device to a gateway, select a gateway from the **Assign to Existing** list.

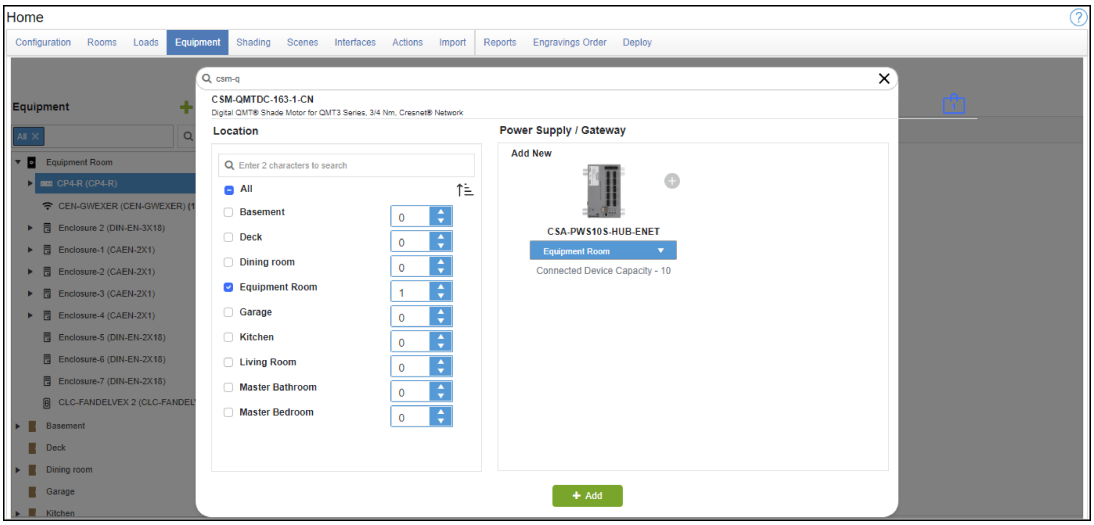
Assign to a Wireless Gateway



Assign to a Wired Gateway



Assign to a Shade Power Supply or Gateway



- **Add New:** To add a new gateway or enclosure, select an item from the **Add New** list and then select a room.

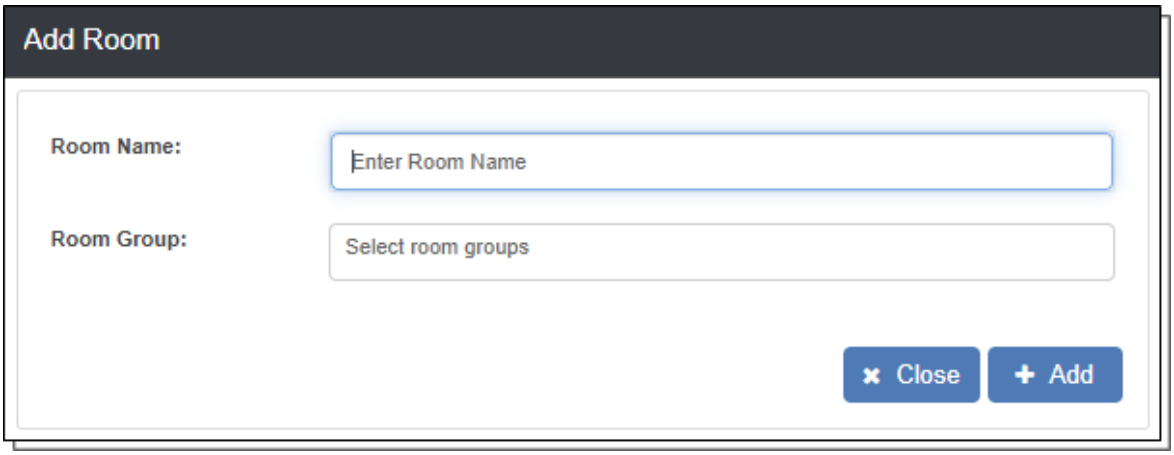
6. Select **Add**.

Room Management

Add a Room

To add a room using the Equipment tab:

1. Select **Add Room**.
2. Enter the required information in the **Add Room** dialog:



> **NOTE:** The names for all rooms and room groups must be unique.

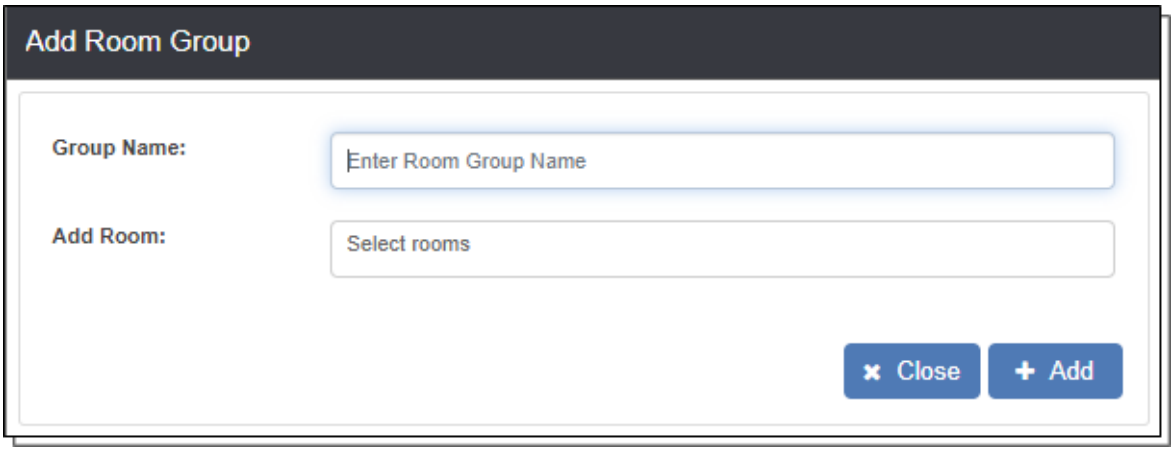
   - **Room Name:** Enter a name for the room. A list of common room names is displayed based on the entered text.
   - **Room Group:** To add the room to a room group, select a room group from the **Room Group** drop-down menu.

3. Click **+ Add** or press **Enter** on your keyboard. The **Add Room** dialog remains open to add more rooms. To exit, select **Close**.

Add a Room Group

To add a room group using the Equipment tab:

1. Select **Add Room Group**.
2. Enter the required information in the **Add Room Group** dialog:



> **NOTE:** The names for all rooms and room groups must be unique.

   - **Group Name:** Enter a name for the room group.
   - **Add Room:** To add rooms to the room group, select rooms from the **Add Room** drop-down menu.
3. Click **+ Add** or press **Enter** on your keyboard. The **Add Room Group** dialog remains open to add more room groups. To exit, select **Close**.

Control Processor

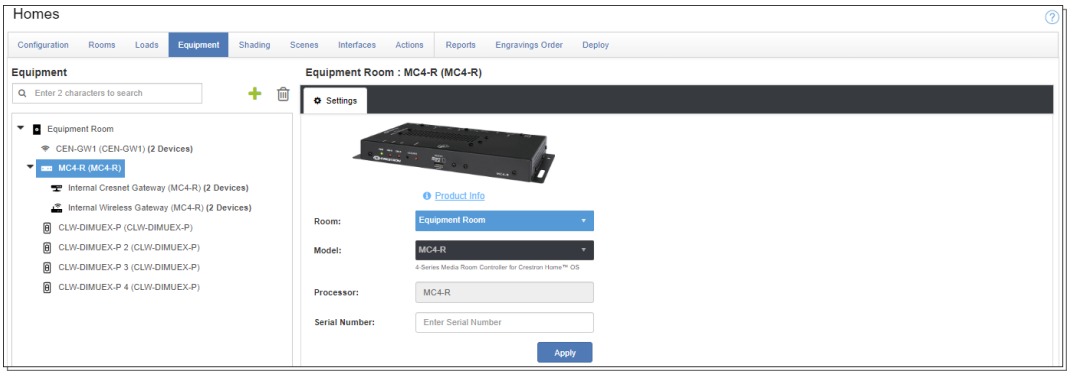
The control processor is added to the Equipment room when the configuration is created.

Edit Control Processor Settings

Change the room assignment or serial number for the control processor.

To change the room or serial number:

1. Select the control processor from the **Equipment** menu and then select the **Settings** tab.

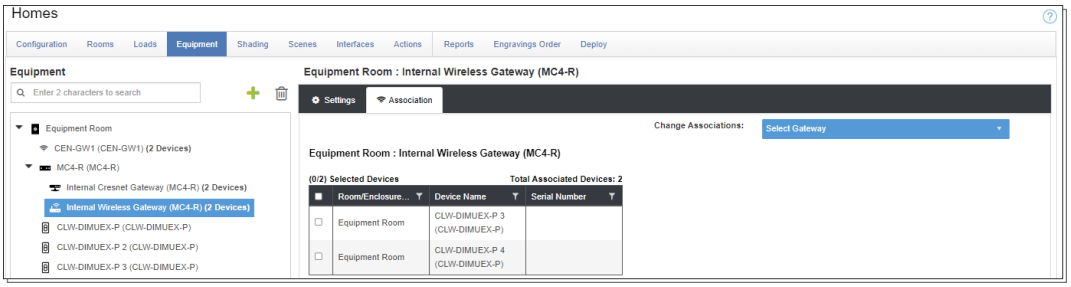


2. Update the room or serial number of the control processor.
3. Select **Apply**.

Change Internal Wired and Wireless Gateway Associations

To move a wired module to a different subnet on the gateway or to a different gateway:

1. Select the control processor from the **Equipment** pane and then select **Internal Cresnet Gateway** or **Internal Wireless Gateway** and then select the **Association** tab.



2. Select new assignments for wired or wireless devices:
   - **Wired gateway association:** Refer to Change Internal Wired and Wireless Gateway Associations on page 659.
   - **Wireless gateway association:** Refer to Change Wireless Gateway Associations on page 671.

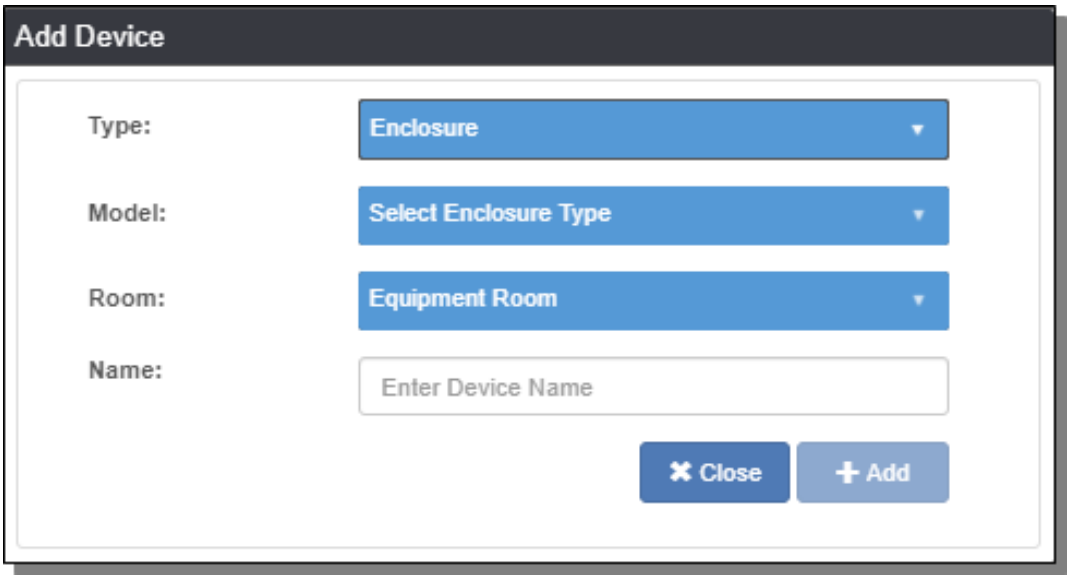
Enclosures

Use enclosures to mount centralized CAEN and DIN modules in the system. You can add, edit, change the enclosure layout, and remove enclosures.

Add an Enclosure

To add a an enclosure, follow these steps:

1. Click ✚ **Add Device**.
2. Enter the required information in the **Add Device** dialog:



   a. **Type:** Select **Enclosure** from the drop-down menu.
   b. **Model:** Select **Crestron CAEN Enclosures**, **Crestron DIN Enclosures**, or **Generic DIN Enclosures** from the drop-down menu.

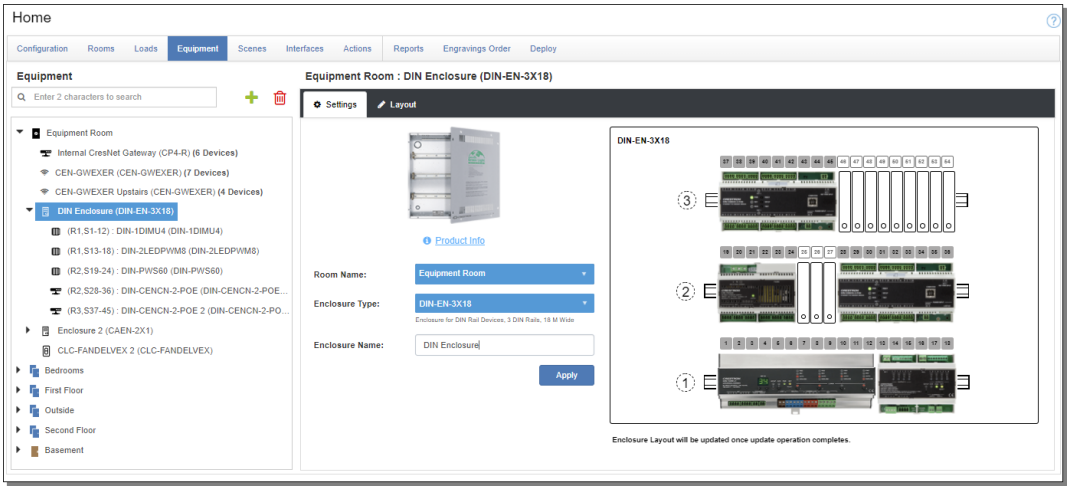
      For Generic DIN Enclosures, select the number of DIN rails in the enclosure and the number of slots for each rail.
   c. **Room:** Select a room from the drop-down menu.
   d. **Name:** Enter a name in the field.
3. Click **+ Add** or press **Enter** on your keyboard. The dialog remains open to add more devices. To exit, select **Close**.

Edit Enclosure Settings

Change the enclosure information, such as the name, room name, and enclosure type, after adding the enclosure.

To change the room, enclosure type, or enclosure name, follow these steps:

1. Select an enclosure from the **Equipment** menu and then select the **Settings** tab.



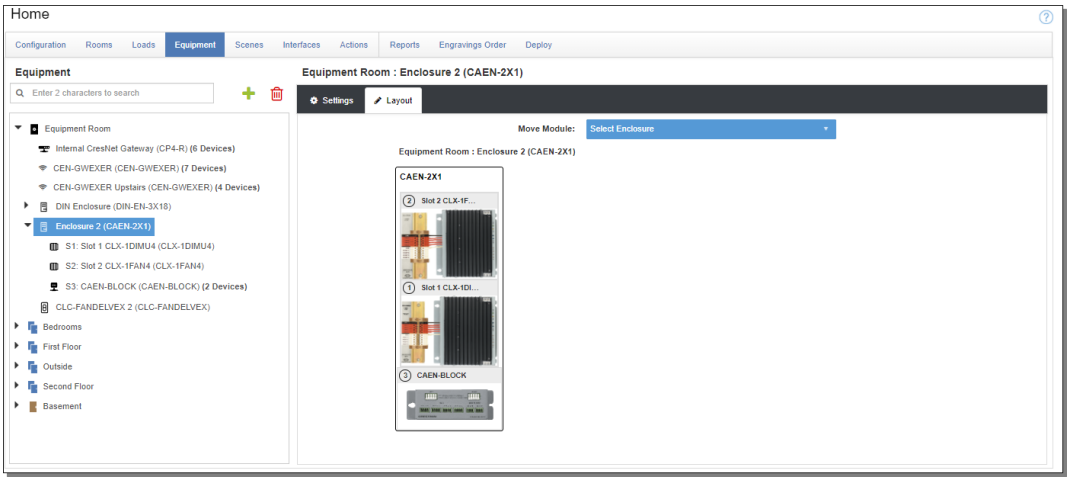
2. Update the room, model, and name of the enclosure.

> **NOTE:** If a different enclosure is selected from the **Enclosure Type** drop-down menu, it must be able to fit all of the modules that are in the enclosure. For example, if a CAEN-4X1 enclosure contains three modules, you cannot select a CAEN-2X1 enclosure. To use a smaller enclosure, first Move a Module to a Different Enclosure on page 663 and then change the enclosure type.

3. Select **Apply**.

Change the Enclosure Layout

Move a centralized module to a different slot within the enclosure or another enclosure in the system.

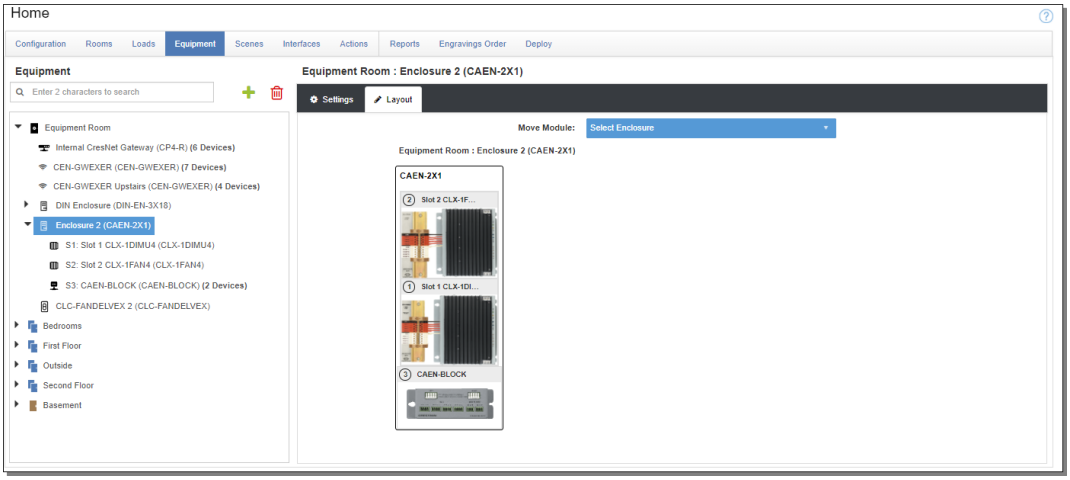


Move a Module to a Different Slot in an Enclosure

To move a module to a different slot in an enclosure, perform the following steps:

1. Select an enclosure from the **Modules & Enclosures** pane.

   The **Enclosure Options** pane on the right of the screen displays the selected enclosure and the location of the modules in the enclosure.



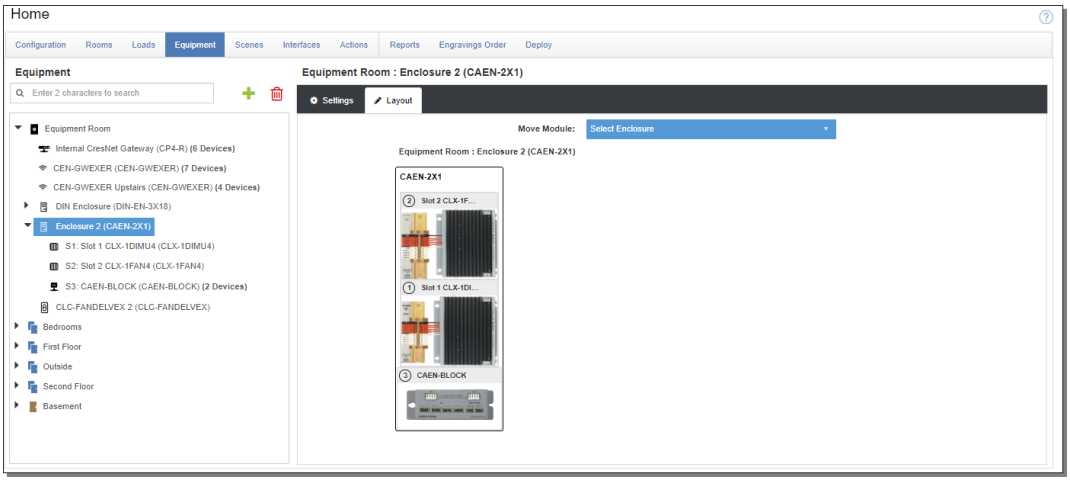
2. Click and drag a module to a new slot in the enclosure. The green box around the slot indicates the module's new location and the orange box indicates the old location.

   To swap the location of two modules, drop a module on top of another module.

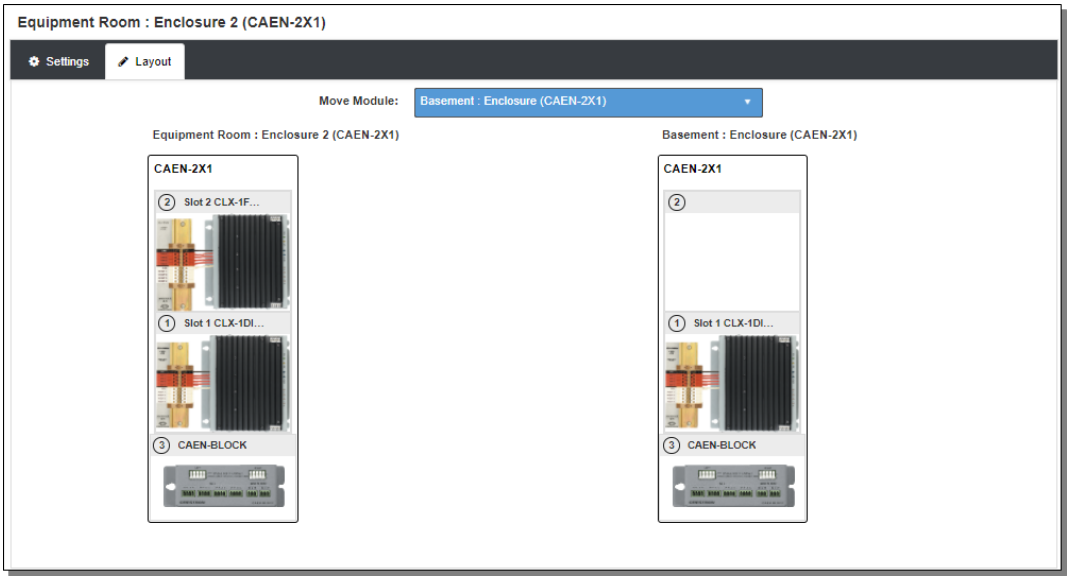
Move a Module to a Different Enclosure

To move a module to a different enclosure, perform the following steps:

1. Select the enclosure from the **Equipment** menu and then select the **Layout** tab.



2. Select an enclosure from the **Move Module** drop-down menu.



3. Click and drag a module to a slot in the different enclosure. The green box around the slot indicates the module's new location and the orange box indicates the old location.

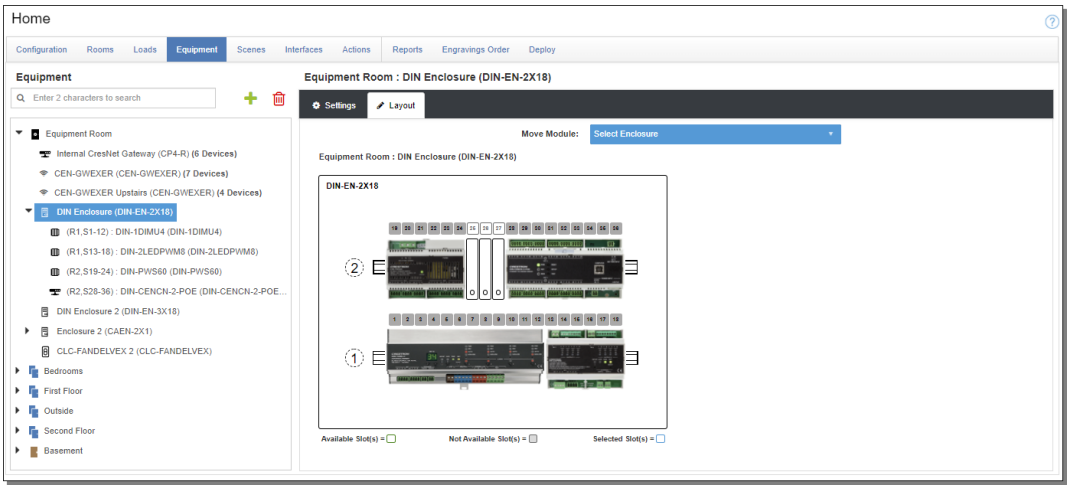
   To swap the location of two modules, drop a module on top of another module.

4. Click **Exit**.

Move a DIN Module to a Different Slot in an Enclosure

To move a DIN module to a different slot in an enclosure, perform the following steps:

1. Select a DIN enclosure from the **Equipment** menu and then select the **Layout** tab.

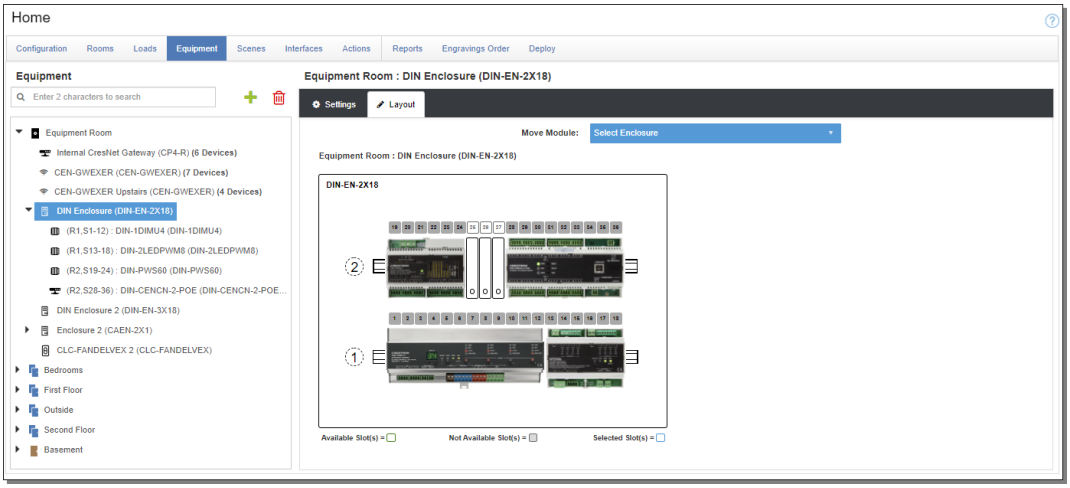


2. Click a DIN module to select it.
3. Click an available DIN slot to place the module.

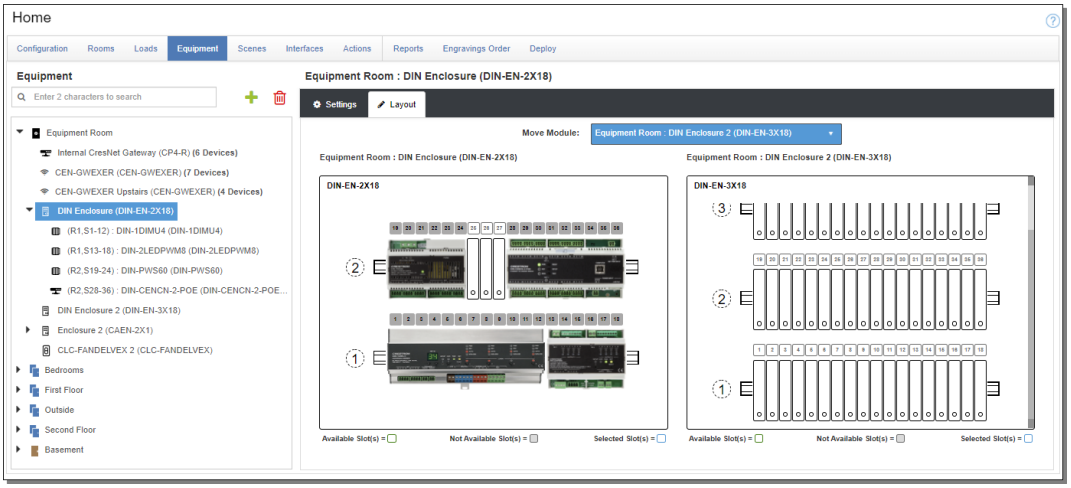
Move a DIN Module to a Different Enclosure

To move a DIN module to a different enclosure, perform the following steps:

1. Select the DIN enclosure from the **Equipment** menu and then select the **Layout** tab.



2. Select a DIN enclosure from the **Move Module** drop-down menu.



3. Click a DIN module to select it.
4. Click an available DIN slot to place the module.
5. Click **Exit**.

Delete an Enclosure

Delete an enclosure from the configuration. When an enclosure is deleted, all data associated with the enclosure is removed from the configuration.

> **NOTE:** Centralized modules and loads that have been added to the load schedule in the **Loads** tab that use the enclosure will be deleted from the configuration.

To delete an enclosure, perform the following steps:

1. Select an enclosure from the **Equipment** menu and then click **Delete**.
2. Click **Yes**.

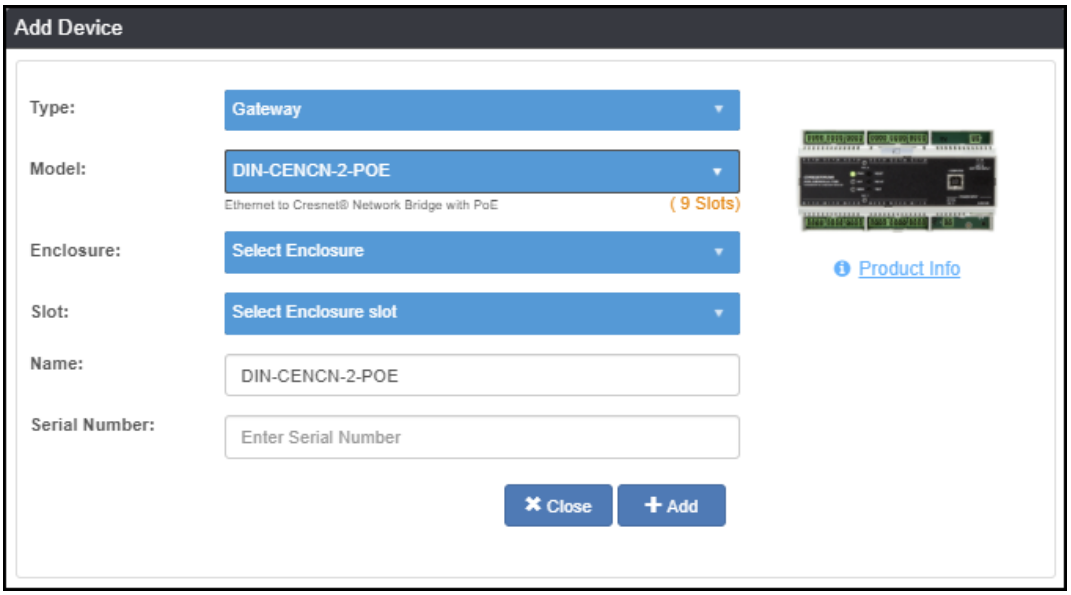
Wired Gateways

Use wired gateways to communicate with wired devices in the system. You can add, edit, change the wired module associations, and delete a gateway.

Add a Wired Gateway

To add a gateway:

1. Click ✚ **Add Device**.
2. Enter the required information in the **Add Device** dialog:



   a. **Type:** Select **Gateway** from the drop-down menu. The CAEN-BLOCK-CENCN-2-POE, DIN-CENCN-2, DIN-CENCN-2-POE, and DIN-GWDL gateways can be selected.
   b. **Model:** Select a gateway type from the drop-down menu.
   c. **Enclosure:** Select an enclosure from the drop-down menu.
   d. **Slot:** Select an enclosure slot from the drop-down menu.
   e. **Name:** Enter a name in the box.
   f. **Serial Number:** Enter a serial number in the box.

3. Click **+ Add** or press **Enter** on your keyboard. The dialog remains open to add more devices. To exit, select **Close**.

Edit Wired Gateway Settings

Change the gateway information, such as the enclosure, enclosure slot, model, gateway name, and serial number after the module is added to the configuration.

To edit a gateway

1. Select a gateway from the **Equipment** menu and then select the **Settings** tab.
2. Update the enclosure, enclosure slot, model, name, and serial number for the gateway.
3. To save the changes, select **Apply**.

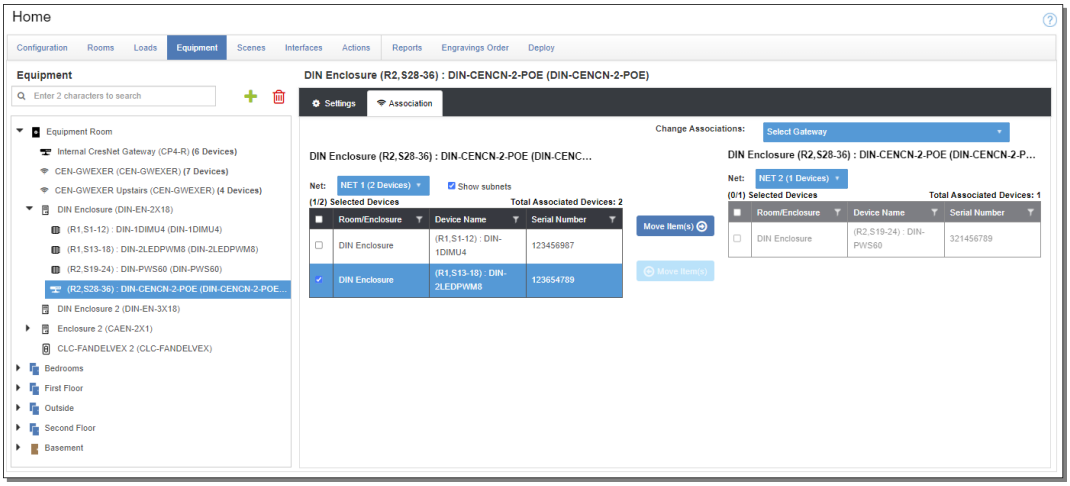
Change Wired Gateway Associations

To move a wired module to a different subnet on the gateway or to a different gateway:

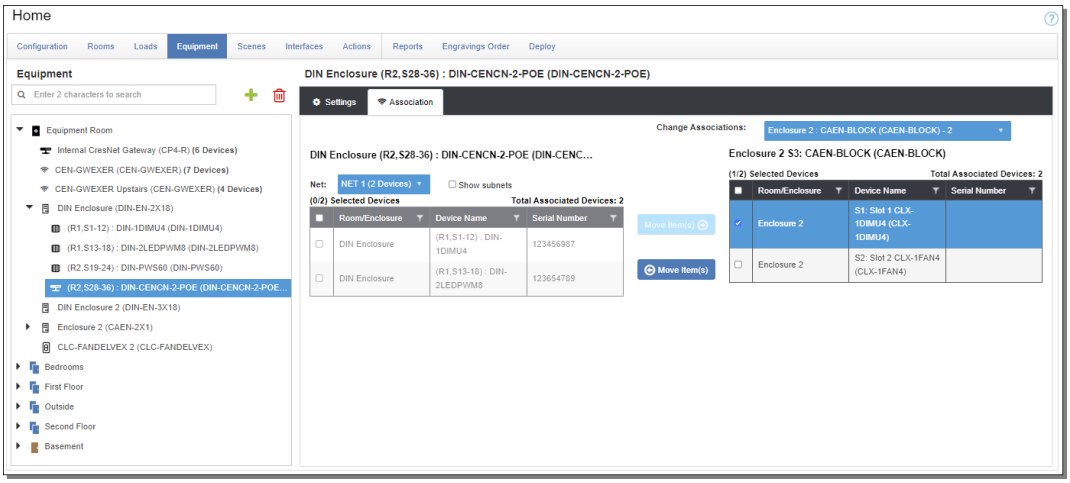
1. Select the gateway from the **Equipment** pane and then select the **Association** tab.
2. Select a destination subnet or gateway:
    - **Different subnet on the gateway:** Select **Show Subnets**.
    - **Different gateway:** Select a gateway from the **Change Associations** drop-down menu.

3. In the **Net** drop-down menus, select a subnet for the gateway on the left and the destination subnet or gateway on the right.

Move to a Different Subnet on the Gateway



Move to a Different Gateway



4. Select a device to move.
5. To move the device, select  or  **Move Item(s)**.

Delete a Wired Gateway

When an gateway is deleted, all data associated with the gateway is removed from the configuration.

> **NOTE:** All wired modules must be associated with a different gateway prior to deleting the gateway.

To delete a gateway:

1. Associate all wired modules with a different wired gateway. For details, refer to Change Internal Wired and Wireless Gateway Associations on page 659.
2. Select a gateway from the **Equipment** menu and then click **Delete**.
3. Click **Yes**.

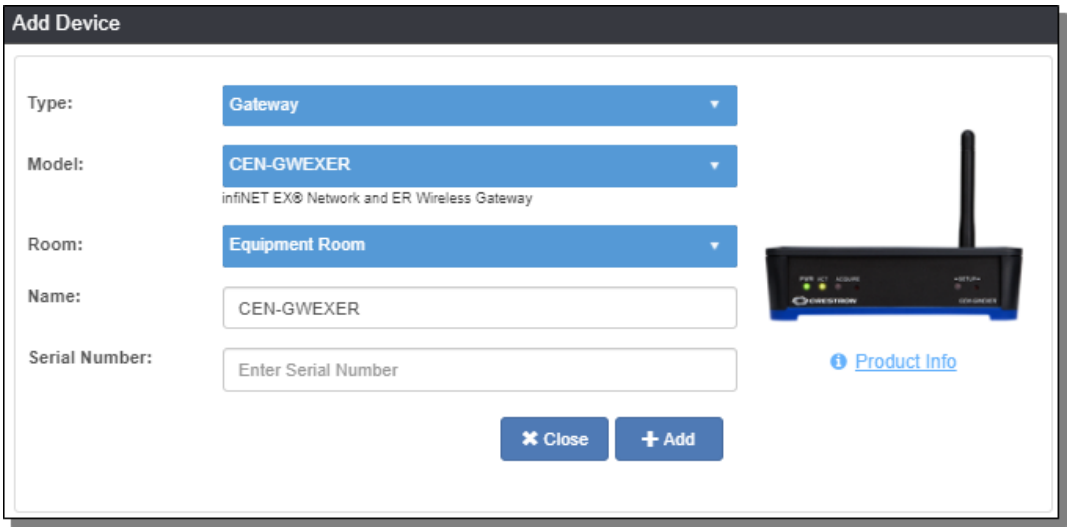
Wireless Gateways

Use gateways to communicate with wireless devices in the system. You can add, edit, change the wireless module associations, and delete a gateway.

Add a Wireless Gateway

To add a wireless gateway:

1. Click ➕ **Add Device**.
2. Enter the required information in the **Add Device** dialog:



   a. **Type:** Select **Gateway** from the drop-down menu.
   b. **Model:** Select a gateway type from the drop-down menu. The CEN-GWEXER, CENI-GWEXER, and CEN-GW1 gateways can be selected.
   c. **Room:** Select a room from the drop-down menu.
   d. **Name:** Enter a name in the box.
   e. **Serial Number** Enter a serial number in the box.
3. Click **+ Add**. The dialog remains open to add more devices. To exit, select **Close**.

Edit Wireless Gateway Settings

Change the gateway information, such as the gateway type, room, gateway name, and serial number after the module is added to the configuration.

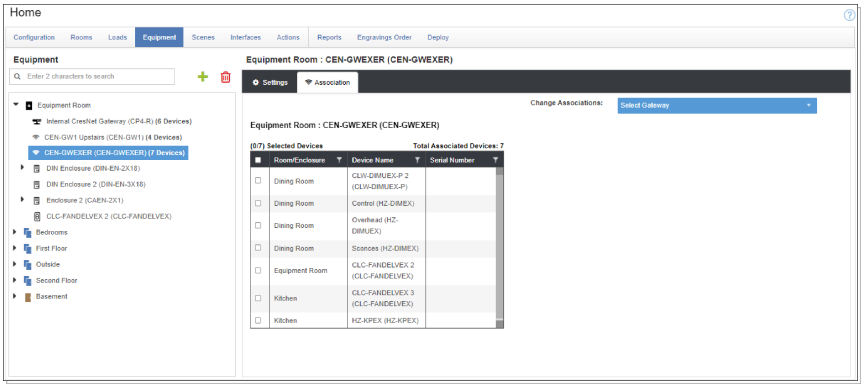
To edit a wireless gateway:

1. Select a gateway from the **Equipment** menu and then select the **Settings** tab.
2. Update the room, gateway type, name, and serial number for the gateway.
3. Select **Apply**.

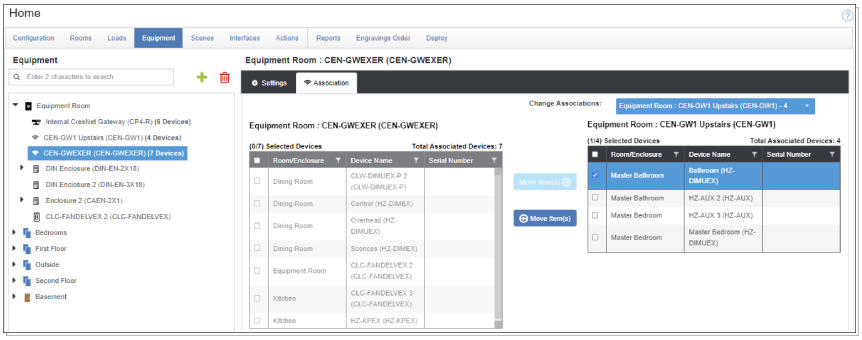
Change Wireless Gateway Associations

To move a wireless module to a different gateway:

1. Select the gateway from the **Equipment** pane and then select the **Association** tab.



2. Select a gateway from the **Change Associations** drop-down menu.



3. Select the devices to move and then select  or  **Move Item(s)**.

Delete a Wireless Gateway

When an gateway is deleted, all data associated with the gateway is removed from the configuration.

> **NOTE:** All wireless modules must be associated with a different gateway prior to deleting the gateway.

To delete a wireless gateway:

1. Associate all wireless modules with a different wireless gateway. For details, refer to Change Wireless Gateway Associations on page 671.
2. Select a gateway from the **Equipment** menu and then click  **Delete**.
3. Click **Yes**.

Accessory

Use Accessories to add Cresnet hubs and distribution blocks to the system.

Add an Accessory

1. Click ➕ **Add Device**.
2. Enter the required information in the **Add Device** dialog:



   a. **Type:** Select **Accessory** from the drop-down menu.
   b. **Model:** Select an accessory type from the drop-down menu.
   c. **Enclosure:** Select an enclosure from the drop-down menu.
   d. **Slot:** If applicable to the selected enclosure, select an enclosure slot from the drop-down menu.
   e. **Name:** Enter a name in the box.
   f. **Serial Number:** Enter a serial number in the box.
   g. **Gateway:** Select a Cresnet gateway to control the accessory.
   h. **Net:** If applicable to the selected gateway, select a subnet for the gateway from the drop-down menu.
3. Click **+ Add** or press **Enter** on your keyboard. The dialog remains open to add more devices. To exit, select **Close**.

Edit Accessory Settings

To edit an accessory:

1. Select an accessory from the **Equipment** menu and then select the **Settings** tab.
2. Update the enclosure, enclosure slot, model, name, and serial number for the gateway.
3. To save the changes, select **Apply**.

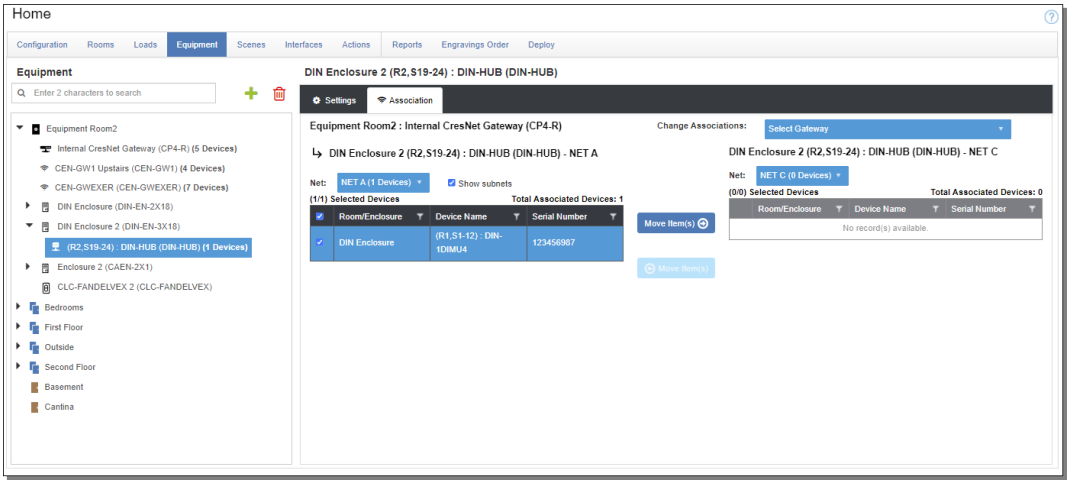
Change Accessory Associations

To move a wired module to a different subnet on the gateway or to a different gateway:

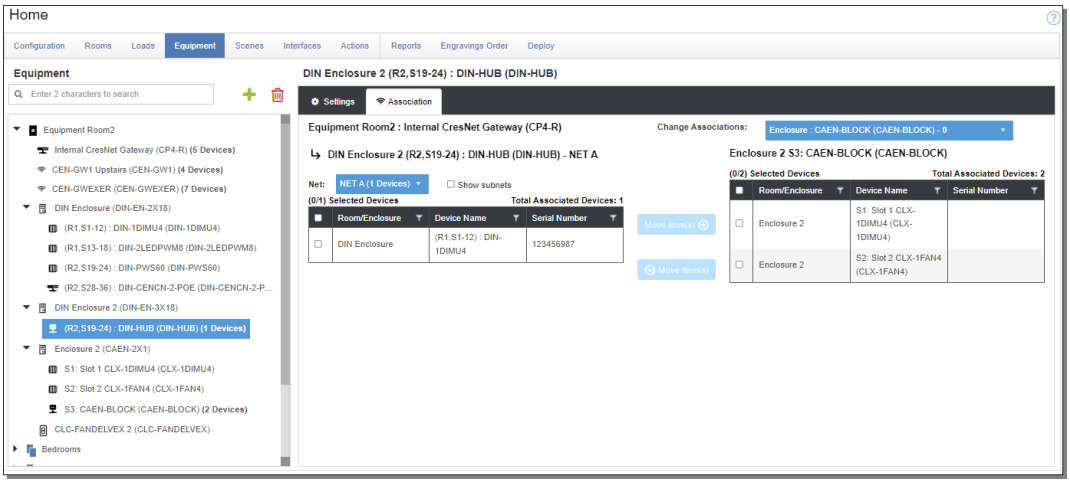
1. Select a gateway from the **Equipment** pane and then select the **Association** tab.
2. Select a destination subnet or gateway:
    - **Different subnet on the gateway:** Select **Show Subnets**.
    - **Different gateway:** Select a gateway from the **Change Associations** drop-down menu.

3. In the **Net** drop-down menus, select a subnet for the gateway on the left and the destination subnet or gateway on the right.

Move to a Different Subnet on the Gateway



Move to a Different Gateway



4. Select a device to move.
5. To move the device, select or **Move Item(s)**.

Delete an Accessory

When an accessory is deleted, all data associated with the accessory is removed from the configuration.

> **NOTE:** All modules must be associated with a different accessory prior to deleting the accessory.

To delete an accessory:

1. Associate all devices with a different accessory. For details, refer to Change Accessory Associations on page 673.
2. Select an accessory from the **Equipment** menu and then click **Delete**.
3. Click **Yes**.

Modules

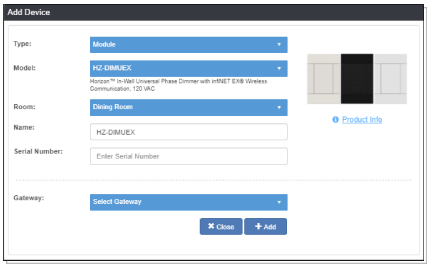
Use modules to control the lights in the system. You can add, remove, and edit in-wall and centralized modules.

> **NOTE:** Add Placeholder devices to the configuration to include devices that do not support programming and third-party products. Placeholder devices are included when reports are generated.

Add an In-Wall Module

To add an in-wall module, perform the following steps:

1. Click **Add Device**.
2. Enter the required information in the **Add Device** dialog:



   a. **Type:** Select **Module** from the drop-down menu.
   b. **Model:** Select a **Crestron In-wall Module** from the drop-down menu.
   c. **Room:** Select a room from the drop-down menu.
   d. **Name:** Enter a name in the box.
   e. **Serial Number:** Enter a serial number in the box.
   f. **Gateway:** Select a gateway from the drop-down menu.

      To add a gateway, select **Add Wireless Gateway** and then select the model and room for the gateway and enter a name and serial number. For details, refer to Add a Wireless Gateway on page 670.

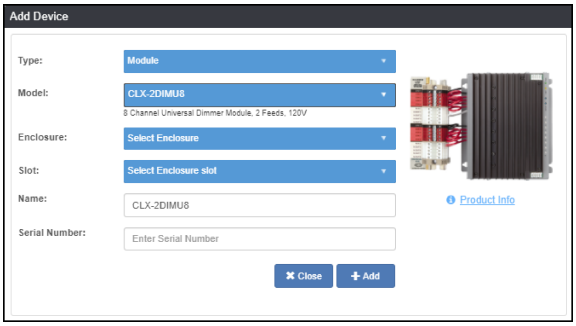
3. Click **+ Add** or press **Enter** on your keyboard. The dialog remains open to add more devices. To exit, select **Close**.

Add a Centralized CAEN or DIN Module

To add a centralized CAEN or DIN module, perform the following steps:

> **NOTE:** Add Placeholder devices to the configuration to include devices that do not support programming and third-party products. Placeholder devices are included when reports are generated.

1. Click ➕ **Add Device**.
2. Enter the required information in the **Add Device** dialog:
   a. Select **Module** from the **Type** drop-down menu.



   b. **Model:** Select a module type from the drop-down menu. The menu is arranged by **Crestron CAEN Centralized Modules**, **Crestron DIN Modules**, **Crestron In-wall Modules**, and **Generic DIN Modules**.
   c. **Enclosure:** Select an enclosure from the drop-down menu and an enclosure slot from the **Slot** drop-down menu.
   d. **Slot:** Select a slot from the drop-down menu.
   e. **Name:** Enter a name in the box.
   f. **Serial Number:** Enter a serial number in the box.
3. Click **+ Add** or press **Enter** on your keyboard. The dialog remains open to add more devices. To exit, select **Close**.

Edit Module Settings

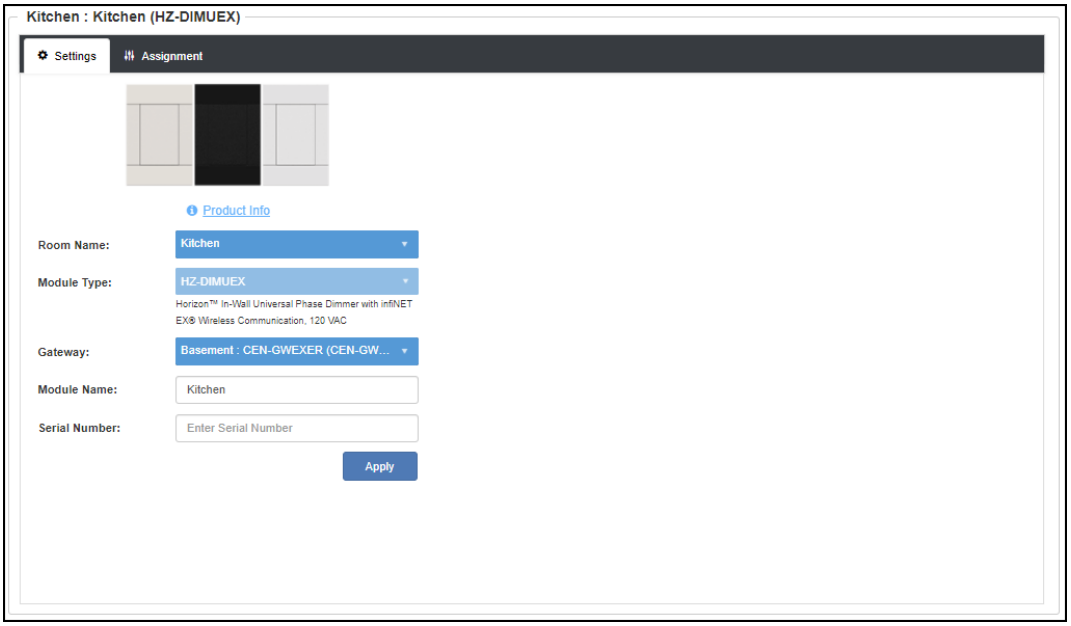
Change the module information, such as the module type, room name, module name, enclosure, and enclosure slot after the module is added to the configuration.

Edit In-Wall Module Settings

To edit a module, perform the following steps:

1. Select a module from the **Equipment** menu and then select the **Settings** tab.
2. Update the room, gateway assignment (wireless devices only), name, and serial number of the module.

> **NOTE:** The model (Module Type) cannot be changed.

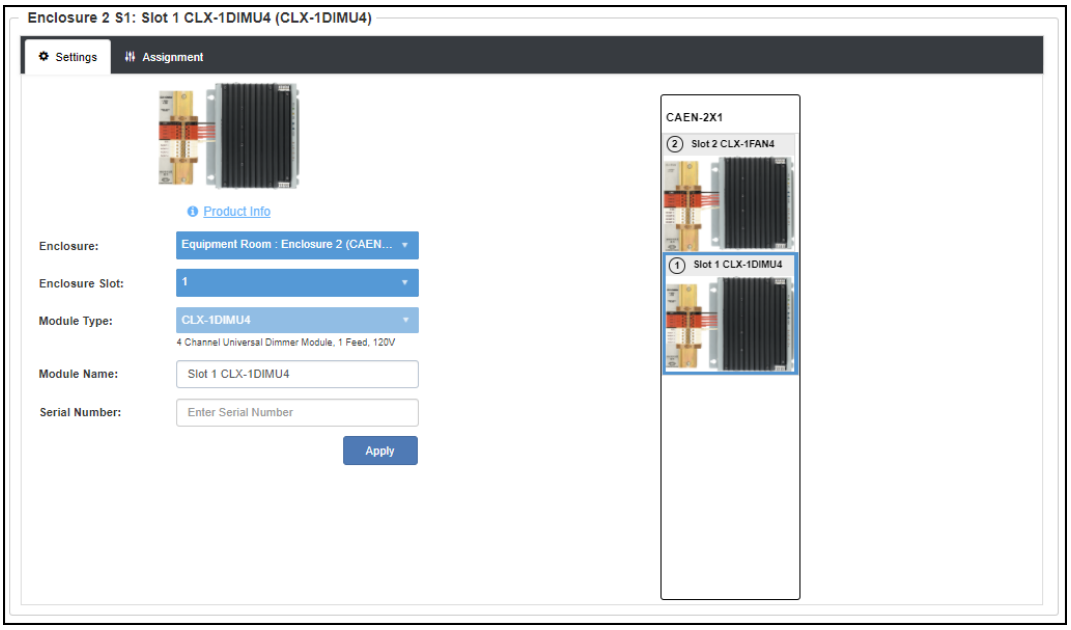


3. Select **Apply**.

Edit CAEN Module Settings

1. Select a module from the **Equipment** menu and then select the **Settings** tab.
2. Update the enclosure, enclosure slot, name, and serial number of the module.

> **NOTE:** The model (Module Type) cannot be changed.

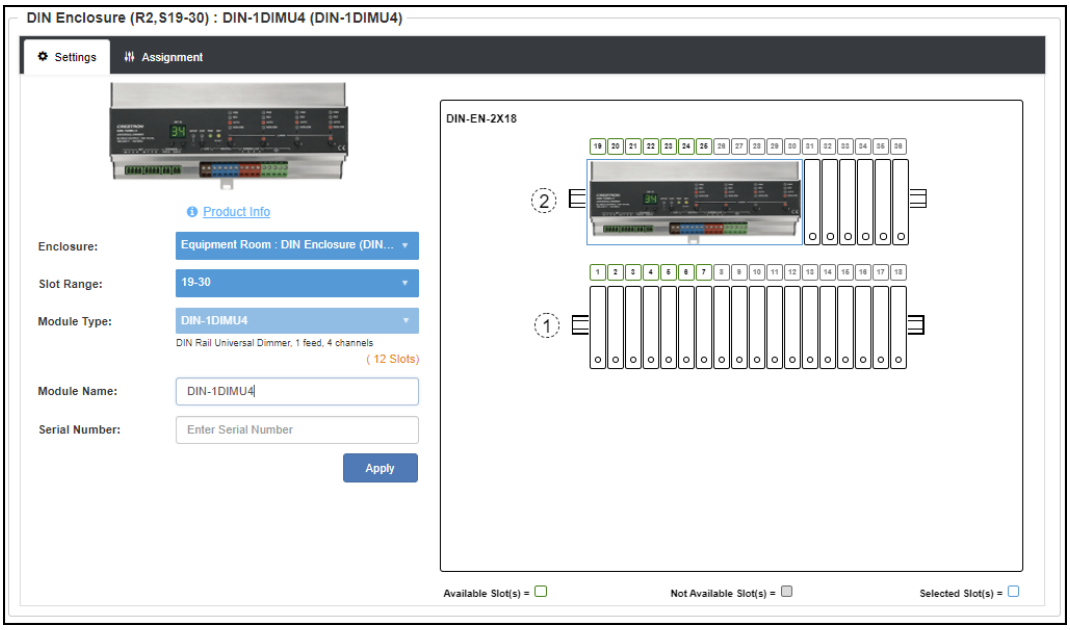


3. Select **Apply**.

Edit DIN Module Settings

1. Select a module from the **Equipment** menu and then select the **Settings** tab.
2. Update the enclosure, slot range, name, and serial number of the module.

> **NOTE:** The model (Module Type) cannot be changed.



3. Select **Apply**.

Delete a Module

Delete a module from the configuration. When a module is deleted, all data that is associated with the module is removed from the configuration.

> **NOTE:** Loads in the **Loads** tab that use the module will be deleted from the configuration.

To delete a module, perform the following steps:

1. Select an module from the **Equipment** menu and then click **Delete**.
2. Click **Yes**.

Assign Loads to Modules

After loads and modules are added to the system, assign loads to modules.

To view a list of compatible modules and load types, refer to Module and Load-Type Compatibility on page 692.

The **Module Options** pane on the right of the screen displays the module information and the available loads.

- **Name:** Displays the name of the selected module.
- **Output assignment:** Displays the output for the selected module. The output assignment displays the room name, load, and fixture wattage of the load that is assigned to the module. If a load is not assigned to a module, the output displays **Unassigned**.

  > **NOTES:**
  > - The number of outputs that are displayed is based on the number of outputs available on the module. For example, an HZ-DIMUEX lists one output and a CLX-1FAN4 lists four outputs.
  > - The first unassigned output is selected.

- **Loads:** Displays a list of rooms and loads that are in the configuration; the loads are grouped by room. The list displayed is based on the filter criteria. The room that is associated with the selected module is expanded. For example, if the selected module is in the Dining Room, the list of loads in the dining room are expanded and the list of loads in all other rooms are collapsed.
- **Assigned loads:** Displays the total number of loads in the configuration and the number of loads that have been assigned to modules.
- **Filters:**
  - **Loads:** Displays the number of loads that match the filter criteria.
  - **Compatible Loads:** To view only loads that are compatible with the selected module, turn on the **Compatible Loads** toggle. When the **Compatible Loads** toggle is off, all loads are displayed; incompatible loads are grayed out and cannot be assigned to the module.

    > **NOTE:** The **Compatible loads** toggle is turned on by default.

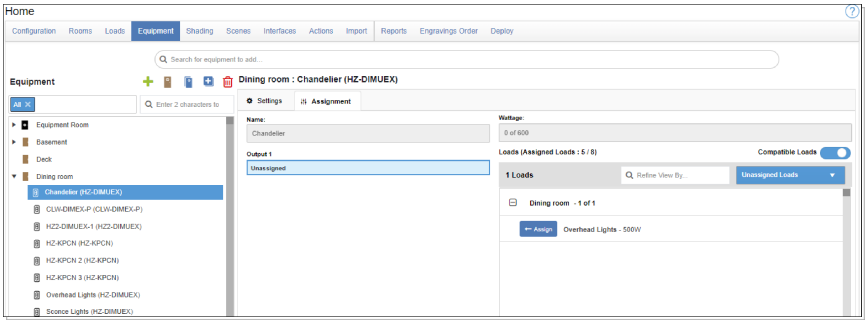
  - **Text Filter:** Enter text to display loads that match the text entry.
  - **Unassigned Loads/All Loads Drop-down:** Select **Unassigned Loads** to view loads that are not assigned to a module. Select **All Loads** to view all loads in the configuration.

    > **NOTE:** The default setting for the **Unassigned Loads/All Loads** Drop-down is **Unassigned loads**.

Assign Loads to In-Wall Modules

To assign a load to an in-wall module, perform the following steps:

1. Select an in-wall module from the **Equipment** lists and then select **Assignment**.

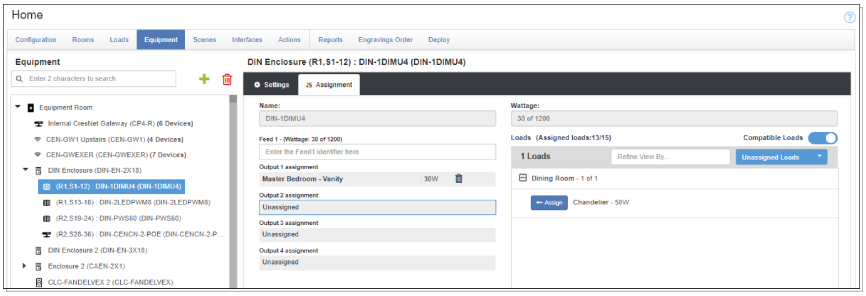


2. Select an **Output assignment** for the module.
3. Select a load from the **Loads** menu.

Assign Loads to Centralized Modules

To assign a load to a centralized module, perform the following steps:

1. Select an in-wall module from the **Equipment** lists and then select **Assignment**.



2. Select an **Output assignment** for the module.
3. Select a load from the **Loads** menu.

Shade Groups

Add shade groups to control all shades in the group as if they were one shade.

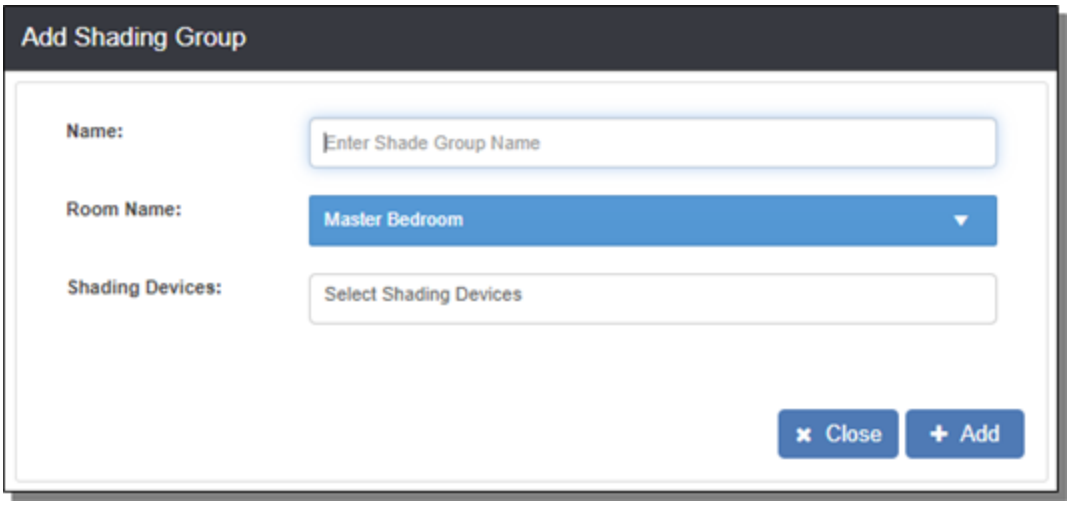
NOTES:

- Empty shade groups will not transfer over to the processor when the system is deployed.
- Shades and shade groups created using the Add Shading Group function cannot be edited within the Crestron Home Setup app after the system is deployed. To update the shade group, use the Crestron Home Configurator to update the shade group and then redeploy the system.

- Shade groups created by assigning facing and material information.
- Shades and shade groups configured using Crestron Home Configurator operate independently from shades and shade groups configured using the Crestron Home Setup app.

To create a shade group:

1. Select **Add Shading Group**.
2. Enter the required information for the group.



- **Name:** Enter a name in the box.
- **Room:** Select a room from the drop-down menu.
- **Shading Devices:** Select shades to add to the group.

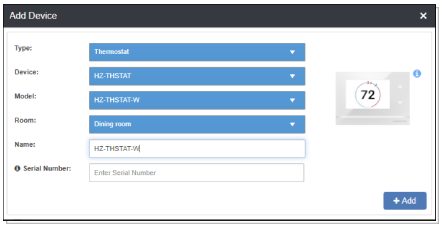
Thermostats

Use thermostats to control the temperature in the system.

Add a Thermostat

To add a thermostat:

1. Click ➕ **Add Device**.
2. Enter the required information in the **Add Device** dialog. For devices that are mounted in an enclosure, enclosure information is included instead



   a. **Type:** Select **Thermostat** from the drop-down menu.
   b. **Model:** Select a thermostat from the drop-down menu.
   c. **Device:** If the thermostat has color options, select a device from the drop-down menu.
   d. **Room:** Select a room from the drop-down menu.
   e. **Enclosure:** Available only when the selected device is mounted in an enclosure. Select an enclosure from the drop-down menu.
   f. **Slot:** Available only when the selected device is mounted in an enclosure. Select an enclosure slot from the drop-down menu.
   g. **Name:** Enter a name in the box.
   h. **Serial Number:** Enter a serial number in the box.
   i. **Gateway:** Available only when the selected device is connected to the system using a gateway. Select a gateway from the drop-down menu.

      To add a gateway, select **Add Wireless Gateway** and then select the model and room for the gateway and enter a name and serial number. For details, refer to Add a Wireless Gateway on page 670.

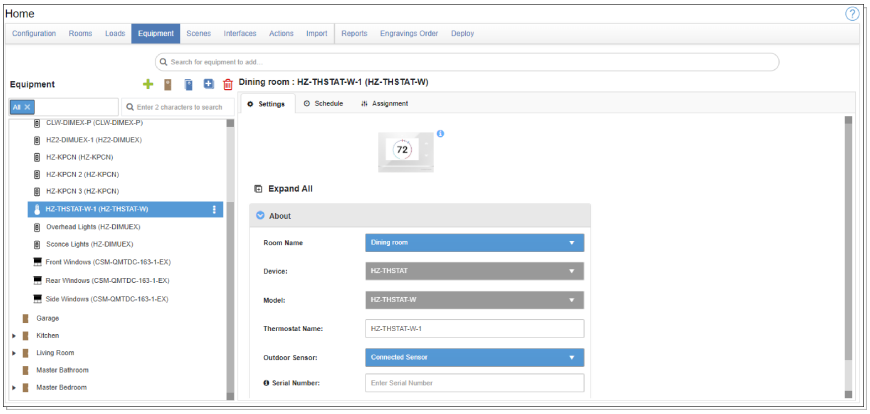
3. Click **+ Add** or press **Enter** on your keyboard. The dialog remains open to add more devices. To exit, select **Close**.

Thermostat Settings

To edit thermostat settings:

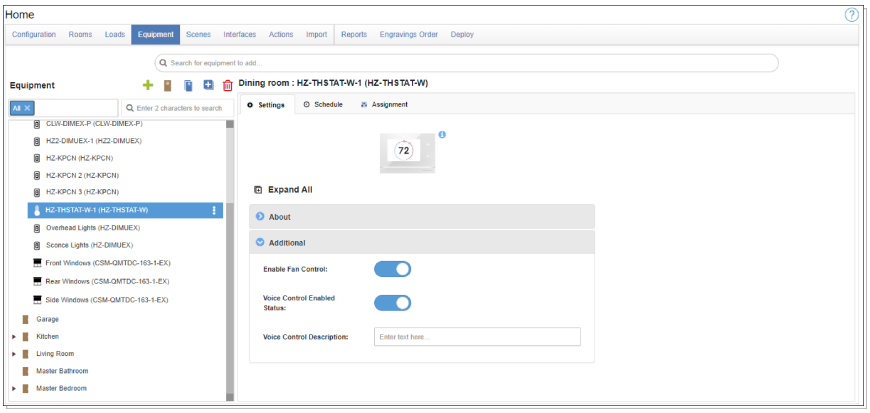
1. Select a thermostat from the **Equipment** menu and then select the **Settings** tab.
2. In the **About** section, update the room, gateway or accessory assignment, name, and serial number of the module.

> **NOTE:** The Device and Model fields cannot be changed.



3. In the **Additional** section, update the settings for the device.

> **NOTE:** All settings are not available for all device types.



   a. **Enable Fan Control:** To hide the fan controls on the user interface, turn off **Enable Fan Control**.

   b. **Voice Control Enabled Status:** Turn on or off to enable or disable voice control services.

   > **NOTE:** To use voice control, voice control services must be turned on and configured. For details, refer to Voice Control Settings on page 607.

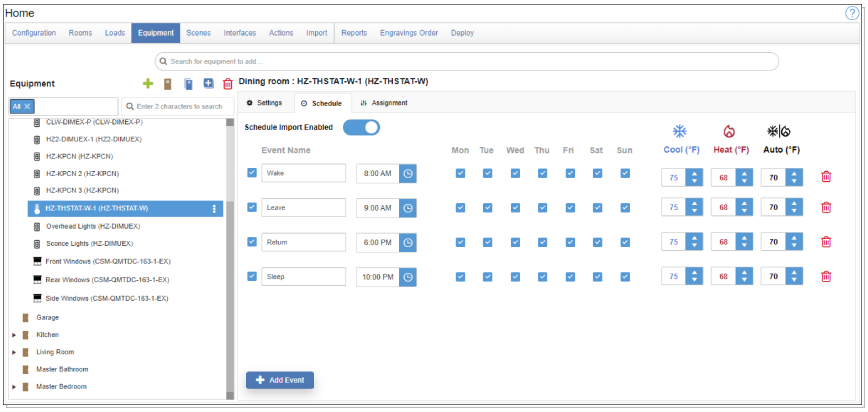
   c. **Voice Control Description:** Enter a descriptive name for the device. The name is used by the voice control services.

Thermostat Schedule

To create a scheduled thermostat event:

1. Select a thermostat from the **Select a Thermostat** menu. The list of scheduled events for the selected thermostat is displayed.
2. Select **Add Event**.

3. Configure the event settings:



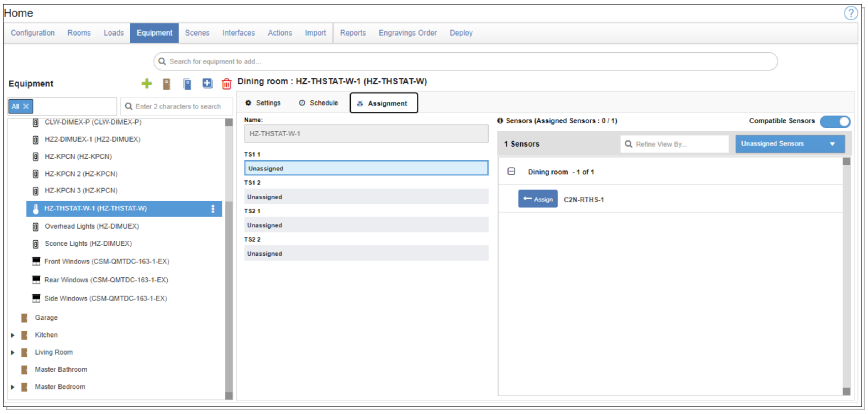
- **Event Name:** Enter a descriptive name for the event.
- **Enable Event:** Select the box next to the Event Name to enable the event.
- **Time:** Set a time for the event.
- **Days:** Select the days that the event should occur.
- **Set points:** Select the temperature set points for Cool, Heat, and **Auto** modes using the appropriate spinner menu.

Thermostat Sensor Assignments

To assign a sensor to a thermostat

1. Select a thermostat from the **Equipment** menu and then select the **Assignment** tab.
2. Select a temperature sensor input

> **NOTE:** The Device and Model fields cannot be changed.



3. Select a sensor from the **Sensors** list.

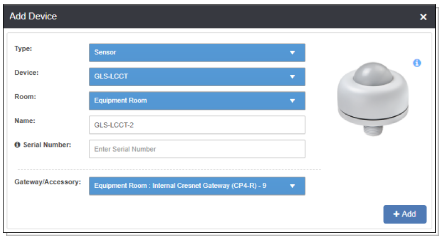
Sensors

Use Sensors to add temperature, humidity, light, and occupancy sensors to the system.

Add a Sensor

To add a sensor:

1. Click ➕ **Add Device**.
2. Enter the required information in the **Add Device** dialog:



   - **Type:** Select **Sensor** from the drop-down menu.
   - **Device:** Select a sensor from the drop-down menu.
   - **Model:** If the sensor has color options, select a model from the drop-down menu.
   - **Room:** Select a room from the drop-down menu.
   - **Name:** Enter a name in the box.
   - **Serial Number:** Enter a serial number in the box.
   - **Gateway:** Available only when the selected device is connected to the system using a gateway. Select a gateway from the drop-down menu.

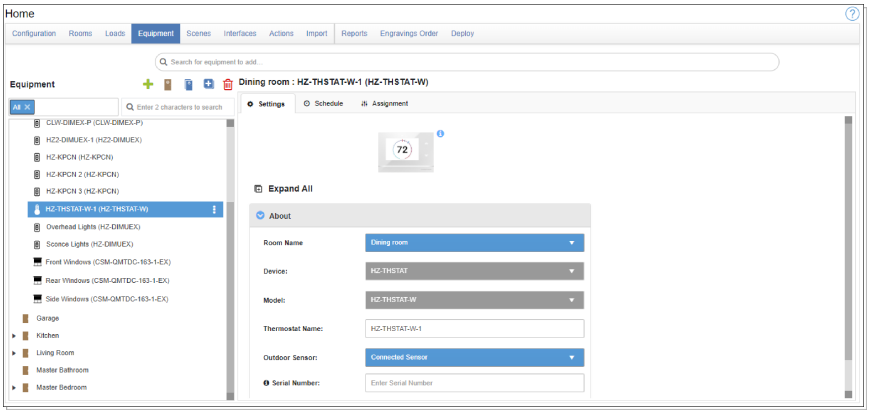
     To add a gateway, select **Add Gateway** and then select the model and room for the gateway and enter a name and serial number. For details, refer to Add a Wireless Gateway on page 670.
3. Click **+ Add** or press **Enter** on your keyboard. The dialog remains open to add more devices. To exit, select **Close**.

Sensor Settings

To edit sensor settings:

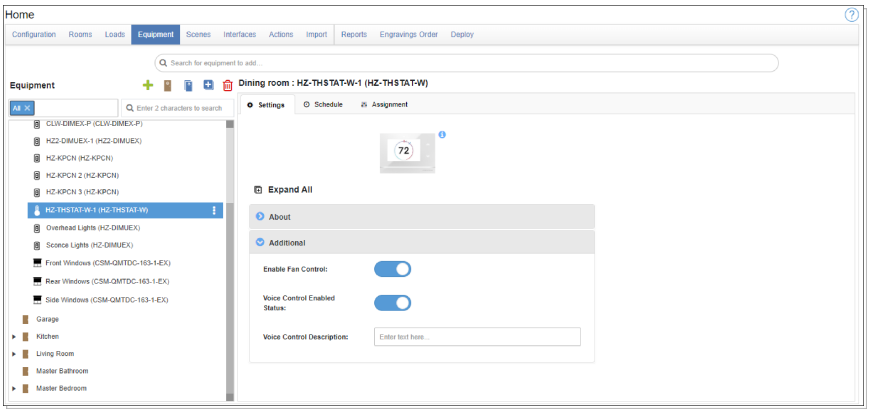
1. Select a sensor from the **Equipment** menu and then select the **Settings** tab.
2. In the **About** section, update the information for the device.

> **NOTE:** The **Device** and **Model** fields cannot be changed.



3. In the **Additional** section, update the settings for the device.

> **NOTE:** All settings are not available for all device types.



- **Timeout:** Tap the **Timeout** tab to configure the occupancy sensor timeout. Select the timeout value from the list of timeout values. To use the timeout setting that is configured on the occupancy sensor, select the **Use Local Timeout** from the **Current Timeout** list.**NOTE:** The **Timeout** tab for some occupancy sensors, such as the GLS-ODT-C-POE, displays a text field to enter timeout value (between 5 and 1,800 seconds) for the occupancy sensor.
- **Interrupt Settings:**

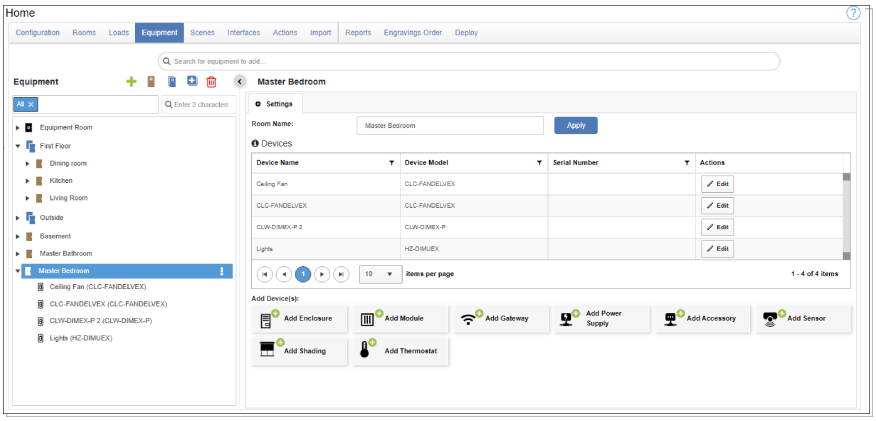
  > **NOTE:** Touch screens that do not have speakers display the interrupt messages but cannot play the associated sound.

  - **Enable Interrupts:** To enable or disable the interrupt for the device, select **Enabled**. When an interrupt is enabled, it is displayed in the Crestron Home user interface.
  - **Interupt Message:** The message that is displayed on the user interface device when the interrupt occurs. The default interrupt message is "[Device Name] in [Room Name]." For example, "Occupancy Sensor in Living Room."

    To display a custom message, enter the message in the field.
  - **Bypass Do Not Disturb:** Select to override the Do Not Disturb setting for the room and play the chime for the interrupt.
- **Hide Device from Health Dashboard:** To hide the device from the health dashboard, select **Hide device from Health Dashboard**.

Room Settings

To view the room settings, select a room. The **Devices** list displays a list of devices in the room. You can change the room name, edit the serial numbers, and add devices.



Change the Room Name

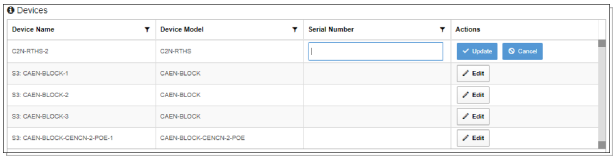
To change the room name, enter a name in the **Room Name** box and then click **Apply**.



Change the Serial Number

To change the serial number for a device:

1. Select **Edit** and then enter a serial number in the **Serial Number** box.



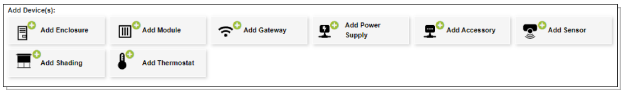
2. Click **Update**.

Add Devices

Add enclosures, modules, gateways, power supplies, and accessories to the room from the Room Settings screen.

To add devices:

1. Select **Add Enclosure**, **Add Module**, **Add Gateway**, **Add Power Supply**, **Add Accessory**, **Add Sensor**, **Add Shading**, or **Add Thermostat**.



2. Enter the required information.
3. Click **+ Add**. The dialog remains open to add more devices. To exit, select **Close**.

Module and Load-Type Compatibility

Refer to the table below for a list of modules and the compatible load types.

✔: Device supports the load type.

Preferred: Suggested device for the load type.

Nondim: Switch functionality only.

Model	Outputs	0-10 V (Fluorescent Ballast)	0-10 V (LED Driver)	Ceiling Fan	ELV/LED	Fluorescent Dim. (2-wire)	Incandescent	MLV	Motor	PWM LED (RGBW)	PWM LED (Single Color)	Switched
CLC-1LEDPWM-RGBW-EX	1-4									✔ Pref-erred	✔ Pref-erred	
CLC-FANDELVEX	1 Light				✔	✔	✔					
CLC-FANDELVEX	1 Fan			✔ Pref-erred								
CLW-DELVEX-230-E, CLW-DELVEX-230-P	1				✔	✔	✔					
CLW-DELVEX-277-P	1				✔	✔	✔					
CLW-DELVEX-E, CLW-DELVEX-P	1				✔	✔	✔					
CLW-DIMEX-230-E, CLW-DIMEX-230-P	1					✔	✔	✔				✔ nondim
CLW-DIMEX-277-P	1					✔	✔	✔				✔ nondim
CLW-DIMEX-E, CLW-DIMEX-P	1					✔	✔	✔				✔ nondim
CLW-DIMFLVEX-P	1	Yes	Yes		Yes nondim	Yes nondim	Yes nondim	Yes nondim				Yes nondim

Model	Outputs	0-10 V (Fluorescent Ballast)	0-10 V (LED Driver)	Ceiling Fan	ELV/LED	Fluorescent Dim. (2-wire)	Incandescent	MLV	Motor	PWM LED (RGBW)	PWM LED (Single Color)	Switched
CLW-DIMSWEX-E, CLW-DIMSWEX-P	1 Dim				Yes	Yes	Yes	Yes				
CLW-DIMSWEX-E, CLW-DIMSWEX-P	1 Sw			Yes nondim					Yes nondim			Yes nondim
CLW-DIMUEX-P	1				Yes	Yes	Yes	Yes				Yes nondim
CLWI-1SW2EX	1				Yes nondim	Yes nondim	Yes nondim	Yes nondim				Yes nondim
CLW-LDIMEX-1GD, CLW-LDIMEX-2GD	1				Yes	Yes	Yes	Yes				
CLW-LSWEX-1GD, CLW-LSWEX-2GD	1			Yes nondim	Yes nondim	Yes nondim	Yes nondim	Yes nondim	Yes nondim			Yes nondim
CLW-SWEX-230-E, CLW-SWEX-230-P	1			Yes nondim			Yes nondim	Yes nondim	Yes nondim			Yes nondim
CLW-SWEX-277-P	1			Yes nondim			Yes nondim	Yes nondim	Yes nondim			Yes nondim
CLW-SWEX-E, CLW-SWEX-P	1			Yes nondim			Yes nondim	Yes nondim	Yes nondim			Yes nondim
CLX-1DELV4	1-4				Yes		Yes					Yes nondim
CLX-1DIM4	1-4				Yes	Yes	Yes	Yes				Yes nondim
CLX-1DIM8	1-8				Yes	Yes	Yes	Yes				Yes nondim
CLX-1DIMU4	1-4				Yes	Yes	Yes	Yes				Yes nondim
CLX-1DIMU4-HP	1-4				Yes	Yes	Yes	Yes				Yes nondim
CLX-1FAN4	1-4			Pref-erred					Yes nondim			Yes nondim

Model	Outputs	0-10 V (Fluorescent Ballast)	0-10 V (LED Driver)	Ceiling Fan	ELV/LED	Fluorescent Dim. (2-wire)	Incandescent	MLV	Motor	PWM LED (RGBW)	PWM LED (Single Color)	Switched
CLX-1MC4	1-4			Yes nondim					Pref-erred			Yes nondim
CLX-2DIM8	1-8				Yes	Yes	Yes	Pref-erred				Yes nondim
CLX-2DIMFLV8	1-8	Pref-erred	Pref-erred		Yes nondim	Yes nondim	Yes nondim	Yes nondim	Yes nondim			Yes nondim
CLX-2DIMFLV8-277	1-8	Yes	Yes		Yes nondim	Yes nondim	Yes nondim	Yes nondim	Yes nondim			Yes nondim
CLX-2DIMU8	1-8				Pref-erred	Pref-erred	Pref-erred	Yes				Yes nondim
CLX-2DIMU8-277	1-8				Yes	Yes	Yes	Yes				Yes nondim
CLX-4HSW4	1-4				Yes nondim	Yes nondim	Yes nondim	Yes nondim	Yes nondim			Pref-erred
HZ-DIMEX	1						Yes	Pref-erred				Yes nondim
HZ-DIMLVEX	1	Pref-erred	Pref-erred	Yes nondim	Yes nondim	Yes nondim	Yes nondim	Yes nondim	Yes nondim			Yes nondim
HZ-DIMUEX	1				Pref-erred	Pref-erred	Pref-erred	Yes				Yes nondim
HZ-SWEX	1			Yes nondim	Yes nondim	Yes nondim	Yes nondim	Yes nondim	Pref-erred nondim			Pref-erred
DIN-1DIM4	1-4				Yes	Yes	Yes	Yes				Yes nondim
DIN-1DIMU4	1-4				Yes	Yes	Yes	Yes				Yes nondim
DIN-4DIMFLV4	1-4	Yes	Yes									
DIN-8SW8-I	1-8			Yes nondim	Yes nondim	Yes nondim	Yes nondim	Yes nondim	Yes nondim			Yes nondim

Model	Outputs	0-10 V (Fluorescent Ballast)	0-10 V (LED Driver)	Ceiling Fan	ELV/LED	Fluorescent Dim. (2-wire)	Incandescent	MLV	Motor	PWM LED (RGBW)	PWM LED (Single Color)	Switched
DIN-2LEDPWM8	1-8									Yes only dim	Yes only dim	
DIN-AO8	1-8	Yes	Yes									
CLCI-1DIMFLV2EX	1-2	Yes	Yes		Yes nondim		Yes nondim	Yes nondim	Yes nondim			Yes nondim
CLCI-1SW2EX	1-2	Yes nondim			Yes nondim		Yes nondim	Yes nondim	Yes nondim			Yes nondim
CLCI-DIMUEX	1				Yes		Yes	Yes				
CLF-LDIMUEX	1				Yes		Yes	Yes				
CLF-LDIMUEX-W-CORD	1				Yes		Yes	Yes				

Shading Tab

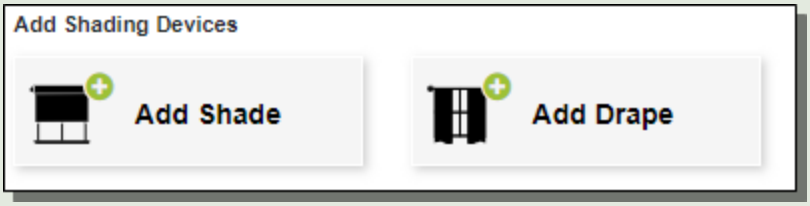
Add and configure shades and drapes using the **Shading** tab.

Add a Shade or Drape

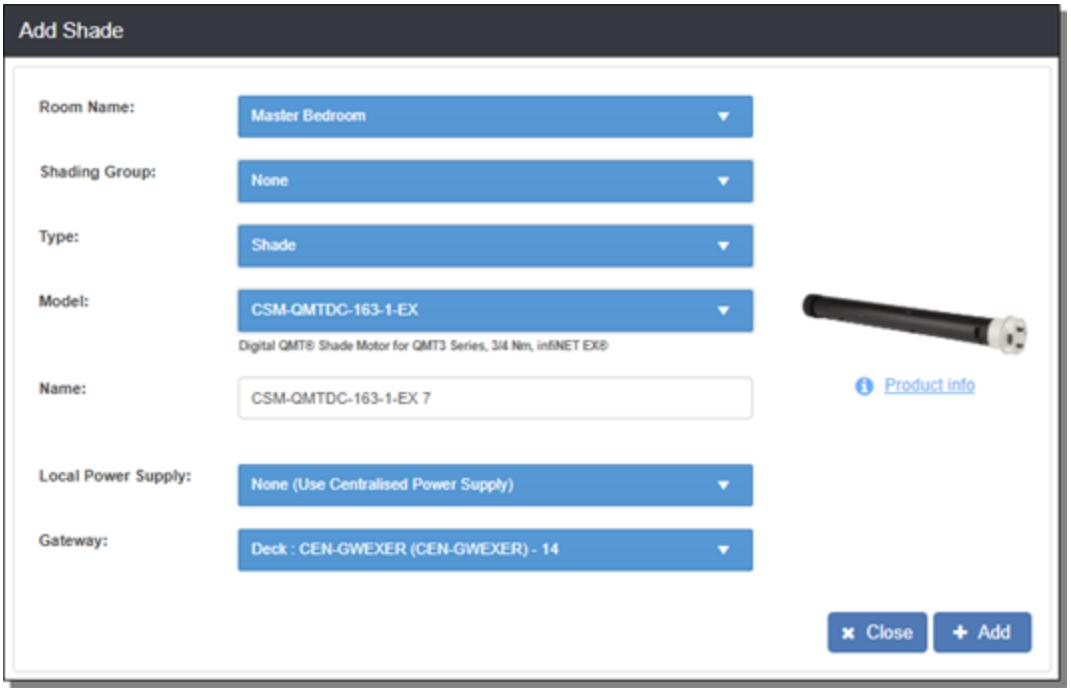
To add a shade or drape:

1. Select ✚ **Add Device**.

   TIP: Alternatively, on the **Room Settings** screen, select **Add Shade** or **Add Drape**.

2. Enter the required information in the **Add Device** dialog:



   a. **Room:** Select a room from the drop-down menu.
   b. **Shading Group:** Select a shade group for the shade or drape.
   c. **Type:** Select **Shade** or **Drape** from the drop-down menu.
   d. **Model:** Select a shade or drape motor from the drop-down menu.
   e. **Name:** Enter a name in the box.
   f. **Local Power Supply:** Select a power supply for the shade or drape. If using a centralized power supply, select **None**.
   g. **Gateway:** Select a wireless gateway for the shade or drape.
3. Click **+ Add**. The dialog remains open to add more devices. To exit, select **Close**.

Edit Shade or Drape Settings

Change the shade information, such as the gateway type, room, gateway name, and serial number after the module is added to the configuration.

To edit a shade:

1. Select a gateway from the **Equipment** menu and then select the **Settings** tab.
2. Update the room, shading group, name, facing, material, serial number, and reference number.
3. Select **Apply**.

Shade Groups

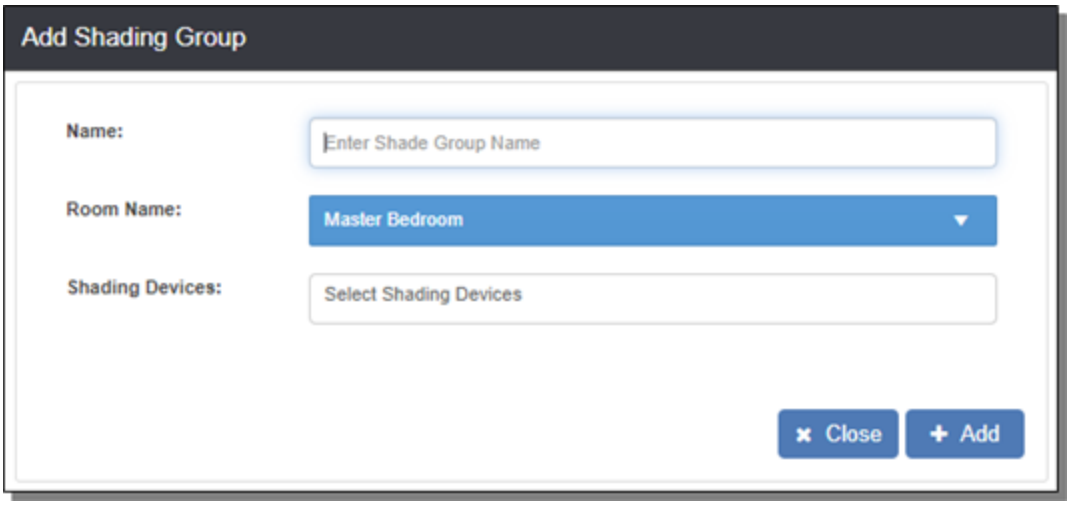
Add shade groups to control all shades in the group as if they were one shade.

NOTES:

- Empty shade groups will not transfer over to the processor when the system is deployed.
- Shades and shade groups created using the Add Shading Group function cannot be edited within the Crestron Home Setup app after the system is deployed. To update the shade group, use the Crestron Home Configurator to update the shade group and then redeploy the system.
- Shade groups created by assigning facing and material information.
- Shades and shade groups configured using Crestron Home Configurator operate independently from shades and shade groups configured using the Crestron Home Setup app.

To create a shade group:

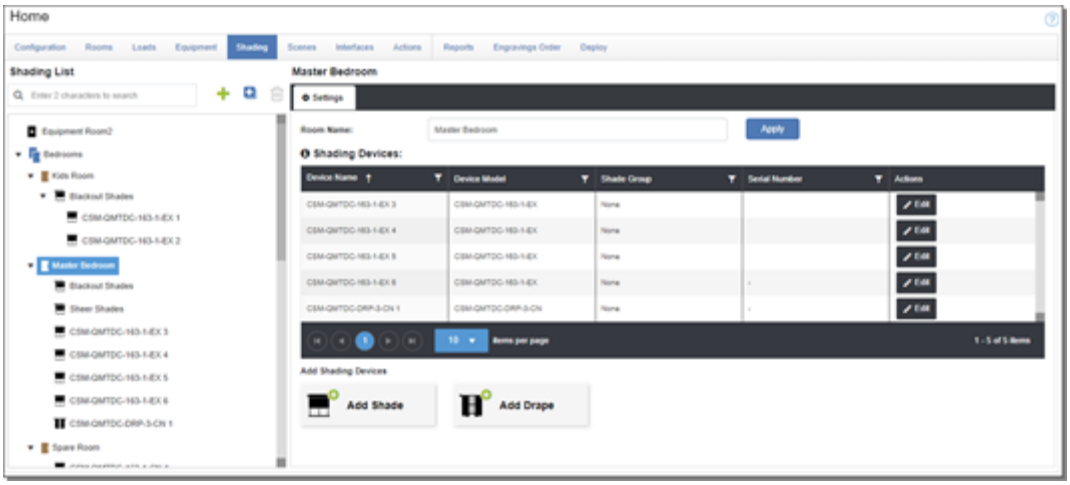
1. Select **Add Shading Group**.
2. Enter the required information for the group.



- **Name:** Enter a name in the box.
- **Room:** Select a room from the drop-down menu.
- **Shading Devices:** Select shades to add to the group.

Room Settings

To view the room settings, select a room. The **Devices** list displays a list of devices in the room. You can change the room name, edit the serial numbers, and add devices.



Change the Room Name

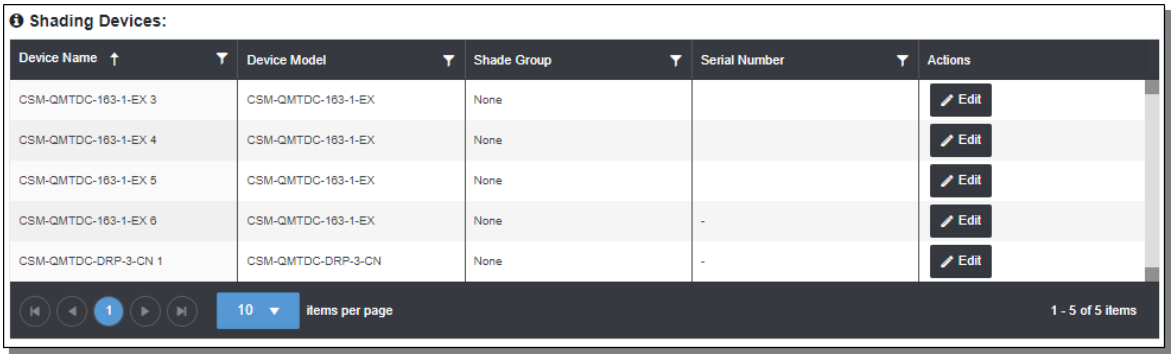
To change the room name, enter a name in the **Room Name** box and then click **Apply**.



Change the Serial Number

To change the serial number for a device:

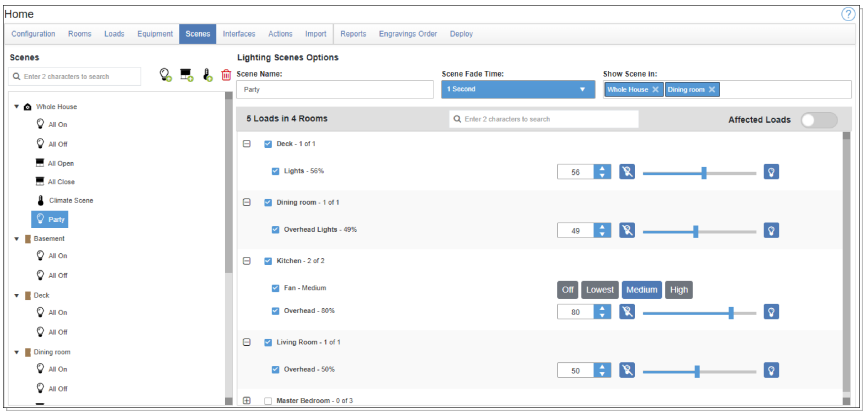
1. Select **Edit** and then enter a serial number in the **Serial Number** box.



2. Click **Update**.

Scenes Tab

Use the **Scenes** tab to create light and shade scenes for the configuration. Scenes can be added, edited, and deleted.



Create a Lighting or Shading Scene

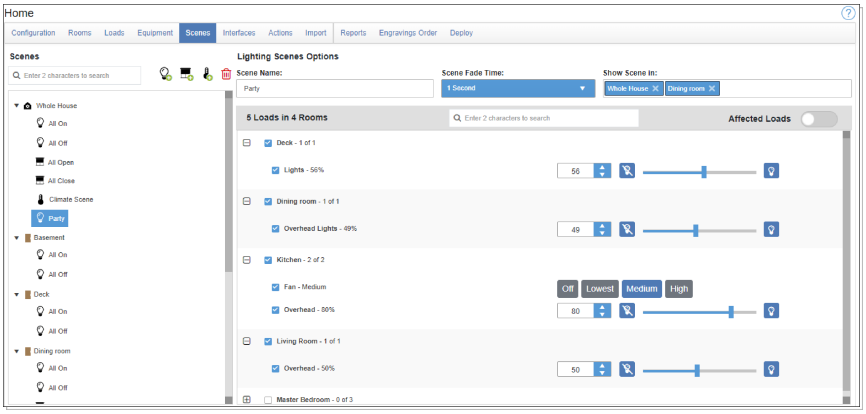
To create a scene:

1. Select a room in the **Scenes** menu.
2. Click **Add Lighting Scene** or **Add Shading Scene**.

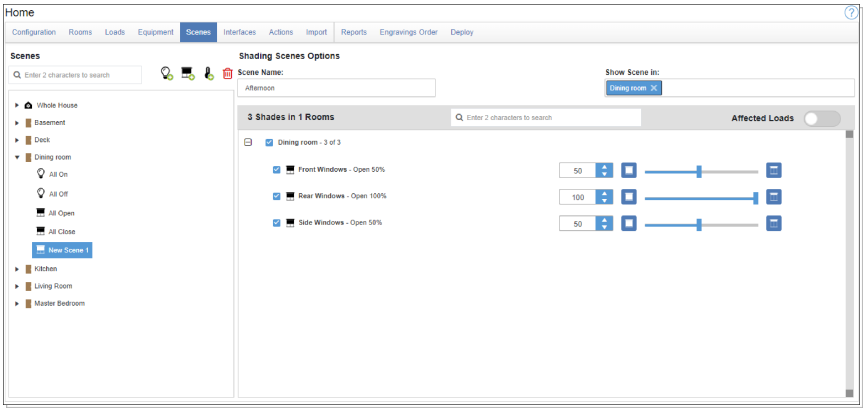
3. Configure the scene in the **Lighting Scenes Options** menu:
    - **Scene Name:** Enter a name for the scene.
    - **Scene Fade Time:** Lighting scenes only. Select the fade time from the drop-down menu.
    - **Show Scene in:** Select the scene visibility from the list box.
    - Check the box next to a load name to include it in the scene.
    - Use the controls for each load to set the levels.

    > **TIP:** To view only the loads that are in the scene, turn on the **Affected Loads** toggle switch.

Lighting Scene



Shading Scene

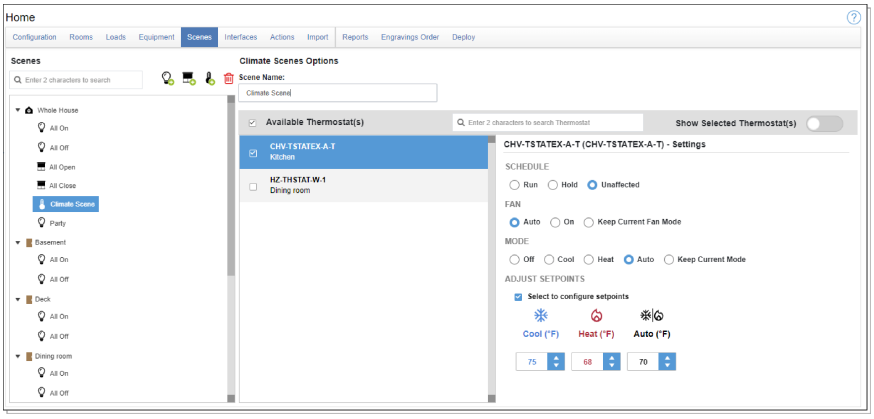


Create a Climate Scene

To create a climate scene:

1. Select a room in the **Scenes** menu.
2. Click **Add Climate Scene**.

3. Configure the scene in the **Climate Scenes Options** menu:



- **Scene Name:** Enter a name for the scene.
- **Available Thermostats:** Select thermostats from the list to include them in the climate scene. Select a thermostat to configure the scene settings.
- **Schedule:** Select a scheduling option:

  > **NOTE:** If the thermostat schedule is running because **Run** or **Unaffected** was triggered by the scene, the next scheduled climate event will overwrite the climate scene's set points.

  - **Run**: Starts the schedule.
  - **Hold**: Pauses the schedule.
  - **Unaffected**: Does not change the current thermostat schedule.
- **Fan:** Select a fan behavior:

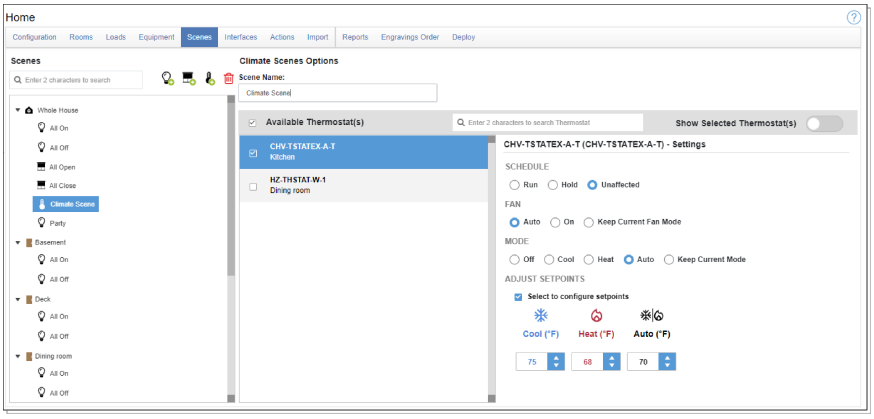
  > **NOTE:** Fan controls are not displayed:
  > - If the thermostat does not support fan control.
  > - If fan controls are hidden in the thermostat settings. For details, refer to Thermostat Settings on page 1339.

  - **Auto**: Turns the fan on and off automatically.
  - **On:** Turns the fan on.
  - **Keep Current Fan Setting** : Does not change the fan setting.
- **Mode:** Select a thermostat mode:
  - **Off**: Turns the thermostat off.
  - **Cool:** Sets the operating mode to cool.
  - **Heat:** Sets the operating mode to heat.
  - **Auto:** Sets the operating mode to auto.
  - **Keep Current Mode:** Does not change the current thermostat mode.

- **Adjust Setpoint(s):** If this check box is selected, select a temperature set point for the **Heat**, **Cool**, and **Auto** modes.

> **TIP:** To view only the thermostats that are in the scene, turn on the **Show Selected Thermostats** toggle switch.

Climate Scene



Edit a Scene

To edit a scene:

1. Select a scene in the **Scenes** menu.
2. Configure the scene as described in Create a Lighting or Shading Scene on page 700 and Create a Climate Scene on page 701.

> **TIP:** To view only the devices that are in the scene, turn on the **Affected Loads** or **Show Selected Thermostats** toggle switch.

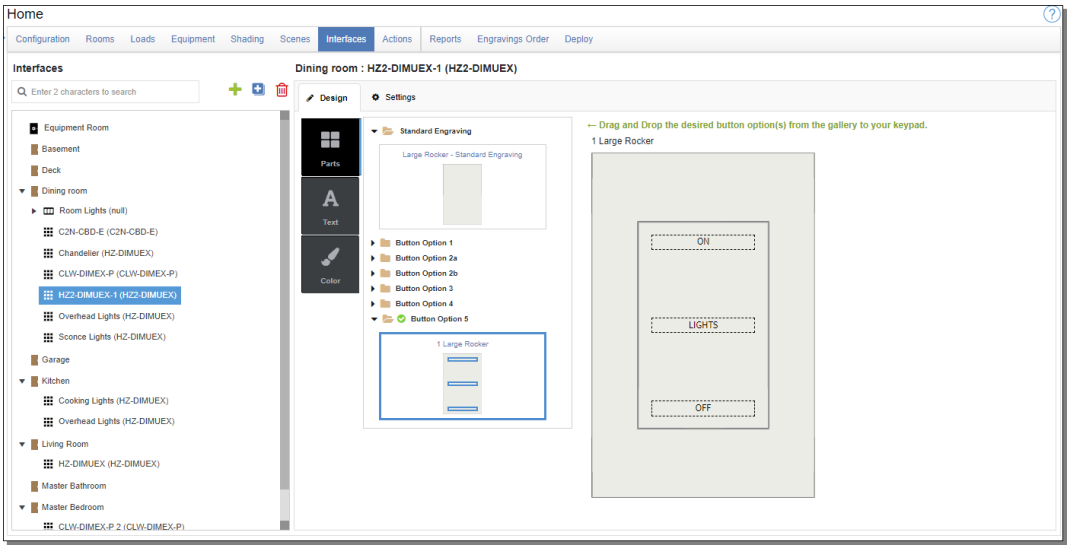
Delete a Scene

To delete a scene:

1. Select a scene in the **Scenes** menu and then click **Delete**.
2. To delete the scene, click **Yes**.

Interfaces Tab

Add and configure Interfaces and Control Stations in the **Interfaces** tab.



The **Interfaces** tab contains two sections:

- **Interfaces:** Displays a list of interfaces in the configuration. Use the **Interfaces** section to add and delete interfaces and control stations. To view device details or configure the interface or control station, select a device.
- **Device Information:** Displays the device details and configuration options for the selected interface or control station. Use the **Design** and **Settings** tabs to configure the device.
    - **Interfaces:** Use the **Design** tab to assign the button layout, button engraving text, and select the interface color. Use the **Settings** tab to change the name, location, and model of the interface; if the interface is part of a control station, you can view the assigned and derated wattage for the interface.
    - **Control Stations:** Use the **Design** tab to assign the interface layout for the control station, select the control station color, and view the assigned and derated wattage for the interfaces. Use the **Settings** tab to change the name, location, and color of the faceplate. You can also add and remove interfaces from the control station.

Interfaces

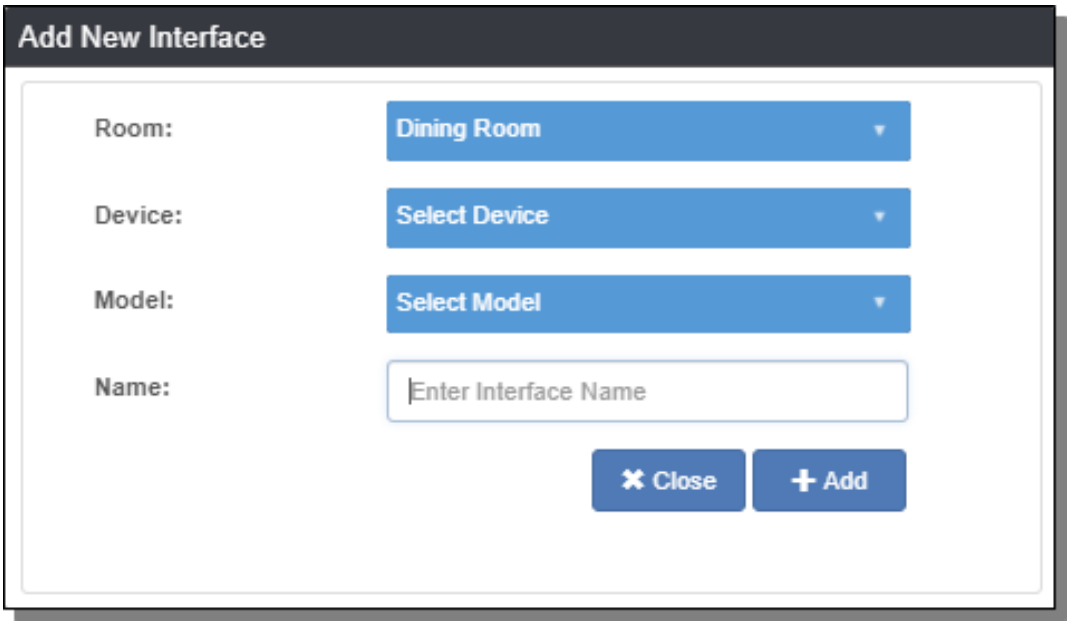
Interfaces are used to control the system. You can add and remove interfaces and configure the button layout, engraving, and color.

> **NOTE:** Add Placeholder devices to the configuration to include devices that do not support programming and third-party products. Placeholder devices are included when reports are generated.

Add an Interface

To add an interface:

1. Click ➕ **Add Interface**.
2. Enter the required information in the **Add New Interface** dialog:



   - **Room:** Select a room from the drop-down menu.
   - **Device:** Select an interface from the drop-down menu. To add a generic interface to the configuration, such as a third-party keypad, select **Placeholder**.
   - **Model:** Select the interface model from the drop-down menu. The models listed are derived from the selection made for **Device**.
   - **Name:** Enter a name for the interface. The default name for the interface is the selection from the Device drop-down menu; if an interface with that name already exists in the configuration, a quantity number is appended to the name, for example, HZ-DIMUEX 2.

     > **NOTE:** Interfaces in the same room cannot have the same name.

3. To add the interface, click **+ Add** or press **Enter** on your keyboard.

   > **NOTE:** To quickly add several of the same interfaces, update the name and then press **Enter** on your keyboard.

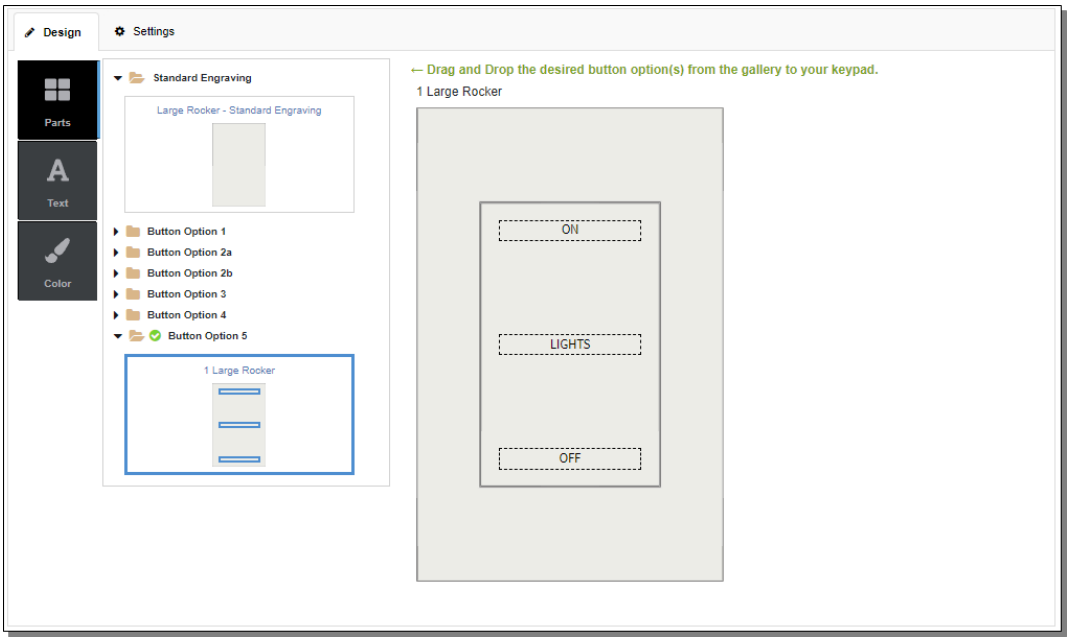
4. To close the **Add New Interface** dialog, click **Close**.

Assign the Button Layout

To assign the button layout, perform these steps:

1. Click **Parts**.
2. Select the button from the list of buttons and drag it onto the interface.

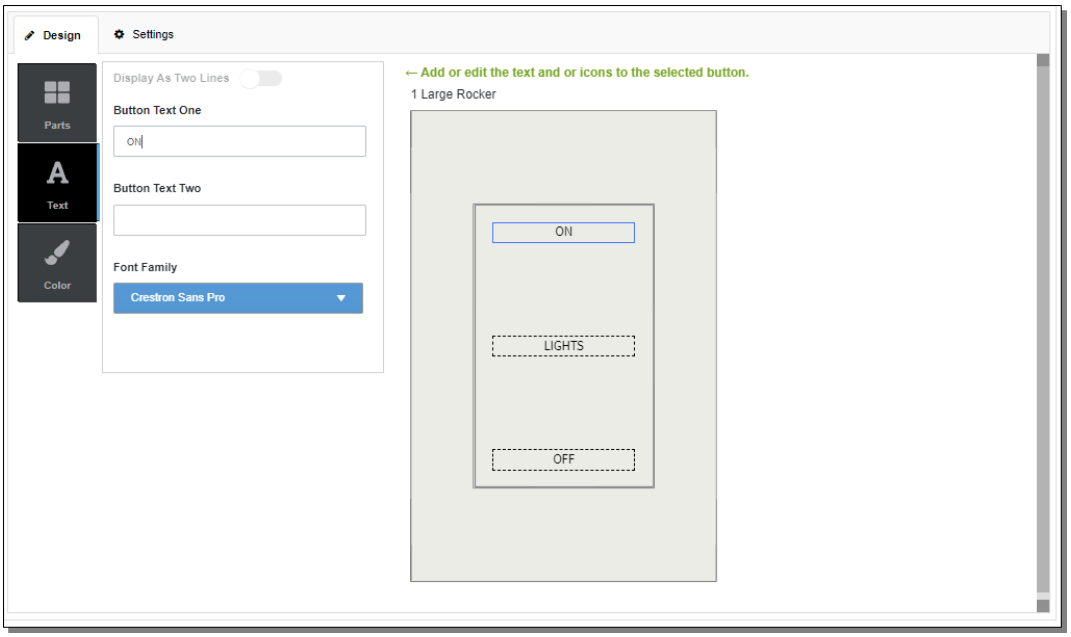
> **NOTES:**
>
> - All of the button positions on the interface must be populated.
> - A button is replaced if another button is placed on top of it.
> - Some buttons can only be placed in certain locations on the keypad.



Add Engraving Text for the Buttons

To add engraving text for the buttons, perform these steps:

1. Click **Text**.
2. Select the button on the interface to add engraving data.



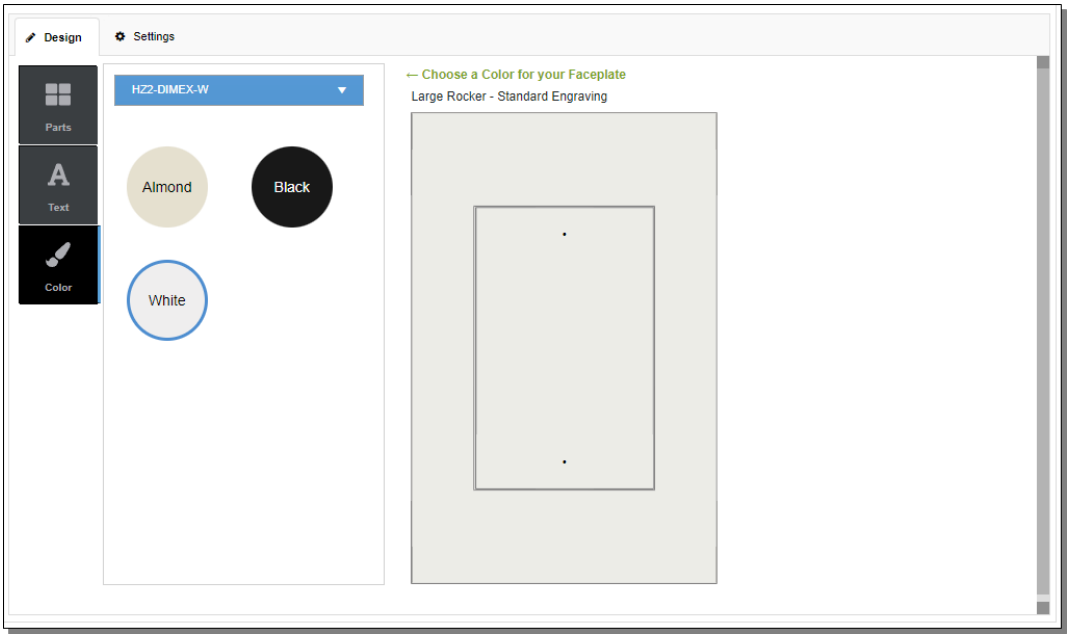
3. Select the font from the **Font Family** drop-down menu and then enter the engraving text in the **Button Text One** and **Button Text Two** boxes. To display the button text on two lines, turn on the **Display As Two Lines** toggle.

> **NOTE:** Not all button types can display text on two lines.

Select a Color for the Interface and Faceplate

To select a color for the interface and faceplate, perform these steps:

1. Click **Color**.
2. Select the color of the keypad from the list of available colors. The image of the interface is updated to match the selected color.



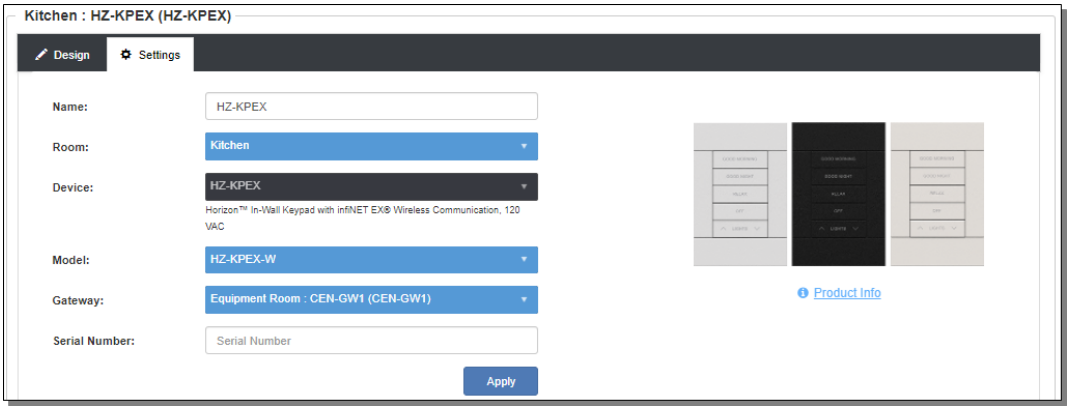
Edit Interface Settings

Change the interface settings, such as the interface type, room name, module name, interface model, gateway assignment, and serial number.

To edit an interface:

1. Select an interface from the **Equipment** menu and then select the **Settings** tab.
2. Update the room, name, model, gateway, and serial number of the interface.

   > **NOTE:** The device (interface type) cannot be changed.



3. To save the changes, select **Apply**.

Delete an Interface

To delete an interface:

1. Select an interface in the **Interfaces** menu and then click **Delete**.
2. To delete the interface, click **Yes**.

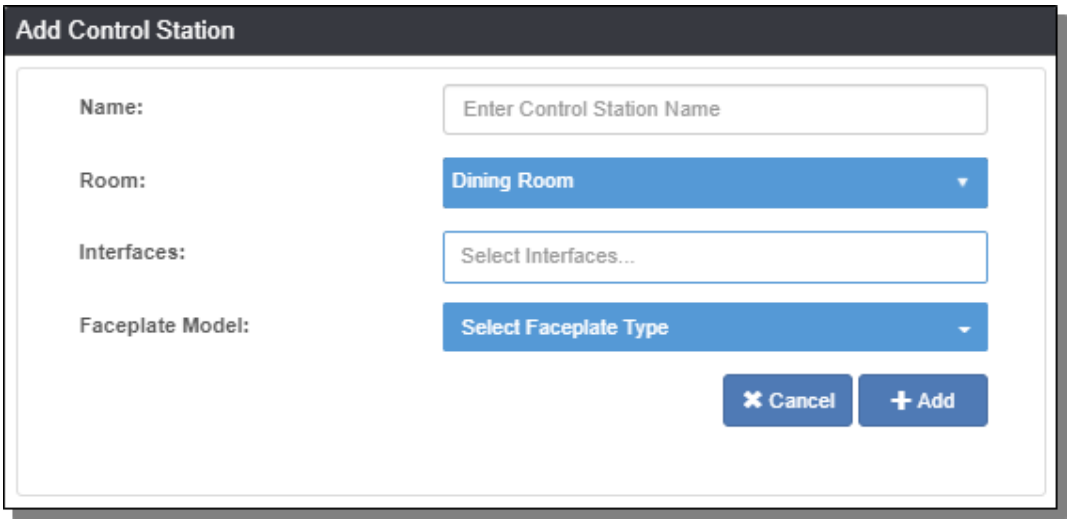
Control Stations

Control stations allow you to group keypad interfaces into a multi-gang keypad station. You can easily view and configure the control station engraving, layout, wattage/derating, and color.

Add a Control Station

To add a control station, perform these steps:

1. Click **Add Control Station**.
2. Enter details for the control station in the **Add Control Station** dialog:



- **Name:** Enter a name for the control station.
- **Room:** Select a room for the control station from the drop-down menu.
- **Interfaces:** Select interfaces to include in the control station from the drop-down menu. The interfaces must all be the same style; either Horizon- or decorator-style.

  > **NOTE:** A maximum of four Horizon® devices can be added to a control station.

- **Faceplate Model:** The **Faceplate Model** drop-down menu displays compatible faceplates for the control station. Select a faceplate color from the drop-down menu.
  - **Horizon® devices:** When Horizon devices are selected from the **Interfaces** drop-down menu, HZ-FP-G1, HZ-FP-G2, HZ-FP-G3, or HZ-FP-G4 Horizon faceplates and their color options are displayed. There can be no more than four Horizon devices in a control station.
  - **Decorator-style devices:** When devices that use a decorator-style faceplate are selected from the **Interfaces** drop-down menu, FP-G1, FP-G2, FP-G3, or FP-G4 decorator style faceplates and their color options are displayed.

    If more than 5 decorator-style devices are selected from the Interfaces drop-down menu, generic (third-party) faceplates and common color options are displayed. Crestron does not sell or supply generic or third-party faceplates.

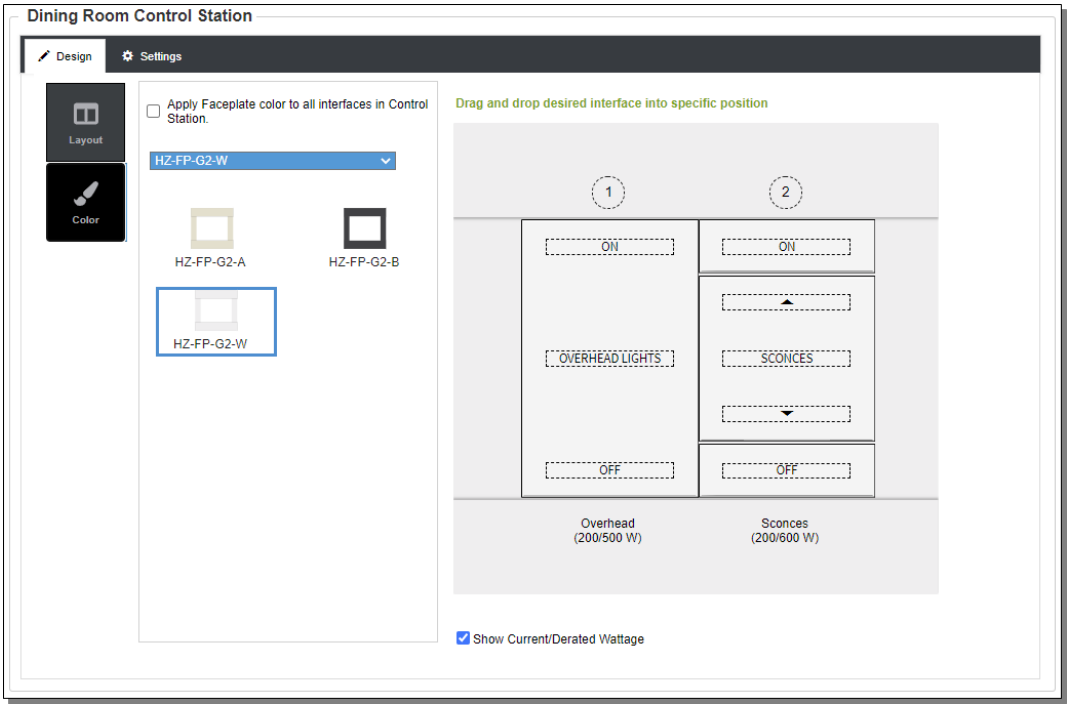
3. Click **Add**.

Select a Color for the Control Station

To change the color of the control station, perform these steps:

> **NOTE:** To view the assigned wattage and derated wattage, select the **Show Current Wattage/Derated Wattage** check box. Refer to Load Derating on page 714 for device derating information.

1. Click **Color**.
2. Select the color of the control station from the list of colors. The image of the control station is updated to match the selected color.



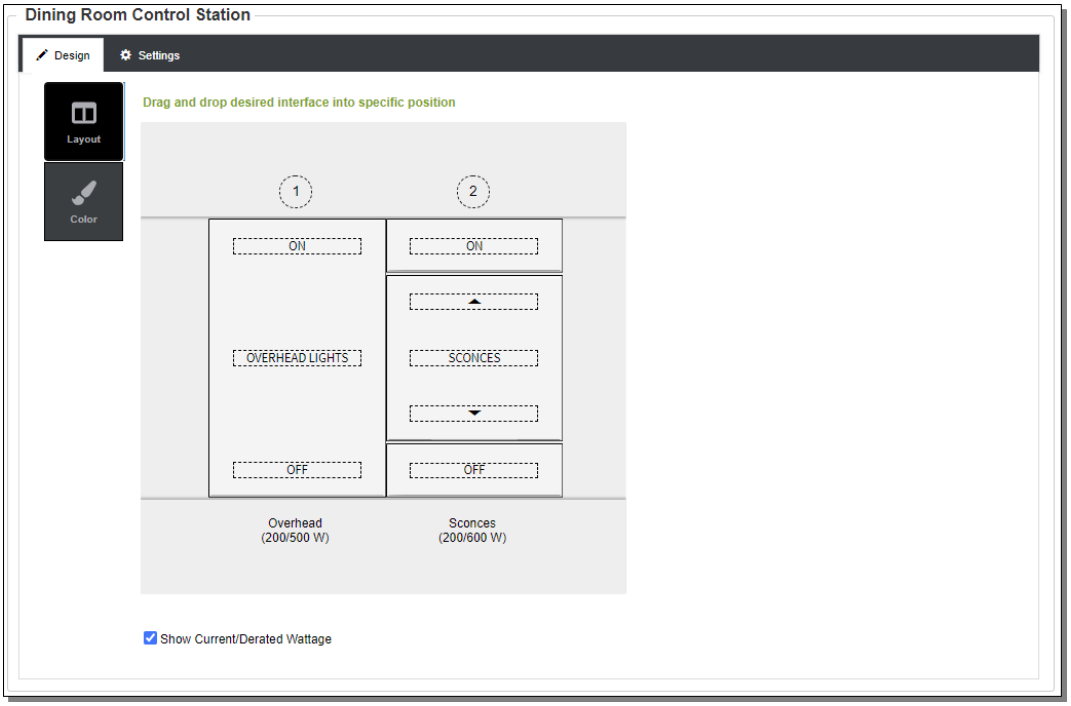
3. If the interfaces and the control station faceplate are different colors and you would like to update the interface color so the interfaces match the faceplate, select the **Apply Faceplate color to all interfaces in Control Station** check box. The interface model is updated to match the faceplate.

Change the Layout of the Control Station

To change the layout of the control station, perform these steps:

> **NOTE:** To view the assigned wattage and derated wattage, select the **Show Current Wattage/Derated Wattage** check box. Refer to Load Derating on page 714 for device derating information.

1. Click **Layout**.
2. Drag the keypad to its new location.

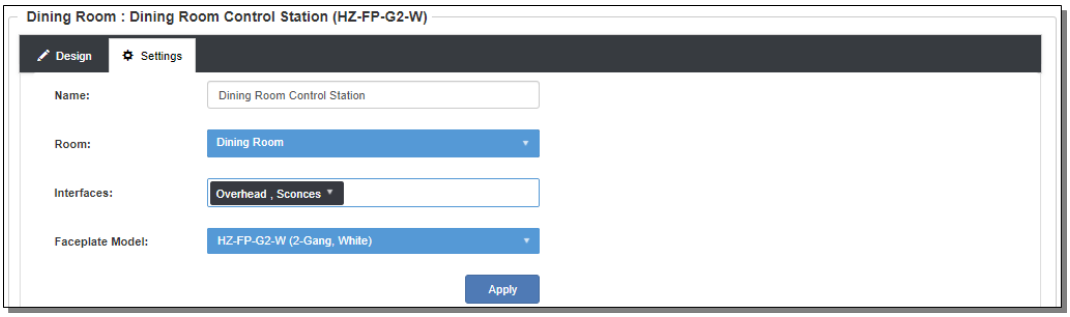


Edit Control Station Settings

Change the control station settings, such as the control station name, room and interface assignments, and faceplate model.

To edit a control station:

1. Select a control station from the **Equipment** menu and then select the **Settings** tab.
2. Update the name, room, interfaces, and faceplate model of the control station.



3. To save the changes, select **Apply**.

Delete a Control Station

To delete a control station:

1. Select a control station in the **Interfaces** menu and then click **Delete**.
2. To delete the control station, click **Yes**.

Load Derating

A load derating applies when multiple devices are installed in an electrical box. The derating for the device is determined by the number of devices and their location within the box.

- **Single:** One device in a 1-gang electrical box.
- **Side Position:** A device placed in the left or right side of a 2-gang or larger electrical box.
- **Middle Position:** A device placed between two other devices in a 3-gang or larger electrical box.

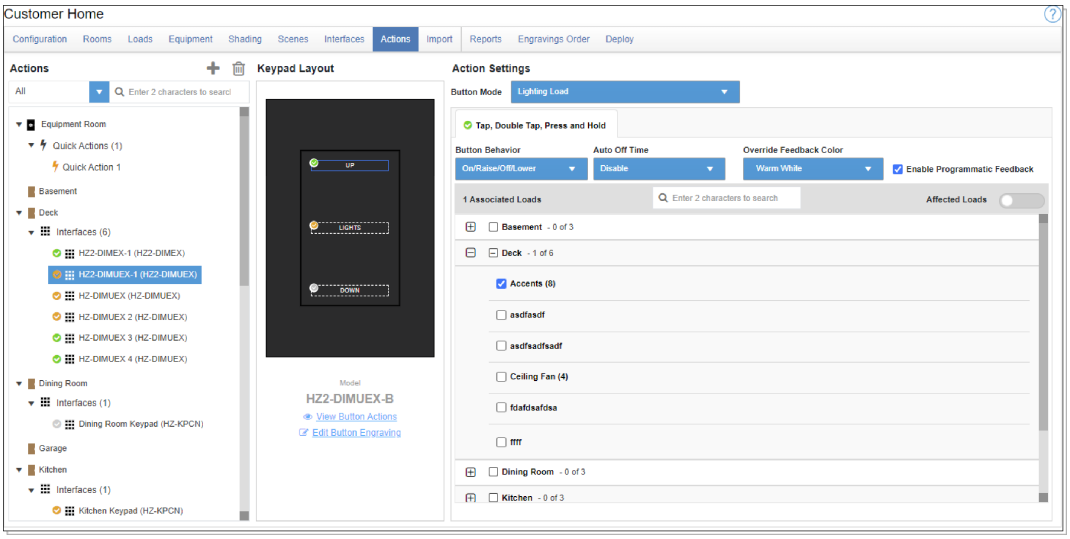
Refer to the table below for the device derating information.

	Device Location		
Device	**Single**	**Side Position**	**Middle Position**
CLW-DELVEX-230-E, CLW-DELVEX-230-P	500 VA	400 VA	250 VA
CLW-DELVEX-277-P	500 VA	400 VA	250 VA
CLW-DELVEX-E, CLW-DELVEX-P	500 VA	400 VA	250 VA
CLW-DIMEX-230-E, CLW-DIMEX-230-P	1000 VA	800 VA	400 VA
CLW-DIMEX-277-E, CLW-DIMEX-277-P	1200 VA	800 VA	600 VA
CLW-DIMEX-E, CLW-DIMEX-P	750 VA	600 VA	400 VA
CLW-DIMFLVEX-E, CLW-DIMFLVEX-P	No derating[1]	No derating[1]	No derating[1]
CLW-DIMSWEX-E, CLW-DIMSWEX-P	500 VA	400 VA	250 VA
CLW-DIMUEX-P	600 VA	500 VA	300 VA
CLW-SWEX-230-E, CLW-SWEX-230-P, CLW-SWEX-277-P, CLW-SWEX-E, CLW-SWEX-P	No derating[1]	No derating[1]	No derating[1]
HZ-DIMUEX	600 VA	500 VA	300 VA
HZ-DIMEX	750 VA	600 VA	300 VA
HZ-DIMLVEX	No derating[2]	No derating[2]	No derating[2]
HZ-SWEX	No derating[2]	No derating[2]	No derating[2]

1. The maximum environmental temperature for the CLW-DIMFLVEX and CLW-SWEX is 104° F (40° C).
2. The maximum environmental temperature for the HZ-DIMLVEX and HZ-SWEX is 86° F (30° C).

Actions Tab

Use the **Actions** tab to create and assign functions to the controls in the configuration.



Status indicators display the progress for interfaces in the **Devices** section and items in the **Device Layout** section.

- : No actions are assigned to the interface or item.
- : Actions are assigned to some, but not all, items on the interface.
- : Actions are assigned to all components on the interface or item.

Assign Actions to an Interface

> **NOTE:** The top button on a Horizon® keypad is assigned as the Local button. Use the Crestron Home Setup app after the configuration is deployed on a Crestron Home processor to change the Local button. For details, refer to Configure Horizon® Keypads.

1. In the **Devices** window, select an interface.
2. In the **Device Layout** window, select a button on the device.
3. In the **Action Settings** window, select a button mode from the **Button Mode** drop-down menu. The mode determines the type of action that is recalled when the button is pressed.
4. Configure the action. For details, refer to Button Modes on page 715.

Button Modes

These Button Modes are available.

None

Select **None** from the **Button Mode** drop-down list to assign button functions using the Crestron Home Setup app instead of the Crestron Home Configurator. To assign actions using the Crestron Home Setup app, refer to Button Actions on page 456.

To preserve actions assigned using the Crestron Home Setup app, select **Preserve Crestron Home Settings**. During a redeploy, the actions assigned in the Crestron Home Setup app are preserved.

> **NOTE:** If **Preserve Crestron Home Settings** is not selected, the actions assigned in the Crestron Home Setup app are overwritten.

Scene

Select **Scene** from the **Button Mode** drop-down list to recall or switch a scene when the button is pressed. The scene can be recalled using the built-in or multi-press functionality.

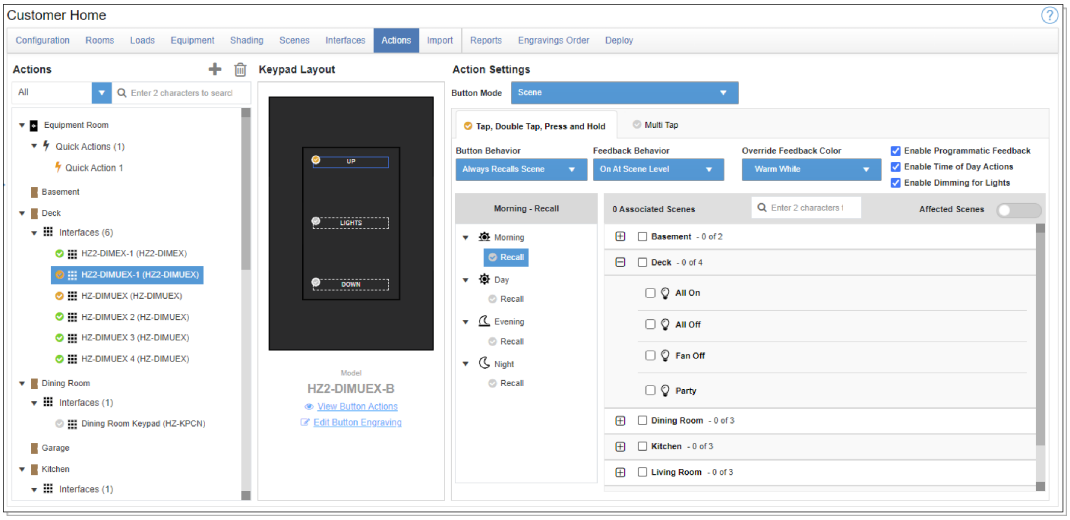
> **NOTE:** The Tap, Double Tap, Press and Hold function cannot be used in conjunction with the **Multi Tap** button function. Settings applied to the function will be discarded when switching between the functions.

- **Tap, Double Tap, Press and Hold Functionality:** One button press can recall or switch one scene.
- **Multi Tap:** Multiple button presses can recall up to 10 scenes and provide the ability to cycle through scenes. Sequential button presses recall up to 10 scenes.

Affected Scenes: Toggle the **Enable Affected Scenes** to filter the scene list and only display scenes that are associated with the button.

Tap, Double Tap, Press and Hold Functionality

Click the **Tap, Double Tap, Press and Hold tab** to configure using the tap, double tap, press and hold functionality.



ButtonBehavior: The behavior defines how the scene is recalled or toggled when the button is pressed. Select a behavior from the **Button Behavior** drop-down list:

- **Always Recalls Scene:** Recalls the scene.
- **Toggles Scene/Off:** Switches the scene on and off.
- **Custom Toggle:** Switches between the On Actions and Off Actions. Assign different scenes to the On Action and Off Action.

Functions are assigned for the following button presses:

- **Tap:** Recalls the scene or the scene on or off with the defined fade time.
- **Double Tap:** Immediately recalls the scene or the scene on or off. The fade time for the scene is bypassed.
- **Press and Hold:** To use the button to raise or lower the lights, select **Enable Dimming for Lights**. The load raises or lowers based on the action that was performed last. If the load was turned on or raised, press and hold the button to lower the light level. To turn off the lights, continue holding the button after the minimum light level is reached.

Feedback Behavior: The LED feedback behavior defines the function of the LED that is associated with the button. Select an LED feedback behavior from the **Feedback** drop-down list:

- **On at Scene Level:** The LED lights when the scene is recalled.

  > **NOTE:** The LED turns off if the scene is modified. For example, the LED turns off if the lights or shades are raised or lowered.

- **On When any Light On:** The LED lights when any lighting load that is associated with the scene is on. For example, if a keypad button recalls the All On scene from the Whole House room, the LED lights when any light in the house is on and the LED turns off when all lights in the house are off.

Enable Dimming for Lights: When **Enable Dimming for Lights** is enabled, press and hold the button to raise or lower the lights. If the last action performed raised the lights, the lights will be lowered.

Enable Time of Day Actions: Assign a different action for each time of day. Tap the **Morning**, **Day**, **Evening**, or **Night** button and then select the action.

Enable Programmatic Feedback: When enabled, the LED provides feedback based on the status of other devices in the Crestron Home system. This allows the LED to light when another keypad in the system recalls the same action (for example, a different keypad recalls the same scene). When disabled, the LED provides no feedback.

Override Feedback Color: The color of the LED feedback associated with the button. Select an LED color from the **Override Feedback Color** drop-down list. The Alarm feedback color lights red when activated and is off when inactive.

> **NOTE:** For feedback purposes only, the center of a rocker button can be programmed to light and display programmatic feedback. For example, the LED can be programmed to mimic the function of the top button of the rocker by assigning the same settings used by the top button.

Enable Local Button Functionality: Select this option to turn on the Local Button functionality on the keypad.

Set as Local Button: Select this option to assign the selected button as the local button. A local button must always be selected on a load controller. Only one button can be set as the local button. The local button provides direct control of the connected load (without input from the control processor) and can also be programmed to perform other actions, such as turning on the TV.

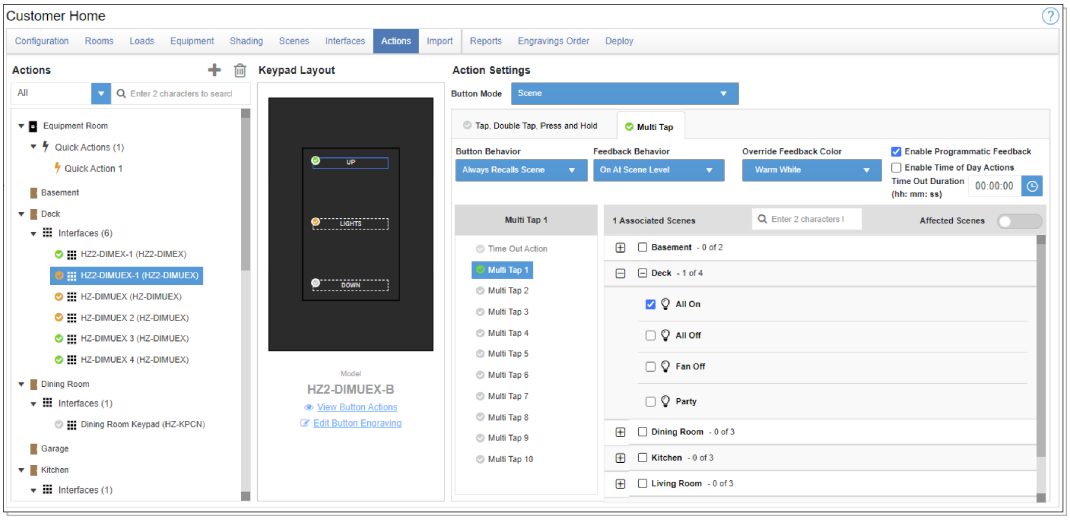
NOTES:

- An HZ-KPEX and HZ2-KPEX can be assigned a local button even though it cannot directly control a load.
- When the local button on the HZ-AUX is pressed, the signal is transmitted using the "traveler" wire to the Horizon dimmer or switch and then the load attached to the Horizon dimmer or switch is turned on or off or dimmed up or down.
- The HZ-DIMFLVEX does not support multiway control.

Multi Tap

Click the **Multi Tap** tab to configure using the multi tap functionality.

> **NOTE:** The Tap, Double Tap, Press and Hold function cannot be used in conjunction with the **Multi Tap** button function. Settings applied to the function will be discarded when switching between the functions.



Button Behavior: The behavior defines how the scene is recalled or toggled when the button is pressed. Select a behavior from the **Behavior** drop-down list:

- **Custom Toggle:** Switches between the On Actions and Off Actions. Assign different scenes to the On Action and Off Action.

Override Feedback Color: The color of the LED feedback associated with the button. Select an LED color from the **Override Feedback Color** drop-down list:

Multi Tap (1-10): Assign an action for each button press. To assign an action to a button press, tap a button press number and then assign the action.

> **NOTES:**
>
> - The Crestron Home system maintains a count of the button presses that have occurred. When the system count matches the button press number, the action associated with the button press number is performed.
> - The system count resets after it reaches the end of the list. For example, if an action is assigned for button press 1 through 4, the fifth button press resets the system count and the action assigned to button press 1 is performed.
> - Button presses can be skipped. For example, if an action is assigned for button presses 1 and 5 and no action is assigned for button presses 2, 3, and 4, no action is performed when button presses 2, 3, and 4 occur.

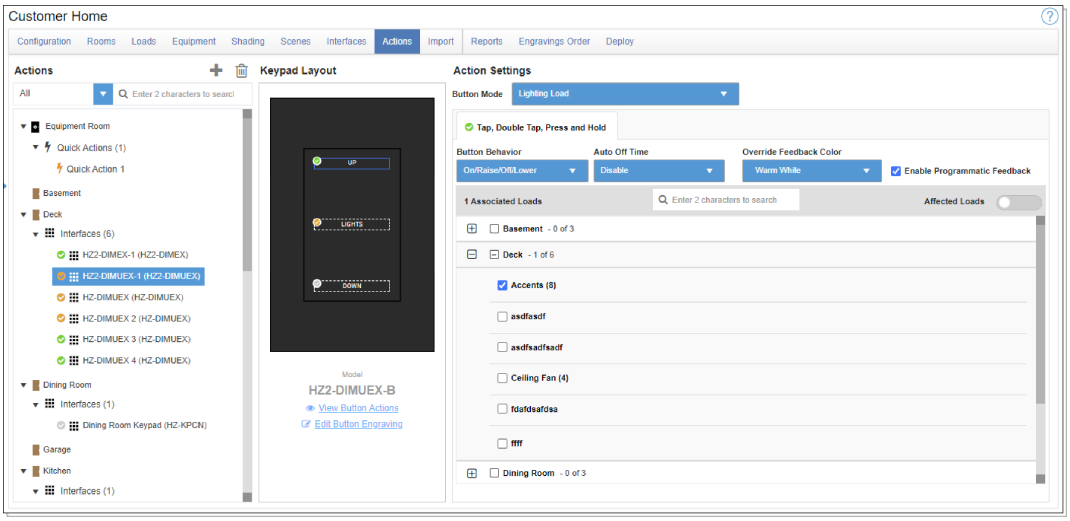
Time Out Action: A time out action can be performed when the time out period expires. To set the time out action, tap the **Time Out Action** button and then assign an action.

> **NOTE:** A time out period begins after the last button press and is used to determine how long the Crestron Home system waits for an addition button press. The default timeout period is 24 hours.

Enable Time of Day Actions: Assign a different action for each time of day. Assign an action for the **Morning**, **Day**, **Evening**, or **Night**.

Lighting Load

Select **Lighting Load** from the **Button Mode** drop-down list to control a lighting load when the button is pressed.



Affected Loads: Toggle the **Enable Affected Loads** to filter the load list and only display loads that are associated with the button.

ButtonBehavior: The behavior defines how the lights are controlled. Select a button behavior from the **Button Behavior** drop-down list:

- **On/Raise/Off/Lower:** Switches the load on or off or raises or lowers the lights. The lights turn on or off or raise or lower based on the action that was performed last. If the lights were turned on or raised, press the button to turn the lights off or press and hold the button to lower the lights.
- **On/Raise:** Turns the load on or raises the lights.
- **Off/Lower:** Turns the load off or lowers the lights.

Functions are assigned for the following button presses:

- **Tap:** Increase or decrease (jog) the light level.
- **Double Tap:** Turns the lights on or off without fade time.
- **Press and Hold:** Raise or lower the light level until the button is released or the maximum or minimum light level is reached.

> **NOTE:** To turn off the lights, continue holding the button after the minimum light level is reached.

Auto Off Time: Sets a timer to turn the lights off after a set period of time. To set the Auto Off time, select a time from the **Auto Off Time** drop-down list. The default auto off time is **Disabled**.

Override Feedback Color: The color of the LED feedback associated with the button. Select an LED color from the **Override Feedback Color** drop-down list. The Alarm feedback color lights red when activated and is off when inactive.

> **NOTE:** For feedback purposes only, the center of a rocker button can be programmed to light and display programmatic feedback. For example, the LED can be programmed to mimic the function of the top button of the rocker by assigning the same settings used by the top button.

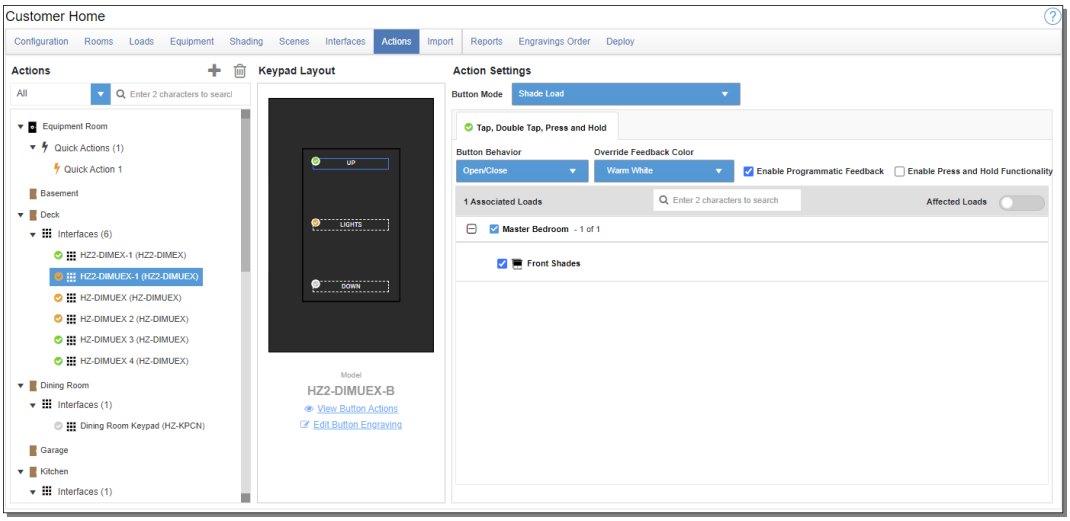
Enable Local Button Functionality: Select this option to turn on the Local Button functionality on the keypad.

Set as Local Button: Select this option to assign the selected button as the local button. A local button must always be selected on a load controller. Only one button can be set as the local button. The local button provides direct control of the connected load (without input from the control processor) and can also be programmed to perform other actions, such as turning on the TV.

> **NOTES:**
>
> - An HZ-KPEX and HZ2-KPEX can be assigned a local button even though it cannot directly control a load.
> - When the local button on the HZ-AUX is pressed, the signal is transmitted using the "traveler" wire to the Horizon dimmer or switch and then the load attached to the Horizon dimmer or switch is turned on or off or dimmed up or down.
> - The HZ-DIMFLVEX does not support multiway control.

Shade Load

Select **Shade Load** from the **Button Mode** drop-down list to control a shade load when the button is pressed.



Behavior: The behavior defines how the shades are controlled. Select a button behavior from the **Behavior** drop-down list:

- **Open/Close:** Open or close the shades.
- **Open:** Open the shades.
- **Close:** Close the shades.

Predefined functions are assigned for the following button presses:

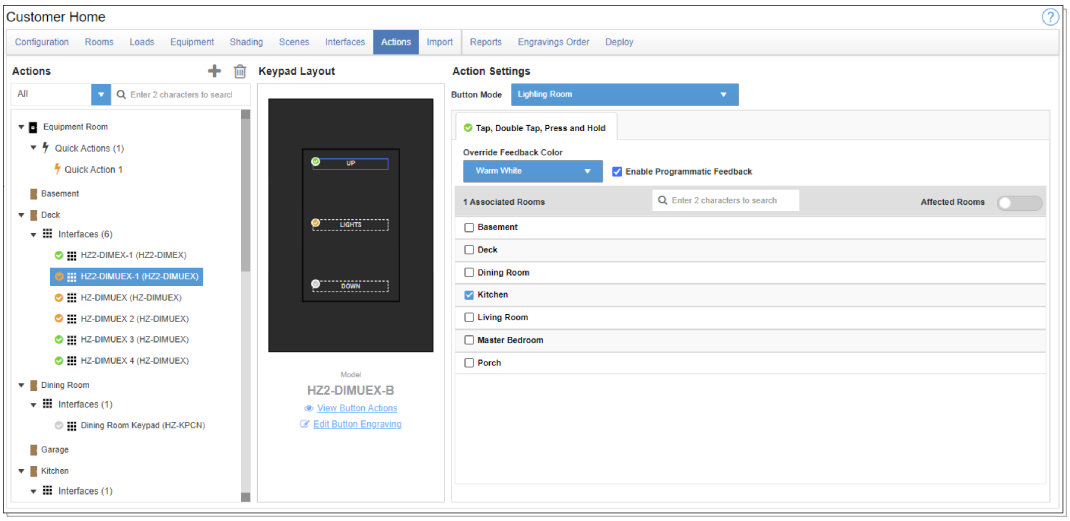
- **Tap:** Open or close the shades.
- **Press and Hold:** When **Enable Press-and-Hold Functionality** is enabled. Raise or lower the shades until the button is released or the upper or lower limit is reached.

> **NOTE:** To enable press-and-hold functionality, select the **Enable Press-and-Hold Functionality** check box.

Override Feedback Color: The color of the LED feedback associated with the button. Select an LED color from the **Override Feedback Color** drop-down list:

Lighting Room

Select **Lighting Room** from the **Button Mode** drop-down list to control all of the lighting loads in the rooms.



Affected Rooms: Toggle the **Enable Affected Rooms** to filter the room list and only display rooms that are associated with the button.

Functions are assigned for the following button presses:

> **NOTE:** The lights are controlled based on the action that was performed last. If the lights were turned on or raised, the next button press will turn off or lower the lights.

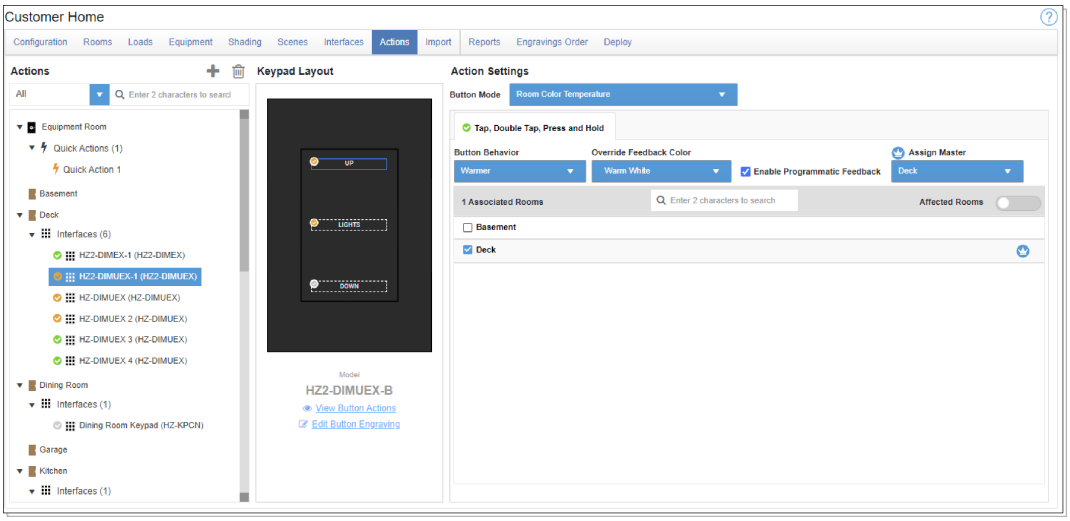
- **Tap:** Switches the lights on or off with the default fade time.
- **Double Tap:** Switches the lights on or off with no fade time.
- **Press and Hold:** Raise or lower the lights until the button is released or the maximum or minimum light level is reached.

  > **NOTE:** To turn off the lights, continue holding the button after the minimum light level is reached.

Override Feedback Color: The color of the LED feedback associated with the button. Select an LED color from the **Override Feedback Color** drop-down list:

Color Temperature

Select **Room Color Temperature** from the **Button Mode** drop-down list to control the color temperature for the lights in the room.



Button Behavior: The behavior defines how the lights are controlled. Select a button behavior from the **Button Behavior** drop-down list:

- **Warmer:** Decrease the color temperature of the lights. When the color temperature decreases the lights produce warm white (amber) light. Tap the button to make small adjustments or tap and hold to ramp.
- **Cooler:** Increase the color temperature of the lights. When the color temperature increases the lights produce daylight(blue-white) light. Tap the button to make small adjustments or tap and hold to ramp.

Enable Programmatic Feedback: The LED associated with the button on the device can light to indicate that the mode is active. To use the LED to provide feedback, select **Enable Programmatic Feedback**. The LED will light if any device in the system activates the mode.

Override Feedback Color: The color of the LED feedback associated with the button. Select an LED color from the **Override Feedback Color** drop-down list. The Alarm feedback color lights red when activated and is off when inactive.

> **NOTE:** For feedback purposes only, the center of a rocker button can be programmed to light and display programmatic feedback. For example, the LED can be programmed to mimic the function of the top button of the rocker by assigning the same settings used by the top button.

Enable Local Button Functionality: Select this option to turn on the Local Button functionality on the keypad.

Set as Local Button: Select this option to assign the selected button as the local button. A local button must always be selected on a load controller. Only one button can be set as the local button. The local button provides direct control of the connected load (without input from the control processor) and can also be programmed to perform other actions, such as turning on the TV.

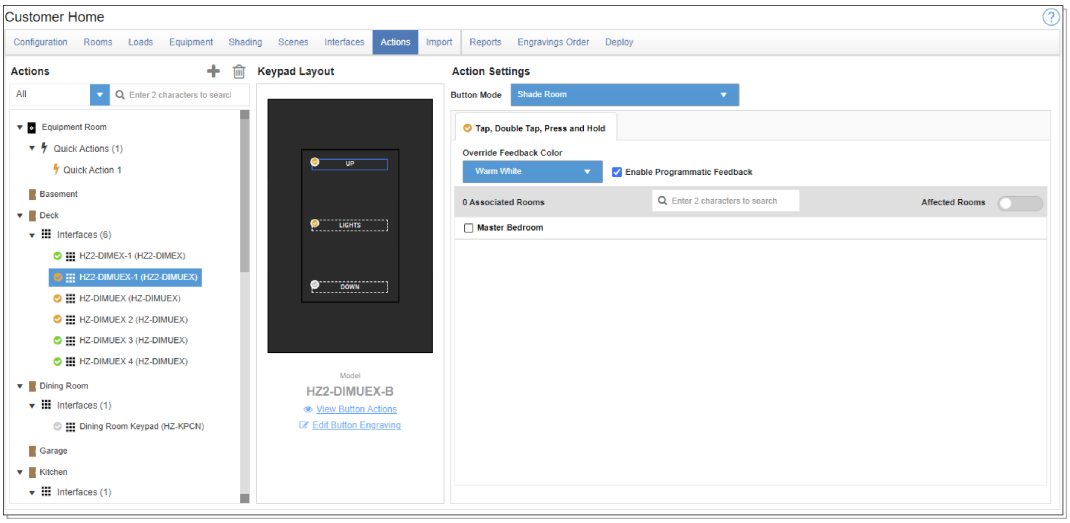
NOTES:

- An HZ-KPEX and HZ2-KPEX can be assigned a local button even though it cannot directly control a load.
- When the local button on the HZ-AUX is pressed, the signal is transmitted using the "traveler" wire to the Horizon dimmer or switch and then the load attached to the Horizon dimmer or switch is turned on or off or dimmed up or down.
- The HZ-DIMFLVEX does not support multiway control.

Assign Primary Controller: The behavior defines how the lights are controlled. Select room with DMX-C lights from the **Assign Master** drop-down menu.

Shade Room

Select **Shade Room** from the **Button Mode** drop-down list to control all of the shades in the rooms.



Predefined functions are assigned for the following button presses:

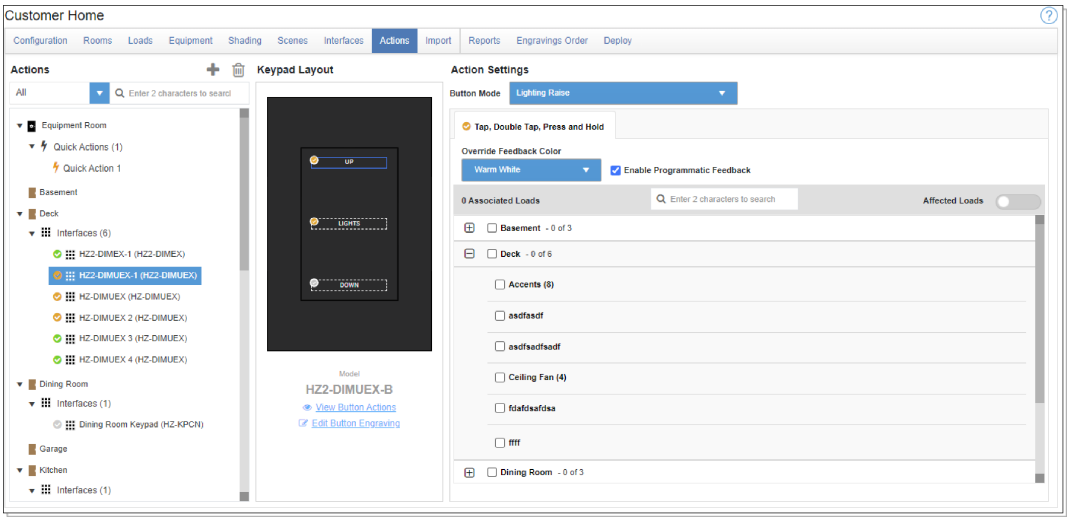
> **NOTE:** The shades are controlled based on the action that was performed last. If the shades were opened or raised, the next button press will lower or close the shades.

- **Tap:** Open or close the shades.
- **Press and Hold:** Raise or lower the shades until the button is released or the upper or lower limit is reached.

Override Feedback Color: The color of the LED feedback associated with the button. Select an LED color from the **Override Feedback Color** drop-down list:

Lighting Raise and Lighting Lower

Select **Lighting Raise** or **Lighting Lower** from the **Button Mode** drop-down list to raise or lower the lights in the room.



Affected Loads: Toggle the **Enable Affected Loads** to filter the load list and only display loads that are associated with the button.

Predefined functions are assigned for the following button presses:

- **Tap:** Increase or decrease (jog) the light level.
- **Double Tap:** Turns the lights on or off with no fade time.
- **Press and Hold:** Raise or lower the light level until the button is released or the maximum or minimum light level is reached.

> **NOTE:** To turn off the lights, continue holding the button after the minimum light level is reached.

Override Feedback Color: The color of the LED feedback associated with the button. Select an LED color from the **Override Feedback Color** drop-down list. The Alarm feedback color lights red when activated and is off when inactive.

> **NOTE:** For feedback purposes only, the center of a rocker button can be programmed to light and display programmatic feedback. For example, the LED can be programmed to mimic the function of the top button of the rocker by assigning the same settings used by the top button.

Enable Local Button Functionality: Select this option to turn on the Local Button functionality on the keypad.

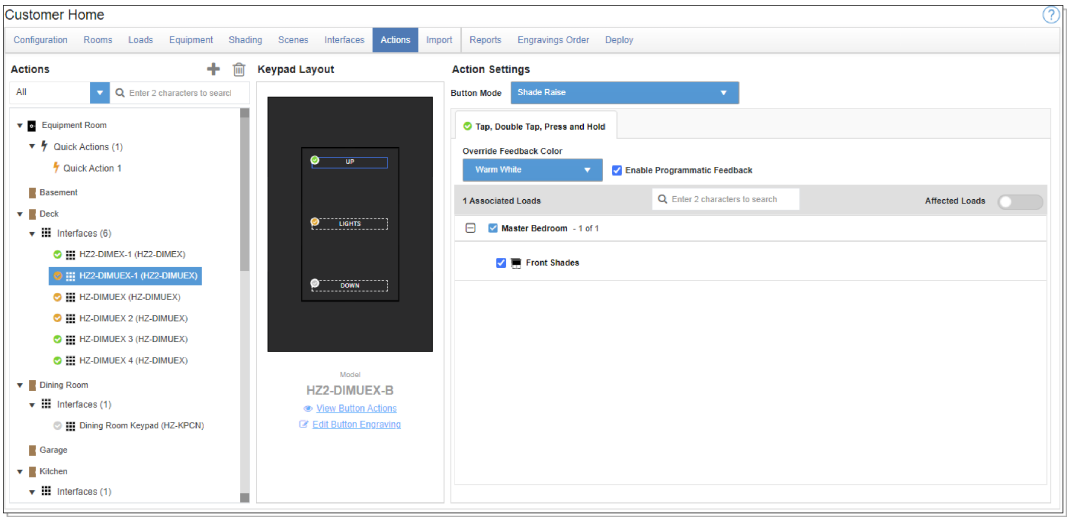
Set as Local Button: Select this option to assign the selected button as the local button. A local button must always be selected on a load controller. Only one button can be set as the local button. The local button provides direct control of the connected load (without input from the control processor) and can also be programmed to perform other actions, such as turning on the TV.

NOTES:

- An HZ-KPEX and HZ2-KPEX can be assigned a local button even though it cannot directly control a load.
- When the local button on the HZ-AUX is pressed, the signal is transmitted using the "traveler" wire to the Horizon dimmer or switch and then the load attached to the Horizon dimmer or switch is turned on or off or dimmed up or down.
- The HZ-DIMFLVEX does not support multiway control.

Shade Raise and Shade Lower

Select **Shade Raise** or **Shade Lower** from the **Button Mode** drop-down list to raise or lower the shades in the room.



Affected Loads: Toggle the **Enable Affected Loads** to filter the load list and only display loads that are associated with the button.

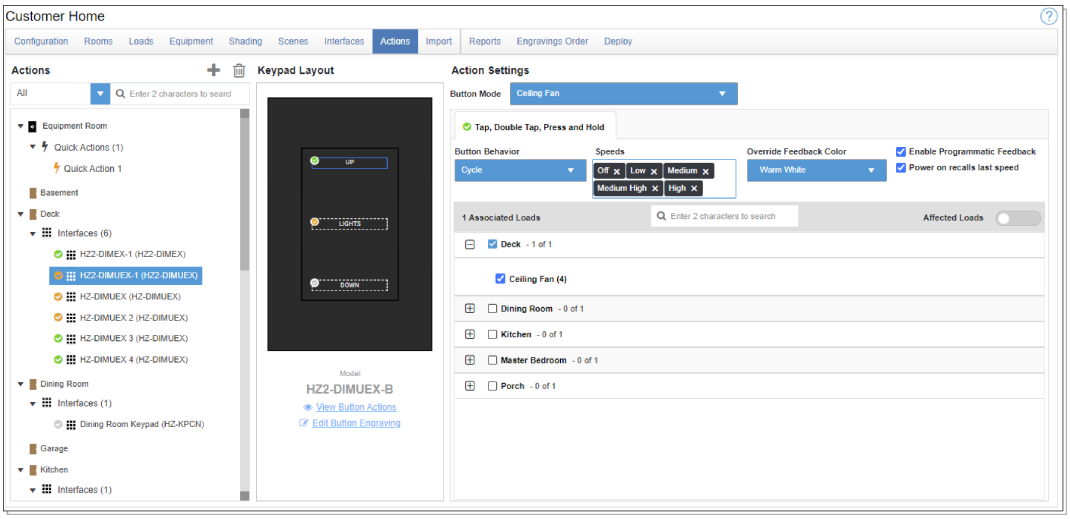
Predefined functions are assigned for the following button presses:

- **Tap:** Raise or lower (jog) the shades.
- **Press and Hold:** Raise or lower the shades until the button is released or the upper or lower limit is reached.

Override Feedback Color: The color of the LED feedback associated with the button. Select an LED color from the **Override Feedback Color** drop-down list:

Ceiling Fan

Select **Ceiling Fan** from the **Button Mode** drop-down list to control a ceiling fan when the button is pressed.



ButtonBehavior: The behavior defines how the fans are controlled. Select a button behavior from the **Behavior** drop-down list:

- **Cycle:** Cycle through the available fan speeds. Each button press advances through the available fan speeds in the **Speeds** list. When the last speed in the list is reached, the next button press advances to the first option in the list.

  > **NOTES:**
  >
  > - If multiple fans are controlled and they are operating at different speeds, a button press sets the fan speed for both fans to the first speed in the **Available Speeds** list.
  > - If the **Off** speed is included in the **Available Speeds** list and five seconds pass since the last button press, a button press turns the fan off.
  > - If **Power On Recalls Last Speed** is enabled and multiple fans are controlled and operating at different speeds when the room is turned off, the fans resume operating at their previously set speeds when the room is powered on.

- **Increase:** Increase the fan speed until the maximum fan speed in the list is reached.

  If the fans are operating at different speeds, pressing the button increases the fan speed for each fan independently. For example, if **High**, **Medium**, and **Low** fan speeds are available and Fan 1 is operating at **Low** and Fan 2 is operating the **Medium**, pressing the button increases the fan speed for Fan 1 to **Medium** and Fan 2 to **High**.

- **Decrease:** Decrease the fan speed until the lowest fan speed in the list is reached.

  If the fans are operating at different speeds, pressing the button decreases the fan speed for each fan independently. For example, if **High**, **Medium**, and **Low** fan speeds are available and Fan 1 is operating at **High** and Fan 2 is operating at **Medium**, pressing the button decreases the fan speed for Fan 1 to **Medium** and Fan 2 to **Low**.

Speeds: Displays the fan speeds that are available for the selected fan(s). The speeds available are populated based on the fan controller that is used and are listed in order from the slowest (Off) to the fastest fan speed. The default setting is to include all of the available fan speeds in the **Speeds** list.

To exclude a fan speed from the list, deselect a fan speed.

To reorder the fan speeds when **Cycle** is selected, click and drag it to the desired position. The **Off** speed cannot be moved.

> **NOTES:**
>
> - If different fan controllers are used, only the fan speeds that are common between the fan controllers are displayed in the **Speeds** list.
> - The **High** fan speed is not included in the **Speeds** list when **Decrease** is selected from the **Speeds** drop-down menu.
> - The **Off** fan speed is not included in the **Speeds** list when **Increase** is selected from the **Speeds** drop-down menu.

Power On Recalls Last Speed: If enabled, the fans resume operating at their previously set speeds when the room is powered on. If disabled, the fans resume operating at the first speed option in the list. To disable, deselect the **Power On Recalls Last Speed** check box.

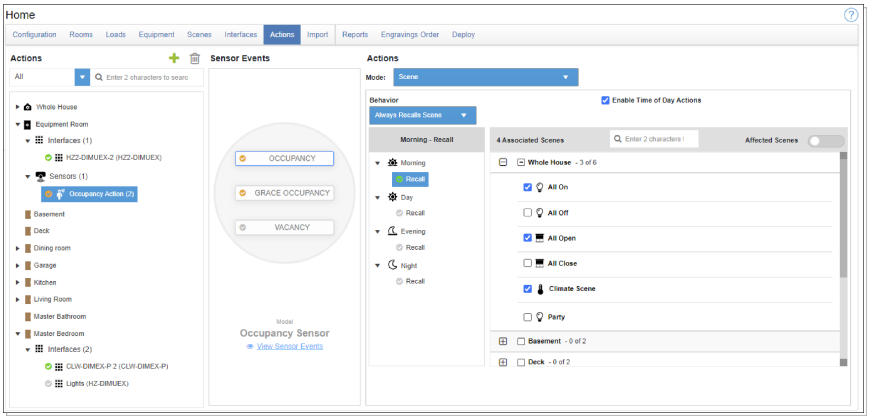
Override Feedback Color: The color of the LED feedback associated with the button. Select an LED color from the **Override Feedback Color** drop-down list:

Assign Actions to Occupancy Events

To assign actions to occupancy sensor events:

1. Select an occupancy sensor from the list of devices.
2. In the **Sensor Events** list, select **Occupancy**, **Grace Occupancy**, or **Vacancy**.

   > **NOTE:** The Basalte Auro occupancy sensor does not support **Grace Occupancy** programming events. If actions are assigned for the **Grace Occupancy** event, they will not trigger.



3. Select the action mode type from the **Mode** drop-down menu:

   > **NOTE:** Other configuration options may be provided depending on the selected mode.

   - **None:** No action is performed when the occupancy event occurs.
   - **Scene:** A scene is recalled when the occupancy event occurs.
   - **Quick Action:** A quick action is recalled when the occupancy event occurs.
4. When **Scene** is selected from the **Mode** drop-down menu, select a function from the **Behavior** drop-down menu.
   - **Always Recalls Scene:** A scene is recalled when the event occurs.
5. When **Scene** is selected from the **Mode** drop-down menu, select **Enable Time of Day Actions** to recall a different scene during the Morning, Day, Evening, and Night. Select a scene for each time period.
6. Select scenes to recall when the event occurs. When a room is expanded, the scenes in the room are displayed.

   Climate scenes are listed in the **Whole House** room.

   If **Enable Time of Day Actions** is selected, select scenes for the **Morning**, **Day**, **Evening**, and **Night** time periods.

   > **NOTE:** Only rooms that contain selectable actions appear on the **Select Room Below** menu. Once an action is selected from a room, the room name is shown with blue text in the **Select Room Below** menu.

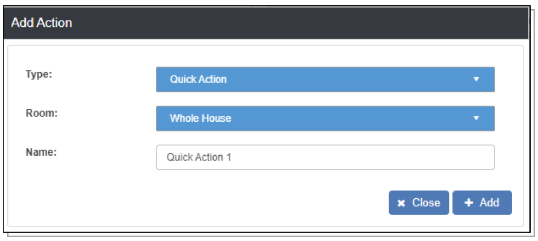
Quick Actions

Create Quick Actions that recall defined actions.

Create a Quick Action

Select **Quick Actions** from the **Select an Item** menu to display a configuration screen for the Quick Action.

1. Select a room from the **Actions** menu.
2. Tap ➕ **Add Event**.
3. In the **Add Action** menu, configure the Quick Action:



   - **Type:** Select **Quick Action**.
   - **Room:** Select a room.
   - **Name:** Enter a name for the Quick Action.
4. Select **Add**.

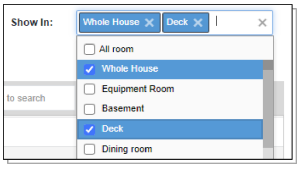
Show Quick Action in Different Rooms

The Quick Action can be configured so that it is available in different rooms around the house. When the Quick Action is displayed in a different room, it can be recalled by a user interface device that is located in the selected room(s).

> **TIP:** To hide a Quick Action, deselect all rooms. A hidden Quick Action can be accessed by other programming features.

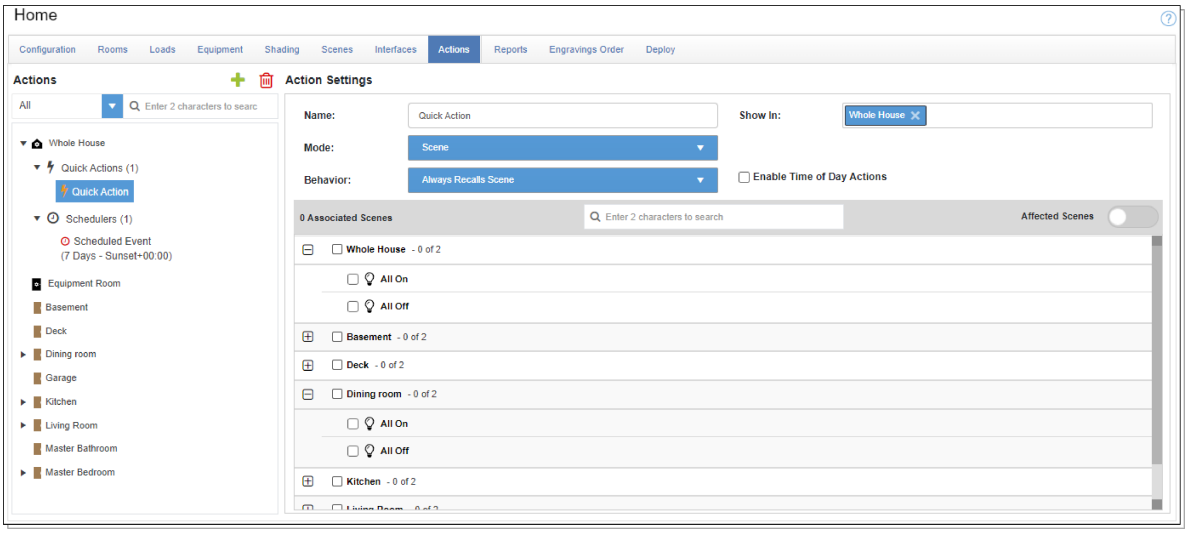
To display Quick Actions in other rooms:

1. Select a Quick Action and then select **Show In**.
2. Select the rooms that should display the Quick Action. Select or deselect All Rooms to select or deselect all rooms.



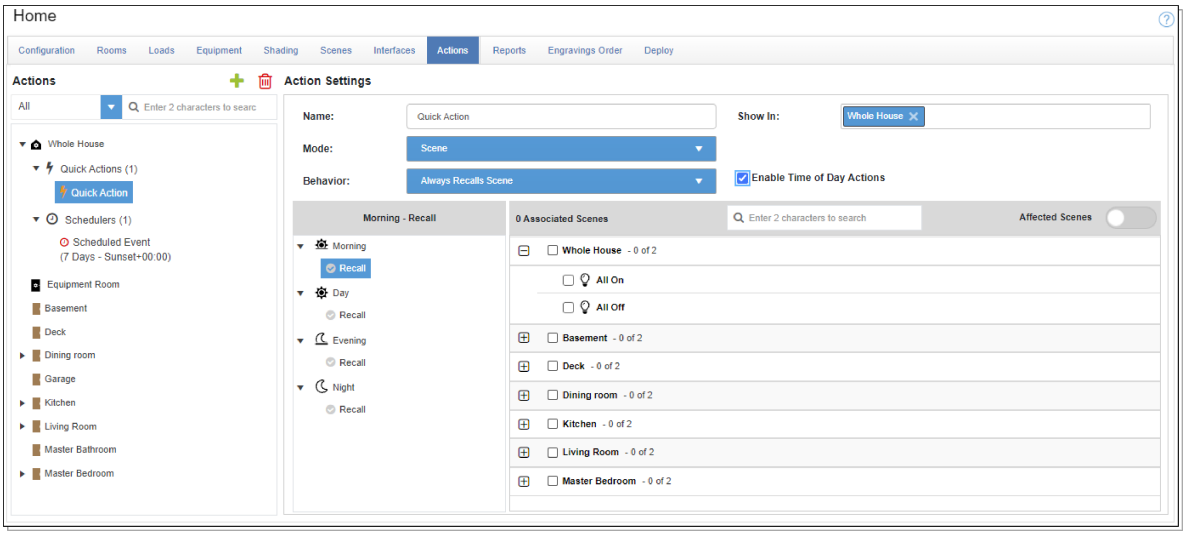
Scene

Select **Scene** from the **Mode** drop-down menu to recall a scene when the Quick Action is recalled.



Enable Time of Day Actions: Recall a different scene based on the time of day.

> **NOTE:** To configure the time periods, refer to Current Times of Day on page 563.



To assign a different scene for the morning, day, evening, and night time periods:

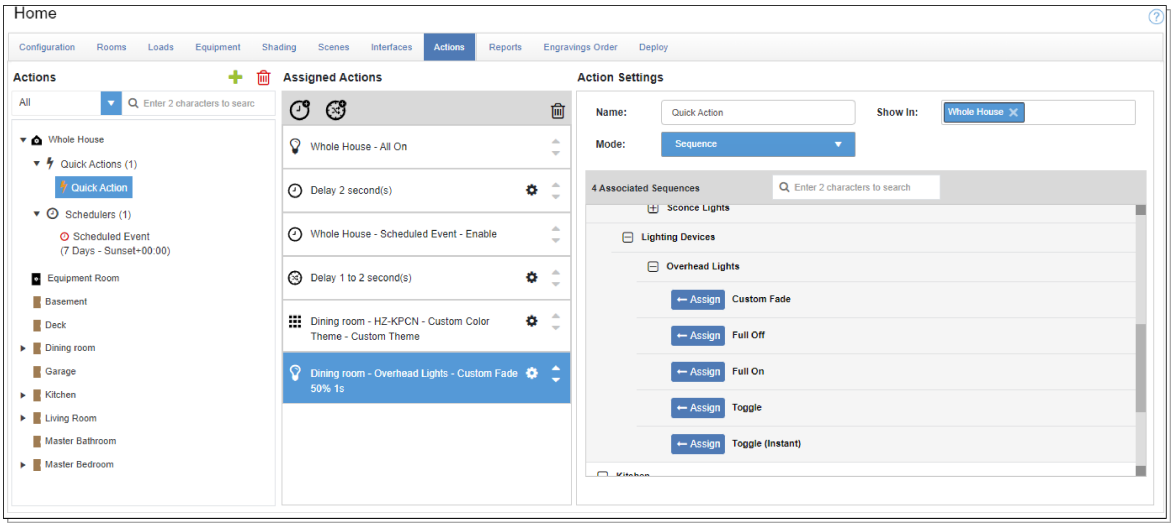
1. Select **Enable Time of Day Actions**.
2. Select **Morning**, **Day**, **Evening**, or **Night** and then select scenes from the **Actions** menu. Select a scene for all time periods. If scenes are not selected for a time period, no action will be performed when the Quick Action is recalled during the time period.

Sequence

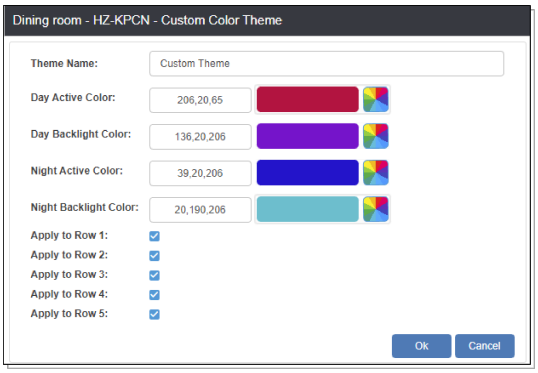
Select **Sequence** from the **Mode** drop-down menu to recall a series of actions when the Quick Action is recalled.

Add a Step

1. Select an action from the list of actions and then select **Assign**.



2. If the action requires a value to be set, enter the required data in the dialog that is displayed and then tap **OK**.





3. The step is added to the sequence. Each step displays information about the step such as the room name, device type, settings, and the action that is performed.

Add a Randomized Delay Step

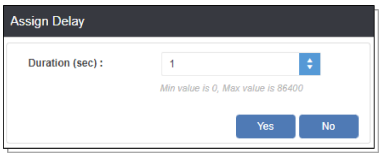
Use a delay to temporarily pause the sequence between steps for a defined amount of time. Use a Delay to pause the sequence for a set period of time or a Random Delay to pause the sequence for a variable amount of time between the minimum an maximum set time.

Random Delays can be used to create a Vacation mode. For details, refer to Vacation Scheduler on page 548.

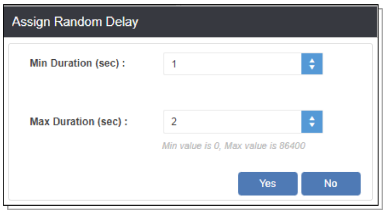
> **NOTE:** Timed action steps and delays run concurrently. For example:
>
> - If two lighting load actions are added with 5 second fade times, the loads will fade to their brightness settings at the same time.
> - If two lighting load actions are added with 5 second fade times and a 10 second delay is added between the steps, the second lighting load action begins 10 seconds after the first lighting load starts to dim.

To add a delay step:

1. Tap **Add Delay** or **Add Random Delay**.
2. Enter the duration of the delay:
   - **Delay:** The delay will occur for a defined period of time. Set the delay time in the **Duration (s)** box.

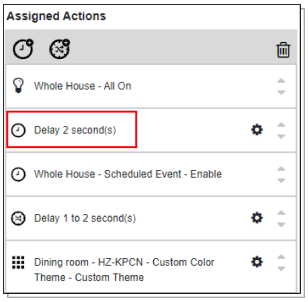


   - **Random Delay:** The delay will occur for a variable amount of time between two defined points. Set the minimum and maximum delay time in the **Min Duration (s)** and **Max Duration (s)** boxes. The **Max Duration(s)** time must be greater than or equal to the **Min Duration (s)** time.

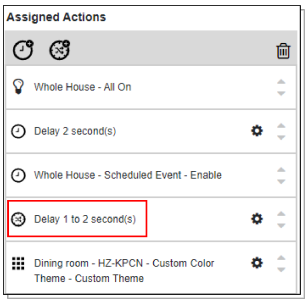


3. Tap **Yes**. The random delay step is added to the sequence. The step displays the range for the length of the delay in seconds.

Delay in Sequence



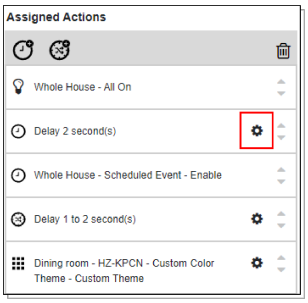
Random Delay in Sequence



Edit a Step

To edit a step in a sequence:

1. Select ⚙ **Edit Step**.



2. Enter the required data in the dialog that is displayed.

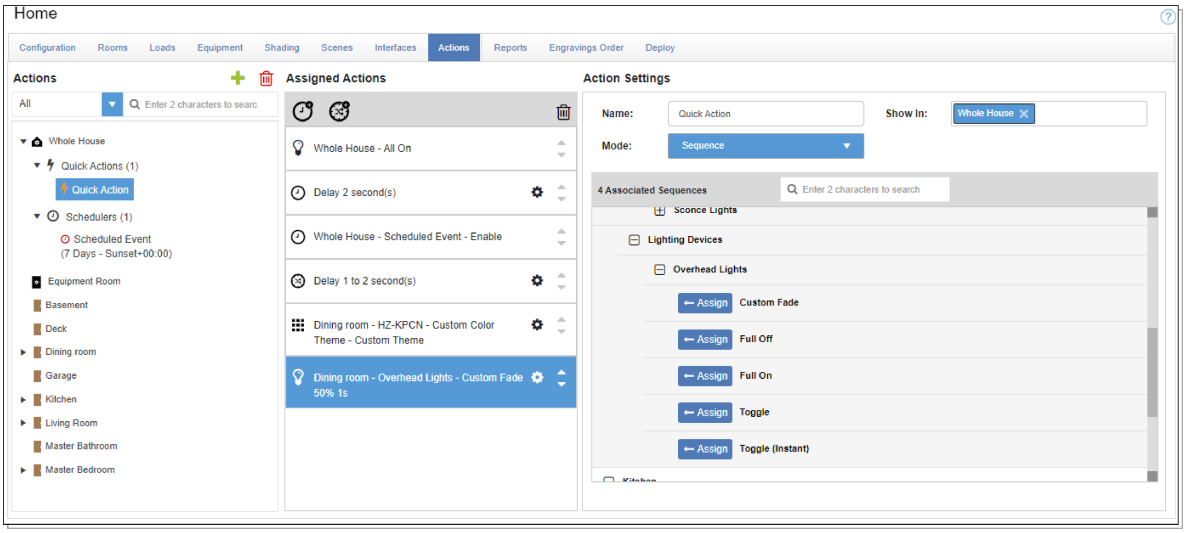
Example Dialog Box - Custom Fade



3. Tap **OK**.

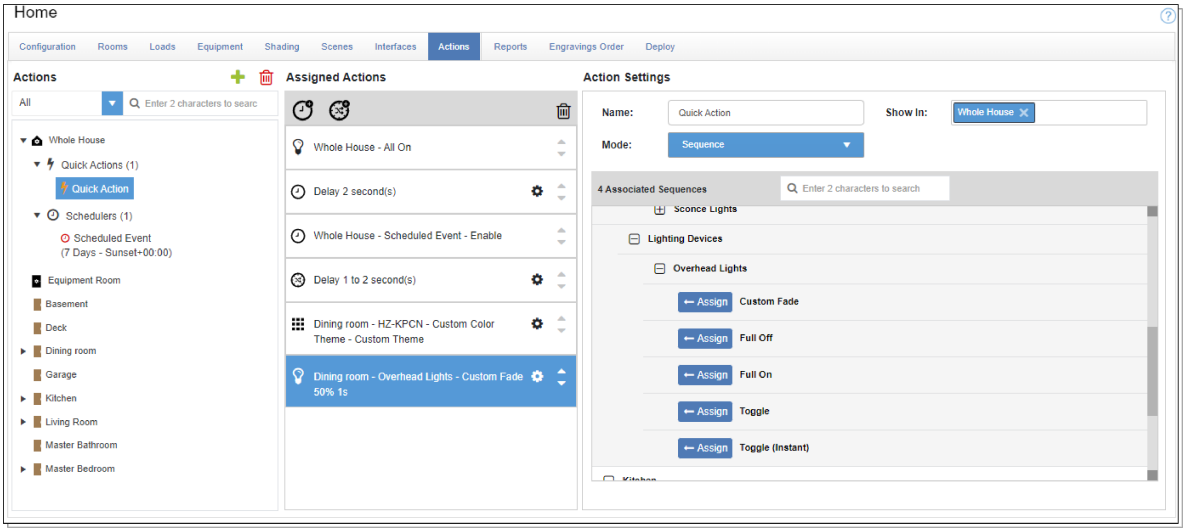
Reorder the Steps

To reorder the steps in a sequence, drag and drop the step to the desired location in the sequence. Alternatively, move the step up or down in the sequence using the **Up** and **Down** arrows.



Delete a Step

To reorder the steps in a sequence, select a step and then select **Delete**.



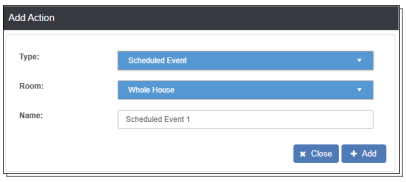
Scheduler

Create scheduled events that recall actions at defined times.

Create a Scheduled Event

To create a scheduled event:

1. Select ➕ **Add Event**.
2. In the **Add Action** menu, configure the event:



   - **Type:** Select **Scheduled Event**.
   - **Room:** Select a room.
   - **Name:** Enter a name for the event.
3. Select **Add**.

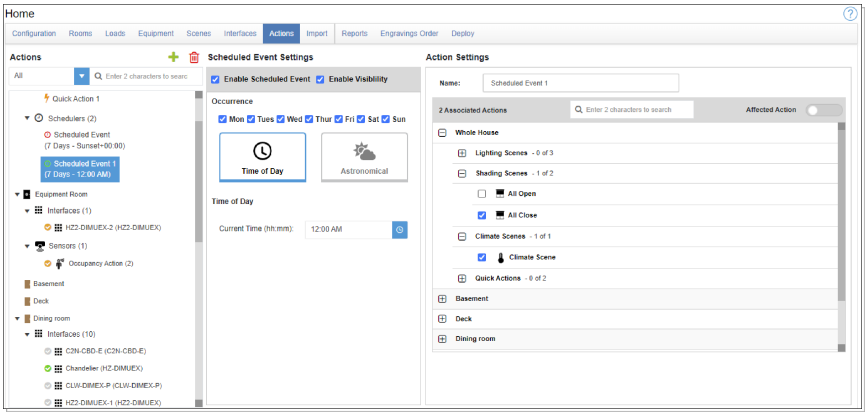
Configure a Scheduled Event

To configure a scheduled event:

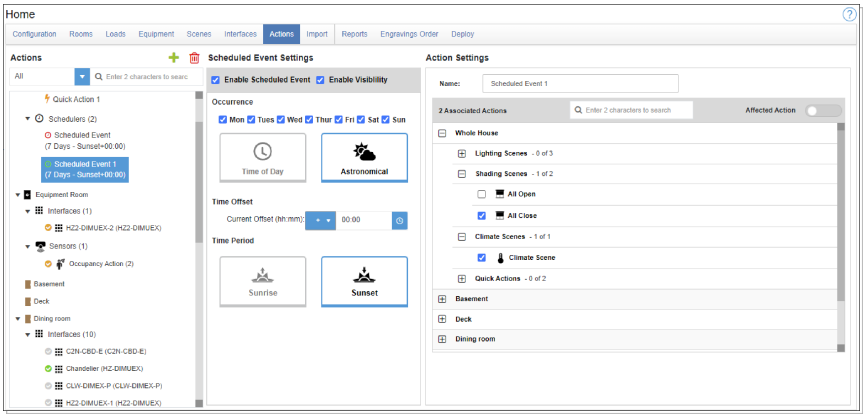
- **Enable Scheduled Event:** Turn the scheduled event on or off. To turn a schedule event on, select **Enable Scheduled Event**.

  > **NOTE:** New scheduled events are turned off by default.

- **Enable Visibility:** Select to show the scheduled event in the user interface.
- **Occurrence:** Select the days for the event to occur.
- **Time of Day**: Schedule the event to occur at a specific time of day. Set the time using the provided spinner menus.



- **Astronomical**: Schedule the event to occur at a time relative to sunrise or sunset (calculated by date and time zone). Select whether the event should occur at sunrise or sunset and then set when the event should occur relative to the sunrise or sunset time.



  - **Time Period:** Select **Sunrise** or **Sunset** to determine the time of day that the event should occur.
  - **Offset:** Select the time that the event should occur in relation to the time period. To assign an offset time before the **Time Period**, select **–** and to set an offset time after the **Time Period**, select **+**.The default offset is **00:00**. The maximum offset is 4 hours and 59 minutes.

> **NOTE:** To adjust the default times for sunrise and sunset, navigate to **Installer Settings** > **System Configuration** > **System Settings**, and then tap the wrench button on the **Current Times of Day** panel. For more information, refer to Current Time and Date on page 561.

- **Action Settings:** Select a room from the menu, and then select the scene(s) that will be triggered by the event.

> **NOTE:** Only rooms that contain scenes display on the **Select Rooms Below** menu. Any room with a selected scene is shown with blue text on the **Select Rooms Below** menu.

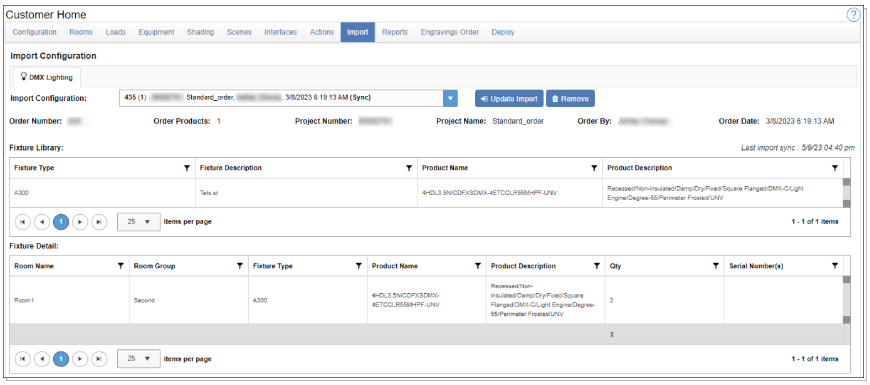
Delete a Scheduled Event

To delete a scheduled event:

1. Select a scheduled event.
2. Select **Delete** and then **Yes** to confirm.

Import Tab

Use the **Import** tab to add and manage Light Fixture Configuration Tool orders in the configuration.



Import a Configuration

Multiple Light Fixture Configuration Tool orders can be added to the configuration. If the Light Fixture Configuration Tool is updated with additional fixtures, the updates are imported as a separate order.

To import a configuration:

1. Select an order from the **Import Configuration** drop-down menu.
2. Select **Import** and then **Yes** to confirm. A preview of the configuration is displayed.
3. Select **Sync Import** to transfer the data to the configuration.

Synchronize Fixture Serial Numbers

To import the serial numbers from the Light Fixture Configuration Tool after an order has been placed, select **Update Import** and then **Yes** to confirm. The serial numbers in the configuration tool will be added to the **Import** tab.

Remove the Import

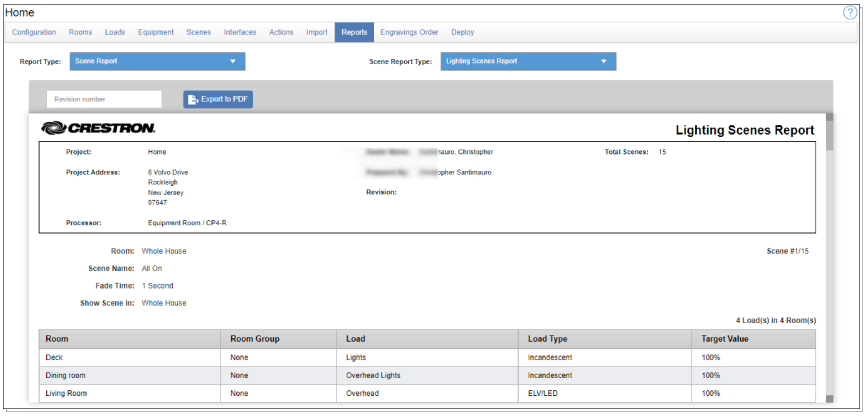
To remove the import from the configuration, select **Remove** and then **Yes** to confirm.

Reports Tab

Use the **Reports** tab to view and export reports for the configuration.

These report types can be created:

- Actions
  - Keypad Actions
  - Sensor Actions
- Bill of Materials
- DMX-C
- Engraving
- Gateways
- Lighting Load Schedule
- Panel Wiring
- Quick Action
- Scene
  - Lighting Scenes
  - Shading Scenes
  - Climate Scenes
- Scheduled Event
- Shading Load Schedule
- Thermostat Scheduled Event



NOTES:

- The Bill of Materials report is exported as a XLS file.
- All other reports are exported as a PDF file.

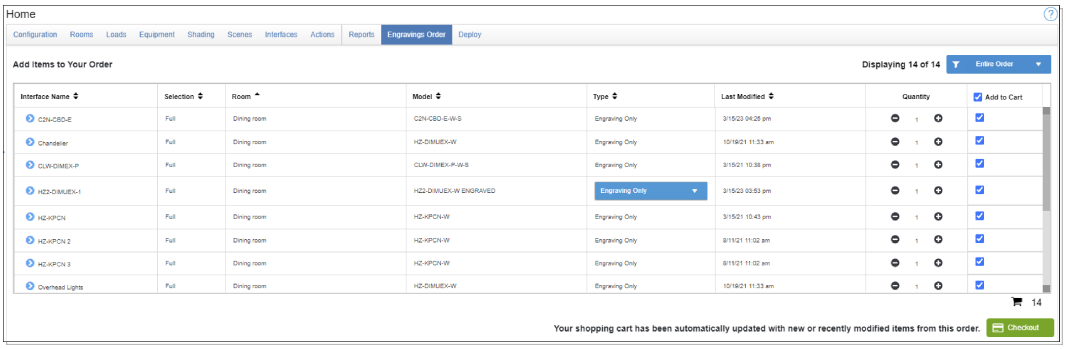
- The revision number is not programmatically managed. The revision number must be maintained and updated manually.

To view and export a report:

1. Select a report from the **Report Type** drop-down menu.
2. For Actions and Scenes reports, select a report from the secondary **Report** drop-down menu.
3. Enter the revision number of the report in the **Revision number** field.
4. To export the report, select **Export to PDF** or **Export to XLS**.

Engravings Order Tab

The **Engravings Order** tab displays a list of the interfaces in the system that contain engravings.



Each interface in the list contains values for **Add to Cart**, **Interface Name**, **Selection**, **Room**, **Model**, **Type**, **Last Modified**, and **Quantity**.

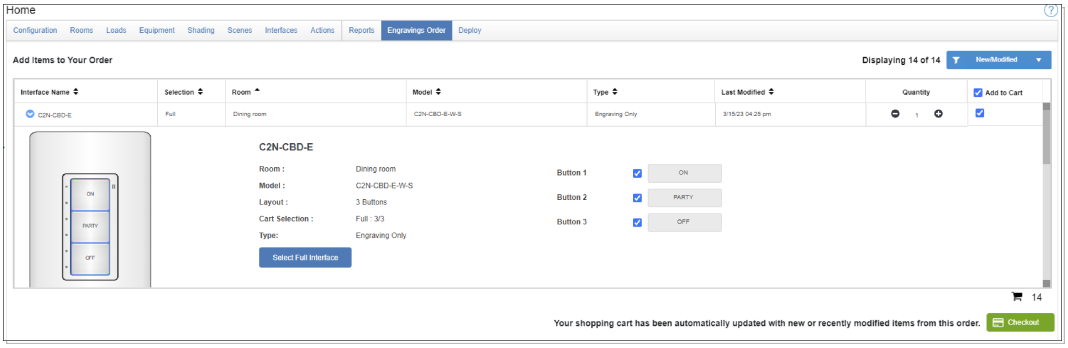
> **NOTES:**
>
> - New items are automatically added to the cart.
> - After an order has been placed:
>   - If a new item is added to the configuration after an order was placed, the new item is added to the cart and a new order must be placed.
>   - If a modification was made to an item after an order was placed, the modified item is automatically added to the cart and a new order must be placed.

To order engravings:

1. If necessary, modify the items in the cart.

   > **NOTE:** This may be necessary if placing an order for part of the configuration.

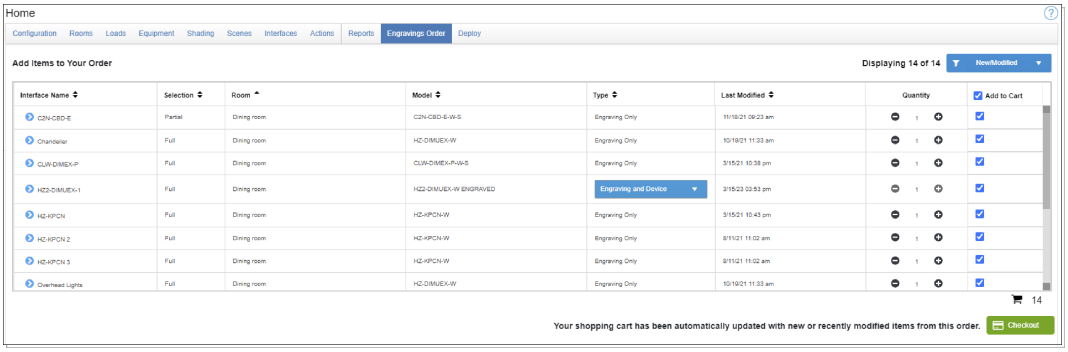
a. Click the blue arrow next to the interface name to view the engravings for the interface.



b. Select the buttons to include in the order for the interface. The default selection is to include all buttons for the interface.

> **NOTES:**
>
> - Click **Select Full Interface** to include all buttons for the interface.
> - Click **Edit Design** to change the button layout or engraving text for the interface. Click **Update Cart** to accept the changes and update the order.

c. For Horizon® 2 devices, select **Engraving** order engravings or **Engraving and Device** from the **Engraving Type** drop-down menu to include the Horizon 2 device and the engraving in the order. Horizon 2 devices configured with Standard Engraving are not displayed on the **Engravings Order** tab.

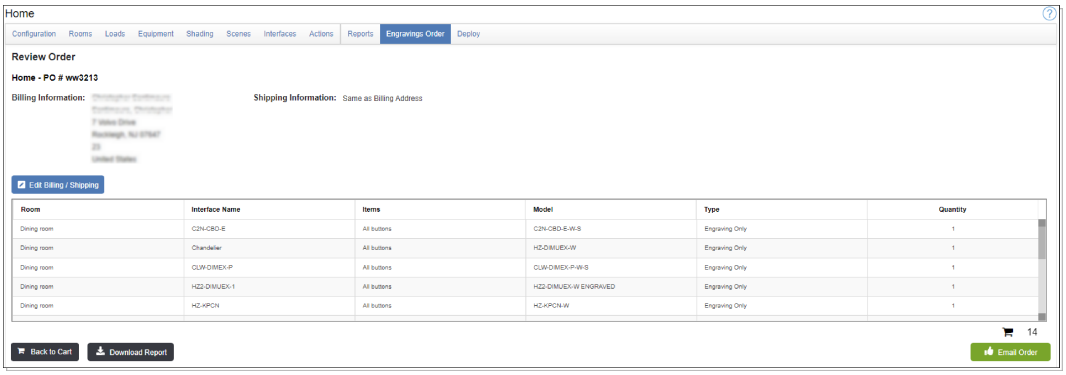


d. Click **Checkout**.

2. Enter the project and billing information:
    a. In the **Project Information** section, enter the PO Number for the project and add any comments that are required for the order.
    b. Click **Billing Information** and then enter the required billing information.

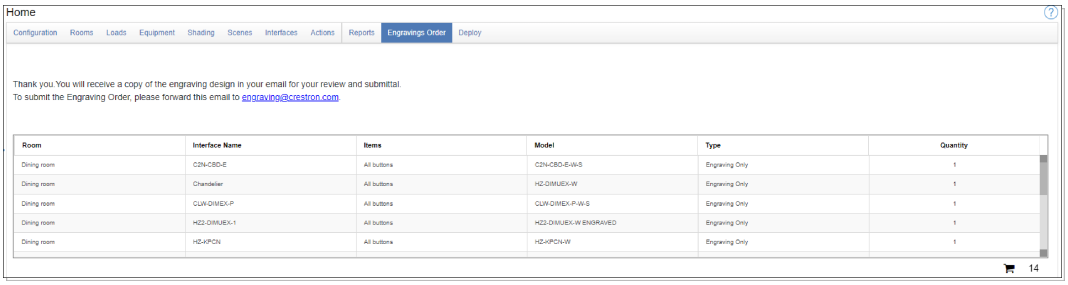
> **NOTE:** If the shipping address is different from the billing address, deselect **Same As Billing** and then enter the shipping address.

    c. Click **Review Order**.
3. Review and confirm the order:



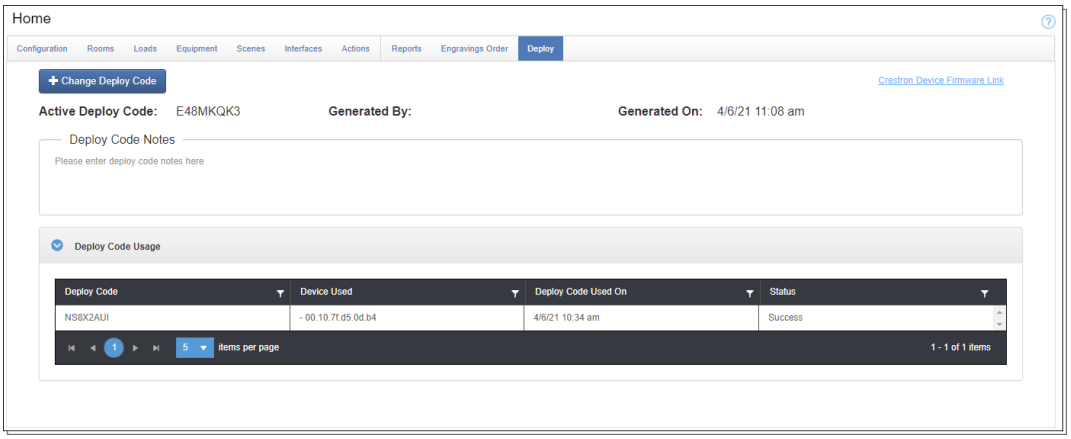
    a. Verify the PO number, billing information, and shipping information. To make changes, click **Edit Billing/Shipping**.
    b. Verify that the order listed in the table is correct. To make changes, click **Back to Cart**.
    c. Click **Email Order** to complete the order. A confirmation message is displayed and an email is sent to the dealer that includes details about the engraving order.

> **NOTES:**
>
> - To submit the engraving order, forward the email to the Engraving Order Processing department (engraving@crestron.com).
> - The engraving file is for Order Processing use only. The Crestron Studio application will not be able to open the file.



Deploy Tab

Use the **Deploy** tab to manage deploy codes for the configuration.



Validation Results

View messages about the configuration and the expected results of the deployed system.

Create a New Code

A Deploy code is generated the first time that the **Deploy** tab is opened.

To generate a new deploy code, select **Change Deploy Code**.

> **NOTE:** Only one Deploy code can be active at a time. When a new Deploy code is generated, the previous Deploy code is deactivated.

Enter notes about the configuration in the **Deploy Code Notes** box. The notes are not discarded when a new Deploy code is created.

Deploy Code Usage

The **Deploy Code Usage** table displays the deploy codes that have been used for the configuration along with the Crestron Home processor used to load the configuration, the date and time that the deploy code was used, and the status of the deploy code procedure.

Deploy a Configuration

Use a Crestron Home Configurator Deploy code to load the configuration onto a Crestron Home processor. Use these methods to load the configuration:

- **Load the configuration onto a new processor:** To load the configuration onto a new processor, refer to Load Configuration onto a New Processor on page 750.
- **Replace the configuration on a processor (Erase Data):** To erase the current configuration and load a configuration created using the Crestron Home Configurator, refer to Replace Configuration on a Processor (Erase Data) on page 758.
- **Update a configuration (redeploy):** To update a configuration with the latest Crestron Home Configurator configuration, refer to Update a Configuration (Redeploy) on page 758.

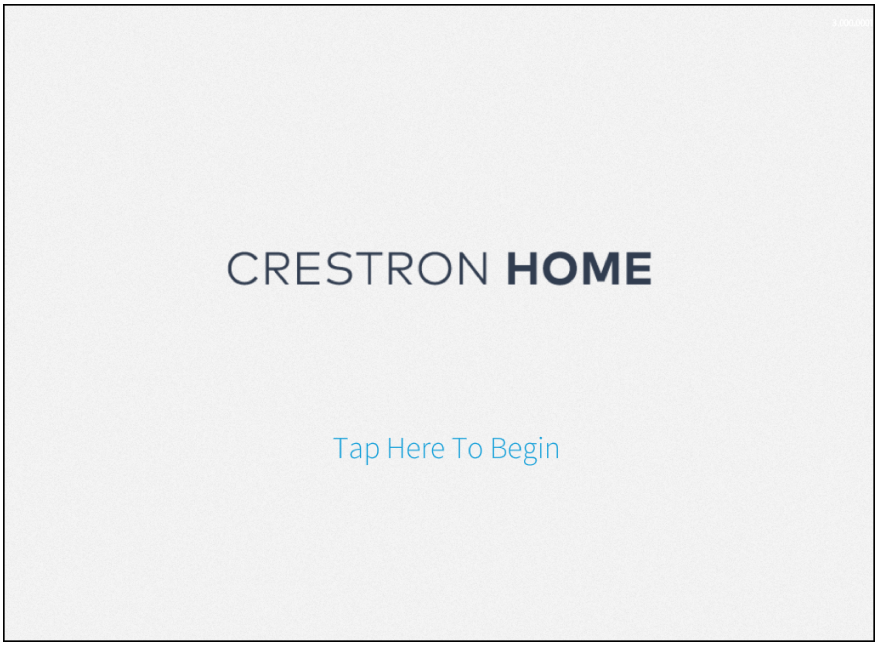
Load Configuration onto a New Processor

To load the configuration onto a new Crestron Home processor:

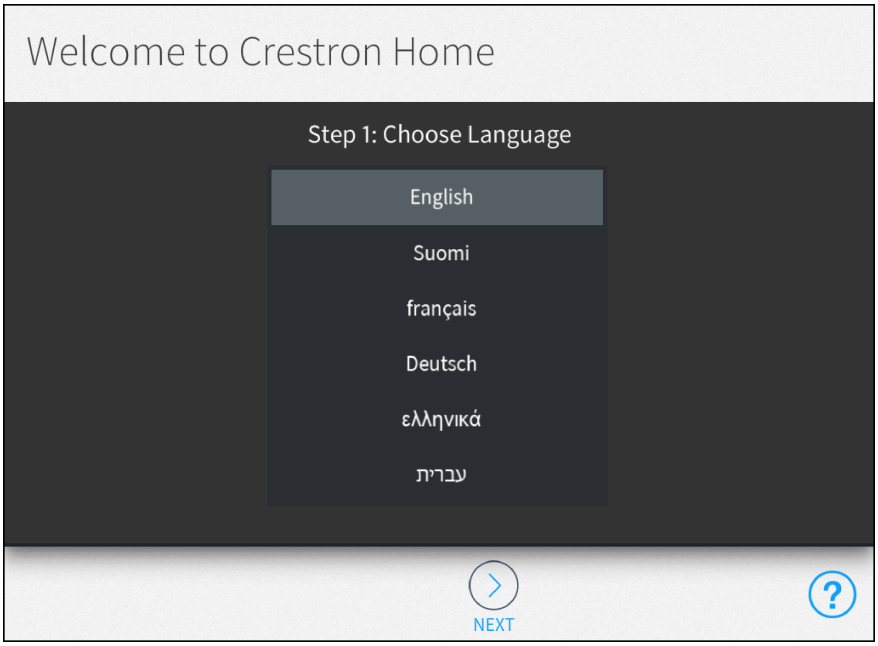
1. Open the Crestron Home Setup app and then connect to the Crestron Home processor.

   > **NOTE:** If the Crestron Home Setup app does not connect to the Crestron Home processor automatically, enter the Crestron Home processor's hostname and select **Connect**. The default hostname for a Crestron Home processor is "[Product-Name]-[MAC Address]" (excluding punctuation). For example, "CP4-R-123A567B91C3." The MAC address label is located on the bottom or rear of the device.

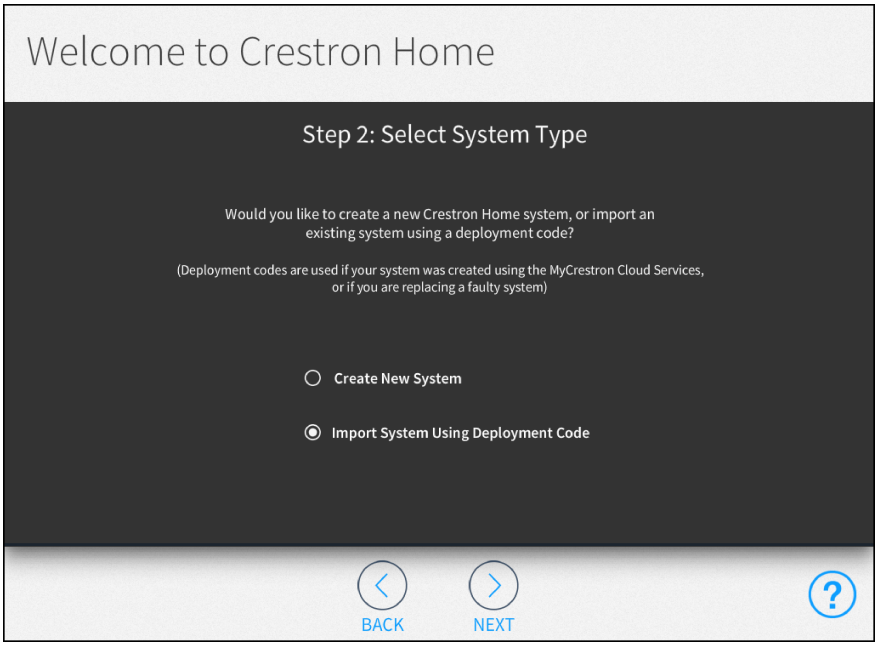
2. The Crestron Home Setup splash screen is displayed. Select **Tap Here to Begin**.



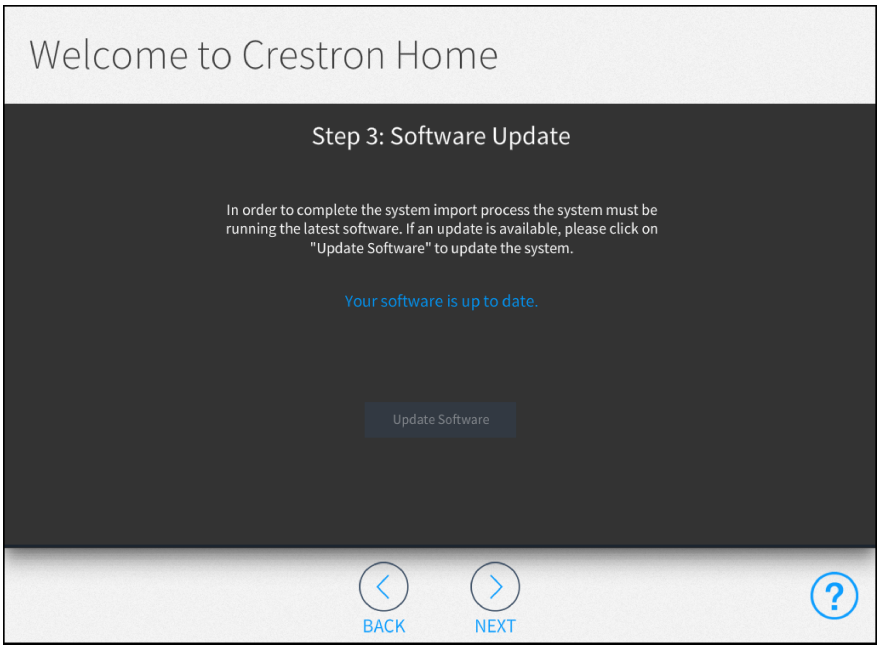
3. Select the language for the Crestron Home Setup app and then **NEXT**.



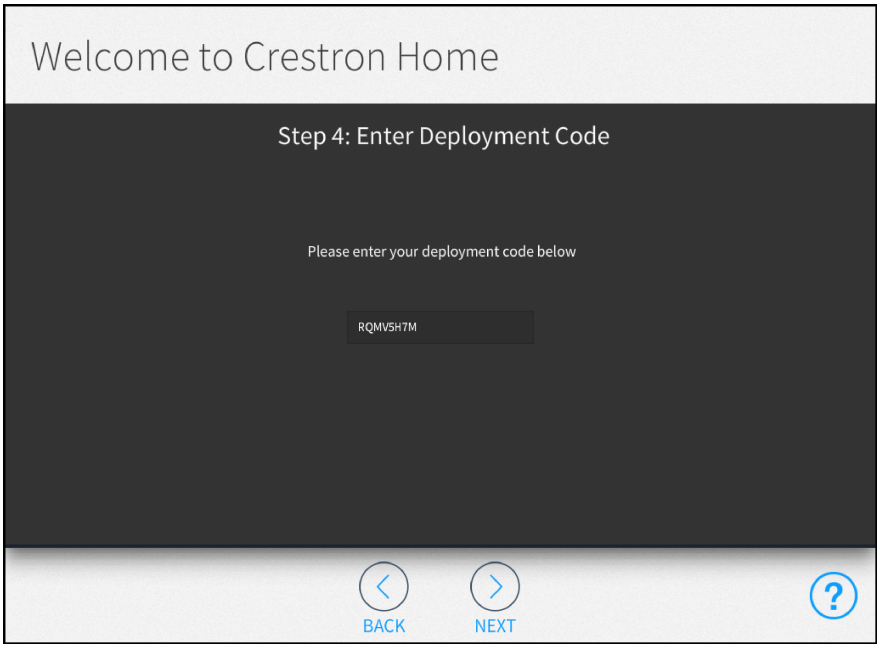
4. Select **Import System Using Deployment Code** and then **NEXT**.



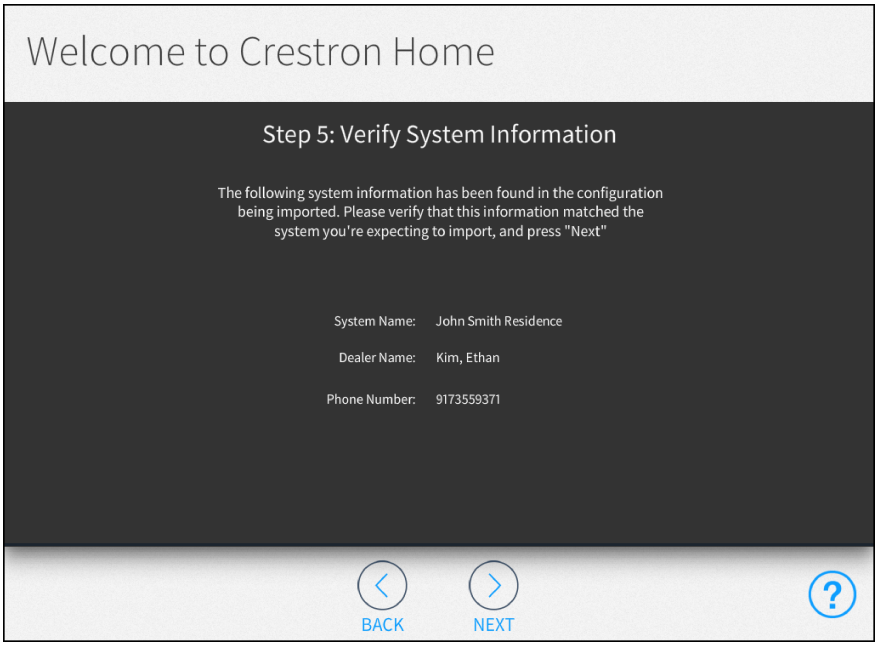
5. The Crestron Home software must be up to date to use a deployment code. If necessary, select **Update Software** to update the software and then **NEXT**.



6. Enter the deployment code that was generated using the Crestron Home Configurator and then select **NEXT**. The deployment code is validated.

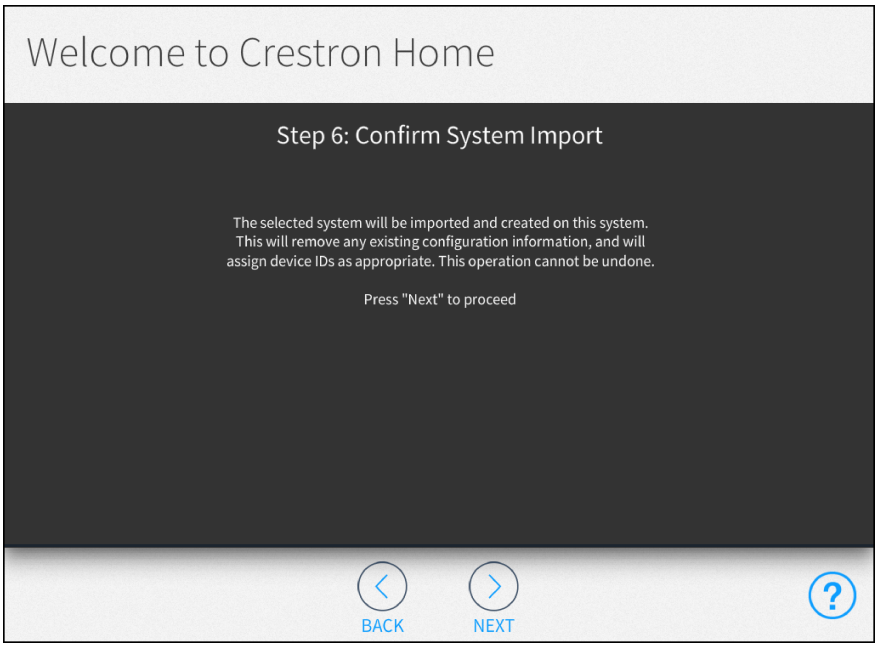


7. The system information is displayed. Select **NEXT**.

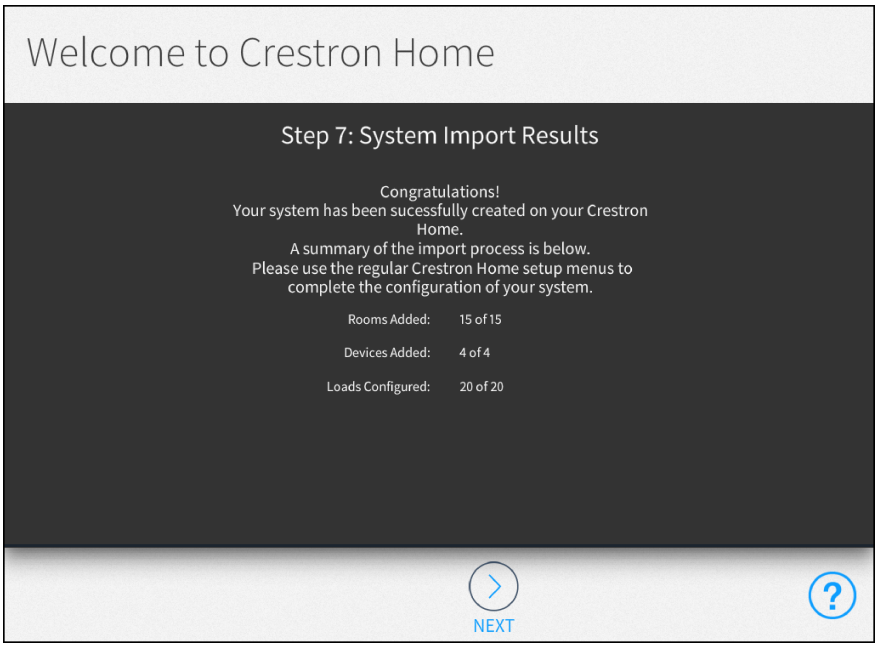


8. To import the system, select **NEXT** and then **NEXT** to confirm. The new processor should have the same IP address as the old processor.

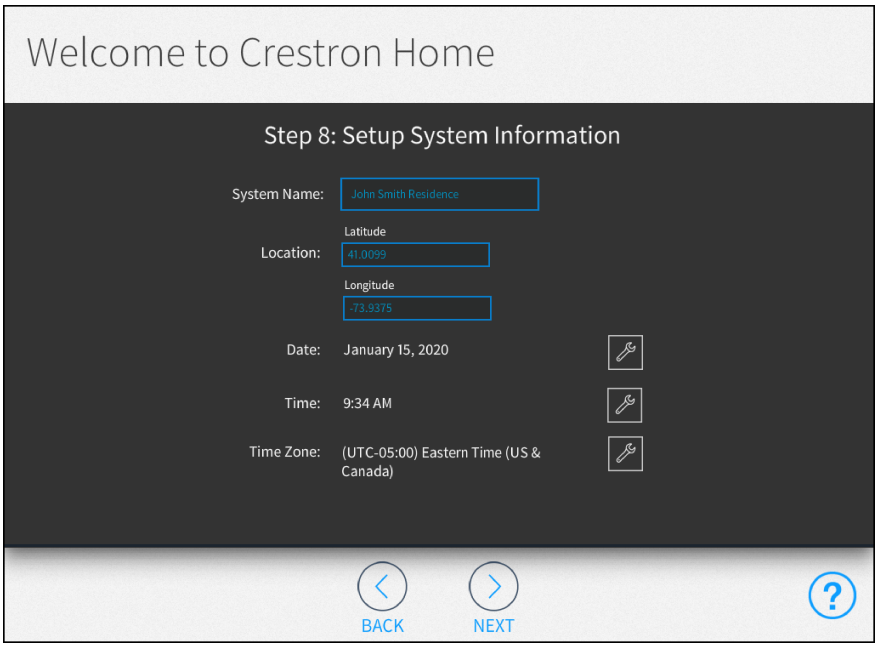
   CAUTION: Importing the configuration removes the existing configuration and cannot be undone.



9. A confirmation screen is displayed along with a summary of the import process. Select **NEXT**.



10. Enter the system information and then select **NEXT**.

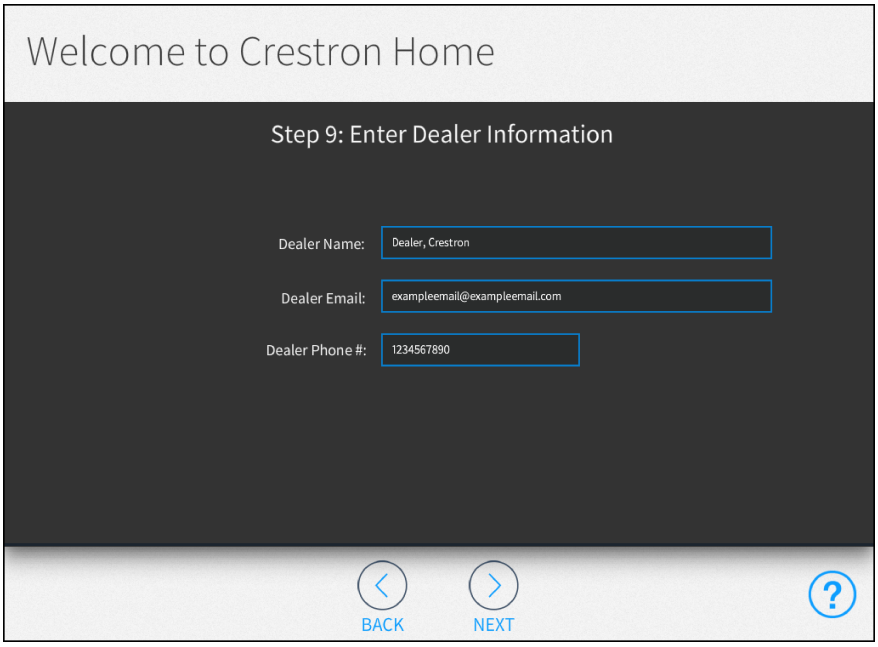


- **System Name:** Enter a descriptive system name.
- **Location:** Enter the latitude and longitude of the system.

  > **NOTE:** If setting up the Crestron Home system with an iPad device, tap the **Synchronize with iPad** button to synchronize the time zone, longitude, and latitude automatically with the iPad device's location services.

- **Date:** Tap the wrench button to display spinners for selecting the month, day, and year.
- **Time:** Tap the wrench button to display spinners for selecting the hour and minute buttons, and for selecting **AM** or **PM**.
- **Time Zone:** Tap the wrench button to display a menu for selecting the time zone used by the system.

11. Enter the dealer information and then select **NEXT**.



- **Dealer Name:** Enter the Crestron dealer responsible for the installation.
- **Dealer Email:** Enter the email address of the Crestron dealer responsible for the installation.
- **Dealer Phone #:** Enter the phone number of the Crestron dealer responsible for the installation.

12. Tap the **Privacy Statement**, **myCrestron Residential Monitoring Service Terms of Use**, **Mobile Apps Terms of Use**, **Software License Agreement**, and **Legal Information** links to review Crestron's legal terms regarding the setup, configuration, and use of the Crestron Home system. Tap the **I agree to the above terms** check box to accept these legal terms.

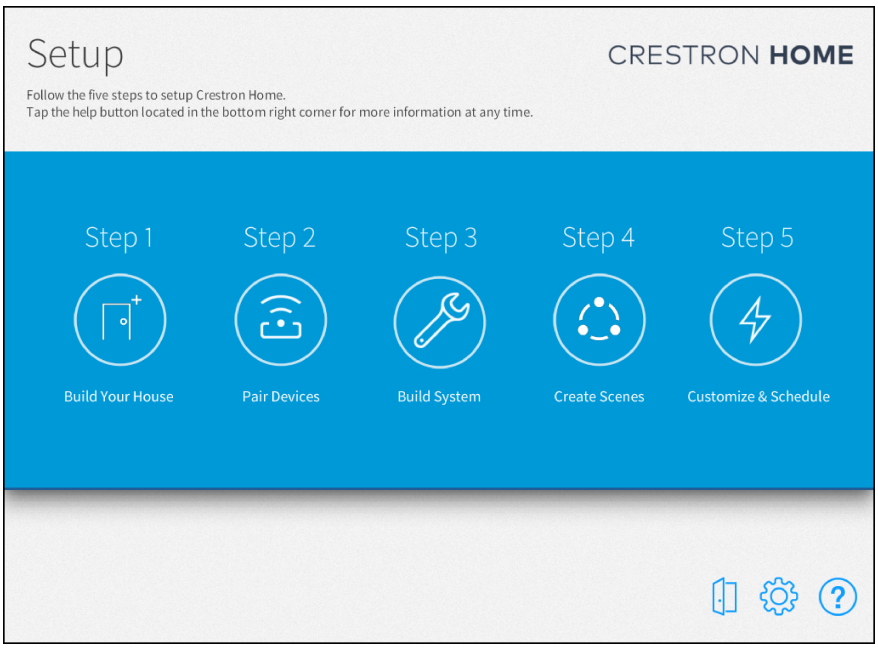


13. To complete the initial setup, select **Get Started**.

14. The main **Setup** screen is displayed. Configure the system as described in Configure a System on page 123.

NOTES:

- **Step 1: Build Your House:** Rooms that are entered in the Crestron Home Configurator are placed in the **Build Your House** section. Use the **Build Your House** screen to modify or delete rooms and to create room groups.
- **Step 2: Pair Devices:** In-wall and centralized modules that are entered in the Crestron Home Configurator are placed in the appropriate rooms in the **Pair Devices** screens. The modules are added as virtual devices.
- If a device does not come back online after this process, **Repair** the connection. For details, refer to Device in a Crestron Home System on page 155.



Replace Configuration on a Processor (Erase Data)

To load the configuration onto a processor that is already programmed and erase the existing configuration, refer to Replace the Configuration on page 580.

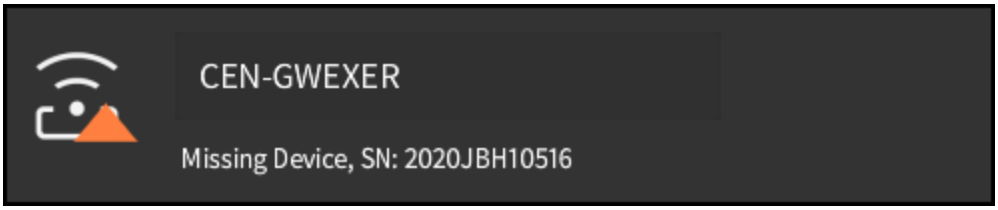
Update a Configuration (Redeploy)

Redeploy a configuration to merge the updates with a processor that is already running. To Redeploy a configuration, refer to Update the Current Configuration on page 582.

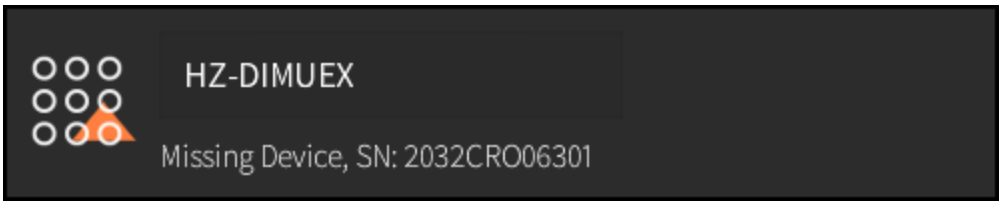
Pair Imported Devices

After the configuration is deployed, imported devices are added to the system as Virtual Devices. The Virtual Devices are indicated by an orange triangle over the device icon and a"Missing Device" message. If a serial number is entered for the device in the Crestron Home Configurator, it is shown next to the missing device text.

Virtual Gateway Example



Virtual Device Example



Replace a Virtual Gateway

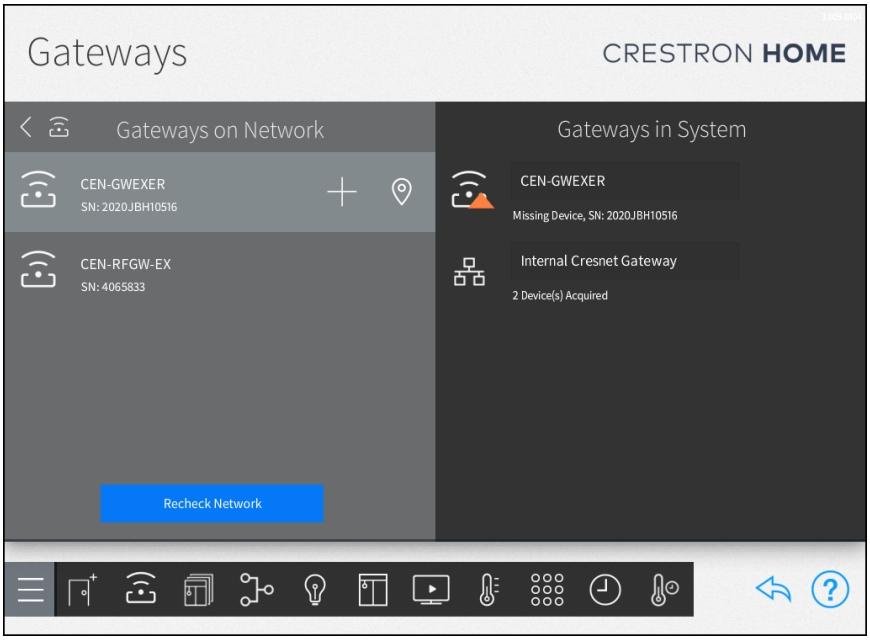
To replace a virtual gateway:

1. On the **Setup** screen, select **Pair Devices** or  and then select **Manage Gateways**.

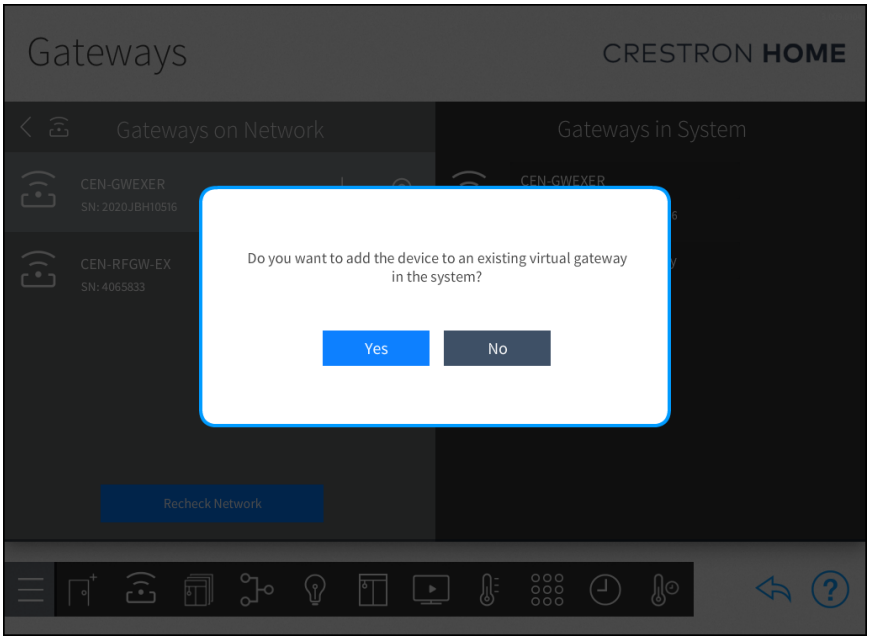
   > **NOTE:** To rescan the network, select **Recheck Network**.



2. The Virtual Gateway is displayed in the **Gateways in System** menu with a yellow triangle on the device icon. To add a gateway, select a gateway and then select **Add**.



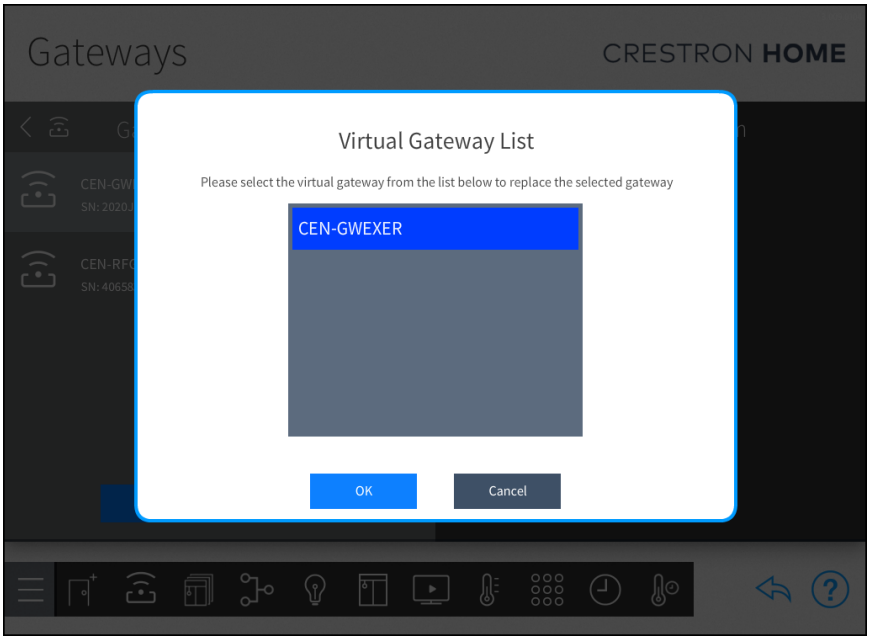
3. When the gateway is added it can replace a virtual device or it can be added as a new gateway. To add the gateway, do either of the following:



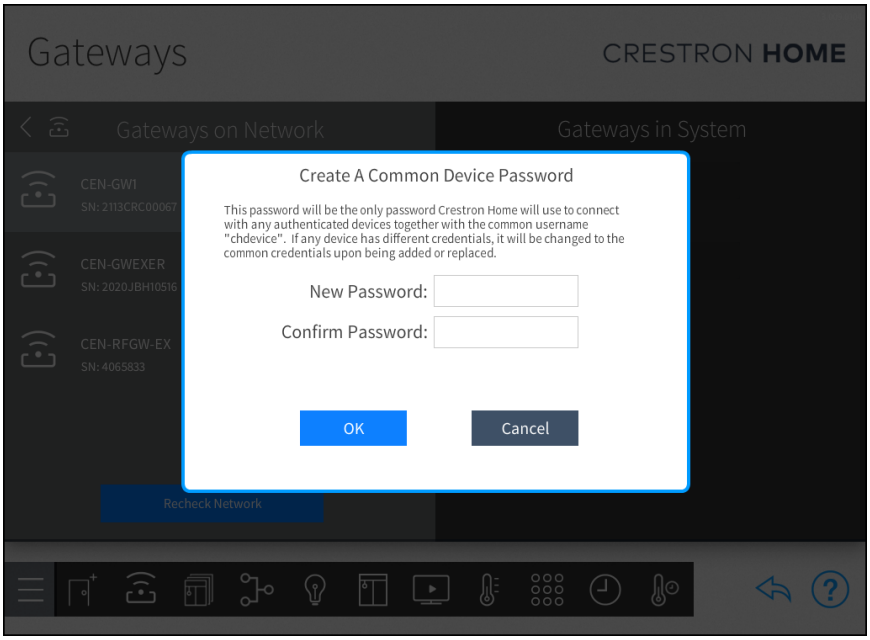
   a. **Replace a Virtual Gateway:** To replace a Virtual Gateway, select **Yes**. The data stored in the Virtual Gateway is transferred to the new gateway.

   b. **Add as a New Gateway:** To add the gateway without replacing the Virtual Gateway, select **No**. Devices may need to be manually added to the system and then programmed.

