TSW-760

7" Touch Screen

> Ultra clean, modern appearance

> Thin profile and compact footprint

> Affordable and easy to install

> 7" widescreen active-matrix color display

> 1024 x 600 WSVGA display resolution

> Capacitive touch screen technology

> Multi-touch capable

> Smart Graphics® performance

> Backlit soft-touch capacitive buttons

> Any/all button hide feature

> Auto-brightness control

> Voice recognition capability [1,2]

> H.264 or MJPEG streaming video display

> Built-in 5 MP H.264 IP camera [2]

> Built-in microphone and speakers [2]

> Rava® SIP intercom and phone technology [2]

> Native Sonos® app

> Crestron Fusion® room scheduling [4]

> Built-in PinPoint™ beacon [2,5]

> Customizable audio feedback

> Built-in web browsing [1]

> On-screen multi-language keyboard

> Customizable screensaver

> Single-wire Ethernet connectivity

> PoE or PoE+ network powered (refer to specifications)

> US, UK, or European electrical wall box mounting

> Lectern mount over a rectangular cutout

> Retrofit and masonry mounting options available [6]

> Tabletop and swivel mount options available [3]

> 3 RU rack mount option available [3]

> 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 those piles of remote controls, cluttered wall switches, disparate smartphone apps, and cryptic 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.

With its clean, contemporary design highlighted by edge-to-edge glass and stunning color graphics, the Crestron TSW-760 touch screen makes an elegant statement on any wall, tabletop, lectern, or equipment rack. Perfectly at home in the most contemporary residence or modern office

building, its high-tech good looks underline its power for simplifying everyday tasks and functions throughout any facility.

The TSW-760 delivers the ultimate touch screen experience in an unobtrusive, space-saving design. It features a brilliant 7 inch capacitive touch screen display with Smart Graphics® and 5 soft-touch buttons. PoE connectivity and a range of mounting options make installation a breeze for both new and retrofit applications. Additional advanced features include the abilities to control any function using voice commands, view security cameras and other video sources, communicate using built-in video intercom and phone capabilities, manage meeting room scheduling, browse the Internet, and enjoy full access to your Sonos® Home Sound System. [1]
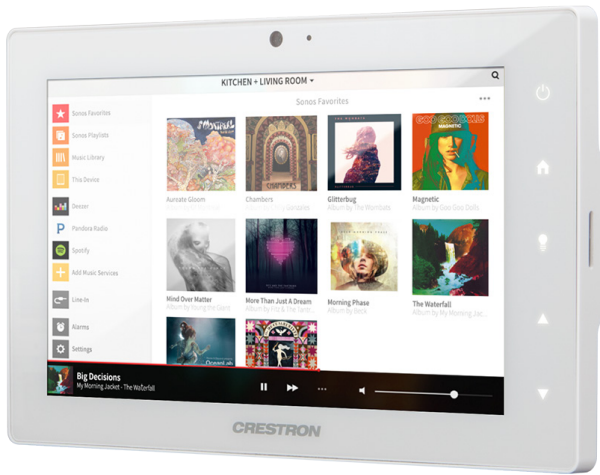
Smart Graphics®

Crestron touch screens use Smart Graphics to deliver the ultimate user experience *and* the ultimate value by enabling the creation of dynamically rich user interfaces with incredible efficiency and unparalleled functionality. Using Smart Graphics, programmers can swiftly integrate fluid gesture-driven controls, animated feedback, rich metadata, embedded apps and widgets, and full-motion video for a deeply engaging and ultra-intuitive touch screen experience.

Crestron Smart Graphics offers these enhancements and more:

- Cool-looking graphical buttons, sliders, knobs, and gauges that are intuitive and fun to use
- Kinetic effects to enhance the feeling of realism, with lists and toolbars that scroll with momentum at the flick of a fingertip
- Drag-and-drop objects that snap into place, offering an easy way to switch sources
- Dashboard widgets to personalize the touch screen with clocks, weather, news, and other information [1]
- A power-saving screensaver that allows display of time, temperature, and other text content at a reduced brightness level

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TSW-760-W-S – Shown in White

TSW-760-B-S with TSW-760-TTK-B-S Tabletop Kit

- Customizable themes allowing a completely different look and feel for every user, event, or season
- Fully-developed SmartObjects® that enable sophisticated control over complex devices with minimal programming
- A consistent look and feel across multiple touch screens of varying sizes

Soft-Touch Buttons

The TSW-760 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 the control system for custom functionality, and any unused button can be hidden by simply turning off its backlight.

