



TSW-570, TSW-770, and TSW-1070
5 in., 7 in., and 10.1 in. Wall Mount Touch
Screens

Product Manual
Crestron Electronics, Inc.

Original Instructions

The U.S. English version of this document is the original instructions.

All other languages are a translation of the original instructions.

Regulatory Models: M201923001, M201923002, M201923003

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Introduction

The Crestron® [TSW-570](#), [TSW-770](#), and [TSW-1070](#) are wall mount touch screens that feature web browsing, Smart Graphics® software and HTML5 UI technology, custom-programmable virtual buttons, H.265/H.264 streaming video, a Rava® SIP intercom (TSW-770 and TSW-1070 only), Wi-Fi® network connectivity (TSW-770 and TSW-1070 only), and PoE+ (Power over Ethernet Plus) network power. The touch screens also provide built-in applications for room scheduling, conferencing, and home control.

NOTE: The TSW-570, TSW-770, and TSW-1070 are functionally similar. For simplicity within this guide, the term "touch screen" is used except where otherwise noted.

Crestron offers the following variations for its standard touch screen models. Certain settings described in this document are not applicable to these models.

- The [TSW-770-GV](#) and [TSW-1070-GV](#) series touch screens eliminate the microphone, the Bluetooth® communications beacon, and Wi-Fi network connectivity to comply with government applications demanding extra privacy and security.
- The [TSW-570PR](#), [TSW-770R](#), and [TSW-1070R](#) series touch screens are designed specifically to run the Crestron Home™ OS home control application.

For more information on the TSW-570, TSW-770, and TSW-1070, refer to the [TSW-570, TSW-770, and TSW-1070 Quick Start \(Doc. 8552\)](#).

Access the Setup Screens

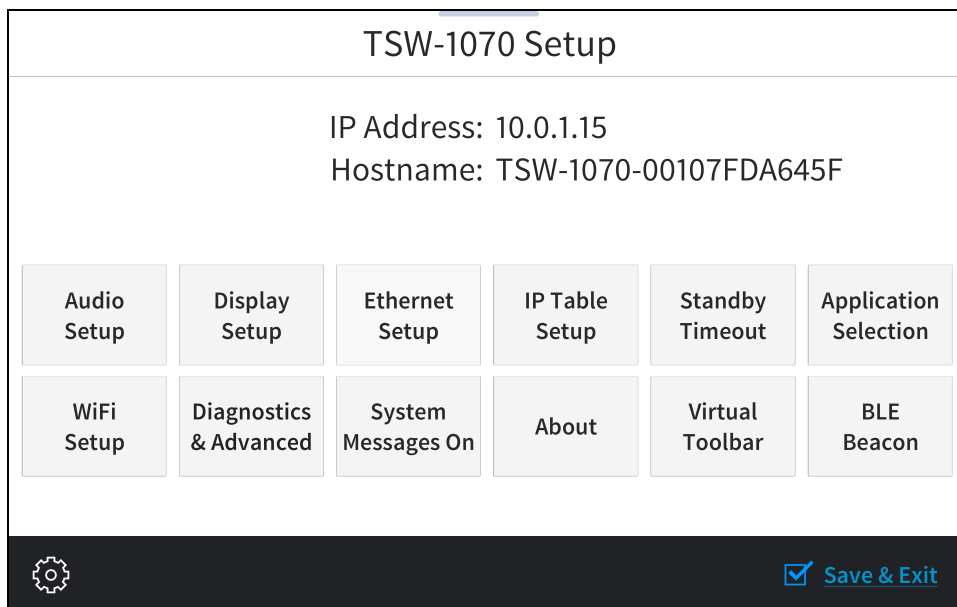
The setup screens enable basic configuration prior to regular operation of the touch screen.

NOTE: The TSW-570P 5 in. portrait touch screen provides the same setup screens that are described in this guide, but the appearance and layout of the screens have been modified for portrait orientation.

To access the touch screen's built-in setup screens during regular operation, place five fingers on the display and hold for 15 seconds.

The main Setup screen is displayed (TSW-1070 shown).

TSW-1070 Setup Screen




NOTE: The touch screen also provides a web configuration interface that may be used to view and configure various touch screen settings. For more information, refer to [Web Configuration \(on page 35\)](#).

The Setup screen shows the IP address and hostname of the touch screen and provides the following configuration selections:

- Buttons for Ethernet setup, IP table setup, audio setup, display setup, standby timeouts, application selection, Wi-Fi® network setup, diagnostics, Bluetooth® beacon configuration, and the virtual toolbar (model dependent).
- A button to toggle system messages on or off
- An **About** button that provides information about the touch screen.

The functions of each button are detailed in the following pages of this guide.

NOTE: A toolbar is present on the bottom of all setup screens. The toolbar provides a gear button  that may be tapped to return to the Setup screen and a **Save & Exit** button that may be tapped to save all settings, to exit the setup screens, and to return to the selected scheduling application.

Local Configuration

Refer to the following sections for information about configuring the device locally using its setup screens.

Ethernet Setup

Tap **Ethernet Setup** on the Setup screen to display the **Ethernet Setup** screen.

Ethernet Setup Screen

The screenshot shows the 'Ethernet Setup' screen with a dark header bar containing '< BACK', 'Ethernet Setup', 'APPLY CHANGES', and 'REBOOT'. The main content area is divided into two columns. The left column lists network details: 'Link: ●', 'MAC: 00:10:7f:da:64:5f', 'IP Address: 10.0.255.0', 'Subnet Mask: 255.255.255.0', 'Default Router: 10.0.1.0', 'Primary DNS: 10.0.1.0', 'Secondary DNS: 0.0.0.0', 'Hostname: TSW-1070-001', and 'Domain: localdomain'. The right column contains three sections: 'Ethernet IP Options' with a 'Set Static IP Address Settings' button; 'DHCP Enable' with 'On' and 'Off' toggle buttons (the 'On' button is selected); and 'LAN Access' with 'On' and 'Off' toggle buttons (the 'On' button is selected). At the bottom, there is a gear icon on the left and a 'Save & Exit' button with a checkmark icon on the right.

Use the Ethernet Setup screen to view the touch screen MAC and IP addresses, subnet mask address, default router address, primary and secondary DNS addresses, hostname, and domain. A **Link** indicator is provided to indicate the status of the Ethernet connection. (Green indicates that the Ethernet connection is active.)

The following buttons are provided for configuring Ethernet settings:

- Tap **On** or **Off** under **LAN Access** to turn the Ethernet adapter on or off. If **LAN Access** is set to **Off**, Ethernet will not function and a Wi-Fi connection can be established.
- Tap **On** or **Off** under **DHCP Enable** to turn DHCP (dynamic host configuration protocol) on or off.

NOTE: DHCP is enabled on the touch screen by default.

- If DHCP is turned off, tap **Set Static IP Address Settings** to enter static IP addresses manually.
- Tap **Set Hostname** to enter a new touch screen hostname using an on-screen keyboard.

- Tap **APPLY CHANGES** to apply any new Ethernet settings to the touch screen and to stay in setup mode.
- Tap **REBOOT** to exit setup mode and reboot the touch screen.



To change a static IP address, tap **Off** under **DHCP Enable**. Then, tap **Set Static IP Address Settings** to display the **Static IP Ethernet Setup** screen.

Static IP Ethernet Setup Screen

To edit the static IP address, the static subnet mask, the static default router, the preferred DNS, or the alternate preferred DNS, tap the text field underneath the setting name.

The on-screen numeric keypad opens for the chosen setting.

Edit IP Address On-Screen Numeric Keypad

- Use the keypad to make a new entry.
- Tap the clear button  in the text field to clear any previous entry.
- Tap the delete button  to delete the last digit.
- Tap **Save** to save a new entry or tap **< CANCEL** to discard any changes. The display returns to the **Static IP Ethernet Setup** screen.

After new settings have been saved, tap **APPLY CHANGES** on the **Static IP Ethernet Setup** screen to apply the new settings and stay in setup mode. Tap **REBOOT** to exit setup mode and reboot the touch screen.

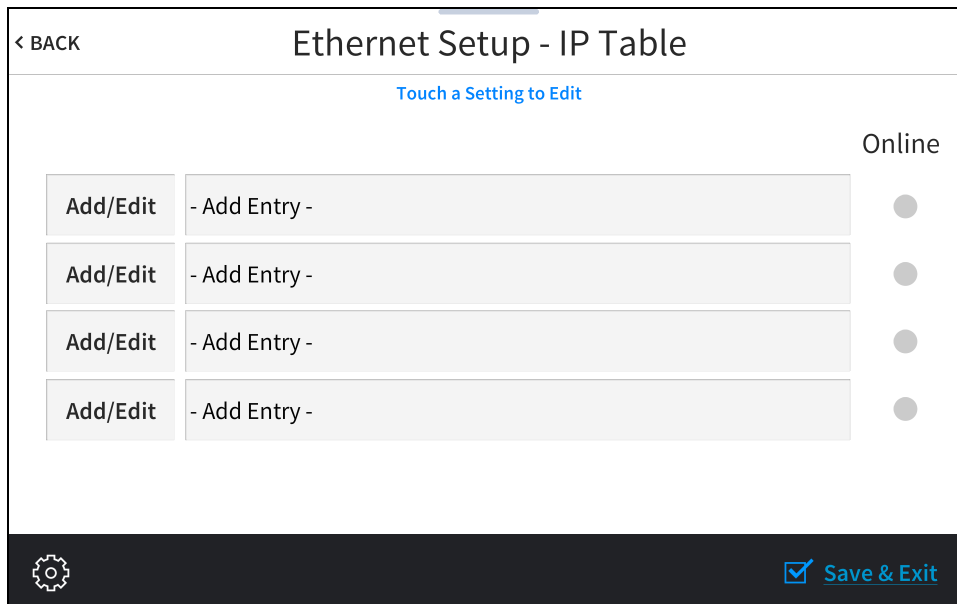
Tap **< BACK** to return to the **Ethernet Setup** screen.

Tap **< BACK** on the **Ethernet Setup** screen to return to the Setup screen.

IP Table Setup

Tap **IP Table Setup** on the Setup screen to display the **Ethernet Setup - IP Table** screen.

Ethernet Setup - IP Table Screen



Use the **Ethernet Setup - IP Table** screen to view and edit the IP table settings for connecting the touch screen to a control system. The **Ethernet Setup - IP Table** screen also provides an **Online** indicator for each IP table entry. (Green indicates that the control system is online.)

To add or edit an entry, tap **Add/Edit** next to the corresponding entry. The **Ethernet Setup - Edit IP Table** screen is displayed.

Ethernet Setup - Edit IP Table Screen

CIP ID	IP Address / Hostname	Port
3		41794

SAVE **DELETE**

Save & Exit

Tap the **CIP ID** text field to display the on-screen hex keypad.



On-Screen Hex Keypad

Edit CIP ID

3

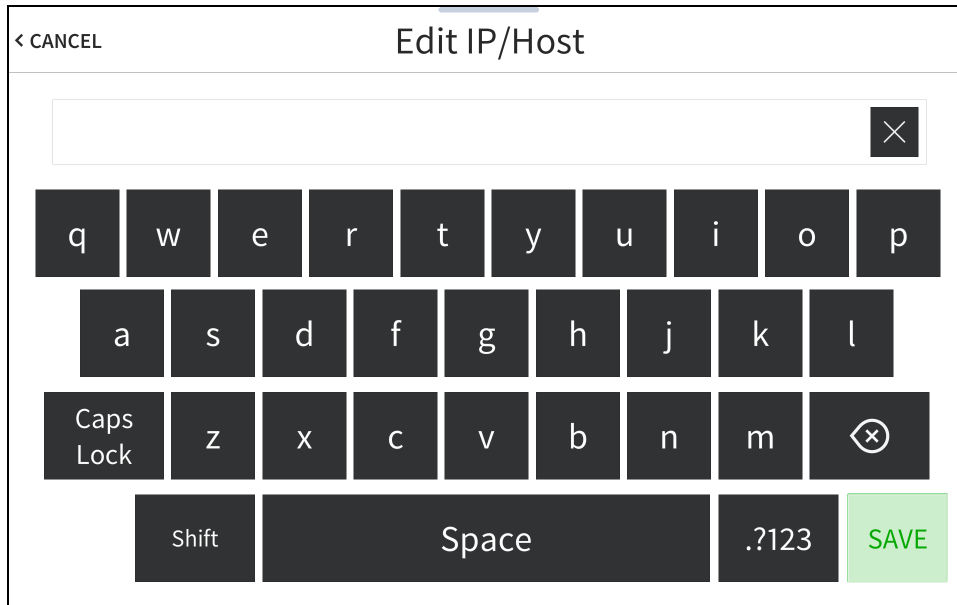
1	2	3	4
5	6	7	8
9	A	B	C
D	E	F	0



SAVE

- Use the keypad to make the new entry.
- Tap the clear button  in the text field to clear any previous entry.
- Tap the delete button  to delete the last digit.
- Tap **SAVE** to save a new entry or tap **< CANCEL** to discard any changes. The display returns to the **Ethernet Setup - Edit IP Table** screen.

On the **Ethernet Setup - Edit IP Table** screen, tap the **IP Address / Hostname** text field to display an on-screen keyboard.

On-Screen Keyboard



- Use the keyboard to make the new entry.
- Tap the clear button  in the text field to clear any previous entry.
- Tap the delete button  to delete the last digit.
- Tap **SAVE** to save a new entry or tap **< CANCEL** to discard any changes. The display returns to the **Ethernet Setup - Edit IP Table** screen.

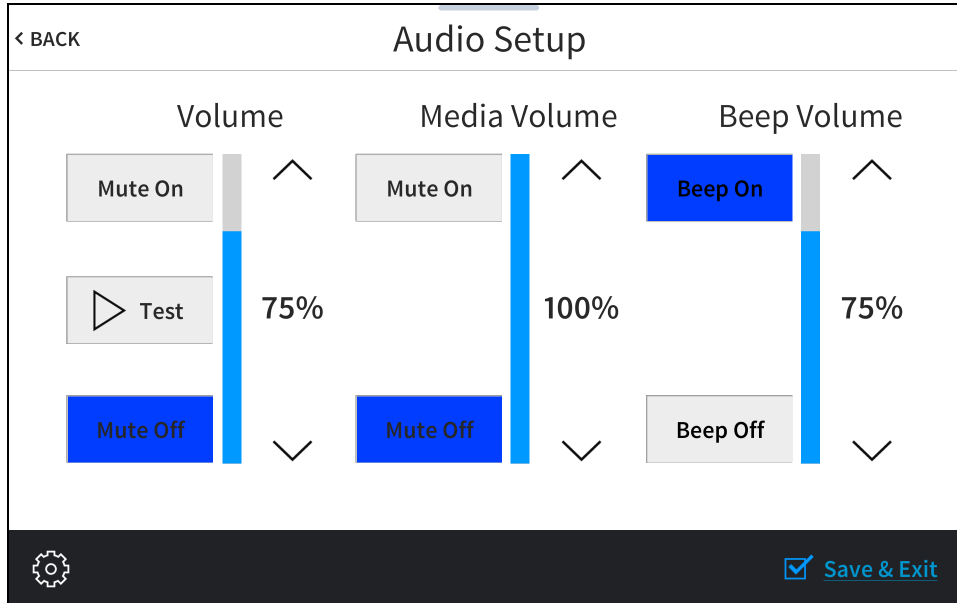
Tap **< BACK** on the **Ethernet Setup - Edit IP Table** screen to return to the **Ethernet Setup - IP Table** screen.

Tap **< BACK** on the **Ethernet Setup - IP Table** screen to return to the Setup screen

Audio Setup

Tap **Audio Setup** on the Setup screen to display the **Audio Setup** screen.

Audio Setup Screen



Use the **Audio Setup** screen to control the master volume, media volume, and beep volume settings for the touch screen.

NOTE: The **Media Volume** controls adjust the H.264 streaming media level in relation to the **Volume** controls.

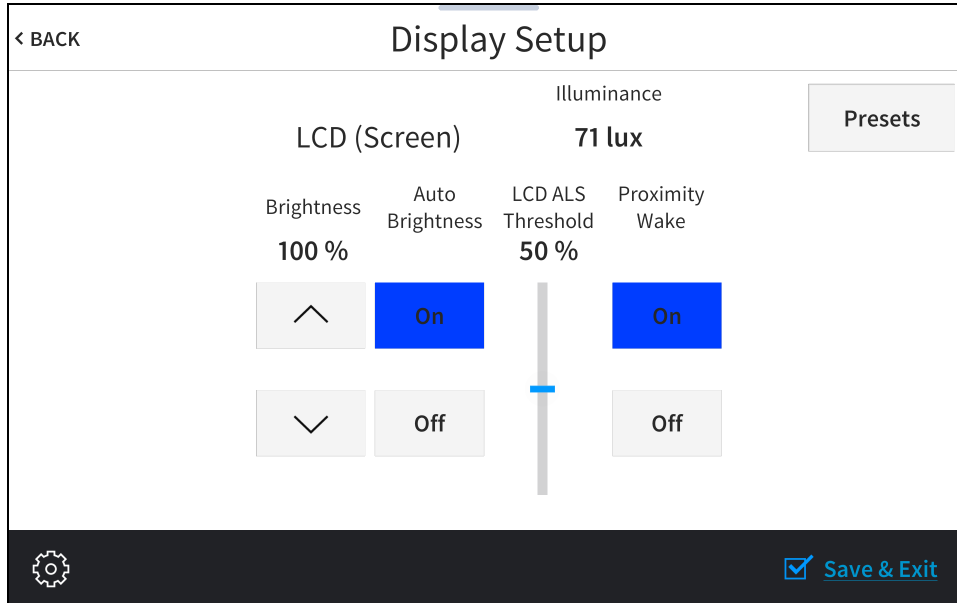
- **Volume**
 - Tap the up and down arrow buttons to raise or lower the touch screen master volume incrementally from 0 to 100%.
 - Tap **Mute On** or **Mute Off** to mute or unmute the master volume.
 - Tap **Test** to play a test recording at the current volume level.
- **Media Volume**
 - Tap the up and down arrow buttons to raise or lower the touch screen media volume incrementally from 0 to 100%.
 - Tap **Mute On** or **Mute Off** to mute or unmute the media volume.
- **Beep Volume**
 - Tap the up and down arrow buttons to raise or lower the touch screen beep volume incrementally from 0 to 100%.
 - Tap **Beep On** or **Beep Off** to turn the beep volume on or off.

Tap **< BACK** to return to the Setup screen.

Display Setup

Tap **Display Setup** on the Setup screen to display the **Display Setup** screen.

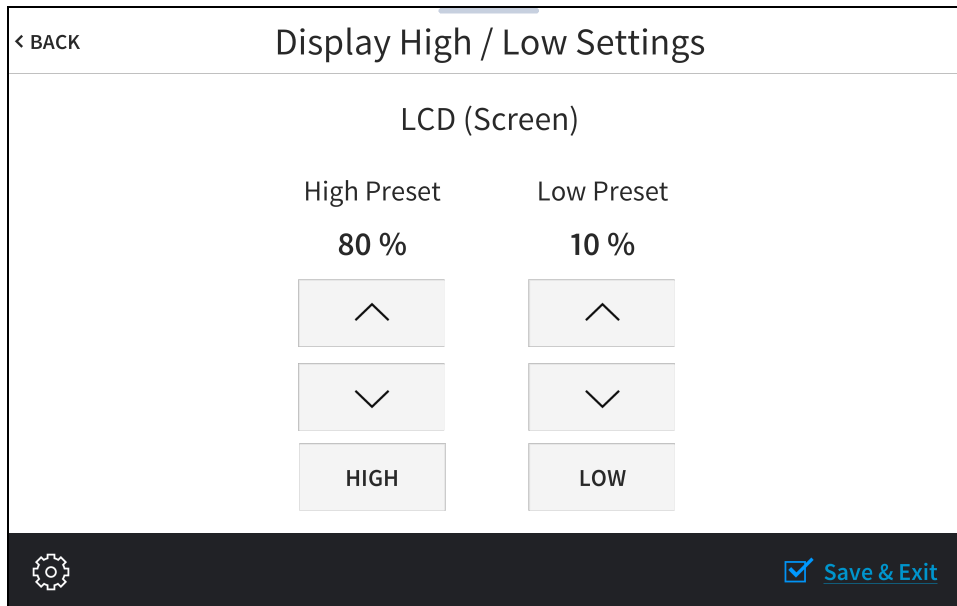
Display Setup Screen



- The value shown under **Illuminance** represents the units of light (in lux) that are received by the touch screen. This value changes in real time depending on the light received by the touch screen.
- Tap the up or down arrow buttons under **Brightness** to raise or lower the LCD display brightness level incrementally from 0 to 100%.
- Tap **On** or **Off** under **Auto Brightness** to turn automatic brightness on or off for the display.
- Drag the slider up and down under **LCD ALS Threshold** to adjust the ALS (ambient light sensor) threshold value for switching between high and low auto-brightness presets on the LCD display.
- Tap **On** or **Off** under **Proximity Wake** to turn proximity waking on or off for the display. When proximity waking is on, the touch screen will wake from standby automatically when a user gets within proximity of the touch screen.