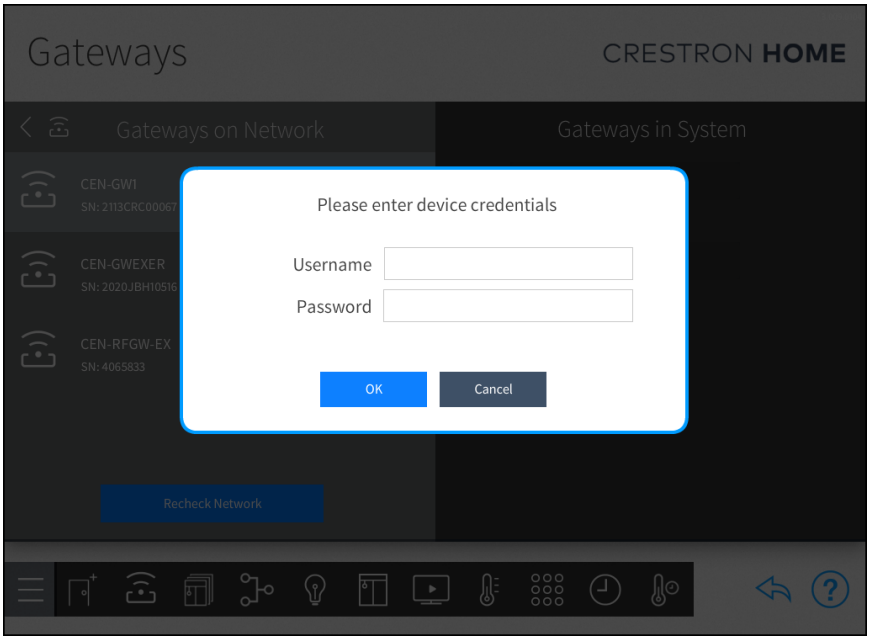
4. In the **Virtual Gateway List**, select a gateway and then press **OK**.



5. The system may display prompts to create a Common Device Password or to enter device credentials. For details, refer to Secure Device Connections on page 153 and System Detail and Password Configuration on page 566.
    a. **Create a Common Device Password:** If the Common Device Credentials are not set, enter a password for the chdevice user and then select **OK**. The system will create the Common Device username (chdevice) and password on the gateway.



b. **Enter Device Credentials:** If administrator credentials were set on the device, enter those credentials and then select **OK**. The device credentials are required for the system to create the chdevice user on the device.



6. Configure the gateway after it is added to the system. Tap the gear button next to the device name to display a Settings dialog box. For details, refer to Device Settings on page 1191.

Replace a Virtual Device

To replace a virtual device:

1. In the **Device Types** menu, select **Crestron Wireless** or **Crestron Wired and Wi-Fi**. For details, refer to Pair Devices on page 151.



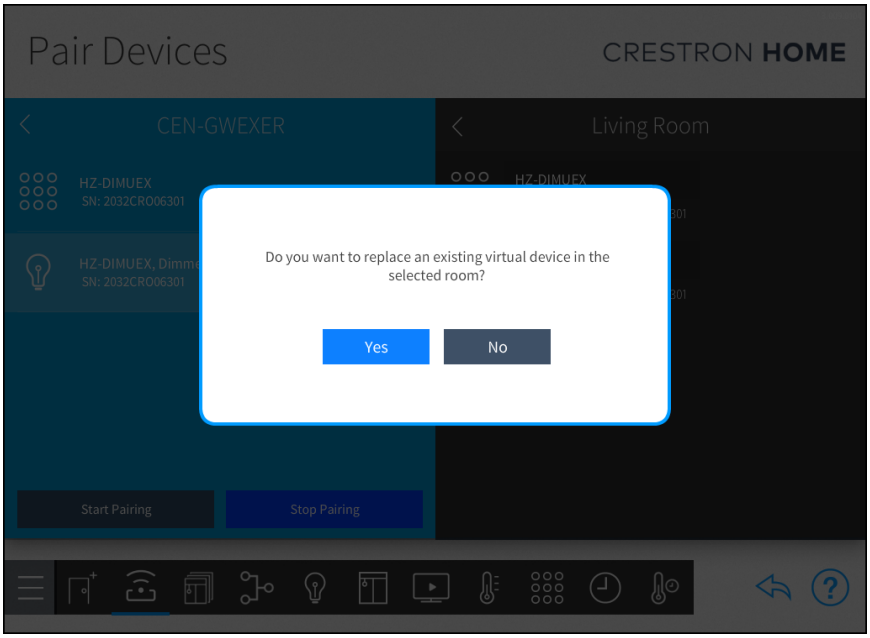
2. In the **Select a room** menu, select a room with the Virtual Device. The Virtual Device is displayed in the room with a yellow triangle on the device Icon.



3. Select a device and then select **Add**.



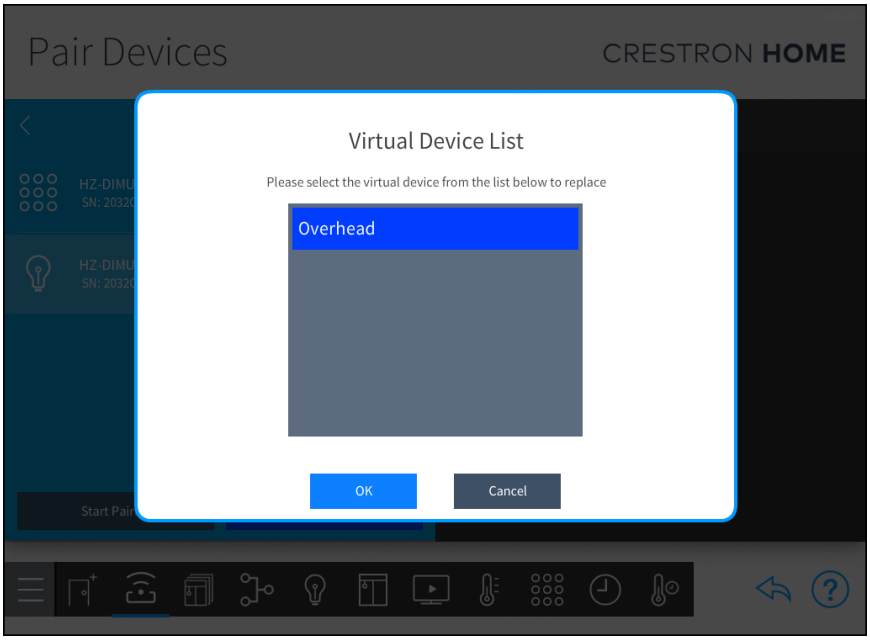
4. When the device is added it can replace a virtual device or it can be added as a device. To add the device, do either of the following:



   a. **Replace a Virtual Device:** To replace a Virtual Device, select **Yes**. The data stored in the Virtual Device is transferred to the new device.

   b. **Add as a New Device:** To add the device without replacing the Virtual Device, select **No**.

5. In the **Virtual Device List**, select a device and then press **OK**.



6. Configure the device after it is added to the room. Tap **Settings** next to the device name to display a Settings dialog box. For details, refer to Device Settings on page 1191.

Operation

The Crestron Home® user interface runs on 60- and 70-series touch screens, UC-MM30-R tabletop conference devices, iOS devices, Android devices, and TSR-310 handheld remotes.

For an overview of the Crestron Home user interface, refer to the following sections:

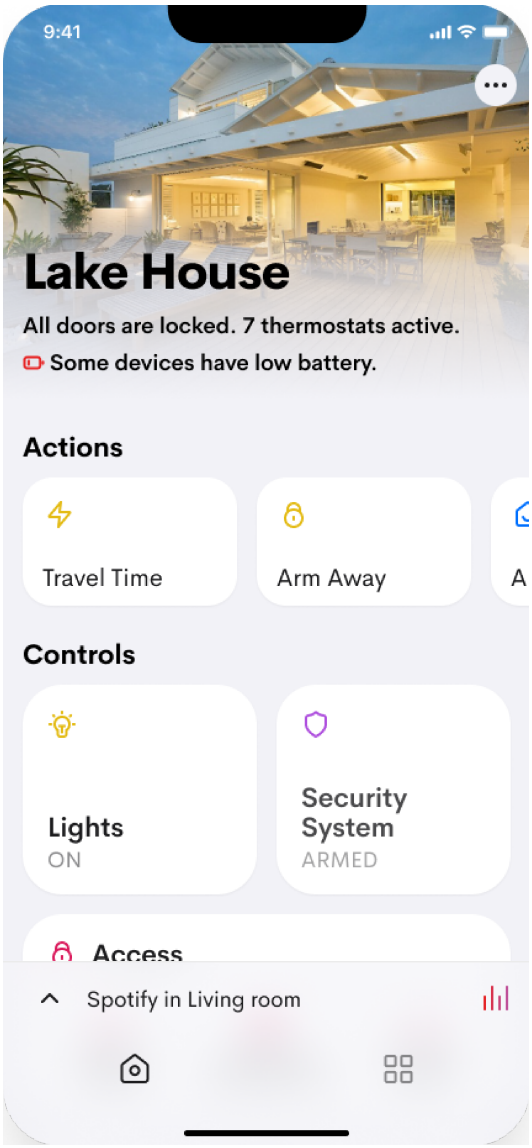
- Crestron Home® OS User Interface
- User Interface for TSR-310 Touch Screen Remotes
- UC-MM30-R Volume and Microphone Control

Crestron Home® OS User Interface

The Crestron Home user interface runs on Crestron touch screens, iOS devices, and Android devices to provide a seamless user interface across all devices. The user interface for the Crestron Home system is populated based on the Crestron Home system configuration.

The Crestron Home interface is comprised these tabs:

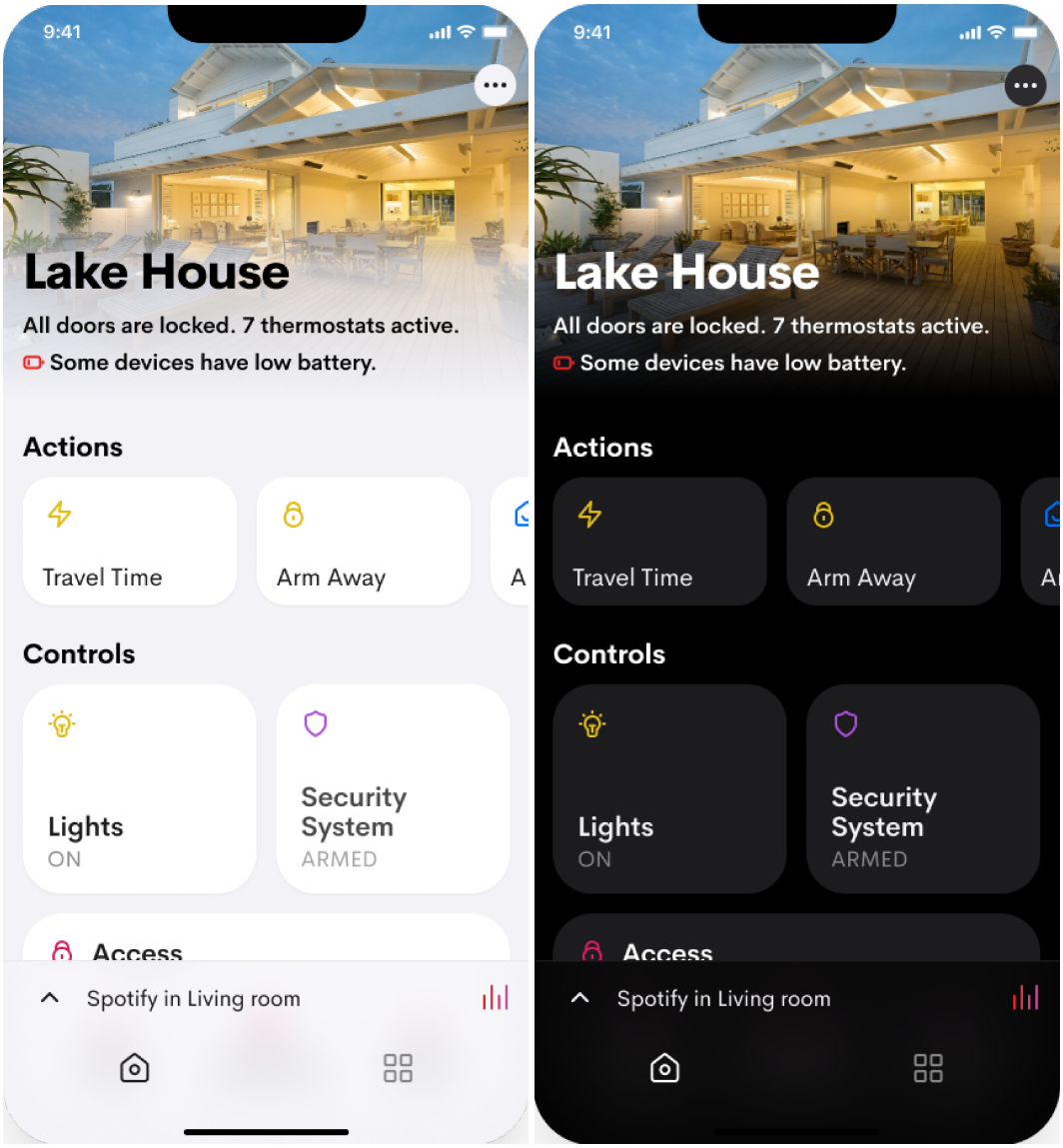
- **Home:** Displays controls that apply to the entire home. For details, refer to Home Tab on page 777.
- **Rooms:** Displays all of the rooms in the home to navigate to room specific controls. For details, refer to Room Selection Tab on page 820.



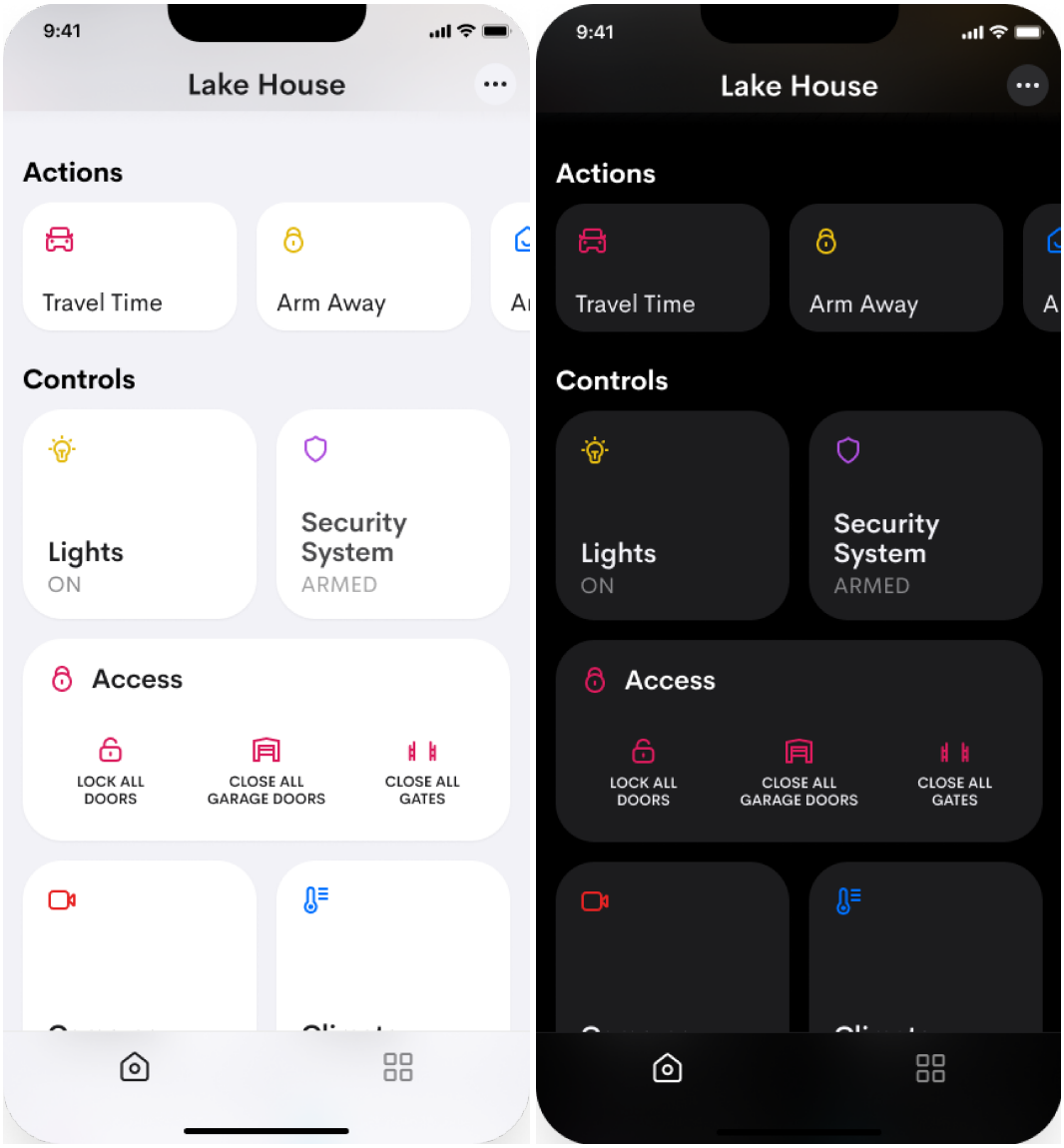
Light and Dark Mode

If Dark Mode is enabled on the Crestron touch screen, Android Device, or iOS Device, the Crestron Home app is displayed in dark mode.

Home Screen Example - Light Mode (Left) and Dark Mode (Right)



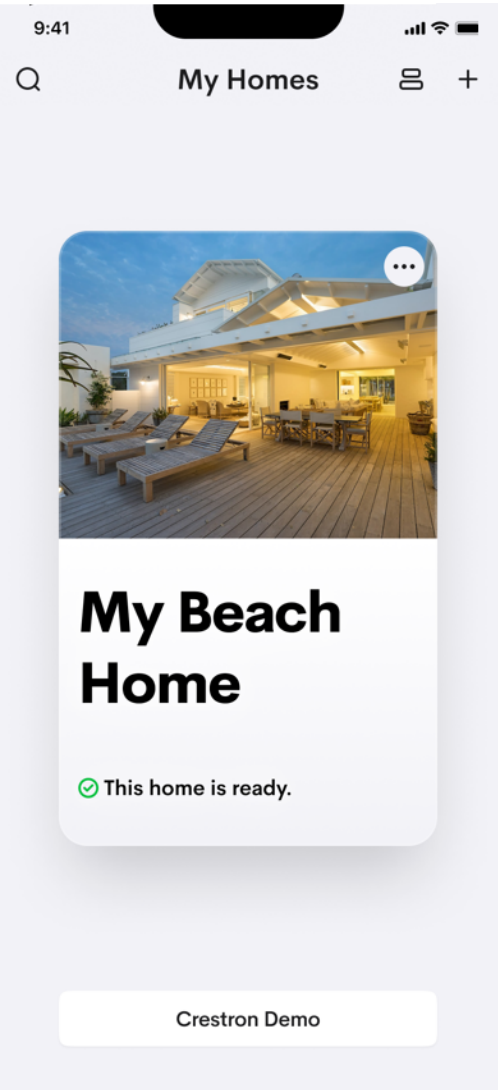
Home Screen Scrolled Down Example - Light Mode (Left) and Dark Mode (Right)



My Homes

The **My Homes** screen displays the homes that are available on the device. To view the **My Homes** screen, go to **Menu > My Systems**.

Use the **My Homes** screen to change the view, add homes, edit connection information, and view the home status.



Icons

- **Cloud Icon:** A connection is made to the home using the cloud connection. Displays next to the status icon.
- **Green Check:** Indicates a secure connection using the cloud or local connection.
- **Orange Check:** The home is set up for connection using only the legacy remote connection type. This requires open ports on the network and may not be secure.

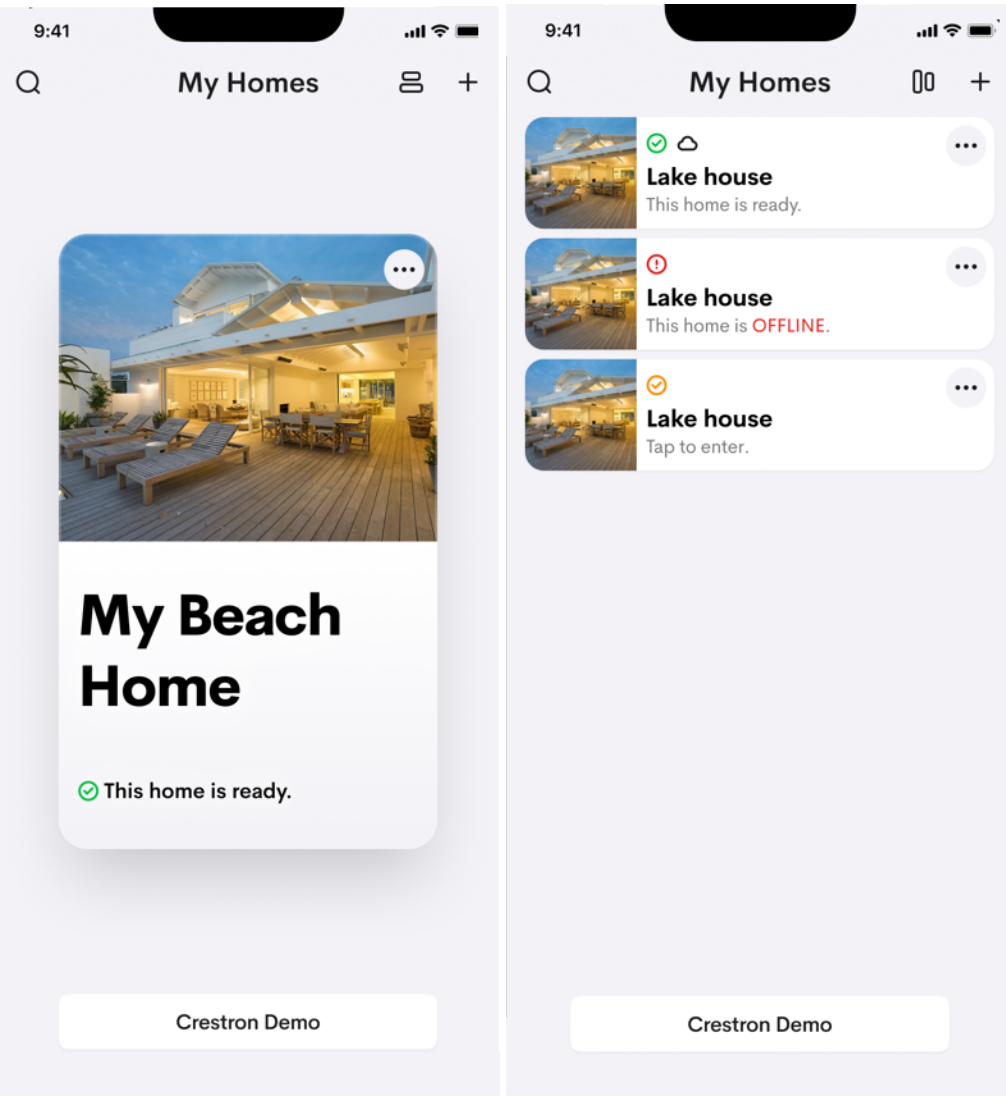
- **Red Check:** No connectivity. There is no local connection and no cloud connection. The cloud could not be configured or the cloud is down.

Home View

Display homes using a tile or list view.

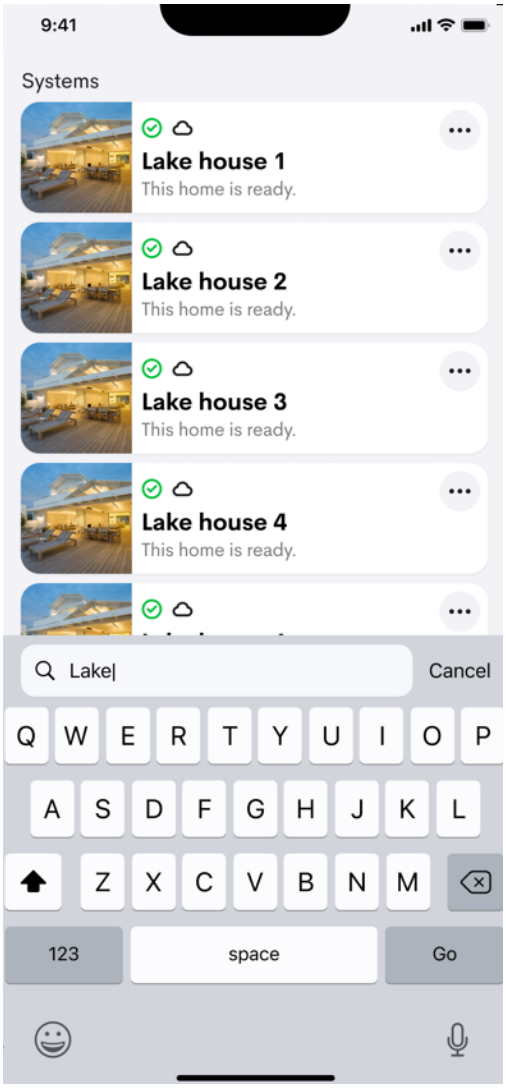
To change the view, select **Tile** or **List**.

Homes in Tile View (Left) and List View (Right)



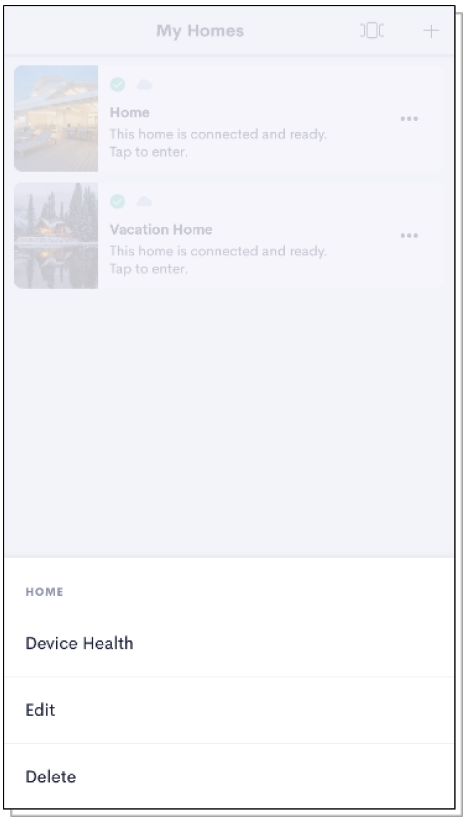
To search for a home, select **Search**.

Homes Search View



Home Menu

Use the home menu to view the Device Health dashboard, edit a home, or delete a home.



Device Health

View the Device Health dashboard for the home. To go to the **Device Health** dashboard, select ••• **Menu** and then **Device Health**.

> **NOTE:** The Advanced User password is required to access the Device Health dashboard.

Edit Home

Change the display name or the connection settings for the home. To go to the **Edit Home** screen, select ••• **Menu** and then **Edit**.

> **NOTE:** The User Interface Device password is required to change the settings.

Delete Home

Delete a home from the device. To delete a home, select ••• **Menu**, **Delete**, and then **Delete** to confirm.

Demo Mode for iOS Devices

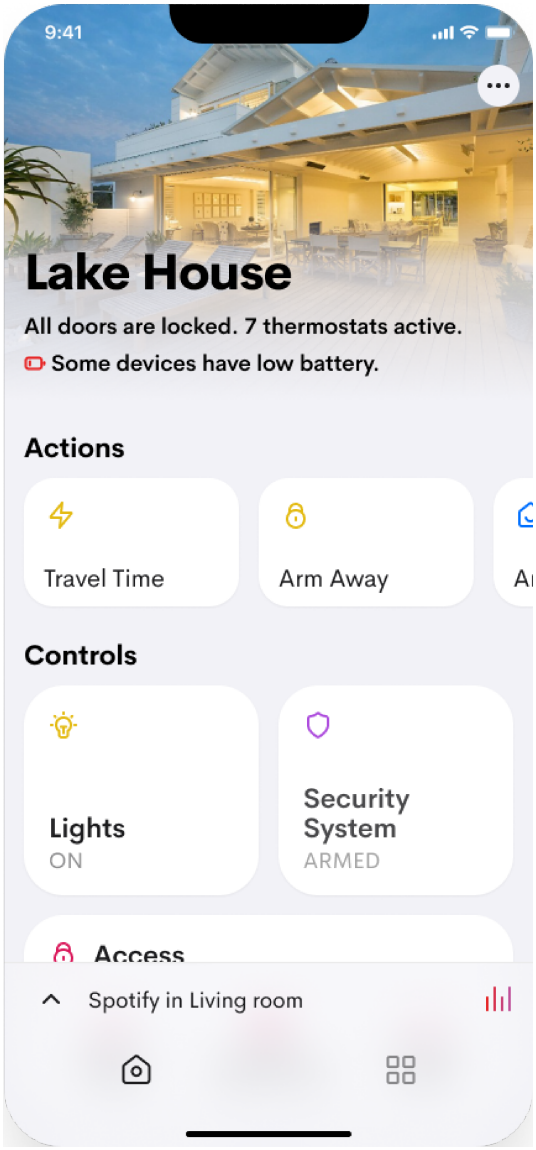
Demo mode is available to provide a preview of the Crestron Home user interface. It displays a common house that utilizes quick actions; security system and climate control; house access including garage door, door lock, and gate control; and rooms with light, shade, audio, and video devices.

To exit Crestron Demo mode, tap the **Exit Crestron Demo** button.

Home Tab

Use the **Home** screen to display controls that apply to the entire Crestron Home system.

To view the **Home** screen, tap the **Home** icon.

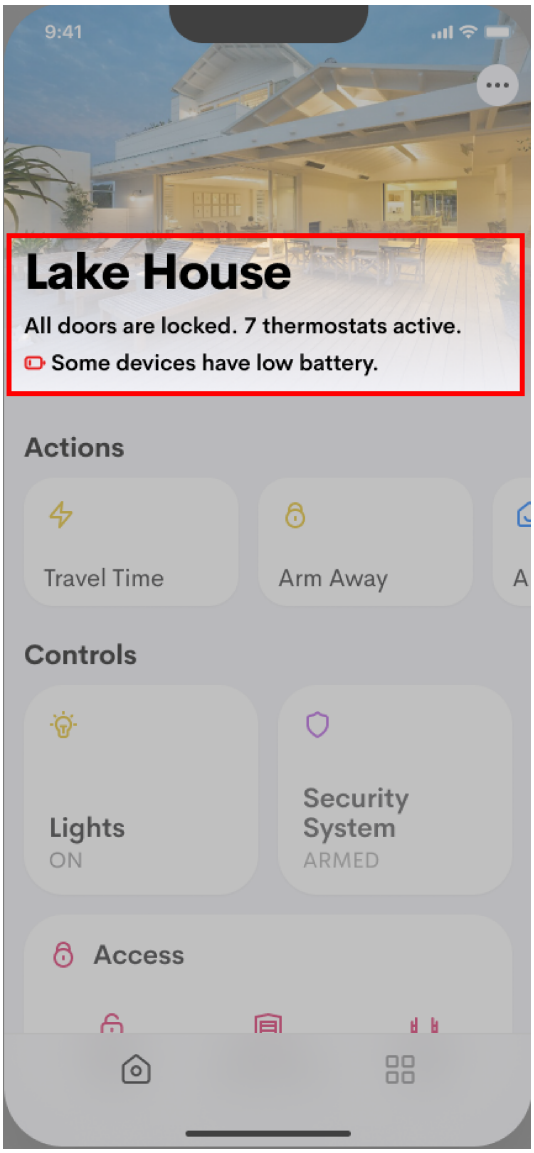


Home Information and Status

Information about the house and device status is shown on the top of the screen.

The name of the home is listed at the top. To switch homes, tap the down arrow and then select the home.

The status can include information such as the state of the door locks, gates, or garage doors, if the security system is active, if media is playing, and more.


9:41
Lake House
All doors are locked. 7 thermostats active.
Some devices have low battery.
Actions
Travel Time
Arm Away
Controls
Lights
ON
Security System
ARMED
Access

Actions

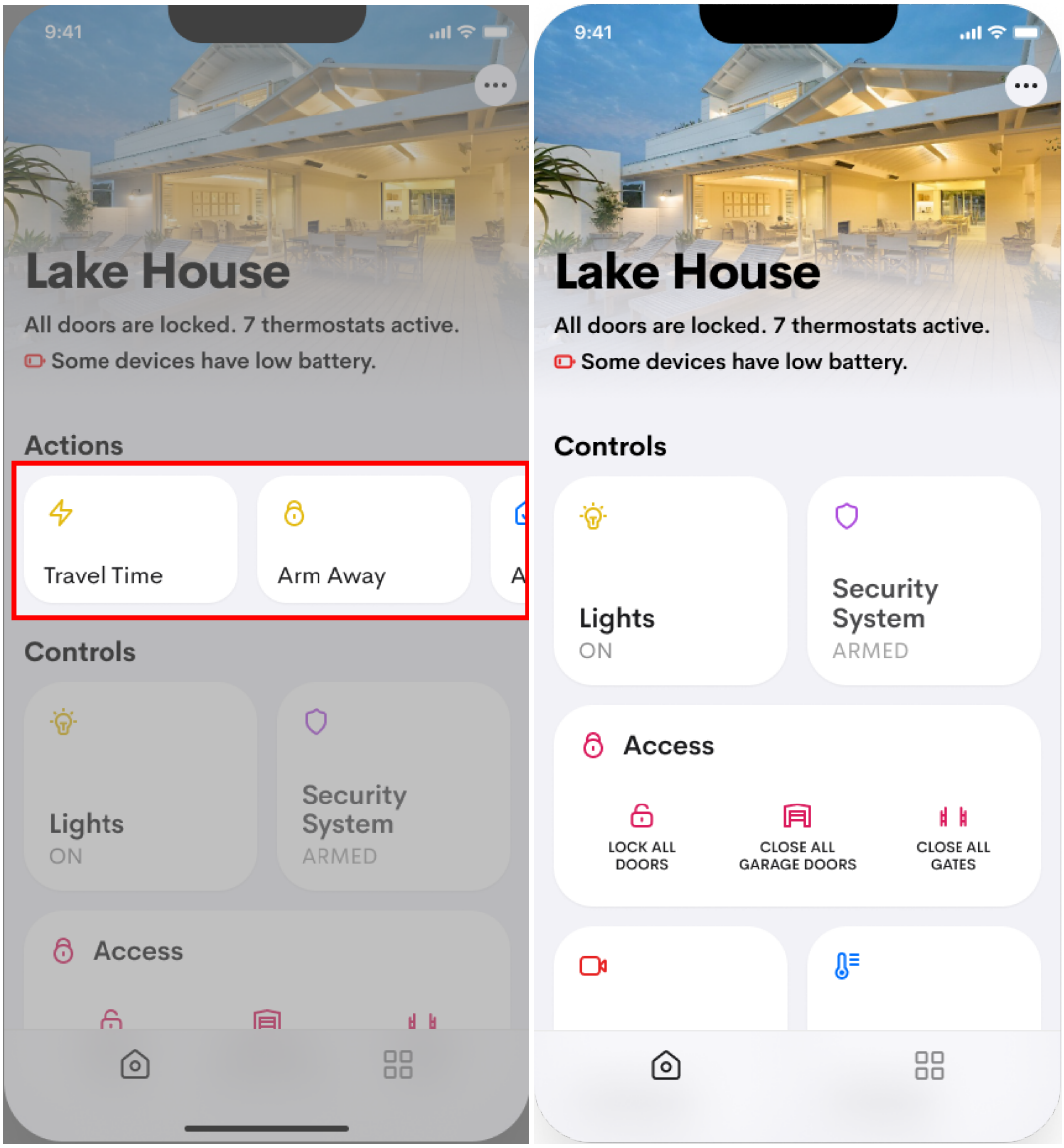
Use the **Actions** to perform several functions at the same time. For example, a quick action can be created that controls the lights, shades, and television in a room.

To change the order of the Actions or the Action icon, refer to Edit Actions on page 938.

NOTES:

- The Crestron Home app displays up to 20 Actions.
- Actions are customized by Crestron Home installer using the Crestron Home Setup app. The functionality is custom to the devices in the room, house, and your preferences.

Home Screen - Actions (Left) and No Actions (Right)

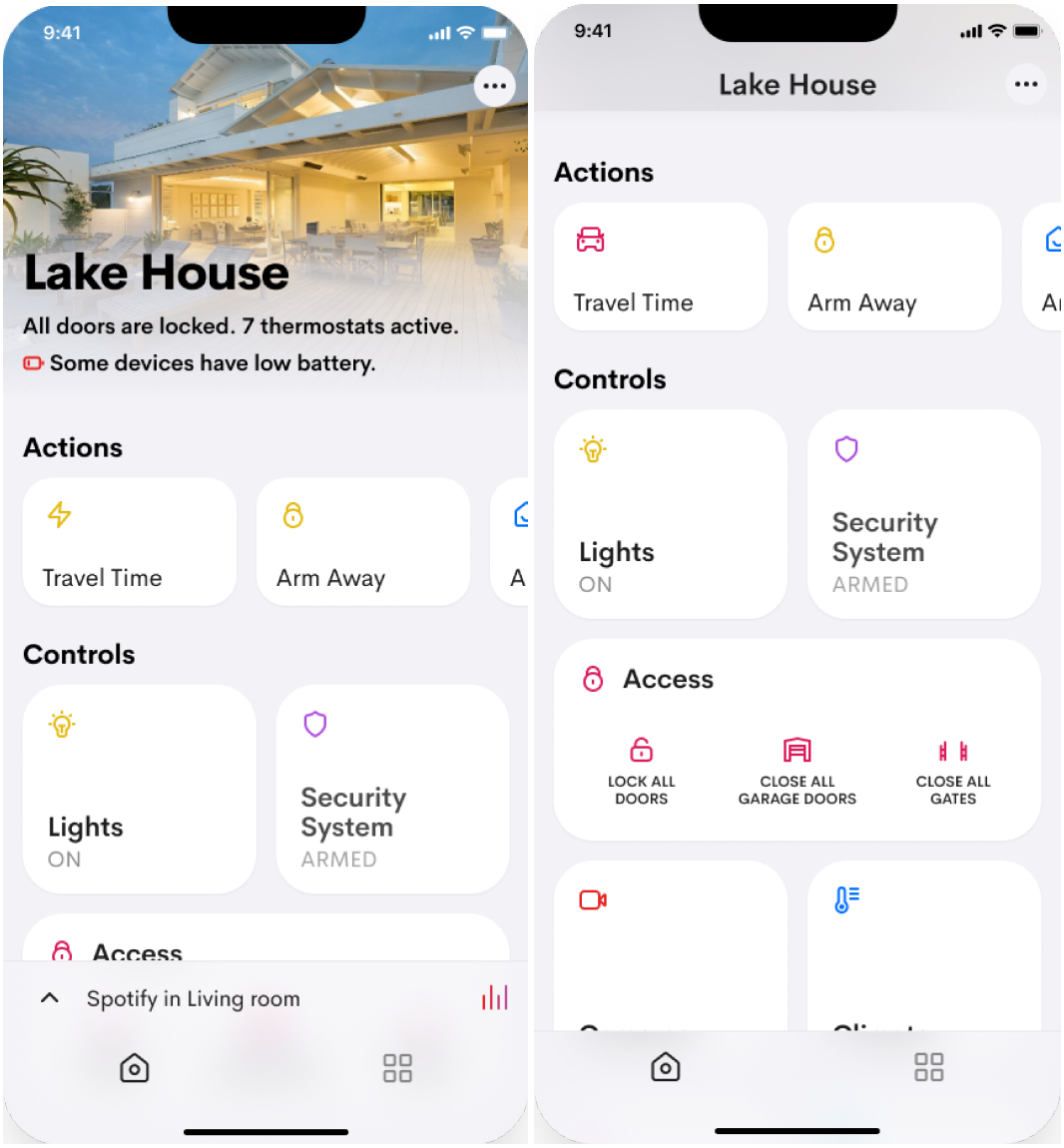


Home Controls

Use the **Home Controls** to control similar devices from one screen. **Home Controls** are available for these device types when they are included in the home:

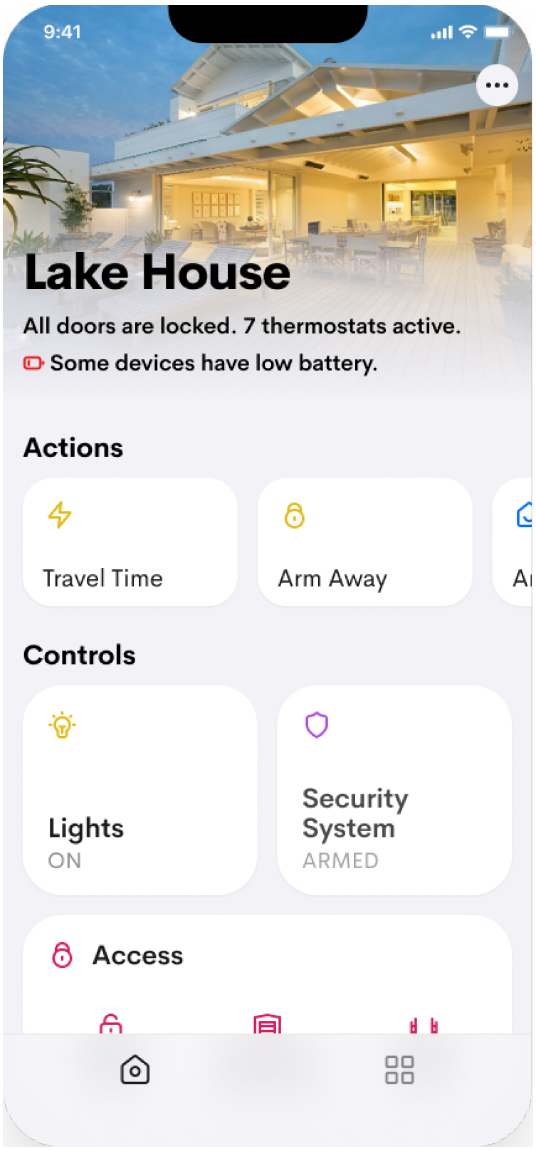
- **Lights:** View and control all lights in the system. For details, refer to Whole House Light Control on page 782.
- **Music:** View and control audio sources in the system. For details, refer to Control Media on page 862.
- **Security System:** View and control all security zones in the system. For details, refer to Control Security Systems on page 795.
- **Access:** View and control all locks, gates, and garage doors in the system. For details, refer to House Access on page 809.
- **Climate:** View and control all thermostats in the system. For details, refer to Control Climate on page 848.
- **Cameras:** View and control all security cameras in the system. For details, refer to Control Cameras on page 799.
- **Pool and Spa:** View and control all pools and spas from one screen. For details, refer to Control Pools and Spas on page 931.

Home Screen Example - Top (Left) and Scrolled Down (Right)



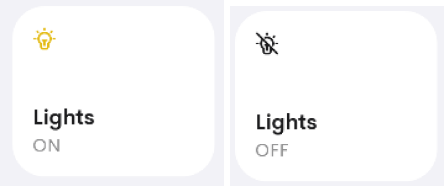
Whole House Light Control

The **Home Control** for **Lights** provides access to all light controls and whole house light scenes in the system in one location.



The **Lights** tile icon indicates **Lights Off** when all lights are off and **Lights On** when some or all of the lights are on. To control whole house lights and whole house light scenes, tap the **Lights** tile.

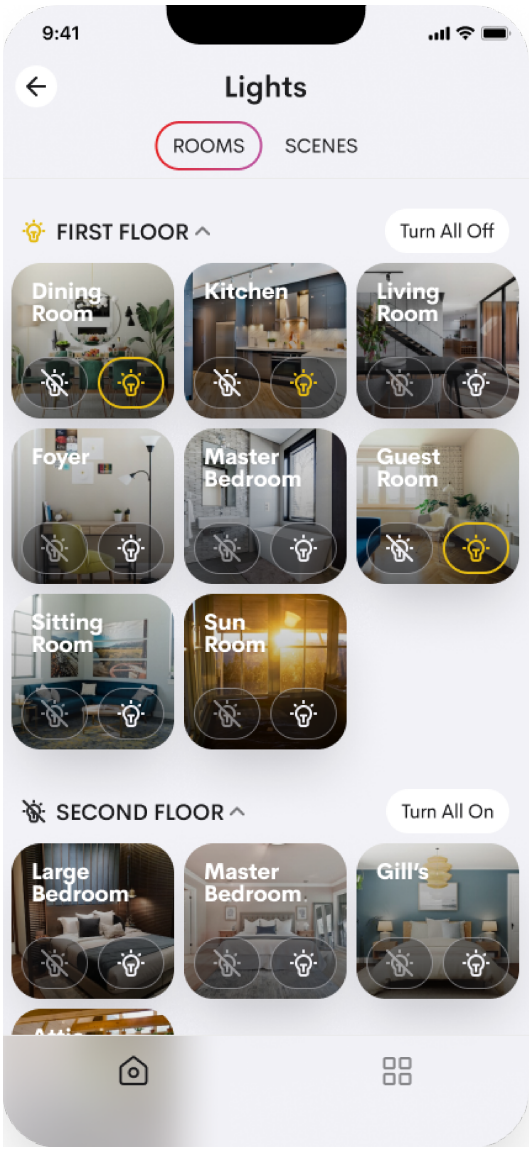
Lights Tile Icon - Lights On (Left) and Off (Right)



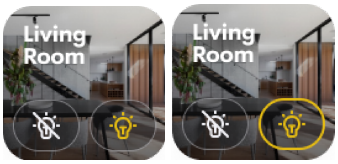
Whole House Lights

Control and view the status of the lights in each room and room group in the **Lights** tab. **Lights Off** indicates that all lights are off and **Lights On** indicates that some or all of the lights are on.

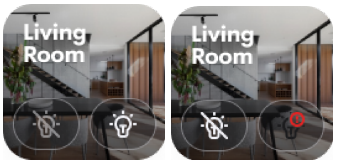
To collapse and expand room groups, select the **Room Group**. The room group's collapsed or expanded state persists in the app until it is changed.



Lights -Partial On (Left) and All On (Right)



Lights -Off (Left) and Error (Right)



Room Group Lights

Room groups that have rooms with lights are shown in the whole house lights page. Rooms that Control all lights in the room group:

- If all lights are off, turn on all lights in the room group by selecting **Turn All On**.
- If all lights are on, turn off all lights in the room group by selecting **Turn All Off**.

Room Group Lights - Turn All On



Room Group Lights - Turn All Off



Room Lights

Control lights in individual rooms:

- Tap a room tile to turn the lights on or off. The **All On** or **All Off** light scene is recalled.
- Select ••• **Menu** to open the Lights Control page for the room and control the loads individually or recall light scenes. To return to the whole house lights screen, swipe down or select **Close**.

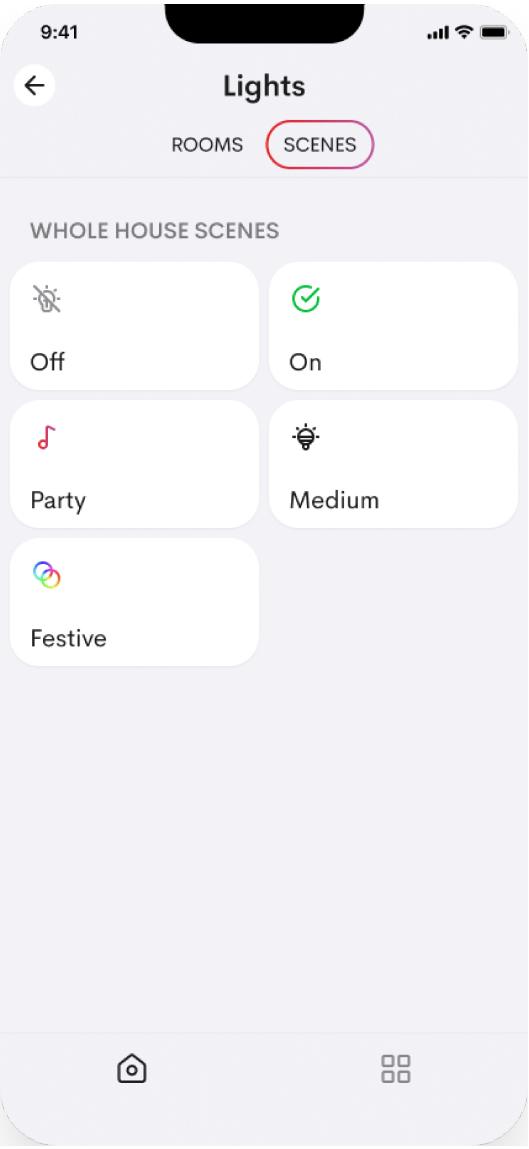
Reorder Rooms

Reorder the rooms within the room group.

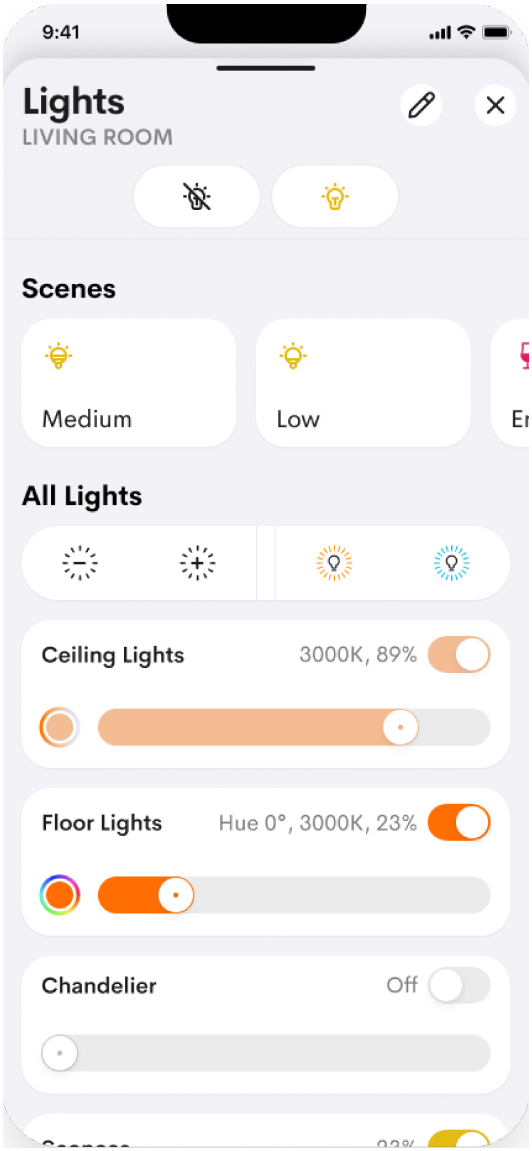
To reorder rooms, tap and hold the room and then drag it to the desired location within the room group.

Whole House Light Scenes

Recall whole house light scenes in the **Scenes** tab.

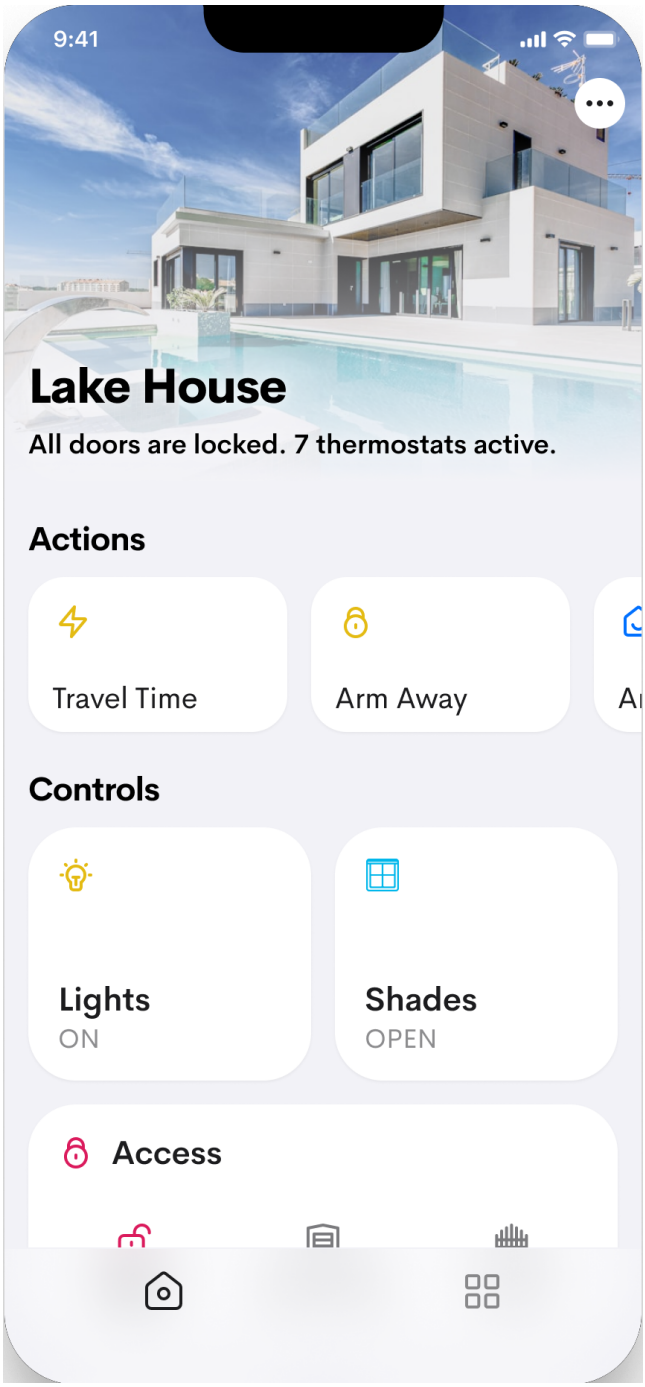


Select **Menu** to create, edit, and reorder scenes. For details, refer to Control Lights on page 829.



Whole House Shade Control

The **Home Control** for **Shades** provides access to whole house shade controls and scenes in the system in one location.

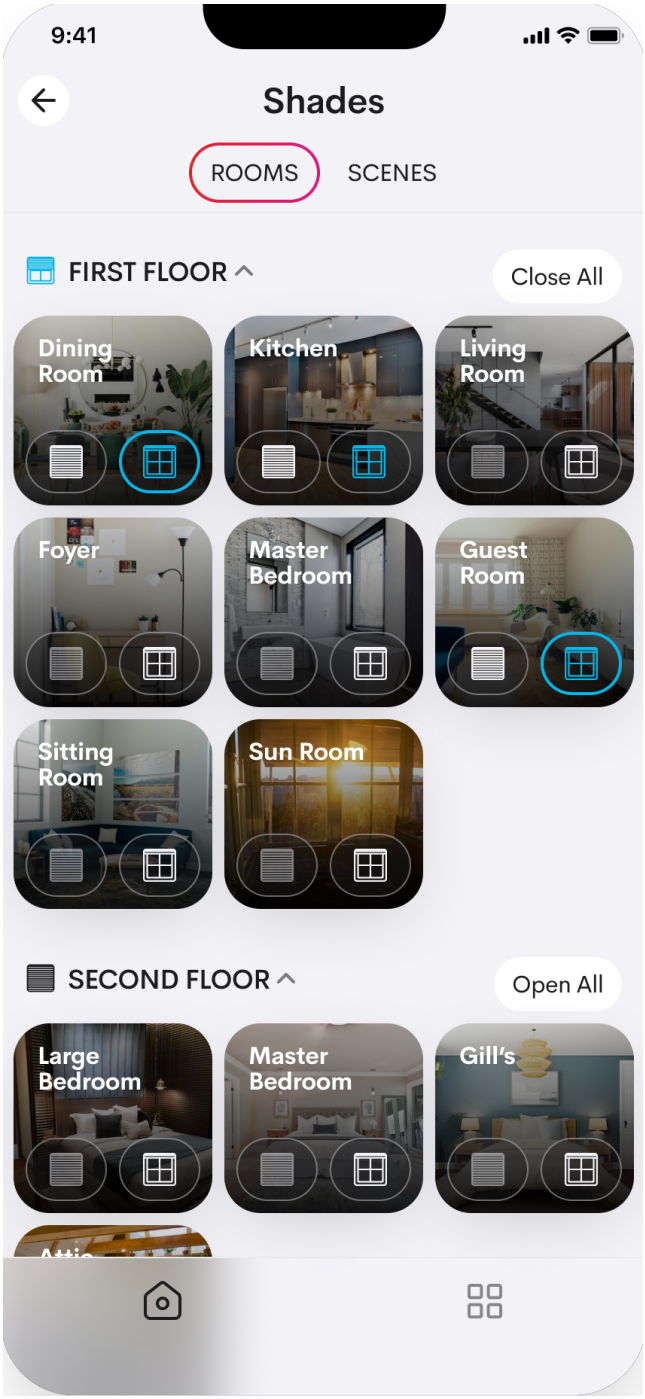


The **Shades** tile icon indicates **OPEN** when all shades are open and **CLOSED** when some or all of the shades are closed. To control whole house shades and scenes, tap the **Shades** tile.

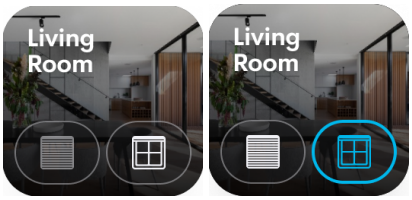
Whole House Shades

Control and view the status of the shades in each room and room group in the **Shades** tab.

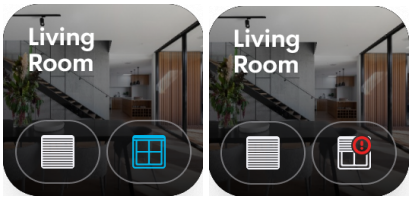
To collapse and expand room groups, select the **Room Group**. The room group's collapsed or expanded state persists in the app until it is changed.



Shades - All Closed (Left) and All Open (Right)



Shades - Some Open (Left) and Error (Right)

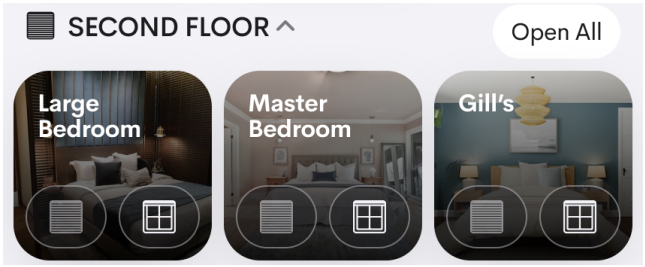


Room Group Shades

Room groups that have rooms with shades are shown in the whole house shades page. Rooms that control all shades in the room group:

- If all shades are closed, open all shades in the room group by selecting **All Open**.
- If all shades are open, close all shades in the room group by selecting **All Close**.

Room Group Shades - Open All



Room Group Shades - Close All



Room Shades

Control shades in individual rooms:

- Tap a room tile to open or close the shades. The **All Open** or **All Close** shade scene is recalled.

- Select ••• **Menu** to open the Shades Control page for the room and control the shades individually or recall shade scenes. To return to the whole house shades screen, swipe down or select ✕ **Close**.

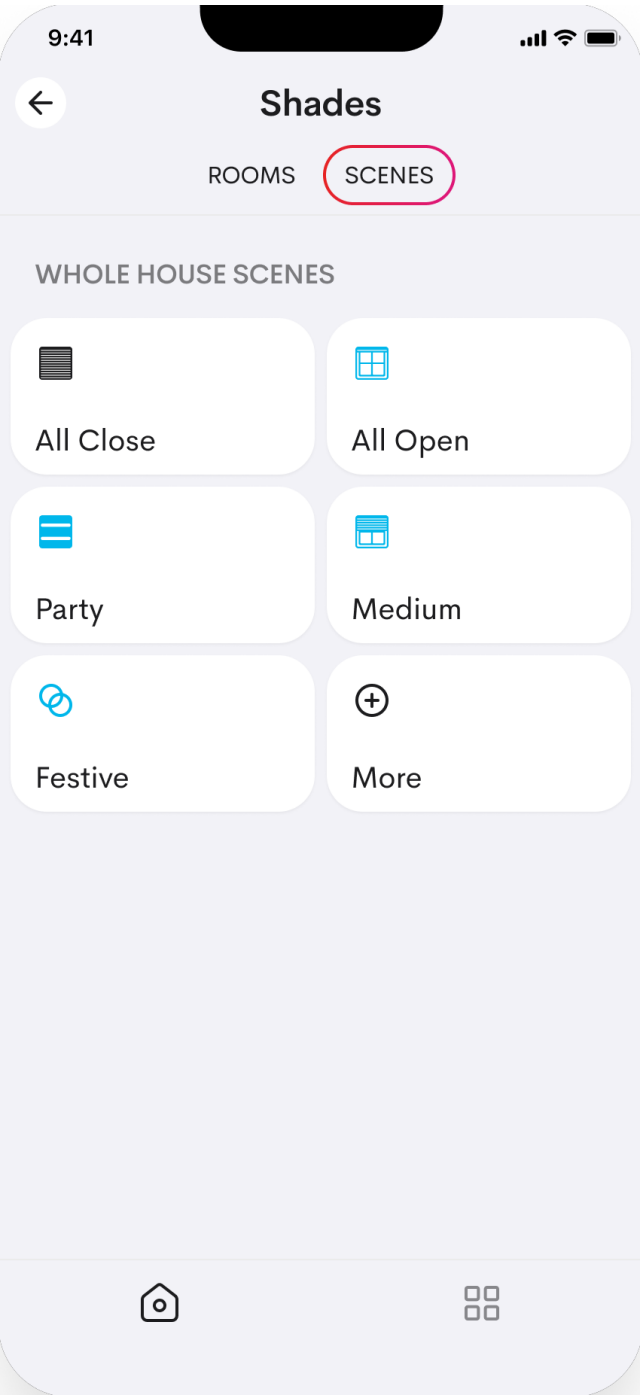
Reorder Rooms

Reorder the rooms within the room group.

To reorder rooms, tap and hold the room and then drag it to the desired location within the room group.

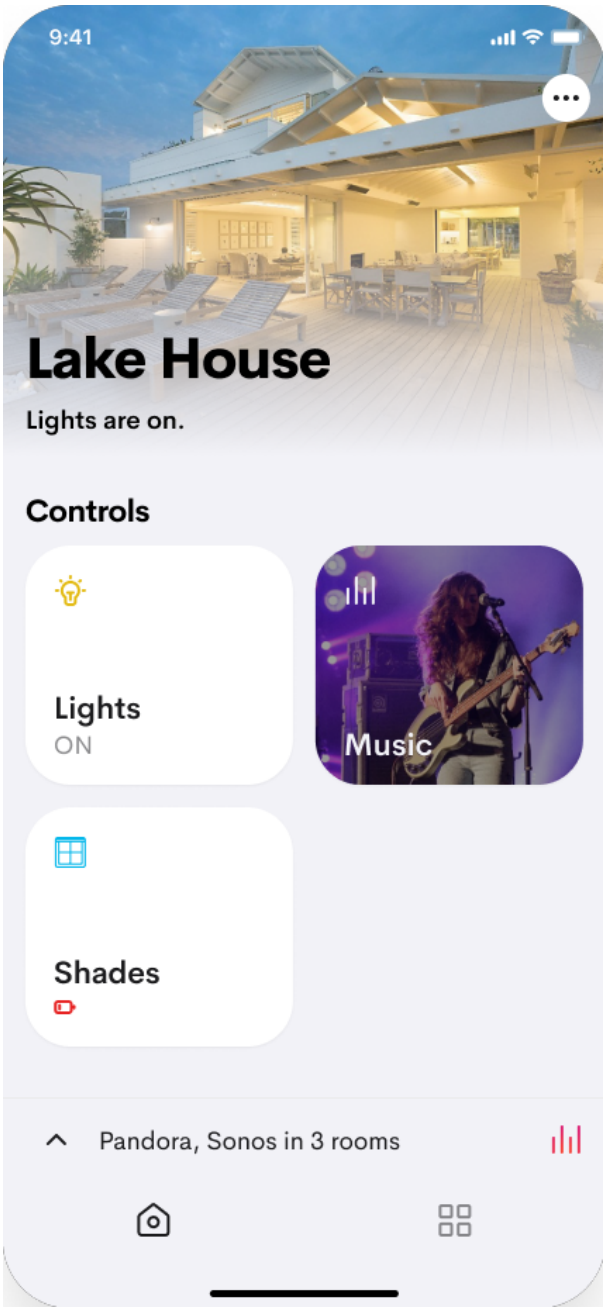
Whole House Shade Scenes

Recall whole house shade scenes in the **Scenes** tab.



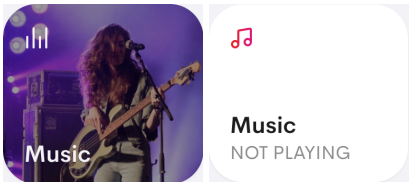
Whole House Music Control

The **Home Control** for **Music** provides access to all music controls in the system in one location.



The **Music** tile icon indicates **NOT PLAYING** when all music is off and album art (or **ON**) when some or all rooms have music on. To control whole house music, tap the **Music** tile.

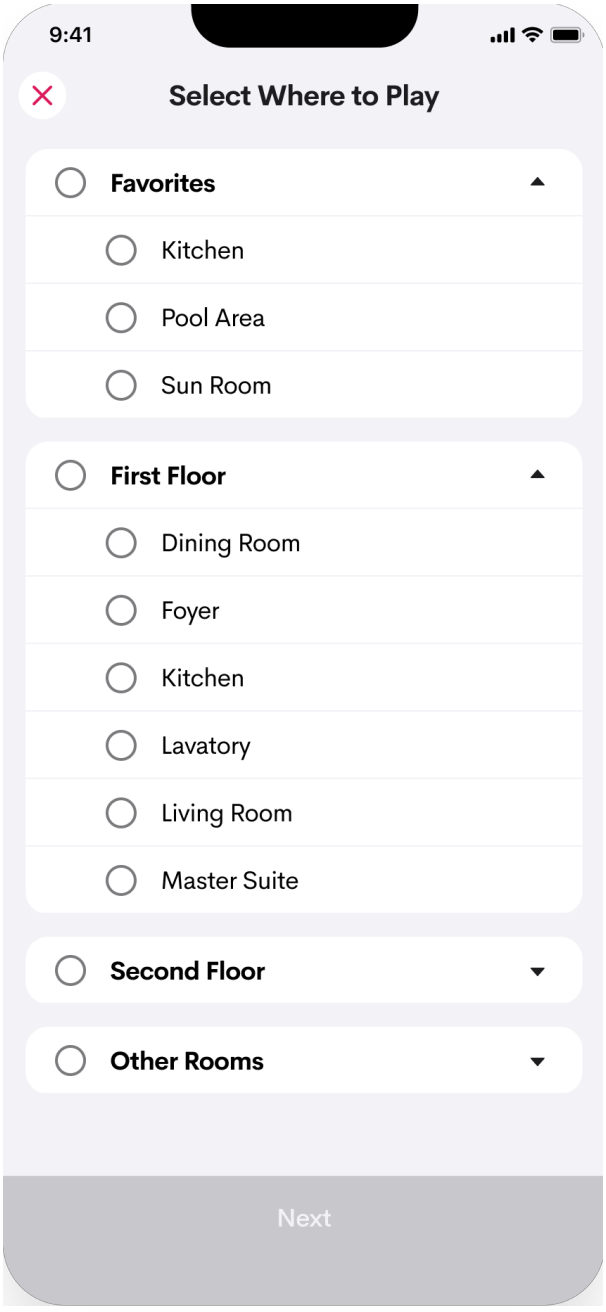
Music Tile Icon - Music On (Left) and Off (Right)



Whole House Music

Control and view the music status of in each room and room group in the **Music** tab.

For details, refer to Music on page 880.

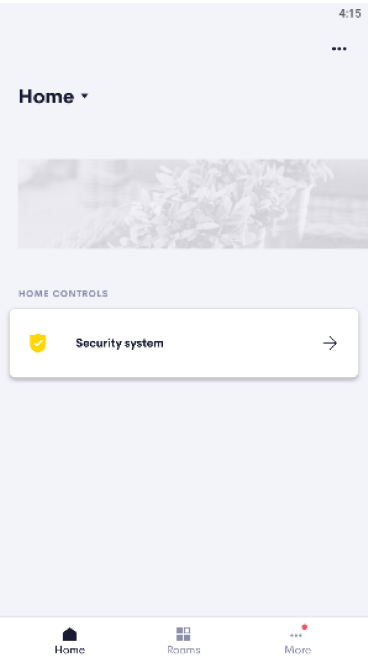


Control Security Systems

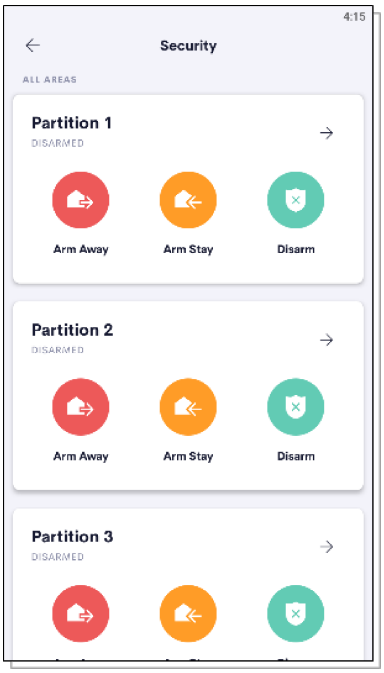
Tap the **Security System** tile on the **Home** screen. The **Security** screen displays the status of the security system at the top of the screen.

Security system functionality depends on the security system's make and model, configuration, and driver. The information and controls provided for the security system may include keypad emulation, an area list for systems that support areas, area controls to arm or disarm the system (including storing the password on the UI device), programming area arm or disarm events, and triggering area commands from button or trigger events via scenes.

> **NOTE:** To view the features supported by the security system, refer to Security System Configuration on page 1542.

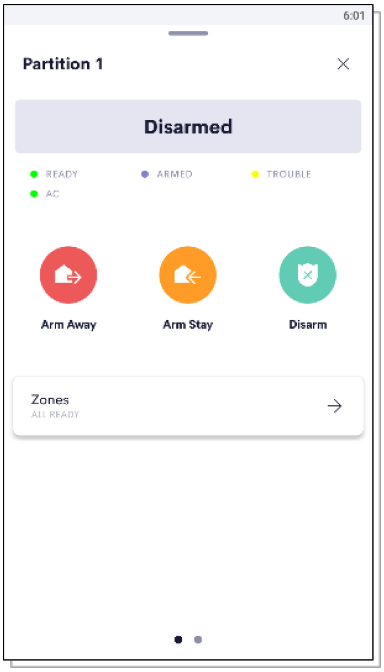


The area name, status, and actions are displayed for each area. To initiate an action, tap and hold an action button until the button icon updates.



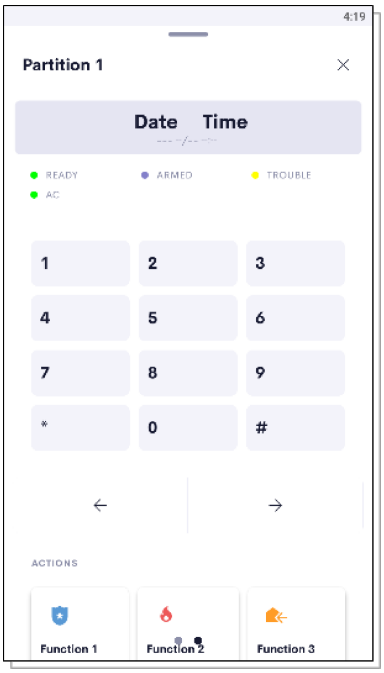
To view the zone information and additional controls for the area, select the Partition name.

Zone status is displayed. To initiate an action for the security system, tap and hold an action button until the button icon updates.

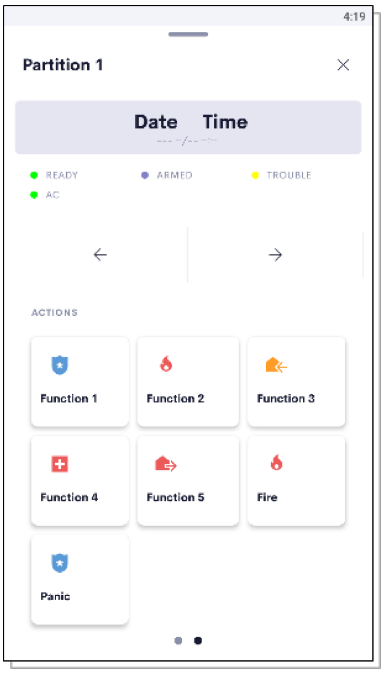


To view the keypad and additional actions, swipe left.

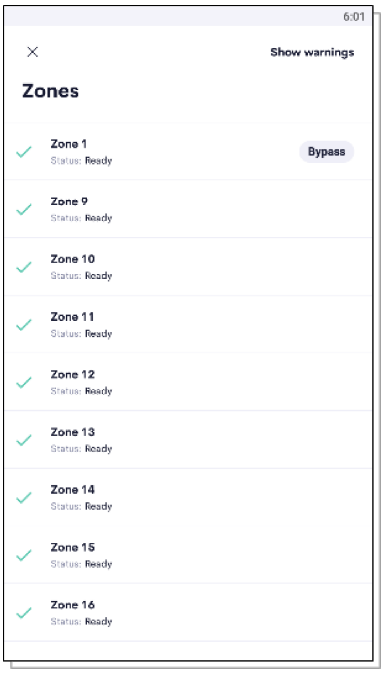
Use the keypad and direction arrows to control and enter the alarm code.



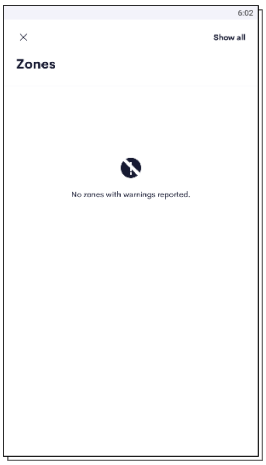
Additional security system actions are listed below the keypad. To initiate an action, tap and hold an action button until the button icon updates.



To view the zone status and warnings, select **Zones** from the Zone status page. To bypass a zone, select **Bypass**.



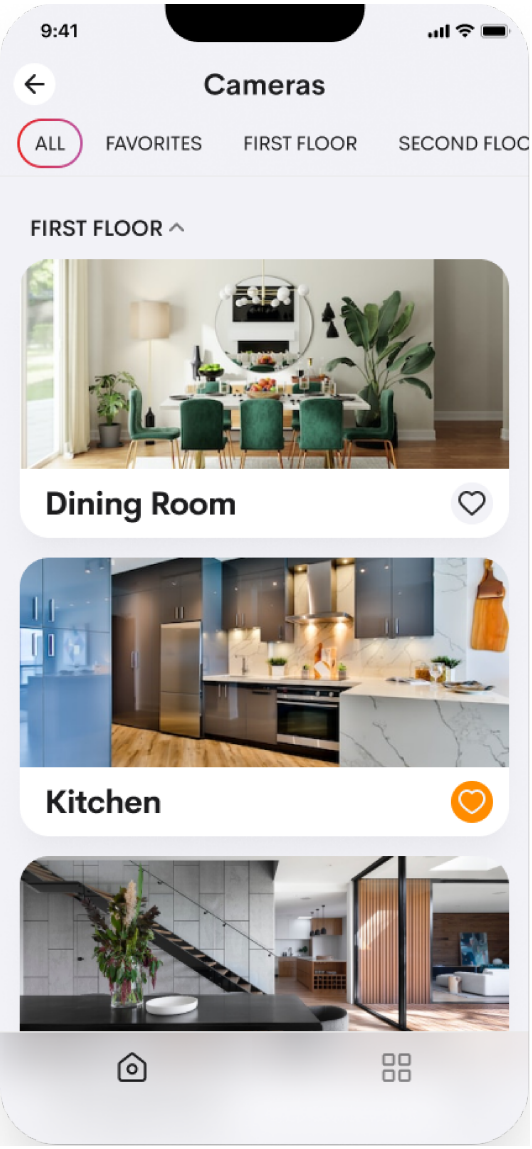
To view security system warnings, select **Show warnings**. To view the zones, select **Show all**.



Control Cameras

The **Cameras** screen displays a camera tile for each camera that is in the Crestron Home system. Each camera tile displays the camera name, the name of the room, and a snapshot from the camera. The snapshot is updated every five seconds.

Cameras View



View

NOTES:

- The camera name is listed before the room name. If the camera name and the room name match, the name is only listed once.
- Cameras are sorted by favorite status, then room groups, and then alphabetically.

- If a camera snapshot cannot be loaded, the image will be grayed out and an error message will be displayed. If a snapshot was previously loaded, the cached image will be displayed under the error message.

Tap a camera tile to view a camera stream.

NOTE: The aspect ratio of the camera dictates how the feed is displayed on your device. Borders will be displayed (letterboxing) if the aspect ratio of the camera does not match the aspect ratio of the user interface.

For cameras that support PTZ (pan, tilt, zoom) camera controls, the available PTZ controls are displayed when the camera stream is first displayed. After three seconds of inactivity, the PTZ camera controls are hidden.

Tap the camera stream to view the PTZ controls. Tap or tap and hold the PTZ camera controls to pan, tilt, and zoom the camera.

Camera Control, 1:1 Aspect Ratio, Full Screen, Controls Hidden



Camera Control, 4:3 Aspect Ratio, Full Screen, Controls Hidden

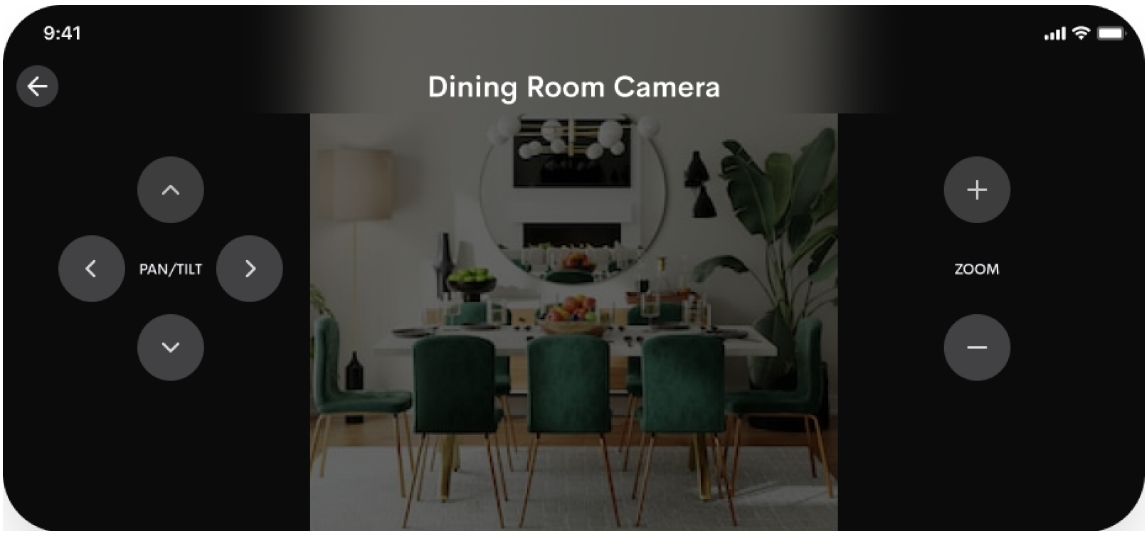


Camera Control, 16:9 Aspect Ratio, Full Screen, Controls Hidden

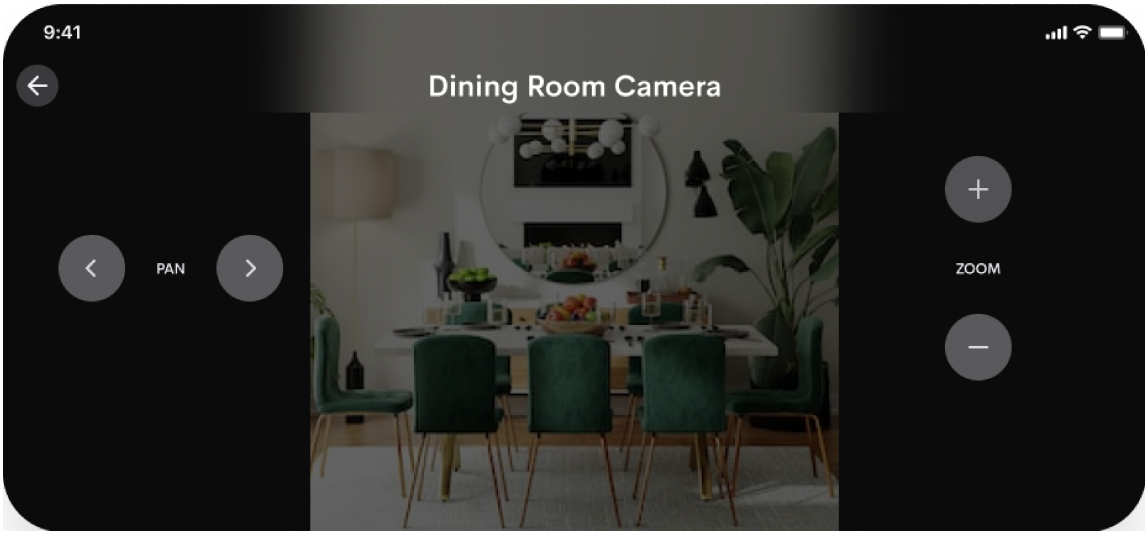


PTZ Controls

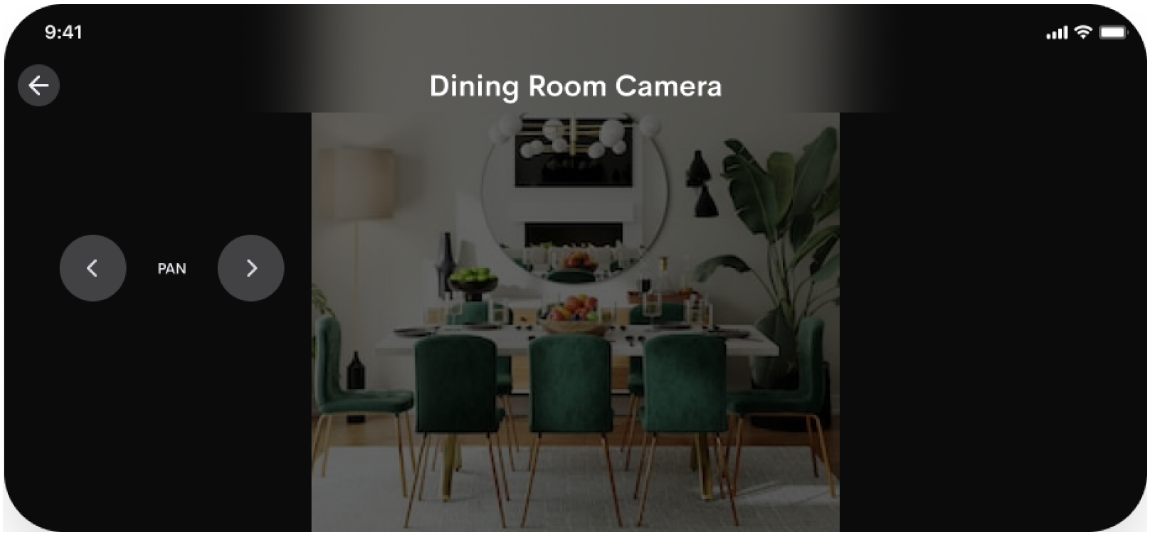
Camera Control, 1:1 Aspect Ratio, Full Screen, Controls Pan Tilt Zoom



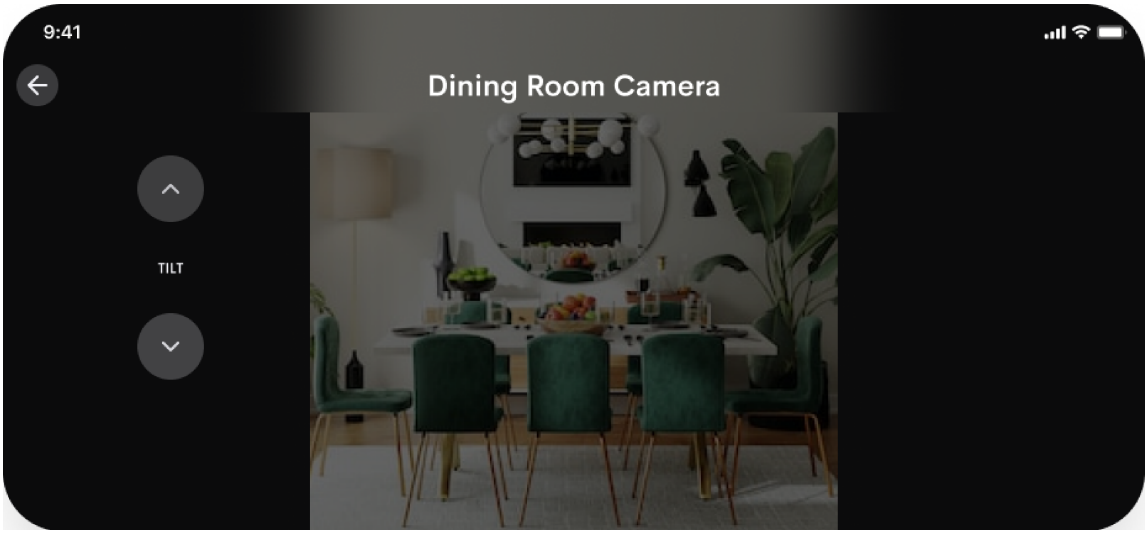
Camera Control, 1:1 Aspect Ratio, Full Screen, Controls Pan Zoom



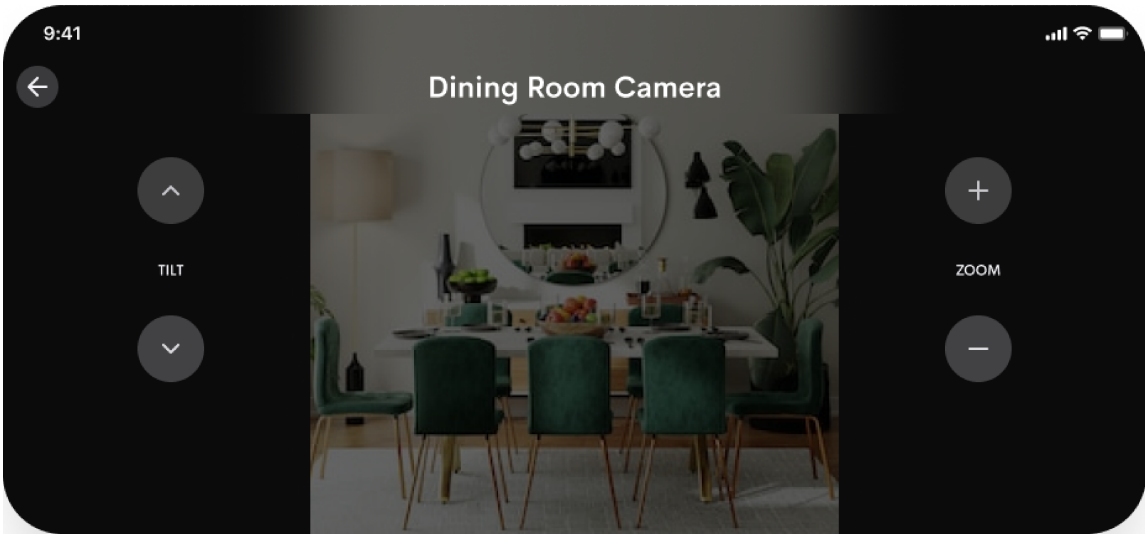
Camera Control, 1:1 Aspect Ratio, Full Screen, Controls Pan



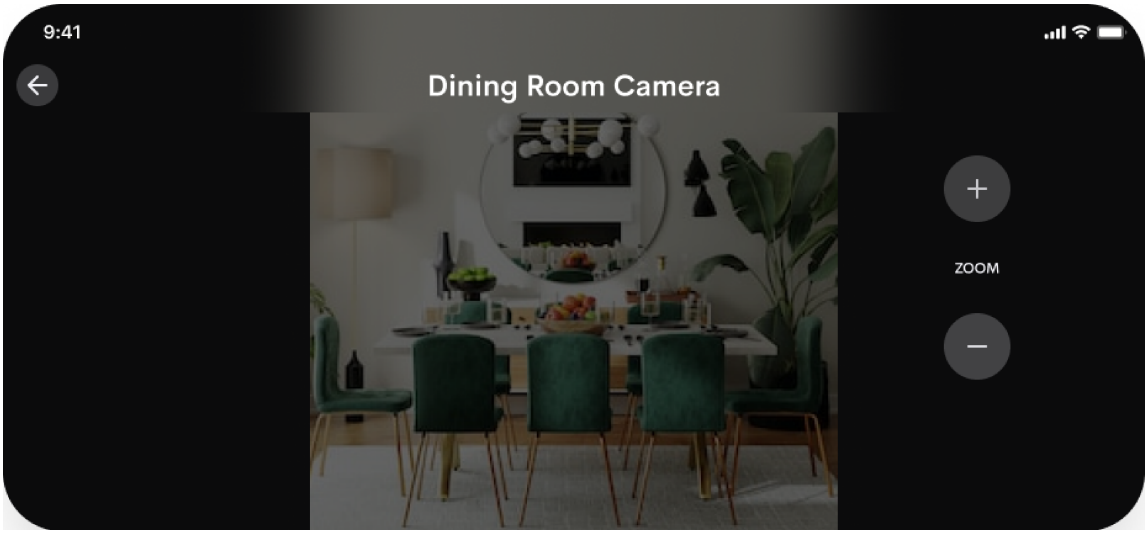
Camera Control, 1:1 Aspect Ratio, Full Screen, Controls Tilt



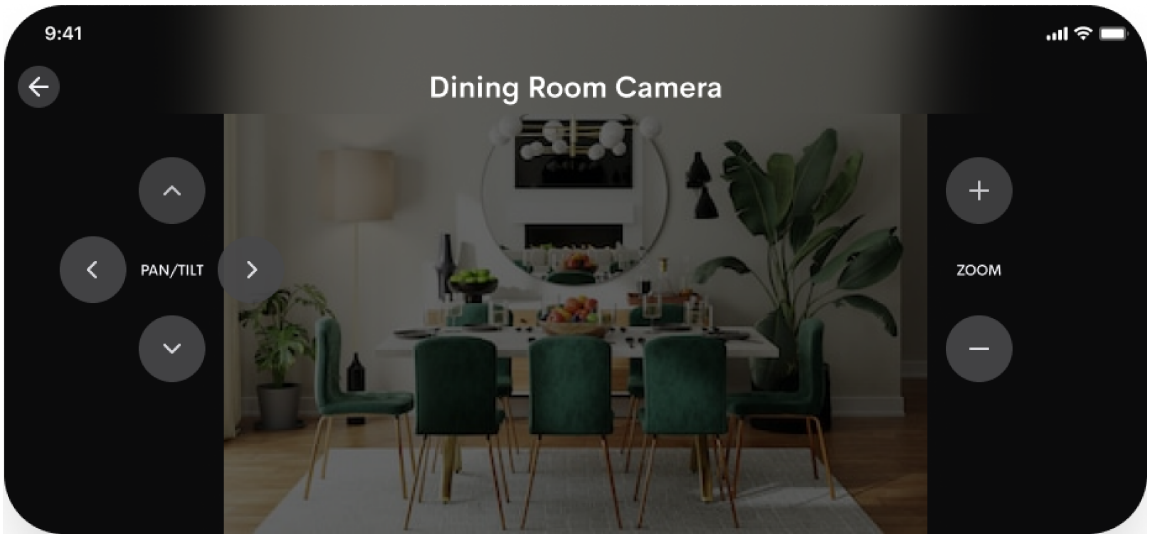
Camera Control, 1:1 Aspect Ratio, Full Screen, Controls Tilt and Zoom

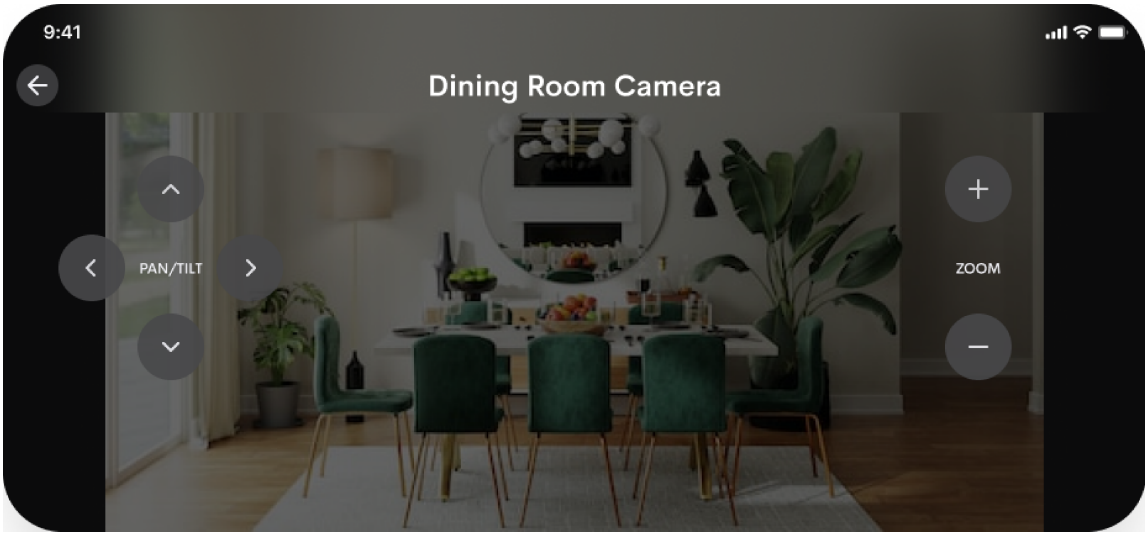


Camera Control, 1:1 Aspect Ratio, Full Screen, Controls Zoom

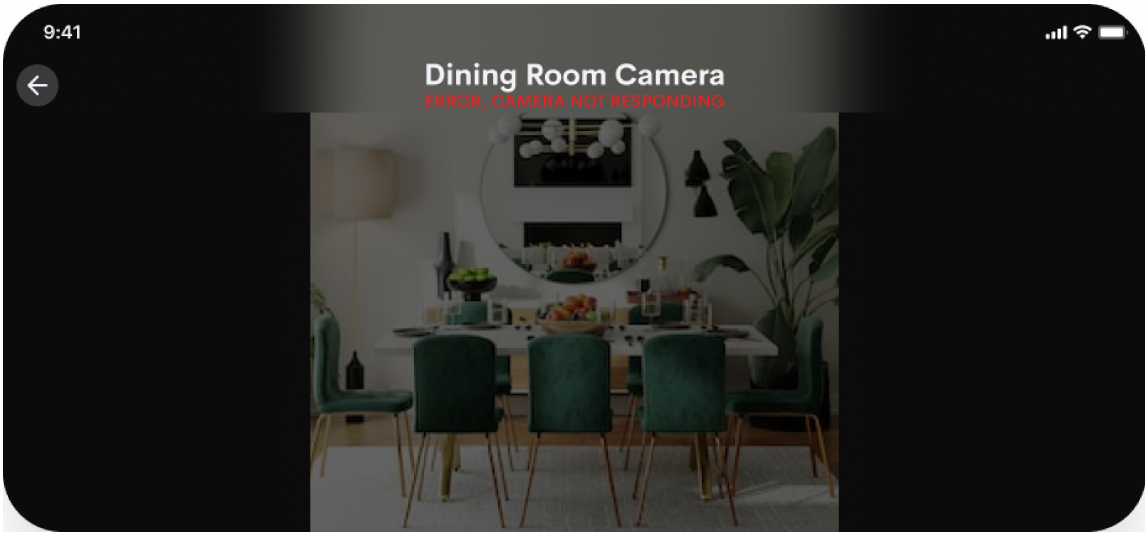


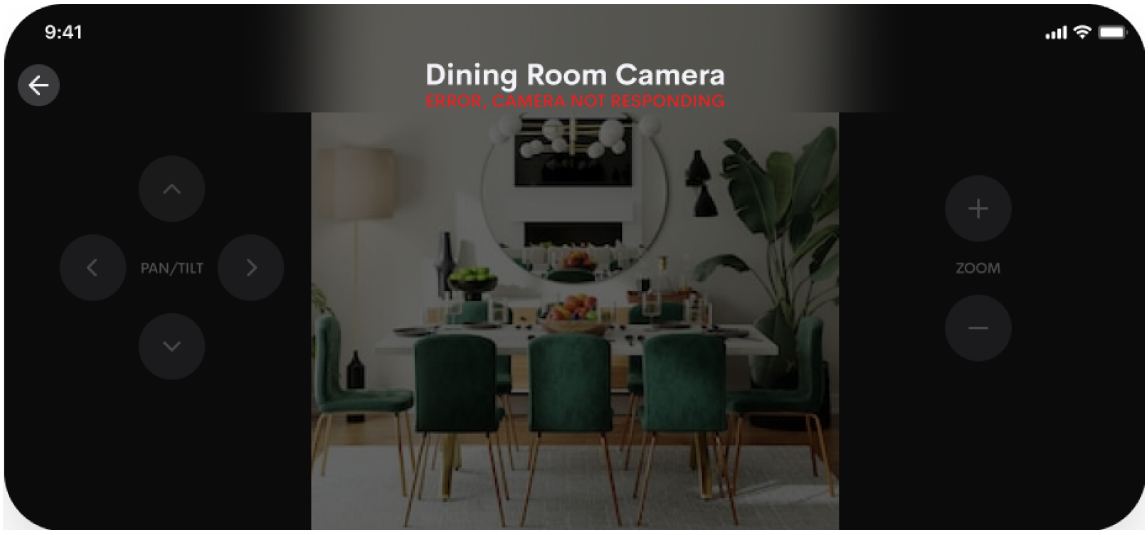
Camera Control, 4:3 Aspect Ratio, Full Screen, Controls PTZ





Errors


9:41
Dining Room Camera
ERROR, CAMERA NOT RESPONDING


9:41
Dining Room Camera
ERROR, CAMERA NOT RESPONDING
PAN/TILT
ZOOM

2N® Door Stations Screen

Use a Crestron touch screen to control a 2N® door station from the Crestron Home system.

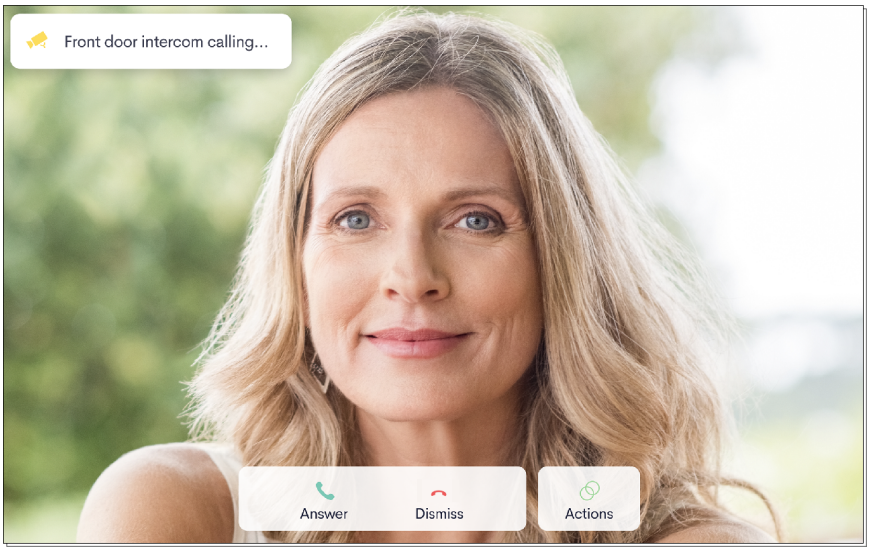
To integrate a 2N door station, refer to 2N® Door Station on page 1428.

Answer a Call

When the touch screen receives a call from the door station, an incoming call window opens on the touch screen with the door station name and the camera feed. If the call is declined, the call window is closed.

To answer a call:

- Tap to answer the call.
- Tap to decline the call.

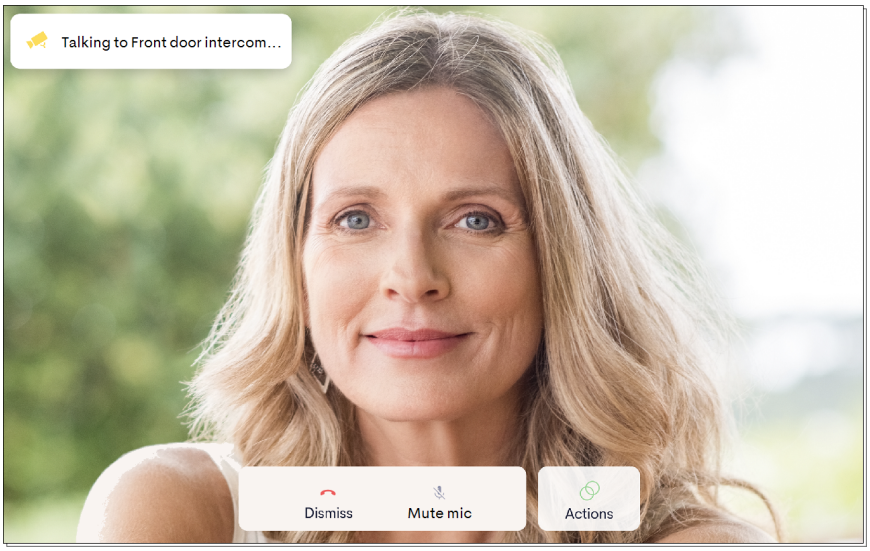


Mute the Microphone

Tap to mute or unmute the intercom microphone.

End a Call

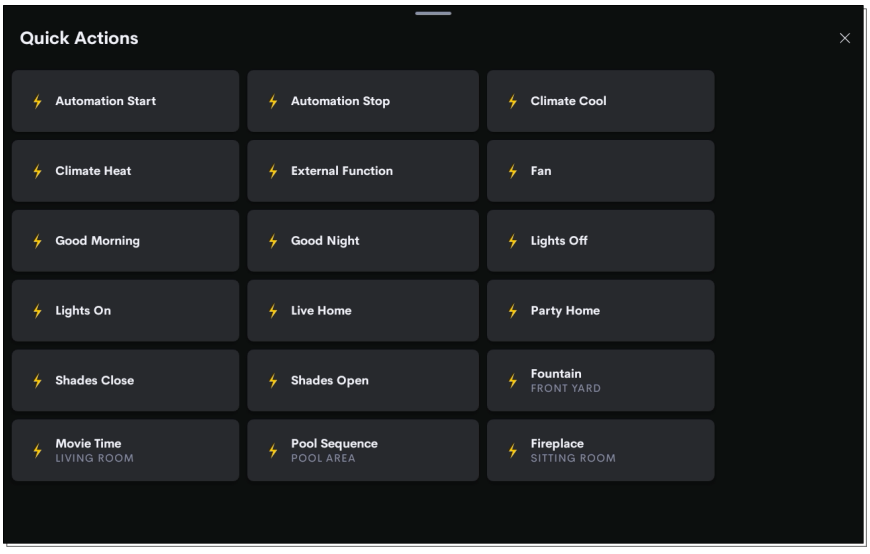
Tap to end the call. The call window is closed.



Recall Quick Actions

To view the available Quick Actions, select **Actions** . Tap a Quick Action to activate it.

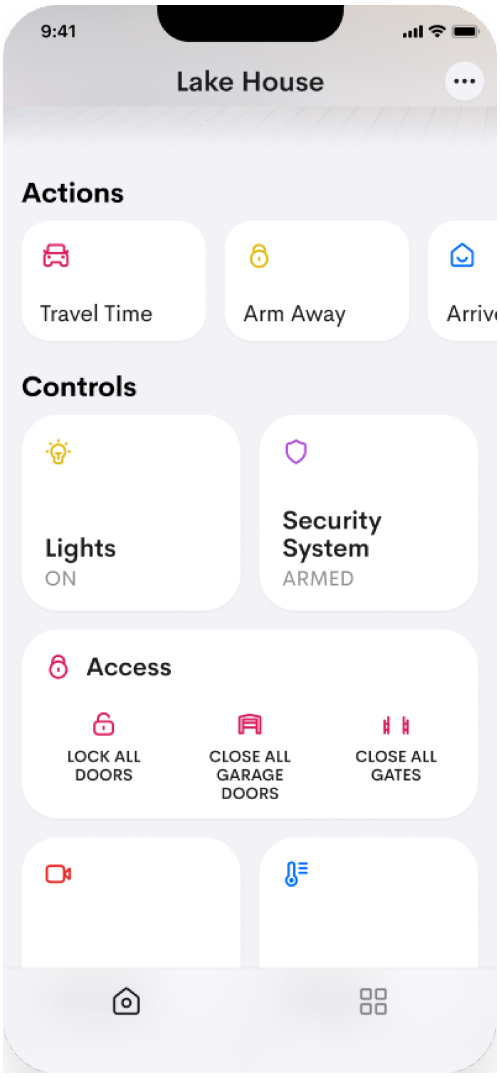
> **NOTE:** Quick Actions are displayed when they are enabled in the Settings for the Quick Action. For details, refer to Quick Actions on page 414.



House Access

The **Access** tile provides control for locks, garage doors, and gates in the home.

> **NOTE:** The **Access** tile only displays the locks, garage doors, and gates that are in the house.

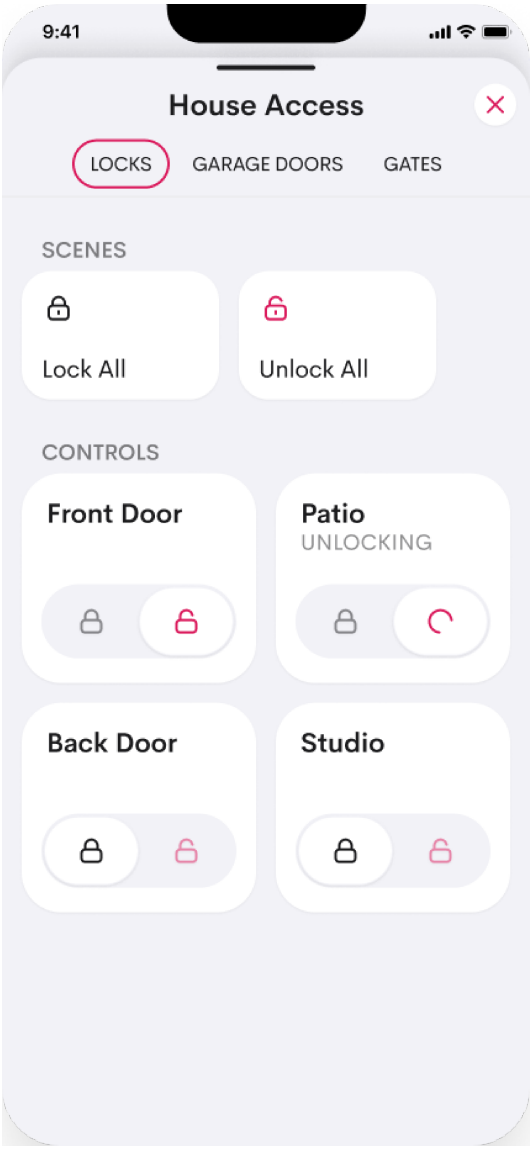


Access Tile

The **Access** tile provides control of all devices in the house. It also provides access to the **House Access** menu for individual control of all locks, gates, and garage doors.

To control all locks, garage doors, or gates in the system, select a **Lock**, **Garage Door**, or **Gate** icon on the **Access** tile.

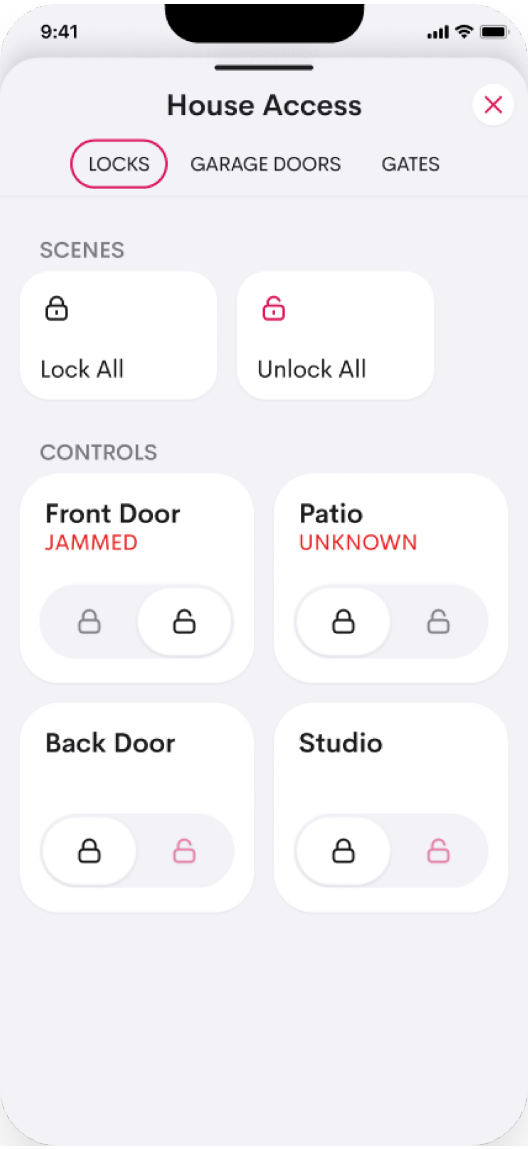
To open the **House Access** menu, select **Access**.



Locks Tab

Scenes are provided along the top of the **Locks** tab. Tap the **Unlock all** or **Lock all** scene to unlock or lock all of the locks.

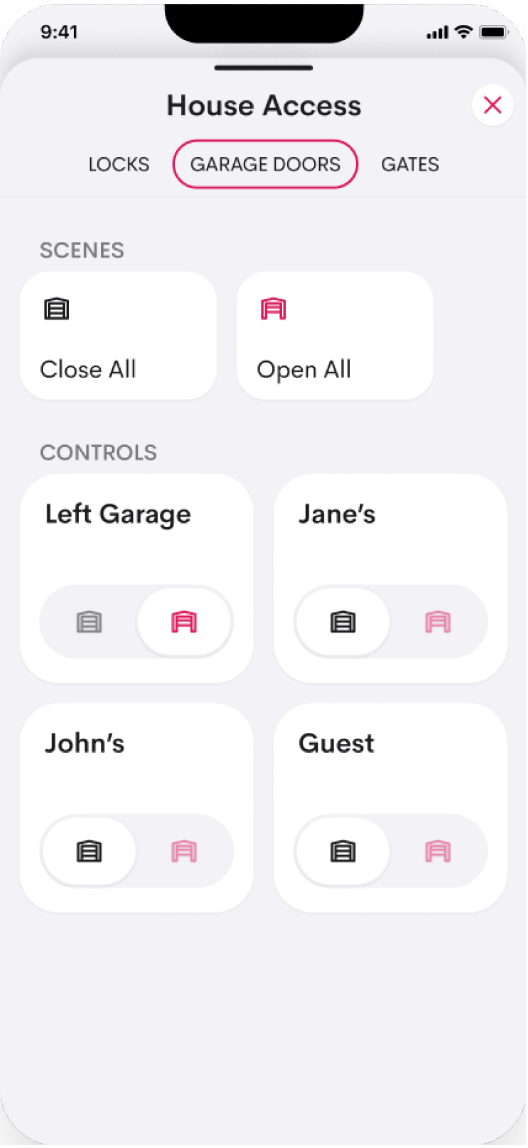
Individual lock control is provided in the **Controls** section. Here, you can control the lock independently of the Quick Action. Each lock displays the name of the lock, the lock status, and any error messages. Tap the lock tile to unlock or lock the individual locks.



Garage Doors Tab

Scenes are provided along the top of the **Garage Doors** tab. Tap the **Open all** or **Close all** scene to open or close all of the garage doors.

Individual garage door control is provided in the **Controls** section. Here, you can control the garage door independently of the Quick Action. Each garage door displays the name of the garage door, the garage door status, and any error messages. Tap the garage door tile to open or close the individual garage doors.



The garage door tile displays the status:

> **NOTE:** The garage door state is only provided if the garage door is configured with sensors that monitor the open and closed state of the garage door.

- Open: The garage door is open.
- Opening: The garage door is opening.
- Closed: The garage door is closed.
- Closing: The garage door is closing.
- Moving: The garage door is moving, but the direction is not known.
- Unknown: The system is not able to determine the state of the garage door.

The garage door tile displays any errors:

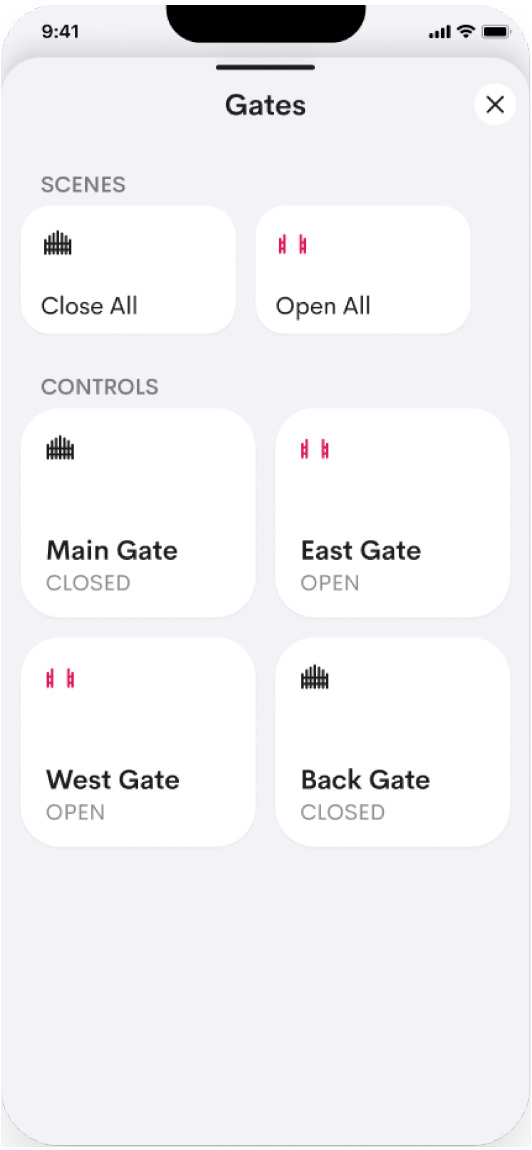
> **NOTE:** The error replaces the status information in the device tile.

- Object in path: When the garage door is known to be closing but ends up in the fully open opsition
- Device Stopped: When the garage door is known to be traveling towards a monitored position but does not reach that position.
- Offline: When any component of the garage door is offline, the entire garage door is considered to be offline.

Gates Tab

Scenes are provided along the top of the **Gates** tab. Tap the **Open all** or **Close all** scene to open or close all of the gates.

Individual gate control is provided in the **Controls** section. Here, you can control the gate independently of the Quick Action. Each gate displays the name of the gate, the gate status, and any error messages. Tap the gate tile to open or close the individual gates.



The gate tile displays the status:

> **NOTE:** The gate state is only provided if the gate is configured with sensors that monitor the open and closed state of the gate.

- Open: The gate is open.
- Opening: The gate is opening.
- Closed: The gate is closed.
- Closing: The gate is closing.
- Moving: The gate is moving, but the direction is not known.
- Unknown: The system is not able to determine the state of the gate.

The gate tile displays any errors:

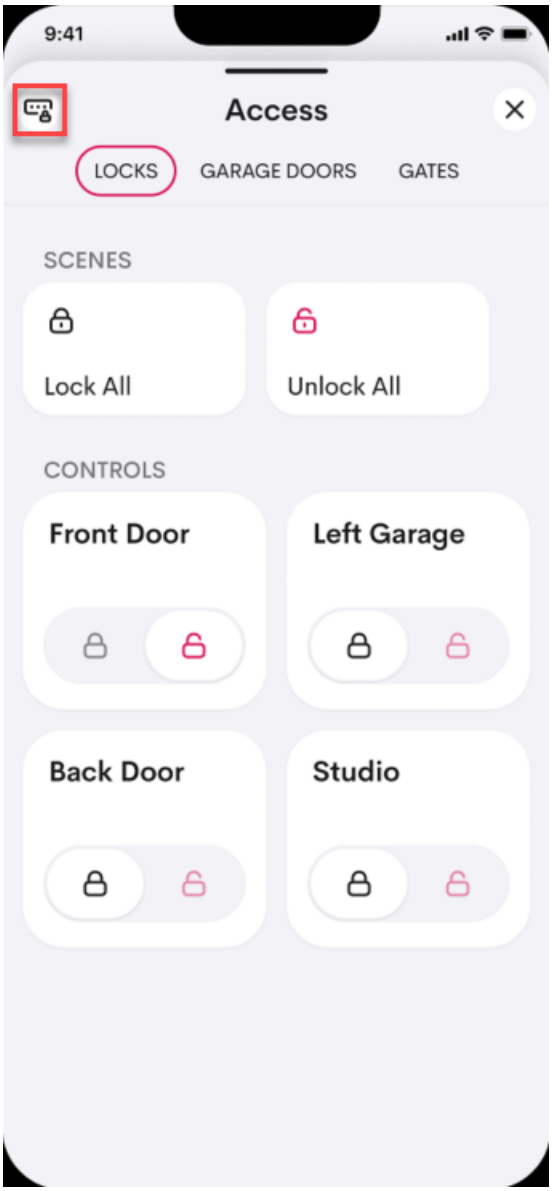
> **NOTE:** The error replaces the status information in the device tile.

- Object in path: When the gate is known to be closing but ends up in the fully open opsition
- Device Stopped: When the garage door is known to be traveling towards a monitored position but does not reach that position.
- Offline: When any component of the gate is offline, the entire gate is considered to be offline.

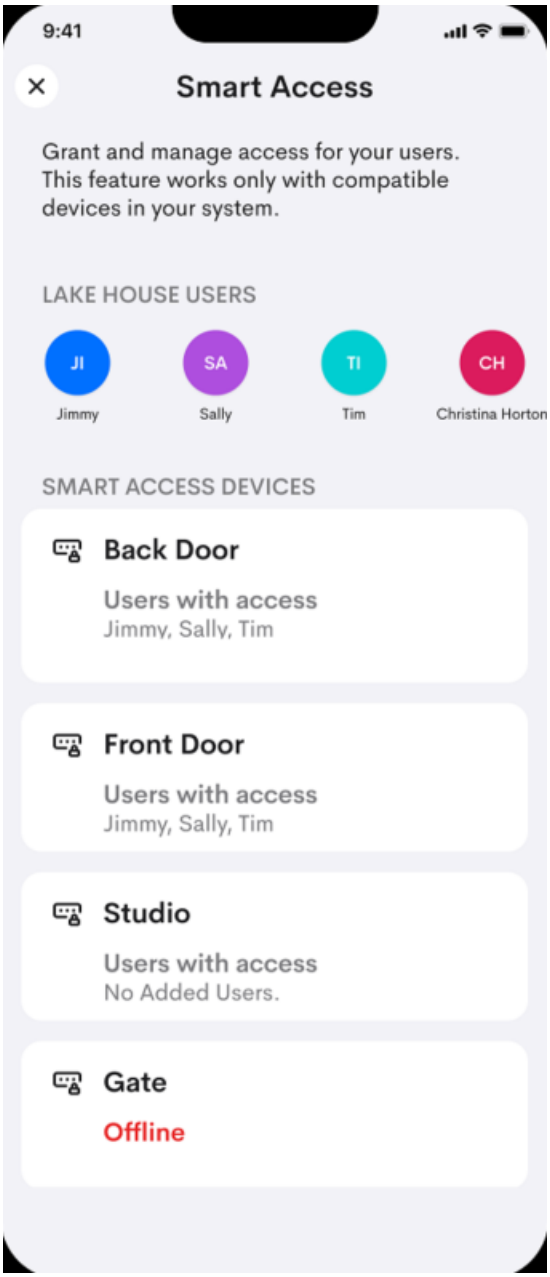
Smart Access

Crestron Home Cloud owners can use Smart Access functions. With Smart Access, permission levels for each compatible lock can be customized for each user.

To get started with Smart Access, select the Smart Access icon ( ).

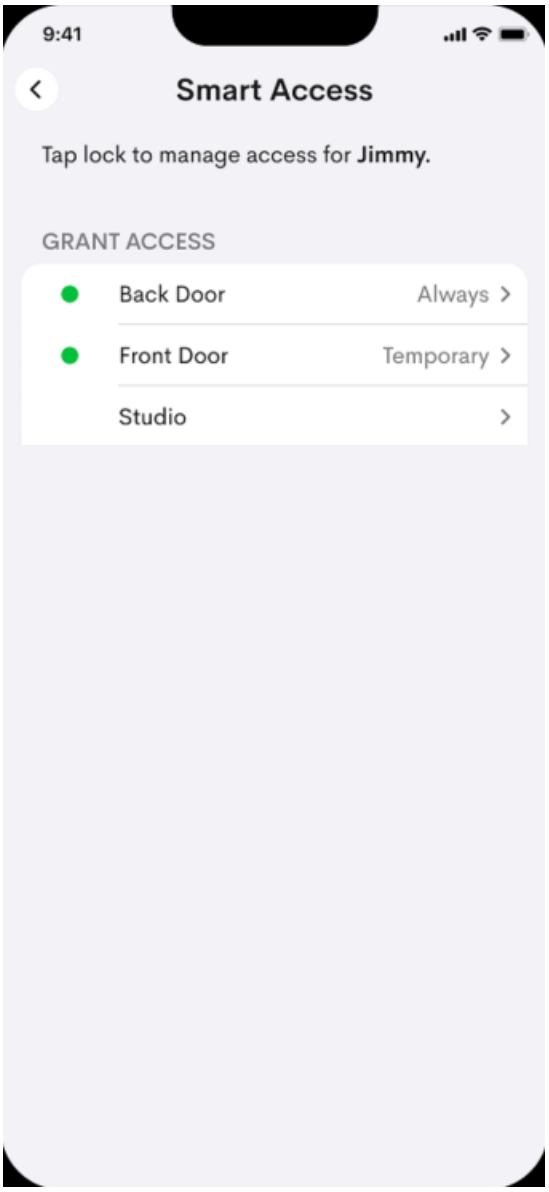


On the Smart Access screen, select a user to configure their access for all locks, or select an individual lock to configure access for each user.



Access by User

After selecting a user on the **Smart Access** page, a list of all compatible locks and the user's current access level is displayed. Select a lock to configure the user's access.

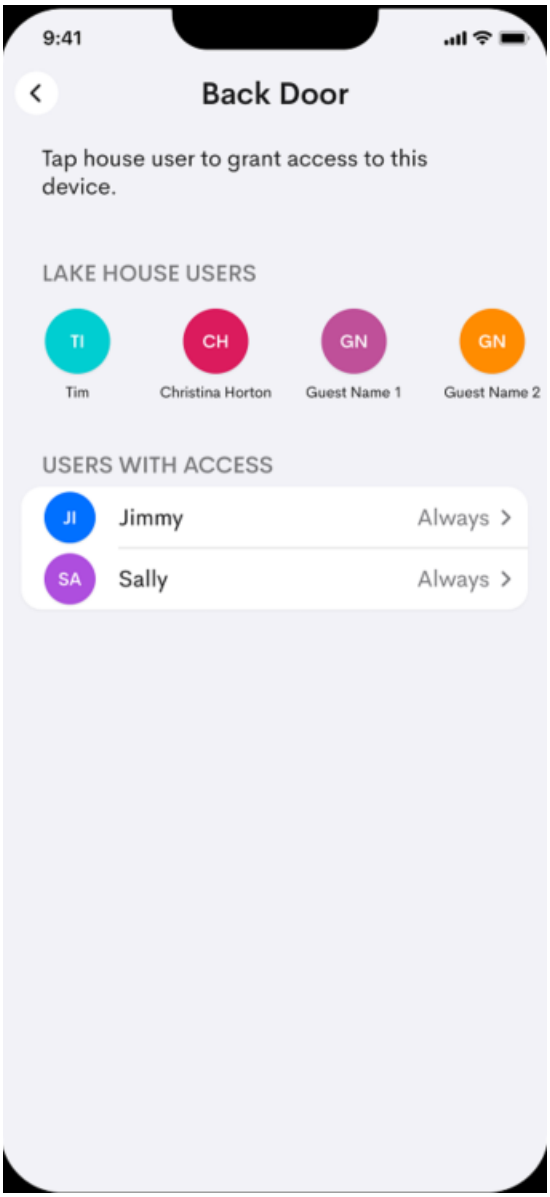


On the lock's screen, the following can be configured:

- **Access Code**: Set an access code for the user.
- **Enabled**: Turn on the toggle to enable access to this lock for the user.

Access by Lock

After selecting a lock on the **Smart Access** page, all users and their current access levels are displayed.



Select a user to configure the user's access to the selected lock as described in Access by User on page 817.

Room Selection Tab

Use the **Rooms** tab to show the rooms in the Crestron Home system.

The Room Cards display the room name, image, and state.the rooms in your home are displayed in tiles that provide the status of the room. The list of rooms are also organized by Favorites and Room Groups within the Crestron Home app.

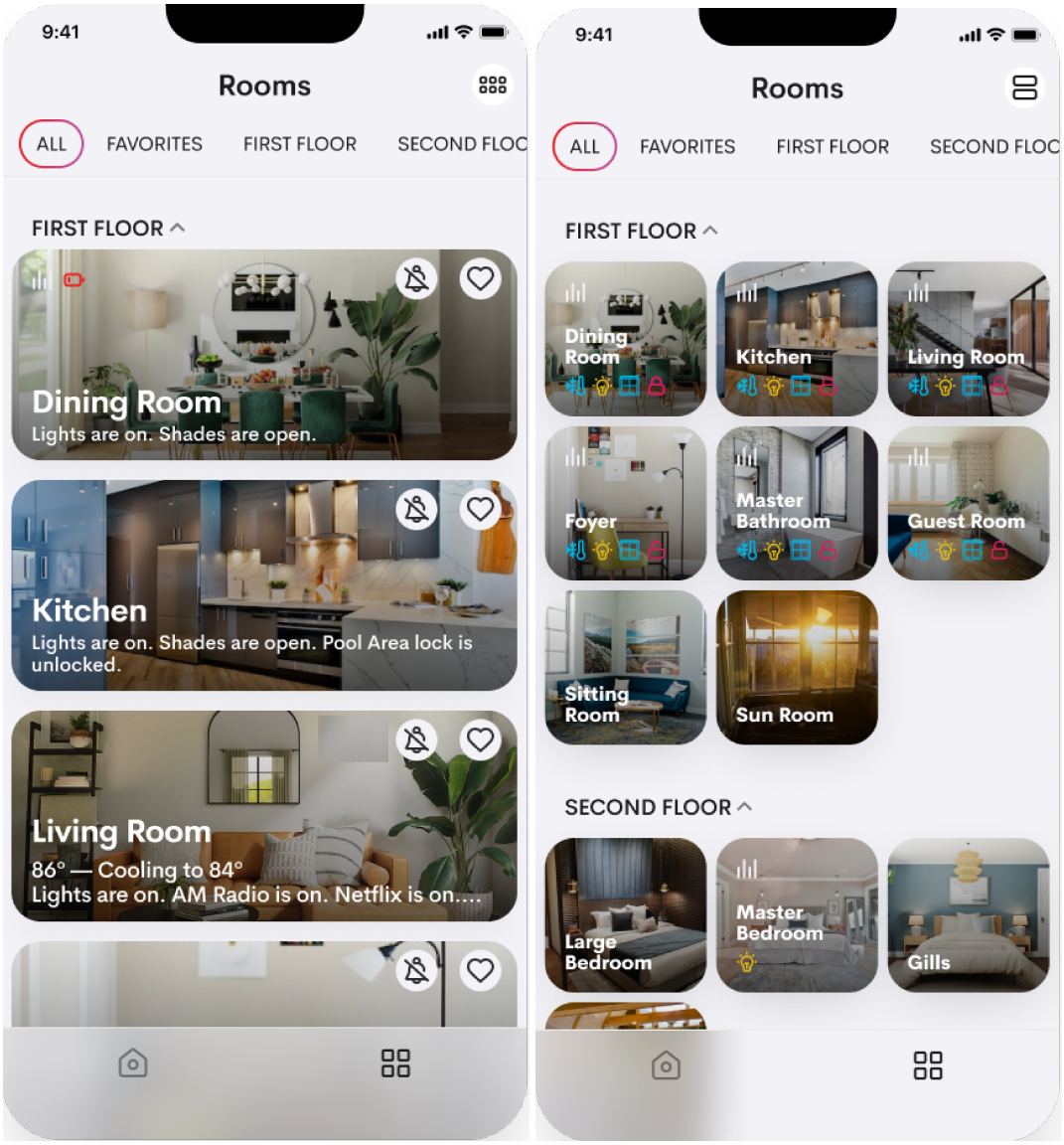
Tap a room tile to enter the Room View. For details, refer to Room Details View on page 822.

Room View

Display rooms using a grid or list view.

To change the view, select **Grid** or **List**.

Rooms in List View (Left) and Grid View (Right)



Tiles

Room tiles display the name of the rooms in the home and key information about each room, such as the temperature, if music is playing or the television is on, the status of the shades, and more.

Groups

Room groups filter the room tiles that are displayed on the right-hand side of the Crestron Home app. Room groups are created when the dealer configures your Crestron Home system. The **All Rooms**, **Favorites**, and **Other Rooms** room groups are automatically generated by the Crestron Home user interface.

Room groups are rooms that share similar characteristics and that were created by your dealer when configuring your Crestron Home system. For example, room groups may have names such as First Floor and Second Floor which display rooms based on their level in the house, Entertainment Rooms which displays all entertainment rooms in the house, or Bedrooms which displays all bedrooms in the house.

The **Other Rooms** room group displays all rooms that are not placed in a room group.

Favorites

Select favorite rooms to show them at the top of the page and in the **Favorites** room group. Select  and  to switch the favorite status.

Favorite rooms are unique to each user-interface device.

Do Not Disturb

Use **Do not disturb** mode to silence chimes in the room. Chimes play when interrupts are triggered in the room. To turn **Do not disturb** mode on and off, select  and .

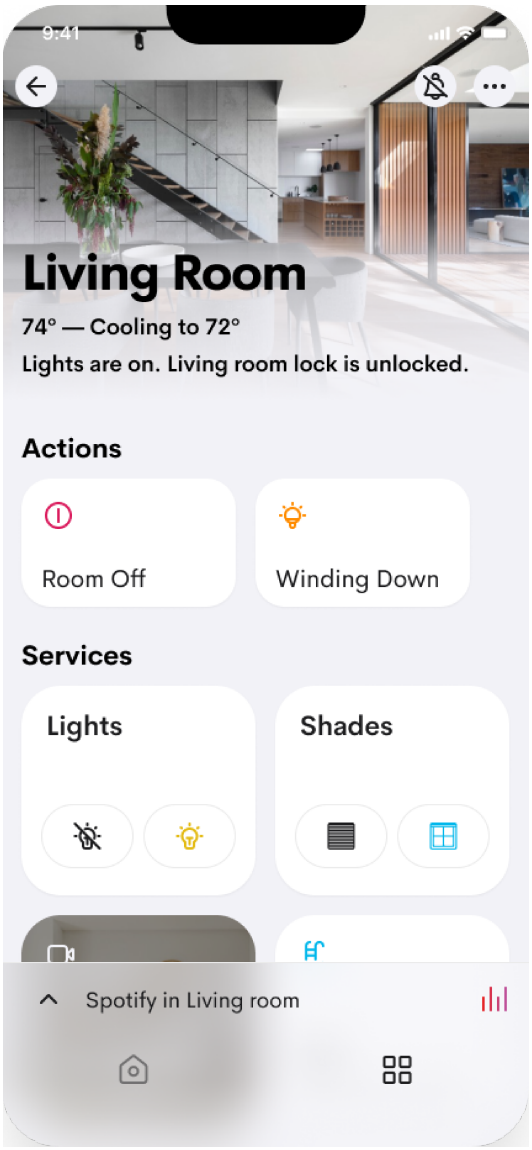
NOTES:

- Chimes can be programmed to bypass **Do not disturb** mode. For example, a fire alarm or security system chime can be set to override the do not disturb setting.
- To show or hide the  and  **Do Not Disturb** icons, refer to Settings on page 943.

-  **Do Not Disturb Off**: Do not disturb mode is off. Interrupts and chimes will play in the room.
-  **Do Not Disturb On**: Do not disturb mode is on. Interrupts and chimes are silenced.

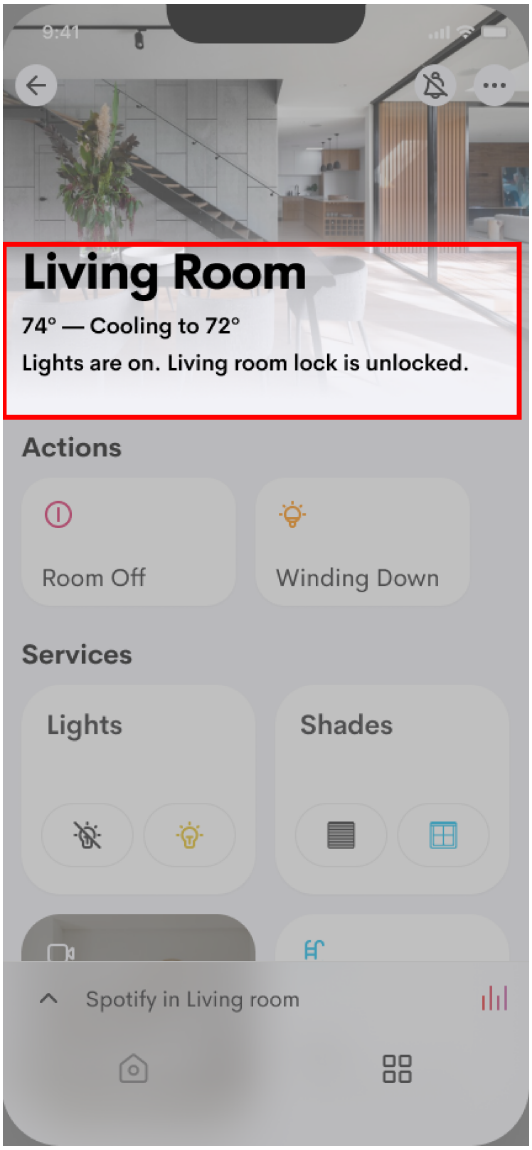
Room Details View

Use the **Room View** to display all actions that can be performed in a room.



Information and Status

The top of the screen displays the name of the room and the status of devices that are in the room.

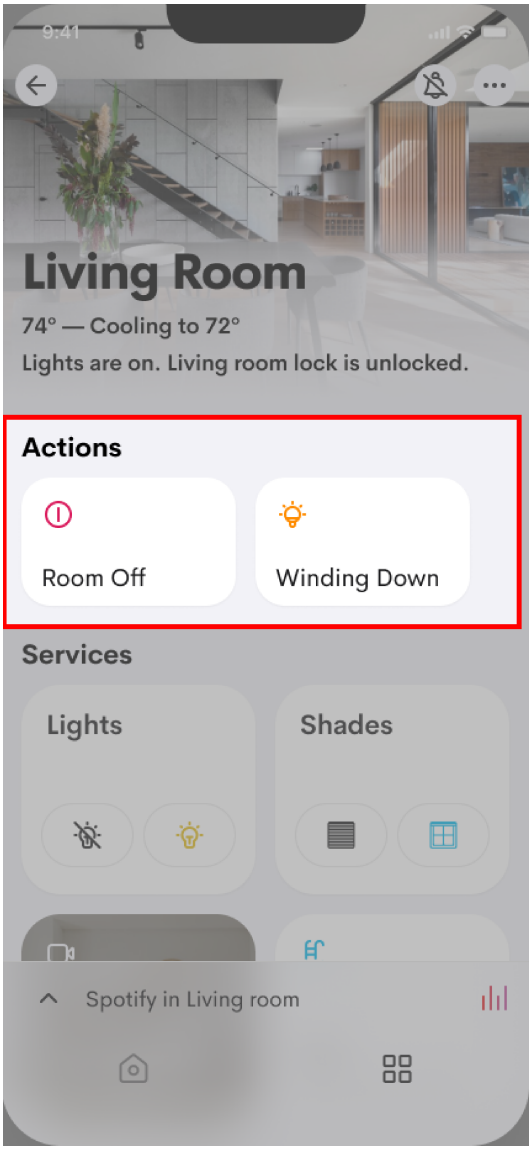


Actions

Use the **Actions** to perform several functions at the same time. For example, a quick action can be created that controls the lights, shades, and television in a room.

To change the order of the Actions or the Action icon, refer to Edit Actions on page 938.

> **NOTES:**
>
> - The Crestron Home app displays up to 20 Actions.
> - Actions are customized by Crestron Home installer using the Crestron Home Setup app. The functionality is custom to the devices in the room, house, and your preferences.



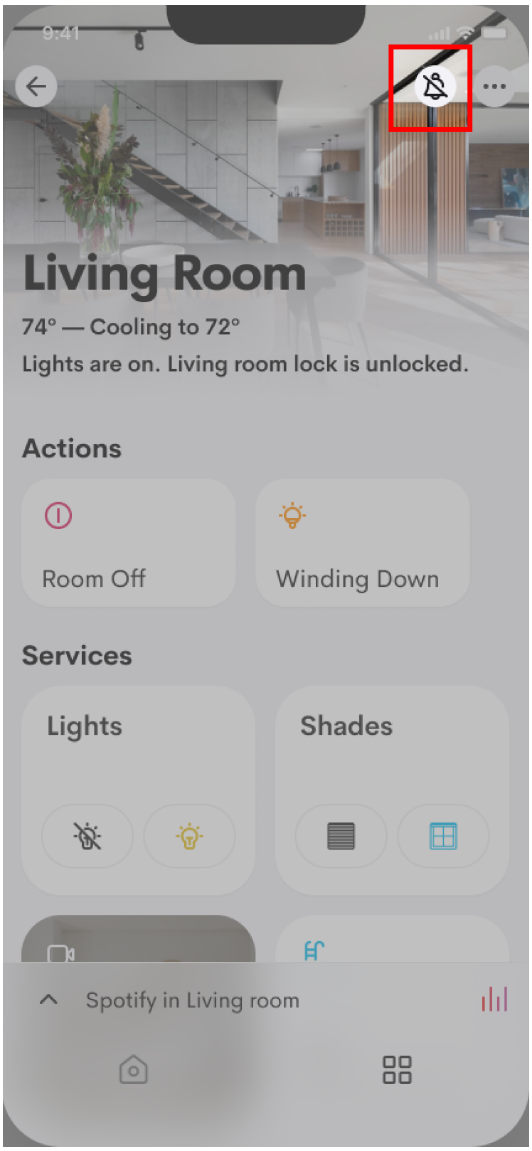
Do Not Disturb

Use **Do not disturb** mode to silence chimes in the room. Chimes play when interrupts are triggered in the room. To turn **Do not disturb** mode on and off, select and .

NOTES:

- Chimes can be programmed to bypass **Do not disturb** mode. For example, a fire alarm or security system chime can be set to override the do not disturb setting.
- To show or hide the and **Do Not Disturb** icons, refer to Settings on page 943.

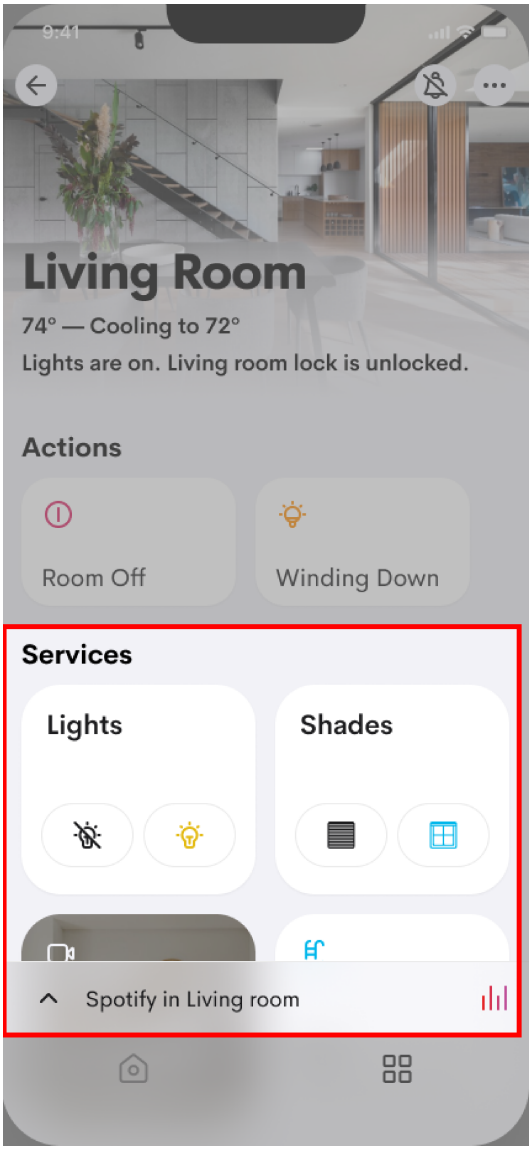
- **Do Not Disturb Off**: Do not disturb mode is off. Interrupts and chimes will play in the room.
- **Do Not Disturb On**: Do not disturb mode is on. Interrupts and chimes are silenced.



Services

Use the **Services** section to control each device type in the room.

Scroll up to view all of the **Services** that are available.



These Services are available:

- Control Lights on page 829
- Control Shades on page 844
- Control Climate on page 848
- Control Media on page 862
- Control Locks on page 919
- Control Garage Doors on page 927
- Control Gates on page 923
- Control Cameras on page 799
- Control Pools and Spas on page 931

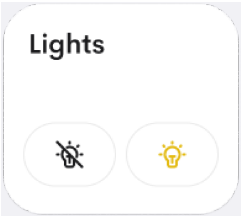
Control Lights

Control the lights in the room using the Room View screen or Lights Control screen.

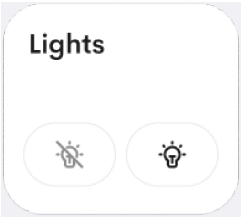
To turn the lights on and off from the Room View, tap On or Off on the **Lights** tile. The controls on the **Lights** tile recalls the All On and All Off scenes.

To open the light controls for the room, tap anywhere on the **Lights** tile.

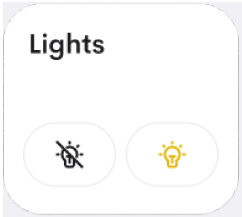
Widget Navigation and Status



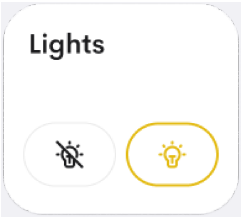
All Off



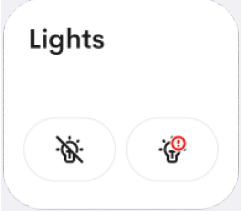
Some On



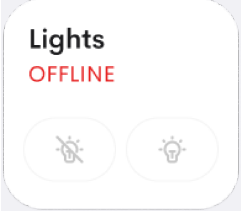
All On



Partial Offline

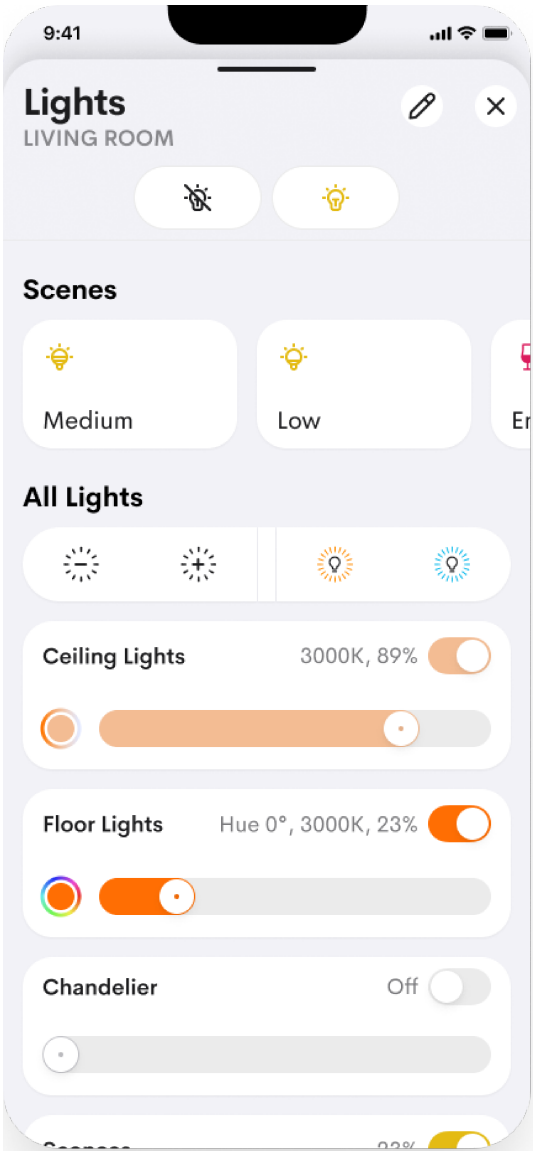


Offline



The Lights Control screen displays the light controls for the room:

- **Primary Controls:** Turns all lights on or off.
- **Scenes:** Recall a predefined set of lighting levels.
- **All Lights:** Controls for all lights in the room.
- **Controls:** Individual controls for each light in the room.

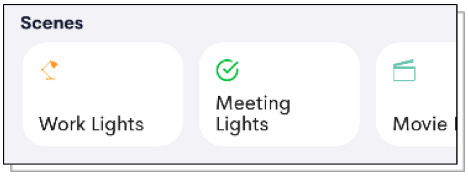


Scenes

Tap a scene to recall the lighting scene.

Light scenes can be created by the Crestron Home dealer or the homeowner.

- **Dealer:** Create scenes using the Crestron Home Setup app (Light Scenes on page 396), Crestron Home Configurator (Scenes Tab on page 700), or Crestron Home app (Create a Scene on page 834).
- **Homeowner:** Create scenes using the Crestron Home app (Create a Scene on page 834).



NOTES: For Crestron Home systems that include Lutron lighting controls:

- The Crestron Home user interface does not provide individual load control and load feedback for RA2 Select systems.
- If a Lutron scene controls a light and a shade, recalling the lighting scene also controls the shades.

The room may contain these default scenes:

- **All On:** Turns all lights in the room on. The default configuration includes all lights in the room and sets the lights to On (100%). The All On scene can be modified to include lights in different rooms or to set the lights to a different brightness level. This scene can be hidden or shown in other rooms.
- **All Off:** Turns all lights in the room off. The default configuration includes all lights in the room and sets the lights to Off (0%). The All Off scene can be modified to include lights in different rooms or to set the lights to a different brightness level. This scene can be hidden or shown in other rooms.
- **Circadian scene:** Available when any light in the room is included in the Circadian lighting settings. When active, the lights adjust according to the levels defined in the Circadian settings. For dimmable lights, the light intensity is adjusted. For tunable lights, the color temperature and intensity is adjusted. For details, refer to Settings on page 943.
- **SolarSync scene:** Available when tunable lights and a SolarSync® outdoor daylight and color temperature sensor (GLS-LCCT) is included in the installation. When active, the lights adjust the color temperature to match the outdoor color temperature values provided by the sensor. The intensity of the lights adjust according to the levels defined in Circadian settings. If the outdoor light levels are low (for example, it is night time or significant cloud cover is blocking the sun), the color temperature defined in Circadian settings is used.

Light Controls

Use the **All Lights** menu or **Controls** menu to control the lights.

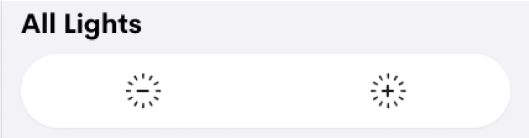
NOTE: For light controllers that support override mode, consider the following:

- When **Override** mode is active, the intensity for all lights is set to their defined override levels and the lights cannot be controlled.
- If the light intensity is changed when **Override** mode is active, the interface displays the changes but the lights will not be controlled. After exiting Override mode, the intensity shown on the interface and the actual intensity of the light levels will be out of sync. The levels will synchronize when the light is controlled.

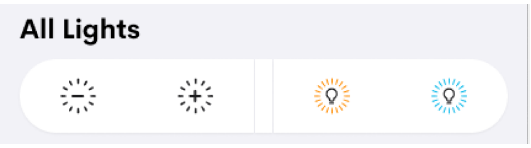
All Lights

Use the **All Lights** menu to adjust all lights in the room at the same time.

All Lights Control



All Lights Control with Color Tuning



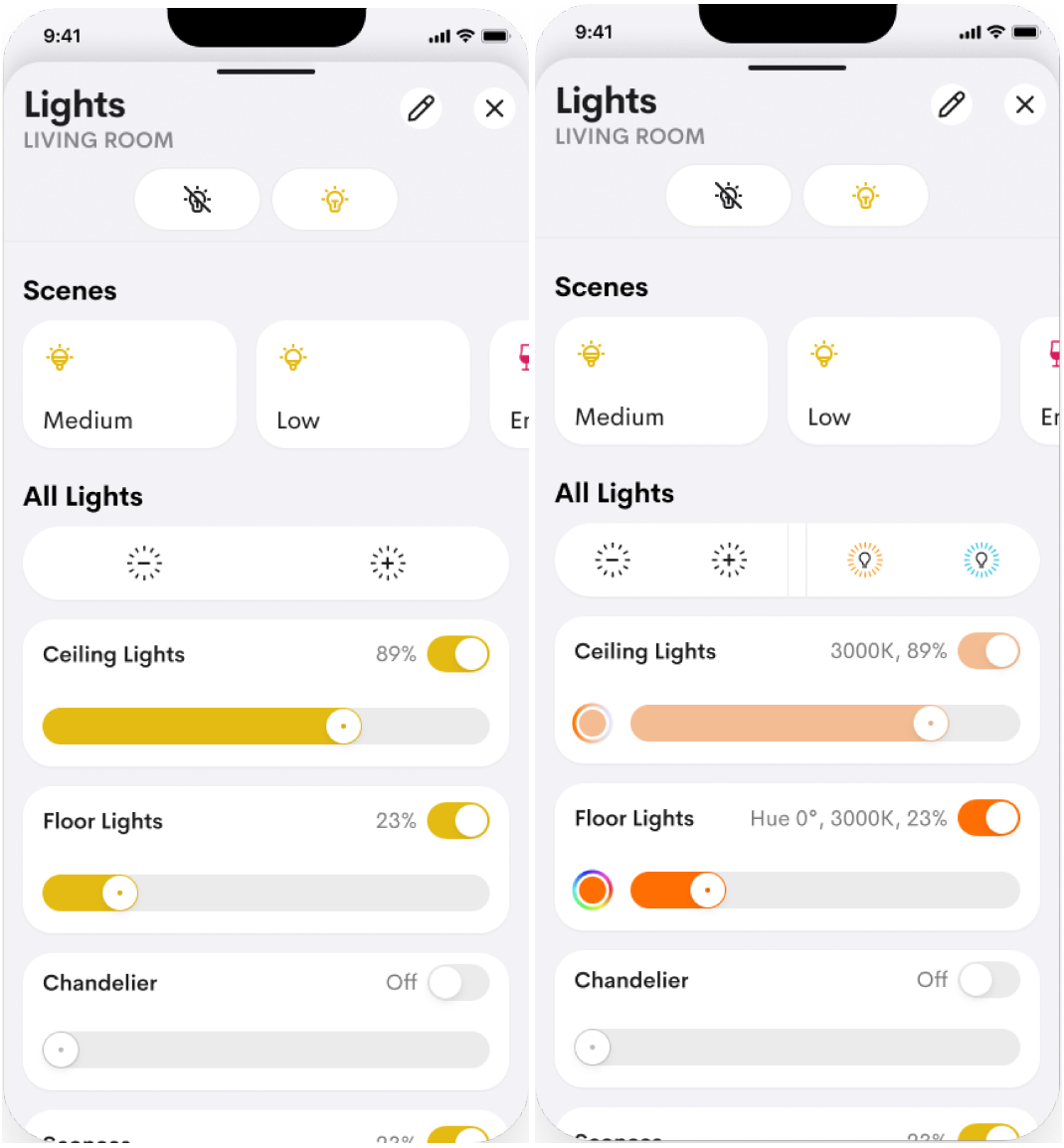
These controls are available:

- **Brighter +**
  - Tap **Brighter +** to raise the lights in the room in 1% increments. If a light is off (0%), it will be turned on. If a light is at 100%, the light level remains unchanged.
  - Tap and hold **Brighter +** to ramp the light level up. If a light is off (0%), it will be turned on. If a light is at 100%, the light level remains unchanged.
- **Dimmer -**
  - Tap **Dimmer -** to lower the lights in the room in 1% increments. If a light is at 1%, it will be turned off (0%). If a light is at 0% (off), the light level remains unchanged.
  - Tap and hold **Dimmer -** to ramp the light level down. If a light reaches 1%, it will pause briefly and then turn off (0%). If a light is at 0%, the light level remains unchanged.
- **Warmer**
  - Tap **Warmer** to lower the color temperature in increments of 100. Adjust the color temperature of the lights between 1650K (warmer, amber) and 8000K (cooler, white).
  - Tap and hold **Warmer** to ramp the color temperature down.
- **Cooler**
  - Tap **Cooler** to increase the color temperature in increments of 100. Adjust the color temperature of the lights between 1650K (warmer, amber) and 8000K (cooler, white).
  - Tap and hold **Cooler** to ramp the color temperature up.

Controls

Use the **Controls** menu to adjust individual lights in the room.

Lights Control (Left) with Color Tuning (Right)



Lights Control with Color Tuning

Each load displays the current load information

- **Dimmable load:** Shows the intensity information for the load.
- **Switched load:** Shows the intensity information for the load.
- **Tunable white load:** Shows the color temperature and intensity information for the load.
- **Full color tuning:** Shows the hue, color temperature, and intensity information for the load.

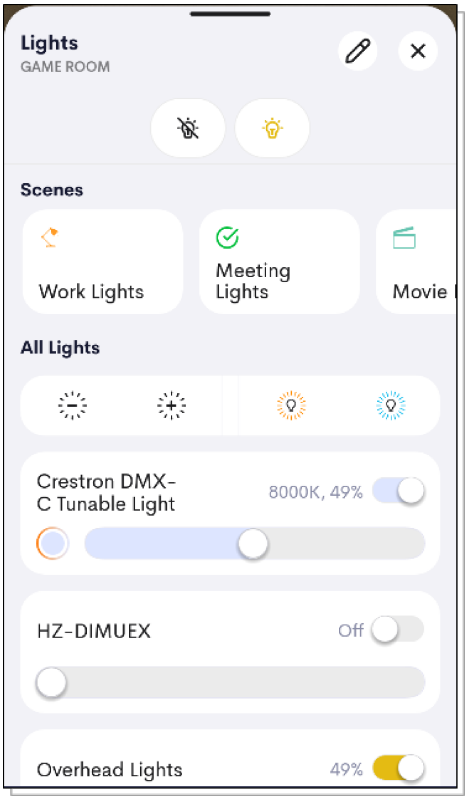
These controls are available:

- **Toggle:** Tap to turn the lights on (100%) and off (0%).
- **Slider:** Drag the slider to set the intensity of the lights.
- **Color control:** Tap the color control to change the color of the lights. These settings are retained temporarily. The defined settings are restored when the lights are turned off and then on again.

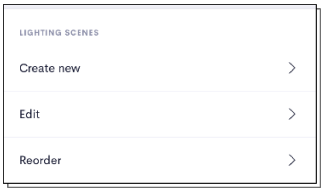
Create a Scene

To create a lighting scene:

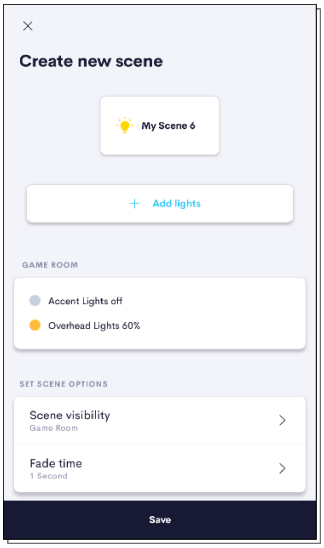
1. Open the **Scenes** menu. If prompted, enter the Advanced User Password.



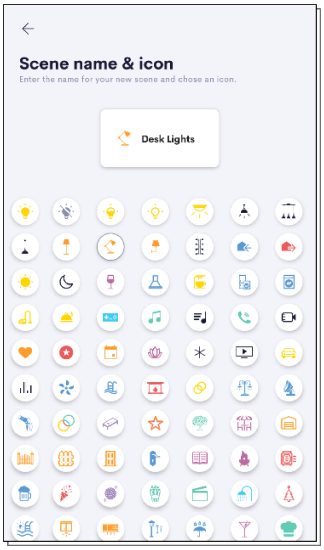
2. Select **Create new**.



3. The **Create new scene** menu opens.

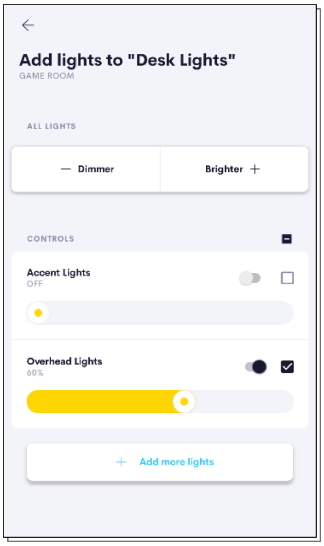


4. To name the scene or select a scene icon, tap the **My Scene** button:



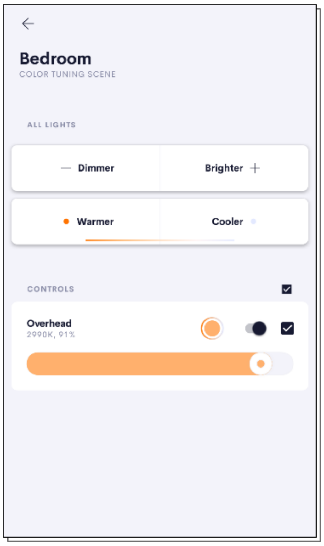
- **Name the scene:** Tap the scene and then enter a name.
- **Select the scene icon:** Select an icon from the list of icons.
- To save and exit, press ← **back**.

5. To configure the lights for the scene, select **Add lights** or select a light in the list of rooms:



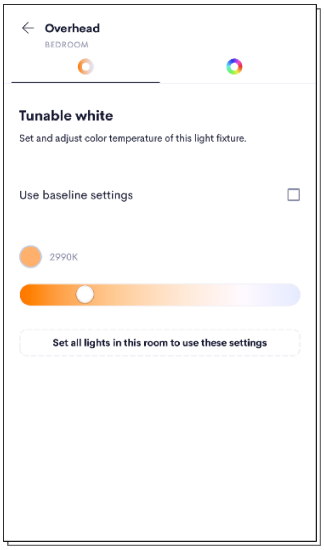
- **Select lights:** Select or deselect a light to include or remove the light from the scene. By default, all lights in the room are included in the scene.
- **Set light levels:** Use the slider to set the intensity of the light or the toggle switch to turn the light off or full on. To adjust the intensity for all lights in the room, tap or tap and hold **Dimmer** or **Brighter**.
- **Add lights from other rooms:** Select **Add more lights > select a room** and then select the lights and assign light levels.
- To save and exit, press ← **back**.

6. To configure tunable lights, select the color control.



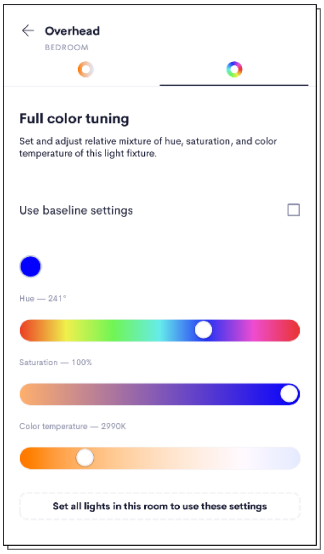
- **Tunable White settings:** Select **Tunable white** and then set the color temperature or select **Use baseline settings**. The baseline settings are defined in the settings for the lights. For details, refer to Settings on page 943.

  To set all lights in the room to the same settings, select **Set all lights in this room to use these settings**. These settings are retained only while the scene is created. The previous settings are restored when the lights are turned off and then on again.

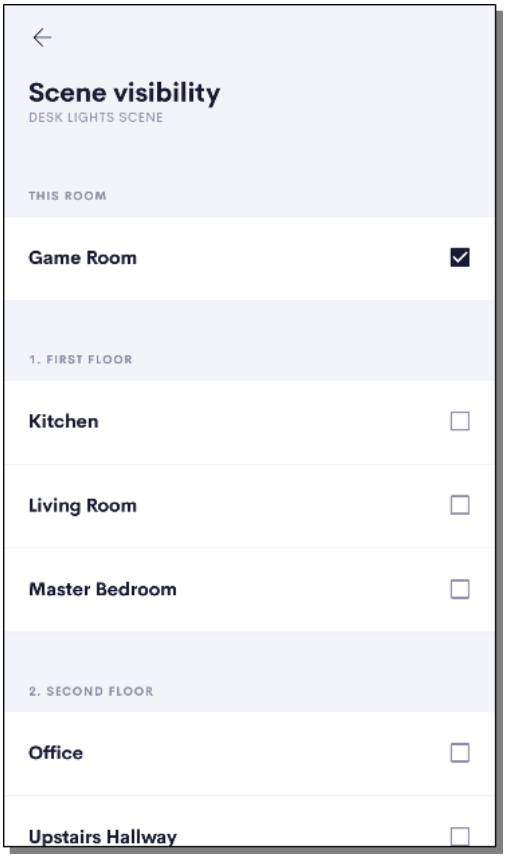


- **Color tunable settings**: Select **Full color tuning** and then set the **Hue**, **Saturation**, and **Color temperature** or select **Use baseline settings**. The baseline settings are defined in the settings for the lights. For details, refer to Settings on page 943.

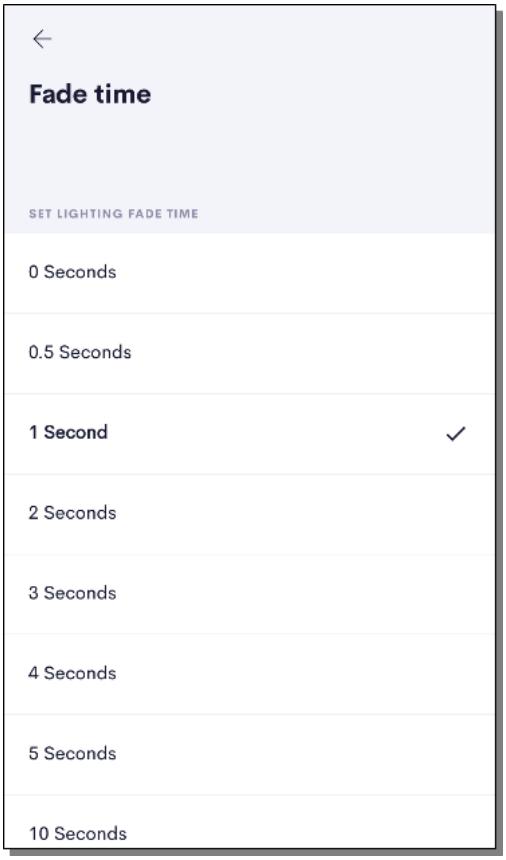
  To set all lights in the room to the same settings, select **Set all lights in this room to use these settings**. These settings are retained only while the scene is created. The previous settings are restored when the lights are turned off and then on again.



7. To show the scene in other rooms, select **Scene visibility** and then select the rooms. To save and exit, press ← **back**.



8. To set the fade time, select **Fade time** and then select a duration. To save and exit, press ← **back**.

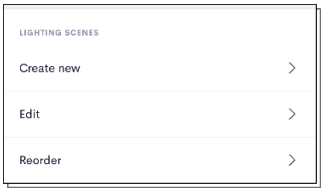


9. Select **Save**.

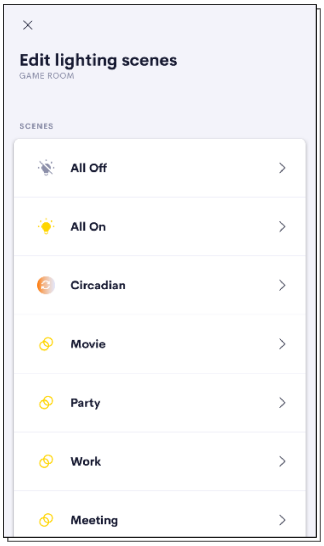
Edit a Scene

To edit a lighting scene:

1. Open the ••• **Scenes** menu. If prompted, enter the Advanced User Password.
2. Select **Edit**.



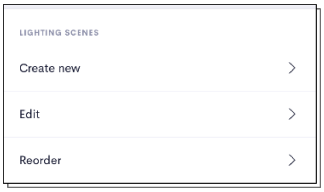
3. Select a scene.



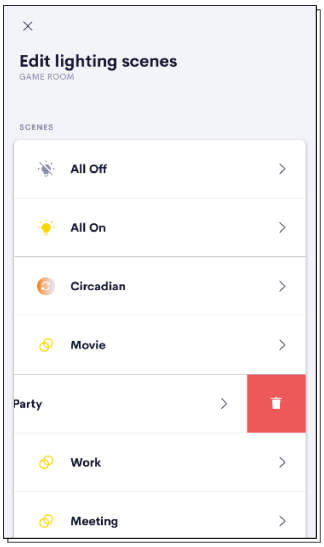
4. To rename, add lights, show in other rooms, and set the fade time, refer to steps 4 through 8 in Create a Scene on page 834.

Delete a Scene

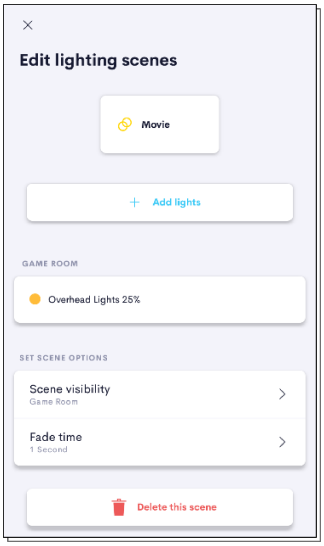
1. Open the ••• **Scenes** menu. If prompted, enter the Advanced User Password.
2. Select **Edit**.



3. To delete a scene, do one of the following:
   - Partially swipe the scene to the left to open the delete menu and then select **Delete**.



   - Fully swipe the scene to the left.
   - Select a scene and then select **Delete this scene**.

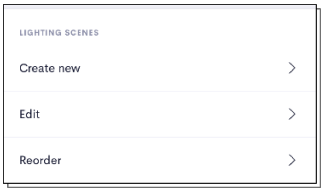


Reorder Scenes

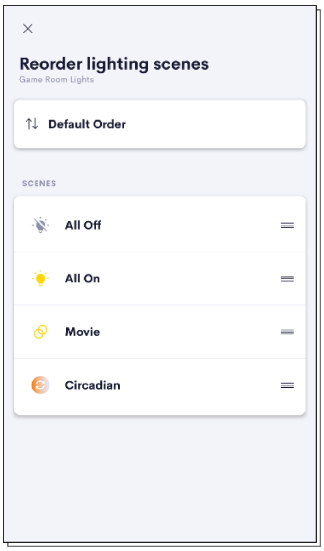
The default scene order is alphabetical.

To reorder lighting scenes:

1. Open the ••• **Scenes** menu. If prompted, enter the Advanced User Password.
2. Select **Reorder**.



3. To reorder the scenes, do either of the following:



   - Drag the handle for a scene and drop it in the desired spot.
   - Select ↑↓ **Default order** to place the scenes in alphabetical order.

Control Shades

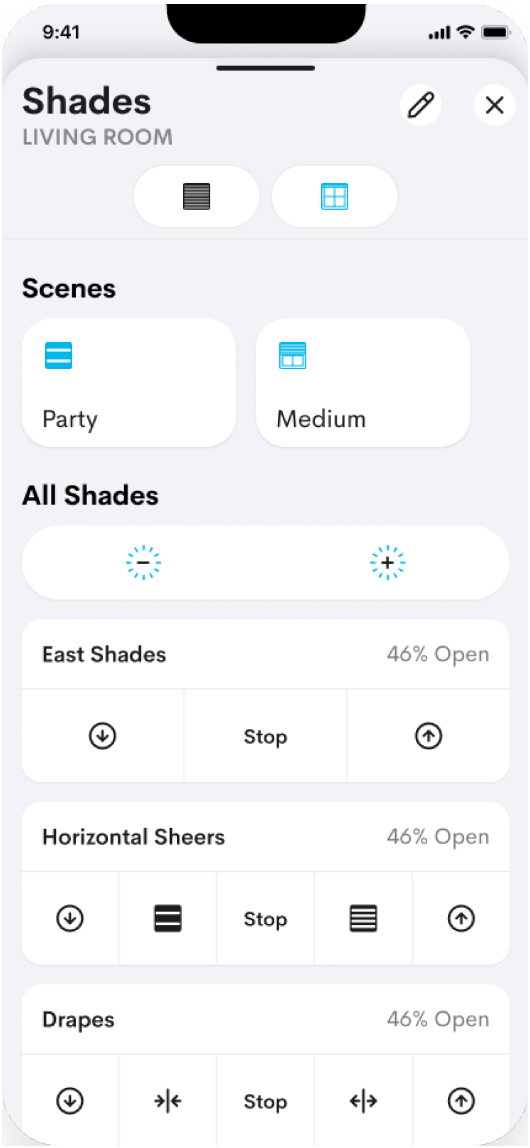
Use the Shades screen to control the shades in the room.

Scenes

The shade scenes are listed along the top of the screen. Tap a scene to recall the shade scene.

> **NOTE:** Scenes are customized by your Crestron Home installer. The functionality is custom to the devices in the room, house, and your preferences.

Shade Controls



> **NOTES:** For Crestron Home systems that include Lutron controls:

- The Crestron Home user interface does not provide individual load control and load feedback for RA2 Select systems.
- If a Lutron scene controls a light and a shade, recalling the lighting scene also controls the shades.

All Shades

Use the **More Light** and **Less Light** buttons to open or close the shades or drapes.

More Light

- Tap the **More Light** button to open the shades or drapes in the room in 1% increments.
- Tap and hold the **More Light** button to open the shades or drapes. Release the button to stop opening the shades or drapes.

Less Light

- Tap the **Less Light** button to close the shades or drapes in the room in 1% increments.
- Tap and hold the **Less Light** button to close the shades or drapes. Release the button to stop closing the shades or drapes.

Controls

Use the Up arrow, Down arrow, and Stop button to control individual shades and drapes in the room.

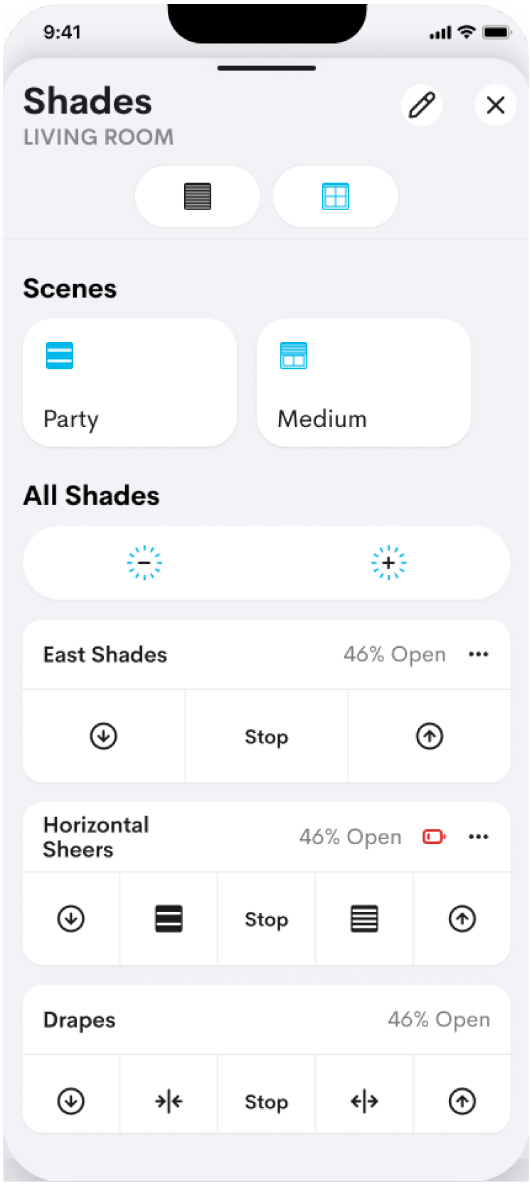
- Up arrow: Tap the Up arrow to open the shade or drape. The shade or drape will travel until it is fully open.
- Down arrow: Tap the Down arrow to close the shade or drape. The shade or drape will travel until it is fully closed.
- Stop button: Tap the **Stop** button to stop the shade or drape while it is traveling.

NOTE: Crestron horizontal sheer shades have additional controls to adjust the tilt of the hembar and allow more or less light into the room.

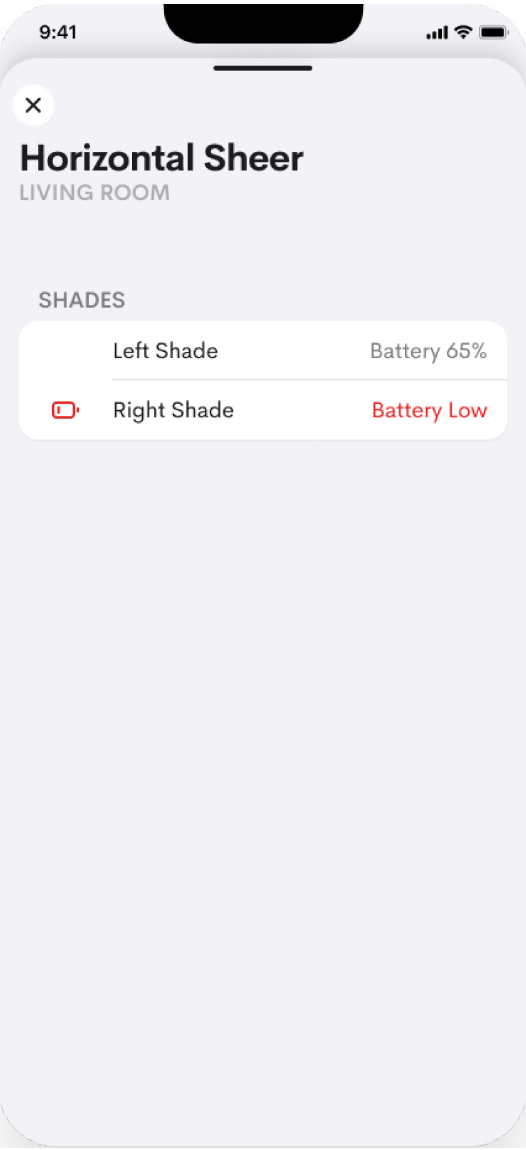
Shade Groups

To view the shade group details, select ••• **More**.

Shade Controls - With Shade Groups



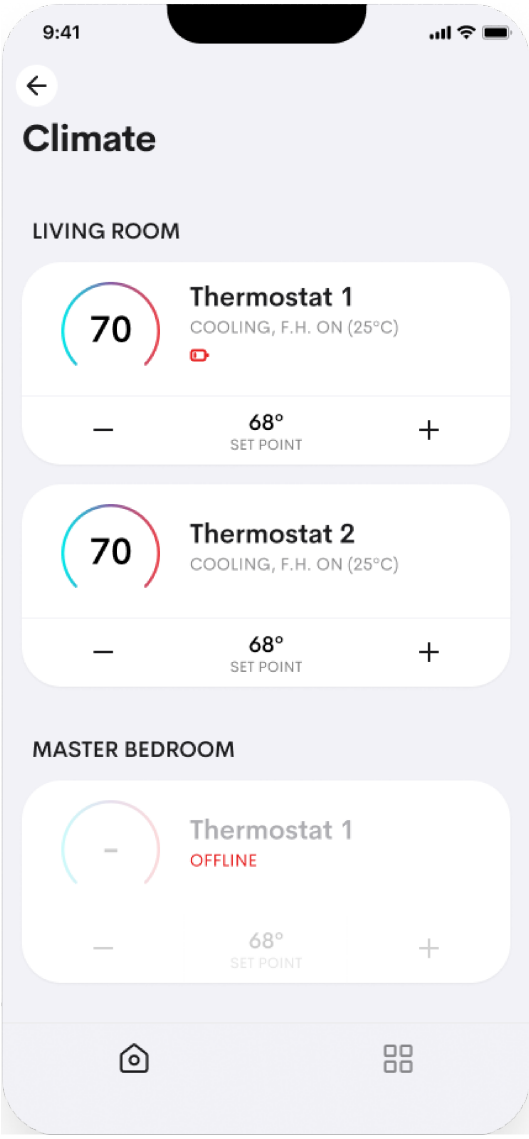
Shade Group Details



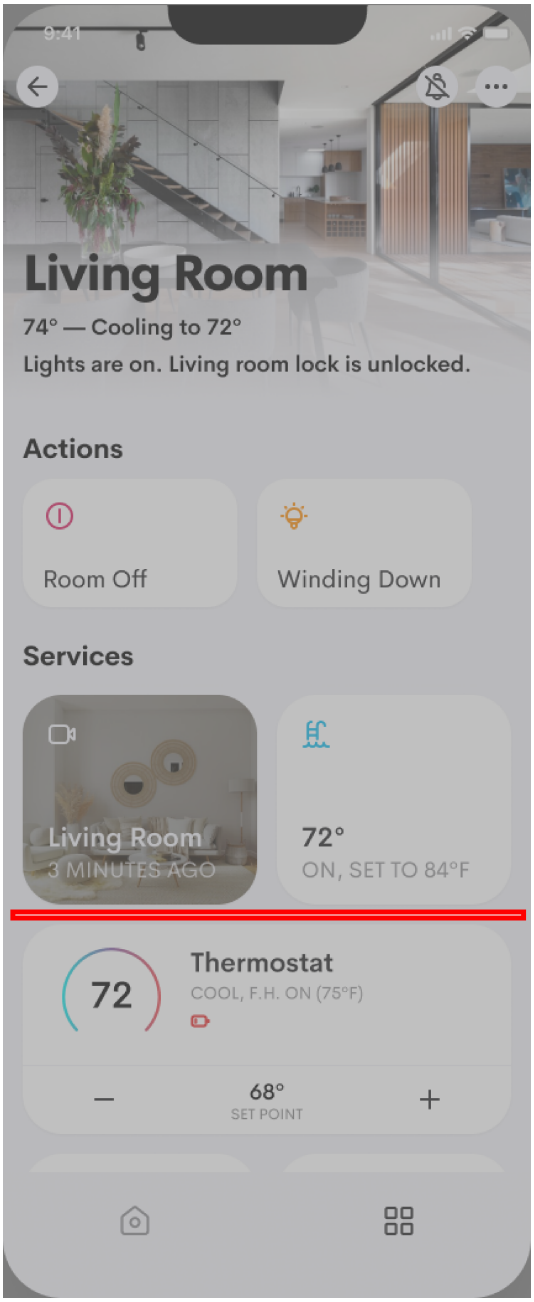
Control Climate

Set the temperature throughout the house, or a different temperature in every room. To view and control:

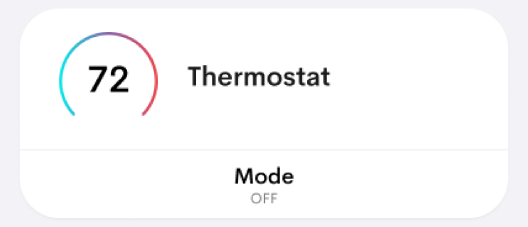
- **All thermostats in the house:** Tap the **Climate** tile on the **Home** screen. The **Climate** screen displays the current temperature, status, and temperature control for each thermostat.



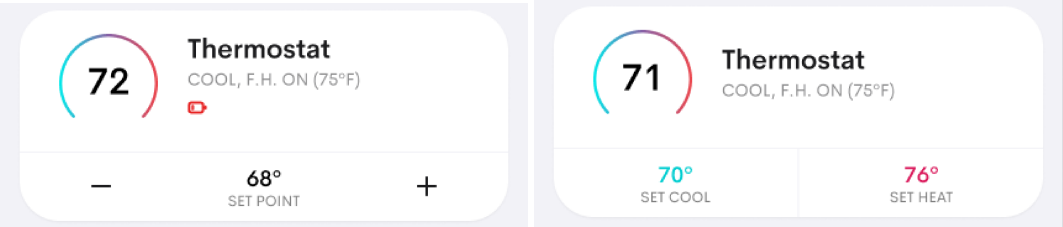
- **A thermostat in a room:** Tap a **Room** tile for a room that has a thermostat. The **Room View** displays the current temperature, status, and temperature control for the thermostat in the **Services** section.



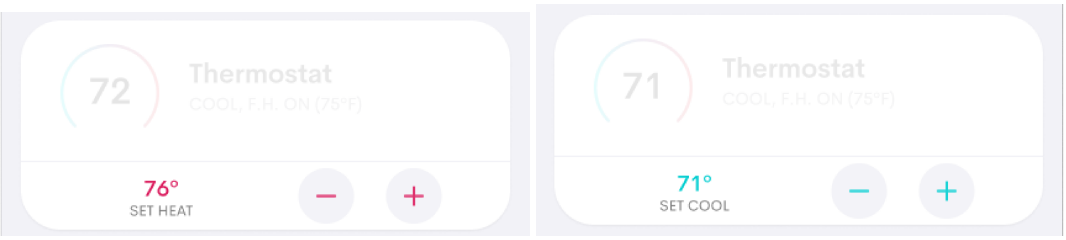
Room Control - Thermostat Off



Room Control - Heat Cool System with Single Setpoint (Left) and Dual Setpoint (Right)

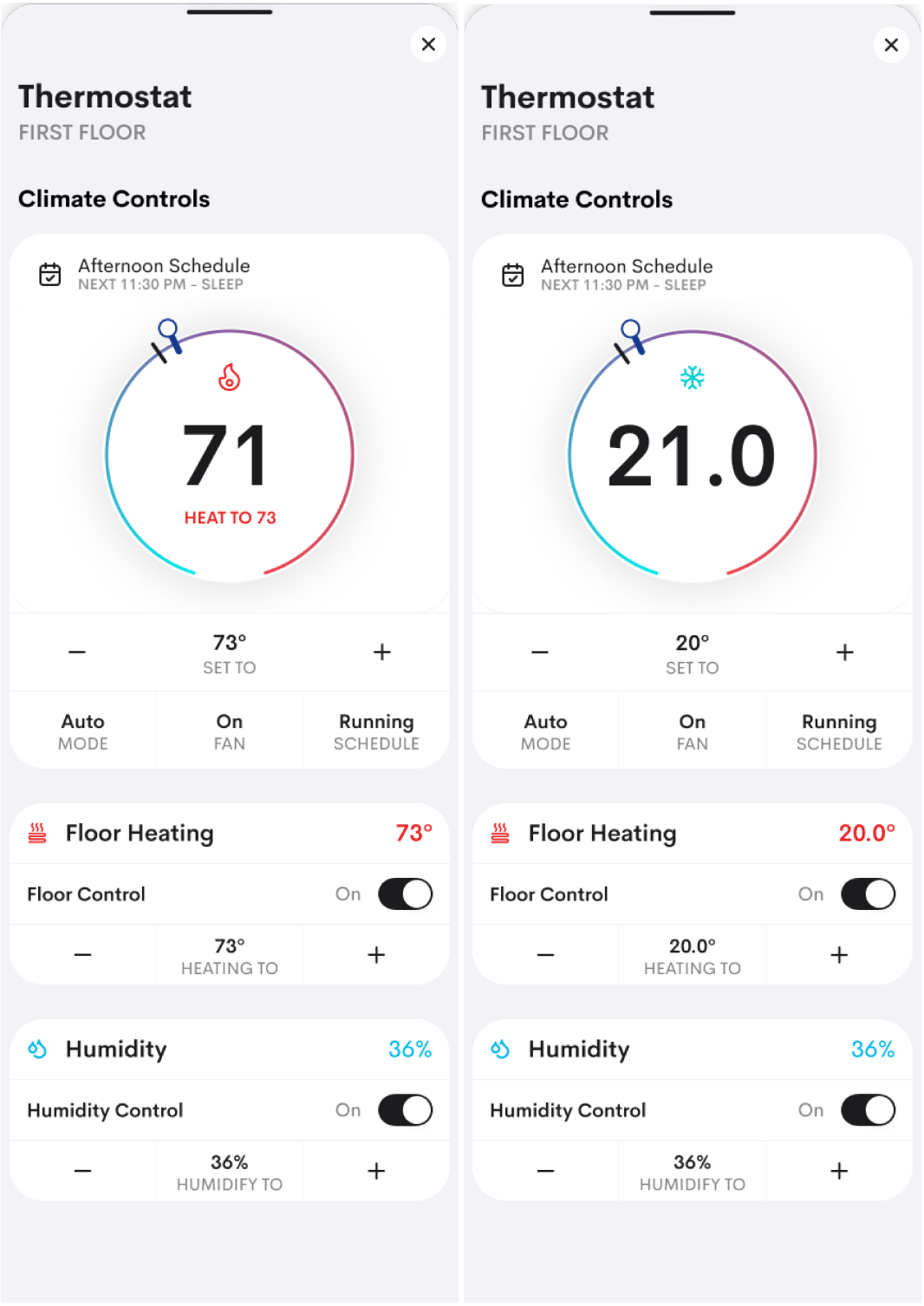


Room Control - Heat Only System (Left) and Cool Only System (Right)

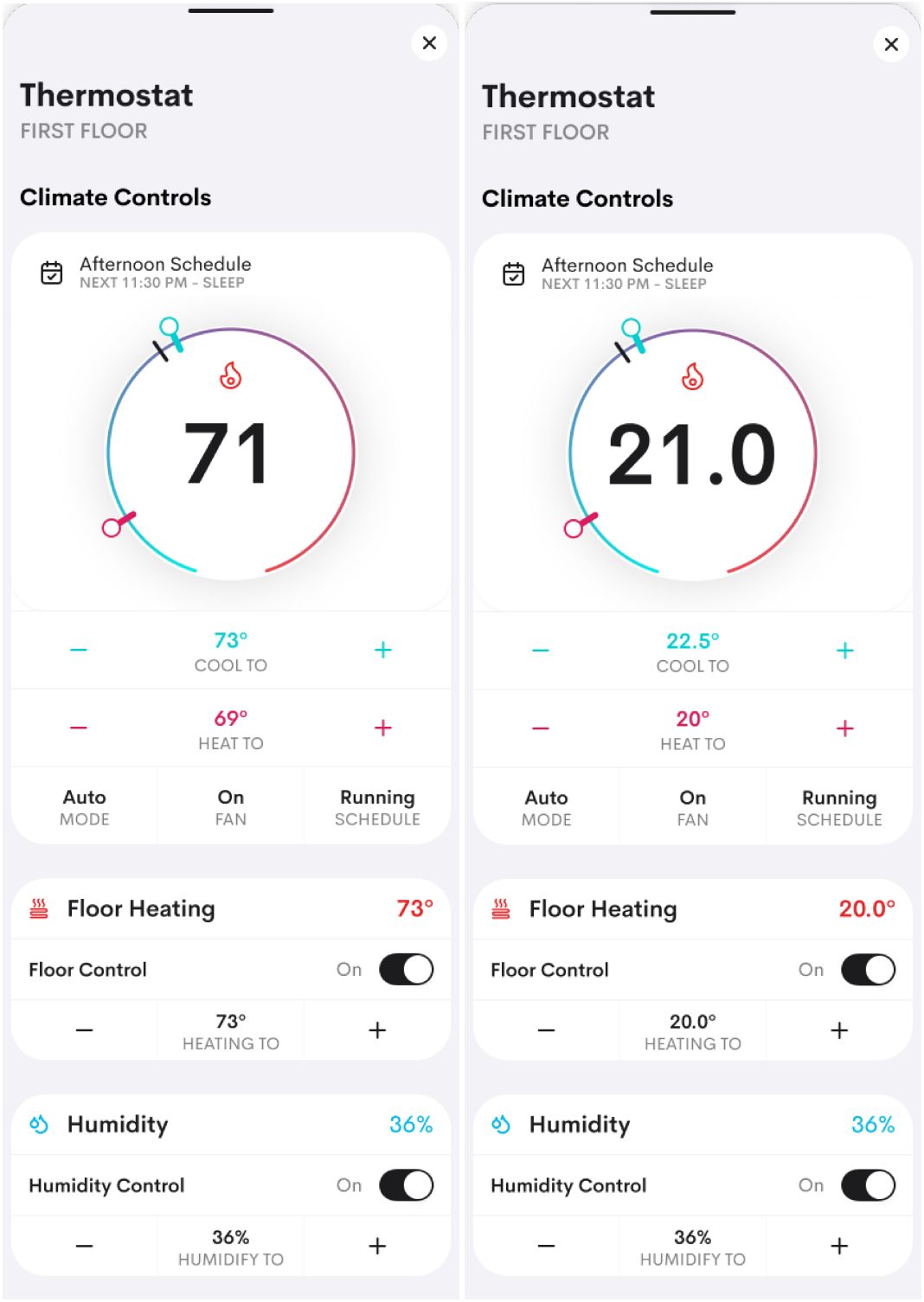


Tap the thermostat name for additional thermostat controls.

Climate Controls - Single Setpoint (Fahrenheit - Left) and (Celsius -Right)



Climate Controls - Dual Setpoint (Fahrenheit - Left) and (Celsius -Right)



Set the Temperature

Slide the circular temperature gauge, or tap the **+ Raise** and **- Lower** buttons, to change the temperature for the room.

Mode

> **NOTE:** The configurable settings may vary depending on the thermostat functionality. For more information, refer to the thermostat documentation.

Tap **Mode** to set the operating mode for the thermostat. Typical options are **Off**, **Cool**, **Heat**, and **Dual Auto**.



- **Cool:** Turn cooling mode on.
- **Heat:** Turn heating mode on.
- **Dual Auto:** Turns on heating or cooling mode based on the heat and cool temperatures that are selected.
- **Off:** Turn the thermostat off

Fan

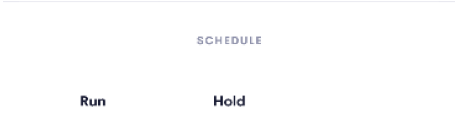
Tap **Fan** to set the fan mode. Typical options are **Auto**, **On**, **Circulate Low**, and **Circulate Medium**.



- **Auto:** The fan turns on and off automatically when the heat or air conditioning is on.
- **On:** The fan turns on to circulate air in the house.
- **Circulate Low:** The fan turns on at low speed to circulate air in the house.
- **Circulate Medium:** The fan turns on at medium speed to circulate air in the house.

Schedule

Tap **Schedule** to switch the schedule between **Run** and **Hold**.



- **Run:** Starts the thermostat schedule.
- **Hold:** Stops the thermostat schedule.

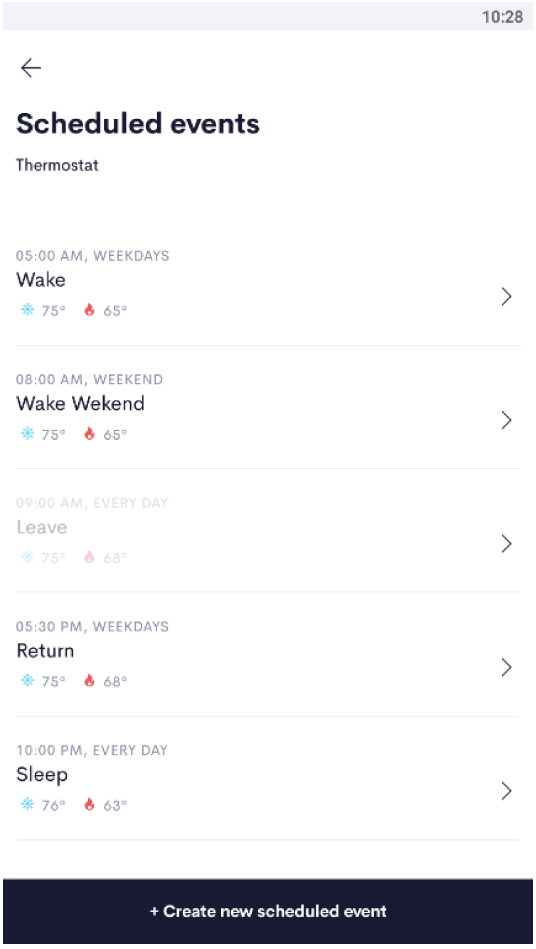
Create a Scheduled Climate Event

To create a new climate event in the user control interface:

1. Select a thermostat from the drop-down menu on the top left of the screen.
2. Tap ••• **Menu** and then select **Scheduled Events**.

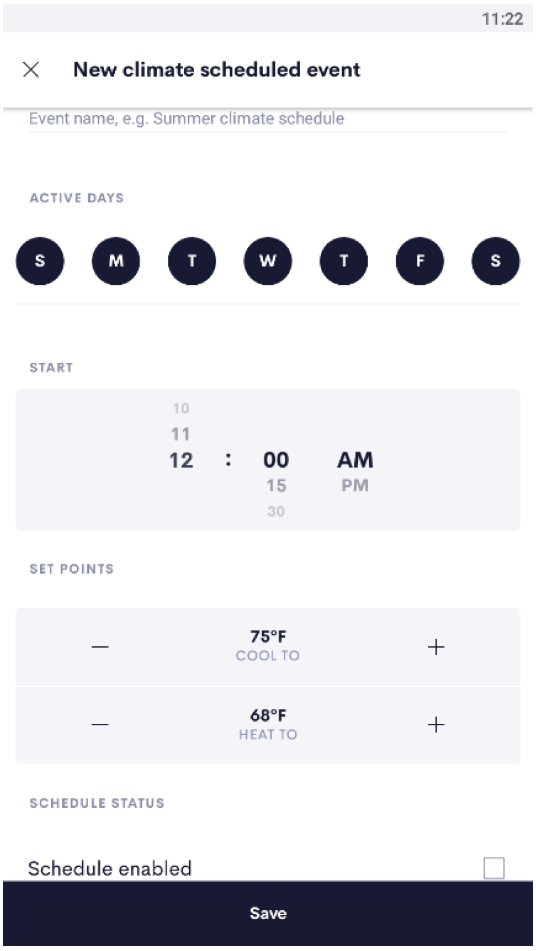


3. Tap **Scheduled Events**. The **Scheduled Events** screen for the thermostat is displayed.



4. Tap **+ Create new scheduled event**. The **New climate scheduled event** screen is displayed.

5. Configure the settings for the climate event:



   - **Name:** Enter a descriptive name for the climate event.
   - **Start:** Set the time that the climate event should occur.
   - **Active Days:** Select the days for the climate event to occur. The default setting is for the event to occur on all days.
   - **Set Points:** Select the setpoints for **Cool** ❄, **Heat** 🔥, and **Auto** 🔥|❄ modes.

     > **NOTE:** Depending on the selected mode, the thermostat switches to cooling mode when the room temperature reaches the cooling set point, switches to heating mode when the room temperature reaches the heating set point, or maintains the auto mode set point.

   - **Schedule Status:** To enable the schedule, select **Schedule Enable**. New events are disabled by default.
6. Select **Save**.

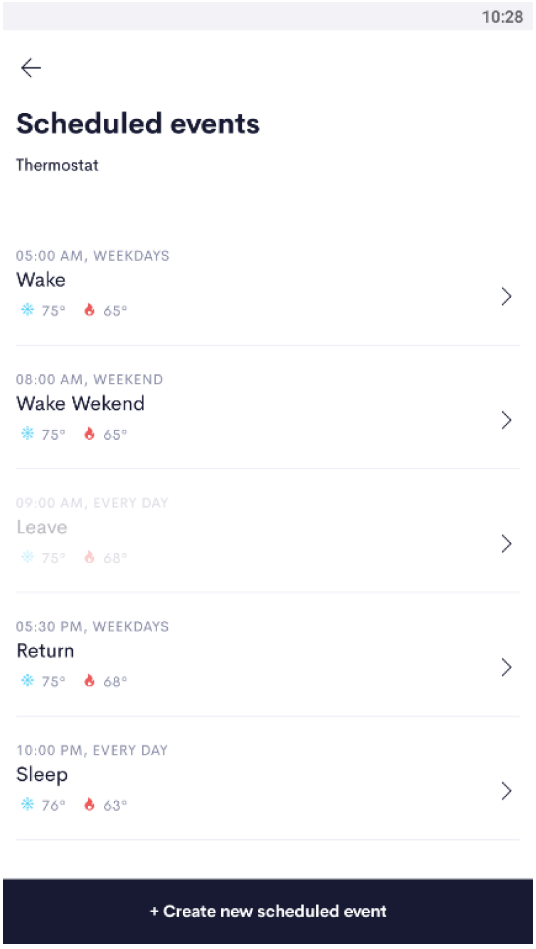
Edit a Scheduled Climate Event

To edit an existing climate event:

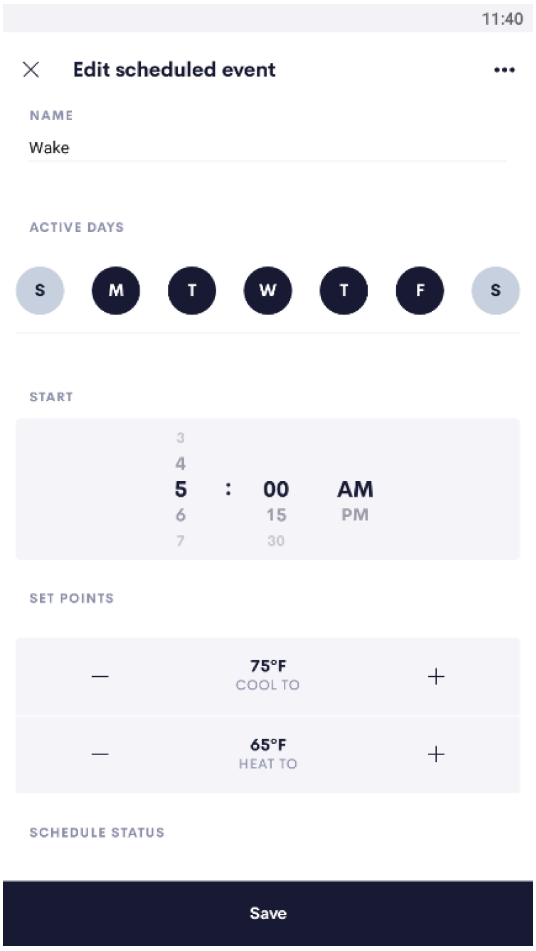
1. Select a thermostat from room.
2. Tap ••• **Menu** and then select **Scheduled Events**.



3. Tap the event to edit the thermostat behavior for the climate event.



4. Configure the settings for the climate event:



   - **Name:** Enter a descriptive name for the climate event.
   - **Start:** Set the time that the climate event should occur.
   - **Active Days:** Select the days for the climate event to occur. The default setting is for the event to occur on all days.
   - **Set Points:** Select the setpoints for **Cool** ❄, **Heat** 🔥, and **Auto** 🔥|❄ modes.

     > **NOTE:** Depending on the selected mode, the thermostat switches to cooling mode when the room temperature reaches the cooling set point, switches to heating mode when the room temperature reaches the heating set point, or maintains the auto mode set point.

   - **Schedule Status:** To enable the schedule, select **Schedule Enable**. New events are disabled by default.
5. Select **Save**.

Copy a Scheduled Climate Event to Another Thermostat

Scheduled climate events can be transferred between thermostats in the system.

To copy a scheduled climate event to another thermostat:

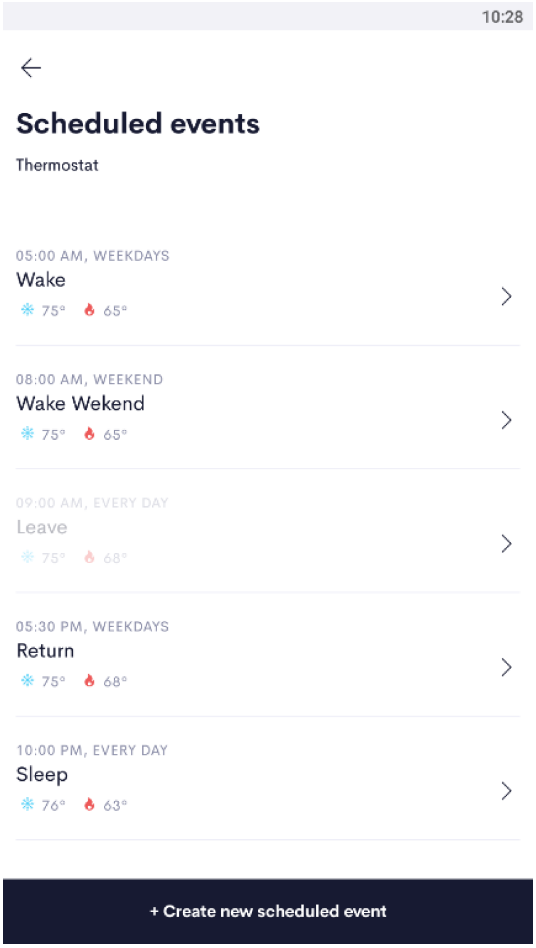
1. Select a thermostat.
2. Tap ••• **Menu** and then select a scheduled event.
3. Tap ••• **Menu** and and then **Copy Event**.
4. Select **Copy to Another Thermostat**.
5. Select the desired thermostat and then tap **Apply Copy**.

Delete a Climate Event

To delete a climate event:

1. Select a thermostat from the room.
2. Tap ••• **Menu**.

3. Tap **Scheduled Events**. The **Scheduled Events** screen for the thermostat is displayed. The **Scheduled Events** screen lists the thermostat events that have been created for the thermostat. Each thermostat event provides the time and days that it is scheduled to occur, as well as its cooling and heating set points.



4. Tap the ••• icon and then **Delete**.

Control Media

Use the audio and video tiles to control the media in the room.

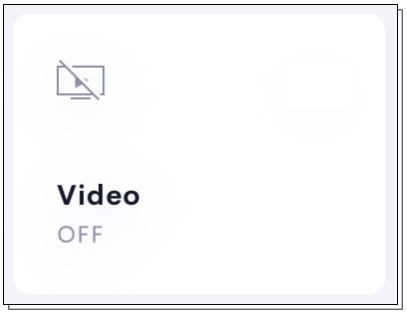
Video

Select and control video sources in the room.

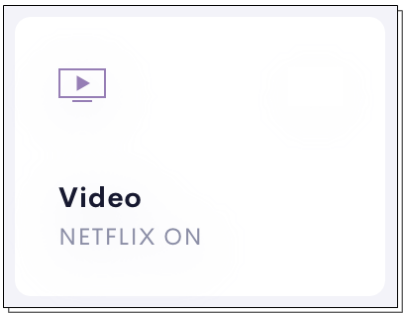
Use the **Video** tile to display video source status and control video sources.

- **Status:** Indicates that video is playing in the room or that video is off. The status displays the name of the source that is playing and if multiple video sources are playing in the room.
- **Menu icon ••• :** Available when there are multiple displays in a room. To control an individual display, tap ••• **menu**.

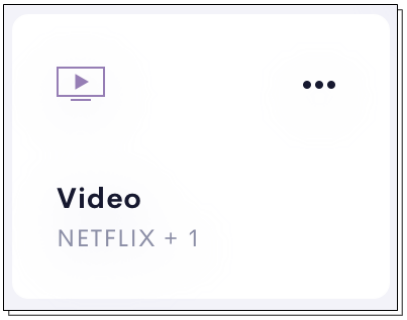
Video - Off



Video - On (One Source Playing)

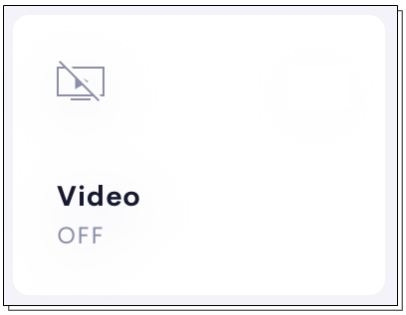


Video - On (Two Sources Playing)



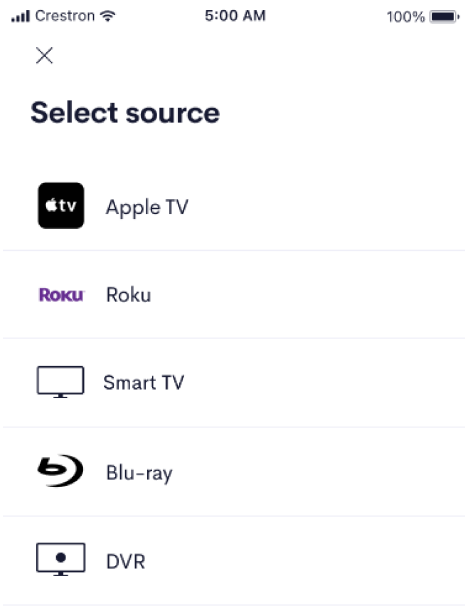
Play a Video Source - One Display in Room

1. Tap the **Video** tile.



2. Tap a source to watch from the **Select Source** screen. The **Select Source** screen displays a list of video sources that are available to the room.

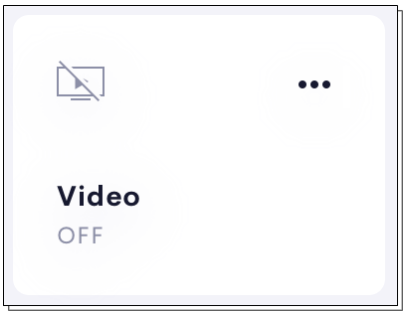
> **NOTE:** If there is only one available source, the source automatically opens.



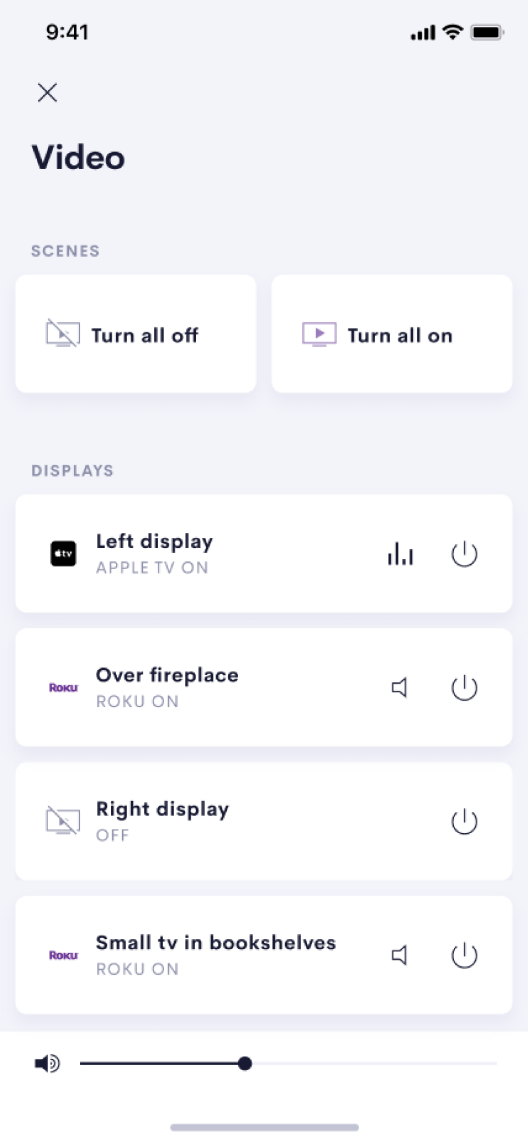
3. The Crestron Home user interface displays controls that are used with the video source. The video source displays on your TV.

Play a Video Source - Multiple Displays in Room

1. Tap the **Video** tile.

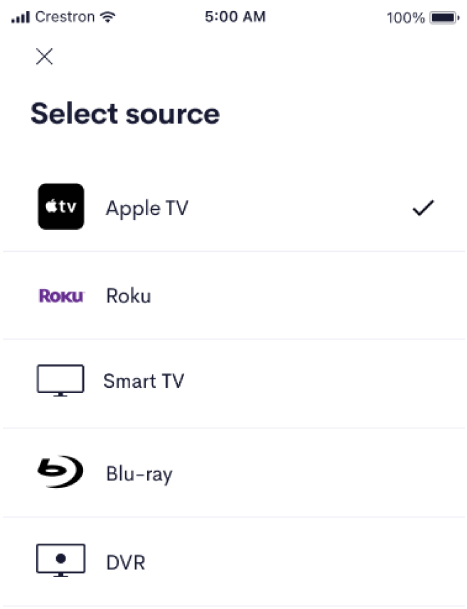


2. The **Video** screen shows a tile for each display in the room. The tiles indicate the name of the display, status, sound control, and power controls.
    - **Display Tile:** Tap a display tile to open the **Select Source** screen for the display.
    - **Display Status:** The display tile indicates the name and logo of the active source. When the display is off, the video off icon and text is displayed.
    - **Sound Bars:** The active sound bars indicate that the audio associated with the display is active in the room.
    - **Speaker Icon:** The speaker icon indicates that the audio associated with the display is inactive. Tap the speaker icon to activate the audio associated with the display in the room.
    - **Power Icon:** Tap the power icon to power on or power off the display. The display starts playing the auto-select source or default source when powered on. If the auto-select source is not playing and no default source is selected, the **Select Source** screen displays.
    - **Volume Control:** Available when a video source is playing. Use the volume slider and the sound icons to control the audio volume in the room. Drag the slider to the left or right to lower or raise the volume. To raise or lower the volume in 1% increments, tap the slider to the left or right of the current volume indicator. To toggle the mute control, tap the or volume control icons.


9:41
Video
SCENES
Turn all off
Turn all on
DISPLAYS
Left display
APPLE TV ON
Over fireplace
ROKU ON
Right display
OFF
Small tv in bookshelves
ROKU ON

3. (Optional) Tap a source to watch from the **Select Source** screen. The **Select Source** screen displays a list of video sources that are available to the room.

   > **NOTE:** If there is only one available source, the source automatically opens.



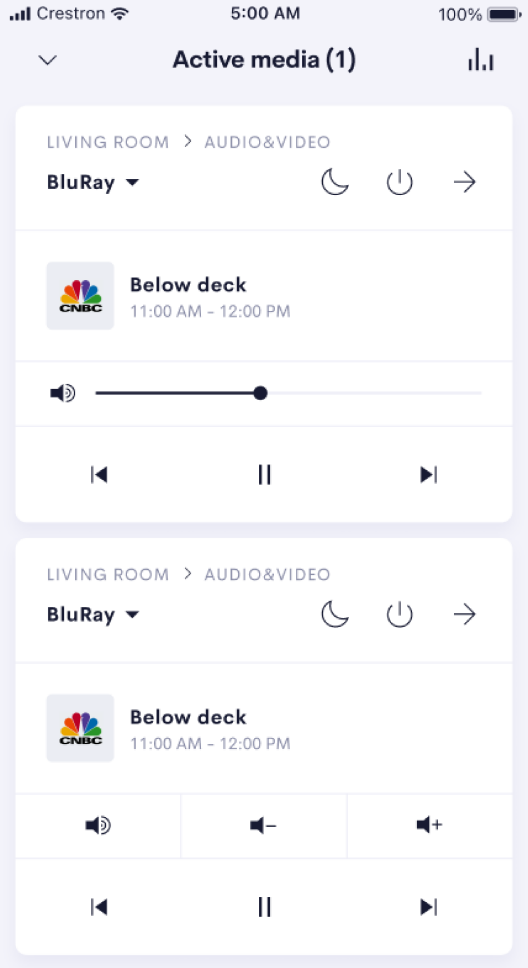
4. The Crestron Home user interface displays controls that are used with the video source. The source displays on your TV.

Active Media

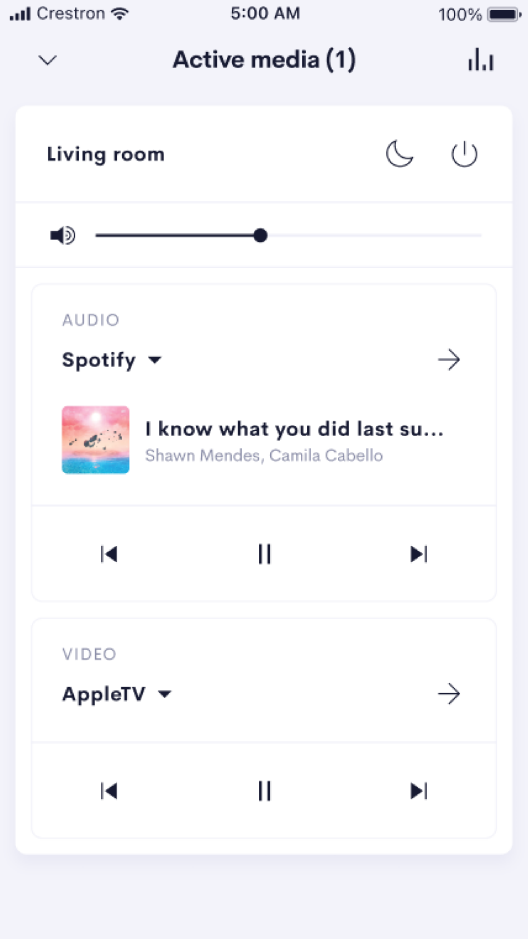
Use the Active Media toolbar to display and control active audio and video media sources in the system. The Active Media toolbar is displayed on all screens when media is playing in the system.

Select the Active Media toolbar to view the **Active Media** screen.

Active Media - Video Sources Only



Active Media - Video and Audio Sources



- **Room Tile:** The room tile displays information about the active sources in the room and provides controls for the entire room. The room tile contains the source tiles for all active sources in the room.

  > **NOTE:** If there is only one active source in the room, the source tile is combined with the room tile.

- **Source Tile:** The source tile indicates the active source and the name of the device that is controlling it.
- **Sound Bars:** The active sound bars indicate that the audio associated with the source is active in the room.
- **Speaker Icon:** The speaker icon indicates that the audio associated with the source is inactive. Tap the speaker icon to activate the audio associated with the device in the room.
- **Power Icon:** Tap **Power** to power off the source. The power icon in the room tile powers off the entire room.

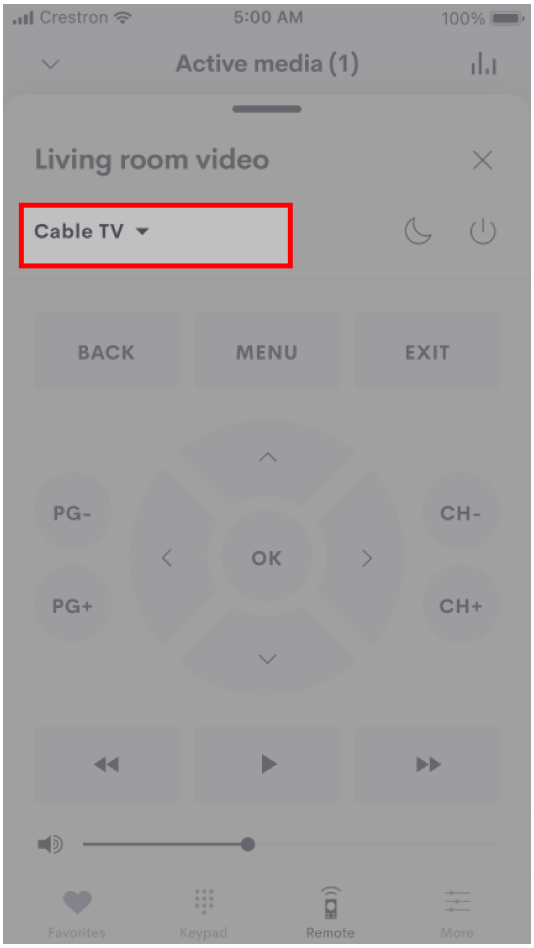
  Press and hold **Power** to power cycle the device.

- **Volume Control:** Available when a video source is playing. Use the volume slider and the sound icons to control the audio volume in the room. Drag the slider to the left or right to lower or raise the volume. To raise or lower the volume in 1% increments, tap the slider to the left or right of the current volume indicator. To toggle the mute control, tap the or volume control icons.
- **Control Media Source:** Tap the arrow icon → to display controls for the media source.
- **Turn off all media:** Tap **Turn off all media** to power off all media devices in the house. A confirmation message is displayed.

Change the Video Source

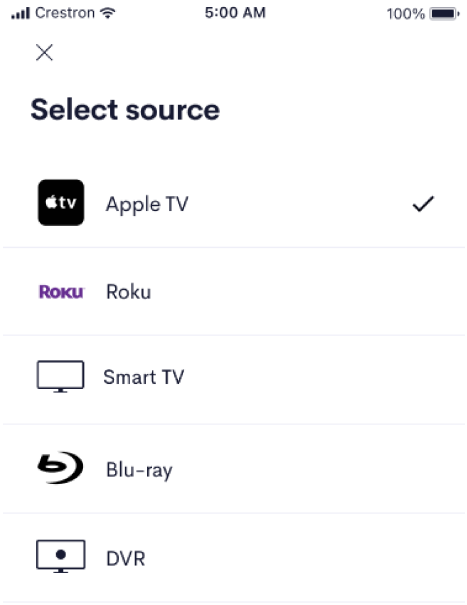
When multiple video sources are available in the same room, you can change sources.

1. Tap the down arrow next to the current video source.



2. The **Select Source** screen displays a list of available video sources, including apps that are available on the Smart TV. Tap the video source that you wish to watch.

   NOTE: Media services (video streaming sources) that are provided by a Smart TV can be omitted from the list of sources during the setup of the Crestron Home system. For additional information, refer to Control Unlisted Video Sources on page 872.

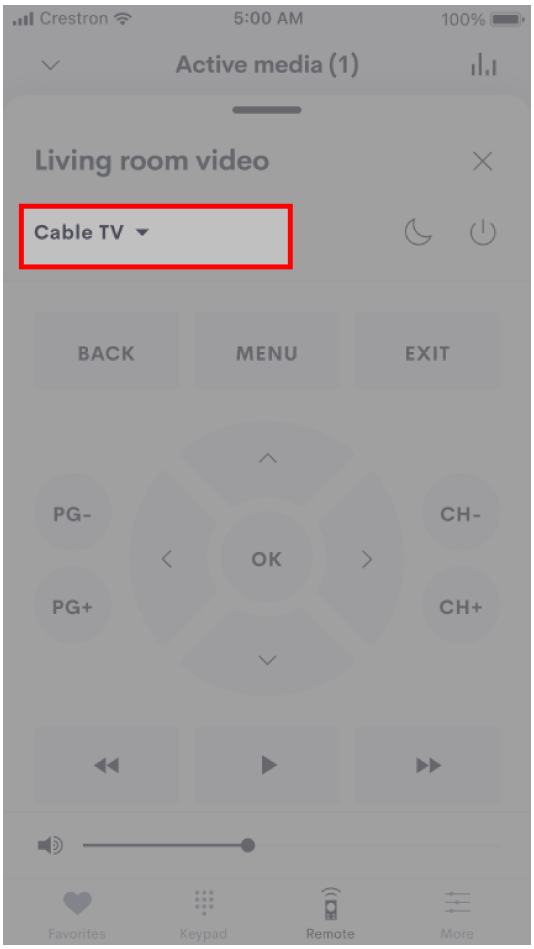


3. Tap the video source that you wish to watch. The video source displays on your TV.

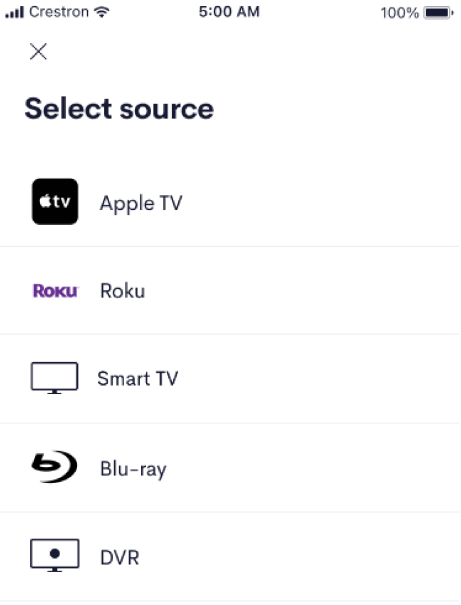
Control Unlisted Video Sources

The sources listed in the **Select Source** screen are populated from the list of branded apps that are installed on the TV (for example, Amazon, Netflix, and Hulu). To control a source on a Smart TV that is not listed (for example, a TV manufacturer's app store):

1. Tap the down arrow next to the current video source.



2. Select **Smart TV** from the **Select a Source** list.



3. The Crestron Home user interface displays a generic user interface and the Smart TV does not change it's source. Use the generic user interface to navigate the Smart TV.

   > **NOTE:** Depending on the Smart TV model, some controls may not perform any function.

DGE-1000

Sources selected for the DGE-1000 launch in full screen. Tap the video to switch between preview and full screen modes.

> **NOTE:** Set the DGE-1000's video endpoint to match the default room

DGE Preview Mode



DGE Full Screen Mode



Control Video Sources

Perform standard video controls using the play, pause, stop, previous/rewind, skip/fast forward, shuffle, and repeat buttons. The controls function like the remote that came with the device.

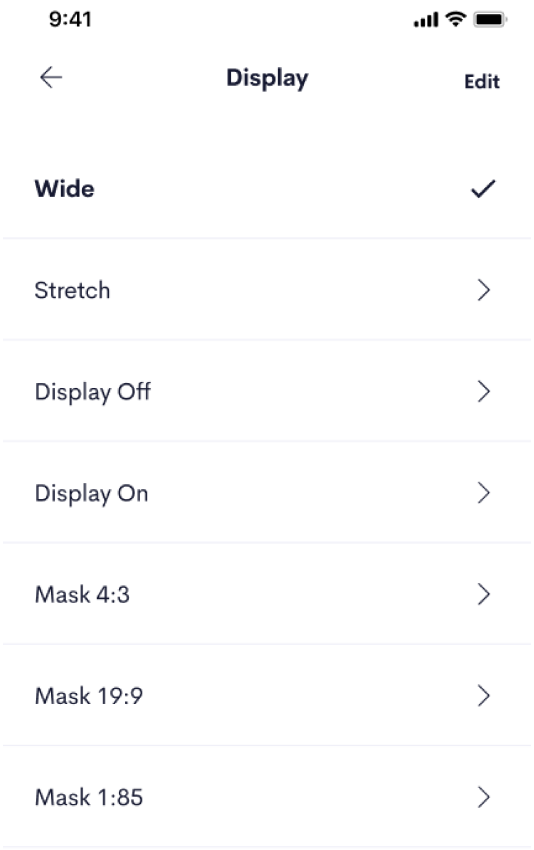
Control the Volume with a Mobile Device

To control the volume, use the volume up and down buttons on a mobile device or use the slider. To mute the volume, tap the speaker icon.

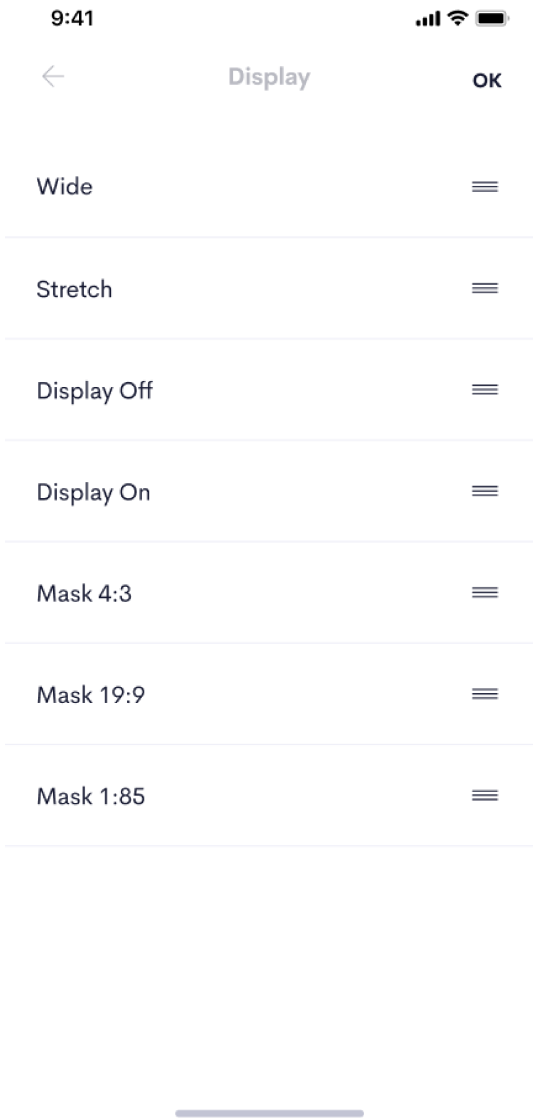
> **TIP:** Volume control using the volume buttons on a mobile device requires the media page in the Crestron Home app to be open. Volume control using the buttons is not available on the Active Media screen or any other screen in the app.

Tap **Display** to control the display and accessories that are associated with the display. Tap a command to control the display or accessory.

> **NOTE:** The commands are enabled during setup of the Crestron Home system.



To reorder the display commands, select Edit and then use the handles to reorder the commands.

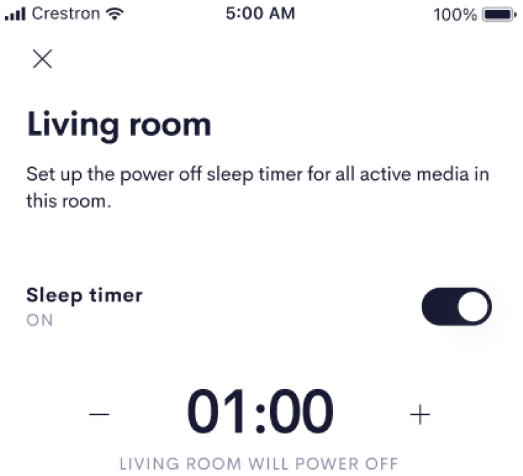

9:41
Display
OK
Wide
Stretch
Display Off
Display On
Mask 4:3
Mask 19:9
Mask 1:85

Sleep Timer

Use a sleep timer to turn off all active media after a specific period of time.

To set a sleep timer:

1. Select **Sleep**.
2. Turn on the **Sleep Timer** toggle.
3. Press **Raise** or **Lower** to set the time.



Power Off

Use the **Power** button to turn off or power-cycle the video source.

- **Tap:** Stop the video and turn off the associated hardware.
- **Tap and hold:** Power cycle the video sources. Power-cycle is supported only for devices controlled by a power distribution unit. All devices connected to the same outlet will be power cycle.

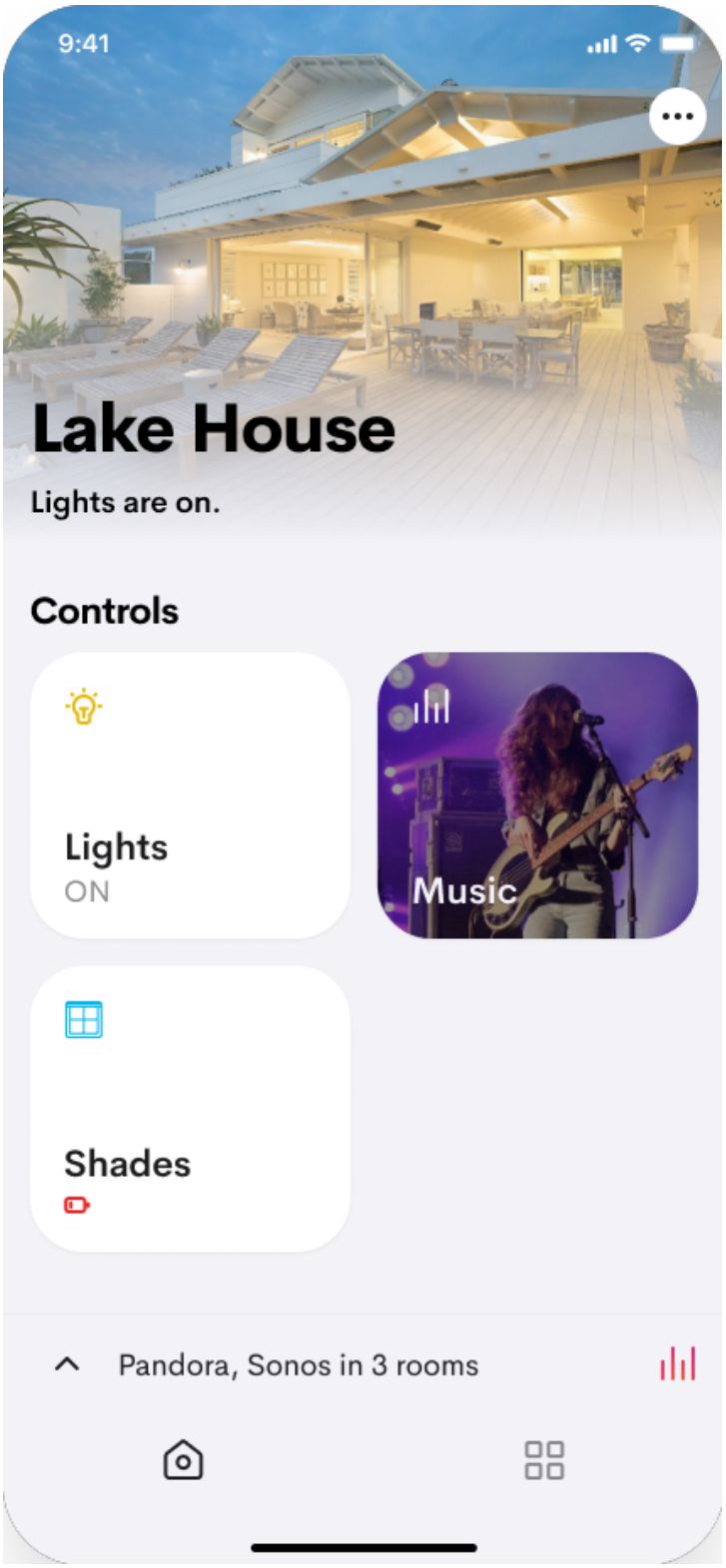
> **NOTE:** If audio and video is playing in the same room (audio breakaway mode), pressing room power off will turn off both video and audio sources.

Music

Use the **Music** tile to control audio sources in the system. If music is playing, selecting **Music** will open the **Now Playing** screen. If music is not playing, selecting **Music** will open the **Select Where to Play** screen.

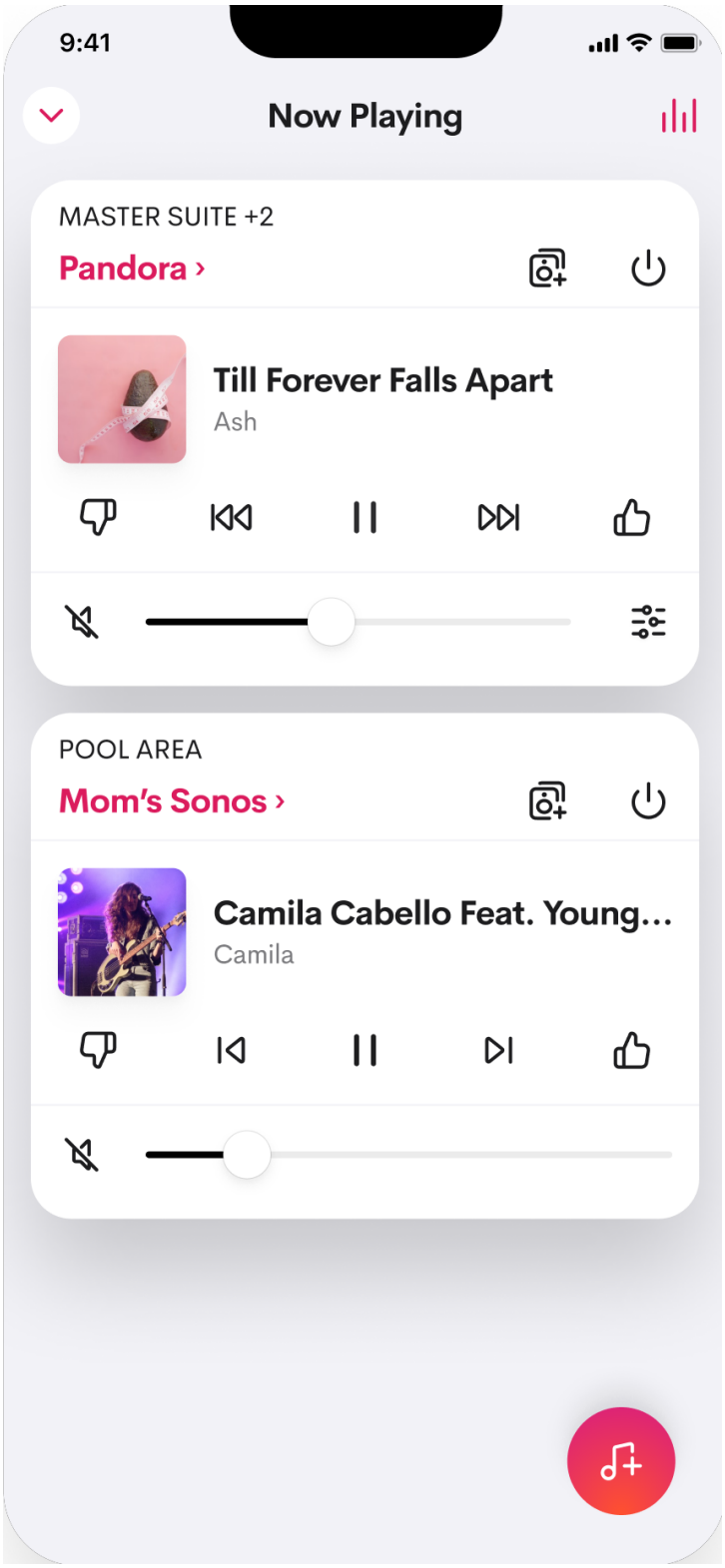
NOTES:

- The functions described below require an Android device, iOS device, or a Crestron 70-Series touch panel or newer. 60 Series touch panels have reduced music control functionality.
- NSP internet radio sources are no longer supported.



Now Playing

All currently playing music is displayed and can be controlled on the **Now Playing** screen. Rooms playing the same source are grouped together.



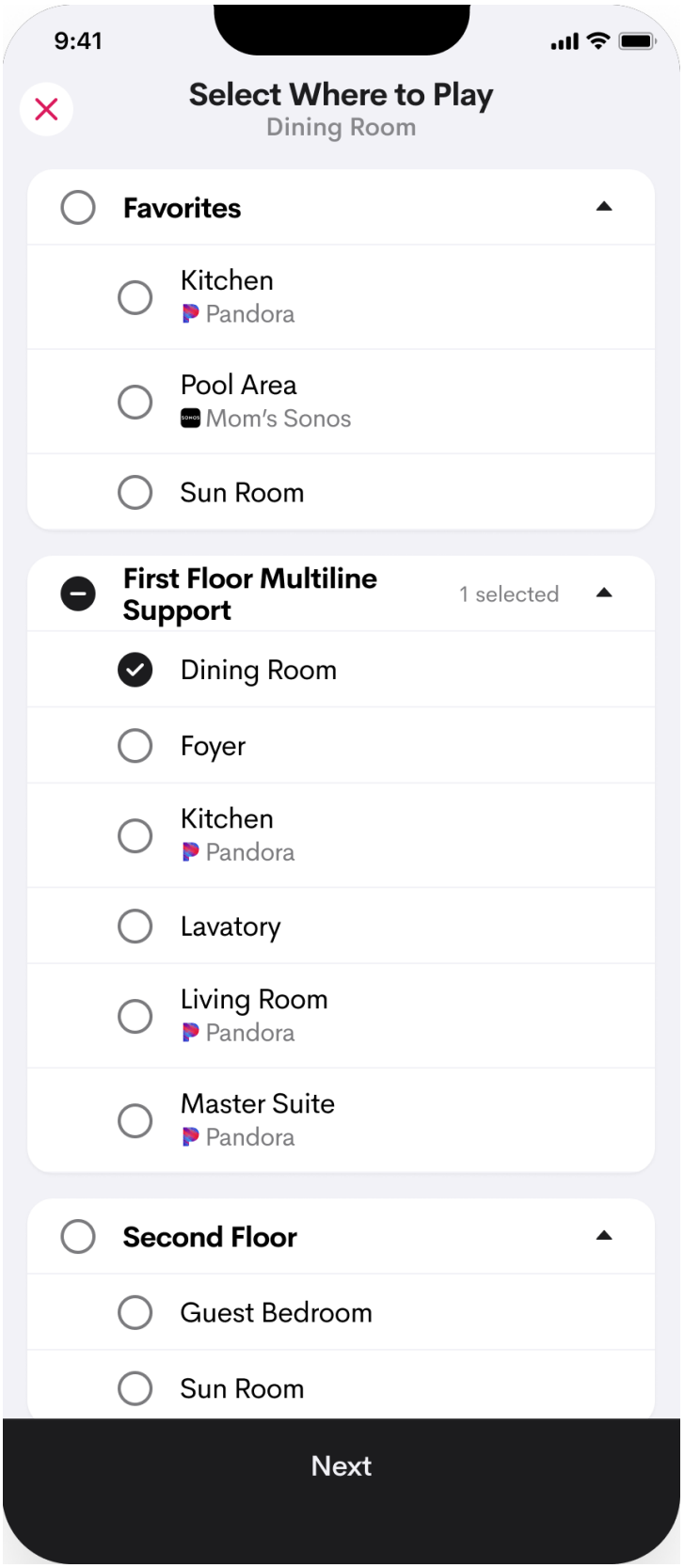
In addition to basic control, the following controls are available.

- **Source Volume Control:** Use the volume slider and the sound icons to control the audio volume for the source. Drag the slider to the left or right to lower or raise the volume. To raise or lower the volume in 1% increments, tap the slider to the left or right of the current volume indicator. To toggle the mute control, tap the or volume control icons.
- **Multi Room Volume Control:** To adjust volume for the group, select .
- **Stop:** Use the **Power** button to turn off a source and remove it from **Now Playing**.
- **Change Source:** To change the source, select the pink source name. In the screen shot above, that is **Pandora** and **Mom's Sonos**. The **Select Music** screen opens.
- **New Group:** To play new music in another room, select . The **Select Where to Play** screen opens.
- **Add Room to Group:** To play the same source in another room, select . The **Select Where to Play** screen opens.

