# 15.6" HD Touch Screen

- > Modern, high-end appearance
- > Premium metallic construction
- > Full HD 1080p capacitive touch display
- > Multi-touch capable
- > Auto-brightness control
- > Integrated digital graphics engine
- > Enhanced Smart Graphics™ performance
- > Dual-window HD streaming video display
- > Remote annotation support
- > Built-in web browsing[1]
- > On-screen keyboard
- > External USB keyboard support
- > Customizable screensaver
- > Built-in microphone and speakers
- > Voice recognition capability[1]
- > Full duplex Rava® intercom and phone
- > Customizable audio feedback
- > High-speed 10/100 Ethernet LAN port
- > PoE+ or 24VDC powered
- > Includes 100-240V universal power pack
- > Choice of surface wall mount or tabletop
- > VESA mount compatible
- > Available in dark gray w/black glass or all white
- > Signature Series custom colors and graphics also available

# **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, full-motion video windows, and a full-featured media player for an enhanced multiroom entertainment experience.

The Crestron TS-1542 delivers the ultimate touch screen experience — blending style and function with advanced high-definition graphics. In one slim device, the TS-1542 integrates a brilliant 15.6" Full HD touch screen display and high-performance digital graphics engine. Its sleek, modern design features premium metallic construction and edge-to-edge glass for a contemporary look that's perfectly at home placed on an executive boardroom table, installed in a high-tech command center, or mounted on the wall in a luxury residence.

Featuring enhanced Smart Graphics™ performance and dual-window HD streaming video display, the TS-1542 delivers an elegant and powerful touch screen control solution for a wide range of applications. Additional



features include the abilities to control any function using voice commands, browse the Internet, annotate over a video image or whiteboard screen, and communicate using built-in VoIP intercom and phone functions. [1] Single-wire PoE+ connectivity and a choice of tabletop, wall, or VESA mounting options afford an integrator-friendly solution that's easy to install and fits perfectly in any space. Standard finishes include either white or dark gray metallic, or choose the Signature Series option to design your own custom finish.

# Sleek, Versatile Design

At just 1-3/4 inches (45 mm) deep, the TS-1542 can be mounted virtually anywhere using the supplied wall mount kit or a third-party VESA 100 compliant mounting arm, bracket, or stand. A tabletop tilt model (TS-1542-TILT) is also offered, which features an ultra-stylish, smooth-tilt base for use on a table, desk, podium, or countertop.

# 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





TS-1542-TILT-B-S — Rear Side View

- 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, allowing display of time, temperature, and other text content at a reduced brightness level
- 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

#### **Auto-Brightness Control**

The TS-1542 maintains optimal visibility under varying lighting conditions by automatically adjusting its display brightness according to changes in the ambient light level in the room.

# **HD Streaming Video**

High-definition streaming video capability makes it possible to view security cameras and other video sources right on the touch screen. Up to two video windows can be displayed simultaneously. Native support for H.264 and MJPEG formats allows the TS-1542 to display live streaming video from IP cameras, streaming encoders (Crestron CEN-NVS200, DM-TXRX-100-STR, or similar <sup>[2]</sup>), and DigitalMedia<sup>™</sup> switchers. Video is delivered to the touch screen over Ethernet, eliminating the need for any extra video wiring.

# **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 TS-1542 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.<sup>[1]</sup>

#### 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 [3], 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.

# **Speakers and Microphone**

The built-in speakers and microphone provide clear audio for intercom and phone calls, as well as for listening to multimedia.

#### **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.

#### **Web Browsing**

Using its built-in web browser, the TS-1542 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



### **TS-1542 Signature Series**

The Signature Series allows the TS-1542 to be transformed into a beautiful showpiece adorned with custom colors and graphics on the tilt base and rear of the touch screen. No design is off limits, as Crestron provides the means for design ideas to be submitted, rendered for approval, and then made real. For more information, please visit: <a href="https://www.crestron.com/signatureseries">www.crestron.com/signatureseries</a>.

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 TS-1542. Of course, the web browser may also be used to simply browse the Internet, watch online videos, and check up on social media.<sup>[1]</sup>

# **Multi-Touch Support**

The TS-1542's capacitive touch screen affords enhanced capabilities for browsing web pages using multi-touch gestures.

# **Keyboard Options**

Typing in passwords, URLs, and text searches is facilitated using the onscreen multi-language keyboard. A physical USB keyboard (not included) may also be connected.

