

# 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 WXGA 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 Crestron® TSW-770R 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.

### 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 [DM-TXRX-100-STR](#), or similar), or a [DigitalMedia™ switcher](#).<sup>3</sup> 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.<sup>2</sup>

### 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.<sup>1</sup>

### 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-16<sup>3</sup>](#)) offer a total networking solution with built-in PoE for multiple touch screens. A PoE Injector ([PWE-4803RU<sup>3</sup>](#)) 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.<sup>3,4</sup>

### 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.<sup>3</sup>
- 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](#).

# TSW-770R

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

### Specifications

#### Touch Screen Display

<b>Display Type</b>	TFT active matrix color LCD
<b>Size</b>	7 in. (178 mm) diagonal
<b>Aspect Ratio</b>	16:10 WXGA
<b>Resolution</b>	1280 x 800 pixels
<b>Brightness</b>	350 nits (cd/m <sup>2</sup> )
<b>Contrast</b>	850:1
<b>Color Depth</b>	24 bit, 16.7M colors
<b>Illumination</b>	Edgelit LED with auto brightness control
<b>Viewing Angle</b>	±80° horizontal, ±80° vertical
<b>Touch Screen</b>	Projected capacitive, 5-point multitouch capable

#### Buttons

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

#### Graphics Engine

Native Sonos® app<sup>1</sup>, 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

<b>Onscreen Keyboard</b>	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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#### Memory

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

#### Wired Communications

<b>Ethernet</b>	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
<b>USB</b>	USB 2.0 host

#### Wireless Communications

<b>Transceiver</b>	IEEE 802.11a/b/g/n/ac Wi-Fi (2.4 or 5 GHz 2-way RF), static IP or dynamic IP via DHCP
<b>Security</b>	64 and 128-bit WEP, WPA and WPA2-PSK with TKIP and AES
<b>Range</b>	Up to 50 ft (15 m), subject to site-specific conditions

#### Streaming Decoder

<b>Video Formats</b>	H.265, H.264 (MPEG-4 part 10 AVC, MJPEG)
<b>Audio Formats</b>	AAC Stereo
<b>Bitrates</b>	Up to 25 Mbps (20 Mbps maximum recommended)
<b>Input Resolutions</b>	Up to 1920x1080@30fps
<b>Protocol</b>	RTSP

#### Audio

<b>Features</b>	Built-in microphone and speakers, Rava® SIP Intercom <sup>1,2</sup>
<b>Audio Feedback Formats</b>	MP3

#### Connectors

<b>LAN PoE</b>	(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
<b>USB</b>	(2) USB Type A connectors, female; USB 2.0 host ports

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### Power

<b>PoE (Power over Ethernet)</b>	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

<b>Temperature</b>	32 to 104 °F (0 to 40 °C)
<b>Humidity</b>	10% to 95% RH (noncondensing)
<b>Heat Dissipation</b>	44 BTU/hr

### Construction

<b>Housing</b>	Plastic, smooth black or white finish, edge-to-edge glass with black or white surround
<b>Mounting</b>	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

### Dimensions

<b>Height</b>	4.17 in. (106 mm)
<b>Width</b>	6.80 in. (173 mm)
<b>Depth</b>	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

For supported accessories, visit the appropriate TSW-770R product page at [www.crestron.com](http://www.crestron.com).

#### Notes:

1. 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.

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](http://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](http://www.crestron.com/warranty) for full details.

The specific patents that cover Crestron products are listed online at [patents.crestron.com](http://patents.crestron.com).

Certain Crestron products contain open source software. For specific information, please visit [www.crestron.com/opensource](http://www.crestron.com/opensource).

