

# TS-770R

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



- Next generation Crestron® tabletop 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
- USB 2.0 port
- Enterprise grade security and authentication
- Web or device-based configuration

The Crestron® TS-770R series is a stylish and versatile tabletop touch screen that is designed specifically to run the Crestron Home™ OS application. The TS-770R features a 7 in. (178 mm) capacitive touch screen display. PoE and Wi-Fi® network connectivity and a modern tabletop design allow the touch screen to be deployed just about anywhere.

### Advanced Touch Screen Control

The TS-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 TS-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.<sup>1,2</sup>

### Streaming Video

Native support for H.265, H.264, and MJPEG formats allows the TS-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](#).<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 TS-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 TS-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 TS-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 TS-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 TS-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.

### Optional Mounting Accessories

The [TS-770/1070-SMK](#) allows the touch screen to be mounted permanently to a tabletop and permits up to 330 degree swivel rotation.

## 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 WSVGA
<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 bottom 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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<b>Voice Recognition<sup>1</sup></b>	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

<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, WPA and WPA2 - Enterprise
<b>Range</b>	Up to 50 ft (15 m), subject to site-specific conditions
<b>Gateway</b>	Requires an 802.11a/b/g/n/ac wireless access point and Ethernet-enabled Crestron control system

### 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, voice recognition <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>	(1) USB Type A connector, female; USB 2.0 host port

### 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
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### Dimensions

<b>Height</b>	4.02 in. (102 mm)
<b>Width</b>	6.87 in. (175 mm)
<b>Depth</b>	4.37 in. (111 mm)

### Weight

1.33 lb (605 g)
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### Compliance

<b>Regulatory Model: M201923005</b>
IC, CE, FCC Part 15 Class B digital device

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### Models

#### TS-770R-B-S

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

#### TS-770R-W-S

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

### Available Accessories

#### TS-770/1070-SMK

Swivel Mount Kit for TS-70 Series

#### 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.

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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