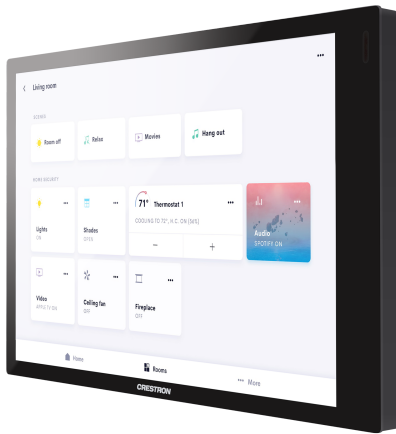


TSW-770R

7 in. Wall Mount Touch Screen, Crestron Home™ OS Version



- Next generation Crestron® wall mount touch screen featuring a native Crestron Home™ OS application
- 7 in. (178 mm) widescreen active-matrix color display and 1280 x 800 WSVGA display resolution
- Capacitive touch screen display
- Built-in Rava® SIP intercom
- Built-in speakers and microphone
- H.265, H.264, or MJPEG streaming video display
- Single wire Ethernet connection with PoE or PoE+ power
- Wi-Fi® network connectivity
- Dual USB 2.0 ports
- Enterprise grade security and authentication
- Web or device-based configuration
- Electrical box mounting with provided mounting bracket

The TSW-770R is compatible with [Wall-Smart® flush wall mounting accessories](#).

The Crestron® TSW-770R series is a stylish and versatile wall mount touch screen that is designed specifically to run the Crestron Home™ OS application. The TSW-770R features a 7 in. (178 mm) capacitive touch screen display. PoE and Wi-Fi® network connectivity and a comprehensive assortment of mounting accessories simplify new and retrofit installations.

Advanced Touch Screen Control

The TSW-770R offers a sleek and powerful user interface for controlling technology in the home via the Crestron Home app. The touch screen provides an intuitive interface that is fully customizable with easy-to-use capacitive controls, true feedback, and real-time status display. A built-in proximity sensor wakes the screen without requiring any user interaction, and automatic brightness controls ensure optimal visibility under varying lighting conditions.

Voice Recognition

With built-in voice recognition, spoken commands can be issued to the TSW-770R to quickly turn devices on or off, select and play a specific media source, 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}

Streaming Video

Native support for H.265, H.264, and MJPEG formats allows the TSW-770R to display live streaming video from an IP camera, a streaming encoder (Crestron [CEN-NVS200-PWE](#), [DM-TXRX-100-STR](#), or similar), or a [DigitalMedia™ switcher](#).³ 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 the integrated microphone and speakers.²

Sonos App

[Sonos and Crestron](#) have partnered to provide a powerful whole-house music experience. From any touch screen in the house, browse for tracks, artists, or playlists using all the services available from Sonos and instantly play them in any room using Sonos® wireless speakers or a Crestron [Sonnex® multiroom audio system](#). The Sonos app runs natively on the TSW-770R, enabling enhanced control of Sonos products as part of a complete Crestron system. The app checks for updates nightly so it's always current, and support for the Sonos S2 App is provided.¹

Crestron Home OS Control

The TSW-770R 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-770R may be installed in each room to provide easy access to various Crestron Home functions for both the room and the home.

Wired and Wi-Fi Connectivity

An Ethernet LAN connection is all that is required to wire the TSW-770R, containing all control, video, intercom, and power signals within a single wire.

For deployments without access to Ethernet, the touch screen can also be connected the network over Wi-Fi communications via a local wireless access point (WAP).

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Power over Ethernet

Using PoE technology, the TSW-770R 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-16³](#)) offer a total networking solution with built-in PoE for multiple touch screens. A PoE Injector ([PWE-4803RU³](#)) is also available to support a single touch screen.

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

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.

Wall Mount Options

Using the bracket provided, the TSW-770R is easily installed over a 2-gang or 3-gang US electrical box, or a 2-gang European or UK electrical box. A security latch option is included to deter unauthorized removal of the touch screen.

Additional wall mounting options are afforded using the optional [TSW-UMB-70](#) universal mounting bracket, [TSW-UMB-70-PMK](#) preconstruction mounting kit, and [TSW-UMB-70-BBI](#) back box.^{3,4}

Optional Mounting Accessories

The TSW-770R supports numerous optional mounting accessories that allow the touch screen to be installed in all kinds of installations:

- The [TSW-770-MSMK](#) multisurface mount kit allows a TSW-770R 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.
- The [TSW-770/1070-MUMK](#) allows the touch screen to be attached to the mullion of an interior glass wall, window, or partition.³
- The [TSW-770/1070-RMB-1](#) and [TSW-770/1070-RMB-2](#) retrofit mounting brackets allow for retrofit installations in place of an older Crestron touch screen (APAD, CT-1000, LC-1000, TPS-4L, or TPS-2000L) without having to tear out the old mounting hardware or patch the wall.
- The [TSW-570/770-RMK-1](#) rack mount kit allows the touch screen to be mounted into a 19 in. rack. When installed, the touch screen occupies three rack spaces.
- The [TSW-770-FP](#) face plate hides the electrical box from view when replacing a TSW-760 or TSS-7 series touch screen with a TSW-770 series touch screen.

