Crestron Home™ OS

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.

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Contents

Introduction

The Crestron Home™ OS product manual provides comprehensive information and support for a complete Crestron Home system.

Crestron Home Processors

Crestron Home processors provide a secure, high-performance, cost-effective control processor and interface with the embedded Crestron Home operating system. The CP4-R and MC4-R Crestron Home control processors are designed to function as the core of a Crestron Home system and feature enhanced processing power to handle large or small homes. Crestron Home control processors are equipped with a 4-Series multicore CPU processor that delivers remarkable speed and performance while handling the demands of an advanced automated system.

CP4-R -Control Processor

The CP4-R is a rack-mountable control processor that is designed to handle larger home automation, home theater, multiroom video, and MDU (multidwelling unit) applications.

MC4-R - Media Room Controller

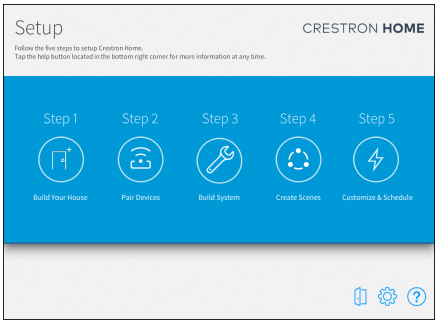
The MC4-R's small form factor and versatile mounting options make it ideal for smaller Crestron Home systems such as single-room systems, small to medium-sized homes, and MDUs (multidwelling units).

NOTE: Crestron Home OS is not available on the PYNG-HUB or CP3-R control processors. A CP4-R or MC4-R Crestron Home control processor must be used to run a Crestron Home OS system.

Crestron Home Software

Configuration Software

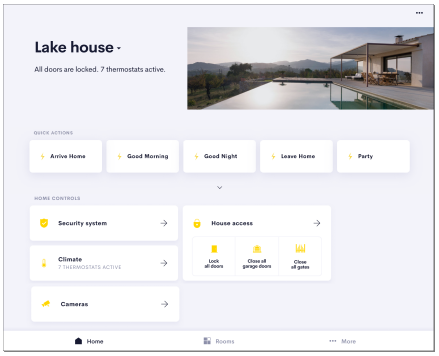
The Crestron Home Setup app provides fast setup and configuration with no programming. Set up any home in a few simple steps using an Apple® iPad® device. There is no programming required and no software to learn. Every device in the Crestron Home system can be configured all within one app.

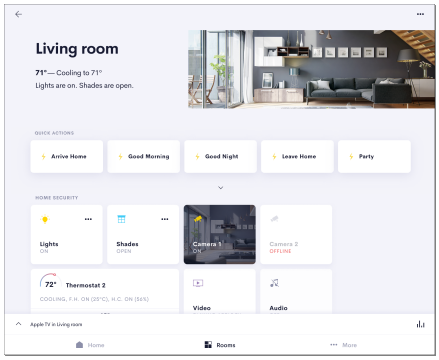


User Interface Software

The Crestron Home app provides the same user interface on all Crestron Home user-interface devices such as Crestron TSW-xx60 series touch screens, Apple® iOS® devices, and Android™ devices.

Use the Crestron Home app user interface to control audio, video, lighting, shading, climate, a security system, door locks, and cameras throughout your home. The Crestron Home app user interface allows you to raise or lower the lights, set the thermostat, raise or lower the shades, play music throughout your house, and control video sources in each room.





Supported Devices

Works with Crestron Home™ OS

Crestron Home™ OS is designed to work with a wide variety of devices to provide control of audio, video, lighting, shading, climate, security systems, door locks, cameras, I/O devices, and third-party AV devices.

NOTE: For a comprehensive list of devices that are supported by Crestron Home™ OS, refer to Works with Crestron Home™ OS on page 351.

Crestron Certified Drivers

The Crestron Home operating system now supports all Crestron Certified Driver types. Crestron Certified Drivers expand the devices that may be integrated with a Crestron Home system, including third party sources, displays, and A/V receivers. These drivers are downloaded directly into the Crestron Home Setup app from the Crestron cloud.

Partner Products

Crestron works with our partners to offer the best smart home solution for you and your clients. Some of these partners include 2N video intercom door stations, Amazon® Alexa® voice control, Apple® iOS® devices and Siri® voice commands, Cool Automation, Android devices™ and Google Assistant™ voice control, Josh Josh.ai voice control, Sonos® speakers and amplifiers, Yale® door locks, and more.

myCrestron Services

myCrestron Residential Monitoring Service

Powered by the cloud, the myCrestron Residential Monitoring Service enables you to centrally monitor and manage Crestron Home systems with ease, identify issues, and resolve them faster. Crestron Home systems are displayed on an online dashboard to provide a comprehensive status update at a single glance. System-level information is available as well as device-level event logs that the Crestron Home system automatically sends to the cloud. True Blue Support and your technicians can access log files to eliminate many troubleshooting truck rolls.

myCrestron Dynamic DNS

The myCrestron.com Dynamic DNS (DDNS) service furnishes a URL for the system to enable remote control and monitoring of a Crestron Home system. This enables control of a home's lighting, climate and security system from any location.

Support

Design Support

If you have any system design questions or just want to learn more at the initial stages of your project, email our Crestron Home Subject Matter Experts. They will make sure all of your questions are answered quickly and thoroughly. Email homedesign@crestron.com to obtain Crestron Home OS design support.

Tech Support

Our Crestron Home Tech Sales Specialists are always available for support, they will guide and advise you on everything from information on System layout to compatibility and pricing, ensuring that you deliver the best solution and experience within a quick time frame. Email homesupport@crestron.com to contact Crestron Home Tech Sales.

Crestron Home™ System Design

Use the following sections to help design a Crestron Home system:

Crestron Pyng® OS and Crestron Home™ OS Feature Chart

Refer to the following chart to determine the device types and product features that are compatible with the Crestron Pyng® OS 1, Crestron Pyng® OS 2, and Crestron Home™ OS operating systems.

NOTE: For a comprehensive list of devices that are supported by Crestron Home™ OS, refer to Works with Crestron Home™ OS on page 351.

Crestron Pyng OS 1, Crestron Pyng OS 2, and Crestron Home OS Comparison Chart

Feature Class	Feature	Crestron Pyng OS 1	Crestron Pyng OS 2	Crestron Home OS
Control Processor	Compatible Processor	PYNG-HUB	CP4-R CP3-R	CP4-R MC4-R
Multi-Home Support	Multi-Home Support	No	No	**Yes**
Home and Room Images	Home and Room Images	No	No	**Yes**
iPad Split View	iPad Split View	No	No	**Yes**
Room Favorites	Room Favorites	No	No	**Yes**

Crestron Pyng OS 1, Crestron Pyng OS 2, and Crestron Home OS Comparison Chart

Feature Class	Feature	Crestron Pyng OS 1	Crestron Pyng OS 2	Crestron Home OS
Audio	Sonos® CONNECT™ Wireless Receivers	**Yes**	**Yes**	**Yes**
	Sonos CONNECT:AMP Devices	No	**Yes**	**Yes**
	All Sonos Speakers (including Sound Bars)	No	**Yes**	**Yes**
	Audio Grouping	**Yes** Simple Audio Source Sharing	**Yes** Hybrid Grouping of Sonos and Sonnex	**Yes** Hybrid Grouping of Sonos and Sonnex
	Crestron Distribution Amplifiers	**Yes**	**Yes**	**Yes**
	Remote Media Control (Mobile device using a cellular network)[1]	**Yes**	**Yes**	**Yes** Source selection and Basic Control

[1]Remote media control is performed when a mobile device is not on the local Wi-Fi® network. For example, the mobile device is connected to a cellular network and is disconnected from the local Wi-Fi network.

Crestron Pyng OS 1, Crestron Pyng OS 2, and Crestron Home OS Comparison Chart

Feature Class	Feature	Crestron Pyng OS 1	Crestron Pyng OS 2	Crestron Home OS
Video	Custom TV Presets (Favorites)	No	**Yes**	**Yes**
	Handheld Remotes	No	**Yes**	**Yes**
	Source Control	No	**Yes**	**Yes**
	Display Control	No	**Yes**	**Yes**
	A/V Receivers	No	**Yes**	**Yes**
	DigitalMedia™ Devices	No	**Yes**	**Yes**
	DM NVX® Devices	No	**Yes**	**Yes**
	Remote Media Control (Mobile device using a cellular network)[1]	**Yes**	**Yes**	**Yes**
myCrestron Residential Monitoring Service	Automatic Backups	**Yes**	**Yes**	**Yes**
	Monitoring	**Yes**	**Yes**	**Yes**
	Preconfiguration	**Yes**	CP4-R: **Yes** CP3-R: No	**Yes**
Lighting	Lighting	**Yes**	**Yes**	**Yes**
Climate	Thermostats	**Yes**	**Yes**	**Yes**
	BACnet Thermostats	No	No	**Yes**
Shades	Shades	**Yes**	**Yes**	**Yes**
Security	Door Locks	**Yes**	**Yes**	**Yes**
	Security Systems	**Yes**	**Yes**	**Yes**
Sensors	Sensors	**Yes**	**Yes**	**Yes**
Keypads	Keypads	**Yes**	**Yes**	**Yes**
Touch Screens	Touch Screens	**Yes**	**Yes**	**Yes**

Crestron Pyng OS 1, Crestron Pyng OS 2, and Crestron Home OS Comparison Chart

Feature Class	Feature	Crestron Pyng OS 1	Crestron Pyng OS 2	Crestron Home OS
Cameras	2N Video Intercom Door Stations	No	**Yes**	**Yes**
	Streaming Cameras	No	**Yes**	**Yes**
Editing	Scene Editing	**Yes**	**Yes**	Future Release
	Scheduling	**Yes**	**Yes**	Future Release
Quick Actions	Per Room Quick Actions	No	No	**Yes**
	Whole House Quick Actions	**Yes**	**Yes**	**Yes**
Multi-Language Support	End-User Interface	**Yes**	**Yes**	Future Release
	Setup App	**Yes**	**Yes**	**Yes**
Mobile Platform Support	iOS® Phones	**Yes**	**Yes**	**Yes**
	iOS® Tablets	**Yes**	**Yes**	**Yes**
	Android™ Phones	**Yes**	**Yes**	**Yes**
	Android™ Tablets	**Yes**	**Yes**	**Yes**
	PC	**Yes**	**Yes**	Future Release

Crestron Home Processor Feature Chart

Refer to the following chart to view the features of the PYNG-HUB, CP3-R, MC4-R, and CP4-R Crestron Home processors. Refer to their product pages at www.crestron.com for complete details.

Crestron Home Processor Feature Chart

		Crestron Home Processor			
Feature Class	**Feature**	**PYNG-HUB**	**CP3-R**	**CP4-R**	**MC4-R**
Operating System	Crestron Home OS	No	No	**Yes**	**Yes**
	Crestron Pyng OS 2	No	**Yes**	**Yes**	No
	Crestron Pyng OS 1	**Yes**	No	No	No
infiNET EX® Wireless Gateways	Built-in Gateways	1	0	0	1
	External Gateways	4	15	15	14
Cresnet® Wired Gateways	Built-in Gateways	1	1	1	1
	External Gateways	4	14	14	14
Connectors	IR Ports	0	8	8	4
	RS-232/-422/-485	0	3	3	1
	Relays	0	8	8	2
	Digital I/O Ports and Analog In	0	8	8	2
	Net	**Yes**	**Yes**	**Yes**	**Yes**
	LAN	**Yes**	**Yes**	**Yes**	**Yes**
RAM and CPU	RAM	256 MB	1 GB	2 GB	1 GB
	CPU	AM3352	i.MX53	i.MX6	i.MX8
	Clock Speed	600 MHz	1 GHz	1 GHz	1.8 Ghz
	Cores	1	1	4	4

Maximum System Configuration

Refer to the following chart to determine the maximum number of devices or components that may be added to the Crestron Home system. These system maximums are tested and have been guaranteed to work with the CP4-R and MC4-R control processors.

NOTE: For a comprehensive list of devices that are supported by Crestron Home™ OS, refer to Works with Crestron Home™ OS on page 351.

Crestron Home OS Maximum System Size - CP4-R and MC4-R

	Maximum System Size	
Type	CP4-R	MC4-R
Touch Screens or TSR-310s	24	12
Apps in Home	10	8
Remotes (HR series)	24	16
Remotes per Room	2	1
Keypads	120	60
Active Audio Groups	4	4
Max Rooms in 1 Audio Group	20	10
Crestron Speaker Zones	32	16
Audio Sources	24	24
Sonos Speaker Zones or Players	16	8
Video Sources	32	16
Video Zones	32	16
Displays in a Room	1	1
Shades/Drapes	100	50
Lighting Loads	300	100
Thermostats	32	12
BACnet Objects	2,000	500
Security Systems	1	1
Locks	6	4
Streaming Cameras	10	10
Sensors	32	16
AVRs	6	3

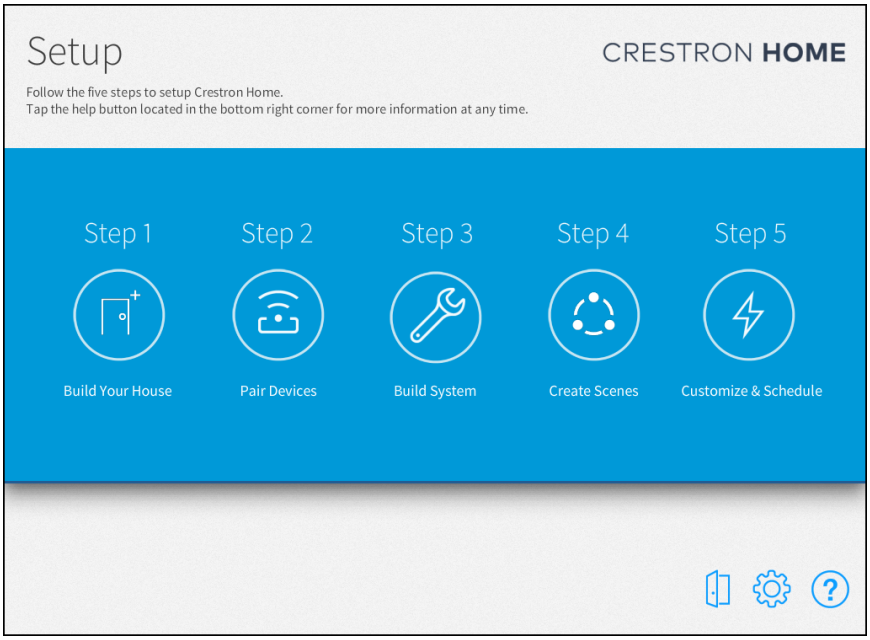
Configure a Crestron Home™ System

NOTES:

- To upgrade from Crestron Pyng OS 2 to Crestron Home OS, refer to Upgrade Crestron Pyng OS 2 to Crestron Home OS on page 373.
- To set up using a deployment code, refer to Method 1: Use a Deployment Code (Recommended) on page 579.

To set up a Crestron Home system, download the Crestron Home Setup app, set up the Crestron Home processor, and then configure the Crestron Home™ system.

NOTE: To access the installer configuration screens, use the Crestron Home Setup app or a web Xpanel interface.



The menu button ☰ on the bottom of the setup screens allows quick navigation throughout the setup screens. Tap the menu button ☰ to show or hide the menu.

Setup Screen Menu Buttons

Menu Button	Setup Page
	Build House
	Pair Devices
	Shade Groups
	Source Routes
	Light Scenes
	Shade Scenes
	Media Scenes
	Climate Scenes
	Actions & Events
	Scheduler
	Thermostats

While configuring the Crestron Home system:

Icon	Description
	Displays a dialog box that explains screen functions and features and provides links to tutorial videos.
	Displays the **Installer Settings** screen to configure advanced Crestron Home system settings. For more information on the **Installer Settings** screen, refer to Configure a Crestron Home™ System on the previous page.
	Exit installer configuration mode and to enter the user interface. For more information about the user interface, refer to Crestron Home™ OS User Interface on page 285.

Download the Configuration Software

The Crestron Home system can be configured using the Crestron Home Setup app on an iPad device or using the Crestron Home processor's built-in web XPanel interface.

Crestron Home™ Setup App

Crestron Home Setup app is used to configure the Crestron Home system. The Crestron Home Setup app is available from the App Store® online store and may be downloaded onto an Apple iOS® device such as an iPad.

To download the Crestron Home Setup app:

NOTES:

- The Crestron Home Setup app is not available for Android™ devices.
- An Apple ID is required to download the Crestron Home Setup app. Refer to https://support.apple.com/kb/HT2731 for help with setting up an Apple ID.
- For a comprehensive list of mobile hardware and software versions that are compatible with Crestron Home, refer to OLH article 5655 at https://support.crestron.com/app/answers/detail/a_id/5655.

1. Tap the **App Store** icon on the iPad device home screen.
2. Tap the search field, and enter the search term "Crestron Home Setup."
3. Tap **Search**.
4. Tap the **Crestron Home Setup** app icon .
5. Follow the prompts to download and install the app to the device.

Crestron® Web XPanel Interface Setup

The Crestron Home system may also be configured on a personal computer using the Crestron Home processor's built-in web XPanel interface. The user interface is identical to the Crestron Home Setup app. To access the configuration screens, enter the IP address (or hostname) of the control processor into a web browser.

NOTE: If the Crestron Home processor is assigned an IP address over DHCP, use the Device Discovery Tool in Crestron Toolbox™ software to discover the device and its IP address. For more information on configuring web XPanel interface settings, refer to Web Settings on page 229.

Initial Processor Setup

Set up the Crestron Home system after all of the Crestron Home devices and the Crestron Home processor control processor have been installed and connected to the local network. For more information on installing and connecting the Crestron Home processor, refer to Crestron Home processor's documentation at www.crestron.com/manuals.

Set Up the Crestron Home™ System

Once the Crestron Home Setup app is downloaded and installed, system setup takes place entirely through the app.

NOTES

- Ensure that the iPad device, personal computer, and the Crestron Home processor are placed on the same subnet prior to setup.
- To access help screens that explain each setup screen and to view instructional videos, tap the help (?) button. The iPad device or personal computer must be connected to the internet to access videos.
- To return to a previous screen, tap the **BACK** button (**<**).

To set up the Crestron Home system:

1. Tap the Crestron Home Setup app icon on the iPad device home screen.

   NOTE: If using a web XPanel interface, enter the IP address or hostname into a web browser.

2. Enter the username and password and then tap **Sign In**.

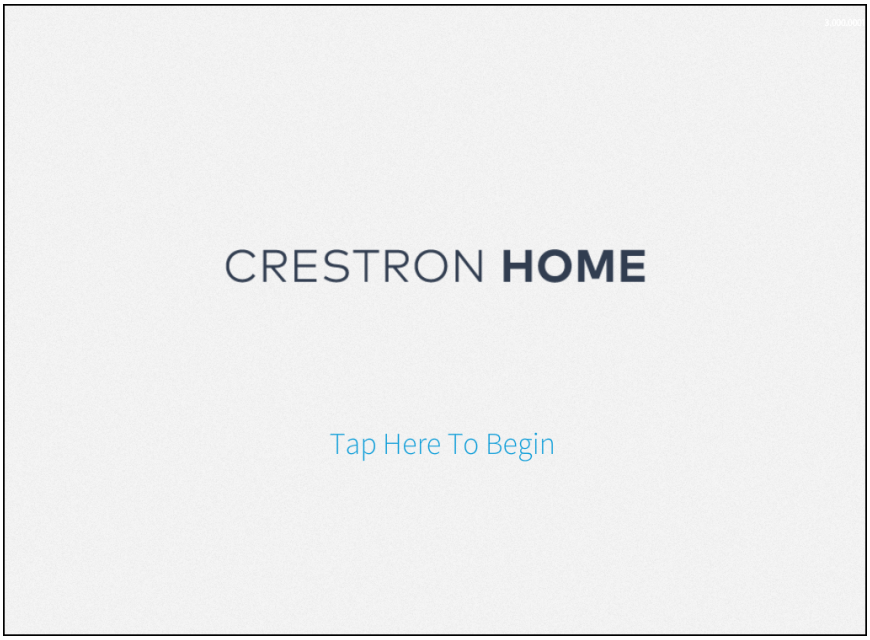
   Username: Admin

   Password: The serial number of the Crestron Home processor

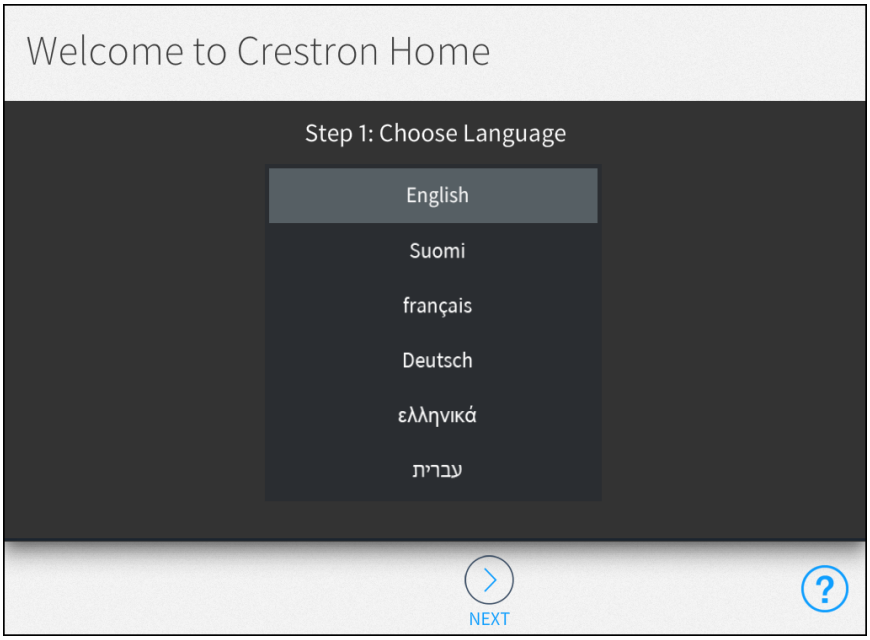
   NOTE: If security was enabled before the upgrade, use the credentials set previously to log in.

3. The Crestron Home Setup app connects to the Crestron Home processor automatically. A splash screen is displayed.

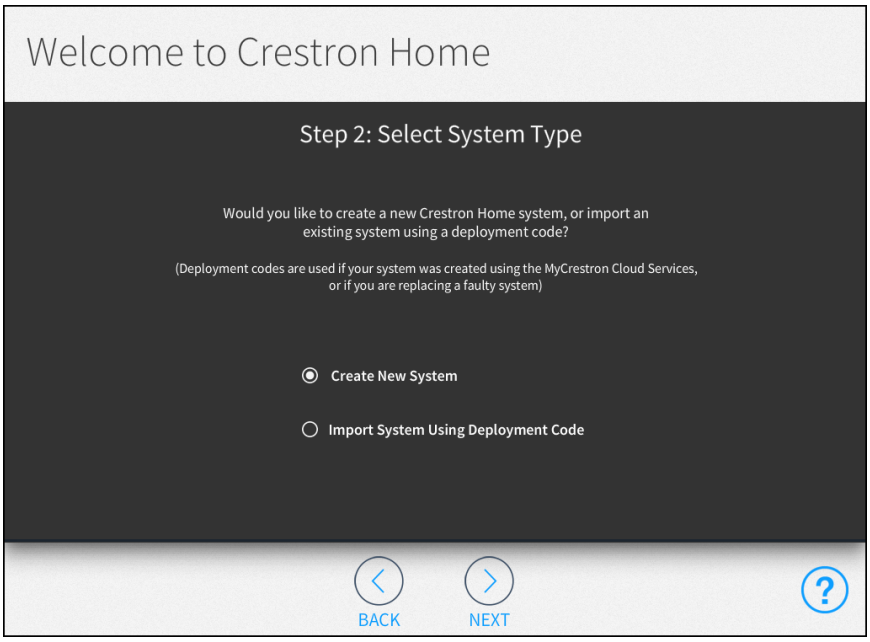
   NOTE: If the Crestron Home Setup app does not connect to the Crestron Home processor automatically, enter the Crestron Home processor's hostname and tap **Connect**. The default hostname for a CP4-R is "CP4-R-[MAC address]. The entire MAC address is used (excluding punctuation). The MAC address label is located on the bottom or rear of the device.



4. Tap the **Tap Here to Begin** text. The **Step 1: Choose Language** screen is displayed.



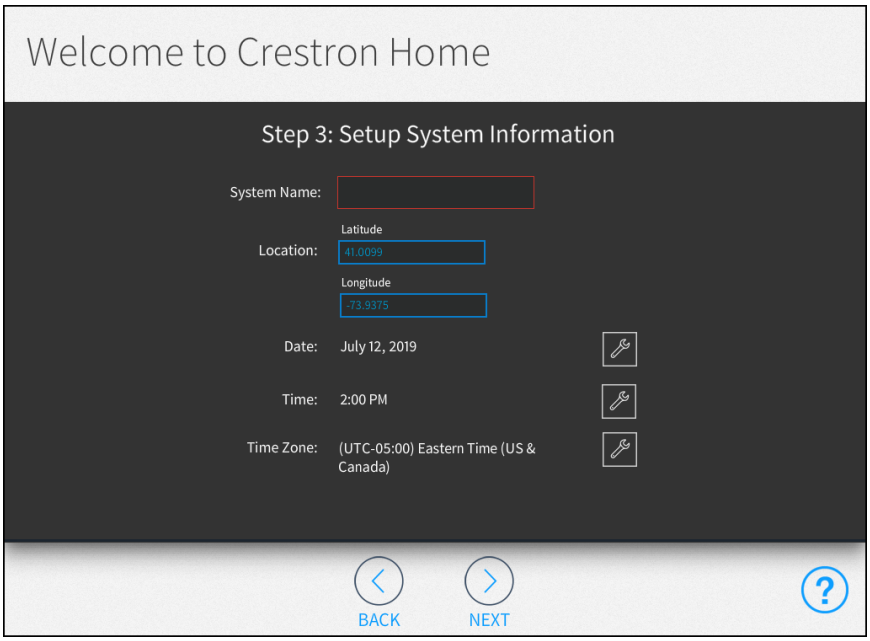
5. Select the language that will be displayed by the system.
6. Tap the **NEXT** button (**>**). The **Step 2: Select System Type** screen is displayed.



7. Tap the **Create New System** radio button and then tap the **NEXT** button (**>**). The **Step 3: Setup System Information** screen is displayed.

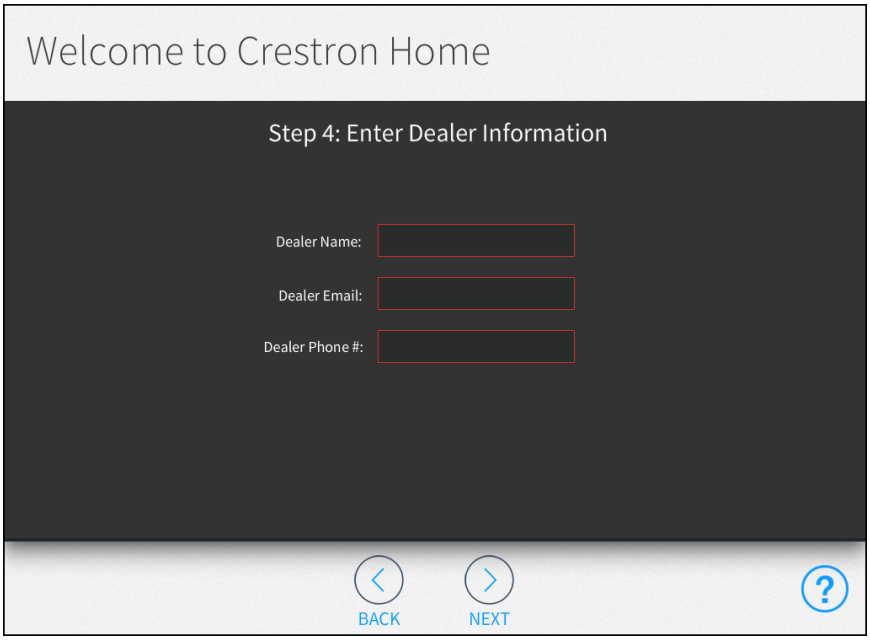
NOTES:

- To import a system that was configured using the myCrestron offline configuration service, tap the **Import System Using Deployment Code** radio button and then tap the **NEXT** button (**>**). For details, refer to myCrestron Crestron Home Configurator on page 501.
- To transfer system data from a CP3-R to a CP4-R, or from a dealer's CP4-R to a customer's CP4-R, tap the **Import System Using Deployment Code** radio button and then tap the **NEXT** button (**>**). For details, refer to Upgrade Crestron Home Processors on page 579.



8. Enter the system information:
    - **System Name:** Enter a descriptive system name (for example, "Smith Residence").
    - **Location:** Enter the latitude and longitude of the system.

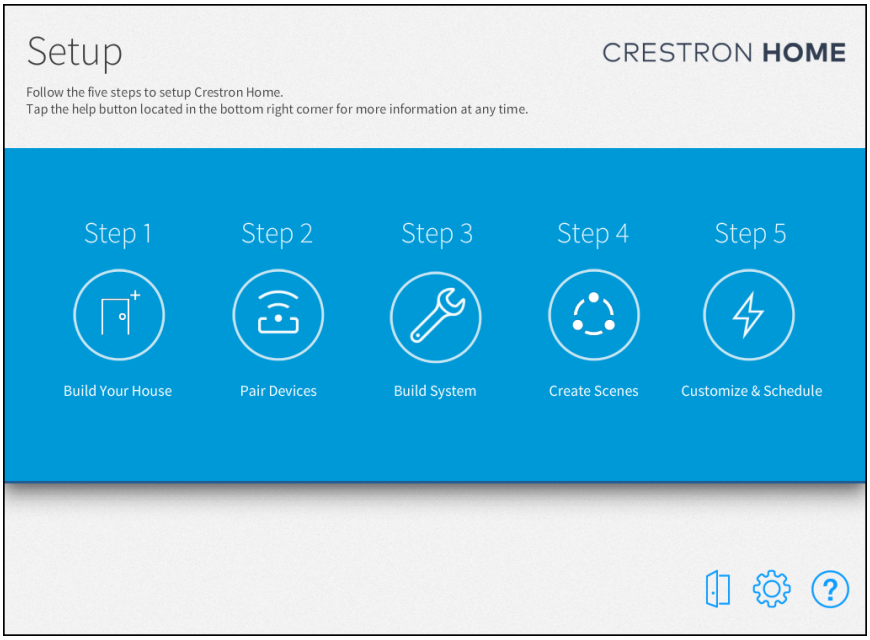
      NOTE: If setting up the Crestron Home system with an iPad device, tap the **Synchronize with iPad** button to synchronize the time zone, longitude, and latitude automatically with the iPad device's location services.
    - **Date:** Tap the wrench button to display spinners for selecting the month, day, and year.
    - **Time:** Tap the wrench button to display spinners for selecting the hour and minute buttons, and for selecting **AM** or **PM**.
    - **Time Zone:** Tap the wrench button to display a menu for selecting the time zone used by the system.
9. Tap the **NEXT** button (**>**). The **Step 4: Enter Dealer Information** screen is displayed.



10. Enter the dealer information:
    - **Dealer Name:** Enter the Crestron dealer responsible for the installation.
    - **Dealer Email:** Enter the email address of the Crestron dealer responsible for the installation.
    - **Dealer Phone #:** Enter the phone number of the Crestron dealer responsible for the installation.

11. Tap the **NEXT** button (**>**). The **Step 5: Legal & Privacy Information** screen is displayed.

12. Tap the **Privacy Statement**, **myCrestron Residential Monitoring Service Terms of Use**, **Mobile Apps Terms of Use**, **Software License Agreement**, and **Legal Information** links to review Crestron's legal terms regarding the setup, configuration, and use of the Crestron Home system. Tap the **I agree to the above terms** check box to accept these legal terms.
13. Tap the **Get Started** button (**>**) to complete the initial setup procedure. The main **Setup** screen is displayed.



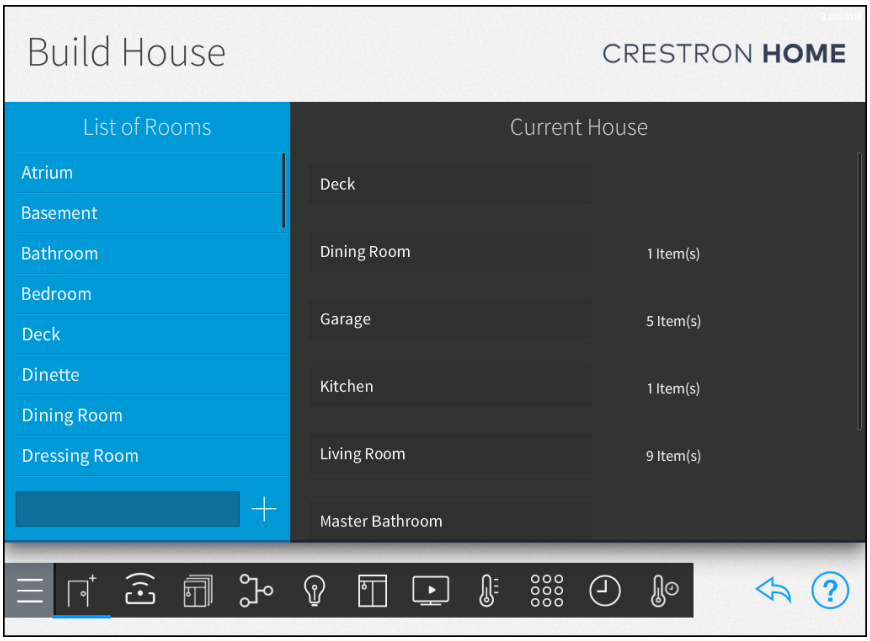
Step 1: Build Your House

The first step is to build your house. During this step you will add all of the rooms in the house to the Crestron Home system. The build your house step also allows rooms to be grouped and to enable or disable voice control for each room.

The following actions can be performed in Step 1: Build Your House:

NOTE: The **Build House** screen also displays the number of devices in each room.

Tap the **Build Your House** button on the **Setup** screen or the Build House button on the setup menu to display the **Build House** screen.



To return to the previous screen, tap the back arrow button .

Add, Rename, and Delete Rooms

Add a Room

To add a room:

1. Select a predefined room name from the **List of Rooms** menu. The room name displays in the lower-left text box.

   NOTE: Room names must be unique. The system rejects the new room if the room has the same name as one that has already been added.

2. If necessary, modify the room name in the lower-left text box.
3. Tap the plus button (**+**). The room is added to the house and displayed in the **Current House** menu.

Rename a Room

To edit the room name:

1. Select the room from the **Current House** menu.
2. Tap the room name to display a text box.
3. Use the on-screen keyboard to edit the room name.

Delete a Room

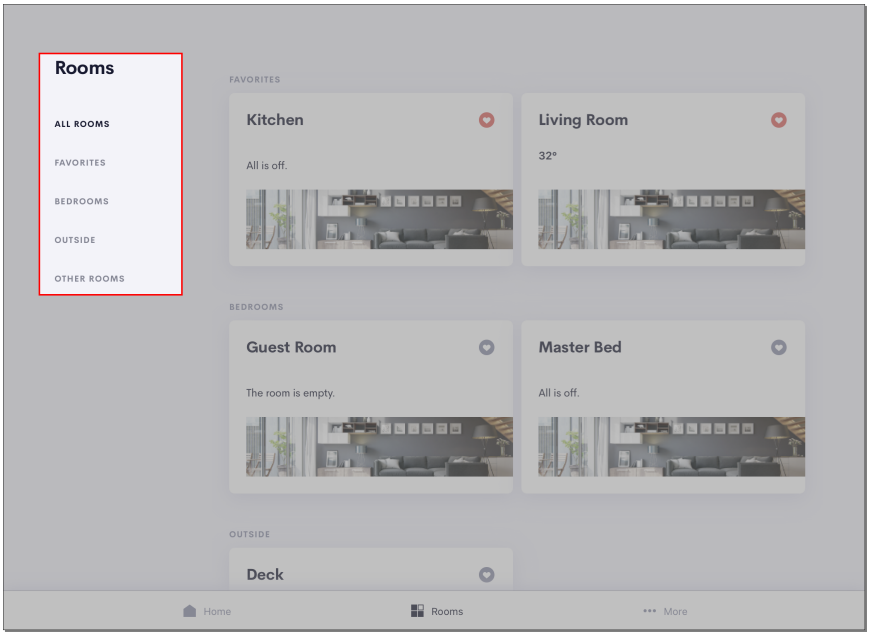
To delete a room:

1. Select the room from the **Current House** menu.
2. Tap the trashcan button next to the room name.

Room Groups

Room groups allow multiple rooms to be organized within the Crestron Home user interface. Creating room groups helps the user find rooms in the Crestron Home user interface.

The **All Rooms**, **Favorites**, and **Other Rooms** room groups are automatically generated by the Crestron Home user interface.

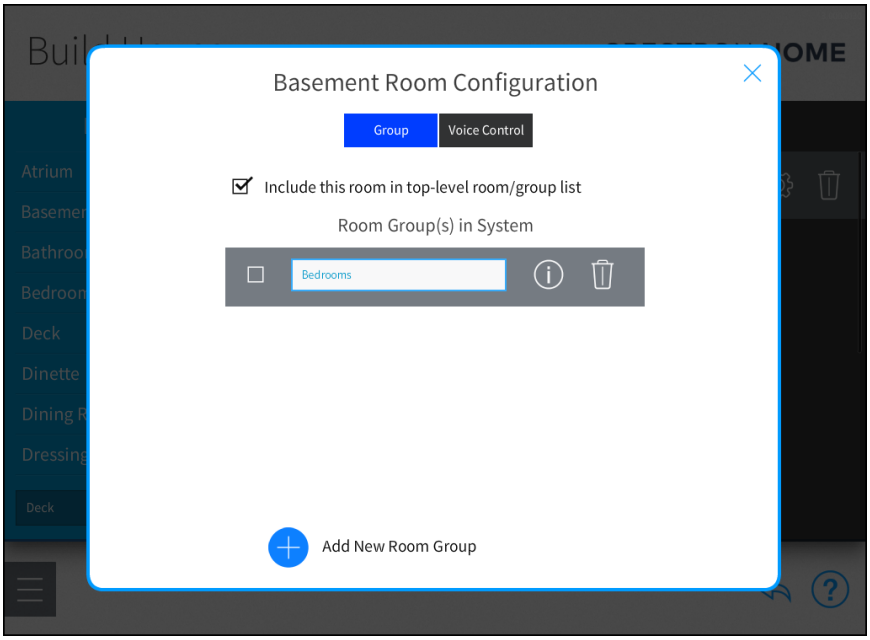


Create a Room Group

To create a room group:

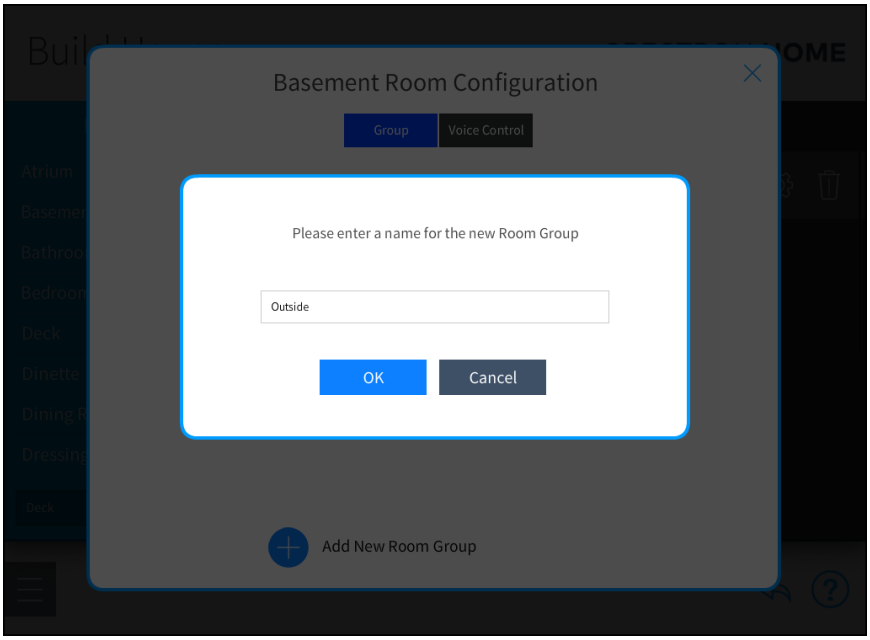
1. Select a room from the **Current House** menu.
2. Tap the gear button next to the room name. The **Room Configuration** dialog box opens with the **Group** tab open.

   NOTE: To view all of the rooms in a room group, tap the information button.



3. Tap the plus button (**+**) next to **Add New Room Group**.

4. A dialog appears to enter the name of the room group. Enter a descriptive name for the room group, and then tap **OK**. The selected room is add to the new room group.

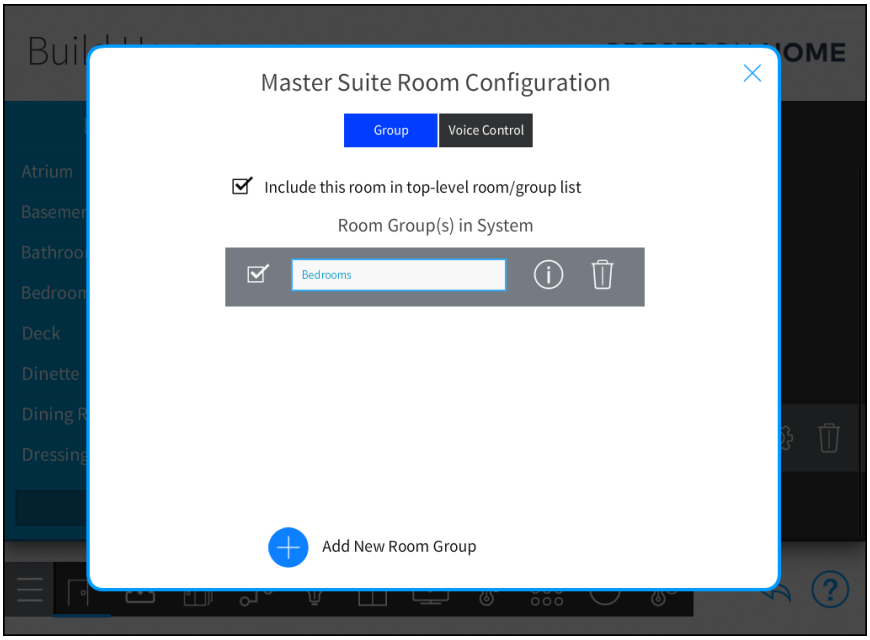


Add a Room to a Room Group

To add a room to a room group:

1. Select a room from the **Current House** menu.
2. Tap the gear button next to the room name. The **Room Configuration** dialog box opens with the **Group** tab open.
3. Select the room group(s) to add the room to the group.

> **NOTE:** To view all of the rooms added to the room group, tap the information button .



Rename a Room Group

To rename a room group:

1. Select a room from the **Current House** menu.
2. Tap the gear button next to the room name. The **Room Configuration** dialog box opens with the **Group** tab open.
3. Tap the room group name, and then use the on-screen keyboard to edit the room name.

Delete a Room Group

To delete a room group:

NOTE: Deleting a room group does not delete the assigned rooms from the system.

1. Select the room from the **Current House** menu.
2. Tap the gear button next to the room name. The **Room Configuration** dialog box opens with the **Group** tab open.
3. Tap the trashcan button to delete the room group.

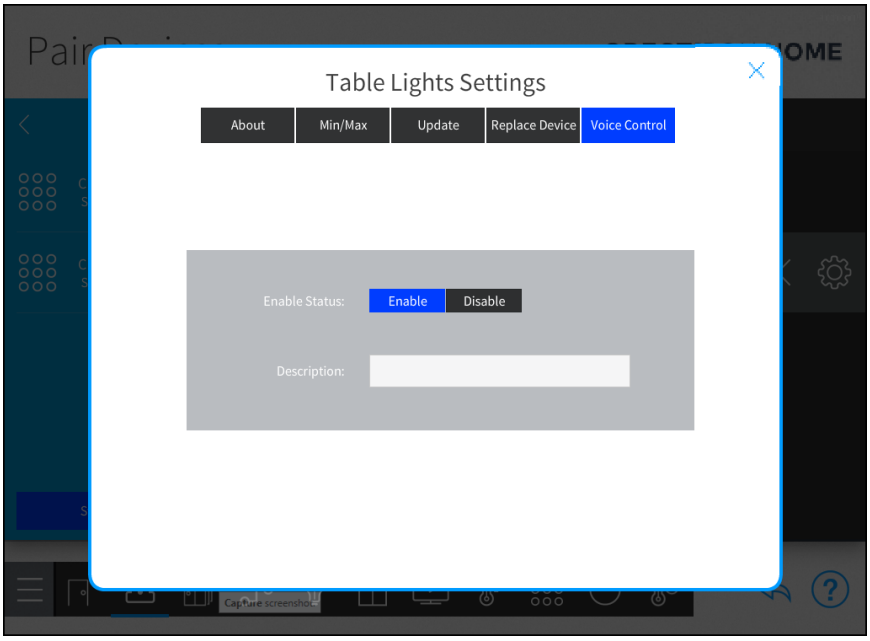
Select the check box at the top of the **Room Configuration** dialog box to add or remove the room from the top-level room list that is displayed in the user control interface. A checked box indicates that the room is included in the top-level room list.

Enable or Disable Voice Control

NOTE: Voice control services must be enabled prior to using voice control services with Crestron Home. For more information about setting up voice control on the Crestron Home system, refer to Voice Control Settings on page 230.

To enable or disable voice control for a room:

1. Select the room from the **Current House** menu.
2. Tap the gear button next to the room name. The **Room Configuration** dialog box opens.



3. Tap the **Voice Control** tab.
4. Tap **Enable** to enable voice control or **Disable** to disable voice control for the room.

5. Enter a description for the device.
6. Tap the **x** button to return to the **Build House** screen.

Step 2: Pair Devices

The second step is to pair devices with the Crestron Home system. During this step you will add all of the devices to the system. Devices are then added to the rooms created during Step 1: Build Your House. Use the **Pair Devices** screen to pair devices with the Crestron Home system.

The following actions can be performed in Step 2: Pair Devices:

NOTES:

- For a comprehensive list of devices that are supported by Crestron Home, refer to Works with Crestron Home™ OS on page 351.
- New device support is added through device and control processor firmware updates.

Tap the **Pair Devices** button on the **Setup** screen or the Pair Devices button on the setup menu to display the **Pair Devices** screen.

SSL AND AUTHENTICATION

Select Crestron Home compatible devices utilize SSL and authentication to create a secure connection within the Crestron Home system.

To add the device to the Crestron Home system, enter the Common Device Password when prompted.

NOTES:

- If the firmware on the device does not meet the minimum version, the user will be asked to upgrade the firmware before adding the device to the system.
- If the firmware of a device in the Crestron Home system is updated to include SSL and authentication, authentication is not automatically enabled. To enable authentication, remove the device from the system and then add it to the system. You will be prompted to enter the Common Device password.
- To set the Common Device password, refer to Set or Change the Common Device Password on page 209.
- If the common device password is not set when a device with authentication is added to the Crestron Home system, the installer will be prompted to create the Common Device password.
- If SSL or Authentication is not enabled on the device when it is added to the system, the Crestron Home system will:
  - Enable SSL with a self-signed certificate.
  - Enable Authentication and create the common user on the device.
- For additional information, refer to Set or Change the Common Device Password on page 209

NOTES:

- To pair a user interface device (TSW-xx60 series touch screens, TSR-310 handheld remotes, iOS® devices, and Android™ devices) to the Crestron Home system, refer to Pair User Interface Devices on page 381.
- To use a TSW-xx60 series touch screen in Smart Graphics mode, add it to the Crestron Home system using the procedure outlined in the Crestron Wired and Wi-Fi Devices on page 45 section.

To return to the previous screen, tap the back arrow button .

Crestron infiNET EX® Devices

SSL AND AUTHENTICATION

Select Crestron Home compatible devices utilize SSL and authentication to create a secure connection within the Crestron Home system.

To add the device to the Crestron Home system, enter the Common Device Password when prompted.

NOTES:

- If the firmware on the device does not meet the minimum version, the user will be asked to upgrade the firmware before adding the device to the system.
- If the firmware of a device in the Crestron Home system is updated to include SSL and authentication, authentication is not automatically enabled. To enable authentication, remove the device from the system and then add it to the system. You will be prompted to enter the Common Device password.
- To set the Common Device password, refer to Set or Change the Common Device Password on page 209.
- If the common device password is not set when a device with authentication is added to the Crestron Home system, the installer will be prompted to create the Common Device password.
- If SSL or Authentication is not enabled on the device when it is added to the system, the Crestron Home system will:
  - Enable SSL with a self-signed certificate.
  - Enable Authentication and create the common user on the device.
- For additional information, refer to Set or Change the Common Device Password on page 209

Pair Crestron infiNET EX Devices

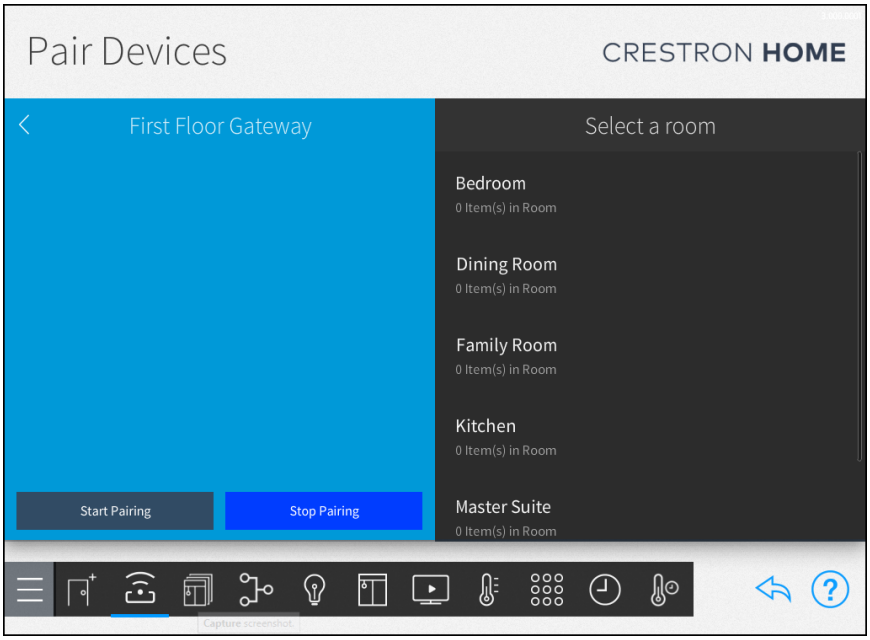
NOTES:

- An infiNET EX® wireless gateway, such as the CEN-GWEXER, must be installed and configured on the network prior to pairing devices. For more information, refer to Manage Device Gateways on page 76.
- For best practices regarding the installation and setup of Crestron RF (radio frequency) products, refer to the Installation and Setup of Crestron RF Products Best Practices Guide (Doc. 6689) at www.crestron.com/manuals.
- If a TSR-310 handheld remote will be added to the system, ensure that it is connected to a WAP that is in Crestron's list of recommended WAP brands. For more information and a complete list of brands, refer to the TSR-310 Supplemental Guide (Doc. 8226) at www.crestron.com/manuals.

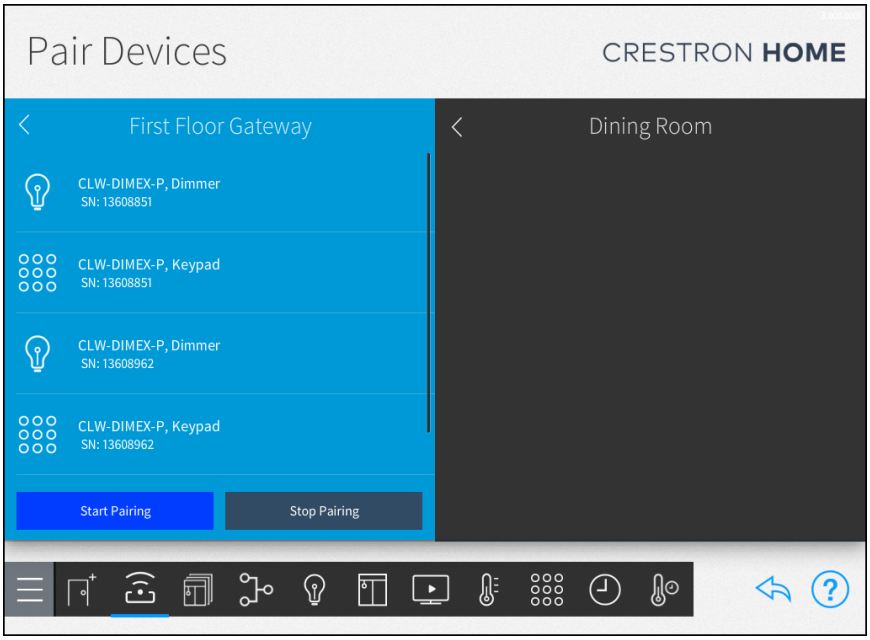
To pair Crestron infiNET EX devices with the Crestron Home system:

1. Select **Crestron infiNET EX** from the **Device Types** menu.

2. Select a wireless gateway from the **Select Gateway Below** menu.
3. Tap **Start Pairing** to place the selected gateway into acquire mode.



4. Place the infiNET EX wireless device(s) into acquire mode as described in the device documentation. When the device is acquired, it is displayed in the **Pair Devices** screen.

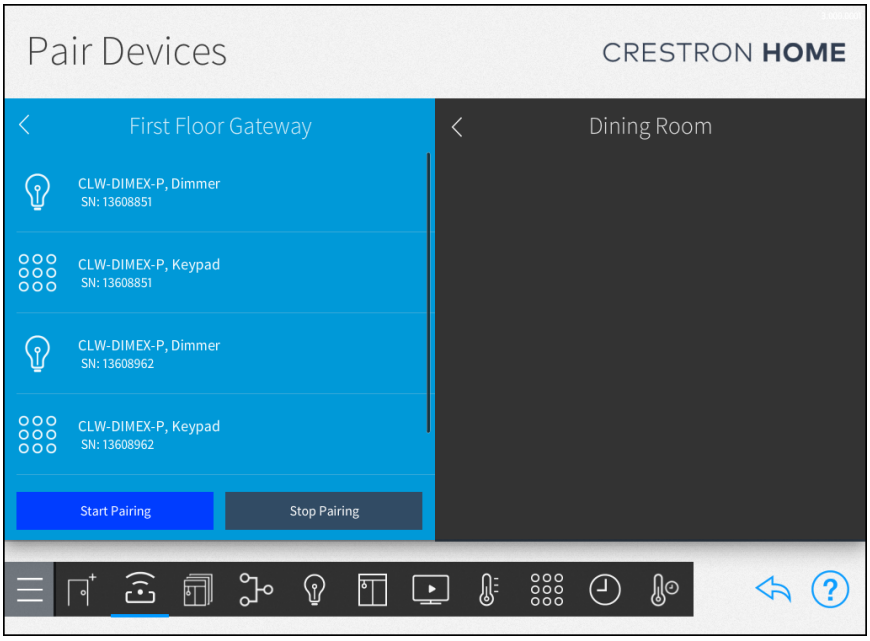


5. Repeat Step 4 until all infiNET EX devices are acquired.
6. Tap **Stop Pairing** to remove the selected gateway from acquire mode.

Add an infiNET EX Device to a Room

To add an infiNET EX device to a room:

1. Select the room where the device is installed from the **Select a room** menu.



2. Select the device from the wireless gateway's menu, and then tap the plus button (+) to add the device to the room.

NOTES:

- To identify the location of a device (if supported), tap the button. The device will flash its LED or screen to identify its location.
- To identify paired TSR-310 handheld remotes using the locator feature, ensure that the TSR-310 is awake and placed on its charging dock before tapping the location button.

3. Enter a descriptive name for the device in the text field that is displayed, and then tap **OK**. The device is added to the room and displayed on the right side of the screen.

4. Configure the device after it is added to the room. Tap the gear button next to the device name to display a Settings dialog box. For details, refer to Configure the Device Settings on page 396.

Remove a Crestron infiNET EX Device from a Room

NOTE: For most devices, removing the device from a room does not remove it from the entire system.

To remove a Crestron infiNET EX device from a room:

1. Select a device in the room that you would like to remove.
2. Tap the back arrow (**<**) next to a wireless device to remove the device from the room. The device is added back to the gateway menu that was used to pair the device.

Delete Crestron infiNET EX Devices from the Gateway

NOTE: The device must be reacquired if it needs to be added back to the system.

To delete Crestron infiNET EX devices from the gateway:

1. Tap the device that you would like to delete.
2. Tap the trashcan button to delete the device from the gateway.
3. Tap **OK** to delete the device

Crestron Wired and Wi-Fi Devices

Add Crestron Wired and Crestron Wi-Fi Network Device to a Room

To add Crestron wired and Crestron Wi-Fi® network devices, including DM® switchers, DM-RMC series room controllers, and DM NVX® devices, to the room:

NOTE: After a TSW-xx60 series touch screen or compatible handheld remote is added to the system, the Crestron Home user interface is loaded to the device.

1. Select the room where the device is installed from the **Select a room** menu.
2. Select **Crestron Wired and Wi-Fi** from the **Device Types** menu.

3. Select **Ethernet and Wi-Fi** or **Internal Cresnet Gateway** from the **Crestron Wired and Wi-Fi** menu.

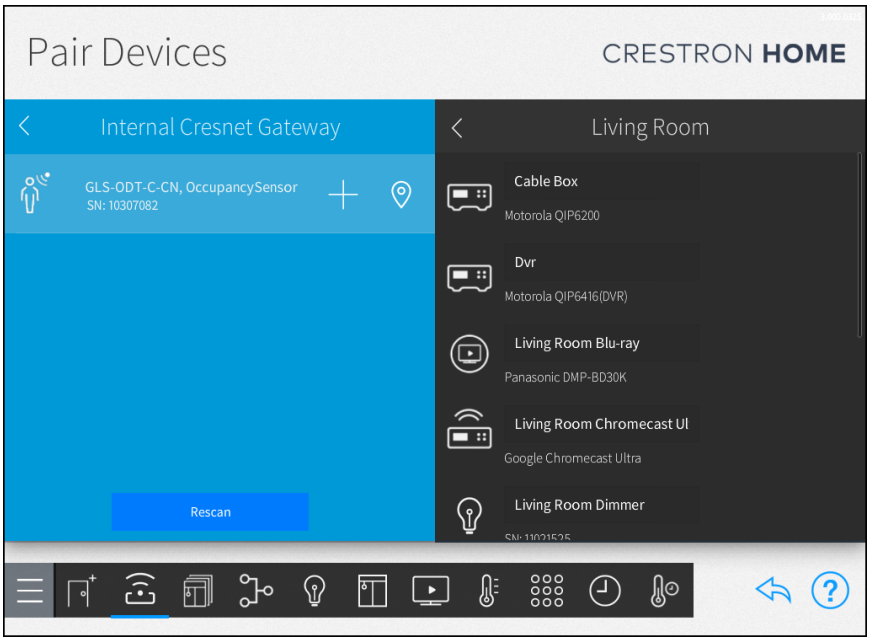
   NOTE: If necessary, tap **Rescan** to rescan the selected network for any unpaired devices.

4. The system scans the network for unpaired devices and displays the devices in the **Ethernet and Wi-Fi** or **Internal Cresnet Gateway** menu.

   NOTES:

   - Cresnet devices are automatically assigned a Cresnet ID when they are discovered by the Crestron Home system.
   - Cresnet devices that require the Cresnet ID to be set manually using dials on the device (for example, the C2N-IO and GLS-SIM) must have their Cresnet ID set manually. A dialog is displayed that lists the device name, serial number, and the Cresnet ID that the device should be set to.

5. Select the device from the menu and then tap the plus button (**+**) to add the device to the selected room.



NOTES:

- Tap the location button to turn on the location feature for the device (if supported), which is used to locate the device in the room.
- Some Crestron wired and Crestron Wi-Fi® network devices require a static IP address. A popup displays when this is required.

- If adding a wired device with connected outputs, such as a SWAMP series audio expander or a DM-MD series video switcher, tap the device (represented by a folder icon) to view all of the available outputs that may be added to a room.

6. Enter a descriptive name for the device in the pop-up dialog box that is displayed and then tap **OK**.

NOTES: When adding a DM NVX® device:

- A pop-up dialog box is displayed that prompts the user to enter the device username and password. Enter the required credentials, and then tap **OK**. For new DM NVX® devices, the default username and password are both "admin."
- Select whether the device will be configured as a receiver (audio input or output) or as a transmitter (audio input or output).
- For more information on configuring a DM NVX® device on the network, refer to https://support.crestron.com/app/answers/answer_view/a_id/5861/loc/en_US.

7. The device is added to the room and displayed on the right side of the screen.

8. Configure the device after it is added to the room. Tap the gear button next to the device name to display a Settings dialog box. For details, refer to Configure the Device Settings on page 396.

Remove a Crestron Wired and Crestron Wi-Fi Network Device from a Room

To remove a Crestron Wired and Crestron Wi-Fi device from a room:

1. Select a device in the room that you would like to remove.
2. Tap the back arrow (**<**) next to a wireless device to remove the device from the room. The device is removed from the room and is added back to the **Ethernet and Wi-Fi** menu.

   NOTE: For most devices, removing the device from a room does not remove it from the entire system.

Tap the back arrow (**<**) next to a wired connection name to return to the **Crestron Wired and Wi-Fi** menu.

Tap the back arrow (**<**) next to **Crestron Wired and Wi-Fi** to return to the **Device Types** menu.

Sonos® Devices

NOTES:

- All Sonos® speakers and amplifiers must be discovered and configured using the Sonos app prior to pairing them with the Crestron Home system.
- For best practices, troubleshooting, and general information regarding integrating Sonos devices within the Crestron Home system, refer to Sonos and Crestron Home Integration on page 469.

Pair Sonos Devices

To pair Sonos devices with the Crestron Home system:

NOTE: If necessary, tap **Rescan** to rescan the network for unpaired Sonos devices.

1. Select **Sonos** from the **Device Types** menu. The system scans the local network for any Sonos devices.

2. Discovered Sonos devices display underneath the **Sonos** menu.

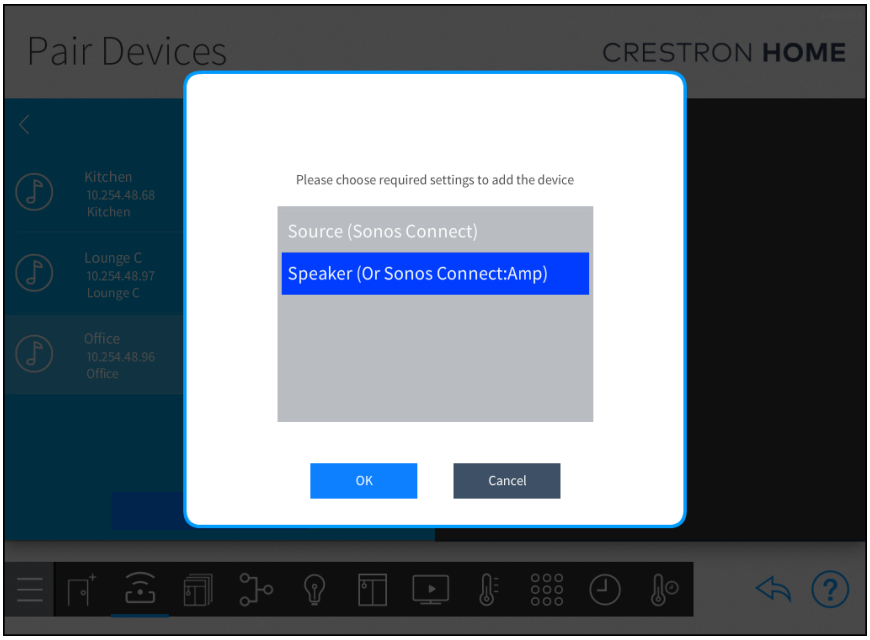
Add a Sonos Device to a Room

To add a Sonos device to a room:

NOTE: If necessary, tap **Rescan** to rescan the network for unpaired Sonos devices.

1. Select the room where the device is installed from the **Select a room** menu.
2. Tap the plus button (**+**) next to the Sonos device name.

3. Use the pop-up menu to select whether the Sonos device is a source (CONNECT) or a speaker (Sonos One®, PLAY:1®, PLAY:3®, CONNECT, PLAY:5®, CONNECT:AMP, Sonos Beam, PLAYBAR®, PLAYBASE® devices).



4. Tap **OK**. The Sonos device is added to the room.

Remove a Sonos Device from a Room

To remove a Sonos device from a room:

1. Select a device in the room that you would like to remove.
2. Tap the back arrow (**<**) next to the device to remove the device from the room. The device is removed from the room and is added back to the **Sonos** menu.

> **NOTE:** For most devices, removing the device from a room does not remove it from the entire system.

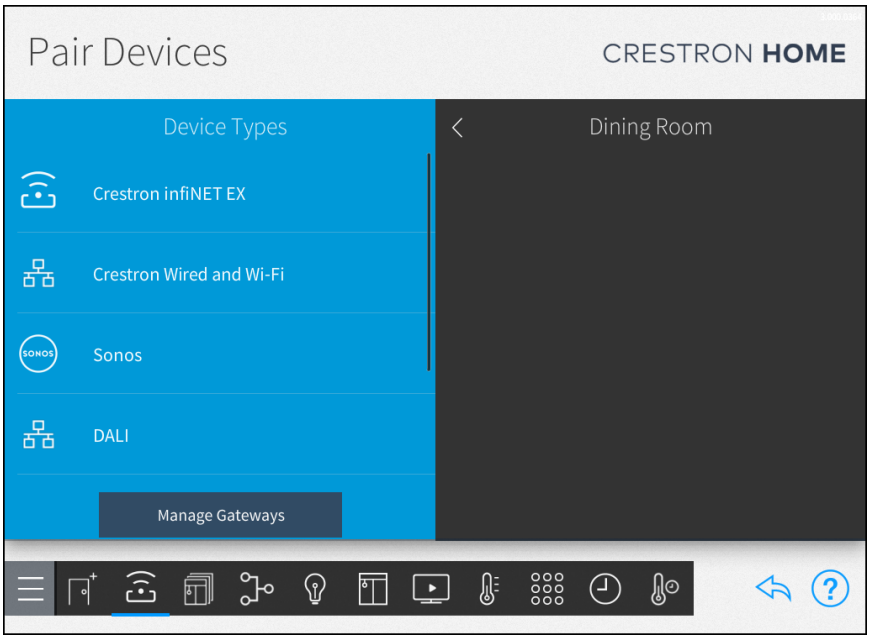
Tap the back arrow (**<**) next to **Sonos** to return to the **Device Types** menu.

Add DALI® Groups

NOTE: DALI is not listed in the **Device Types** menu until a DIN-DALI-2 is added to the system as a gateway. To add the DIN-DALI-2 to the Crestron Home system, refer to Manage Device Gateways on page 76.

Add a DALI Group to a Room

1. Select the room where the DALI group is installed from the **Select a room** menu.
2. Select **DALI** from the **Device Types** menu.



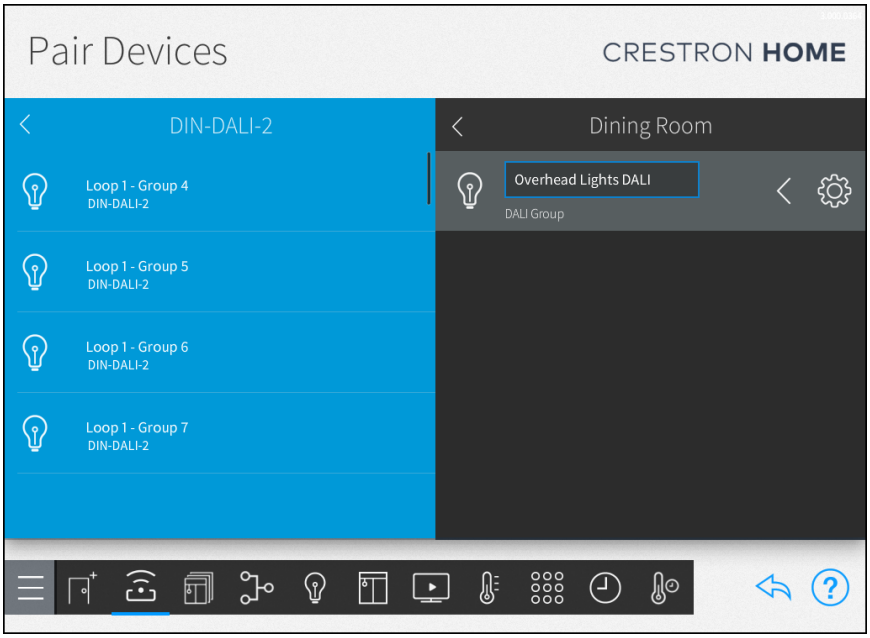
3. Select the DALI group from the menu and then tap the plus button (+) to add the DALI group to the selected room.

   NOTES:

   - If multiple DIN-DALI-2 devices exist in the system, each DIN-DALI-2 is placed in a folder. Select the folder that contains the DALI groups that you would like to add to the selected room. The folder names match the name provided to the gateway when it is added to the system.
   - The name of the menu matches the name of the DIN-DALI-2 when it is added to the system.
   - The menu lists the loop name, group name, and the name of the DIN-DALI-2 when it is added to the system. To view the name of the ballasts in the DALI group, refer to Configure a DIN-DALI-2 Gateway on page 405.

4. Enter a descriptive name for the DALI group in the pop-up dialog box that is displayed and then tap **OK**.

5. The DALI group is added to the room and displayed on the right side of the screen.



Remove a DALI Group from a Room

To remove a DALI group from a room:

1. Select a DALI group in the room that you would like to remove.
2. Tap the back arrow (**<**) next to the device to remove the device from the room. The device is removed from the room and is added back to the **DALI** menu.

> **NOTE:** For most devices, removing the device from a room does not remove it from the entire system.

Tap the back arrow (**<**) next to **DALI** to return to the **Device Types** menu.

Third Party Devices

Third-party devices, such as streaming players, Blu-ray players, televisions, and cable boxes that are manufactured by other companies, can be added to the system. When the Third Party Devices screen is opened, the Crestron Home system downloads the Crestron Certified Drivers that are currently available for third-party devices.

NOTES:

- If the third-party device is not shown in the device list, create a custom device driver with media controls and then loadthe driver onto the Crestron Home processor. To create the custom device driver, , refer to Create and Upload a Custom Device Driver on page 534.
- Only devices with discrete on and off commands should be paired with the system. If, for example, a device with an auto-off timer is paired with the system, the device may turn itself off while the room remains on. This behavior causes the device to power on and become out of sync with the room after the room is powered off.

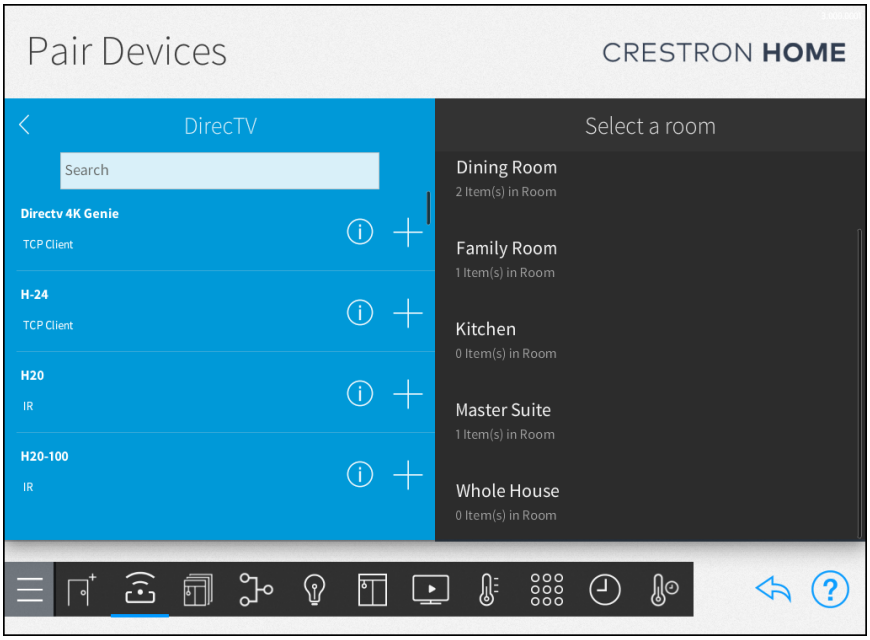
Add a Third-Party Device to a Room

To add a third party device to a room:

1. Select the room where the device is installed from the **Select a room** menu.
2. Select **Third Party** from the **Device Types** menu.

3. Select the device type from the **Third Party Devices** menu and then select the device manufacturer.

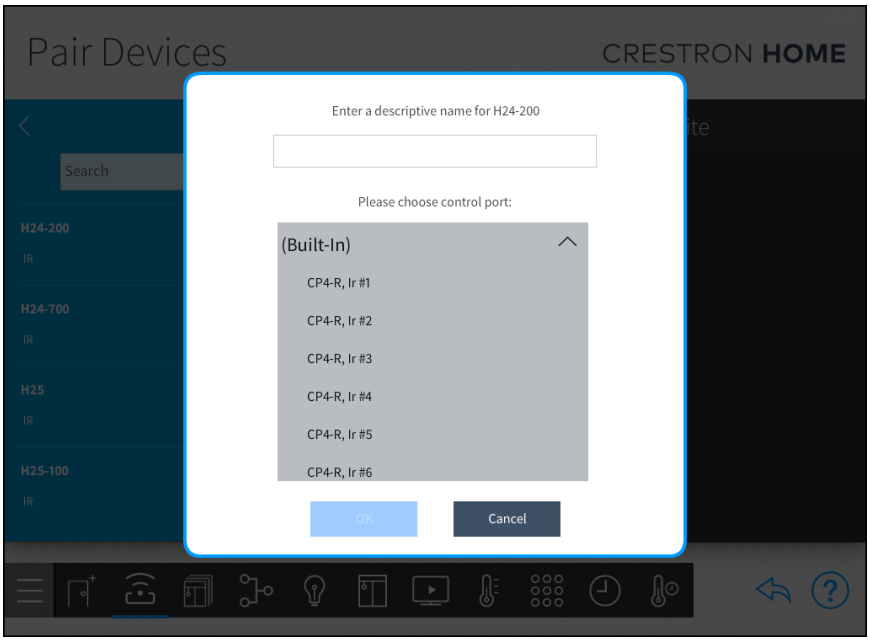
4. Tap the plus button (+) next to the appropriate device model. The device driver downloads from the cloud (if it has not been already downloaded).



NOTE: When a device is added to the system using a Crestron Certified Driver, the device driver does not update automatically in the system when a new version is released in the cloud. For instructions on installing an updated Crestron Certified device driver, refer to Update Crestron Certified Drivers on page 570.

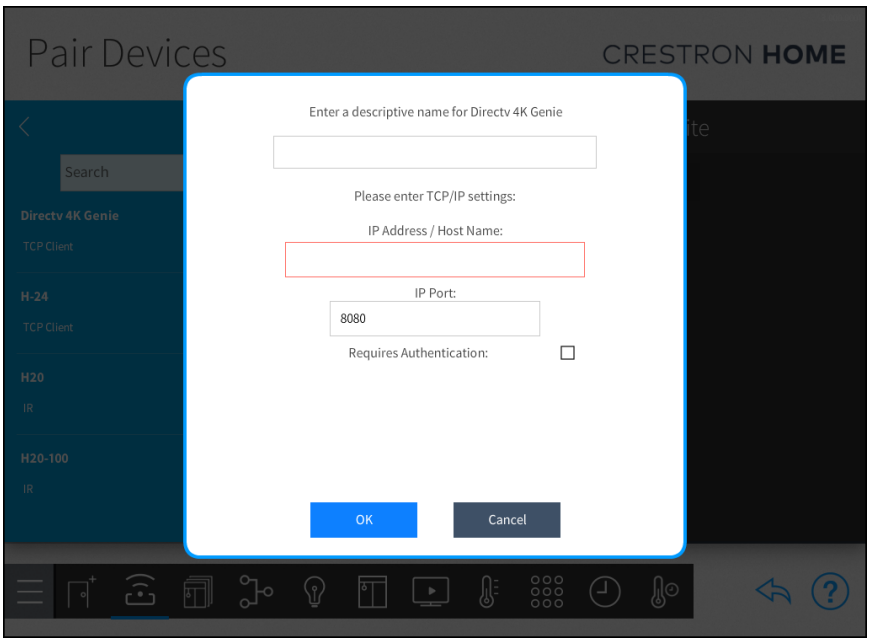
5. Enter a descriptive name for the device in the pop-up dialog box that is displayed.

6. Configure the provided transport settings used for device communication:
   - **For IR, serial, and CEC-controlled devices**, select a control port from the list of available ports.

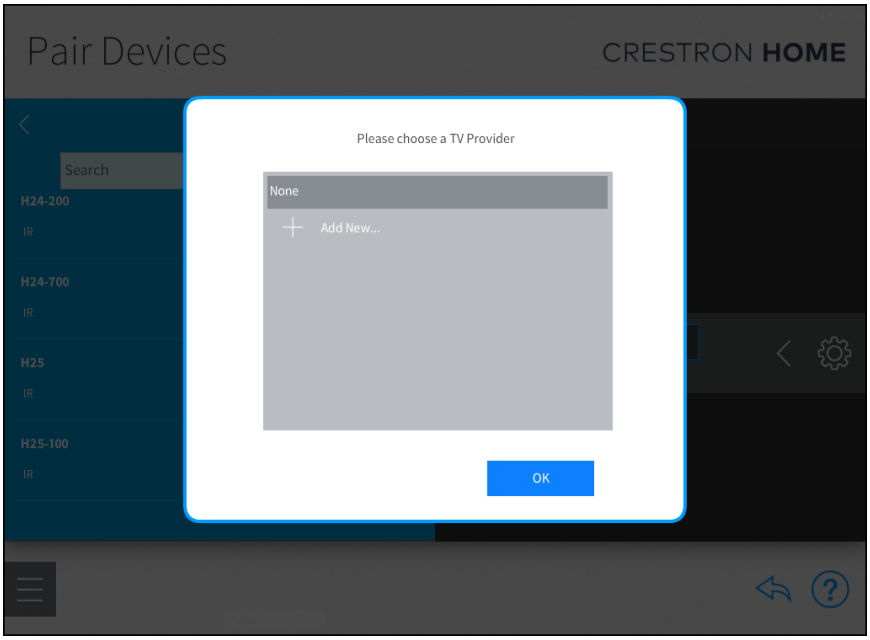


> **NOTE:** IP devices must be configured with a static IP address. The system will no longer be able to detect the device if its IP address changes.

   - **For TCP client devices**, enter the device IP address or hostname, IP port, and authentication credentials (if required).



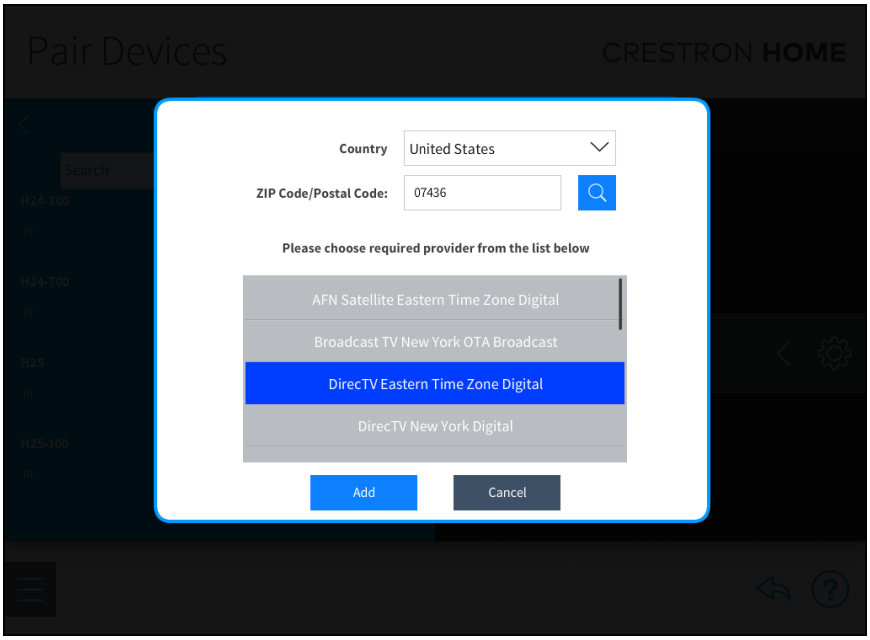
- **For cable boxes**, select a television provider from the list if it has already been added for another cable box, or tap **+ Add New** to add a new provider.



  - Add a new television provider (if necessary):
    a. Select a country and a zip/postal code to display a list of available providers.

b. Select a provider from the list, and then tap **Add**. A screen displays showing the list of cable providers that are in the system

> **NOTE:** If the cable provider is not listed, a custom cable provider file must be created and uploaded to the Crestron Home processor. For more information, refer to Create and Upload a Custom Television Provider on page 565.



7. Tap **OK**. The third party device is added to the room.
8. Configure the device after it is added to the room. Tap the gear button next to the device name to display a Settings dialog box. For details, refer to Configure the Device Settings on page 396.

Remove a Third Party Device from a Room

To remove a third party device from a room:

1. Select a device in the room that you would like to remove.
2. Tap the back arrow (**<**) next to the device to remove the device from the room. The device is removed from the room and is added back to the **Third Party** menu.

> **NOTE:** For most devices, removing the device from a room does not remove it from the entire system.

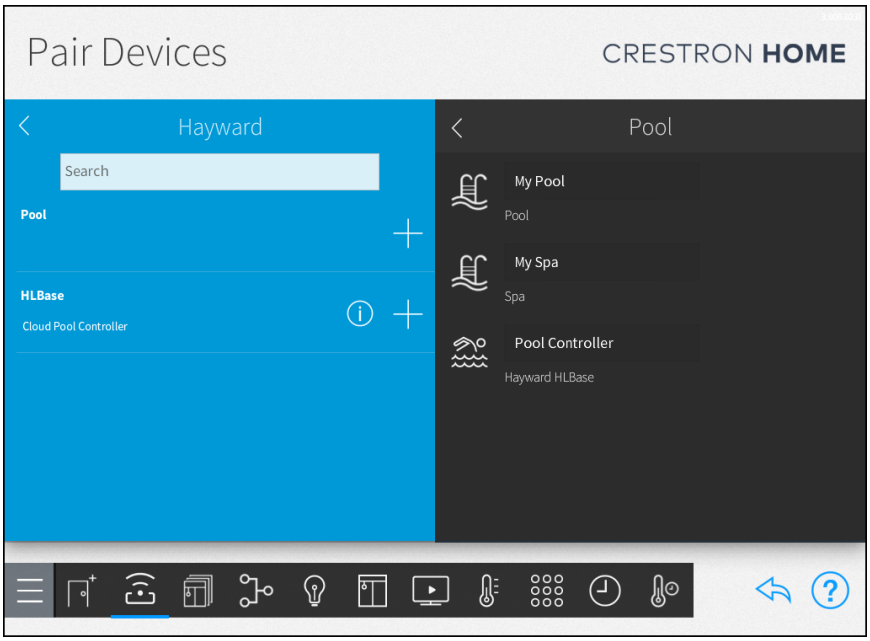
Tap the back arrow (<) next to **Third Party Devices** to return to the **Device Types** menu.

Add a Pool

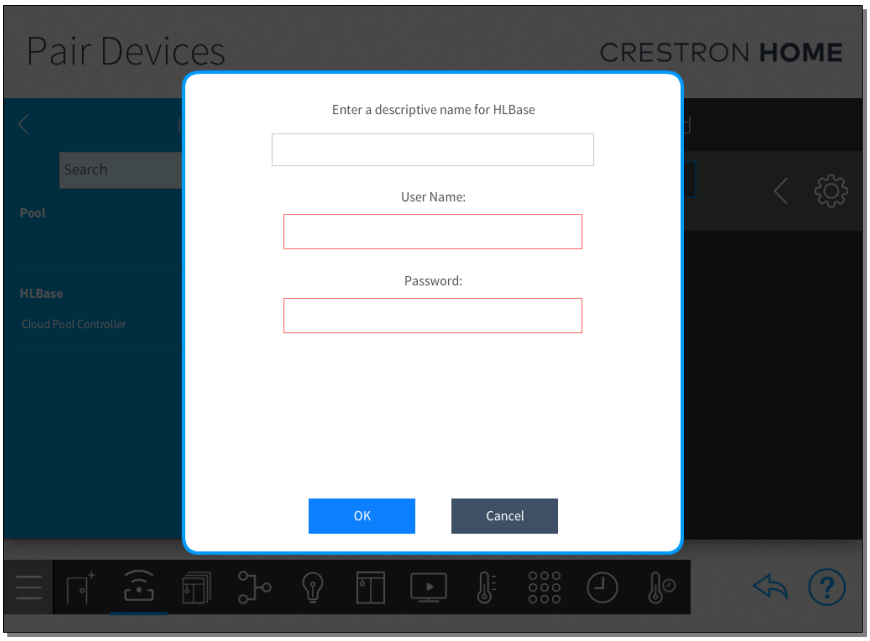
To add a pool to the system, add the pool controller to the system and then add the pool:

1. Select the room where the a pool controller is installed from the **Select a room** menu.
2. Select **Other** from the **Device Types** menu.

3. Select **Pools** from the **Other** menu and then select the manufacturer of the pool controller.
4. Select the pool controller from the menu and then tap the plus button (**+**).

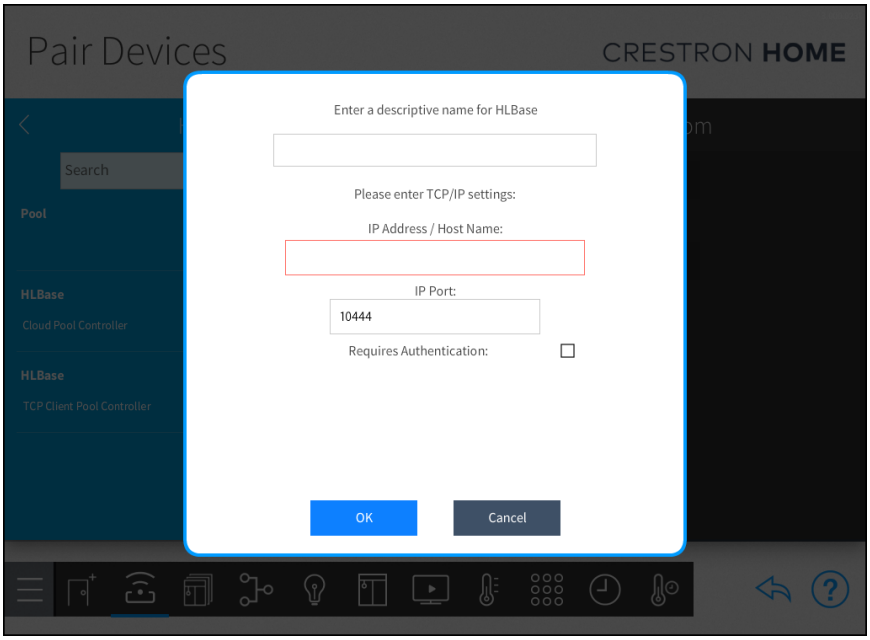


5. Enter a descriptive name for the pool controller.
    - **For cloud-based controllers**, enter the **User Name** and **Password** for the pool controller.



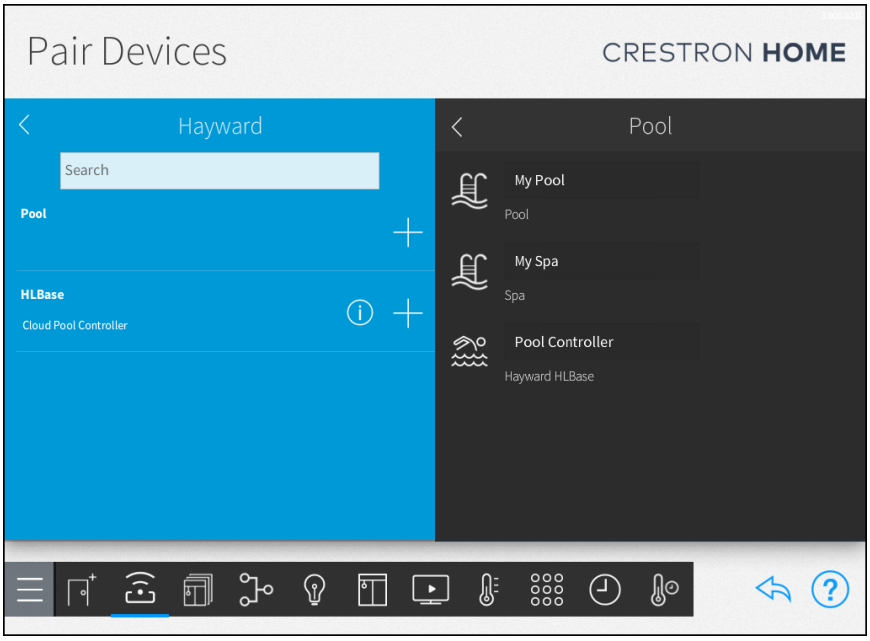
- **For IP-based controllers**, enter the **IP Address/Hostname** and **IP Port** for the pool controller. If authentication is required for the pool controller, tap the **Requires Authentication** check box and then enter the user name and password for the pool controller.

  NOTE: All pool controllers in the system must use a static or reserved IP address.



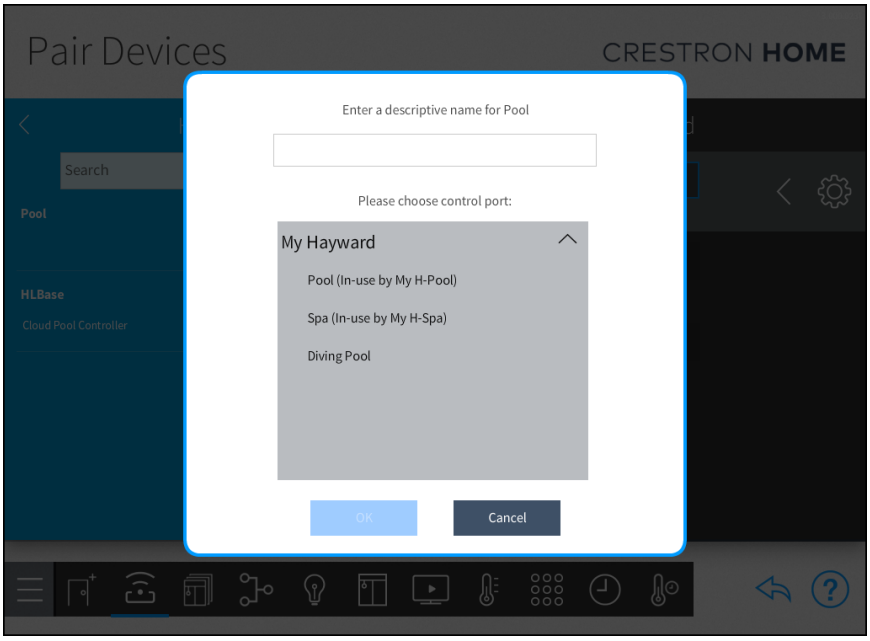
6. Tap **OK**. The pool controller is added to the room. The pool controller information is loaded into the system.

7. Select **Pool** from the menu and then tap the plus button (**+**).



8. Enter a descriptive name for the pool and then select a control port.

NOTE: The pool controller must be fully loaded before the pool can be added.



9. Tap **OK**. The pool is added to the room.
10. Configure the pool controller and the pool after they are added to the room. Tap the gear button ⚙ next to the pool controller or the pool to display a Settings dialog box. For details, refer to Configure the Device Settings on page 396.

Remove a Pool Controller or a Pool from a Room

To remove a pool controller or a pool from a room:

1. Select the pool controller or a pool that you would like to remove.
2. Tap the back arrow (**<**) next to the pool controller or pool to remove the device from the room. The device is removed from the room and is added back to the **Other** menu.

Other Devices

Other devices are components of the Crestron Home system that are not directly controlled through the system.

NOTES:

- Uncontrolled and relay-controlled devices must be connected to the appropriate hardware in order to function properly in the system. For example, the garage door and the garage door sensors must be connected to the Crestron Home processor or control module.
- Set up and test the connections using the device's settings screen. For details, refer to Configure the Device Settings on page 396.
- When a garage door, gate, camera, or BACnet Thermostat is added to the system, control elements are added to the to the user interface device.
- Sensor Devices and Uncontrolled devices (for example, Door Sensor and Uncontrolled Audio Source) do not report the status of the controlled devices and do not have automatically generated control elements added to the user interface device The device status must be verified manually.
- Relay controlled devices (for example, Fireplace and Lift) do not have automatically generated control elements added to the user interface device. To control a relay controlled device, use a Quick Action (for example, turn on the fireplace), a Media Zone Event (for example, open a TV lift when the TV is turned on), or a Scene.

Add an Other Device to a Room

To add an other device to a room:

1. Select the room where the device is installed from the **Select a room** menu.
2. Select **Other** from the **Device Types** menu.

3. Select the device type from the **Other** menu, and tap the plus button (**+**).
4. Enter a descriptive name for the device.
5. Tap **OK**. The device is added to the room.
6. Configure the device after it is added to the room. Tap the gear button  next to the device name to display a Settings dialog box. For details, refer to Configure the Device Settings on page 396.

Remove an Other Device from a Room

To remove an other device from a room:

1. Select a device in the room that you would like to remove.
2. Tap the back arrow (**<**) next to the device to remove the device from the room. The device is removed from the room and is added back to the **Other** menu.

Tap the back arrow (**<**) next to **Other** to return to the **Device Types** menu.

Add an ONVIF Camera

To add an ONVIF camera:

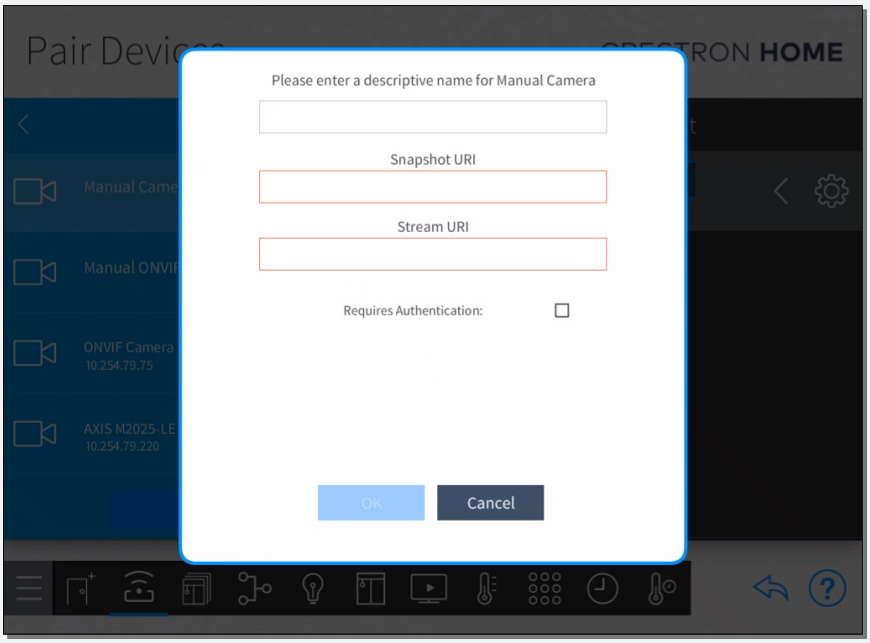
NOTE: All ONVIF cameras in the system must use a static or reserved IP address.

1. Select **Other** from the **Device Types** menu.

2. Select the room where the ONVIF camera is installed from the **Select a room** menu.
3. Select **Cameras** from the **Other** menu. The system scans for ONVIF cameras and displays them in the **Cameras** menu.

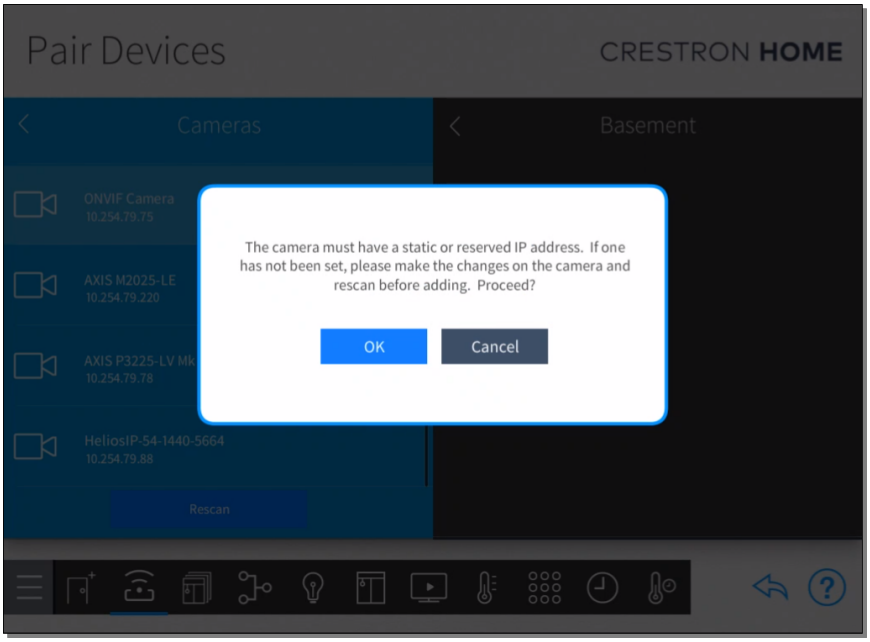
4. Select the camera from the **Cameras** menu and then tap the plus button (**+**).

NOTE: If the ONVIF camera is not found, select **Manual ONVIF Camera** from the **Cameras** menu and then tap the plus button (**+**). Enter the required information.

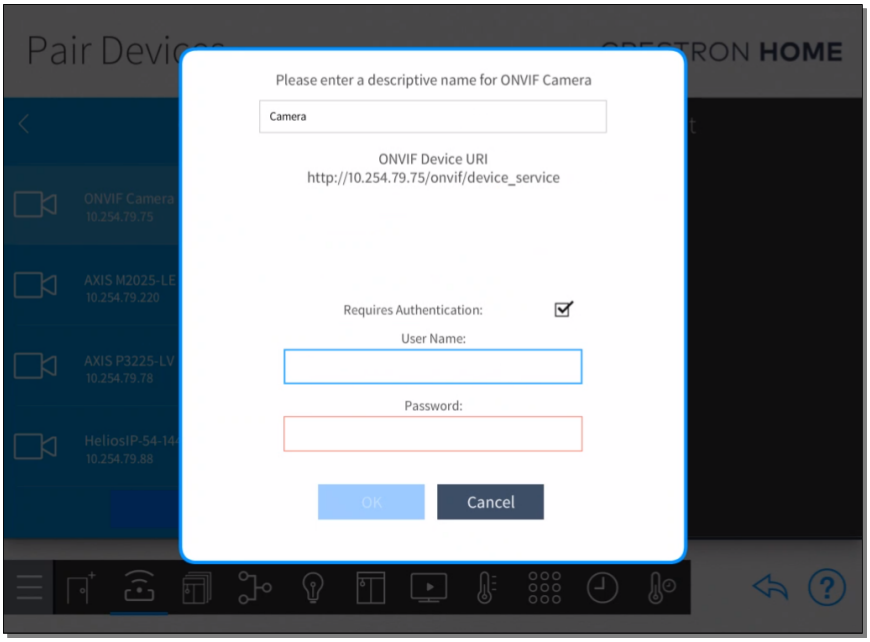


5. A dialog displays stating that the camera must have a static or reserved IP address. Tap **OK** to confirm.

   NOTE: If a static or reserved IP address has not been set, tap **Cancel**, then configure the ONVIF camera with a static or reserved IP address, and then tap **Rescan**.



6. Enter a descriptive name for the ONVIF camera. If authentication is required for the ONVIF camera, select the **Requires Authentication** check box and then enter the user name and password for the camera.



7. Tap **OK**. The camera is added to the room.
8. Configure the ONVIF camera after it is added to the room. Tap the gear button next to the ONVIF camera to display a Settings dialog box. For details, refer to Configure the Device Settings on page 396.

Remove an ONVIF Camera from a Room

To remove an ONVIF camera from a room:

1. Select the ONVIF camera that you would like to remove.
2. Tap the back arrow (**<**) next to the ONVIF camera to remove the device from the room. The device is removed from the room and is added back to the **Other** menu.

Add a BACnet Thermostat

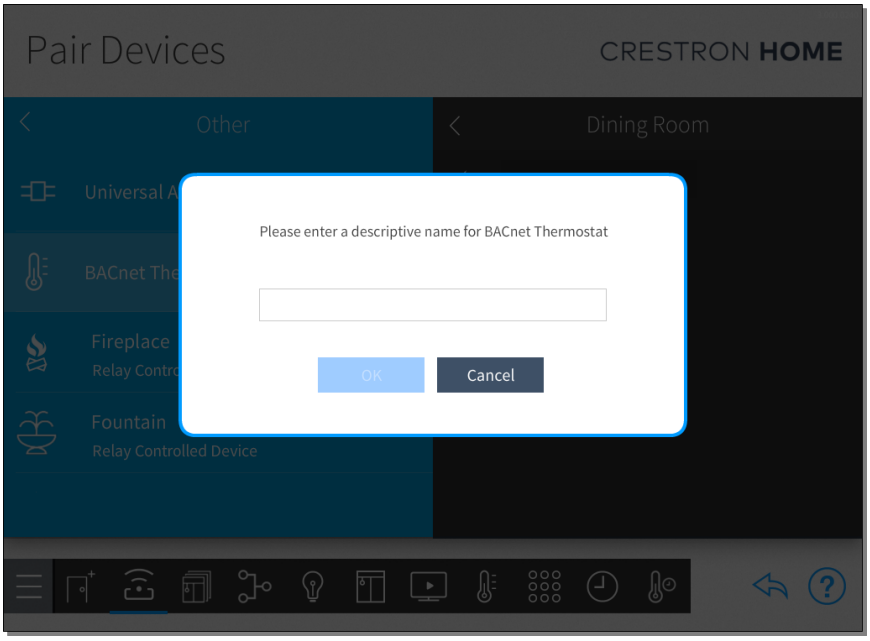
To add a BACnet thermostat:

1. Select the room where the BACnet thermostat is installed from the **Select a room** menu.

2. Select **Other** from the **Device Types** menu.

3. Select **BACnet Thermostat** from the **Other** menu and then tap the plus button (**+**).

4. Enter a descriptive name for the BACnet thermostat.



5. Tap **OK**. The BACnet thermostat is added to the room.
6. Configure the BACnet thermostat after it is added to the room. Tap the gear button next to the BACnet thermostat to display a Settings dialog box. For details, refer to Configure the Device Settings on page 396.

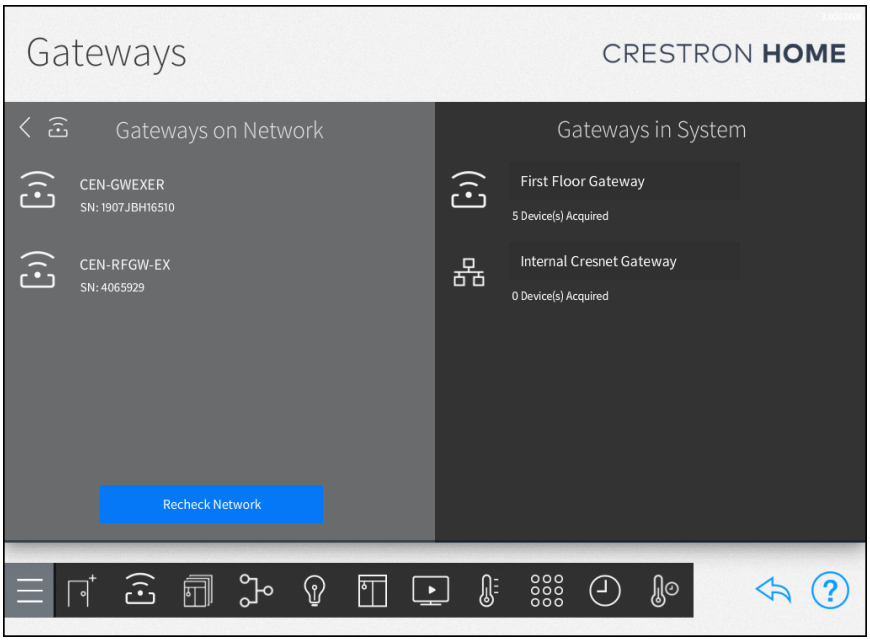
Remove a BACnet Thermostat from a Room

To remove a BACnet thermostat from a room:

1. Select the BACnet thermostat that you would like to remove.
2. Tap the back arrow (**<**) next to the BACnet thermostat to remove the device from the room. The device is removed from the room and is added back to the **Other** menu.

Manage Device Gateways

Tap **Manage Gateways** in the **Device Types** menu. The local network is scanned for gateways that can be added to the Crestron Home system. Discovered gateways appear under the **Gateways on Network** menu.



Add a Gateway to the System

To add a gateway to the system:

NOTE:

- The DIN-DALI-2 must be connected via Ethernet to communicate with the Crestron Home system.
- Use the DALI Commissioning tool in Crestron Toolbox™ software for managing the DALI configuration. Only the DALI groups are imported into the Crestron Home system.
- The Cresnet® communication port on the DIN-DALI-2 cannot be used in the Crestron Home system. Do not make connections to this port.

1. Tap **Manage Gateways** in the **Device Types** menu. The local network is scanned for gateways that can be added to the Crestron Home system. Discovered gateways are displayed in the **Gateways on Network** menu.

   NOTE: Tap the **Recheck Network** button to scan the network for available gateways.

2. Select the gateway in the **Gateways on Network** menu and then tap the plus (**+**) button.

3. Enter a descriptive name for the gateway in the pop-up dialog box that is displayed and then tap **OK**.
4. The gateway is added to the system and is displayed in the **Gateways in System** menu.
5. Configure the gateway after it is added to the room. Tap the gear button  next to the device name to display a Settings dialog box. For details, refer to Configure the Device Settings on page 396.

Remove a Gateway from the System

NOTES:

- Removing a gateway also removes all devices acquired by that gateway.
- The Internal Cresnet Gateway cannot be removed.

To remove a gateway from the system:

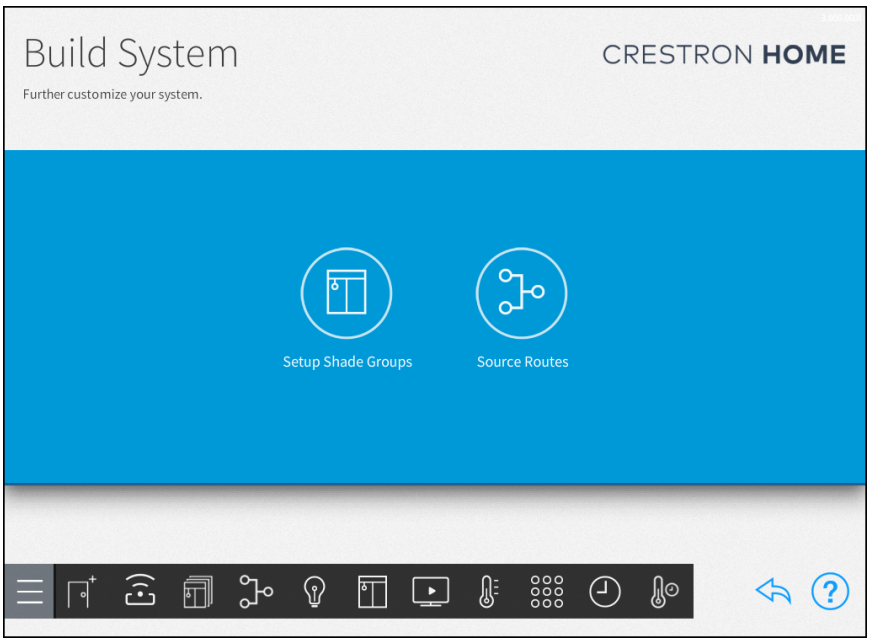
1. Select the gateway that you would like to remove.
2. Tap the back arrow (**<**) next to the gateway to remove it from the system. The gateway is removed from the system and is added back to the **Gateways on Network** menu.

Step 3: Build System

The third step is to build the system. During this step you will configure shade groups and source routes. Use the **Build System** screen to group multiple shade motors together and to configure audio and video source routing behavior for the Crestron Home system.

The following actions can be performed in Step 3: Build System:

Tap the **Build System** button on the **Setup** screen to display the **Build System** screen.

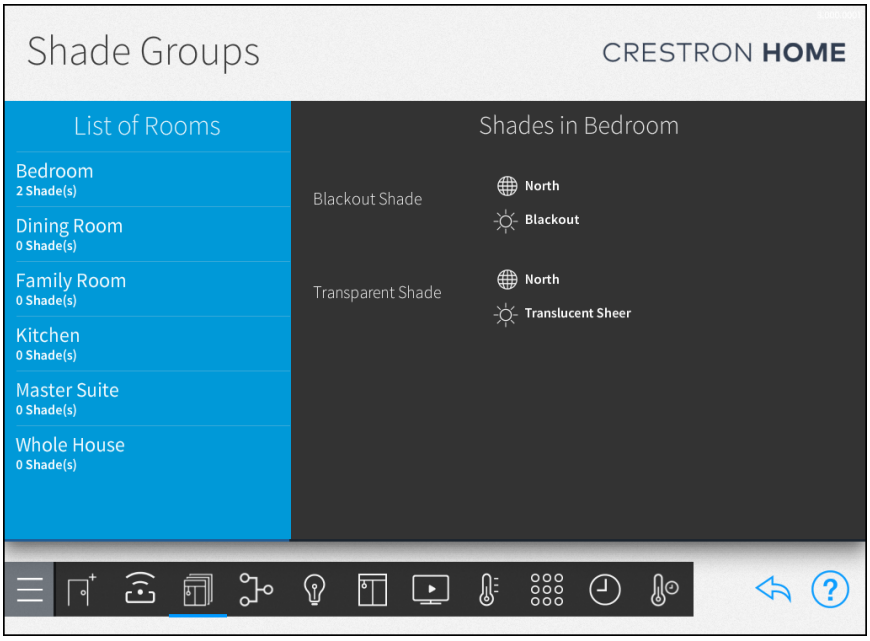


To return to the previous screen, tap the back arrow button .

Shade Groups

Use the **Shade Groups** screen to group multiple shade motors together. When shade motors are grouped, all shade motors for an entire window are controlled as one. Shade motors that have the same fabric type and that are installed on the same window may be grouped.

Tap the **Setup Shade Groups** button on the **Build System** screen or the Shade Groups button on the setup menu to display the **Shade Groups** screen.



Select a room from the **List of Rooms** menu to view all of the shade motors configured for that room. The user-defined name, the direction the associated window is facing, and the fabric type are displayed for each shade motor.

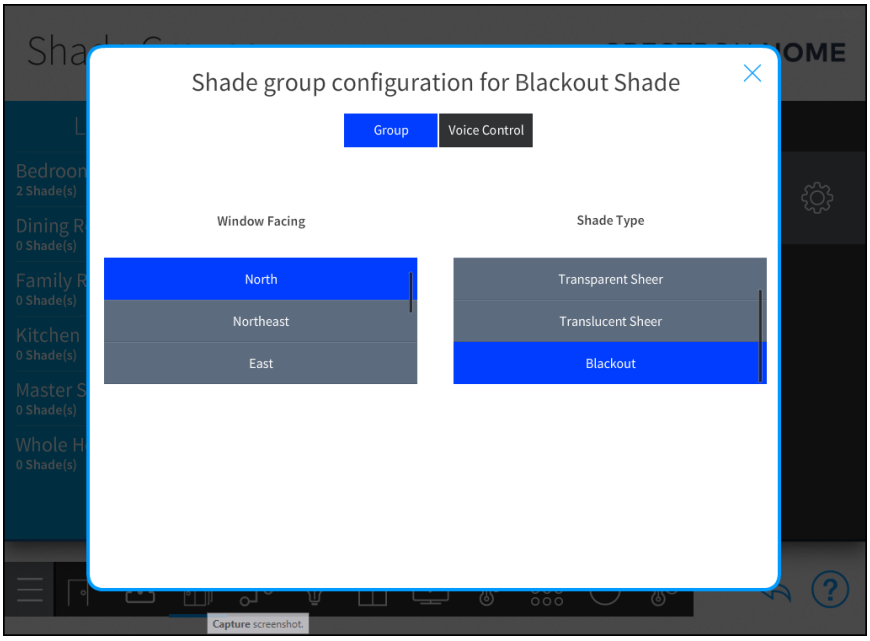
Shades motors that share the same window facing direction, the same fabric type, or both are grouped together automatically. From this point forward, the shade groups will appear in the configuration steps instead of the individual motors.

NOTES:

- Shade groups do not span across multiple rooms. However, multiple shade groups in different rooms may be controlled at the same time using shade scenes, actions, and events.
- Shade motors may be grouped by window facing direction only, fabric type only, or both window facing direction and fabric type.

To view and edit shade motor settings:

1. Select the shade motor from the **Shades in [Room]** menu.
2. Tap the gear button  next to the motor name. The **Shade group configuration** dialog box is displayed.

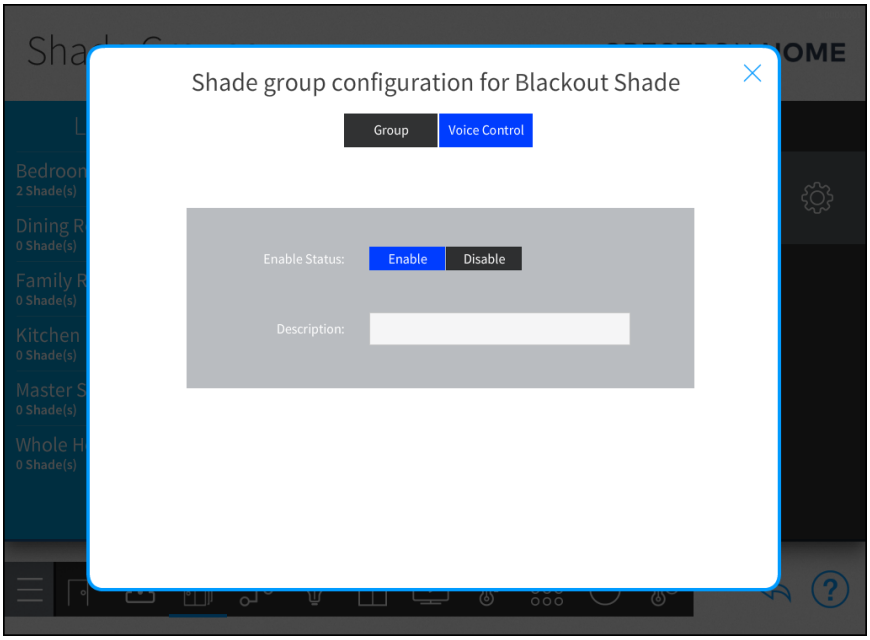


Tap the **Group** tab to change the window facing direction and the fabric type for the shade motor.

The following configuration options are provided:

- **Window Facing:** Select the direction that the shade motor's associated window is facing.
- **Shade Type:** Select the fabric type of the shade controlled by the shade motor.

Tap the **Voice Control** tab to enable or disable the ability to control the shade motor with voice control services (if enabled for the system).



NOTE: For more information on configuring voice control for the Crestron Home system, refer to Voice Control Settings on page 230.

The following configuration options are provided:

- **Enable Status:** Select whether voice control is enabled or disabled for the shade motor.
- **Description:** Enter a description for the voice control command that appears in the voice control application.

Tap **Save** on the **Group** tab to save any changes.

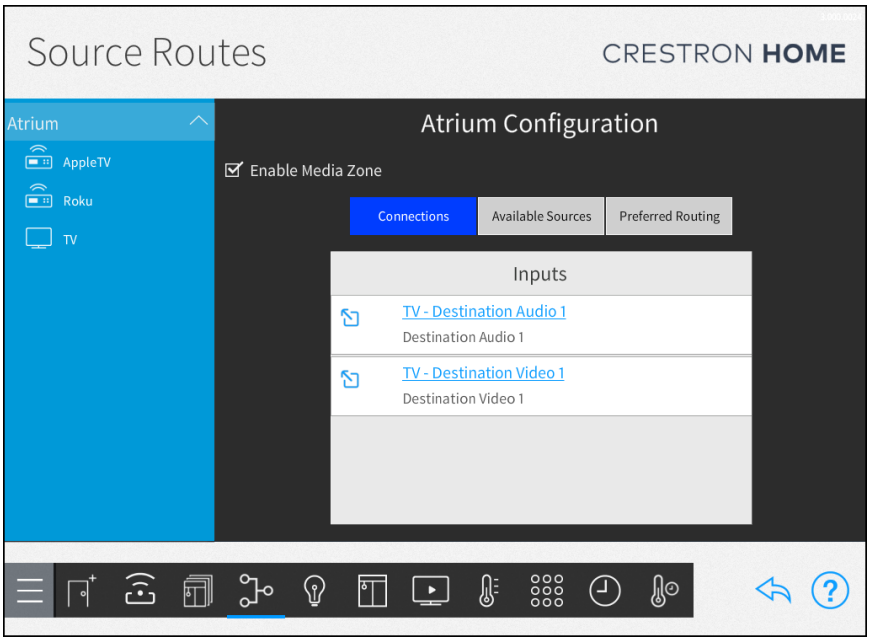
On the **Shade Groups** screen, tap the back arrow button to return to the **Build System** screen.

Source Routes

Use the **Source Routes** screen to configure audio and video source routing behavior for the Crestron Home system.

Media sources and content items may be routed to the appropriate endpoints in one or more rooms across the system. Rooms may also be defined as media zones so that the room's media sources may be controlled from the user control interface.

Tap the **Source Routes** button on the **Build System** screen or the Source Routes button on the setup menu to display the **Source Routes** screen.



NOTES:

- The button to the left of an input channel name navigates to the input device's source routing selections.
- The button to the right of an output channel name navigates to the output device's source routing selections.

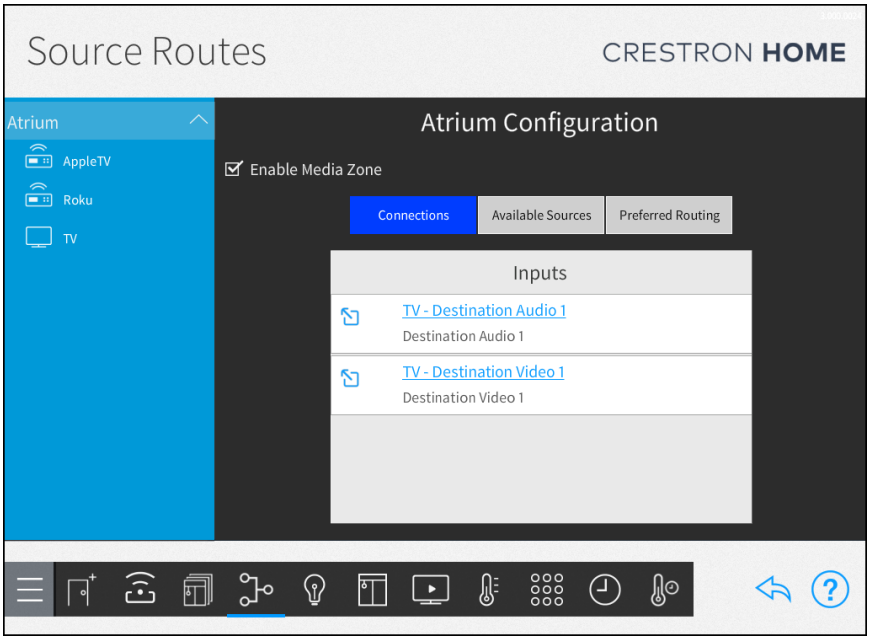
Enable or Disable a Media Zone

To allow source routing and to display components in the user interface, configure rooms as media zones. When enabled as a media zone, the room may be selected from the user control interface. Actions and events may also be configured for the media zone.

Rooms configured as media zones may be controlled by the TSR-310 user interface. For more information, refer to the Performance UI for TSR-310 Operations Guide (Doc. 8410) at www.crestron.com/manuals.

To enable a room as a media zone:

1. Select a room from the left screen menu.
2. Tap the check box next to Enable Media Zone to enable or disable the room as a media zone. A filled check box indicates that the room is enabled as a media zone.



Configure Source Routes

NOTES: Observe the following points when configuring source routes:

- If two media sources are routed to a DM NVX® device (via the Input 1 and Input 2 ports), they may not be used at the same time. For example, if switching from Input 1 to Input 2 in a media zone, all media zones where Input 1 is selected switch to Input 2.
- CEC devices must be routed manually to the HDMI® input that matches the control port that was assigned to the device.
- If the audio signal for a video source is routed to a SWAMP audio expander endpoint, the video will display but no audio will be heard. This behavior occurs because the SWAMP device is warming up and is corrected within a few seconds.

To configure source routing behavior for a media device:

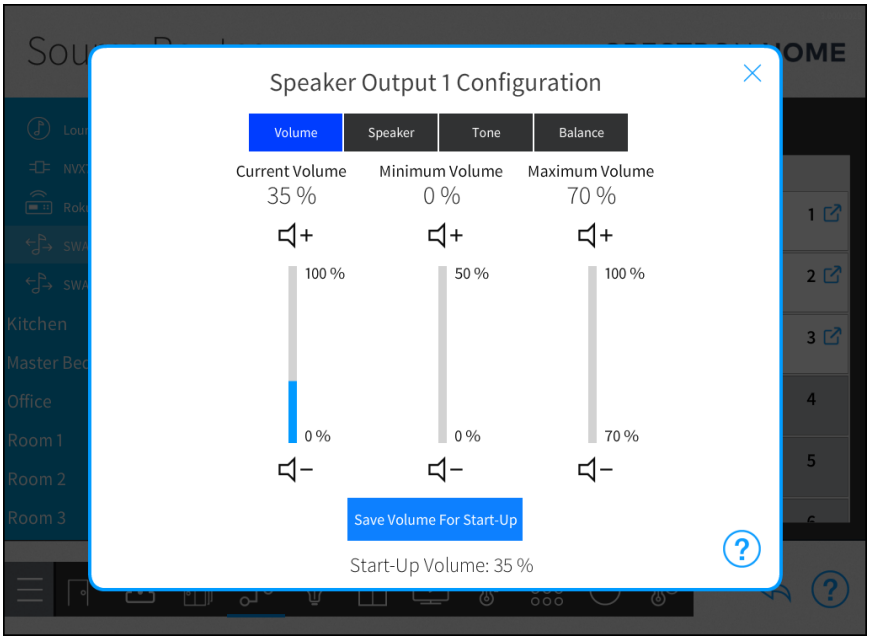
1. Select a room from the left screen menu and then select a media device from the provided options.

2. Assign an input source:
    a. Tap an input channel from the **Inputs** list. The available sources are displayed.
    b. Select the source that is connected to the input.

3. Assign an output source:
    a. Tap an output channel from the **Outputs** list. The available output destinations are displayed.
    b. Select the destination for the selected channel.

> **NOTE:** Outputs for certain Crestron amplifiers and expanders can be bridged or bussed.
>
> **Bridging Outputs:** To bridge outputs, assign two output channels that are capable of bridging to the same output destination. If the channels can be bridge, a dialog is displayed asking if the channels should be bridged or bussed.
>
> **Bussing Outputs:** To buss outputs, assign output channels to the same output destination. A dialog is displayed asking if the channels should be bridged or bussed.

4. Configure the audio input and output channels:
    a. Tap the gear button ⚙ next to an audio input or output channel.
    b. Configure the available audio settings.

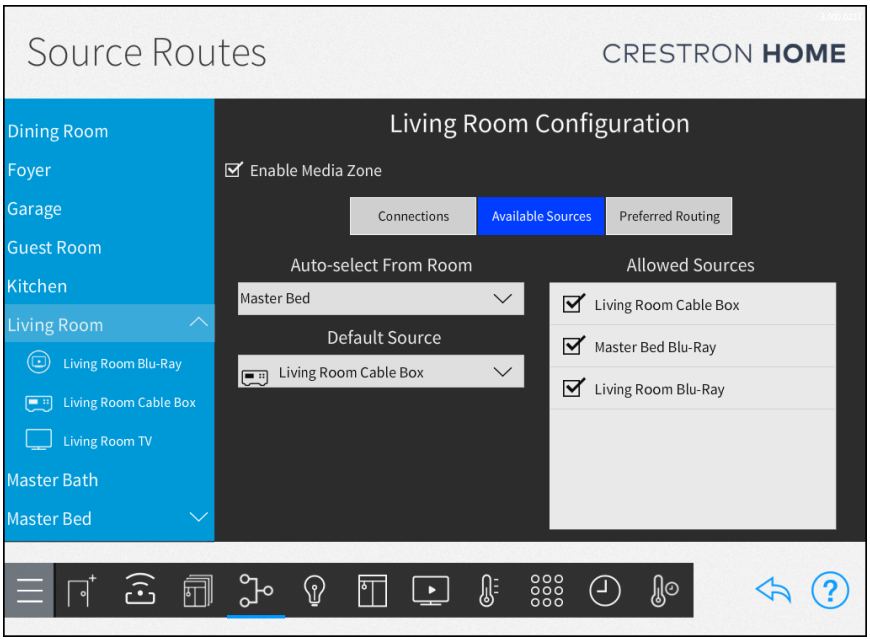


Set the Default Source and Allowed Sources

The default source is the source that is configured to start playing when the room is turned on. The allowed sources are the media devices in the room that can be selected on the user control interface.

To configure the available sources in the room:

1. Select a room from the left screen menu.
2. Tap **Available Sources**. A list of all media sources that can be played in the room is displayed.



3. The **Auto-select From Room** dropdown displays all rooms in the system that have at least one media source in common with the current room. Select a room from the **Auto-select From Room**. The default room is **None**.

   NOTES:

   - Use the **Auto-select From Room** menu to select the Default Room On Behavior for the current room. When the current room is turned on, the media source that is playing in the **Auto-select From Room** will begin playing in current room. For example, in the image shown above, **Master Bedroom** is selected as the **Auto-select From Room**. If the **Master Bed Blu-Ray** source is playing in the Master Bedroom and the Living Room is powered on, the video that is playing in the Master Bedroom will also start playing in the living room.
   - A source route broken icon () is displayed next to the selected room in the **Auto-select From Room** menu if the room selection no longer has a common source with the current room.
   - **Auto-select From Room** is only available for audio and video media sources.
   - To use the Default Room On feature, at least one source must be capable of being routed to the desired room.
   - Multiple rooms can identify the same room in the **Auto-select From Room** drop down. For example, Kitchen, Dining Room, and Atrium rooms can select Living Room from the **Auto-select From Room** drop down.
   - The Default Room On feature will only play a source from the **Auto-select From Room** if that source is currently playing in that room and can be successfully routed to the adjoining room.
   - The rooms are not permanently linked. Changes to the source in either room will not affect the source in the other room.

4. The **Default Source** dropdown displays all media sources in the system that can be played in the current room. Select a source from the **Default Source**. The default source is **None**. The default source can also be **None** or **Use last Source**.
   - **None:** No source is displayed by default. A blank screen is displayed.
   - **Use last Source:** The source that was last used is displayed.
5. The **Allowed Sources** menu displays all of the sources in the system that can be played in the current room. Tap the check box next to a source name to enable or disable the source from appearing as a selectable item in the user control interface for the room. A filled check box indicates that the source may be selected for the room.

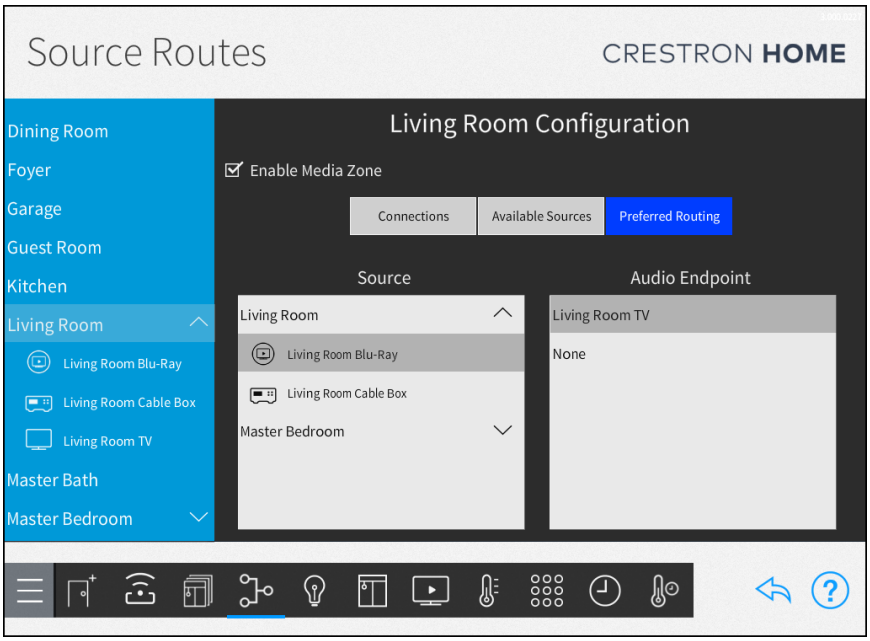
   NOTE: To reorder the **Allowed Sources** menu, tap and hold a media source until it turns green and then move it up or down in the menu. The order of the sources in the **Allowed Sources** menu matches the order that the media sources appear in the user control interface.

Set the Preferred Routing

The **Preferred Routing** tab sets the preferred audio endpoint in the room for each media source.

To set the preferred routing:

1. Select a room from the left screen menu.
2. Tap **Preferred Routing**. A list of all media sources and audio end points is displayed.



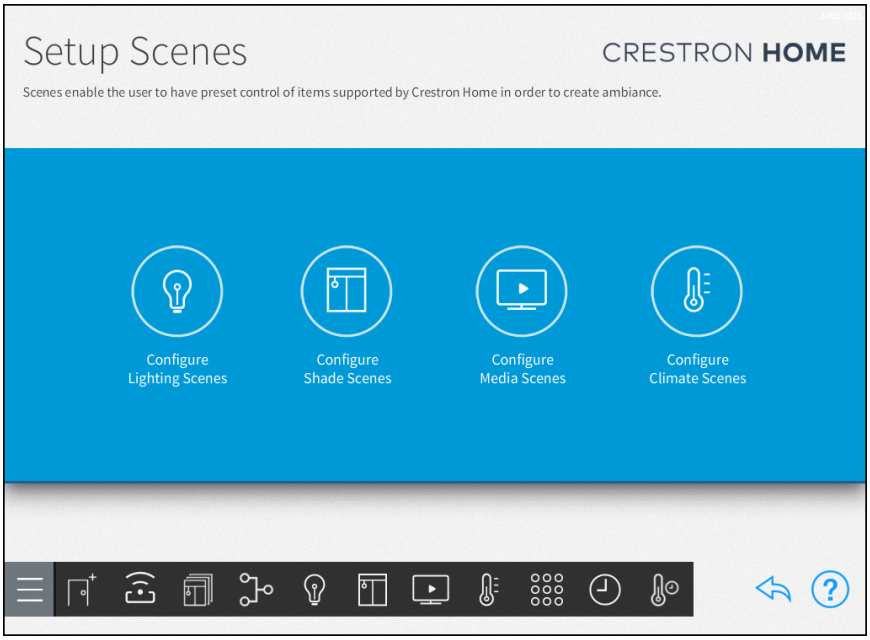
3. Select a media source from the **Source** list and then select the audio endpoint that should play the audio from the **Audio Endpoint** list. Repeat this process for all media sources.

Step 4: Create Scenes

The fourth step is to create scenes for the house. Scenes are a programmed set of actions that can be recalled by the user interface. During this step you will configure lighting scenes, shade scenes, media scenes, and climate scenes. For example, a lighting scene called Party may be programmed to dim the lights in the house or a shade scene called Privacy may be programmed to class all of the shades in the house. Use the **Setup Scenes** screen to create and configure scenes for the Crestron Home system.

The following actions can be performed in Step 4: Create Scenes:

Tap the **Create Scenes** button on the **Setup** screen to display the **Setup Scenes** screen.



NOTES:

- Each room may contain up to 24 lighting scenes, 24 shade scenes, 24 climate scenes, and 200 media scenes.
- Media scenes are added to the Whole House room.
- Scenes are recalled from a user interface device such as a touch screen, remote, keypad, time of day action, or mobile device. To program buttons and create events that recall scenes, refer to Step 5: Customize & Schedule on page 108.

To return to the previous screen, tap the back arrow button .

Light Scenes

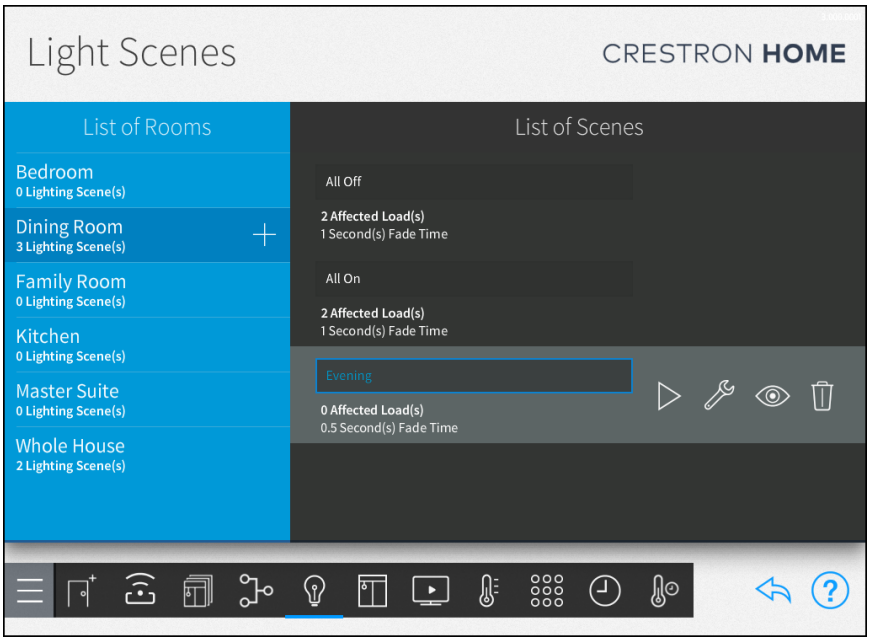
Use the **Light Scenes** screen to create lighting scenes for one or more rooms or for the entire house.

Lighting scenes are used to set predefined light levels for multiple lighting loads. By default, the Crestron Home system creates **All On** and **All Off** scenes for all rooms with a lighting load. Additionally, an **All On** and **All Off** scene is created for the Whole House room when a lighting load is added to the system.

NOTES:

- Up to 24 lighting scenes can be added to each room.
- Tap the play button to recall the lighting scene in real time.

Tap the **Configure Lighting Scenes** button on the **Setup Scenes** screen or the Light Scenes button on the setup menu to display the **Light Scenes** screen.

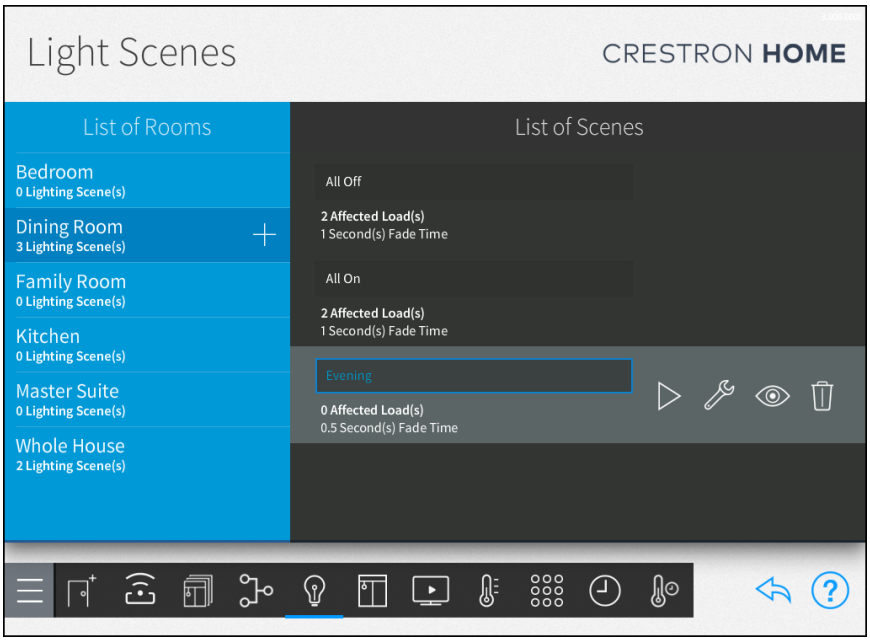


Create a New Lighting Scene

NOTE: When a scene is created, the current light state is saved as the scene setting and will be recalled by the scene. To adjust the levels, tap the wrench button next to the lighting scene name.

To create a new lighting scene:

1. Select a room from the **List of Rooms** menu, and then tap the plus button (**+**) next to the room name. A dialog box for the scene name is displayed.



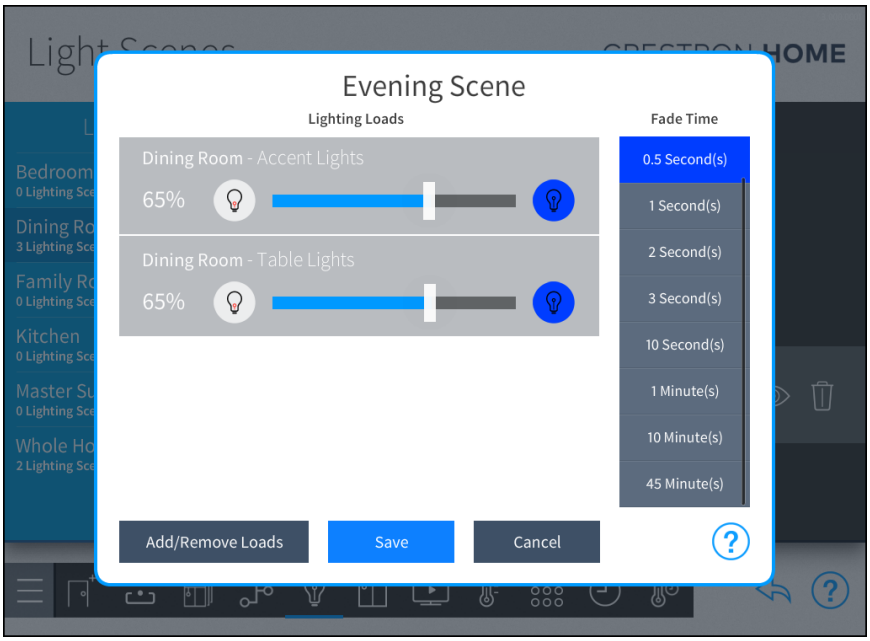
2. Enter a descriptive name for the lighting scene in the dialog box that is displayed, and then tap **OK**. The new lighting scene is added to the room under the **List of Scenes** menu.