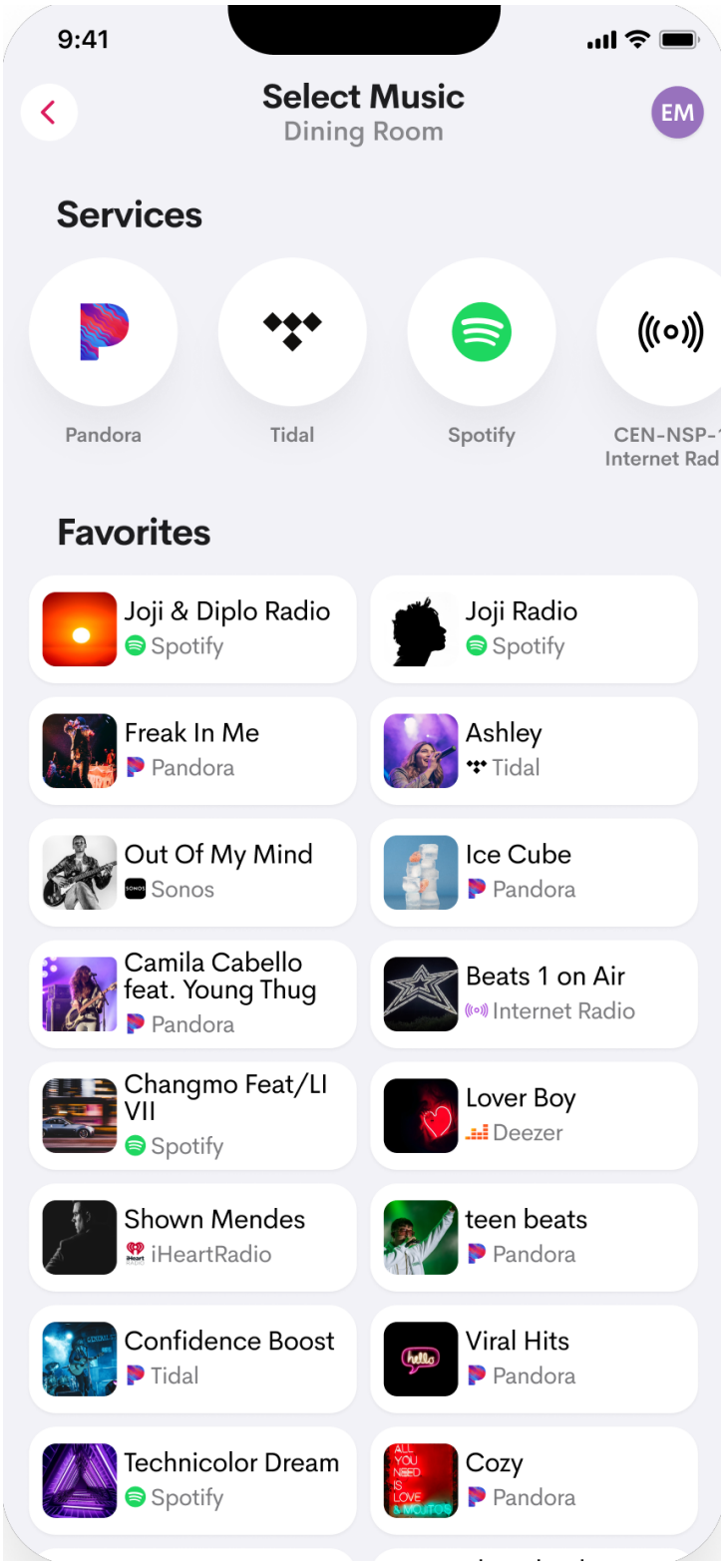
Starting New Music

When starting new music, the **Select Where to Play** screen opens. Follow the instructions below.

1. Select the desired rooms and tap **Next**. The **Select Music** screen opens.


9:41
Select Where to Play
Dining Room
Favorites
Kitchen
Pandora
Pool Area
Mom's Sonos
Sun Room
First Floor Multiline Support
1 selected
Dining Room
Foyer
Kitchen
Pandora
Lavatory
Living Room
Pandora
Master Suite
Pandora
Second Floor
Guest Bedroom
Sun Room
Next

2. Select a source to play from **Services** or **Favorites**. The source plays and the **Now Playing** screen opens.

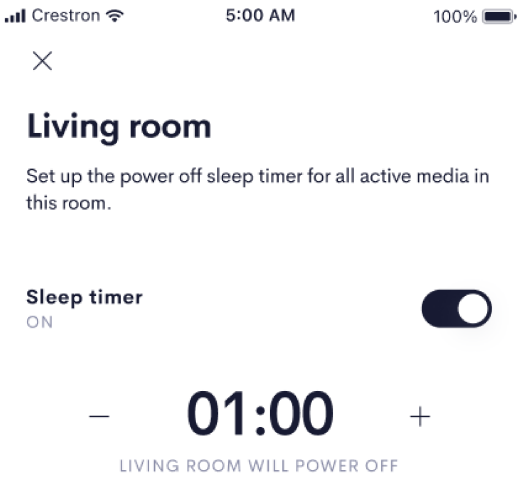


Sleep Timer

Use a sleep timer to turn off all active media after a specific period of time.

To set a sleep timer:

1. Select **Sleep**.
2. Turn on the **Sleep Timer** toggle.
3. Press **Raise** or **Lower** to set the time.



Power Off

Use the **Power** button to turn off or power-cycle the audio source.

- **Tap:** Stop the audio and turn off the associated hardware.
- **Tap and hold:** Power cycle the audio source. Power-cycle is supported only for devices controlled by a power distribution unit. All devices connected to the same outlet will be power cycle.

> **NOTE:** If audio and video is playing in the same room (audio breakaway mode), pressing room power off will turn off both video and audio sources.

Audio Control

Perform standard music controls using the play, pause, stop, previous/rewind, skip/fast forward, shuffle, and repeat buttons.

Control the Volume with a Mobile Device

To control the volume, use the volume up and down buttons on a mobile device or use the slider. To mute the volume, tap the speaker icon.

> **TIP:** Volume control using the volume buttons on a mobile device requires the media page in the Crestron Home app to be open. Volume control using the buttons is not available on the Active Media screen or any other screen in the app.

Play Audio in Multiple Rooms

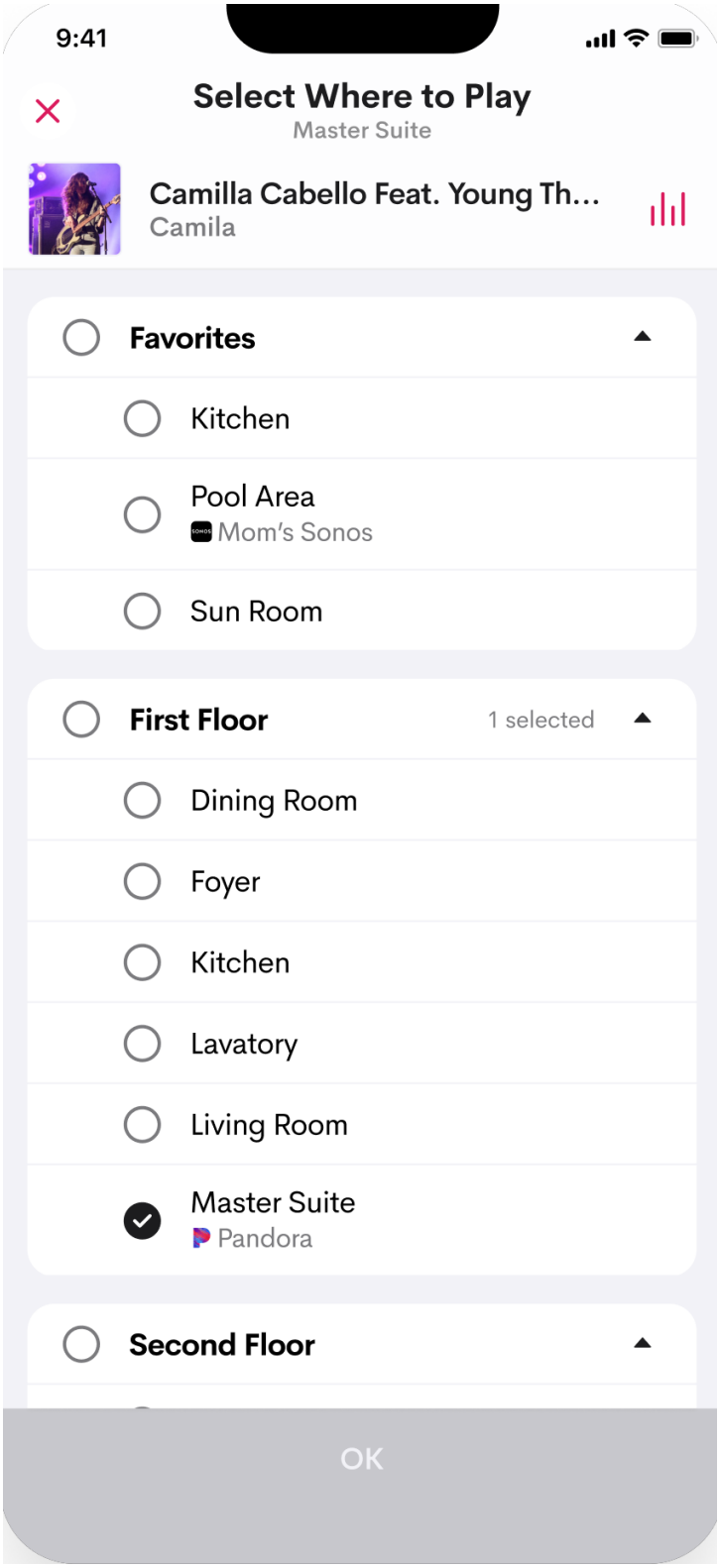
Listen to the same music in more than one room by creating a room group. All rooms in the media group display their audio sources in the Select Source menu. Room groups work alongside Sonos device groups to synchronize audio output across rooms.

> **NOTES:**
>
> - When creating a room group with rooms that have audio or video playing, note the following:
>   - All video sources in the group are turned off.
>   - If the group is created with a room playing an audio source, the audio source is routed to all rooms. All other audio sources in the group are turned off.
> - Crestron recommends grouping no more than eight media rooms for best performance. Grouping more through the Sonos app is possible, but it may cause inconsistencies between the app and the Crestron Home user interface.

Create a Room Group

To create a room group:

1. Select . The **Select Where to Play** screen opens.



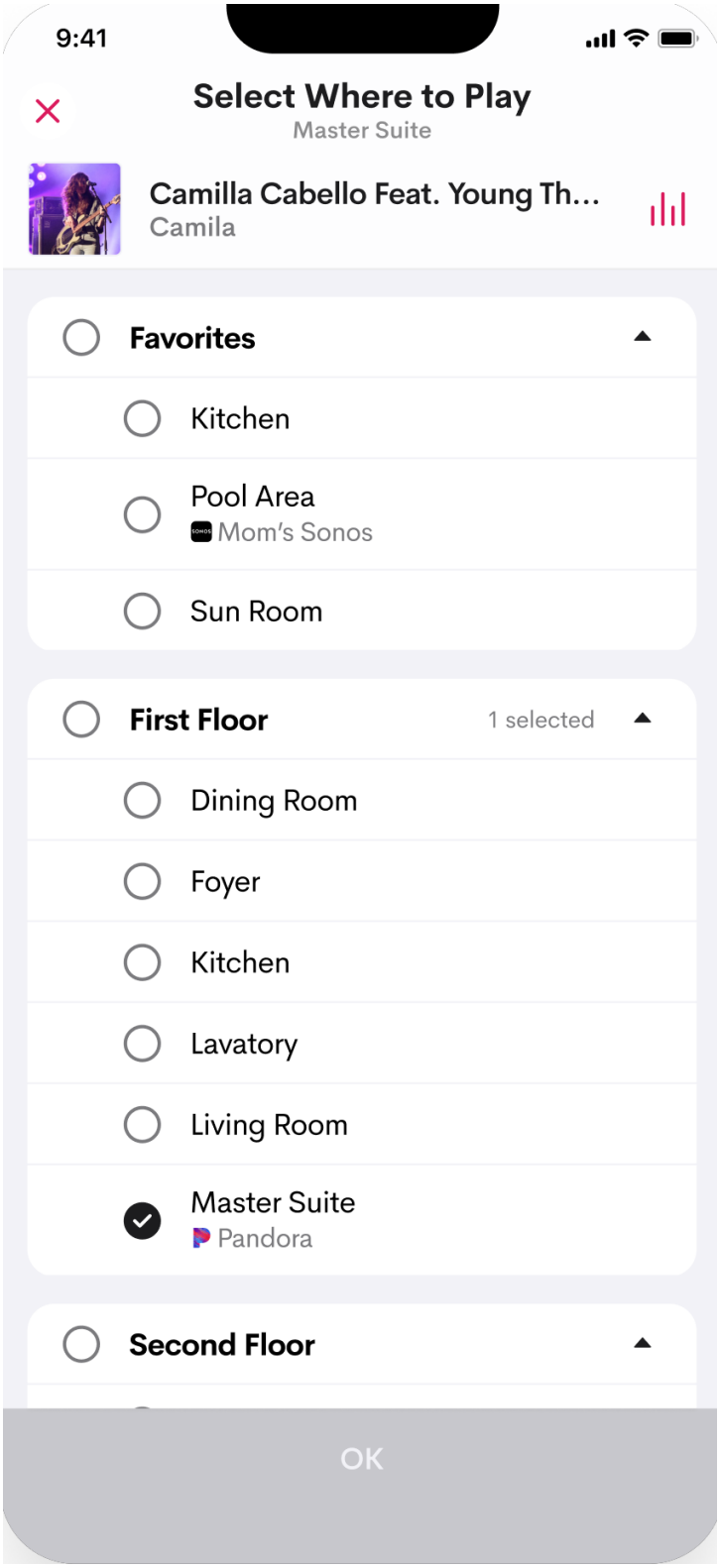
2. Select rooms to add to the group.
3. Select **OK**.

Add or Remove Rooms from a Room Group

After a room group is created, rooms can be added to or removed from a room group.

To manage room groups:

1. Select . The **Select Where to Play** screen opens.

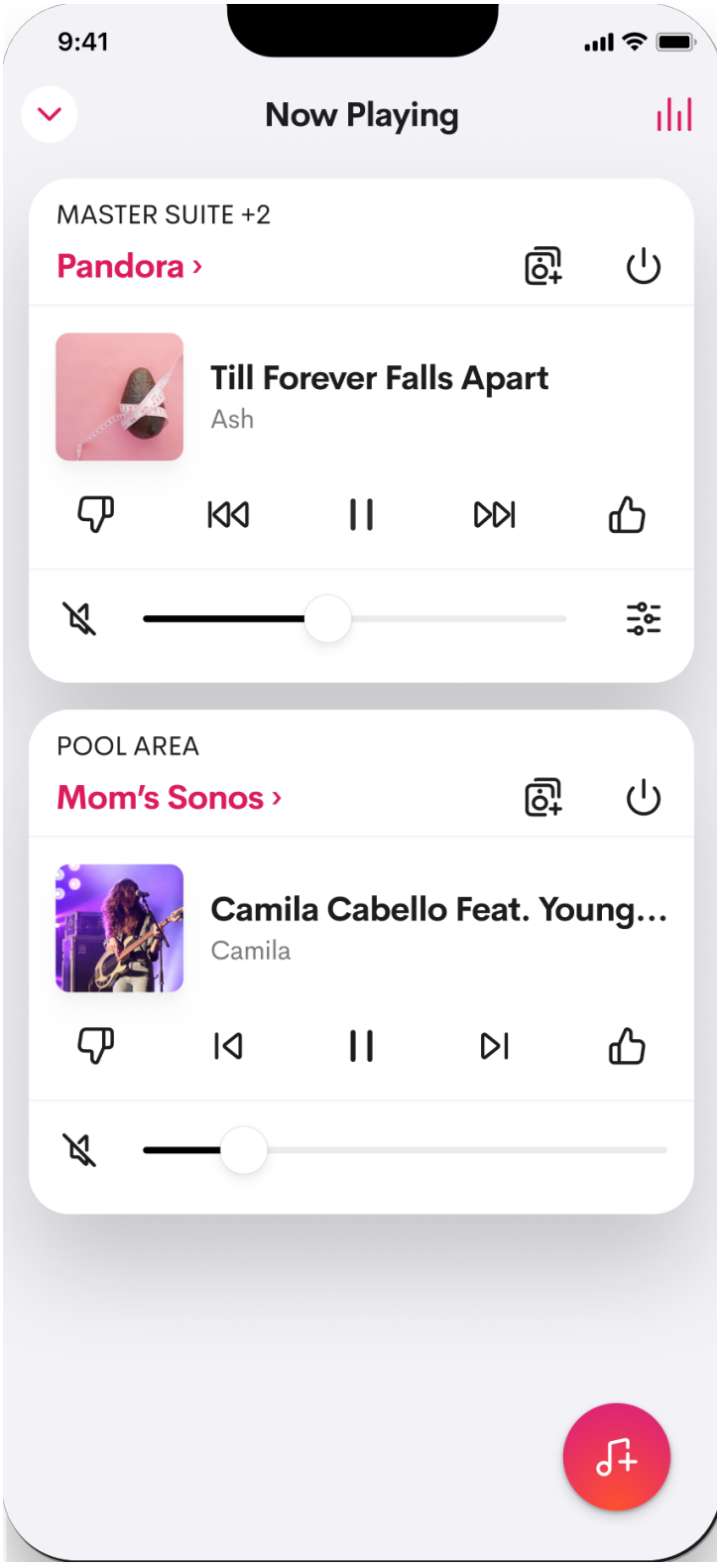


2. Select rooms to add them to the group.
3. Deselect rooms to remove them from the group.
4. Select **OK**.

Room Group Volume Control

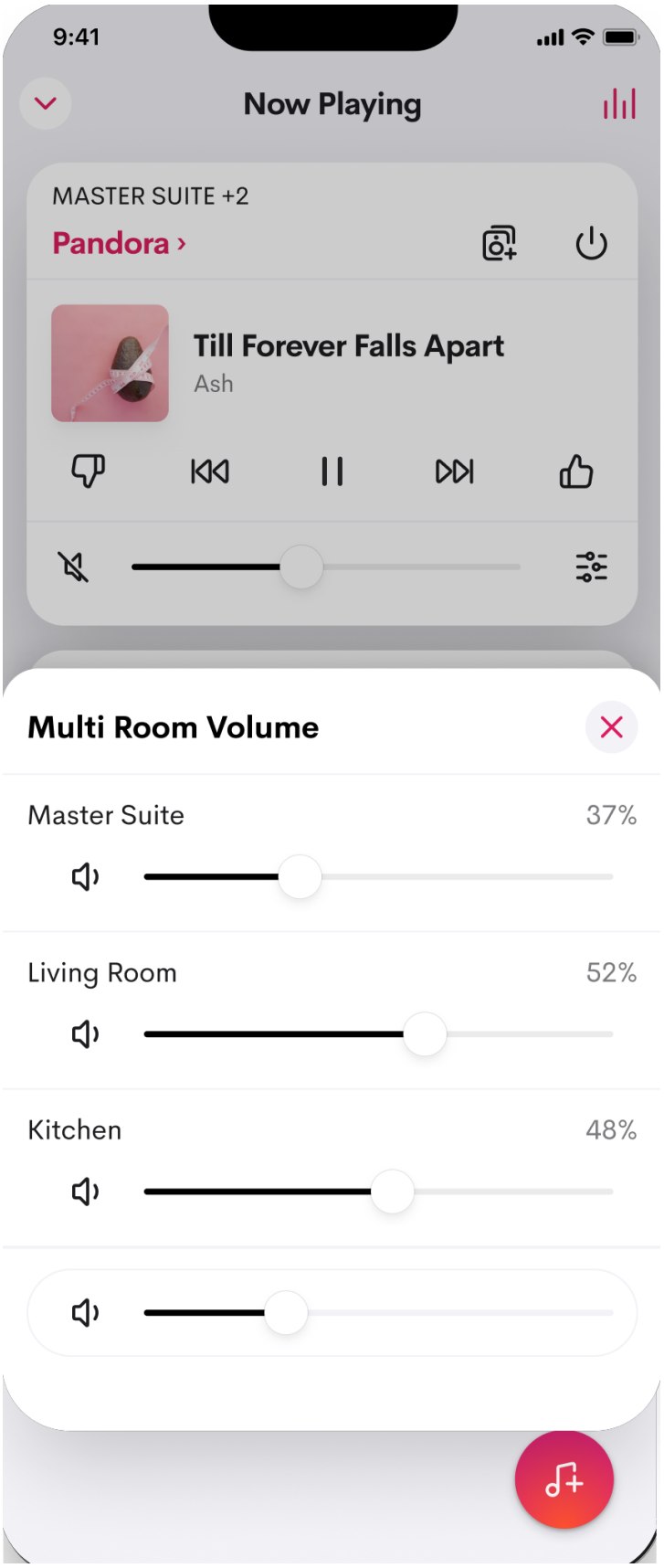
To change the volume for all rooms in a room group:

1. On the **Now Playing** screen, select .



The **Multi Room Volume** panel opens.

2. Use the volume slider and the sound icons to control the audio volume for the source in each room. The slider at the bottom of the screen controls the audio volume for the entire group.


9:41
Now Playing
MASTER SUITE +2
Pandora ›
Till Forever Falls Apart
Ash
Multi Room Volume
Master Suite
37%
Living Room
52%
Kitchen
48%

Intercom

Use the Intercom to send a page (audio message) or make a call to devices throughout the system.

> **NOTE:** If the intercom functions are not working on a touch screen, an existing intercom (SIP) configuration may be configured. To remove the SIP configuration, factory reset the touch screen.

The following touch panels support these features:

- TSW-1070
- TSW-770
- TSW-1070-R
- TSW-770-R
- TS-1070
- TS-770
- TSW-1060
- TSW-770
- TSW-560
- TSW-560p
- TST-1080

Paging

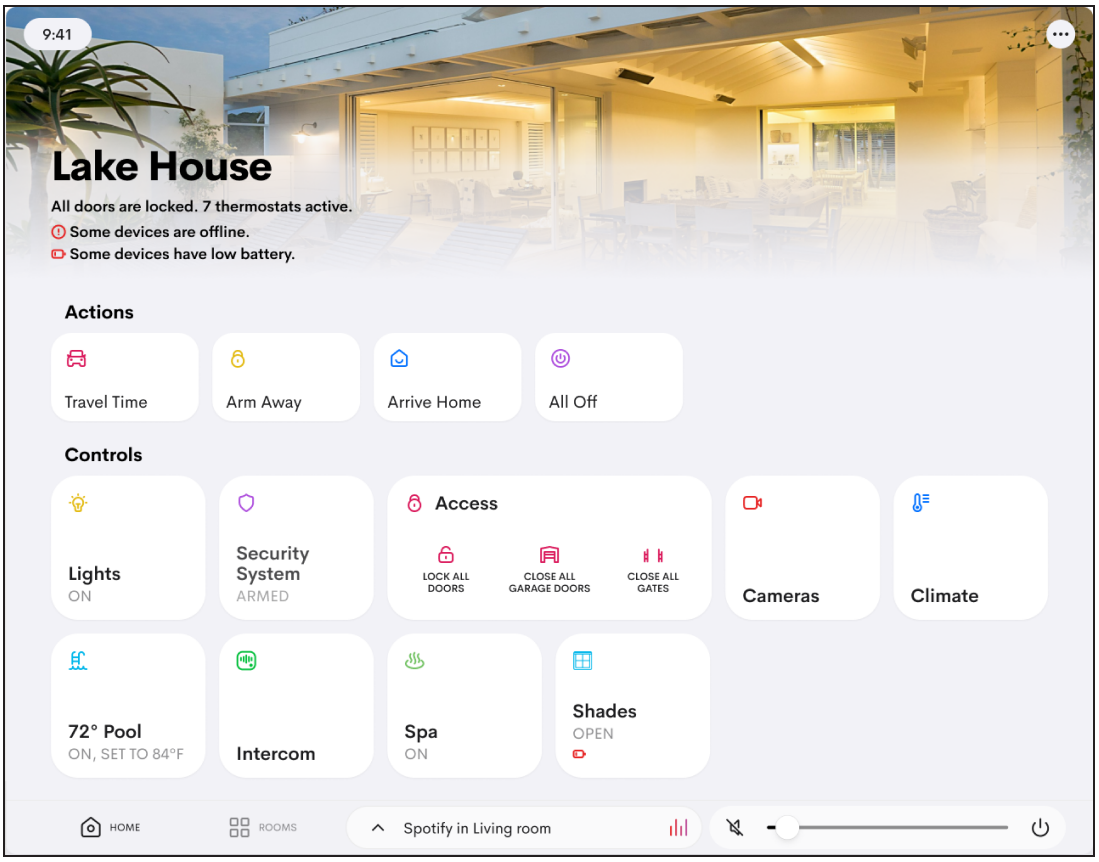
Pages are sent and received in real-time as the user speaks.

Send a page using the Intercom tile on the Home page. The Intercom tile can be used to send a message to a default group of rooms or it can be used to open the Intercom screen where any room group can be selected.

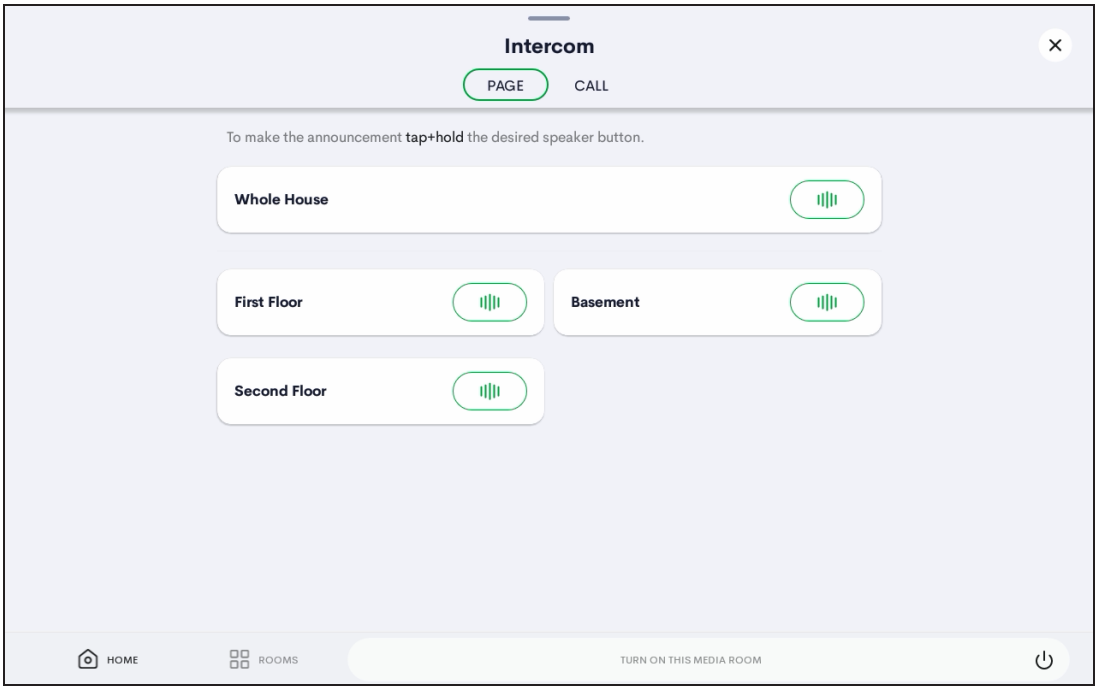
> **NOTE:** Individual rooms that are part of a group cannot be paged.

To send a page:

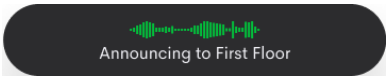
1. To select the paging group that should receive the page, do either of the following:
   - **Default paging group:** Tap and hold the **Intercom** tile. Do not release the tile until you are done saying the message. To select the default paging group, refer to Intercom on page 1025.



- **Page a specific paging group:** Tap the **Intercom** tile to open the **Intercom** screen and then tap and hold **Send Page** for a paging group. Do not release the button until you are done saying the message.



2. The **Preparing to Page** message displays with an orange waveform.
3. When the **Announcing to [Room Group]** message displays with the green waveform, say the message.



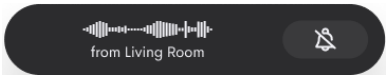
4. When the message is complete, release the **Intercom** tile or **Send Page** button.

While a page is in progress, consider the following:

- The **Intercom** tile and **Send Page** buttons on all touch screens are disabled until the page is complete.



- The touch screen receiving the page will display a pop-up at the top of the screen showing the room that is sending the page.



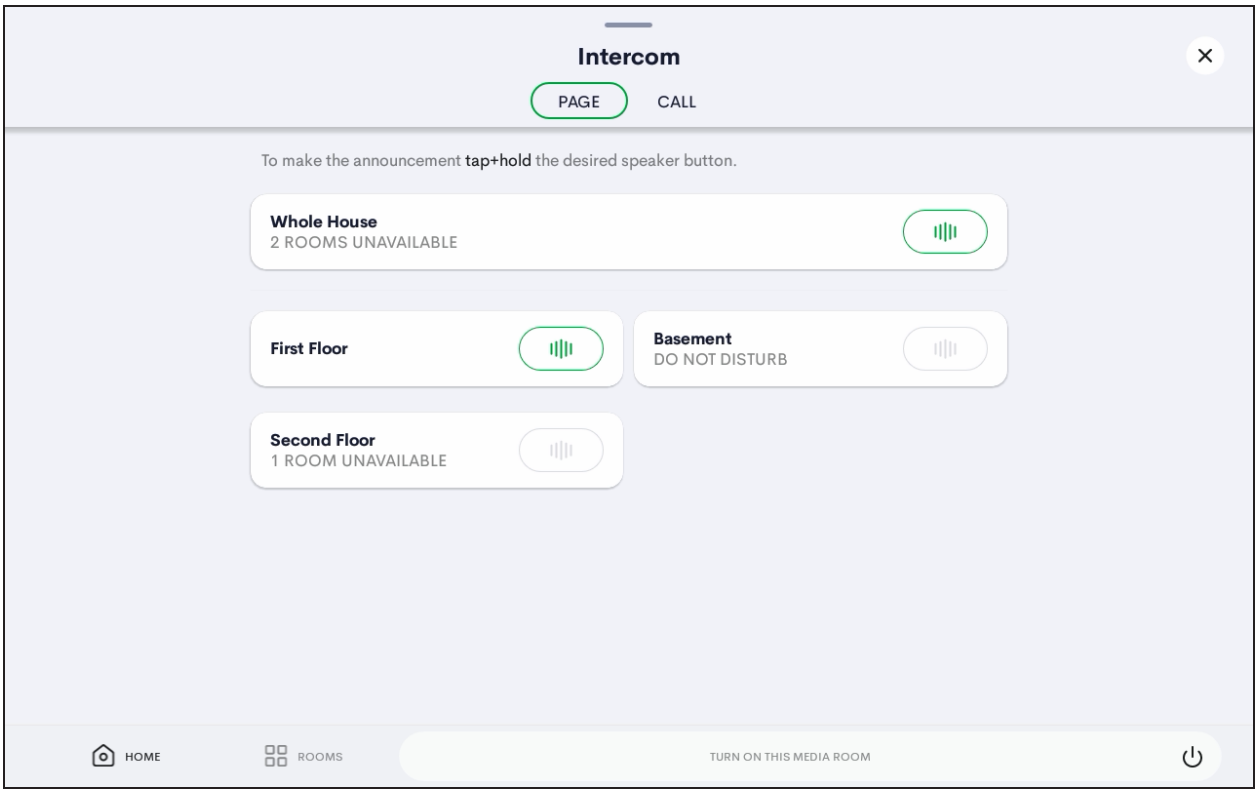
- If media is playing in the room, the volume may be lowered depending on the available support of the audio endpoint:
    - Devices that support audio ducking or set volume will have the volume lowered.
    - Devices that only support audio mute will have the volume muted.
    - Devices that do not support audio mute, audio ducking, or set volume, audio will not be changed while the page is played.
- Rooms that are offline or in Do Not Disturb mode will be identified on the touch screen that is initiating the page. These rooms cannot receive a page.
- If all rooms are in Do Not Disturb mode, the page will not be initiated.
- A device receiving the page can be silenced while receiving the page and enter Do Not Disturb mode. For details, refer to Silence a Page on page 905.

Silence a Page

To silence an incoming page, select **Do Not Disturb** on the incoming page. Do Not Disturb mode is turned on for the room.

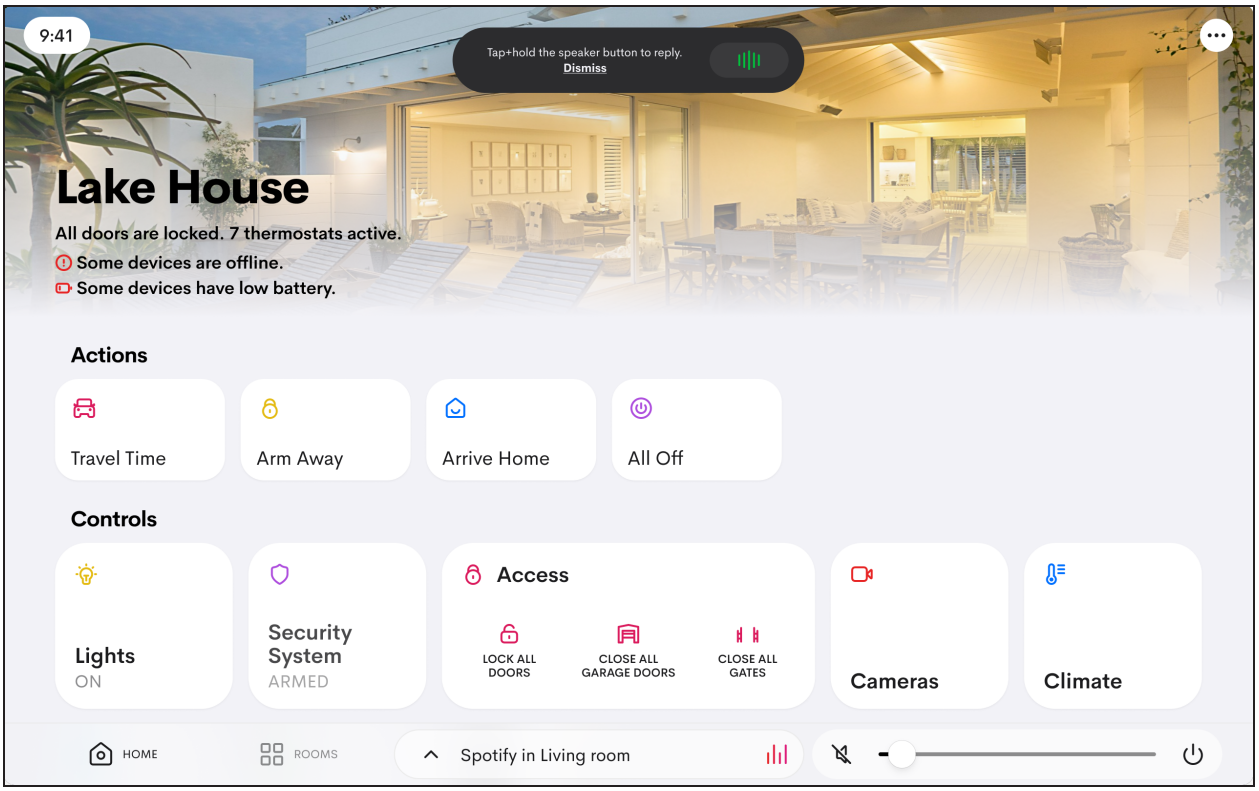
Paging Statuses

Rooms listed as **DO NOT DISTURB** or **UNAVAILABLE** cannot receive pages.



Replying to a Page

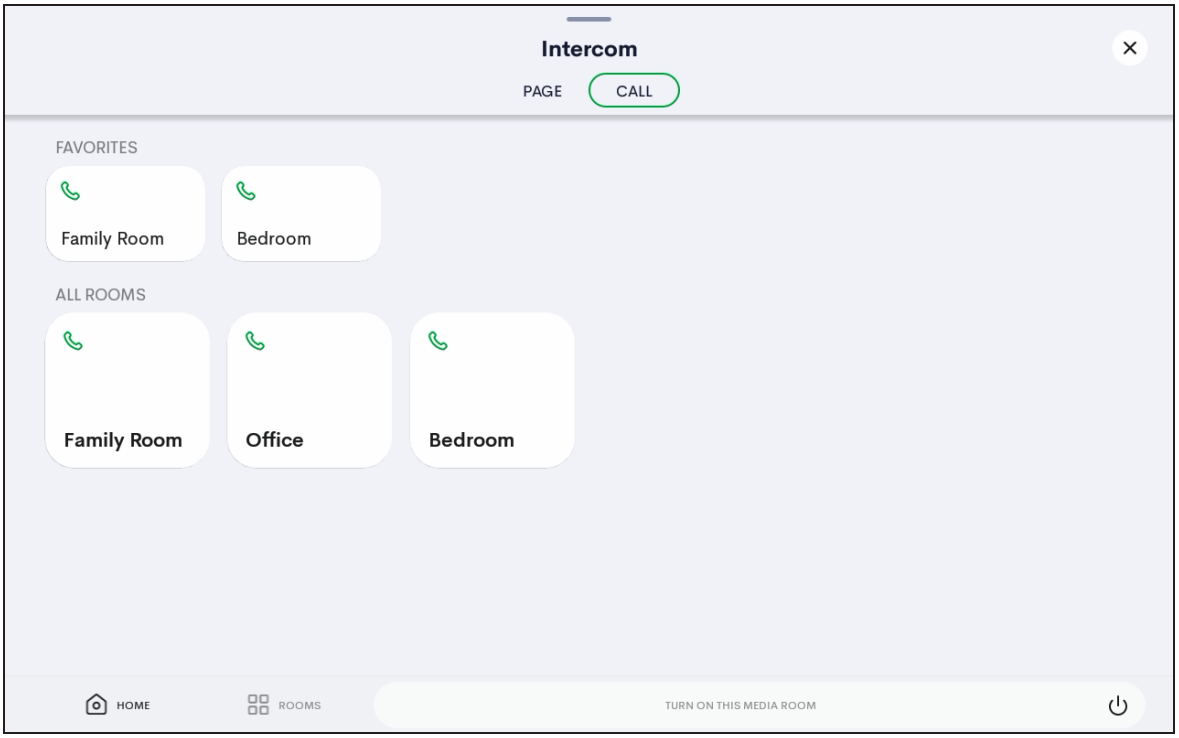
TSW panels can reply to pages. Tap and hold the speaker button to reply to the page.



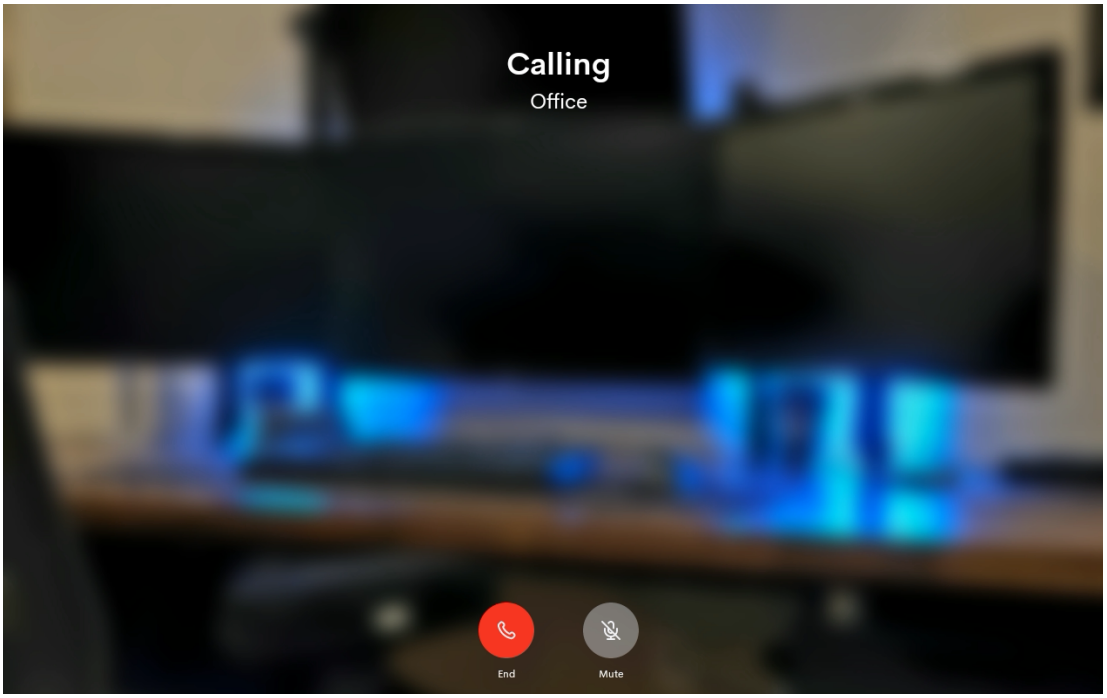
Calling

Calls enable two-way real-time communication between two touch panels. Make a call using the **Intercom** tile on the home page.

1. Tap the **Intercom** tile.
2. At the top of the screen, tap **CALL**.

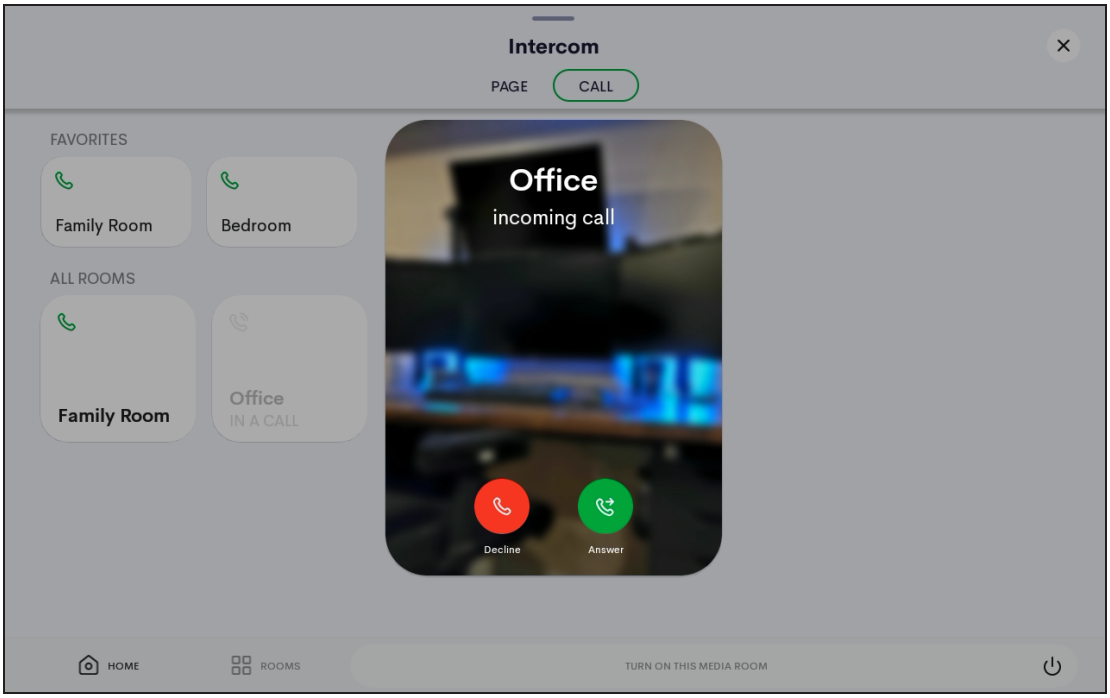


3. Select a room to initiate a call.



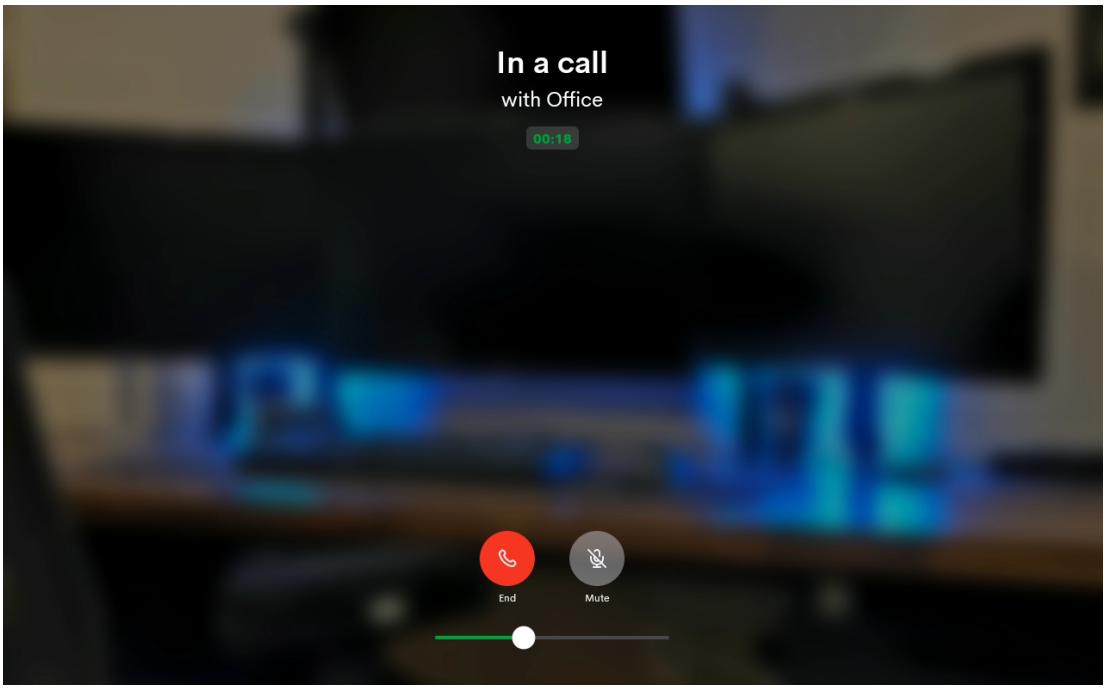
While a call is in progress, consider the following:

- The touch screen receiving the call will display a pop-up showing the room that is sending the call.



- If media is playing in the room, the volume may be lowered depending on the available support of the audio endpoint:
    - Devices that support audio ducking or set volume will have the volume lowered.
    - Devices that only support audio mute will have the volume muted.
    - Devices that do not support audio mute, audio ducking, or set volume, audio will not be changed while the page is played.

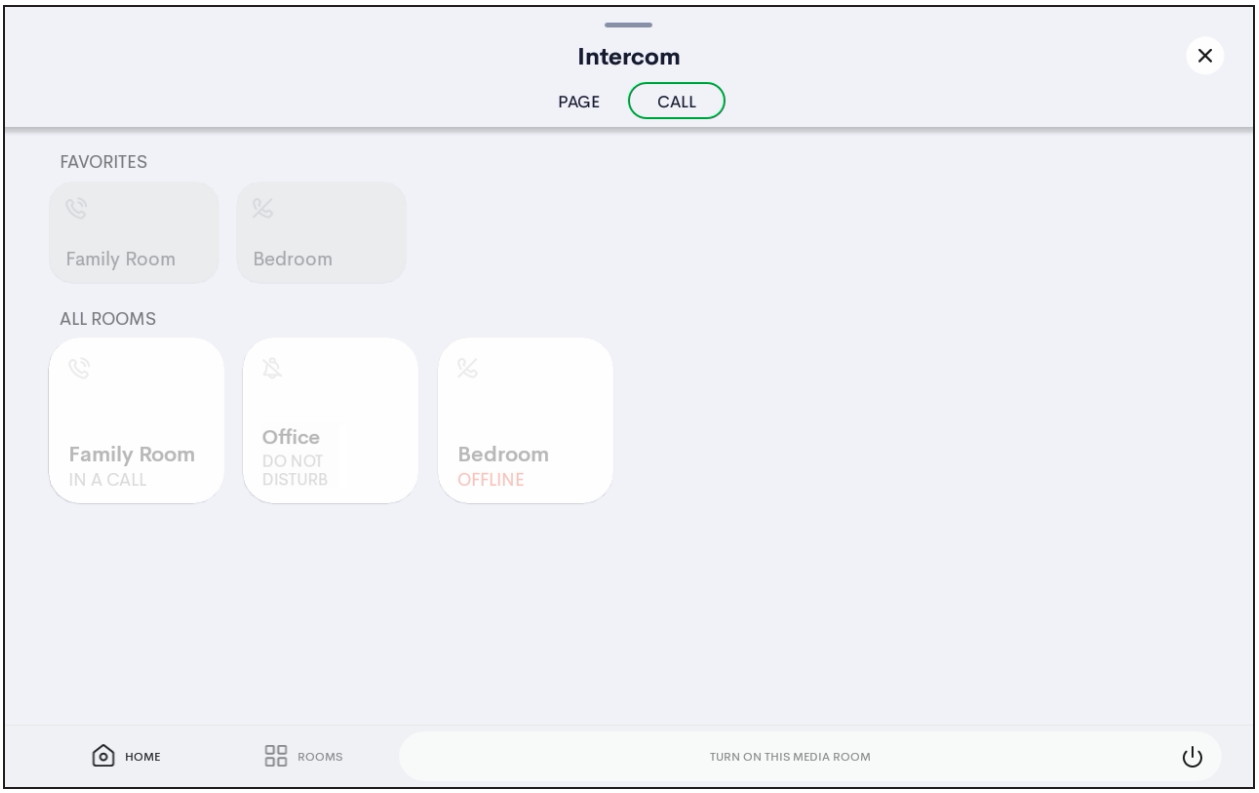
- Use the controls at the bottom of the screen to **End** or **Mute** the call. The slider adjusts the call volume.



- Rooms that are offline or in Do Not Disturb mode will be identified on the touch screen that is initiating the call. These rooms cannot receive a call.

Calling Statuses

Rooms listed as **DO NOT DISTURB**, **IN A CALL**, or **OFFLINE**cannot receive calls.


Intercom
PAGE
CALL
FAVORITES
Family Room
Bedroom
ALL ROOMS
Family Room
IN A CALL
Office
DO NOT
DISTURB
Bedroom
OFFLINE
HOME
ROOMS
TURN ON THIS MEDIA ROOM

Apple AirPlay Control

Use Apple® AirPlay® to stream audio from an AirPlay-enabled device (such as an iPhone, iPad, iPod, or Mac) to a to a Crestron Home system that uses a DM-NAX-8ZSA 8-zone streaming amplifier. The DM NAX™ device can play the streamed audio in any room that it is connected to.

The AirPlay-enabled device must be on the same Wi-Fi® wireless or Ethernet network as the Crestron Home system.

Stream Audio

To stream audio using an AirPlay-enabled device:

1. Play music on the device.
2. In the Control Center or music app, tap **AirPlay**.
3. Each room in the system that can play the source is listed as a speaker in the list of **Speakers & TVs**. To stream audio to a room, select a room in the Crestron Home system.

Control Streaming Content

Control the music, including the volume, from the Crestron Home app or the AirPlay-enabled device.

Active Media and AirPlay

Active media in the Crestron Home system may behave differently when using room groups and using AirPlay to stream content.

Scenario 1

Situation:

1. Play music in Room 1 using a built-in streaming service (for example, Pandora or Internet Radio).
2. Create a group with Rooms 1, 2, and 3.
3. Use AirPlay to stream to Room 1.

Result:

- The room group is cleared.
- Rooms 2 and 3 are powered off.
- Room 1 plays the streamed content.

Scenario 2

Situation:

1. Play music in Room 1 using a built-in streaming service (for example, Pandora or Internet Radio).
2. Create a group with Rooms 1, 2, and 3.
3. Use AirPlay to stream to Room 2.

Result:

- Rooms 1 and 3 continue to play the original streaming source.
- Room 2 is removed from the group.
- Room 2 plays the streamed content.

Scenario 3

Situation:

1. Use AirPlay to stream to Room 1.
2. Use the Crestron Home app to create a group with Rooms 1, 2, and 3

Result:

- Rooms 1, 2, and 3 play the streamed content.
- The Control Center or music app reports that only Room 1 is selected for streaming.

Scenario 4

Situation:

1. Use AirPlay to stream to Room 1.
2. Create a group with Rooms 1, 2, and 3.
3. Remove Room 1 from the group.

Result:

- The room group is cleared.
- Rooms 1, 2 and 3 are powered off.
- In the Control Center or music app, the selected room is cleared.

Scenario 5

Situation:

1. Use AirPlay to stream to Room 1.
2. Create a group with Rooms 1, 2, and 3.
3. Stop streaming.

Result:

- The room group is cleared.
- Rooms 1, 2 and 3 are powered off.

Spotify Connect

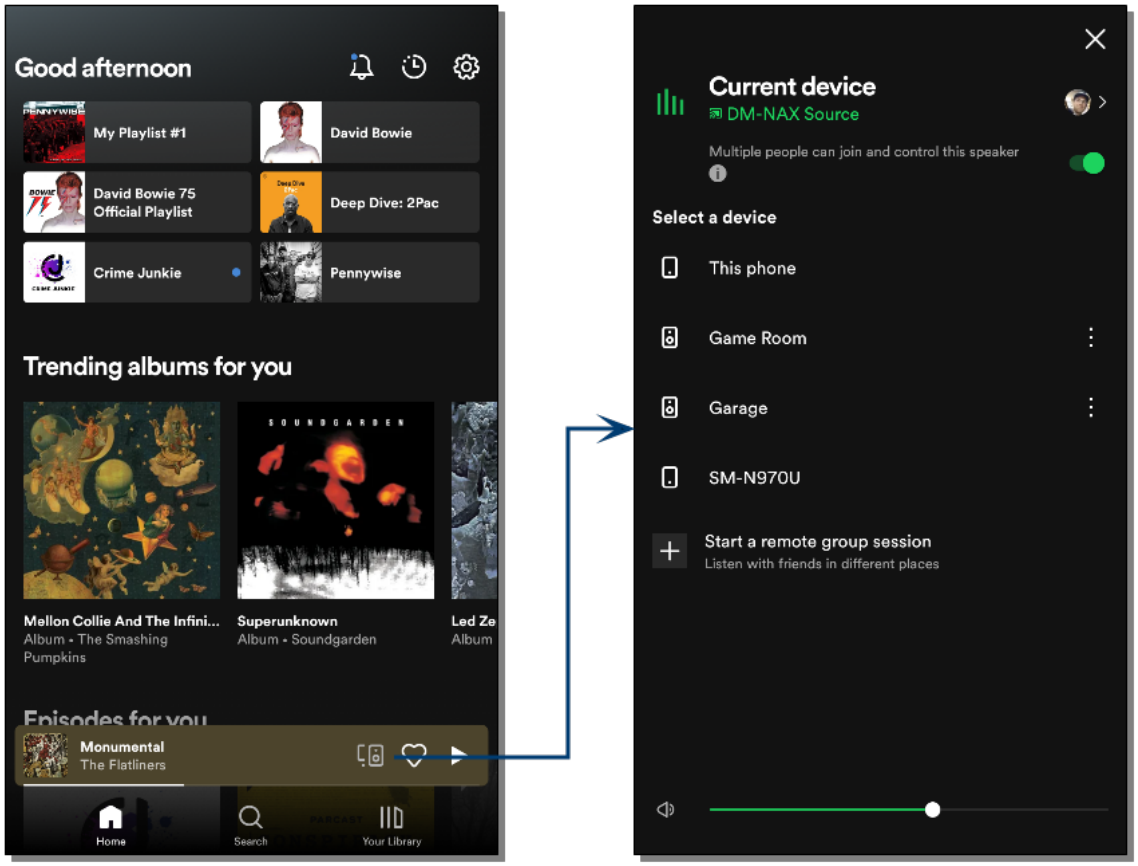
Use Spotify Connect™ in the Spotify® app on a third-party device. Spotify is available for Crestron Home systems that use a DM NAX™ streaming device (DM-NAX-8ZSA or DM-NAX-4ZSA) with Spotify enabled.

> **NOTES:** The third-party device must be connected to the same local network (Wi-Fi® wireless or Ethernet network) as the Crestron Home system to utilize Spotify Connect features.

Stream Audio

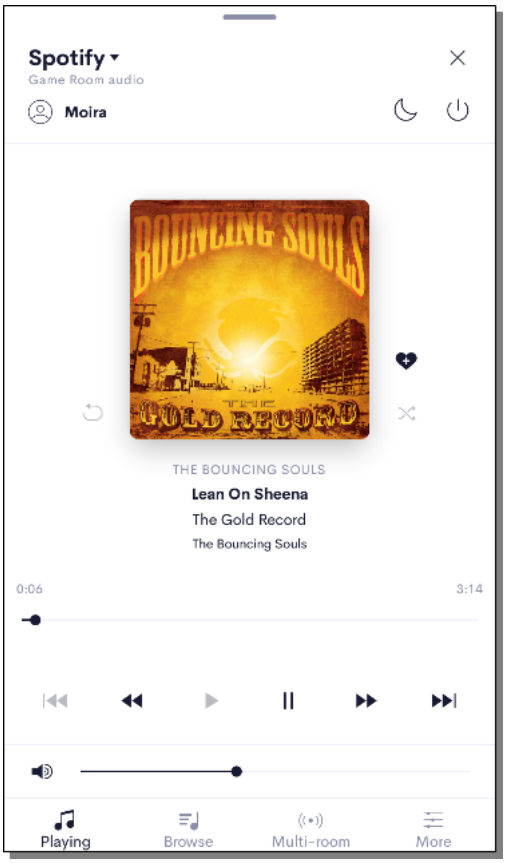
To stream audio using Spotify Connect, select **Connect Device** on the third-party device and then select a room speaker.

> **NOTE:** Other devices in the system will also display in the list, such as Google Cast, AirPlay, and Bluetooth devices. To use Spotify with AirPlay, refer to Apple AirPlay Control on page 911.



Control Streaming Content

To control the music, use the controls in the Crestron Home app or a device using the Spotify app. Control actions are synced between all devices.



Multi-Room

Stream music to multiple rooms. For details, refer to Play Audio in Multiple Rooms on page 888.

More

To control advanced speaker settings, select **More**.

Active Media and Spotify Connect

Active media in the Crestron Home system may behave differently when using room groups with Spotify Connect to stream content.

Scenario 1

Situation:

1. Play music in Room 1 using a built-in streaming service (for example, Pandora or Internet Radio).
2. Create a group with Rooms 1, 2, and 3.
3. Use Spotify Connect to stream to Room 1.

Result:

- The room group is cleared.
- Rooms 2 and 3 are powered off.
- Room 1 plays the streamed content.

Scenario 2

Situation:

1. Play music in Room 1 using a built-in streaming service (for example, Pandora or Internet Radio).
2. Create a group with Rooms 1, 2, and 3.
3. Use Spotify Connect to stream to Room 2.

Result:

- Rooms 1 and 3 continue to play the original streaming source.
- Room 2 is removed from the group.
- Room 2 plays the streamed content.

Scenario 3

Situation:

1. Use Spotify Connect to stream to Room 1.
2. Use the Crestron Home app to create a group with Rooms 1, 2, and 3

Result:

- Rooms 1, 2, and 3 play the streamed content.
- The Spotify app reports that only Room 1 is selected for streaming.

Scenario 4

Situation:

1. Use Spotify Connect to stream to Room 1.
2. Create a group with Rooms 1, 2, and 3.
3. Remove Room 1 from the group.

Result:

- The room group is cleared.
- Rooms 1, 2 and 3 are powered off.
- In the Spotify app, the selected room is cleared.

Scenario 5

Situation:

1. Use Spotify Connect to stream to Room 1.
2. Create a group with Rooms 1, 2, and 3.
3. Stop streaming.

Result:

- The room group is cleared.
- Rooms 1, 2 and 3 are powered off.

Apple Shortcuts to Run Quick Actions and Scenes

Use the Apple Shortcuts app to create shortcuts that run Crestron Home Quick Actions and Crestron Home Scenes. Shortcuts can be run from the Shortcuts app, Siri voice commands, or an Apple Watch.

NOTES:

- To create and run Apple Shortcuts, the device initiating the shortcut must be connected to the same local network as the Crestron Home system.
- For help with Apple devices, including configuration and operation, refer to Apple Support.

Create Apple Shortcuts

Use an Apple iPhone or iPad device to create shortcuts

NOTES:

- The same device must be used for the duration of this procedure.
- For users with multiple homes, open the Crestron Home app and select the home with the Quick Action or Scene that you want to use. The Shortcuts app uses the selected home to generate a list of Quick Actions and Scenes.
- If the home or Crestron Home Quick Action is deleted, an error message is displayed by the Shortcuts app indicating that the Shortcut should be reconfigured.

To create a Shortcut:

1. Open the Shortcuts app on the iPhone or iPad.
2. Select **New Shortcut > Apps** and then select the **Crestron Home** app.
3. Select **Run Quick Action** or **Run Scene** to add the action to the shortcut.
4. Assign a **Crestron Home Quick Action** or **Crestron Home Scene** to the action:
    a. **Quick Action:** Select **Quick Action** and then choose a **Crestron Home Quick Action**.
    b. **Scene:** Select a scene category from the **Select Scene Type** menu and then select a **Crestron Home Scene** from the **Select Scene** menu.
5. To show the Shortcut on an Apple Watch, select **Information** and then **Show on Apple Watch**.

Run Apple Shortcuts

Use the Shortcuts app, Shortcuts widget or Home Screen on your iPhone, iPad, or iPod touch, Apple Watch, or Siri to run shortcuts that recall Crestron Home Quick Actions and Crestron Home Scenes. When running a shortcut, a check mark is displayed to indicate that the shortcut ran successfully.

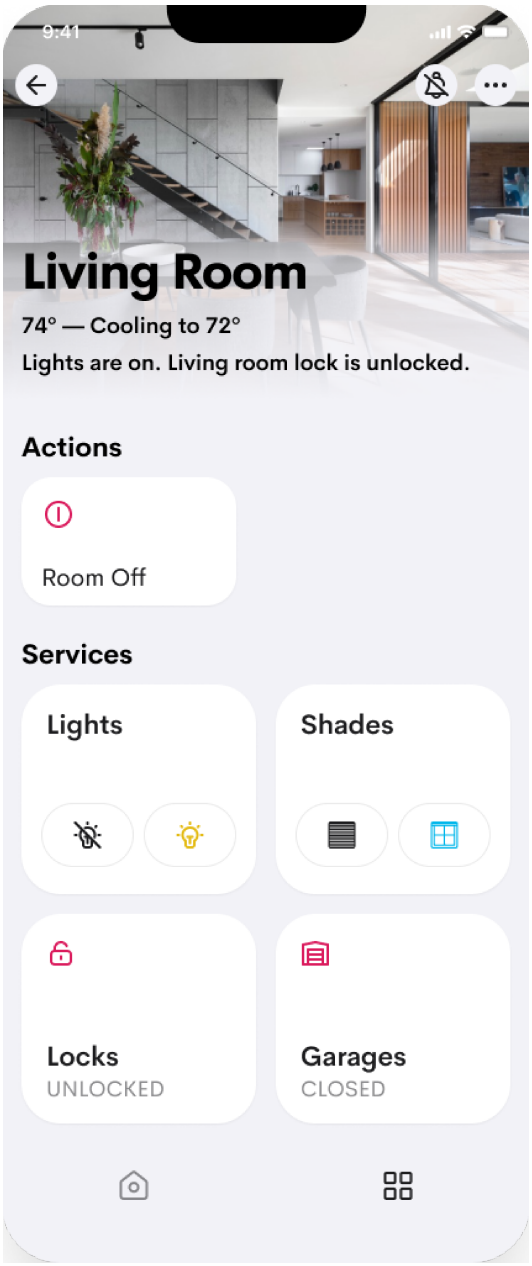
- **Apple Watch:** View the available shortcuts and then select the action to run. The watch must have an active bluetooth connection with the iPhone.
- **Voice Control:** Ask Siri to run the shortcut. Use the name of the shortcut in the command.
- **Automation:** Use the Automation feature in the Shortcuts app to create personal automations that run shortcuts automatically.

For additional information, visit the Shortcuts User Guide.

> **NOTE:** If the home or Crestron Home Quick Action is deleted, an error message is displayed by the Shortcuts app indicating that the Shortcut should be reconfigured.

Control Locks

Use the **Locks** screen to control the locks in the room.

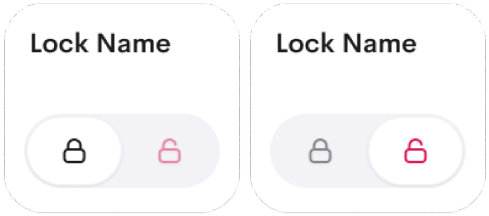


Tile Types

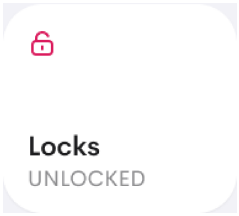
A device control or navigational tile may be displayed.

- **One lock in room:** A control tile is displayed. Tap the tile to open and close the lock.

  Lock Control Tile - Locked (Left) and Unlocked (Right)

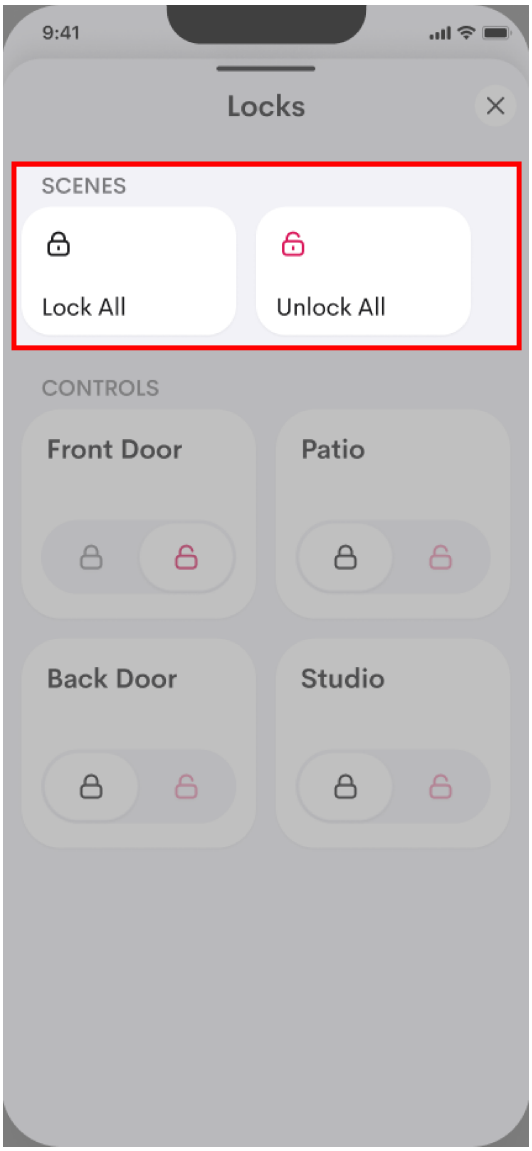
  

- **Multiple locks in room:** A navigational tile is displayed. Tap the tile to open the Locks screen and control the locks with scenes or individually. For details, refer to Scenes on page 921 and Controls on page 922.

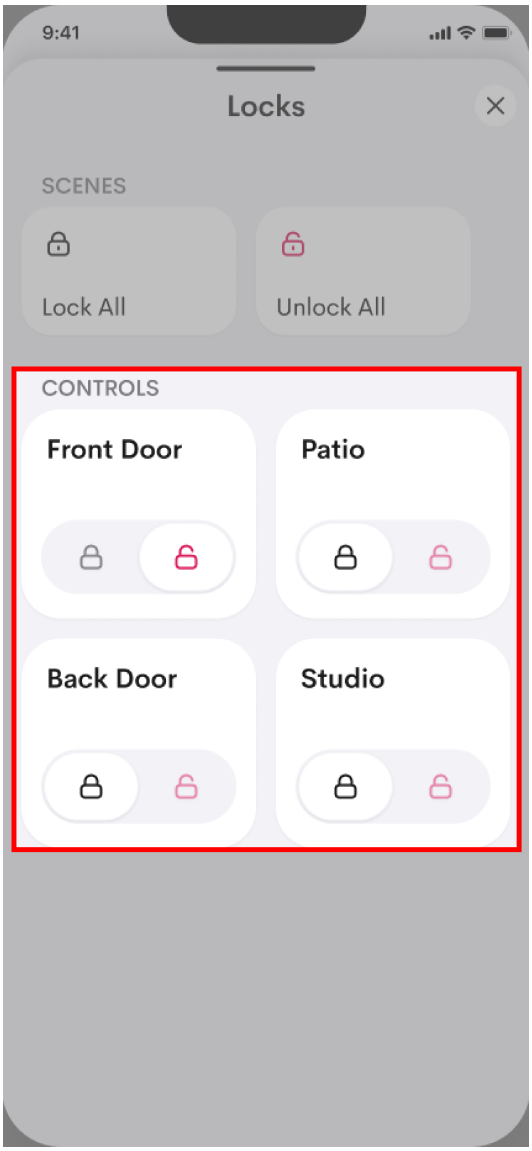
Scenes

The **Scenes** menu displays the lock scenes in the room. Select **Lock All** or **Unlock All** to lock or unlock all locks in the room.



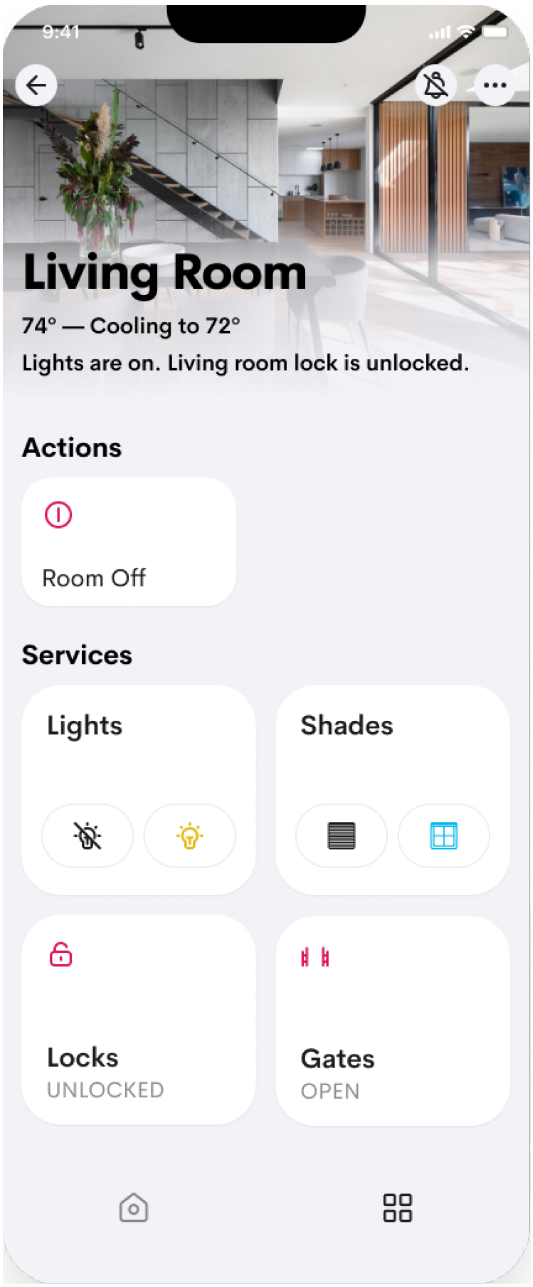
Controls

The **Controls** menu displays the individual lock controls in the room. Select **Lock** or **Unlock** to lock or unlock the lock in the room.



Control Gates

Use the **Gates** screen to control the gates associated with the room.

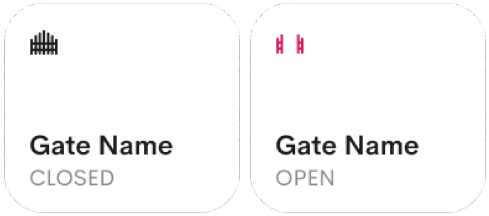


Tile Types

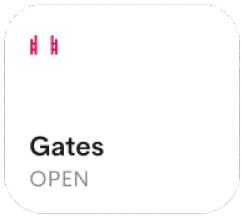
A device control or navigational tile may be displayed.

- **One gate in room:** A control tile is displayed. Tap the tile to open and close the gate.

  Gate Control Tile - Closed (Left) and Open (Right)

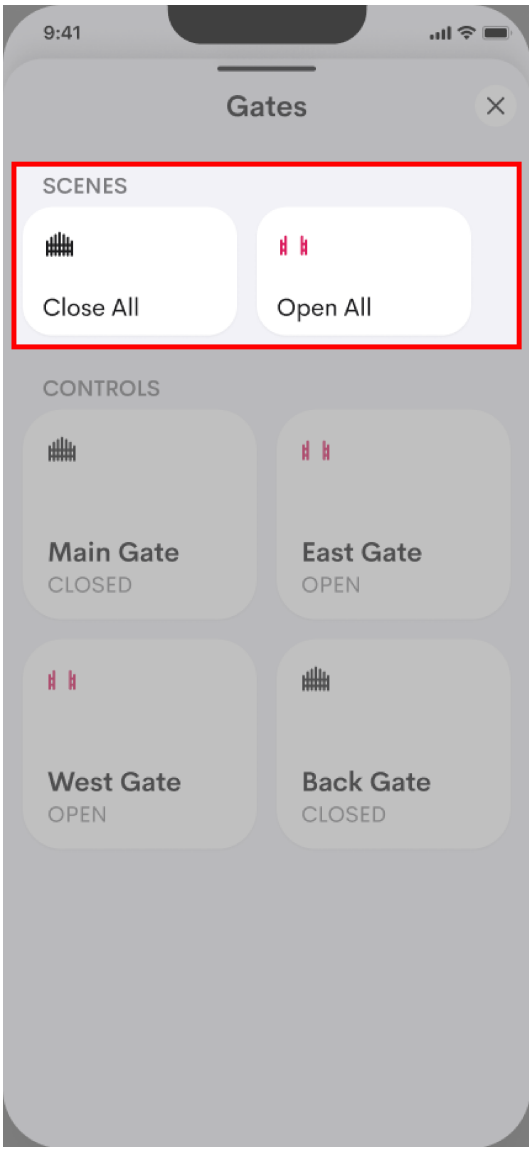
  

- **Multiple gates in room:** A navigational tile is displayed. Tap the tile to open the Gates screen and control the gates with scenes or individually. For details, refer to Scenes on page 925 and Controls on page 926.

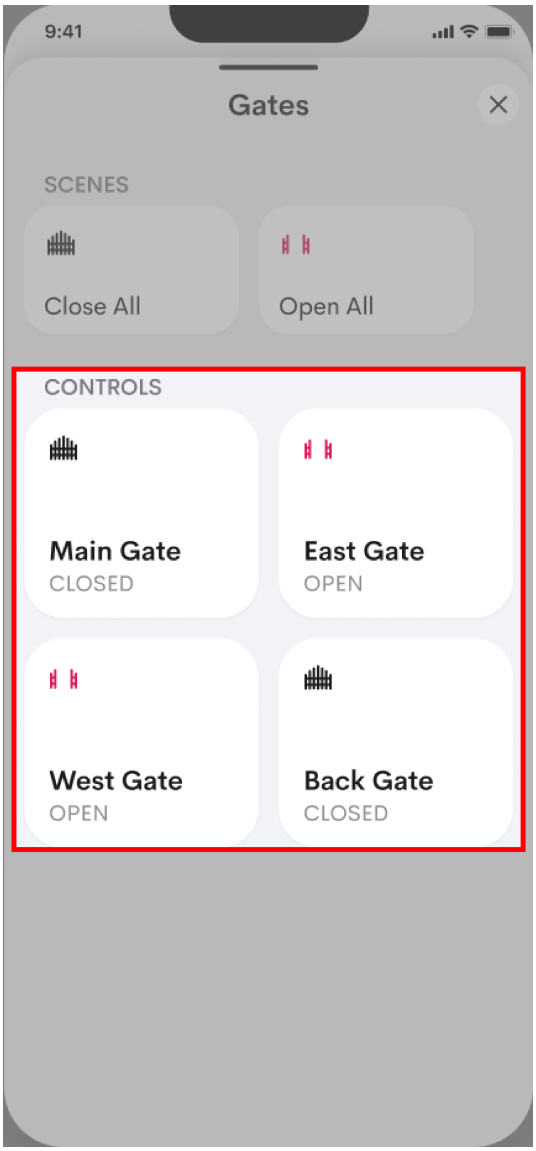
Scenes

The **Scenes** menu displays the gate scenes in the room. Select **Close All** or **Open All** to close or open all gates associated with the room.



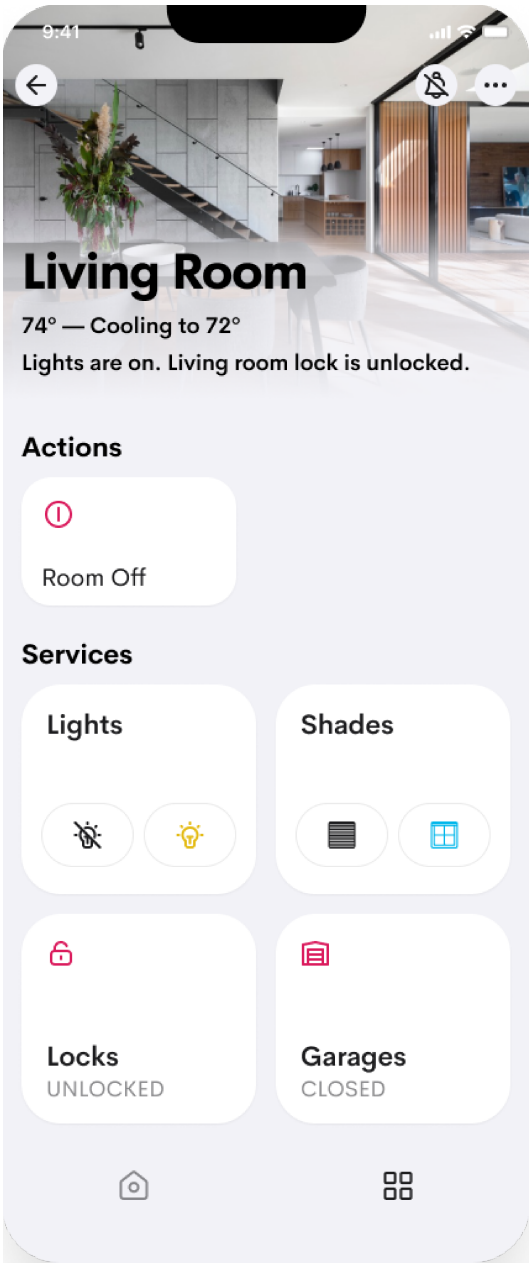
Controls

The **Controls** menu displays the individual gate controls in the room. Select **Close All** or **Open All** to close or open the gate associated with the room.



Control Garage Doors

Use the **Garage Door** screen to control the garage doors associated with the room.

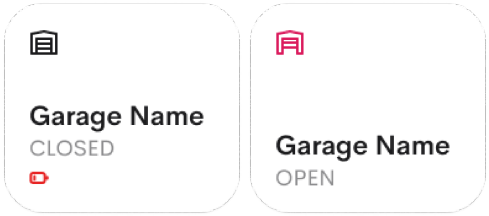


Tile Types

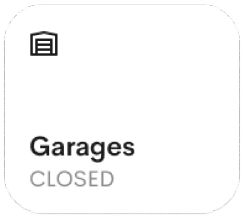
A device control or navigational tile may be displayed.

- **One lock in room:** A control tile is displayed. Tap the tile to open and close the lock.

  Garage Control Tile - Closed (Left) and Open (Right)

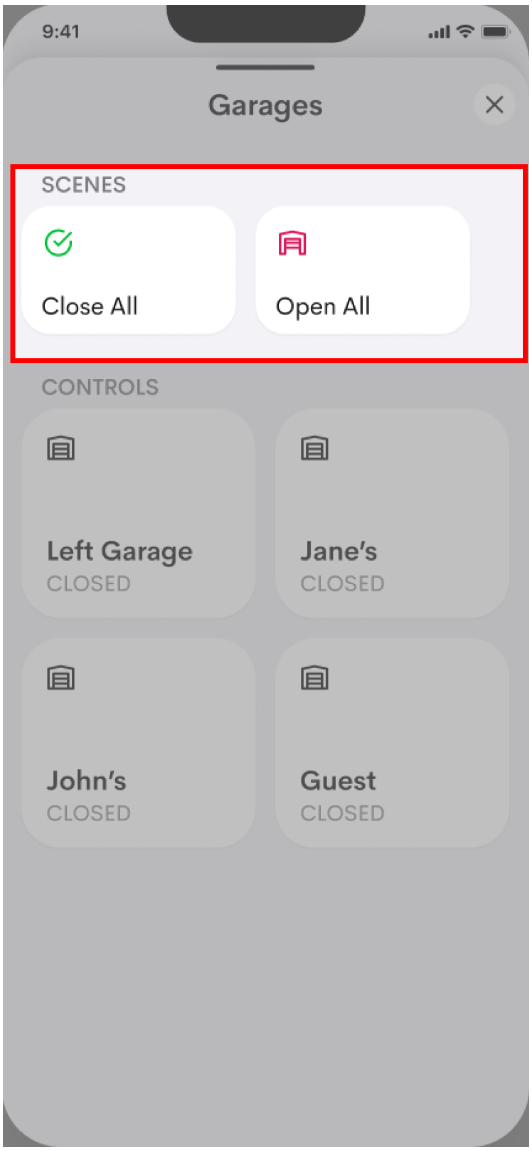
  

- **Multiple locks in room:** A navigational tile is displayed. Tap the tile to open the Garages screen and control the garages with scenes or individually. For details, refer to Scenes on page 929 and Controls on page 930.

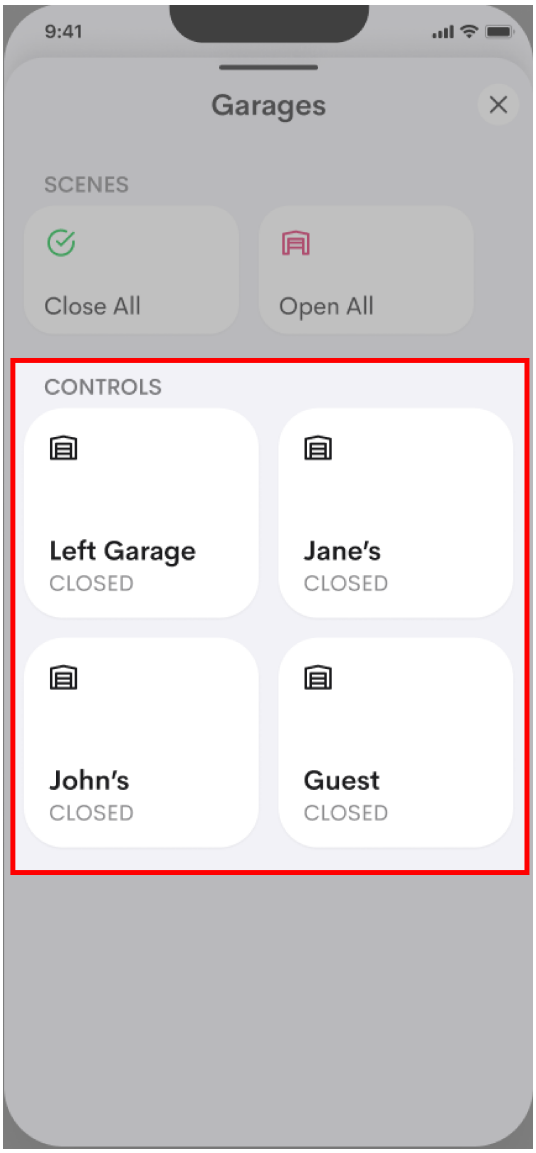
Scenes

The **Scenes** menu displays the garage door scenes in the room. Select **Close All** or **Open All** to close or open all garage doors associated with the room.



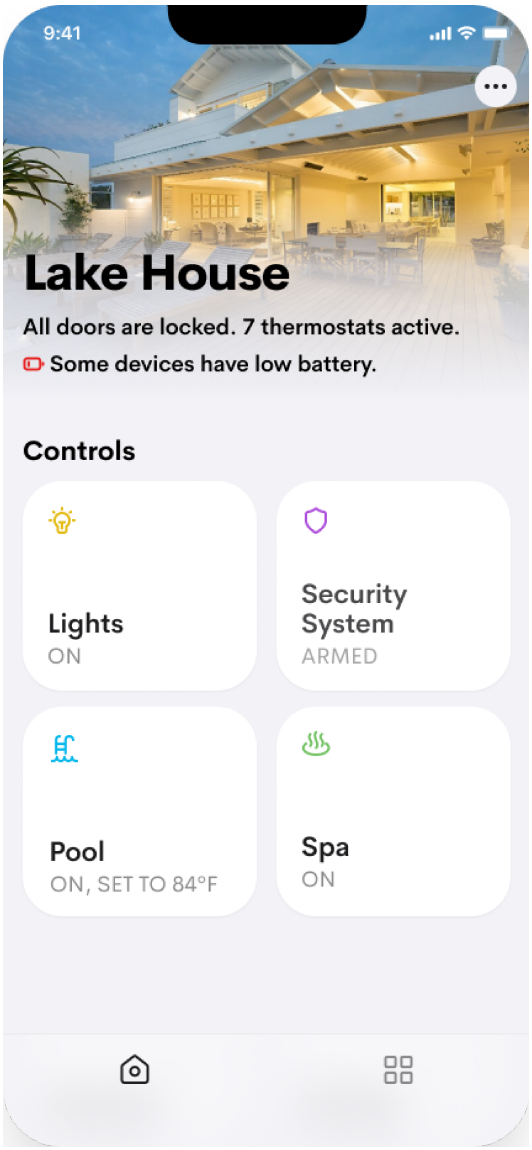
Controls

The **Controls** menu displays the individual garage door controls in the room. Select **Close** or **Open** to close or open the garage door associated with the room.



Control Pools and Spas

Use the Pool and Spa screens to control the pools and spas associated with the system.

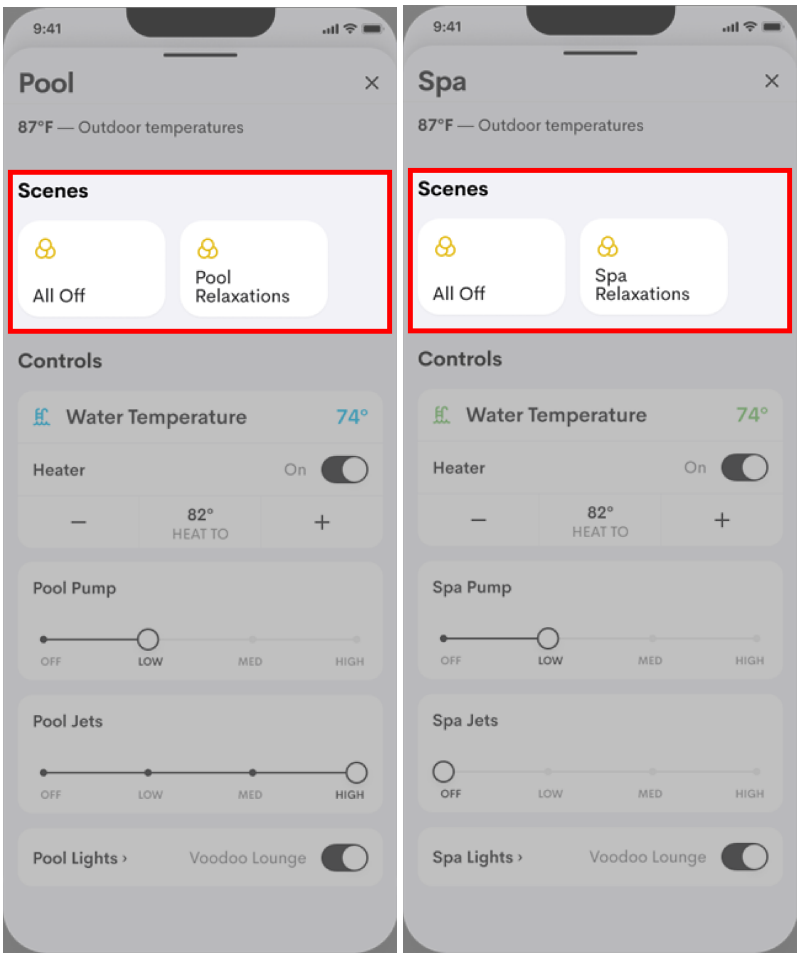


Scenes

Tap any of the available scenes to activate them.

> **NOTE:** Scenes are customized by your Crestron Home installer. The functionality is custom to the devices in the room, house, and your preferences.

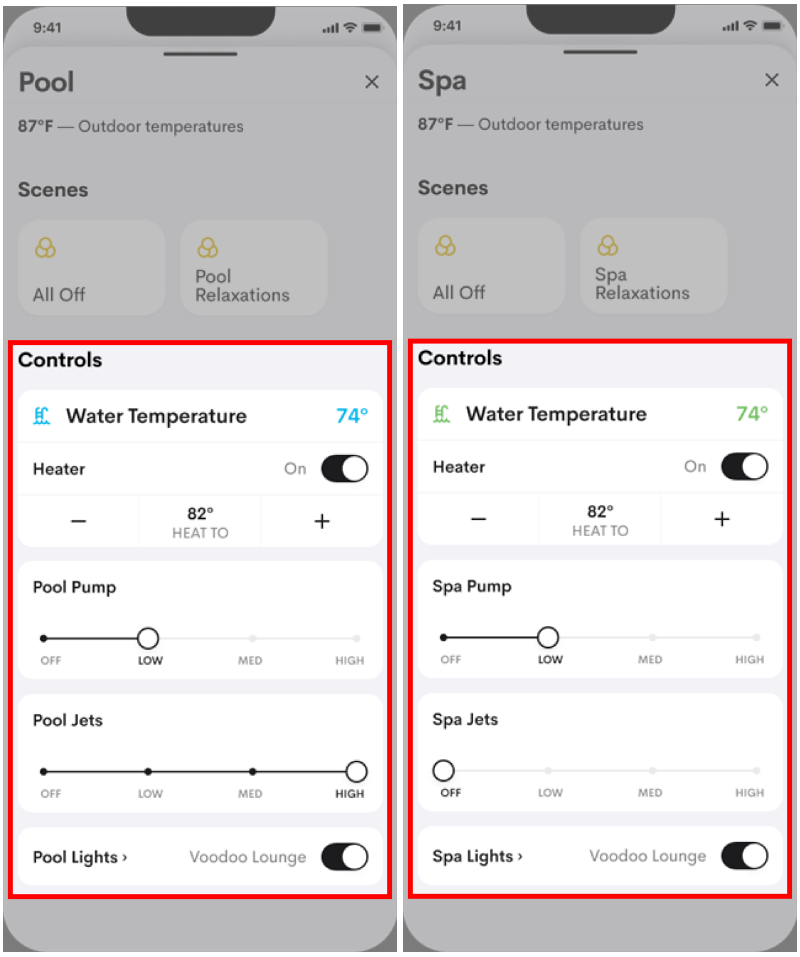
Pool (Left) and Spa (Right) Scenes



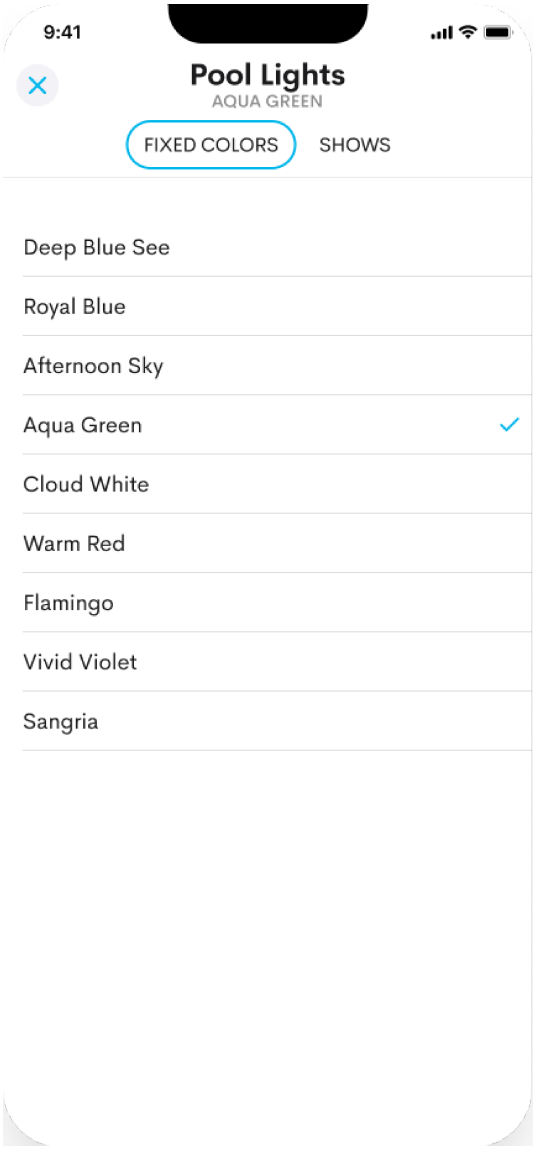
Controls

Control individual features for the pool. To control the pool, tap the toggle switches, drag the sliders left or right, or press the **+ Raise** or **- Lower**.

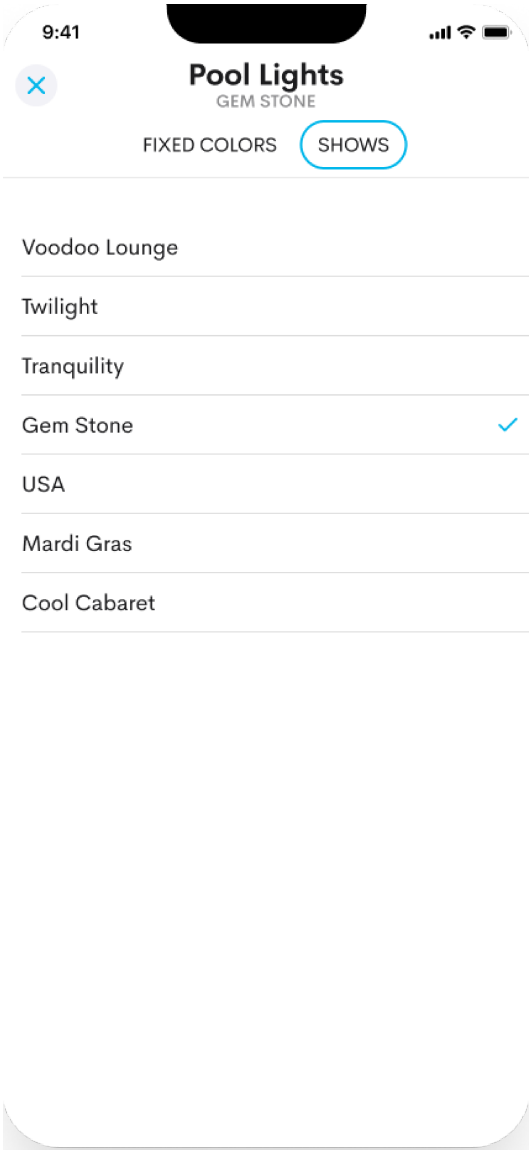
Pool (Left) and Spa (Right) Controls



Pool and Spa Lights - Fixed Colors



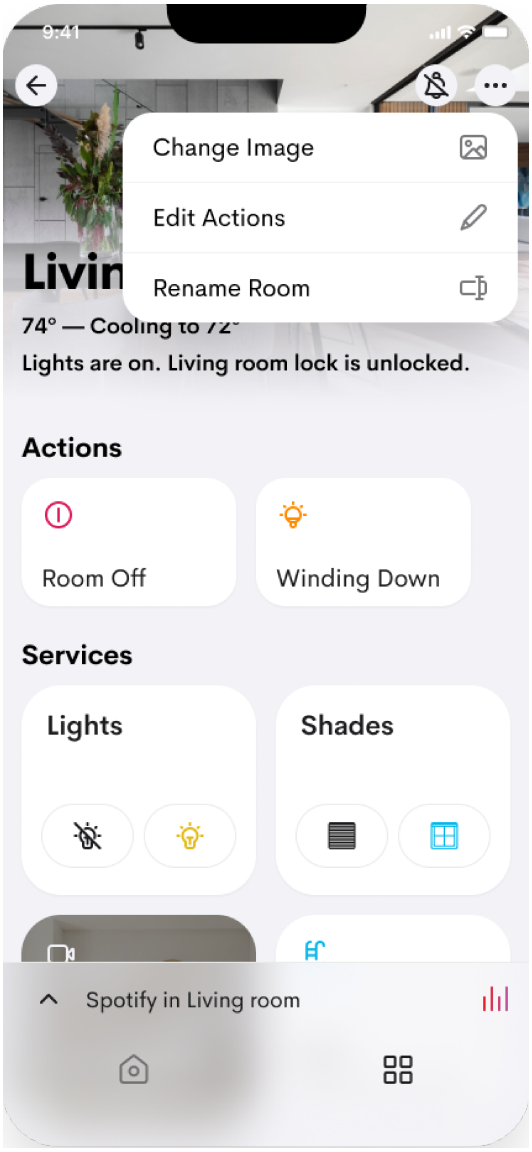
Pool and Spa Lights - Shows



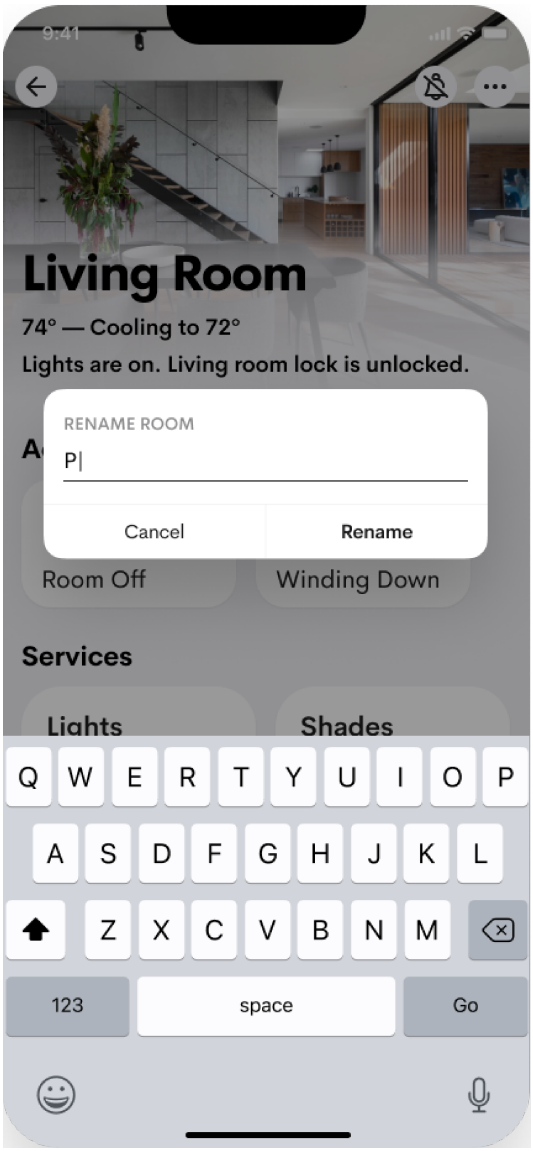
Rename a Room

To change the name of a room from within the Crestron Home app:

1. Tap the room ••• **Menu** button and then select **Rename Room**.



2. The **Room Rename** dialog displays. Use the on-screen keyboard to enter a new name and then tap **Rename**.



3. If voice control is enabled for the room, you will be prompted to rediscover your devices.
    - **Amazon Alexa:** Say "Alexa, discover my devices."
    - **Google Assistant:** Say "OK Google, sync my devices."

Edit Actions

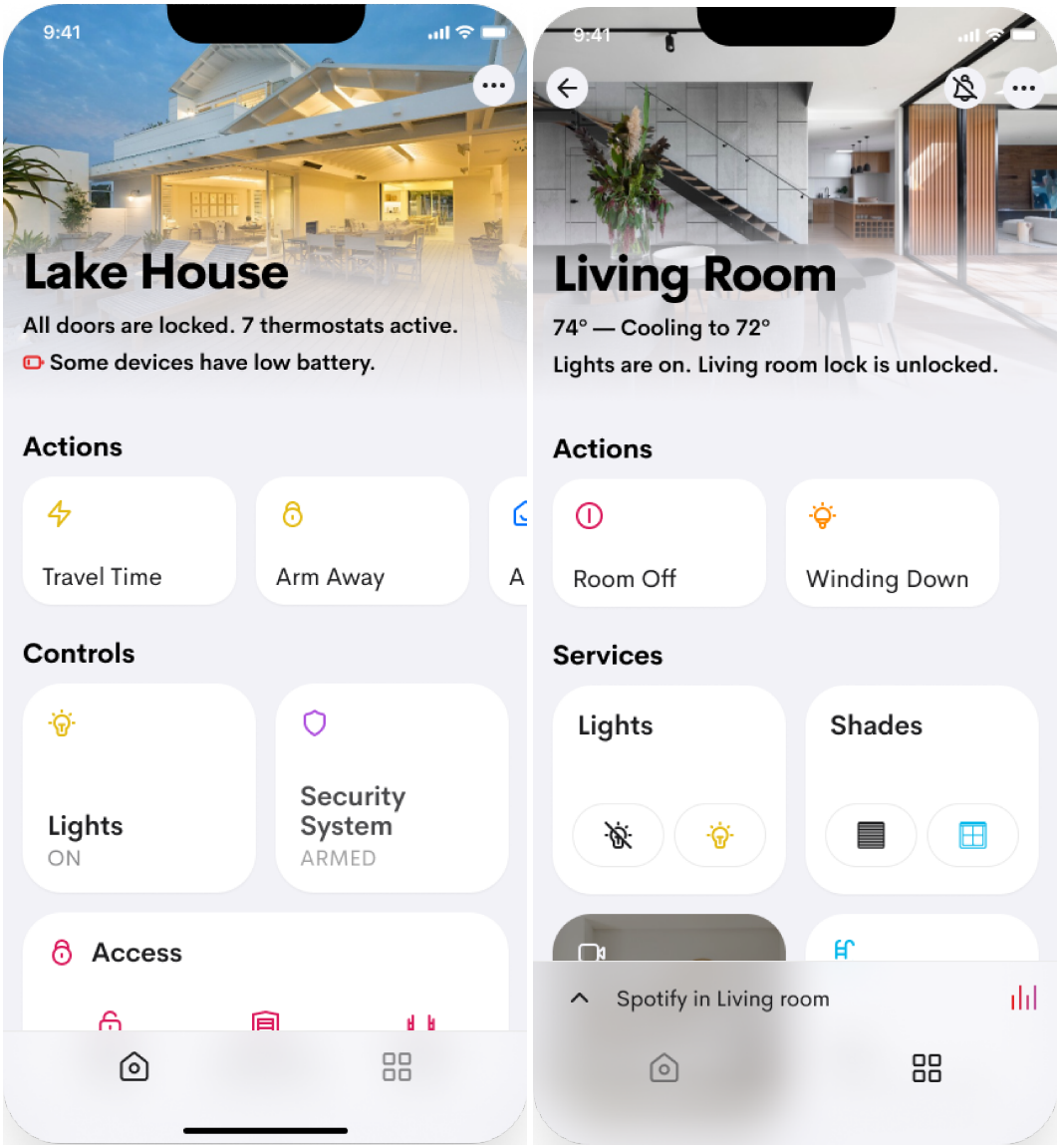
Use the **Actions** to perform several functions at the same time. For example, a quick action can be created that controls the lights, shades, and television in a room.

To change the order of the Actions or the Action icon, refer to Edit Actions on page 938.

NOTES:

- The Crestron Home app displays up to 20 Actions.
- Actions are customized by Crestron Home installer using the Crestron Home Setup app. The functionality is custom to the devices in the room, house, and your preferences.

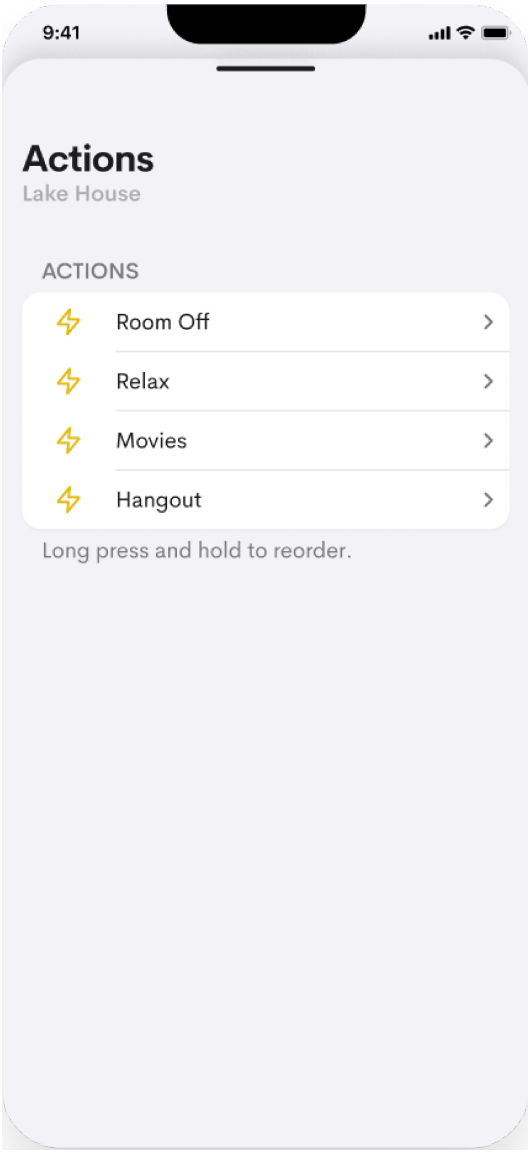
Actions - Home Tab (Left) and Room Details (Right)



Reorder Actions

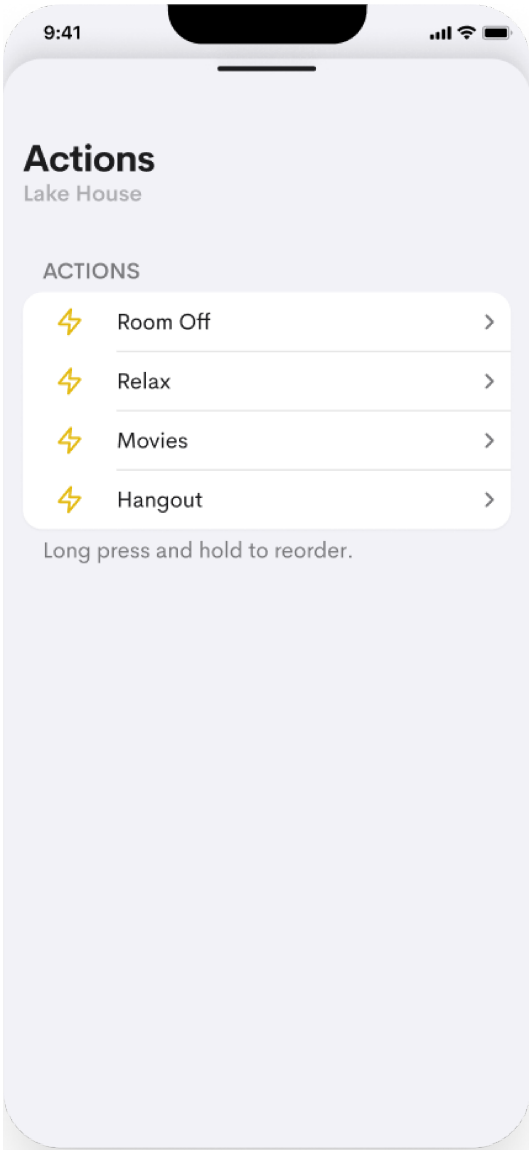
To reorder Actions:

1. Select ••• **Menu** and then **Edit Actions**.
2. Select and hold a Action and then drop it in the desired location.

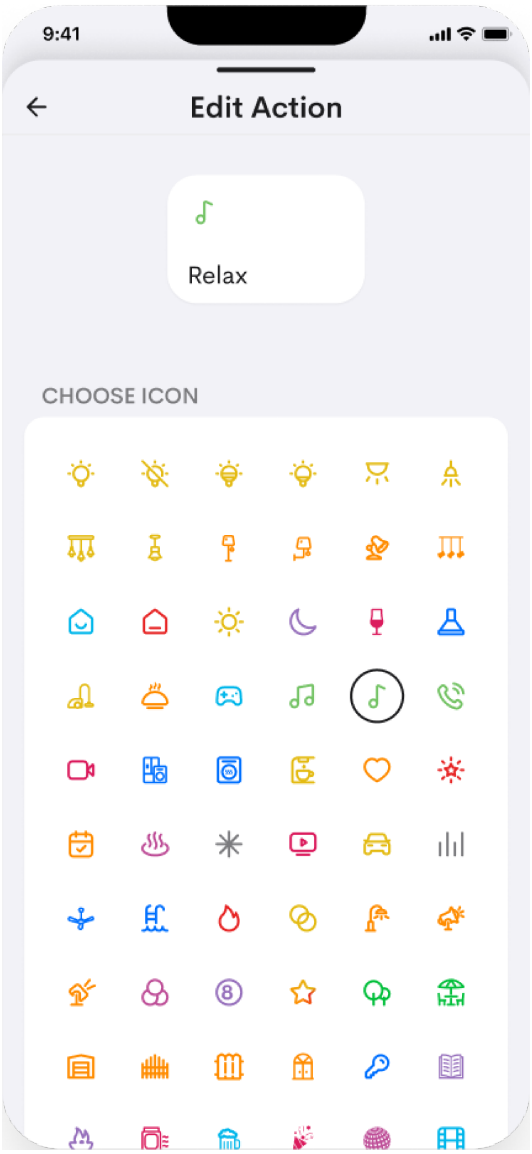


Change Action Icon

1. Select ••• **Menu** and then **Edit Actions**.
2. Select an Action.



3. Select an icon. The default icon is ⚡.



4. To save and exit, select ← **back**.

Put a Display to Sleep (Touch Screens Only)

If enabled, the Crestron touch screen can be placed into sleep mode. The touch screen screensaver configuration determines if the display activates the screen saver or turns the display off. If the screen saver is enabled, the screen saver is displayed. To configure the screen saver, refer to Display on page 1036.

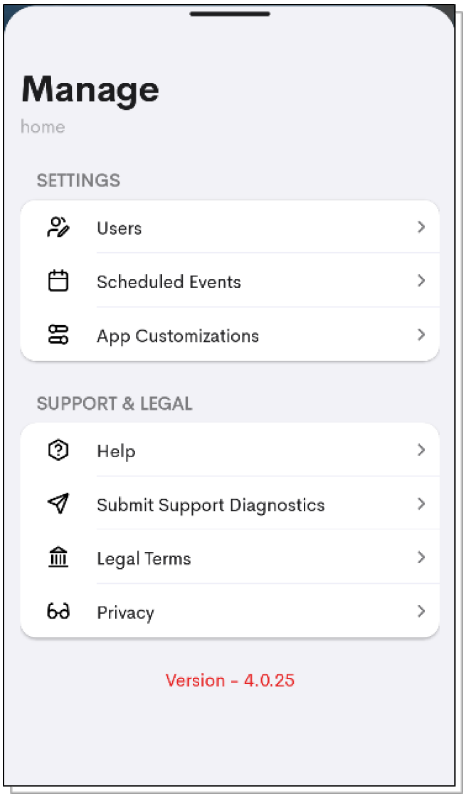
To put the touch screen display to sleep, select the Panel Sleep, Screen Sleep, or Standby button. The Action may be configured to perform other actions.

Settings

Change the settings and customize the appearance and functionality of the device using the settings that are available on the Manage screen.

To view the **Manage** screen, go to **More > Settings**.

Settings - Mobile Devices



This section provides the following information:

- Users
- Claim a New Home
- Claim an Existing Home
- Invite Users with a Remote Connection
- Invite Users with a Local Connection
- Edit Name
- Change E-mail
- Change Password
- Change Phone Number
- Change User Role
- Remove User

- Sign Out
- Delete Account
- Smart Access
- Streaming Music Services
- Scheduled Events
- Display Mode
- Connection Editing (Mobile Devices Only)
- App Customization

Users

Use the **Users** setting screen to claim a home, update profile information, manage users, and configure music services. To open the **Users** settings screen, go to **More > Settings > Users**.

Pair a mobile iOS® Device or Android™ Device using the Secure Remote Connection on page 945 (recommended) or the Local Connection on page 965.

> **NOTE:** When using a Crestron Cloud account for secure remote access the account will be signed out after 90 days of inactivity. This will require the user to sign back in when they next use the application. If a third-party service is used for secure remote access the user is signed out based on rules set by the service and does not apply to the 90 day timeout.

Secure Remote Connection

The remote connection is secure and does not require port-forwarding. Use the secure remote connection to do the following:

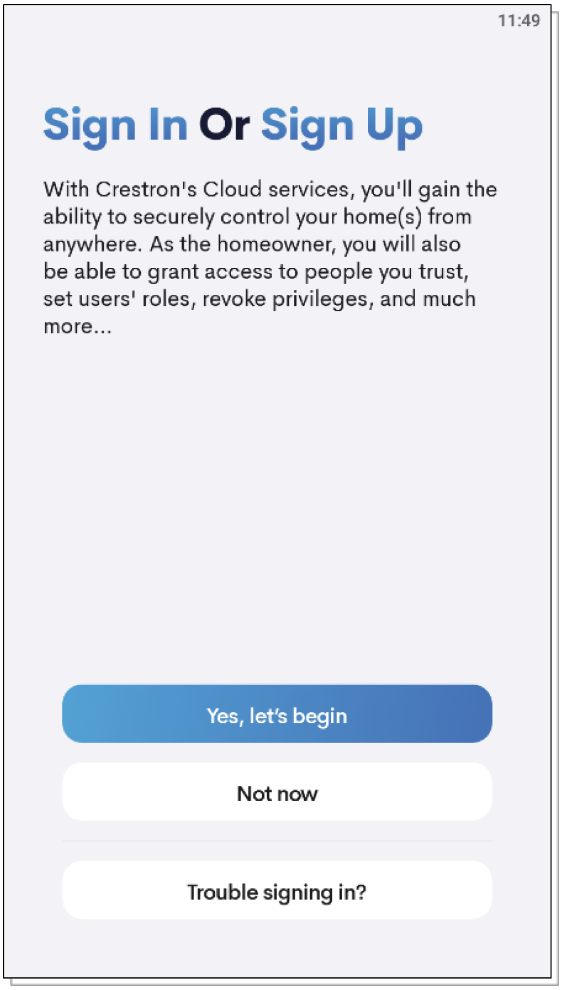
- Create an account and sign in.
- Claim a home.
- Invite and manage users.
- Manage account settings.

Create an Account using an Email Address

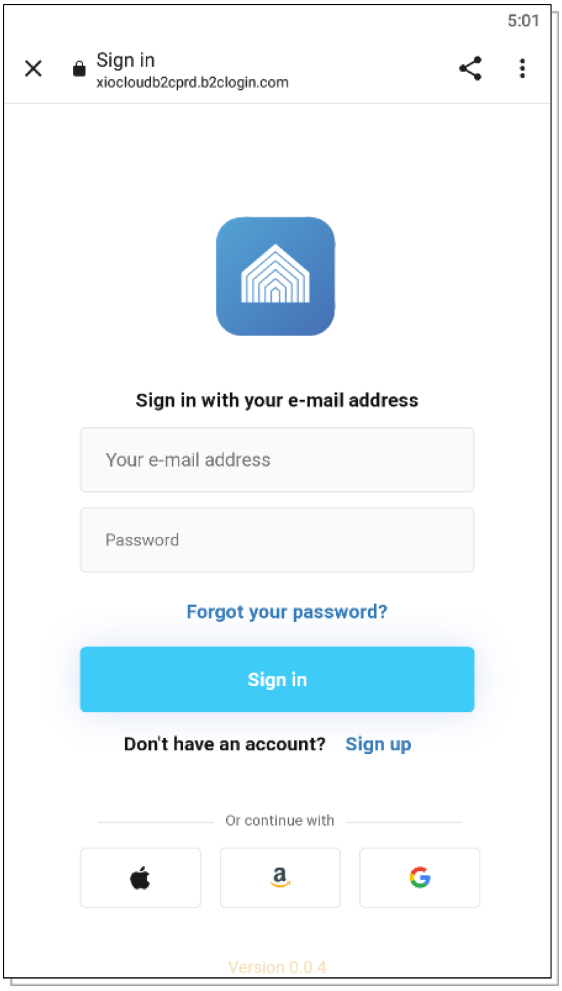
Create an account to control the home from outside the wireless network.

To sign up using an email address:

1. Select **Yes, let's begin**.



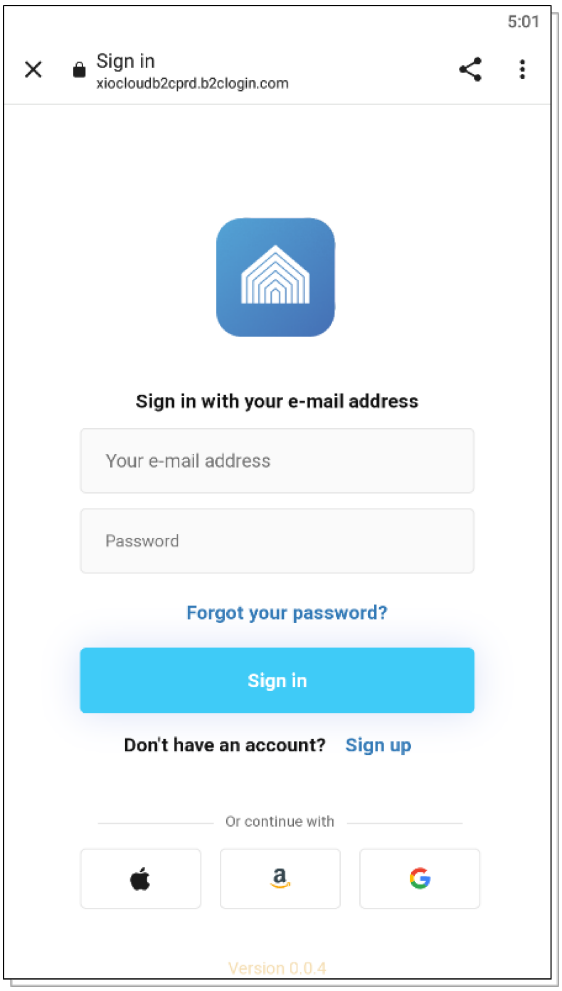
2. Select **Sign up**.



3. Follow the on-screen prompts to create an account. An email address and phone number is required to create an account. Two-factor authentication is used to verify the email address and phone number that is provided. Additionally, a display name and password will be selected.

Sign In with Email Address

1. Select **Yes, let's begin**.
2. Enter your e-mail address and password.

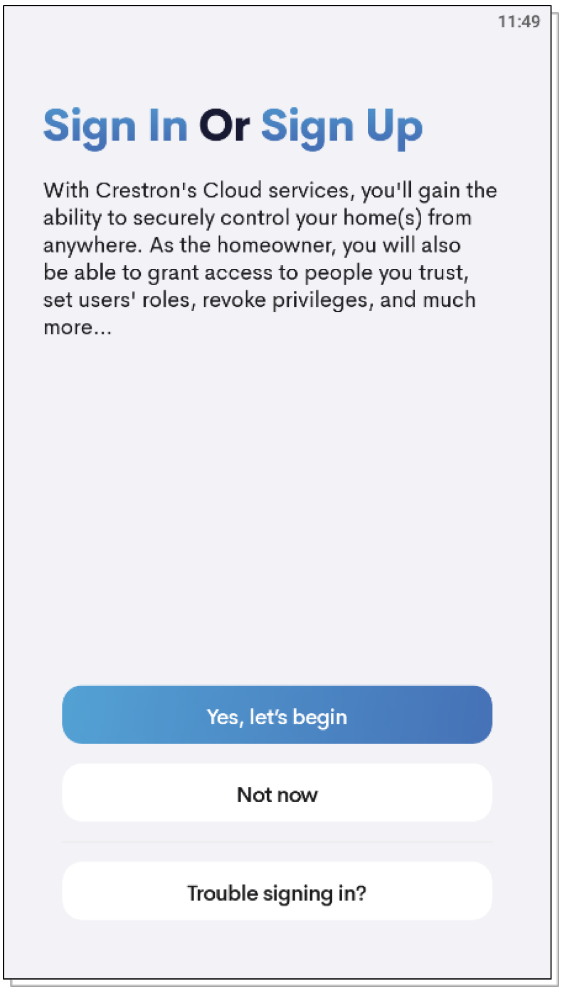


3. Select **Sign in** and then follow the prompts. For security, two-factor authentication is used to verify the email address used when signing up.

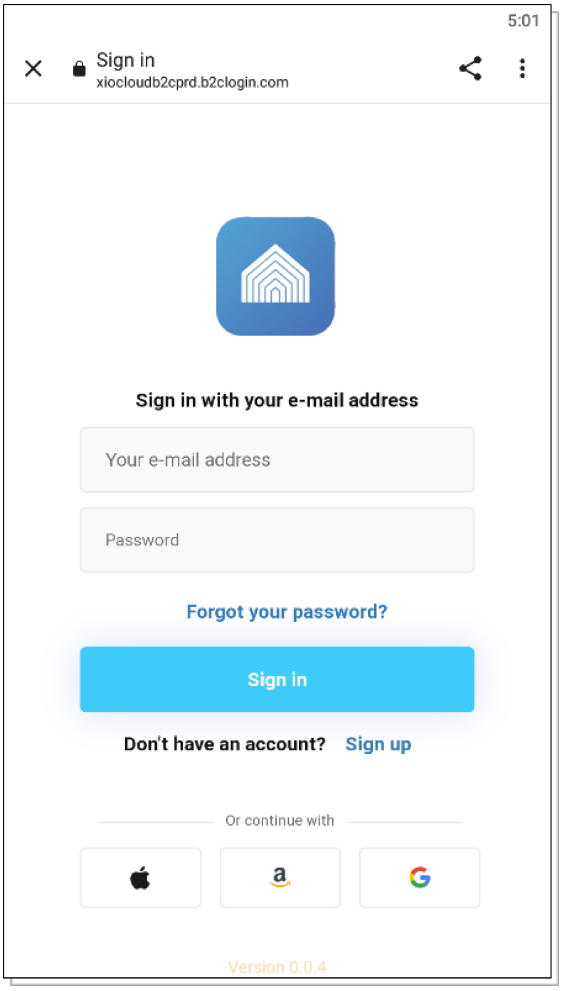
Create Account and Sign In Using a Third-party Service

To create an account and sign in using an Apple, Amazon, or Google account:

1. Select **Yes, let's begin**.



2. Select a third-party service.



3. Select **Apple**, **Amazon**, or **Google** and then follow the prompts to sign up and sign in.

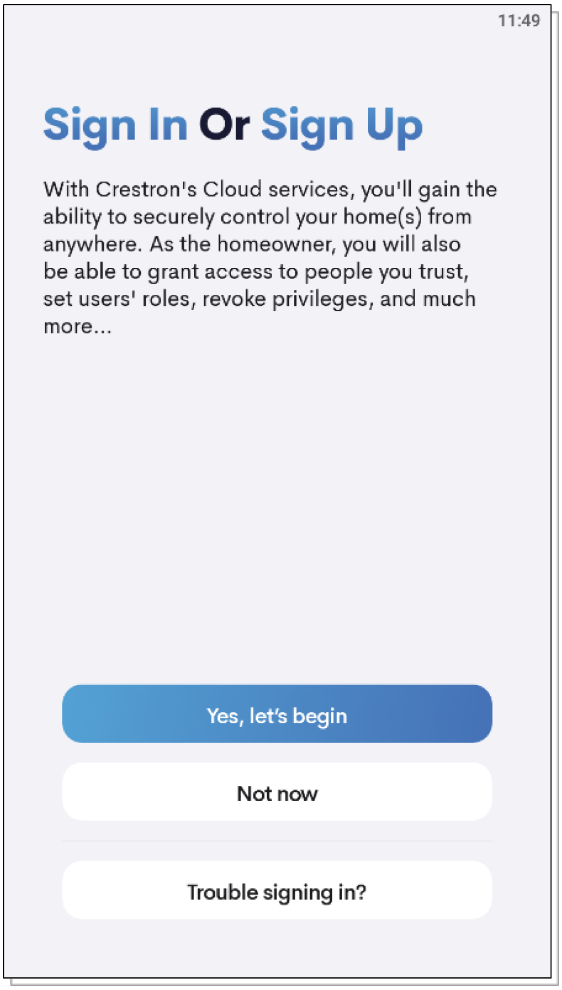
> **NOTE:** For assistance, visit How to use Sign in with Apple, Use Login with Amazon, or Use your Google Account to sign in to other apps or services.

Trouble Signing In

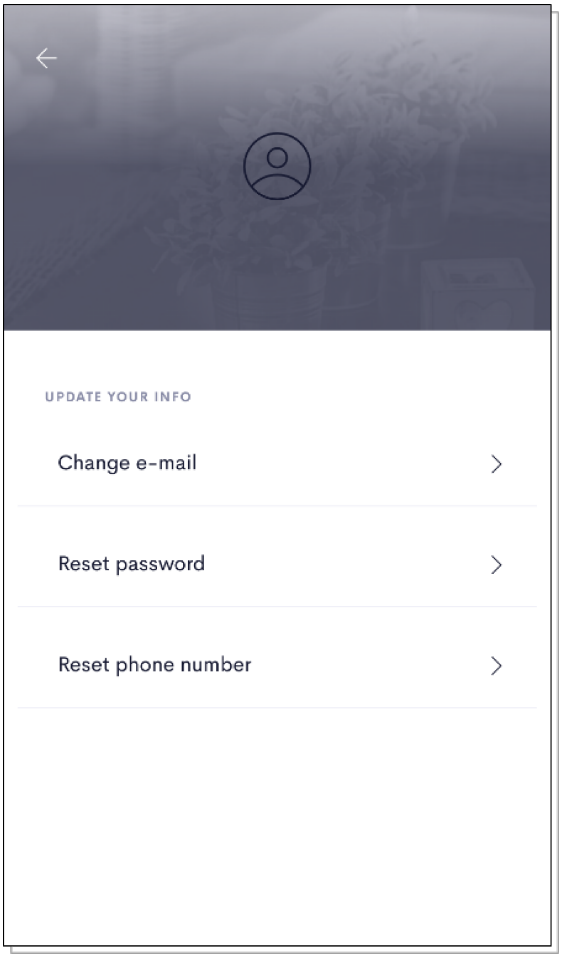
If unable to sign in, change the email address, password, or the phone number for the account.

To change the email address, password, or phone number:

1. Select **Trouble Signing in?**



2. Change the email, password, or phone number.



- To change the email address, select **Change e-mail** and then follow the prompts to change the email address. For security, two-factor authentication is used to verify the phone number used when signing up. Two-factor authentication is also used to verify the new email address.
- To reset the password, select **Reset password** and then follow the prompts to change the password. For security, two-factor authentication is used to verify the phone number and email address used when signing up.
- To change the phone number, select **Reset phone number** and then follow the prompts to change the phone number. For security, two-factor authentication is used to verify the email address used when signing up. Two-factor authentication is also used to verify the new phone number.

Claim a Home

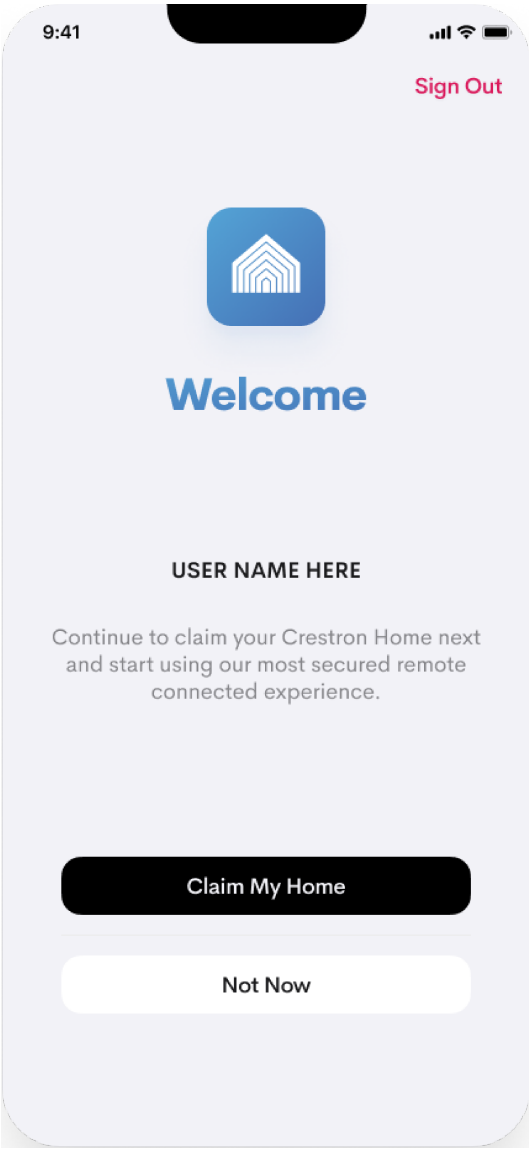
Claim the home to connect with secure remote access and acquire the Owner user role. For new Crestron Home systems, refer to Claim a New Home on page 953. For existing systems, refer to Claim an Existing Home on page 956.

> **NOTE:** The Advanced User Password must be turned on for the Crestron Home system in order to use the secure remote connection. If the Advanced User Password is not turned on, contact your Crestron dealer.

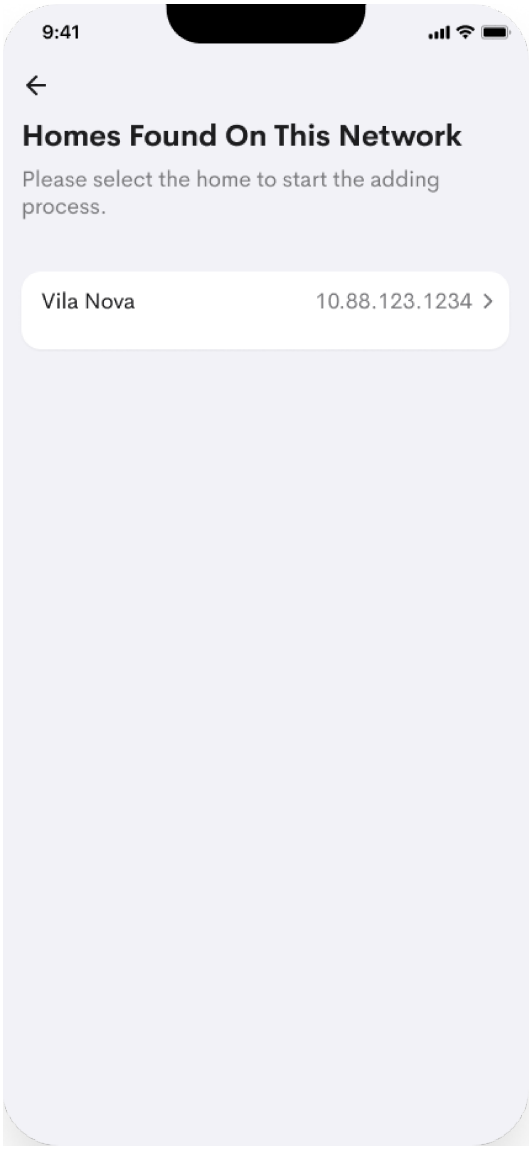
Claim a New Home

To claim a new home:

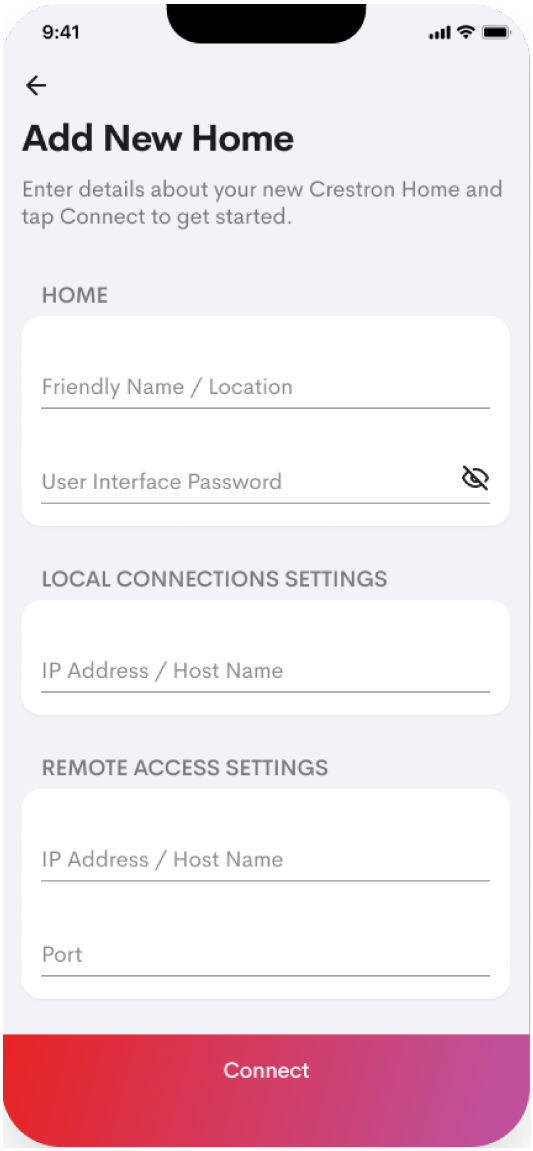
1. Select **Claim My Home**.



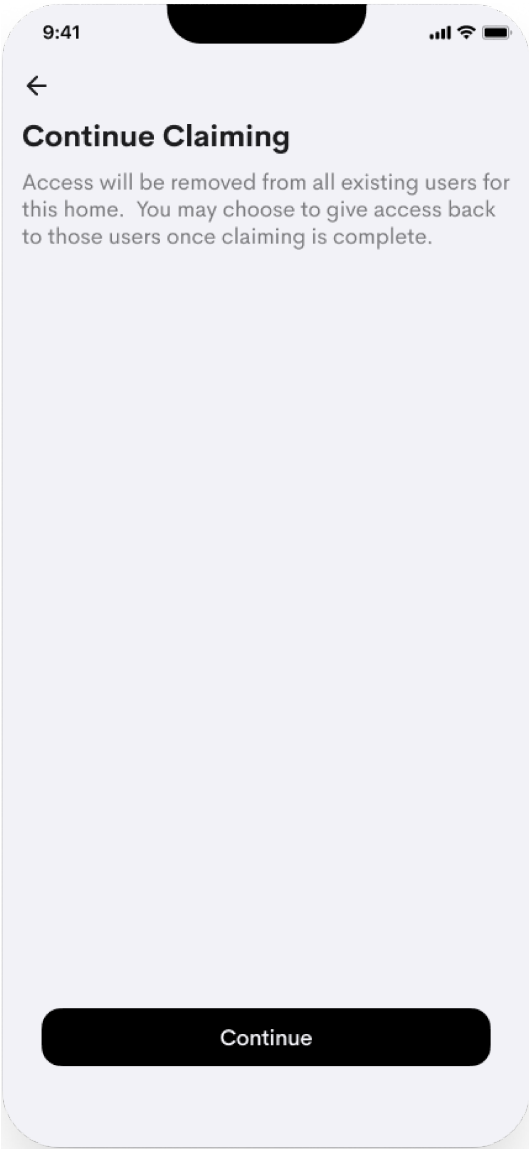
2. Select a home from the list



3. Enter the connection information for your home and then select **Connect**.



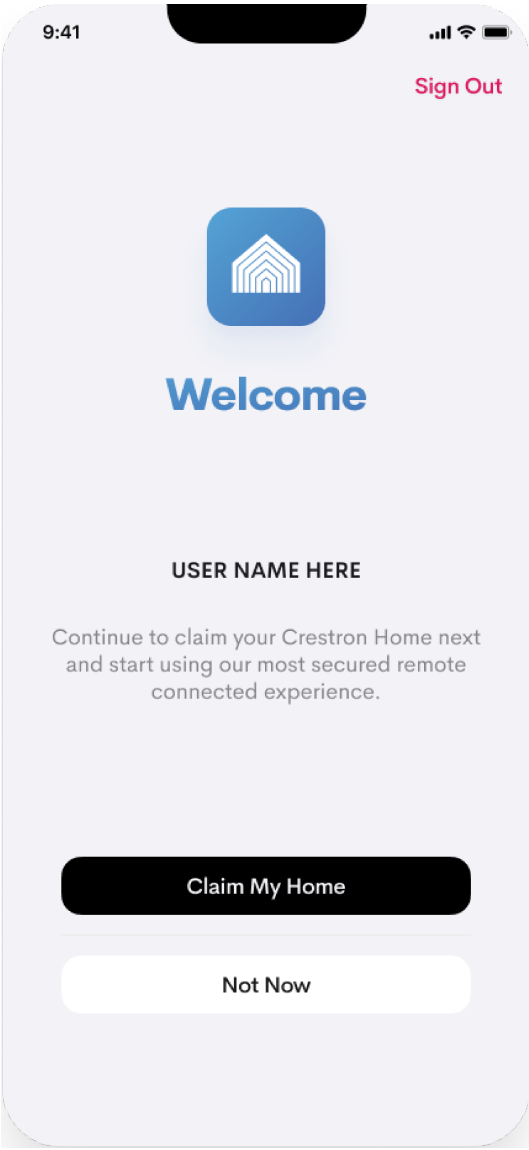
4. Select **Continue**.



Claim an Existing Home

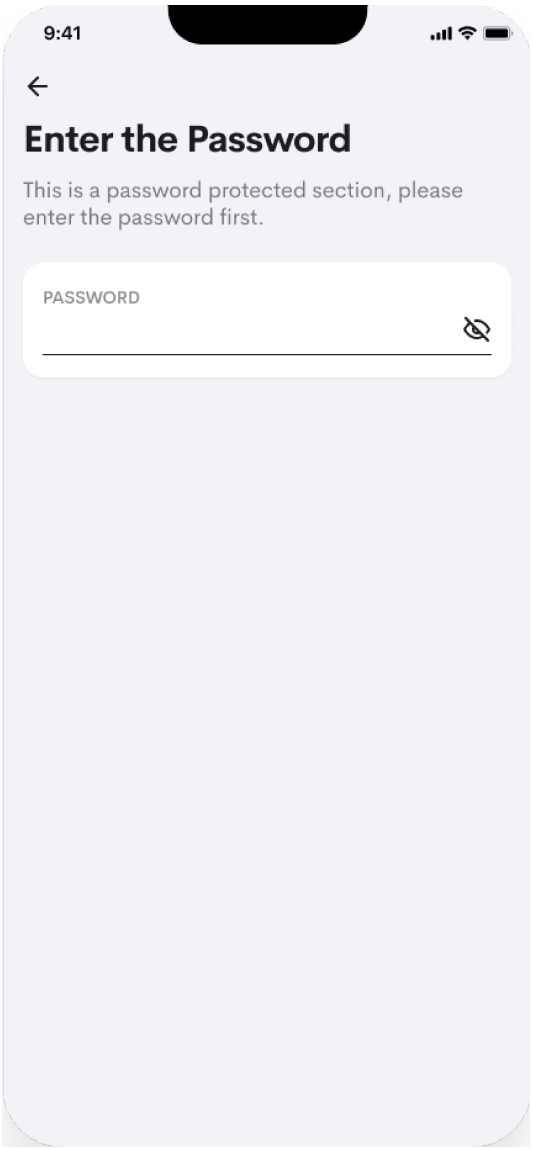
1. Go to **Settings > Users**.
2. If necessary, create an account or sign in. For details, refer to Create an Account using an Email Address on page 946 and Sign In with Email Address on page 948 or Create Account and Sign In Using a Third-party Service on page 949.

3. Select **Claim My Home**.

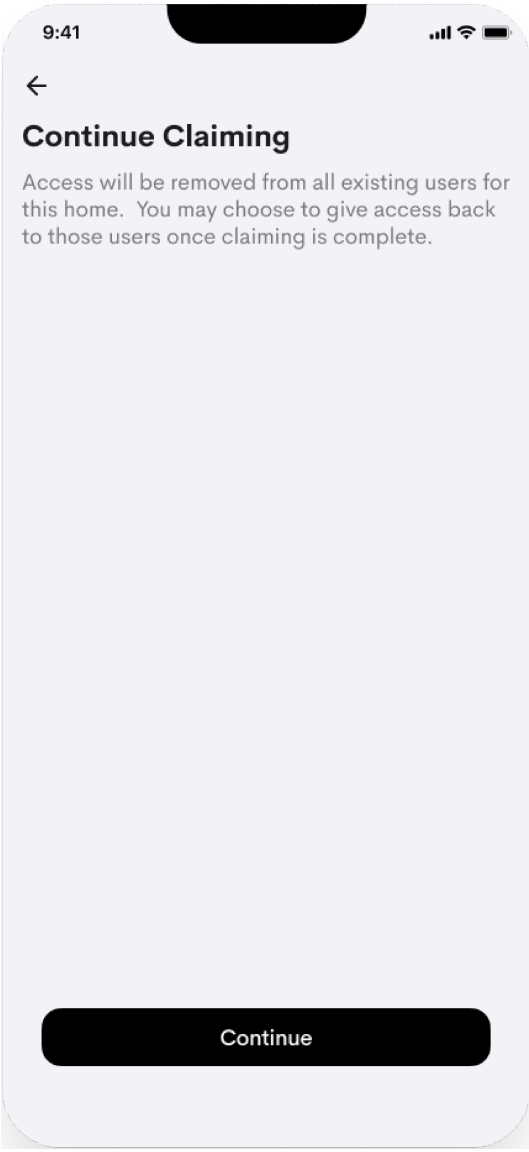


4. Enter the Advanced User Password.

> **NOTE:** Skipping this step is not recommended. If **skip this step** is selected, the home will be added but it will not be claimed.



5. To claim the home, select **Continue**.



User Roles

There are two user-roles, Owner and User.

- **Owner:** The Owner can edit their account information, reclaim the home, sign out, and delete their account. The Owner can also invite and remove members and assign their user roles.
- **User:** The User can edit their account information, reclaim the home, sign out, and delete their account.

Invite Users

Invite Users with a Remote Connection

1. Select **Add new user**.
2. Enter a User Name and e-mail address and then select a User Role.

   > **NOTE:** The user is able to change the user name.

3. Tap **Send invite**. **Invite Pending** is displayed next to a user name until they accept the invite.

Invite Users with a Local Connection

> **NOTE:** The user is able to change the user name.

1. Select **Add new user**.
2. Deselect **Invite to connect from anywhere** and then enter a user name.
3. Tap **Add user**.

Accept Invite

1. Open email on your mobile device.
2. In the invite email from Crestron Home, select **Accept**.
3. If the Crestron Home app is not installed, the app store for the device will open. Download the app.
4. If necessary, create an account and/or sign in.

Reclaim Home

1. Select **Reclaim this home**.
2. Enter the Advanced User password.
3. Select **Continue**.

Account Settings

To change the account name, email, password, or phone number and to sign out or delete an account, go to **More > Users**.

Edit Name

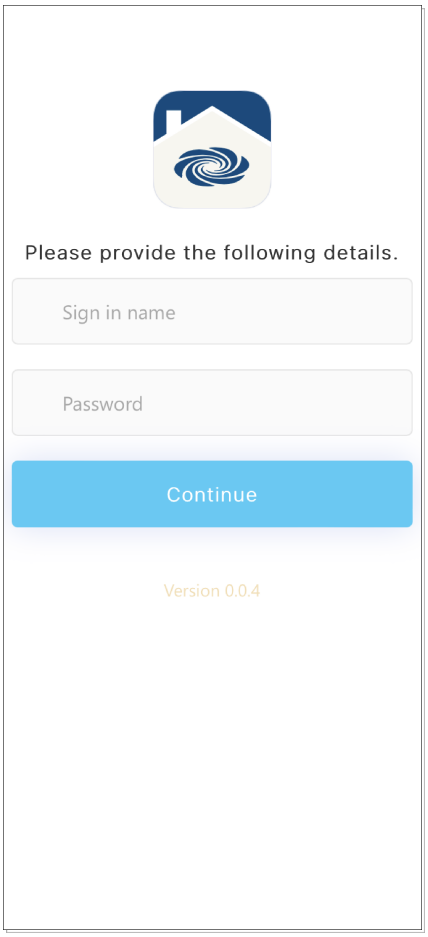
1. Select **Edit Name**.
2. Enter a new name and then select **Done**.

Change E-mail

To change the email address for the account:

> **NOTE:** To exit without saving the changes, select **Cancel**.

1. Select **Change e-mail**.
2. Enter the current email address and password, and then press **Continue**. Follow the prompts to change the email address. For security, two-factor authentication is used to verify the phone number used when signing up. Two-factor authentication is also used to verify the new email address.

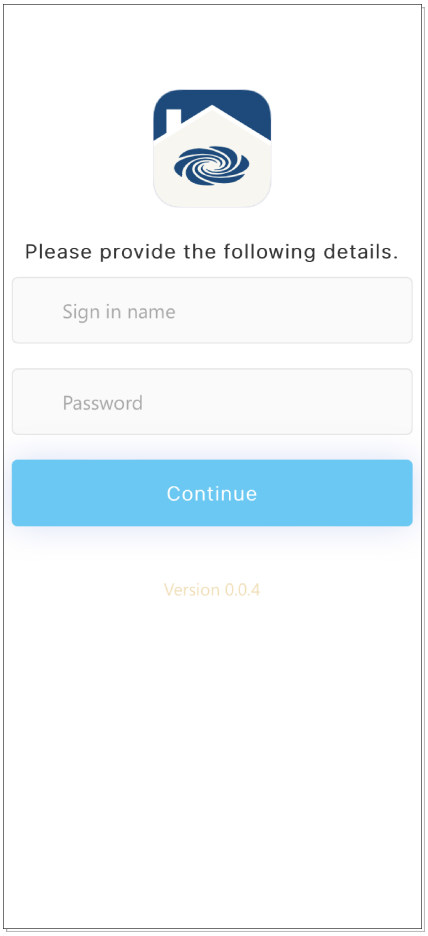


Change Password

To change the password for the account:

> **NOTE:** To exit without saving the changes, select **Cancel**.

1. Select **Change password**.
2. Enter the email address and password, and then press **Continue**. Follow the prompts to change the password. For security, two-factor authentication is used to verify the phone number used when signing up.

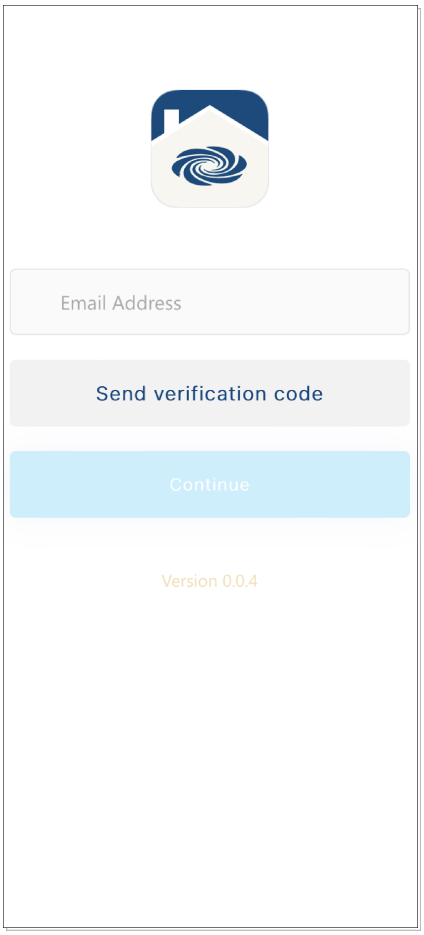


Change Phone Number

To change the phone number for the account:

> **NOTE:** To exit without saving the changes, select **Cancel**.

1. Select a user and then **Change phone number**.
2. Enter the email address and then press **Send verification code**. Follow the prompts to change the phone number. For security, two-factor authentication is used to verify the email address used when signing up. Two-factor authentication is also used to verify the new phone number.



Change User Role

The user role can be changed by an Owner.

1. Go to **Settings > Users** and then select a user.
2. To select a user role, select **Owner** or **User**.

Remove User

A user can be removed by an Owner.

> **NOTE:** The user will be signed out and won't be able to connect using the secure remote connection. Any lock codes created for the user will be deleted. The removed user will be prompted to connect using a local connection and will be prompted to enter the User Interface password.

1. Go to **More > Settings > Users**. and then select a user.
2. Select **Remove user** and then select **Remove** to confirm.

Sign Out

1. Select **Sign out** or **Sign out from all devices**.
   - **Sign out:** Sign out of the account on the current device.
   - **Sign out from all devices:** Sign out of the account on all devices. This process may take up to one hour.
2. Select **Yes**.

Delete Account

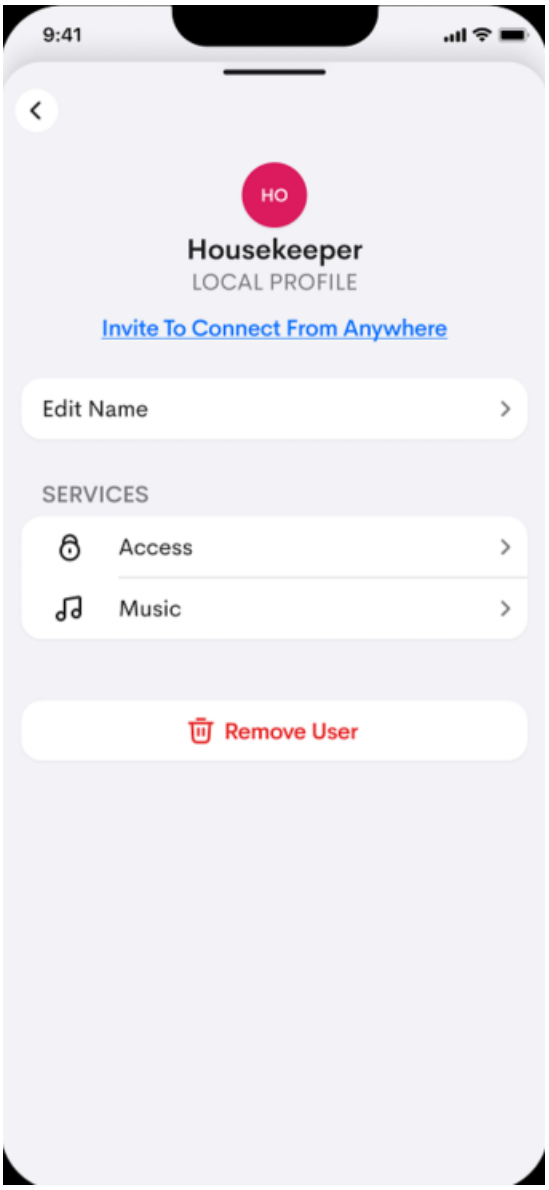
> **NOTE:** After an account is deleted, a new account can be created using the same email address.

1. Select **Delete account**.
2. Select **Yes**.

Smart Access

User access to locks can configured on the user screen.

1. Go to **Settings > User** and select a user.
2. Select **Access**.
3. Follow the instructions described in House Access on page 809.

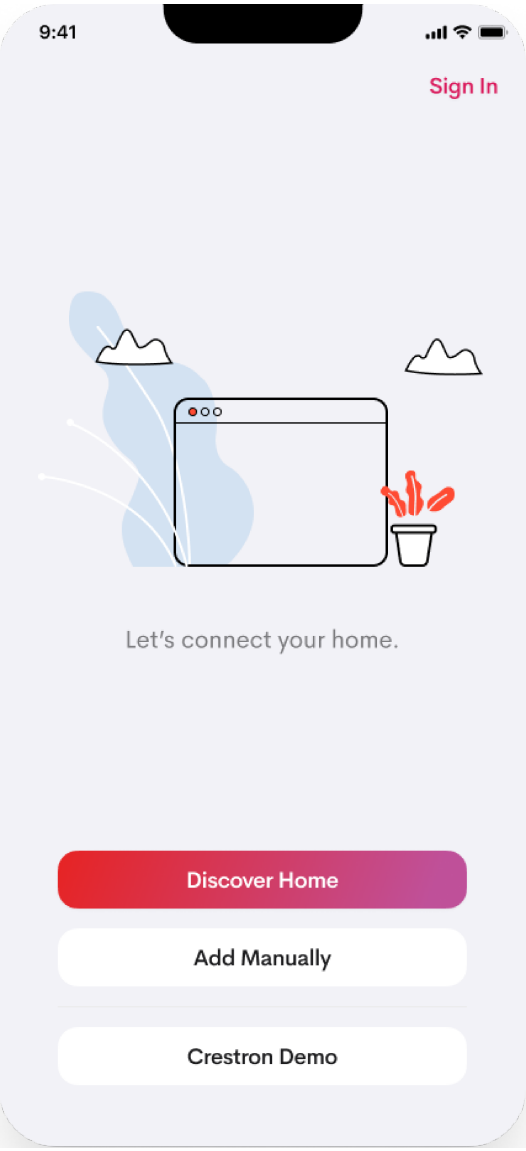


Local Connection

> **NOTE:** Only use this procedure if you opt to not use the cloud-based secure remote connection.

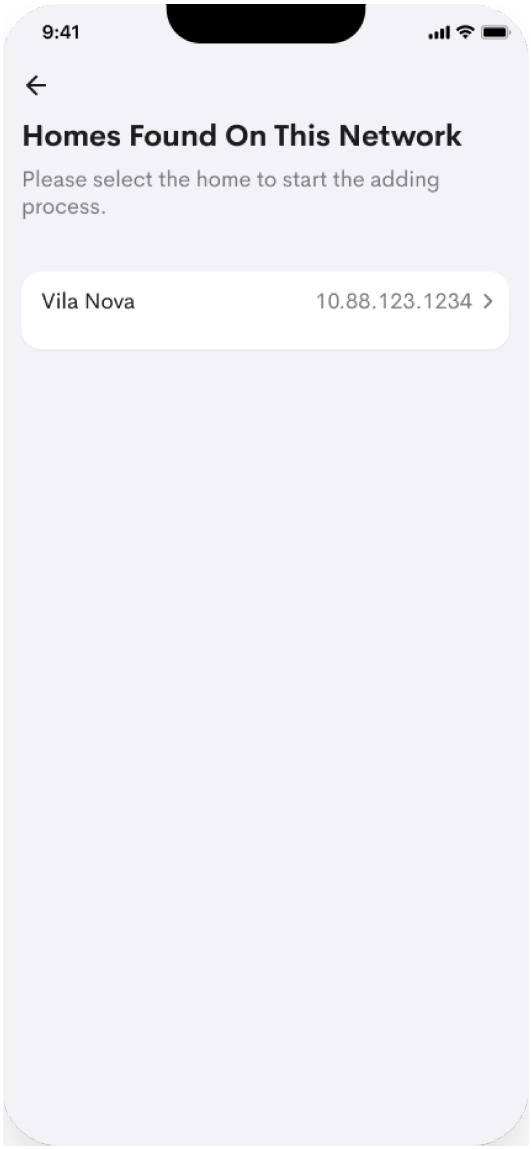
1. Open the **Crestron Home** app.
2. Review the **Privacy Statement** and **Mobile Apps Terms of Use**, select **I agree to the Crestron Terms of Use and Privacy Statement**, and then **Agree & Continue**.

3. To scan the local network for homes, select **Discover Home**. to scan the network for the Crestron Home processor. The **Homes found on this network** screen is displayed and shows the list of available Crestron Home processors on the network. The Hostname and IP Address for each Crestron Home processor is displayed.



> **NOTE:** The iOS device or Android device and the Crestron Home processor must be on the same wireless network for the device to be found.

4. Select a home to join.



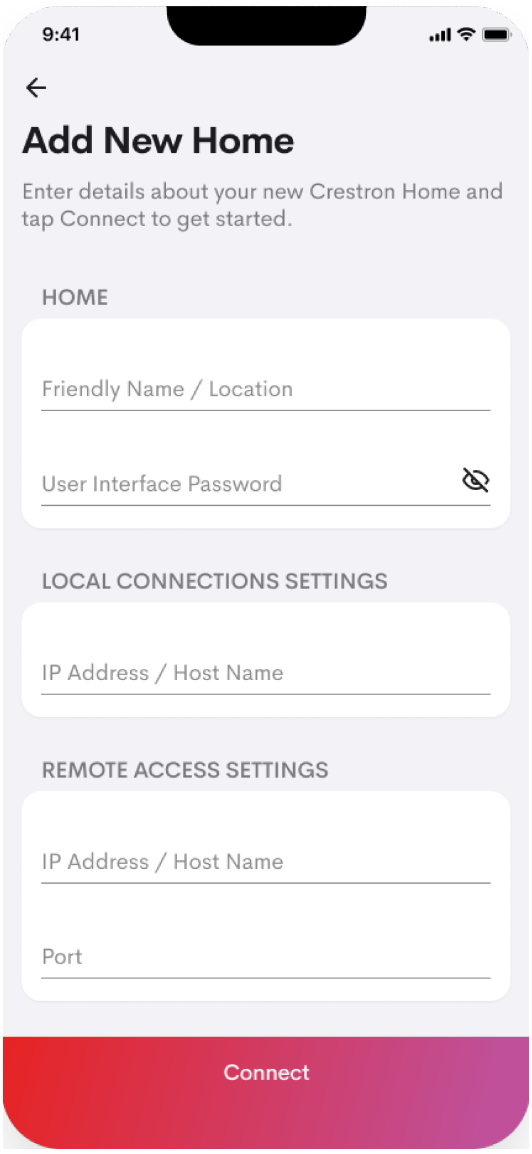
5. Enter the **Friendly Name / Location** and **User Interface Password** in the **HOME** section.
    - **Friendly Name / Location:** Enter a name or location of the Crestron Home processor. The name will be used to identify the Crestron Home processor on the My Homes screen.
    - **User Interface Password:** Enter the User Interface Password. For details, refer to Set the User Interface Device Password on page 1187 and System Detail and Password Configuration on page 566.

      > **NOTE:** After three unsuccessful login attempts, the IP address of the device is blocked from joining the Crestron Home system for 1 hour. Other devices are allowed to join during this period.

6. Enter the **IP ADDRESS / HOST NAME** in the **LOCAL CONNECTION SETTINGS** section.
    a. **IP ADDRESS / HOST NAME:** Enter the IP Address or hostname of the control processor.
7. Enter the **Port** and **IP Address / Hostname** in the **REMOTE ACCESS SETTINGS** section.
    - **Port**: Enter the port to access the system. The default port is 50001.
    - **IP address / Host name**: Enter the IP address or the Host name of the Crestron Home processor to enable remote access.
8. Enter the **Port** in the **LOCAL PORT** section.
    - **Local Port:** If the port for the user interface was changed during setup, enter the port in this field. The port number should only be changed if port 50001 is in use by the ISP and cannot be forwarded. For details, refer to System Detail and Password Configuration on page 566.

      > **NOTE:** Only change the Local Port when directed by your authorized Crestron dealer.

9. Enter the following information for **HOME**, **LOCAL CONNECTION SETTINGS**, and **REMOTE ACCESS SETTINGS** on the **Add New Home** screen:



HOME:

- **Friendly Name / Location:** Enter a name or location of the Crestron Home processor. The name will be used to identify the Crestron Home processor on the My Homes screen.
- **User Interface Password:** Enter the User Interface Password. For details, refer to Set the User Interface Device Password on page 1187 and System Detail and Password Configuration on page 566.

> **NOTE:** After three unsuccessful login attempts, the IP address of the device is blocked from joining the Crestron Home system for 1 hour. Other devices are allowed to join during this period.

LOCAL CONNECTION SETTINGS:

- **IP ADDRESS / HOST NAME:** The Host name is entered by the system during discovery.

REMOTE ACCESS SETTINGS:

> **NOTE:** To configure the system for remote access (outside of the home using a cellular network), refer to Remote System Access on page 639.

- **IP address / Host name**: Enter the IP address or the Host name of the Crestron Home processor to enable remote access.
- **Port**: Enter the port to access the system. The default port is 50001.
- **Local Port:** If the port for the user interface was changed during setup, enter the port in this field. The port number should only be changed if port 50001 is in use by the ISP and cannot be forwarded. For details, refer to System Detail and Password Configuration on page 566.

> **NOTE:** Only change the Local Port when directed by your authorized Crestron dealer.

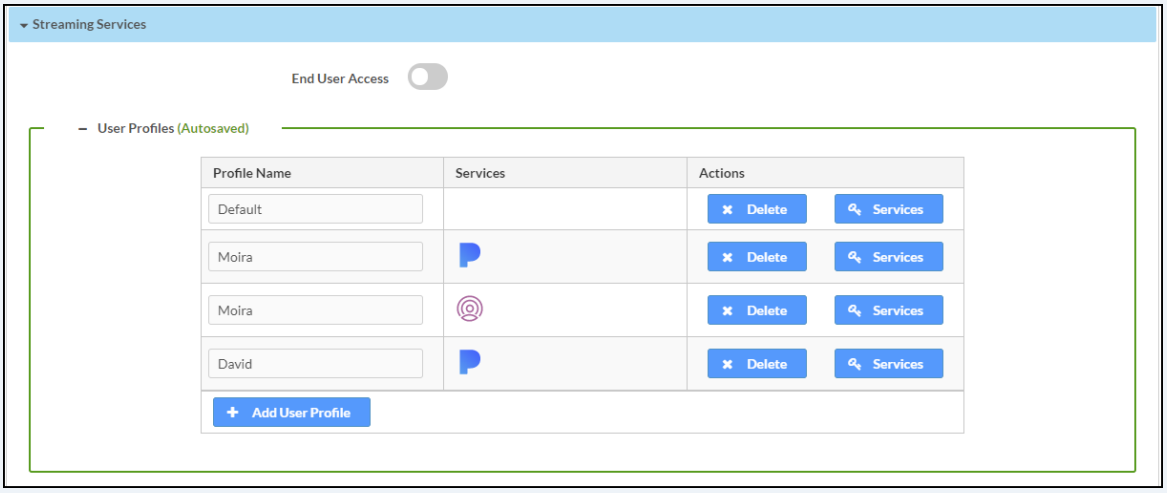
10. Tap **Connect**. The **My Homes** screen is displayed.

Streaming Music Services

Use the **Music Services** setting to add streaming music services and manage users. Streaming music services are available on systems that include DM NAX streaming amplifiers.

To configure music services, select **More > Settings > Users > [User Name] > Music**.

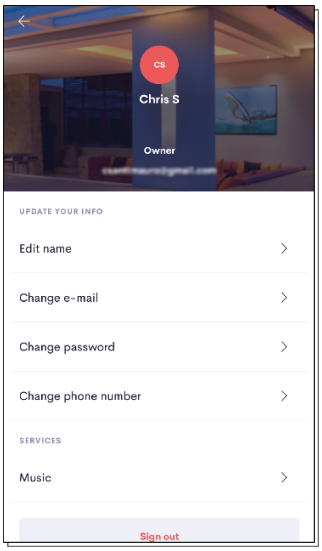
NOTE: For systems using Crestron Home version 3.017.0098 and earlier, the dealer must configure the music services using the web UI on the DM NAX streaming amplifier. For details, refer to DM-NAX-8ZSA product manual.



Music services are available when one of the following is true:

- The user must use the secure remote connection to access the home and be assigned to the Owner user role.
- The user must be a local user.

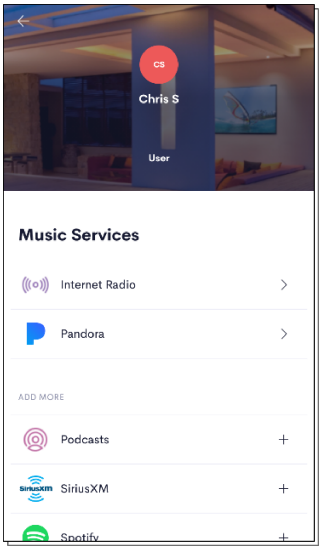
Local users can be created using the web UI on a DM NAX device. Users created using the DM NAX Web UI and using Crestron Home version 3.017.0098 and earlier will be added as local users. Local users can be invited to connect remotely. For details, refer to Users on page 945.



Add a Music Service

To add a music service:

1. In the **Add More** menu, select a music service to add.



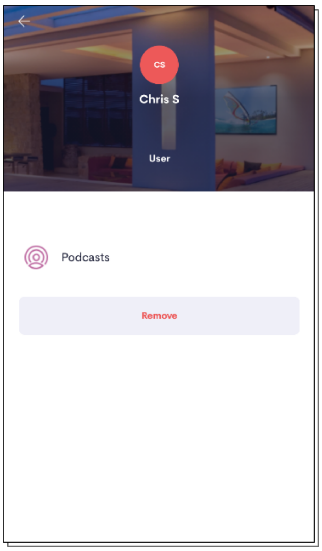
2. Complete the prompts to add the music service.

> **NOTE:** Select music services, such as Internet Radio and Podcasts, do not require login credentials.

Remove a Music Service

To remove a music service:

1. In the **Music Services** menu, select a music service.



2. Select **Remove** and then **Yes, remove** to confirm.

Scheduled Events

Use the **Scheduled Events** screen to create events that repeat at specific times and days. A scheduled event can recall Light scenes and Shade scenes.

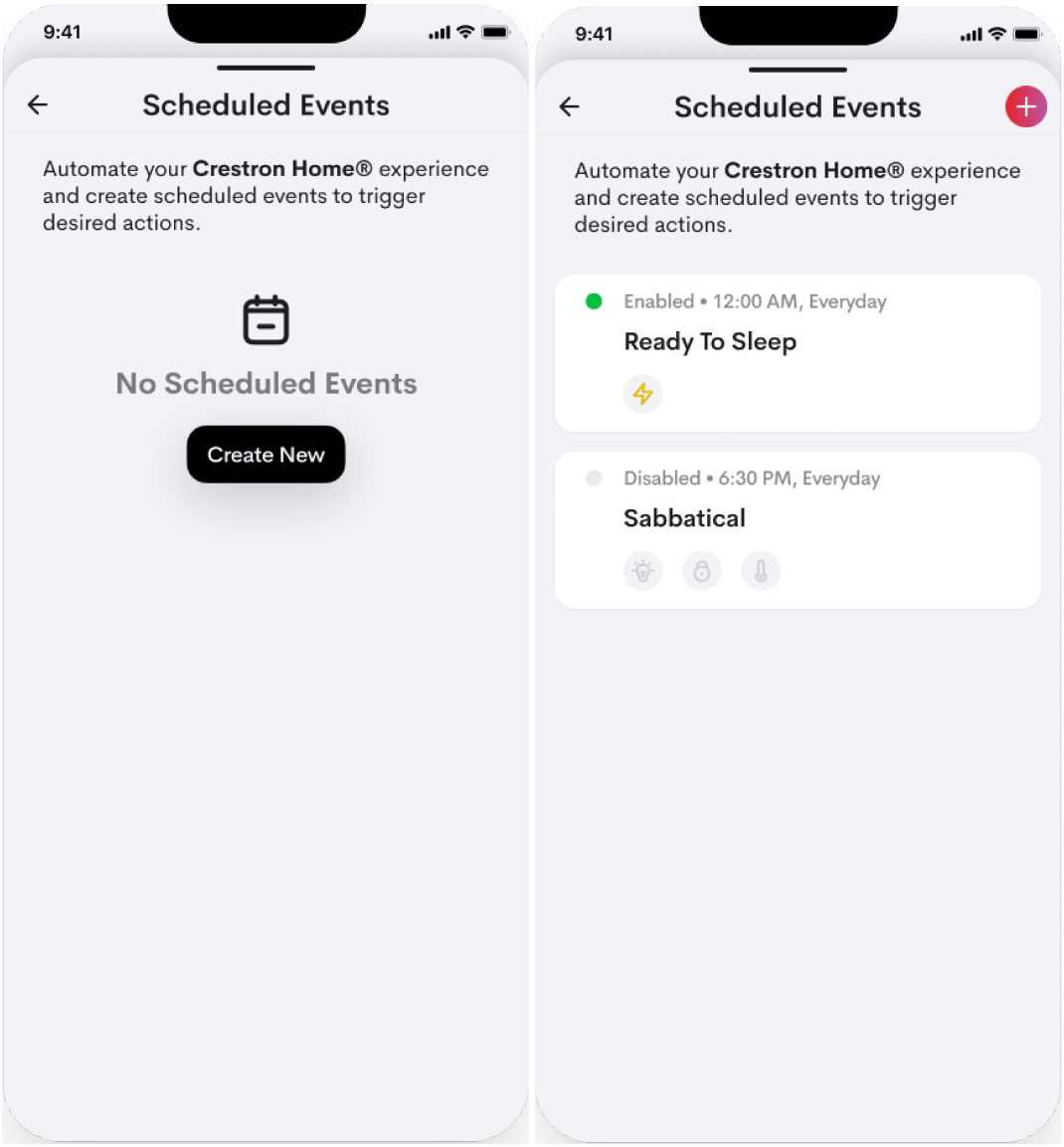
To view the **Scheduled Events** screen, go to **Menu > Settings > Scheduled Events**.

New Scheduled Event

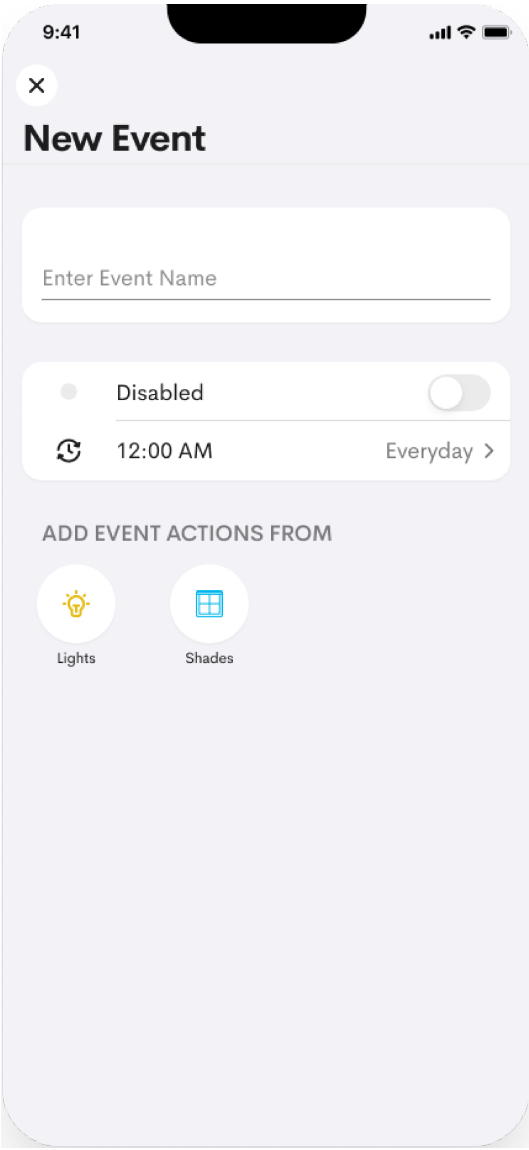
To create a new scheduled event:

1. Select **Create New**.

Scheduled Events - No Events (Left) and Event List (Right)



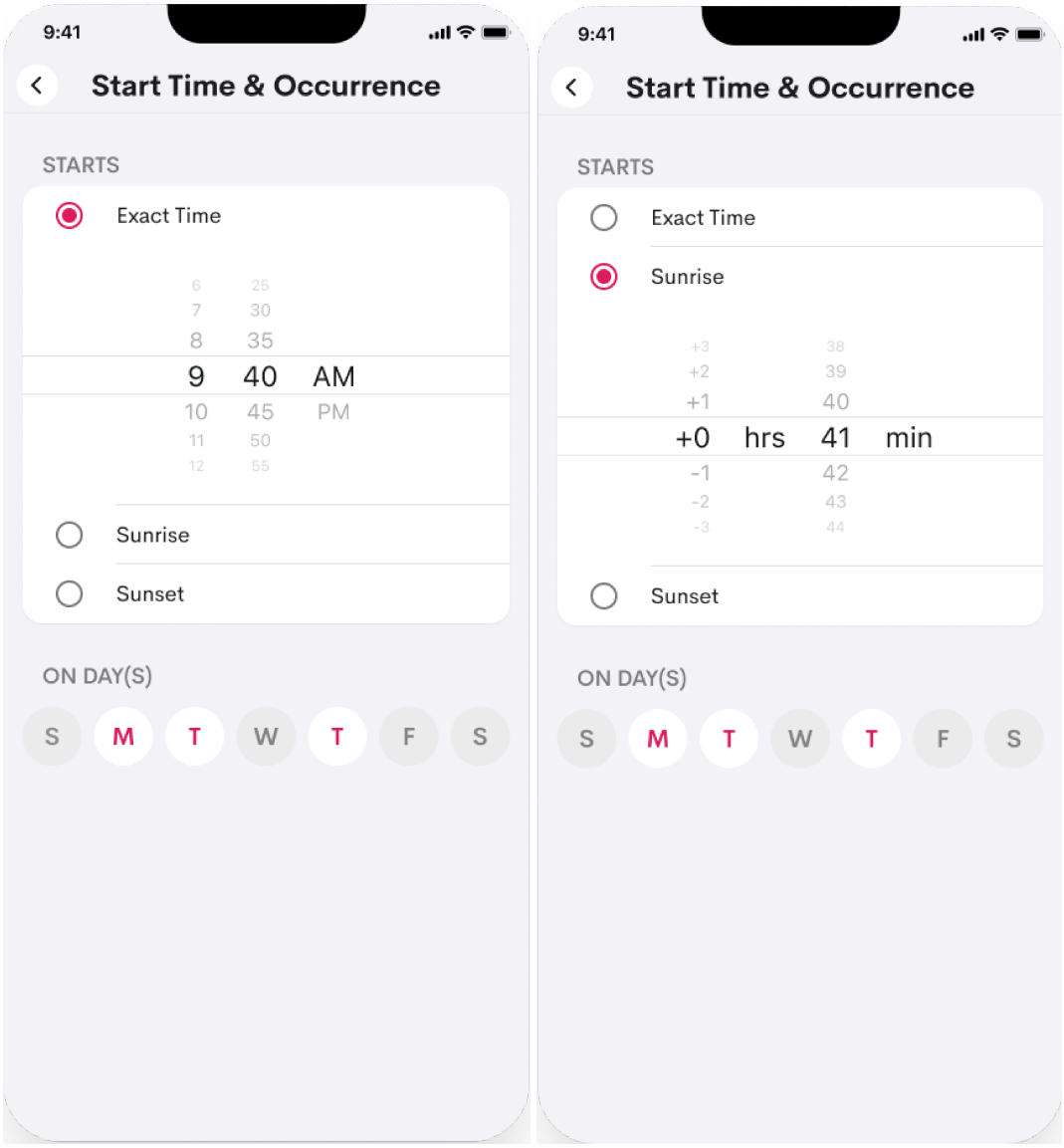
2. Enter a name for the event.



3. To enable the scheduled event, turn on the status toggle.

4. To set the time and occurrence.

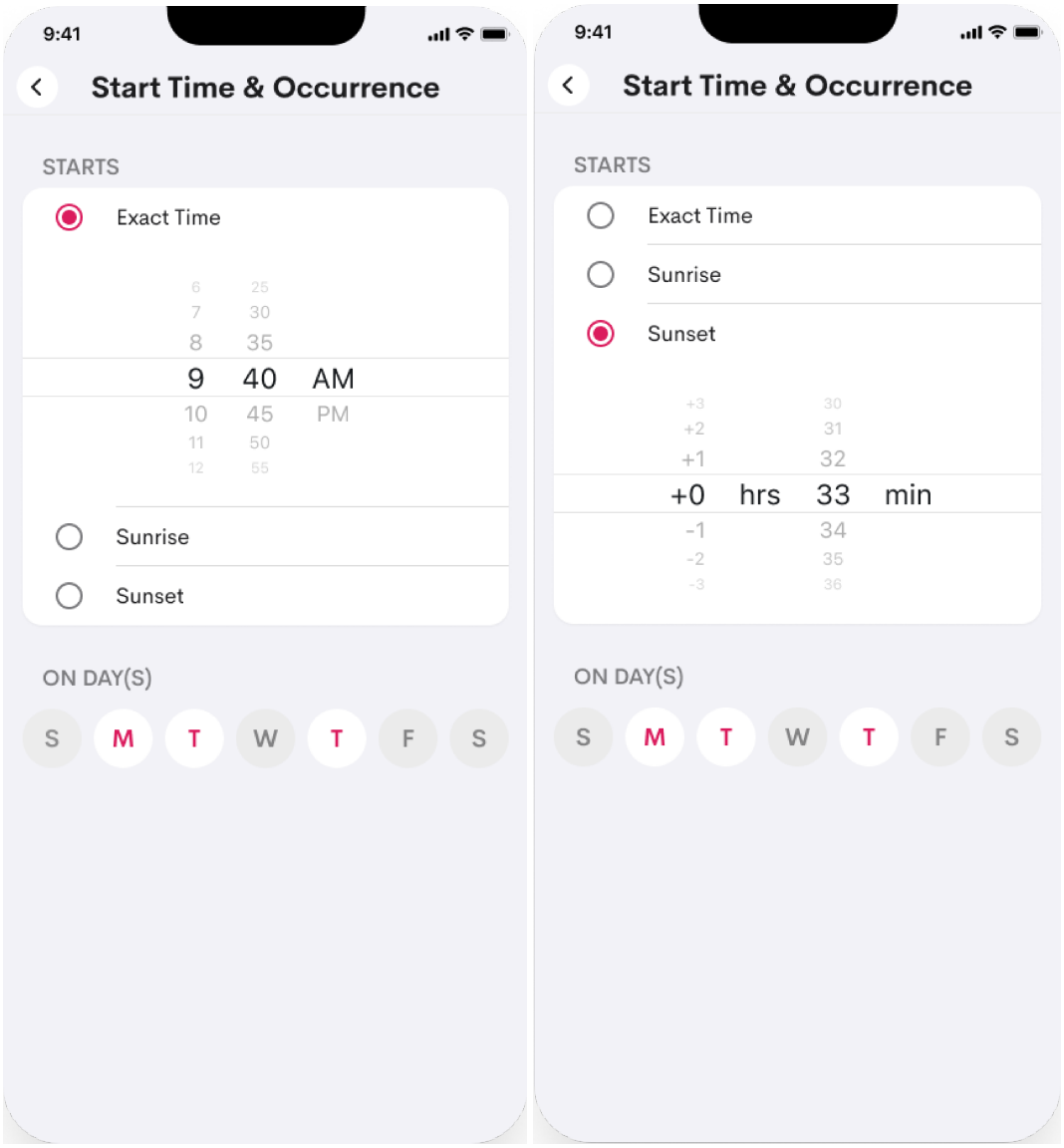
Start Time and Occurrence - Exact Time (Left) and Sunrise Time (Right)



a. Select the time.

b. Select **Exact Time**, **Sunrise**, or **Sunset** and then a time to establish the start time. To start the event at a specific time, select **Exact Time** and then select a time. To start the event based on the sunrise or sunset, select **Sunrise** or **Sunset** and then select a time offset.

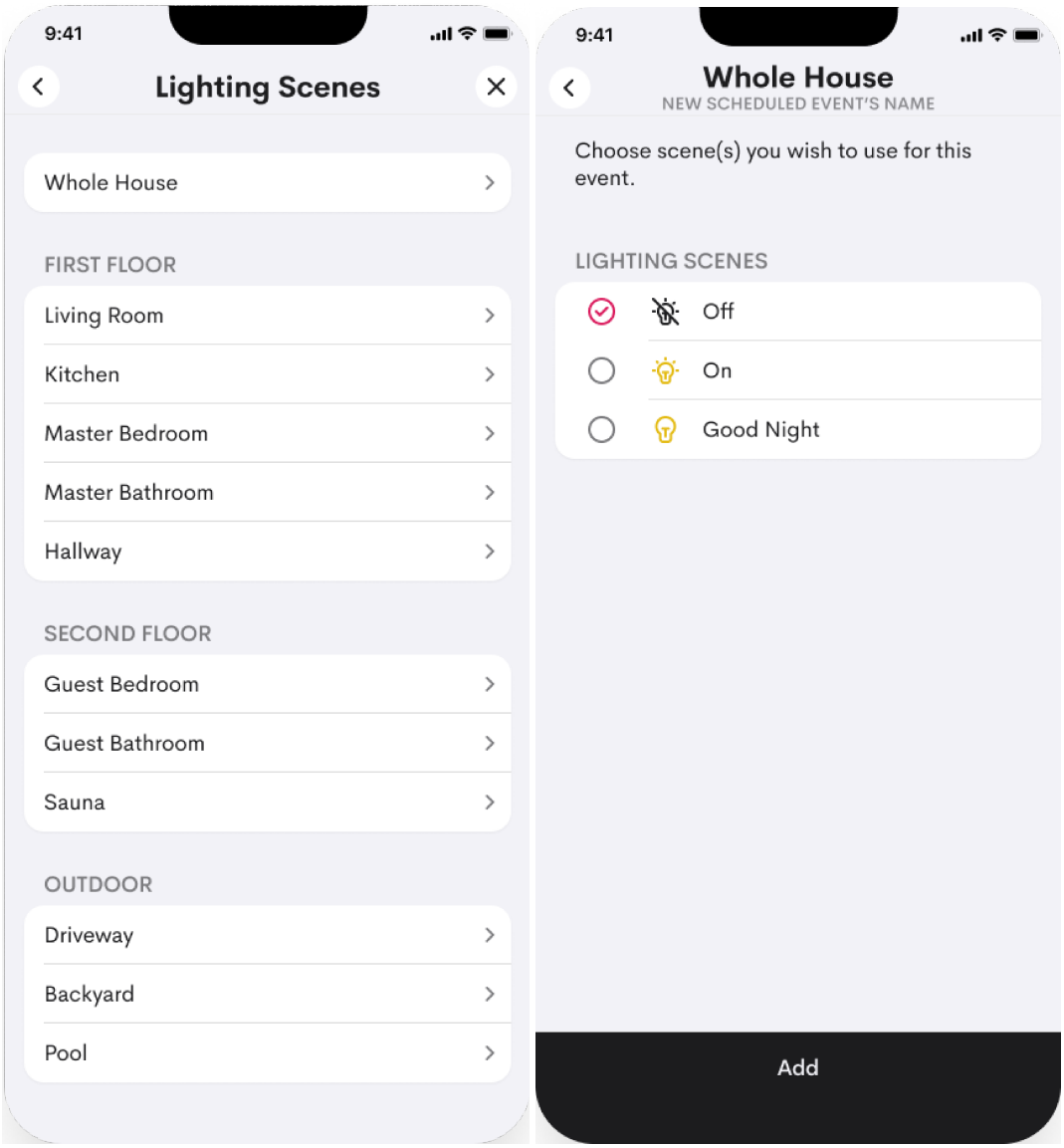
Start Time - Exact Time (Left) and Sunset (Right)



c. Select the days of the week for the event to occur.

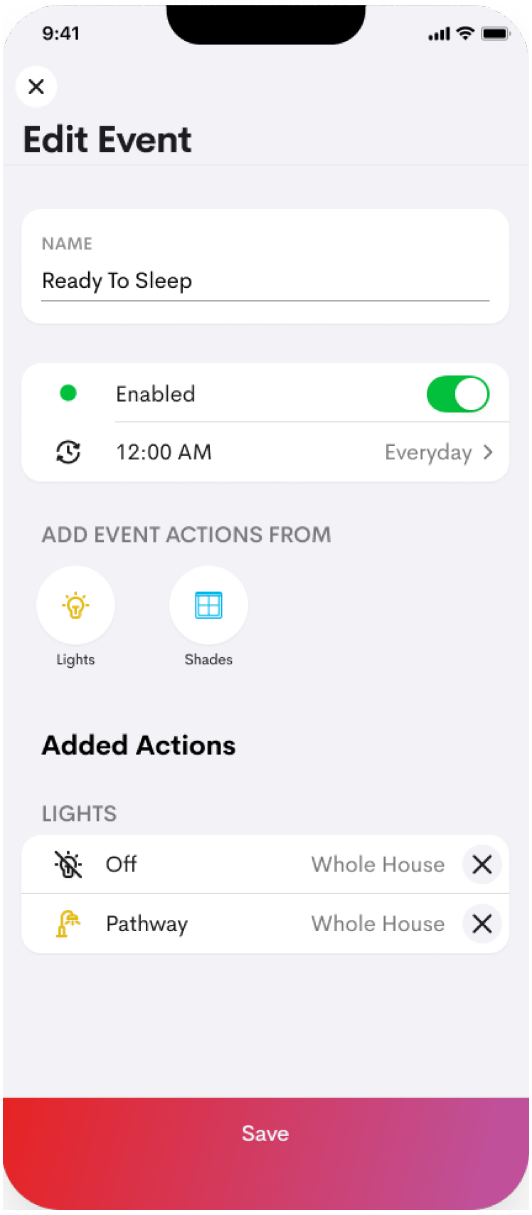
5. Add actions to the event.
    a. Select **Lights** or **Shades**.
    b. Open a room and then select scenes to recall.

    Scheduled Event - Scene Room List (Left) and Scene List (Right)



    c. Select **Add**. If necessary, repeat this process for other event categories.

6. Select **Save**.



Disable an Event

To disable an event:

1. Select a scheduled event.
2. Turn off the status toggle switch. The **Disabled** status will show.
3. Select **Save**.

Delete and Event

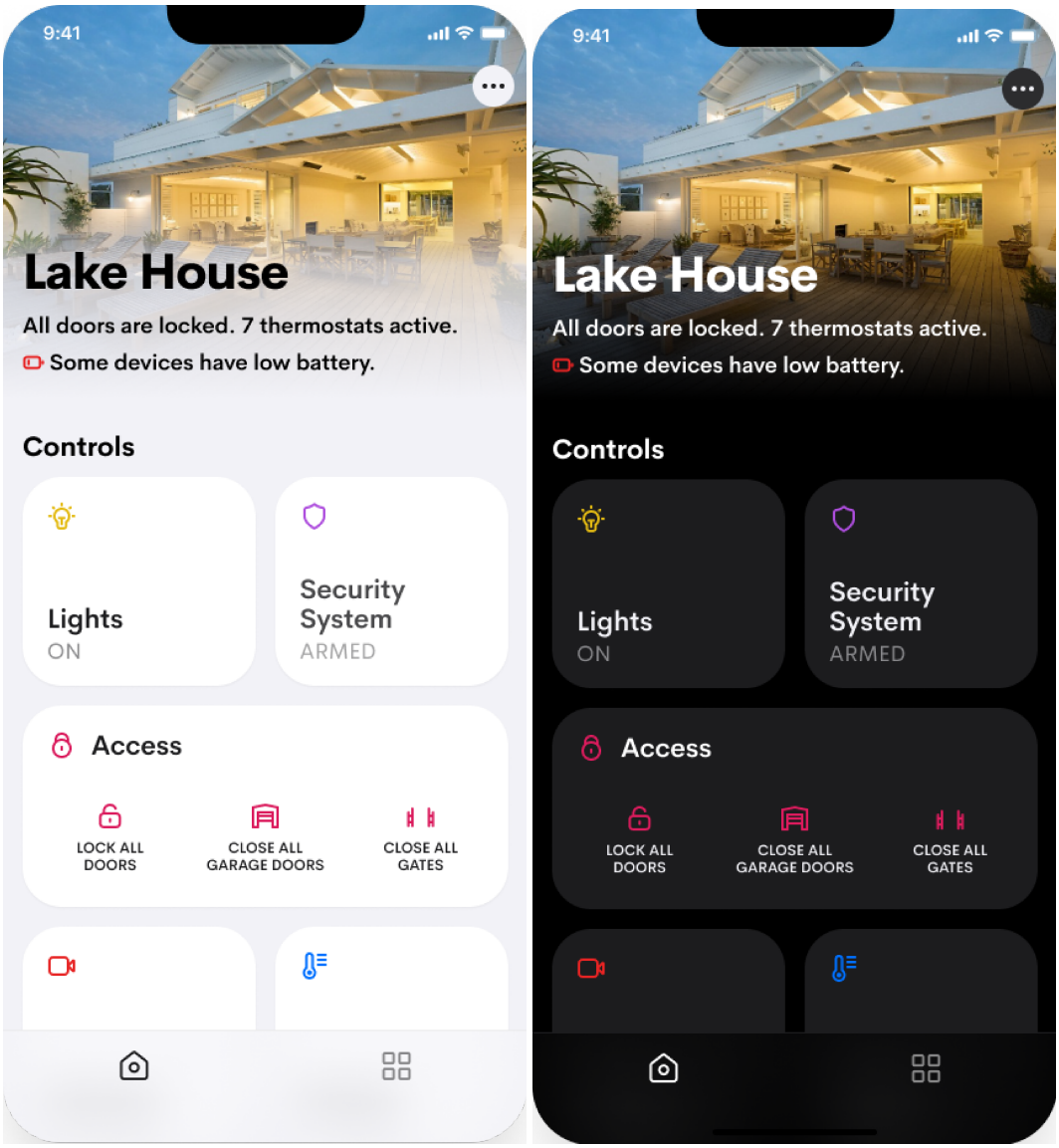
To delete an event, select the scheduled event and then **Delete This Event**.

Display Mode

Use the **Display** menu to change the color theme for mobile devices. To view the **Display** menu, go to **More > Settings > App Customizations** and then scroll to **Display**.

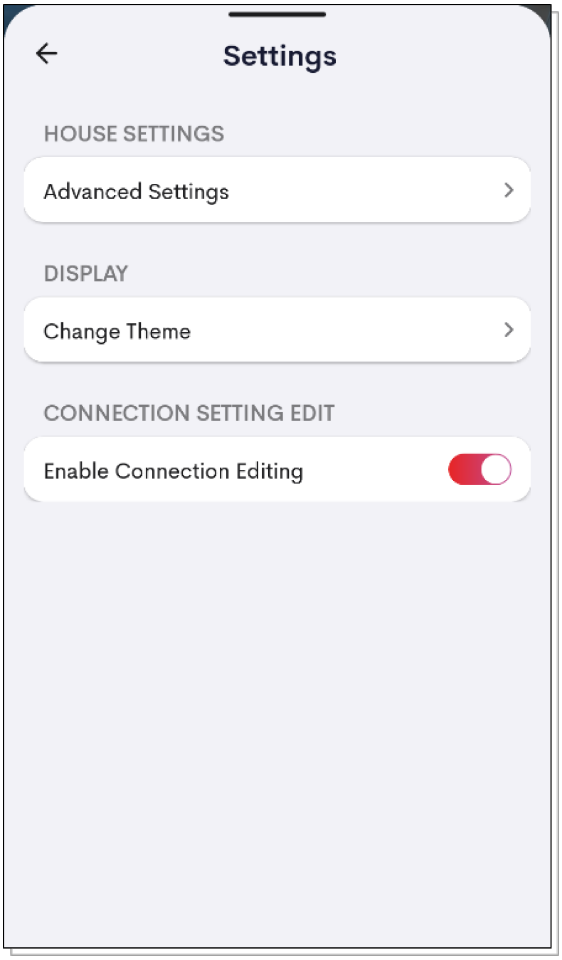
> **NOTES:**
>
> - The display mode for iOS devices is determined by the system settings.
> - For touch screens, refer to Display on page 1036.

Display Themes - Light Mode (Left) and Dark Mode (Right)

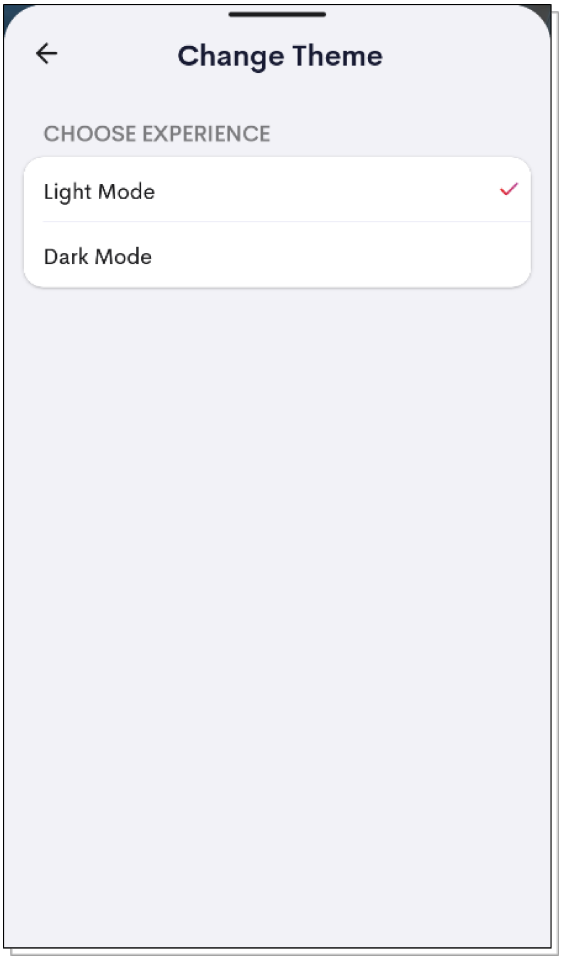


To set the display mode:

1. Select **Change Theme**.



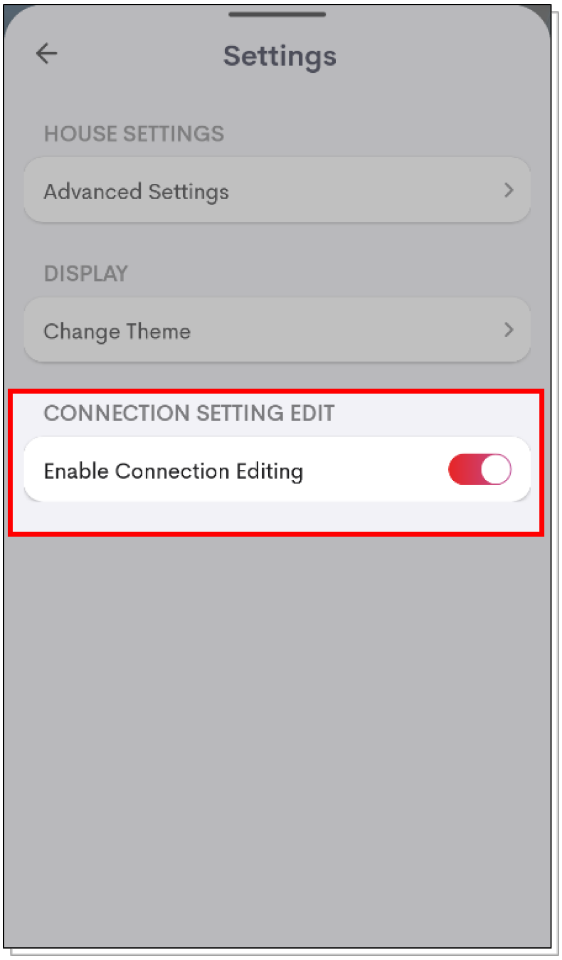
2. Select **Light Mode** or **Dark Mode**.



Connection Editing (Mobile Devices Only)

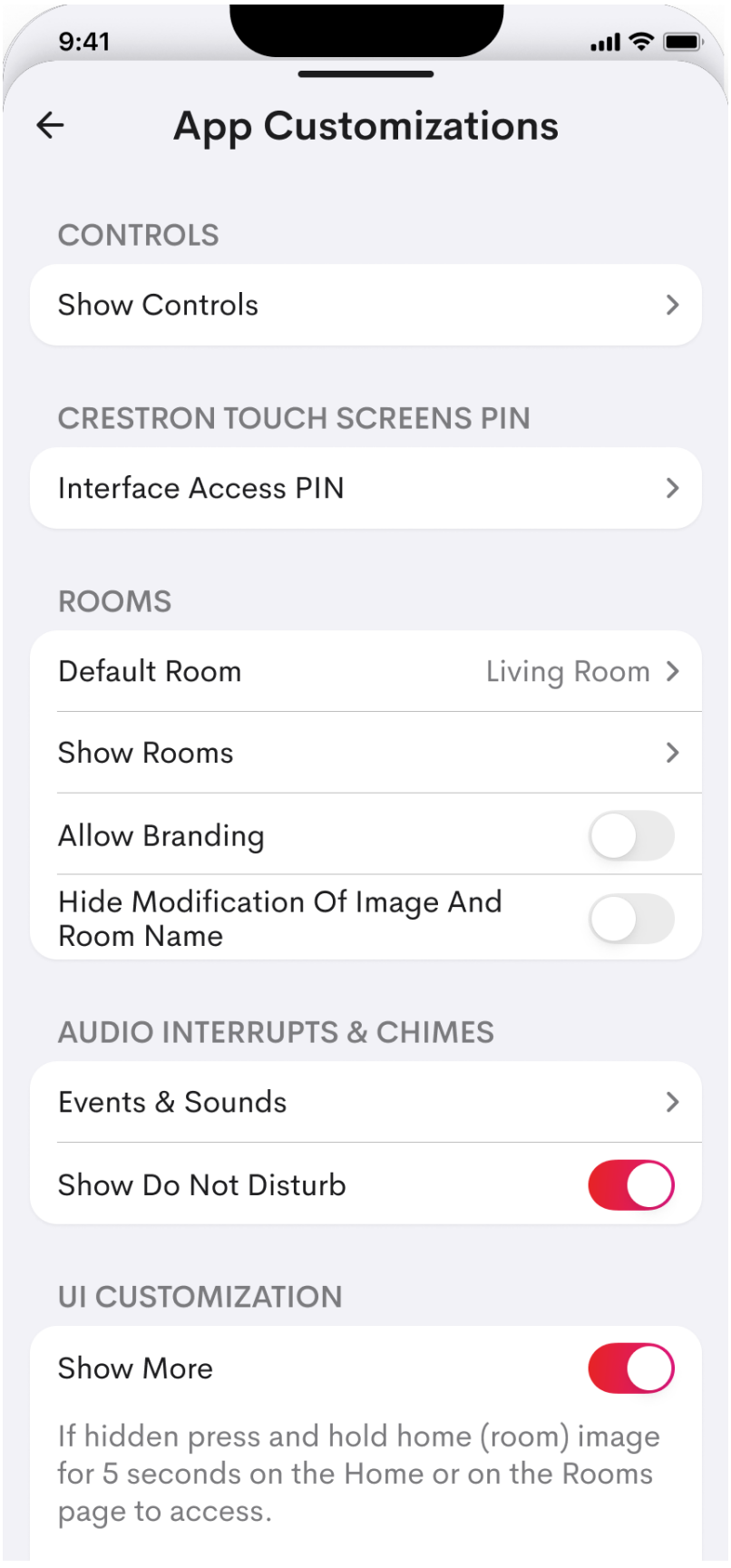
Use the **Connection Setting Edit** menu to enable or disable the connection editing capability for the Home tiles in the Home list. To view the **Connection Setting Edit** menu, go to **More > Settings > App Customizations** and then scroll to **Connection Setting Edit**.

To disable editing options on the **My Systems** screen, turn off **Enable Connection Editing**.



App Customization

Use the **App Customization** menu to customize the in-app experience.


9:41
App Customizations
CONTROLS
Show Controls
CRESTRON TOUCH SCREENS PIN
Interface Access PIN
ROOMS
Default Room
Living Room
Show Rooms
Allow Branding
Hide Modification Of Image And Room Name
AUDIO INTERRUPTS & CHIMES
Events & Sounds
Show Do Not Disturb
UI CUSTOMIZATION
Show More
If hidden press and hold home (room) image for 5 seconds on the Home or on the Rooms page to access.

This section provides the following information:

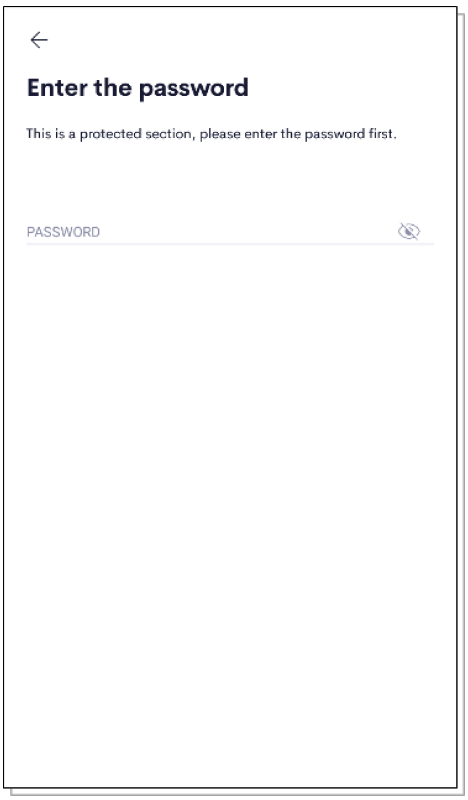
- Advanced User Password
- Interface Access PIN
- Tunable Lighting

Advanced User Password

To access certain parts of the Crestron Home user interface, you may be asked to enter a password.

When prompted, enter the Advanced User Password. The Advanced User Password is provided by the Crestron Home dealer.

Enter the Password Screen - Mobile Device



Based on the device type, re-entry of the Advanced User Password may not be required for a certain period of time:

- **Mobile Device:** The password will be required after the app is closed. Placing the app in the background will not require the password to be entered again.
- **Touch Screen:** The password will be required 30 minutes after the initial password entry. The password will always be required when claiming or reclaiming a home.

Interface Access PIN

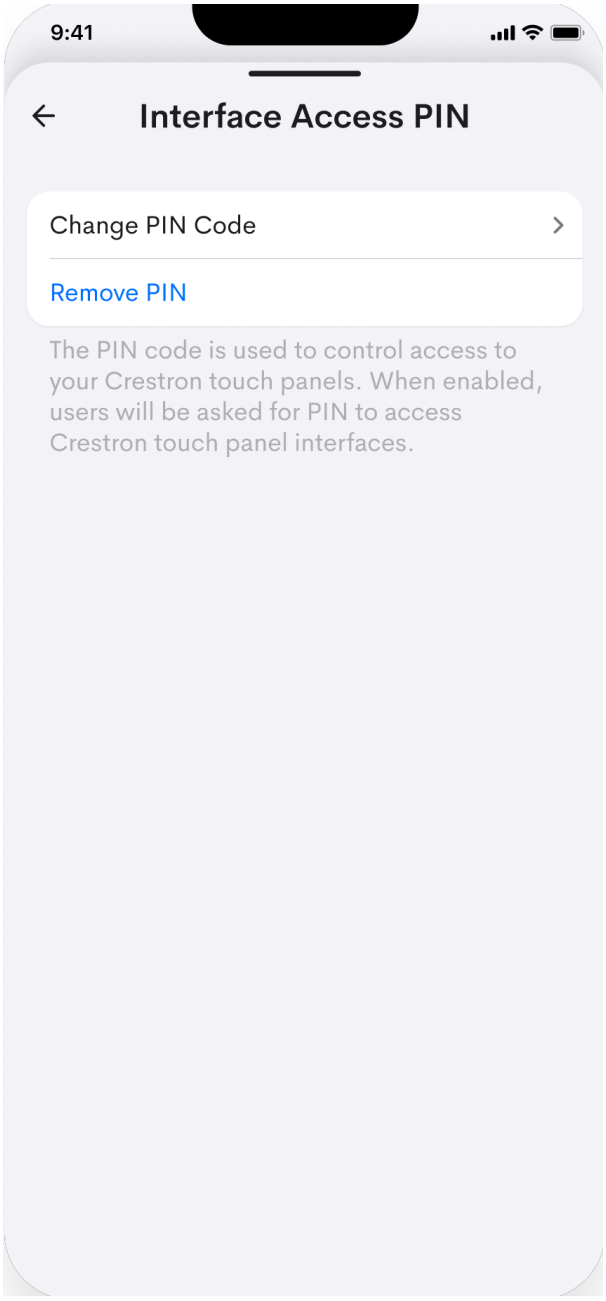
Crestron Home can be configured to require a PIN code when accessing the system with a touch screen.

NOTES:

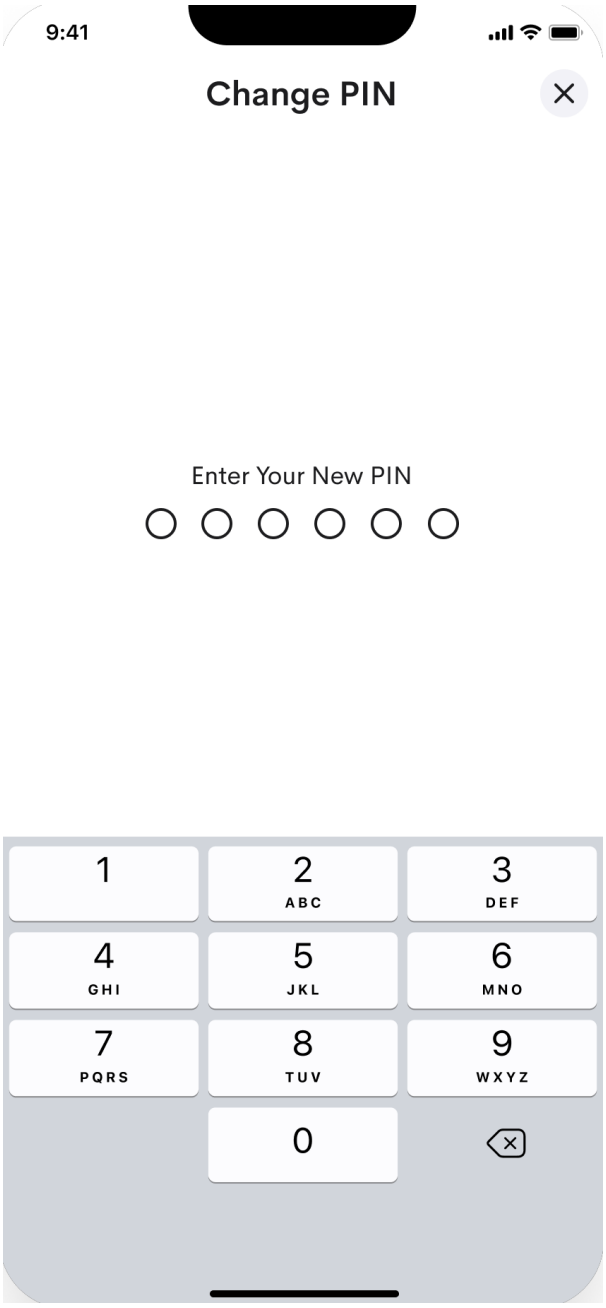
- This feature requires an advanced user password. For details, refer to System Detail and Password Configuration on page 566.
- If the touch panels are configured to never go to sleep, setting an Interface Access PIN will override the touch panel sleep time to two minutes.
- Entering an incorrect PIN five consecutive times will prompt for the advanced user password. This enables the user to bypass the PIN and remove or change it.

To set up a PIN, follow the instructions below.

1. Select **Interface Access PIN** from the **App Customizations** screen.
2. Select **Change PIN Code**.

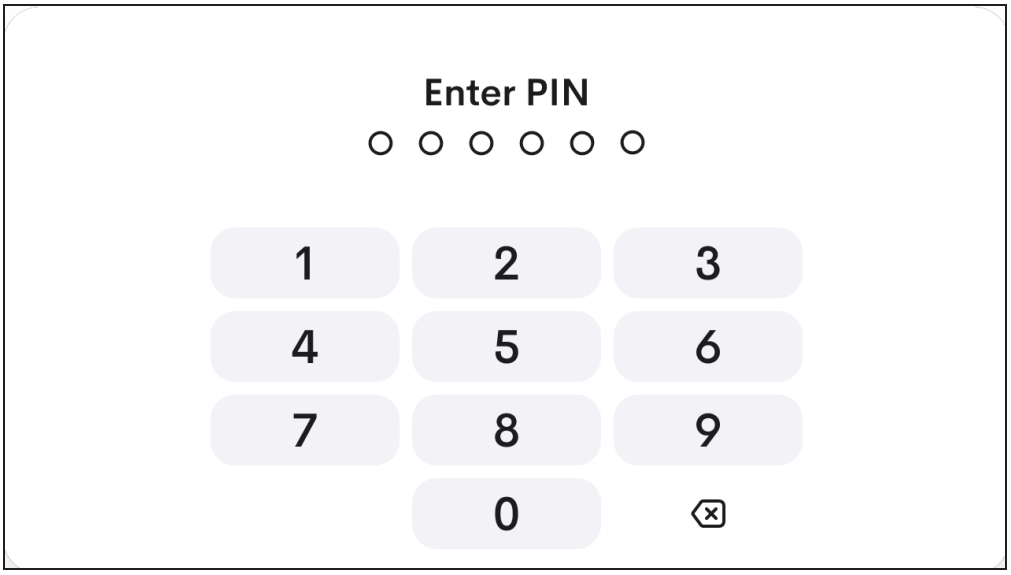


3. Enter a PIN.



While the PIN is active, accessing the system with a touch screen will require PIN entry.

Touch Screen PIN Prompt



To remove the PIN requirement, select **Remove PIN** on the **Interface Access PIN** screen.

Tunable Lighting

Go to **More > Settings > App Customizations > Advanced Settings** and then scroll to **Tunable Lighting**.

Color Tuning

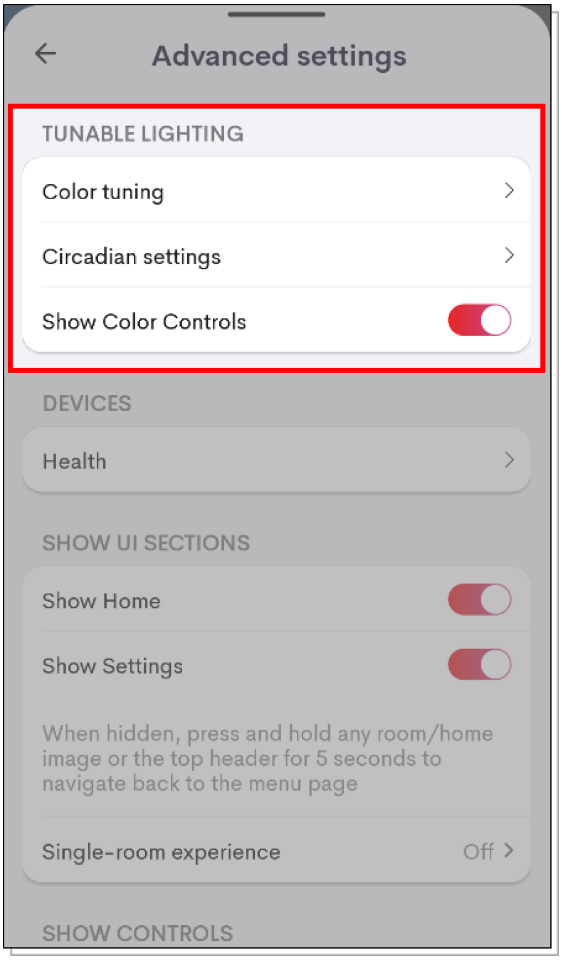
Define baselines for tunable lights. Baselines are the desired color and temperature for the tunable fixtures when the lights turn on.

There are two types of baseline settings:

- **Local:** Local baseline settings are applied only to the fixture group.
- **Global:** Global baseline settings are applied to all fixtures in the system (house).

To configure the baseline settings, go to **More > Settings > App Settings > Advanced Settings**. and then scroll to the **Tunable Lighting** menu.

Tunable Lighting Settings - Mobile Device



Define Baseline Settings

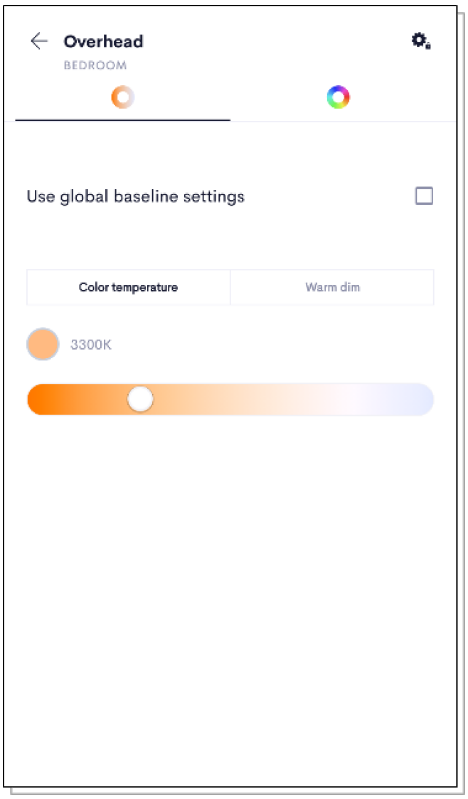
To set the baseline settings:

1. In the **Tunable Lighting** menu, select **Color tuning**.
2. Select or deselect **Use global baseline settings**. The lights will adjust to display the applicable baseline settings and the app will display the corresponding settings. The screen may switch to the tunable white or full color tuning tab.

   NOTES:

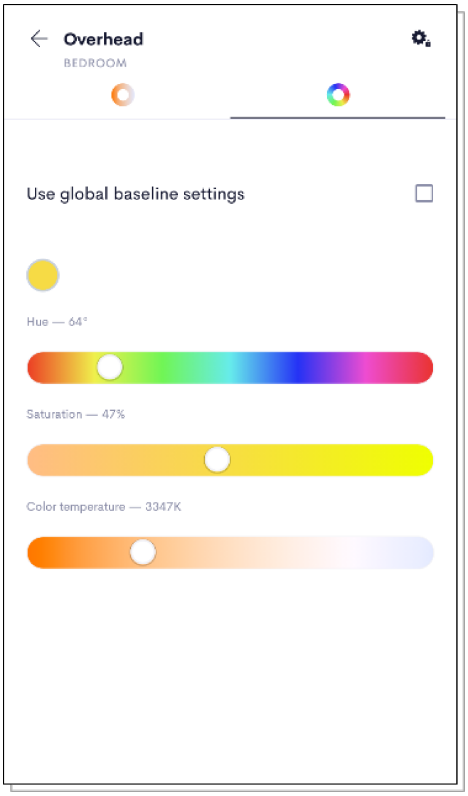
   - Selecting or deselecting **Use global baseline settings** automatically saves the setting without a prompt.
   - The **Set all lights in this room to use these settings** option applies the current settings to the other light groups in the room, but it does not save the settings. The previous settings are restored when the lights are turned off and then on again. To save the settings for other light groups, open the baseline settings for the other light groups and save their current settings.

3. Select **Tunable white** or **Full color tuning** and then configure the baseline.
   - Tunable white baseline:



     - **Color temperature:** Select **Color temperature** to assign a default color temperature for the lights. Use the slider to set the color temperature for the lights.
     - **Warm dim:** Select **Warm dim** to assign the warm dim function for the lights. When **Warm dim** is selected, the color temperature of the lights adjusts based on their intensity levels, which replicates the effect of incandescent and halogen lights. When the LED intensity is reduced (dimmed), the lights display a warmer color temperature and when the intensity is increased, the lights display a cooler color temperature.

- Full color tuning baseline:

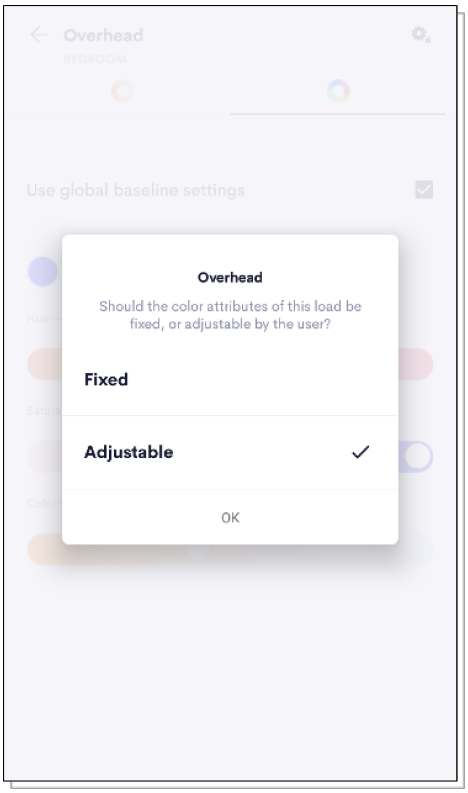


    - **Hue:** Use the slider to set the hue for the lights.
    - **Saturation:** Use the slider to set the saturation for the lights.
    - **Color temperature:** Use the slider to set the color temperature for the lights.

4. Select **Save** or **Save as global baseline settings**.

Lock Adjustments

Allow or disallow changes to the color attributes by changing the permissions for the selected light.



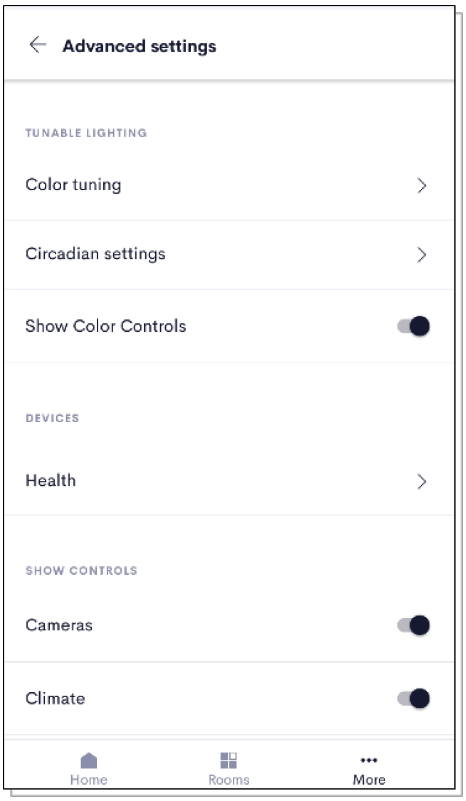
To set the permissions, select **Menu** and then **Fixed** or **Adjustable**.

- **Fixed:** The settings cannot be changed. Scenes cannot update to use different colors. Controls do not display hue, saturation, or color temperature
- **Adjustable:** The settings can be changed.

Circadian Settings

Use the Circadian Lighting settings to configure the Morning, Day, Evening, and Night circadian transition points for lights in the system.

To configure the circadian lighting settings, in the **Tunable Lighting** menu select **Circadian settings**.



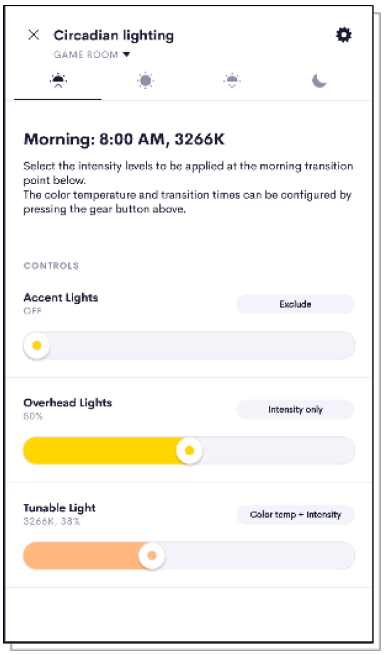
Set the Circadian Light Mode

When a light is included in the Circadian lighting function, the Circadian scene is added to the room with the dimmer.

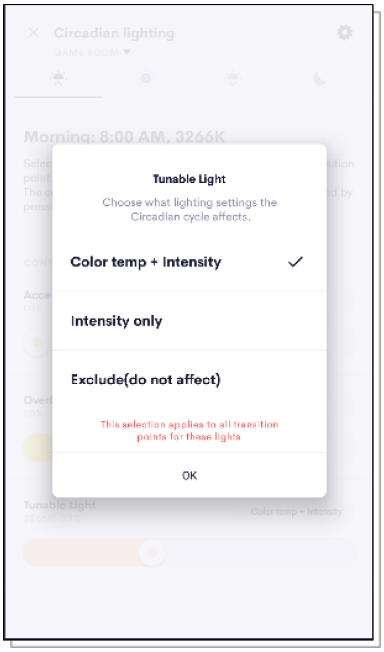
> **Note:** The circadian light mode setting applies to all transition points for the lights.

To set the circadian light mode:

1. Select the current mode for the light. The mode is displayed on the button next to the name of the light.



2. Select the **Circadian Light Mode**:



   - **Color temp + Intensity:** The light changes the color temperature and intensity when Circadian mode is active. This option is available only for tunable lights. To set the light intensity, refer to Set the Light Intensity on page 1000. To set the color temperature, refer to Set the Transition Time and Color Temperature on page 1001.
   - **Intensity:** The light changes intensity when Circadian mode is active. To set the light intensity, refer to Set the Light Intensity on page 1000.
   - **Exclude:** The light is not controlled when Circadian mode is active.

     > **NOTE:** Lights without color tuning capabilities are excluded from the Circadian lighting functions by default.

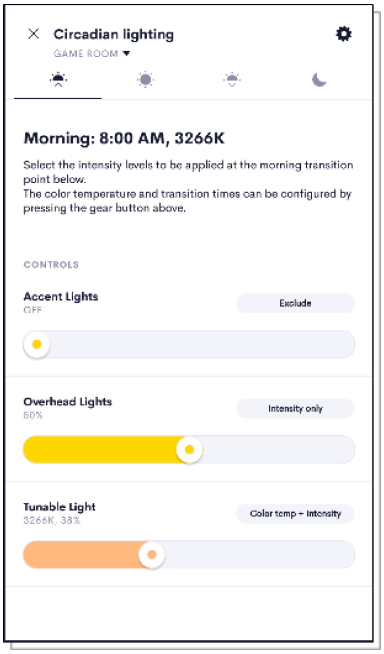
3. Select **OK**.
4. Select **Save current settings as Circadian cycle**.

Set the Light Intensity

Set the light intensity for the Morning, Day, Evening, and Night transition points.

To set the intensity for the transition points:

1. Select the **Morning**, **Day**, **Evening**, or **Night** circadian transition point.
2. For each circadian transition point, use the slider to set the intensity.



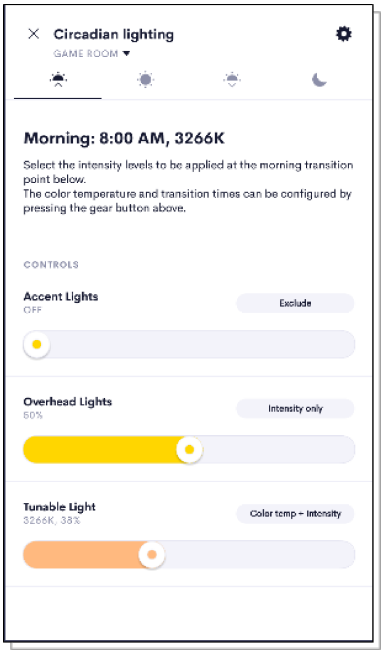
3. Select **Save current settings as Circadian cycle**.

Set the Transition Time and Color Temperature

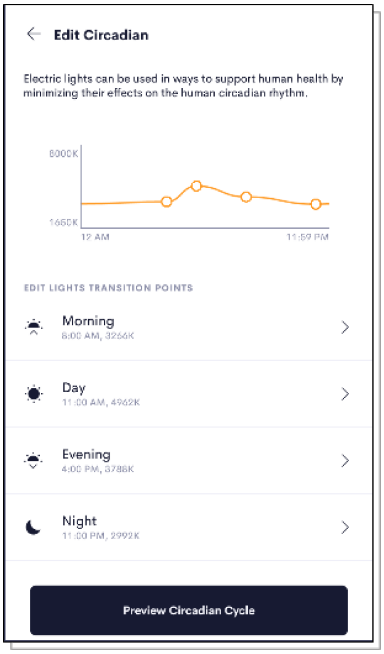
Set the time and color temperature for the Morning, Day, Evening, and Night transition points.

To set the time and color temperature for the transition points:

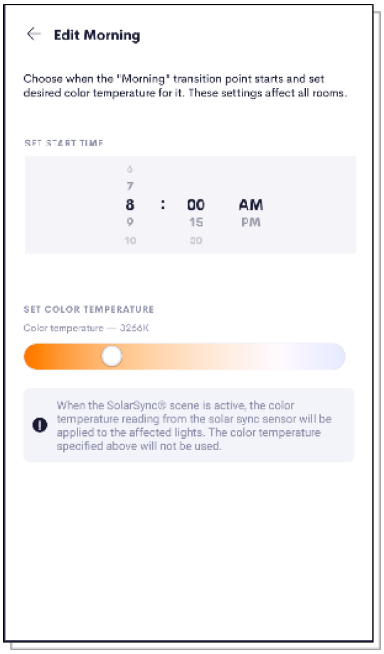
1. Select **Circadian Lighting Settings**.



2. Select the **Morning**, **Day**, **Evening**, or **Night** circadian transition point.



3. For each circadian transition point, set the start time and color temperature:



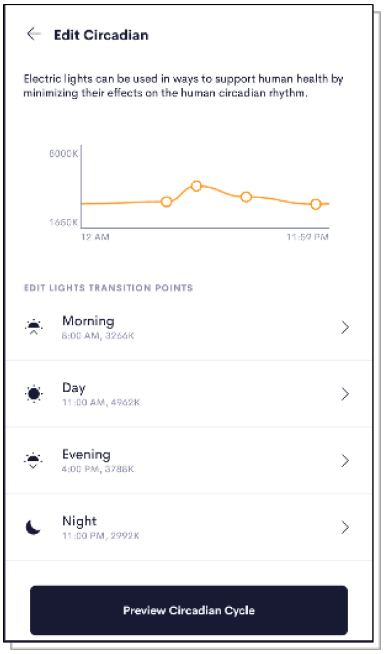
   - **Set Start Time:** Select the start time for the transition point.
   - **Set Color Temperature:** Use the slider to set the color temperature for the lights.

     > **NOTE:** When the SolarSync® scene is active, the color temperature from the GLS-LCCT sensor will be used instead of the value set in this field.

4. Select ← **Back**.
5. To save, select ← **Back** on the **Edit Circadian** screen and then select **Save current settings as Circadian cycle**.

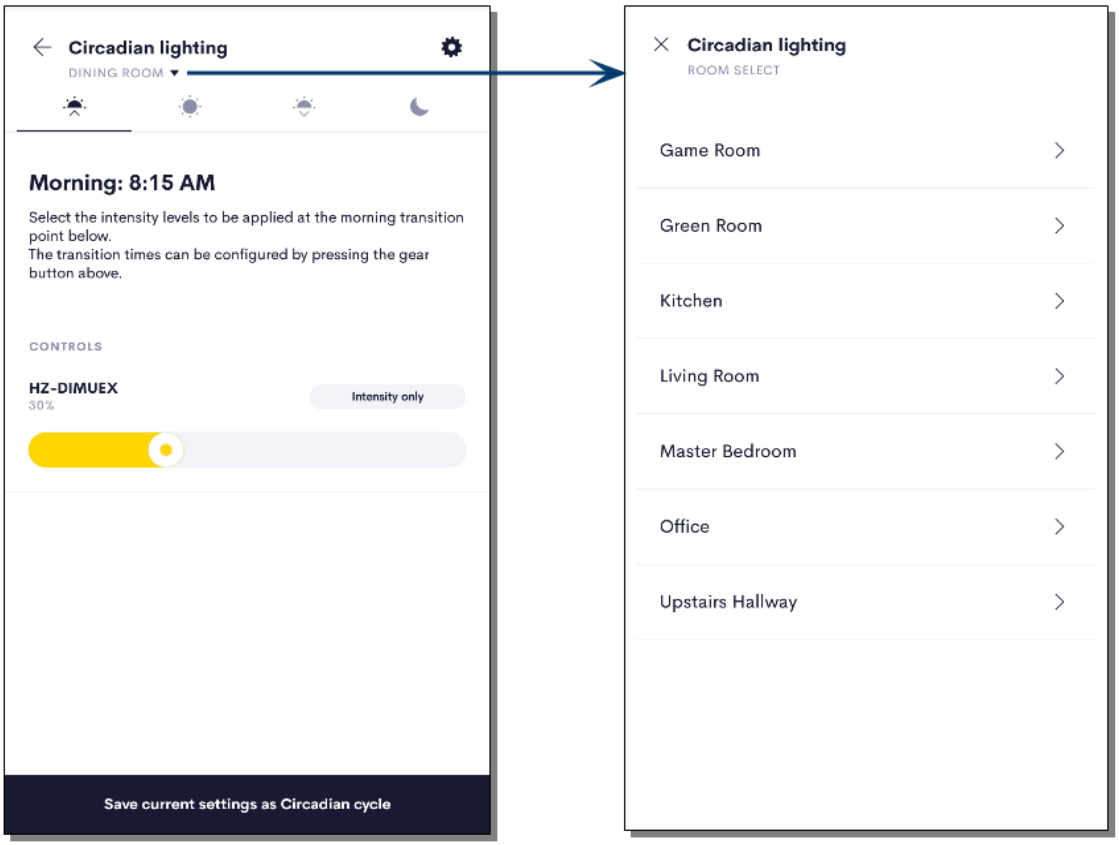
Preview the Circadian Cycle

To preview the circadian cycle, select **Preview Circadian Cycle**. The lights will cycle through the Morning, Day, Evening, and Night transition points. The duration of the preview is 30 seconds. To end the preview, select **End Circadian Preview**.



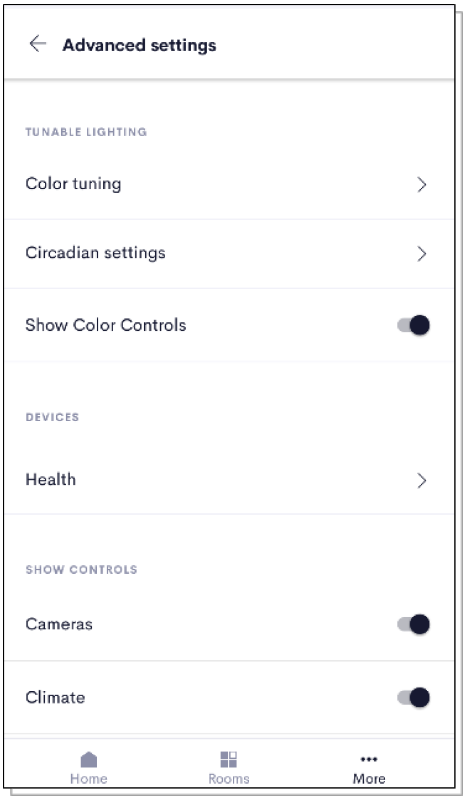
Change Rooms

To select a different room, tap the rooms drop-down menu and then select a room.



Show Color Controls

Show or hide color controls on the device. To hide the color controls, turn of **Show Color Controls**.

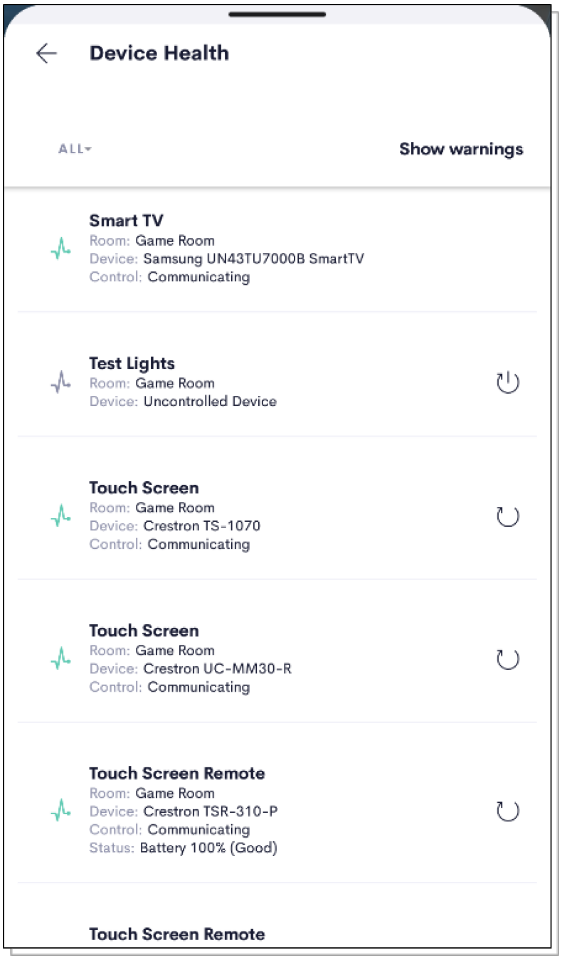


Device Health

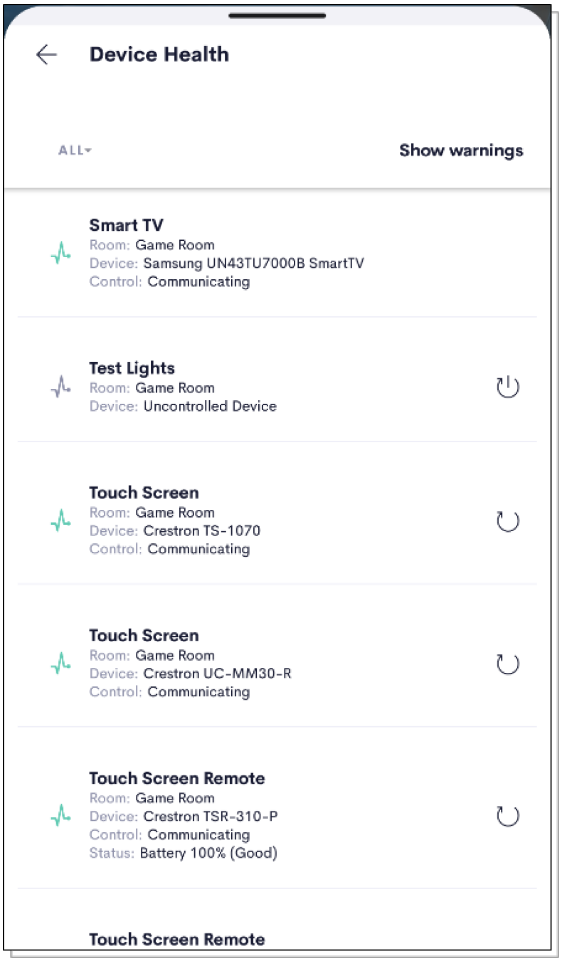
The device health dashboard provides the status of devices in the system. The health dashboard displays Crestron Home processors, touch screens, media devices, uncontrolled devices, occupancy sensors, wired and wireless gateways, battery-operated keypads and shades, TSR-310 and HR-310 remotes, and Lutron processors. If supported, the device can also be power cycled or rebooted.

To view the Health Dashboard, go to **More > Settings > App Customizations > Advanced Setting** and then scroll to **Devices**.

Device Health - Mobile Device

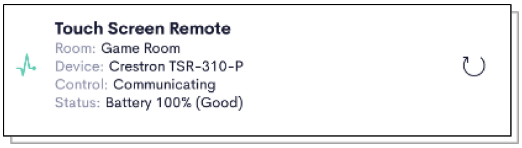


Device Status



Device Health - Mobile Device

Each device in the system may display the following information:



- **Health Icon:**
  - **Online:** The device is communicating with the control processor.
  - **Offline:** The device is not communicating with the control processor.
  - **Restart progress:** The device is power cycling or restarting.
  - **Unknown:** The communication status of the device is unknown.
  - **Battery low:** The device is reporting low battery level.
- **Device Name:** Name of the device as it is displayed in the system.

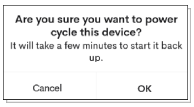
- **Room name:** The room that the device belongs to.
- **Device make and model:** The manufacturer and model name of the device.
- **Control Status:** This field is displayed for devices that provide their online status or if it is power cycling.
    - **Communicating:** The device is communicating with the control processor.
    - **Power cycling:** The device is power cycling.
    - **Rebooting:** The device is restarting.
    - **Reboot Failed:** An error occurred while the device was restarting and will be displayed until there is a change in communication state or the device is restarted or power cycled again.
    - **Offline:** The device is offline.
    - **Unknown:** The device is in Sleep mode. Shown only for devices that can enter sleep mode.
- **Status:** The battery level for the device. Depending on device capabilities, the battery level may be displayed as **Battery Good/Low** or **Battery % (Good/Low/Dead)**.
- **Last Seen:** Displays the length of time that the device has been offline.
- **Power Cycle:** Available when the device power is controlled by a power bank on a networked power controller.

  To power cycle a device:

  > **TIP:** The power cycle function can also be performed from the source control screen. For details, refer to Control Media on page 862.

  1. Press **Power Cycle**.
  2. In the confirmation dialog, press **OK**.

     > **NOTE:** If multiple devices are assigned to the same power source, they will be displayed in the confirmation dialog. All devices will power cycle.

- **Restart:** Available when the device can be restarted over the network. If the device can be power cycled and restarted, the device will be power cycled.

  To restart a device:

  > **NOTE:** If the device can be power cycled and restarted, **Power Cycle** will display and the device will be power cycled.

  > **TIP:** The restart function can also be performed from the source control screen. For details, refer to Control Media on page 862.

  1. Press **Restart**.
  2. In the confirmation dialog, press **OK**.

     > **NOTE:** Devices that connect to the device will go offline until the device restarts and comes back online.

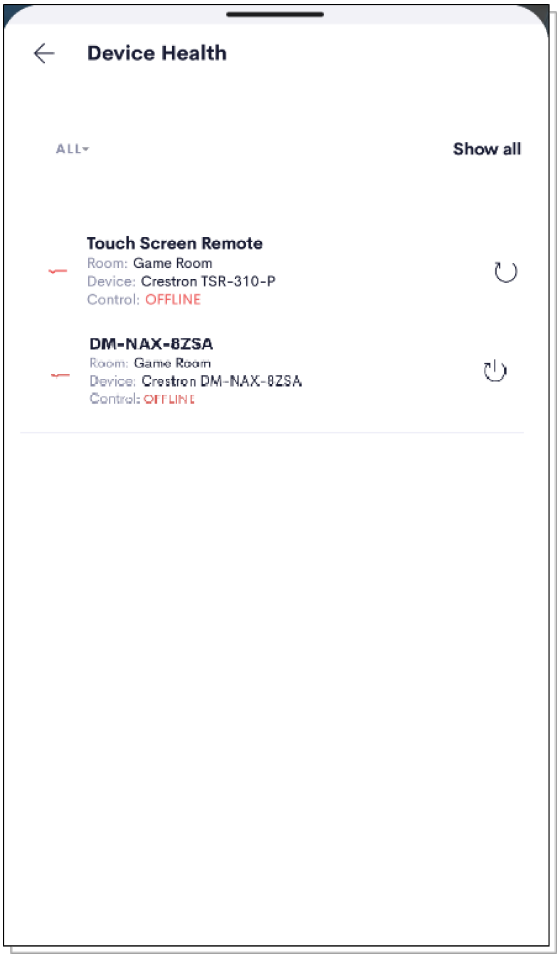
Filter Devices

To filter the devices by room group, select a room group from the **Rooms** drop-down menu.

> **NOTE:** The control system is always displayed.

Show Warnings

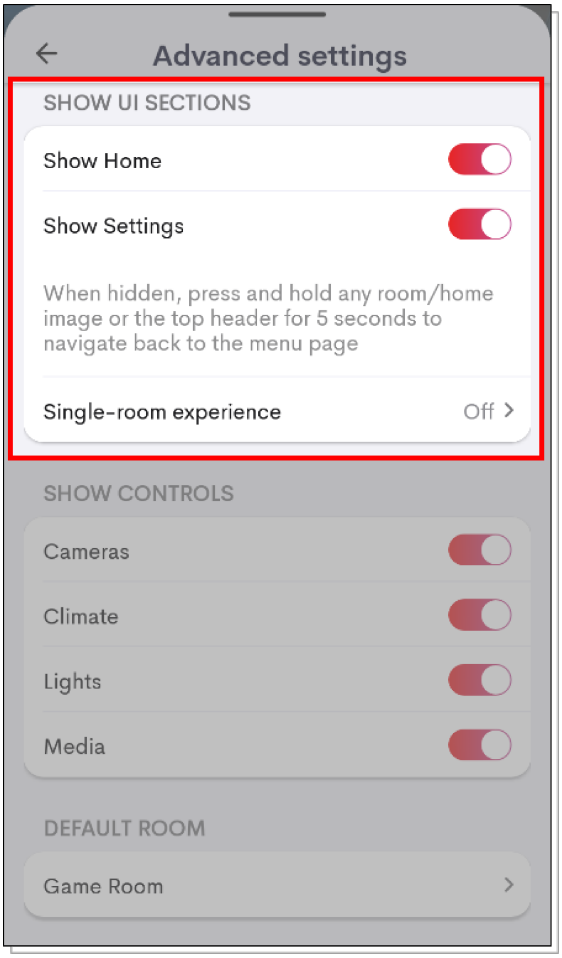
To show only devices with warnings, select **Show warnings**.



Show UI Sections

Use the **Show UI Sections** menu to change how the Crestron Home user interface is displayed.

To view the **Show UI Sections** menu, go to **Menu > Settings > App Customizations > Advanced Settings** and then scroll to **Show UI Sections**.



Hide Home Tab

Hiding the **Home** tab can help provide a better user experience for the user based on the setup of the system. When hidden, the whole house functions on the **Home** tab are hidden. The user can interact with all rooms in the system.

To hide the **Home** tab, deselect **Show Home**.

To access the Settings screen when the **Home** tab is hidden, tap and hold a room image until the Settings screen is displayed (about 5 seconds).