Tap **Presets** to access the **Display High / Low Settings** screen.

Display High / Low Settings Screen



Use the **Display High / Low Settings** screen to adjust the brightness values for the touch screen display and key backlight.

- Tap the up and down arrows to raise or lower the values of the high and low brightness settings for the LCD display from 0 to 100%.
- Tap **Low** or **High** to set the brightness level to low or high, respectively, for the LCD display.

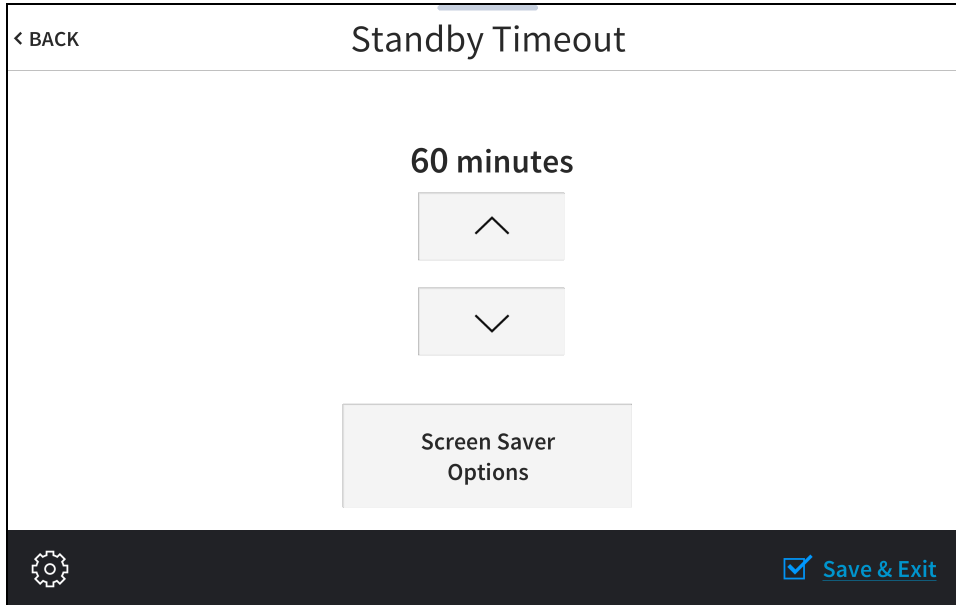
Tap < **BACK** to return to the **Display Setup** screen.

Tap < **BACK** on the **Display Setup** screen to return to the Setup screen.

Standby Timeout

Tap **Standby Timeout** on the Setup screen to display the **Standby Timeout** screen.

Standby Timeout Screen

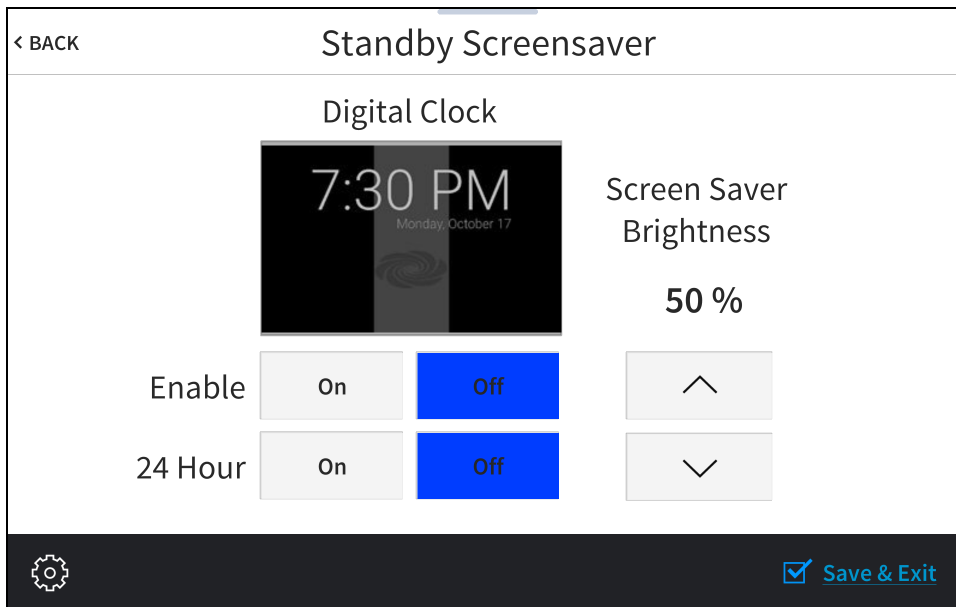


Use the **Standby Timeout** screen to set the standby timeout settings for the touch screen.

Tap the up and down arrow buttons to increase the touch screen standby timeout duration from 0 to 120 minutes.

Tap **Screen Saver Options** to display the **Standby Screensaver** screen.

Standby Screensaver Screen



- Tap **On** or **Off** next to **Enable** to turn the digital clock screensaver on or off during standby timeout
- Tap **On** or **Off** next to **24 Hour** to turn 24-hour time format on or off for the digital clock.
- Tap the up and down arrow buttons under **Screen Saver Brightness** to increase or decrease the screensaver brightness from 0 to 100%.

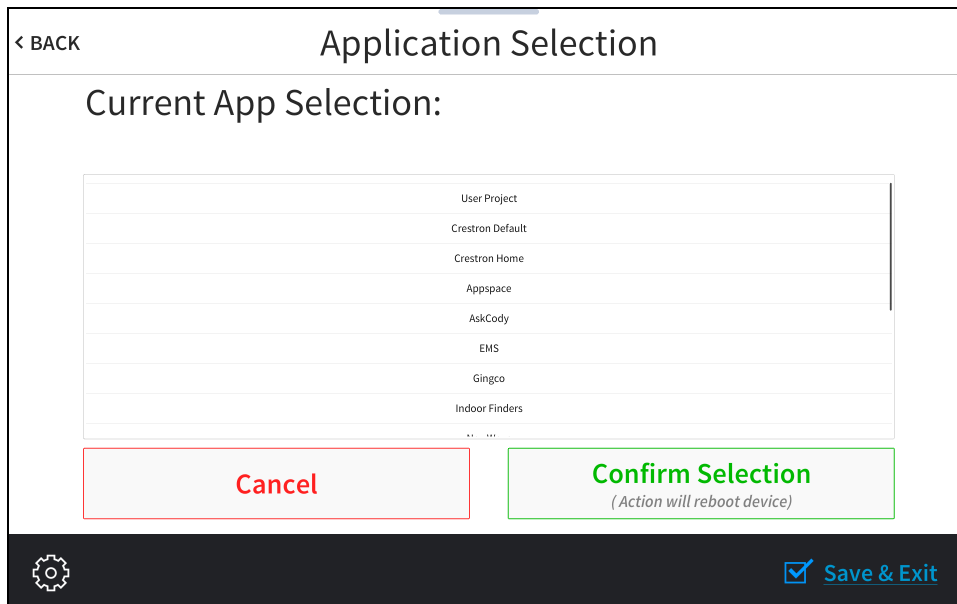
Tap **< BACK** to return to the **Standby Timeout** screen.

Tap **< BACK** on the **Standby Timeout** screen to return to the Setup screen.

Application Selection

Tap **Application Selection** on the Setup screen to display the **Application Setup** screen.

Application Setup Screen



Use the **Application Selection** screen to select a touch screen application from the available selections. **User Project** is selected by default, which is used when a custom project is loaded to the touch screen. Swipe up or down through the list, and then tap an application to select it. Tap **Confirm Selection** to confirm the selection or tap **Cancel** to return to the previous screen. Once confirmed, the touch screen reboots with the new application running.

NOTE: Each application uses a unique setup procedure for registering and configuring the application. For more information on setting up each application, refer to [Application Selection \(on page 71\)](#).

Tap **< BACK** to return to the Setup screen.

Wi-Fi Setup

Tap **Wi-Fi Setup** on the Setup screen to display the **Wi-Fi Setup** screen. (TSW-770 and TSW-1070 only)

Wi-Fi Setup Screen

The screenshot shows the 'Wi-Fi Setup' screen with a dark header bar containing '< BACK', 'WiFi Setup', 'APPLY CHANGES', and 'REBOOT'. The main content area is divided into two columns. The left column lists network details: Link (green dot), WiFi MAC (00:00:00:00:00:00), IP Address (10.0.255.0), Subnet Mask (255.255.255.0), Default Router (10.0.1.0), Primary DNS (10.0.1.0), Secondary DNS, Hostname (TSW-1070-001), Domain (localdomain), SSID (Ham1), BSSID (b8:c7:5d:07:f7:b8), and Radio Band (G). The right column contains interactive settings: 'WiFi IP Options' with a 'Set Static IP Address Settings' button; 'DHCP Enable' with 'On' (selected) and 'Off' buttons; 'Set Hostname' button; 'Select WiFi Access Point' and 'Manage WiFi Access Points' buttons; and 'WiFi Access' with 'On' (selected) and 'Off' buttons. A bottom bar features a gear icon on the left and a 'Save & Exit' button with a checkmark icon on the right.

Use the Wi-Fi Setup screen to view the Wi-Fi network MAC and IP addresses, subnet mask address, default router address, primary and secondary DNS addresses, hostname, domain, and various details about the Wi-Fi connection. A **Link** indicator is provided to indicate the status of the Wi-Fi connection. (Green indicates that the Wi-Fi connection is active.)

NOTE: Ethernet must be disabled before a Wi-Fi connection can be configured.

The following buttons are provided for configuring Wi-Fi settings:

- Tap **On** or **Off** under **Wi-Fi Access** to turn the Wi-Fi adapter on or off. If **Wi-Fi Access** is set to **Off**, Wi-Fi will not function and an Ethernet connection can be established.
- Tap **On** or **Off** under **DHCP Enable** to turn DHCP (dynamic host configuration protocol) on or off.

NOTE: DHCP is enabled on the touch screen by default.

- If DHCP is turned off, tap **Set Static IP Address Settings** to enter static IP addresses manually.
- Tap **Set Hostname** to enter a new touch screen hostname using an on-screen keyboard.
- Tap **APPLY CHANGES** to apply any new Wi-Fi settings to the touch screen and to stay in setup mode.
- Tap **REBOOT** to exit setup mode and reboot the touch screen.

To change a static IP address, tap **Off** under **DHCP Enable**. Then, tap **Set Static IP Address Settings** to display the **Wi-Fi Static IP Setup** screen.

Wi-Fi Static IP Setup Screen

< BACK WiFi Static IP Setup APPLY CHANGES REBOOT

[Touch a Setting to Edit](#)

Static IP address Preferred DNS
0.0.0.0 0.0.0.0

Static Subnet Mask Alternate Preferred DNS
0.0.0.0 0.0.0.0

Static Default Router
0.0.0.0

 Save & Exit

To edit the static IP address, the static subnet mask, the static default router, the preferred DNS, or the alternate preferred DNS, tap the text field underneath the setting name.

The on-screen numeric keypad opens for the chosen setting.

Edit IP Address On-Screen Numeric Keypad

< CANCEL Edit IP Address



0.0.0.0

1 2 3

4 5 6

7 8 9

. 0 Save

- Use the keypad to make a new entry.
- Tap the clear button  in the text field to clear any previous entry.
- Tap the delete button  to delete the last digit.
- Tap **Save** to save a new entry or tap **< CANCEL** to discard any changes. The display returns to the **Static IP Ethernet Setup** screen.

After new settings have been saved, tap **APPLY CHANGES** on the **WiFi Static IP Setup** screen to apply the new settings and stay in setup mode. Tap **REBOOT** to exit setup mode and reboot the touch screen.

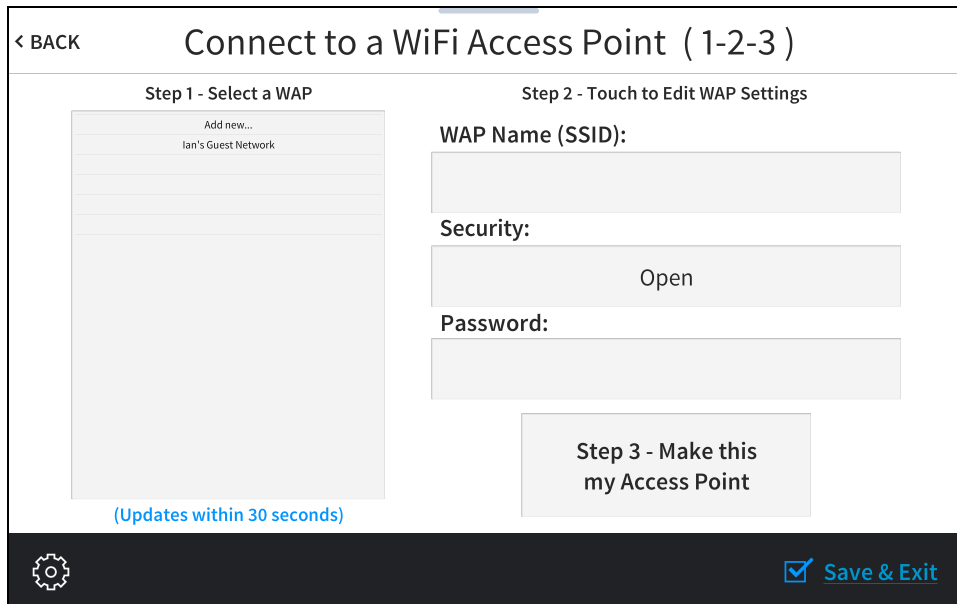
Tap **< BACK** to return to the **Wi-Fi Setup** screen.

Tap **< BACK** on the **Wi-Fi Setup** screen to return to the Setup screen.

Select a Wi-Fi Access Point

On the **Wi-Fi Setup** screen, tap **Select Wi-Fi Access Point**. The **Connect to a Wi-Fi Access Point (1-2-3)** screen is displayed.

Connect to a Wi-Fi Access Point (1-2-3) Screen



Connect to a Wi-Fi Access Point (1-2-3)

Step 1 - Select a WAP

Add new...

Ian's Guest Network

(Updates within 30 seconds)

Step 2 - Touch to Edit WAP Settings

WAP Name (SSID):

Security:

Open

Password:

Step 3 - Make this my Access Point

Save & Exit

Use the **Connect to a Wi-Fi Access Point (1-2-3)** screen to connect the touch screen to an existing WAP that is in range or to configure a new WAP. Any WAPs that are in range and discoverable are displayed under **Step 1 - Select a WAP** upon successful discovery.

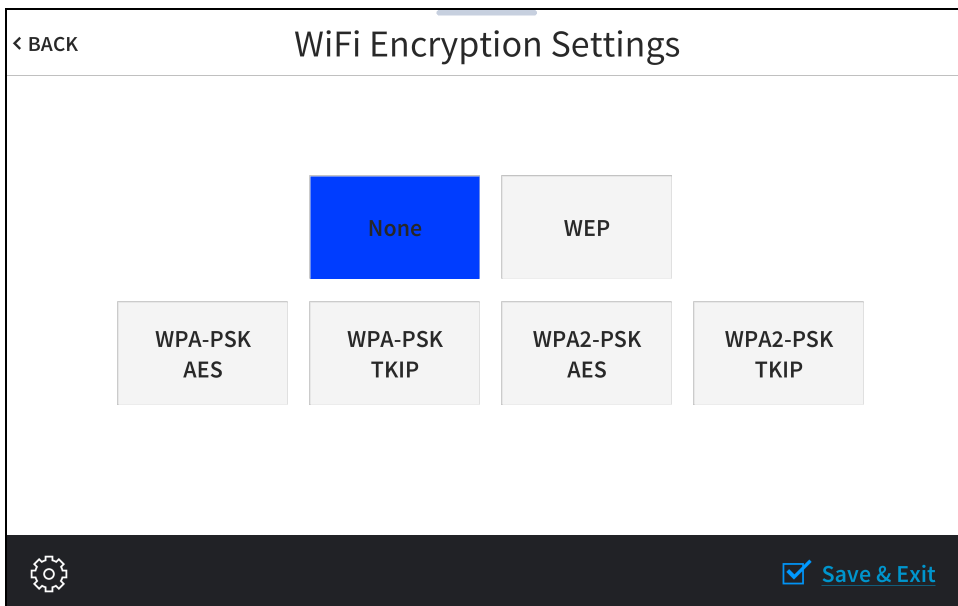
To set up a Wi-Fi network connection:

1. Select the desired WAP from the options shown underneath **Step 1 - Select a WAP**. If the desired WAP is not shown, tap **Add New**.

NOTE: The **WAP Name (SSID)** and **Security** fields are populated automatically when a discovered WAP is selected. This information must be entered manually when adding a new WAP.

2. Tap the **WAP Name (SSID)** text field to display an on-screen keyboard.
3. Enter or modify the WAP name if necessary, and then tap **SAVE**.
4. Tap the **Security** text field to display the **Wi-Fi Encryption Settings** screen.

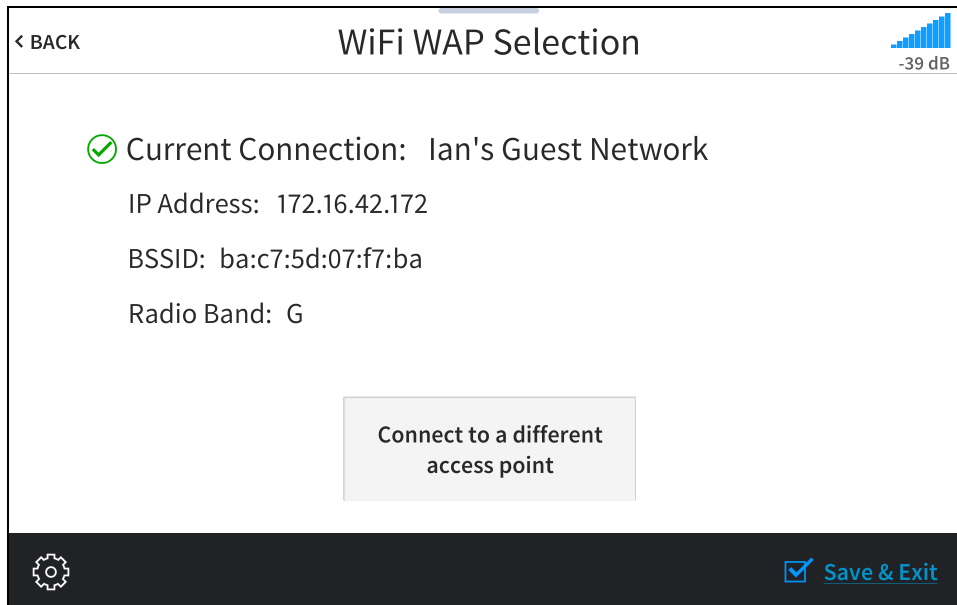
Wi-Fi Encryption Settings



5. Tap the appropriate encryption type used by the WAP, and then tap **< BACK**.
6. Tap the **Password** text field to display an on-screen keyboard.
7. Enter the password used to connect to the WAP, and then tap **SAVE**.
8. Tap **Step 3 - Make this my Access Point**. The **Wi-Fi WAP Selection** screen is displayed.

The touch screen attempts to connect to the WAP using the provided credentials. If a connection is established, connection details for the WAP are shown with a green check mark to the left of **Current Connection**.

Wi-Fi WAP Selection Screen (Connection Successful)



If the connection fails, a failure message is displayed. Tap **Connect to a different access point** to return to the **Connect to a Wi-Fi Access Point (1-2-3)** screen.