Configure a Lighting Scene

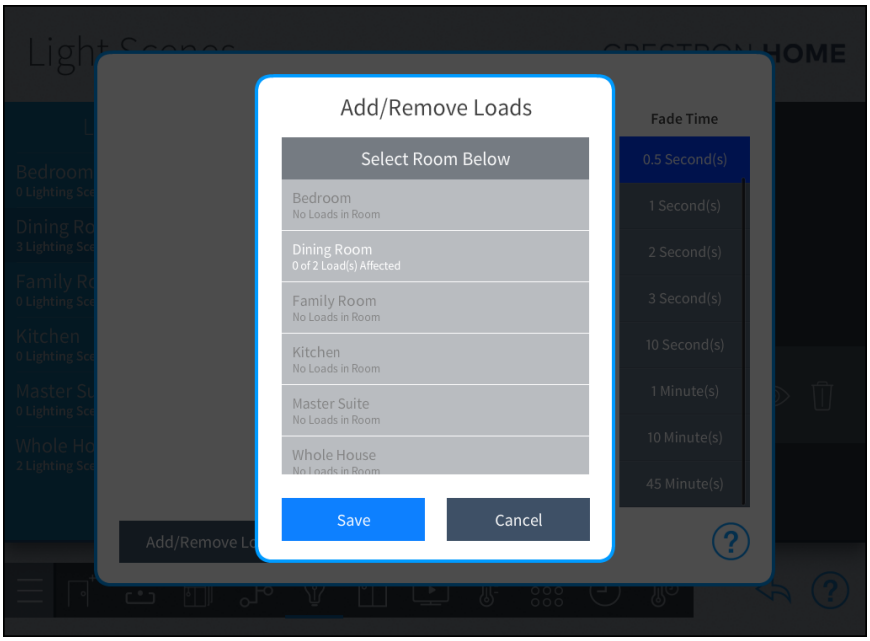
A lighting scene may be configured and tested after it has been added to the system. Use the **List of Scenes** menu to select a lighting scene for configuration.

To configure a lighting scene:

1. Tap the wrench button next to the lighting scene name. The scene configuration screen opens.



2. Tap **Add/Remove Loads** . The **Add/Remove Loads** dialog is displayed.



3. Select a room from Select Room Below and then tap the check box next to the lighting loads that should be controlled in the lighting scene.

   NOTE: The lighting loads can be from the same room or from different rooms in the house.

4. Configure the lighting scene:

   - **Lighting Loads:** Use the provided controls to adjust the brightness levels for any lighting loads that have been added to the scene. Lighting loads are adjusted in real time.
     - Tap the left lightbulb button to turn off a lighting load (0%).
     - Tap the right lightbulb button to set a lighting load to its maximum brightness (100%).
     - Use the slider to adjust the brightness level incrementally for lighting loads with dimmers.

     NOTE: Lighting loads may also be adjusted using the dimmers or switches configured to control the lighting load. The load levels are updated in real-time in the system.

   - **Fade Time:** Select the duration that a lighting scene fades in after being recalled and fades out after the scene is completed.

5. Tap **Save** to save any changes or **Cancel** to discard the changes.

Add or Remove a Lighting Load from a Scene

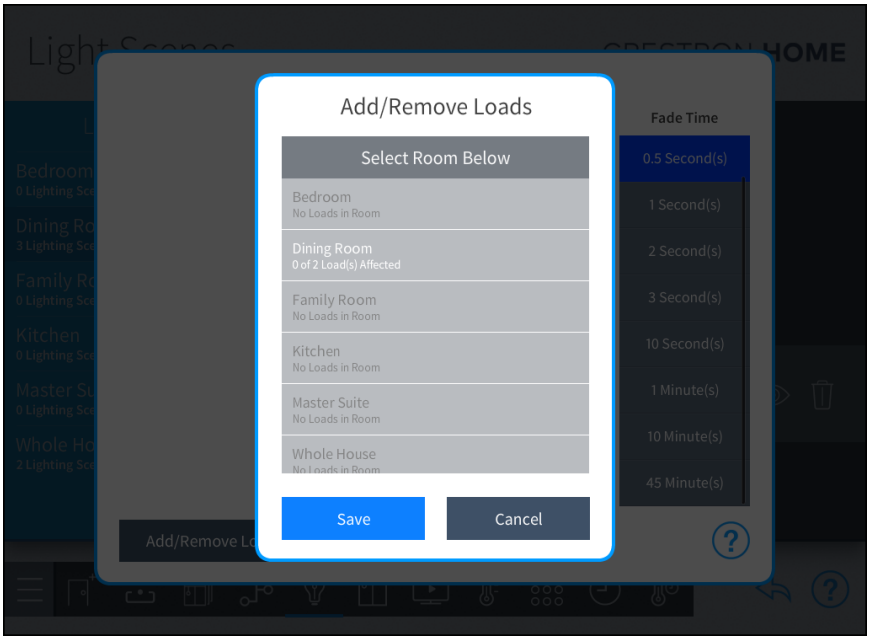
A scene can contain all devices that are located in a room or only a few devices. A scene can also contain a lighting load that is located in different rooms in the house.

To add or remove a lighting load from the scene:

NOTES:

- The DALI protocol allows ballasts to be added to multiple DALI groups.
- Do not add multiple DALI groups to a scene if the DALI groups control a common ballast. This will cause unpredictable lighting control when a scene is recalled and unreliable feedback of the light levels in the user interface.

1. Tap the wrench button next to the lighting scene name. The scene configuration screen opens.
2. Tap **Add/Remove Loads**. The **Add/Remove Loads** dialog is displayed.
3. Select a room from Select Room Below and then tap the check box next to the lighting loads that should be controlled in the lighting scene.



4. Tap **Save** to save any changes or **Cancel** to discard the changes.

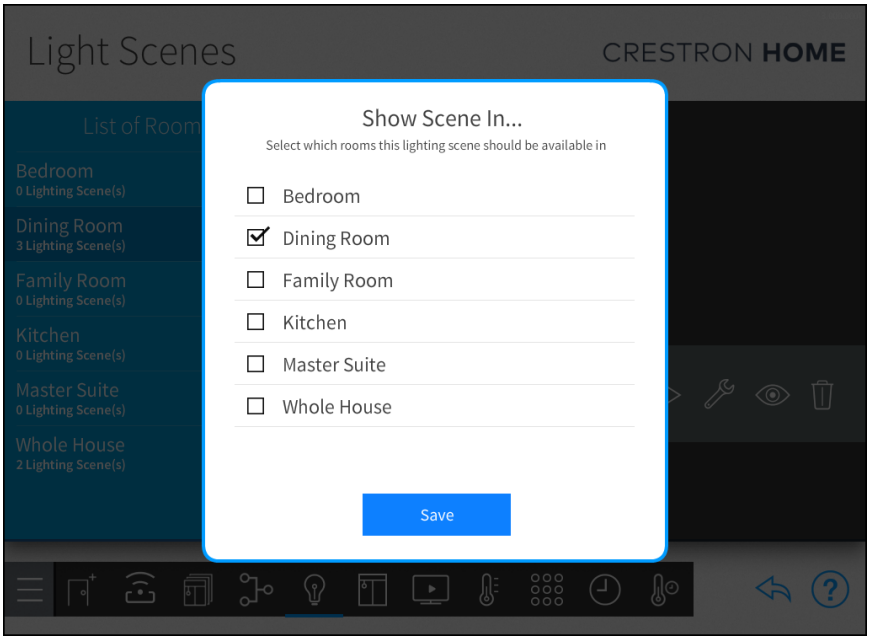
NOTE: Adjust the lighting scene as necessary. Refer to the "Configure a Lighting Scene" section above.

Display Lighting Scenes in Different Rooms

The lighting scene can be configured so that it is available in different rooms around the house. When the scene is displayed in a different room, it can be recalled by a user interface device that is located in any of the selected rooms.

To display lighting scenes in other rooms:

1. Tap the eye button next to a lighting scene name. The **Show Scene In...** dialog box is displayed.
2. Tap the check box next to a room name to make the lighting scene visible in that room. A filled check box indicates that the lighting scene is visible and may be recalled from a control device in the room (such as a touch screen).



3. Tap **Save** to save any changes.

Delete a Light Scene

To delete a light scene:

1. Select a room from the **List of Rooms** menu and then select the scene to delete.
2. Tap the trashcan button to delete the light scene. A confirmation dialogue is shown.
3. Tap **OK** to delete the light scene or **Cancel** to keep the light scene.

To return to the previous screen, tap the back arrow button .

Shade Scenes

Use the **Shade Scenes** screen to create shade scenes for one or more rooms or for the entire house.

Shade scenes are used to set predefined levels for multiple shade groups. By default, the Crestron Home system creates **All Open** and **All Closed** scenes for all rooms with a shade group. Additionally, an **All Open** and **All Closed** scene is created for the Whole House room when a shade motor is added to the system.

NOTES:

- Up to 24 shade scenes can be added to each room.
- Tap the play button to recall the shade scene in real time.

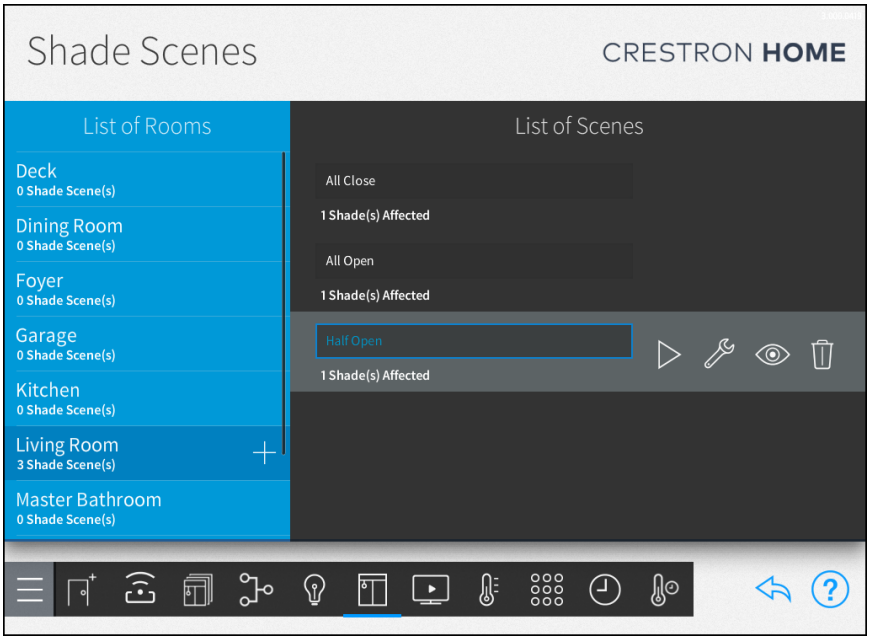
Tap the **Configure Shade Scenes** button on the **Setup Scenes** screen or the Shade Scenes button on the setup menu to display the **Shade Scenes** screen.

Create a New Shade Scene

NOTE: When a scene is created, the current shade state is saved as the scene setting and will be recalled by the scene. To adjust the levels, tap the wrench button next to the shade scene name.

To create a new shade scene:

1. Select a room from the **List of Rooms** menu, and then tap the plus button (**+**) next to the room name. A dialog box for the scene name is displayed.



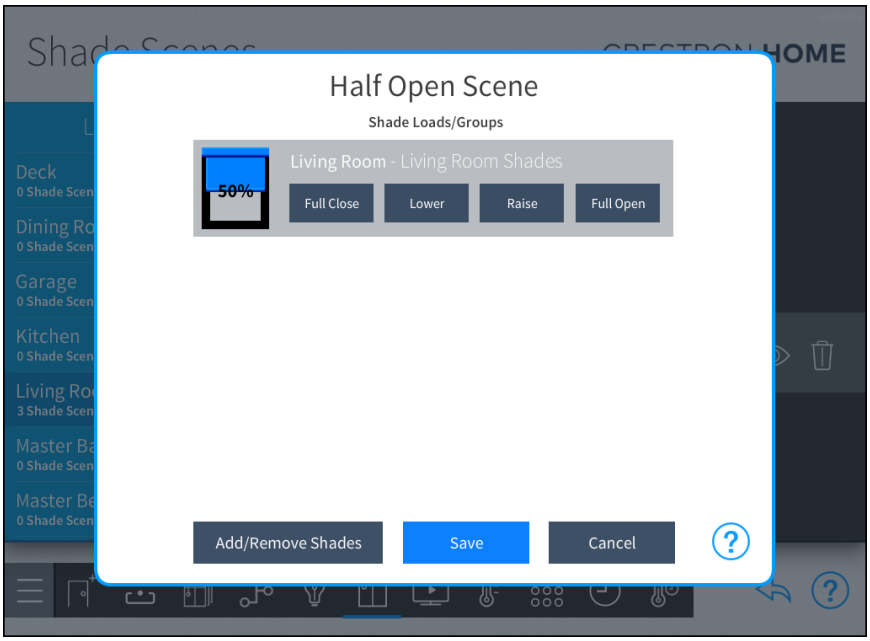
2. Enter a descriptive name for the shade scene in the dialog box that is displayed, and then tap **OK**. The new shade scene is added to the room under the **List of Scenes** menu.

Configure a Shade Scene

A shade scene may be configured and tested after it has been added to the system. Use the **List of Scenes** menu to select a shade scene for configuration.

To configure a shade scene:

1. Tap the wrench button next to the shade scene name. A notice is displayed stating that the shade scene will be recalled upon entering the scene configuration dialog box. Tap **OK** to display the dialog box or tap **Cancel** to cancel. The scene configuration screen opens.



2. Tap **Add/Remove Loads** . The **Add/Remove Loads** dialog is displayed.
3. Select a room from Select Room Below and then tap the check box next to the shade that should be controlled in the shade scene.

   NOTE: The shades can be from the same room or from different rooms in the house.

4. Configure the shade scene:
   - **Raise** or **Lower:** Tap to raise or lower the shade incrementally.
   - **Full Open** or **Full Close:** Tap to open or close the shade fully.

   NOTES:

- Shade loads may also be adjusted using the shade motor controls or using keypads configured to control the shade motors.
- The icon to the left of each shade load shows the percentage that the shade group is open in real time.

5. Tap **Save** to save any changes or **Cancel** to discard the changes.

Add or Remove a Shade from a Scene

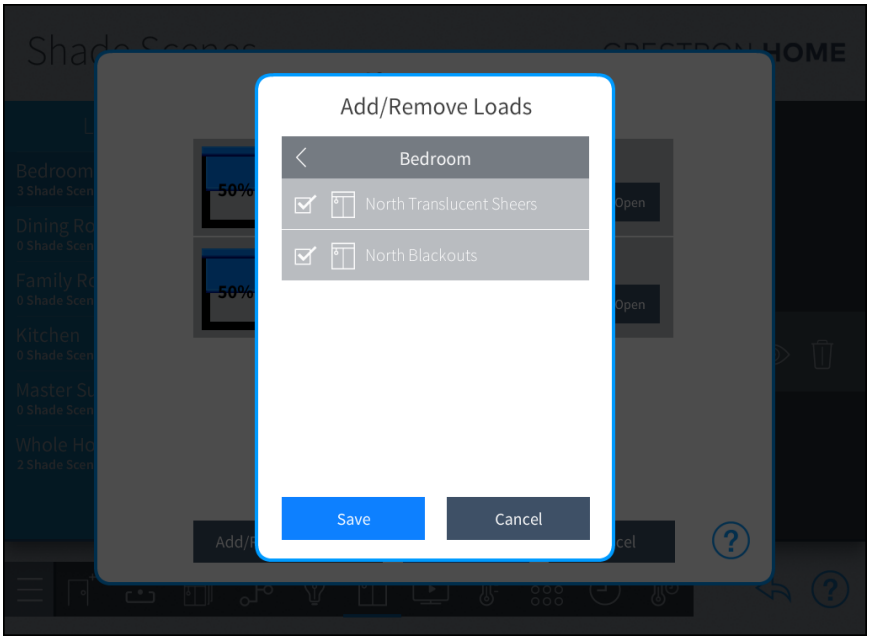
A scene can contain all devices that are located in a room or only a few devices. A scene can also contain a shade that is located in different rooms in the house.

To add or remove a shade from the scene:

NOTES:

- The DALI protocol allows ballasts to be added to multiple DALI groups.
- Do not add multiple DALI groups to a scene if the DALI groups control a common ballast. This will cause unpredictable lighting control when a scene is recalled and unreliable feedback of the light levels in the user interface.

1. Tap the wrench button  next to the lighting scene name. The scene configuration screen opens.
2. Tap **Add/Remove Loads**. The **Add/Remove Loads** dialog is displayed.
3. Select a room from Select Room Below and then tap the check box next to the shade that should be controlled in the shade scene.



4. Tap **Save** to save any changes or **Cancel** to discard the changes.

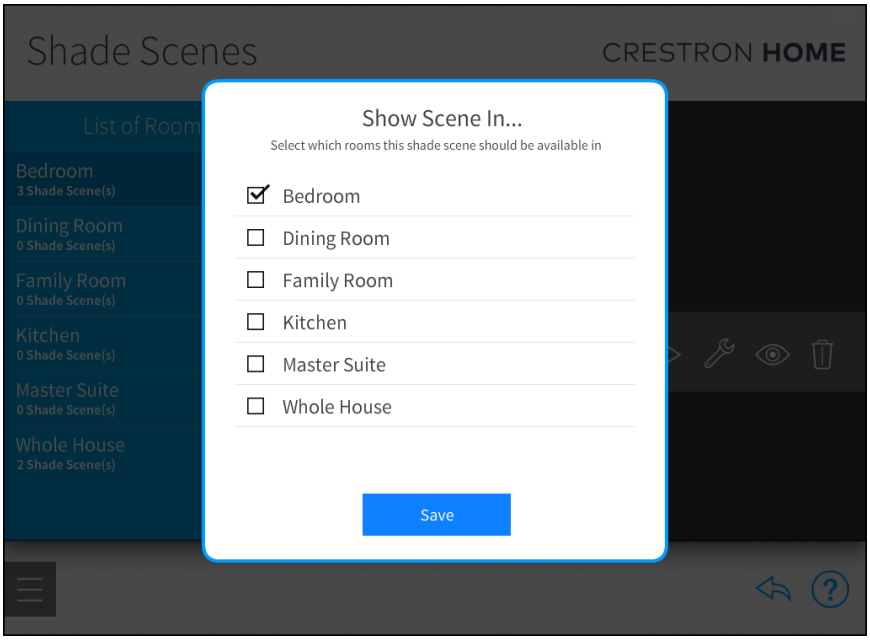
> **NOTE:** Adjust the shade scene as necessary. Refer to the "Configure a Shade Scene" section above.

Display Shade Scenes in Different Rooms

The shade scene can be configured so that it is available in different rooms around the house. When the scene is displayed in a different room, it can be recalled by a user interface device that is located in any of the selected rooms.

To display shade scenes in other rooms:

1. Tap the eye button next to a shade scene name. The **Show Scene In...** dialog box is displayed.
2. Tap the check box next to a room name to make the shade scene visible in that room. A filled check box indicates that the shade scene is visible and may be recalled from a control device in the room (such as a touch screen).



3. Tap **Save** to save any changes.

Delete a Shade Scene

To delete a shade scene:

1. Select a room from the **List of Rooms** menu and then select the scene to delete.
2. Tap the trashcan button to delete the shade scene. A confirmation dialogue is shown.
3. Tap **OK** to delete the shade scene or **Cancel** to keep the shade scene.

To return to the previous screen, tap the back arrow button .

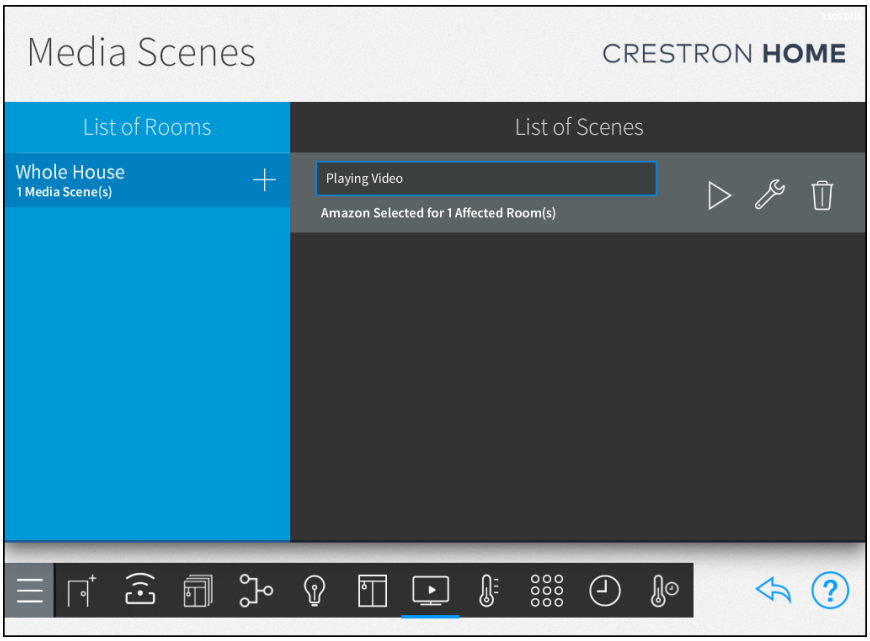
Media Scenes

Use the **Media Scenes** screen to create media scenes for the entire house. Media scenes are used to control source routing and on/off behavior for various media zones in the home.

NOTES:

- Up to 200 media scenes can be added to the whole house room.
- Tap the play button to recall the media scene in real time.

Tap the **Configure Media Scenes** button on the **Setup Scenes** screen or the Media Scenes button to display the **Media Scenes** screen.

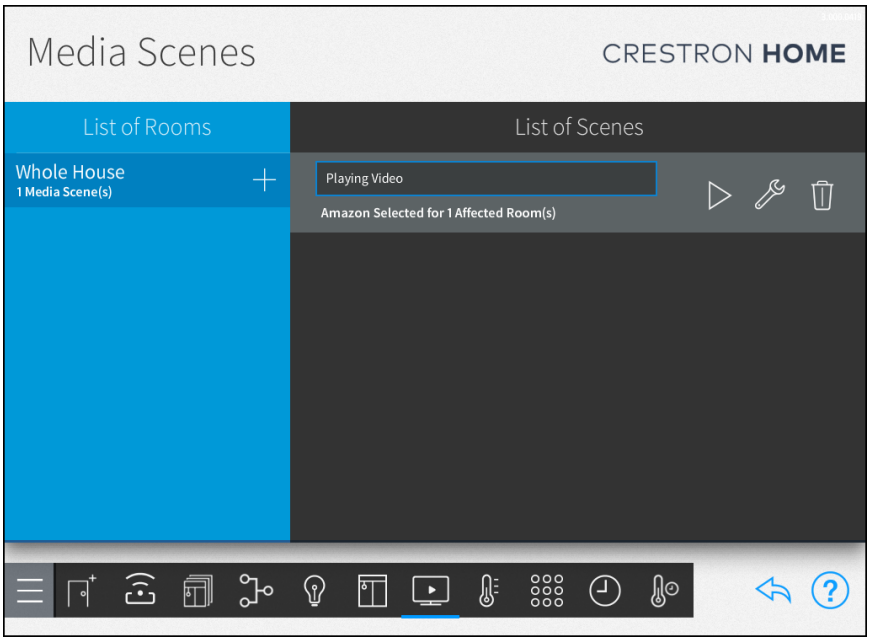


Create a New Media Scene

NOTE: When a scene is created, the current media state is saved as the scene setting and will be recalled by the scene. To adjust the levels, tap the wrench button next to the media scene name.

To create a new media scene:

1. Select a room from the **List of Rooms** menu, and then tap the plus button (**+**) next to the room name. A dialog box for the scene name is displayed.



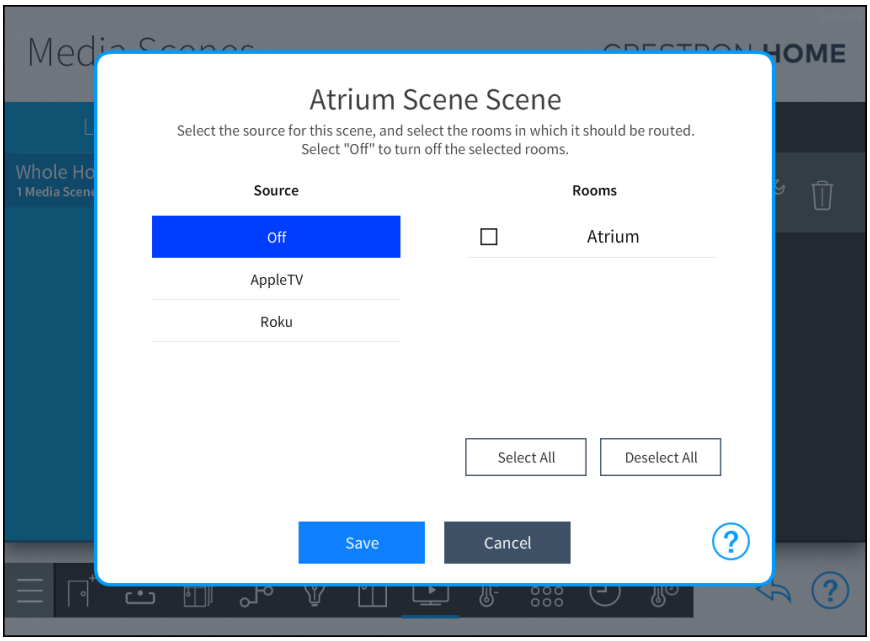
2. Enter a descriptive name for the media scene in the dialog box that is displayed, and then tap **OK**. The new media scene is added to the room under the **List of Scenes** menu.

Configure a Media Scene

A media scene may be configured and tested after it has been added to the system. Use the **List of Scenes** menu to select a media scene for configuration.

To configure a media scene:

1. Tap the wrench button next to the media scene name. The scene configuration screen opens.



2. Configure the media scene:
   - **Source:** Swipe up or down to select the media source or favorite that will be added to the scene. Select **Off** to have the scene turn off all media sources for the selected rooms.
   - **Rooms:** Swipe up or down to select the room(s) in which the media source will be routed when the scene is triggered. A filled check box to the left of the room name indicates that the room is selected.

     NOTE: A room must be configured as a media zone before it can be selected for a media scene. For more information, refer to Media Scenes on page 101.

     - **Select All:** Selects all available rooms.
     - **Deselect All:** Deselects all available rooms.
3. Tap **Save** to save any changes or **Cancel** to discard the changes.

Delete a Media Scene

To delete a media scene:

1. Select a room from the **List of Rooms** menu and then select the scene to delete.
2. Tap the trashcan button to delete the media scene. A confirmation dialogue is shown.
3. Tap **OK** to delete the media scene or **Cancel** to keep the media scene.

To return to the previous screen, tap the back arrow button.

Climate Scenes

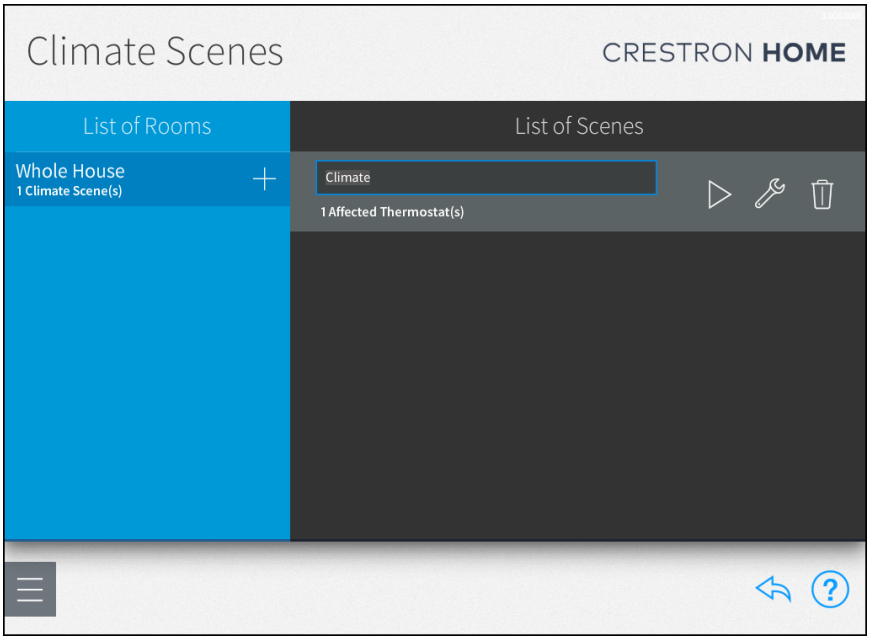
Use the **Climate Scenes** screen to create climate scenes for thermostats that have been added to the system.

Climate scenes are used to set predefined temperature set points or modes for a thermostat. Climate scenes are ideal for changing the HVAC system parameters during specified times of day.

NOTES:

- Up to 24 climate scenes can be added to each room.
- Tap the play button to recall the climate scene in real time.

Tap the **Configure Climate Scenes** button on the **Setup Scenes** screen or the Climate Scenes button on the setup menu to display the **Climate Scenes** screen.



Create a New Climate Scene

NOTE: When a scene is created, the current thermostat state is saved as the scene setting and will be recalled by the scene. To adjust the levels, tap the wrench button  next to the climate scene name.

To create a new climate scene:

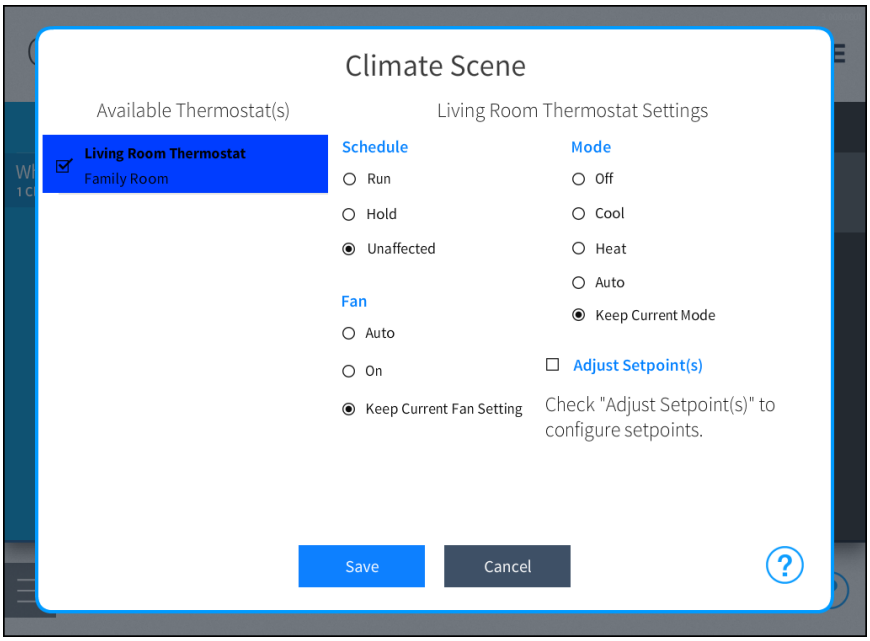
1. Select a room from the **List of Rooms** menu, and then tap the plus button (**+**) next to the room name. A dialog box for the scene name is displayed.
2. Enter a descriptive name for the climate scene in the dialog box that is displayed, and then tap **OK**. The new climate scene is added to the room under the **List of Scenes** menu.

Configure a Climate Scene

A climate scene may be configured and tested after it has been added to the system. Use the **List of Scenes** menu to select a climate scene for configuration.

To configure a climate scene:

1. Tap the wrench button next to the climate scene name. The scene configuration screen opens.



2. Configure the climate scene:
   - **Available Thermostats:** Tap the check box next to one or more thermostats in the **Available Thermostat(s)** menu to add the thermostats to the climate scene. A filled check box indicates that the thermostat is added to the scene. Tap on a thermostat to configure its behavior within the scene.
   - **Schedule:** Select one of the following scheduling options:

     NOTE: If the thermostat schedule is running because **Run** or **Unaffected** was triggered by the scene, the next scheduled climate event will overwrite the climate scene's set points.

     - **Run**: Starts the thermostat schedule.
     - **Hold**: Stops the thermostat schedule.
     - **Unaffected**: The scene does not alter the current thermostat schedule.
   - **Fan:** Select one of the following fan behavior options:
     - **Auto**: Turns on and off the fan automatically.
     - **On:** Turns on the fan.

        - **Keep Current Fan Setting** : The scene does not alter the fan setting.
    - **Mode:** Select one of the following thermostat modes:
        - **Off**: The scene turns the thermostat off.
        - **Cool:** The scene sets the operating mode to cool.
        - **Heat:** The scene sets the operating mode to heat.
        - **Auto:** The scene sets the operating mode to auto.
        - **Keep Current Mode:** The scene does not alter the current thermostat mode.
    - **Adjust Setpoint(s):** If this check box is selected, the scene adjusts the set points for Heat, Cool, and Auto modes to the chosen temperature values. Select the temperature set point for each mode from the appropriate spinner menu.
3. Tap **Save** to save any changes or **Cancel** to discard the changes.

Delete a Climate Scene

To delete a climate scene:

1. Select a room from the **List of Rooms** menu and then select the scene to delete.
2. Tap the trashcan button to delete the climate scene. A confirmation dialogue is shown.
3. Tap **OK** to delete the climate scene or **Cancel** to keep the climate scene.

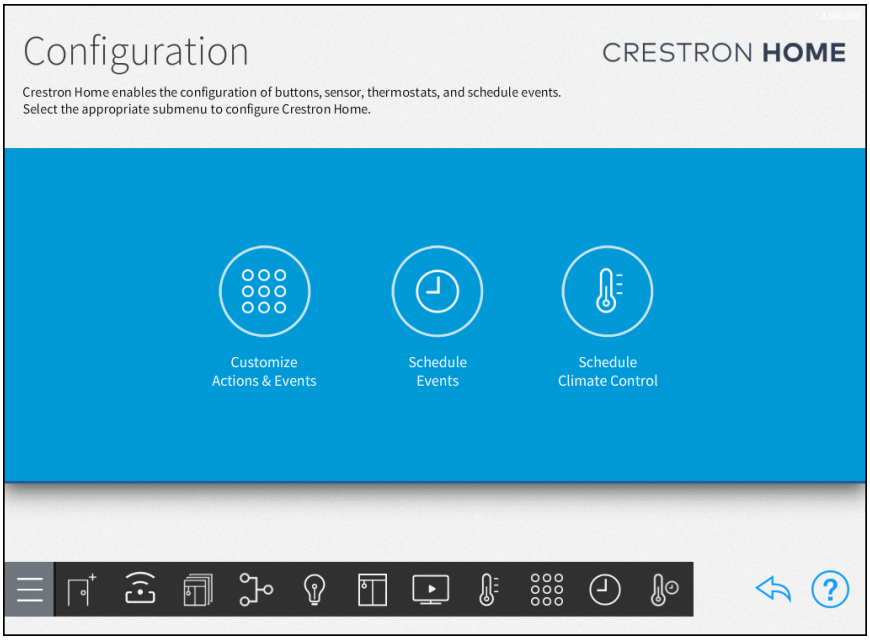
To return to the previous screen, tap the back arrow button.

Step 5: Customize & Schedule

The fifth step is to customize and schedule actions and events for the house. Use the **Configuration** screen to create and schedule system events that are triggered when a button is pressed, an occupancy sensor detects motion, a door is locked, an alarm is deactivated, and more. Events can be scheduled based on time of day, including the current sunrise or sunset times and climate control scenes can be scheduled to occur throughout the day.

The following actions can be performed in Step 5: Customize & Schedule:

Tap the **Customize & Schedule** button on the **Setup** screen to display the **Configuration** screen.

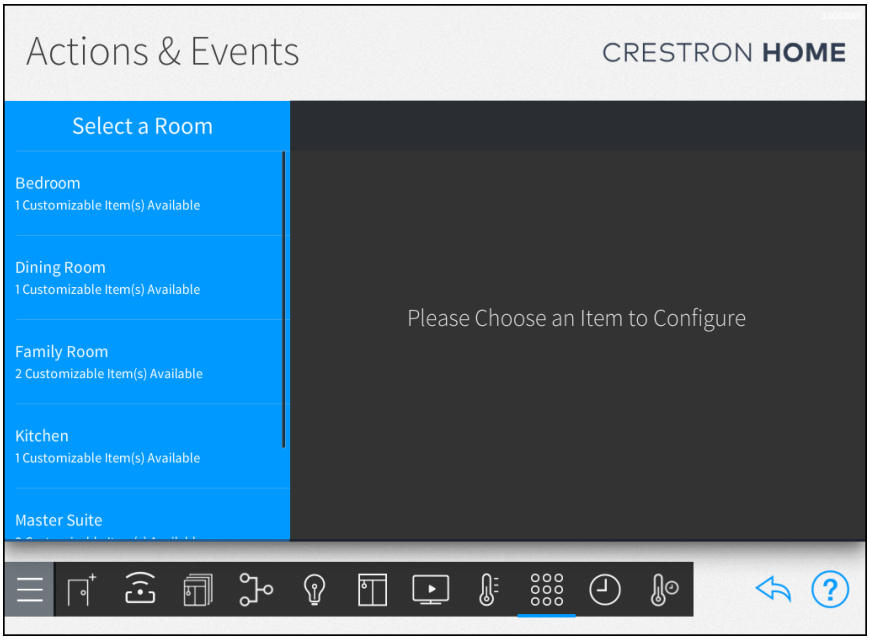


To return to the previous screen, tap the back arrow button .

Customize Actions & Events

Use the Actions & Events screen to configure the behavior of remotes and keypads, occupancy sensors, door locks, security systems, remote system events, media zone events, and quick actions. Scenes and other actions may be programmed to occur when a button is pressed or a system event is triggered.

Tap the **Customize Actions & Events** button on the **Configuration** screen or the Actions & Events button on the setup menu to display the **Actions & Events** screen.



NOTE: The same basic configuration settings are provided for each item, although some settings are added or removed for different device types and models. Refer to the following sections for specific information on each configurable device.

To select an item for configuration:

1. Select the room that contains the item from the **Select a Room** menu.
2. Select the item to configure from the menu on the right. A configuration screen for the device is displayed.

To return to the previous screen, tap the back arrow button .

Configure Quick Actions

Use the quick action button configuration screen to create and configure quick actions.

NOTE: The Crestron Home system supports up to 32 quick actions per room. The Whole House room supports up to 32 quick actions.

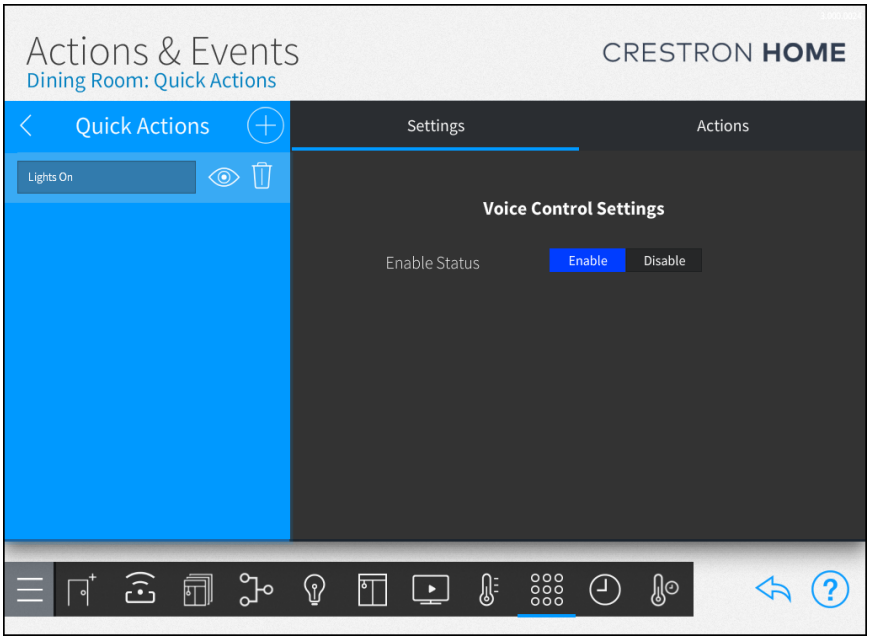
Create a Quick Action

Select **Quick Actions** from the **Select an Item** menu to display a configuration screen for the Quick Action.

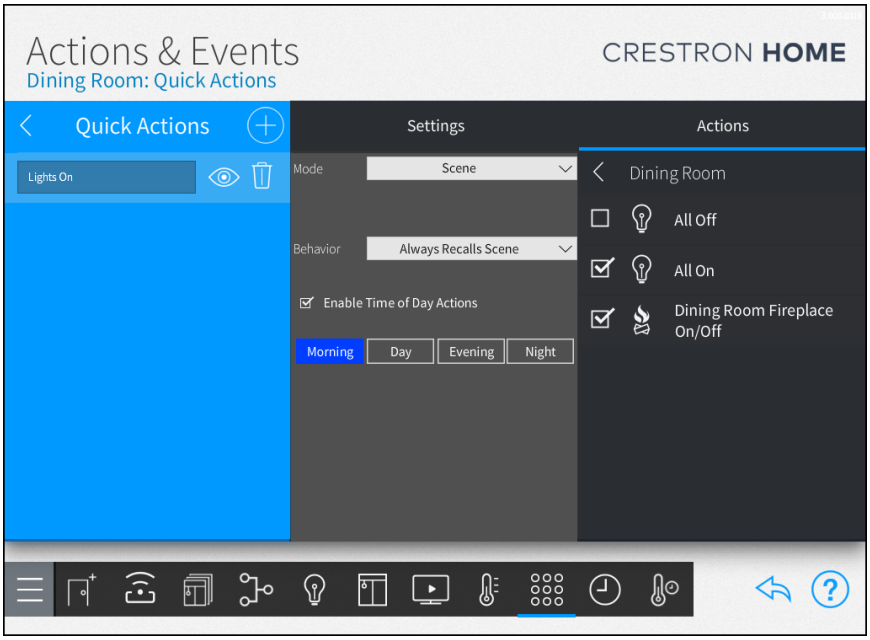
1. Select a room from the **Select a Room** menu.
2. Tap **Quick Actions** from the **Select an Item** menu.
3. Tap the [plus icon] at the top of the **Quick Actions** menu.
4. Enter a descriptive name for the quick actions and then tap **OK**. The quick action is added to the **Quick Actions** menu.

Configure a Quick Action

1. Select a room from the **Select a Room** menu.
2. Tap **Quick Actions** from the **Select an Item** menu.
3. To enable voice control, tap the **Settings** tab and then tap the **Enable** button.



4. To configure the action that is triggered when the action is recalled, tap the **Actions** tab.



- **Mode:** Select the type of action that is recalled when the quick action is recalled.

  Options for **Mode** include:

  - **None:** No action is performed when the quick action is recalled.
  - **Scene:** A scene is recalled when the quick action is recalled.
  - **Quick Action:** A quick action is recalled when the quick action is recalled. Only available when there are quick actions available in the room.
  - **External Function:** Recalls a function that is defined by an external control system, such, as an MC3.

- **Behavior:** Available when **Scene** is selected from the **Mode** drop-down menu. Sets the behavior when the quick action occurs.

  Options for **Scene** include:

  - **Always Recalls Scene:** The quick action recalls a scene.
  - **Toggles Scene/Off:** The quick action toggles the scene on or off.
  - **Custom Toggle:** The quick action toggles either the on actions or off actions.

- **Enable Time of Day Actions:** Available when **Scene** is selected from the **Mode** drop-down menu. Enables different scenes to be recalled based on the time of the day. Set a scene for Morning, Day, Evening, and Night.

5. Use the right screen panel to associate an action with the quick action.

   NOTES:

   - The same action or scene may be assigned to multiple quick actions.
   - Multiple actions or scenes may also be assigned to the same quick action.

   - Use the **Select Room Below** menu to select the room that contains the desired action or scene.

     NOTE: Only rooms that contain selectable actions appear on the **Select Room Below** menu. Once an action is selected from a room, the room name is shown with blue text in the **Select Room Below** menu.

   - Tap on a room name to display a list of actions that may be selected for the room. The type of action that is displayed is set using the **Mode** drop-down menu in the center panel.
   - Tap the check box next to an action to add or remove that action from the quick action. A checked box indicates that the action is set to occur when the quick action is recalled.
   - Tap the back arrow (<) next to the room name to return to the **Select Room Below** menu.

Configure Media Zone Events

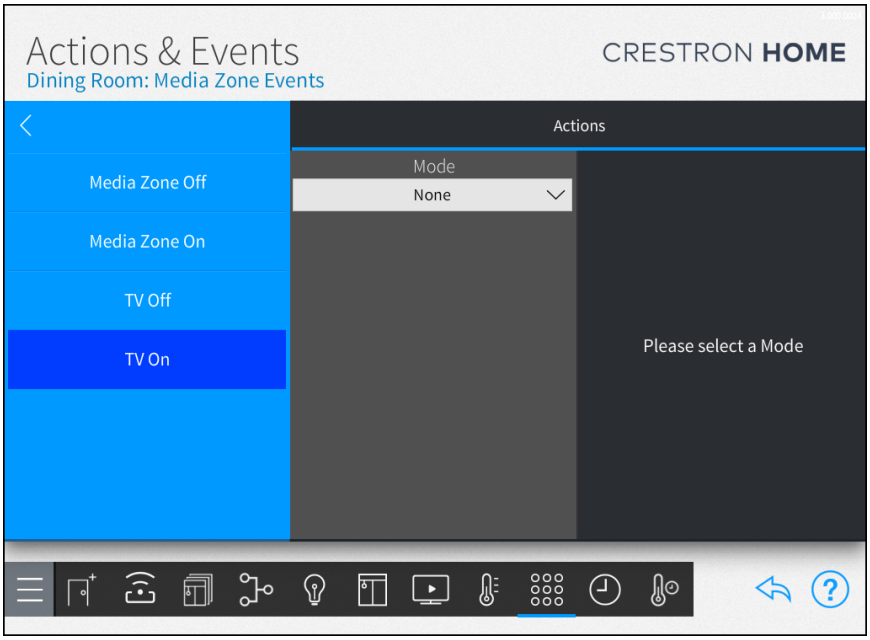
Media Zone Events are displayed when the room is configured as a media zone. To configure the room as a Media Zone, refer to Step 3: Build System on page 78.

Use the media zone configuration screen to associate scenes and other actions with media zone events.

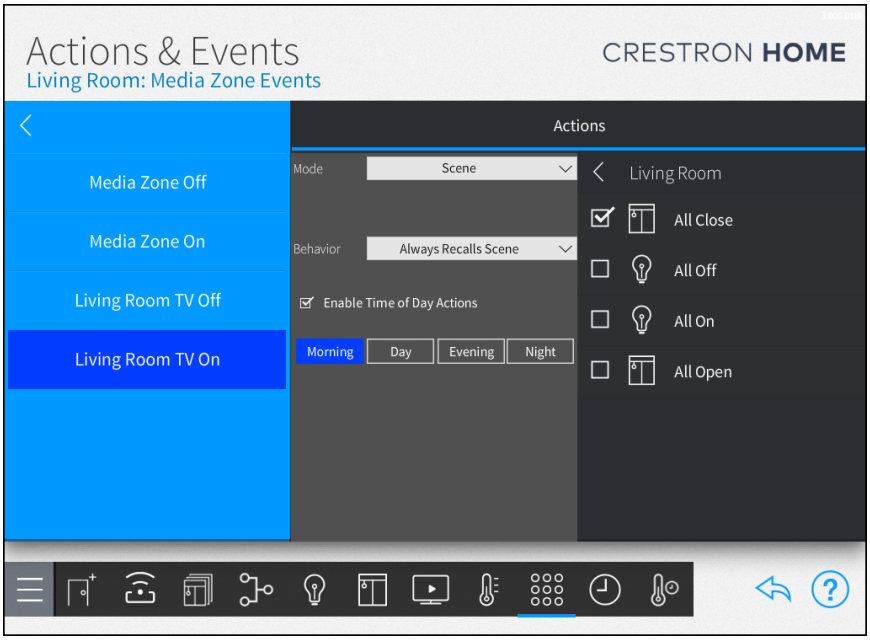
To configure a media zone event:

1. Select a room from the **Select a Room** menu.
2. Tap **Media Zone Events** from the **Select an Item** menu.

3. The media zone events that are available for the room are displayed in the menu on the left. Tap the media zone event from the menu.



4. Configure the action that is triggered when the media zone event occurs.



- **Mode:** Select the type of action that is recalled when the media zone event occurs.

  Options for **Mode** include:

  - **None:** No action is performed when the media zone event occurs.
  - **Scene:** A scene is recalled when the media zone event occurs.
  - **Quick Action:** A quick action is recalled when the media zone event occurs.
  - **External Function:** Recalls a function that is defined by an external control system, such, as an MC3.

- **Behavior:** Available when **Scene** is selected from the **Mode** drop-down menu. Sets the behavior when the media event occurs.

  Options for **Scene** include:

  - **Always Recalls Scene:** The media zone event recalls a scene.
  - **Toggles Scene/Off:** The media zone event toggles the scene on or off.
  - **Custom Toggle:** The media zone event toggles either the on actions or off actions.

- **Enable Time of Day Actions:** Available when **Scene** is selected from the **Mode** drop-down menu. Enables different scenes to be recalled based on the time of the day. Set a scene for Morning, Day, Evening, and Night.

5. Use the right screen panel to associate an action with the media zone event.

   NOTES:

   - The same action or scene may be assigned to multiple media zone events.
   - Multiple actions or scenes may also be assigned to the same media zone event.

   - Use the **Select Room Below** menu to select the room that contains the desired action or scene.

     NOTE: Only rooms that contain selectable actions appear on the **Select Room Below** menu. Once an action is selected from a room, the room name is shown with blue text in the **Select Room Below** menu.

   - Tap on a room name to display a list of actions that may be selected for the room. The type of action that is displayed is set using the **Mode** drop-down menu in the center panel.
   - Tap the check box next to an action to add or remove that action from the media zone event. A checked box indicates that the action is set to occur when the media zone event occurs.
   - Tap the back arrow (<) next to the room name to return to the **Select Room Below** menu.

Configure Keypads

To configure a keypad, identify the color, button layout, button labels (engraving), and button actions.

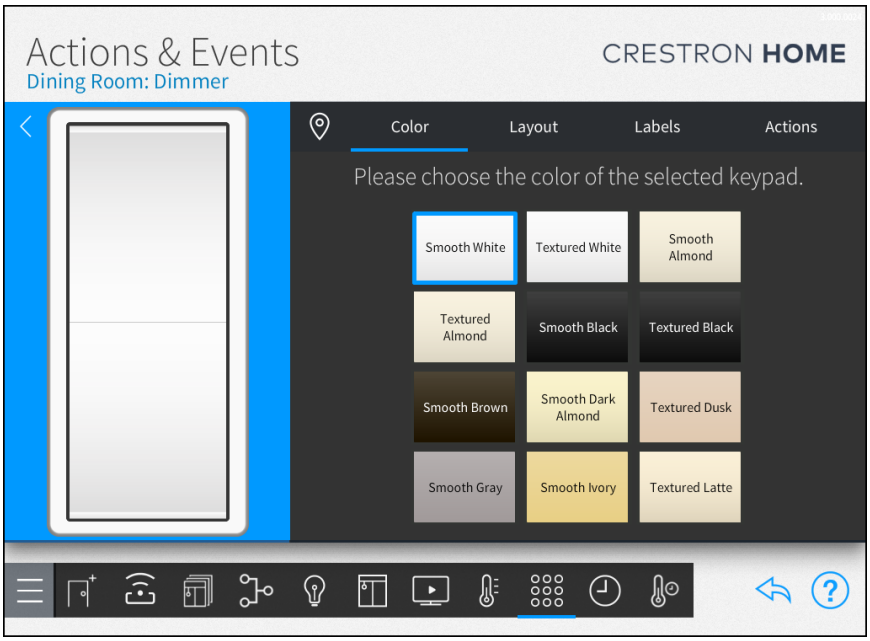
NOTE: Tap the location button to turn on the location feature for the keypad (if supported), which may be used to locate the device in the room.

Select the Keypad Color

When custom-engraved keypad buttons are ordered through myCrestron, the button color is generated automatically based on the selected color.

NOTE: Confirm that the keypad color selected with the Color tab matches the actual keypad color before ordering custom-engraved buttons.

1. Tap the **Color** tab to set the keypad color.

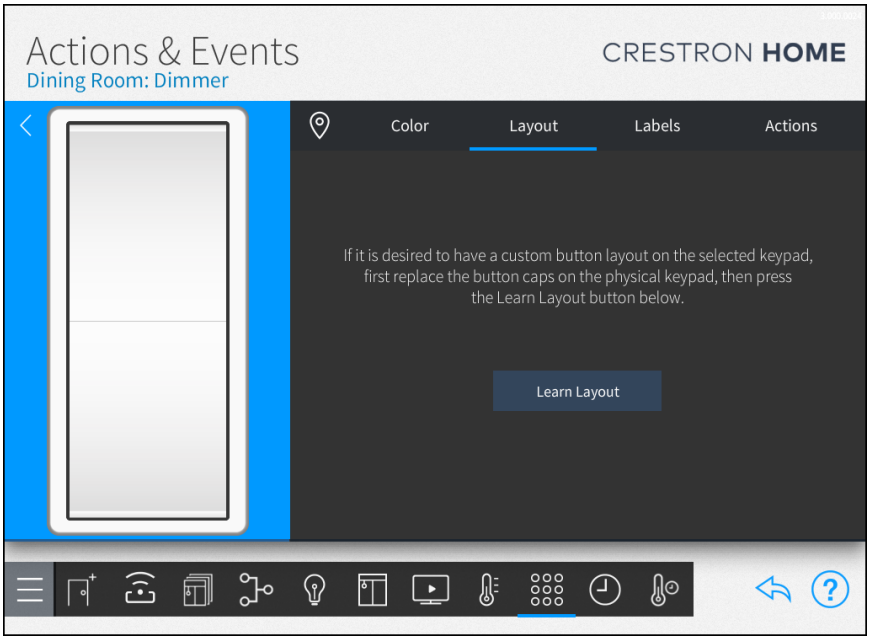


2. Tap a color to choose the color of the selected keypad. The keypad on the left changes color and the selected color is highlighted.

Configure the Keypad Button Layout

NOTE: Install the custom buttons on the keypad prior to making this selection.

1. Tap the **Layout** tab to set the button layout.



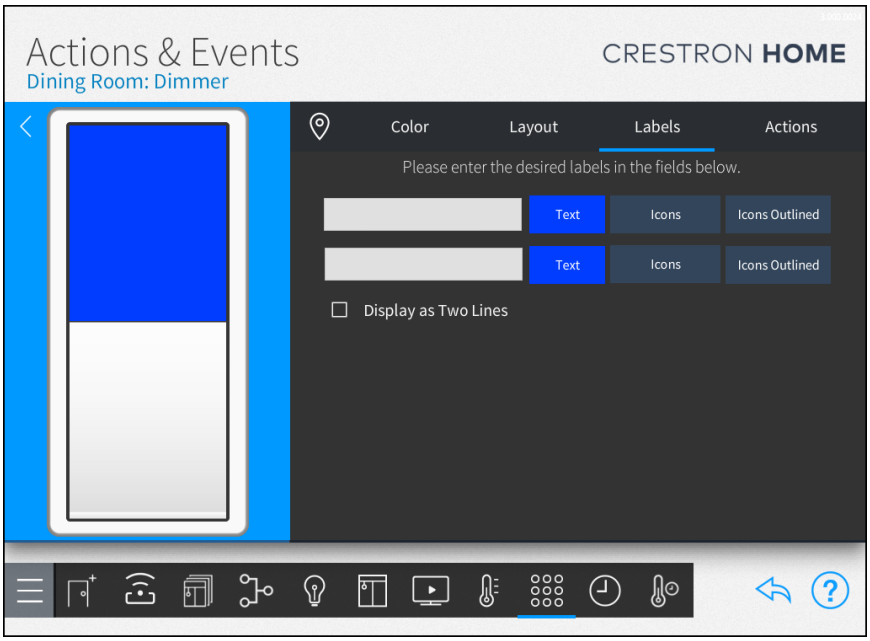
2. Tap **Learn Layout** to set the button layout by pressing the buttons that are installed on the keypad.
3. Follow the instructions on the screen to set the new layout for the keypad.
4. Tap **Done**.

Assign Custom Labels (Engraving) to the Keypad Buttons

NOTES:

- For more information on ordering custom labels using the myCrestron service, refer to Configure Keypads on page 116.
- The layout for the keypad must be set before labeling the keypad buttons.

1. Tap the **Labels** tab.

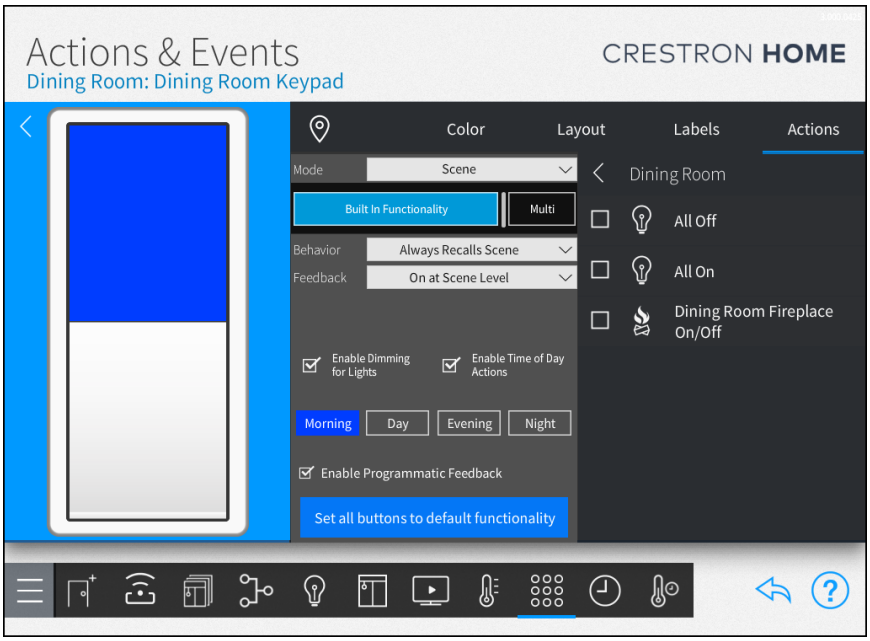


2. Select a button to label. The selected button is highlighted.
3. Label the button using text, icons, or icons outlined. A combination of text and icons can be used to label each button. To display the labels on two lines, check the box next to **Display as Two Lines**.
   - **Text:** Enter custom text to display on the button.
   - **Icons:** Use the on-screen icons to display on the button. Icons are filled in with a solid color.
   - **Icons Outlined:** Use the on-screen icons to display on the button. Icons Outlined are not filled in with a solid color.

     NOTE: Icons and icons outlined options cannot be mixed on the same button.

Configure the Keypad Actions

1. Tap the **Actions** tab to program the keypad buttons to recall scenes and other actions.



2. Select a button to assign an action. The selected button is highlighted.
3. Select a button mode from the **Mode** drop-down list. The mode determines the type of action that is recalled when the button is pressed. Options for **Mode** include:
   - **None:** No action is performed when the button is pressed.
   - **Scene:** A scene is recalled when the button is pressed. For details, refer to Mode: Scene on page 121.
   - **Quick Action:** A quick action is recalled when the button is pressed. For details, refer to Mode: Quick Actions on page 125.
   - **Lighting Load:** A lighting load is controlled when the button is pressed. For details, refer to Mode: Lighting Load on page 130.
   - **Shade Load:** A shade is controlled when the button is pressed. For details, refer to Mode: Shade Load on page 131.
   - **Lighting Room:** All of the lighting loads in the room(s) are controlled. For details, refer to Mode: Lighting Room on page 132.
   - **Shade Room:** All of the shades in the room(s) are controlled. For details, refer to Mode: Shade Room on page 133.
   - **Lighting Raise:** All of the lighting loads in the room(s) are raised. For details, refer to Mode: Lighting Raise / Lighting Lower on page 134.
   - **Lighting Lower:** All of the lighting loads in the room(s) are lowered. For details, refer to Mode: Lighting Raise / Lighting Lower on page 134.

- **Shade Raise:** All of the shades in the room(s) are raised. For details, refer to Mode: Shade Raise / Shade Lower on page 135.
- **Shade Lower:** All of the shades in the room(s) are lowered. For details, refer to Mode: Shade Raise / Shade Lower on page 135.
- **Ceiling Fan:** A ceiling fan is controlled when the button is pressed. The button presses can be configured to cycle through all available fan speeds, increase the fan speed, or decrease the fan speed. For details, refer to Mode: Ceiling Fan on page 136.
- **Volume Raise:** The volume in the room is raised. For details, refer to Mode: Volume Raise / Volume Lower on page 138.
- **Volume Lower:** The volume in the room is lowered. For details, refer to Mode: Volume Raise / Volume Lower on page 138.
- **Master Raise:** Raises the lights, shades, audio, or fan speed in the room depending on the item that was controlled most recently. For example, if the shade scene was recalled the shades will be raised. For details, refer to Mode: Master Raise / Master Lower on page 139.
- **Master Lower:** Lowers the lights, shades, audio, or fan speed in the room depending on the item that was controlled most recently. For example, if a lighting scene was recalled the lights will be lowered. For details, refer to Mode: Master Raise / Master Lower on page 139.
- **Media Function** Recalls an audio function. For details, refer to Mode: Media Functions on page 140.
- **External Function:** Recalls a function that is defined by an external control system, such, as an MC3. For details, refer to Mode: External Function on page 145.

Mode: Scene

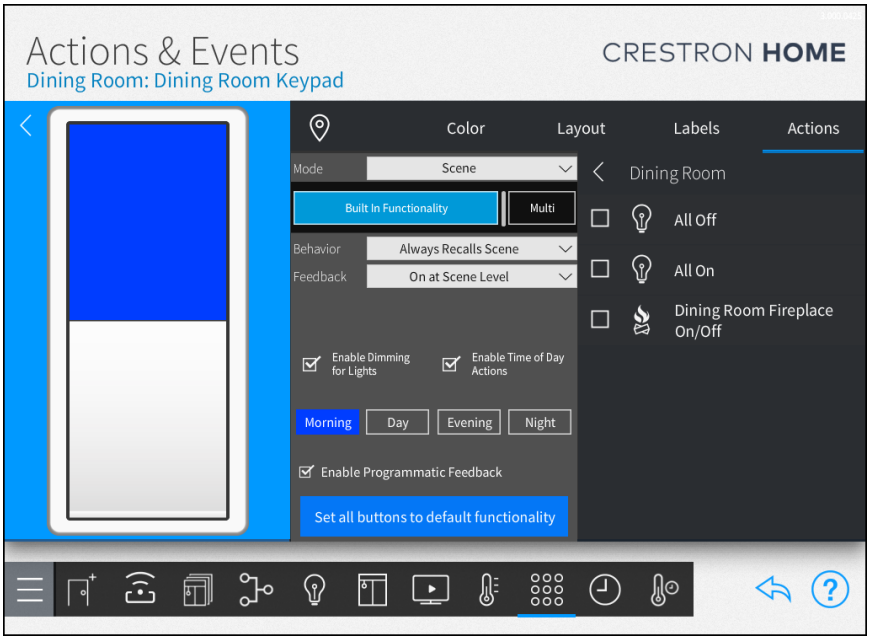
Select **Scene** from the **Mode** drop-down list to recall or toggle a scene when the button is pressed. The scene can be recalled using the built-in functionality or multi press functionality.

> **NOTE:** The **Built In Functionality** button function cannot be used with the **Multi** button function. Settings for the **Built In Functionality** button function will be lost when the **Multi** button function is selected.

- **Built In Functionality:** One button press can recall or toggle one scene.
- **Multi:** Multiple button presses can recall up to 10 scenes and provide the ability to cycle through scenes.

Built In Functionality

Tap the **Built In Functionality:** button to configure using the built-in functionality.



Behavior: The behavior defines how the scene is recalled or toggled. Select a behavior from the **Behavior** drop-down list:

- **Always Recalls Scene:** Recalls the scene.
- **Toggles Scene/Off:** Toggles the scene on and off.
- **Custom Toggle:** Toggles the On Actions and Off Actions. Assign different scenes to the On Action and Off Action.

Built-in functions are assigned for the following button presses:

- **Tap:** Recalls or toggles the scene with the defined fade time.
- **Double Tap:** Immediately recalls or toggles the scene. The fade time for the scene is bypassed.

- **Press and Hold:** When **Enable Dimming for Lights** is enabled. Raise or lower the lights. The load raises or lowers based on the action that was performed last. If the load was turned on or raised, press and hold the button to lower the light level. To turn off the lights, continue holding the button after the minimum light level is reached.

Feedback: The LED feedback behavior defines the function of the LED that is associated with the button. Select an LED feedback behavior from the **Feedback** drop-down list:

- **On at Scene Level:** The LED lights when the scene is recalled.

  NOTE: The LED turns off if the scene is modified. For example, the LED turns off if the lights or shades are raised or lowered.

- **On When any Light On:** The LED lights when any lighting load that is associated with the scene is on. For example, if a keypad button recalls the All On scene from the Whole House room, the LED lights when any light in the house is on and the LED turns off when all lights in the house are off.

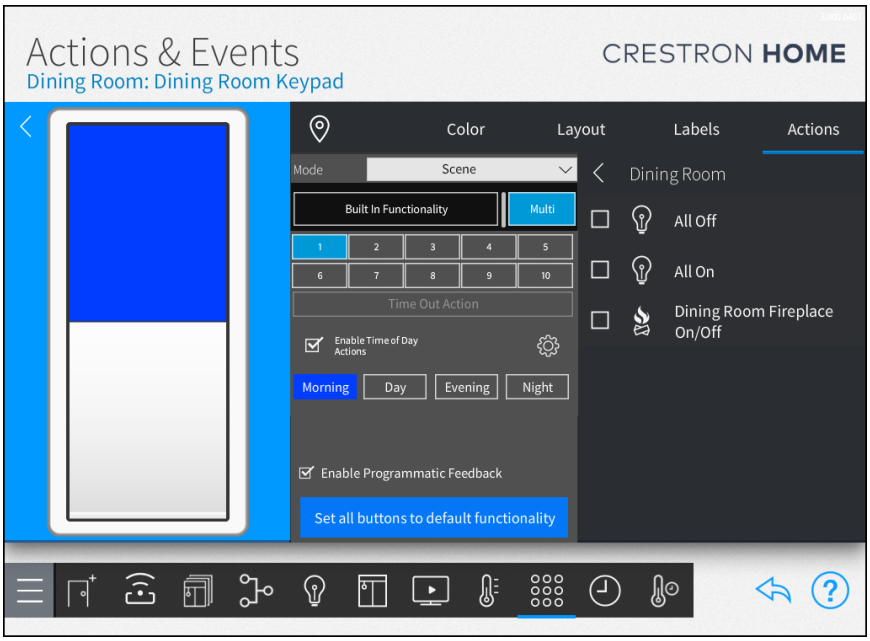
Enable Dimming for Lights: When **Enable Dimming for Lights** is enabled, press and hold the button to raise or lower the lights. If the last action performed raised the lights, the lights will be lowered.

Enable Time of Day Actions: Assign a different action for each time of day. Tap the **Morning**, **Day**, **Evening**, or **Night** button and then select the action.

Multi

Tap the **Multi** button to configure using the multi tap functionality.

NOTE: The **Multi** button function cannot be used with the **Built In Functionality** button function. Settings for the **Built In Functionality** button function will be lost when the **Multi** button function is selected.



Button Press (1-10): Assign an action for each button press. To assign an action to a button press, tap a button press number and then assign the action.

NOTES:

- The Crestron Home system maintains a count of the button presses that have occurred. When the system count matches the button press number, the action associated with the button press number is performed.
- The system count resets to one after it reaches the end of the list. For example, if an action is assigned for button press 1 through 4, the fifth button press resets the system count to one and the action assigned to button press 1 is performed.
- Button presses can be skipped. For example, if an action is assigned for button presses 1 and 5 and no action is assigned for button presses 2, 3, and 4, no action is performed when button presses 2, 3, and 4 occur.

Time Out Action: A time out action can be performed when the time out period expires. To set the time out action, tap the **Time Out Action** button and then assign an action.

NOTES:

- A time out period begins after the last button press and is used to determine how long the Crestron Home system waits for an addition button press. The default timeout period is 24 hours.
- To configure the time out period for the keypad, tap the gear button  next to the **Enable Time of Day** button.
    - To set a custom time out period, deselect the **Use System Settings** check box and then enter the time out period in the **Hours**, **Minutes**, and **Seconds** text boxes.
    - To use the system wide settings, select the **Use System Settings** check box.
    - The maximum time out period is 24 hours. To set the time out period to 24 hours, type **0** in the **Hours**, **Minutes**, and **Seconds** text boxes.

Mode: Quick Actions

Select **Quick Actions** from the **Mode** drop-down list to recall a quick action when the button is pressed. The quick action can be recalled using the tap, double tap, press and hold, and multi-press functionality.

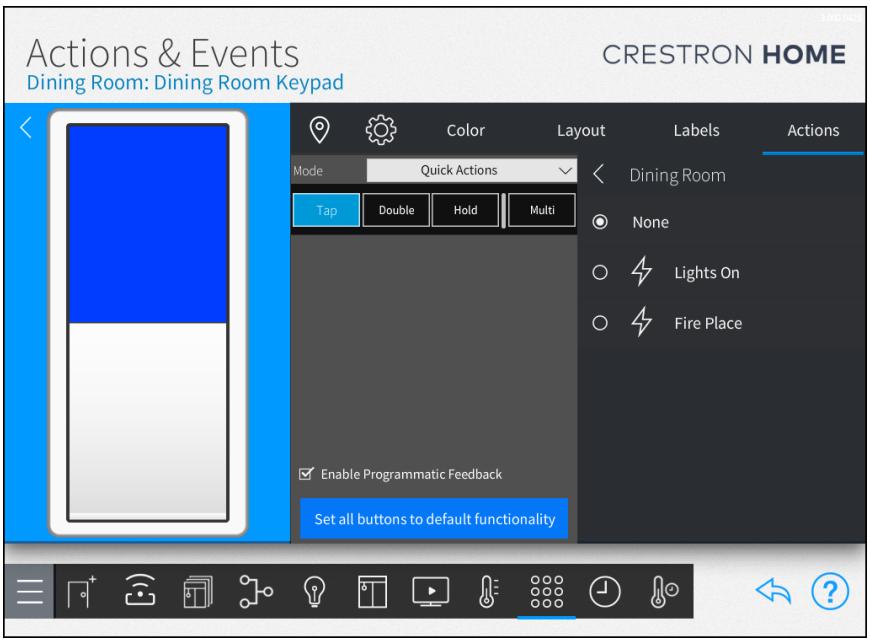
NOTES:

- Assign different actions to the **Tap**, **Double**, and **Hold** button functions to recall different actions with the same button.
- The **Tap**, **Double**, and **Hold** button functions cannot be used with the **Multi** button function. Settings for the **Tap**, **Double**, and **Hold** button functions will be lost when the **Multi** button function is selected.

- **Tap:** One button press to recall the quick action.
- **Double:** Two button presses to recall the quick action.
- **Hold:** Press and hold the button to recall the quick action.
- **Multi:** Multiple button presses can recall up to 10 quick actions and provide the ability to cycle through quick actions.

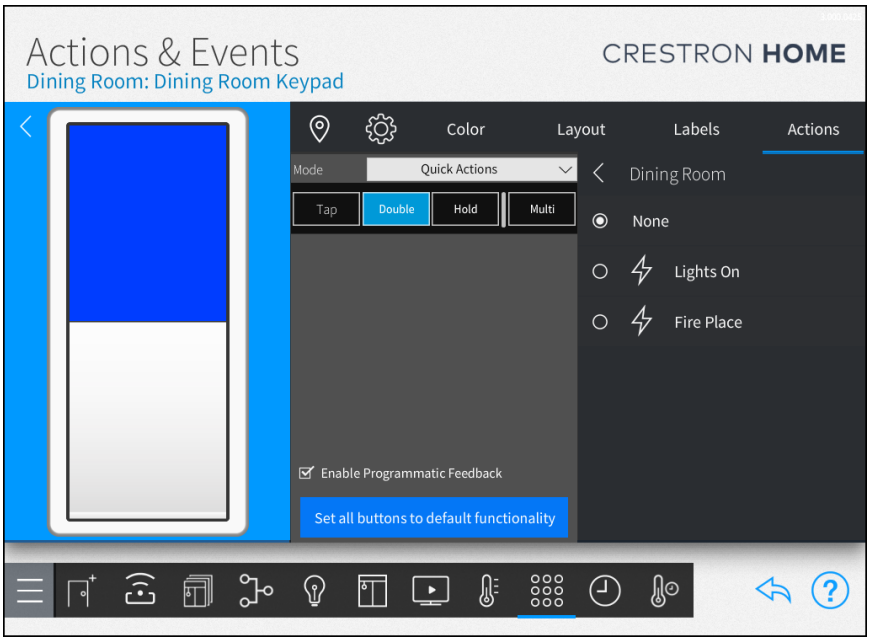
Tap

To assign a quick action to a single button press (single tap), tap the **Tap** button and then select a quick action.



Double

To assign a quick action to a double button press (double tap), tap the **Double** button and then select a quick action.



Tap the gear button next to the location button to configure the double tap settings for the keypad.

- **Use System Settings:** Tap the check box next to **Use System Settings** to use the delay that is set by the system. For details, refer to Keypad Settings on page 217.
- **Wait For Double Tap:** Available when **Use System Settings** is not checked. Tap the check box next to **Wait For Double Tap** to enable the wait for double tap function. The Wait for Double Tap function determines if the Crestron Home system triggers the Tap button action or the Double Tap button action. The delay is the amount of time (in seconds) that the system waits after a button press to determine if a subsequent button press is a double tap. The values can be set between 0.2 and 1 second.

  For example:

  - Tap button action is set to route video to a bedroom.
  - Double Tap button action is set to route audio to a bedroom.

  When Wait for Double Tap is enabled:

  NOTE: The Tap button action is not triggered if the button is pressed twice within the delay time.

  - A single button press will route video to the bedroom if the room is off (Tap button action).

- Two button presses will route audio to the bedroom (Double Tap button action).

When Wait for Double Tap is disabled:

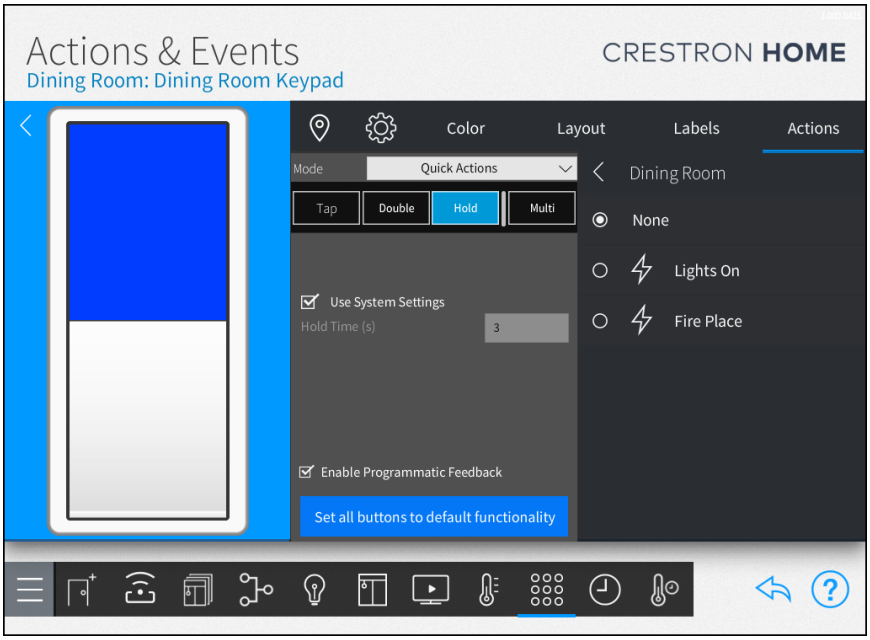
NOTE: The Crestron Home system registers both the single and double button presses and triggers both actions.

- A single button press will route video to the bedroom if the room is off (Tap button action).
- Two button presses will route video to the bedroom if the room is off (Tap button action) and then will route audio to the bedroom if the room is off (Double Tap button action).

- **Hold Time:** Available when **Use System Settings** is not checked. The amount of time (in seconds) that a button must be pressed during a press-and-hold operation before the Hold button action is performed.
- **Time Out:** Available when **Use System Settings** is not checked. The amount of time (in hours, minutes, and seconds) that the system waits to determine if the Multi Tap button action is performed.

Hold

To assign a quick action to a press-and-hold button press, tap the **Hold** button and then select a quick action.



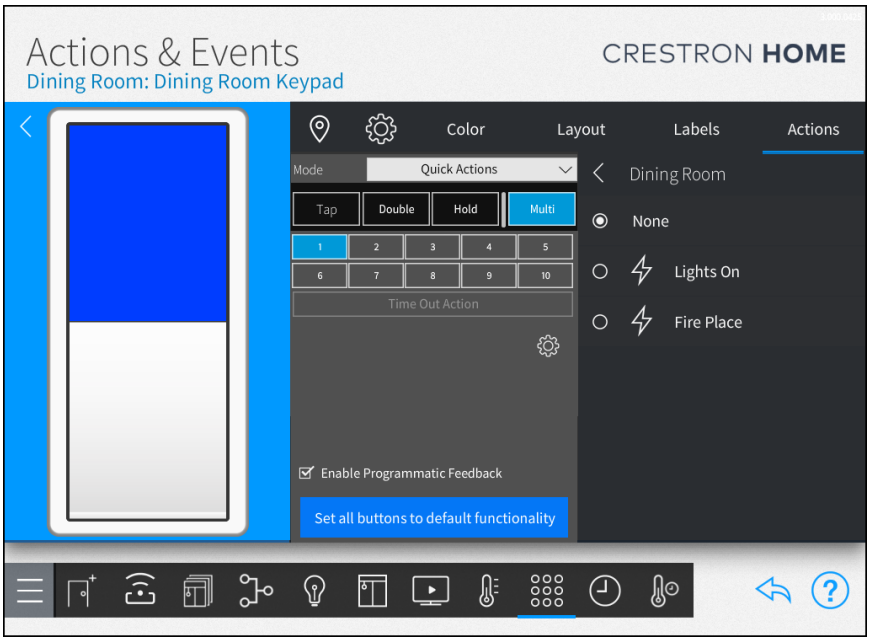
To set a custom hold time for the button, deselect the **Use System Settings** check box and then enter the hold time (seconds) in the **Hold Time** text box.

NOTE: A custom hold time can be set for each button on the keypad.

Multi

To assign multiple quick actions to a series of button presses, tap the **Multi** button and then select a quick action.

NOTE: The **Multi** button function cannot be used with the **Tap**, **Double**, and **Hold** button functions. Settings for the **Tap**, **Double**, and **Hold** button functions will be lost when the **Multi** button function is selected.



Button Press (1-10): Assign an action for each button press. To assign an action to a button press, tap a button press number and then assign the action.

NOTES:

- The Crestron Home system maintains a count of the button presses that have occurred. When the system count matches the button press number, the action associated with the button press number is performed.
- The system count resets to one after it reaches the end of the list. For example, if an action is assigned for button press 1 through 4, the fifth button press resets the system count to one.and the action assigned to button press 1 is performed.
- Button presses can be skipped. For example, if an action is assigned for button presses 1 and 5 and no action is assigned for button presses 2, 3, and 4, no action is performed when button presses 2, 3, and 4 occur.

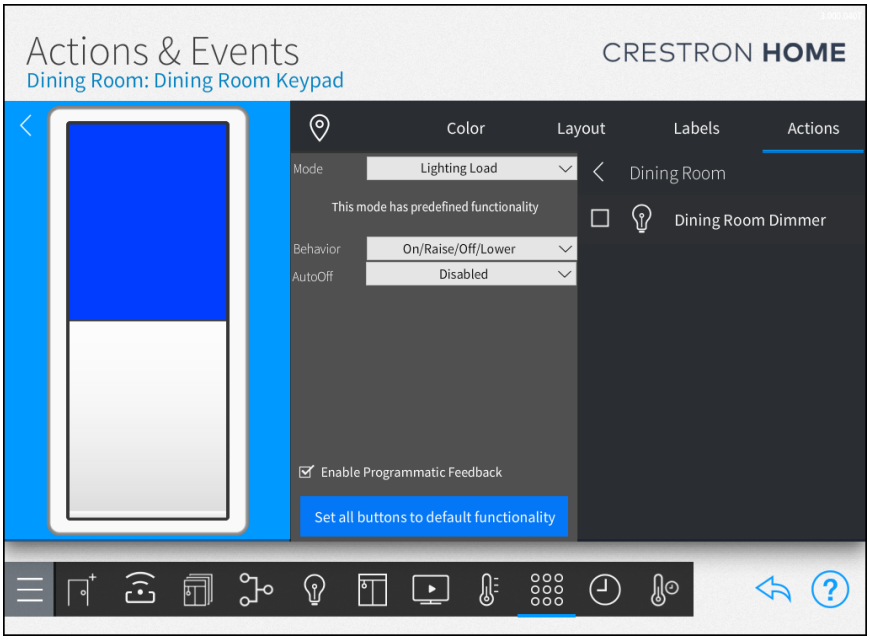
Time Out Action: A time out action can be performed when the time out period expires. To set the time out action, tap the **Time Out Action** button and then assign an action.

NOTES:

- A time out period begins after the last button press and is used to determine how long the Crestron Home system waits for an addition button press. The default timeout period is 24 hours.
- To configure the time out period.for the keypad, tap the gear button  next to the **Enable Time of Day** button.
    - To set a custom time out period, deselect the **Use System Settings** check box and then enter the time out period in the **Hours**, **Minutes**, and **Seconds** text boxes.
    - To use the system wide settings, select the **Use System Settings** check box.
    - The maximum time out period is 24 hours. To set the time out period to 24 hours, type **0** in the **Hours**, **Minutes**, and **Seconds** text boxes.

Mode: Lighting Load

Select **Lighting Load** from the **Mode** drop-down list to control a lighting load when the button is pressed.



Behavior: The behavior defines how the lights are controlled. Select a button behavior from the **Behavior** drop-down list:

- **On/Raise/Off/Lower:** Toggles the load on or off or raises or lowers the lights. The lights turn on or off or raise or lower based on the action that was performed last. If the lights were turned on or raised, press the button to turn the lights off or press and hold the button to lower the lights.
- **On/Raise:** Turns the load on or raises the lights.
- **Off/Lower:** Turns the load off or lowers the lights.

Predefined functions are assigned for the following button presses:

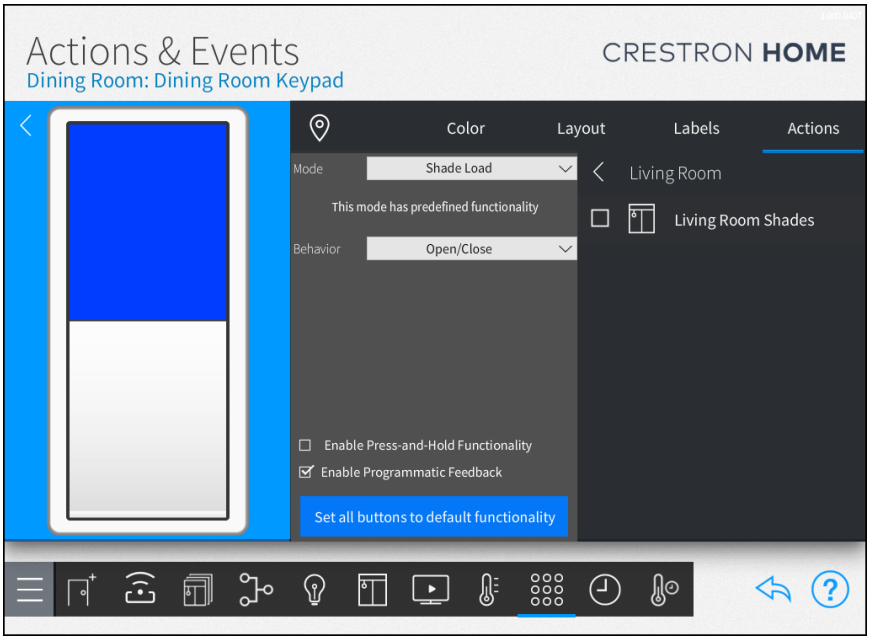
- **Tap:** Increase or decrease (jog) the light level.
- **Double Tap:** Turns the lights on or off without fade time.
- **Press and Hold:** Raise or lower the light level until the button is released or the maximum or minimum light level is reached.

> **NOTE:** To turn off the lights, continue holding the button after the minimum light level is reached.

Auto Off: Sets a timer to turn the lights off after a set period of time. To set the Auto Off time, select a time from the **Auto Off** drop-down list. The default auto off time is **Disabled**.

Mode: Shade Load

Select **Shade Load** from the **Mode** drop-down list to control a shade load when the button is pressed.



Behavior: The behavior defines how the shades are controlled. Select a button behavior from the **Behavior** drop-down list:

- **Open/Close:** Toggle the shades open or closed.
- **Open:** Open the shades.
- **Close:** Close the shades.

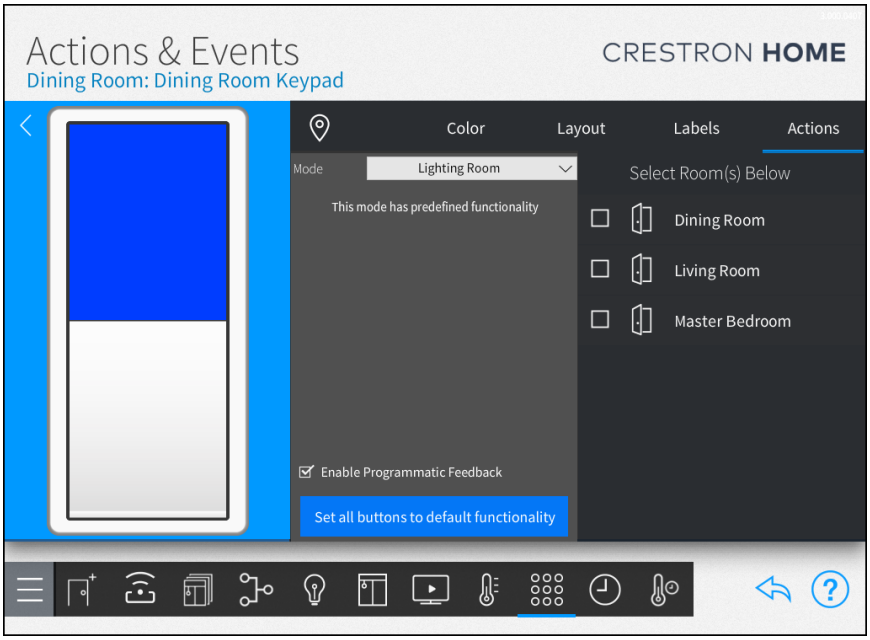
Predefined functions are assigned for the following button presses:

- **Tap:** Open or close the shades.
- **Press and Hold:** When **Enable Press-and-Hold Functionality** is enabled. Raise or lower the shades until the button is released or the upper or lower limit is reached.

> **NOTE:** To enable press-and-hold functionality, select the **Enable Press-and-Hold Functionality** check box.

Mode: Lighting Room

Select **Lighting Room** from the **Mode** drop-down list to control all of the lighting loads in the rooms.



Predefined functions are assigned for the following button presses:

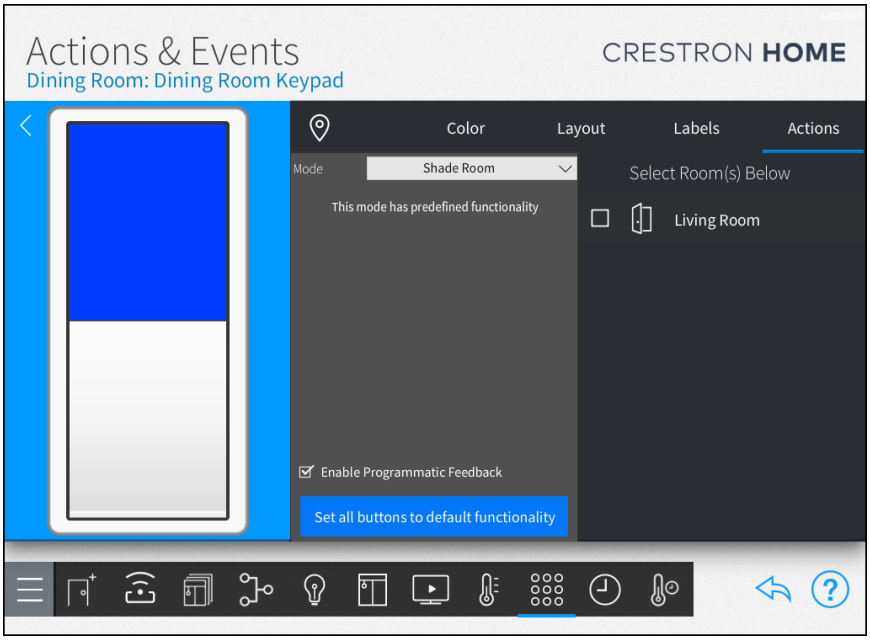
NOTE: The lights are controlled based on the action that was performed last. If the lights were turned on or raised, the next button press will turn off or lower the lights.

- **Tap:** Toggles the lights on or off with the default fade time.
- **Double Tap:** Toggles the lights on or off with no fade time.
- **Press and Hold:** Raise or lower the lights until the button is released or the maximum or minimum light level is reached.

  NOTE: To turn off the lights, continue holding the button after the minimum light level is reached.

Mode: Shade Room

Select **Shade Room** from the **Mode** drop-down list to control all of the shades in the rooms.



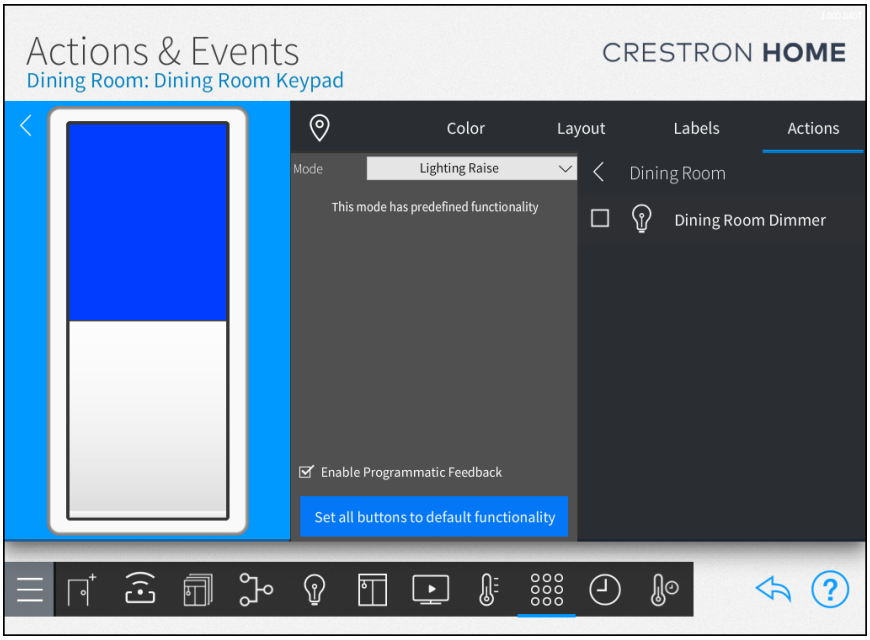
Predefined functions are assigned for the following button presses:

NOTE: The shades are controlled based on the action that was performed last. If the shades were opened or raised, the next button press will lower or close the shades.

- **Tap:** Open or close the shades.
- **Press and Hold:** Raise or lower the shades until the button is released or the upper or lower limit is reached.

Mode: Lighting Raise / Lighting Lower

Select **Lighting Raise** or **Lighting Lower** from the **Mode** drop-down list to raise or lower the lights in the room.



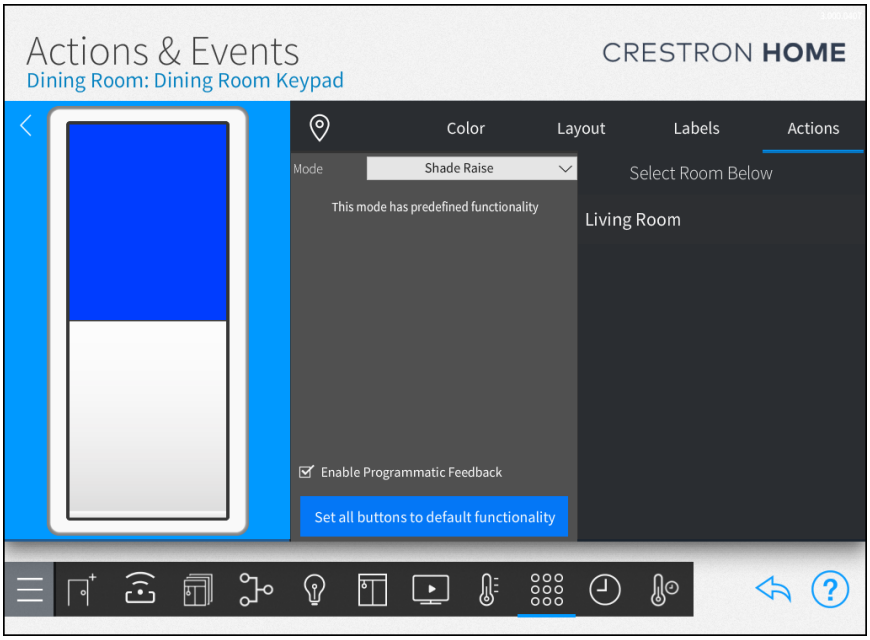
Predefined functions are assigned for the following button presses:

- **Tap:** Increase or decrease (jog) the light level.
- **Double Tap:** Turns the lights on or off with no fade time.
- **Press and Hold:** Raise or lower the light level until the button is released or the maximum or minimum light level is reached.

  NOTE: To turn off the lights, continue holding the button after the minimum light level is reached.

Mode: Shade Raise / Shade Lower

Select **Shade Raise** or **Shade Lower** from the **Mode** drop-down list to raise or lower the shades in the room.

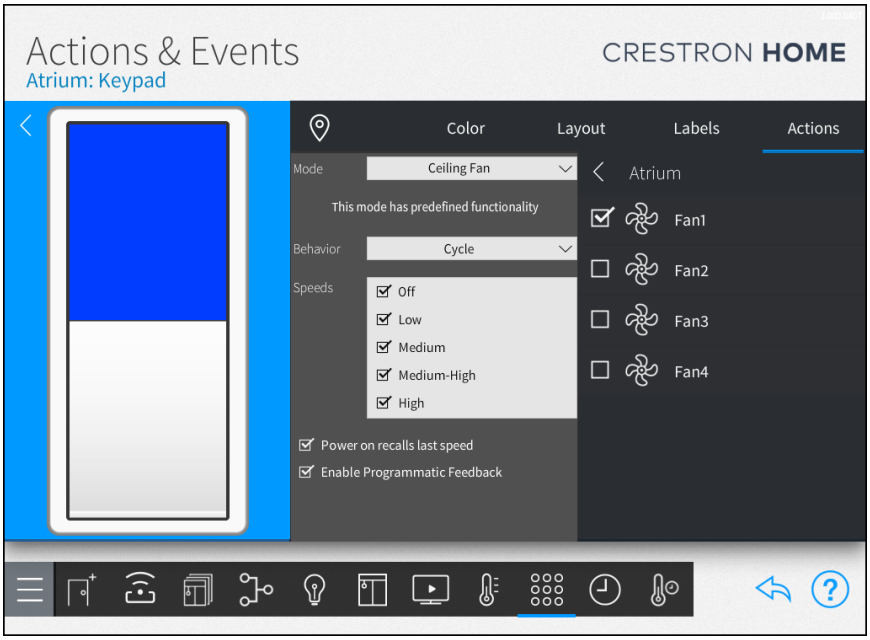


Predefined functions are assigned for the following button presses:

- **Tap:** Raise or lower (jog) the shades.
- **Press and Hold:** Raise or lower the shades until the button is released or the upper or lower limit is reached.

Mode: Ceiling Fan

Select **Ceiling Fan** from the **Mode** drop-down list to control a ceiling fan when the button is pressed.



Behavior: The behavior defines how the fans are controlled. Select a button behavior from the **Behavior** drop-down list:

- **Cycle:** Cycle through the available fan speeds. Each button press advances through the available fan speeds in the **Available Speeds** list. When the last speed in the list is reached, the next button press advances to the first option in the list.

  NOTES:

  - If multiple fans are controlled and they are operating at different speeds, a button press sets the fan speed for both fans to the first speed in the **Available Speeds** list.
  - If the **Off** speed is included in the **Available Speeds** list and five seconds pass since the last button press, a button press turns the fan off.
  - If **Power On Recalls Last Speed** is enabled and multiple fans are controlled and operating at different speeds when the room is turned off, the fans resume operating at their previously set speeds when the room is powered on.

- **Increase:** Increase the fan speed until the maximum fan speed in the list is reached.

  If the fans are operating at different speeds, pressing the button increases the fan speed for each fan independently. For example, if **High**, **Medium**, and **Low** fan speeds are available and Fan 1 is operating at **Low** and Fan 2 is operating the **Medium**, pressing the button increases the fan speed for Fan 1 to **Medium** and Fan 2 to **High**.

- **Decrease:** Decrease the fan speed until the lowest fan speed in the list is reached.

  If the fans are operating at different speeds, pressing the button decreases the fan speed for each fan independently. For example, if **High**, **Medium**, and **Low** fan speeds are available and Fan 1 is operating at **High** and Fan 2 is operating at **Medium**, pressing the button decreases the fan speed for Fan 1 to **Medium** and Fan 2 to **Low**.

Speeds: Displays the fan speeds that are available for the selected fan(s). The speeds available are populated based on the fan controller that is used and are listed in order from the slowest (Off) to the fastest fan speed. The default setting is to include all of the available fan speeds in the **Speeds** list.

To exclude a fan speed from the list, deselect the check box next to the fan speed

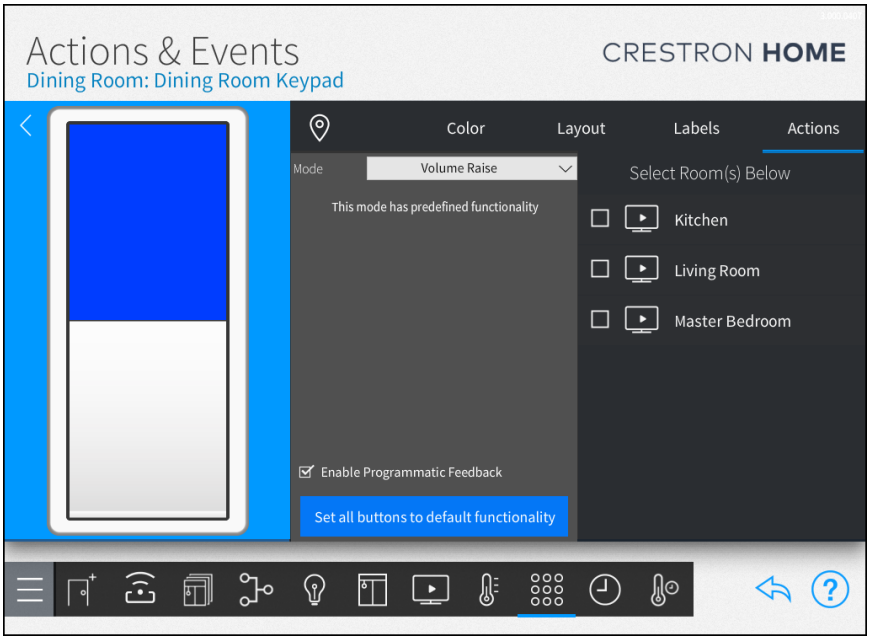
NOTES:

- If different fan controllers are used, only the fan speeds that are common between the fan controllers are displayed in the **Speeds** list.
- The fan speeds can be reordered when **Cycle** is selected. To reorder the fan speeds in the **Speeds** list, tap and hold a fan speed until it turns green and then drag it to the desired position. The **Off** speed cannot be moved.
- The **High** fan speed is not included in the **Speeds** list when **Decrease** is selected from the **Speeds** drop-down menu.
- The **Off** fan speed is not included in the **Speeds** list when **Increase** is selected from the **Speeds** drop-down menu.

Power On Recalls Last Speed: If enabled, the fans resume operating at their previously set speeds when the room is powered on. If disabled, the fans resume operating at the first speed option in the list. To disable, deselect the **Power On Recalls Last Speed** check box.

Mode: Volume Raise / Volume Lower

Select **Volume Raise** or **Volume Lower** from the **Mode** drop-down list to raise or lower the volume in the room.

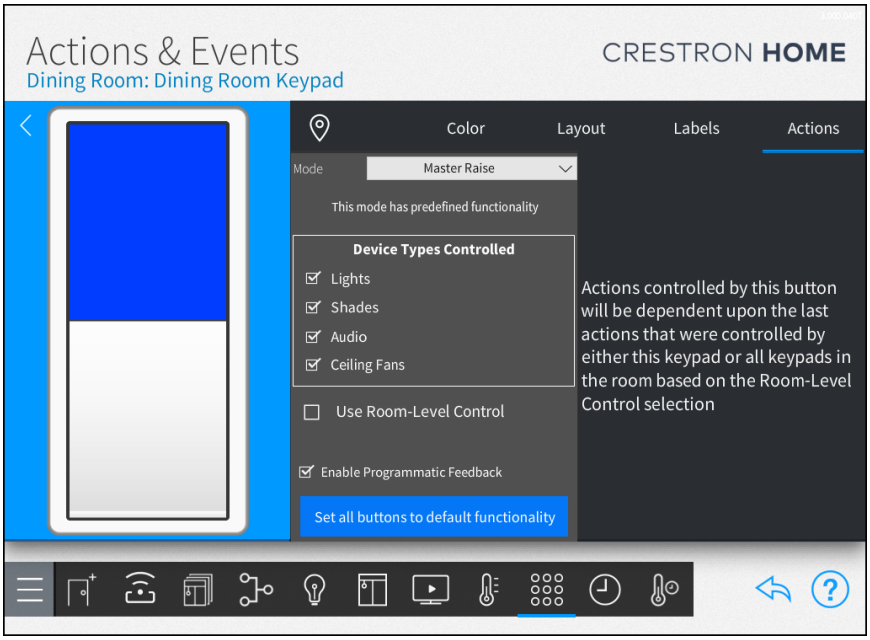


Predefined functions are assigned for the following button presses:

- **Tap:** Raise or lower (jog) the volume.
- **Press and Hold:** Raise or lower the volume until the button is released or the maximum or minimum volume is reached.

Mode: Master Raise / Master Lower

Select **Master Raise** or **Master Lower** from the **Mode** drop-down list to raise or lower the selected device types (lights, shades, audio, ceiling fans) in the room.



Predefined functions are assigned for the following button presses:

NOTE: The device type that is controlled is based on the last device type that was controlled. For example, if the shades were controlled last, the shades will be raised or lowered.

- **Tap:** Raise or lower (jog) the level for the device type.
- **Press and Hold:** Raise or lower the level for the device type until the button is released or the maximum or minimum level is reached.

Mode: Media Functions

Select **Media Functions** from the **Mode** drop-down list to recall a media function when the button is pressed. The media function can be recalled using the tap, double tap, press and hold, and multi-press functionality.

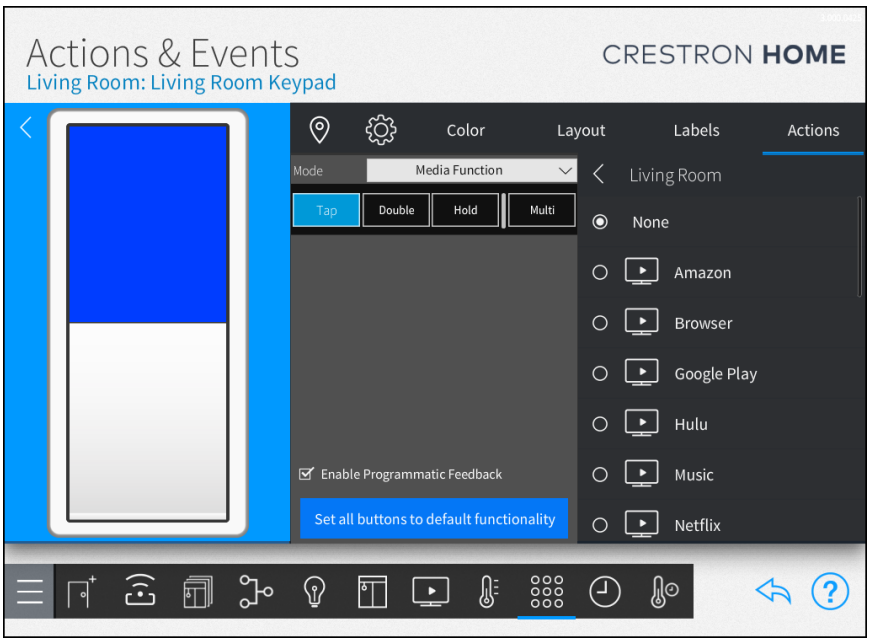
NOTES:

- Assign different actions to the **Tap**, **Double**, and **Hold** button functions to recall different actions with the same button.
- The **Tap**, **Double**, and **Hold** button functions cannot be used with the **Multi** button function. Settings for the **Tap**, **Double**, and **Hold** button functions will be lost when the **Multi** button function is selected.

- **Tap:** One button press to recall the media function.
- **Double:** Two button presses to recall the media function.
- **Hold:** Press and hold the button to recall the media function.
- **Multi:** Multiple button presses can recall up to 10 media functions and provide the ability to cycle through media functions.

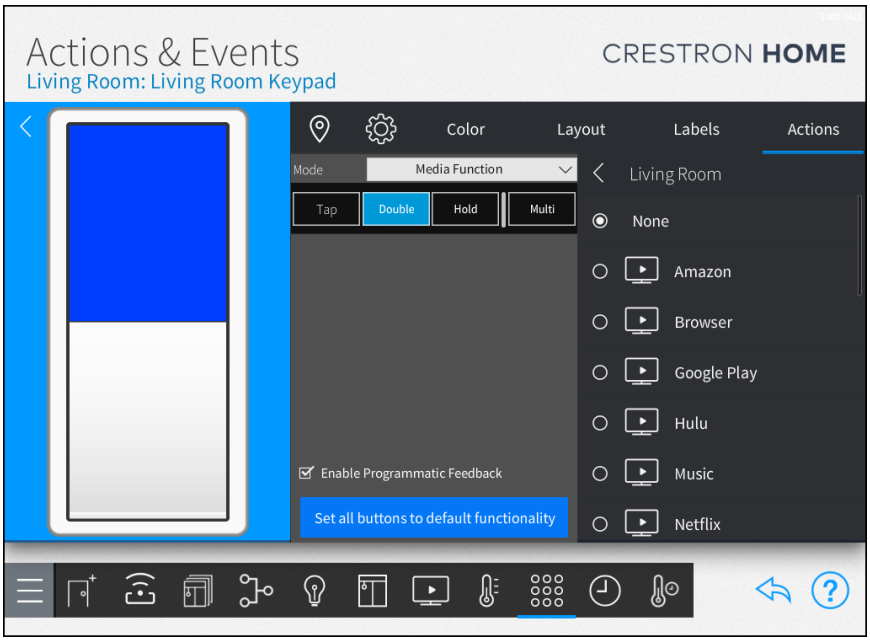
Tap

To assign a media function to a single button press (single tap), tap the **Tap** button and then select a media function.



Double

To assign a media function to a double button press (double tap), tap the **Double** button and then select a media function.



Tap the gear button next to the location button to configure the double tap settings for the keypad.

- **Use System Settings:** Tap the check box next to **Use System Settings** to use the delay that is set by the system. For details, refer to Keypad Settings on page 217.
- **Wait For Double Tap:** Available when **Use System Settings** is not checked. Tap the check box next to **Wait For Double Tap** to enable the wait for double tap function. The Wait for Double Tap function determines if the Crestron Home system triggers the Tap button action or the Double Tap button action. The delay is the amount of time (in seconds) that the system waits after a button press to determine if a subsequent button press is a double tap. The values can be set between 0.2 and 1 second.

  For example:

  - Tap button action is set to route video to a bedroom.
  - Double Tap button action is set to route audio to a bedroom.

  When Wait for Double Tap is enabled:

  NOTE: The Tap button action is not triggered if the button is pressed twice within the delay time.

  - A single button press will route video to the bedroom if the room is off (Tap button action).

- Two button presses will route audio to the bedroom (Double Tap button action).

When Wait for Double Tap is disabled:

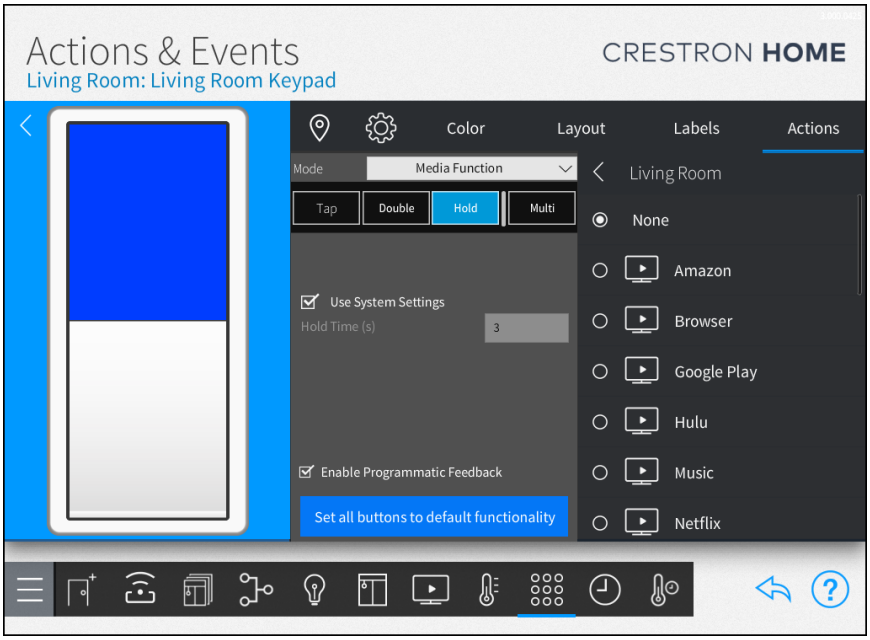
NOTE: The Crestron Home system registers both the single and double button presses and triggers both actions.

- A single button press will route video to the bedroom if the room is off (Tap button action).
- Two button presses will route video to the bedroom if the room is off (Tap button action) and then will route audio to the bedroom if the room is off (Double Tap button action).

- **Hold Time:** Available when **Use System Settings** is not checked. The amount of time (in seconds) that a button must be pressed during a press-and-hold operation before the Hold button action is performed.
- **Time Out:** Available when **Use System Settings** is not checked. The amount of time (in hours, minutes, and seconds) that the system waits to determine if the Multi Tap button action is performed.

Hold

To assign a media function to a press-and-hold button press, tap the **Hold** button and then select a media function.



To set a custom hold time for the button, deselect the **Use System Settings** check box and then enter the hold time (seconds) in the **Hold Time** text box.

NOTE: A custom hold time can be set for each button on the keypad.

Multi

To assign multiple media functions to a series of button presses, tap the **Multi** button and then select a media function.

NOTE: The **Multi** button function cannot be used with the **Tap**, **Double**, and **Hold** button functions. Settings for the **Tap**, **Double**, and **Hold** button functions will be lost when the **Multi** button function is selected.

Button Press (1-10): Assign an action for each button press. To assign an action to a button press, tap a button press number and then assign the action.

NOTES:

- The Crestron Home system maintains a count of the button presses that have occurred. When the system count matches the button press number, the action associated with the button press number is performed.
- The system count resets to one after it reaches the end of the list. For example, if an action is assigned for button press 1 through 4, the fifth button press resets the system count to one.and the action assigned to button press 1 is performed.
- Button presses can be skipped. For example, if an action is assigned for button presses 1 and 5 and no action is assigned for button presses 2, 3, and 4, no action is performed when button presses 2, 3, and 4 occur.

Time Out Action: A time out action can be performed when the time out period expires. To set the time out action, tap the **Time Out Action** button and then assign an action.

NOTES:

- A time out period begins after the last button press and is used to determine how long the Crestron Home system waits for an addition button press. The default timeout period is 24 hours.
- To configure the time out period.for the keypad, tap the gear button  next to the **Enable Time of Day** button.
    - To set a custom time out period, deselect the **Use System Settings** check box and then enter the time out period in the **Hours**, **Minutes**, and **Seconds** text boxes.
    - To use the system wide settings, select the **Use System Settings** check box.
    - The maximum time out period is 24 hours. To set the time out period to 24 hours, type **0** in the **Hours**, **Minutes**, and **Seconds** text boxes.

Mode: External Function

Select **Media Functions** from the **Mode** drop-down list to recall an external function when the button is pressed. The external function can be recalled using the tap, double tap, press and release, and multi-press functionality.

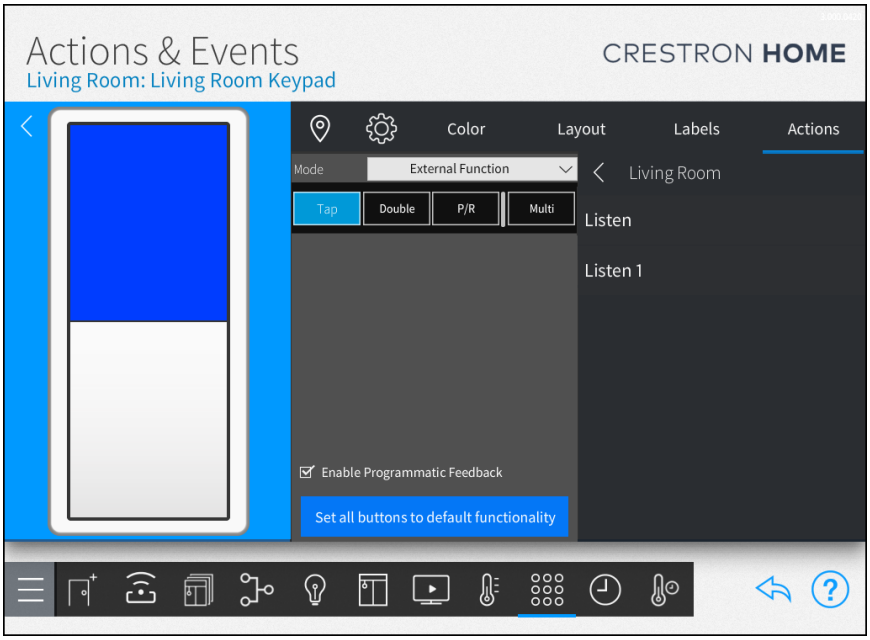
NOTES:

- Assign different actions to the **Tap**, **Double**, and **P/R** button functions to recall different actions with the same button.
- The **Tap**, **Double**, and **P/R** button functions cannot be used with the **Multi** button function. Settings for the **Tap**, **Double**, and **P/R** button functions will be lost when the **Multi** button function is selected.

- **Tap:** One button press to recall the external function.
- **Double:** Two button presses to recall the external function.
- **P/R:** Press and hold the button to recall the external function. The external function is stopped when the button is released.
- **Multi:** Multiple button presses can recall up to 10 external functions and provide the ability to cycle through external functions.

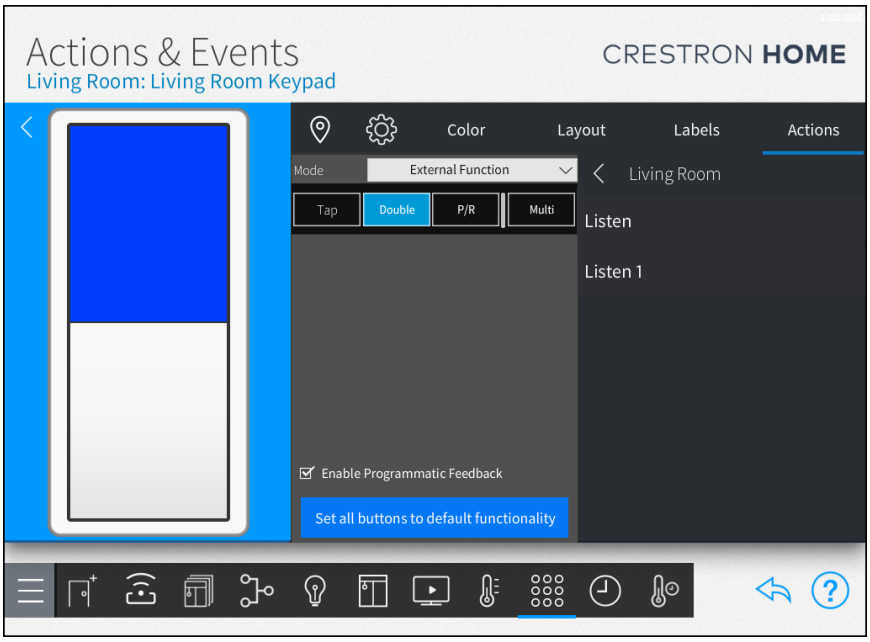
Tap

To assign an external function to a single button press (single tap), tap the **Tap** button and then select an external function.



Double

To assign an external function to a double button press (double tap), tap the **Double** button and then select an external function.



Tap the gear button next to the location button to configure the double tap settings for the keypad.

- **Use System Settings:** Tap the check box next to **Use System Settings** to use the delay that is set by the system. For details, refer to Keypad Settings on page 217.
- **Wait For Double Tap:** Available when **Use System Settings** is not checked. Tap the check box next to **Wait For Double Tap** to enable the wait for double tap function. The Wait for Double Tap function determines if the Crestron Home system triggers the Tap button action or the Double Tap button action. The delay is the amount of time (in seconds) that the system waits after a button press to determine if a subsequent button press is a double tap. The values can be set between 0.2 and 1 second.

  For example:

  - Tap button action is set to route video to a bedroom.
  - Double Tap button action is set to route audio to a bedroom.

  When Wait for Double Tap is enabled:

  NOTE: The Tap button action is not triggered if the button is pressed twice within the delay time.

  - A single button press will route video to the bedroom if the room is off (Tap button action).

- Two button presses will route audio to the bedroom (Double Tap button action).

When Wait for Double Tap is disabled:

> **NOTE:** The Crestron Home system registers both the single and double button presses and triggers both actions.

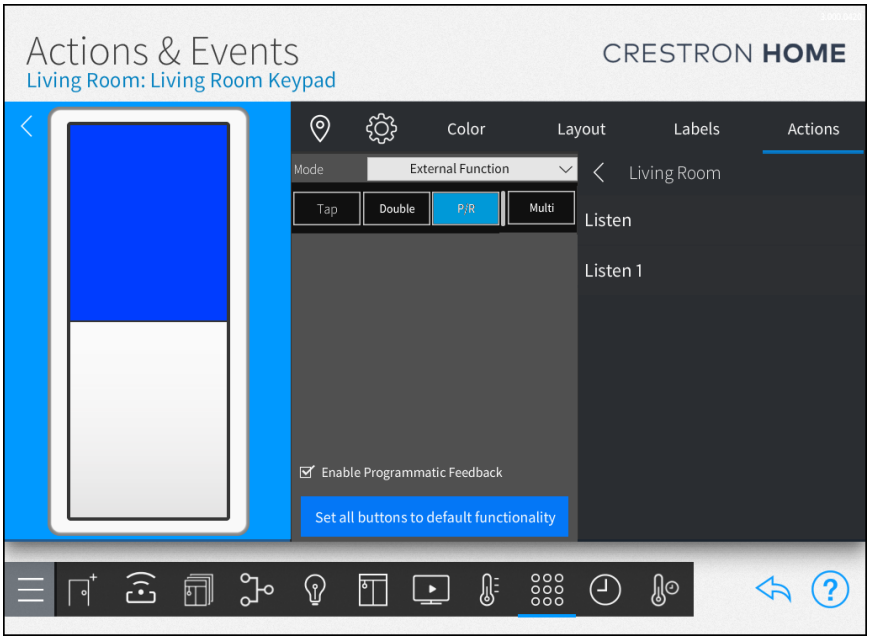
- A single button press will route video to the bedroom if the room is off (Tap button action).
- Two button presses will route video to the bedroom if the room is off (Tap button action) and then will route audio to the bedroom if the room is off (Double Tap button action).

- **Hold Time:** Available when **Use System Settings** is not checked. The amount of time (in seconds) that a button must be pressed during a press-and-hold operation before the Hold button action is performed.
- **Time Out:** Available when **Use System Settings** is not checked. The amount of time (in hours, minutes, and seconds) that the system waits to determine if the Multi Tap button action is performed.

P/R

To assign an external function to a press and release, tap the **P/R** button and then select an external function.

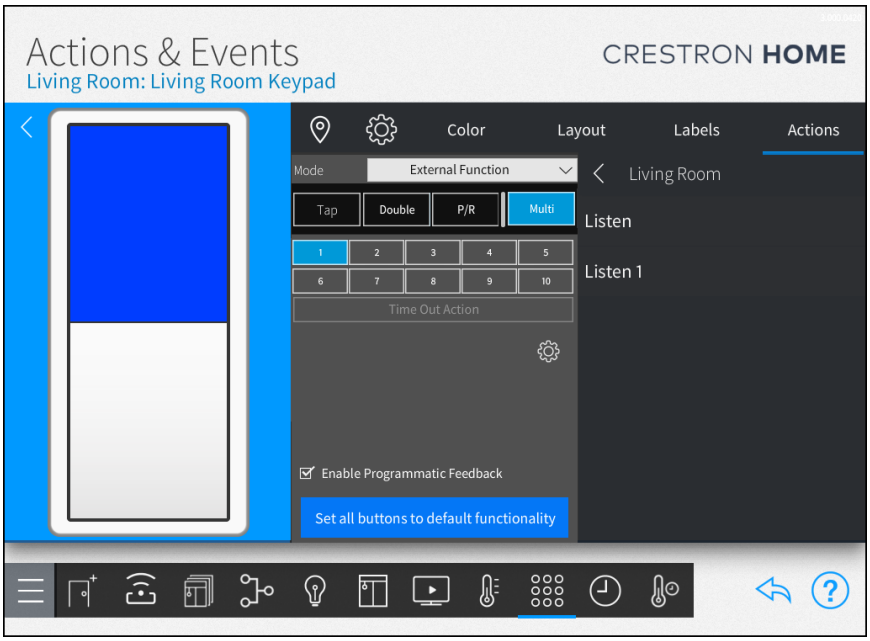
> **NOTE:** The P/R function is executed for however long the button is pressed for.



Multi

To assign multiple external functions to a series of button presses, tap the **Multi** button and then select an external function.

NOTE: The **Multi** button function cannot be used with the **Tap**, **Double**, and **P/R** button functions. Settings for the **Tap**, **Double**, and **P/R** button functions will be lost when the **Multi** button function is selected.



Button Press (1-10): Assign an action for each button press. To assign an action to a button press, tap a button press number and then assign the action.

NOTES:

- The Crestron Home system maintains a count of the button presses that have occurred. When the system count matches the button press number, the action associated with the button press number is performed.
- The system count resets to one after it reaches the end of the list. For example, if an action is assigned for button press 1 through 4, the fifth button press resets the system count to one.and the action assigned to button press 1 is performed.
- Button presses can be skipped. For example, if an action is assigned for button presses 1 and 5 and no action is assigned for button presses 2, 3, and 4, no action is performed when button presses 2, 3, and 4 occur.

Time Out Action: A time out action can be performed when the time out period expires. To set the time out action, tap the **Time Out Action** button and then assign an action.

NOTES:

- A time out period begins after the last button press and is used to determine how long the Crestron Home system waits for an addition button press. The default timeout period is 24 hours.
- To configure the time out period.for the keypad, tap the gear button  next to the **Enable Time of Day** button.
    - To set a custom time out period, deselect the **Use System Settings** check box and then enter the time out period in the **Hours**, **Minutes**, and **Seconds** text boxes.
    - To use the system wide settings, select the **Use System Settings** check box.
    - The maximum time out period is 24 hours. To set the time out period to 24 hours, type **0** in the **Hours**, **Minutes**, and **Seconds** text boxes.

Configure Horizon™ Keypads

To configure a Horizon™ keypad, identify the color, button layout, button labels (engraving), and button actions.

NOTES:

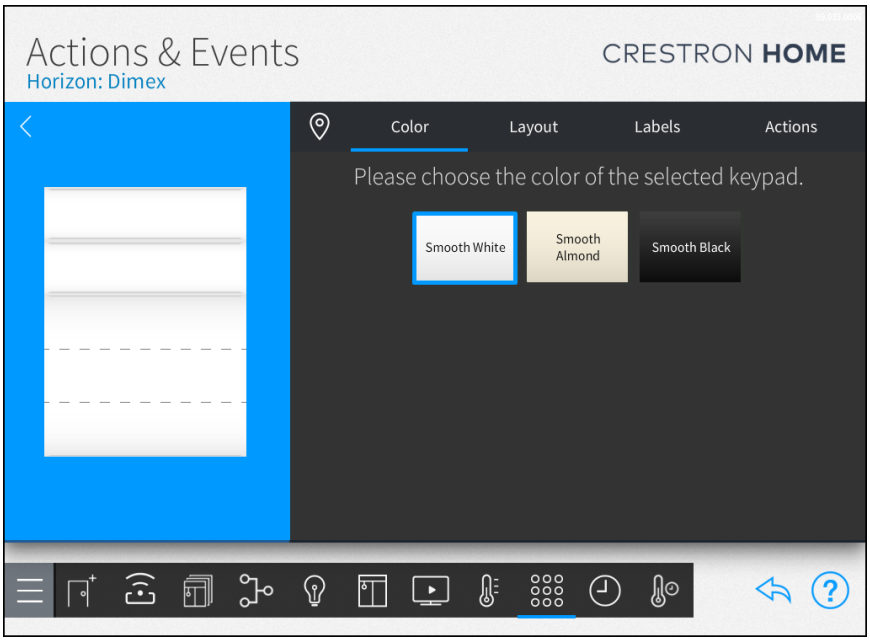
- Tap the location button to turn on the location feature for the keypad (if supported), which may be used to locate the device in the room.
- To change the color of the LED, refer to the documentation provided with the Horizon keypad, dimmer, or switch.
- The LEDs on the HZ-KPEX and HZ-AUX keypads are disabled by default. To enable the LEDs, calibrate the light sensor. For details, refer to Configure the Device Settings for Horizon Keypads on page 427.

Select the Keypad Color

When custom-engraved keypad buttons are ordered through myCrestron, the button color is generated automatically based on the selected color.

NOTE: Confirm that the keypad color selected with the Color tab matches the actual keypad color before ordering custom-engraved buttons.

1. Tap the **Color** tab to set the keypad color.

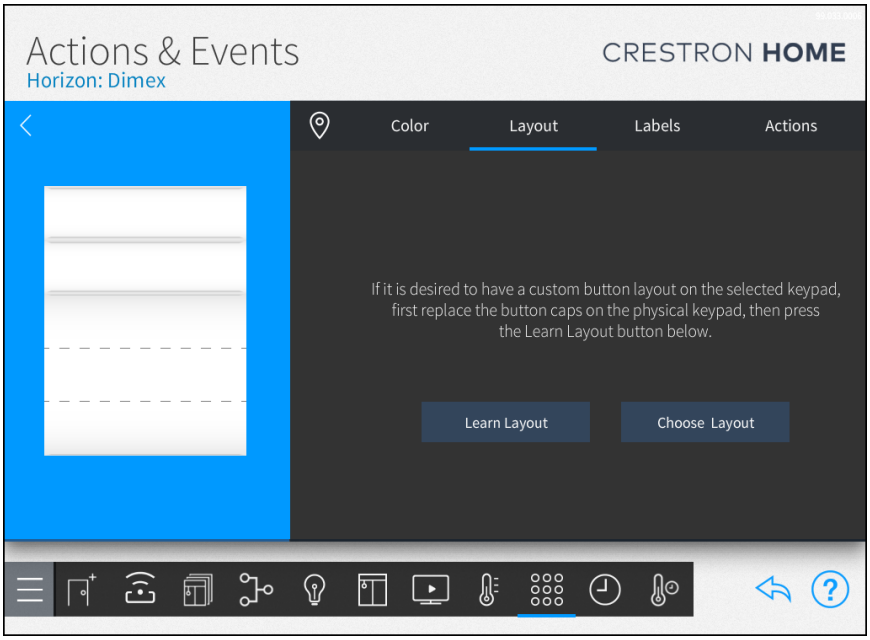


2. Tap a color to choose the color of the selected keypad. The keypad on the left changes color and the selected color is highlighted.

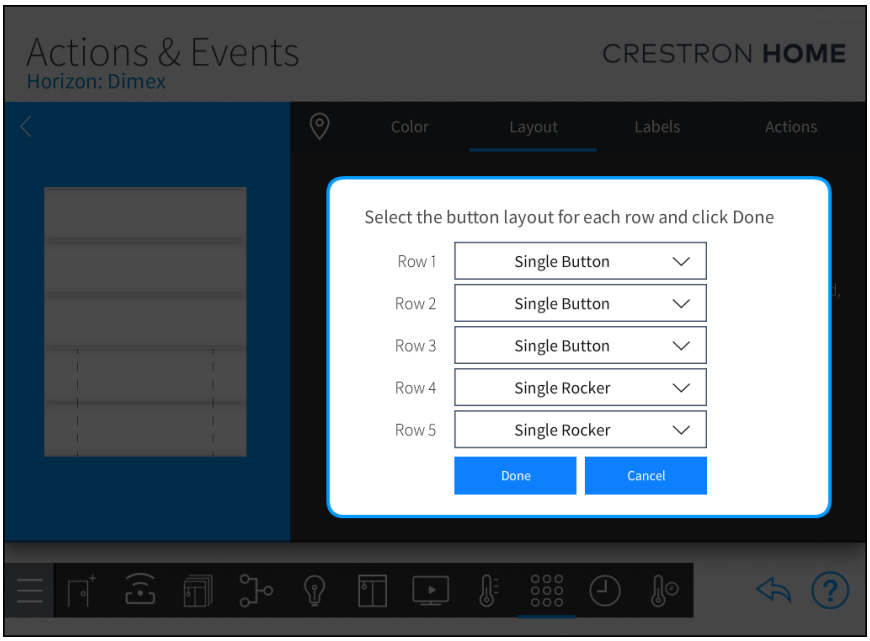
Configure the Keypad Button Layout

NOTE: Install the custom buttons on the keypad prior to making this selection.

1. Tap the **Layout** tab to set the button layout.



2. Set the button layout:
    - **Learn Layout:** Tap to set the button layout by pressing the buttons that are installed on the keypad. Follow the instructions on the screen to set the new layout for the keypad.
    - **Choose Layout:** Tap to set the button layout using a dialog in the Crestron Home Setup app. Select the button that is used on each row. For buttons that occupy multiple rows, select the topmost position of the button.



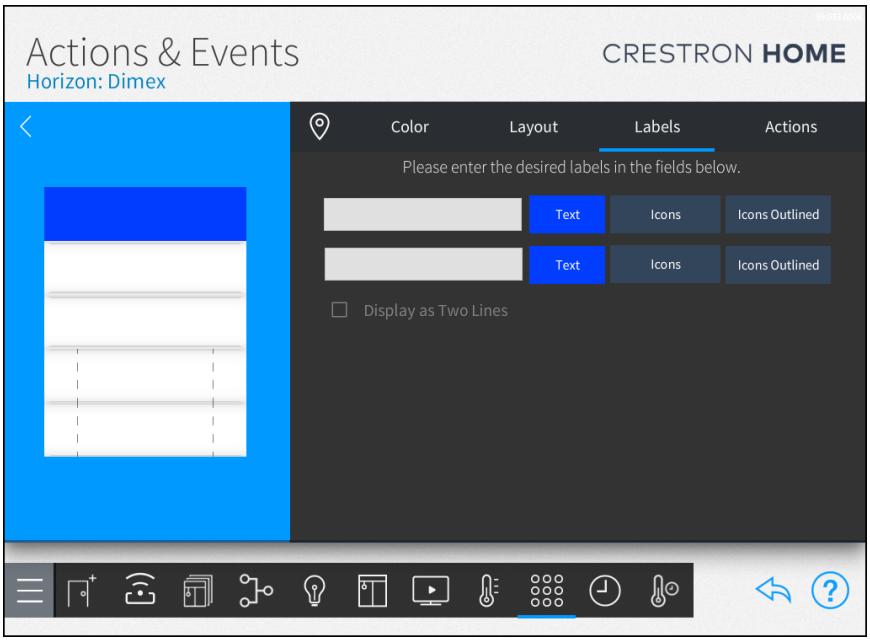
3. Tap **Done**.

Assign Custom Labels (Engraving) to the Keypad Buttons

NOTES:

- For more information on ordering custom labels using the myCrestron service, refer to Configure Horizon™ Keypads on page 150.
- The layout for the Horizon™ keypad must be set before labeling the keypad buttons.

1. Tap the **Labels** tab.

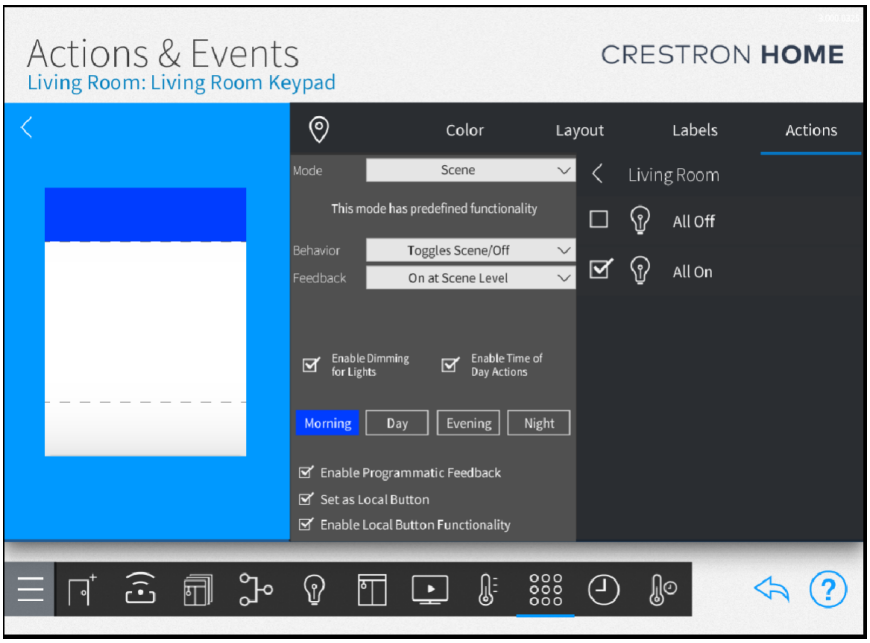


2. Select a button to label. The selected button is highlighted. When a single rocker button is used, the left and right sides of the button can be labeled in addition to the center of the button. When a large or small vertical rocker button is used, the top and bottom of the button can be labeled in addition to the center of the button.
3. Label the button using text, icons, or icons outlined. A combination of text and icons can be used to label each button.
   - **Text:** Enter custom text to display on the button.
   - **Icons:** Use the on-screen icons to display on the button. Icons are filled in with a solid color.
   - **Icons Outlined:** Use the on-screen icons to display on the button. Icons Outlined are not filled in with a solid color.

     NOTE: Icons and icons outlined options cannot be mixed on the same button.

Configure the Keypad Actions

1. Tap the **Actions** tab to program the keypad buttons to recall scenes and other actions.



2. Select a button to assign an action. The selected button is highlighted.
3. Select a button mode from the **Mode** drop-down list. The mode determines the type of action that is recalled when the button is pressed. Options for **Mode** include:
   - **None:** No action is performed when the button is pressed.
   - **Scene:** A scene is recalled when the button is pressed. For details, refer to Mode: Scene on page 156.
   - **Quick Action:** A quick action is recalled when the button is pressed. For details, refer to Mode: Quick Actions on page 159.
   - **Lighting Load:** A lighting load is controlled when the button is pressed. For details, refer to Mode: Lighting Load on page 162.
   - **Shade Load:** A shade is controlled when the button is pressed. For details, refer to Mode: Shade Load on page 163.
   - **Lighting Room:** All of the lighting loads in the room(s) are controlled. For details, refer to Mode: Lighting Room on page 164.
   - **Shade Room:** All of the shades in the room(s) are controlled. For details, refer to Mode: Shade Room on page 165.
   - **Lighting Raise:** All of the lighting loads in the room(s) are raised. For details, refer to Mode: Lighting Raise / Lighting Lower on page 166.
   - **Lighting Lower:** All of the lighting loads in the room(s) are lowered. For details, refer to Mode: Lighting Raise / Lighting Lower on page 166.

- **Shade Raise:** All of the shades in the room(s) are raised. For details, refer to Mode: Shade Raise / Shade Lower on page 166.
- **Shade Lower:** All of the shades in the room(s) are lowered. For details, refer to Mode: Shade Raise / Shade Lower on page 166.
- **Ceiling Fan:** A ceiling fan is controlled when the button is pressed. The button presses can be configured to cycle through all available fan speeds, increase the fan speed, or decrease the fan speed. For details, refer to Mode: Ceiling Fan on page 166.
- **Volume Raise:** The volume in the room is raised. For details, refer to Mode: Volume Raise / Volume Lower on page 168.
- **Volume Lower:** The volume in the room is lowered. For details, refer to Mode: Volume Raise / Volume Lower on page 168.
- **Master Raise:** Raises the lights, shades, audio, or fan speed in the room depending on the item that was controlled most recently. For example, if the shade scene was recalled the shades will be raised. For details, refer to Mode: Master Raise / Master Lower on page 168.
- **Master Lower:** Lowers the lights, shades, audio, or fan speed in the room depending on the item that was controlled most recently. For example, if a lighting scene was recalled the lights will be lowered. For details, refer to Mode: Master Raise / Master Lower on page 168.
- **Media Function** Recalls an audio function. For details, refer to Mode: Media Functions on page 169.
- **External Function:** Recalls a function that is defined by an external control system, such, as an MC3. For details, refer to Mode: External Function on page 172.

Mode: Scene

Select **Scene** from the **Mode** drop-down list to recall or toggle a scene when the button is pressed. The scene can be recalled using the built-in functionality or multi press functionality.

NOTE: The **Built In Functionality** button function cannot be used with the **Multi** button function. Settings for the **Built In Functionality** button function will be lost when the **Multi** button function is selected.

- **Built In Functionality:** One button press can recall or toggle one scene.
- **Multi:** Multiple button presses can recall up to 10 scenes and provide the ability to cycle through scenes.

Built In Functionality

Tap the **Built In Functionality:** button to configure using the built-in functionality.

Behavior: The behavior defines how the scene is recalled or toggled. Select a behavior from the **Behavior** drop-down list:

- **Always Recalls Scene:** Recalls the scene.
- **Toggles Scene/Off:** Toggles the scene on and off.
- **Custom Toggle:** Toggles the On Actions and Off Actions. Assign different scenes to the On Action and Off Action.

Built-in functions are assigned for the following button presses:

- **Tap:** Recalls or toggles the scene with the defined fade time.
- **Double Tap:** Immediately recalls or toggles the scene. The fade time for the scene is bypassed.
- **Press and Hold:** When **Enable Dimming for Lights** is enabled. Raise or lower the lights. The load raises or lowers based on the action that was performed last. If the load was turned on or raised, press and hold the button to lower the light level. To turn off the lights, continue holding the button after the minimum light level is reached.

Feedback: The LED feedback behavior defines the function of the LED that is associated with the button. Select an LED feedback behavior from the **Feedback** drop-down list:

NOTE: For feedback purposes only, the center of a rocker button can be programmed to light and display programmatic feedback. For example, the LED can be programmed to mimic the function of the top button of the rocker by assigning the same settings used by the top button.

- **On at Scene Level:** The LED lights when the scene is recalled.

  NOTE: The LED turns off if the scene is modified. For example, the LED turns off

if the lights or shades are raised or lowered.

- **On When any Light On:** The LED lights when any lighting load that is associated with the scene is on. For example, if a keypad button recalls the All On scene from the Whole House room, the LED lights when any light in the house is on and the LED turns off when all lights in the house are off.

Enable Dimming for Lights: When **Enable Dimming for Lights** is enabled, press and hold the button to raise or lower the lights. If the last action performed raised the lights, the lights will be lowered.