Hide Settings Tab

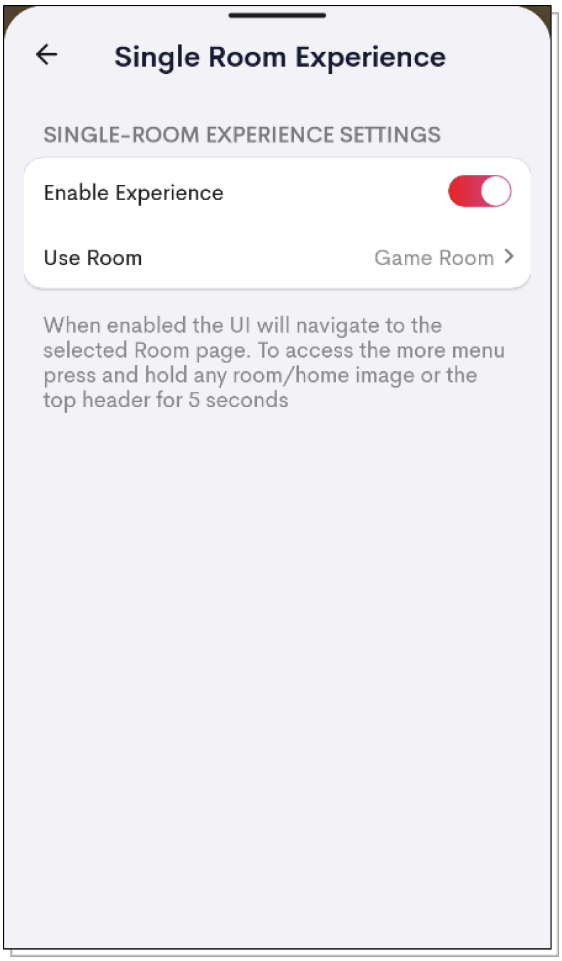
Hiding the **Home** tab to help prevent changes to the settings on the device. When hidden, the **Settings** option in the menu on the Home tab is not shown.

To hide the **Settings**, deselect **Show Settings**.

To access the **Settings** screen when the **Settings** option is hidden, tap and hold a home or room image until the **Settings** screen is displayed (about 5 seconds).

Single-Room Experience

Use the Single-Room Experience to configure the touch screen so that room controls for only one room are displayed. The navigation bar that contains the Home and Rooms tabs is not displayed when using the single-room experience.



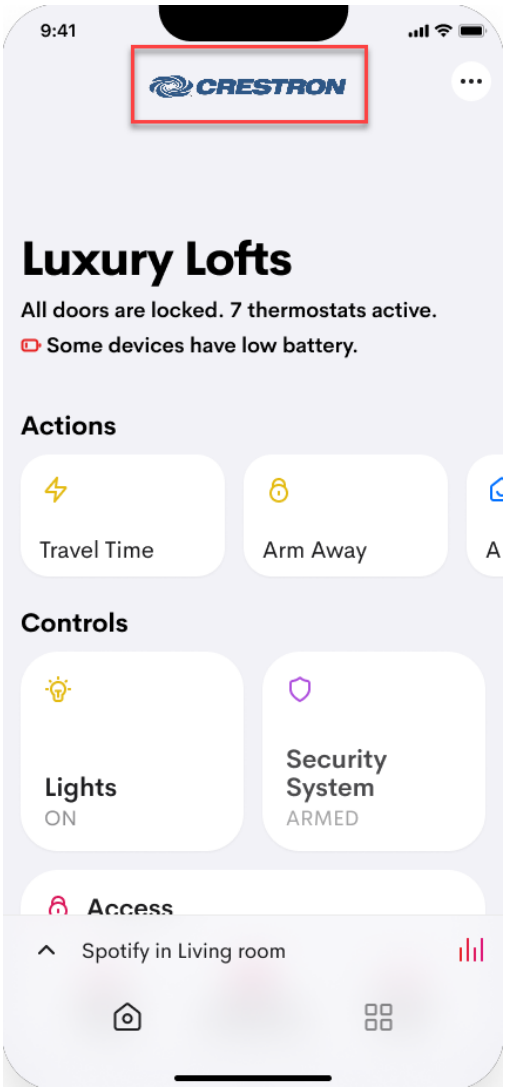
To turn on the Single-Room Experience:

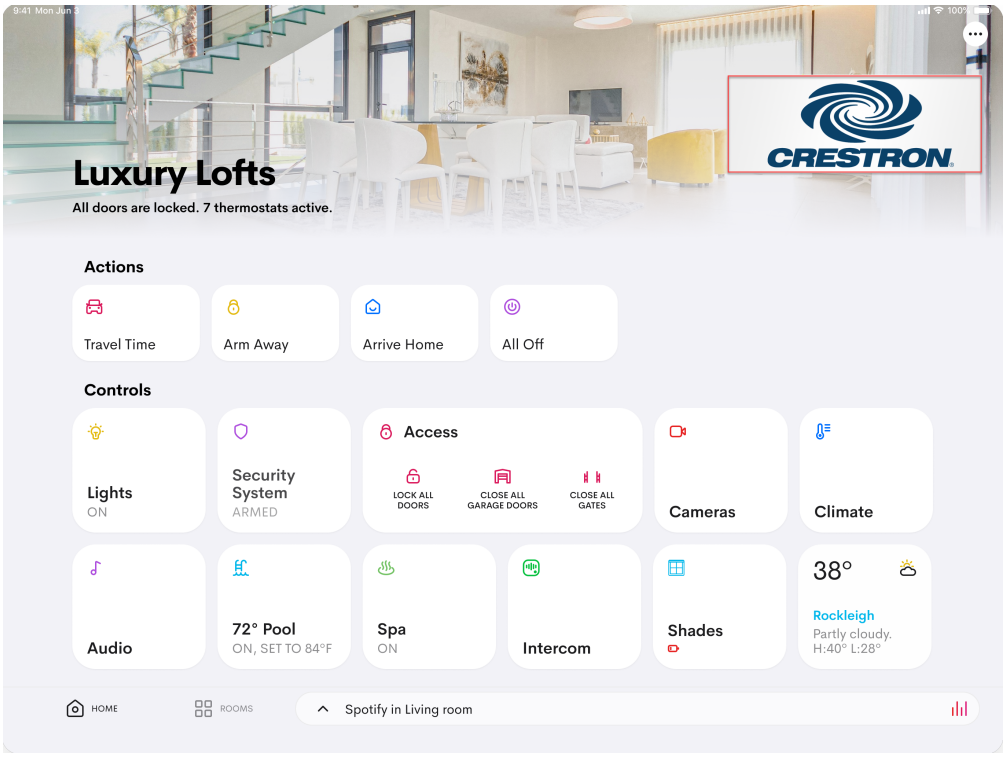
1. Select **Single-room experience**.
2. Tap the **Use room** menu and then select a room.
3. Select **Enable Experience** and then **OK** to confirm.

Branding

With the branding feature, a logo or other image can be displayed through the Crestron Home interface.

Branding Examples

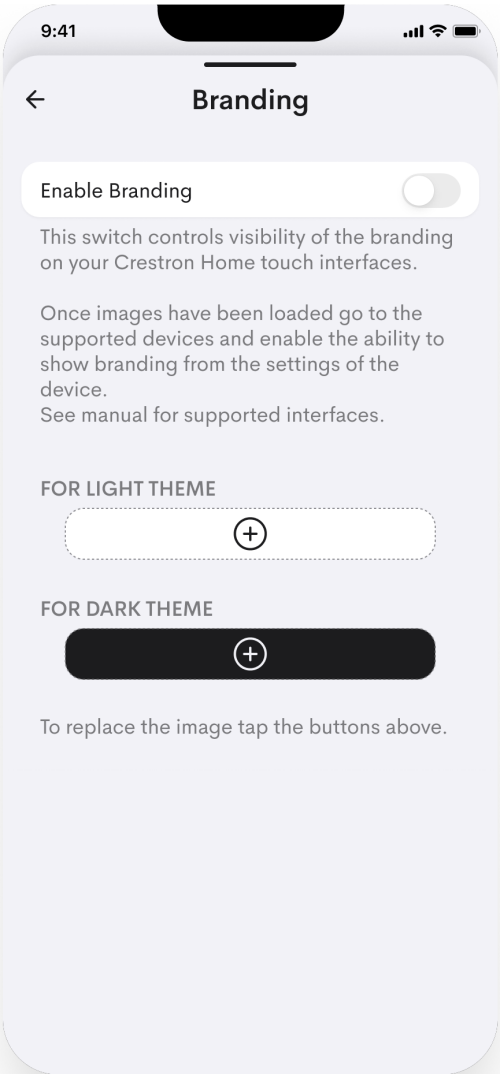

9:41
CRESTRON
Luxury Lofts
All doors are locked. 7 thermostats active.
Some devices have low battery.
Actions
Travel Time
Arm Away
Controls
Lights
ON
Security System
ARMED
Access
Spotify in Living room



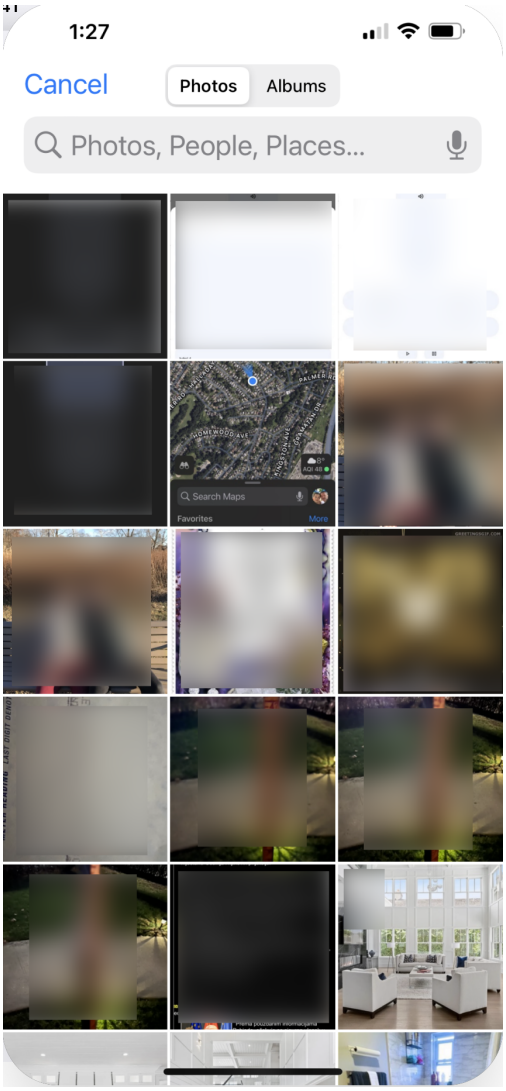
To add a branding image to the interface, follow the instructions below.

1. On the **App Customizations** screen, select **Branding** to access the **Branding** screen.
2. Set the **Enable Branding** toggle to the right to turn the feature on.

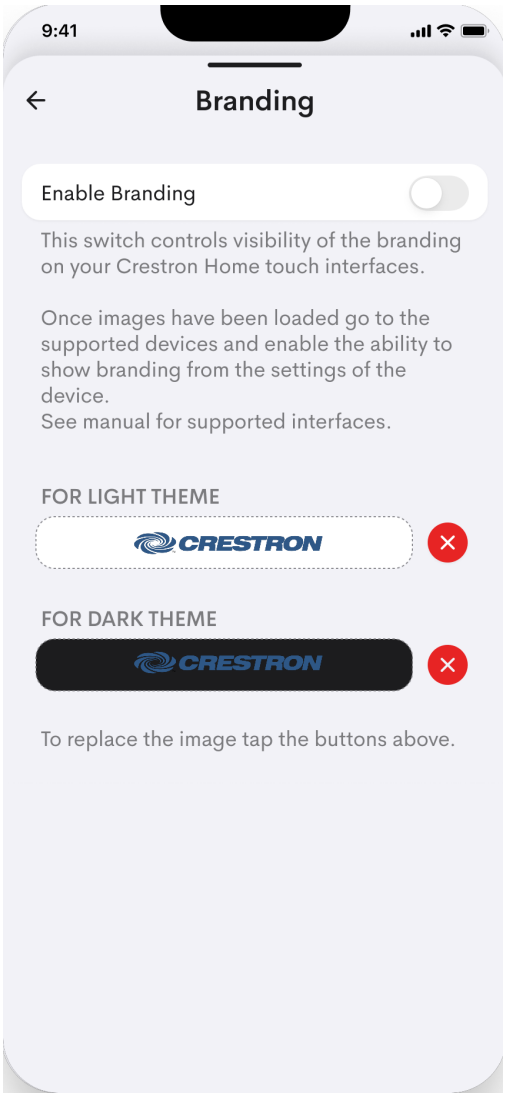
3. Select the **+** below a theme to open the device's photo album.



4. Select a .PNG to use. The image will scale to the correct size while maintaining the original aspect ratio.



The branding image appears below each theme and will now appear throughout the Crestron Home interface.



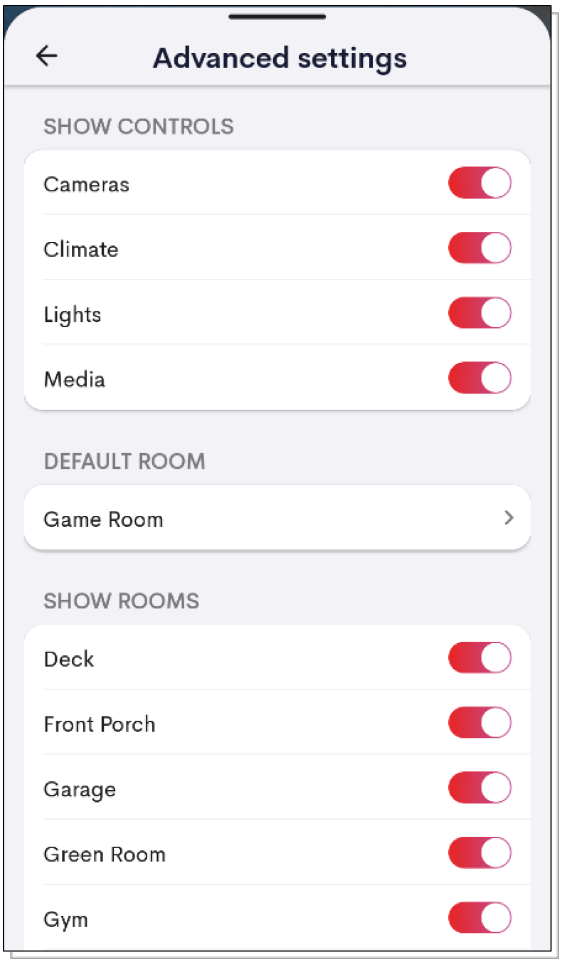
To replace an image, follow the instructions below.

1. Select the image to replace. The album view opens.
2. Select the replacement image. The new image appears on the **Branding** screen.

To remove an image, select the **X**.

Show Controls

Use the **Show Controls** menu to select the device types that should or should not be shown on the device. To view the **Show Controls** menu, go to **Menu > Settings > App Customizations > Advanced Settings** and then scroll to **Show Controls**.



The controls that are available in the Crestron Home system are displayed in the **Show Controls** list. The default setting for controls is **Show**.

To hide a control, switch the toggle to off. The control will not appear on any screen in the user interface. For example, if **Climate** is hidden, thermostats will not be shown in the rooms they are located in and the Climate option will not be shown on the **Home** tab.

NOTES:

- Controls that are hidden apply only to the user interface device that is being configured. For example, if **Cameras** is hidden on a touch screen in the living room, **Cameras** will not be hidden on the touch screen in the foyer or on a mobile device.
- Quick actions that are displayed in the **Home** tab can operate controls that are hidden.

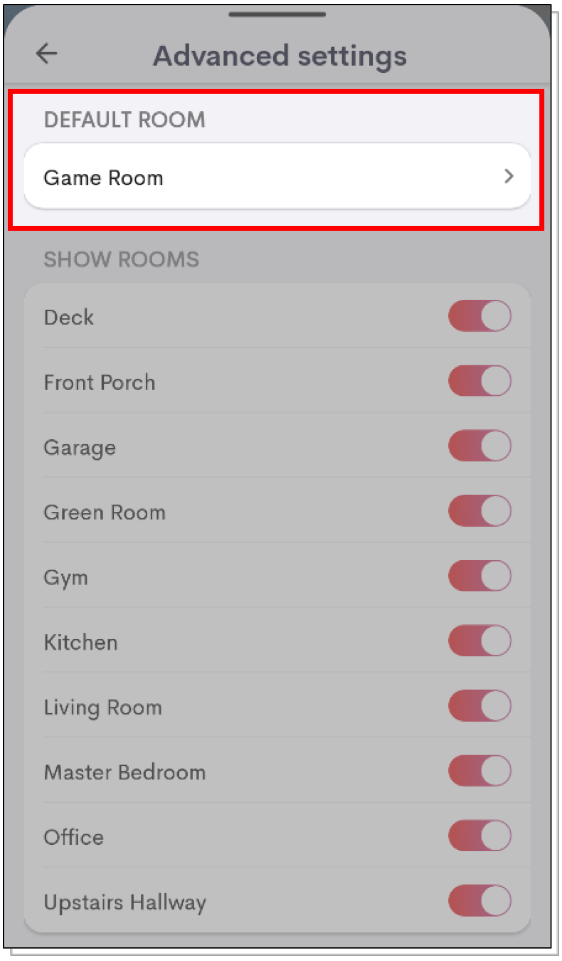
The following controls may be displayed in the **Show Controls** list:

- Cameras
- Climate
- House Access
- Intercom
- Lights
- Media
- Pools & Spas
- Security
- Shades

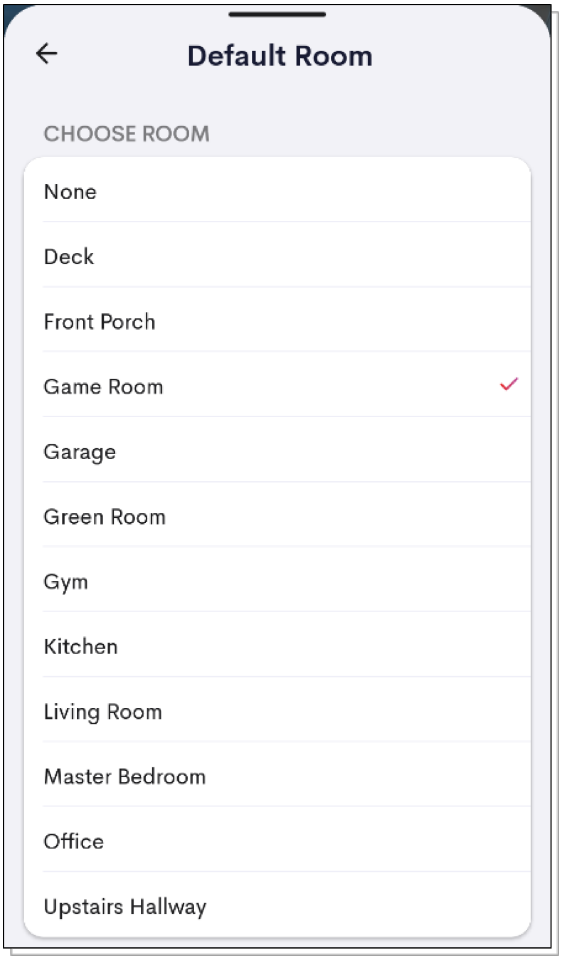
Default Room

Use the **Default Room** setting screen to select the room that is opened when the **Rooms** tab is pressed.

To open the **Default Room** settings screen, go to **More > Settings > App Customizations > Advanced Settings** and then scroll to **Default Room**.



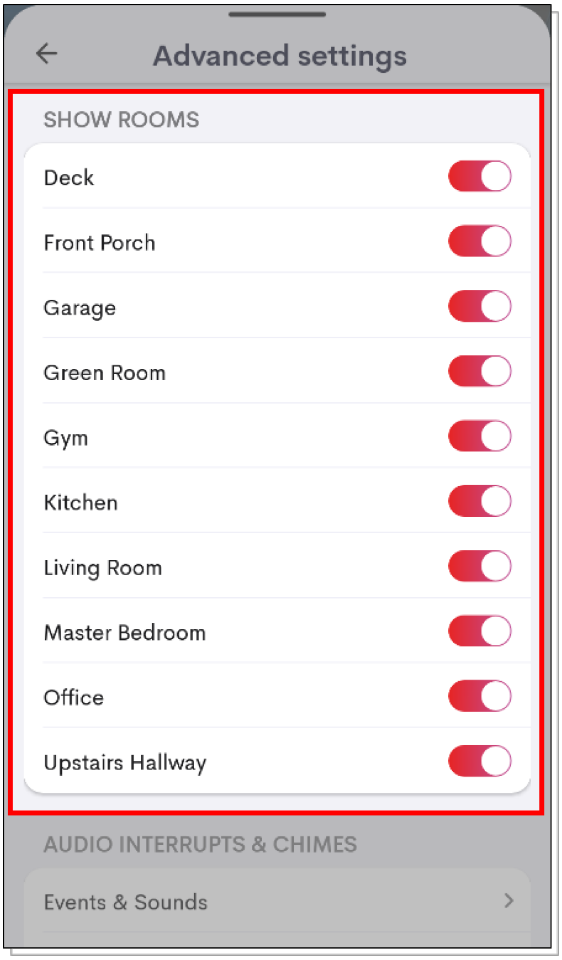
To select the default room, tap **Default Room** and then select a room.



Show Rooms

Use the **Show Rooms** menu to select the rooms that should or should not be shown on the device.

To view the **Show Rooms** menu, go to **More > Settings > App Customizations > Advanced Settings** and then scroll to **Show Rooms**.



The rooms that are available in the Crestron Home system are displayed in the **Show Rooms** list. The default setting for rooms is **Show**.

To hide a room, switch the toggle to off. The room will not be shown in the **Rooms** tab. Devices that are in the room may still be displayed in the **Home Controls** section of the **Home** tab. For example, if **Master Bedroom** is hidden and the room contains a thermostat, the thermostat will be displayed.

NOTES:

- Rooms that are hidden apply only to the user interface device that is being configured. For example, if **Kitchen** is hidden on a touch screen in the living room, **Kitchen** will not be hidden on the touch screen in the foyer or on a mobile device.

- Quick actions that are displayed in the **Home** tab can control devices in rooms that are hidden.

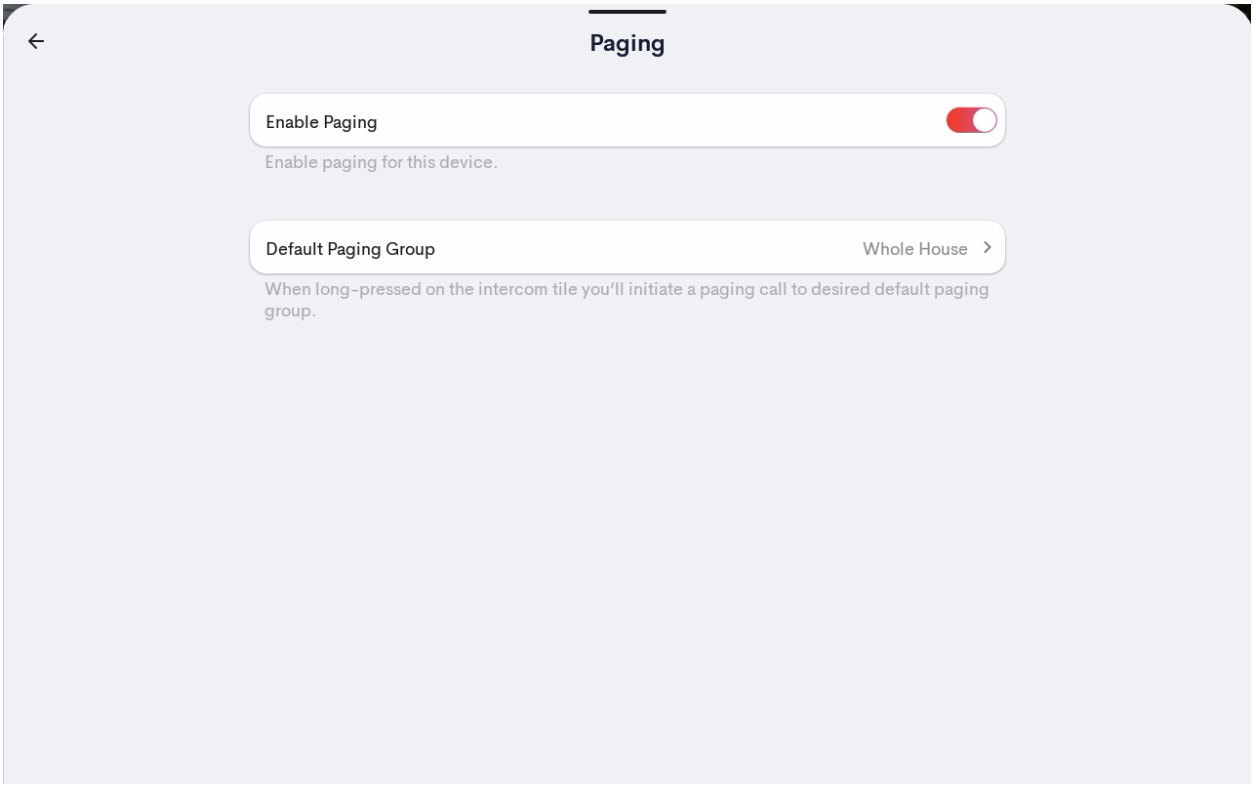
Intercom

Use the **Intercom** menu to configure the intercom settings.

Paging

If the touch screen will be used for paging, use the Paging menu to configure the device. The paging settings are specific to each device in the system that supports paging.

To enable or disable paging, use the toggle switch to select **On** (default) or **Off**.



When paging is turned off:

- The Intercom control is not displayed in the Show Controls list.
- The Intercom tile is not displayed on the Home screen.
- The device cannot receive pages.

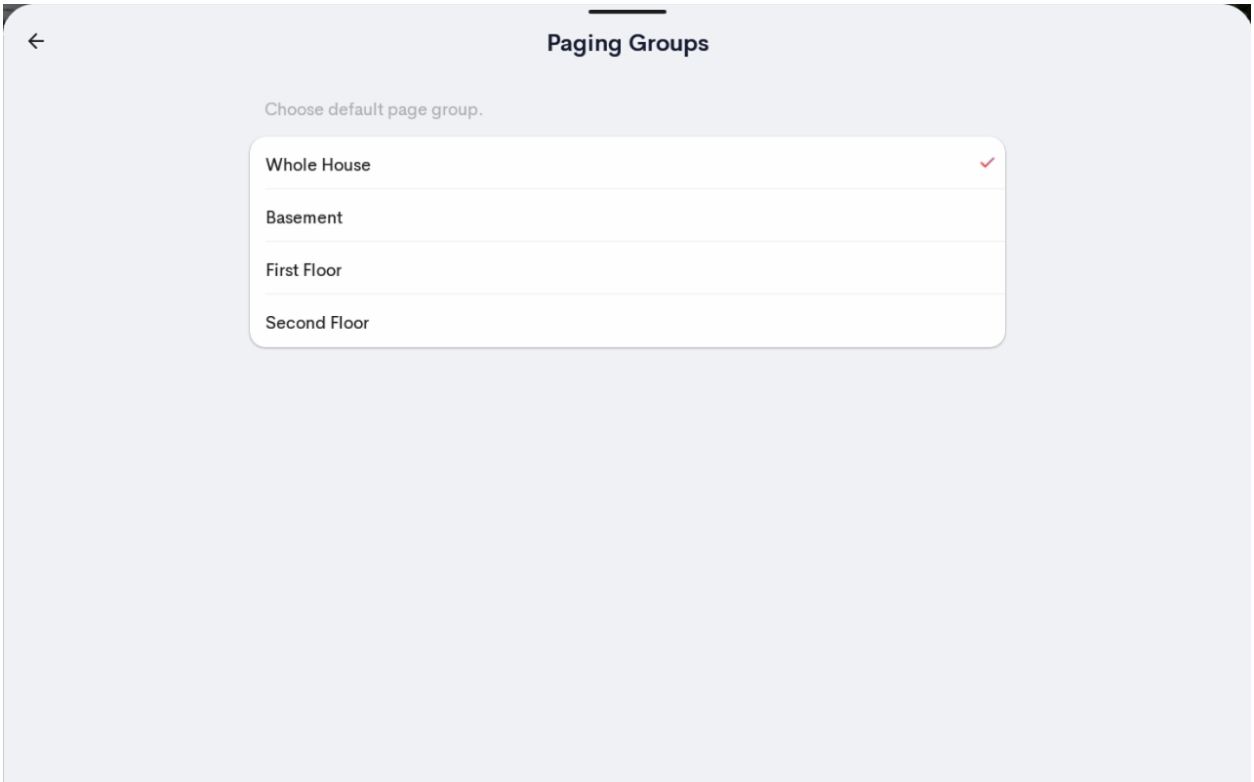
> **NOTE:** If paging is enabled and the **Intercom** control is turned off in the **Show Controls** list, the device can receive a page but it cannot send pages.

Paging Groups

Select the default paging group. The default paging group is used when the Intercom tile on the Home screen is held to send a page. For details, refer to Intercom on page 902.

To select the default paging group, select **Default paging group** and then select a group from the list. The default paging group is **Whole House**.

> **NOTE:** If the selected room group is deleted by a dealer using the Crestron Home Setup app, the Whole House group will be set as the default paging group.

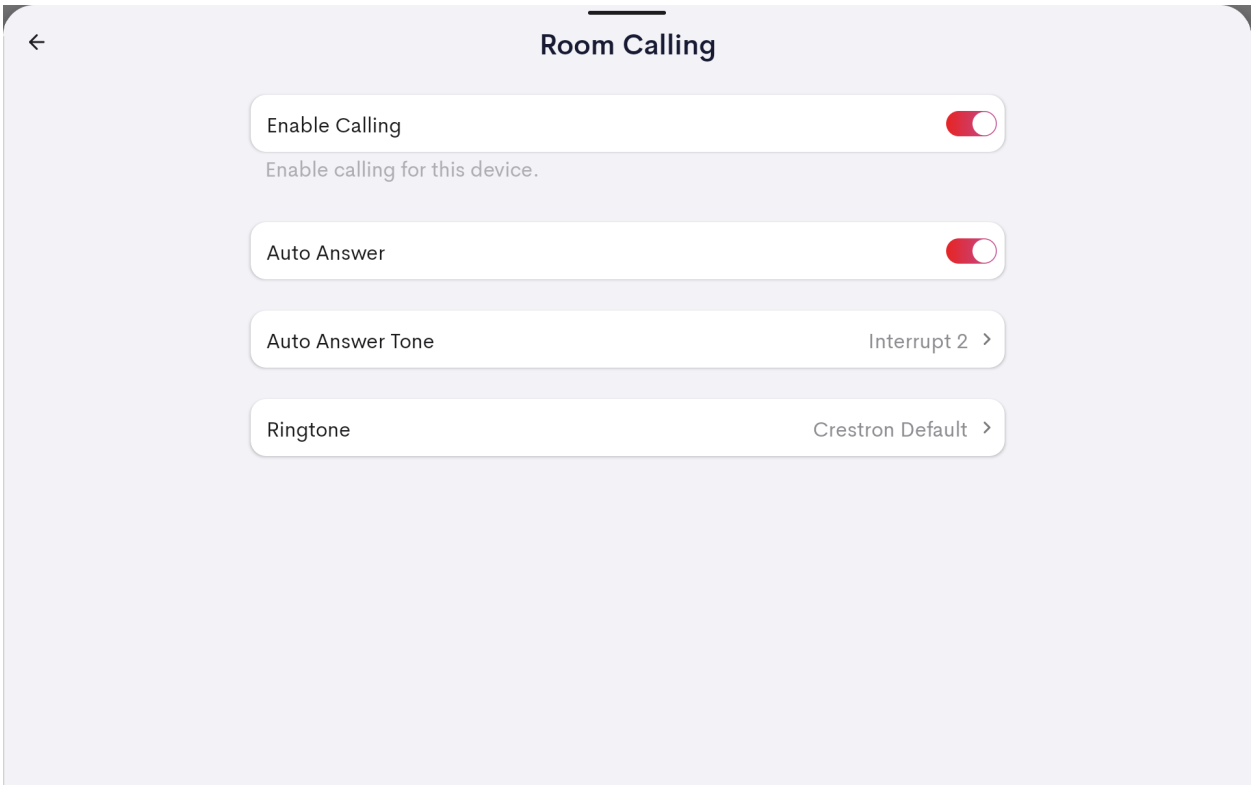


Calling

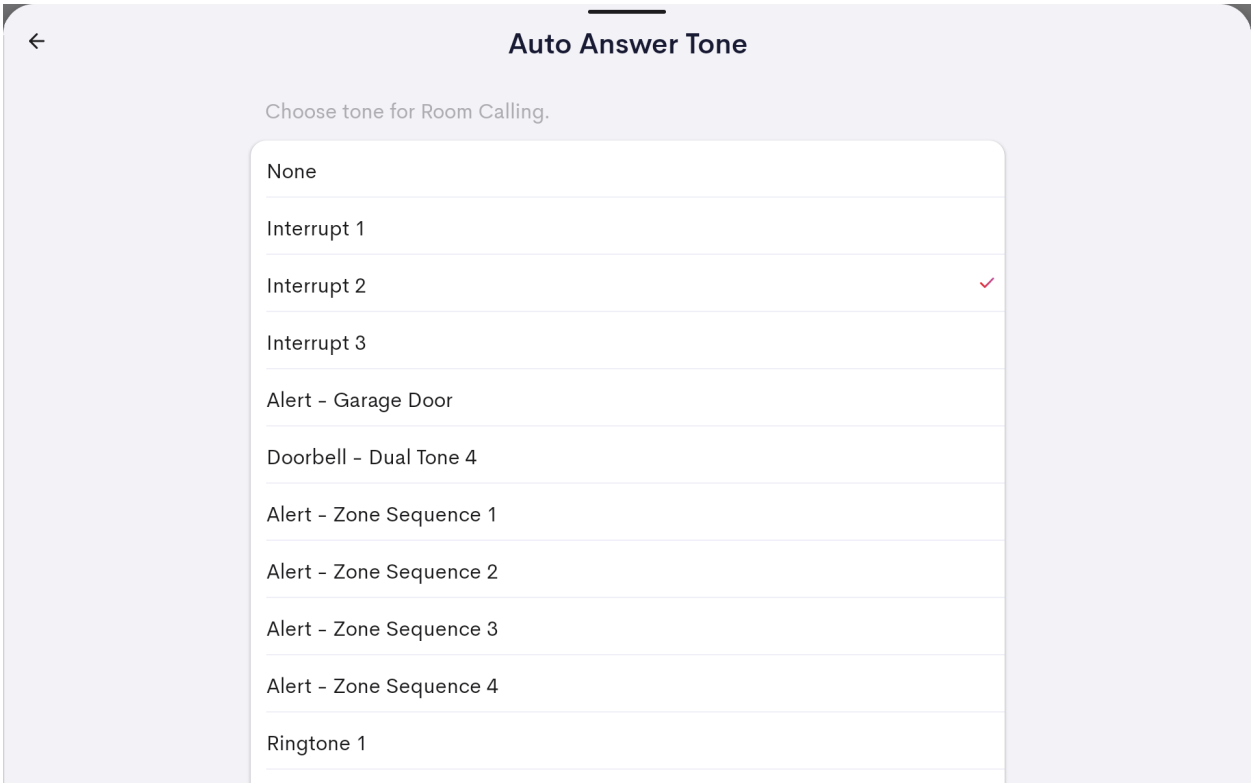
If the touch screen will be used for calling, use the Calling menu to configure the device. The calling settings are specific to each supported device in the system.

To enable or disable calling, use the **Calling** toggle switch to select **On** (default) or **Off**.

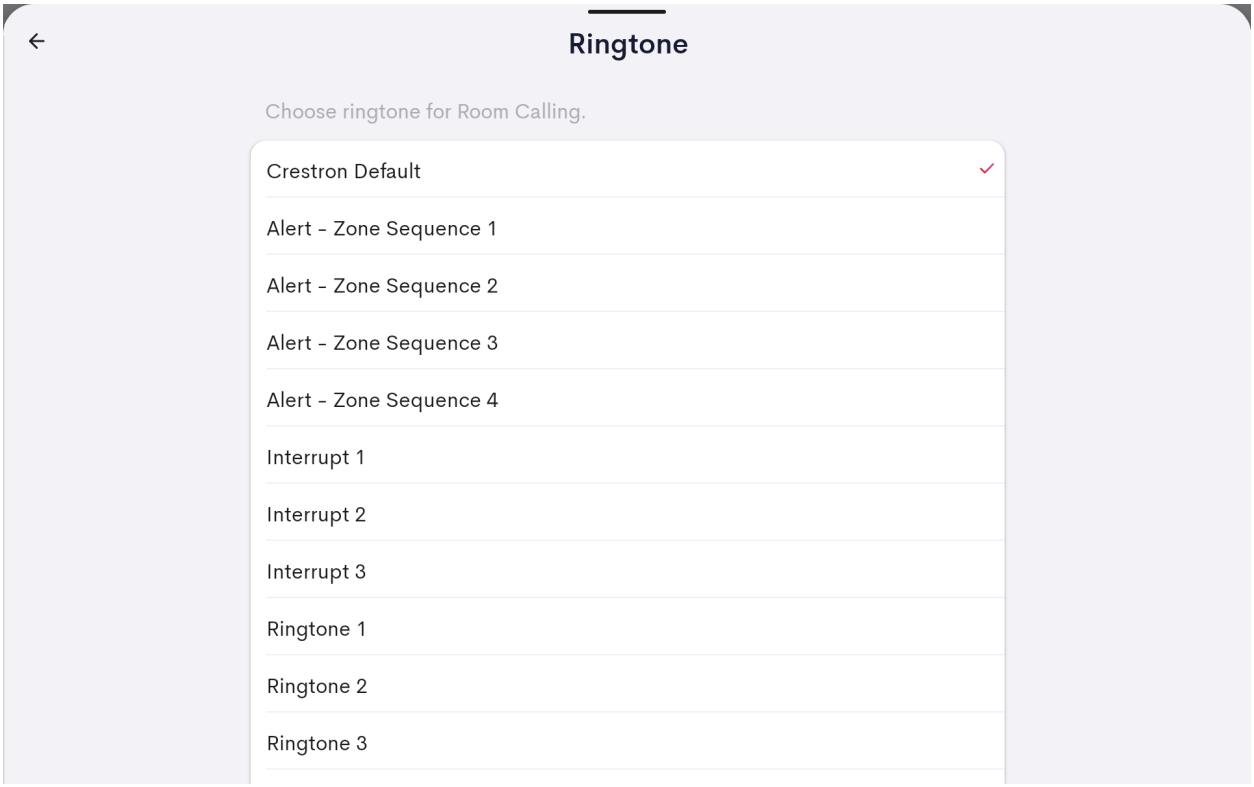
To enable or disable automatic call answering, use the **Auto Answer** toggle switch select **On** or **Off** (default).



To change the tone that plays when automatically answering a call, select **Auto Answer Tone** and then a tone to use.



To change the ringtone, select **Ringtone** and then a tone to use.

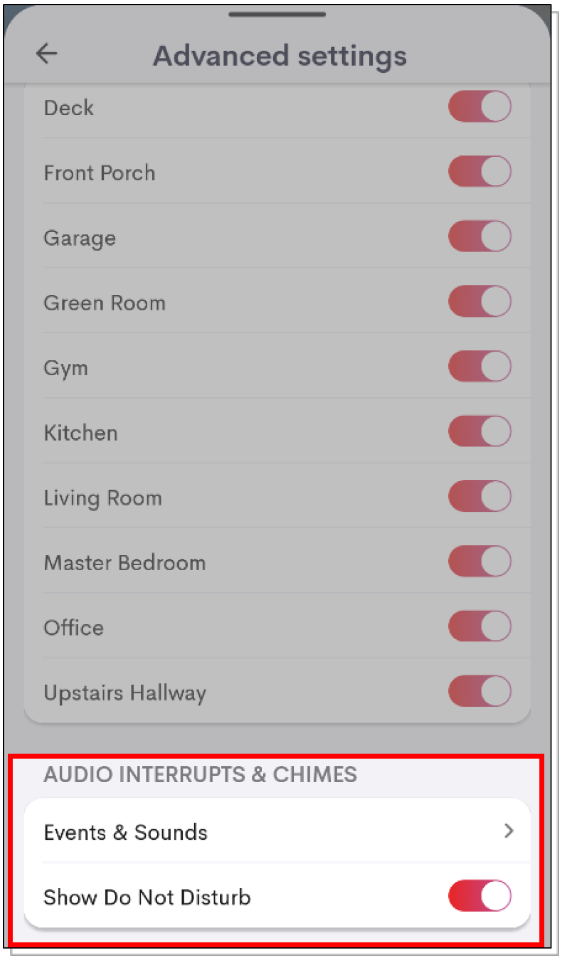


Audio Interrupts and Chimes

Use the **Audio Interrupts & Chimes** menu to configure the interrupt and chime settings for the device.

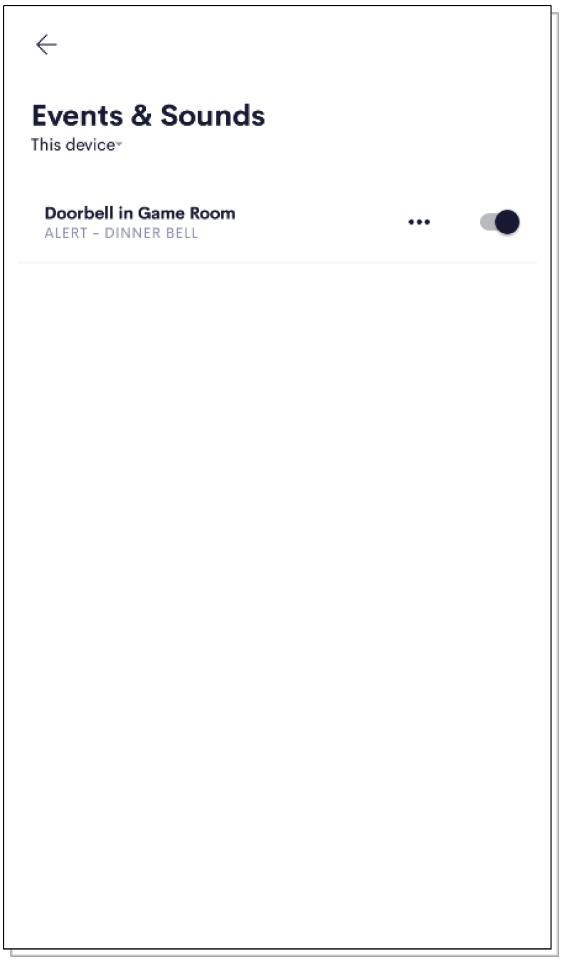
To view the **Display** menu, go to **More > Settings > Advanced Settings** and then scroll to **Audio Interrupts & Chimes**

Audio Interrupts & Chimes - Mobile Device



Events and Sounds

Go to **Settings > Advanced Settings > Events & Sounds**.



The notifications (interrupts) and chimes that are available in the Crestron Home system are displayed in the **Events & sounds** list. The default setting for interrupts and chimes is **On**.

> **NOTE:** Touch screens that do not have speakers display the interrupt messages but cannot play the associated sound.

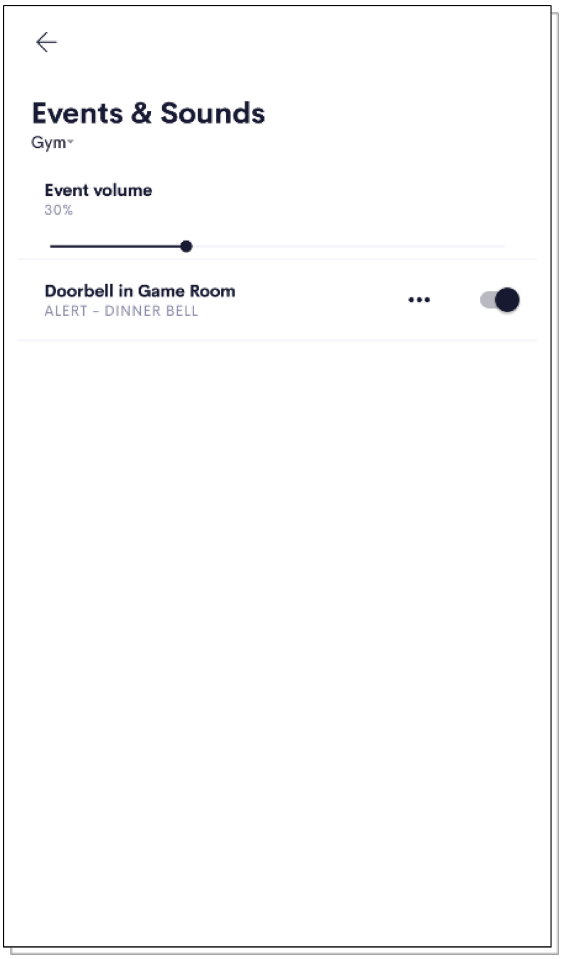
To turn off a chime, switch the toggle to off. The chime will not play on the user interface device.

To change rooms, tap the current room name to view a list of rooms that contain chimes and then select a room. When changing rooms on a mobile device or touch screen, consider the following:

- Mobile devices have an option of **This Device** where the settings only apply to the mobile device.
- Touch Screens that are in a room that does not contain a chime have an option for the name of the room that the touch screen is in where the settings only apply to the touch screen.

To set the volume for the chime, use the **Event Volume** slider.

The volume slider controls the sound level of the chime when it is played. When an event is disabled, the **Event Volume** slider is not shown.

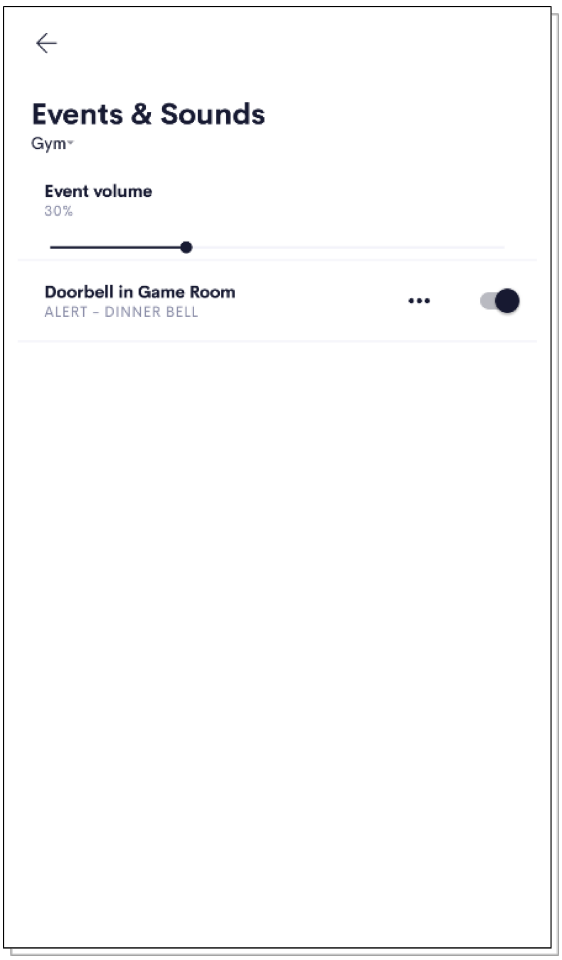


When playing chimes on a mobile device or touch screen, consider the following:

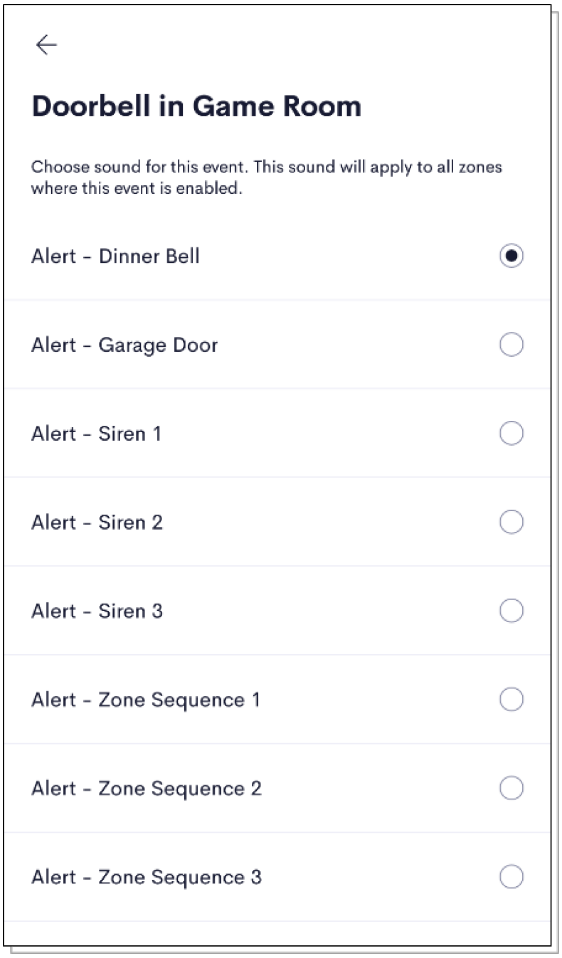
- To play the chime on a mobile device, the Crestron Home app must be open. The chime volume is determined by the sound volume on the device.
- To play the chime using room speakers, the interrupt must be configured to **Prefer Room Speakers**. For details, refer to Interrupt Settings on page 1381.

To change the chime for the notification.

1. Select ••• **More**.



2. Select a chime. The chime is saved when it is selected.



3. Select **Back**.

NOTES:

- The chime that is selected is applied to all user interface devices in the Crestron Home system.
- The notification for the interrupt is displayed even if the chime is turned off.
- If **Do not disturb** mode is turned on, the chimes on for all events are silenced.
- If a room is hidden on the user interface device, the notification appears and the chime plays.

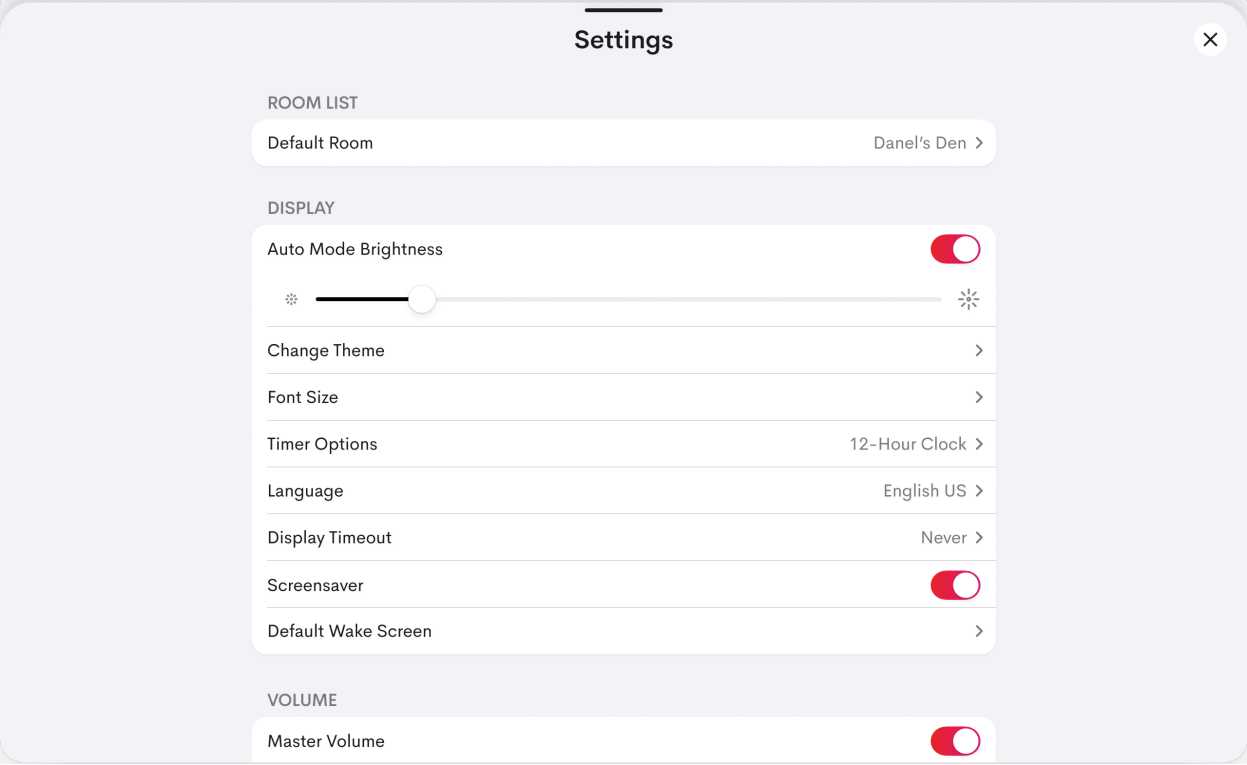
Show Do Not Disturb

Go to **Settings > Advanced Settings > Events & Sounds**.

Show or hide the and **Do Not Disturb** icons on the device. To hide the **Do Not Disturb** icons, deselect **Show Do Not Disturb**.

Panel Settings (Touch Screens Only)

Use the **Panel Settings** menu to customize the in-app experience.



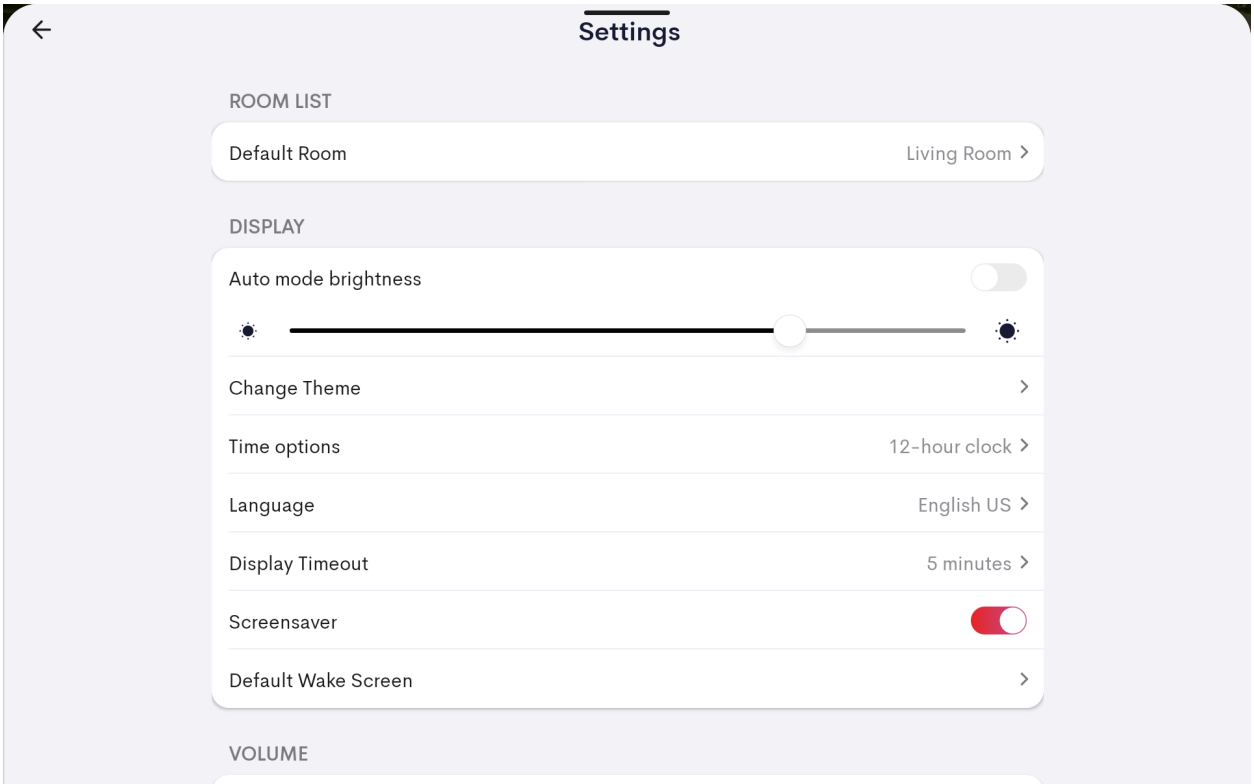
This section provides the following information:

- Room List
- Display
- Volume
- Home
- Up and Down Panel Button Behavior
- Info

Room List

Use the **Room List** setting screen to select the room that is opened when the **Rooms** tab is pressed.

To open the **Default Room** settings screen, go to **Menu > Panel Settings** and then scroll to **Room List**. For 60-series touch screens with soft buttons, the Home button also opens the default room.



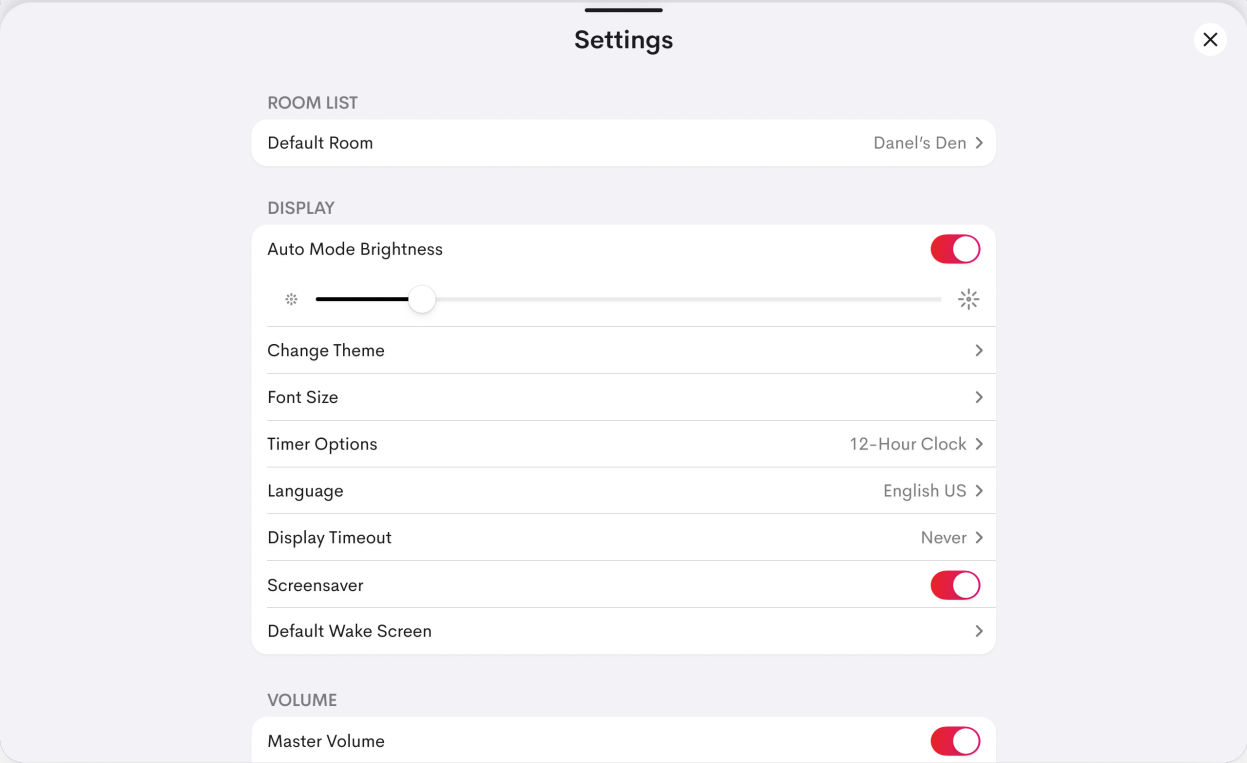
To select the default room, tap **Default Room** and then select a room.

Display

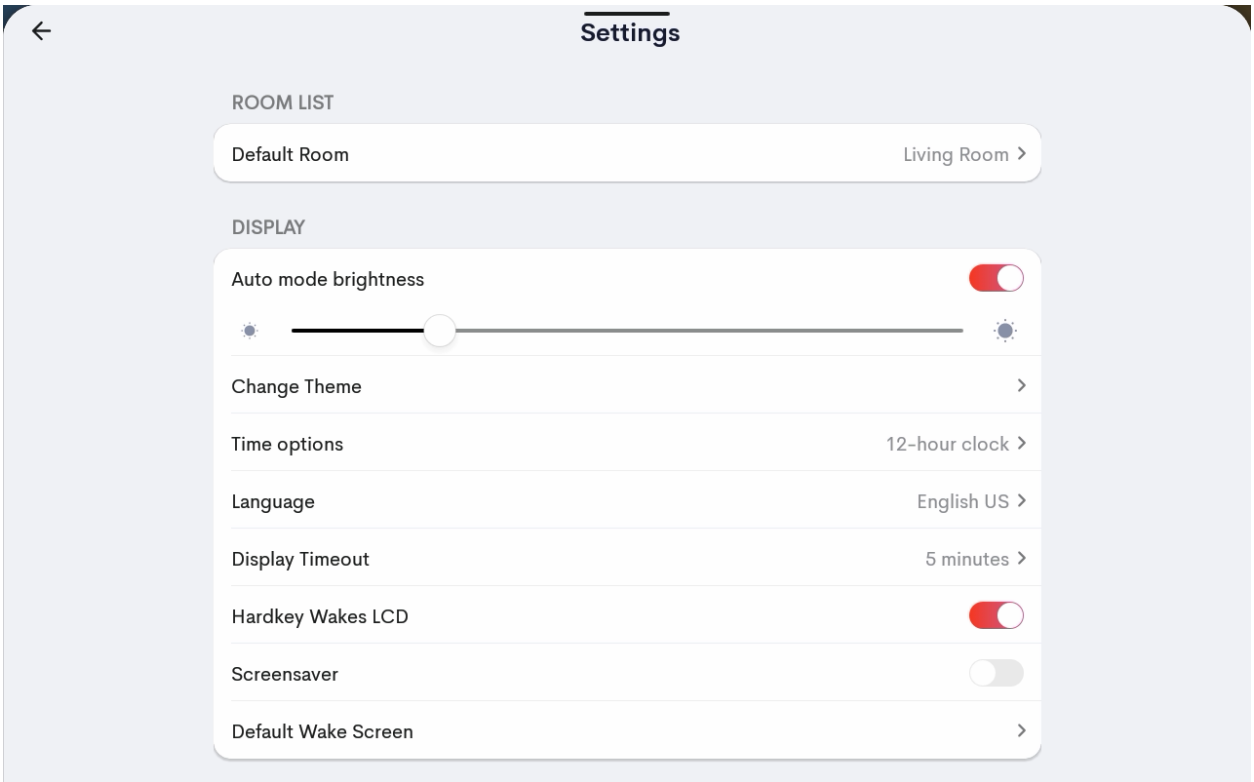
Use the **Display** menu to configure the settings for a touch screen. To view the **Display** menu, go to **Menu > Settings > Panel Settings** and then scroll to **Display**.

> **NOTE:** For mobile devices, refer to Display Mode on page 980.

Display Settings - 70-Series Touch Screen



Display Settings - 60-Series Touch Screen



Brightness

Set the brightness level for the display to a fixed level or variable level based on the ambient light in the room.

To turn on auto brightness, turn on the **Auto mode brightness** toggle. For 60- and 70-series touch screens only.

Set the brightness level for the display. To set the brightness, drag the **Brightness** slider to the left or right.

> **NOTE:** When **Auto mode brightness** is on, manual adjustment using the **Brightness** slider is disabled.

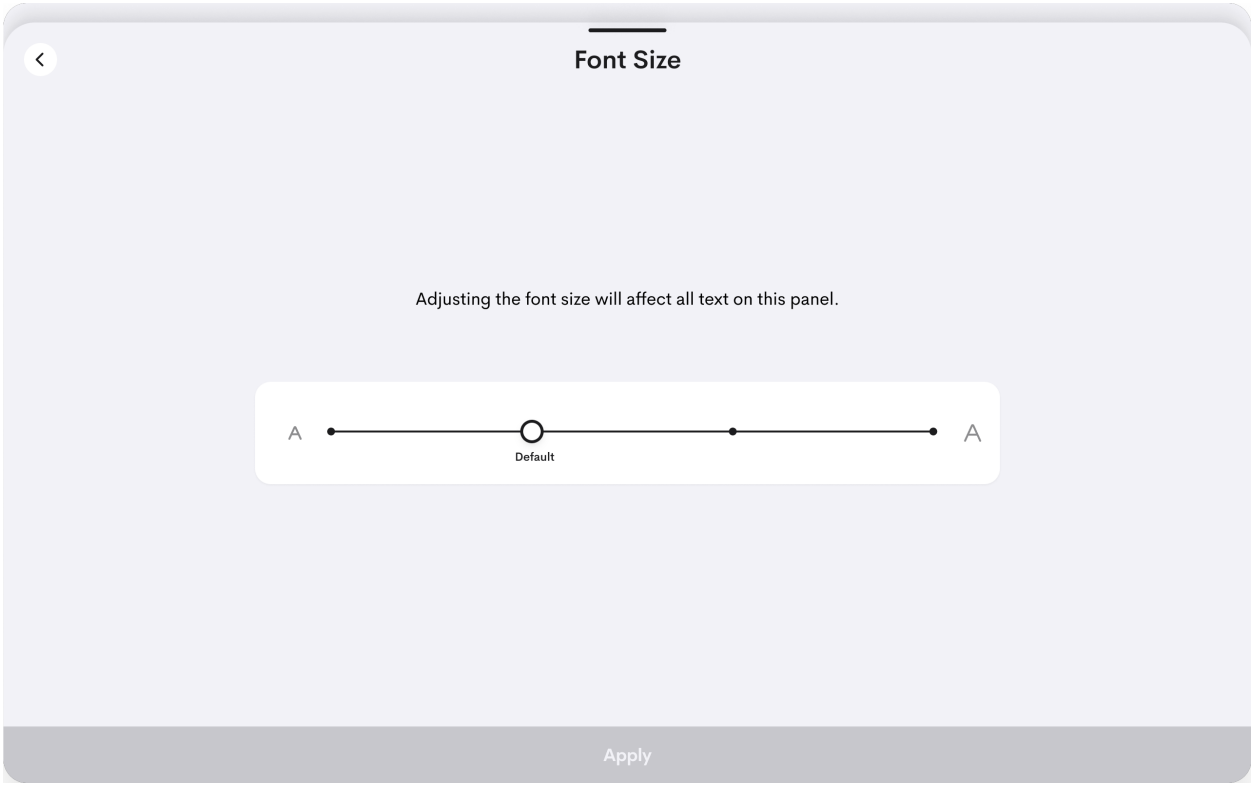
Change Theme

Set the display mode for the Crestron Home app. Select **Change Theme** and then **Light Mode** or **Dark Mode**.

Font Size

> **NOTE:** This feature is not available on 60 Series touch panels.

Set the font size for all text on the panel. Select **Font Size**, then use the slider to set the font size.



Time Options

Set the time format that is used on the touch screen. This time format is used in all locations that display the time including configuration screens.

To set the time format, select **Time Options** and then select **12-hour clock** or **24-hour clock**.

> **NOTES:**
>
> - The time format for mobile devices is determined by the system settings.
> - The UC-MM30-R does not support changing the time format.

Language

Select the language for the text on the touch screen.

To set the language, select **Language** and then select a language.

Display Timeout

Set the period of inactivity before the touch screen enters sleep mode. When the touch screen enters sleep mode the display turns off or, if enabled, the screensaver is shown.

To set the display timeout, select **Display Timeout** and then select a length of time.

The TST-1080 includes a **Display Timeout (Docked**), **Display Timeout (Undocked)**, and **Sleep Timeout** options for when the display is docked and undocked. The sleep timeout value is used when the display is using battery power, the default setting is 30 seconds.

Hardkey Wakes LCD

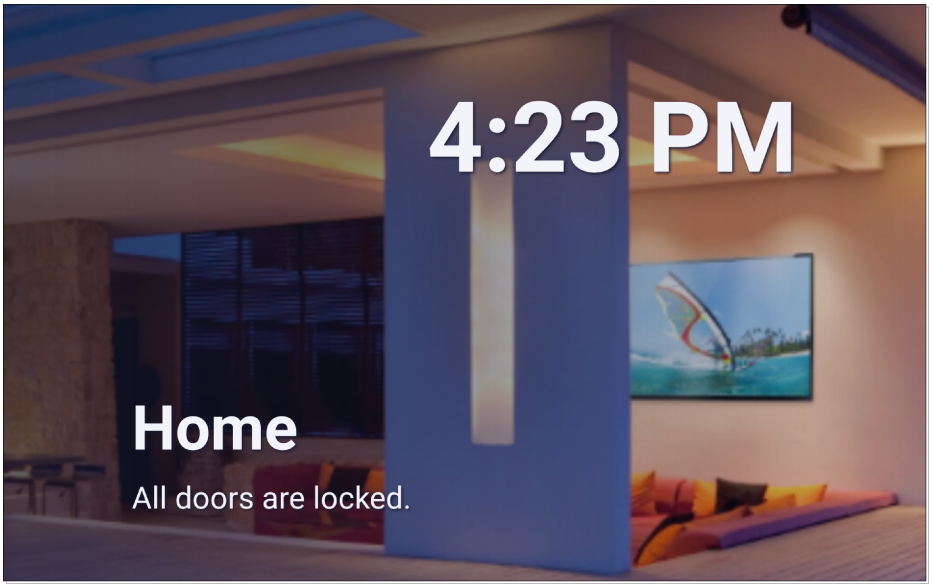
Wake the display by pressing a capacitive button on the touch screen. For 60-series touch screens only.

To wake the display using a button, select **Hardkey Wakes LCD**.

Screensaver

Show a screensaver, instead of putting the display to sleep, when the **Display Timeout** is reached. To show a screensaver, turn on **Screensaver**.

Touch Screen Screensaver Example



Default Wake Screen

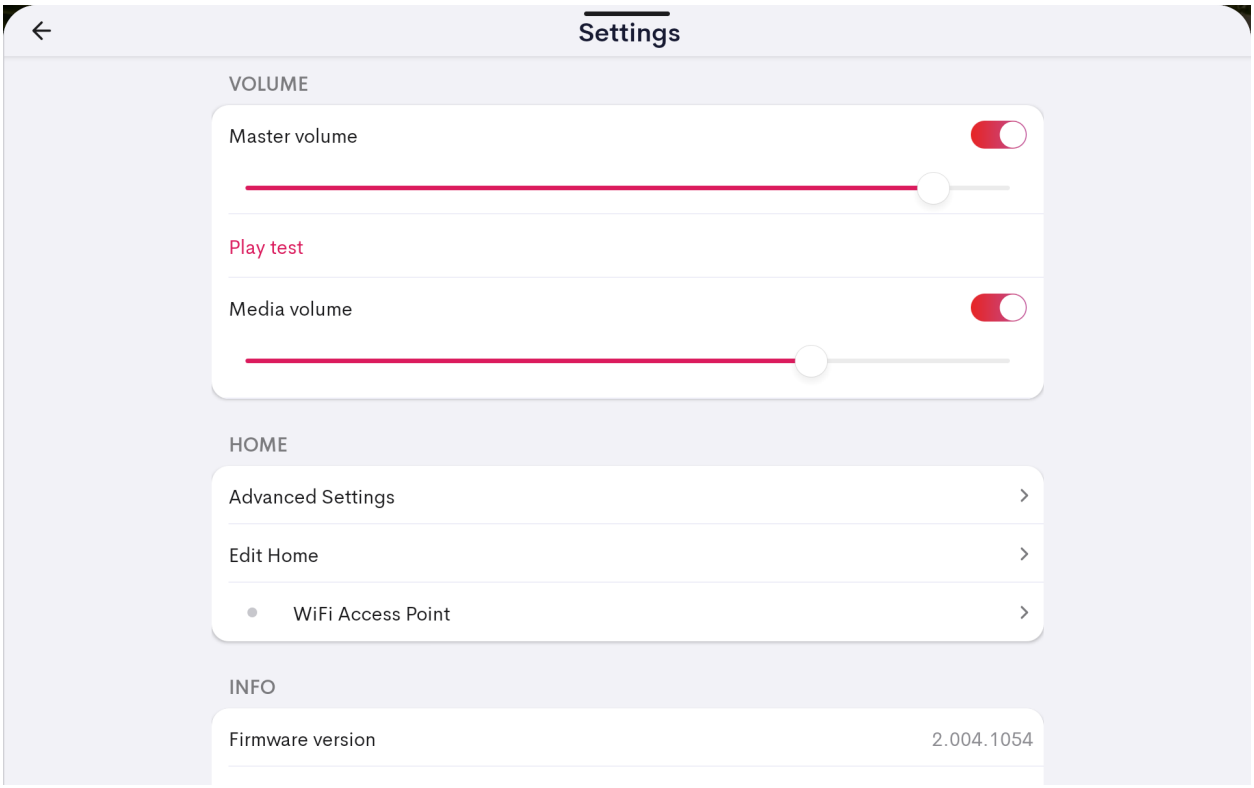
Select the screen that is displayed when the touch screen wakes up. Select **Always Show Default Room**, **Always Show Rooms List**, **Always Show Home Screen**, or **Last Selected**.

Wake on Touch

For UC-MM30-R only. The display on the UC-MM30-R wakes up when the built-in motion sensor detects motion. To disable the motion sensor and wake the display only by touching the display, select **Wake on touch only**.

Volume

Configure the media and speaker volume for touch screens. To configure the volume, go to **Menu > Settings > Panel Settings** and then scroll to **Volume**.



- **Master volume:** Set the volume for interrupts and intercom. To set the master volume, drag the **Master volume** slider to the desired volume level. To turn off the master volume, deselect the **Master volume** toggle.

  To test the master volume, tap **Play test**.
- **Media volume:** Set the volume for media played (for example, camera audio). To set the interrupt volume, drag the **Media volume** slider to the desired volume level. To turn off the media sounds (not available on US-MM30-R devices), deselect the **Media volume** toggle.
- **Speaker Volume:** Tests the volume for the built-in speakerphone (available on UC-MM30-R devices only). To set the speakerphone volume, drag the **Speaker Volume** slider to the desired volume level. The Speaker Volume slider is displayed on the bottom of the UC-MM30-R's screen when it is connected to a PC.

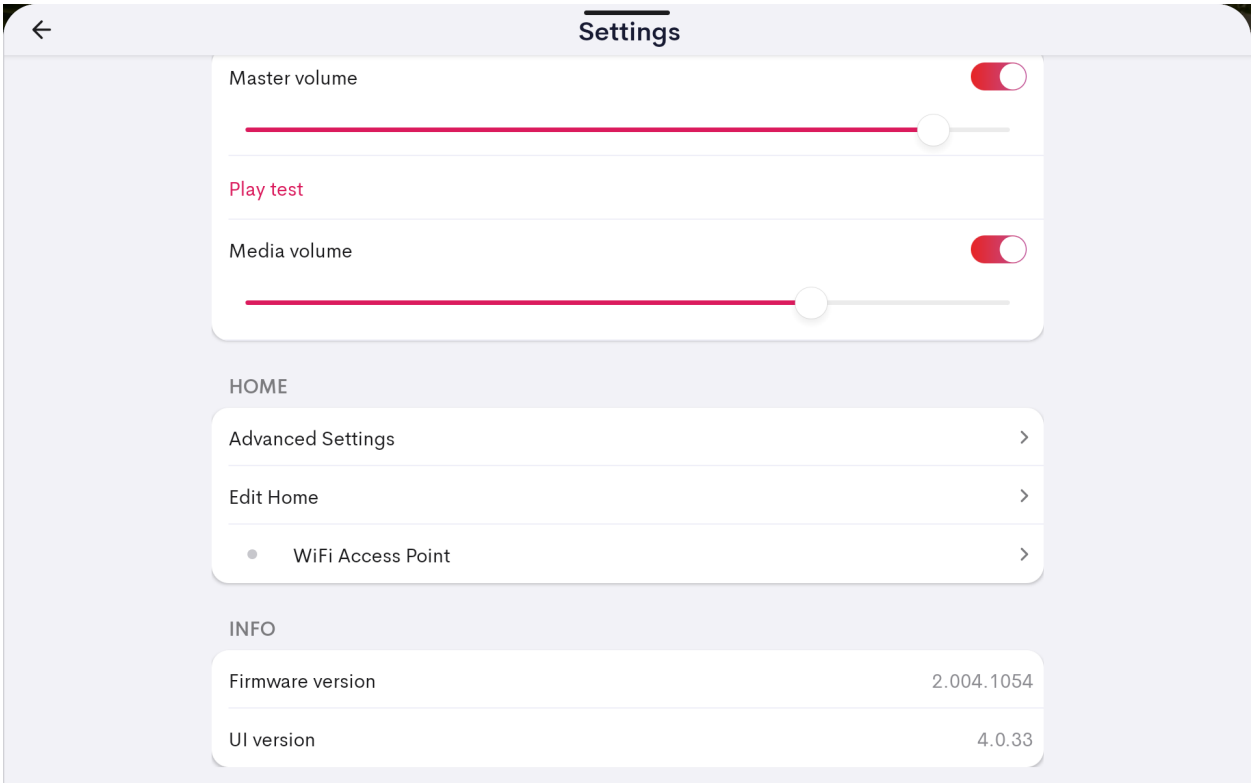
  To test the speakerphone volume, tap **Play test**.

Home

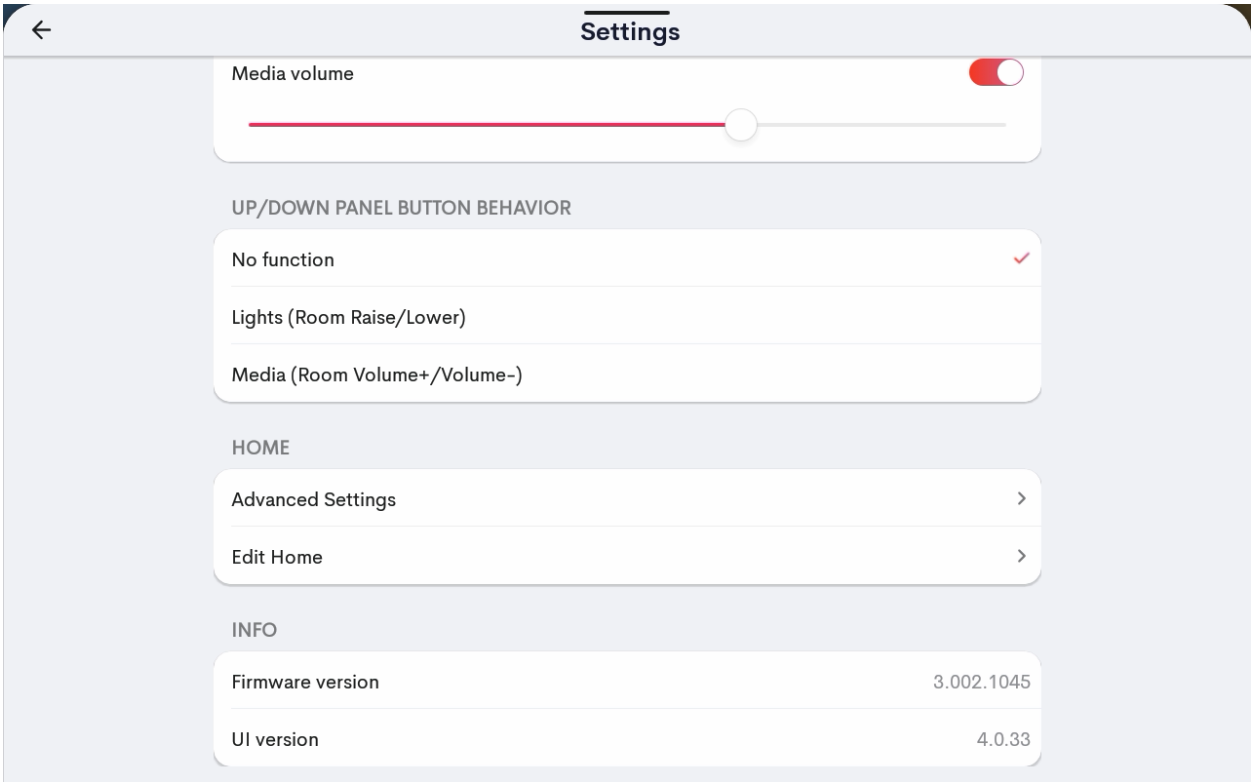
> **NOTE:** Do not change these settings unless instructed to do so by your Crestron Home dealer.

Use the **Home** menu to access the advanced settings or change the connection settings for the device. To view the **Home** menu, go to **More > Settings** and then scroll to **Home**.

Home Menu - 70-Series Touch Screens



Home Menu - 60-Series Touch Screens



Edit Home

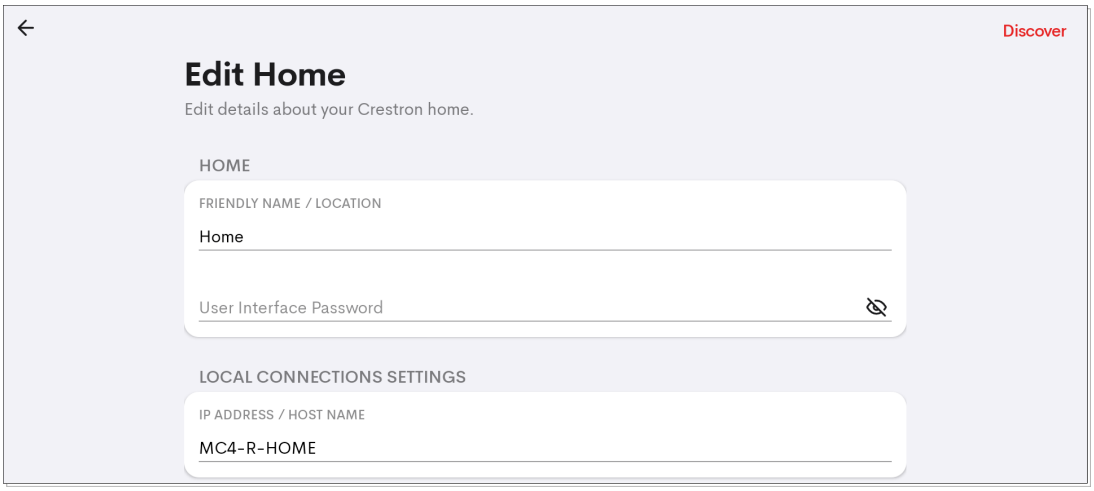
To edit a home connection or to connect to a different home:

NOTES:

- For details about the Local Connection Settings and discovering a different Crestron Home processor, refer to User Interface Devices on page 156.
- For details about the local port, refer to System Detail and Password Configuration on page 566.

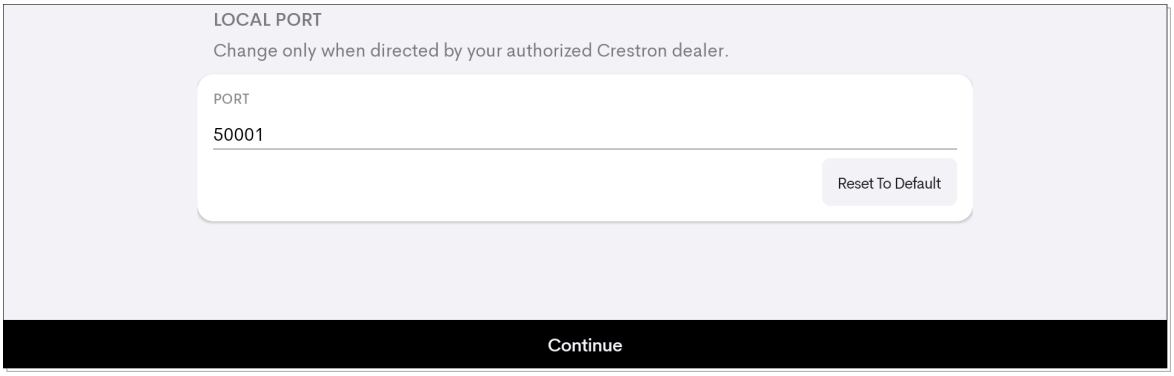
1. Tap **Edit Home**. and then **Continue** to confirm.
2. To connect to a different home, tap **Discover** and then select a home.

3. Enter the **Local Connection Settings**:
    - **Friendly Name / Location:** Enter the display name for the Crestron Home system.
    - **Password:** Enter the Advanced User password.
    - **IP Address / Host Name:** Enter the IP address or Host Name of the Crestron Home system processor.



4. Enter the **Local Port** number. This is the port that the Crestron Home system uses for communication with Crestron User Interface Devices.

> **NOTE:** To change the Local Port number to the default value, select **Reset To Default**.



5. Select **Continue**.

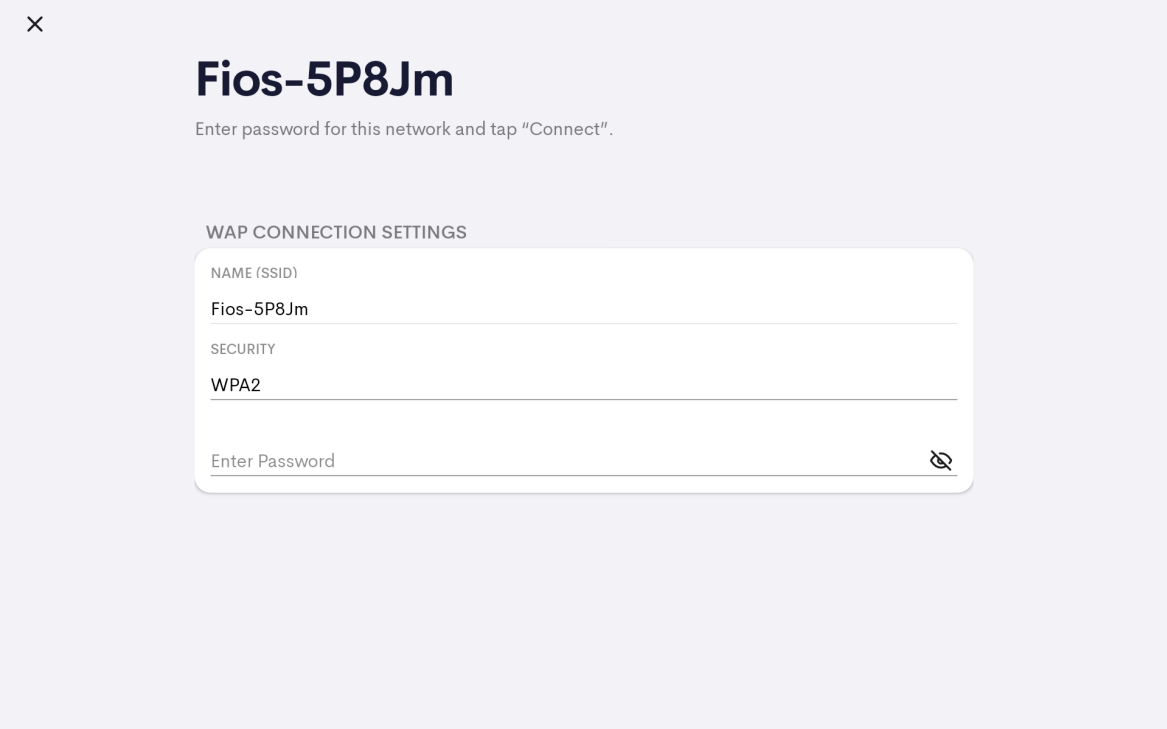
Advanced Settings

Use the Advanced Setting screen to make changes to the display and function of the touch screen. The Advanced User password is required to access these options.

WiFi Access Point

Connect to a Wi-Fi® access point. To connect to an access point, follow these steps:

1. Tap **WiFi Access Point** and then select an access point.
2. Enter the credentials for the access point.

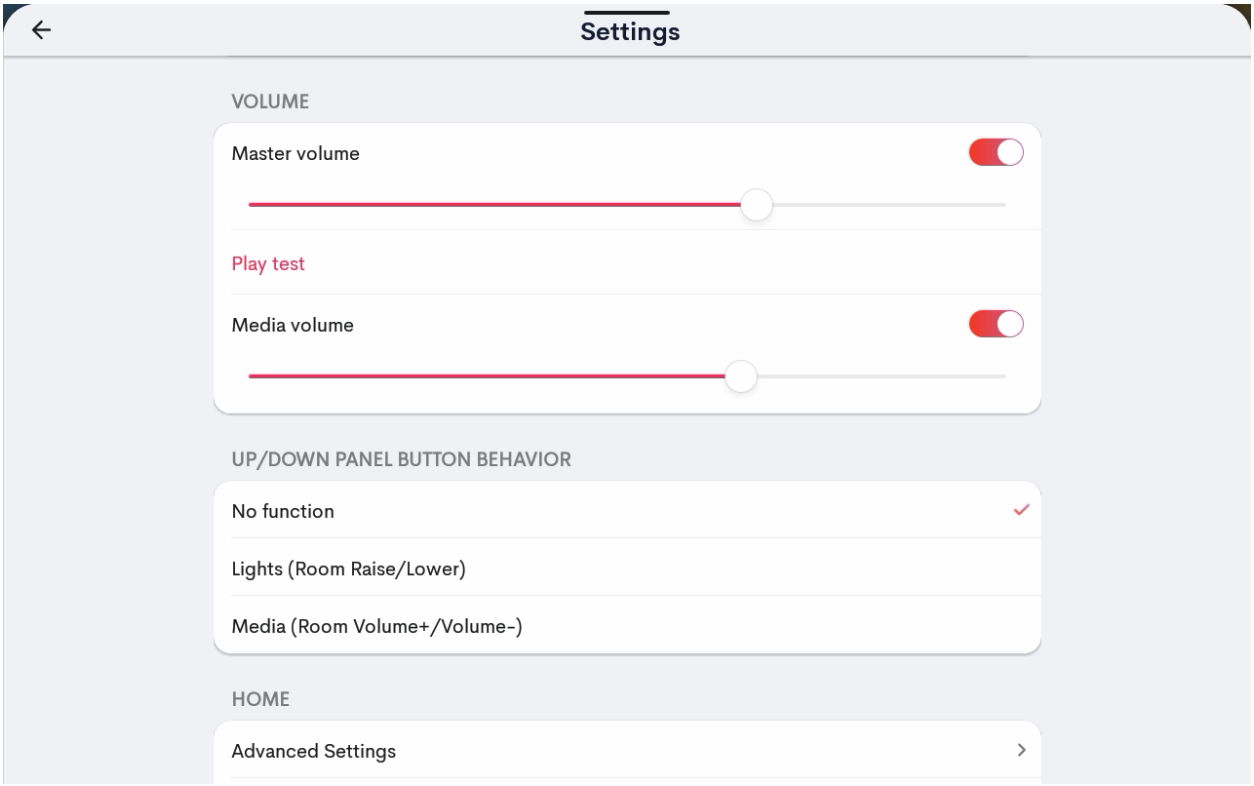


3. Tap **Connect**. The Connect button is displayed when the password is entered.

Up and Down Panel Button Behavior

Use the **Panel Button Behavior** menu to assign a function for the up and down soft-touch capacitive buttons that are on the 60-series touch screens.

To view the **Panel Button Behavior** menu, go to **Menu > Settings > Panel Settings** and then scroll to **Panel Button Behavior**.



Set the behavior for the up and down the soft-touch capacitive buttons:

- **No function:** The buttons have no function. The up and down buttons are not illuminated.
- **Lights:** The buttons control the lights for the default room. The buttons are always illuminated.

  > **NOTE:** To select the default room, refer to Up and Down Panel Button Behavior on page 1047.

  - Press or press and hold the up button to raise the lights or the down button to lower the lights.
  - When controlling a room other than the default room, the up and down buttons continue to only control the default room.

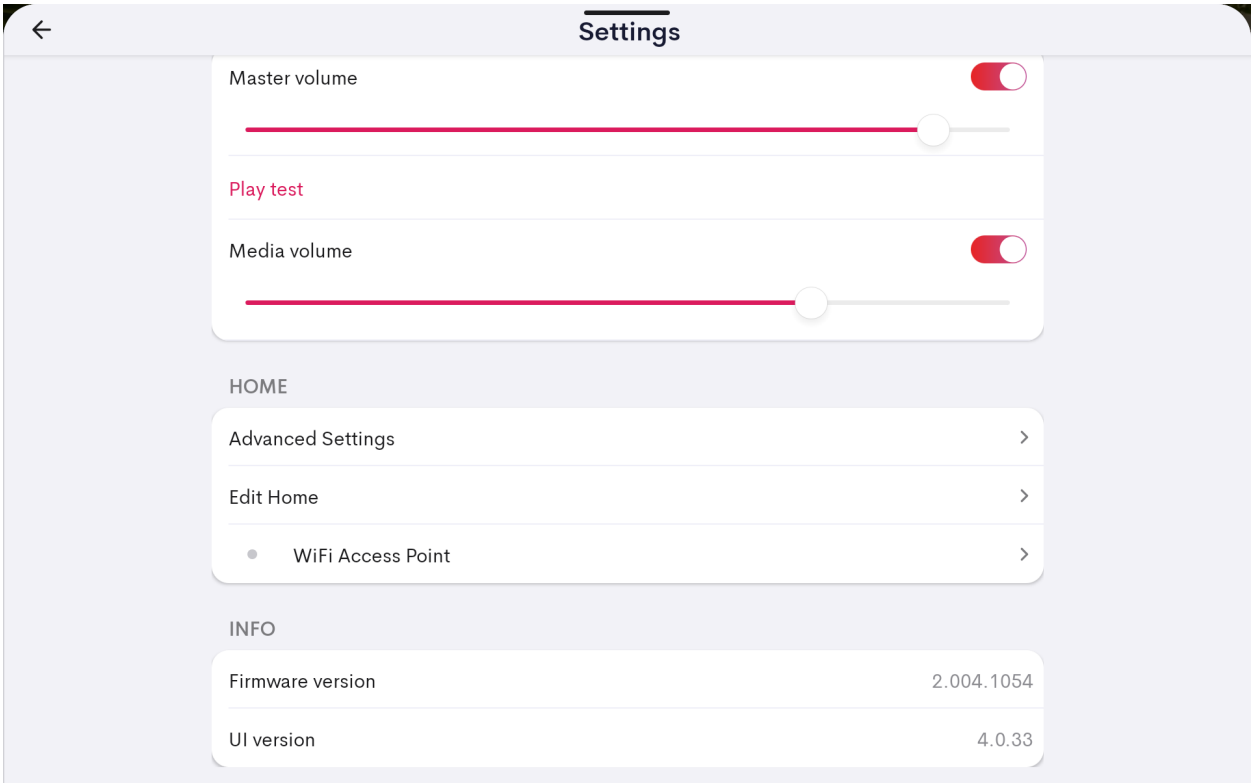
- **Media:** The buttons control the media volume for the default room. The buttons are illuminated when the room is playing media.

  > **NOTE:** To select the default room, refer to Up and Down Panel Button Behavior on page 1047.

  - Press or press and hold the up button to raise the volume or the down button to lower the volume.
  - When controlling a room other than the default room, the up and down buttons continue to only control the default room.

Info

View the device information for the touch screen. To view the touch screen information, go to **More > Settings > Panel Settings** and then scroll to **Info**.



- **Firmware version:** The firmware version of the touch screen.
- **UI version:** The UI version of the touch screen.
- **IP address:** UC-MM30-R only. The IP address of the touch screen.

Support and Legal

Use the Support and Legal menu to view

Help

View quick start guide.

Submit Support Diagnostics (Mobile Only)

Enable and submit support diagnostics. These logs contain information specific to the UI, including what data is being received from the control system. Because of their complexity, these logs should only be used when working with Crestron Tech Support.

To enable the logs and submit them to Crestron Tech Support, follow the steps below.

1. Select **Submit Support Diagnostics**.
2. Turn on the **Enable Submission of Diagnostics** toggle. Crestron Home will begin logging.
3. Reproduce any issues.
4. Select **Submit Support Diagnostics**.
5. Select **Submit**. Logs can be downloaded or sent via email.

   > **NOTE:** Do not submit diagnostic information unless directed to by Crestron Tech Support.

6. When directed by Crestron Tech Support, turn off the **Enable Submission of Diagnostics** toggle.

Legal Terms

View the legal material associated with Crestron Home OS. To view the information, tap **Legal Terms**.

Privacy

View the privacy material associated with Crestron Home OS. To view the information, tap **Privacy Information**.

User Interface for TSR-310 Touch Screen Remotes

Use a TSR-310 handheld remote to control the Crestron Home system. The functionality and user interface for the TSR-310 is based off the configuration of the Crestron Home system. An overview of the user interface is described in the following sections.

The TSR-310 handheld remote displays up to five main user interface screens:

1. Media (Selected Audio or Video Source)
2. Quick Actions
3. Lighting
4. Shades
5. Climate

> **NOTE:** User interface screens are not displayed if components associated with screen are not in the Crestron Home system. For example, if shades are not present in the system, the shades screen is not displayed.

Swipe left or right to navigate through the screens.

TSR-310 User Interface Navigation



When the media system is turned on in the room, the TSR-310 displays the media screen for the currently playing media source by default.

Media Screen



NOTE: If no media sources are powered on, a **MY SOURCES** screen is displayed instead of the media screen. For more information, refer to Media System Power on page 1082.

An information bar at the top of each screen displays the current subsystem or media device, the time, the TSR-310 battery level, and the active user profile.

NOTE: When the remote wakes after a period of inactivity, the room name is briefly displayed instead of the subsystem or media device.

Media Screen - Information Bar

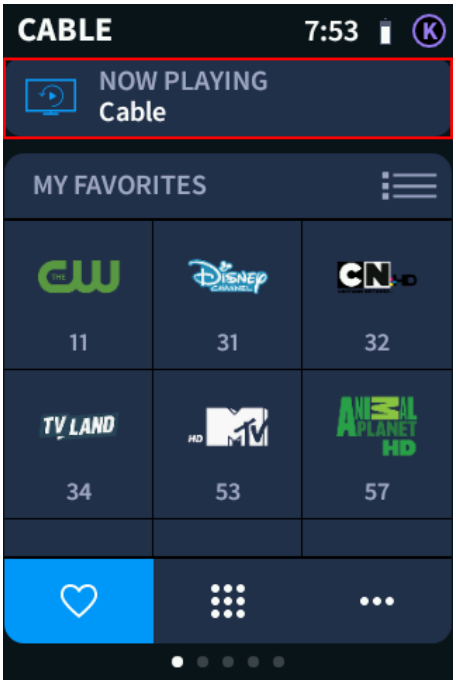


Now Playing

A **NOW PLAYING** panel is displayed on the top of each screen when the media system is on. The **NOW PLAYING** panel shows the media source or content item (such as a radio station or TV channel) that is currently playing. Controls are also provided to send commands to the display or display accessories.

> **NOTE:** The **NOW PLAYING** panel is not displayed when the media system is off.

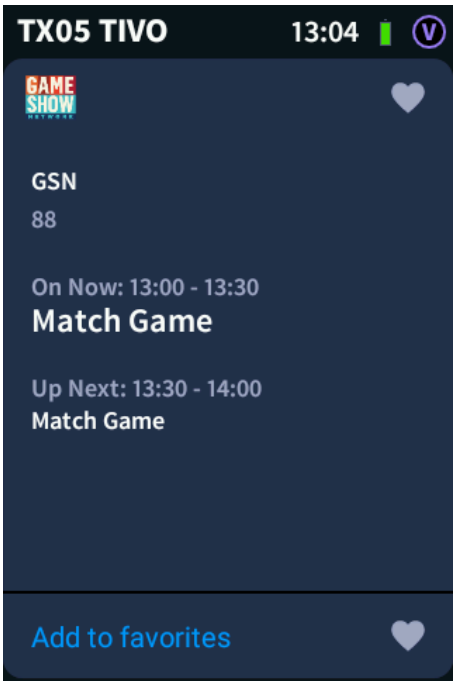
Media Screen - NOW PLAYING Panel



Tap the **NOW PLAYING** panel to view additional information and controls for the media source. The provided information varies depending on the media source type. Tap inside the expanded **NOW PLAYING** panel to collapse the selection.

- The channel information is displayed for devices that report the current media content to the Crestron Home system.

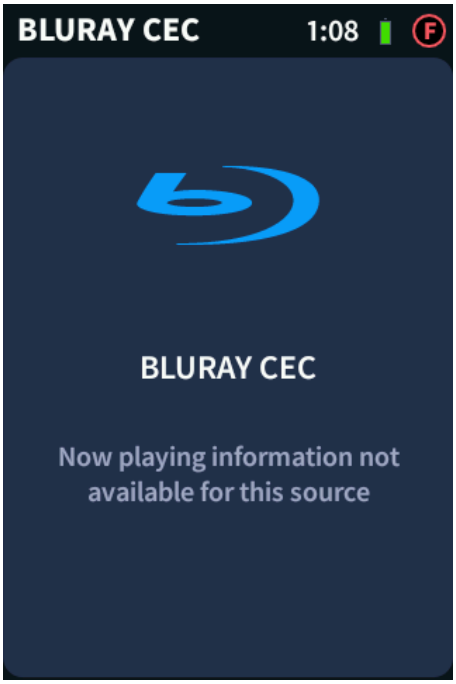
  NOW PLAYING Panel - Cable TV Receiver



> **NOTE:** Tap **Add to favorites** or **Remove from favorites** to add or remove the channel from the **MY FAVORITES** menu.

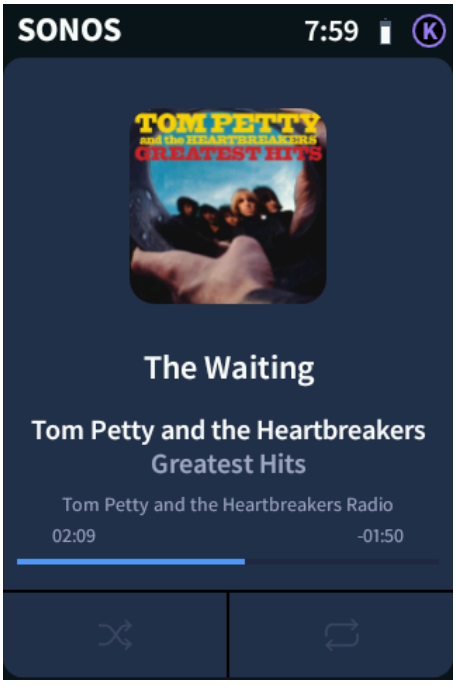
- The source name and icon is displayed for devices that do not report the current media content to the Crestron Home system.

  NOW PLAYING Panel - Blu-Ray Disc Player

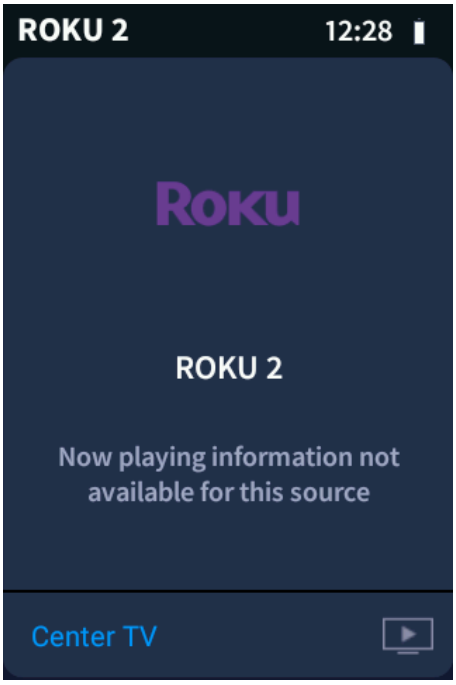
  

- The current song or station information, along with various audio controls, is displayed for streaming music players that report the current content to the Crestron Home system.

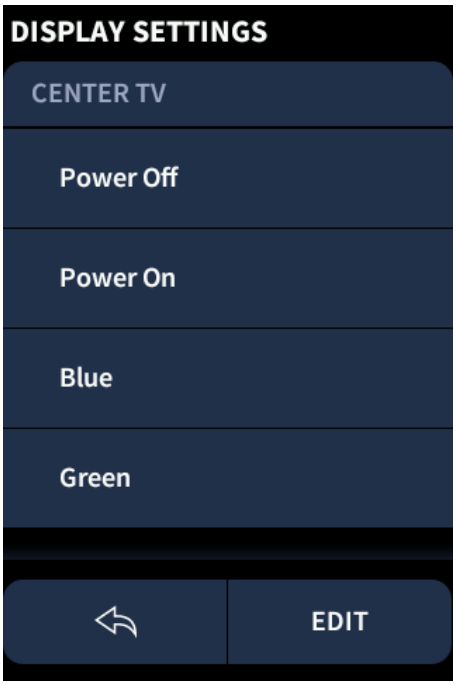
  NOW PLAYING Panel - Streaming Music Player

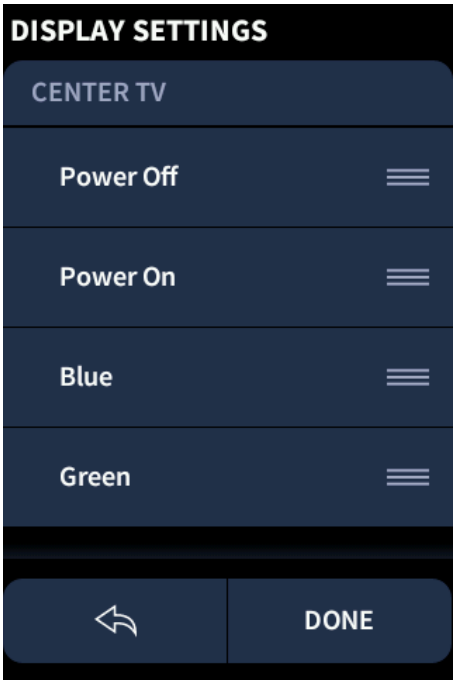
- The display command panel is displayed to provide control of the display or display accessory. Tap the display command panel to view the available commands.



  - Tap a command to control the display or display accessory.



- To reorder the commands, tap **EDIT**, reorder the command using the reorder icons , and then tap **DONE**.



Control Media

Swipe through the operational screens until the media screen is displayed for the media source that is currently playing. The media screen updates to provide controls for the current source.

> **NOTE:** If all media and environmental subsystems are active in the Crestron Home system, the media screen is the left-most screen as indicated by the navigation dots on the bottom of the screen.

When the device is powered off, a **MY SOURCES** menu is displayed instead of the media screen.

MEDIA Screen - MY SOURCES Menu



Cable or DVR Media Sources

If a cable/satellite TV receiver or DVR device is playing, the media screen for the device is displayed with the favorites tab selected by default.

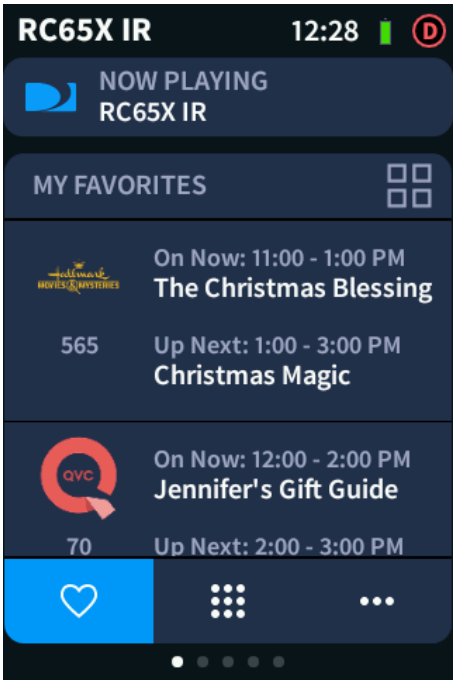
Favorites

> **NOTE:** Create new favorites groups using a Crestron touch screen, iOS device, or Android device running the Crestron Home app.

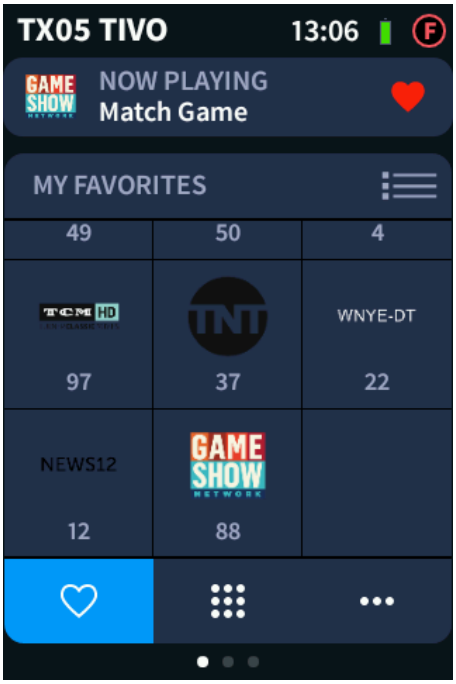
Tap the favorites icon to display the **MY FAVORITES** menu for the cable TV provider or DVR. The **MY FAVORITES** menu provides a selection of favorite channels that may be customized for each user profile.

- To select a channel, tap the desired channel icon in the **MY FAVORITES** menu.
- Tap the list icon to view the **MY FAVORITES** menu in list form or tap the grid icon to view the menu in grid form.

Media Screen - MY FAVORITES Menu (List View)



Media Screen - MY FAVORITES Menu (Grid View)



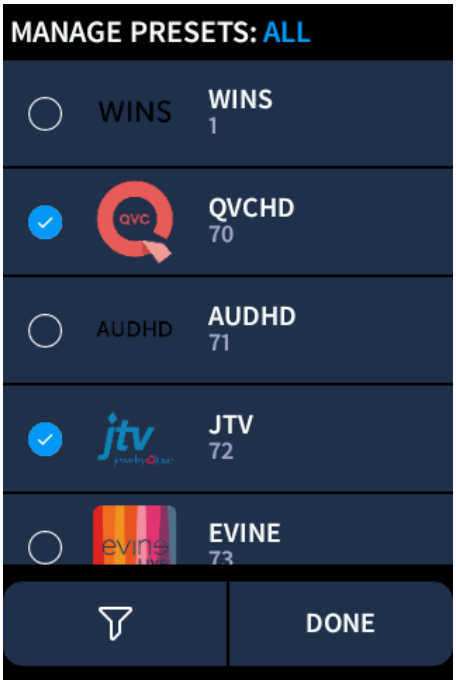
Add a Favorite to a Favorites Group

> **NOTE:** Favorites can also be changed from the **NOW PLAYING** panel. For details, refer to Now Playing on page 1054.

To add channels to the **MY FAVORITES** menu:

1. Tap and hold the favorites icon for 3 seconds.
2. Select the favorites from the **MANAGE PRESETS** list. Tap the favorites icon to view the current list of favorites or the filter icon to search for the desired channel.

   MANAGE PRESETS Screen

3. Tap **Done**.

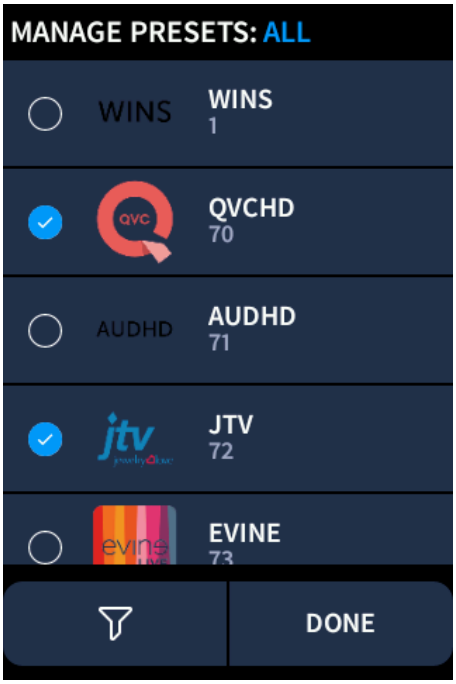
Delete a Favorite from a Favorites Group

> **NOTE:** Favorites can also be changed from the **NOW PLAYING** panel. For details, refer to Now Playing on page 1054.

To remove channels to the **MY FAVORITES** menu:

1. Tap and hold the favorites icon for 3 seconds.
2. Deselect the favorite from the **MANAGE PRESETS** list. Tap the favorites icon to view the current list of favorites or the filter icon to search for the desired channel.

   MANAGE PRESETS Screen

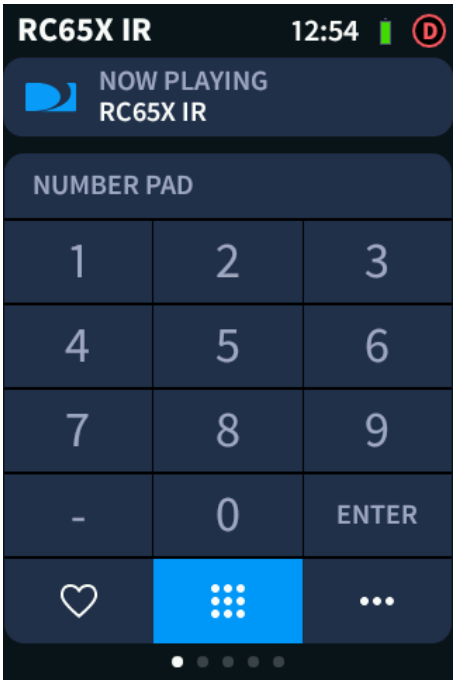
   

3. Tap **Done**.

Keypad

Tap the keypad icon to display the **NUMBER PAD** menu for the cable TV provider or DVR. The **NUMBER PAD** menu provides a number pad that is used to select a channel manually.

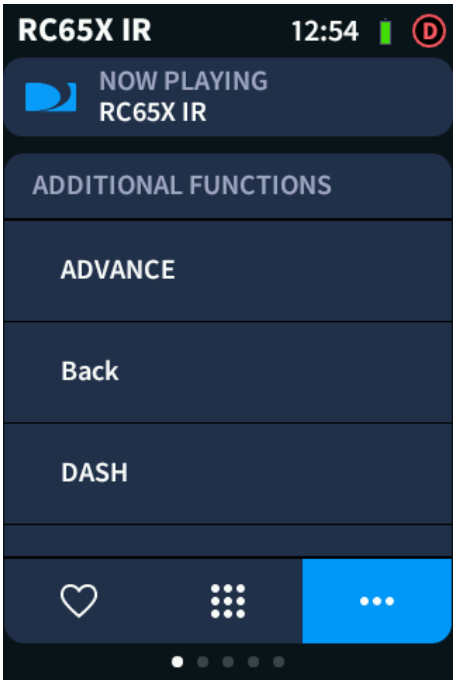
Media Screen - NUMBER PAD Menu



Menu

Tap the menu icon ••• to display the **ADDITIONAL FUNCTIONS** menu for the cable TV provider or DVR. The **ADDITIONAL FUNCTIONS** menu provides additional controls for the source.

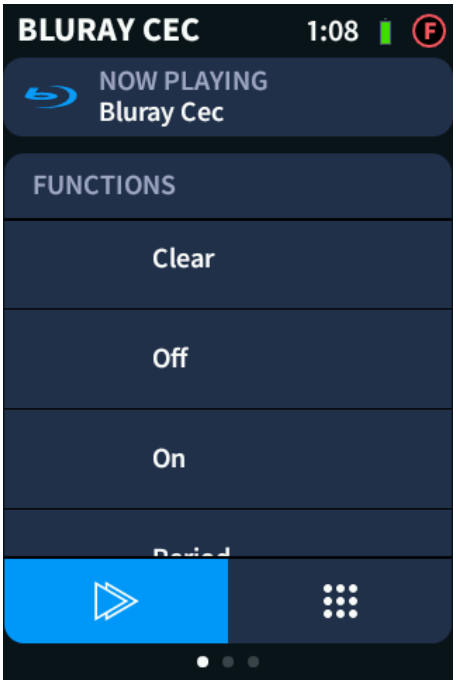
Media Screen - ADDITIONAL FUNCTIONS Menu



Blu-ray Disc Player Media Sources

If a Blu-ray Disc player is playing, the media screen for the device is displayed with the functions tab selected by default.

Media Screen - FUNCTIONS Menu



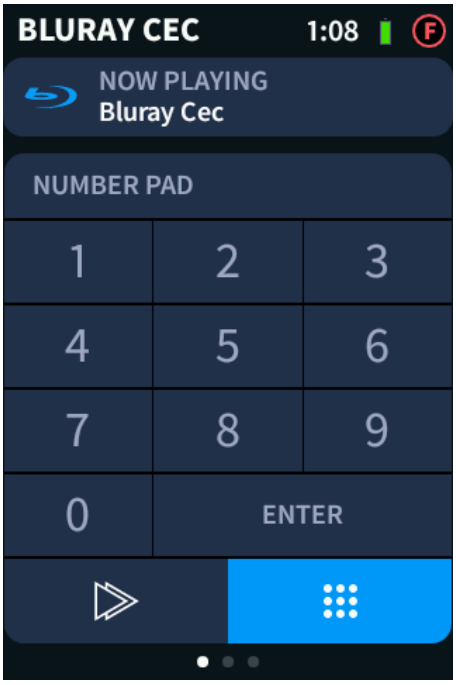
Functions

Tap the play icon to display the **FUNCTIONS** menu for the Blu-ray Disc player. The **FUNCTIONS** menu provides a selection of commonly used controls for the device.

Keypad

Tap the keypad icon to display the **NUMBER PAD** menu for the Blu-ray Disc player. The **NUMBER PAD** menu provides a number pad for use with the device.

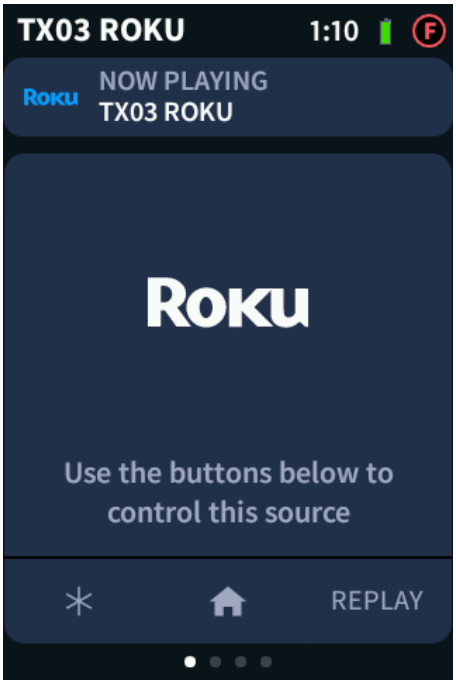
Media Screen - NUMBER PAD Menu



Streaming Video Player Media Sources

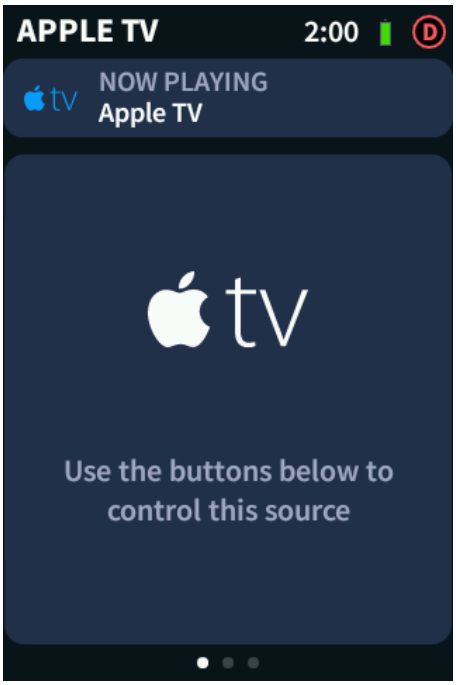
If a streaming video player is playing, the media screen for the device is displayed. Use the media screen to select from the available device controls. The selections provided on the media screen vary depending on the streaming video player model.

Media Screen with On-screen Controls



If device controls for the streaming video player are only available via hard buttons on the remote, the media screen shows a device logo without any touch controls.

Media Screen without On-screen Controls



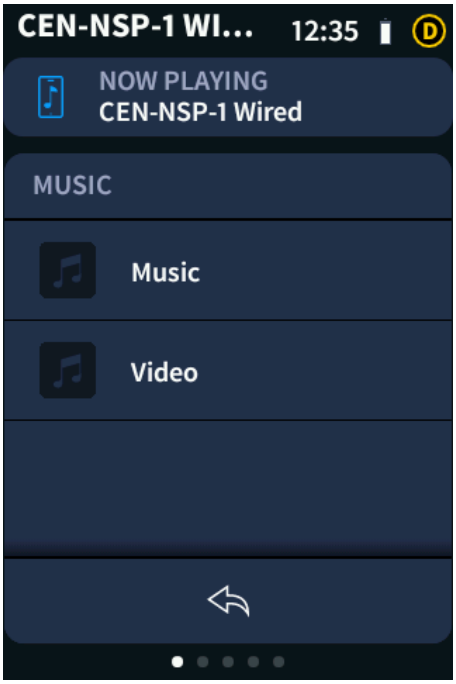
Streaming Music Player Media Sources

If a streaming music player is playing, the media screen for the device is displayed. Select a menu item to reveal the available options for the selection. Stations, playlists, and favorites may be selected using the various menu options, depending on the device.

> **NOTE:** Favorites and playlists are created using the streaming music player service.

Device-specific controls are also provided at the bottom of the screen that allow for quick navigation through the device menus and for selecting favorites.

Media Screen - MUSIC Menu



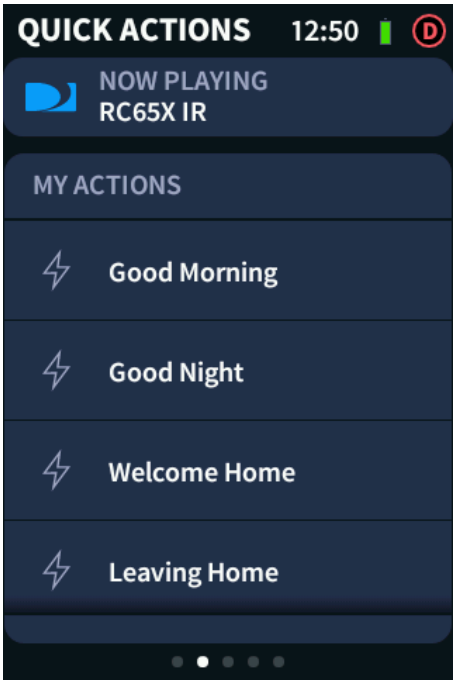
> **NOTE:** Some device functions for streaming music players, such as search functions that require a keyboard, are not supported on the TSR-310. If an unsupported function is attempted on the TSR-310, an alert screen is displayed. These functions may be performed from another control device in the home (such as a touch screen).

Control Quick Actions

If quick actions have been created for the Crestron Home system, swipe through the operational screens until the **QUICK ACTIONS** screen is displayed.

> **NOTE:** If all media and environmental subsystems are active in the Crestron Home system, the **QUICK ACTIONS** screen is the second screen from the left as indicated by the navigation dots on the bottom of the screen.

QUICK ACTIONS Screen



Use the **QUICK ACTIONS** screen to recall quick actions for the whole house.

Quick actions are commonly used functions that change the behavior of multiple devices across a household when recalled. Quick actions are used to create a desired ambiance or to send an unscheduled global command (such as "all off") to the entire system.

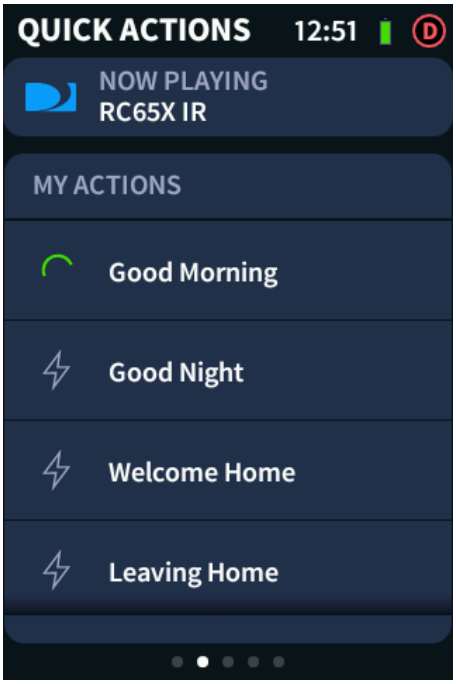
> **NOTE:** Quick actions are created during setup using the Crestron Home Setup app. The **QUICK ACTIONS** screen may be accessed only if the Quick Actions setting is enabled in User Control mode and if one or more quick actions have been created for the system. For more information, refer to Quick Actions on page 414.

The **MY ACTIONS** menu contains all of the quick actions that have been created for the Crestron Home system.

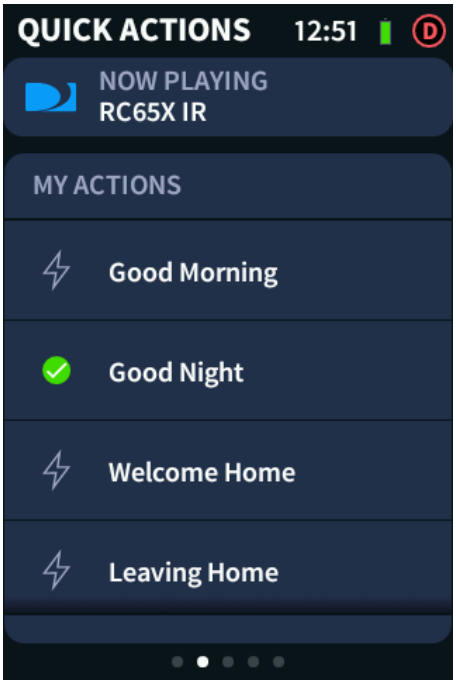
NOTE: To toggle the quick actions that are displayed in the **MY ACTIONS** menu and to change the order of quick actions in the menu, refer to Quick Actions Settings on page 1114.

To select a quick action, swipe up and down through the **MY ACTIONS** menu, and then tap the desired quick action. A green swirl animation is displayed to the left of the quick action name to indicate that the action is in progress. Once the quick action has completed, a green check icon is displayed to the left of the quick action name. The check icon is shown for a few seconds before reverting to the lightning bolt icon.

QUICK ACTIONS Screen - Action in Progress



QUICK ACTIONS Screen - Action Complete

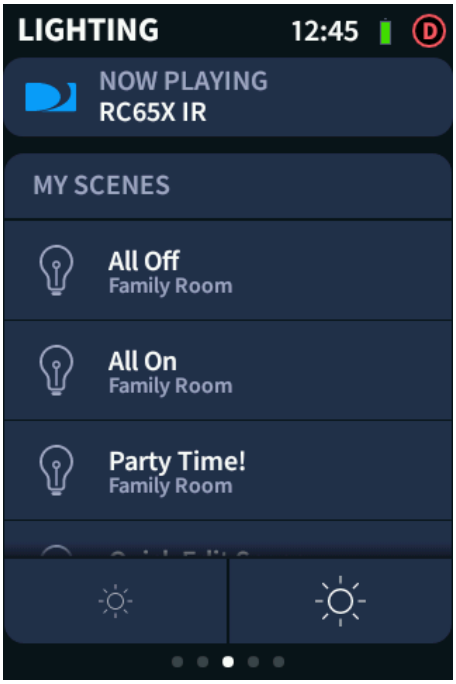


Control Lighting

If lighting loads have been added to the Crestron Home system, swipe through the operational screens until the **LIGHTING** screen is displayed.

> **NOTE:** If all media and environmental subsystems are active in the Crestron Home system, the **LIGHTING** screen is the center screen as indicated by the navigation dots on the bottom of the screen.

LIGHTING Screen



Use the **LIGHTING** screen to recall light scenes for the room where the TSR-310 is paired or for the whole house. The **LIGHTING** screen also provides master raise and lower controls for programmed dimmable lights in the room.

Light scenes are used to set predefined levels for multiple lighting loads when recalled. By default, the Crestron Home system creates **All On** and **All Off** scenes for every room that has a lighting load in it. Additionally, **All On** and **All Off** scenes are created automatically for the whole house.

> **NOTE:** Light scenes are created during setup using the Crestron Home Setup app. The **LIGHTING** screen may be accessed only if lighting control is enabled for the room in User Control mode and if one or more lighting loads have been added to the room. For more information, refer to Light Scenes on page 396.

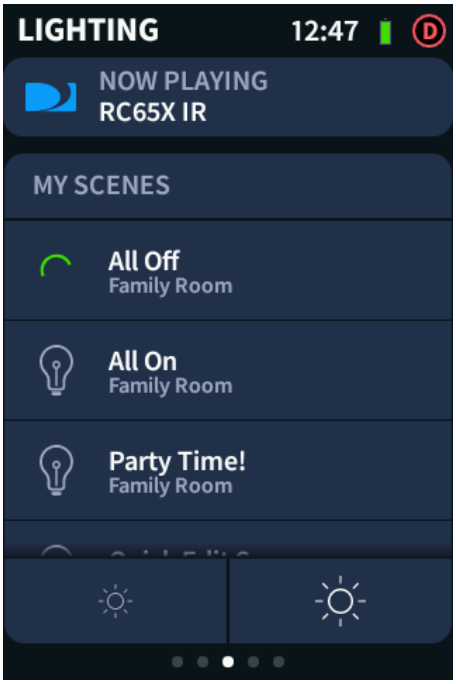
To adjust the master lighting level in the room:

- Tap the small sun icon at the bottom left of the screen to lower the master lighting level incrementally.
- Tap the large sun icon at the bottom right of the screen to raise the master lighting level incrementally.

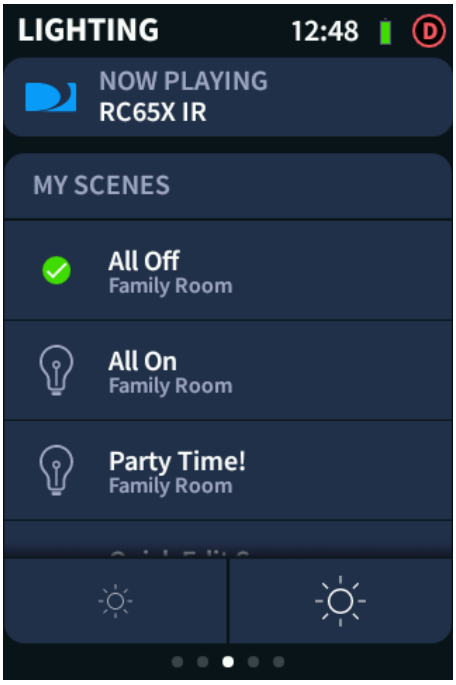
The **MY SCENES** menu contains all of the light scenes that may be recalled from the room. The room where the light scene will be recalled is displayed under the scene name. All of the scenes for the room where the remote is paired are listed first, followed by any scenes for other rooms.

To select a light scene, swipe up and down through the **MY SCENES** menu, and then tap the desired scene. A green swirl animation is displayed to the left of the light scene name to indicate that the scene is in progress. Once the light scene has completed, a green check icon is displayed to the left of the light scene name. The check icon is displayed until another scene is played that overwrites the existing scene.

LIGHTING Screen - Scene in Progress



LIGHTING Screen - Scene Complete

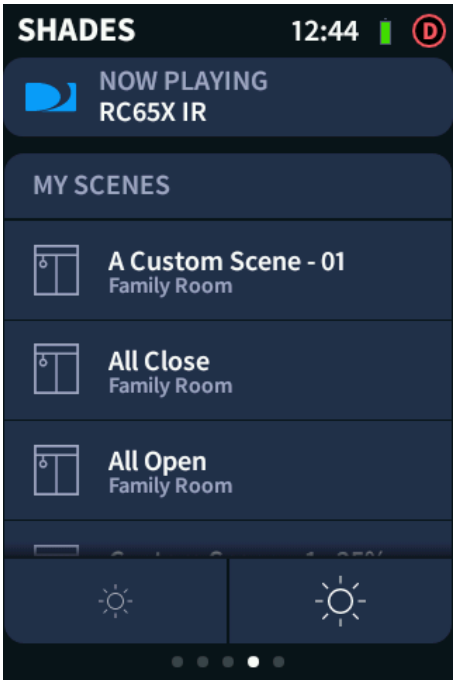


Control Shades

If shade motors have been added to the Crestron Home system, swipe through the main carousel screens until the **SHADES** screen is displayed.

> **NOTE:** If all media and environmental subsystems are active in the Crestron Home system, the **SHADES** screen is the second screen from the right as indicated by the navigation dots on the bottom of the screen.

SHADES Screen



Use the **SHADES** screen to recall shade scenes for the room where the TSR-310 is paired or for the whole house. The **SHADES** screen also provides master raise and lower controls for programmed shade motors or groups in the room.

Shade scenes are used to set predefined levels for multiple shade motors when recalled. By default, the Crestron Home system creates **All On** and **All Off** scenes for every room that has a shade motor or group in it. Additionally, **All On** and **All Off** scenes are created automatically for the whole house.

> **NOTE:** Shade scenes are created during setup using the Crestron Home Setup app. The **SHADES** screen may be accessed only if shade control is enabled for the room in User Control mode and if one or more shade motors or groups have been added to the room. For more information, refer to Shade Scenes on page 402.

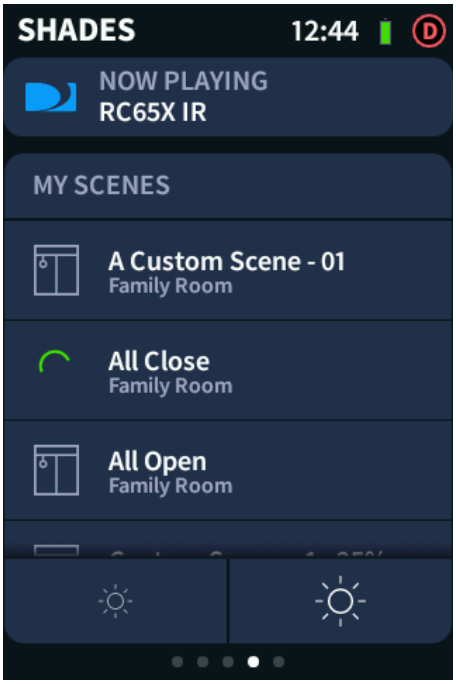
To adjust the master shade position in the room:

- Tap the small sun icon at the bottom left of the screen to lower the shade position incrementally.
- Tap the large sun icon at the bottom right of the screen to raise the shade position incrementally.

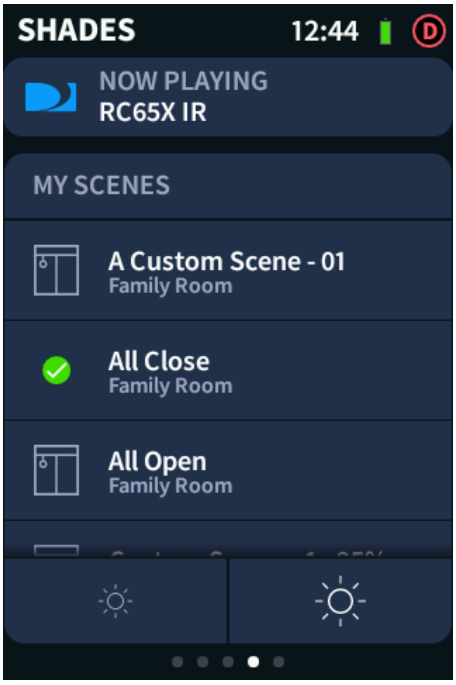
The **MY SCENES** menu contains all of the shade scenes that may be recalled from the room. The room where the shade scene will be recalled is displayed under the scene name. All of the scenes for the room where the remote is paired are listed first, followed by any scenes for other rooms.

To select a shade scene, swipe up and down through the **MY SCENES** menu, and then tap the desired scene. A green swirl animation is displayed to the left of the shade scene name to indicate that the scene is in progress. Once the shade scene has completed, a green check icon is displayed to the left of the shade scene name. The check icon is displayed until another scene is played that overwrites the existing scene.

SHADES Screen - Scene in Progress



SHADES Screen - Scene Complete

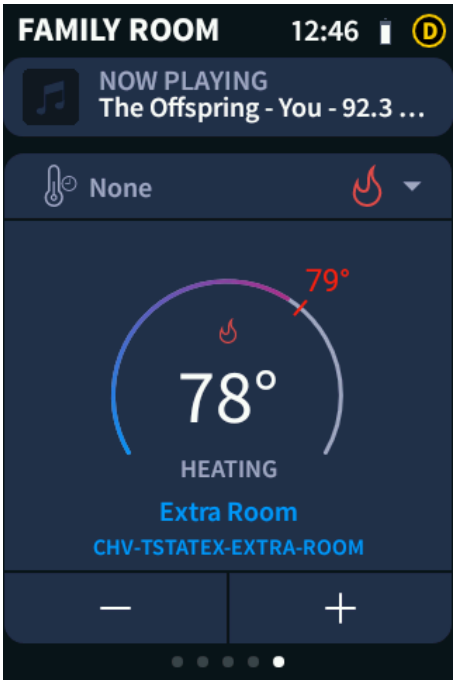


Control Climate

If thermostats have been added to the Crestron Home system, swipe through the main carousel screens until the **CLIMATE** screen is displayed.

> **NOTE:** If all media and environmental subsystems are active in the Crestron Home system, the **CLIMATE** screen is the rightmost screen as indicated by the navigation dots on the bottom of the screen.

CLIMATE Screen



Use the **CLIMATE** screen to adjust the temperature of a thermostat from the room where the TSR-310 is paired. The **CLIMATE** screen also shows the status of the thermostat and provides controls for changing the thermostat mode.

> **NOTE:** The **CLIMATE** screen may be accessed only if thermostat control is enabled for the room in User Control mode and if one or more thermostats have been added to the system. For more information, refer to Climate Scenes on page 410.

The current room temperature is displayed in the center of the screen.

- When heating mode is activated, the temperature of the heating set point is displayed in red text on the visual representation of the thermostat.
- When cooling mode is activated, the temperature of the cooling set point is displayed in blue text on the visual representation of the thermostat.

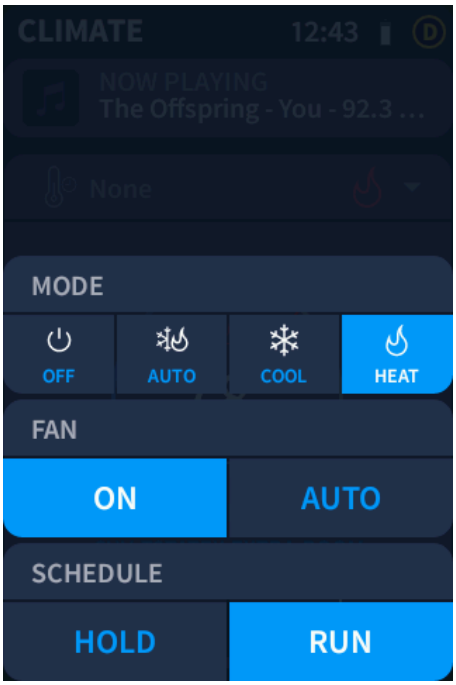
To adjust the scheduled set point of the active mode (heating or cooling):

- **Minus Button (-):** Lowers the set point temperature.
- **Plus Button (+):** Raises the set point temperature.

> **NOTE:** Any changed set point will revert back to its programmed value once the next scheduled thermostat event occurs.

To change the thermostat mode, tap the thermostat mode icon on the upper right of the **CLIMATE** screen to display a configuration menu.

CLIMATE Screen - Configuration Menu



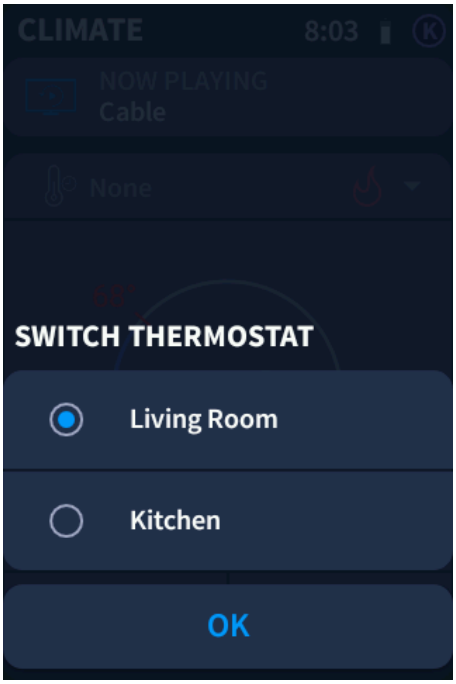
The following thermostat settings are provided (if supported by the thermostat):

- **MODE:** Select the desired thermostat mode:
  - **OFF:** Turn off the thermostat.
  - **AUTO:** Place the thermostat in auto mode.
  - **COOL:** Place the thermostat in cooling mode.
  - **HEAT:** Place the thermostat in heating mode.
- **FAN:** Select a fan behavior for the thermostat:
  - **ON:** Turn the thermostat fan on.
  - **AUTO:** Place the thermostat fan in auto mode.
- **SCHEDULE:** Select the behavior of the programmed thermostat schedule:
  - **HOLD:** Stop the thermostat schedule.
  - **RUN:** Resume the thermostat schedule.

Once a new setting is selected, the configuration menu closes automatically.

To change the thermostat that is controlled by the TSR-310, tap the thermostat name on the **CLIMATE** screen and then tap a thermostat to select it. Tap **OK** to return to the **CLIMATE** screen.

CLIMATE Screen - SWITCH THERMOSTAT Menu



Hard Button Controls

The following user-triggered screens may be accessed at any time with the appropriate hard buttons on the TSR-310. User-triggered screens provide additional options for system control.

Media System Power

Use the power button to turn the room on and off, turn the whole house off, and set the sleep timer.

Turn the Room On

Press the power button to turn the room on. Depending on the Crestron Home system programming, different actions are performed when the room is turned on:

- The default media source starts playing.
- The last played media source starts playing.
- The **MY SOURCES** menu displays. Select a source to start playing the media source.
- Pressing the power button results in no action. The media source must be selected manually from the **MY SOURCES** menu.

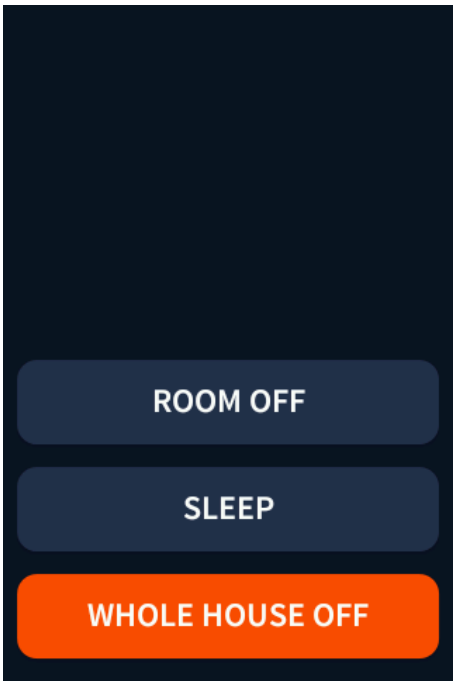
Turn the Room Off

Press the power button on the TSR-310 to power off the room. The active media source stops playing.

> **NOTE:** Alternatively, press and hold the power button to view the power down options and then tap **ROOM OFF**. The room turns off.

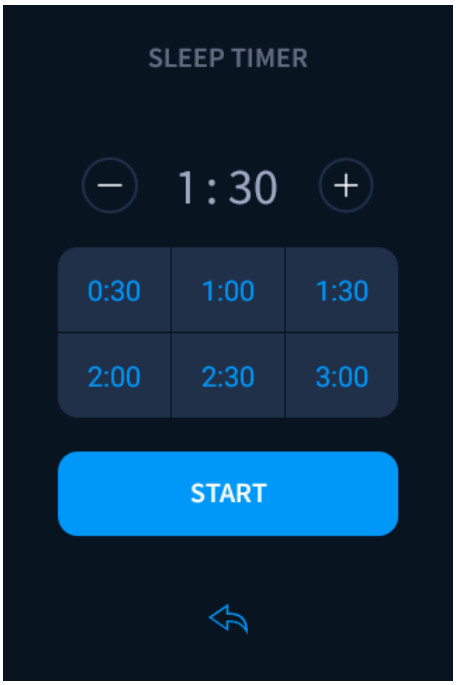
Turn the Whole House Off

Press and hold the power button to view the power down options and then tap **WHOLE HOUSE OFF**. The whole house turns off.



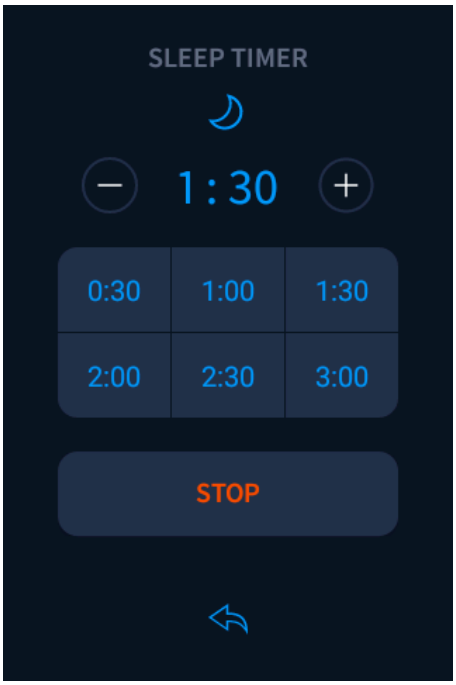
Set the Sleep Timer

Press and hold the power button to view the power down options and then tap **SLEEP**. Set the length of the sleep timer and then tap **START**. The room turns off after the set amount of time.



Cancel the Sleep Timer

Press and hold the power button to view the power down options and then tap **SLEEP**. Tap **STOP** to cancel the sleep timer.



Voice Commands

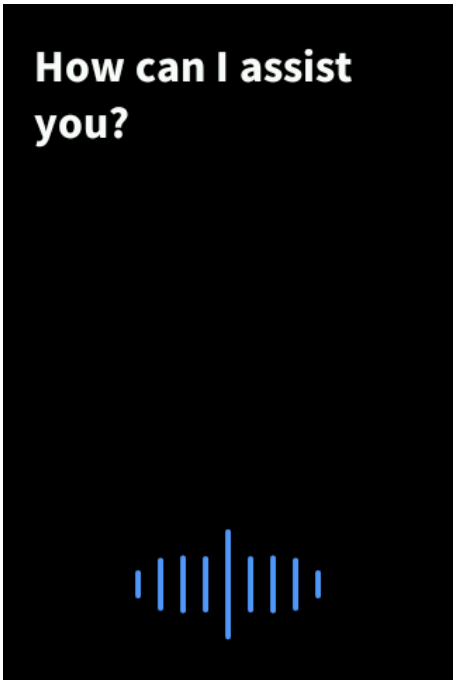
Use the microphone button to issue voice commands.

NOTES:

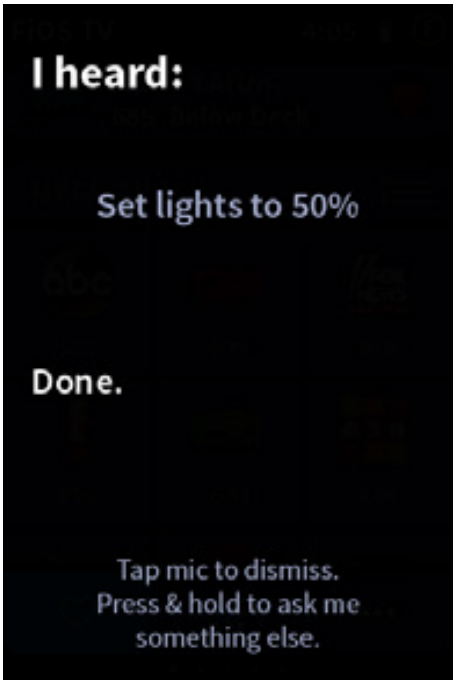
- For a list of available voice commands, refer to Voice Commands on page 1098.
- To use voice commands, the Crestron Home system must be associated with a voice control provider, and voice registration must be enabled on the TSR-310. For more information, refer to Voice Control Settings on page 607 and Voice Settings on page 1112.

To issue voice commands, press and hold the microphone button , speak the voice command, then release the microphone button. The command is displayed on the screen with a swirl animation to show that the command is in progress. Once the command has been executed, a green check icon appears on the screen, followed by a textual conformation that the command was executed.

Voice Commands Screen - Command Prompt

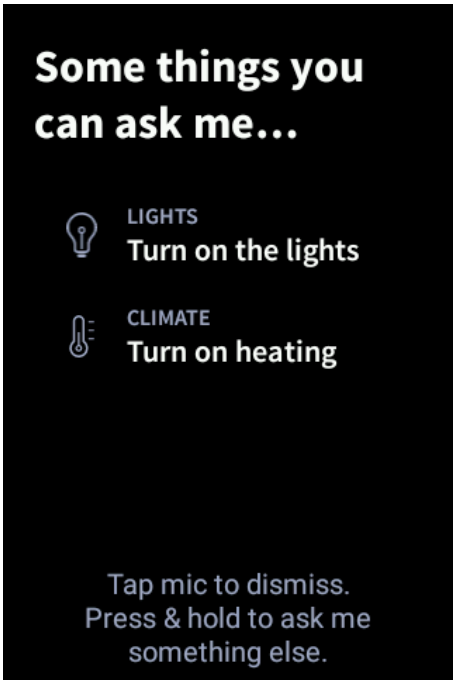


Voice Commands Screen - Command Complete



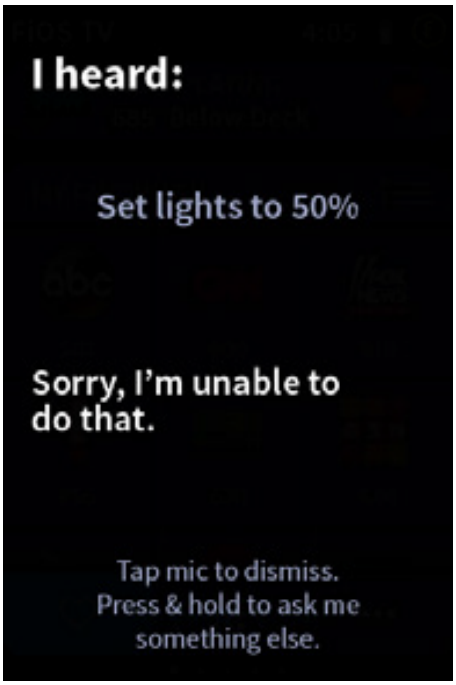
If no command is spoken and the microphone button is released, a list of common voice commands is displayed on the screen.

Voice Commands Screen



If the TSR-310 recognizes the command but it unable to process it in the system, a message indicating this information is displayed. Press the microphone button to dismiss this message, and then attempt to reissue the voice command.

Voice Commands Screen - Command Not Processed



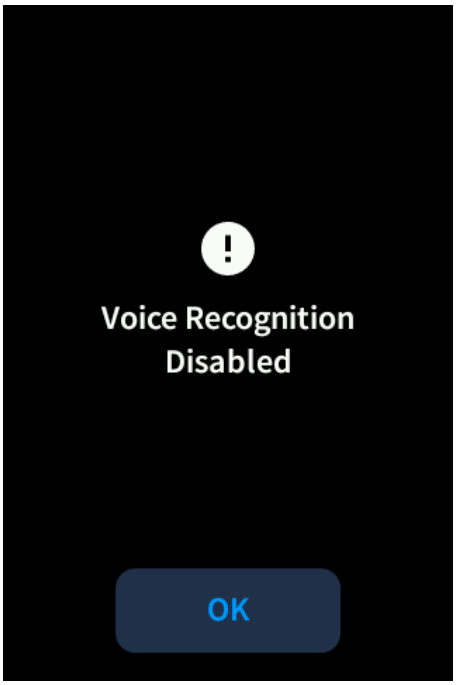
If the TSR-310 does not recognize the command, a message indicating this information is displayed. Press the microphone button to dismiss this message, and then attempt to reissue the voice command.

Voice Commands Screen - Command Not Recognized



If voice control is disabled, a screen alerting the user is displayed when the microphone button is pressed. Tap **OK** to dismiss the notification.

Voice Recognition Disabled Screen

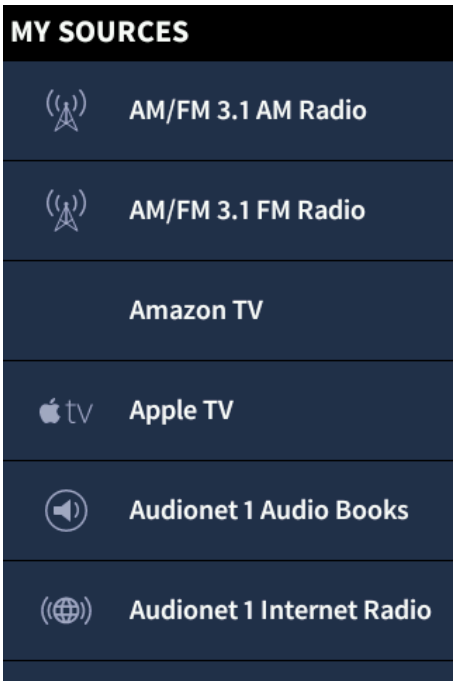


My Sources

Press the home button ☰ on the TSR-310 to display the **MY SOURCES** screen. The **MY SOURCES** screen lists all the available media sources for the room. A check mark is placed next to the source that is currently playing.

Tap a source on the **MY SOURCES** screen to switch to a different source.

MY SOURCES Screen



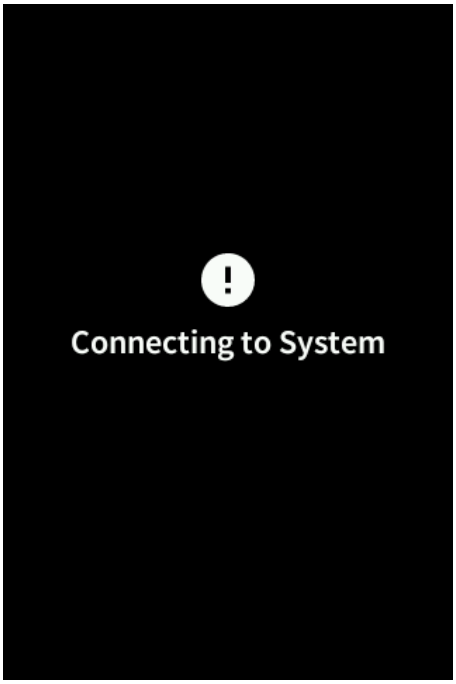
System Screens

The TSR-310 handheld remote displays system screens to provide feedback, notifications, and alerts to the user.

System Alert Screens

The **Connecting to System** alert is displayed if the Crestron Home system is offline or if the TSR-310 is waiting to establish a connection after a reboot. This alert is closed automatically once a connection is established. If this message is displayed for a prolonged period, check the connection to the Crestron Home system.

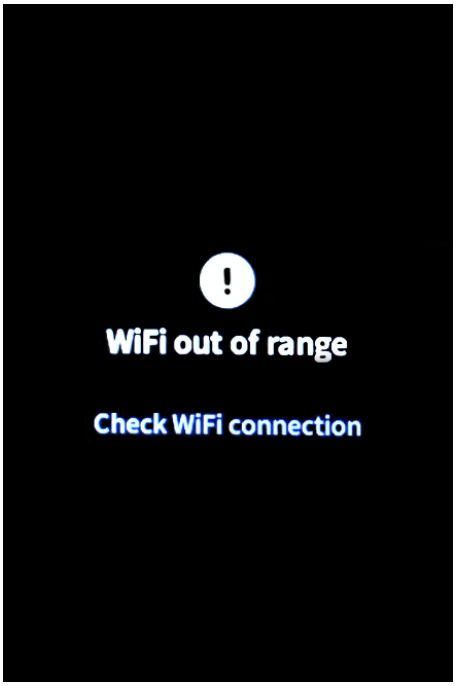
Connecting to System Alert Screen



The **Wi-Fi out of range** alert is displayed if the TSR-310 is no longer in range of the wireless access point or if the wireless access point is not functioning. This alert is closed automatically once the TSR-310 is back in range of the wireless access point. If this message is displayed while in range of the access point, ensure that the access point is powered on and is functioning properly.

> **NOTE:** When the TSR-310 is first disconnected from the wireless access point, the **Connecting to System** alert may be displayed for a few seconds before the "Wi-Fi out of range" alert is displayed. This behavior is normal.

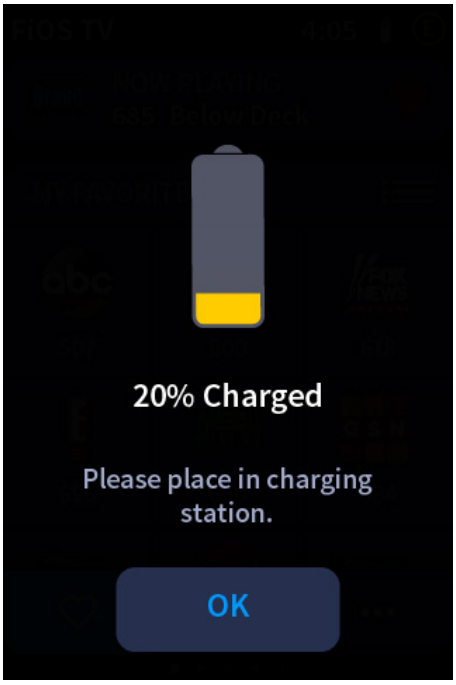
Wi-Fi Out of Range Alert Screen



Battery Low

When the TSR-310 battery level has reached 20%, a screen is displayed to alert the user that the TSR-310 should be placed on its charging dock. Tap **OK** to dismiss the notification.

Battery Low Screen



If the remote is not placed on the charging dock, additional alert screens are displayed when the battery level reaches 10% and 5%. When the battery level reaches 5%, a battery critical screen is displayed. Tap **OK** to dismiss the notification.

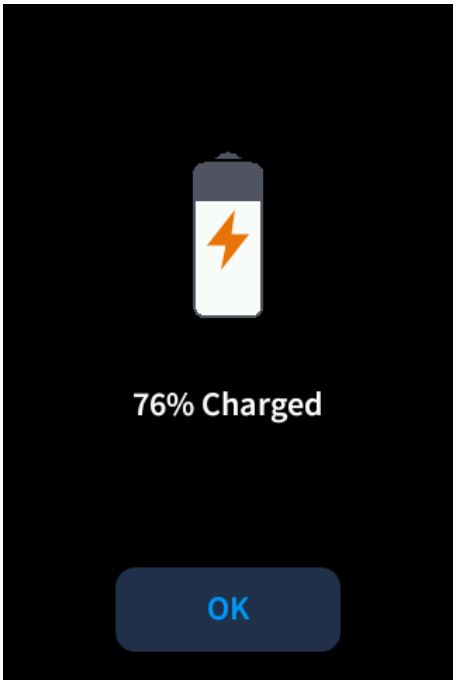
Battery Critical Screen



Battery Charging

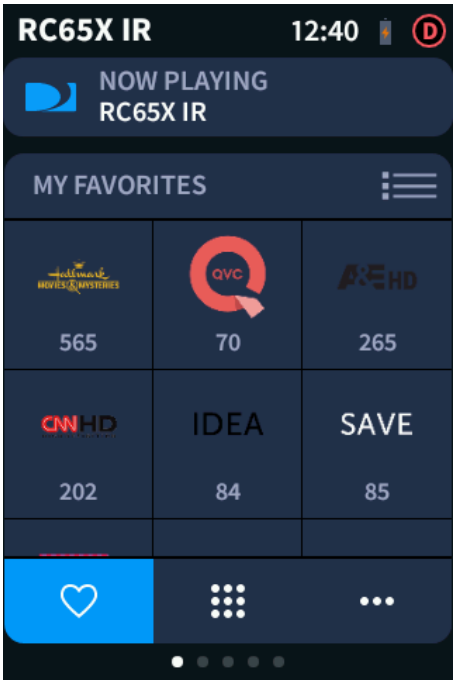
When the TSR-310 is placed in its charging dock, a screen with a charging battery image and the current battery level is displayed to alert the user that the battery is charging. Tap **OK** to dismiss the notification. Otherwise, this screen is closed automatically after three seconds.

Battery Charging Screen



When the battery is charging, a battery charging indicator replaces the battery level indicator on the upper right of the operational screens.

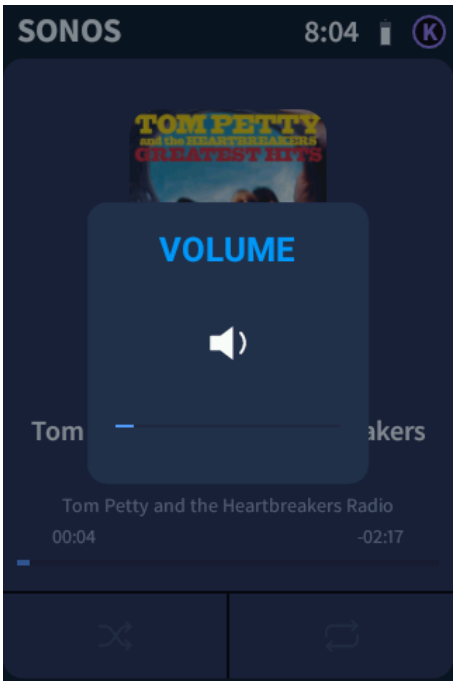
Media Screen - Battery Charging Indicator



Volume

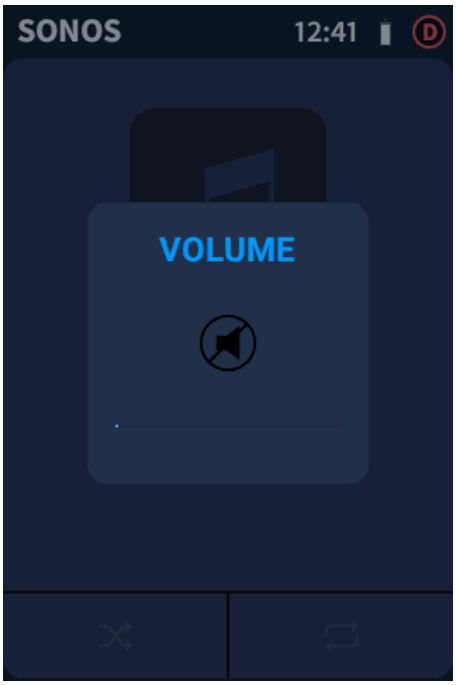
When the system volume is adjusted using the volume raise and volume lower hard buttons, a **VOLUME** panel is displayed. The blue bar underneath the volume icon adjusts to show the volume level.

VOLUME Panel



If the mute hard button is pressed or if the system volume is lowered to 0%, a volume mute icon is displayed.

VOLUME Panel - Volume Muted



Voice Commands

Use the TSR-310 handheld remote to control your Crestron Home® system with voice commands. Voice commands can be used to control the lights and temperature, increase or decrease a value or level for a device, recall global Quick Actions, and get a list of rooms or scenes.

Requirements

To use voice commands on the TSR-310 handheld remote:

- In the Crestron Home Setup app, turn on voice control. For details, refer to Voice Control Settings on page 607.
- In the TSR-310 settings, turn on voice control. For details, refer to Voice Settings on page 1112.

Decrease a Device Value or Level

Example Phrases	Expected Response	Comments
Decrease the <device> by <number> percent.	Sure, decrementing the <device>.	
Decrease <device> by <number>.	Sure, decrementing the <device>.	
Decrease <device> by <number> percent in the <room>.	Sure, decrementing the <device>.	
Decrease <room> <device> by <number> percent.	Sure, decrementing the <device>.	
Decrease <device>.	Sure, decrementing the <device>.	The number is decreased by 25.

Increase a Device Value or Level

Example Phrases	Expected Response	Comments
Increase the <device> by <number> percent.	Sure, incrementing the <device>.	
Increase <device> by <number>.	Sure, incrementing the <device>.	
Increase <device> by <number> percent in the <room>.	Sure, incrementing the <device>.	
Increase <room> <device> by <number> percent.	Sure, incrementing the <device>.	
Increase <device>.	Sure, incrementing the <device>.	The number is increased by 25.

Make a Room-wide Light or Temperature Adjustment

Example Phrases	Expected Response	Comments
It is too dark in the <room>.	Adjusting the <room>.	The lights are increased by 25 percent.
It is too bright.	Adjusting the <room>.	The lights are decreased by 25 percent.
It is too cold.	Adjusting the <room>.	The temperature is increased by 2 degrees.
It is too warm.	Adjusting the <room>.	The temperature is decreased by 2 degrees.
It is too hot.	Adjusting the <room>.	The temperature is decreased by 2 degrees.

Turn Off a Device

Example Phrases	Expected Response
Turn off <room> <device>.	Sure, turning off the <device>.
Turn off <device>.	Sure, turning off the <device>.
Turn off the <room> <device>.	Sure, turning off the <device>.
Turn off the <device>.	Sure, turning off the <device>.
Turn off the <device> in the <room>.	Sure, turning off the <device>.

Turn On a Device

Example Phrases	Expected Response
Turn on <room> <device>.	Sure, turning on the <device>.
Turn on <device>.	Sure, turning on the <device>.
Turn on the <room> <device>.	Sure, turning on the <device>.
Turn on the <device>.	Sure, turning on the <device>.
Turn on the <device> in the <room>.	Sure, turning on the <device>.

Set a Device Value or Level

Example Phrases	Expected Response
Set the <device> to half in the <room>.	Sure, setting the <device> to <number> percent.
Set the <device> to <number> percent.	Sure, setting the <device> to <number> percent.
Set the <device> to <number>.	Sure, setting the <device> to <number> percent.
Set the <room> <device> to <number>.	Sure, setting the <device> to <number> percent.
Set <device> to <number>.	Sure, setting the <device> to <number> percent.

Set the Away Preset

Example Phrases	Expected Response
Good bye.	Goodbye. Setting your away presets.
I am going.	Goodbye. Setting your away presets.
I am leaving.	Goodbye. Setting your away presets.
We are going away.	Goodbye. Setting your away presets.
We are leaving the house.	Goodbye. Setting your away presets.

Set the Morning Preset

Example Phrases	Expected Response
Good morning.	Good morning. Setting your morning presets.
Wake up.	Good morning. Setting your morning presets.

Set the Night Preset

Example Phrases	Expected Response
Good night.	Good night. Setting your night presets.
Go to sleep.	Good night. Setting your night presets.

Set the Home Preset

Example Phrases	Expected Response
I am back.	Welcome home. Setting your home presets.
I am home.	Welcome home. Setting your home presets.
I'm here.	Welcome home. Setting your home presets.
We are here.	Welcome home. Setting your home presets.
We are home.	Welcome home. Setting your home presets.

Decrease the Thermostat Temperature

Example Phrases	Expected Response	Comments
Decrease the thermostat by <number> degrees in the <room>.	Auto is set to <number>. The AC is set <number>. The heat is set to <number>.	The response is based on the thermostat mode.
Decrease the thermostat by <number> degrees.	Auto is set to <number>. The AC is set <number>. The heat is set to <number>.	The response is based on the thermostat mode.

Example Phrases	Expected Response	Comments
Decrease the thermostat by <number>.	Auto is set to <number>. The AC is set <number>. The heat is set to <number>.	The response is based on the thermostat mode.
Decrease the <room> thermostat by <number> degrees.	Auto is set to <number>. The AC is set <number>. The heat is set to <number>.	The response is based on the thermostat mode.
Decrease thermostat by <number> degrees.	Auto is set to <number>. The AC is set <number>. The heat is set to <number>.	The response is based on the thermostat mode.

Increase the Thermostat Temperature

Example Phrases	Expected Response	Comments
Increase the thermostat by <number> degrees in the <room>.	Auto is set to <number>. The AC is set <number>. The heat is set to <number>.	The response is based on the thermostat mode.
Increase the thermostat by <number> degrees.	Auto is set to <number>. The AC is set <number>. The heat is set to <number>.	The response is based on the thermostat mode.
Increase the thermostat by <number>.	Auto is set to <number>. The AC is set <number>. The heat is set to <number>.	The response is based on the thermostat mode.
Increase the <room> thermostat by <number> degrees.	Auto is set to <number>. The AC is set <number>. The heat is set to <number>.	The response is based on the thermostat mode.
Increase thermostat by <number> degrees.	Auto is set to <number>. The AC is set <number>. The heat is set to <number>.	The response is based on the thermostat mode.

Get the Current Thermostat Setpoint

Example Phrases	Expected Response	Comments
What's my thermostat set to?	Auto is set to <number>. The AC is set <number>. The heat is set to <number>.	The response is based on the thermostat mode.
What is my thermostat set to?	Auto is set to <number>. The AC is set <number>. The heat is set to <number>.	The response is based on the thermostat mode.
What's the thermostat set to?	Auto is set to <number>. The AC is set <number>. The heat is set to <number>.	The response is based on the thermostat mode.

Example Phrases	Expected Response	Comments
What's the <room> thermostat set to?	Auto is set to <number>. The AC is set <number>. The heat is set to <number>.	The response is based on the thermostat mode.
What is the thermostat set to?	Auto is set to <number>. The AC is set <number>. The heat is set to <number>.	The response is based on the thermostat mode.
What is the <room> thermostat set to?	Auto is set to <number>. The AC is set <number>. The heat is set to <number>.	The response is based on the thermostat mode.

Get the Room Temperature

Example Phrases	Expected Response
What is the thermostat temp?	The thermostat temperature is <number> degrees.
What's the temp in the thermostat?	The thermostat temperature is <number> degrees.
What is the temperature in the kitchen thermostat?	The thermostat temperature is <number> degrees.
What is the thermostat temperature?	The thermostat temperature is <number> degrees.
What is the temperature in the thermostat?	The thermostat temperature is <number> degrees.

Set the Thermostat Operating Mode

Example Phrases	Expected Response
Set the thermostat to <mode> mode	Thermostat is set to <mode>
Set the thermostat to <mode> mode in the <room>	Thermostat is set to <mode>
Set the <room> thermostat to <mode> mode	Thermostat is set to <mode>
Set thermostat to <mode> mode	Thermostat is set to <mode>
Set <room> thermostat to <mode> mode	Thermostat is set to <mode>

Set the Thermostat Temperature

Example Phrases	Expected Response
Set the thermostat to <number> degrees in the <room>	Auto is set to <number> or The AC is set <number> or The heat is set to <number>
Set the thermostat to <number> degrees	Auto is set to <number> or The AC is set <number> or The heat is set to <number>

Example Phrases	Expected Response
Set the thermostat to <number>	Auto is set to <number> or The AC is set <number> or The heat is set to <number>
Set the <room> thermostat to <number> degrees	Auto is set to <number> or The AC is set <number> or The heat is set to <number>
Set thermostat to <number> degrees	Auto is set to <number> or The AC is set <number> or The heat is set to <number>

Get a list of Rooms

Example Phrases	Expected Response
List the rooms.	Here is a list of available rooms: <room list>.
List the zones.	Here is a list of available rooms: <room list>.
What rooms?	Here is a list of available rooms: <room list>.
Get the room list.	Here is a list of available rooms: <room list>.
Get the list of rooms.	Here is a list of available rooms: <room list>.

Get a list of Scenes

Example Phrases	Expected Response
List the scenes.	Here is a list of available scenes: <scene list>.
List the scenes in the <room>.	Here is a list of available scenes: <scene list>.
What scenes?	Here is a list of available scenes: <scene list>.
Get the scenes list.	Here is a list of available scenes: <scene list>.
Get the list of scenes.	Here is a list of available scenes: <scene list>.

Recall a Scene

Example Phrases	Expected Response
Recall the scene <scene> in the <room>.	Recalling the <scene> scene in the <room>.
Recall <scene> scene.	Recalling the <scene> scene in the <room>.
Recall scene <scene>.	Recalling the <scene> scene in the <room>.
Recall <scene>.	Recalling the <scene> scene in the <room>.
Recall the <scene> scene in the <room>.	Recalling the <scene> scene in the <room>.

Common Errors

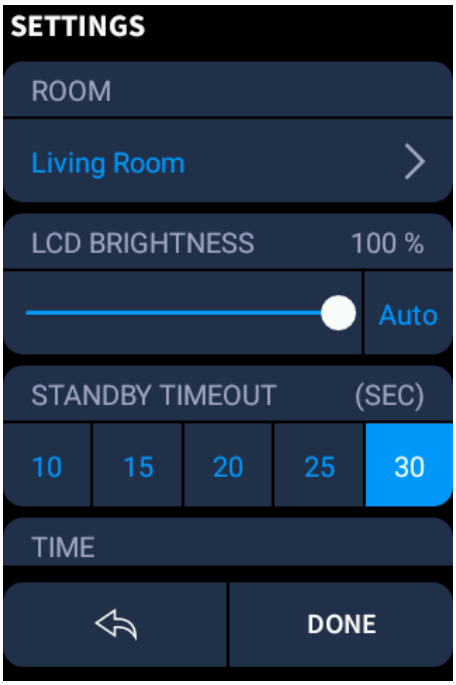
Error Response	Reason
I am unable to determine your thermostat mode.	Thermostat mode is not supported.

Error Response	Reason
I can only set the temperature between <number> and <number>.	Number is not in range.
Something went wrong trying to decrement the device <device>.	Unknown error.
Something went wrong trying to increment the device <device>.	Unknown error.
Something went wrong trying to retrieve the report state of the device <device>.	Unable to retrieve device feedback.
Something went wrong trying to set the device <device>.	Unknown error.
Something went wrong trying to turn off device <device>.	Unknown error.
Sorry, I'm unable to locate your registration information. Please register the device.	Client is not register.
Sorry, I didn't find the device <device>.	Unable to locate device on control system.
Sorry, I do not understand your request.	Missing parameters or unable to determine intent or parsing error.
Sorry, I was not able to locate the room <room>.	Room location not found.
Sorry, the device is not responding. Please check its network connection and power supply.	Device is offline.
Sorry, the room name or default location is not specified.	Room name or default location not specified.
The device <device> is currently off.	The device is in off mode.
The device <device> is offline.	The device is offline.
The Voice Control module on the control system does not support this operation.	The version of the room module on the control system is not compatible.
There was an invalid <input>. Here is a list of valid inputs: <inputs>	Parameter is out of range.
There was an invalid <parameter>. Here is a list of valid parameters: <parameters>	Control system does not support that parameter.
There was an invalid value for <parameter>. The minimum valid value is <number> and the maximum valid value is <number>.	Value is out of range.
This device doesn't support that action. Here are a list of supported actions: <actions>	Control system does not support that action.
Unknown error.	Unknown error.

Configuration

To access the Performance UI configuration screens, press and hold the home button ☰ on the TSR-310 for five seconds. The **SETTINGS** screen is displayed.

SETTINGS Screens



Room Settings

Use the **ROOM** menu to select the room that the TSR-310 handheld remote is associated with in the Crestron Home system.

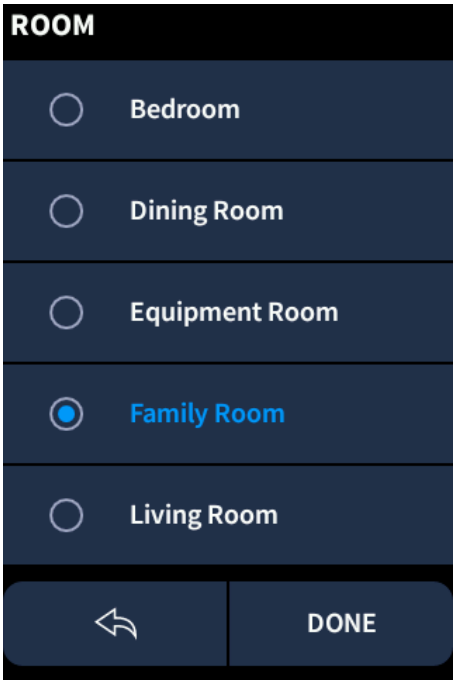
NOTES:

- If a room is set as a Media Zone in the Crestron Home system, the room may be selected from the **ROOM** screen regardless of whether it contains any media sources.
- If a room without any media sources is selected, the media screen is replaced with a **MY SOURCES** screen that shows no available sources.

To select a room:

1. Tap the arrow button next to the currently selected room to display the **ROOM** screen.
2. Tap a room from the list to select it.

   ROOM Screen

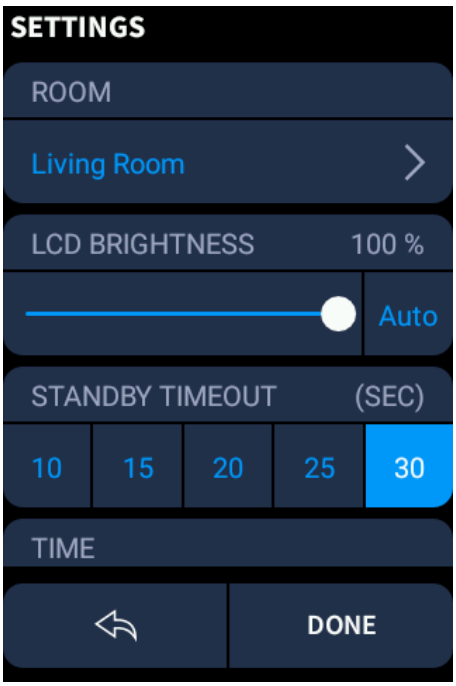
   

3. Tap **DONE** to save and return to the **SETTINGS** screen, or the back arrow icon to return without saving.

LCD Brightness Settings

Use the **LCD BRIGHTNESS** menu to adjust the brightness of the TSR-310 handheld remote display. The brighness can be manually set using the slider or adjust automatically based on the brightness in the room.

- Use the slider to adjust the LCD brightness level from 0 to 100%.
- Tap **Auto** to turn on or off automatic brightness. If automatic brightness is turned on, the **Auto** button is shown with a light blue background and the slider is disabled.

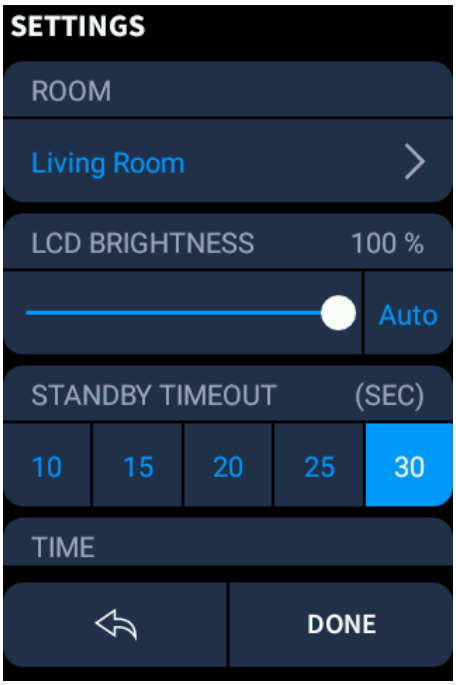


Standby Timeout Settings

Use the **STANDBY TIMEOUT** menu to set the amount of time that the display stays on when the TSR-310 handheld remote is inactive and undocked. When the timeout is reached, the display turns off to conserve battery life. The display turns on when a button is pressed or the TSR-310 handheld remote is moved.

Tap **10**, **15**, **20**, **25**, or **30** (seconds) to set the standby timeout duration. The current selection is shown with a light blue background.

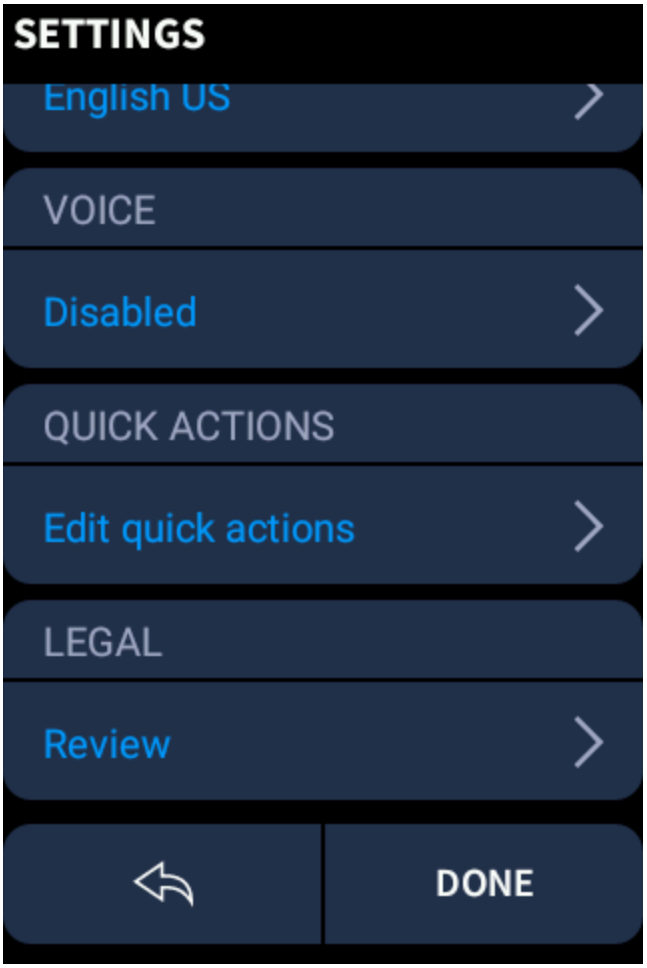
SETTINGS Screens



Time Settings

Use the **TIME** menu to select the time format for the digital clock on the TSR-310 handheld remote display.

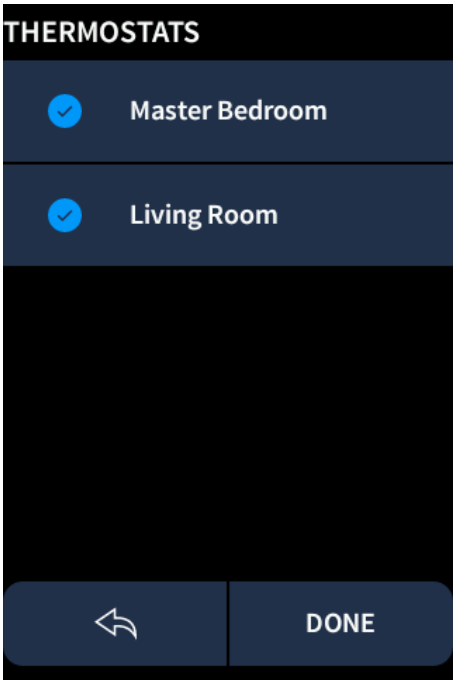
Tap **12 Hour** or **24 Hour** to select the desired time format. The current selection is shown with a light blue background.



Climate Settings

Use the **CLIMATE** menu to select the thermostats that are displayed on the **CLIMATE** screen. For more information on climate, refer to Control Climate on page 1079.

Tap **Thermostats** to display the **THERMOSTATS** screen. The **THERMOSTATS** screen displays all thermostats in the system.



To show or hide a thermostat on the **CLIMATE** screen:

1. Tap a thermostat to enable or disable the thermostat on the TSR-310 handheld remote.
    - A check icon next to a thermostat indicates that it will appear on the **CLIMATE** screen.
    - An empty circle indicates that the thermostat will not appear on the **CLIMATE** screen.
2. Tap **DONE** to save and return to the **SETTINGS** screen, or the back arrow icon to return without saving.

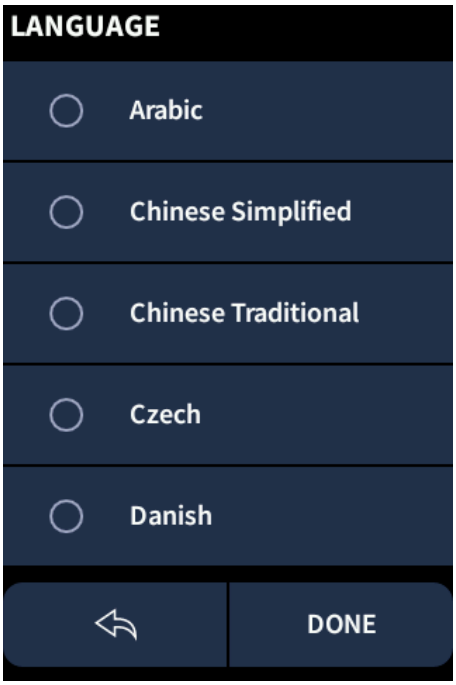
Language Settings

Use the **LANGUAGE** menu to select a language to display on the TSR-310 handheld remote.

To select a language:

1. Tap the arrow button next to the currently selected language to display the **LANGUAGE** screen.
2. Tap a language from the list to select it.

   LANGUAGE Screen

3. Tap **DONE** to save and return to the **SETTINGS** screen, or the back arrow icon to return without saving.

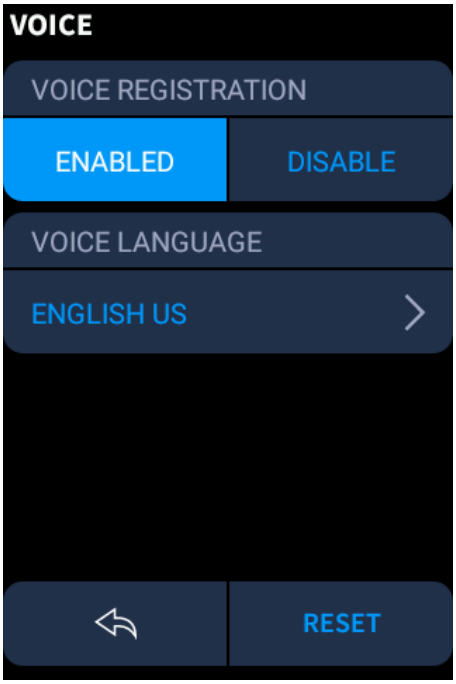
Voice Settings

Use the **VOICE** menu to enable or disable voice control services and select the voice language.

> **NOTES:**
>
> - To use voice commands, voice control services must be enabled for the Crestron Home system. For more information, refer to Voice Control Settings on page 607.
> - English (US and UK variants) is the only language currently supported by the TSR-310 for voice control at this time.

Tap **Enabled** or **Disabled** to enter the **VOICE** screen.

VOICE Screen



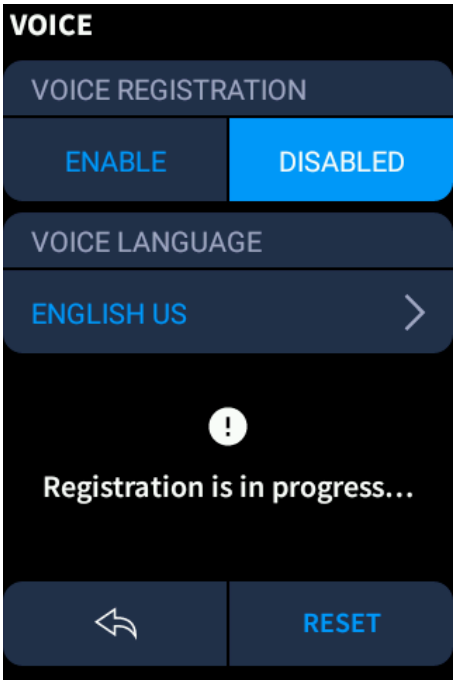
To enable or disable voice control:

1. Tap **Enable** or **Disable**.

   > **NOTE:** The TSR-310 handheld remote displays the current selection as **ENABLED** or **DISABLED** and is shown with a light blue background to indicate the voice registration status.

2. The TSR-310 handheld remote updates the registration with the voice control provider associated with the Crestron Home system. If successful, a confirmation message is displayed.

   VOICE Screen - Registration In Progress

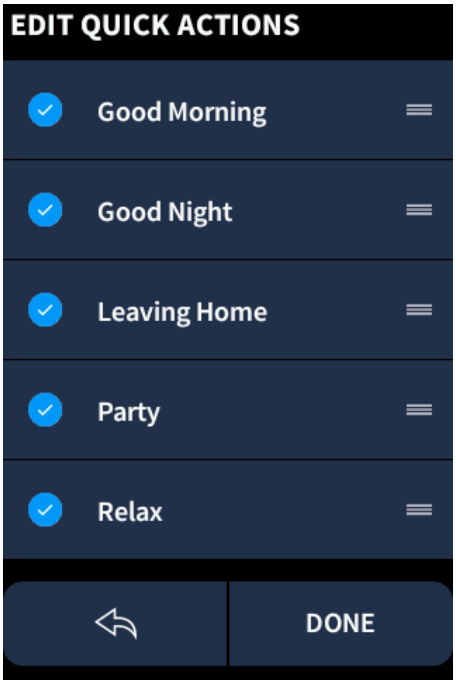


3. Tap **DONE** to save and return to the **SETTINGS** screen, or the back arrow icon to return without saving.

Quick Actions Settings

Use the **QUICK ACTIONS** menu to select and arrange the Quick Actions that are displayed on the TSR-310 handheld remote. For more information on quick actions, refer to Control Quick Actions on page 1070.

Tap **Edit quick actions** to enter the **EDIT QUICK ACTIONS** screen



Enable or Disable Quick Actions

To enable or disable a Quick Action:

1. Tap a quick action to enable or disable the Quick Action on the TSR-310 handheld remote.
   - A check icon next to a quick action indicates that it will appear on the **QUICK ACTIONS** screen.
   - An empty circle indicates that the quick action will not appear on the **QUICK ACTIONS** screen.
2. Tap **DONE** to save and return to the **SETTINGS** screen, or the back arrow icon to return without saving.

Reorder Quick Actions

To reorder the Quick Actions:

1. Tap and hold the reorder icon to the right of a Quick Action name.
2. Drag the Quick Action to the desired position in the list and then release the reorder icon.
3. Tap **DONE** to save and return to the **SETTINGS** screen, or the back arrow icon to return without saving.

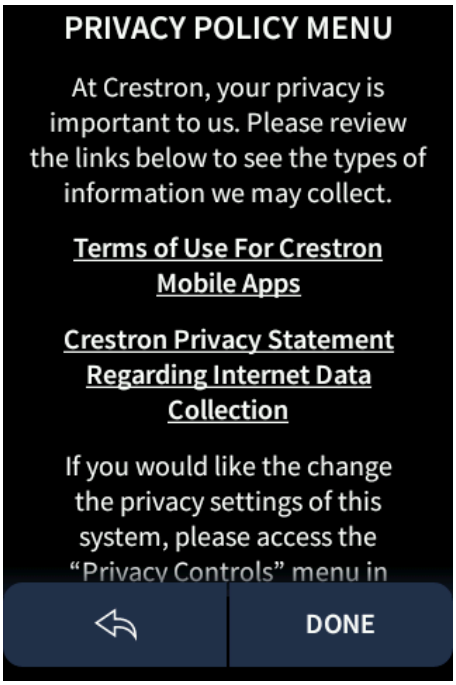
Legal

Use the **LEGAL** menu to review the legal information for the TSR-310 handheld remote and data collection.

To review the legal terms:

1. Tap **Review** to display the **PRIVACY POLICY MENU** screen.
2. Tap **Terms of Use For Crestron Mobile Apps** or **Crestron Privacy Statement Regarding Internet Data Collection**.

   PRIVACY POLICY MENU Screen



3. The TSR-310 handheld remote displays a URL to access the legal terms. Enter the URL into a web browser to view the legal terms.

   Terms of Use Screen

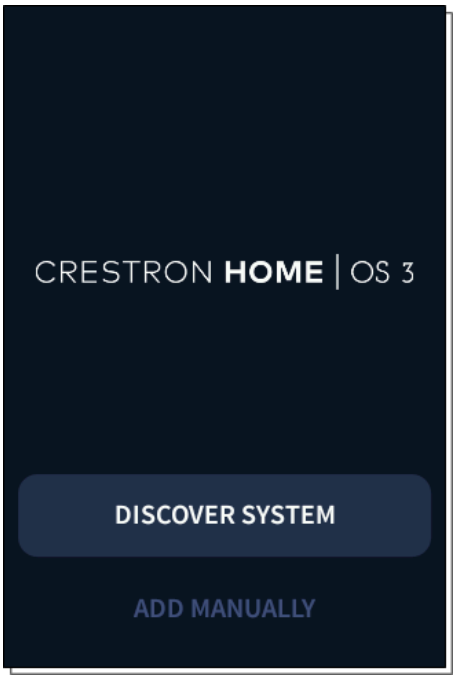
4. Tap **OK** to return to the **PRIVACY POLICY MENU** screen.
5. Tap **DONE** or the back arrow icon to return to the **SETTINGS** screen.

Crestron Home OS 3 Settings

Use the **CRESTRON HOME OS 3** menu to pair the TSR-310 handheld remote with a different Crestron Home processor.

> **NOTE:** Only change these settings if instructed to by your Crestron dealer.

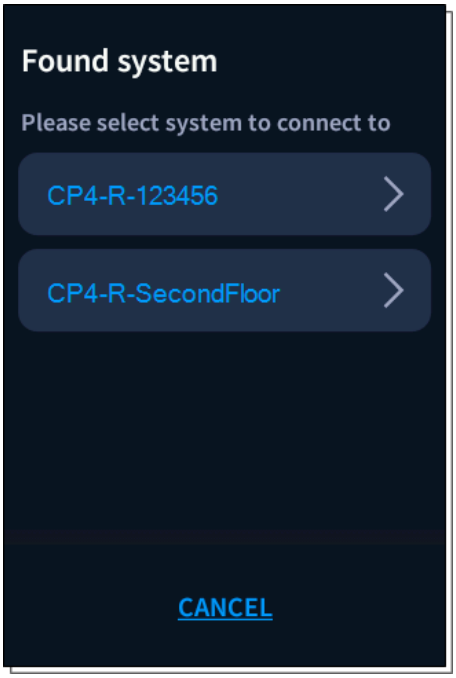
1. Tap **Edit system** and then **OK**. The splash screen is displayed.



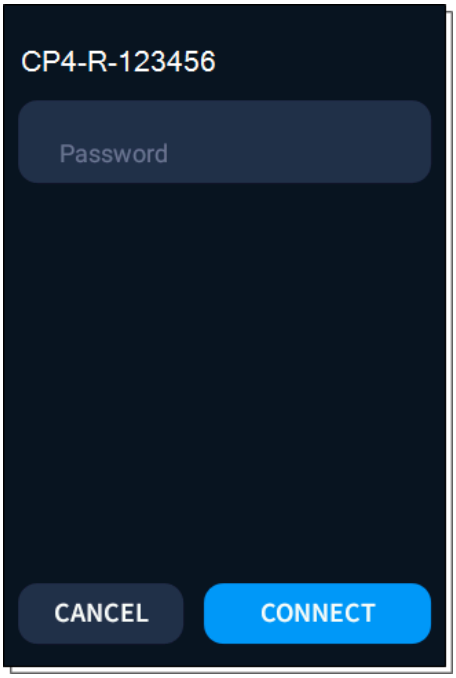
2. Tap **Discover Home** to scan the network for the Crestron Home processor. The **Homes found on this network** screen is displayed and shows the list of available Crestron Home processors on the network. The Hostname and IP Address for each Crestron Home processor is displayed.

   NOTES:

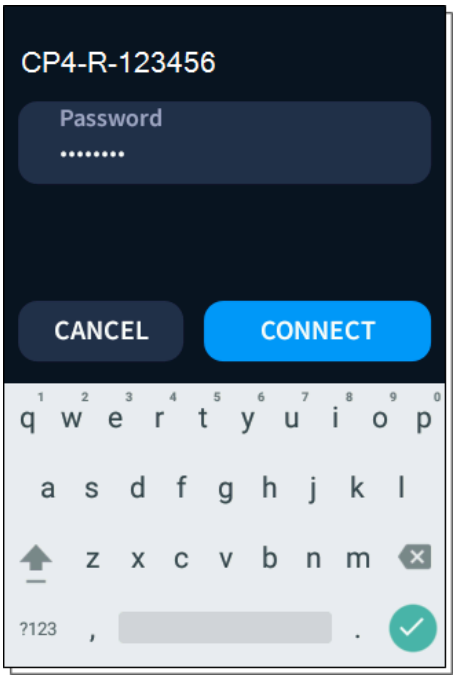
   - The TSR-310 handheld remote and the Crestron Home processor must be on the same wireless network for the device to be found.
   - Tap **Add Manually** if the Crestron Home system uses a device port other than 50001.



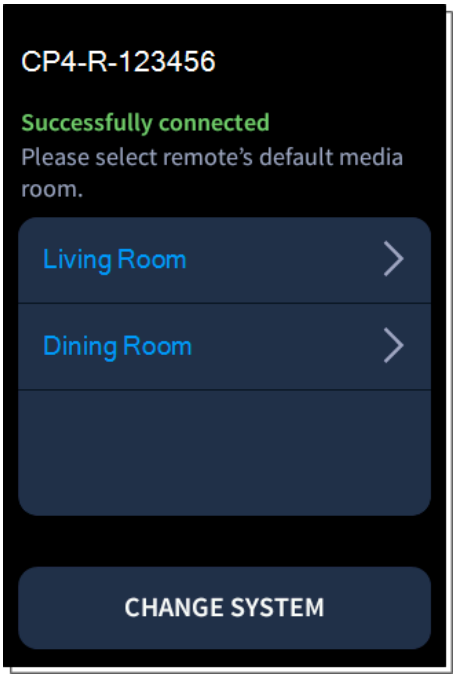
3. Tap the system that you would like to connect to. The password entry screen displays.



4. Enter the User Interface Device Password into the **Password** field using the on-screen keyboard.



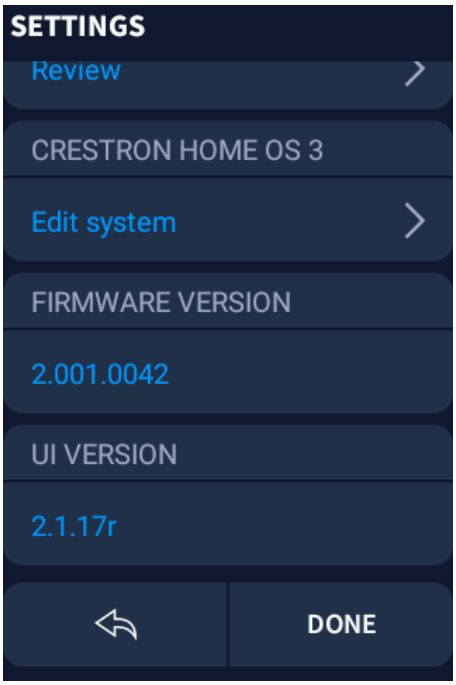
5. Tap **Connect** to add the TSR-310 handheld remote to the Crestron Home system. If the information is valid, the screen is displayed.



6. Select the room that the TSR-310 handheld remote is in. The TSR-310 handheld remote displays the **Home** screen when it is successfully added to the system.

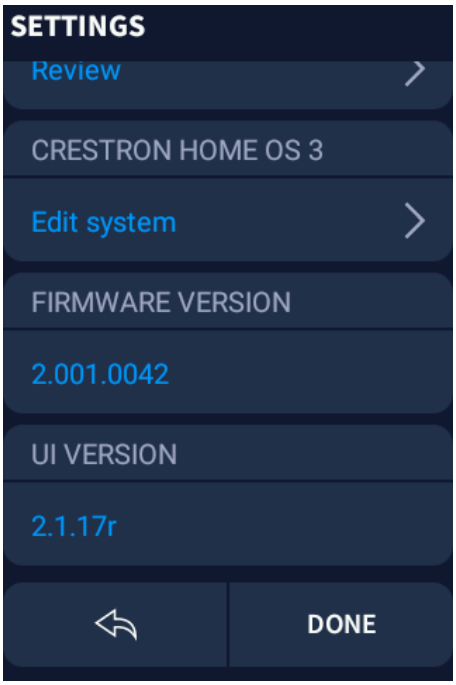
Firmware Version

Use the **Firmware Version** menu to view the firmware that is running on the TSR-310 handheld remote.



UI Version

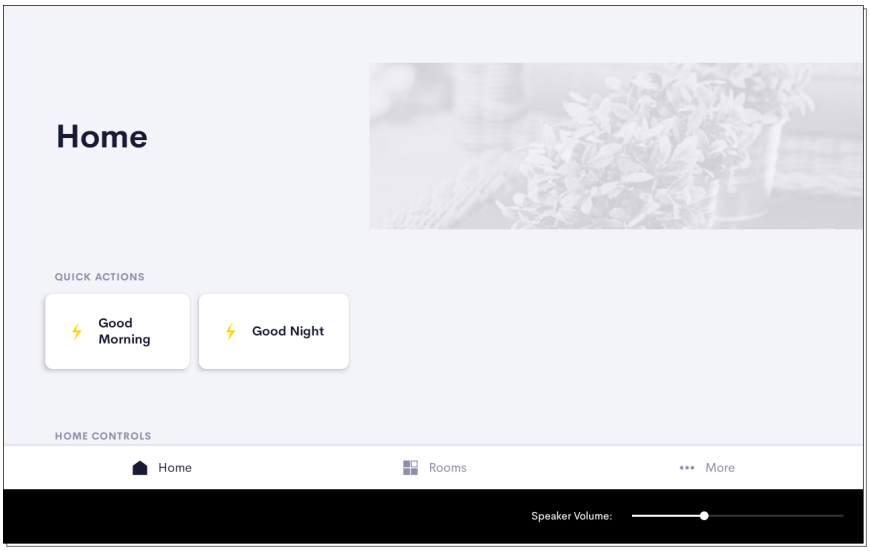
Use the **UI Version** menu to view the user interface software version that is running on the TSR-310 handheld remote.



UC-MM30-R Volume and Microphone Control

Control the volume during a video conference and control your home at the same time.

The **Speaker Volume** control appears when the UC-MM30-R is connected to a PC.



Adjust the Volume

To adjust the volume, drag the **Speaker Volume** slider to the left or right.

Mute the Built-in Microphone

The UC-MM30-R has four lighted **Mute** buttons and a status bar.

The **Mute** buttons and the status bar light green when the microphone is active (unmuted) and light red when the microphone is muted.

To mute the microphone, tap a **Mute** button.

End User Configuration

The user configuration screens provide the homeowner with advanced options to customize their Crestron Home system. Use the Crestron Home Setup app to access the user configuration.



To access the user configuration:

1. Use the Crestron Home Setup app to open the configuration.
2. Enter the Advanced User credentials and then select **OK**.
    - **Username:** advanceduser
    - **Password:** Set by the dealer. Contact your dealer for details.
3. Select **OK**.

Configure these settings:

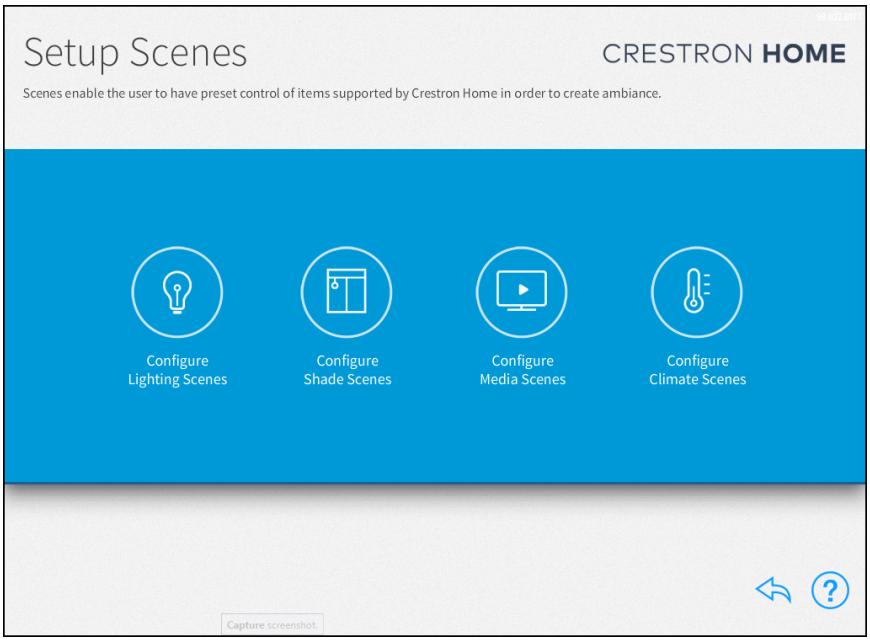
- **Setup Scenes:** Create and edit light, shade, media, and climate scenes that are recalled from the user control interface. For details, refer to Setup Scenes on page 1125.
- **System Scheduling:** Create and edit events that recall one or more scenes at specific times and days of the week. For details, refer to System Scheduling on page 1144.
- **Climate Scheduling:** Create and edit thermostat events that are recalled at specific times and days of the week. For details, refer to Climate Scheduling on page 1146.

Setup Scenes

Use the **Setup Scenes** screen to create and configure scenes for the Crestron Home system, including lighting scenes, shade scenes, and climate scenes.

Scenes are preset configurations for different device types that create a specific ambiance when recalled. Scenes may be recalled from keypads, from touch screens, and from scheduled events.

Tap the **Setup Scenes** button on the user **Setup** screen to display the **Setup Scenes** screen.



> **NOTE:** Each room may contain a maximum of 24 scenes for each scene type. For example, a room may contain up to 24 lighting scenes, up to 24 shade scenes, and so forth.

To return to the previous screen, tap **Back**.

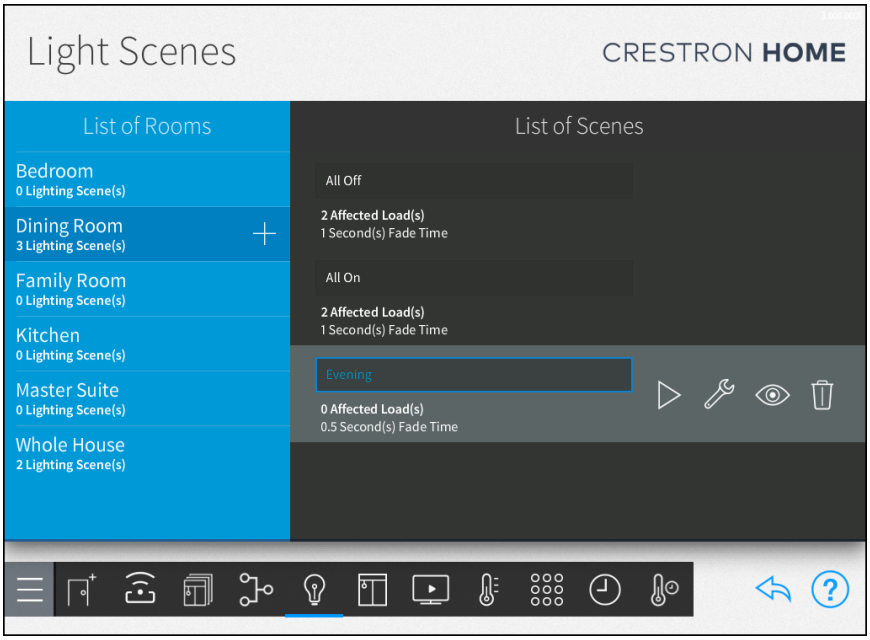
Light Scenes

Use the **Light Scenes** screen to create lighting scenes for one or more rooms or for the entire house.

Lighting scenes are used to set predefined levels for multiple lighting loads. By default, the Crestron Home system creates **All On** and **All Off** scenes for every room with a lighting load. Additionally, **All On** and **All Off** scenes are created automatically for the whole house after the first lighting load has been added to the system.

> **NOTE:** Tap the play button to recall the lighting scene in real time.

Tap the **Configure Lighting Scenes** button on the **Setup Scenes** screen or the Light Scenes button on the setup menu to display the **Light Scenes** screen.

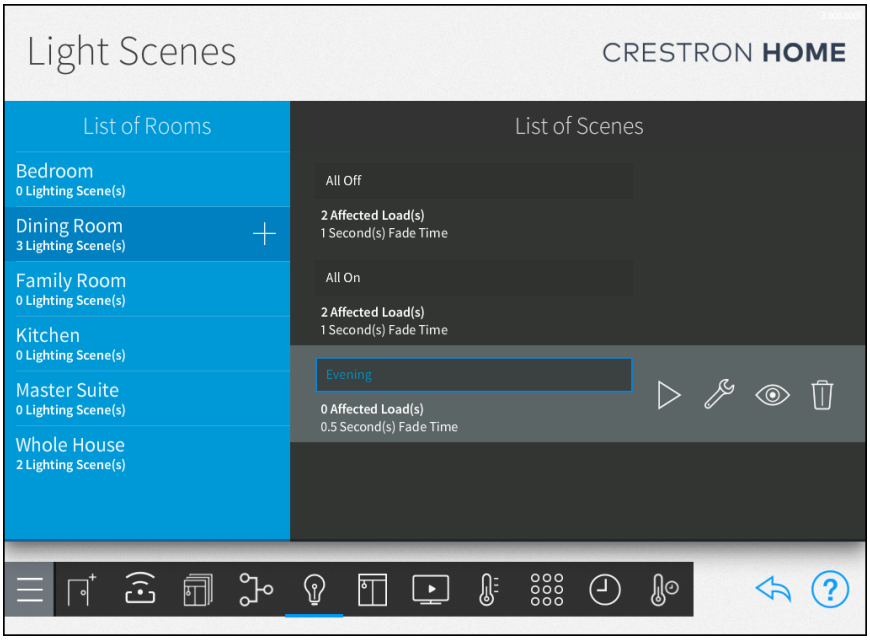


Create a Lighting Scene

> **NOTE:** When a scene is created, the current light state is saved as the scene setting and will be recalled by the scene. To adjust the levels, tap the wrench button next to the lighting scene name.

To create a lighting scene:

1. In the **List of Rooms** menu, select a room and then select **Add Scene**.

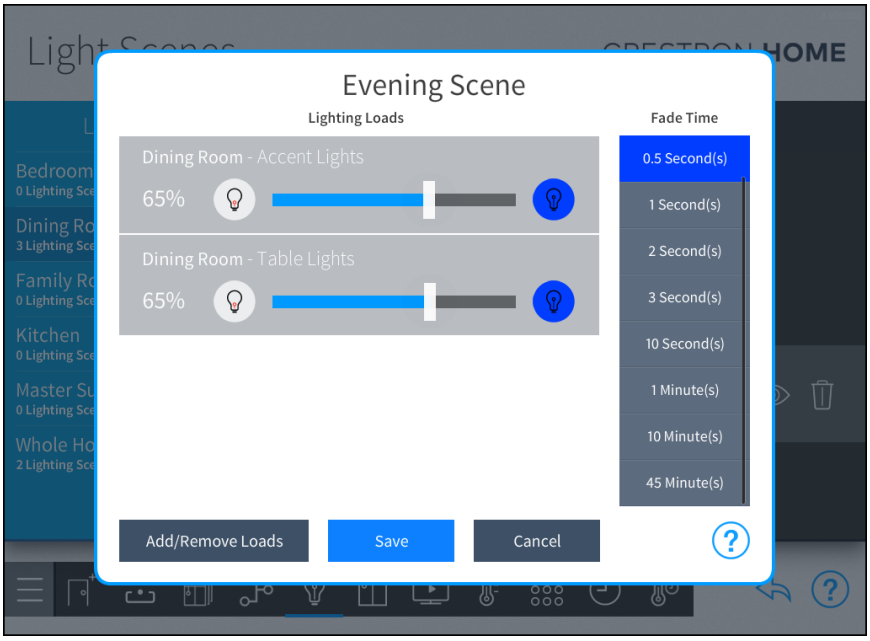


2. Enter a descriptive name for the lighting scene select **OK**.

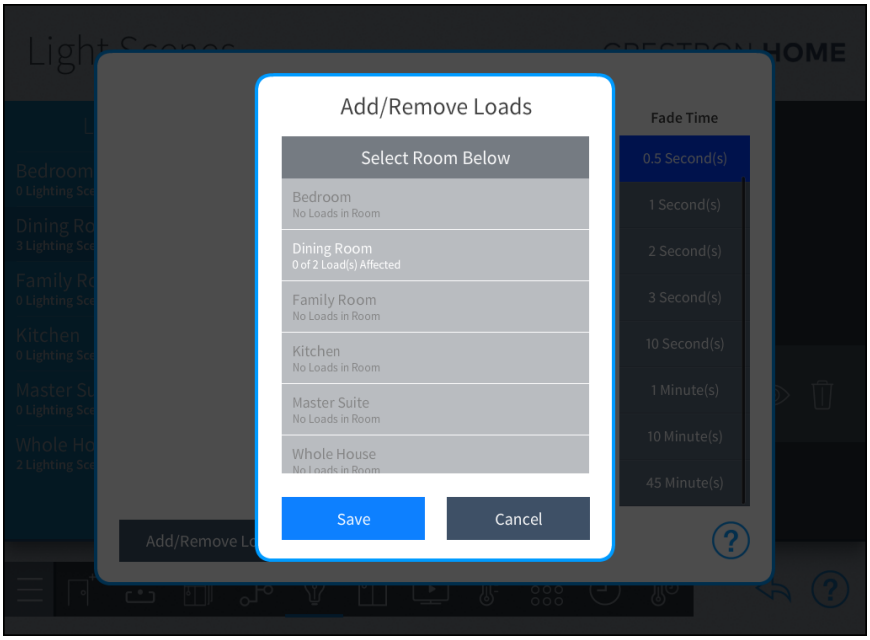
Configure a Lighting Scene

To configure a lighting scene:

1. In the **List of Scenes** menu, select a scene and then select **Configure Scene**. The scene configuration screen opens.



2. Select **Add/Remove Loads**.



3. Select a room from Select Room Below and then tap the check box next to the lighting loads that should be controlled in the lighting scene.

   > **NOTE:** The lighting loads can be from the same room or from different rooms in the house.

4. Configure the lighting scene:
   - **Lighting Loads:** Use the provided controls to adjust the brightness levels for any lighting loads that have been added to the scene. Lighting loads are adjusted in real time.
     - Tap the left lightbulb button to turn off a lighting load (0%).
     - Tap the right lightbulb button to set a lighting load to its maximum brightness (100%).
     - Use the slider to adjust the brightness level incrementally for lighting loads with dimmers.

     > **NOTE:** Lighting loads may also be adjusted using the dimmers or switches configured to control the lighting load. The load levels are updated in real-time in the Crestron Home system.

   - **Fade Time:** Select the duration that a lighting scene fades in after being recalled and fades out after the scene is completed.
5. Select **Save**.

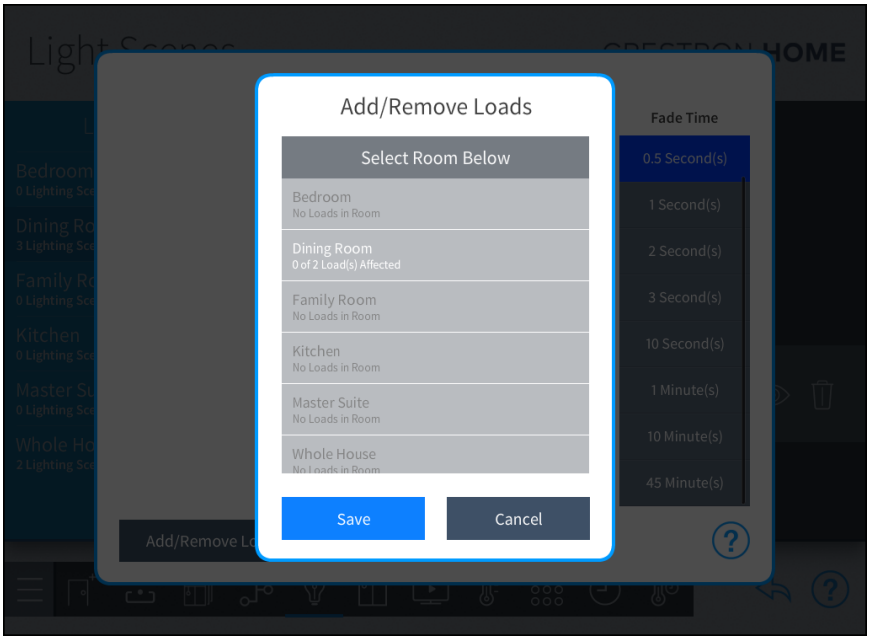
Add or Remove a Lighting Load from a Scene

A scene can contain all devices that are located in a room or only a few devices. A scene can also contain a lighting load that is located in different rooms in the house.

To add or remove a lighting load from the scene:

> **NOTES:**
>
> - The DALI protocol allows ballasts to be added to multiple DALI groups.
> - Do not add multiple DALI groups to a scene if the DALI groups control a common ballast. This will cause unpredictable lighting control when a scene is recalled and unreliable feedback of the light levels in the user interface.

1. Tap the wrench button next to the lighting scene name. The scene configuration screen opens.
2. Tap **Add/Remove Loads**. The **Add/Remove Loads** dialog is displayed.
3. Select a room from Select Room Below and then tap the check box next to the lighting loads that should be controlled in the lighting scene.



4. Select **Save**.

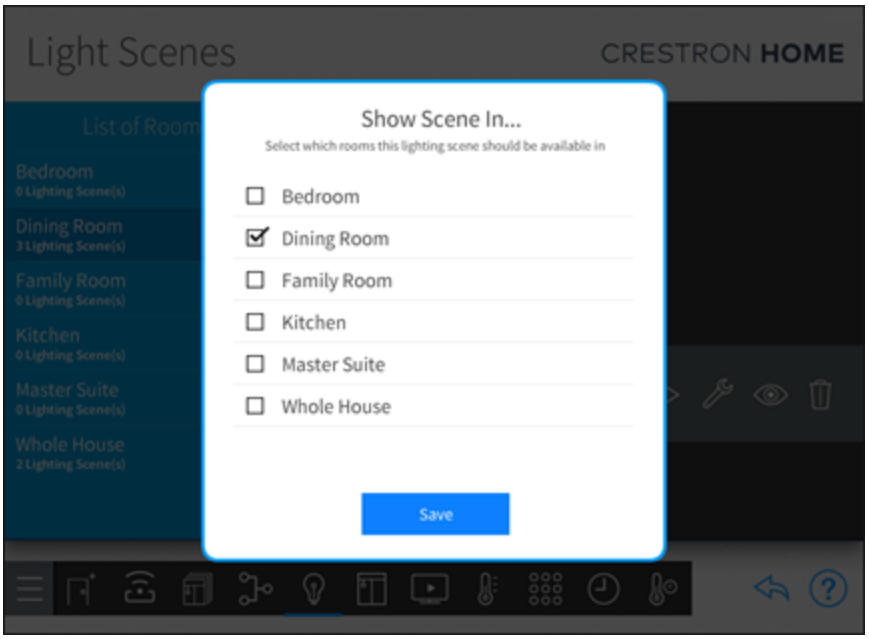
> **NOTE:** Adjust the lighting scene as necessary. Refer to the "Configure a Lighting Scene" section above.

Display Lighting Scenes in Different Rooms

The lighting scene can be configured so that it is available in different rooms around the house. When the scene is displayed in a different room, it can be recalled by a user interface device that is located in the selected room(s).

To display lighting scenes in other rooms:

1. In the **List of Scenes** menu, select a scene and then select **Show Scene**.
2. In the **Show Scene In** dialog box, select rooms to show the scene.



3. Select **Save**.

Delete a Light Scene

To delete a light scene:

1. In the **List of Rooms** menu, select a room and then select a scene.
2. Select **Delete** and then **OK** to confirm.

To return to the previous screen, tap **Back**.

Shade Scenes

Use the **Shade Scenes** screen to create shade scenes for one or more rooms or for the entire house.

Shade scenes are used to set predefined levels for multiple shade groups. By default, the Crestron Home system creates **All Open** and **All Closed** scenes for every room with a shade group. Additionally, **All Open** and **All Closed** scenes are created automatically for the whole house after the first shade motor has been added to the system.

> **NOTE:** Tap the play button to recall the shade scene in real time.

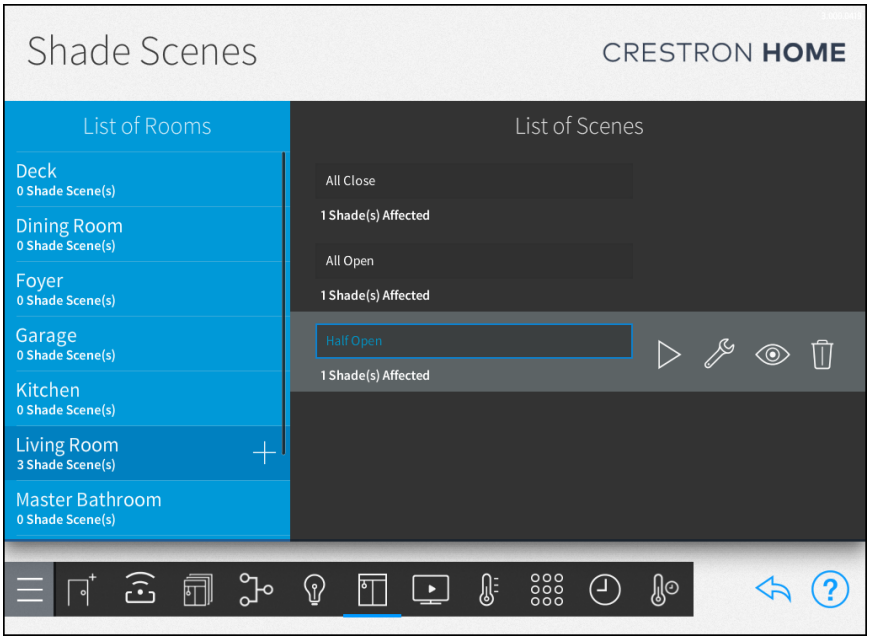
Tap the **Configure Shade Scenes** button on the **Setup Scenes** screen or the Shade Scenes button on the setup menu to display the **Shade Scenes** screen.

Create a Shade Scene

> **NOTE:** When a scene is created, the current shade state is saved as the scene setting and will be recalled by the scene. To adjust the levels, tap the wrench button next to the shade scene name.

To create a shade scene:

1. In the **List of Rooms** menu, select a room and then select **Add Scene**.

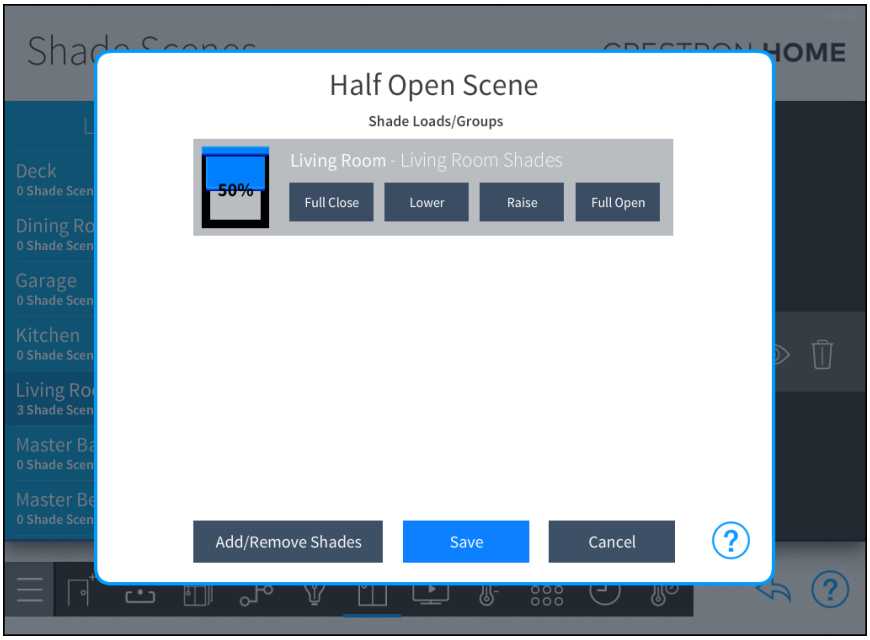


2. Enter a descriptive name for the shade scene select **OK**.

Configure a Shade Scene

To configure a shade scene:

1. In the **List of Scenes** menu, select a scene and then select **Configure Scene**. A notice is displayed stating that the shade scene will be recalled upon entering the scene configuration dialog box. Tap **OK** to display the dialog box or tap **Cancel** to cancel. The scene configuration screen opens.



2. Select **Add/Remove Loads**.
3. Select a room from Select Room Below and then tap the check box next to the shade that should be controlled in the shade scene.

> **NOTE:** The shades can be from the same room or from different rooms in the house.

4. Configure the shade scene:
   - **Raise** or **Lower:** Tap to raise or lower the shade incrementally.
   - **Full Open** or **Full Close:** Tap to open or close the shade fully.

> **NOTES:**
> - Shade loads may also be adjusted using the shade motor controls or using keypads configured to control the shade motors.
> - The icon to the left of each shade load shows the percentage that the shade group is open in real time.

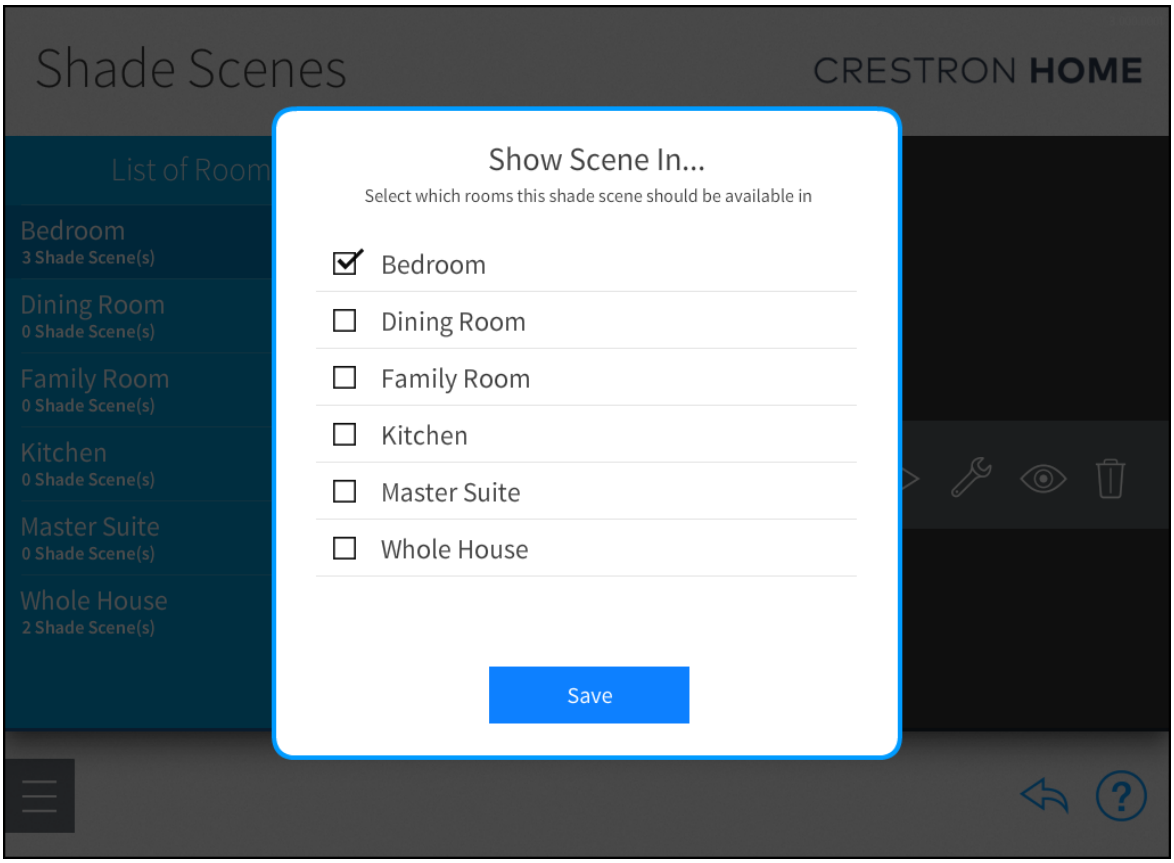
5. Select **Save**.

Display Shade Scenes in Different Rooms

The shade scene can be configured so that it is available in different rooms around the house. When the scene is displayed in a different room, it can be recalled by a user interface device that is located in the selected room(s).

To display shade scenes in other rooms:

1. In the **List of Scenes** menu, select a scene and then select **Show Scene**.
2. In the **Show Scene In** dialog box, select rooms to show the scene.



3. Select **Save**.

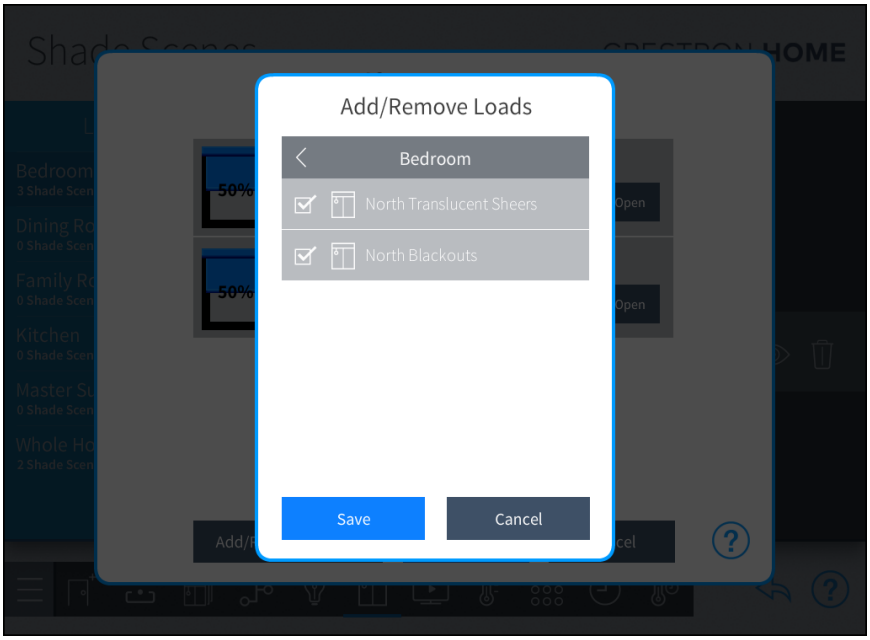
Add or Remove a Shade from a Scene

A scene can contain all devices that are located in a room or only a few devices. A scene can also contain a shade that is located in different rooms in the house.

To add or remove a shade from the scene:

> **NOTES:**
>
> - The DALI protocol allows ballasts to be added to multiple DALI groups.
> - Do not add multiple DALI groups to a scene if the DALI groups control a common ballast. This will cause unpredictable lighting control when a scene is recalled and unreliable feedback of the light levels in the user interface.

1. Tap the wrench button next to the lighting scene name. The scene configuration screen opens.
2. Tap **Add/Remove Loads**. The **Add/Remove Loads** dialog is displayed.
3. Select a room from Select Room Below and then tap the check box next to the shade that should be controlled in the shade scene.



4. Select **Save**.

> **NOTE:** Adjust the shade scene as necessary. Refer to the "Configure a Shade Scene" section above.

Delete a Shade Scene

To delete a shade scene:

1. In the **List of Rooms** menu, select a room and then select a scene.
2. Select  **Delete** and then **OK** to confirm.

Tap the back arrow button  to return to the **Setup Scenes** screen.

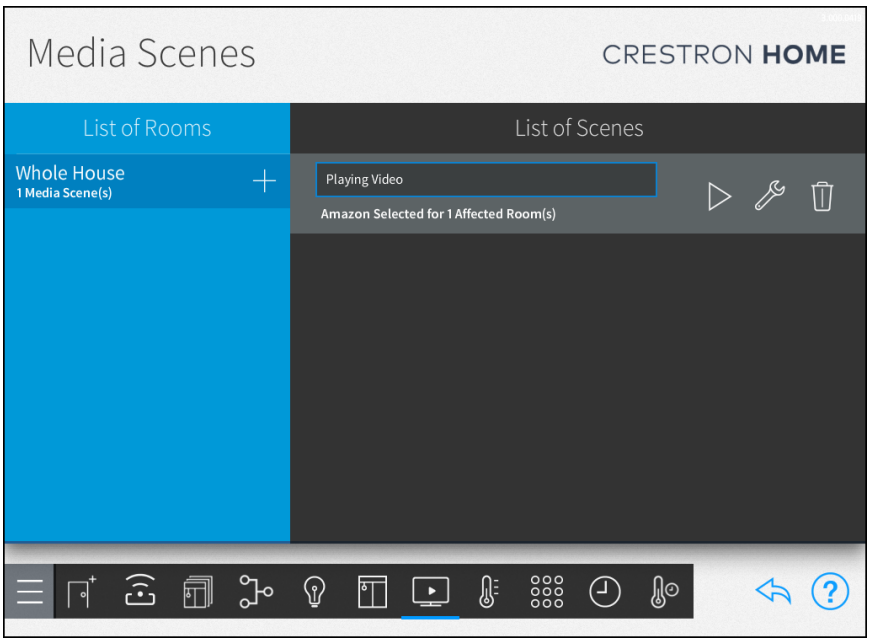
Media Scenes

Use the **Media Scenes** screen to create media scenes for the entire house. Media scenes are used to control source routing and on/off behavior for various media zones in the home.

NOTES:

- Tap the play button to recall the media scene in real time.
- Media scenes are added to the Whole House room.

Tap the **Configure Media Scenes** button on the **Setup Scenes** screen or the Media Scenes button to display the **Media Scenes** screen.

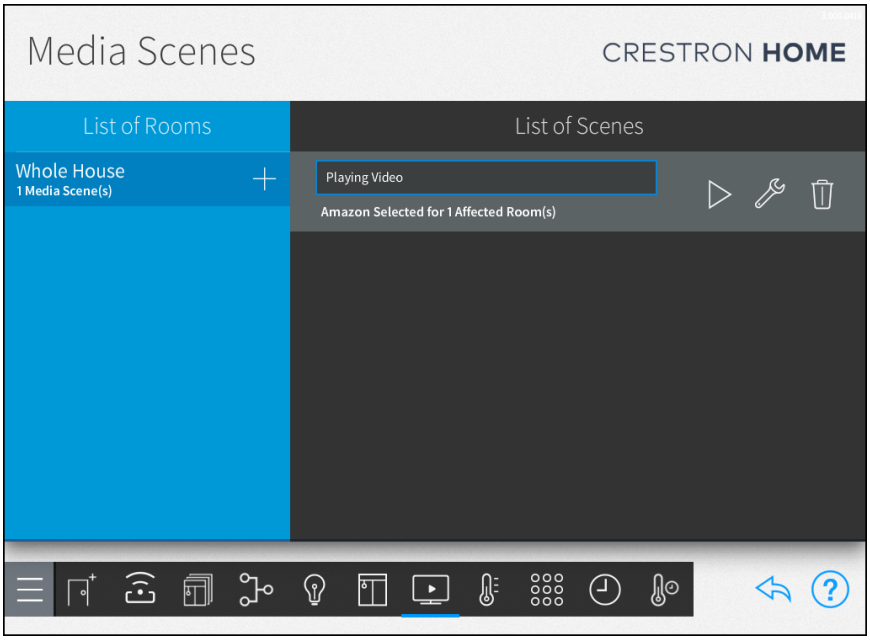


Create a Media Scene

> **NOTE:** When a scene is created, the current media state is saved as the scene setting and will be recalled by the scene. To adjust the levels, tap the wrench button next to the media scene name.

To create a media scene:

1. In the **List of Rooms** menu, select a room and then select **Add Scene**.

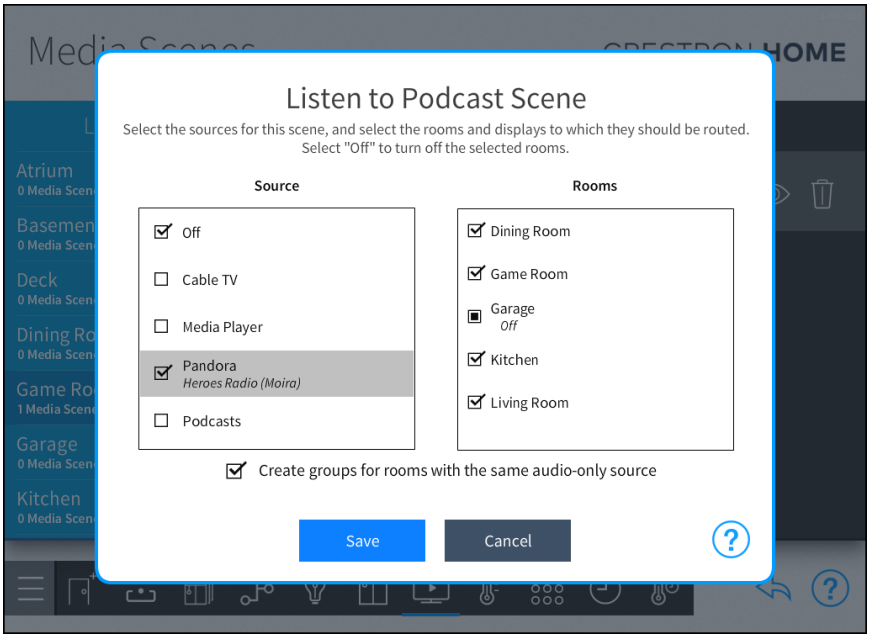


2. Enter a descriptive name for the media scene select **OK**.

Configure a Media Scene

To configure a media scene:

1. In the **List of Scenes** menu, select a scene and then select **Configure Scene**. The scene configuration screen opens.



2. Configure the media scene:
   a. In the **Source** list, select a media source.
      - To turn rooms off, select **Off**.
      - To select a streaming service profile and preset, select the name of an audio streaming service and then select a profile and preset.
        - **Profile:** Select a profile from the list. To select the profile that is currently playing or was last played, select **Current Profile**. The profile is displayed under the name of the streaming service.
        - **Preset:** Select a preset from the list. To select the preset that is currently playing or was last played, select **Currently Playing**. The preset is displayed under the name of the streaming service.
   b. In the **Rooms** list, select rooms for the source to play in. The selected rooms will turn on and play the selected source. If the **Off** source is selected, the room will turn off. When multiple sources are selected from the **Source** list, a filled check box indicates that the room is selected by a different source.

> **NOTE:** The **Rooms** list displays rooms that are media zones.

c. For audio-only sources, select a **Create Groups...** option:

i. **Selected:** The audio source starts as a group and plays in all rooms. Content controls (play, pause, etc) will affect all rooms. If the source is changed in any room, the source is changed for all rooms.

ii. **Deselected:** The source is played individually in each room. Content controls (play, pause, etc) will affect all rooms. If the source in a room is changed, the source change only affects that room.

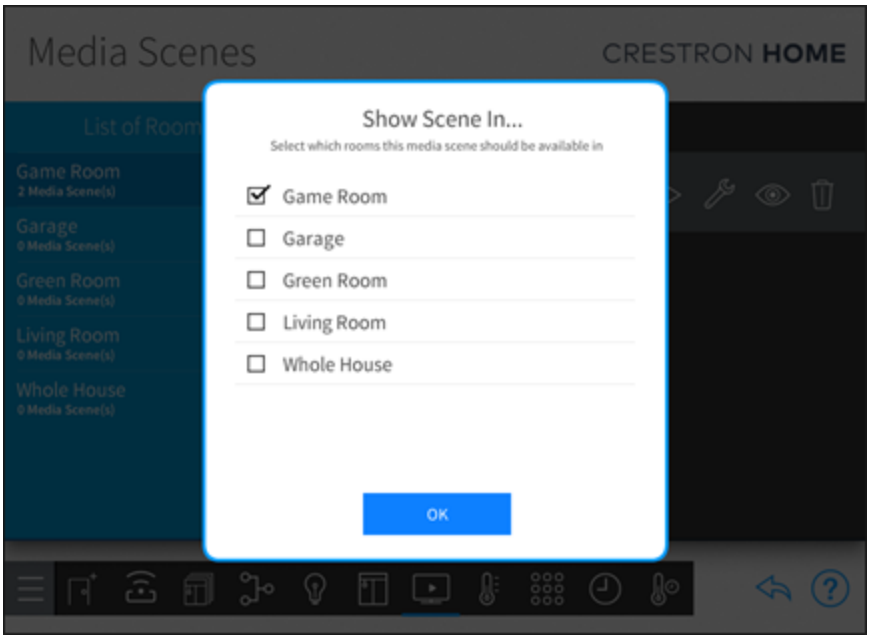
3. Select **Save**.

Display Media Scenes in Different Rooms

The media scene can be configured so that it is available in different rooms around the house. When the scene is displayed in a different room, it can be recalled by a user interface device that is located in the selected room(s).

To display media scenes in other rooms:

1. In the **List of Scenes** menu, select a scene and then select **Show Scene**.
2. In the **Show Scene In** dialog box, select rooms to show the scene.



3. Select **Save**.

Delete a Media Scene

To delete a media scene:

1. In the **List of Rooms** menu, select a room and then select a scene.
2. Select **Delete** and then **OK** to confirm.

Tap the back arrow button to return to the **Setup Scenes** screen.

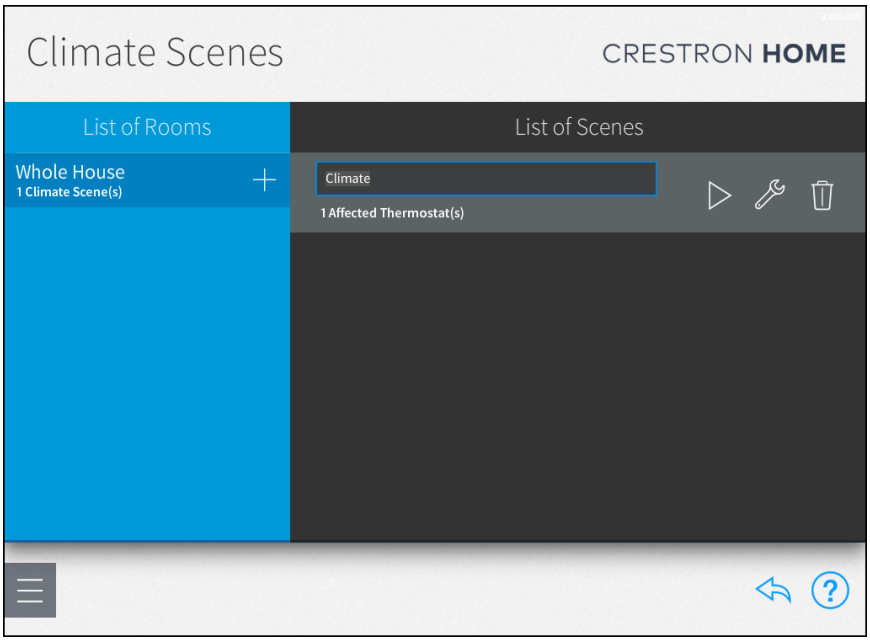
Climate Scenes

Use the **Climate Scenes** screen to create climate scenes for thermostats that have been added to the system.