Auto-Brightness Control

To ensure optimal visibility under varying lighting conditions, the TSW-760 includes a built-in light sensor, which regulates the brightness of the display and button backlighting 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

Some things are easier *said* than *done*, so why not just *say* what you want and let Crestron *do* it for you? With built-in voice recognition, the TSW-760 provides the ability to use spoken commands to control virtually anything. Voice recognition can be used to quickly turn devices on or off, select and play a specific media title or playlist, change the channel, choose a lighting scene, lock the doors, arm the security system, or enter a password. Simply say a command and Crestron does the rest.[1,2]

Streaming Video

High-performance streaming video capability makes it possible to view security cameras and other video sources right on the touch screen. Native support for H.264 and MJPEG formats allows the TSW-760 to display live streaming video from an IP camera, a streaming encoder (Crestron CEN-NVS200, DM-TXRX-100-STR, or similar [3]), 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, video 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 TSW-760's integrated microphone and speakers.[2]

Built-in Camera

A 5 megapixel camera is built into the TSW-760 to support video intercom and room monitoring capabilities. This feature allows individuals to communicate both verbally and visually 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 similar [3]) or a third-party video monitoring system. When not needed, the camera feature can be turned off programmatically through the control system. A "no-camera" model is also available.[2]

Sonos® App

Merging technologies from Sonos and Crestron brings a whole-house music experience like no other. From any touch screen in the house, a family can effortlessly 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-760, enabling enhanced control of Sonos products as part of a complete Crestron system. The app checks for updates nightly so it's always current.[1]

Room Scheduling (Coming Soon)

The TSW-760 can provide an invaluable productivity tool for corporate enterprises and other organizations that use Crestron Fusion®, Microsoft® Outlook®, Google Calendar™, or another calendaring application, to schedule meetings and manage rooms. Mounted on the wall outside each room, the TSW-760 allows anyone to see at-a-glance if the room is

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available or in use, and to view details about the current meeting. A swipe of the finger reveals the room's entire schedule for the day, displaying upcoming meetings and open time slots, and allowing the room to be reserved right on the spot.

Room scheduling functionality is enabled on the TSW-760 using the built-in room scheduling application, which syncs directly over the network with Crestron Fusion, Microsoft Exchange, Office 365®, or Google Calendar. A Room Availability Hallway Sign (model SSC or SSW [3]) can be added for enhanced visibility.[4]

PinPoint™ Beacon (Coming Soon)

The built-in PinPoint proximity detection beacon enhances the intelligence and personalization of a Crestron system by enabling a smartphone or tablet device to always know what room it's in. It works with the Crestron App or Crestron PinPoint App, using Bluetooth® technology to determine when the mobile device is in or near the same room as the beacon, and signals the mobile app to automatically display the appropriate controls and information for that location.[2,5]

Web Browsing

Using its built-in web browser, the TSW-760 provides quick access to online program guides and other web-based services at the touch of a button, allowing enhanced touch screen control of DVRs and other appliances without having to pick up a separate tablet or smartphone. If a device can be controlled or managed through a web browser, it can be integrated into the Crestron system through the TSW-760. Of course, the web browser may also be used to simply browse the Internet, check traffic conditions, or look up a recipe.[1]

On-Screen Keyboard

Typing in passwords, URLs, and text searches is facilitated using the on-screen multi-language keyboard.

Multi-Touch Support

The TSW-760's capacitive touch screen affords enhanced capabilities for browsing web pages using multi-touch gestures.

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

A simple Ethernet LAN connection is all that is required to wire the TSW-760, containing all control, video, intercom, and power signals within a single wire.

Power over Ethernet

Using PoE technology, the TSW-760 gets its operating power right through the LAN wiring. PoE (Power over Ethernet) eliminates the need for a local power supply or any dedicated power wiring. A PoE Injector (PWE-4803RU [3]) simply connects in line with the LAN cable at a convenient location. Crestron PoE switches (CEN-SW-POE-5 or CEN-SWPOE-16 [3]) may also be used to provide a total networking solution with built-in PoE.

Note: Refer to the "Power" specifications for additional details.

Simple, Versatile Mounting

Using the bracket provided, the TSW-760 is easily installed over a 2-gang or 3-gang electrical box, or a 2-gang European or UK electrical box. The same bracket allows for installation in a wooden lectern or podium over a rectangular cutout. When installed, the touch screen protrudes just 1/2 inch from the mounting surface and latches firmly into its mounting bracket leaving no visible screws for an ultra clean appearance.