Enable Time of Day Actions: Assign a different action for each time of day. Tap the **Morning**, **Day**, **Evening**, or **Night** button and then select the action.

Disable Programmatic Feedback: Select this option to prevent the LED for the button from providing feedback based on the Crestron Home system status. Apply this setting if the feedback should match a local behavior or to prevent button feedback from displaying in rooms that are sensitive to feedback light. If this button is also selected as the Local Button then this setting has no effect.

Multi

Tap the **Multi** button to configure using the multi tap functionality.

NOTE: The **Multi** button function cannot be used with the **Built In Functionality** button function. Settings for the **Built In Functionality** button function will be lost when the **Multi** button function is selected.

Button Press (1-10): Assign an action for each button press. To assign an action to a button press, tap a button press number and then assign the action.

NOTES:

- The Crestron Home system maintains a count of the button presses that have occurred. When the system count matches the button press number, the action associated with the button press number is performed.
- The system count resets to one after it reaches the end of the list. For example, if an action is assigned for button press 1 through 4, the fifth button press resets the system count to one and the action assigned to button press 1 is performed.
- Button presses can be skipped. For example, if an action is assigned for button presses 1 and 5 and no action is assigned for button presses 2, 3, and 4, no action is performed when button presses 2, 3, and 4 occur.

Time Out Action: A time out action can be performed when the time out period expires. To set the time out action, tap the **Time Out Action** button and then assign an action.

NOTES:

- A time out period begins after the last button press and is used to determine how long the Crestron Home system waits for an addition button press. The default timeout period is 24 hours.
- To configure the time out period for the keypad, tap the gear button next to the **Enable Time of Day** button.
    - To set a custom time out period, deselect the **Use System Settings** check box and then enter the time out period in the **Hours**, **Minutes**, and **Seconds** text boxes.
    - To use the system wide settings, select the **Use System Settings** check box.
    - The maximum time out period is 24 hours. To set the time out period to 24 hours, type **0** in the **Hours**, **Minutes**, and **Seconds** text boxes.

Mode: Quick Actions

Select **Quick Actions** from the **Mode** drop-down list to recall a quick action when the button is pressed. The quick action can be recalled using the tap, double tap, press and hold, and multi-press functionality.

NOTES:

- Assign different actions to the **Tap**, **Double**, and **Hold** button functions to recall different actions with the same button.
- The **Tap**, **Double**, and **Hold** button functions cannot be used with the **Multi** button function. Settings for the **Tap**, **Double**, and **Hold** button functions will be lost when the **Multi** button function is selected.

- **Tap:** One button press to recall the quick action.
- **Double:** Two button presses to recall the quick action.
- **Hold:** Press and hold the button to recall the quick action.
- **Multi:** Multiple button presses can recall up to 10 quick actions and provide the ability to cycle through quick actions.

Tap

To assign a quick action to a single button press (single tap), tap the **Tap** button and then select a quick action.

Double

To assign a quick action to a double button press (double tap), tap the **Double** button and then select a quick action.

Tap the gear button  next to the location button to configure the double tap settings for the keypad.

- **Use System Settings:** Tap the check box next to **Use System Settings** to use the delay that is set by the system. For details, refer to Keypad Settings on page 217.
- **Wait For Double Tap:** Available when **Use System Settings** is not checked. Tap the check box next to **Wait For Double Tap** to enable the wait for double tap function. The Wait for Double Tap function determines if the Crestron Home system triggers the Tap button action or the Double Tap button action. The delay is the amount of time (in seconds) that the system waits after a button press to determine if a subsequent button press is a double tap. The values can be set between 0.2 and 1 second.

  For example:

  - Tap button action is set to route video to a bedroom.
  - Double Tap button action is set to route audio to a bedroom.

  When Wait for Double Tap is enabled:

NOTE: The Tap button action is not triggered if the button is pressed twice within the delay time.

- A single button press will route video to the bedroom if the room is off (Tap button action).
- Two button presses will route audio to the bedroom (Double Tap button action).

When Wait for Double Tap is disabled:

NOTE: The Crestron Home system registers both the single and double button presses and triggers both actions.

- A single button press will route video to the bedroom if the room is off (Tap button action).
- Two button presses will route video to the bedroom if the room is off (Tap button action) and then will route audio to the bedroom if the room is off (Double Tap button action).

- **Hold Time:** Available when **Use System Settings** is not checked. The amount of time (in seconds) that a button must be pressed during a press-and-hold operation before the Hold button action is performed.
- **Time Out:** Available when **Use System Settings** is not checked. The amount of time (in hours, minutes, and seconds) that the system waits to determine if the Multi Tap button action is performed.

Hold

To assign a quick action to a press-and-hold button press, tap the **Hold** button and then select a quick action.

To set a custom hold time for the button, deselect the **Use System Settings** check box and then enter the hold time (seconds) in the **Hold Time** text box.

NOTE: A custom hold time can be set for each button on the keypad.

Multi

To assign multiple quick actions to a series of button presses, tap the **Multi** button and then select a quick action.

NOTE: The **Multi** button function cannot be used with the **Tap**, **Double**, and **Hold** button functions. Settings for the **Tap**, **Double**, and **Hold** button functions will be lost when the **Multi** button function is selected.

Button Press (1-10): Assign an action for each button press. To assign an action to a button press, tap a button press number and then assign the action.

NOTES:

- The Crestron Home system maintains a count of the button presses that have occurred. When the system count matches the button press number, the action associated with the button press number is performed.
- The system count resets to one after it reaches the end of the list. For example, if an action is assigned for button press 1 through 4, the fifth button press resets the system count to one.and the action assigned to button press 1 is performed.
- Button presses can be skipped. For example, if an action is assigned for button presses 1 and 5 and no action is assigned for button presses 2, 3, and 4, no action is performed when button presses 2, 3, and 4 occur.

Time Out Action: A time out action can be performed when the time out period expires. To set the time out action, tap the **Time Out Action** button and then assign an action.

NOTES:

- A time out period begins after the last button press and is used to determine how long the Crestron Home system waits for an addition button press. The default timeout period is 24 hours.
- To configure the time out period.for the keypad, tap the gear button  next to the **Enable Time of Day** button.
    - To set a custom time out period, deselect the **Use System Settings** check box and then enter the time out period in the **Hours**, **Minutes**, and **Seconds** text boxes.
    - To use the system wide settings, select the **Use System Settings** check box.
    - The maximum time out period is 24 hours. To set the time out period to 24 hours, type **0** in the **Hours**, **Minutes**, and **Seconds** text boxes.

Mode: Lighting Load

Select **Lighting Load** from the **Mode** drop-down list to control a lighting load when the button is pressed.

Behavior: The behavior defines how the lights are controlled. Select a button behavior from the **Behavior** drop-down list:

- **On/Raise/Off/Lower:** Toggles the load on or off or raises or lowers the lights. The lights turn on or off or raise or lower based on the action that was performed last. If the lights were turned on or raised, press the button to turn the lights off or press and hold the button to lower the lights.
- **On/Raise:** Turns the load on or raises the lights.
- **Off/Lower:** Turns the load off or lowers the lights.

Predefined functions are assigned for the following button presses:

- **Tap:** Increase or decrease (jog) the light level.
- **Double Tap:** Turns the lights on or off without fade time.
- **Press and Hold:** Raise or lower the light level until the button is released or the maximum or minimum light level is reached.

  NOTE: To turn off the lights, continue holding the button after the minimum light level is reached.

Auto Off: Sets a timer to turn the lights off after a set period of time. To set the Auto Off time, select a time from the **Auto Off** drop-down list. The default auto off time is **Disabled**.

Mode: Shade Load

Select **Shade Load** from the **Mode** drop-down list to control a shade load when the button is pressed.

Behavior: The behavior defines how the shades are controlled. Select a button behavior from the **Behavior** drop-down list:

- **Open/Close:** Toggle the shades open or closed.
- **Open:** Open the shades.
- **Close:** Close the shades.

Predefined functions are assigned for the following button presses:

- **Tap:** Open or close the shades.
- **Press and Hold:** When **Enable Press-and-Hold Functionality** is enabled. Raise or lower the shades until the button is released or the upper or lower limit is reached.

  NOTE: To enable press-and-hold functionality, select the **Enable Press-and-Hold Functionality** check box.

Mode: Lighting Room

Select **Lighting Room** from the **Mode** drop-down list to control all of the lighting loads in the rooms.

Predefined functions are assigned for the following button presses:

NOTE: The lights are controlled based on the action that was performed last. If the lights were turned on or raised, the next button press will turn off or lower the lights.

- **Tap:** Toggles the lights on or off with the default fade time.
- **Double Tap:** Toggles the lights on or off with no fade time.
- **Press and Hold:** Raise or lower the lights until the button is released or the maximum or minimum light level is reached.

  NOTE: To turn off the lights, continue holding the button after the minimum light level is reached.

Mode: Shade Room

Select **Shade Room** from the **Mode** drop-down list to control all of the shades in the rooms.

Predefined functions are assigned for the following button presses:

> **NOTE:** The shades are controlled based on the action that was performed last. If the shades were opened or raised, the next button press will lower or close the shades.

- **Tap:** Open or close the shades.
- **Press and Hold:** Raise or lower the shades until the button is released or the upper or lower limit is reached.

Mode: Lighting Raise / Lighting Lower

Select **Lighting Raise** or **Lighting Lower** from the **Mode** drop-down list to raise or lower the lights in the room.

Predefined functions are assigned for the following button presses:

- **Tap:** Increase or decrease (jog) the light level.
- **Double Tap:** Turns the lights on or off with no fade time.
- **Press and Hold:** Raise or lower the light level until the button is released or the maximum or minimum light level is reached.

  NOTE: To turn off the lights, continue holding the button after the minimum light level is reached.

Mode: Shade Raise / Shade Lower

Select **Shade Raise** or **Shade Lower** from the **Mode** drop-down list to raise or lower the shades in the room.

Predefined functions are assigned for the following button presses:

- **Tap:** Raise or lower (jog) the shades.
- **Press and Hold:** Raise or lower the shades until the button is released or the upper or lower limit is reached.

Mode: Ceiling Fan

Select **Ceiling Fan** from the **Mode** drop-down list to control a ceiling fan when the button is pressed.

Behavior: The behavior defines how the fans are controlled. Select a button behavior from the **Behavior** drop-down list:

- **Cycle:** Cycle through the available fan speeds. Each button press advances through the available fan speeds in the **Available Speeds** list. When the last speed in the list is reached, the next button press advances to the first option in the list.

  NOTES:

  - If multiple fans are controlled and they are operating at different speeds, a button press sets the fan speed for both fans to the first speed in the **Available Speeds** list.
  - If the **Off** speed is included in the **Available Speeds** list and five seconds pass since the last button press, a button press turns the fan off.

- If **Power On Recalls Last Speed** is enabled and multiple fans are controlled and operating at different speeds when the room is turned off, the fans resume operating at their previously set speeds when the room is powered on.

- **Increase:** Increase the fan speed until the maximum fan speed in the list is reached.

  If the fans are operating at different speeds, pressing the button increases the fan speed for each fan independently. For example, if **High**, **Medium**, and **Low** fan speeds are available and Fan 1 is operating at **Low** and Fan 2 is operating the **Medium**, pressing the button increases the fan speed for Fan 1 to **Medium** and Fan 2 to **High**.

- **Decrease:** Decrease the fan speed until the lowest fan speed in the list is reached.

  If the fans are operating at different speeds, pressing the button decreases the fan speed for each fan independently. For example, if **High**, **Medium**, and **Low** fan speeds are available and Fan 1 is operating at **High** and Fan 2 is operating at **Medium**, pressing the button decreases the fan speed for Fan 1 to **Medium** and Fan 2 to **Low**.

Speeds: Displays the fan speeds that are available for the selected fan(s). The speeds available are populated based on the fan controller that is used and are listed in order from the slowest (Off) to the fastest fan speed. The default setting is to include all of the available fan speeds in the **Speeds** list.

To exclude a fan speed from the list, deselect the check box next to the fan speed

NOTES:

- If different fan controllers are used, only the fan speeds that are common between the fan controllers are displayed in the **Speeds** list.
- The fan speeds can be reordered when **Cycle** is selected. To reorder the fan speeds in the **Speeds** list, tap and hold a fan speed until it turns green and then drag it to the desired position. The **Off** speed cannot be moved.
- The **High** fan speed is not included in the **Speeds** list when **Decrease** is selected from the **Speeds** drop-down menu.
- The **Off** fan speed is not included in the **Speeds** list when **Increase** is selected from the **Speeds** drop-down menu.

Power On Recalls Last Speed: If enabled, the fans resume operating at their previously set speeds when the room is powered on. If disabled, the fans resume operating at the first speed option in the list. To disable, deselect the **Power On Recalls Last Speed** check box.

Mode: Volume Raise / Volume Lower

Select **Volume Raise** or **Volume Lower** from the **Mode** drop-down list to raise or lower the volume in the room.

Predefined functions are assigned for the following button presses:

- **Tap:** Raise or lower (jog) the volume.
- **Press and Hold:** Raise or lower the volume until the button is released or the maximum or minimum volume is reached.

Mode: Master Raise / Master Lower

Select **Master Raise** or **Master Lower** from the **Mode** drop-down list to raise or lower the selected device types (lights, shades, audio, ceiling fans) in the room.

Predefined functions are assigned for the following button presses:

NOTE: The device type that is controlled is based on the last device type that was controlled. For example, if the shades were controlled last, the shades will be raised or lowered.

- **Tap:** Raise or lower (jog) the level for the device type.
- **Press and Hold:** Raise or lower the level for the device type until the button is released or the maximum or minimum level is reached.

Mode: Media Functions

Select **Media Functions** from the **Mode** drop-down list to recall a media function when the button is pressed. The media function can be recalled using the tap, double tap, press and hold, and multi-press functionality.

NOTES:

- Assign different actions to the **Tap**, **Double**, and **Hold** button functions to recall different actions with the same button.
- The **Tap**, **Double**, and **Hold** button functions cannot be used with the **Multi** button function. Settings for the **Tap**, **Double**, and **Hold** button functions will be lost when the **Multi** button function is selected.

- **Tap:** One button press to recall the media function.
- **Double:** Two button presses to recall the media function.
- **Hold:** Press and hold the button to recall the media function.
- **Multi:** Multiple button presses can recall up to 10 media functions and provide the ability to cycle through media functions.

Tap

To assign a media function to a single button press (single tap), tap the **Tap** button and then select a media function.

Double

To assign a media function to a double button press (double tap), tap the **Double** button and then select a media function.

Tap the gear button  next to the location button to configure the double tap settings for the keypad.

- **Use System Settings:** Tap the check box next to **Use System Settings** to use the delay that is set by the system. For details, refer to Keypad Settings on page 217.
- **Wait For Double Tap:** Available when **Use System Settings** is not checked. Tap the check box next to **Wait For Double Tap** to enable the wait for double tap function. The Wait for Double Tap function determines if the Crestron Home system triggers the Tap button action or the Double Tap button action. The delay is the amount of time (in seconds) that the system waits after a button press to determine if a subsequent button press is a double tap. The values can be set between 0.2 and 1 second.

  For example:

  - Tap button action is set to route video to a bedroom.
  - Double Tap button action is set to route audio to a bedroom.

  When Wait for Double Tap is enabled:

NOTE: The Tap button action is not triggered if the button is pressed twice within the delay time.

- A single button press will route video to the bedroom if the room is off (Tap button action).
- Two button presses will route audio to the bedroom (Double Tap button action).

When Wait for Double Tap is disabled:

NOTE: The Crestron Home system registers both the single and double button presses and triggers both actions.

- A single button press will route video to the bedroom if the room is off (Tap button action).
- Two button presses will route video to the bedroom if the room is off (Tap button action) and then will route audio to the bedroom if the room is off (Double Tap button action).

- **Hold Time:** Available when **Use System Settings** is not checked. The amount of time (in seconds) that a button must be pressed during a press-and-hold operation before the Hold button action is performed.
- **Time Out:** Available when **Use System Settings** is not checked. The amount of time (in hours, minutes, and seconds) that the system waits to determine if the Multi Tap button action is performed.

Hold

To assign a media function to a press-and-hold button press, tap the **Hold** button and then select a media function.

To set a custom hold time for the button, deselect the **Use System Settings** check box and then enter the hold time (seconds) in the **Hold Time** text box.

NOTE: A custom hold time can be set for each button on the keypad.

Multi

To assign multiple media functions to a series of button presses, tap the **Multi** button and then select a media function.

NOTE: The **Multi** button function cannot be used with the **Tap**, **Double**, and **Hold** button functions. Settings for the **Tap**, **Double**, and **Hold** button functions will be lost when the **Multi** button function is selected.

Button Press (1-10): Assign an action for each button press. To assign an action to a button press, tap a button press number and then assign the action.

NOTES:

- The Crestron Home system maintains a count of the button presses that have occurred. When the system count matches the button press number, the action associated with the button press number is performed.
- The system count resets to one after it reaches the end of the list. For example, if an action is assigned for button press 1 through 4, the fifth button press resets the system count to one.and the action assigned to button press 1 is performed.
- Button presses can be skipped. For example, if an action is assigned for button presses 1 and 5 and no action is assigned for button presses 2, 3, and 4, no action is performed when button presses 2, 3, and 4 occur.

Time Out Action: A time out action can be performed when the time out period expires. To set the time out action, tap the **Time Out Action** button and then assign an action.

NOTES:

- A time out period begins after the last button press and is used to determine how long the Crestron Home system waits for an addition button press. The default timeout period is 24 hours.
- To configure the time out period.for the keypad, tap the gear button  next to the **Enable Time of Day** button.
    - To set a custom time out period, deselect the **Use System Settings** check box and then enter the time out period in the **Hours**, **Minutes**, and **Seconds** text boxes.
    - To use the system wide settings, select the **Use System Settings** check box.
    - The maximum time out period is 24 hours. To set the time out period to 24 hours, type **0** in the **Hours**, **Minutes**, and **Seconds** text boxes.

Mode: External Function

Select **Media Functions** from the **Mode** drop-down list to recall an external function when the button is pressed. The external function can be recalled using the tap, double tap, press and release, and multi-press functionality.

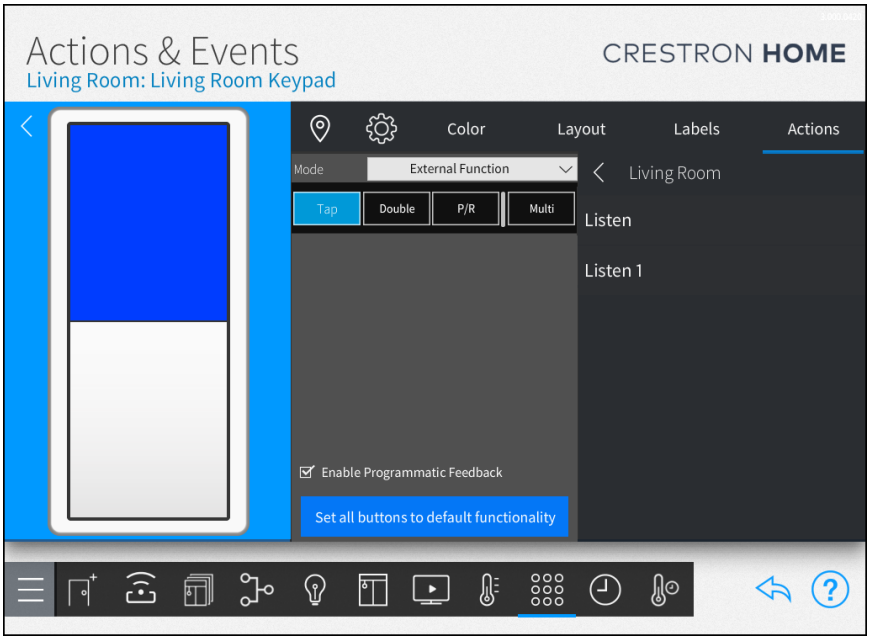
NOTES:

- Assign different actions to the **Tap**, **Double**, and **P/R** button functions to recall different actions with the same button.
- The **Tap**, **Double**, and **P/R** button functions cannot be used with the **Multi** button function. Settings for the **Tap**, **Double**, and **P/R** button functions will be lost when the **Multi** button function is selected.

- **Tap:** One button press to recall the external function.
- **Double:** Two button presses to recall the external function.
- **P/R:** Press and hold the button to recall the external function. The external function is stopped when the button is released.
- **Multi:** Multiple button presses can recall up to 10 external functions and provide the ability to cycle through external functions.

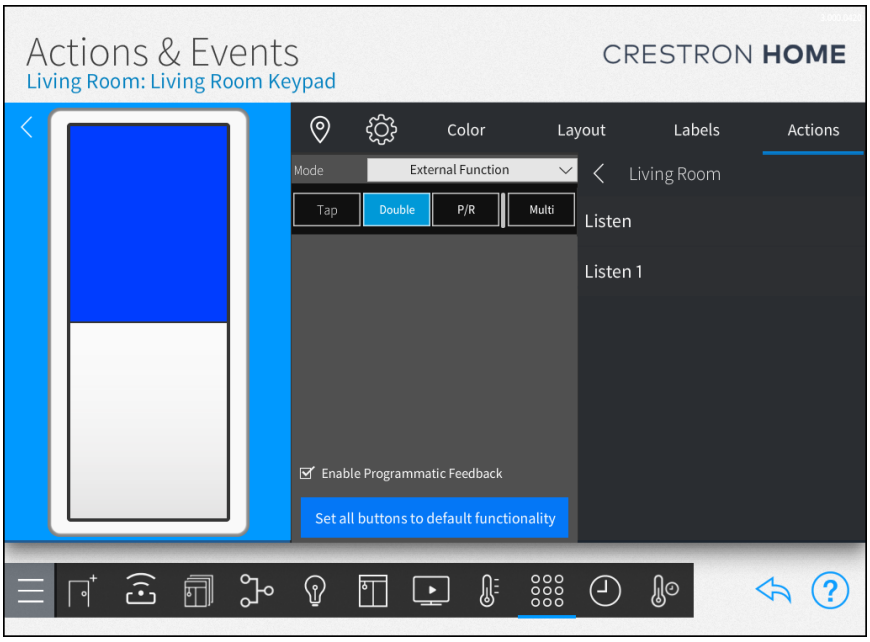
Tap

To assign an external function to a single button press (single tap), tap the **Tap** button and then select an external function.



Double

To assign an external function to a double button press (double tap), tap the **Double** button and then select an external function.



Tap the gear button next to the location button to configure the double tap settings for the keypad.

- **Use System Settings:** Tap the check box next to **Use System Settings** to use the delay that is set by the system. For details, refer to Keypad Settings on page 217.
- **Wait For Double Tap:** Available when **Use System Settings** is not checked. Tap the check box next to **Wait For Double Tap** to enable the wait for double tap function. The Wait for Double Tap function determines if the Crestron Home system triggers the Tap button action or the Double Tap button action. The delay is the amount of time (in seconds) that the system waits after a button press to determine if a subsequent button press is a double tap. The values can be set between 0.2 and 1 second.

  For example:

  - Tap button action is set to route video to a bedroom.
  - Double Tap button action is set to route audio to a bedroom.

  When Wait for Double Tap is enabled:

  NOTE: The Tap button action is not triggered if the button is pressed twice within the delay time.

  - A single button press will route video to the bedroom if the room is off (Tap button action).

- Two button presses will route audio to the bedroom (Double Tap button action).

When Wait for Double Tap is disabled:

NOTE: The Crestron Home system registers both the single and double button presses and triggers both actions.

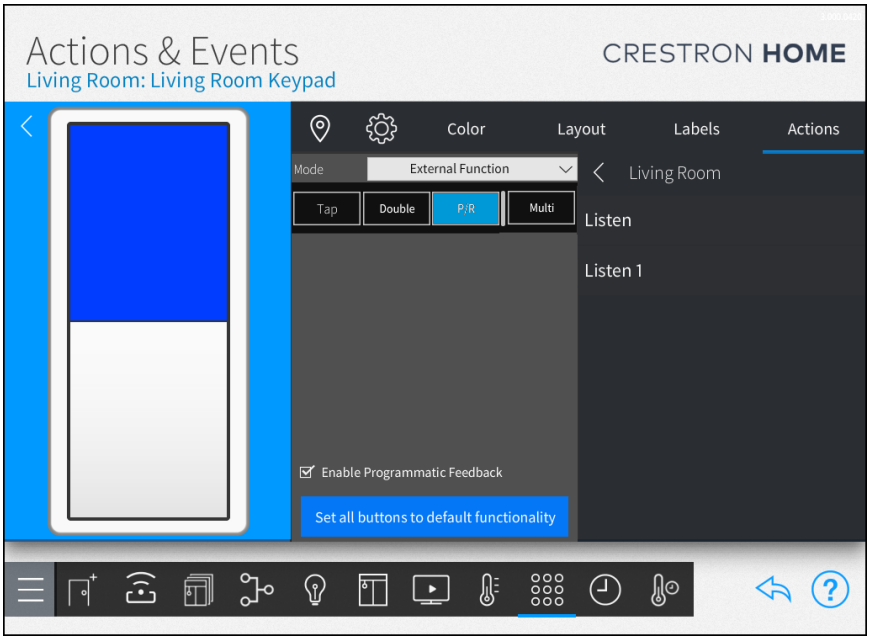
- A single button press will route video to the bedroom if the room is off (Tap button action).
- Two button presses will route video to the bedroom if the room is off (Tap button action) and then will route audio to the bedroom if the room is off (Double Tap button action).

- **Hold Time:** Available when **Use System Settings** is not checked. The amount of time (in seconds) that a button must be pressed during a press-and-hold operation before the Hold button action is performed.
- **Time Out:** Available when **Use System Settings** is not checked. The amount of time (in hours, minutes, and seconds) that the system waits to determine if the Multi Tap button action is performed.

P/R

To assign an external function to a press and release, tap the **P/R** button and then select an external function.

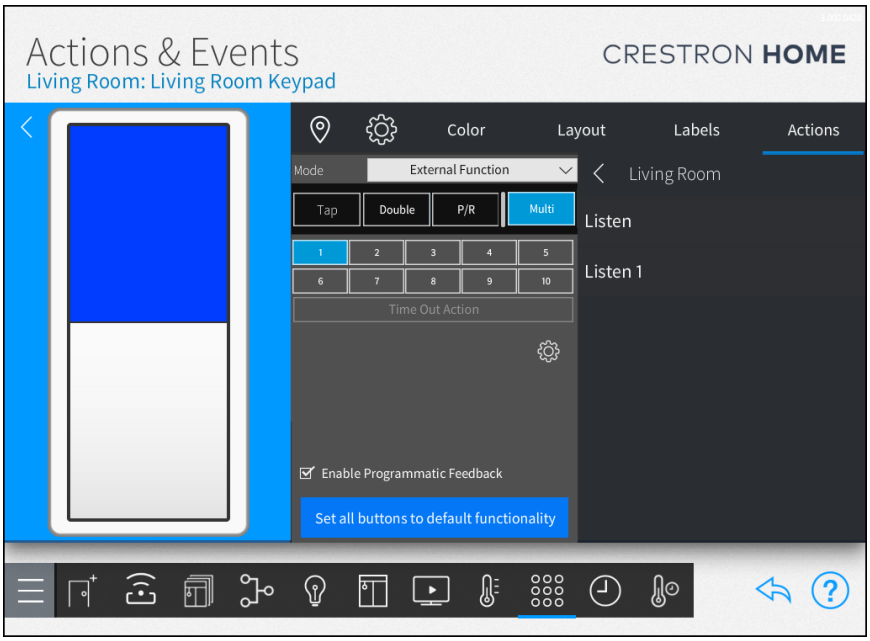
NOTE: The P/R function is executed for however long the button is pressed for.



Multi

To assign multiple external functions to a series of button presses, tap the **Multi** button and then select an external function.

NOTE: The **Multi** button function cannot be used with the **Tap**, **Double**, and **P/R** button functions. Settings for the **Tap**, **Double**, and **P/R** button functions will be lost when the **Multi** button function is selected.



Button Press (1-10): Assign an action for each button press. To assign an action to a button press, tap a button press number and then assign the action.

NOTES:

- The Crestron Home system maintains a count of the button presses that have occurred. When the system count matches the button press number, the action associated with the button press number is performed.
- The system count resets to one after it reaches the end of the list. For example, if an action is assigned for button press 1 through 4, the fifth button press resets the system count to one.and the action assigned to button press 1 is performed.
- Button presses can be skipped. For example, if an action is assigned for button presses 1 and 5 and no action is assigned for button presses 2, 3, and 4, no action is performed when button presses 2, 3, and 4 occur.

Time Out Action: A time out action can be performed when the time out period expires. To set the time out action, tap the **Time Out Action** button and then assign an action.

NOTES:

- A time out period begins after the last button press and is used to determine how long the Crestron Home system waits for an addition button press. The default timeout period is 24 hours.
- To configure the time out period.for the keypad, tap the gear button  next to the **Enable Time of Day** button.
    - To set a custom time out period, deselect the **Use System Settings** check box and then enter the time out period in the **Hours**, **Minutes**, and **Seconds** text boxes.
    - To use the system wide settings, select the **Use System Settings** check box.
    - The maximum time out period is 24 hours. To set the time out period to 24 hours, type **0** in the **Hours**, **Minutes**, and **Seconds** text boxes.

Configure Remotes

Use the remote configuration screen to configure remote button colors and layout, to create custom remote button labels, and to program remote buttons to recall scenes and other actions.

NOTE: Tap the location tab to turn on the location feature for the remote (if supported), which may be used to locate the device in the room.

Select a remote from the **Select an Item** menu to display a configuration screen for the remote.

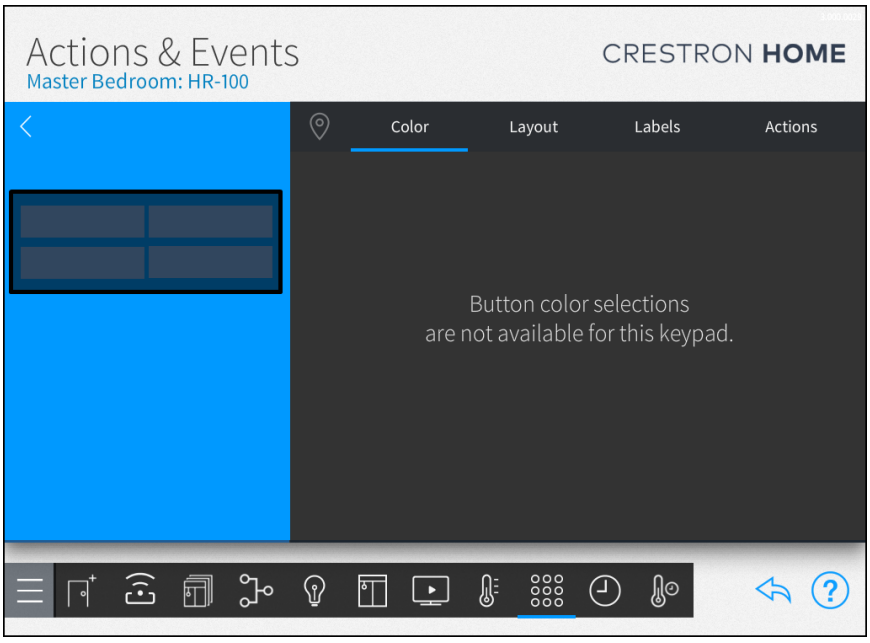
Select the Remote Color

When custom-engraved buttons are ordered through myCrestron, the button color is generated automatically based on the selected color.

NOTES:

- Confirm that the color selected with the Color tab matches the actual remote color before ordering custom-engraved buttons.
- Color selection is not available for all remotes.

1. Tap the **Color** tab to set the color.

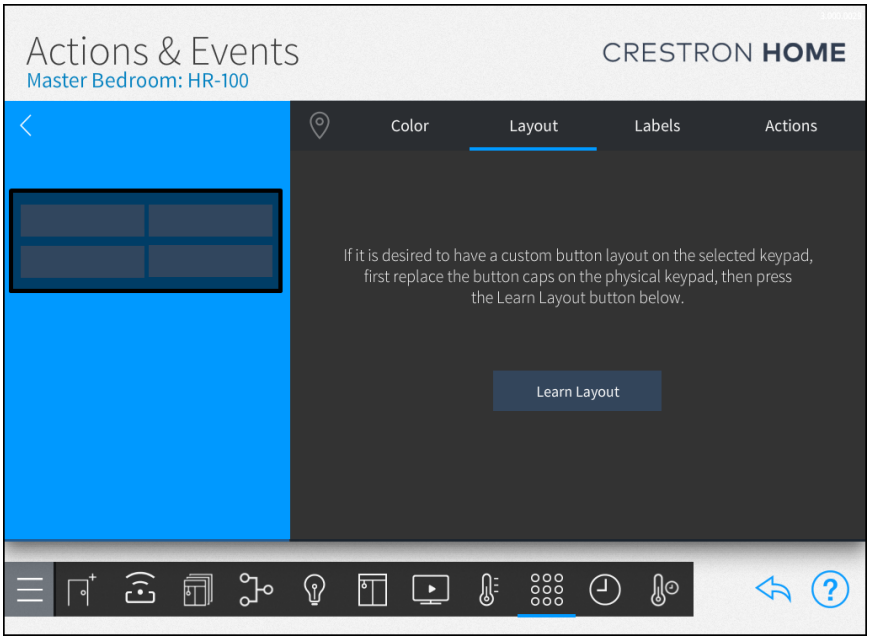


2. Tap a color to choose the color of the selected remote.

Configure the Remote Button Layout

NOTE: Install the custom buttons on the remote prior to making this selection.

1. Tap the **Layout** tab to set the button layout.



2. Tap **Learn Layout**.
3. Follow the instructions on the screen to set the new layout for the keypad.
4. Tap **Done**.

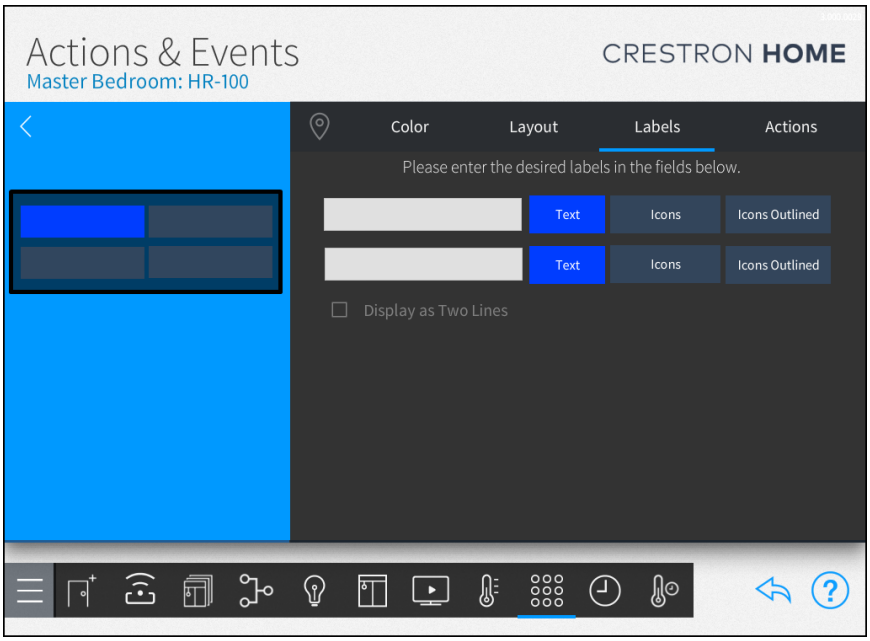
Assign Custom Labels (Engraving) to the Remote Buttons

Create custom text labels for the remote buttons.

Each line item represents a corresponding button on the remote. The selected button lights blue on the onscreen remote while it is being edited.

NOTE: The layout for the remote must be set before labeling the buttons.

1. Tap the **Labels** tab.



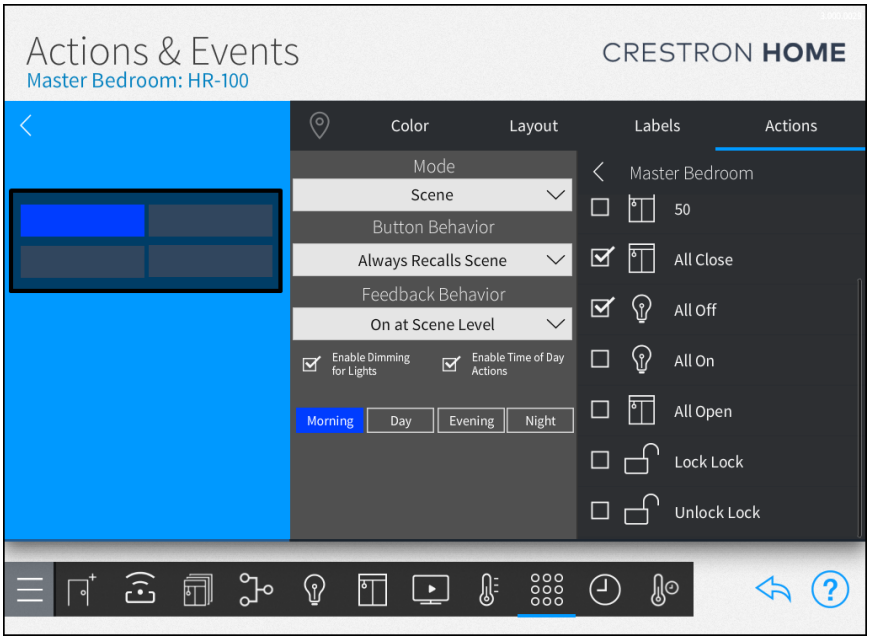
2. Select a button to label.
3. Label the button using text, icons, or icons outlined. A combination of text and icons can be used to label each button. To display the labels on two lines, check the box next to **Display as Two Lines**. Tap the check box next to **Use Pre-Labeled Button** if a button with an existing label will be used.
   - **Text:** Enter custom text to display on the button.
   - **Icons:** Use the on-screen icons to display on the button. Icons are filled in with a solid color.
   - **Icons Outlined:** Use the on-screen icons to display on the button. Icons Outlined are not filled in with a solid color.

     NOTE: Icons and icons outlined options cannot be mixed on the same button.

Configure the Remote Actions:

Program the remote buttons to recall scenes and perform other actions.

1. Tap the **Actions** tab.



2. The following configuration options are provided:
   - Use the left screen panel to select the remote button that will be associated with an action. Tap the desired button to select it.
   - Use the center panel to select the type of action that will be associated with the button and to configure action-related behavior.

     NOTE: Other configuration options may be provided depending on the selected mode.

     - **Mode**: Select the type of action that is recalled by pressing the button (such as "Scene").
     - **Button Behavior**: (Available when a compatible selection is made for **Mode**) A drop-down menu to set the button behavior for recalling the selected action.
     - **Feedback Behavior**: (Available when **Scene** is selected for **Mode**) Sets the feedback behavior for recalling the scene. Options for Scene include **On at Scene Level** and **On When any Light On**.
     - **Enable Dimming for Lights**: (Available when **Scene** is selected for **Mode**) Press and hold the button to raise or lower the lights.
     - **Enable Time of Day Actions**: (Available when **Scene** is selected for **Mode**) Enables different scenes to be recalled based on the time of the day. Set a scene for Morning, Day, Evening, and Night.

    - **Set all buttons to default functionality:** Restores the buttons to their default functionality.
- Use the right screen panel to associate an action with the button.

  NOTES:
  - The same action or scene may be assigned to multiple buttons.
  - Multiple actions or scenes may also be assigned to the same button.

    - Use the **Select Room Below** menu to select the room that contains the desired action or scene.
    - Tap on a room name to display a list of actions that may be selected for the room. The type of action that is displayed is set using the **Mode** drop-down menu in the center panel.
    - Tap the check box next to an action to add or remove that action from the keypad button. A checked box indicates that the action is set to occur when the button is pressed.
    - Tap the back arrow (<) next to the room name to return to the **Select Room Below** menu.

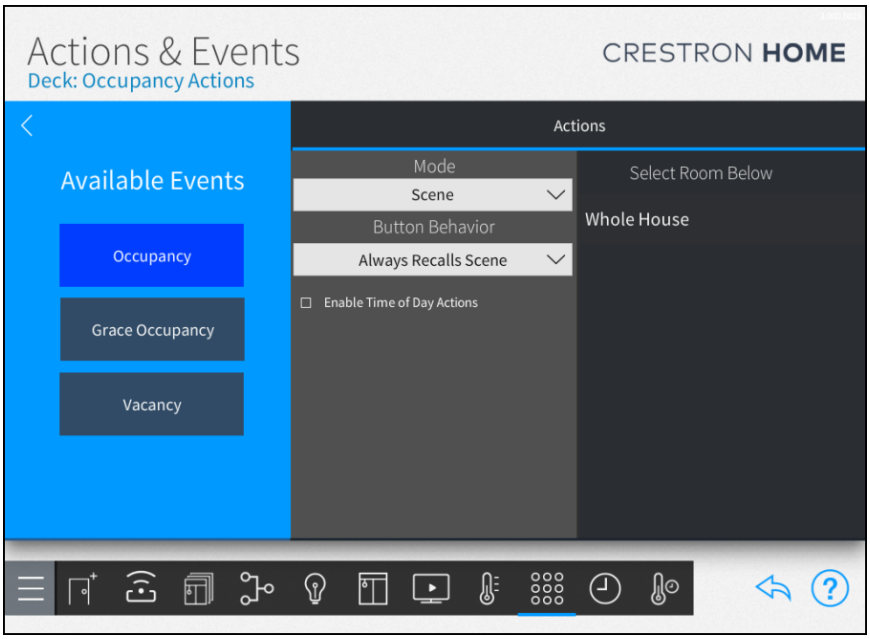
  NOTE: Only rooms that contain selectable actions appear on the **Select Room Below** menu. Once an action is selected from a room, the room name is shown with blue text in the **Select Room Below** menu.

Configure Occupancy Sensors

Configure the occupancy sensor to associate scenes and other actions with occupancy events.

Select an occupancy sensor from the **Select an Item** menu to display a configuration screen for the occupancy sensor.

1. Tap the **Occupancy**, **Grace Occupancy**, or **Vacancy** button to program the occupancy event to recall scenes and other actions. The selected occupancy event button is highlighted.



2. Configure the action that is performed when the occupancy event occurs.

   NOTE: Other configuration options may be provided depending on the selected mode.

   - **Mode:** Select the type of action that is recalled when the occupancy event occurs.

     Options for **Mode** include:

     - **None:** No action is performed when the occupancy event occurs.
     - **Scene:** A scene is recalled when the occupancy event occurs.
     - **Macro:** A macro is recalled when the occupancy event occurs.
     - **Audio Function:** Recalls an audio function.
     - **External Function:** Recalls a function that is defined by an external control system, such, as an MC3.

   - **Button Behavior:** Available when **Scene** is selected from the **Mode** drop-down menu. Sets the behavior when the occupancy event occurs.

     Options for **Scene** include:

     - **Always Recalls Scene:** Press the button to recall a scene.
     - **Toggles Scene/Off:** Press the button to toggle the scene on or off.
     - **Custom Toggle:** Each button press toggles either the on actions or off actions.

   - **Enable Time of Day Actions:** Available when **Scene** is selected from the **Mode** drop-down menu. Enables different scenes to be recalled based on the time of the day. Set a scene for Morning, Day, Evening, and Night.

3. Use the right screen panel to associate an action with the occupancy event.

NOTES:

- The same action or scene may be assigned to multiple occupancy events.
- Multiple actions or scenes may also be assigned to the same occupancy event.

- Use the **Select Room Below** menu to select the room that contains the desired action or scene.

  NOTE: Only rooms that contain selectable actions appear on the **Select Room Below** menu. Once an action is selected from a room, the room name is shown with blue text in the **Select Room Below** menu.

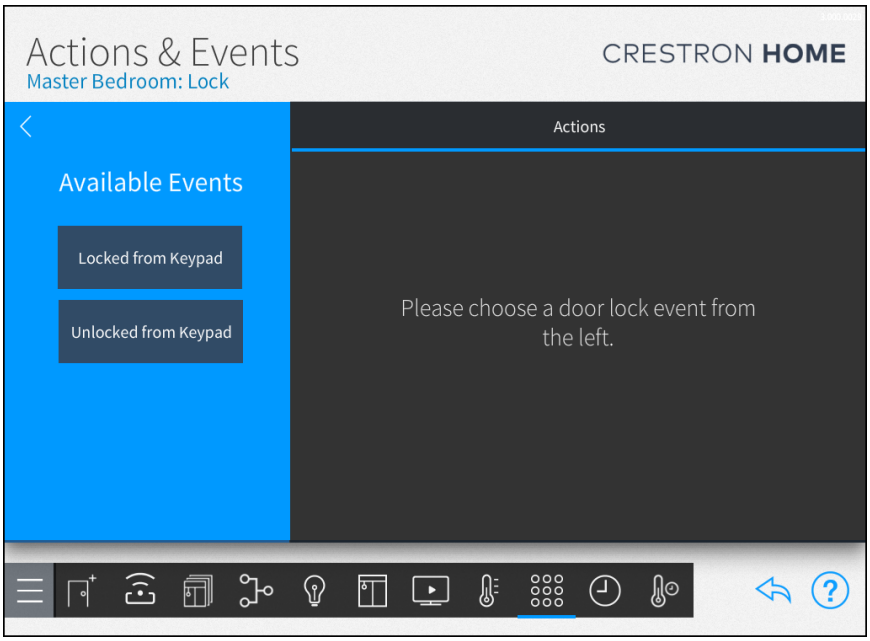
- Tap on a room name to display a list of actions that may be selected for the room. The type of action that is displayed is set using the **Mode** drop-down menu in the center panel.
- Tap the check box next to an action to add or remove that action from the occupancy event. A checked box indicates that the action is set to occur during the occupancy event.
- Tap the back arrow (<) next to the room name to return to the **Select Room Below** menu.

Configure a Door Lock

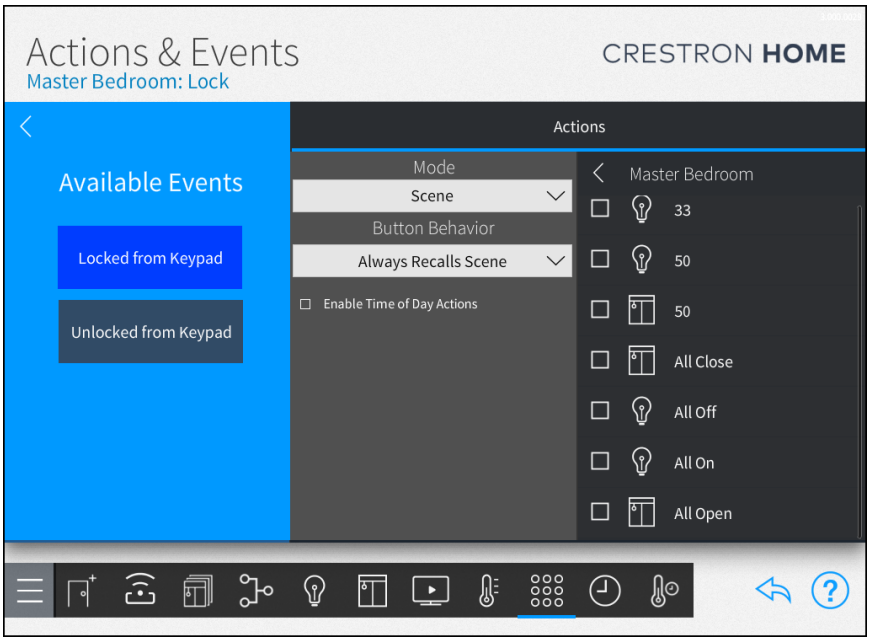
Use the door lock configuration screen to associate scenes and other actions with door lock events.

Select a door lock from the **Select an Item** menu to display a configuration screen for the door lock.

1. Tap an **Available Events** button.



2. The following configuration options are provided:



- Use the center panel to select the type of action that will be associated with the door lock event and to configure action-related behavior.

  NOTE: Other configuration options may be provided depending on the selected mode.

  - **Mode**: Select the type of action that is recalled by the door lock event (such as "Scene").
  - **Button Behavior**: (Available for compatible selection is selected for **Mode**) A drop-down menu to set the door lock event behavior for recalling the selected action.
  - **Enable Time of Day Actions**: (Available when **Scene** is selected for **Mode**) Enables different scenes to be recalled based on the time of the day. Set a scene for Morning, Day, Evening, and Night.
- Use the right screen panel to associate an action with the door lock event.

  NOTES:

  - The same action or scene may be assigned to multiple door lock events.
  - Multiple actions or scenes may also be assigned to the same door lock event.

  - Use the **Select Room Below** menu to select the room that contains the desired action or scene.
  - Tap on a room name to display a list of actions that may be selected for the room. The type of action that is displayed is set using the **Mode** drop-down menu in the center panel.
  - Tap the check box next to an action to add or remove that action from the door lock event. A checked box indicates that the action is set to occur during the door lock event.
  - Tap the back arrow (<) next to the room name to return to the **Select Room Below** menu.

  NOTE: Only rooms that contain selectable actions appear on the **Select Room Below** menu. Once an action is selected from a room, the room name is shown with blue text in the **Select Room Below** menu.

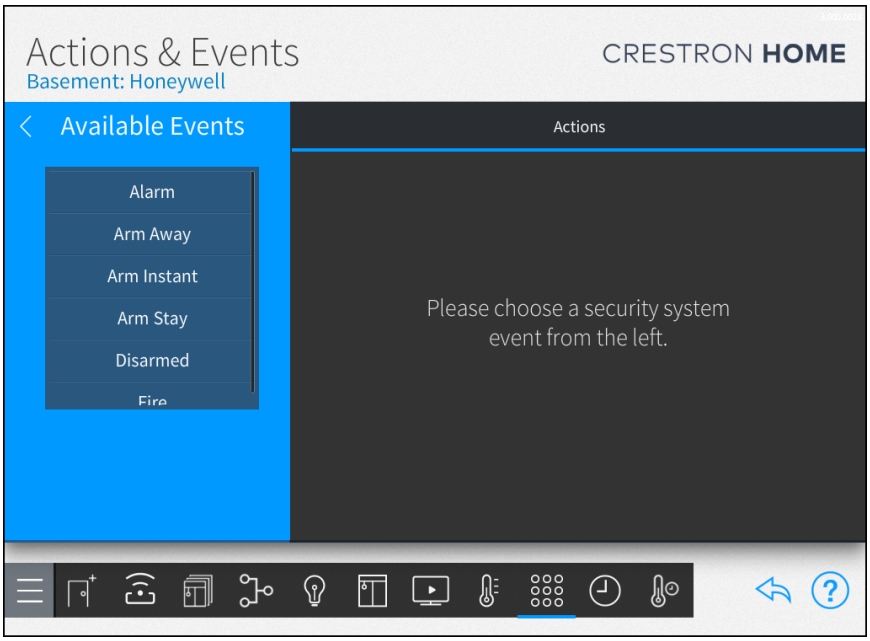
Configure Security Systems

Use the security system configuration screen to associate scenes and other actions with security events.

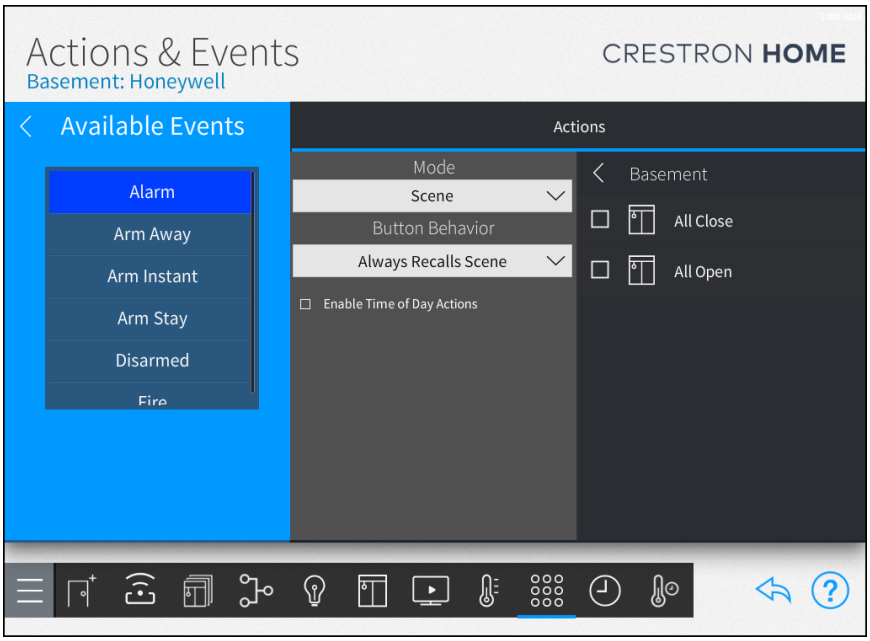
NOTE: Security systems must be connected to a PYNG-CONNECT-COM device before they may be discovered by the Crestron Home system. For more information, refer to the PYNG-CONNECT-COM DO Guide (Doc. 7697) at www.crestron.com/manuals.

Select a security system from the **Select an Item** menu to display a configuration screen for the security system.

1. Tap an **Available Events** button.



2. The following configuration options are provided:



- Use the center panel to select the type of action that will be associated with the security event and to configure action-related behavior.

  NOTE: Other configuration options may be provided depending on the selected mode.

  - **Mode**: Select the type of action that is recalled by the security event (such as "Scene").
  - **Button Behavior**: (Available for compatible selection is selected for **Mode**) A drop-down menu to set the security event behavior for recalling the selected action.
  - **Enable Time of Day Actions**: (Available when **Scene** is selected for **Mode**) Enables different scenes to be recalled based on the time of the day. Set a scene for Morning, Day, Evening, and Night.
- Use the right screen panel to associate an action with the security event.

  NOTES:

  - The same action or scene may be assigned to multiple security events.
  - Multiple actions or scenes may also be assigned to the same security event.

  - Use the **Select Room Below** menu to select the room that contains the desired action or scene.

- Tap on a room name to display a list of actions that may be selected for the room. The type of action that is displayed is set using the **Mode** drop-down menu in the center panel.
- Tap the check box next to an action to add or remove that action from the event. A checked box indicates that the action is set to occur during the security event.
- Tap the back arrow (<) next to the room name to return to the **Select Room Below** menu.

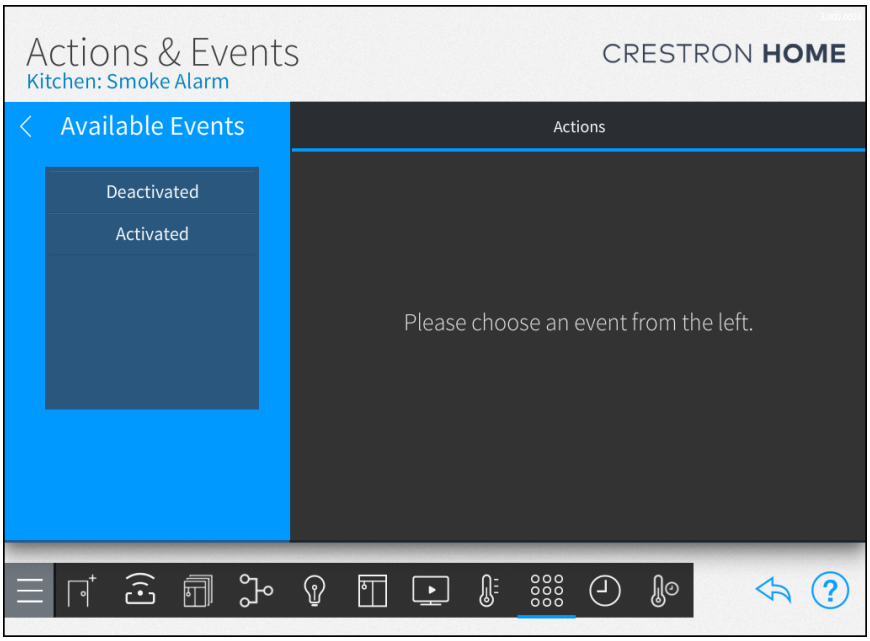
NOTE: Only rooms that contain selectable actions appear on the **Select Room Below** menu. Once an action is selected from a room, the room name is shown with blue text in the **Select Room Below** menu.

Configure Alarms

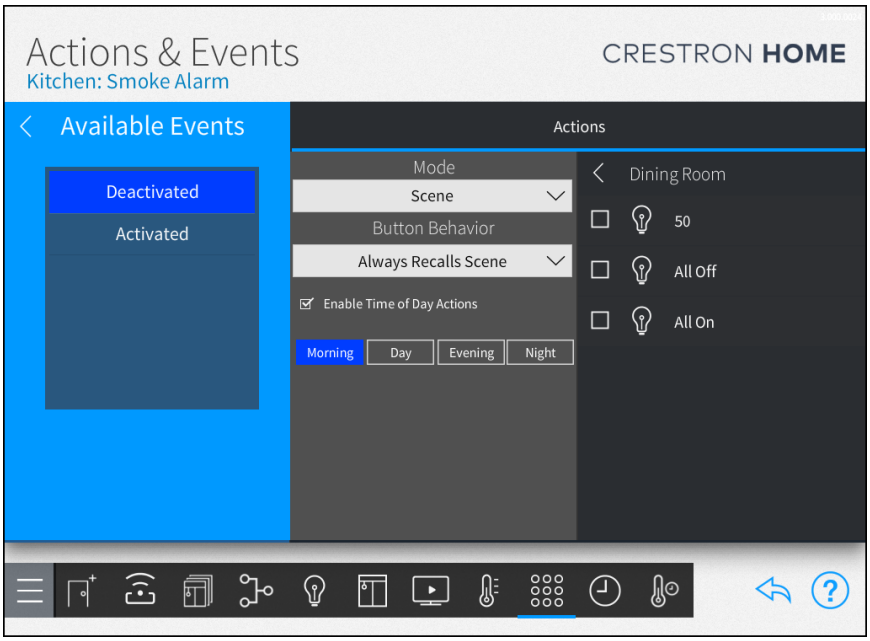
Use the alarm configuration screen to associate scenes and other actions with alarm events.

Select an alarm device from the **Select an Item** menu to display a configuration screen for the alarm.

1. Tap an **Available Events** button.



2. The following configuration options are provided:



- Use the center panel to select the type of action that will be associated with the alarm event and to configure action-related behavior.

  NOTE: Other configuration options may be provided depending on the selected mode.

  - **Mode**: Select the type of action that is recalled by the alarm event (such as "Scene").
  - **Button Behavior**: (Available for compatible selection is selected for **Mode**) A drop-down menu to set the alarm event behavior for recalling the selected action.
  - **Enable Time of Day Actions**: (Available when **Scene** is selected for **Mode**) Enables different scenes to be recalled based on the time of the day. Set a scene for Morning, Day, Evening, and Night.
- Use the right screen panel to associate an action with the alarm event.

  NOTES:

  - The same action or scene may be assigned to multiple alarm events.
  - Multiple actions or scenes may also be assigned to the same alarm event.

  - Use the **Select Room Below** menu to select the room that contains the desired action or scene.

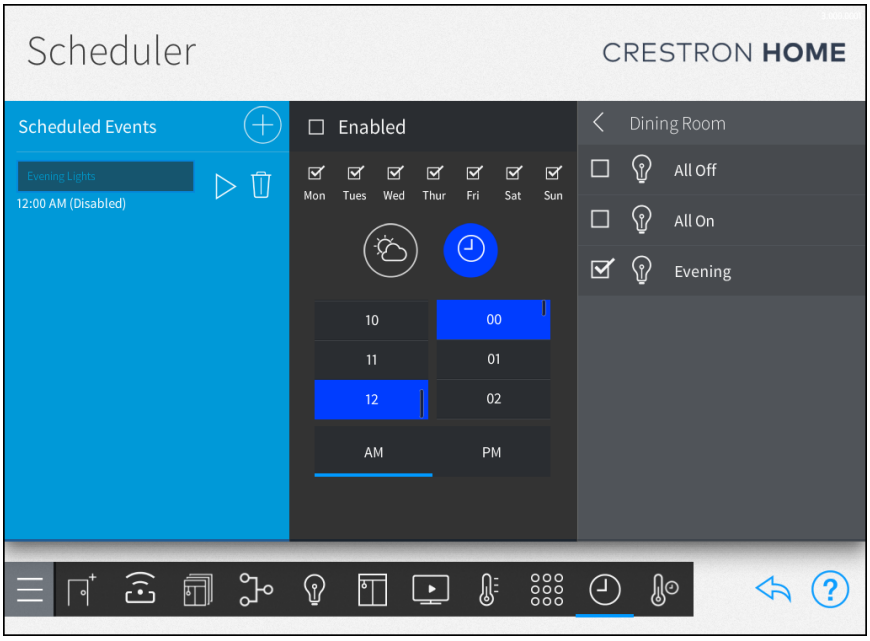
- Tap on a room name to display a list of actions that may be selected for the room. The type of action that is displayed is set using the **Mode** drop-down menu in the center panel.
- Tap the check box next to an action to add or remove that action from the event. A checked box indicates that the action is set to occur during the alarm event.
- Tap the back arrow (<) next to the room name to return to the **Select Room Below** menu.

NOTE: Only rooms that contain selectable actions appear on the **Select Room Below** menu. Once an action is selected from a room, the room name is shown with blue text in the **Select Room Below** menu.

Schedule Events

Use the **Scheduler** screen to schedule events that recall one or more scenes at specific times and days of the week.

Tap the **Schedule Events** button on the **Configuration** screen or the Scheduler button on the setup menu to display the **Scheduler** screen.



To recall the scenes that are scheduled to be triggered by the event, tap the play button next to the event name.

Create a New Scheduled Event

To create a new scheduled event:

1. Tap the plus button (**+**) next to **Scheduled Events**.
2. Enter a descriptive name for the event.
3. Tap **OK**. The new event is displayed in the **Scheduled Events** menu.

Configure a Scheduled Event

To configure an existing scheduled event:

- **Enabled:** Check the box to enable the event and add it to the system schedule.

  NOTE: New events are disabled by default.

- **Day of Week:** Tap the appropriate check boxes above each day of the week to select the days that the event will occur. A filled check box indicates that the event is scheduled to occur on the associated day.
-  : Schedule the event to occur at a specific time of day. Set the time using the provided spinner menus.
-  : Schedule the event to occur at a time relative to sunrise or sunset (calculated by date and time zone). Select whether the event should occur at sunrise or sunset and then set when the event should occur relative to the sunrise or sunset time.

  NOTE: To adjust the default times for sunrise and sunset, navigate to **Installer Settings** > **System Configuration** > **System Settings**, and then tap the wrench button  on the **Current Times of Day** panel. For more information, refer to Current Time and Date on page 200.

- **Select Room Below:** Select a room from the menu, and then select the scene(s) that will be triggered by the event.

  NOTE: Only rooms that contain scenes display on the **Select Rooms Below** menu. Any room with a selected scene is shown with blue text on the **Select Rooms Below** menu.

Delete a Scheduled Event

To delete a scheduled event:

1. Tap an event in the **Scheduled Events** menu.
2. Tap the trashcan button  next to the event name.
3. Tap **OK** to delete the event or tap **Cancel** to cancel any changes.

To return to the previous screen, tap the back arrow button  .

Schedule Climate Control

Use the **Thermostat** screen to view and schedule events for the thermostats in the system.

The available thermostats are listed under **Select a Thermostat** and the list of available thermostat events are listed under **List of Scheduled Events**. Each thermostat event provides the time and days that it is scheduled to occur, as well as its cooling and heating set points.

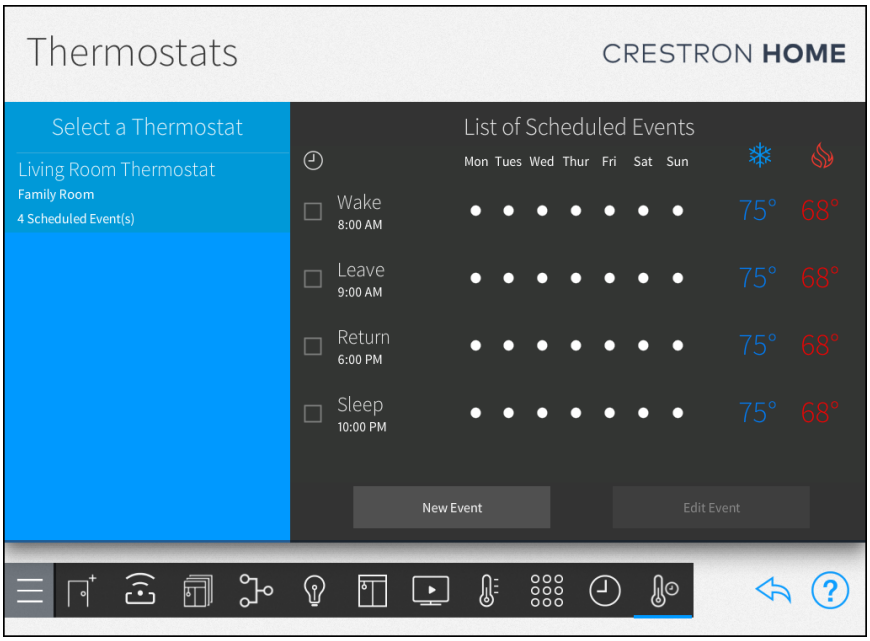
When a thermostat is added to the system, events are created for "Sleep," "Wake," "Leave," and "Return." These events are disabled by default. To enable them, tap the event's check box to the left of the event name. A filled check box indicates that the scene is enabled.

Tap the **Schedule Climate Control** button on the **Configuration** screen or the Thermostats button on the setup menu to display the **Thermostats** screen.

Create a New Thermostat Event

To create a new scheduled thermostat event:

1. Select a thermostat from the **Select a Thermostat** menu. The list of scheduled events for the selected thermostat is displayed.



2. Tap **New Event**. The **Edit Event** dialog box is displayed.

3. Configure the following event settings:
   - **Event Name:** Enter a descriptive name for the event in the text box at the top of the dialog box using the on-screen keyboard.
   - **Enable Event:** Tap the check box next to **Enabled** to enable the event and add it to the thermostat schedule. New events are disabled by default.
   - **Set the Time:** Set the time that the thermostat event should occur using the provided spinner menus.
   - **Select the Days:** Tap the check box above each day of the week to select the days that the thermostat event should occur. A filled check box indicates that the event is scheduled to occur on the associated day.
   - **Select the Setpoints:** Select the temperature set points for cooling ❄, heating 🔥, and auto ♨|❄ modes using the appropriate spinner menu.
4. Tap **OK** to save the thermostat event or tap **Cancel** to cancel any changes.

Configure a Thermostat Event

To configure an existing thermostat event:

1. Select a thermostat from the **Select a Thermostat** menu. The list of scheduled events for the selected thermostat is displayed.
2. Select a thermostat event from the **List of Scheduled Events**.
3. Tap **Edit Event** to display the **Edit Event** dialog box.
4. Configure the following event settings:
    - **Event Name:** Enter a descriptive name for the event in the text box at the top of the dialog box using the on-screen keyboard.
    - **Enable Event:** Tap the check box next to **Enabled** to enable the event and add it to the thermostat schedule. New events are disabled by default.
    - **Set the Time:** Set the time that the thermostat event should occur using the provided spinner menus.
    - **Select the Days:** Tap the check box above each day of the week to select the days that the thermostat event should occur. A filled check box indicates that the event is scheduled to occur on the associated day.
5. Tap **OK** to save the thermostat event or tap **Cancel** to cancel any changes.

Enable or Disable a Thermostat Event

To enable or disable an existing thermostat event, tap the check box next to the event name. A filled check box indicates that the scene is enabled.

Delete a Thermostat Event

To delete an existing thermostat event:

1. Select a thermostat from the **Select a Thermostat** menu. The list of scheduled events for the selected thermostat is displayed.
2. Select a thermostat event from the **List of Scheduled Events.**
3. Tap **Edit Event** to display the **Edit Event** dialog box.
4. Tap the trashcan button  to delete the event.
5. Tap **OK** to save the thermostat event or tap **Cancel** to cancel any changes.

To return to the previous screen, tap the back arrow button  .

System Settings - Installer

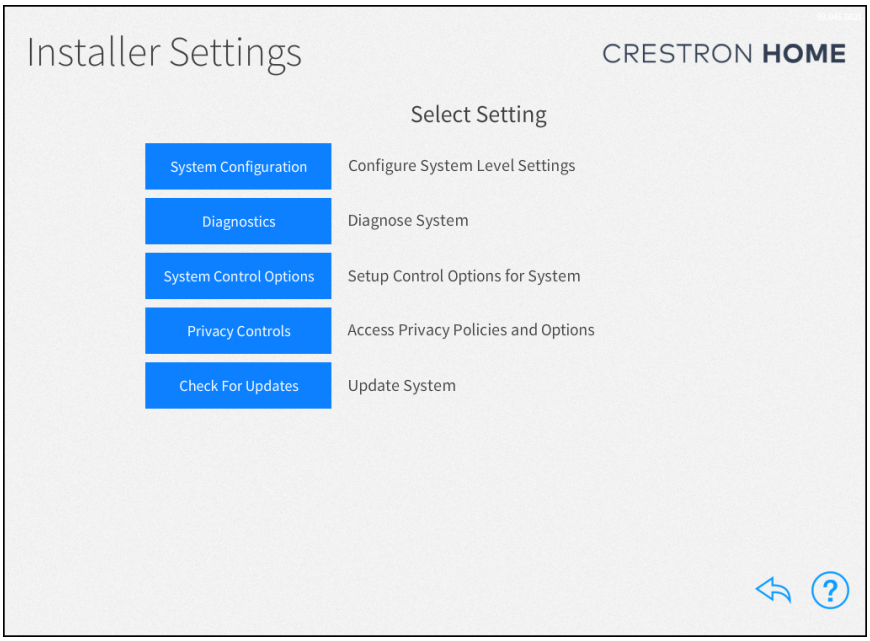
Use the **Installer Settings** screen to configure the settings for the Crestron Home system and the Crestron Home processor.

To enter the **Installer Settings** screen, tap the gear button on the bottom right of the **Setup** screen.

The following items can be configured from the **Installer Settings** screen.

- **System Configuration:** Configure system settings, system information and passwords, Ethernet settings, and myCrestron services. This selection also provides an option for resetting the Crestron Home processor to its factory default settings. For details, refer to System Settings on page 199.
- **Diagnostics:** Configure various settings for the Crestron Home system and the Crestron Home processor. For details, refer to Diagnostics on page 221.
- **System Control Options:** Set up a myCrestron account, to adjust the web XPanel interface server settings, to configure voice control settings, and to update the web API authentication token. For details, refer to System Control Options on page 226.
- **Privacy Controls:** View and edit privacy settings for collecting system information. For details, refer to Privacy Controls on page 236.
- **Check for Updates:** Check for and download software updates for the Crestron Home system and for connected devices. For details, refer to Software Update on page 237.
- **App Settings:** View and edit the settings used to connect the Crestron Home Setup app to the Crestron Home control processor.

  NOTE: Only available on the Crestron Home Setup app for Apple iPad devices.



Tap the help button ? on any of the **Installer Settings** screens to display dialog boxes that explain the screen functions and features and provide links to tutorial videos.

NOTE: The iPad or PC running the web XPanel interface must be connected to the network to access videos.

To return to the previous screen, tap the back arrow button .

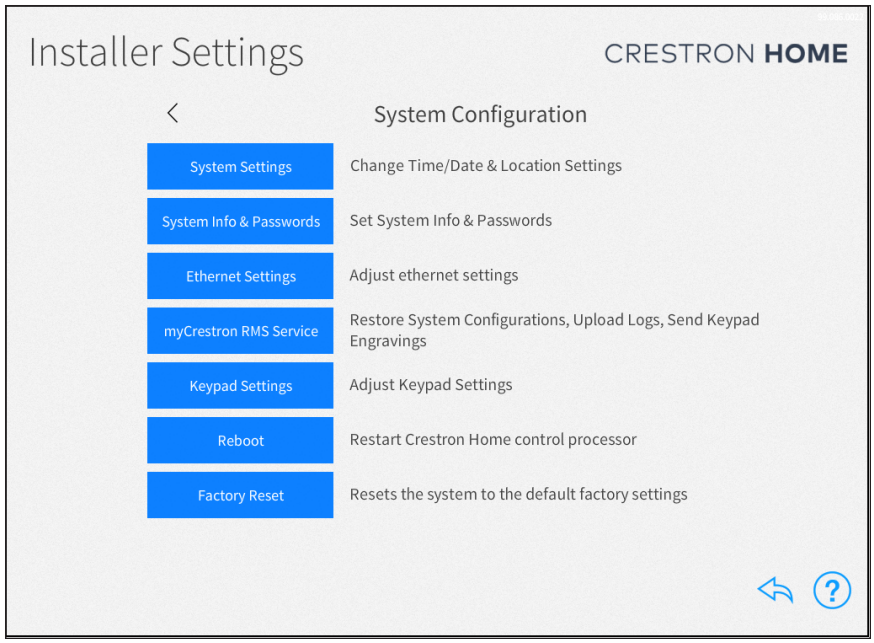
System Configuration

Use the **Installer Settings - System Configuration** screen to configure various Crestron Home system settings:

- **System Settings**: Configure the time and date, location settings, time of day settings, and the system language. For details, refer to System Settings on the next page.
- **System Info & Passwords**: Configure the system information and to change the system passwords. For details, refer to System Detail & Password Configuration on page 205.
- **Ethernet Settings**: Configure and view the Ethernet settings for the Crestron Home processor. For details, refer to Ethernet Settings on page 211.
- **MyCrestron RMS Service**: To obtain a registration code for registering the Crestron Home processor with a myCrestron domain and to access various myCrestron services. For details, refer to myCrestron RMS Services on page 213.
- **Keypad Settings**: To change system-wide keypad settings. For details, refer to myCrestron RMS Services on page 213.
- **Reboot** : To reboot the Crestron Home control processor. For details, refer to myCrestron RMS Services on page 213.
- **Reset to Factory Defaults**: Resets the Crestron Home processor to its factory default settings. For details, refer to Reset to Factory Defaults on page 219.

To enter the **System Configuration** screen:

1. Tap the gear button on the bottom right of the **Setup** screen.
2. Tap **System Configuration**. The **Installer Settings - System Configuration** screen is displayed.



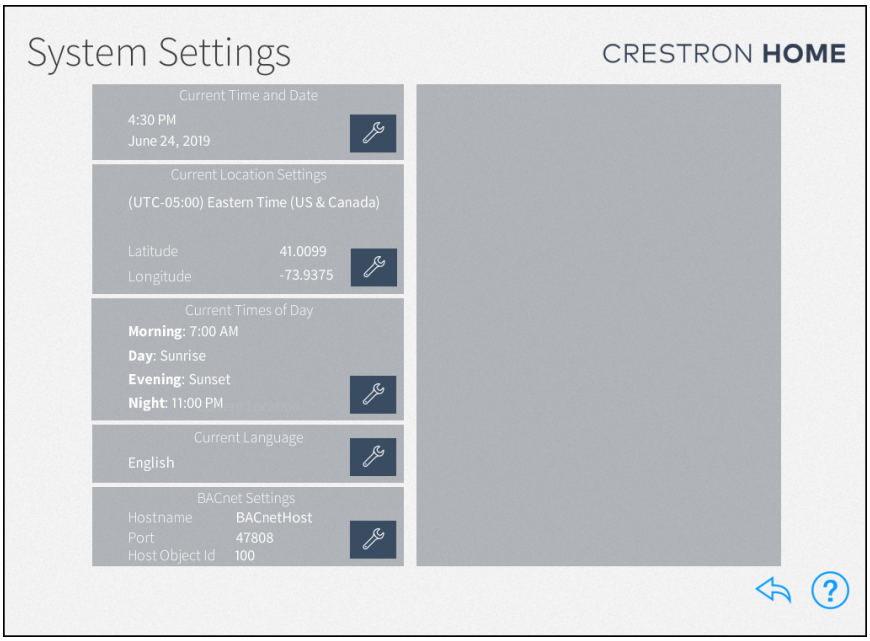
To return to the **Installer Settings** screen, tap the back arrow <.

To return to the previous screen, tap the back arrow button .

System Settings

Use the **System Settings** screen to configure the time and date, the location settings, the current times of day used for events, the system language, and the BACnet Settings.

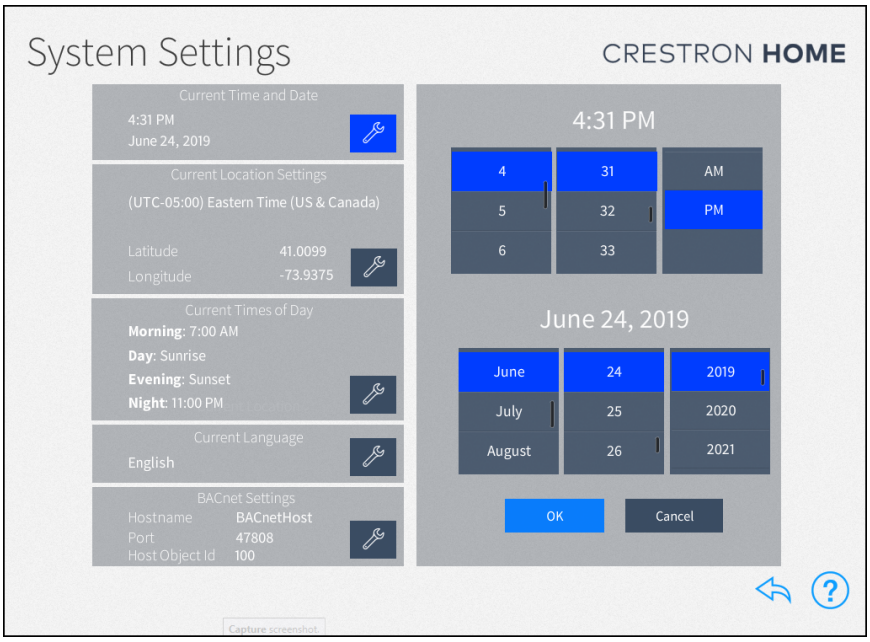
To configure the System Settings, tap **System Settings** on the **Installer Settings - System Settings** screen.



Current Time and Date

To set the current time and date:

1. Tap the wrench button  next to **Current Time and Date**.



2. Use the spinner menus to set the hour and minute and **AM** or **PM**.
3. Use the spinner menus to set the month, day, and year.
4. Tap **OK** to save any changes. Tap **Cancel** to cancel any changes.

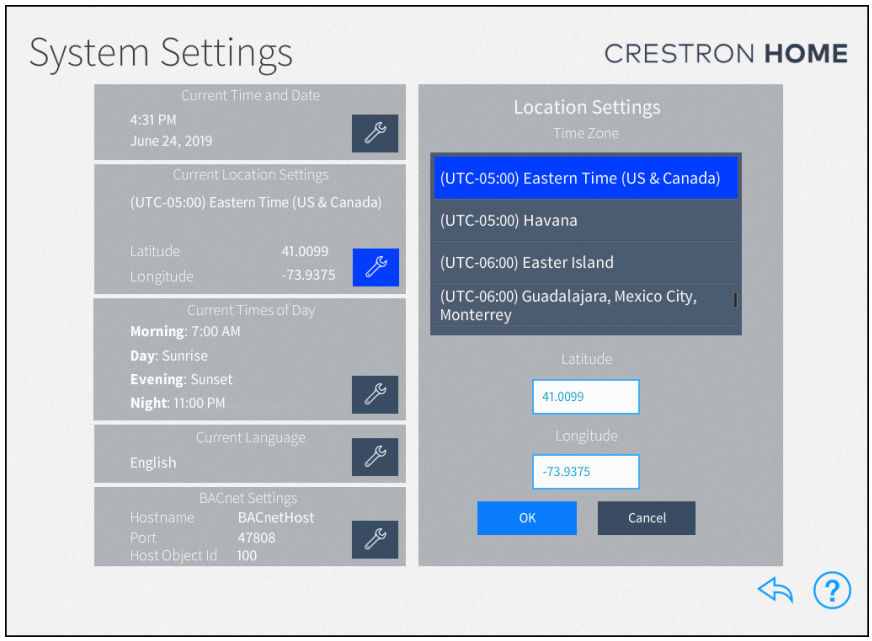
To return to the previous screen, tap the back arrow button  .

Current Location Settings

To set the Location Settings:

NOTE: If configuring the system with an iPad, tap **Synchronize with iPad** to synchronize the time zone, longitude, and latitude with the iPad device's location services.

1. Tap the wrench button  next to **Current Location Settings**.



2. To set the time zone, select the location in the **Time Zone** field.
3. If necessary, the latitude and longitude can be fine-tuned. Adjust the latitude in the **Latitude** field and adjust the longitude in the **Longitude** field.
4. Tap **OK** to save any changes. Tap **Cancel** to cancel any changes.

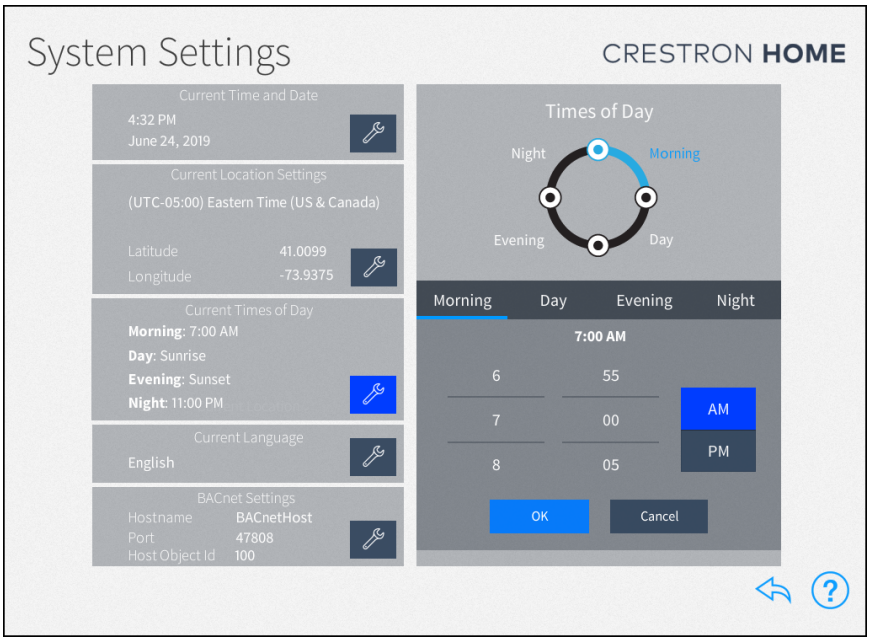
To return to the previous screen, tap the back arrow button  .

Current Times of Day

Times of day are used to trigger different actions and events within the system when the preset clock time is reached. The Morning and Night Times of Day are static times that occur at the same time every day. The Day and Evening Times of Day are based on sunrise and sunset times and change during the course of the year.

To set the Morning and Night times.

1. Tap the wrench button next to **Current Times of Day**.



2. Tap **Morning** or **Night**., and then set the time.
   - **Morning:** When the homeowner typically wakes up.
   - **Night:** When the homeowner typically goes to sleep.
3. Tap **OK** to save any changes. Tap **Cancel** to cancel any changes.

To set the Day and Evening times:

1. Tap the wrench button next to **Current Times of Day**.
2. Tap **Day** or **Evening**, and then set the time.
   - **Day:** How long before or after sunrise (calculated by date and time zone) the Day preset occurs.

     NOTE: In some cases (such as in the summer months), the time set for the Day preset may occur before the time set for the Morning preset. In these cases, any actions or events set for the Morning preset do not occur.

   - **Evening:** How long before or after sunset (calculated by date and time zone) the Evening preset occurs.
3. Tap **OK** to save any changes. Tap **Cancel** to cancel any changes.

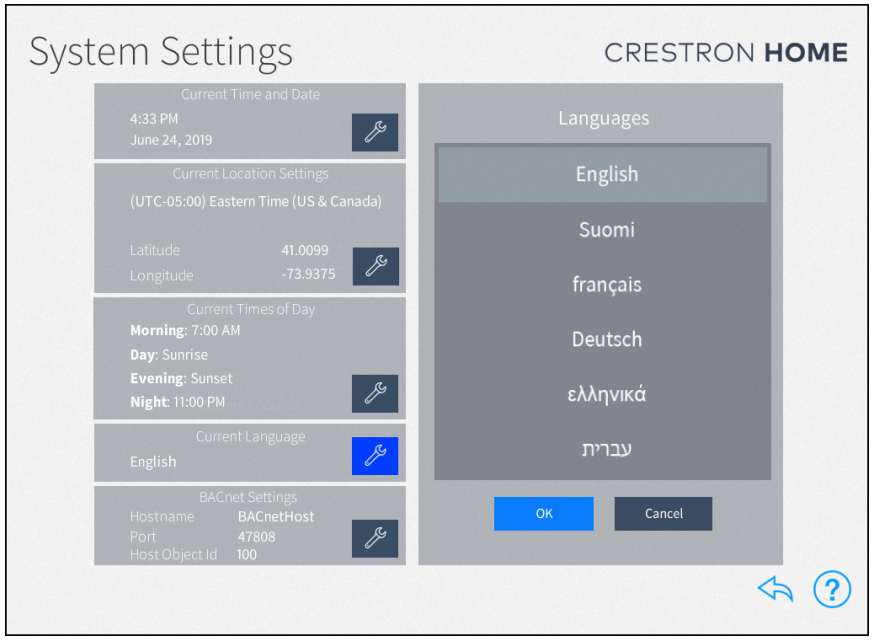
To return to the previous screen, tap the back arrow button .

Current Language

The Current Languages screen sets the language that is used in the setup app and the user interface devices.

To set the language:

1. Tap the wrench button next to **Current Language**.



2. Select the system language from the menu provided under **Languages**.
3. Tap **OK** to save any changes. Tap **Cancel** to cancel any changes.

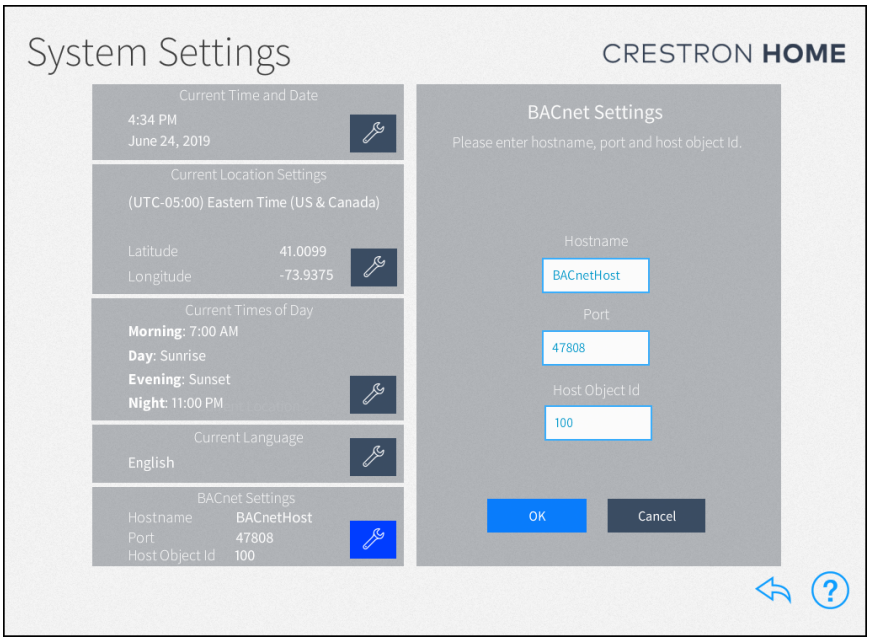
To return to the previous screen, tap the back arrow button .

BACnet Settings

The **BACnet Settings** screen sets the information that is used for the BACnet.

To set the BACnet settings:

1. Tap the wrench button  next to **BACnet Settings**. The **BACnet Settings** screen displays.



2. Configure the following settings:
   - **Hostname:** Enter the HostName for the BACnet system.
   - **Port:** Enter the port for the BACnet system.
   - **Host Object Id:** Enter the host object id for the BACnet system.
3. Tap **OK** to save any changes. Tap **Cancel** to cancel any changes.

To return to the previous screen, tap the back arrow button  .

System Detail & Password Configuration

Use the **System Detail & Password Configuration** screen to update the system information and to change the Advanced User Password and Admin password used to access the configuration screens.

About Crestron Home Passwords

The Crestron Home system uses several passwords to allow access to different areas of the Crestron Home system.

NOTES:

- After three unsuccessful login attempts, the IP address of the device is blocked from joining the Crestron Home system for 1 hour. Other devices are allowed to join during this period.
- Create passwords using any combination of letters, numbers and symbols (ASCII-standard characters only, accents and accented characters are not supported).
- All passwords must be unique.
- Use Crestron Toolbox™ software to manage blocked IP addresses and to change the password policy and the maximum login attempts.
- To reset passwords, refer to Reset Passwords on page 210.

Crestron Home Setup app passwords:

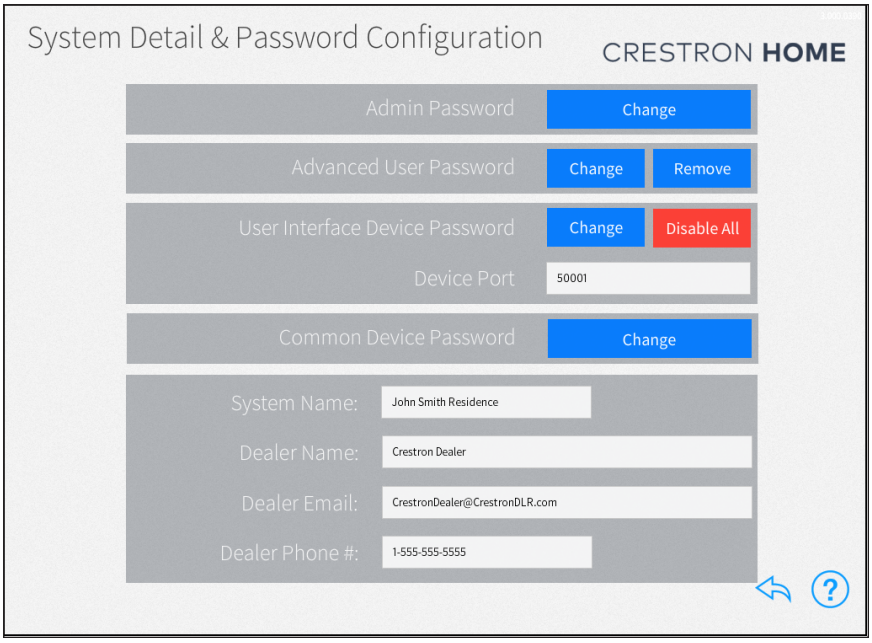
- **Admin Password:** Allows full access to the setup and configuration screens on the Crestron Home system.
- **Advanced User Password:** Allows limited access to the setup and configuration screens on the Crestron Home system.
- **Common Device Password:** Allows devices that support SSL and authentication to be added to the Crestron Home system.

Crestron Home App password:

- **User Interface Device Password:** Allows user interface devices (TSW-xx60 series touch screens, TSR-310 handheld remotes, iOS® devices, and Android™ devices) to join the Crestron Home system.

  NOTE: User interface devices will not be able to connect to the Crestron Home system if the User Interface Device Password is not set. To set the User Interface Device Password, refer to Set or Change the User Interface Device Password on page 208.

Tap **System Info & Passwords** on the **Installer Settings - System Configuration** screen to display the **System Detail & Password Configuration** screen.



Change the Admin Password

The Admin password is used to allow access to set up and configure the Crestron Home processor. The default username is "admin" and the default password is the serial number of the Crestron Home processor.

To change the Admin password:

1. Tap **Change** to set a new Admin password. A pop-up dialog box is displayed.
2. Enter a new password.
3. Tap **OK** to confirm the change to the password.

CAUTION: Once an admin password is set, installer configuration mode may not be accessed without entering the password.

Set or Change the Advanced User Password

To change the Advanced User password:

1. Tap **Set** to set the Advanced User password or **Change** to change the Advanced User password. A pop-up dialog box is displayed.
2. Enter the **Admin Username** and **Admin Password** and then enter the new **Advanced User** password.
3. Tap **OK** to confirm the password.

NOTE: The Admin Password and the Advanced User Password may not be the same.

Remove the Advanced User Password

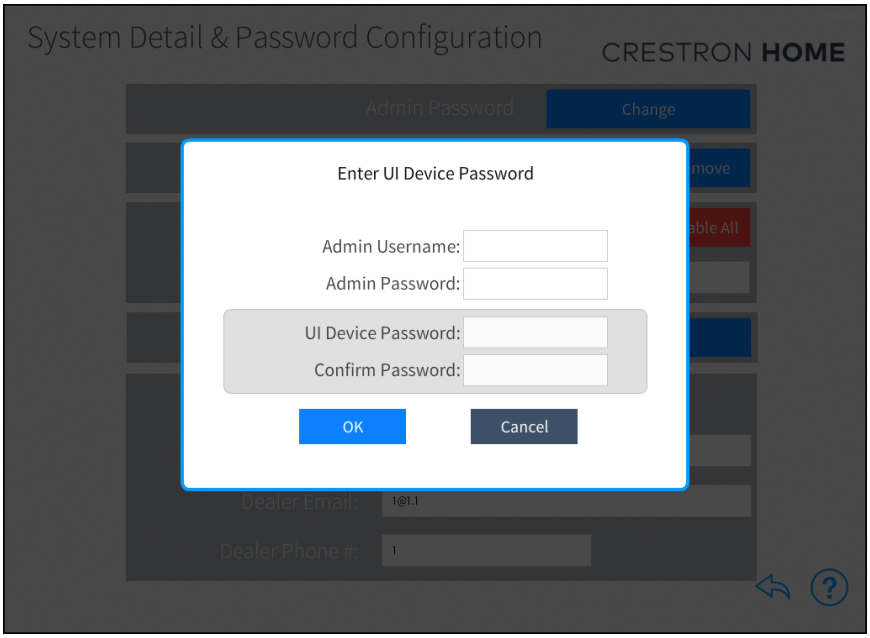
To remove the Advanced User password, tap **Remove** and then tap **OK**.

Set or Change the User Interface Device Password

The User Interface Device Password allows user interface devices (TSW-xx60 series touch screens, TSR-310 handheld remotes, iOS® devices, and Android™ devices) to join the Crestron Home system. If the User Interface Password is not set, user interface devices will be unable to connect to the Crestron Home system.

To change the User Interface Device password:

1. Tap **Enable** to set the User Interface Device Password or **Change** to change the User Interface Device Password. The **Enter UI Device Password** dialog displays.



2. Enter the required credentials for the Admin in the **Admin Username** and **Admin Password** fields and then enter the User Interface Device password in the **UI Device Password** and **Confirm Password** fields.
3. Tap **OK** to continue or **Cancel** to exit without saving changes.

Change the User Interface Device Port (Local Port)

The Crestron Home system uses port 50001 for communication between the Crestron Home processor and the User Interface Device. The port used for communications can be changed if port 50001 is in use by the ISP and cannot be forwarded.

To change the User Interface Device Port (Local Port):

1. Enter the port number into the **Port** field.
2. Change the port on all user interface devices. For details, refer to Pair User Interface Devices on page 381.

Set or Change the Common Device Password

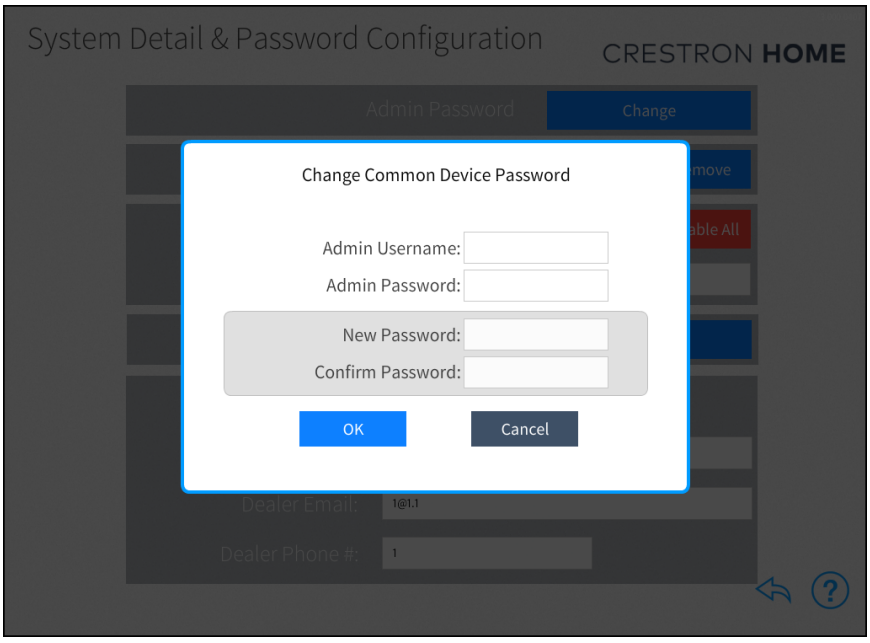
The Common Device Password allows devices that support authentication to be added to the Crestron Home system.

NOTES:

- The password is set when the first device that supports authentication is added to the Crestron Home system.
- If the Common Device Password is changed, the password for all devices that use the Common Device Password will need to be updated.

To set or change the Common Device Password:

1. Tap **Set** to set the Common Device Password or **Change** to change the Common Device Password. The **Change Common Device Password** dialog displays.



2. Enter the required credentials for the Admin in the **Admin Username** and **Admin Password** fields and then enter the Common Device password in the **New Password** and **Confirm Password** fields.
3. Tap **OK** to continue or **Cancel** to exit without saving changes.

Reset Passwords

Passwords can be reset to their factory default setting if a password is lost or if the system is transferred to a new owner.

NOTES:

- The Admin password is reset to the default password.
- The Advanced User, User Interface Device, and Common Device passwords must be set manually.

To reset the passwords:

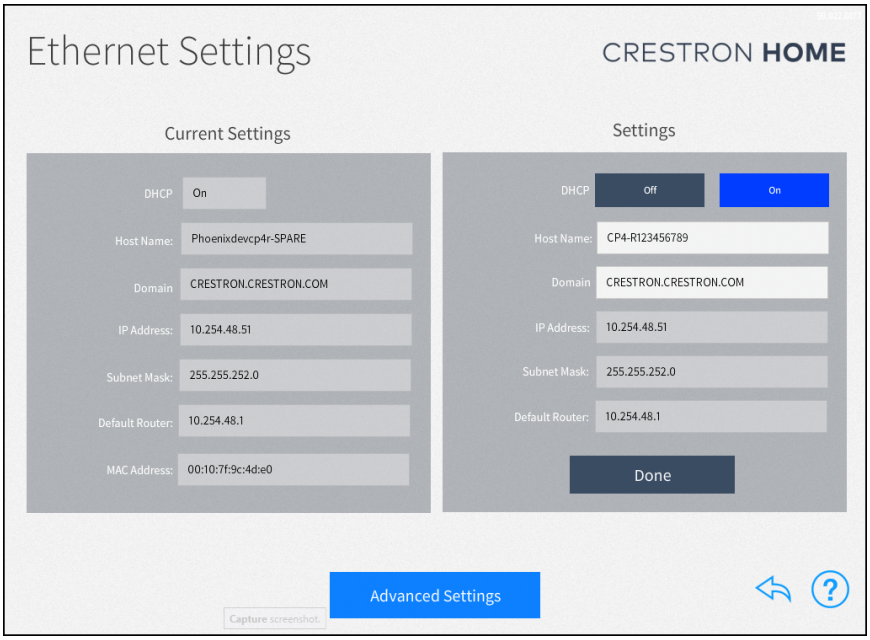
1. Press and hold the **SW-R** button on the Crestron Home processor (about 15 seconds) until the MSG LED flashes rapidly.
2. Change the default Admin, Advanced User, User Interface Device, and Common Device passwords:
   - **Admin password:** Refer to Change the Admin Password on page 207
   - **Advanced User password:** Refer to Set or Change the Advanced User Password on page 207
   - **User Interface Device password:** Refer to Set or Change the Advanced User Password on page 207
   - **Common Device password:** Refer to Set or Change the Common Device Password on the previous page

To return to the previous screen, tap the back arrow button .

Ethernet Settings

Use the **Ethernet Settings** screen to view and modify the Ethernet settings for the Crestron Home processor.

To configure the Ethernet settings, tap **Ethernet Settings** on the **Installer Settings - System Configuration** screen.



The **Current Settings** panel displays the following Ethernet settings:

- **DHCP:** Reports whether DHCP (Dynamic Host Configuration Protocol) is turned on or off.
- **Host Name:** The Crestron Home processor hostname.
- **Domain:** The Crestron Home processor domain name.
- **IP Address:** The Crestron Home processor IP address.

  NOTE: If a static IP address is set for the Crestron Home processor, a DNS server must also be set to generate the IP address. DNS servers may be added or edited by tapping Advanced Settings.

- **Subnet Mask:** The Crestron Home processor subnet mask address.
- **Default Router:** The default gateway router address.
- **MAC Address:** The Crestron Home processor unique MAC (Media Access Control) address.

The following Ethernet settings may be edited in the **Settings** panel.

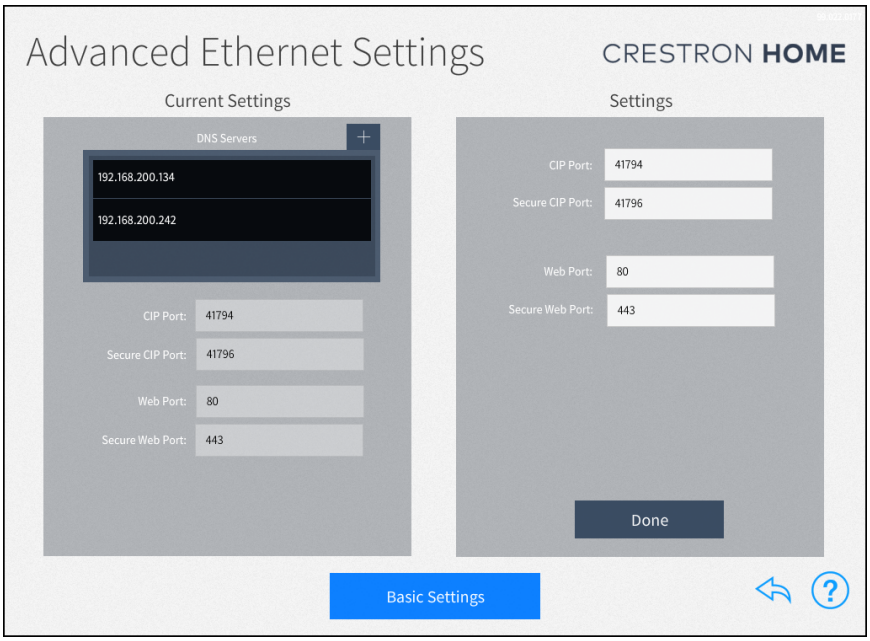
- **DHCP:** Tap **On** to turn DHCP on, or tap **Off** to turn DHCP off.

  NOTE: If DHCP is turned on, the device IP address, the subnet mask, and the default router settings may not be changed manually.

- **Host Name:** Enter the Crestron Home processor hostname.
- **Domain:** Enter the Crestron Home processor domain name used for connection.
- **IP Address:** If DHCP is turned off, enter the Crestron Home processor IP address.
- **Subnet Mask:** If DHCP is turned off, enter the Crestron Home processor subnet mask address.
- **Default Router:** If DHCP is turned off, enter the default gateway router IP address.

After making any changes to the Ethernet settings, tap **Done**. A dialog box is displayed to confirm the changes. Tap **OK** to save the changes and to reboot the device using the new Ethernet settings. Tap **Cancel** to cancel the changes.

Tap **Advanced Settings** at the bottom of the screen to display the **Advanced Ethernet Settings** screen.



Use the **Advanced Ethernet Settings** screen to view and modify advanced Ethernet settings. This screen is also used to configure authentication for the device.

The following Ethernet settings may be viewed in the Current Settings panel.

- **DNS Servers:** The DNS (Domain Name Servers) servers that are used to generate IP addresses for the Crestron Home processor.
  - Tap the plus button (**+**) at the top of the **DNS Servers** menu to display a dialog box for entering a new DNS server IP address.

    - Enter the new DNS server address in the provided text field.
    - Tap **OK** to save the new DNS server or tap **Cancel** to cancel the addition.
- **CIP Port:** The CIP (Crestron Internet Protocol) port number for the CIP routing protocol.
- **Secure CIP Port:** The secure CIP port number for the CIP routing protocol.
- **Web Port:** The web port number for the hypertext transfer protocol.
- **Secure Web Port:** The secure web port number for the hypertext transfer protocol.

The following Ethernet settings may be edited in the **Settings** panel.

- **CIP Port:** Enter the CIP port number for the CIP routing protocol.
- **Secure CIP Port:** Enter the secure CIP port number for the CIP routing protocol.
- **CTP Port:** Enter the CTP port number for the CTP routing protocol.
- **Secure CTP Port:** Enter the secure CTP port number for the CTP routing protocol.
- **Web Port:** Enter the web port number for the hypertext transfer protocol.
- **Secure Web Port:** Enter the secure web port number for the hypertext transfer protocol.

After making any changes to the advanced Ethernet settings, tap **Apply**. A dialog box is displayed confirming whether the changes should be submitted. Tap **OK** to save the changes and to reboot the device using the new advanced Ethernet settings. Tap **Cancel** to cancel the changes.

Tap **Basic Settings** to return to the main **Ethernet Settings** screen.

To return to the previous screen, tap the back arrow button  .

Update the System Information

The system information is used to describe the name of the system and to provide information about the dealer that set up the system. Enter all of the information:

NOTE: Ensure that the dealer information is kept up to date, as this information is needed to place custom engraving orders through the Crestron Home system.

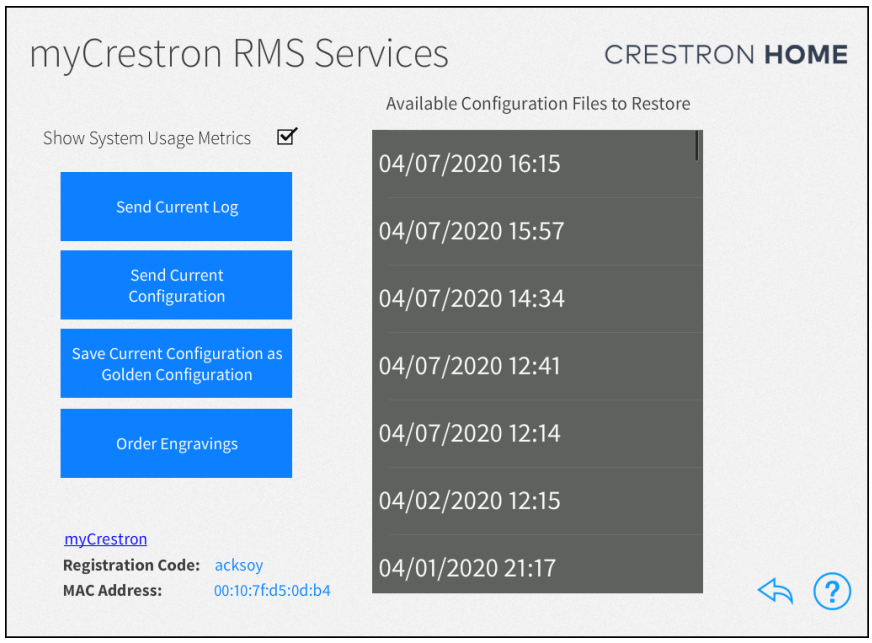
- **System Name:** Enter a descriptive system name (for example, "Smith Residence").
- **Dealer Name:** Enter the Crestron dealer responsible for the system installation.
- **Dealer Phone #:** Enter the phone number of the Crestron dealer responsible for the system installation.
- **Dealer Email:** Enter the email address of the Crestron dealer responsible for the system installation.

myCrestron RMS Services

Use the **MyCrestron RMS Services** screen to manage saved configuration files, to send message logs to the cloud, and to order custom engravings.

A **Registration Code** and **MAC Address** is provided to register the Crestron Home system with the myCrestron residential monitoring service. For more information on registering the Crestron Home system with the myCrestron Residential Monitoring Service, refer to Enable Remote System Access on page 561.

To configure the myCrestron Services, tap **MyCrestron RMS Services** on the **Installer Settings - System Configuration** screen.



Show System Usage Metrics

Check or uncheck the **Show System Usage Metrics** to enable or disable displaying the system usage metrics within the myCrestron Residential Monitoring Service.

Send Current Log

Sends the current message log file to the myCrestron Residential Monitoring Service. A dialog is displayed, tap **OK** to send the current message log file or tap **Cancel** to cancel.

Send Current Configuration

Sends the current system configuration settings to the myCrestron Residential Monitoring Service. A dialog is displayed, tap **OK** to send the current configuration or tap **Cancel** to cancel.

Save Current Configuration as Golden Configuration

Saves the current configuration as a golden configuration and then sends the configuration to myCrestron Residential Monitoring Service. A dialog is displayed, tap **OK** to save the current configuration as the golden configuration and send the configuration to myCrestron or tap **Cancel** to cancel.

NOTES:

- A golden configuration is indicated by a star icon next to the configuration in the **Available Configuration Files to Restore** menu.
- A golden configuration should only be made to preserve a system that is properly working. It may be used to repair known, working system states.
- The golden configuration will always be available for restore. It will not be deleted from myCrestron routine backups that are made by the system.

Order Engravings

Orders any custom engravings that are created in the system. A dialog is displayed, tap **OK** to order the engraving or tap **Cancel** to cancel.

NOTES:

- The control processor must be registered on the myCrestron Residential Monitoring service before engravings can be ordered. For details, refer to Enable Remote System Access on page 561.
- An email that contains the ordering information is generated and sent to the dealer using the email address entered on the myCrestron Residential Monitoring service. The email contains the device color, layout, and engraving information that was entered for the device during setup. For details, refer to Customize Actions & Events on page 109.

Restore a Previous System Configuration

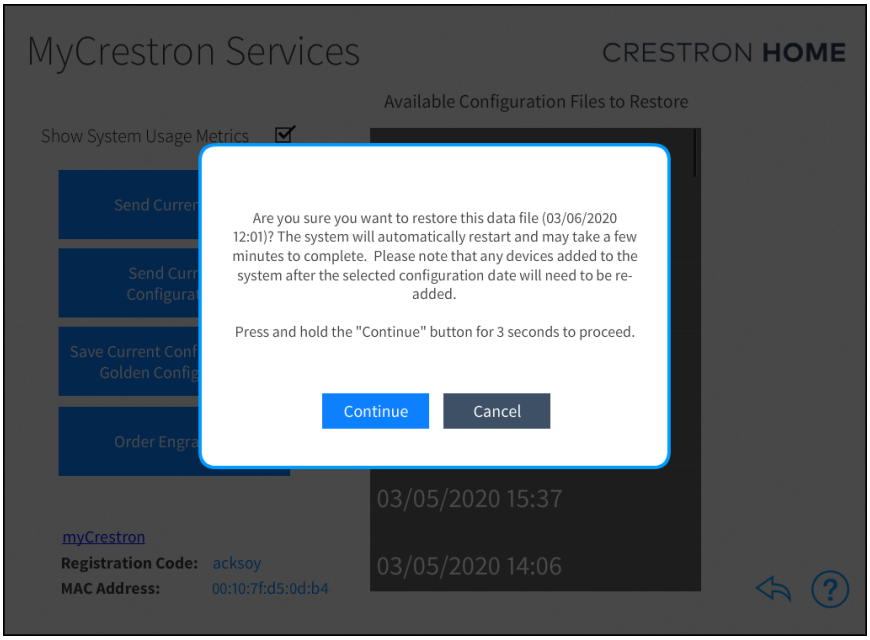
The Crestron Home system records the system configuration settings periodically and saves them in configuration files, which are sorted by time and date.

NOTE: Golden Configurations are indicated by a star icon and appear at the top of the **Available Configuration Files to Restore** list.

To restore a system configuration:

1. Identify a known working configuration file from the **Available Configuration Files to Restore** menu.
2. Tap the configuration file that you wish to restore.

3. A confirmation dialog is displayed. To restore the data file, tap and hold the **Continue** button for 3 seconds. The configuration is downloaded and then applied to the system. When complete, the control processor restarts.

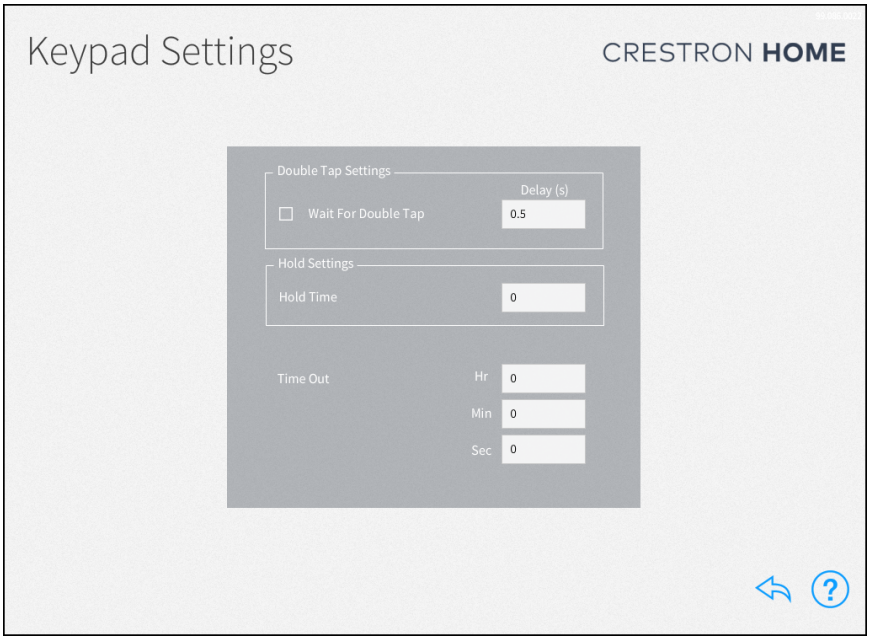


To return to the previous screen, tap the back arrow button .

Keypad Settings

Use the **Keypad Settings** screen to view and modify the global keypad settings for the double tap function.

To configure the Keypad settings, tap **Keypad Settings** on the **Installer Settings - System Configuration** screen.



Button Press Settings

- **Wait For Double Tap:**Tap the check box next to **Wait For Double Tap** to enable the wait for double tap function. The Wait for Double Tap function determines if the Crestron Home system triggers the Tap button action or the Double Tap button action. The delay is the amount of time (in seconds) that the system waits after a button press to determine if a subsequent button press is a double tap. The values can be set between 0.2 and 1 second.

  For example:

  - Tap button action is set to route video to a bedroom.
  - Double Tap button action is set to route audio to a bedroom.

  When Wait for Double Tap is enabled:

  NOTE: The Tap button action is not triggered if the button is pressed twice within the delay time.

  - A single button press will route video to the bedroom if the room is off (Tap button action).

- Two button presses will route audio to the bedroom (Double Tap button action).

When Wait for Double Tap is disabled:

> **NOTE:** The Crestron Home system registers both the single and double button presses and triggers both actions.

- A single button press will route video to the bedroom if the room is off (Tap button action).
- Two button presses will route video to the bedroom if the room is off (Tap button action) and then will route audio to the bedroom if the room is off (Double Tap button action).

- **Hold Time:** The amount of time (in seconds) that a button must be pressed during a press-and-hold operation before the Hold button action is performed.
- **Time Out:** The amount of time (in hours, minutes, and seconds) that the system waits to determine if the Multi Tap button action is performed.

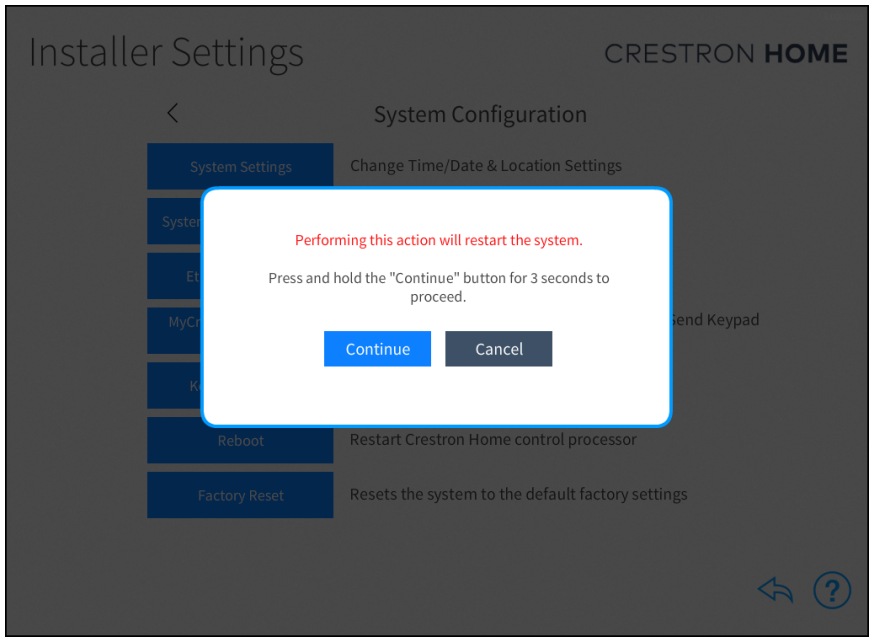
To return to the previous screen, tap the back arrow button .

Reboot the Control Processor

To reboot the Crestron Home processor:

1. Tap the **Reboot** button.
2. Tap and hold the **Continue** button for 3 seconds to reboot the control processor.

> **NOTE:** Tap the **Cancel** button to close the dialog and return to the **System Configuration** screen.



Reset to Factory Defaults

CAUTIONS:

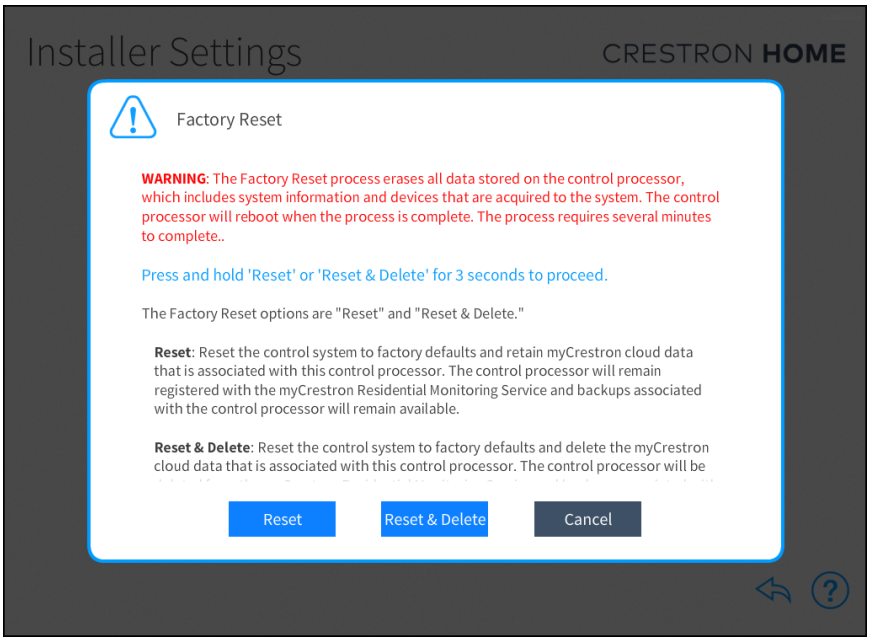
- Files cannot be recovered from the myCrestron Residential Monitoring Service if they are deleted.
- If required, download the backup files from the myCrestron Residential Monitoring Service before proceeding.

To reset the Crestron Home processor to its factory default settings:

1. Tap **Factory Reset**. A confirmation dialog appears.

   NOTE: All configured settings and all devices that are paired with the Crestron Home processor are erased during a factory restore.

2. Tap and hold the **Reset** or **Reset & Delete** button for three seconds. The factory default settings are applied to the control processor and then it reboots. Data that is stored on the myCrestron Residential Monitoring Service is handled differently when the **Reset** and **Reset & Delete** buttons are pressed.



   - **Reset:** Resets the control processor to the factory defaults. The control processor will remain registered with the myCrestron Residential Monitoring service and system data, such as system backups, that is stored on the myCrestron Residential Monitoring Service is retained.
   - **Reset & Delete:** Resets the control processor to the factory defaults. The control processor is deleted from the myCrestron Residential Monitoring Service and backups that are associated with the control processor will also

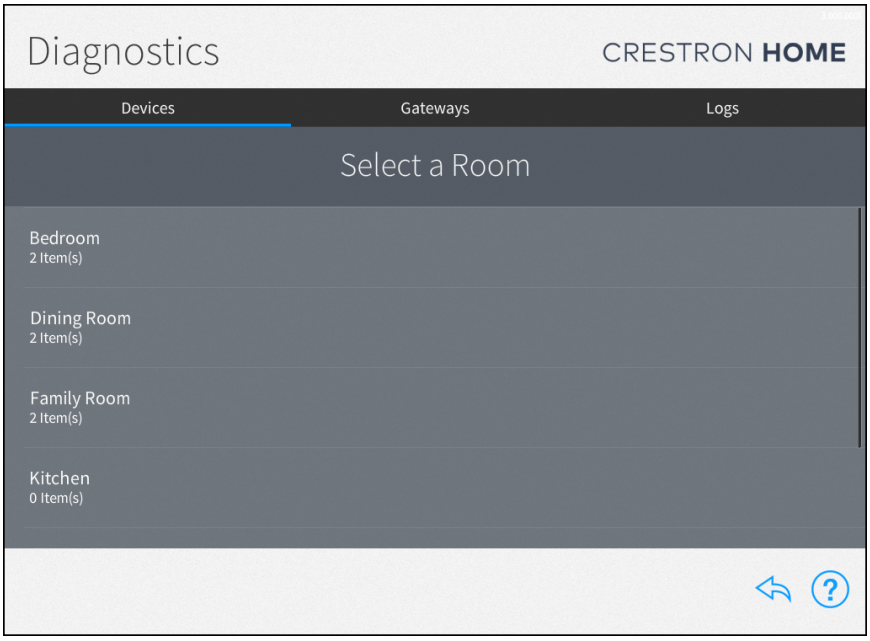
be deleted.

- **Cancel:** Cancel the factory restore and close the dialog.

Diagnostics

Use the **Diagnostics** screen to troubleshoot devices and gateways connected to the system and to view system message logs.

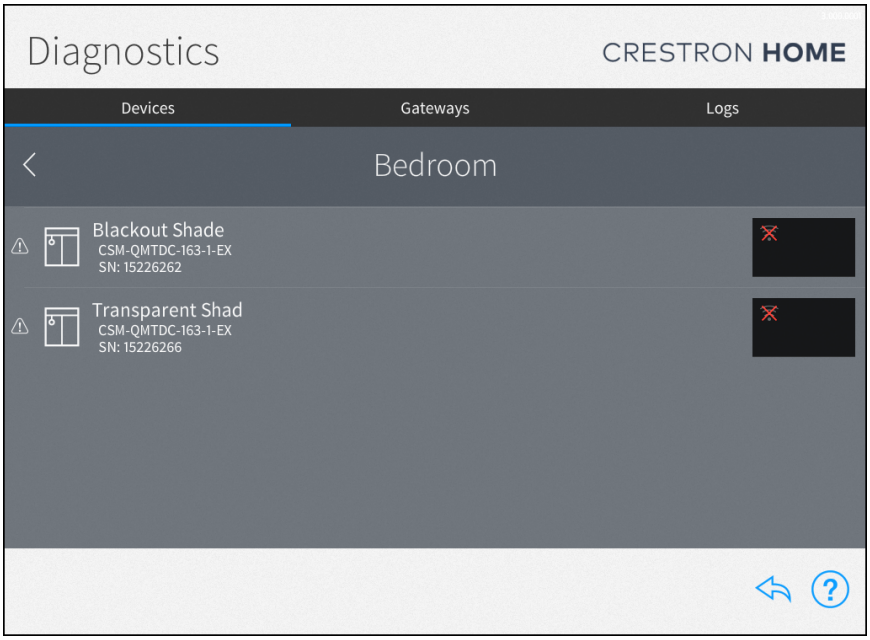
To view the **Diagnostics** screen, tap **Diagnostics** on the **Installer Settings - System Configuration** screen.



Devices

Tap the **Devices** tab to view all of the network devices that are paired with the Crestron Home system, organized by room. Each device reports its network status, firmware status, whether it is included in a scene, and whether it is affected by a scheduled event.

Select a room from the list to view the status of the devices configured for the room.



The following status information is provided for each device in the room:

Icon	Description
	The wireless device is online and detected by the system.
	The wired device is online and detected by the system.
	The wireless device is offline or not detected by the system.
	The wired device is offline or not detected by the system.
	A network connection cannot be determined or if the device is being scanned.
	A serial device is functioning and is associated with a COM port in the system.
	A serial device is functioning but is not associated with a COM port.
	An IR device is functioning and is associated with an IR port in the system.
	An IR device is functioning but is not associated with an IR port.

Icon	Description
	A CEC device is functioning and is associated with a CEC port in the system.
	A CEC device is functioning but it not associated with a CEC port in the system.
	The device is part of a scene.
	The device is running an outdated firmware version that is not supported by the system.
	The device is battery-operated and has low battery power.
	The system detects an issue with the device.

NOTE: Devices that are not connected to the network, such as relay-controlled devices and uncontrolled audio sources, do not display any network connection information.

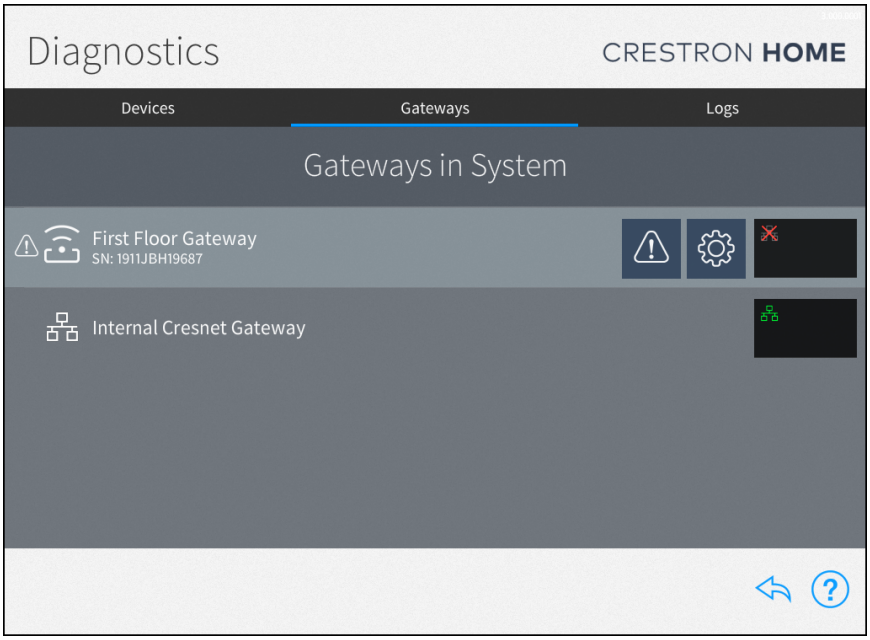
To view and modify device settings, tap the gear button next to the device.

To view the scene(s) that a device is in, tap the scene button next to the device.

To view an issue that is found with a device, tap the warning button next to the device.

Gateways

Tap the **Gateways** tab to view all of the gateways that are paired with the Crestron Home system. The **Gateways** tab also provides an option for viewing the system of paired Sonos devices. Each gateway reports its network and firmware status.



The following status information is provided for each gateway:

Icon	Description
	The gateway is online and detected by the system.
	The gateway is offline or not detected by the system.
	The gateway is running an outdated firmware version that is not supported by the system.
	The system detects an issue with the gateway

The following additional status information is provided for the **Sonos System** gateway:

NOTE: For more information on troubleshooting the Sonos system, refer to Sonos and Crestron Home Integration on page 469.

Icon	Description
	The Sonos system has discovered devices from multiple households after a device from one household has been paired.
	The Sonos system is not detected by the Crestron Home system.
	The Sonos system is disabled.
	A paired Sonos device is not detected by the Crestron Home system.

To view and modify device settings, tap the gear button  next to the device.

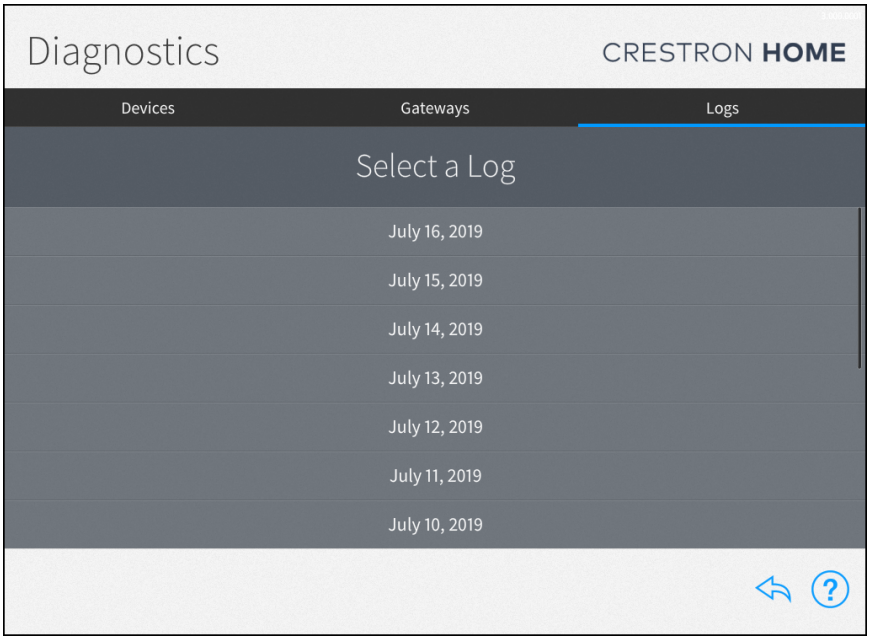
To view and modify gateway settings and to view all devices paired to the gateway, tap the gear button  next to a gateway.

If an issue is found with a gateway, tap the warning button  next to the device to view more information about the issue.

Logs

The message logs display all of the actions that have occurred in the Crestron Home system during a specified date and time range.

Tap the **Logs** tab on the top of the screen to view the message logs for the entire system, organized by day and time. Each item in the message log includes a time stamp, a recorded event description, and a message level indicating whether the item is general information or an error.



NOTE: An SD card must be loaded into the **MEMORY** slot on the Crestron Home processor to store log files.

To navigate the message logs:

- Select a date from the **Select a Log** menu.
- Tap the left and right arrow buttons (**<** and **>**) at the top of the screen to move forward and backward through logs for each day (starting with the current day).
- Swipe up or down through the list of times on the far left of the screen to view the logs for a specific time range (broken down into one-hour intervals).
- If more than one page of the log is available for the selected time range, use the left and right arrow buttons (**<** and **>**) at the bottom of the page to move forward or backward through the log pages.

To return to the previous screen, tap the back arrow button .

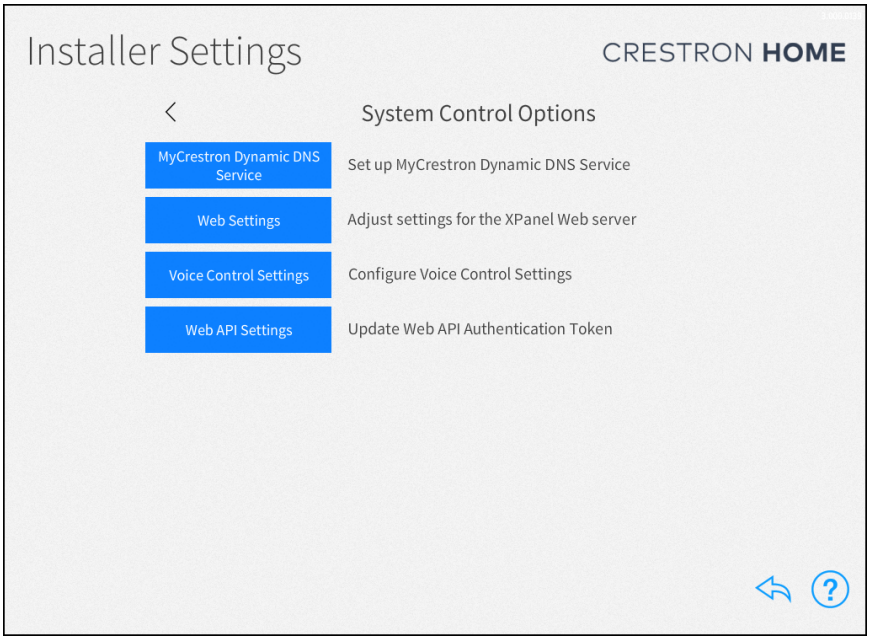
System Control Options

Use the **Installer Settings - System Control Options** screen to configure various options for system control:

- **MyCrestron Dynamic DNS Service**: Register the Crestron Home system with a myCrestron domain and to view the current myCrestron registration status. For details, refer to myCrestron Settings on the next page.
- **Web Settings**: Configure the settings for the web XPanel interface. For details, refer to Web Settings on page 229.
- **Voice Control Settings**: Set up voice control service to work with the Crestron Home system. For details, refer to Voice Control Settings on page 230.
- **Web API Settings**: Update the web API authentication token for the Crestron Home system. For details, refer to Web API Settings on page 235.

To enter the **System Control Options** screen:

1. Tap the gear button on the bottom right of the **Setup** screen.
2. Tap **System Control Options**. The **Installer Settings - System Control Options** screen is displayed.



To return to the previous screen, tap the back arrow button .

myCrestron Settings

Use the **MyCrestron Settings** screen to enable remote access to the Crestron Home system through the myCrestron Dynamic DNS service.

NOTE: A myCrestron domain name must be registered at www.mycrestron.com prior to registering the system with myCrestron.

To configure the myCrestron dynamic DNS service, tap **MyCrestron Dynamic DNS Service** on the **Installer Settings - System Control Options** screen.

Register a Domain Name with the myCrestron.com Dynamic DNS Service

To register a domain through the myCrestron.com Dynamic DNS Service page:

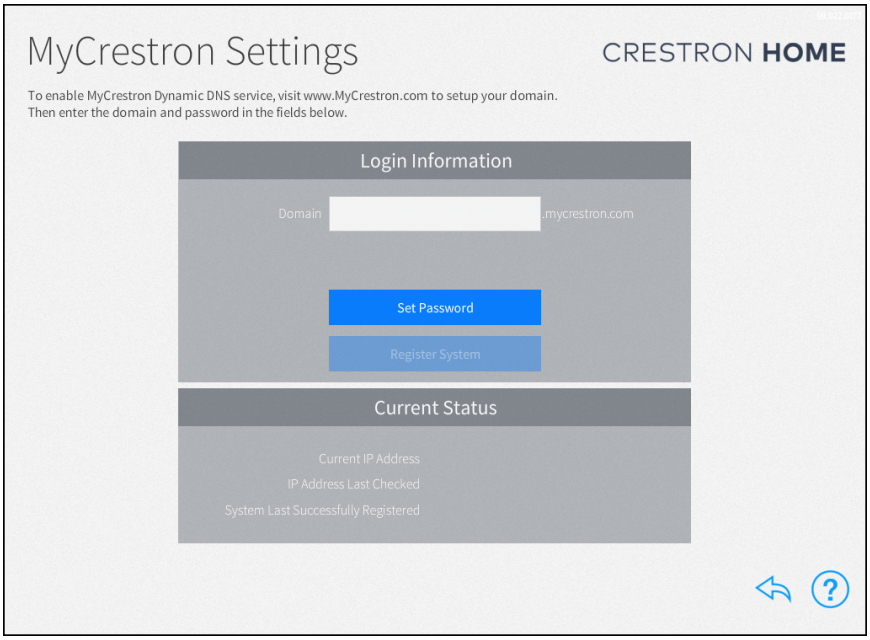
1. Navigate to www.mycrestron.com using a Web browser.
2. Click the **Register Domain** button. The Add a new Subdomain page displays.
3. Enter the required information in the Add a new Subdomain page.
    - **Domain Name**: The subdomain name that will be used for remote access to the system. The domain name is a subdomain of mycrestron.com, for example, the domain name "JohnSmithCottage" will use the URL JohnSmithCottage.mycrestron.com for remote access to the system.

      NOTE: A message is displayed if the domain name is already in use.
    - **Domain Password**: The password used to protect the system from access by others. For example, it prevents someone from updating the IP Address of the subdomain.
    - **Project Name**: The descriptive name of the project.
    - **Customer Name**: The name of the customer.
    - **Notes**: Information that may be important in the future and help differentiate different systems for the same customer.
4. Click the **Submit** button to register the system.

Pair the Crestron Home System with the myCrestron Domain Name

To register the Crestron Home system with a myCrestron account:

1. Enter the Login Information:



   - **Domain:** Enter the myCrestron subdomain in the **Domain** text box.
   - **Set Password:** Tap **Set Password** and then enter the password that was created for the subdomain.
2. Tap **Register System**. A success message is displayed when the system is successfully registered with the myCrestron.com domain name and the System Last Successfully Registered date updates in the Current Status panel.

Current Status

The **Current Status** panel displays the following information:

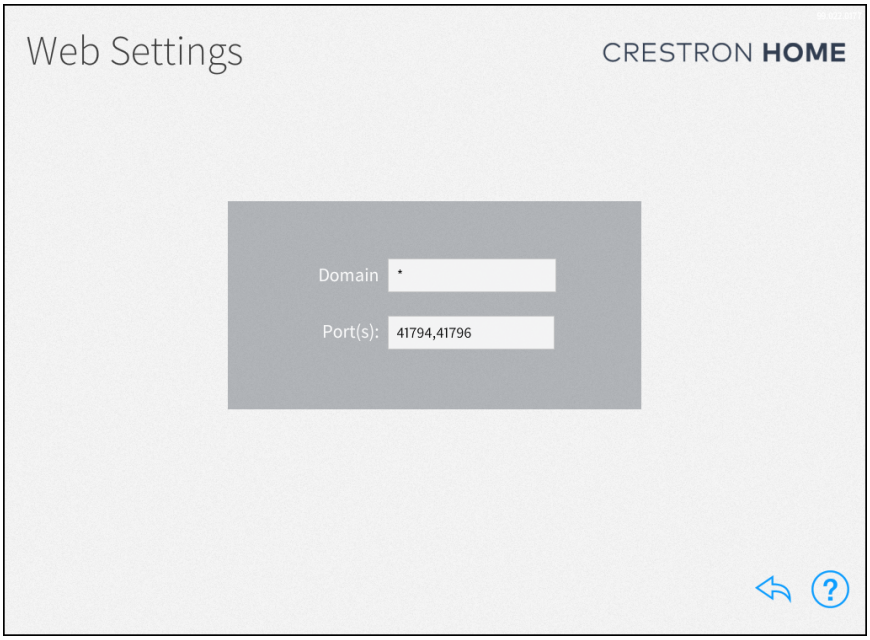
- **Current IP Address:** Displays the IP address associated with the myCrestron account domain name
- **IP Address Last Checked:** Displays the date and time that the myCrestron account IP address was last checked
- **System Last Successfully Registered:** Displays the date and time that the Crestron Home system was last successfully registered to a myCrestron account

To return to the previous screen, tap the back arrow button .

Web Settings

Use the **Web Settings** screen to enter a domain and port for accessing the Crestron Home processor's built-in web XPanel interface. The following web XPanel interface settings may be edited:

To configure the web settings, tap **Web Settings** on the **Installer Settings - System Control Options** screen.



Enter the following information:

- **Domain:** Enter the web XPanel interface web domain.
- **Port(s):** Enter the web XPanel interface port(s).

> **NOTE:** For most applications, set **Domain** to "*" and set **Port(s)** to "41794,41796". For more information on advanced web XPanel interface configurations, refer to OLH article 5793 at www.crestron.com/onlinehelp.

To return to the previous screen, tap the back arrow button .