Climate scenes are used to configure predefined temperature set points or modes for a thermostat when recalled. Climate scenes are ideal for changing the HVAC system parameters during specified times of day.

> **NOTE:** Tap the play button ▷ to recall the climate scene in real time.

Tap the **Configure Climate Scenes** button on the **Setup Scenes** screen or the Climate Scenes button on the setup menu to display the **Climate Scenes** screen.



Create a Climate Scene

> **NOTE:** When a scene is created, the current thermostat state is saved as the scene setting and will be recalled by the scene. To adjust the levels, tap the wrench button next to the climate scene name.

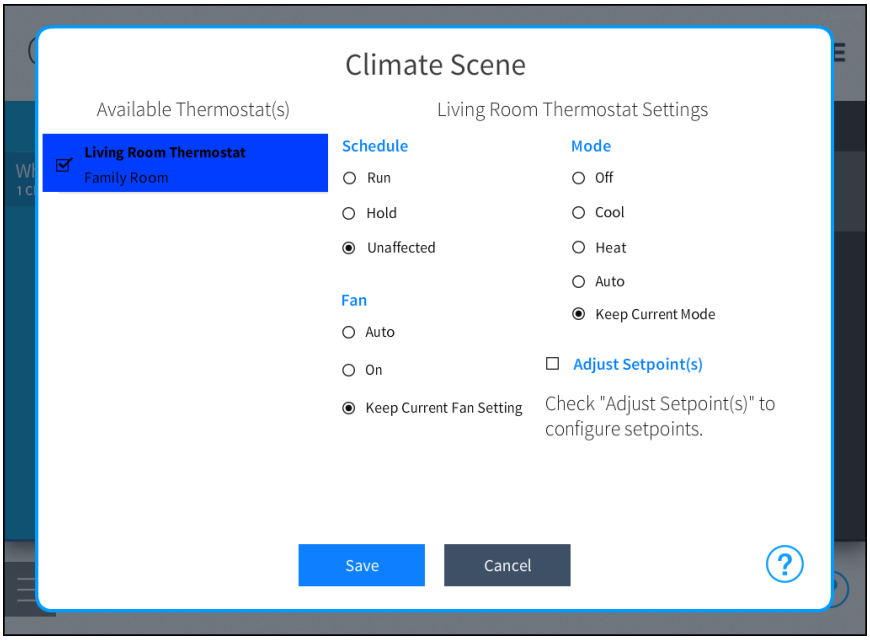
To create a climate scene:

1. In the **List of Rooms** menu, select a room and then select **Add Scene**.
2. Enter a descriptive name for the climate scene select **OK**.

Configure a Climate Scene

To configure a climate scene:

1. In the **List of Scenes** menu, select a scene and then select **Configure Scene**. The scene configuration screen opens.



2. Configure the climate scene:
   - **Available Thermostats:** Select thermostats from the list to include them in the climate scene. Select a thermostat to configure the scene settings.
   - **Schedule:** Select a scheduling option:

     > **NOTE:** If the thermostat schedule is running because **Run** or **Unaffected** was triggered by the scene, the next scheduled climate event will overwrite the climate scene's set points.

     - **Run**: Starts the schedule.
     - **Hold**: Pauses the schedule.
     - **Unaffected**: Does not change the current thermostat schedule.
   - **Fan:** Select a fan behavior:

     > **NOTE:** Fan controls are not displayed:
     > - If the thermostat does not support fan control.
     > - If fan controls are hidden in the thermostat settings. For details, refer to Thermostat Settings on page 1339.

    - **Auto**: Turns the fan on and off automatically.
    - **On:** Turns the fan on.
    - **Keep Current Fan Setting** : Does not change the fan setting.
- **Mode:** Select a thermostat mode:
    - **Off**: Turns the thermostat off.
    - **Cool:** Sets the operating mode to cool.
    - **Heat:** Sets the operating mode to heat.
    - **Auto:** Sets the operating mode to auto.
    - **Keep Current Mode:** Does not change the current thermostat mode.
- **Adjust Setpoint(s):** If this check box is selected, select a temperature set point for the **Heat**, **Cool**, and **Auto** modes.

3. Select **Save**.

Delete a Climate Scene

To delete a climate scene:

1. In the **List of Rooms** menu, select a room and then select a scene.
2. Select **Delete** and then **OK** to confirm.

Tap the back arrow button to return to the **Setup Scenes** screen.

System Scheduling

Schedule events to occur in the home at specific times using the **Scheduler** screen. Use the Scheduler to recall scenes, Quick Actions, and external events based on the day and the time.

To view the **Scheduler** screen, select **System Scheduling** on the **Setup** screen.



Create a Scheduled Event

To create a scheduled event:

1. Select **Add Scheduled Event**.
2. Enter a name for the event.
3. Select **OK**.

Configure a Scheduled Event

To configure a scheduled event:

- **Enabled:** Turn the scheduled event on or off. To turn a schedule event on, select **Enabled**.

  > **NOTE:** New scheduled events are turned off by default.

- **:** Select to show the scheduled event in the user interface.
- **Day of Week:** Select the days for the event to occur.

- **Time of Day**: Schedule the event to occur at a specific time of day. Set the time using the provided spinner menus.
- **Astronomical**: Schedule the event to occur at a time relative to sunrise or sunset (calculated by date and time zone). Select whether the event should occur at sunrise or sunset and then set when the event should occur relative to the sunrise or sunset time.
    - **Time Period:** Select **Sunrise** or **Sunset** to determine the time of day that the event should occur.
    - **Offset:** Select the time that the event should occur in relation to the time period. To assign an offset time before the **Time Period**, select **–** and to set an offset time after the **Time Period**, select **+**.The default offset is **00:00**. The maximum offset is 4 hours and 59 minutes.

    > **NOTE:** To adjust the default times for sunrise and sunset, navigate to **Installer Settings** > **System Configuration** > **System Settings**, and then tap the wrench button on the **Current Times of Day** panel. For more information, refer to Current Time and Date on page 561.

- **Select Room Below:** Select a room from the menu, and then select the scene(s) that will be triggered by the event.

    > **NOTE:** Only rooms that contain scenes display on the **Select Rooms Below** menu. Any room with a selected scene is shown with blue text on the **Select Rooms Below** menu.

To test a scheduled event, select an event and then select **Play**.

Delete a Scheduled Event

To delete a scheduled event:

1. Select a scheduled event.
2. Select **Delete** and then **OK** to confirm.

Climate Scheduling

Use the **Thermostat** screen to view and schedule events for the thermostats in the Crestron Home system.

When a thermostat is added to the Crestron Home system, events are created for **Sleep**, **Wake**, **Leave**, and **Return**. These events are disabled by default. To enable them, tap the event's check box to the left of the event name. A filled check box indicates that the scene is enabled.

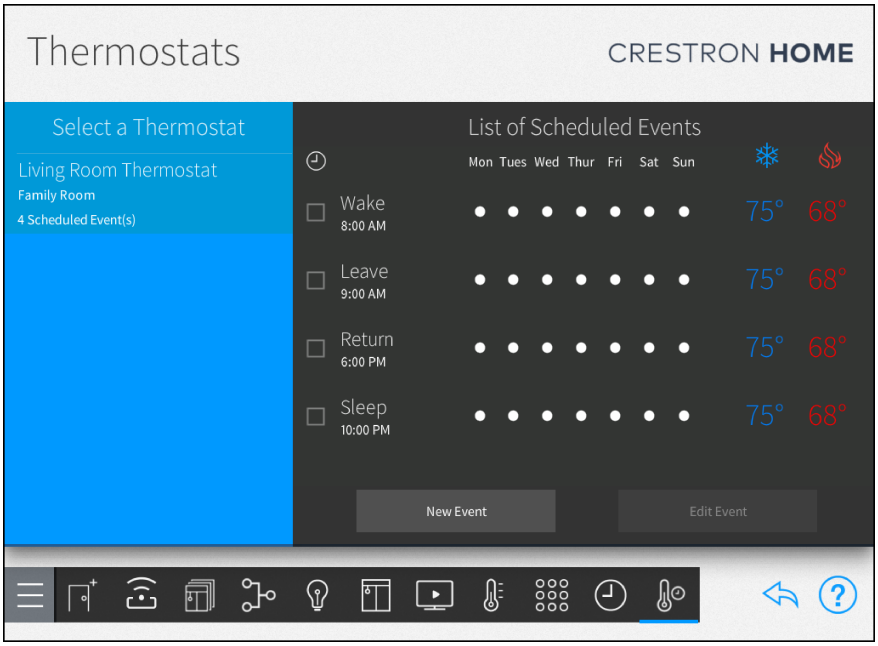
Tap the **Climate Scheduling** button on the **Configuration** screen to display the **Thermostats** screen.

To view the **Thermostats** screen, select **Climate Scheduling** on the **Setup** screen.

Create a Thermostat Event

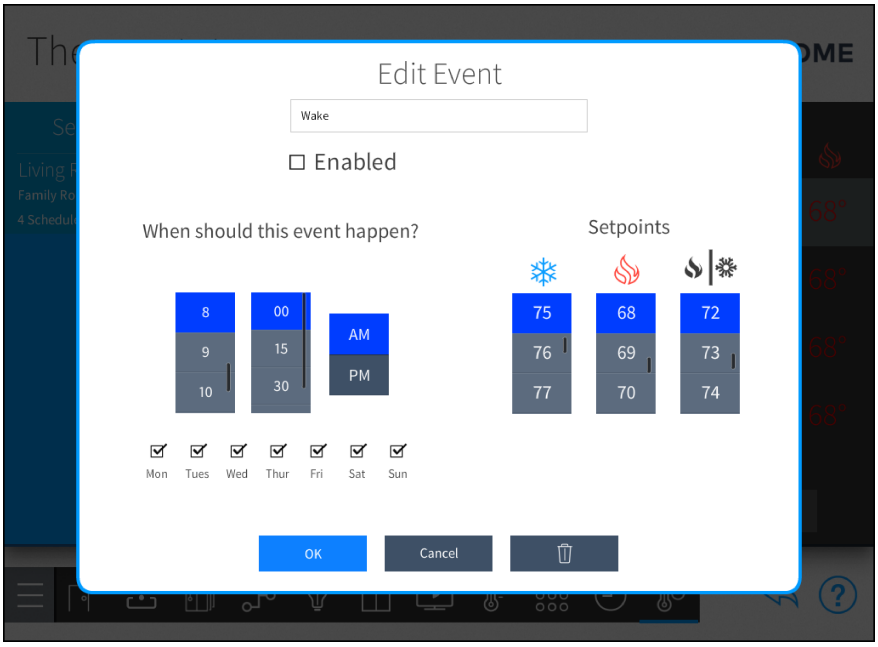
To create a scheduled thermostat event:

1. Select a thermostat from the **Select a Thermostat** menu. The list of scheduled events for the selected thermostat is displayed.



2. Select **Add Event**.

3. Configure the event settings:



   - **Event Name:** Enter a descriptive name for the event.
   - **Enable Event:** Select the box next to the Event Name to enable the event. New events are disabled by default.
   - **Time:** Set a time for the event.
   - **Days:** Select the days that the event should occur.
   - **Set points:** Select the temperature set points for Cool, Heat, and **Auto** modes using the appropriate spinner menu.
4. Select **OK**.

Configure a Thermostat Event

To configure an existing thermostat event:

1. Select a thermostat from the **Select a Thermostat** menu. The list of scheduled events for the selected thermostat is displayed.
2. Select a thermostat event from the **List of Scheduled Events**.
3. Tap **Edit Event** to display the **Edit Event** dialog box.
4. Configure the following event settings:
   - **Event Name:** Enter a descriptive name for the event in the text box at the top of the dialog box using the on-screen keyboard.
   - **Enable Event:** Tap the check box next to **Enabled** to enable the event and add it to the thermostat schedule. New events are disabled by default.

- **Set the Time:** Set the time that the thermostat event should occur using the provided spinner menus.
- **Select the Days:** Tap the check box above each day of the week to select the days that the thermostat event should occur. A filled check box indicates that the event is scheduled to occur on the associated day.

5. Select **OK** to save.

Enable or Disable a Thermostat Event

To enable or disable an existing thermostat event, tap the check box next to the event name. A filled check box indicates that the scene is enabled.

Delete a Thermostat Event

To delete a thermostat event:

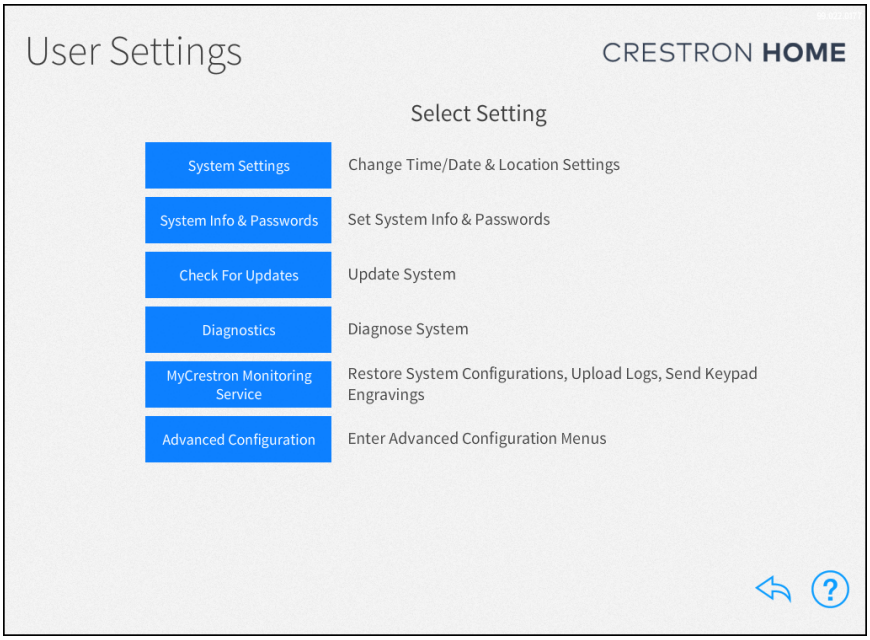
1. Select a thermostat from the **Select a Thermostat** menu. The list of scheduled events for the selected thermostat is displayed.
2. Select a thermostat event from the **List of Scheduled Events.**
3. Tap **Edit Event** to display the **Edit Event** dialog box.
4. Select **Delete**.

To return to the previous screen, tap **Back**.

Control Processor Settings - End User

Use the **User Settings** screen to configure the Crestron Home system and the Crestron Home processor.

To view the **User Settings** screen, select **Settings** on the **Setup** screen.



- **System Settings**: Configure the time and date, location, time of day, and the system language. For details, refer to System Settings on page 1151.
- **System Info & Passwords**: Change the advanced user password. For details, refer to Password Configuration on page 1157.
- **Check for Updates**: Check for and download software updates for the Crestron Home system and connected devices. For details, refer to Software Update on page 1158.
- **Diagnostics**: Troubleshoot the Crestron Home system. For details, refer to Diagnostics on page 1161.
- **MyCrestron Monitoring Service**: Tap to obtain a registration code for registering the Crestron Home processor with a myCrestron domain and to access various myCrestron services. For details, refer to myCrestron RMS Services on page 1168.

- **App Settings:** View and edit the settings used to connect the Crestron Home Setup app to the Crestron Home control processor.

  > **NOTE:** Only available on the Crestron Home Setup app for Apple iPad devices.

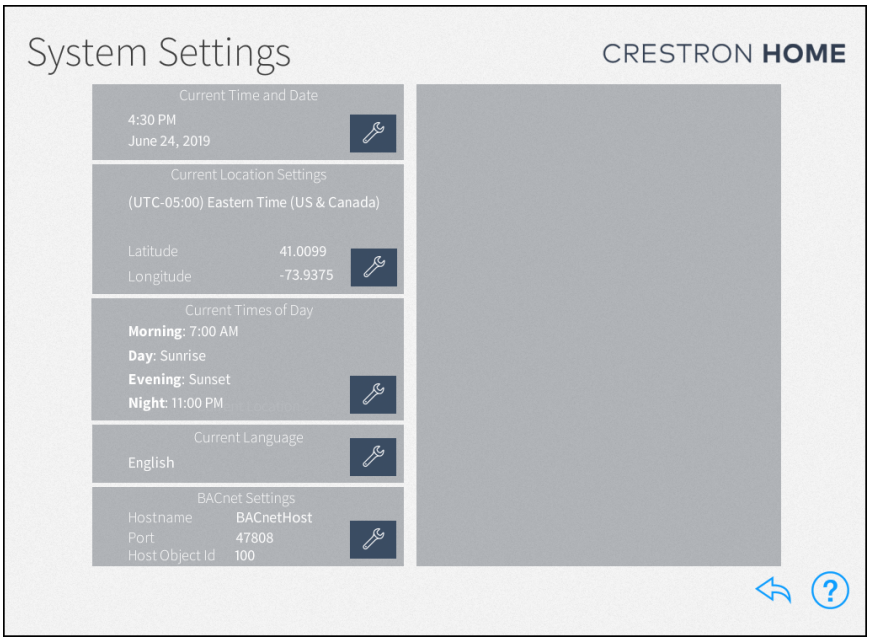
- **Advanced Configuration**: Tap to access the user configuration screens. The Advanced User Password is required. For details, refer to Advanced Configuration on page 1171.

To return to the previous screen, tap **Back**.

System Settings

Use the **System Settings** screen to configure the time and date, location settings, current times of day used for events, system language, and the BACnet Settings.

To view the **System Settings** screen, select **Settings** > **System Settings**.

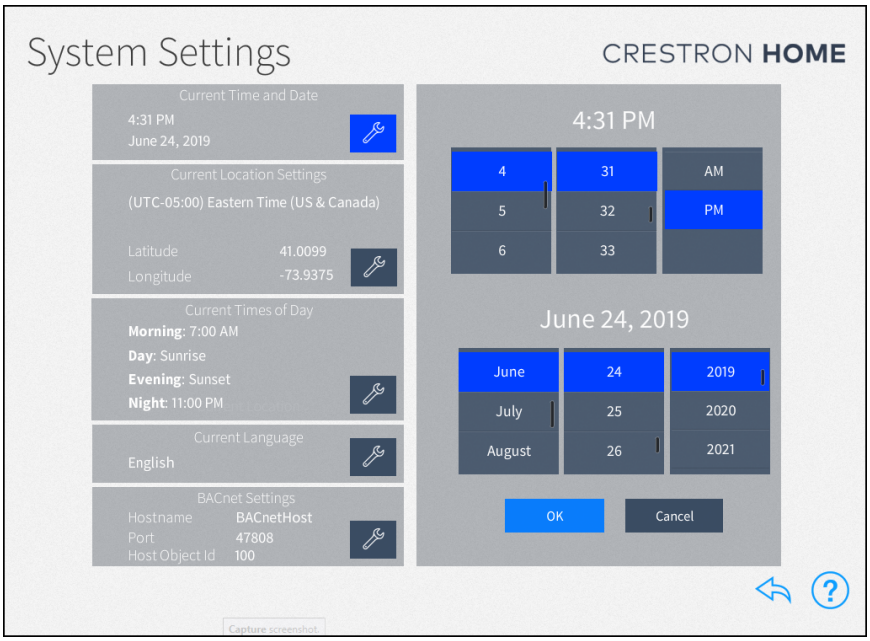


To return to the previous screen, tap **Back**.

Current Time and Date

To set the current time and date:

1. Tap the wrench button  next to **Current Time and Date**.



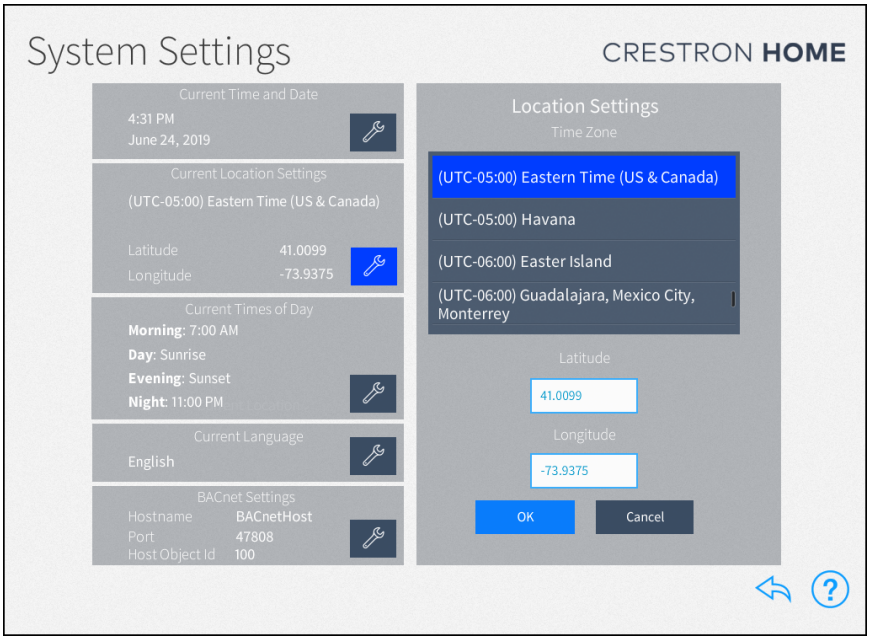
2. Use the spinner menus to set the hour and minute and **AM** or **PM**.
3. Use the spinner menus to set the month, day, and year.
4. Tap **OK** to save any changes. Tap **Cancel** to cancel any changes.

Current Location Settings

To set the Location Settings:

> **NOTE:** If configuring the system with an iPad, tap **Synchronize with iPad** to synchronize the time zone, longitude, and latitude with the iPad device's location services.

1. Tap the wrench button  next to **Current Location Settings**.



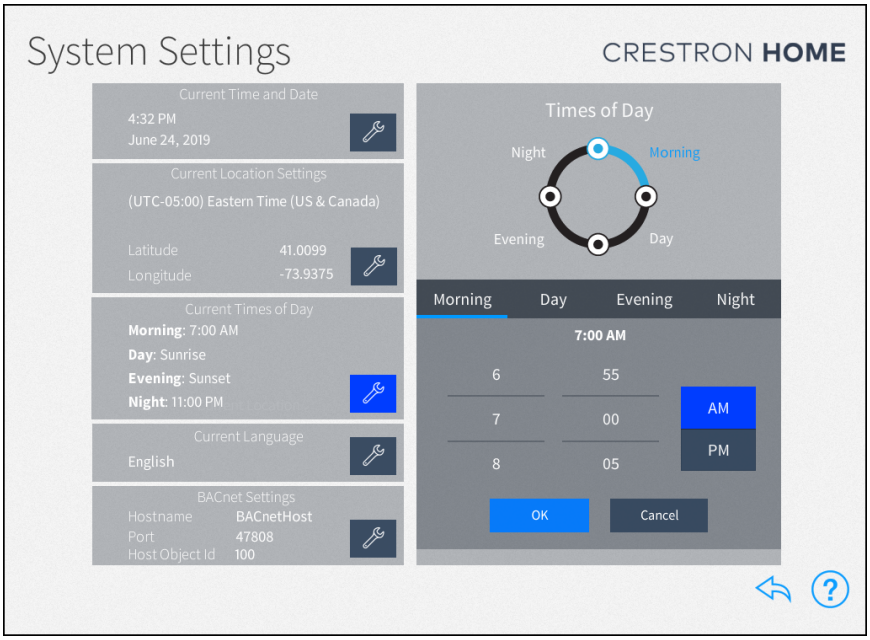
2. To set the time zone, select the location in the **Time Zone** field.
3. If necessary, the latitude and longitude can be fine-tuned. Adjust the latitude in the **Latitude** field and adjust the longitude in the **Longitude** field.
4. Tap **OK** to save any changes. Tap **Cancel** to cancel any changes.

Current Times of Day

Times of day are used to trigger different actions and events within the system when the preset clock time is reached. The Morning and Night Times of Day are static times that occur at the same time every day. The Day and Evening Times of Day are based on sunrise and sunset times and change during the course of the year.

To set the Morning and Night times.

1. Tap the wrench button  next to **Current Times of Day**.



2. Tap **Morning** or **Night**., and then set the time.
   - **Morning:** When the homeowner typically wakes up.
   - **Night:** When the homeowner typically goes to sleep.
3. Tap **OK** to save any changes. Tap **Cancel** to cancel any changes.

To set the Day and Evening times:

1. Tap the wrench button next to **Current Times of Day**.
2. Tap **Day** or **Evening**, and then set the time.
   - **Day:** How long before or after sunrise (calculated by date and time zone) the Day preset occurs.

     > **NOTE:** In some cases (such as in the summer months), the time set for the Day preset may occur before the time set for the Morning preset. In these cases, any actions or events set for the Morning preset do not occur.

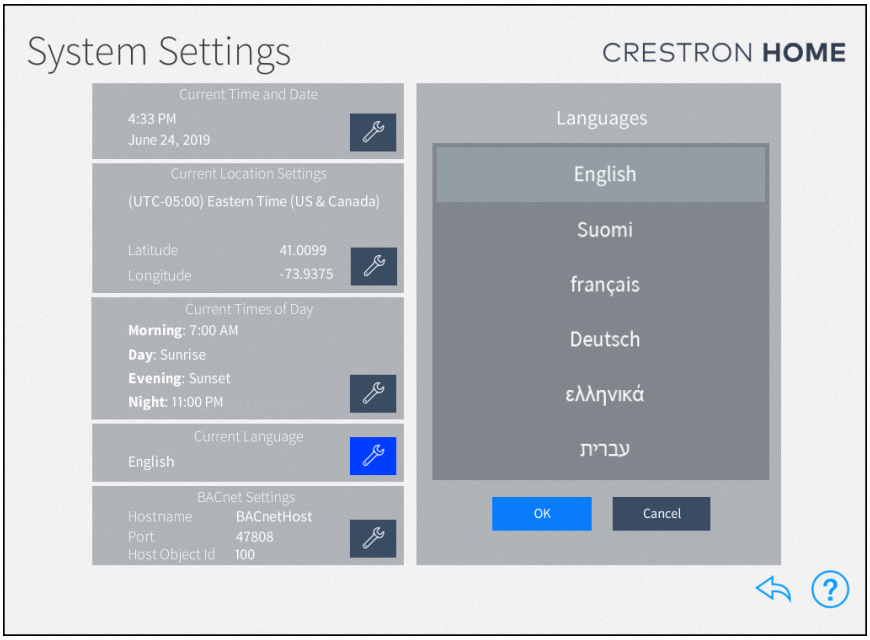
   - **Evening:** How long before or after sunset (calculated by date and time zone) the Evening preset occurs.
3. Tap **OK** to save any changes. Tap **Cancel** to cancel any changes.

Current Language

The Current Languages screen sets the language that is used in the setup app and the user interface devices.

To set the language:

1. Tap the wrench button next to **Current Language**.



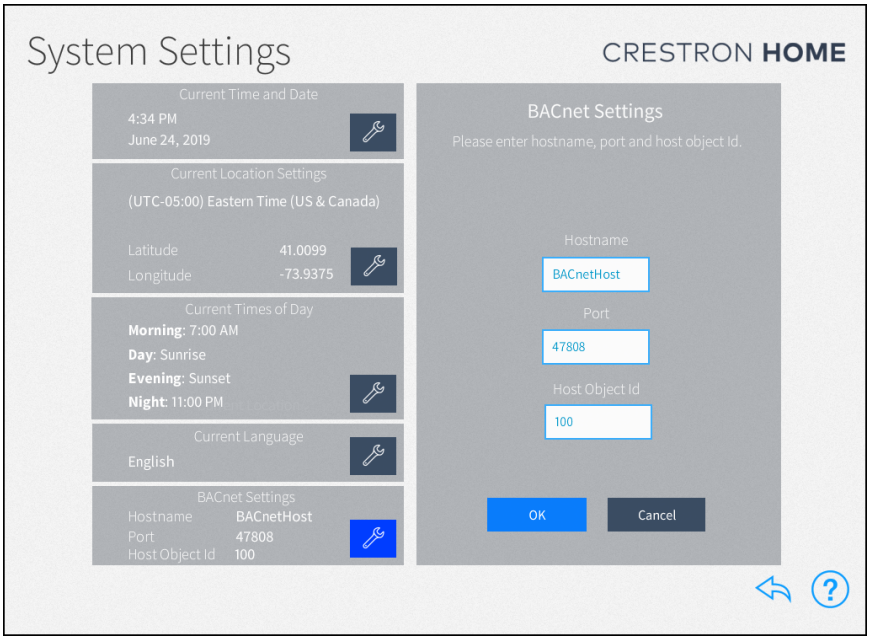
2. Select the system language from the menu provided under **Languages**.
3. Tap **OK** to save any changes. Tap **Cancel** to cancel any changes.

BACnet Settings

The **BACnet Settings** screen sets the information that is used for the BACnet.

To set the BACnet settings:

1. Tap the wrench button  next to **BACnet Settings**. The **BACnet Settings** screen displays.



2. Configure the following settings:
   - **Hostname:** Enter the HostName for the BACnet system.
   - **Port:** Enter the port for the BACnet system.
   - **Host Object Id:** Enter the host object id for the BACnet system.
3. Tap **OK** to save any changes. Tap **Cancel** to cancel any changes.

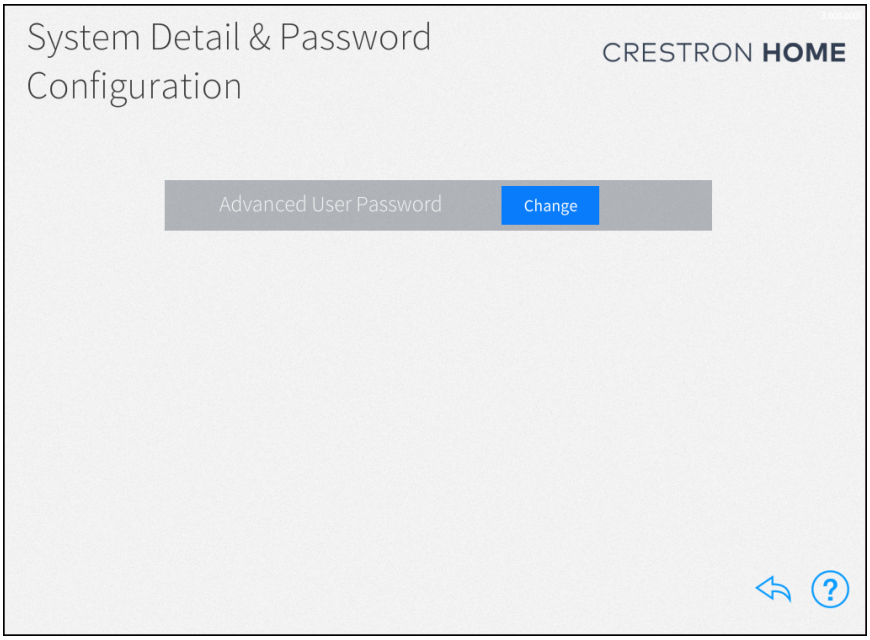
Password Configuration

Use the **Password Configuration** screen to change the Advanced User password that is required to access the user configuration screens.

To view the **System Detail & Password Configuration** screen, select **Settings** > **System Info & Passwords**.

To change to change the Advanced User password:

1. Tap the **Change** button.



2. Enter a new password in the pop-up dialog box that is displayed.
3. Tap **OK** to save the password or **Cancel** to discard the changes.

To return to the previous screen, tap **Back**.

Software Update

Use the **Software Update** screen to check for and download software updates for the Crestron Home system and for connected devices. System updates must be initiated manually.

To view the **Software Update** screen, select **Settings** > **Check for Updates**.

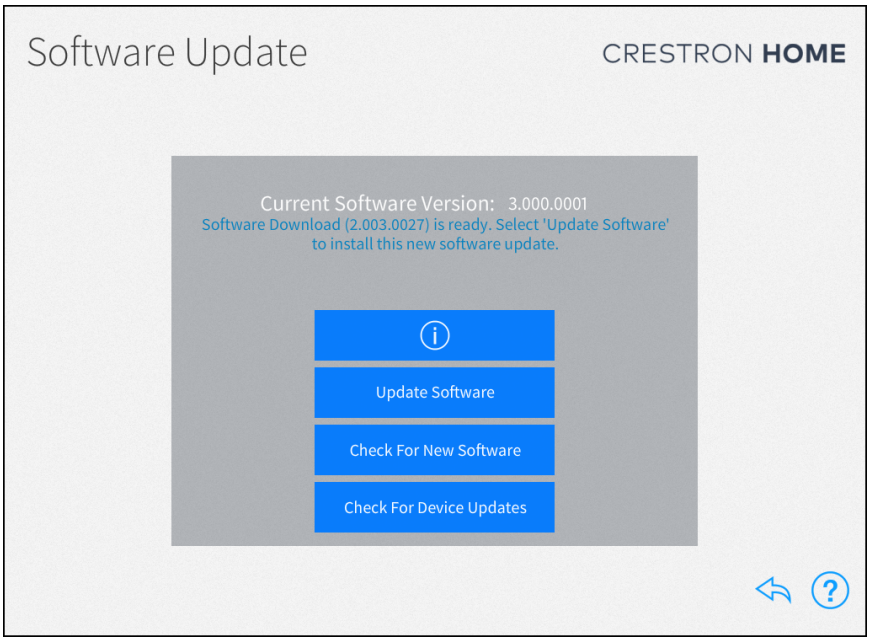
> **NOTE:** When a software update is available, a pop-up notification on the user interface and setup pages is displayed. Software downloads may be initiated from this notification or from the **Software Update** screen.

Update Software

To update Crestron Home processor firmware, follow these steps:

> **NOTE:** A software update may take up to 30 minutes to complete, and the Crestron Home processor reboots several times throughout the update process. Therefore, updates should be performed when the system is not in use.

1. Tap **Check for Updates**. The **Software Update** screen displays.



2. To search for updates, tap **Check for New Software**. The control processor searches for software updates and indicates that updated software is available or that the software is up to date.

   > **NOTE:** Tap **i** to view the software release notes.

3. Tap **Download Update**, and then tap **OK** in the confirmation dialog.

   > **NOTE:** The update does not install automatically.

4. Tap **Update Software**. A confirmation dialog displays the release notes.
5. Tap **Update**. The Crestron Home processor reboots when the software update is complete.

   > **CAUTION:** Communication with the Crestron Home processor will be lost during the software update. Do not power down the Crestron Home processor during the software update.

Check for Device Updates

To update device firmware, follow these steps:

1. Tap **Check for Device Updates**. The Crestron Home system searches for available firmware updates. Once the scan is complete, the **Device Firmware Update** screen presents a list of devices with recommended firmware updates.

   NOTES:

   - To rescan for new device firmware updates, tap **Check For Updates**.
   - To view release notes for the firmware update, tap the information button ⓘ next to the device.



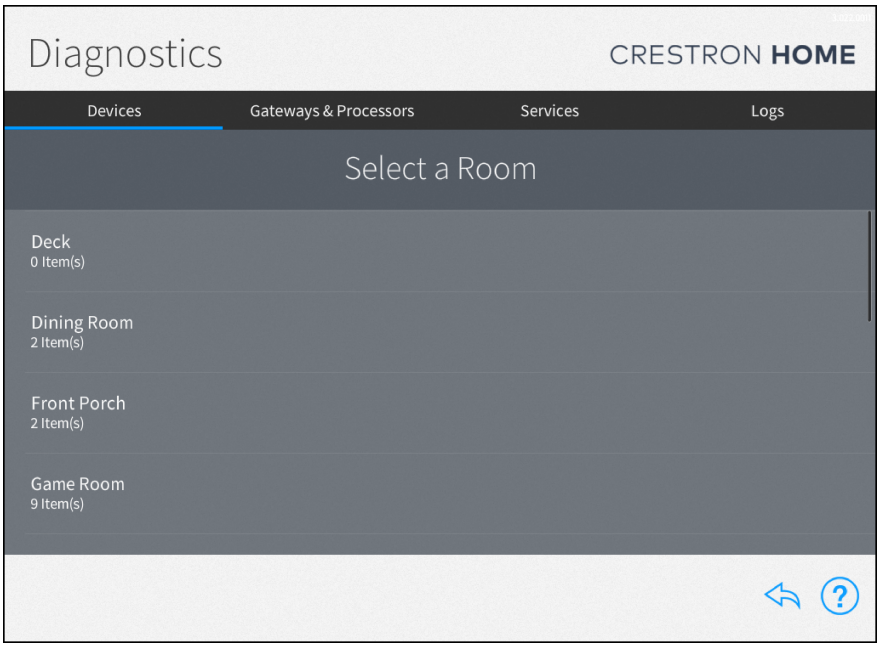
2. Select the devices you want to update.
3. Tap **Update Selected Devices**.

To return to the previous screen, tap **Back**.

Diagnostics

Use the **Diagnostics** screen to troubleshoot the system.

To view the **Diagnostics** screen, select **Settings > Diagnostics**.



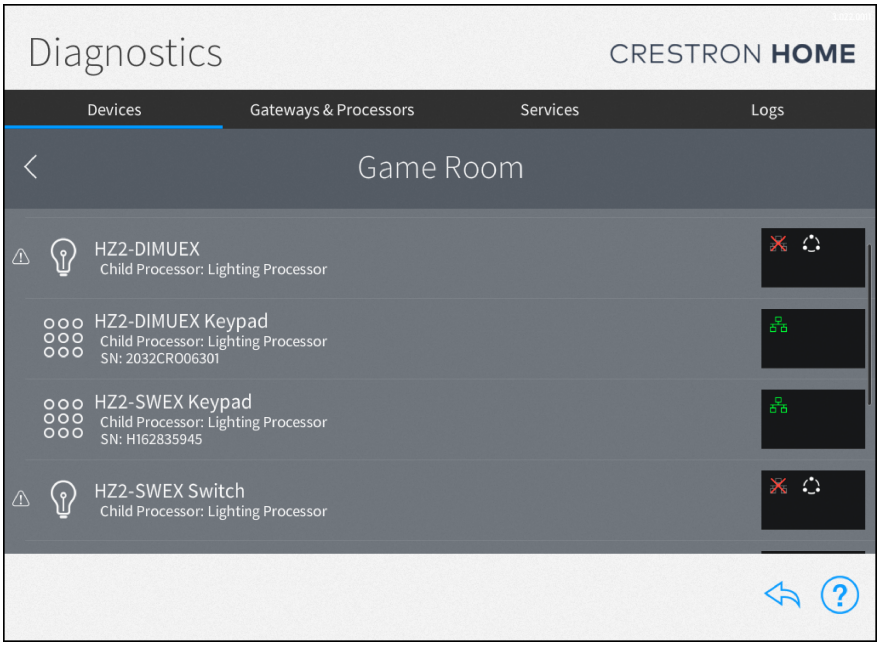
Devices

Tap the **Devices** tab to view all of the network devices that are paired with the Crestron Home system, organized by room. Each device reports its network status, firmware status, whether it is included in a scene, and whether it is affected by a scheduled event.

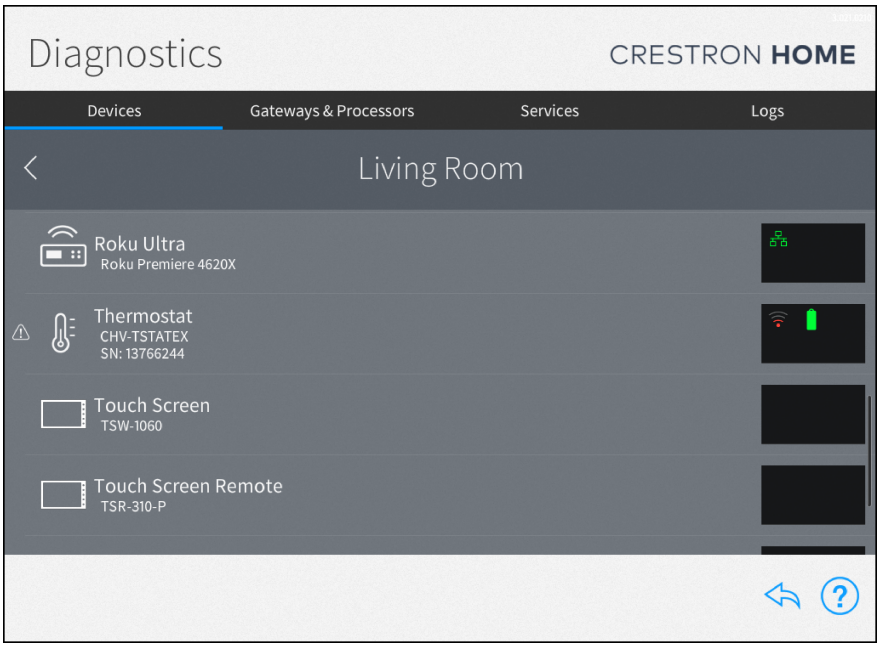
Select a room from the list to view the status of the devices configured for the room.

For multiprocessor systems, the Diagnostics screen on the parent processor displays the child processor name.

Parent Processor



Child Processor



The following status information is provided for each device in the room:

> **NOTE:** Devices that are not connected to the network, such as relay-controlled devices and uncontrolled audio sources, do not display any network connection information.

Wireless Device Status

-  The device is online and detected by the system.
- The device is offline or not detected by the system.
-  A network connection cannot be determined or if the device is being scanned.

Wired Device Status

- The device is online and detected by the system.
-  The device is offline or not detected by the system.

Serial Device Status

-  The device is functioning and is associated with a COM port in the system.
-  The device is functioning but is not associated with a COM port.

IR Device Status

-  The device is functioning and is associated with an IR port in the system.
-  The device is functioning but is not associated with an IR port.

CEC Device Status

-  The device is functioning and is associated with a CEC port in the system.
-  The device is functioning but it not associated with a CEC port in the system.

Battery Device Status

-  The battery level is OK.
-  The battery level is low. Replace the batteries soon.

> **NOTE:** For battery-operated shades:
>
> - The shade will operate normally.
> - When the battery level is very low, the shade operates at reduced speed.

- The battery level is too low to operate the device. Replace the batteries. The device will also report as offline.

  > **NOTE:** For battery-operated shades:
  >
  > - The shade cannot be operated.
  > - The shade can communicate with the system to perform firmware functions and report status. For example, report communications status, provide feedback, pair with a gateway, report battery level.
  > - When the usable battery-level is depleted, the shade motor will also report as offline.

Scenes

- The device is part of a scene.
- To view the scene(s) that a device is in, select **Scene**.

Firmware

- The device is running outdated firmware that is not supported by the system.

View Error Details

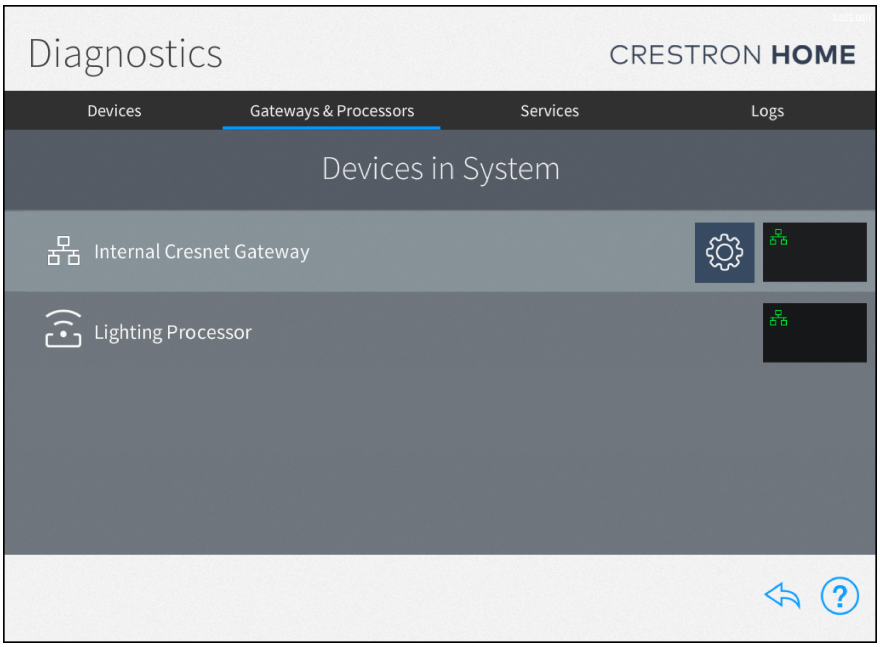
- The system detects an issue with the device.
- To view an error, select **Error**.

Device Settings

To view the device settings, select a device and then select **Settings**.

Gateways

Use the **Gateways & Processors** tab to view the gateways and processors that are in the system. The **Gateways & Processors** tab also provides an option for viewing the system of paired Sonos devices.



Gateway and Processor Status

The status is displayed for each gateway and processor:

- The device is online and detected by the system.
- The device is offline or not detected by the system.
- The device is running outdated firmware that is not supported by the system.

Sonos Gateway Status

The status is displayed for the Sonos System gateway:

> **NOTE:** For more information on troubleshooting the Sonos system, refer to Sonos and Crestron Home Integration on page 1385.

- The Sonos system has discovered devices from multiple households after a device from one household has been paired.
- The Sonos system is not detected by the system.
- The Sonos system is disabled.
- A paired Sonos device is not detected by the system.

View Error Details

- The system detects an issue with the gateway.
- To view an error, select **Error**.

Gateway and Processor Settings

To view the device settings, select a gateway and then select **Settings**.

Logs

Use the **Logs** tab to view system events that have occurred on the Crestron Home system.

To view logs for Crestron Driver devices turn on Driver Logging. For details, refer to Crestron Driver Logs on page 602.

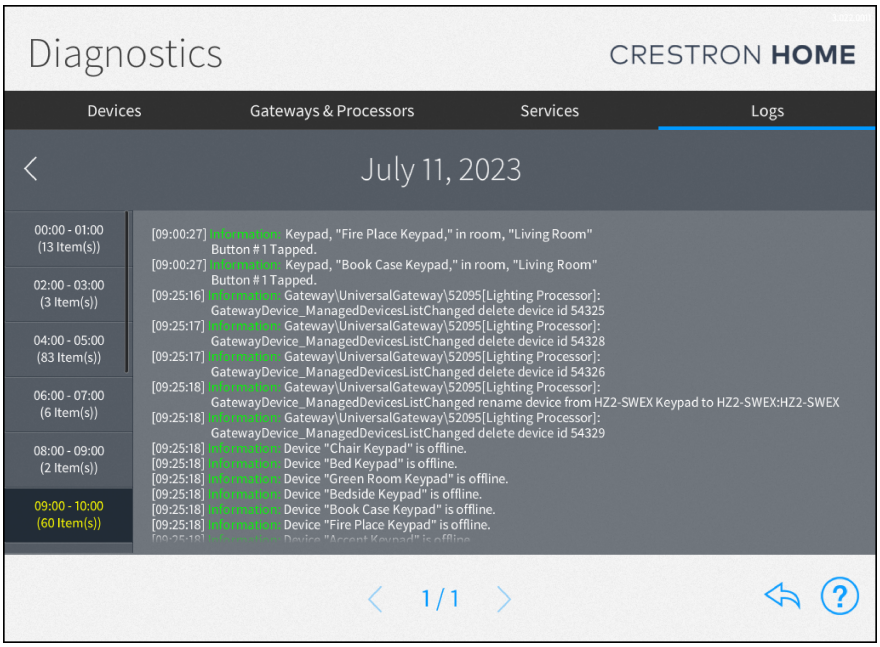
> **NOTE:** If Driver Logging is off and a Crestron Driver device logs an event at the Error or Warning level, the event will display in the logs.

To view the system logs:

1. Select the **Logs** tab.
2. Select a date and then a specific time range. from the menu on the left.
3. The logs are displayed on the center of the screen. Use the **Left** and **Right** arrows to move through the log pages.

   The logs are displayed as: `[Time] [log severity] [Driver:][Device Name] in room [RoomName] [message]`

   - **Time:** The time of the log (hh:mm:ss).
   - **Log Severity:** The logging level.
   - **Driver:** Displayed for events related to Crestron Drivers.
   - **Device Name:** Displays the name of the device.
   - **RoomName:** Displays the room that the device is in.
   - **Message:** Displays the log message.

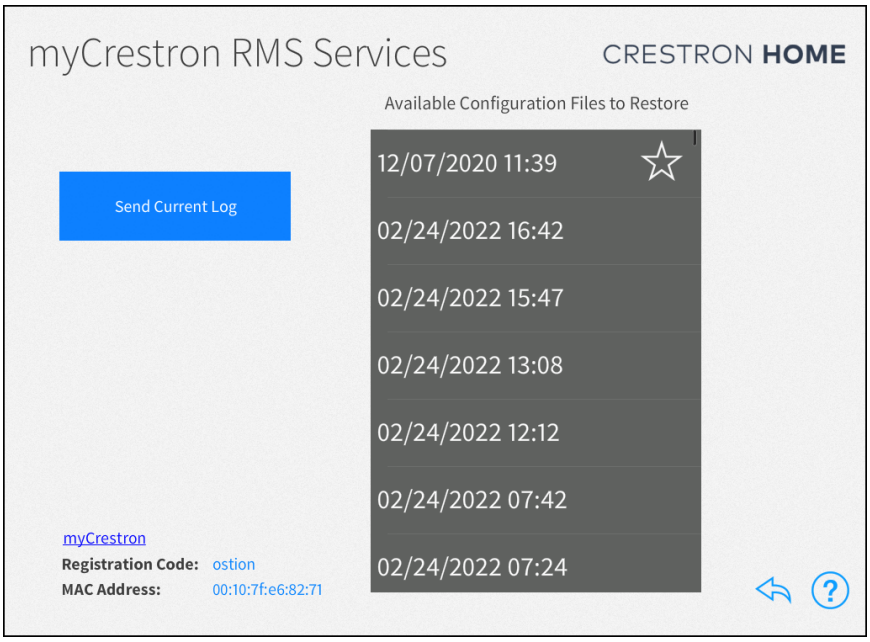


NOTE: An SD card must be loaded into the **MEMORY** slot on the Crestron Home processor to store log files.

myCrestron RMS Services

Use the **MyCrestron RMS Services** screen to restore saved configuration files and to send message logs to the cloud.

To view the **myCrestron Services** screen, select **Settings > myCrestron RMS Services**.



TIP: The **Registration Code**, **MAC Address**, and a link to the myCrestron Residential Monitoring Service web page are provided to assist with registration. A registration code and MAC address is required to register the Crestron Home processor with the myCrestron Residential Monitoring Service.

To register the processor with the myCrestron Residential Monitoring Service, refer to myCrestron Residential Monitoring Service on page 626.

Configuration Backups

The Crestron Home system automatically backs up the system configuration and log files and stores them in the myCrestron Residential Monitoring Service.

System configuration backups contain settings for the control system, devices, and drivers that are required to completely restore the system; including third-party driver settings that are stored in the /user/Data/ThirdParty/ folder.

Show System Usage Metrics

> **NOTE:** This function is no longer supported. The **Track System Usage** option was removed in Crestron Home OS version 3.005.0074.

Create Backups

Create backups of the current system logs or system configuration or create a backup and save it as a Golden Configuration.

Send Current Log

Back up logs to the myCrestron Residential Monitoring Service. The log backup includes the system-level persistent logs (plogs) and Crestron Home app logs. The plogs include information related to the system, such as memory usage, processes, and system errors and the Crestron Home app logs include information related to the system usage, such as button presses and device reports.

To back up the logs, select **Send Current Log** and then **OK**.

> **NOTE:** To access logs, the Crestron Home processor must be added to the myCrestron Residential Monitoring Service.

Restore a System Configuration

> **NOTE:** The backups are sorted by date and time. The Golden Configuration is marked with a star icon and appears at the top of the **Available Configuration Files to Restore** menu.

To restore a system configuration:

1. In the **Available Configuration Files to Restore** menu, select a configuration. The current firmware version of the control processor is displayed above the menu. Each configuration lists the date, time, and firmware version of the backup.

   To restore a backup, the firmware version of the backup must be equal to or lower than the system version. Firmware versions 3.014.0087 or lower are displayed as unknown.

   - **Green Check Icon:** Backup version is equal to or lower than the system version.
   - **Gray ? Icon:** Backup version is unknown.
   - **Red ! Icon:** Backup version is higher than the system version and cannot be restored until the system firmware is upgraded.
2. To restore the configuration, select and hold **Continue** for 3 seconds. The configuration is downloaded and then applied to the system. When complete, the control processor restarts.

To return to the previous screen, tap **Back**.

Advanced Configuration

The **Advanced Configuration** screen allows dealer-level access to their Crestron Home system.

To access Advanced Configuration:

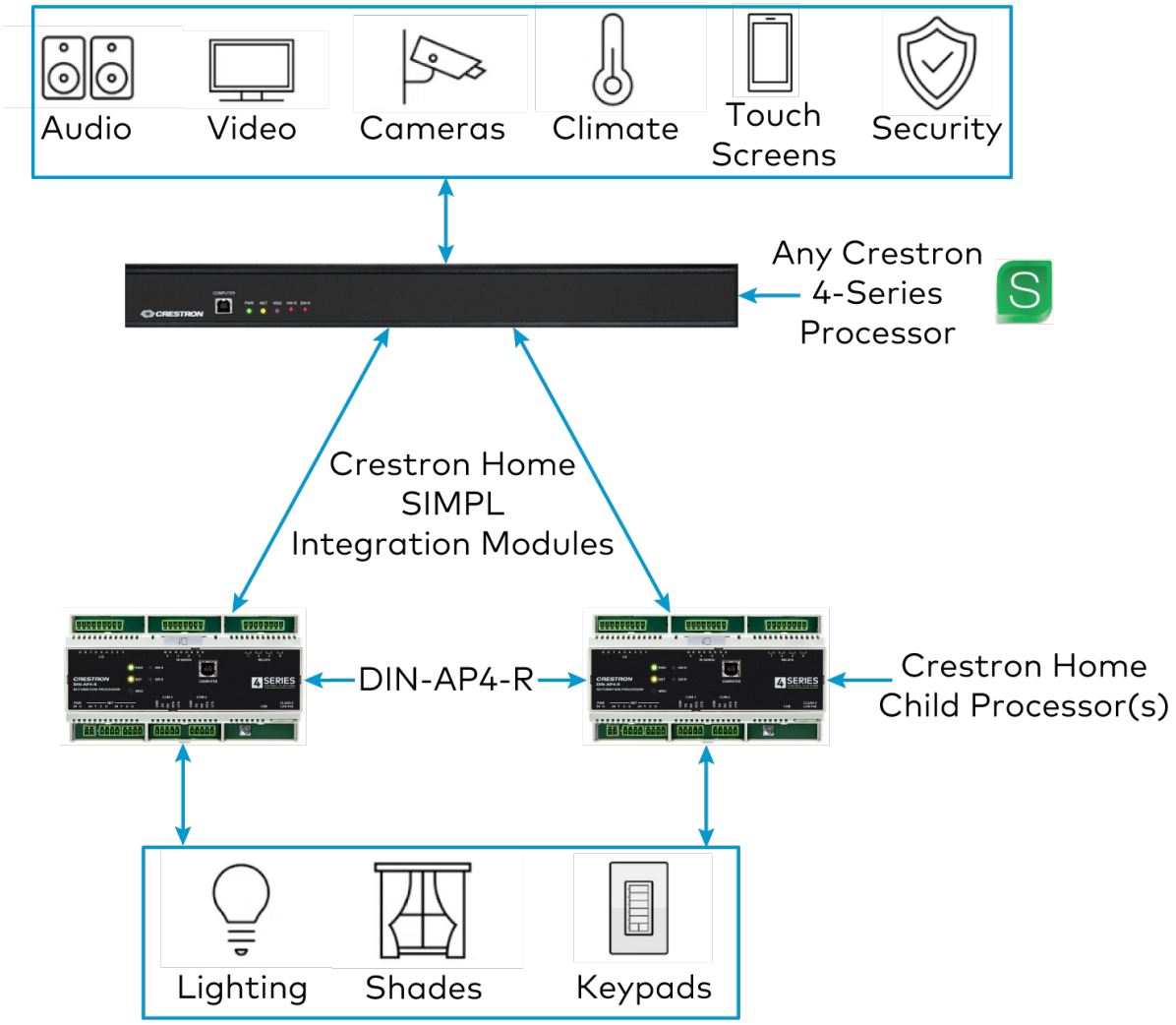
1. Select **Settings**  **> Advanced Configuration**.
2. Enter administrator credentials.

To configure the system, refer to Configure a System on page 123.

Crestron Home SIMPL Integration Modules

With Crestron Home SIMPL integration modules, a 4-Series processor running SIMPL can communicate with Crestron Home processors.

In the example below, a pair of DIN-AP4-R processors control lighting, shades, and keypads for a 4-Series SIMPL processors.



To program a system with Crestron Home SIMPL integration modules, refer to the following sections.

myCrestron Residential Monitoring Service

myCrestron Residential Monitoring Service is required to use the Crestron Home SIMPL integration modules. Follow the instructions below.

> **NOTE:** For complete information on using the myCrestron RMS portal, refer to myCrestron Residential Monitoring Service on page 626.

Accessing myCrestron Residential Monitoring Service

To access myCrestron RMS, go to portal.my.crestron.com.

Accessing myCrestron Residential Monitoring Service portal and the Crestron Home Configurator requires the following:

- The user must be a Crestron residential dealer.
- The dealer must be subscribed to the myCrestron Residential Monitoring Service.
- The dealer administrator must provide the user access to the myCrestron Residential Monitoring Service portal.

Subscribing to myCrestron RMS

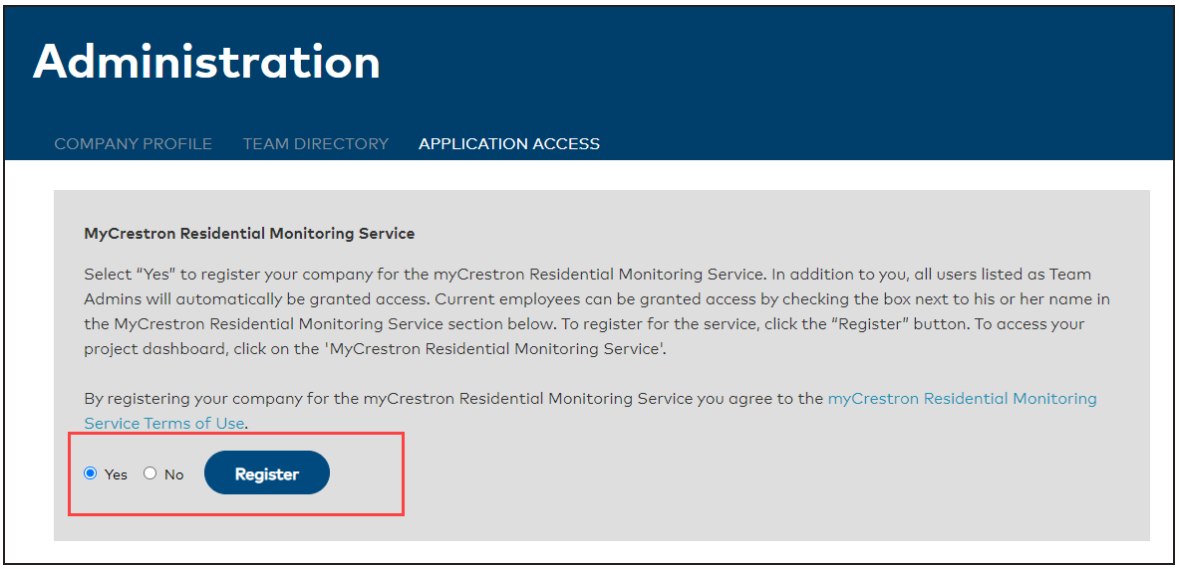
Dealer administrators can subscribe to myCrestron RMS by following the instructions below.

1. Log in to Crestron.com as an administrator.
2. Select .



3. Select **Administration**.
4. Select **Application Access**.
5. Review the terms of use and select **Yes**.

6. Select **Register**.



Your dealership is now subscribed to myCrestron RMS.

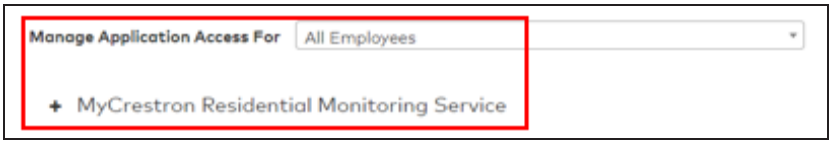
Setting Employee Permissions

Dealer administrators can provide myCrestron RMS access to other employees by following the instructions below.

1. Log in to Crestron.com as an administrator.
2. Select .



3. Select **Administration**.
4. Select **Application Access**.
5. Scroll down to **Manage Application Access For**.



6. Select the **+** to expand the list.

7. Select any employees that should have myCrestron RMS access.

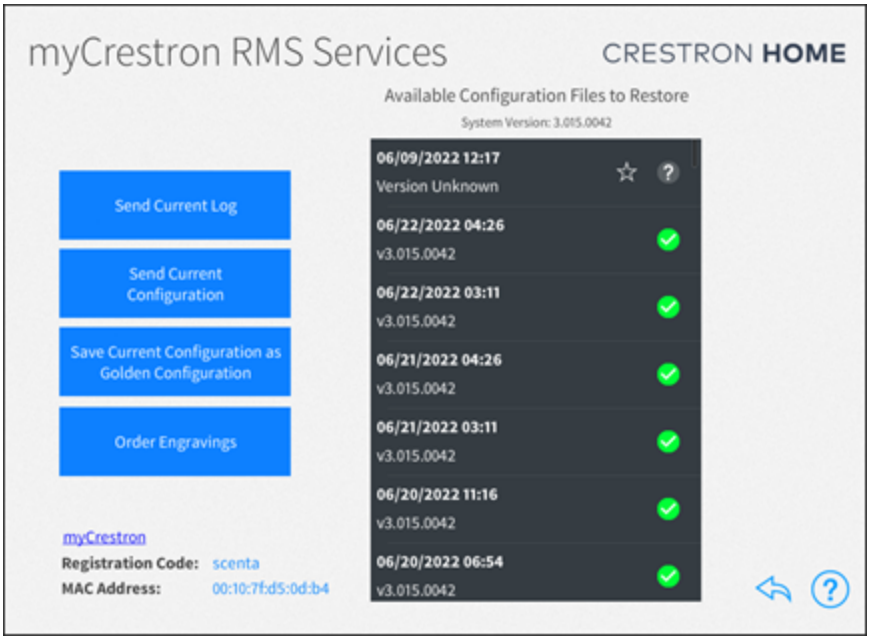


The selected employees can now access myCrestron RMS.

Obtain the Processor MAC Address and Registration Code

Before adding the processor to the RMS, the processor's MAC Address and Registration Code (device key) must be obtained.

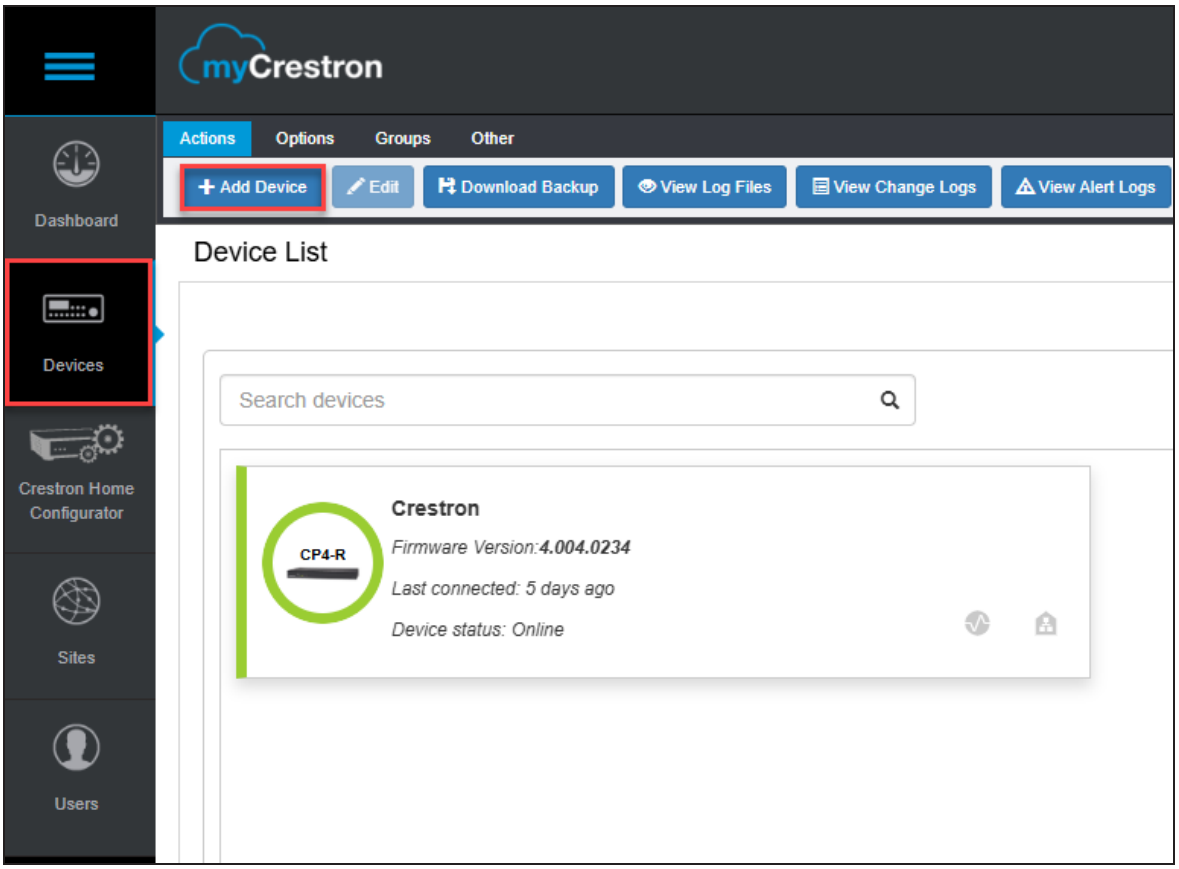
To view this information, use the Crestron Home interface and navigate to **Settings > System Configuration > myCrestron RMS Services**.



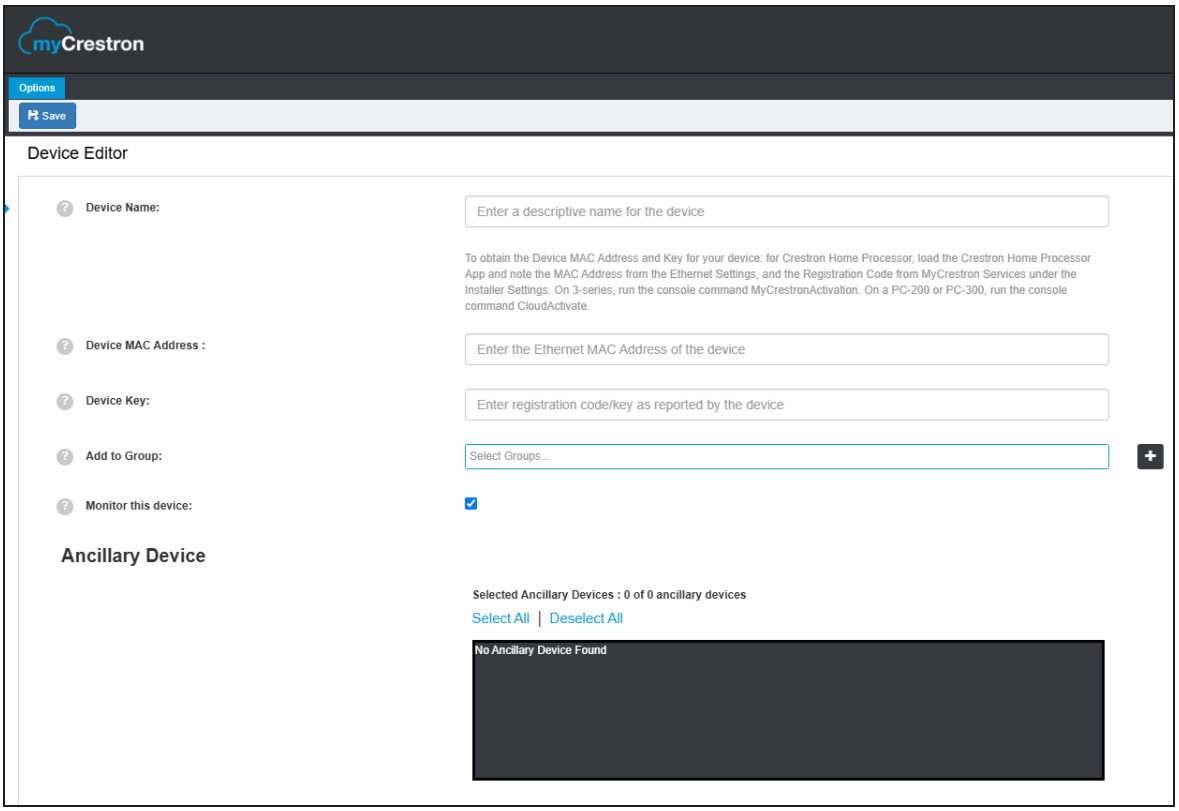
Add the Crestron Home Processor

To add the processor to the myCrestron Residential Monitoring Service:

1. Go to portal.my.crestron.com.
2. Select **Devices** and then **Add Device**.



3. Enter the required information.



- **Device Name:** Enter a descriptive name for the Crestron Home processor.

  > **NOTE:** To obtain the Device MAC Address and Device Key, select **Settings >System Configuration > myCrestron RMS Services**. For details, refer to myCrestron RMS Services on page 574.

- **Device MAC Address:** Enter the MAC address.
- **Device Key:** Enter the registration code.
- **Add to Group:** (Optional) To add the Crestron Home processor to a group, select a group or select **Add** and then create a group.
- **Monitor the device:** Select to turn on remote monitoring for the Crestron Home processor.
- **Ancillary Device:** (Optional) Select any ancillary devices that are connected to the Crestron Home processor.

4. Select **Save**.

The processor is now available in the RMS.

Build a Crestron Home System

To build a Crestron Home system, refer to the following sections.

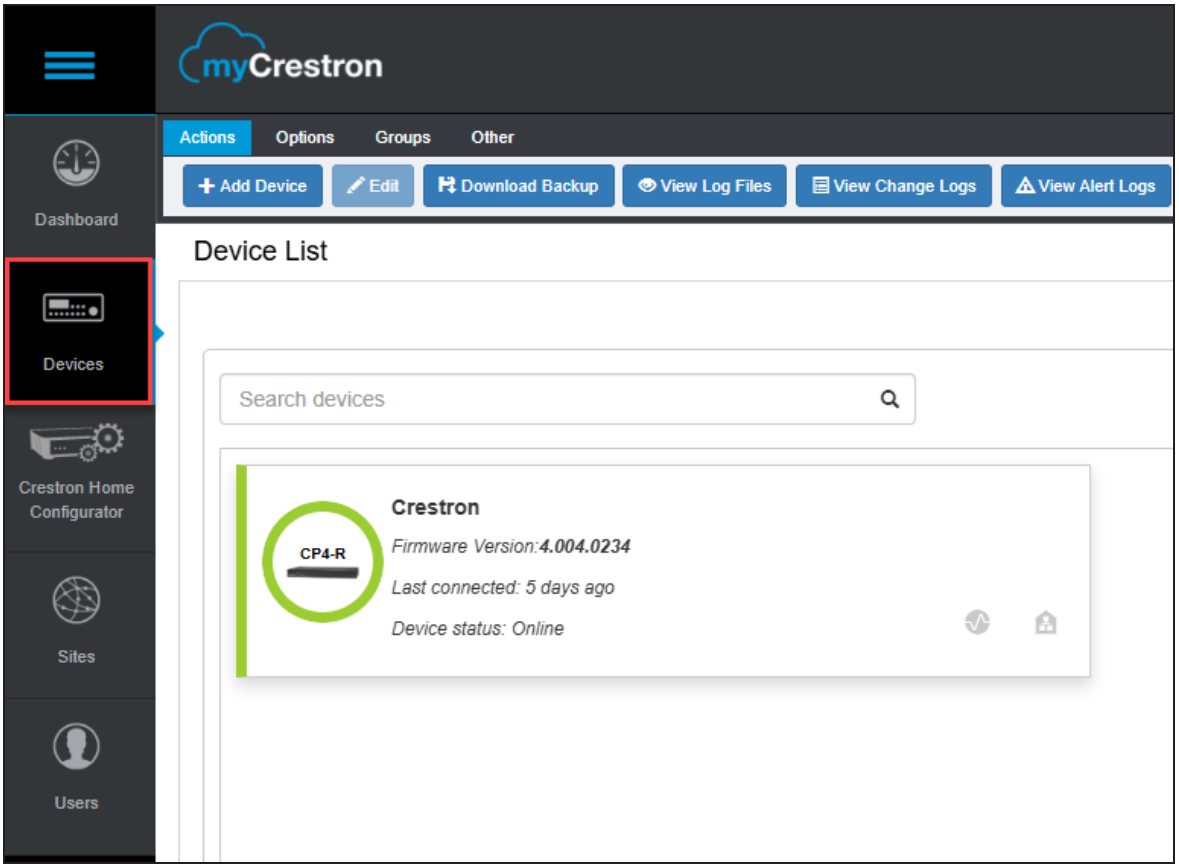
- Configure a System on page 123
- Control Processor Settings - Installer on page 558

Generate Integration Report

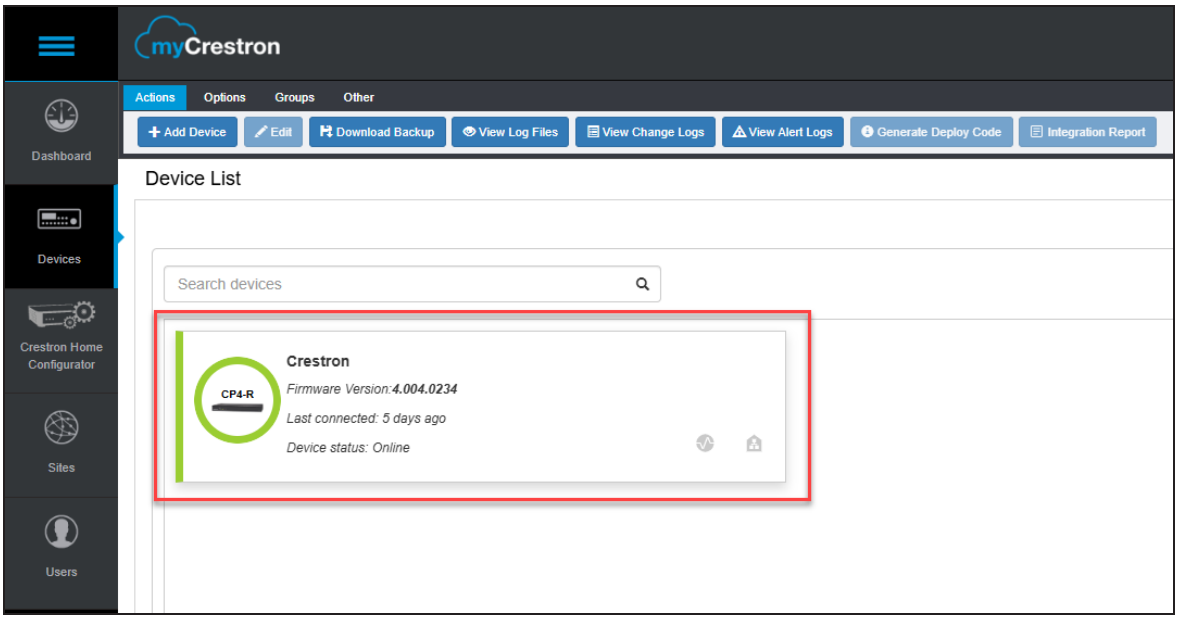
Use myCrestron RMS to build an Integration Report. This report is required for the Crestron Home SIMPL integration modules.

Follow the instructions below.

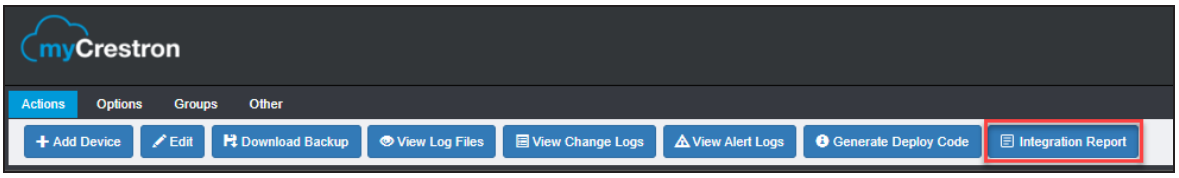
1. Navigate to portal.my.crestron.com.
2. Select **Devices**.



3. Select the Crestron Home processor.



4. Select **Integration Report**.



To generate a PDF report, select **Export to PDF**.

To generate an XLS report, select **Export to XLS**.

The report can be filtered by rooms and device types. Select the **Rooms** or **Types** fields, then check the desired filters. Select **Generate Report** to create the filtered report.



Example Integration Report Page

LIGHTING LOADS

Name	Load ID	Room Name (ID)	Load Control Type	Gateway
Ceiling Light	52722	Amro's Room (52080)	Dimmable	CAEN-BLOCK 1
Tunable Light	57090	Amro's Room (52080)	Tunable	GWDL
C1 CN Dim Light 1	94916	Amro's Room (52080)	Dimmable	Child-1
C1 EX Dim Light 1	94917	Amro's Room (52080)	Dimmable	Child-1
C1 EX Sw Light 1	94918	Amro's Room (52080)	Switched	Child-1
C1 EX HZ Sw Light 1	94919	Amro's Room (52080)	Switched	Child-1
C1 DMX Sim-1 Light	94920	Amro's Room (52080)	Dimmable	Child-1
C1 DMX Sim-2 Light	94921	Amro's Room (52080)	Dimmable	Child-1
C1 DALI Light	94922	Amro's Room (52080)	Dimmable	Child-1

LIGHTING SCENES

Name	Scene ID	Room Name (ID)	Visible Room Name (ID)	Fade Time	Affected Loads
All On	53224	Amro's Room (52080)	Amro's Room (52080)	1 Sec.	Amro's Room / Ceiling Light (52722) Amro's Room / Tunable Light (57090)
All Off	53225	Amro's Room (52080)	Amro's Room (52080)	1 Sec.	Amro's Room / Ceiling Light (52722) Amro's Room / Tunable Light (57090)
Circadian	53226	Amro's Room (52080)	Amro's Room (52080)	0 Sec.	
Solar Sync	57495	Amro's Room (52080)	Amro's Room (52080)	0 Sec.	
All Dim Renamed Dimmer	59873	Amro's Room (52080)	Amro's Room (52080)	3 Sec.	Amro's Room / Ceiling Light (52722) Amro's Room / Tunable Light (57090)
Tunable New Tune	83889	Amro's Room (52080)	Amro's Room (52080)	4 Hr.	Amro's Room / Ceiling Light (52722) Amro's Room / Tunable Light (57090)

The IDs listed in the report are used when programming Crestron Home SIMPL integration modules.

Program SIMPL Modules

Every program using Crestron Home SIMPL integration modules requires the **CRPC Home Client** (Control Processor Connection Module) to establish communication with the Crestron Home processor.

> **NOTE:** The following information is needed to connect the modules:
>
> - The IP Address/Hostname of the Crestron Home processor.
> - The Crestron Home user interface password.
> - IDs from the Integration report.

> **TIP:** Refer to the sample program for programming examples.

Module List

Below is a list of all Crestron Home SIMPL integration modules. For instructions on individual modules, refer to the Crestron Database module help files available within SIMPL and as part of Crestron Database. By default, these files are located in the following folder: **C:\Program Files (x86)\Crestron\Cresdb\Modules**.

- Control Processor
    - **CRPC Home Client** (Control Processor Connection Module)
- Scenes, Quick Actions, and Scheduling
    - **CRPC Home Lighting Scene** (Lighting Scene Module)
    - **CRPC Home Shade Scene** (Shade Scene Module)
    - **CRPC Home Quick Action** (Quick Action Module)
- Room Control
    - **CRPC Home Room** (Room Control Module)
- Load Control
    - **CRPC Home Lighting Load** (Lighting Module)
    - **CRPC Home Shade Load** (Shade Module)
    - **CRPC Home Ceiling Fan** (Ceiling Fan Module)
    - **CRPC Home Keypad** (Keypad Control and Feedback Module)

Appendix

This section provides the following information:

- Upgrade Crestron Pyng OS 2 to Crestron Home OS
- Device Settings
- Sonos and Crestron Home Integration
- Migrate Crestron Wireless Devices to a Different Gateway
- Restore a Crestron Home Processor to Factory Settings
- Reset Passwords
- Source Routing Behavior for Media Sources
- Control System Integration
- Keypad Button Programming
- Connect a Door Station
- HR-CV-MINI Remote
- Migrate System Data to a Different Processor
- Downgrade MC4-R Firmware Version to 3.003.0035 or Earlier
- How to Create Images for the Crestron Home App
- Security System Configuration
- Conditionals and Variables: Feedback, Commands, and Events
- Ports Used by Crestron Home
- Supported Languages
- Engravings

Upgrade Crestron Pyng OS 2 to Crestron Home OS

Upgrade to Crestron Home OS to access the latest responsive user interface from Crestron. Upgrading from Crestron Pyng OS 2 to Crestron Home OS is a simple process. The system must be running on a CP4-R control processor with Crestron Pyng OS 2 firmware version 2.003.0021 or later.

NOTES:

- The CP3-R control processor cannot run Crestron Home OS. To upgrade, the system data must be transferred to a CP4-R control processor using a deployment code. For details, refer to Migrate System Data to a Different Processor on page 1500.
- The PYNG-HUB control processor running Crestron Pyng OS 1 cannot be upgraded to Crestron Home OS.

To upgrade to Crestron Home OS, perform the following procedures:

- Upgrade the Operating System
- Set the User Interface Device Password
- Update the Firmware for Connected Devices

Upgrade the Operating System

CAUTIONS:

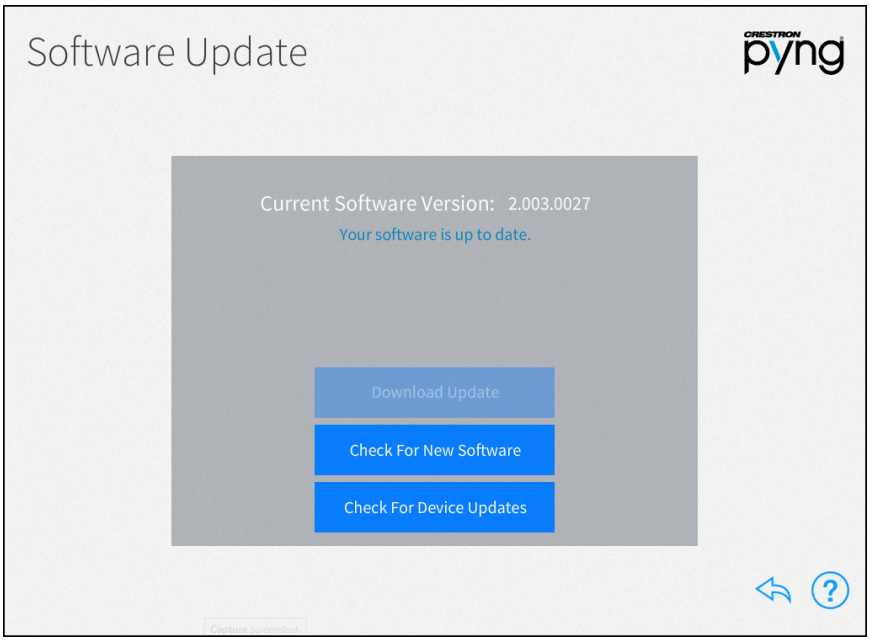
- Record the serial number of the Crestron Home processor prior to upgrading. The serial number is case sensitive. This is especially important if upgrading the Crestron Home processor remotely as you will not be able to access the serial number later.
- Updating to Crestron Home places the Crestron Home processor into secure mode. If prompted, set the Admin username and password in the **Create Admin Account** dialog box.
- If security was enabled before the upgrade, the credentials are retained. Use the credentials set previously to log in.

NOTES:

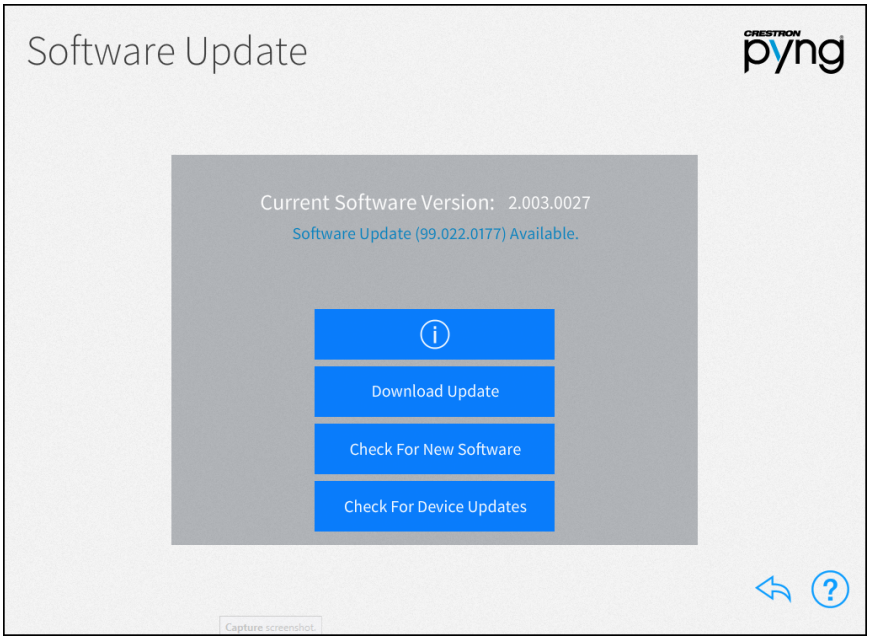
- Do not perform the upgrade the operating system while the customer is using the system.
- The software update may take up to 30 minutes to complete.

To upgrade to Crestron Home OS:

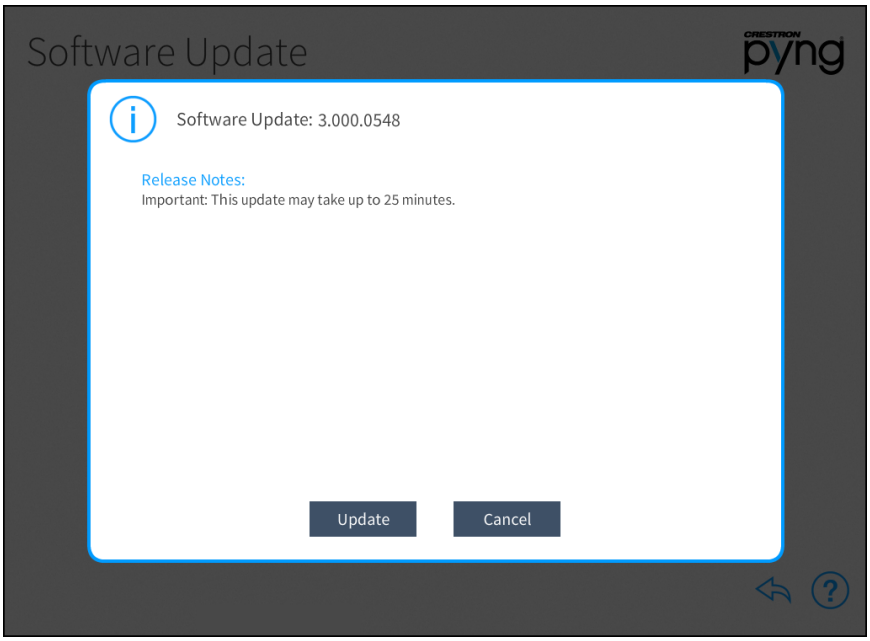
1. Tap the gear button on the bottom right of the **Setup** screen to display the **Installer Settings**.
2. Tap **Check for Updates**. The **Software Update** screen displays.



3. Tap **Check for New Software**. The system scans for and displays the available software updates.



4. Tap the ⓘ button to review the software release notes.
5. Tap **Download Update**. A confirmation dialog appears.
6. Tap **Download** to download the update. The Crestron Home processor downloads the latest firmware. The download may take several minutes. The update does not install automatically.
7. Tap **Update Software**. A confirmation dialog is shown along with the release notes.



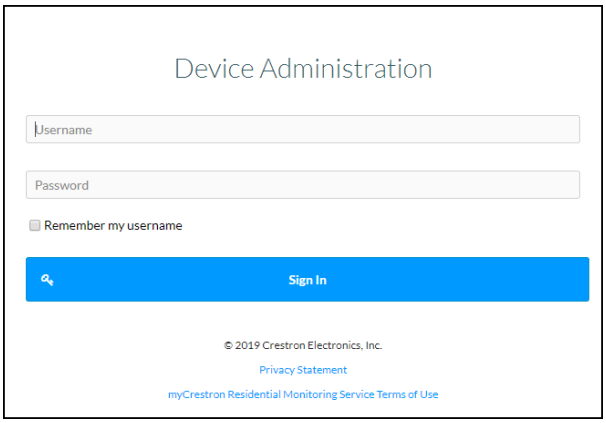
8. Tap **Update**. The software update is applied. When the software update is complete, the Crestron Home processor reboots.

   CAUTION: Communication with the Crestron Home processor will be lost several times during the software update. Do not power down the Crestron Home processor during the software update.

9. When the Crestron Home processor reboots, open the Crestron Home Setup app.
10. If prompted, create the Admin username and password by entering the desired Admin username in the **Username** field and the password in the **Password** and **Confirm Password** fields and then tap the **Create User** button.

    NOTE: If security was enabled before the upgrade, the credentials are retained. Use the credentials set previously to log in.

11. Enter the Admin username and password in the **Device Administration** page and then tap the **Sign In** button.



NOTE: To ensure that all devices are properly recognized by the Crestron Home processor, restart all IP devices on the network.

Set the User Interface Device Password

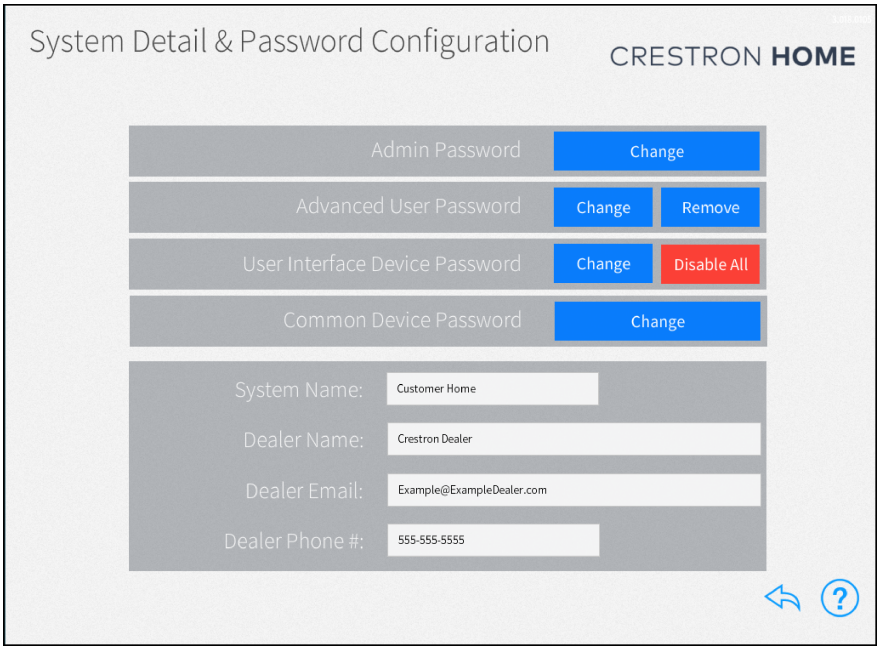
Assign a User Interface Device Password before connecting user interfaces devices (Crestron touch screens, TSR-310 handheld remotes, iOS devices, and Android devices) to the Crestron Home system.

NOTES:

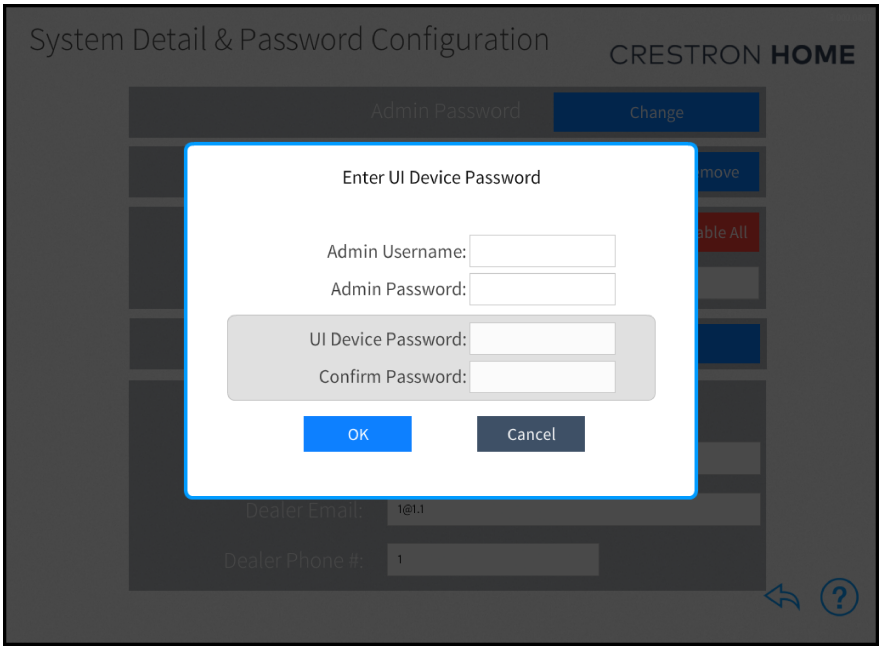
- For details about user names and passwords, refer to User Names and Passwords on page 135.
- To assign user names and passwords, refer to System Detail and Password Configuration on page 566.

To set the User Interface Device Password:

1. Go to **Settings** > **System Configuration** > **System Info & Passwords**.



2. Next to Advanced User Password, select **Enable**.



3. Enter the **Admin Username** and **Admin Password**. Then, enter the User Interface Device password in the **UI Device Password** and **Confirm Password** fields.
4. Select **OK**.

Update the Firmware for Connected Devices

To ensure the best system performance, update the firmware for all devices that are connected to the system.

NOTES:

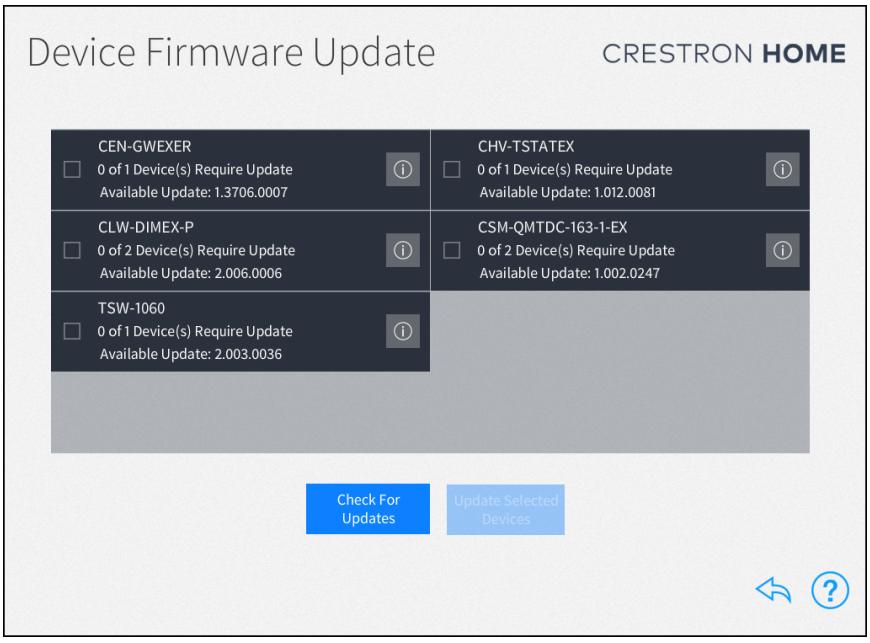
- The TSW-xx60 series touch screen and TSR-310 handheld remote must be running the latest firmware in order to display the Crestron Home app.
- To enable the Crestron Home app on the:
  - TSW-xx60 series touch screen, refer to Pair a Crestron Touch Screen on page 176.
  - TSR-310 handheld remote, refer to Pair a TSR-310 Handheld Remote on page 182.

To update device firmware, follow these steps:

1. Tap **Check for Device Updates**. The Crestron Home system searches for available firmware updates. Once the scan is complete, the **Device Firmware Update** screen presents a list of devices with recommended firmware updates.

   NOTES:

   - To rescan for new device firmware updates, tap **Check For Updates**.
   - To view release notes for the firmware update, tap the information button ⓘ next to the device.



2. Select the devices you want to update.
3. Tap **Update Selected Devices**.

NOTES:

- The TSW-xx60 series touch screen running Smart Graphics mode will appear as "TSW-xx60(Legacy)" while the TSW-xx60 series touch screen running Crestron Home will appear as "TSW-xx60."
- The TSR-310 running Performance UI-OS 2S mode will appear as "TSR-310(Legacy)" while the TSR running Performance UI-OS 3 (Crestron Home) will appear as "TSR-310."

Device Settings

The devices that are added to the Crestron Home OS system may have additional settings that can be configured.

This section provides the following information:

- Audio Settings
- Camera Settings
- Child Processor Settings
- Display Settings
- Gateway Settings
- Input Device Settings
- Keypad Settings
- Lighting Load Controller Settings
- Occupancy Sensor Settings
- Photo Sensor Settings
- Pool and Spa Settings
- Power Controller Settings
- Relay-Controlled Device Settings
- Security System Settings
- Sensor Controlled Device Settings
- Service Settings
- Shade Motor and Motor Controller Settings
- Thermostat Settings
- Video Source Settings
- Lutron Device Settings
- Health Settings
- Interrupt Settings
- Advanced Settings

NOTE: If the settings dialog box contains an **Interrupts** or **Health** tab:

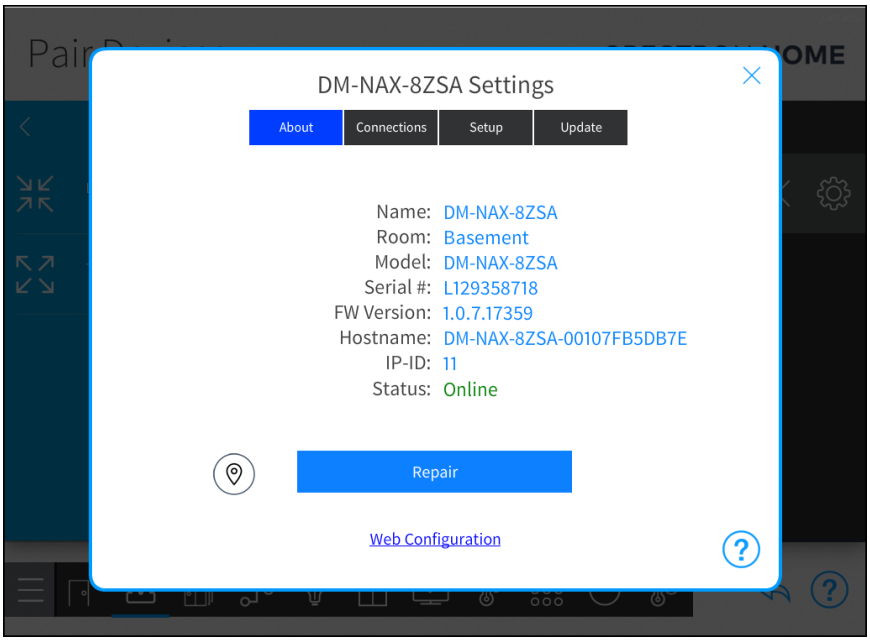
- Refer to Interrupt Settings on page 1381 to configure the interrupt.
- Refer to Health Settings on page 1380 to restart the device or hide the device from the Health Dashboard.

Audio Settings

DM-NAX-8ZSA

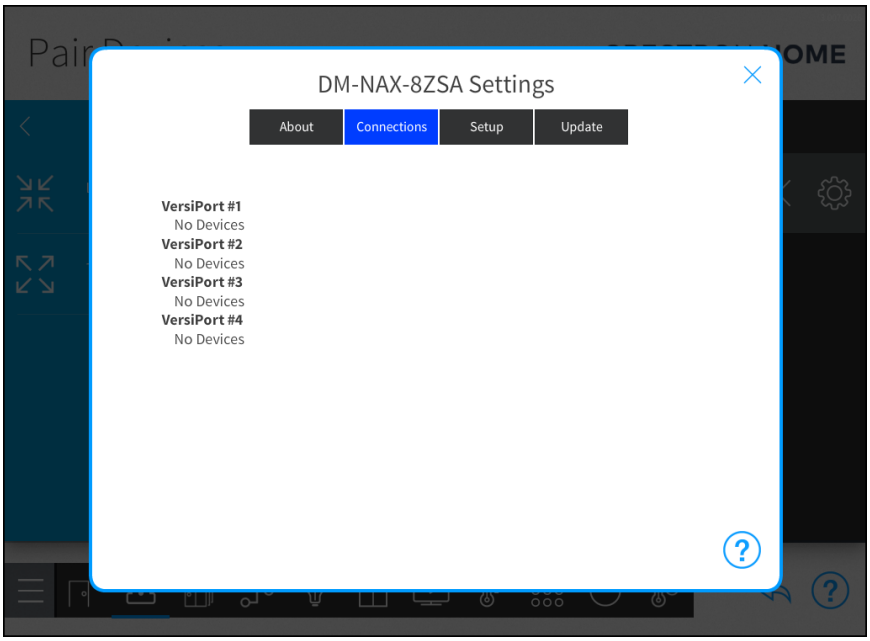
Tap the gear button next to the device name to display a Settings dialog box for the sensor device. The **About** tab is selected and displays the device information.

Configure the DM-NAX-8ZSA using the web interface. To configure, select **Web Configuration**.



Connections

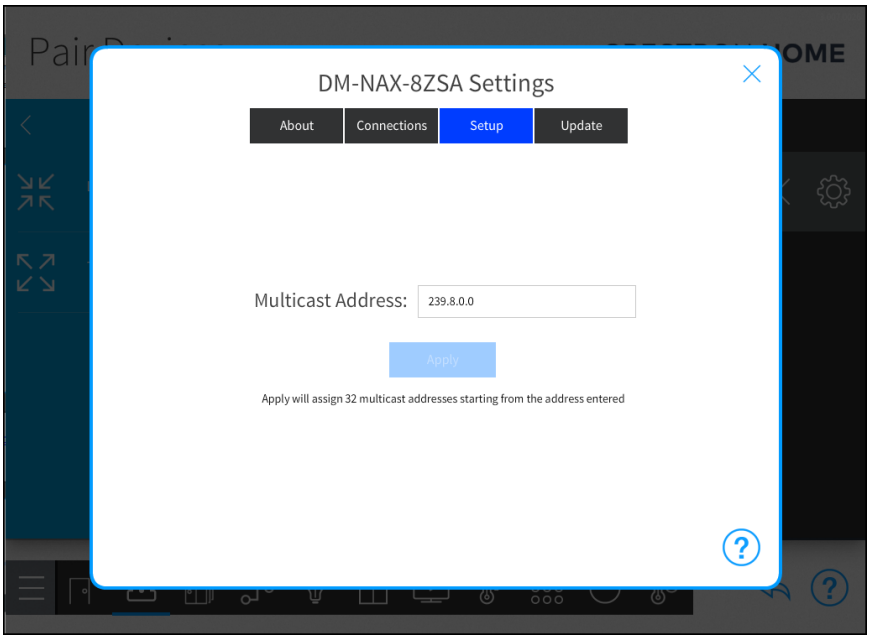
Use the **Connections** tab to view the connections made to the versiports on the device.



Setup

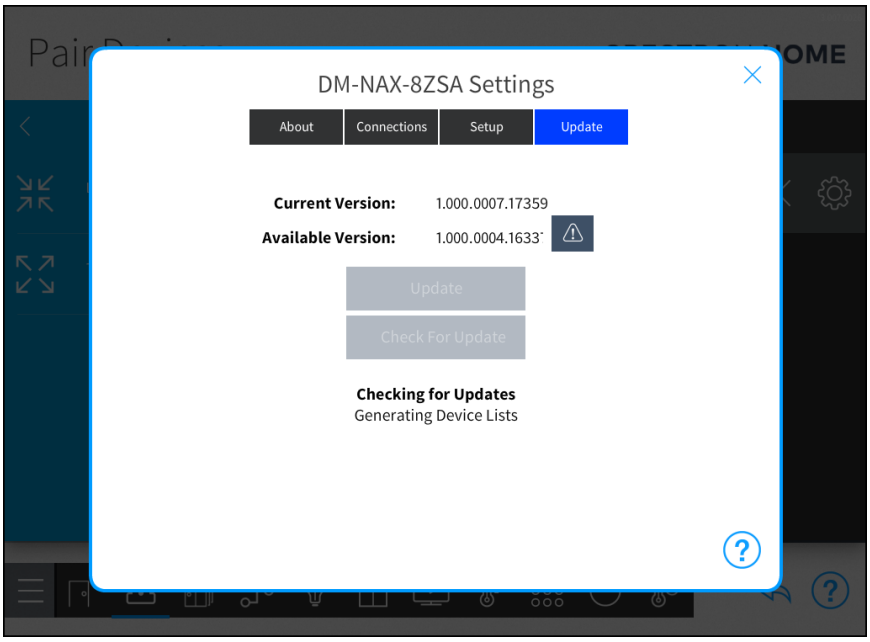
Use the **Setup** tab to set the multicast address. The range of multicast addresses starts at the value that is entered.

To set the multicast address, enter the multicast address and then select **Apply**.



Update

Use the **Update** tab to update the device firmware.

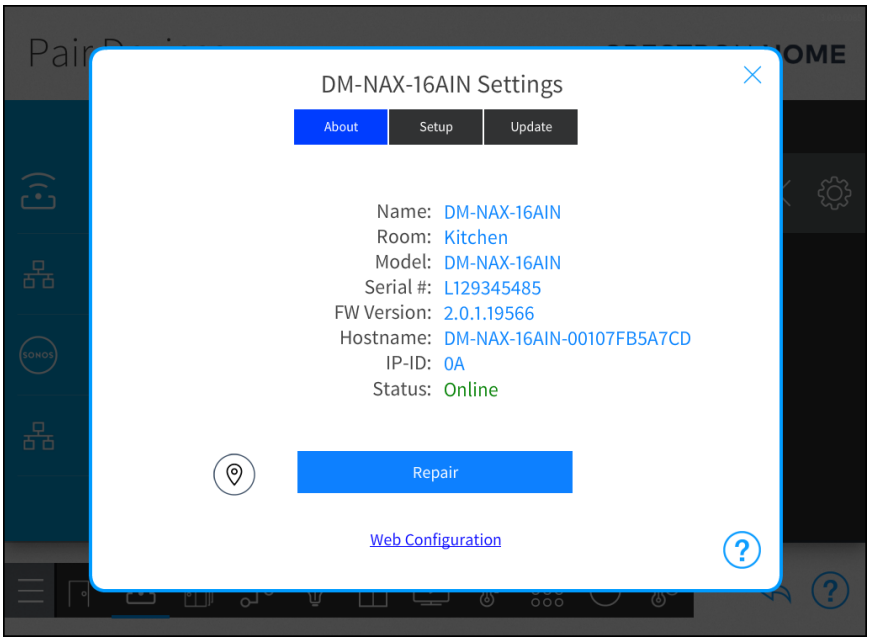


- **Current Version:** Displays the current firmware version for the gateway.
- **Available Version:** Displays the available firmware version for the gateway.
- **Update:** If a firmware update is available, tap **Update** to update the firmware.
- **Check For Update:** Tap the **Check For Update** button to search for firmware updates for the gateway.

DM-NAX-16AIN

Tap the gear button next to the device name to display a Settings dialog box for the sensor device. The **About** tab is selected and displays the device information. The Settings dialog box has additional tabs for **Setup** and **Update**.

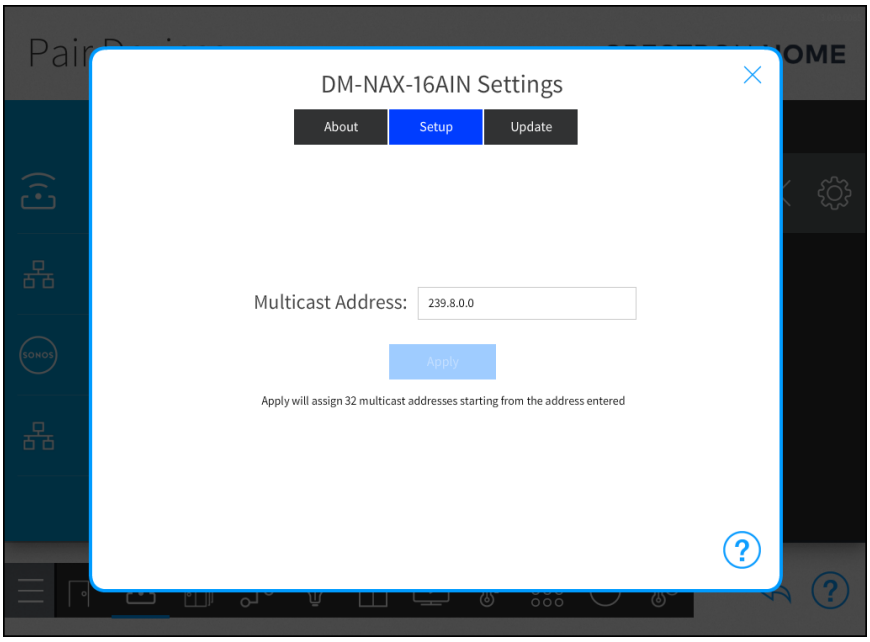
Configure the DM-NAX-16AIN using the web interface. To configure, select **Web Configuration**.



Setup

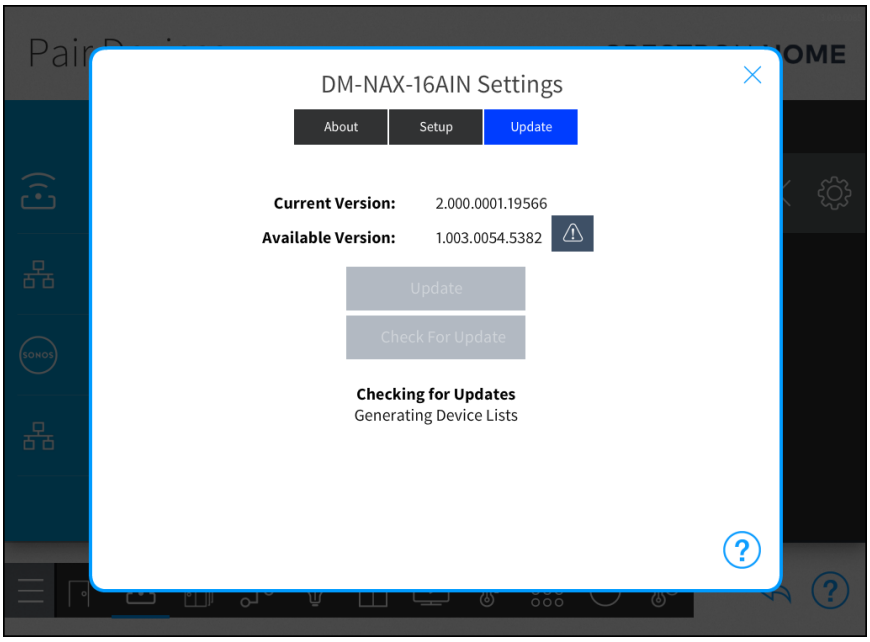
Use the **Setup** tab to set the multicast address. The range of multicast addresses starts at the value that is entered.

To set the multicast address, enter the multicast address and then select **Apply**.



Update

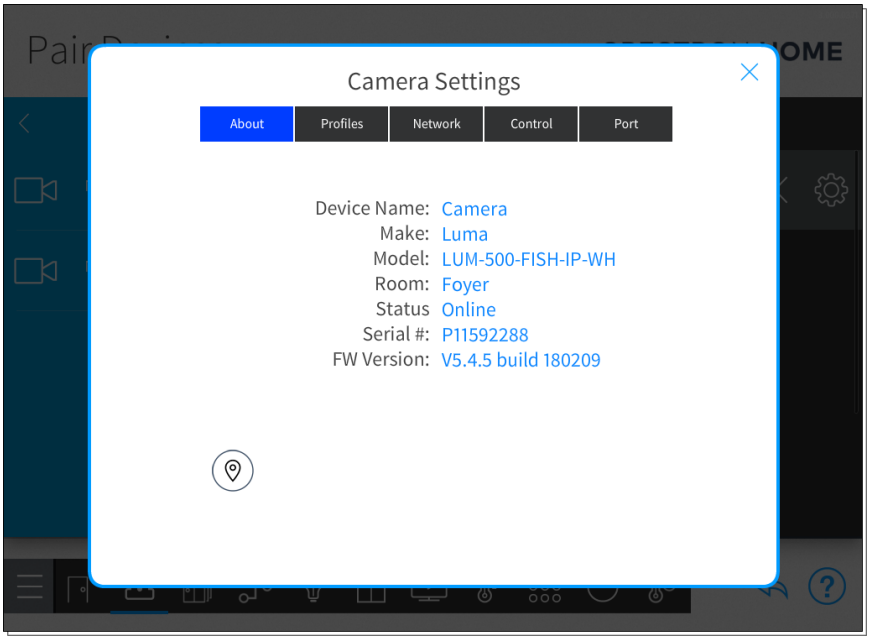
Use the **Update** tab to update the device firmware.



- **Current Version:** Displays the current firmware version.
- **Available Version:** Displays the available firmware version.
- **Update:** Active when a firmware update is available. To update the firmware, select **Update**.
- **Check For Update:** To search for a firmware update, select **Check for Update**.

Camera Settings

Tap the gear button next to the device name to display a Settings dialog box for the camera. The **About** tab is selected and displays the device information.

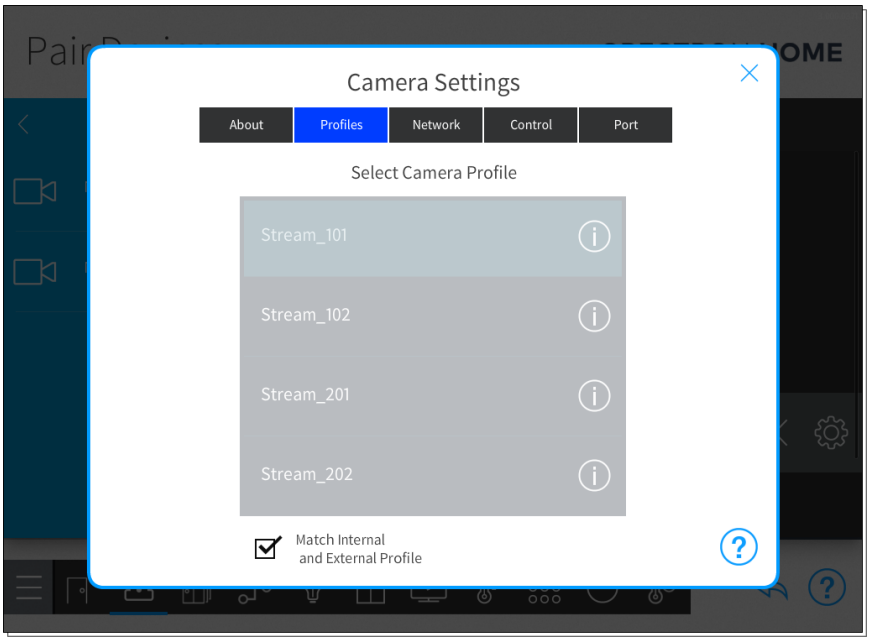


Tap the location button and then the **Preview** button to view the camera's snapshot in your web browser. Use the snapshot to confirm the camera's location.

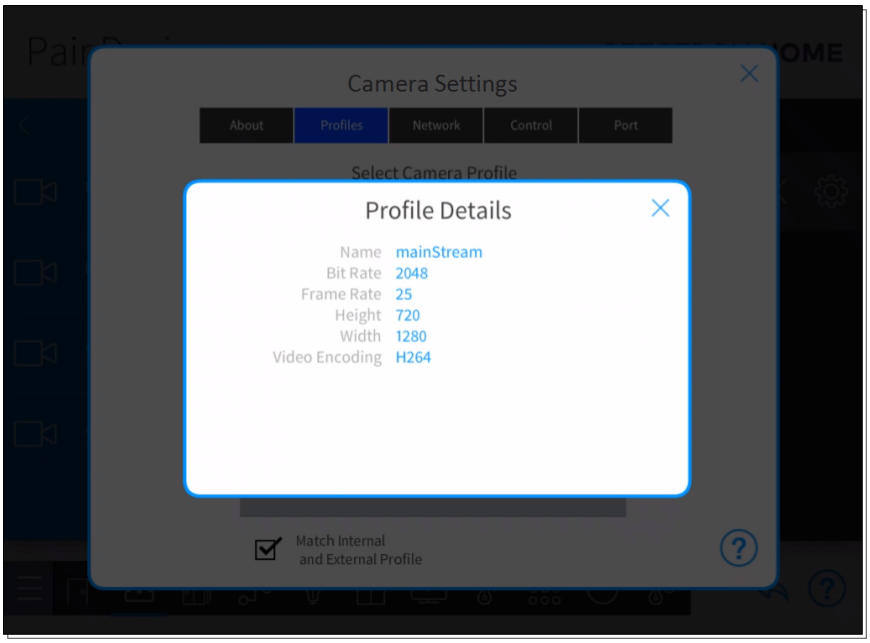
Profiles

Tap the **Profiles** tab to configure the camera profiles. Select the camera profile that you would like to use for the camera.

> **NOTE:** Each camera manufacturer provides different profiles for their cameras.

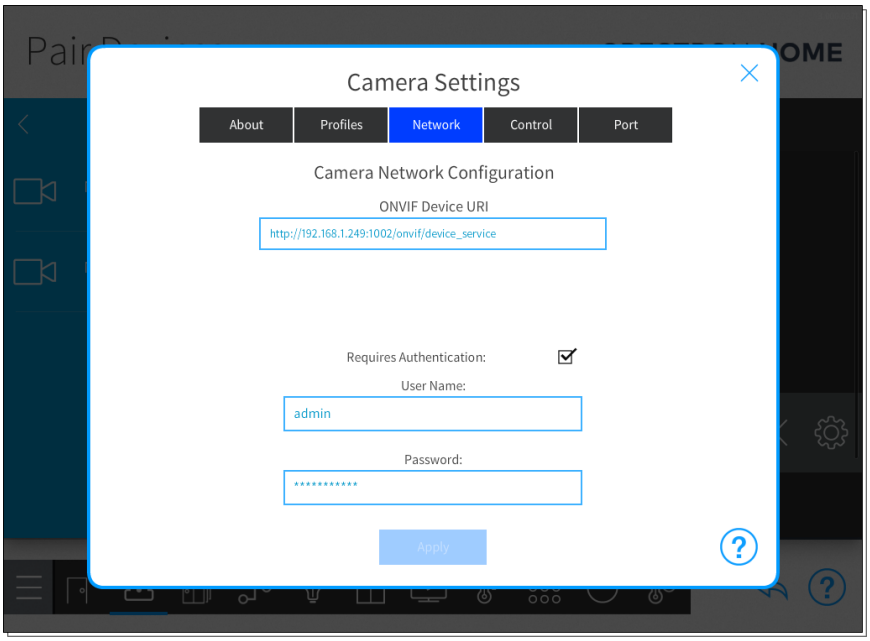


To view information about the camera profile, tap the information button next to the profile name.



Network

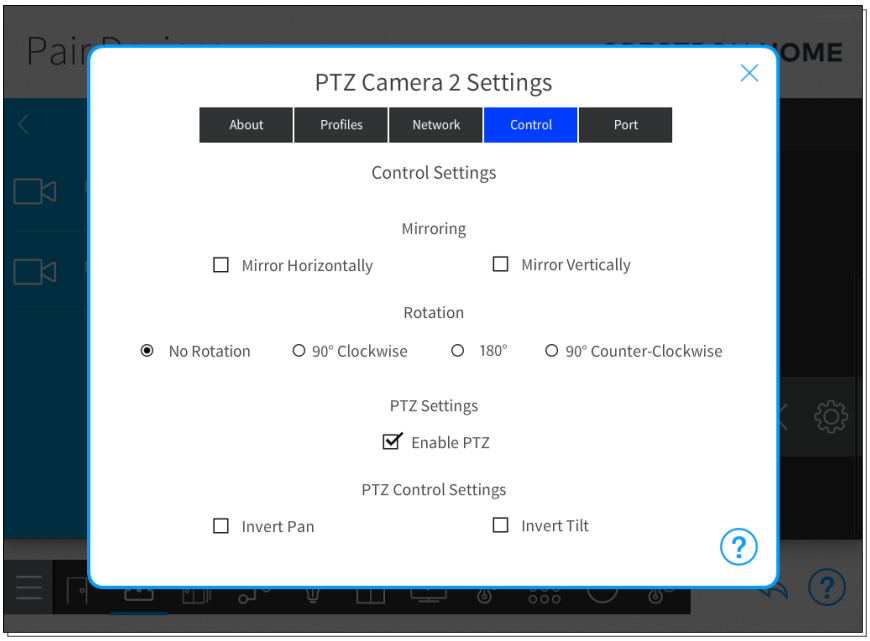
Tap the **Network** tab to configure the camera network configuration.



- **ONVIF Device URI:** Enter the ONVIF device URI that is provided from the camera.
- **Requires Authentication:** If the ONVIF camera requires authentication, select the check box next to **Requires Authentication** and then enter the username and password for the ONVIF camera.

Control

Tap the **Control** tab to configure the camera display in the Crestron Home user interface.



Mirroring:

- **Mirror Horizontally:** Select to mirror the camera display horizontally.
- **Mirror Vertically:** Select to mirror the camera display vertically.

Rotation:

- **No Rotation:** Select to keep the camera display at its default orientation.
- **90° Clockwise:** Select to rotate the camera display 90 degrees clockwise.
- **180°:** Select to rotate the camera display 180 degrees.
- **90° Counter-Clockwise:** Select to rotate the camera display 90 degrees counterclockwise.

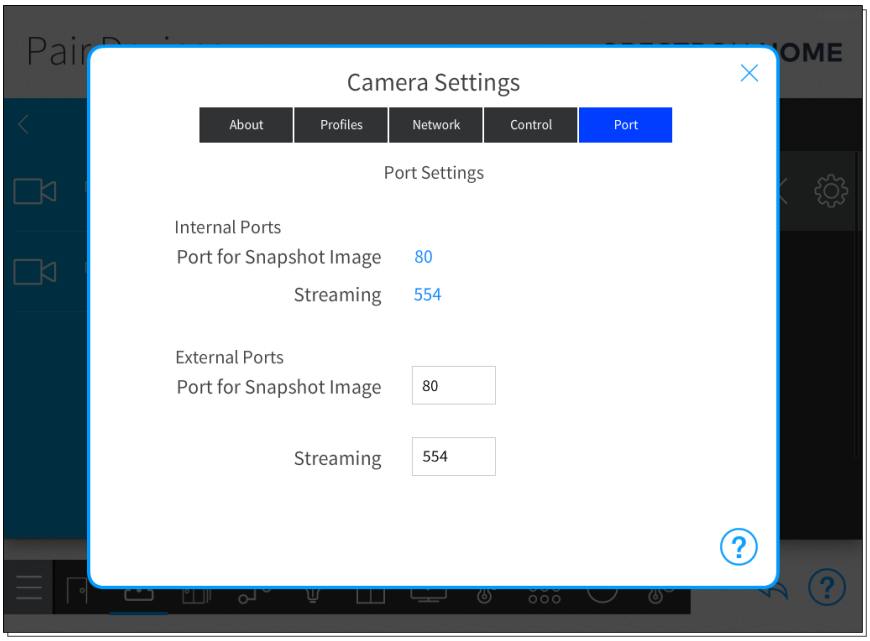
PTZ Settings:

> **NOTE:** The PTZ controls are displayed only for cameras that support PTZ.

- **Invert Pan:** Select to invert the pan controls.
- **Invert Tilt:** Select to invert the tilt controls.

Port

Tap the **Port** tab to configure camera port settings.



Port settings are available for **Internal Ports** and **External Ports**. The **Port for Snapshot Image** and **Streaming** are populated when the camera is added to the system. These fields generally do not need to be changed.

NOTES:

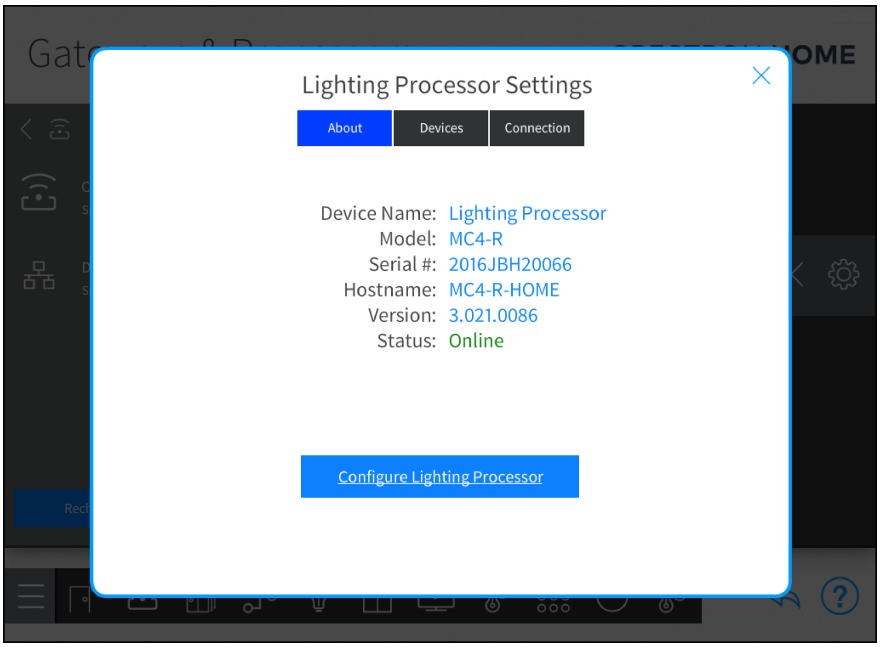
- The external ports are used to view the camera outside of the home.
- A myCrestron.com DNS registration is required to view the camera outside of the home. For details, refer to Remote System Access on page 639

- **Port for Snapshot Image:** The port that is used by the camera for snapshot images. Snapshot images are used for static images within the Crestron Home user interface.
- **Streaming:** The port number that is used by the camera for the Real-Time Streaming Protocol (RTSP). This port allows the camera's DVR to display video within the Crestron Home user interface.

Child Processor Settings

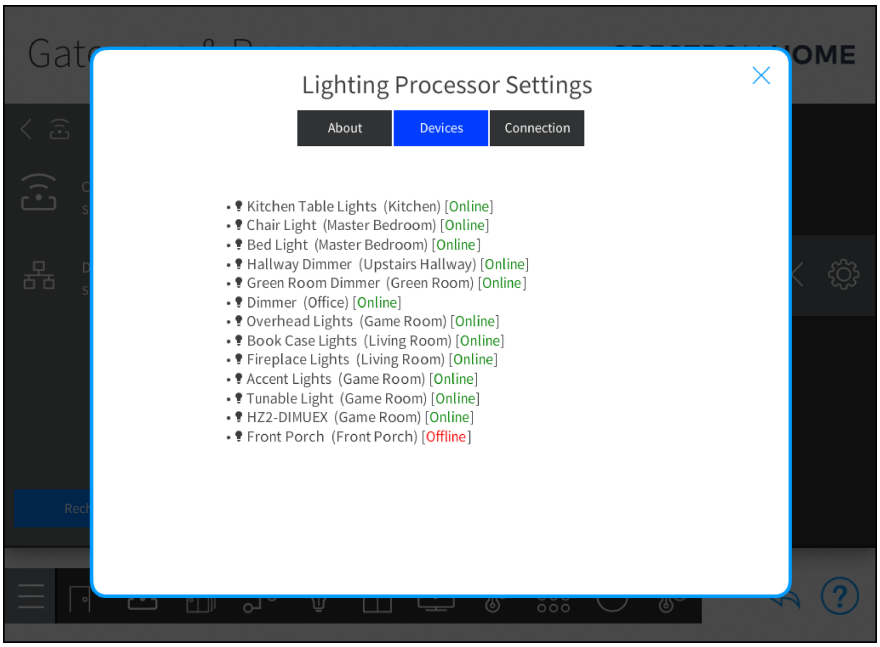
Tap the gear button next to the device name to display a Settings dialog box for the child processor. The **About** tab is selected and displays the device information.

Select **Configure** to close the current configuration window and open a new configuration window for the other processor in the Crestron Home Setup app.



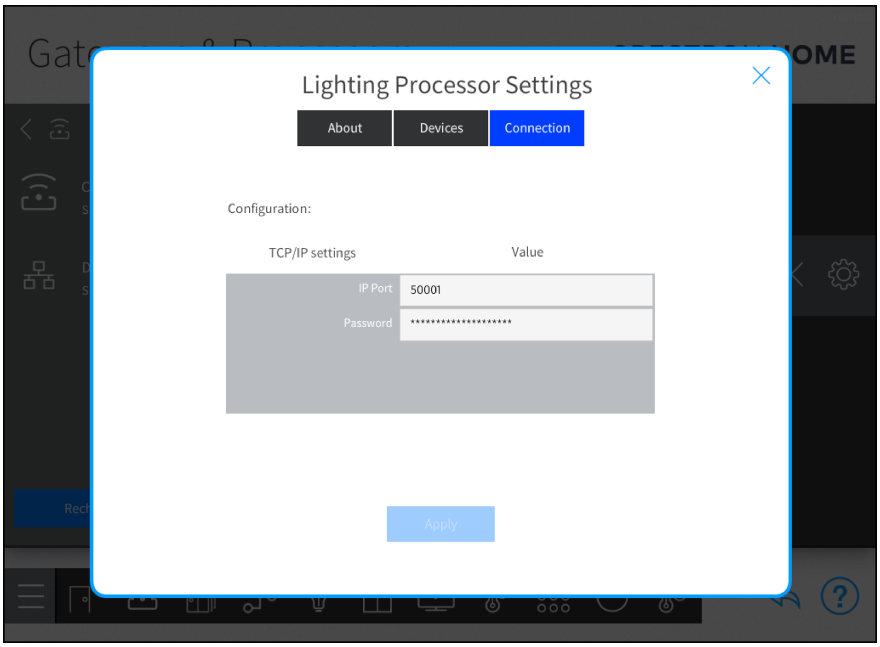
Devices

Use the **Devices** tab to view the devices that are connected to the child processor.



Connection

Use the **Connection** tab to view or change TCP/IP settings for the child processor.

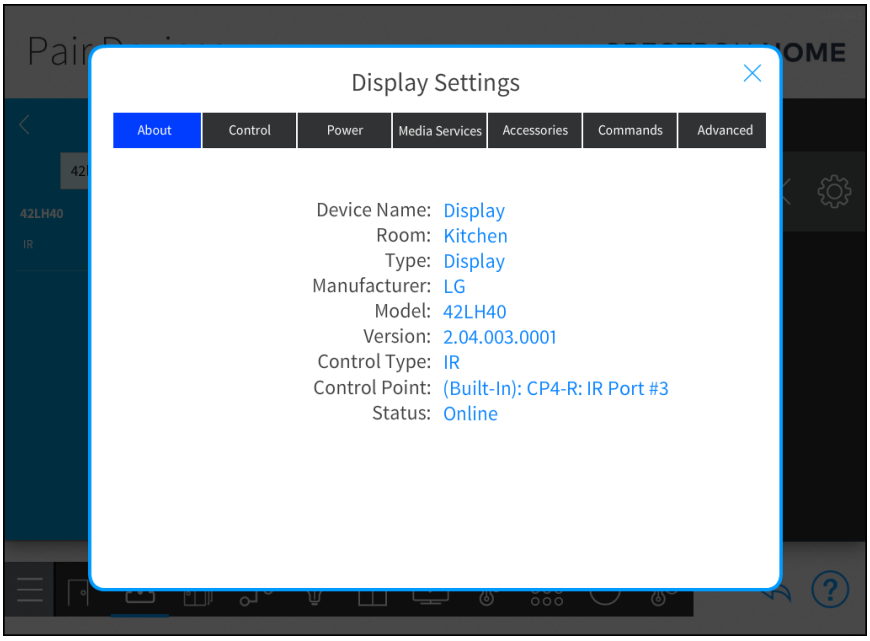


- **IP Port:** Enter the IP port for the child control processor. The default value is **50001**.
- **User Interface Device Password:** Enter the User Interface Device password for the child processor.

Display Settings

Display Settings

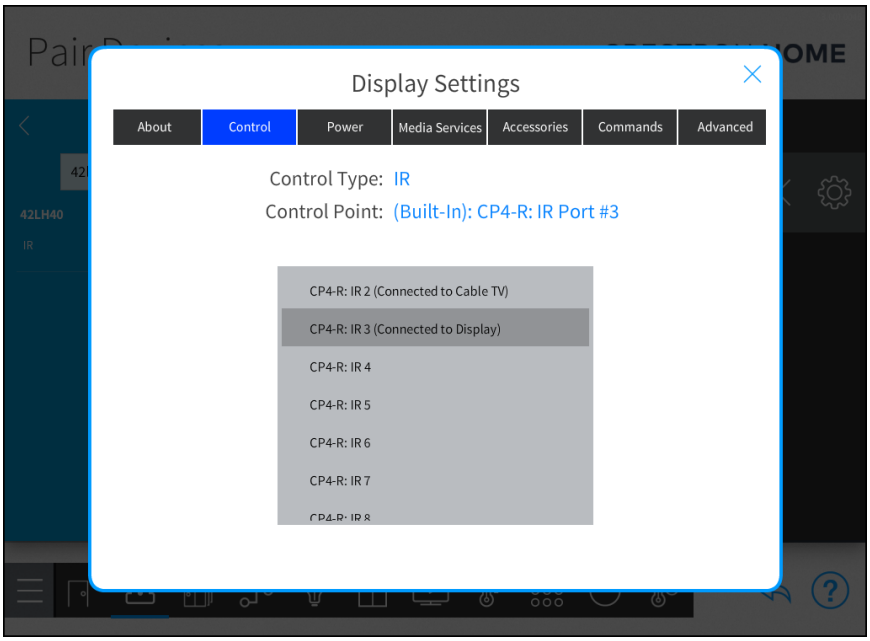
Tap the gear button next to the display to display a Settings dialog box for the display. The **About** tab is selected and displays the device information.



Control

Tap the **Control** tab to change the display network configuration.

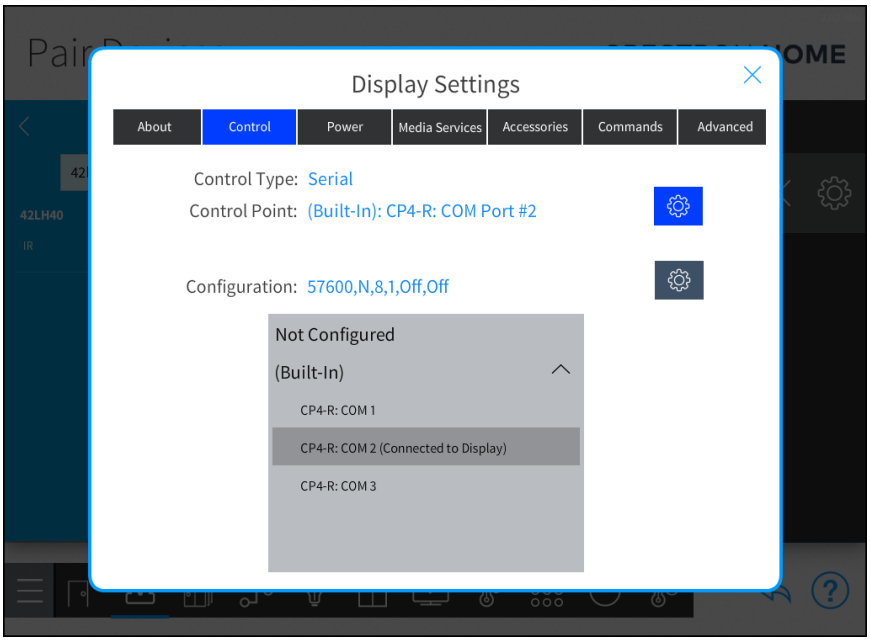
IR Control



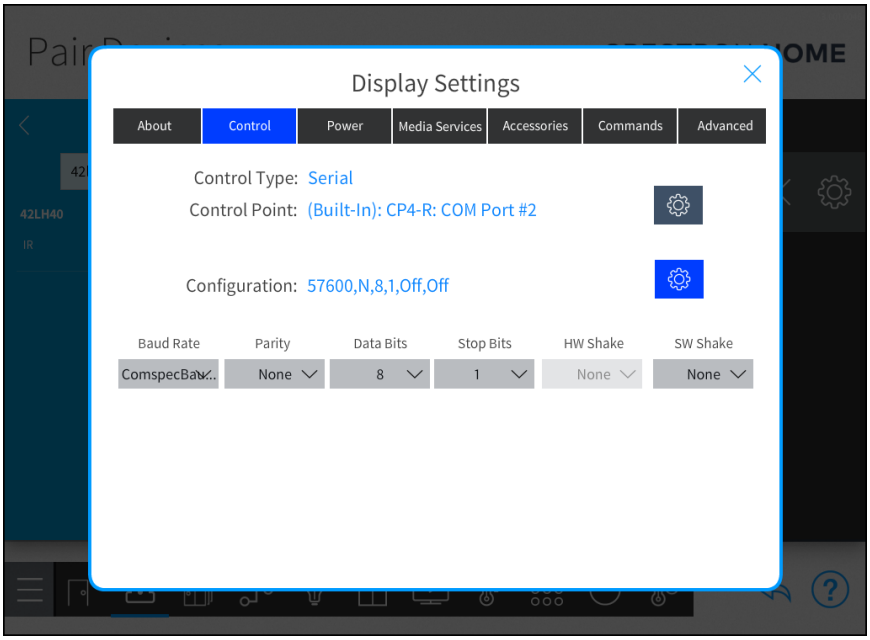
- **Control Type:** Displays the type of control for the display.
- **Control Point:** Displays the hardware connection for the IR emitter probe. To change the control point, tap the gear icon next to **Control Point** and then select an IR port from the **Control Point** list.

Serial Control

- **Control Type:** Displays the type of control for the display.
- **Control Point:** Displays the hardware connection for the COM port. To change the control point, tap the gear icon next to **Control Point** and then select a COM port from the **Control Point** list.

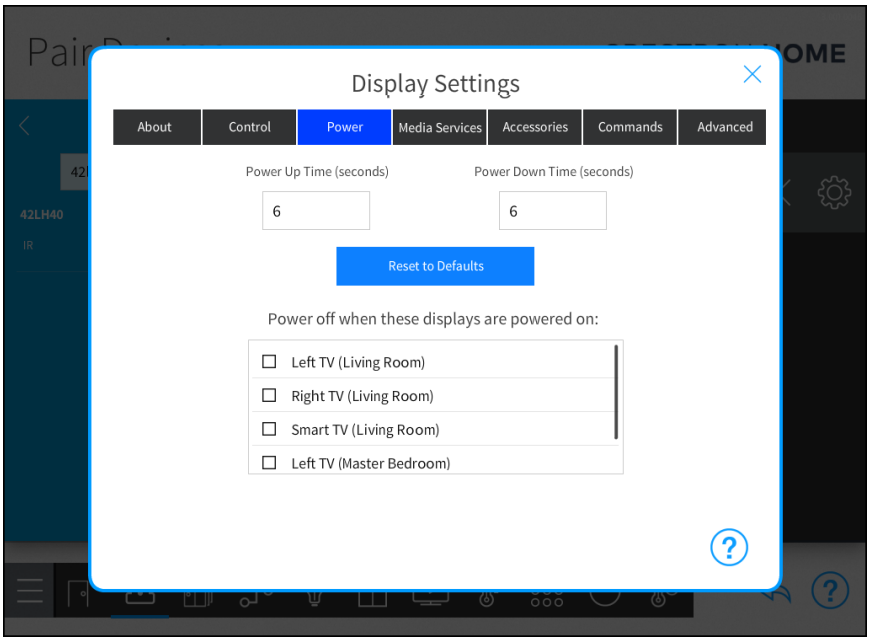


- **Configuration:** Displays the settings for COM port communications. To change the settings, tap the gear icon next to **Configuration** and then select the settings for the **Baud Rate**, **Parity**, **Data Bits**, **Stop Bits**, **HW Shade**, and **SW Shake** parameters.



Power

Tap the **Power** tab to configure the power up and power down time for the display.

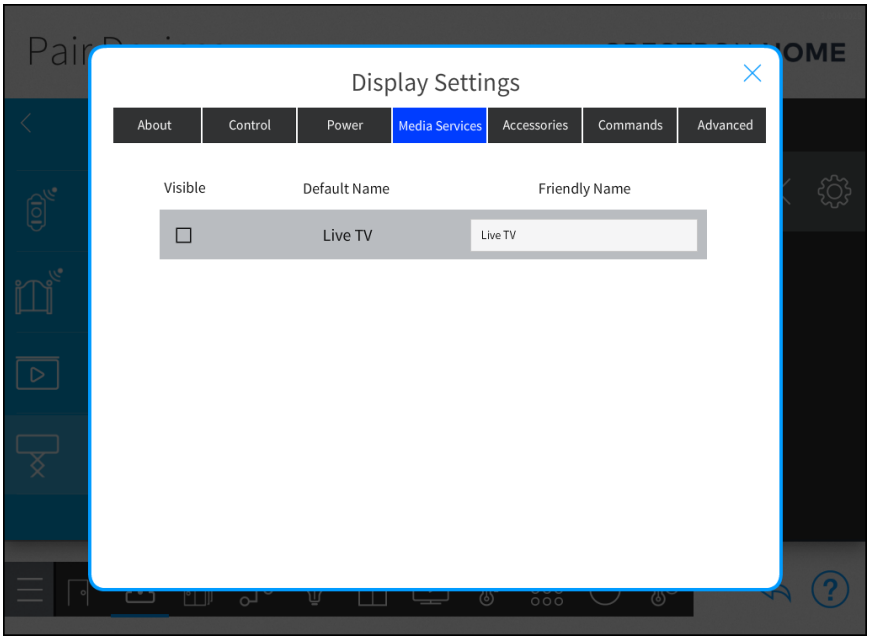


- **Power Up Time (seconds):** The amount of time that must pass between turning on the device and selecting an input. The value can be set between 1 and 600 seconds. Unexpected functionality may occur if the value is set too low.
- **Power Down Time (seconds):** The amount of time that must pass between turning off the device and turning it back on. The value can be set between 1 and 600 seconds. Unexpected functionality may occur if the value is set too low.
- **Reset to Defaults:** Sets the fields in the **Setup** tab to their default values.
- **Power off when these displays are powered on:** Select the **Main Display** for the room. When the **Main Display** is powered on, this the current display is powered off. For example, if a room contains a projector with a screen that covers a Smart TV when the projector is in use, the Smart TV can be automatically powered down when the projector powers on and the screen is lowered. To do this, select the projector from the settings screen for the Smart TV to designate the projector as the **Main Display** and the Smart TV as the secondary display.

Media Services

Tap the **Media Services** tab to configure the media services that are available on the display. The list of media sources is defined by the display driver that is used and varies by make and model.

> **NOTE:** The Live TV media service is the only service provided for generic displays. If the Live TV media service is not available on the display, a message is displayed saying that the device does not support any media services.



Each media service displays the **Default Name**, **Friendly Name**, and **Visible** properties.

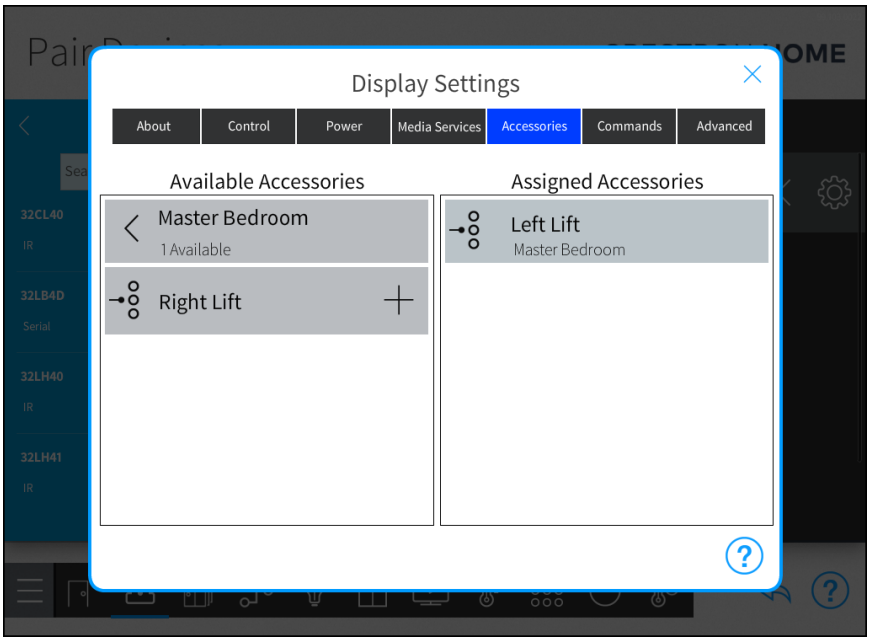
- **Default Name:** The name that is provided by the display for the media service.
- **Friendly Name:** The name that is displayed in the Crestron Home user interface when the media service is visible.
- **Visible:** Indicates that the media service is visible in the Crestron Home Setup app and the Crestron Home user interface. To view the media service in the Crestron Home Setup app and the Crestron Home user interface, tap the check box next to the name of the media service.

  > **NOTES:**
  >
  > - The default visibility setting for all media devices is hidden. This prevents the Crestron Home user interface from displaying long lists of media services.
  > - The default visibility setting will not be changed for displays that are already added to the system.

Accessories

Tap the **Accessories** tab to display the Display Accessory list for the house and to assign Display Accessories to the display. Display Accessories are Screens and Lifts.

When a Display Accessory is assigned to the display, the display accessory's commands can be selected in the **Commands** tab with a User interface device (Crestron touch screens, TSR-310 handheld remotes, iOS® devices, and Android™ devices). For example, the lift or screen can be directly controlled from the User Interface device.



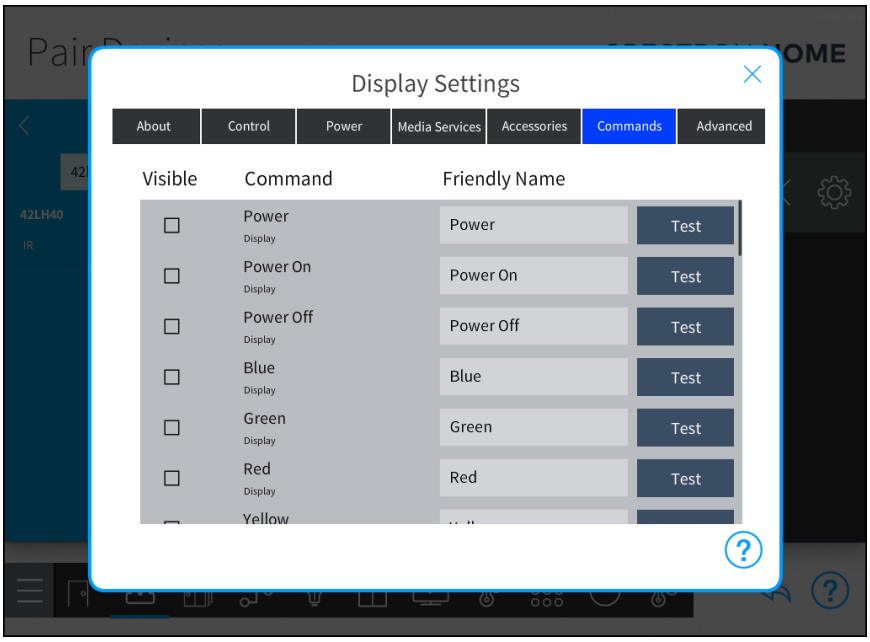
The Display Accessory list consists of the **Available Accessories** list and the **Assigned Accessories** list.

> **NOTE:** If the Display Accessory is not configured, a warning icon is shown next to the Display Accessory Name.

- **Available Accessories:** Displays the room name and number of Display Accessories in the room. To assign a Display Accessory to the display, tap the plus icon next to the Display Accessory to add it to the **Assigned Accessories** list.
- **Assigned Accessories:** Displays the Display Accessories that are assigned to the display. To remove a Display Accessory from the **Assigned Accessory** list, select the Display Accessory and then tap the back arrow (**<**).

Commands

Tap the **Commands** tab to display the Commands list for the display. The Commands list is defined by the display driver that is used and varies by make and model. Quick Actions that contain the display and Display Accessories are visible to the room are also included in the Commands list.



The Commands list displays the **Command**, **Friendly Name**, and **Visible** properties for each command. A **Test** button is also provided for each command.

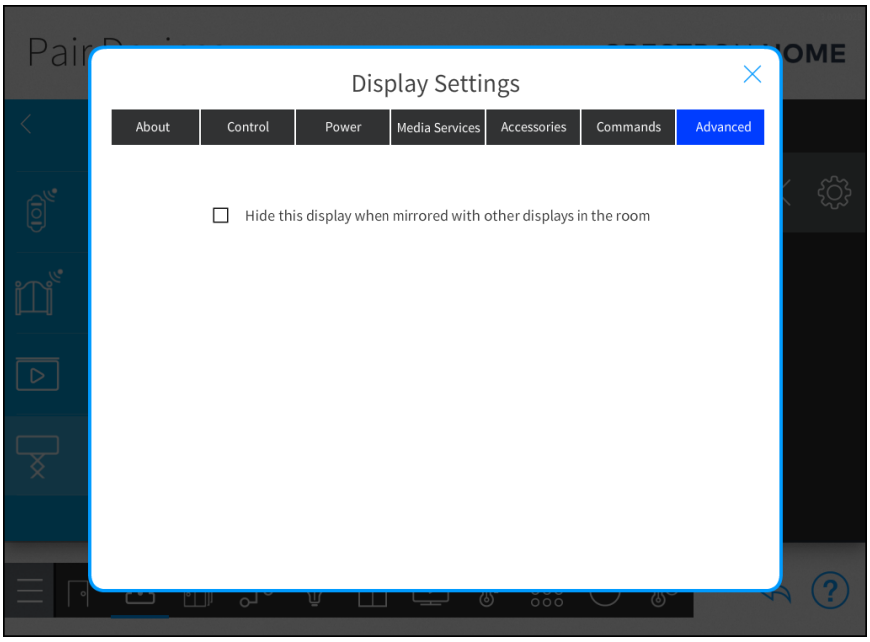
- **Command:** The name of the command that is provided by the display, display accessory, or Quick Action. The name of the device, Quick Action, or Display Accessory is also shown.
- **Friendly Name:** The name that is displayed in the Crestron Home user interface when the **Display Settings** menu is opened.
- **Visible:** Indicates that the command is visible in the Crestron Home user interface when the **Display Settings** menu is opened. To view the command in the **Display Settings** menu for the display, tap the check box next to the name of the command.

  > **NOTE:** The default visibility setting for all commands is hidden. This prevents the Crestron Home user interface from displaying long lists of commands.

- **Test:** To verify that the command functions properly, tap the **Test** button The display, or its accessories, must be turned on and a source must be routed to the display before testing the command.

Advanced

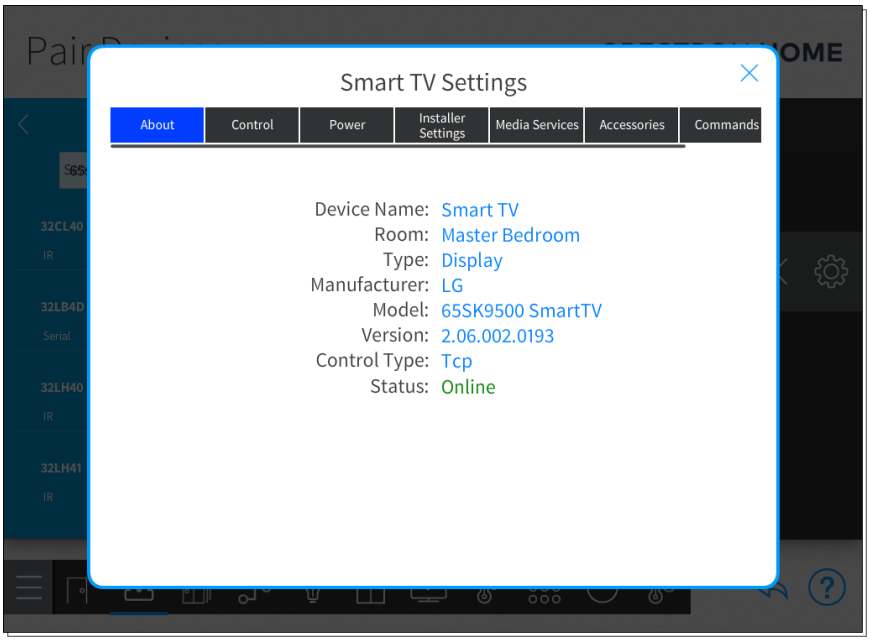
Tap the **Advanced** tab to display the advanced functions for the display.



Select the **Hide this display** checkbox to hide the display on the Crestron Home User Interface when the display is mirrored with another display in the room. To configure mirrored displays, refer to Mirror Displays on page 380.

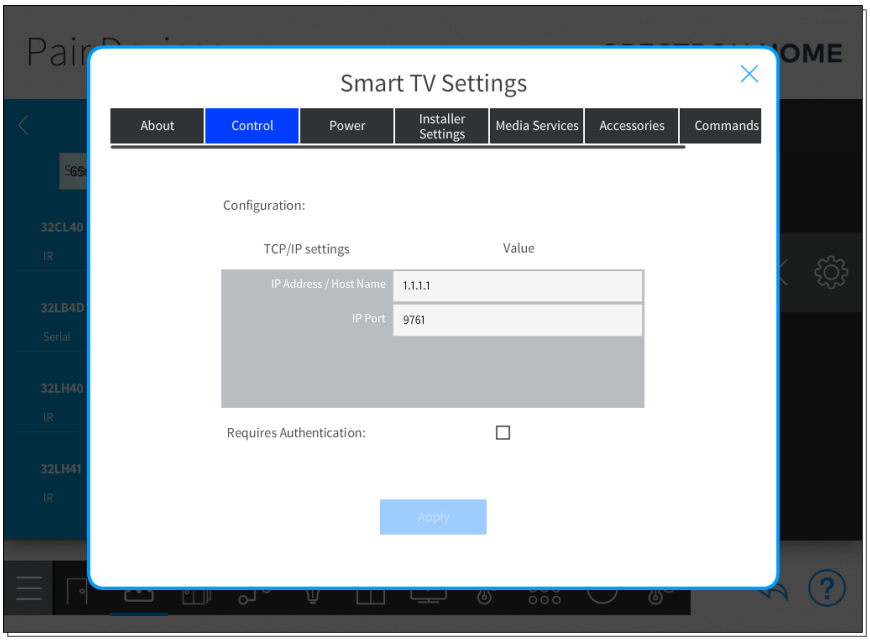
Smart TV Settings

Tap the gear button next to the Smart TV to display a Settings dialog box for the Smart TV. The **About** tab is selected and displays the device information.



Control

Tap the **Control** tab to change the Smart TV network configuration.



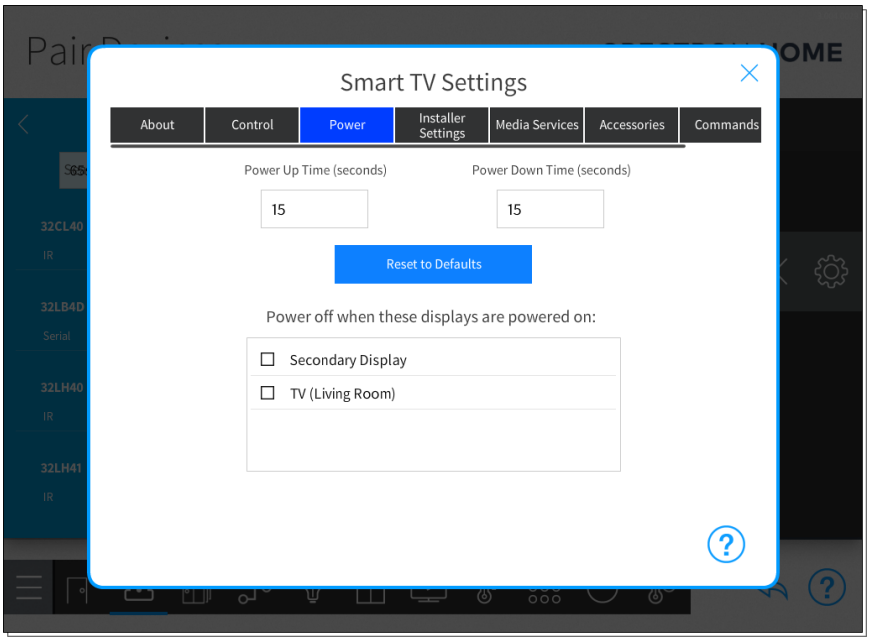
- **IP Address/Hostname:** The IP address or hostname of the Smart TV.

  > **NOTE:** Each Smart TV should use a static or reserved IP address.

- **IP Port:** The port number of the Smart TV.
- **Requires Authentication:** If the Smart TV requires authentication, select the check box next to **Requires Authentication** and then enter the username and password for the Smart TV.

Power

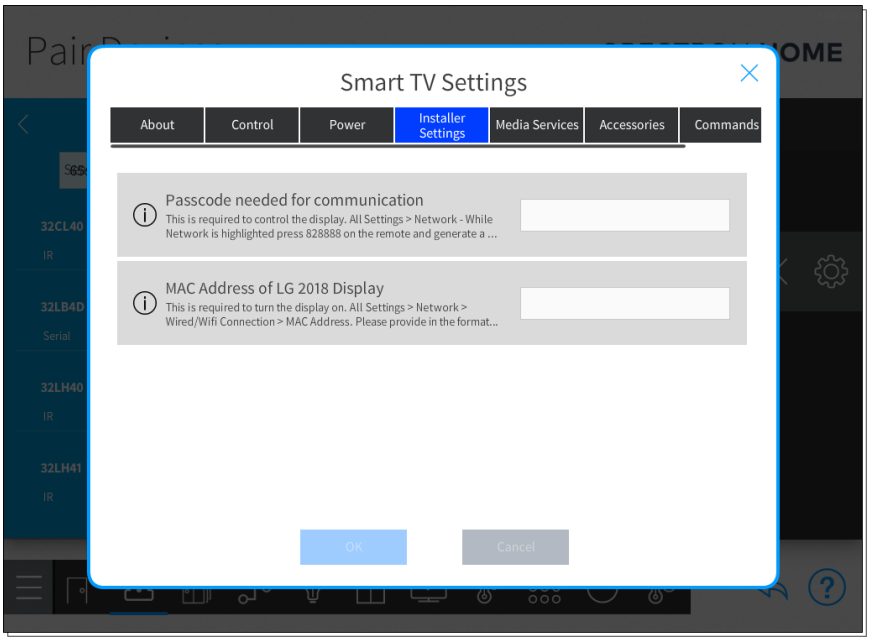
Tap the **Power** tab to configure the power up and power down time for the Smart TV.



- **Power Up Time (seconds):** The amount of time that must pass between turning on the device and selecting an input. The value can be set between 1 and 600 seconds. Unexpected functionality may occur if the value is set too low.
- **Power Down Time (seconds):** The amount of time that must pass between turning off the device and turning it back on. The value can be set between 1 and 600 seconds. Unexpected functionality may occur if the value is set too low.
- **Reset to Defaults:** Sets the fields in the **Setup** tab to their default values.
- **Power off when these displays are powered on:** Select the **Main Display** for the room. When the **Main Display** is powered on, this the current display is powered off. For example, if a room contains a projector with a screen that covers a Smart TV when the projector is in use, the Smart TV can be automatically powered down when the projector powers on and the screen is lowered. To do this, select the projector from the settings screen for the Smart TV to designate the projector as the **Main Display** and the Smart TV as the secondary display.

Installer Settings

Tap the **Installer Settings** tab to view and change the passcode and the MAC address of the Smart TV.

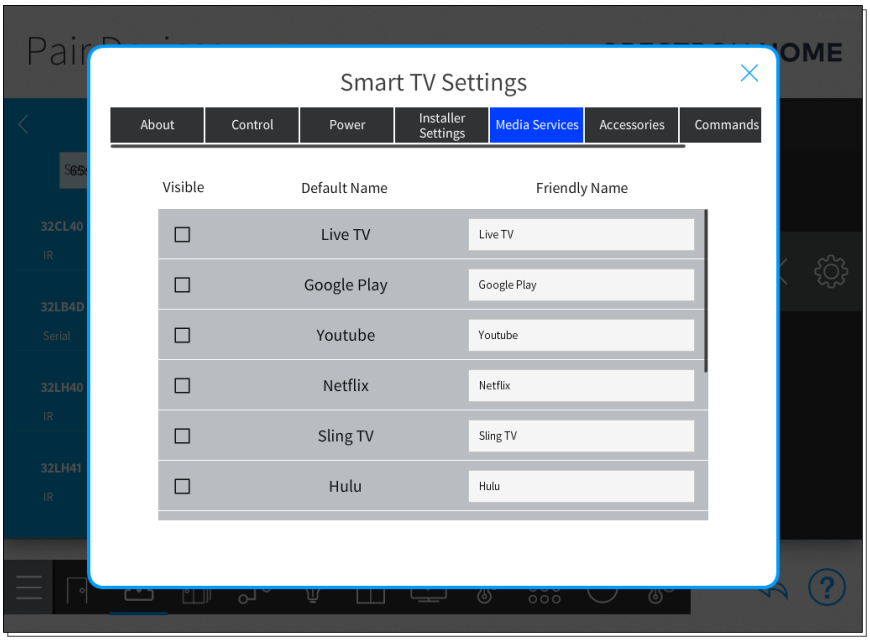


NOTE: The passcode and MAC address can be updated in the **Installer Settings** tab. Previous versions of Crestron Home required the Smart TV to be removed from the system and then re-added.

- **Passcode:** The passcode allows the TV to be controlled by the Crestron Home system. Enter the passcode into the text box. Refer to the instructions provided in the Crestron Home setup app to generate the passcode.
- **MAC Address:** The MAC address allows the TV to be turned on and off. Enter the MAC address of the Smart TV into the text box. Refer to the instructions provided in the Crestron Home setup app to generate the passcode.

Media Services

Tap the **Media Services** tab to configure the media services that are available on the Smart TV. The list of media sources is defined by the Smart TV driver that is used and varies by make and model.



Each media service displays the **Default Name**, **Friendly Name**, and **Visible** properties.

- **Default Name:** The name that is provided by the Smart TV for the media service.
- **Friendly Name:** The name that is displayed in the Crestron Home user interface when the media service is visible.

- **Visible:** Indicates that the media service is visible in the Crestron Home Setup app and the Crestron Home user interface. To view the media service in the Crestron Home Setup app and the Crestron Home user interface, tap the check box next to the name of the media service.

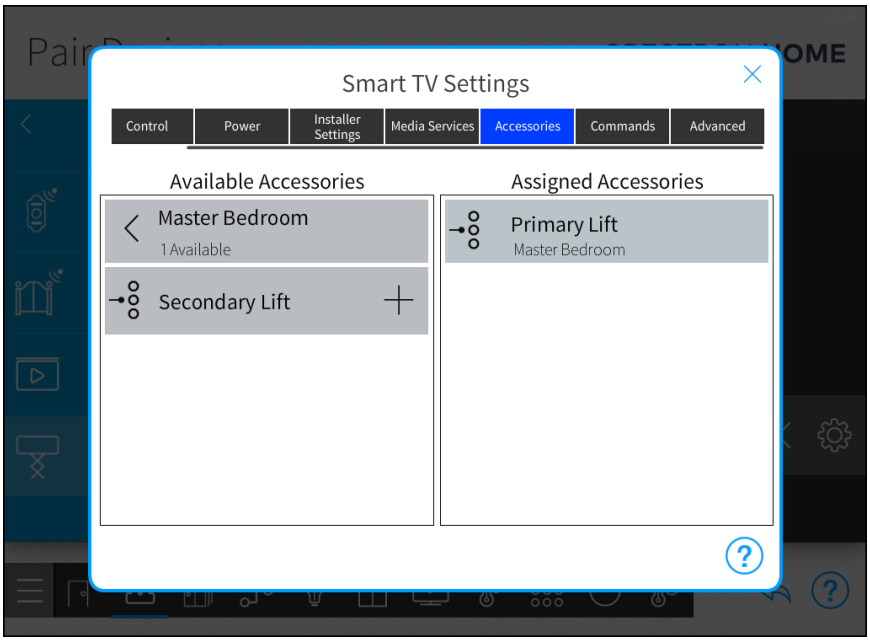
  NOTES:

  - The default visibility setting for all media devices is hidden. This prevents the Crestron Home user interface from displaying long lists of media services.
  - The default visibility setting will not be changed for Smart TVs that are already added to the system.
  - The Smart TV media service cannot be hidden. The Smart TV media service allows the Crestron Home user interface to control the Smart TV when:
    - Using unlisted sources such as the TV manufacturer's app store.
    - Viewing a media service that is hidden from the source list in the Crestron Home user interface. This can occur when the Crestron Home user interface is used to navigate the Smart TV's user interface and open a media service that is hidden.

Accessories

Tap the **Accessories** tab to display the Display Accessory list for the house and to assign Display Accessories to the Smart TV. Display Accessories are Screens and Lifts.

When a Display Accessory is assigned to the Smart TV, the display accessory's commands can be selected in the **Commands** tab with a User interface device (Crestron touch screens, TSR-310 handheld remotes, iOS® devices, and Android™ devices). For example, the lift or screen can be directly controlled from the User Interface device.



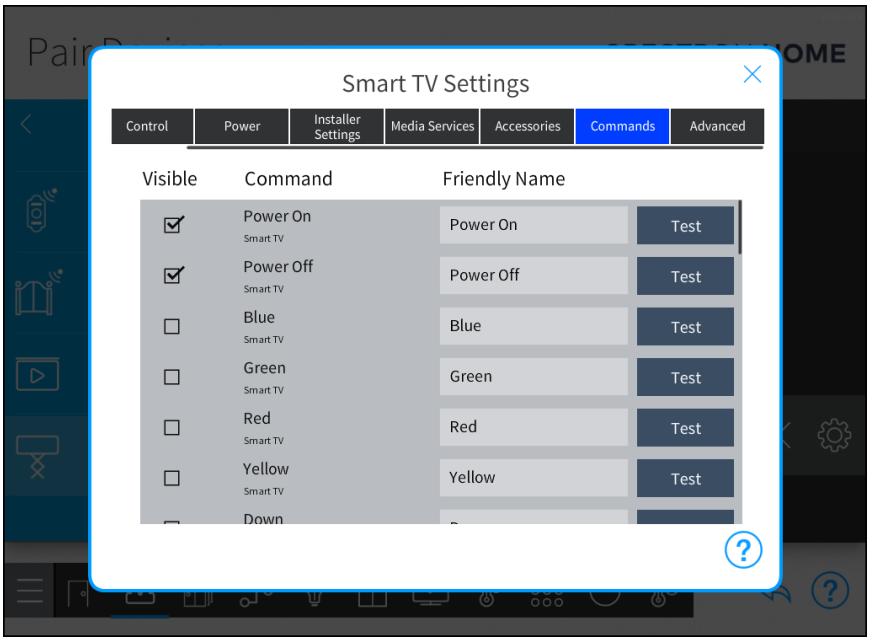
The Display Accessory list consists of the **Available Accessories** list and the **Assigned Accessories** list.

> **NOTE:** If the Display Accessory is not configured, a warning icon is shown next to the Display Accessory Name.

- **Available Accessories:** Displays the room name and number of Display Accessories in the room. To assign a Display Accessory to the Smart TV, tap the plus icon next to the Display Accessory to add it to the **Assigned Accessories** list.
- **Assigned Accessories:** Displays the Display Accessories that are assigned to the Smart TV. To remove a Display Accessory from the **Assigned Accessory** list, select the Display Accessory and then tap the back arrow (**<**).

Commands

Tap the **Commands** tab to display the Commands list for the Smart TV. The Commands list is defined by the Smart TV driver that is used and varies by make and model. Quick Actions that contain the Smart TV and Display Accessories are visible to the room are also included in the Commands list.



The Commands list displays the **Command**, **Friendly Name**, and **Visible** properties for each command. A **Test** button is also provided for each command.

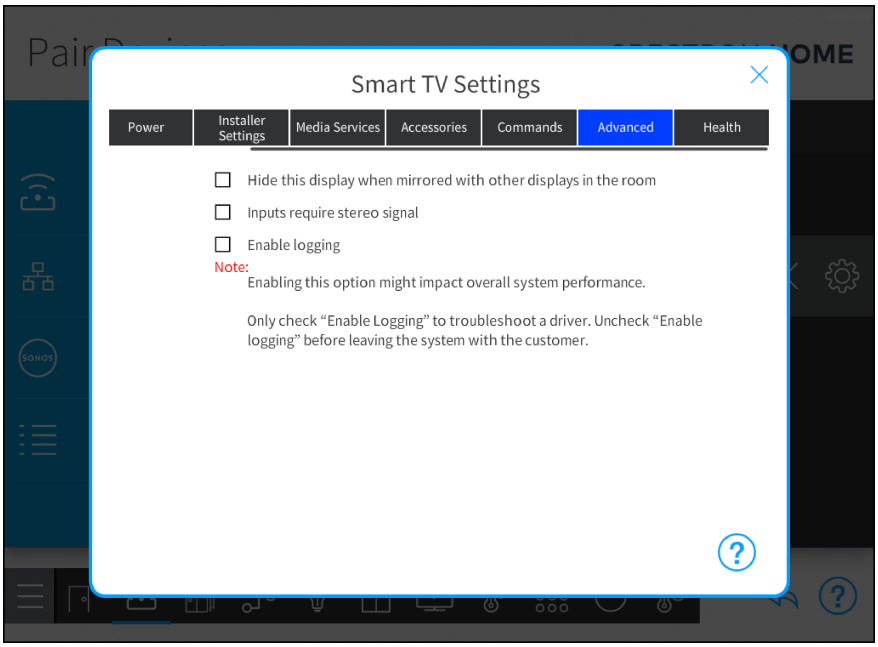
- **Command:** The name of the command that is provided by the Smart TV, display accessory, or Quick Action. The name of the device, Quick Action, or Display Accessory is also shown.
- **Friendly Name:** The name that is displayed in the Crestron Home user interface when the **Display Settings** menu is opened.
- **Visible:** Indicates that the command is visible in the Crestron Home user interface when the **Display Settings** menu is opened. To view the command in the **Display Settings** menu for the display, tap the check box next to the name of the command.

  > **NOTE:** The default visibility setting for all commands is hidden. This prevents the Crestron Home user interface from displaying long lists of commands.

- **Test:** To verify that the command functions properly, tap the **Test** button The Smart TV, or its accessories, must be turned on and a source must be routed to the Smart TV before testing the command.

Advanced

Tap the **Advanced** tab to display the advanced functions for the Smart TV.

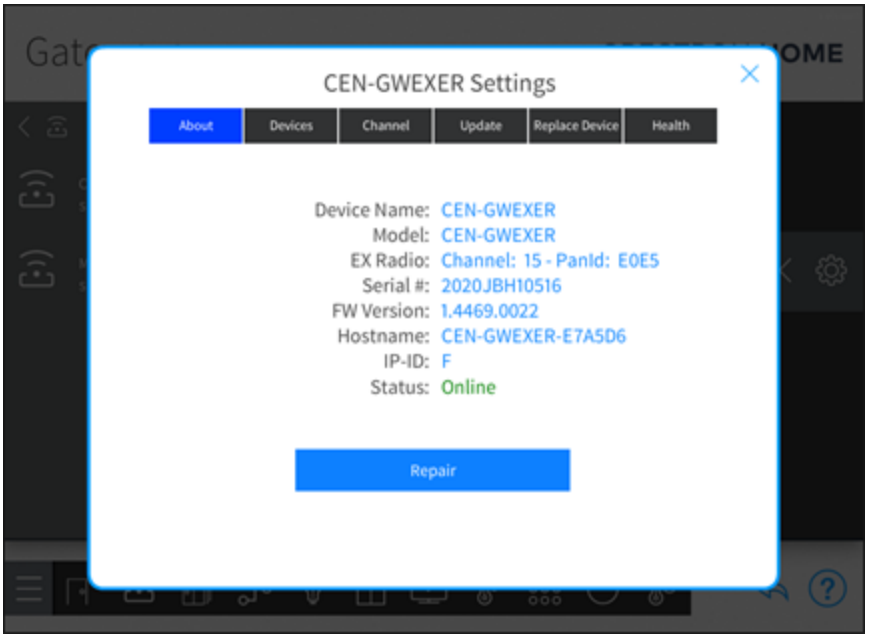


Select the **Hide this display** checkbox to hide the display on the Crestron Home User Interface when the display is mirrored with another display in the room. To configure mirrored displays, refer to Mirror Displays on page 380.

Gateway Settings

CEN-GWEXER Settings

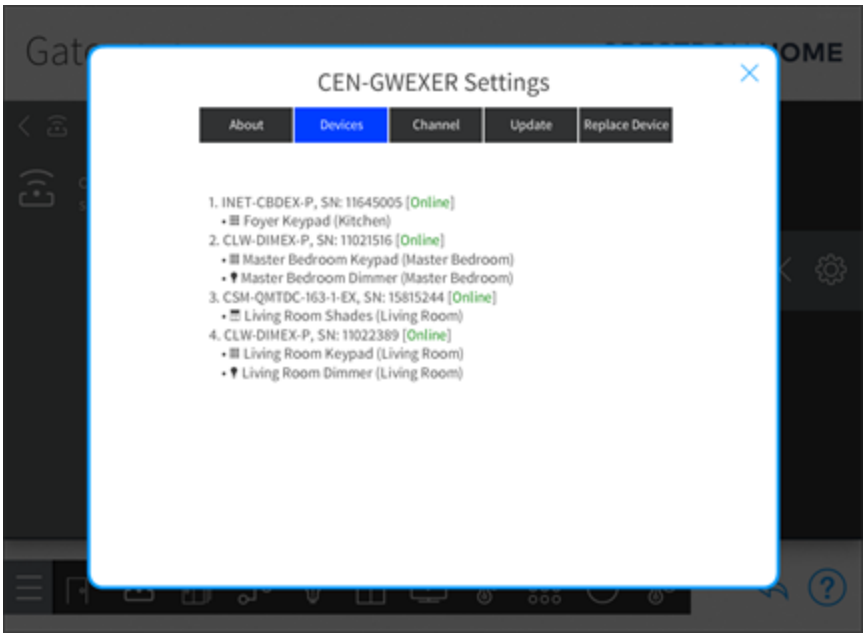
Tap the gear button next to the device name to display a Settings dialog box for the gateway. The **About** tab is selected and displays the device information.



PanId: The PanId is transferred to the new gateway when the Replace Device function is performed on a gateway. This ensures that wireless devices come online and communicate with the new gateway. If the old gateway is not removed, the PanId text turns red to indicate that there are duplicate PanIds in the system. Duplicate PanIds cannot exist in the same system. Remove the old gateway from the system.

Devices

Use the **Devices** tab to view the devices that are acquired to the gateway. The list of devices include the device name, serial number, device type, room, and network status for each device.



Channel

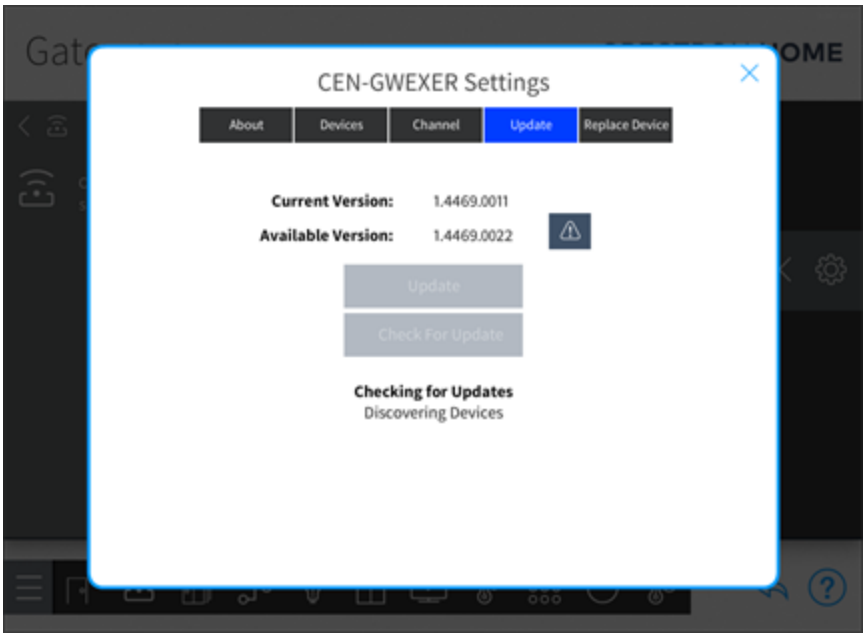
Use the **Channel** tab to view and configure the RF channel assigned to the gateway.



- **Current Gateway Channel:** Displays the current gateway channel.
- **Set Gateway Channel:** To change the gateway channel, select a channel and then select **Set Channel**.

Update

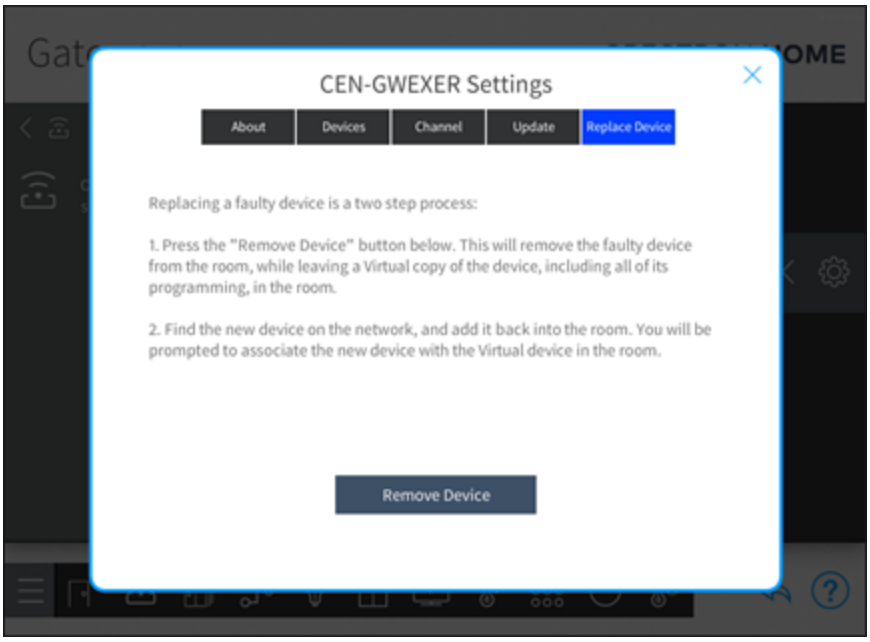
Use the **Update** tab to update the device firmware.



- **Current Version:** Displays the current firmware version for the gateway.
- **Available Version:** Displays the available firmware version for the gateway.
- **Update:** If a firmware update is available, tap **Update** to update the firmware.
- **Check For Update:** Tap the **Check For Update** button to search for firmware updates for the gateway.

Replace Device

Use the **Replace Device** tab to replace the device and retain the current settings.



CEN-GW1 Settings

Tap the gear button next to the device name to display a Settings dialog box for the gateway. The **About** tab is selected and displays the device information. The Settings dialog box has additional tabs for **Devices**, **Channel**, **Update**, and **Replace Device**.

Configure the CEN-GW1 using the web interface. To configure, select **Web Configuration**.



PanId: The PanId is transferred to the new gateway when the Replace Device function is performed on a gateway. This ensures that wireless devices come online and communicate with the new gateway. If the old gateway is not removed, the PanId text turns red to indicate that there are duplicate PanIds in the system. Duplicate PanIds cannot exist in the same system. Remove the old gateway from the system.

Devices

Use the **Devices** tab to view the devices that are acquired to the gateway. The list of devices include the device name, serial number, device type, room, and network status for each device.



Channel

Use the **Channel** tab to view and configure the RF channel assigned to the gateway.



Current Gateway Channel: Displays the current channel for the selected gateway.

To set the infiNET EX radio channel:

1. Select **EX** from the **Selected Radio** drop-down menu.
2. Select a channel from the channel list.
3. Select **Set Channel**.



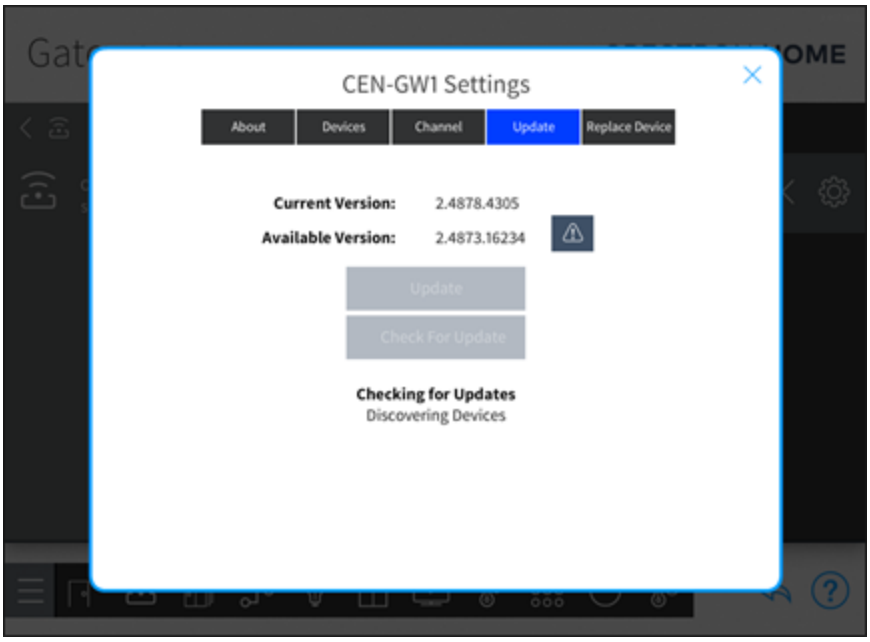
To scan the wireless network and automatically assign the best RF channel, select **Auto Select Channel**.

To manually set the SG radio channel:

1. Select **SG** from the **Selected Radio** drop-down menu.
2. Select a channel from the channel list.
3. Select **Set Channel**.

Update

Use the **Update** tab to update the device firmware.



- **Current Version:** Displays the current firmware version for the gateway.
- **Available Version:** Displays the available firmware version for the gateway.
- **Update:** If a firmware update is available, tap **Update** to update the firmware.
- **Check For Update:** Tap the **Check For Update** button to search for firmware updates for the gateway.

Replace Device

Use the **Replace Device** tab to replace the device and retain the current settings.



DIN-DALI-2 Settings

Tap the gear button next to the device name to display a Settings dialog box for the DIN-DALI-2. The **About** tab is selected and displays the device information. The Settings dialog box has additional tabs for **Devices**, **Update**, and **Replace Device**.

> **NOTE:** The Cresnet® communication port on the DIN-DALI-2 cannot be used in the Crestron Home system. Do not make connections to this port.

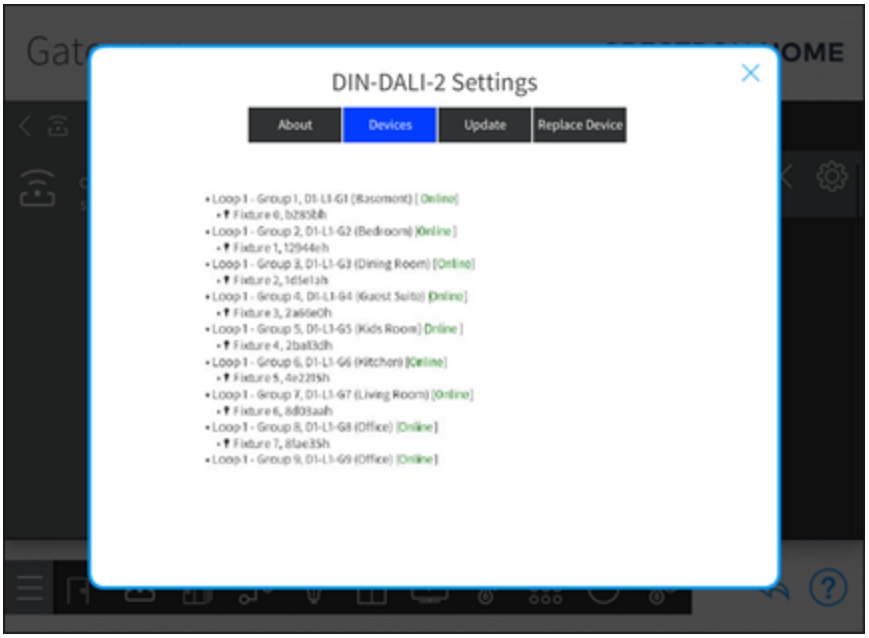


The DALI configuration stored on the DIN-DALI-2 is imported into the Crestron Home system when the DIN-DALI-2 is added. If there were changes to the DALI configuration, tap the **Reload Configuration** button.

Devices

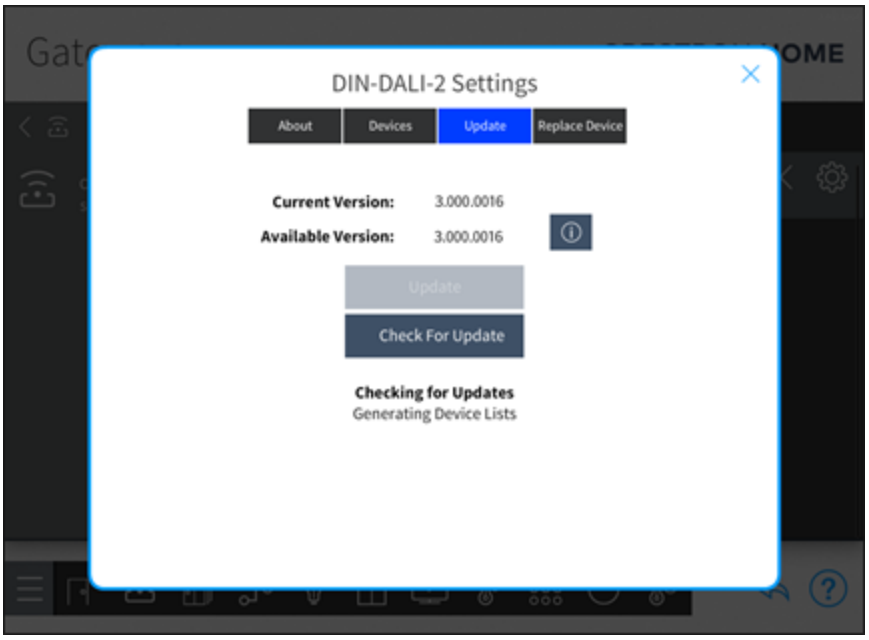
Tap the **Devices** tab to view the loads that are connected to the DIN-DALI-2. The list includes the DALI loop and group number and the group name and room that is assigned in the Crestron Home Setup app. It also displays the status for each group. The list also includes the short and long fixture identifiers and the load name.

> **NOTE:** The fixture number starts at 0.



Update

Use the **Update** tab to update the device firmware.



- **Current Version:** Displays the current firmware version for the gateway.
- **Available Version:** Displays the available firmware version for the gateway.
- **Update:** If a firmware update is available, tap **Update** to update the firmware.
- **Check For Update:** Tap the **Check For Update** button to search for firmware updates for the gateway.

Replace Device

Tap the **Replace Device** tab to replace the DIN-DALI-2.

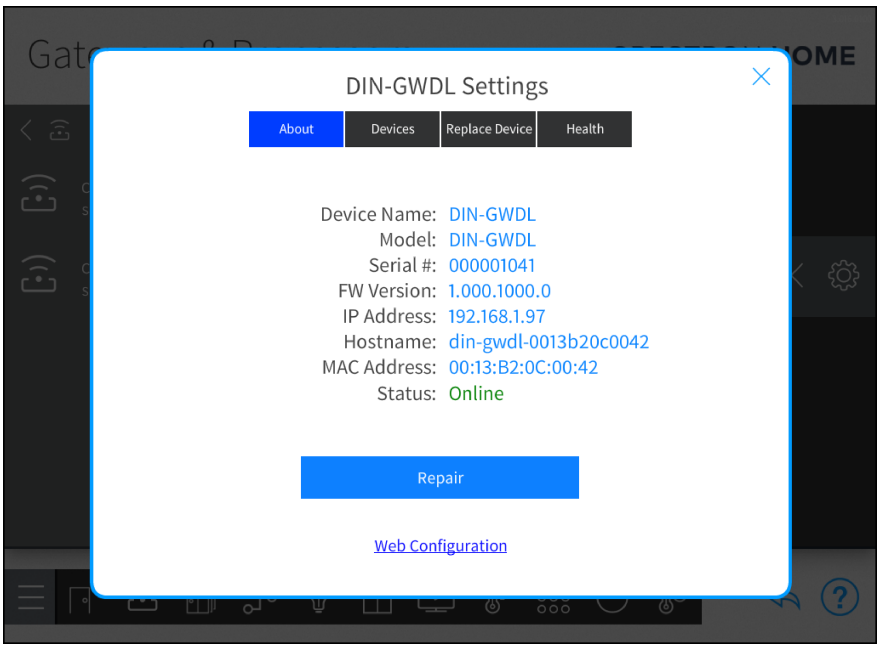
> **NOTE:** The DALI load settings must be restored on the replacement DIN-DALI-2 prior to adding it to the system. The replacement DIN-DALI-2 must be connected to the same DALI loops as the original device.



DIN-GWDL Settings

Tap the gear button next to the device name to display a Settings dialog box for the gateway.

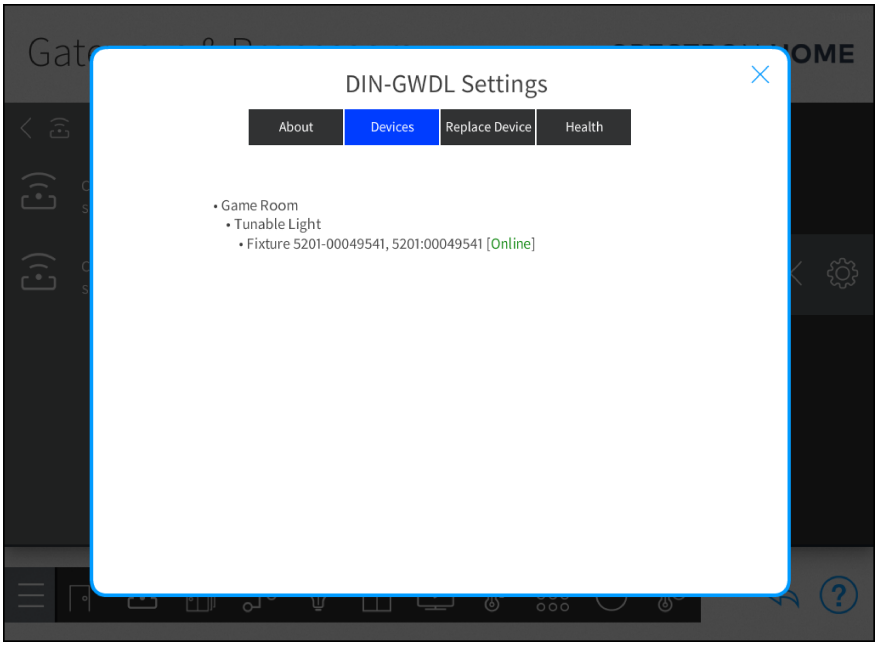
Configure the DIN-GWDL using the web interface. To configure, select **Web Configuration**.



Devices

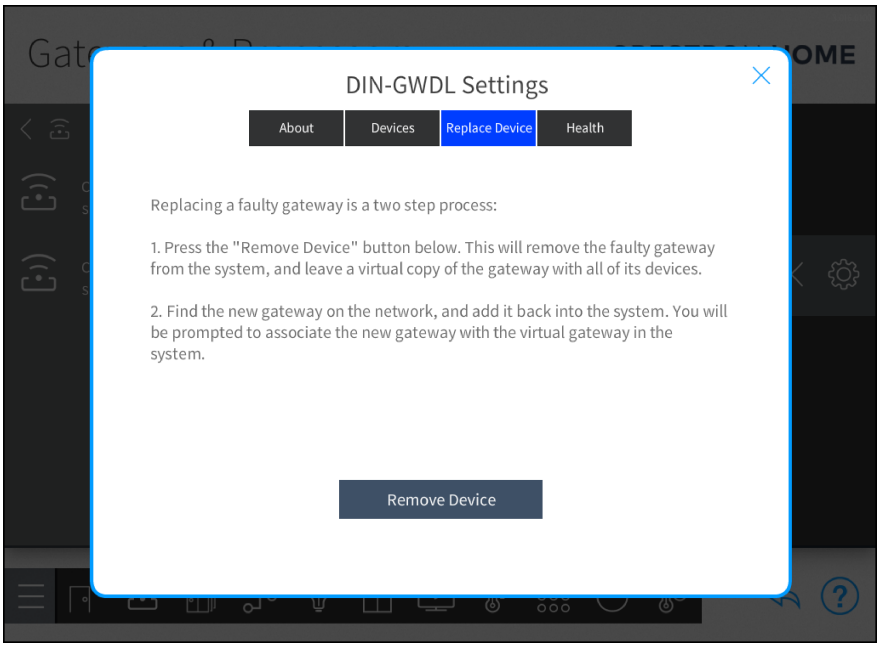
Use the **Devices** tab to view the devices that are acquired to the gateway. The list of devices include the device name, serial number, device type, room, and network status for each device.

> **NOTE:** If a device does not respond during the scan, it will appear to be offline. This may occur in large lighting systems or with light fixtures that are slow to respond. To verify the status, check the device settings for the fixture or fixture group.



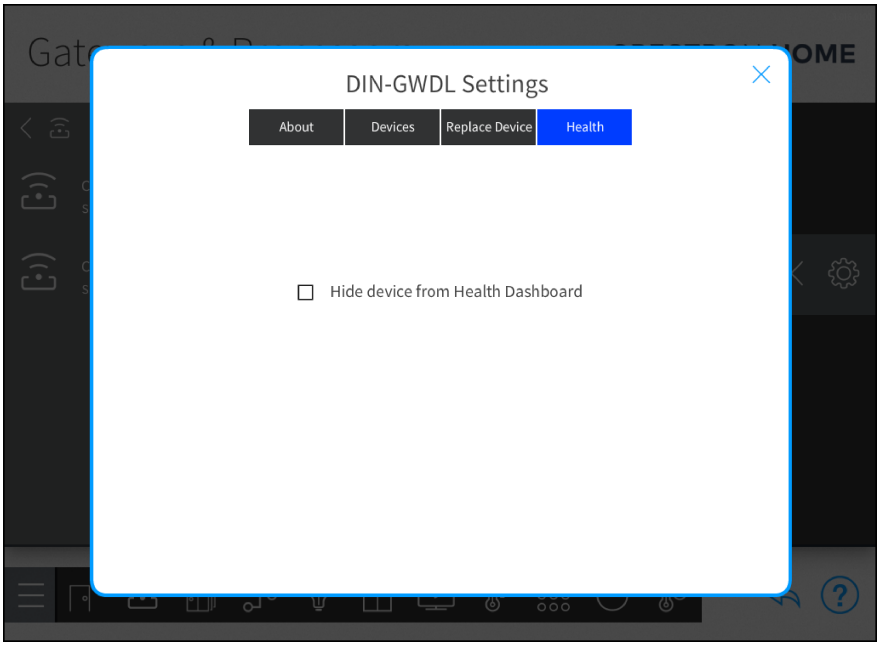
Replace Device

Use the **Replace Device** tab to replace the device and retain the current settings.



Health

Use the **Health** tab to configure the Health Dashboard settings. For details, refer to Health Settings on page 1380.

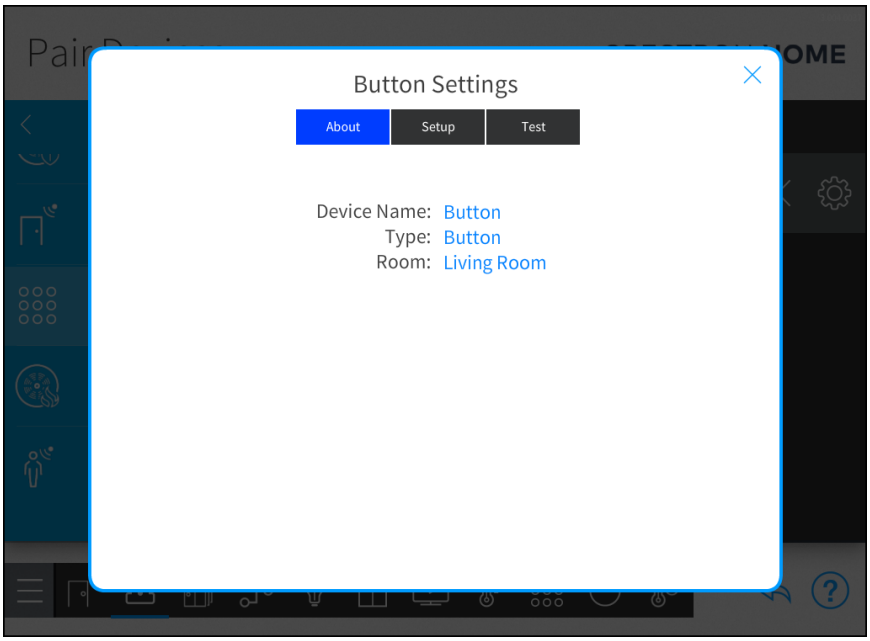


Input Device Settings

Button Input Device

Tap the gear button next to the device name to display a Settings dialog box for the button device. The **About** tab is selected and displays the device information.

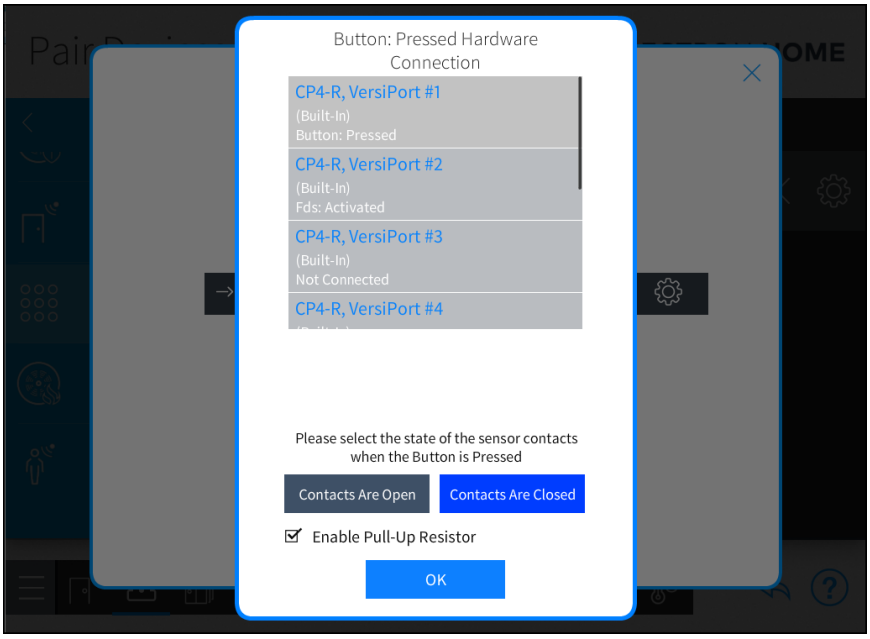
> **NOTE:** The button device must be installed in the room and wired to a digital input that is part of the system to function properly. For more information, refer to the device's documentation.



Setup

Tap the **Setup** tab to configure the digital input controls.

1. Tap the gear button for the digital input.
2. Select the hardware connection where the relay is connected and then tap **OK**.

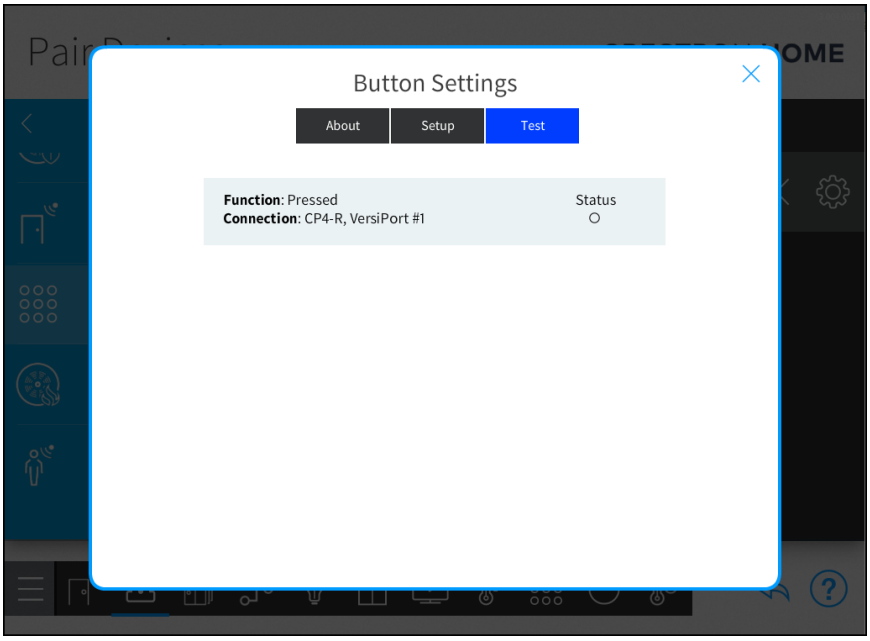


3. Select **Contacts Are Open** or **Contacts Are Closed** to select the state of the sensor contacts when the button is pressed.
4. Select the **Enable Pull-Up Resistor** check box to enable the pull-up resistor.

Test

Tap the **Test** tab to view the status device.

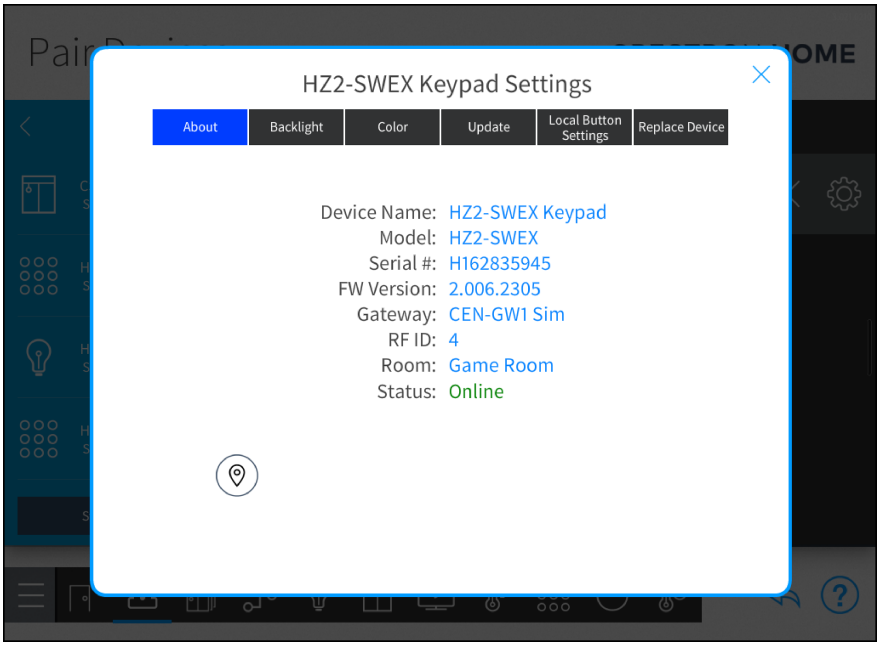
> **NOTE:** The hardware connection(s) must be configured prior to testing.



Keypad Settings

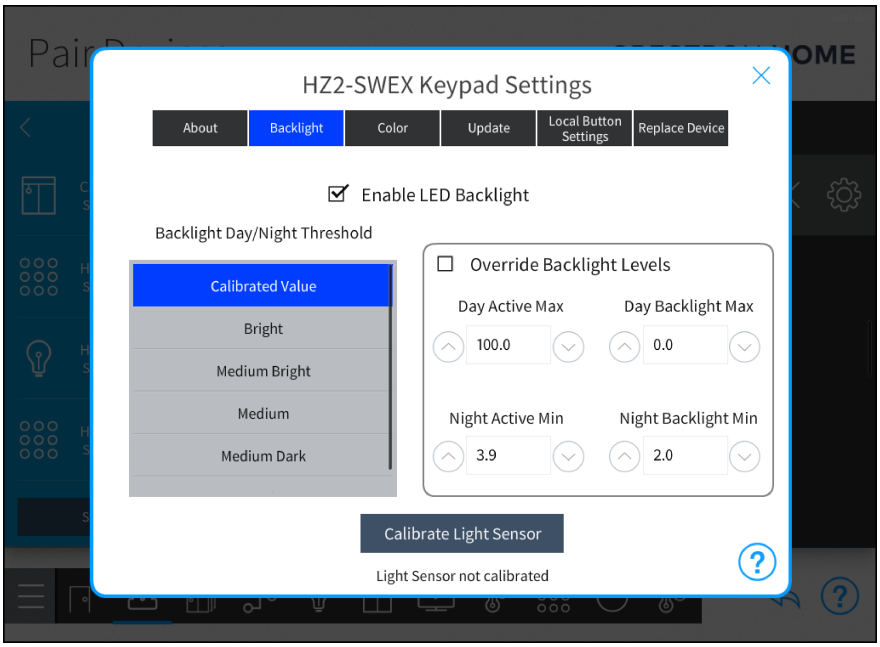
Horizon Keypads

Tap the gear button next to the device name to display a Settings dialog box for the keypad. The **About** tab is selected and displays the device information.



Backlight

Tap the **Backlight** tab to configure the LED backlight for the buttons.



Turn on the LED Backlight

To turn on the LED backlight for the buttons, select **Enable LED Backlight**.

> **NOTES:**
>
> - To assign the Local (default) LED color, follow the instructions provided for the device.
> - To assign custom LED colors, refer toCustom LED Colors.
> - Previous generation Horizon EX devices and all Horizon 2 devices will have the LED backlight enabled by default. The revious generation HZ-KPCN did not have the LED backlight enabled by default.

Set the Backlight Day/Night Threshold

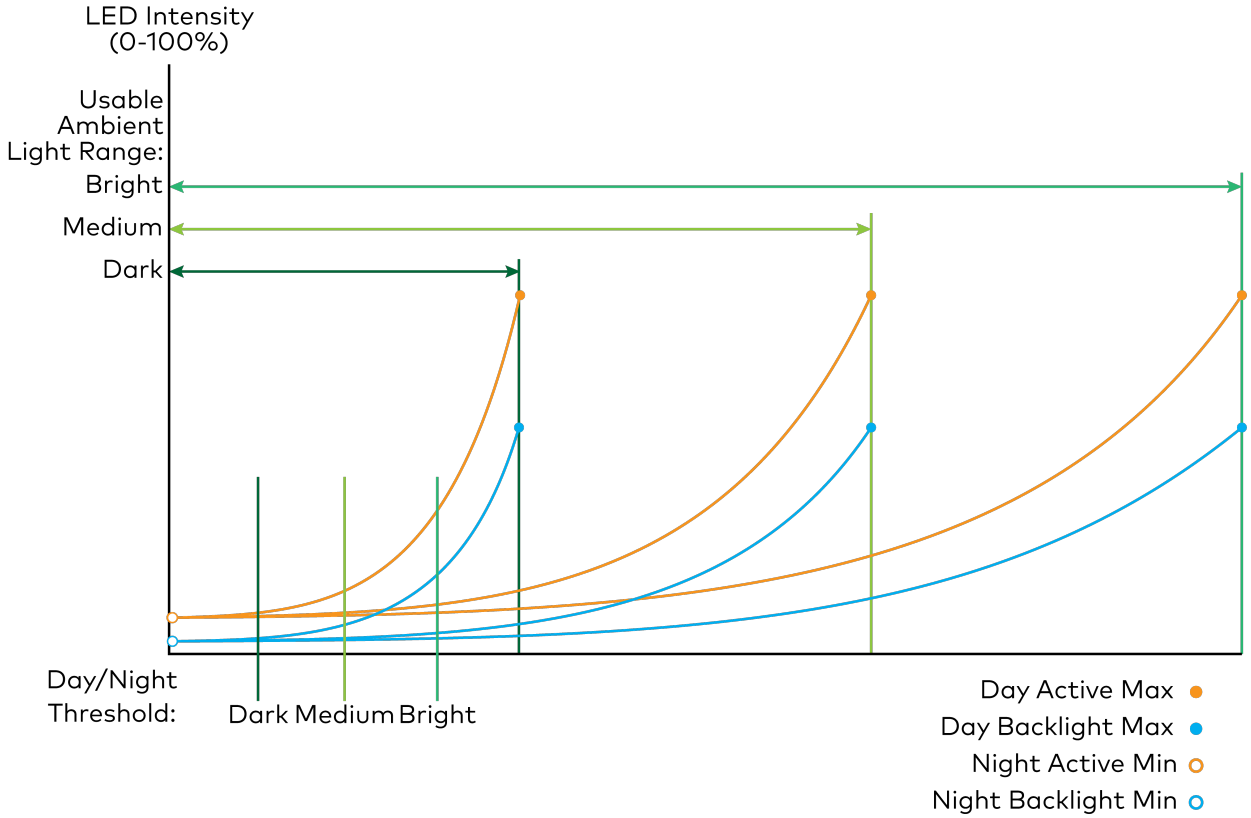
The light sensor on the keypad monitors the ambient light level in the room in order to adjust the brightness of the LEDs. The **Backlight Day/Night Threshold** setting controls when the keypad switches between **Day** and **Night** mode and the scaled full range of the ambient light sensor.

Day mode is defined as when the room is brighter than the **Day/Night Threshold** and **Night** mode is defined as when the room is darker than the **Day/Night Threshold**. The LED backlight will dim continuously throughout the full scaled range of the ambient light sensor regardless of **Day** and **Night** modes to ensure readability and minimize obtrusiveness. The purpose of **Day** and **Night** modes is to allow for a backlight or active feedback to be a different color or enabled/disabled depending on **Day** vs **Night**modes to further enhance the user experience. By default, the active feedback is disabled for day mode to improve text readability in direct sunlight.

Setting the **Backlight Day/Night Threshold** to **Bright** makes the keypad switch between **Day** and **Night**mode when a higher ambient light level is detected. This setting also increases the scaled full range of the ambient light sensor causing the LEDs to go to full brightness when it is brighter in the room. Because the ambient light sensor is downward facing, this setting is ideal when the room has very light-colored walls and floors. When set to**Dark**, the keypad switches between **Day** and **Night**mode when a lower ambient light level is detected. This setting also decreases the scaled full range of the ambient light sensor, causing the LEDs to go to full brightness when it is darker in the room. Because the ambient light sensor is downward facing, this setting is ideal when the room has very dark colored walls and floors. You can also choose to use the **Calibrated Value** which automatically detects the **Backlight Day/Night Threshold** and scaled full range of the ambient light sensor. If you choose the **Calibrated Value**, you must calibrate the ambient light sensor as per theCalibrate the Light Sensor on page 1243section.

Below is a graphical representation of how the Backlight Day/Night Threshold setting affects the Day/Night Threshold and scaled full range of the ambient light sensor.

LED Backlight Threshold Settings



Override the LED Backlight Levels

To override the default LED backlight levels:

1. Select **Override Backlight Levels**.
2. Set the LED backlight levels:

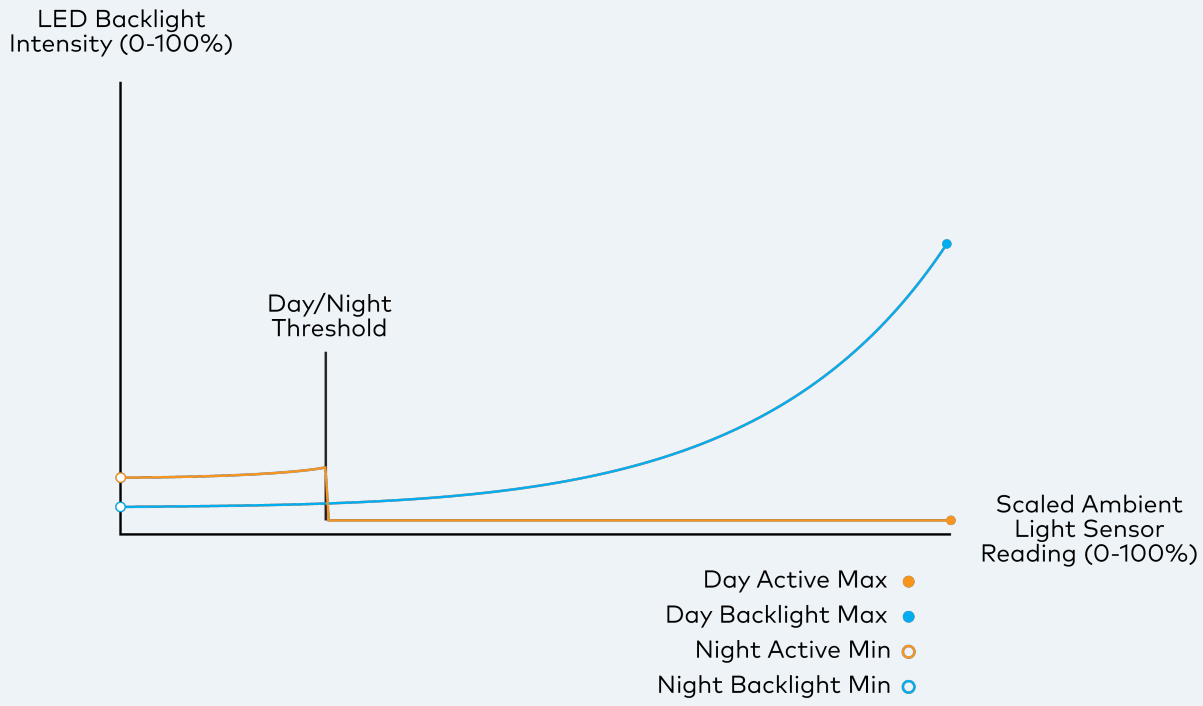
   To enter the value manually, select the associated text box and then enter a value. If an invalid value is entered, a red outline is displayed around the field.

   To set the value with the up and down arrows, tap an arrow to change the value in 0.1% increments, or tap and hold the arrow to change the values in 1% increments.

   - **Day Active Max:** The LED backlight level when the button feedback is on and keypad is in **Day** mode. The default value is **100.0**.
   - **Night Active Min:** The LED backlight level when the button feedback is on and keypad is in **Night** mode. The default value is **3.9**.
   - **Day Backlight Max:** The LED backlight level when there is no button feedback and keypad is in **Day** mode. The default value is **0.0**.
   - **Night Backlight:** The LED backlight level when there is no button feedback and keypad is in **Night** mode. The default value is **2.0**.

NOTE: If any of these values are set to zero, the LED intensity will maintain the same Active/Backlight Min or Max ratio, and then go immediately to zero at the Day/Night Threshold. Observe this in the graph below which is also representative of the default behavior of the device.

LED Backlight Intensity vs 0-100% Scaled Ambient Light Sensor Reading



Calibrate the Light Sensor

Calibrate the ambient light sensor if **Calibrated Value** is selected for the **Backlight Day/Night Threshold**. When performing the calibration, the faceplate and trim should be installed on the Horizon keypad before starting the calibration process. The room should have all of the lights on their brightest setting and the device should be free of direct sunlight.

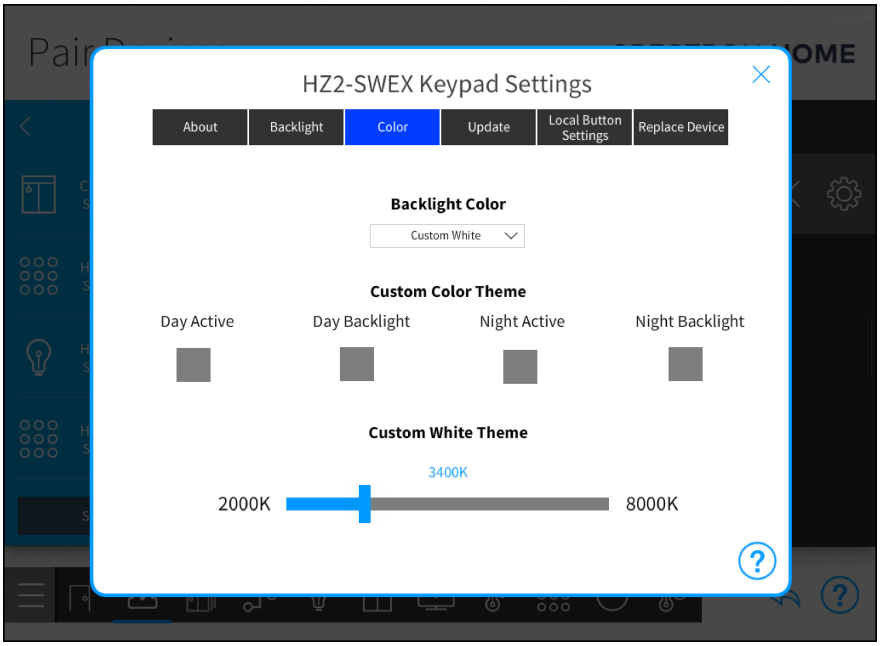
To calibrate the light sensor:

1. Install the faceplate on the Horizon keypad.
2. Turn all lights in the room to their brightest levels.
3. Make sure the keypad is free of direct sunlight.
4. Select **Calibrate Light Sensor**. The backlight on the device flashes while the calibration is running. While the calibration process is running, avoid blocking light from reaching the sensor on the bottom of the keypad.

Color

> **NOTE:** The **Color** tab is available on Horizon® 2 keypads.

Tap the **Color** tab to configure the LED backlight color options for the buttons.



Backlight Color

Use the **Backlight Color** drop-down menu to select the local color theme for the keypad. The **Backlight Color** overrides the color theme selected via the local setup button on the keypad and is overridden via the local setup button on the keypad.

The **Backlight Color** drop-down menu provides selection for **Custom White**, **Neutral White**, **Cool White**, **Circadian**, **Custom Color**, **Dim to Warm**, and a variety of individual colors.

The **Dim to Warm** option adjusts the white color temperature of the LED backlight progressively from cool white (6500K) to warm white (2000K). The LED backlights displays cool white when the ambient light sensor detects the most amount of light and warm white when the ambient light sensor detects the least amount of light.

Custom Color Theme

Assign a separate color for the **Day Active**, **Day Backlight**, **Night Active**, and **Night Backlight** operating modes.

To use the **Custom Color Theme**, select **Custom Color** from the **Backlight Color** drop-down menu.

- **Day mode:** When the ambient light sensor detects light above the **Backlight Day/Night Threshold**.
- **Night mode:** When the ambient light sensor detects light below the **Backlight Day/Night Threshold**.
- **Active feedback:** When the device is providing active feedback.
- **Backlight feedback:** When there is no active feedback.

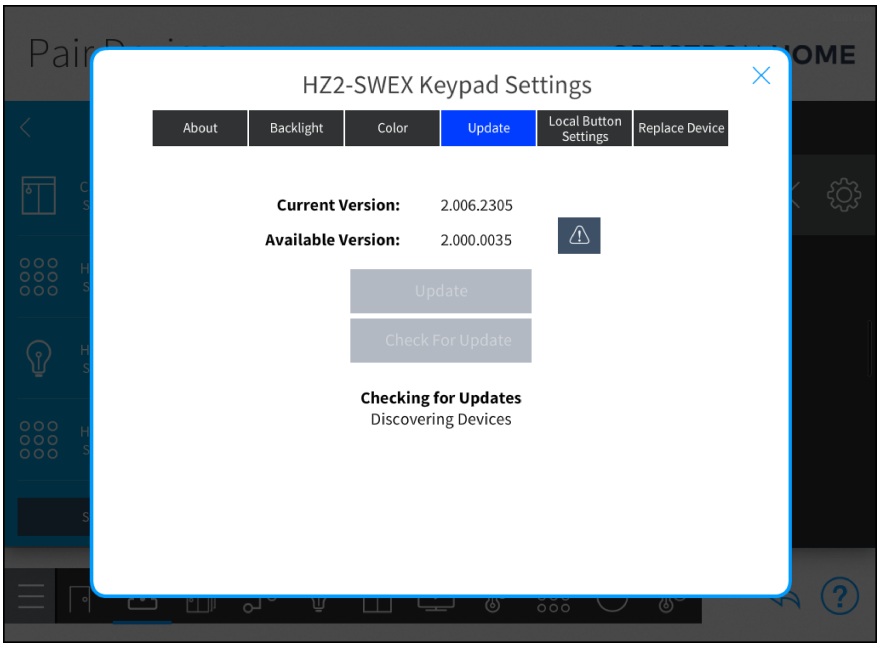
Custom White Theme

Assign a specific color temperture for the LED backlight.

To use a specific color temperature, select Custom White from the **Backlight Color** drop-down menu. The color temperture can be set between 2000K (warm white) and 8000K (cool white).

Update

Use the **Update** tab to update the device firmware.

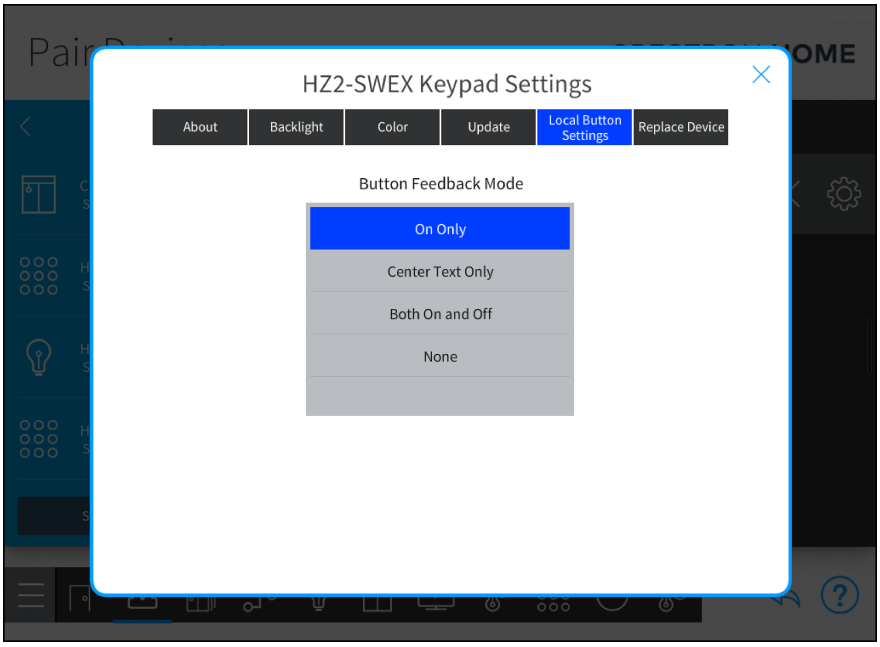


- **Current Version:** Displays the current firmware version for the gateway.
- **Available Version:** Displays the available firmware version for the gateway.

- **Update:** If a firmware update is available, tap **Update** to update the firmware.
- **Check For Update:** Tap the **Check For Update** button to search for firmware updates for the gateway.

Local Button Settings

Tap the **Local Button Settings** tab to configure how the LED feedback will respond for the local button if local button functionality is being used.

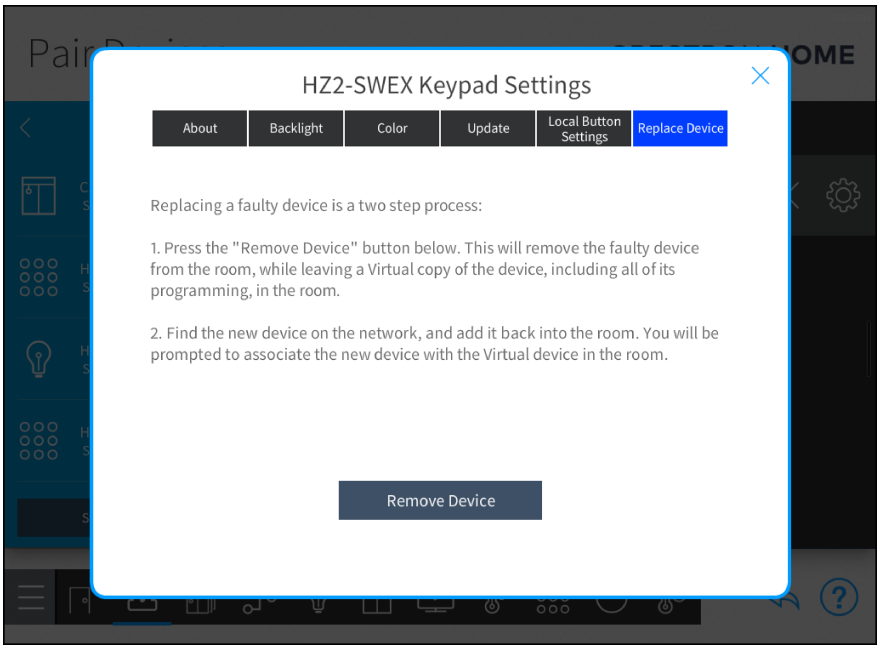


Set the **Button Feedback Mode**:

- **On Only:** The LED lights when the scene is on.
- **Center Text Only:** The LED for the center of a rocker button lights when the scene is on.
- **Both On and Off:** The LED on either end of a rocker button lights when the scene is on. The LED on the opposite side of the rocker turns off.
- **None:** The LED does not light when the scene is on or off.

Replace Device

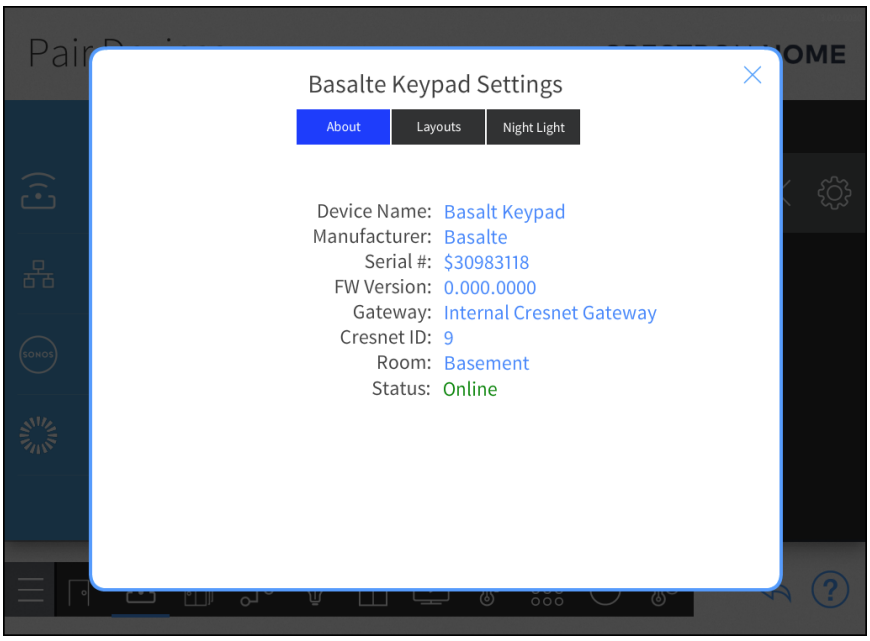
Tap the **Replace Device** tab to replace the keypad.



Third-Party Keypad Settings

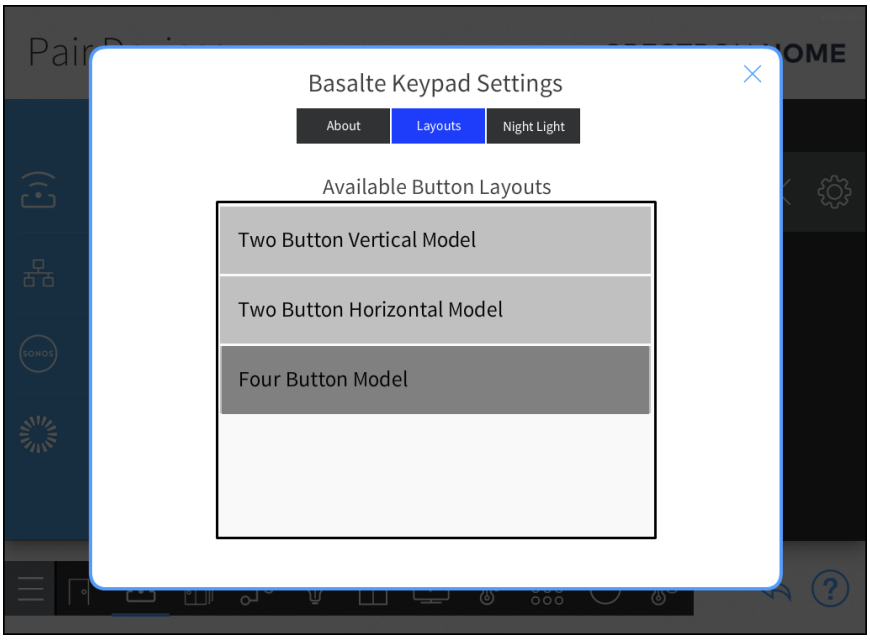
Configure Basalte Keypads

Tap the gear button next to the device name to display a Settings dialog box for the device. The **About** tab is selected and displays the device information.



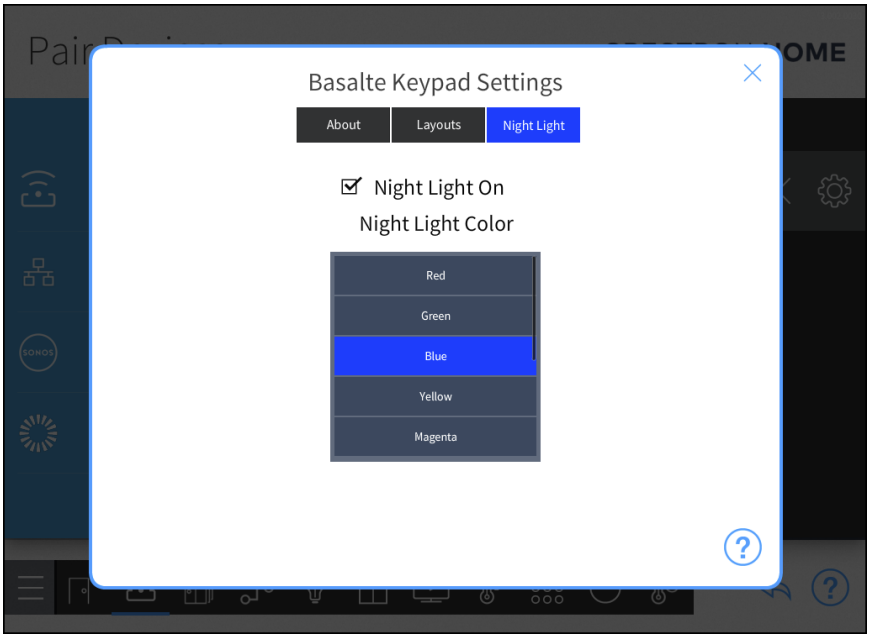
Layouts

Tap the **Layouts** tab to configure the keypad layout. Select the number of buttons that are on the keypad.



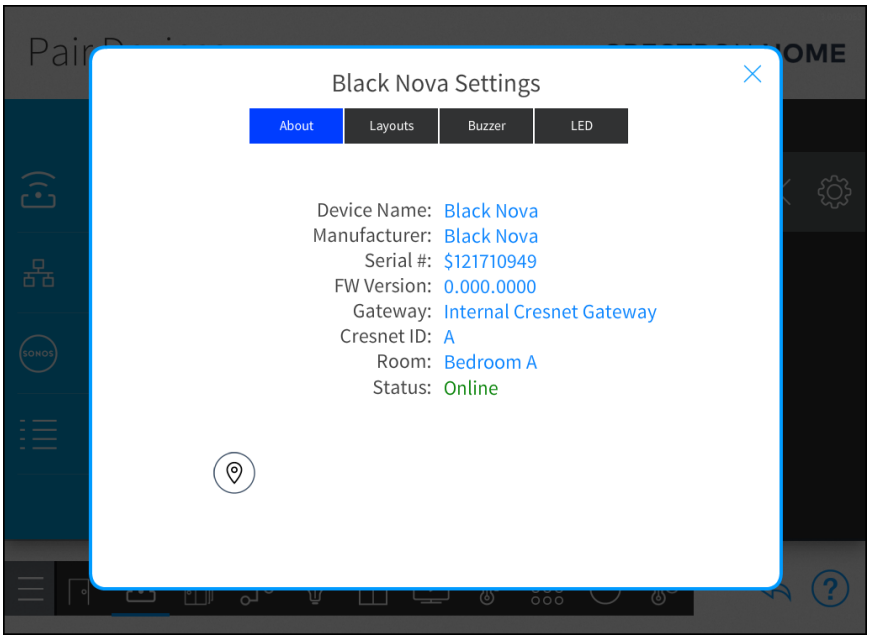
Night Light

Tap the **Night Light** tab to configure the night light. Select the **Night Light On** check box to enable the light and then select a color from the **Night Light Color** list.



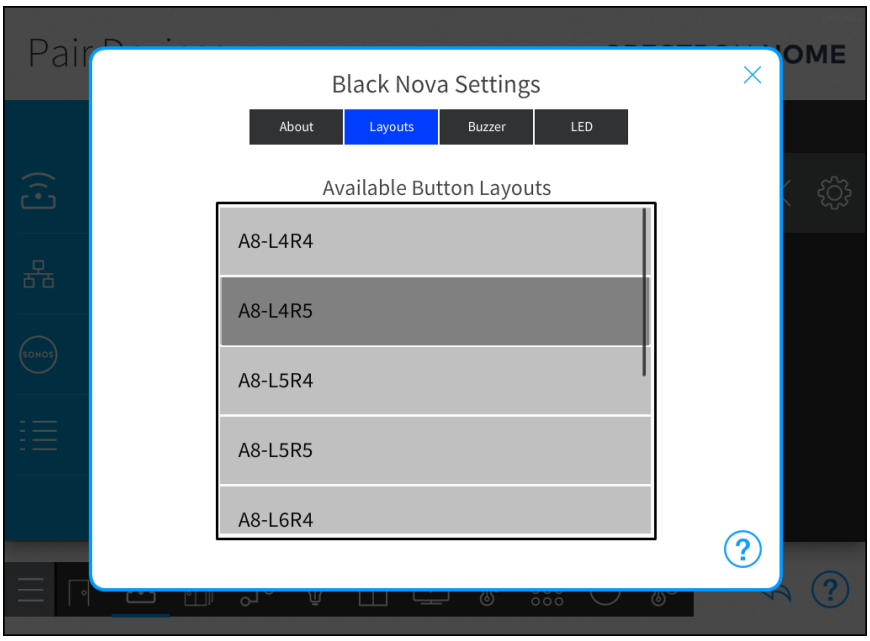
Configure Black Nova Keypads

Tap the gear button next to the device name to display a Settings dialog box for the device. The **About** tab is selected and displays the device information.

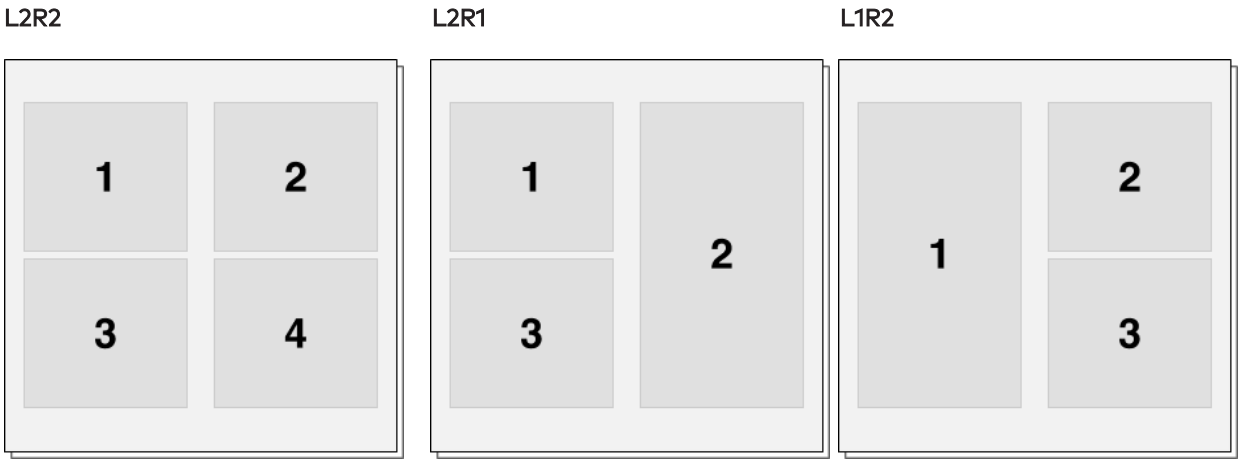


Layouts

Tap the **Layouts** tab to configure the keypad layout. Select the number of buttons that are on the keypad.