## **Built-in Annotation**

Whether conducting a high-level boardroom meeting or training seminar, sharing ideas in a huddle space, or watching sports in your home theater, annotation helps put the fine point on any presentation. Annotation provides the ability to illustrate your thoughts on-the-fly, letting you draw and write over streaming video and computer images, and sketch out ideas on a whiteboard screen.

Native to the TS-1542, remote annotation capability allows multiple participants, each with a separate touch screen, to draw with their fingertips over the same video image or whiteboard, enabling enhanced collaboration in a classroom, courtroom, or council chamber. Adding a Crestron Digital Graphics Engine (model DGE-100  $^{\rm [2]}$ ) connected to the room's main display allows the whole annotation session to be viewed by the entire audience.

# **Single-Wire Connectivity**

A simple Ethernet LAN connection with PoE+ is all that is required to wire the TS-1542, containing all control, video, intercom, and power signals within a single wire. If the LAN does not support PoE+, the TS-1542 may be powered using the supplied 100-240V power pack or 24VDC Cresnet® power.<sup>[4]</sup>

#### **Power over Ethernet**

Using PoE+ technology, the TS-1542 can get 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. To supply PoE+ to a network of TS-1542 touch screens and other devices, Crestron offers the CEN-SWP0E-16 16-Port Managed PoE Switch.<sup>[2]</sup>

# Interface Module

Each TS-1542 ships with a compact interface module (TS-1542-IMCW), which may be used as required to provide an RJ45 LAN connection for the touch screen. The module can be mounted in a 1-gang electrical box or floor box, under a table, or in a podium or equipment rack. A 6 foot (1.8 meter) long LAN cable is included for connection between the module and touch screen.

NOTE: When surface mounted using the wall mount kit (included with models TS-1542-B-S and TS-1542-W-S only), all wiring enters through an electrical box or cut-out and is concealed from view. For this method of installation, the interface module may not be required.

# **SPECIFICATIONS**

# **Touch Screen Display**

**Display Type:** TFT Active matrix color LCD **Size:** 15.6 inch (396 mm) diagonal

Aspect Ratio: 16:9 Full HD Resolution: 1920 x 1080 pixels Brightness: 400 nits (cd/m²) Contrast: 800:1 typical Response Time: 30 ms G-to-G Color Depth: 24-bit, 16.7M colors

Illumination: LED w/auto-brightness control Viewing Angle: ±80° horizontal, +80°/-65° vertical

Touch Screen: Projected Capacitive, 10-point multi-touch capable

## **Graphics Engine**

**Graphics Engine:** Crestron Smart Graphics

Features: Local and remote annotation, multi-language web browser [1],

multi-language on-screen keyboard, screensaver

Video Windowing: Fully-scalable dual streaming video windowing

# 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

# Memory

DDR3 SDRAM: 2 GB Flash: 4 GB

Maximum Project Size: 1 GB



## 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), SNMP, IPv4 or IPv6, IEEE 802.3at Type 2 compliant

**USB Host:** Supports USB HID compliant keyboard devices

**USB Device:** For computer console (installer setup and firmware update)

# Streaming Decoder

Video Formats: H.264 (MPEG-4 part 10 AVC), MJPEG

Audio Formats: AAC stereo Bitrates: Up to 25 Mbps <sup>[5]</sup> Resolutions: Up to 1080p60

#### **Audio**

Features: Built-in microphone and speakers, Rava® SIP Intercom, multi-

language voice recognition [1]

Audio Feedback Formats: MP3

#### Connectors

24V DC, 1.0 A: (1) 2-pin 3.5 mm detachable terminal block;

24 Volt DC power input; Wire Size: 18 AWG maximum;

Connects to the PW-2420RUL power pack (included), or to a Cresnet®

network or power supply [4]

USB HID: (1) USB Type A female;

USB 2.0 host port for USB HID-compliant keyboard

**CONSOLE:** (1) USB Type B female; USB computer console port (for setup)

G: (1) 6-32 screw, chassis ground lug

LAN: (1) 8-pin RJ45 female;

10Base-T/100Base-TX Ethernet port; Power over Ethernet Plus compliant;

6 ft (1.8 m) cable and TS-1542-IMCW interface module included

# **Buttons & Indicators**

RESET: (1) Pushbutton at rear connector panel for hardware reset LAN: (2) LEDs at LAN connector, green LED indicates Ethernet link status, amber LED indicates Ethernet activity