The TSW-770R is also compatible with Wall-Smart® flush wall mount products via a partnership with Crestron. For more information on supported Wall-Smart hardware, click [here](#).

Specifications

Touch Screen Display

Display Type	TFT active matrix color LCD
Size	7 in. (178 mm) diagonal
Aspect Ratio	16:10 WSVGA
Resolution	1280 x 800 pixels
Brightness	350 nits (cd/m ²)
Contrast	850:1
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

Virtual Buttons	(6) Virtual buttons in collapsible universal tool bar, per-button show/hide, preconfigured with icons for Power, Home, Lights, Up, Down, and Microphone
Reset	(1) Pin hole on rear panel for hardware reset

Graphics Engine

Native Sonos® app¹, native Crestron Home™ OS app, touch screen setup and diagnostics via web browser or onscreen UI, Crestron Home setup and diagnostics via Crestron Home Setup app

Languages

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
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Voice Recognition¹	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)
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Memory

RAM	2 GB LPDDR3
Storage	Firmware/Application: 16 GB eMMC pSLC

Wired 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, IEEE 802.3at compliant
USB	USB 2.0 host

Wireless Communications

Transceiver	IEEE 802.11a/b/g/n/ac Wi-Fi (2.4 or 5 GHz 2-way RF), static IP or dynamic IP via DHCP
Security	64 and 128-bit WEP, WPA and WPA2-PSK with TKIP and AES, WPA and WPA2 - Enterprise
Range	Up to 50 ft (15 m), subject to site-specific conditions
Gateway	Requires an 802.11a/b/g/n/ac wireless access point and Ethernet-enabled Crestron control system

Streaming Decoder

Video Formats	H.265, 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

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	(2) USB Type A connectors, female; USB 2.0 host ports

Power

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

Temperature	32 to 104 °F (0 to 40 °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 or 3-gang US electrical box, 2-gang European (DIN 49073) electrical box, or 2-gang UK (BS 4662) electrical box; Lectern mount over a 2 in. H x 3-3/4 in. W (51 mm H x 96 mm W) cutout; 1-3/8 in. (35 mm) minimum mounting depth; Wall mount, surface mount, and rack options available separately

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Dimensions

Height 4.17 in. (106 mm)

Width 6.80 in. (173 mm)

Depth 1.99 in. (51 mm)

Dimensions do not include mounting bracket or add-on accessories

Weight

14.11 oz (400 g)

Compliance

Regulatory Model: M201923002

IC, CE, FCC Part 15 Class B digital device

Models

TSW-770R-B-S

7 in. Wall Mount Touch Screen, Crestron Home™ OS Version, Black Smooth

TSW-770R-W-S

7 in. Wall Mount Touch Screen, Crestron Home™ OS Version, White Smooth

Available Accessories

TSW-UMB-70

Universal Mounting Bracket for TSW-70 Series

TSW-UMB-70-PMK

Preconstruction Mounting Kit for TSW-UMB-70

TSW-UMB-70-BBI

Wall Mount Back Box for TSW-70 Series

TSW-770-MSMK-B-S

Multisurface Mount Kit for TSW-770, Black Smooth

TSW-770-MSMK-W-S

Multisurface Mount Kit for TSW-770, White Smooth

TSW-770/1070-MUMK-B

Mullion Mount Kit for TSW-770 and TSW-1070, Black

TSW-770/1070-MUMK-W

Mullion Mount Kit for TSW-770 and TSW-1070, White

TSW-770/1070-RMB-1

Retrofit Mounting Bracket - Converts APAD, CT/LC-1000, or TPS-2000L to TSW-770 or TSW-1070

TSW-770/1070-RMB-2

Retrofit Mounting Bracket - Converts TPS-4L to TSW-770 or TSW-1070

TSW-570/1070-RMK-1

Rack Mount Kit for TSW-570 and TSW-770

TSW-770-FP-B-S

Face Plate, Black Smooth - Converts TSW-760 to TSW-770

TSW-770-FP-W-S

Face Plate, White Smooth - Converts TSW-760 to TSW-770

CEN-SW-POE-5

5-Port PoE Switch

CEN-SWPOE-16

16-Port Managed PoE Switch

PWE-4803RU

PoE Injector

CEN-NVS200-PWE

Network Video Streamer with PoE Injector

DM-RMC-100-STR

HD Streaming Receiver and Room Controller 100

DM-TXRX-100-STR

HD Streaming Transmitter/Receiver

Notes:

1. Voice recognition and certain other functions require an Internet connection.
2. The microphone may be defeated programmatically at any time.
3. Item(s) sold separately. Refer to each product's spec sheet for complete information.
4. The TSW-UMB-70 is also compatible with older TSW-UMB-PMK series preconstruction mounting kits and TSW-BBI series back boxes, allowing the TSW-770R to be installed in place of a previous generation touch screen.

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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 www.crestron.com/How-To-Buy/Find-a-Representative or by calling 855-263-8754.

This product is covered under the Crestron standard limited warranty. Refer to www.crestron.com/warranty for full details.

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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