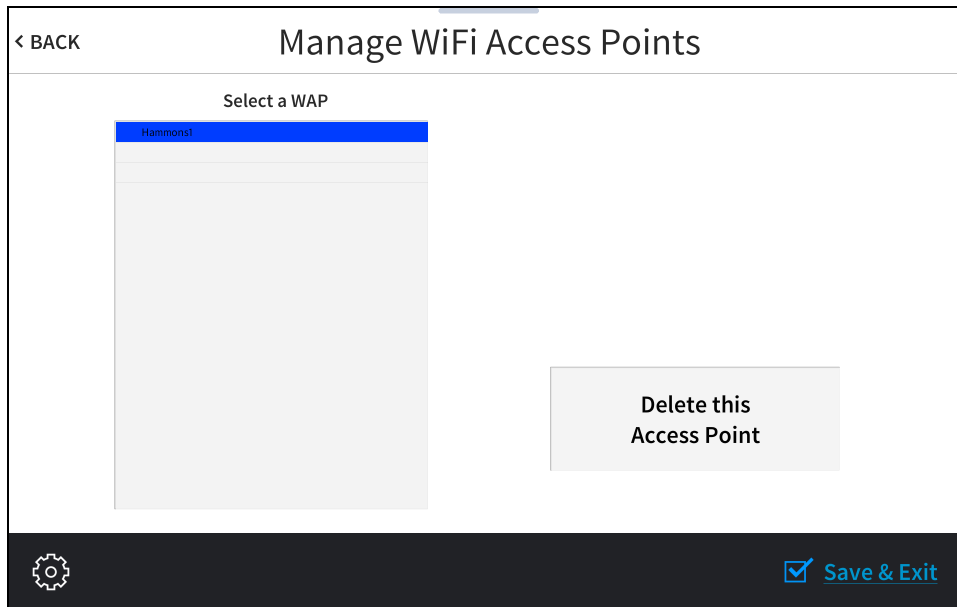
NOTE: If four WAPs have already been assigned, the **Wi-Fi WAP Selection** screen indicates that the WAP list is full. Tap **Delete an access point?** to display the **Manage Wi-Fi Access Points** screen, where an existing WAP may be deleted, or tap **< BACK** to cancel adding the new WAP. For more information, refer to [Manage Wi-Fi Access Points \(on the facing page\)](#).

Tap **< BACK** to return to the **Wi-Fi Setup** screen.

Manage Wi-Fi Access Points

On the **Wi-Fi Setup** screen, tap **Manage Wi-Fi Access Point**. The **Manage Wi-Fi Access Points** screen is displayed.

Manage Wi-Fi Access Points Screen



Use the **Manage Wi-Fi Access Points** screen to manage settings for up to four saved WAPs. Tap one of the listed WAPs to display controls to manage the WAP.

Tap **Delete this Access Point** to delete the selected WAP. If a WAP is deleted, it must be added back to the list using the procedures described in [Select a Wi-Fi Access Point \(on page 16\)](#).

Tap **< BACK** to return to the **Wi-Fi Setup** screen.

Bluetooth Beacon

Tap **BLE Beacon** on the Setup screen to display the **BLE Beacon** screen. (TSW-770 and TSW-1070 only)

BLE Beacon Screen



Use the **BLE Beacon** screen to configure the built-in PinPoint™ proximity detection beacon. Using Bluetooth® technology, the beacon works with the Crestron App or Crestron PinPoint App to determine when a 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 the room.

- Tap **On** or **Off** underneath **BLE Beacon** to turn the proximity beacon on or off, respectively.
- Tap **On** or **Off** underneath **Config Mode** to turn configuration mode on or off, respectively. Turning on configuration mode enables the proximity beacon to be configured.

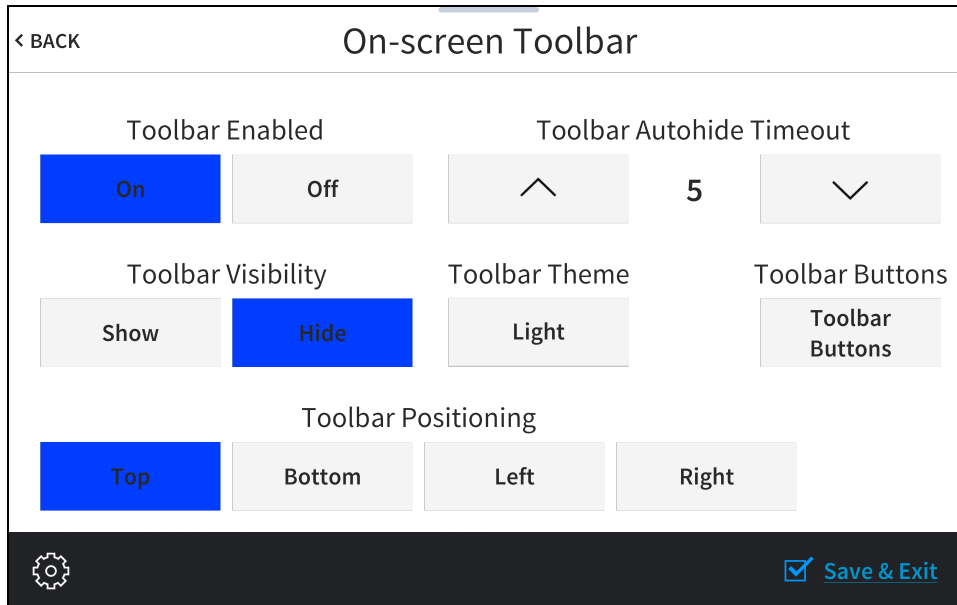
NOTE: The proximity beacon and configuration mode cannot both be turned on at the same time.

Tap **< BACK** to return to the Setup screen.

Virtual Toolbar

Tap **Virtual Toolbar** on the Setup screen to display the **On-screen Toolbar** screen.

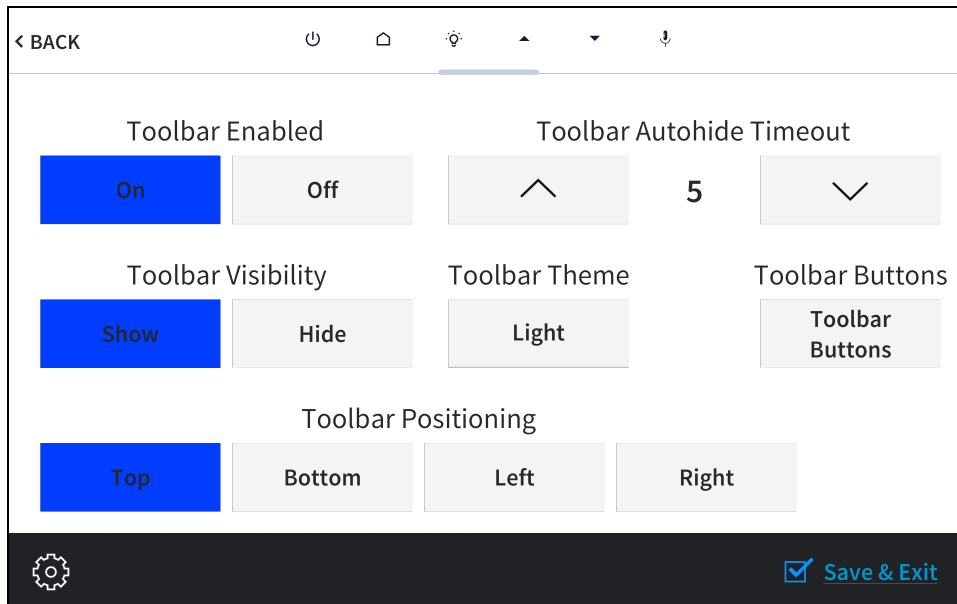
On-screen Toolbar Screen



Use the **On-screen Toolbar** screen to configure settings for the virtual toolbar. By default, the virtual toolbar can be accessed by swiping down on the tab located at the top of the screen and provides virtual buttons for power, home, lighting, up, down, and microphone. The toolbar is hidden automatically after a set timeout duration.

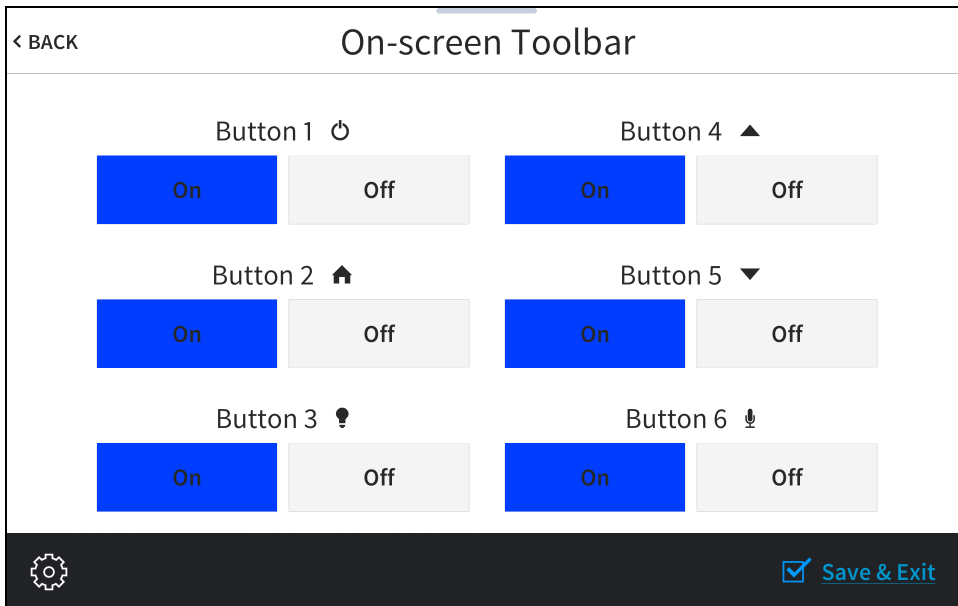
NOTE: Virtual button functionality can be custom programmed using a Crestron control system.

On-screen Toolbar Screen (with Virtual Toolbar)



- Tap **On** or **Off** under **Toolbar Enabled** to turn the virtual toolbar on or off, respectively.
- Tap **Show** or **Hide** under **Toolbar Visibility** to have the toolbar exposed or hidden by default, respectively.
- Tap **Top**, **Bottom**, **Left**, or **Right** under **Toolbar Positioning** to place the toolbar on the respective location on the screen.
- Tap the up and down arrow buttons under **Toolbar Autohide Timeout** to increase or decrease the duration before the toolbar is automatically hidden from 0 to 600 seconds. Selecting "0" disables this behavior.
- Tap the button under **Toolbar Theme** to switch between a light and dark theme. The currently selected theme is displayed on the button.
- Tap **Toolbar Buttons** to display a screen for showing or hiding individual buttons in the virtual toolbar. Tap **On** or **Off** next to a button to show or hide the button, respectively.

On-screen Toolbar Screen - Toolbar Buttons

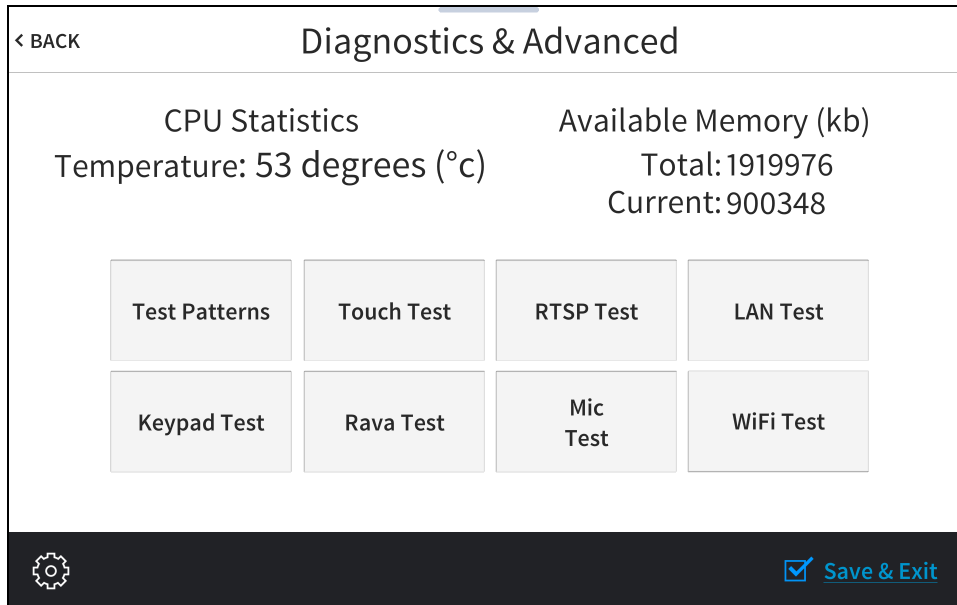


Tap < **BACK** to return to the Setup screen.

Diagnostics & Advanced

Tap **Diagnostics** on the Setup screen to display the **Diagnostics & Advanced** screen.

Diagnostics & Advanced Screen



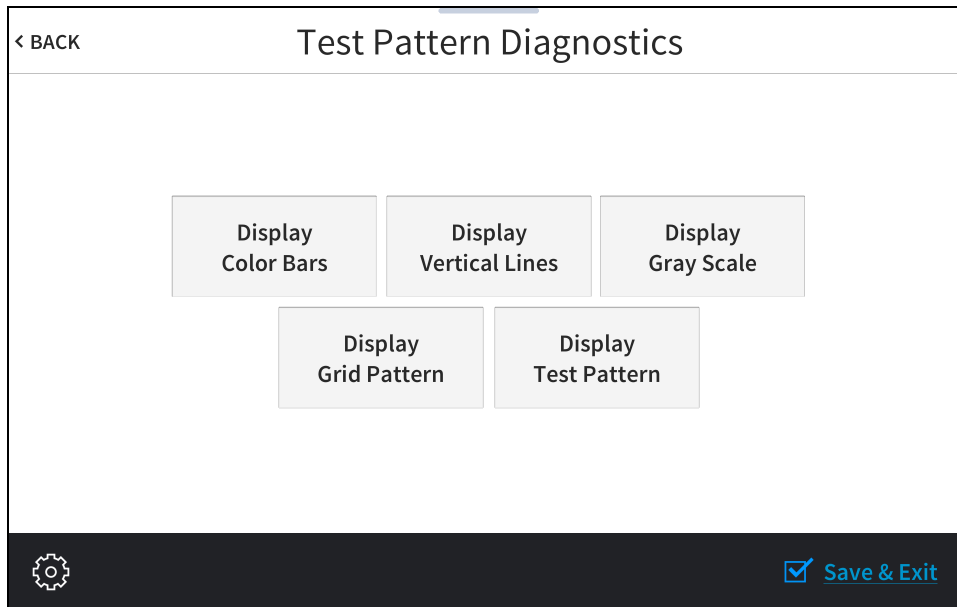
Use the **Diagnostics & Advanced** screen to access various diagnostic test screens for the touch screen. The **Diagnostics & Advanced** screen also provides the touch screen CPU temperature and available memory.

Each test screen is described in the sections that follow.

Test Patterns

Tap **Test Patterns** on the **Diagnostics & Advanced** screen to display the **Test Pattern Diagnostics** screen.

Test Pattern Diagnostics Screen



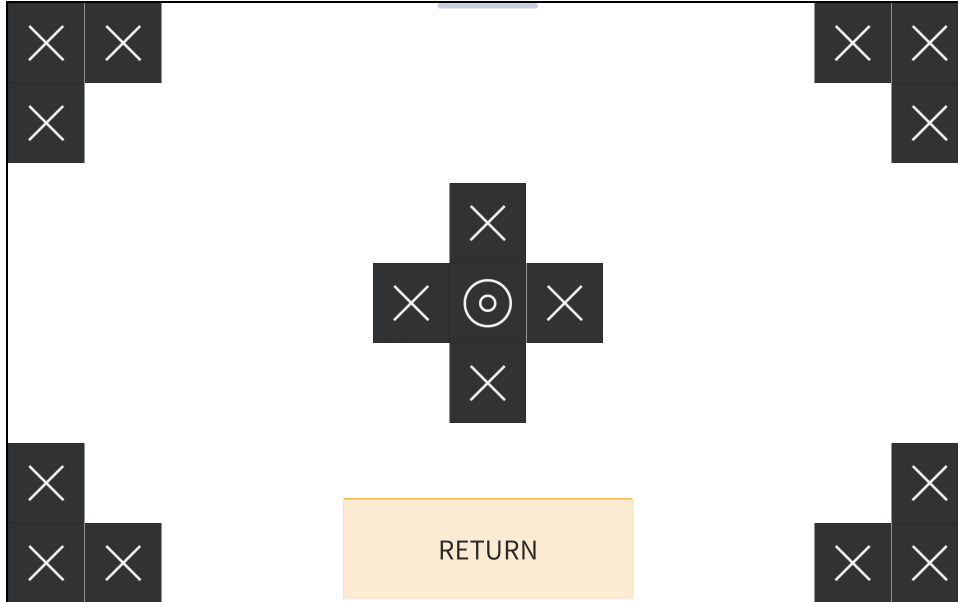
Use the **Test Pattern Diagnostics** screen to display any of the available test patterns. Tap one of the buttons on the screen to display its respective test pattern.

Tap **< BACK** to return to the **Diagnostics & Advanced** screen.

Touch Test

Tap **Touch Test** on the **Diagnostics & Advanced** screen to display the touch test screen.

Touch Test Screen



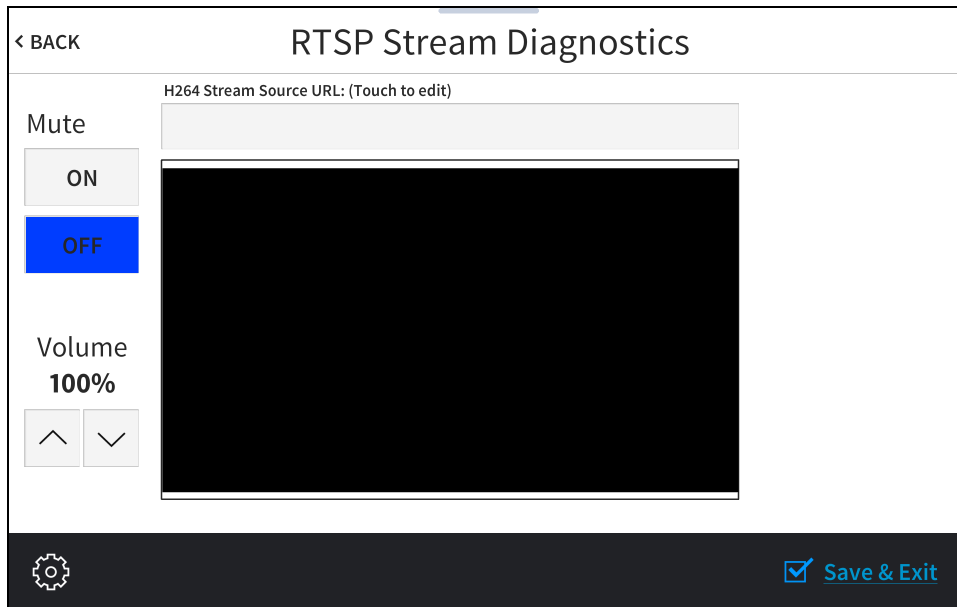
Use the touch test screen to test the touch functionality of the display. When a location button is tapped, its respective indicator lights on the screen.

Tap **RETURN** to return to the **Diagnostics & Advanced** screen.

RTSP Test

Tap **RTSP Test** on the **Diagnostics & Advanced** screen to display the **RTSP Stream Diagnostics** screen.

RTSP Stream Diagnostics Screen



Use the **RTSP Stream Diagnostics** screen to view and test RTSP (real time streaming protocol) on the touch screen.