Additional mounting options are afforded using the TSW-UMB-60 Universal Mounting Bracket. By itself, the TSW-UMB-60 provides a post-construction solution for retrofitting the TSW-760 into existing drywall. For pre-construction applications that don't require a back box, the TSW-UMB-60 can be used along with a TSW-UMB-60-PMK Pre-Construction Mounting Kit. Masonry and concrete applications are accommodated using the TSW-UMB-60 along with a TSW-UMB-60-BBI back box. The TSW-UMB-60 is compatible with TSW-560, -760, and -1060 model touch screens, making it easy to change devices at any time.[6]

When installing the TSW-760 in place of an older Crestron touch screen (APAD, CT-1000, LC-1000, TPS-4L, or TPS-2000L), Crestron offers Retrofit Mounting Brackets (TSW-60-RMB series [3]), which facilitate replacement without having to tear out the old mounting hardware or patch the wall.[6]

Secure Mounting

Every TSW-760 includes an optional security latch for installations in which the physical security of the touch screen is important. When installed, the security latch ensures that a casual passerby cannot remove the TSW-760 from its mounted position in the wall. The latch can only be disengaged through a special removal sequence, protecting the touch screen against theft while still allowing serviceability where required.

Tabletop Option

Using the optional Tabletop Kit (TSW-760-TTK [3]), the TSW-760 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-SMK [3]).

Rack Mount Option

The TSW-760 can be mounted in a 19" EIA equipment rack using the optional Rack Mount Kit (TSW-560/760-RMK-1 [3]). When rack mounted, the touch screen occupies three rack spaces.

SPECIFICATIONS

Touch Screen Display

Display Type: TFT active matrix color LCD
Size: 7 inch (178 mm) diagonal
Aspect Ratio: 17:10 WSVGA
Resolution: 1024 x 600 pixels
Brightness: 350 nits (cd/m²)
Contrast: 1100:1
Color Depth: 24-bit, 16.7M colors
Illumination: Edgelit LED w/auto-brightness control
Viewing Angle: ±80° horizontal, ±80° vertical
Touch Screen: Projected capacitive, 5-point multi-touch capable

Buttons

Hard Keys: (5) Projected capacitive pushbuttons, backlit w/auto-brightness control, per-button show/hide (backlight enable/disable), pre-labeled with icons for "Power", "Home", "Lights", "Up", and "Down"
Reset: (1) Miniature pushbutton on rear panel for hardware reset

Graphics Engine

Crestron Smart Graphics, multi-language web browser [1], multi-language on-screen keyboard, screensaver, single scalable streaming video window, native Sonos app [1], native room scheduling application [4], setup and diagnostics via web browser or onscreen UI

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
On-Screen 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 [4]: 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: 4 GB eMMC
Maximum Project Size: 600 MB

Communications

Ethernet: 10/100 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, IEEE 802.3at compliant
USB: USB 2.0 host for room availability hallway sign [3,4]
Bluetooth: Crestron PinPoint proximity detection beacon [2,5]

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)
Streaming Input Resolutions: Up to 1920x1080@30fps
Streaming Protocol: RTSP

Streaming Encoder & Camera [2]

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

Audio

Features: Built-in microphone and speakers, Rava SIP Intercom, multi-language voice recognition [1,2]
Audio Feedback Formats: MP3

Connectors

LAN PoE: (1) 8-pin RJ45 connector, female, with 2 LED indicators;
10Base-T/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 room availability hallway sign [3,4]

Power

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

Environmental

Temperature: 32° to 112° F (0° to 45° C)
Humidity: 10% to 90% RH (non-condensing)
Heat Dissipation: 44 BTU/hr

Enclosure

Construction: 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 2-1/5" H x 3-3/4" W (56 mm H x 96 mm W) cutout; 1-3/8" (35 mm) minimum mounting depth; additional wall mount, rack mount, and tabletop options available separately

Dimensions

Height: 4.79 in (122 mm)
Width: 7.61 in (194 mm)
Depth: 1.52 in (39 mm)
Dimensions do not include the mounting bracket

Weight

14.1 oz (400 g)

