3-Series Control System® Automated Processors

The Crestron® CP3 and CP3N are compact, rack-mountable 3-Series® automated control processors with numerous integrated control ports. Featuring the 3-Series control engine, the CP3 and CP3N unify the disparate technologies in residential, commercial, and government buildings so that they can communicate and work together intelligently. The CP3N also supports the Crestron Control Subnet, which is an isolated gigabit Ethernet network dedicated exclusively to Crestron devices.

NOTE: The CP3 and CP3N are functionally similar. For simplicity within this guide, the term "control system" is used to refer to both unless otherwise noted.

In the Box

1	CP3 or CP3N, 3-Series Control System

Additional Items

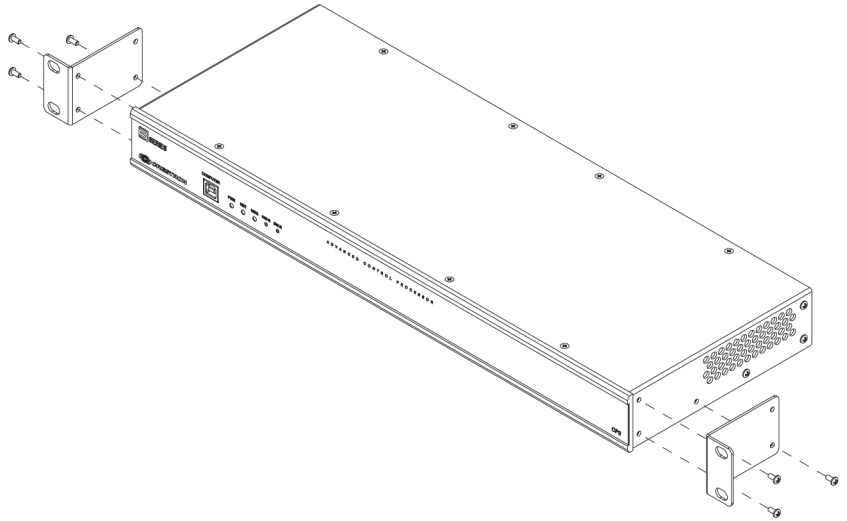
2	Bracket, Rack Ear, 1U (2032122)
2	Connector, 3-Pin (2003575)
1	Connector, 4-Pin (2003576)
1	Connector, 5-Pin (2003577)
4	Connector, 8-Pin (2003580)
1	Connector, 9-Pin (2003581)
4	Foot, 0.5 in. x 0.5 in. x 0.23 in., Adhesive (2002389)
1	Cable, Power, 5 ft 10 in. (1.78 m) (2042043)
1	Power Pack, 24 VDC, 2.5 A, 100-240 VAC (2045873)

Install the Device

The control system can be mounted into a rack or placed on a flat surface.

Mount into a Rack

The control system occupies 1U of rack space. Use the three screws from the front part of each side panel, and a #1 Phillips screwdriver to attach the two included rack ears to the device, as shown in the following illustration. Then mount the control system into the rack using four mounting screws (not included).



Rack Mounting Safety Precautions

Elevated Operating Ambient Temperature: If installed in a closed or multi-unit rack assembly, the operating ambient temperature of the rack environment may be greater than room ambient temperature. Therefore, consideration should be given to installing the equipment in an

environment compatible with the maximum ambient temperature (Tma) specified by the manufacturer.

Reduced Airflow: Installation of the equipment in a rack should be such that the amount of airflow required for safe operation of the equipment is not compromised.

Mechanical Loading: Mounting of the equipment in the rack should be such that a hazardous condition is not achieved due to uneven mechanical loading.

Circuit Overloading: Consideration should be given to the connection of the equipment to the supply circuit and the effect that overloading of the circuits might have on overcurrent protection and supply wiring. Appropriate consideration of equipment nameplate ratings should be used when addressing this concern.

Reliable Earthing: Reliable earthing of rack-mounted equipment should be maintained. Particular attention should be given to supply connections other than direct connections to the branch circuit (e.g., use of power strips).

Place on a Flat Surface

Attach the included feet near the corners on the underside of the control system before placing it onto a flat surface or stacking it with other equipment.