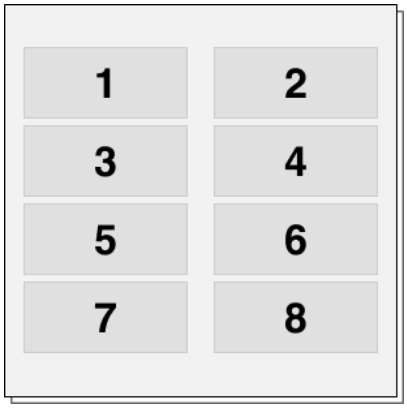


Alba 2-Button Layout

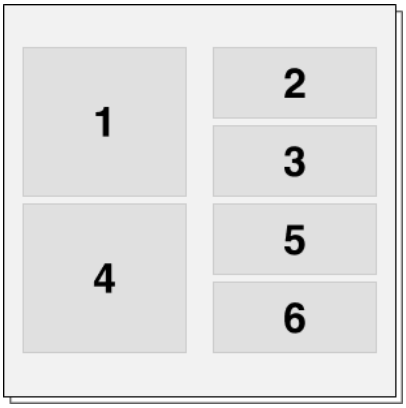


Alba 4-Button Layout

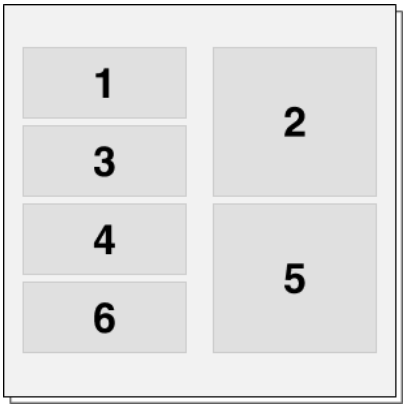
L4R4



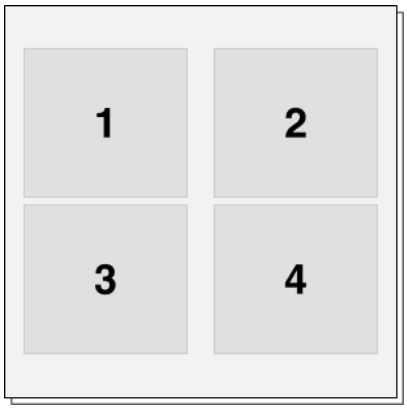
L2R4



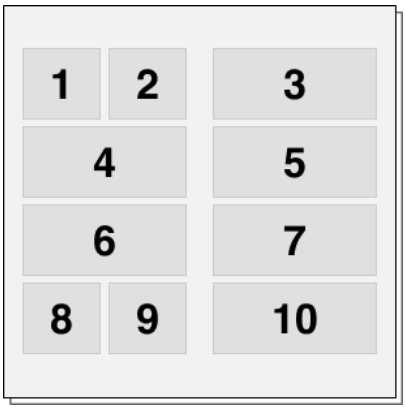
L4R2



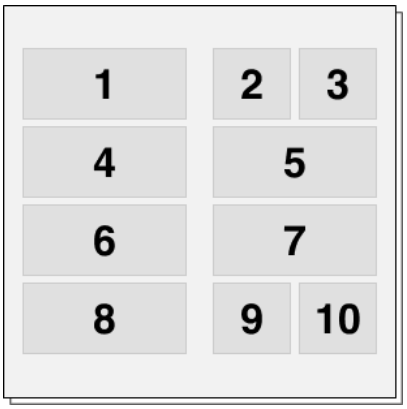
L2R2



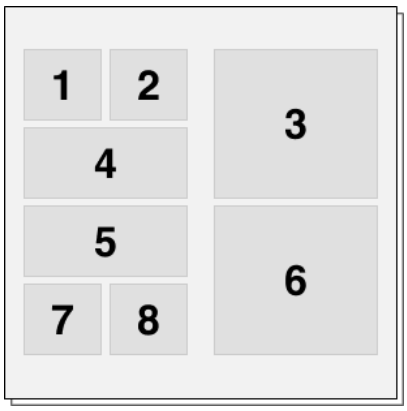
L6R4



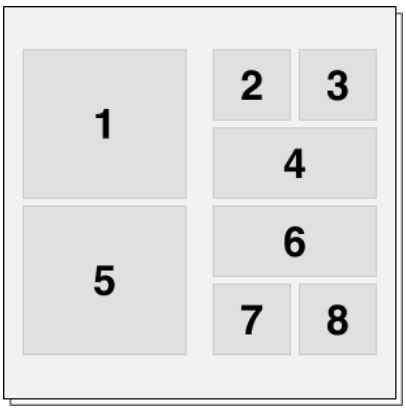
L4R6



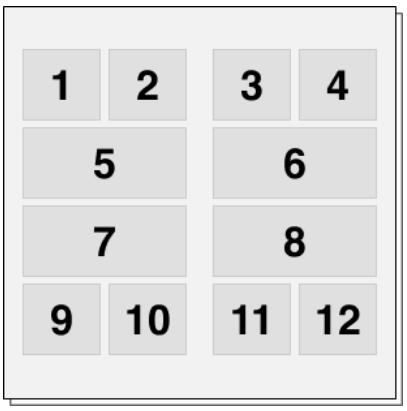
L6R2



L2R6

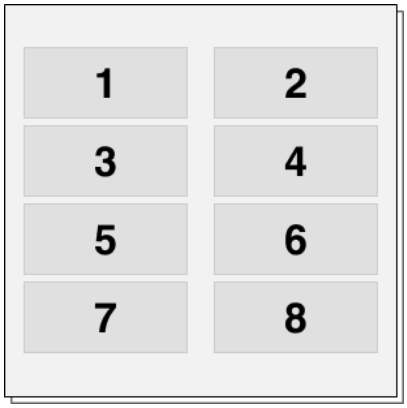


L6R6

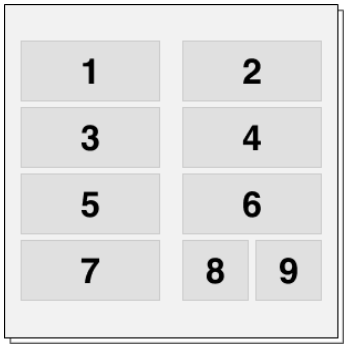


Alba 8-Button Layout

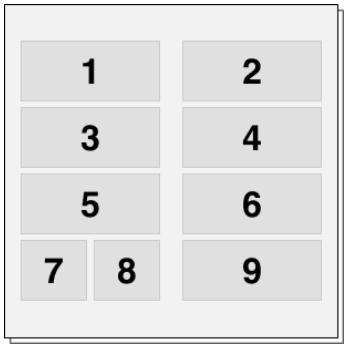
L4R4



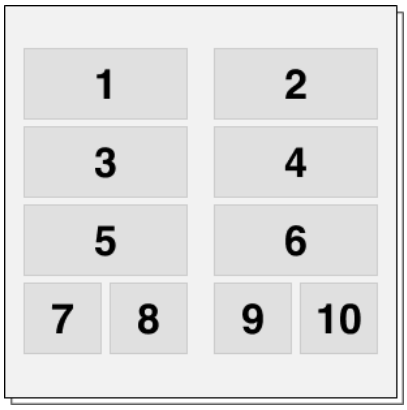
L4R5



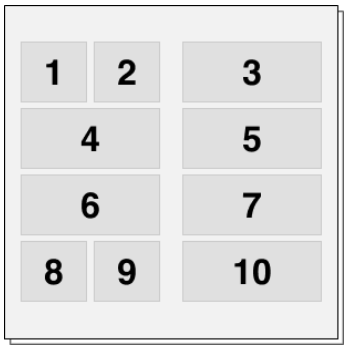
L5R4



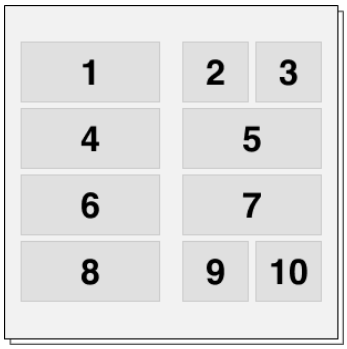
L5R5



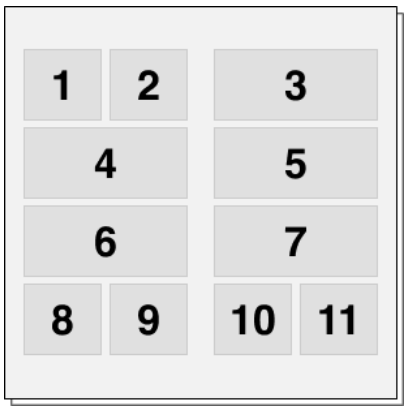
L6R4



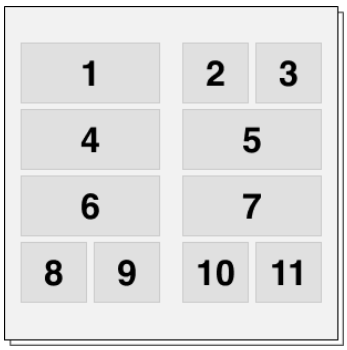
L4R6



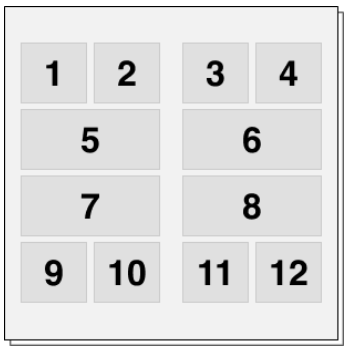
A8-L6R5



L5R6

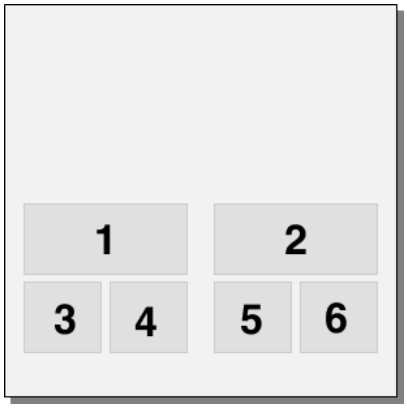


L6R6

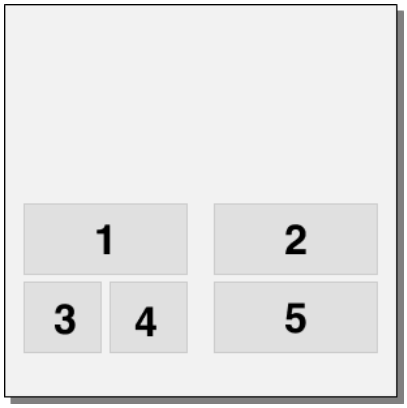


Alba M1

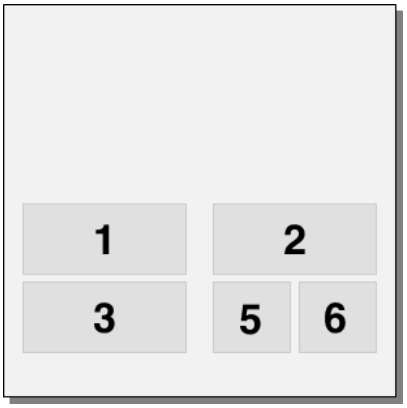
L3R3



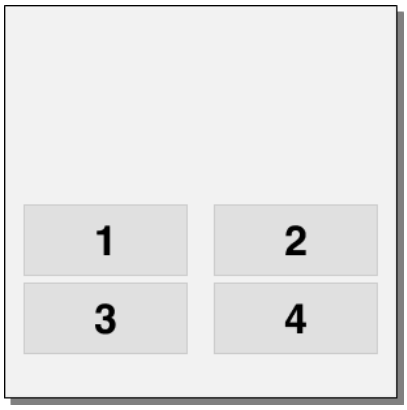
L3R2



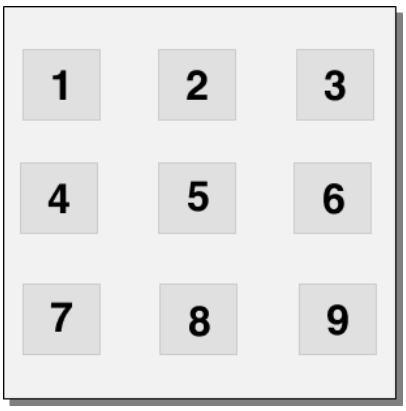
L2R3



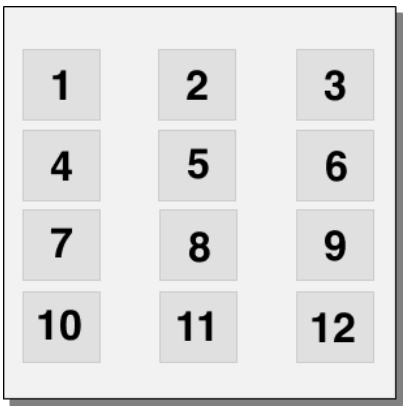
L2R2



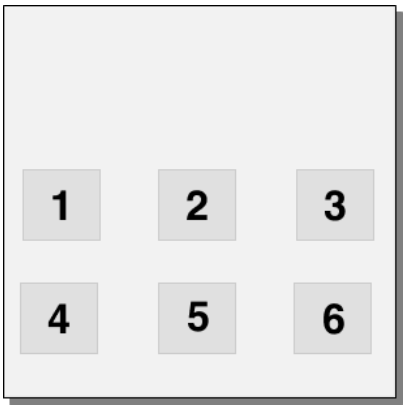
Aria 9



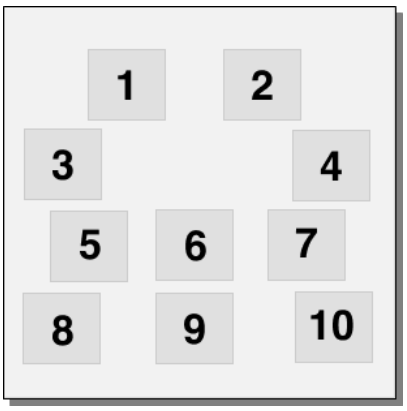
Aria 12



Aria M1

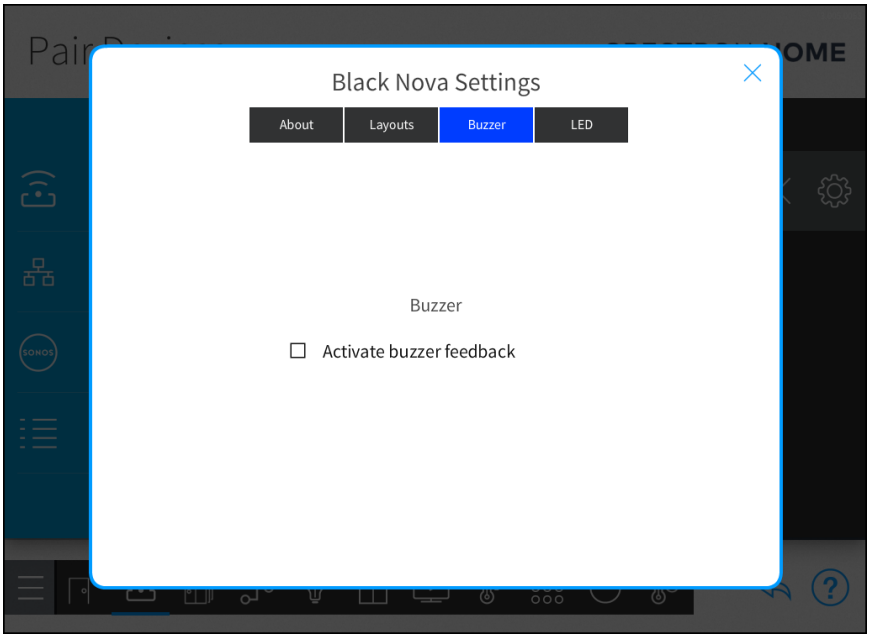


Aria TT



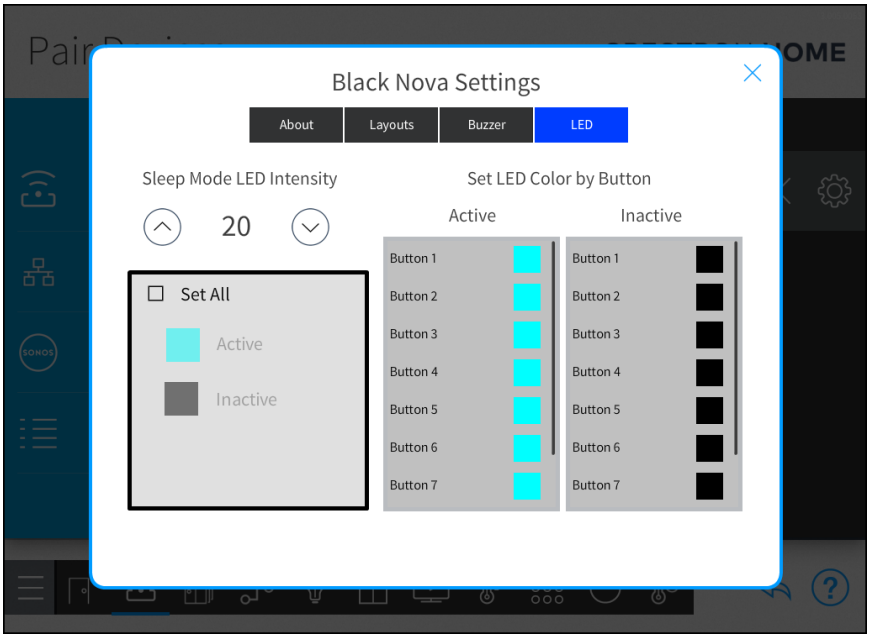
Buzzer

Tap the **Buzzer** tab to activate the buzzer feedback for the keypad. To use the buzzer, select **Activate buzzer feedback**.



LED

Tap the **LED** tab to configure the LEDs.



Set the Sleep Mode LED Intensity

To set the LED brightness when the keypad enters Sleep mode, select an LED intensity between 1 and 100.

Set the Color for all LEDs

1. Select the **Set All** check box.
2. Tap **Active** or **Inactive** to set the LED color for the Active or Inactive LED state.
3. Select the color.

   > **NOTE:** The Hue must be set prior to setting the color.

4. Tap **OK**.

Set the Color for Individual LEDs

1. Deselect the **Set All** check box.
2. Select a button in the **Active** or **Inactive** column.
3. Select the color.

   > **NOTE:** The Hue must be set prior to setting the color.

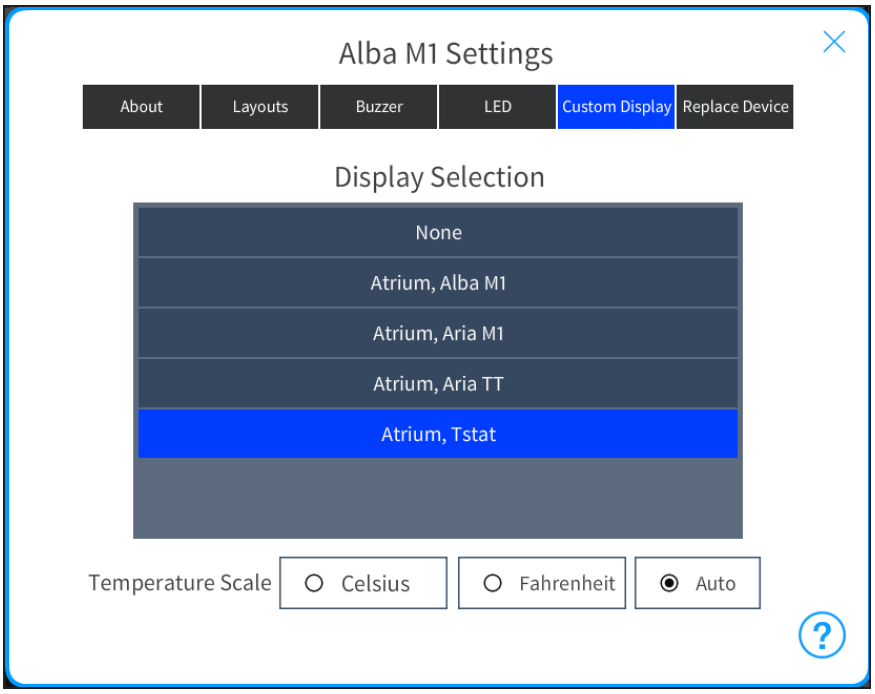
4. Tap **OK**.

Custom Display

Tap the **Custom Display** tab to select which thermostat the Black Nova keypad display should reflect.

The Black Nova Keypad will display the following from the selected thermostat:

- Current temperature
- Mode
- Fan speed (represented with zero to six bars, depending on device capabilities)
- Current setpoint (displayed for five seconds upon a change)
- Humidity level (displayed for five seconds upon a change)



Select **Celsius**, **Fahrenheit**, or **Auto** for the **Temperature Scale**. **Auto** uses the same scale as the thermostat.

Replace Device

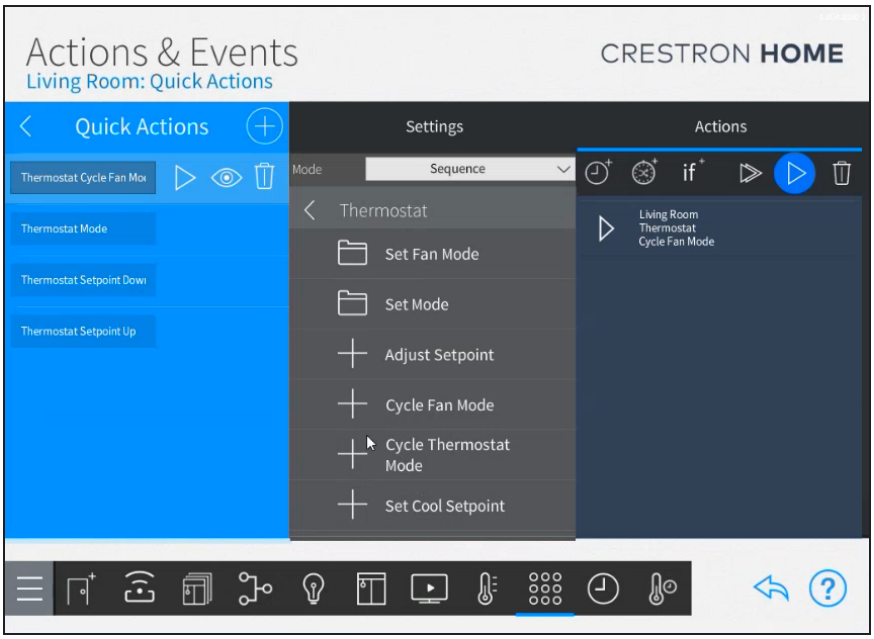
Use the **Replace Device** tab to replace the device and retain the current settings.

Actions for Black Nova Keypads

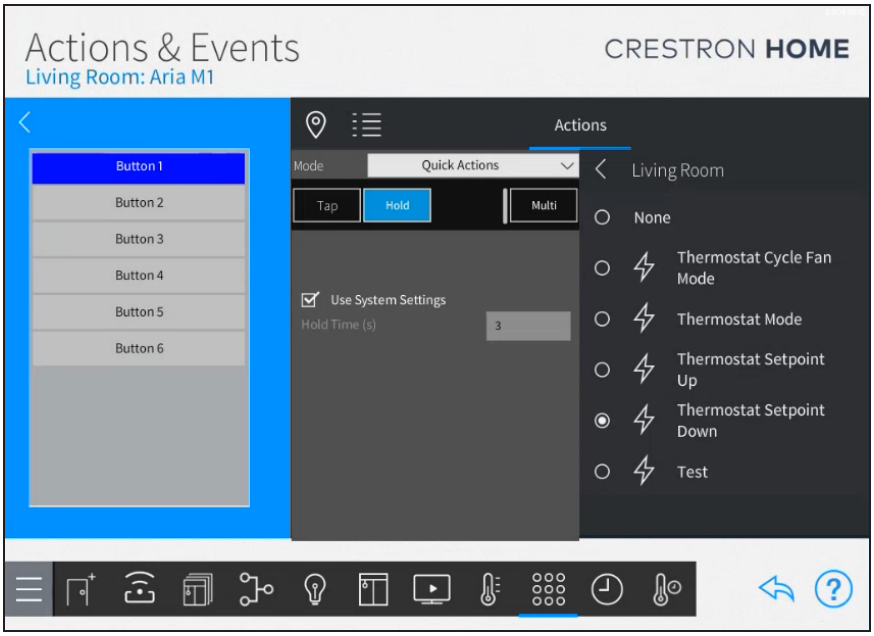
To control a Crestron thermostat from a Black Nova keypad, follow the steps below.

> **NOTE:** The temperature and humidity sensors on the Black Nova keypad cannot be used as remote sensors for Crestron thermostats. Use a CHV-RTS or CHV-RTHS.

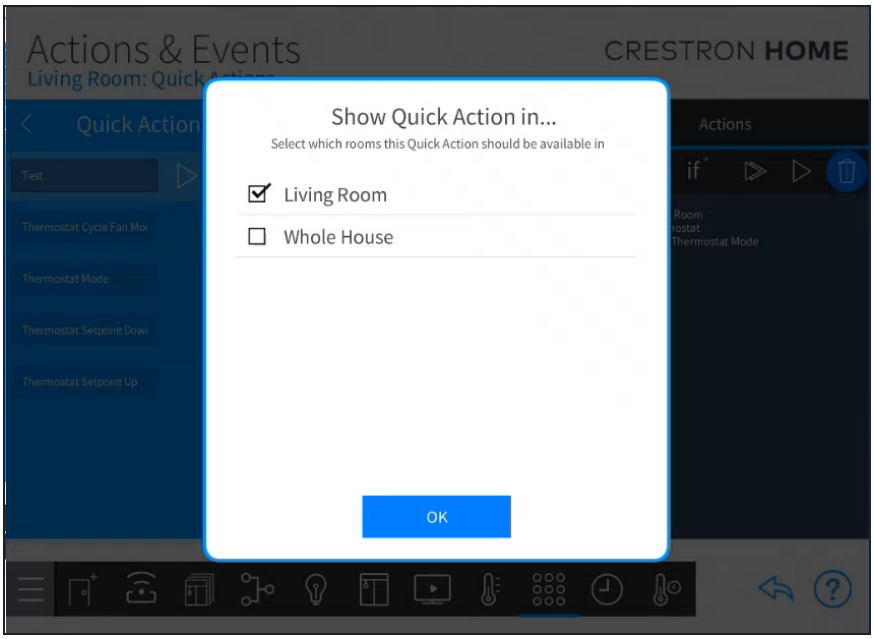
1. Create a **Quick Action** for the desired effect, such as **Thermostat Setpoint Up** or **Thermostat Setpoint Down**. Refer to Quick Actions on page 414 for instructions.



2. Program the Black Nova keypad to trigger the **Quick Action**. Refer to Configure Other Keypads for instructions.



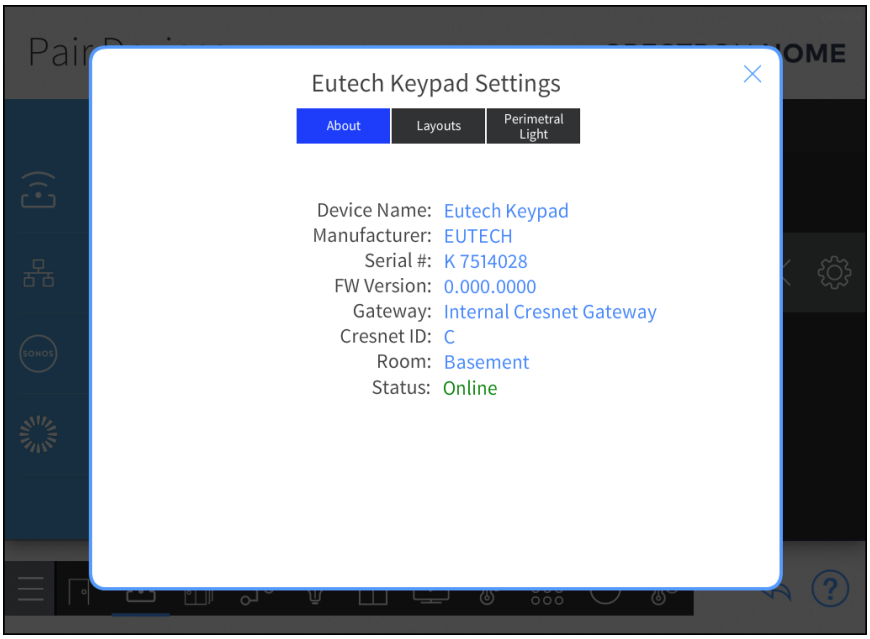
3. Hide the **Quick Action** so that it does not appear in the room.



The Black Nova keypad button will now perform the selected **Quick Action**. Repeat this process for each button.

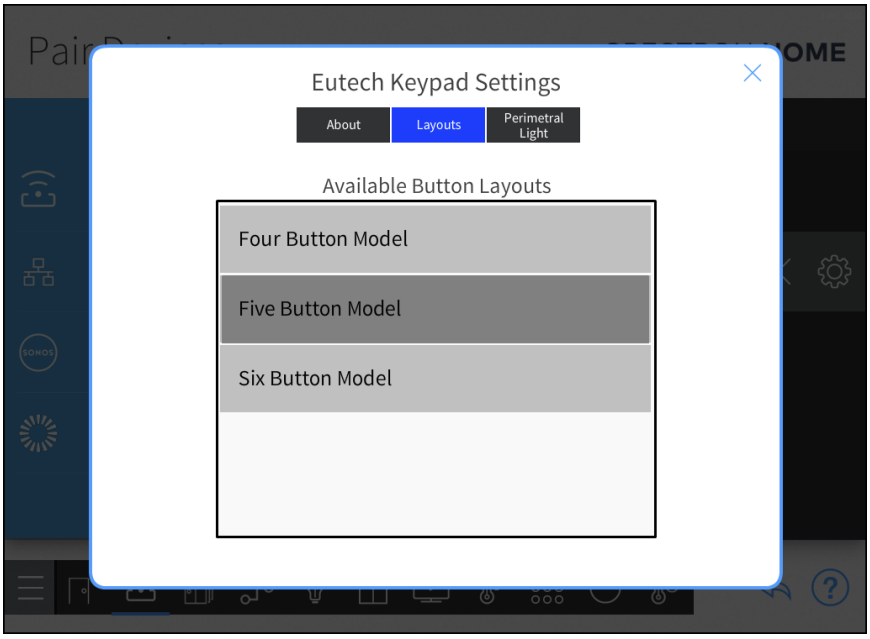
Configure Arkadia Keypads

Tap the gear button next to the device name to display a Settings dialog box for the device. The **About** tab is selected and displays the device information.



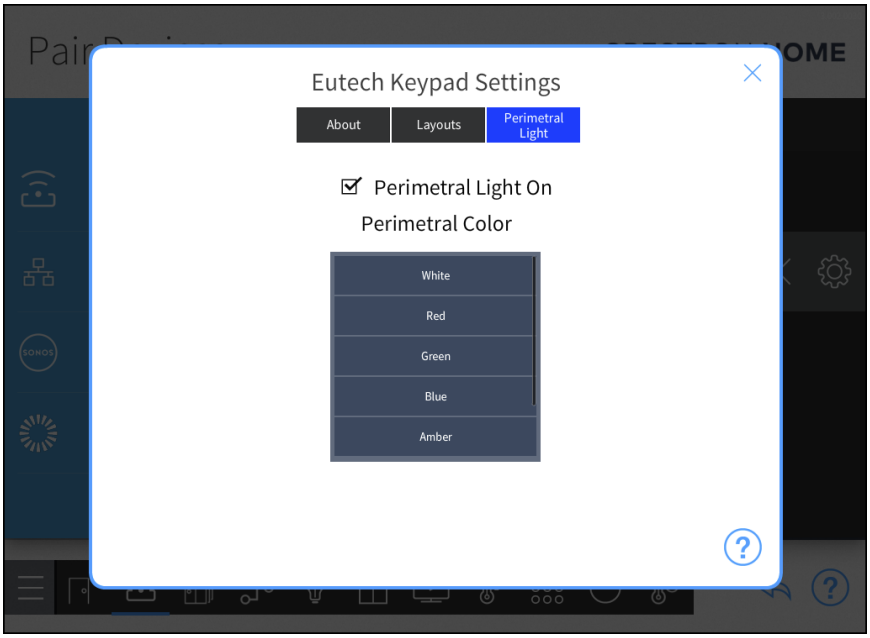
Layouts

Tap the **Layouts** tab to configure the keypad layout. Select the number of buttons that are on the keypad.



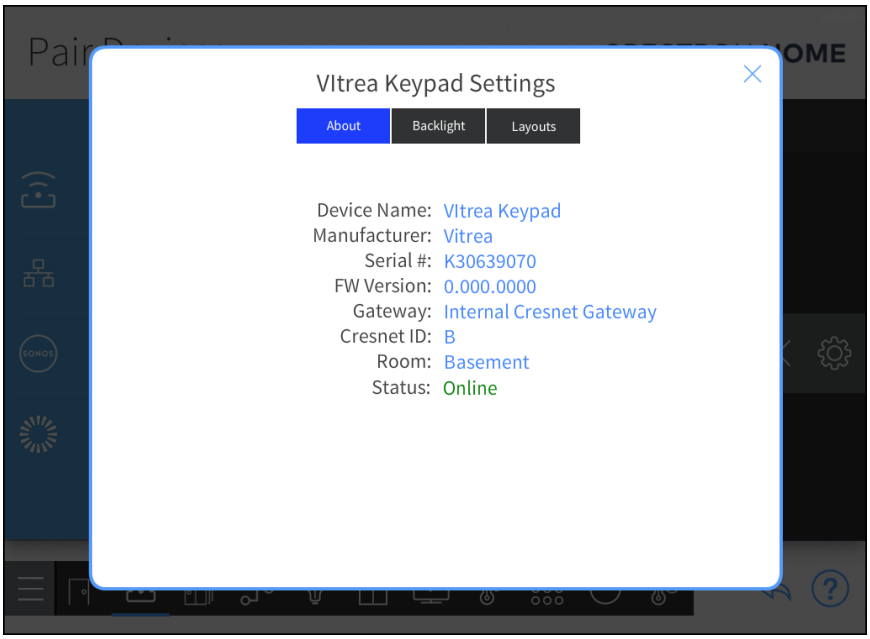
Perimetral Light

Tap the **Perimetral Light** tab to configure the perimetral light. Select the **Perimetral Light On** check box to enable the light and then select a color from the **Perimetral Color** list.



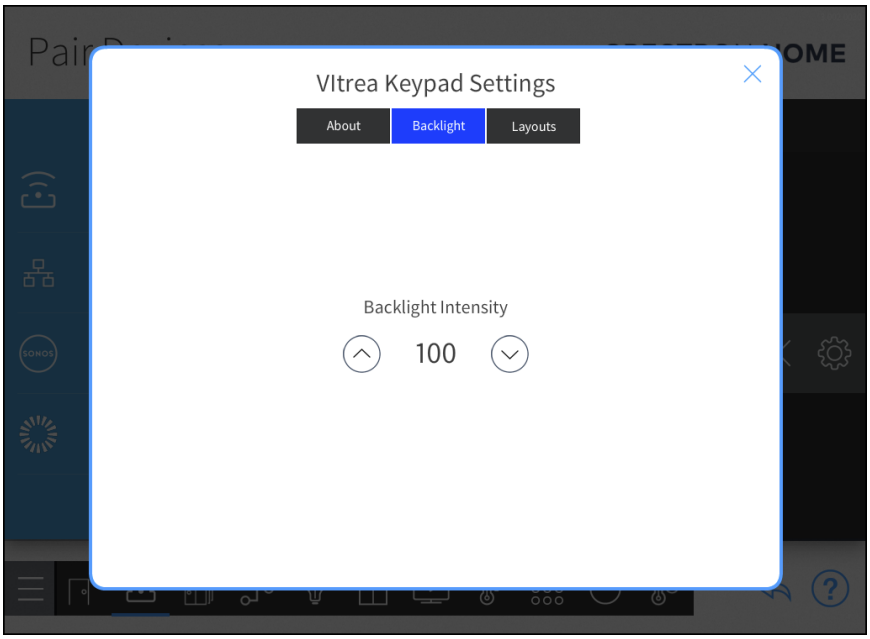
Configure Vitrea Keypads

Tap the gear button next to the device name to display a Settings dialog box for the device. The **About** tab is selected and displays the device information.



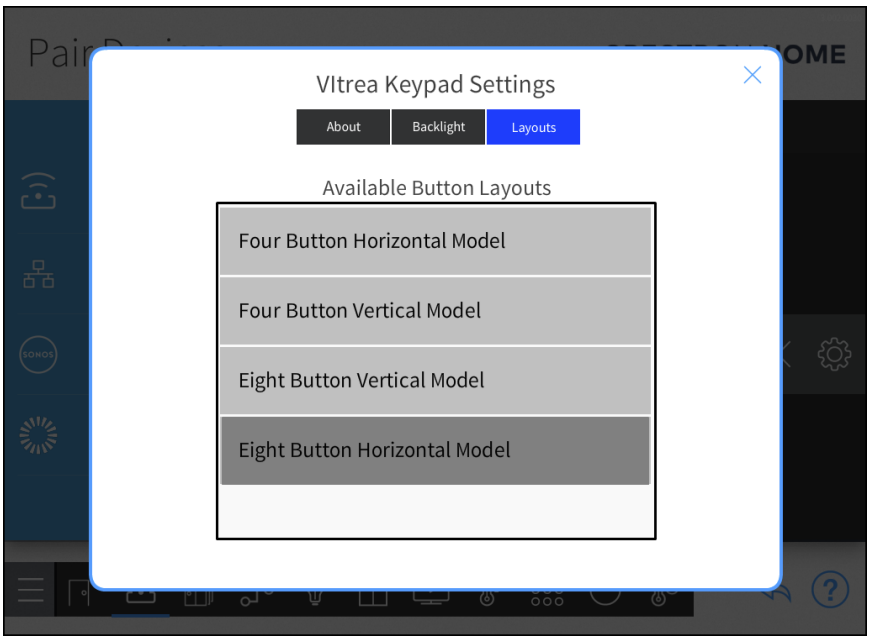
Backlight

Tap the **Backlight** tab to configure the backlight intensity. Use the up and down arrows to set the backlight intensity.



Layouts

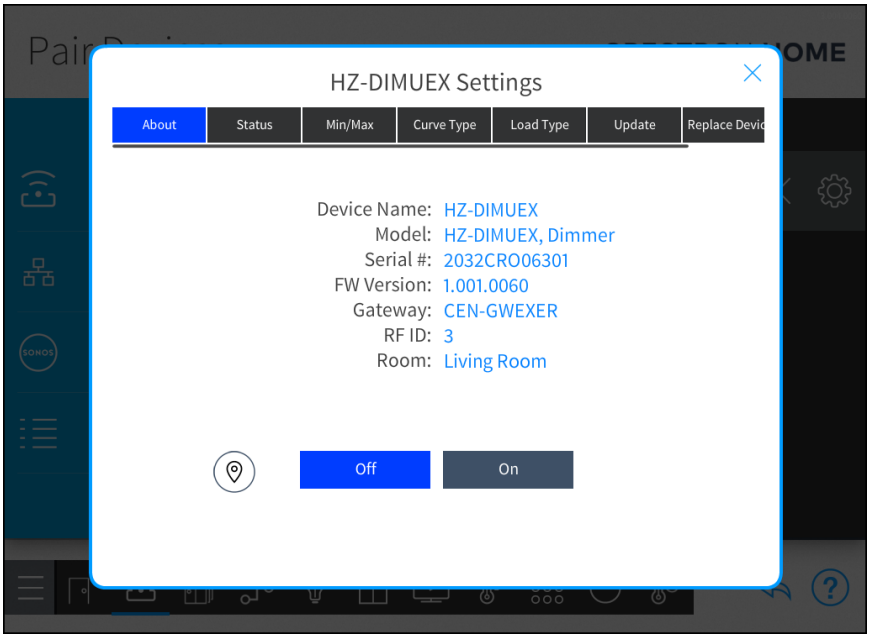
Tap the **Layouts** tab to configure the keypad layout. Select the number of buttons that are on the keypad.



Lighting Load Controller Settings

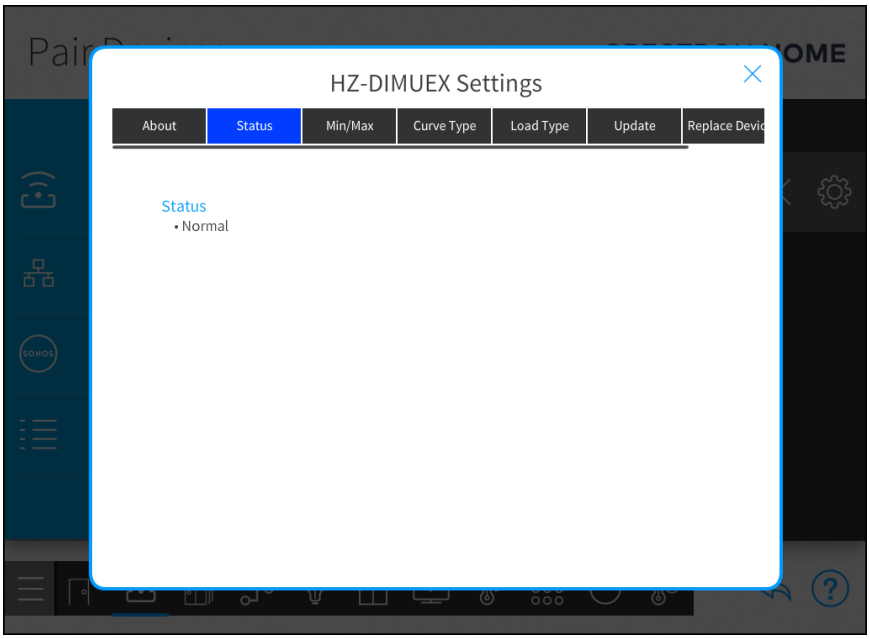
Horizon Dimmers and Switches

Tap the gear button next to the device name to display a Settings dialog box for the dimmer or switch. The **About** tab is selected and displays the device information.



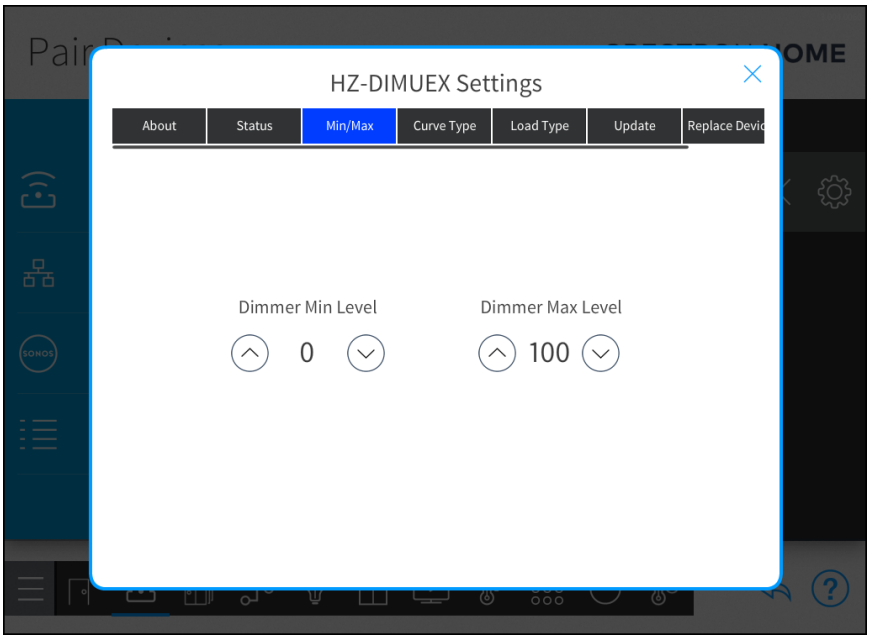
Status

Tap the **Status** tab to view the status of the dimmer or switch.



Min/Max

Tap the **Min/Max** tab to set the minimum and maximum dimmer level.

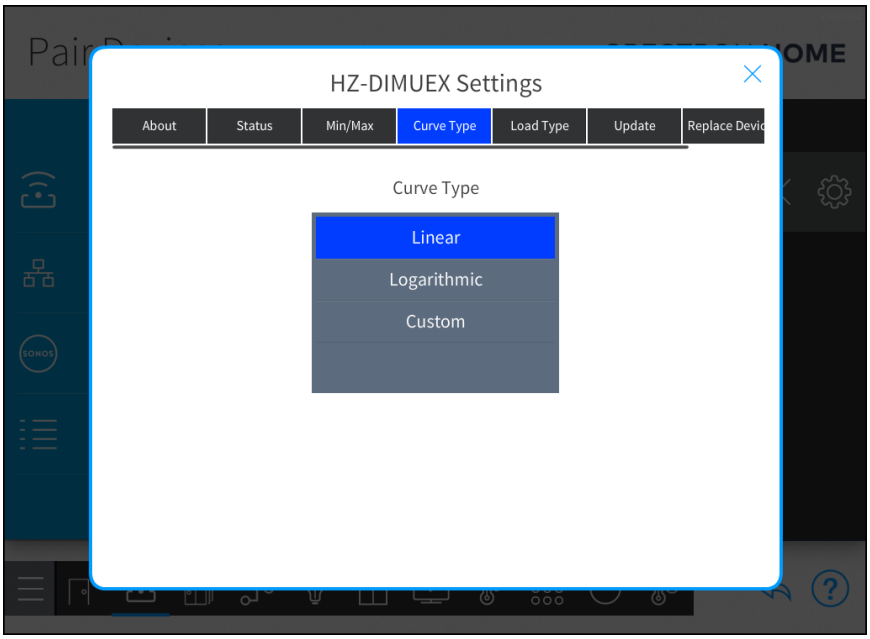


Set the **Dimmer Min Level** and **Dimmer Max Level**:

- **Dimmer Min Level:** The lowest level that the lights will dim to. This may help prevent flickering at low levels.
- **Dimmer Max Level:** The highest level that the lights will raise to. This will prevent the lights from being too bright in the room when at full brightness.

Curve Type

Tap the **Curve Type** tab to configure the curve type that is used to dim the load. Select **Linear** or **Logarithmic** based on the load type.

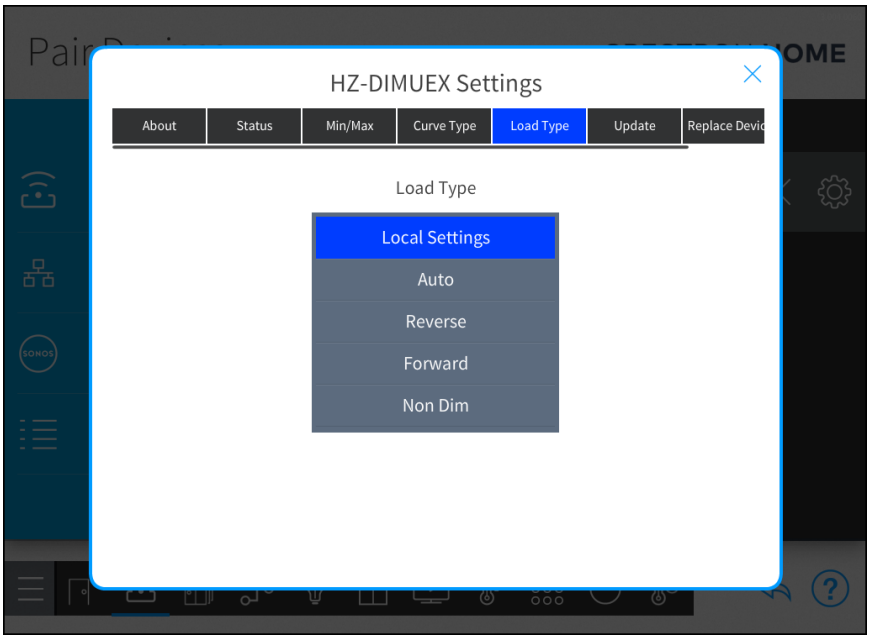


Set the **Curve Type**:

- **Linear:** Dim the load using a linear dimming curve.
- **Logarithmic:** Dim the load using a logarithmic dimming curve.
- **Custom:** Dim the load using a custom dimming curve. Create the dimming curve using Crestron Toolbox™ software.

Load Type

Tap the **Load Type** tab to match the type of load that is connected to the dimmer.

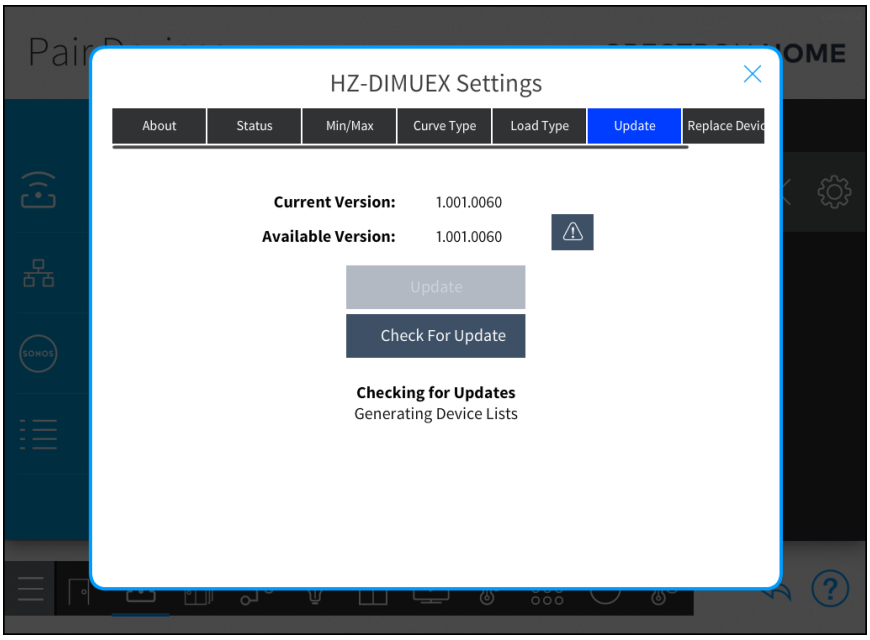


Set the **Load Type**:

- **Local Settings:** Dims the load using the dimming mode set locally on the dimmer.
- **Auto:** Dims the load using forward or reverse phase dimming. The dimmer selects the best dimming mode based on the type of load that is attached.
- **Reverse:** Dims the load using reverse phase dimming (trailing-edge dimming). Typically used with incandescent, dimmable LED, or electronic low-voltage (ELV) loads.
- **Forward:** Dims the load using forward phase dimming (leading-edge). Typically used with magnetic low-voltage (MLV) loads.
- **Non Dim:** The load type is not dimmable. The dimmer functions a switch and switches the load between full on (100%) and full off (0%). Ramp and fade times are ignored. Overrides the functionality set on the dimmer.

Update

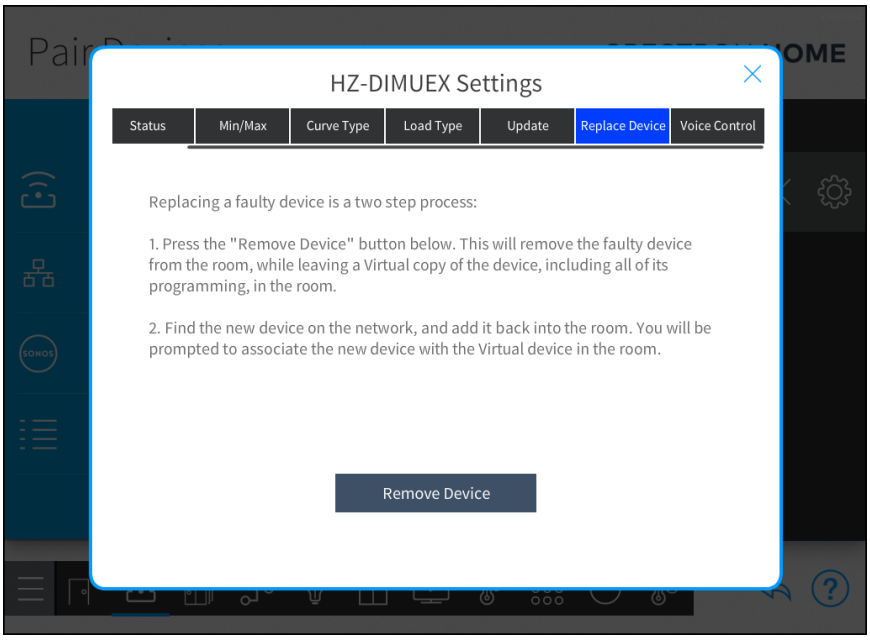
Use the **Update** tab to update the device firmware.



- **Current Version:** Displays the current firmware version for the gateway.
- **Available Version:** Displays the available firmware version for the gateway.
- **Update:** If a firmware update is available, tap **Update** to update the firmware.
- **Check For Update:** Tap the **Check For Update** button to search for firmware updates for the gateway.

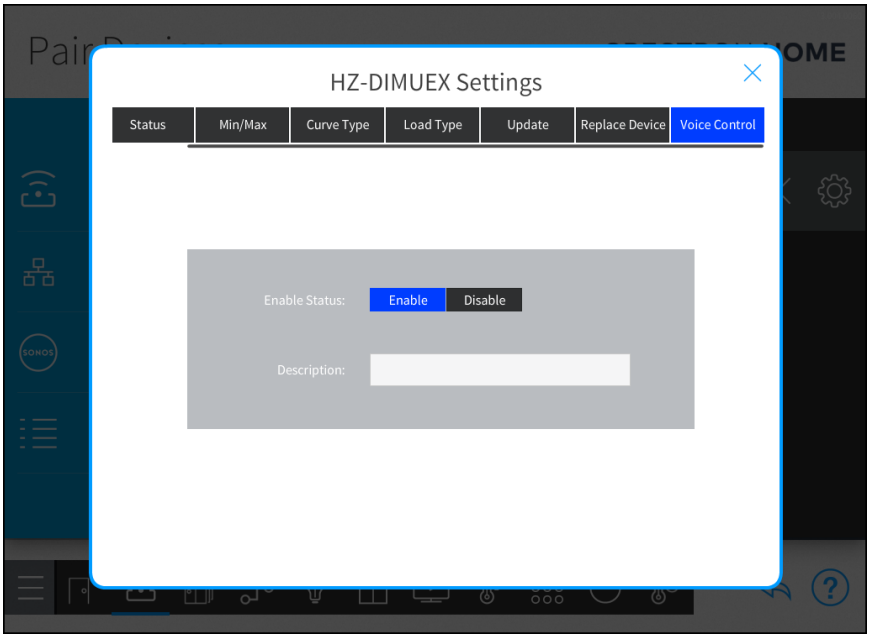
Replace Device

Tap the **Replace Device** tab to replace the dimmer.



Voice Control

Tap the **Voice Control** tab to change the voice control settings.

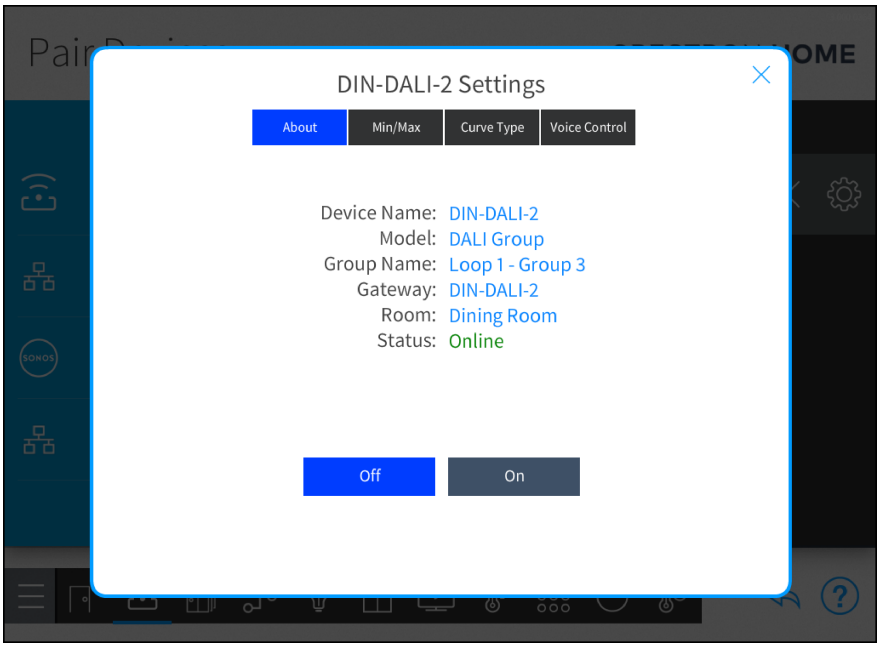


NOTE: To use voice control, voice control services must be turned on and configured. For details, refer to Voice Control Settings on page 607.

- **Enable Status:** Select **Enable** or **Disable** to turn voice control services on or off.
- **Description:** Enter a descriptive name. The name is used by the voice control services.

DIN-DALI-2 Groups (Loads)

Tap the gear button next to the device name to display a Settings dialog box for the DIN-DALI-2 group (load). The **About** tab is selected and displays the device information. The Settings dialog box has additional tabs for **Min/Max**, **Curve Type**, and **Voice Control**.

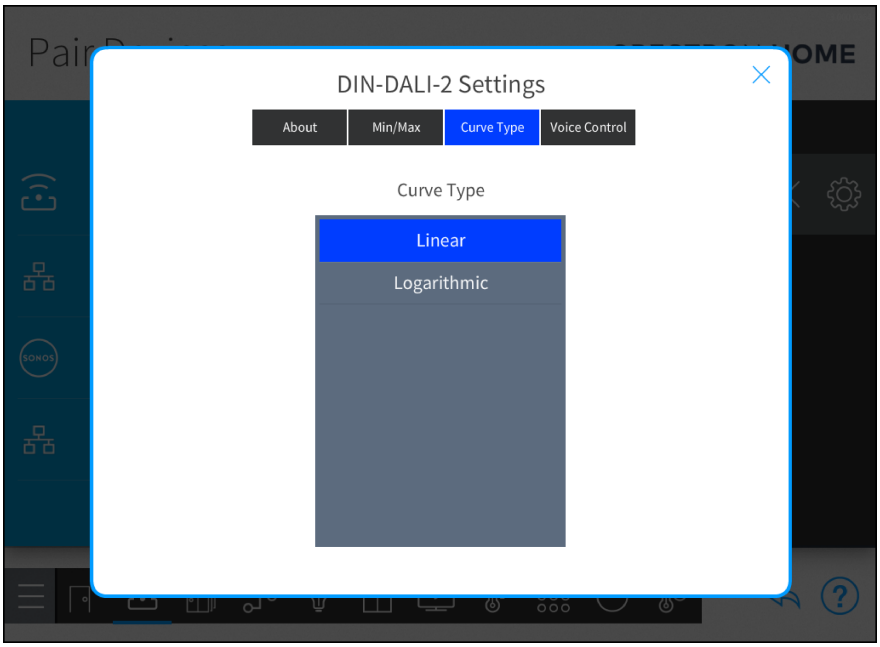


Min/Max

The **Dimmer Min Level** and **Dimmer Max Levels** are set using the DALI Commissioning tool in the Crestron Toolbox™ application. The settings cannot be changed and will revert to 0 and 100. For additional details, refer to Add a DALI Gateway on page 284.

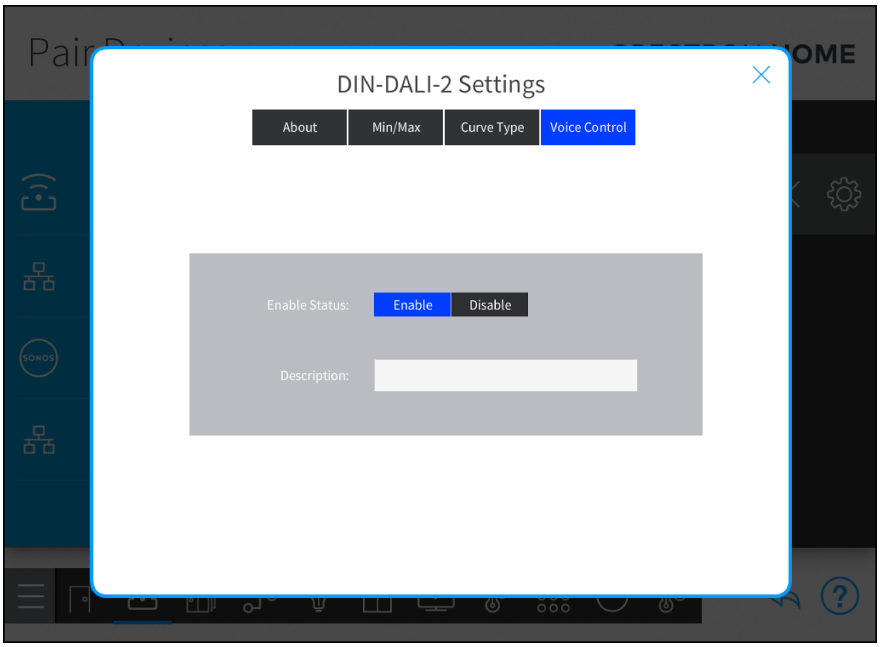
Curve Type

Tap the **Curve Type** tab to configure the curve type that is used to dim the load. Select **Linear** or **Logarithmic** based on the load type.



Voice Control

Tap the **Voice Control** tab to change the voice control settings.

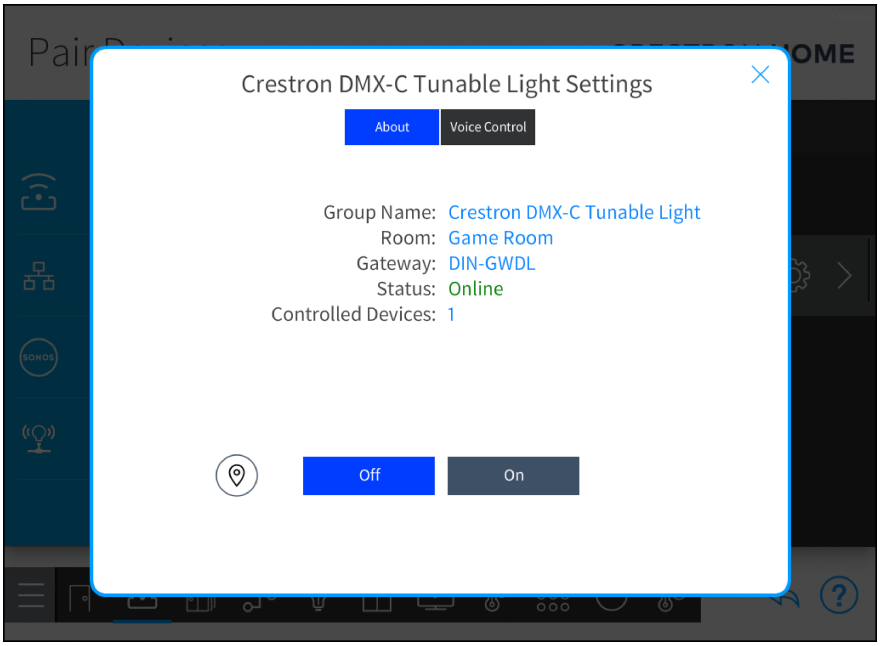


NOTE: To use voice control, voice control services must be turned on and configured. For details, refer to Voice Control Settings on page 607.

- **Enable Status:** Select **Enable** or **Disable** to turn voice control services on or off.
- **Description:** Enter a descriptive name. The name is used by the voice control services.

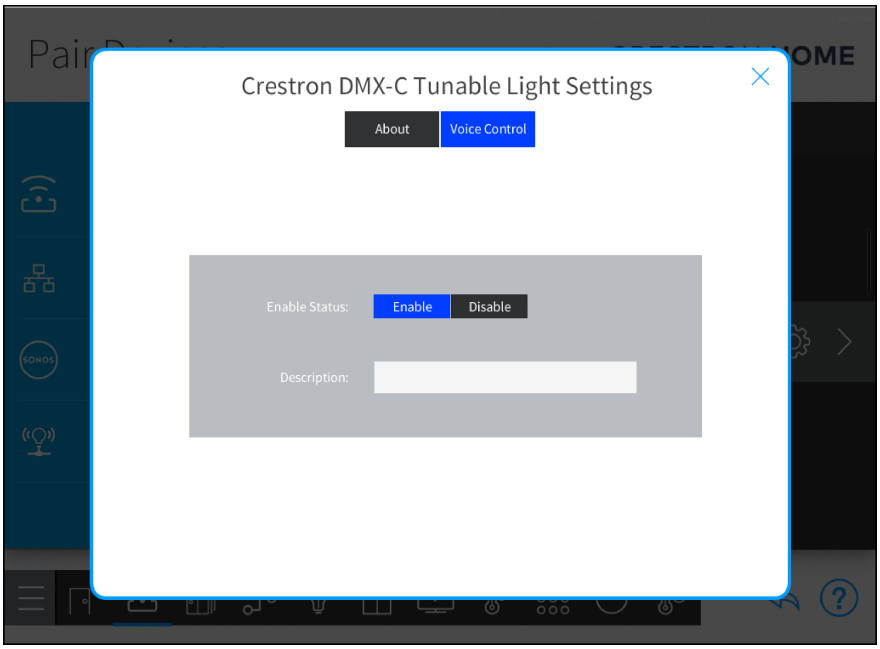
DMX-C Fixture Groups (Loads)

Tap the gear button next to the device name to display a Settings dialog box for the DMX-C fixture group (load). The **About** tab is selected and displays the device information.



Voice Control

Tap the **Voice Control** tab to change the voice control settings.

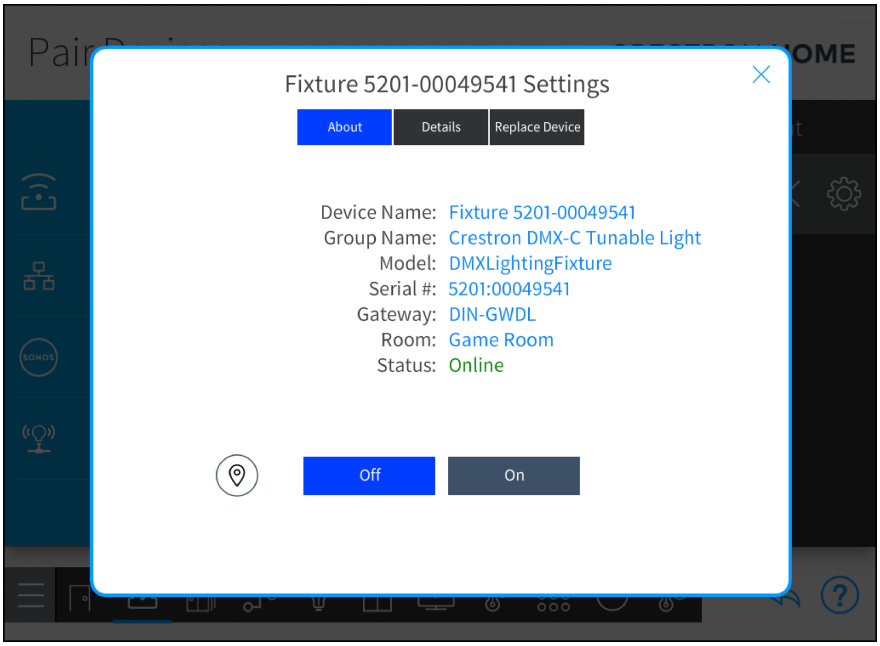


NOTE: To use voice control, voice control services must be turned on and configured. For details, refer to Voice Control Settings on page 607.

- **Enable Status:** Select **Enable** or **Disable** to turn voice control services on or off.
- **Description:** Enter a descriptive name. The name is used by the voice control services.

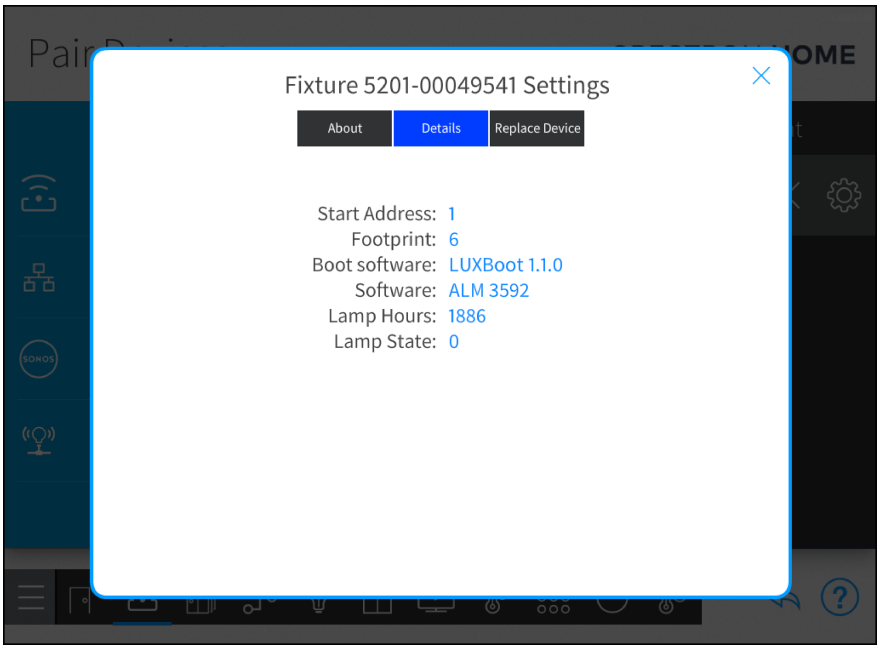
DMX-C Fixture (Loads)

Tap the gear button next to the device name to display a Settings dialog box for the DMX-C fixture (load). The **About** tab is selected and displays the device information.



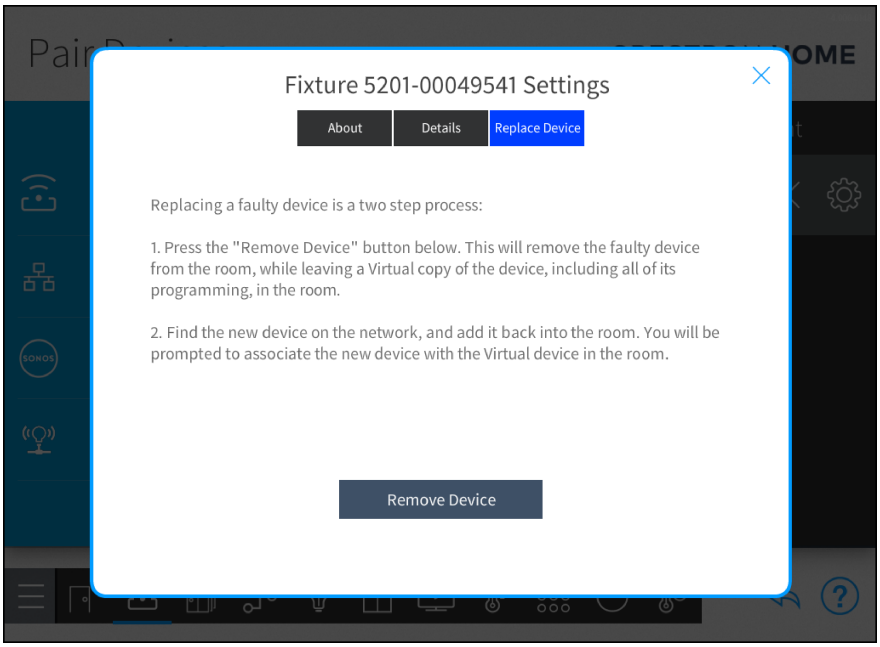
Details

Tap the **Details** tab to view information about the fixture.



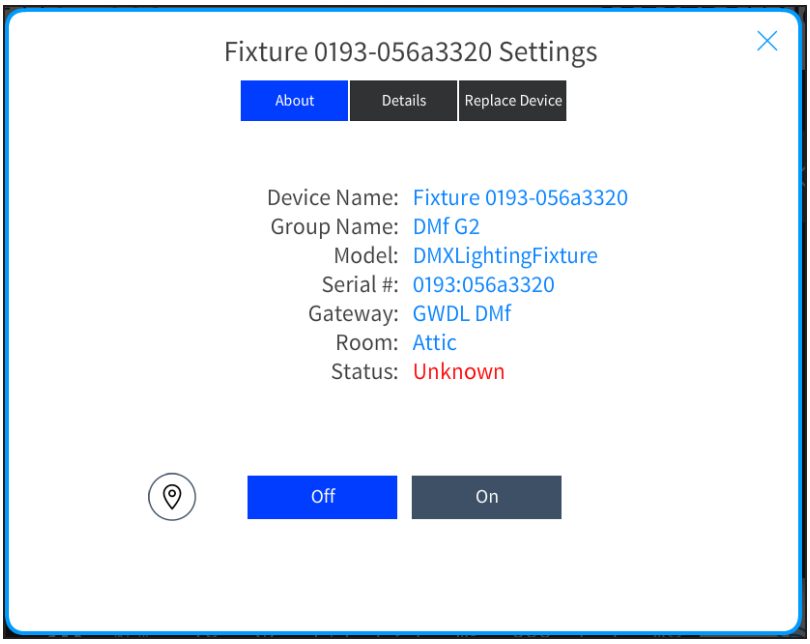
Replace Device

Tap the **Replace Device** tab to replace the device.



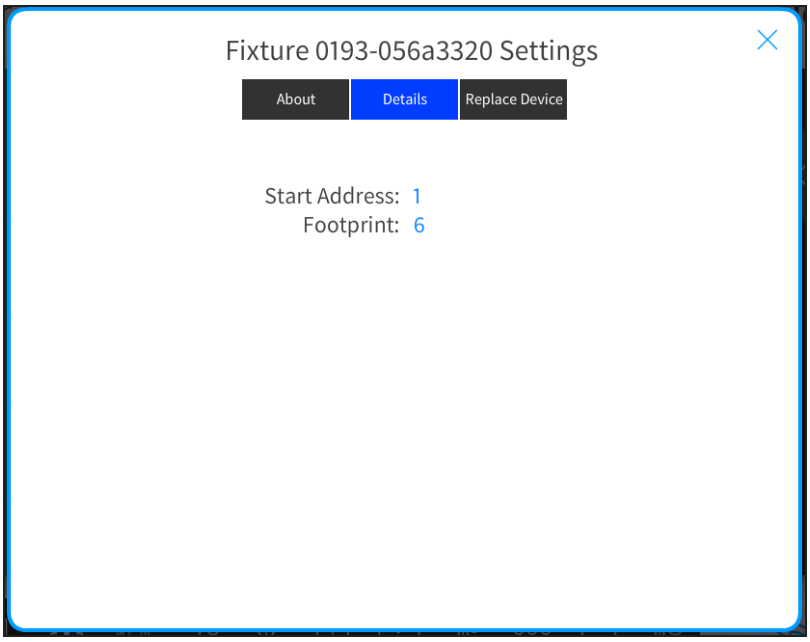
PhaseX Fixture (Loads)

Tap the gear button next to the device name to display a Settings dialog box for the PhaseX fixture (load). The **About** tab is selected and displays the device information.



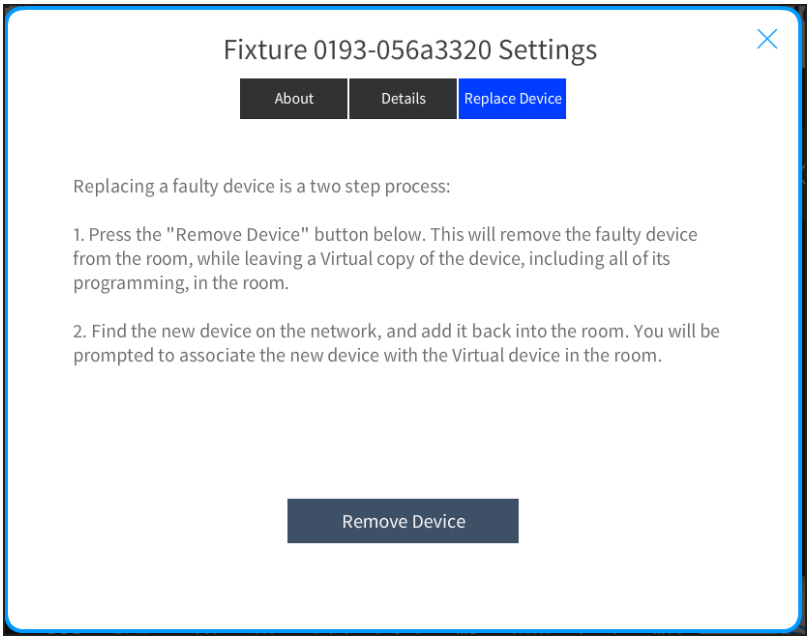
Details

Tap the **Details** tab to view information about the fixture.



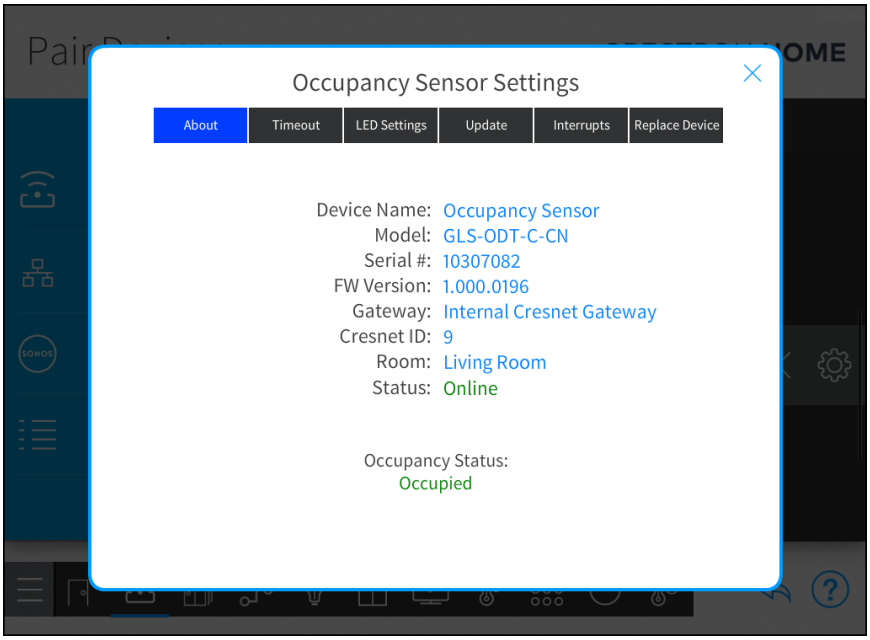
Replace Device

Tap the **Replace Device** tab to replace the device.



Occupancy Sensor Settings

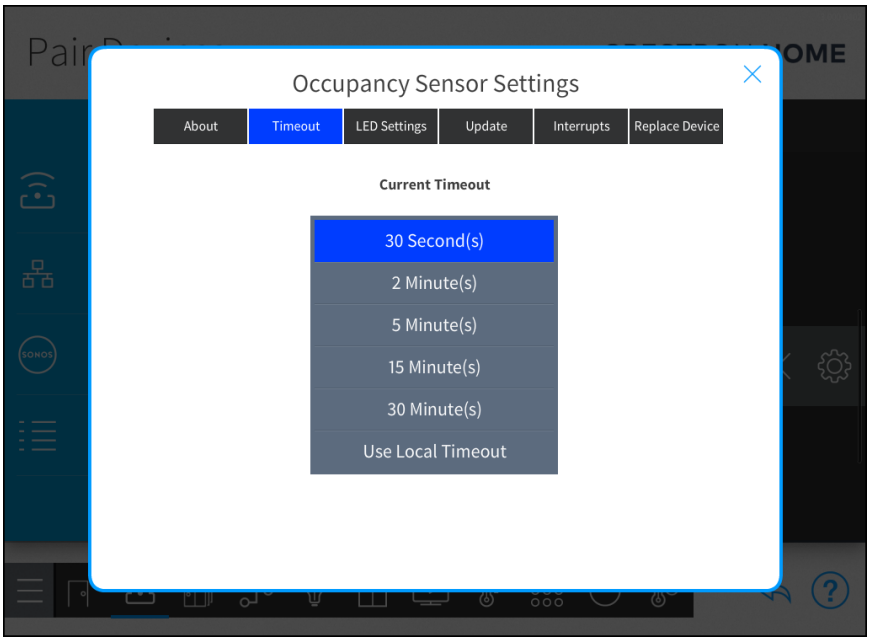
Tap the gear button next to the device name to display a Settings dialog box for the occupancy sensor. The **About** tab is selected and displays the device information.



Timeout

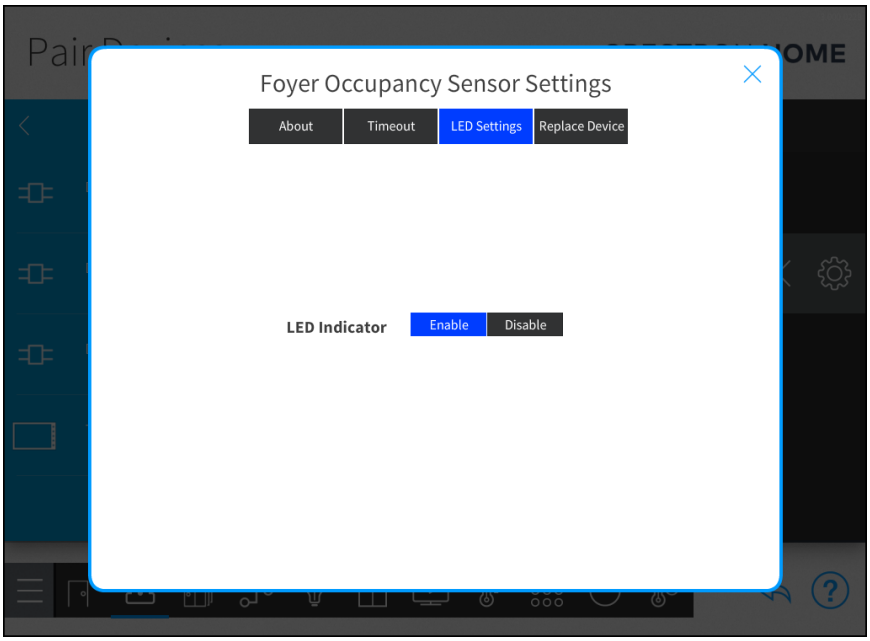
Tap the **Timeout** tab to configure the occupancy sensor timeout. Select the timeout value from the list of timeout values. To use the timeout setting that is configured on the occupancy sensor, select the **Use Local Timeout** from the **Current Timeout** list.

> **NOTE:** The **Timeout** tab for some occupancy sensors, such as the GLS-ODT-C-POE, displays a text field to enter timeout value (between 5 and 1,800 seconds) for the occupancy sensor.



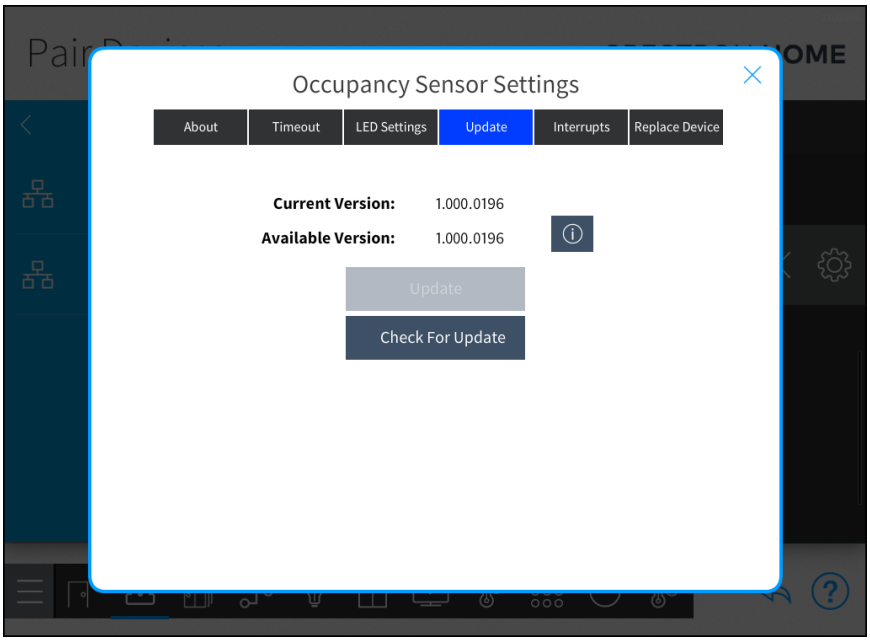
LED Settings

Tap the **LED Settings** tab to enable or disable the LEDs on the occupancy sensor.



Update

Use the **Update** tab to update the device firmware.

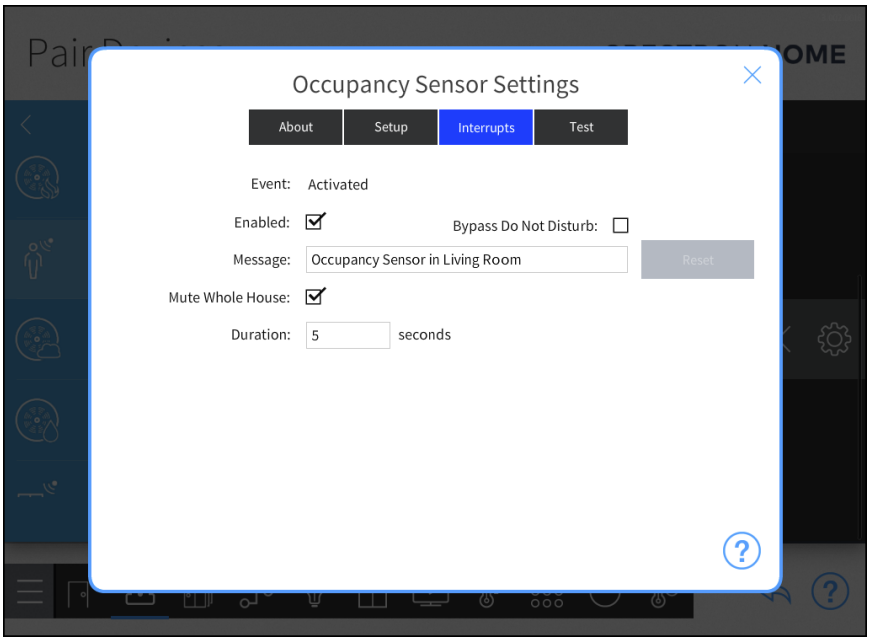


- **Current Version:** Displays the current firmware version for the gateway.
- **Available Version:** Displays the available firmware version for the gateway.
- **Update:** If a firmware update is available, tap **Update** to update the firmware.
- **Check For Update:** Tap the **Check For Update** button to search for firmware updates for the gateway.

Interrupts

Tap the **Interrupts** tab to configure the occupancy sensor interrupts.

> **NOTE:** There is no interrupt when occupancy is detected by the Grace Occupancy feature on a Crestron occupancy sensor.



> **NOTE:** Touch screens that do not have speakers display the interrupt messages but cannot play the associated sound.

- **Event:** The action that triggers the interrupt.
- **Enabled:** To enable or disable the interrupt for the device, tap the check box next to **Enabled**. When an interrupt is enabled, it is displayed in the Crestron Home user interface.
- **Bypass Do Not Disturb:** Tap the check box to override the Do Not Disturb setting for the room and play the chime for the interrupt.
- **Message:** The message that is displayed on the user interface device when the interrupt occurs. The default interrupt message is "[Device Name] in [Room Name]." For example, "Occupancy Sensor in Living Room."

  To display a custom message, enter the message in the field. To revert to the default message, select **Reset**.
- **Prefer Room Speakers:** Available for systems with DM NAX™ devices. Plays the interrupt using the speakers in the room.
- **Mute Whole House:** To mute the audio that is playing in any media room, tap the check box next to **Mute Whole House**. The audio is muted for the time set in the **Duration** field. The default **Mute Whole House** setting is enabled.

- **Duration:** The length of time that the audio in the room is muted. The duration can be set between 1 and 60 seconds. The default duration is 5 seconds.

Replace Device

Tap the **Replace Device** tab to replace the occupancy sensor.

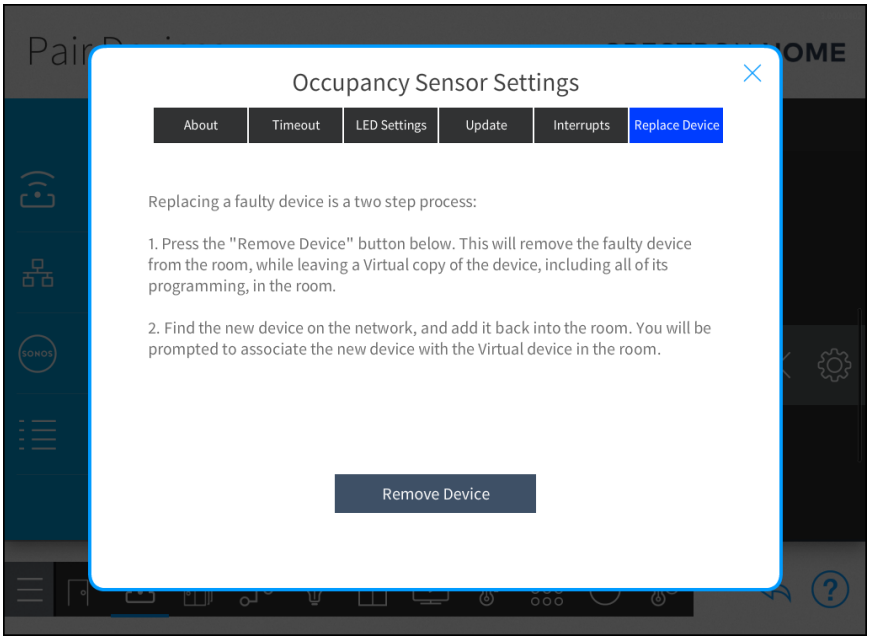
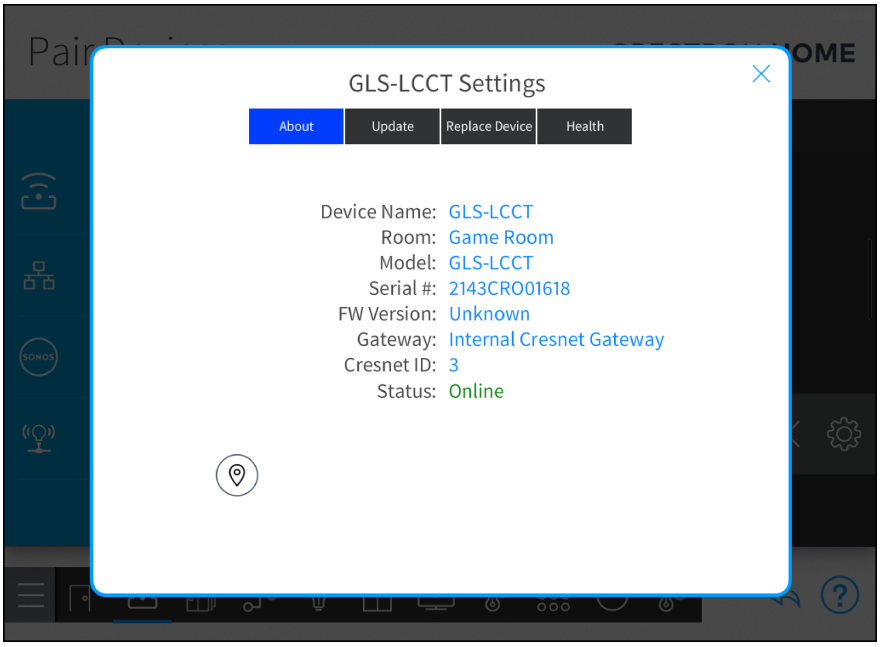


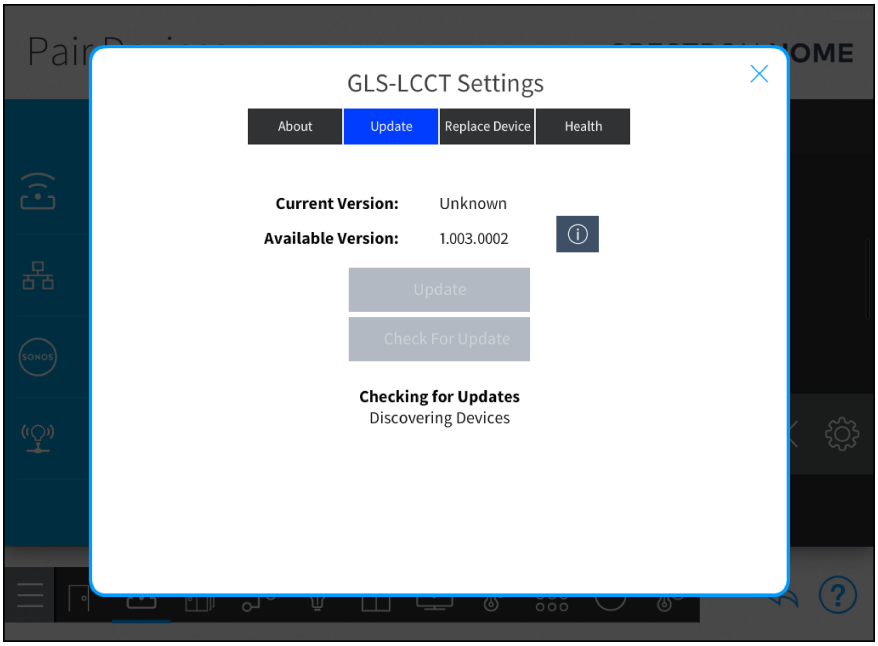
Photo Sensor Settings

Tap the gear button next to the device name to display a Settings dialog box for the photo sensor. The **About** tab is selected and displays the device information.



Update

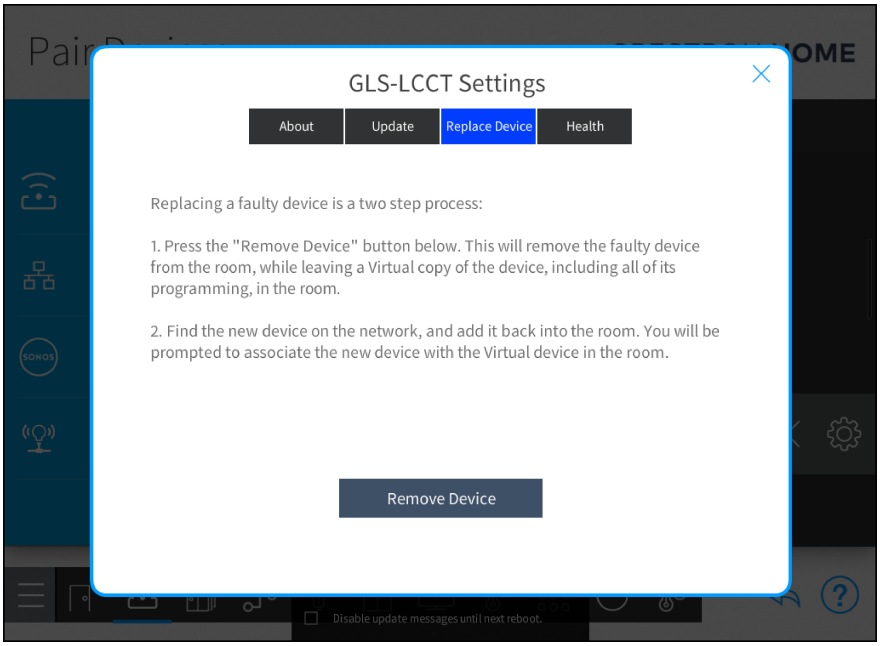
Use the **Update** tab to update the device firmware.



- **Current Version:** Displays the current firmware version for the gateway.
- **Available Version:** Displays the available firmware version for the gateway.
- **Update:** If a firmware update is available, tap **Update** to update the firmware.
- **Check For Update:** Tap the **Check For Update** button to search for firmware updates for the gateway.

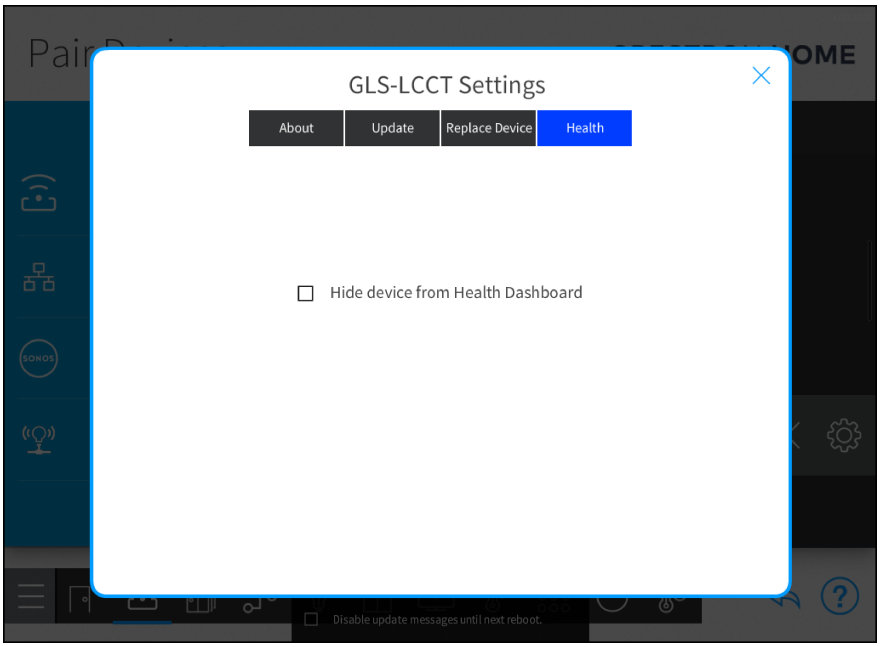
Replace Device

Tap the **Replace Device** tab to replace the device and retain the current settings.



Health

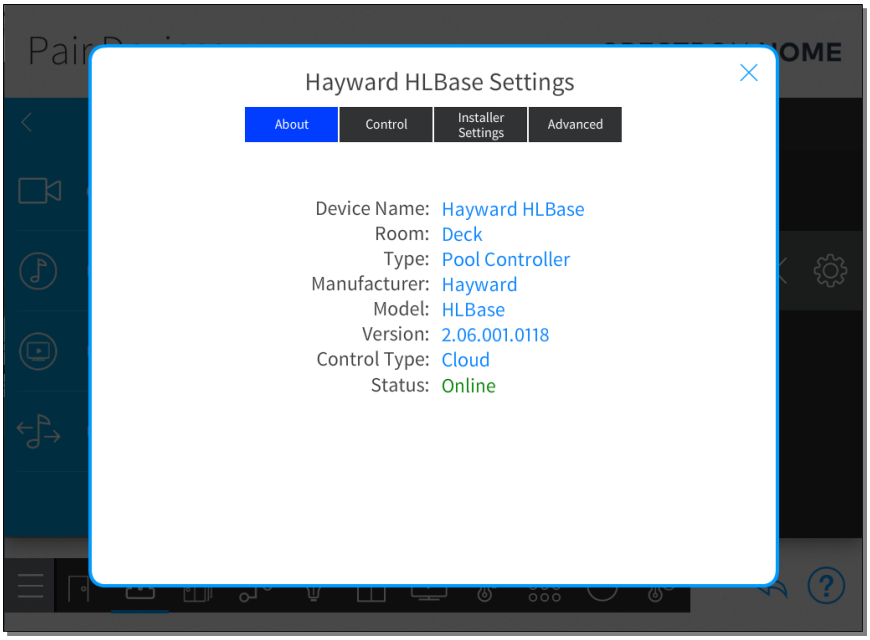
To hide the device from the Device Health dashboard, select **Hide device from Health Dashbaord**.



Pool and Spa Settings

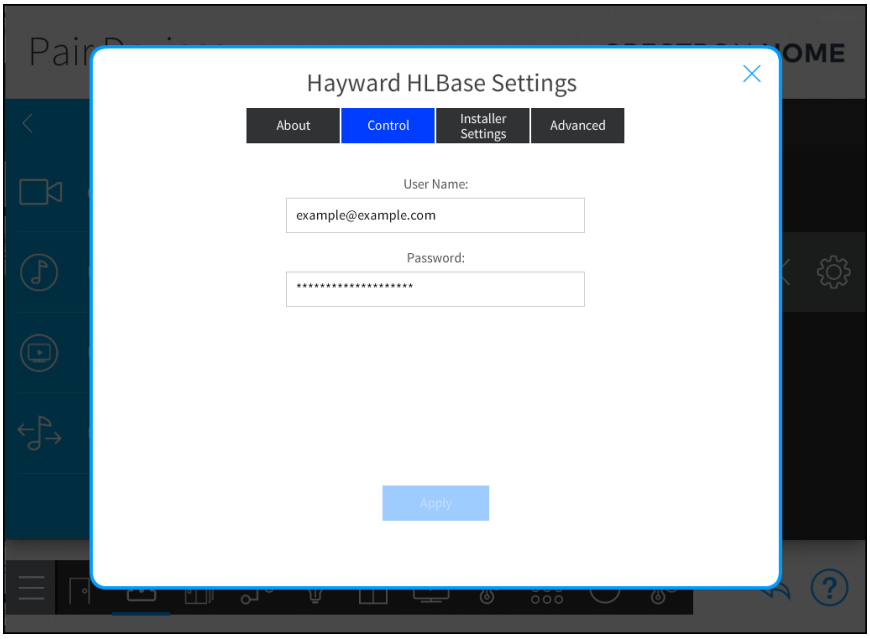
Pool Controller

Tap the gear button next to the device name to display a Settings dialog box for the pool controller. The **About** tab is selected and displays the device information.



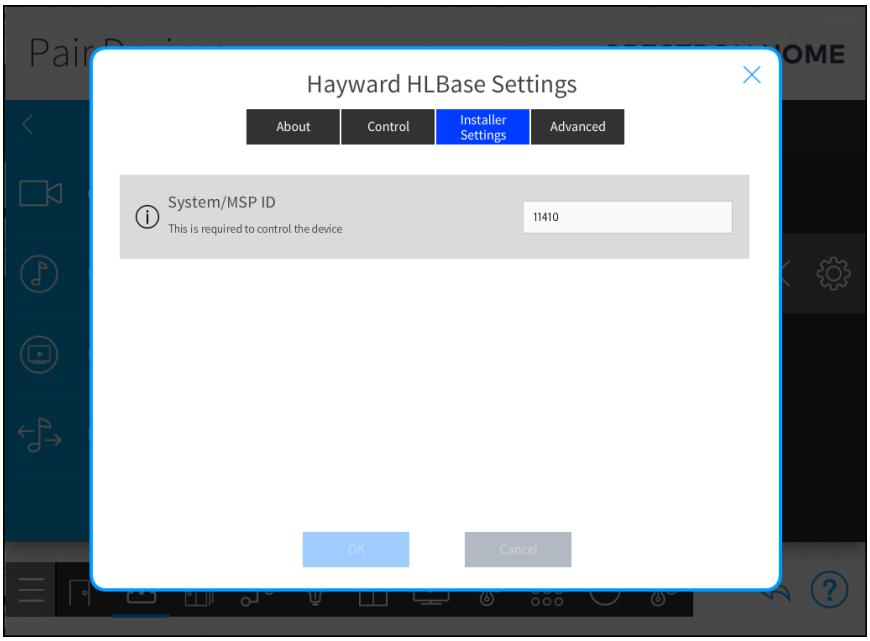
Control

Tap the **Control** tab to configure the pool controller. To change login credentials for the pool controller, enter the **User Name** and **Password** and then select **Apply**.



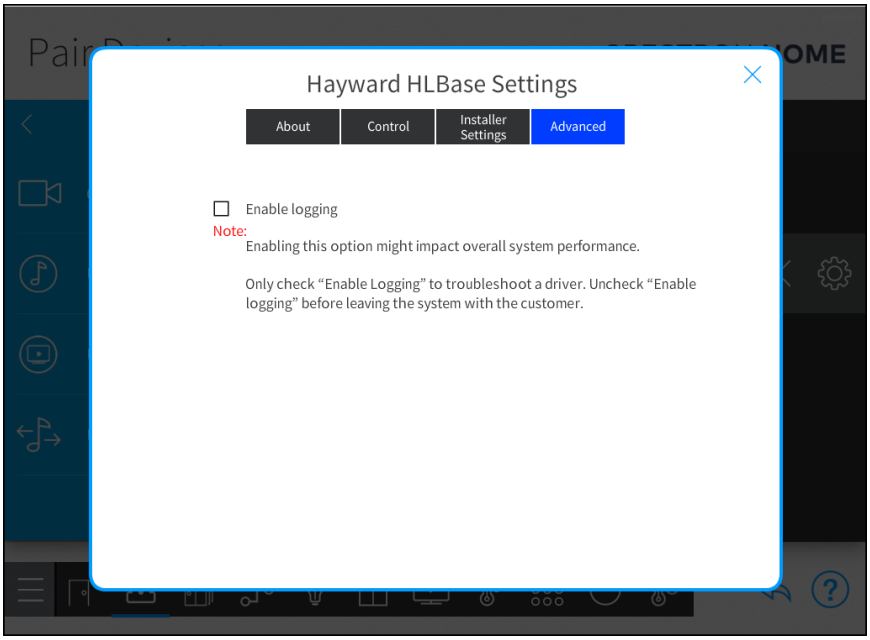
Installer Settings

Tap the **Installer Settings** tab to view the **System/MSP ID** information. To change the **System/MSP ID**, enter the value and then select **OK**.



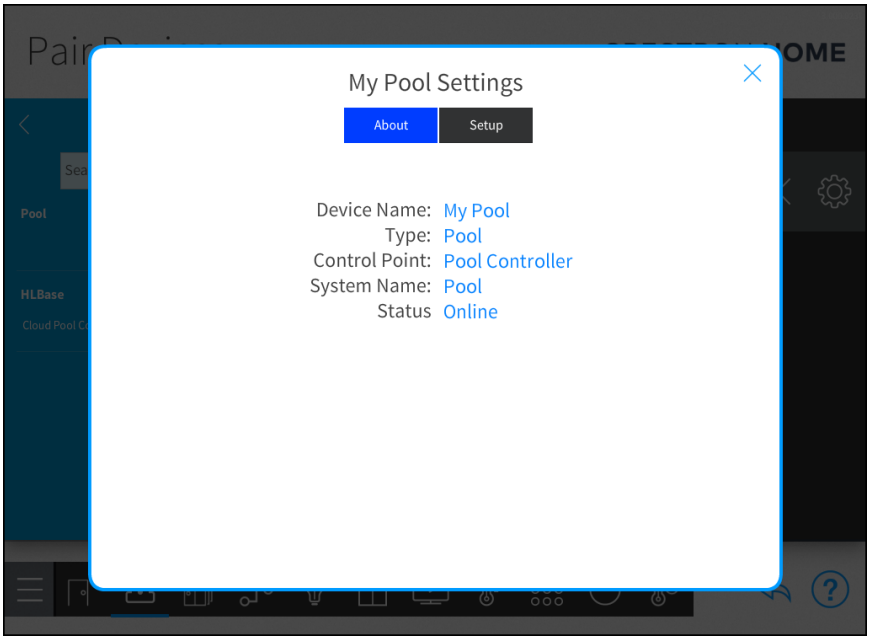
Advanced

Tap the **Advanced** tab to enable logging for the pool.

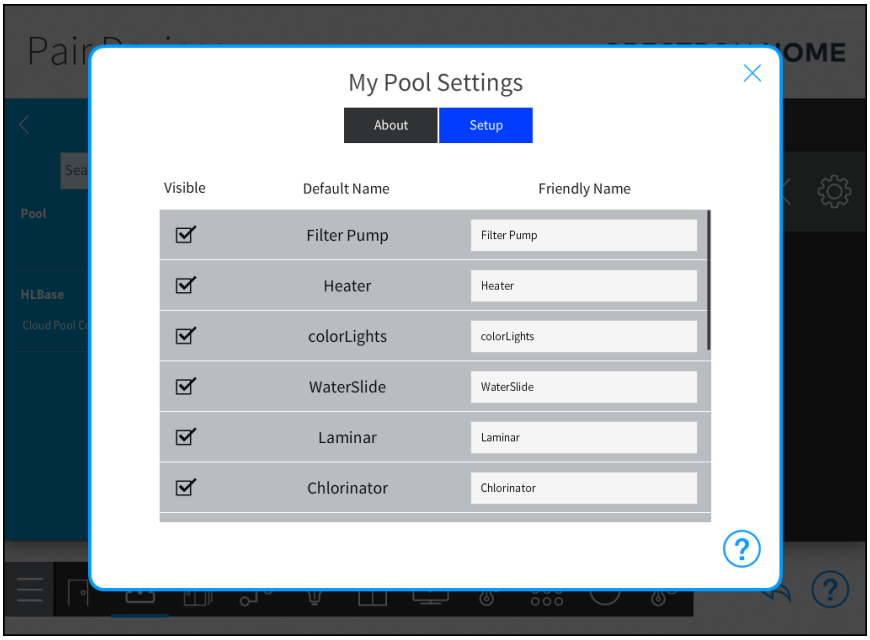


Pool

Tap the gear button next to the device name to display a Settings dialog box for the pool. The **About** tab is selected and displays the device information. The Settings dialog box has an additional tab for **Setup**.



Tap the **Setup** tab to configure the pool. The **Setup** tab displays a list of pool functions that are provided by the pool controller.



- **Default Name:** The name of the pool function that is provided by the pool controller.
- **Friendly Name:** The name that is displayed in the Crestron Home user interface for the pool function.
- **Visible:** Tap the check box to display the pool function in the Crestron Home user interface.

Power Controller Settings

Tap the gear button next to the device name to display a Settings dialog box for the power controller. The **About** tab is selected and displays the device information.

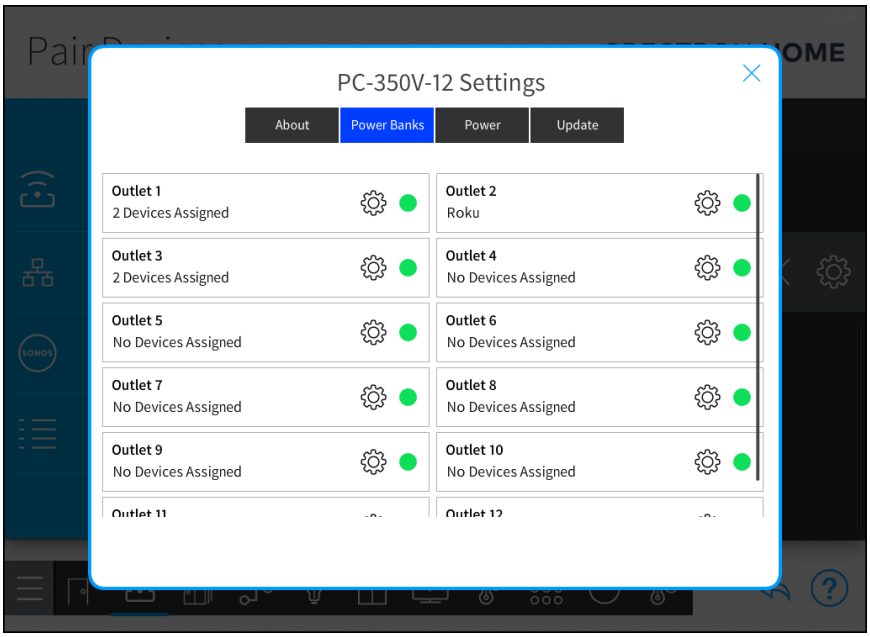
To configure additional settings, select **Web Configuration** to open the Web UI.

> **NOTE:** The available settings may vary based on the capabilities of the device.



Power Banks

Tap the **Power Banks** tab to configure outlets, configure power settings, and ping monitoring.

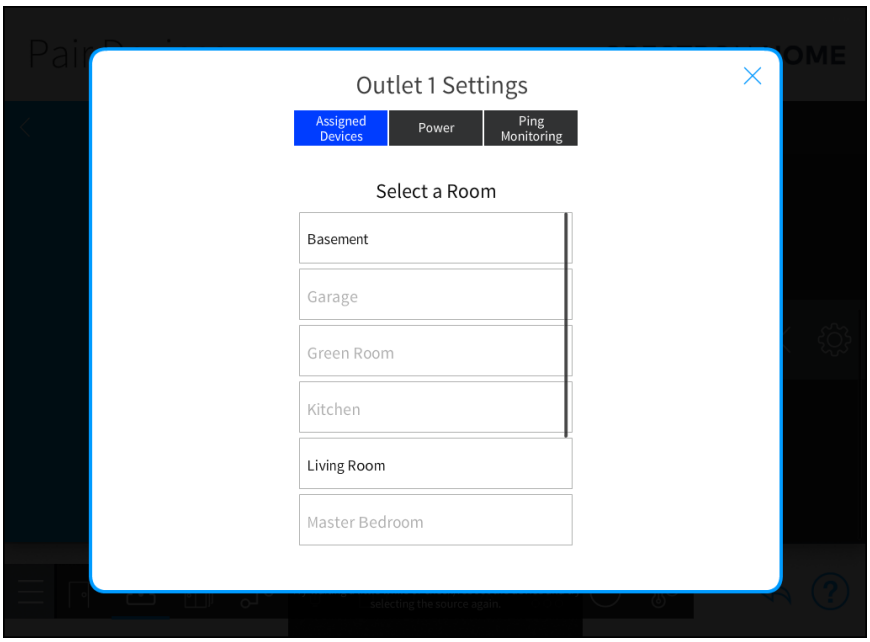


Assign Devices

To assign devices that are connected to the outlet:

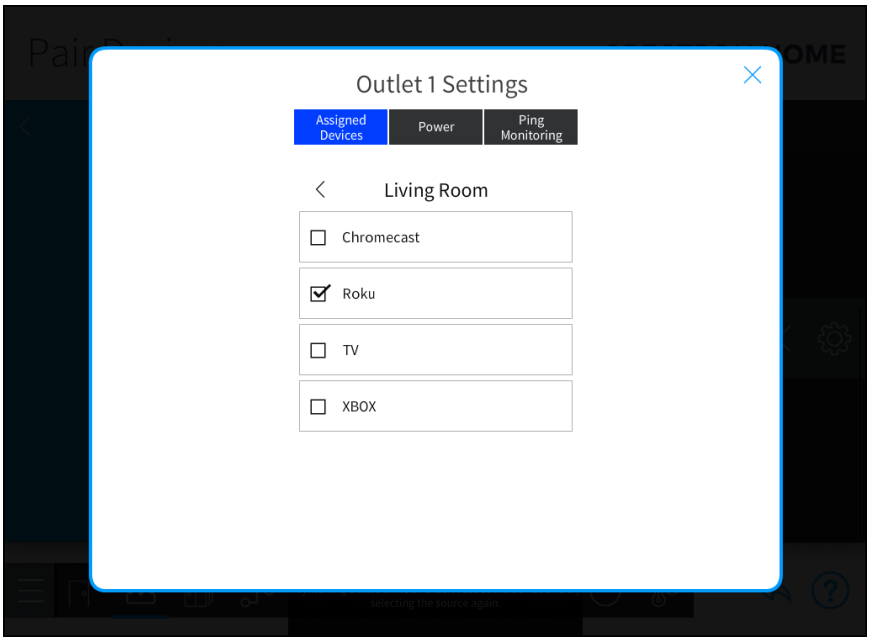
1. Select ⚙ **Configure**.
2. Select a room.

> **NOTES:**
>
> - Rooms with unassigned devices are displayed with black text, rooms with assigned devices are displayed with blue text, and rooms that have no devices are shown with gray text.
> - The Crestron Home processor and gateways are located in the Whole House room.



3. Select devices that are connected to the outlet.

> **NOTE:** A device can be assigned to only one outlet.

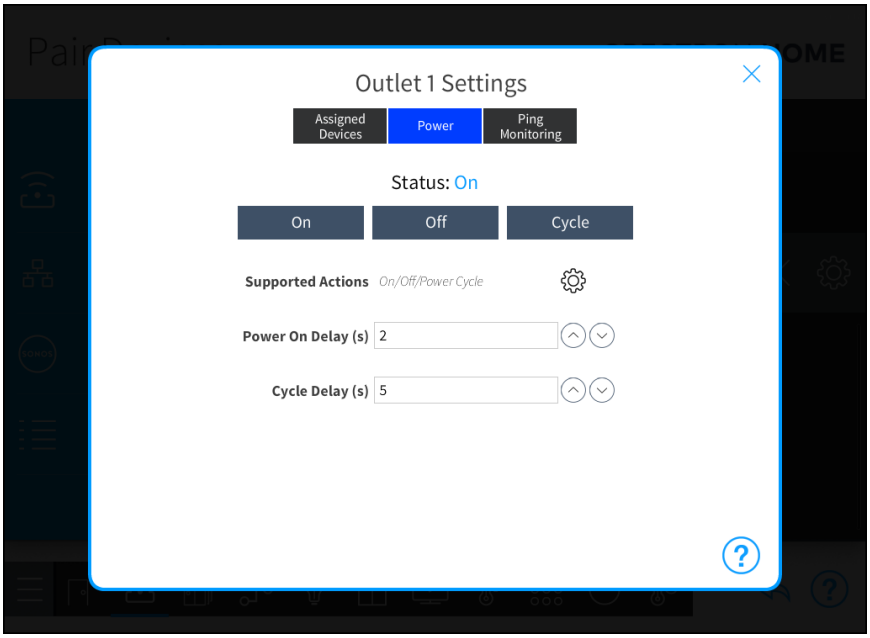


Outlet Power Settings

To configure the outlets:

1. Select the **Power** tab.
2. To configure the supported actions, select **Supported Actions** and then select the actions that are supported by the power controller.

3. To control the outlet, select **On**, **Off**, or **Cycle**.



4. To set the power on delay or cycle delay:

> **NOTE:** If a system-wide delay is used for all controlled outlets, set the delay using the Power tab on the main settings screen.

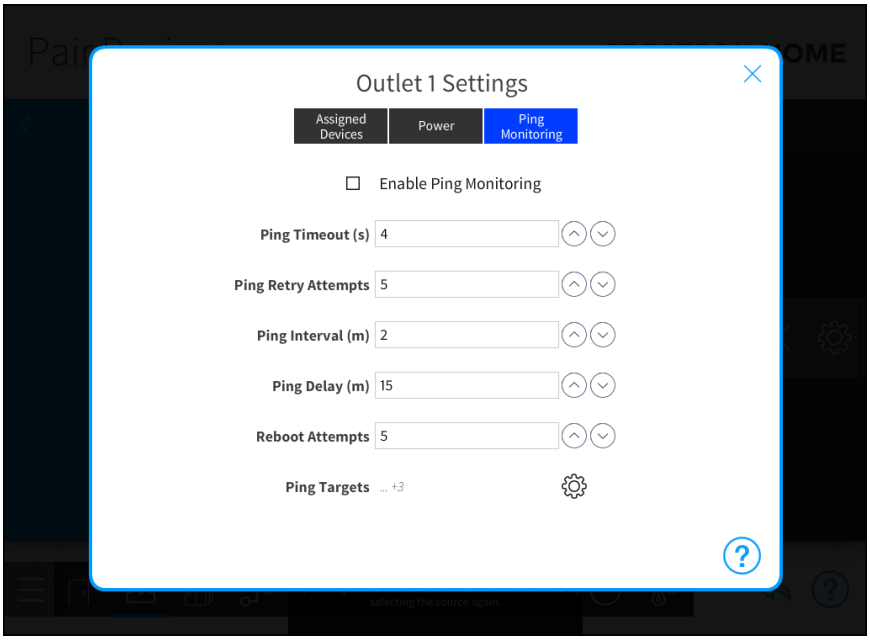
- **Power On Delay:** Enter the number of seconds to wait before turning on the outlet in **Power On Delay (s)**.
- **Cycle Delay:** The amount of time that the outlet remains off during a power cycle. To set the cycle delay, enter the number of seconds to wait before turning on the outlet in **Cycle Delay (s)**.

Ping Monitoring Settings

Use Ping Monitoring to detect an offline device and automatically power cycle the outlet.

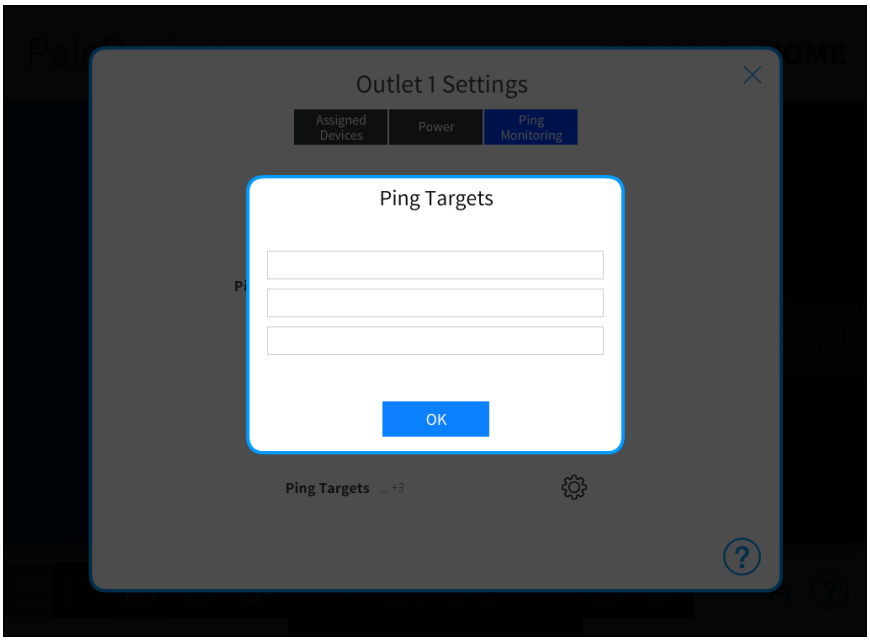
To turn on and configure ping monitoring:

1. Select the **Ping Monitoring** tab.



2. To turn on ping monitoring, select **Enable Ping Monitoring**.
3. Enter the ping settings:
    - **Ping Timeout:** The amount of time that passes before determining that the ping failed.
    - **Ping Retry attempts:** The number of failed ping attempts before determining that the device is offline before triggering a reboot.
    - **Ping Interval:** The frequency between ping attempts.
    - **Ping Delay:** The amount of time to wait after a reboot before pinging the device.
    - **Reboot Attempts:** The number of times a device will be power-cycled due to failed ping attempts.

4. Set the Ping Targets:
    a. Select ⚙ **Configure**.
    b. Enter the IP address, host name, or web address of the device.



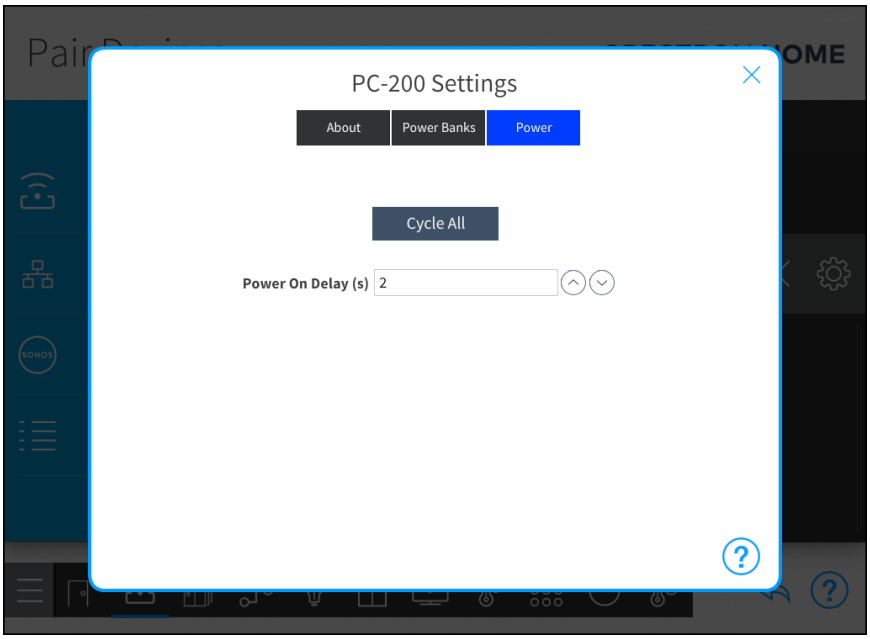
    c. Select **OK**.

Device Power

Use the **Power** tab to power cycle all devices. To power cycle all devices connected to the device, select **Cycle All**.



If available, set the system-wide power on or cycle delay:



- **Power On Delay:** Enter the number of seconds to wait before turning on the outlet in **Power On Delay (s)**.

- **Cycle Delay:** The amount of time that the outlet remains off during a power cycle. To set the cycle delay, enter the number of seconds to wait before turning on the outlet in **Cycle Delay (s)**.

Update

Use the **Update** tab to update the device firmware.



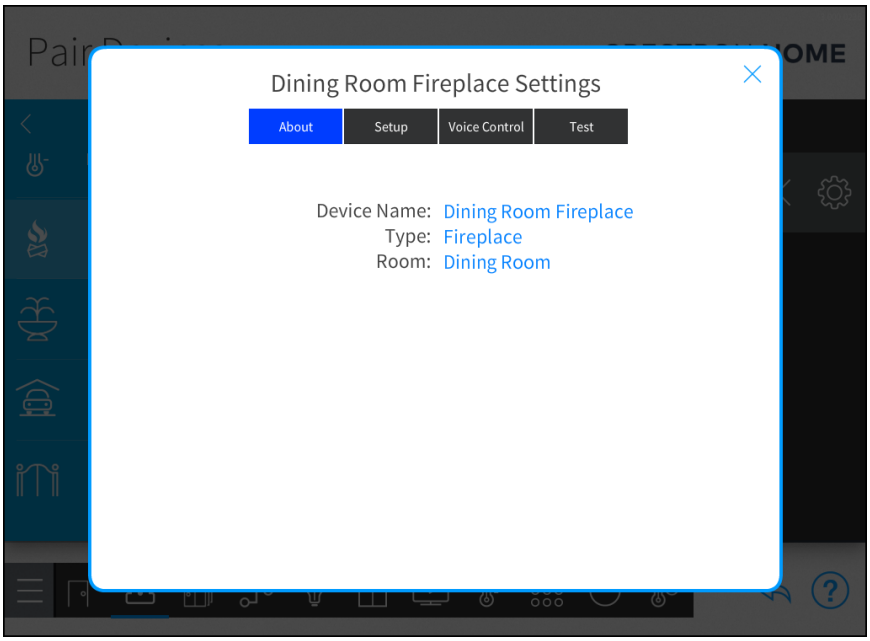
- **Current Version:** Displays the current firmware version for the gateway.
- **Available Version:** Displays the available firmware version for the gateway.
- **Update:** If a firmware update is available, tap **Update** to update the firmware.
- **Check For Update:** Tap the **Check For Update** button to search for firmware updates for the gateway.

Relay-Controlled Device Settings

Generic Relay-Controlled Device

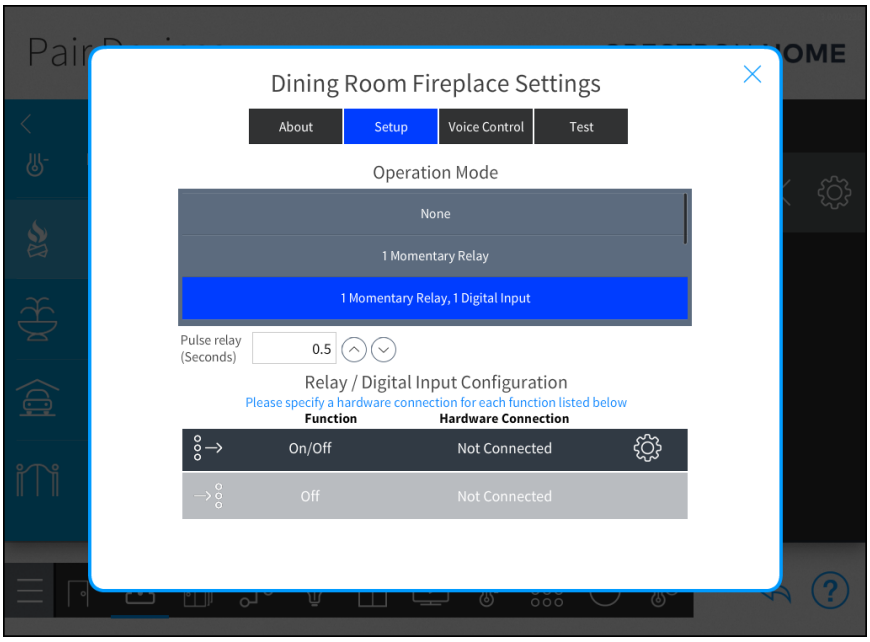
Tap the gear button next to the device name to display a Settings dialog box for the relay-controlled device. The **About** tab is selected and displays the device information.

> **NOTE:** The relay device must be installed in the room and wired to the relay port of a paired control device in order to function properly. For more information, refer to the relay device's documentation.



Setup

Tap the **Setup** tab to configure the relay controls.



Operation Mode:

- **Momentary:** Momentary relays are used to turn a relay on and off for a set duration.

  Select **1 Momentary Relay** to switch the relay between the on and off state. Select **2 Momentary Relays** to have one relay enable the on state and the other relay enable the off state.

- **Digital Input:** Digital inputs are used to monitor the device state.

  Select **1 Digital Input** if the device uses one sensor to monitor the on and off state. Select **2 Digital Inputs** if the device uses two sensors to monitor the on and off state; one sensor to monitor the on state and the other sensor to monitor the off state.

- **Latching:** Latched relays are used to turn a relay on and off and remain in the selected state until an inverse command is sent.

- **Pulse relay (Seconds):** Enter how long the momentary relay should be closed (seconds). The time can be set between 0.1 and 3 seconds. The default is 0.5 seconds.

  > **NOTE:** The **Pulse relay (Seconds)** field is not shown when the **Operation Mode** is set to **None** or **1 Latched Relay**.

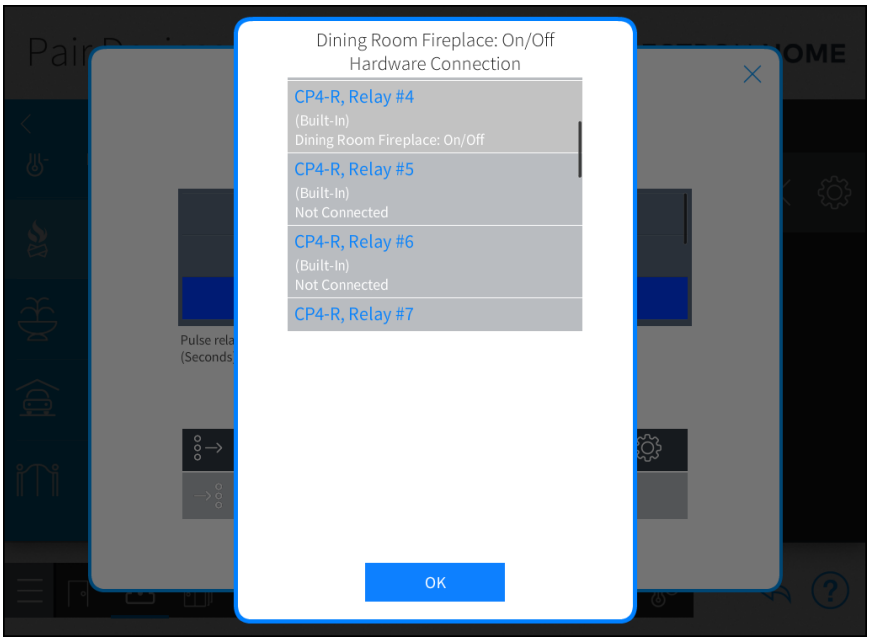
Relay/Digital Input Configuration:

1. Configure the relay(s).

> **NOTE:** If **2 Momentary Relays** was selected, repeat these steps for both relays.

   a. Tap the relay icon ( ) and then tap the gear button .

   b. Select the hardware connection where the relay is connected and then tap **OK**.

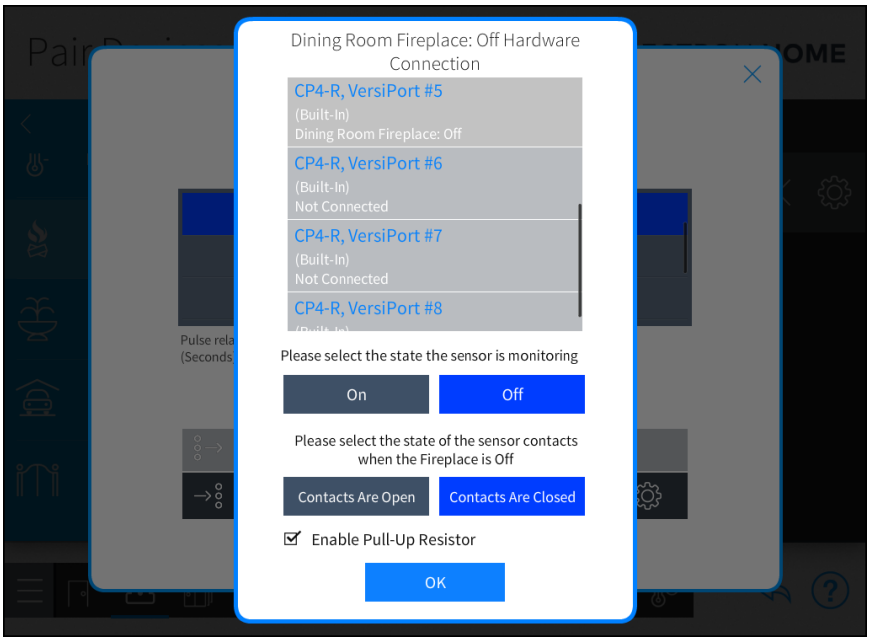


2. Configure the digital input(s).

> **NOTE:** If **2 Digital Inputs** was selected, repeat these steps for both digital inputs.

   a. Tap the digital input icon ( ) and then tap the gear button .

   b. Select the hardware connection where the relay is connected and then tap **OK**.



   c. **Sensor Monitoring:** Tap the **On** or **Off** button to select the state that the sensor is monitoring.

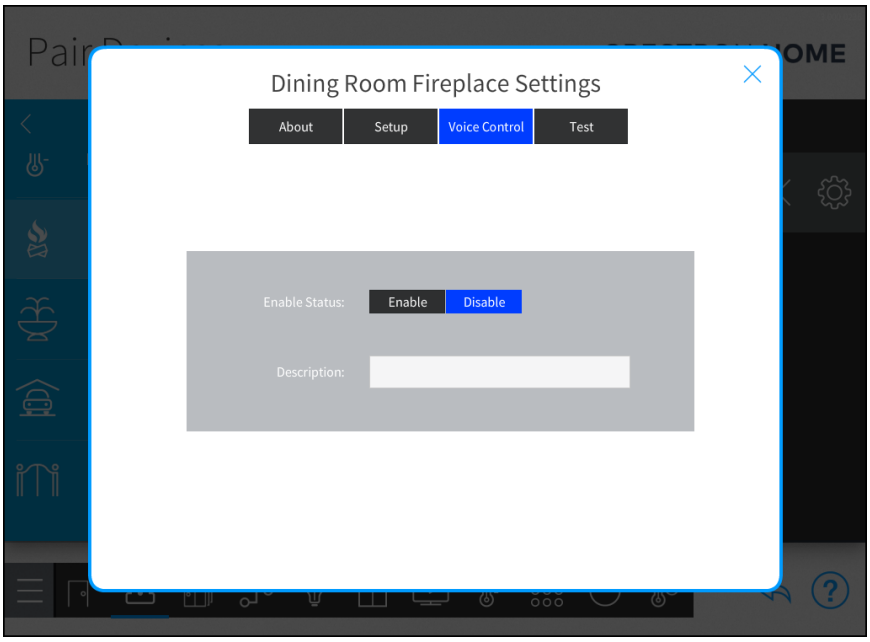
> **NOTE:Sensor Monitoring** is not displayed if **2 Digital Inputs** was selected in **Operation Mode**. An entry for **On** and an entry for **Off** is provided in the **Relay/Digital Input Configuration** menu.

   d. **Sensor State:** Tap the **Contacts Are Open** or **Contacts Are Closed** button to select the state of the sensor contacts when **Sensor Monitoring** is set to **On** or **Off**.

   e. **Enable Pull-Up Resistor:** Tap the **Enable Pull-Up Resistor** check box to enable the pull-up resistor.

Voice Control

Tap the **Voice Control** tab to configure the voice control settings.



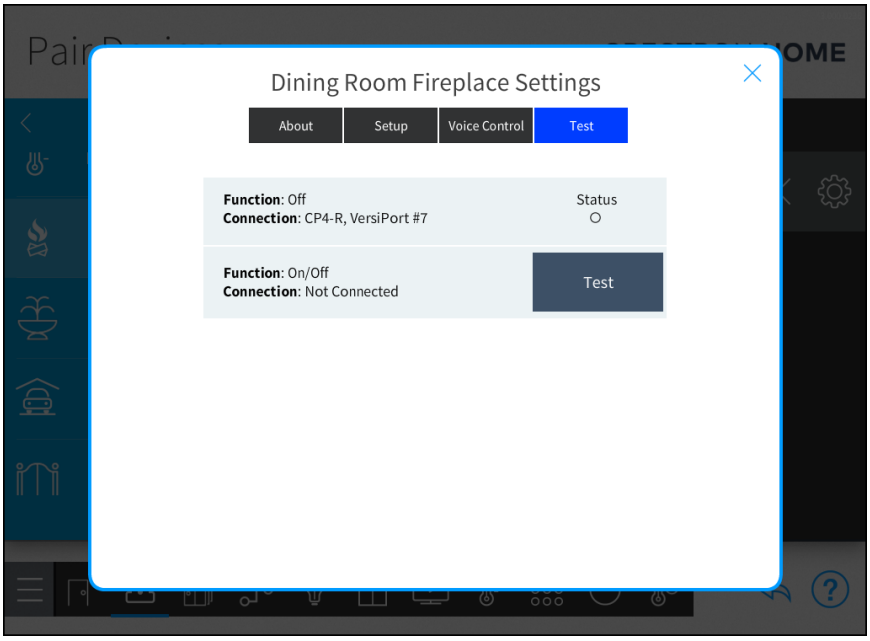
NOTE: To use voice control, voice control services must be turned on and configured. For details, refer to Voice Control Settings on page 607.

- **Enable Status:** Select **Enable** or **Disable** to turn voice control services on or off.
- **Description:** Enter a descriptive name. The name is used by the voice control services.

Test

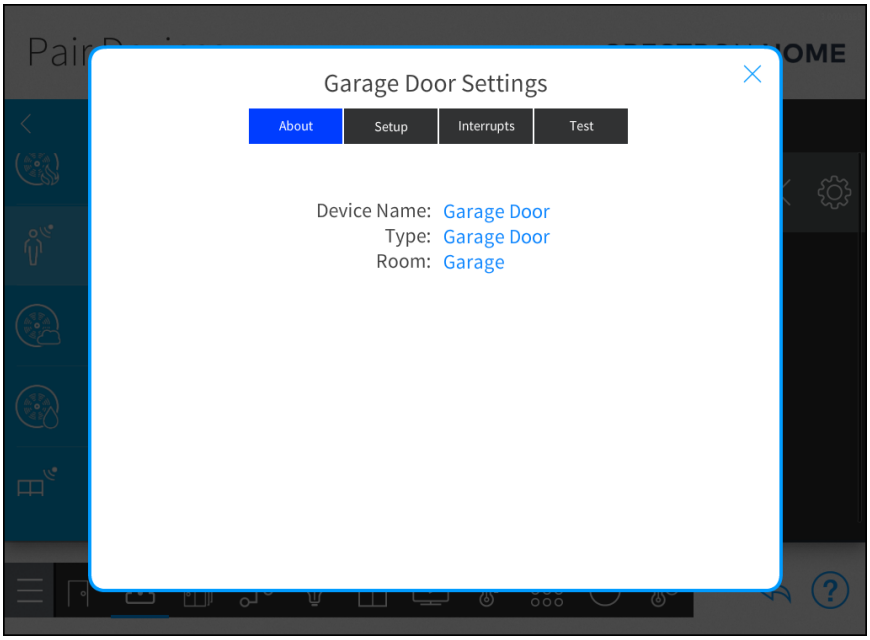
Tap the **Test** tab to view and test the relay-controlled device.

> **NOTE:** The hardware connection for the relay behavior(s) must be configured before they may be tested.



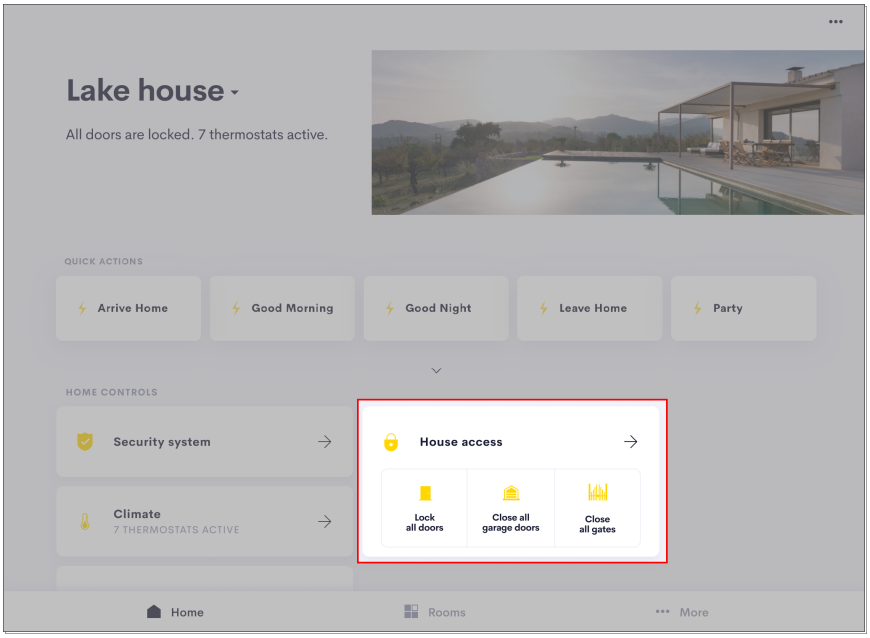
Gates and Garage Doors

Tap the gear button next to the device name to display a Settings dialog box for the garage door or gate. The **About** tab is selected and displays the device information. The Settings dialog box has additional tabs for **Setup**, **Interrupts**, and **Test**.



Configure the Garage Door

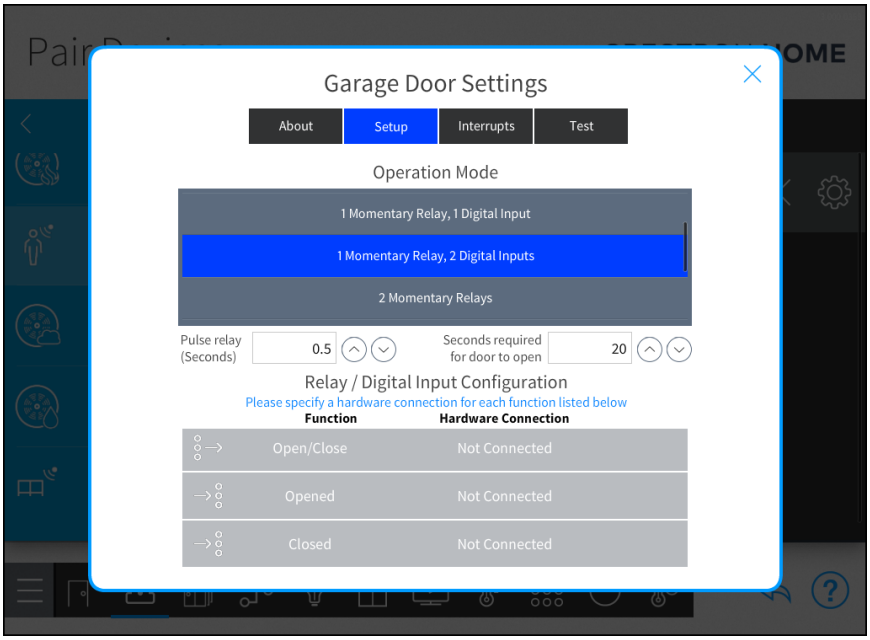
The Crestron Home user interface is capable of displaying the status of all garage doors, gates, and locks in the system. It also provides Open All and Close All functionality to provide one-press control of all device types.



NOTES:

- To enable the Open All and Close All functions and to display the garage door status in the Crestron Home OS user interface, every garage door in the system must utilize at least one sensor to monitor the garage door position. When one sensor is used, the sensor must monitor the closed position of the garage door.
- The following configurations are not valid selections:
  - None
  - 1 Latched Relay
  - 1 Momentary Relay, 1 Digital Input that monitors the opened state

Tap the **Setup** tab to configure the garage door.



Pulse relay (Seconds): Enter how long the momentary relay should be closed (seconds). The time can be set between 0.1 and 3 seconds. The default is 0.5 seconds.

NOTE: The **Pulse relay (Seconds)** field is not shown when the **Operation Mode** is set to **None** or **1 Latched Relay**.

Seconds required for door to open: Enter the typical time (seconds) that it takes for the garage door to open or close. This is used to stop the transition state when the garage door does not reach a monitored position. The default is 20 seconds.

Operation Mode: Select the number of momentary relays and the number of digital inputs (for example, VersiPorts).

NOTE: Certain garage door configurations do not provide adequate feedback to the control processors. As a result, garage door feedback may not be provided to the customer in the Crestron Home app. A notification will display to describe the feedback that will be provided to the customer.

- **Momentary:** Momentary relays are used to open and close the garage door.

  Select **1 Momentary Relay** if the garage door uses one button to open and close the garage door. Select **2 Momentary Relays** if the garage door uses two buttons, one to open the garage door and one to close the garage door.

- **Digital Input:** Digital inputs are used to monitor the open or close state of the garage door.

  Select **1 Digital Input** if the garage door uses one sensor to monitor the garage door position. The sensor must be installed and configured to monitor the closed position of the garage door. Select **2 Digital Inputs** if the garage door uses two sensors to monitor the open and close state; one sensor to monitor the open state and the other sensor to monitor the close state.

Relay/Digital Input Configuration: Assign a function to each momentary relay and digital input that was selected in **Operation Mode**.

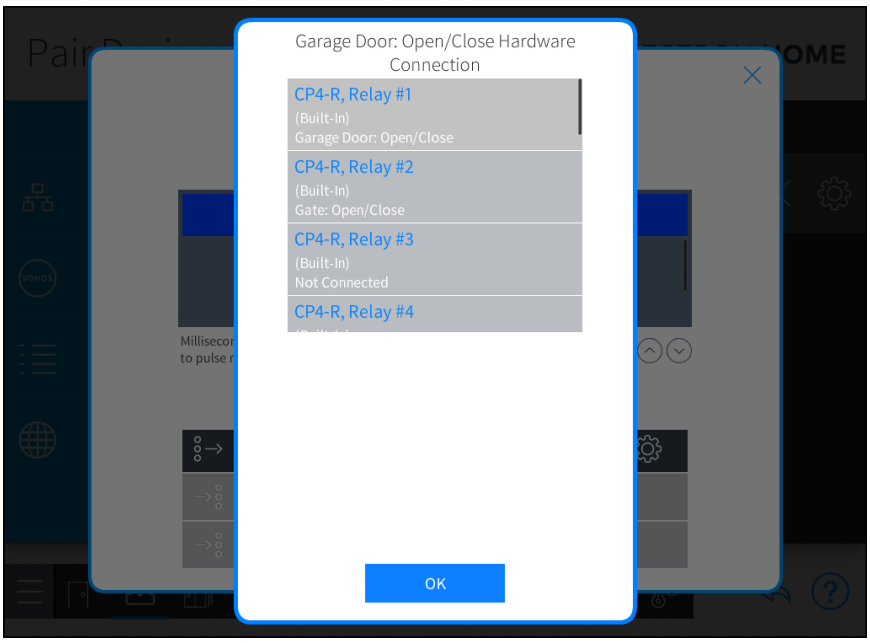
NOTE: The procedure below shows a garage door that is configured with **1 Momentary Relay, 2 Digital Inputs**. When the momentary relay is engaged, the garage door opens or closes depending on the garage door's last state. The first digital input senses when the garage door is open and the second digital input senses when the garage door is closed.

- **Configure the Momentary Relay(s):**

  1. Tap the gear button  next to the **Open/Close** relay. The **Open/Close Hardware Connection** dialog appears.

     > **NOTE:** If **2 Momentary Relays** was selected in **Operation Mode**, configure one momentary relay to open the garage door and the other momentary relay to close the garage door.

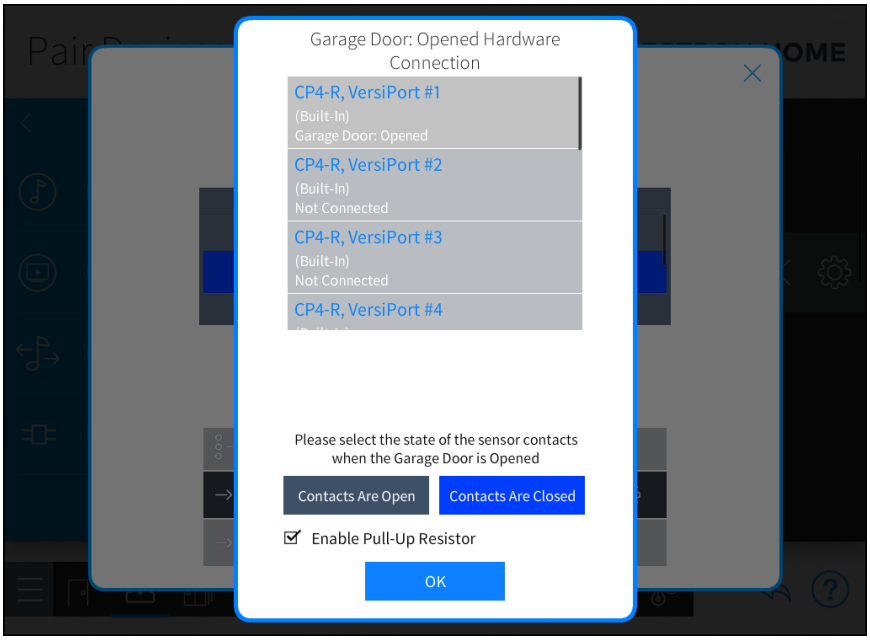
  2. Select the relay that the garage door is connected to and then tap **OK**.



- **Configure the Digital Input(s):**
    1. Tap the gear button  next to the **Opened** digital input. The **Opened Hardware Connection** dialog appears.
    2. Select the digital input (VersiPort) number that is monitoring the open state of the garage door.
    3. Select **Contacts Are Open** or **Contacts Are Closed** to select the state of the sensor contacts when the garage door is opened or closed.

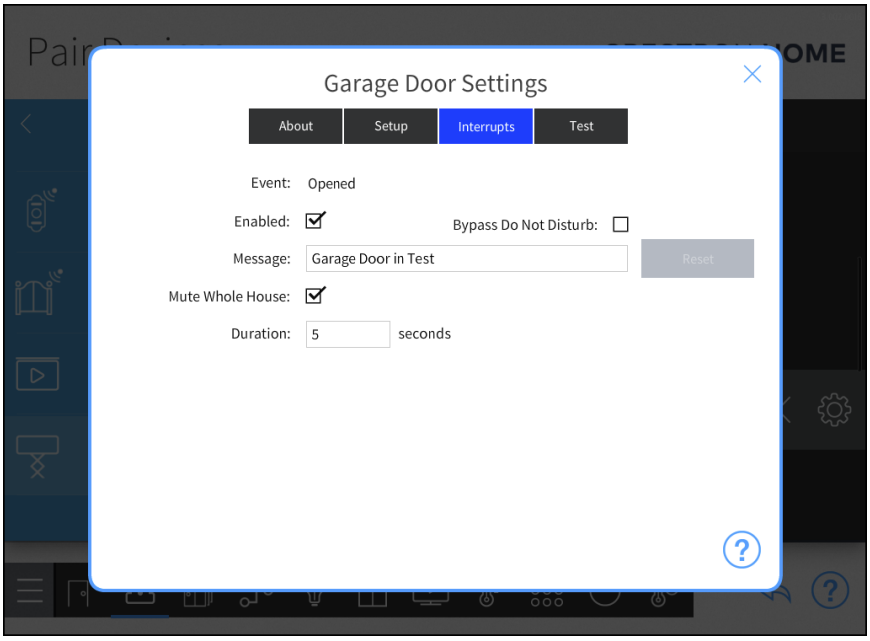
        > **NOTE:** If **1 Digital Input** is selected in **Operation Mode**, select the state (**Opened** or **Closed**) that the sensor is monitoring.

    4. Select the check box next to **Enable Pull-Up Resistor** to enable the pull-up resistor.
    5. Tap **OK**.



    6. Repeat steps 1 and 2 for the **Closed** digital input.

Tap the **Interrupts** tab to configure the garage door interrupts.



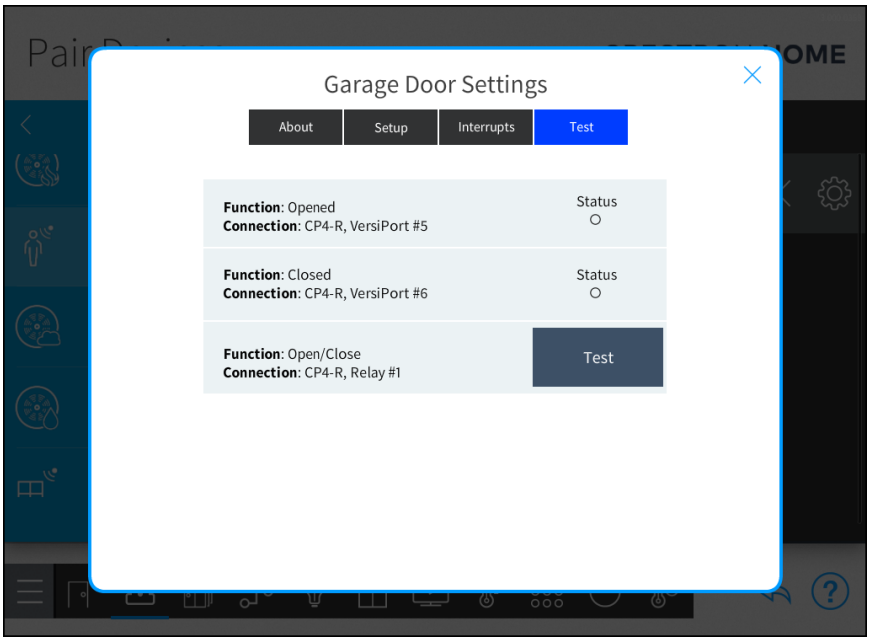
NOTE: Touch screens that do not have speakers display the interrupt messages but cannot play the associated sound.

- **Event:** The action that triggers the interrupt.
- **Enabled:** To enable or disable the interrupt for the device, tap the check box next to **Enabled**. When an interrupt is enabled, it is displayed in the Crestron Home user interface.
- **Bypass Do Not Disturb:** Tap the check box to override the Do Not Disturb setting for the room and play the chime for the interrupt.
- **Message:** The message that is displayed on the user interface device when the interrupt occurs. The default interrupt message is "[Device Name] in [Room Name]." For example, "Occupancy Sensor in Living Room."

  To display a custom message, enter the message in the field. To revert to the default message, select **Reset**.
- **Prefer Room Speakers:** Available for systems with DM NAX™ devices. Plays the interrupt using the speakers in the room.
- **Mute Whole House:** To mute the audio that is playing in any media room, tap the check box next to **Mute Whole House**. The audio is muted for the time set in the **Duration** field. The default **Mute Whole House** setting is enabled.
- **Duration:** The length of time that the audio in the room is muted. The duration can be set between 1 and 60 seconds. The default duration is 5 seconds.

Test the Garage Door

Tap the **Test** tab to verify that the garage door functions properly.

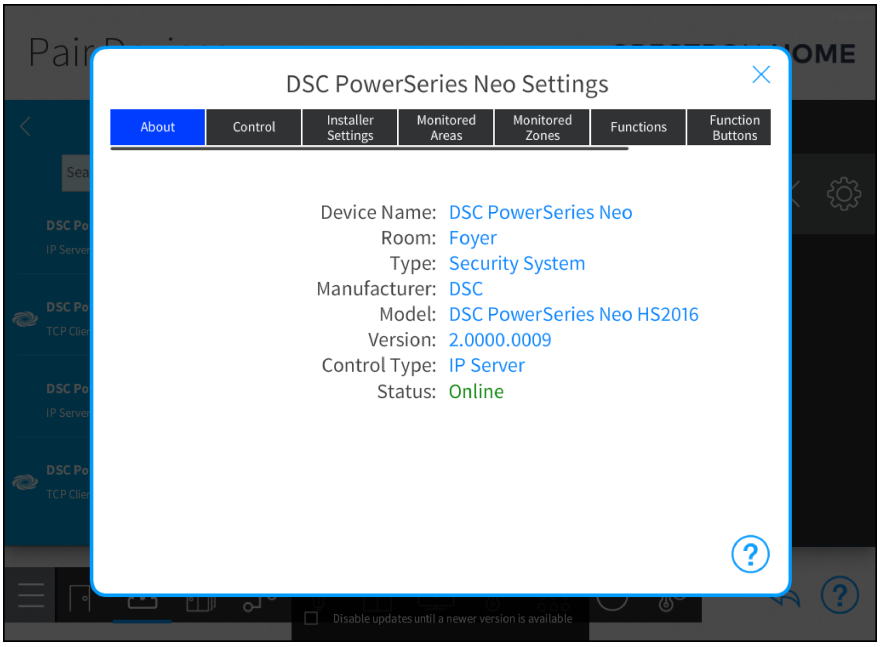


Tap the **Test** buttons that are associated with the open and close relays. The opened and closed status is indicated in the **Status** field.

Security System Settings

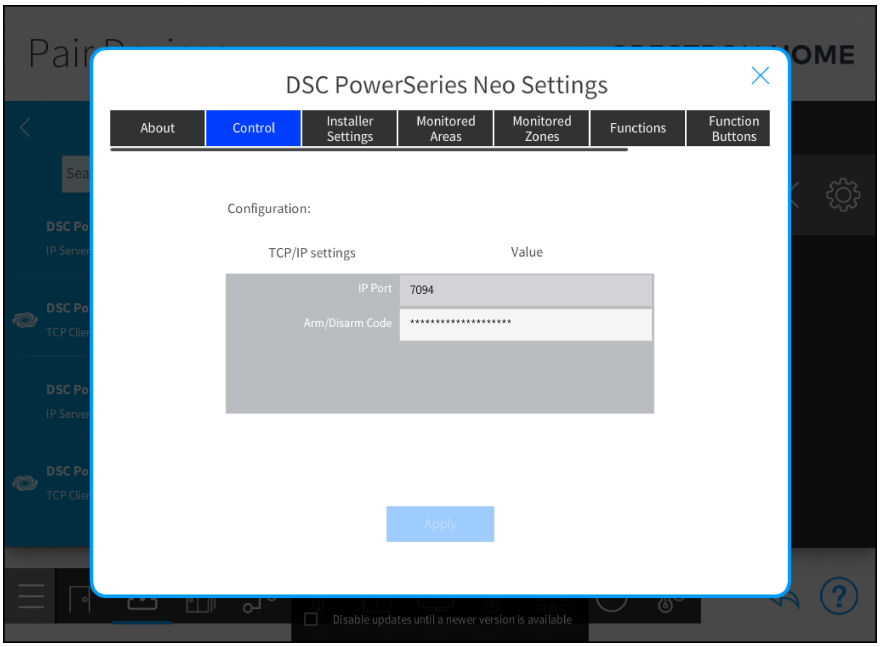
> **NOTE:** The available settings may vary based on the capabilities of the device.

Tap the gear button next to the device name to display a Settings dialog box for the security system device. The **About**tab is selected and displays the device information.

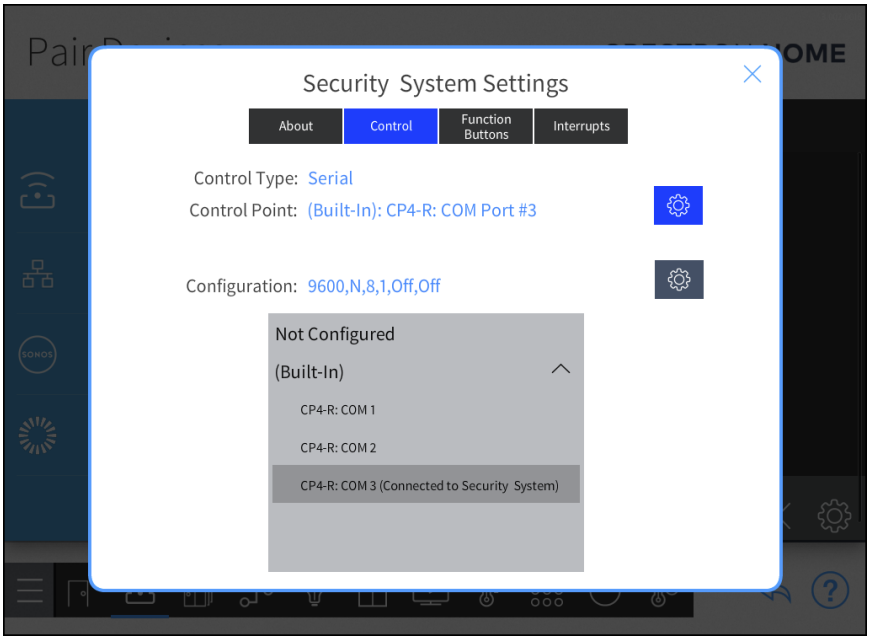


Control

Tap the **Control** tab to change the security system configuration.



- **Control Type:** Displays the type of control for the security system.
- **Control Point:** Displays the hardware connection for the COM port. To change the control point, tap the gear icon next to **Control Point** and then select a COM port from the **Control Point** list.

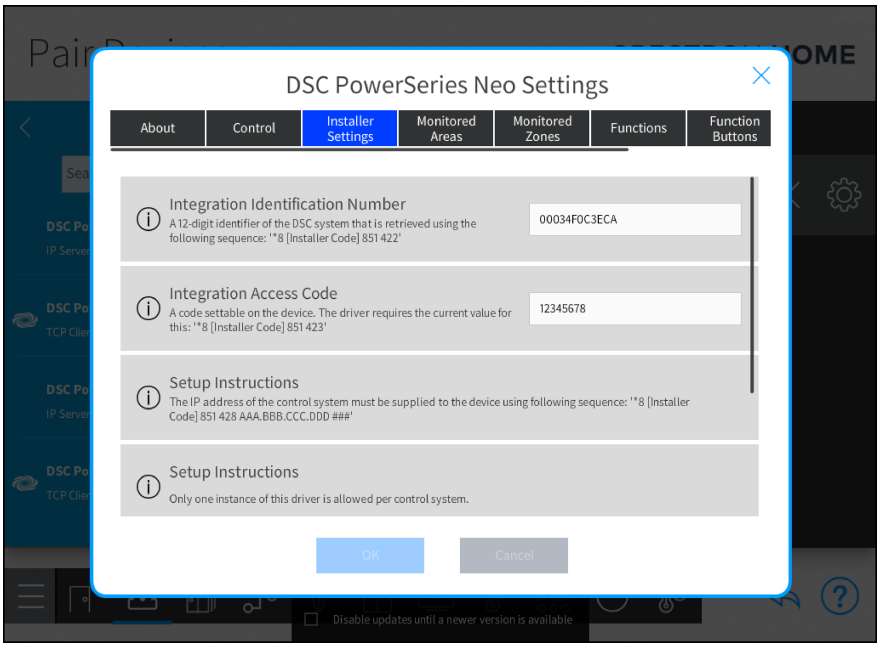


- **Configuration:** Displays the settings for COM port communications. To change the settings, tap the gear icon next to **Configuration** and then select the settings for the **Baud Rate**, **Parity**, **Data Bits**, **Stop Bits**, **HW Shade**, and **SW Shake** parameters.



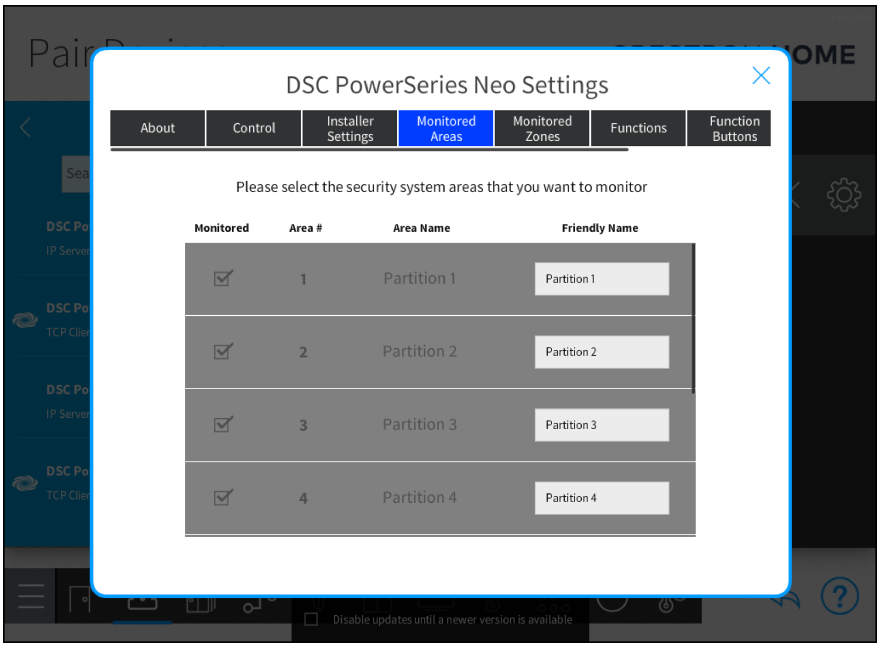
Installer Settings

Use the Installer Settings tab to configure and assign settings for the security system.



Monitored Areas

Use the**Monitored Areas**tab to configure the areas that are monitored by the security system.

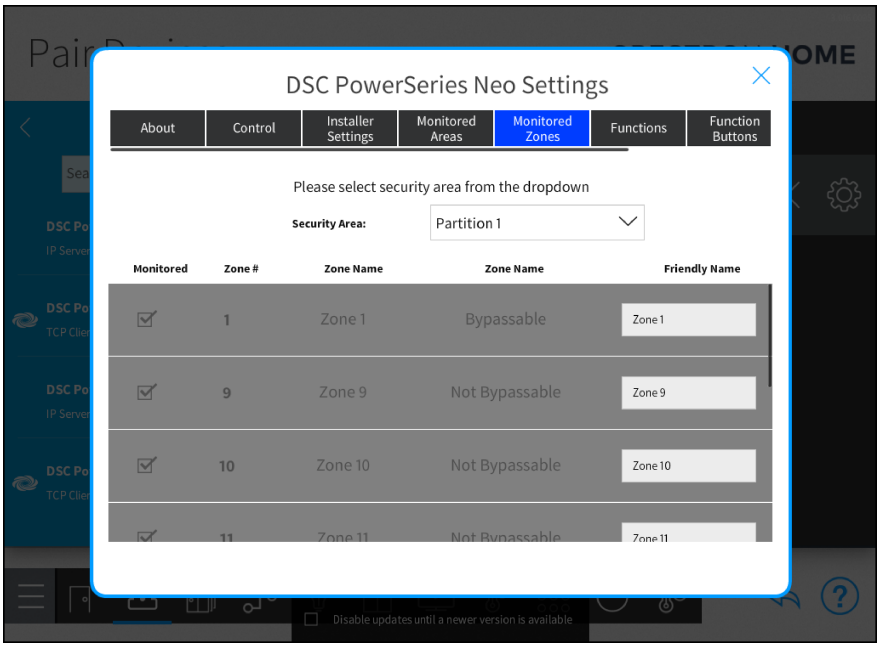


The Monitored Areas list displays the **Monitored**, **Area Number**, **Area Name**, and **Friendly Name** properties for each area.

- **Monitored:** Indicates that the area is visible in the Crestron Home user interface when the security system menu is opened. To view the area in the menu for the security system, tap the check box next to the area number.
- **Area #:** The area number that is provided by the security system.
- **Area Name:** The name of the area that is provided by the security system.
- **Friendly Name:** The name that is displayed for the area in the Crestron Home user interface when the security system menu is opened.

Monitored Zones

Tap the **Monitored Zones** tab to display the zones that are monitored by the security system.

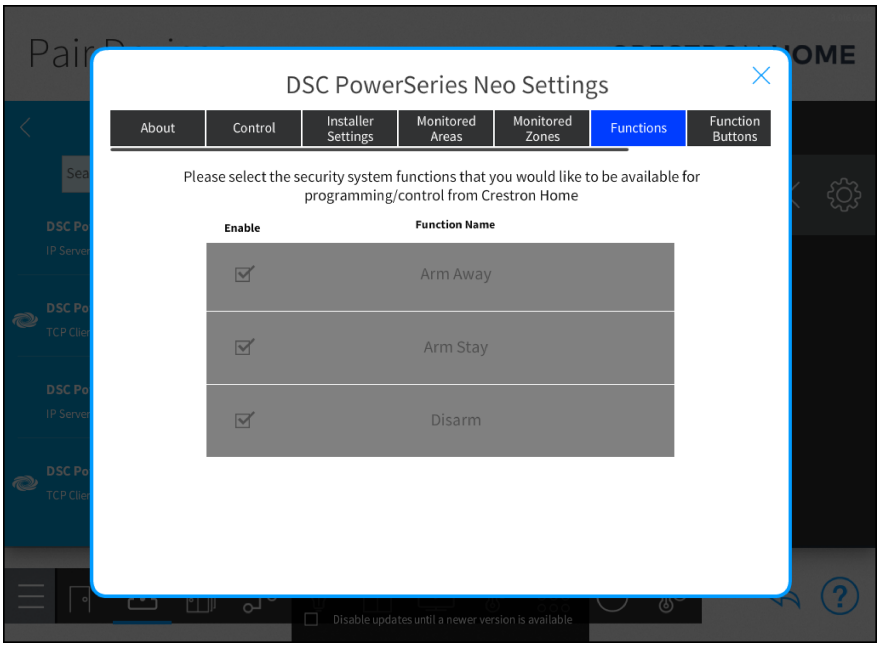


The Monitored Zones list displays the **Monitored**, **Zone Number**, **Zone Name**, **Zone Function**, and **Friendly Name** properties for each area.

- **Monitored:** Indicates that the zone is visible in the Crestron Home user interface when the security system menu is opened. To view the zone in the menu for the security system, tap the check box next to the zone number.
- **Zone #:** The zone number that is provided by the security system.
- **Zone Name:** The name of the zone that is provided by the security system.
- **Zone Function:** The functionality of the zone that is provided by the security system.
- **Friendly Name:** The name that is displayed for the zone in the Crestron Home user interface when the security system menu is opened.

Functions

Tap the **Function** tab to display the function list and enable functions for the security system. The functions are defined by the security system driver that is used and varies by make and model.

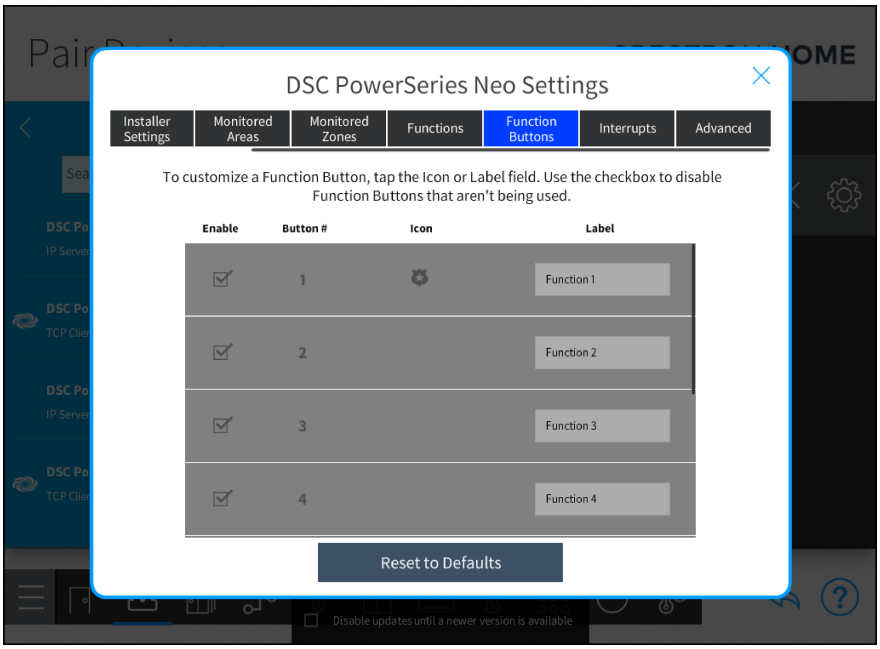


The Functions list displays the **Enable** and **Function Name** properties for each function.

- **Enable:** Indicates that the function is visible in the Crestron Home user interface when the security system menu is opened. To view the function in the menu for the security system, select the check box next to the function name.
- **Function Name:** The name of the function that is provided by the security system.

Function Buttons

Tap the **Function Buttons** tab to display the function buttons list and configure the function buttons for the security system. The function buttons are defined by the security system driver that is used and varies by make and model.

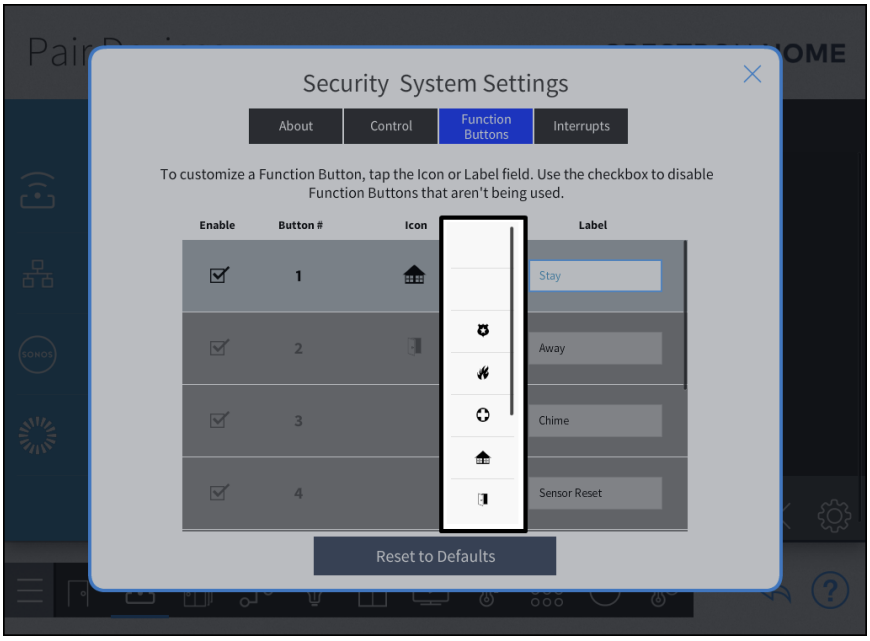


The Function Button list displays the **Enable**, **Button #**, **Icon**, and **Label** properties for each button.

- **Enable:** Indicates that the function button is visible in the Crestron Home user interface when the security system menu is opened. To view the function button in the menu for the security system, tap the check box next to the button number.
- **Button #:** The button number that is provided by the security system.

- **Icon:** The image that is displayed on the button in the Crestron Home user interface when the security system menu is opened.

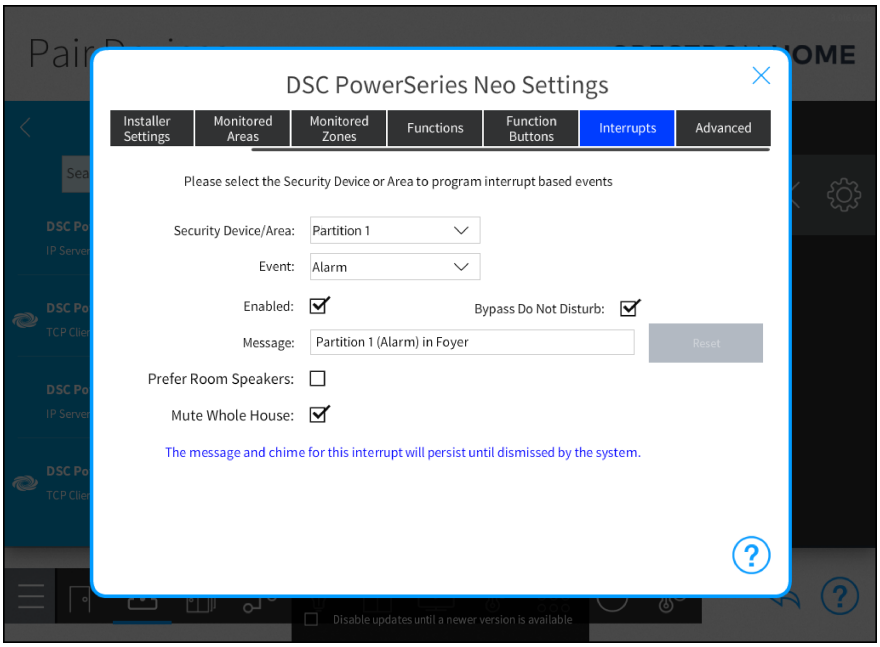
  To change the icon, tap an icon and then select a new icon from the list.



- **Label:** The name that is displayed for the button in the Crestron Home user interface when the security system menu is opened.
- **Reset to Defaults:** Resets the **Enable**, **Button #**, **Icon**, and **Label** settings for all buttons to their default settings. To apply the default settings, tap **Reset to Defaults**.

Interrupts

Tap the **Interrupts** tab to configure the interrupts for the security system.



NOTE: Touch screens that do not have speakers display the interrupt messages but cannot play the associated sound.

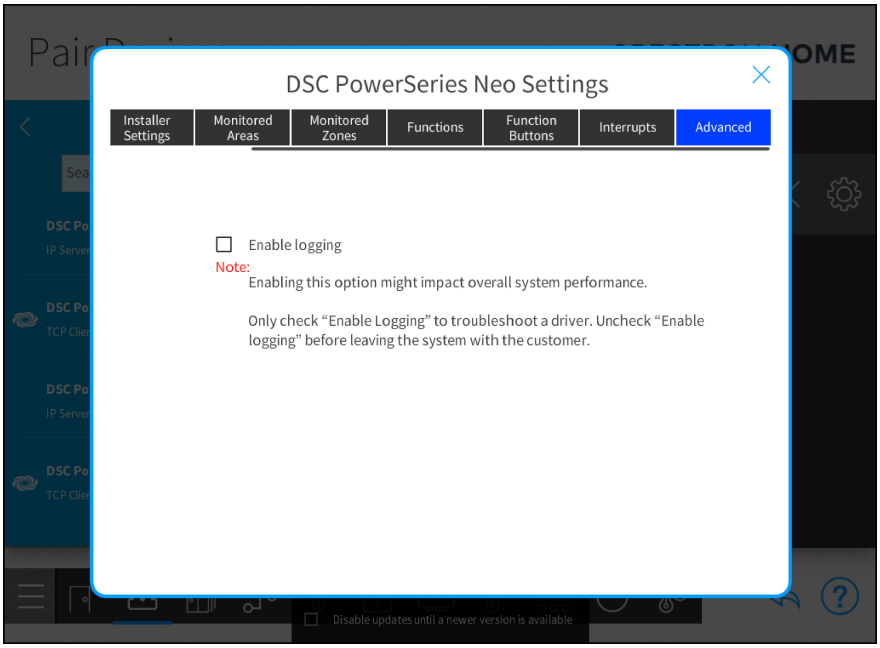
- **Security Device/Area:** The device or area monitored by the security system. The available devices and areas are displayed in the drop-down menu. Configure the interrupt settings for all events and for all devices and areas.
- **Event:** The action that triggers the interrupt. The available events are displayed in a drop-down menu. Configure the interrupt settings for all events.
- **Enabled:** To enable or disable the interrupt for the device, tap the check box next to **Enabled**. When an interrupt is enabled, it is displayed in the Crestron Home user interface.
- **Bypass Do Not Disturb:** Tap the check box to override the Do Not Disturb setting for the room and play the chime for the interrupt.
- **Message:** The message that is displayed on the user interface device when the interrupt occurs. The default interrupt message is "[Device Name] ([Event Name]) in [Room Name]." For example, "Security System (Fire) in Atrium."

  To display a custom message, enter the message in the field. To revert to the default message, select **Reset**.
- **Prefer Room Speakers:** Available for systems with DM NAX™ devices. Plays the interrupt using the speakers in the room.

- **Mute Whole House:** To mute the audio that is playing in any media room, tap the check box next to **Mute Whole House**. The audio is muted for the time set in the **Duration** field. The default **Mute Whole House** setting is enabled.
- **Duration:** The message and chime persists until it is dismissed by the system.

Advanced

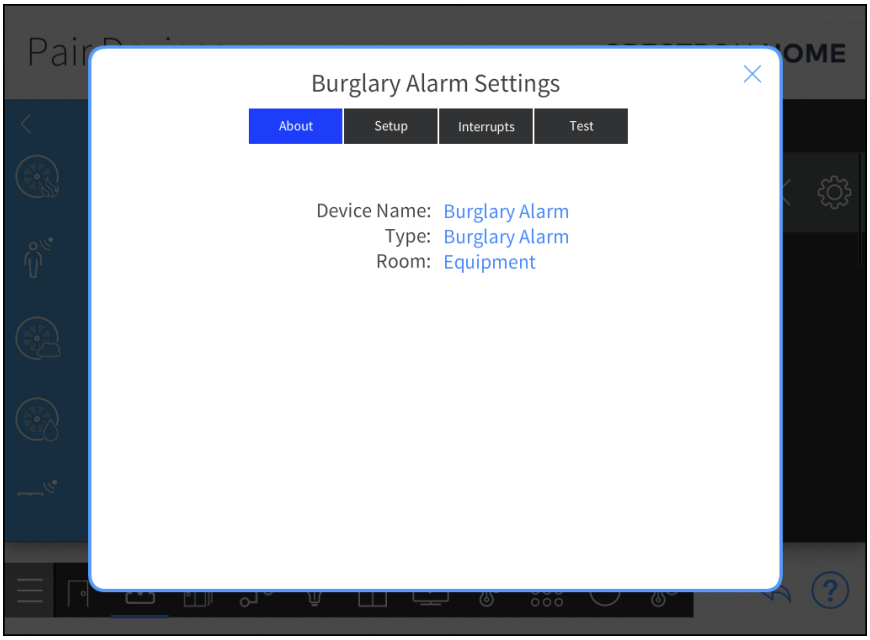
Tap the **Advanced** tab to display the advanced functions for the device. For details, refer to Advanced Settings on page 1383.



Sensor Controlled Device Settings

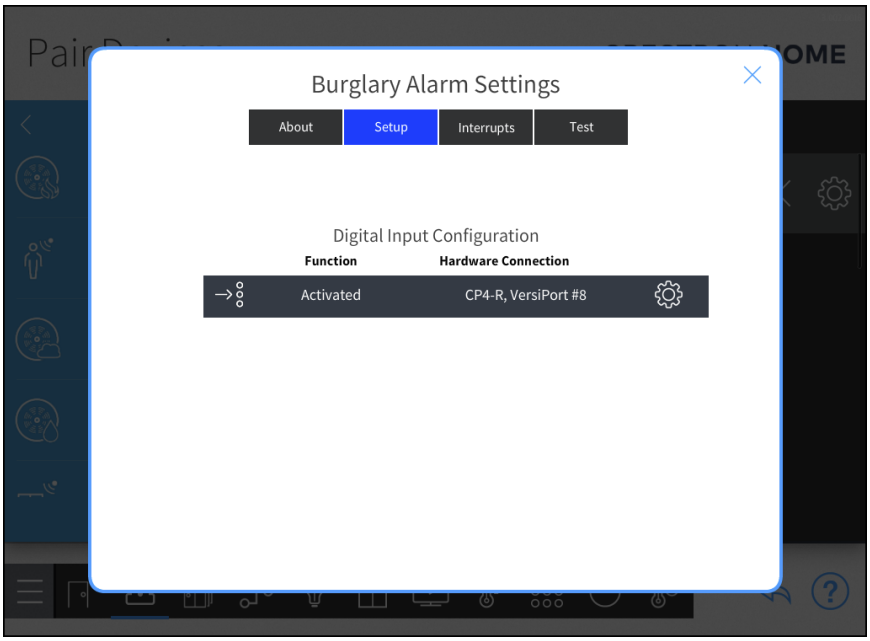
> **NOTE:** The sensor device must be installed in the room and wired to a paired control device in order to function properly. For more information, refer to the sensor device documentation.

Tap the gear button next to the device name to display a Settings dialog box for the sensor device. The **About** tab is selected and displays the device information.



Setup

Tap the **Setup** tab to configure the digital inputs.



Tap the gear button next to an input to configure the digital input

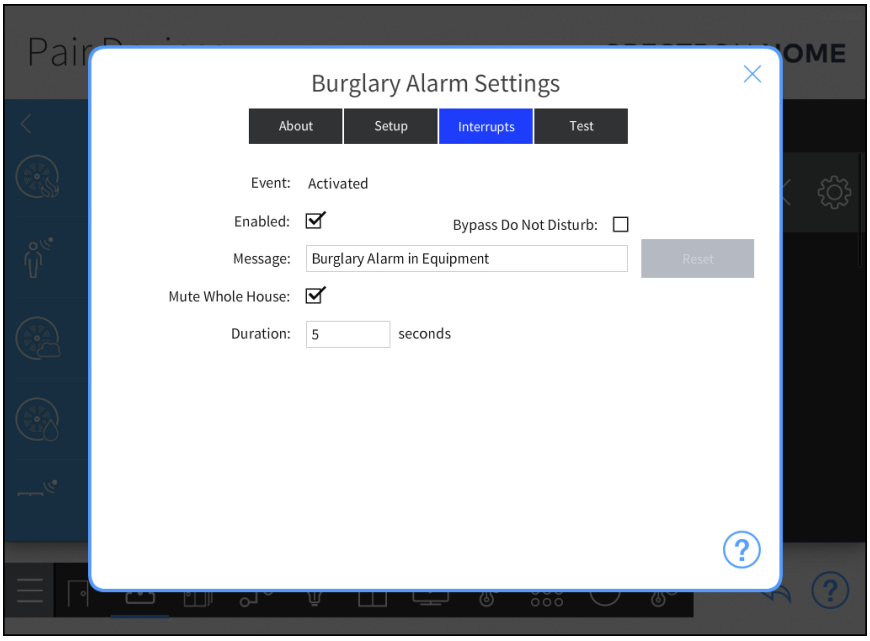


- **Hardware Connection:** Tap a port to select the hardware port where the sensor controlled device is connected.
- **Sensor State Monitoring:** Tap **Activated** or **Deactivated** to select the state that the senor is monitoring.

- **Contact State:** Tap **Contacts Are Open** or **Contacts Are Closed** to select the state of the sensor contacts when the sensor is activated or deactivated.
- **Enable Pull-Up Resistor:** Tap the **Enable Pull-Up Resistor** check box to enable a pull-up resistor for the hardware connection. A checked box indicates an enabled pull-up resistor.

Interrupts

Tap the **Interrupts** tab to configure the interrupts for the device.



NOTE: Touch screens that do not have speakers display the interrupt messages but cannot play the associated sound.

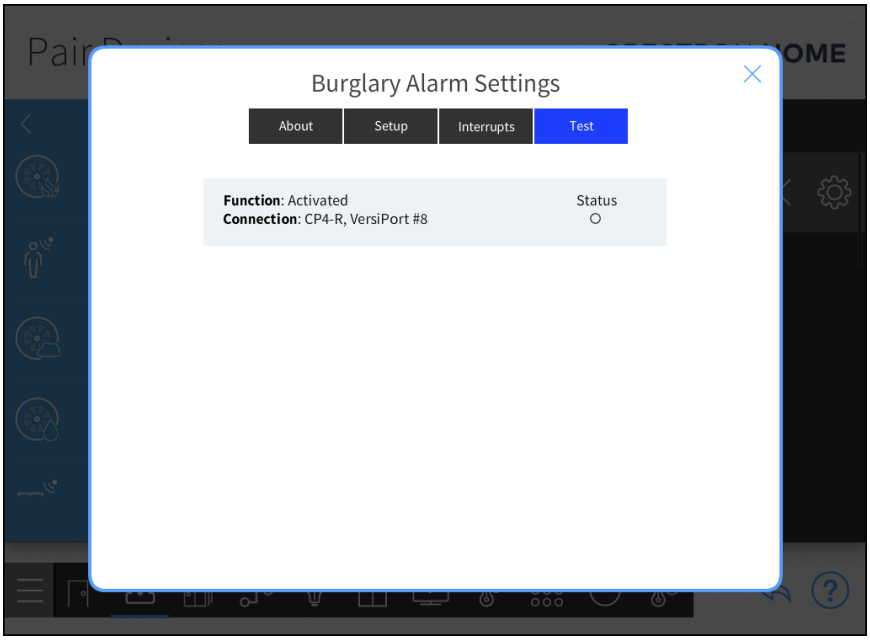
- **Event:** The action that triggers the interrupt.
- **Enabled:** To enable or disable the interrupt for the device, tap the check box next to **Enabled**. When an interrupt is enabled, it is displayed in the Crestron Home user interface.
- **Bypass Do Not Disturb:** Tap the check box to override the Do Not Disturb setting for the room and play the chime for the interrupt.
- **Message:** The message that is displayed on the user interface device when the interrupt occurs. The default interrupt message is "[Device Name] in [Room Name]." For example, "Occupancy Sensor in Living Room."

  To display a custom message, enter the message in the field. To revert to the default message, select **Reset**.
- **Prefer Room Speakers:** Available for systems with DM NAX™ devices. Plays the interrupt using the speakers in the room.

- **Mute Whole House:** To mute the audio that is playing in any media room, tap the check box next to **Mute Whole House**. The audio is muted for the time set in the **Duration** field. The default **Mute Whole House** setting is enabled.
- **Duration:** The length of time that the audio in the room is muted. The duration can be set between 1 and 60 seconds. The default duration is 5 seconds.

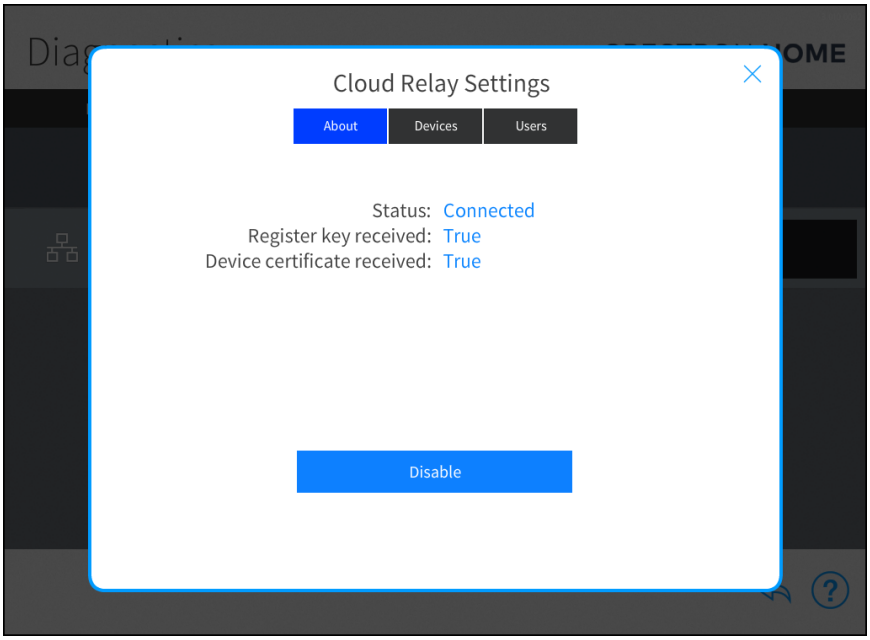
Test

Tap the **Test** tab to verify that the device functions properly.



Service Settings

Tap the gear button next to the device name to display a Settings dialog box for the gateway. The **About** tab is selected and displays the device information.

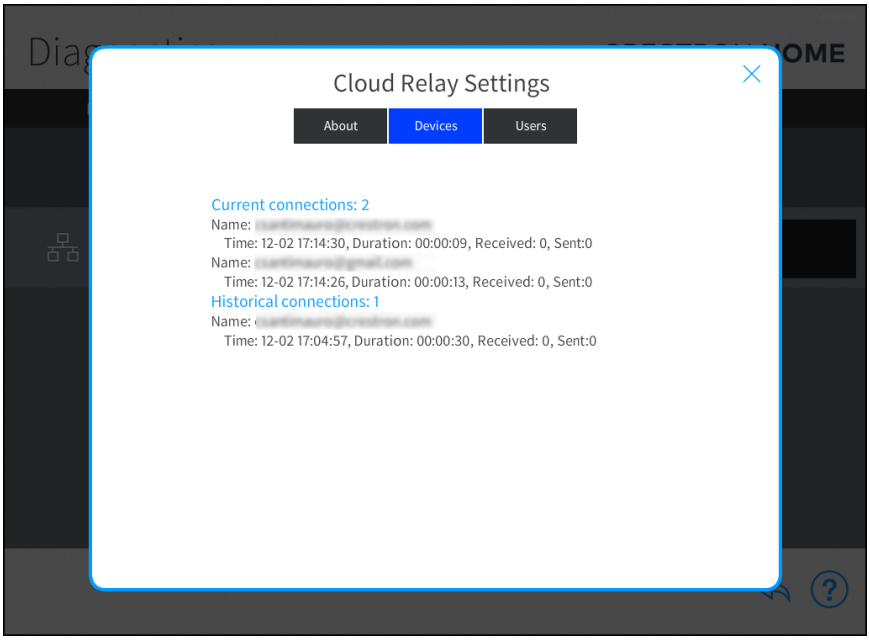


To turn on or off the cloud service, select **Disable** or **Enable**. When turned off, the **Devices** and **Users** tab is not shown and the status displays **Disabled**.

Devices

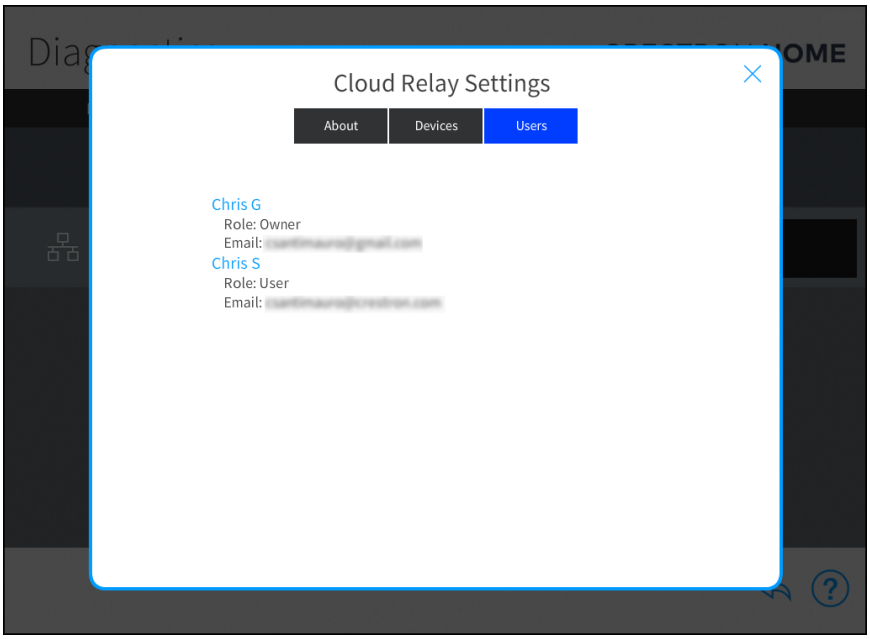
Use the **Devices** tab to view the devices that are connected to the service. The Current connections list displays the number of devices with a remote connections that are active and the Historical connections shows the number devices that have been connected in the past.

The list of devices includes the user email address, device name, length of connection, and the amount of bytes sent and received.



Users

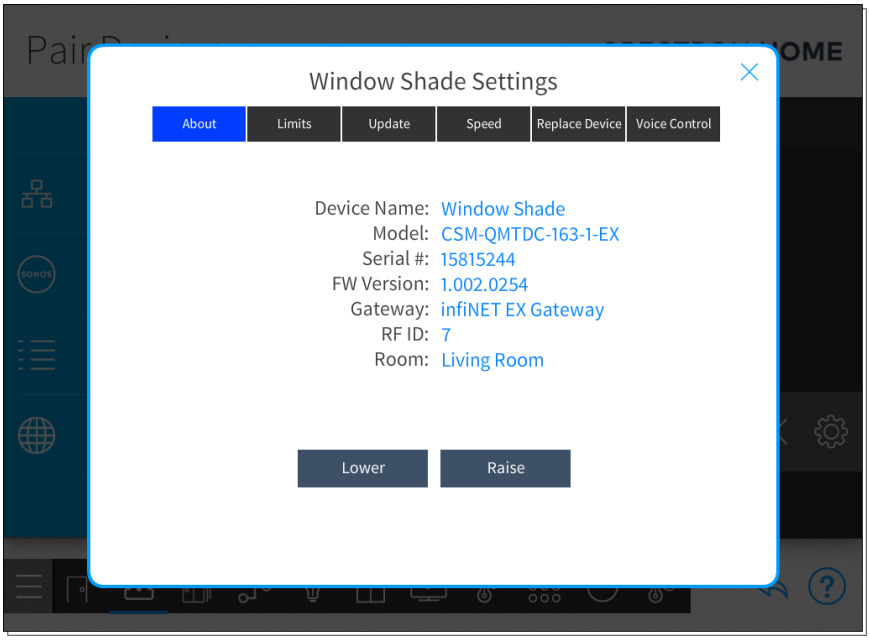
Use the **Users** tab to view users that have joined the system. When a user is removed from the system they are also removed from this list.



Shade Motor and Motor Controller Settings

CSM-QMTDC Series Motors

Tap the gear button next to the device name to display a Settings dialog box for the shade motor. The **About** tab is selected and displays the device information.



Limits

Tap the **Limits** tab to configure the shade motor limits. The lower limit is the lowest point that the shade fabric will travel and the upper limit is the highest point that the shade fabric will travel.



To set the lower limit:

1. Tap the **Adjust Lower Limit** button.
2. Tap and hold the **Raise** and **Lower** buttons or tap the **Jog Up** or **Jog Down** buttons to set the fabric height at its lower limit.
3. Tap the **Save Limit** button.

To set the upper limit:

1. Tap the **Adjust Upper Limit** button.
2. Tap and hold the **Raise** and **Lower** buttons or tap the **Jog Up** or **Jog Down** buttons to set the fabric height at its upper limit.
3. Tap the **Save Limit** button.

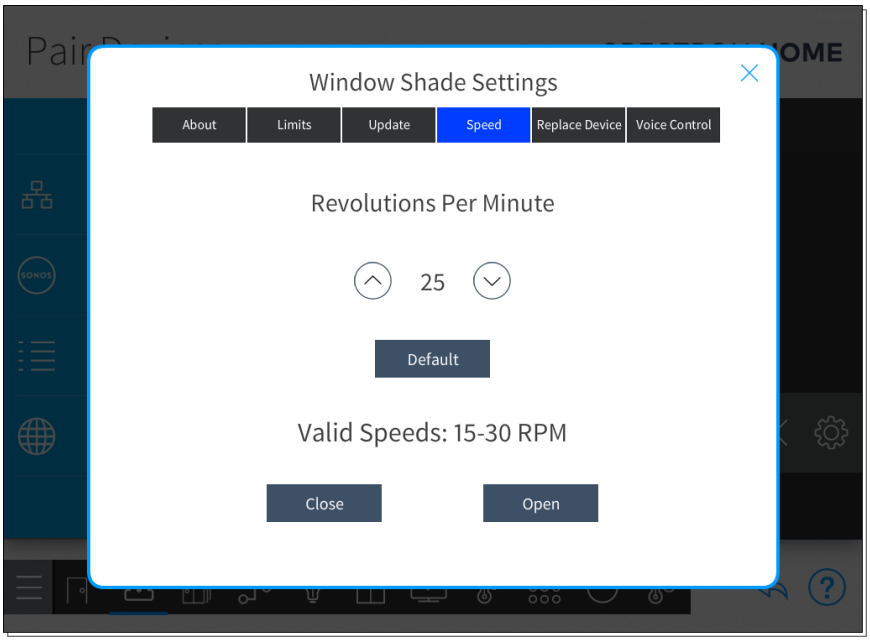
Update

Tap the **Update** tab to update the firmware for the shade motor. Tap **Check for Update** to search for updated firmware. If a firmware update is available, tap **Update** to update the firmware for the shade motor.



Speed

Tap the **Speed** tab to set the speed, in revolutions per minute (RPM), that the shade travels. The value can be set between 15 and 30 revolutions per minute.



- **Default:** Sets the revolutions per minute to the default value. The default value is 25 revolutions per minute.
- **Close:** Fully closes the shade.
- **Open:** Fully opens shade.

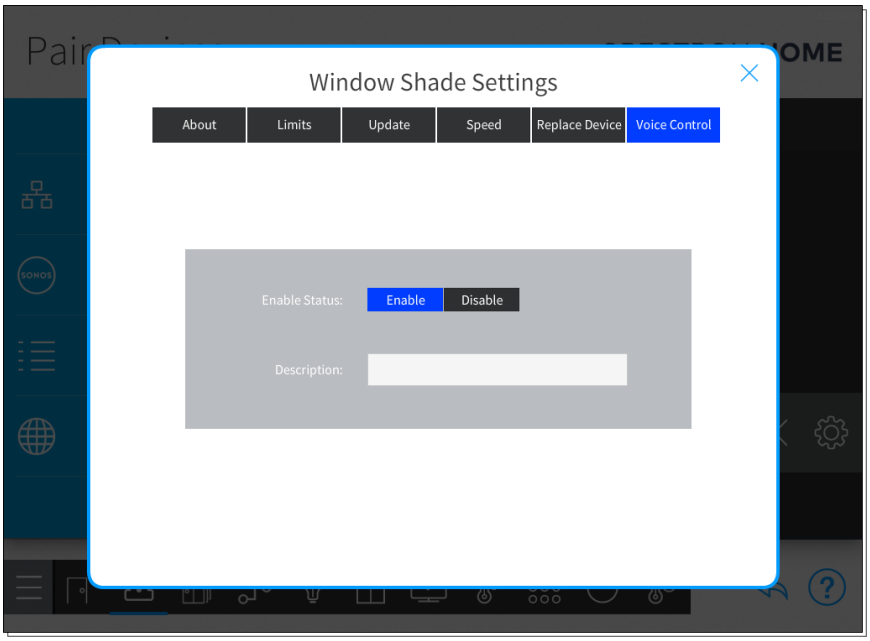
Replace Device

Tap the **Replace Device** tab to replace the device.



Voice Control

Tap the **Voice Control** tab to configure the voice control settings.

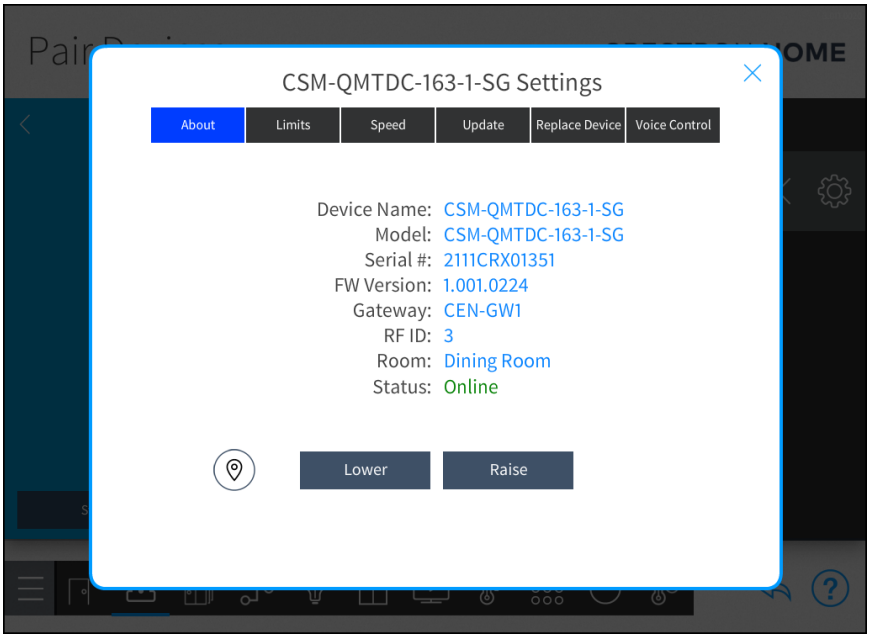


NOTE: To use voice control, voice control services must be turned on and configured. For details, refer to Voice Control Settings on page 607.

- **Enable Status:** Select **Enable** or **Disable** to turn voice control services on or off.
- **Description:** Enter a descriptive name. The name is used by the voice control services.

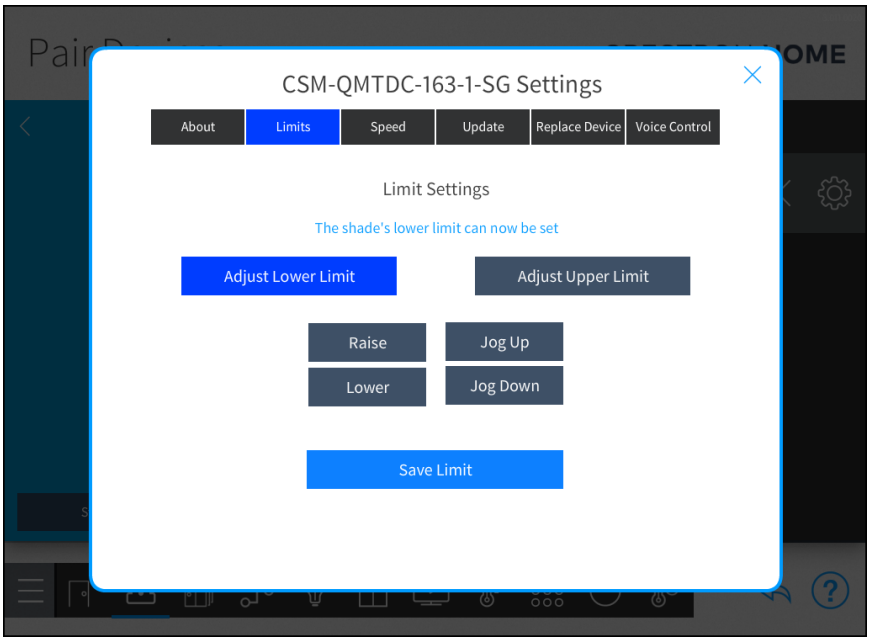
CSM-QMTDC Battery Shades

Tap the gear button next to the device name to display a Settings dialog box for the shade motor. The **About** tab is selected and displays the device information. The Settings dialog box has additional tabs for **Limits**, **Speed**, **Update**, **Replace Device**, and **Voice Control**.



Limits

Tap the**Limits** tab to configure the shade motor limits. The lower limit is the lowest point that the shade fabric will travel and the upper limit is the highest point that the shade fabric will travel.



To set the lower limit:

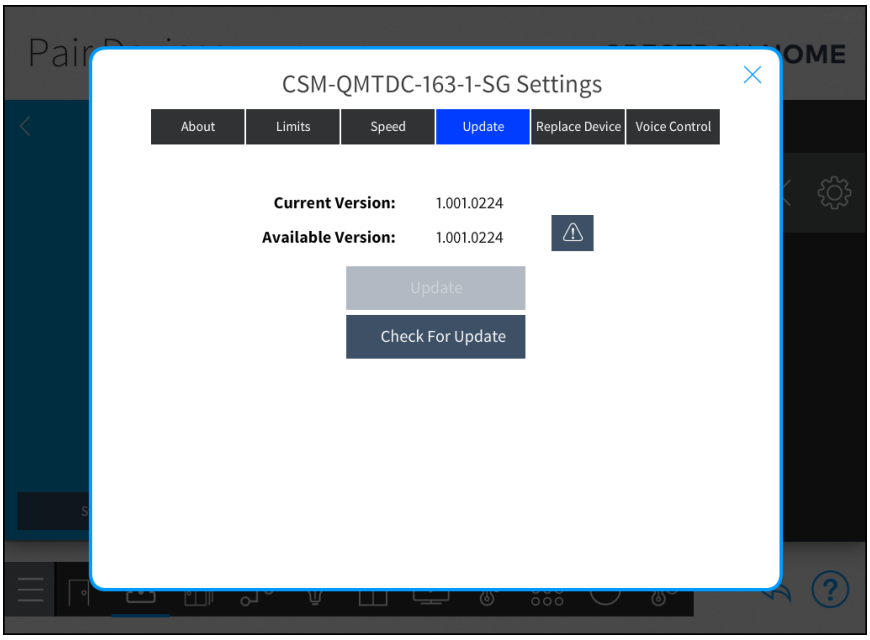
1. Tap the**Adjust Lower Limit** button.
2. Tap and hold the**Raise** and**Lower** buttons or tap the**Jog Up** or **Jog Down** buttons to set the fabric height at its lower limit.
3. Tap the**Save Limit** button.

To set the upper limit:

1. Tap the**Adjust Upper Limit** button.
2. Tap and hold the**Raise** and**Lower** buttons or tap the**Jog Up** or **Jog Down** buttons to set the fabric height at its upper limit.
3. Tap the**Save Limit** button.

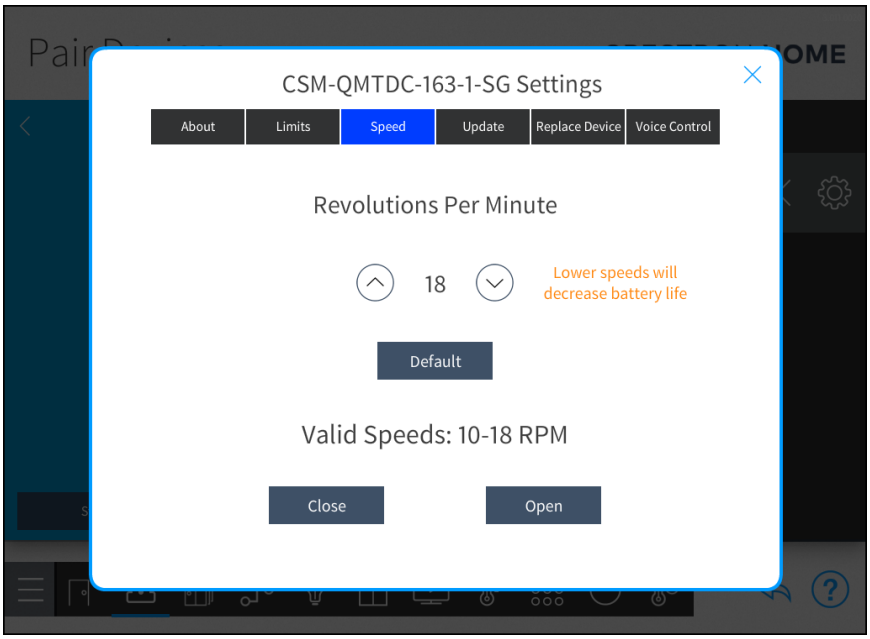
Update

Tap the**Update** tab to update the firmware for the shade motor. Tap**Check for Update** to search for updated firmware. If a firmware update is available, tap**Update** to update the firmware for the shade motor.



Speed

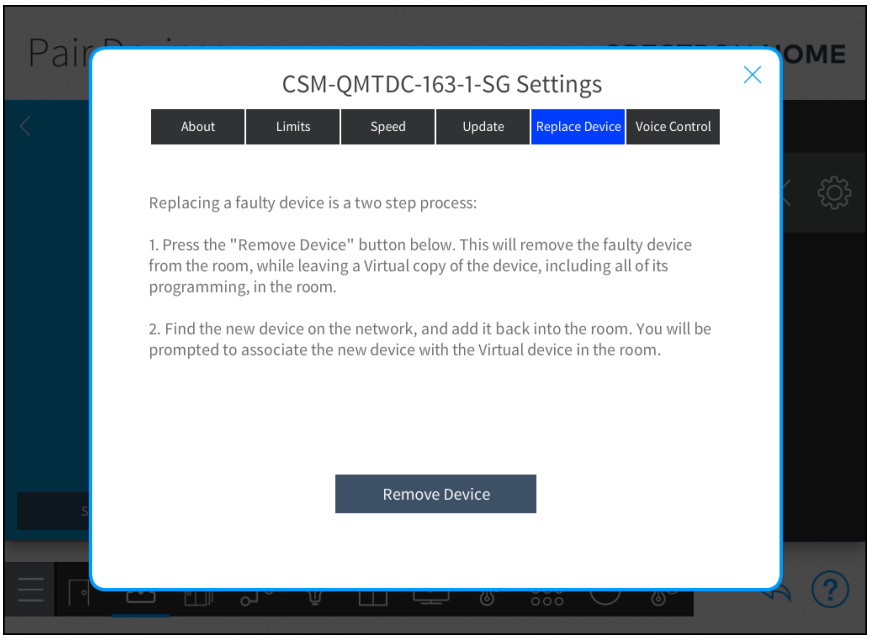
Tap the**Speed** tab to set the speed, in revolutions per minute (RPM), that the shade travels. The value can be set between 10 and 18 revolutions per minute.



- **Default:** Sets the revolutions per minute to the default value. The default value is 18 revolutions per minute.
- **Close:** Fully closes the shade.
- **Open:** Fully opens shade.

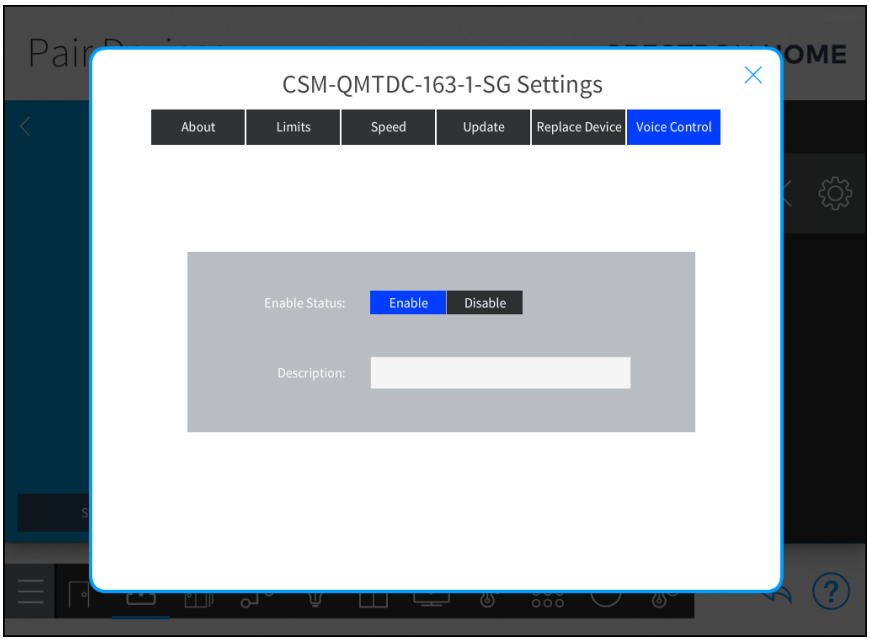
Replace Device

Tap the **Replace Device** tab to replace the device.



Voice Control

Tap the **Voice Control** tab to configure the voice control settings.

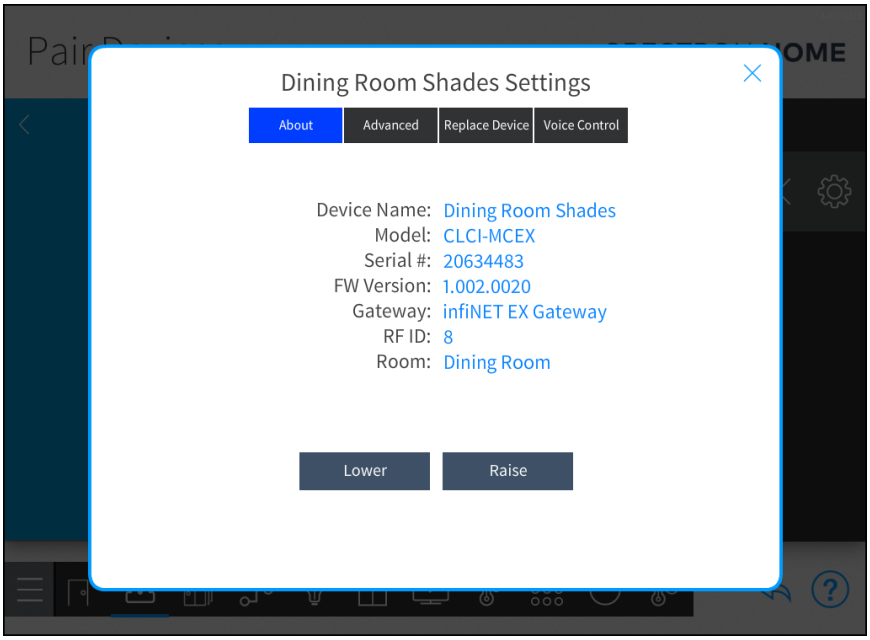


NOTE: To use voice control, voice control services must be turned on and configured. For details, refer to Voice Control Settings on page 607.

- **Enable Status:** Select **Enable** or **Disable** to turn voice control services on or off.
- **Description:** Enter a descriptive name. The name is used by the voice control services.

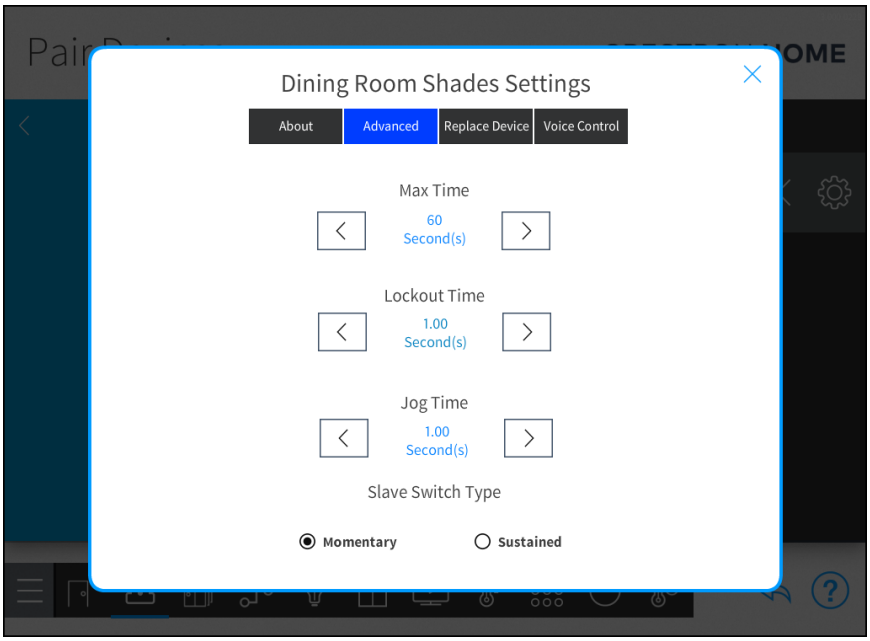
CLC-MCEX

Tap the gear button next to the device name to display a Settings dialog box for the motor controller. The **About** tab is selected and displays the device information. The Settings dialog box has additional tabs for **Advanced**, **Replace Device**, and **Voice Control**.



Advanced

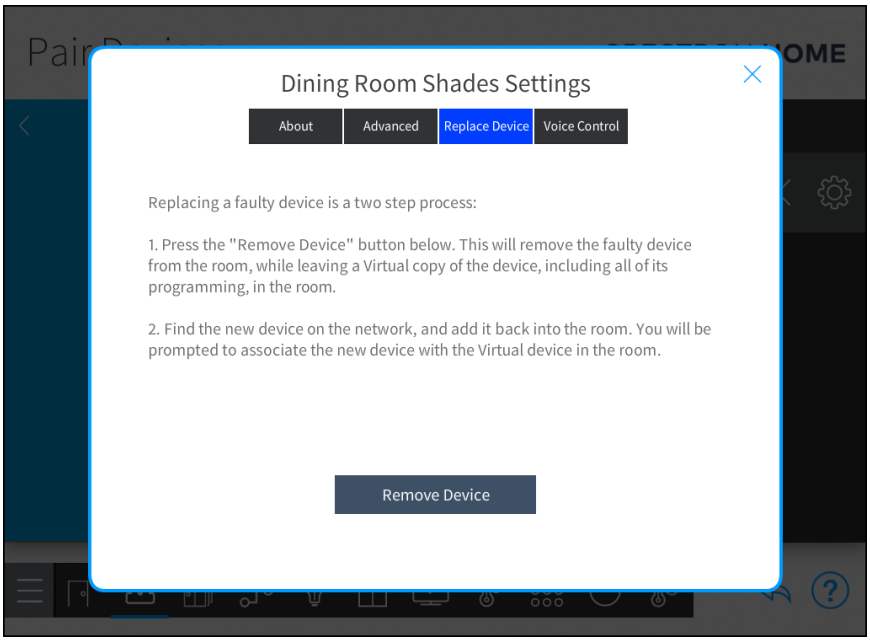
Tap the **Advanced** tab to configure the motor controller.



- **Max Time:** Sets the maximum time that the motor can move in the open or close direction. The value can be set between 1 and 600 seconds.
- **Lockout Time:** Sets the minimum amount of time that the motor must remain in the stop state before changing direction. The value can be set between 0.02 to 2 seconds.
- **Jog Time:** Sets the time that the motor will move during a jog open or jog close operation. The value can be set between 0.05 and 2 seconds.
- **Slave Switch Type:** Sets the type of slave switch that is connected to the motor controller. The slave switch can be set to either **Momentary** or **Sustained**.

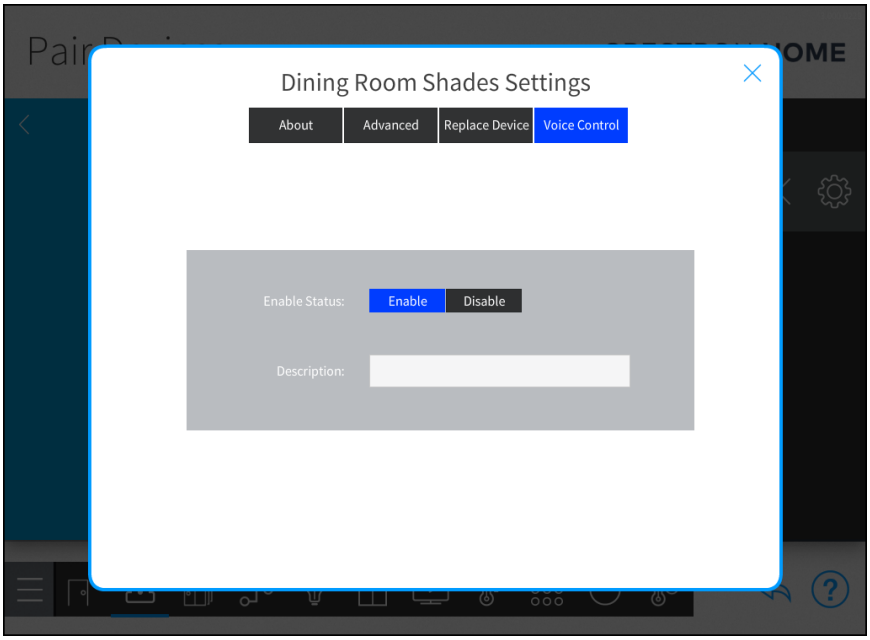
Replace Device

Tap the **Replace Device** tab to replace the device.



Voice Control

Tap the **Voice Control** tab to configure the voice control settings.



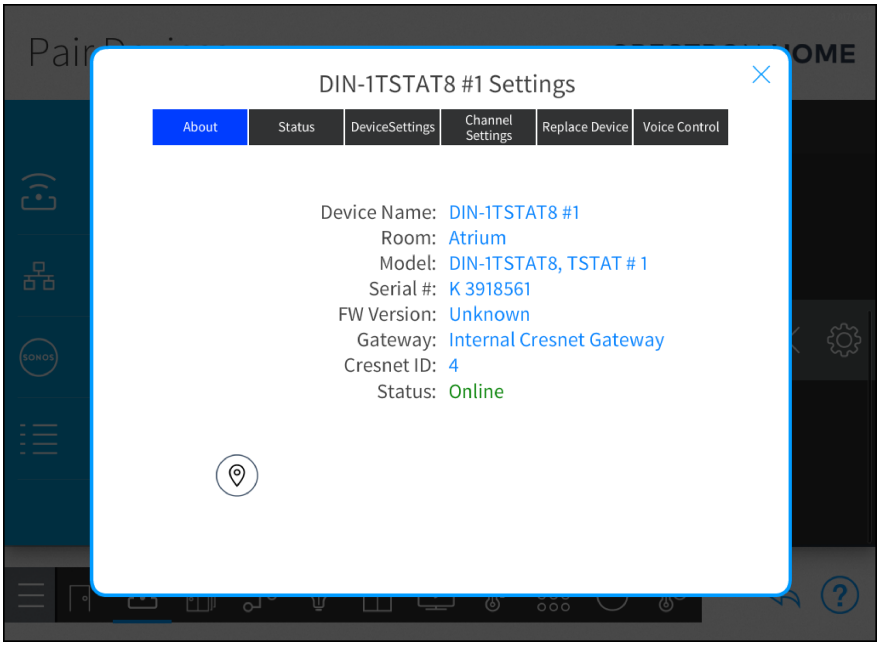
NOTE: To use voice control, voice control services must be turned on and configured. For details, refer to Voice Control Settings on page 607.

- **Enable Status:** Select **Enable** or **Disable** to turn voice control services on or off.
- **Description:** Enter a descriptive name. The name is used by the voice control services.

Thermostat Settings

Tap the gear button next to the device name to display a Settings dialog box for the thermostat. The **About** tab is selected and displays the device information.

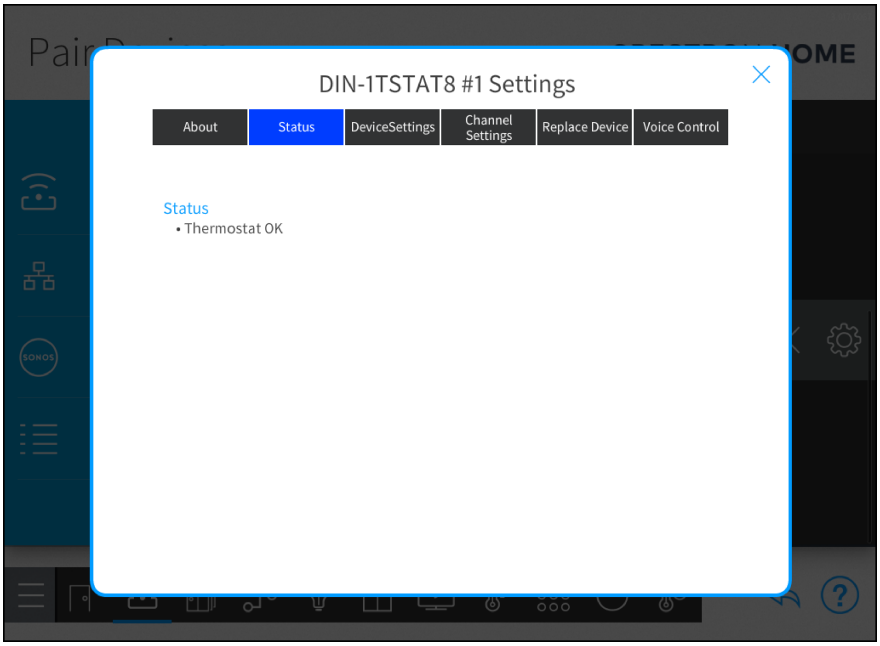
> **NOTE:** The available settings may vary based on the capabilities of the device.



Crestron Thermostats

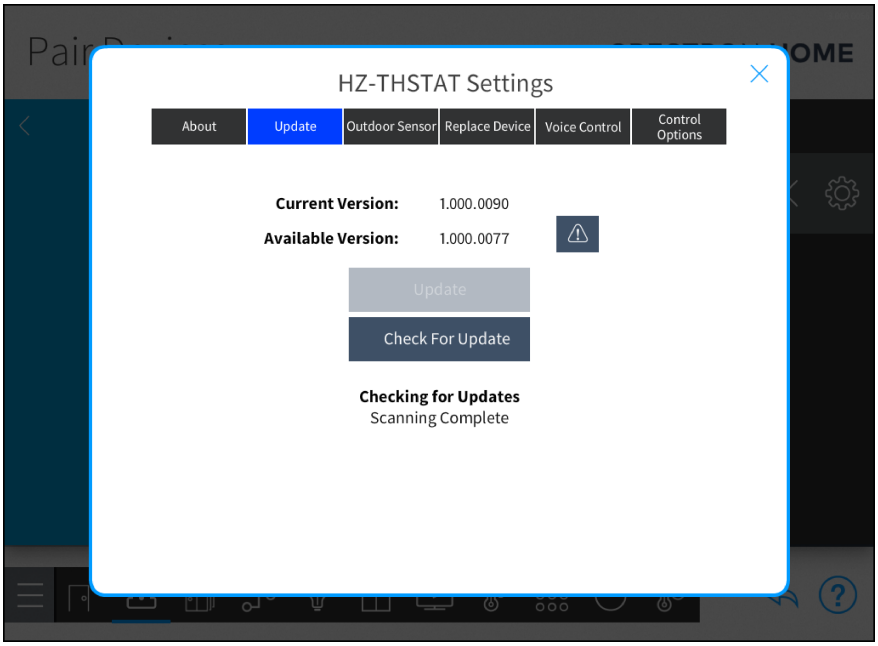
Status

Tap the **Status** tab to view the thermostat status.



Update

Use the **Update** tab to update the device firmware.

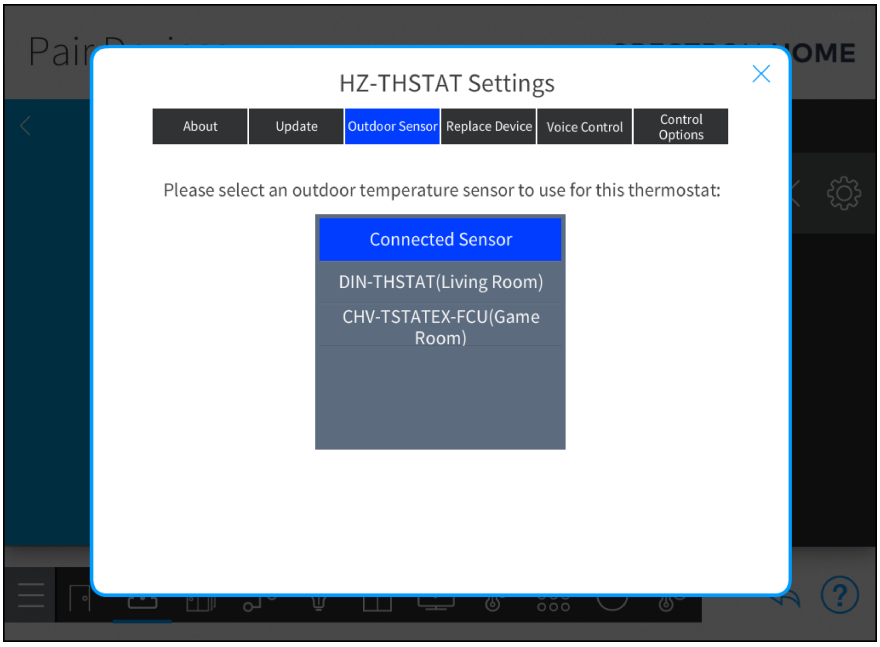


- **Current Version:** Displays the current firmware version for the gateway.
- **Available Version:** Displays the available firmware version for the gateway.
- **Update:** If a firmware update is available, tap **Update** to update the firmware.
- **Check For Update:** Tap the **Check For Update** button to search for firmware updates for the gateway.

Outdoor Sensor

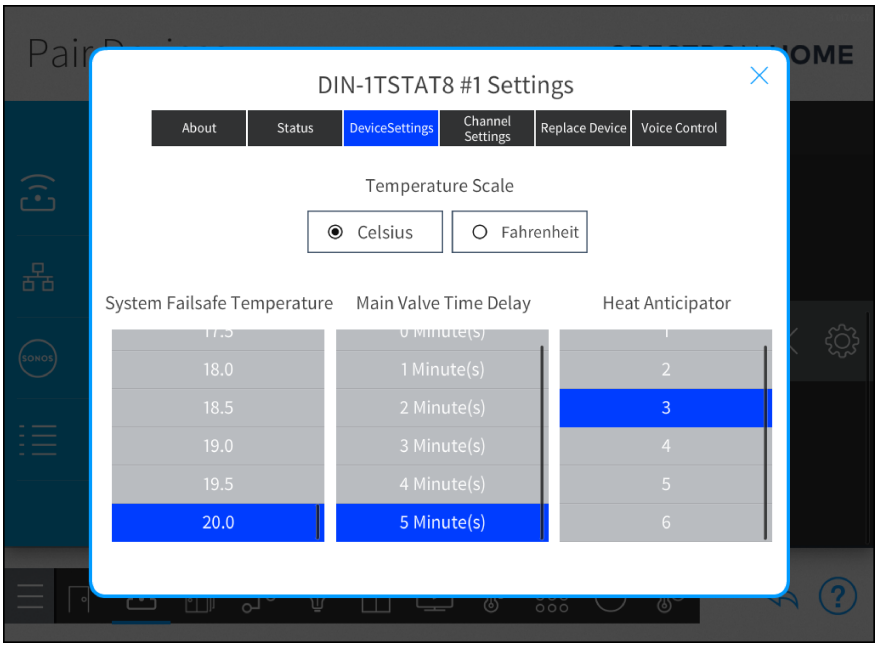
Use the **Outdoor Sensor** tab to select the outdoor temperature sensor that is used for the HVAC system.

To use the outdoor temperature sensor connected to the current thermostat, select **Connected Sensor**, or, to use the outdoor temperature sensor connected to a different thermostat, select the thermostat.



Device Settings

Use the **Device Settings** tab to set the temperature scale that is displayed in the Crestron Home user interface and other thermostat settings.



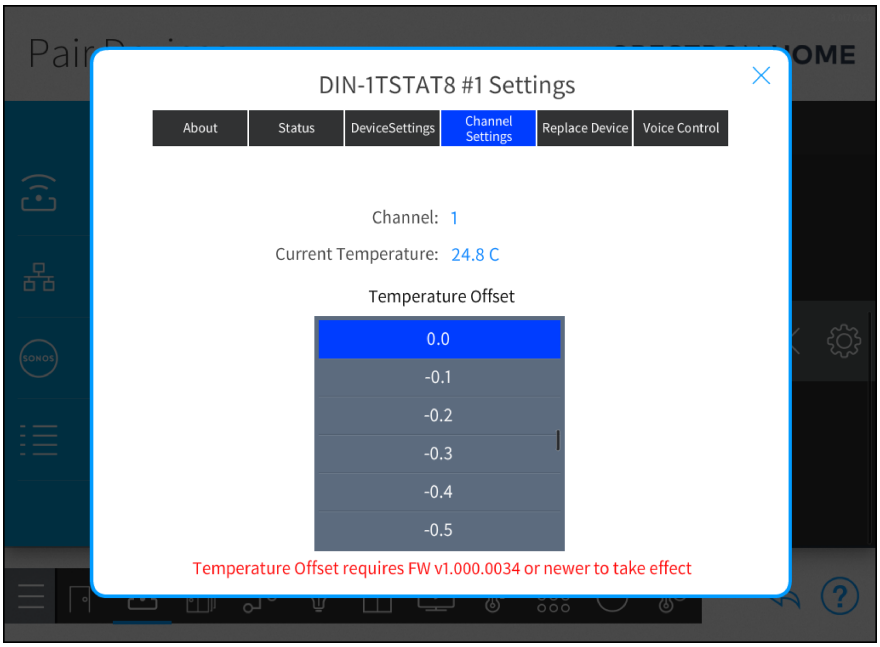
- **Temperature Scale:** Select **Celsius** or **Fahrenheit**.
- **System Failsafe Temperature:** The temperature used for safe operation when there is no connection to a control system. Select a temperature from the list.
- **Main Valve Time Delay:** The delay before opening the main valve.
- **Heat Anticipator:** The sensitivity, in relation to the setpoint, that controls the heat cycle frequency and response times. A lower number provides more frequent cycles and a faster response. A higher number provides less frequent cycles and a slower response.

Channel Settings

Use the **Channel Settings** tab to set the temperature offset for the temperature sensor. The temperature offset adjusts the reading from the temperature sensor and the temperature display for the room. The channel number and current temperature are also displayed.

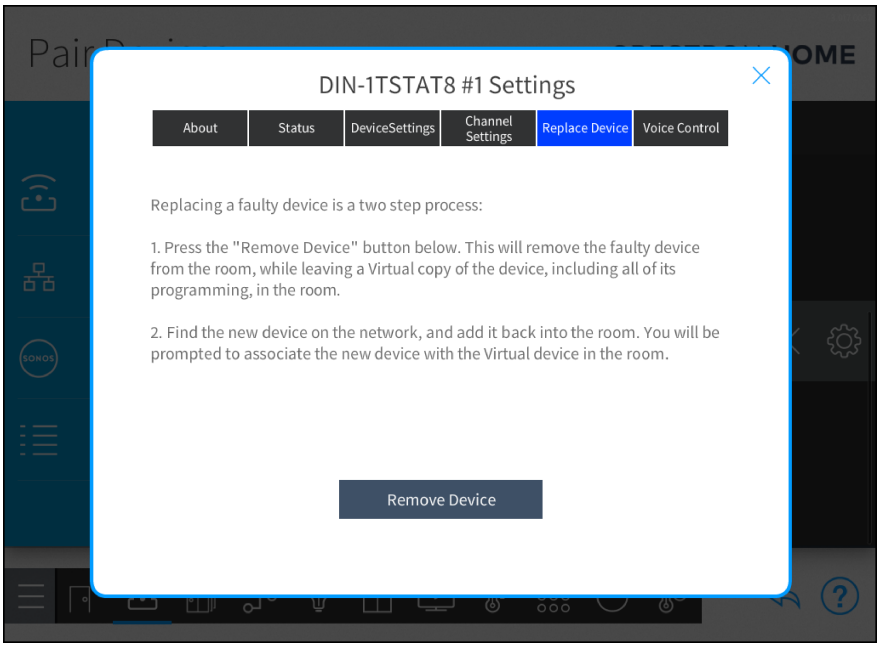
To set the temperature offset, select a value from the list.

DIN-1TSTAT8 Settings - Channel Settings Tab



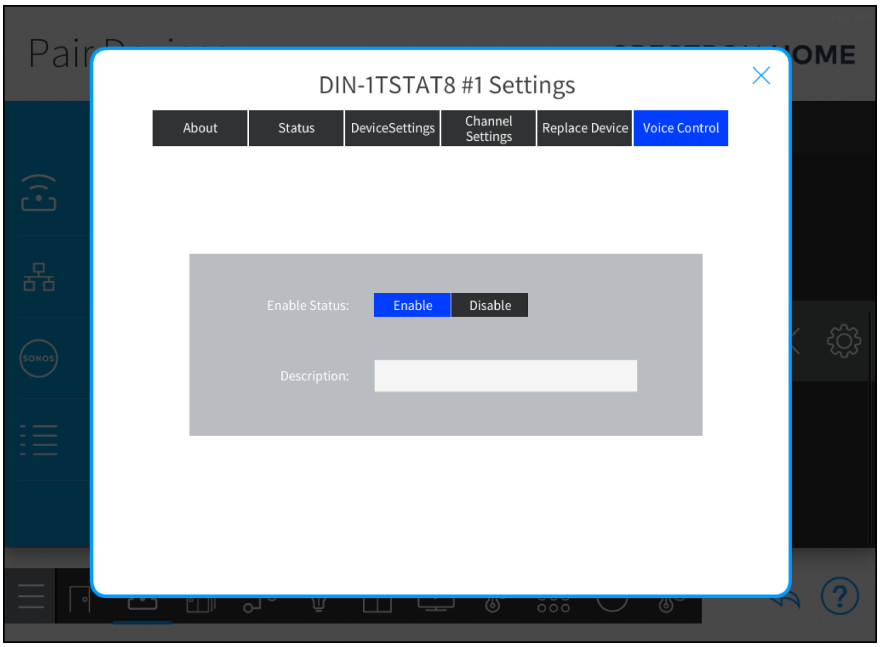
Replace Device

Use the **Replace Device** tab to replace the thermostat.



Voice Control

Use the **Voice Control** tab to configure the voice control settings.

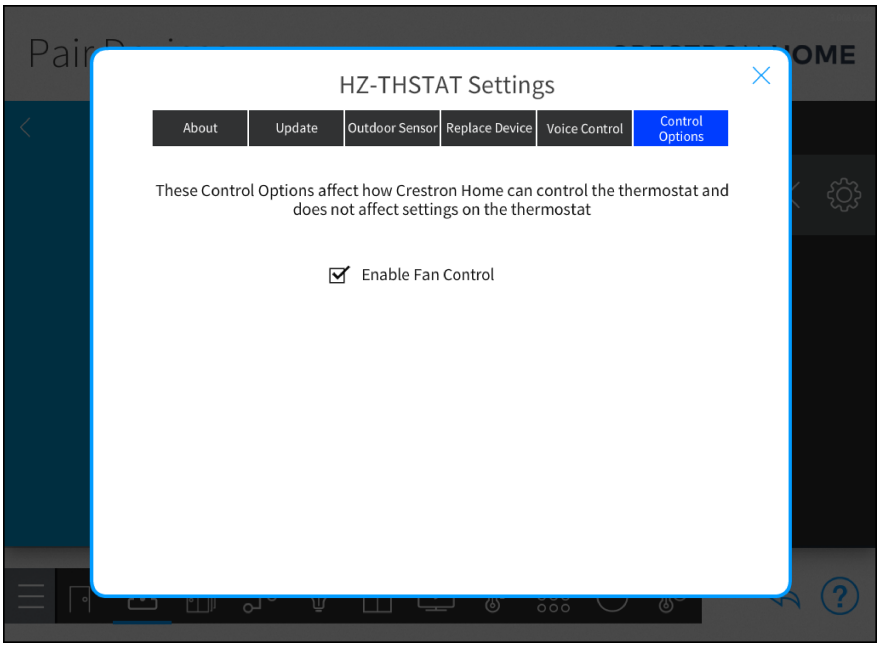


NOTE: To use voice control, voice control services must be turned on and configured. For details, refer to Voice Control Settings on page 607.

- **Enable Status:** Select **Enable** or **Disable** to turn voice control services on or off.
- **Description:** Enter a descriptive name. The name is used by the voice control services.

Control Options

Use the **Control Options** tab to show or hide the fan controls in the Crestron Home Setup app and Crestron Home user interface.



To hide the fan controls on the user interface, deselect turn off **Enable Fan Control**.

To hide the fan controls, deselect **Enable Fan Control**.

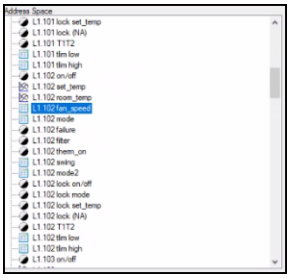
BACnet Thermostat

To configure a BACnet Thermostat, select **Settings** next to the BACnet thermostat to display a Settings dialog box.