### Power

Power Options: Power pack, Cresnet, or PoE

Power Pack (included): Output: ≥1 Amp @ 24 Volts DC

Input: 1.3 Amps @ 100-240 Volts AC, 50/60 Hz

Model: PW-2420RUL

Cresnet: 25 Watts @ 24 Volts DC [4]

PoE (Power over Ethernet): IEEE 802.3at Type 2 Class 4 (25.5 W) PoE+

Powered Device

Power Consumption: 25 Watts maximum;

18.4 Watts typical (display brightness 100%); 8.7 Watts standby (display backlight off)

#### **Environmental**

Temperature:  $32^{\circ}$  to  $113^{\circ}$  F ( $0^{\circ}$  to  $45^{\circ}$  C) Humidity: 10% to 90% RH (non-condensing)

Heat Dissipation: 63 BTU/hr typical

# Construction

**Composition:** Aluminum housing with dark gray or white finish (custom colors and graphics also available), edge-to-edge glass with black or white surround

Mounting (model TS-1542): Mounts to a flat wall surface over a 2-gang electrical box, horizontally-oriented 1-gang electrical box, 1-gang UK electrical box (BS 4662), 1-gang European electrical box (DIN 49073), or rough cut-out up to 2" H x 3" W (50 mm H x 75 mm W) using wall mount kit provided; VESA 100 x 100 mm mountable with wall mount kit removed Mounting (model TS-1542-TILT): Includes tabletop base with 23° to 45° adjustable tilt

# Dimensions - Model TS-1542

**Height:** 9.42 in (240 mm) **Width:** 15.35 in (390 mm)

Depth: 1.80 in (46 mm) with wall mount kit;

1.76 in (45 mm) without wall mount kit (VESA mount)

#### Dimensions - Model TS-1542-TILT

Height: 8.76 in (223 mm) minimum at 45° tilt;

9.90 in (252 mm) maximum at 23° tilt

Width: 15.35 in (390 mm)

Depth: 6.80 in (173 mm) minimum at 23° tilt; 8.15 in (207 mm) maximum at 45° tilt

#### Weight

**TS-1542**: 7.3 lb (3.4 kg) **TS-1542-TILT**: 10.1 lb (4.6 kg)



# **MODELS & ACCESSORIES**

#### **Available Models**

TS-1542-B-S: 15.6" HD Touch Screen, Wall Mount or VESA, Black Smooth TS-1542-W-S: 15.6" HD Touch Screen, Wall Mount or VESA, White Smooth TS-1542-TILT-B-S: 15.6" HD Touch Screen, Tabletop Tilt, Black Smooth TS-1542-TILT-W-S: 15.6" HD Touch Screen, Tabletop Tilt, White Smooth TS-1542-TILT-SSB: 15.6" HD Touch Screen, Tabletop Tilt, Signature Series

TS-1542-TILT-SSW: 15.6" HD Touch Screen, Tabletop Tilt, Signature

Series White

#### **Included Accessories**

TS-1542-IMCW: Interface Module (Qty. 1 included)

PW-2420RUL: Desktop Power Pack, 24VDC, 2A, Flying Leads, Universal

(Qty. 1 included)

#### **Available Accessories**

**CEN-SWP0E-16**: 16-Port Managed PoE Switch **CEN-NVS200**: Network Video Streamer

DM-TXRX-100-STR: HD Streaming Transmitter/Receiver

#### Notes:

- Voice recognition, web browsing, weather information, and certain other functions require an internet connection.
- 2. Item(s) sold separately
- 3. H.264 compatible IP camera required.
- Connection to a Cresnet network or power supply is for power only. Does not support Cresnet data communications.
- Supports up to two simultaneous streaming inputs with a maximum combined total bitrate of 25 Mbps.