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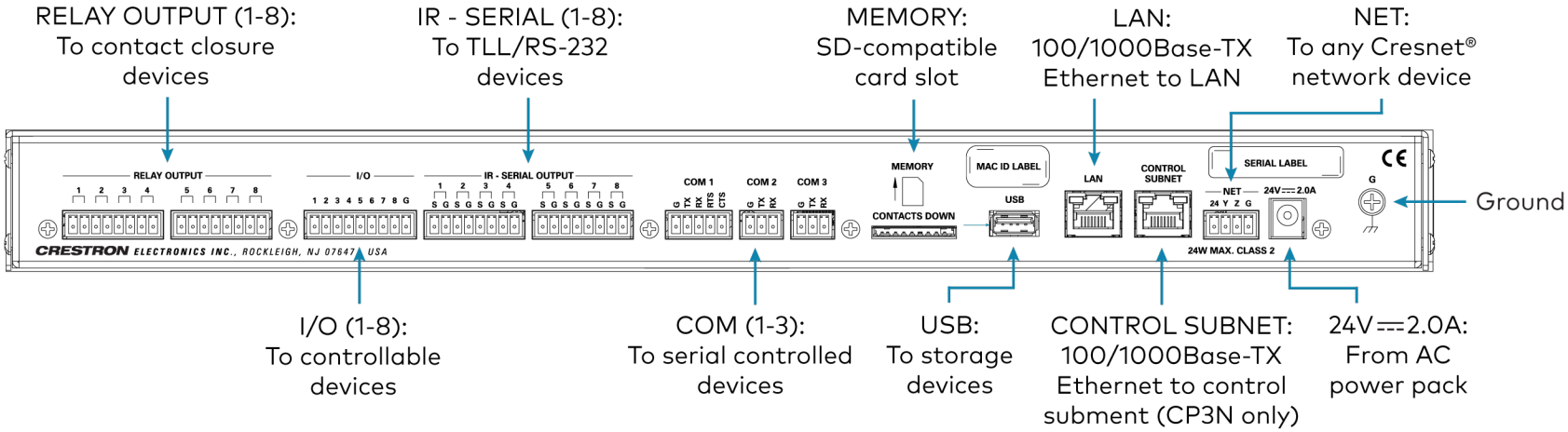
Connect the Device

Connect the control system as called out in the following illustration.
Connect power last.



When connecting the control system:

- Use Crestron power supplies for Crestron equipment.
- The control system can be powered with the included 24 VDC power pack or via Cresnet® network power via the **NET** 4-pin terminal block port.
- Connect the chassis ground lug to a known earth ground (for example, building steel) to ensure the control system is properly grounded.

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COM 1 Connections

Port	RS-232	RS-422[1]	RS-485
G	GND	GND	GND[2]
TX	TX (from CP3/CP3N)	TX- (from CP3/CP3N)	TX-/RX-
RX	RX (to CP3/CP3N)	RX+ (to CP3/CP3N)	Not used
RTS	RTS (from CP3/CP3N)	RTS+ (from CP3/CP3N)	TX+/RX+
CTS	CTS (to CP3/CP3N)	CTS- (to CP3/CP3N)	Not used

1. RS-422 transmit and receive are balanced signals that require two lines plus a ground in each direction. RXD+ and TXD+ should idle high (going low at start of data transmission). RXD- and TXD- should idle low (going high at the start of data transmission). If necessary, RXD+/RXD- and TXD+/TXD- may be swapped to maintain correct signal levels.
2. A ground terminal connection is recommended but not required.

Connect the Control Subnet (CP3N Only)

The CP3N has a dedicated Control Subnet used for communication between the control system and Crestron Ethernet devices without interference from other traffic on the network.

NOTE: Do not connect the **CONTROL SUBNET** port to the LAN. The **CONTROL SUBNET** port must only be connected to Crestron Ethernet devices.

For more information on using the Control Subnet, refer to the 3-Series Control System Reference Guide (Doc. 7150) at www.crestron.com/manuals.

Configure the Device

The control system can be configured using Crestron Toolbox™ software and the included web-based configuration utility.

To configure the control system:

1. Use the Device Discovery tool in Crestron Toolbox to discover the control system and its IP address on the network.
2. Use Crestron Toolbox to set the time zone. For more information refer to the Crestron Toolbox help file.
3. Use a web browser to navigate to http://xxx.xxx.xxx.xxx/setup, where xxx.xxx.xxx.xxx is the IP address of the control system. The 3-Series splash page is displayed.

4. Click **Setup**. The main Setup page is displayed.

The Setup page displays the IP address, hostname, and MAC address of the control system, as well as a key that is used to register the control system with the MyCrestron service.

The Setup page also provides access to various setup and programming pages.

