

TSW-560

5 in. Touch Screen



- Affordable and easy to install touch screen with ultra clean, modern appearance
- 5 in. (127 mm) widescreen active-matrix color display and 960 x 540 qHD display resolution
- Capacitive touch screen display and backlit soft-touch capacitive buttons
- Supports Crestron HTML5 and Smart Graphics® software custom projects
- Voice recognition capability
- H.264 or MJPEG streaming video display
- Built-in microphone, speakers, and 5 MP H.264 IP camera
- Rava® SIP intercom and phone technology
- Native room scheduling app
- Built-in web browsing
- Single-wire Ethernet connection with PoE or PoE+ power
- Enterprise grade security
- Web or cloud based configuration
- Wall or lectern mount over a rectangular cutout
- Available in smooth black or white finish

Advanced Touch Screen Control

A Crestron® touch screen offers an ideal user interface for controlling all the technology in your home, boardroom, classroom, courtroom, or command center. Touch screens simplify and enhance the way you use technology, doing away with the need for remote controls, wall switches, smartphone apps, and computer screens. For controlling audio, video, lighting, shades, HVAC, security, and other systems, Crestron touch screens are fully-customizable with easy-to-use controls and icons, true feedback and real-time status display, live streaming video, voice recognition, web browsing, and a full-featured media player for an enhanced multiroom entertainment experience.

The TSW-560 series features a 5 in. capacitive touch screen display with Crestron HTML5 and Smart Graphics® software technology and five soft-touch buttons. PoE (Power over Ethernet) connectivity and a range of mounting options make installation simple for both new and retrofit applications. Additional features include the ability to control any function using voice commands, view security cameras and other video sources, communicate using built-in video intercom and phone capabilities, and browse the Internet. A native room scheduling application is included to enable use as a room scheduling panel.¹

Dynamic User Interfaces

The TSW-560 supports custom user interfaces created with [Crestron HTML5 User Interface](#) and Smart Graphics technologies, allowing greater flexibility for UI developers and programmers.

- Crestron HTML5 User Interface enables UI designers to develop rich, front-end user interfaces with increased reusability and efficiency using modern web methodologies. Crestron HTML5 User Interface development components are provided to simplify creating user interfaces built on standard web technologies.
- Smart Graphics enables programmers to integrated fluid gesture-driven controls, animated feedback, rich metadata, embedded apps and widgets, and full-motion video into their user interfaces. Smart Graphics provides dynamic features such as graphical buttons and sliders, lists and toolbars, drag-and-drop objects, dashboard widgets, screensavers, and customizable themes.

Soft-Touch Buttons

The TSW-560 series includes five backlit, soft-touch capacitive buttons for quick access to commonly used functions. These buttons are pre-labeled with icons for Power, Home, Lights, Up, and Down functions. Each button is programmable via a control system for custom functionality, and any unused button can be hidden by turning off its backlight.

Auto Brightness Control

To ensure optimal visibility under varying lighting conditions, the TSW-560 series includes a built-in light sensor, which regulates the display and button backlighting brightness according to the ambient light level in the room. Separate auto brightness settings are provided for the display and buttons to allow each to be adjusted or defeated as needed.

Voice Recognition

With built-in voice recognition, the TSW-560 provides the ability to use spoken commands to quickly turn devices on or off, select and play a specific media title or playlist, change the channel, choose a lighting scene, lower the window shades, lock the doors, arm the security system, or enter a password. Simply say a command and Crestron does the rest.^{1,2}

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Streaming Video

Native support for H.264 and MJPEG formats allows the TSW-560 to display live streaming video from an IP camera, a streaming encoder (Crestron [CEN-NVS200-PWE](#), [DM-TXRX-100-STR](#), or similar³), or a [DigitalMedia™ switcher](#). Video is delivered to the touch screen over Ethernet, eliminating the need for any extra video wiring.