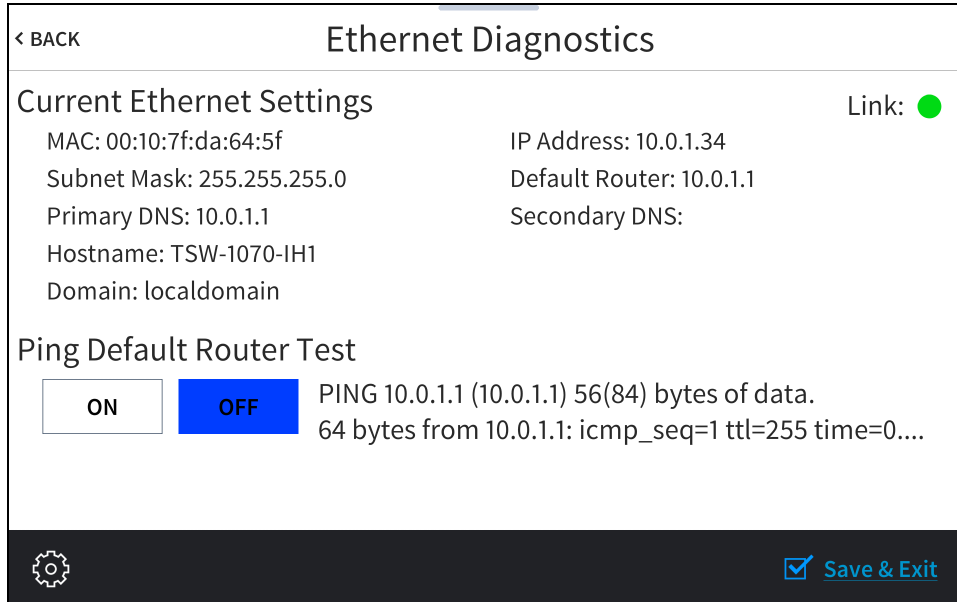
- Tap the text field under **H264 Stream Source URL: (Touch to edit)** to display an on-screen keyboard for entering an H.264 streaming video source URL.
- Tap the up and down arrow buttons under **Volume** to raise or lower the media volume incrementally from 0 to 100%.
- Tap **On** or **Off** under **Mute** to mute or unmute the media volume.

Tap **< BACK** to return to the **Diagnostics & Advanced** screen.

LAN Test

Tap **LAN Test** on the **Diagnostics & Advanced** screen to display the **Ethernet Diagnostics** screen.

Ethernet Diagnostics Screen



Use the **Ethernet Diagnostics** screen to view and test the Ethernet connection. The Ethernet Diagnostics screen displays the touch screen MAC and IP addresses, subnet mask address, default router address, primary and secondary DNS addresses, hostname, and domain name. A **Link** indicator is provided to indicate the status of the Ethernet connection. (Green indicates that the Ethernet connection is active.)

The **Ethernet Diagnostics** screen also provides controls to test the connection to the default router. Tap **On** to begin the test and **Off** to end the test.

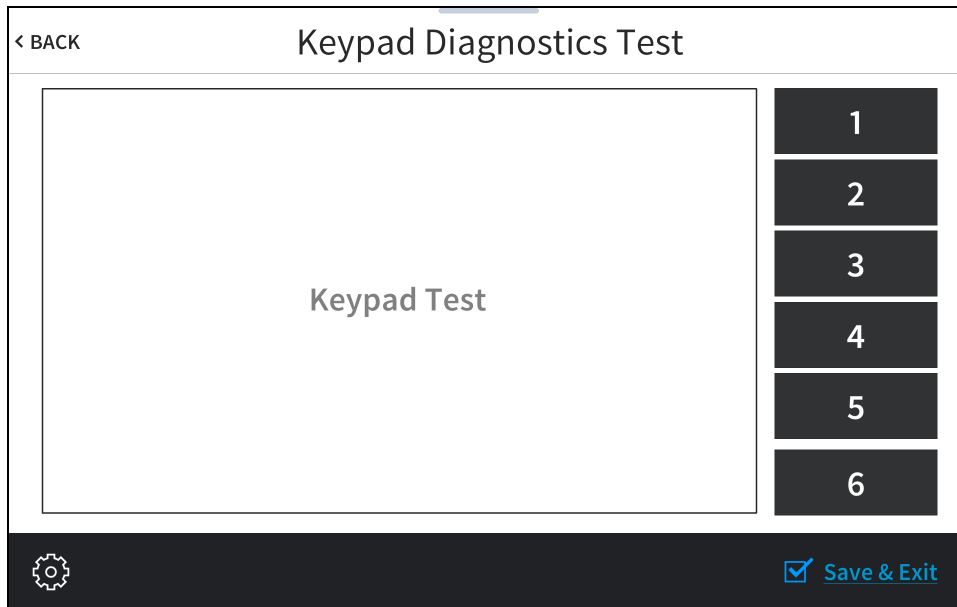
During the router test, the touch screen pings the default router. If the router is communicating with the touch screen, connection data is displayed below the ping test controls within five seconds. The connection data updates after every successive ping.

Tap **< BACK** to return to the **Diagnostics & Advanced** screen.

Keypad Test

Tap **Keypad Test** on the **Diagnostics & Advanced** screen to display the **Keypad Diagnostics Test** screen.

Keypad Diagnostics Test Screen



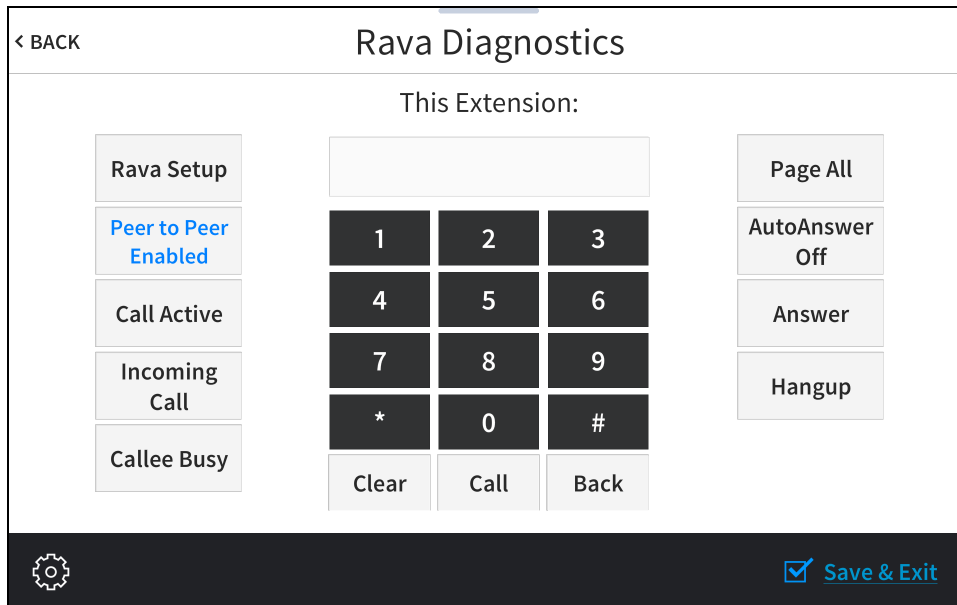
Use the **Keypad Diagnostics Test** screen to test the functionality of the six virtual toolbar buttons. When one of the virtual buttons is pressed on the touch screen, its respective indicator lights on the screen.

Tap **< BACK** to return to the **Diagnostics & Advanced** screen.

Rava® SIP Intercom

Tap **Rava Test** on the **Diagnostics & Advanced** screen to display the **Rava Diagnostics** screen (TSW-770 and TSW-1070 only).

Rava Diagnostics Screen



Use the **Rava Diagnostics** screen to test using the Rava® SIP Intercom with the touch screen. 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.

This screen may be used to call another touch screen that has a Rava SIP intercom, to test and configure projects, and to adjust various Rava settings.

- To place a call to another touch screen with a Rava SIP intercom, enter the extension of the touch screen using the numeric keypad, and then tap **Call**.

NOTE: If the intercom functions but the Rava project does not, there is an issue with the project. If the intercom does not function, there is an issue with the intercom settings.

- Use the buttons on the left and right of the screen to view or control various call settings.

Tap **Rava Setup** to display the **Rava Settings** screen.

Rava Settings Screen

< BACK APPLY

Touch a Setting to Edit
Rava connection mode

Local extension	SIP server IP address
<input type="text"/>	NONE
Member groups	Port (default 5060)
CRESTRON	5060
Display name	SIP server username
CRESTRON	guest
Port (default 5060)	SIP server password
5060	****
Proxy IP address (optional)	SIP server realm
NONE	*

Save & Exit

The Rava Settings screen provides controls to switch between **Peer to Peer Mode** and **SIP Server Mode**. Tapping the text fields on the screen opens the on-screen keyboard or on-screen numeric keypad for entering the appropriate information.

NOTE: The touch screen Rava SIP intercom may be configured to connect to a supported door station as part of a Crestron Home™ OS door station solution. For more information, refer to the [Crestron Home OS Product Manual \(Doc. 8525\)](#).

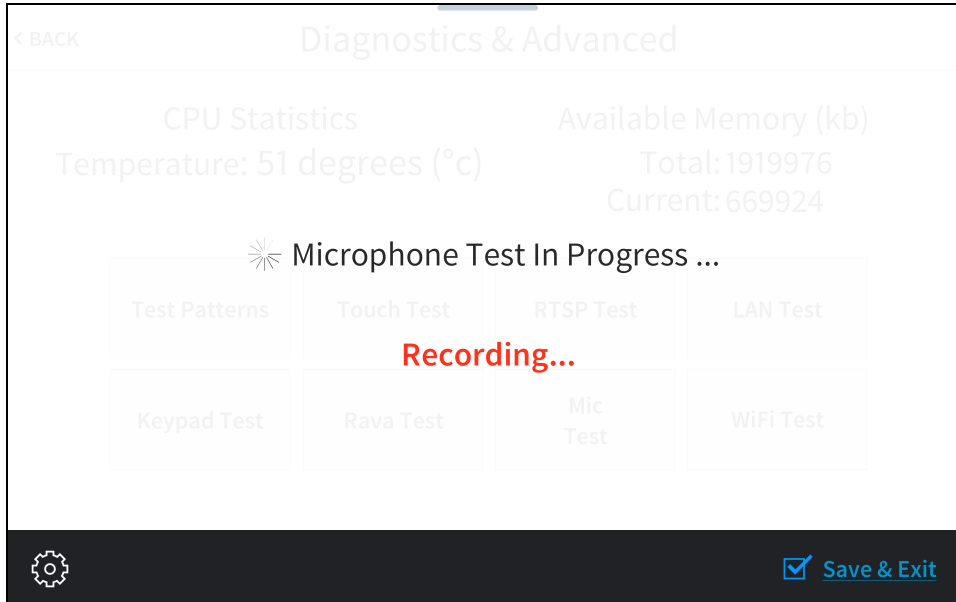
Tap **APPLY** to save any changes. Tap < **BACK** to return to the **Rava Diagnostics** screen.

Tap < **BACK** on the **Rava Diagnostics** screen to return to the **Diagnostics & Advanced** screen.

Mic Test

Tap **Mic Test** on the **Diagnostics & Advanced** screen to begin a microphone test.

Mic Test Screen



During a microphone test, the built-in microphones record sound for five seconds and then play the sound back to confirm that the microphones are functioning. This test is performed twice: The first test records and plays sound back from the left microphone, and the second test records and plays sound back from the right microphone.

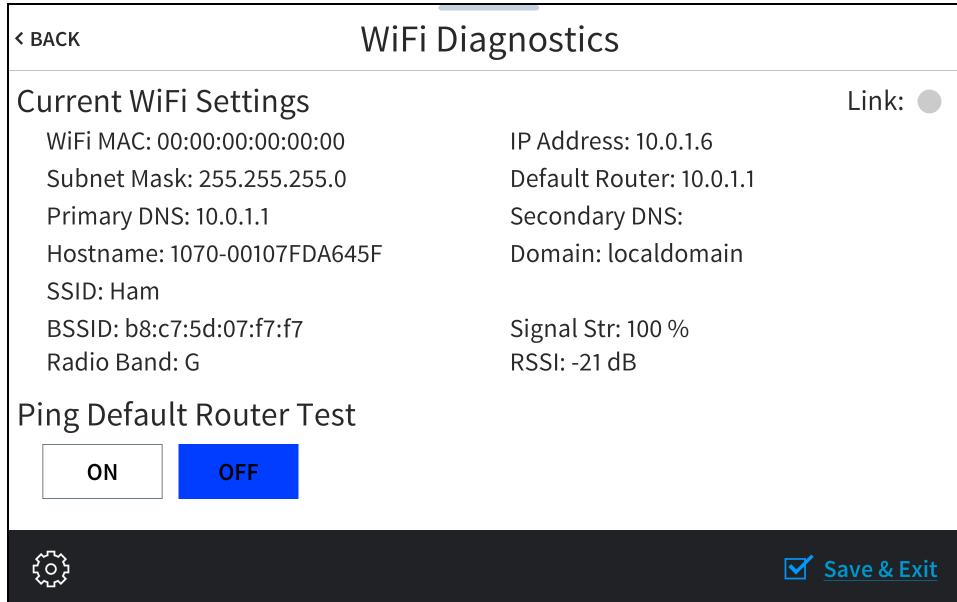
When the second playback is finished, the display automatically returns to the **Diagnostics & Advanced** screen.

Tap < **BACK** on the **Diagnostics & Advanced** screen to return to the **Setup** screen.

Wi-Fi Test

Tap **Wi-FiTest** on the **Diagnostics & Advanced** screen to display the **Wi-Fi Diagnostics** screen.

Wi-Fi Diagnostics Screen



Use the **Wi-Fi Diagnostics** screen to view and test the Wi-Fi network connection. The Ethernet Diagnostics screen displays the Wi-Fi network MAC and IP addresses, subnet mask address, default router address, primary and secondary DNS addresses, hostname, and domain name. A **Link** indicator is provided to indicate the status of the Wi-Fi network connection. (Green indicates that the Wi-Fi network connection is active.)

The **Wi-Fi Diagnostics** screen also provides controls to test the connection to the default router. Tap **On** to begin the test and **Off** to end the test.

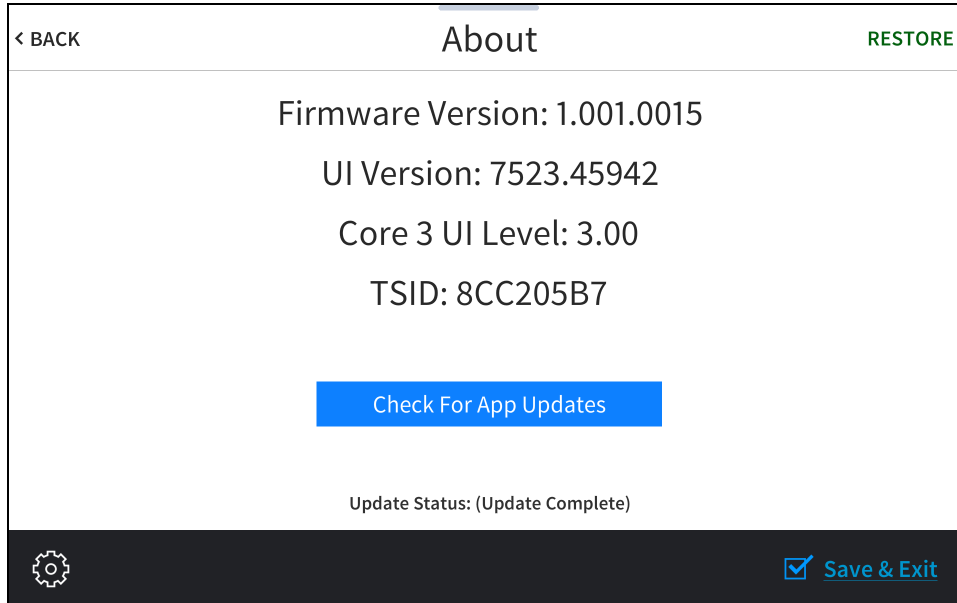
During the router test, the touch screen pings the default router. If the router is communicating with the touch screen, connection data is displayed below the ping test controls within five seconds. The connection data updates after every successive ping.

Tap **< BACK** to return to the **Diagnostics & Advanced** screen.

About

Tap **About** on the Setup screen to display the **About** screen.

About Screen



Use the **About** screen to view information about the touch screen, including the firmware version and the operating system versions.

Tap **Check For App Updates** to scan the network for any updates to the touch screen applications. If application updates are available, the touch screen downloads and installs the updates. The status of the updates is shown on the bottom of the screen.

NOTE: The **Check For App Updates** button is shown only if an application is running on the touch screen.

Tap **RESTORE** at the top right of the screen to restore the touch screen to its default factory settings.

Tap < **BACK** to return to the Setup screen.

Web Configuration

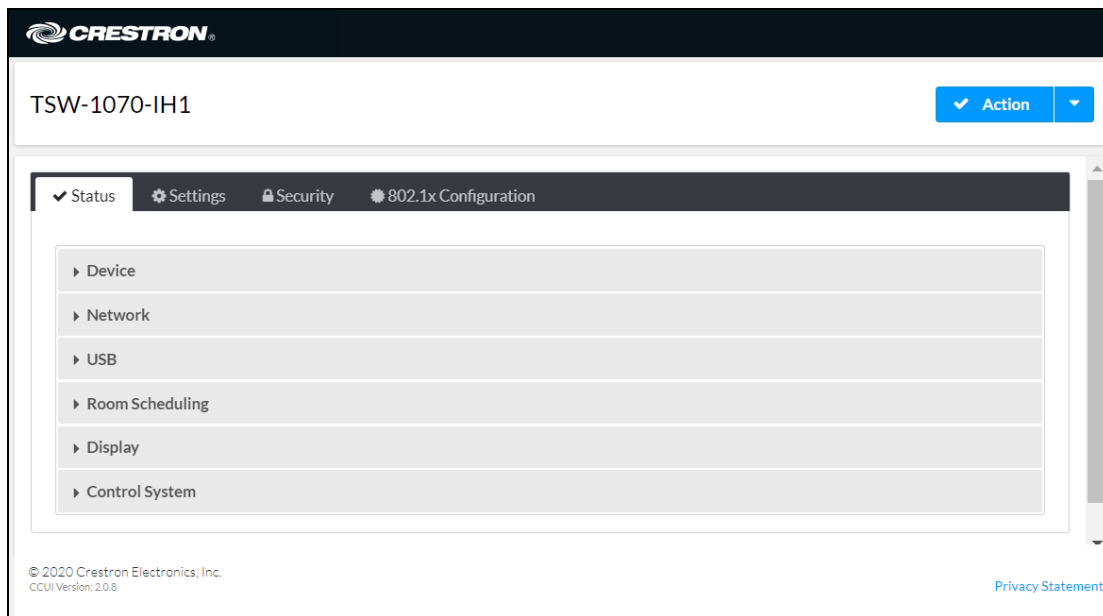
The touch screen may be monitored and configured using the included web configuration interface. The configuration interface is accessible from a web browser if the touch screen IP address is known. This interface is also accessible using the XiO Cloud® service.

To access the configuration interface:

1. Use the Device Discovery tool in Crestron Toolbox™ software to discover the touch screen and its IP address on the network.
2. Open a web browser.
3. Enter the touch screen IP address into the browser URL field. The configuration interface is displayed (TSW-1070 shown).

NOTE: If authentication is enabled for the touch screen, an administrator username and password must be entered prior to accessing the web configuration interface. For more information on configuring authentication settings, refer to [Authentication \(on page 59\)](#).

Web Configuration Interface



The configuration interface provides the following tabs:

- **Status:** Used to monitor touch screen status
- **Settings:** Used to configure touch screen settings
- **Security:** Used to enable authentication and other security settings
- **802.1x Configuration:** Used to configure IEEE 802.1x network authentication for touch screen security

NOTE: Some device settings may be displayed or hidden depending on the selected application mode.

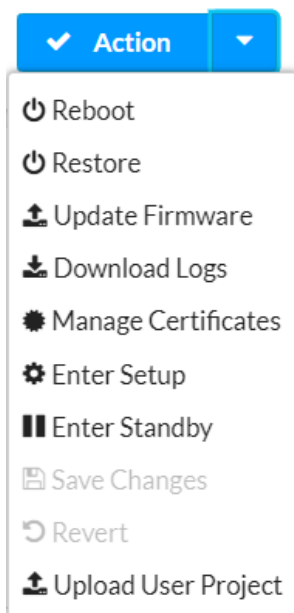
If the Crestron room scheduling application is running on the touch screen, the web configuration utility provides additional configuration options for the room scheduling application. For more information, refer to the [Crestron Room Scheduling Panels Operations Guide \(Doc. 8205\)](#).