Voice Control Settings

Use the **Voice Control Settings** page to pair the Crestron Home system with an Amazon® Alexa® voice control account or the Google Assistant™ voice control account.

NOTE: When using Amazon voice control services, no more than 300 voice enabled devices can be added to the Crestron Home system.

Tap **Voice Control Settings** on the **Installer Settings - System Control Options** screen to display the **Voice Control Settings** screen.

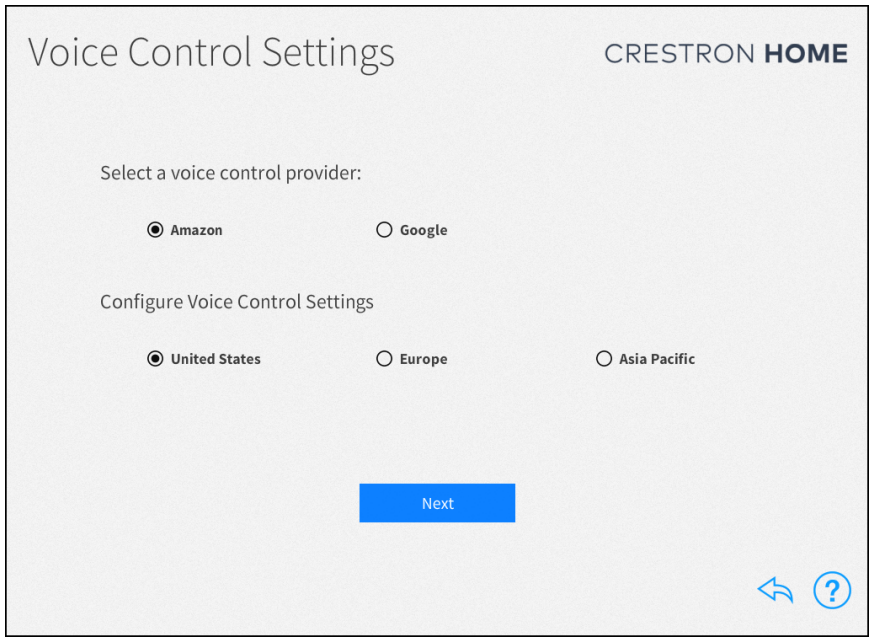
Enable Voice Control Services

To configure voice control settings for the Crestron Home system:

1. Select the voice control provider (**Amazon** or **Google**) and the location of the Crestron Home system (**United States**, **Europe**, or **Asia Pacific**) and then tap **Next**.

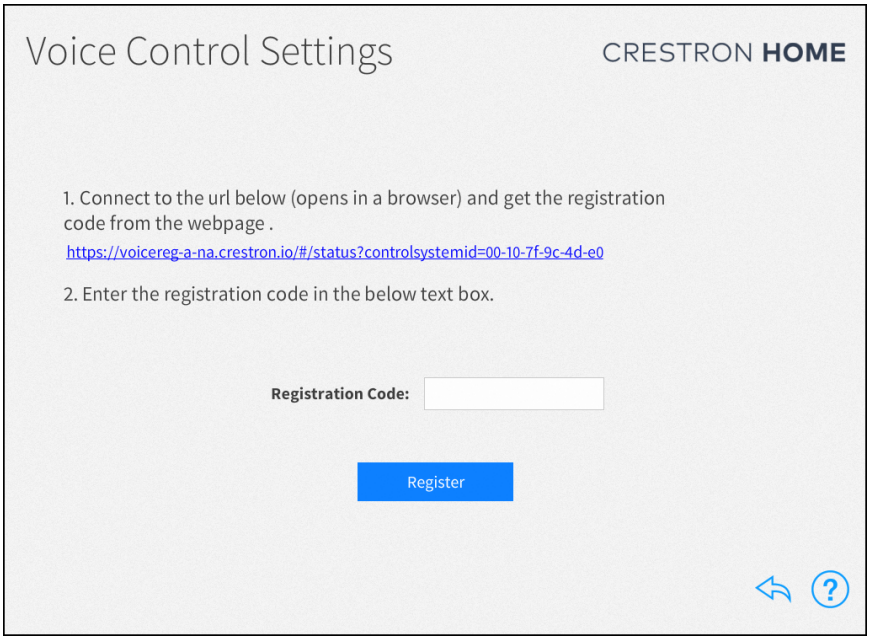
   NOTES:

   - Google Assistant voice services are only available in the United States.
   - Voice control via the TSR-310 is applicable only to systems that are registered in the United States region at this time.

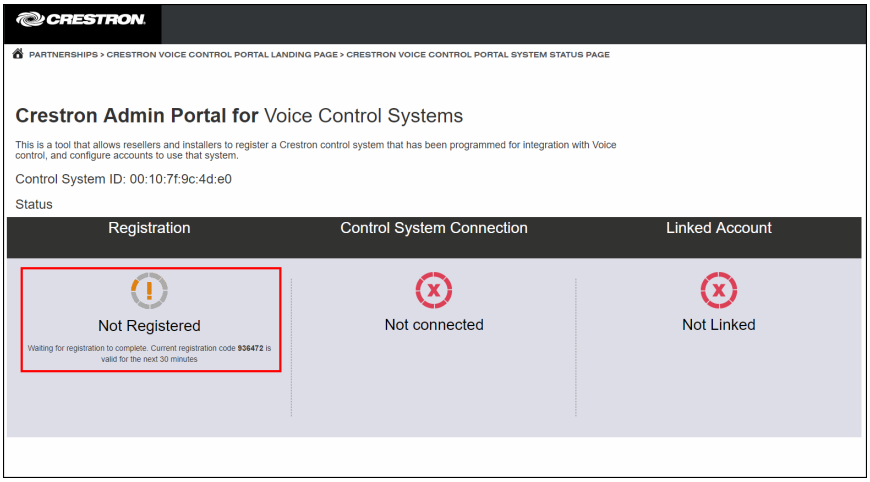


2. Tap the URL provided on the screen to open the Crestron Admin Portal for Voice Control Systems for the selected voice control service and region.

   NOTE: The URL displayed in the following screen is for Amazon voice services. If Google voice services is selected, a different URL is displayed

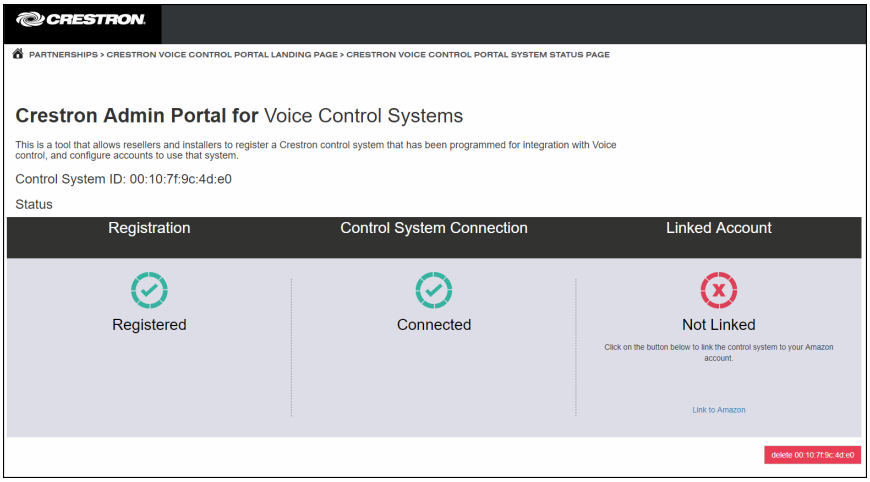


3. Record the six-digit registration code provided under the **Registration** section.



4. Enter the registration code in the **Registration Code** field on the **Voice Control Settings** screen.
5. Tap **Register**. If the registration credentials are valid, a dialog box is displayed stating that the registration was successful. Tap **OK** to continue.

6. A dialog box is displayed stating that the homeowner's Amazon® Alexa® voice control account or Google Assistant™ voice control account must be linked to the Crestron Home system. Tap the **Registration Portal** link to display the **Crestron Admin Portal for Voice Control Systems** page in the web browser.



NOTE: To unlink the Crestron Home processor from the voice services provider, tap **delete [MAC Address]** (red button) at the bottom right of the page. The registration process must be completed again to relink the Crestron Home processor with the voice services provider.

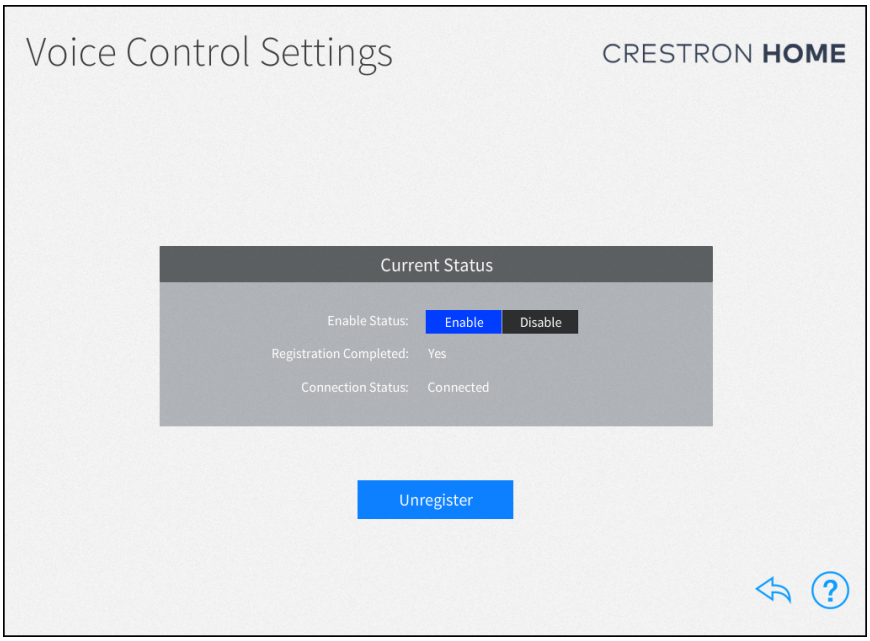
7. Tap the link at the bottom of the **Linked Account** section. A dialog box for entering the voice provider account credentials is displayed.
8. Enter the credentials for the voice provider account. If the registration process is successful, the **Linked Account** status changes to Linked.

NOTE: If the control system is registered with an Amazon account, a dialog box is displayed asking whether the linked account is for a smart home or for an Alexa for Business (AWS) account. Tap **Smart Home** to use the control system with a residential Amazon account. Alexa for Business accounts are not supported by the TSR-310.

9. The **Voice Control Settings** screen displays once the Crestron Home system is registered with a voice services account. The **Voice Control Settings** screen provides selections for viewing and configuring voice control settings.

Configure Voice Control Services

Once the Crestron Home system is registered with a voice services account, the **Voice Control Settings** screen provides selections for viewing and configuring voice control settings.



The following settings may be viewed and configured:

- **Enable Status:** Tap **Enable** or **Disable** to enable or disable voice control, respectively, for the system.
  - **Enable:** The system connects to and processes commands from the voice recognition service.
  - **Disable:** The system disconnects from the voice control service. Voice control commands will no longer be processed.
- **Registration Completed:**Indicates whether or not the system is registered with the voice recognition service.

- **Connection Status:** Indicates the connection state between the system and the voice control service. If the system is enabled but unable to connect to the service, additional details are provided in the message logs.

  NOTES:

  - When the **Connection Status** does not display as "Connected," the system is unable to connect to the voice control service. To fix this, navigate to the registration portal and delete the control system from the portal.
  - If the system is registered and connected, but voice commands are not working, ensure that Crestron is enabled on the voice service provider's app.

Remove Voice Control Services

To remove voice control services from the Crestron Home system.

1. Tap **Unregister.**. The registration credentials are cleared from the system and the voice control administration portal.
2. Tap **OK** in the dialog box that is displayed to unregister from voice control services, or tap **Cancel** to cancel unregistering the system.

   NOTES:

   - To enable or disable control of a specific room or load, navigate to the **Voice Control** tab in the configuration settings for the room or load. Loads without a **Voice Control** tab are not compatible with voice control.
   - To enable voice services on a TSR-310 that has been added to the Crestron Home system, refer to the Performance UI for TSR-310 Operations Guide (Doc. 8410) at www.crestron.com/manuals.

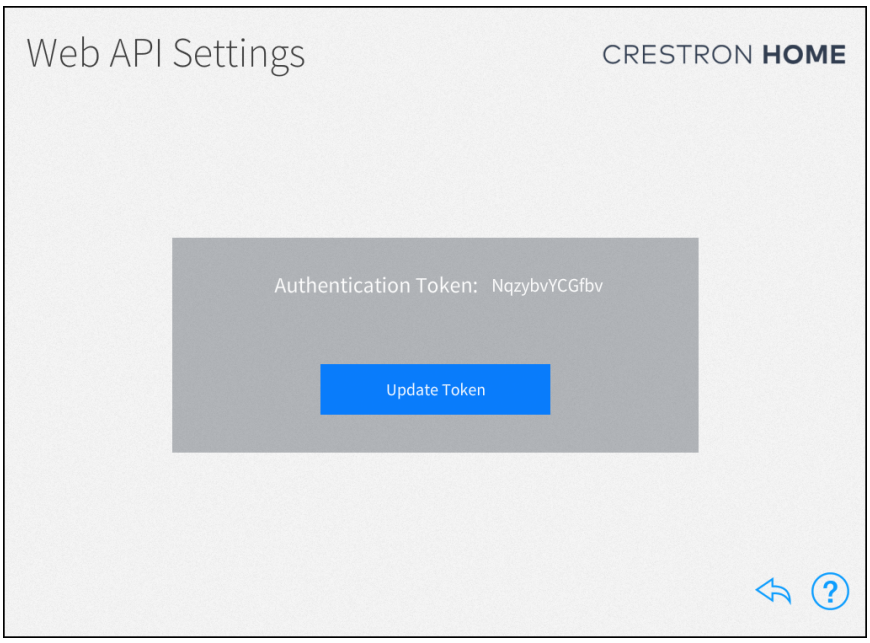
To return to the previous screen, tap the back arrow button  .

Web API Settings

Use the **Web API Settings** screen to view and update the Web API (Application Programming Interface) authentication token used to access the Crestron Home system's REST API interface. Refer to the Crestron Virtual Control REST API (Doc. 8314A) at www.crestron.com/manuals for additional information.

Tap **Web API Settings** on the **Installer Settings** screen to display the **Web API Settings** screen.

Tap **Update Token** to display a dialog box asking whether the authentication token should be updated. Tap **OK** to update the token or **Cancel** to cancel the update.

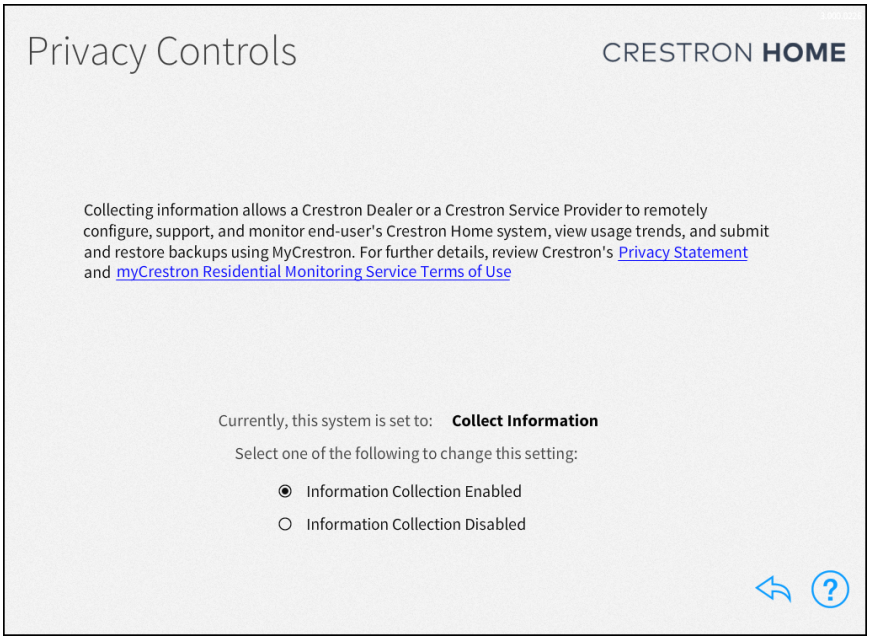


To return to the previous screen, tap the back arrow button .

Privacy Controls

Use the **Privacy Controls** screen to view Crestron's Privacy Statement and MyCrestron Residential Monitoring Service Terms of Use and to enable or disable the collection of information. Collecting information allows a Crestron Dealer or a Crestron Service Provider to remotely configure, support, and monitor a customer's Crestron Home system. Additionally, they can use the myCrestron Residential Monitoring Service to view usage trends, create system backups, and restore system backups.

To view and configure the privacy controls, tap **Privacy Controls** on the **Installer Settings - System Configuration** screen.



When information collection is enabled, the **Currently, this system is set to** field displays **Collect Information**.To enable the collection of information, select **Information Collection Enabled**. The Crestron Home processor restarts.

To disable the collection of information,

NOTE: Disabling information collection prevents the Crestron Home processor from utilizing any backup capabilities, usage statistics, and preemptive system monitoring.

1. Select **Information Collection Disabled**.
2. In the **Disable Information Collection** dialog, tap **Continue** to disable information collection. The Crestron Home processor will restart. Tap **Cancel** to exit without disabling information collection.
3. The **Currently, this system is set to** field displays **Not Collect Information**.

To return to the previous screen, tap the back arrow button .

Software Update

Use the **Software Update** screen to check for and download software updates for the Crestron Home system and connected devices. System updates must be initiated manually.

NOTE: When a software update is available, a pop-up notification on the user interface and setup pages is displayed. Software downloads may be initiated from this notification or from the **Software Update** screen.

To enter the **Software Update** screen:

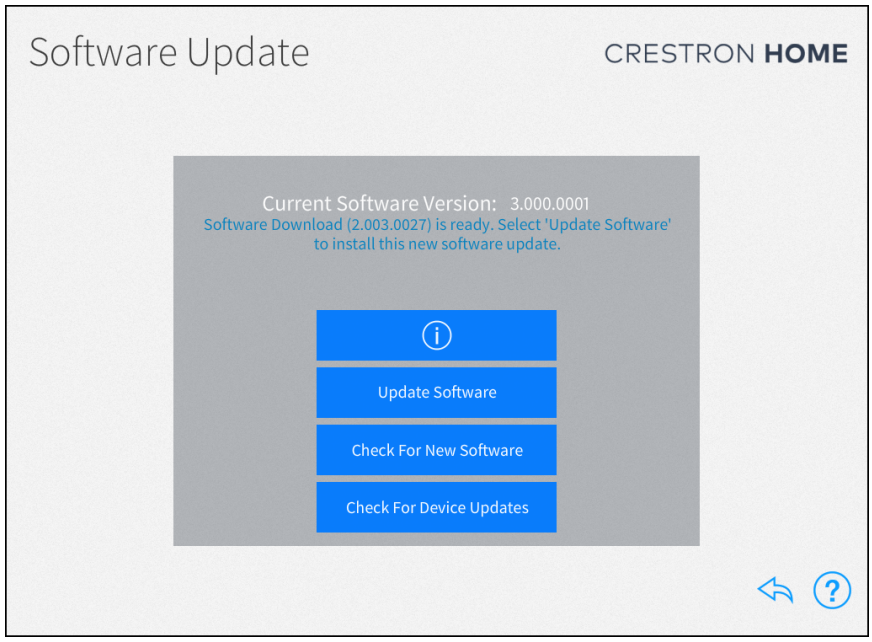
1. Tap the gear button on the bottom right of the **Setup** screen.
2. Tap **Software Update**. The **Installer Settings - Software Update** screen is displayed.

Update Software

To check for new updates and update the software for Crestron Home system:

NOTE: A software update may take up to 30 minutes to complete, and the Crestron Home processor reboots several times throughout the update process. Therefore, updates should be performed when the system is not in use.

1. Tap **Check for Updates**. The **Software Update** screen displays.

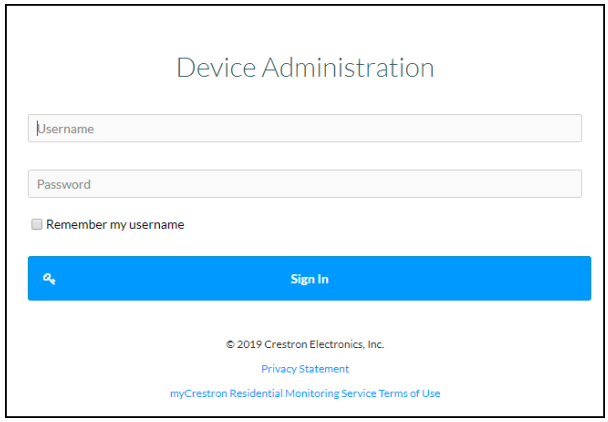


2. Tap **Check for New Software**. The system scans for available software updates and displays the available update.
3. Tap the **i** button to review the software release notes.
4. Tap **Download Update**. A confirmation dialog appears.

5. Tap **Download** to download the update. The Crestron Home processor downloads the latest firmware. The download may take several minutes. The update does not install automatically.
6. When the download is complete, tap **Update Software**. A confirmation dialog is shown along with the release notes.
7. Tap **Update**. The software begins to update. The Crestron Home processor reboots when the software update is complete.

   CAUTION: Communication with the Crestron Home processor will be lost several times during the software update. Do not power down the Crestron Home processor during the software update.

8. When the Crestron Home processor reboots, enter the Crestron Home Setup app (or open the web XPanel interface using a web browser). The **Device Adminstration** page displays.



9. Enter the username and password and then tap **Sign In**.

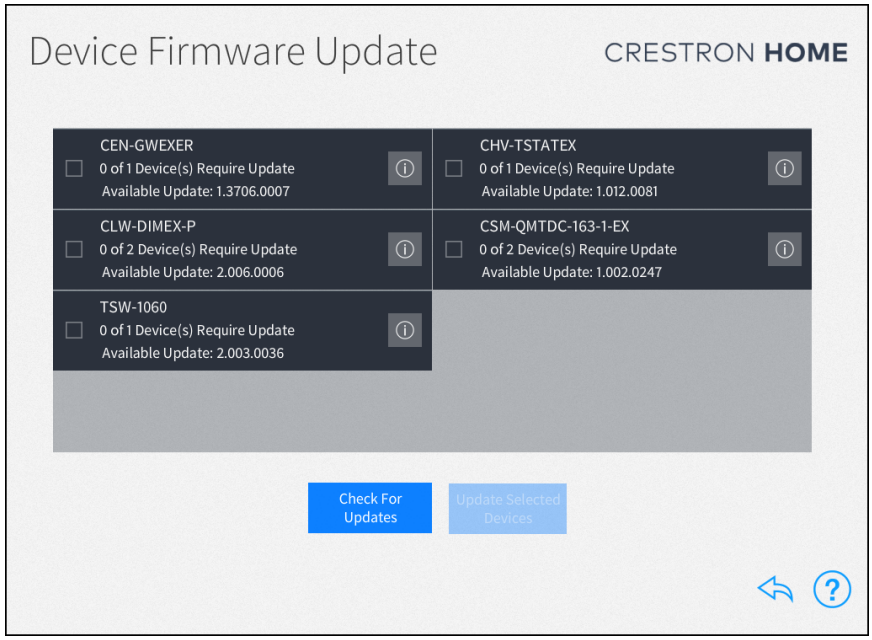
Check for Device Updates

To scan the devices connected to the Crestron Home system for available updates:

1. Tap **Check for Device Updates**. Crestron Home scans the connected devices for available updates. Once the scan is complete, the **Device Firmware Update** screen presents a list of devices with recommended firmware updates.

   NOTES:

   - To rescan the update server for new device firmware updates, tap **Check For Updates**.
   - To view release notes for the firmware update, tap the information button ⓘ next to the device.



2. Tap the check box next to a device to select the device to receive a firmware update.
3. Tap **Update Selected Devices** to perform firmware updates for the selected devices.

NOTE: The TSW-xx60 series touch screen running Smart Graphics mode will appear as "TSW-xx60(Legacy)" while the TSW-xx60 series touch screen running Crestron Home will appear as "TSW-xx60."

NOTE: The TSR running Performance UI-OS 2S mode will appear as "TSR-310(Legacy)" while the TSR running Performance UI-OS 3 (Crestron Home) will appear as "TSR-310."

To return to the previous screen, tap the back arrow button ↩.

End User Configuration

The user configuration screens provide the homeowner with advanced options to customize their Crestron Home system.

The user configuration screens allow configuration of:

- **Setup Scenes:** Create and edit light, shade, media, and climate scenes that are recalled from the user control interface. For details, refer to Setup Scenes on page 242.
- **System Scheduling:** Create and edit events that recall one or more scenes at specific times and days of the week. For details, refer to System Scheduling on page 260.
- **Climate Scheduling:** Create and edit thermostat events that are recalled at specific times and days of the week. For details, refer to Climate Scheduling on page 262.

Use the Crestron Home Setup app to access the user configuration screens.

1. Tap the Crestron Home Setup app icon on the iPad device home screen.

   NOTE: If using web XPanel interface, enter the IP address or hostname into a web browser.

2. Enter the username and password when prompted, and then tap **OK**.

   Username: advanceduser

   Password: Set by the dealer. Contact your dealer for details.

3. Tap **OK**.

While configuring the Crestron Home system:

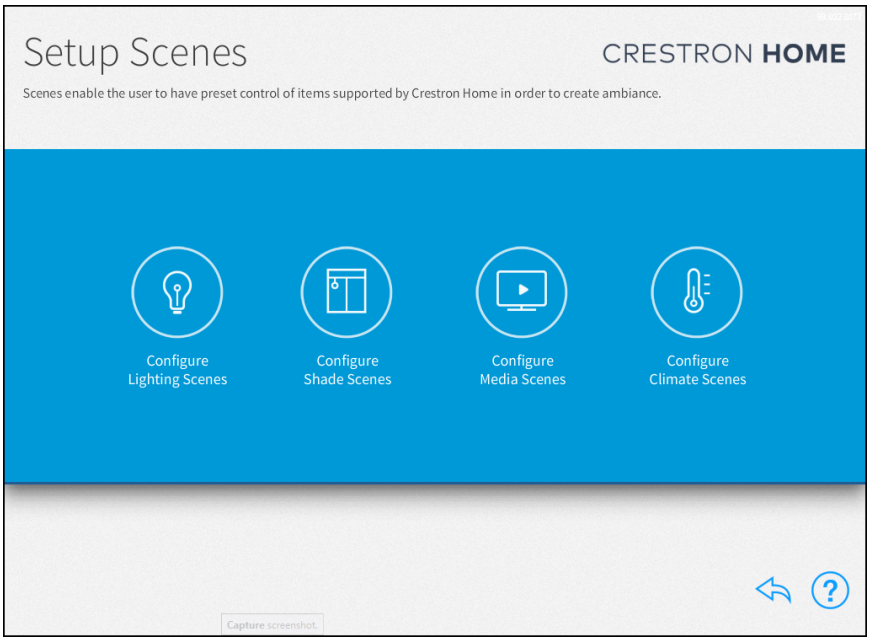
Icon	Description
	Displays a dialog box that explains screen functions and features and provides links to tutorial videos.
	Displays the **User Settings** screen to configure advanced Crestron Home system settings. For more information on the **User Settings** screen, refer to System Settings - End User on page 265.
	Exit user configuration mode and to enter the user interface. For more information about the user interface, refer to Crestron Home™ OS User Interface on page 285.

Setup Scenes

Use the **Setup Scenes** screen to create and configure scenes for the Crestron Home system, including lighting scenes, shade scenes, and climate scenes.

Scenes are preset configurations for different device types that create a specific ambiance when recalled. Scenes may be recalled from keypads, from touch screens, and from scheduled events.

Tap the **Setup Scenes** button on the user **Setup** screen to display the **Setup Scenes** screen.



NOTE: Each room may contain a maximum of 24 scenes for each scene type. For example, a room may contain up to 24 lighting scenes, up to 24 shade scenes, and so forth.

To return to the previous screen, tap the back arrow button .

Light Scenes

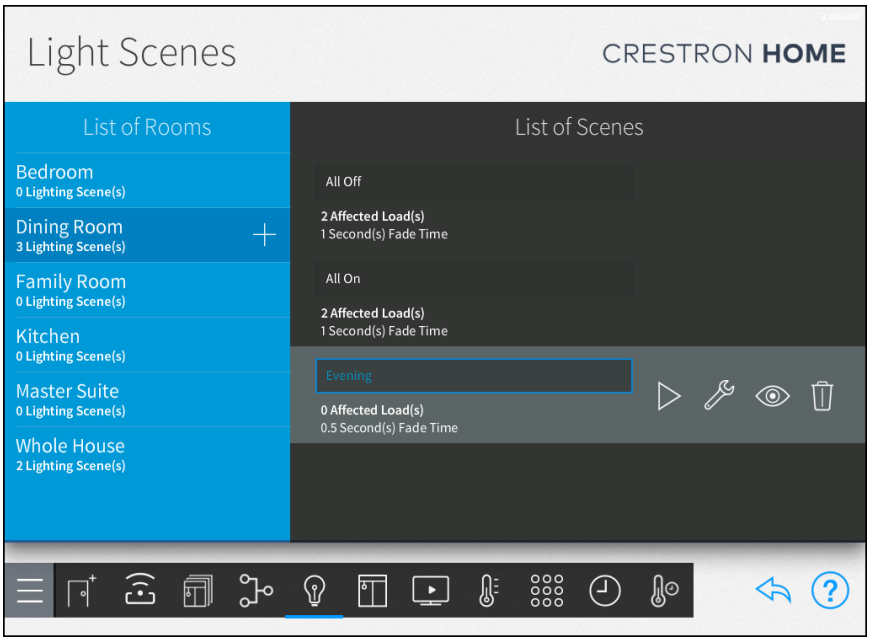
Use the **Light Scenes** screen to create lighting scenes for one or more rooms or for the entire house.

Lighting scenes are used to set predefined levels for multiple lighting loads. By default, the Crestron Home system creates **All On** and **All Off** scenes for every room with a lighting load. Additionally, **All On** and **All Off** scenes are created automatically for the whole house after the first lighting load has been added to the system.

NOTES:

- Up to 24 lighting scenes can be added to each room.
- Tap the play button to recall the lighting scene in real time.

Tap the **Configure Lighting Scenes** button on the **Setup Scenes** screen or the Light Scenes button on the setup menu to display the **Light Scenes** screen.

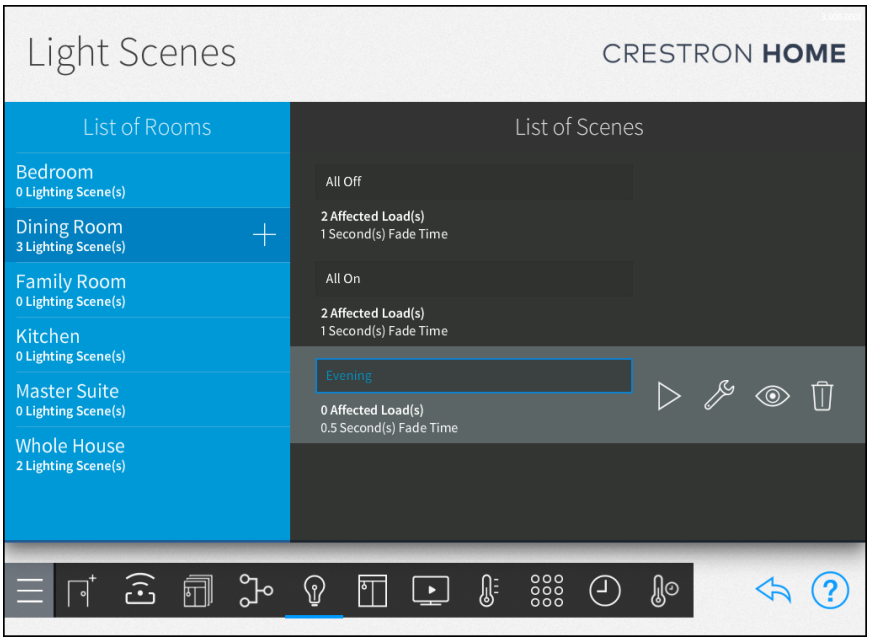


Create a New Lighting Scene

NOTE: When a scene is created, the current light state is saved as the scene setting and will be recalled by the scene. To adjust the levels, tap the wrench button next to the lighting scene name.

To create a new lighting scene:

1. Select a room from the **List of Rooms** menu, and then tap the plus button (**+**) next to the room name. A dialog box for the scene name is displayed.



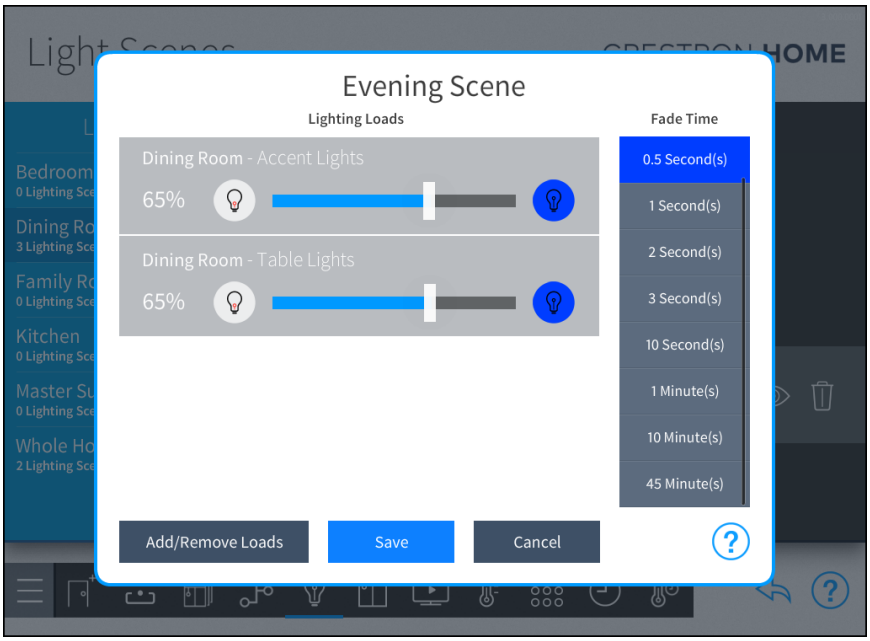
2. Enter a descriptive name for the lighting scene in the dialog box that is displayed, and then tap **OK**. The new lighting scene is added to the room under the **List of Scenes** menu.

Configure a Lighting Scene

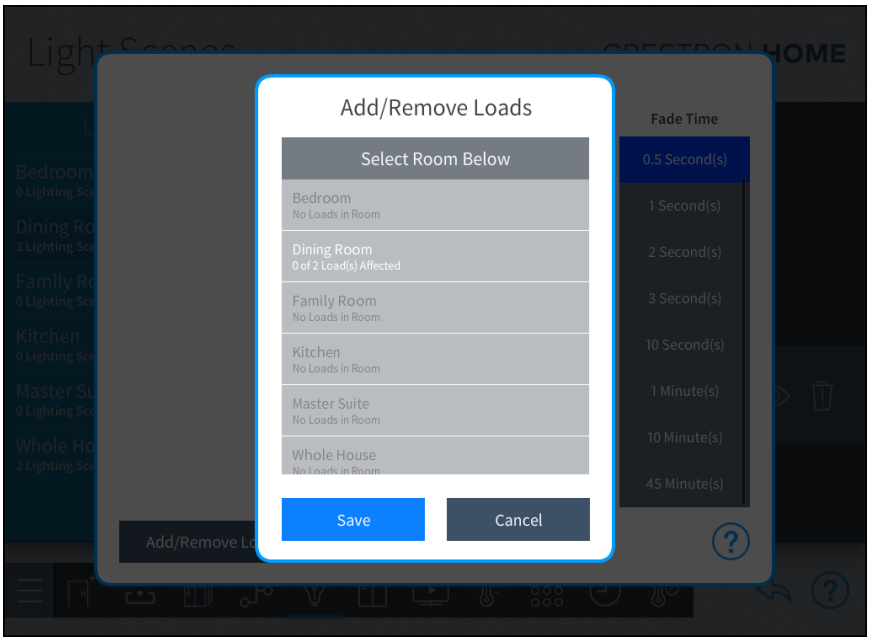
A lighting scene may be configured and tested after it has been added to the system. Use the **List of Scenes** menu to select a lighting scene for configuration.

To configure a lighting scene:

1. Tap the wrench button next to the lighting scene name. The scene configuration screen opens.



2. Tap **Add/Remove Loads** . The **Add/Remove Loads** dialog is displayed.



3. Select a room from Select Room Below and then tap the check box next to the lighting loads that should be controlled in the lighting scene.

   NOTE: The lighting loads can be from the same room or from different rooms in the house.

4. Configure the lighting scene:

   - **Lighting Loads:** Use the provided controls to adjust the brightness levels for any lighting loads that have been added to the scene. Lighting loads are adjusted in real time.
     - Tap the left lightbulb button to turn off a lighting load (0%).
     - Tap the right lightbulb button to set a lighting load to its maximum brightness (100%).
     - Use the slider to adjust the brightness level incrementally for lighting loads with dimmers.

     NOTE: Lighting loads may also be adjusted using the dimmers or switches configured to control the lighting load. The load levels are updated in real-time in the system.

   - **Fade Time:** Select the duration that a lighting scene fades in after being recalled and fades out after the scene is completed.

5. Tap **Save** to save any changes or **Cancel** to discard the changes.

Add or Remove a Lighting Load from a Scene

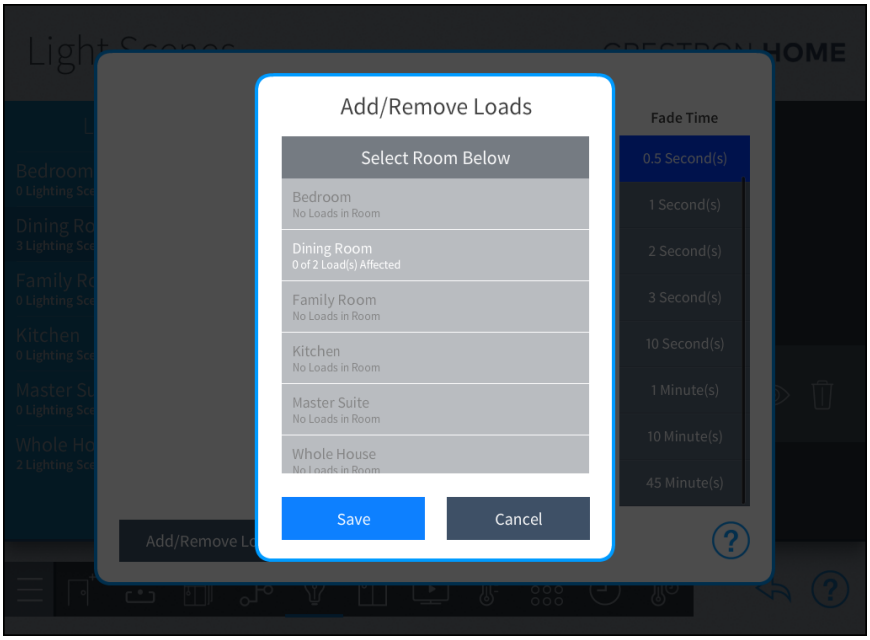
A scene can contain all devices that are located in a room or only a few devices. A scene can also contain a lighting load that is located in different rooms in the house.

To add or remove a lighting load from the scene:

NOTES:

- The DALI protocol allows ballasts to be added to multiple DALI groups.
- Do not add multiple DALI groups to a scene if the DALI groups control a common ballast. This will cause unpredictable lighting control when a scene is recalled and unreliable feedback of the light levels in the user interface.

1. Tap the wrench button next to the lighting scene name. The scene configuration screen opens.
2. Tap **Add/Remove Loads**. The **Add/Remove Loads** dialog is displayed.
3. Select a room from Select Room Below and then tap the check box next to the lighting loads that should be controlled in the lighting scene.



4. Tap **Save** to save any changes or **Cancel** to discard the changes.

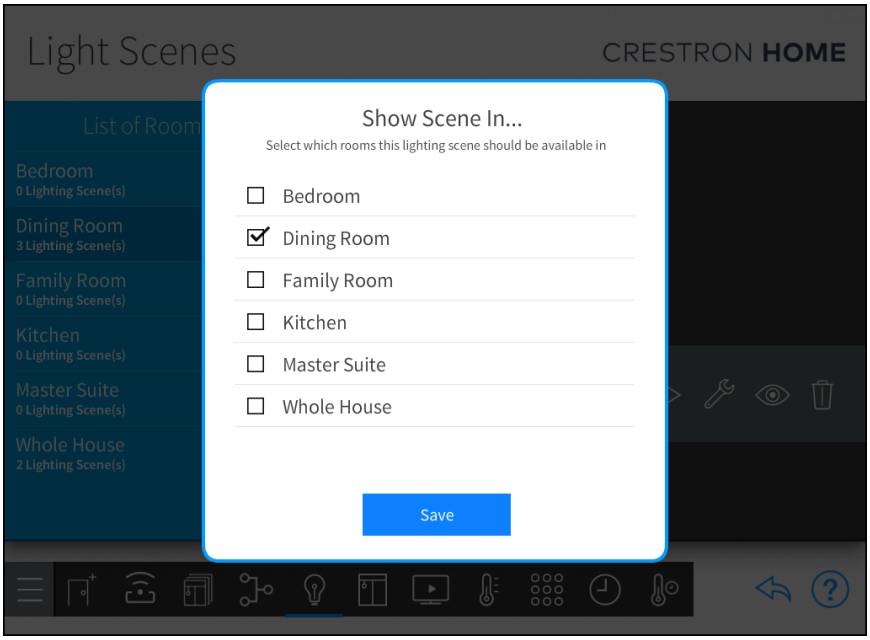
NOTE: Adjust the lighting scene as necessary. Refer to the "Configure a Lighting Scene" section above.

Display Lighting Scenes in Different Rooms

The lighting scene can be configured so that it is available in different rooms around the house. When the scene is displayed in a different room, it can be recalled by a user interface device that is located in any of the selected rooms.

To display lighting scenes in other rooms:

1. Tap the eye button next to a lighting scene name. The **Show Scene In...** dialog box is displayed.
2. Tap the check box next to a room name to make the lighting scene visible in that room. A filled check box indicates that the lighting scene is visible and may be recalled from a control device in the room (such as a touch screen).



3. Tap **Save** to save any changes.

Delete a Light Scene

To delete a light scene:

1. Select a room from the **List of Rooms** menu and then select the scene to delete.
2. Tap the trashcan button to delete the light scene. A confirmation dialogue is shown.
3. Tap **OK** to delete the light scene or **Cancel** to keep the light scene.

To return to the previous screen, tap the back arrow button .

Shade Scenes

Use the **Shade Scenes** screen to create shade scenes for one or more rooms or for the entire house.

Shade scenes are used to set predefined levels for multiple shade groups. By default, the Crestron Home system creates **All Open** and **All Closed** scenes for every room with a shade group. Additionally, **All Open** and **All Closed** scenes are created automatically for the whole house after the first shade motor has been added to the system.

NOTES:

- Up to 24 shade scenes can be added to each room.
- Tap the play button to recall the shade scene in real time.

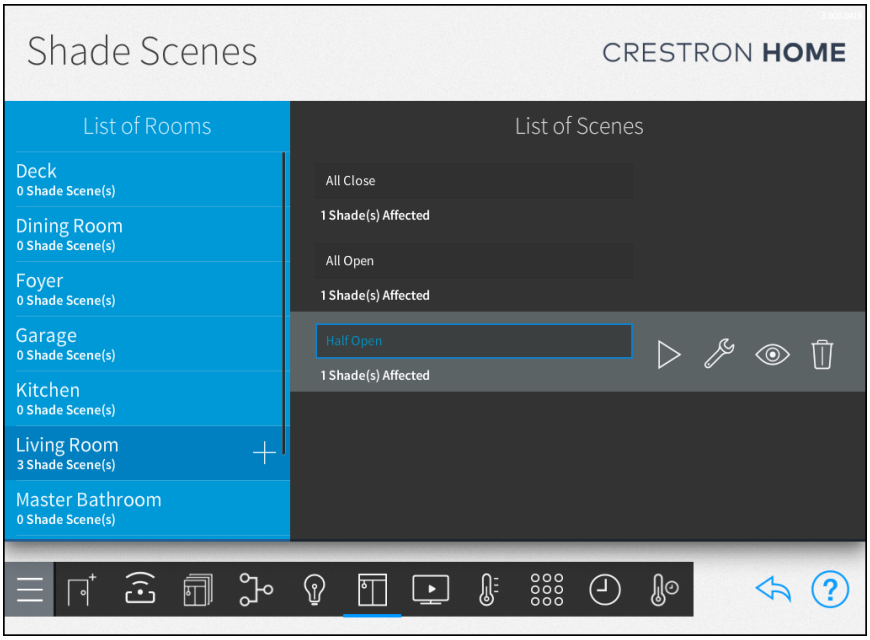
Tap the **Configure Shade Scenes** button on the **Setup Scenes** screen or the Shade Scenes button on the setup menu to display the **Shade Scenes** screen.

Create a New Shade Scene

NOTE: When a scene is created, the current shade state is saved as the scene setting and will be recalled by the scene. To adjust the levels, tap the wrench button next to the shade scene name.

To create a new shade scene:

1. Select a room from the **List of Rooms** menu, and then tap the plus button (**+**) next to the room name. A dialog box for the scene name is displayed.



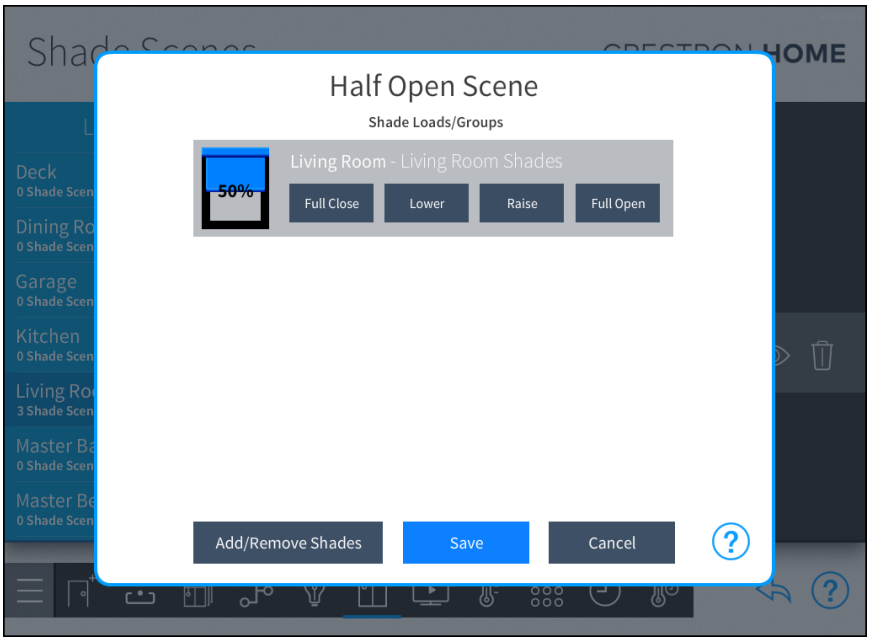
2. Enter a descriptive name for the shade scene in the dialog box that is displayed, and then tap **OK**. The new shade scene is added to the room under the **List of Scenes** menu.

Configure a Shade Scene

A shade scene may be configured and tested after it has been added to the system. Use the **List of Scenes** menu to select a shade scene for configuration.

To configure a shade scene:

1. Tap the wrench button next to the shade scene name. A notice is displayed stating that the shade scene will be recalled upon entering the scene configuration dialog box. Tap **OK** to display the dialog box or tap **Cancel** to cancel. The scene configuration screen opens.



2. Tap **Add/Remove Loads** . The **Add/Remove Loads** dialog is displayed.
3. Select a room from Select Room Below and then tap the check box next to the shade that should be controlled in the shade scene.

   NOTE: The shades can be from the same room or from different rooms in the house.

4. Configure the shade scene:
   - **Raise** or **Lower:** Tap to raise or lower the shade incrementally.
   - **Full Open** or **Full Close:** Tap to open or close the shade fully.

   NOTES:

- Shade loads may also be adjusted using the shade motor controls or using keypads configured to control the shade motors.
- The icon to the left of each shade load shows the percentage that the shade group is open in real time.

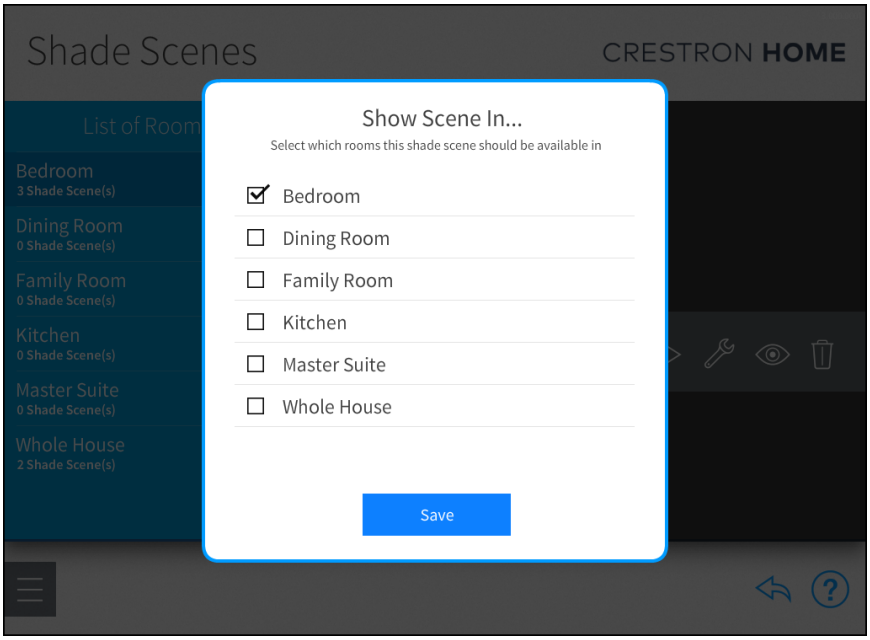
5. Tap **Save** to save any changes or **Cancel** to discard the changes.

Display Shade Scenes in Different Rooms

The shade scene can be configured so that it is available in different rooms around the house. When the scene is displayed in a different room, it can be recalled by a user interface device that is located in any of the selected rooms.

To display shade scenes in other rooms:

1. Tap the eye button next to a shade scene name. The **Show Scene In...** dialog box is displayed.
2. Tap the check box next to a room name to make the shade scene visible in that room. A filled check box indicates that the shade scene is visible and may be recalled from a control device in the room (such as a touch screen).



3. Tap **Save** to save any changes.

Add or Remove a Shade from a Scene

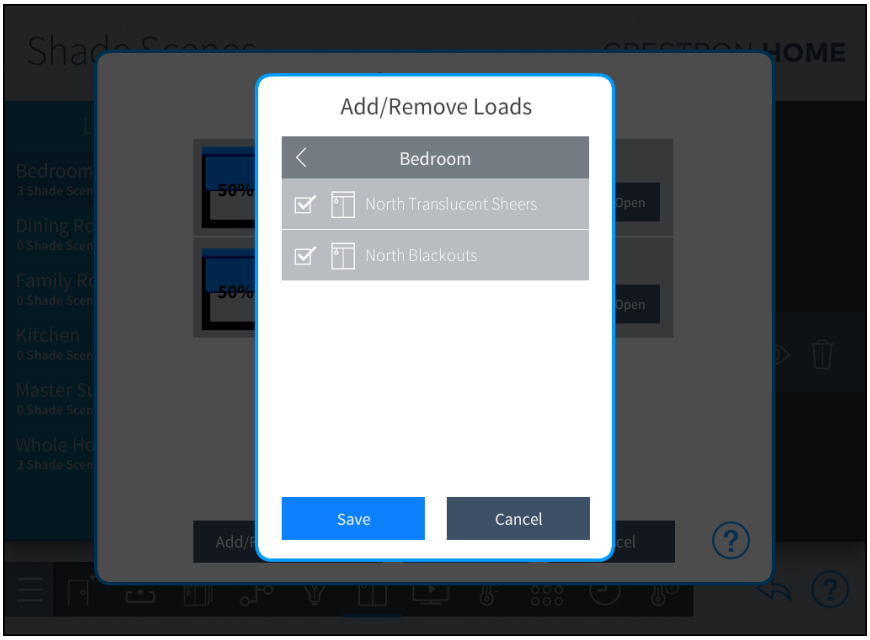
A scene can contain all devices that are located in a room or only a few devices. A scene can also contain a shade that is located in different rooms in the house.

To add or remove a shade from the scene:

NOTES:

- The DALI protocol allows ballasts to be added to multiple DALI groups.
- Do not add multiple DALI groups to a scene if the DALI groups control a common ballast. This will cause unpredictable lighting control when a scene is recalled and unreliable feedback of the light levels in the user interface.

1. Tap the wrench button next to the lighting scene name. The scene configuration screen opens.
2. Tap **Add/Remove Loads**. The **Add/Remove Loads** dialog is displayed.
3. Select a room from Select Room Below and then tap the check box next to the shade that should be controlled in the shade scene.



4. Tap **Save** to save any changes or **Cancel** to discard the changes.

NOTE: Adjust the shade scene as necessary. Refer to the "Configure a Shade Scene" section above.

Delete a Shade Scene

To delete a shade scene:

1. Select a room from the **List of Rooms** menu and then select the scene to delete.
2. Tap the trashcan button to delete the shade scene. A confirmation dialogue is shown.
3. Tap **OK** to delete the shade scene or **Cancel** to keep the shade scene.

Tap the back arrow button to return to the **Setup Scenes** screen.

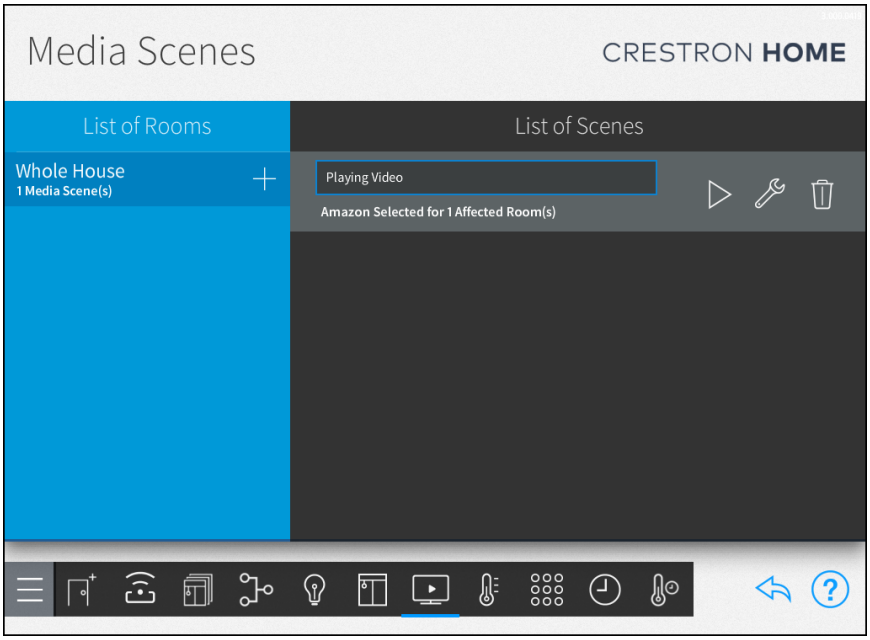
Media Scenes

Use the **Media Scenes** screen to create media scenes for the entire house. Media scenes are used to control source routing and on/off behavior for various media zones in the home.

NOTES:

- Up to 200 media scenes can be added to the whole house room.
- Tap the play button to recall the media scene in real time.

Tap the **Configure Media Scenes** button on the **Setup Scenes** screen or the Media Scenes button to display the **Media Scenes** screen.

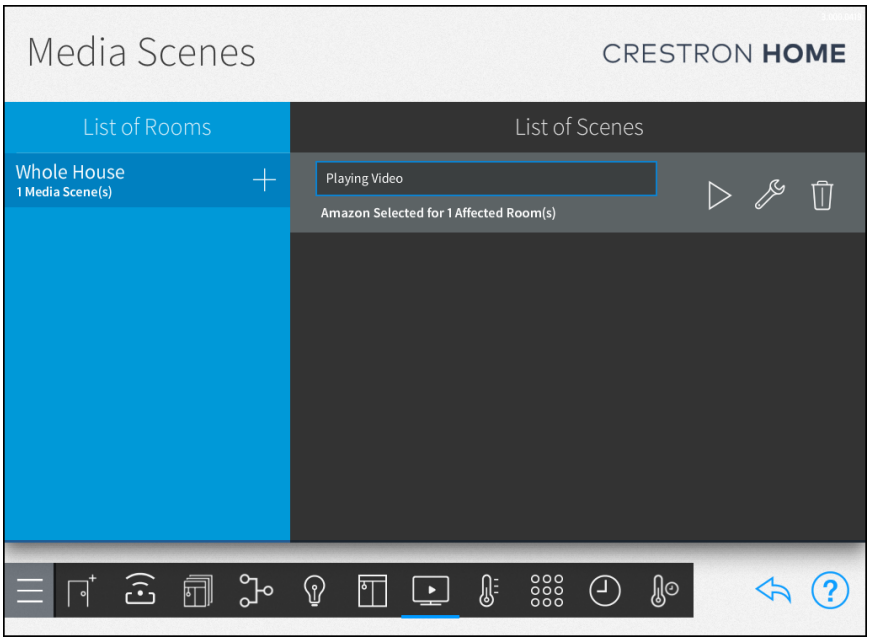


Create a New Media Scene

NOTE: When a scene is created, the current media state is saved as the scene setting and will be recalled by the scene. To adjust the levels, tap the wrench button next to the media scene name.

To create a new media scene:

1. Select a room from the **List of Rooms** menu, and then tap the plus button (**+**) next to the room name. A dialog box for the scene name is displayed.



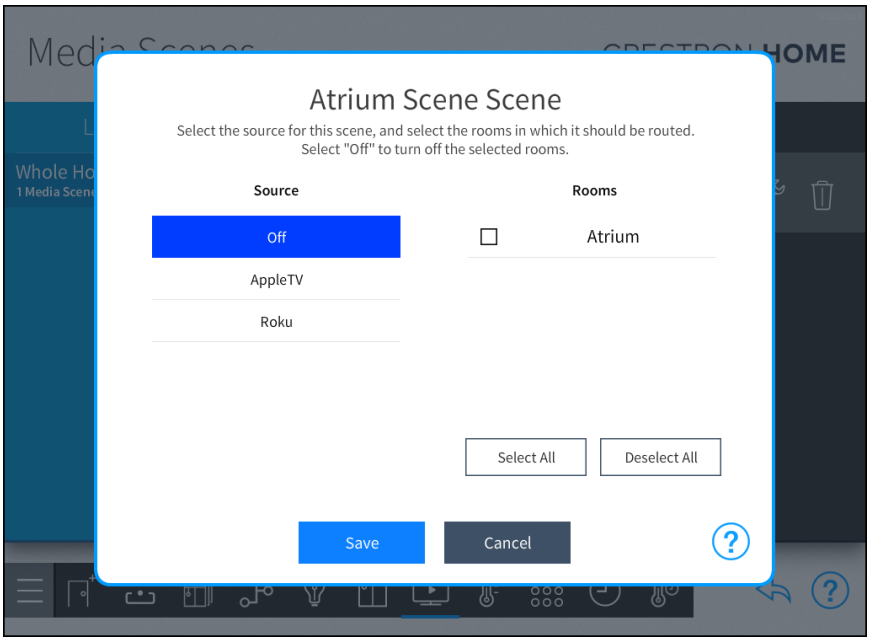
2. Enter a descriptive name for the media scene in the dialog box that is displayed, and then tap **OK**. The new media scene is added to the room under the **List of Scenes** menu.

Configure a Media Scene

A media scene may be configured and tested after it has been added to the system. Use the **List of Scenes** menu to select a media scene for configuration.

To configure a media scene:

1. Tap the wrench button next to the media scene name. The scene configuration screen opens.



2. Configure the media scene:
   - **Source:** Swipe up or down to select the media source or favorite that will be added to the scene. Select **Off** to have the scene turn off all media sources for the selected rooms.
   - **Rooms:** Swipe up or down to select the room(s) in which the media source will be routed when the scene is triggered. A filled check box to the left of the room name indicates that the room is selected.

     NOTE: A room must be configured as a media zone before it can be selected for a media scene. For more information, refer to Media Scenes on page 253.

     - **Select All:** Selects all available rooms.
     - **Deselect All:** Deselects all available rooms.
3. Tap **Save** to save any changes or **Cancel** to discard the changes.

Delete a Media Scene

To delete a media scene:

1. Select a room from the **List of Rooms** menu and then select the scene to delete.
2. Tap the trashcan button to delete the media scene. A confirmation dialogue is shown.
3. Tap **OK** to delete the media scene or **Cancel** to keep the media scene.

Tap the back arrow button to return to the **Setup Scenes** screen.

Climate Scenes

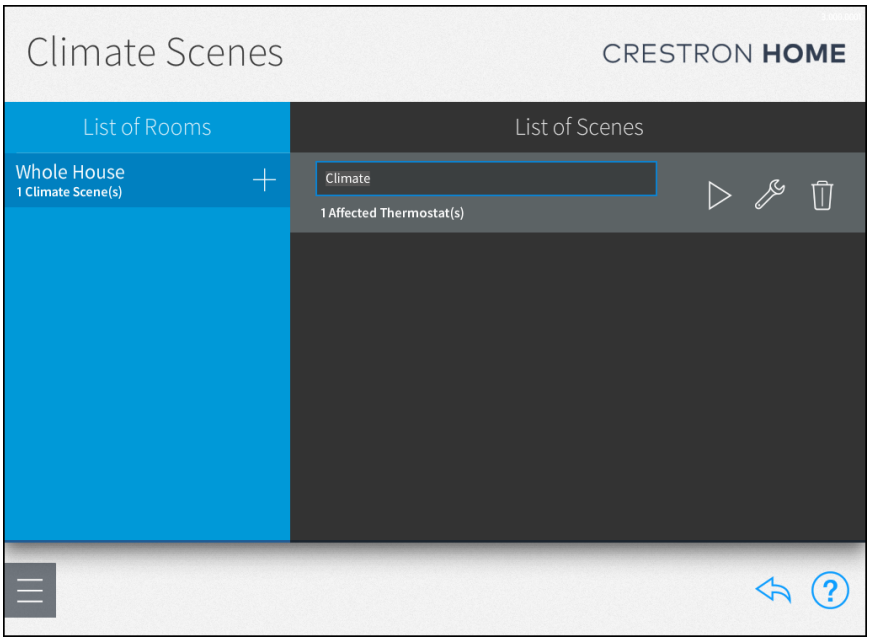
Use the **Climate Scenes** screen to create climate scenes for thermostats that have been added to the system.

Climate scenes are used to configure predefined temperature set points or modes for a thermostat when recalled. Climate scenes are ideal for changing the HVAC system parameters during specified times of day.

NOTES:

- Up to 24 climate scenes can be added to each room.
- Tap the play button to recall the climate scene in real time.

Tap the **Configure Climate Scenes** button on the **Setup Scenes** screen or the Climate Scenes button on the setup menu to display the **Climate Scenes** screen.



Create a New Climate Scene

NOTE: When a scene is created, the current thermostat state is saved as the scene setting and will be recalled by the scene. To adjust the levels, tap the wrench button  next to the climate scene name.

To create a new climate scene:

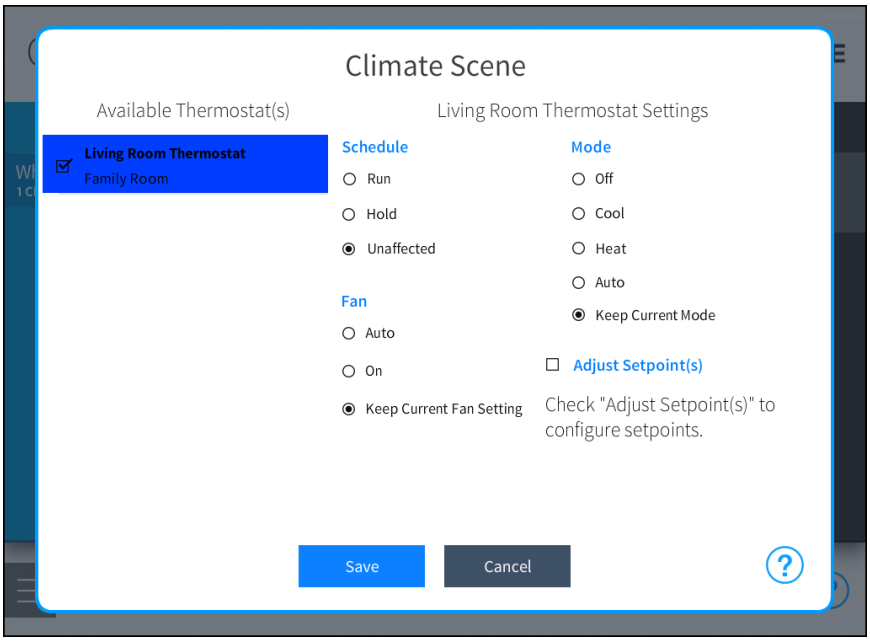
1. Select a room from the **List of Rooms** menu, and then tap the plus button (**+**) next to the room name. A dialog box for the scene name is displayed.
2. Enter a descriptive name for the climate scene in the dialog box that is displayed, and then tap **OK**. The new climate scene is added to the room under the **List of Scenes** menu.

Configure a Climate Scene

A climate scene may be configured and tested after it has been added to the system. Use the **List of Scenes** menu to select a climate scene for configuration.

To configure a climate scene:

1. Tap the wrench button next to the climate scene name. The scene configuration screen opens.



2. Configure the climate scene:
   - **Available Thermostats:** Tap the check box next to one or more thermostats in the **Available Thermostat(s)** menu to add the thermostats to the climate scene. A filled check box indicates that the thermostat is added to the scene. Tap on a thermostat to configure its behavior within the scene.
   - **Schedule:** Select one of the following scheduling options:

     NOTE: If the thermostat schedule is running because **Run** or **Unaffected** was triggered by the scene, the next scheduled climate event will overwrite the climate scene's set points.

     - **Run**: Starts the thermostat schedule.
     - **Hold**: Stops the thermostat schedule.
     - **Unaffected**: The scene does not alter the current thermostat schedule.
   - **Fan:** Select one of the following fan behavior options:
     - **Auto**: Turns on and off the fan automatically.
     - **On:** Turns on the fan.

    - **Keep Current Fan Setting** : The scene does not alter the fan setting.
- **Mode:** Select one of the following thermostat modes:
    - **Off**: The scene turns the thermostat off.
    - **Cool:** The scene sets the operating mode to cool.
    - **Heat:** The scene sets the operating mode to heat.
    - **Auto:** The scene sets the operating mode to auto.
    - **Keep Current Mode:** The scene does not alter the current thermostat mode.
- **Adjust Setpoint(s):** If this check box is selected, the scene adjusts the set points for Heat, Cool, and Auto modes to the chosen temperature values. Select the temperature set point for each mode from the appropriate spinner menu.

3. Tap **Save** to save any changes or **Cancel** to discard the changes.

Delete a Climate Scene

To delete a climate scene:

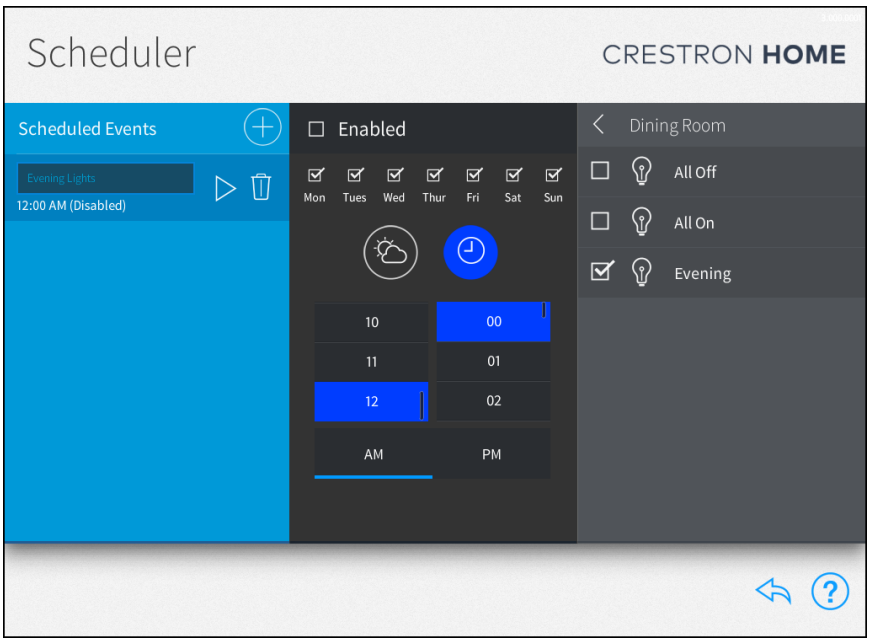
1. Select a room from the **List of Rooms** menu and then select the scene to delete.
2. Tap the trashcan button to delete the climate scene. A confirmation dialogue is shown.
3. Tap **OK** to delete the climate scene or **Cancel** to keep the climate scene.

Tap the back arrow button to return to the **Setup Scenes** screen.

System Scheduling

Use the **Scheduler** screen to schedule events that recall one or more scenes at specific times and days of the week.

Tap the **System Scheduling** button on the **Setup** screen to display the **Scheduler** screen.



To recall the scenes that are scheduled to be triggered by the event, tap the play button  next to the event name.

Create a New Scheduled Event

To create a new scheduled event:

1. Tap the plus button (**+**) next to **Scheduled Events**.
2. Enter a descriptive name for the event.
3. Tap **OK**. The new event is displayed in the **Scheduled Events** menu.

Configure a Scheduled Event

To configure an existing scheduled event:

- **Enabled:** Check the box to enable the event and add it to the system schedule.

  NOTE: New events are disabled by default.

- **Day of Week:** Tap the appropriate check boxes above each day of the week to select the days that the event will occur. A filled check box indicates that the event is scheduled to occur on the associated day.
-  : Schedule the event to occur at a specific time of day. Set the time using the provided spinner menus.
-  : Schedule the event to occur at a time relative to sunrise or sunset (calculated by date and time zone). Select whether the event should occur at sunrise or sunset and then set when the event should occur relative to the sunrise or sunset time.

  NOTE: To adjust the default times for sunrise and sunset, navigate to **Installer Settings** > **System Configuration** > **System Settings**, and then tap the wrench button  on the **Current Times of Day** panel. For more information, refer to Current Time and Date on page 200.

- **Select Room Below:** Select a room from the menu, and then select the scene(s) that will be triggered by the event.

  NOTE: Only rooms that contain scenes display on the **Select Rooms Below** menu. Any room with a selected scene is shown with blue text on the **Select Rooms Below** menu.

Delete a Scheduled Event

To delete a scheduled event:

1. Tap an event in the **Scheduled Events** menu.
2. Tap the trashcan button  next to the event name.
3. Tap **OK** to delete the event or tap **Cancel** to cancel any changes.

To return to the previous screen, tap the back arrow button  .

Climate Scheduling

Use the **Thermostat** screen to view and schedule events for the thermostats in the Crestron Home system.

The available thermostats are listed under **Select a Thermostat** and the list of available thermostat events are listed under **List of Scheduled Events**. Each thermostat event provides the time and days that it is scheduled to occur, as well as its cooling and heating set points.

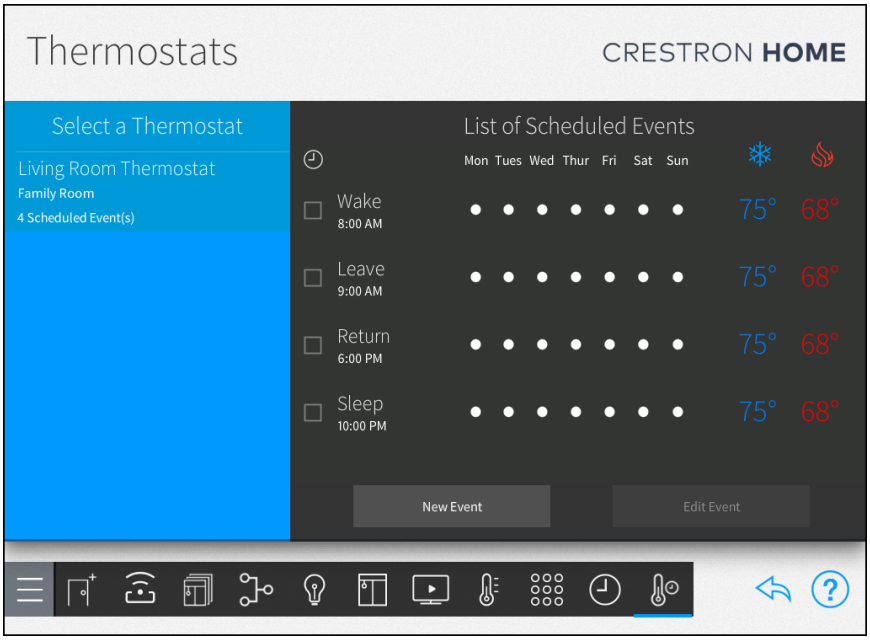
When a thermostat is added to the Crestron Home system, events are created for "Sleep," "Wake," "Leave," and "Return." These events are disabled by default. To enable them, tap the event's check box to the left of the event name. A filled check box indicates that the scene is enabled.

Tap the **Climate Scheduling** button on the **Configuration** screen to display the **Thermostats** screen.

Create a New Thermostat Event

To create a new scheduled thermostat event:

1. Select a thermostat from the **Select a Thermostat** menu. The list of scheduled events for the selected thermostat is displayed.



2. Tap **New Event**. The **Edit Event** dialog box is displayed.

3. Configure the following event settings:
   - **Event Name:** Enter a descriptive name for the event in the text box at the top of the dialog box using the on-screen keyboard.
   - **Enable Event:** Tap the check box next to **Enabled** to enable the event and add it to the thermostat schedule. New events are disabled by default.
   - **Set the Time:** Set the time that the thermostat event should occur using the provided spinner menus.
   - **Select the Days:** Tap the check box above each day of the week to select the days that the thermostat event should occur. A filled check box indicates that the event is scheduled to occur on the associated day.
   - **Select the Setpoints:** Select the temperature set points for cooling ❄, heating 🔥, and auto ♨|❄ modes using the appropriate spinner menu.
4. Tap **OK** to save the thermostat event or tap **Cancel** to cancel any changes.

Configure a Thermostat Event

To configure an existing thermostat event:

1. Select a thermostat from the **Select a Thermostat** menu. The list of scheduled events for the selected thermostat is displayed.
2. Select a thermostat event from the **List of Scheduled Events**.
3. Tap **Edit Event** to display the **Edit Event** dialog box.
4. Configure the following event settings:
   - **Event Name:** Enter a descriptive name for the event in the text box at the top of the dialog box using the on-screen keyboard.
   - **Enable Event:** Tap the check box next to **Enabled** to enable the event and add it to the thermostat schedule. New events are disabled by default.
   - **Set the Time:** Set the time that the thermostat event should occur using the provided spinner menus.
   - **Select the Days:** Tap the check box above each day of the week to select the days that the thermostat event should occur. A filled check box indicates that the event is scheduled to occur on the associated day.
5. Tap **OK** to save the thermostat event or tap **Cancel** to cancel any changes.

Enable or Disable a Thermostat Event

To enable or disable an existing thermostat event, tap the check box next to the event name. A filled check box indicates that the scene is enabled.

Delete a Thermostat Event

To delete an existing thermostat event:

1. Select a thermostat from the **Select a Thermostat** menu. The list of scheduled events for the selected thermostat is displayed.
2. Select a thermostat event from the **List of Scheduled Events.**
3. Tap **Edit Event** to display the **Edit Event** dialog box.
4. Tap the trashcan button  to delete the event.
5. Tap **OK** to save the thermostat event or tap **Cancel** to cancel any changes.

To return to the previous screen, tap the back arrow button  .

System Settings - End User

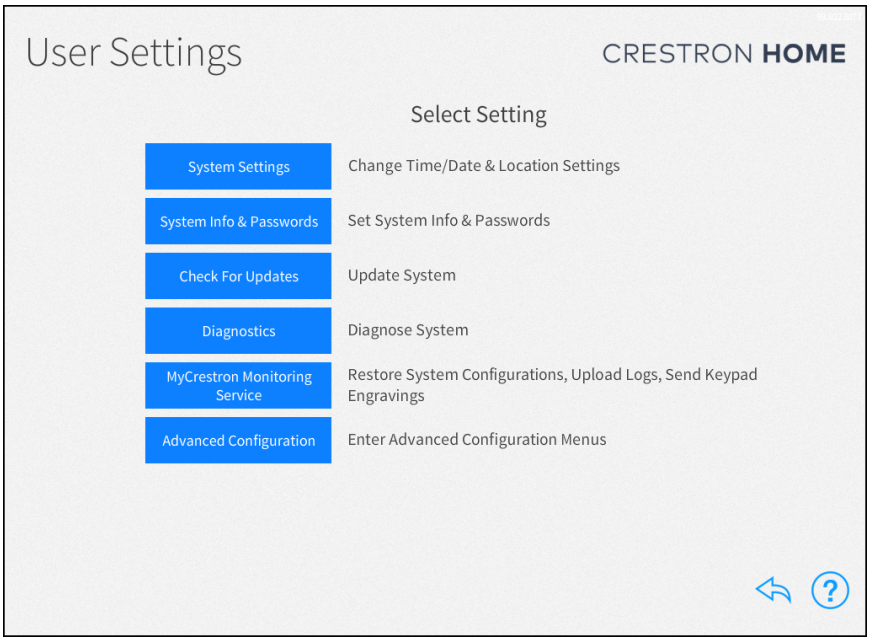
Tap the gear button on the bottom right of the user **Setup** screen to display the **User Settings** screen.

Use the **User Settings** screen to configure various settings for the Crestron Home system and the Crestron Home processor:

- **System Settings**: Configure the time and date, location settings, time of day settings, and the system language. For details, refer to System Settings on page 267.
- **System Info & Passwords**: Change the user password. For details, refer to Refer to Password Configuration on page 273.
- **Check for Updates**: Check for and download software updates for the Crestron Home system and for connected devices. For details, refer to Refer to Software Update on page 274.
- **Diagnostics**: Configure various settings for the Crestron Home system and the Crestron Home processor. For details, refer to Refer to Diagnostics on page 277 for details.
- **MyCrestron Monitoring Service**: Tap to obtain a registration code for registering the Crestron Home processor with a myCrestron domain and to access various myCrestron services. For details, refer to myCrestron Services on page 282.
- **App Settings:** View and edit the settings used to connect the Crestron Home Setup app to the Crestron Home control processor.

  NOTE: Only available on the Crestron Home Setup app for Apple iPad devices.

- **Advanced Configuration**: Tap to access the user configuration screens. The Advanced User Password is required. For details, refer to Advanced Configuration on page 284.



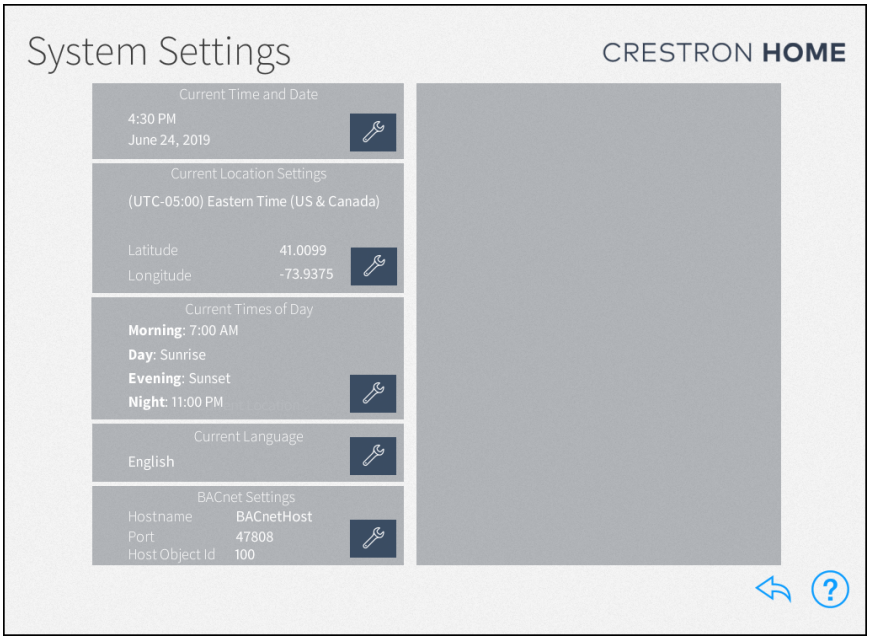
Tap the help button ? on any of the **User Settings** screens to display dialog boxes that explain the screen functions and features and provide links to tutorial videos. The iPad or setup device must be connected to the network to access videos.

To return to the previous screen, tap the back arrow button .

System Settings

Use the **System Settings** screen to configure the time and date, the location settings, the current times of day used for events, the system language, and the BACnet Settings.

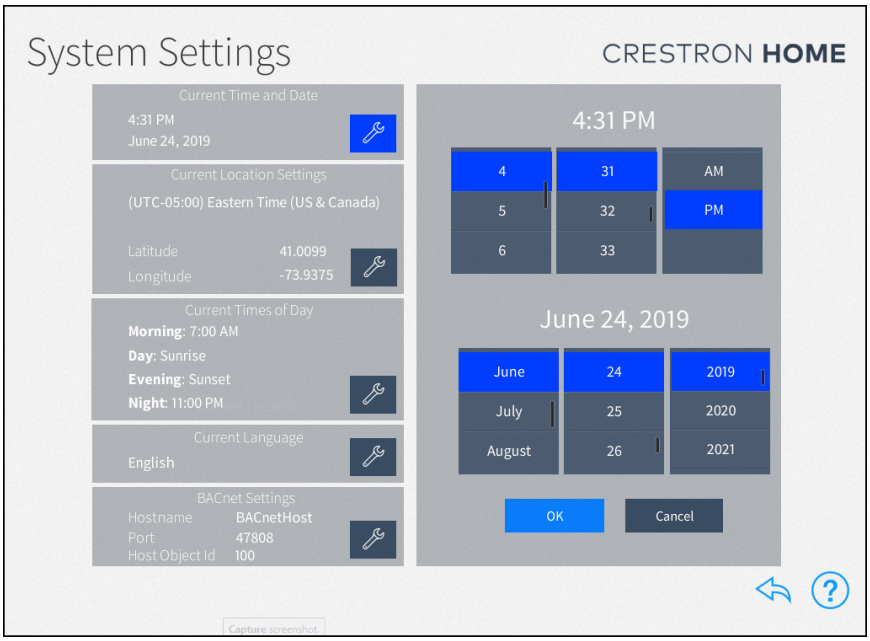
To configure the System Settings, tap **System Settings** on the **User Settings - System Configuration** screen.



Current Time and Date

To set the current time and date:

1. Tap the wrench button  next to **Current Time and Date**.



2. Use the spinner menus to set the hour and minute and **AM** or **PM**.
3. Use the spinner menus to set the month, day, and year.
4. Tap **OK** to save any changes. Tap **Cancel** to cancel any changes.

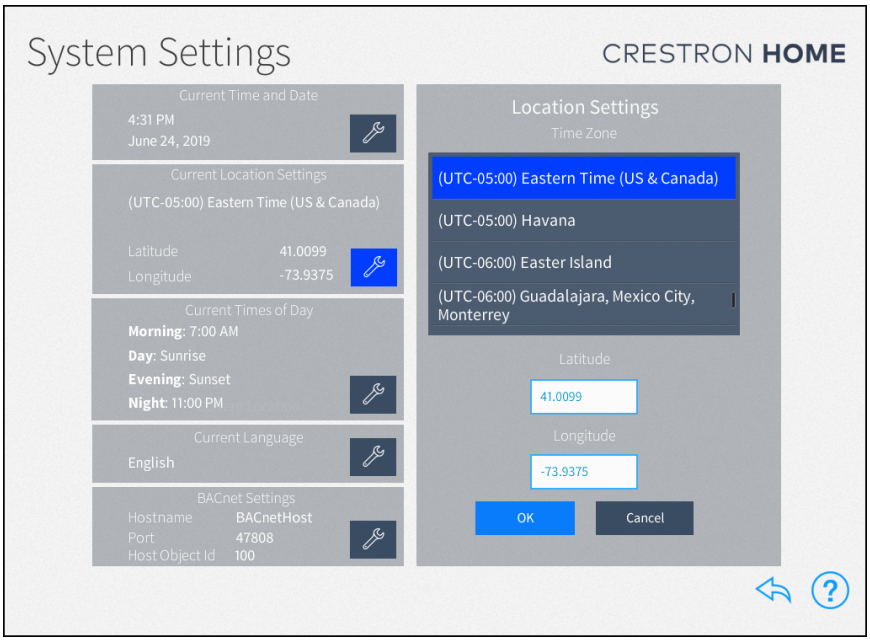
To return to the previous screen, tap the back arrow button  .

Current Location Settings

To set the Location Settings:

NOTE: If configuring the system with an iPad, tap **Synchronize with iPad** to synchronize the time zone, longitude, and latitude with the iPad device's location services.

1. Tap the wrench button next to **Current Location Settings**.



2. To set the time zone, select the location in the **Time Zone** field.
3. If necessary, the latitude and longitude can be fine-tuned. Adjust the latitude in the **Latitude** field and adjust the longitude in the **Longitude** field.
4. Tap **OK** to save any changes. Tap **Cancel** to cancel any changes.

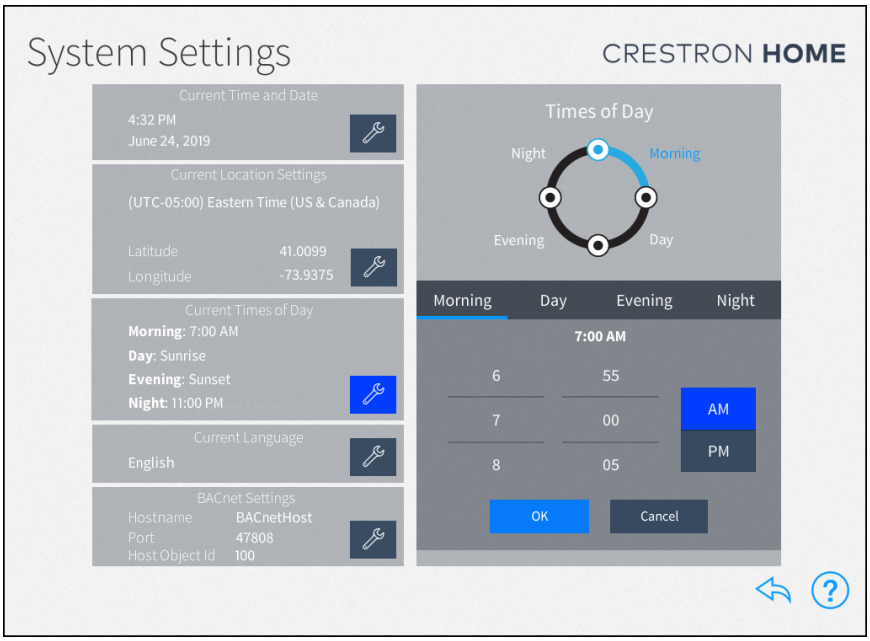
To return to the previous screen, tap the back arrow button .

Current Times of Day

Times of day are used to trigger different actions and events within the system when the preset clock time is reached. The Morning and Night Times of Day are static times that occur at the same time every day. The Day and Evening Times of Day are based on sunrise and sunset times and change during the course of the year.

To set the Morning and Night times.

1. Tap the wrench button next to **Current Times of Day**.



2. Tap **Morning** or **Night.**, and then set the time.
   - **Morning:** When the homeowner typically wakes up.
   - **Night:** When the homeowner typically goes to sleep.
3. Tap **OK** to save any changes. Tap **Cancel** to cancel any changes.

To set the Day and Evening times:

1. Tap the wrench button next to **Current Times of Day**.
2. Tap **Day** or **Evening**, and then set the time.
   - **Day:** How long before or after sunrise (calculated by date and time zone) the Day preset occurs.

     NOTE: In some cases (such as in the summer months), the time set for the Day preset may occur before the time set for the Morning preset. In these cases, any actions or events set for the Morning preset do not occur.

   - **Evening:** How long before or after sunset (calculated by date and time zone) the Evening preset occurs.
3. Tap **OK** to save any changes. Tap **Cancel** to cancel any changes.

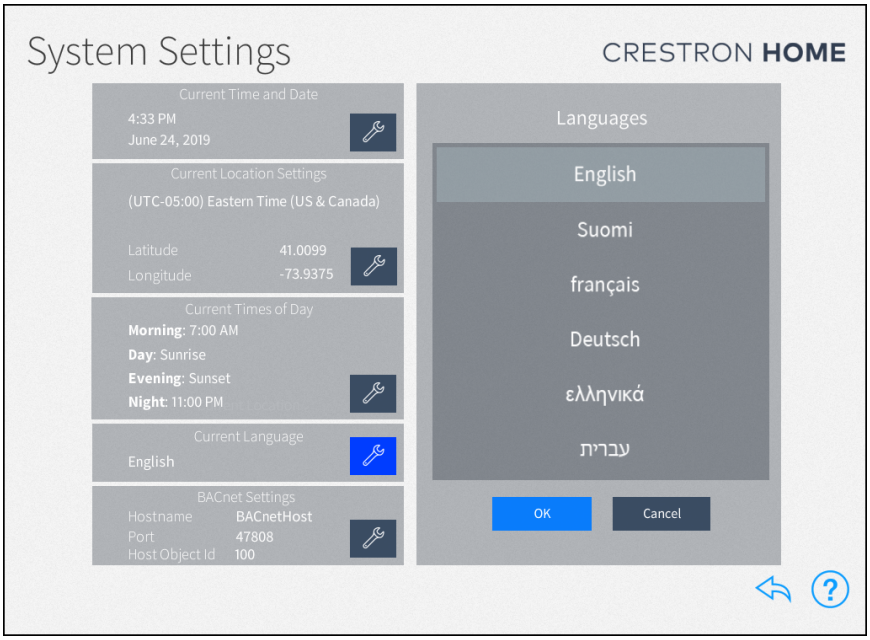
To return to the previous screen, tap the back arrow button .

Current Language

The Current Languages screen sets the language that is used in the setup app and the user interface devices.

To set the language:

1. Tap the wrench button next to **Current Language**.



2. Select the system language from the menu provided under **Languages**.
3. Tap **OK** to save any changes. Tap **Cancel** to cancel any changes.

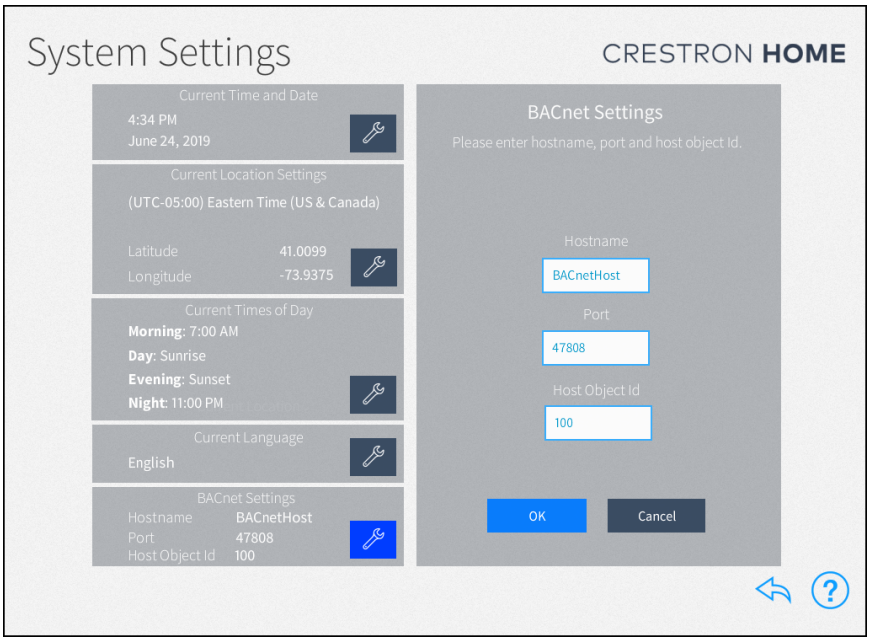
To return to the previous screen, tap the back arrow button .

BACnet Settings

The **BACnet Settings** screen sets the information that is used for the BACnet.

To set the BACnet settings:

1. Tap the wrench button  next to **BACnet Settings**. The **BACnet Settings** screen displays.



2. Configure the following settings:
   - **Hostname:** Enter the HostName for the BACnet system.
   - **Port:** Enter the port for the BACnet system.
   - **Host Object Id:** Enter the host object id for the BACnet system.
3. Tap **OK** to save any changes. Tap **Cancel** to cancel any changes.

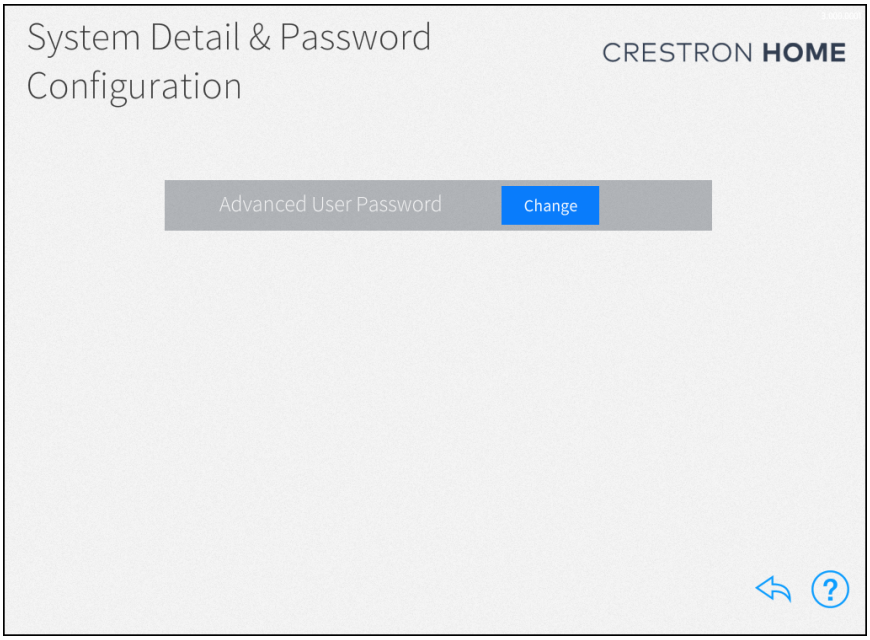
Password Configuration

Use the **Password Configuration** screen to change the Advanced User password that is required to access the user configuration screens.

Tap **System Info & Passwords** on the **User Settings** screen to display the **System Detail & Password Configuration** screen.

To change to change the Advanced User password:

1. Tap the **Change** button.



2. Enter a new password in the pop-up dialog box that is displayed.
3. Tap **OK** to save the password or **Cancel** to discard the changes.

To return to the previous screen, tap the back arrow button .

Software Update

Use the **Software Update** screen to check for and download software updates for the Crestron Home system and for connected devices. System updates must be initiated manually.

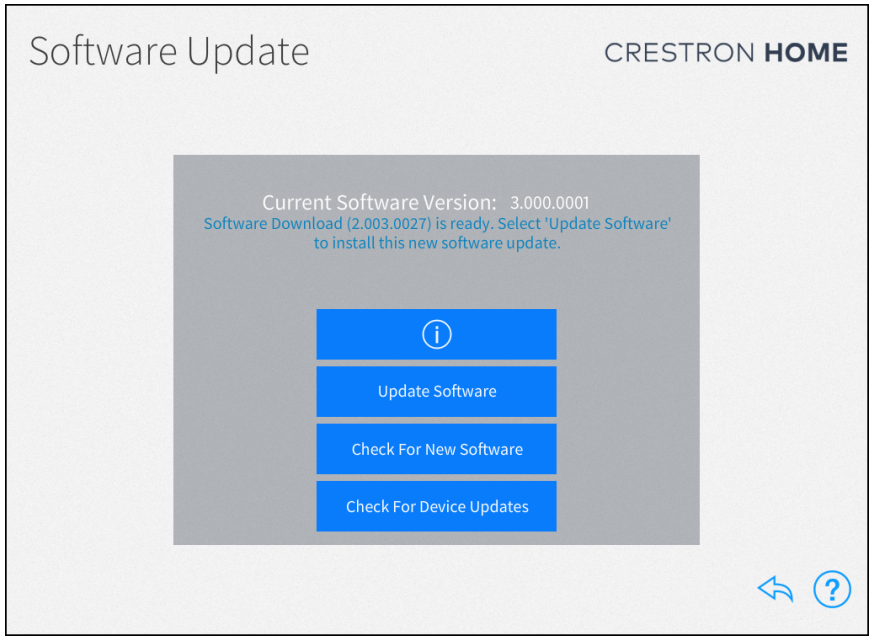
NOTE: When a software update is available, a pop-up notification on the user interface and setup pages is displayed. Software downloads may be initiated from this notification or from the **Software Update** screen.

Update Software

To check for new updates and update the software for Crestron Home system:

NOTE: A software update may take up to 30 minutes to complete, and the Crestron Home processor reboots several times throughout the update process. Therefore, updates should be performed when the system is not in use.

1. Tap **Check for Updates**. The **Software Update** screen displays.

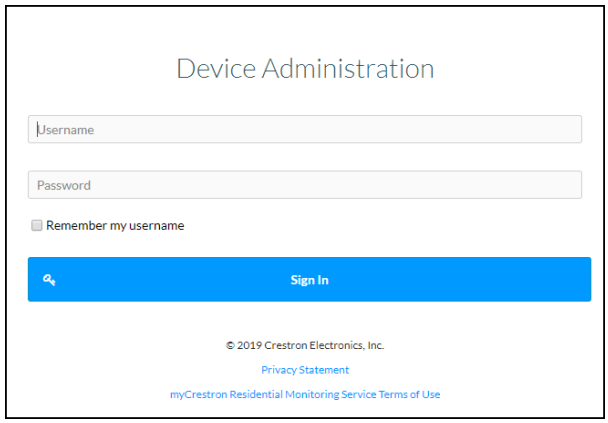


2. Tap **Check for New Software**. The system scans for available software updates and displays the available update.
3. Tap the **i** button to review the software release notes.
4. Tap **Download Update**. A confirmation dialog appears.
5. Tap **Download** to download the update. The Crestron Home processor downloads the latest firmware. The download may take several minutes. The update does not install automatically.

6. When the download is complete, tap **Update Software**. A confirmation dialog is shown along with the release notes.
7. Tap **Update**. The software begins to update. The Crestron Home processor reboots when the software update is complete.

   CAUTION: Communication with the Crestron Home processor will be lost several times during the software update. Do not power down the Crestron Home processor during the software update.

8. When the Crestron Home processor reboots, enter the Crestron Home Setup app (or open the web XPanel interface using a web browser). The **Device Adminstration** page displays.



9. Enter the username and password and then tap **Sign In**.

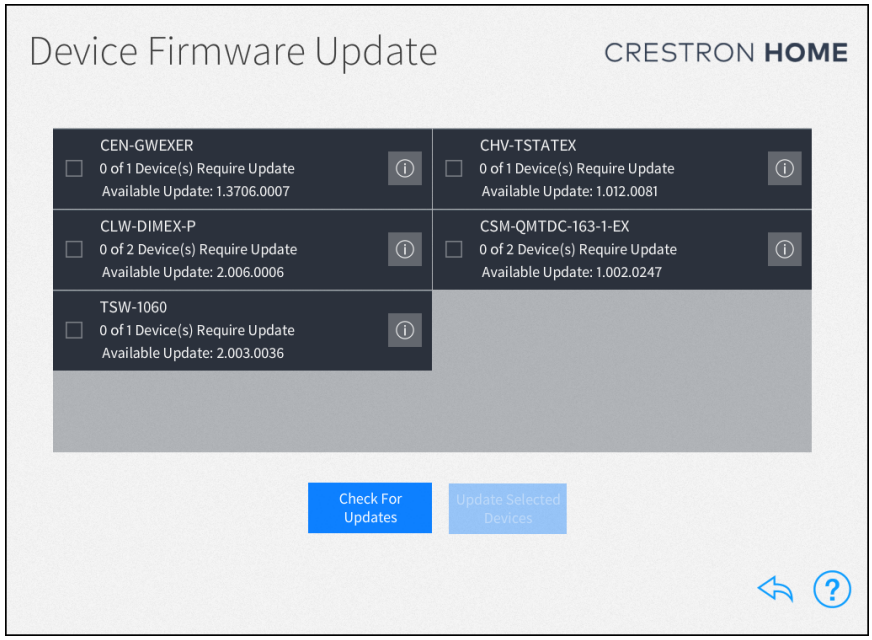
Check for Device Updates

To scan the devices connected to the Crestron Home system for available updates:

1. Tap **Check for Device Updates**. Crestron Home scans the connected devices for available updates. Once the scan is complete, the **Device Firmware Update** screen presents a list of devices with recommended firmware updates.

   NOTES:

   - To rescan the update server for new device firmware updates, tap **Check For Updates**.
   - To view release notes for the firmware update, tap the information button ⓘ next to the device.



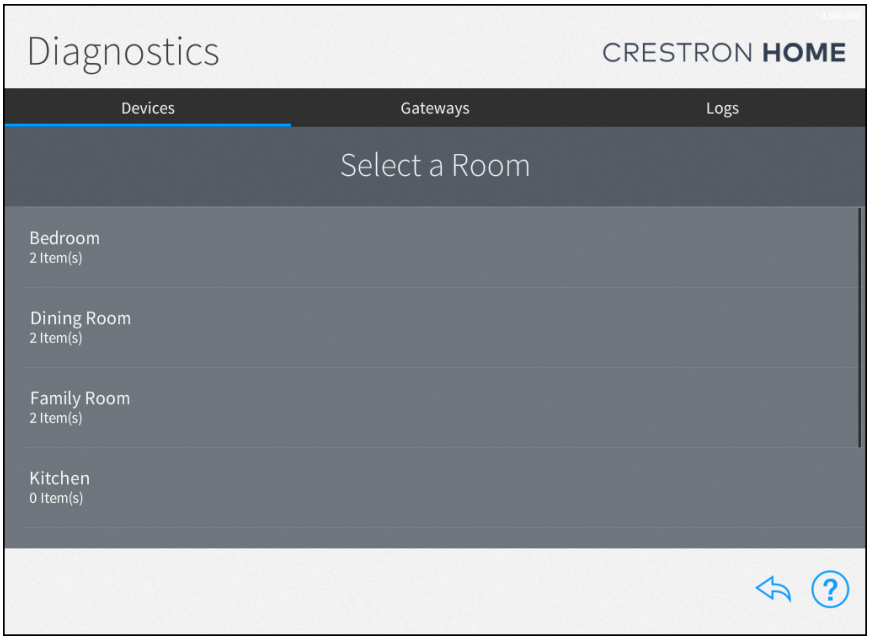
2. Tap the check box next to a device to select the device to receive a firmware update.
3. Tap **Update Selected Devices** to perform firmware updates for the selected devices.

To return to the previous screen, tap the back arrow button ↩.

Diagnostics

Use the **Diagnostics** screen to troubleshoot devices and gateways connected to the system and to view system message logs.

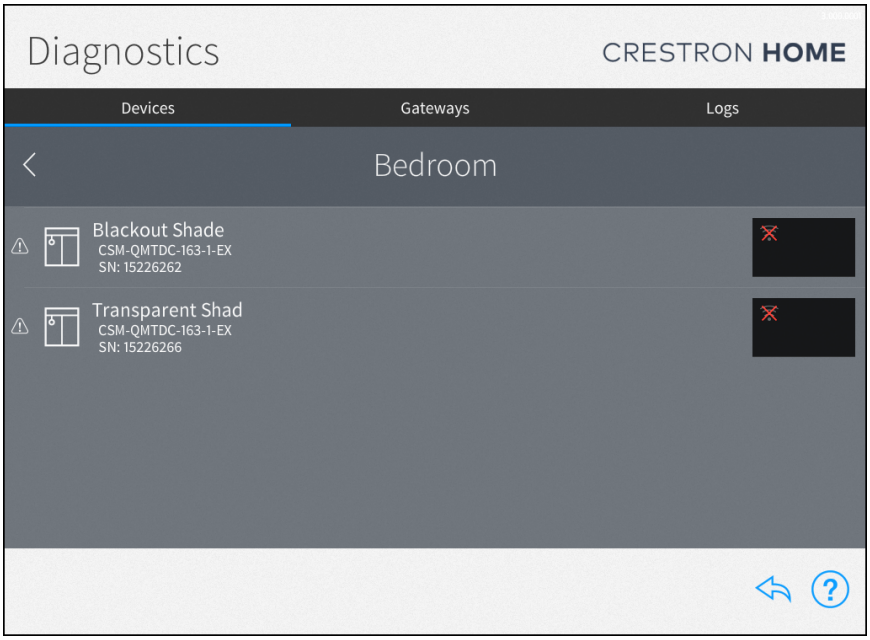
To view the **Diagnostics** screen, tap **Diagnostics** on the **User Settings - System Configuration** screen.



Devices

Tap the **Devices** tab to view all of the network devices that are paired with the Crestron Home system, organized by room. Each device reports its network status, firmware status, whether it is included in a scene, and whether it is affected by a scheduled event.

Select a room from the list to view the status of the devices configured for the room.



The following status information is provided for each device in the room:

Icon	Description
	The wireless device is online and detected by the system.
	The wired device is online and detected by the system.
	The wireless device is offline or not detected by the system.
	The wired device is offline or not detected by the system.
	A network connection cannot be determined or if the device is being scanned.
	A serial device is functioning and is associated with a COM port in the system.
	A serial device is functioning but is not associated with a COM port.
	An IR device is functioning and is associated with an IR port in the system.
	An IR device is functioning but is not associated with an IR port.

Icon	Description
	A CEC device is functioning and is associated with a CEC port in the system.
	A CEC device is functioning but it not associated with a CEC port in the system.
	The device is part of a scene.
	The device is running an outdated firmware version that is not supported by the system.
	The device is battery-operated and has low battery power.
	The system detects an issue with the device.

NOTE: Devices that are not connected to the network, such as relay-controlled devices and uncontrolled audio sources, do not display any network connection information.

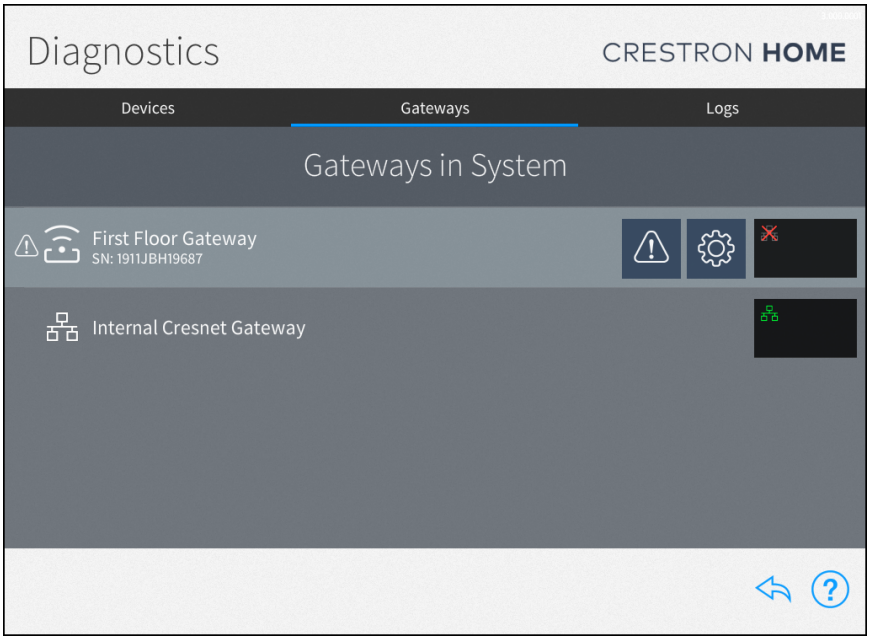
To view and modify device settings, tap the gear button next to the device.

To view the scene(s) that a device is in, tap the scene button next to the device.

To view an issue that is found with a device, tap the warning button next to the device.

Gateways

Tap the **Gateways** tab to view all of the gateways that are paired with the Crestron Home system. The **Gateways** tab also provides an option for viewing the system of paired Sonos devices. Each gateway reports its network and firmware status.



The following status information is provided for each gateway:

Icon	Description
	The gateway is online and detected by the system.
	The gateway is offline or not detected by the system.
	The gateway is running an outdated firmware version that is not supported by the system.
	The system detects an issue with the gateway

The following additional status information is provided for the **Sonos System** gateway:

NOTE: For more information on troubleshooting the Sonos system, refer to Sonos and Crestron Home Integration on page 469.

Icon	Description
	The Sonos system has discovered devices from multiple households after a device from one household has been paired.
	The Sonos system is not detected by the Crestron Home system.
	The Sonos system is disabled.
	A paired Sonos device is not detected by the Crestron Home system.

To view and modify device settings, tap the gear button  next to the device.

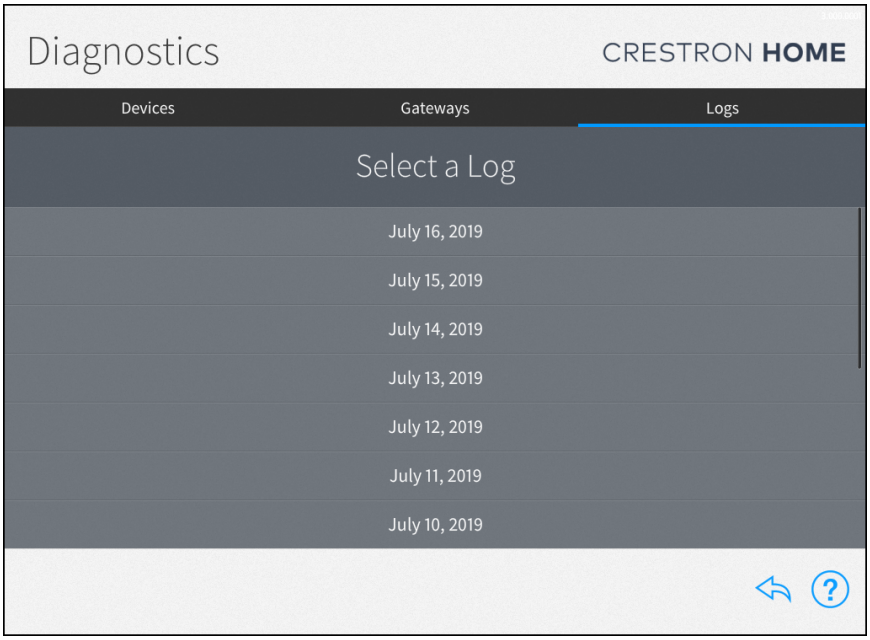
To view and modify gateway settings and to view all devices paired to the gateway, tap the gear button  next to a gateway.

If an issue is found with a gateway, tap the warning button  next to the device to view more information about the issue.

Logs

The message logs display all of the actions that have occurred in the Crestron Home system during a specified date and time range.

Tap the **Logs** tab on the top of the screen to view the message logs for the entire system, organized by day and time. Each item in the message log includes a time stamp, a recorded event description, and a message level indicating whether the item is general information or an error.



NOTE: An SD card must be loaded into the **MEMORY** slot on the Crestron Home processor to store log files.

To navigate the message logs:

- Select a date from the **Select a Log** menu.
- Tap the left and right arrow buttons (**<** and **>**) at the top of the screen to move forward and backward through logs for each day (starting with the current day).
- Swipe up or down through the list of times on the far left of the screen to view the logs for a specific time range (broken down into one-hour intervals).
- If more than one page of the log is available for the selected time range, use the left and right arrow buttons (**<** and **>**) at the bottom of the page to move forward or backward through the log pages.

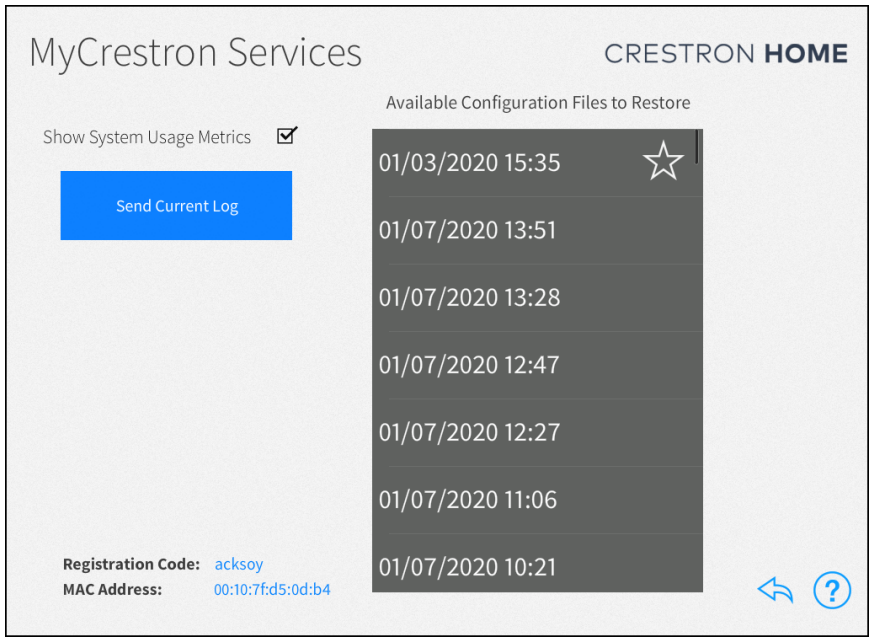
To return to the previous screen, tap the back arrow button .

myCrestron Services

Use the **MyCrestron RMS Services** screen to restore saved configuration files and to send message logs to the cloud.

A **Registration Code** and **MAC Address** is provided to register the Crestron Home system with the myCrestron residential monitoring service. For more information on registering the Crestron Home system with the myCrestron Residential Monitoring Service, refer to Enable Remote System Access on page 561.

To configure the myCrestron Services, tap **MyCrestron RMS Services** on the **User Settings** screen.



Show System Usage Metrics

Check or uncheck the **Show System Usage Metrics** to enable or disable displaying the system usage metrics within the myCrestron Residential Monitoring Service.

Send Current Log

Sends the current message log file to the myCrestron Residential Monitoring Service. A dialog is displayed, tap **OK** to send the current message log file or tap **Cancel** to cancel.

NOTES:

- A golden configuration is indicated by a star icon next to the configuration in the **Available Configuration Files to Restore** menu.
- The golden configuration will always be available for restore. It will not be deleted from myCrestron routine backups that are made by the system.

Restore a Previous System Configuration

The Crestron Home system records the system configuration settings periodically and saves them in configuration files, which are sorted by time and date.

NOTE: Golden Configurations are indicated by a star icon and appear at the top of the **Available Configuration Files to Restore** list.

To restore a system configuration:

1. Identify a known working configuration file from the **Available Configuration Files to Restore** menu.
2. Tap the configuration file that you wish to restore.
3. A confirmation dialog is displayed. To restore the data file, tap and hold the **Continue** button for 3 seconds. The configuration is downloaded and then applied to the system. When complete, the control processor restarts.

To return to the previous screen, tap the back arrow button  .

Advanced Configuration

The **Advanced Configuration** screen allows the homeowner to make changes to their Crestron Home system. For additional information, refer to End User Configuration on page 240.

Tap **Advanced Configuration** on the **User Settings** screen to enter the **Advanced Configuration** screen.

Username: advanceduser

Password: Set by the dealer. Contact your dealer for details.

The following settings can be changed:

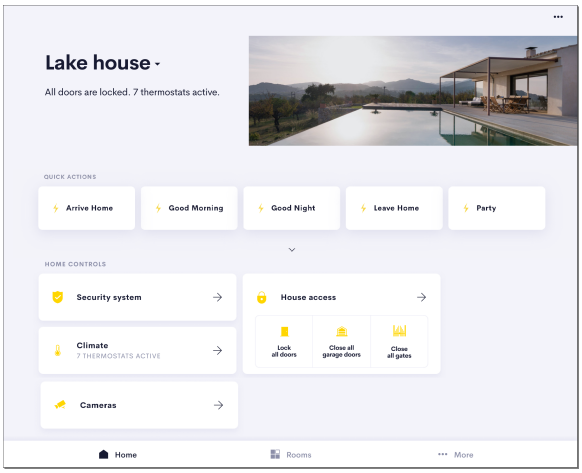
- **Setup Scenes:** Change the settings for Lighting Scenes, Shade Scenes, Media Scenes, and Climate Scenes. Refer to Setup Scenes on page 242 for details.
- **System Scheduling:** Create, edit, and delete scheduled events. Refer to System Scheduling on page 260 for details.
- **Climate Scheduling:** Create, edit, and delete climate events. Refer to Climate Scheduling on page 262 for details.

Crestron Home™ OS User Interface

The Crestron Home user interface runs on TSW-xx60 series touch screens, iOS devices, and Android devices to provide a seamless user interface across all devices. The user interface for the Crestron Home system is populated based on the configuration of the Crestron Home system.

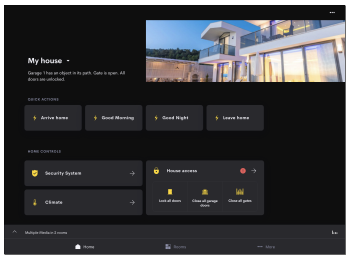
The Crestron Home interface is comprised of three main tabs: **Home**, **Rooms**, and **More**.

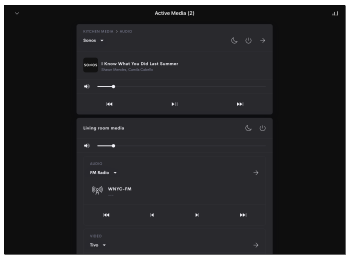
- **Home:** Displays controls that apply to the entire home.
- **Rooms:** Displays all of the rooms in the home to navigate to room specific controls.
- **More:** Provides information about the Crestron Home system and also addition functions available.



Dark Mode for iOS Devices

If Dark Mode is enabled on the iOS device, the Crestron Home app is displayed in dark mode.

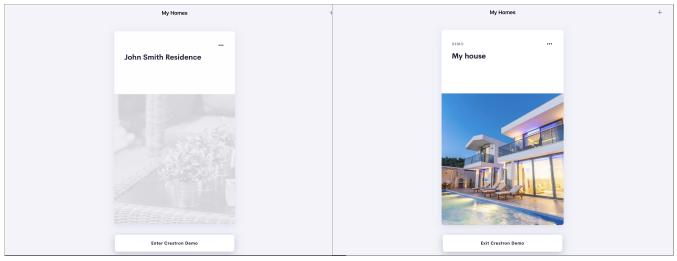


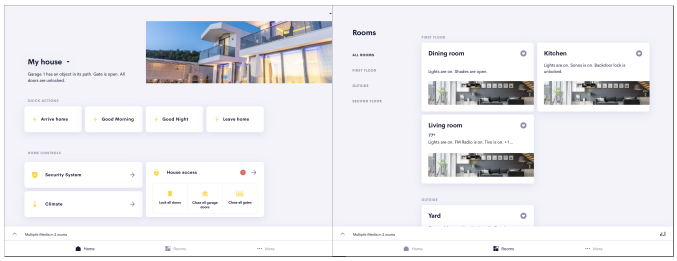


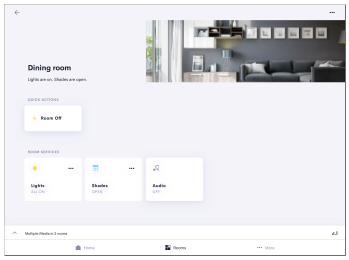
Demo Mode for iOS Devices

Demo mode is available to provide a preview of the Crestron Home user interface. It displays a common house that utilizes quick actions; security system and climate control; house access including garage door, door lock, and gate control; and rooms with light, shade, audio, and video devices.

To exit Crestron Demo mode, tap the **Exit Crestron Demo** button.

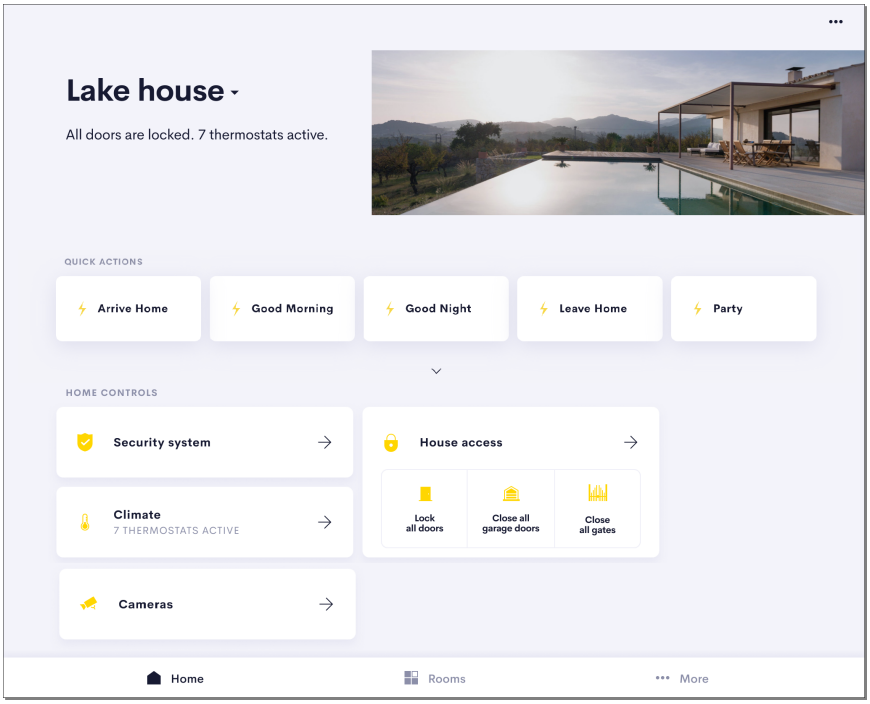






Home Screen

The **Home** screen displays controls that apply to the entire Crestron Home system.

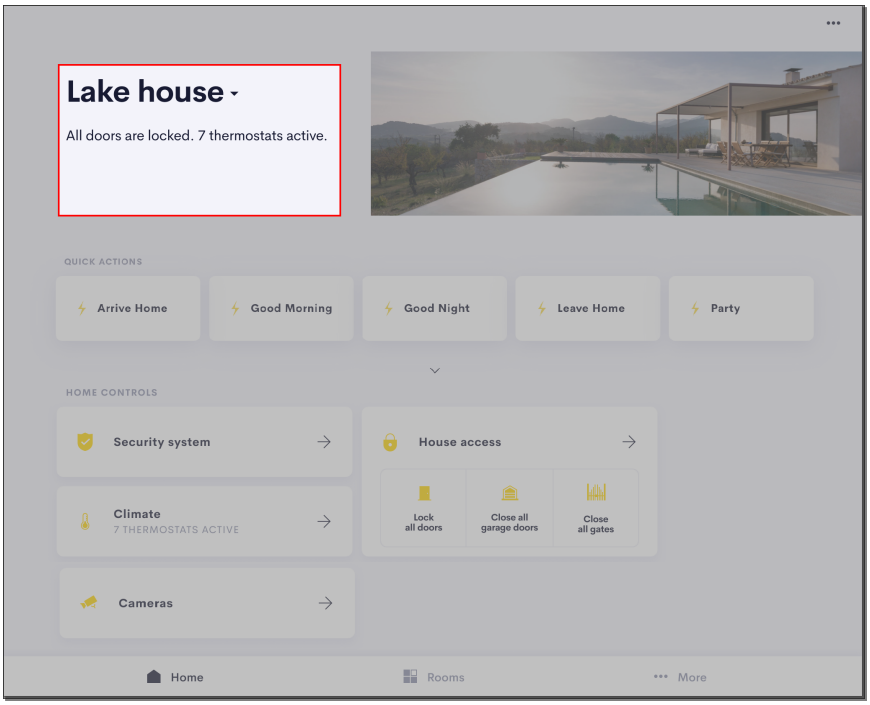


Home Information and Status

Information about the house and device status is shown on the top of the screen.

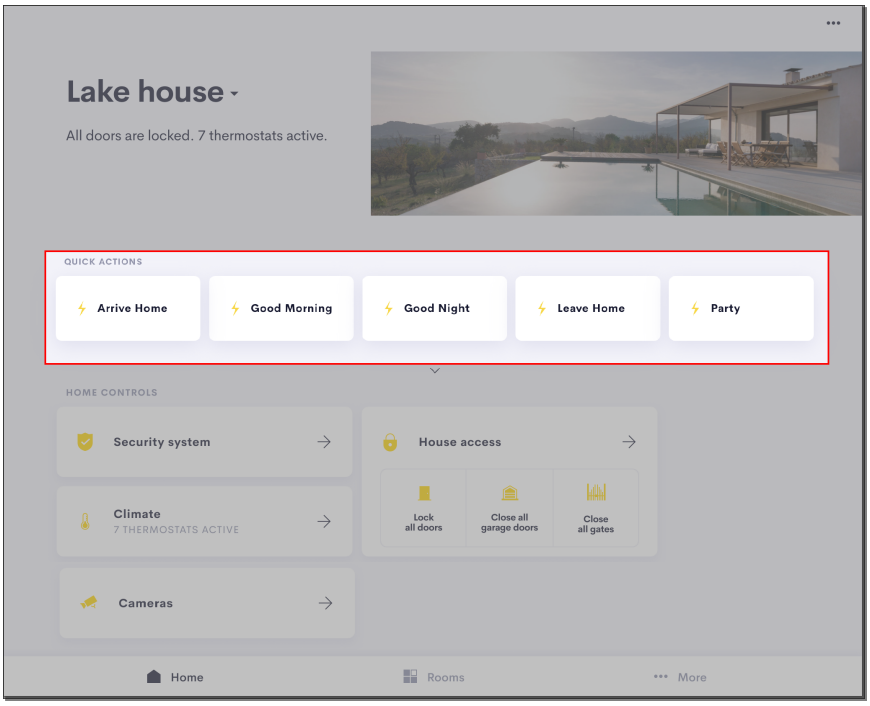
The name of the home is listed at the top. To switch homes, tap the down arrow and then select the home.

The status can include information such as the state of the door locks, gates, or garage doors, if the security system is active, if media is playing, and more.



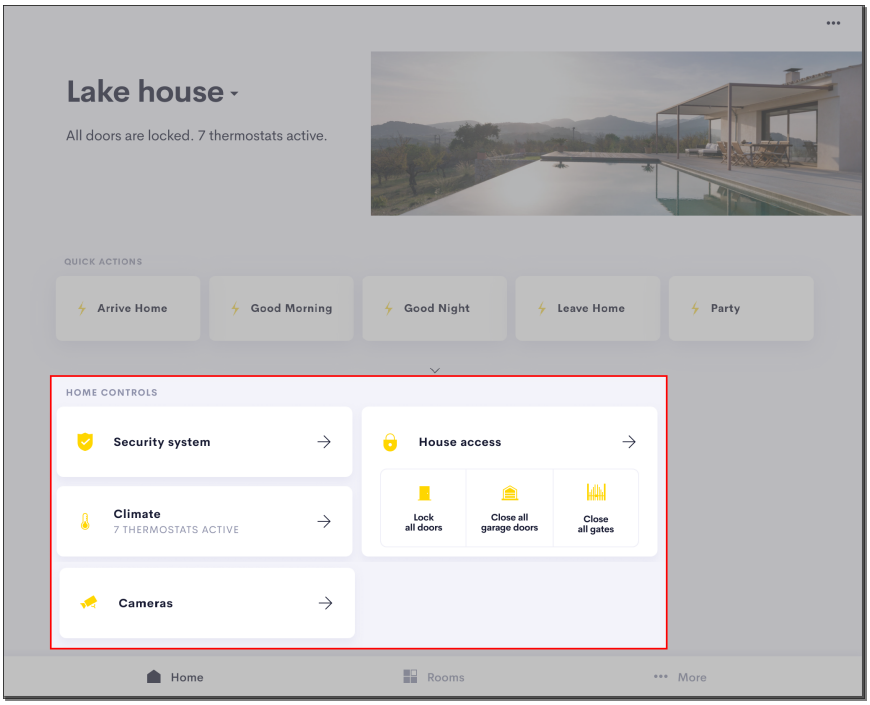
Quick Actions

Quick Actions are listed along the top of the home screen. Quick Actions, which are similar to shortcuts, execute a series of events with one tap. Press a quick action button to perform the action.



Home Controls

Home Controls provide control of all security systems, thermostats, and home access devices (locks, garage doors, and gates), and cameras.



For information about the Home Controls, refer to the following sections:

- House Access on the facing page
- Security System on page 345
- Control Climate on page 313
- View Cameras on page 346

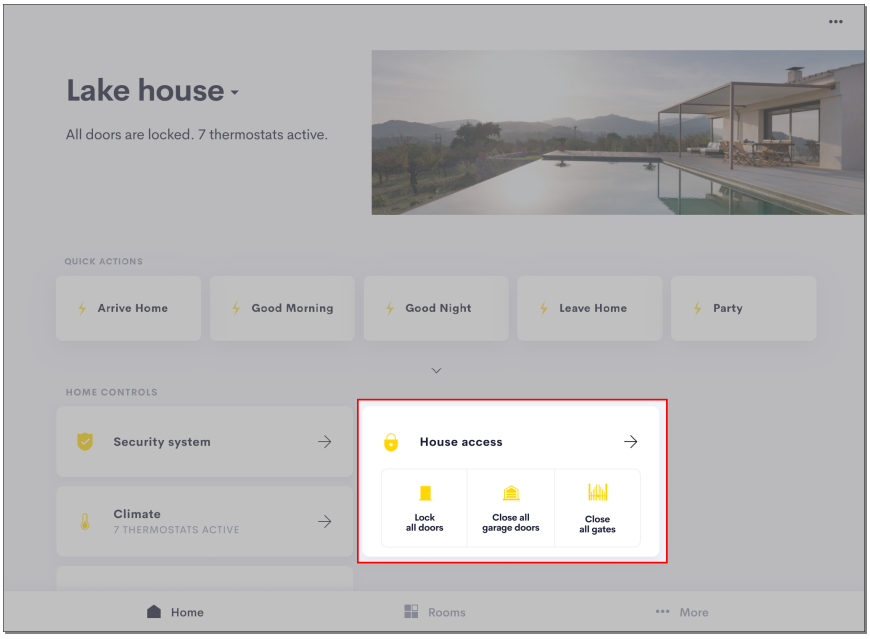
House Access

House Access Tile

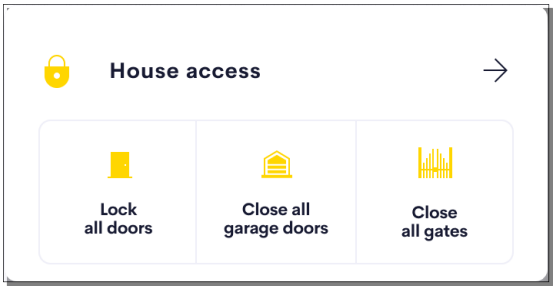
The **House access** tile allows all of the locks, garage doors, and gates in the home to be controlled from the home screen.

NOTES:

- If locks, garage doors, or gates are not part of the system, the device is not displayed in the House access tile.
- If there are no locks, garage doors, or gates in the system, the House access tile is not shown.



The icons in the House access tile provide control for all locks, garage doors, and gates in the home.

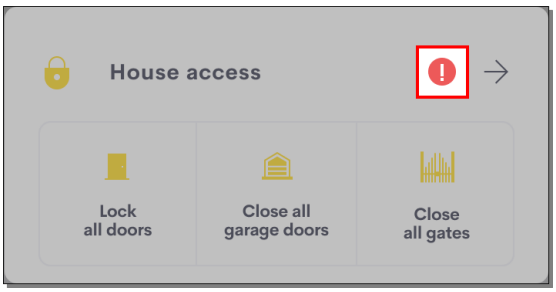


NOTE: The House access tile only displays the items that are in the house.

Home Access Tile Actions

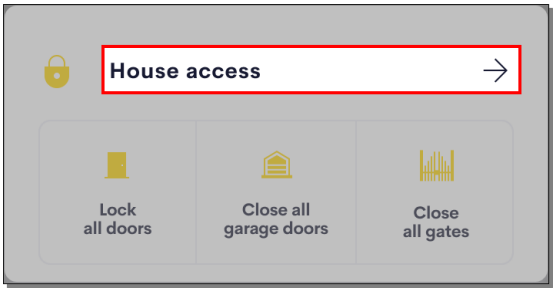
Device	Icon	Status	Action
Door Lock		All of the doors are locked.	Tap to unlock all of the doors.
		One or more doors are unlocked.	Tap to lock all of the doors.
Garage Door		All of the garage doors are closed.	Tap to open all of the garage doors.
		One or more of the garage doors are open.	Tap to close all of the garage doors.
Gate		All of the gates are closed.	Tap to open all of the gates.
		One or more of the gates are open.	Tap to close all of the gates.

An alert is displayed when a device fails to lock or close.



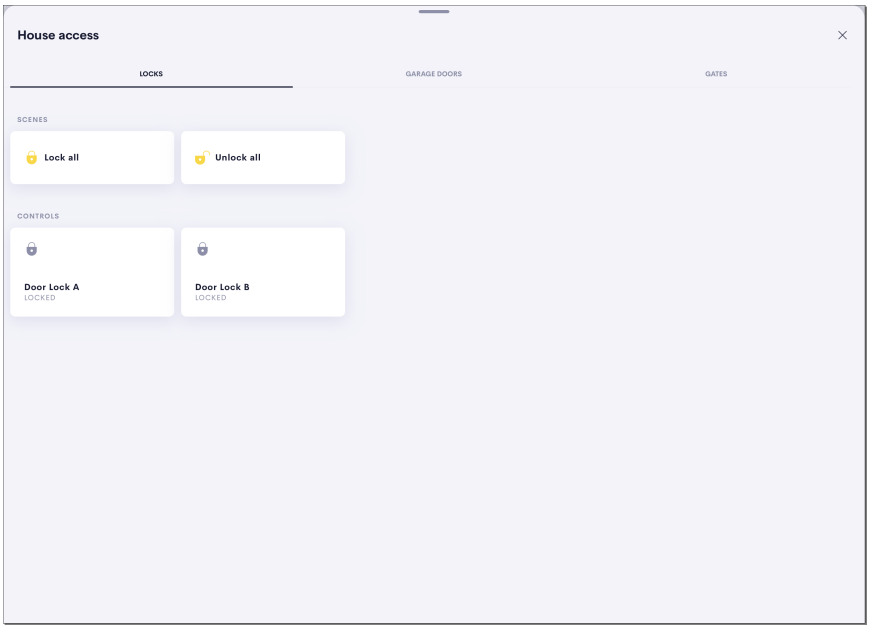
House Access Menu

Tap **House access** to view the **House access** menu.



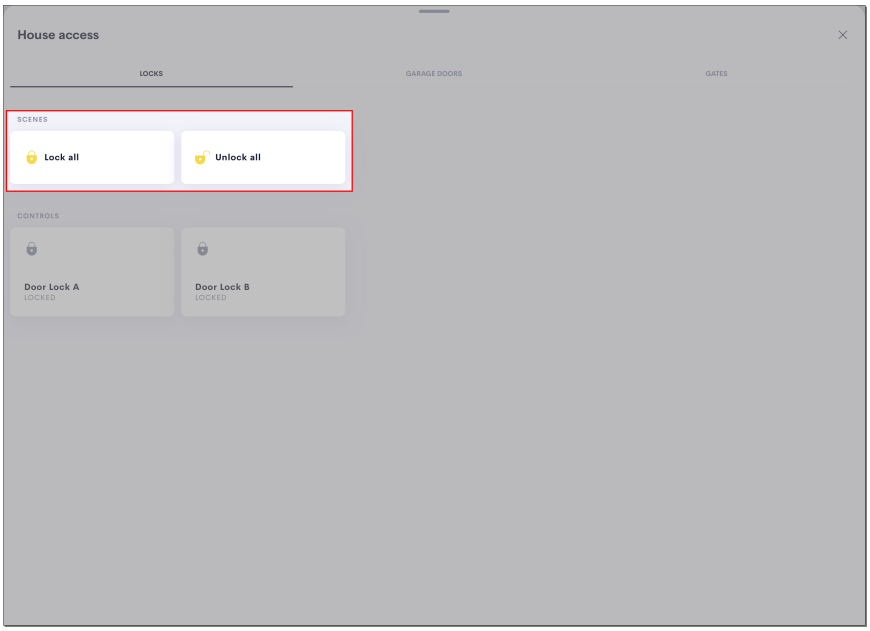
The **House access** menu contains tabs for **Locks**, **Garage Doors**, and **Gates**.to provide individual control for all locks, garage doors, and gates that are in the home.

NOTE: If locks, garage doors, or gates are not part of the system, the tab for the device is not shown.

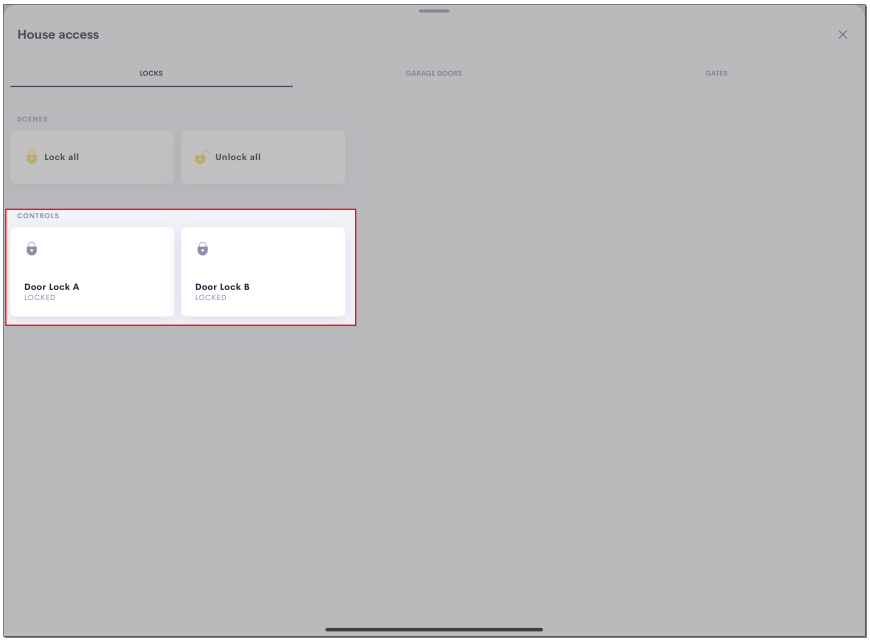


Locks Tab

Scenes are provided along the top of the **Locks** tab. Tap the **Unlock all** or **Lock all** scene to unlock or lock all of the locks.