Rava SIP Intercom

[Rava® SIP Intercom Technology](#) enables hands-free VoIP communication with other Rava-enabled touch screens and door stations. Rava works over Ethernet, supporting 2-way intercom and paging without requiring any special wiring. VoIP phone capability is also possible through integration with a SIP-compatible IP phone system or SIP server, allowing hands-free telephone functionality complete with speed-dialing, caller ID, custom ringers, and other enhancements. Built-in echo cancellation affords full-duplex performance for clear, seamless voice communication using integrated microphone and speakers.²

Built-in Camera

A 5 megapixel camera is built into the TSW-560 to support video intercom and room monitoring capabilities. This feature allows individuals to communicate between two touch screens, or between one touch screen and a Rava-compatible video door station. It can also be used to visually monitor any room securely using an H.264 compatible decoder (Crestron [DM-TXRX-100-STR](#), [DM-RMC-100-STR](#), or similar³) or a third-party video monitoring system.²

Room Scheduling Mode

As part of a complete enterprise room scheduling solution, the TSW-560 can be deployed in room scheduling mode. Running the Crestron Scheduling App, the TSW-560 integrates directly with [Crestron Fusion®](#) software, Microsoft Exchange Server® software (for users of Outlook® software and Office 365® software), the Google Calendar™ calendaring app (including G Suite™ software), CollegeNET® 25Live® scheduling software, or Ad Astra™ software.⁴ IBM® Notes® software is also supported through a Crestron Fusion on-premises server.

Crestron room scheduling touch screens help organizations to maximize productivity and manage usage for every meeting space. They can be installed at the entrance to each room to provide indication of the room's availability and a view of its schedule for the day. If desired, the room can be reserved on the spot for an ad hoc meeting. A [CEN-ODT-C-POE](#) occupancy sensor can also be paired to the touch screen, allowing for occupancy status to be reported instantly to the scheduling app for no-shows and unscheduled room usage.

Crestron room scheduling also offers three levels of customization—ranging from simply configuring settings in the web user interface to modifying the application source code for a completely unique appearance—depending on the needs of an enterprise.⁵

Status Indicator Options

Adding the optional light bar accessory ([TSW-560-LB](#) series) to a TSW-560 produces a light around the perimeter of the touch screen. For room scheduling applications, the light bar provides a 180° visual indication of a room's availability status, illuminating green if the room is available and red when reserved. Custom functionality is available by integrating with a control system, allowing for illumination in almost any color.⁶

As an alternative to the light bar, Crestron offers a selection of hallway signs and indicators that mount on the wall or ceiling above each touch screen. The [SSW](#), [SSW-EL](#), [SSC](#), and [SSC-EL](#) series hallway signs feature a two sided acrylic sign face that can be custom engraved with the room name or number. The [SIW-100](#) offers a lower profile wall mount status indicator.⁶

Web Browsing

Using its built-in web browser, the TSW-560 provides access to online program guides and other web-based services at the touch of a button, allowing for touch screen control of DVRs and other devices without having to use a smart device¹

Onscreen Keyboard

Typing in passwords, URLs, and text searches is facilitated using the onscreen multilanguage keyboard.

Multitouch Support

The capacitive touch screen display affords enhanced capabilities for browsing web pages using multitouch control.

Audio Feedback

Customized audio files can be loaded to add another dimension to the touch screen graphics using personalized sounds, button feedback, and voice prompts.

Single-Wire Connectivity

An Ethernet LAN connection is all that is required to wire the TSW-560, containing all control, video, intercom, and power signals within a single wire.

Power over Ethernet

Using PoE technology, the TSW-560 gets its operating power directly through the network cable. PoE (Power over Ethernet) eliminates the need for a local power supply or any dedicated power wiring. Crestron PoE switches ([CEN-SW-POE-5](#) or [CEN-SWPOE-16](#)³) offer a total networking solution with built-in PoE for multiple touch screens. A PoE Injector ([PWE-4803RU](#)³) is also available to support a single touch screen.

NOTE: Refer to the "Power" specifications for more details.

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Enterprise Grade Security

Crestron touch screens employ enterprise-grade networking with robust security features such as 802.1X authentication, TLS encryption, HTTPS connectivity, and Active Directory® service integration. These features are imperative to protect your network against service interruptions and malicious intrusions, and to ensure compliance with your organization's network policies. Cloud-based provisioning and management streamlines the process of configuring, monitoring, and updating every touch screen on the network. Additional support for SNMP allows every touch screen to be monitored by your IT administrator.