The **Status** tab is the default tab that is displayed, as shown in the image on the previous page.

Actions Menu

The configuration interface provides an **Actions** drop-down menu on the top right of the page. The **Actions** menu may be accessed at any time.

Actions Menu



Once any changes have been made to the touch screen configuration, the **Actions** button changes to a **Save Changes** button. Click **Save Changes** to save changes to the configuration settings.

If a reboot is required after changes have been saved, a dialog box is displayed asking whether the reboot should be performed. Select **Yes** to reboot the device or **No** to cancel the reboot.

The **Actions** menu provides the following selections.

Reboot

Click **Reboot** to reboot the touch screen.

After **Reboot** is selected, a dialog box is displayed asking whether the touch screen should be rebooted. Select **Yes** to reboot the device or **No** to cancel the reboot.

Restore

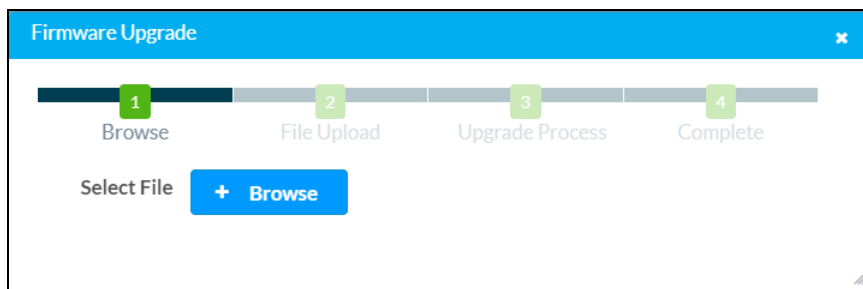
Click **Restore** to restore the touch screen configuration settings to their default values.

After **Restore** is selected a dialog box is displayed asking whether the device settings should be restored. Select **Yes** to restore the settings or **No** to cancel the restore.

Update Firmware

Click **Update Firmware** to upgrade the touch screen firmware manually with a downloaded PUF (package update file). The **Firmware Upgrade** dialog box opens.

Firmware Upgrade Dialog Box



To upload a firmware PUF through the web configuration interface:

NOTE: Visit www.crestron.com/firmware to download the latest firmware PUF.

1. Click **Browse**, and then navigate to the firmware PUF on the host computer.
2. Select the firmware PUF, and then click **Open**.
3. Click **Load** to load the PUF to the touch screen. The upload progress is shown in the dialog box.
4. Once the touch screen has completed the firmware upgrade, click **OK**.

Click the **x** button to close the Firmware Upgrade dialog box at any time during the upgrade process. Clicking the **x** button before the PUF is uploaded to the touch screen cancels the upgrade.

Download Logs

Click **Download Logs** to download the touch screen message logs for diagnostic purposes. The message files download as a compressed .tgz file. Once the compressed file is downloaded, extract the message log files to view them.

Manage Certificates

Click **Manage Certificates** to manage any certificates that are installed on the touch screen. For more information on certificate management, refer to [802.1x Configuration \(on page 68\)](#).

Enter Setup

Click **Enter Setup** to force the touch screen to enter its built-in setup interface.

Enter Standby

Click **Enter Standby** to force the touch screen to enter standby mode.

Save Changes

Click **Save Changes** to save any changes made to the configuration settings.

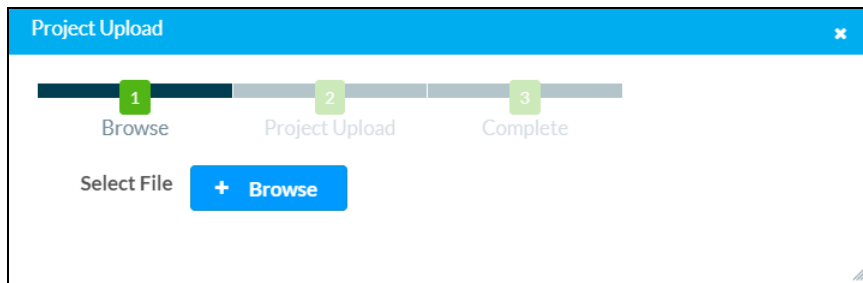
Revert

Click **Revert** to revert the touch screen back to the last saved configuration settings.

Upload User Project

Click **Upload User Project** to upload a custom user project to the touch screen. A **Project Upload** dialog box opens.

Project Upload Dialog Box



NOTE: This selection is available only if the touch screen is running in user project mode.

To upload a custom user project:

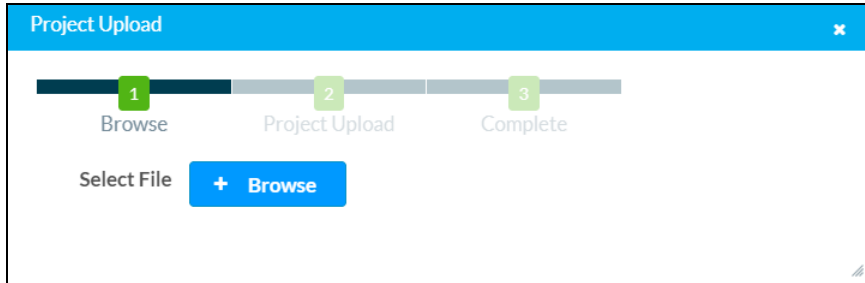
1. Click **Browse**, and then navigate to the project .vtz file on the host computer.
2. Select the project .vtz file, and then click **Open**.
3. Click **Load** to load the project .vtz file to the touch screen. The upload progress is shown in the dialog box.
4. Once the touch screen has completed the project upload, click **OK**.

Click the **x** button to close the **Project Upload** dialog box at any time during the upgrade process. Clicking the **x** button before the project file is uploaded to the touch screen cancels the upload.

Upload Scheduling Project

Click **Upload Scheduling Project** to upload a custom scheduling project to the touch screen. A **Project Upload** dialog box opens.

Project Upload Dialog Box



NOTE: This selection is available only if the touch screen is running in **Crestron Default** scheduling mode.

To upload a custom scheduling project:

1. Click **Browse**, and then navigate to the project .vtz file on the host computer.
2. Select the project .vtz file, and then click **Open**.
3. Click **Load** to load the project .vtz file to the touch screen. The upload progress is shown in the dialog box.
4. Once the touch screen has completed the project upload, click **OK**.

Click the **x** button to close the **Project Upload** dialog box at any time during the upgrade process. Clicking the **x** button before the project file is uploaded to the touch screen cancels the upload.

App Upgrade

Click **App Upgrade** to update the currently selected application. The update progress is shown in a pop-up window.

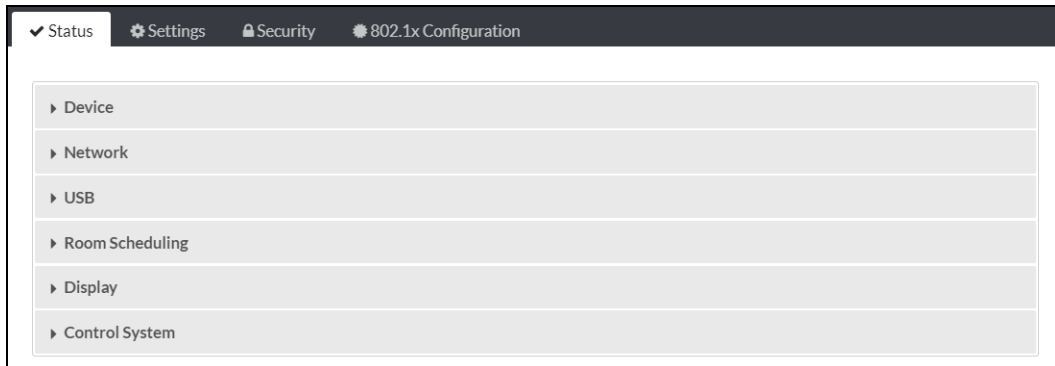
Once the update is complete, click **OK** to close the pop-up window.

Status

Click the **Status** tab on the top left of the configuration interface to display selections for viewing the status of device, network, and control system settings.

Click on a selection name to expand the selection. If the selection is expanded, click the selection name again to collapse the section.

Status Tab Selections

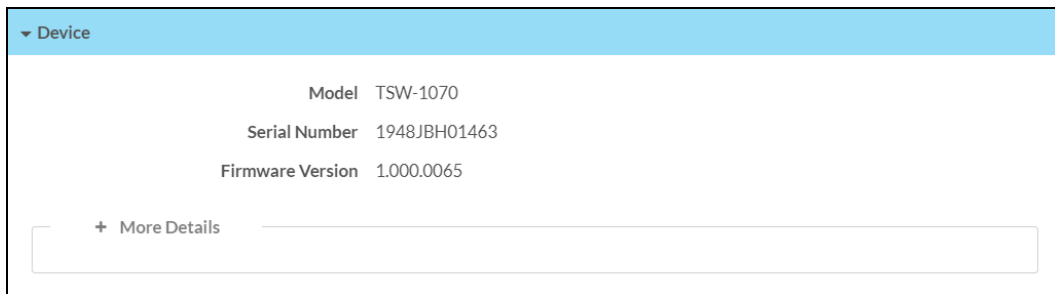


Each selection is described in the sections that follow.

Device

Click **Device** to view general device information.

Status Tab - Device



The following **Device** information is displayed:

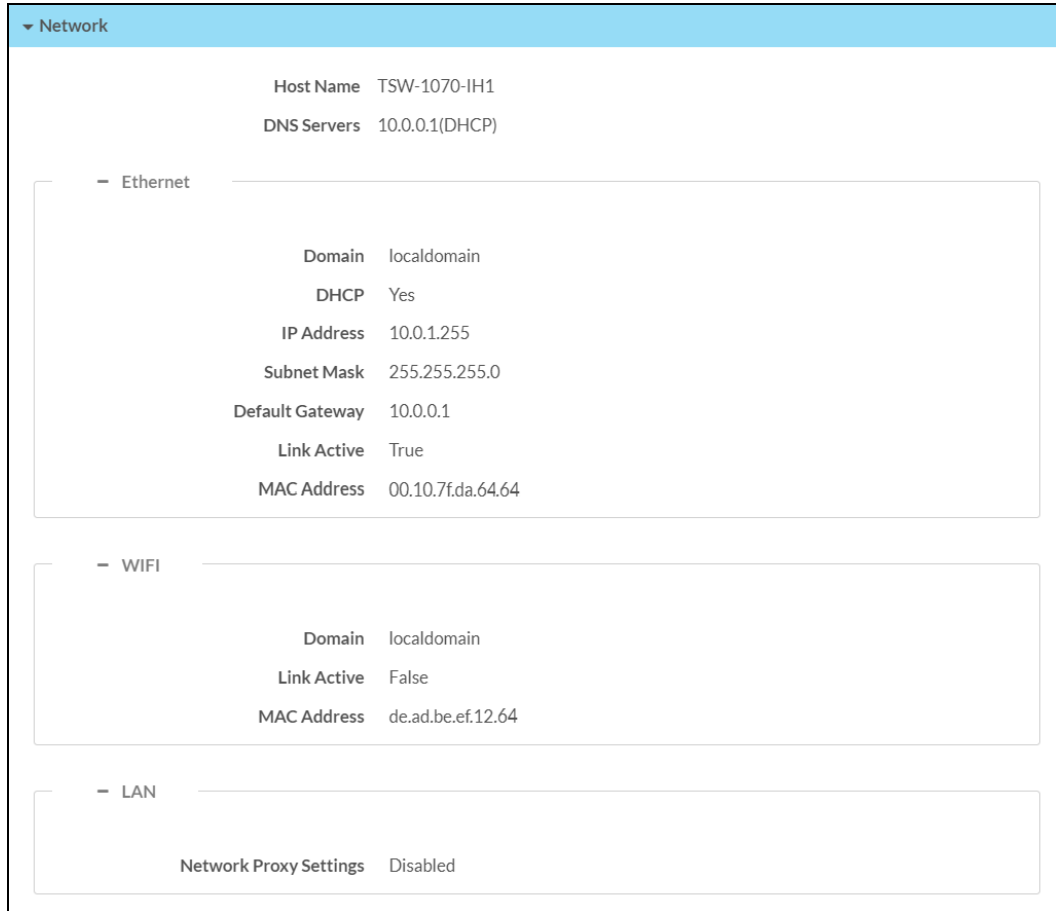
- **Model:** The touch screen model name
- **Serial Number:** The touch screen serial number
- **Firmware Version:** The firmware version loaded onto the touch screen

Click **+ More details** at the bottom of the **Device** tab to display an expanded section that shows additional touch screen information. If **+ More Details** is selected, click **- Less** details to collapse the section.

Network

Click **Network** to view the status of the network settings for the touch screen.

Status Tab - Network



The following **Network** information is displayed:

- **Host Name:** The touch screen hostname
- **DNS Servers:** The DNS (domain name server) addresses used to resolve the touch screen domain to an IP address

Click the + (plus) icon next to **Ethernet** to display the following Ethernet settings:

- **Domain:** The touch screen domain name
- **DHCP:** Reports whether the IP address is static (Yes) or dynamic (No)
- **IP Address:** The touch screen IP address, shown only if an Ethernet connection is enabled
- **Subnet Mask:** The touch screen subnet mask address, shown only if an Ethernet connection is enabled
- **Default Gateway:** The gateway router address, shown only if an Ethernet connection is enabled

- **Link Active:** Reports the status of the Ethernet connection (A true message indicates that the Ethernet connection is active, while a false message indicates that the Ethernet connection is inactive.)
- **MAC Address:** The unique touch screen MAC (media access control) address

Click the + (plus) icon next to **WI-FI** to display the following Wi-Fi network settings:

- **Domain:** The Wi-Fi network domain name
- **DHCP:** Reports whether the Wi-Fi network IP address is static (Yes) or dynamic (No), shown only if a Wi-Fi network connection is enabled
- **IP Address:** The Wi-Fi network IP address, shown only if a Wi-Fi network connection is enabled
- **Subnet Mask:** The Wi-Fi network subnet mask address, shown only if a Wi-Fi network connection is enabled
- **Default Gateway:** The Wi-Fi network gateway router address, shown only if a Wi-Fi network connection is enabled
- **Link Active:** Reports the status of the Wi-Fi network connection (A true message indicates that the Wi-Fi network connection is active, while a false message indicates that the Wi-Fi network connection is inactive.)
- **MAC Address:** The unique Wi-Fi network MAC (media access control) address

Click the + (plus) icon next to **LAN** to display the following LAN settings:

- **Network Proxy Settings:** Reports whether network proxy settings are enabled or disabled for the touch screen

For more information on configuring network settings, refer to [System Setup \(on page 45\)](#).

USB

Click **USB** to view the status of a connected USB accessory, such as a room scheduling hallway sign or light bar.

Status Tab - USB



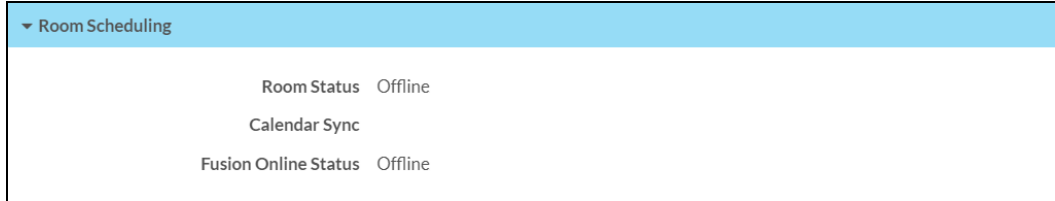
The following **USB** information is displayed:

- **Accessory Connected:** The name of the connected accessory
- **Accessory Type:** The type of connected accessory

Room Scheduling

Click **Room Scheduling** to view the status of the room if using a room scheduling application.

Status Tab - Room Scheduling



The following **Room Scheduling** information is displayed:

- **Room Status:** The status of the connected room (available or reserved)
- **Calendar Sync:** The status of the sync between the touch screen and the room scheduling calendar
- **Crestron Fusion Online Status:** The status of the Crestron Fusion connection (if applicable)

Display

Click **Display** to view the display status.

Status Tab - Display



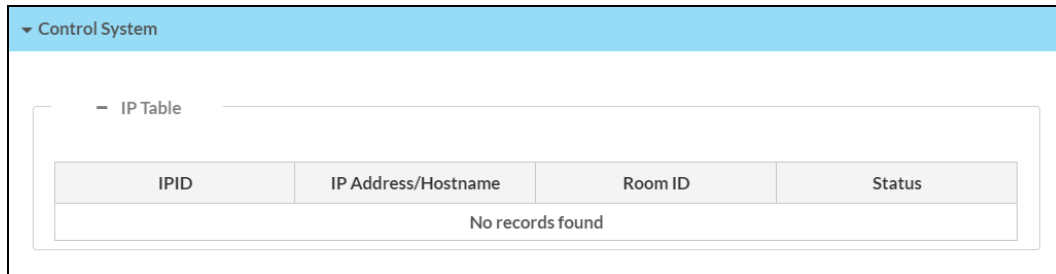
The **Display Status** field indicates the display status (on, standby, or screensaver).

Control System

Click **Control System** to view the status of a connected control system.

NOTE: The Control System accordion is shown in user project mode only.

Status Tab - Control System



The screenshot shows a user interface for the Control System status. At the top, there is a blue header with a dropdown arrow and the text "Control System". Below this, there is a section titled "IP Table" with a minus sign to its left. Inside this section, there is a table with four columns: "IPID", "IP Address/Hostname", "Room ID", and "Status". The table is currently empty, and the text "No records found" is centered below the table.

IPID	IP Address/Hostname	Room ID	Status
No records found			

The following **Control System** information is displayed:

- **Encrypt Connection:** Indicates whether the connection between the control system and touch screen is encrypted
- **IP Table:** Displays the IP table information for the control system connection:
 - **IP ID:** The IP ID used to connect the touch screen to the control system
 - **IP Address/Hostname:** The control system IP address or hostname
 - **Room ID:** The control system room ID that the touch screen is associated with (for connections to the Crestron Virtual Control server-based control system)
 - **Status:** The control system connection status

Settings

Click the **Settings** tab on the top left of the configuration interface to display selections for configuring various touch screen settings and to select a touch screen application.

Settings Selections



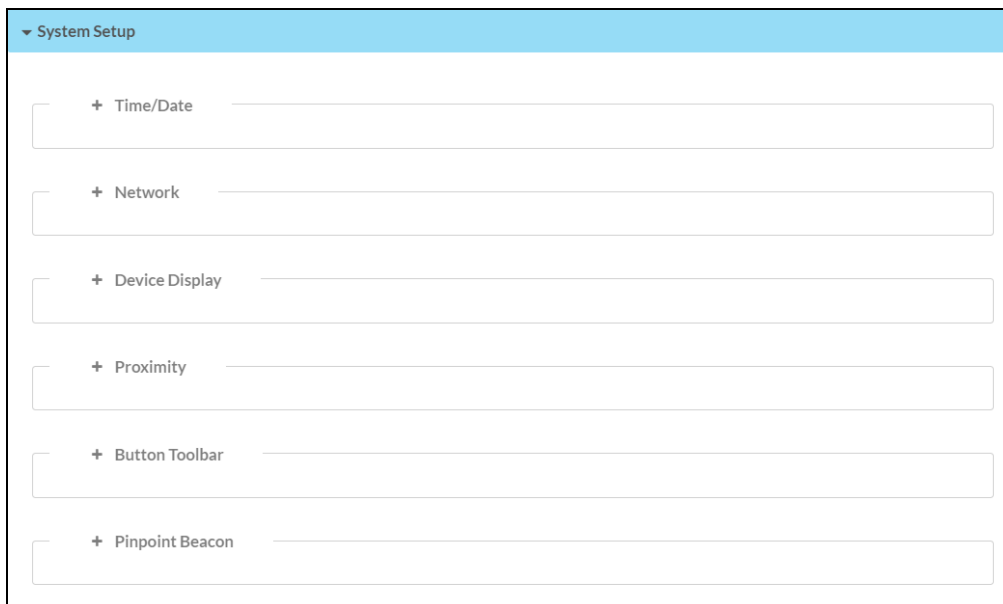
Each selection is described in the sections that follow.

NOTE: If an invalid value is entered for a setting, the web interface will not allow changes to be saved until a valid value is entered. Red text is displayed next a setting to indicate an invalid value.