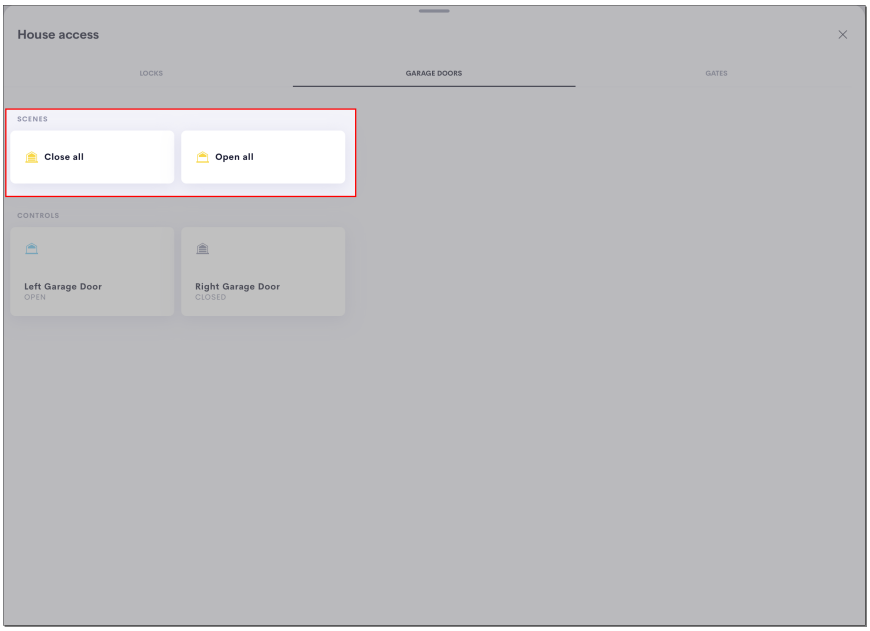


Individual lock control is provided in the **Controls** section. Here, you can control the lock independently of the Quick Action. Each lock displays the name of the lock, the lock status, and any error messages. Tap the lock tile to unlock or lock the individual locks.

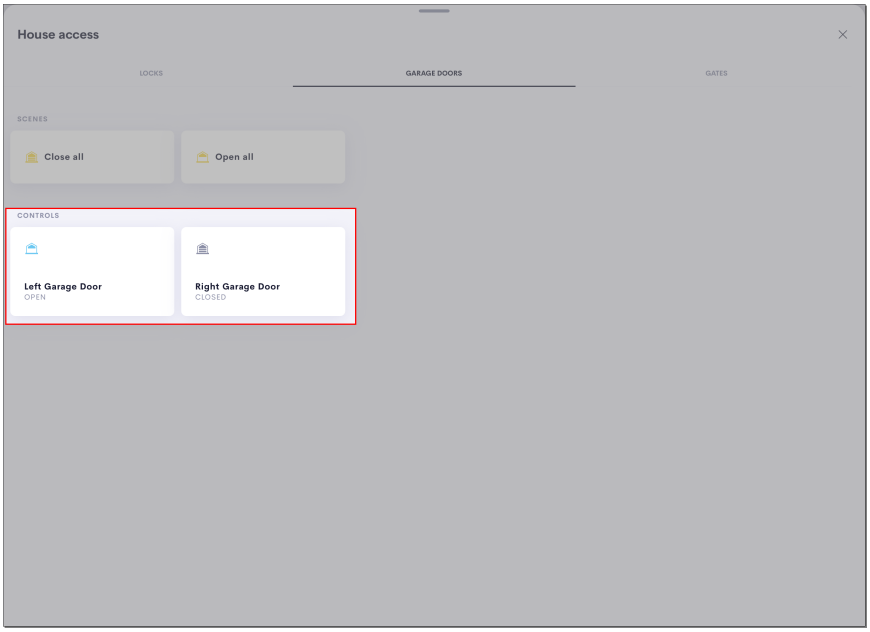


Garage Doors Tab

Scenes are provided along the top of the **Garage Doors** tab. Tap the **Open all** or **Close all** scene to open or close all of the garage doors.



Individual garage door control is provided in the **Controls** section. Here, you can control the garage door independently of the Quick Action. Each garage door displays the name of the garage door, the garage door status, and any error messages. Tap the garage door tile to open or close the individual garage doors.



The garage door tile displays the status:

NOTE: The garage door state is only provided if the garage door is configured with sensors that monitor the open and closed state of the garage door.

- Open: The garage door is open.
- Opening: The garage door is opening.
- Closed: The garage door is closed.
- Closing: The garage door is closing.
- Moving: The garage door is moving, but the direction is not known.
- Unknown: The system is not able to determine the state of the garage door.

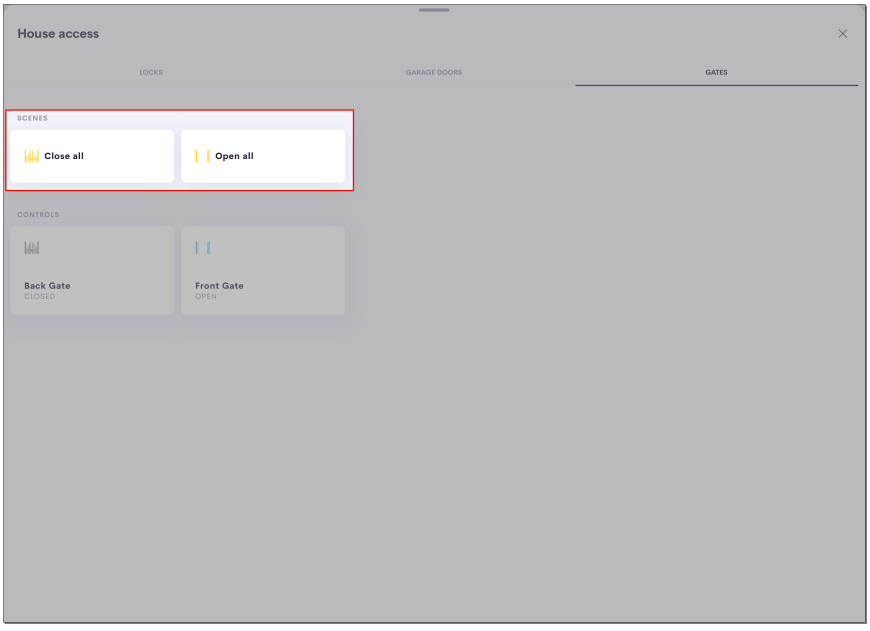
The garage door tile displays any errors:

NOTE: The error replaces the status information in the device tile.

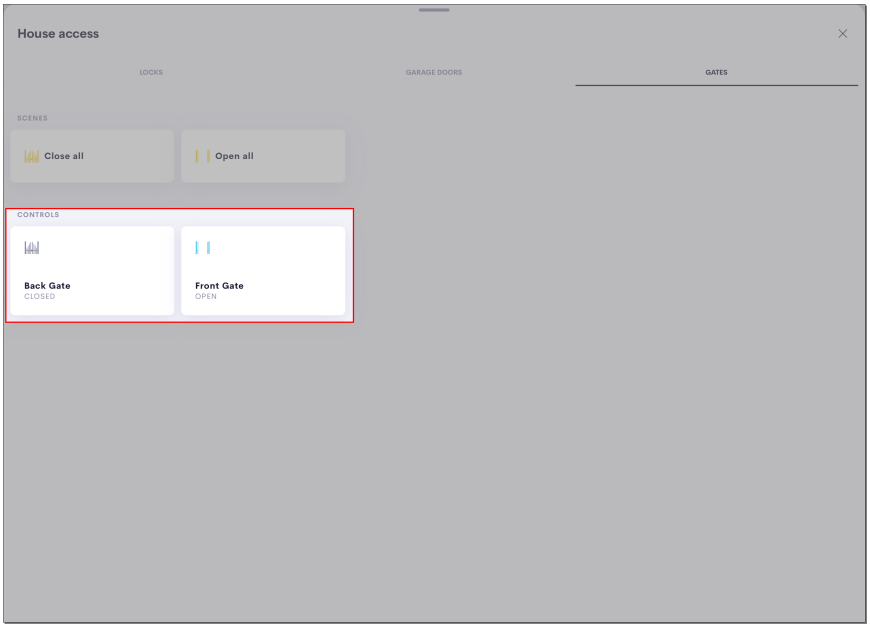
- Object in path: When the garage door is known to be closing but ends up in the fully open opsition
- Device Stopped: When the garage door is known to be traveling towards a monitored position but does not reach that position.
- Offline: When any component of the garage door is offline, the entire garage door is considered to be offline.

Gates Tab

Scenes are provided along the top of the **Gates** tab. Tap the **Open all** or **Close all** scene to open or close all of the gates.



Individual gate control is provided in the **Controls** section. Here, you can control the gate independently of the Quick Action. Each gate displays the name of the gate, the gate status, and any error messages. Tap the gate tile to open or close the individual gates.



The gate tile displays the status:

NOTE: The gate state is only provided if the gate is configured with sensors that monitor the open and closed state of the gate.

- Open: The gate is open.
- Opening: The gate is opening.
- Closed: The gate is closed.
- Closing: The gate is closing.
- Moving: The gate is moving, but the direction is not known.
- Unknown: The system is not able to determine the state of the gate.

The gate tile displays any errors:

NOTE: The error replaces the status information in the device tile.

- Object in path: When the gate is known to be closing but ends up in the fully open opsition
- Device Stopped: When the garage door is known to be traveling towards a monitored position but does not reach that position.
- Offline: When any component of the gate is offline, the entire gate is considered to be offline.

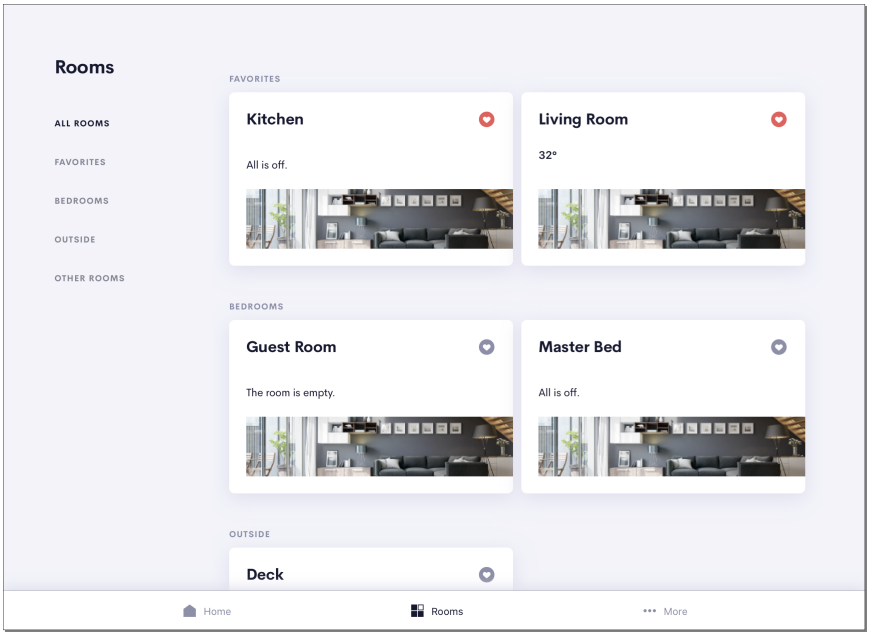
Rooms Screen

The Rooms screen displays all of the rooms within the Crestron Home system.

From the home screen, tap the **Rooms** icon along the bottom. All of the rooms in your home are displayed as room tiles which display important usage information about each room. The list of rooms are also organized by Room Groups on the left-hand side of the Crestron Home app.

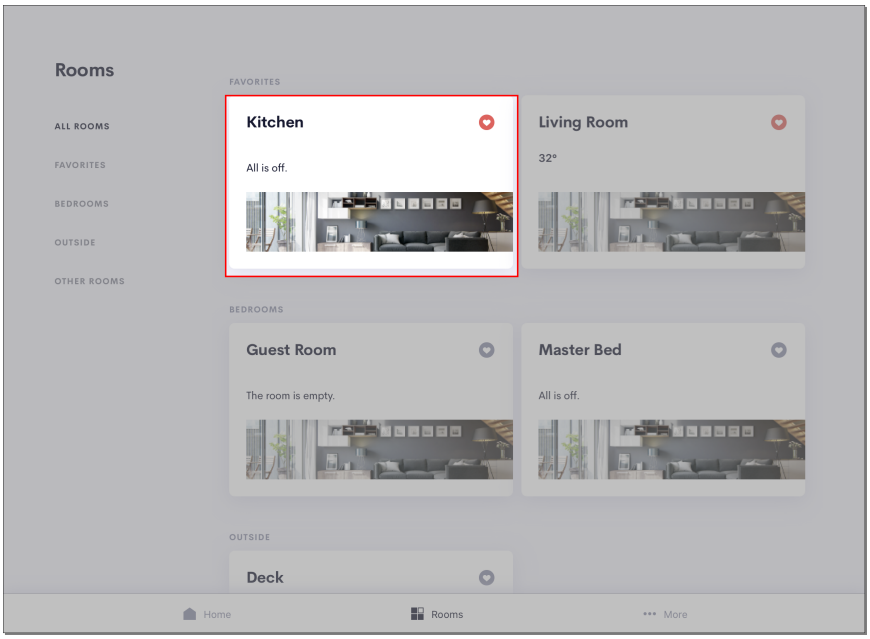
Swipe up to see all rooms in your Crestron Home.

Tap a room tile to enter the Room View. For details, refer to Room View on page 300



Room Tiles

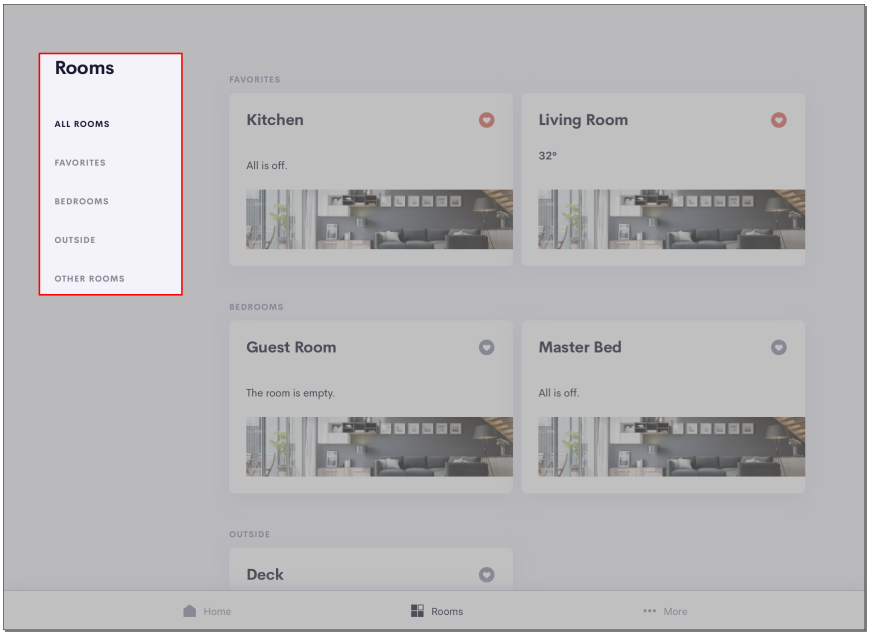
Room tiles display the name of the rooms in the home and key information about each room, such as the temperature, if music is playing or the television is on, the status of the shades, and more.



Room Groups

Room groups filter the room tiles that are displayed on the right-hand side of the Crestron Home app. Room groups are created when the dealer configures your Crestron Home system. The **All Rooms**, **Favorites**, and **Other Rooms** room groups are automatically generated by the Crestron Home user interface.

Room groups are rooms that share similar characteristics and that were created by your dealer when configuring your Crestron Home system. For example, room groups may have names such as First Floor and Second Floor which display rooms based on their level in the house, Entertainment Rooms which displays all entertainment rooms in the house, or Bedrooms which displays all bedrooms in the house.

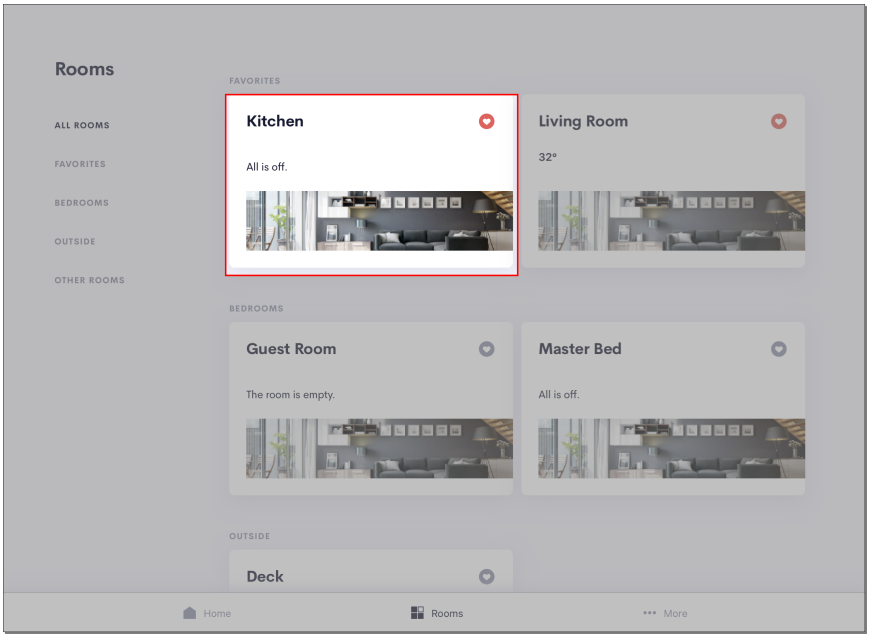


The **Other Rooms** room group displays all rooms that are not placed in a room group.

Favorites

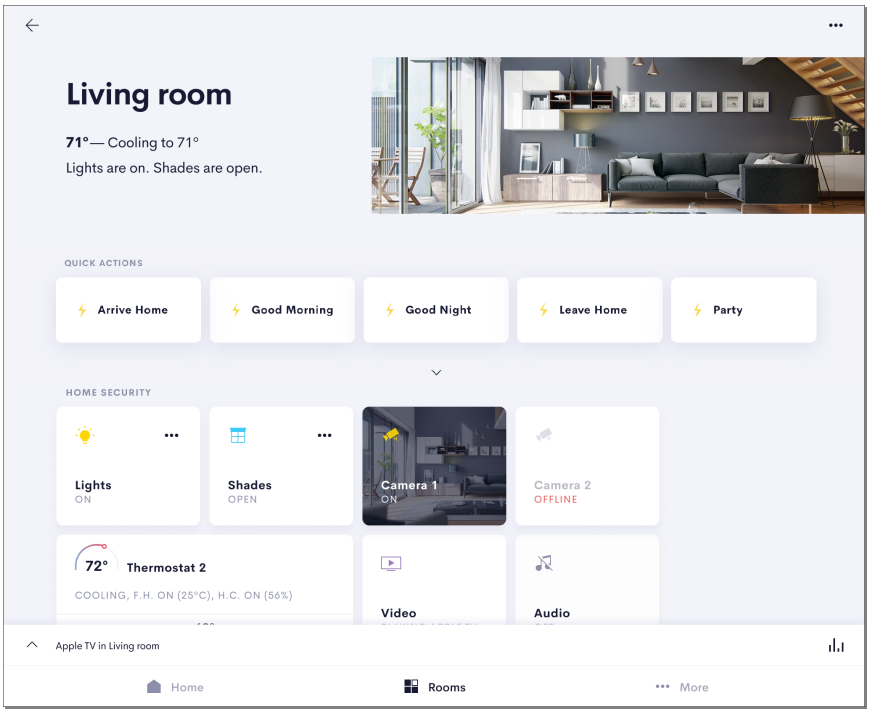
Tap to select a room as a favorite. Rooms that are selected as a favorite appear at the top of the page for quick access and are also listed in the **Favorites** room group.

NOTE: Each user interface device can have its own favorites.



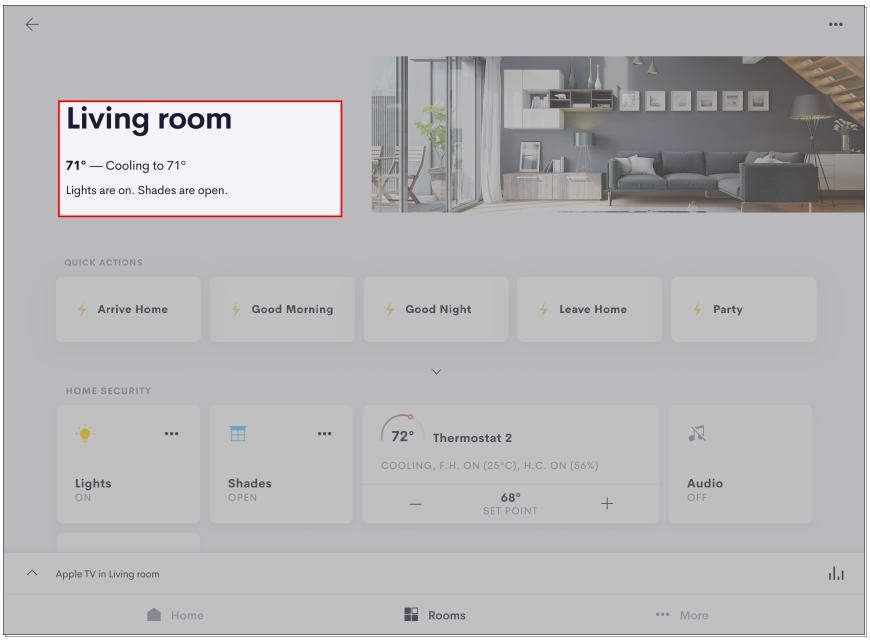
Room View

The **Room View** displays all actions that can be performed in a room.



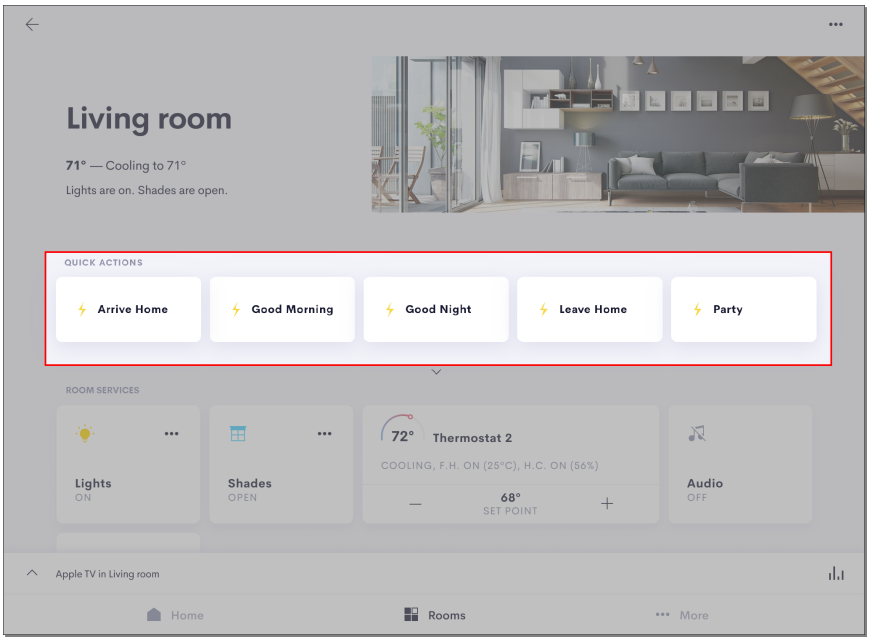
Room Information and Status

The top of the screen displays the name of the room and the status of devices that are in the room.



Quick Actions

Quick Actions are listed along the top of the room screen. Quick Actions, which are similar to shortcuts, execute a scene with one tap. Tap a quick action to perform the action.



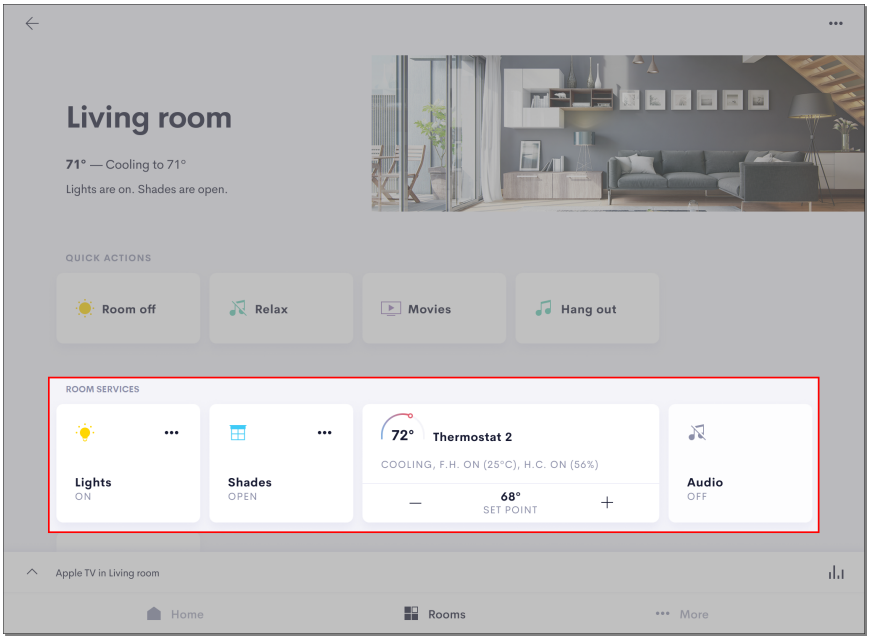
NOTE: Quick Actions are customized by your Crestron Home installer. The functionality are custom to the devices in the room, house, and your preferences.

Room Controls

Control individual room devices in the **Room Services** section. Here you can control the lights, temperature, shades, cameras, and more independently of the Quick Action.

For example, if you activated the Movies Quick Action and you would like to turn up the lights, use the Room Services controls to change only the lights.

Scroll up to view all of the **Room Services** that are available.



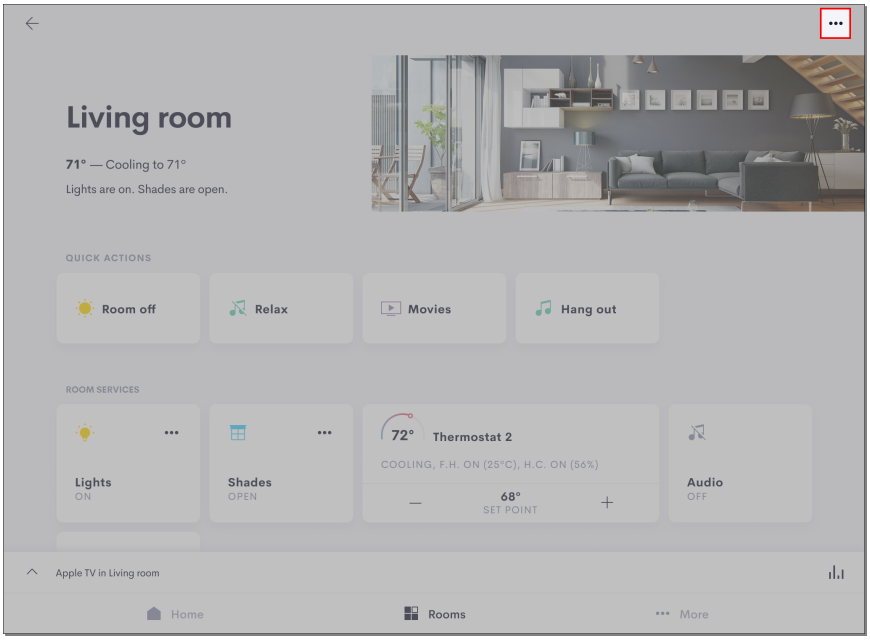
For information about the Room Controls, refer to the following sections:

- Lights, refer to Control Lights on page 309.
- Shades, refer to Control Shades on page 311.
- Climate, refer to Control Climate on page 313.
- Audio and video, refer to Control Media on page 322.
- Locks, refer to Control Locks on page 339.
- Garage doors, refer to Control Garage Doors on page 341.
- Gates, refer to Control Gates on page 343.
- Cameras, refer to View Cameras on page 346.

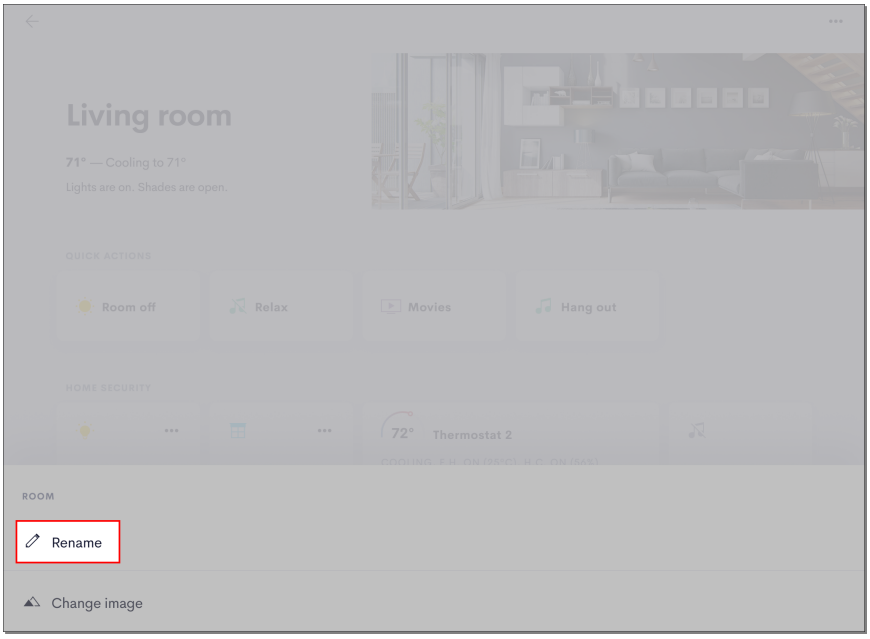
Rename a Room

To change the name of a room from within the Crestron Home app:

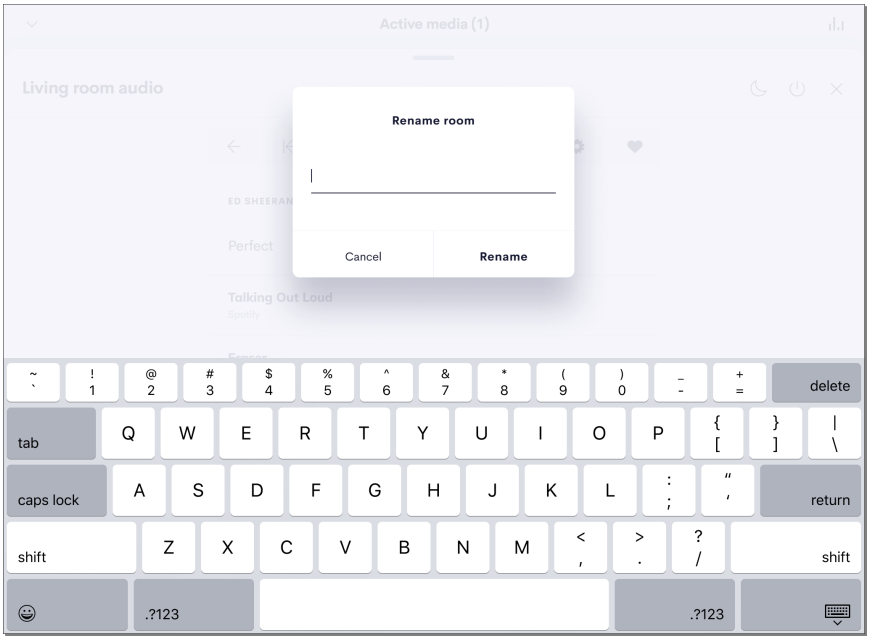
1. Tap the menu button ••• to show the room options.



2. Tap **Rename**.



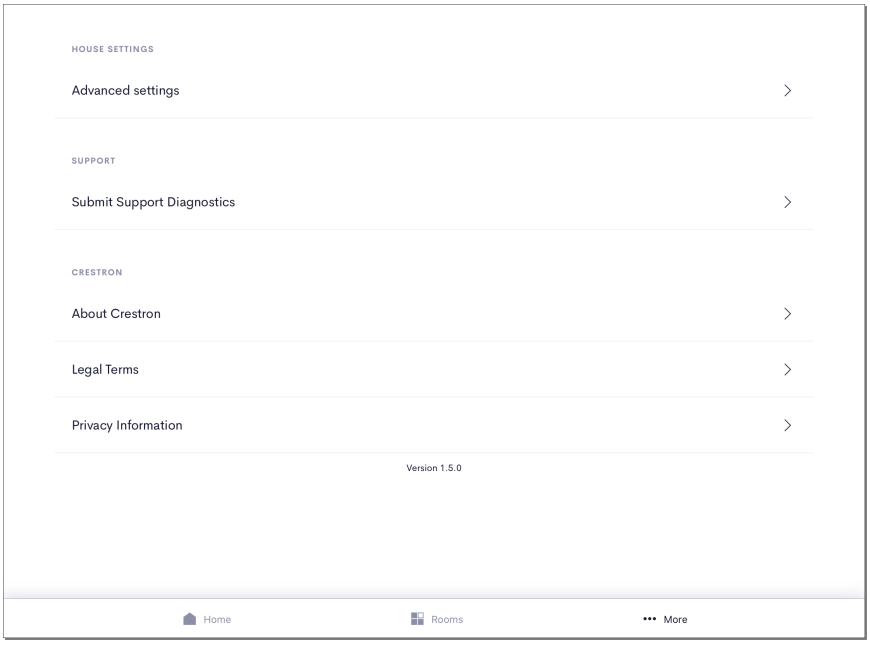
3. The **Room Rename** dialog displays. Use the on-screen keyboard to enter a new name and then tap **Rename**.



4. If voice control is enabled for the room, you will be prompted to rediscover your devices.
    - **Amazon Alexa:** Say "Alexa, discover my devices."
    - **Google Assistant:** Say "OK Google, sync my devices."

More Screen

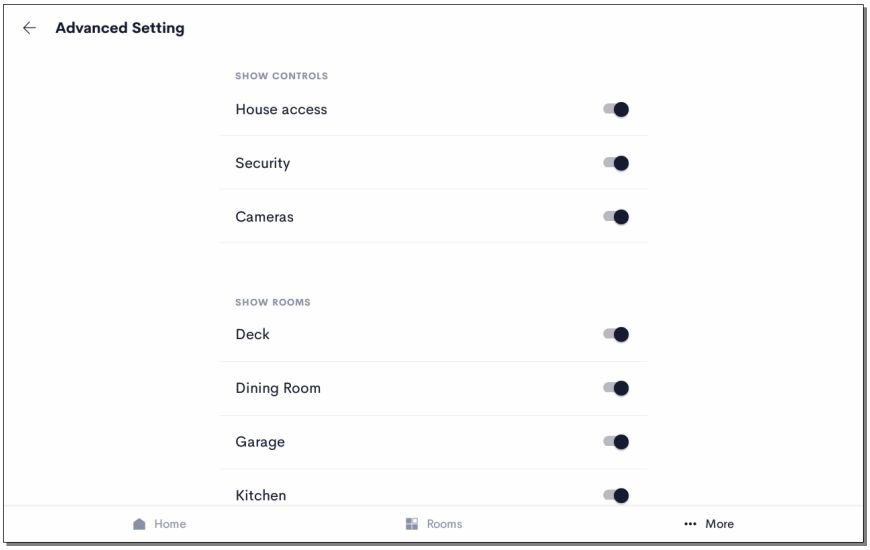
Tap **More** to access advanced settings, submit support diagnostics, and obtain information about Crestron.



House Settings

The Advanced Setting screen allows the user to show or hide controls and rooms in the user interface. The Advanced User password is required to access these options. Tap the toggle switch to show or hide the system-wide controls and rooms on the touch screen.

NOTE: The Crestron Home app for Android™ provides the ability to show or hide system-wide controls (house access, security, and cameras).



Show Controls

The **Show Controls** list displays the controls that are available in the Crestron Home system. The default setting for controls is show.

Tap the slider to hide the control in the user interface device. The control will not appear on any screen in the user interface. For example, if **Climate** is hidden, thermostats will not be shown in the rooms they are located in and the Climate option will not be shown on the **Home** tab.

NOTES:

- Controls that are hidden apply only to the user interface device that is being configured. For example, if **Cameras** is hidden using a TSW-xx60 series touch screen in the living room, **Cameras** will not be hidden on the TSW-xx60 series touch screen in the foyer or on a mobile device.
- Quick actions that are displayed in the **Home** tab can operate controls that are hidden.

The following controls may be displayed in the **Show Controls** list:

- Cameras
- Climate
- House Access
- Lights
- Media
- Pools & Spas
- Security
- Shades

Show Rooms

The **Show Rooms** list displays the rooms that are available in the Crestron Home system. The default setting for rooms is show.

Tap the slider to hide the room in the user interface device. The room will not be shown in the **Rooms** tab. Devices that are in the room may still be displayed in the **Home Controls** section of the **Home** tab. For example, if **Master Bedroom** is hidden and the room contains a thermostat, the thermostat will be displayed.

NOTES:

- Rooms that are hidden apply only to the user interface device that is being configured. For example, if **Kitchen** is hidden using a TSW-xx60 series touch screen in the living room, **Kitchen** will not be hidden on the TSW-xx60 series touch screen in the foyer or on a mobile device.

- Quick actions that are displayed in the **Home** tab can control devices in rooms that are hidden.

Audio Interrupts and Chimes

Tap **Events & sounds** to view the **Events & sounds** screen.

NOTE: Touch screens that do not have speakers display the interrupt messages but cannot play the associated sound.

The **Events & sounds** list displays the notifications (interrupts) and chimes that are available in the Crestron Home system. The default setting for interrupts and chimes is enable.

Tap the slider to disable the chimes in the user interface device. The chime will not play on the user interface device.

To change the sound of the notification, tap the three dots next to the name of the event and then select the sound. The sound is saved when it is selected.

NOTES:

- The sound that is selected is set for all user interface devices in the Crestron Home system.
- Disabling an event only disables the chime from playing on the user interface device. The notification will still be shown.
- Enabling **Do Not Disturb** mode (TSW-xx60 series touch screens only) silences the sound for all events on the device.
- If a room is hidden on the user interface device, the notification appears and the chime plays

Support

NOTE: Do not enable the submission of diagnostics unless directed to by Crestron Tech Support.

Allows the user to toggle the submission of diagnostics.

Crestron

Displays information about Crestron, the legal terms, and privacy information.

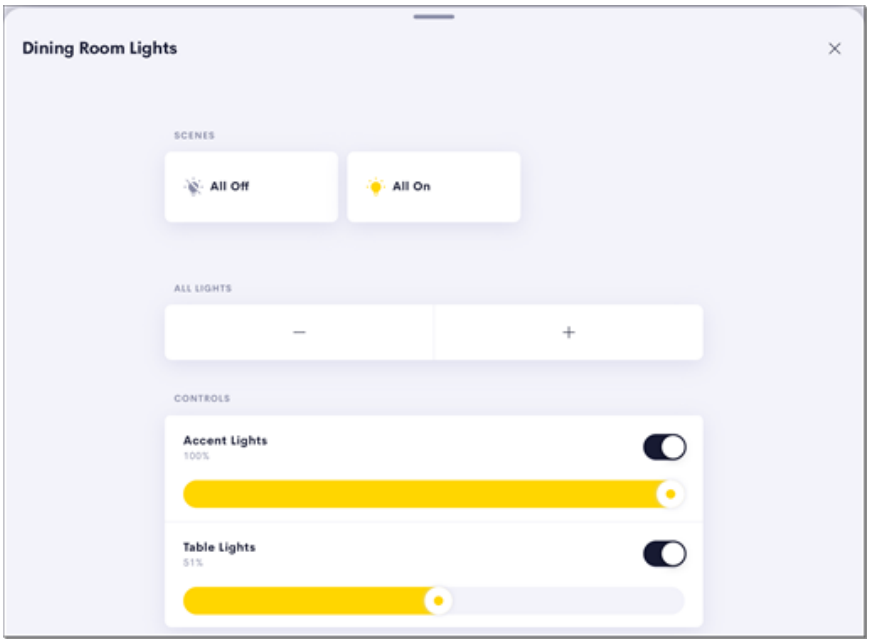
Control Lights

Use the Lights screen to control the lights in the room.

Scenes

The lighting scenes are listed along the top of the screen. Tap a scene to recall the lighting presets.

NOTE: Scenes are customized by your Crestron Home installer. The functionality are custom to the devices in the room, house, and your preferences.



NOTES:

For Crestron Home systems that include Lutron lighting controls:

- The Crestron Home user interface can only recall Lutron scenes. The Crestron Home user interface does not provide feedback to indicate the state of the Lutron scenes.
- If the room contains only Lutron lighting controls, the All Lights section and Controls section are not shown.
- If a Lutron scene controls a light and a shade, recalling the lighting scene also controls the shades.

All Lights

Use the + or - buttons to raise or lower all lights in the room.

+ (raise)

- Tap the + button to raise the lights in the room by 1% increments. If a light is off (0%), it will be turned on. If a light is at 100%, the light level remains unchanged.
- Tap and hold the + button to ramp the light level up. If a light is off (0%), it will be turned on. If a light is at 100%, the light level remains unchanged.

- (lower)

- Tap the - button to lower the lights in the room by 1% increments. If a light is at 1%, it will be turned off (0%). If a light is at 100%, the light level remains unchanged.
- Tap and hold the - button to ramp the light level down. If a light reaches 1%, it will pause briefly and then turn off (0%). If a light is at 0%, the light level remains unchanged.

Controls

Use the toggle switches and sliders to control individual lights in the room.

Toggle Switch

- Tap the toggle switch to turn the lights on (100%) and off (0%).

Slider

- Tap and slide the end of the slider to the right or left to raise or lower the light.

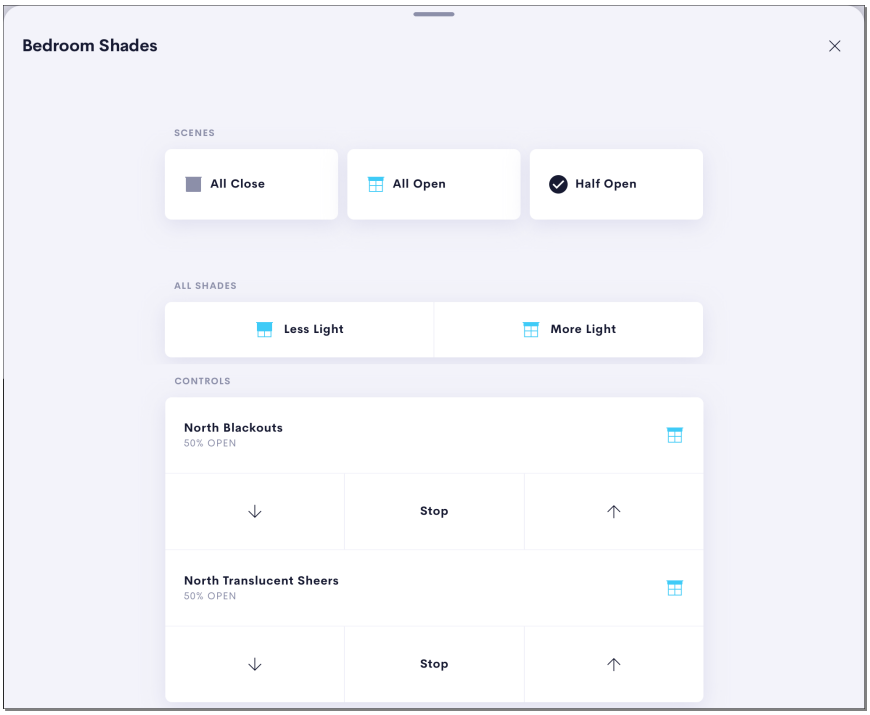
Control Shades

Use the Shades screen to control the shades in the room.

Scenes

The lighting scenes are listed along the top of the screen. Tap a scene to recall the shade preset.

NOTE: Scenes are customized by your Crestron Home installer. The functionality are custom to the devices in the room, house, and your preferences.



NOTES:

For Crestron Home systems that include Lutron shading controls:

- If the room contains only Lutron shading controls, the All Shades and Controls menus are not shown. The Crestron Home system provides only scene control and does not provide scene feedback.
- If a Lutron shading scene controls a shade and a light, recalling the shading scene also controls the lights.

All Shades

Use the **More Light** and **Less Light** buttons to open or close the shades or drapes.

More Light

- Tap the **More Light** button to open the shades or drapes in the room by 1% increments.
- Tap and hold the **More Light** button to open the shades or drapes. Release the button to stop opening the shades or drapes.

Less Light

- Tap the **Less Light** button to close the shades or drapes in the room by 1% increments.
- Tap and hold the **Less Light** button to close the shades or drapes. Release the button to stop closing the shades or drapes.

Controls

Use the Up arrow, Down arrow, and Stop button to control individual shades and drapes in the room.

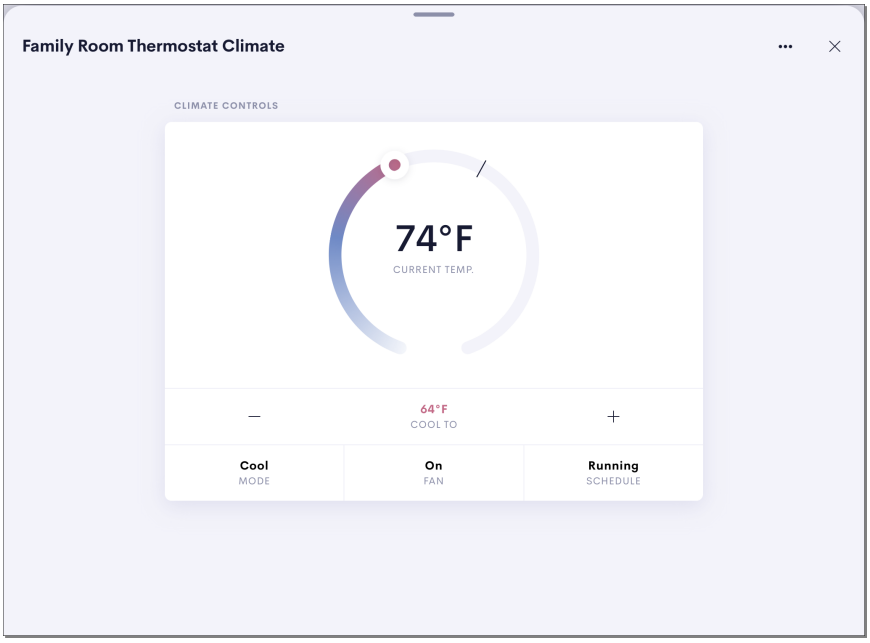
- Up arrow: Tap the Up arrow to open the shade or drape. The shade or drape will travel until it is fully open.
- Down arrow: Tap the Down arrow to close the shade or drape. The shade or drape will travel until it is fully closed.
- Stop button: Tap the **Stop** button to stop the shade or drape while it is traveling.

NOTE: Crestron horizontal sheer shades have additional controls to adjust the tilt of the hembar and allow more or less light into the room.

Control Climate

Set the temperature throughout the house, or a different temperature in every room. Tap the Climate button on the Home screen or a Room screen, the Climate screen displays showing the thermostats available in all rooms in the Crestron Home. Control the temperature in all rooms using the convenient control buttons.

Tap a room tile for information on the climate in that room.



Change the Setpoint

Slide the circular temperature gauge, or tap the + and - buttons, to change the temperature setpoint.

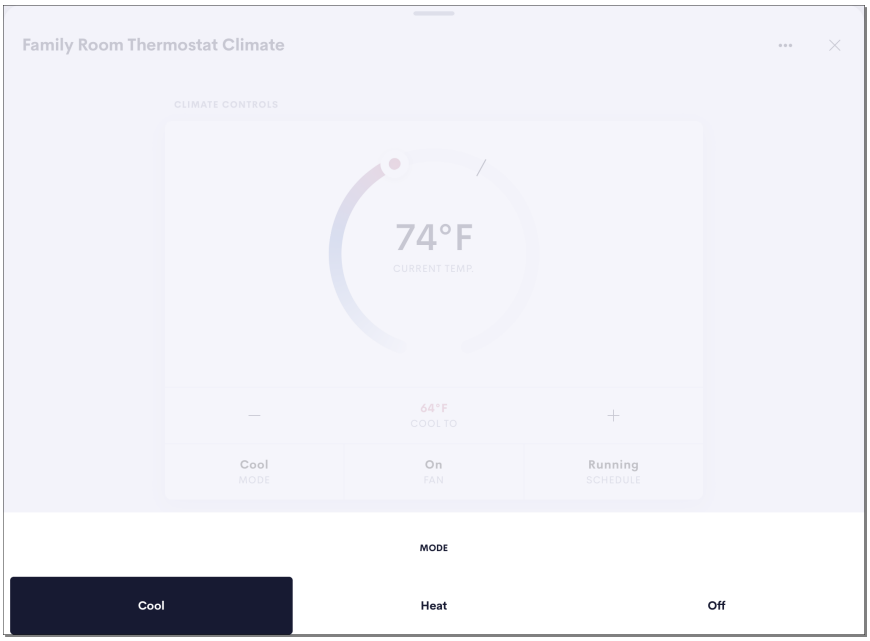
Change the Operating Mode

Operating Mode

NOTE: The configurable settings may vary depending on the thermostat functionality. For more information, refer to the thermostat documentation.

Tap **Mode** to switch the operating mode between **Off**, **Cool**, and **Heat**.

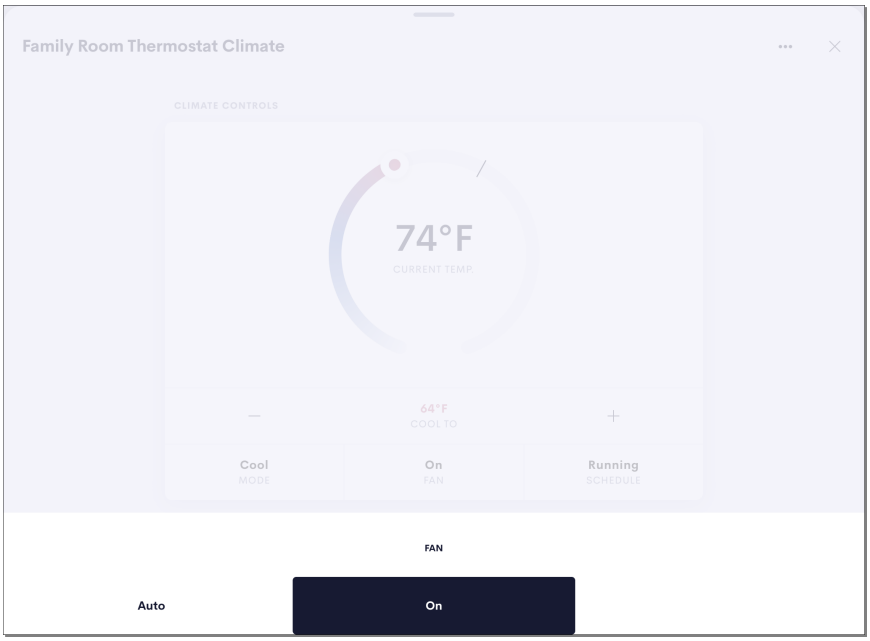
- **Cool:** Turn cooling mode on.
- **Heat:** Turn heating mode on.
- **Off:** Turn the thermostat off



Fan Mode

Tap **Fan** to switch the fan between **Auto** and **On**.

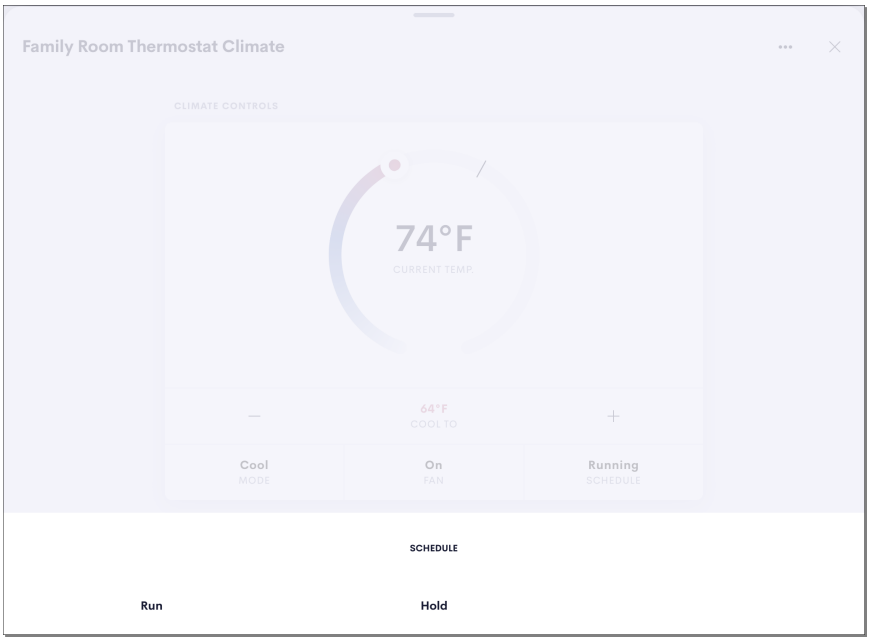
- **Auto:** The scene runs the fan automatically.
- **On:** The scene turn the fan on.



Schedule

Tap **Schedule** to switch the schedule between **Run** and **Hold**.

- **Run:** Starts the thermostat schedule.
- **Hold:** Stops the thermostat schedule.

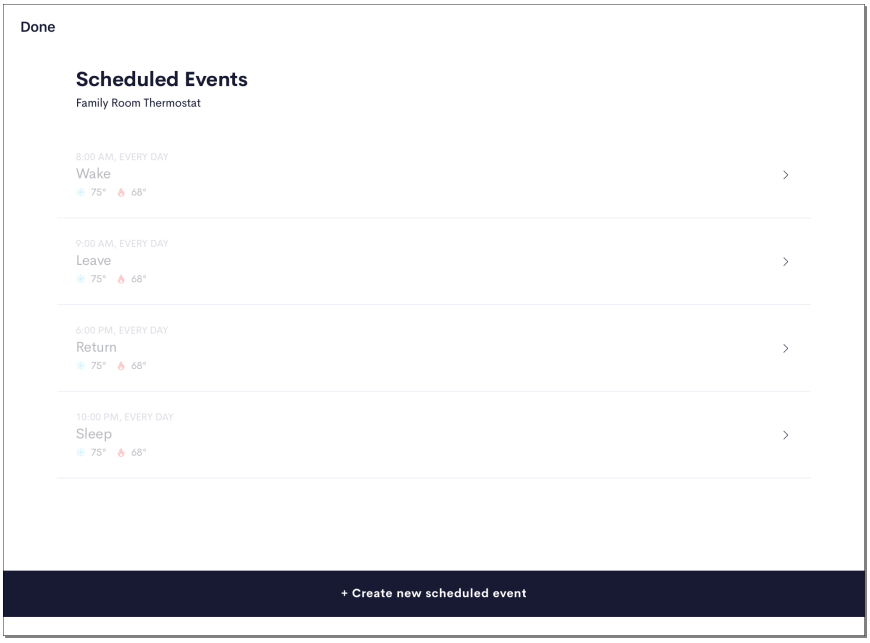


Create a Scheduled Climate Event

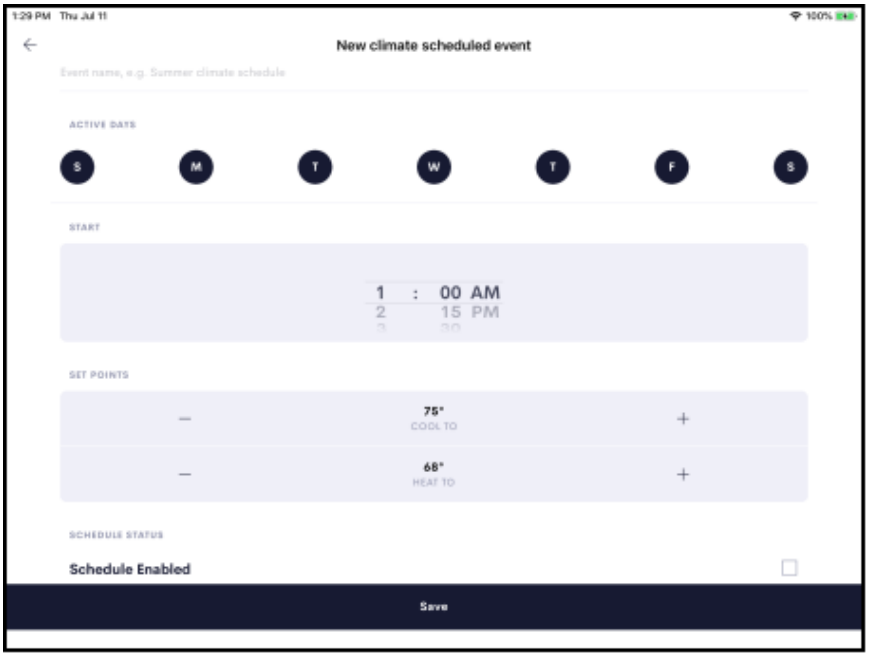
To create a new climate event in the user control interface:

1. Select a thermostat from the drop-down menu on the top left of the screen.
2. Tap the menu button ••• on the top right of the screen.

3. Tap **Scheduled Events**. The **Scheduled Events** screen for the thermostat is displayed.



4. Tap **+ Create new scheduled event**. The **New climate scheduled event** screen is displayed.



5. Configure the following settings for the climate event:
    - Use the text box at the top of the screen to edit the name for the climate event.
    - **Start:** Set the time that the climate event should occur using the provided spinner menus.
    - **Active Days:** Tap the appropriate day of the week to select the days that the climate event should occur. A filled icon indicates that the event is scheduled to occur on the associated day.
    - **Set Points:** Select the temperature set points for cooling ❄, heating 🔥, and auto 🔥|❄ modes using the appropriate spinner menu.

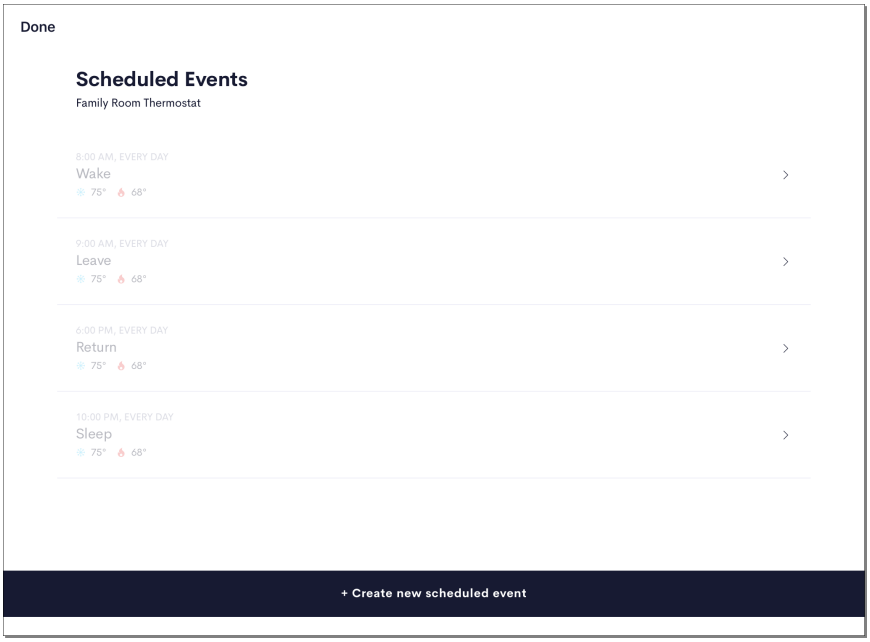
      NOTE: Depending on the selected mode, the thermostat switches to cooling mode when the room temperature reaches the cooling set point, switches to heating mode when the room temperature reaches the heating set point, or maintains the auto mode set point.

    - **Event Status:** Tap the check box to enable the event and add it to the thermostat schedule. New events are disabled by default.
6. Tap **Save** to save the climate event or tap the back button to cancel creating the event.

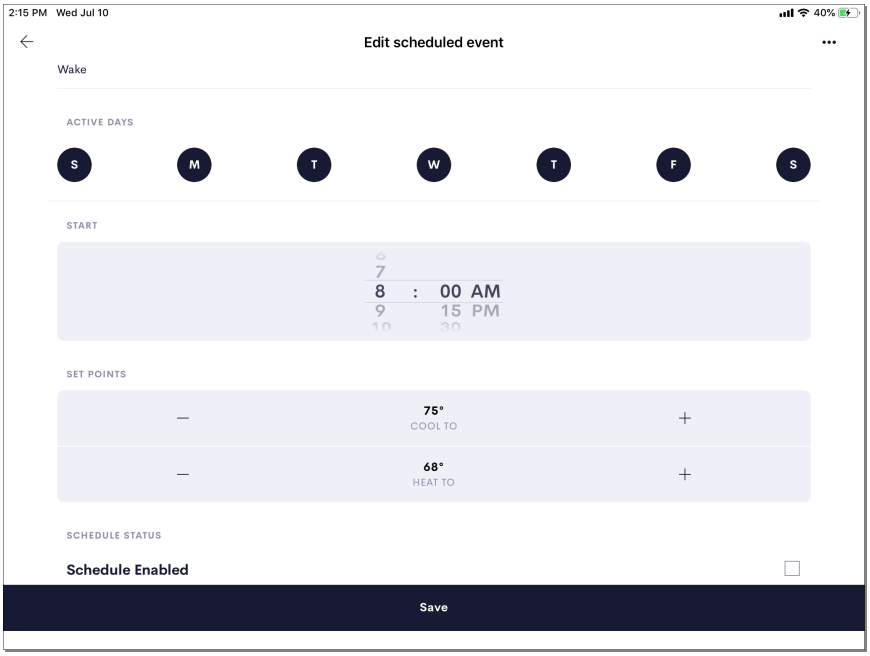
Edit a Scheduled Climate Event

To edit an existing climate event:

1. Select a thermostat from room.
2. Tap the menu button ••• on the top right of the screen.
3. Tap **Scheduled Events**. The **Scheduled Events** screen for the thermostat is displayed. The **Scheduled Events** screen lists the thermostat events that have been created for the thermostat. Each thermostat event provides the time and days that it is scheduled to occur, as well as its cooling and heating set points.



4. Tap the event to edit the thermostat behavior for the climate event.



5. Configure the following settings for the climate event:
   - Use the text box at the top of the screen to edit the name for the climate event.
   - **Start:** Set the time that the climate event should occur using the provided spinner menus.
   - **Active Days:** Tap the appropriate day of the week to select the days that the climate event should occur. A filled icon indicates that the event is scheduled to occur on the associated day.
   - **Set Points:** Select the temperature set points for cooling ❄, heating 🔥, and auto 🔥|❄ modes using the appropriate spinner menu.

     NOTE: Depending on the selected mode, the thermostat switches to cooling mode when the room temperature reaches the cooling set point, switches to heating mode when the room temperature reaches the heating set point, or maintains the auto mode set point.

   - **Event Status:** Tap the check box to enable the event and add it to the thermostat schedule. New events are disabled by default.
6. Tap **Save** to save the climate event or tap the back button to cancel creating the event.

Copy a Scheduled Climate Event to Another Thermostat

Scheduled climate events can be transferred between thermostats in the system.

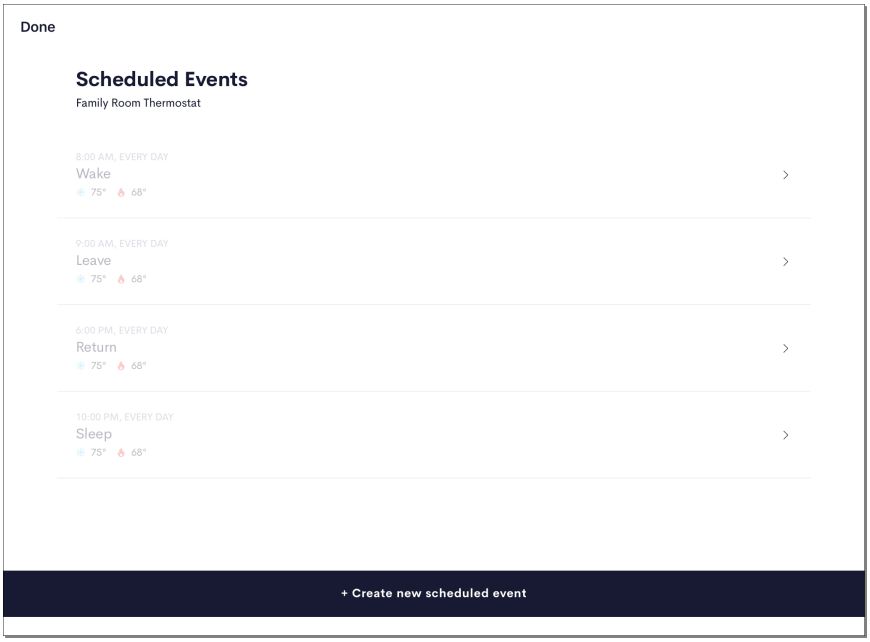
To copy a scheduled climate event to another thermostat:

1. Select a thermostat.
2. Tap the menu button ••• on the top right of the screen.
3. Select a scheduled event.
4. Tap the ••• icon and then **Copy Event**.
5. Tap **Copy to Another Thermostat**. A dialog shows the available thermostats in the system.
6. Select the desired thermostat and then tap **Apply Copy**. A dialog indicates that the scheduled event has been successfully copied to the new thermostat.

Delete a Climate Event

To delete a climate event:

1. Select a thermostat from the room.
2. Tap the menu button ••• on the top right of the screen.
3. Tap **Scheduled Events**. The **Scheduled Events** screen for the thermostat is displayed. The **Scheduled Events** screen lists the thermostat events that have been created for the thermostat. Each thermostat event provides the time and days that it is scheduled to occur, as well as its cooling and heating set points.



4. Tap the ••• icon and then Delete to delete the climate event.

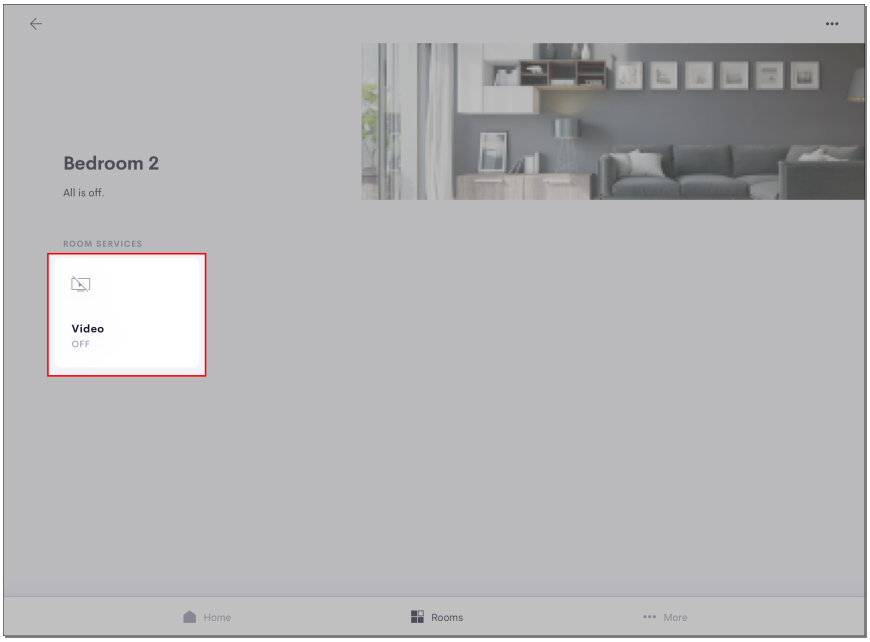
Control Media

Video Sources

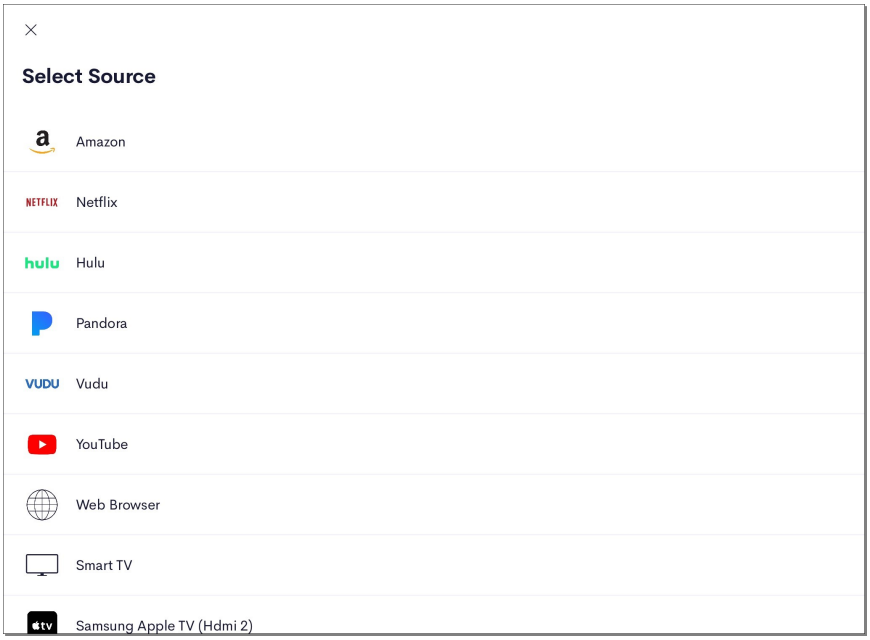
Use the Crestron Home user interface to select and control video sources that are displayed on the TV in the selected room.

Play a Video Source

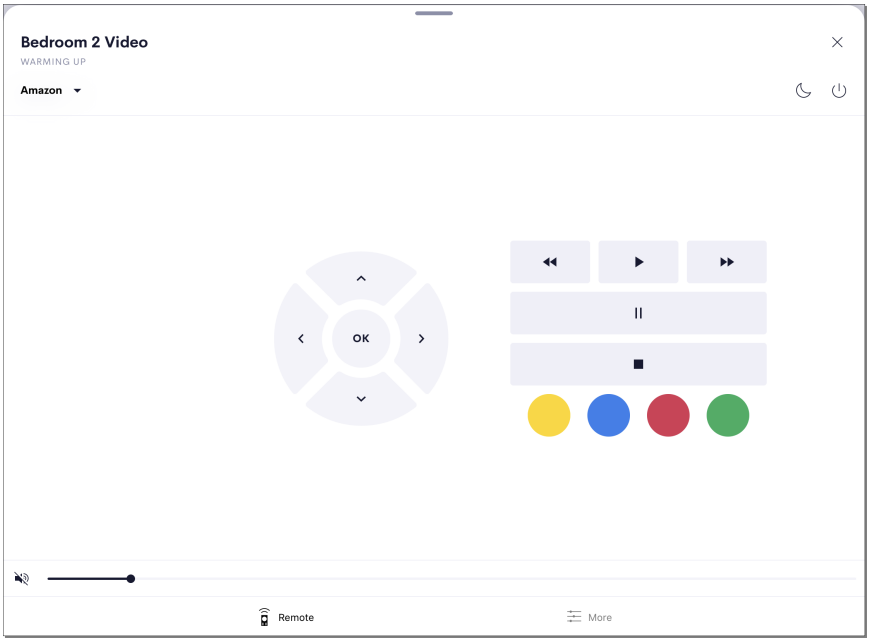
1. Tap the **Video** tile on a room screen.



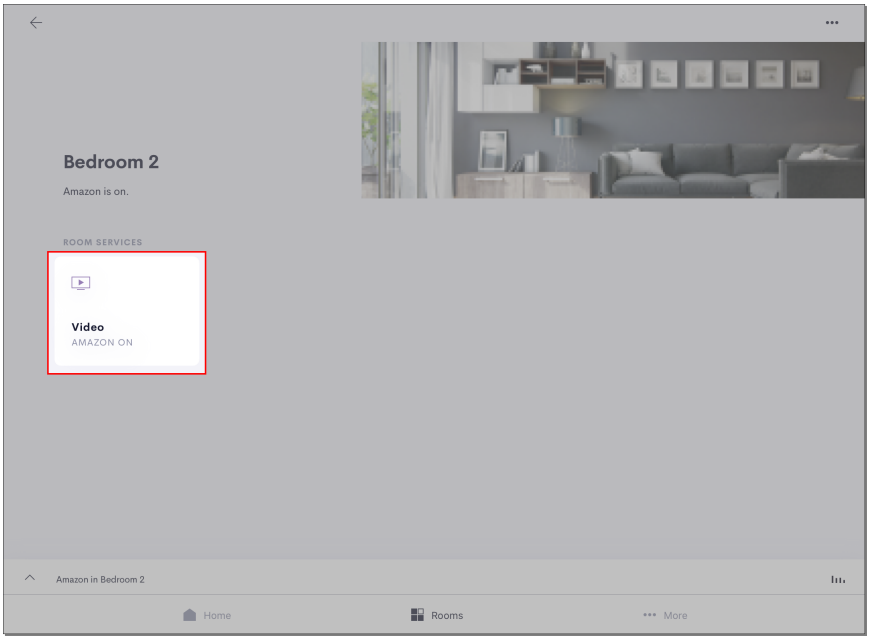
2. The **Select Source** screen displays a list of available video sources, including apps that are available on the Smart TV. Tap the video source that you wish to watch.



3. The Crestron Home user interface displays controls that are used with the video source. The video source displays on your TV.

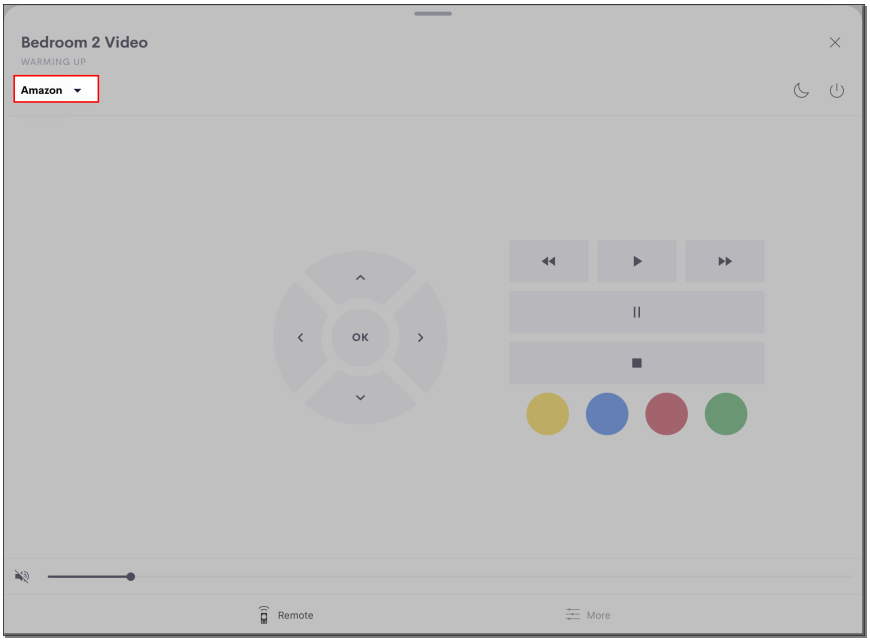


NOTE: The room screen updates the **Video** tile to indicate the video source that is playing in the room.



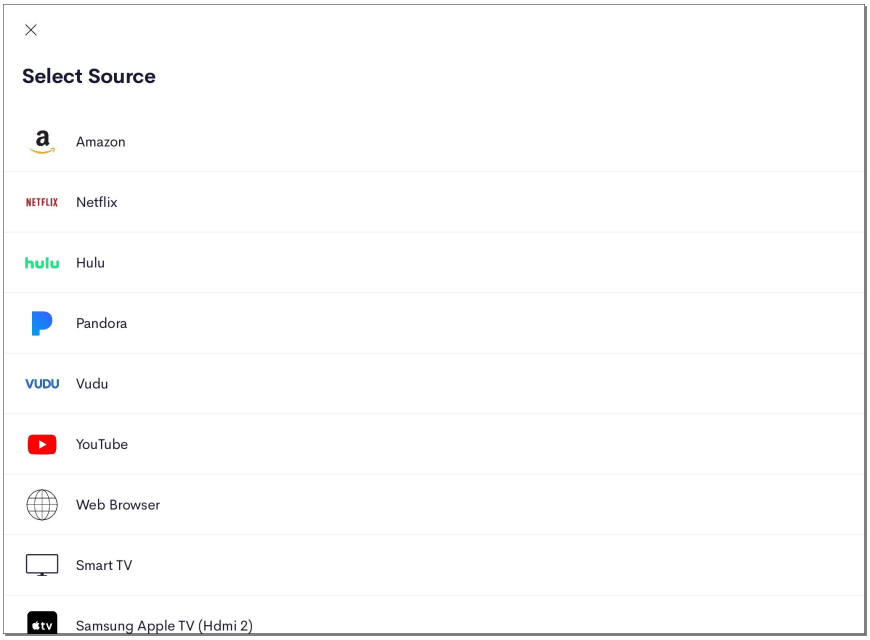
Change the Video Source

1. Tap the down arrow next to the current video source.



2. The **Select Source** screen displays a list of available video sources, including apps that are available on the Smart TV. Tap the video source that you wish to watch.

   NOTE: Media services (video streaming sources) that are provided by a Smart TV can be omitted from the list of sources during the setup of the Crestron Home system. For additional information, refer to Control Unlisted Video Sources below.

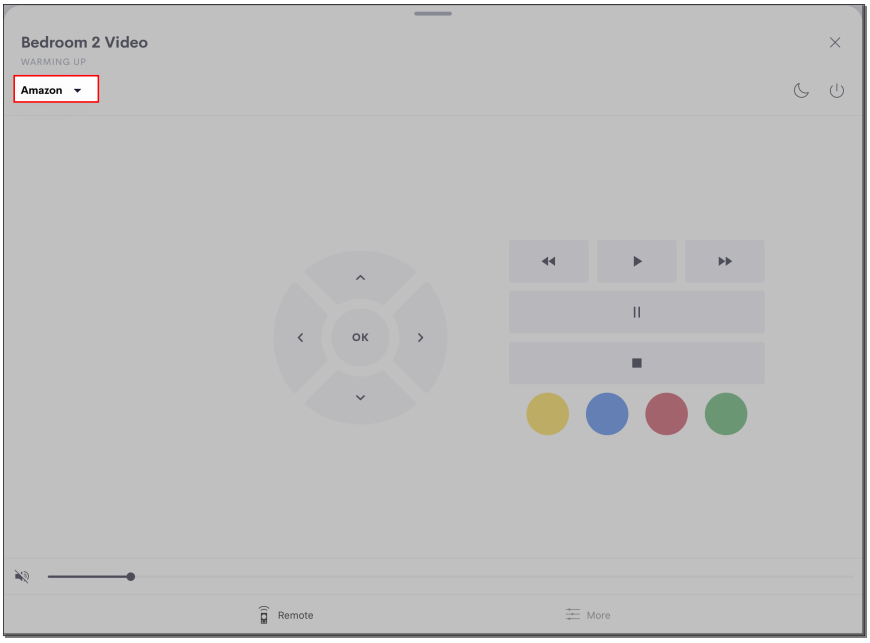


3. Tap the video source that you wish to watch. The video source displays on your TV.

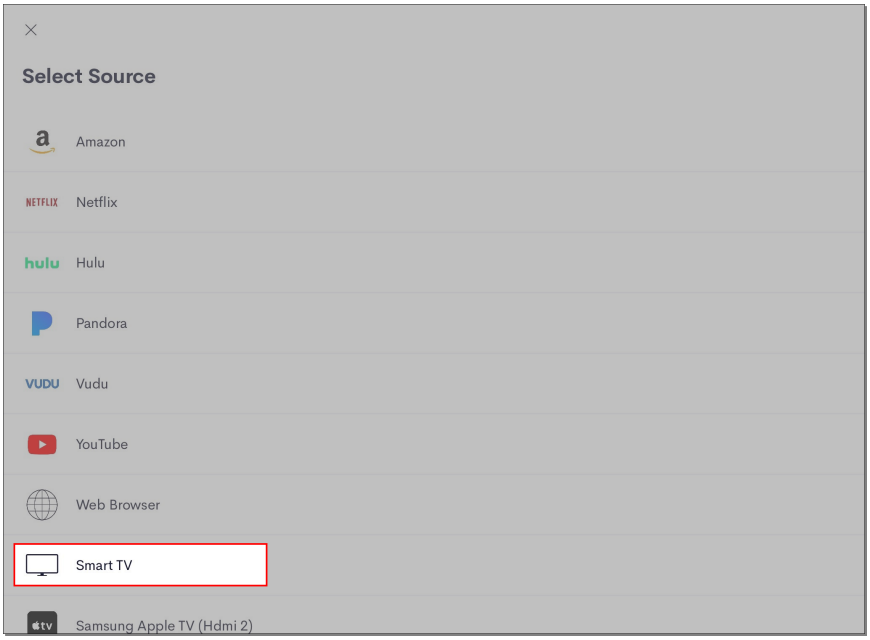
Control Unlisted Video Sources

The sources listed in the **Select Source** screen are populated from the list of branded apps that are installed on the TV (for example, Amazon, Netflix, and Hulu). To control a source on a Smart TV that is not listed (for example, a TV manufacturer's app store):

1. Tap the down arrow next to the current video source.

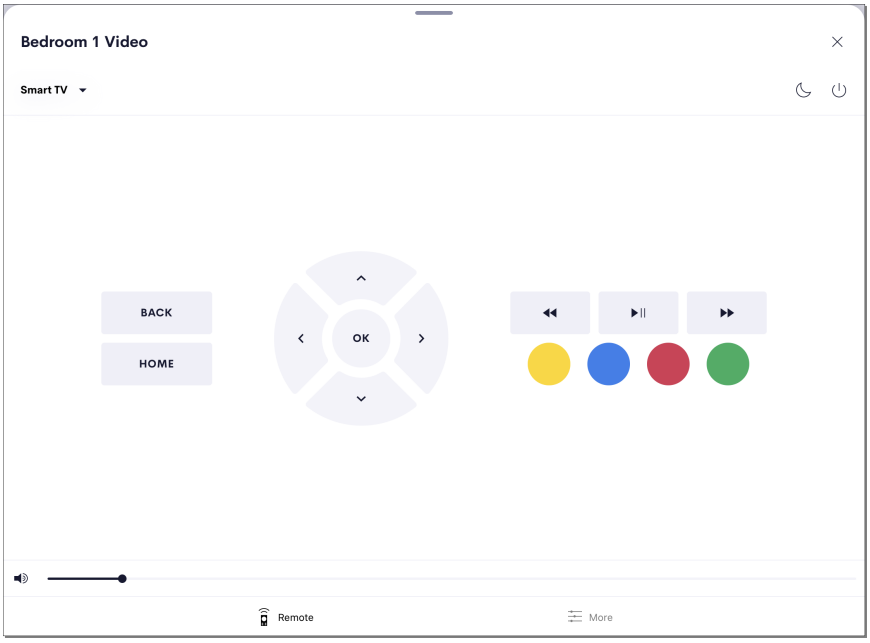


2. Select **Smart TV** from the **Select a Source** list.



3. The Crestron Home user interface displays a generic user interface and the Smart TV does not change it's source. Use the generic user interface to navigate the Smart TV.

   NOTE: Depending on the Smart TV model, some controls may not perform any function.



Control Video Sources

Perform standard video controls using the play, pause, stop, previous/rewind, skip/fast forward, shuffle, and repeat buttons. The controls function like the remote that came with your TV, Roku, DirecTV, Amazon Fire TV, etc.

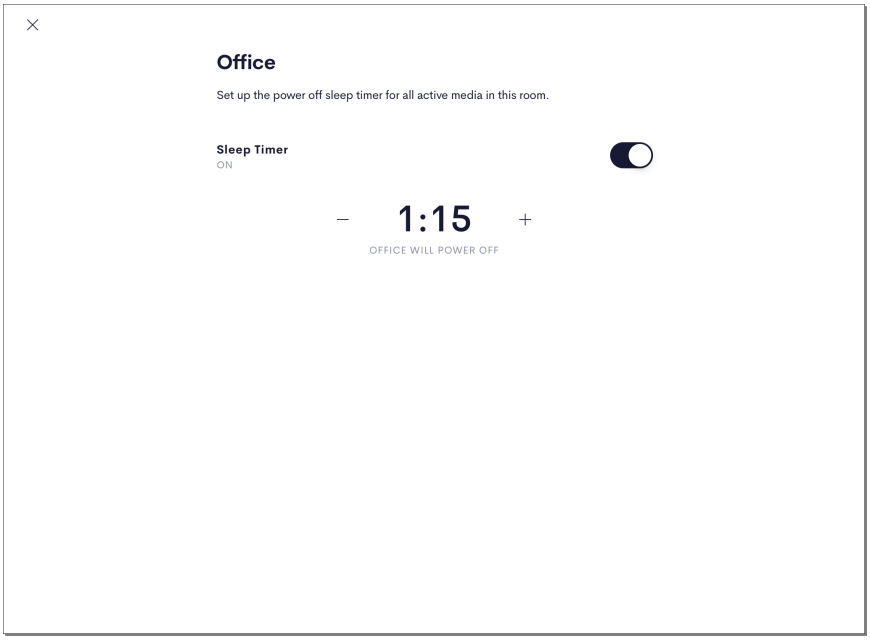
Use the slider to control the volume. Tap the speaker button to mute or unmute the audio.

Sleep Timer

Set a sleep timer so that the video turns off after a set amount of time.

Tap the sleep button at the top right of the screen to display the sleep timer menu.

- Tap the toggle switch next to **Sleep Timer** to enable or disable the sleep timer.
- If **Sleep Timer** is enabled, tap the minus (**-**) or plus (**+**) buttons to set the duration of the sleep timer.



Power Off

Tap the power button to stop the video and turn off the associated hardware..

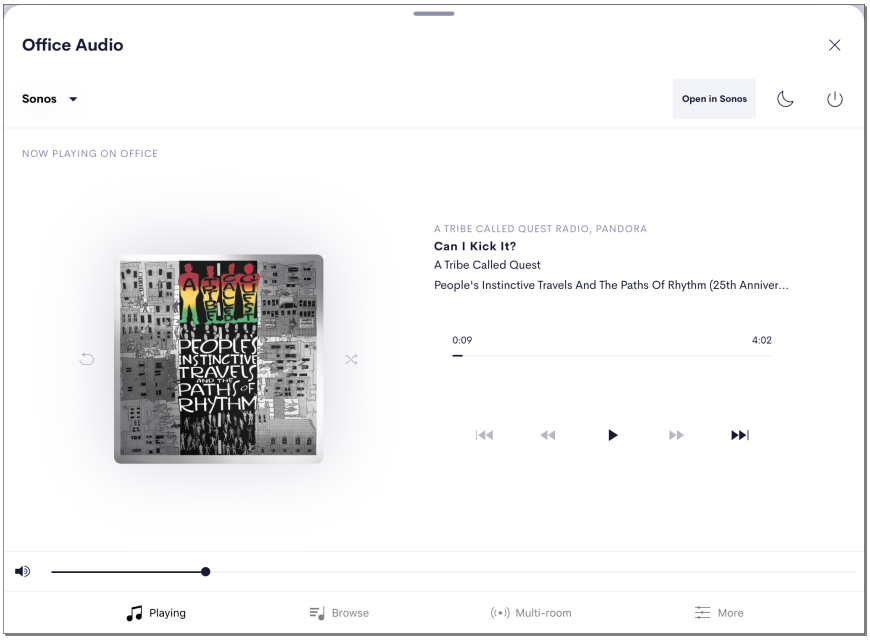
NOTE: If audio and video is playing in the same room (audio breakaway mode), pressing room power off will turn off both video and audio sources.

Audio

Play your favorite music throughout the house, or different music in every room. Tap the Audio button on the Home screen or a Room screen, the Active media screen displays the

audio playing in all rooms in the Crestron Home. Control the music in all rooms using the play, pause, previous/rewind, and skip/fast forward buttons.

Tap a room tile for information on audio in that room.



NOTE: When connecting to the system from outside the home network, users can select audio sources. Users will not be able to browse provider content such as songs or playlists.

Change Audio Source

Tap the down arrow to select an audio source. The list of available audio sources is displayed.

Go to App

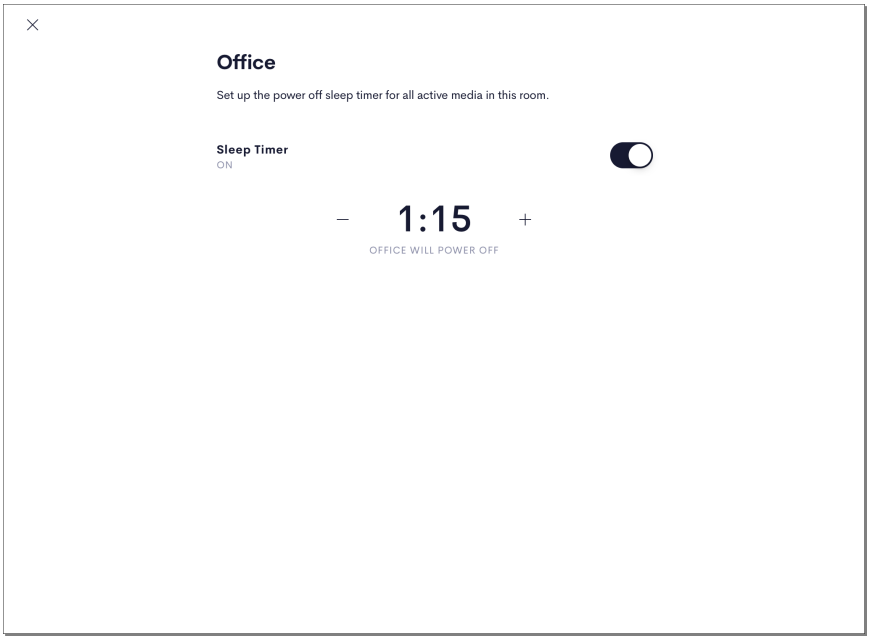
If available, tap to open the music app.

Sleep Timer

Set a sleep timer so that the music turns off automatically.

Tap the sleep button at the top right of the screen to display the sleep timer menu.

- Tap the toggle switch next to **Sleep Timer** to enable or disable the sleep timer.
- If **Sleep Timer** is enabled, tap the minus (**-**) or plus (**+**) buttons to set the duration of the sleep timer.



Power Off

Tap the power button to stop the music. The audio sources and associated hardware turn off.

NOTE: If audio and video is playing in the same room (audio breakaway mode), pressing room power off will turn off both video and audio sources.

Audio Control

Perform standard music controls using the play, pause, stop, previous/rewind, skip/fast forward, shuffle, and repeat buttons.

Use the slider to control the volume. Tap the speaker button to mute or unmute the audio.

Play Audio in Multiple Rooms

Listen to the same music in more than one room in your house by creating a room group. All rooms in the media group display their audio sources in the Select Source menu. Room groups work alongside Sonos device groups to synchronize audio output across rooms.

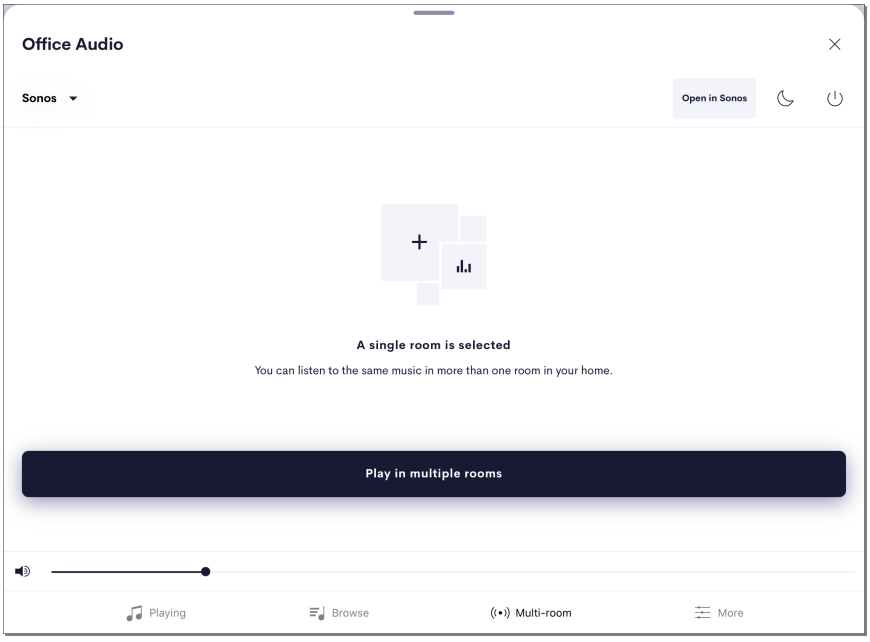
NOTE:

- When creating a room group with rooms that have audio or video playing in the rooms, note the following:
  - If the room creating the group is playing a video source, the video source is turned off.
  - If the room creating the group is playing an audio source, the audio source is played in all rooms.
  - If the rooms added to the group are playing an audio or video source, the audio or video source is turned off.
- Crestron recommends placing no more than 8 media rooms in one group for optimal performance. However, the Sonos app allows for more than 8 Sonos devices to be grouped together, which may cause inconsistencies between the Sonos app and the Crestron Home user interface.

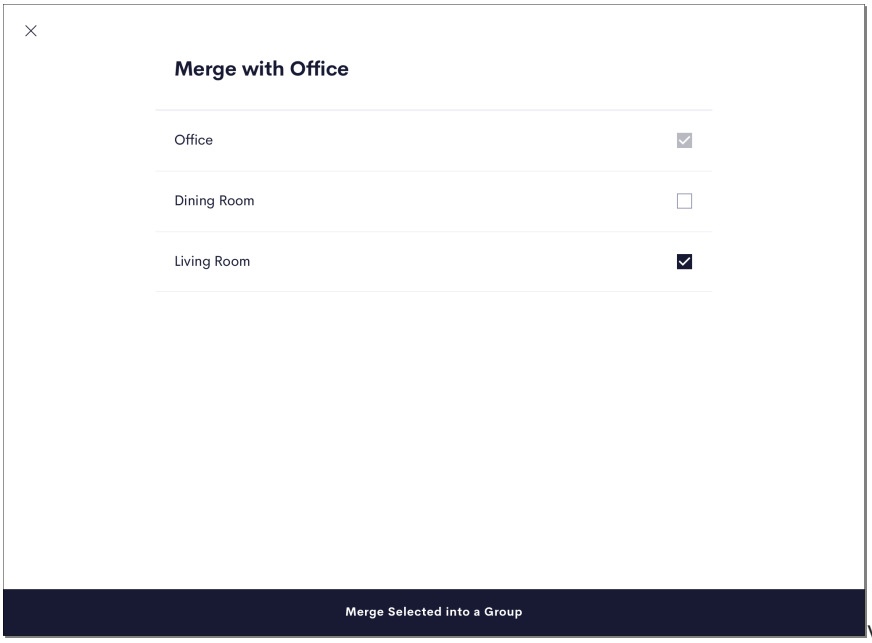
Create a Room Group

To create a room group:

1. Press the **Multi-room** button to display a menu for grouping media rooms.



2. Tap **Play in multiple rooms**. The rooms in the home are displayed.



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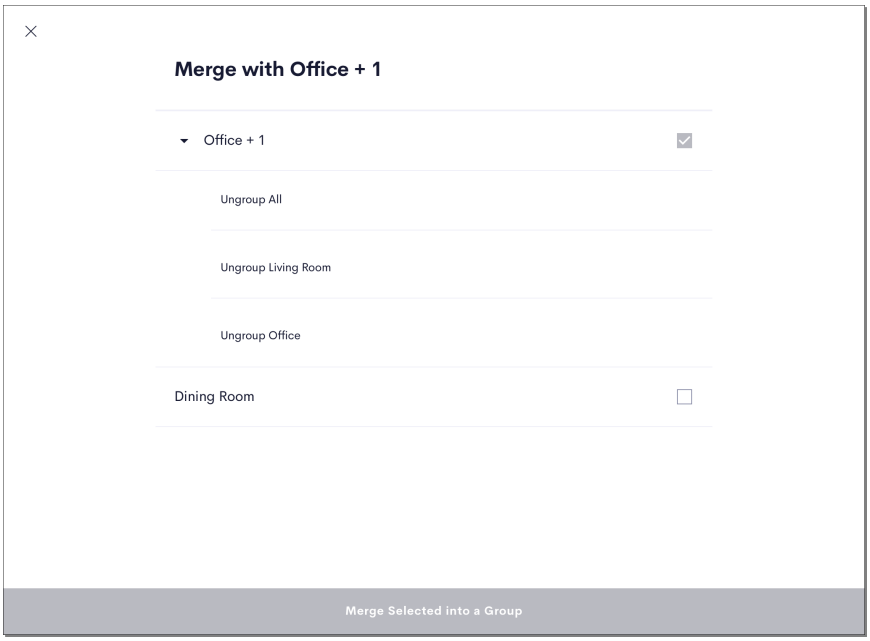
3. Tap the check box next to a room to add it to the group.
4. When all of the rooms are selected, tap **Merge Selected into a Group** to save the group. The source selection screen updates to show the rooms as grouped.

Add or Remove Rooms from a Room Group

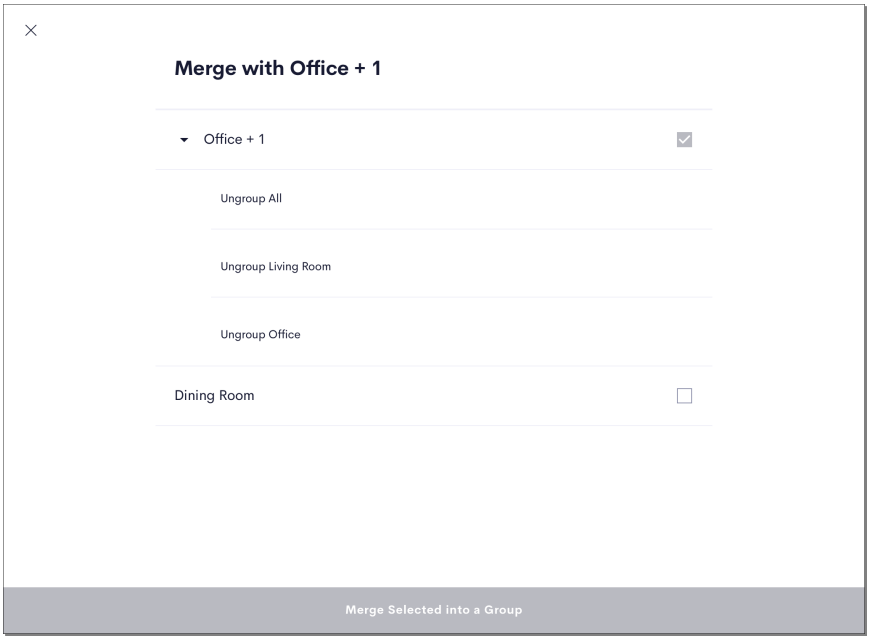
After a room group is created, rooms can be added to a room group, removed from a room group, and room groups can be deleted.

To manage room groups:

1. Press the **Multi-room** button to display the menu for grouping media rooms.



2. Tap **Manage Rooms and Groups**. The grouped rooms are displayed with options to change the grouping.



- To remove a room from a room group or to remove a room group:
  - **Ungroup All:** Removes all rooms from the room group. The room group is removed.
  - **Ungroup [Room Name]:** Removes the room from the room group.
- To add a room to a room group
  I. Tap the check box next to a room to add it to the group.
  II. Tap **Merge Selected into a Group** to group the selected rooms

Room Group Volume Control

To change the volume for all rooms in a room group:

1. Press the **Multi-room button** to display the **Volume Manager** menu. The **Volume Manager** menu provides settings for managing the volume for all media sources within a room or all of the rooms within a group.

2. The following options are provided for each source or room
    - Tap the volume button to mute or unmute the volume for the source or room.
    - Use the slider to adjust the volume level for the source or room.

About Sonos Room Groups

Observe the following points about media groups and Sonos device groups:

Group Creation

- All compatible endpoint devices that may be grouped (such as a Sonos PLAYBAR) are grouped immediately at the device level.
    - When compatible endpoints and sources are available in the same room, only source devices show as available.
    - A Sonos endpoint (PLAYBAR) may be added to a device group in the Sonos app, but it is ignored by the Crestron Home media system.
- All compatible endpoint devices have their sources displayed as one. For example, all Sonos speakers are displayed as one source named "Sonos."
- Source devices that are added as individual sources and later grouped are displayed alone. For example, a Sonos CONNECT device added as an individual source is displayed alone with the name set for it in the Sonos app.
- Media group names do not always match the device group names set in the Sonos app.

Device-Grouped Source Routes

- All compatible Sonos devices that may be grouped and that are required to complete the routes to all rooms in the group are added to the appropriate device group.
    - If a speaker's "Sonos" source is routed, but a room only allows routing from a Sonos CONNECT, the CONNECT is added to the Sonos group so that it plays audio in sync with the routed Sonos speakers.
    - If an individual Sonos CONNECT is routed, it is always added to the group of Sonos speakers (if any exist).
    - If an individual Sonos CONNECT is routed, but other rooms only allow routing from other Sonos CONNECT devices, those CONNECT devices are grouped together.
- All Source devices that may be grouped but are no longer routed anywhere are removed from the device group.

Non-Device-Grouped Source Routes

- All source devices that may be grouped are removed from the group.
- Group power off shares this behavior.

Group Modification

- Any rooms added to a media group abide by the behavior listed under the Group Creation bullet on the previous page. If a group source exists, the added rooms have the source routed to them using the source routing behavior described above.
- If any rooms removed from the media group, the compatible endpoint devices from that room are removed from the device group.
- All Source devices that may be grouped but are no longer available to the group or routed anywhere are removed from the device group.

Group Deletion

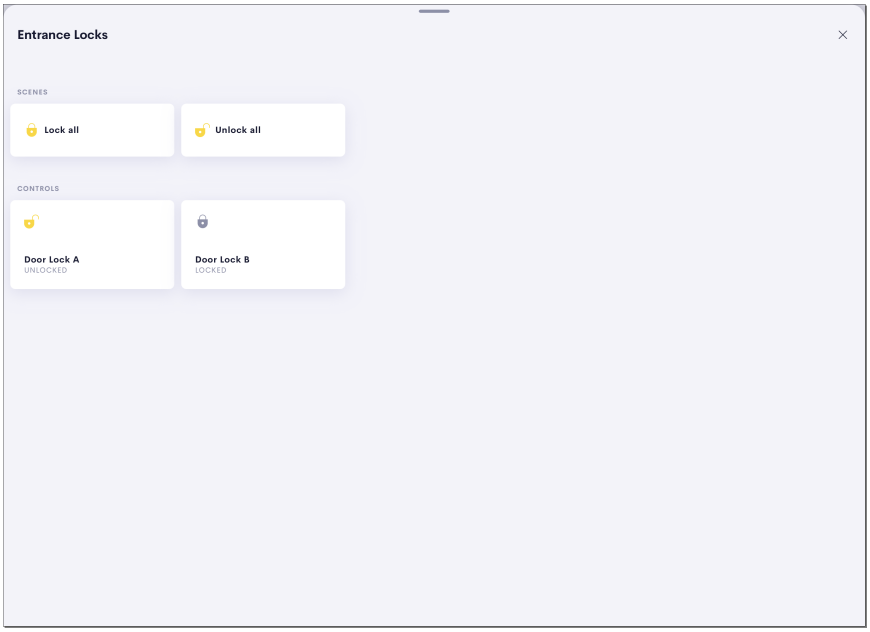
All source devices and endpoint devices in the grouped rooms are ungrouped after a deletion.

Grouping via a Third-Party App (Sonos)

- When endpoint devices are grouped for the first time, a new media group is created with the rooms that contain the endpoints.
- When endpoint devices are added to an existing device group, the room containing the endpoints is added to the corresponding media group.
- When source devices are grouped, the Crestron Home media subsystem does nothing.
- When source devices are ungrouped, the Crestron Home media subsystem turns off the rooms that use the source devices. However, these rooms are not removed from the media group.

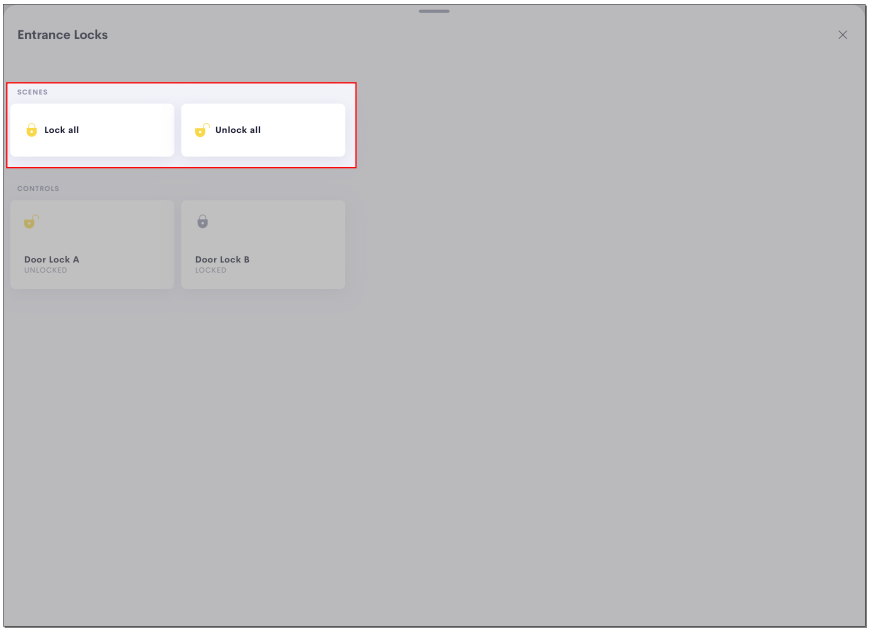
Control Locks

Use the Locks screen to control the locks in the room.



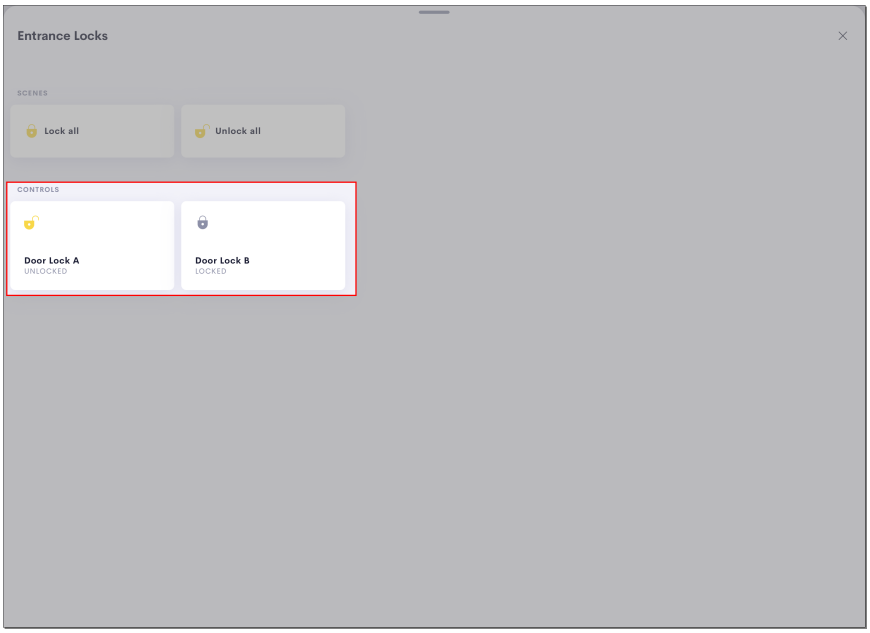
Scenes

The lock scenes are listed along the top of the screen. Tap the **Lock All** scene to lock all locks in the room or the **Unlock all** scene to unlock all locks in the room.



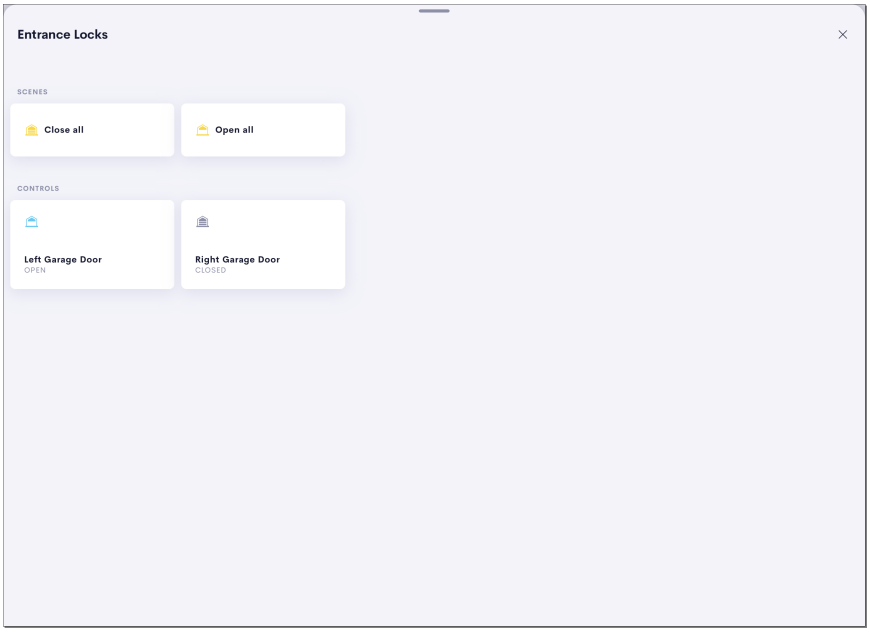
Controls

Use the tiles to control individual locks in the room. Tap a lock tile to unlock or lock the device.



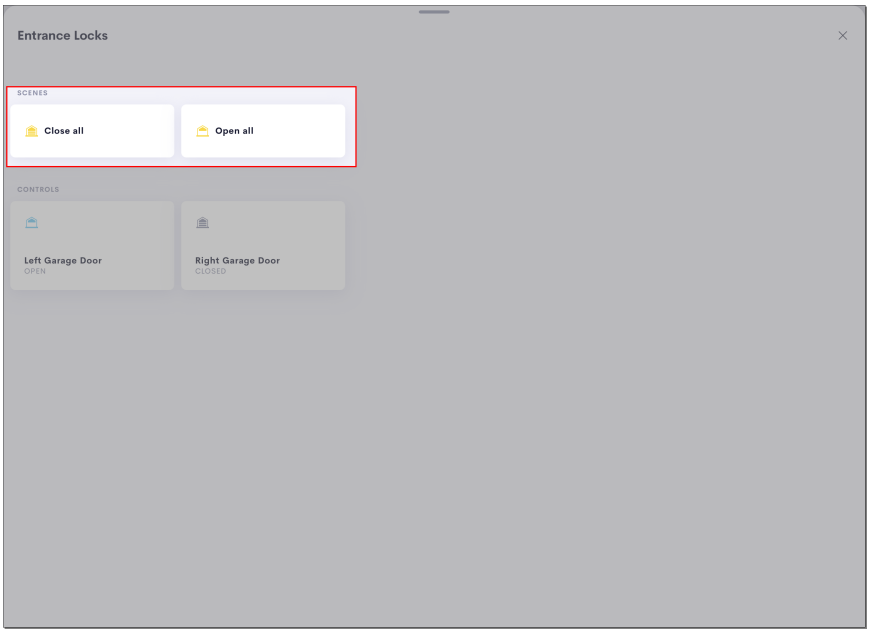
Control Garage Doors

Use the Garage Door screen to control the garage doors.



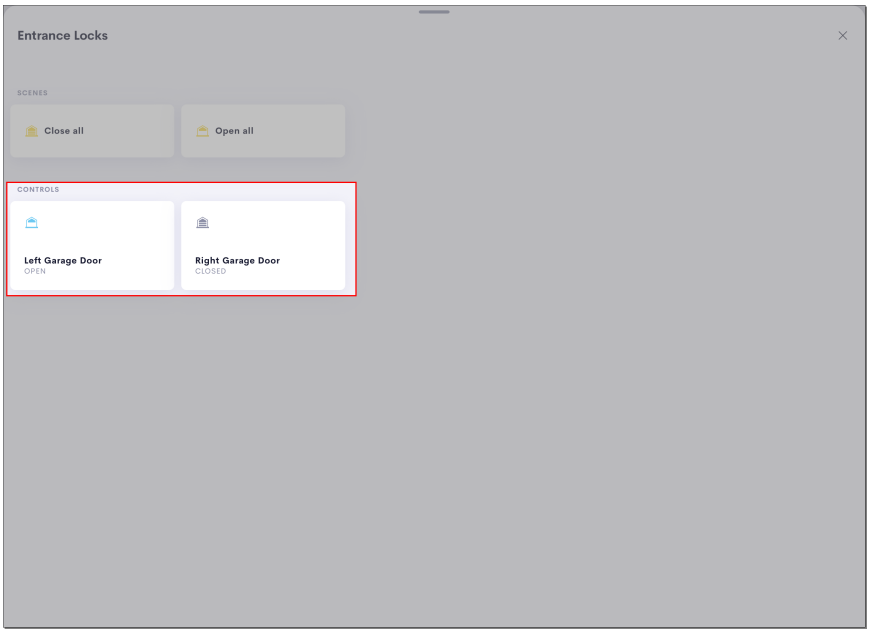
Scenes

The garage door scenes are listed along the top of the screen. Tap the **Close All** scene to close all garage doors or the **Open all** scene to open all garage doors.



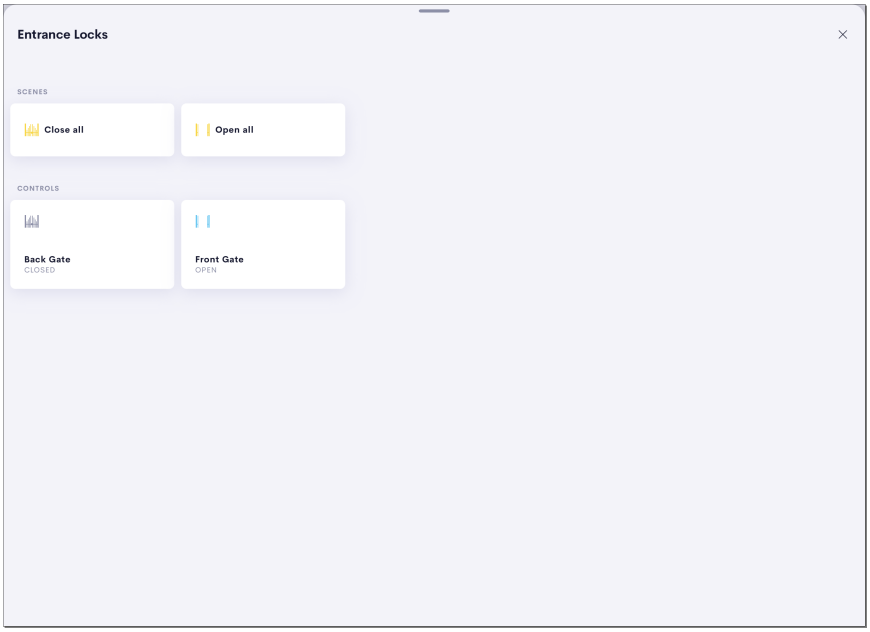
Controls

Use the tiles to control individual garage doors. Tap a garage door tile to close or open the garage door.



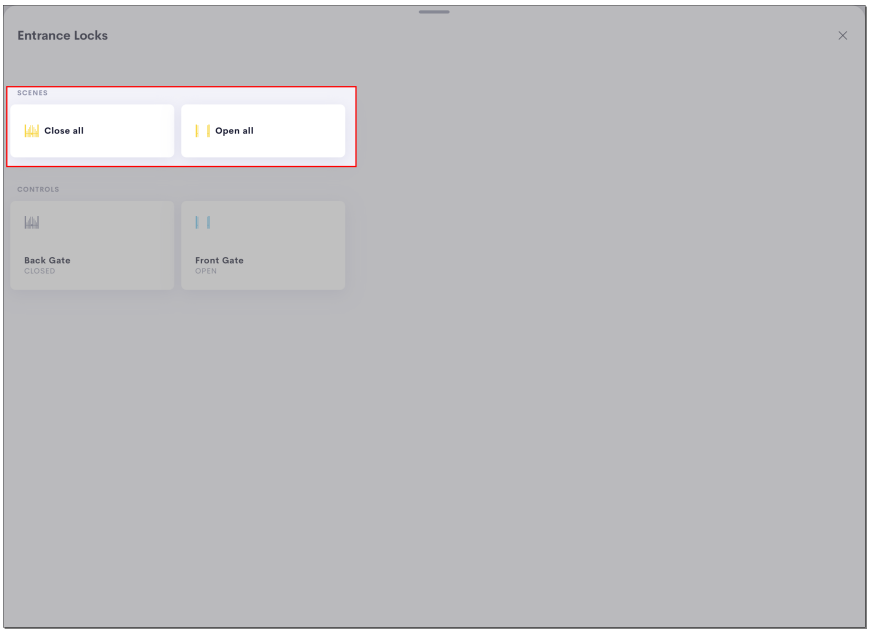
Control Gates

Use the Gates screen to control the gates.



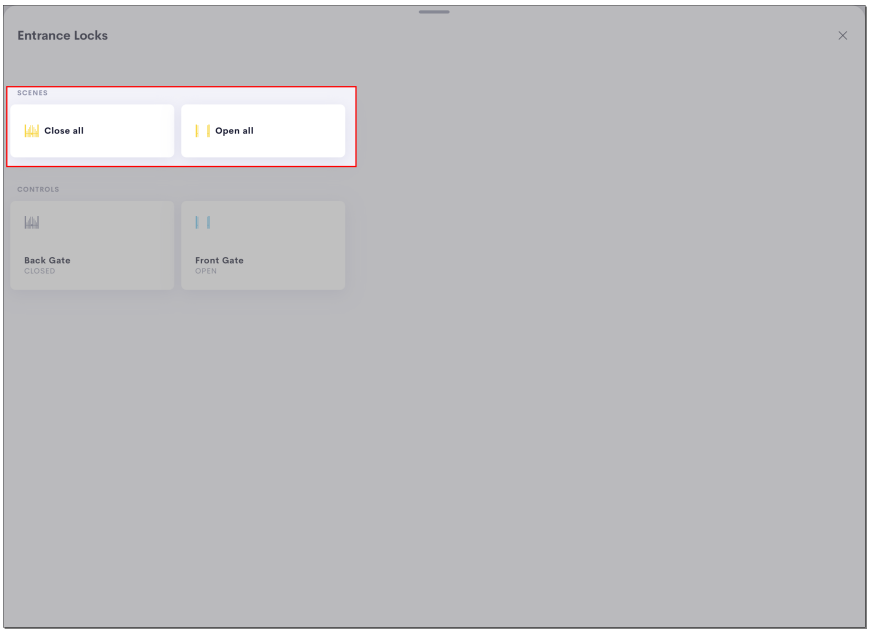
Scenes

The gate scenes are listed along the top of the screen. Tap the **Close All** scene to close all gates or the **Open all** scene to open all gates.



Controls

Use the tiles to control individual gates. Tap a gate tile to close or open the gate.



Security System

Use the Security screen to control the security system

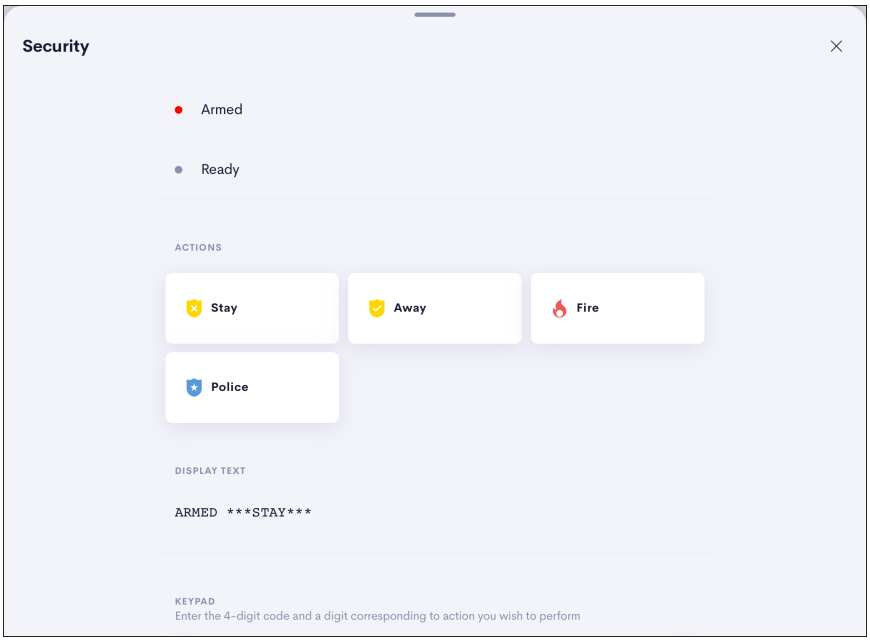
The status of the security system is displayed at the top of the screen.

Actions

The security system actions are listed below the status of the security system. To initiate an action for the security system, tap and hold an action button until the button icon updates.

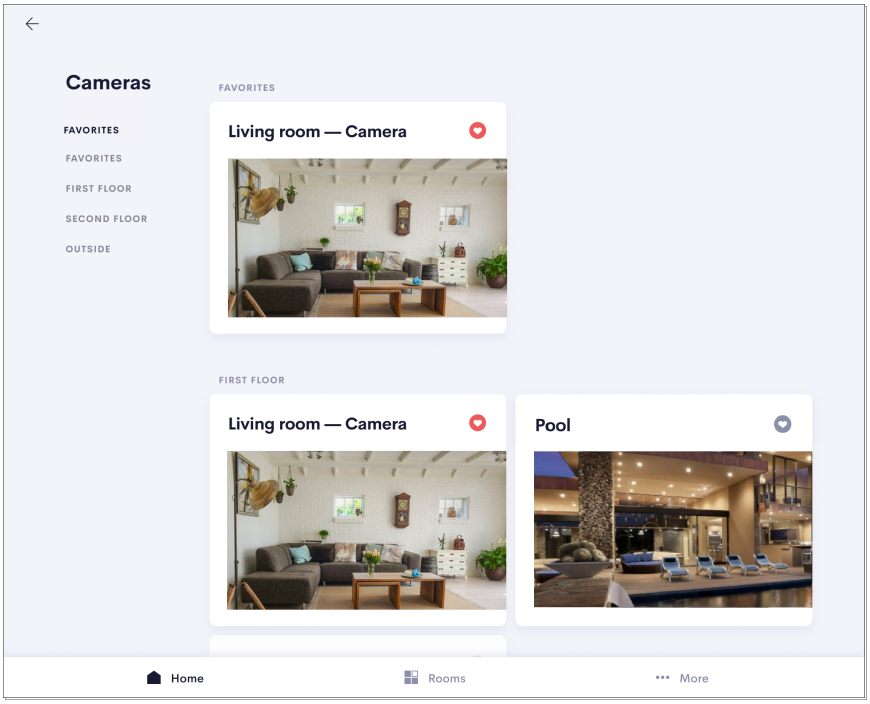
Keypad

Use the keypad to enter the code for arming and disarming the security system.



View Cameras

The **Cameras** screen displays a camera tile for each camera that is in the Crestron Home system. Each camera tile displays the camera name, the name of the room, and a snapshot from the camera. The snapshot is updated every five seconds.



NOTES:

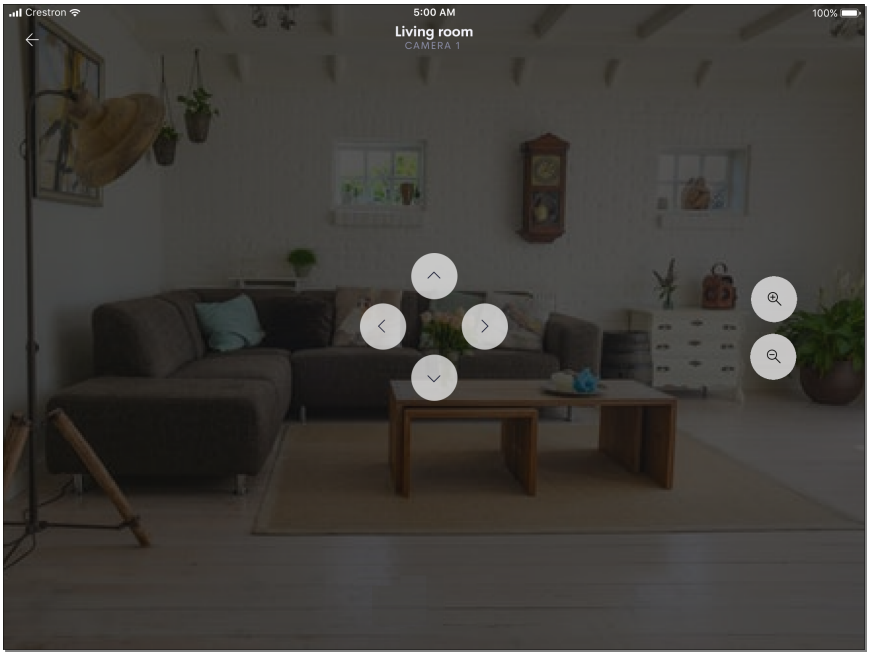
- The camera name is listed before the room name. If the camera name and the room name match, the name is only listed once.
- Cameras are sorted by favorite status, then room groups, and then alphabetically.
- If a camera snapshot cannot be loaded, the image will be grayed out and an error message will be displayed. If a snapshot was previously loaded, the cached image will be displayed under the error message.

Tap a camera tile to view a camera stream.

NOTE: The aspect ratio of the camera dictates how the feed is displayed on your device. Borders will be displayed (letterboxing) if the aspect ratio of the camera does not match the aspect ratio of the user interface.

For cameras that support PTZ (pan, tilt, zoom) camera controls, the available PTZ controls are displayed when the camera stream is first displayed. After three seconds of inactivity, the PTZ camera controls are hidden.

Tap the camera stream to view the PTZ controls. Tap or tap and hold the PTZ camera controls to pan, tilt, and zoom the camera.



2N® Door Stations Screen

If a TSW-xx60 series touch screen has been added to the Crestron Home system and is running the Crestron Home user project, the touch screen may be connected to a 2N® door station to provide a door station solution for the system.

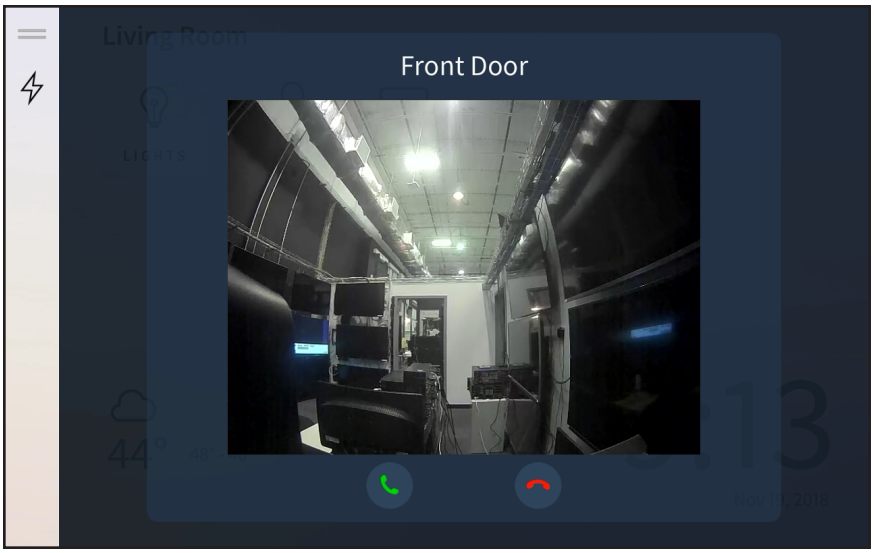
For more information on integrating a 2N door station with Crestron Home, refer to Connect to a 2N® Door Station on page 572.

Answer a Call

When the touch screen receives a call from the door station, an incoming call window opens on the touch screen with the door station name and the camera feed. If the call is declined, the call window is closed.

To answer a call:

- Tap to answer the call.
- Tap to decline the call.

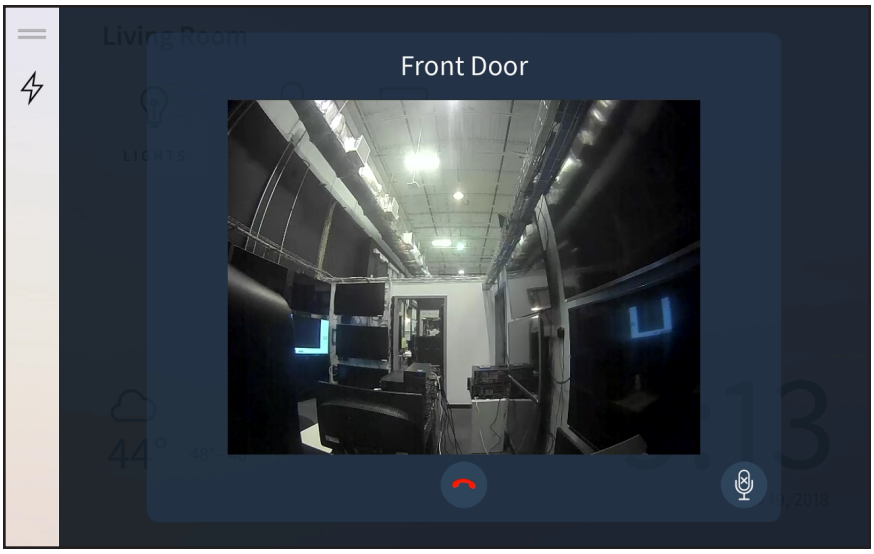


Mute the Microphone

Tap to mute or unmute the intercom microphone.

End a Call

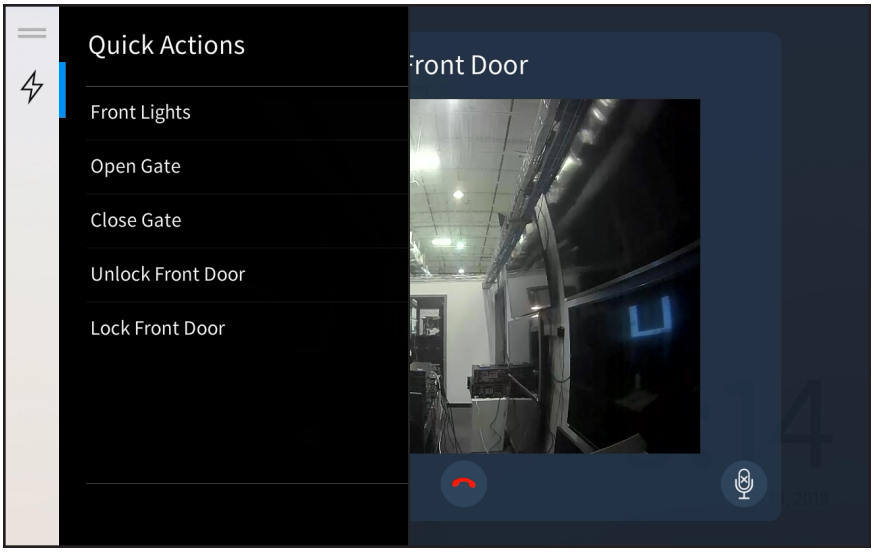
Tap to end the call. The call window is closed.



Quick Actions During a Call

Tap the lightning bolt icon on the left menu to view and activate quick actions during the call (such as "Open Gate"). A quick actions menu is displayed.

Tap a quick action to activate it. Tap the lightning bolt icon again to close the quick action menu.



Appendix

The following supplemental topics are provided for the Crestron Home system:

Appendix A: Works with Crestron Home™ OS

The Crestron Home™ OS is designed to work with many Crestron and third-party products. Refer to the list below for compatible devices.

Video

DigitalMedia™ Switchers

- DM-MD16X16 - 16x16 DigitalMedia™ Switcher
- DM-MD16X16-CPU3 - 16x16 DigitalMedia™ Switcher
- DM-MD32X32 - 32x32 DigitalMedia™ Switcher
- DM-MD32X32-CPU3 - 32x32 DigitalMedia™ Switcher
- DM-MD6x4 - 6x4 DigitalMedia™ Distribution Center
- DM-MD6x6 - 6x6 DigitalMedia™ Distribution Center
- DM-MD8X8 - 8x8 DigitalMedia™ Switcher
- DM-MD8X8-CPU3 - 8x8 DigitalMedia™ Switcher

DigitalMedia™ Cards

- DMC-4K-CO-HD - 2-Channel HDBaseT® Certified 4K DigitalMedia 8G+® Output Card for DM® Switchers
- DMC-4K-CO-HD-HDCP - 2-Channel HDBaseT® Certified 4K DigitalMedia 8G+® Output Card for DM® Switchers
- DMC-4K-CO-HD-HDCP2 - 4K HDMI® Input Card for DM® Switchers
- DMC-4K-HD - 4K HDMI® Input Card for DM® Switchers
- DMC-4K-HD-DSP - 4K HDMI® Input Card with Downmixing for DM® Switchers
- DMC-4K-HD-DSP-HDCP2 - 4K HDMI® Input Card with Downmixing for DM® Switchers
- DMC-4K-HDO - 2-Channel 4K Scaling HDMI® Output Card for DM® Switchers
- DMC-4KZ-CO-HD - 2-Channel DigitalMedia 8G+® 4K60 4:4:4 HDR Output Card for DM® Switchers
- DMC-4KZ-HD - HDMI® 4K60 4:4:4 HDR Input Card for DM® Switchers
- DMC-4KZ-HD-DSP - HDMI® 4K60 4:4:4 HDR Input Card with Downmixing for DM® Switchers
- DMC-4KZ-HDO - 2-Channel 4K Scaling HDMI® 4K60 4:4:4 HDR Scaling Output Card for DM® Switchers
- DMC-CO-HD - 2-Channel DigitalMedia 8G+™ Output Card for DM® Switchers
- DMC-CPU3 - CPU Card for 8X8, 16X16, and 32X32 DigitalMedia™ Switchers
- DMC-DVI - DVI/VGA Input Card for DM® Switchers
- DMC-HD - HDMI® Input Card for DM® Switchers

- DMC-HD-DSP - HDMI® Input Card with Downmixing for DM® Switchers
- DMC-HDO - 2-Channel HDMI® Output Card for DM® Switchers
- DMC-4KZ-C - DigitalMedia 8G+® 4K60 4:4:4 HDR Input Card for DM® Switchers, HDBaseT® Compatible
- DMC-4KZ-C-DSP - DigitalMedia 8G+® 4K60 4:4:4 HDR Input Card with Downmixing for DM® Switchers, HDBaseT® Compatible

DigitalMedia™ Room Boxes

- DM-RMC-100-C - DigitalMedia 8G+® Receiver and Room Controller 100
- DM-RMC-200-C - DigitalMedia 8G+® Receiver and Room Controller 200
- DM-RMC-4K-100-C - 4K DigitalMedia 8G+® Receiver and Room Controller 100
- DM-RMC-4K-100-C-1G-B-T - Wall Plate 4K DigitalMedia 8G+® Receiver and Room Controller 100, Black Textured
- DM-RMC-4K-100-C-1G-B-W - Wall Plate 4K DigitalMedia 8G+® Receiver and Room Controller 100, White Textured
- DM-RMC-4K-SCALER-C - 4K DigitalMedia 8G+® Receiver and Room Controller with Scaler
- DM-RMC-4K-SCALER-C-DSP - 4K DigitalMedia 8G+® Receiver and Room Controller with Scaler and Downmixing
- DM-RMC-4KZ-100-C - DigitalMedia 8G+® 4K60 4:4:4 HDR Receiver and Room Controller 100
- DM-RMC-4KZ-SCALER-C - DigitalMedia 8G+® 4K60 4:4:4 HDR Receiver and Room Controller with Scaler
- DM-RMC-SCALER-C - DigitalMedia 8G+® Receiver and Room Controller with Scaler

DigitalMedia NVX™ Encoders and Decoders

- DM-NVX-350 - DM NVX® 4K60 4:4:4 HDR Network AV Encoder/Decoder
- DM-NVX-350C - DM NVX® 4K60 4:4:4 HDR Network AV Encoder/Decoder Card
- DM-NVX-351 - DM NVX® 4K60 4:4:4 HDR Network AV Encoder/Decoder with Downmixing
- DM-NVX-351C - DM NVX® 4K60 4:4:4 HDR Network AV Encoder/Decoder Card with Downmixing
- DM-NVX-352 - DM NVX® 4K60 4:4:4 HDR Network AV Encoder/Decoder with Dante® Audio
- DM-NVX-352C - DM NVX® 4K60 4:4:4 HDR Network AV Encoder/Decoder Card with Dante® Audio
- DM-NVX-D30 - DM NVX® 4K60 4:4:4 HDR Network AV Decoder
- DM-NVX-D30C - DM NVX® 4K60 4:4:4 HDR Network AV Decoder Card
- DM-NVX-E30 - DM NVX® 4K60 4:4:4 HDR Network AV Encoder
- DM-NVX-E30C - DM NVX® 4K60 4:4:4 HDR Network AV Encoder Card

DigitalMedia Transmitters

- DM-TX-201-C - DigitalMedia 8G+® Transmitter 201
- DM-TX-401-C - DigitalMedia 8G+® Transmitter 401
- DM-TX-4K-100-C-1G - Wall Plate 4K DigitalMedia 8G+® Transmitter 100, Black Textured
- DM-TX-4KZ-100-C-1G - DigitalMedia 8G+® 4K60 4:4:4 HDR Wall Plate Transmitter 100
- DM-TX-4KZ-202-C - DigitalMedia 8G+® 4K60 4:4:4 HDR Transmitter 202
- DM-TX-4KZ-302-C - DigitalMedia 8G+® 4K60 4:4:4 HDR Transmitter 302

Remotes

- HR-100-B - Handheld Remote, 34 Button, Black
- HR-150-B - Handheld Remote, 50 Button, Black
- HR-310 - Handheld Remote, US and Canada
- HR-310-I - Handheld Remote, International
- TSR-310 - Handheld Touch Screen Remote

infiNET EX® Wireless Gateways and Expanders

- CEN-GWEXER - infiNET EX® Network and ER Wireless Gateway
- CEN-GWEXER-PWE - infiNET EX® Network and ER Wireless Gateway with PoE Injector
- CENI-GWEXER - infiNET EX® Network and ER Wireless Gateway - International Version
- CENI-GWEXER-PWE - infiNET EX® Network and ER Wireless Gateway with PoE Injector - International Version
- CLW-EXPEX-GD-W-T - infiNET EX® Wireless Expander, Ground Pin Down, White Textured

Audio

Amplifiers and Expanders

- ATC-AMFM2 - Dual AM/FM Radio Tuner Card

  NOTE: Only ATC-AMFM2-REV2 (Part Number: 6505307; Firmware 2.0 and higher) is supported.