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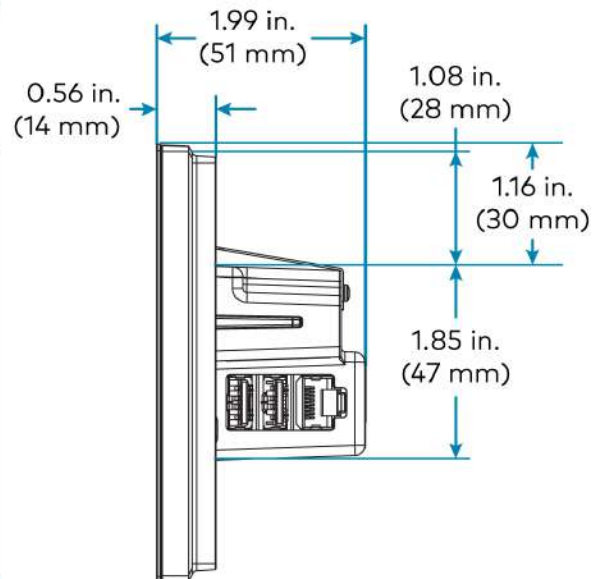
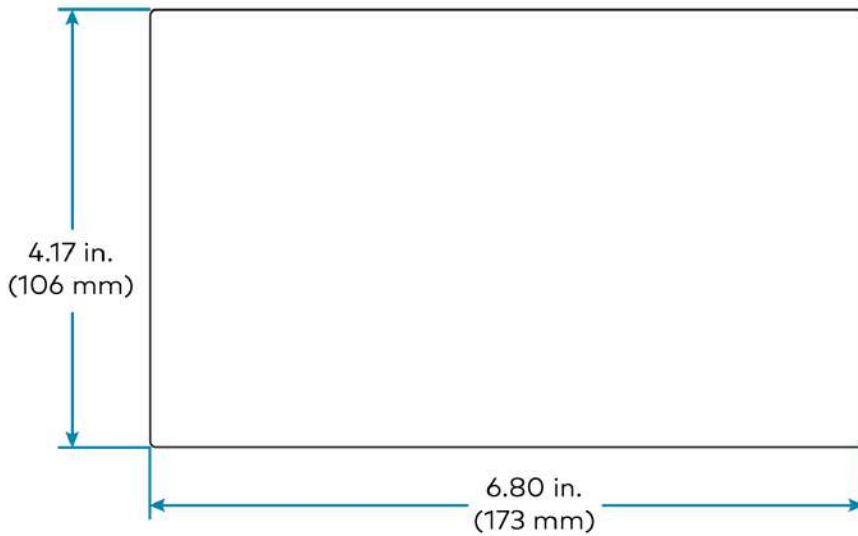
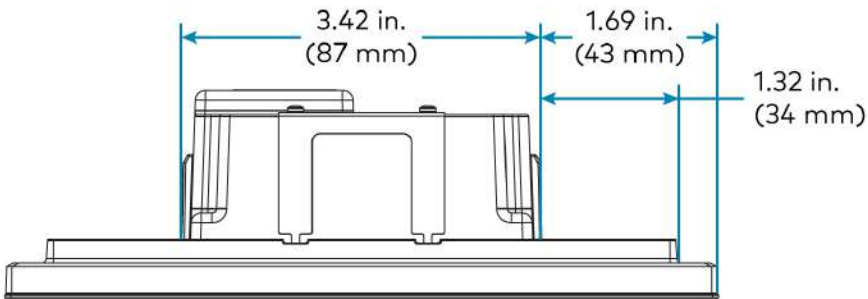
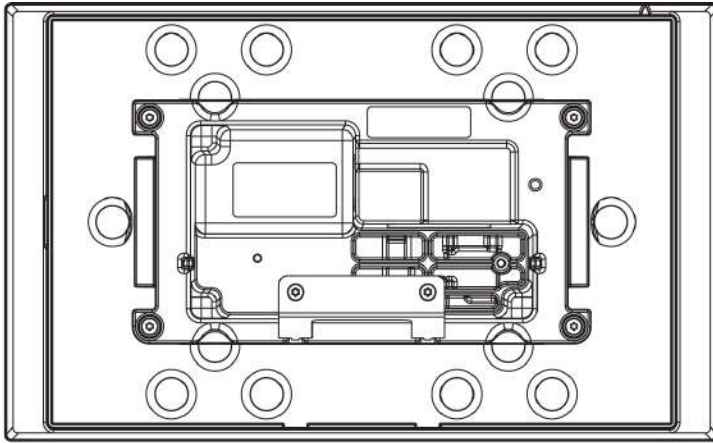
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Rev 03/25/22

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