System Setup

Click **System Settings** to configure general network and touch screen settings.

Settings Tab - System Setup



Click the + (plus) icon next to **Time/Date** to display the following time and date settings.

Settings Tab - System Setup (Time/Date)

Time/Date

Time Synchronization

Enable Time Synchronization

Time Server pool.ntp.org

Synchronize Now

Time Configuration

Time Zone (UTC) Coordinated Universal Time

Time Format 12 24

Date Format WMDY

Time(24 hr Format) 19:13

Date 07/09/2020

Time Synchronization

- **Enable Time Synchronization:** Toggle the switch to turn time synchronization via SNTP (Simple Network Time Protocol) on or off.
- **Time Server:** With **Enable Time Synchronization** set to **On**, enter the SNTP server used to synchronize the date and time for the touch screen.
- **Synchronize Now:** With **Enable Time Synchronization** set to **On**, tap **Synchronize Now** to synchronize the touch screen with the SNTP server entered for **Time Server**.

Time Configuration

- **Time Zone:** Select a time zone for the touch screen using the drop-down menu.
- **Time Format:** Select the format that the time will display on the touch screen (12 hour or 24 hour).
- **Date Format:** Select the format that the date will display on the touch screen using the drop-down menu.
- **Time(24hr Format):** Select the time for the touch screen (in 24-hour format) using the pop-up menu that is displayed.
- **Date:** Select the date for the touch screen using the pop-up calendar that is displayed.

Click the + (plus) icon next to **Network** to display the following network settings.

Settings Tab - System Setup (Network)

Network Configuration

Host Name

Primary Static DNS

Secondary Static DNS

Ethernet

Adapter Enabled

DHCP Enabled

Domain

IP Address

Subnet Mask

Default Gateway

WiFi

Adapter Enabled

DHCP Enabled

Domain

IP Address

Subnet Mask

Default Gateway

WiFi Access Points

Select Discovered Access Points

<input type="checkbox"/>	SSID	Encryption Key	Password	Active Access Point
<input type="checkbox"/>	Ham	WPA2	<input type="checkbox"/>
<input type="checkbox"/>	Network	WPA	<input type="checkbox"/>

NOTE: The IP Address, Subnet Mask, and Default Gateway fields are required only if DHCP is set to **Disabled** for Ethernet and Wi-Fi network connection.

- **Network Configuration**

- **Host Name:** Enter the touch screen hostname.
- **Primary Static DNS:** Enter the primary DNS address.
- **Secondary Static DNS:** Enter the secondary DNS address.

- **Ethernet**

- **Adapter Enabled:** Toggle the switch to enable or disable the touch screen Ethernet adapter, which allows the touch screen to make an Ethernet connection
- **DHCP Enabled:** Toggle the switch to enable or disable using DHCP.

NOTE: If DHCP is enabled, IP does not function until a reply has been received from the server. The touch screen broadcasts requests for an IP address periodically.

- **Domain:** Enter the fully qualified domain name on the network.
- **IP Address:** Enter the touch screen IP address on the network.
- **Subnet Mask:** Enter the touch screen subnet mask address on the network.
- **Default Gateway:** Enter the gateway router address on the network.

- **WI-FI**

- **Adapter Enabled:** Toggle the switch to enable or disable the touch screen Wi-Fi adapter, which allows the touch screen to make a Wi-Fi network connection.
- **DHCP Enabled:** Toggle the switch to enable or disable using DHCP for the Wi-Fi connection.
- **Domain:** Enter the fully qualified Wi-Fi domain name on the network.
- **Subnet Mask:** Enter the Wi-Fi subnet mask address on the network.
- **Default Gateway:** Enter the Wi-Fi gateway router address on the network.

- **WI-FI Access Points**

- **Scan Wi-Fi Access Points:** Tap this button to scan the network for any open Wi-Fi access points. All discovered access points are displayed in the **Select Discovered Access Points** menu.
- **Select Discovered Access Points:** Select an access point from this menu after scanning for Wi-Fi access points. Enter text in the search field to search for a specific Wi-Fi access point name
- **Add Access Points:** Tap this button to add the selected access point entry from the **Select Discovered Access Points** field to the table below.

Each added Wi-Fi access point is displayed in a table that contains the following information.

- **SSID:** Enter or modify the SSID (name) of the Wi-Fi access point.
- **Encryption Key:** Select the security/encryption type used by the Wi-Fi access point.
- **Password:** Enter the password used to connect to the Wi-Fi access point.
- **Active Access Point:** Indicates whether a connection to the Wi-Fi access point is active

Tap **Add** to add a new entry to the Wi-Fi access point table. After selecting one more entries in the Wi-Fi access point table, tap **Remove** to delete the selected entries.

Click the + (plus) icon next to **Device Display** to display the following device display settings.

Settings Tab - System Setup (Device Display)

Device Display

LCD

Auto Brightness

ALS Threshold Value %

Brightness %

Brightness High Preset %

Brightness Low Preset %

Setup

Local Setup Sequence

Screensaver and Standby

Standby Timeout Minutes

Screensaver Enabled

24 Hour Digital Clock Enabled

Outdoor Temperature Enabled

Indoor Temperature Enabled

Date Enabled

Date Format

Brightness %

Text Color

Text Outline Color

Text Font Face

Header Text Line 1

Header Text Line 2

Header Text Justification Left
 Center
 Right

Header Text Bidirectional Text Direction Left-To-Right
 Right-To-Left

Background Image URL

Video URL

Logo Setting None
 Crestron
 Custom

Logo URL

- **LCD**

- **Auto Brightness:** Toggle the switch to turn automatic brightness control for the touch screen LCD display on or off.
- **ALS Threshold Value:** If **Auto Brightness** is turned on, enter a value (1–100%) for the ALS (ambient light sensor) threshold, which is used for switching between high and low auto-brightness presets.
- **Brightness:** If **Auto Brightness** is turned off, enter a value (1–100%) for the LCD display brightness.
- **Brightness High Preset:** Enter a value (1–100%) for the LCD display high brightness preset.
- **Brightness Low Preset:** Enter a value (1–100%) for the LCD display low brightness preset.

- **Setup**

- **Local Setup Sequence:** Toggle to switch to enable or disable local access to the setup screens using the five-finger press.

- **Screensaver and Standby**

- **Standby Timeout:** Enter a standby timeout duration (1–120 minutes) for the touch screen.
- **Screensaver Enabled:** Toggle the switch to enable or disable displaying a screensaver on the touch screen during standby timeout.
- **24 Hour Digital Clock Enabled:** Toggle the switch to enable or disable displaying a 24-hour digital clock on the touch screen during standby timeout.
- **Outdoor Temperature Enabled:** Toggle the switch to enable or disable displaying the outdoor temperature on the touch screen during standby timeout via a join from a control system.
- **Indoor Temperature Enabled:** Toggle the switch to enable or disable displaying the indoor temperature on the touch screen during standby timeout via a join from a control system.
- **Date Enabled:** Toggle the switch to enable or disable displaying the date on the touch screen during standby timeout.
- **Date Format:** Use the drop-down menu to select a format for displaying the date on the touch screen.
- **Brightness:** Enter a brightness value (1–100%) for the screensaver.
- **Text Color:** Tap the color icon to the right of this field to display a pop-up window for selecting the text color of the screensaver, or enter a hex value for a specific color.
- **Text Outline Color:** Tap the color icon to the right of this field to display a pop-up window for selecting the text outline color of the screensaver, or enter a hex value for a specific color.
- **Text Font Face:** Use the drop-down menu to select a font for the screensaver text.

- **Header Text Line 1:** Enter text to be displayed on the first header text line of touch screen screensaver.
- **Header Text Line 2:** Enter text to be displayed on the second header text line of touch screen screensaver.
- **Header Text Justification:** Select one of the radio buttons (**Left**, **Center**, or **Right**) to select how the header text is justified on the touch screen screensaver.
- **Header Text Bidirectional Text Direction:** Select one of the radio buttons (**Left-To-Right** or **Right-To-Left**) to determine the language text direction on the touch screen screensaver.
- **Background Image URL:** Enter a URL of a background image to be used by the touch screen screensaver.
- **Video URL:** Enter a URL of video to be used by the touch screen screensaver.
- **Logo Setting:** Select one of the radio buttons (**None**, **Crestron**, and **Custom**) to select a logo type to use on the touch screen screensaver.
- **Logo URL:** If Logo Setting is set to Custom, enter a URL of a custom logo to be used by the touch screen screensaver.

Click the + (plus) icon next to **Proximity** to display the following proximity settings.

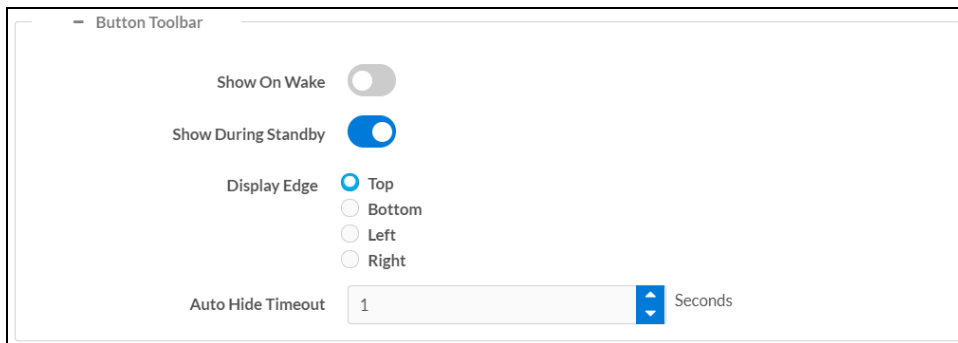
Settings Tab - System Setup (Proximity)



Toggle the **Wake On Proximity** switch to enable or disabling waking the touch screen automatically when a user enters the touch screen proximity field.

Click the + (plus) icon next to **Button Toolbar** to display the following virtual toolbar button settings.

Settings Tab - System Setup (Button Toolbar)

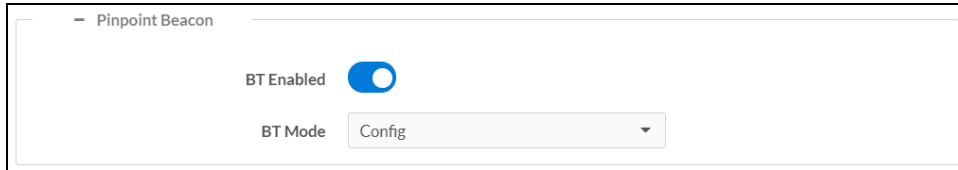


- **Show On Wake:** Toggle the switch to enable or disable showing the virtual toolbar when the touch screen wakes from standby timeout.
- **Show During Standby:** Toggle the switch to enable or disable showing the virtual toolbar during standby timeout.

- **Display Edge:** Select a radio button (Top, Bottom, Left, or Right) to select the position on the touch screen where the virtual toolbar is displayed
- **Auto Hide Timeout:** Select a duration (in seconds) that must elapse before the virtual toolbar is hidden automatically.

Click the + (plus) icon next to **PinPoint Beacon** to display the following Bluetooth beacon settings.

Settings Tab - System Setup (PinPoint Beacon)

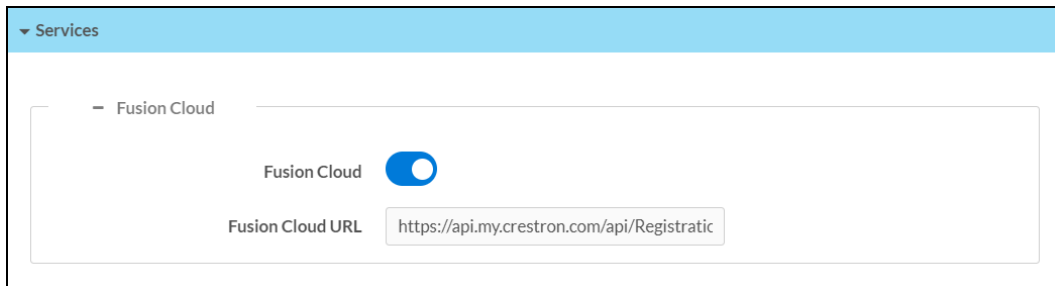


- **BT Enabled:** Toggle the switch to enable or disable the Bluetooth beacon.
- **BT Mode:** Use the drop-down menu to select the mode (**Advertise** or **Config**) of the Bluetooth beacon.
 - Select **Advertise** to make the Bluetooth beacon available to Crestron devices that support this functionality.
 - Select **Config** to put the Bluetooth beacon into configuration mode.

Services

Click **Services** to configure Crestron Fusion® software settings.

Settings Tab - Services



NOTE: If connecting to a Crestron Fusion software on-premises server, connections are made using either traditional (outbound) or inbound communications. For more information, refer to the [Crestron Fusion 10 On-Premises Software Getting Started Guide \(Doc. 7685\)](#).

- **Crestron Fusion Cloud:** Toggle the switch to enable or disable a connection to a Crestron Fusion Cloud server. This connection is only applicable when the scheduling mode is set to Crestron Default or User Project.
- **Crestron Fusion Cloud URL:** Enter the URL used to connect the touch screen to the desired Crestron Fusion Cloud server.

Network Proxy Settings

Click **Network Proxy Settings** to configure network proxy settings for the touch screen.

Settings Tab – Network Proxy Settings

The screenshot shows the 'Network Proxy Settings' interface. At the top, there is a blue header with a dropdown arrow and the text 'Network Proxy Settings'. Below the header, there is a 'Proxy' toggle switch. Underneath, there are two sections: 'HTTP Settings' and 'HTTPS Settings'. Each section contains a toggle switch for the respective proxy type, followed by input fields for 'Address', 'Port', 'Username', and 'Password'.

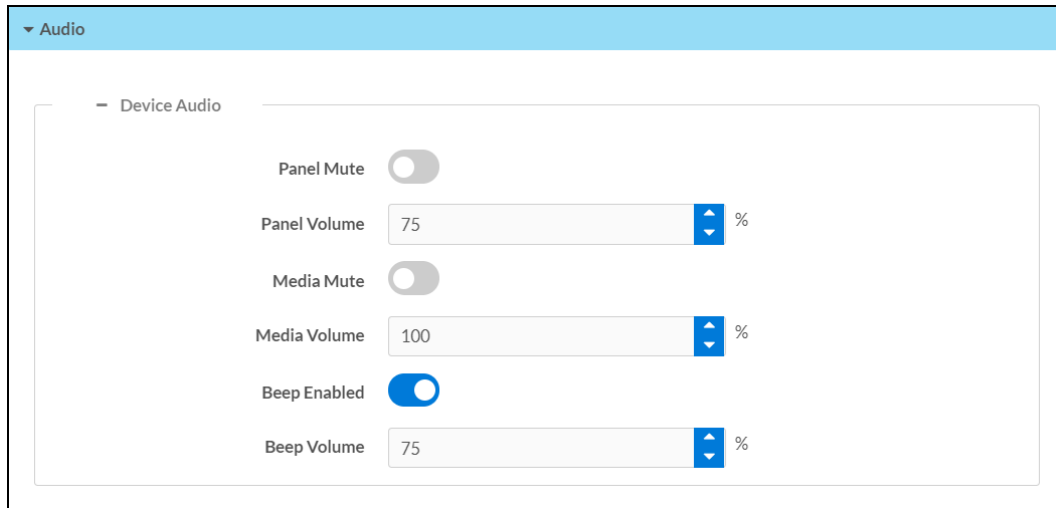
- **Proxy:** Toggle the switch to enable or disable configuring the touch screen for use with a proxy server.
- **HTTP Settings**
 - **HTTP Proxy:** Toggle the switch to enable or disable an HTTP proxy server.
 - **HTTP Proxy Address:** Enter the IP address of the HTTP proxy server.
 - **HTTP Proxy Port:** Enter the port number of the HTTP proxy server.
 - **Username:** Enter the username required for the HTTP proxy server.
 - **Password:** Enter the password required for the HTTP proxy server.
- **HTTPS Settings**
 - **HTTPS Proxy:** Toggle the switch to enable or disable an HTTPS proxy server.
 - **HTTPS Proxy Address:** Enter the IP address of the HTTPS proxy server.
 - **HTTPS Proxy Port:** Enter the port number of the HTTPS proxy server.

- **Username:** Enter the username required for the HTTPS proxy server.
- **Password:** Enter the password required for the HTTPS proxy server.

Audio

Click Audio to configure various audio settings for the touch screen.

Settings Tab – Audio Settings



NOTE: The **Media Volume** setting adjusts the H.264 streaming media level in relation to the **Panel Volume** setting.

- **Panel Mute:** Toggle the switch to mute (**On**) or unmute (**Off**) the touch screen master volume.
- **Panel Volume:** Enter a value (1–100) for the touch screen master volume level.
- **Media Mute:** Toggle the switch to mute (**On**) or unmute (**Off**) the touch screen media volume.
- **Media Volume:** Enter a value (1–100) for the touch screen media volume level.
- **Beep Enabled:** Toggle the switch to turn the touch screen beep volume on or off.
- **Beep Volume:** Enter a value (1–100) for the touch screen beep volume.

Auto Update

Click **Auto Update** to configure automatic firmware updates for the touch screen.

NOTE: The **Auto Update** accordion can be used to configure auto update settings for firmware only. Automatic application updates are not affected by these settings.

Settings Tab - Auto-Update

Auto Update

Custom URL Path

- Schedule

Day of Week

Time of Day

Poll Interval Minutes

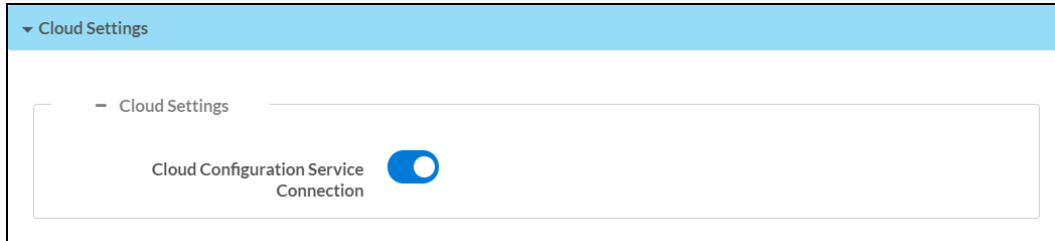
Update Now

- **Auto Update:** Toggle the switch to enable or disable automatic firmware updates.
- **Control URL Path:** Enter the URL path for the update server.
- **Day of Week:** Select the day of week when the touch screen will check for updates. Select Daily to have the touch screen check for updates every day.
- **Time of Day:** Enter a time of day (in 24-hour format) when the touch screen will check updates on the scheduled day.
- **Poll Interval:** Enter the polling interval (in hours) for when the touch screen will poll the server for updates.
- Click **Update Now** to check the update server for new firmware and to update the touch screen immediately if new firmware is available.

Cloud Settings

Click **Cloud Settings** to enable or disable a connection between the touch screen and an XiO Cloud® service account. A connection to the XiO Cloud service is enabled by default.

Settings Tab – Cloud Settings



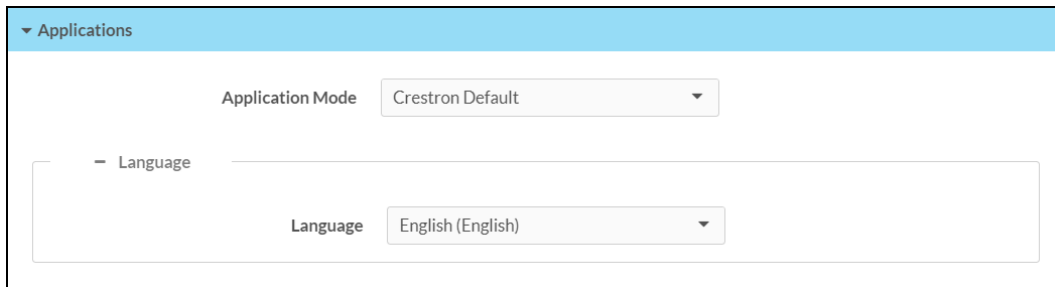
Toggle the **Cloud Configuration Service Connection** switch to enable or disable a connection between the touch screen and an XiO Cloud account. This setting is enabled by default.

For more information on connecting to the XiO Cloud service, refer to [Connect to XiO Cloud Service \(on page 72\)](#).