MODELS & ACCESSORIES

Available Models

TSW-760-B-S: 7" Touch Screen, Black Smooth
TSW-760-W-S: 7" Touch Screen, White Smooth
TSW-760-NC-B-S: 7" Touch Screen without Camera, Microphone, or PinPoint™ Beacon; Black Smooth
TSW-760-NC-W-S: 7" Touch Screen without Camera, Microphone, or PinPoint™ Beacon; White Smooth

Available Accessories

TSW-760-TTK: Tabletop Kit for TSW-760
TSW-560/760/1060-SMK: Swivel Mount Kit for TSW-760-TTK
TSW-UMB-60: Universal Mounting Bracket for TSW-x60 Series
TSW-UMB-60-PMK: Pre-Construction Mounting Kit for TSW-UMB-60
TSW-UMB-60-BBI: Wall Mount Back Box for TSW-UMB-60
TSW-760/1060-RMB-1: Retrofit Mounting Bracket – Converts APAD, CT/LC-1000, or TPS-2000L to TSW-760 or TSW-1060
TSW-760/1060-RMB-2: Retrofit Mounting Bracket – Converts TPS-4L to TSW-760 or TSW-1060
TSW-560/760-RMK-1: Rack Mount Kit for TSW-560 & TSW-760
SSC: Room Availability Hallway Sign, Ceiling Mount
SSW: Room Availability Hallway Sign, Wall Mount
PWE-4803RU: PoE Injector

CEN-SW-POE-5: 5-Port PoE Switch
CEN-SWPOE-16: 16-Port Managed PoE Switch
CEN-NVS200: Network Video Streamer
DM-TXRX-100-STR: HD Streaming Transmitter/Receiver
DM-RMC-100-STR: HD Streaming Receiver & Room Controller 100

Notes:

1. Voice recognition, web browsing, weather information, Sonos app, and certain other functions require an Internet connection.
2. The camera, microphone, and PinPoint beacon (Bluetooth) are included on models TSW-760-B-S and TSW-760-W-S only. To ensure privacy, the camera, microphone, and Bluetooth transceiver can each be defeated programmatically at any time. For applications demanding an extra measure of privacy, Crestron offers models TSW-760-NC-B-S and TSW-760-NC-W-S, which have no physical camera, microphone, or Bluetooth transceiver installed.
3. Item(s) sold separately.
4. Room scheduling functionality and USB support for the SSC or SSW hallway sign can be enabled using the native room scheduling application or the Room Scheduling SmartObject®. The SmartObject provides a UI similar to the TSS-752 and requires Crestron Fusion. The native application features a newer, more customizable UI, and can be used with Crestron Fusion, or without Crestron Fusion via direct connection to MS Exchange, Office 365, or Google Calendar. Refer to www.crestron.com/fusion for a list of other calendaring applications that are supported through Crestron Fusion. Using the native application, the TSW-760 must be designated exclusively for room scheduling use, which precludes use of certain other features and functions described in this spec sheet. Both room scheduling options are future features that will be available soon.
5. PinPoint beacon functionality will be enabled through a future firmware update. When enabled, the TSW-760 will provide an integrated, equivalent alternative to the standalone PP-100 beacon. For more details, refer to the PP-100 spec sheet. Bluetooth technology is used solely for proximity detection and does not transmit or receive any control, multimedia, or personal data. PinPoint beacons are only visible to Bluetooth enabled devices that are specifically programmed and configured to work with your system.
6. The TSW-UMB-60, TSW-UMB-60-PMK, and TSW-UMB-60-BBI are all sold separately. The TSW-UMB-60 is also compatible with older TSW-UMB-PMK preconstruction mounting kits and TSW-550-BBI back boxes, allowing the TSW-760 touch screen to be installed in place of a previous generation TSW-5xx series touch screen, or any other device that was originally installed using the a TSW-UMB-PMK or TSW-550-BBI, without modification to the wall. If replacing an APAD, CT-1000, LC-1000, TPS-4L, or TPS-2000L device, use the appropriate TSW-60-RMB retrofit mounting bracket (sold separately).

This product may be purchased from an authorized Crestron dealer. To find a dealer, please contact the Crestron sales representative for your area. A list of sales representatives is available online at www.crestron.com/salesreps or by calling 800-237-2041.

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.

3.57 in
91 mm

1.11 in
28 mm

3.71 in
95 mm

TOP

5.76 in
147 mm

1.96 in
50 mm

0.05 in
1.2 mm

TOP

Wall mounting bracket (included)

1.52 in
39 mm

4.79 in
122 mm

7.61 in
194 mm

0.48 in
13 mm