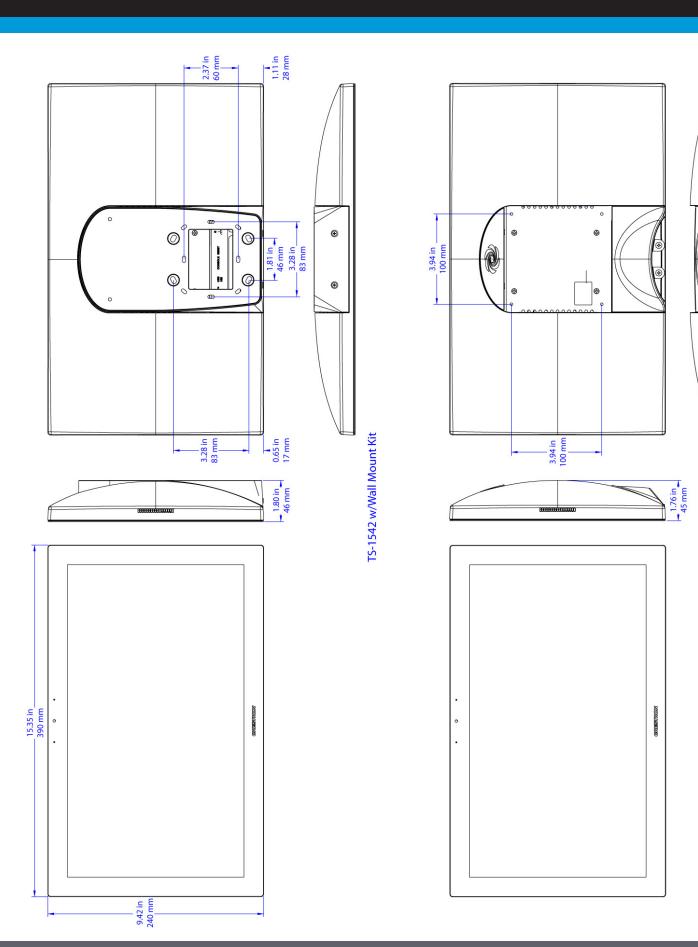
This product may be purchased from an authorized Crestron dealer. To find a dealer, please contact the Crestron sales representative for your area. A list of sales representatives is available online at <a href="https://www.crestron.com/salesreps">www.crestron.com/salesreps</a> or by calling 800-237-2041.

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

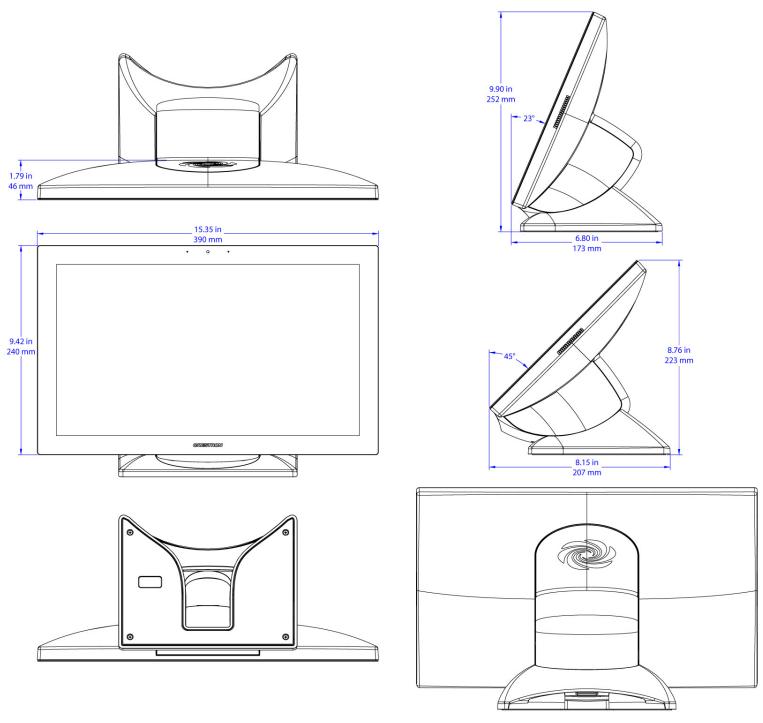
Certain Crestron products contain open source software. For specific information, please visit www.crestron.com/opensource.

Crestron, the Crestron logo, Cresnet, DigitalMedia, Rava, Smart Graphics, and SmartObjects are either trademarks or registered trademarks of Crestron Electronics, Inc. in the United States and/or other countries. Other trademarks, registered trademarks, and trade names may be used in this document to refer to either the entities claiming the marks and names or their products. Crestron disclaims any proprietary interest in the marks and names of others. Crestron is not responsible for errors in typography or photography. Specifications are subject to change without notice. ©2017 Crestron Electronics, Inc.





TS-1542 VESA Mount



TS-1542-TILT