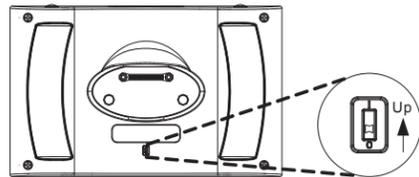


1 Battery Switch

The TST-600 from Crestron® ships with the battery switch (on the rear) in the OFF (downward) position. The OFF position is used for shipping and long term storage only. Use the included T-pin to turn the switch ON (slide it upward) and place the TST-600 on the included docking station/charger for a minimum of four hours before using.

To charge the internal battery, the TST-600 must be placed on the TST-600-DS Docking Station, which must be connected to a powered TST-600-IMCW Interface Module (included).



2 Configure the Touch Screen

The main menu is the starting point for configuring the TST-600. If no project is loaded, touch the screen to access the main menu. If a project is running, the main menu can be accessed by using the following procedure:

1. Press and hold the left trigger key on the top of the touch screen until the unit resets (approximately 5 seconds).
2. When the display turns black, then displays a "3", release the trigger key.
3. When "Loading Crestron Applications" appears on the display, touch the screen.
4. Release the touch screen when "Preparing to enter setup" appears.

The main menu can also be accessed by pressing **HOME**, **MEDIA**, **▲** and **▼**, on the left of the touch screen display, in sequence twice (press **HOME**, **MEDIA**, **▲**, **▼**, **HOME**, **MEDIA**, **▲**, **▼**) within a 5 second period.



NOTE: From any of the setup menus, touch  to go back to the previous menu.



For details on configuring the TST-600, refer to the TST-600 Configuration Guide (Doc. 7383) at www.crestron.com/manuals.

3 Basic Wireless Setup

Before a TST-600 can be used with a Crestron control system, it must first be acquired by a CEN(I)-ERFGW-POE Extended Range RF Wireless Gateway (sold separately).

To acquire a TST-600:

1. Use a stylus or other thin tipped object to press **ACQUIRE** on the CEN(I)-ERFGW-POE gateway to enter Acquire mode. The accompanying LED illuminates, indicating the unit is ready to link with the touch screen.
2. From the main menu on the TST-600, touch **RF Setup** to display the **RF Setup** screen. Then place the TST-600 in Acquire mode by touching **Acquire** on the **RF Setup** screen. The screen displays an "Acquire in progress" message and the TST-600 is automatically acquired by the gateway within 2 minutes.
3. When the process is complete, the screen displays an "Acquire OK" message. Press **ACQUIRE** on the gateway to exit Acquire mode. The LED turns off.

RF Setup Screen



RF Setup (Acquire in Progress) Screen

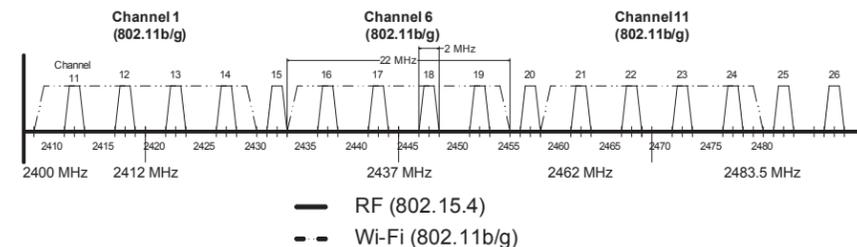


RF Setup (Acquire OK) Screen



NOTE: Select an RF channel between 12 and 23 for maximum range. Channels 11, 24-26 will result in less range but are available if RF interference requires moving the RF channel.

IEEE 802.15.4 Channel Selection (2400 MHz PHY)



NOTE: The RF ID of the unit must match the RF ID specified in the SIMPL Windows program.



For details, refer to "Appendix A: The RF Spectrum" and "Appendix B: Optimum RF Reception Guidelines" in the TST-600 Configuration Guide (Doc. 7383).

4 Networking Setup

From the main menu, touch **Networking Setup** to display the **Networking Setup - Choose WiFi or LAN** menu.

Out of the box, LAN access is turned on. To switch to Wi-Fi® access, touch **On** under **WiFi Access**, then touch **Reboot Required to Apply Networking Changes** to reboot the TST-600.

To set up Wi-Fi, proceed to the next column.

The TST-600 ships with DHCP enabled by default. To enter static IP settings, touch **LAN Setup** to display the **Ethernet Setup** menu.



From the **Ethernet Setup** menu, touch **Set Static IP Address Settings** to display the **Ethernet Setup - Static IPs** menu.