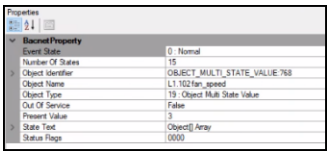
> **NOTES:** The BACnet thermostat must be properly installed and wired before it can be configured. Refer to the BACnet thermostat documentation for details.

A BACnet explorer application, such as Yet Another BACnet Explorer (YABE), is required to interface with the BACnet thermostat. The application displays the address space and properties for each BACnet object. The information that is displayed is used to configure the BACnet thermostat.

BACnet Explorer Address Space Example



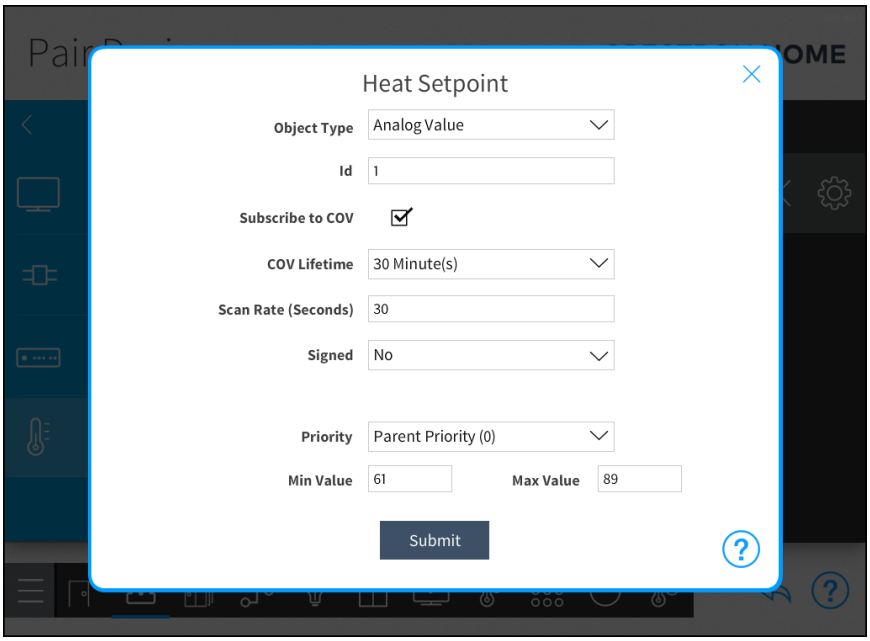
BACnet Explorer Object Property Settings Example



BACnet Object Property Settings

For items that provide additional configuration settings, select ⚙ **Settings** to configure the object property settings. The center of the ⚙ **Settings** icon lights green or red to indicate correct (green) and incorrect (red) settings.

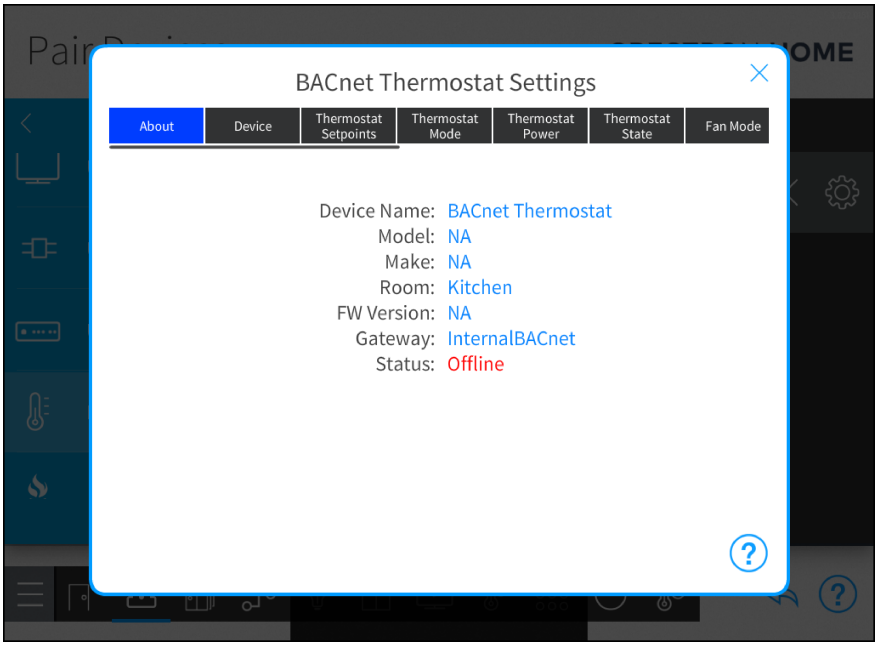
BACnet Object Property Settings with Min Value and Max Value Fields



These settings may be available:

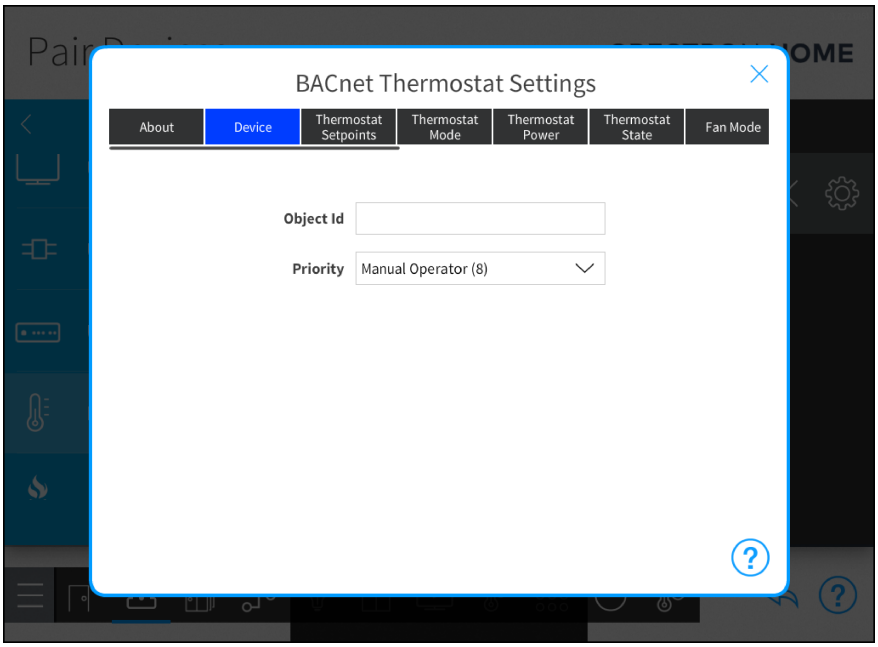
- **Object Type:** The BACnet object type for the selected object ID.
- **Id:** The identifier for the object. Enter the Object Identifier for the property.

- **Subscribe to COV:** Subscribe to a COV (Change of Value) notifcation. To subscribe, select **Subscribe to COV**. Enabled by default.
- **COV Lifetime:** The length of time that the COV subscription is maintained. Select **30 Minutes** through **4 Hours**. The default time is **30 Minutes**.
- **Scan Rate:** The time interval for scanning the object properties. Enter a time interval (in seconds) for the property. The scan rate must match the ability of the device to respond. The default time is **30** seconds.
- **Signed:** The BACnet object uses signed or unsigned integers. If the object uses signed integers, select **Yes**. The default setting is **No**.
- **Decimal Places:** The number of decimal places shown for the object. Select the number of decimal places to display from the drop-down menu. The default is **0**.
- **Priority:** The priority level that the object uses for communication. Select a priority level from the drop-down menu. The default is **Parent Priority (0)**. When **Parent Priority (0)** is selected, the object uses the same priority as the parent thermostat.
- **Null Value:** Sets the value of the priority for the object to empty. Allows a device with a non-null value to control the value. To change the value from null, select a new value from the **Priority** drop-down menu.
- **Min Value:** The minimum temperature setpoint. Available for heat, cool, and auto setpoints only.
- **Max Value:** The maximum temperature setpoint. Available for heat, cool, and auto setpoints only.



Device

Enter the settings to establish communications with the BACnet thermostat.



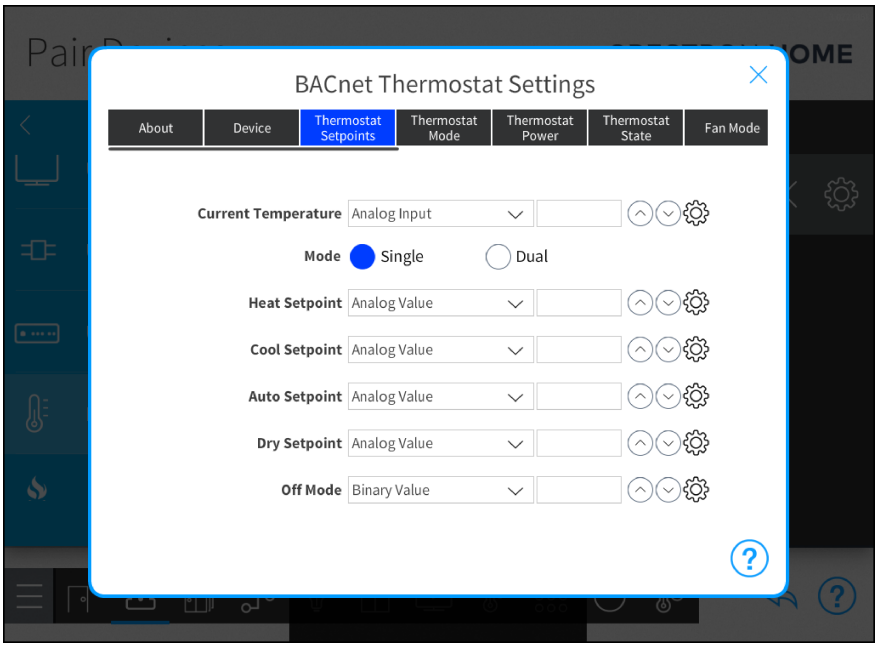
Thermostat Setpoints

Enter the settings for the **Temperature Setpoints**.

To configure additional settings, select ⚙ **Settings**. For details, refer to BACnet Object Property Settings on page 1346.

NOTES:

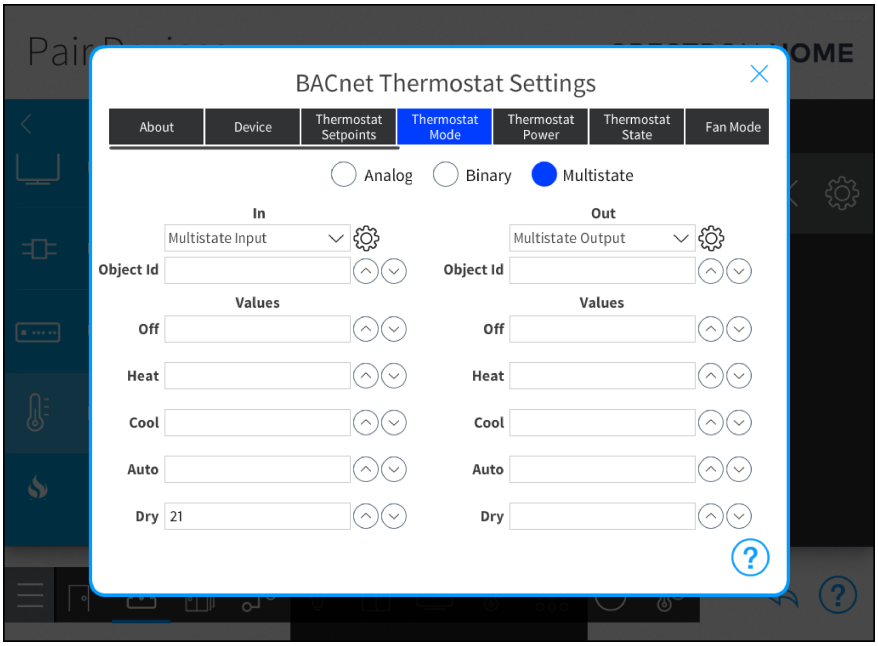
- When configuring settings for **Off Mode**, consider the following:
  - This setting controls devices that have on and off controls (for example, the CoolMasterNet).
  - This setting does not change the thermostat operating mode (for example, heat, cool, auto, and off mode).
  - This setting accepts Binary Value and Binary Output.
- CoolMasterNet does not support Dual mode.
- Dual mode cannot be used if the heat and cool objects have the same Object ID.



Thermostat Mode

Enter the settings for the **Thermostat Mode**.

To configure additional settings, select ⚙ **Settings**. For details, refer to BACnet Object Property Settings on page 1346.

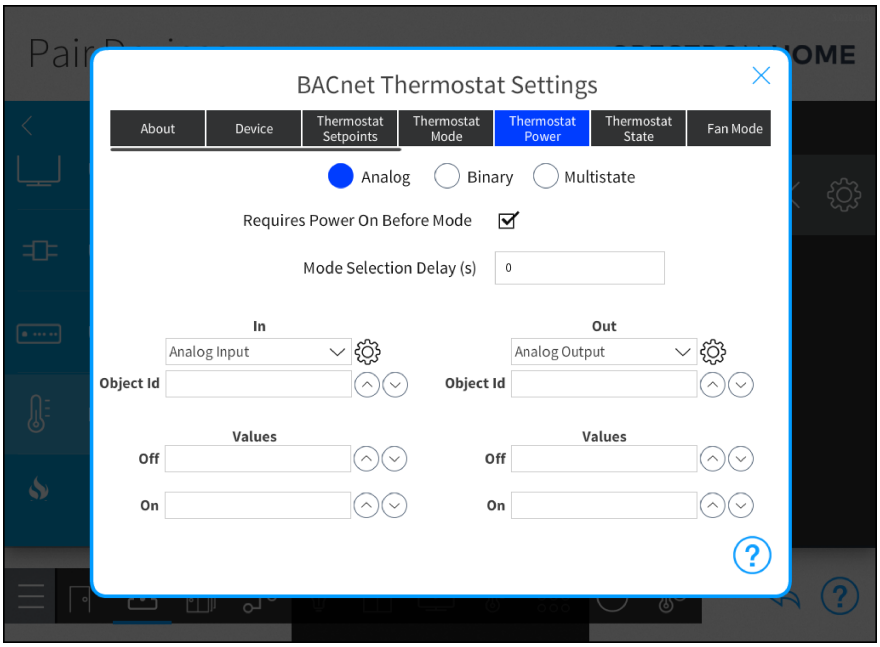


Thermostat Power

Enter the settings for the **Thermostat Power**.

For thermostats that can be turned off and require a power on command before selecting the operating mode, select **Requires Power On Before Mode** and then enter a delay time to specify how long the Crestron Home system should wait before sending the mode selection to the thermostat. The power on command is not sent when changing thermostat modes.

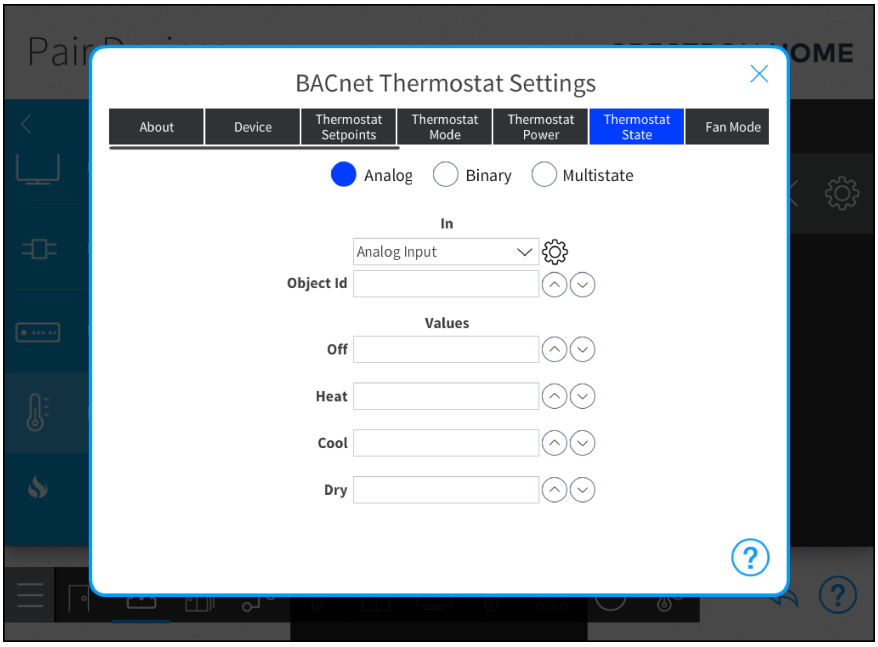
To configure additional settings, select ⚙ **Settings**. For details, refer to BACnet Object Property Settings on page 1346.



Thermostat State

Enter the settings for the **Thermostat State**.

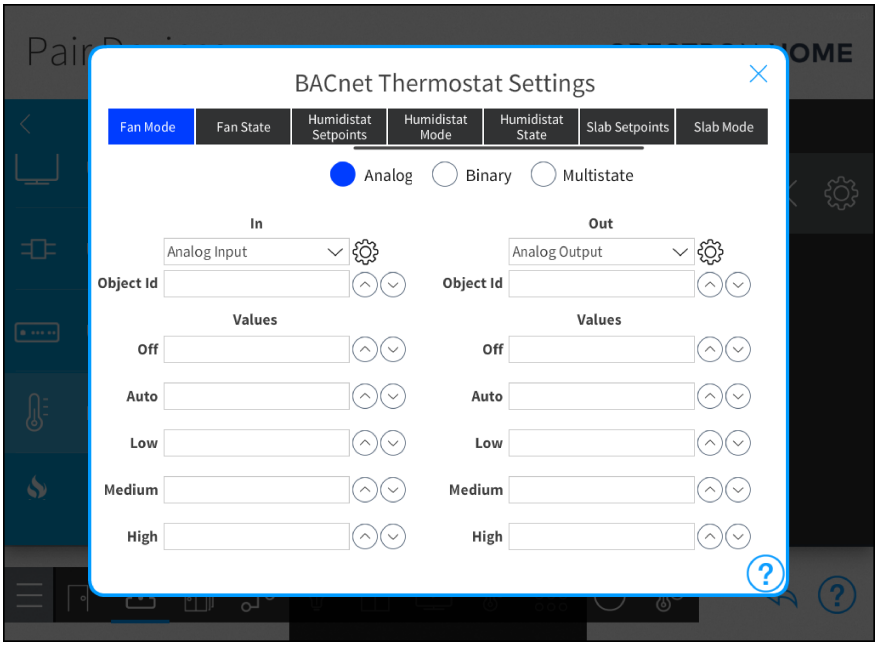
To configure additional settings, select ⚙ **Settings**. For details, refer to BACnet Object Property Settings on page 1346.



Fan Mode

Enter the settings for the **Fan Mode**.

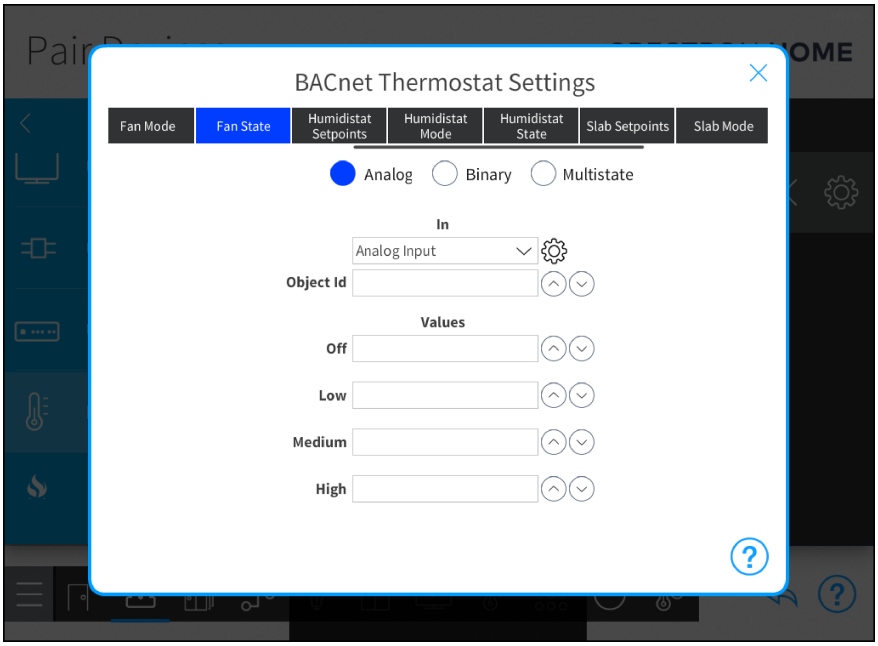
To configure additional settings, select **Settings**. For details, refer to BACnet Object Property Settings on page 1346.



Fan State

Enter the settings for the **Fan State**.

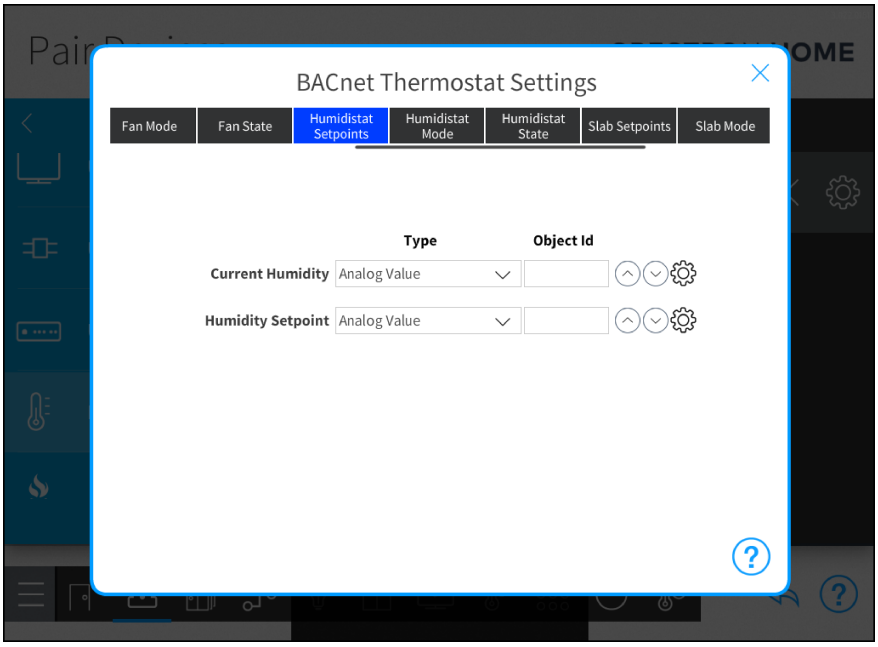
To configure additional settings, select **Settings**. For details, refer to BACnet Object Property Settings on page 1346.



Humidistat Setpoints

Enter the settings for the **Humidistat Setpoints**.

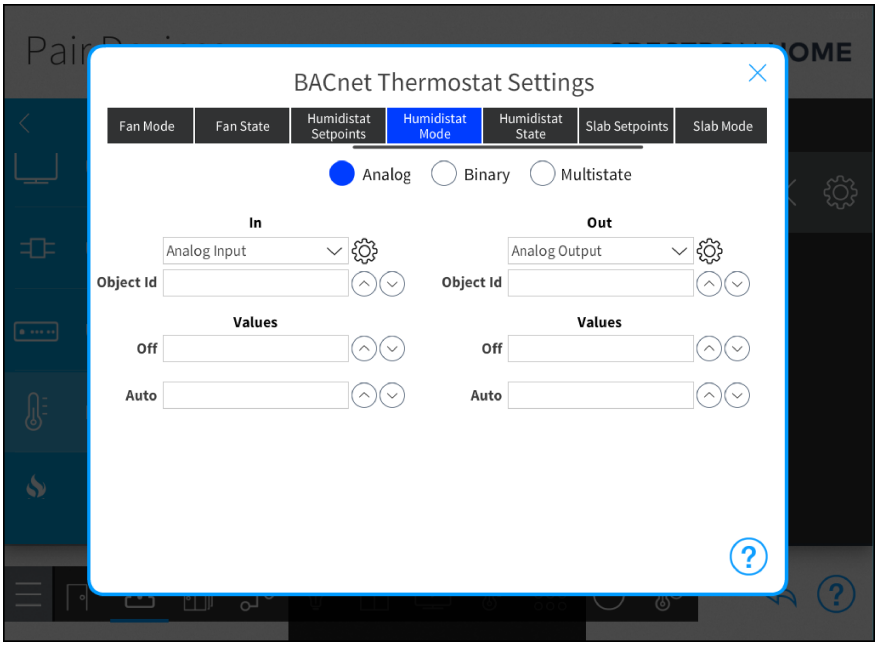
To configure additional settings, select ⚙ **Settings**. For details, refer to BACnet Object Property Settings on page 1346.



Humidistat Mode

Enter the settings for the **Humidistat Mode**.

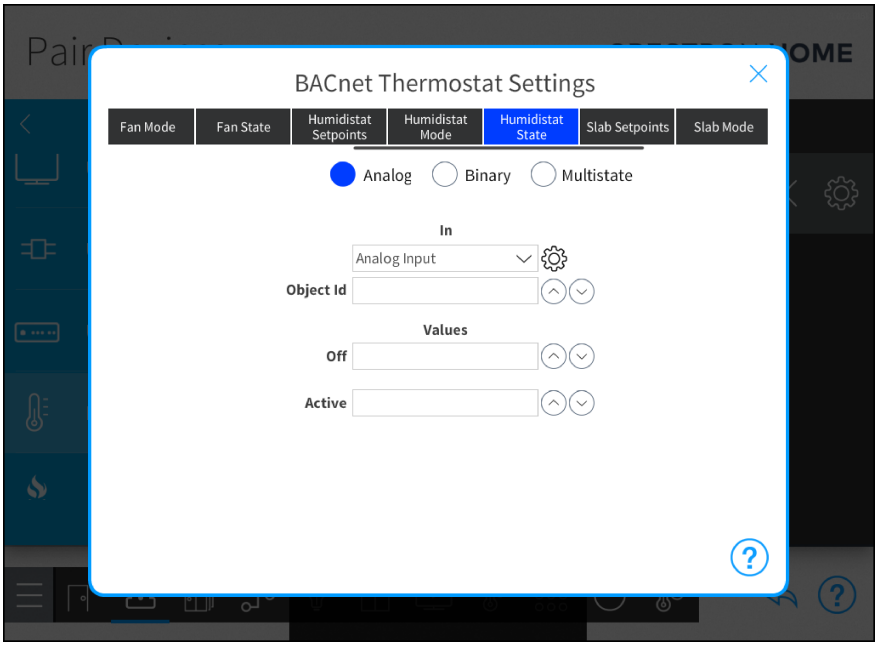
To configure additional settings, select ⚙ **Settings**. For details, refer to BACnet Object Property Settings on page 1346.



Humidistat State

Enter the settings for the **Humidistat State**.

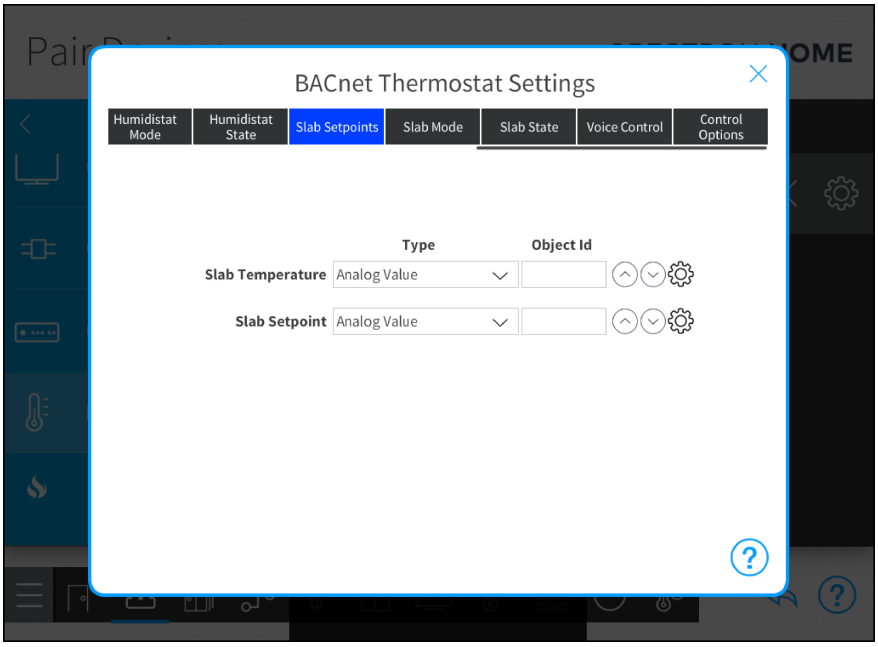
To configure additional settings, select **Settings**. For details, refer to BACnet Object Property Settings on page 1346.



Slab Setpoints

Enter the settings for the **Slab Setpoints**.

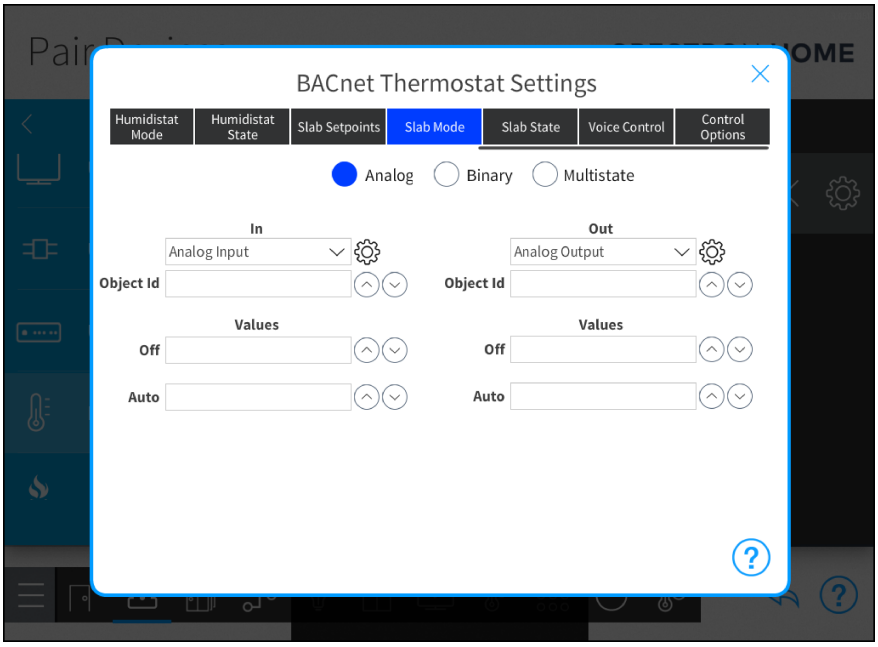
To configure additional settings, select **Settings**. For details, refer to BACnet Object Property Settings on page 1346.



Slab Mode

Enter the settings for **Slab Mode**.

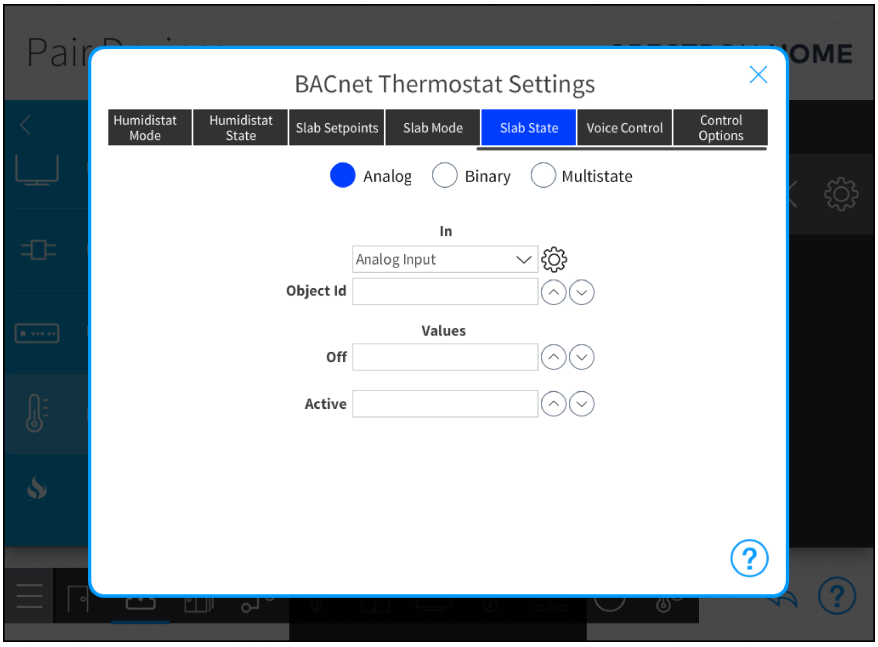
To configure additional settings, select ⚙ **Settings**. For details, refer to BACnet Object Property Settings on page 1346.



Slab State

Enter the settings for **Slab States**.

To configure additional settings, select **Settings**. For details, refer to BACnet Object Property Settings on page 1346.

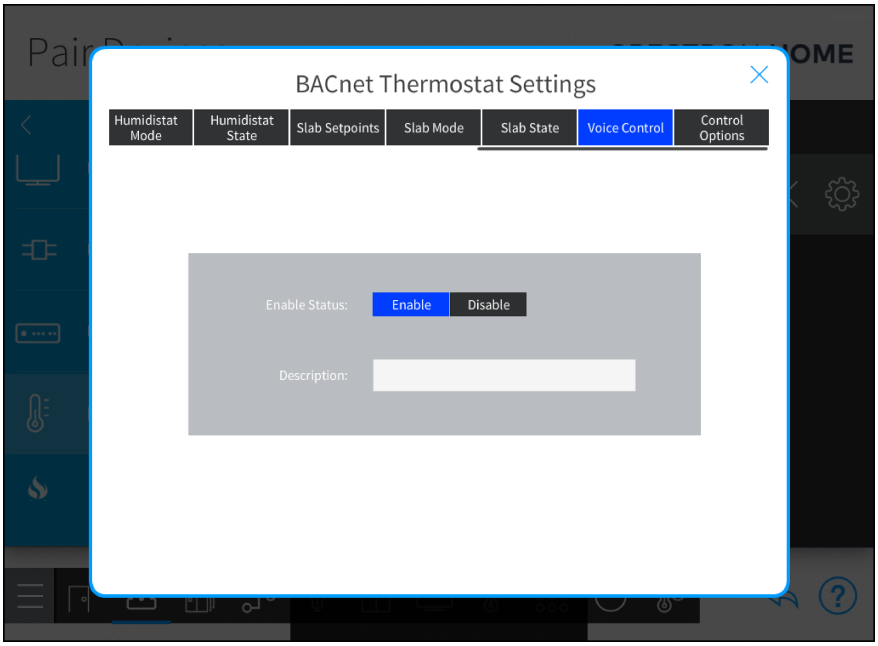


Voice Control

Enter the settings for **Voice Control**.

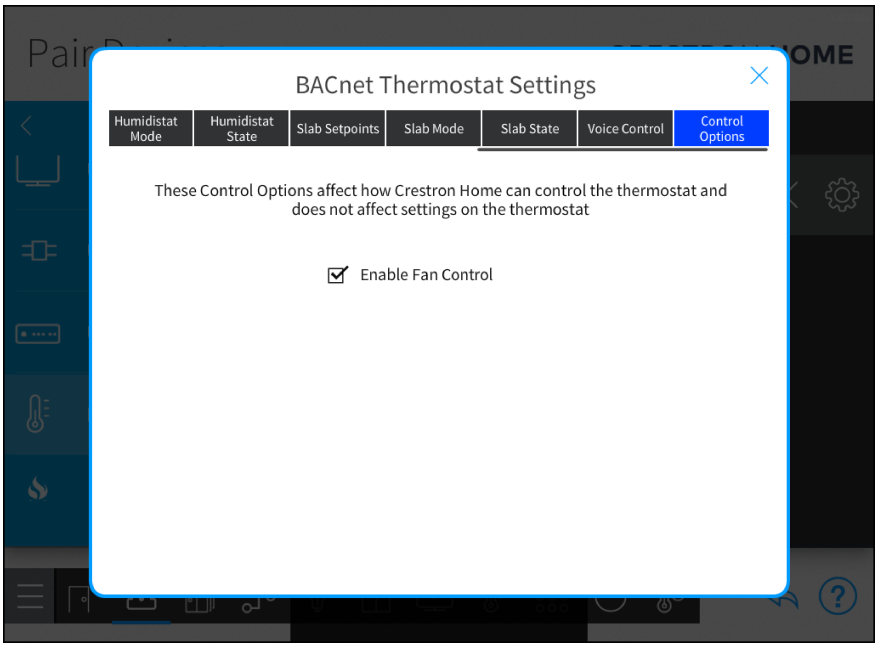
> **NOTE:** To use voice control, voice control services must be turned on and configured. For details, refer to Voice Control Settings on page 607.

- **Enable Status:** Select **Enable** or **Disable** to turn voice control services on or off.
- **Description:** Enter a descriptive name. The name is used by the voice control services.



Control Options

Use the **Control Options** tab to show or hide the fan controls in the Crestron Home Setup app and Crestron Home user interface.



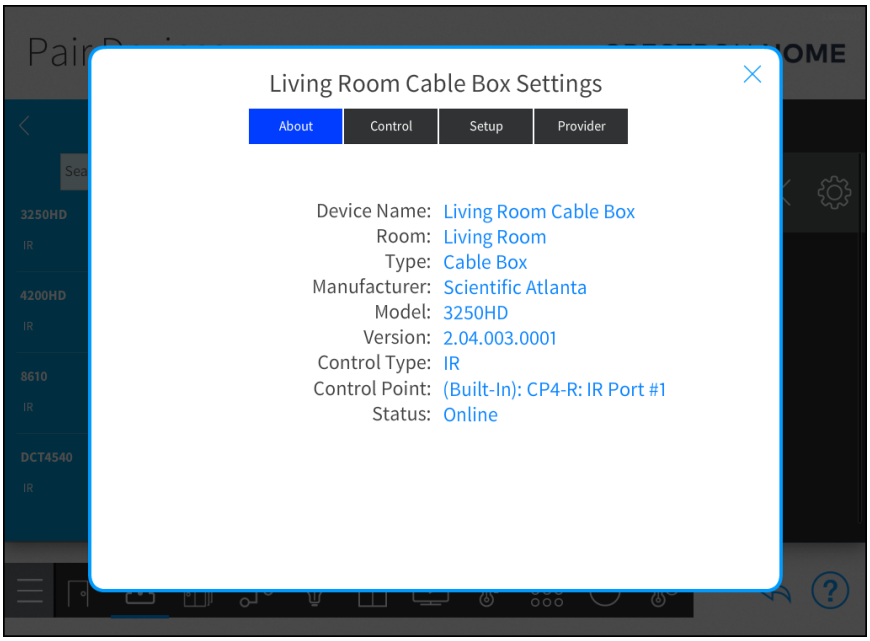
To hide the fan controls, deselect **Enable Fan Control**.

Video Source Settings

> **NOTE:** The available settings may vary based on the capabilities of the device.

Cable Box Settings

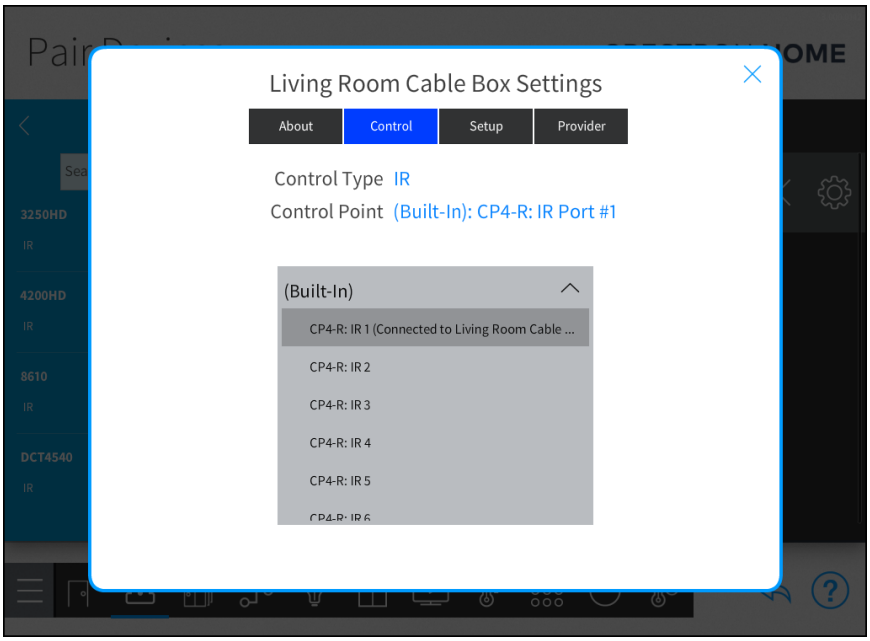
Tap the gear button next to the device name to display a Settings dialog box for the cable box. The **About** tab is selected and displays the device information.



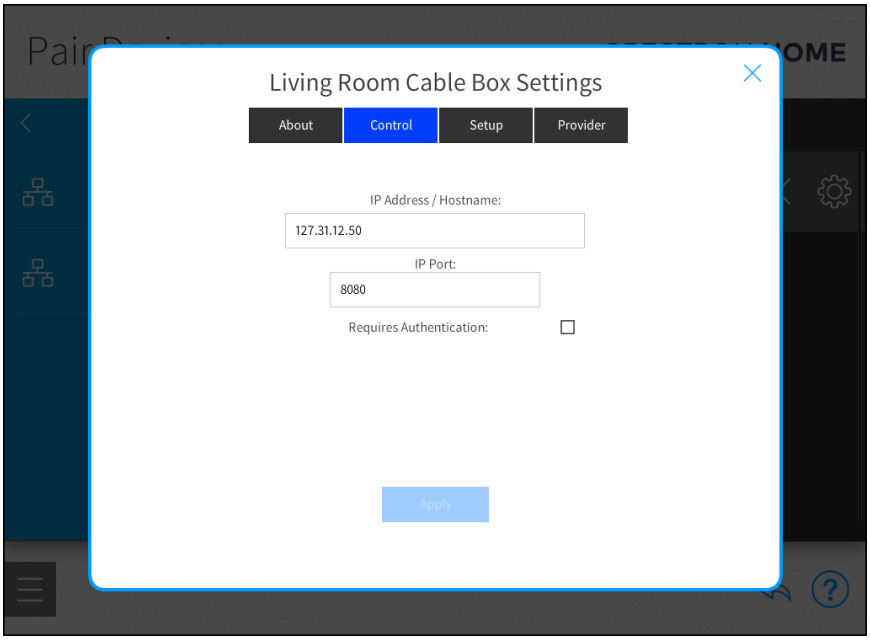
Control

Tap the **Control** tab to configure the IR or TCP settings for the cable box.

- For IR controlled cable boxes, select the IR port used to control the cable box.



- For TCP controlled cable boxes:



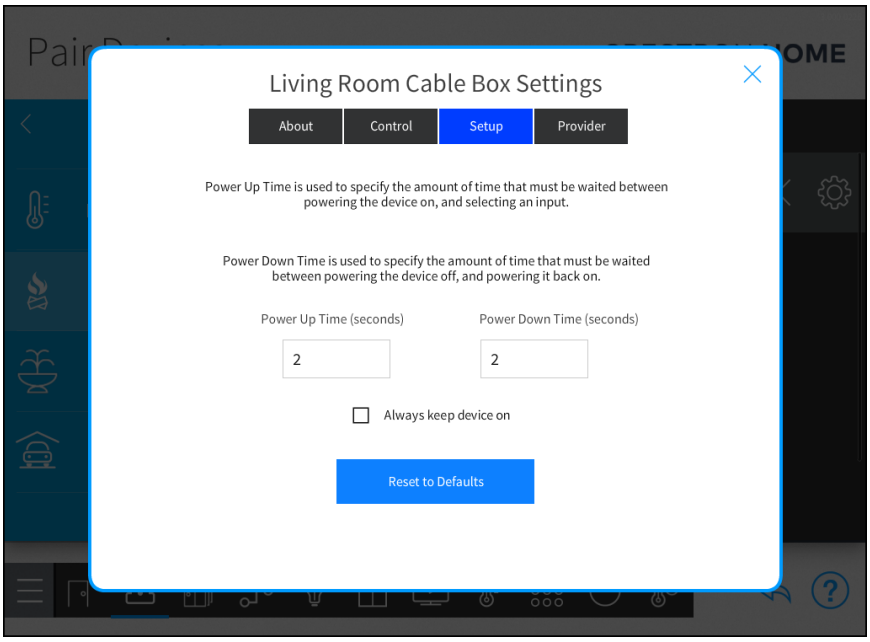
  - **IP Address/Hostname:** The IP address or hostname of the device.

    > **NOTE:** Each TCP controlled device should use a static or reserved IP address.

  - **IP Port:** The port number of the device.
  - **Requires Authentication:** If the device requires authentication, select the check box next to **Requires Authentication** and then enter the username and password for the device.

Setup

Tap the **Setup** tab to configure the cable box power settings.



- **Power Up Time (seconds):** The amount of time that must pass between turning on the device and selecting an input. The value can be set between 1 and 600 seconds. Unexpected functionality may occur if the value is set too low.
- **Power Down Time (seconds):** The amount of time that must pass between turning off the device and turning it back on. The value can be set between 1 and 600 seconds. Unexpected functionality may occur if the value is set too low.
- **Reset to Defaults:** Sets the fields in the **Setup** tab to their default values.

- **Always keep device on:** Select the check box to prevent the device from turning off after 60 seconds. The default for **Always keep device on** is disabled.

  NOTES:

  Existing devices in upgraded systems will have "keep sources on" disabled to maintain their current functionality in Pyng. The Installer can then enable it as needed.

  When **Always keep device on** is disabled:

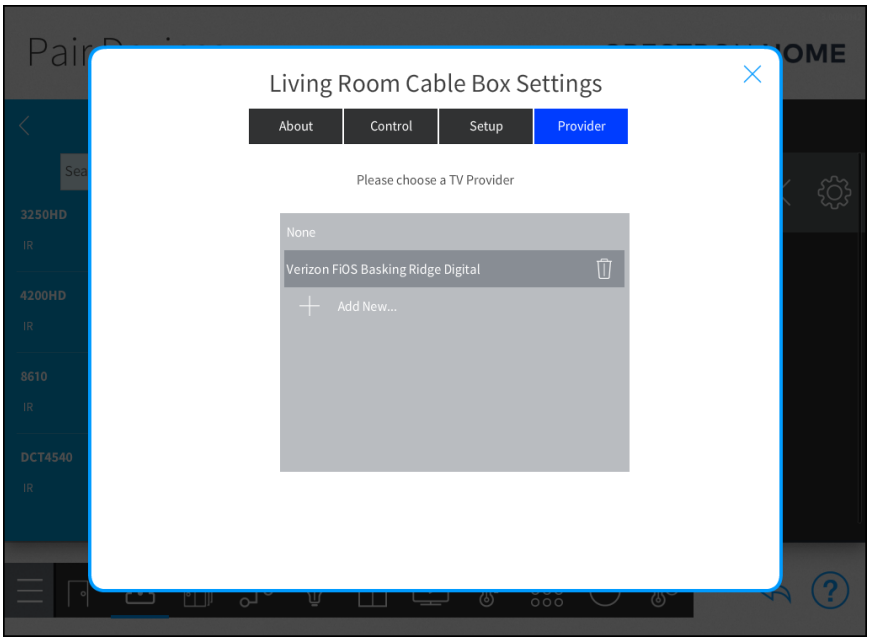
  - Keep device on when not in use is disabled by default.
  - Startup behavior:
    - For sources with power state feedback, the source power state is set to reflect the current source power state (on or off).
    - For sources that do not support power state feedback, the source power state is assumed to be off.
    - For sources that do not have power commands, the source power state is assumed to be on.
  - If the source is off when routed, then the source will be turned on using either the discrete Power On command or the Toggle Power command.
  - If the source is no longer routed to any room, the source is turned off after 60 seconds.

  When **Always keep device on** is enabled:

  - Startup behavior.
    - For sources with power state feedback, if the source is off then it will be turned on automatically. If the source is on, no action will be taken.
    - If the source does not have power feedback and supports discrete power commands, the PowerOn command is sent to the device and the power state is set to on. Turning the source on at startup minimizes the wait-time for the device to warm up.
    - If the source does not have power feedback and only supports toggle power commands, the PowerToggle command is not sent to the device and the power state is set to on. This prevents a source that is on from being turned off. If the source is not on, the user can turn on the source in the Crestron Home user interface.
    - If the source does not have any power commands, the power state is set to on.
  - If the source supports power feedback and is off when routed, the source will be turned on. This can occur if the source was manually powered off.
  - If the source is no longer routed to any room, the source remains on.

Provider

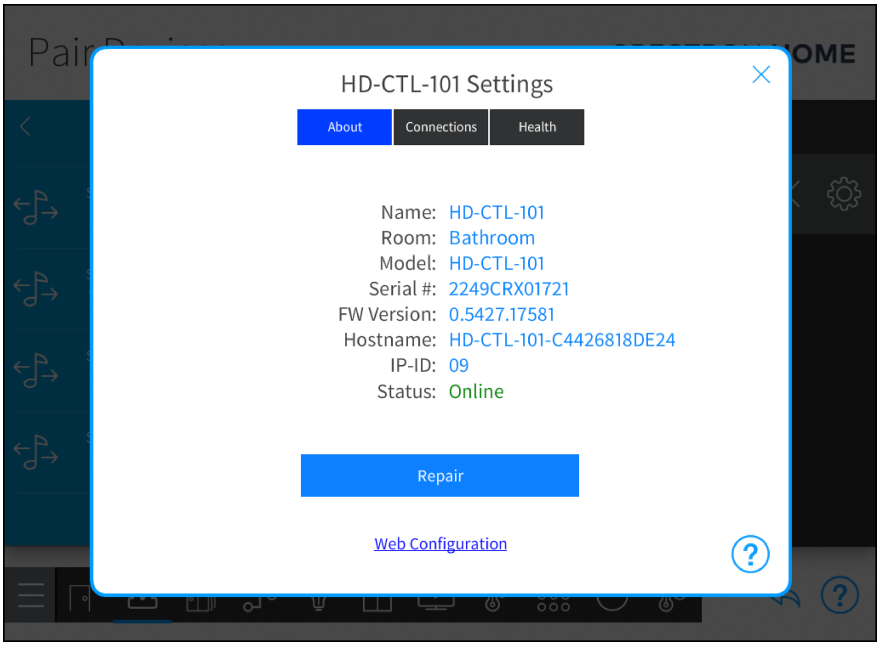
Tap the **Provider** tab to select, add, or delete the cable box TV provider.



- **Change the TV Provider:** Select the new TV provider for the cable box.
- **Add a new TV Provider:** Tap the **+ Add New** button and then enter the **Country** and **Zip Code/Postal Code** information for the customer's house. Select the cable provider from the list that is displayed and then tap **Add**.
- **Delete a TV Provider:** Tap the delete icon and then **Yes** to confirm. The TV provider is removed for the entire house. Tap **No** to keep the TV provider.

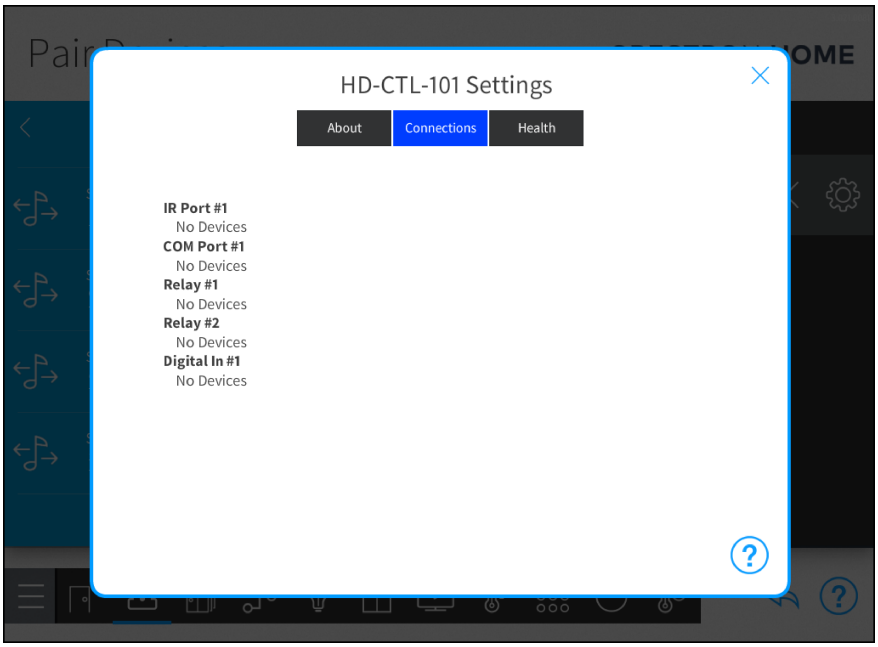
HD-CTL-101 Settings

Tap the gear button next to the device name to display a Settings dialog box for the device. The **About** tab is selected and displays the device information.



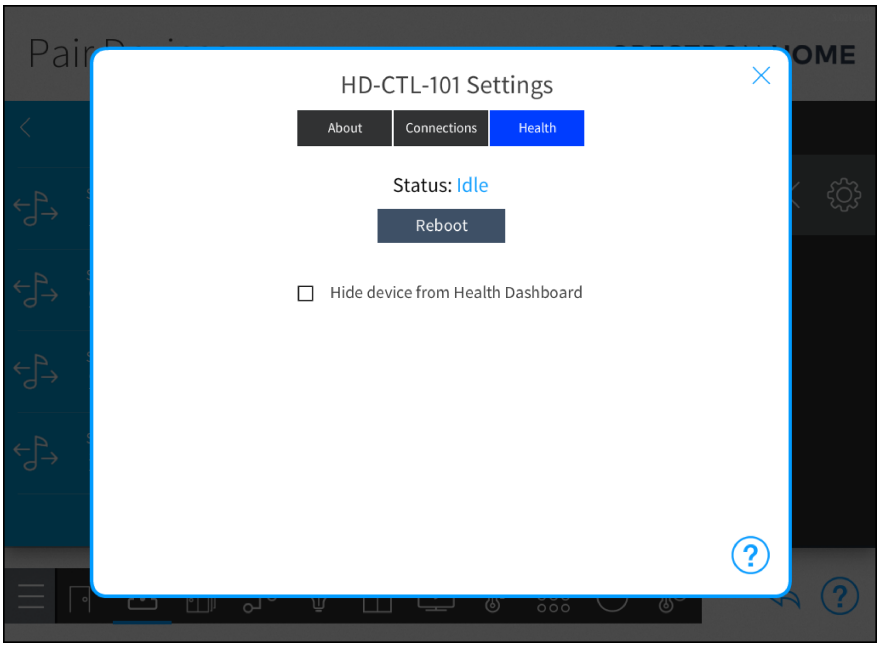
Connections

Use the **Connections** tab to view the connections made to the ports on the device.



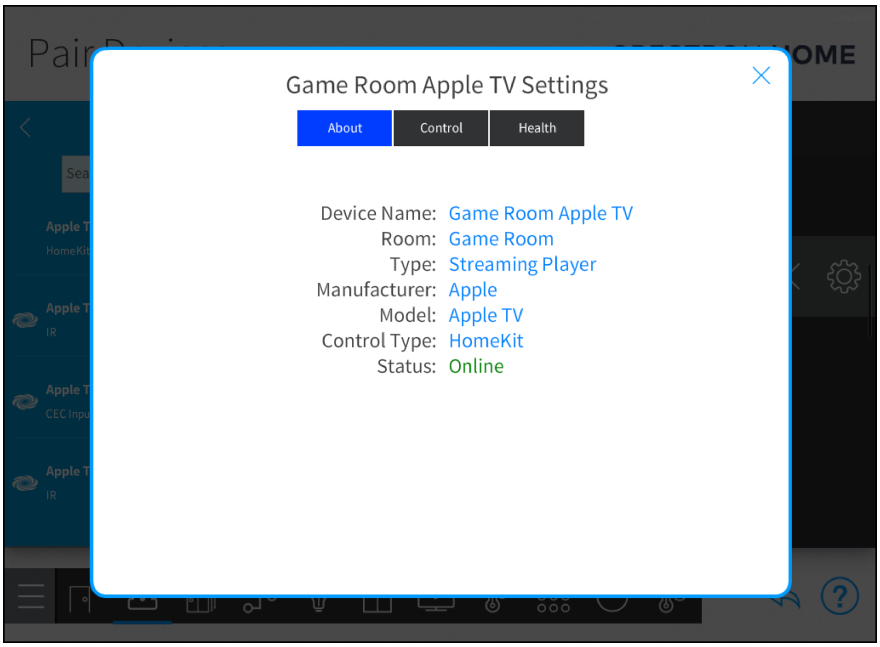
Health

Use the **Health** tab to view settings for the Health Dashboard. For details, refer to Health Settings on page 1380.



Apple TV Device Settings

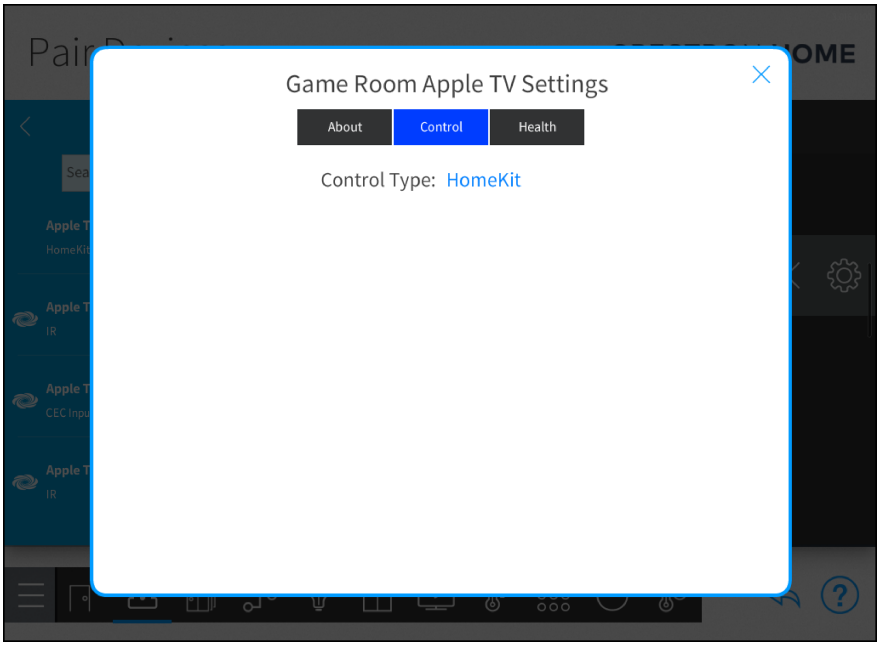
Tap the gear button next to the device name to display a Settings dialog box for the device. The **About** tab is selected and displays the device information.



Control

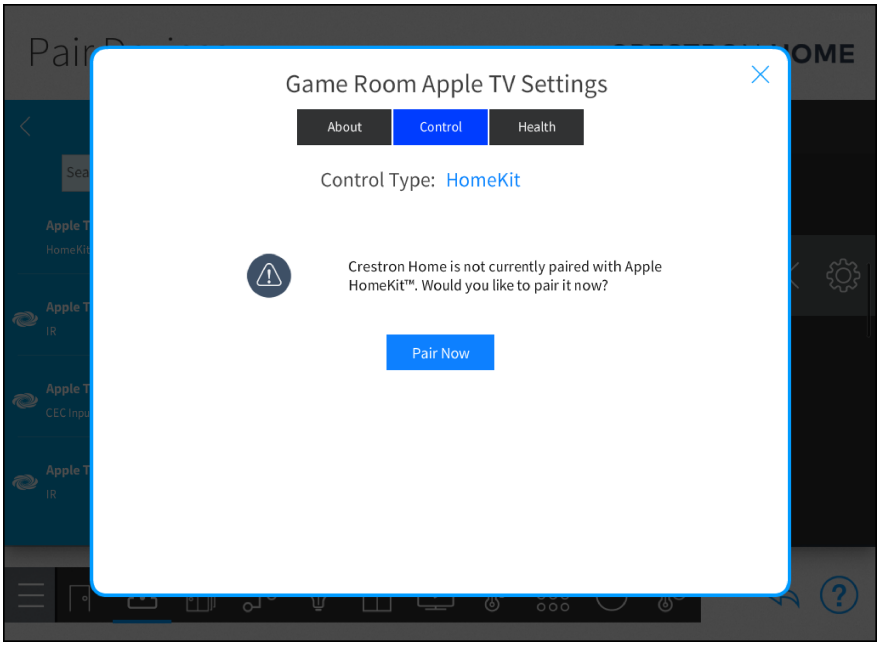
Use the Control tab to view the communication settings used to control for the device. The HomeKit type does not provide settings that can be adjusted.

HomeKit Control Type



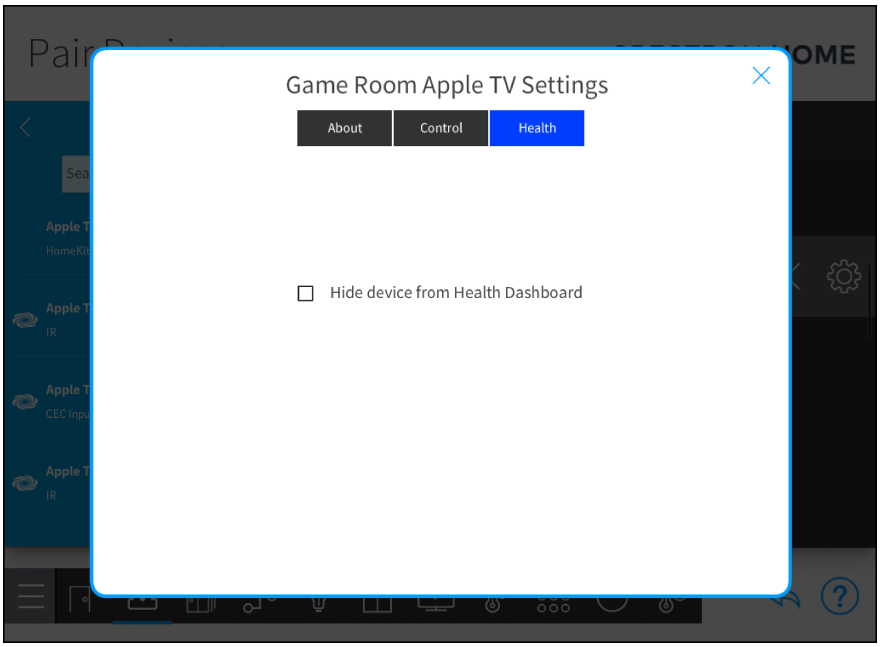
If the Crestron Home processor is not paired with Apple a warning message is displayed. To pair, select Pair now. For details, refer to Pair Apple TV with Apple HomeKit on page 329.

HomeKit Control Type with Unpaired Devices



Health

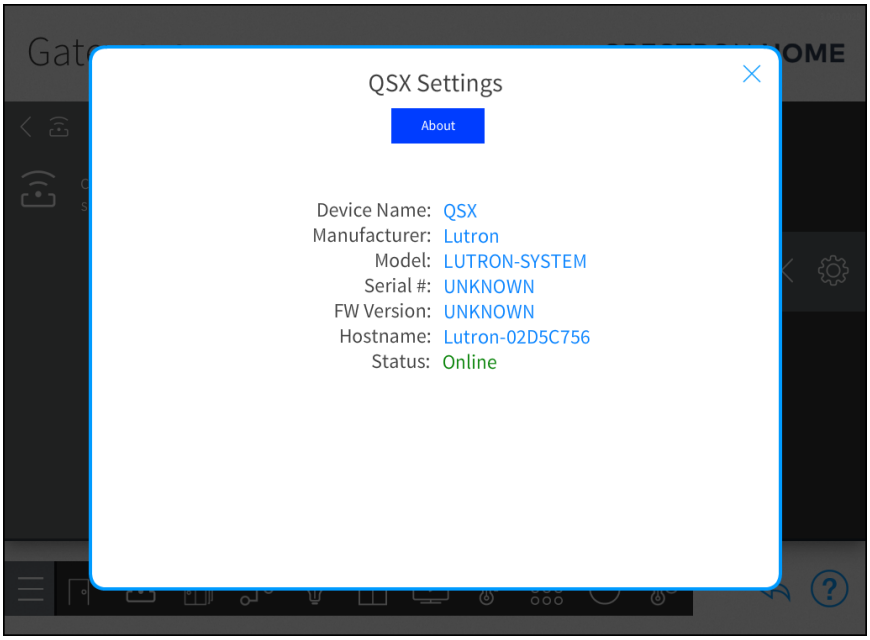
Use the **Health** tab to view settings for the Health Dashboard. For details, refer to Health Settings on page 1380.



Lutron Device Settings

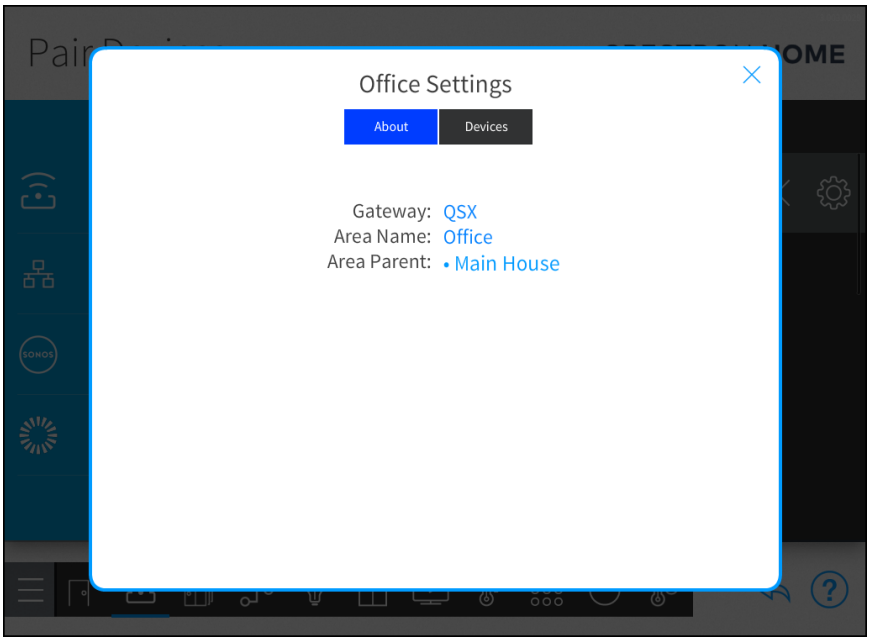
Lutron System Gateway Settings

Tap the gear button next to the device name to display a Settings dialog box for the Lutron system. The **About** tab is selected and displays the device information.

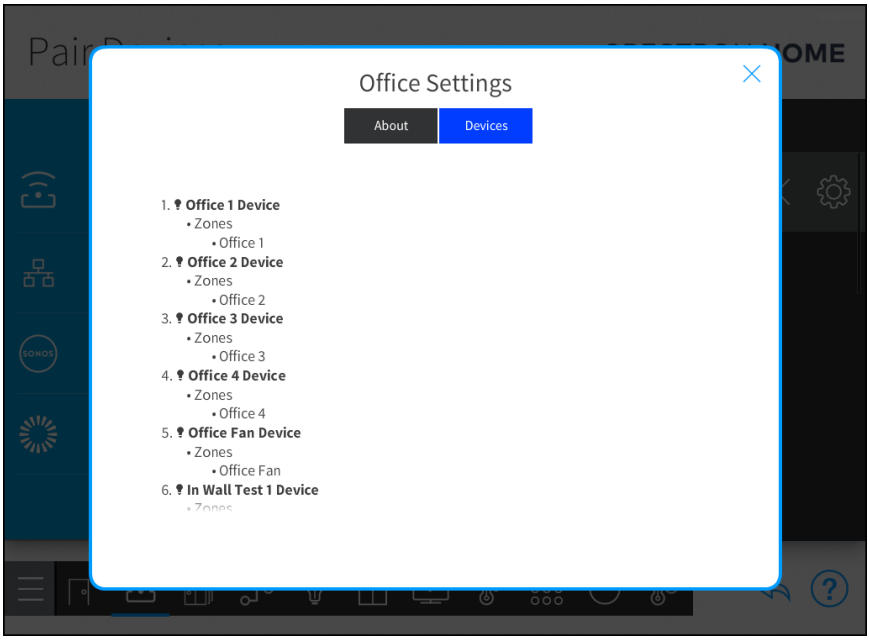


Lutron Area Settings

Tap the gear button next to the device name to display a Settings dialog box for the Lutron area. The **About** tab is selected and displays the device information.



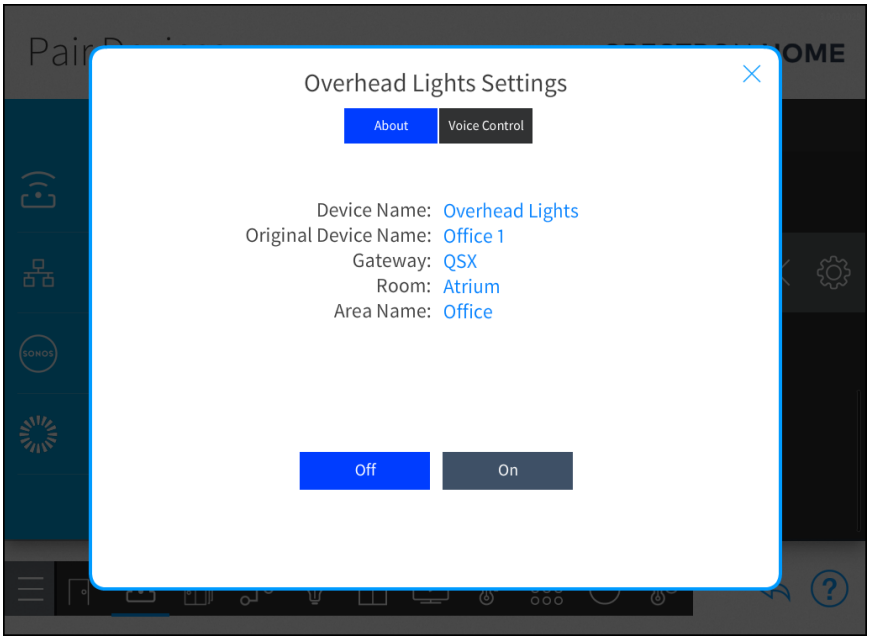
Tap the **Devices** tab to view the devices in the Lutron Area.



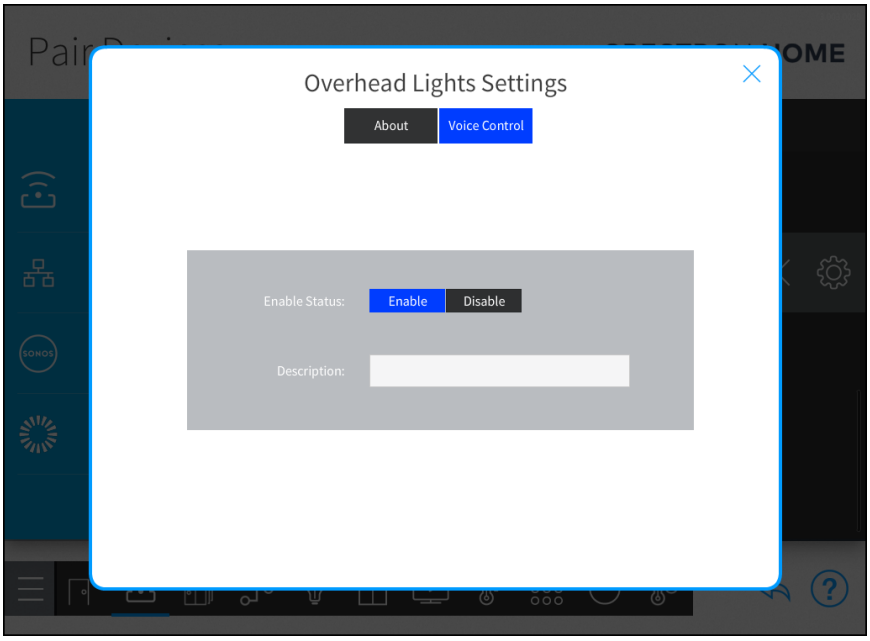
Lutron Loads

Lutron Light Settings

Tap the gear button next to the device name to display a Settings dialog box for the Lutron lights. The **About** tab is selected and displays the device information. The Settings dialog box has an additional tab for **Voice Control**.



Tap the **Voice Control** tab to configure the voice control settings.

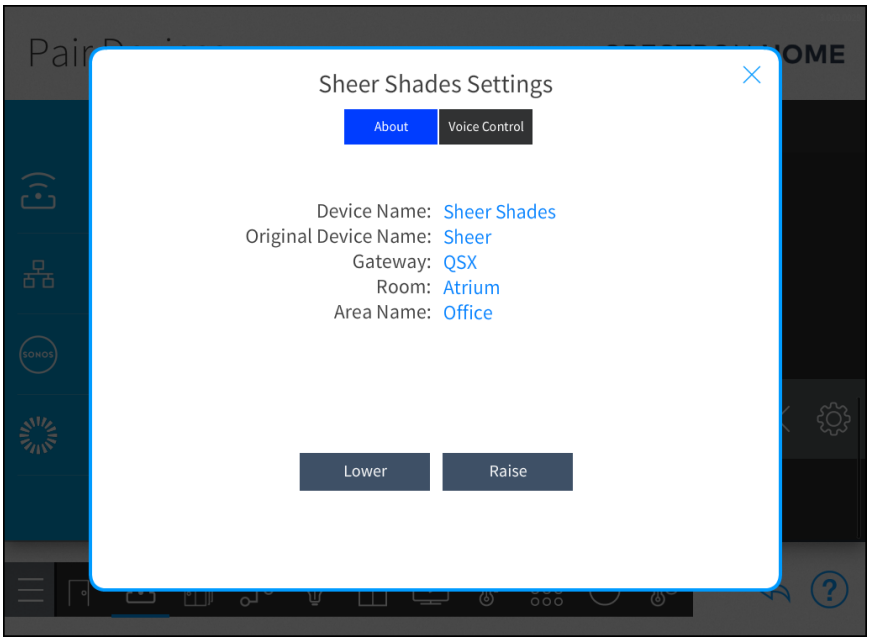


NOTE: To use voice control, voice control services must be turned on and configured. For details, refer to Voice Control Settings on page 607.

- **Enable Status:** Select **Enable** or **Disable** to turn voice control services on or off.
- **Description:** Enter a descriptive name. The name is used by the voice control services.

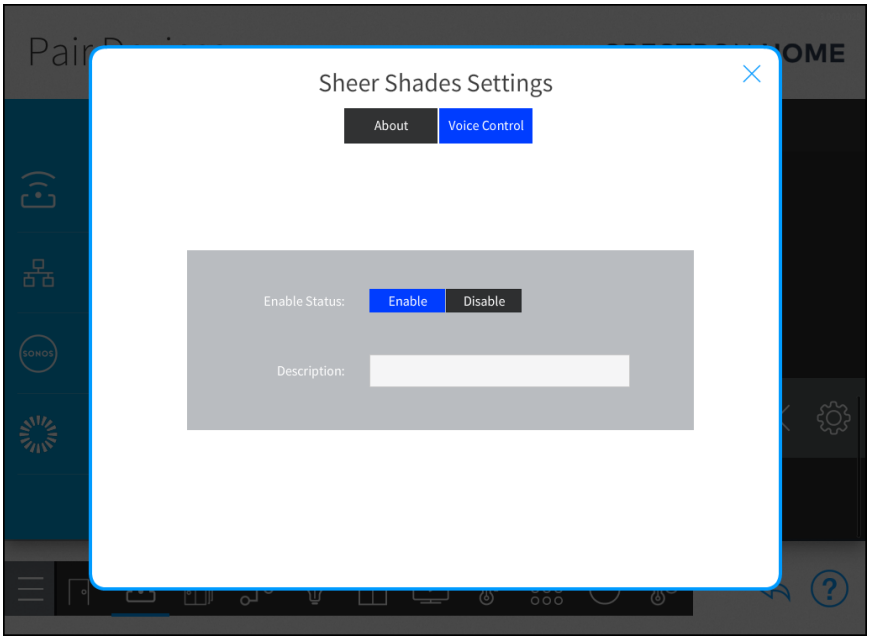
Lutron Shade Settings

Tap the gear button next to the device name to display a Settings dialog box for the Lutron shade. The **About** tab is selected and displays the device information. The Settings dialog box has an additional tab for **Voice Control**.



- **Lower:** Tap to lower the shade.
- **Raise:** Tap to raise the shade.

Tap the **Voice Control** tab to configure the voice control settings.

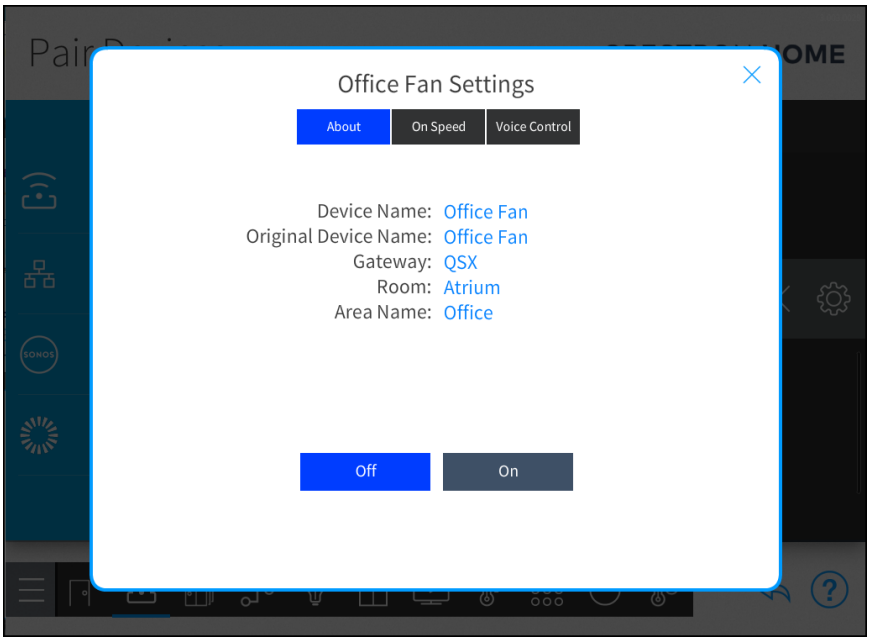


NOTE: To use voice control, voice control services must be turned on and configured. For details, refer to Voice Control Settings on page 607.

- **Enable Status:** Select **Enable** or **Disable** to turn voice control services on or off.
- **Description:** Enter a descriptive name. The name is used by the voice control services.

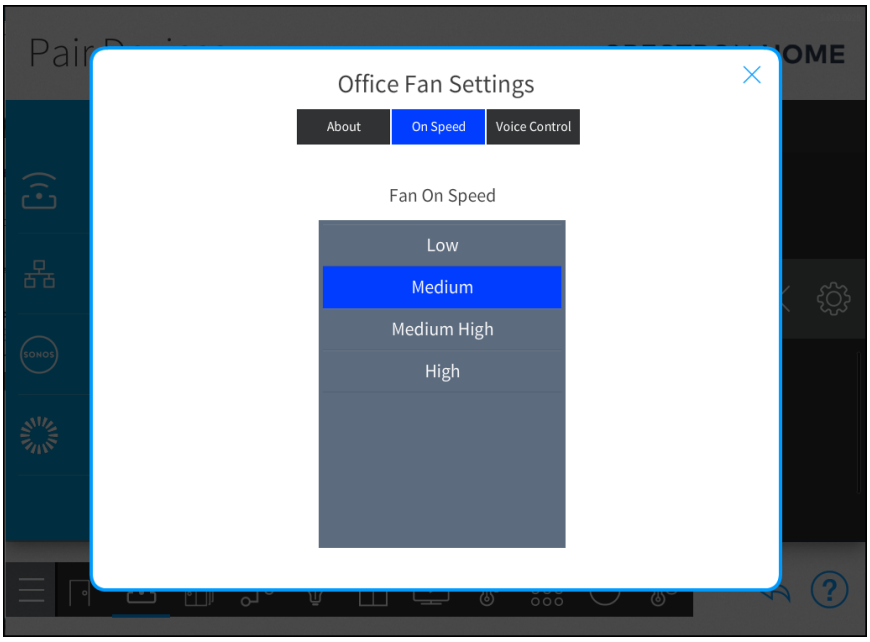
Lutron Fan Settings

Tap the gear button next to the device name to display a Settings dialog box for the Lutron fan. The **About** tab is selected and displays the device information. The Settings dialog box has additional tabs for **On Speed** and **Voice Control**.

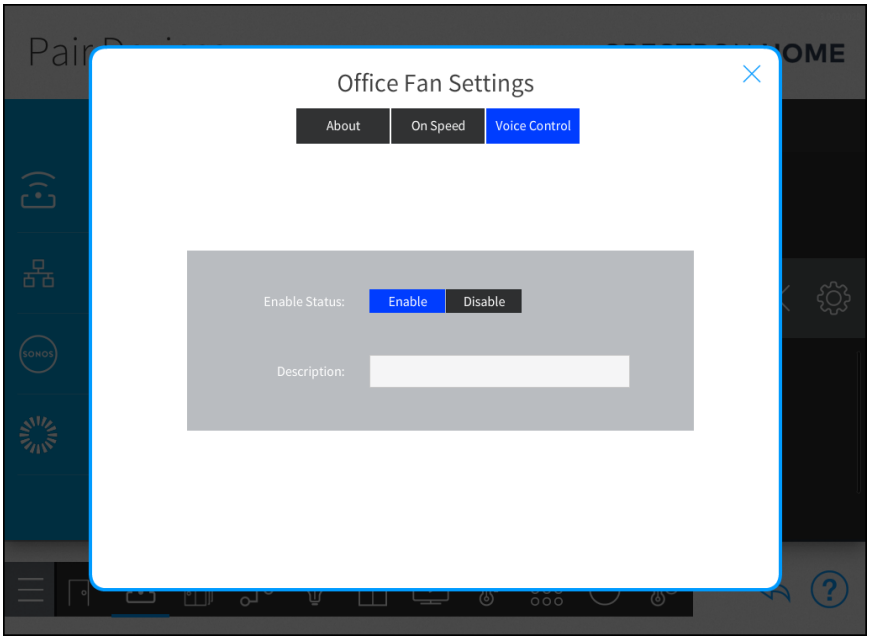


- **Off:** Tap to turn the fan off.
- **On:** Tap to turn the fan on.

Tap the **On Speed** tab to configure the speed that the fan turns on if the fan is controlled using the Lighting Load button model. For details, refer to Configure the Button Actions on page 458.



Tap the **Voice Control** tab to configure the voice control settings.

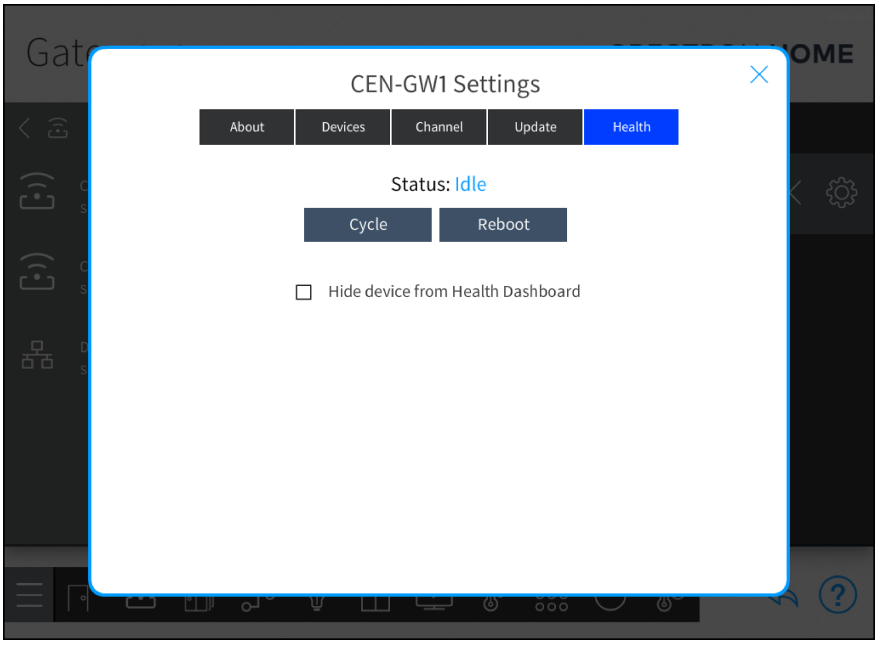


NOTE: To use voice control, voice control services must be turned on and configured. For details, refer to Voice Control Settings on page 607.

- **Enable Status:** Select **Enable** or **Disable** to turn voice control services on or off.
- **Description:** Enter a descriptive name. The name is used by the voice control services.

Health Settings

Use the **Health** tab to restart the device or to hide the device from the Health Dashboard.



Restart

Restart or power cycle devices that are controlled by a PDU or support the reboot command when sent over the network. The **Cycle** button displays when the device's power supply is connected to a power bank on a networked power controller and the **Reboot** button displays when an Ethernet device can be restarted using the `reboot` command.

- **Cycle:** Power cycle the power bank associated with the device on the networked power controller.
- **Reboot:** Restart a device over the network.

The **Status** field indicates if the device is **power cycling**, **rebooting**, or **idle**. **Idle** indicates that the device power cycling or restarting. If an error occurs while the device is restarting, a **Reboot Failed** message is displayed until the device is restarted or power cycled again.

Hide from Health Dashboard

To hide the device from the health dashboard, select **Hide device from Health Dashboard**.

Interrupt Settings

Use the **Interrupts** tab to enable, disable, and configure the interrupts for a device.

An interrupt is a notification from the Crestron Home system that informs the user that an event has occurred. When an interrupt event occurs, a message describing the event is displayed on the user interface devices (Crestron touch screens, iOS® devices, and Android™ devices) in the home. Additionally, audio that is playing in the room may be momentarily muted and a chime can be played.

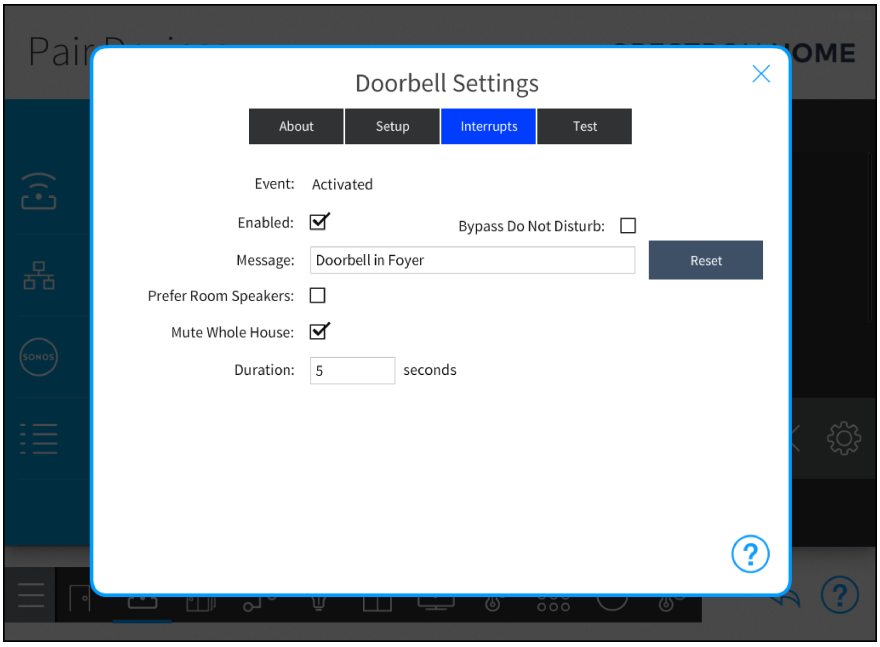
Interrupts are supported by the following devices:

Device Type	Enabled/Disabled (Default)	Event
Axxess Industries	Enabled	Device is activated
Burglary Alarm	Enabled	Burglary alarm is activated
Doorbell	Enabled	Doorbell is activated
Door Lock	Enabled	Door is unlocked
Door Sensor	Disabled	Door is opened
Driveway Sensor	Enabled	Driveway sensor is activated
Garage Door	Disabled	Garage door is opened
Gate	Disabled	Gate is opened
Occupancy Sensor	Disabled	Occupancy sensor is activated
Security System	Enabled (for alarm events)	Security system event is activated
Smoke Alarm	Enabled	Smoke alarm is activated
Water Alarm	Enabled	Water alarm is activated
Window Alarm	Enabled	Window alarm is activated

NOTES:

- There is no interrupt when occupancy is detected by the Grace Occupancy feature on a Crestron occupancy sensor.
- Devices that are paired with the Crestron Home system prior to the introduction of the interrupts feature will have their interrupt enabled or disabled according to the list above. For example, the interrupt for a Smoke Alarm will be enabled when the system is updated.

Tap the **Interrupts** tab to configure the interrupts for the device.



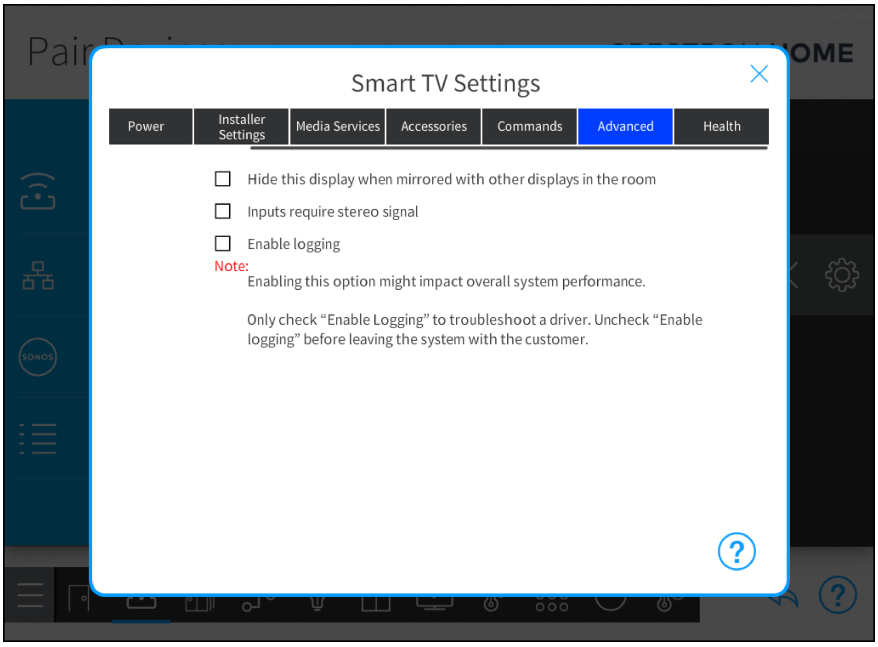
NOTE: Touch screens that do not have speakers display the interrupt messages but cannot play the associated sound.

- **Event:** The action that triggers the interrupt.
- **Enabled:** To enable or disable the interrupt for the device, tap the check box next to **Enabled**. When an interrupt is enabled, it is displayed in the Crestron Home user interface.
- **Bypass Do Not Disturb:** Tap the check box to override the Do Not Disturb setting for the room and play the chime for the interrupt.
- **Message:** The message that is displayed on the user interface device when the interrupt occurs. The default interrupt message is "[Device Name] in [Room Name]." For example, "Occupancy Sensor in Living Room."

  To display a custom message, enter the message in the field. To revert to the default message, select **Reset**.
- **Prefer Room Speakers:** Available for systems with DM NAX™ devices. Plays the interrupt using the speakers in the room.
- **Mute Whole House:** To mute the audio that is playing in any media room, tap the check box next to **Mute Whole House**. The audio is muted for the time set in the **Duration** field. The default **Mute Whole House** setting is enabled.
- **Duration:** The length of time that the audio in the room is muted. The duration can be set between 1 and 60 seconds. The default duration is 5 seconds.

Advanced Settings

Tap the **Advanced** tab to display the advanced functions for the device.



Hide Display

Select the **Hide this display** checkbox to hide the display on the Crestron Home User Interface when the display is mirrored with another display in the room. To configure mirrored displays, refer to Mirror Displays on page 380.

Receive Stereo Signal

When a TV is configured to play audio, the audio stream over the network can be configured so that the TV receives either surround sound or stereo audio. To receive stereo audio on the TV, go to the display settings, select the **Advanced** tab, and then select **Inputs require stereo signal**. The audio route will prefer devices that support multichannel downmixing.

Enable Logging

Turn on driver logging to view logs for Crestron Driver devices. Logging can be turned on for only one device at a time.

When driver logging is turned on:

- The Crestron Home system saves the logs for Crestron Driver devices.
- The logs are retained between reboots.
- Driver logging remains on between reboots.

IMPORTANT: Turn off logging when finished. Leaving driver logging on may cause system performance issues.

To turn on driver logging:

1. Select the **Devices** tab and then a device.
2. Select **Settings**.
3. Open the **Advanced** tab.
4. To turn on driver logging, select the **Enable logging**.

To view the logs, use the system diagnostics. For details, refer to Diagnostics on page 595.

Sonos and Crestron Home Integration

A Sonos system can have more than one Sonos household available. A Sonos household is a collection of grouped Sonos devices. Sonos devices that are part of the same household can be grouped together and share a Favorites list.

The Sonos app shows the devices for only one household. When the Sonos app is first launched, the app asks the user to add one Sonos device to the same subnet as the controller (the device that is running the Sonos app). Once the controller is synced with the Sonos device, the Sonos household that includes the device becomes the default household for the controller.

To add a Sonos device in the Sonos app, select **Manage > Add a player or sub**.

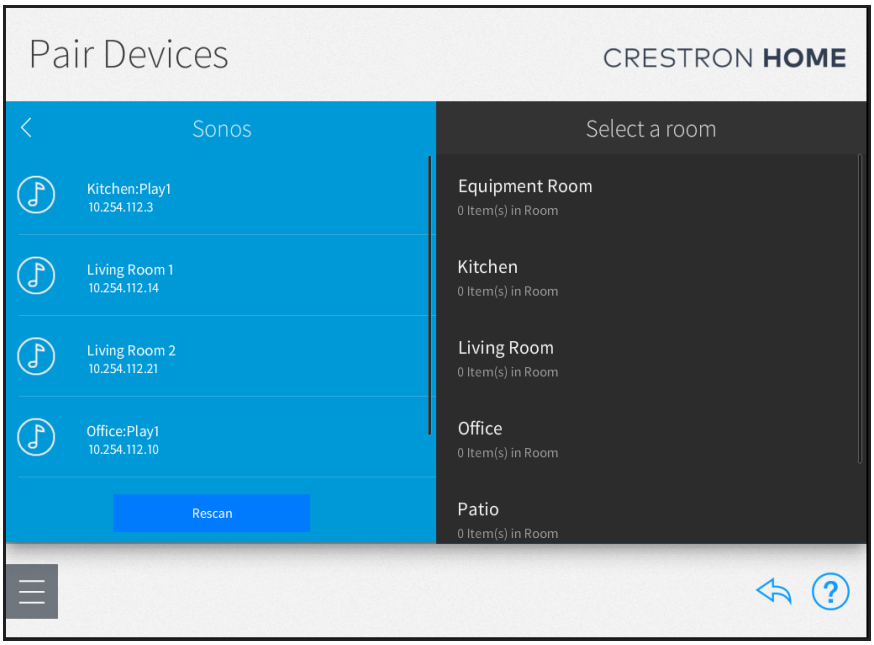
To move a device to a new household, select **Help > Reset Controller** to remove the Sonos device and then add the Sonos device to the desired household in the system.

> **NOTE:** If a Sonos device was previously connected to a different wireless network or a different household, the Sonos app will not display the Sonos device until it is added to the desired Sonos household.

When configuring the Sonos system, remember the following:

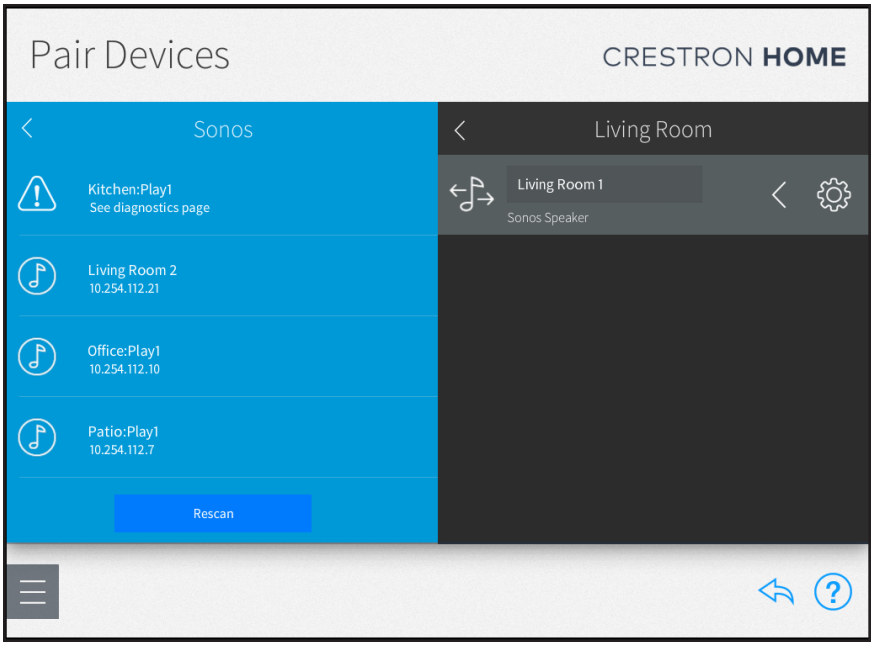
- The Crestron Home system allows Sonos devices from one Sonos household to be added to the system.
- All discovered Sonos devices are listed in the unassigned devices list, regardless of their Sonos household.

  Pair Devices Screen - Sonos (Devices from Multiple Households Shown)



- Once a device from a Sonos household is added to the system, Sonos devices that are in other Sonos households cannot be added. A warning icon is displayed next to the Sonos devices that cannot be added to the Crestron Home system.

  Pair Devices Screen - Sonos (Living Room 1 Added)



Sonos Troubleshooting

The following sections describe troubleshooting procedures for some of the common issues that may occur when adding Sonos devices to the Crestron Home system.

Multiple Sonos Households Found

This issue occurs when multiple Sonos households are discovered by the Crestron Home system.

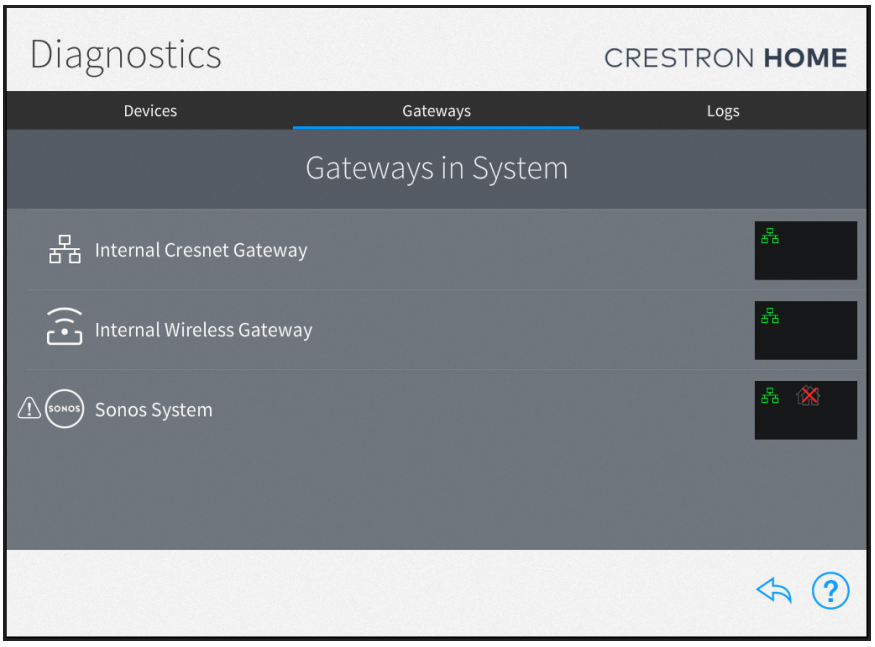
Issue(s)

- Not all discovered Sonos devices may be added to the Crestron Home system.
- A Sonos device is reporting as offline after it is moved to a different Sonos household.

Explanation

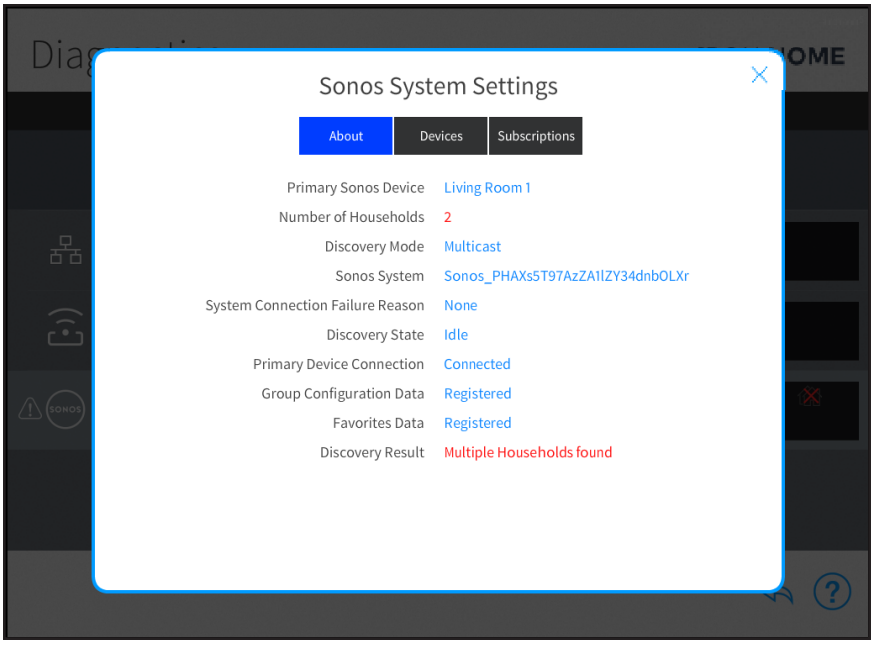
Devices from different Sonos households have been discovered on the network. The Crestron Home system provides a notification of this issue on the **Diagnostics** screen.

Diagnostics Screen - Multiple Sonos Households Found



Tap **Sonos System** in the **Gateways in System** screen, and then the gear icon next to the gateway to view the **Sonos System Settings** page. A "Multiple Households found" status is indicated for **Discovery Result**.

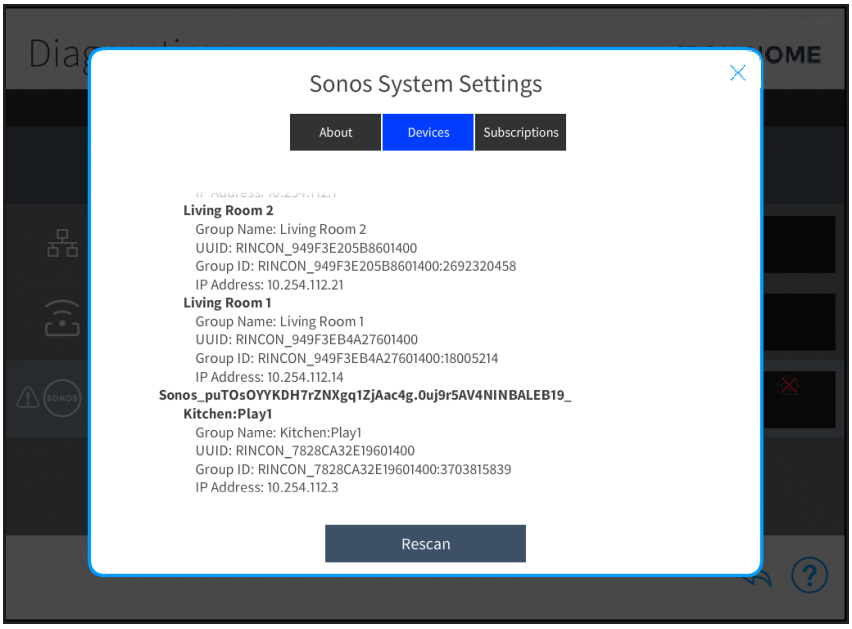
Sonos System Settings Screen - Multiple Sonos Households Found



Solution

1. Tap the **Devices** tab on the **Sonos System Settings** page.
2. Scroll through the list of devices to determine which devices belong to different Sonos households.

   Sonos System Settings Screen - Devices Tab



3. Reconfigure devices in the Sonos app so that they are added to the Sonos household that is assigned to the Crestron Home system.

Desired Household Not Found

This issue occurs when the desired Sonos household cannot be discovered by the Crestron Home system.

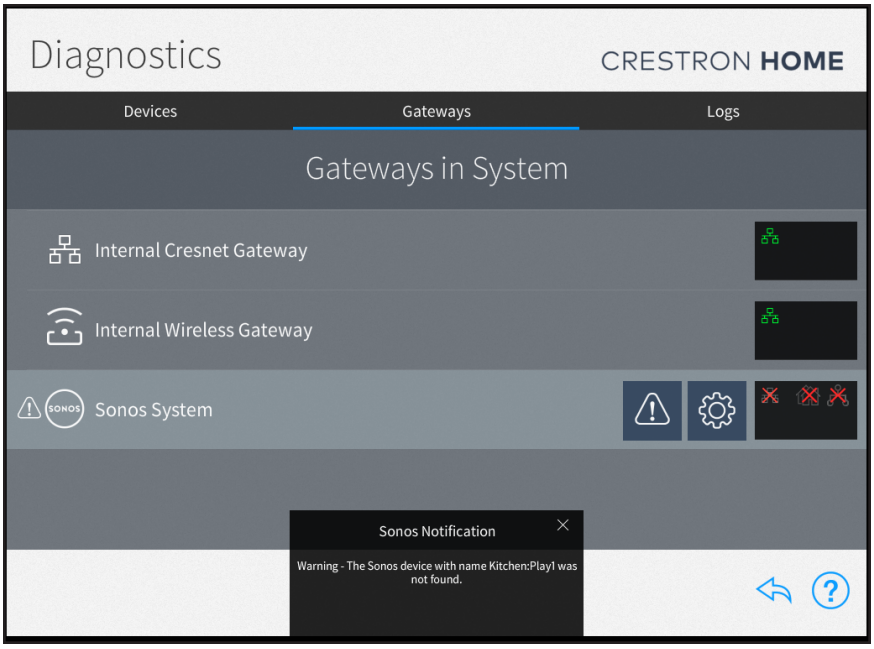
Issue(s)

- The Sonos discovery scan found Sonos devices, but all Sonos devices in the Crestron Home system report as offline.
- All Sonos devices in the Sonos household were reset to factory default settings.

Explanation

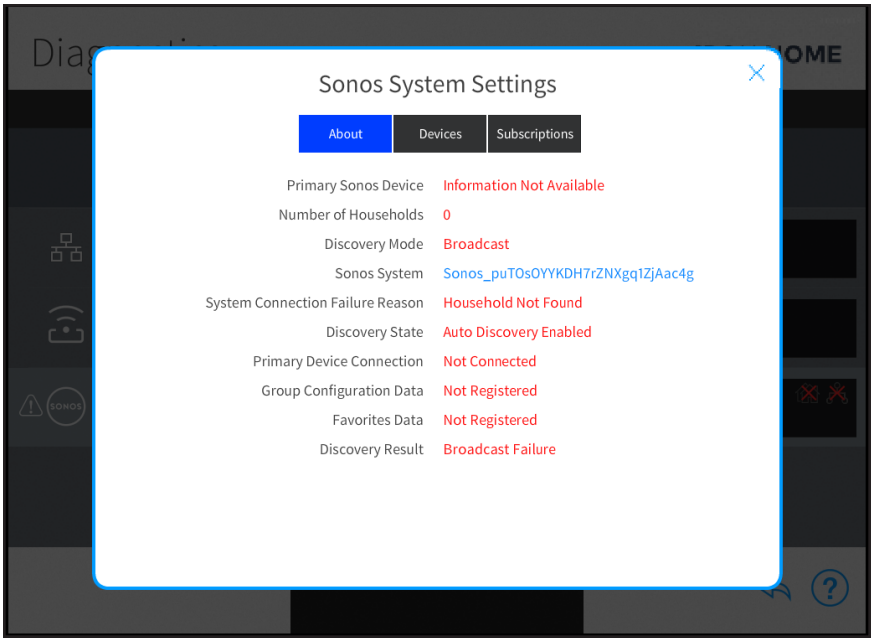
When the first Sonos device is added to the Crestron Home system, the Sonos household that the device belongs to is saved in the system configuration files. The Sonos System in Crestron Home reports as online only when a connection is established with one of the devices that is part of the saved Sonos household. The Crestron Home system provides a notification of this issue on the **Diagnostics** screen.

Diagnostics Screen - Desired Household Not Found



Tap **Sonos System** in the **Gateways in System** screen, and then the gear icon next to the gateway to view the **Sonos System Settings** page. A "Household Not Found" status is indicated for **Discovery State**.

Sonos System Settings Screen - Multiple Sonos Households Found



Solution

1. Open the Sonos app.
2. To verify that the devices that are assigned in the Crestron Home system are online, test to see if the devices can be controlled via the app.

   > **NOTE:** Always close the Sonos app before verifying that a Sonos device is online.

3. If the device can be controlled, start a Sonos discovery scan on the **Pair Devices** screen to discover the device.

No Devices Found

This issue occurs when no Sonos devices are discovered by the Crestron Home system.

Issue(s)

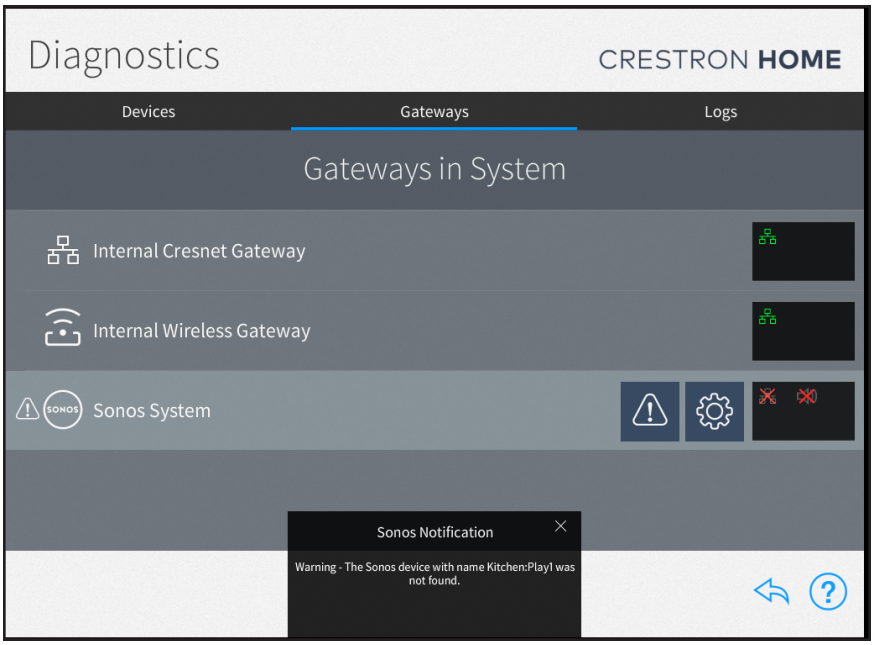
No Sonos devices were found during the Sonos discovery scan.

Explanation

When a Sonos discovery is initiated, a two-stage discovery process begins. In the first stage, a multicast message is sent out on the network. The Crestron Home system gives Sonos devices 30 seconds to respond. If at least one device responds during this interval, discovery is stopped. On the **Sonos System Settings** screen, a "Multicast Success" message is displayed.

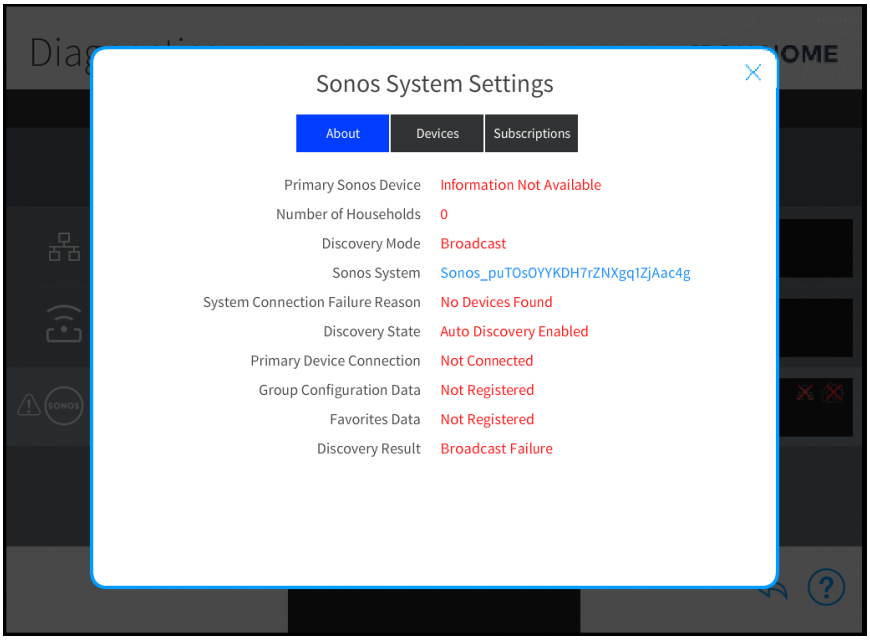
If no devices are discovered during the first stage, a second multicast message is sent out on the network. If no Sonos devices respond within 30 seconds, a "No Devices Found" error is raised. The Crestron Home system provides a notification of this issue on the **Diagnostics** screen.

Diagnostics Screen - No Devices Found



Tap the gear icon next to the **Sonos System** gateway to view the **Sonos System Settings** page with the **About** tab open by default. A "Household Not Found" status is indicated for **System Connection Failure Reason**.

Sonos System Settings Screen - No Devices Found



Solution

1. Connect a PC that is wired to the same network switch as the Crestron Home processor.
2. Open the Sonos app on the PC.
3. Verify that the Sonos devices are listed in the Sonos app.
4. If no devices are listed, the Sonos household must be reconfigured until the Sonos devices are discovered. For more information, refer to the Sonos support pages at support.sonos.com.

No Online Devices Found

This issue occurs when the discovered Sonos devices do not report as online.

Issue(s)

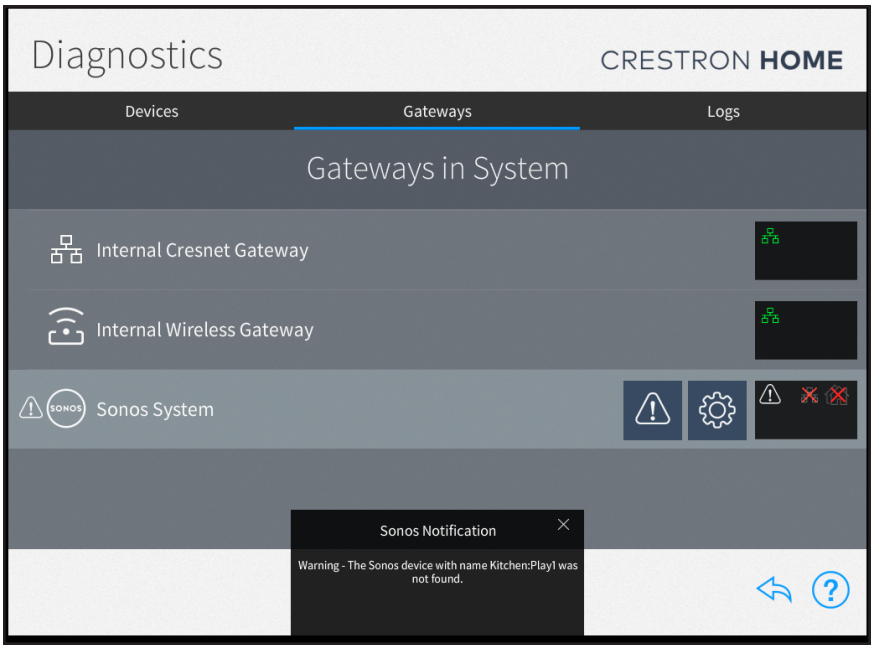
The Crestron Home system was able to discover Sonos devices but is unable connect to any of the devices for setup.

Explanation

After a successful Sonos discovery scan, the Crestron Home system selects one of the Sonos devices as the primary device. The system then connects to the device and subscribes for the Favorites event (used to retrieve and update the Favorites list) and the Group Configuration event (used to retrieve and update the group and player configuration).

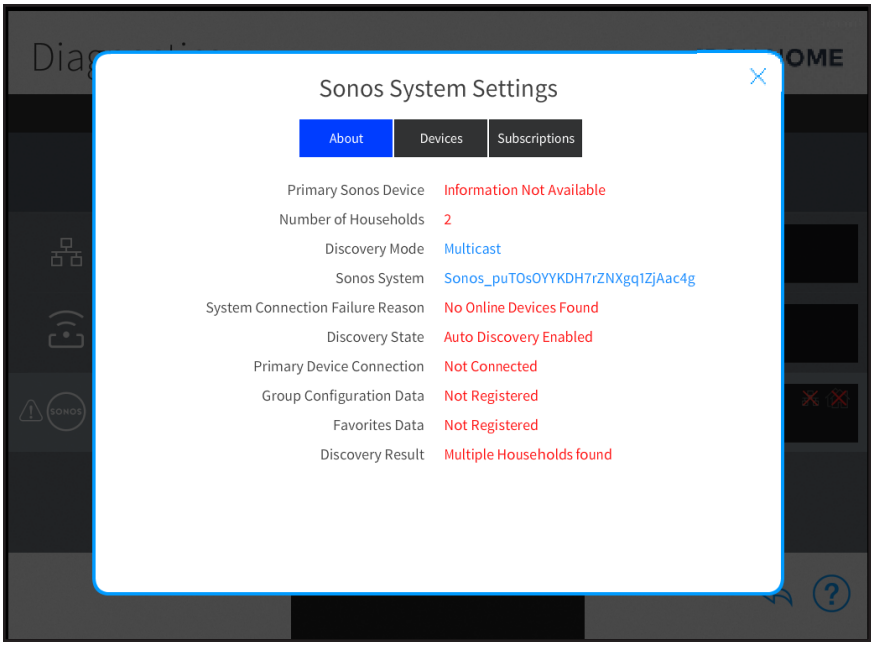
If one of these three processes fails, the Crestron Home system assumes that the device is offline and moves to the next Sonos device that was discovered. If one of these three processes fails for all discovered Sonos devices, the Sonos system cannot be created, and a "No Online Devices Found" error is raised. The Crestron Home system provides a notification of this issue on the **Diagnostics** screen.

Diagnostics Screen - No Online Devices Found



Tap the gear icon next to the Sonos System gateway to view the **Sonos System Settings** page with the **About** tab open by default. A "No Online Devices Found" status is indicated for **System Connection Failure Reason**.

Sonos System Settings Screen - No Devices Found



Solution

Depending on the issue, multiple solutions may be attempted:

- In the Sonos app, ungroup all devices, and then start a new Sonos discovery scan.
- Remove all Sonos devices in the Crestron Home system, and then add one new device to the system.
- For a "Favorites Event Subscription Timeout" or "Favorites Event Subscription Failed" message, select the **Subscriptions** tab in the **Sonos System Settings** page, and then press the **Refresh** button for the Favorites event.
- For a "Group Configuration Event Subscription Timeout" or "Group Configuration Event Subscription Failed" message, select the **Subscriptions** tab in the **Sonos System Settings** page, and then press the **Refresh** button for the Group Configuration event.

If the above solutions do not fix the issue:

- Power cycle the Sonos devices, and wait until they are discovered in the Sonos app.

  > **NOTE:** Close the Sonos app after powering down a Sonos device.

- Power cycle the Crestron Home processor.

Speaker Pairs

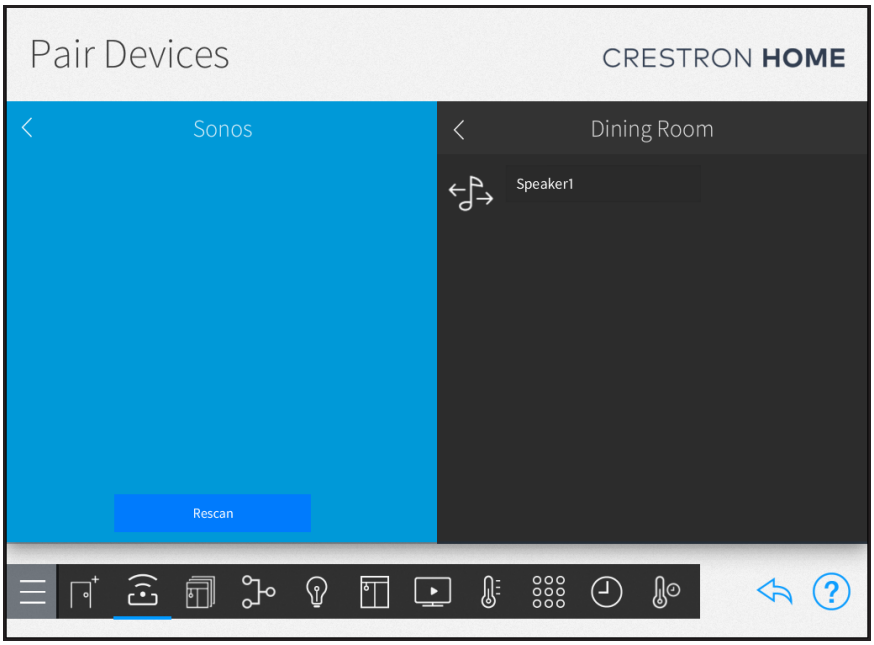
In the Sonos app, it is possible to pair two PLAY:1, PLAY:3, PLAY:5, or CONNECT:AMP speaker devices. When two of these speakers are paired, both speakers act as a single Sonos device in the Sonos app.

When a speaker pair is created in the Sonos app, the user is asked to assign one of the paired speakers as the left speaker. The speaker assigned as the left speaker becomes the master, and from that point forward, is used to represent both speakers in the pair.

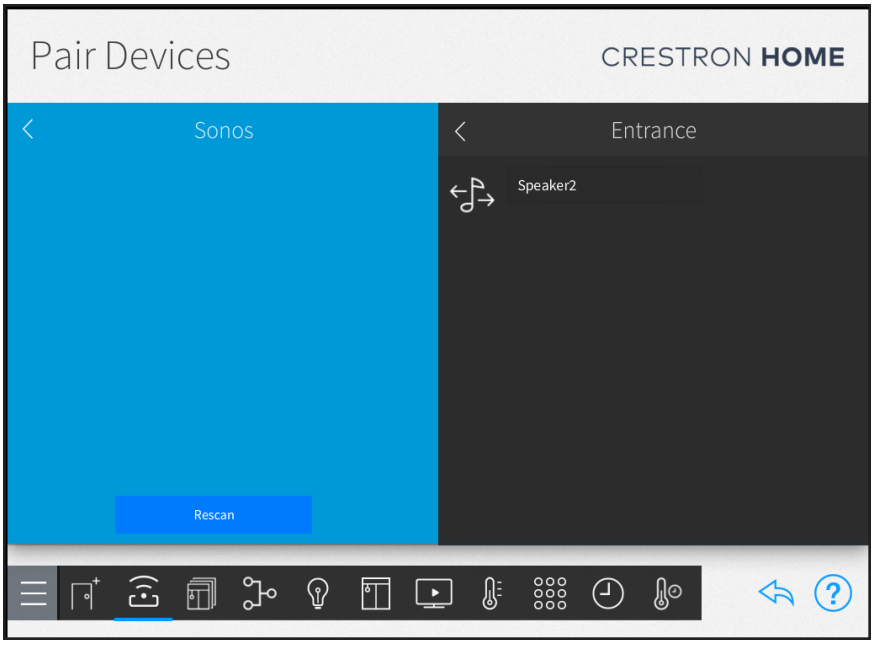
The speaker pair is named after the speaker that was used to start the speaker pair configuration. If this speaker is not chosen as the left (master) speaker, the left speaker is renamed automatically.

In the following images, "Speaker1" in the Dining Room and "Speaker2" in the Entrance will be used to create a speaker pair.

Pair Devices Screen - Sonos (Speaker1)



Pair Devices Screen - Sonos (Speaker2)

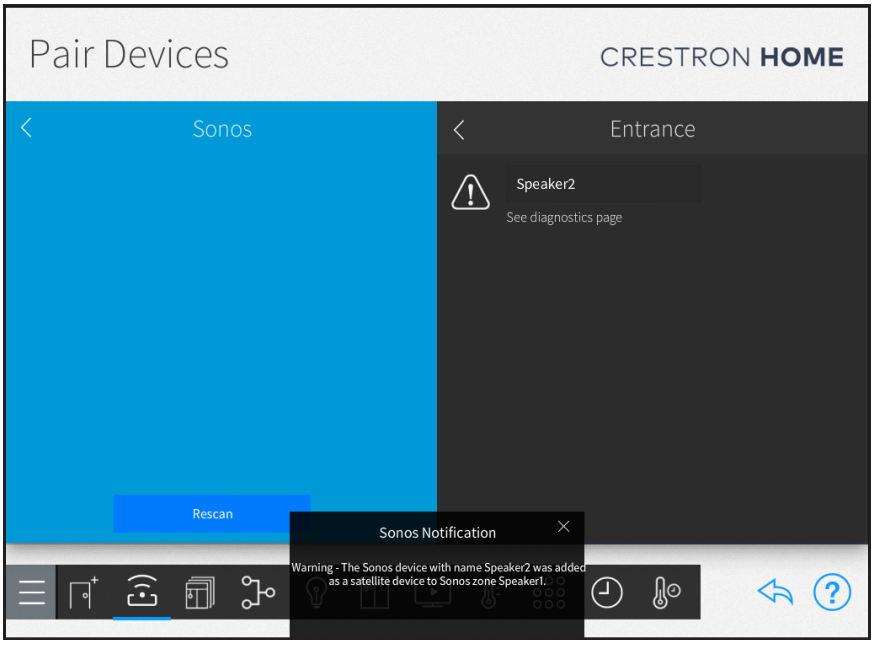


To select Speaker1 as the left (master) speaker:

1. Open the Sonos app.
2. Select **Speaker1**, and then select **Settings** > **Create Speaker Pair**.
3. Create a pair between Speaker1 and Speaker2 by following the in-app instructions.
4. Assign **Speaker1** as the left speaker.

Speaker2 is hidden, and the resulting speaker pair is named Speaker1. The Crestron Home system will be able to discover only Speaker1. If Speaker2 was assigned in the Crestron Home system, it will report as offline, and a pop-up dialog is displayed stating that Speaker2 was added as a satellite device to Speaker1.

Pair Devices Screen - Sonos (Speaker2 Offline)

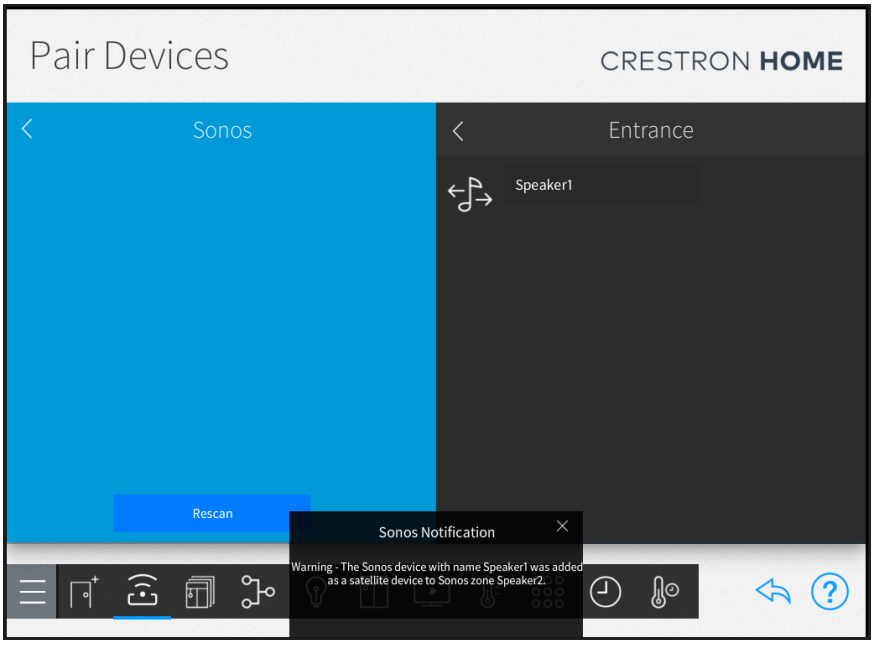


To select Speaker2 as the left (master) speaker:

1. Open the Sonos app.
2. Select **Speaker1**, and then select **Settings** > **Create Speaker Pair**.
3. Create a pair between Speaker1 and Speaker2 by following the in-app instructions.
4. Assign **Speaker2** as the left speaker.

Speaker1 is hidden, and the resulting speaker pair is named Speaker1. The Crestron Home system will be able to discover only Speaker2 (renamed to Speaker1). If Speaker1 was assigned in Crestron Home system, it will report as offline, and a pop-up dialog is displayed stating that Speaker1 was added as a satellite device to Speaker2.

Pair Devices Screen - Sonos (Speaker1 Pair)



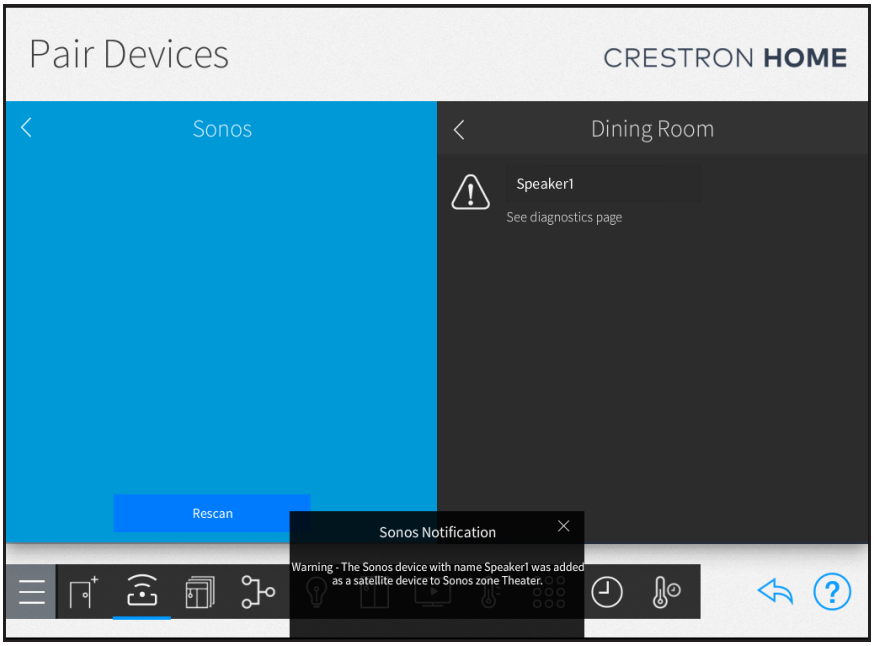
Surround Speakers

In the Sonos app, it is possible to assign two PLAY:1, PLAY:3, or PLAY:5 speaker devices as surround speakers for a Beam, PLAYBAR, or PLAYBASE device.

The two speakers that are selected as surround speakers are hidden in the Sonos app and may no longer be controlled.

If any of the surround speakers were assigned in the Crestron Home system, a pop-up dialog is displayed stating the Sonos device was added as a satellite device to the Beam, PLAYBAR, or PLAYBASE device.

Pair Devices Screen - Sonos (Speaker1 Offline)



Line-Out Configuration

For a Sonos CONNECT device, the line-out settings may be set as **Variable** or **Fixed**:

- **Variable:** The volume level of the line-out output may be controlled.
- **Fixed:** The volume level of the line-out output is set to 100% and may not be controlled.

Depending on the device type that was chosen when assigning a Sonos device in the Crestron Home system, observe the following points:

- Source
  - A source device type is used for a CONNECT device that is connected as an input to an audio receiver.
  - The line-out setting for source devices should always be set to **Fixed**, as the audio receiver is used for volume control.

    - A notification is displayed if the line-out setting for a CONNECT device with a source device type was set to **Variable**.
- Speaker
    - A speaker device type is added to a room in the Crestron Home system as an audio endpoint.
    - The line-out setting for speaker devices should always be set to **Variable**, as the Sonos device is used for volume control.
    - A notification is displayed if the line-out setting for a CONNECT device with a speaker device type was set to **Fixed**.

Best Practices

Refer to the following best practices when integrating Sonos devices with the Crestron Home system.

- When adding a Sonos device to an existing Sonos household, the device must be reset to factory settings to ensure that it begins using the system ID assigned to the existing Sonos system.
- Multiple Sonos households cannot be placed on the same network. Each Sonos household has a unique system ID, and Crestron Home system only allows Sonos devices to be assigned that are part of the Sonos household stored in the Crestron Home system configuration files.
- Set up the Sonos device(s) through the Sonos app before attempting a discovery with Crestron Home. If the Sonos device is not assigned to a room in the Sonos app, it cannot be discovered by Crestron Home.
- To rename a Sonos device in Crestron Home, change the name of the Sonos room that the device is assigned to using the Sonos app. The device name automatically updates in the Crestron Home system.
- Do not group Sonos devices together in the Sonos app, as this can lead to Crestron Home only being able to control one Sonos device instead of all of them individually.
- Crestron Homeuses multicast to discover Sonos devices. Some network switches do not route these discovery packets correctly, and, as a result, Crestron Home does not discover any Sonos devices.
- The Autoplay option must be turned on in the Sonos app when adding a PLAY:5, CONNECT:AMP, Beam, PLAYBAR, or PLAYBASE.

Migrate Crestron Wireless Devices to a Different Gateway

If necessary, migrate Crestron wireless devices to a different gateway. When Crestron wireless devices are migrated, the wireless device is removed from the wireless gateway and transferred to a new gateway. All programming is retained when devices are migrated.

IMPORTANT: The Crestron wireless gateway must be factory fresh or from within the same system.

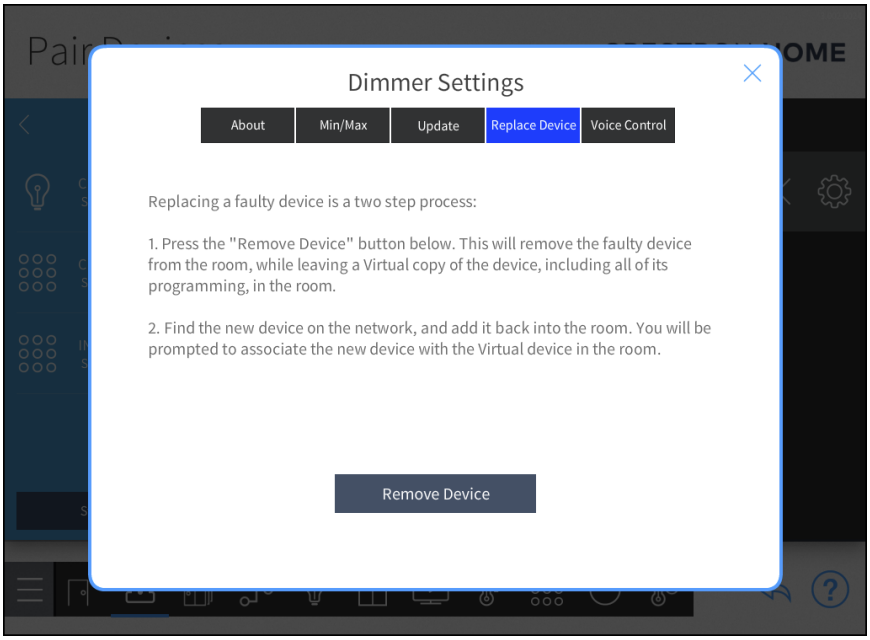
To migrate Crestron wireless devices to a different gateway:

1. Write down the serial number and location for all devices that will be migrated.

   NOTES:

   - To view the name, location, and serial number for all devices acquired by a gateway, view the**Devices** tab in the gateway's settings dialog. For details, refer to Gateway Settings on page 1220.
   - Alternatively, perform this procedure one device at a time for all of the devices that need to be migrated.

2. Tap **Settings** next to the device name to display a Settings dialog box for the device and then tap the **Replace Device** tab. For details, refer to Gateway Settings on page 1220.



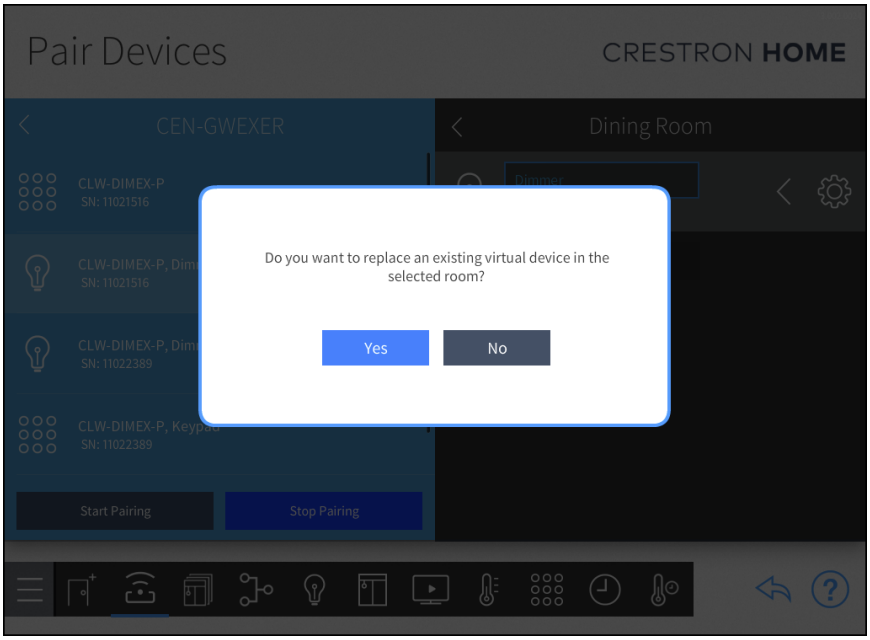
3. Tap **Remove Device** and then tap **OK** to confirm.

4. In the confirmation dialog that displays tap **OK** to confirm. A virtual copy of the device remains in the room and is identified with orange triangles in the device icon. The virtual device preserves all of the programming that is associated with the device.

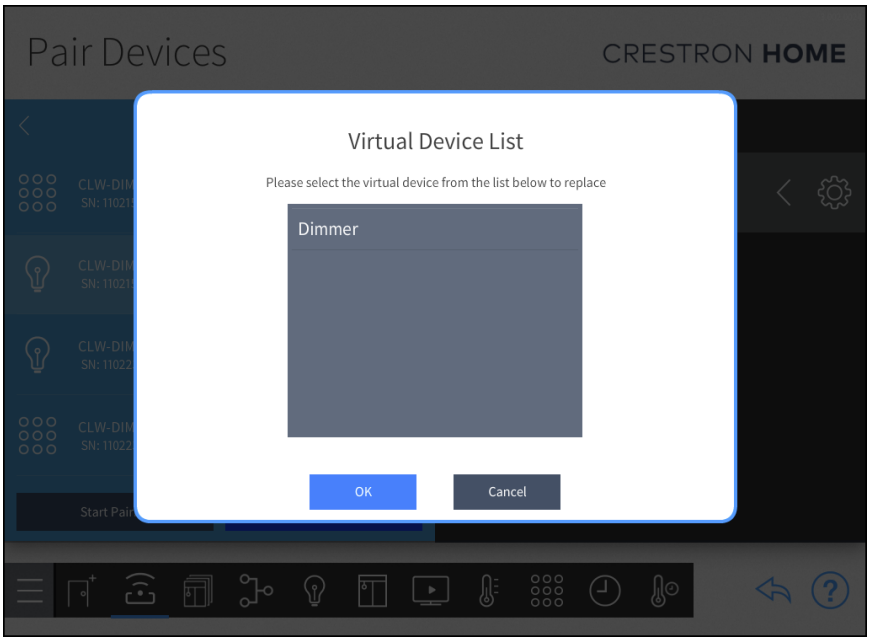


5. If necessary, add a new wireless gateway (CEN-GWEXER or CEN-GW1) to the system. For details, refer to Add a Gateway on page 280.
6. Place the CEN-GWEXER or CEN-GW1 into acquire mode and then acquire the wireless device. For details, refer to Crestron Wireless Devices on page 188.
7. Select the room where the device is installed from the **Select a room** menu.
8. Select the device from the wireless gateway's menu and then select **Add**.

9. A dialog displays asking if the device will replace a virtual device in the room. To replace the device that was previously removed, tap **Yes**.



10. The Virtual Device List displays the virtual devices in the room. To replace a device, select the virtual device from the**Virtual Device List** and then tap **OK**.



Restore a Crestron Home Processor to Factory Settings

Factory reset a Crestron Home processor.

Restore Crestron Control Processor

> **NOTE:** If the Crestron Home processor is responsive, factory reset the processor using the Crestron Home Setup app. For details, refer to Reset to Factory Defaults on page 593.

If the Crestron Home processor is no longer communicating with Crestron Toolbox via USB or Ethernet, use the following procedure to restore the device to its factory default settings.

> **CAUTIONS:**
>
> - All configured settings and all devices that are paired with the Crestron Home processor are erased during a factory restore.
> - If required, download the backup files from the myCrestron Residential Monitoring Service before proceeding.

To factory reset the Crestron Home processor:

> **NOTE:** Use a small, pointed object (such as the tip of a pen) to press the buttons on theCrestron Home processor.

1. Press and release the **HW-R** button on the Crestron Home processor.
2. Within 3 seconds, press the **SW-R** button on the Crestron Home processor five times, with under a 1-second gap between each press. The Crestron Home processor begins the factory reset process and then reboots. The process may take up to 15 minutes to complete.
3. Connect to the Crestron Home processor using Crestron Toolbox™ software and then use the Text Console tool to check for a prompt. The standard device prompt should display.

Restore PC Control Processor

The PC4-R requires a USB drive to factory reset the processor.

> **NOTE:** Consider the following:
>
> - The USB drive must use the FAT32 file system. If necessary, format the USB drive.
> - The USB drive should not contain other files on the drive.
> - The file required for the factory reset must be located at the root level of the drive.
> - The file name is case sensitive and should not include a file extension.

To factory reset the PC4-R:

1. Use a PC to create a file named `restore` in the root level of a USB drive. The file name is case sensitive. Do not include a file extension.
2. Insert the USB drive into any USB port on the PC4-R.
3. Restart the PC4-R. The factory default settings are reset while the PC4-R restarts. The splash screen will display.
4. Remove the USB drive.

Reset Passwords

Factory reset a Crestron Home processor.

Crestron Control Processor

Reset the passwords if a password is lost or if the system is transferred to a new owner.

> **NOTES:**
>
> - The Admin username and all other users are removed from the system.
> - When the passwords are reset, the system displays a prompt to enter a new Admin username and password.
> - After the password reset, the Advanced User, User Interface Device, and Common Device passwords must be set.

To reset the passwords:

1. Press and hold the **SW-R** button on the Crestron Home processor (about 15 seconds) until the **MSG** LED flashes rapidly.
2. Set the Admin username and password in the **Create Admin Account** dialog box.
3. Set the Advanced User, User Interface Device, and Common Device passwords:

   > **NOTE:** To change the Admin password, refer to Admin Password on page 566.

   - **Advanced User password:** Refer to Advanced User Password on page 567.
   - **User Interface Device password:** Refer to User Interface Device Password on page 568.
   - **Common Device password:** Refer to Common Device Password on page 569.

PC Control Processor

The PC4-R requires a USB drive to reset the passwords.

> **NOTE:** Consider the following:
>
> - The USB drive must use the FAT32 file system. If necessary, format the USB drive.
> - The USB drive should not contain other files on the drive.
> - The file required for the factory reset must be located at the root level of the drive.
> - The file name is case sensitive and should not include a file extension.

To reset the passwords on the PC4-R:

1. Use a PC to create a file named `pwdrecover` in the root level of a USB drive. The file name is case sensitive. Do not include a file extension.
2. Insert the USB drive into any USB port on the PC4-R.
3. Restart the PC4-R. The passwords are reset while the PC4-R restarts.
4. Set the Admin username and password in the **Create Admin Account** dialog box.
5. Set the Advanced User, User Interface Device, and Common Device passwords:

   > **NOTE:** To change the Admin password, refer to Admin Password on page 566.

   - **Advanced User password:** Refer to Advanced User Password on page 567.
   - **User Interface Device password:** Refer to User Interface Device Password on page 568.
   - **Common Device password:** Refer to Common Device Password on page 569.
6. Remove the USB drive.

Source Routing Behavior for Media Sources

When a media source is routed to a room from the media screen in the user control interface, the behavior of the media source varies depending on the device type and the routing action that is performed.

This appendix describes the expected source routing behavior for various media sources within the Crestron Home system.

When a media source is routed to a room:

- For audio-only media devices (such as the CEN-NSP-1, Autonomic streaming devices, and CEN-TRACK devices), if the device is not yet playing, it should begin to play automatically.
- A Sonos device does not begin to play when the "Sonos Favorites" source is selected. The Sonos device begins to play once a specific favorites channel is selected from inside the channel's user interface.
- The Crestron Home system does not attempt to start devices automatically unless the device supports automatic play functionality.
- Audio only devices will be favored as much as possible while routing an audio only source to an endpoint.
- Audio routes will follow video routes as much as possible while routing audio/video sources to an endpoint.

When a room is turned off, or a new media source is routed to a room:

- For the CEN-NSP-1, Autonomic streaming devices, and CEN-TRACK devices, a discrete pause command is executed. If this command is not available, no command is executed.
- For DVD players, a discrete pause command is executed. If this command is not available, no command is executed.
- For streaming devices (such as Amazon Fire® streaming devices or Apple TV digital media extenders), a discrete pause command is executed. If this command is not available, no command is executed.
- For cable boxes, no action is attempted.
- If the existing media source is still playing, no action is attempted.

> **NOTE:** The Crestron Home system does not execute a discrete pause command when:
>
> - Switching between sources that are part of the same device and part of the same audio output channel (such as the Autonomic MMS-2A).
> - Switching between sources that are part of the same device that has single audio output channel (such as the CEN-NSP-1).

The Crestron Home system also supports a "Device No Longer Used" feature. When a source is no longer being used by the Crestron Home system, a power off command is sent to the device after one minute.

Media endpoints (such as speakers and displays) are powered off immediately.

Control System Integration

> **IMPORTANT NOTE:** Use control system integration only when necessary. Most functionality within a Crestron Home® OSsystem is available through native support, Crestron drivers, and extension drivers.

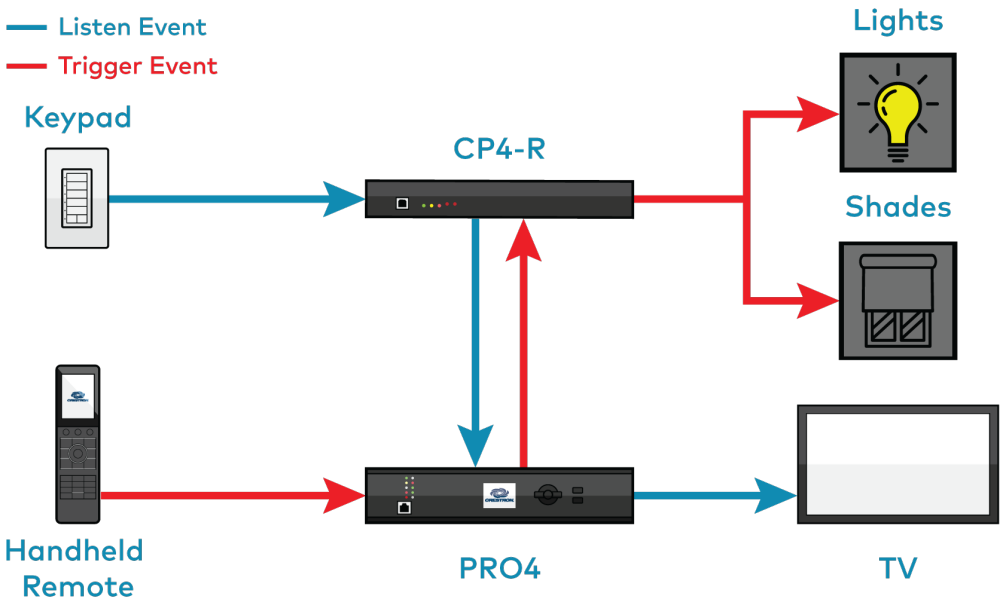
Integrate a Crestron® control system with a Crestron Home® OSsystem to control devices that cannot be controlled through the native functionality provided by Crestron Home OS, Crestron drivers, and extension drivers.

Integration with the Crestron Home system is accomplished using a 3- or 4-series control system programmed in Simpl Windows with the trigger and listen modules.

- **Trigger Event:** A 3- or 4-series control system sends an event to the Crestron Home system. When the Crestron Home system receives the event, it performs an action based on its configuration.
- **Listen Event:** A Crestron Home system sends an event to the 3- or 4-series control system. When the 3- or 4-series control system receives the event, it performs an action based on its programming.

Trigger and Listen Module Example

For example, a 3- or 4-series control system and a CP4-R are used to control the TV, lights, and shades. The 3- or 4-series control system controls the TV using a handheld remote and the CP4-R controls the lights and shades using an in-wall keypad.



- To control the lights and shades using the handheld remote connected to the PRO4, use a Trigger module in Simpl Windows.
- To control the TV using the in-wall keypad connected to the CP4-R, use a Listen module in Simpl Windows.

Enable Trigger and Listen Modules

To use the Trigger and Listen modules, the **Legacy Device Port** must be enabled. To turn on the Legacy Device Port, select **Legacy Device Port Enabled** on the **Local connection Settings** screen. For details, refer to Local Connection Settings on page 618.

> **NOTE:** The default setting for the Legacy Device Port is disabled in Crestron Home version 3.012.0125 and later.

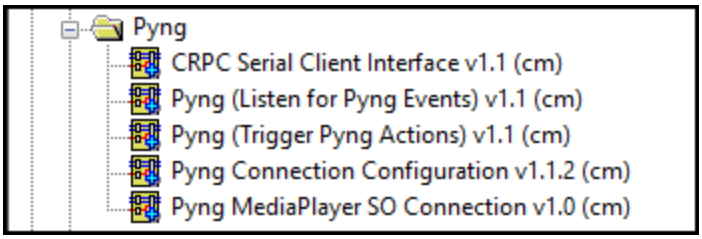
Connection Configuration Module

Use the Pyng Connection Configuration module to set the IP address of the Crestron Home processor and allow communications between the two systems.

> **NOTE:** Only add one instance of the Pyng Connection Configuration per program. Adding multiple modules may result in system errors.

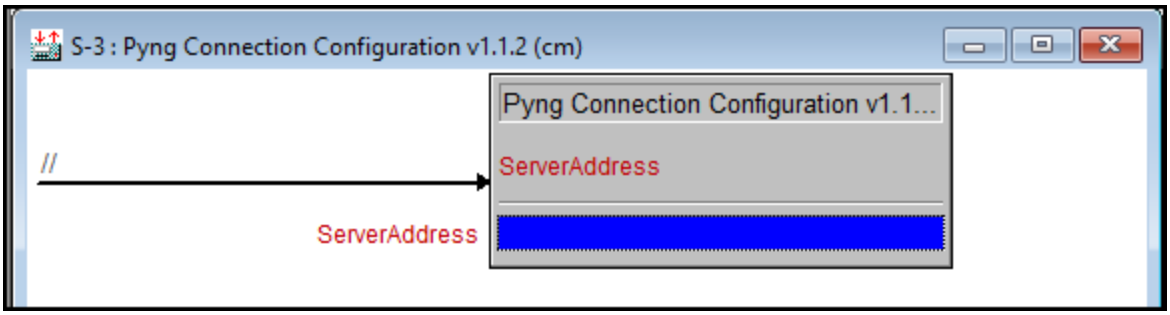
Add the Pyng Connection Configuration module:

1. In the Simpl Windows **Symbol Library**, go to **Crestron Modules > Pyng**.



2. Add the **Pyng Connection Configuration** module to the program.
3. Open the **Detail View** for the **Pyng Connection Configuration** module.
4. Enter the IP address or Hostname of the Crestron Home processor in the **ServerAddress** parameter.

> **NOTE:** To prevent a loss in communications, use a reserved IP address for the Crestron Home processor or enter the processor's hostname.



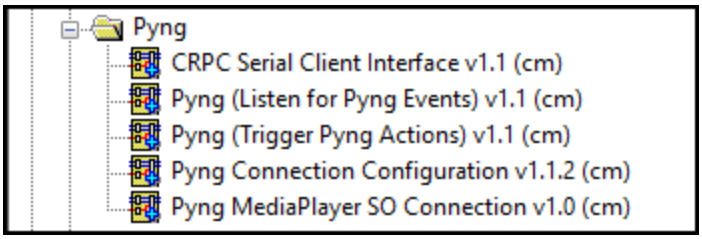
Trigger Module

Use a Trigger module to control the Crestron Home system with a 3- or 4-Series Control System.

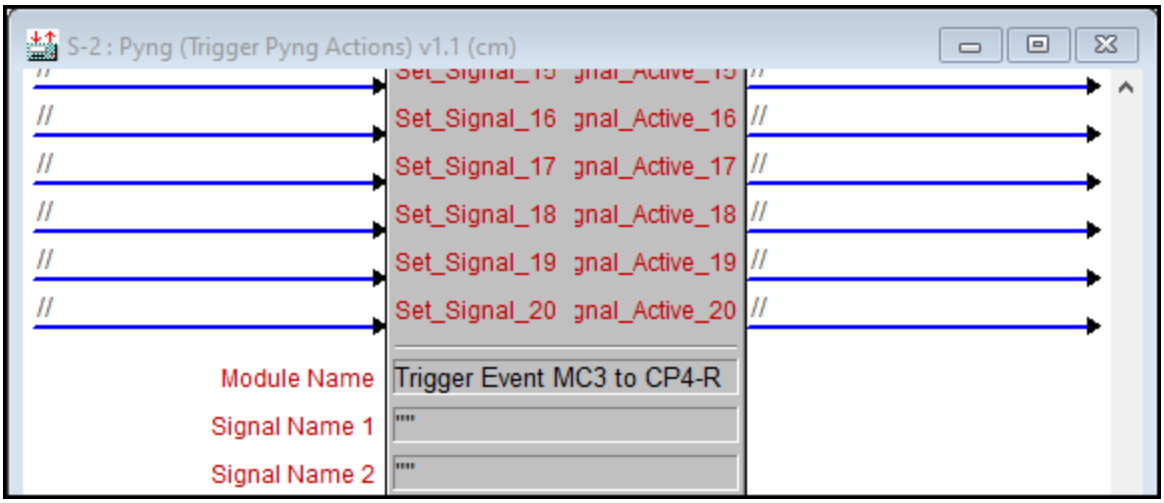
Create a Trigger Event in SIMPL Windows

Use SIMPL Windows to add and configure a Trigger event:

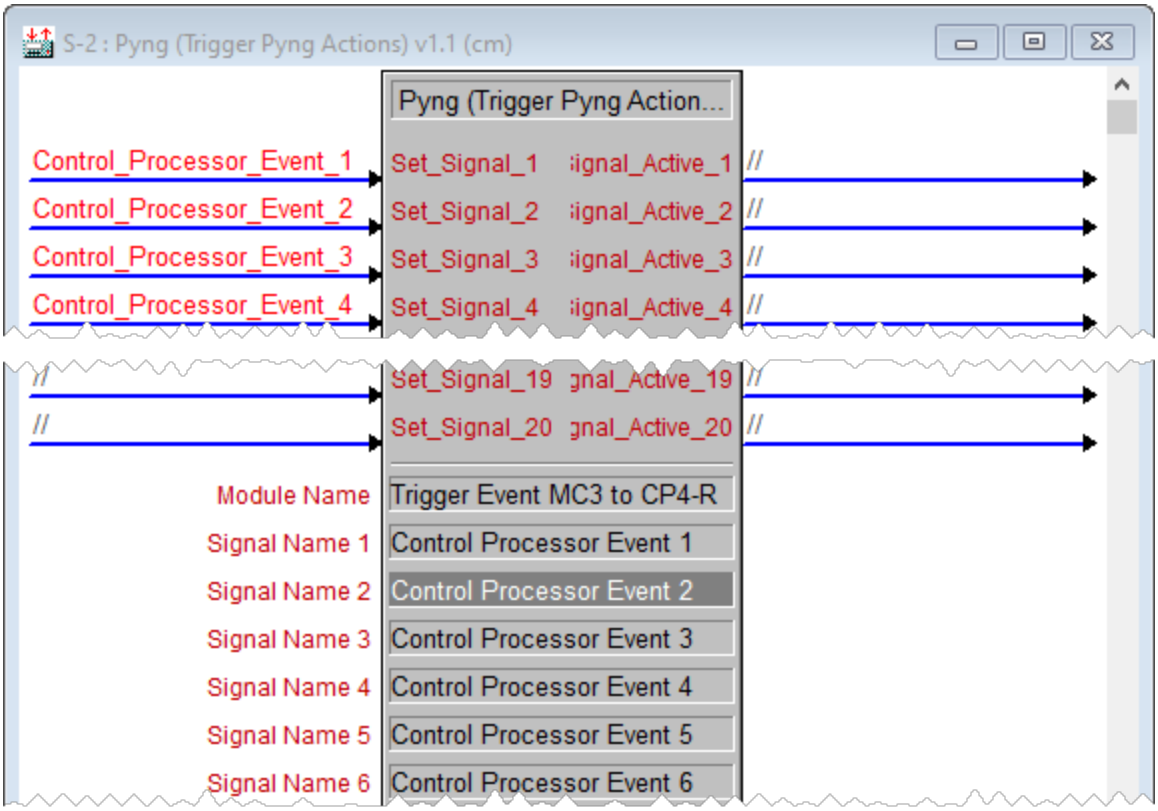
1. In the Simpl Windows **Symbol Library**, go to **Crestron Modules > Pyng**.



2. Add a **Pyng (Trigger Pyng Actions)** module to the program.
3. Enter a name in the **Module Name** parameter. The **Module Name** is displayed in the Crestron Home Setup app.



4. Add **Signal Name** parameters to the module.

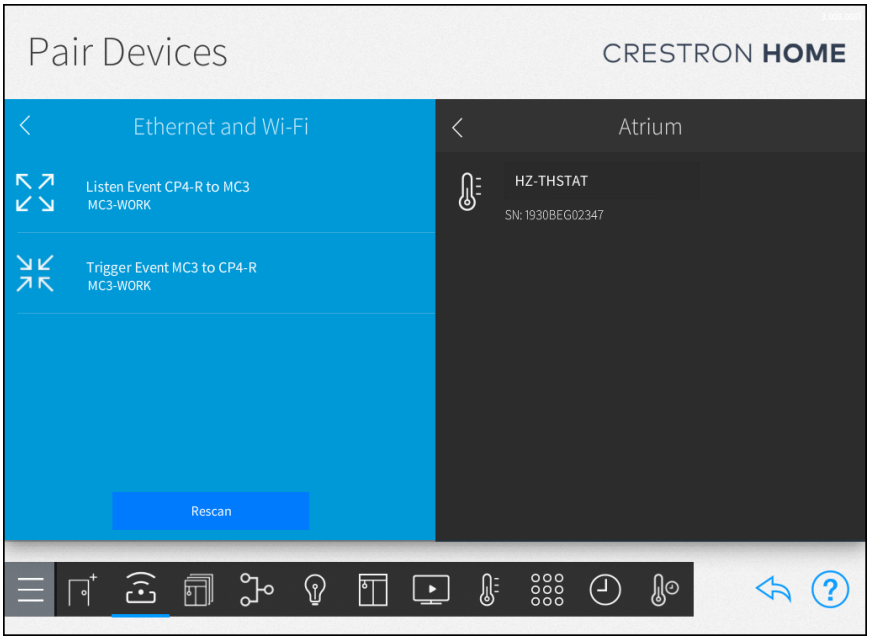


Add a Trigger to the Crestron Home system

Add the Trigger to the system using the Crestron Home Setup app. The trigger is discovered as an Ethernet device. For additional details, refer to Crestron Wired and Wi-Fi Devices on page 193.

1. In the Crestron Home Setup app, go to **Step 2: Pair Devices > Crestron Wired and Wi-Fi > Ethernet and Wi-Fi**.

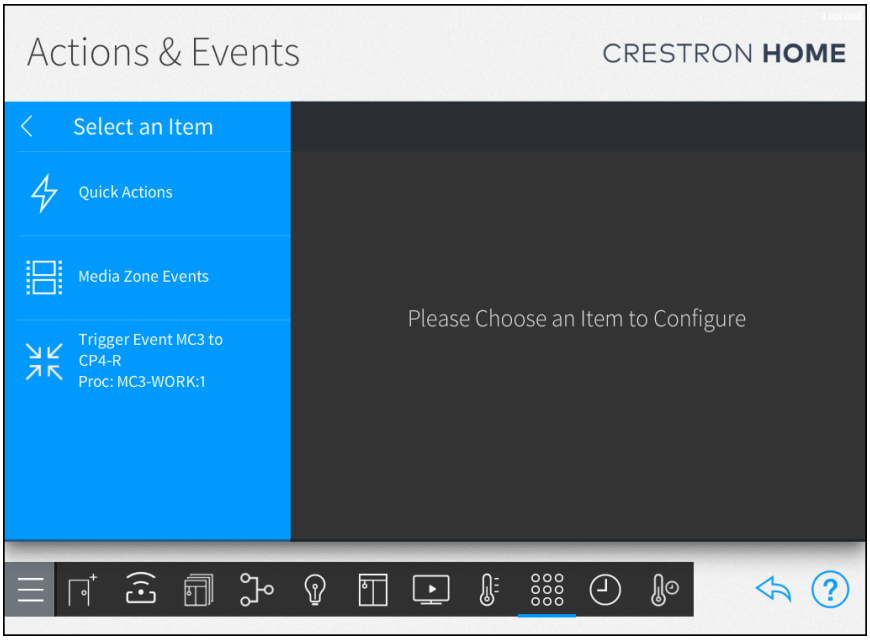
2. In the **Ethernet and Wi-Fi** menu, select a trigger event and then select **Add**. The trigger event icon is four inward pointing arrows.



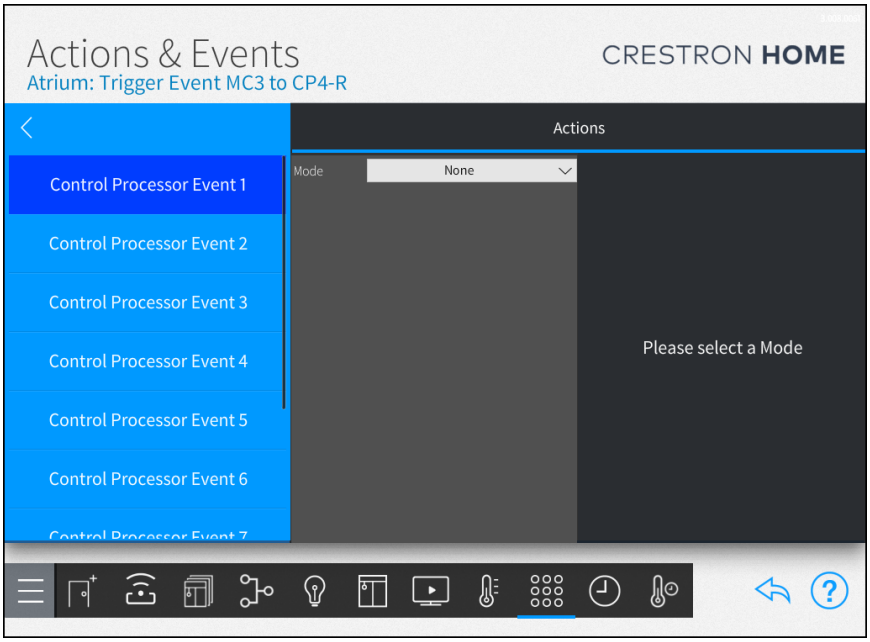
Configure Trigger in the Crestron Home system

Assign actions to the trigger event using the Actions & Events screen.

1. Go to **Step 5 > Customize Actions & Events** and then select the room with the Trigger event. The trigger event is indicated with four inward pointing arrows.



2. Select a Trigger event.



3. In the **Actions** menu, select an action from the **Mode** drop-down menu. For details, refer to Customize Actions & Events on page 514.

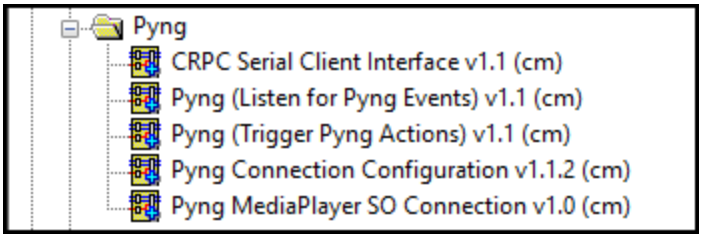
Listen Module

Use a Listen module to control the 3- or 4-Series Control System with a Crestron Home system.

Create a Listen Event in SIMPL Windows

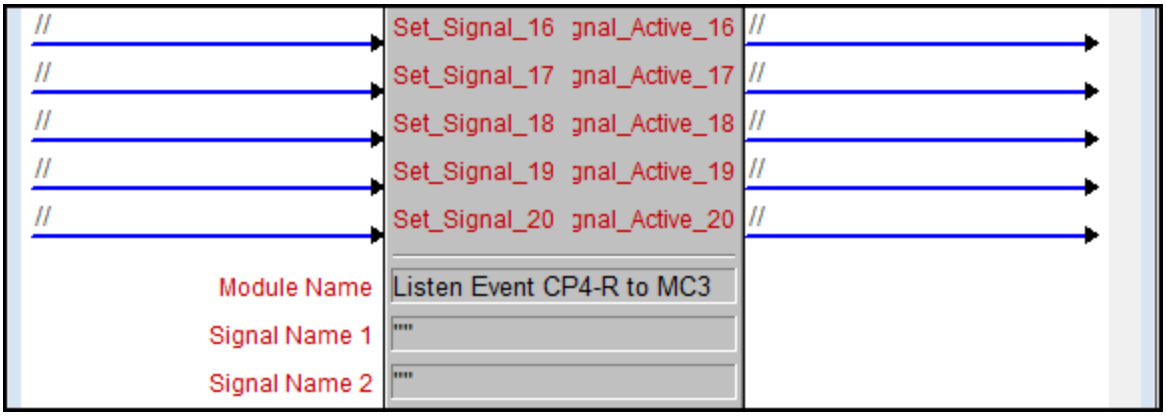
Use SIMPL Windows to add and configure a Listen event:

1. In the Simpl Windows **Symbol Library**, go to **Crestron Modules > Pyng**.

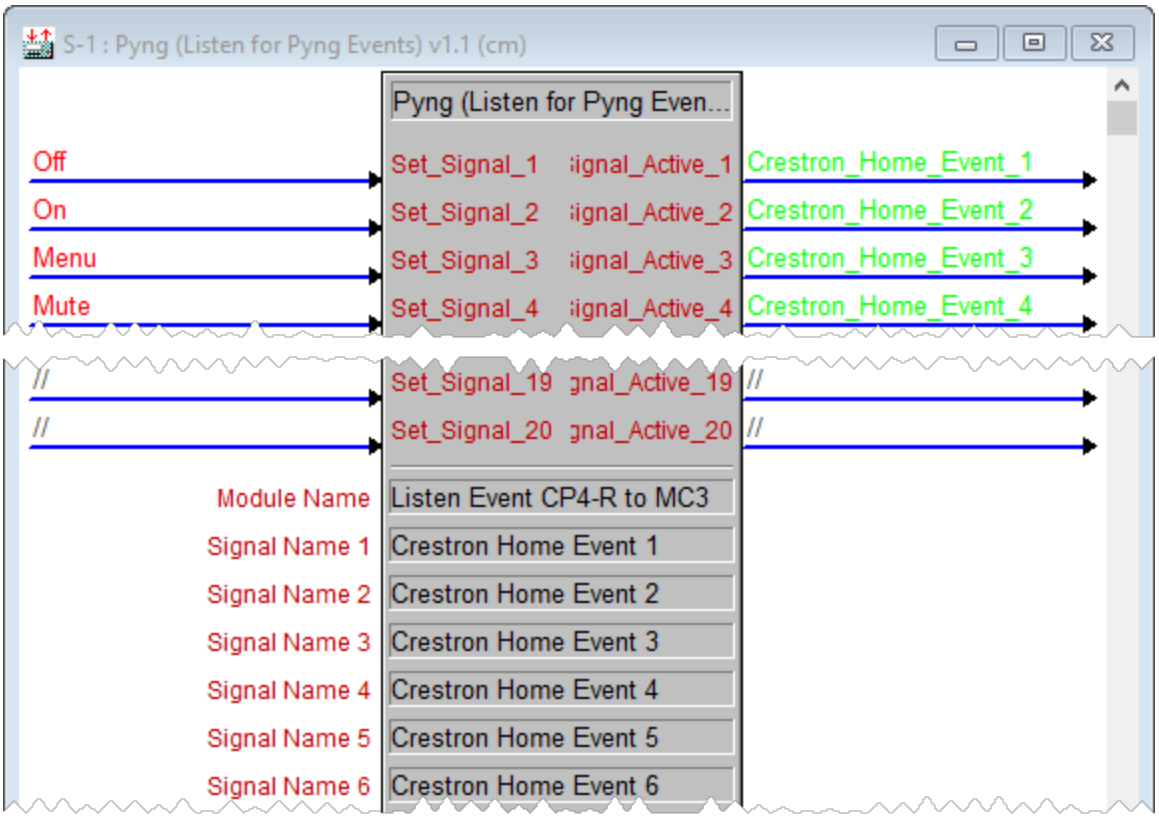


2. Add a **Pyng (Listen for Pyng Events)** module to the program.

3. Enter a name in the **Module Name** parameter. The **Module Name** is displayed in the Crestron Home Setup app.



4. Add **Signal Name** parameters to the module.

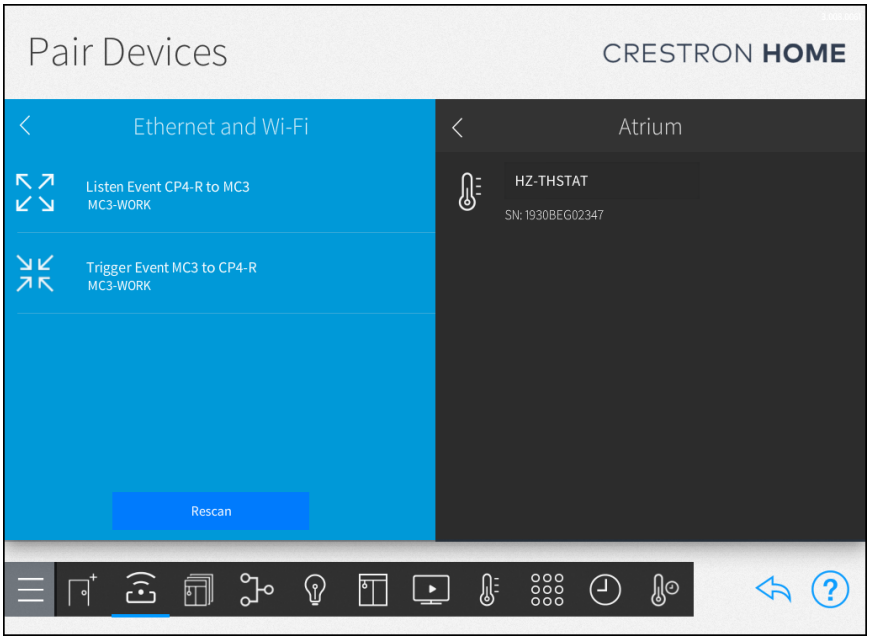


5. Connect the digital signals that you want to control on the processor to the **Signal_Active** signals in the **Pyng (Listen for Pyng Events)** module.

Add a Listen Event to the Crestron Home system

Use the Crestron Home Setup app to add the listen event. The listen is discovered as an Ethernet device. For additional details, refer to Crestron Wired and Wi-Fi Devices on page 193.

1. In the Crestron Home Setup app, go to **Step 2: Pair Devices > Crestron Wired and Wi-Fi > Ethernet and Wi-Fi**.
2. In the **Ethernet and Wi-Fi** menu, select a listen event and then select **Add**. The listen event icon is four outward pointing arrows.

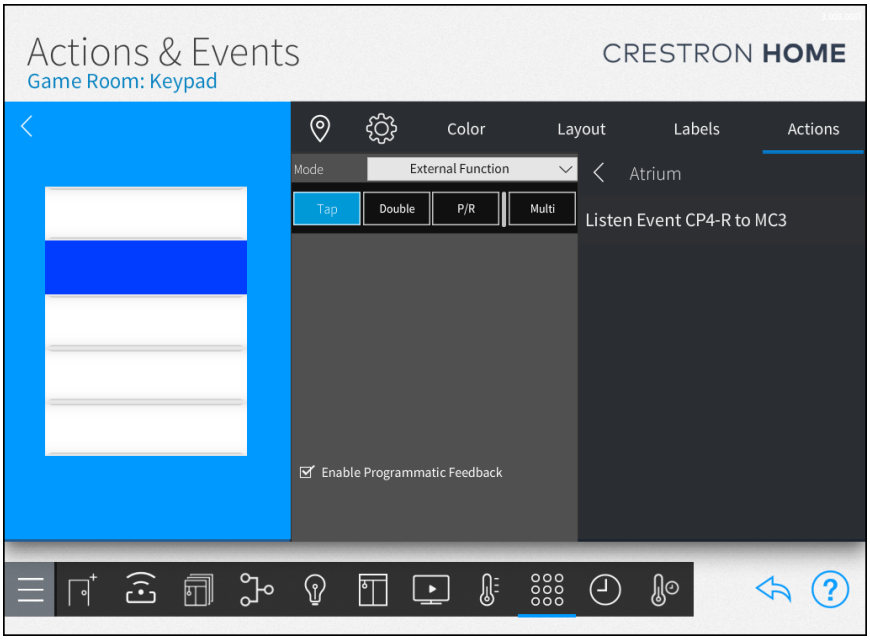


Configure Listen in the Crestron Home system

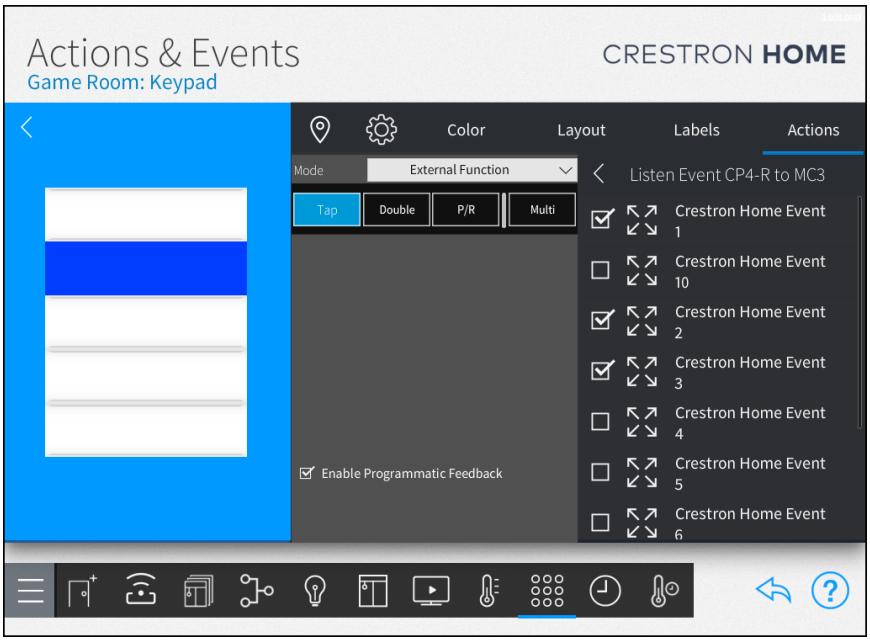
Use the **Actions & Events** screen to assign actions in the Crestron Home system that will initiate an event on the 3- or 4-series control system. For additional details, refer to Customize Actions & Events on page 514.

1. In the Crestron Home Setup app, go to **Step 5 > Customize Actions & Events**.
2. Select a room and then select a device or event to recall the action. The device can be a Quick Action, keypad or remote button, occupancy or vacancy event, or Media Zone event.

3. In the **Mode** drop-down menu, select **External Function**.



4. Select a listen event and then select the events to recall. The listen event icon is four outward pointing arrows.



Keypad Button Programming

The buttons on Crestron and third-party keypads (including certain hand-held remotes) can be assigned actions based on the type of button press that is performed (tap, double tap, press and hold, and multi-tap) and the button mode assigned to the button.

The available button presses and button modes are based on the keypad model and the assigned button mode. For details, refer to Keypad Button Press Support on page 1420 and Keypad Button Modes and Button Functions on page 1423.

Keypad Button Press Support

Crestron and third-party keypads (including certain hand-held remotes) can support tap, double tap, press and hold, and multi-tap functions. Refer to the table that follows for a list of keypads and the button presses that they support.

Device	Tap	Double Tap	Press and Hold	Multi-Tap
C2N-CBD-E	✓	✓	✓	✓
C2N-CBD-P	✓	✓	✓	✓
C2N-CBF-P	✓	✗	✓	✓
C2N-UNI8IO	✓	✗	✓	✓
C2N-UNI8IO-D	✓	✓	✓	✓
C2NI-CB	✓	✓	✓	✓
CLW-DELVEX-E	✓	✗	✓	✓
CLW-DELVEX-P	✓	✓	✓	✓
CLW-DIMEX-E	✓	✓	✓	✓
CLW-DIMEX-P	✓	✓	✓	✓
CLW-DIMFLVEX-P	✓	✓	✓	✓
CLW-DIMSWEX-E	✓	✓	✓	✓
CLW-DIMSWEX-P	✓	✓	✓	✓
CLW-DIMUEX-E	✓	✓	✓	✓
CLW-DIMUEX-P	✓	✓	✓	✓
CLW-SWEX-277-P	✓	✓	✓	✓
CLW-SWEX-230-E	✓	✓	✓	✓
CLW-SWEX-230-P	✓	✓	✓	✓
CLW-SWEX-E	✓	✓	✓	✓

Device	Tap	Double Tap	Press and Hold	Multi-Tap
CLW-SWEX-P	✓	✓	✓	✓
CLWI-1SW2EX	✓	✗	✓	✓
CLWI-DIMFLVEX	✓	✓	✓	✓
CLWI-DIMUEX	✓	✓	✓	✓
CLWI-DIMUNEX	✓	✓	✓	✓
CLWI-KPLCN	✓	✓	✓	✓
CLWI-KPLEX	✓	✓	✓	✓
CLWI-KPLEX-BATT	✓	✓	✓	✓
CLWI-SWEX	✓	✓	✓	✓
CNX-B2	✓	✗	✓	✓
CNX-B4	✓	✗	✓	✓
CNX-B6	✓	✗	✓	✓
CNX-B8	✓	✗	✓	✓
CNX-B12	✓	✗	✓	✓
HR-310	✓	✗	✓	✓
HR-150	✓	✗	✓	✓
HR-100	✓	✗	✓	✓
HTT-B2EX-BATT	✓	✗	✓	✓
HTT-B10EX	✓	✓	✓	✓
HZ-DIMEX	✓	✓	✓	✓
HZ-DIMLVEX	✓	✓	✓	✓
HZ-DIMUEX	✓	✓	✓	✓
HZ-KPCN	✓	✓	✓	✓
HZ-KPEX	✓	✓	✓	✓
HZ-SWEX	✓	✓	✓	✓
HZ2-DIMEX	✓	✓	✓	✓
HZ2-DIMLVEX	✓	✓	✓	✓
HZ2-DIMUEX	✓	✓	✓	✓
HZ2-KPCN	✓	✓	✓	✓
HZ2-KPEX	✓	✓	✓	✓
HZ2-SWEX	✓	✓	✓	✓

Device	Tap	Double Tap	Press and Hold	Multi-Tap
INET-CBDEX-E	✓	✓	✓	✓
INET-CBDEX-P	✓	✓	✓	✓
Third-Party Keypads	✓	✗	✓	✓

Keypad Button Modes and Button Functions

Crestron and third-party keypads support different button functions based on the Button mode that is selected. For example, the Scene button mode supports Built-In Functionality and Multi button functions; the Quick Actions button mode supports Tap, Double, Hold, and Multi button functions; and the Shade Room button mode supports Tap and Press and Hold button functions. Each button mode and button function perform a defined action. Refer to the table that follows for a list of button modes and the button functions that they support.

> **NOTE:** Every button on a keypad can be assigned to a different button mode.

Button Mode	Button Function	Button Behavior
SCENE		
	Built-In Functionality: **Tap:** Recalls or switches the scene with the defined fade time. **Double Tap:** Immediately recalls or switches the scene. The fade time for the scene is bypassed. **Press and Hold:** When **Enable Dimming for Lights** is enabled. Raise or lower the lights. The load raises or lowers based on the action that was performed last. If the load was turned on or raised, press and hold the button to lower the light level. To turn off the lights, continue holding the button after the minimum light level is reached.	**Always Recalls Scene:** Recalls the scene. **Toggles Scene/Off:** Switches between scene on and off. **Custom Toggle:** Switches between the On Actions and Off Actions. Assign different scenes to the On Action and Off Action.
	Multi: Multiple button presses can recall up to 10 scenes and provide the ability to cycle through scenes.	Not Available
QUICK ACTIONS		
	Tap: One button press to recall the quick action. **Double:** Two button presses to recall the quick action. **Hold:** Press and hold the button to recall the quick action.	Not Available
	Multi: Multiple button presses can recall up to 10 quick actions and provide the ability to cycle through quick actions.	Not Available

Button Mode	Button Function	Button Behavior
LIGHTING LOAD		
	Tap: Increase or decrease (jog) the light level. **Double Tap:** Turns the lights on or off without fade time. **Press and Hold:** Raise or lower the light level until the button is released or the maximum or minimum light level is reached. **NOTE:** To turn off the lights, continue holding the button after the minimum light level is reached.	**On/Raise/Off/Lower:** Switches the load on or off or raises or lowers the lights. The lights turn on or off or raise or lower based on the action that was performed last. If the lights were turned on or raised, press the button to turn the lights off or press and hold the button to lower the lights. **On/Raise:** Turns the load on or raises the lights. **Off/Lower:** Turns the load off or lowers the lights.
SHADE LOAD		
	Tap: Open or close the shades. **Press and Hold:** When **Enable Press-and-Hold Functionality** is enabled. Raise or lower the shades until the button is released or the upper or lower limit is reached. **NOTE:** To enable press-and-hold functionality, select the **Enable Press-and-Hold Functionality** check box.	**Open/Close:** Switch the shades between open or closed. **Open:** Open the shades. **Close:** Close the shades.
LIGHTING ROOM		
	Tap: Switches the lights on or off with the default fade time. **Double Tap:** Switches the lights on or off with no fade time. **Press and Hold:** Raise or lower the lights until the button is released or the maximum or minimum light level is reached. **NOTE:** To turn off the lights, continue holding the button after the minimum light level is reached.	Not Available
SHADE ROOM		

Button Mode	Button Function	Button Behavior
	Tap: Open or close the shades. **Press and Hold:** Raise or lower the shades until the button is released or the upper or lower limit is reached.	Not Available
LIGHTING RAISE AND LIGHTING LOWER		
	Tap: Increase or decrease (jog) the light level. **Double Tap:** Turns the lights on or off with no fade time. **Press and Hold:** Raise or lower the light level until the button is released or the maximum or minimum light level is reached. > **NOTE:** To turn off the lights, continue holding the button after the minimum light level is reached.	Not Available
SHADE RAISE AND SHADE LOWER		
	Tap: Raise or lower (jog) the shades. **Press and Hold:** Raise or lower the shades until the button is released or the upper or lower limit is reached.	Not Available
CEILING FAN		
	Tap: Control the ceiling fan.	**Cycle:** Cycle through the available fan speeds. Each button press advances through the available fan speeds in the **Available Speeds** list. When the last speed in the list is reached, the next button press advances to the first option in the list. **Increase:** Increase the fan speed until the maximum fan speed in the list is reached. **Decrease:** Decrease the fan speed until the lowest fan speed in the list is reached.
VOLUME RAISE AND VOLUME LOWER		

Button Mode	Button Function	Button Behavior
	Tap: Raise or lower (jog) the volume. **Press and Hold:** Raise or lower the volume until the button is released or the maximum or minimum volume is reached.	Not Available
MASTER RAISE AND MASTER LOWER		
	Tap: Raise or lower (jog) the level for the device type. **Press and Hold:** Raise or lower the level for the device type until the button is released or the maximum or minimum level is reached.	Not Available
MEDIA FUNCTION		
	Tap: One button press to recall the media function. **Double:** Two button presses to recall the media function. **Hold:** Press and hold the button to recall the media function. **Multi:** Multiple button presses can recall up to 10 media functions and provide the ability to cycle through media functions.	Not Available
BUTTON EMULATION		
	Tap: One button press to emulate the Lutron button. **Press and Hold:** Press and hold the button to emulate the Lutron button.	Not Available
EXTERNAL FUNCTION		
	Tap: One button press to recall the external function. **Double:** Two button presses to recall the external function. **P/R:** Press and hold the button to recall the external function. The external function is stopped when the button is released. **Multi:** Multiple button presses can recall up to 10 external functions and provide the ability to cycle through external functions.	Not Available

Connect a Door Station

The following door stations can be configured in the Crestron Home system:

- 2N® Door Station
- CAME Door Station with AVLINKPRO
- CAME Door Station
- Doorbird Door Station

2N® Door Station

A 2N door station may be integrated with the Crestron Home system and controlled from a Crestron touch screen. To add a 2N door station to the Crestron Home system:

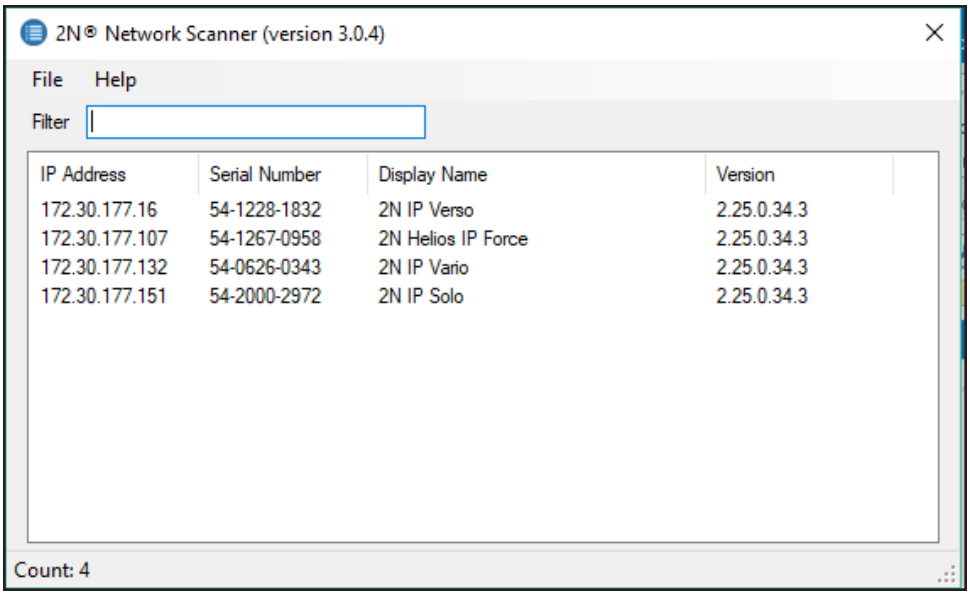
NOTES:

- Ensure that the 2N door station the same subnet as the Crestron Home system and is discoverable on the network prior to setup.
- For additional technical information, refer to the 2N WiKi and the 2N device documentation.
- For information on configuring the touch screen for 2N door station support, refer to the TSW-560/TSW-760/TSW-1060 Product Manual at www.crestron.com/docs/7927.
- Minimum firmware requirements:
  - TSW-xx60 Touch Screen: 2.003.0040
  - 2N Door Station: 2.25.0

Discover the 2N Device

To discover the 2N device on the network:

1. Download and install the 2N Network Scanner application from https://www.2nusa.com/en_US/products/2n-network-scanner.
2. Open the application. All discovered 2N door stations on the network are displayed.



Configure 2N Device Settings

Use the following procedures to configure the 2N device for integration with the Crestron Home system.

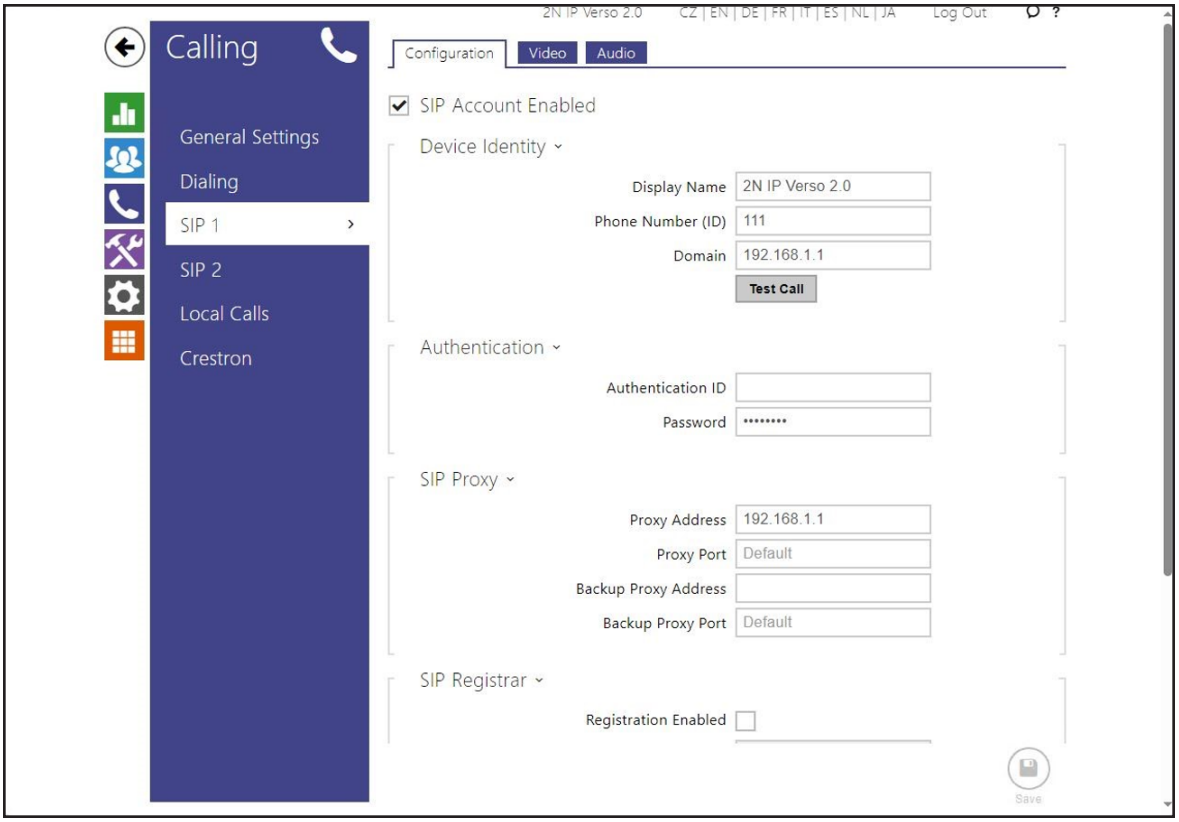
Calling Settings

1. Launch the web configuration utility for the appropriate 2N device by entering its IP address into a web browser. For more information on the 2N web configuration utility, refer to the 2N device documentation.
2. Select **Calling**.

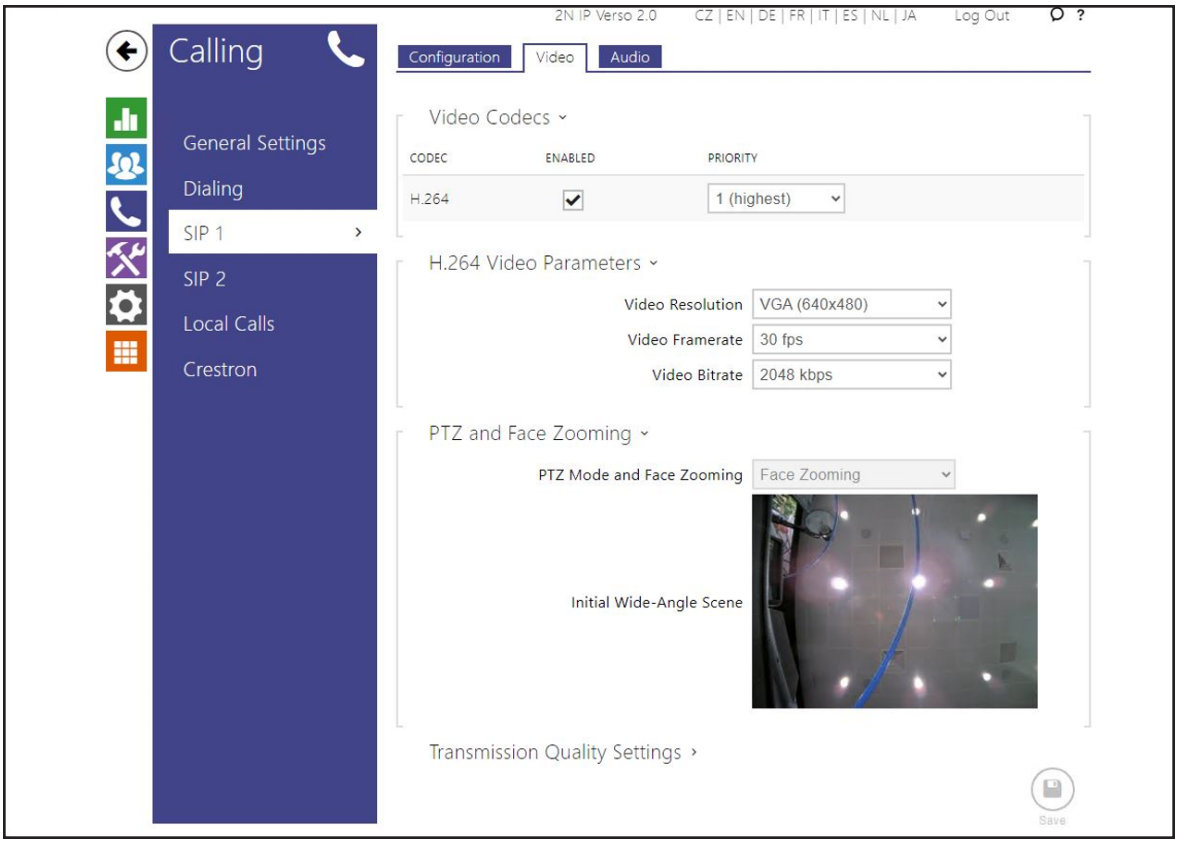


3. Select **SIP 1** and enter the following information:
    - Enter a name for the door station in the **Display Name** text field. This name will be shown on the touch screen to identify the door station when a call is received.
    - If configuring the door station to support Rava® SIP intercom calls, enter the Rava extension for the door station in the **Phone Number (ID)** text field.

      NOTE: If there are multiple door stations on site, each door station will have a unique extension number.

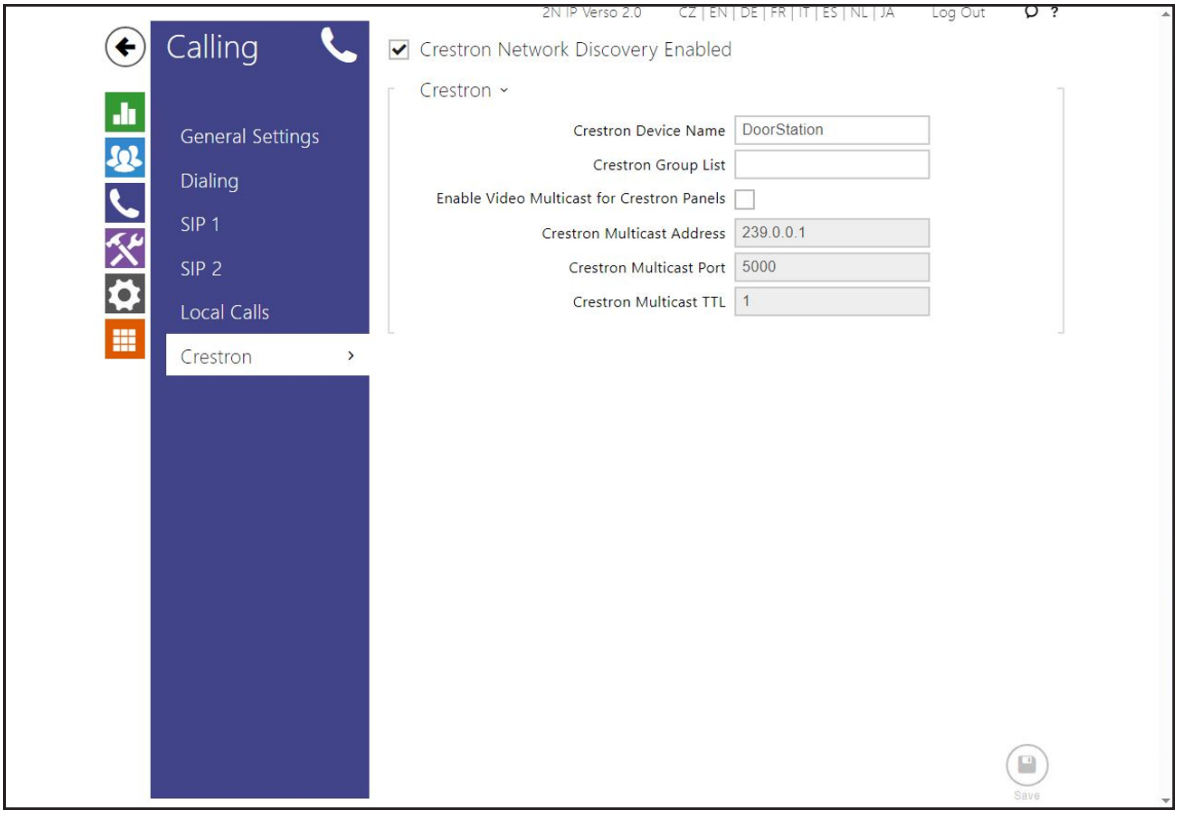


4. Select the **Video** tab, and enter the following settings:
    - Click the check box to display a check mark next to **H.264**.
    - Select **VGA (640x480)** from the **Video Resolution** drop-down menu.
    - Select **30 fps** from the **Video Framerate** drop-down menu.
    - Select **2048 kbps** from the **Video Bitrate** drop-down menu.



5. Select **Crestron**.

6. Click the check box to display a check mark next to **Enable Crestron Network Discovery** under **Advanced Settings**. The 2N device is now discoverable in Crestron Toolbox.



NOTES:

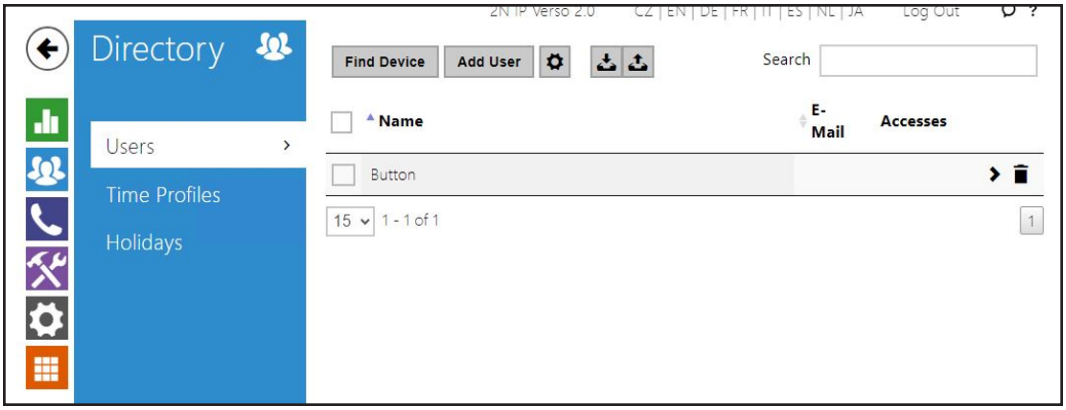
- Video unicast may be used if three or fewer Rava-enabled touch screens will be used with the 2N device. Otherwise, click the check box to display a check mark next to **Enable Video Multicast for Crestron panels**, and enter the Crestron multicast settings in the appropriate text fields.
- If multicast is used and there are multiple 2N door stations on site, specify the unique multicast address for each door station.
- Multicast may not be supported if it is used with an SIP server.

Directory Settings

1. In the web configuration utility, select **Directory**.

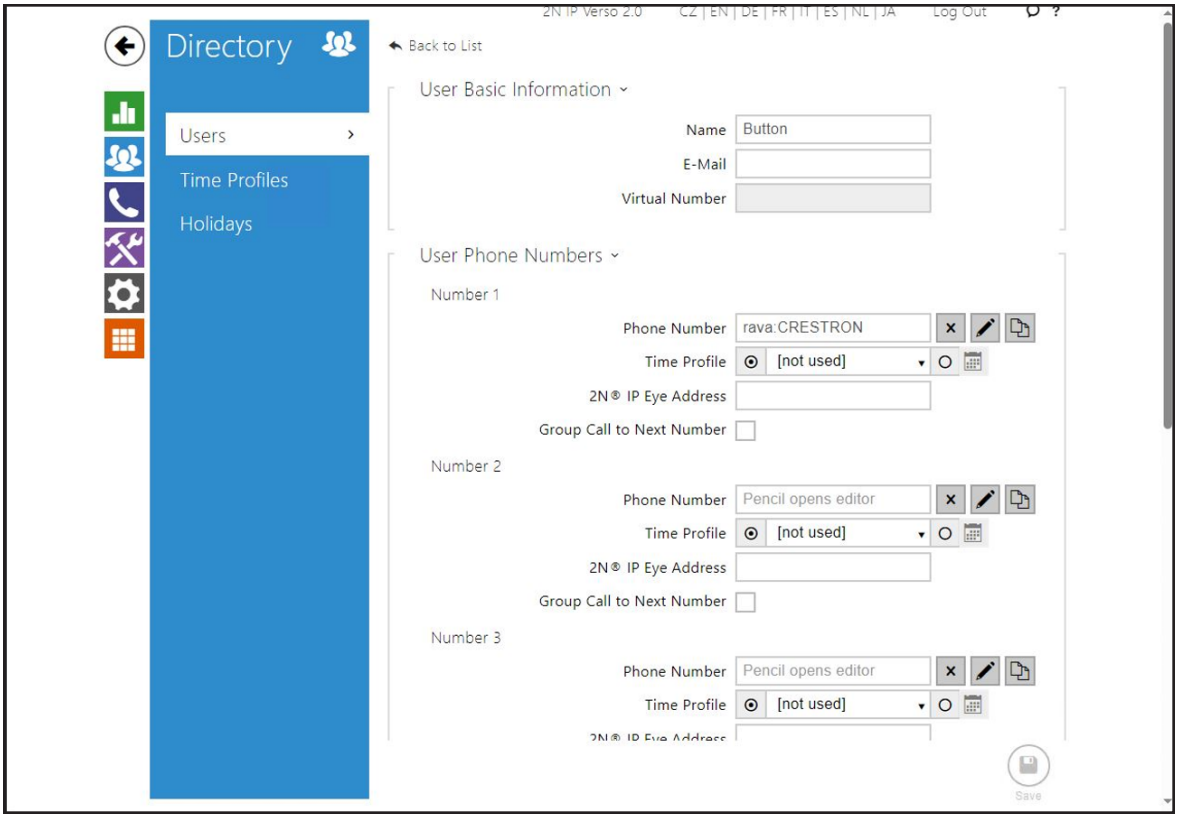


2. Navigate to **Users**, and click the add user button to create a new user.



> **NOTE:** 2N devices also refer to users as "buttons," as this refers to the buttons on the 2N door station that are used to dial specific dwellings or ring groups.

3. Enter "rava:CRESTRON" in the **Phone Number** text field.

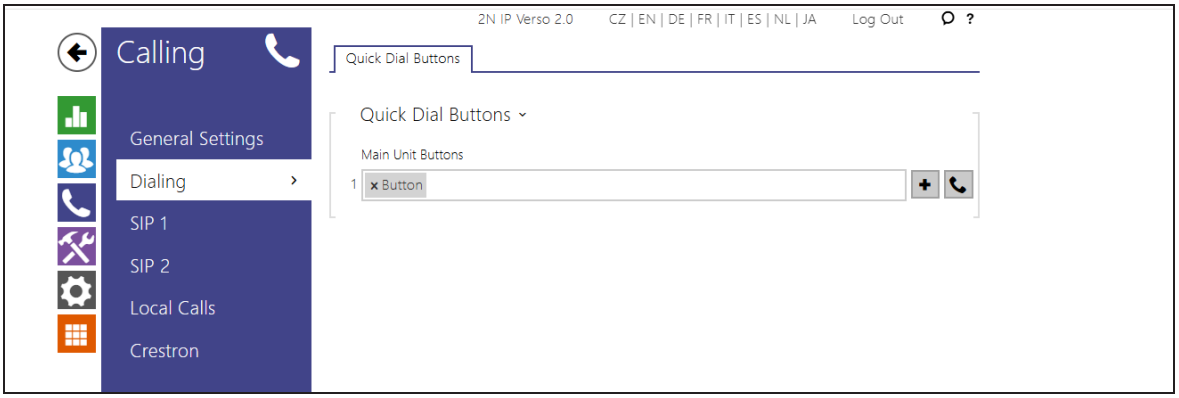


> **NOTE:** CRESTRON is the default ring group for all shipping TSW-x60 touch screens. To use a different group name, issue the `SIPPAGEGROUP [GROUPNAME]` command to the touch screen using the Text Console tool in Crestron Toolbox, where `[GROUPNAME]` is the desired group name (all capital letters with no spaces). Then, enter "rava:[GROUPNAME]" in the **Phone Number** text field.
>
> For example, if a `SIPPAGEGROUP FIRSTFLOORGROUP` command was issued to the touch screen, enter "rava:FIRSTFLOORGROUP" in the **Phone Number** text field.

Quick Dial

1. In the web configuration utility, select **Calling** again.
2. Select **Dialing**.

3. Under **Quick Dialing**, add the button (user) created in the previous procedure to the **Main Unit Buttons** menu by clicking the plus button.



Advanced Configuration

If the 2N door station has been configured to send calls to a mobile device via the 2N Mobile Video app, calls may be sent to both the mobile device and the Crestron Home touch screen by configuring two phone numbers for the 2N device.

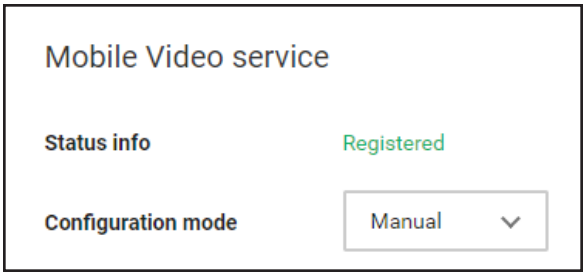
All 2N Mobile Video app settings must be configured and propagated to the door station before configuring the 2N device for call forwarding. For more information on configuring the mobile app, refer to my2n.com.

To configure the 2N door station for use with the app and the touch screen:

> **NOTE:** The 2N door station must be configured to support a connection to the touch screen (s) prior to attempting this procedure. For more information, refer to Configure 2N Device Settings on page 1429.

1. Open the **DEVICE DETAIL** tab for the configured 2N door station in the 2N Mobile Video web configuration interface.
2. Under **Mobile Video service**, select **Manual** from the **Configuration mode** drop-down menu.

Mobile Video service - Configuration mode



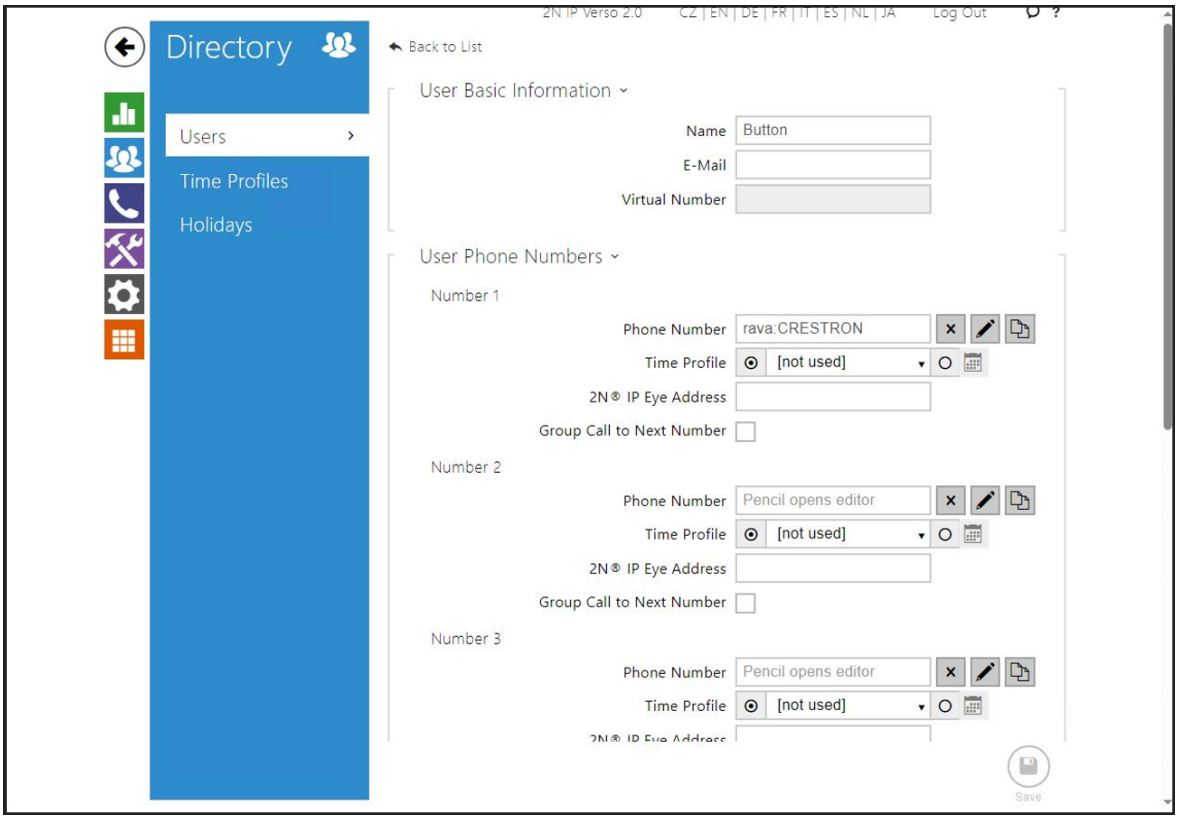
> **NOTE:** If Configuration mode is set to automatic, the mobile app may overwrite the existing 2N IP intercom settings, including the touch screen connection.

3. In the 2N device web configuration utility, click the blue users icon to display the **Directory** menu.
4. Navigate to **Users**, and click the desired user to edit user settings.
5. Enter the following information under **User Phone Numbers**:

   NOTE: The phone number for the mobile device is entered automatically in the Phone Number text field for Number 1 if the mobile device has been configured using the 2N Mobile Video app.

   - For **Number 1**, click the check box to display a check mark next to **Group call to next number**.
   - For **Number 2**, enter "rava: [GROUPNAME]" in the **Phone Number** text field, where [GROUPNAME] is the desired ring group name. For more information, refer to Directory Settings on page 1433.

2N Configuration Utility - Users Settings

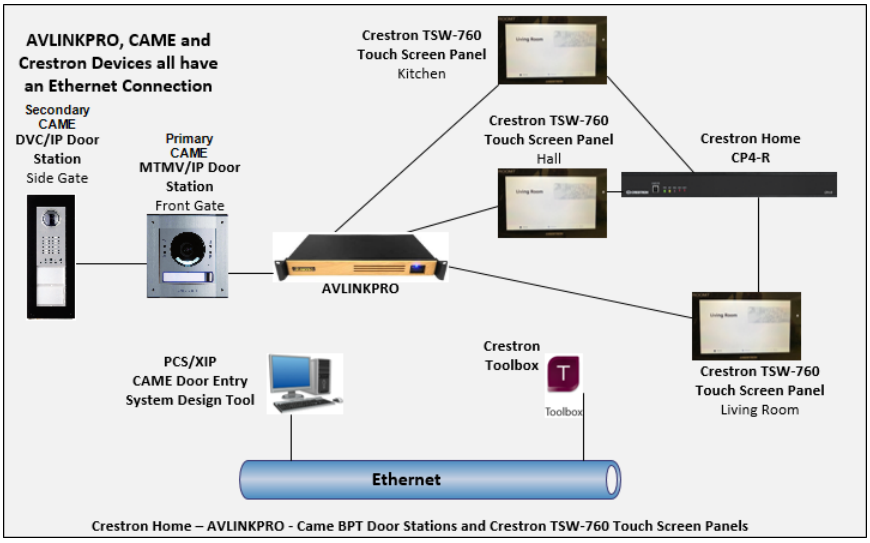


CAME Door Station with AVLINKPRO

Configure CAME door stations to communicate with a Crestron Home processor, Crestron touch screens, and an AVLINKPRO. The Crestron touch screens register to the AVLINKPRO as SIP users. The primary CAME door station acts as a mini server (primary) and allows the AVLINKPRO and secondary CAME door station to register to it.

Overview

The network topology for the Crestron Home processor and Crestron touch screens to interop with the CAME door stations is shown below.



The system was tested using the following components:

- Crestron Home processor (version 2.4362.12407)
- AVLINKPRO (16.2c)
- (3) Crestron TSW-xx60 series touch screen (version 2.7.60)
- Crestron Toolbox™ software
- CAME MTMV/IP Door Station (Primary) (version 2.5.3)
- CAME DVC/IP Door Station (Secondary) (version 2.5.3)
- PCS/XIP Design Tool Software (version 6.1.4)

> **NOTE:** A computer is required to use Crestron Toolbox™ software and the PCS/XIP Design Tool software.

Summary

The Video Door Entry system uses the AVLINKPRO as a server/PBX. In this setup, the AVLINKPRO registers as a SIP Client to the primary CAME door station (MTMV/IP). The Crestron touch screens register to the AVLINKPRO.

The MTMV/IP primary door station acts as a server and the PCS/XIP designs and configures the system. The MTMV/IP and DVC/IP door stations provide audio and video over Ethernet to the Crestron touch screens. The SIP devices can be connected using PoE Ethernet connections.

The Crestron Home processor connects to the touch screens and uploads the Crestron Home User Interface onto the touch screen.

Features Supported

- Audio and video from the CAME door stations
- Audio only from the Crestron touch screen
- Calls from CAME door station to Crestron touch screen
- Basic calls with G711ulaw codec
- Video using 103 H264/90000

Features Not Supported

- CAME door stations do not have a video display. Video from the Crestron touch screens to the CAME door stations is not supported.
- Calls from Crestron touch screens to the CAME door stations
- Calls from Crestron touch screens to other touch screens

Known Issues and Limitations

None

Setup

The Crestron Home processor, Crestron touch screens, AVLINKPRO, and CAME door stations must be properly configured. All Ethernet devices must be assigned a static IP address and be on the same subnet.

Configure the Crestron Home Processor

The Crestron Home processor must be fully set up and configured prior to setting up the AVLINKPRO and the CAME door stations. Additionally, a static IP address, Advanced User password, and User Interface Device password must be set.

NOTES:

- Use the Device Discovery Tool that is available in Crestron Toolbox™ Software to obtain the IP address of the Crestron Home processor.
- The CP4-R was assigned Static IP address 10.64.5.90 for the test.

1. **Set up the Crestron Home System:** Set up and configure the Crestron Home system. For details, refer to Configure a System on page 123.
2. **Assign an IP Address:** Assign a static IP address. For details, refer to Ethernet Settings on page 571.
3. **Set the Passwords:** Set up the Advanced User password and User Interface Device password. For details, refer to System Detail and Password Configuration on page 566.

Configure the TSW-xx60 Series Touch Screen

The Crestron touch screen must be configured to use a static IP address, use the latest firmware, run the Crestron Home app, and be added to the Crestron Home system.

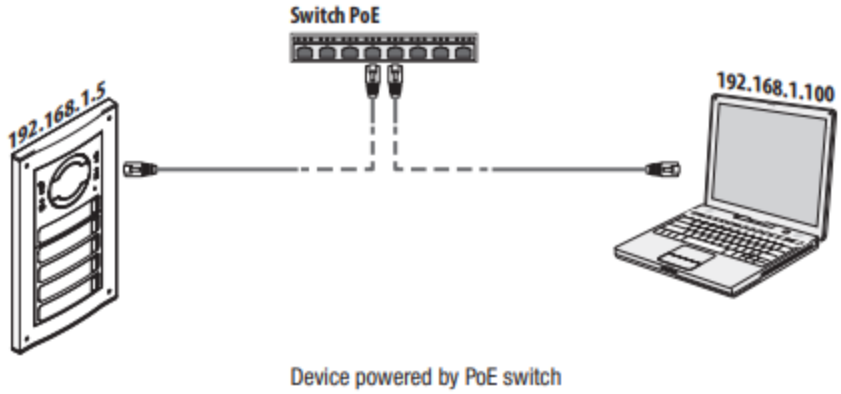
- **Assign a Static IP:** Refer to the Crestron TSW-560, TSW-760, and TSW-1060 Product Manual, TSW-570, TSW-770, and TSW-1070 Product Manual, or the Crestron Toolbox™ Software help file.
- **Upgrade the Firmware:** Refer to the Crestron TSW-560, TSW-760, and TSW-1060 Product Manual, TSW-570, TSW-770, and TSW-1070 Product Manual, or the Crestron Toolbox™ Software help file.
- **Launch the Crestron Home App and Pair the Touch Screen:** Refer to Pair a Crestron Touch Screen on page 176.

Configure the CAME Door Station Cameras

Connect the CAME BTP MTMV/IP and DVC/IP door stations to a network switch and supply PoE+ (Power-over-Ethernet). The door stations are configured using a Web interface.

On the initial power up of the CAME Door Station, the Default IP address is 192.168.1.5 with Netmask 255.255.255.0. To access the Door Station Camera, connect the camera to a PoE switch along with a laptop which is assigned an IP address on the same subnet of the Door Stations default IP.

CAME Door Station – Default IP



Set a Static IP for the CAME MTMV/IP Door Station

To set a static IP address for the door station:

1. Log into the door station.
   a. Enter the IP address of the door station into a web browser.

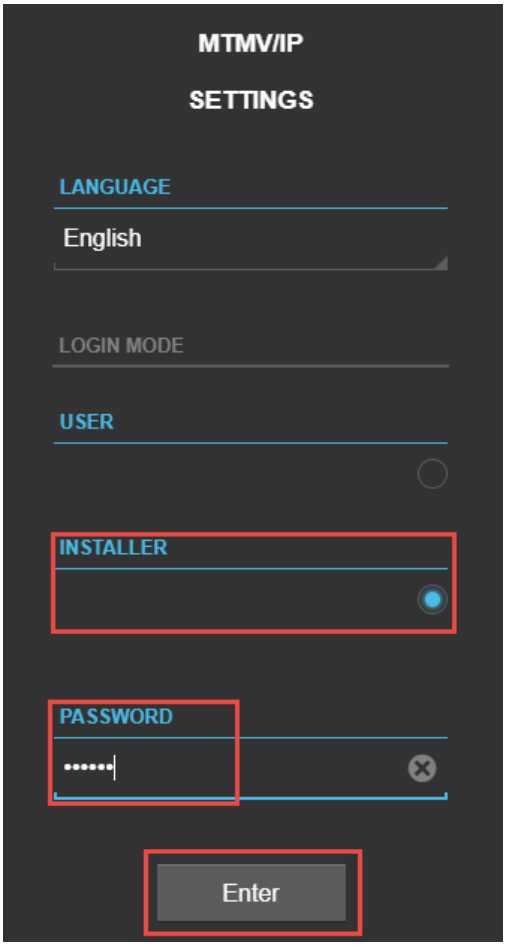
      > **NOTE:** The default IP address of the Door Station is 192.168.1.5.

   b. Click **INSTALLER** in the **LOGIN MODE** section.
   c. Enter the installer password in the **PASSWORD** field.

      > **NOTE:** The default password is 112233.

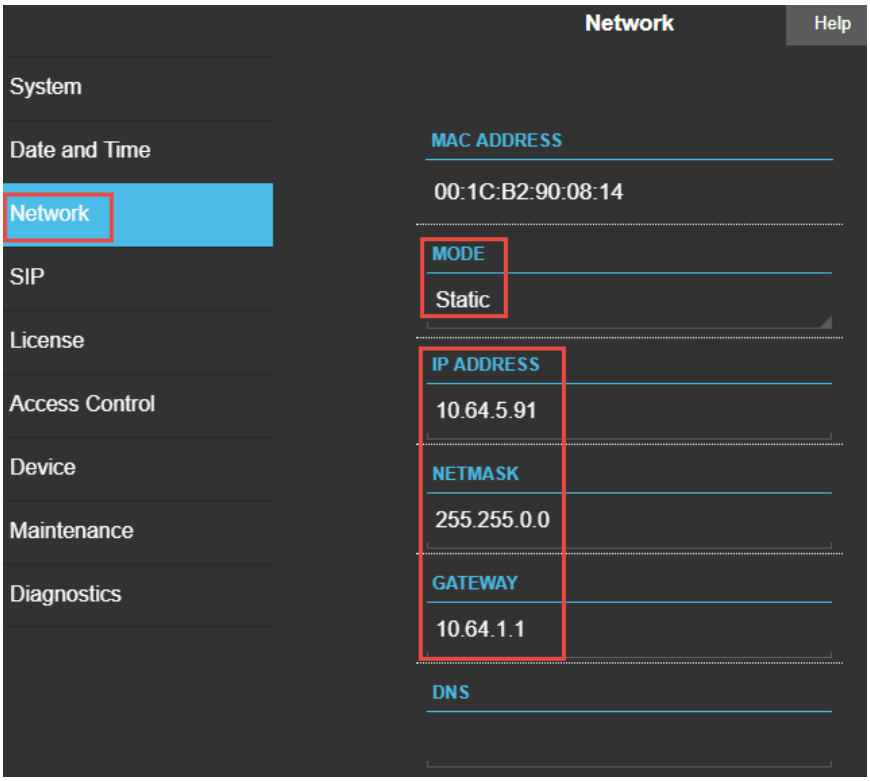
   d. Click **Enter**.

      CAME Door Station – Login



2. Set a static IP address for the CAME door station.
    a. Click the **Network** tab.
    b. Select **Static** from the **Mode** drop-down menu.
    c. Enter the network information into the **IP ADDRESS**, **NETMASK**, and **GATEWAY** fields.

    CAME Door Station – Static IP



    d. Save the configuration.
    e. Connect the door station to the network and power on.

> **NOTE:** The door station can be accessed from the network when it is booted up.

    f. Repeat this step for all CAME door stations.

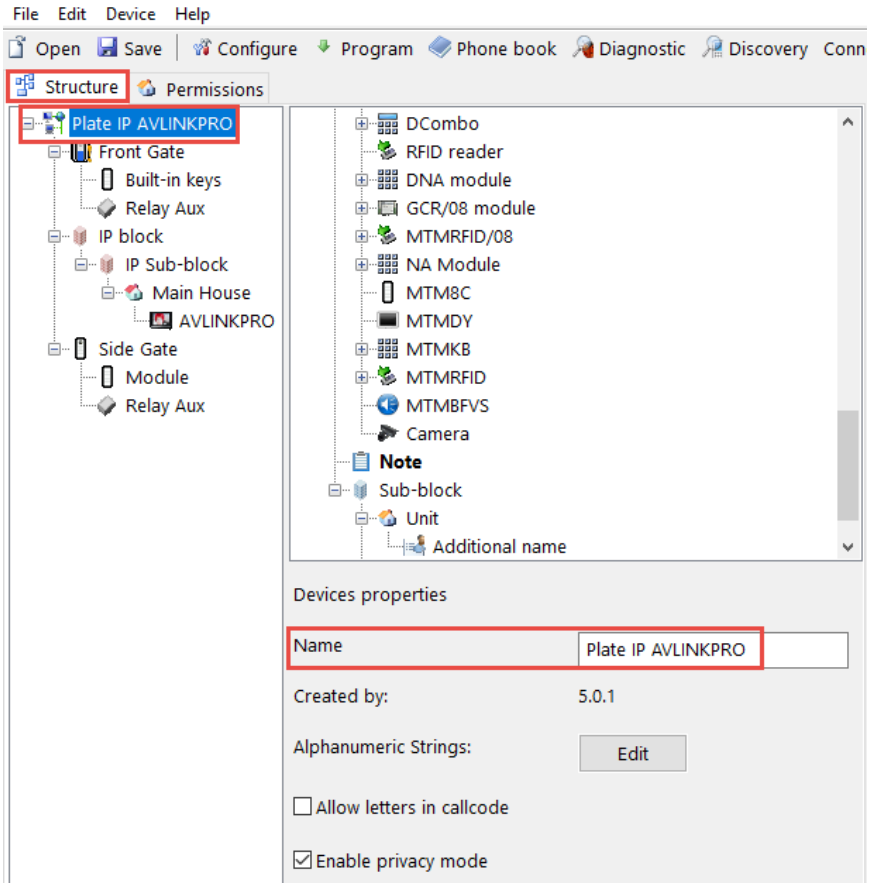
Configure the PCS/XIP CAME Door Station

Use the CAME PCS/XIP software package to design and configure the system:

> **NOTE:** To set the language, select the **Configure** tab, select your preferred language from the **Language** drop-down menu, and then click the **OK** button.

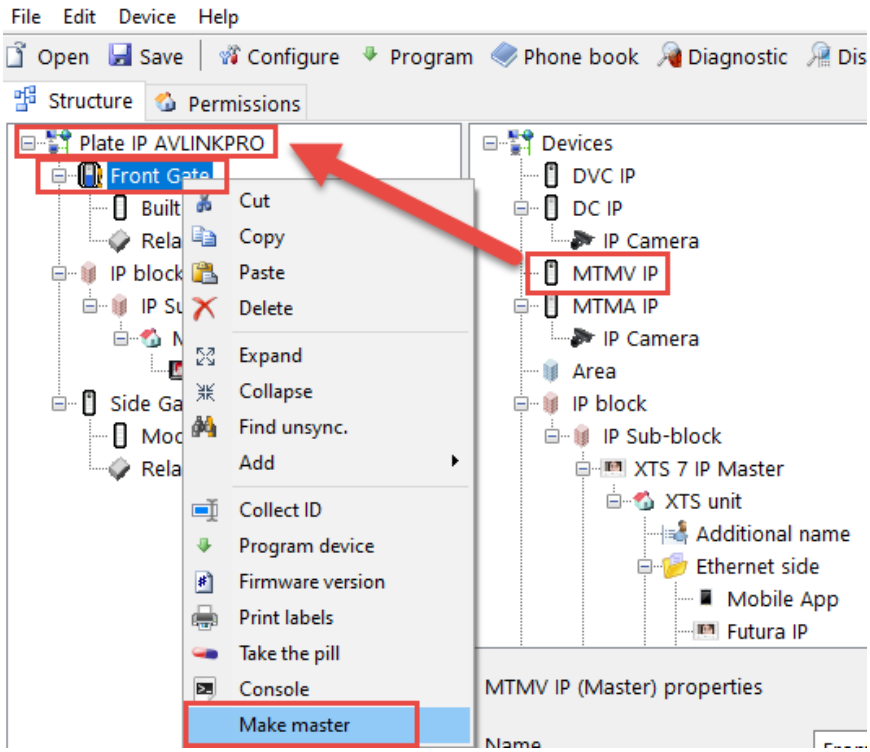
1. Click the **Structure** tab and then enter a name for the system structure in the **Name** field.

   CAME PCS/XIP - MTMV/IP Primary Door Station



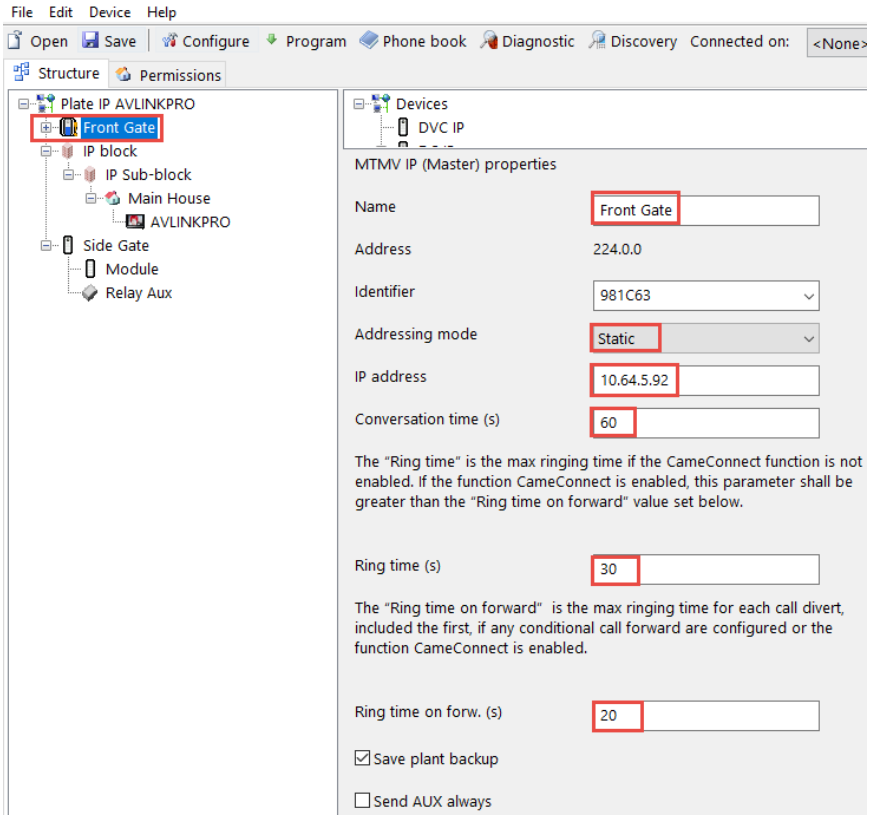
2. Add the MTMV/IP to the structure.

3. Right click the MTV/IP and then click **Make master** to assign the door station as the primary door station.



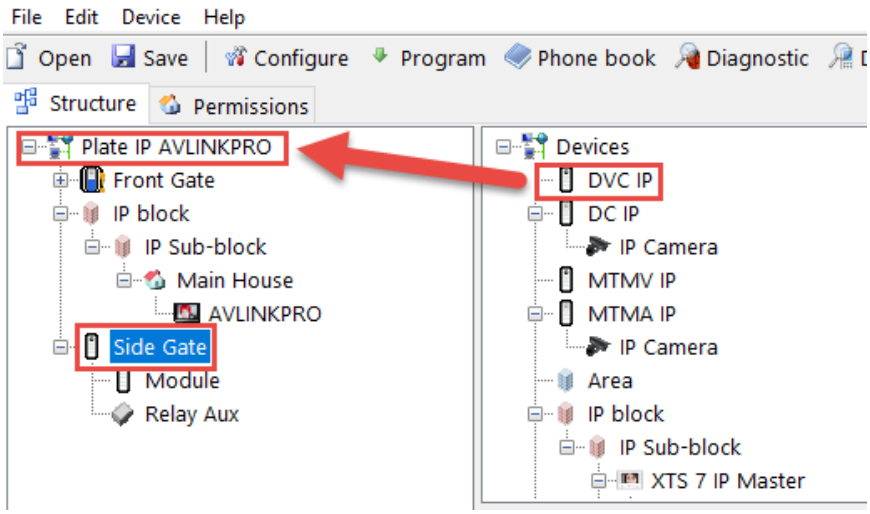
4. Configure the master door station in the **Properties** window.
    - **Name:** Enter a name for the door station.
    - **Addressing Mode:** Select **Static** from the drop-down menu.
    - **IP Address:** Enter the IP address for the door station.

> **NOTE:** Enter time values in seconds for the **Conversation time**, **Ring time**, and **Ring time on forw**.



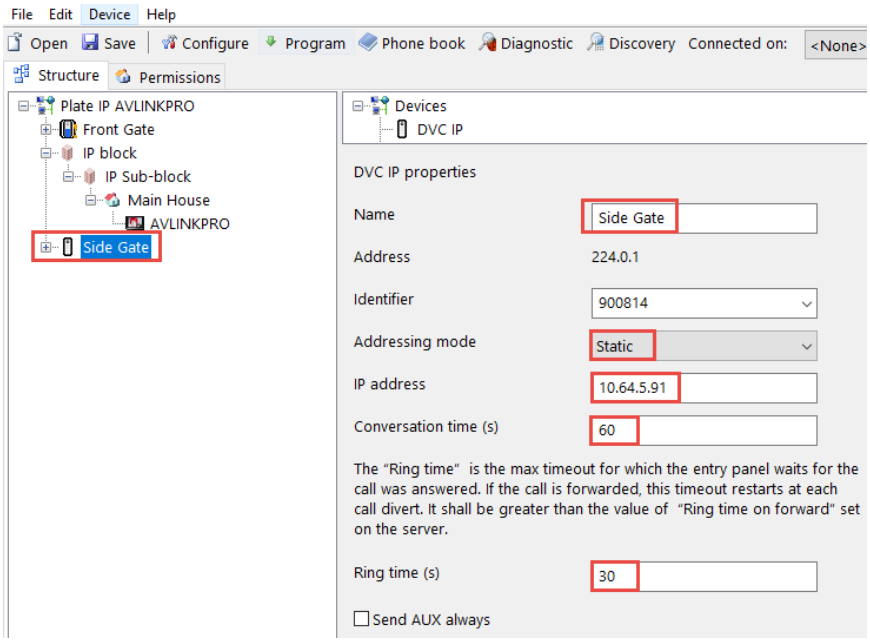
5. Add the DVC/IP to the system. The DVC/IP is added as a secondary door station.

   CAME PCS/XIP - DVC/IP Secondary Door Station



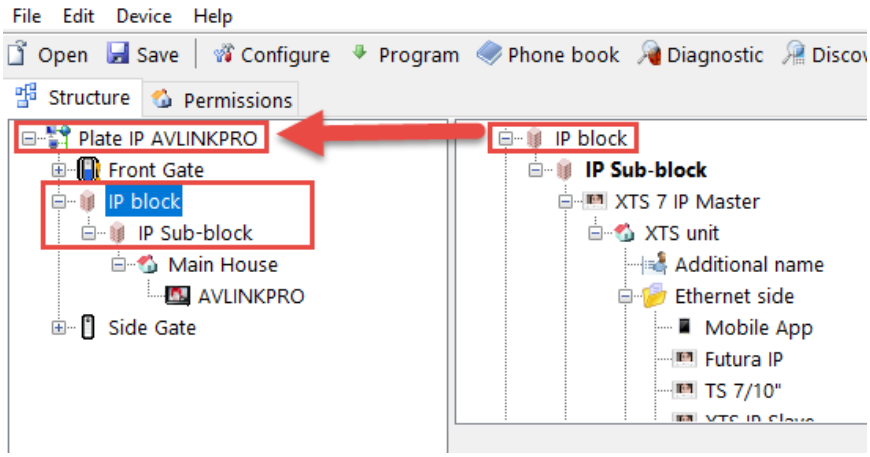
6. Configure the secondary door station in the **Properties** window.
   - **NAME:** Enter a name for the door station.
   - **Addressing mode:** Select **Static** from the drop-down menu.
   - **IP address:** Enter the IP address for the door station.

> **NOTE:** Enter time values in seconds for the **Conversation time**, **Ring time**, and **Ring time on forw**.

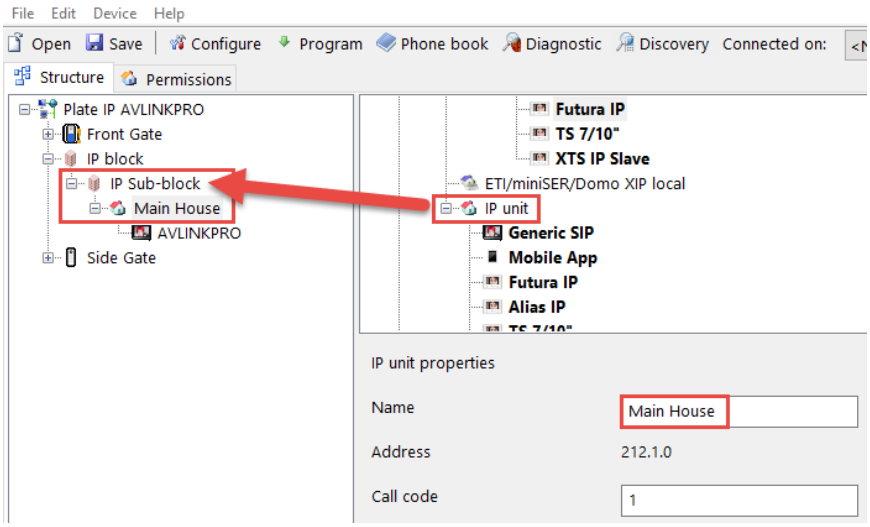


7. Add an **IP block** to the structure.

   CAME PCS/XIP – IP Block

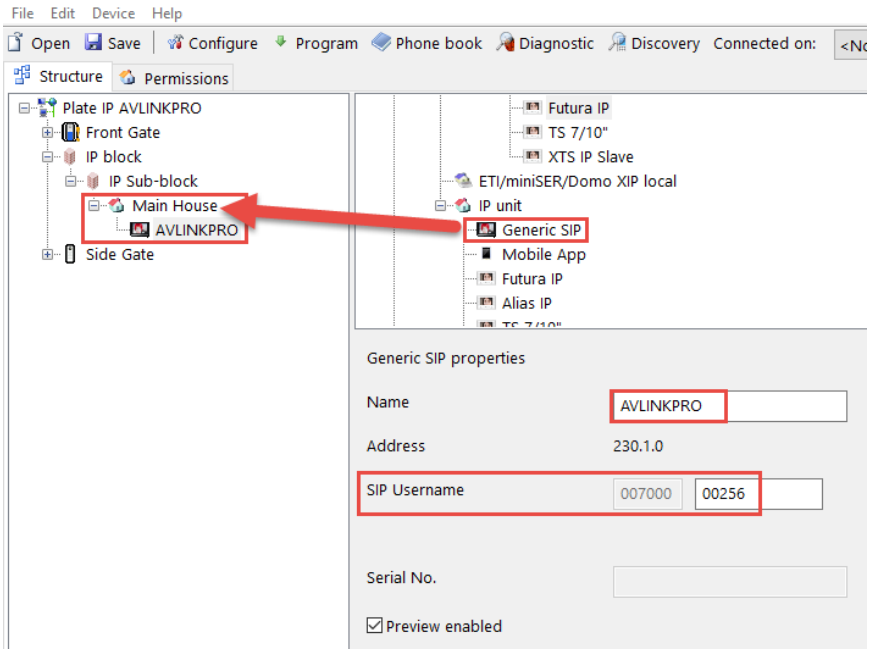


8. Add an **IP unit** to the **IP Sub-block** structure.
9. Enter a name for the **IP unit** in the **Name** field in the **Properties** window.

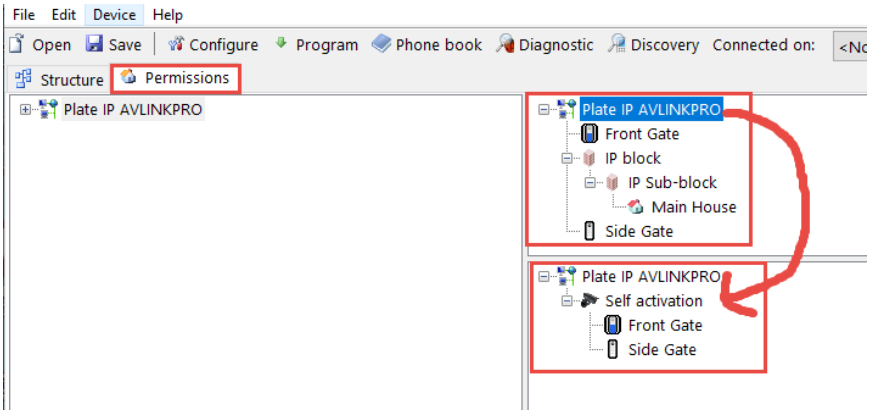


10. Add a **Generic SIP** device to the IP unit for the AVLINKPRO in the configuration.

11. Configure the **Generic SIP** device in the **Properties** window.
    - **NAME:** Enter a name for the AVLINKPRO.
    - **SIP Username:** Enter a SIP username for the AVLINKPRO.