Crestron XiO Cloud Service

The TSW-560 is compatible with the Crestron XiO Cloud™ service, which is an IoT (Internet of Things) based platform for remotely provisioning, monitoring, and managing Crestron devices across an enterprise or an entire client base. Built on the Microsoft® Azure® software platform and utilizing Microsoft's industry-leading Azure IoT Hub technology, Crestron XiO Cloud enables installers and IT managers to deploy and manage thousands of devices in the time it previously took to manage just one. Unlike other virtual machine-based cloud solutions, Azure services provide unlimited scalability to suit the ever-growing needs of an enterprise. For more information, visit www.crestron.com/xiocloud.

Crestron Home OS Control

The TSW-560 may be used to control a [Crestron Home™ OS](#) whole home solution. Select the Crestron Home app from the touch screen to control lighting, shades, climate, media, security, and cameras, including the ability to create and recall scenes that create a desired ambiance throughout a home. A TSW-560 may be installed in each room in the home to provide easy access to the room's environmental and media subsystems.

2N® Door Station Integration

The TSW-560 may be integrated with a supported 2N® door station⁷ via the touch screen's built-in Rava SIP intercom to provide a door station solution for Crestron Home or other residential systems. When a call is initiated on the 2N door station, the video and audio feed is displayed on the TSW-560. Controls are provided on the touch screen to answer or decline the call, and Crestron Home quick actions (such as "open gate") may be performed while the call is in progress. A "do not disturb" option is also provided to prevent calls from appearing on the TSW-560.

Wall or Lectern Mounting Options

The TSW-560 is easily installed into drywall and other surfaces using the included [TSW-UMB-60](#) universal mounting bracket, which affords the following mounting options:⁸

- Can be used with the [TSW-UMB-60-PMK](#) preconstruction mounting kit for applications that don't require a back box.
- Can be used with the [TSW-UMB-60-BBI](#) back box for masonry and concrete applications.

The TSW-560 can also be installed in a wooden lectern or podium. When installed, the touch screen protrudes only 1/2 in. out from the mounting surface and leaves no visible screws for an ultra clean appearance. A security latch option is included to deter unauthorized removal of the touch screen.

The [TS-5-MSMK³](#) allows a TSW-560 touch screen to be mounted directly to virtually any flat surface, which is ideal for mounting at the entrance to a meeting space for room scheduling applications.

Other Mounting Options

Using the optional tabletop kit ([TSW-560-TTK³](#)), the TSW-560 becomes a stylish, freestanding touch screen that fits perfectly on a table, desk, or countertop. It can even be permanently attached to the surface using the optional swivel mount kit ([TSW-560/760/1060-SMK³](#)). When rack mounted, the touch screen occupies three rack spaces.

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Specifications

Touch Screen Display

Display Type	TFT active matrix color LCD
Size	5 in. (127 mm) diagonal
Aspect Ratio	16:9 qHD
Resolution	960 x 540 pixels
Brightness	400 nits (cd/m ²)
Contrast	750:1
Color Depth	24 bit, 16.7M colors
Illumination	Edgelit LED with auto brightness control
Viewing Angle	±80° horizontal, ±80° vertical
Touch Screen	Projected capacitive, 5-point multitouch capable

Buttons

Hard Keys	(5) Projected capacitive push buttons, backlit with auto brightness control, per-button show/hide (backlight enable/disable), prelabeled with icons for Power, Home, Lights, Up, and Down
Reset	(1) Miniature push button on rear panel for hardware reset

Graphics Engine

Crestron HTML5 and Smart Graphics® software technology, multilanguage web browser¹, multilanguage onscreen keyboard, screensaver, single scalable streaming video window, native room scheduling application⁴, native Crestron Home™ OS app, setup and diagnostics via web browser or onscreen UI