The **Ethernet Setup - Static IPs** menu is used to edit **Static IP address**, **Static Subnet Mask**, **Static Default Router**, **Preferred DNS** and **Alternate Preferred DNS** settings. Touch each to display a keypad for entering the new setting.



Touch **Reboot Required to Apply IP Changes** to save the new settings and reboot the TST-600.

To enter Wi-Fi settings, from the **Networking Setup - Choose WiFi or LAN** menu, touch **WiFi Setup** to display the **WiFi Setup** menu.



If a static IP address is preferred, from the **WiFi Setup** menu, touch **Set Static IP Address Settings** to display the **WiFi Setup - Static IPs** menu. To stay with DHCP, skip to the bottom of this column to connect to a WiFi access point.



The **WiFi Setup - Static IPs** menu is used to edit **Static IP address**, **Static Subnet Mask**, **Static Default Router**, **Preferred DNS** and **Alternate Preferred DNS** settings. Touch each to display a keypad for entering the new setting.



Touch  to return to the **WiFi Setup** menu.

From the **WiFi Setup** menu, touch **Select a WiFi Access Point** to display the **Connect to a WiFi Access Point: 1-2-3** menu.



The left side of the **Connect to a WiFi Access Point: 1-2-3** menu displays a list of available access points. Touch the name of the desired access point.



The name and security type for the selected access point are displayed on the right side of the screen.

Touch the area below the word **Password** to display a keyboard for password entry.



Enter the password for the access point and touch **Save**.

The password will appear below the **WAP Name** and **Security** entries on the right side of the screen.

Touch **Step 3 - Make this my Access Point**.



Touch **Reboot Required to Apply IP Changes** to save the new settings and reboot the TST-600.

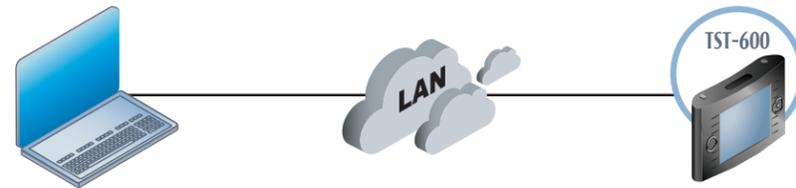


5 Establish Communication

Use Crestron Toolbox™ for communicating with the TST-600; refer to the Crestron Toolbox help file for details. There are three methods of communication: TCP/IP, Indirect (using Wi-Fi) and USB.

When using a wired LAN, the TST-600 must be placed on the TST-600-DS Docking Station, which must be connected to a powered TST-600-IMCW Interface Module (both included) or it must be placed in the TST-600-DSW Wall Mount Docking Station (sold separately). It must also be in LAN mode. Refer to section 4 "Networking Setup" on page 2 for details.

Ethernet Communication (LAN Communication is Enabled)

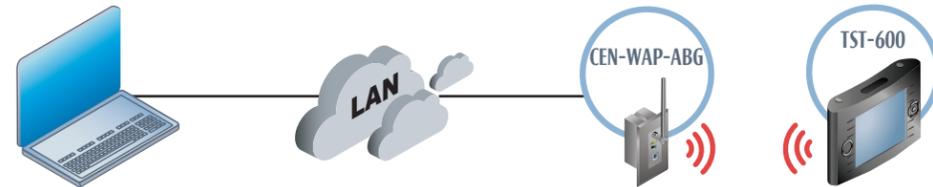


PC Running Crestron Toolbox

TST-600 connects to PC via Ethernet:

1. Use the Device Discovery Tool (click the icon) in Crestron Toolbox to detect all Ethernet devices on the network and their IP configuration. The tool is available in Toolbox version 1.15.143 or later.
2. Click on the TST-600 to display information about the device.

Wi-Fi Communication (Wi-Fi Communication is Enabled)



PC Running Crestron Toolbox

Using Wi-Fi, the TST-600 can communicate directly with the PC via the network.

USB Communication



PC Running Crestron Toolbox

The USB port on the TST-600 connects to USB port on the PC via the included Type A to Type B USB cable:

1. Select **Tools > System Info**.
2. Click the icon.
3. For Connection Type, select USB. When multiple USB devices are connected, identify the TST-600 by entering "TST-600" in the Model text box, the unit's serial number in the Serial text box or the unit's hostname (if known) in the Hostname text box.
4. Click OK. Communications are confirmed when the device information is displayed.