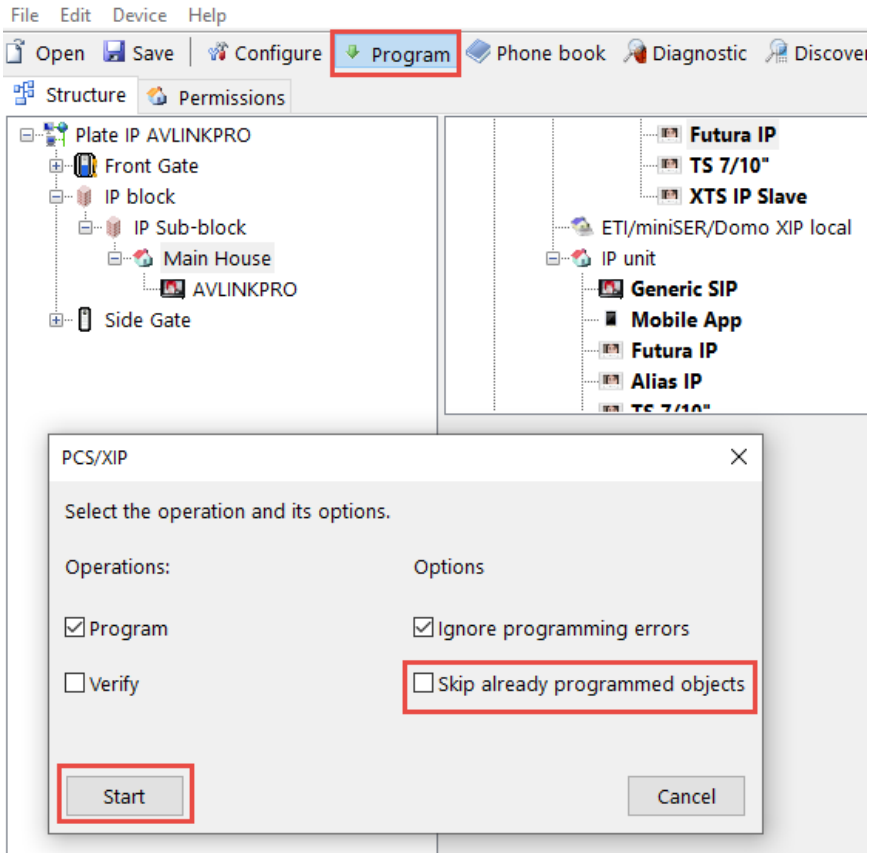
12. Click the **Permissions** tab and then right-click the server name in the top frame and then click **Self activation**. The device is shown in the bottom frame. Repeat this process for all items in the top frame.



13. Upload the configuration to the CAME door stations.
    a. Click the **Program** tab. The **Program Upload** window displays.
    b. Click to select the **Program** and **Ignore programming error** check boxes.

> **NOTE:** Deselect the **Verify** and **Skip already programmed objects** check boxes.

CAME PCS/XIP – Program



    c. Click **Start** to send the configuration to the CAME door stations.

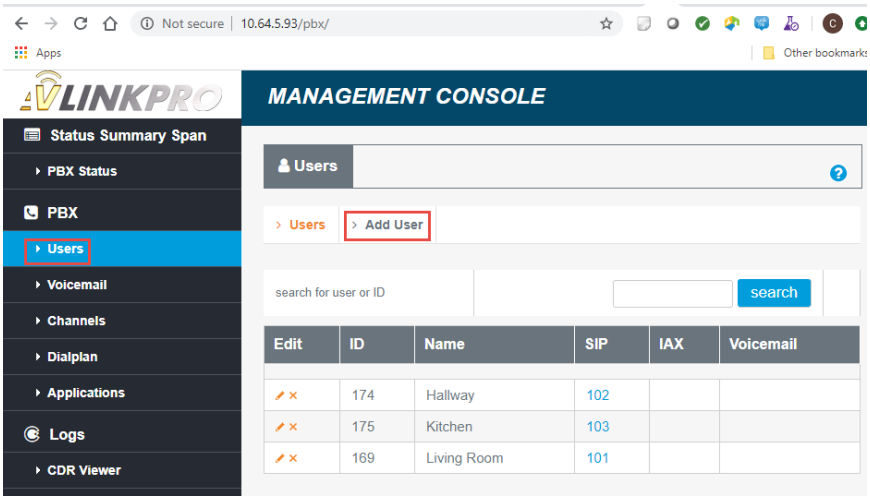
Configure the AV LinkPro Server / PBX

1. Enter the IP address/pbx of the AVLINKPRO into a web browser and then log in.

> **NOTE:** The default credentials are admin/avlinkpro.

2. Click the **Users** tab and then **Add User** to add a new user.

AVLINKPRO - Users

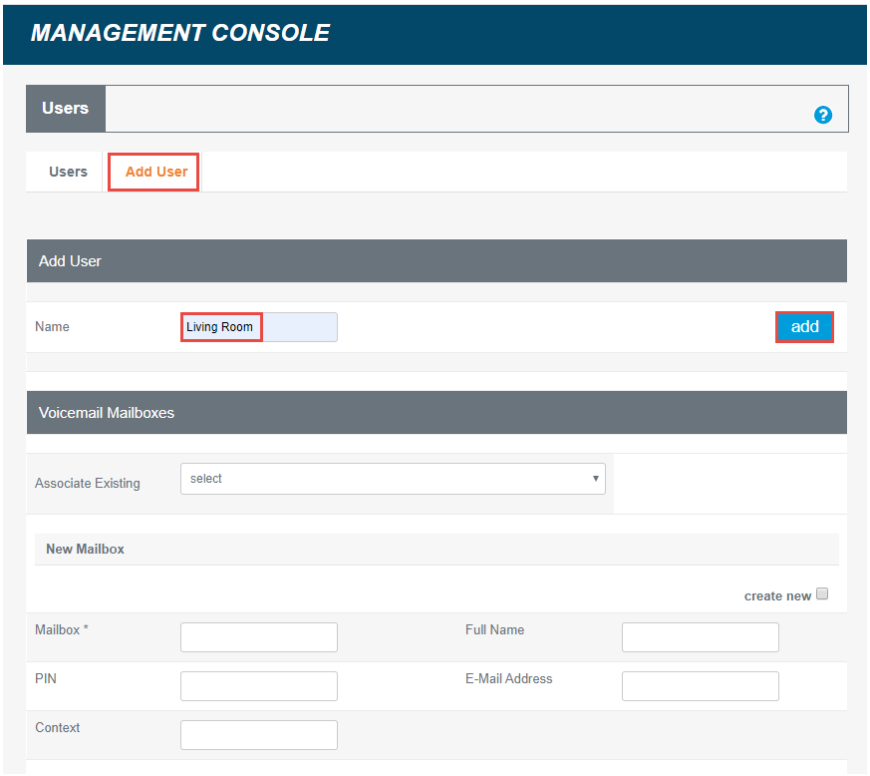


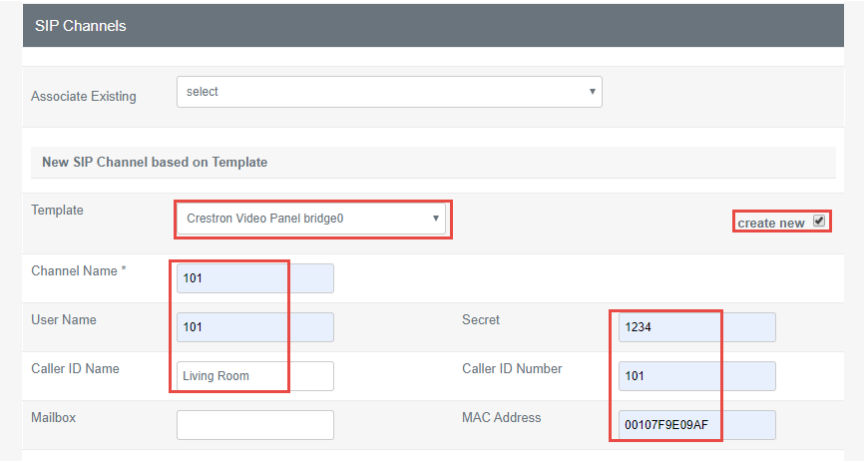
3. Enter the following information in the **Add User** and **SIP Channels** sections:

> **NOTES:**
>
> - Repeat this step for all Crestron touch screens in the system.
> - Increment the value entered for **Channel Name**, **User Name**, and **Caller ID Number** for each Crestron touch screen. For example, enter 102 for the second touch screen and 103 for the third touch screen.

- **Name:** Enter the room name for a Crestron touch screen.
- **Create New:** Select the check box.
- **Template:** Select **Crestron Video Panel bridge0** from the drop-down menu.
- **Channel Name:** Enter 101. For additional touch screens, enter 102, 103, 104, etc.
- **User Name:** Enter 101. For additional touch screens, enter 102, 103, 104, etc.
- **Caller ID Number:** Enter 101. For additional touch screens, enter 102, 103, 104, etc.
- **Caller ID Name:** Enter the room name for the Crestron touch screen.
- **Secret:** Enter the user password.
- **MAC Address:** Enter the MAC address for the Crestron touch screen in the room.

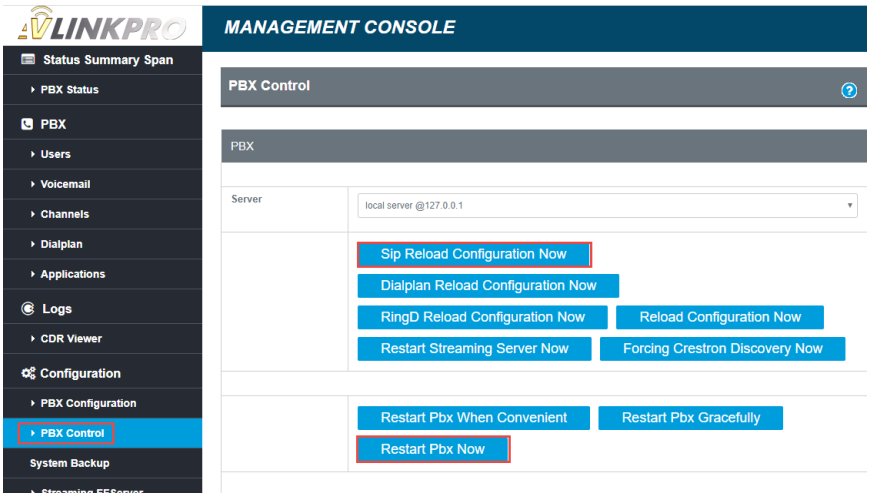
AVLINKPRO – Add User





4. Reload the configuration and then restart the AVLINKPRO.
   a. Click the **PBX Control** tab.
   b. Click **Sip Reload Configuration Now** and then **Confirm Reload**.
   c. Click **Restart Pbx Now** and then **Confirm Restart**.

   AV LinkPro – PBX Control

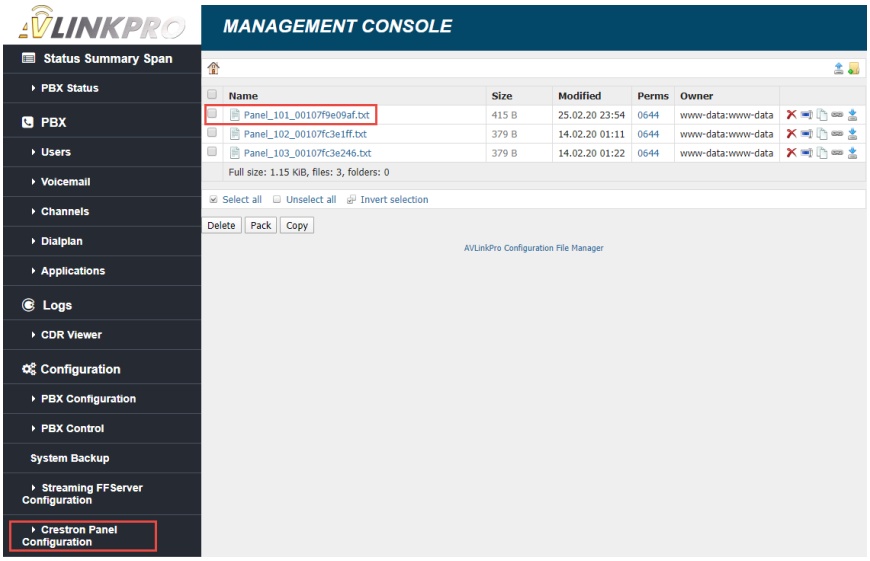


Download the Touch Screen SIP Configuration

> **NOTE:** The touch screen SIP configuration is used later in this procedure.

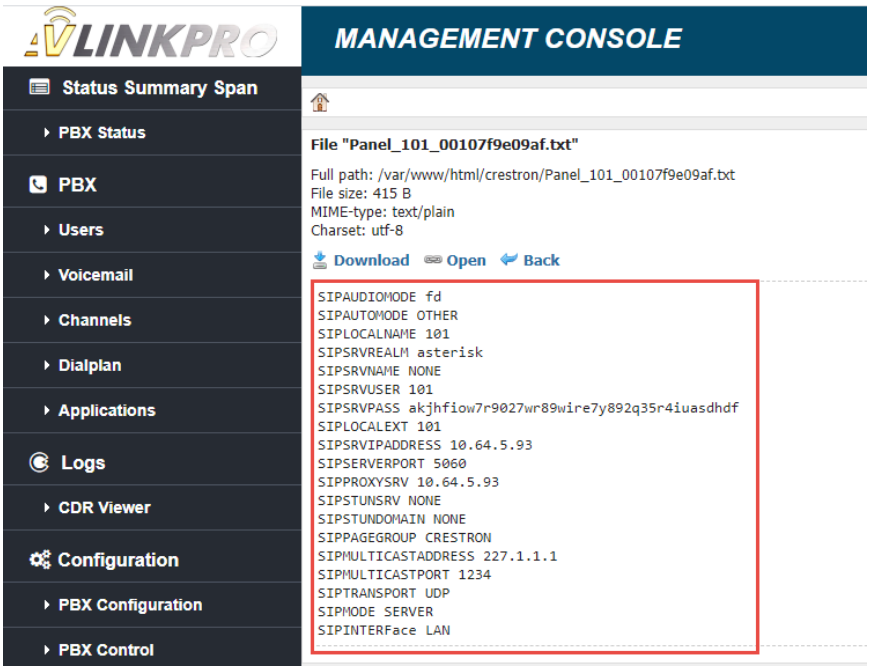
1. Click the **Crestron Panel Configuration** tab.
2. Click the **Panel Configuration** to open the touch screen configuration.

   AVLINKPRO – Crestron Panel Configuration



3. The SIP configuration for the touch screen is displayed. Click **Download** to save the configuration.

   AVLINKPRO – Crestron Panel Configuration File



4. Repeat this procedure for all Crestron touch screens in the system.

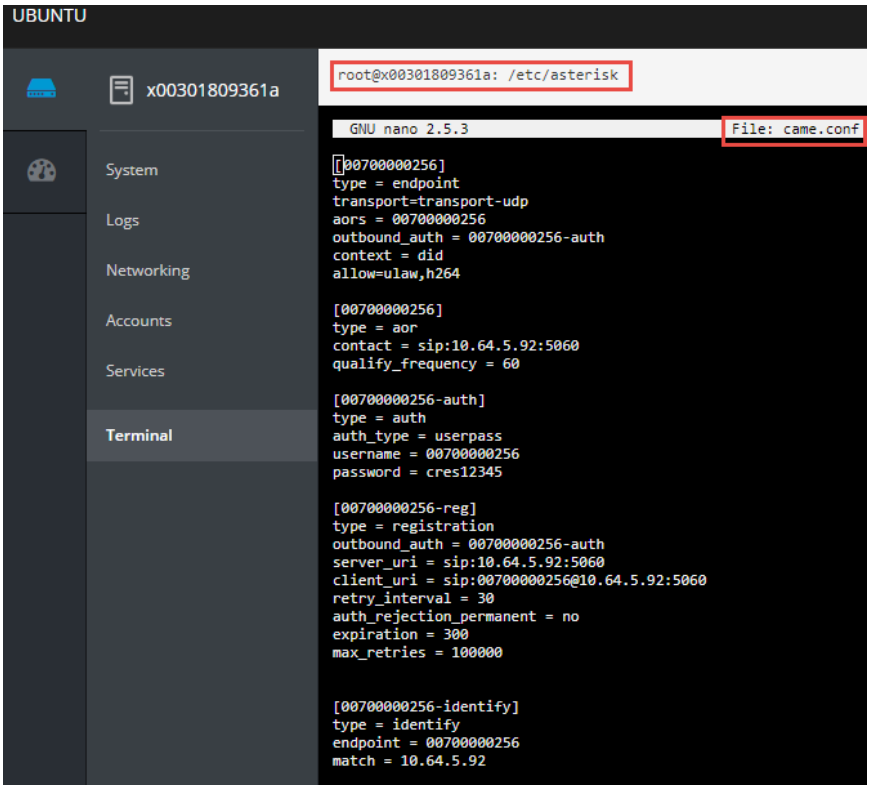
AVLINKPRO – Configuration File

> **NOTE:** Changes made in the CLI can compromise the functioning state of the AVLINKPRO system. Please follow the details below exactly or refer to AVLINKPRO product support if any issues or errors are created.

To allow the AVLINKPRO to register to the CAME Master Door Station as a User Agent, the AVLINKPRO was configured as shown below.

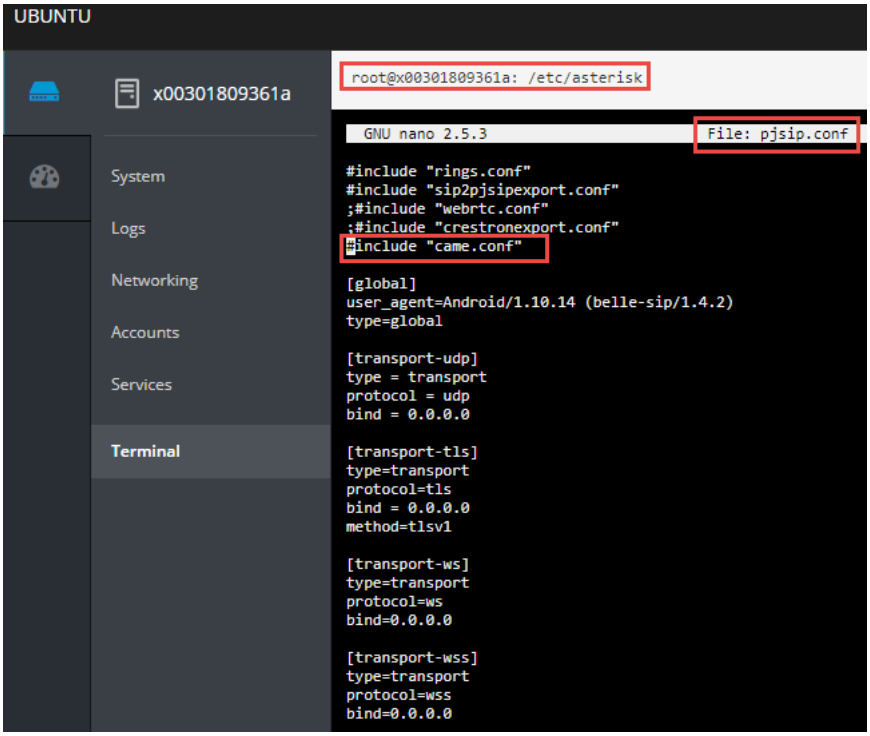
1. From the AVLINKPRO CLI on the "/etc/asterisk" folder the "came.conf" file that is shown below was created:
    - "00700000256" is the phone number the CAME Master Door Station sends to the AVLINKPRO and is assigned by the PCS/XIP tool for the AVLINKPRO Generic SIP Device
    - Transport was set as UDP
    - ULAW and Video H264 was configured
    - Contact = sip:10.64.5.92:5060 - The IP address of the CAME Master Door Station
    - Qualify_Frequency = 60 (Options sent every 60 seconds to Master Door Station)
    - Auth_Type = userpass – Username assigned by the PCS-XIP Tool and Password is created on the CAME Master Door Station Web UI shown below, under the AVLINKPRO Generic SIP State and Credentials
    - "Expiration = 300" and "Max-retries = 100000" allows the AVLINKPRO to Re-Register if registration had fails.

      AVLINKPRO – Came.conf Configuration File



2. From the AVLINKPRO CLI on the "/etc/asterisk" folder, add `#include "came.conf"` to the "pjsip.conf" file.

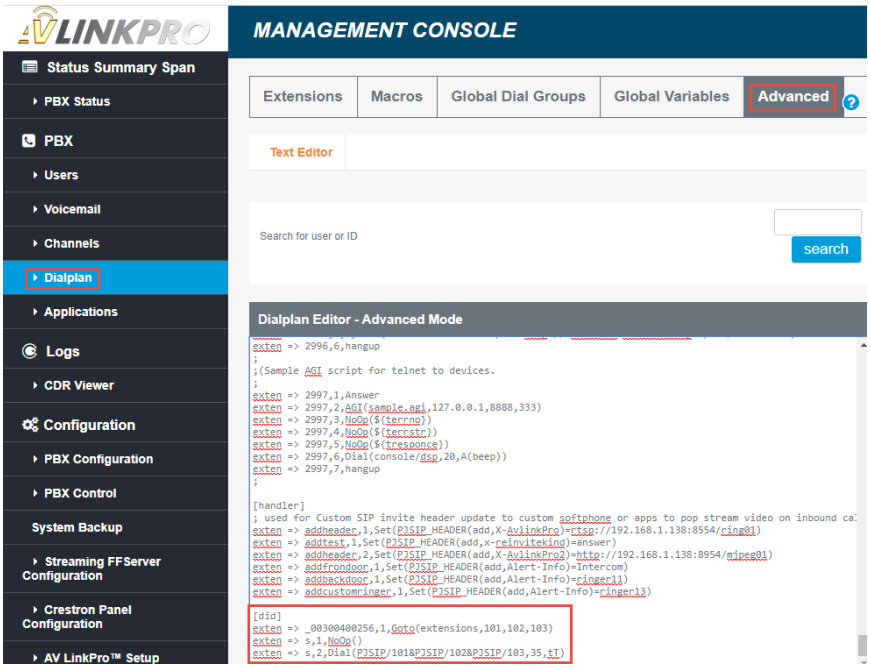
AVLINKPRO – Pjsip.conf Configuration File



3. Update the Dialplan.
    a. Click the **Dialplan** tab and then the **Advanced** tab.
    b. In the **Dialplan Editor - Advanced Mode** section, enter the following under [did]:

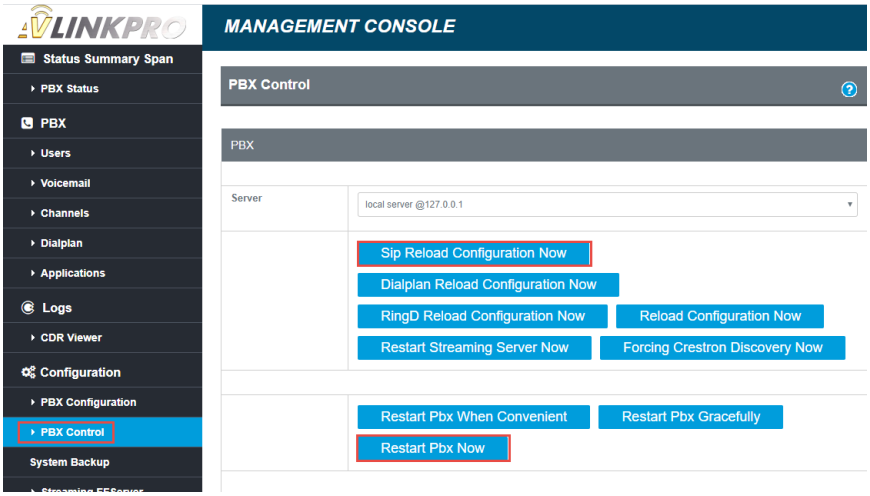
```
exten => _00300400256,1,Goto(extensions,101,102,103)
exten => s,1,NoOp()
exten => s,2,Dial(PJSIP/101&PJSIP/102&PJSIP/103,35,tT)
```

AVLINKPRO – Dialplan



4. Reload the configuration and then restart the AVLINKPRO.
    a. Click the **PBX Control** tab.
    b. Click **Sip Reload Configuration Now** and then **Confirm Reload**.
    c. Click **Restart Pbx Now** and then **Confirm Restart**.

    AV LinkPro – PBX Control



AVLINKPRO Enable and Registration

After the PCS/XIP and AVLINKPRO setup is complete, the SIP Device – AVLINKPRO that was added to the Master CAME Door Station Camera will need to be set up and configured.

To set up and configure the Master CAME Door Station:

1. Log into the door station.
    a. Enter the IP address of the door station into a web browser.

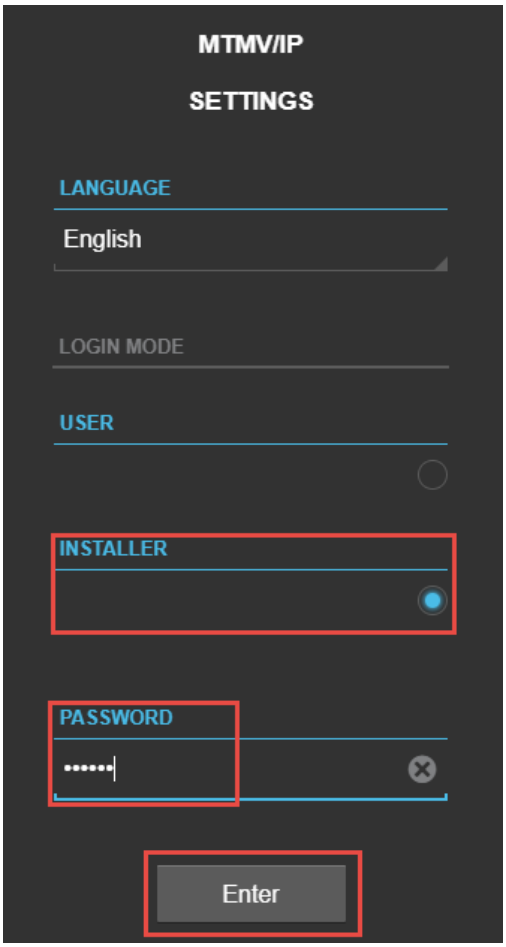
    > **NOTE:** The default IP address of the Door Station is 192.168.1.5.

    b. Click **INSTALLER** in the **LOGIN MODE** section.
    c. Enter the installer password in the **PASSWORD** field.

    > **NOTE:** The default password is 112233.

    d. Click **Enter**.

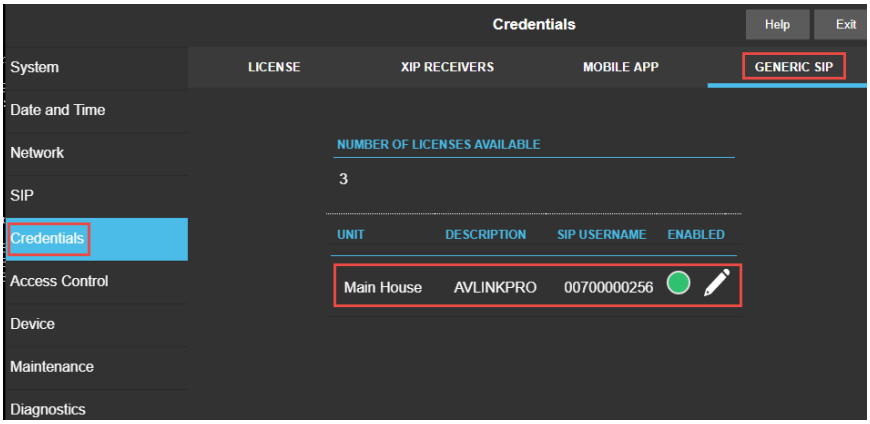
    CAME Door Station – Login



2. Enable the AVLINKPRO and provide Password.
    a. Click the **Credentials** tab and then the **GENERIC SIP** tab.
    b. Click on the pencil icon to edit the device.

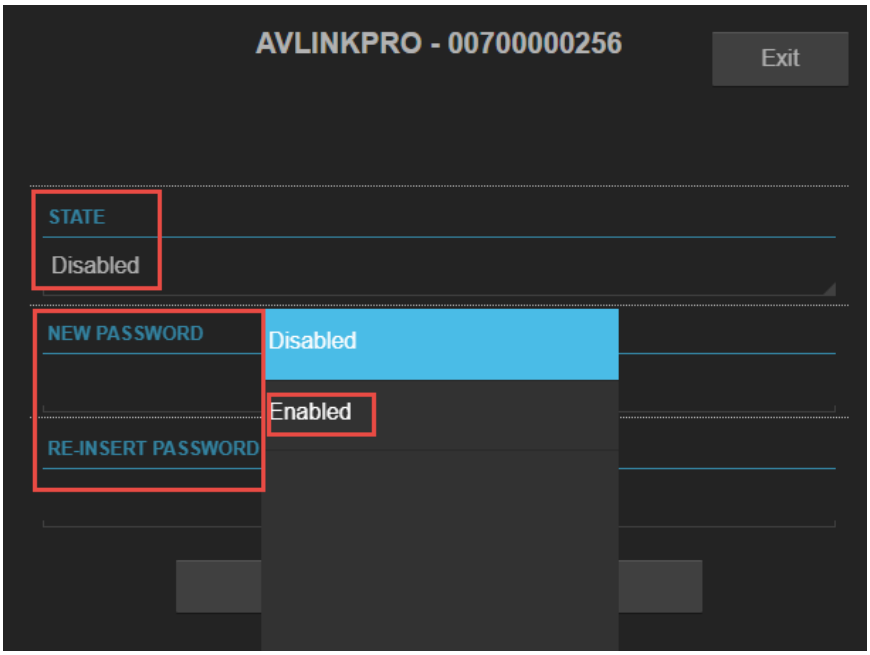
> **NOTE:** The **SIP USERNAME** was created by the PCS/XIP SIP Device creation.

CAME BPT Door Station – Credentials – Generic SIP



3. Edit the Device state and Password.
    a. Select **Enabled** from the **State** drop-down menu.
    b. Enter a Password for the User when the AVLINKPRO Registers to the Master Door Station Camera (SIP Server).

    CAME BPT Door Station – Password



    c. Click **Save**.

> **NOTE:** The red circle should turn green if the touch screen is configured correctly and enabled. This does not indicate that the Crestron touch screen is registered.

Crestron TSW-X60 Touch Screen Panel CLI SIPINFO

Enter the SIP commands for the Crestron touch screens. The SIP commands allow the touch screen to register and communicate with the AVLINKPRO.

> **NOTES:**
>
> - The SIP commands were downloaded previously.
> - The SIP commands are specific to each Crestron touch screen in the system.
> - Repeat this procedure for all touch screens in the system.

1. Open Crestron Toolbox™ software and then open the **Text Console** tool.
2. Connect to the Crestron touch screen.

3. Enter `SIPINFO` to view the current SIP parameters for the touch screen.

Crestron TSW-X60 - Toolbox – Text Console – Default SIPINFO

```
TSW-760>sipinfo
SIP Parameters
------------------------------
SIP: ENABLED
------------------------------
SIP audio mode: FD
SIP auto mode: NONE
SIP local ext: 2195226070
SIP local name: CRESTRON
SIP local port: 5060
SIP connection mode: PEER
SIP page group(s): CRESTRON
SIP realm: *
SIP remote config file: NONE
SIP server name: NONE
SIP server port: 5060
SIP server ip address: NONE
SIP server username: guest
SIP server password: ****
SIP Name server: NONE
SIP proxy server: NONE
SIP STUN server: NONE
SIP STUN domain: NONE
SIP multicast address: 227.1.1.1
SIP multicast port: 1234
SIP transport type: UDP
SIP transport qos: 24
SIP media port: 40000
SIP media qos: 46
SIP session timer: optional
SIP Interface: LAN
SIP registration timeout: 300
```

4. Enter the SIP commands for the Crestron touch screen.

   Example SIP Commands

```
SIPAUDIOMODE fd
SIPAUTOMODE OTHER
SIPLOCALNAME 101
SIPSRVREALM asterisk
SIPSRVNAME NONE
SIPSRVUSER 101
SIPSRVPASS akjhfiow7r9027wr89wire7y892q35r4iuasdhdf
SIPLOCALEXT 101
SIPSRVIPADDRESS 10.64.5.93
SIPSERVERPORT 5060
SIPPROXYSRV 10.64.5.93
SIPSTUNSRV NONE
SIPSTUNDOMAIN NONE
SIPPAGEGROUP CRESTRON
SIPMULTICASTADDRESS 227.1.1.1
SIPMULTICASTPORT 1234
SIPTRANSPORT UDP
SIPMODE SERVER
SIPINTERFace LAN
```

5. Enter `SIPINFO` to view the SIP parameters for the Crestron touch screen and confirm that the SIP parameters are correct.

   > **NOTE:** The SIP commands are specific for each touch screen in the system.

   Crestron TSW-X60 - Toolbox – Text Console – SIPINFO

```
TSW-760>

TSW-760>sipinfo
SIP Parameters
------------------------------
SIP: ENABLED
------------------------------
SIP audio mode: FD
SIP auto mode: NONE
SIP local ext: 101
SIP local name: 101
SIP local port: 5060
SIP connection mode: SERVER
SIP page group(s): CRESTRON
SIP realm: asterisk
SIP remote config file: NONE
SIP server name: NONE
SIP server port: 5060
SIP server ip address: 10.64.5.93
SIP server username: 101
SIP server password: ****
SIP Name server: NONE
SIP proxy server: 10.64.5.93
SIP STUN server: NONE
SIP STUN domain: NONE
SIP multicast address: 227.1.1.1
SIP multicast port: 1234
SIP transport type: UDP
SIP transport qos: 24
SIP media port: 40000
SIP media qos: 46
SIP session timer: optional
SIP Interface: LAN
SIP registration timeout: 300


TSW-760>
```

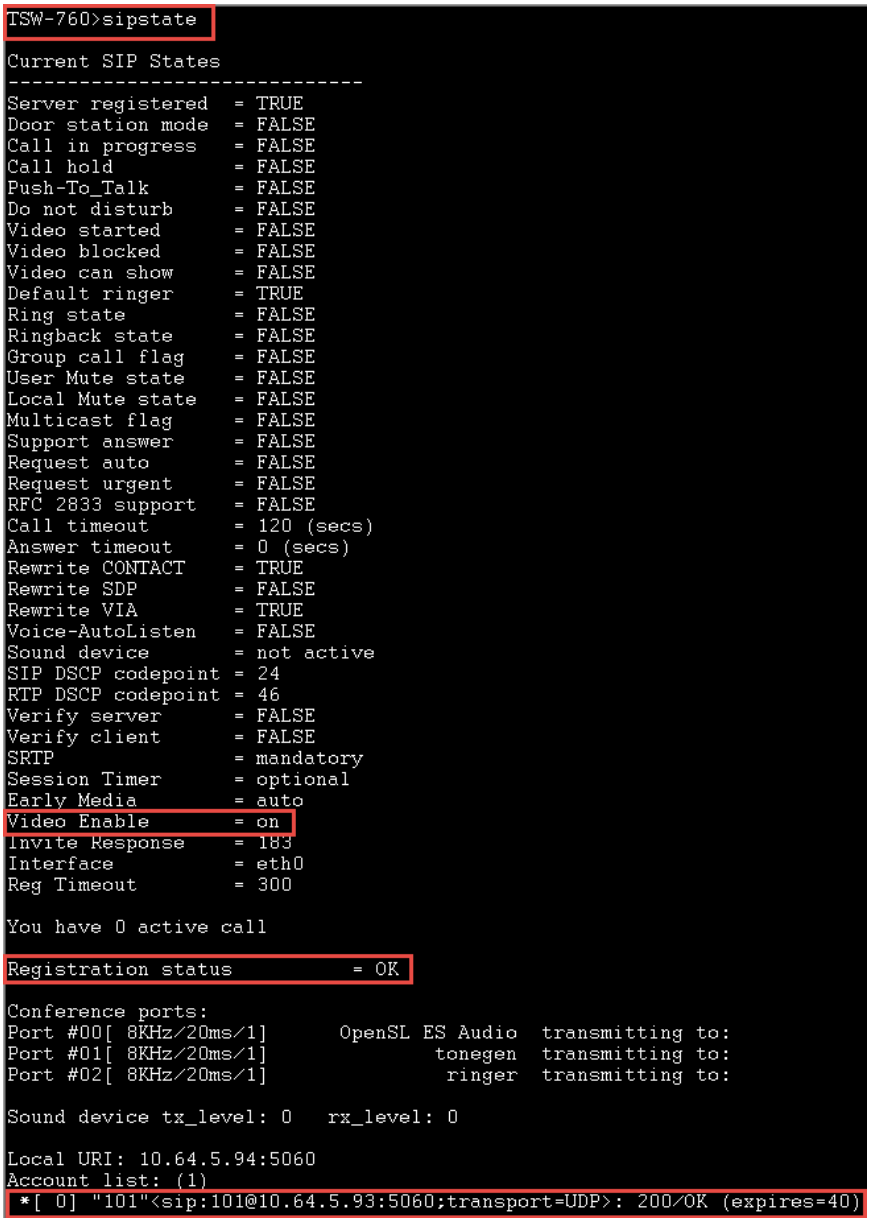
6. Enter `SIPVIDEO ON` to view the video from the CAME door station on the touch screen.

   Crestron TSW-X60 - Toolbox – Text Console – SIPVIDEO ON

```
TSW-760>sipvideo on
Success: New parameter has been set
```

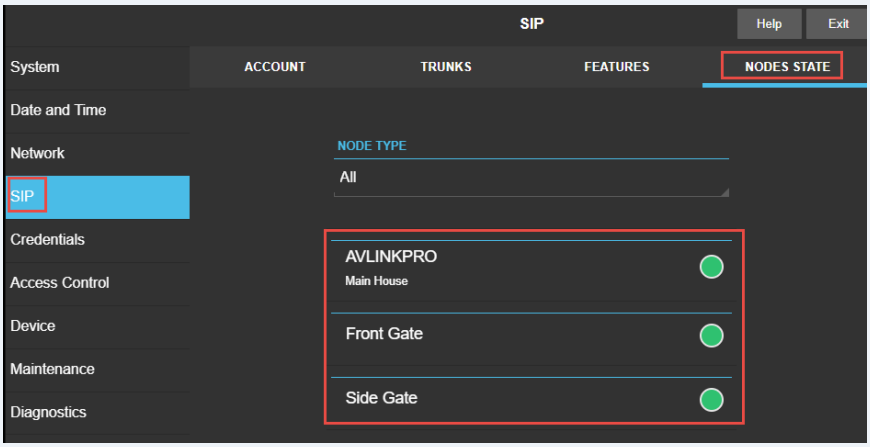
7. Enter `SIPSTATE` to view the current SIP states on the Crestron touch screen. Verify that `Video Enable = ON`, `Registration status = OK`, and the account list displays the proper SIP data.

Crestron TSW-X60 - Toolbox – Text Console – SIPSTATE



> **NOTE:** To view the registration using the CAME door station UI, navigate to **SIP** > **NODES STATE**. The connection status is shown with a green or red circle.

CAME Door Station Camera – SIP – Nodes State



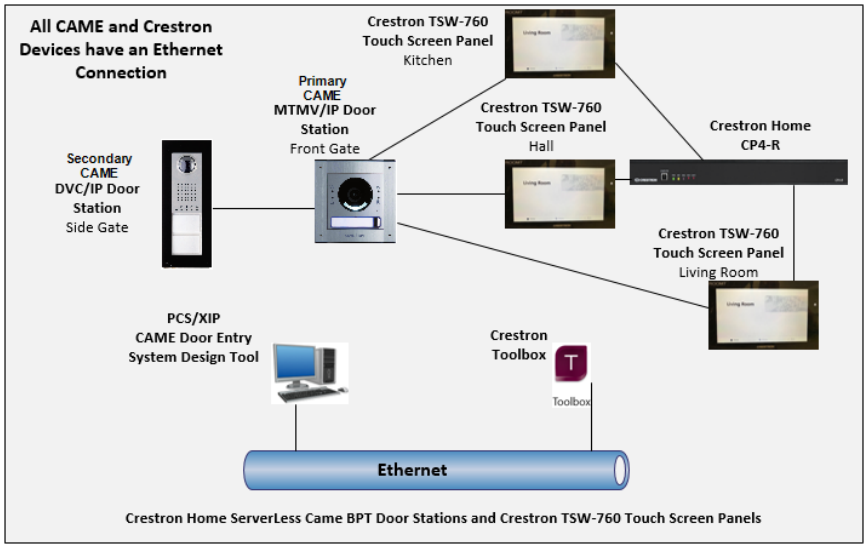
8. Repeat this procedure for all touch screens in the system.

CAME Door Station

Configure CAME door stations to communicate with a Crestron Home processor and Crestron touch screens. The Crestron touch screens register to the primary CAME door station as SIP users. The primary CAME door station acts as a mini server (primary) and allows the secondary CAME door station to register to it.

Overview

The network topology for the Crestron Home processor and Crestron touch screens to interop with the CAME door stations is shown below.



The system was tested using the following components:

- Crestron Home processor (version 2.4362.12407)
- (3) Crestron TSW-xx60 series touch screen (version 2.7.60)
- Crestron Toolbox™ software
- CAME MTMV/IP Door Station (Primary) (version 2.5.3)
- CAME DVC/IP Door Station (Secondary) (version 2.5.3)
- PCS/XIP Design Tool Software (version 6.1.4)

> **NOTE:** A computer is required to use Crestron Toolbox™ software and the PCS/XIP Design Tool software.

Summary

The Video Door Entry system is a serverless system. The primary MTMV/IP door station acts as the server where the PCS/XIP designs and configures the system. The MTMV/IP and DVC/IP door stations provide audio and video over Ethernet to the Crestron touch screens. The SIP devices can be connected using PoE Ethernet connections.

The Crestron Home processor connects to the touch screens and uploads the Crestron Home User Interface onto the touch screen.

Features Supported

- Audio and video from the CAME door stations
- Audio only from the Crestron touch screen
- Calls from CAME door station to Crestron touch screen
- Basic calls with G711ulaw codec
- Video using 103 H264/90000

Features Not Supported

- CAME door stations do not have a video display. Video from the Crestron touch screens to the CAME door stations is not supported.
- Calls from Crestron touch screens to the CAME door stations
- Calls from Crestron touch screens to other touch screens

Known Issues and Limitations

None

Setup

The Crestron Home processor, Crestron touch screens, and CAME door stations must be properly configured. All Ethernet devices must be assigned a static IP address and be on the same subnet.

Configure the Crestron Home Processor

The Crestron Home processor must be fully set up and configured prior to setting up the CAME door stations. Additionally, a static IP address, Advanced User password, and User Interface Device password must be set.

> **NOTES:**
>
> - Use the Device Discovery Tool that is available in Crestron Toolbox™ Software to obtain the IP address of the Crestron Home processor.
> - The CP4-R was assigned Static IP address 10.64.5.90 for the test.

1. **Set up the Crestron Home System:** Set up and configure the Crestron Home system. For details, refer to Configure a System on page 123.
2. **Assign an IP Address:** Assign a static IP address. For details, refer to Ethernet Settings on page 571.
3. **Set the Passwords:** Set up the Advanced User password and User Interface Device password. For details, refer to System Detail and Password Configuration on page 566.

Configure the TSW-xx60 Series Touch Screen

The Crestron touch screen must be configured to use a static IP address, use the latest firmware, run the Crestron Home app, and be added to the Crestron Home system.

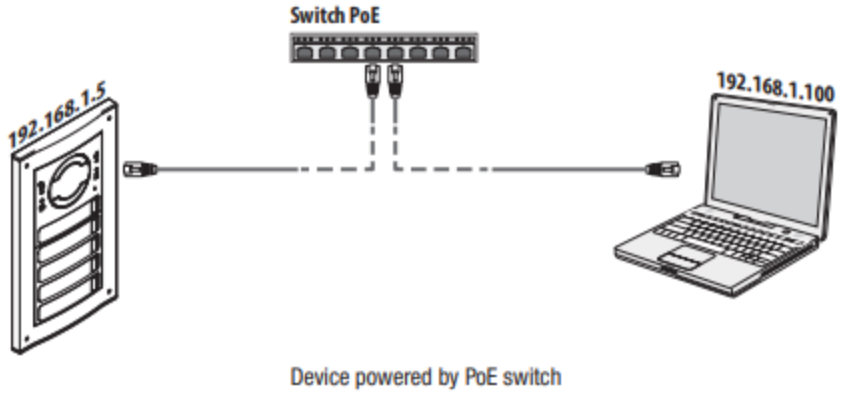
- **Assign a Static IP:** Refer to the Crestron TSW-560, TSW-760, and TSW-1060 Product Manual, TSW-570, TSW-770, and TSW-1070 Product Manual, or the Crestron Toolbox™ Software help file.
- **Upgrade the Firmware:** Refer to the Crestron TSW-560, TSW-760, and TSW-1060 Product Manual, TSW-570, TSW-770, and TSW-1070 Product Manual, or the Crestron Toolbox™ Software help file.
- **Launch the Crestron Home App and Pair the Touch Screen:** Refer to Pair a Crestron Touch Screen on page 176.

Configure the CAME Door Station Cameras

Connect the CAME MTMV/IP and DVC/IP door stations to a network switch and supply PoE+ (Power-over-Ethernet). The door stations are configured using a Web interface.

On the initial power up of the CAME Door Station, the Default IP address is 192.168.1.5 with Netmask 255.255.255.0. To access the Door Station Camera, connect the camera to a PoE switch along with a Laptop which is assigned an IP address on the same subnet of the Door Stations default IP.

CAME Door Station – Default IP



Set a Static IP for the CAME MTMV/IP Door Station

To set a static IP address for the door station:

1. Log into the door station.
   a. Enter the IP address of the door station into a web browser.

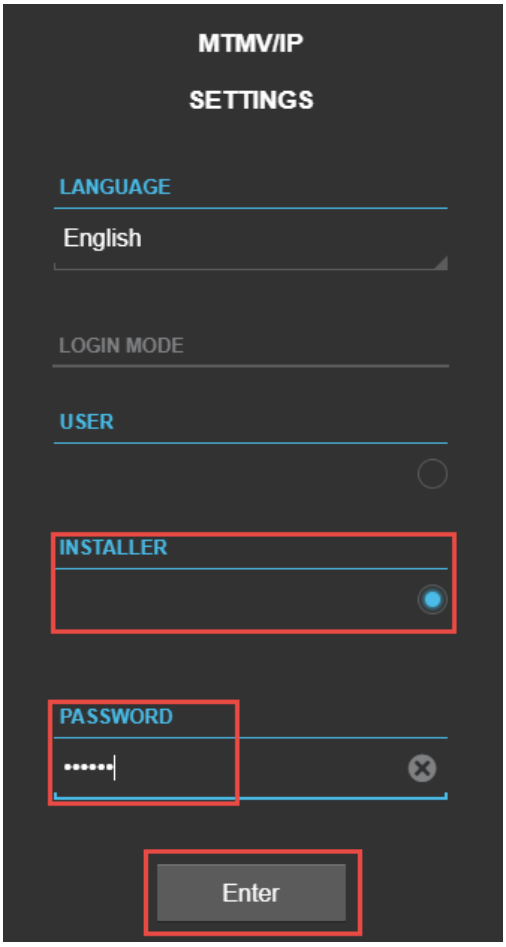
      > **NOTE:** The default IP address of the Door Station is 192.168.1.5.

   b. Click **INSTALLER** in the **LOGIN MODE** section.
   c. Enter the installer password in the **PASSWORD** field.

      > **NOTE:** The default password is 112233.

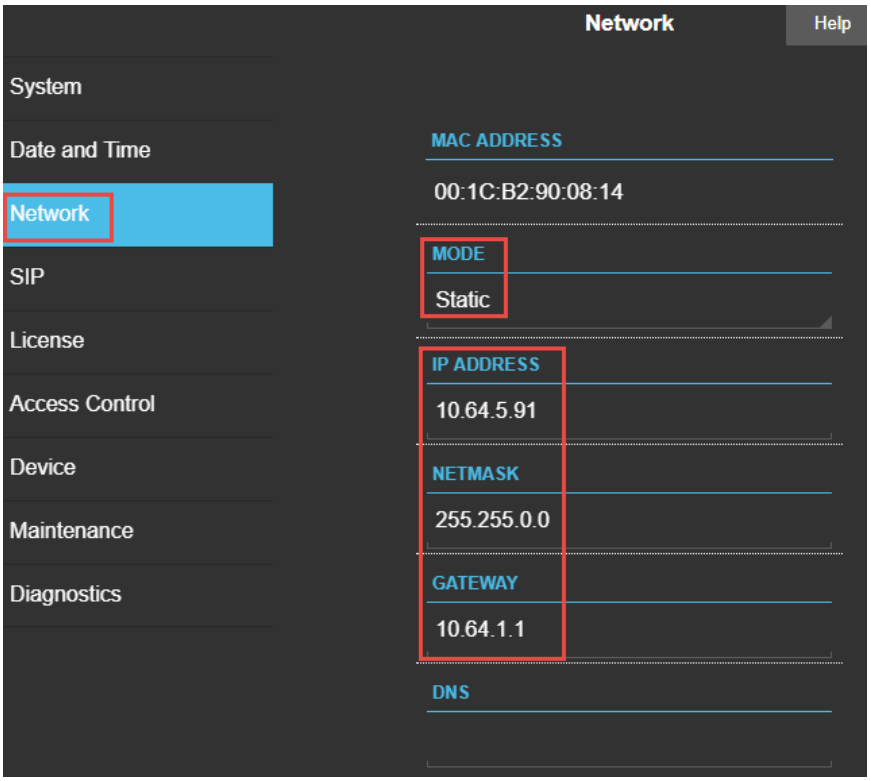
   d. Click **Enter**.

      CAME Door Station – Login



2. Set a static IP address for the CAME door station.
    a. Click the **Network** tab.
    b. Select **Static** from the **Mode** drop-down menu.
    c. Enter the network information into the **IP ADDRESS**, **NETMASK**, and **GATEWAY** fields.

    CAME Door Station – Static IP



    d. Save the configuration.
    e. Connect the door station to the network and power on.

> **NOTE:** The door station can be accessed from the network when it is booted up.

    f. Repeat this step for all CAME door stations.

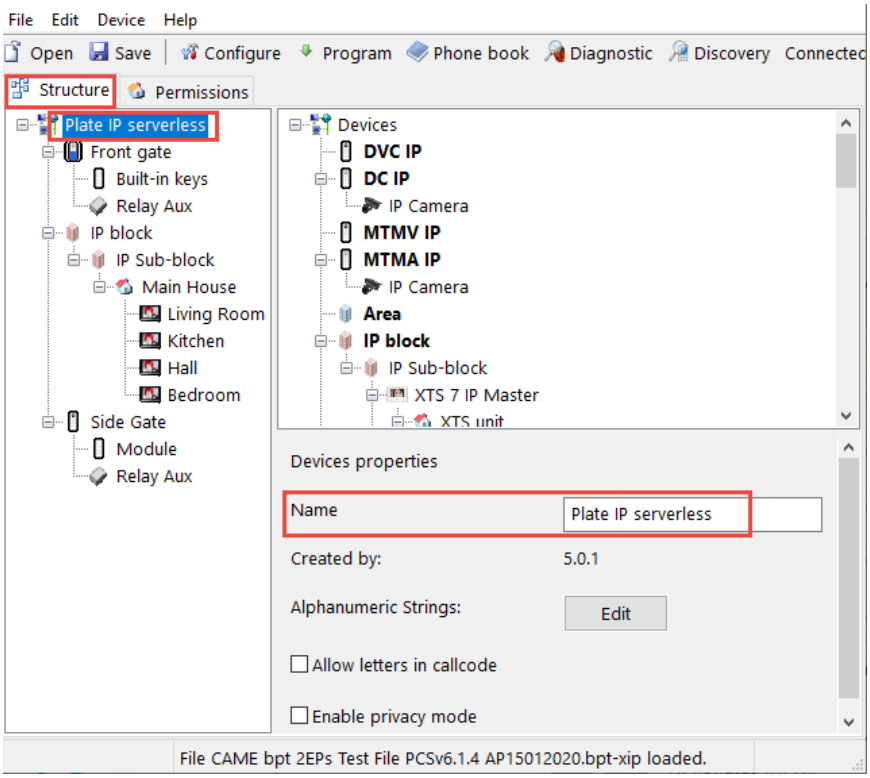
Configure the PCS/XIP CAME Door Station

Use the CAME PCS/XIP software package to design and configure the system:

> **NOTE:** To set the language, select the **Configure** tab, select your preferred language from the **Language** drop-down menu, and then click the **OK** button.

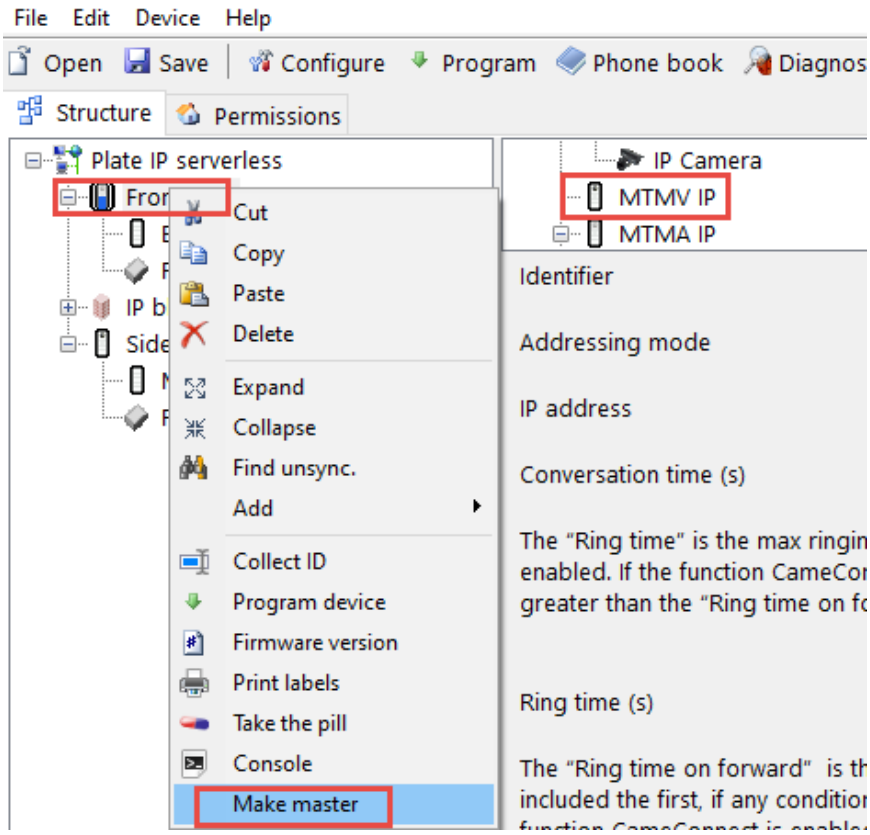
1. Click the **Structure** tab and then enter a name for the system structure in the **Name** field.

   CAME PCS/XIP - MTMV/IP Primary Door Station



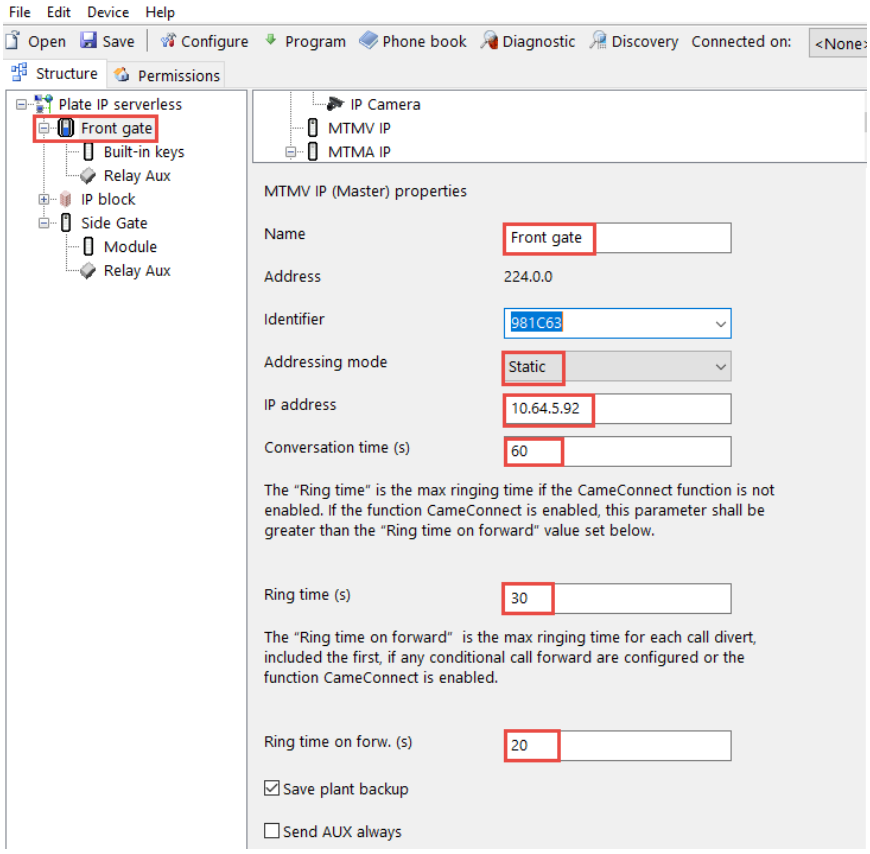
2. Add the MTMV/IP to the structure.

3. Right click the MTV/IP and then click **Make master** to assign the door station as the primary door station.



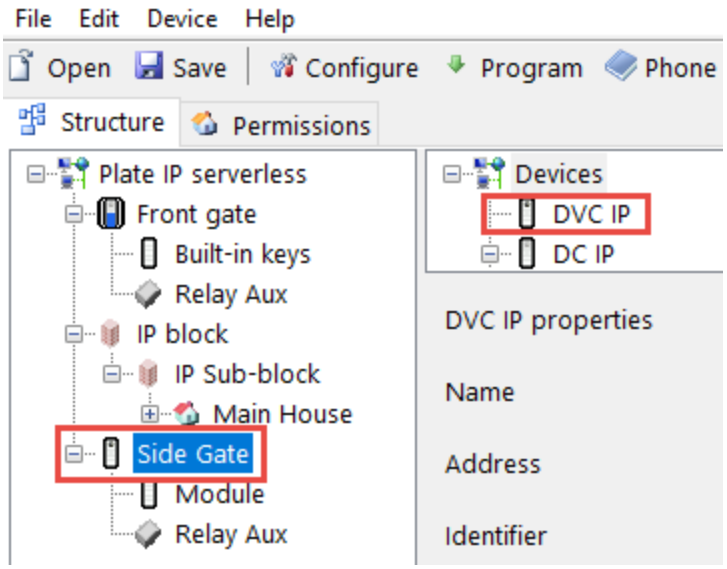
4. Configure the master door station in the **Properties** window.
    - **Name:** Enter a name for the door station.
    - **Addressing Mode:** Select **Static** from the drop-down menu.
    - **IP Address:** Enter the IP address for the door station.

> **NOTE:** Enter time values in seconds for the **Conversation time**, **Ring time**, and **Ring time on forw**.



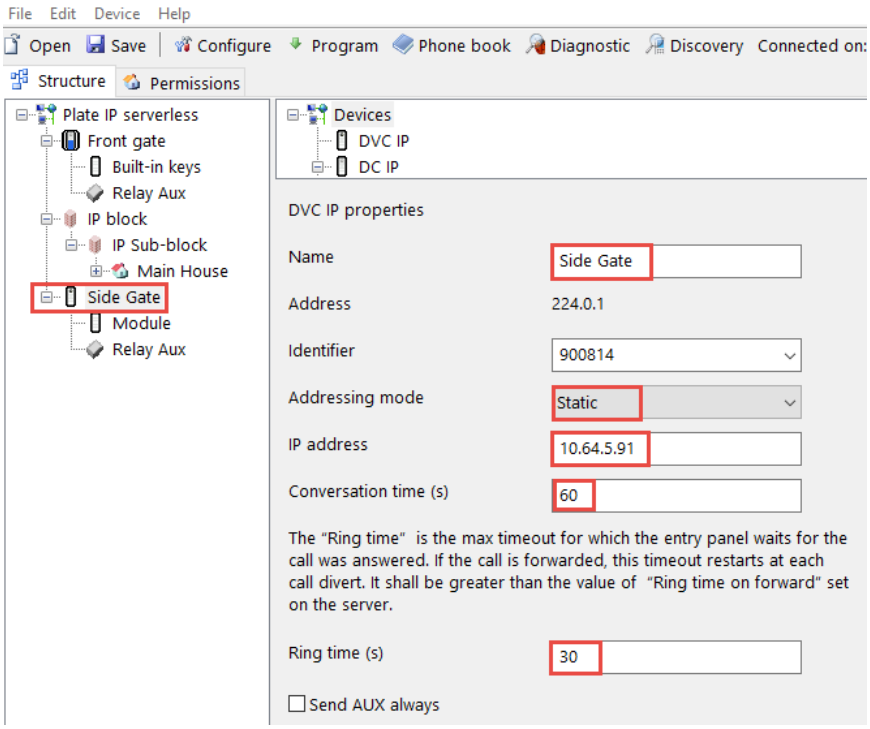
5. Add the DVC/IP to the system. The DVC/IP is added as a secondary door station.

CAME PCS/XIP - DVC/IP Secondary Door Station

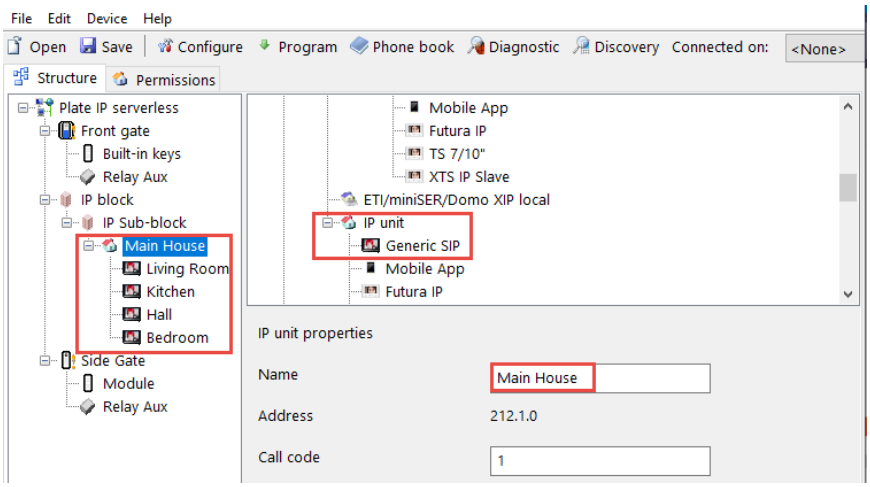


6. Configure the secondary door station in the **Properties** window.
    - **NAME:** Enter a name for the door station.
    - **Addressing mode:** Select **Static** from the drop-down menu.
    - **IP address:** Enter the IP address for the door station.

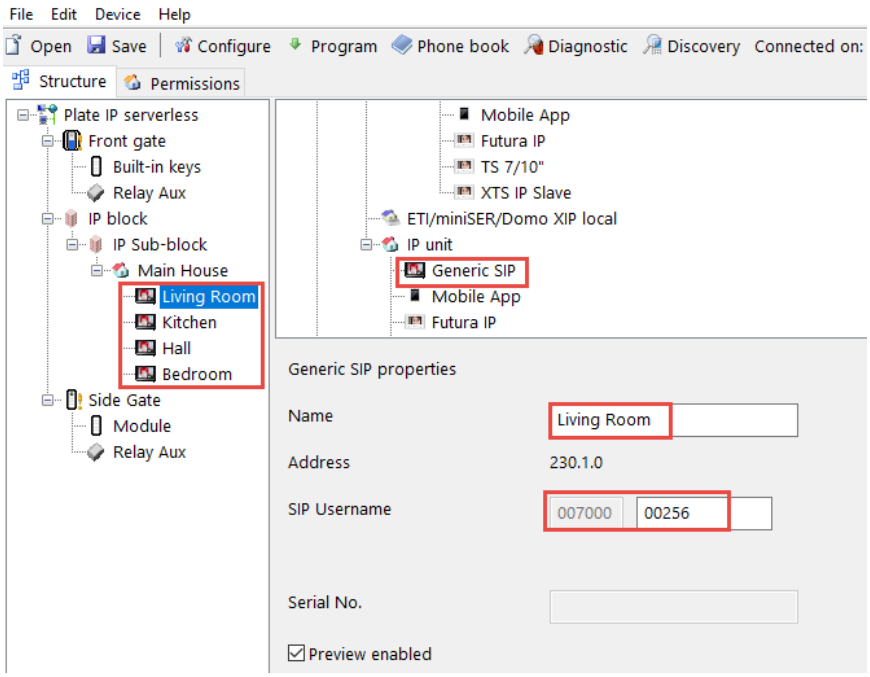
> **NOTE:** Enter time values in seconds for the **Conversation time**, **Ring time**, and **Ring time on forw**.



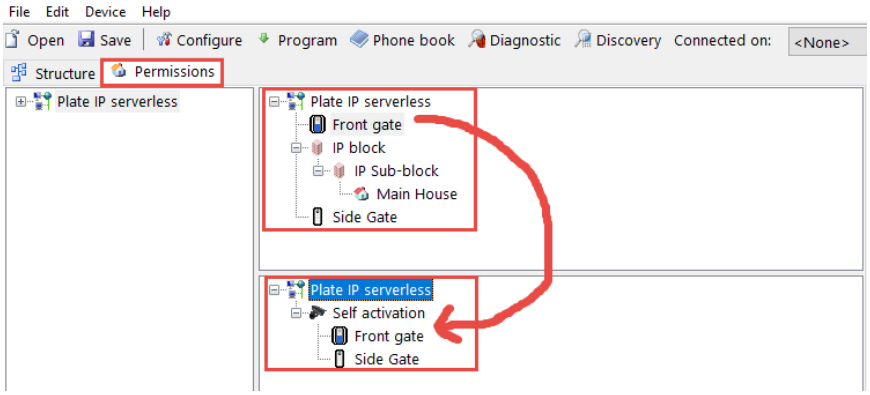
7. Add an **IP unit** to the **IP Sub-block** structure.
8. Enter a name for the **IP unit** in the **Name** field in the **Properties** window.



9. Add four **Generic SIP** devices to the IP unit for each Crestron touch screen in the configuration.
10. Configure each **Generic SIP** device in the **Properties** window.
    - **NAME:** Enter a name for Crestron touch screen.
    - **SIP Username:** Enter a SIP username for Crestron touch screen.



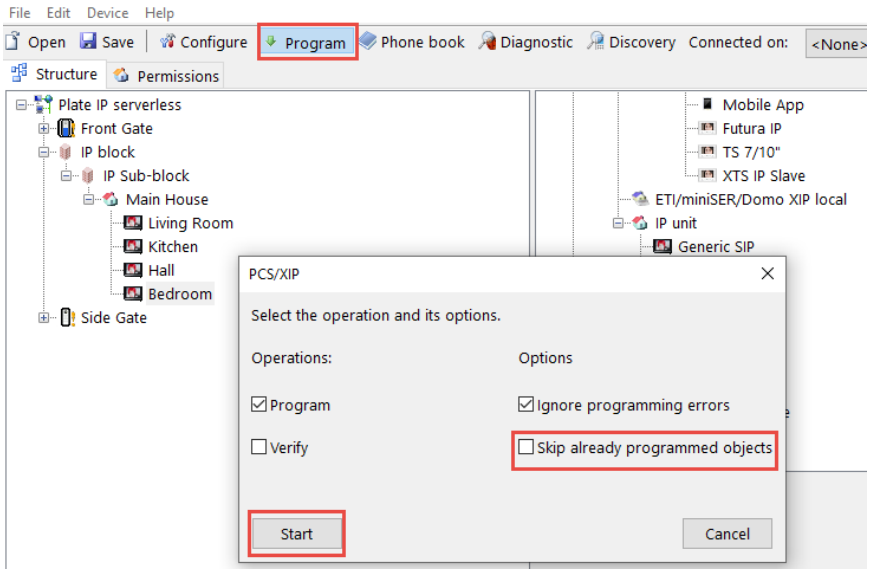
11. Click the **Permissions** tab and then right-click the server name in the top frame and then click **Self activation**. The device is shown in the bottom frame. Repeat this process for all items in the top frame.



12. Upload the configuration to the CAME door stations.
    a. Click the **Program** tab. The **Program Upload** window displays.
    b. Click to select the **Program** and **Ignore programming error** check boxes.

> **NOTE:** Deselect the **Verify** and **Skip already programmed objects** check boxes.

CAME PCS/XIP – Program



    c. Click **Start** to send the configuration to the CAME door stations.

Enter SIP Information for TSW-xx60 Series Touch Screen

Enter the SIP commands for the Crestron touch screens. The SIP commands allow the touch screen to register and communicate with the primary door station.

> **NOTES:**
>
> - The SIP commands are specific to each Crestron touch screen in the system.
> - Repeat this procedure for all touch screens in the system.

1. Open Crestron Toolbox™ software and then open the **Text Console** tool.
2. Connect to the Crestron touch screen.

3. Enter `SIPINFO` to view the current SIP parameters for the touch screen.

Crestron TSW-X60 - Toolbox – Text Console – Default SIPINFO

```
TSW-760>sipinfo
SIP Parameters
------------------------------
SIP: ENABLED
------------------------------
SIP audio mode: FD
SIP auto mode: NONE
SIP local ext: 2195226070
SIP local name: CRESTRON
SIP local port: 5060
SIP connection mode: PEER
SIP page group(s): CRESTRON
SIP realm: *
SIP remote config file: NONE
SIP server name: NONE
SIP server port: 5060
SIP server ip address: NONE
SIP server username: guest
SIP server password: ****
SIP Name server: NONE
SIP proxy server: NONE
SIP STUN server: NONE
SIP STUN domain: NONE
SIP multicast address: 227.1.1.1
SIP multicast port: 1234
SIP transport type: UDP
SIP transport qos: 24
SIP media port: 40000
SIP media qos: 46
SIP session timer: optional
SIP Interface: LAN
SIP registration timeout: 300
```

4. Enter the SIP commands for the Crestron touch screen.

   NOTES:

   - The data for the `SIPSRVUSER`, `SIPSRVPASS`, and `SIPLOCALEXT` SIP commands is based on the parameters set in the PCS/XIP software.
   - The data for the `SIPSRVIPADDRESS` and `SIPREMOTECONFIG` SIP commands is based on the parameters set for the primary door station.

```
SIPAUDIOMODE fd
SIPAUTOMODE ds
SIPSRVREALM asterisk
SIPSRVNAME BPT
SIPSRVUSER [SIP username]
SIPSRVPASS [SIP device password]
SIPLOCALEXT [SIP username]
SIPSRVIPADDRESS [IP address of the primary door station]
SIPSERVERPORT 5060
SIPREMOTECONFIG http://[IP address of the primary door station]/XIP-
server/xipPlant/bptXipPlant.xml
SIPlOCALPORT 5060
SIPMULTICASTADDRESS 227.1.1.1
SIPMULTICASTPORT 1234
SIPPROXYSRV NONE
SIPNAMESRV NONE
SIPMODE server
```

5. Enter `SIPINFO` to view the SIP parameters for the Crestron touch screen and confirm that the SIP parameters are correct.

> **NOTE:** The SIP commands are specific for each touch screen in the system.

Crestron TSW-X60 - Toolbox – Text Console – SIPINFO

```
TSW-760>sipinfo
SIP Parameters
------------------------------
SIP: ENABLED
------------------------------
SIP audio mode: FD
SIP auto mode: DS
SIP local ext: 00700000256
SIP local name: Living Room
SIP local port: 5060
SIP connection mode: SERVER
SIP page group(s): CRESTRON
SIP realm: asterisk
SIP remote config file: http://10.64.5.92/XIP-server/xipPlant/bptXipPlant.xml
SIP server name: BPT
SIP server port: 5060
SIP server ip address: 10.64.5.92
SIP server username: 00700000256
SIP server password: ****
SIP Name server: NONE
SIP proxy server: NONE
SIP STUN server: NONE
SIP STUN domain: NONE
SIP multicast address: 227.1.1.1
SIP multicast port: 1234
SIP transport type: UDP
SIP transport qos: 24
SIP media port: 40000
SIP media qos: 46
SIP session timer: optional
SIP Interface: LAN
SIP registration timeout: 300


TSW-760>
```

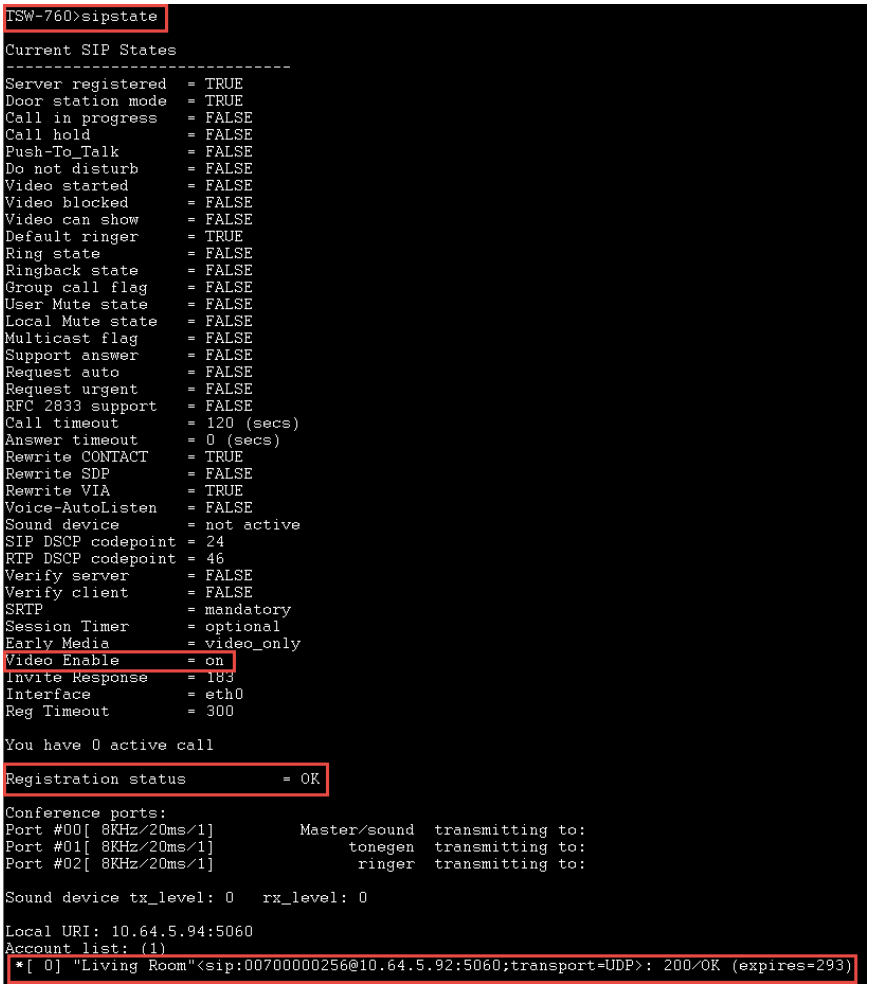
6. Enter `SIPVIDEO ON` to view the video from the CAME door station on the touch screen.

Crestron TSW-X60 - Toolbox – Text Console – SIPVIDEO ON

```
TSW-760>sipvideo on
Success: New parameter has been set
```

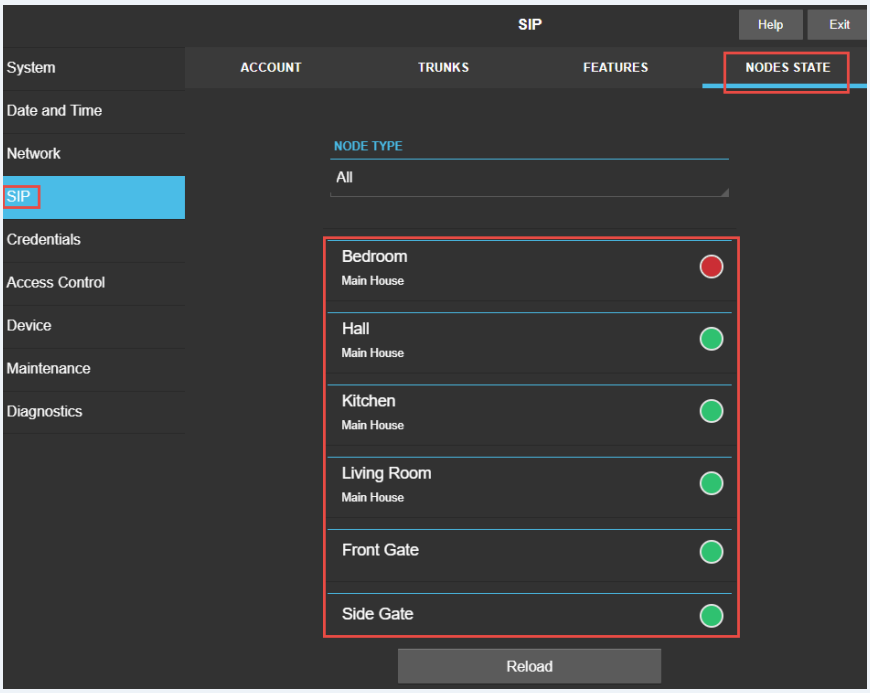
7. Enter `SIPSTATE` to view the current SIP states on the Crestron touch screen. Verify that `Video Enable = ON`, `Registration status = OK`, and the account list displays the proper SIP data.

Crestron TSW-X60 - Toolbox – Text Console – SIPSTATE



> **NOTE:** To view the registration using the CAME door station UI, navigate to **SIP** > **NODES STATE**. The connection status is shown with a green or red circle.

CAME Door Station Camera – SIP – Nodes State



8. Repeat this procedure for all touch screens in the system.

Crestron TSW-X60 Touch Screen Panel CLI SIPINFO

Enter the SIP commands for the Crestron touch screens. The SIP commands allow the touch screen to register and communicate with the primary door station.

NOTES:

- The SIP commands are specific to each Crestron touch screen in the system.
- Repeat this procedure for all touch screens in the system.

1. Open Crestron Toolbox™ software and then open the **Text Console** tool.
2. Connect to the Crestron touch screen.

3. Enter `SIPINFO` to view the current SIP parameters for the touch screen.

Crestron TSW-X60 - Toolbox – Text Console – Default SIPINFO

```
TSW-760>sipinfo
SIP Parameters
------------------------------
SIP: ENABLED
------------------------------
SIP audio mode: FD
SIP auto mode: NONE
SIP local ext: 2195226070
SIP local name: CRESTRON
SIP local port: 5060
SIP connection mode: PEER
SIP page group(s): CRESTRON
SIP realm: *
SIP remote config file: NONE
SIP server name: NONE
SIP server port: 5060
SIP server ip address: NONE
SIP server username: guest
SIP server password: ****
SIP Name server: NONE
SIP proxy server: NONE
SIP STUN server: NONE
SIP STUN domain: NONE
SIP multicast address: 227.1.1.1
SIP multicast port: 1234
SIP transport type: UDP
SIP transport qos: 24
SIP media port: 40000
SIP media qos: 46
SIP session timer: optional
SIP Interface: LAN
SIP registration timeout: 300
```

4. Enter the SIP commands for the Crestron touch screen.

   NOTES:

   - The data for the `SIPSRVUSER`, `SIPSRVPASS`, and `SIPLOCALEXT` SIP commands is based on the parameters set in the PCS/XIP software.
   - The data for the `SIPSRVIPADDRESS` and `SIPREMOTECONFIG` SIP commands is based on the parameters set for the primary door station.

```
SIPAUDIOMODE fd
SIPAUTOMODE ds
SIPSRVREALM asterisk
SIPSRVNAME BPT
SIPSRVUSER [SIP username]
SIPSRVPASS [SIP device password]
SIPLOCALEXT [SIP username]
SIPSRVIPADDRESS [IP address of the primary door station]
SIPSERVERPORT 5060
SIPREMOTECONFIG http://[IP address of the primary door station]/XIP-
server/xipPlant/bptXipPlant.xml
SIPlOCALPORT 5060
SIPMULTICASTADDRESS 227.1.1.1
SIPMULTICASTPORT 1234
SIPPROXYSRV NONE
SIPNAMESRV NONE
SIPMODE server
```

5. Enter `SIPINFO` to view the SIP parameters for the Crestron touch screen and confirm that the SIP parameters are correct.

> **NOTE:** The SIP commands are specific for each touch screen in the system.

Crestron TSW-X60 - Toolbox – Text Console – SIPINFO

```
TSW-760>sipinfo
SIP Parameters
------------------------------
SIP: ENABLED
------------------------------
SIP audio mode: FD
SIP auto mode: DS
SIP local ext: 00700000256
SIP local name: Living Room
SIP local port: 5060
SIP connection mode: SERVER
SIP page group(s): CRESTRON
SIP realm: asterisk
SIP remote config file: http://10.64.5.92/XIP-server/xipPlant/bptXipPlant.xml
SIP server name: BPT
SIP server port: 5060
SIP server ip address: 10.64.5.92
SIP server username: 00700000256
SIP server password: ****
SIP Name server: NONE
SIP proxy server: NONE
SIP STUN server: NONE
SIP STUN domain: NONE
SIP multicast address: 227.1.1.1
SIP multicast port: 1234
SIP transport type: UDP
SIP transport qos: 24
SIP media port: 40000
SIP media qos: 46
SIP session timer: optional
SIP Interface: LAN
SIP registration timeout: 300

TSW-760>
```

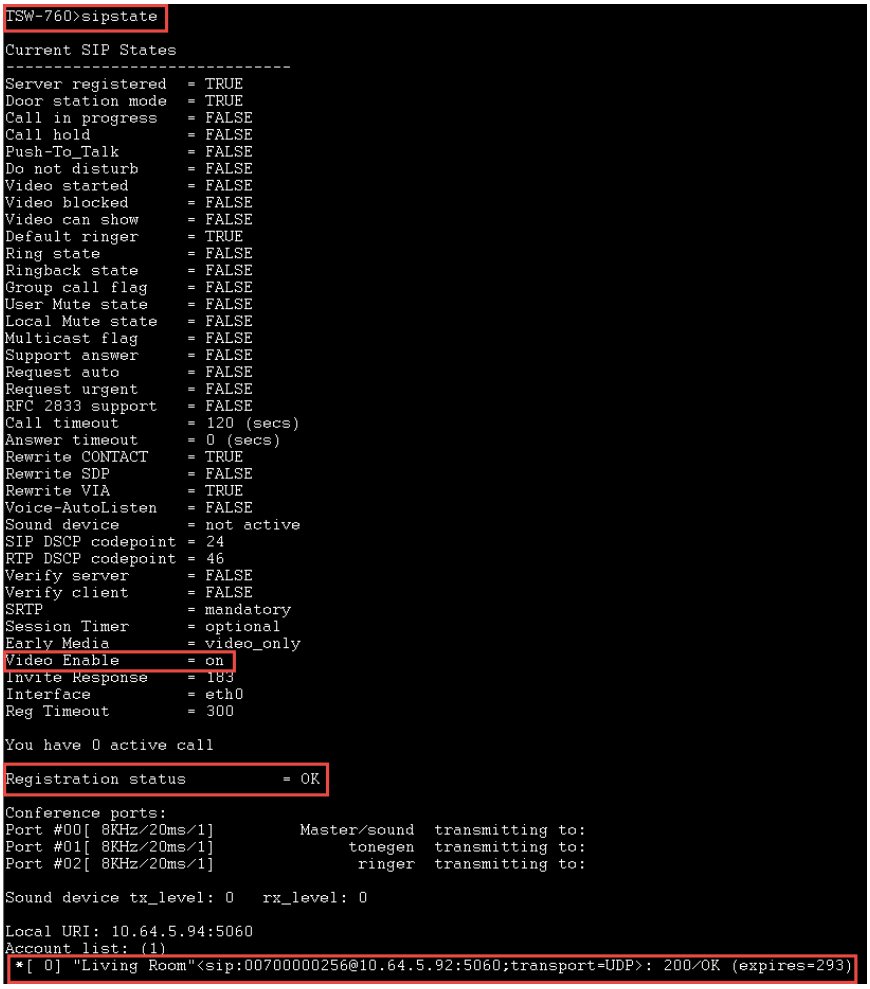
6. Enter `SIPVIDEO ON` to view the video from the CAME door station on the touch screen.

Crestron TSW-X60 - Toolbox – Text Console – SIPVIDEO ON

```
TSW-760>sipvideo on
Success: New parameter has been set
```

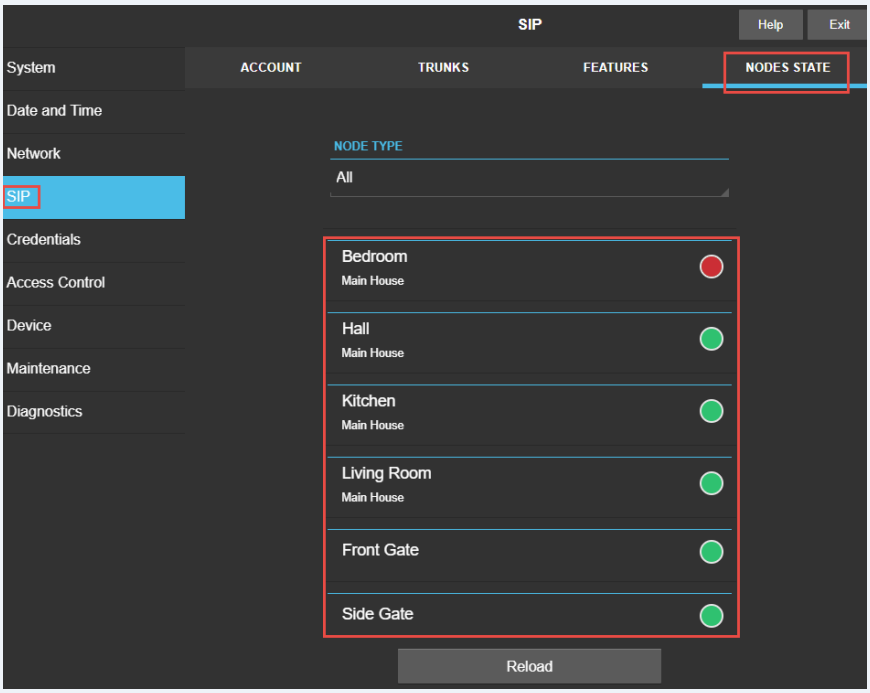
7. Enter `SIPSTATE` to view the current SIP states on the Crestron touch screen. Verify that `Video Enable = ON`, `Registration status = OK`, and the account list displays the proper SIP data.

Crestron TSW-X60 - Toolbox – Text Console – SIPSTATE



> **NOTE:** To view the registration using the CAME door station UI, navigate to **SIP** > **NODES STATE**. The connection status is shown with a green or red circle.

CAME Door Station Camera – SIP – Nodes State



8. Repeat this procedure for all touch screens in the system.

Doorbird Door Station

A Doorbird door station may be integrated with the Crestron Home system and controlled from a Crestron touch screen. For instructions, refer to Doorbird's documentation.

HR-CV-MINI Remote

The HR-CV-MINI is a durable handheld remote with a simple all-purpose design, customizable buttons for source selection, and voice control capabilities. The HR-CV-MINI may be paired with the Crestron Home® OS for complete control over audio, video, lighting, shades, and other amenities.

Before the HR-CV-MINI can be added to Crestron Home, it must be configured with Device Assistant App. Refer to Getting Started in the HR-CV-MINI product manual for instructions.

Discover in Crestron Home

The HR-CV-MINI is added to Crestron Home as a Wired and Wi-Fi Device. Follow the simplified steps below or refer to Crestron Wired and Wi-Fi Devices on page 193 for detailed instructions.

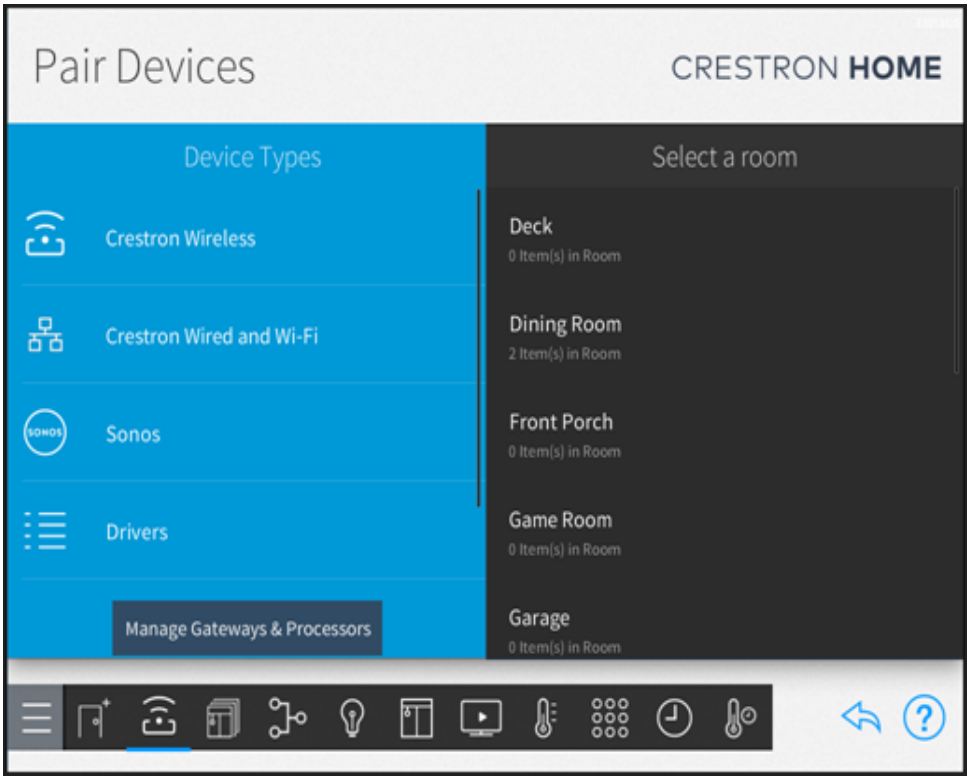
1. Connect the HR-CV-MINI to either the charging dock or to USB power. Ensure the remote is charging.
2. Open the Crestron Home Setup App. Refer to the Configure a System on page 123 for reference.

   NOTES:

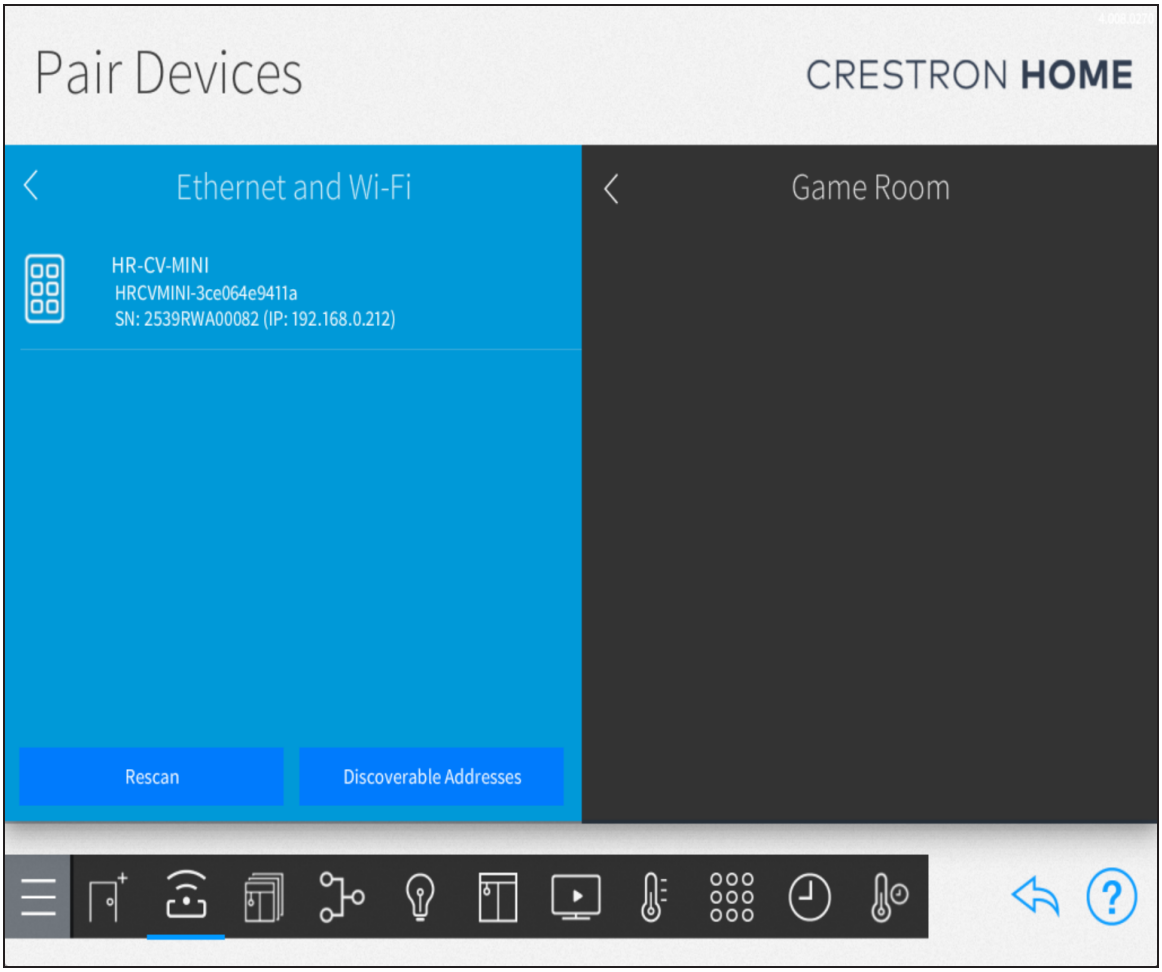
   - Device Assistant login credentials are required to pair with Crestron Home.
   - The HR-CV-MINI must be connected to power and charging during the set up process.

3. Select **Pair Devices** on the Setup screen.

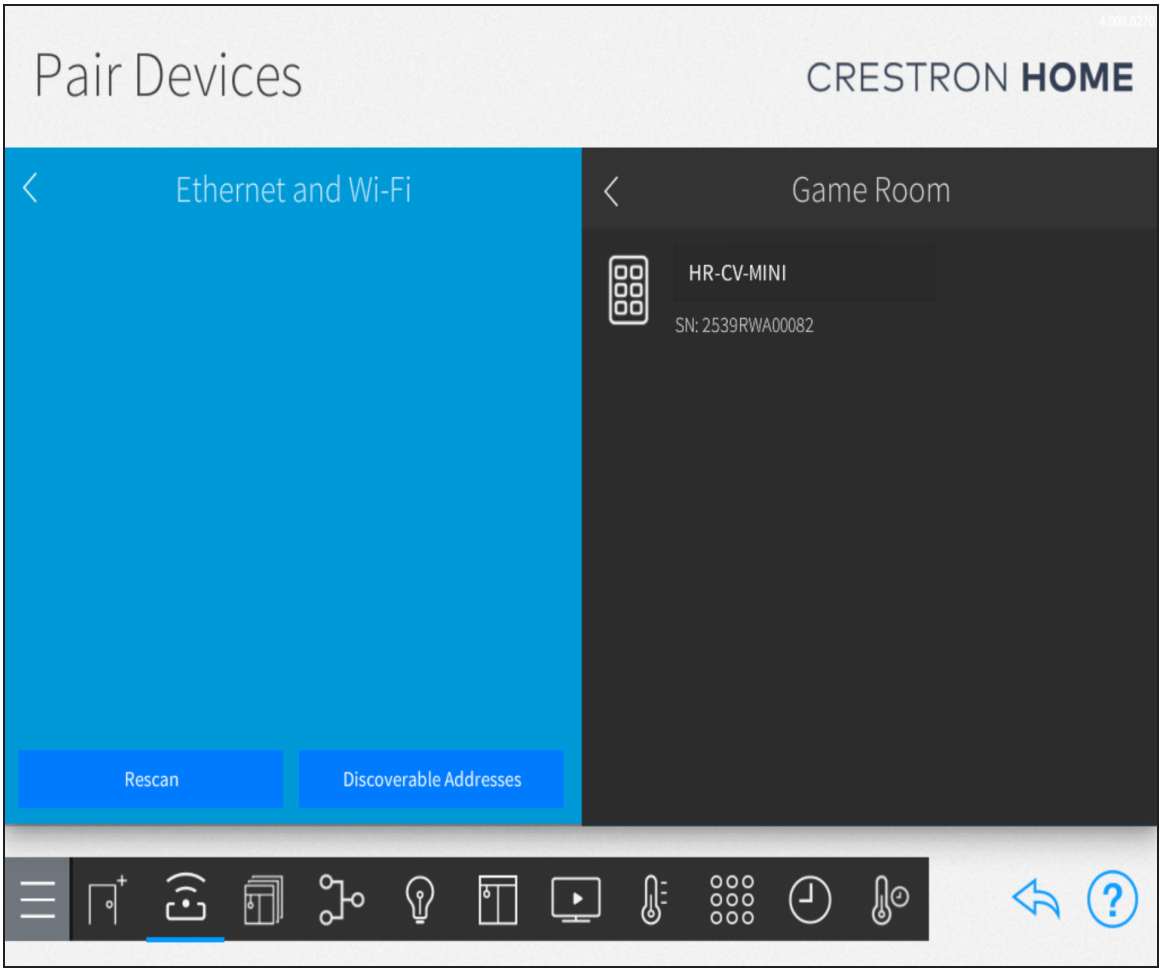
4. Select **Crestron Wired and Wi-Fi**.



5. Select the **Ethernet and Wi-Fi** icon from the taskbar below.



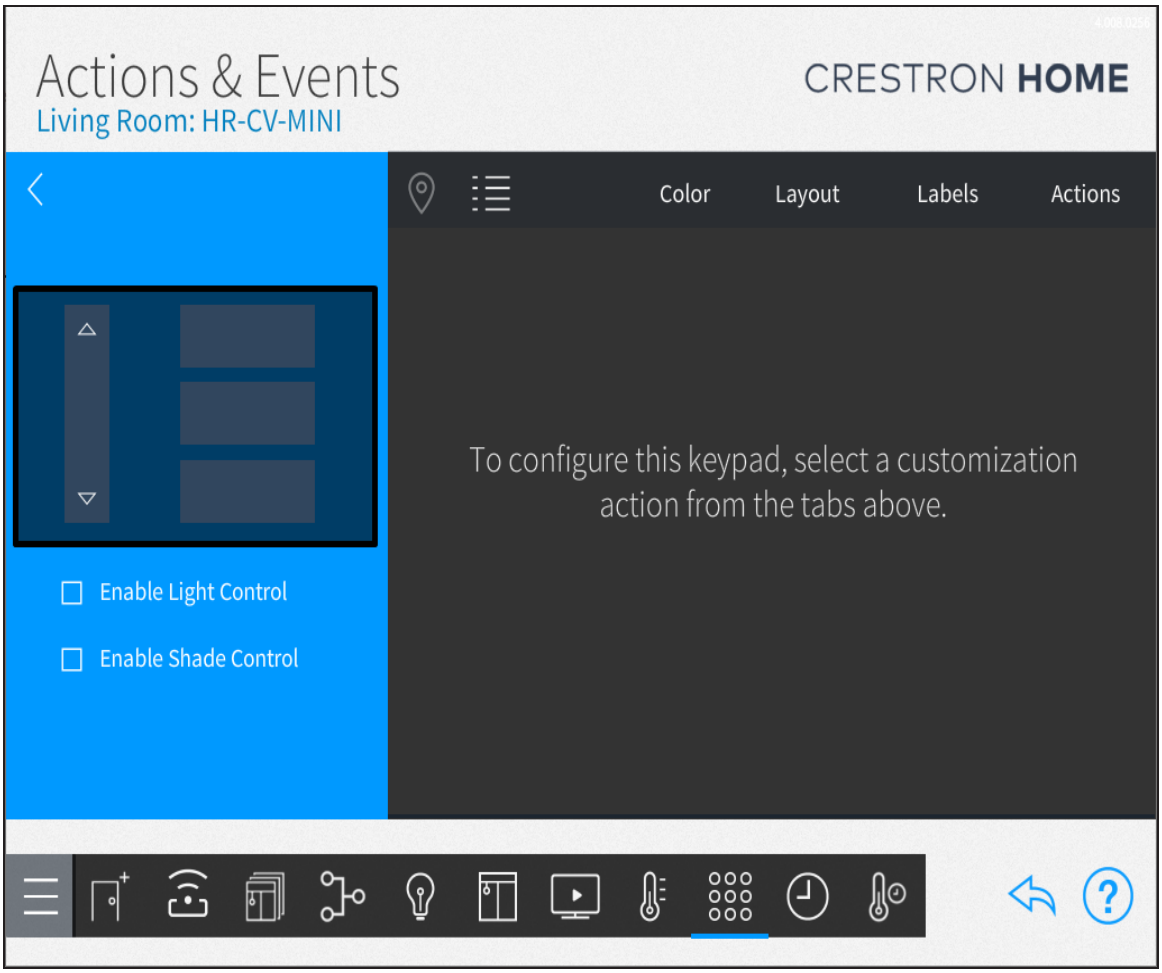
6. In the **Ethernet and Wi-Fi** section, select the HR-CV-MINI to add it to a Crestron Home room.



The HR-CV-MINI is now ready for use in Crestron Home.

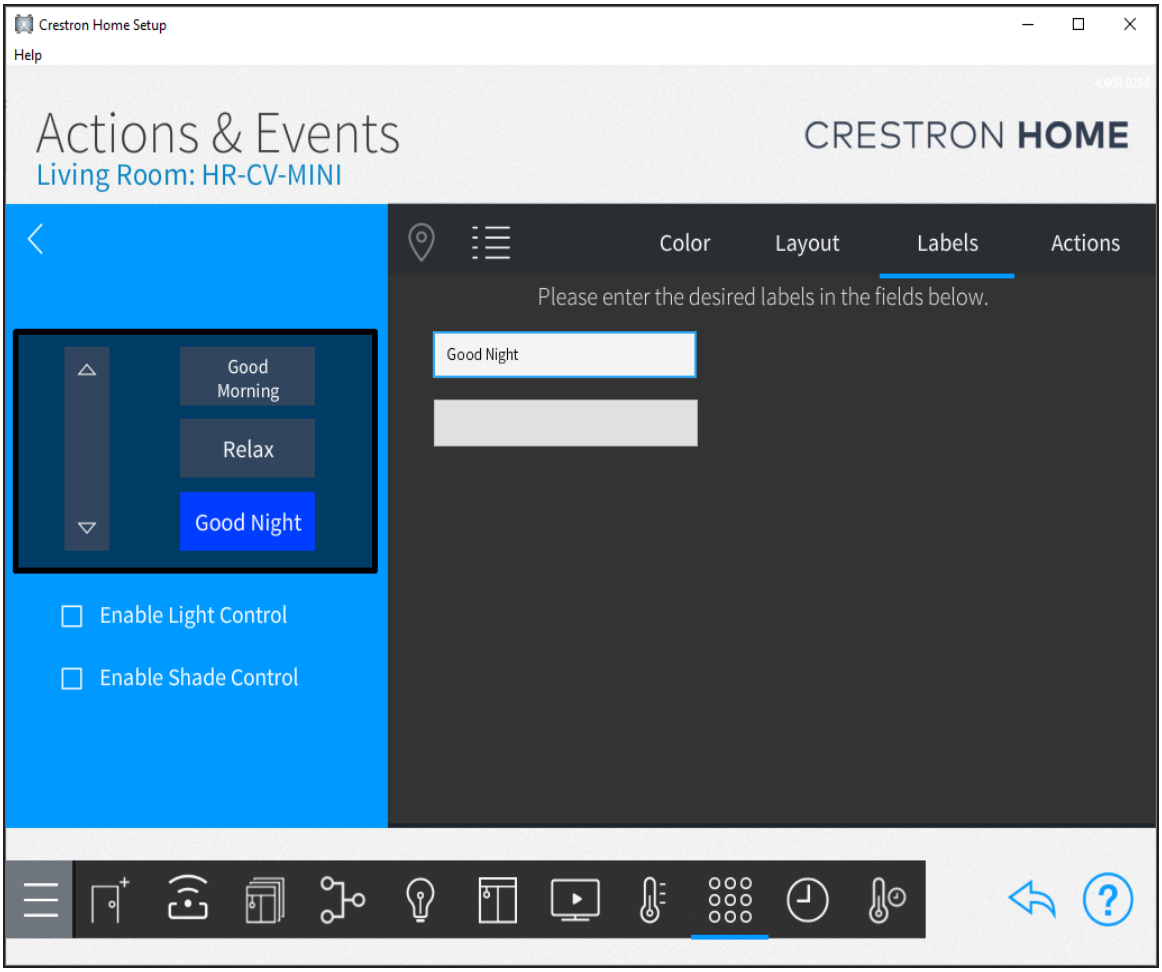
Customization

Access the **Actions & Events** screen to customize the remote. Refer to Customize Actions & Events on page 514 and the below sections for further reference.

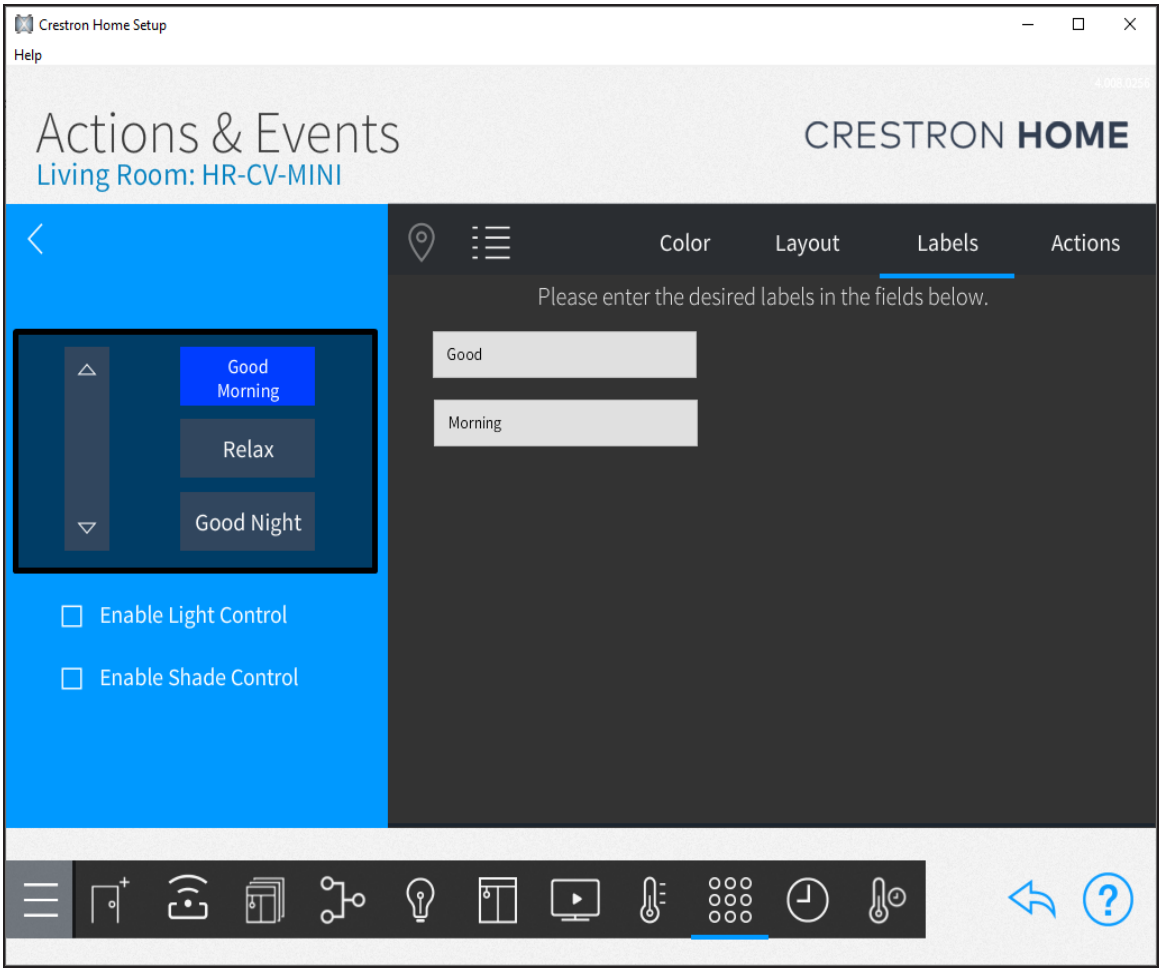


The configurable buttons can be programmed with text through the instructions below.

1. Navigate to the **Labels** tab.
2. Select the button you would like to configure from the remote options on the left.



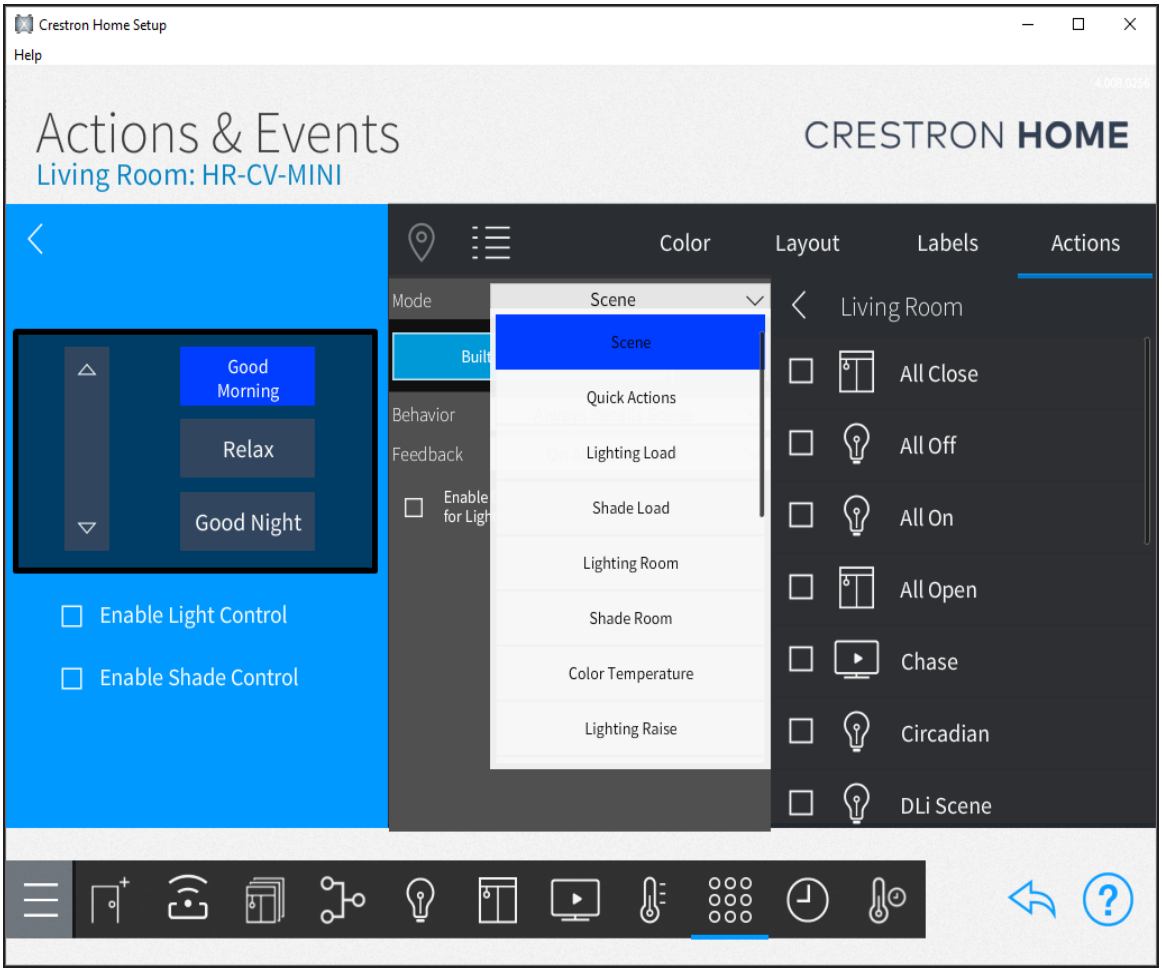
3. Add your desired text. Text can be displayed stacked in two lines as in the image below.



Program any desired actions for each button via the **Actions** tab.

1. Verify that you have selected the button you want to configure from the remote options on the left.

2. Click the **Mode** dropdown menu to choose a pre-configured Crestron Home action to tie to the selected button. For more information on setting up Crestron Home Actions, see Customize Actions & Events on page 514.



Configure Light and Shade Control

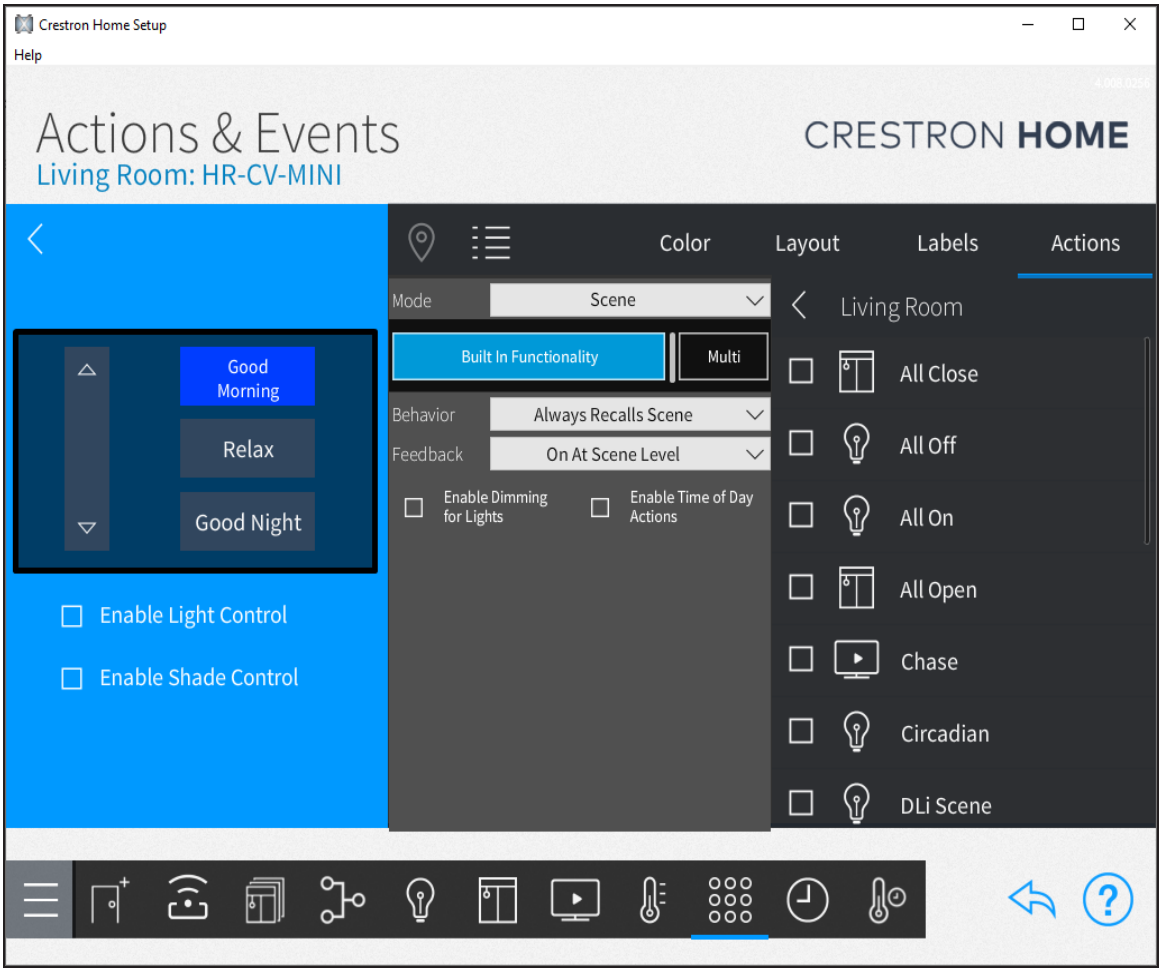
Light and Shade controls are enabled by default if they are already configured to the Crestron Home room the HR-CV-MINI is linked to. Refer to Configure a System on page 123 for more information on enabling Shade and Light control into a room.

If Light or Shade control is enabled, the actions and icons of the configurable buttons default to **All On/All Off** for lights and **All Open/All Closed** for shades. These buttons cannot be customized or further configured.

1. Open the **Actions** tab.

> **NOTE:** If the HR-CV-MINI does not display in the Actions tab, close and reopen Crestron Home.

2. The **Enable Light/Shade Control** check box is selected by default and can be deselected if necessary. Refer to the image below for reference.



3. To control shades, cycle to the shades page on the HR-CV-MINI via the icon in the picture below. The two buttons above are now configured as **All Open/All Closed**.



4. To control lights, cycle to the lights page on the HR-CV-MINI via the icon in the picture below. The two buttons above are now configured as **All On/All Off**.



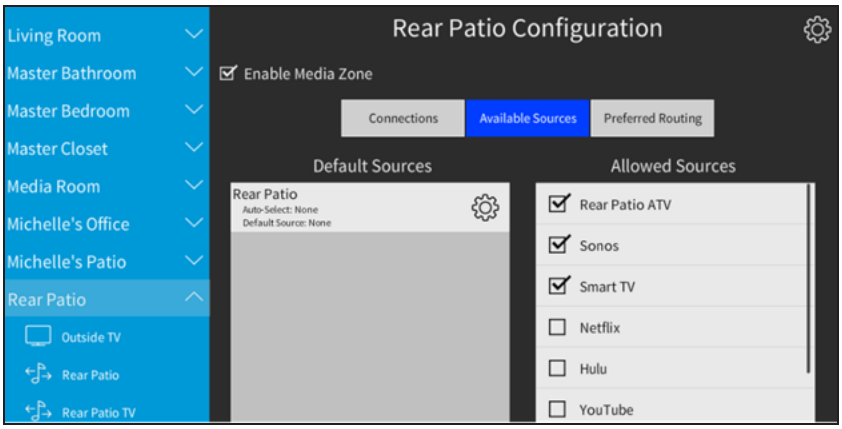
> **NOTE:** When lights and shades are paired with the HR-CV-MINI, the configurable buttons above become fixed as **All Open/All Closed** or **All On/All Off** and are no longer available for other Crestron Home functions.

Configure Source/Service Selection

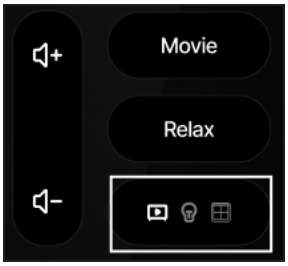
Multiple media sources can be linked to the HR-CV-MINI. Video source icons are preloaded into the top bar of the remote. The display bar has the capacity to host ten icons. More than ten sources are able to link to the remote, but only the first ten will display.



1. Select **Build System** in Crestron Home. Refer to Source Routes on page 361 for reference.
2. Select **Source Routes**.
3. Select the **Room Name** the remote is associated with.
4. Select **Available Sources.**
5. Select each desired source from the list of available services. The Allowed Sources can be clicked and dragged into a desired order that will display on the remote. Refer to the image below and Source Routes on page 361 for reference.



6. To control media and source selection, cycle to the media page via the icon in the image below.



Migrate System Data to a Different Processor

Migrate data between different Crestron Home processors by transferring the system data to a new Crestron Home processor. Data can also be transferred between Crestron Home processors as a means of transferring system data from a test system to a live system or to replace a processor.

> **NOTE:** If adding an Ethernet-to-Cresnet bridge during the data transfer, the Ethernet-to-Cresnet bridge must be installed and configured prior to the transfer. For details, refer to Migrate Cresnet® Wired Devices to an Ethernet-to-Cresnet Bridge on page 1536.

This section provides the following information:

- Transfer Data using a Deploy Code (Recommended)
- Copy Data between Control Processors
- Copy Data from a myCrestron Cloud Backup File
- Migrate Cresnet® Wired Devices to an Ethernet-to-Cresnet Bridge
- Replace the Processor Associated with a myCrestron Domain

Transfer Data using a Deploy Code (Recommended)

Use a deploy code to transfer system data from a cloud backup to a new Crestron Home processor. The deploy code is the most versatile method of transferring data and is recommended for most situations. The Crestron Home processor system data must be backed up using the myCrestron Residential Monitoring Service. When a deploy code is used, system data is downloaded from the myCrestron Residential Monitoring Service and then loaded onto the Crestron Home processor.

Transfer data using a deploy code between the control processors listed below:

		TO					
		CP4-R	**MC4-R**	**PC4-R**	**DIN-AP4-R**	**CP3-R**	**PYNG-HUB**
FROM	**CP4-R**	✓	✓	✓	✓	✗	✗
	MC4-R	✓	✓	✓	✓	✗	✗
	PC4-R	✓	✓	✓	✓	✗	✗
	DIN-AP4-R	✓	✓	✓	✓	✗	✗
	CP3-R	✓	✗	✗	✗	✓	✗
	PYNG-HUB	✓	✓	✓	✗	✗	✓

When migrating system data that contains Crestron wireless devices, the wireless gateway data is either transferred to the control processors internal wireless gateway or stored in a Virtual Gateway.

- **Stored in a Virtual Gateway:** Wireless gateway data is stored in a Virtual Gateway if the old system had an internal wireless gateway and the new system does not or if the old system use external wireless gateway (CP4-R with CEN-GWEXER). For example, during an MC4-R to CP4-R or CP4-R with CEN-GWEXER to MC4-R data migration. To transfer the data to a gateway, refer to Add a Wireless Gateway and Migrate Wireless Devices on page 1510.
- **Transfer to internal gateway:** Wireless gateway data is transferred to the internal wireless gateway automatically if the old and new system have internal wireless gateways. For example, during a PYNG-HUB to MC4-R or MC4-R to MC4-R data migration.



IMPORTANT: When transferring to an internal gateway:

- **The internal wireless gateway can only accept an automatic a wireless gateway data migration one time. Wireless gateway data migration will fail if attempting subsequent migrations to the same internal wireless gateway.**
- **To make sure that the wireless gateway data can be transferred to the wireless gateway, the wireless gateway should be factory fresh.**

Requirements

- If adding an Ethernet-to-Cresnet bridge during the data transfer, the Ethernet-to-Cresnet bridge must be installed and configured prior to the transfer. For details, refer to Migrate Cresnet® Wired Devices to an Ethernet-to-Cresnet Bridge on page 1536.
- Cresnet connection The Crestron Home processor must be connected to the myCrestron Residential Monitoring Service prior to using a deployment code. Refer to myCrestron Residential Monitoring Service on page 626 for details.
- The new control processor must be connected to the same network and have the same subnet mask as the old control processor. Using a private switch and connecting all devices to it is best.
- Write down the Hostname of the old control processor. The hostname will be needed when setting up the new Crestron Home processor.
- Document the credentials for any connected devices. This information will be needed when setting up connections with the new Crestron Home processor. For more information, refer to User Names and Passwords on page 135.
- Migrating from PYNG-HUB to a CP4-R or MC4-R control processor:
    - Audio components, such as audio sources, endpoints, and routing, are not transferred to the new control processor. The audio components must be manually added to the system.
    - Camera tiles do not display in the user interface after migrating to the new control processor. To view the camera tiles, remove the camera and then add it again. For details, refer to Cameras.
- Add a Crestron wireless gateway to the system if the old control processor had an internal wireless gateway and the new processor does not have a gateway.
- Disconnect the Amazon® Alexa® voice control account or the Google Assistant™ voice control account prior to transferring data. To remove voice control service, refer to Remove Voice Control Services on page 612.

    > **NOTE:** The homeowner may need to enter their Amazon or Google credentials to unregister the old processor.

- Lutron RadioRA3, Homeworks QSX, and RA2 Select processors and their configurations cannot migrate to a different Crestron Home processor. During the pairing process, a unique certificate is created that allows communications between the two processors. After migration, the Lutron system must be paired and reconfigured.

Transfer Data

To transfer data with a Deploy code, generate a Deploy code from the old processor and then set up the new processor using the Deploy code.

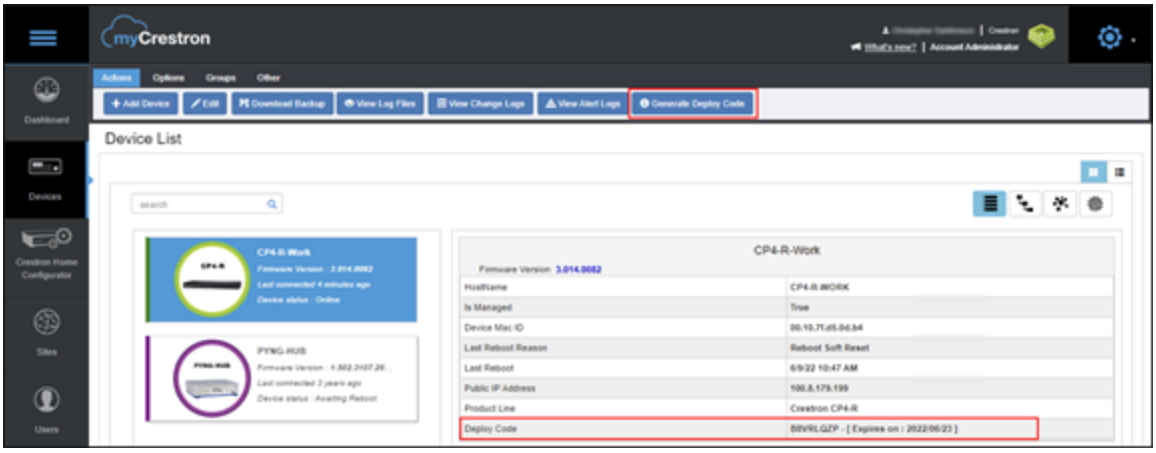
> **NOTE:** Document the IP address of the old processor.

Generate a Deploy Code

To generate a Deploy Code:

1. Go to portal.my.crestron.com.
2. Select **Devices** and then select a processor.
3. The Deploy Code is displayed in the system information. If the deploy code is not shown or to create a new Deploy Code, select **Generate Deploy Code**.

> **NOTE:** The deploy code expires after 14 days.



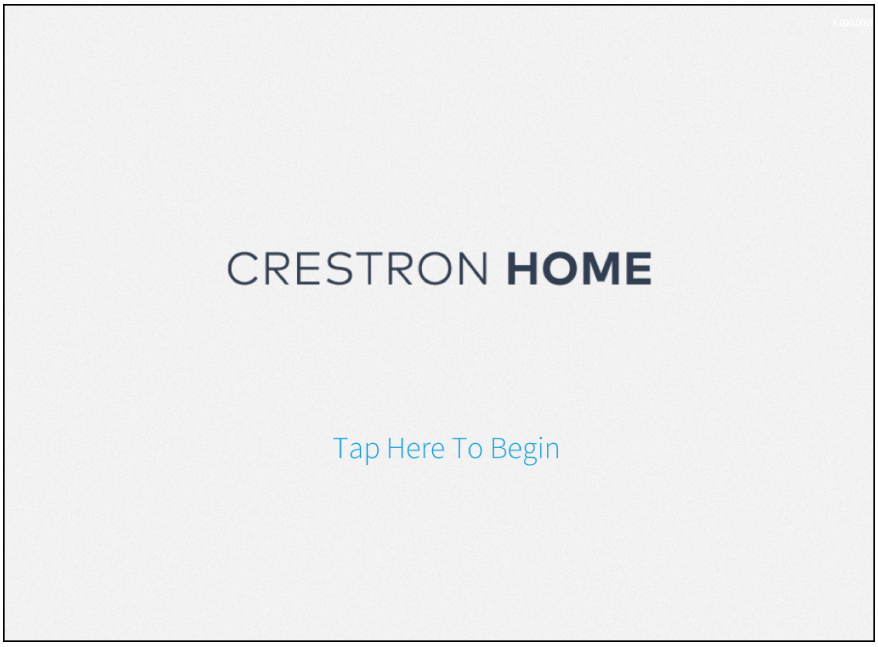
Set Up the Crestron Home System using a Deployment Code

To load the configuration onto a Crestron Home processor:

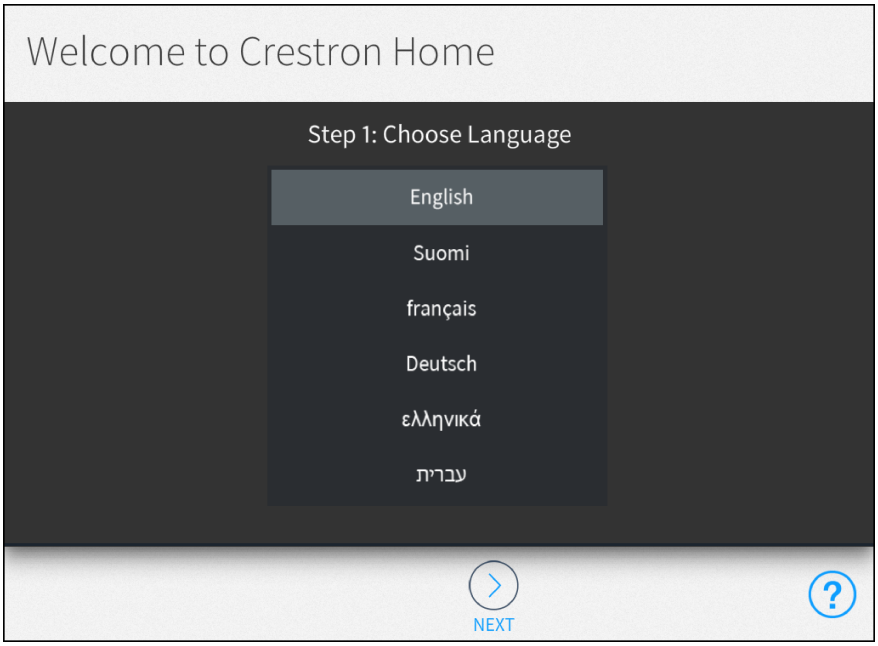
1. Open the Crestron Home Setup app and then connect to the Crestron Home processor.

> **NOTE:** If the Crestron Home Setup app does not connect to the Crestron Home processor automatically, enter the Crestron Home processor's hostname and select **Connect**. The default hostname for a Crestron Home processor is "[Product-Name]-[MAC Address]" (excluding punctuation). For example, "CP4-R-123A567B91C3." The MAC address label is located on the bottom or rear of the device.

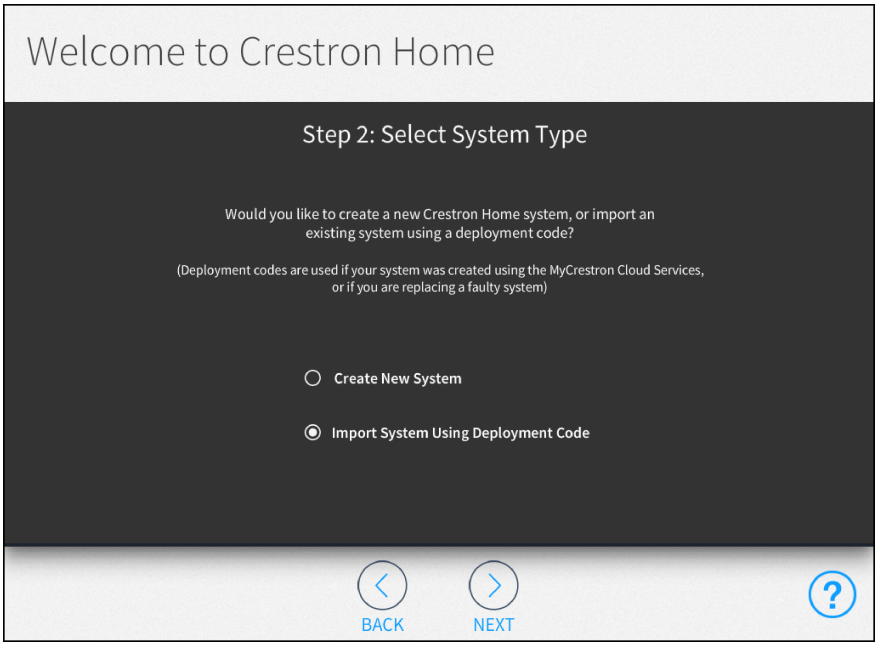
2. The Crestron Home Setup splash screen is displayed. Select **Tap Here to Begin**.



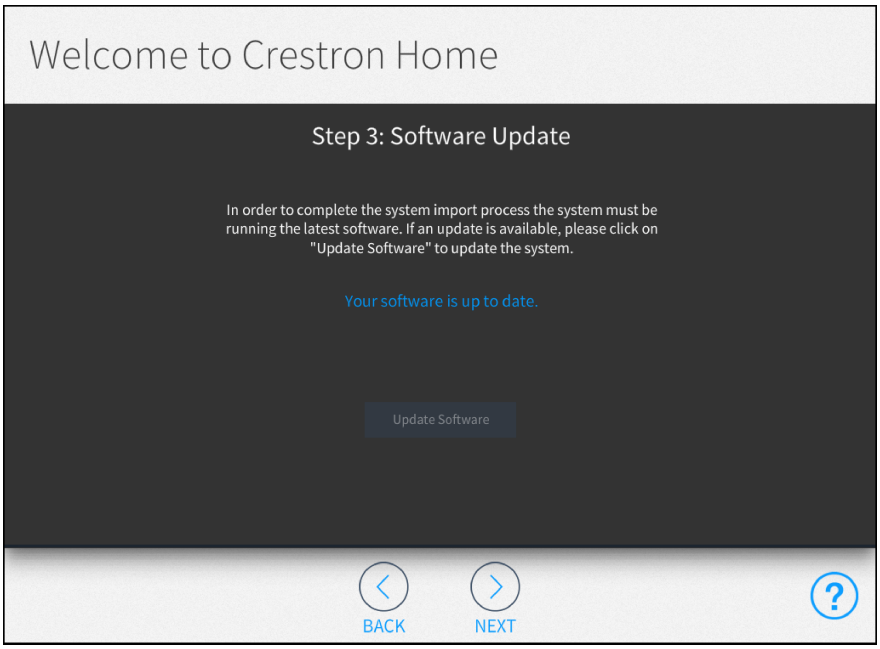
3. Select the language for the Crestron Home Setup app and then **NEXT**.



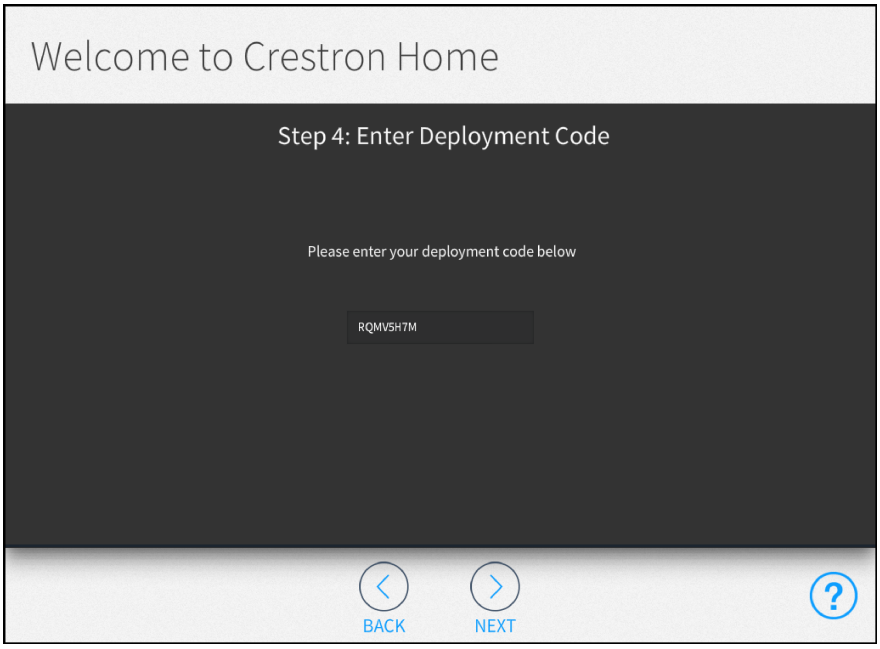
4. Select **Import System Using Deployment Code** and then **NEXT**.



5. The Crestron Home software must be up to date to use a deployment code. If necessary, select **Update Software** to update the software and then **NEXT**.



6. Enter the deployment code that was generated using the myCrestron Residential Monitoring Service and then select **NEXT**. The deployment code is validated.

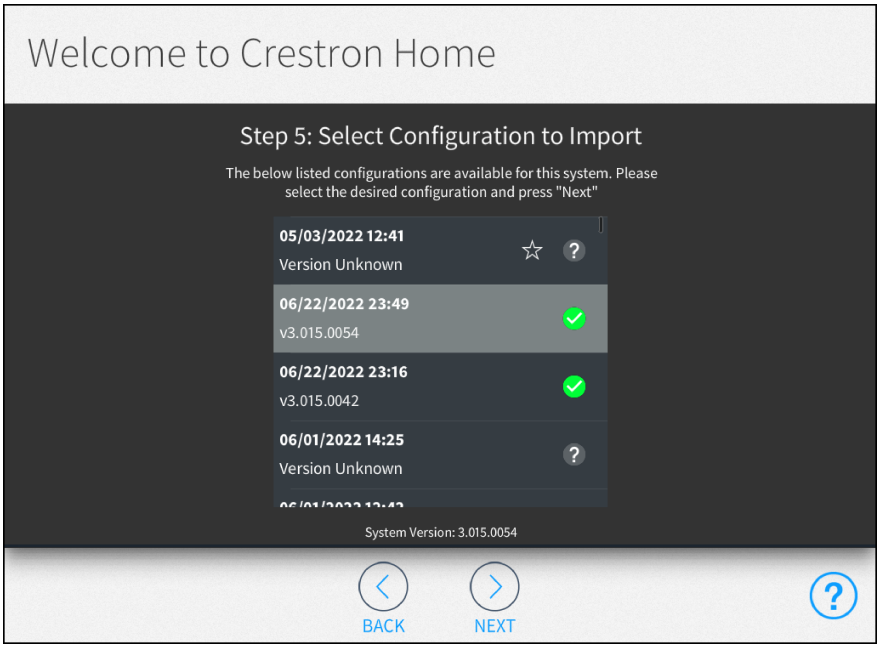


7. Select a configuration and then **NEXT**.

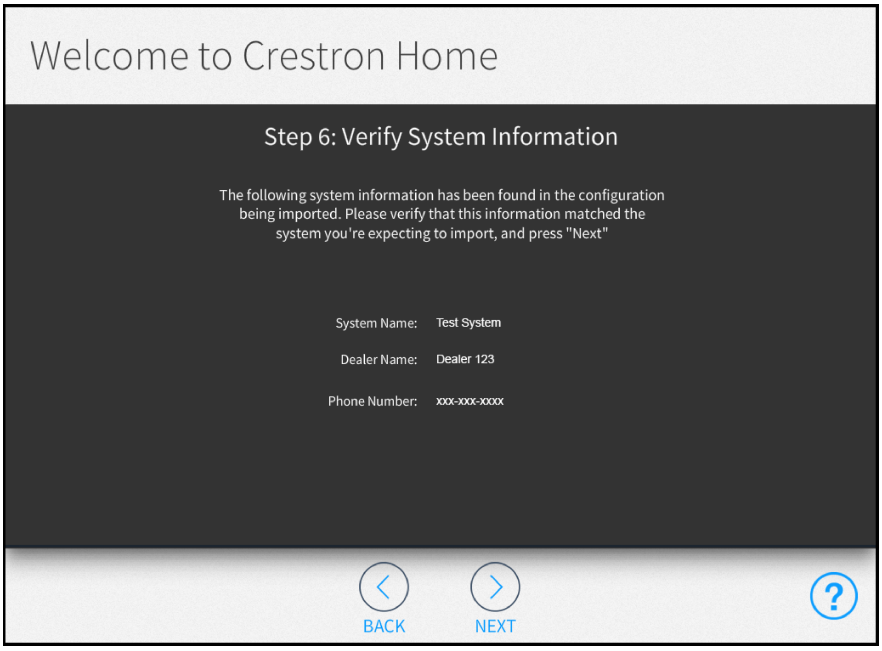
   In the **Select Configuration to Import** menu, select a configuration. The current firmware version of the control processor is displayed below the menu. Each configuration lists the date, time, and firmware version of the backup.

   To restore a backup, the firmware version of the backup must be equal to or lower than the system version. Firmware versions 3.014.0087 or lower are displayed as unknown.

   - **Green Check Icon:** Backup version is equal to or lower than the system version.
   - **Gray ? Icon:** Backup version is unknown.
   - **Red ! Icon:** Backup version is higher than the system version and cannot be restored until the system firmware is upgraded.



8. The configuration is downloaded from the myCrestron Residential Monitoring Service and then displays the system information. To load the system onto the Crestron Home processor, select **NEXT**.



> **NOTES:**
>
> - The **Step 7: Loading System Information** screen is displayed while the system information is loaded onto the Crestron Home processor.
> - The system information is typically loaded to the Crestron Home processor very quickly. The **Step 7: Loading System Information** screen may be visible for a very short period of time.

9. The Crestron Home processor restarts after the system information is fully loaded onto the Crestron Home processor.
10. Update the hostname for the replacement Crestron Home processor.

    The hostname on the replacement control processor must match the hostname of the control processor that was written down during Generate a Deploy Code on page 1503.

    a. Go to **Settings > System Configuration > Ethernet Settings** to view the **Ethernet Settings** screen.
    b. Enter the hostname in the **Host Name** box.
    c. Select **Done** and then **OK** to confirm. The Crestron Home processor applies the new Ethernet settings and then reboots.

11. Restart these system components:
    - **Control processor:** To restart, issue the `reboot` command
    - **DNS server:** In most cases, this is accomplished by restarting the router.
    - **IP Devices:** Restart the touch screens, Ethernet devices, and Wi-Fi network devices in the system.
12. If necessary, perform these steps:
    - Add a new wireless gateway (CEN-GWEXERor CEN-GW1) to the system. For details, refer to Add a Wireless Gateway and Migrate Wireless Devices on page 1510.
    - Register the Crestron Home processor with an Amazon® Alexa® voice control account or a Google Assistant™ voice control account. For details, refer to Voice Control Settings on page 607.

Add a Wireless Gateway and Migrate Wireless Devices

When migrating system data that contains wireless gateway data stored in a Virtual Gateway, transfer the data to a new Crestron wireless gateway.

IMPORTANT:

- **Transferring data from a Virtual Gateway to a Crestron wireless gateway (CEN-GWEXER or CEN-GW1) can be performed once per gateway.**
- **The Crestron wireless gateway can only accept an automatic wireless gateway data migration one time. Wireless gateway data migration will fail if attempting subsequent migrations to the same internal wireless gateway.**
- **To make sure that the Virtual Gateway data can be transferred to the wireless gateway, the wireless gateway should be factory fresh.**

Data can be transferred between these wireless gateways:

		TO	
		CEN-GW1	**CEN-GWEXER**
FROM	**CEN-GW1**	✗	✗
	CEN-GWEXER	✓	✓
	MC4-R Internal infiNET EX wireless gateway	✓	✓
	PYNG-HUB Internal infiNET EX wireless gateway	✓	✓

NOTE: Migration is supported only for wireless gateway data for infiNET EX® wireless devices only. Wireless gateway data for SG wireless devices cannot migrate to a different wireless gateway.

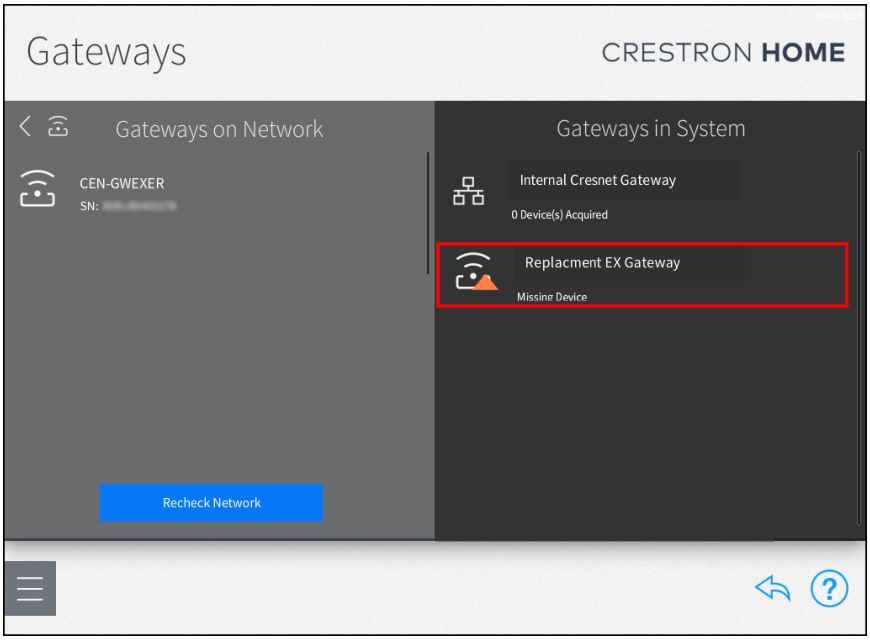
To transfer the Virtual Gateway data to a Crestron wireless gateway:

NOTES:

- The CEN-GWEXER must use firmware v1.4469.00022 or later. To update the firmware, refer to Update Device Firmware on page 624.
- If the Crestron wireless gateway was transferred out of a system, the CEN-GW1 or CEN-GWEXER must acquire devices manually. Refer to Add a Crestron Wireless Device to a Room on page 188 for details.
- Verify that no USB connections are made to the CEN-GW1 or CEN-GWEXER.
- Verify that Crestron software (for example, Crestron Toolbox software) is not connected to the CEN-GW1 or CEN-GWEXER via USB or Ethernet cable.

1. To view the **Pair Devices** screen, select **Pair Devices** on the **Setup** screen or on the setup menu.
2. In the **Device Types** menu, select **Manage Gateways**. The local network is scanned for gateways. Discovered gateways are displayed in the **Gateways on Network** menu.

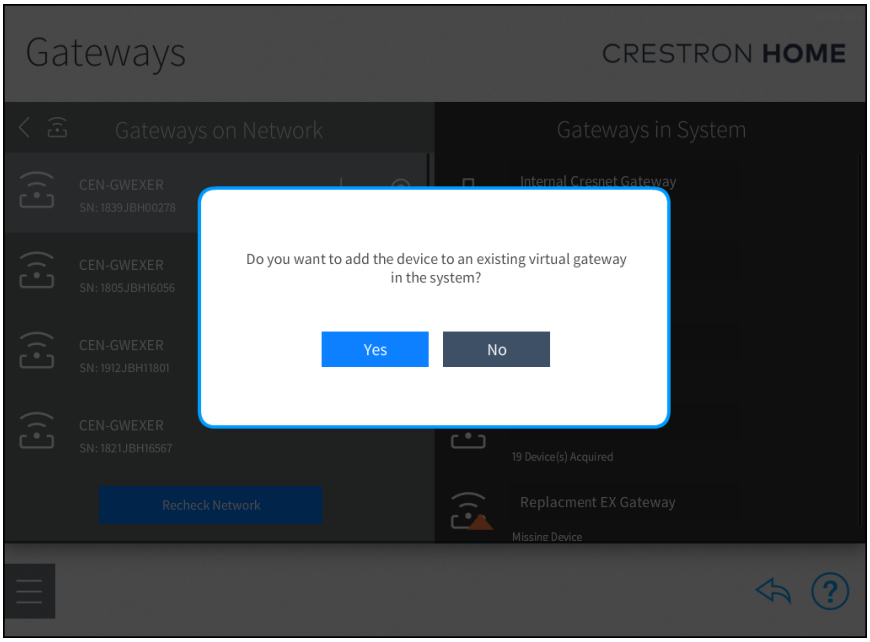
   > **NOTE:** The Virtual Gateway is displayed in the **Gateways in System** menu with a yellow triangle on the device icon and named "Replacement EX Gateway."



   > **NOTE:** To scan the network for new gateways, select **Recheck Network**.

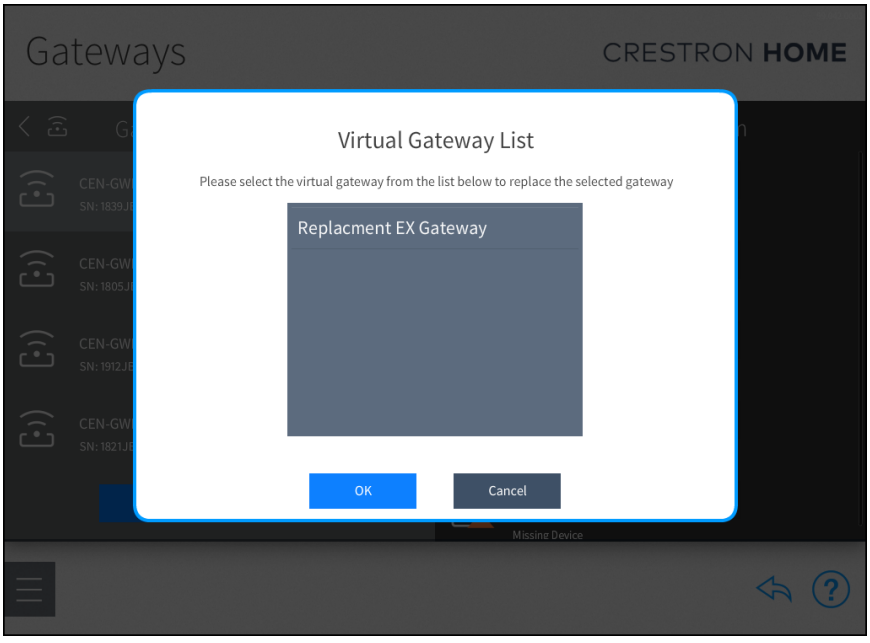
3. In the **Gateways on Network** menu, select a new wireless gateway and then select **Add**.

4. A dialog appears asking if the new wireless gateway is replacing a Virtual Gateway. Select **Yes** to add the new gateway to the system and to transfer data stored in a Virtual Gateway to the new gateway.



> **NOTE:** To add the new gateway without replacing the Virtual Gateway, select **No**. If **No** is selected, all wireless devices will need to be manually added to the system and programmed.

5. Select a Virtual Gateway from the **Virtual Gateway List** and then select **OK**.



6. The data stored in the Virtual Gateway is transferred to the new gateway and the new gateway is displayed in the **Gateways in System** menu.
7. Configure the gateway after it is added to the system. Tap **Settings** next to the device name to display a Settings dialog box. For details, refer to Device Settings on page 1191.

Copy Data between Control Processors

Use an FTP client to transfer system data by copying the data from an old processor and then transferring it to a new processor. The file transfer is performed with an FTP client. The system data is transferred from a control processor to a PC, and then the system data is transferred from the PC to the new control processor. The system data being copied must be previously copied and stored or both control processors must be available.

Transfer data by copying data between the control processors listed below:

		TO					
		CP4-R	**MC4-R**	**PC4-R**	**DIN-AP4-R**	**CP3-R**	**PYNG-HUB**
FROM	**CP4-R**	✓	✓	✓	✓	✗	✗
	MC4-R	✓	✓	✓	✓	✗	✗
	PC4-R	✓	✓	✓	✓	✗	✗
	DIN-AP4-R	✓	✓	✓	✓	✗	✗
	CP3-R	✓	✗	✗	✗	✓	✗
	PYNG-HUB	✗	✗	✗	✗	✗	✗

When migrating system data that contains Crestron wireless devices, the wireless gateway data is either transferred to the control processors internal wireless gateway or stored in a Virtual Gateway.

- **Stored in a Virtual Gateway:** Wireless gateway data is stored in a Virtual Gateway if the old system had an internal wireless gateway and the new system does not or if the old system use external wireless gateway (CP4-R with CEN-GWEXER). For example, during an MC4-R to CP4-R or CP4-R with CEN-GWEXER to MC4-R data migration. To transfer the data to a gateway, refer to Add a Wireless Gateway and Migrate Wireless Devices on page 1522.
- **Transfer to internal gateway:** Wireless gateway data is transferred to the internal wireless gateway automatically if the old and new system have internal wireless gateways. For example, during an MC4-R to MC4-R data migration.

IMPORTANT: When transferring to an internal gateway:

- **The internal wireless gateway can only accept an automatic a wireless gateway data migration one time. Wireless gateway data migration will fail if attempting subsequent migrations to the same internal wireless gateway.**
- **To make sure that the wireless gateway data can be transferred to the wireless gateway, the wireless gateway should be factory fresh.**

Requirements

- If adding an Ethernet-to-Cresnet bridge during the data transfer, the Ethernet-to-Cresnet bridge must be installed and configured prior to the transfer. For details, refer to Migrate Cresnet® Wired Devices to an Ethernet-to-Cresnet Bridge on page 1536.
- The system data being copied must be previously copied from the old processor and stored on a PC or the old and new control processors must be available.
- Write down the Hostname of the old control processor. The hostname will be needed when setting up the new Crestron Home processor.
- Disconnect the Amazon® Alexa® voice control account or the Google Assistant™ voice control account prior to transferring data. To remove voice control service, refer to Remove Voice Control Services on page 612.

  > **NOTE:** The homeowner may need to enter their Amazon or Google credentials to unregister the old processor.

- Lutron RadioRA3, Homeworks QSX, and RA2 Select processors and their configurations cannot migrate to a different Crestron Home processor. During the pairing process, a unique certificate is created that allows communications between the two processors. After migration, the Lutron system must be paired and reconfigured.

Transfer Data

To transfer data by copying data between control processors:

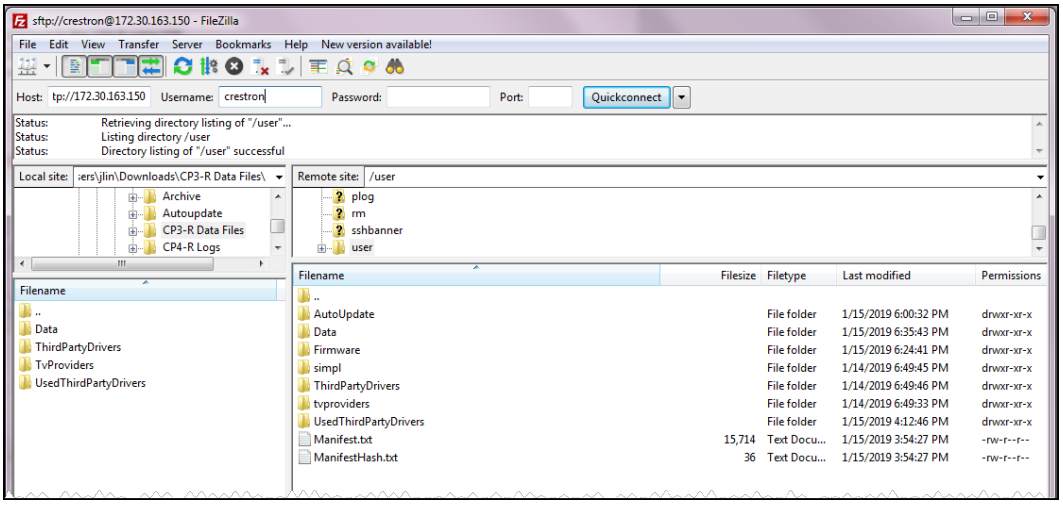
> **NOTES:**
>
> - Transfer files between the PC and the Crestron Home processor using an FTP client.
> - To issue console commands, use the Text Console tool in Crestron Toolbox™ software.

1. On the old processor, issue the `enableprogramcmd` command and then the `stopprog -p:0` command to stop the program.

2. Copy the files from the old processor:
    a. Connect to the old processor using an FTP program. Use SFTP (Secure File Transfer Protocol) and the Admin Credentials for the processor.

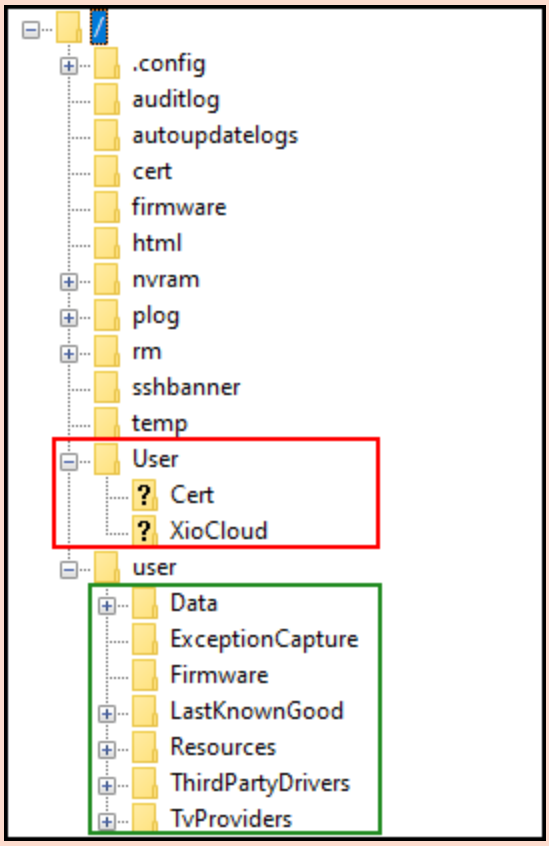
> **NOTE:** The Admin Username and Admin Password is set during the initial processor setup. For information about usernames and passwords, including resetting the username and password, refer to System Detail and Password Configuration on page 566.

Processor Connection over SFTP



b. Go to the **user** folder and copy the contents to your PC. Do not copy the **AutoUpdate** folder.

WARNING: Make sure to copy the correct folder. Do not copy the **User** folder (with the capital U) that contains the Cert and XioCloud folders..



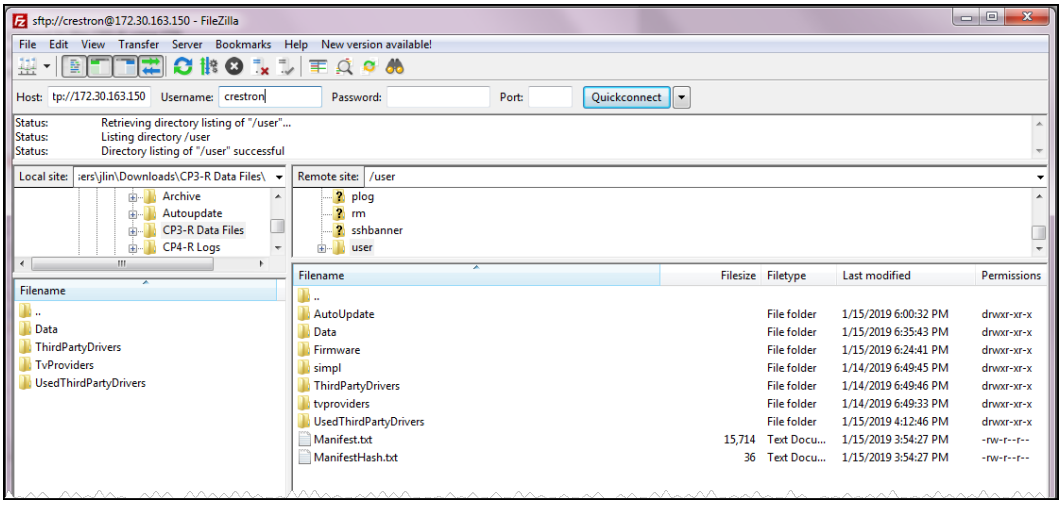
NOTE: The **AutoUpdate** folder was removed from the **user** folder in the Crestron Home 3.004.0071 release.

3. Turn off the old processor and then remove it from the network.
4. On the new processor, issue the `enableprogramcmd` command and then the `stopprog -p:0` command to stop the program.

5. Transfer the files to the new control processor:
    a. Connect to the new processor using an FTP program. Use SFTP (Secure File Transfer Protocol) and the device Admin Credentials for the processor.

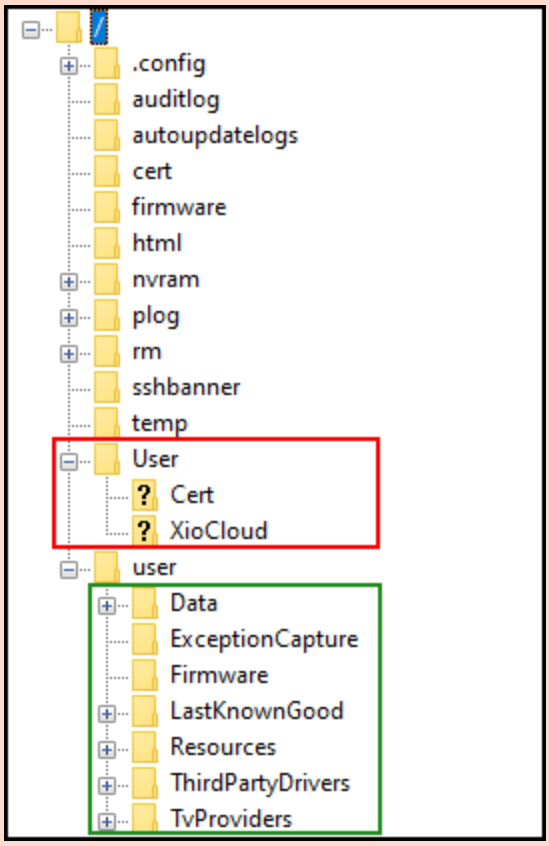
> **NOTE:** The Admin Username and Admin Password is set during the initial processor setup. For information about usernames and passwords, including resetting the username and password, refer to System Detail and Password Configuration on page 566.

Processor Connection over SFTP



b. Go to the **user** folder and delete the contents of the folder. Do not delete the **AutoUpdate** folder.

WARNING: Make sure to delete the correct folder. Do not delete the **User** folder (with the capital U) that contains the Cert and XioCloud folders..



NOTE: The **AutoUpdate** folder was removed from the **user** folder in the Crestron Home 3.004.0071 release.

c. Create a folder named **Data** in the **/user** folder.

d. Transfer the files that were copied to the PC to the **/user/Data** folder on the new processor.

6. On the new processor, issue the `hostname [hostname]` command to change the hostname of the new processor. For `[hostname]`, enter the hostname of the old processor.

7. Restart these system components:
    - **Control processor:** To restart, issue the `reboot` command
    - **DNS server:** In most cases, this is accomplished by restarting the router.
    - **IP Devices:** Restart the touch screens, Ethernet devices, and Wi-Fi network devices in the system.
8. If necessary, perform these steps:
    - Add a new Crestron wireless gateway (CEN-or CEN-GW1) to the system. For details, refer to Add a Wireless Gateway and Migrate Wireless Devices on page 1522.
    - Register the Crestron Home processor with an Amazon® Alexa® voice control account or a Google Assistant™ voice control account. For details, refer to Voice Control Settings on page 607.
    - Restore the connection to the myCrestron DDNS. For details, refer to Replace the Processor Associated with a myCrestron Domain on page 1537.

Add a Wireless Gateway and Migrate Wireless Devices

When migrating system data that contains wireless gateway data stored in a Virtual Gateway, transfer the data to a new Crestron wireless gateway.

IMPORTANT:

- **Transferring data from a Virtual Gateway to a Crestron wireless gateway (CEN-GWEXER or CEN-GW1) can be performed once per gateway.**
- **The Crestron wireless gateway can only accept an automatic wireless gateway data migration one time. Wireless gateway data migration will fail if attempting subsequent migrations to the same internal wireless gateway.**
- **To make sure that the Virtual Gateway data can be transferred to the wireless gateway, the wireless gateway should be factory fresh.**

Data can be transferred between these wireless gateways:

		TO	
		CEN-GW1	**CEN-GWEXER**
FROM	**CEN-GW1**	✗	✗
	CEN-GWEXER	✓	✓
	MC4-R Internal infiNET EX wireless gateway	✓	✓

NOTE: Migration is supported only for wireless gateway data for infiNET EX® wireless devices only. Wireless gateway data for SG wireless devices cannot migrate to a different wireless gateway.

To transfer the Virtual Gateway data to a Crestron wireless gateway:

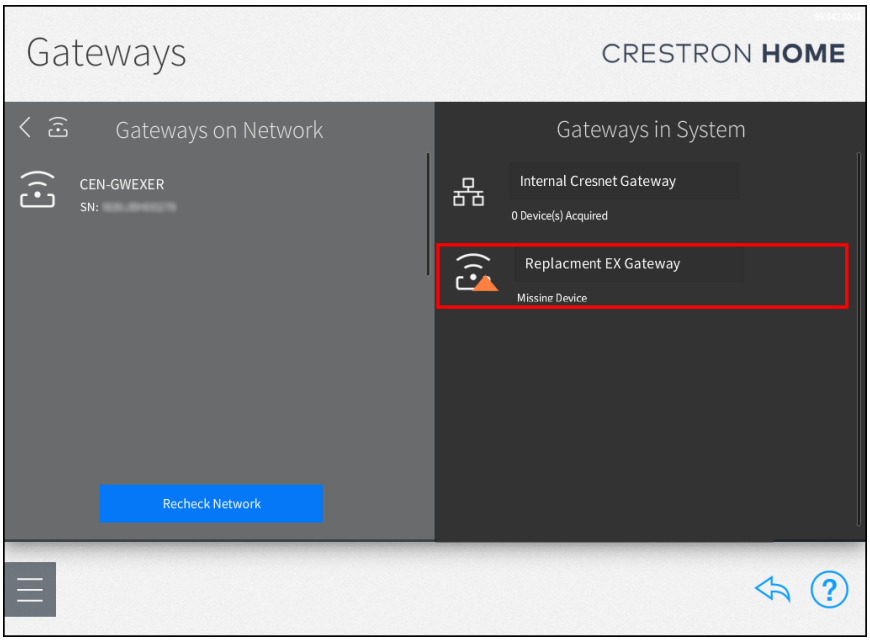
NOTES:

- The CEN-GWEXER must use firmware v1.4469.00022 or later. To update the firmware, refer to Update Device Firmware on page 624.
- If the Crestron wireless gateway was transferred out of a system, the CEN-GW1 or CEN-GWEXER must acquire devices manually. Refer to Add a Crestron Wireless Device to a Room on page 188 for details.
- Verify that no USB connections are made to the CEN-GW1 or CEN-GWEXER.
- Verify that Crestron software (for example, Crestron Toolbox software) is not connected to the CEN-GW1 or CEN-GWEXER via USB or Ethernet cable.

1. To view the **Pair Devices** screen, select **Pair Devices** on the **Setup** screen or  on the setup menu.

2. In the **Device Types** menu, select **Manage Gateways**. The local network is scanned for gateways. Discovered gateways are displayed in the **Gateways on Network** menu.

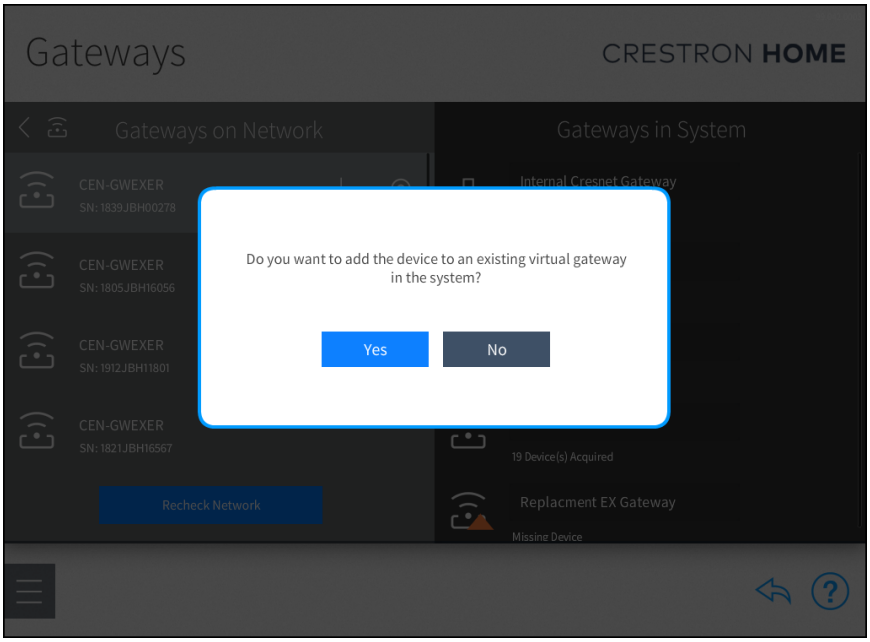
> **NOTE:** The Virtual Gateway is displayed in the **Gateways in System** menu with a yellow triangle on the device icon and named "Replacement EX Gateway."



> **NOTE:** To scan the network for new gateways, select **Recheck Network**.

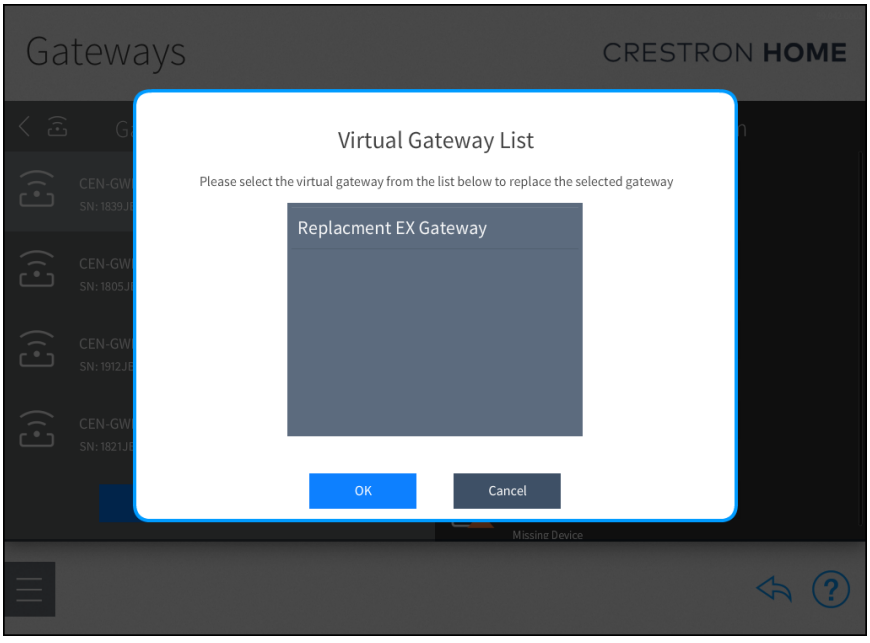
3. In the **Gateways on Network** menu, select a new wireless gateway and then select **Add**.

4. A dialog appears asking if the new wireless gateway is replacing a Virtual Gateway. Select **Yes** to add the new gateway to the system and to transfer data stored in a Virtual Gateway to the new gateway.



> **NOTE:** To add the new gateway without replacing the Virtual Gateway, select **No**. If **No** is selected, all wireless devices will need to be manually added to the system and programmed.

5. Select a Virtual Gateway from the **Virtual Gateway List** and then select **OK**.



6. The data stored in the Virtual Gateway is transferred to the new gateway and the new gateway is displayed in the **Gateways in System** menu.
7. Configure the gateway after it is added to the system. Tap **Settings** next to the device name to display a Settings dialog box. For details, refer to Device Settings on page 1191.

Copy Data from a myCrestron Cloud Backup File

Use an FTP client to transfer system data from a Golden Configuration backup file to a new processor. The Golden Configuration is downloaded from the myCrestron Residential Monitoring Service to a PC, and then the data from the Golden Configuration is transferred from the PC to the new control processor. The Crestron Home processor system data must be backed up using the myCrestron Residential Monitoring Service or the Golden Configuration backup file must be previously downloaded and stored.

Transfer data by copying data from a cloud backup file to the control processors listed below:

		TO					
		CP4-R	**MC4-R**	**PC4-R**	**DIN-AP4-R**	**CP3-R**	**PYNG-HUB**
FROM	**CP4-R**	✓	✓	✓	✓	✗	✗
	MC4-R	✓	✓	✓	✓	✗	✗
	PC4-R	✓	✓	✓	✓	✗	✗
	DIN-AP4-R	✓	✓	✓	✓	✗	✗
	CP3-R	✓	✗	✗	✗	✓	✗
	PYNG-HUB	✗	✗	✗	✗	✗	✗

When migrating system data that contains Crestron wireless devices, the wireless gateway data is either transferred to the control processors internal wireless gateway or stored in a Virtual Gateway.

- **Stored in a Virtual Gateway:** Wireless gateway data is stored in a Virtual Gateway if the old system had an internal wireless gateway and the new system does not or if the old system use external wireless gateway (CP4-R with CEN-GWEXER). For example, during an MC4-R to CP4-R or CP4-R with CEN-GWEXER to MC4-R data migration. To transfer the data to a gateway, refer to Add a Wireless Gateway and Migrate Wireless Devices on page 1532.
- **Transfer to internal gateway:** Wireless gateway data is transferred to the internal wireless gateway automatically if the old and new system have internal wireless gateways. For example, during an MC4-R to MC4-R data migration.

IMPORTANT: When transferring to an internal gateway:

- **The internal wireless gateway can only accept an automatic a wireless gateway data migration one time. Wireless gateway data migration will fail if attempting subsequent migrations to the same internal wireless gateway.**
- **To make sure that the wireless gateway data can be transferred to the wireless gateway, the wireless gateway should be factory fresh.**

Requirements

- If adding an Ethernet-to-Cresnet bridge during the data transfer, the Ethernet-to-Cresnet bridge must be installed and configured prior to the transfer. For details, refer to Migrate Cresnet® Wired Devices to an Ethernet-to-Cresnet Bridge on page 1536.
- The old processor must be connected to the myCrestron Residential Monitoring Service prior to using a deployment code. For details, refer to myCrestron Residential Monitoring Service on page 626.
- Disconnect the Amazon® Alexa® voice control account or the Google Assistant™ voice control account prior to transferring data. To remove voice control service, refer to Remove Voice Control Services on page 612.

  > **NOTE:** The homeowner may need to enter their Amazon or Google credentials to unregister the old processor.

- Lutron RadioRA3, Homeworks QSX, and RA2 Select processors and their configurations cannot migrate to a different Crestron Home processor. During the pairing process, a unique certificate is created that allows communications between the two processors. After migration, the Lutron system must be paired and reconfigured.

Transfer Data

To transfer with a myCrestron cloud backup file:

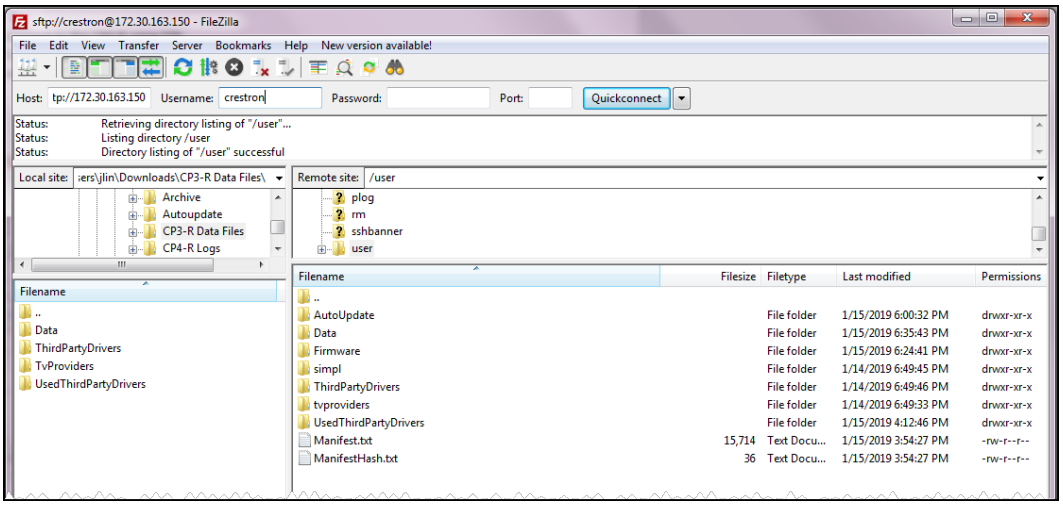
> **NOTES:**
>
> - Transfer files between the PC and the Crestron Home processor using an FTP client.
> - To issue console commands, use the Text Console tool in Crestron Toolbox™ software.

1. Download a configuration backup from the myCrestron Residential Monitoring Service and then extract the zip file. To download a backup, refer to Download Backup Files on page 635.
2. On the old processor, issue the `enableprogramcmd` command and then the `stopprog -p:0` command to stop the program.
3. Transfer the golden configuration files to the new control processor:

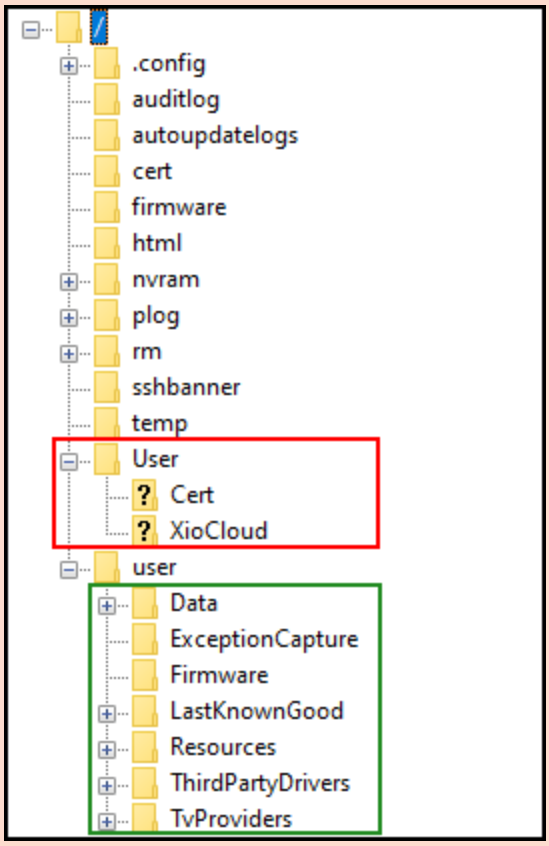
a. Connect to the new processor using an FTP program. Use SFTP (Secure File Transfer Protocol) and the Admin Credentials for the processor.

> **NOTE:** The Admin Username and Admin Password is set during the initial processor setup. For information about usernames and passwords, including resetting the username and password, refer to System Detail and Password Configuration on page 566.

Processor Connection over SFTP



b. Go to the **user** folder and delete the contents of the folder. Do not delete the **AutoUpdate** folder.

> **WARNING:** Make sure to delete the correct folder. Do not delete the **User** folder (with the capital U) that contains the Cert and XioCloud folders..
>
> 
>

> **NOTE:** The **AutoUpdate** folder was removed from the **user** folder in the Crestron Home 3.004.0071 release.

c. Create a folder named **Data** in the **/user** folder.

d. Transfer the files that were extracted from the zip file to the **/user/Data** folder on the new processor.

4. On the new processor, issue the `hostname [hostname]` command to change the hostname of the new processor. For `[hostname]`, enter the hostname of the old processor.

5. Restart these system components:
    - **Control processor:** To restart, issue the `reboot` command
    - **DNS server:** In most cases, this is accomplished by restarting the router.
    - **IP Devices:** Restart the touch screens, Ethernet devices, and Wi-Fi network devices in the system.
6. If necessary, perform these steps:
    - Add a new wireless gateway (CEN-or CEN-GW1) to the system. For details, refer to Add a Wireless Gateway and Migrate Wireless Devices on page 1532.
    - Register the Crestron Home processor with an Amazon® Alexa® voice control account or a Google Assistant™ voice control account. For details, refer to Voice Control Settings on page 607.
    - Restore the connection to the myCrestron DDNS. For details, refer to Replace the Processor Associated with a myCrestron Domain on page 1537.

Add a Wireless Gateway and Migrate Wireless Devices

When migrating system data that contains wireless gateway data stored in a Virtual Gateway, transfer the data to a new Crestron wireless gateway.

IMPORTANT:

- **Transferring data from a Virtual Gateway to a Crestron wireless gateway (CEN-GWEXER or CEN-GW1) can be performed once per gateway.**
- **The Crestron wireless gateway can only accept an automatic wireless gateway data migration one time. Wireless gateway data migration will fail if attempting subsequent migrations to the same internal wireless gateway.**
- **To make sure that the Virtual Gateway data can be transferred to the wireless gateway, the wireless gateway should be factory fresh.**

Data can be transferred between these wireless gateways:

		TO	
		CEN-GW1	**CEN-GWEXER**
FROM	**CEN-GW1**	✗	✗
	CEN-GWEXER	✓	✓
	MC4-R Internal infiNET EX wireless gateway	✓	✓

NOTE: Migration is supported only for wireless gateway data for infiNET EX® wireless devices only. Wireless gateway data for SG wireless devices cannot migrate to a different wireless gateway.

To transfer the Virtual Gateway data to a Crestron wireless gateway:

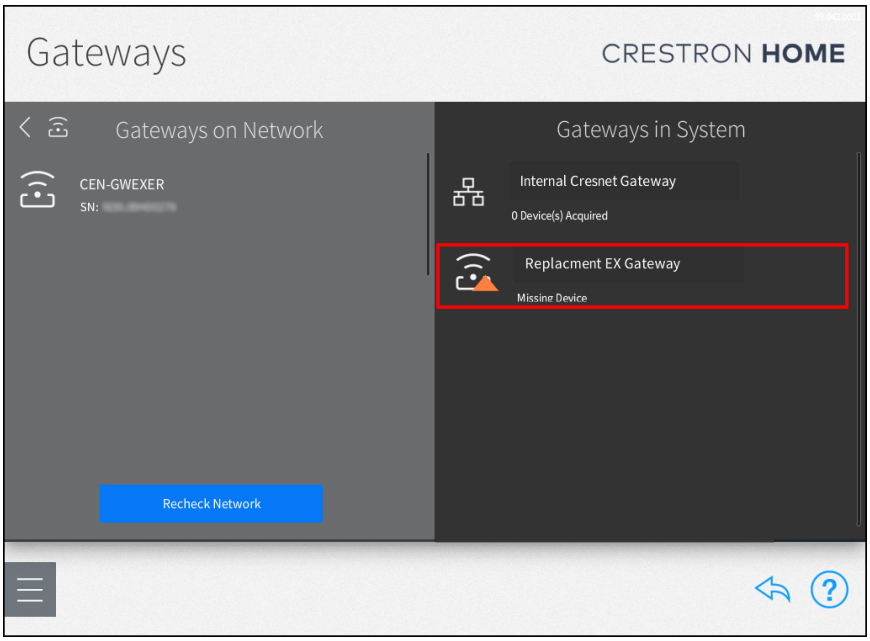
NOTES:

- The CEN-GWEXER must use firmware v1.4469.00022 or later. To update the firmware, refer to Update Device Firmware on page 624.
- If the Crestron wireless gateway was transferred out of a system, the CEN-GW1 or CEN-GWEXER must acquire devices manually. Refer to Add a Crestron Wireless Device to a Room on page 188 for details.
- Verify that no USB connections are made to the CEN-GW1 or CEN-GWEXER.
- Verify that Crestron software (for example, Crestron Toolbox software) is not connected to the CEN-GW1 or CEN-GWEXER via USB or Ethernet cable.

1. To view the **Pair Devices** screen, select **Pair Devices** on the **Setup** screen or  on the setup menu.

2. In the **Device Types** menu, select **Manage Gateways**. The local network is scanned for gateways. Discovered gateways are displayed in the **Gateways on Network** menu.

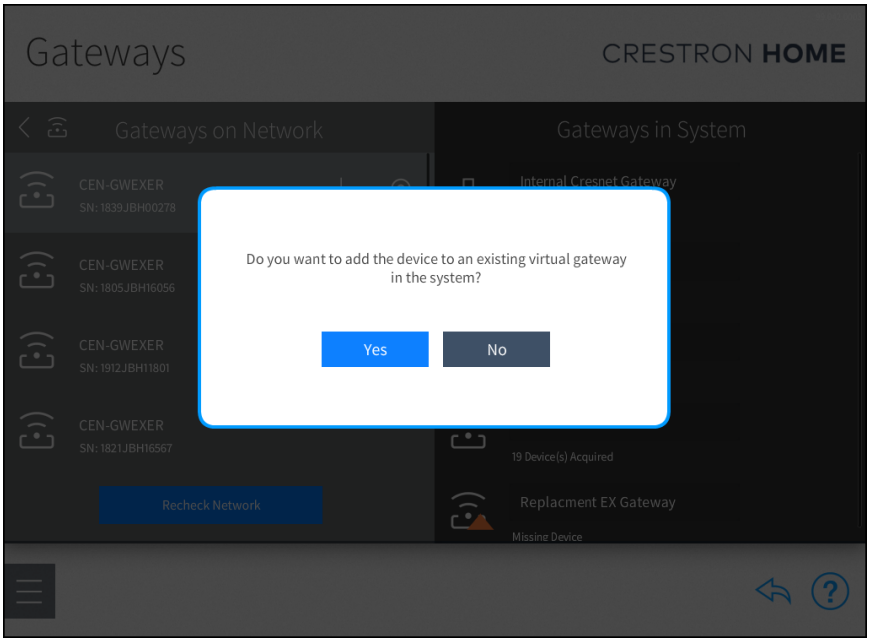
> **NOTE:** The Virtual Gateway is displayed in the **Gateways in System** menu with a yellow triangle on the device icon and named "Replacement EX Gateway."



> **NOTE:** To scan the network for new gateways, select **Recheck Network**.

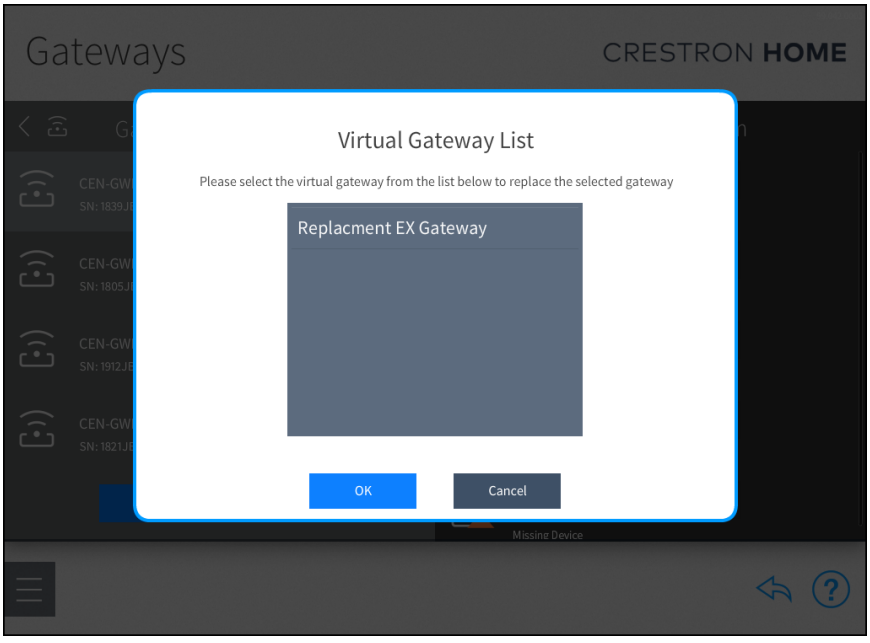
3. In the **Gateways on Network** menu, select a new wireless gateway and then select **Add**.

4. A dialog appears asking if the new wireless gateway is replacing a Virtual Gateway. Select **Yes** to add the new gateway to the system and to transfer data stored in a Virtual Gateway to the new gateway.



> **NOTE:** To add the new gateway without replacing the Virtual Gateway, select **No**. If **No** is selected, all wireless devices will need to be manually added to the system and programmed.

5. Select a Virtual Gateway from the **Virtual Gateway List** and then select **OK**.



6. The data stored in the Virtual Gateway is transferred to the new gateway and the new gateway is displayed in the **Gateways in System** menu.
7. Configure the gateway after it is added to the system. Tap **Settings** next to the device name to display a Settings dialog box. For details, refer to Device Settings on page 1191.

Migrate Cresnet® Wired Devices to an Ethernet-to-Cresnet Bridge

To migrate Cresnet® wired devices to an Ethernet-to-Cresnet bridge:

> **TIP:** The physical Cresnet connection must be moved before migrating the system data. Otherwise, the replace device process will need to be followed for each device. If the device does not support the Replace Device function, it will need to be readded and programming will be lost.

1. Use the Crestron Home Setup to add an Ethernet-to-Cresnet bridge to the system. For details, refer to Gateways and Processors on page 280.
2. Disconnect the Cresnet cable connections:
    a. Disconnect the Cresnet cable from the Cresnet ports on the processor.
    b. In the Crestron Home Setup app, go to **Pair Devices > Internal Cresnet Gateway** and then scan for devices. The Cresnet devices will appear to be offline or missing. For details, refer to Crestron Wired and Wi-Fi Devices on page 193.
3. Connect the Cresnet cable that was disconnected from the control processor's Cresnet port to a Cresnet port on the Ethernet-to-Cresnet Bridge.
4. In the Crestron Home Setup app, go to **Pair devices**, select the Ethernet-to-Cresnet bridge, and then scan for devices. The Cresnet devices will be identified and come back online. For details, refer to Crestron Wired and Wi-Fi Devices on page 193.
5. Create a Deploy code and migrate the system data. For details, refer to Transfer Data using a Deploy Code (Recommended) on page 1501.

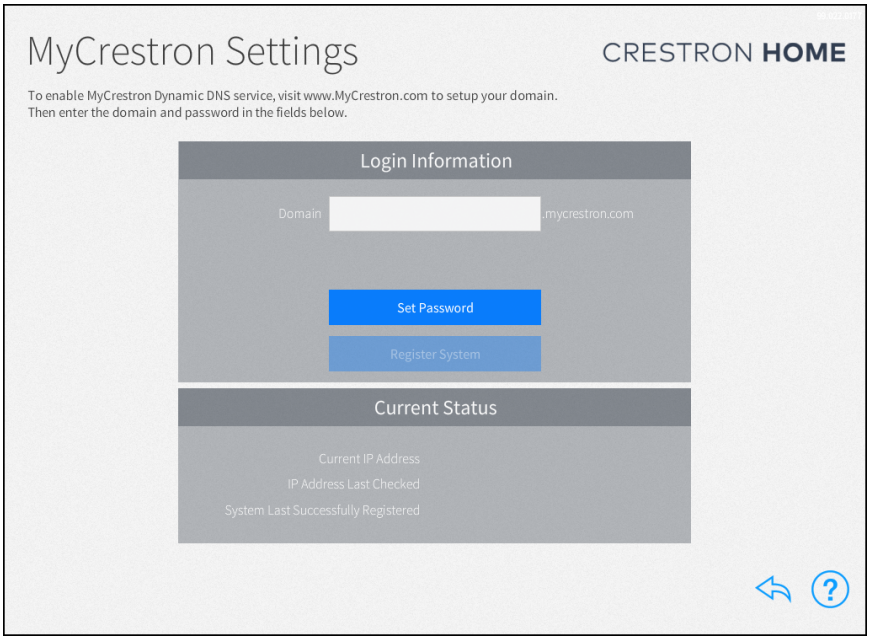
Replace the Processor Associated with a myCrestron Domain

Replace the control processor associated with a myCrestron domain using the Crestron Home Setup app or the Text Console tool in Crestron Toolbox™ Software.

Replace Using the Crestron Home Setup App

To replace the control processor associated with a myCrestron domain using the Crestron Home Setup app:

1. On the old processor, go to **Settings > System Control Options > myCrestron Dynamic DNS** and then write down the domain shown for the old processor.



2. Turn off and then disconnect the old processor from the network.
3. Disassociate the old processor's MAC address from the myCrestron domain:
   a. Go to myCrestron.com.
   b. Find and open the domain associated with the old processor.
   c. In the **Utilities** section, select **Clear Mac Address**.
4. On the new processor, do the following:
   a. Go to **Settings > System Control Options > myCrestron Dynamic DNS**.
   b. Enter the domain for the old processor.
   c. Select **Set Password** and then enter the password.
   d. Select **Register System**.

Replace Using Text Console

> **NOTE:** To issue console commands, use the Text Console tool in Crestron Toolbox™ software.

To replace the control processor associated with a myCrestron domain using Text Console:

1. On the old processor, use issue the `mycrestron` command and then write down the myCrestron domain for the old processor.
2. Turn off and then disconnect the old processor from the network.
3. Disassociate the old processor's MAC address from the myCrestron domain:
    a. Go to myCrestron.com.
    b. Find and open the domain associated with the old processor.
    c. In the **Utilities** section, select **Clear Mac Address**.
4. On the new processor, issue the `mycrestron [domain] [password]` command. For `[domain]`, enter the domain name for the old processor. For `[password]`, enter the password associated with the myCrestron domain.
5. Issue the `mycrestron` command and confirm the settings.

Downgrade MC4-R Firmware Version to 3.003.0035 or Earlier

IMPORTANT:

Do not perform this procedure unless it is recommended by Crestron Technical Support.

The MC4-R's built-in infiNET EX radio firmware was upgraded with the release of Crestron Home version 3.004.0071 and is not backwards compatible. If it is necessary to downgrade the MC4-R control processor firmware from 3.004.0071 or later to 3.003.0035 or earlier, downgrade the infiNET EX radio firmware prior to downgrading control processor firmware.

To downgrade the MC4-R control processor firmware, follow these steps:

NOTES:

- Transfer files between the PC and the Crestron Home processor using an FTP client.
- To issue console commands, use the Text Console tool in Crestron Toolbox™ software.

1. Download the PUF file containing the desired MC4-R control processor firmware (3.003.0035 or earlier) and then transfer it to the MC4-R's /Firmware folder.
2. Identify the radio stacks that are supported and record the index number for version 5810. To view the radio stacks, enter the following command:

   ```
   rfsystem
   ```

   The console displays the following:

   ```
   upload NCP app image with the gateway builtin version
   RFSYSTEM [STACK INDEX]
   List of Radio Stacks Supported
   Index Version
   --------------
   [1] 5810
   [2] 6230
    System is currently running version 6230
   ```

3. Downgrade the infiNET EX radio firmware to version 5810. To downgrade, enter the following command:

```
rfsystem [index]
```

> **NOTE:** It may take several minutes for the process to complete.

4. Verify that the radio firmware was successfully downgraded to version 5810. To verify, enter the following command:

```
rfsystem
```

If the downgrade is successful, the console displays the following:

```
System is currently running version 5810
```

> **NOTE:** Crestron Home version 3.003.0035 and earlier does not display the version number when the `rfsystem` command is used.

5. **Do not restart the MC4-R control processor prior to downgrading the processor firmware. If the processor restarts, the firmware downgrade reverts while the control processor boots.**
6. Downgrade the MC4-R control processor firmware to version 3.003.0035 or earlier. To downgrade, enter the following command:

```
puf all
```

How to Create Images for the Crestron Home App

Custom images can be used in Crestron Home. Images may represent the residence that the Crestron Home system is installed in or a room within the residence.

Keep the following in mind when creating custom images:

- Plan Pictures Accordingly

  On most user interface devices, the picture will be displayed in a wide band.

  Images with a landscape orientation may display better than portrait orientation.

  A panoramic picture is not necessary.
- Use the Preview

  The Crestron Home app displays a preview of the cropped image.

  Use the preview to find the best location to crop the image.
- Use a Quality Camera

  Use a digital camera to create high quality images.

  The built-in camera on your phone or tablet may produce acceptable image. Verify the images are acceptable before use.
- Images are synchronized across all user interface devices. After an image is selected for a room it will be seen on all other user interface devices connected to the Crestron Home system. Review the images on each user interface device to ensure that the image is acceptable on all devices.
- Keep the Camera Steady

  For the best quality photos, use a tripod to keep the camera steady.
- Optimize the Lighting

  Turn on as many lights as possible to create the best image.

  Take all of the pictures when there is good exterior lighting.

  For example, the bright morning light tends to look great for rooms with windows. Try to take all of the room pictures at the same time so you have consistent lighting for the rooms with windows. If pictures of eastern facing windows are taken in the morning, west facing windows may need to be photographed in the afternoon.
- Use Existing Pictures

  Existing real estate pictures can be used since they often times are high quality images. Make sure that you have the rights to use these pictures.

  Coordinate with the homeowner to verify that the images accurately represent the room.

- Maintain Backups

  Keep a backup of the final set of room images. The homeowner has the ability to change the images and the only way to restore the image is to add it back to the system.

  Crestron Home configurations that are backed up to the cloud contain a copy of the room images so please make sure you register each Crestron Home processor with the myCrestron cloud. Otherwise, you will not be able to retrieve the system configuration later.
- We can't cover all of the best photography tips in this document, but there are a wealth of resources on the internet.The same type of internet content that describes how to get great room pictures for real estate also tends to apply to getting great looking room images for the Crestron Home app.

Security System Configuration

The following security systems can be configured for use with the Crestron Home system:

- Honeywell Security System
- Interlogix Security System
- Texecom Security System
- DSC Security System

Honeywell Security System

The Honeywell security system must be configured to work with the Crestron Home system. Setup is performed using a Vista keypad with Alpha display (such as the Vista 6160).

> **NOTE:** The Honeywell 4232CBM module is required in order to use Crestron Home system with a Honeywell Vista security system.

Models

The following models are supported:

- VISTA-128FBPT
- VISTA-128BPT
- VISTA-128BPTSIA
- VISTA-15P (Firmware 9.1 or higher required)
- VISTA-15PSIA (Firmware 9.1 or higher required)
- VISTA-20P (Firmware 9.1 or higher required)
- VISTA-20PSIA (Firmware 9.1 or higher required)
- VISTA-21iP (Firmware 3.13 or higher required)
- VISTA-21iPSIA (Firmware 3.13 or higher required)
- VISTA-250BPT (Firmware 10.3 or higher required)
- VISTA-250FBPT

> **NOTE:** The systems listed above support keypad emulation. They do not support an area list for systems that support areas, area control to arm or disarm the system (including storing the password on the UI device), programming area arm or disarm events, and triggering area commands from button or trigger events via scenes.

Wiring

The Honeywell 4232CBM interface card should be connected to the Crestron Home system as shown below:

Crestron Home System	Honeywell 4232CBM
GND	GND
TX	RX
RX	TX

Setup

Setup is different based on the model of the system.

VISTA-15P, VISTA-15PSIA, VISTA-20P, VISTA-20PSIA, VISTA-21iP, VISTA-21iPSIA

> **NOTE:** Do not include leading zeros (0) when entering values.

1. Enter [Installer Code]+800 to enter Programming mode. For example, if the Installer Code is 1234, enter 1234+800.
2. Press #91 to view the settings in the Options Selection menu. The Options Selection menu displays [Options] and [Call-Waiting] values. Write down the Options value that is displayed. This number will be entered in the following step.
3. Press *91 to change the Options Selection settings. Enter [Options]+[Call-Waiting] to assign the option and call waiting values.
    - Options: Enter the Options value that was written down in the previous step.
    - Call Waiting: To enable call waiting, enter 2. To disable call waiting, enter 3.

      > **NOTE:** The call waiting selection will only have an effect on systems with an SIA in the model number, but it must still be entered on all systems.
4. Press #190 to view the settings in the Keypad 2 Device Address 17 menu. The Keypad 2 Device Address menu displays the [Partition-Number] and [Sound] values. Write down the Partition Number value that is displayed. This number will be entered in the following step.
5. Press *190 to change the Keypad 2 Device Address 17 settings. Enter 5+[Sound] to set the Partition Number to Partition 1 for Remote Services Sound to the value written down in the previous step.
6. Press #189 to view the settings in the Touch Screen Device (AUI) Enable menu. The Touch Screen Device (AUI) Enable menu displays [AUI 1], [AUI 2], [AUI 3], and [AUI 4] values. Write down the AUI 2, AUI 3, and AUI 4 values that are displayed. These numbers will be entered in the following step.
7. Press *189 to change the Touch Screen Device (AUI) Enable settings. Enter 5+[AUI 2] + [AUI 3] + [AUI 4] to set AUI 1 to 5 and to set AUI2, AUI 3, and AUI 4 to the values that were written down in the previous step.
8. Press *99 to exit programming mode. After the system resets, it should be ready for use with the Crestron Home system.

VISTA-128BPT, VISTA-128BPTSIA, VISTA-32FBPT, VISTA-128FBPT, VISTA-250FBPT, FA1660CT, VISTA-250BPT

1. Enter [Installer Code]+800 to enter Programming mode. For example, if the Installer Code is 1234, enter 1234+800.
2. Press #+93 to enter Menu Mode and then press 0 until DEVICE PROG? is displayed on the screen.
3. Press 1 to enter Device Programming mode and display the DEVICE ADDRESS screen.

4. On the DEVICE ADDRESS screen, program address 25:
    a. Press 25 and then * to program device address 25.
    b. Press 12 to set the device type to Remote Interactive Service (RIS).
    c. Press * to return to the DEVICE ADDRESS screen.
5. On the DEVICE ADDRESS screen, program address 5:
    a. Press 05 and then * to program address 5.
    b. Press 01 and then * to set the device type to Alpha Keypad.
    c. Press 1 and then * to assign the device to Partition 1.
    d. Press * until AUI ? is displayed on the screen. Press 1 and then * to set the device as a graphic/touch-screen keypad and return to the DEVICE ADDRESS screen.
6. On the DEVICE ADDRESS screen, program address 6:
    a. Press 06 and then * to program address 6.
    b. Press 01 and then * to set the device type to Alpha Keypad.
    c. Press 1 and then * to assign the device to Partition 1.
    d. Press * until AUI ? is displayed on the screen. Press 1 and then * to set the device as a graphic/touch-screen keypad and return to the DEVICE ADDRESS screen.
    e. Press 00* then press 1 to exit the DEVICE ADDRESS screen.
7. Press *99 to exit Device Programming mode. After the system resets, it will be ready for use with the Crestron Home system.

Set the Keypad Address

> **NOTE:** The Crestron Home system communicates with the security system over address 1 and 17 for commercial installations and 5 and 6 for residential installations. Do not assign a keypad to address 1 and 17 for commercial installations and 5 and 6 for residential installations.

1. Power up the keypad and (within 60 seconds) press and hold the 1 and 3 keys at the same time for 3 seconds. The keypad enters Address mode.
2. Enter the two digit keypads address for the keypad.

    > **NOTE:** The first keypad address is 16.

3. Press * to save the keypad address and exit Address mode.

Configuring Multiple Keypads

For systems with multiple keypads, do not assign keypad address 17 to any keypad. TheCrestron Home system uses address 17 to communicate with the Honeywell system.

NOTES:

- The Crestron Home system communicates with the security system over address 1 and 17 for commercial installations and 5 and 6 for residential installations. Do not assign a keypad to address 1 and 17 for commercial installations and 5 and 6 for residential installations.
- Keypad address 16 is factory enabled and cannot be disabled. Reserve this address for physical keypads.

Check Keypad Addresses

To view the keypad address and verify that a keypad address is enabled:

1. Enter [Installer Code]+800 to enter Programming mode. For example, if the Installer Code is 1234, enter 1234+800.
2. Enter the #+[Keypad-Address-Code] for the Keypad Address that you want to check:

Keypad Address Code	Keypad Address
190	17
191	18
192	19
193	20
194	21
195	22
196	23

3. They keypad displays the [Partition-Number] and [Sound] values. If the partition number is 01 or higher, the keypad address is enabled. If the partition number is 00, the keypad address is disabled.

Change a Keypad Address

1. Enter [Installer Code]+800 to enter Programming mode. For example, if the installer code is 1234, enter 1234+800.

2. Enter *+[Keypad-Address-Code]+[Partition-Number]+[Sound] to assign a keypad address, partition number, and sound value for the keypad. The keypad beeps to confirm the entry. For example, to assign keypad address 20, partition 1, and no suppression, enter *+193+1+0:
    a. Keypad Address Code: The address for the keypad.

Keypad Address Code	Keypad Address
190	17
191	18
192	19
193	20
194	21
195	22
196	23

    b. Partition Number: The partition where the keypad is located.
    c. Sound: The sound suppression value. The sound value 0 (no suppression) is common. Refer to the Honeywell documentation for the sound options.

Interlogix Security System

The Interlogix security system must be configured to work with the Crestron Home system.

> **NOTE:** The Interlogix NX-587e virtual keypad module is required in order to use Crestron Home system with an Interlogix security system .

Models

The following models are supported:

- NetworX NX-4
- NetworX NX-4V2
- NetworX NX-6
- NetworX NX-6V2
- NetworX NX-8
- NetworX NX-8E
- NetworX NX-8V2

> **NOTE:** The systems listed above support keypad emulation. They do not support an area list for systems that support areas, area control to arm or disarm the system (including storing the password on the UI device), programming area arm or disarm events, and triggering area commands from button or trigger events via scenes.

Wiring

The Honeywell 4232CBM interface card should be connected to the Crestron Home system as shown below:

> **NOTE:** The serial port is configured to communicate at 9,600 baud, 8 data bits, 1 stop bit, and no parity. There is no hardware or software flow control.

Crestron Home System	Interlogix NX-587e (DB9F)
GND	Pin 5
TX	Pin 2
RX	Pin 3

The Interlogix NX-587e requires a RJ-14 (6-pin) telco cable to tie the adapter into the control panel.

RJ-14 (6-Pin)	Interlogix Control Panel Keypad Connection
GND	Pin 5

RJ-14 (6-Pin)	Interlogix Control Panel Keypad Connection
TX	Pin 2
RX	Pin 3

Setup

The Interlogix NX-587e virtual keypad module uses a fixed keypad address of 248 which limits it to a single instance per control panel. By default the Interlogix NX-587e virtual keypad module is assigned to control partition 1.

Texecom Security System

The Texecom security system must be configured to work with the Crestron Home system.

> **NOTE:** The Premier Elite PC-COM cable (model JAA-0001) is required for communications between the security system and the Crestron Home control processor or PC. Using a different cable or a cable from a third-party may cause connection issues.

Models

These Texecom security systems are supported:

- Premier Elite 48
- Premier Elite 88
- Premier Elite 168

> **NOTE:** The systems listed above support keypad emulation. They do not support an area list for systems that support areas, area control to arm or disarm the system (including storing the password on the UI device), programming area arm or disarm events, and triggering area commands from button or trigger events via scenes.

Wiring

Use the Premier Elite PC-COM cable (model JAA-0001) to communicate with a Crestron Home control processor or PC.

Connect to a Control Processor

To connect the security system to the control processor:

- Connect the PC-COM cable to the **COM2** port on the security system.
- Connect the PC-COM cable to a **COM** (RS-232) port on the control processor, PYNG-CONNECT-COM, or other Crestron device in the system with a **COM** (RS-232) port.

  > **NOTES:**
  >
  > - It may be necessary to modify the PC-COM cable to make the connection to the RS-232 port.
  > - To preserve the PC-COM cable, modify a standard serial cable (DB9) to make the connection between the cable and the control processor. To modify the cable, cut one end off of the serial cable and then wire it to a terminal block connector (Green - Ground; Orange - TX; Red - RX).

Connect to a PC

To connect the security system to a PC:

- Connect the PC-COM cable to the **COM1** port on the security system.
- Connect the PC-COM cable to a COM port on your PC.

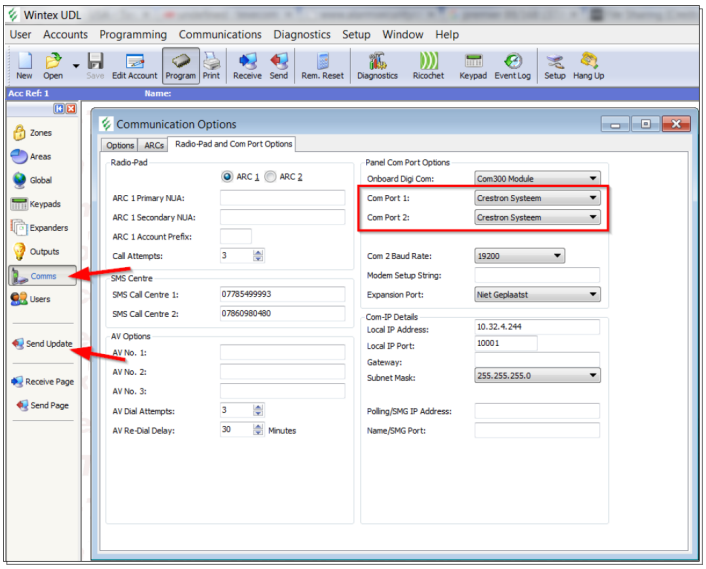
> **NOTE:** You can use a USB-to-COM adapter to make the connection.

Setup

The Texecom security system can be set up using a PC or a security system keypad.

Set up using a PC

1. Connect to the security system using the **Wintex UDL** software that is provided with the Texecom security system and retrieve all of the settings from the device. Refer to the Texecom manual for detailed instructions.
2. Click **Comms** to open the **Communication Options** window.
3. Select **Crestron System** from the **COM Port 2** drop-down menu.
4. Select **19200** from the **COM 2 BAUD Rate** drop-down menu.
5. Click **Send Update**. The settings are sent to the Texecom Security system.



Set up using a Security System Keypad

> **NOTE:** The following procedure was created using the Premier Elite 48 security system.

1. Assign **Crestron System** to **COM2**:
    a. Enter **1,2, 3, 4** to log in as engineer.
    b. Select **7 UDL/Digi** and then **YES**.
    c. Select **8 Com Port Setup** and then **YES**.
    d. Use the arrow keys to select **Com Port 2**.
    e. To change the setting, select **NO**.
    f. Use the arrow keys to cycle through the available options. Select **Crestron System** and then **YES** to confirm.
    g. Press **MENU**, **MENU**, **MENU**, and then **YES** to log out of engineers mode.
2. Assign **19200** for the **BAUD RATE**:
    a. Enter **1, 2, 3, 4** to log in as engineer.
    b. Select **7 UDL/Digi** and then **Yes**.
    c. Select **7 Setup Modules** and then **YES**.
    d. Select **9 Modem Speed** and then **YES**.
    e. To change the speed, select **NO**.
    f. Use the up and down arrows to select the speed. Select **19200** and then **YES**.

        > **NOTE:** The keypad may display some com traffic. This is normal.

    g. Press **MENU**, **MENU**, **MENU**, and then **YES** to log out of engineers mode.

DSC Security System

The DSC security system must be configured to work with the Crestron Home system.

> **NOTE:** For serial communication with PC1864, PC1832, and PC1616 control panels, the DSC IT-100 Data Interface Module is required.

Models

The following models are supported:

- HS2128 - PowerSeries Neo Control Panel
- HS2064 - PowerSeries Neo Control Panel
- HS2032 - PowerSeries Neo Control Panel
- HS2016-4 - PowerSeries Neo Control Panel
- HS2016 - PowerSeries Neo Control Panel
- PC1864 - PowerSeries Control Panel
- PC1832 - PowerSeries Control Panel
- PC1616 - PowerSeries Control Panel

> **NOTE:** The systems listed above support keypad emulation. They do not support an area list for systems that support areas, area control to arm or disarm the system (including storing the password on the UI device), programming area arm or disarm events, and triggering area commands from button or trigger events via scenes.

Wiring

The DSC IT-100 Data Interface Module should be connected to the Crestron Home system as shown below:

> **NOTE:** The serial port is configured to communicate at 9,600 baud, 8 data bits, 1 stop bit, and no parity. There is no hardware or software flow control.

Crestron Home System	DSC IT-100 (DB9F)
GND	Pin 5
TX	Pin 2
RX	Pin 3

Setup

Wire the keypads and the DSC IT-100 Data Interface Module identically and in parallel. Terminate the devices on the keypad terminals on the control panel.

When the control panel is initially powered, there may be two faults on the system. To view the faults, enter *2 on the hardware panel. It may be necessary to set the time and date and also to disable the Telephone Line Monitoring (TLM).

Basic Setup Information:

> **NOTES:**
>
> - The default Master Code is 1234. If a 6-digit master code is enabled, the default master code is 123456.
> - The default Installer Code is 5555.

Set the time and date:

1. Press *6 + [Master-Code] to access the User Functions menu.
2. Press 1 to access the time and date menu.
3. Enter the time and date using the following format [hhmm]+[MMDDYY]. Enter the time using the 24-hour time system (for example, 8:30 PM is entered as 2030).
4. Press # # to save and exit.

Disable the Telephone Line Monitoring (TLM).:

1. Press *8 + [Installer-Code] to access the Installer Programming menu.
2. Press 015 to access the Third System Options menu.
3. Press 7 to select TLM Disabled (off).
4. Press # # to save and exit.

For Stay mode to function, at least one zone must be set to 05 (Interior, Stay/Away). To configure the zones:

1. Press *8 + [Installer-Code] to access the Installer Programming menu.
2. Press 001, 002, 003, or 004 to enter the zone definitions for section 001, 002, 003, or 004. There are 16 zones in each section.
3. Configure the zones as needed. At least one zone needs to be set to 05 (Interior, Stay/Away).

   For example:

   Zone 1 - 01 (Delay 1)

   Zone 2 - 03 (Instant)

   Zone 3 - 03 (Instant)

   Zone 4 - 03 (Instant)

   Zone 5 - 05 (Interior, Stay/Away)

   Zone 6 - 05 (Interior, Stay/Away)
4. Press # # to save and exit.

Conditionals and Variables: Feedback, Commands, and Events

This section contains a listing of currently available feedback, commands, and events to be used with conditions and variables.

For instructions on use, refer to Add an If Statement on page 433 and Variables on page 541.

For example scenarios using these features, refer to the Conditional Use Cases Guide.

Lighting

Lights

- Custom Fade
- Full On
- Full Off
- Toggle
- Toggle (Instant)

Feedback

- Level: 0-100%
- Is On
- Hue: range dependent on driver
- Saturation: 0-100%
- Color temperature: range dependent on driver

Events

- Level Changed
- Turned On
- Turned Off
- Hue Changed
- Saturation Changed
- Color Temperature Changed

Commands

- Set Temperature
    - Temperature
    - TransitionTime (0-600s)

- Set Saturation
    - Saturation
    - TransitionTime (0-600s)
- Set Hue
    - Temperature
    - TransitionTime (0-600s)
- Set Tunable Settings
    - TransitionTime (0-600s)
    - Intensity (0-100%)
    - Hue
    - Color Temperature
    - Saturation

Room With at Least One Light

Feedback

- Any Light is On

Events

- Any Light is On
- All Lights are off

Scenes (Lights, Shades, Media)

Feedback

- Is Active

Events

- Active
- Not Active

Shading

Shades and Shade Groups

Feedback

- Is Fully Open
- Is Fully Closed
- Is Open
- Position: 0-100%

- Tilt Position: 0-100%
- Is Battery Low

Events

- Fully Open
- Fully Closed
- Closing
- Opening
- Position Changed
- Tilt Position Changed
- Battery Low (not applicable to groups)

Room With at Least One Shade

Feedback

- Any Shade is Open

Events

- Any Open
- All Closed

Scenes (Lights, Shades, Media)

Feedback

- Is Active

Events

- Active
- Not Active

Third Party Entry Devices

Power Controller Temperature Sensor

Events

- Temperature Sensor Connected
- Temperature Sensor Disconnected
- Current Temperature Changed

Feedback

- Temperature Warning Active
- Temperature Sensor Connected
- Current Temperature

Garage Doors and Gates

Feedback

- Current State: Open, Closed

Events

- Opened
- Closed

Commands

- Open
- Close
- Toggle

Scenes

- Open
- Close

Sensors and IO/Relay Inputs

Occupancy Sensor

Feedback

- Occupied
- Vacant
- Internal Photosensor Level (0 - 1000 lux), for GLS-OIRLCL-C-CN
- External Photosensor Level, for GLS-OIRLCL-C-CN

Commands

- Force Vacant (Duration (0-86400s))
- Cancel Force Vacant
- Force Occupied (Duration (0-86400s))
- Cancel Force Occupied

Events

- Occupancy
- Vacancy
- Grace Occupancy
- Internal Photosensor Level Changed, for GLS-OIRLCL-C-CN
- External Photosensor Level Changed, for GLS-OIRLCL-C-CN

Digital Input

Feedback

- Is Closed

Events

- Already present

Media

Volume Device

Feedback

- Is Muted
- Volume

Events

- Muted
- Unmuted
- Volume Changed

Media Zone

Feedback

- Is On
- Volume (0-100%)
- Is Muted
- Sleep Mode On
- Source
- Audio Source
- Video Source

Events

- Muted
- Unmuted
- Volume Changed
- Sleep Mode On Changed
- Source Changed
- Audio Source Changed
- Video Source Changed

Video Endpoint (Display)

Feedback

- Is On
- Source

Events

- Source Changed

Multi-Display Audio Detection

Feedback

- Audio Active

Events

- Audio Active
- Audio Inactive

Scenes (Lights, Shades, Media)

Feedback

- Is Active

Events

- Active
- Not Active

Drivers

Feedback

- Power Is On
- Is Online

Events

- Power Is On
- Power is Off
- Online
- Offline

Cable box, Video Server, and TV

Feedback

- Channel

Events

- Channel Changed

AVR

Feedback

- Frequency
- Surround Mode

Events

- Frequency Changed
- Surround Mode Changed

Climate

Thermostats

Feedback

- Mode Values
    - Off
    - Heat
    - Cool
    - Single Setpoint Auto
    - Dual Setpoint Auto
    - Aux Heat
    - Dry
- Fan Mode Values
    - Off
    - On
    - Auto
    - Low
    - Medium
    - High
    - Circulate
    - Circulate Low
    - Circulate Medium
- Fan Speed Values
    - Low
    - Medium
    - High

- Heat Setpoint, range dependent on thermostat
- Cool Setpoint, range dependent on thermostat
- Auto Setpoint, range dependent on thermostat
- Current Temperature, range dependent on thermostat
- Heat Call
- Cool Call
- Aux Call
- Fan Call
- Dry Call
- Humidity Call
- Floor Heat Call
- Current Humidity (0%-100%)
- Humidity Setpoint (0%-100%)
- Current Floor Temperature, range dependent on thermostat
- Floor Heat Setpoint, range dependent on thermostat
- Floor Heat On
- Humidity On
- Setpoint Adjustment Amount

Commands

- Set Mode(Mode)
- Set Fan Mode(Fan Mode)
- Set Fan Speed(Fan Speed)
- Set Heat Setpoint(Heat Setpoint), range dependent on thermostat
- Set Cool Setpoint(Cool Setpoint), range dependent on thermostat
- Set Auto Setpoint(Auto Setpoint), range dependent on thermostat
- Set Dual Setpoint(Heat Setpoint, Cool Setpoint), range dependent on thermostat
- Set Humidity Setpoint(Setpoint (0-100%))
- Humidity On
- Humidity Off
- Set Floor Heat Setpoint(Setpoint), range dependent on thermostat
- Floor Heat On
- Floor Heat Off

- Adjust Setpoint (only items supported by the thermostat will appear)
    - Current
    - Heat
    - Cool
    - Auto
    - Dual Auto
    - Dry
- Direction
    - Up: increments the setpoint
    - Down: decrements the setpoint
- Amount
    - Auto: adjusts the setpoint by either 0.5 or 1.0 degrees depending on the thermostat's current temperature scale setting
    - 1.0: adjusts the setpoint by 1 degree regardless of the thermostat temperature scale setting
- Cycle Thermostat Mode, based on the capabilities of the thermostat
    - Cool
    - Heat
    - Aux
    - Heat
    - Single Auto
    - Dual Auto
    - Off
- Cycle Fan Speed, based on the capabilities of the thermostat
    - Low
    - Medium
    - High

- Cycle Fan Mode, based on the capabilities of the thermostat
    - Off
    - On
    - Auto
    - Low
    - Medium
    - High
    - Circulate
    - Circulate Low
    - Circulate Medium

Events

- Mode Changed
- Fan Mode Changed
- Fan Speed Changed
- Heat Setpoint Changed
- Cool Setpoint Changed
- Auto Setpoint Changed
- Current Temperature Changed
- Heat Call Changed
- Cool Call Changed
- Aux Heat Call Changed
- Fan Call Changed
- Dry Call Changed
- Floor Heat Call Changed
- Current Humidity Changed
- Humidity Setpoint Changed
- Current Floor Temperature Changed
- Floor Heat Setpoint Changed
- Floor Heat On Changed
- Humidity On Changed
- Temperature Units Changed

Security

All Security Systems

Feedback

- Alarm
- Armed Away
- Armed Stay
- Armed Stay Instant
- Burglary
- Disarmed
- Entry Delay Active
- Exit Delay Active
- Fire
- Medical
- Tamper
- Is Online

Events

- Alarm
- Armed Away
- Armed Stay
- Armed Stay Instant
- Burglary
- Disarmed
- Entry Delay Active
- Exit Delay Active
- Fire
- Medical
- Tamper
- Is Online

Areas (Partitions)

The following apply to Satel, DSC Neo, and third-party drivers using this driver model.

Feedback

- Alarm
- Armed Away
- Armed Stay
- Armed Stay Instant
- Burglary
- Disarmed
- Entry Delay Active

- Exit Delay Active
- Fire
- Medical
- Tamper
- Is Online

Events

- Alarm
- Armed Away
- Armed Stay
- Armed Stay Instant
- Burglary
- Disarmed
- Entry Delay Active
- Exit Delay Active
- Fire
- Medical
- Tamper
- Is Online

Commands

- Set Arming Mode
    - Away
    - Disard
    - Stay
    - Away Instant
    - Stay Instant
- Password, depending on the device support

Zones

The following apply to Satel, DSC Neo, and third-party drivers using this driver model.

Feedback

- Bypassed
- Closed
- Low Battery
- Missing
- Open
- Tamper

Events

- Bypassed
- Missing
- Low Battery
- Tamper
- Opened
- Closed

Commands

- Set Bypass Mode
    - Bypass Mode
        - Bypass
        - Unbypass
    - Password, depending on the device support

Keypads

Black Nova

Commands

- Cycle Temperature C/F
- Display Temperature Units Auto
- Display Temperature Units Celsius
- Display Temperature Units Fahrenheit

Driver

Available commands, properties, and events are determined by the driver type.

Additional custom commands, properties, and events may be added by the driver developer and may differ from driver to driver.

Video and Audio Sensing

The options available change based upon the inputs of the connected devices. For example, a device without a VGA input will not have VGA options.

> **NOTE:** The DM-NAX-16AIN and HD-XSPA are not currently supported.

Feedback

- HDMI Input
    - Audio Signal Detected
    - Video Sync
- USB-C Input
    - Audio Signal Detected
    - Video Sync
- DVI Input
    - Video Sync
- VGA Input
    - Video Sync
- Analog Audio Input
    - Audio Signal Detected
- Composite Input
    - Audio Signal Detected
    - Video Sync
- Display Port Input
    - Audio Signal Detected
    - Video Sync

Events

- HDMI Input
    - Audio Signal Detected
    - Audio Signal Not Detected
    - Video Sync Detected
    - Video Sync Not Detected
- USB-C Input
    - Audio Signal Detected
    - Audio Signal Not Detected
    - Video Sync Detected
    - Video Sync Not Detected
- DVI Input
    - Video Sync Detected
    - Video Sync Not Detected
- VGA Input
    - Video Sync Detected
    - Video Sync Not Detected

- Analog Audio Input
    - Audio Signal Detected
    - Audio Signal Not Detected
- Composite Input
    - Audio Signal Detected
    - Audio Signal Not Detected
    - Video Sync Detected
    - Video Sync Not Detected
- Display Port Input
    - Audio Signal Detected
    - Audio Signal Not Detected
    - Video Sync Detected
    - Video Sync Not Detected

Crestron Audio Devices

These options depend upon the inputs of the connected devices.

Feedback

- Digital Input
    - Audio Signal Detected
- Analog Input
    - Audio Signal Detected
- HDMI Input
    - Audio Signal Detected
    - Video Sync
- USB Input
    - Audio Signal Detected

Events

- Digital Input
    - Audio Signal Detected
    - Audio Signal Not Detected
- Audio Input
    - Audio Signal Detected
    - Audio Signal Not Detected

- HDMI Input
    - Audio Signal Detected
    - Audio Signal Not Detected
    - Video Sync Detected
    - Video Sync Not Detected
- USB Input
    - Audio Signal Detected
    - Audio Signal Not Detected

Video Processors

Feedback

- HDMI Input
    - Video Sync

Events

- HDMI Input
    - Video Sync Detected
    - Video Sync Not Detected

Ports Used by Crestron Home

The following ports are used by Crestron Home.

Port	Description	Protocol	Forwarding across VLANs
22	SSH remote login for Toolbox console	SSH	Not recommended unless administration needs to be done through a separate VLAN.
80	World Wide Web HTTP (limited use)	HTTP	Not recommended. (Limited usage.)
443	Communication with Crestron Home Setup App	TSL (HTTP)	Recommended.
41794	AutoDiscovery port within same subnet and across subnets within the Crestron Home Setup App.	UDP	Not recommended.
41794	CIP Protocol (default enabled) Pyng Setup App	TCP	Not recommended. (Limited usage.)
41796	Secure Cresnet over Internet protocol. Communication with Crestron Home Setup App.	TLS (secure CIP)	Recommended.
49200	Mobility services (CP4-R only)	TLS	Recommended only for access to mobility services.
50001	Communication with Crestron Home App from mobile.	TLS (secure CRPC)	Recommended.
67	Bootstrap protocol server	UDP	Not recommended.
68	Bootstrap protocol server	UDP	Not recommended.
49000	Websocket used by Configure Pro application.	TLS (websocket)	Recommended.

Supported Languages

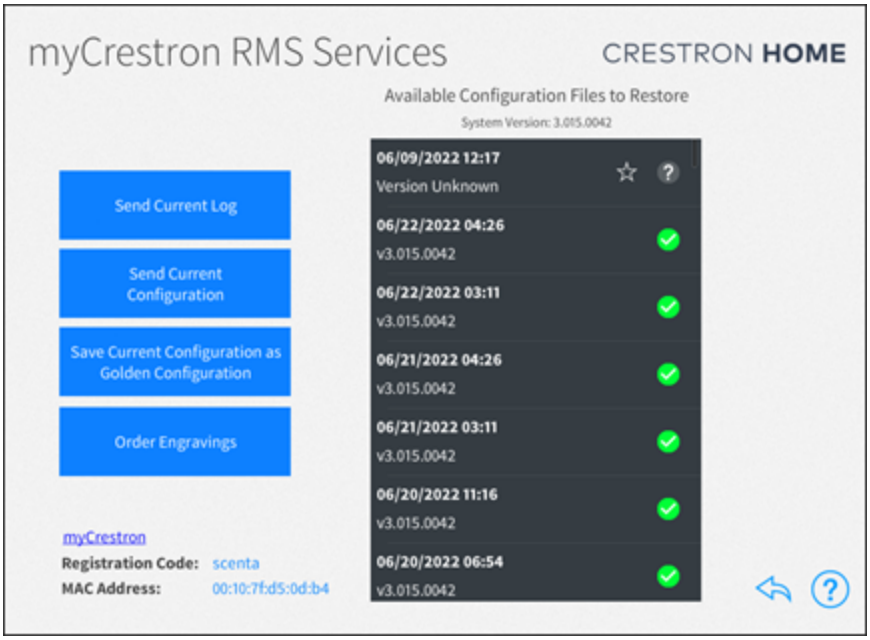
The Crestron Home end user application supports the following languages:

- Arabic
- Chinese Simplified
- Chinese Traditional
- Czech
- Danish
- Dutch
- English UK
- English US
- Finnish
- French
- German
- Greek
- Hebrew
- Hungarian
- Italian
- Japanese
- Korean
- Norwegian Bokmal
- Polish
- Portuguese
- Portuguese Brazil
- Romanian
- Russian
- Slovak
- Spanish
- Swedish
- Thai

Engravings

Engravings are ordered through the **MyCrestron RMS Services** screen. For full details on this screen, refer to myCrestron RMS Services on page 574.

Order Engravings



Create a report that can be used to order engravings for devices in the system. The report is sent to the dealer using the email address entered on the myCrestron Residential Monitoring service. The report contains the device color, layout, and engraving information that was entered during device setup.

NOTES:

- The control processor must be registered on the myCrestron Residential Monitoring service before engravings can be ordered. For details, refer to Remote System Access on page 639.
- To assign or modify engravings, refer to Customize Actions & Events on page 514.

To create an engravings report, select **Order Engravings** and then select **OK**.

To submit the order, use Impress Software. Refer to Import Crestron Home OS Engravings in the Impress Software manual for additional details.

NOTE: To import a Crestron Home OS engravings file obtained from the Crestron Home Setup app, create a new project and then import the ZIP file.

Troubleshooting

The following list provides troubleshooting information. If further assistance is required, contact Crestron True Blue Support.

This section provides the following information:

- Cannot Establish Communication with the Crestron Home Processor
- Cannot Connect to the Crestron Home System after Firmware Downgrade
- Cannot Discover Cresnet® Devices
- Cannot Discover a CHV-THSTAT3F Thermostat
- Cannot Add a CSA-PWS10S-HUB-ENET Gateway
- Cannot Discover a Security System
- Cannot Discover the CNAMPX-16X60 or CNAMPX-12X60
- Cannot Set or Change the Passwords
- Cannot Enter Advanced User Settings
- Cannot Connect User Interface Device to the System
- The Web XPanel Interface is Unresponsive
- Crestron Driver Version is Out of Date
- Unexpected Audio and Video Routing
- Disabled Autonomic® MMS Sources are Displayed in the Source List

Cannot Establish Communication with the Crestron Home Processor

The Crestron Home processor is not communicating with Crestron Toolbox via Ethernet or USB.

Possible Cause(s)

The Crestron Home processor needs to be restored to factory settings.

Corrective Action(s)

Factory reset the Crestron Home processor:

CAUTIONS:

- All configured settings and all devices that are paired with the Crestron Home processor are erased during a factory restore.
- If required, download the backup files from the myCrestron Residential Monitoring Service before proceeding.

To factory reset the Crestron Home processor:

NOTE: Use a small, pointed object (such as the tip of a pen) to press the buttons on theCrestron Home processor.

1. Press and release the **HW-R** button on the Crestron Home processor.
2. Within 3 seconds, press the **SW-R** button on the Crestron Home processor five times, with under a 1-second gap between each press. The Crestron Home processor begins the factory reset process and then reboots. The process may take up to 15 minutes to complete.
3. Connect to the Crestron Home processor using Crestron Toolbox™ software and then use the Text Console tool to check for a prompt. The standard device prompt should display.

Cannot Connect to the Crestron Home System after Firmware Downgrade

The firmware for the Crestron Home processor was downgraded from version 3.000.0419 or higher to version 3.000.0329 or lower and any of the following conditions are occurring:

- Cannot log in to the Crestron Home Setup app or web XPanel interface.
- Cannot log in to the Crestron Home processor using Crestron Toolbox software.
- Cannot change the Admin password using the Crestron Home Setup app or web XPanel interface.

Possible Cause(s)

Improved security features were incorporated in firmware version 3.000.0419 that interfere with backward compatibility.

Corrective Action(s)

The following corrective actions can be performed:

- **Reset the Passwords and then Reboot:** The password reset procedure is unobtrusive and should be attempted first.

  > **NOTE:** If the Advanced User password or User Interface Device password is set, the Crestron Home processor must be factory reset.

- **Factory reset the Crestron Home Processor:** Factory reset the Crestron Home processor only if other corrective actions do not work.

Reset the Passwords and then Reboot

NOTES:

- The Admin username and all other users are removed from the system.
- When the passwords are reset, the system displays a prompt to enter a new Admin username and password.
- After the password reset, the Advanced User, User Interface Device, and Common Device passwords must be set.

To reset the passwords:

1. Press and hold the **SW-R** button on the Crestron Home processor (about 15 seconds) until the **MSG** LED flashes rapidly.
2. Set the Admin username and password in the **Create Admin Account** dialog box.
3. Disconnect power from the Crestron Home processor (for example, unplug) for 15 seconds and then reconnect power.
4. Set the Advanced User, User Interface Device, and Common Device passwords:

   NOTE: To change the Admin password, refer to Admin Password on page 566.

   - **Advanced User password:** Refer to Advanced User Password on page 567.
   - **User Interface Device password:** Refer to User Interface Device Password on page 568.
   - **Common Device password:** Refer to Common Device Password on page 569.

Factory Reset the Crestron Home Processor

CAUTIONS:

- All configured settings and all devices that are paired with the Crestron Home processor are erased during a factory restore.
- If required, download the backup files from the myCrestron Residential Monitoring Service before proceeding.

To factory reset the Crestron Home processor:

NOTE: Use a small, pointed object (such as the tip of a pen) to press the buttons on theCrestron Home processor.

1. Press and release the **HW-R** button on the Crestron Home processor.
2. Within 3 seconds, press the **SW-R** button on the Crestron Home processor five times, with under a 1-second gap between each press. The Crestron Home processor begins the factory reset process and then reboots. The process may take up to 15 minutes to complete.
3. Connect to the Crestron Home processor using Crestron Toolbox™ software and then use the Text Console tool to check for a prompt. The standard device prompt should display.

Cannot Discover Cresnet® Devices

The Cresnet® device cannot be discovered by the Crestron Home system and the following condition is occurring:

- The Cresnet device is not discovered by the Crestron Home system.
- The Cresnet device is displayed in the Network Device Tree using Crestron Toolbox software.

Possible Cause(s)

The firmware for the Cresnet device or Crestron Home processor is not up to date.

Corrective Action(s)

Update the firmware for the Cresnet device and Crestron Home processor.

Cannot Discover a CHV-THSTAT3F Thermostat

The CHV-THSTAT3F thermostat cannot be discovered by the Crestron Home system and the following conditions are occurring:

- The CHV-THSTAT3F thermostat is not discovered by the Crestron Home system.
- The CHV-THSTAT3F thermostat is displayed in the Network Device Tree using Crestron Toolbox software.

Possible Cause(s)

Three speed fan applications are not supported.

Corrective Action(s)

Update the CHV-THSTAT3F with CHV-TSTAT/THSTAT firmware.

Cannot Add a CSA-PWS10S-HUB-ENET Gateway

The CSA-PWS10S-HUB-ENET cannot be added to the Crestron Home system and a "Gateway Could Not Be Added" message is displayed.

Possible Cause(s)

The mode switch on the CSA-PWS10S-HUB-ENET is not set correctly.

Corrective Action(s)

Set the mode switch on the CSW-PSW10S-HUB-ENET to **CRES** or **ETH** to match the physical connection method.

Cannot Discover a Security System

The security system is not discovered by the Crestron Home system.

Possible Cause(s)

The security system is not compatible with the Crestron Home system.

Corrective Action(s)

Use a security system that is compatible with the Crestron Home system.

> **NOTE:** For a list of devices that are supported by Crestron Home® OS, refer to Works with Crestron Home OS on page 55.

Cannot Discover the CNAMPX-16X60 or CNAMPX-12X60

The CNAMPX-16X60 and CNAMPX-12X60 are not discovered by the Crestron Home system.

Possible Cause(s)

The Cresnet ID that is set for the CNAMPX-16X60 or CNAMPX-12X60 is already in use by the Crestron Home system. The CNAMPX-16X60 and CNAMPX-12X60 do not support TSID; the Cresnet ID must be manually set to a unique value.

Corrective Action(s)

Use Crestron Toolbox™ software to set the Cresnet ID to a value that is not in use by the Crestron Home system and then rescan the Cresnet gateway.

Cannot Set or Change the Passwords

The firmware for the Crestron Home processor was downgraded from version 3.000.0419 or higher to version 3.000.0329 or lower and then upgraded to 3.000.0419 or higher and the following condition is occurring:

- Cannot set or change the Advanced User Interface Device password or User Interface Device password.

Possible Cause(s)

The password reset procedure was not performed when the firmware for the Crestron Home processor was downgraded from version 3.000.0419 or higher to version 3.000.0329 or lower

Corrective Action(s)

Reset the passwords and then reboot:

> **NOTES:**
>
> - The Admin username and all other users are removed from the system.
> - When the passwords are reset, the system displays a prompt to enter a new Admin username and password.
> - After the password reset, the Advanced User, User Interface Device, and Common Device passwords must be set.

To reset the passwords:

1. Press and hold the **SW-R** button on the Crestron Home processor (about 15 seconds) until the **MSG** LED flashes rapidly.
2. Set the Admin username and password in the **Create Admin Account** dialog box.
3. Disconnect power from the Crestron Home processor (for example, unplug) for 15 seconds and then reconnect power.
4. Set the Advanced User, User Interface Device, and Common Device passwords:

   > **NOTE:** To change the Admin password, refer to Admin Password on page 566.

   - **Advanced User password:** Refer to Advanced User Password on page 567.
   - **User Interface Device password:** Refer to User Interface Device Password on page 568.
   - **Common Device password:** Refer to Common Device Password on page 569.

Cannot Enter Advanced User Settings

The end-user cannot enter the Advanced User settings screens.

Possible Cause(s)

- The Advanced User username is incorrectly entered.
- The Advanced User functionality is not enabled.

Corrective Action(s)

The following corrective actions can be performed:

- **Enter the correct username:** Enter "advanceduser" when prompted for the Advanced User username.
- **Enable the Advanced User functionality:** Set the Advanced User Password to enable Advanced User feature. For details, refer to Advanced User Password on page 567.

Cannot Connect User Interface Device to the System

The user interface device (Crestron touch screens, TSR-310 handheld remotes, iOS® devices, and Android™ devices) cannot connect to the Crestron Home system.

Possible Cause(s)

- The User Interface Device Password is not set.
- The IP address is blocked for one hour after the User Interface Device Password is incorrectly entered three times.

Corrective Action(s)

The following corrective actions can be performed:

- **Set the User Interface Device Password:** For details, refer to User Interface Device Password on page 568.
- **Clear the blocked IP address:**
    - **Wait for IP block to clear:** The IP address block is cleared after one hour.
    - **Clear the blocked IP address:** Clear the blocked IP address with Crestron Toolbox software.

The Web XPanel Interface is Unresponsive

There is no response when clicking buttons in the web XPanel or some page elements are missing.

Possible Cause(s)

The domain web setting for the web XPanel interface is set incorrectly.

Corrective Action(s)

In Installer Settings, select Web Settings, and then ensure that Domain is set to "*". For more information on web XPanel interface settings, refer to OLH article 5793.

Crestron Driver Version is Out of Date

The third-party device is added to the system but the driver is not up to date.

Possible Cause(s)

- A custom driver file is used.
- Devices in the system are using the driver

Corrective Action(s)

The following corrective actions can be performed:

- **A custom driver file is used:** Custom drivers are not automatically removed or updated. The custom driver must be manually deleted from the Crestron Home processor and then reloaded. For details, refer to Crestron Driver Devices on page 228.
- **Devices in the system are using the driver:** Remove all devices that use the driver from the Crestron Home system and then navigate to **Pair Devices** > **Third Party**, wait for the Crestron Home processor to update the list of Crestron Drivers, and then add the device to the system. For details, refer to Crestron Driver Devices on page 228.

Unexpected Audio and Video Routing

The audio or video is not heard or seen or is playing in the incorrect destination.

Possible Cause(s)

- The audio or video output is not configured or is configured incorrectly.
- The default audio or video output is used but the configuration is not using the audio or video output.

Corrective Action(s)

- **Configure the audio or video output:** To configure the source routes, refer to Source Routes on page 361.
- **Change the audio or video output:** For devices with one audio or video output (such as the HD-MD4X1-4KZ or DM-NVX-363), the default destination for the single audio or video output is the room where the device is added. Set the audio or video output to none.

Disabled Autonomic® MMS Sources are Displayed in the Source List

A source was disabled in the Autonomic® MMS web user interface but it still appears in the Crestron Home source list.

Possible Cause(s)

The source was disabled after the Autonomic MMS device was added to the Crestron Home system.

Corrective Action(s)

Remove the Autonomic MMS device and then add it back to the system using. The Crestron Home system will display the correct sources.

Resources

The following resources are provided for the Crestron Home® OS.

> **NOTE:** You may need to provide your Crestron.com web account credentials when prompted to access some of the following resources.

Crestron Support and Training

- Crestron True Blue Support
- Crestron Resource Library
- Crestron Online Help (OLH)
- Crestron Training Institute (CTI) Portal

Programmer and Developer Resources

- help.crestron.com: Provides help files for Crestron programming tools such as SIMPL, SIMPL#, and Crestron Toolbox™ software
- developer.crestron.com: Provides developer documentation for Crestron APIs, SDKs, and other development tools

Product Certificates

To search for product certificates, refer to support.crestron.com/app/certificates.

Related Documentation

- Crestron Drivers SDK
- Security Best Practices (PDF)

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