- ATC-AMFMXMD - AM/FM and XM® Satellite Radio Tuner Card
- ATC-AUDIONET - Internet Radio Tuner Card
- C2N-AMP-4X100 - 4 Room Audio System

- C2N-AMP-6X100 - 6 Room + 2 Audio System
- C2NI-AMP-4X100 - 4 Room Audio System - International Version, 230 V
- C2NI-AMP-6X100 - 6 Room + 2 Audio System – International Version, 230 V
- CEN-NSP-1 - Network Stream Player
- CEN-TRACK-AMFM2 - Tuner Rack Modular Multi-Tuner with Dual AM/FM Tuner Card
- CEN-TRACK-AMFMSRD - Tuner Rack with AM/FM and SIRIUS Satellite Radio Tuner Card, Digital Output
- CEN-TRACK-AMFMXMD - Tuner Rack Modular Multi-Tuner with AM/FM and XM® Satellite Radio Tuner Card
- CEN-TRACK-AUDIONET - Tuner Rack Modular Multi-Tuner with Internet Radio Tuner Card
- CNX-BIPAD8 - CAT5 Audio Distribution Processor
- CNX-PAD8A - Audio Distribution Processor
- HD-DA-2 - 1-to-2 HDMI® Distribution Amplifier and Audio Converter
- HD-DA2-4KZ-E - 1:2 HDMI® Distribution Amplifier with 4K60 4:4:4 and HDR Support
- HD-DA-2-QUAD - Quad 1-to-2 HDMI® Distribution Amplifier
- HD-DA4-4KZ-E - 1:4 HDMI® Distribution Amplifier with 4K60 4:4:4 and HDR Support
- HD-DA8-4KZ-E - 1:8 HDMI® Distribution Amplifier with 4K60 4:4:4 and HDR Support
- HDI-XSPA - 4K Ultra High-Definition 7.1 Surround Sound AV Receiver, International, 220-240 V
- HD-XSP - High-Definition 7.1 Surround Sound Processor
- HD-XSPA - 4K Ultra High-Definition 7.1 Surround Sound AV Receiver, US/NA, 120 V
- SWAMP-24X8 - Sonnex® Multiroom Audio System
- SWAMPE-4 - Sonnex® Multiroom Audio Expander, 4-Zone
- SWAMPE-8 - Sonnex® Multiroom Audio Expander, 8-Zone
- SWAMPI-24X8 - Sonnex® Multiroom Audio System - International Version, 220-240 V
- SWAMPIE-4 - Sonnex® Multiroom Audio Expander - International Version, 4-Zone
- SWAMPIE-8 - Sonnex® Multiroom Audio Expander - International Version, 8-Zone
- SWE-8 - Sonnex® Multiroom Audio Unamplified Expander, 8-Zone

Speakers

- AIR IGS82T-BRZ-T-EACH - AIR® Dual 8" In-Ground Subwoofer, Bronze Textured, Single
- AIR LS4T-BRZ-T - AIR® 4 in. Landscape Speakers, Bronze Textured, Pair
- AIR LS6T-BRZ-T - AIR® 6.5 in. Landscape Speakers, Bronze Textured, Pair
- AIR SR4 - AIR® 4 in. 2-Way Surface Mount Outdoor Speakers,Pair

- AIR SR6 - AIR® 6.5 in. 2-Way Surface Mount Outdoor Speakers, Pair
- AIR SR8 - AIR® 8 in. 2-Way Surface Mount Outdoor Speakers, Pair
- ASPIRE IC5-W-T - Aspire® 5.25 in. 2-Way In-Ceiling Speakers, White Textured, Pair
- ASPIRE IC6DT-W-T-EACH - Aspire® 6.5 in. 2-Way Single-Point Stereo In-Ceiling Speaker, White Textured, Single
- ASPIRE IC6-W-T - Aspire® 6.5 in. 2-Way In-Ceiling Speakers, White Textured, Pair
- ASPIRE IC8DT-W-T-EACH - Aspire® 8 in. 2-Way Single-Point Stereo In-Ceiling Speaker, White Textured, Single
- ASPIRE IC8-W-T - Aspire® 8 in. 2-Way In-Ceiling Speakers, White Textured, Pair
- ASPIRE IW5-W-T - Aspire® 5.25 in. 2-Way In-Wall Speakers, White Textured, Pair
- ASPIRE IW6-W-T - Aspire® 6.5 in. 2-Way In-Wall Speakers, White Textured, Pair
- ASPIRE IW8-W-T - Aspire® 8 in. 2-Way In-Wall Speakers, White Textured, Pair
- ASPIRE IWLCR52-W-T-EACH - Aspire® In-Wall Dual 5.25" 2-Way LCR Speaker, White Textured, Single
- ASPIRE IWS82-W-T-EACH - Aspire® In-Wall Dual 8" Subwoofer, White Textured, Single
- EXCITE IC5-W-T - Excite® 5.25 in. 2-Way In-Ceiling Speakers, White Textured, Pair
- EXCITE IC6DT-W-T-EACH - Excite® 6.5" 2-Way Single-Point Stereo In-Ceiling Speaker, White Textured, Single
- EXCITE IC6-W-T - Excite® 6.5 in. 2-Way In-Ceiling Speakers, White Textured, Pair
- EXCITE IC8-W-T - Excite® 8 in. 2-Way In-Ceiling Speakers, White Textured, Pair
- EXCITE IW5-W-T - Excite® 5.25 in. 2-Way In-Wall Speakers, White Textured, Pair
- EXCITE IW6-W-T - Excite® 6.5 in. 2-Way In-Wall Speakers, White Textured, Pair
- EXCITE IW8-W-T - Excite® 8 in. 2-Way In-Wall Speakers, White Textured, Pair
- SAROS SR4T-B-T-EACH - Saros 4 in. 2-Way Surface Mount Indoor/Outdoor Speaker, Black Textured, Single
- SAROS SR4T-W-T-EACH - Saros 4 in. 2-Way Surface Mount Indoor/Outdoor Speaker, White Textured, Single
- SAROS SR6T-B-T-EACH - AIR® 6.5 in. 2-Way Surface Mount Indoor/Outdoor Speaker, Black Textured, Single
- SAROS SR6T-W-T-EACH - AIR® 6.5 in. 2-Way Surface Mount Indoor/Outdoor Speaker, White Textured, Single
- SAROS SR8T-B-T-EACH - Saros® 8 in. 2-Way Surface Mount Indoor/Outdoor Speaker, Black Textured, Single
- SAROS SR8T-W-T-EACH - Saros® 8 in. 2-Way Surface Mount Indoor/Outdoor Speaker, White Textured, Single

Autonomic

- MMS-1E - Single Source Music Streamer
- MMS-3E - Three Source Music Streamer
- MMS-5E - Five Source Music Streamer
- MMS-2A - Two Source Mirage Audio Server
- MMS-5A - Five Source Mirage Audio Server

Lighting

In-Wall

- CLC-1DIMFLV2EX-24V-W - Wireless In-Ceiling 0-10 V Dimmer for 24 VDC Applications
- CLC-1LEDPWM-RGBW-EX - RGBW LED Controller
- CLC-FANDELVEX-W - Wireless Lighting and Fan Controller, White
- CLCI-1DIMFLV2EX-W - Wireless In-Ceiling 0-10 V Dimmer, 230 VAC
- CLCI-1SW2EX-W - Wireless In-Ceiling Switch, 230 VAC
- CLCI-DIMUEX-W - Wireless In-Ceiling Dimmer, 230 VAC
- CLFI-LDIMUEX-230 - Universal Lamp Dimmer, 230 VAC
- CLF-LDIMUEX-W - Wireless Lamp Dimmer, 120 V, White
- CLF-LDIMUEX-W-CORD - Wireless Lamp Dimmer with Lamp Switch Control Input, 120 V, White
- CLW-DELVEX-230-E - Cameo® Express Wireless In-Wall Dimmer, ELV, 230 V
- CLW-DELVEX-230-P - Cameo® Wireless In-Wall Dimmer, ELV, 230 V
- CLW-DELVEX-277-P - Cameo® Wireless In-Wall Dimmer, ELV, 277 V
- CLW-DELVEX-E - Cameo® Express Wireless In-Wall Dimmer, ELV, 120 V
- CLW-DELVEX-P - Cameo® Wireless In-Wall Dimmer, ELV, 120 V
- CLW-DIMEX-230-E - Cameo® Express Wireless In-Wall Dimmer, 230 V
- CLW-DIMEX-230-P - Cameo® Wireless In-Wall Dimmer, 230 V
- CLW-DIMEX-277-P - Cameo® Wireless In-Wall Dimmer, 277 V
- CLW-DIMEX-E - Cameo® Express Wireless In-Wall Dimmer, 120 V
- CLW-DIMEX-P - Cameo® Wireless In-Wall Dimmer, 120 V
- CLW-DIMFLVEX-P - In-Wall 0-10 V Dimmer, 120 V
- CLW-DIMSWEX-E - Cameo® Express Wireless In-Wall Dimmer/Switch Combo, 120 V
- CLW-DIMSWEX-P - Cameo® Wireless In-Wall Dimmer/Switch Combo, 120 V
- CLWI-1SW2EX - In-Wall 2-Channel Switch, 230 VAC
- CLWI-DIMFLVEX - In-Wall 0-10 V Dimmer, 230 VAC

- CLWI-DIMUNEX - Universal Phase In-Wall Dimmer with Neutral Wire, 230 VAC
- CLWI-KPLCN - In-Wall Keypad, Cresnet
- CLWI-KPLEX-ANTH - In-Wall Wireless Keypad, 230 VAC Line Powered, Anthracite
- CLWI-SWEX-ANTH - In-Wall Switch, 230 VAC, Anthracite
- CLW-LDIMEX-1GD-W-T - Single-Channel Wireless Lamp Dimmer, Ground Pin Down, White Textured
- CLW-LDIMEX-1GU-W-T - Single-Channel Wireless Lamp Dimmer, Ground Pin Up, White Textured
- CLW-LDIMEX-2GD-W-T - Dual-Channel Wireless Lamp Dimmer, Ground Pin Down, White Textured
- CLW-LSWEX-1GD-W-T - Single-Channel Wireless Lamp Switch, Ground Pin Down, White Textured
- CLW-LSWEX-1GU-W-T - Single-Channel Wireless Lamp Switch, Ground Pin Up, White Textured
- CLW-LSWEX-2GD-W-T - Dual-Channel Wireless Lamp Switch, Ground Pin Down, White Textured
- CLW-SLVU-230-P - Cameo® In-Wall Remote Dimmer, 230 V
- CLW-SLVU-P - Cameo® In-Wall Remote Dimmer, 120 V
- CLW-SWEX-230-E - Cameo® Express Wireless In-Wall Switch, 230 V
- CLW-SWEX-230-P - Cameo® Wireless In-Wall Switch, 230 V
- CLW-SWEX-277-P - Cameo® Wireless In-Wall Switch, 277 V
- CLW-SWEX-E - Cameo® Express Wireless In-Wall Switch, 120 V
- CLW-SWEX-P - Cameo® Wireless In-Wall Switch, 120 V

Centralized

- CAEN-1X1 - Automation Enclosure, 1 modules high x 1 module wide
- CAEN-2X1 - Automation Enclosure, 2 modules high x 1 module wide
- CAEN-4X1 - Automation Enclosure, 4 modules high x 1 module wide
- CAEN-4X2 - Automation Enclosure, 4 modules high x 2 module wide
- CAEN-7X1 - Automation Enclosure, 7 modules high x 1 module wide
- CAEN-7X2 - Automation Enclosure, 7 modules high x 2 module wide
- CAEN-BLOCK-CENCN-2-POE - Ethernet to Cresnet® Network Bridge for CAEN Automation Enclosures
- CLX-1DELV4 - 4 Channel Electronic Low-Voltage Dimmer Module, Single Feed
- CLX-1DIM4 - 4 Channel Dimmer Module, Single Feed
- CLX-1DIM8 - 8 Channel Dimmer Module, Single Feed
- CLX-1DIMU4 - 4 Channel Universal Dimmer Module, 1 Feed, 120 V
- CLX-1DIMU4-HP - 4 Channel Universal Dimmer Module, High Power, 1 Feed, 120 V

- CLX-1FAN4 - 4 Channel Fan Speed Control Module, Single Feed
- CLX-1MC4 - 4 Channel Motor Control Module, 1 Feed, 120 V
- CLX-2DIM2 - 2 Channel Dimmer Module, 2 Feeds.
- CLX-2DIM8 - 8 Channel Dimmer Module, 2 Feeds, 120 V
- CLX-2DIMFLV8 - 8 Channel 0-10 V Dimmer Module, 2 Feeds, 120 V
- CLX-2DIMU8 - 8 Channel Universal Dimmer Module, 2 Feeds, 120 V
- CLX-2IND - 2 Channel Inductor Module
- CLX-4HSW4 - 4 Channel High-Inrush Switch Module, 4 Feeds, 120 V
- CLX-4IND - 4 Channel Inductor Module
- CLXI-1DELV4 - 4 Channel Electronic Low-Voltage Dimmer Module, Single Feed - International Version, 230 V
- CLXI-1DIM4 - 4 Channel Dimmer Module, Single Feed - International Version, 230 V.
- CLXI-1MC4 - 4 Channel Motor Control Module, Single Feed - International Version, 230 V
- CLXI-2DIM2 - 2 Channel Dimmer Module, 2 Feeds - International Version, 230 V
- CLXI-2DIM8 - 8 Channel Dimmer Module, 2 Feeds - International Version, 230 V
- CLXI-2DIMU8 - 8 Channel Universal Dimmer Module, 2 Feeds, 230 V
- CLXI-2IND - 2 Channel Inductor Module - International Version, 230 V
- CLXI-4HSW4 - 4 Channel High-Inrush Switch Module, 4 Feeds - International Version, 230 V
- CLXI-4IND - 4 Channel Inductor Module - International Version, 230 V
- DIN-1DIM4 - DIN Rail Dimmer, 1 feed, 4 channels
- DIN-1DIMU4 - DIN Rail Universal Dimmer, 1 feed, 4 channels
- DIN-2LEDPWM8 - 2 Channel RGBW LED Dimmer, DIN Rail Mount
- DIN-2MC2 - DIN Rail Motor Control, 2 feeds, 2 channels
- DIN-4DIMFLV4 - DIN Rail 0-10 V Dimmer Module, 4 feeds, 4 channels
- DIN-8SW8 - DIN Rail High-Voltage Switch, 8 feeds, 8 channels
- DIN-8SW8-I - DIN Rail High-Voltage Switch with Digital Inputs
- DIN-AO8 - DIN Rail Analog Output Module
- DIN-AP3 - DIN Rail 3-Series® Automation Processor
- DIN-CENCN-2 - Ethernet to Cresnet® Network Bridge
- DIN-CENCN-2-POE - Ethernet to Cresnet® Network Bridge with PoE
- DIN-DALI-2 - DIN Rail 2-Channel DALI® Interface
- DIN-EN-2X18 - Enclosure for DIN Rail Devices, 2 DIN Rails, 18 Units Wide
- DIN-EN-3X18 - Enclosure for DIN Rail Devices, 3 DIN Rails, 18 Units Wide
- DIN-EN-3X18-MMOE - Enclosure for DIN Rail Devices, 3 DIN Rails, 18 Units Wide, Rough-In Enclosure

- DIN-EN-3X18-MMP - Enclosure for DIN Rail Devices, 3 DIN Rails, 18 Units Wide, Lay-In Panel
- DIN-EN-6X18 - Enclosure for DIN Rail Devices, 6 DIN Rails, 18 Units Wide
- DIN-EN-6X18-MMOE - Enclosure for DIN Rail Devices, 6 DIN Rails, 18 Units Wide, Rough In Enclosure
- DIN-EN-6X18-MMP - Enclosure for DIN Rail Devices, 6 DIN Rails, 18 Units Wide, Lay-In Panel
- DIN-IO8 - DIN Rail Versiport Module
- GL-CAEN-2DIM8 KIT - 8 Channel Dimmer Module with Terminal Block, 2 Feeds, 120 V
- GL-EXP-DIM-CN - Crestron Green Light® Dimmer Expansion Module, Cresnet® Network
- GL-EXP-DIMFDB-CN - Crestron Green Light® 3-Wire Fluorescent Dimmer Expansion Module, Cresnet® Network
- GL-EXP-DIMFLV-CN - Crestron Green Light® 0-10 V Dimmer Expansion Module, Cresnet® Network
- GL-EXP-DIMU-CN - Crestron Green Light® Universal Dimmer Expansion Module, Cresnet® Network
- GL-EXP-SW-CN - Crestron Green Light® Switching Expansion Module, Cresnet® Network
- GLPP-1DIMFLV2CN-PM - Crestron Green Light® Power Pack, 2-Channel 0-10 V Dimmer with Cresnet® Network and Built-in Power Monitoring
- GLPP-1DIMFLV2EX-PM - Crestron Green Light® Power Pack, 2-Channel 0-10 V Dimmer with infiNET EX® Wireless and Built-in Power Monitoring
- GLPP-1DIMFLV3CN-PM - Crestron Green Light® Power Pack, 3-Channel 0-10 V Dimmer with Cresnet® Network and Built-in Power Monitoring
- GLPP-1DIMFLV3EX-PM - Crestron Green Light® Power Pack, 3-Channel 0-10 V Dimmer with infiNET EX® Wireless and Built-in Power Monitoring
- GLPP-1SW2CN - Crestron Green Light® Power Pack, 2-Channel Switch with Cresnet® Network
- GLPP-1SW2EX - Crestron Green Light® Power Pack, 2-Channel Switch with infiNET EX® Wireless
- GLPP-1SW3CN - Crestron Green Light® Power Pack, 3-Channel Switch with Cresnet® Network
- GLPP-1SW3EX - Crestron Green Light® Power Pack, 3-Channel Switch with infiNET EX® Wireless
- GLPP-DIMFLVCN-PM - Crestron Green Light® Power Pack, 1-Channel 0-10 V Dimmer with Cresnet® Network and Built-in Power Monitoring
- GLPP-DIMFLVEX-PM - Crestron Green Light® Power Pack, 1-Channel 0-10 V Dimmer with infiNET EX® Wireless and Built-in Power Monitoring

- GLPP-SWCN - Crestron Green Light® Power Pack, 1-Channel Switch with Cresnet® Network
- GLPP-SWEX - Crestron Green Light® Power Pack, 1-Channel Switch with infiNET EX® Wireless
- GLX-DIM6 - 6 Channel Dimmer Module
- GLX-HSW8 - 8 Channel High-Inrush Switch Module
- GLXP-DIMFLV8 - 8 Channel 0-10 V Dimmer Module
- GLXP-DIMFLV8-LP - 8 Channel 0-10 V Dimmer Module, Low Profile
- GLXP-HSW12 - 12 Channel High-Inrush Switch Module
- GLXP-HSW12-LP - 12-Channel High-Inrush Switch Module, Low Profile
- GLXP-HSW12-LP - 12-Channel High-Inrush Switch Module, Low Profile
- GLXP-HSW8 - 8 Channel High-Inrush Switch Module
- GLXP-SW10 - 10 Channel Switch Module
- GLXP-SW16 - 16 Channel Switch Module
- GLXP-SW16-LP - 16-Channel Switch Module, Low Profile
- GLXX-2DIM8 - 8 Channel Dimmer Module
- GLXX-CTRL - Cresnet® Network Control Module

Shading

Shade Motors

- CSM-QMT50-DCCN - Crestron® QMT® Motor for 38 in. Roller Shades and Larger, Cresnet® Network
- CSM-QMT50-DCEX - Crestron® QMT® Motor for 38 in. Roller Shades and Larger, infiNET EX® Wireless
- CSM-QMT60-DRP-DCCN - Crestron® Drapery Track Motor with Cresnet® Network
- CSM-QMT60-DRP-DCEX - Crestron® Drapery Track Motor with infiNET EX® Wireless
- CSM-QMTDC-163-1-CN - Digital QMT® Shade Motor for QMT3 Series, 3/4 Nm, Cresnet® Network
- CSM-QMTDC-163-1-EX - Digital QMT® Shade Motor for QMT3 Series, 3/4 Nm, infiNET EX® Wireless
- CSM-QMTDC-250-2-CN - Digital QMT® Shade Motor for QMT5 Series, 2 Nm, Cresnet® Network
- CSM-QMTDC-250-2-EX - Digital QMT® Shade Motor for QMT5 Series, 2 Nm, infiNET EX® Wireless
- CSM-QMTDC-250-4-CN - Digital QMT® Shade Motor for QMT5 Series, 4 Nm, Cresnet® Network

- CSM-QMTDC-250-4-EX - Digital QMT® Shade Motor for QMT5 Series, 4 Nm, infiNET EX® Wireless
- CSM-QMTDC-256-2-CN - Digital QMT® Shade Motor for 21 in. Roller Shades and Larger, 2 Nm, Cresnet® Network
- CSM-QMTDC-256-2-EX - Digital QMT® Shade Motor for 21 in. Roller Shades and Larger, 2 Nm, infiNET EX® Wireless
- CSM-QMTDC-275-4-CN - Digital QMT® Shade Motor for QMT5 Series, 4 Nm, Cresnet® Network
- CSM-QMTDC-275-4-EX - Digital QMT® Shade Motor for QMT5 Series, 4 Nm, infiNET EX® Wireless
- CSM-QMTDC-DRP-3-CN - Digital QMT® Drapery Motor for CSS-DRAPERY, Cresnet® Network
- CSM-QMTDC-DRP-3-EX - Digital QMT® Drapery Motor for CSS-DRAPERY, infiNET EX® Wireless

Modules

- C2N-SDC - Shade and Drape Controller, 2 outputs for 120 VAC 3-wire bidirectional motors
- C2N-SDC-DC - Shade and Drape Controller, 2 outputs for 24 VDC 2-wire bidirectional motors
- CSC-ACEX - infiNET EX® Wireless Interface to Somfy® ST50 ILT2 Motor
- CSC-DCCN - Cresnet® Network Interface to Crestron® CSM-QMT30 Shades

Motor Controller

- CLCI-MCEX-W - Wireless Motor Controller, 230 VAC

Accessories

- CSA-PWS10S-HUB - 10-Motor Power Supply and Cresnet® Network Hub
- CSA-PWS10S-HUB-ENET - 10-Motor Power Supply with Ethernet to Cresnet® Network Bridge and Cresnet Hub
- CSC-DCEX - infiNET EX® Wireless Interface to Crestron® CSM-QMT30 Shades
- CSS-ARCH3 - QMT3 Series Architectural Shade Hardware
- CSS-ARCH5 - QMT5 Series Architectural Shade Hardware
- CSS-DECOR3 - QMT3 Series Décor Shade Hardware
- CSS-DECOR5 - QMT5 Series Décor Shade Hardware

Touch Screens

- TSW-1060 - 10.1 in. Touch Screen
- TSW-1060-NC - 10.1 in. Touch Screen without Camera, Microphone, or PinPoint™ Beacon
- TSW-560 - 5 in. Touch Screen
- TSW-560-NC-B-S - 5 in. Touch Screen without Camera, Microphone, or PinPoint™ Beacon; Black Smooth
- TSW-560P - 5 in. Touch Screen, Portrait
- TSW-760 - 7 in. Touch Screen
- TSW-760-NC - 7 in. Touch Screen without Camera, Microphone, or PinPoint™ Beacon

Climate Control

Crestron

- CHV-THSTAT - Heating, Cooling and Relative Humidity Thermostat
- CHV-TSTAT - Heating and Cooling Thermostat
- CHV-TSTATEX - infiNET EX® Wireless Thermostat
- CHV-TSTATEX-FCU - infiNET EX® Wireless Thermostat, Fan Coil Unit
- CHV-TSTATEX-W-T - infiNET EX® Wireless Thermostat, White Textured
- DIN-1TSTAT8 - 8-Zone Radiant Heat Thermostat, DIN Rail Mount
- DIN-THSTAT - Heating, Cooling, and Relative Humidity Thermostat, DIN Rail Mount

Cool Automation

NOTE: BACnet over IP allows control and feedback of BACnet enabled HVAC systems.

- CoolMasterNet - Universal HVAC Bridge

Security and Door Locks

Door Stations

2N® Video Intercom Door Stations

- IP Verso
- IP Solo
- IP Force
- IP Base
- IP Vario

- IP Safety
- IP Uni
- IP Audio Kit
- IP Audio Kit Lite
- IP Video Kit

Door Locks

Yale® Door Locks

- CLK-YL-YRD210-CR - Yale® Wireless Deadbolt Lock with infiNET EX® Wireless and Pushbutton Keypad
- CLK-YL-YRD216-CR2 - Yale® Assure Lock™ Wireless Deadbolt with infiNET EX® Wireless and Pushbutton Keypad
- CLK-YL-YRD220-CR - Yale® Wireless Deadbolt Lock with infiNET EX® Wireless and Touch Screen Keypad
- CLK-YL-YRD226-CR2 - Yale® Assure Lock™ Wireless Deadbolt with infiNET EX® Wireless and Touchscreen Keypad
- CLK-YL-YRD240-CR - Yale® Key-Free Wireless Deadbolt Lock with infiNET EX® Wireless and Touch Screen Keypad
- CLK-YL-YRD246-CR2 - Yale® Assure Lock™ Key-Free Wireless Deadbolt with infiNET EX® Wireless and Touchscreen Keypad
- CLK-YL-YRD256-CR2 - Yale Real Living® Assure Lock™ SL – Key Free Touchscreen Deadbolt with infiNET EX® Wireless Technology
- CLK-YL-YRL210-CR - Yale® Wireless Lever Lock with infiNET EX® Wireless and Pushbutton Keypad
- CLK-YL-YRL220-CR - Yale® Wireless Lever Lock with infiNET EX® Wireless and Touch Screen Keypad

Baldwin® Locks

- CLK-BD-8252-003-AC5 - Baldwin® Boulder Wireless Deadbolt with infiNET EX® Wireless, Pushbutton Keypad, Polished Brass
- CLK-BD-8252-003-AC5X - Baldwin® Boulder Wireless Deadbolt with infiNET EX® Wireless, No Keypad, Polished Brass
- CLK-BD-8252-102-AC5 - Baldwin® Boulder Wireless Deadbolt with infiNET EX® Wireless, Pushbutton Keypad, Oil-Rubbed
- CLK-BD-8252-102-AC5X - Baldwin® Boulder Wireless Deadbolt with infiNET EX® Wireless, No Keypad, Oil-Rubbed Bronze
- CLK-BD-8252-112-AC5 - Baldwin® Boulder Wireless Deadbolt with infiNET EX® Wireless, Pushbutton Keypad, Venetian Bronze
- CLK-BD-8252-112-AC5X - Baldwin® Boulder Wireless Deadbolt with infiNET EX® Wireless, No Keypad, Venetian Bronze

- CLK-BD-8285-056-AC5 - Baldwin® Soho Wireless Deadbolt with infiNET EX® Wireless, Pushbutton Keypad, Satin Nickel
- CLK-BD-8285-056-AC5X - Baldwin® Soho Wireless Deadbolt with infiNET EX® Wireless, No Keypad, Satin Nickel
- CLK-BD-8285-260-AC5 - Baldwin® Soho Wireless Deadbolt with infiNET EX® Wireless, Pushbutton Keypad, Polished Chrome
- CLK-BD-8285-260-AC5X - Baldwin® Soho Wireless Deadbolt with infiNET EX® Wireless, No Keypad, Polished Chrome
- CLK-BD-8285-264-AC5 - Baldwin® Soho Wireless Deadbolt with infiNET EX® Wireless, Pushbutton Keypad, Satin Chrome
- CLK-BD-8285-264-AC5X - Baldwin® Soho Wireless Deadbolt with infiNET EX® Wireless, No Keypad, Satin Chrome

Kwikset® Locks

- CLK-KW-914TRL-ZB-11P-UL - Kwikset® SmartCode™ 914 Wireless Deadbolt with infiNET EX® Wireless, Pushbutton Keypad, Venetian Bronze
- CLK-KW-914TRL-ZB-15-UL - Kwikset® SmartCode™ 914 Wireless Deadbolt with infiNET EX® Wireless, Pushbutton Keypad, Satin Nickel
- CLK-KW-914TRL-ZB-L03-UL - Kwikset® SmartCode™ 914 Wireless Deadbolt with infiNET EX® Wireless, Pushbutton Keypad, Polished Brass
- CLK-KW-916TRL-ZB-11P-UL - Kwikset® SmartCode™ 916 Wireless Deadbolt with infiNET EX® Wireless, Touch Screen Keypad, Venetian Bronze
- CLK-KW-916TRL-ZB-15-UL - Kwikset® SmartCode™ 916 Wireless Deadbolt with infiNET EX® Wireless, Touch Screen Keypad, Satin Nickel
- CLK-KW-916TRL-ZB-L03-UL - Kwikset® SmartCode™ 916 Wireless Deadbolt with infiNET EX® Wireless, Touch Screen Keypad, Polished Brass

Security Systems

Crestron

- PYNG-CONNECT-COM - COM Port Expander

> **NOTE:** Any device that is compatible with a Crestron Home system and has a COM port can be used to interface with a security system.

Honeywell® Vista®

- VISTA-128FBPT
- VISTA-128BPT
- VISTA-128BPTSIA
- VISTA-15P
- VISTA-15PSIA

- VISTA-20P
- VISTA-20PSIA (Firmware version 9.1 or higher required)
- VISTA-21iP
- VISTA-21iPSIA (Firmware version 3.13 or higher required)
- VISTA-250BPT (Firmware version 10.3 or higher required)
- VISTA-250FBPT
- VISTA-32FBPT

Interlogix

- Interlogix NetworX NX-4
- Interlogix NetworX NX-4V2
- Interlogix NetworX NX-6
- Interlogix NetworX NX-6V2
- Interlogix NetworX NX-8
- Interlogix NetworX NX-8E
- Interlogix NetworX NX-8V2

DSC

- DSC PC1616
- DSC PC1832
- DSC PC1864

First Alarm

- FA1660CT (Works with all firmware versions)

Texecom

- Premier Elite 48
- Premier Elite 88
- Premier Elite 168

Keypads

Wired

- C2N-CBD-E - Cameo® Express Keypad, Standard Mount
- C2N-CBD-P - Cameo® Keypad, Standard Mount
- C2N-CBF-P - Cameo® Keypad, Flush Mount
- C2NI-CB-A-T - Cameo® Keypad - International Version, Almond Textured
- C2N-UNI8IO - Universal Keypad Interface

- CLWI-KPLCN - In-Wall Keypad, Cresnet
- CNX-B12 - Designer Keypad, 12-Buttons
- CNX-B2 - Designer Keypad, 2-Buttons
- CNX-B4 - Designer Keypad, 4-Buttons
- CNX-B6 - Designer Keypad, 6-Buttons
- CNX-B8 - Designer Keypad, 8-Buttons
- HZ-KPCN - Horizon™ Keypad, Cresnet® Network

infiNET EX® Wireless

- CLWI-KPLEX - In-Wall Wireless Keypad, 230 VAC Line Powered
- CLWI-KPLEX-BATT - On-Wall Wireless Lighting Keypad, Battery Powered
- HTT-B10EX - Wireless Tabletop Keypad
- HTT-B2EX-BATT - Battery-Powered infiNET EX® Wireless 2-button Wireless Keypad
- INET-CBDEX-230-E - Cameo® Express Wireless Keypad, infiNET EX® Wireless, 230 V
- INET-CBDEX-230-P - Cameo® Wireless Keypad, infiNET EX® Wireless, 230 V
- INET-CBDEX-277-P - Cameo® Wireless Keypad, infiNET EX® Wireless, 277 V
- INET-CBDEX-E - Cameo® Express Wireless Keypad, infiNET EX® Wireless, 120 V
- INET-CBDEX-P - Cameo® Wireless Keypad, infiNET EX® Wireless, 120 V

Sensors

- CEN-ODT-C-POE - Dual-Technology Occupancy Sensor, PoE, 2,000 Sq Ft
- GLS-ODT-C-CN - Dual-Technology Occupancy Sensor with Cresnet®, 2,000 Sq Ft
- GLS-OIR-C-CN - Passive Infrared Occupancy Sensor with Cresnet®
- GLS-OIR-CSM-EX-BATT - Wireless Passive Infrared Occupancy Sensor, infiNET EX® Wireless, Battery-Powered
- GLS-OIRLCL-C-CN - Ceiling Mount Passive Infrared Occupancy and Daylight Sensor, Cresnet®
- INETS-IOEX-DOOR-BATT - infiNET EX® Wireless Door Sensor

Sonos® Speakers and Amplifiers

- SNS-BEAM1US1 - Sonos® Beam Smart Soundbar, White (BEAM1US1)
- SNS-BEAM1US1BLK - Sonos® Beam Smart Soundbar, Black (BEAM1US1)
- SNS-CTAZPUS1 - Sonos® CONNECT:AMP Streaming Amplifier (CTAZPUS1)
- SNS-CTNZPUS1 - Sonos® CONNECT Streaming Player and Preamplifier (CTAZPUS1)
- SNS-ONEG1US1 - Sonos One™ Wireless Speaker with Amazon® Alexa® Built In, White

- SNS-ONEG1US1BLK - Sonos One™ Wireless Speaker with Amazon® Alexa® Built In, Black
- SNS-PBAR1US1BLK - Sonos® PLAYBAR® Home Theater Soundbar and Streaming Music Speaker, Black
- SNS-PBASEUS1 - Sonos® PLAYBASE® Home Theater and Streaming Music Speaker for TVs on Stands, White
- SNS-PBASEUS1BLK - Sonos® PLAYBASE® Home Theater and Streaming Music Speaker for TVs on Stands, Black
- SNS-PL5G2US1 - Sonos PLAY:5® Wireless Speaker, White (PL5G2US1)
- SNS-PL5G2US1BLK - Sonos PLAY:5® Wireless Speaker, Black (PL5G2US1)
- SNS-PLAY1US1 - Sonos PLAY:1® Wireless Speaker, White (PLAY1US1)
- SNS-PLAY1US1BLK - Sonos PLAY:1® Wireless Speaker, Black (PLAY1US1BLK)
- SNS-PLAY3US1 - Sonos PLAY:3® Wireless Speaker, White (PLAY3US1)
- SNS-PLAY3US1BLK - Sonos PLAY:3® Wireless Speaker, Black (PLAY3US1BLK)
- SNS-SUBG1US1 - Sonos® SUB Wireless Subwoofer, White (SUBG1US1)
- SNS-SUBG1US1BLK - Sonos® SUB Wireless Subwoofer, Black (SUBG1US1BLK)

Cameras

NOTE: For a list of camera features and settings that have been confirmed to function properly within a Crestron Home system, refer to Crestron Home Camera Compatibility on page 371.

Axis

- M1065-L - Full-Featured HDTV 1080p Camera with PoE and Edge Storage
- M3045-V - HDTV 1080p fixed mini dome with HDMI
- M4206-V - Varifocal Mini Dome with HDMI® Output
- M5065 - Palm-sized PTZ camera with 5x optical zoom and Wireless I/O
- P3225-LV Mk II - Streamlined HDTV 1080p Fixed Dome for any Light Conditions
- P3245-V - Streamlined HDTV 1080p fixed dome

Hikvision

- DS-2CD2743G1-IZS - 4 MP Outdoor IR Varifocal Dome Camera
- DS-2CD2E20F-W - Recessed Mount Dome IP camera 2MP, 2.8 mm (106°) fixed lens, Wi-Fi Communication
- DS-2DE2204IW-DE3 - 2 MP Indoor 4x Network IR PTZ Camera

  NOTE: A momentary flash may be seen when entering the stream view.
- DS-2DF6A236X-AEL - 6 in. 2 MP 36X DarkFighter Network Speed Dome

IC Realtime

- ICIP-P2012T - 2MP 12x Starlight PTZ Network Camera

  NOTE: Allows up to three simultaneous connections.

- ICR-D4732Z - 4MP WDR IR Dome Network Camera
- IPEL-E80F-IRW1 - 8MP IR Eyeball Network Camera
- IPFX-B20V-IRW1 - 2MP IR Bullet Network Camera

SnapAV

- VI-M-4340-VT - Visualint™ 4MP IP Dome Outdoor Camera with Motorized Lens + Virtual Technician

  NOTE: Add the camera manually to allow snapshot to work. Use the following URI format: http://<IP addres of camera>/ snapshot.jpg?user=<username>&pwd=<password>&strm=0

- LUM-500-FISH-IP-WH - Luma Surveillance™ 500 Series Fisheye IP Outdoor Camera

  NOTE: Set configuration to use Fish Cam and 1 PTZ cam in order for snapshot preview to work. There will be a 10+ second delay before stream appears.

- LUM-510-DOM-IP-WH - Luma Surveillance™ 510 Series Dome IP Outdoor Camera

Lutron

Control Lutron lights, shades, and fans from within the Crestron Home user interface.

- HomeWorks QS - HomeWorks QS 1-Link Processor (HQP6-1)
- HomeWorks QS - HomeWorks QS 2-Link Processor (HQP6-2)
- HomeWorks QSX - HomeWorks QSX 1-Link Processor (HQP7-1)
- HomeWorks QSX - HomeWorks QSX 2-Link Processor (HQP7-2)
- RA2 Select - RA2 Select Main Repeater (RR-SEL-REP2)
- RadioRA 2 - RadioRA 2 Main Repeater (RR-MAIN-REP)

Pools

Hayward® Pools

- HLBASE - OmniLogic® 4 Relay Base Panel

Jandy® Pools

- IQ900 - iAquaLink™ Web Connect Device

I/O Devices

Modules

- C2N-IO - Control Port Expansion Module
- CEN-IO-COM-102 - Wired Ethernet Module with 2 COM Ports
- CEN-IO-COM-202 - Wireless Ethernet Module with 2 COM Ports
- CEN-IO-DIGIN-104 - Wired Ethernet Module with 4 Digital Inputs
- CEN-IO-DIGIN-204 - Wireless Ethernet Module with 4 Digital Inputs
- CEN-IO-IR-104 - Wired Ethernet Module with 4 IR Ports
- CEN-IO-IR-204 - Wireless Ethernet Module with 4 IR Ports
- CEN-IO-RY-104 - Wired Ethernet Module with 4 Relay Ports
- CEN-IO-RY-204 - Wireless Ethernet Module with 4 Relay Ports
- GLS-SIM - Crestron Green Light® Sensor Integration Module
- INET-IOEX-IRCOM - infiNET EX® Wireless IR/RS-232 Control Module
- INET-IOEX-RYIO - infiNET EX® Wireless Relay/Digital Input Control Module

Control Cards and Interfaces

Control Card Interface

- CEN-CI3-1 - 3-Series® Control Processor Card Interface – 1 Slot
- CEN-CI3-1-POE - 3-Series® Control Processor Card Interface – 1 Slot, with PoE Injector
- CEN-CI3-3 - 3-Series® Control Processor Card Interface – 3 Slot

Control Card

- C3COM-3 - 3-Series™ Control Card – 3 COM Ports
- C3IO-16 - 3-Series™ Control Card – 16 Versiport I/O Port
- C3IR-8 - 3-Series® Control Card – 8 IR Ports
- C3RY-16 - 3-Series™ Control Card – 16 Relay Ports
- C3RY-8 - 3-Series™ Control Card – 8 Relay Ports

Third-Party AV Devices

Crestron Certified Drivers allow third-party AV devices to be added to the Crestron Home system. They offer standardized control without the need to create and maintain custom drivers.

Search for Crestron Certified Drivers using the Crestron Certified Driver Web Portal at drivers.crestron.io.

Crestron Certified Drivers are available for the following device types:

- AV Receivers
- Blu-ray® Disc Players
- Cable Boxes
- Flat Panel Displays
- Projectors
- Video Servers

Unsupported Devices

- CNX-PAD8 - Professional Audio Distribution Processor
- TS-1542 Series - 15.6 in. HD Touch Screen, Wall Mount or VESA

  NOTE: All touch screens in the TS-1542 series are unsupported, including the -C, -TILT, and -C-TILT models.

- TSD-2020-B - 20 in. HD Touch Screen Display, Black
- TSW-xx52 Series - Touch Screen

  NOTE: The TSW-x52 series touch screens are supported in Crestron Pyng OS 1 only. For Crestron Home OS, use TSW-xx60 series touch screens.

Crestron Home Camera Compatibility

The following features and settings have been confirmed to function properly within a Crestron Home system.

IC Realtime Cameras

User Interface Device	Specifications		
	Model	IPFX-B20V-IRW1	IPEL-E80F-IRW1
	Firmware	V2.800.00KL000.0.R	V2.800.00KL005.0.R
iOS Device	Codec	H265	H265
	Snapshot	Yes	Yes
	Audio	Yes Audio heard via Line In	No
	Resolution (max)	1080p	1080p
	FPS (max)	60	60
Android Device	Codec	H265	H265
	Snapshot	Yes	Yes
	Audio	Yes Audio heard via Line In	No
	Resolution (max)	1080p	1080p
	FPS (max)	60	60
TSW-XX60 Series Touch Screen	Codec	H264	H264
	Snapshot	Yes	Yes
	Audio	Yes Audio heard via Line In	No
	Resolution (max)	1080p	1080p
	FPS (max)	60	60

Axis Cameras

User Interface Device	Specifications				
	Model	M1065-L	M3045-V	P3245-V	M5065 Z-WAVE
	Firmware	8.40.1.1	8.40.1.1	9.25.1	6.53.2.2
iOS Device	Codec	H264	H264	H264	H264
	Snapshot	Yes	Yes	Yes	Yes
	Audio	NA	NA	NA	NA
	Resolution (max)	1080p	1080p	1080p	1080p
	FPS (max)	60	60	60	60
Android Device	Codec	H264	H264	H264	H264
	Snapshot	Yes	Yes	Yes	Yes
	Audio	NA	NA	NA	NA
	Resolution (max)	1080p	1080p	1080p	1080p
	FPS (max)	60	60	60	60
TSW-XX60 Series Touch Screen	Codec	H264	H264	H264	H264
	Snapshot	Yes	Yes	Yes	Yes
	Audio	NA	NA	NA	NA
	Resolution (max)	1080p	1080p	1080p	1080p
	FPS (max)	60	60	60	60

Hikvision Cameras

User Interface Device	Specifications	
	Model	DS-2DF6A236X-AEL
	Firmware	V5.6.0build 190130
iOS Device	Codec	H264(H265)
	Snapshot	Yes
	Audio	No Audio not tested
	Resolution (max)	1080p
	FPS (max)	60
Android Device	Codec	H264(H265)
	Snapshot	Yes
	Audio	No Audio not tested
	Resolution (max)	1080p
	FPS (max)	60
TSW-XX60 Series Touch Screen	Codec	H264
	Snapshot	Yes
	Audio	No Audio not tested
	Resolution (max)	1080p
	FPS (max)	60

Appendix B: Upgrade Crestron Pyng OS 2 to Crestron Home OS

Upgrade to Crestron Home OS to access the latest responsive user interface from Crestron. Upgrading from Crestron Pyng OS 2 to Crestron Home OS is a simple process. The system must be running on a CP4-R control processor with Crestron Pyng OS 2 firmware version 2.003.0021 or later.

NOTES:

- The CP3-R control processor cannot run Crestron Home OS. To upgrade, the system data must be transferred to a CP4-R control processor using a deployment code. For details, refer to Upgrade Crestron Home Processors on page 579.

- The PYNG-HUB control processor running Crestron Pyng OS 1 cannot be upgraded to Crestron Home OS.

To upgrade to Crestron Home OS, perform the following procedures:

Upgrade the Operating System

CAUTIONS:

- Record the serial number of the CP4-R prior to upgrading. The serial number is case sensitive. This is especially important if upgrading the CP4-R remotely as you will not be able to access the serial number later.
- Updating to Crestron Home places the CP4-R into secure mode. To log in, use the following username and password:

  Username: Admin

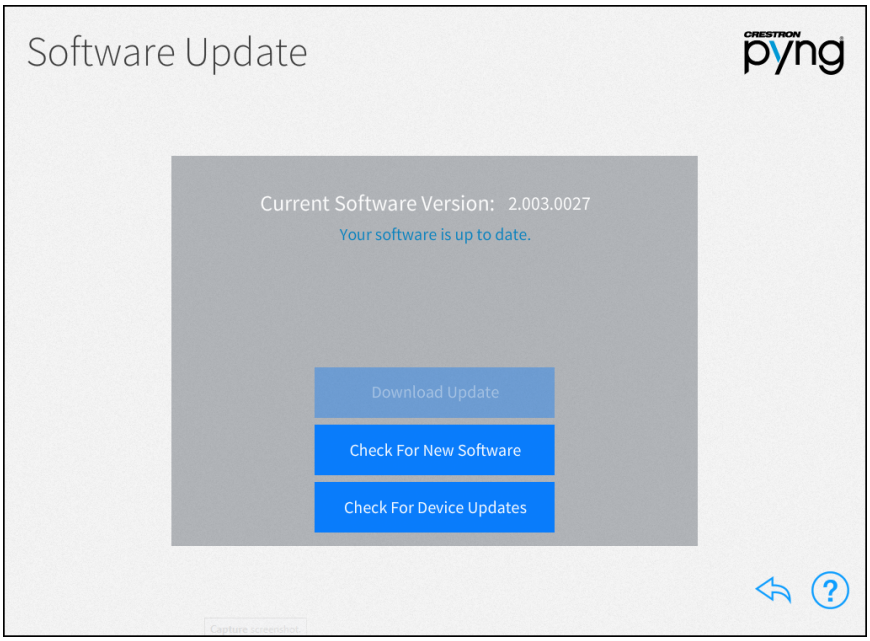
  Password: The serial number of the CP4-R (case sensitive)
- If security was enabled before the upgrade, use the credentials set previously to log in.

NOTES:

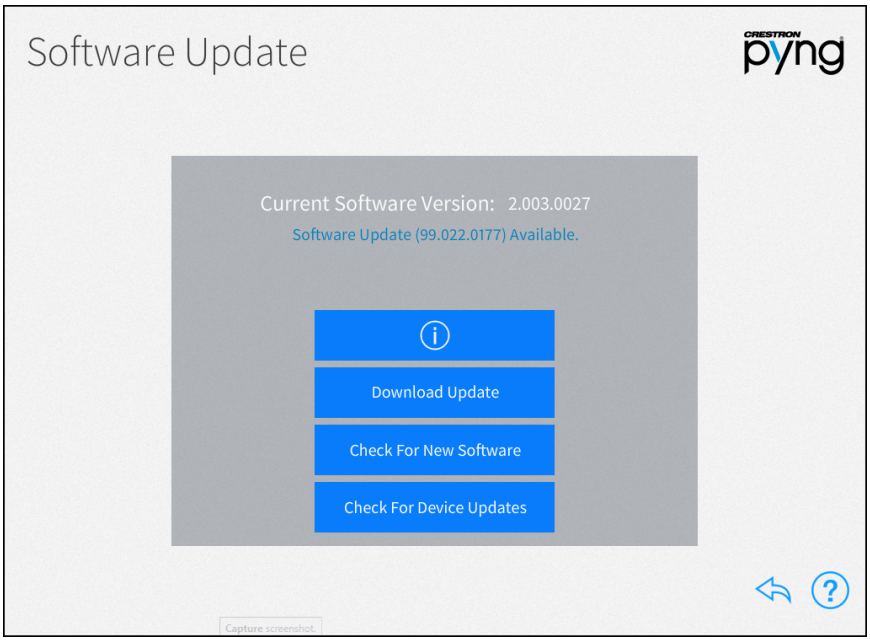
- Do not perform the upgrade the operating system while the customer is using the system.
- The software update may take up to 30 minutes to complete.

To upgrade to Crestron Home OS:

1. Tap the gear button on the bottom right of the **Setup** screen to display the **Installer Settings**.
2. Tap **Check for Updates**. The **Software Update** screen displays.

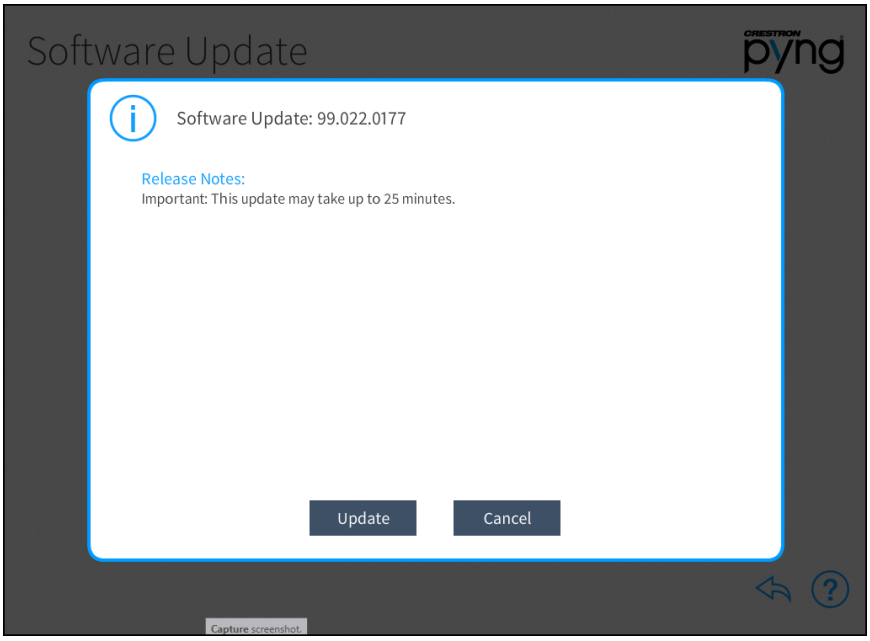


3. Tap **Check for New Software**. The system scans for and displays the available software updates.



4. Tap the **i** button to review the software release notes.
5. Tap **Download Update**. A confirmation dialog appears.
6. Tap **Download** to download the update. The CP4-R downloads the latest firmware. The download may take several minutes. The update does not install automatically.

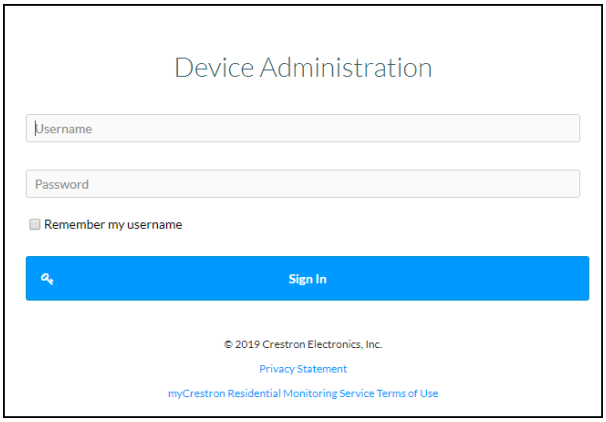
7. Tap **Update Software**. A confirmation dialog is shown along with the release notes.



8. Tap **Update**. The software update is applied. When the software update is complete, the CP4-R reboots.

   CAUTION: Communication with the CP4-R will be lost several times during the software update. Do not power down the CP4-R during the software update.

9. When the CP4-R reboots, open the Crestron Home Setup app (or open the web XPanel interface using a web browser). The **Device Adminstration** page displays.



10. Enter the username and password and then tap **Sign In**.

    Username: Admin

    Password: The serial number of the CP4-R

    NOTE: If security was enabled before the upgrade, use the credentials set previously to log in.

NOTE: To ensure that all devices are properly recognized by the CP4-R, restart all IP devices on the network.

Enable the User Interface Device Password

The User Interface Device Password must be enabled before attempting to connect user interfaces devices (TSW-xx60 series touch screens, TSR-310 handheld remotes, iOS devices, and Android devices) to the Crestron Home system.

The User Interface Device Password is entered on the user interface device when pairing to the Crestron Home system.

About Crestron Home Passwords

The Crestron Home system uses several passwords to allow access to different areas of the Crestron Home system.

NOTES:

- After three unsuccessful login attempts, the IP address of the device is blocked from joining the Crestron Home system for 1 hour. Other devices are allowed to join during this period.
- Create passwords using any combination of letters, numbers and symbols (ASCII-standard characters only, accents and accented characters are not supported).
- All passwords must be unique.
- Use Crestron Toolbox™ software to manage blocked IP addresses and to change the password policy and the maximum login attempts.
- To reset passwords, refer to Reset Passwords on page 210.

Crestron Home Setup app passwords:

- **Admin Password:** Allows full access to the setup and configuration screens on the Crestron Home system.
- **Advanced User Password:** Allows limited access to the setup and configuration screens on the Crestron Home system.
- **Common Device Password:** Allows devices that support SSL and authentication to be added to the Crestron Home system.

Crestron Home App password:

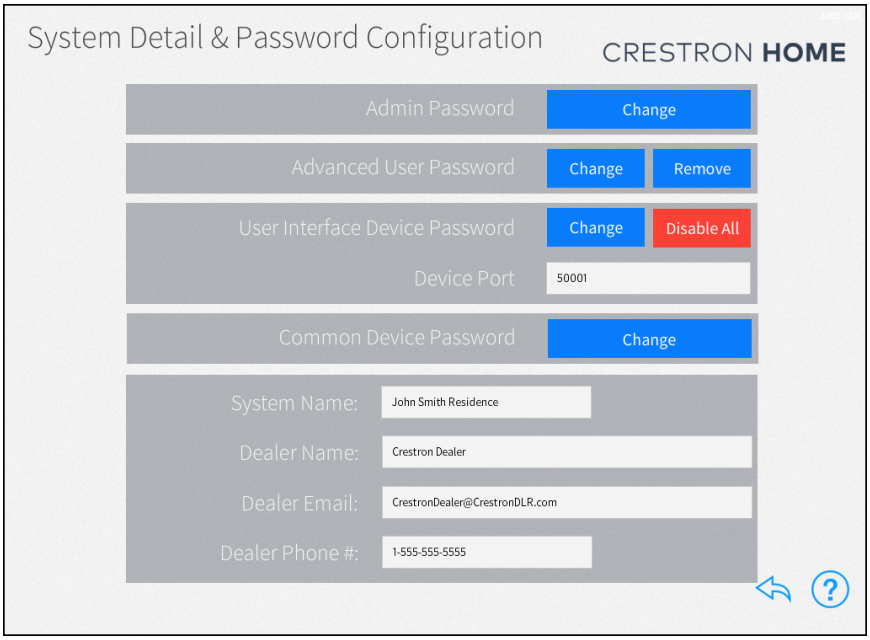
- **User Interface Device Password:** Allows user interface devices (TSW-xx60 series touch screens, TSR-310 handheld remotes, iOS® devices, and Android™ devices) to join the Crestron Home system.

  NOTE: User interface devices will not be able to connect to the Crestron Home system if the User Interface Device Password is not set. To set the User Interface Device Password, refer to Set or Change the User Interface Device Password on page 208.

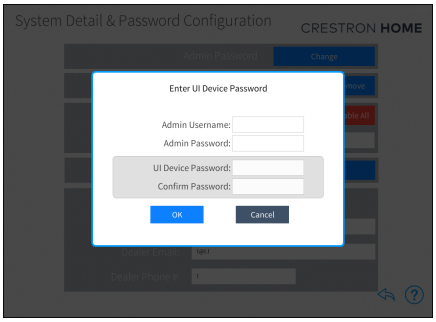
Set the User Interface Device Password

To set the User Interface Device Password:

1. Tap the gear button on the bottom right of the **Setup** screen to display the **Installer Settings** screen.
2. Tap **System Detail & Password Configuration**. The **Installer Settings - System Configuration** screen displays.
3. Tap **System Info & Passwords**. The **System Detail & Password Configuration** screen displays.



4. Tap **Enable**. The **Enter UI Device Password** dialog displays.



5. Enter the required passwords for the **Admin Username**, **Admin Password**, the **UI Device Password** fields, and then confirm the user interface device password in **Confirm Password** field.
6. Tap **OK** to continue or **Cancel** to exit without saving changes.

Update the Firmware for Connected Devices

To ensure the best system performance, update the firmware for all devices that are connected to the system.

NOTES:

- The TSW-xx60 series touch screen and TSR-310 handheld remote must be running the latest firmware in order to display the Crestron Home app.
- To enable the Crestron Home app on the:
  - TSW-xx60 series touch screen, refer to Pair a TSW-xx60 Series Touch Screen on page 386.
  - TSR-310 handheld remote, refer to Pair a TSR-310 Handheld Remote on page 391.

To scan the devices connected to the Crestron Home system for available updates:

1. Tap **Check for Device Updates**. Crestron Home scans the connected devices for available updates. Once the scan is complete, the **Device Firmware Update** screen presents a list of devices with recommended firmware updates.

   NOTES:

   - To rescan the update server for new device firmware updates, tap **Check For Updates**.
   - To view release notes for the firmware update, tap the information button ⓘ next to the device.

2. Tap the check box next to a device to select the device to receive a firmware update.
3. Tap **Update Selected Devices** to perform firmware updates for the selected devices.

NOTE: The TSW-xx60 series touch screen running Smart Graphics mode will appear as "TSW-xx60(Legacy)" while the TSW-xx60 series touch screen running Crestron Home will appear as "TSW-xx60."

NOTE: The TSR running Performance UI-OS 2S mode will appear as "TSR-310(Legacy)" while the TSR running Performance UI-OS 3 (Crestron Home) will appear as "TSR-310."

Appendix C: Pair User Interface Devices

User interface devices (TSW-xx60 series touch screens, TSR-310 handheld remotes, iOS® devices, and Android™ devices) run the Crestron Home app and must be paired to the Crestron Home system using the device's user interface. The pairing process creates a secure connection between the user interface device and the Crestron Home processor.

NOTE: The User Interface Device password must be set prior to pairing. To set the User Interface Device password, refer to Set or Change the User Interface Device Password on page 208.

The following User Interface Devices can be paired:

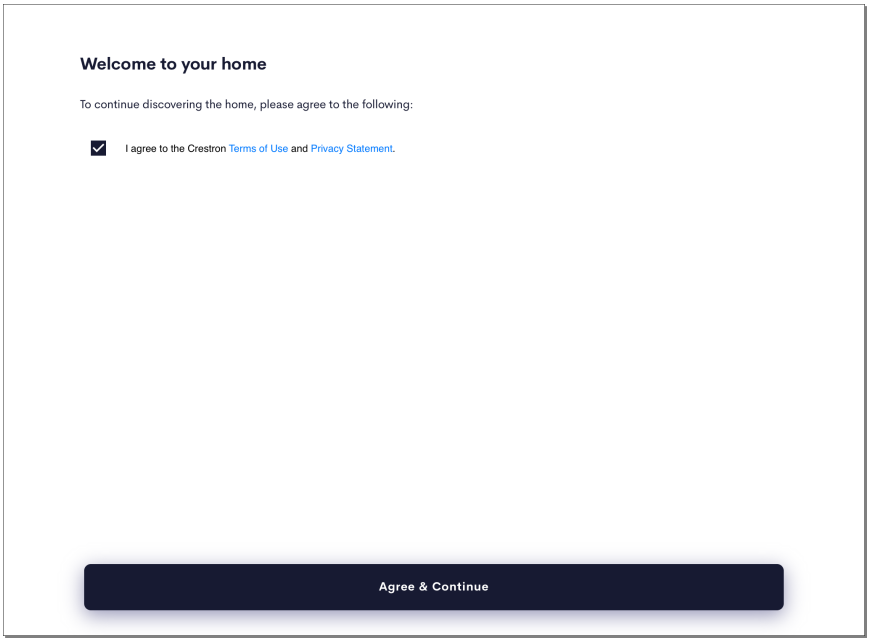
Pair an iOS® Device or Android™ Device

NOTE: The Crestron Home app for Apple iOS® devices is available on the App Store® online store and for Android™ device is available on the Google Play™ Store.

NOTE: For a comprehensive list of mobile device hardware and software versions that are compatible with Crestron Home refer to OLH article 5655 at https://support.crestron.com/app/answers/detail/a_id/5655.

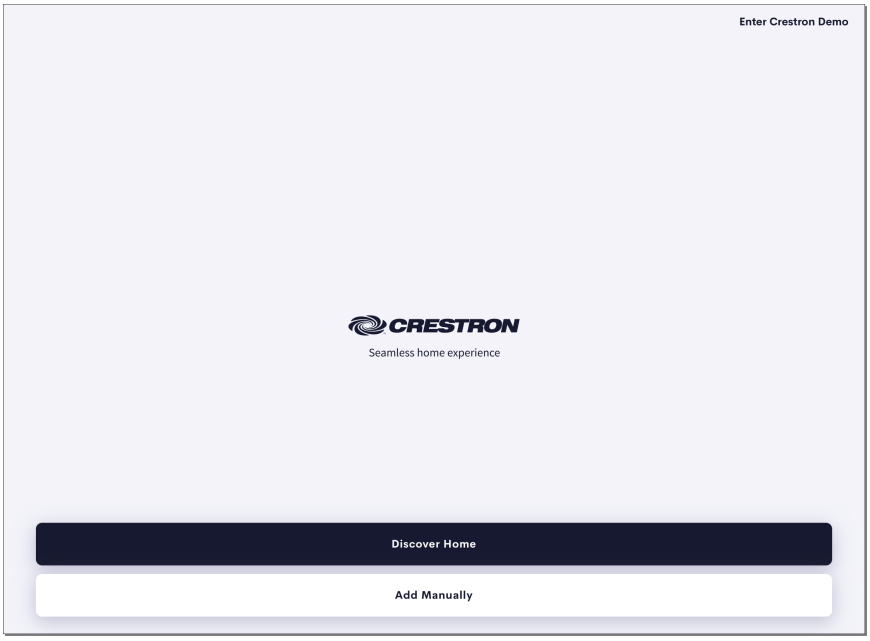
To pair an iOS device or Android device:

1. Tap to open the Crestron Home app.
2. The first time the Crestron Home app is opened, the **Welcome to your home** screen is displayed.



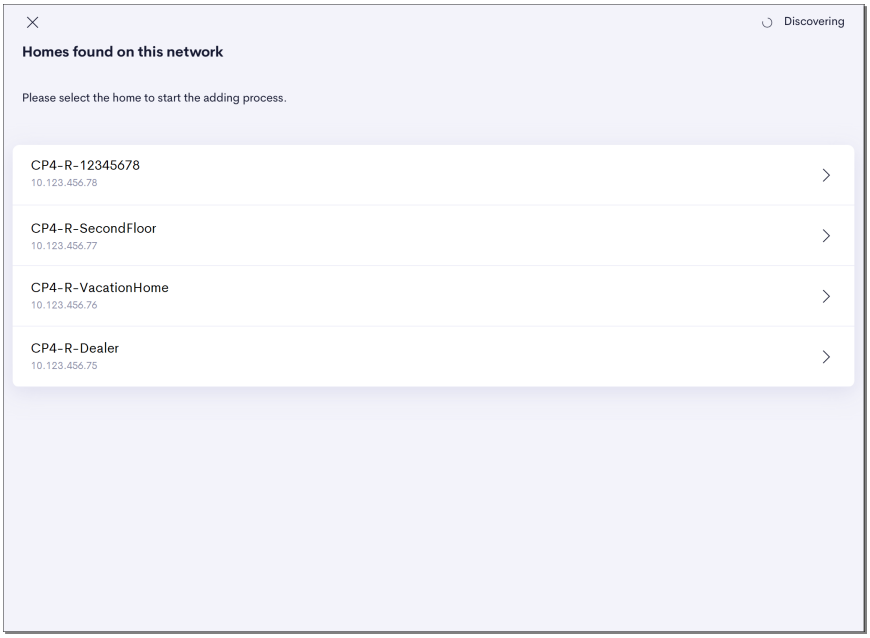
3. Tap **Terms of Use** and **Privacy Statement** to read these legal terms. To accept these legal terms, tap the box next to **I agree to the Crestron Terms of Use and Privacy Statement**.

4. Tap **Agree & Continue** to proceed. The splash page is displayed.

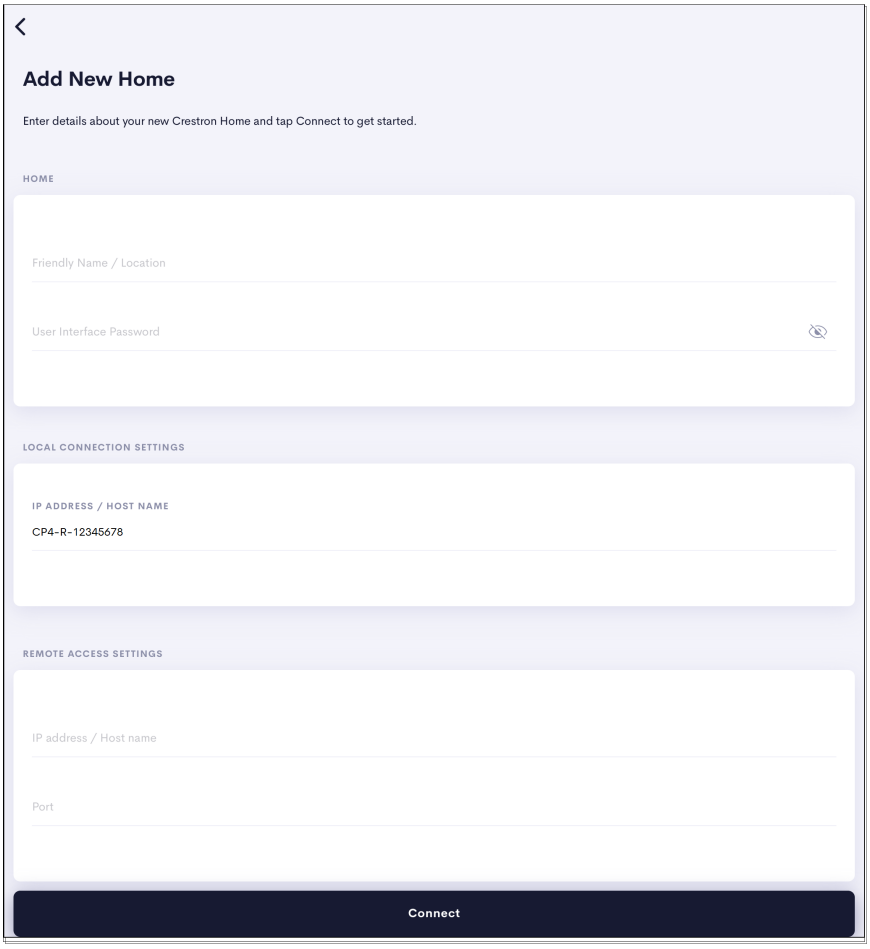


5. Tap **Discover Home** to scan the network for the Crestron Home processor. The **Homes found on this network** screen is displayed and shows the list of available Crestron Home processors on the network. The Hostname and IP Address for each Crestron Home processor is displayed.

   NOTE: The iOS device or Android device and the Crestron Home processor must be on the same wireless network for the device to be found.



6. Tap on the home you would like to connect to. The **Add New Home** screen is displayed.



7. Enter the following information for **HOME**, **LOCAL CONNECTION SETTINGS**, and **REMOTE ACCESS SETTINGS** on the **Add New Home** screen:

   HOME:

   - **Friendly Name / Location:** Enter a name or location of the Crestron Home processor. The name will be used to identify the Crestron Home processor on the My Homes screen.
   - **User Interface Password:** Enter the User Interface Password. For details, refer to Enable the User Interface Device Password on page 377 and System Detail & Password Configuration on page 205.

     NOTE: After three unsuccessful login attempts, the IP address of the device is blocked from joining the Crestron Home system for 1 hour. Other devices are allowed to join during this period.

   LOCAL CONNECTION SETTINGS:

   - **IP ADDRESS / HOST NAME:** The Host name is entered by the system during discovery.

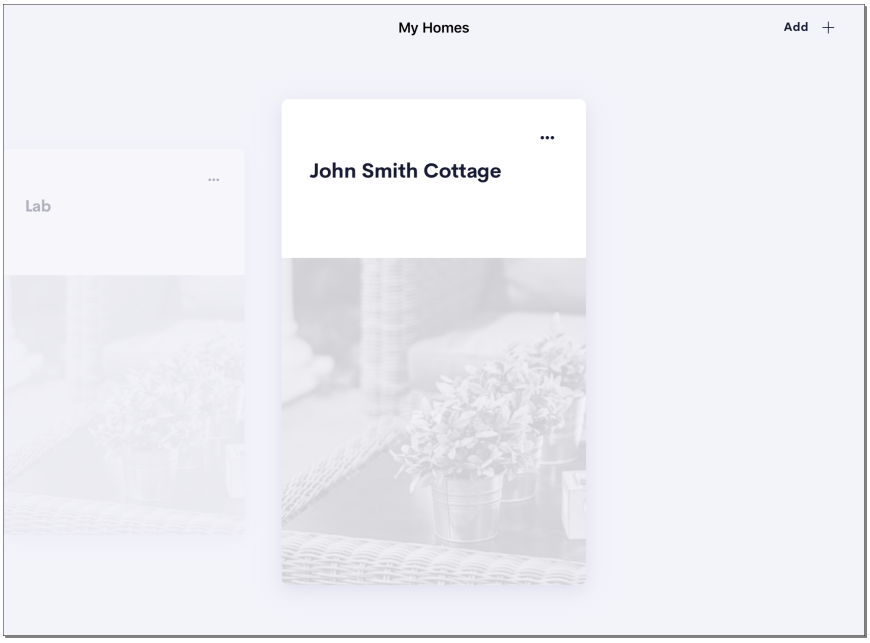
   REMOTE ACCESS SETTINGS:

   NOTE: To configure the system for remote access (outside of the home using a cellular network), refer to Enable Remote System Access on page 561.

   - **IP address / Host name**: Enter the IP address or the Host name of the Crestron Home processor to enable remote access.
   - **Port**: Enter the port to access the system. The default port is 50001.
   - **Local Port:** If the port for the user interface was changed during setup, enter the port in this field. The port number should only be changed if port 50001 is in use by the ISP and cannot be forwarded. For details, refer to System Detail & Password Configuration on page 205.

     NOTE: Only change the Local Port when directed by your authorized Crestron dealer.

8. Tap **Connect** to add the iOS device or Android device to the Crestron Home system. If the information is valid, the **My Homes** screen is displayed.



Pair a TSW-xx60 Series Touch Screen

NOTES:

- The Crestron Home app runs on the TSW-xx60 series touch screen and must be enabled within the device.
- The TSW-xx60 series touch screen must be using firmware version 2.05.xx or higher. To upgrade the firmware, refer to Check for Device Updates on page 239.

Enable the Crestron Home app on the TSW-xx60 Series Touch Screen:

1. Enter the TSW-xx60 settings. The TSW-xx60 settings can be accessed from the touch screen or from a PC connected to the TSW-xx60's web page.
    a. From the TSW-xx60:
        I. Place five fingers on the display and hold for 15 seconds.
        II. Tap **Application Selection** to bring up the **Application Selection** screen.
        III. Tap **Crestron Home**.
        IV. Tap **Confirm Selection**. The touch screen reboots with the Crestron Home application running and then displays the landing page.

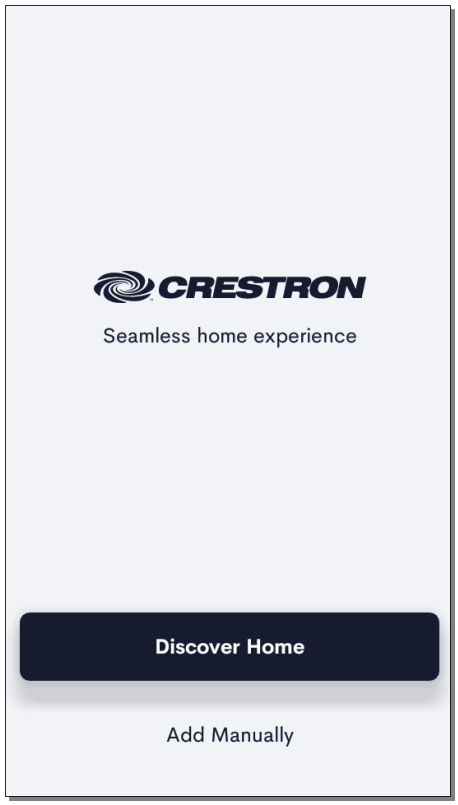
b. From the TSW-xx60's Web Page:

   I. Enter the IP address or host name of the touch screen into a web browser.

   II. Click **Settings** and then **Applications**.

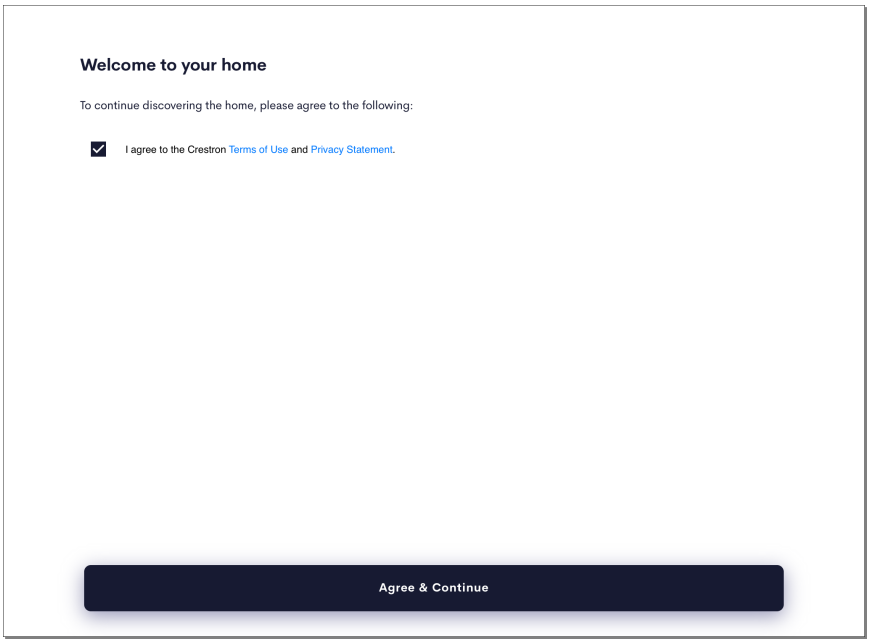
   III. Select **Crestron Home** from the **Application Mode** drop-down.

   IV. Click **Save Changes**. A pop-up dialog 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 Crestron Home application running and then displays the landing page.



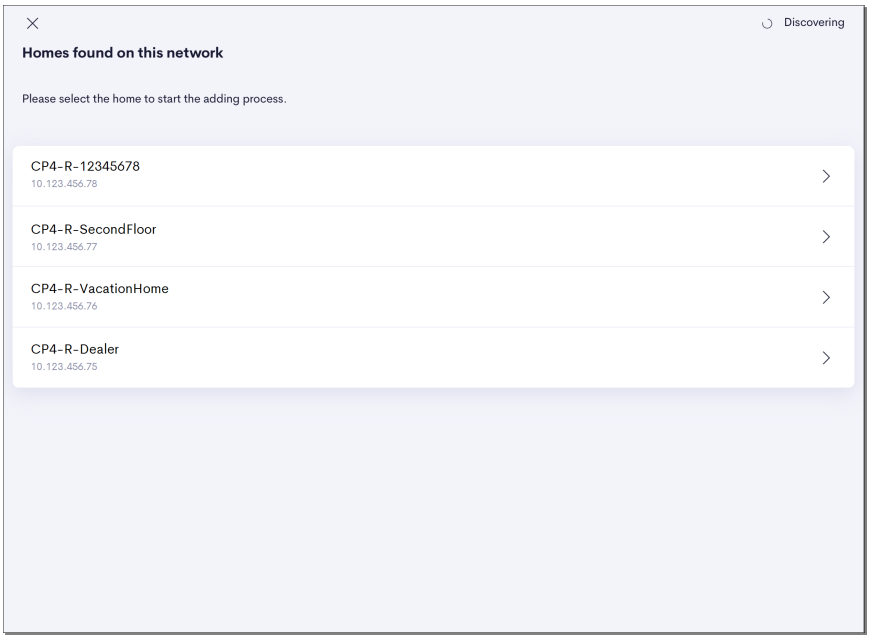
To pair a TSW-xx60 Series Touch Screen:

1. The first time the TSW-xx60 series touch screen is launched, the **Welcome to your home** screen is displayed.

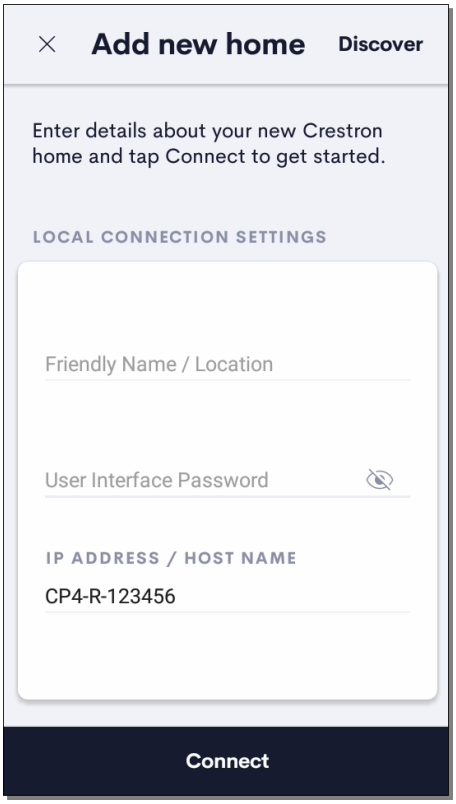


2. Tap **Discover Home** to scan the network for the Crestron Home processor. The **Homes found on this network** screen is displayed and shows the list of available Crestron Home processors on the network. The Hostname and IP Address for each Crestron Home processor is displayed.

NOTE: The TSW-xx60 series touch screen and the Crestron Home processor must be on the same wireless network for the device to be found.



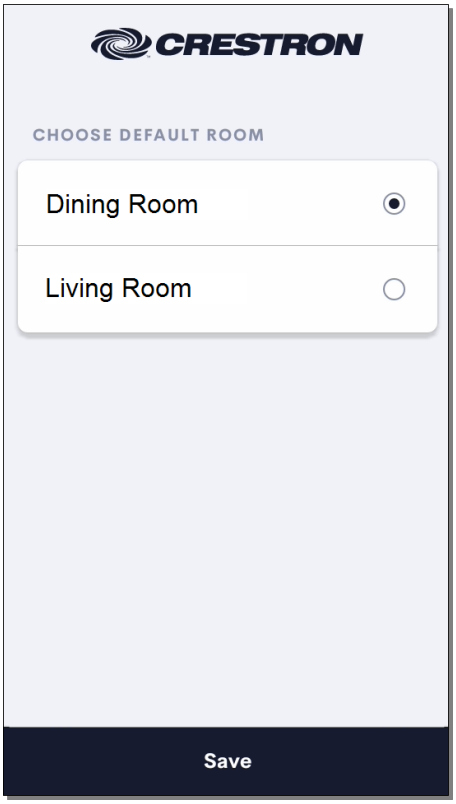
3. Tap on the home you would like to connect to. The **Add New Home** screen is displayed.



4. Enter the following information for **LOCAL CONNECTION SETTINGS** on the **Add New Home** screen:
   - **Friendly Name / Location:** Enter a name or location of the Crestron Home processor. The name is displayed on the TSW-xx60 and will be used to identify the Crestron Home processor on the My Homes screen.
   - **User Interface Password:** Enter the User Interface Password. For details, refer to Enable the User Interface Device Password on page 377 and System Detail & Password Configuration on page 205.

     NOTE: After three unsuccessful login attempts, the IP address of the device is blocked from joining the Crestron Home system for 1 hour. Other devices are allowed to join during this period.
   - **IP ADDRESS / HOST NAME:** The Host name is entered by the system during discovery.

5. Tap **Connect** to add the TSW-xx60 series touch screen to the Crestron Home system. If the information is valid, the room selection screen is displayed.



6. Select the room that the TSW-xx60 series touch screen is in and then tap **Save**.
7. Press the "Home" hard key on the TSW-xx60 series touch screen to display the **Room** screen.

NOTE: If the TSW-xx60 series touch screen was previously discovered and added to the system during Step 2: Pair Devices on page 38, it will now appear as "TSW-xx60 (Legacy)" in the Crestron Home system. The TSW-xx60 series touch screen can be safely removed from the system. Refer to Step 2: Pair Devices on page 38 for details.

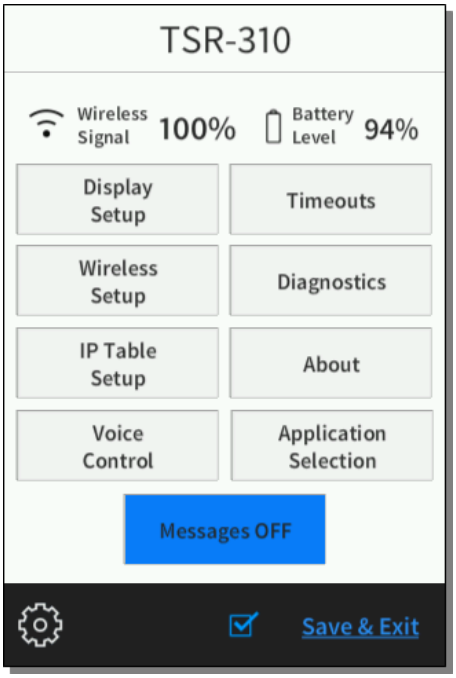
Pair a TSR-310 Handheld Remote

NOTES:

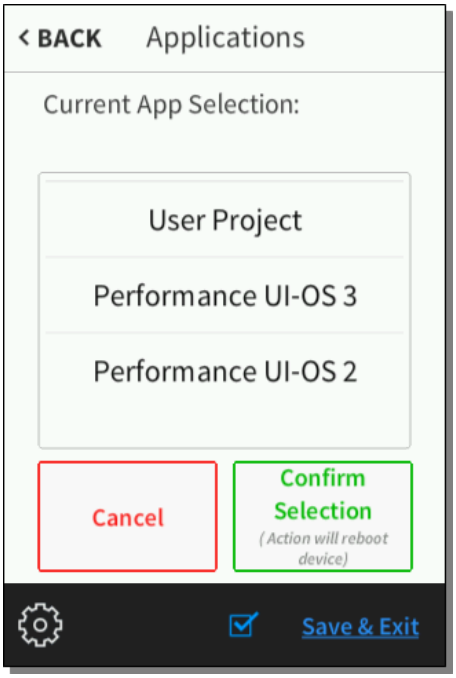
- The Crestron Home app runs on the TSR-310 handheld remote and must be enabled within the device.
- The TSR-310 handheld remote must be using the latest firmware. To upgrade the firmware, refer to Check for Device Updates on page 239.

Enable the Crestron Home app on the TSR-310 Handheld Remote:

1. Press the power, microphone, home, and raise buttons twice in sequence within five seconds. The **TSR-310** main setup screen is displayed.



2. Tap **Application Selection** from the main setup screen. The **Applications** screen is displayed.



3. Select **Performance UI-OS 3** from the **Applications** screen.

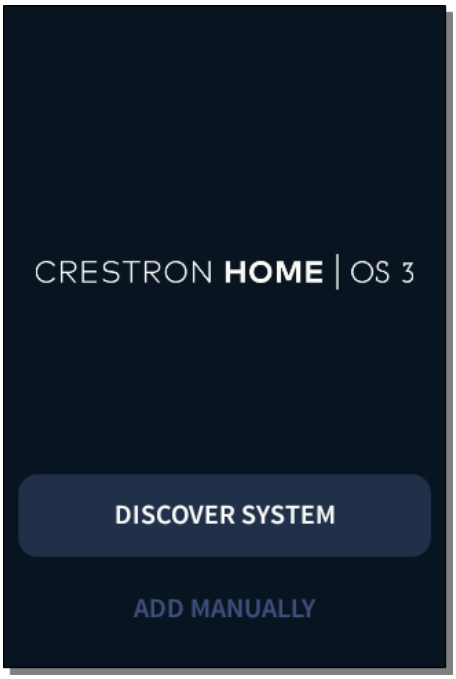
   NOTES:

   - When **Confirm Selection** is pressed, the TSR-310 handheld remote reboots immediately. No confirmation dialog is displayed.
   - If the selected app is already running, no actions are taken when **Confirm Selection** is pressed.

4. Select **Confirm Selection** from the **Applications** screen. The TSR-310 handheld remote reboots with the Performance UI-OS 3 application running.

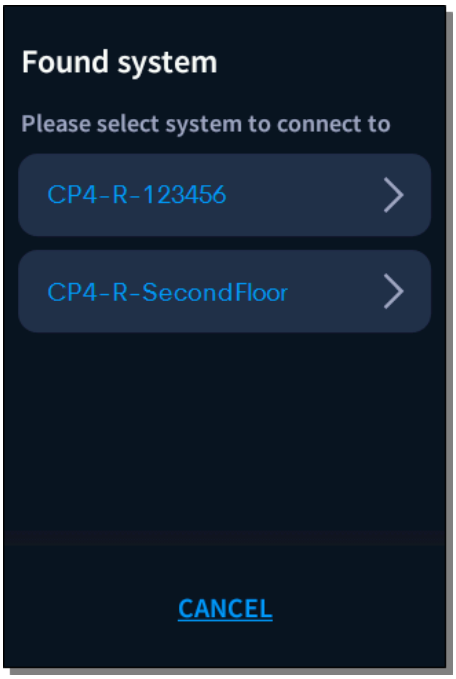
To pair a TSR-310 Handheld Remote:

1. The first time the TSR-310 handheld remote is launched, the splash screen is displayed.

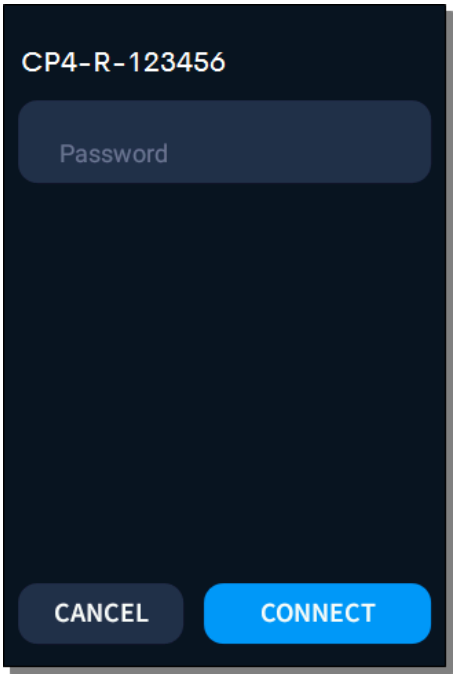


2. Tap **Discover Home** to scan the network for the Crestron Home processor. The **Homes found on this network** screen is displayed and shows the list of available Crestron Home processors on the network. The Hostname and IP Address for each Crestron Home processor is displayed.

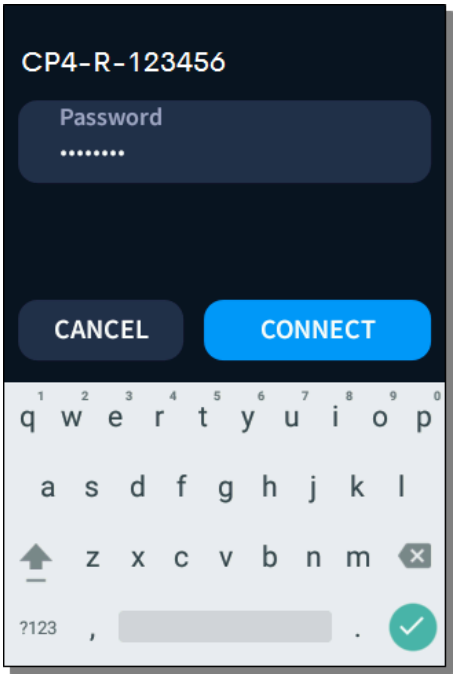
   NOTE: The TSR-310 handheld remote and the Crestron Home processor must be on the same wireless network for the device to be found.



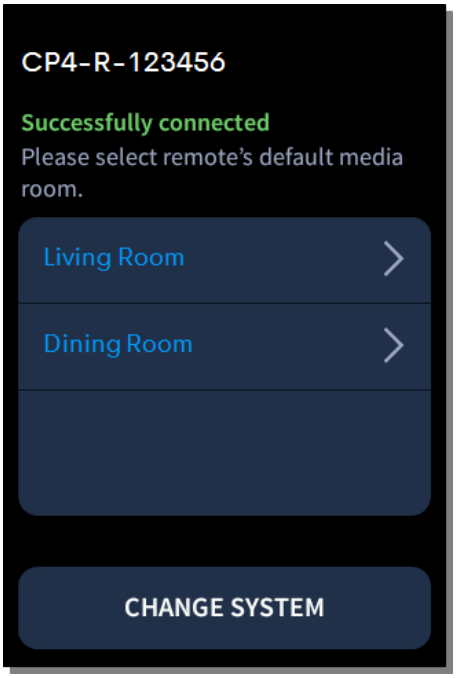
3. Tap the system that you would like to connect to. The password entry screen displays.



4. Enter the User Interface Device Password into the Password field using the on-screen keyboard.



5. Tap **Connect** to add the TSR-310 handheld remote to the Crestron Home system. If the information is valid, the room selection screen is displayed.



6. Select the room that the TSR-310 handheld remote is in. The TSR-310 handheld remote displays the **Home** screen when it is successfully added to the system.

NOTE: If the TSR-310 handheld remote was previously discovered and added to the system during Step 2: Pair Devices on page 38, it will now appear as "TSR-310(Legacy)" in the Crestron Home system. The TSR-310 handheld remote can be safely removed from the system. Refer to Step 2: Pair Devices on page 38 for details.

Appendix D: Configure the Device Settings

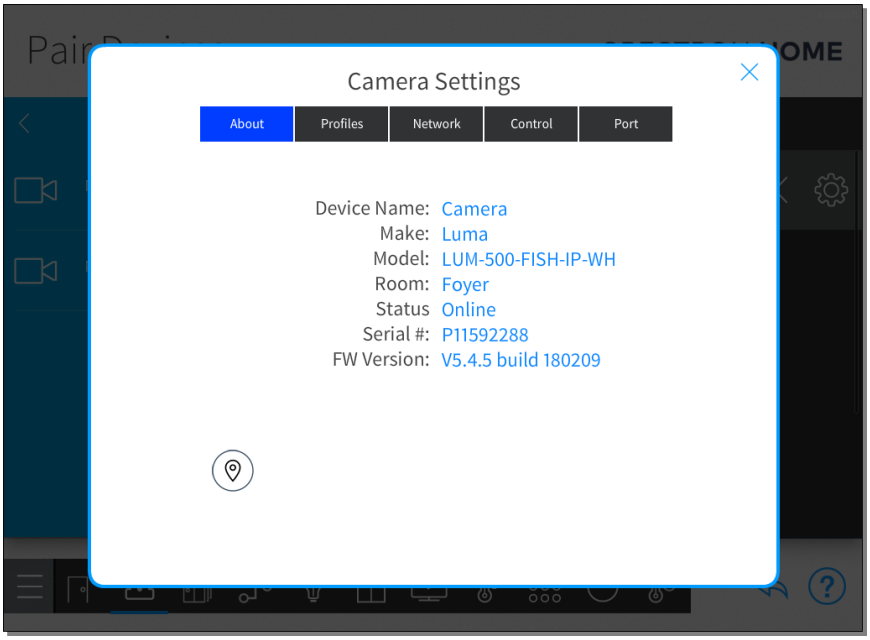
The devices that are added to the Crestron Home OS system may have additional settings that can be configured.

The following devices can be configured:

NOTE: If the settings dialog box contains an **Interrupts** tab, refer to Interrupts on page 467 to configure the interrupt.

Cameras

Tap the gear button next to the device name to display a Settings dialog box for the camera. The **About** tab is selected and displays the device information. The Settings dialog box has additional tabs for **Profiles**, **Network**, **Control**, and **Port**.

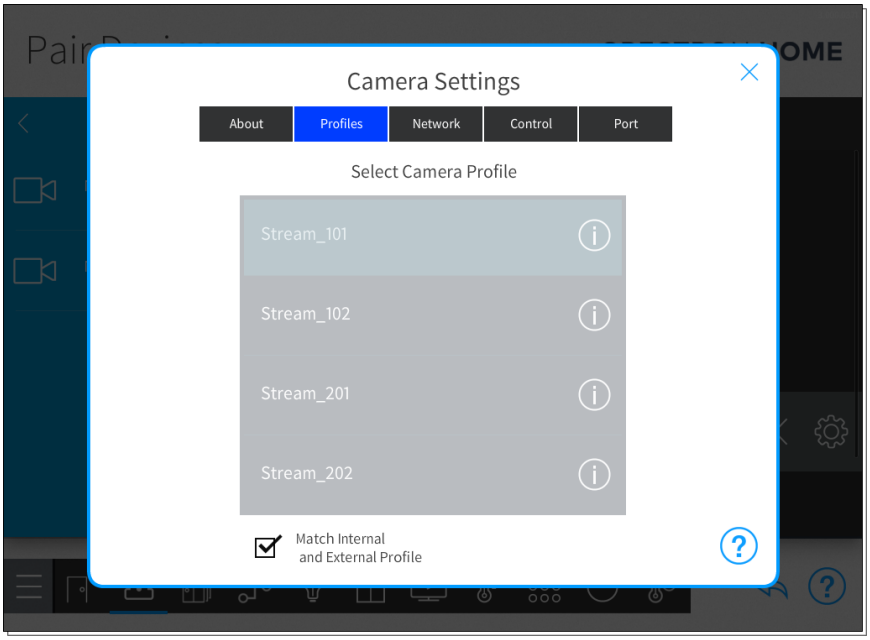


Tap the location button and then the **Preview** button to view the camera's snapshot in your web browser. Use the snapshot to confirm the camera's location.

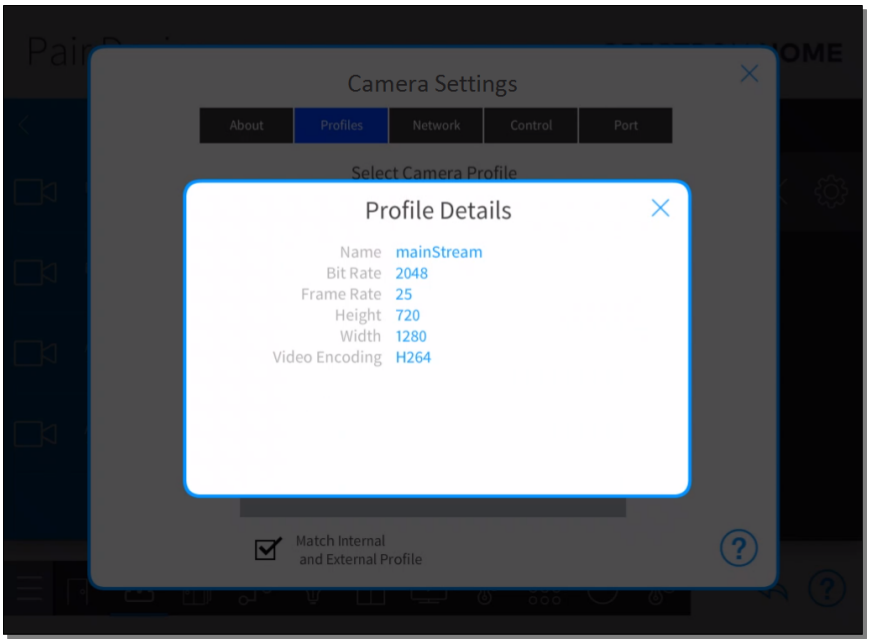
Configure the Camera

Tap the **Profiles** tab to configure the camera profiles. Select the camera profile that you would like to use for the camera.

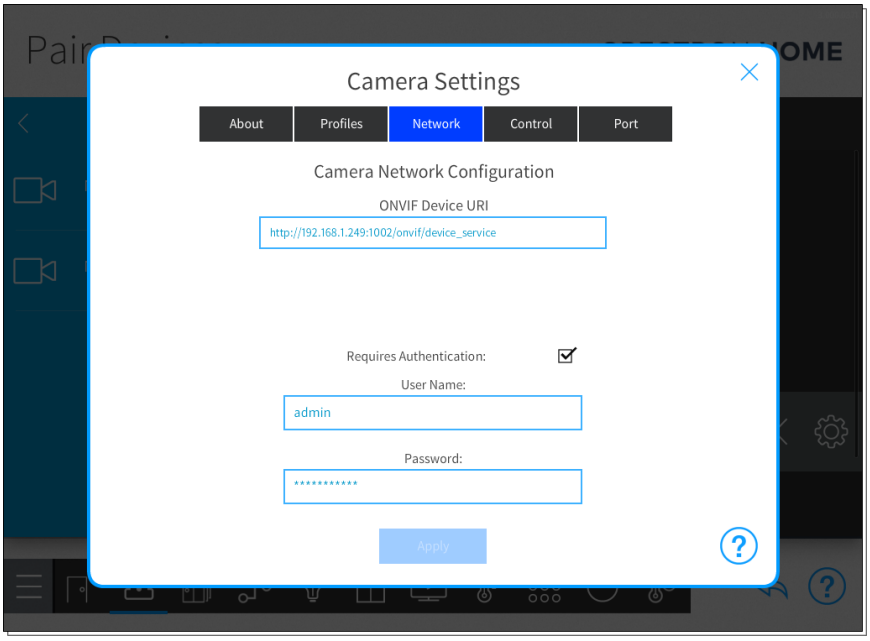
NOTE: Each camera manufacturer provides different profiles for their cameras.



To view information about the camera profile, tap the information button next to the profile name.

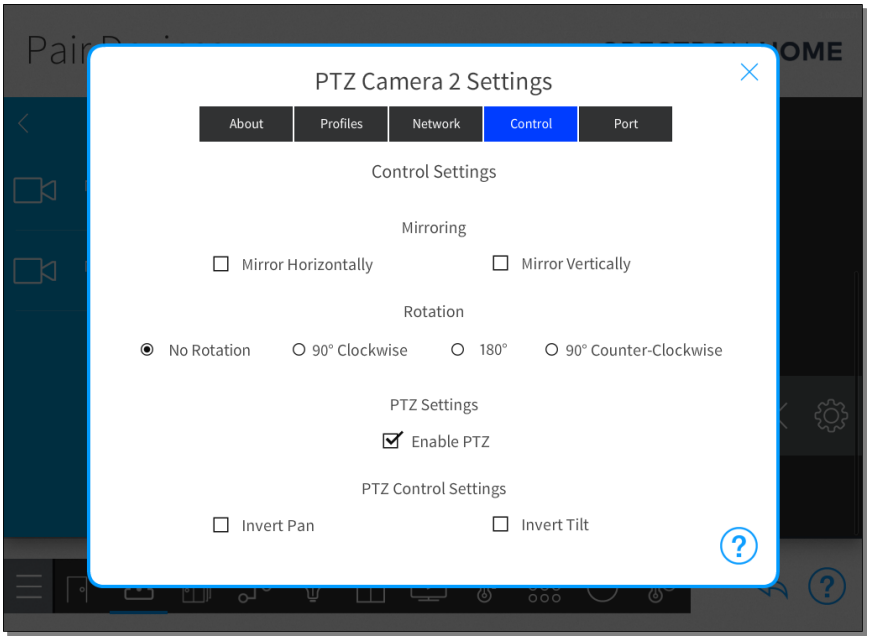


Tap the **Network** tab to configure the camera network configuration.



- **ONVIF Device URI:** Enter the ONVIF device URI that is provided from the camera.
- **Requires Authentication:** If the ONVIF camera requires authentication, select the check box next to **Requires Authentication** and then enter the username and password for the ONVIF camera.

Tap the **Control** tab to configure the camera display in the Crestron Home user interface.



Mirroring:

- **Mirror Horizontally:** Select to mirror the camera display horizontally.
- **Mirror Vertically:** Select to mirror the camera display vertically.

Rotation:

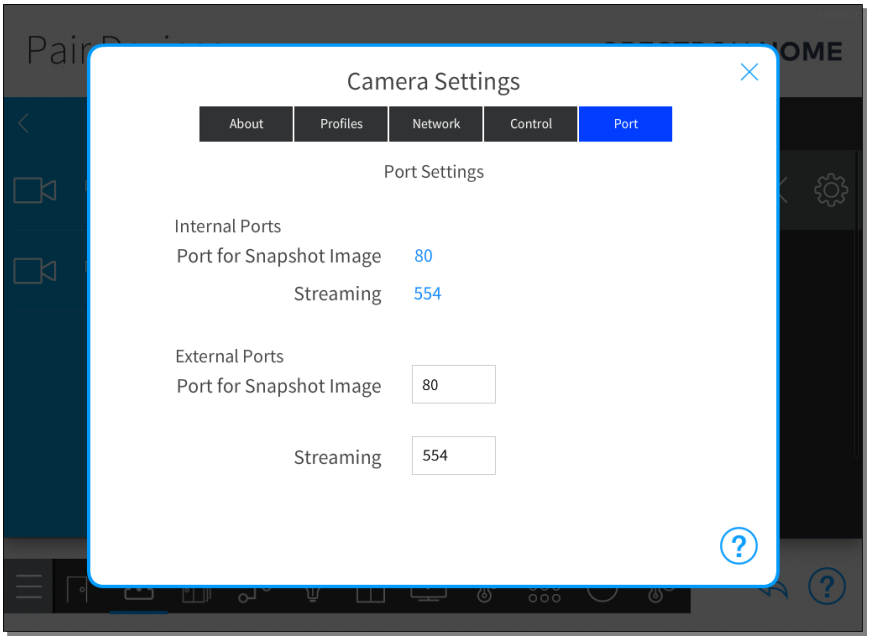
- **No Rotation:** Select to keep the camera display at its default orientation.
- **90° Clockwise:** Select to rotate the camera display 90 degrees clockwise.
- **180°:** Select to rotate the camera display 180 degrees.
- **90° Counter-Clockwise:** Select to rotate the camera display 90 degrees counterclockwise.

PTZ Settings:

NOTE: The PTZ controls are displayed only for cameras that support PTZ.

- **Invert Pan:** Select to invert the pan controls.
- **Invert Tilt:** Select to invert the tilt controls.

Tap the **Port** tab to configure camera port settings.



Port settings are available for **Internal Ports** and **External Ports**. The **Port for Snapshot Image** and **Streaming** are populated when the camera is added to the system. These fields generally do not need to be changed.

NOTES:

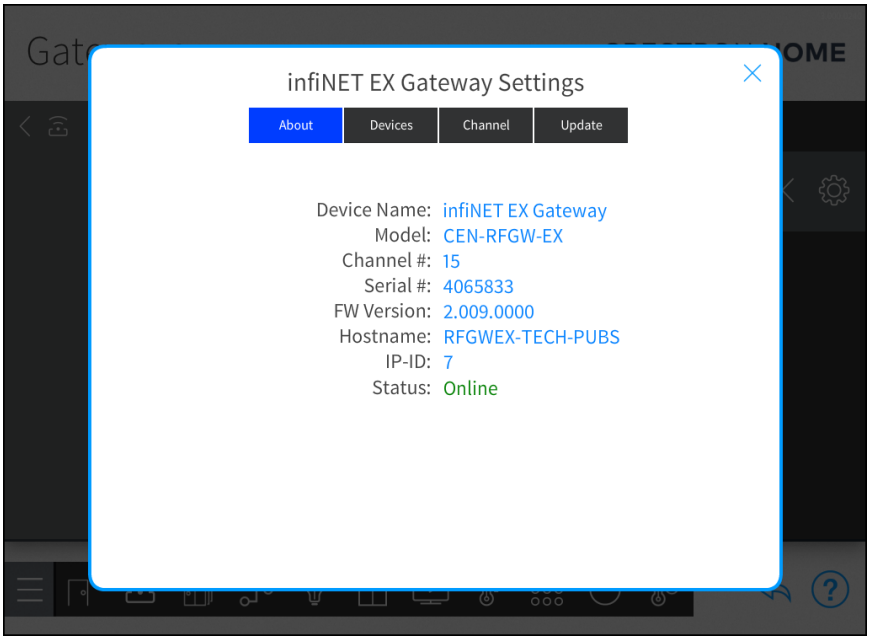
- The external ports are used to view the camera outside of the home.
- A myCrestron.com DNS registration is required to view the camera outside of the home. For details, refer to Enable Remote System Access on page 561

- **Port for Snapshot Image:** The port that is used by the camera for snapshot images. Snapshot images are used for static images within the Crestron Home user interface.
- **Streaming:** The port number that is used by the camera for the Real-Time Streaming Protocol (RTSP). This port allows the camera's DVR to display video within the Crestron Home user interface.

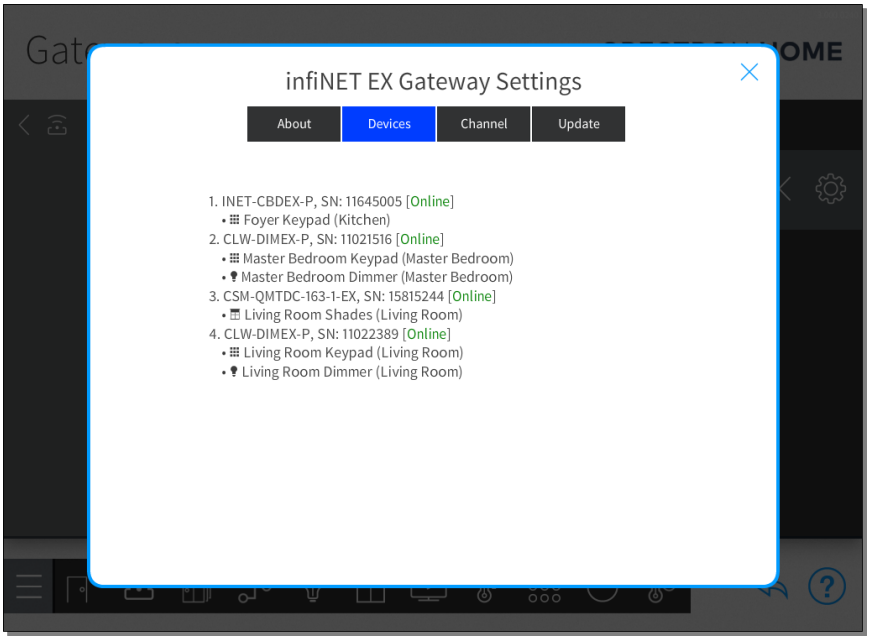
Gateways

Configure an infiNET EX Gateway

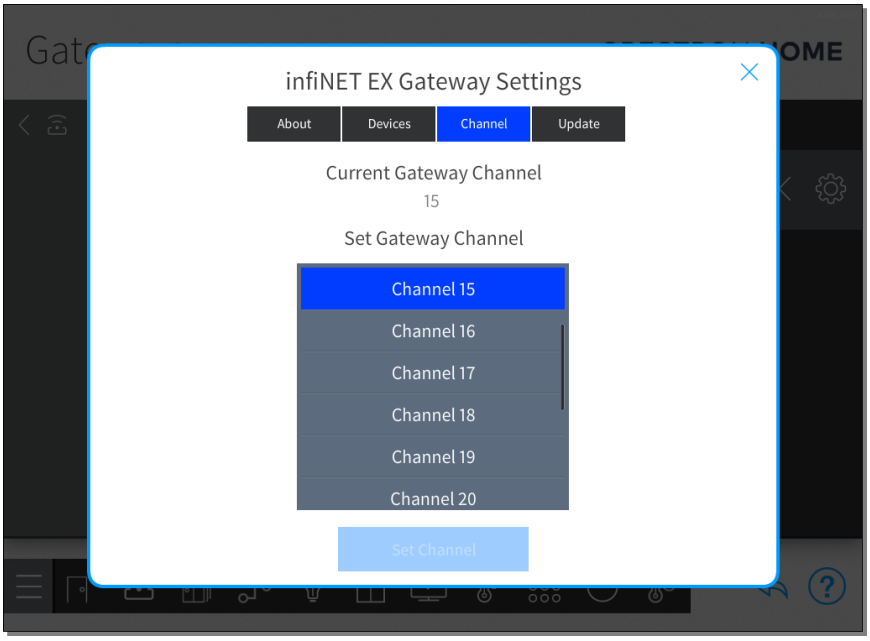
Tap the gear button next to the device name to display a Settings dialog box for the gateway. The **About** tab is selected and displays the device information. The Settings dialog box has additional tabs for **Devices**, **Channel**, and **Update**.



Tap the **Devices** tab to view the devices that are acquired to the gateway. The list of devices include the device name, serial number, device type, room, and network status for each device.

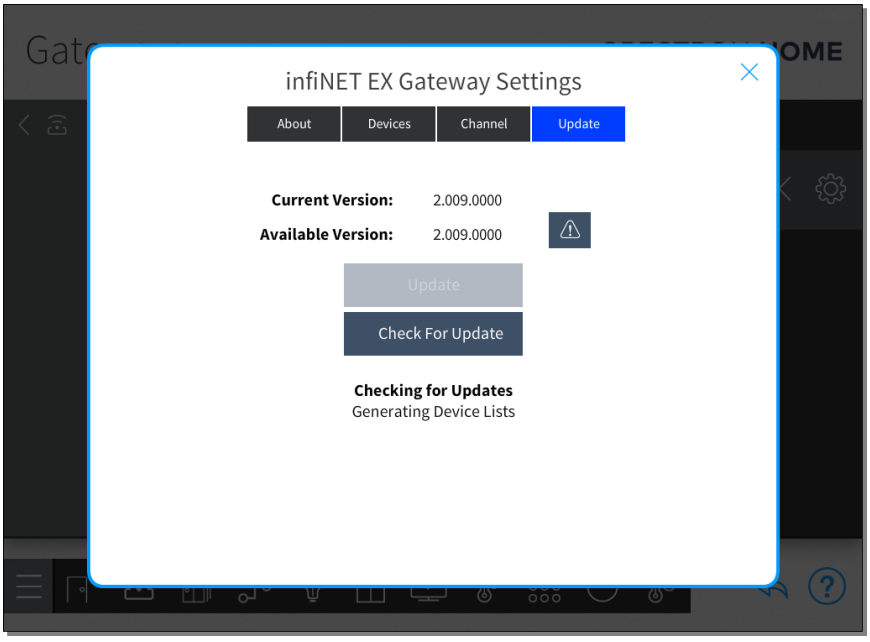


Tap the **Channel** tab to view and configure the RF channel assigned to the gateway.



- **Current Gateway Channel:** Displays the current gateway channel.
- **Set Gateway Channel:** To change the gateway channel, select the gateway channel and then tap **Set Channel**.

Tap the **Update** tab to update the device firmware.



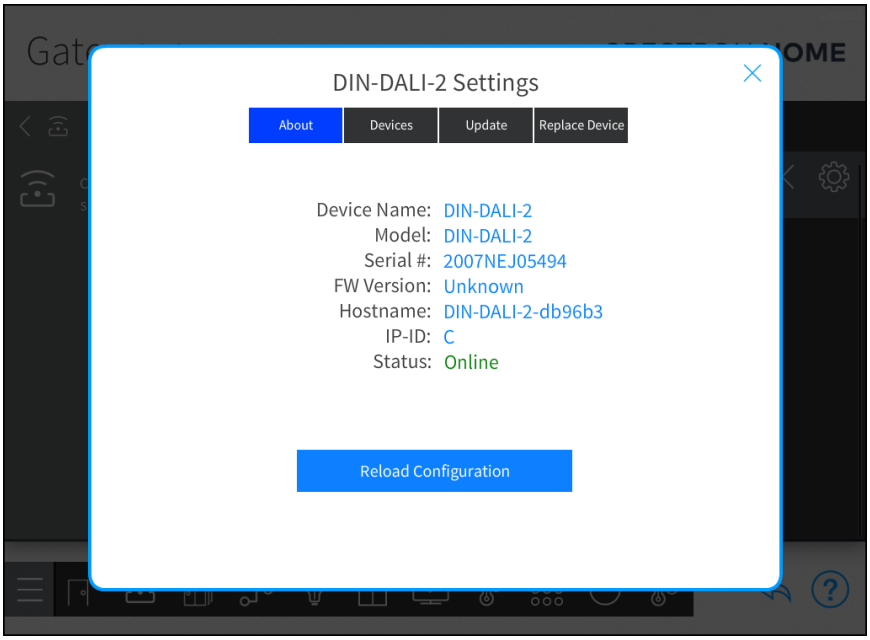
- **Current Version:** Displays the current firmware version for the gateway.
- **Available Version:** Displays the available firmware version for the gateway.
- **Update:** If a firmware update is available, tap Update to update the firmware.

- **Check For Update:** Tap the **Check For Update** button to search for firmware updates for the gateway.

Configure a DIN-DALI-2 Gateway

Tap the gear button next to the device name to display a Settings dialog box for the DIN-DALI-2. The **About** tab is selected and displays the device information. The Settings dialog box has additional tabs for **Devices**, **Update**, and **Replace Device**.

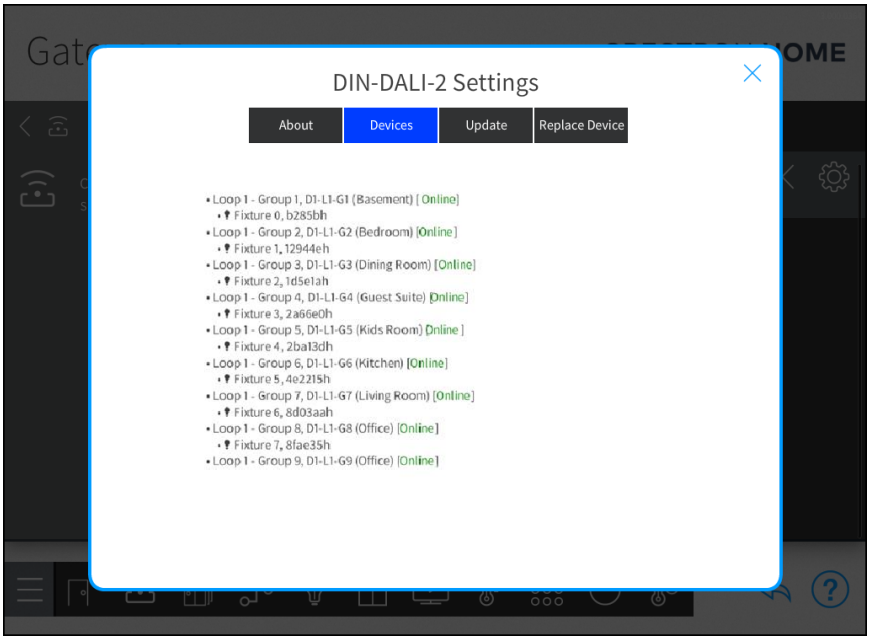
NOTE: The Cresnet® communication port on the DIN-DALI-2 cannot be used in the Crestron Home system. Do not make connections to this port.



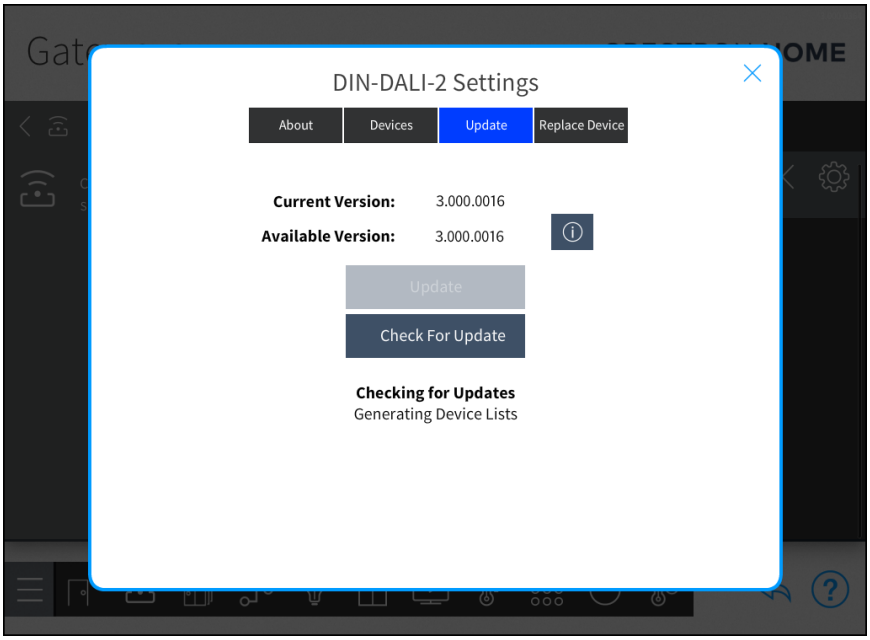
The DALI configuration stored on the DIN-DALI-2 is imported into the Crestron Home system when the DIN-DALI-2 is added. If there were changes to the DALI configuration, tap the **Reload Configuration** button.

Tap the **Devices** tab to view the devices that are acquired to the gateway. The list of devices include the DALI loop and group number, the name of the group in the room, the room where the group is located, and the status of each group. The list also includes the fixture number and the fixture name.

NOTE: The fixture number starts at 0.



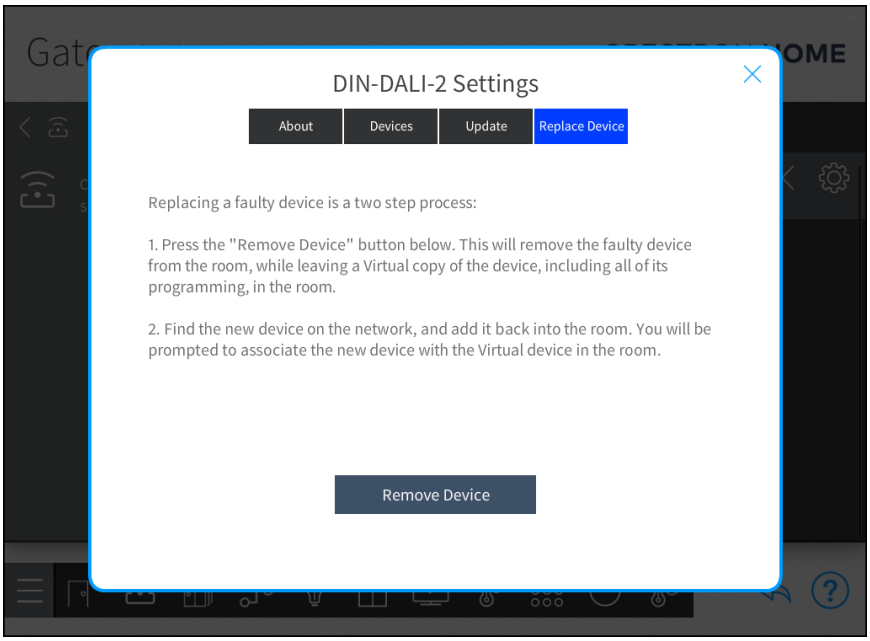
Tap the **Update** tab to update the device firmware.



- **Current Version:** Displays the current firmware version for the gateway.
- **Available Version:** Displays the available firmware version for the gateway.

- **Update:** If a firmware update is available, tap **Update** to update the firmware.
- **Check For Update:** Tap the **Check For Update** button to search for firmware updates for the gateway.

Tap the **Replace Device** tab to replace the DIN-DALI-2.

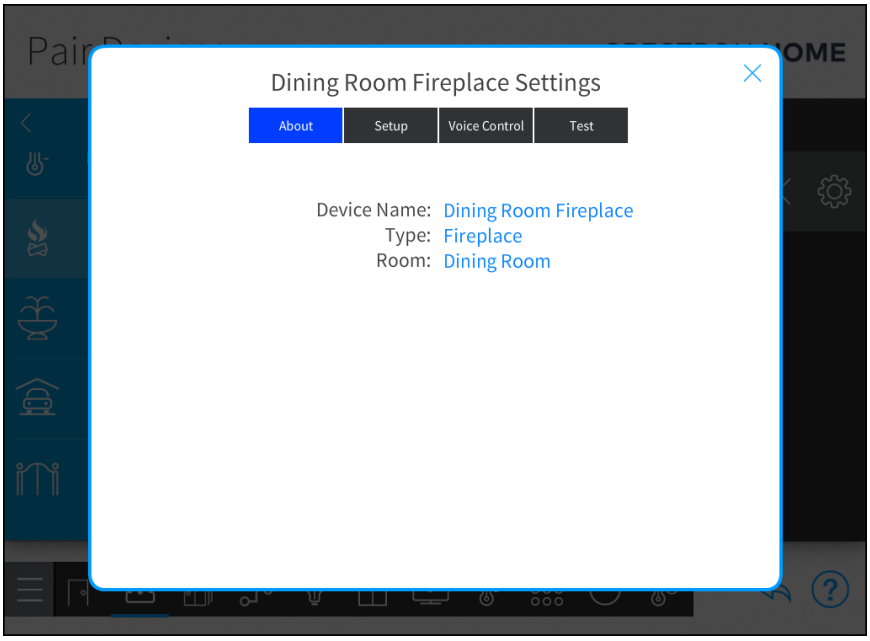


Relay-Controlled Devices

Generic Relay-Controlled Device

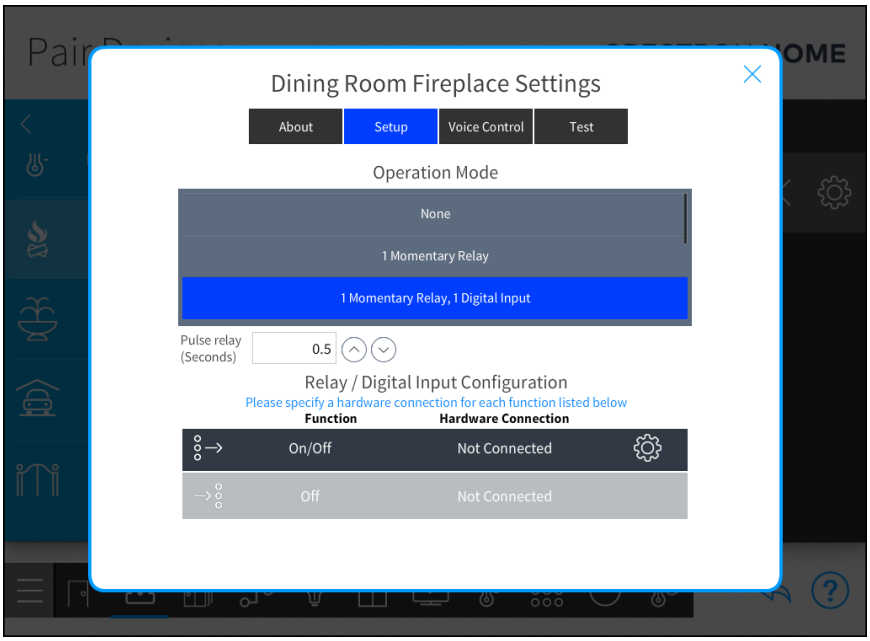
Tap the gear button next to the device name to display a Settings dialog box for the relay-controlled device. The **About** tab is selected and displays the device information. The Settings dialog box has additional tabs for **Setup**, **Voice Control**, and **Test**.

NOTE: The relay device must be installed in the room and wired to the relay port of a paired control device in order to function properly. For more information, refer to the relay device's documentation.



Configure the Generic Relay-Controlled Device

Tap the **Setup** tab to configure the relay controls.



Operation Mode:

- **Momentary:** Momentary relays are used to turn a relay on and off for a set duration.

  Select **1 Momentary Relay** to toggle the relay between the on and off state. Select **2 Momentary Relays** to have one relay enable the on state and the other relay enable the off state.

- **Digital Input:** Digital inputs are used to monitor the device state.

  Select **1 Digital Input** if the device uses one sensor to monitor the on and off state. Select **2 Digital Inputs** if the device uses two sensors to monitor the on and off state; one sensor to monitor the on state and the other sensor to monitor the off state.

- **Latching:** Latched relays are used to turn a relay on and off and remain in the selected state until an inverse command is sent.

- **Pulse relay (Seconds):** Enter how long the momentary relay should be closed (seconds). The time can be set between 0.1 and 3 seconds. The default is 0.5 seconds.

  NOTE: The **Pulse relay (Seconds)** field is not shown when the **Operation Mode** is set to **None** or **1 Latched Relay**.

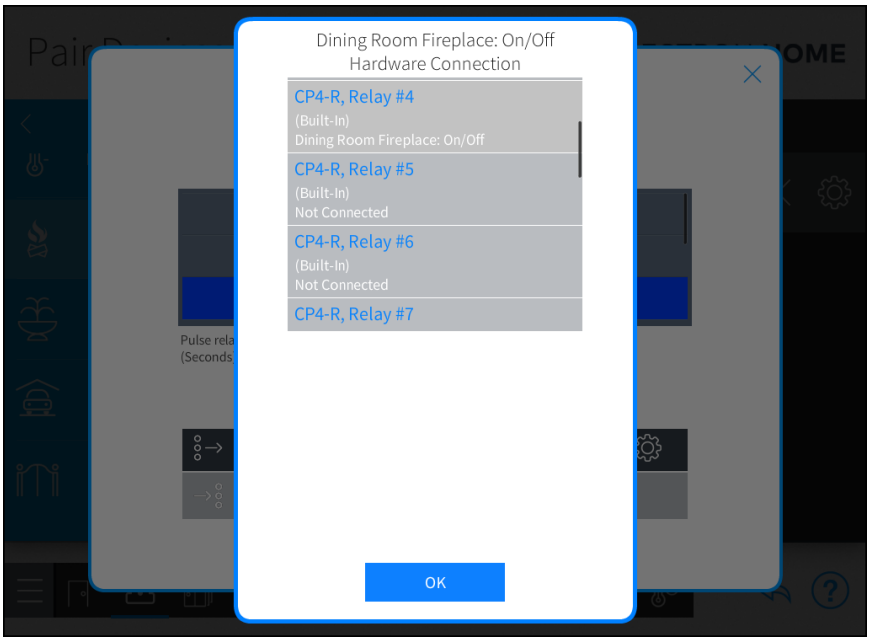
Relay/Digital Input Configuration:

1. Configure the relay(s).

   NOTE: If **2 Momentary Relays** was selected, repeat these steps for both relays.

a. Tap the relay icon ( ) and then tap the gear button .

b. Select the hardware connection where the relay is connected and then tap **OK**.

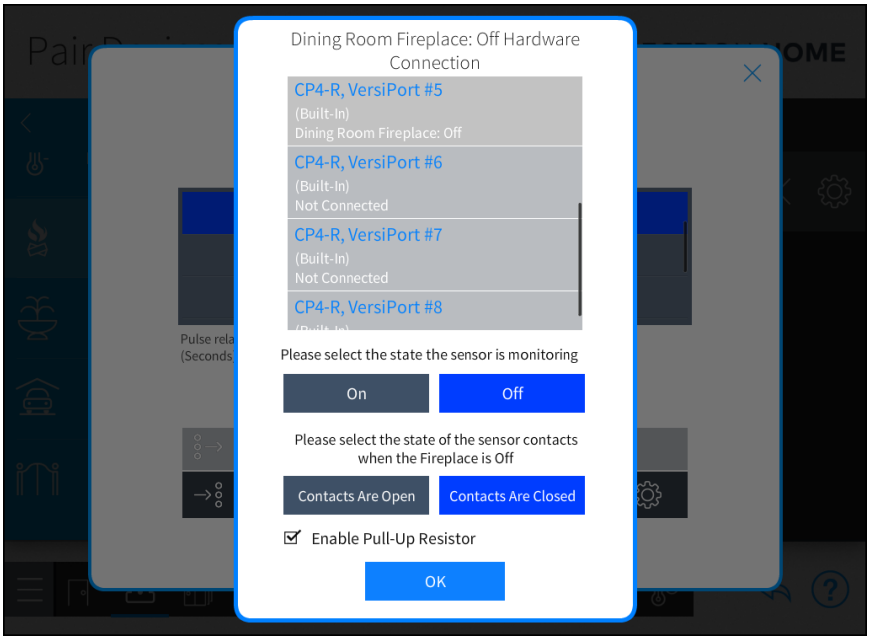


2. Configure the digital input(s).

   NOTE: If **2 Digital Inputs** was selected, repeat these steps for both digital inputs.

   a. Tap the digital input icon ( ) and then tap the gear button .

   b. Select the hardware connection where the relay is connected and then tap **OK**.



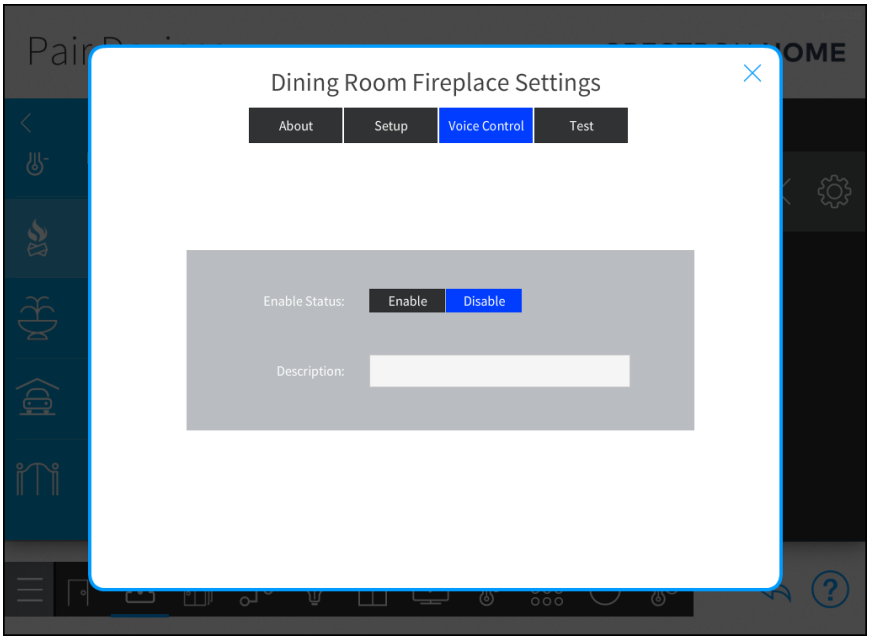
   c. **Sensor Monitoring:** Tap the **On** or **Off** button to select the state that the sensor is monitoring.

      NOTE: **Sensor Monitoring** is not displayed if **2 Digital Inputs** was selected in **Operation Mode**. An entry for **On** and an entry for **Off** is provided in the **Relay/Digital Input Configuration** menu.

   d. **Sensor State:** Tap the **Contacts Are Open** or **Contacts Are Closed** button to select the state of the sensor contacts when **Sensor Monitoring** is set to **On** or **Off**.

   e. **Enable Pull-Up Resistor:** Tap the **Enable Pull-Up Resistor** check box to enable the pull-up resistor.

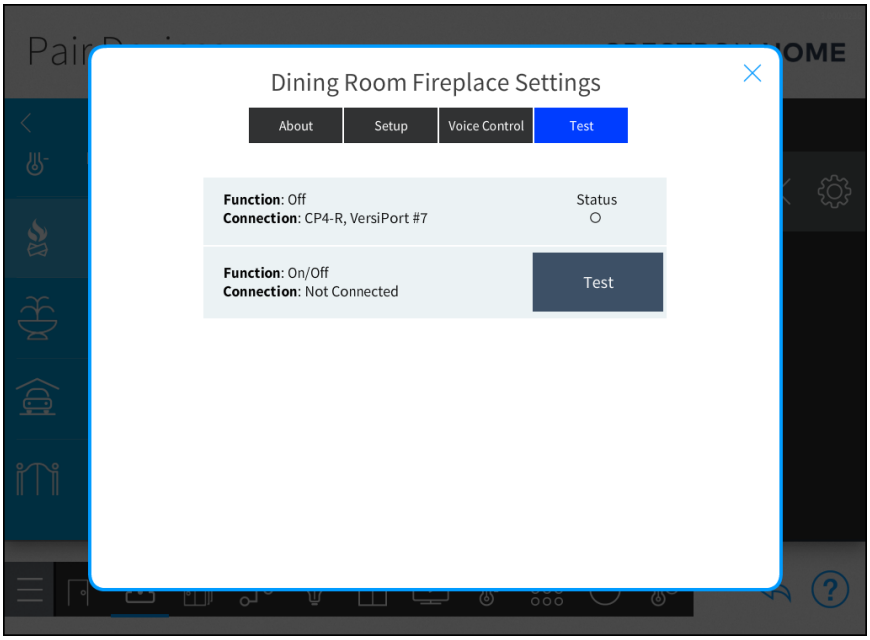
Tap the **Voice Control** tab to configure the voice control settings.



- **Enable Status:** Tap **Enable** to enable voice control services for this device or **Disable** to disable voice control services for this device.
- **Description:** Enter a descriptive name for this device. The name is used by the voice control services.

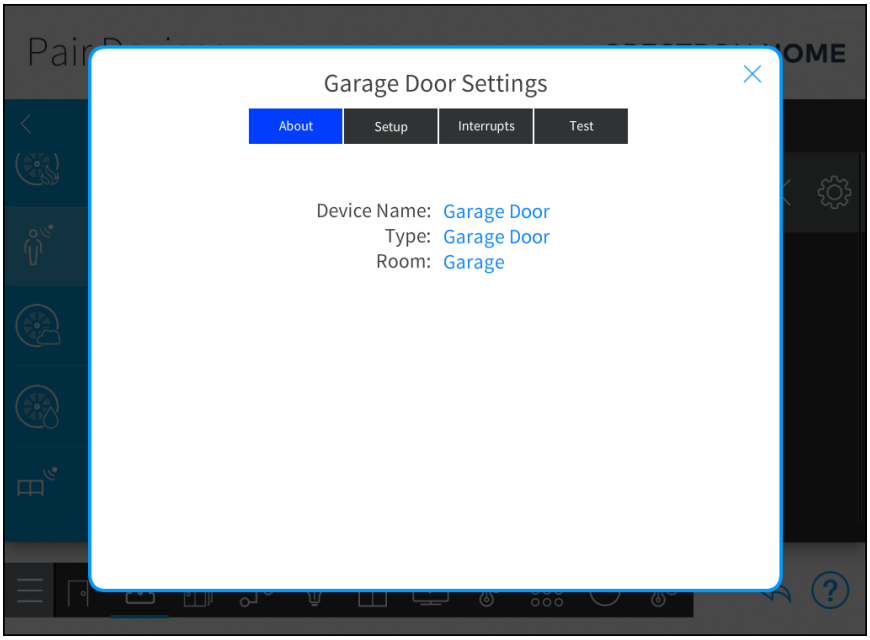
Tap the **Test** tab to view and test the relay-controlled device.

NOTE: The hardware connection for the relay behavior(s) must be configured before they may be tested.



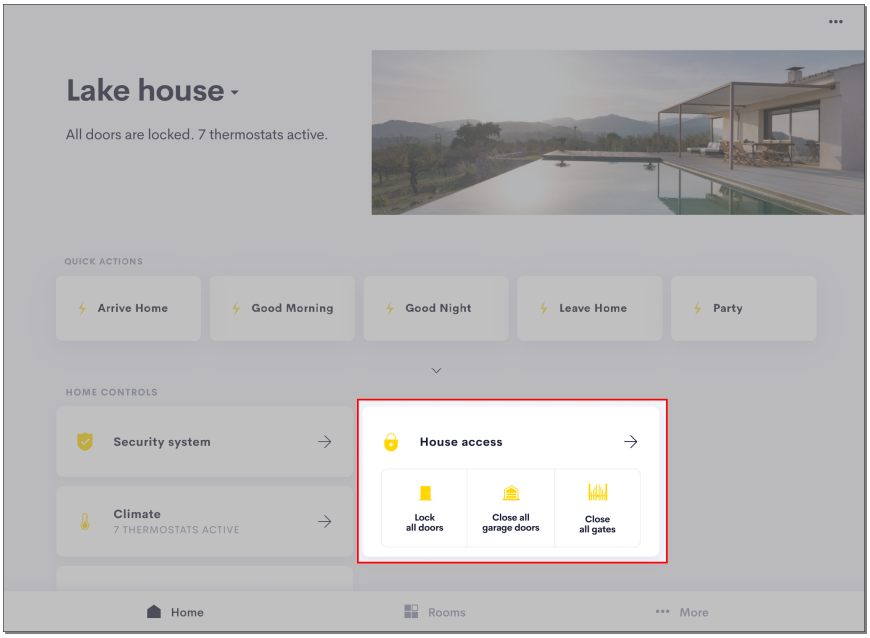
Gates and Garage Doors

Tap the gear button next to the device name to display a Settings dialog box for the garage door or gate. The **About** tab is selected and displays the device information. The Settings dialog box has additional tabs for **Setup**, **Interrupts**, and **Test**.



Configure the Garage Door

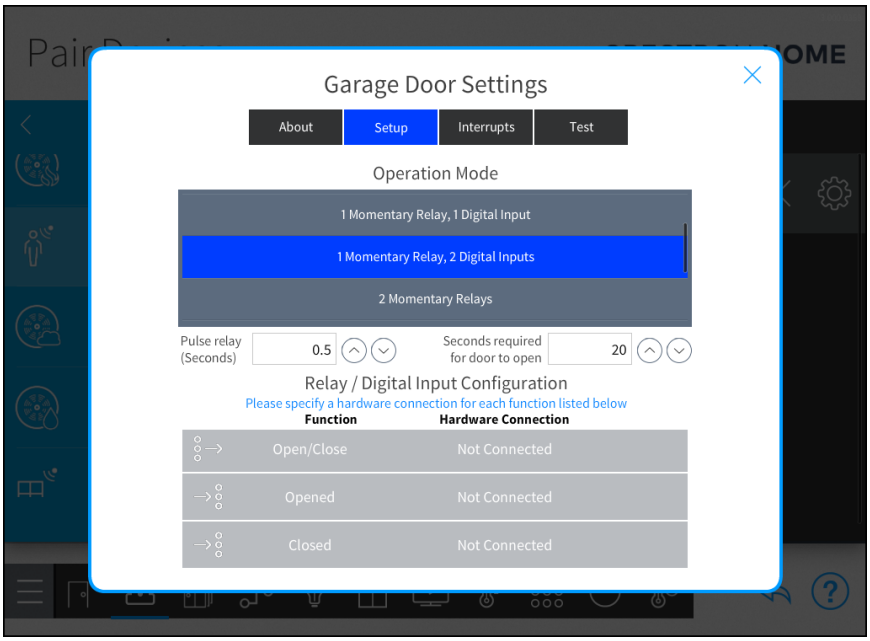
The Crestron Home user interface is capable of displaying the status of all garage doors, gates, and locks in the system. It also provides Open All and Close All functionality to provide one-press control of all device types.



NOTES:

- To enable the Open All and Close All functions and to display the garage door status in the Crestron Home OS user interface, every garage door in the system must utilize at least one sensor to monitor the garage door position. When one sensor is used, the sensor must monitor the closed position of the garage door.
- The following configurations are not valid selections:
  - None
  - 1 Latched Relay
  - 1 Momentary Relay, 1 Digital Input that monitors the opened state

Tap the **Setup** tab to configure the garage door.



Pulse relay (Seconds): Enter how long the momentary relay should be closed (seconds). The time can be set between 0.1 and 3 seconds. The default is 0.5 seconds.

NOTE: The **Pulse relay (Seconds)** field is not shown when the **Operation Mode** is set to **None** or **1 Latched Relay**.

Seconds required for door to open: Enter the typical time (seconds) that it takes for the garage door to open or close. This is used to stop the transition state when the garage door does not reach a monitored position. The default is 20 seconds.

Operation Mode: Select the number of momentary relays and the number of digital inputs (for example, VersiPorts).

NOTE: Certain garage door configurations do not provide adequate feedback to the control processors. As a result, garage door feedback may not be provided to the customer in the Crestron Home app. A notification will display to describe the feedback

that will be provided to the customer.

- **Momentary:** Momentary relays are used to open and close the garage door.

  Select **1 Momentary Relay** if the garage door uses one button to open and close the garage door. Select **2 Momentary Relays** if the garage door uses two buttons, one to open the garage door and one to close the garage door.

- **Digital Input:** Digital inputs are used to monitor the open or close state of the garage door.

  Select **1 Digital Input** if the garage door uses one sensor to monitor the garage door position. The sensor must be installed and configured to monitor the closed position of the garage door. Select **2 Digital Inputs** if the garage door uses two sensors to monitor the open and close state; one sensor to monitor the open state and the other sensor to monitor the close state.

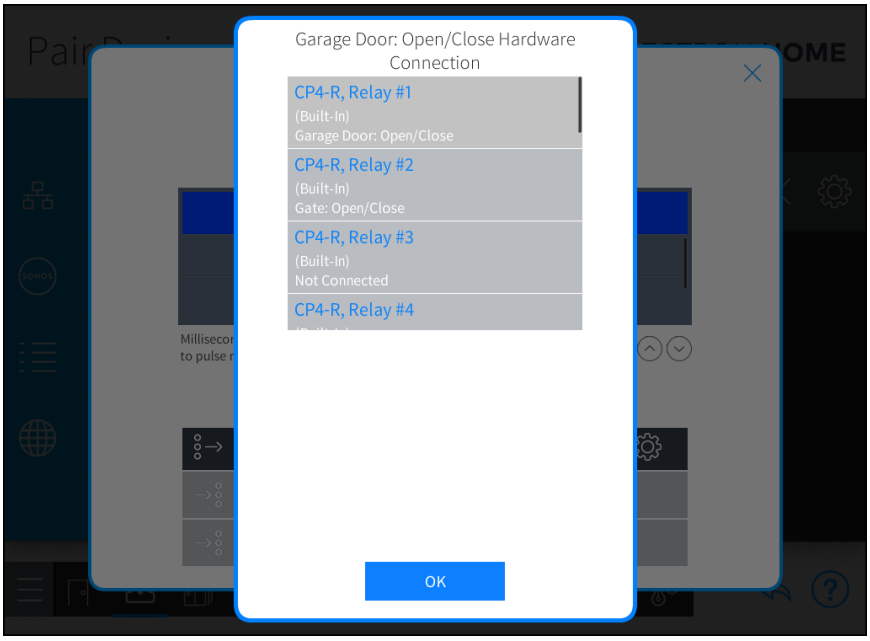
Relay/Digital Input Configuration: Assign a function to each momentary relay and digital input that was selected in **Operation Mode**.