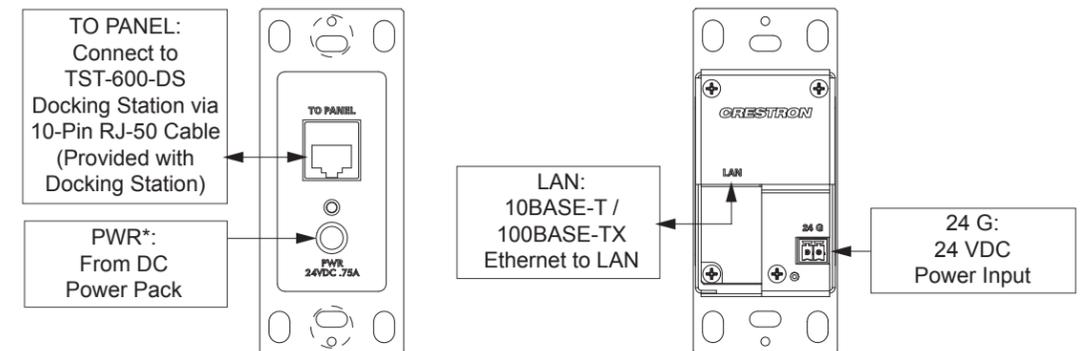
6 Hardware Hookup

When the TST-600 is set for Wi-Fi, after it has been successfully acquired by a CEN(I)-ERFGW-POE gateway (refer to section 4), the TST-600 does not require any physical connections for wireless operation.

When set for wired LAN, the TST-600 must be placed on the TST-600-DS Docking Station, which must be connected to a powered TST-600-IMCW Interface Module (both included) or it must be placed in the TST-600-DSW Wall Mount Docking Station (sold separately).

For details, refer to the TST-600-DS Installation Guide (Doc. 7433) and the TST-600-IMCW Installation Guide (Doc. 7385) at www.crestron.com/manuals.

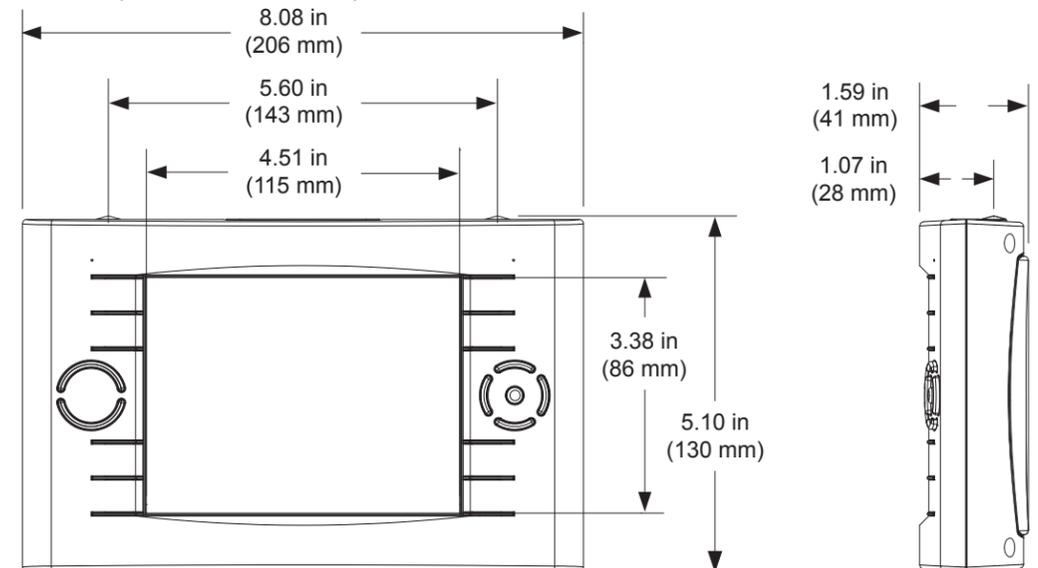
TST-600-IMCW (Front and Rear Views)



* A ferrule dust cap is provided to cover the dc power jack when not in use.

7 Dimensions

TST-600 (Front and Side Views)



8 Specifications

Touch Screen Display

Display Type: TFT active matrix color LCD
Size: 5.7 inch (145 mm) diagonal
Aspect Ratio: 4:3 VGA
Resolution: 640 x 480 pixels
Brightness: 350 nits (cd/m²)
Contrast: 800:1
Color Depth: 18-bit, 262k colors
Illumination: Edgelit LED
Viewing Angle: ±80° horizontal, ±70° vertical
Touch Screen: Projected capacitive