- Click one of the setup selections to configure the applicable device settings.
- Click the back button on any page to return to the previous page.

Pair the Device with Apple® HomeKit® Technology

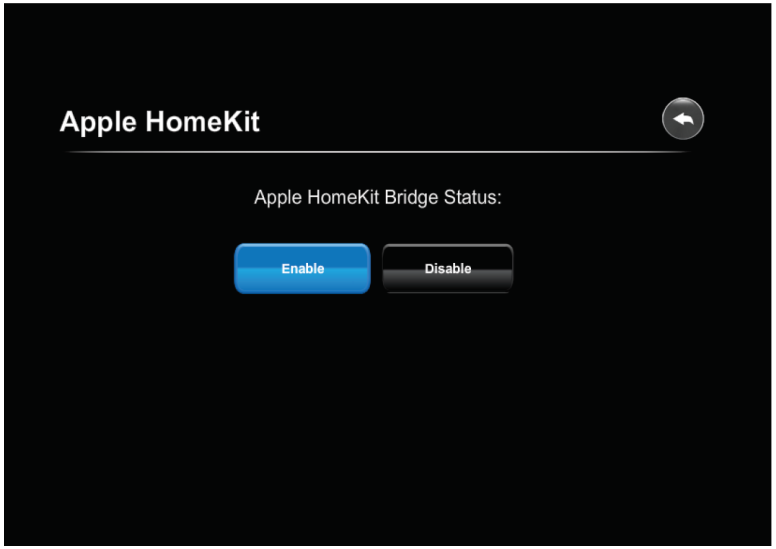
The control system can be paired with an Apple® HomeKit® system, to enable a TSR-310 handheld touch screen remote to control Apple TV® devices via a control system program.

NOTES:

- The control system, the Apple TV device(s), the TSR-310, and the iOS® device used for setup must all be connected to the same network.
- The 3-Series control system must be registered to a MyCrestron account prior to pairing it with Apple HomeKit. To register the device, visit https://portal.my.crestron.com, select **Add Device** from the **Devices** tab, and then follow the provided instructions.
- The 3-Series control system must be connected to the Internet and must have DNS (Domain Name System) enabled.

To enable the Apple HomeKit functionality on the control system:

1. Open Crestron Toolbox and establish a connection to the control system.
2. Enable SSL by using the **SSL Management** function or by issuing the `ssl` command in the **Text Console** tool. for more information refer to the embedded Crestron Toolbox help files and the 3-Series Control System Reference Guide (Doc. 7150) at www.crestron.com/manuals.
3. Navigate to the control system **Setup** page as described in Configure the Device.
4. Click **Apple HomeKit**. The Apple HomeKit page is displayed.



5. Click **Enable** to enable the HomeKit feature on the control system.
6. Click **OK** to reboot the control system after a reboot confirmation message is displayed.
7. Return to the main **Setup** page. A unique eight-digit code is now shown in the **HK Setup Code** field.
8. Record the unique eight-digit HomeKit code that is shown next to **HK Setup Code**.

For further programming and pairing instructions, refer to the Pairing a 3-Series Control System with Apple HomeKit Technology Programming Guide (Doc. 8495) at www.crestron.com/manuals.

Connect to Crestron XiO Cloud Service (Optional)

The Crestron XiO Cloud™ service allows supported Crestron devices across an enterprise to be managed and configured from one central and secure location in the cloud. Supported devices are preconfigured to connect to the service. Use of the service requires a registered Crestron XiO Cloud account.

NOTE: The device can be disconnected from the service using the **Cloud Services** tab in Crestron Toolbox™ software (**Functions > Device Info > Cloud Services**). For details, refer to the Crestron Toolbox help file.

To connect the device to the Crestron XiO Cloud service:

1. Record the MAC address and serial number labeled on the shipping box or rear panel of the device. The MAC address and serial number are required in order to add the device to the Crestron XiO Cloud environment.
2. Do either of the following:
   - For existing accounts, navigate to https://portal.crestron.io.
   - For new accounts, register at www.crestron.com/xiocloud.
3. Claim the device to the service as described in the Crestron XiO Cloud User Guide (Doc. 8214) at www.crestron.com/manuals.

Visit the Product Page

Scan the QR code to visit the product page.

CP3

www.crestron.com/model/6504877

CP3N

www.crestron.com/model/6505417

Additional Information

Original Instructions
The U.S. English version of this document is the original instructions.
All other languages are a translation of the original instructions.

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