NOTE: The procedure below shows a garage door that is configured with **1 Momentary Relay, 2 Digital Inputs**. When the momentary relay is engaged, the garage door opens or closes depending on the garage door's last state. The first digital input senses when the garage door is open and the second digital input senses when the garage door is closed.

- **Configure the Momentary Relay(s):**
  1. Tap the gear button  next to the **Open/Close** relay. The **Open/Close Hardware Connection** dialog appears.

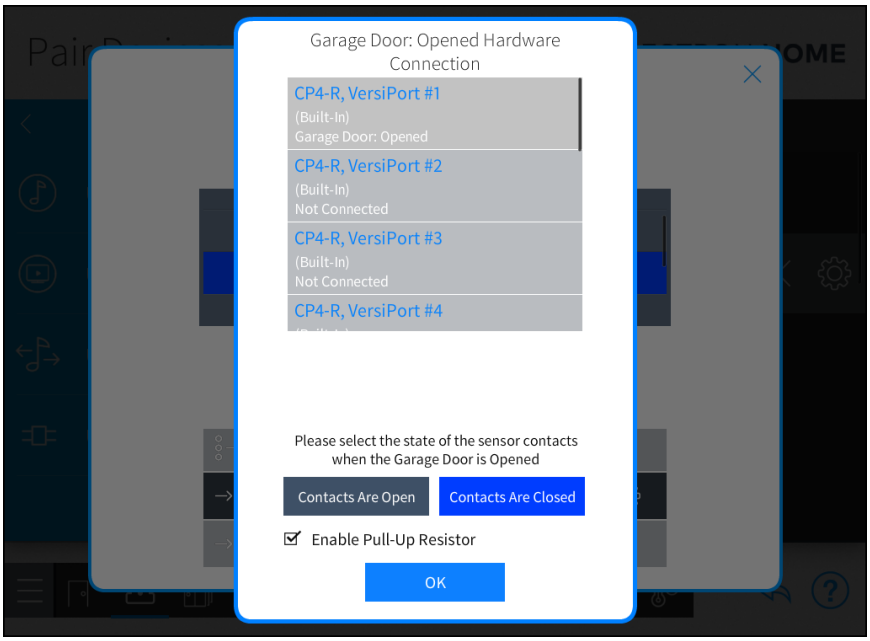
     NOTE: If **2 Momentary Relays** was selected in **Operation Mode**, configure one momentary relay to open the garage door and the other momentary relay to close the garage door.

2. Select the relay that the garage door is connected to and then tap **OK**.



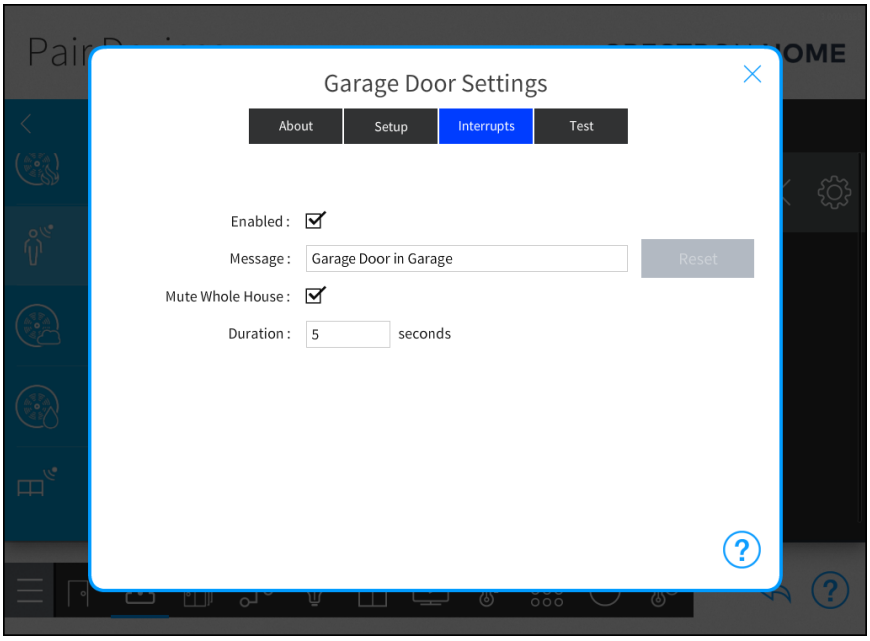
- **Configure the Digital Input(s):**
  1. Tap the gear button next to the **Opened** digital input. The **Opened Hardware Connection** dialog appears.
  2. Select the digital input (VersiPort) number that is monitoring the open state of the garage door.
  3. Select **Contacts Are Open** or **Contacts Are Closed** to select the state of the sensor contacts when the garage door is opened or closed.

     NOTE: If **1 Digital Input** is selected in **Operation Mode**, select the state (**Opened** or **Closed**) that the sensor is monitoring.
  4. Select the check box next to **Enable Pull-Up Resistor** to enable the pull-up resistor.
  5. Tap **OK**.



  6. Repeat steps 1 and 2 for the **Closed** digital input.

Tap the **Interrupts** tab to configure the garage door interrupts.



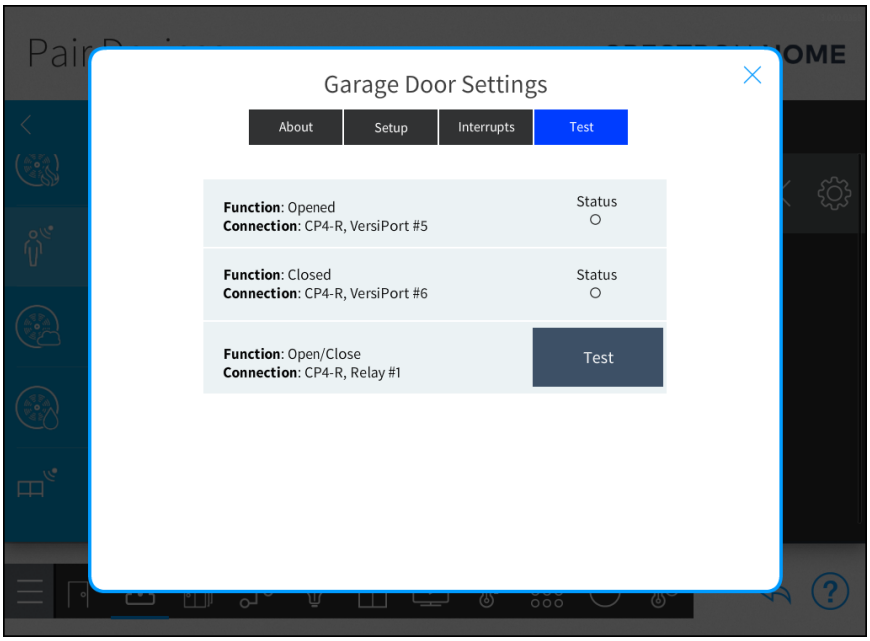
NOTE: Touch screens that do not have speakers display the interrupt messages but cannot play the associated sound.

- **Enabled:** To enable or disable the interrupt for the device, tap the check box next to **Enabled**. When an interrupt is enabled, it is displayed in the Crestron Home user interface.
- **Message:** The message that is displayed on the user interface device when the interrupt occurs. The default interrupt message is "[Device Name] in [room]".

  To display a custom message, enter the message in the field. Tap the **Reset** button to revert to the default message.
- **Mute Whole House:** To mute the audio that is playing in any media room, tap the check box next to **Mute Whole House**. The audio is muted for the time set in the **Duration** field. The default **Mute Whole House** setting is enabled.
- **Duration:** The length of time that the audio in the room is muted. The duration can be set between 1 and 60 seconds. The default duration is 5 seconds.

Test the Garage Door

Tap the **Test** tab to verify that the garage door functions properly.

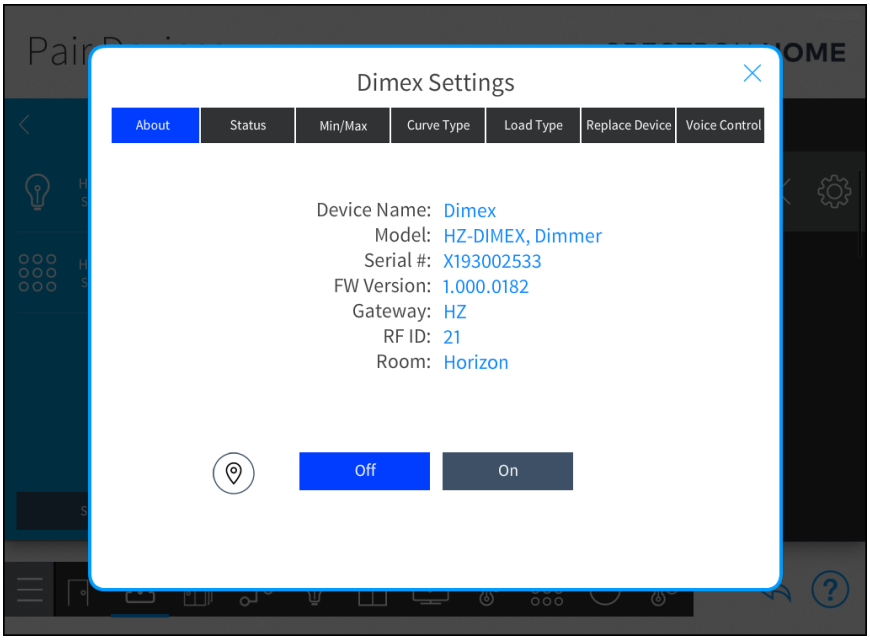


Tap the **Test** buttons that are associated with the open and close relays. The opened and closed status is indicated in the **Status** field.

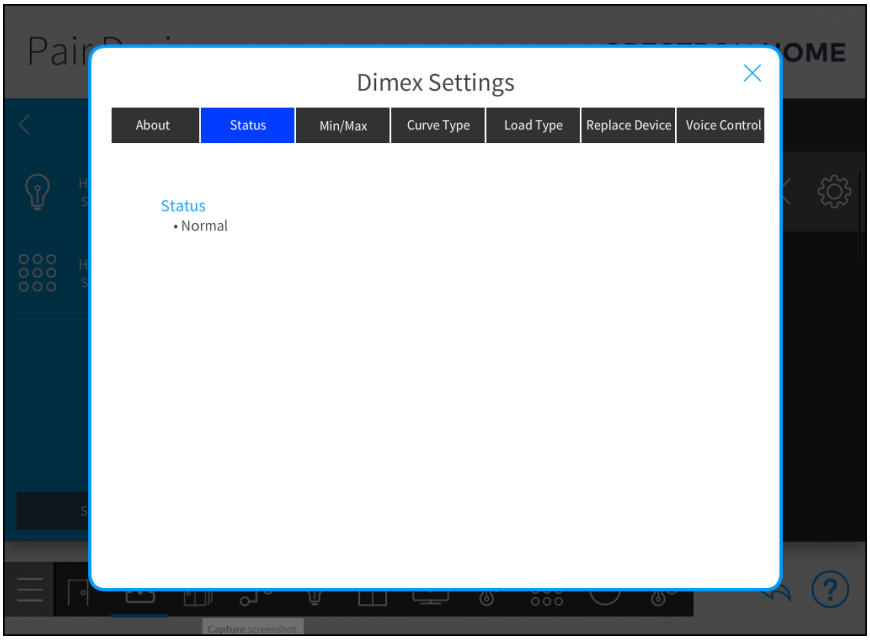
Lighting Load Controllers

Configure the Horizon Dimmers and Switches

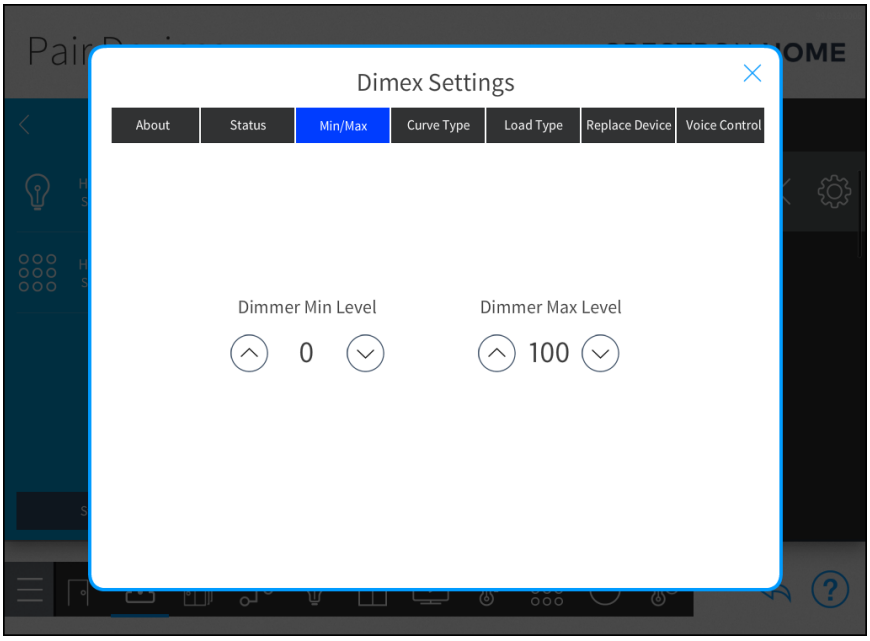
Tap the gear button next to the device name to display a Settings dialog box for the dimmer or switch. The **About** tab is selected and displays the device information. The Settings dialog box has additional tabs for **Status**, **Min/Max**, **Curve Type**, **Load Type**, **Replace Device**, and **Voice Control**.



Tap the **Status** tab to view the status of the dimmer or switch.



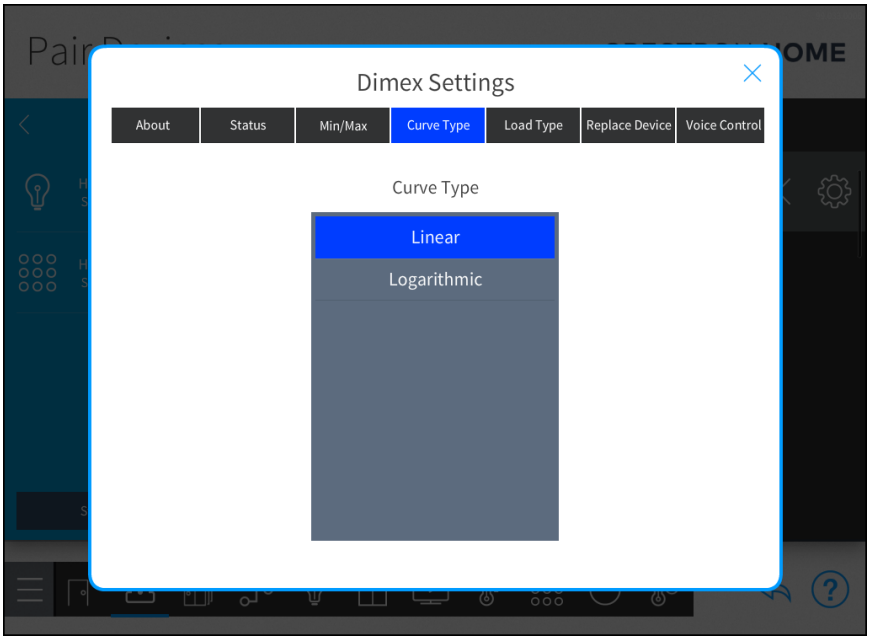
Tap the **Min/Max** tab to configure the minimum and maximum dimmer level.



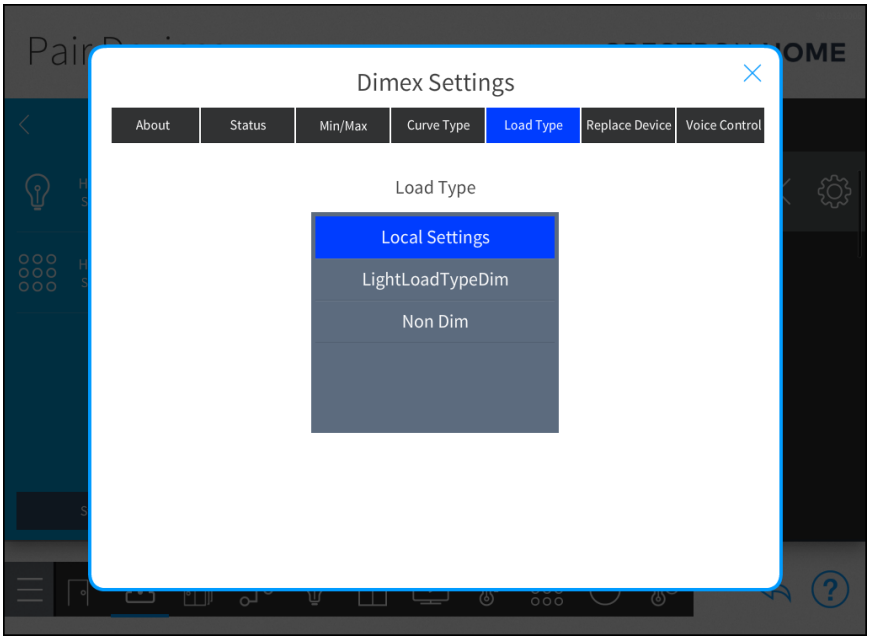
Set the **Dimmer Min Level** and **Dimmer Max Level**:

- **Dimmer Min Level:** The lowest level that the lights will dim to. This may help prevent flickering at low levels.
- **Dimmer Max Level:** The highest level that the lights will raise to. This will prevent the lights from being too bright in the room when at full brightness.

Tap the **Curve Type** tab to configure the curve type that is used to dim the load. Select **Linear** or **Logarithmic** based on the load type.



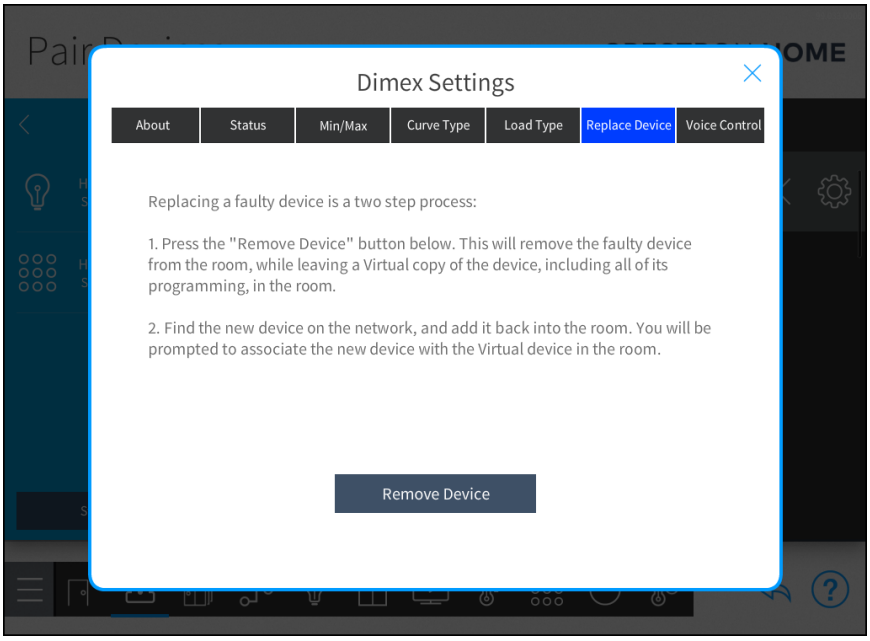
Tap the **Load Type** tab to match the type of load that is connected to the dimmer.



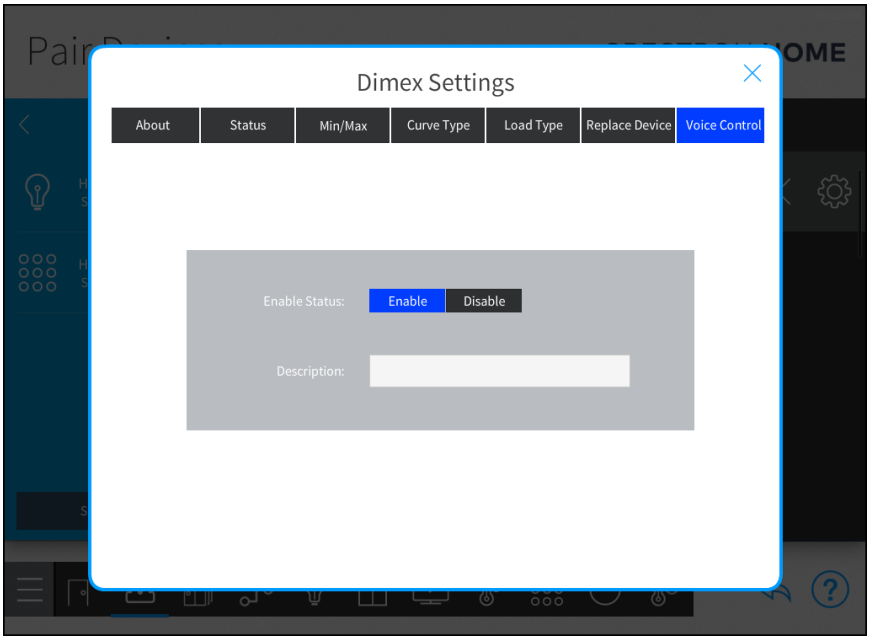
Set the **Load Type**:

- **Local Settings:** Uses the settings that are defined locally on the dimmer.
- **LightLoadTypeDim:** The load type is dimmable. The dimmer can raise and lower the light levels between full off (0%) and full on (100%). Overrides the functionality set on the dimmer.
- **Non Dim:** The load type is not dimmable. The dimmer acts like a switch and toggles the load between full on (100%) and full off (0%). Ramp and fade times are ignored. Overrides the functionality set on the dimmer.

Tap the **Replace Device** tab to replace the dimmer.



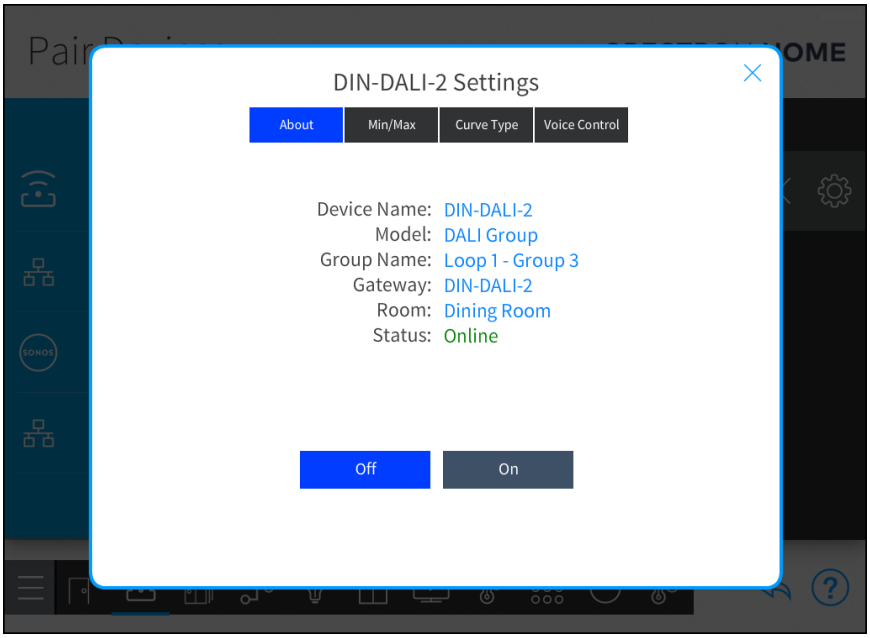
Tap the **Voice Control** tab to change the voice control settings.



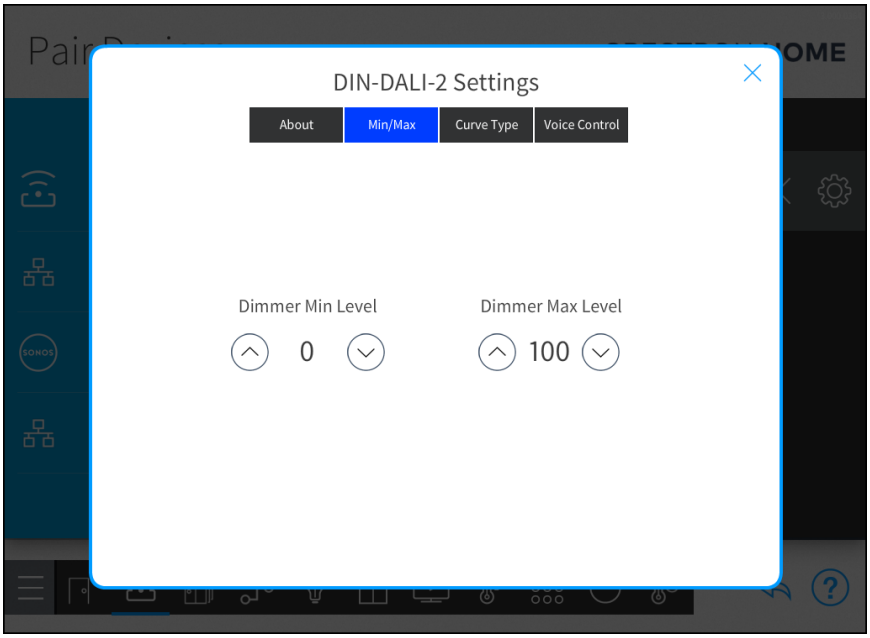
- **Enable Status:** Tap **Enable** to enable voice control services for this device or **Disable** to disable voice control services for this device.
- **Description:** Enter a descriptive name for this device. The name is used by the voice control services.

Configure the DIN-DALI-2 Groups (Loads)

Tap the gear button next to the device name to display a Settings dialog box for the DIN-DALI-2 group (load). The **About** tab is selected and displays the device information. The Settings dialog box has additional tabs for **Min/Max**, **Curve Type**, and **Voice Control**.



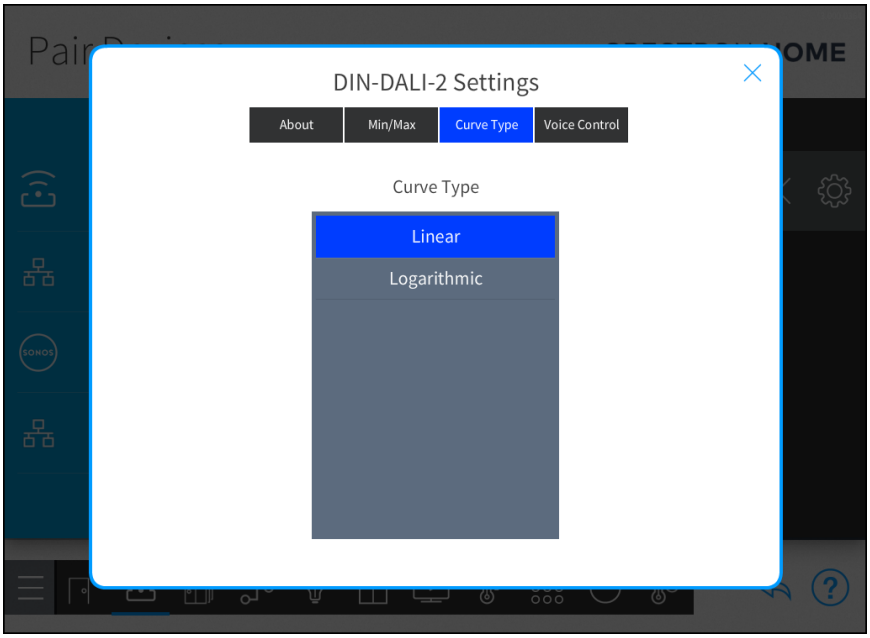
Tap the **Min/Max** tab to configure the minimum and maximum dimmer level.



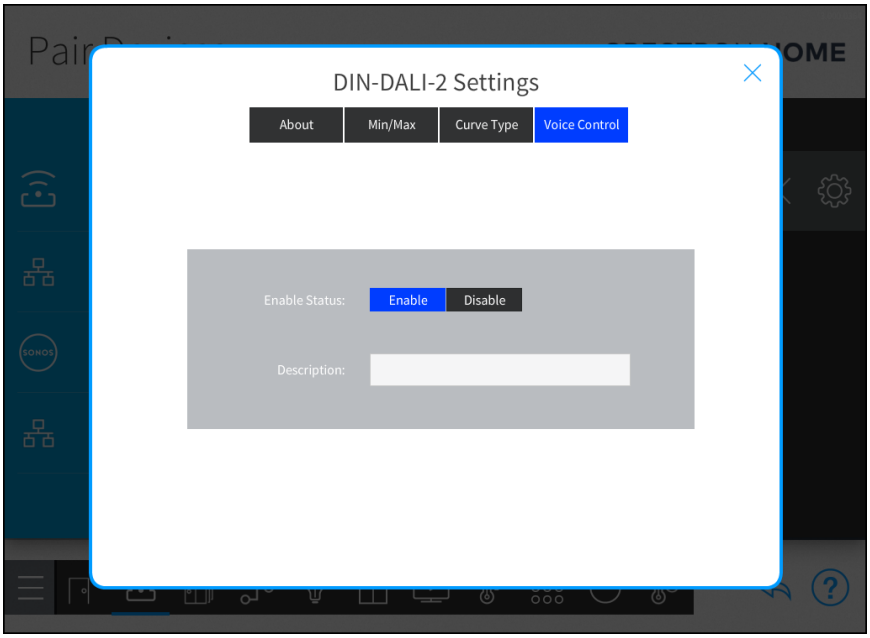
Set the **Dimmer Min Level** and **Dimmer Max Level**:

- **Dimmer Min Level:** The lowest level that the lights will dim to. This may help prevent flickering at low levels.
- **Dimmer Max Level:** The highest level that the lights will raise to. This will prevent the lights from being too bright in the room when at full brightness.

Tap the **Curve Type** tab to configure the curve type that is used to dim the load. Select **Linear** or **Logarithmic** based on the load type.



Tap the **Voice Control** tab to change the voice control settings.

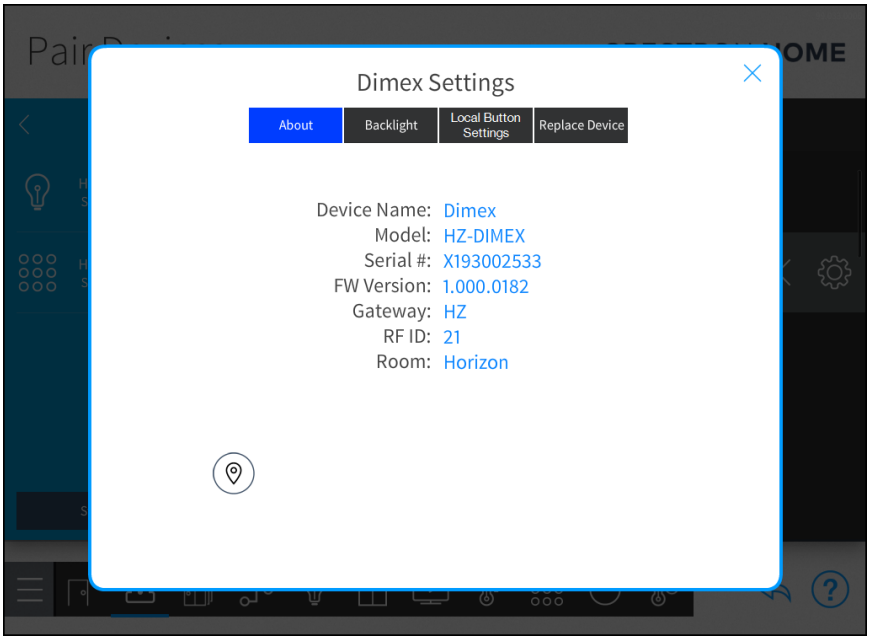


- **Enable Status:** Tap **Enable** to enable voice control services for this device or **Disable** to disable voice control services for this device.
- **Description:** Enter a descriptive name for this device. The name is used by the voice control services.

Keypads

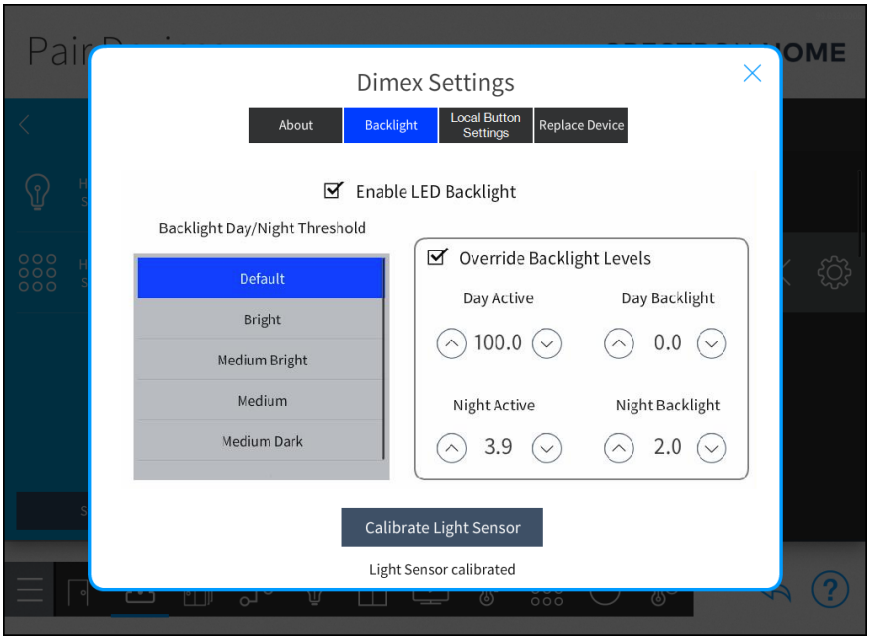
Configure the Device Settings for Horizon Keypads

Tap the gear button next to the device name to display a Settings dialog box for the keypad. The **About** tab is selected and displays the device information. The Settings dialog box has additional tabs for **Backlight**, **Local Button Settings**, and **Replace Device**.



Configure the LED Backlight

Tap the **Backlight** tab to configure the LED backlight for the buttons.



Enable the LED Backlight

To enable the LED backlight for the buttons, tap the **Enable LED Backlight** check box.

Set the Backlight Day/Night Threshold

The light sensor on the keypad monitors the ambient light level in the room in order to adjust the brightness of the LEDs. The **Backlight Day/Night Threshold** setting controls when the keypad switches between **Day** mode and **Night** mode.

The keypad enters **Day** mode when the ambient light level raises above the threshold. When the keypad is in **Day** mode, the brightness of the LED raises to allow the LED to be seen in a bright environment. The keypad enters **Night** mode when the ambient light level in the room drops the threshold. When the keypad is in **Night** mode, the brightness of the LED lowers to prevent the LED from appearing too bright.

The **Default** setting switches between **Day** mode and **Night** mode based on the readings obtained when the ambient light sensor calibration is performed. The **Bright**, **Medium Bright**, **Medium**, **Medium Dark**, and **Dark** settings override the calibration setting and used fixed thresholds. When set to **Bright**, the keypad switches between **Day** mode and **Night** mode when the room is at a very low brightness level. This setting may be ideal when the room has very light colored walls and floors. When set to **Dark**, the keypad switches between **Day** mode and **Night** mode when the room is close to pitch black. This setting may be ideal when the room has very dark colored walls and floors. The **Medium Bright**, **Medium**, and **Medium Dark** settings scale linearly between **Bright** and **Dark**.

Override the LED Backlight Levels

To override the default LED backlight levels:

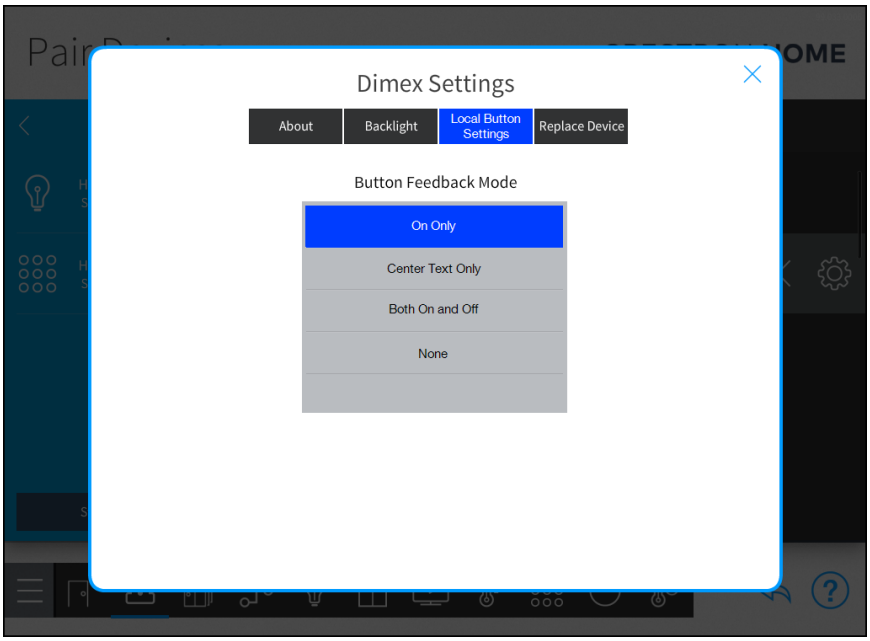
1. Tap the **Override Backlight Levels** check box.
2. Set the LED backlight levels. Tap the up or down arrows to increment the values by 0.1% or tap and hold the button to increment the values by 1%.
    - **Day Active:** The LED backlight level when the button feedback is on and keypad is in **Day** mode.
    - **Night Active:** The LED backlight level when the button feedback is on and keypad is in **Night** mode.
    - **Day Backlight:** The LED backlight level when there is no button feedback and keypad is in **Day** mode.
    - **Night Backlight:** The LED backlight level when there is no button feedback and keypad is in **Night** mode.

Calibrate the Light Sensor

To calibrate the light sensor, tap the **Calibrate Light Sensor button**. The faceplate and trim pieces must be installed on the Horizon keypad before the calibration process is performed. While the calibration process is running, avoid blocking the light sensor on the bottom of the keypad; the light sensor should remain unobstructed and free of direct light.

Local Button Settings

Tap the **Local Button Settings** tab to configure the LED feedback for the local button.

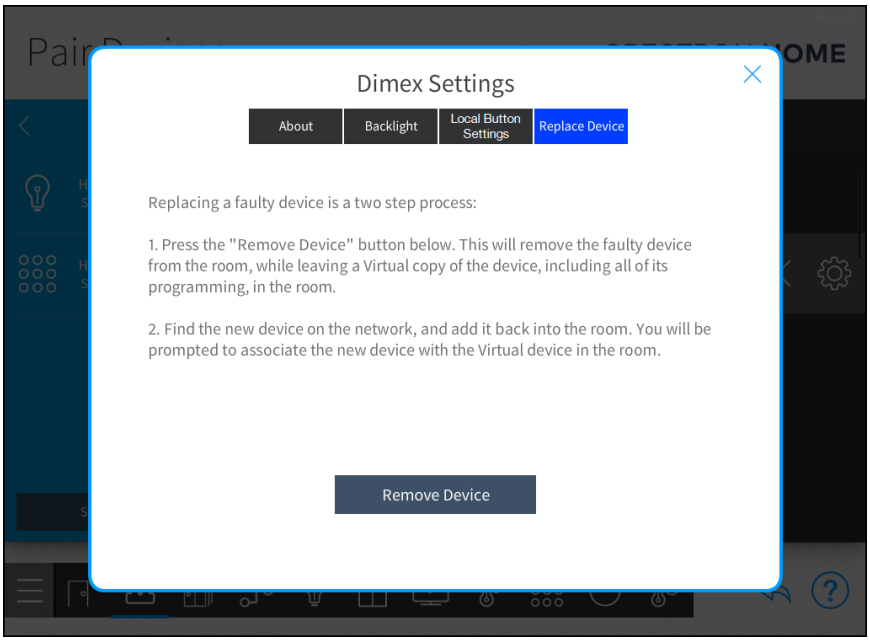


Set the **Button Feedback Mode**:

- **On Only:** The LED lights when the scene is on.
- **Center Text Only:** The LED for the center of a rocker button lights when the scene is on.
- **Both On and Off:** The LED on either end of a rocker button lights when the scene is on. The LED on the opposite side of the rocker turns off.
- **None:** The LED does not light when the scene is on or off.

Replace Device

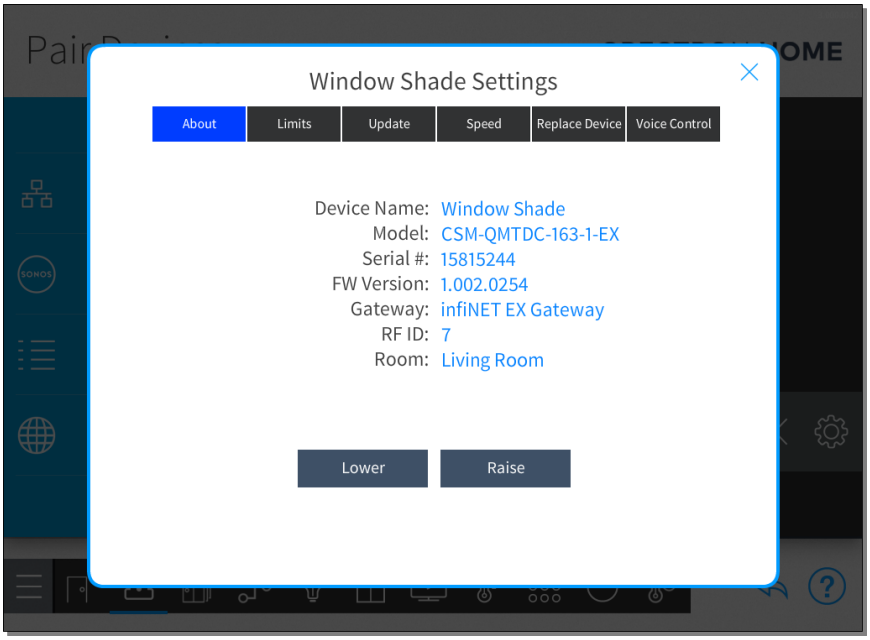
Tap the **Replace Device** tab to replace the keypad.



Shade Motors and Motor Controllers

Shade Motors

Tap the gear button next to the device name to display a Settings dialog box for the shade motor. The **About** tab is selected and displays the device information. The Settings dialog box has additional tabs for **Limits**, **Update**, **Speed**, **Replace Device**, and **Voice Control**.



Configure the Shade Motor

Tap the **Limits** tab to configure the shade motor limits. The lower limit is the lowest point that the shade fabric will travel and the upper limit is the highest point that the shade fabric will travel.

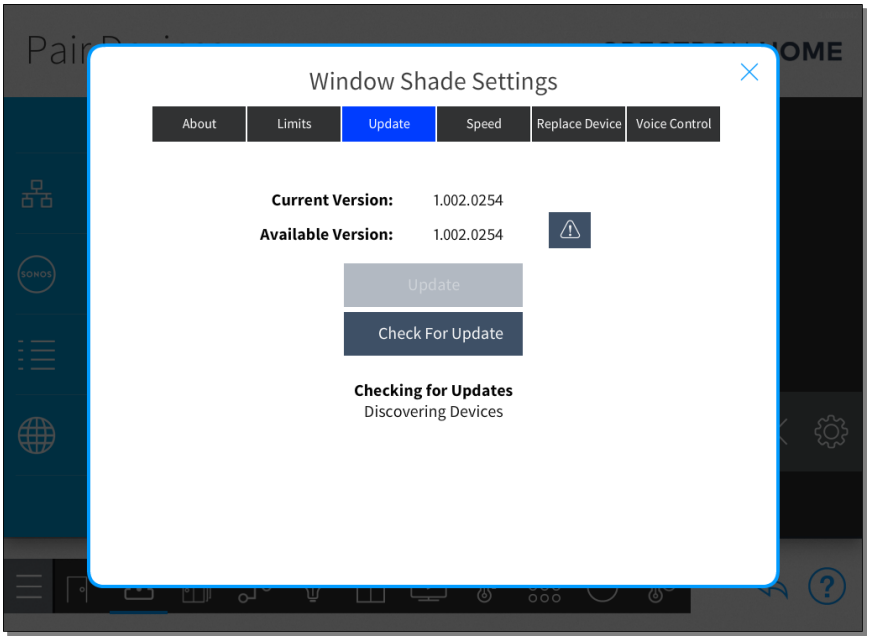
To set the lower limit:

1. Tap the **Adjust Lower Limit** button.
2. Tap and hold the **Raise** and **Lower** buttons or tap the **Jog Up** or **Jog Down** buttons to set the fabric height at its lower limit.
3. Tap the **Save Limit** button.

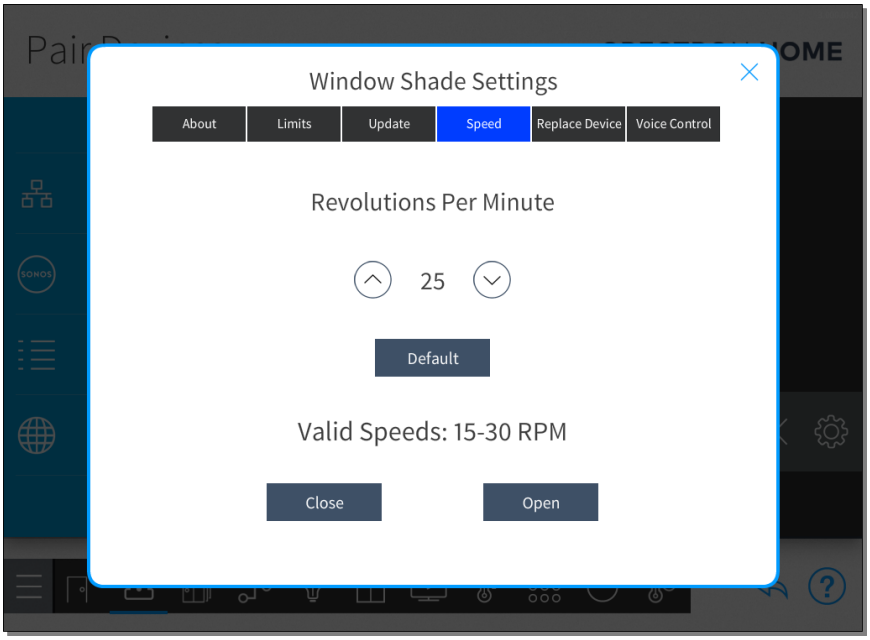
To set the upper limit:

1. Tap the **Adjust Upper Limit** button.
2. Tap and hold the **Raise** and **Lower** buttons or tap the **Jog Up** or **Jog Down** buttons to set the fabric height at its upper limit.
3. Tap the **Save Limit** button.

Tap the **Update** tab to update the firmware for the shade motor. Tap **Check for Update** to search for updated firmware. If a firmware update is available, tap **Update** to update the firmware for the shade motor.

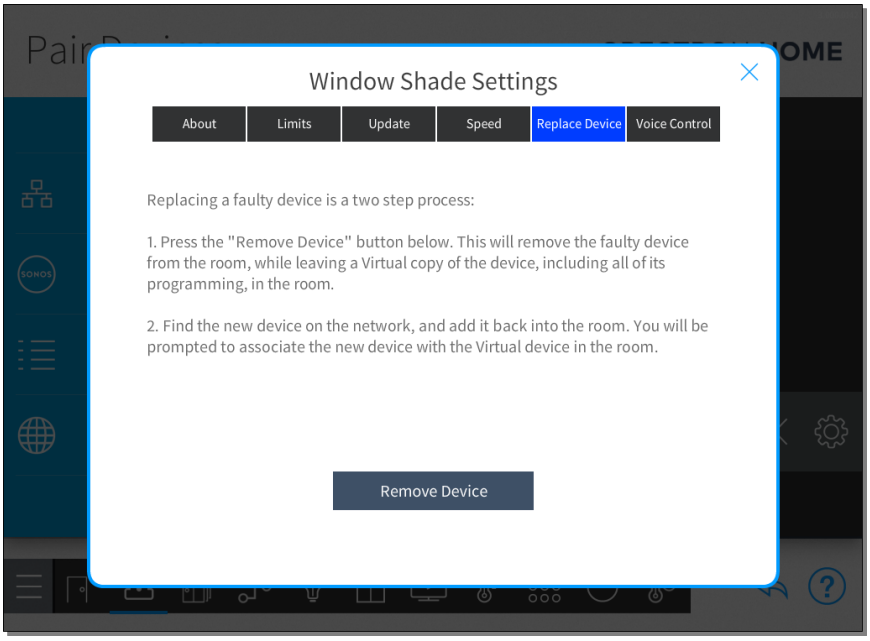


Tap the **Speed** tab to set the speed, in revolutions per minute (RPM), that the shade travels. The value can be set between 15 and 30 revolutions per minute.

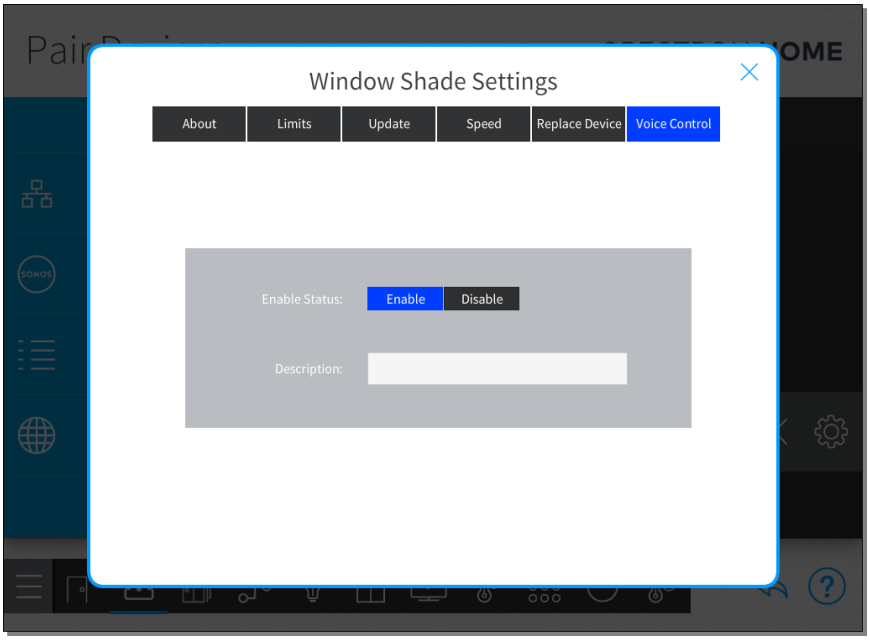


- **Default:** Sets the revolutions per minute to the default value. The default value is 25 revolutions per minute
- **Close:** Fully closes the shade.
- **Open:** Fully opens shade.

Tap the **Replace Device** tab to replace the device.



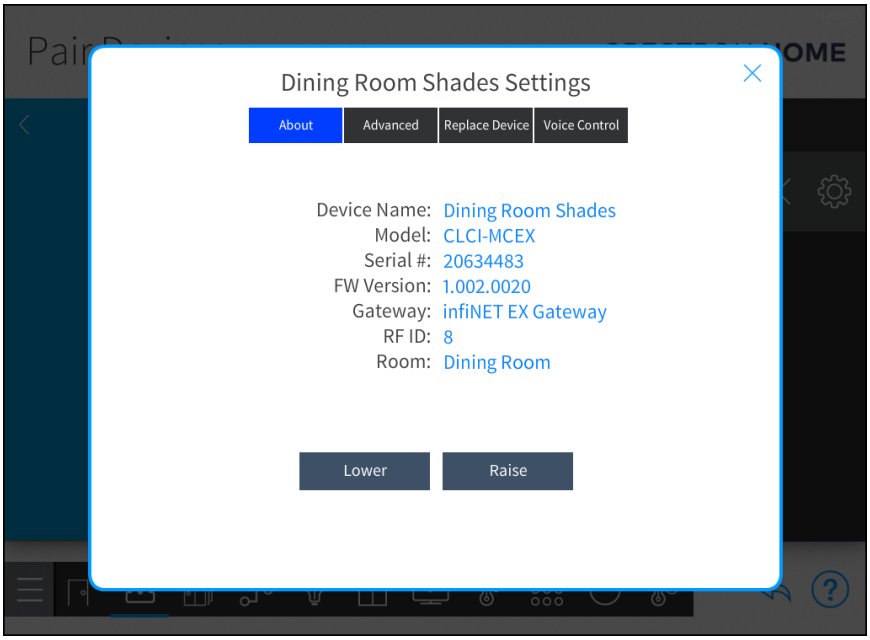
Tap the **Voice Control** tab to configure the voice control settings.



- **Enable Status:** Tap **Enable** to enable voice control services for this device or **Disable** to disable voice control services for this device.
- **Description:** Enter a descriptive name for this device. The name is used by the voice control services.

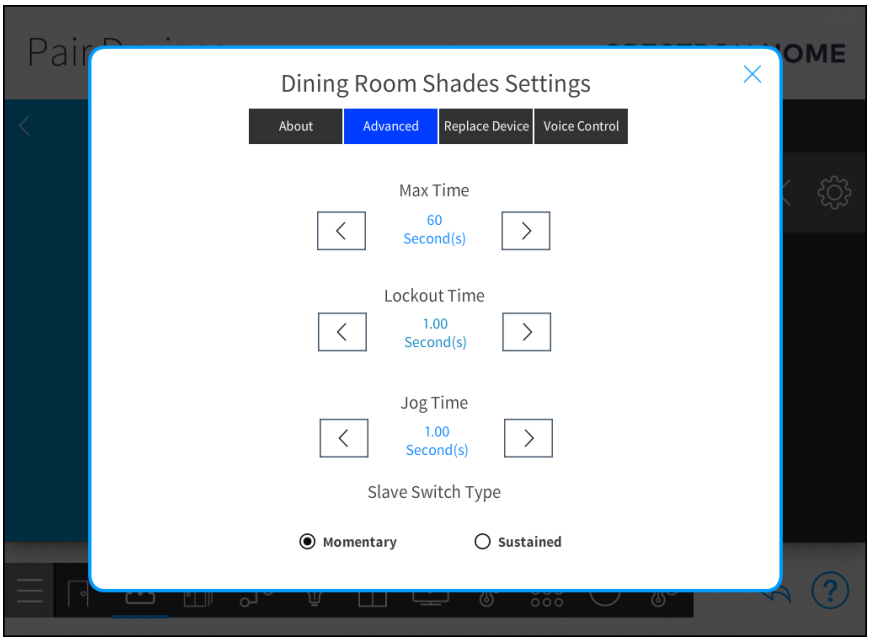
Motor Controllers

Tap the gear button next to the device name to display a Settings dialog box for the motor controller. The **About** tab is selected and displays the device information. The Settings dialog box has additional tabs for **Advanced**, **Replace Device**, and **Voice Control**.



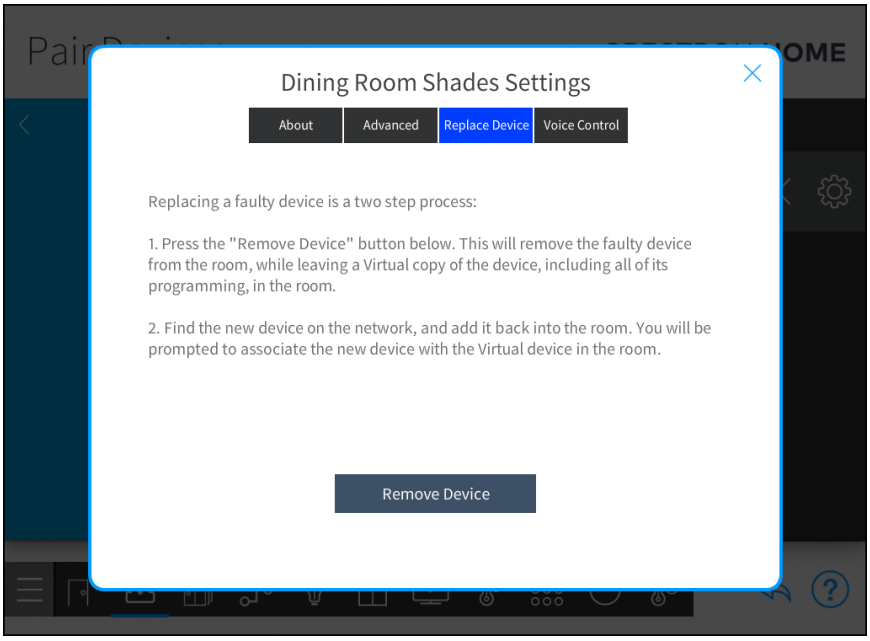
Configure the Motor Controller

Tap the **Advanced** tab to configure the motor controller.

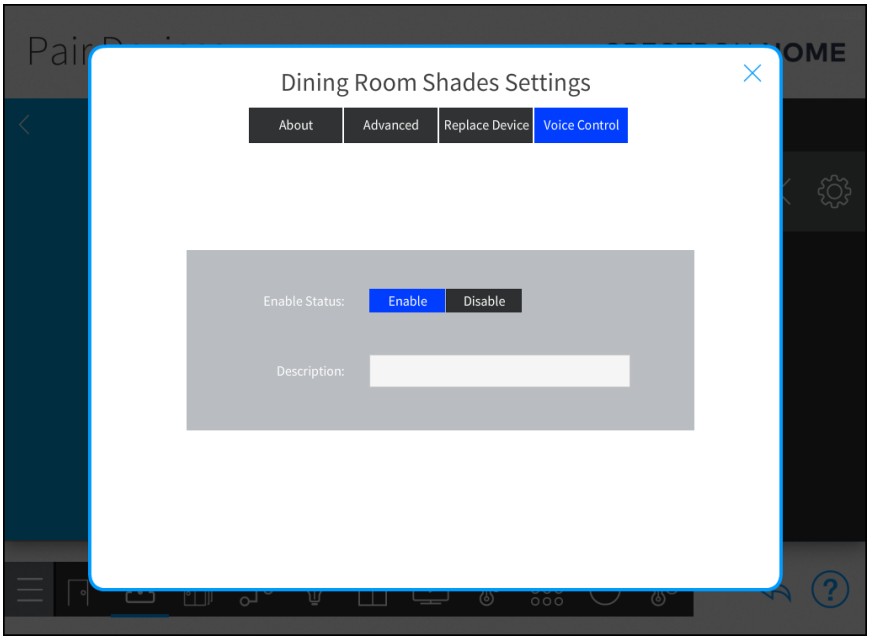


- **Max Time:** Sets the maximum time that the motor can move in the open or close direction. The value can be set between 1 and 600 seconds.
- **Lockout Time:** Sets the minimum amount of time that the motor must remain in the stop state before changing direction. The value can be set between 0.02 to 2 seconds.
- **Jog Time:** Sets the time that the motor will move during a jog open or jog close operation. The value can be set between 0.05 and 2 seconds.
- **Slave Switch Type:** Sets the type of slave switch that is connected to the motor controller. The slave switch can be set to either **Momentary** or **Sustained**.

Tap the **Replace Device** tab to replace the device.



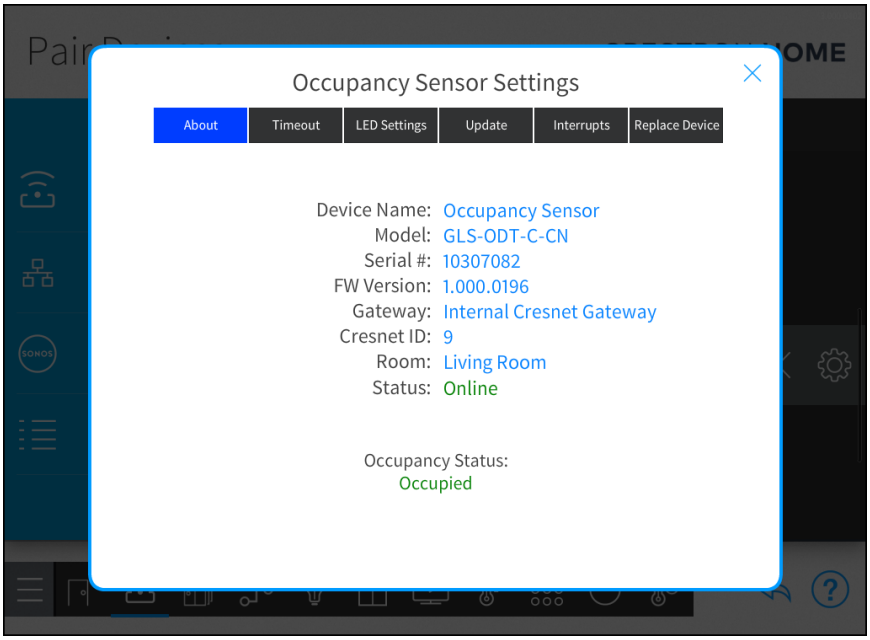
Tap the **Voice Control** tab to configure the voice control settings.



- **Enable Status:** Tap **Enable** to enable voice control services for this device or **Disable** to disable voice control services for this device.
- **Description:** Enter a descriptive name for this device. The name is used by the voice control services.

Occupancy Sensors

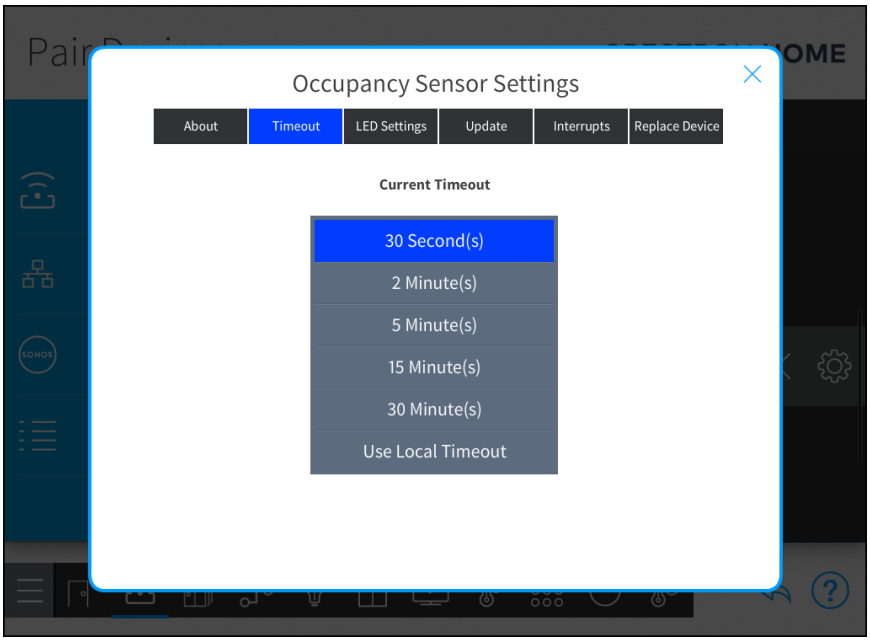
Tap the gear button next to the device name to display a Settings dialog box for the occupancy sensor. The **About** tab is selected and displays the device information. The Settings dialog box has additional tabs for **Timeout**, **LED Settings**, **Update**, **Interrupts**, and **Replace Device**.



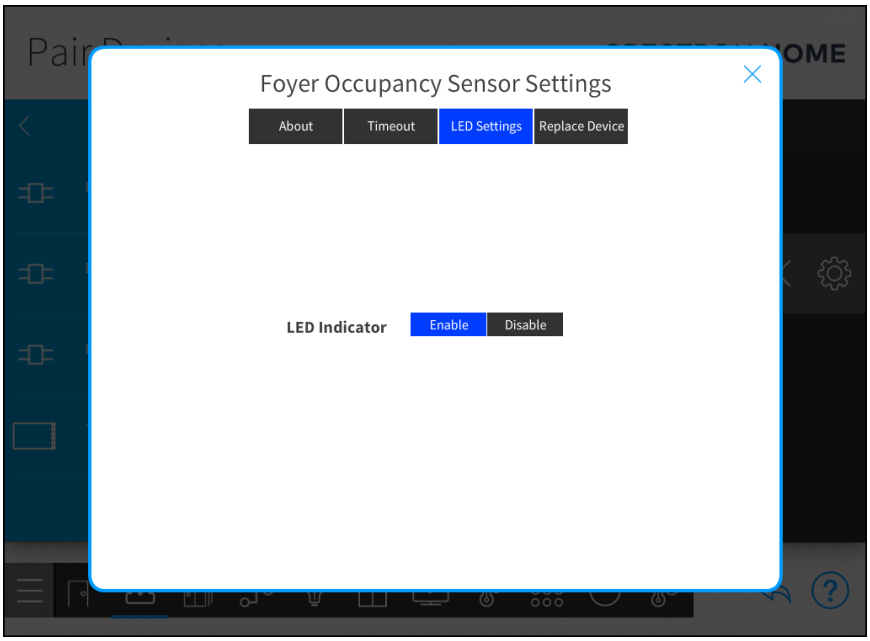
Configure the Occupancy Sensor

Tap the **Timeout** tab to configure the occupancy sensor timeout. Select the timeout value from the list of timeout values. To use the timeout setting that is configured on the occupancy sensor, select the **Use Local Timeout** from the **Current Timeout** list.

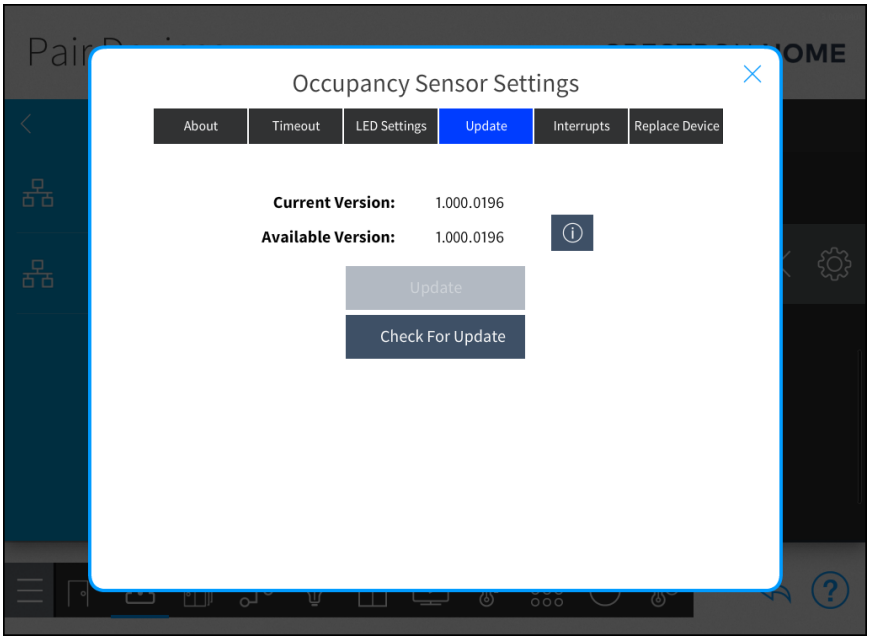
NOTE: The **Timeout** tab for some occupancy sensors, such as the GLS-ODT-C-POE, displays a text field to enter timeout value (between 5 and 1,800 seconds) for the occupancy sensor.



Tap the **LED Settings** tab to enable or disable the LEDs on the occupancy sensor.

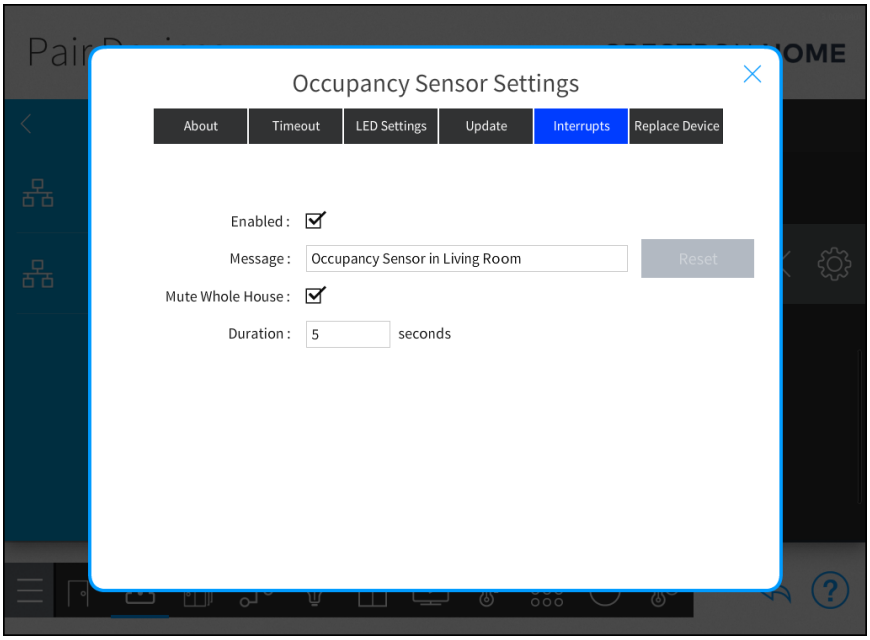


Tap the **Update** tab to enable or disable the LEDs on the occupancy sensor.



Tap the **Interrupts** tab to configure the occupancy sensor interrupts.

NOTE: There is no interrupt when occupancy is detected by the Grace Occupancy feature on a Crestron occupancy sensor.

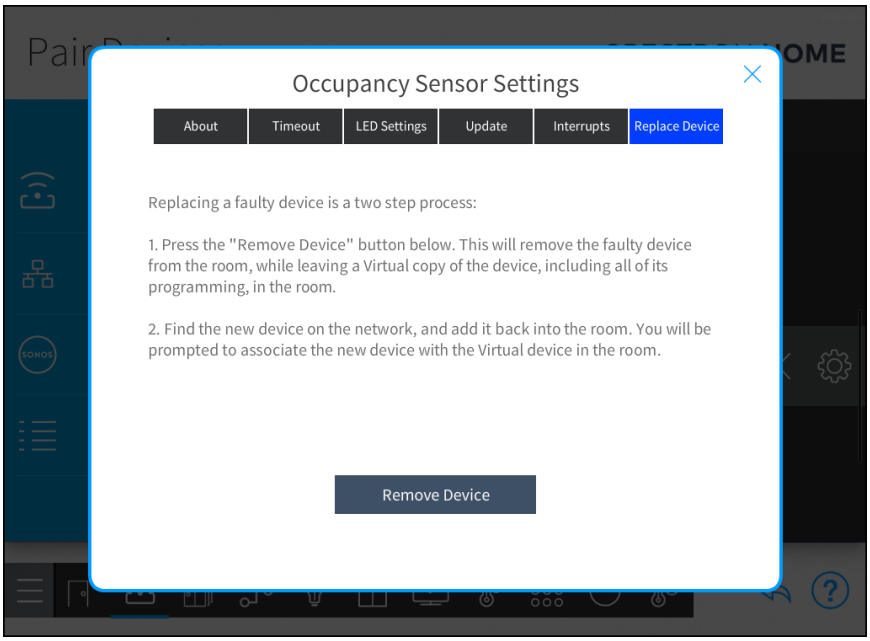


NOTE: Touch screens that do not have speakers display the interrupt messages but cannot play the associated sound.

- **Enabled:** To enable or disable the interrupt for the device, tap the check box next to **Enabled**. When an interrupt is enabled, it is displayed in the Crestron Home user interface.
- **Message:** The message that is displayed on the user interface device when the interrupt occurs. The default interrupt message is "[Device Name] in [room]".

  To display a custom message, enter the message in the field. Tap the **Reset** button to revert to the default message.
- **Mute Whole House:** To mute the audio that is playing in any media room, tap the check box next to **Mute Whole House**. The audio is muted for the time set in the **Duration** field. The default **Mute Whole House** setting is enabled.
- **Duration:** The length of time that the audio in the room is muted. The duration can be set between 1 and 60 seconds. The default duration is 5 seconds.

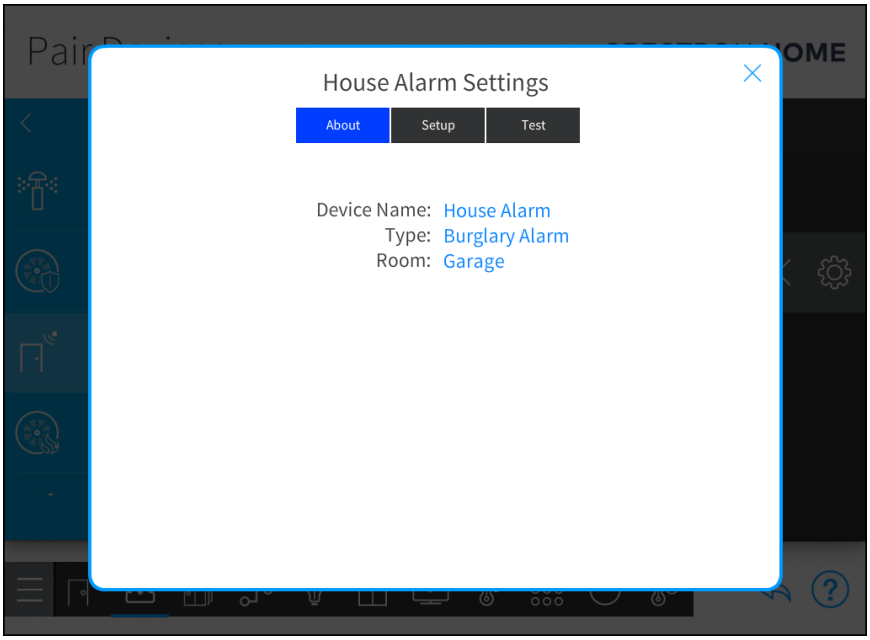
Tap the **Replace Device** tab to replace the occupancy sensor.



Sensor Controlled Devices

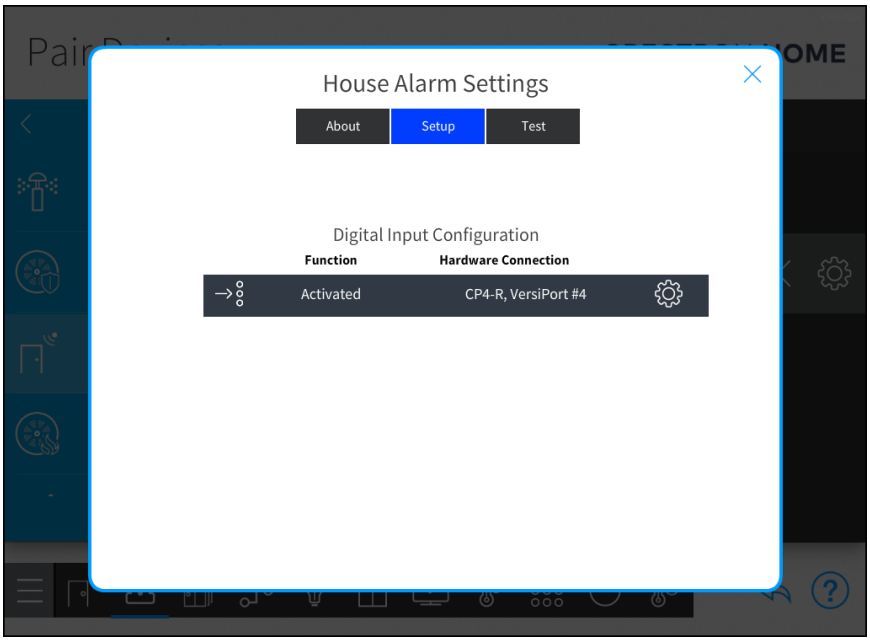
NOTE: The sensor device must be installed in the room and wired to a paired control device in order to function properly. For more information, refer to the sensor device documentation.

Tap the gear button next to the device name to display a Settings dialog box for the sensor device. The **About** tab is selected and displays the device information. The Settings dialog box has additional tabs for **Setup** and **Test**.



Configure the Sensor Controlled Device

Tap the **Setup** tab to configure the digital inputs.

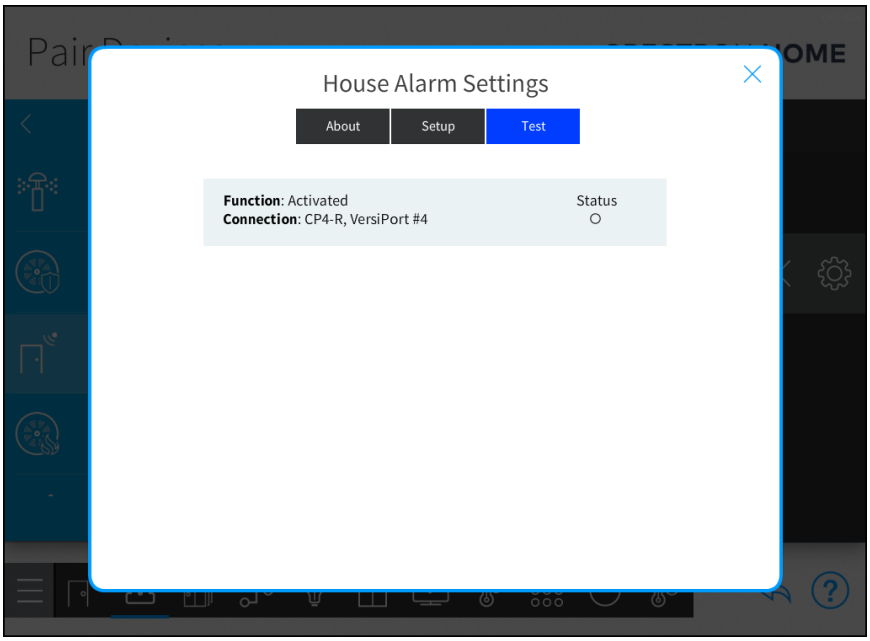


Tap the gear button next to an input to configure the digital input

- **Hardware Connection:** Tap a port to select the hardware port where the sensor controlled device is connected.
- **Sensor State Monitoring:** Tap **Activated** or **Deactivated** to select the state that the senor is monitoring.

- **Contact State:** Tap **Contacts Are Open** or **Contacts Are Closed** to select the state of the sensor contacts when the sensor is activated or deactivated.
- **Enable Pull-Up Resistor:** Tap the **Enable Pull-Up Resistor** check box to enable a pull-up resistor for the hardware connection. A checked box indicates an enabled pull-up resistor.

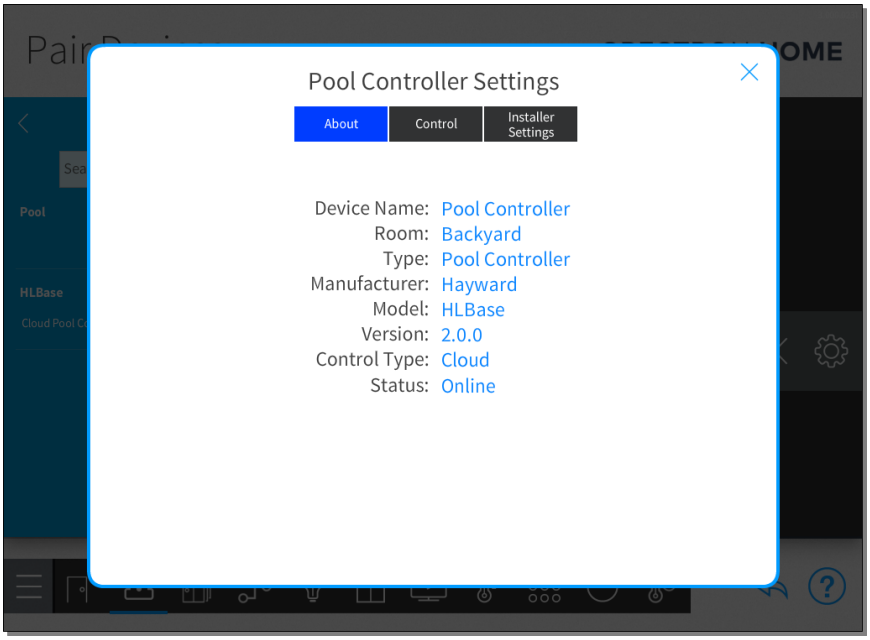
Tap the **Test** tab to view the status of the status of the device.



Pool and Spa

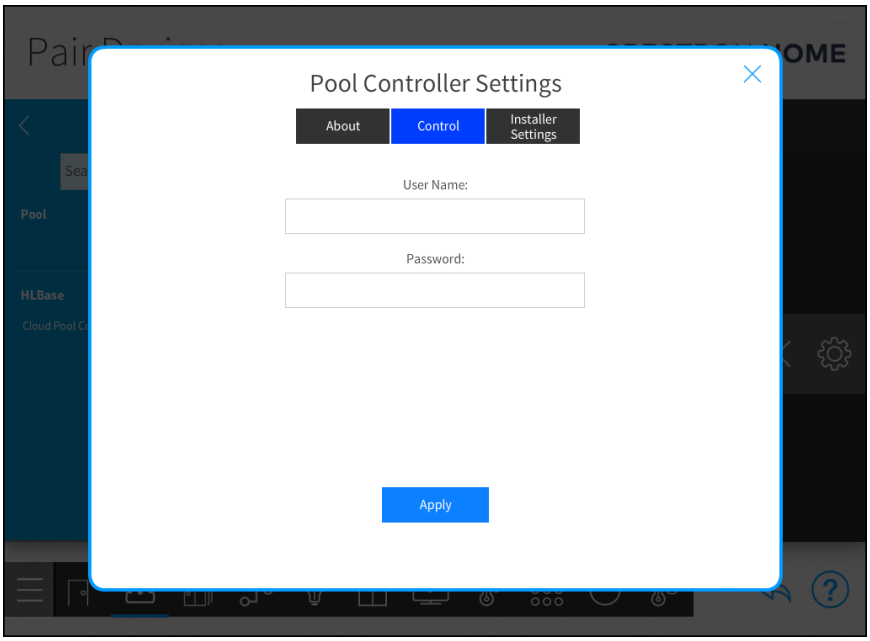
Pool Controller

Tap the gear button next to the device name to display a Settings dialog box for the pool controller. The **About** tab is selected and displays the device information. The Settings dialog box has additional tabs for **Control** and **Installer Settings**.



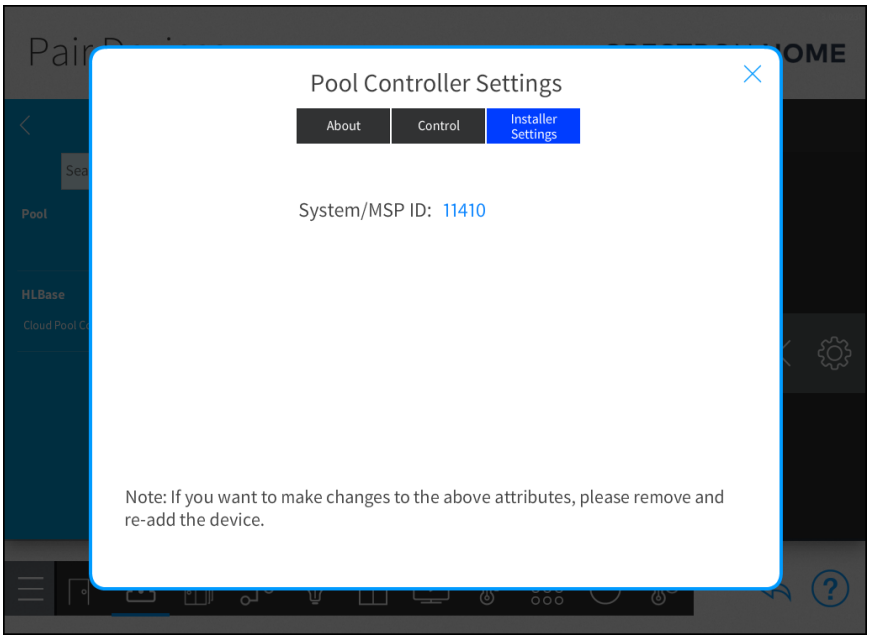
Configure the Pool Controller

Tap the **Control** tab to configure the pool controller. If necessary, change the **User Name** and **Password** for the pool controller.



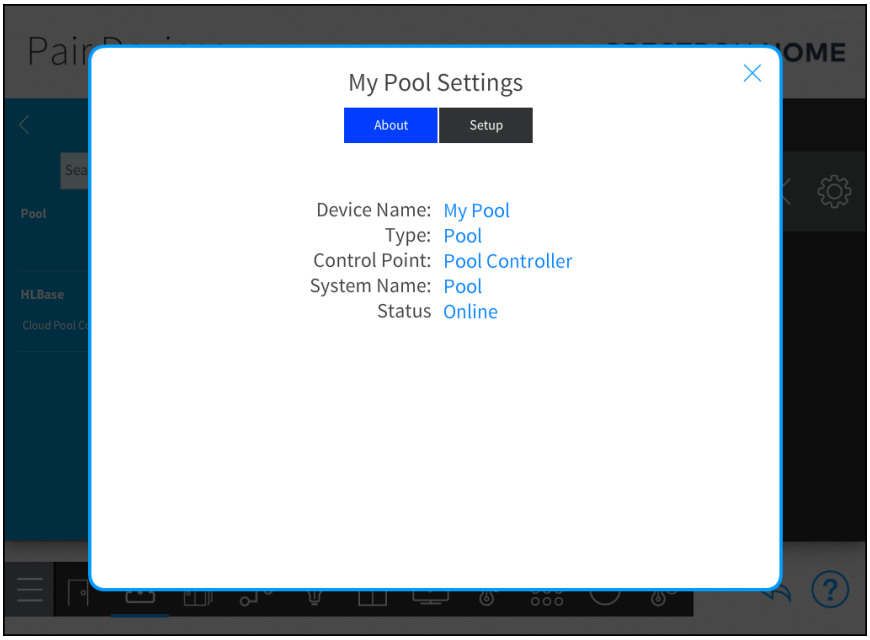
Tap the **Installer Settings** tab to view the **System/MSP ID** information.

NOTE: If the System or MSP ID needs to be changed, remove the pool controller from the system and then re-add the pool controller to the system.



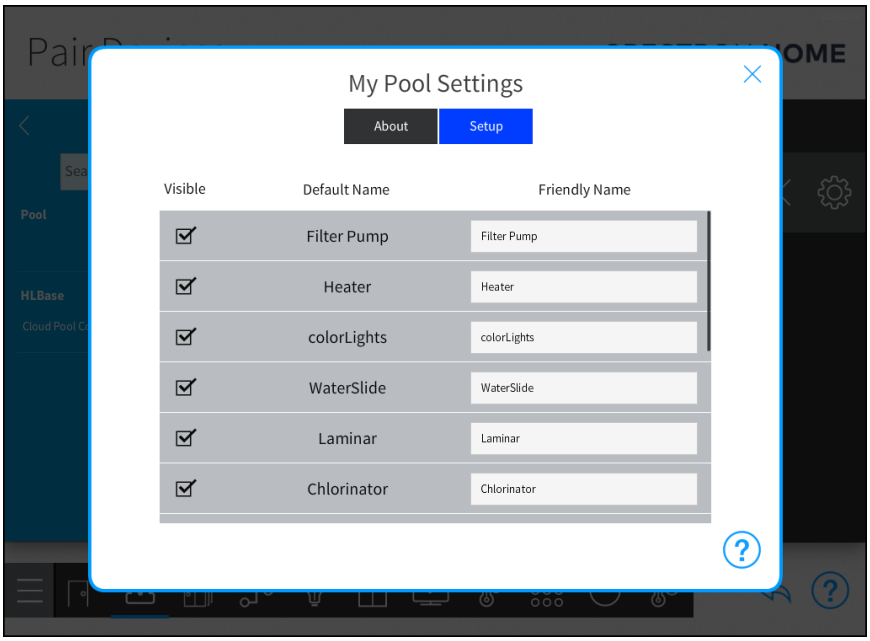
Pool

Tap the gear button next to the device name to display a Settings dialog box for the pool. The **About** tab is selected and displays the device information. The Settings dialog box has an additional tab for **Setup**.



Configure the Pool

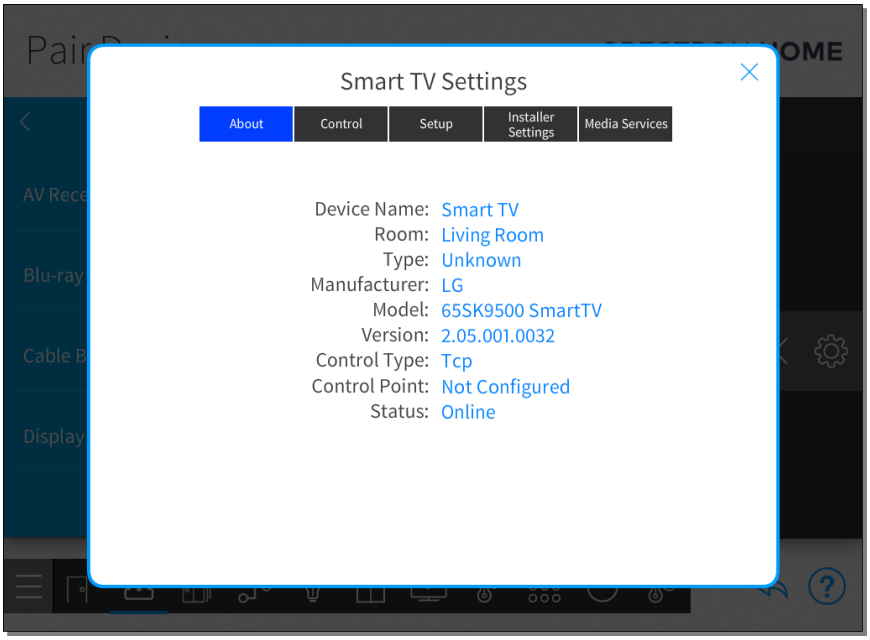
Tap the **Setup** tab to configure the pool. The **Setup** tab displays a list of pool functions that are provided by the pool controller.



- **Default Name:** The name of the pool function that is provided by the pool controller.
- **Friendly Name:** The name that is displayed in the Crestron Home user interface for the pool function.
- **Visible:** Tap the check box to display the pool function in the Crestron Home user interface.

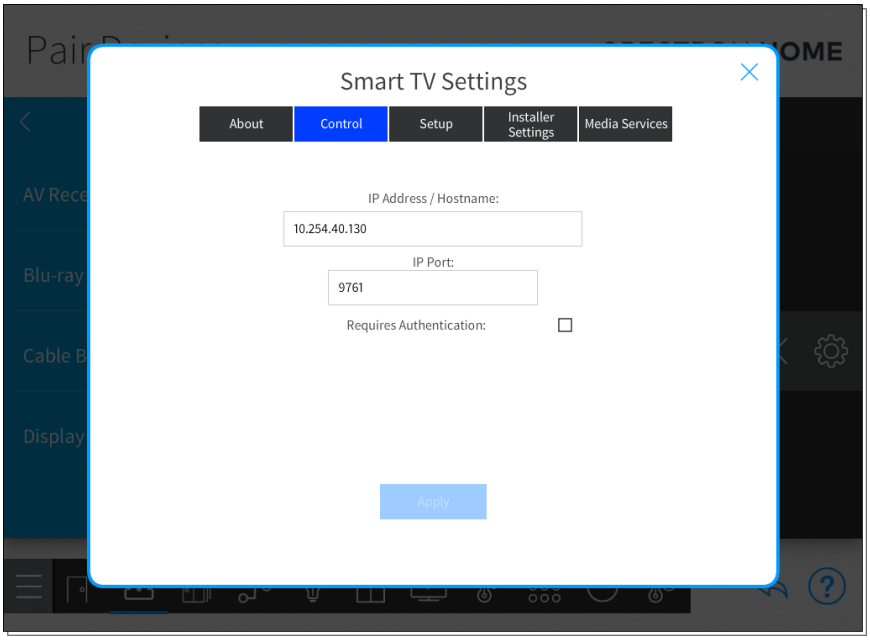
Smart TVs

Tap the gear button next to the Smart TV to display a Settings dialog box for the Smart TV. The **About** tab is selected and displays the device information. The Settings dialog box has additional tabs for **Control**, **Setup**, **Installer Settings**, and **Media Services**.



Configure the Smart TV

Tap the **Control** tab to change the Smart TV network configuration.

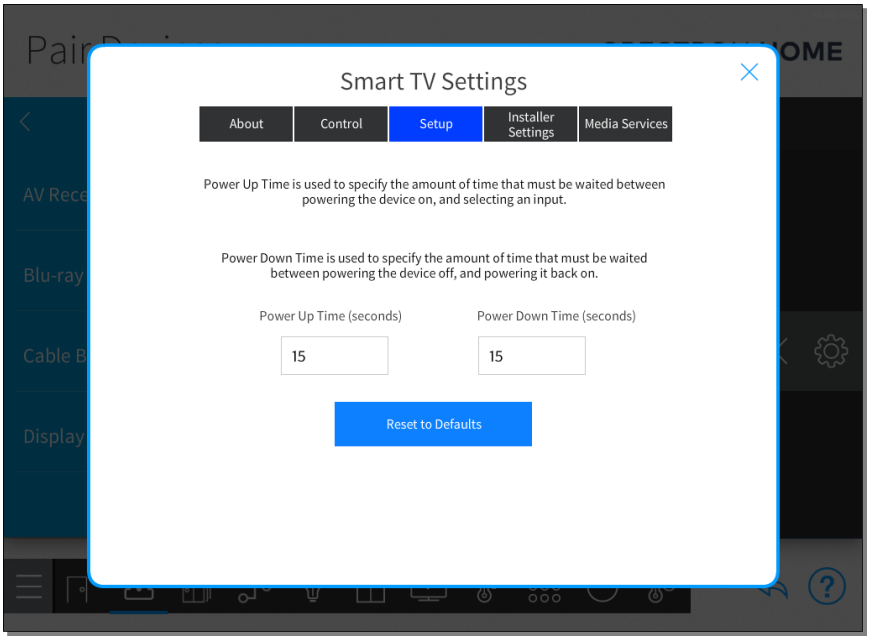


- **IP Address/Hostname:** The IP address or hostname of the Smart TV.

  NOTE: Each Smart TV should use a static or reserved IP address.

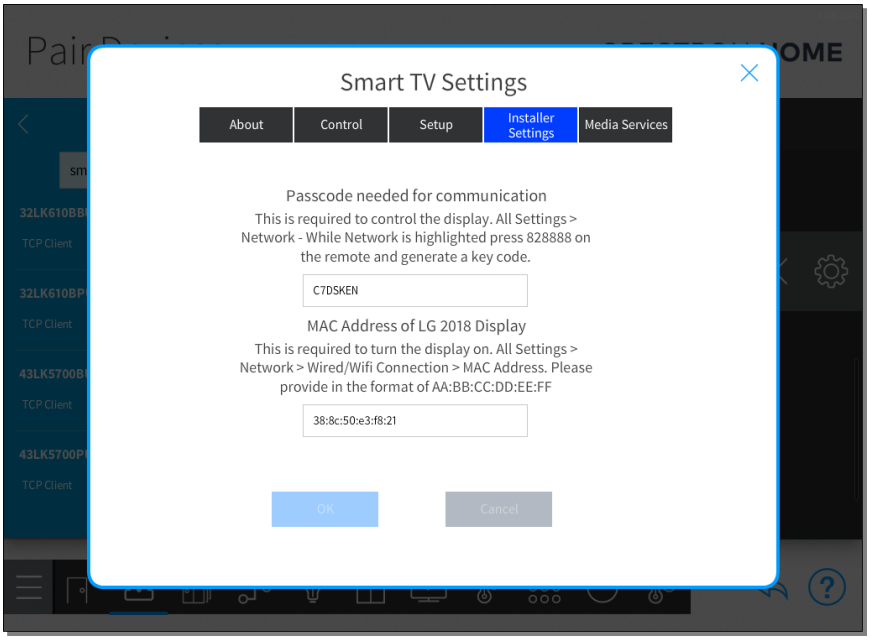
- **IP Port:** The port number of the Smart TV
- **Requires Authentication:** If the Smart TV requires authentication, select the check box next to **Requires Authentication** and then enter the username and password for the Smart TV.

Tap the **Setup** tab to configure the power up and power down time for the Smart TV.



- **Power Up Time (seconds):** The amount of time that must pass between turning on the device and selecting an input. The value can be set between 1 and 600 seconds. Unexpected functionality may occur if the value is set too low.
- **Power Down Time (seconds):** The amount of time that must pass between turning off the device and turning it back on. The value can be set between 1 and 600 seconds. Unexpected functionality may occur if the value is set too low.
- **Reset to Defaults:** Sets the fields in the **Setup** tab to their default values.

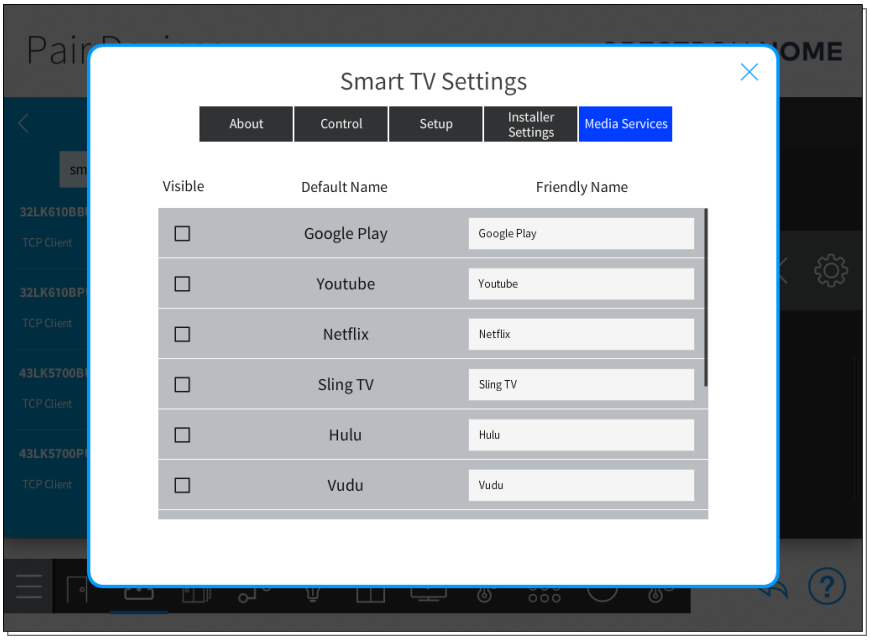
Tap the **Installer Settings** tab to view and change the passcode and the MAC address of the Smart TV.



NOTE: The passcode and MAC address can be updated in the **Installer Settings** tab. Previous versions of Crestron Home required the Smart TV to be removed from the system and then re-added.

- **Passcode:** The passcode allows the TV to be controlled by the Crestron Home system. Enter the passcode into the text box. Refer to the instructions provided in the Crestron Home setup app to generate the passcode.
- **MAC Address:** The MAC address allows the TV to be turned on and off. Enter the MAC address of the Smart TV into the text box. Refer to the instructions provided in the Crestron Home setup app to generate the passcode.

Tap the **Media Services** tab to configure the media services that are available on the Smart TV. The list of media sources is defined by the Smart TV driver that is used and varies by make and model.



Each media service displays the **Default Name**, **Friendly Name**, and **Visible** properties.

- **Default Name:** The name that is provided by the Smart TV for the media service.
- **Friendly Name:** The name that is displayed in the Crestron Home user interface when the media service is visible.

- **Visible:** Indicates that the media service is visible in the Crestron Home Setup app and the Crestron Home user interface. To view the media service in the Crestron Home Setup app and the Crestron Home user interface, tap the check box next to the name of the media service.

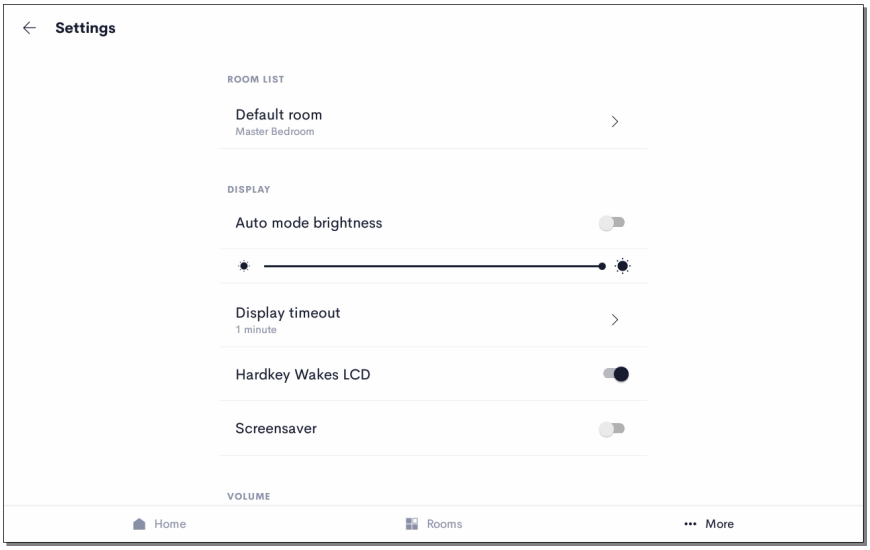
  NOTES:

  - The default visibility setting for all media devices is hidden. This prevents the Crestron Home user interface from displaying long lists of media services.
  - The default visibility setting will not be changed for Smart TVs that are already added to the system.
  - The Smart TV media service cannot be hidden. The Smart TV media service allows the Crestron Home user interface to control the Smart TV when:
    - Using unlisted sources such as the TV manufacturer's app store.
    - Viewing a media service that is hidden from the source list in the Crestron Home user interface. This can occur when the Crestron Home user interface is used to navigate the Smart TV's user interface and open a media service that is hidden.

Touch Screens

The **Settings** screen for the TSW-xx60 series touch screens provides an additional **Hardware** menu for configuring touch screen settings.

To access the Settings screen, tap the **More** button and then **Settings**.



Room List

Use the **Room List** panel to select the room that the touch screen is in.

To set the default room, tap **Default room** and then select the room from the list of rooms.

Display

Use the options in the **Display** list to configure the touch screen display settings.

Brightness

- **Auto Mode Brightness:** Tap the toggle switch to turn Auto brightness mode on or off. When Auto brightness mode is on, the touch screen display adjusts its brightness based on the ambient light level in the room.
- **Brightness Slider:** Available when Auto brightness mode is off. Use the slider to raise or lower the brightness level.

Timeout

Sets the duration before the touch screen enters standby mode and turns off the touch screen display. To change the timeout, tap **Timeout** and then select the timeout value. The timeout can be set between 1 minute and 2 hours or never.

If the screensaver is enabled, the screensaver is displayed.

Screensaver

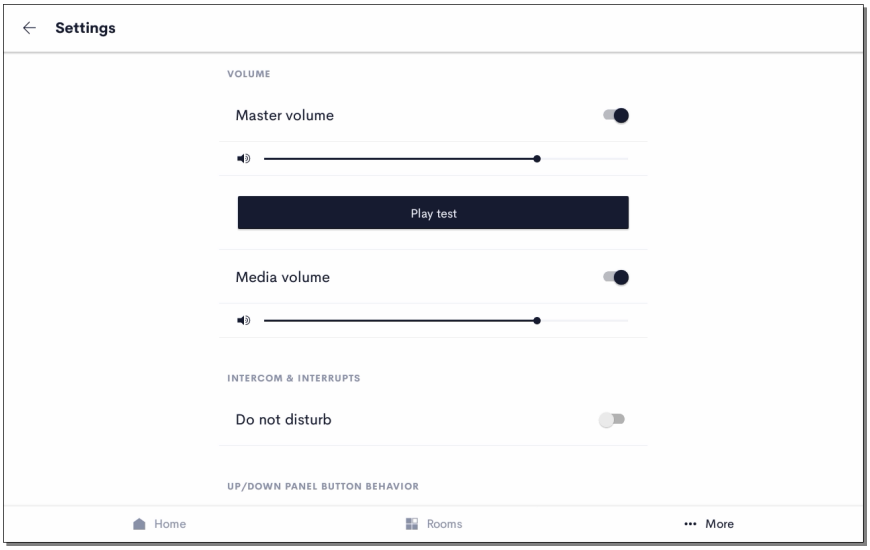
Tap the toggle switch to enable or disable the screensaver when the touch screen enters standby mode.

Hard Key Wakes LCD

Tap the toggle switch to enable or disable the ability for the hard keys to wake the display and exit standby mode.

Volume

Use the **Volume Settings** to configure volume settings for the touch screen and for the 2N door station intercom (if configured).



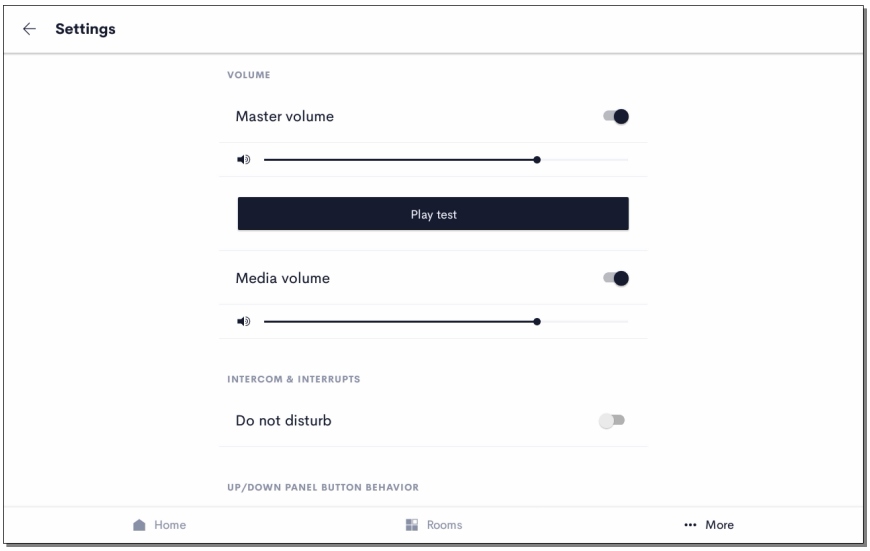
To adjust the Master Volume and Media Volume:

- Tap the toggle switch to enable or disable the master volume and media volume.
- Use the slider to raise or lower the volume.
- Tap to toggle the mute function for the master volume and media volume.
- Tap the **Play Test** button to play a test recording at the current volume level.

Intercom & Interrupts

NOTE: The **Intercom** settings are only applicable if the touch screen is connected to a 2N door station in the Crestron Home system. For more information, refer to Connect to a 2N® Door Station on page 572.

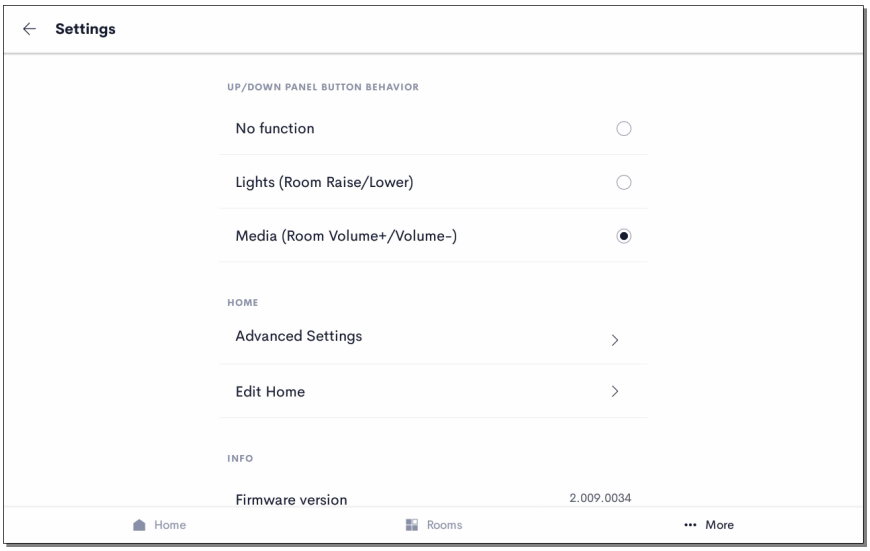
Tap the toggle switch to turn **Do not disturb** mode on or off. When in **Do not disturb** mode, calls from the 2N door station are not received on the touch screen.



Up/Down Panel Button Behavior

NOTE: The **Intercom** settings are only applicable if the touch screen is connected to a 2N door station in the Crestron Home system. For more information, refer to Connect to a 2N® Door Station on page 572.

Define the function of the up and down soft-touch capacitive buttons that are displayed on the side of the TSW-xx60 series touch panel.



Select the function of up and down the soft-touch capacitive buttons:

- **No function:** The buttons have no function. The up and down buttons are not illuminated.
- **Lights:** The buttons control the lights for the room that is selected as the default room.

  NOTE: To select the default room, refer to Room List on page 454.

  - Press or press and hold the up button to raise the lights or the down button to lower the lights.
  - The buttons are always illuminated.
  - When controlling a room other than the default room, the up and down buttons continue to only control the default room.
- Media: The buttons control the media volume for the room that is selected as the default room.

  NOTE: To select the default room, refer to Room List on page 454.

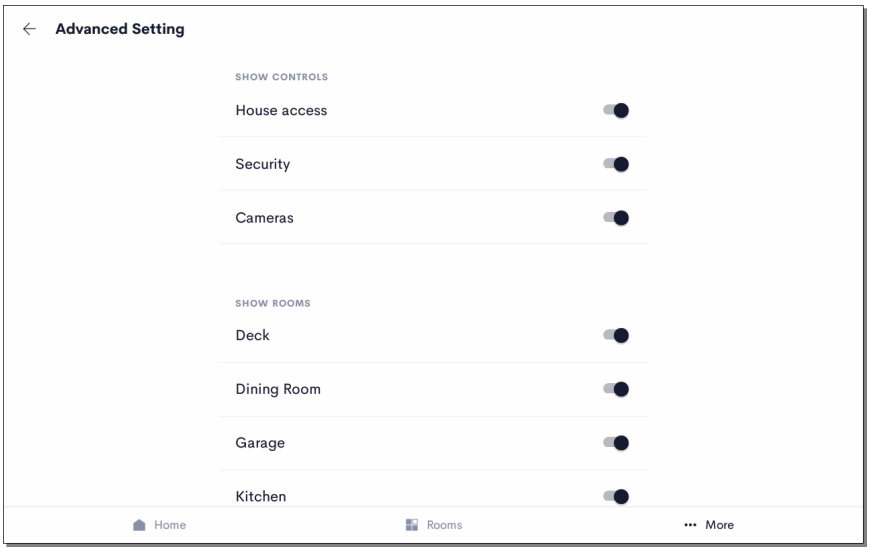
  - Press or press and hold the up button to raise the volume or the down button to lower the volume.
  - The buttons are illuminated only when the room is playing media.
  - When controlling a room other than the default room, the up and down buttons continue to only control the default room.

Home

Make changes to the Crestron Home system. The Advanced User password is required to access these options. For details about the password, refer to System Detail & Password Configuration on page 205

Advanced Settings

The Advanced Setting screen allows the user to show or hide controls and rooms in the user interface. The Advanced User password is required to access these options. Tap the toggle switch to show or hide the system-wide controls and rooms on the touch screen.



Show Controls

The **Show Controls** list displays the controls that are available in the Crestron Home system. The default setting for controls is show.

Tap the slider to hide the control in the user interface device. The control will not appear on any screen in the user interface. For example, if **Climate** is hidden, thermostats will not be shown in the rooms they are located in and the Climate option will not be shown on the **Home** tab.

NOTES:

- Controls that are hidden apply only to the user interface device that is being configured. For example, if **Cameras** is hidden using a TSW-xx60 series touch screen in the living room, **Cameras** will not be hidden on the TSW-xx60 series touch screen in the foyer or on a mobile device.
- Quick actions that are displayed in the **Home** tab can operate controls that are hidden.

The following controls may be displayed in the **Show Controls** list:

- Cameras
- Climate
- House Access
- Lights

- Media
- Pools & Spas
- Security
- Shades

Show Rooms

The **Show Rooms** list displays the rooms that are available in the Crestron Home system. The default setting for rooms is show.

Tap the slider to hide the room in the user interface device. The room will not be shown in the **Rooms** tab. Devices that are in the room may still be displayed in the **Home Controls** section of the **Home** tab. For example, if **Master Bedroom** is hidden and the room contains a thermostat, the thermostat will be displayed.

NOTES:

- Rooms that are hidden apply only to the user interface device that is being configured. For example, if **Kitchen** is hidden using a TSW-xx60 series touch screen in the living room, **Kitchen** will not be hidden on the TSW-xx60 series touch screen in the foyer or on a mobile device.
- Quick actions that are displayed in the **Home** tab can control devices in rooms that are hidden.

Audio Interrupts and Chimes

Tap **Events & sounds** to view the **Events & sounds** screen.

NOTE: Touch screens that do not have speakers display the interrupt messages but cannot play the associated sound.

The **Events & sounds** list displays the notifications (interrupts) and chimes that are available in the Crestron Home system. The default setting for interrupts and chimes is enable.

Tap the slider to disable the chimes in the user interface device. The chime will not play on the user interface device.

To change the sound of the notification, tap the three dots next to the name of the event and then select the sound. The sound is saved when it is selected.

NOTES:

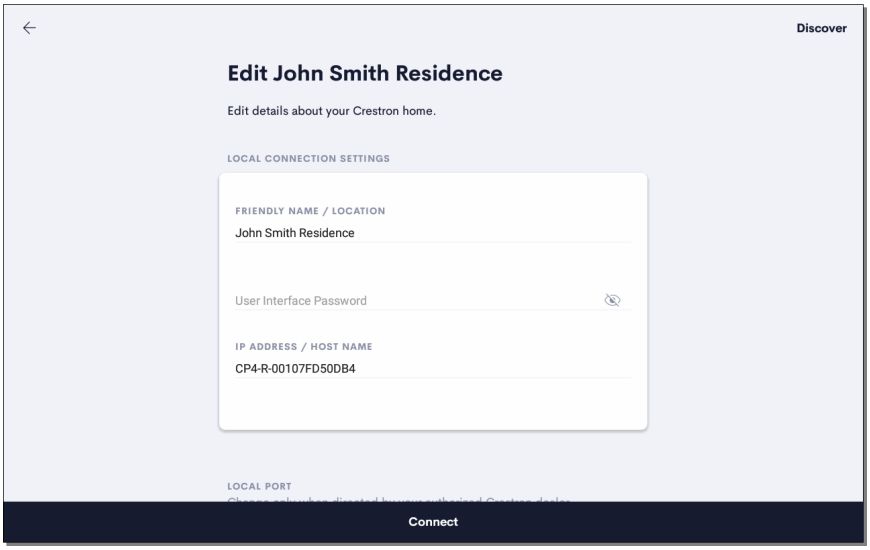
- The sound that is selected is set for all user interface devices in the Crestron Home system.
- Disabling an event only disables the chime from playing on the user interface device. The notification will still be shown.

- Enabling **Do Not Disturb** mode (TSW-xx60 series touch screens only) silences the sound for all events on the device.
- If a room is hidden on the user interface device, the notification appears and the chime plays

Edit Home

Change details about the Crestron Home system such as the Local Connection Settings (Friendly Name/Location, User Interface Password, and IP Address/Host Name) and the Local Port. Additionally, a different Crestron Home processor can be discovered by tapping **Discover**.

For details about the Local Connection Settings and discovering a different Crestron Home processor, refer to Pair a TSW-xx60 Series Touch Screen on page 386. For details about the local port, refer to System Detail & Password Configuration on page 205.



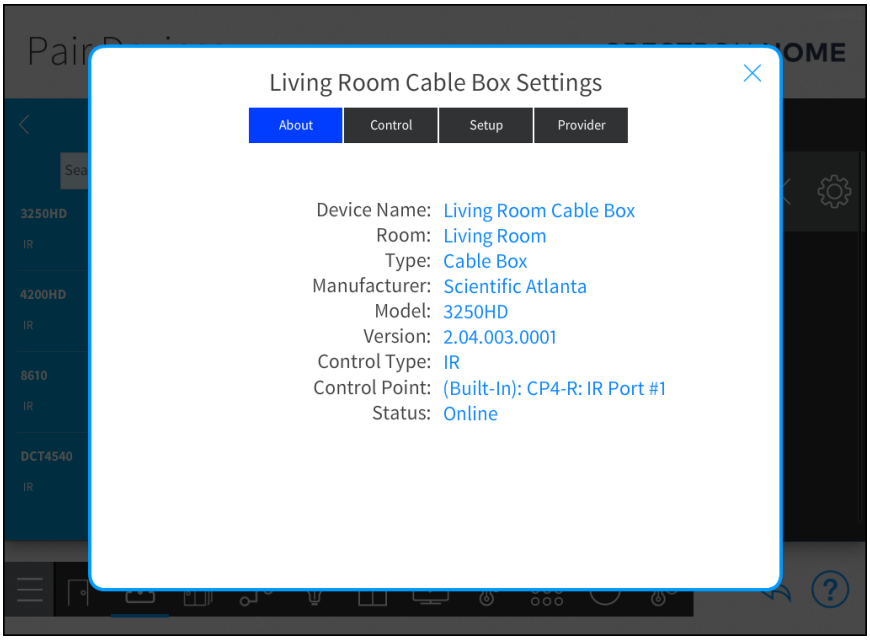
Info

The info section displays the firmware versions running on the touch screen.

Video Sources

Cable Boxes

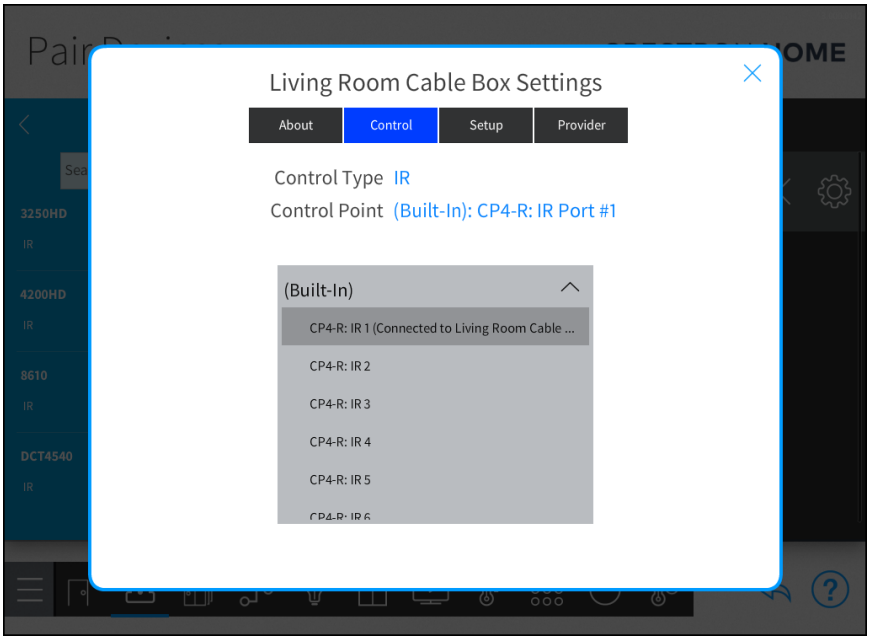
Tap the gear button next to the device name to display a Settings dialog box for the cable box. The **About** tab is selected and displays the device information. The Settings dialog box has additional tabs for **Control**, **Setup**, and **Provider**.



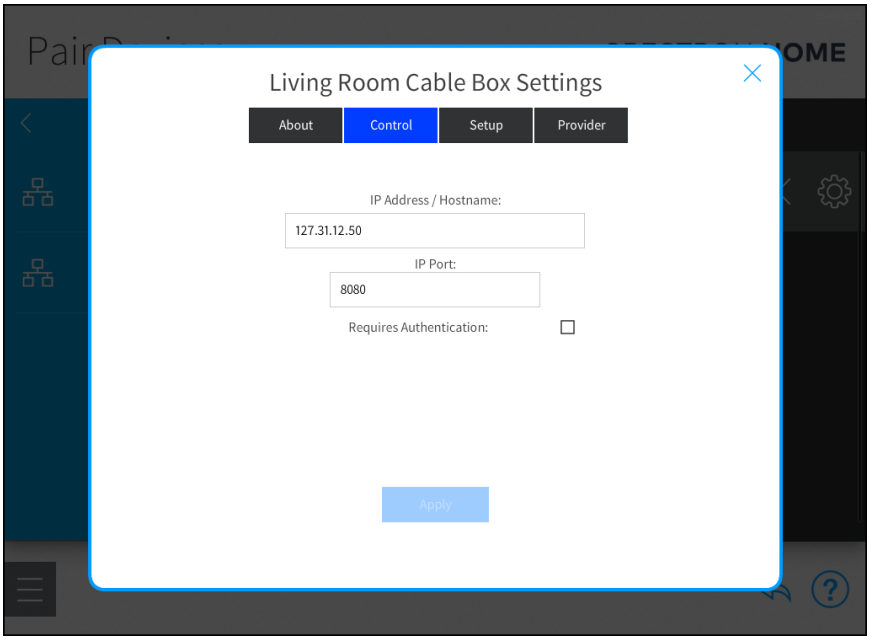
Configure the Cable Box

Tap the **Control** tab to configure the IR or TCP settings for the cable box.

- For IR controlled cable boxes, select the IR port used to control the cable box.



- For TCP controlled cable boxes:

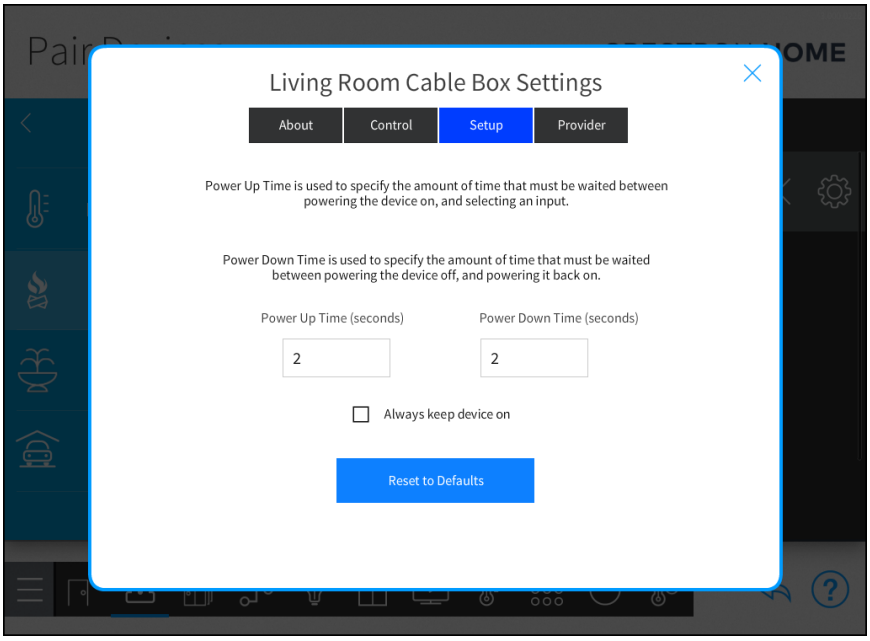


  - **IP Address/Hostname:** The IP address or hostname of the device.

    NOTE: Each TCP controlled device should use a static or reserved IP address.

  - **IP Port:** The port number of the device.
  - **Requires Authentication:** If the device requires authentication, select the check box next to **Requires Authentication** and then enter the username and password for the device.

Tap the **Setup** tab to configure the cable box power settings.



- **Power Up Time (seconds):** The amount of time that must pass between turning on the device and selecting an input. The value can be set between 1 and 600 seconds. Unexpected functionality may occur if the value is set too low.
- **Power Down Time (seconds):** The amount of time that must pass between turning off the device and turning it back on. The value can be set between 1 and 600 seconds. Unexpected functionality may occur if the value is set too low.
- **Reset to Defaults:** Sets the fields in the **Setup** tab to their default values.
- **Always keep device on:** Select the check box to prevent the device from turning off after 60 seconds. The default for **Always keep device on** is disabled.

  NOTES:

  Existing devices in upgraded systems will have "keep sources on" disabled to maintain their current functionality in Pyng. The Installer can then enable it as needed.

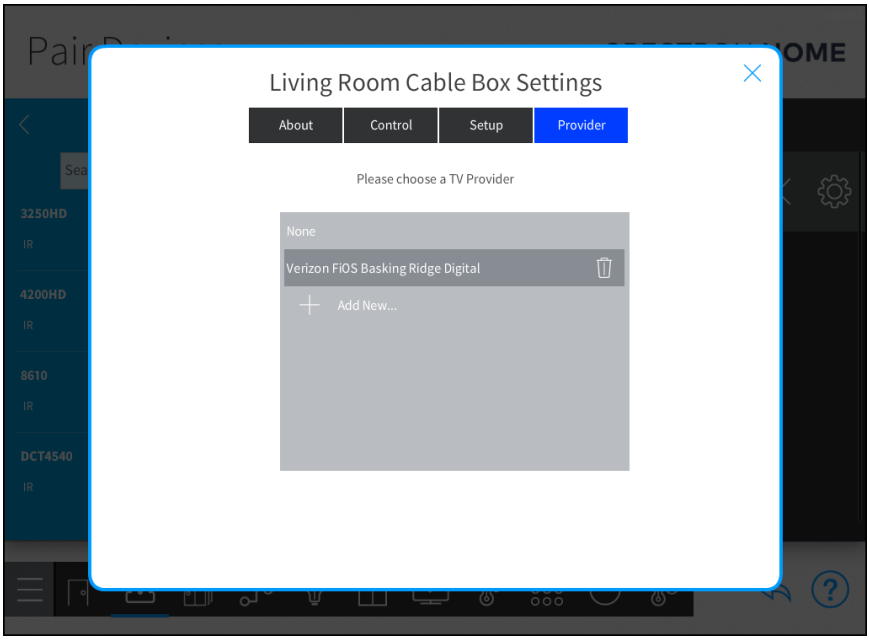
  When **Always keep device on** is disabled:

- Keep device on when not in use is disabled by default.
- Startup behavior:
  - For sources with power state feedback, the source power state is set to reflect the current source power state (on or off).
  - For sources that do not support power state feedback, the source power state is assumed to be off.
  - For sources that do not have power commands, the source power state is assumed to be on.
- If the source is off when routed, then the source will be turned on using either the discrete Power On command or the Toggle Power command.
- If the source is no longer routed to any room, the source is turned off after 60 seconds.

When **Always keep device on** is enabled:

- Startup behavior.
  - For sources with power state feedback, if the source is off then it will be turned on automatically. If the source is on, no action will be taken.
  - If the source does not have power feedback and supports discrete power commands, the PowerOn command is sent to the device and the power state is set to on. Turning the source on at startup minimizes the wait-time for the device to warm up.
  - If the source does not have power feedback and only supports toggle power commands, the PowerToggle command is not sent to the device and the power state is set to on. This prevents a source that is on from being turned off. If the source is not on, the user can turn on the source in the Crestron Home user interface.
  - If the source does not have any power commands, the power state is set to on.
- If the source supports power feedback and is off when routed, the source will be turned on. This can occur if the source was manually powered off.
- If the source is no longer routed to any room, the source remains on.

Tap the **Provider** tab to select, add, or delete the cable box TV provider.



- **Change the TV Provider:** Select the new TV provider for the cable box.
- **Add a new TV Provider:** Tap the **+ Add New** button and then enter the **Country** and **Zip Code/Postal Code** information for the customer's house. Select the cable provider from the list that is displayed and then tap **Add**.
- **Delete a TV Provider:** Tap the delete icon and then **Yes** to confirm. The TV provider is removed for the entire house. Tap **No** to keep the TV provider.

Interrupts

An interrupt is a notification from the Crestron Home system that informs the user that an event has occurred. When an interrupt event occurs, a message describing the event is displayed on the user interface devices (TSW-xx60 series touch screens, iOS® devices, and Android™ devices) in the home. Additionally, audio may be momentarily muted and a chime can be played.

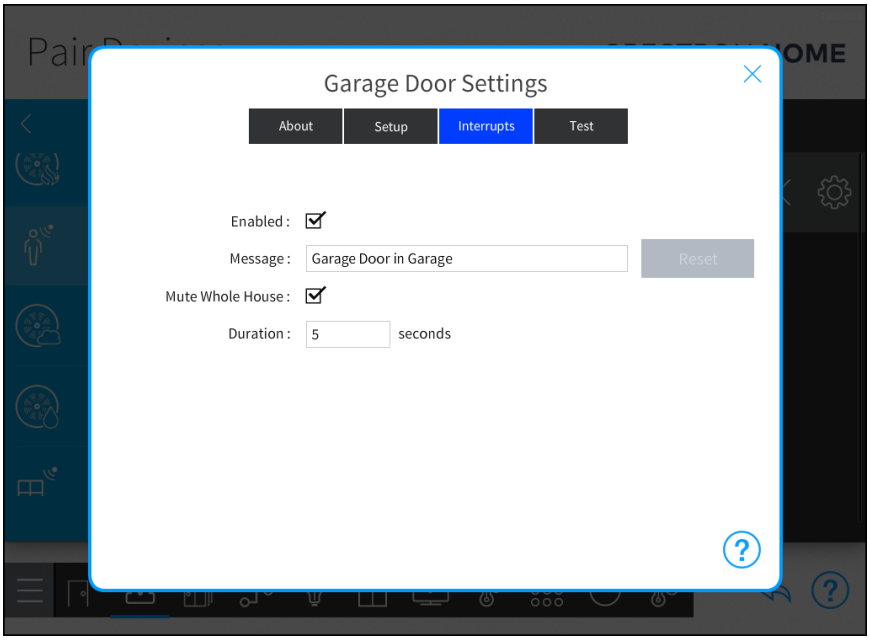
Interrupts are supported by the following devices:

Device Type	Enabled/Disabled (Default)	Event
Doorbell	Enabled	Doorbell is activated
Door Lock	Enabled	Door is unlocked
Door Sensor	Disabled	Door is opened
Driveway Sensor	Enabled	Driveway sensor is activated
Garage Door	Disabled	Garage door is opened
Gate	Disabled	Gate is opened
Burglary Alarm	Enabled	Burglary alarm is activated
Smoke Alarm	Enabled	Smoke alarm is activated
Water Alarm	Enabled	Water alarm is activated
Window Alarm	Enabled	Window alarm is activated
Occupancy Sensor	Disabled	Occupancy sensor is activated

NOTES:

- There is no interrupt when occupancy is detected by the Grace Occupancy feature on a Crestron occupancy sensor.
- Devices that are paired with the Crestron Home system prior to the introduction of the interrupts feature will have their interrupt enabled or disabled according to the list above. For example, the interrupt for a Smoke Alarm will be enabled when the system is updated.

Tap the **Interrupts** tab to configure the interrupts for the device.



NOTE: Touch screens that do not have speakers display the interrupt messages but cannot play the associated sound.

- **Enabled:** To enable or disable the interrupt for the device, tap the check box next to **Enabled**. When an interrupt is enabled, it is displayed in the Crestron Home user interface.
- **Message:** The message that is displayed on the user interface device when the interrupt occurs. The default interrupt message is "[Device Name] in [room]".

  To display a custom message, enter the message in the field. Tap the **Reset** button to revert to the default message.
- **Mute Whole House:** To mute the audio that is playing in any media room, tap the check box next to **Mute Whole House**. The audio is muted for the time set in the **Duration** field. The default **Mute Whole House** setting is enabled.
- **Duration:** The length of time that the audio in the room is muted. The duration can be set between 1 and 60 seconds. The default duration is 5 seconds.

Appendix E: Sonos and Crestron Home Integration

A Sonos system is also referred to as a Sonos household. A Sonos household includes all of the Sonos devices that are part of the same system. Sonos devices that are part of the same household may be grouped together and may share a Favorites list.

The Sonos app shows the devices for only one household. When the Sonos app is first launched, the app asks the user to add one Sonos device to the same subnet as the controller (the device that is running the Sonos app). Once the controller is synced with the Sonos device, the Sonos household that includes the device becomes the default household for the controller.

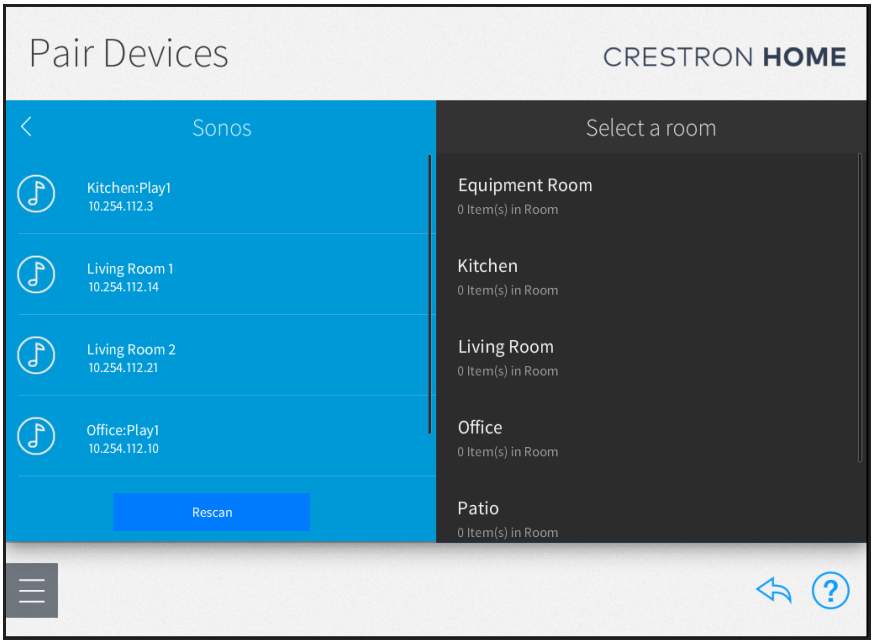
When a Sonos device from a different Sonos household is added to the same network, the Sonos app does not display the Sonos device in the device list until it is added using the appropriate procedure (**Manage** > **Add a player or sub**). To display devices from another household in the Sonos app, select **Help** > **Reset Controller**. Doing so will reset the household for the Sonos app and allows for a different household to be assigned.

The Crestron Home system allows only Sonos devices that belong to the same household to be added to the system. If no Sonos devices have been added to the system, all discovered Sonos devices are listed in the unassigned devices list, regardless of their configured Sonos household.

Once the first Sonos device is assigned to the Crestron Home system, the unassigned devices list is updated to display warning signs for all devices that are not part of the same Sonos household. These devices may not be added to the system unless they are added to the Sonos household that is currently associated with the system.

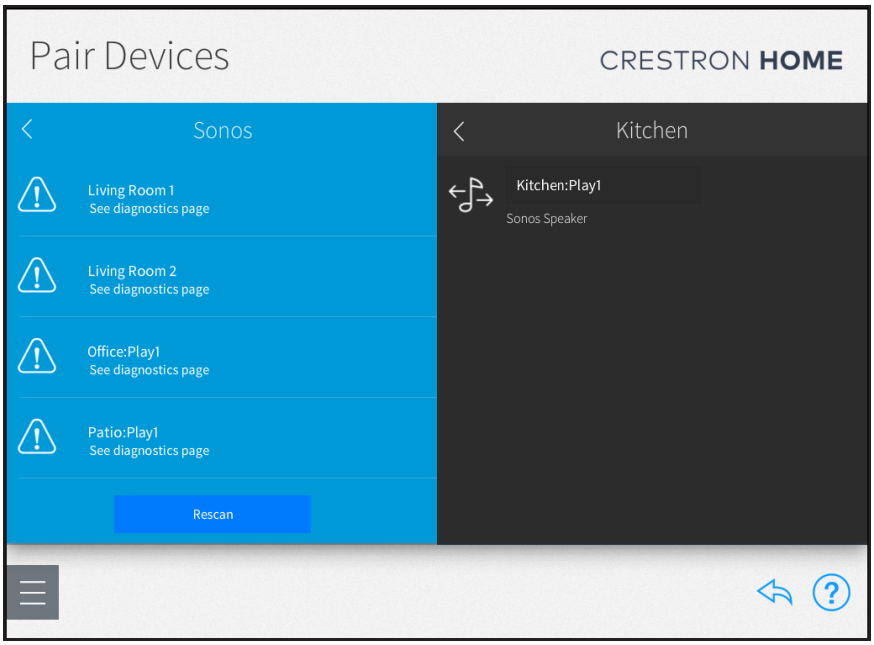
In the image on the following page, the "Kitchen:Play:1" device is assigned to a different Sonos household than the other devices that are shown.

Pair Devices Screen - Sonos (Devices from Multiple Households Shown)

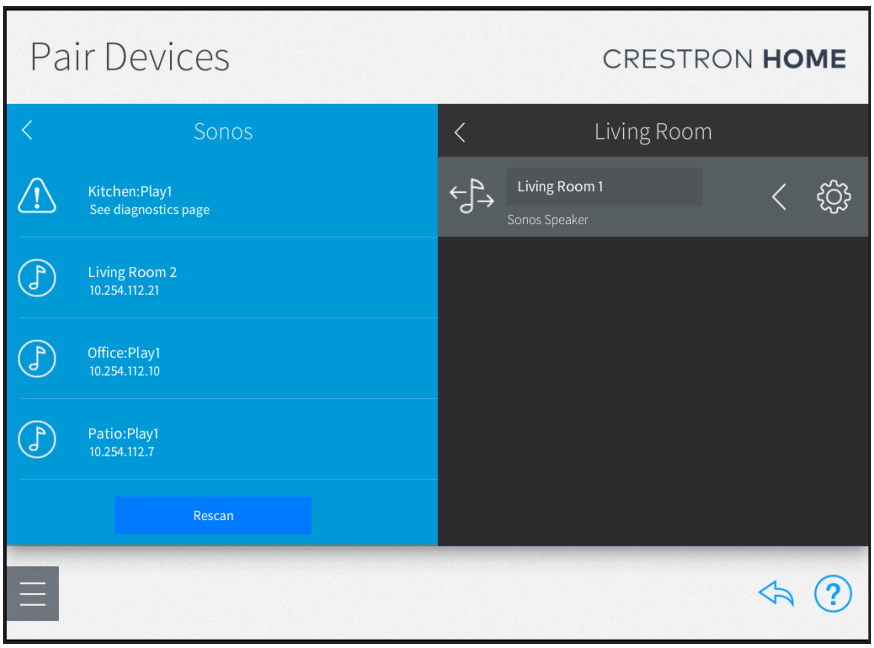


If the "Kitchen:Play:1" device is added to a room within the Crestron Home system, the devices from the other Sonos household may no longer be added.

Pair Devices Screen - Sonos (Kitchen:Play:1 Added)



If the "Living Room:Play:1" device is added to a room within the Crestron Home system, the "KitchenPlay1" device from the other Sonos household may no longer be added.



Sonos Troubleshooting

The following sections describe troubleshooting procedures for some of the common issues that may occur when adding Sonos devices to the Crestron Home system.

Multiple Sonos Households Found

This issue occurs when multiple Sonos households are discovered by the Crestron Home system.

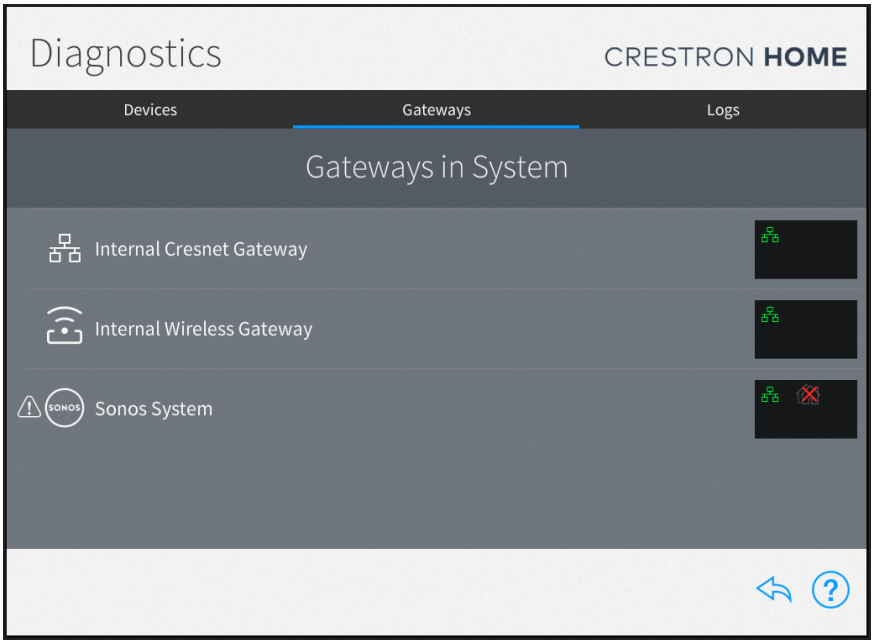
Issue(s)

- Not all discovered Sonos devices may be added to the Crestron Home system.
- A Sonos device is reporting as offline after it is moved to a different Sonos household.