Buttons, Switches & Indicators

Sleep: (1) Top-mounted push button (left); programmable, normally initiates "Sleep" mode when docked, turns power on/off when undocked; also resets the unit if held for 5 seconds
Brightness: (1) Top-mounted push button (right); programmable, normally sets display brightness level
Hard Keys: (8) Optional push buttons, programmable, engravable backlit text (black models only)
Up/Down: (2) Optional backlit translucent "up/down" push buttons, programmable, engravable backlit text on bezel (black models only)
Thumbpad: (5) Optional backlit translucent push buttons for 4-way directional navigation and "enter", programmable
Battery Switch: (1) Rear panel recessed slide switch, shuts off battery for long-term storage
Battery LED: (1) Green LED, indicates battery condition and charging status when docked

Memory

LPDDR2 RAM: 1 GB
Flash: 4 GB
Maximum Project Size: 512 MB

Graphics Engine

Support Smart Graphics™¹

Wireless Communication – Extended Range RF²

RF Transceiver: 2-way RF, 2.4 GHz ISM Channels 11-26 (2400 to 2483.5 MHz), IEEE 802.15.4 compliant
Transmitting Power: 75 mW (Ch.11), 100 mW (Ch.12-23), 15 mW (Ch.24), 3.5 mW (Ch.25), 1 mW (Ch.26) @ High Setting; 1 mW (Ch.11-25), 0.5 mW (Ch.26) @ Low Setting
Range (typical): 100 to 200 feet (30 to 61 meters) maximum indoor, 1000 feet (305 meters) outdoor, subject to site-specific conditions
Gateway: Requires a CEN-ERFGW-POE Extended Range RF Gateway (sold separately)

Wireless Communication – Wi-Fi²

Transceiver: IEEE 802.11a/b/g Wi-Fi (5.8 or 2.4 GHz 2-way RF), static IP or dynamic IP via DHCP, 64 and 128-bit WEP encryption
Range: Up to 50 feet (15 meters), subject to site-specific conditions
Gateway: Requires a CEN-WAP-ABG or similar 802.11a/b/g wireless access point and Ethernet-enabled Crestron control system

Wired Communication

Ethernet: (Via docking station) 10/100 Mbps, auto-switching, auto-negotiating, auto-discovery, full/half duplex, DHCP
USB: USB client for console

Video

Streaming Formats: H.264 (MPEG-4 part 10 AVC), MJPEG²

Audio

Features: Built-in microphone and speakers, Rava® SIP Intercom³
Audio Feedback Formats: MP3

Connectors⁴

Docking Connector: (1) Multi-pin connector
 Mates with the docking port on the docking station

USB: (1) Mini-B USB console port, for installer use only
 Mini-B to A USB cable included

Battery

Internal Battery: Li-ion, 3.7 Volt, 3600 mAh, model TST-600-BTP
Usage per Charge: 3.5 hours continuous, 100 hours under normal use (10% active duty cycle with standby/power down enabled)
Charging Time: 2.5 hours with touch screen in standby, 3.5 to 5 hours during use

Power Requirements

Power Pack: 0.75 amps @ 24 Vdc
 100-240 Vac, 50/60 Hz power pack included

Cresnet® Power Usage: 18 watts (0.75 amps @ 24 Vdc), includes TST-600-IMCW module

Note: May be powered by power pack or Cresnet network power, not both. Does not support Cresnet data communication, only power. All power connections are made via the TST-600-IMCW interface module.

Environmental

Temperature: 32° to 112° F (0° to 45° C), 50° to 104° F (10° to 40° C) while charging
Humidity: 10% to 90% RH (non-condensing)
Heat Dissipation: 40 Btu/h

Enclosure

Construction: Plastic, non-slip grips/feet, integral docking station port
Front Bezels: Plastic, button and no-button bezels included, button bezel includes white translucent illuminated Up/Down and Thumbpad buttons and 8 hardkey buttons with illuminated dividers and default backlit text engraving, optional custom backlit text engraving sold separately (black models only)

Dimensions

Height: 5.10 in (130 mm)
Width: 8.08 in (206 mm)
Depth: 1.59 in (41 mm)

Note: Combined height of the TST-600 touch screen docked on the TST-600-DS docking station is 3.30 in (84 mm).

Weight

23 oz (636 g)

NOTES

1. Supports Smart Graphics only. Not compatible with "traditional" UI projects.
2. ER (Extended Range) RF wireless communication supports basic wireless touch screen functionality and is required for all wireless applications. For advanced functionality including streaming video, intercom and dynamic graphics, Wi-Fi wireless communication is also required (dual-mode). Advanced functionality can also be enabled while docked through a wired Ethernet LAN connection.
3. Streaming video, intercom and dynamic graphics capabilities require dual-mode wireless or a wired Ethernet connection.
4. Refer to TST-600-IMCW interface module specifications for additional connectors.

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

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