Room Scheduling Support

Crestron Scheduling App	Crestron Fusion® software, Microsoft Exchange Server® and Office 365® software, Google Calendar™ calendaring app and G Suite™ software, CollegeNET® 25Live® software, and Ad Astra™ software (IBM® Notes® software is also supported through Crestron Fusion on-premises server only) ⁴
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Languages

Smart Graphics	Arabic, Chinese (Simplified), Chinese (Traditional), Czech, Danish, Dutch, English (UK), English (US), Finnish, French, German, Greek, Hebrew, Hungarian, Italian, Japanese, Korean, Norwegian, Polish, Portuguese, Portuguese (Brazilian), Romanian, Russian, Slovak, Spanish, Swedish, Thai
Onscreen Keyboard	Arabic, Chinese (Simplified), Croatian, Czech, Danish, Dutch, English (UK), English (US), Finnish, French (Canada), French (Switzerland), German, Hebrew, Hungarian, Italian, Japanese, Norwegian Bokmal, Polish, Portuguese, Russian, Serbian, Spanish, Swedish, Turkish
Voice Recognition	Afrikaans (South Africa); Chinese, Mandarin (China, Simplified); Chinese, Mandarin (Hong Kong, Simplified); Chinese, Mandarin (Taiwan, Traditional); Chinese, Yue (Hong Kong, Traditional); Czech (Czech Republic); Dutch (Netherlands); English (Australia); English (Canada); English (Generic); English (India); English (New Zealand); English (South Africa); English (UK); English (US); French (France); German (Germany); isiZulu (South Africa); Italian (Italy); Japanese (Japan); Korean (South Korea); Polish (Poland); Portuguese (Brazil); Russian (Russia); Spanish (Spain); Turkish (Turkey)
Web Browser	Arabic, Bulgarian, Catalan, Chinese, Croatian, Czech, Danish, Dutch, English, Filipino, Finnish, French, German, Greek, Hebrew, Hindi, Hungarian, Indonesian, Italian, Japanese, Korean, Latvian, Lithuanian, Norwegian Bokmal, Pashto, Persian, Polish, Portuguese, Romanian, Romansh, Russian, Serbian, Slovak, Slovenian, Spanish, Swedish, Thai, Turkish, Ukrainian, Vietnamese
Room Scheduling	Chinese (Simplified), Chinese (Traditional), Danish, Dutch (Netherlands), English (US), English (UK), French, German, Hebrew, Italian, Japanese, Korean, Norwegian, Portuguese (Brazil), Portuguese (Portugal), Russian, Spanish, Swedish

Memory

RAM	2 GB DDR3L
Storage	Firmware/Application: 4 GB Class 10 microSD card; System: 4GB eMMC
Maximum Project Size	600 MB

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Communications

Ethernet	100 Mbps, auto switching, auto negotiating, auto discovery, full/half duplex, TCP/IP, UDP/IP, CIP, DHCP, SSL, TLS, SSH, SFTP (SSH File Transfer Protocol), IEEE 802.1X, SNMP, IPv4 or IPv6, Active Directory® service authentication, HTTPS web browser setup, Crestron XiO Cloud™ client, IEEE 802.3at compliant
USB	USB 2.0 host for light bar or hallway sign ⁶

Streaming Decoder

Video Formats	H.264 (MPEG-4 part 10 AVC, MJPEG)
Audio Formats	AAC Stereo
Bitrates	Up to 25 Mbps (20 Mbps maximum recommended)
Input Resolutions	Up to 1920x1080@30fps
Protocol	RTSP

Streaming Encoder and Camera²

Camera Resolution	5.0 MP
Field of View	50° horizontal
Video Format	H.264 (MPEG-4 part 10 AVC)
Output Resolution	1280x720
Protocol	RTSP, ONVIF discovery

Audio

Features	Built-in microphone and speakers, Rava® SIP Intercom, voice recognition ^{1,2}
Audio Feedback Formats	MP3

Connectors

LAN PoE	(1) 8-pin RJ45 connector, female, with 2 LED indicators; 100Base-TX Ethernet port; PoE+ PD port; Green and yellow LEDs indicate Ethernet port status
USB	(1) USB Type A connector, female; USB 2.0 host port; For optional light bar or hallway sign ⁶