Applications

Click **Applications** to select an application to run on the touch screen.

Settings Tab - Applications



Use the **Application Mode** drop-down menu to select a touch screen application from the available selections. **User Project** is selected by default.

Once a new application is selected, click **Save Changes** from the **Actions** menu. A pop-up dialog box is displayed stating that the touch screen must be rebooted for the new application to take effect. Click **Yes** to reboot the touch screen now or **No** to reboot the touch screen later. The touch screen reboots with the new application running.

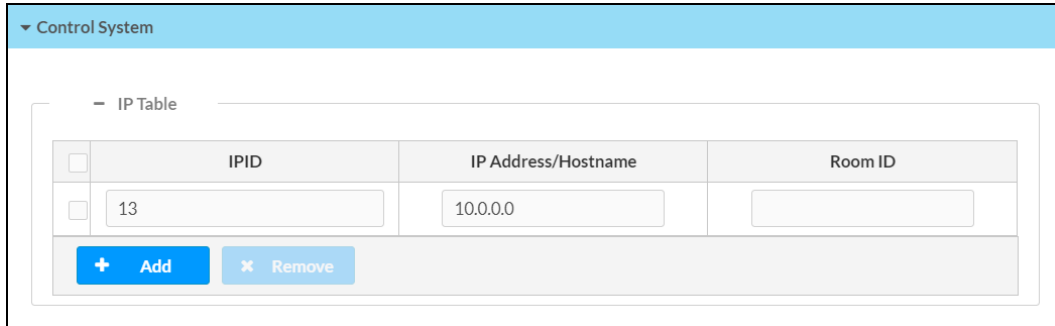
NOTE: Each application uses a unique setup procedure for registering and configuring the application. For more information on setting up each application, refer to [Application Selection \(on page 71\)](#).

Control System

Click **Control System** to configure a connection to a Crestron control system.

NOTE: The **Control System** accordion is shown in user project mode only.

Settings Tab - Control System



The screenshot shows the 'Control System' settings tab. It features a table titled 'IP Table' with three columns: 'IPID', 'IP Address/Hostname', and 'Room ID'. The first row contains the values '13', '10.0.0.0', and an empty field. Below the table are two buttons: '+ Add' and 'x Remove'.

IPID	IP Address/Hostname	Room ID
13	10.0.0.0	

If the control system has authentication enabled, its username and password must be entered in the **Security** tab. For more information, refer to [Security \(on the next page\)](#).

- **IP Table:** Set an IP table connection between the touch screen and control system:
 - **IP ID:** Enter an IP ID for connecting the touch screen to the control system.
 - **IP Address/Hostname:** Enter the control system IP address or hostname.
 - **Room ID:** Enter a room ID to associate with the touch screen (for connections with the Crestron Virtual Control server-based control system)

NOTE: For more information on connecting the touch screen to Crestron Virtual Control, refer to the help file in the Crestron Virtual Control web configuration interface. To access the help file, click the question mark button **?** on the top left of the page.

Security

Click the **Security** tab on the top left of the configuration interface to display selections for configuring security and authentication settings for the touch screen.

Security Tab Selections

The screenshot shows a configuration interface with a dark header bar containing 'Status', 'Settings', 'Security', and '802.1x Configuration'. Below the header, a blue bar indicates the 'Security' section is expanded. The main content area includes an 'SSL Mode' dropdown menu set to 'Encrypt and Validation'. Below this is a section titled 'SSL Authentication' containing three input fields: 'Username', 'Password', and 'Confirm Password'. Red error messages are displayed below the 'Username' and 'Password' fields, stating 'Username cannot be empty' and 'Password cannot be empty' respectively. At the bottom of the section is a toggle switch labeled 'Enable Authentication', which is currently turned off.

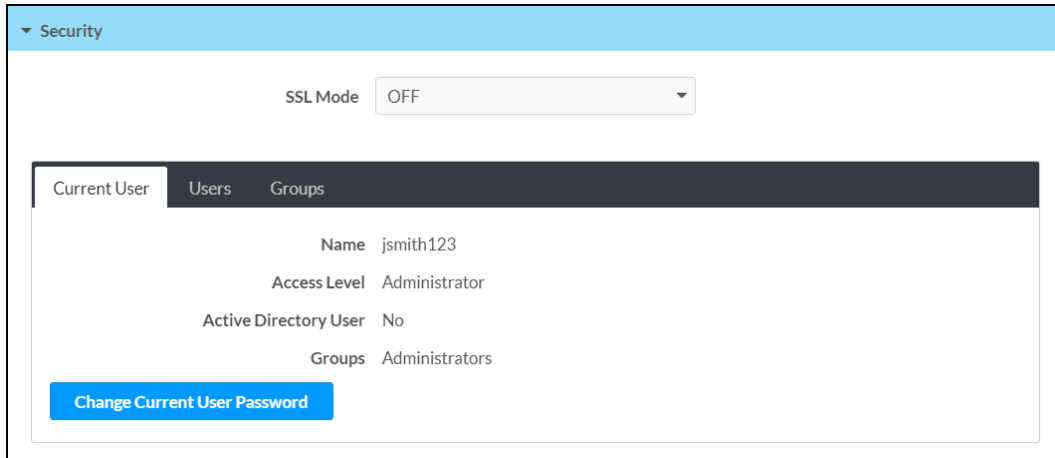
Expand the **Security** accordion to configure the following settings:

- **SSL Mode:** Select an SSL (Secure Sockets Layer) mode to use for establishing a secure connection to the touch screen:
 - **Encrypt and Validation:** The touch screen will require a username and password to validate an encrypted SSL connection. Enter a username and password in the appropriate fields that are displayed.
 - **Encrypt:** The touch screen will use an encrypted SSL connection
 - **OFF:** The touch screen will not use an SSL connection.
- **Enable Authentication:** Toggle the switch to enable or disable authentication for the touch screen as described in [Authentication \(on the facing page\)](#).

Authentication

Toggle the **Enable Authentication** switch in the **Security** settings to turn authentication for the touch screen on or off. Authentication is turned on by default. When authentication is enabled, settings are displayed within the **Security** accordion.

Authentication Settings



When authentication is turned on, the web configuration interface prompts the user to enter a new administrator username and password. After rebooting the touch screen, this username and password must be entered to access the web configuration utility or to connect to the touch screen through Crestron Toolbox™ software.

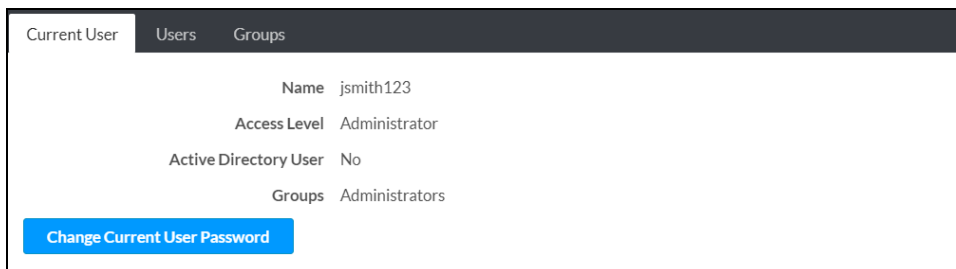
CAUTION: Do not lose the administrator username and password, as the touch screen settings must be restored to factory defaults to reset the username and password.

Use the following **Authentication Management** settings to add, delete, and edit touch screen users and groups.

Current User

Click the **Current User** tab to view and edit information for the current touch screen user.

Authentication Management - Current User Tab



The following settings are displayed for the current user:

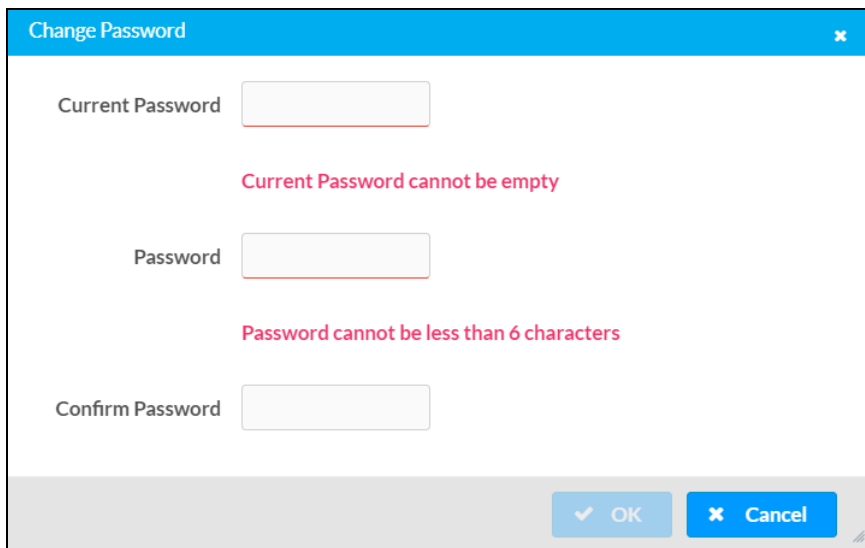
- **Name:** The chosen username
- **Access Level:** The access level granted to the user (Administrator, Programmer, Operator, User, or Connect)
- **Active Directory User:** Reports whether the current user is (Yes) or is not (No) authenticated through Active Directory® software

NOTE: A user must be added to an Active Directory group before the user may be selected as an active directory user. For more information, refer to [Groups \(on page 65\)](#).

- **Groups:** Any groups of which the current user is a member

Click **Change Current User Password** to change the password for the current user. The **Change Password** dialog box is displayed.

Change Password Dialog Box



The screenshot shows a dialog box titled "Change Password". It features three input fields: "Current Password", "Password", and "Confirm Password". The "Current Password" field has a red error message below it: "Current Password cannot be empty". The "Password" field has a red error message below it: "Password cannot be less than 6 characters". At the bottom right, there are two buttons: "OK" (with a checkmark icon) and "Cancel" (with an 'X' icon).

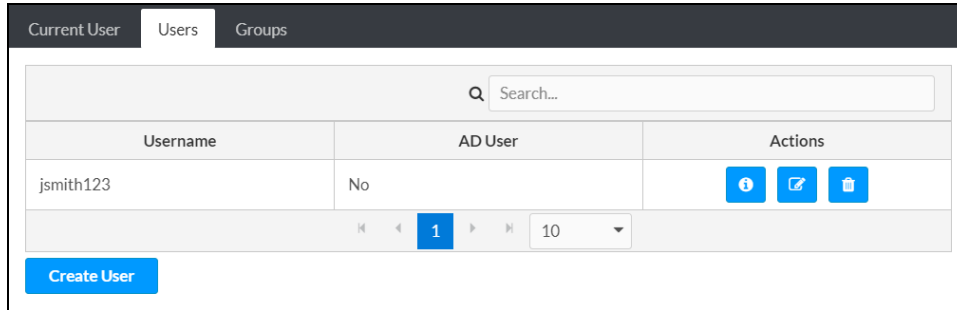
Enter the existing password in the **Current Password** field. Then, enter a new password in the **Password** field, and reenter the password in the **Confirm Password** field.

Tap **OK** to save the new password, or tap **Cancel** to cancel the change.

Users

Click the **Users** tab to view and edit information for the touch screen users.

Authentication Management - Users Tab



Enter text into the **Search Users** field to find and display users that match the search term(s).

Touch screen users are listed in table format. The following information is displayed for each touch screen user:


- **Username:** The chosen username
- **AD User:** Reports whether the user is (**Yes**) or is not (**No**) authenticated through Active Directory

NOTE: A user must be added to an Active Directory group before the user may be selected as an active directory user. For more information, refer to [Groups \(on page 65\)](#).

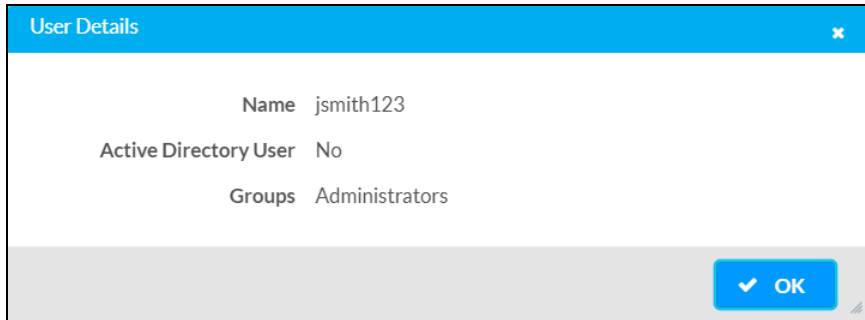
If the touch screen users span multiple pages, use the navigation arrows on the bottom of the page to move forward or backward through the pages, or select a page number to navigate to that page. Additionally, the number of users displayed on each page may be set to 5, 10, or 20 users.

An **Actions** column is also provided for each user that allows various actions to be performed. The following selections may be selected from the **Actions** column.

User Details

Click the information button  in the **Actions** column to view information for the selected user. The **User Details** pop-up dialog box is displayed.

User Details Dialog Box



The dialog box titled "User Details" displays the following information:

Name	jsmith123
Active Directory User	No
Groups	Administrators


At the bottom right, there is a blue button with a checkmark and the text "OK".

The following settings are displayed for the current user:

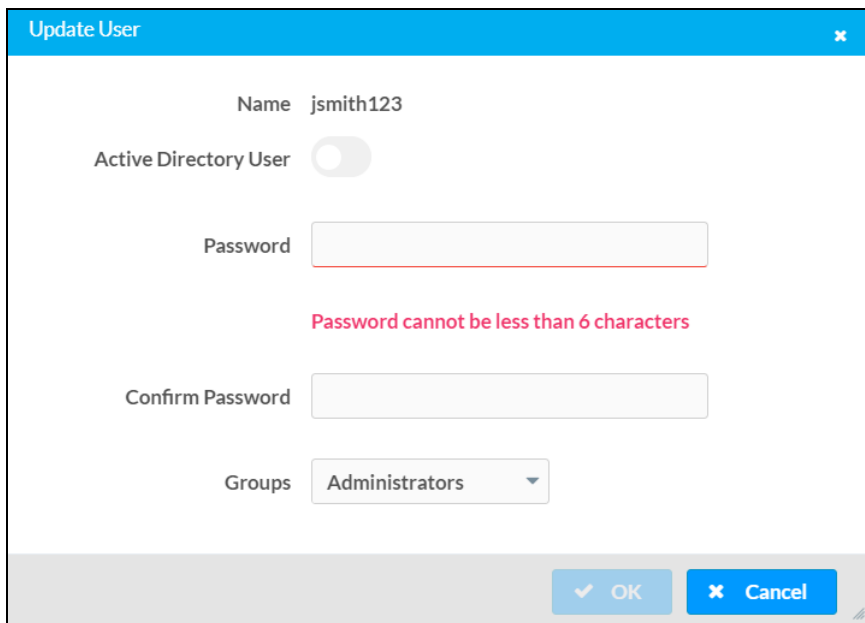
- **Name:** The chosen username
- **Active Directory User:** Reports whether the user is (**Yes**) or is not (**No**) authenticated through Active Directory
- **Groups:** Lists any groups that contain the user

Click **OK** to return to the **Authentication Management > Users** page.

Update User

Click the editing button  in the **Actions** column to edit settings for the selected user. The **Update User** dialog box is displayed.

Update User Dialog Box



The dialog box titled "Update User" displays the following settings:

Name	jsmith123
Active Directory User	<input type="checkbox"/>
Password	<input type="password"/>
	Password cannot be less than 6 characters
Confirm Password	<input type="password"/>
Groups	Administrators

At the bottom, there are two buttons: a blue button with a checkmark and "OK", and a blue button with an 'X' and "Cancel".

The following **Update User** settings may be viewed or configured:

- **Name:** The chosen username
- **Active Directory User:** Toggle the switch to turn authentication via Active Directory on or off for the selected user.
- **Password:** Enter a new password for the selected user.
- **Confirm Password:** Reenter the password provided in the **Password** field.
- **Groups:** Add the user to one or more groups. For more information, refer to [Groups \(on page 65\)](#).

NOTE: A user must be added to an Active Directory group to be selected as an Active Directory user.

Click **OK** to save any changes and to return to the **Authentication Management > Users** page. Click **Cancel** to cancel any changes.

Delete User

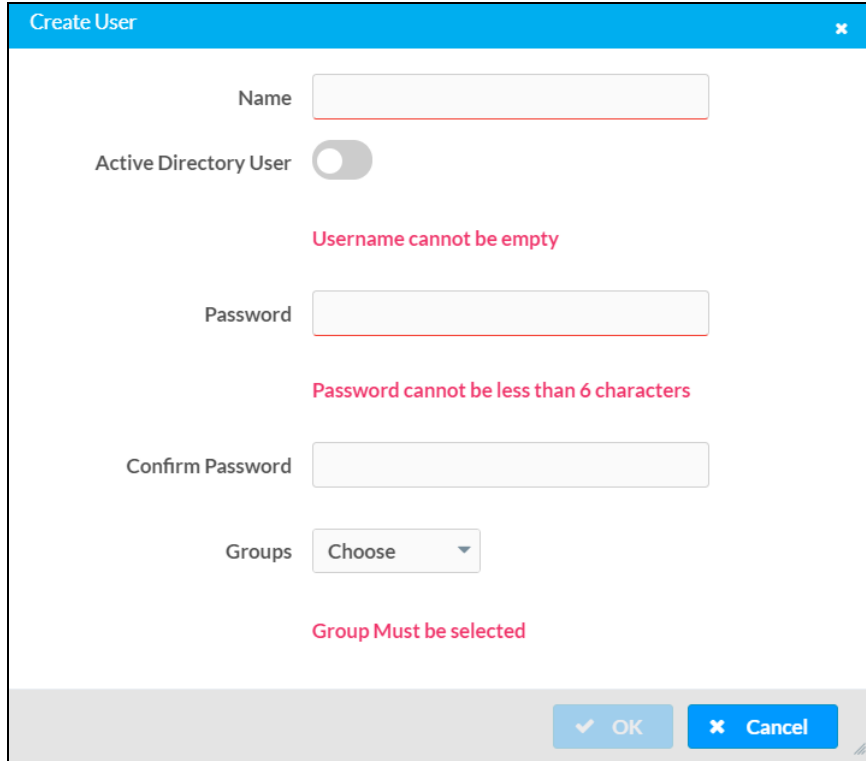
Click the trashcan icon  in the **Actions** column to delete the user.

A pop-up dialog box is displayed asking whether the user should be deleted. Click **Yes** to delete the user or **No** to cancel deleting the user.

Create User

Click **Create User** at the bottom of the page to create a new touch screen user. The **Create User** dialog box is displayed.

Create User Dialog Box



The screenshot shows a 'Create User' dialog box with the following fields and error messages:

- Name:** An empty text input field with a red error message below it: "Username cannot be empty".
- Active Directory User:** A toggle switch that is currently turned off.
- Password:** An empty text input field with a red error message below it: "Password cannot be less than 6 characters".
- Confirm Password:** An empty text input field with a red error message below it: "Group Must be selected".
- Groups:** A dropdown menu with the text "Choose" and a downward arrow.

At the bottom right of the dialog, there are two buttons: "OK" (with a checkmark icon) and "Cancel" (with an 'X' icon).

Use the following settings to create a new user:

- **Name:** Enter a username.
- **Active Directory User:** Toggle the switch to turn authentication via Active Directory on or off for the user.
- **Password:** Enter a password for the user.
- **Confirm Password:** Reenter the password provided in the Password field.
- **Groups:** Add the user to one or more groups. For more information, refer to [Groups \(on the facing page\)](#).

NOTE: A user must be added to an Active Directory group to be selected as an Active Directory user.

Click **OK** to save any changes and to return to the **Authentication Management > Users** page. Click **Cancel** to cancel creating a new user.

Groups

Click the **Groups** tab to view and edit settings for touch screen groups. Touch screen groups are used to group users by access level and Active Directory authentication settings.

Authentication Management - Groups Tab

Group Name	AD Group	Access Level	Actions
Administrators	No	Administrator	
Connects	No	Connect	
Operators	No	Operator	
Programmers	No	Programmer	
Users	No	User	

Enter text in to the **Search Groups** field to find and display groups that match the search term(s).