Power

PoE (Power over Ethernet)	IEEE 802.3at Type 2 compliant PoE+ PD (Powered Device); Requests 15 Watts from an 802.3at Type 2 PSE with LLDP advanced power management; Requests 30 Watts (PoE+ Class 4) from an 802.3at Type 2 PSE without LLDP; Requests 15.4 Watts (PoE Class 0) from an 802.3af (or 802.3at Type 1) PSE
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Environmental

Temperature	32 to 112 °F (0 to 45 °C)
Humidity	10% to 95% RH (noncondensing)
Heat Dissipation	44 BTU/hr

Construction

Housing	Plastic, smooth black or white finish, edge-to-edge glass with black or white surround
Mounting	Surface mount over a 2-1/5 in. H x 3-3/4 in. W (56 mm H x 96 mm W) cutout; 2-13/16 in. (72 mm) minimum mounting depth; 1-1/4 in. (32 mm) maximum mounting surface thickness; Pre/postconstruction mounting bracket assembly include ⁹ ; Optional back box, rack mount, and tabletop options sold separately

Dimensions

Height	3.49 in. (89 mm)
Width	5.68 in. (145 mm)
Depth	1.52 in. (39 mm)

Dimensions do not include mounting bracket or add-on accessories

Weight

9.5 oz (267 g)

Compliance

Regulatory Model: TSW-560
UL® Listed for US and Canada, IC, CE, FCC Part 15 Class B digital device

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Available Models

TSW-560-B-S

TSW-560-W-S

In the Box

TSW-UMB-60

TSW-UMB-560-PMK

Accessories

For supported accessories, visit the appropriate TSW-560 product page at www.crestron.com.

Notes:

1. Voice recognition, web browsing, weather information, and certain other functions require an Internet connection.
2. The camera, microphone, and Bluetooth® transceiver may each be defeated programmatically at any time. For applications demanding an extra measure of privacy, Crestron offers models [TSW-560-NC-B-S](#) and [TSW-560-NC-W-S](#), which have no physical camera, microphone, or Bluetooth transceiver installed.
3. Item(s) sold separately. Refer to each product's spec sheet for complete information.
4. Room Scheduling mode requires the TSW-560 to be designated exclusively for room scheduling use, which precludes use of certain features and functions described in this spec sheet. For design assistance, contact the Crestron True Blue support team at www.crestron.com/support.
5. For more information on custom programming for the Crestron® room scheduling app, refer to the Crestron Room Scheduling Panels Programming Guide (Doc. 8213) at www.crestron.com/manuals.
6. The light bar and hallway sign accessories are sold separately. Only one light bar or hallway sign may be connected to the TSW-560. Use of either accessory precludes use of the other without the addition of a custom-programmed control system and Cresnet® network wiring for the hallway sign. Refer to each accessory's spec sheet for further information.
7. Supported 2N door stations include the 2N IP Audio Kit, 2N IP Audio Kit Lite, 2N IP Base, 2N IP Force, 2N IP Safety, 2N IP Solo, 2N IP Uni, 2N IP Vario, 2N IP Verso, and 2N IP Video Kit. For pairing instructions, refer to the Crestron Home OS 3 Product Manual (Doc. 8525) and the TSW-560/TSW-760/TSW-1060 Supplemental Guide (Doc. 7927) at www.crestron.com/manuals.
8. The [TSW-UMB-60](#) mounting bracket (included) is compatible with older TSW-UMB-PMK preconstruction mounting kits and TSW-550-BBI back boxes, allowing the TSW-560 to be installed in place of a previous generation TSW-5xx series touch screen, or any other device that was originally installed using a TSW-UMB-PMK or TSW-550-BBI, without modification to the wall.

This product may be purchased from select authorized Crestron dealers and distributors. To find a dealer or distributor, please contact the Crestron sales representative for your area. A list of sales representatives is available online at <https://www.crestron.com/How-To-Buy/Find-a-Representative> or by calling 855-263-8754.

The specific patents that cover Crestron products are listed online at patents.crestron.com.

Certain Crestron products contain open source software. For specific information, please visit www.crestron.com/opensource.

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