Touch screen groups are listed in table format. The following information is displayed for each touch screen group:

- **Group Name:** The chosen group name
- **AD Group:** Reports whether the group is (**Yes**) or is not (**No**) authenticated through Active Directory


NOTE: Active Directory provides an additional layer of authentication for touch screen groups and users. Active directory group and user names are stored in the touch screen console along with a unique SID (security identifier). When an Active Directory user attempts to authenticate against the console, the console first checks the user credentials. If the Active Directory authentication is successful, Active Directory queries the console for the user or group's SID. The user is granted access to the touch screen only if at least one SID match is found.

- **Access Level:** The access level for the selected group (**Administrator, Programmer, Operator, User, or Connect**)

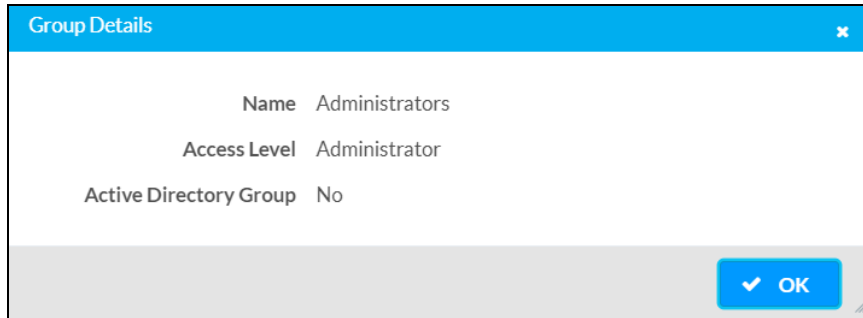
If the touch screen groups span multiple pages, use the navigation arrows on the bottom of the page to move forward or backward through the pages, or select a page number to navigate to that page. Additionally, the number of groups displayed on each page may be set to 5, 10, or 20 users.

An **Actions** column is also provided for each group that allows various actions to be performed. The following selections may be selected from the **Actions** column.

Group Details

Click the information button  in the **Actions** column to view information for the selected group. The **Group Details** dialog box is displayed.

Group Details Dialog Box



The following settings are displayed for the current group:

- **Name:** The chosen group name
- **NOTE:** If authenticating with Active Directory, do not enter the domain name for the Active Directory group in the **Name** field. If this information is being entered via console commands, omit `domain\local` from the command (for example, `adddomaing -n:crestron -L:A` instead of `adddomaing -n:domain.local\crestron -L:A`).
- **Access Level:** The access level of the group and its users
- **Active Directory User:** Reports whether the group is (**Yes**) or is not (**No**) authenticated through Active Directory

Click **OK** to return to the **Authentication Management > Groups** page.

Delete Group

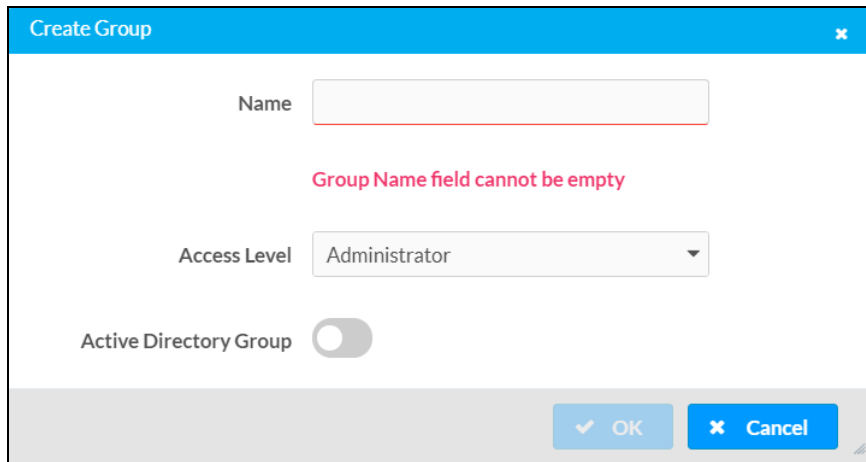
Click the trashcan icon  in the **Actions** column to delete the group.

A pop-up dialog box is displayed asking whether the group should be deleted. Click **Yes** to delete the group or **No** to cancel deleting the group.

Create Group

Click **Create Group** at the bottom of the page to create a new touch screen group. The **Create Group** dialog box is displayed.

Create Group Dialog Box



The screenshot shows a dialog box titled "Create Group" with a close button in the top right corner. The dialog contains the following elements:

- Name:** A text input field that is currently empty. Below it, a red error message reads "Group Name field cannot be empty".
- Access Level:** A dropdown menu with "Administrator" selected.
- Active Directory Group:** A toggle switch that is currently turned off.
- Buttons:** "OK" and "Cancel" buttons at the bottom right.

Use the following settings to create a new group:

- **Name:** Enter a group name.
- **Access Level:** Select an access level for the group and its users from the drop-down menu.
- **Active Directory Group:** Toggle the switch to turn authentication via Active Directory on or off for the group.

Click **OK** to save any changes and to return to the **Authentication Management > Groups** page.

Click **Cancel** to cancel creating a new group.

802.1x Configuration

Click the **Security** tab on the top left of the configuration interface to display selections for configuring IEEE 802.1x network authentication for touch screen security.

802.1x Configuration Tab Selections

The screenshot shows the configuration interface for IEEE 802.1x authentication. At the top, there are navigation tabs: Status, Settings, Security, and 802.1x Configuration. The 802.1x Configuration tab is active. Below the tabs, there is a section titled "802.1x Configuration" with a dropdown arrow. The settings are as follows:

- IEEE 802.1x Authentication:** A toggle switch is currently turned off.
- Authentication Method:** A dropdown menu is set to "EAP MSCHAP V2- password".
- Domain:** An empty text input field.
- Username:** An empty text input field.
- Password:** A text input field with masked characters (dots).
- Enable Authentication Server Validation:** A toggle switch is currently turned off.
- Select Trusted Certificate Authority(ies):** A list of certificate authorities with checkboxes. The list includes:
 - AAA Certificate Services
 - AC RAIZ FNMT-RCM
 - ACCVRAIZ1
 - Actalis Authentication Root CA
 - AffirmTrust Commercial
 - AffirmTrust Networking
 - AffirmTrust Premium ECC
 - AffirmTrust Premium
 - Amazon Root CA 1
 - Amazon Root CA 2
 - Amazon Root CA 3
 - Amazon Root CA 4
 - Atos TrustedRoot 2011
 - Autoridad de Certificacion Firmaprofesional CIF A62634068

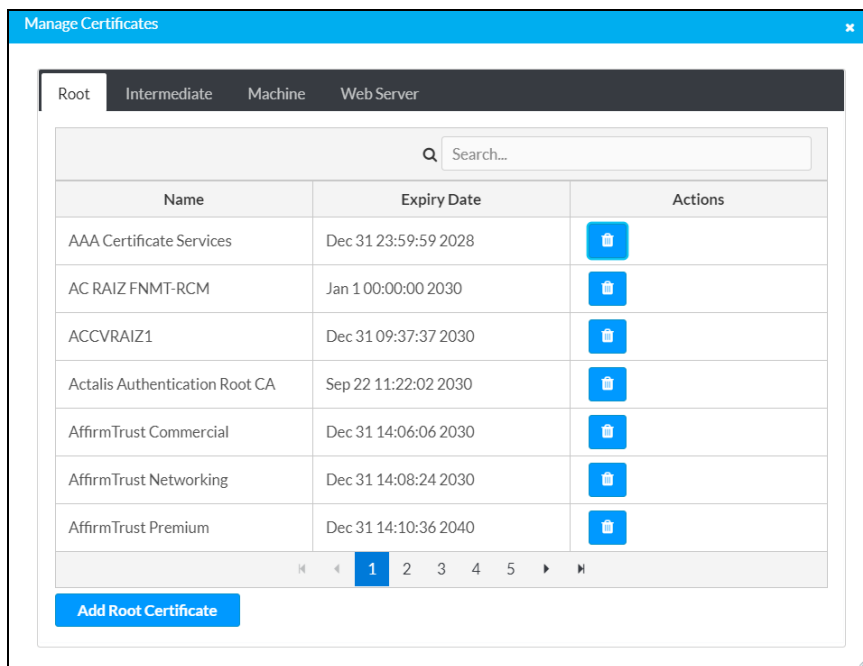
Expand the **802.1x Configuration** accordion to configure the following settings:

- **IEEE 802.1x Authentication:** Toggle the switch to enable or disable using 802.1x authentication for the touch screen.
- **Authentication Method:** Select an 802.1x authentication method (**EAP-TLS Certificate** or **EAP MSCHAP V2- password**) from the drop-down menu.
- **Domain:** If **EAP MSCHAP V2- password** is selected for **Authentication Method**, enter a domain name that is required for authentication.
- **Username:** If **EAP MSCHAP V2- password** is selected for **Authentication Method**, enter a username that is required for authentication.

- **Password:** If **EAP MSCHAP V2- password** is selected for **Authentication Method**, enter a password that is required for authentication.
- **Enable Authentication Server Validation:** Toggle the switch to enable or disable using server validation for increased security.
- **Select Trusted Certificate Authorities:** Select trusted CAs (Certificate Authorities) from the provided CAs to be used for server validation:
 - Click the check box to the left of a CA to select it as a trusted CA.
 - Enter a search term into the text field at the top of the CA menu to search for and display CAs that match the search term.
 - Click the check box to the left of the search field at the top of the CA menu to select all CAs as trusted CAs.

Select **Manage Certificates** from the **Action** menu to add or remove CAs from the list. The **Manage Certificates** dialog box is displayed with the **Root** tab selected.

Manage Certificates Dialog Box - Root Tab




Click the tabs near the top of the page to switch between the different types of CAs (**Root**, **Intermediate**, **Machine**, or **Web Server**). The same settings are provided for each type of CA.

Type a search term into the **Search...** text field to search for and display CAs that match the search term.

The following information is provided for each type of CA:

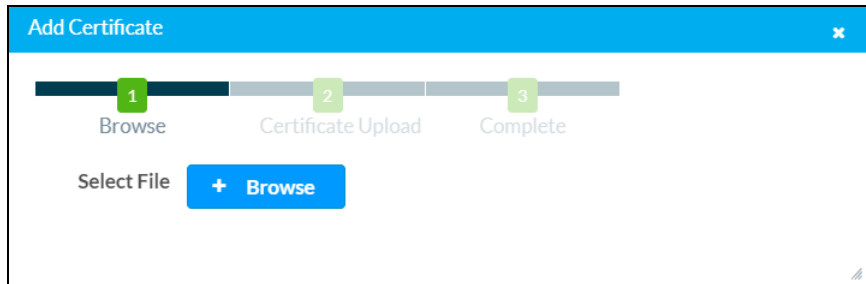
- **Name:** The CA name
- **Expiry Date:** The date and time that the CA is set to expire

If the CAs span multiple pages, use the navigation arrows on the bottom of the page to move forward or backward through the pages, or select a page number to navigate to that page.

Click the trashcan button  in the **Actions** column for a CA to delete it. A pop-up dialog box is displayed asking if the CA should be deleted. Click **Yes** to delete the certificate or **No** to cancel.

Click **Add [Type] Certificate** to add a CA of one of the four available types (**Root**, **Intermediate**, **Machine**, or **Web Server**) to the list of CAs. The **Add Certificate** pop-up dialog box is displayed.

Add Certificate Dialog Box



To add a new certificate:

1. Click **Browse**.
2. Navigate to the CA file on the host computer.
3. Select the CA file, and then click **Open**.
4. Click **Load** to load the CA file to the touch screen. The upload progress is shown in the dialog box.
5. Once the touch screen has completed the upload, click **OK**.

Click the **x** button to close the **Add Certificate** dialog box at any time during the upload process. Clicking the **x** button before the CA file is uploaded to the touch screen cancels the upload.

Click the **x** button to close the **Manage Certificates** dialog box and to return to the **802.1x Authentication** page.

Application Selection

The touch screen ships with a variety of preinstalled applications that provide out-of-the-box functionality. Once an application has been selected, it downloads from the cloud and installs on the touch screen automatically.

The following applications ship with the touch screen:

- [Crestron room scheduling](#) application
- [Crestron Home™ OS](#) user control application
- [22 Miles® ADSign](#) application (TSW-770/TSW-1070 only)
- [Appspace® digital signage](#) application
- [AskCody® room scheduling](#) application (TSW-770/TSW-1070 only)
- [EMS Software® room scheduling](#) application (TSW-770/TSW-1070 only)
- [Gingco.net™ room scheduling](#) application (TSW-770/TSW-1070 only)
- [Indoor Finders® room scheduling](#) application (TSW-770/TSW-1070 only)
- [Matrix Booking® room scheduling](#) application (TSW-770/TSW-1070 only)
- [Microsoft Teams® online meeting solution](#) application (TSW-1070 only)

NOTE: A Crestron Flex Microsoft Teams UC system must be configured prior to configuring the Microsoft Teams application on the touch screen. For more information, refer to the [UC Video Conference Systems for Microsoft Teams Supplemental Guide \(Doc. 8360\)](#).

- [New Wave Apps® room scheduling](#) application (TSW-770/TSW-1070 only)
- [NFS™ Rendezvous room scheduling](#) application (TSW-770/TSW-1070 only)
- [Robin® room scheduling](#) application (TSW-770/TSW-1070 only)
- [SharingCloud™ room scheduling](#) application (TSW-770/TSW-1070 only)
- [Space Connect™ room scheduling](#) application (TSW-770/TSW-1070 only)
- [SpacelQ® room scheduling](#) application (TSW-770/TSW-1070 only)
- [Teem® room scheduling](#) application (TSW-770/TSW-1070 only)
- [Zoom Rooms™ conferencing control and Zoom™ room scheduling](#) application (TSW-770/TSW-1070 only)

NOTE: Support for additional applications will be provided by future firmware updates.

The touch screen runs only one app, which is selected at setup. Only the apps approved and delivered by Crestron may run on the touch screen.

NOTE: Additional subscriptions and/or licenses may be required. Refer to each provider's website for details about the capabilities and requirements of its scheduling application and services.

For more information on using and setting up each application, refer to the provider's website.

Connect to XiO Cloud Service

The XiO Cloud service allows all supported Crestron devices across an enterprise to be managed and configured from one central, secure location in the cloud. The XiO Cloud service may be used to view the status of a device, to configure various device and network settings, to manage licenses, and to update device firmware.

Devices must be claimed by the XiO Cloud service before they may be managed by the service. Devices may be claimed individually or as a group.

For information on creating environments, managing devices, and managing users with the XiO Cloud service, refer to the [XiO Cloud User Guide \(Doc. 8214\)](#).

Claim a Single Device

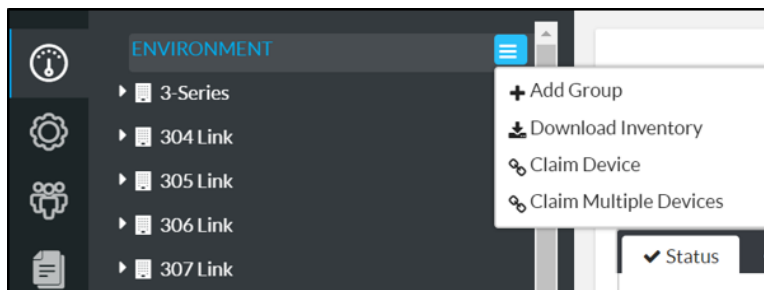
To claim a single device:

1. Record the MAC address and serial number of the device. The MAC address and serial number are labeled on the shipping box or on a sticker attached to the device.

NOTE: Use the MAC address labeled *MAC Address*.

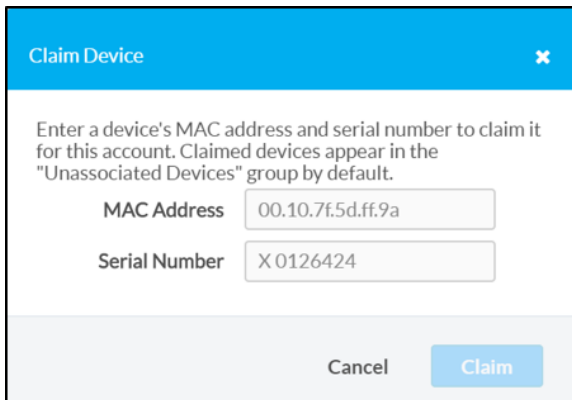
2. In the XiO Cloud service, click the **ENVIRONMENT** menu button  to display a drop-down menu.

Environment - Drop-Down Menu



3. Click **Claim Device**. The **Claim Device** dialog box is displayed.

Claim Device Dialog Box



4. Enter the MAC address and serial number recorded in step 1 in the **MAC Address** and **Serial Number** fields, respectively.
5. Click **Claim**. A success message is displayed if the claim is successful.

NOTE: If an error message is displayed stating that the device does not exist, connect the device to a network that has access to the Internet, wait 15 minutes, and then try again.

6. Click **X** to close the dialog box. The hostname of the claimed device is displayed in the device tree under the group **Unassociated Devices**.

Unassociated Devices



The device may now be managed and assigned to a group.

Claim Multiple Devices

To claim multiple devices:

1. Record the MAC address and serial number of each device as a comma delimited CSV file. The MAC address and serial number are labeled on the shipping box or on a sticker attached to the device.

NOTE: Use the MAC address labeled *MAC Address*.

The CSV file should be formatted as shown below:

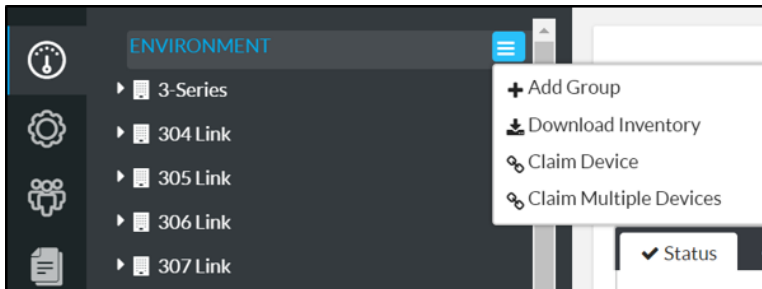
CSV File Format

```
MAC Address,Serial Number
00.10.7e.8b.81.b6,17284712
00.10.7e.8b.8c.87,17284570
00.10.7e.96.83.93,1716JBG01207
00.10.7e.96.92.0a,1716JBG01550
00.10.7e.8b.87.c1,17284670
```

NOTE: An optional third column may be added to the CSV file with custom device names. After being claimed, the device will take the custom name from the CSV file instead of its default name. For example, if adding a custom device name to the first example above, the formatting would be 00.10.73.8b.81.b6,17284712, [custom device name]

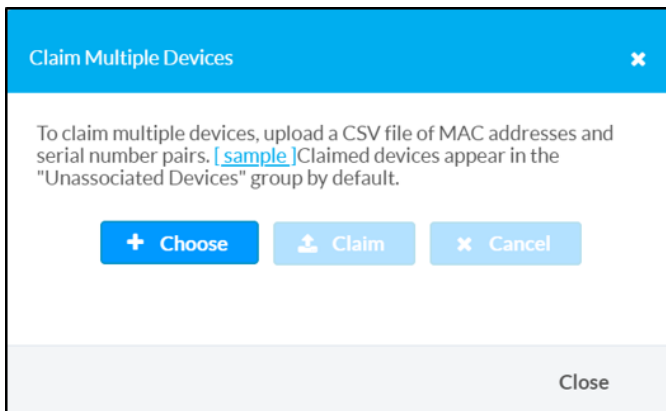
2. Save the CSV file to a location that may be accessed by the computer used to access the XiO Cloud service.
3. In the XiO Cloud service, click the **ENVIRONMENT** menu button  to display a drop-down menu.

Environment - Drop-Down Menu



4. Click **Claim Multiple Devices**. The **Claim Multiple Devices** dialog box is displayed.

Claim Multiple Devices Dialog Box



5. Click **Choose**, and then select the CSV file created in step 1.
6. Click **Claim** to claim all of the devices listed in the file. A message indicating the claim status of each device is displayed.

NOTE: If an error message is displayed stating that a device does not exist, connect that device to a network that has access to the Internet, wait 15 minutes, and then try again.

7. Click **X** to close the dialog box. The hostnames of the claimed devices appear in the device tree under the group **Unassociated Devices**.

Unassociated Devices



The devices may now be managed and assigned to a group.