Explanation

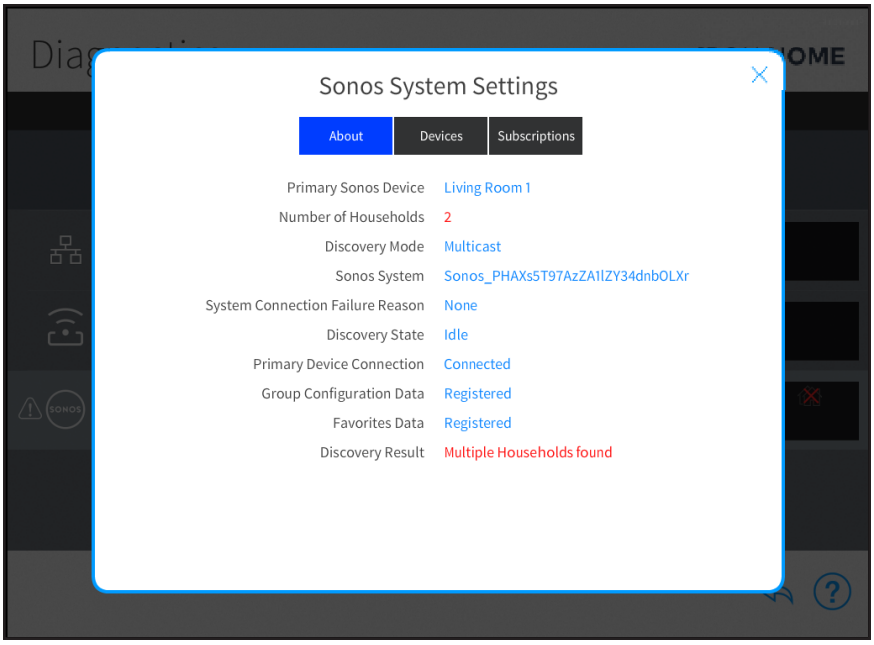
Devices from different Sonos households have been discovered on the network. The Crestron Home system provides a notification of this issue on the **Diagnostics** screen.

Diagnostics Screen - Multiple Sonos Households Found



Tap **Sonos System** in the **Gateways in System** screen, and then the gear icon next to the gateway to view the **Sonos System Settings** page. A "Multiple Households found" status is indicated for **Discovery Result**.

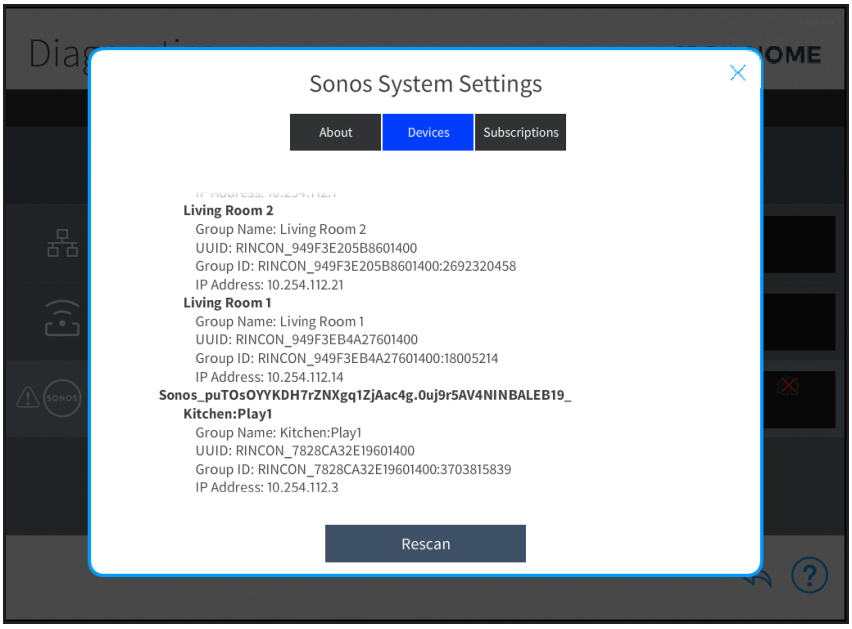
Sonos System Settings Screen - Multiple Sonos Households Found



Solution

1. Tap the **Devices** tab on the **Sonos System Settings** page.
2. Scroll through the list of devices to determine which devices belong to different Sonos households.

   Sonos System Settings Screen - Devices Tab

3. Reconfigure devices in the Sonos app so that they are added to the Sonos household that is assigned to the Crestron Home system.

Desired Household Not Found

This issue occurs when the desired Sonos household cannot be discovered by the Crestron Home system.

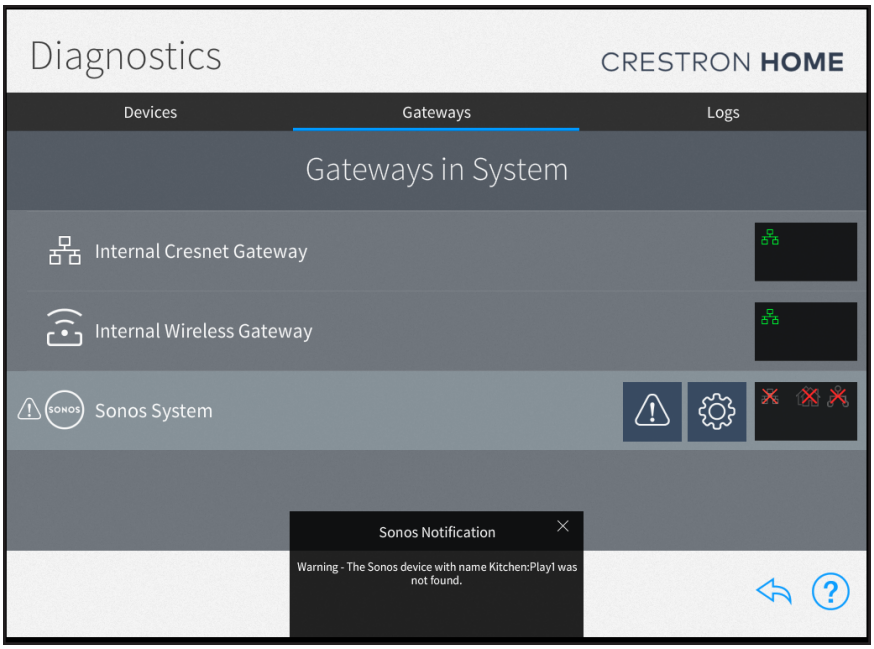
Issue(s)

- The Sonos discovery scan found Sonos devices, but all Sonos devices in the Crestron Home system report as offline.
- All Sonos devices in the Sonos household were reset to factory default settings.

Explanation

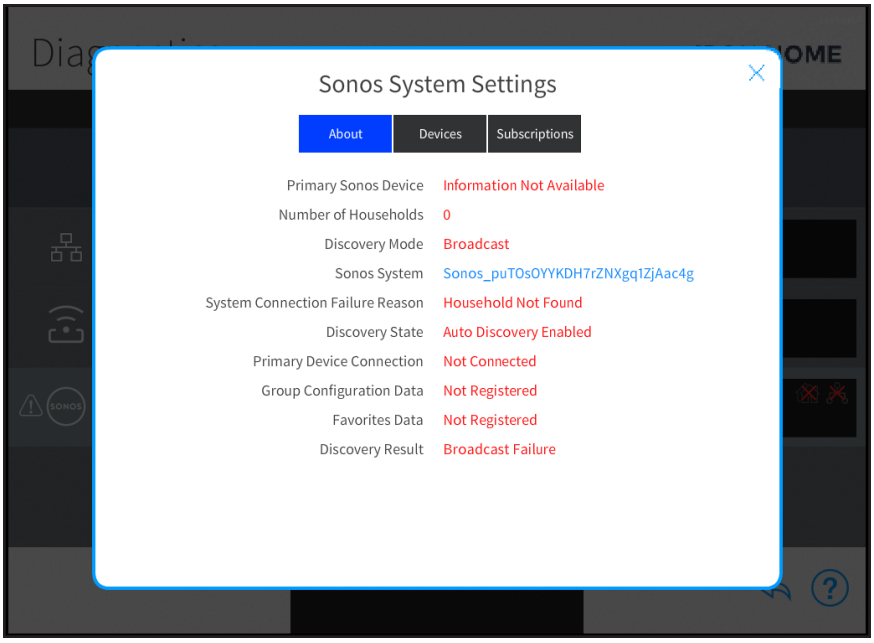
When the first Sonos device is added to the Crestron Home system, the Sonos household that the device belongs to is saved in the system configuration files. The Sonos System in Crestron Home reports as online only when a connection is established with one of the devices that is part of the saved Sonos household. The Crestron Home system provides a notification of this issue on the **Diagnostics** screen.

Diagnostics Screen - Desired Household Not Found



Tap **Sonos System** in the **Gateways in System** screen, and then the gear icon next to the gateway to view the **Sonos System Settings** page. A "Household Not Found" status is indicated for **Discovery State**.

Sonos System Settings Screen - Multiple Sonos Households Found



Solution

1. Open the Sonos app.
2. To verify that the devices that are assigned in the Crestron Home system are online, test to see if the devices can be controlled via the app.

   NOTE: Always close the Sonos app before verifying that a Sonos device is online.

3. If the device can be controlled, start a Sonos discovery scan on the **Pair Devices** screen to discover the device.

No Devices Found

This issue occurs when no Sonos devices are discovered by the Crestron Home system.

Issue(s)

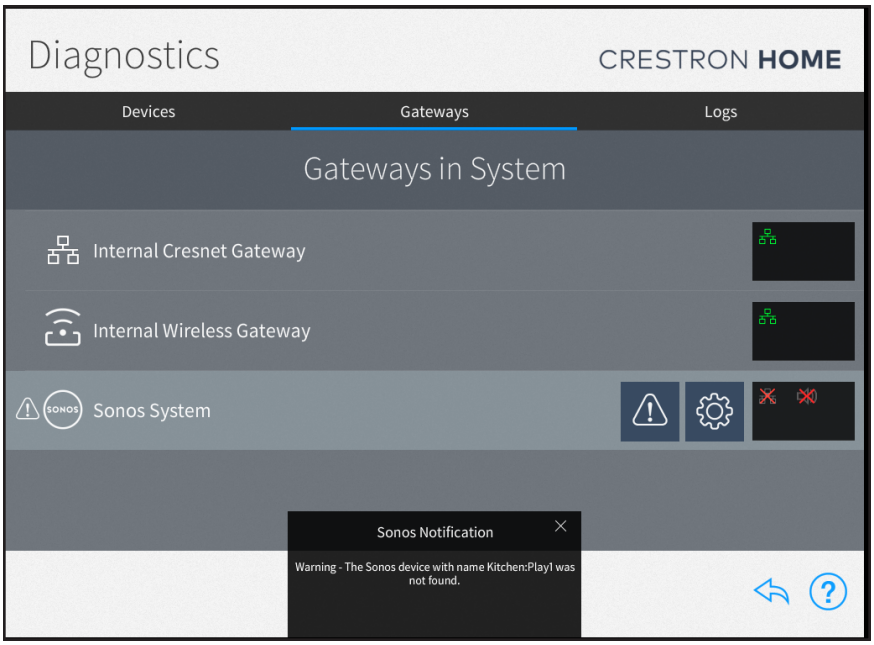
No Sonos devices were found during the Sonos discovery scan.

Explanation

When a Sonos discovery is initiated, a two-stage discovery process begins. In the first stage, a multicast message is sent out on the network. The Crestron Home system gives Sonos devices 30 seconds to respond. If at least one device responds during this interval, discovery is stopped. On the **Sonos System Settings** screen, a "Multicast Success" message is displayed.

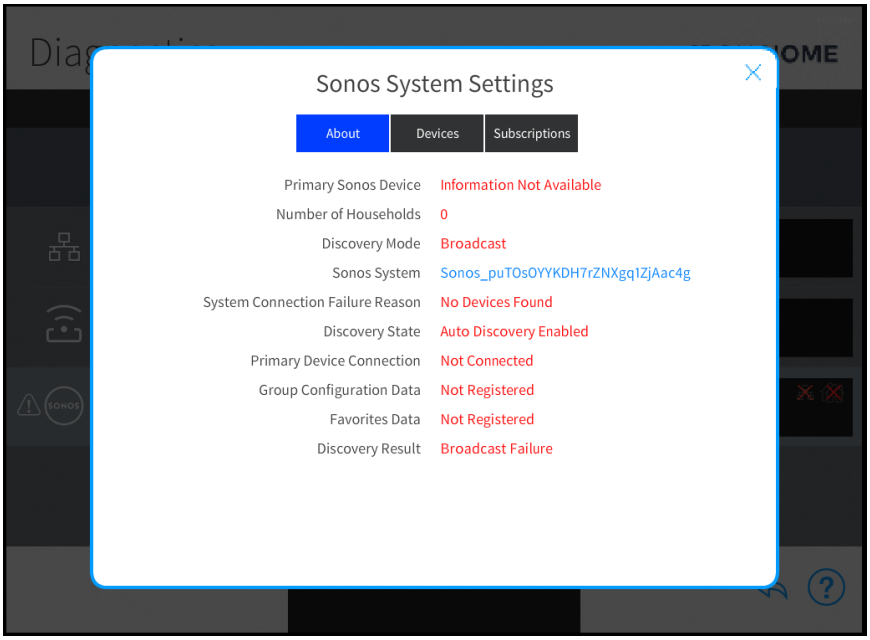
If no devices are discovered during the first stage, a second multicast message is sent out on the network. If no Sonos devices respond within 30 seconds, a "No Devices Found" error is raised. The Crestron Home system provides a notification of this issue on the **Diagnostics** screen.

Diagnostics Screen - No Devices Found



Tap the gear icon next to the **Sonos System** gateway to view the **Sonos System Settings** page with the **About** tab open by default. A "Household Not Found" status is indicated for **System Connection Failure Reason**.

Sonos System Settings Screen - No Devices Found



Solution

1. Connect a PC that is wired to the same network switch as the Crestron Home processor.
2. Open the Sonos app on the PC.
3. Verify that the Sonos devices are listed in the Sonos app.
4. If no devices are listed, the Sonos household must be reconfigured until the Sonos devices are discovered. For more information, refer to the Sonos support pages at www.sonos.com/support.

No Online Devices Found

This issue occurs when the discovered Sonos devices do not report as online.

Issue(s)

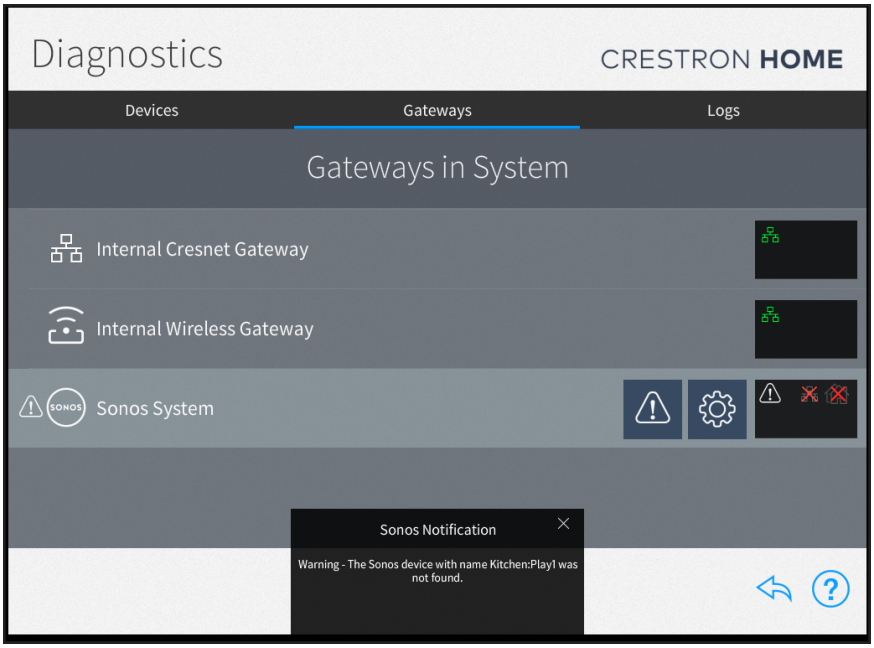
The Crestron Home system was able to discover Sonos devices but is unable connect to any of the devices for setup.

Explanation

After a successful Sonos discovery scan, the Crestron Home system selects one of the Sonos devices as the primary device. The system then connects to the device and subscribes for the Favorites event (used to retrieve and update the Favorites list) and the Group Configuration event (used to retrieve and update the group and player configuration).

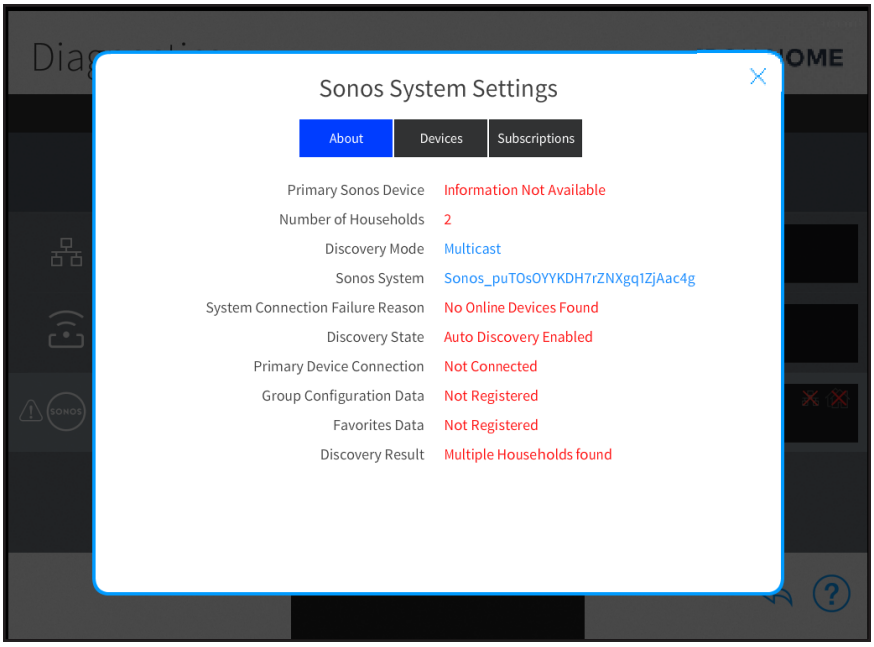
If one of these three processes fails, the Crestron Home system assumes that the device is offline and moves to the next Sonos device that was discovered. If one of these three processes fails for all discovered Sonos devices, the Sonos system cannot be created, and a "No Online Devices Found" error is raised. The Crestron Home system provides a notification of this issue on the **Diagnostics** screen.

Diagnostics Screen - No Online Devices Found



Tap the gear icon next to the Sonos System gateway to view the **Sonos System Settings** page with the **About** tab open by default. A "No Online Devices Found" status is indicated for **System Connection Failure Reason**.

Sonos System Settings Screen - No Devices Found



Solution

Depending on the issue, multiple solutions may be attempted:

- In the Sonos app, ungroup all devices, and then start a new Sonos discovery scan.
- Remove all Sonos devices in the Crestron Home system, and then add one new device to the system.
- For a "Favorites Event Subscription Timeout" or "Favorites Event Subscription Failed" message, select the **Subscriptions** tab in the **Sonos System Settings** page, and then press the **Refresh** button for the Favorites event.
- For a "Group Configuration Event Subscription Timeout" or "Group Configuration Event Subscription Failed" message, select the **Subscriptions** tab in the **Sonos System Settings** page, and then press the **Refresh** button for the Group Configuration event.

If the above solutions do not fix the issue:

- Power cycle the Sonos devices, and wait until they are discovered in the Sonos app.

  NOTE: Close the Sonos app after powering down a Sonos device.

- Power cycle the Crestron Home processor.

Speaker Pairs

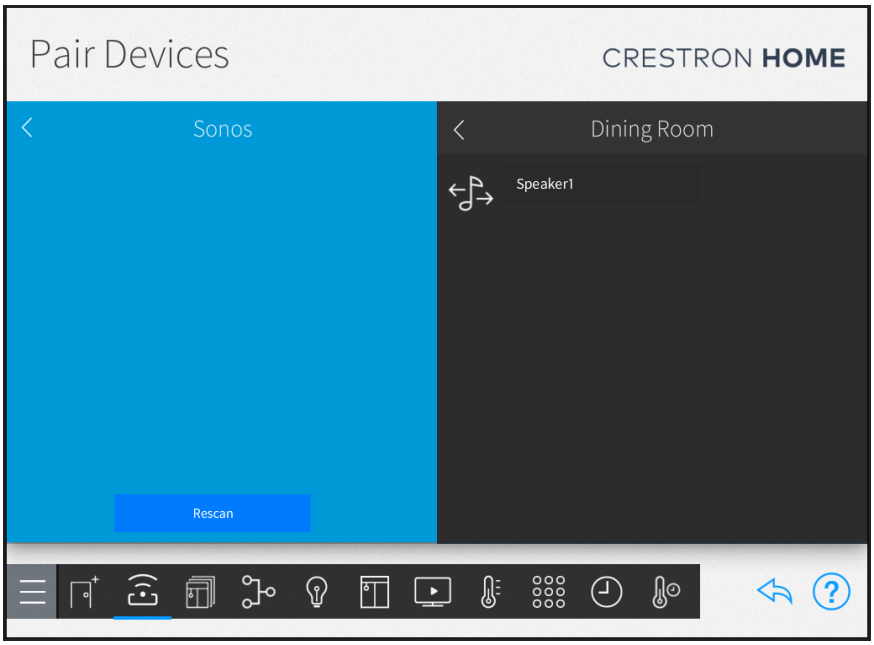
In the Sonos app, it is possible to pair two PLAY:1, PLAY:3, PLAY:5, or CONNECT:AMP speaker devices. When two of these speakers are paired, both speakers act as a single Sonos device in the Sonos app.

When a speaker pair is created in the Sonos app, the user is asked to assign one of the paired speakers as the left speaker. The speaker assigned as the left speaker becomes the master, and from that point forward, is used to represent both speakers in the pair.

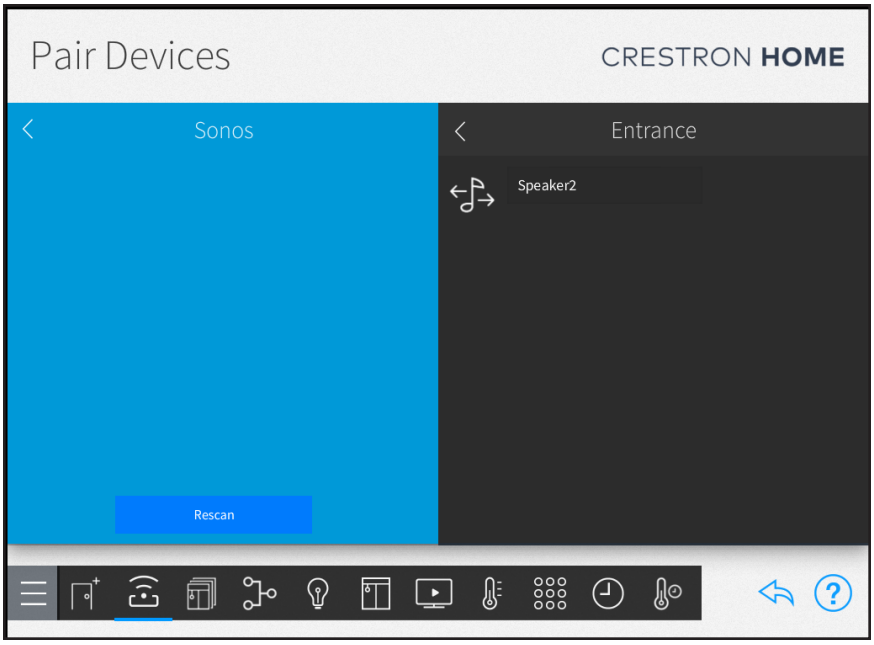
The speaker pair is named after the speaker that was used to start the speaker pair configuration. If this speaker is not chosen as the left (master) speaker, the left speaker is renamed automatically.

In the following images, "Speaker1" in the Dining Room and "Speaker2" in the Entrance will be used to create a speaker pair.

Pair Devices Screen - Sonos (Speaker1)



Pair Devices Screen - Sonos (Speaker2)

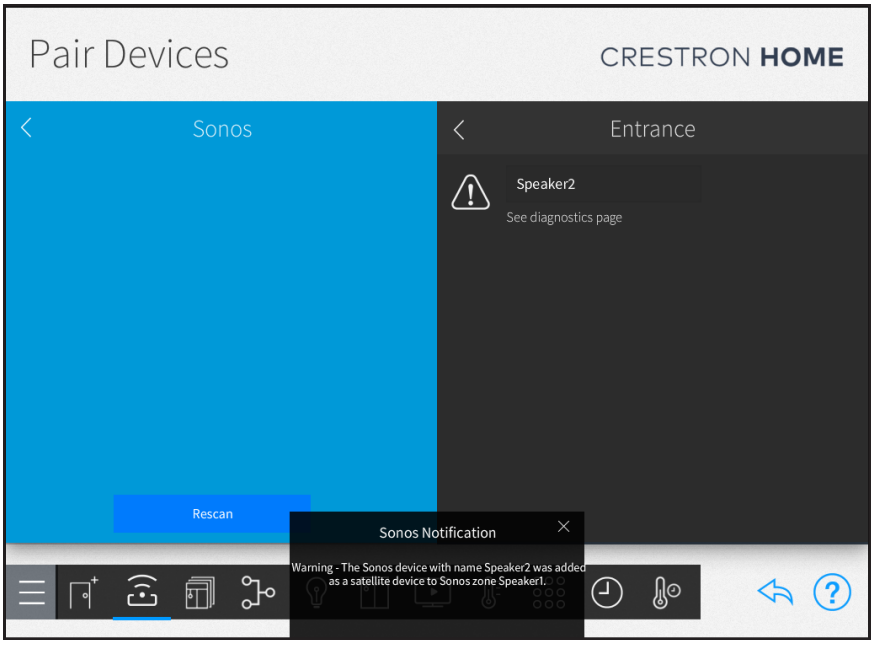


To select Speaker1 as the left (master) speaker:

1. Open the Sonos app.
2. Select **Speaker1**, and then select **Settings** > **Create Speaker Pair**.
3. Create a pair between Speaker1 and Speaker2 by following the in-app instructions.
4. Assign **Speaker1** as the left speaker.

Speaker2 is hidden, and the resulting speaker pair is named Speaker1. The Crestron Home system will be able to discover only Speaker1. If Speaker2 was assigned in the Crestron Home system, it will report as offline, and a pop-up dialog is displayed stating that Speaker2 was added as a satellite device to Speaker1.

Pair Devices Screen - Sonos (Speaker2 Offline)

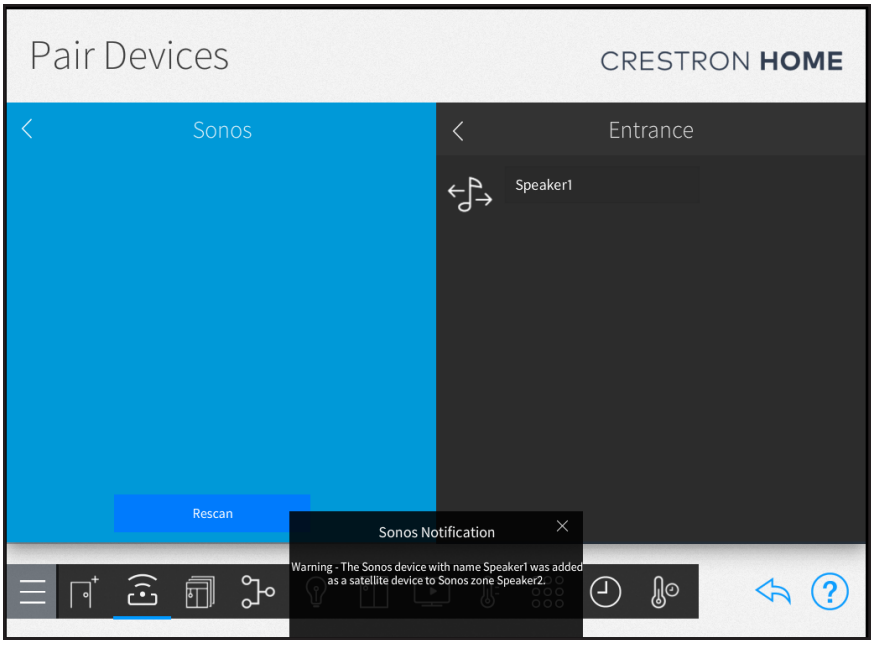


To select Speaker2 as the left (master) speaker:

1. Open the Sonos app.
2. Select **Speaker1**, and then select **Settings** > **Create Speaker Pair**.
3. Create a pair between Speaker1 and Speaker2 by following the in-app instructions.
4. Assign **Speaker2** as the left speaker.

Speaker1 is hidden, and the resulting speaker pair is named Speaker1. The Crestron Home system will be able to discover only Speaker2 (renamed to Speaker1). If Speaker1 was assigned in Crestron Home system, it will report as offline, and a pop-up dialog is displayed stating that Speaker1 was added as a satellite device to Speaker2.

Pair Devices Screen - Sonos (Speaker1 Pair)



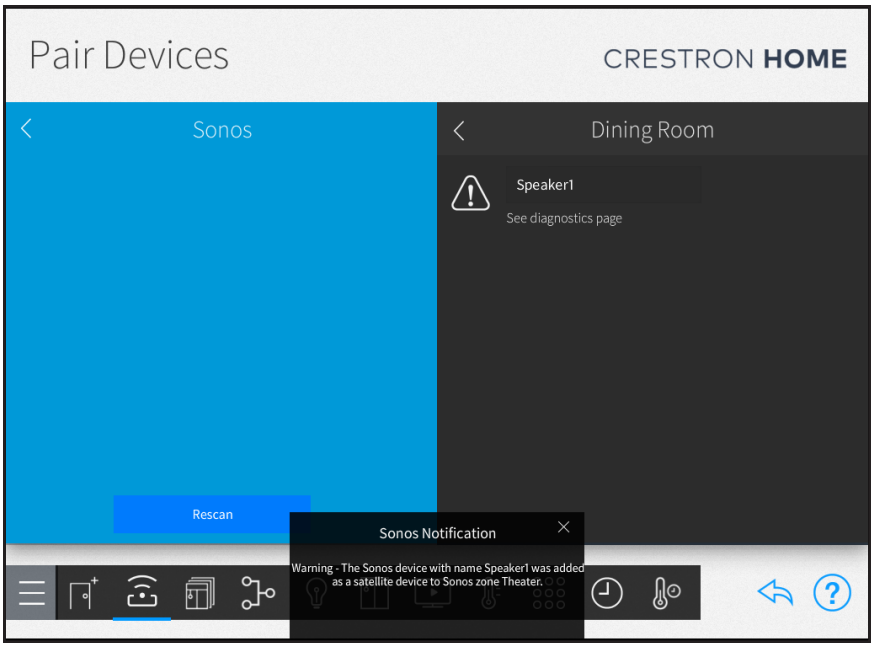
Surround Speakers

In the Sonos app, it is possible to assign two PLAY:1, PLAY:3, or PLAY:5 speaker devices as surround speakers for a Beam, PLAYBAR, or PLAYBASE device.

The two speakers that are selected as surround speakers are hidden in the Sonos app and may no longer be controlled.

If any of the surround speakers were assigned in the Crestron Home system, a pop-up dialog is displayed stating the Sonos device was added as a satellite device to the Beam, PLAYBAR, or PLAYBASE device.

Pair Devices Screen - Sonos (Speaker1 Offline)



Line-Out Configuration

For a Sonos CONNECT device, the line-out settings may be set as **Variable** or **Fixed**:

- **Variable:** The volume level of the line-out output may be controlled.
- **Fixed:** The volume level of the line-out output is set to 100% and may not be controlled.

Depending on the device type that was chosen when assigning a Sonos device in the Crestron Home system, observe the following points:

- Source
  - A source device type is used for a CONNECT device that is connected as an input to an audio receiver.
  - The line-out setting for source devices should always be set to **Fixed**, as the audio receiver is used for volume control.

    - A notification is displayed if the line-out setting for a CONNECT device with a source device type was set to **Variable**.
- Speaker
    - A speaker device type is added to a room in the Crestron Home system as an audio endpoint.
    - The line-out setting for speaker devices should always be set to **Variable**, as the Sonos device is used for volume control.
    - A notification is displayed if the line-out setting for a CONNECT device with a speaker device type was set to **Fixed**.

Best Practices

Refer to the following best practices when integrating Sonos devices with the Crestron Home system.

- When adding a Sonos device to an existing Sonos household, the device must be reset to factory settings to ensure that it begins using the system ID assigned to the existing Sonos system.
- Multiple Sonos households cannot be placed on the same network. Each Sonos household has a unique system ID, and Crestron Home system only allows Sonos devices to be assigned that are part of the Sonos household stored in the Crestron Home system configuration files.
- Set up the Sonos device(s) through the Sonos app before attempting a discovery with Crestron Home. If the Sonos device is not assigned to a room in the Sonos app, it cannot be discovered by Crestron Pyng.
- To rename a Sonos device in Crestron Home, change the name of the Sonos room that the device is assigned to using the Sonos app. The device name automatically updates in the Crestron Home system.
- Do not group Sonos devices together in the Sonos app, as this can lead to Crestron Home only being able to control one Sonos device instead of all of them individually.
- Crestron Home uses multicast to discover Sonos devices. Some network switches do not route these discovery packets correctly, and, as a result, Crestron Home does not discover any Sonos devices.
- The Autoplay option must be turned on in the Sonos app when adding a PLAY:5, CONNECT:AMP, Beam, PLAYBAR, or PLAYBASE.

Appendix F: Pair and Configure a Lutron System with a Crestron Home™ System

Lutron HomeWorks QS, HomeWorks QSX, RadioRA 2, and RA2 Select systems can be integrated into a Crestron Home system to enable control of Lutron lights, shades, and fans. The Lutron devices can be controlled from a user interface device such as a TSW-xx60 series touch screen, TSR-310 handheld remote, iOS® device, and Android™ device.

NOTES:

- It is recommended that the names of the Lutron areas match the names of the rooms in the Crestron Home system. This will allow the Crestron Home system to automatically import the matching areas. Non-matching areas will need to be added individually on the Pair Devices screen.
- One Lutron system can be added to a Crestron Home system.
- Crestron Home currently allows 24 light scenes and 24 shading scenes per room.
- Only Lutron areas that contain keypads that control lights, fans, or shades will be added to the Crestron Home system.
- Phantom Keypads that are part of a HomeWorks QSX system are imported and provide greater flexibility and functionality for the system.
- The Lutron area cannot be renamed.

Add a Lutron System

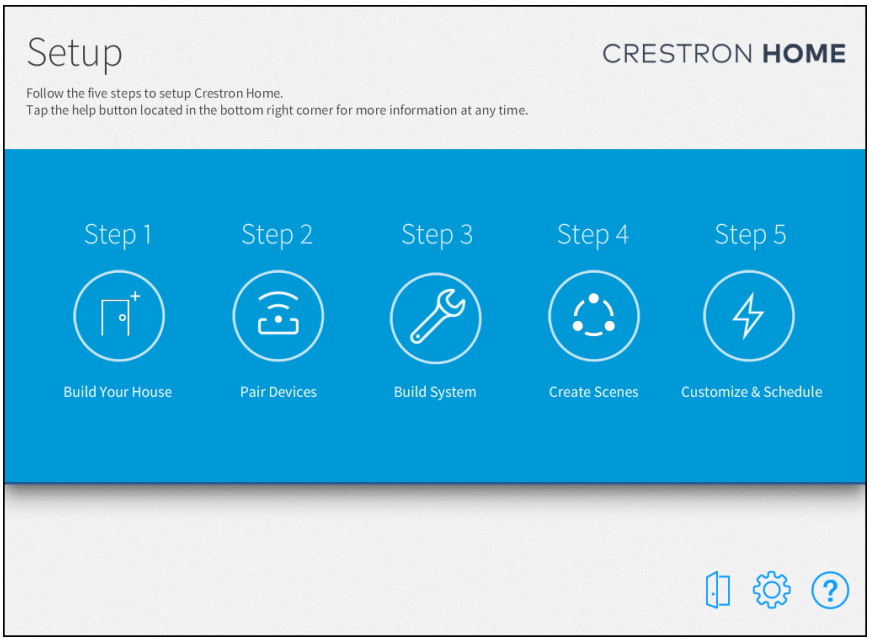
To add a Lutron system, complete the following procedures:

1. Discover and Pair the Lutron System below
2. Add the Lutron Areas and Scenes on page 490
3. Rename Lutron Buttons on page 495
4. Configure the Lutron Scenes (RA2 Select Systems Only) on page 497

Discover and Pair the Lutron System

To discover the Lutron system and pair it with a Crestron Home system:

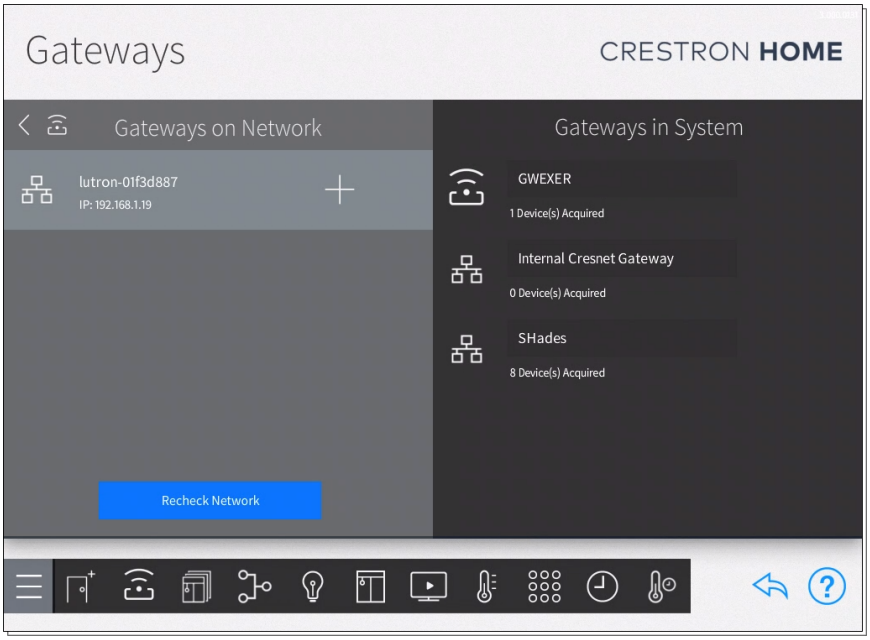
1. Tap the **Pair Devices** button on the **Setup** screen or the Pair Devices button on the setup menu to display the **Pair Devices** screen.



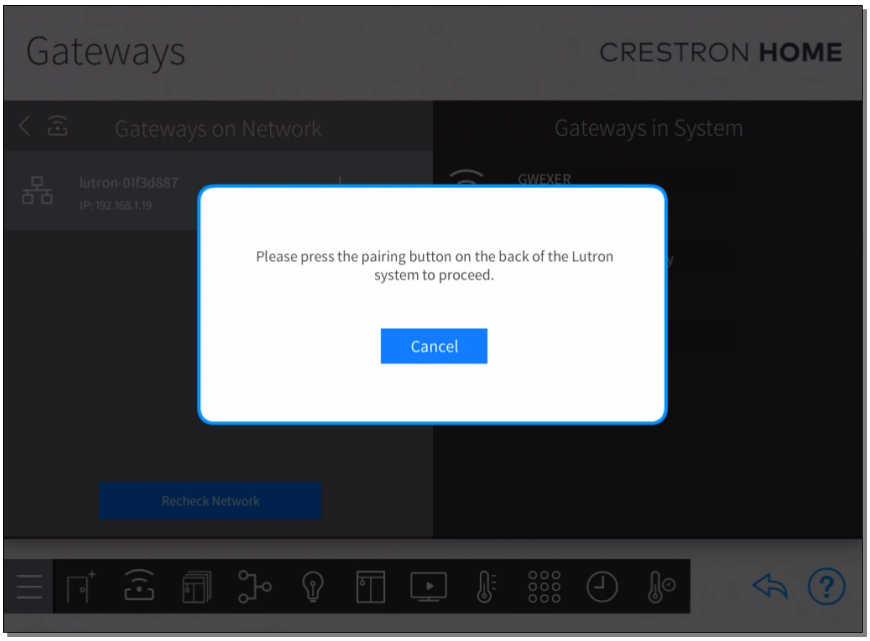
2. Tap **Manage Gateways** in the **Device Types** menu. The local network is scanned for gateways that can be added to the Crestron Home system. Discovered gateways appear under the **Gateways on Network** menu.

   NOTE: If necessary, tap **Recheck Network** to rescan the network for available gateways.

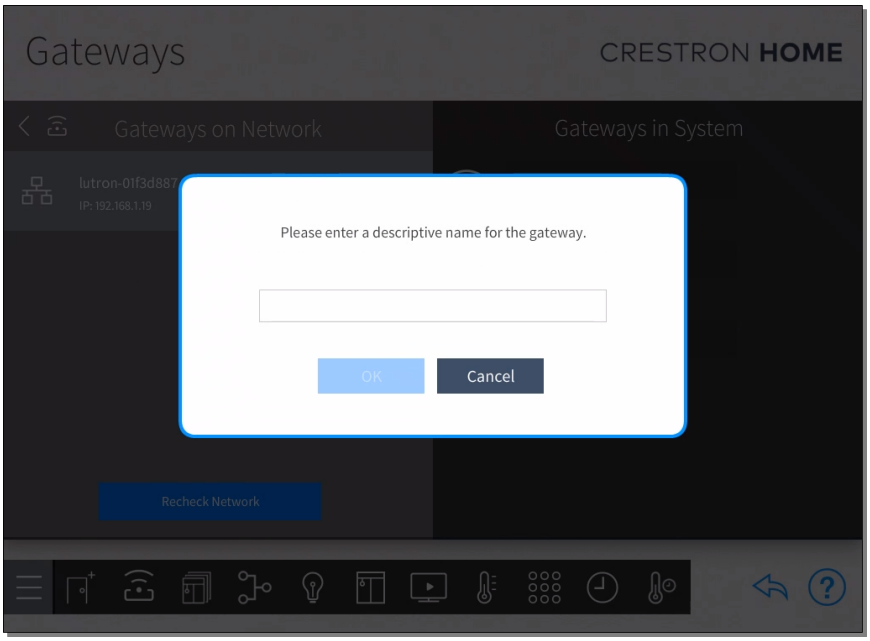
3. Select the Lutron system from the **Gateways on Network** menu and then tap the plus button (**+**) to add it to the system.



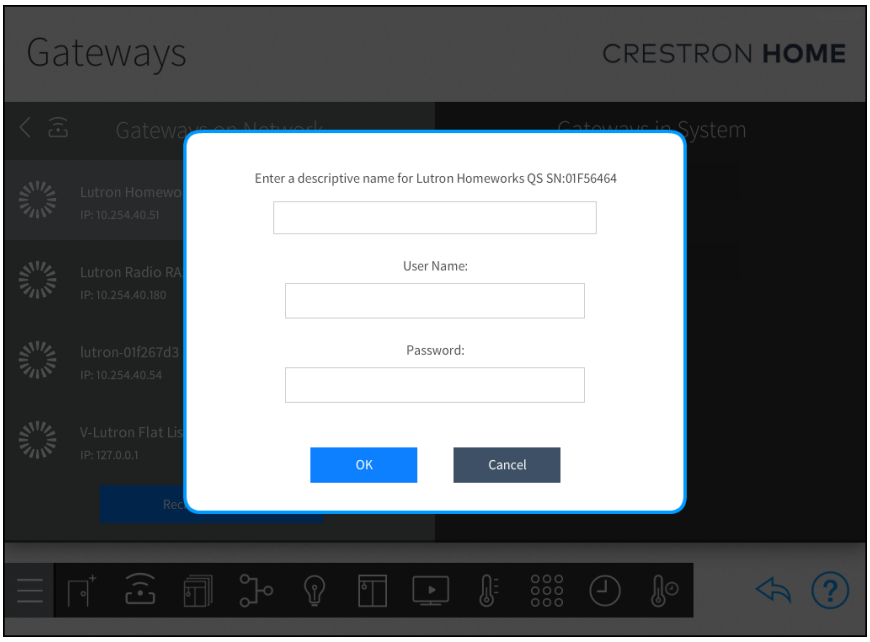
4. When the prompt appears:
    - **RA2 Select Systems**
        a. Press the pairing button on the back of the system. The Crestron Home system and the Lutron system will establish a connection. Tap **Cancel** to stop the pairing process and to return to the **Gateways** screen.



        b. Enter a descriptive name for the gateway and then tap **OK**.



- **Homeworks QS, Homeworks QSX, and Radio RA2 Systems**
    a. Enter a descriptive name for the system along with the user name and the password for the system and then tap **OK**.



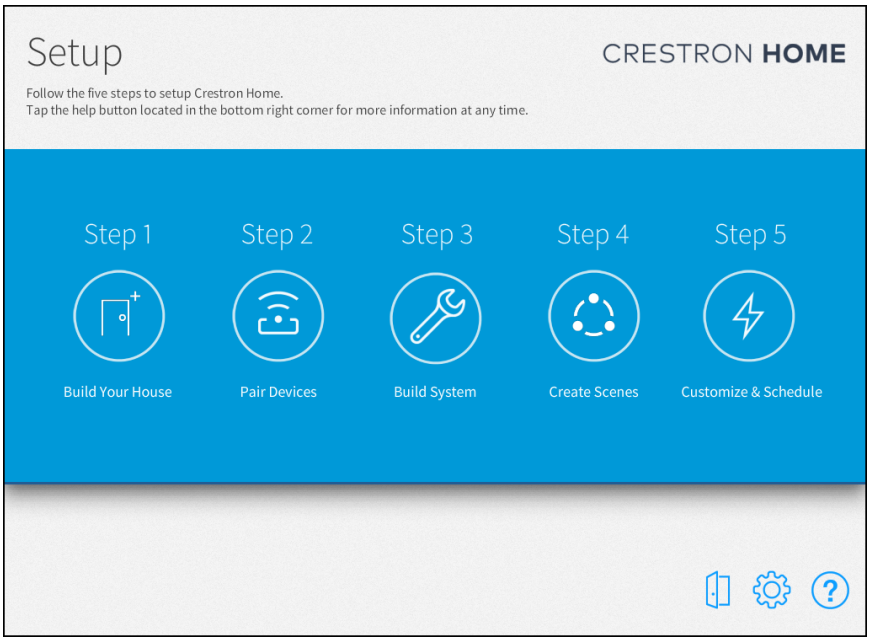
5. The Lutron system is added to the Crestron Home system and is displayed in the **Gateways in System** menu. Tap the gear button next to Lutron system to display the **About** tab.

> **NOTE:** When the Lutron system is added to the Crestron Home system, the **Lutron** folder becomes available in the **Device Types** menu on the **Pair Devices** screen.

Add the Lutron Areas and Scenes

> **NOTE:** Scenes are added for RA2 Select Systems only.

1. Tap the **Pair Devices** button on the **Setup** screen or the Pair Devices button on the setup menu to display the **Pair Devices** screen.

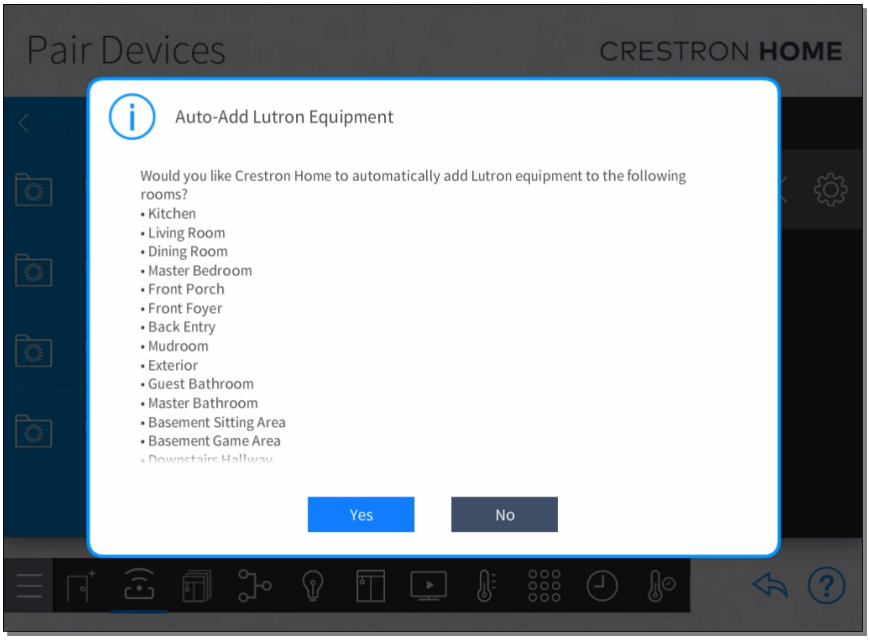


2. Tap **Lutron** in the **Device Types** menu.

3. The **Auto-Add Lutron Equipment** dialog box is displayed and lists the room names that match between the Crestron Home system and the Lutron system. Tap the **Yes** button to automatically add the Lutron areas (and equipment) to the indicated rooms or tap the **No** button to manually add the Lutron area to a room.

   NOTES:

   - Lutron areas that do not have a matching Crestron Home room names are added to the **Lutron Area** menu and must be manually added to a room.
   - To manually add a Lutron area to a room, refer to Add Lutron Areas to Rooms on page 494.
   - Tap the **Rescan** button to scan the Lutron system for new Lutron areas and new equipment. For details, refer to Rescan the Lutron System on page 498.
   - The **Auto-Add Lutron Equipment** dialog box is displayed:
     - After the Lutron system is added and **Lutron** is selected from the **Device Types** menu for the first time.
     - After the **Rescan** button is pressed and matching room names are discovered.

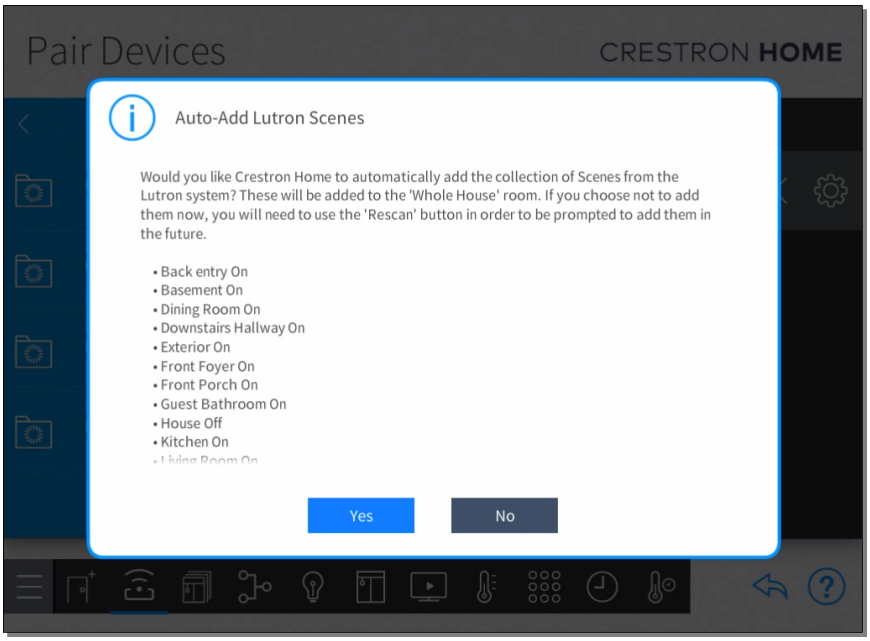


4. (For RA2 Select Systems Only) The **Auto-Add Lutron Scenes** dialog is displayed and lists the Lutron scenes that can be imported. Tap the **Yes** button to add the scenes to the Crestron home system or tap the **No** button to skip the Lutron scene import process. The Lutron scenes are placed in the Whole House room in Light Scenes and Shade Scenes configuration pages.

   If **No** is selected, the Lutron scenes are not added to the Crestron Home system. To add the Lutron scenes, refer to Pair and Configure a Lutron System with a Crestron Home™ System on page 486

   NOTES:

   - A Lutron scene cannot be imported if the scene name already exists in the Crestron Home system or matches a Crestron Home reserved scene name (All On, All Off, All Open, All Closed). The scene name is displayed in red text if a scene name conflict exist.
   - Lutron scenes that control both lights and shades are imported as separate light and shade scenes but retain control of all devices in the scene. For example, the lights and shades are adjusted to their scene levels if the Lutron shade scene is recalled or if the Lutron light scene is recalled.
   - Tap the **Rescan** button to scan the Lutron system for new Lutron scenes. For details, refer to Rescan the Lutron System on page 498.



Add Lutron Areas to Rooms

This procedure is required for Lutron areas that must be manually added to the Crestron Home system.

NOTE: Only one Lutron area can be added to each room in the Crestron Home system.

To add a Lutron area to a room:

1. Select the room where the Lutron area is installed from the **Select a room** menu.
2. Select the Lutron area from the **Lutron Area** menu and then tap the plus button (**+**) to add the Lutron area to the selected room.

3. The Lutron area is added to the room and displayed as a Lutron Area folder on the right side of the screen.

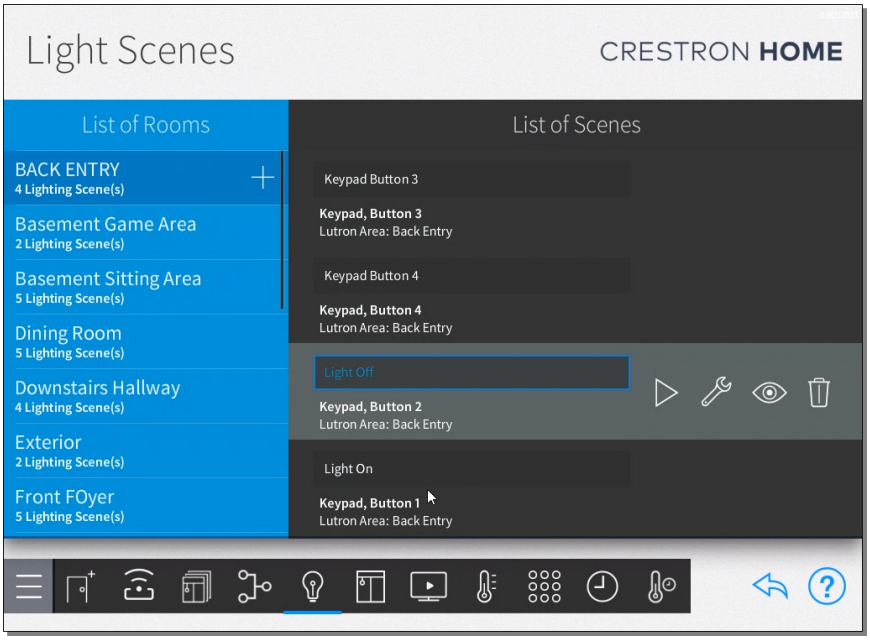
   NOTE: To view information about the Lutron area and the devices that are placed within it, tap the gear button next to the Lutron area folder.

Rename Lutron Buttons

Rename Lutron buttons with user-friendly names. The name of the button is displayed in the Crestron Home user interface.

1. Tap the **Configure Lighting Scenes** button on the **Setup Scenes** screen or the Light Scenes button on the setup menu to display the **Light Scenes** screen.

2. Select a room from the **List of Rooms** menu.



3. Select a Lutron button from the **List of Scenes** menu.
4. Repeat steps 1 and 2 for all Lutron buttons in all rooms in the Crestron Home system.

Configure the Lutron Scenes (RA2 Select Systems Only)

Rename Lutron Scenes and Enable Visibility

To view the scenes in the Crestron Home user interface, the scenes must be made visible in the desired room. The name of the scene is displayed in the Crestron Home user interface and must be provided a user-friendly name.

NOTES:

- Lutron scenes are stored in the Whole House room in the **Light Scenes** and **Shade Scenes** configuration screens.
- To access scenes, tap the **Configure Lighting Scenes** button on the **Setup Scenes** screen or the Light Scenes button on the setup menu to display the **Light Scenes** screen.

Rename Lutron Scenes

To rename the scene, tap the name of the scene and then enter a new name for the scene. The name assigned to the scene will be displayed in the Crestron Home user interface.

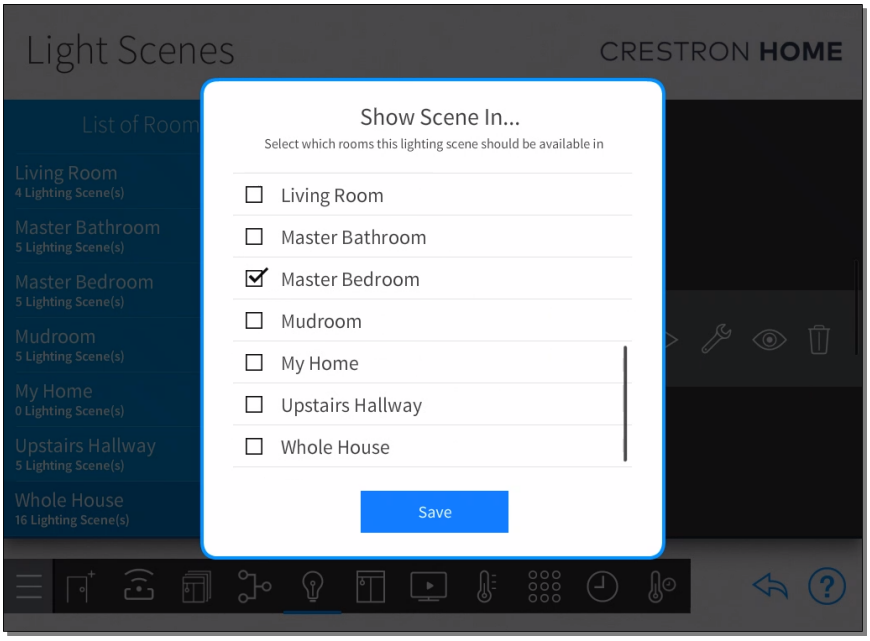
Configure Scene Visibility

Lutron scenes are hidden when the are imported into the Crestron Home system. To use the Lutron scene in the Crestron Home user interface, the scene must be enabled.

To enable the Lutron scene:

1. Tap the Lutron scene and then tap the eye icon. The **Show Scene In** dialog box is displayed.

2. Select the room(s) that should display the Lutron scene.



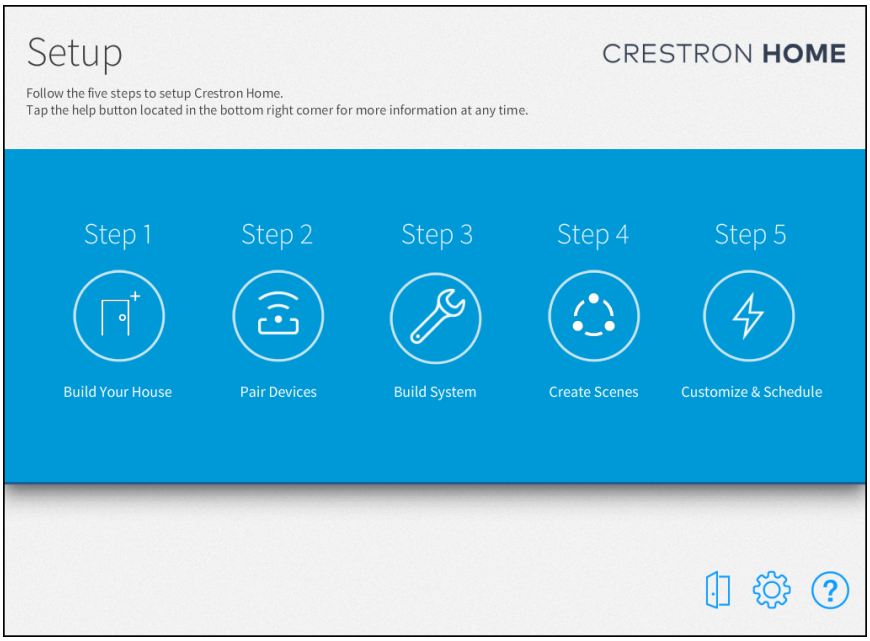
3. Tap the **Save** button to accept the changes.

Rescan the Lutron System

NOTES: When the Lutron system is rescanned, the Lutron system will be re-downloaded. Consider the following when rescanning the Lutron system.

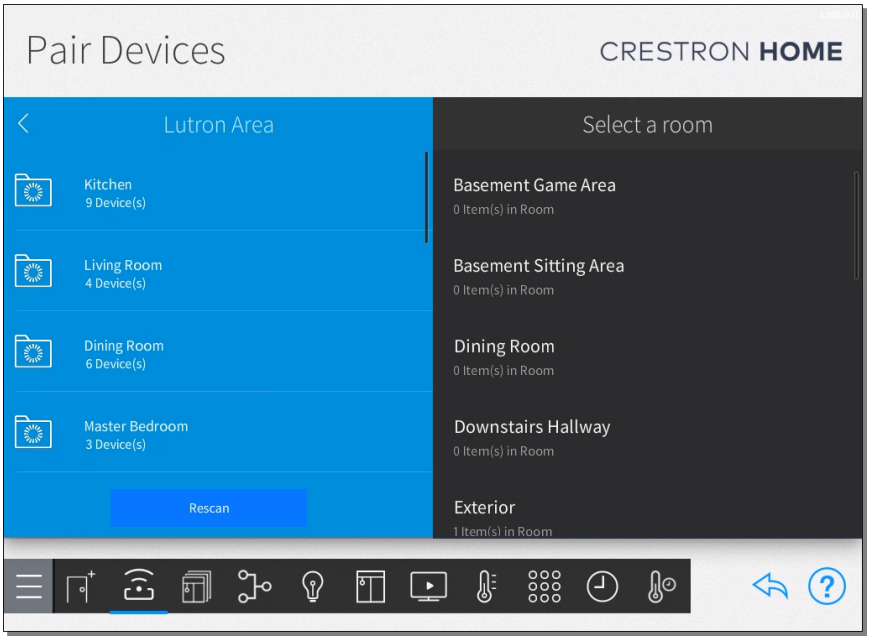
- Devices that have been added to the Lutron system will become available to the Crestron Home system.
- Changes to Lutron scene names and keypad names will not be overwritten.
- If a Lutron device was added to the Lutron system, the device can be added to the Crestron Home system.
- If a Lutron area was deleted from the Lutron system, the device and its programming is deleted from the Crestron Home system.
- If a device in a Lutron system is moved to different Lutron area, the existing device is deleted from the Crestron Home system and is added to the Crestron Home system as a new device.

1. Tap the **Pair Devices** button on the **Setup** screen or the Pair Devices button on the setup menu to display the **Pair Devices** screen.



2. Tap **Lutron** in the **Device Types** menu.

3. Tap the **Rescan** button in the **Lutron Area** menu. The Crestron Home system scans the Lutron system for changes.



Appendix G: myCrestron Crestron Home Configurator

Use the Crestron Home Configurator to create a system configuration that is comprised of rooms, lighting loads, enclosures, in-wall and centralized lighting modules, and a load schedule. This configuration will be used in the Crestron Home system.

The myCrestron Residential Monitoring Service stores the Crestron Home system configuration until the system is ready to be deployed. The Crestron Home configuration is loaded onto a Crestron Home processor using a deployment code which allows the installer to skip the majority of the on-site setup using the Crestron Home Setup app.

Access the Crestron Home Configurator

The Crestron Home Configurator is available from the myCrestron Residential Monitoring Service portal.

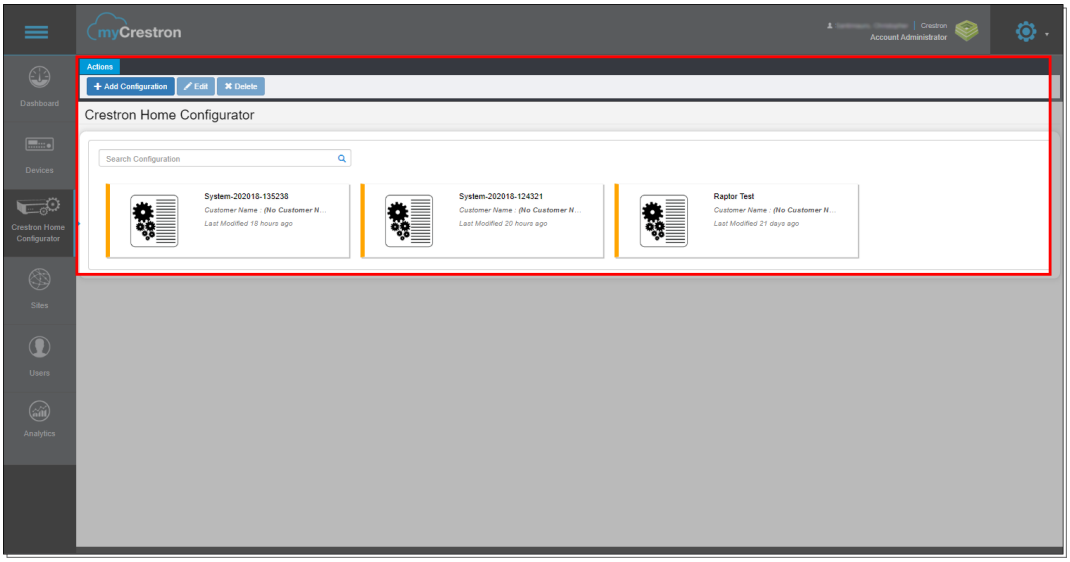
NOTE: To access the myCrestron Residential Monitoring Service portal:

- The user must be a Crestron residential dealer.
- The dealer must be subscribed to the myCrestron Residential Monitoring Service.
- The dealer administrator must provide the user access to the myCrestron Residential Monitoring Service portal.

To access the Crestron Home Configurator:

1. Using a web browser on a PC, navigate to the myCrestron Residential Monitoring Service located at https://portal.my.crestron.com.
2. Click the **Crestron Home Configurator** button.

3. The **Crestron Home Configurator** opens. The **Crestron Home Configurator** lists all configurations that have been created. The configurations list system name, the customer name, and the date the configuration was last modified.



Create and Manage Configurations

Create a Configuration

To create a new configuration:

1. Click the **Add Configuration** button.
2. The configuration is created and then opened. The **Configuration** tab is displayed. To edit the configuration, refer to Configure a Crestron Home System on the next page.

Edit a Configuration

To edit an existing configuration:

1. Click a configuration to select it.
2. Click the **Edit** button.
3. The configuration is opened and displays the **Configuration** tab. To configure, refer to Configure a Crestron Home System on the next page.

Delete a Configuration

To delete an existing configuration:

1. Click a configuration to select it.
2. Click the **Delete** button.
3. A confirmation dialog is shown. Click the **Yes** button to delete the configuration or **No** to keep the configuration.

Configure a Crestron Home System

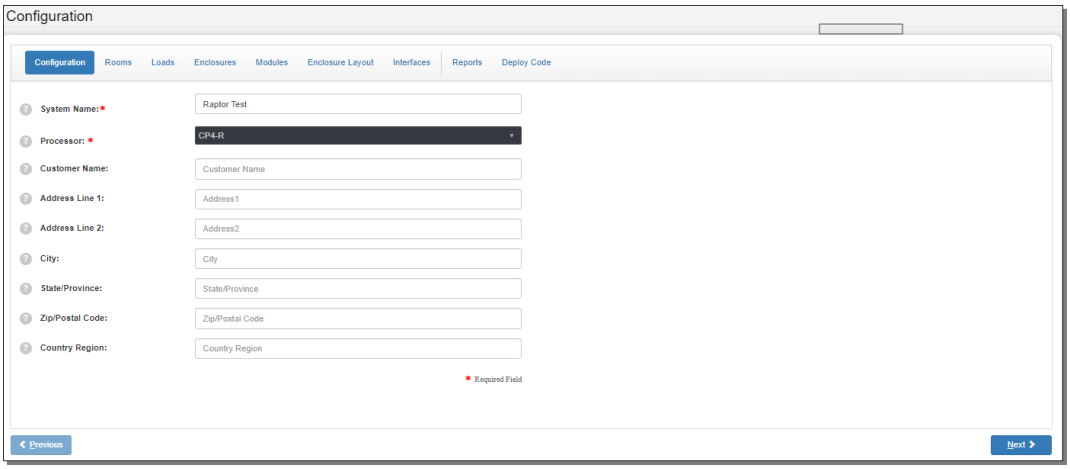
To configure a Crestron Home system, complete the information in the **Configuration**, **Rooms**, **Loads**, **Enclosures**, **Modules**, and **Enclosure Layout** tabs.

Use the **Reports** tab to generate a PDF file of the load schedule and the **Deploy Code** tab to create a deployment code for the configuration.

NOTE: **Previous** and **Next** buttons are provided to navigate between the tabs.

Configuration Tab

The **Configuration** tab is where the configuration is named, the control processor is selected, and the customer information is entered.



- **System Name:** Enter a descriptive name for the system. The system name will be used to identify the configuration within myCrestron and also be used for the system name for Crestron Home. The default system name is "System-[date]-[time]".
- **Processor:** Choose the Crestron Pyng or Crestron Home processor that the system will be loaded on.

  NOTES:

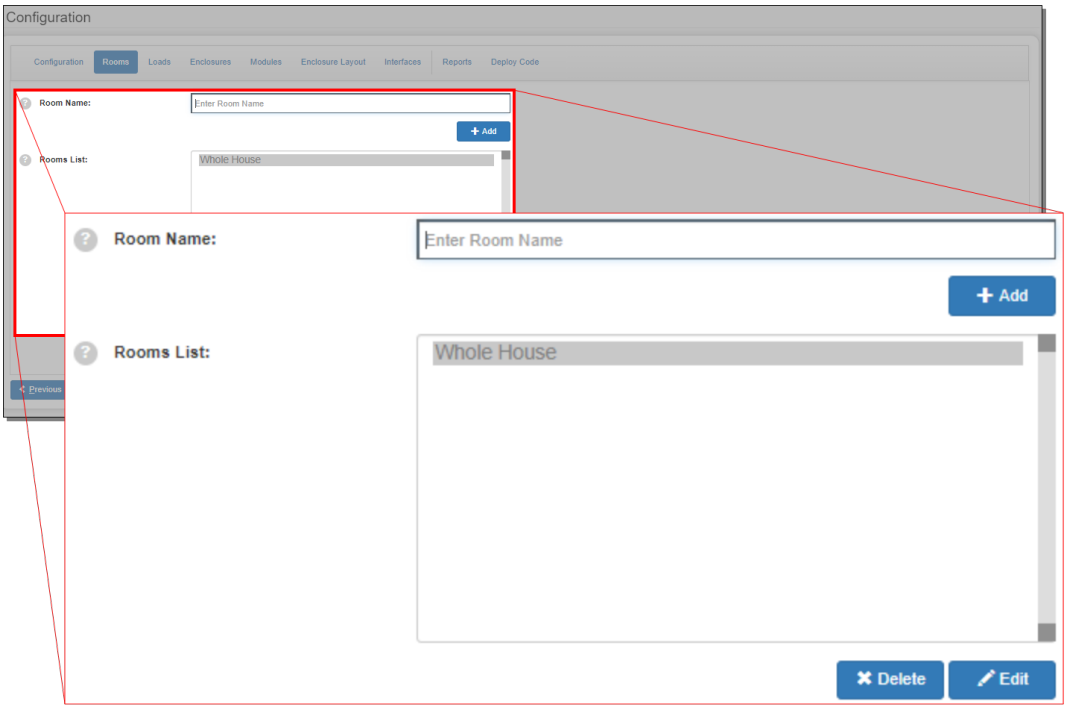
  - The processor type determines the validation settings used for the other tabs. Once the processor is selected, it cannot be changed.
  - The configuration must be loaded onto a control processor that matches the selection. For example, if the PYNG-HUB control processor is selected as the processor, the configuration cannot be loaded onto a CP4-R control processor.
- **Customer Name:** Enter the name of the customer.
- **Customer Address:** Enter the **Address Line 1**, **Address Line 2**, **City**, **State/Province**, **Zip/Postal Code**, and **Country Region** of the customer.

Rooms Tab

Use the **Rooms** tab to add rooms to the configuration. The rooms are displayed in the rooms list.

NOTES:

- When the configuration is transferred to the control processor, the rooms entered in the **Rooms** tab are transferred to the Build your House section of the Crestron Home Setup app.
- A Whole House room is created by default. Devices cannot be added to the Whole House room in the Crestron Home Configurator.



Add Rooms

To add a room:

1. Type the name of the room in the **Room Name** field. The **Room Name** field displays a list of common room names based on the text that is entered.

   NOTE: To add the selected room to the **Rooms List**, press the **Enter** key on your keyboard.

2. Click the **+ Add** button to add the room to the configuration. The room is added to the **Rooms List** menu.

Delete a Room

When a room is deleted, all data associated with the room (such as loads, enclosures, or modules) are removed from the configuration.

To delete a room:

1. Select a room from the **Rooms List** menu and then click the **Delete** button.
2. A confirmation dialog is shown. Click the **Yes** button to delete the room or **No** to keep the room.

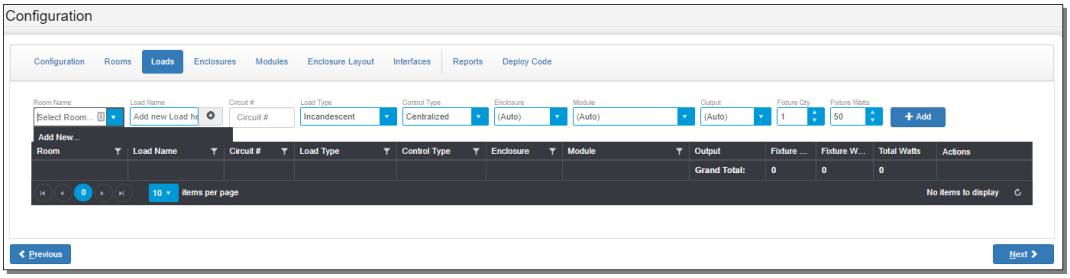
Edit a Room Name

To change a room name:

1. Select a room from the **Rooms List** menu and then click the **Edit** button.
2. The selected room is displayed in the **Room Name** field. Change the name of the room as needed.
3. Click the **Update** button to save the changes or **Cancel** to discard the changes.

Loads Tab

The **Loads** tab is where the loads are entered into the configuration and also displays the load schedule. The load schedule displays the essential details of the load including the room, load name, electrical circuit, load and control type, enclosure, module, module output, number of fixtures, and fixture watts. The load schedule also lists the total watts for the load and provides a grand total for the number of fixtures, fixture watts, and total watts for the entire configuration.



Add a Load

To add loads to the configuration:

1. Select the location of the load from the **Room Name** drop-down.
2. Type the name of the load in the **Load Name** field. The **Load Name** field displays a list of common load names based on the text that is entered.

   NOTES:

   - To select the highlighted load name, press the **Tab** key on your keyboard.
   - To select the highlighted load name and add the load to the load schedule, press the **Enter** key on your keyboard. The other settings for the load, such as **Load Type**, **Control Type**, and **Enclosure**, remain unchanged and are added to the load schedule. Use this feature to add several similar loads to the load schedule.

3. Type the circuit number in the **Circuit #** field.
4. Select the load type from the **Load Type** field. The default is **Incandescent**.
5. Select **Centralized** or **In-Wall** from the **Control Type** drop-down menu. The default is **Centralized**.

   NOTE: When **In-Wall** is selected from the **Control Type** drop-down menu, the **Enclosure** drop-down menu is disabled.

6. Select the enclosure that the load should be placed in from the **Enclosure** drop-down menu. The **Enclosure** drop-down menu displays all enclosures that are in the configuration. The default is **(Auto)**.

   NOTE: To add a new enclosure to the configuration, click the **Add New** button and type the name of the enclosure in the **Enclosure Name** field. Select the room that the enclosure is placed in from the **Room Name** drop-down menu and the type of enclosure from the **Enclosure Type** drop-down menu. Click the **+ Add** button to add the enclosure to the **Enclosure List** menu in the **Enclosures** tab.

7. Select the module that will control the load from the **Module** drop-down menu. The **Module** drop-down menu displays all modules that are in the configuration. The default is **(Auto)**.

   NOTE: To add a new module to the configuration, click the **Add New** button. Select the module type from the **Module Type** drop-down menu and the enclosure slot from the **Enclosure Slot** drop-down menu. The module name is assigned based on the module type and enclosure slot selections. Click the **+ Add** button to add the module to **Modules List** menu in the **Modules** tab.

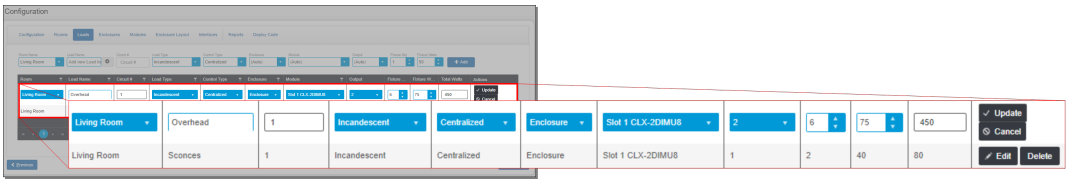
8. Select the module output that will control the load from the **Output** drop-down menu. A module must be selected from the **Module** drop-down menu. The **Output** drop-down menu displays the slots that are available on the module selected in the **Module** drop-down menu. The default is **(Auto)**.
9. Select the number of fixtures on the load from the **Fixture Qty** menu and the fixture wattage from the **Fixture Watts** menu.
10. Click the **+ Add** button to add the load to the load schedule.

Edit a Load

The details of the load can be changed after the load is created.

To edit a load:

1. Identify the load that should be edited and then click the **Edit** button.
2. The line-item in the load schedule displays the fields that can be changed. Make the necessary changes to the load.



3. Click the **Update** button to save the changes or the **Cancel** button to discard the changes.

Delete a Load

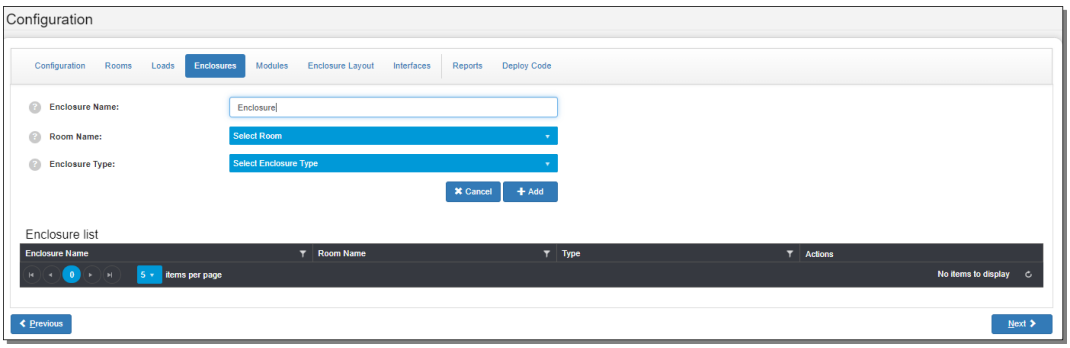
The load can be deleted if it is no longer needed.

To delete a load:

1. Identify the load that should be deleted and then click the **Delete** button.
2. A confirmation dialog is shown. Click the **Yes** button to delete the load or **No** to keep the load.

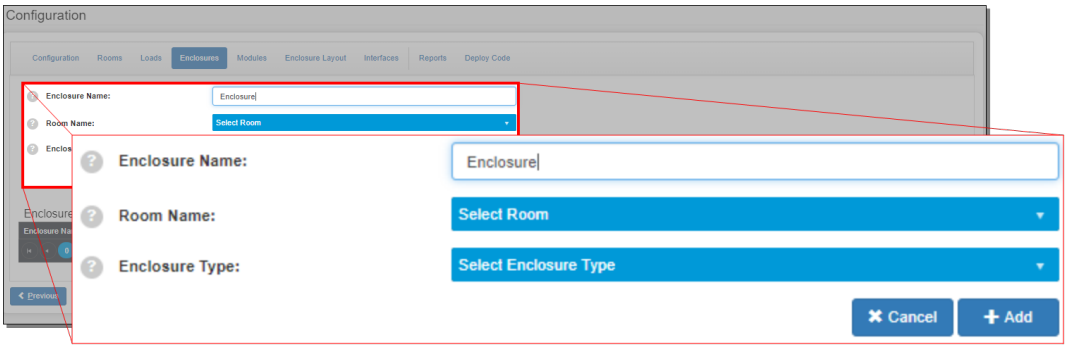
Enclosures Tab

The **Enclosures** tab allows enclosures to be added to the configuration and displays the enclosures that are in the configuration. Enclosures can be added, edited, and deleted.



Add an Enclosure

To add a new enclosure:



1. Type the name of the enclosure in the **Enclosure Name** field.
2. Select the room that the enclosure is placed in from the **Room Name** drop-down menu.
3. Select the type of enclosure from the **Enclosure Type** drop-down menu.
4. Click the **+ Add** button to add the enclosure to the configuration or the **Cancel** button to discard the changes.

Delete an Enclosure

When an enclosure is deleted, it is removed from the **Enclosure List** and all data associated with the enclosure is removed from the configuration.

NOTE: Centralized modules and loads that have been added to the load schedule in the **Loads** tab that use the enclosure will be deleted from the configuration.

To delete an enclosure:

1. Select an enclosure from the **Enclosure List** and then click the **Delete** button.
2. A confirmation dialog is shown. Click the **Yes** button to delete the enclosure or **No** to keep the enclosure.

Edit an Enclosure

The enclosure name, room name, and enclosure type can be edited after it is created.

To edit an enclosure:

1. Select an enclosure from the **Enclosure List** menu and then click the **Edit** button.
2. The selected enclosure is displayed.
3. Type the new name of the enclosure in the **Enclosure Name** field.
4. Select a new room from the **Room Name** drop-down menu.

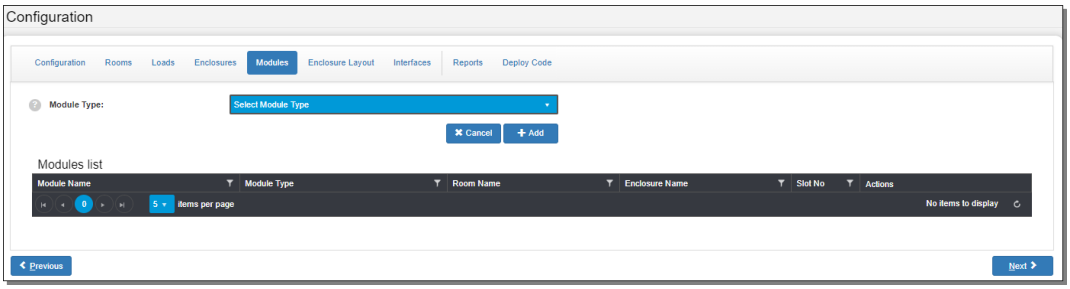
5. Select a new enclosure type from the **Enclosure Type** drop-down menu.

   NOTE: If the enclosure is populated with modules, the selected enclosure must be able to fit all of the modules that are in the original enclosure.

6. Click the **Update** button to save the changes or **Cancel** to discard the changes.

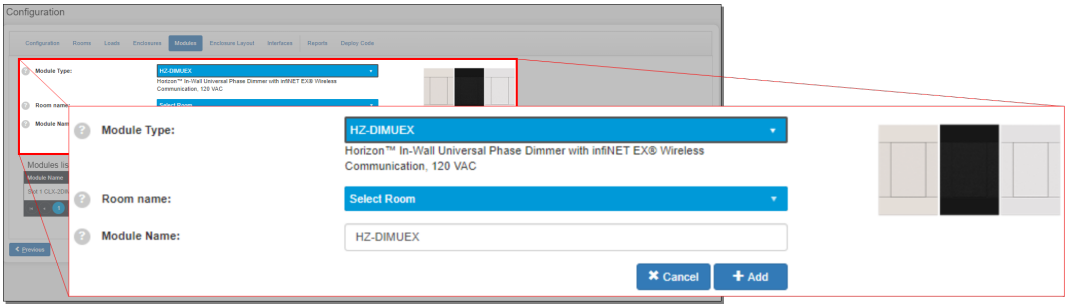
Modules Tab

The **Modules** tab displays all modules that are in the configuration. Modules can be added, edited, and deleted from the **Modules** tab.



Add a Module

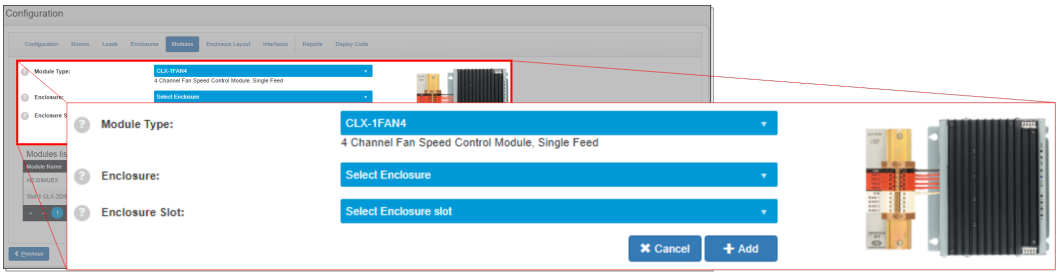
Add an In-Wall Module



1. Select an in-wall module from the **Module Type** drop-down menu. A description and an image of the device is shown and the **Room Name** and **Module Name** fields are displayed.
2. Select the room that the module is placed in from the **Room Name** drop-down menu.
3. Type the name of the module in the **Module Name** field.
4. Click the **+ Add** button to add the module to the configuration or the **Cancel** button to discard the changes.

Add a Centralized Module

1. Select a centralized module from the **Module Type** drop-down menu. A description and an image of the device is shown and the **Enclosure** and **Enclosure Slot** fields are displayed.



2. Select an enclosure to place the module in from the **Enclosure** drop-down menu. An image of the enclosure is shown to view the available enclosure slots.
3. Select the enclosure slot to place the module in from the **Enclosure Slot** drop-down menu.
4. Click the **+ Add** button to add the module to the configuration or the **Cancel** button to discard the changes.

Delete a Module

When a module is deleted, it is removed from the **Modules List** and all data associated with the module is removed from the configuration.

NOTE: Loads in the **Loads** tab that use the module will be deleted from the configuration.

To delete a module:

1. Select an module from the **Module List** and then click the **Delete** button.
2. A confirmation dialog is shown. Click the **Yes** button to delete the module or **No** to keep the module.

Edit a Module

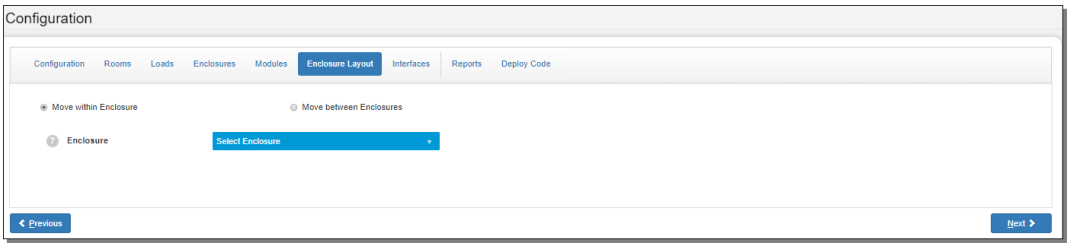
The module information (including module type, room name, module name, enclosure, and enclosure slot) can be edited after it is created.

To edit a module:

1. Select a module from the **Module List** menu and then click the **Edit** button.
2. The selected enclosure is displayed.
3. Update the module information.
    a. **In-Wall Module:** Update the **Module Type**, **Room Name**, and **Module Name** information.
    b. **Centralized Module:** Update the **Module Type**, **Enclosure**, and **Enclosure Slot** information.
4. Click the **Update** button to save the changes or **Cancel** to discard the changes.

Enclosure Layout Tab

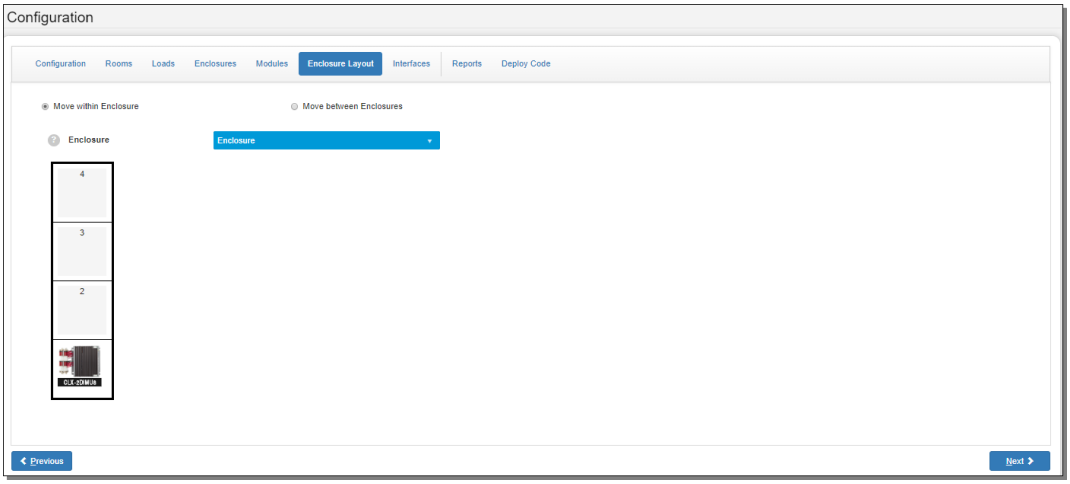
The **Enclosure Layout** tab allows additional layout and organization of the enclosures and the load assignments to the module in the configurations.



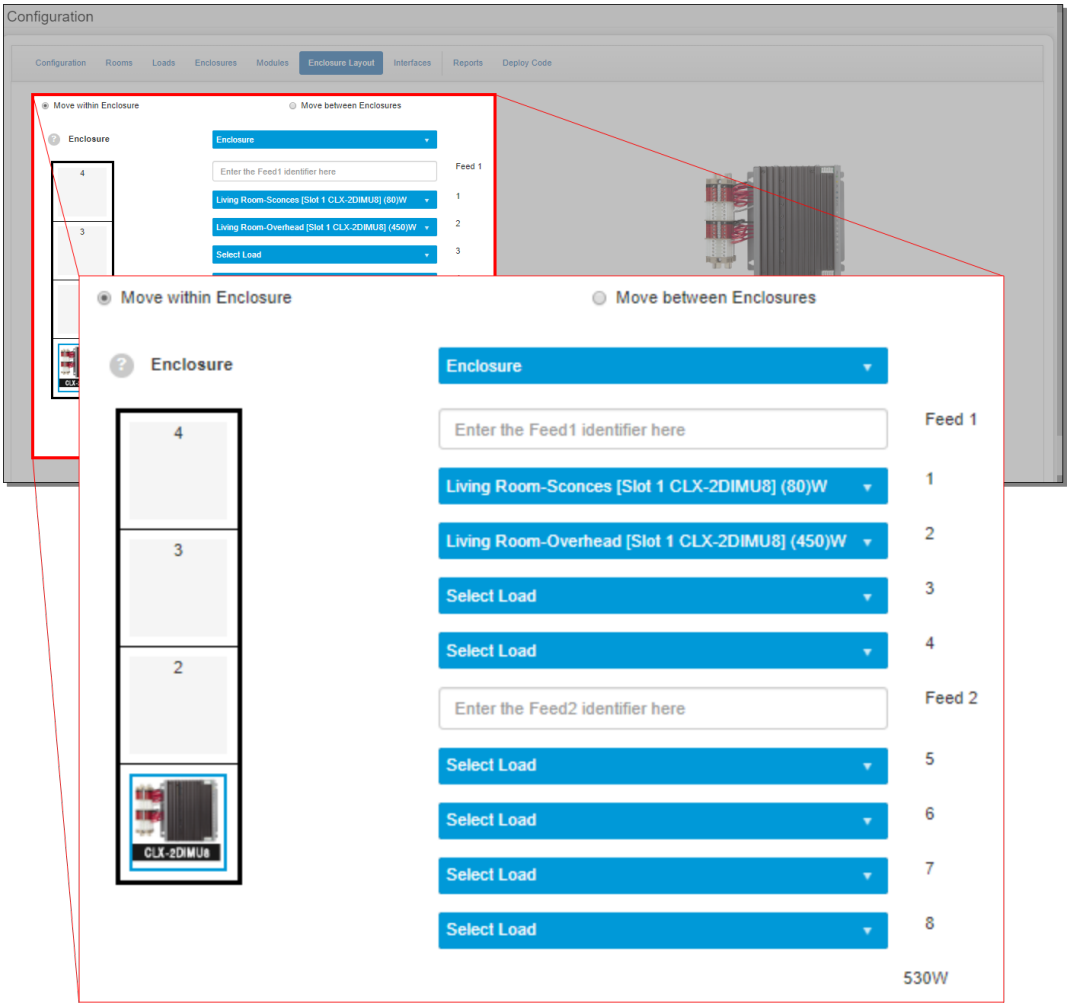
Configure Load Assignments

To move loads to different modules or different module outputs:

1. Select the **Move within Enclosure** radio button and then select the enclosure from the **Enclosure** drop-down menu. An image of the enclosure and the modules within the enclosure is displayed.



2. Click a module in one of the module slots in the enclosure. A blue box around the module indicates that it is the selected module and the feed(s) and output(s) are displayed along with an image of the module.

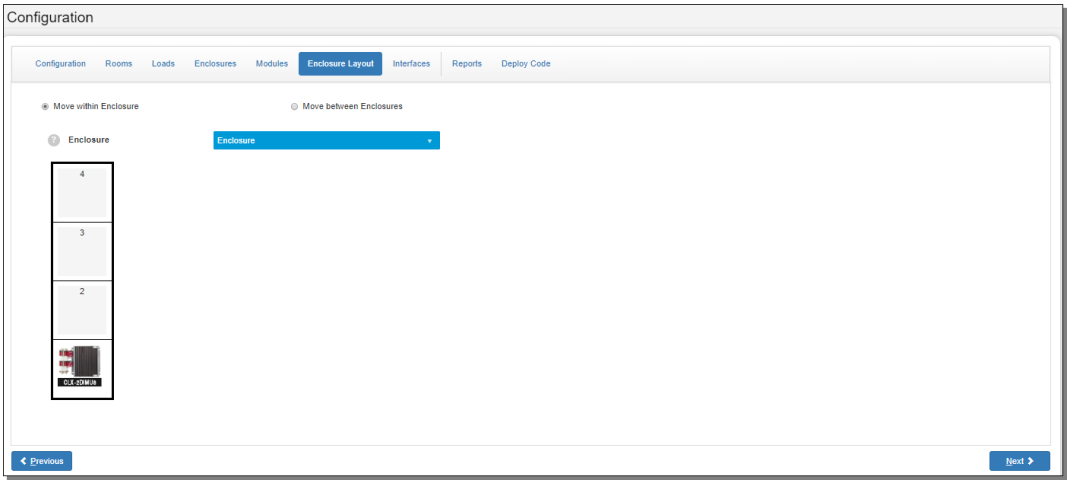


3. Type the name of the power feed in the **Feed 1** field. If the module accepts a second feed, type the name of the power feed in the **Feed 2** fields.
4. Change the load that is associated with each output. Loads can be moved between enclosures.
    a. If no load is identified in the module output drop-down, select a load from the drop-down menu. If the selected load is associated with a different module or module output it will be moved to this new location.
    b. If a load is identified in the module output drop-down, select a new load from the drop-down menu. If the selected load is associated with a different module or module output it will be moved to this new location.

Move Modules within an Enclosure

To move modules to a different slot within an enclosure:

1. Select the **Move within Enclosure** radio button and then select the enclosure from the **Enclosure** drop-down menu. An image of the enclosure and the modules within the enclosure is displayed.

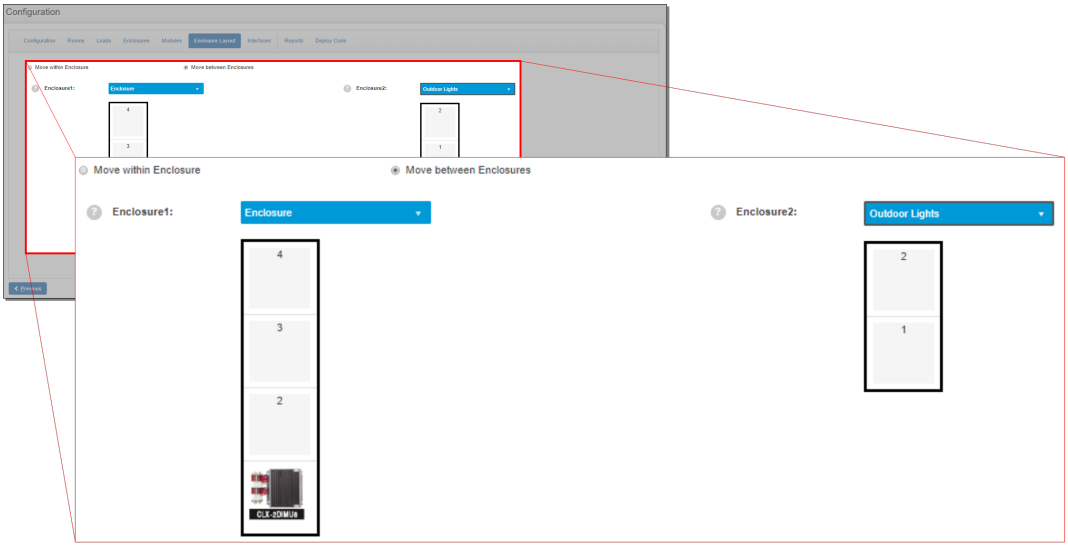


2. Click and hold a module and then drag it to the desired slot in the enclosure. A green box around the module indicates its new location in the enclosure and an orange box around the module indicates its old location in the enclosure.

Move Modules between Different Enclosures

To move modules to a different enclosure:

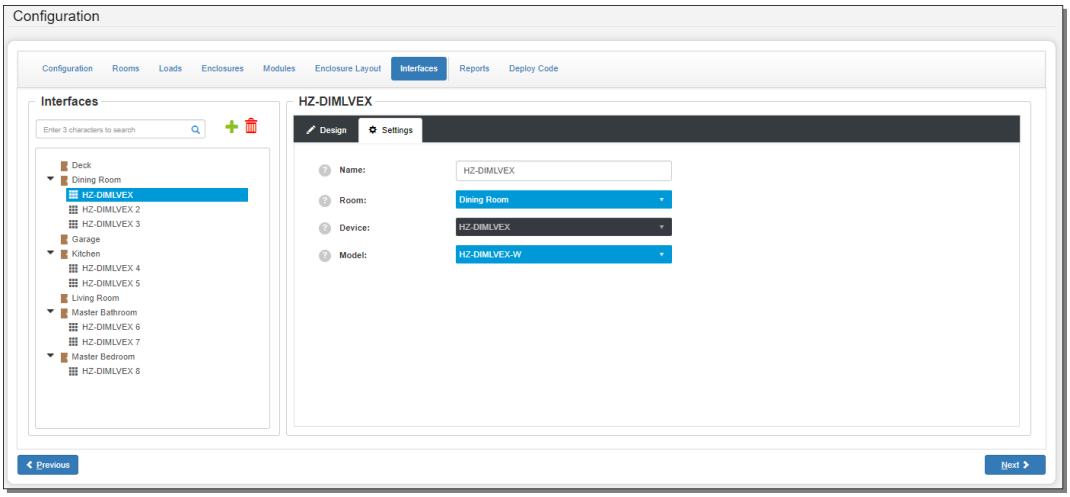
1. Select the **Move between Enclosures** radio button and then select an enclosure from the **Enclosure1** and the **Enclosure2** drop-down menu. Images of the enclosures and the modules within the enclosures is displayed.



2. Click and drag the module to the desired slot in the other enclosure. A green box around the module indicates its new location in the enclosure and an orange box around the module indicates its old location in the enclosure.

Interfaces Tab

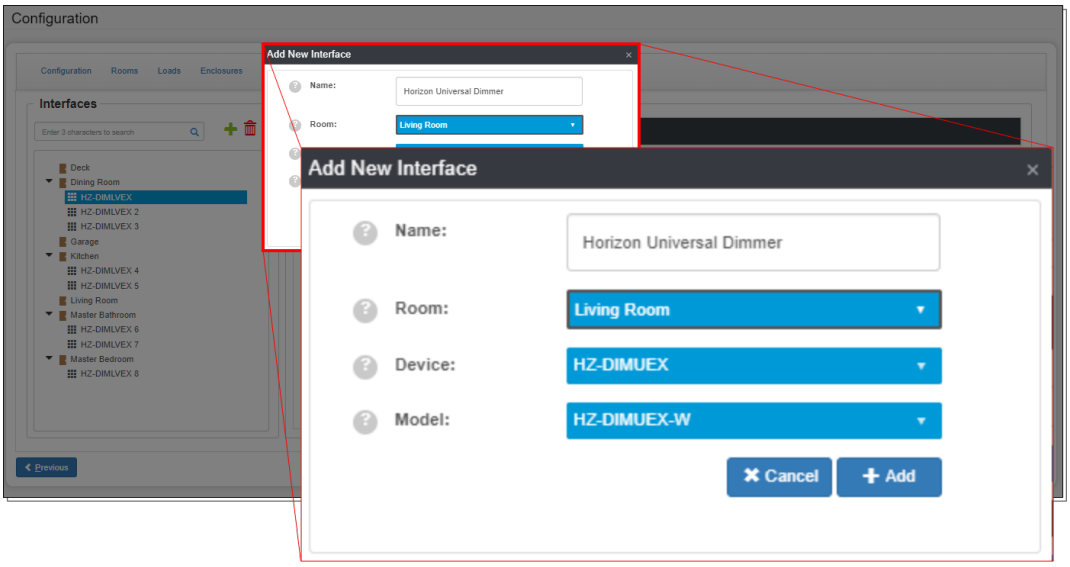
Configure keypads in the **Interfaces** tab. The **Interfaces** tab supports changing the keypad layout, adding engraving data, and changing keypad colors. Additionally, keypads can be added and deleted.



Add an Interface

To add an interface:

1. Click the plus ✚ button.
2. Enter details for the new interface:



   - **Name:** Enter the name of the device.
   - **Room:** Select the room that the device is in from the drop-down menu.
   - **Device:** Select the type of device from the drop-down menu.
   - **Model:** Select the model from the drop-down menu. The model is derived from the selection made for **Device**.
3. Click the **+ Add** button to add the interface to the configuration.

Delete an Interface

1. Select an interface from the **Interfaces** menu and then click the delete button.
2. A confirmation dialog is shown. Click the **Yes** button to delete the interface or **No** to keep the interface.

Configure the Keypad

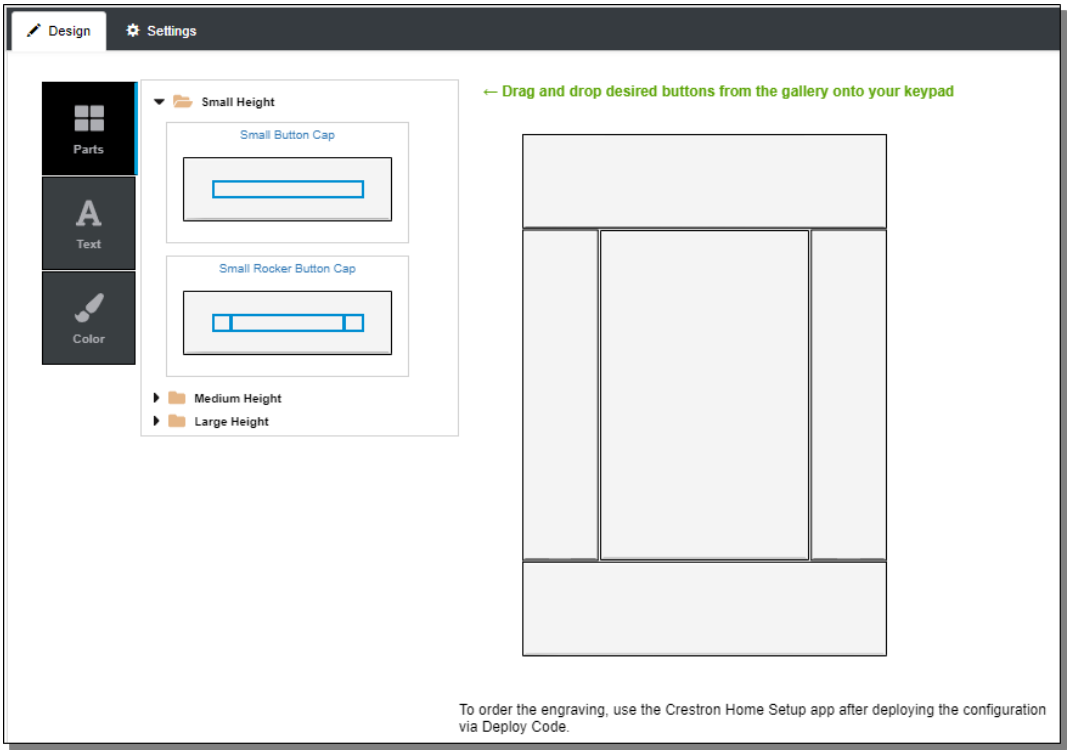
The keypad can be configured to change the keypad layout, add engraving data, and select the keypad color.

To change the keypad layout:

1. Click the **Parts** button.
2. Select the button from the list of buttons and drag it onto the keypad.

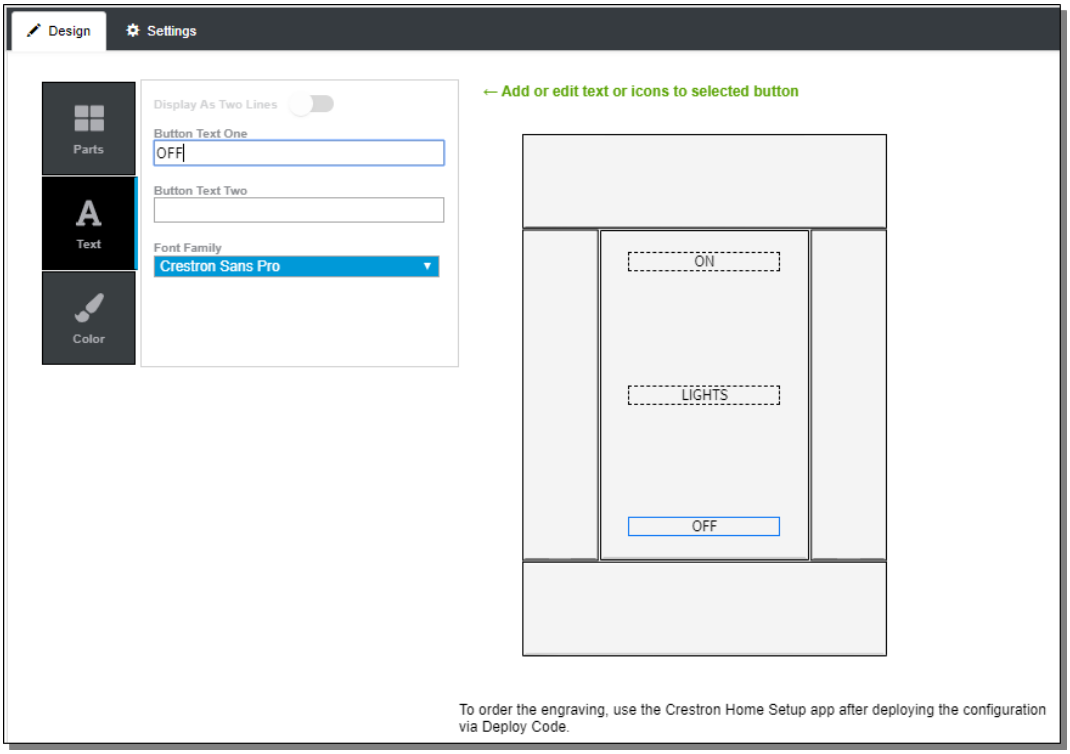
NOTES:

- All of the button positions on the keypad must be populated.
- A button is replaced if another button is placed on top of it.
- Some buttons can only be placed in certain locations on the keypad.



To add engraving data:

1. Click the **Text** button.
2. Select the button from the list of buttons and drag it onto the keypad.

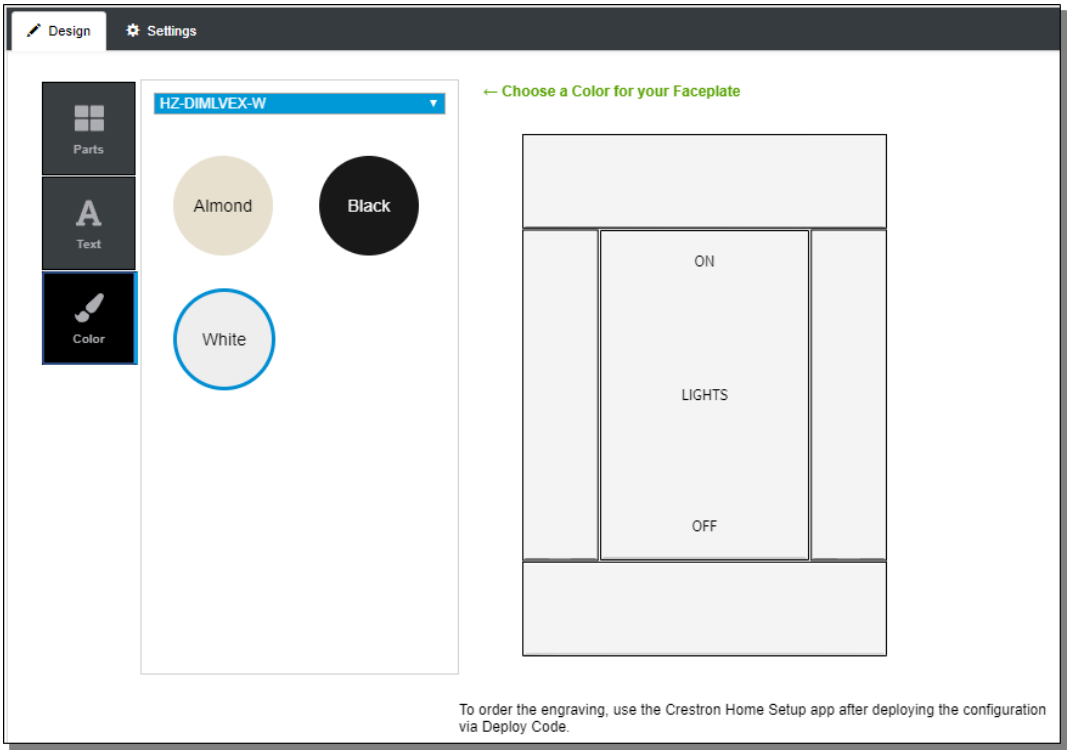


3. Select the font from the **Font Family** drop-down menu and then enter the engraving text in the **Button Text One** and **Button Text Two** fields. Tap the **Display As Two Lines** toggle switch to display the text on two lines of the button.

   NOTE: Not all button types can display text on two lines.

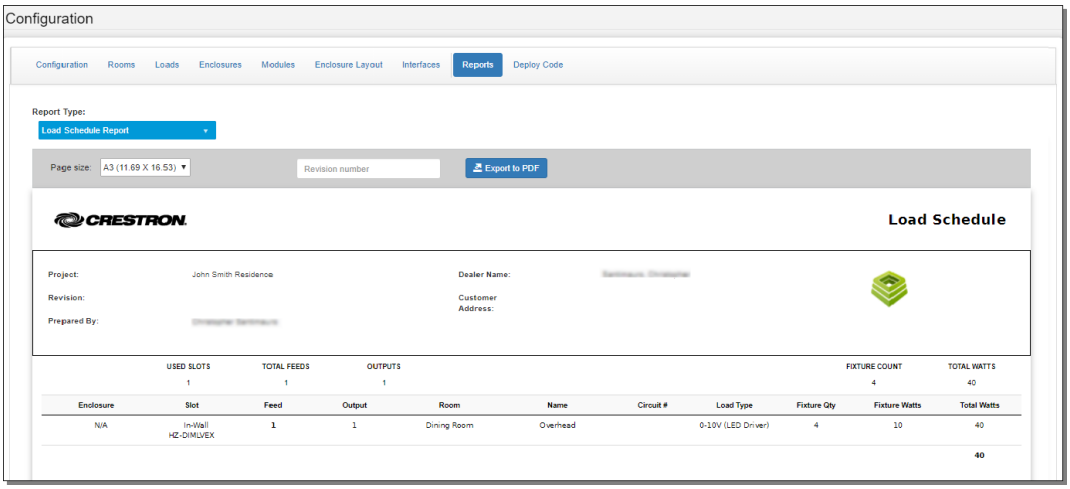
To change the keypad color:

1. Click the **Color** button.
2. Select the color of the keypad from the list of available colors. The keypad model is updated to reflect the color that is selected.



Reports Tab

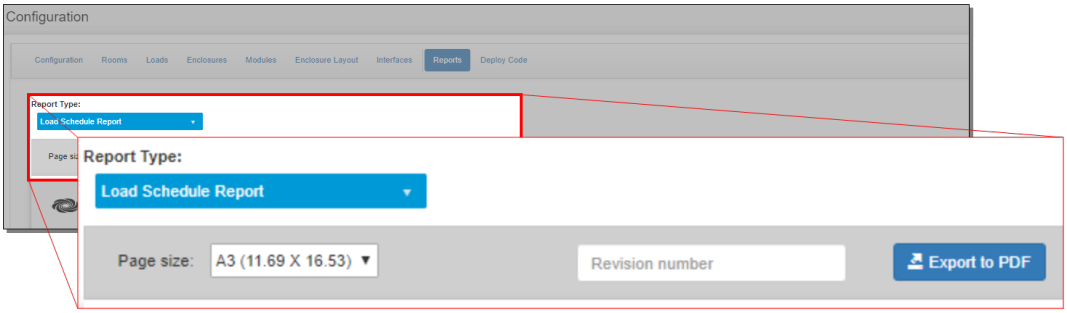
The **Reports** tab displays the load schedule report and the engraving report for the configuration. The reports can be exported as a PDF.



Create a Load Schedule Report

To export a load schedule report:

1. Select **Load Schedule Report** from the **Report Type** drop-down menu.



2. Select the page size from the **Page Size** drop-down menu.
3. Type the revision number of the report in the **Revision number** field.

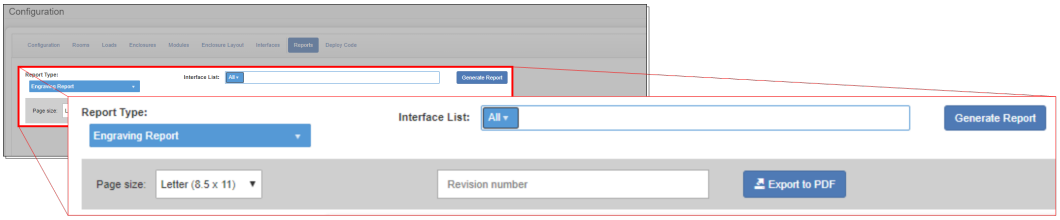
   NOTE: The Crestron Home Configurator does not manage the revision number. The revision number must be maintained and updated by the dealer.

4. Click the **Export to PDF** button to create a PDF of the load schedule.

Create an Engraving Report

To export an engraving report:

1. Select **Engraving Report** from the **Report Type** drop-down menu.



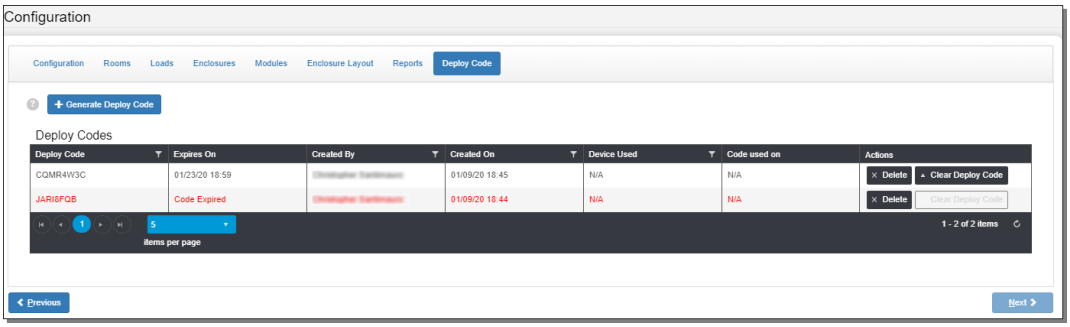
2. Select the page size from the **Page Size** drop-down menu.
3. To show a partial list of engravings in the report, enter the filter criteria in the **Interface List** field.
4. Type the revision number of the report in the **Revision number** field.

   NOTE: The Crestron Home Configurator does not manage the revision number. The revision number must be maintained and updated by the dealer.

5. Click the **Export to PDF** button to create a PDF of the load schedule.

Deploy Code Tab

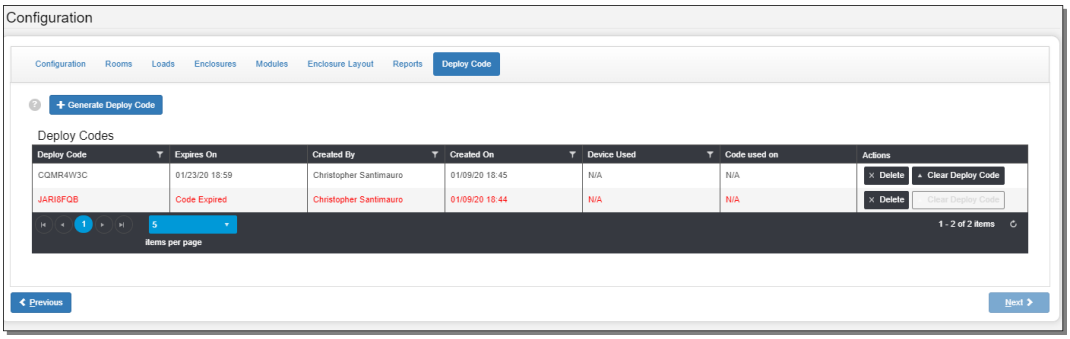
The **Deploy Code** tab is used to generate deploy codes and display the deploy codes list. The deploy codes list displays the deploy codes that have been generated for the system along with the creation and expiration dates, person that created the deploy code, the device the deploy code was used on and the date that the deploy code was used.



Generate a Deploy Code

To generate a deploy code:

1. Click the **+ Generate Deploy Code** button.



2. The deployment code is generated and listed in the **Deploy Codes** list.

> **NOTE:** The deployment code expires after 14 days.

Delete a Deploy Code

To delete a deploy code:

1. Select a deploy code from the **Deploy Codes** list and then click the **Delete** button.
2. A confirmation dialog is shown. Click the **Yes** button to delete the deploy code or **No** to keep the deploy code.

Deactivate a Deploy Code

To deactivate a deploy code:

1. Select a deploy code from the **Deploy Codes** list and then click the **Clear Deploy Code** button.
2. A confirmation dialog is shown. Click the **Yes** button to deactivate the deploy code or **No** to keep the deploy code active. The deploy code is displayed as **Code Expired** in the **Deploy Codes** menu.

Create a Crestron Home System with a Deploy Code

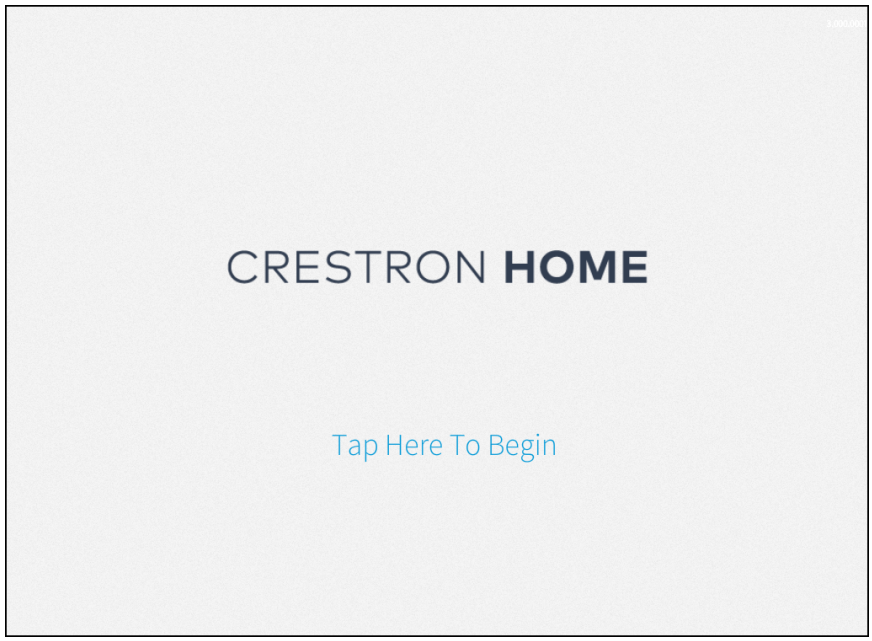
CAUTION: The imported system configuration will replace the configuration that is currently on the system. All information on the device will be lost if it is not backed up using the myCrestron Residential Monitoring Service. This process cannot be undone.

NOTES:

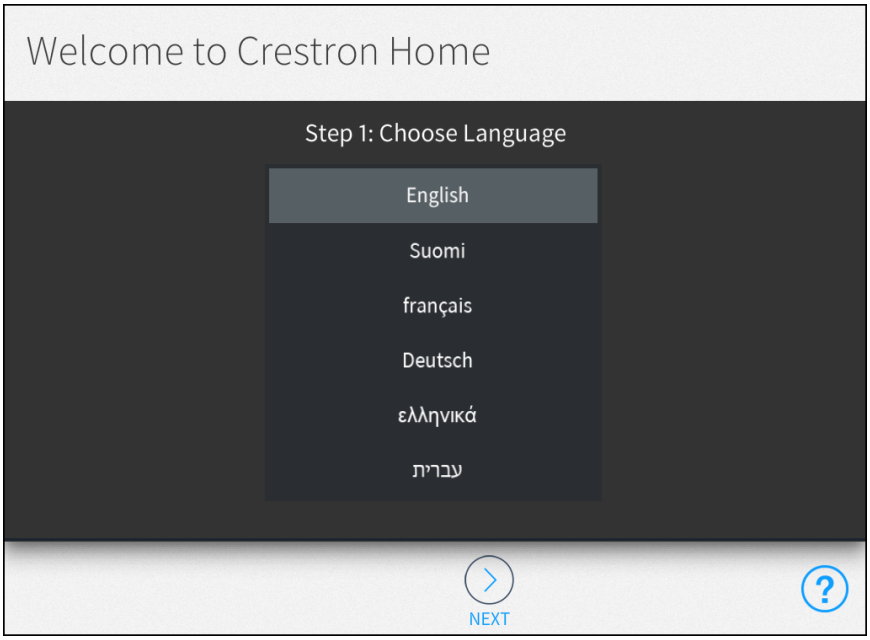
- Tap the help button (?) at any time to display help screens that explain the functions and features of each setup screen and provide instructional videos. The iPad device or setup device must be connected to the network to access videos.
- Tap the **BACK** button (**<**) at any point during the setup process to return to the previous screen.

1. Tap the Crestron Home Setup app icon on the iPad device home screen.
2. The Crestron Home Setup app connects to the Crestron Home processor automatically. A splash screen is displayed. Tap the **Tap Here to Begin** text.

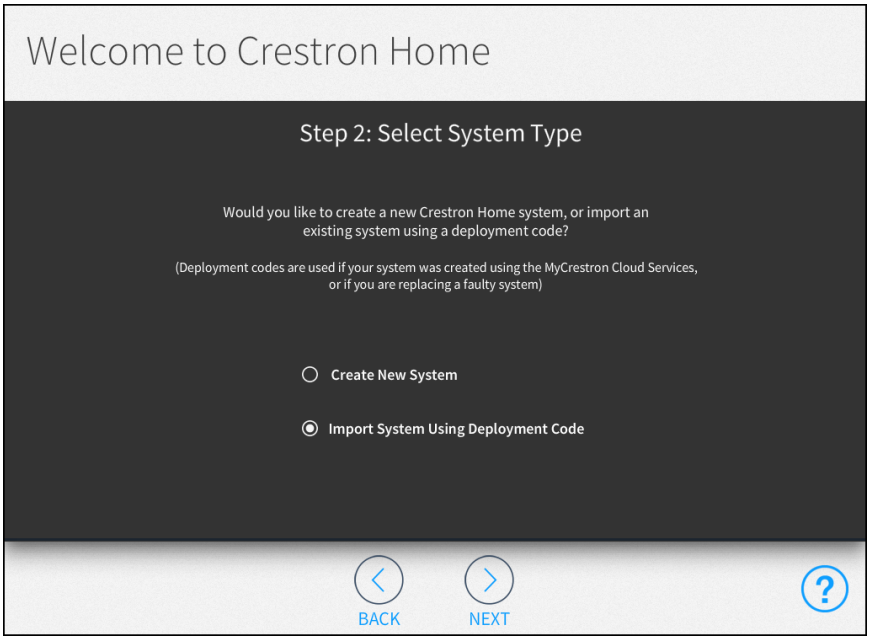
   NOTE: If the Crestron Home Setup app does not connect to the Crestron Home processor automatically, enter the Crestron Home processor's hostname and tap **Connect**. The default hostname for a CP4-R is "CP4-R-[MAC Address]" (excluding punctuation). For example, "CP4-R-123A567B91C3." The MAC address label is located on the bottom or rear of the device.



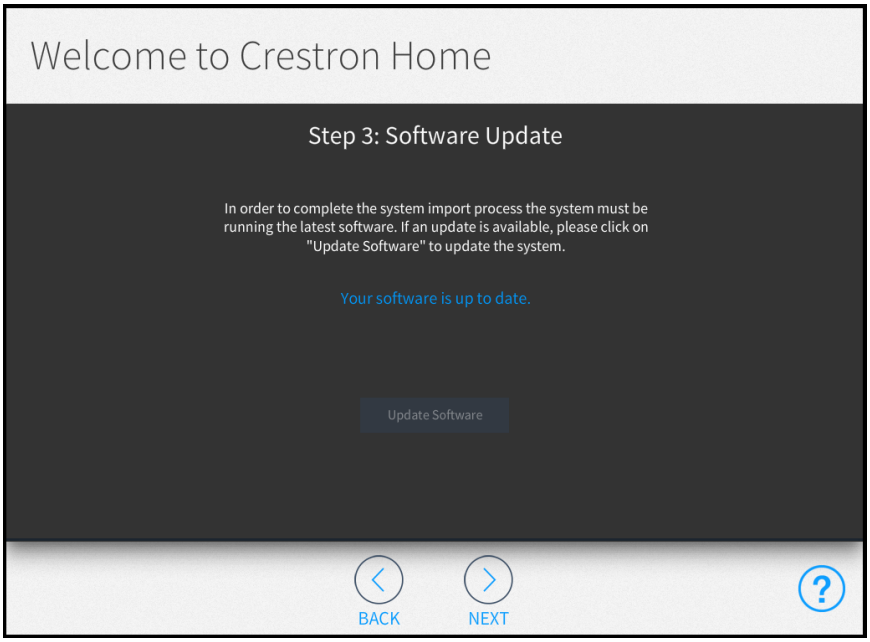
3. Select the language that will be displayed by the system and then tap the **NEXT** button (**>**).



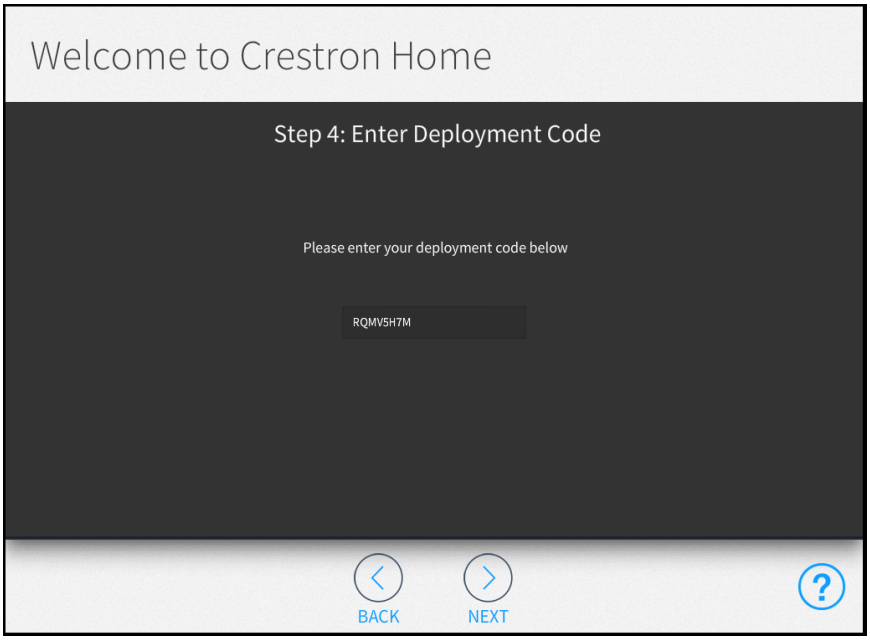
4. Tap the **Import System Using Deployment Code** radio button and then tap the **NEXT** button (**>**).



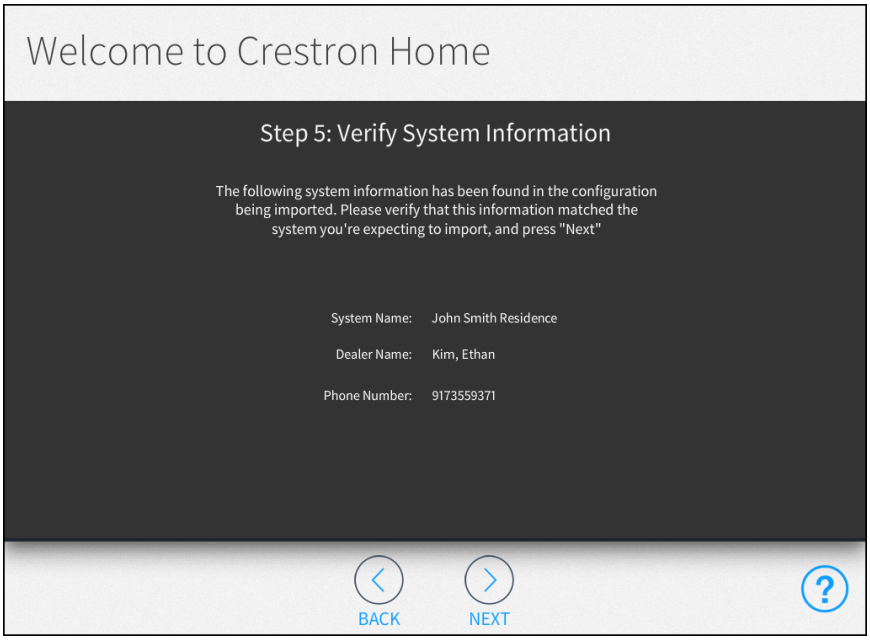
5. The Crestron Home software must be up to date to use a deployment code. If necessary, tap the **Update Software** button to update the software and then tap the **NEXT** button (**>**).



6. Enter the deployment code that was generated using the Crestron Home Configurator and then tap the **NEXT** button (**>**). The deployment code is validated.

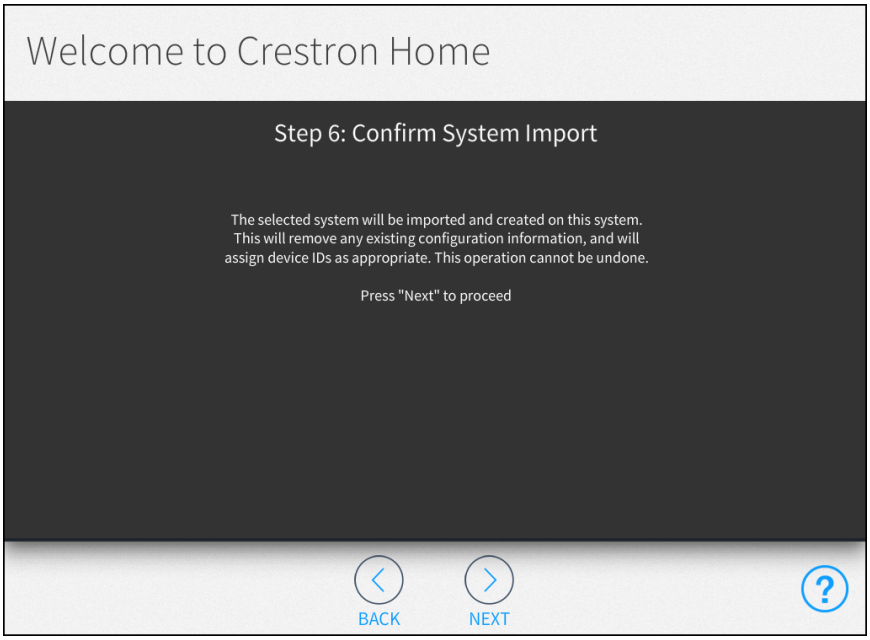


7. Verify that the system information is correct and then tap the **NEXT** button (**>**).

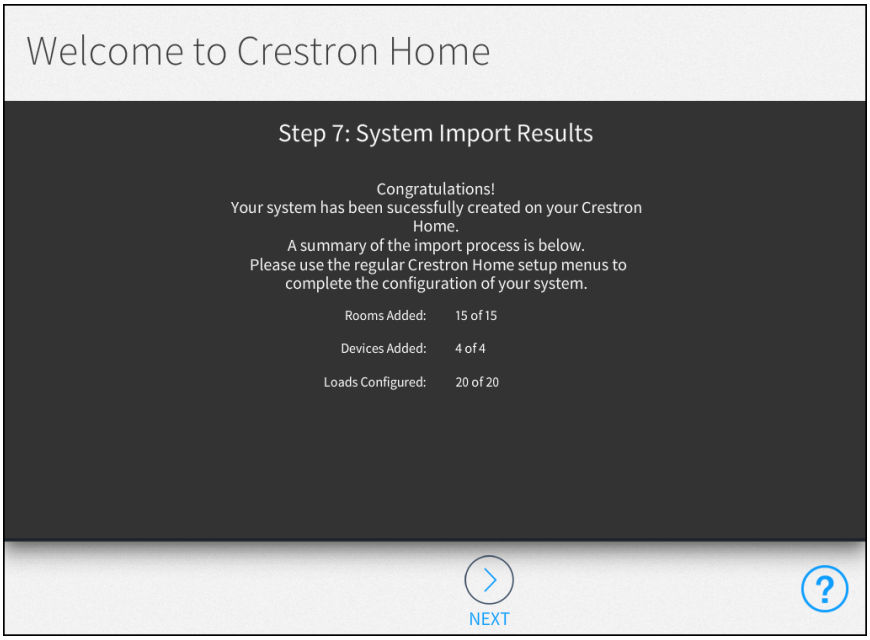


8. Confirm that the system should be imported onto the Crestron Home processor and then tap the **NEXT** button (**>**). The configuration will be imported. Tap the **NEXT** button (**>**).

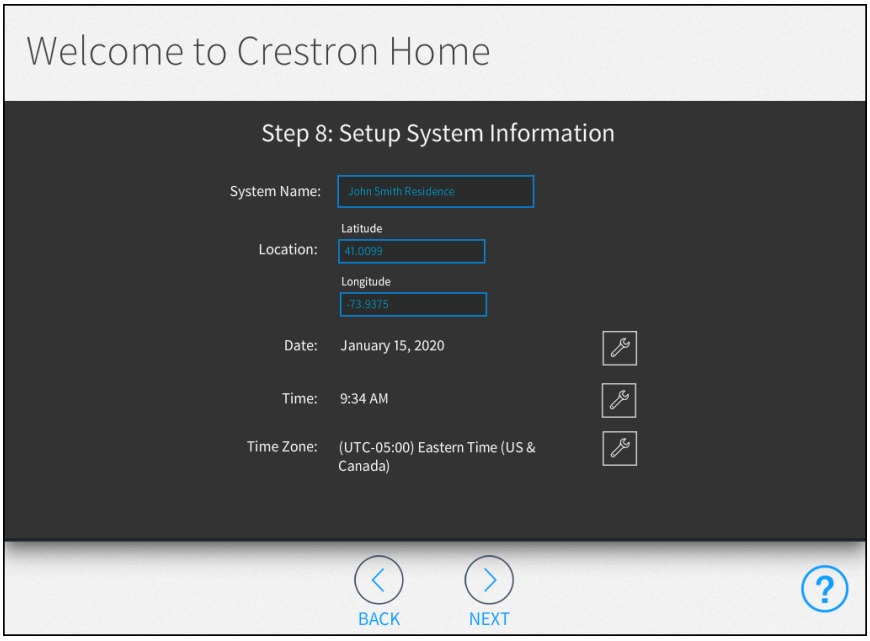
CAUTION: Importing the configuration removes any existing configuration information and cannot be undone.



9. A confirmation screen is displayed showing that the import was successful. It also displays a summary of the import process. Tap the **NEXT** button (**>**).



10. Enter the system information:

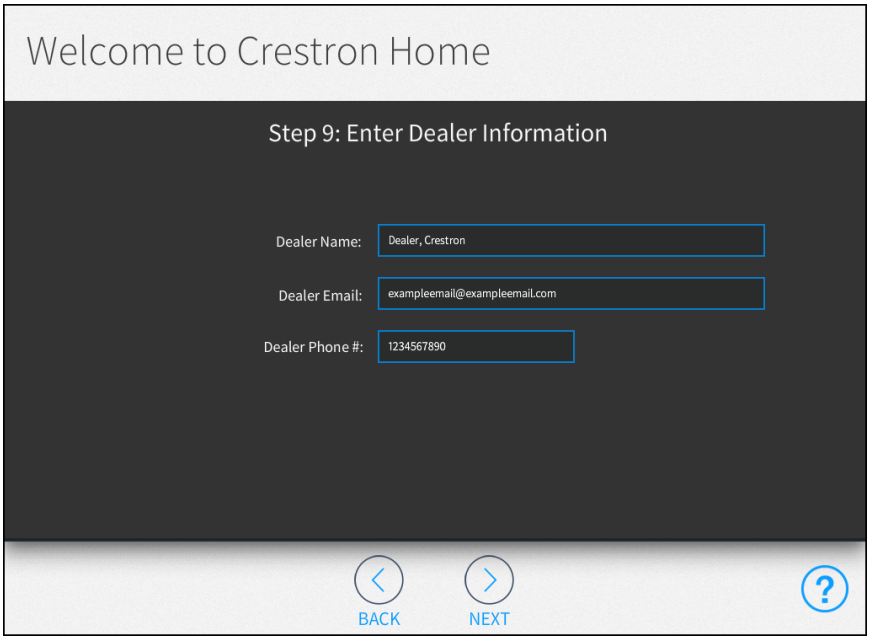


- **System Name:** Enter a descriptive system name.
- **Location:** Enter the latitude and longitude of the system.

  NOTE: If setting up the Crestron Home system with an iPad device, tap the **Synchronize with iPad** button to synchronize the time zone, longitude, and latitude automatically with the iPad device's location services.

- **Date:** Tap the wrench button to display spinners for selecting the month, day, and year.
- **Time:** Tap the wrench button to display spinners for selecting the hour and minute buttons, and for selecting **AM** or **PM**.
- **Time Zone:** Tap the wrench button to display a menu for selecting the time zone used by the system.

11. Enter the dealer information:



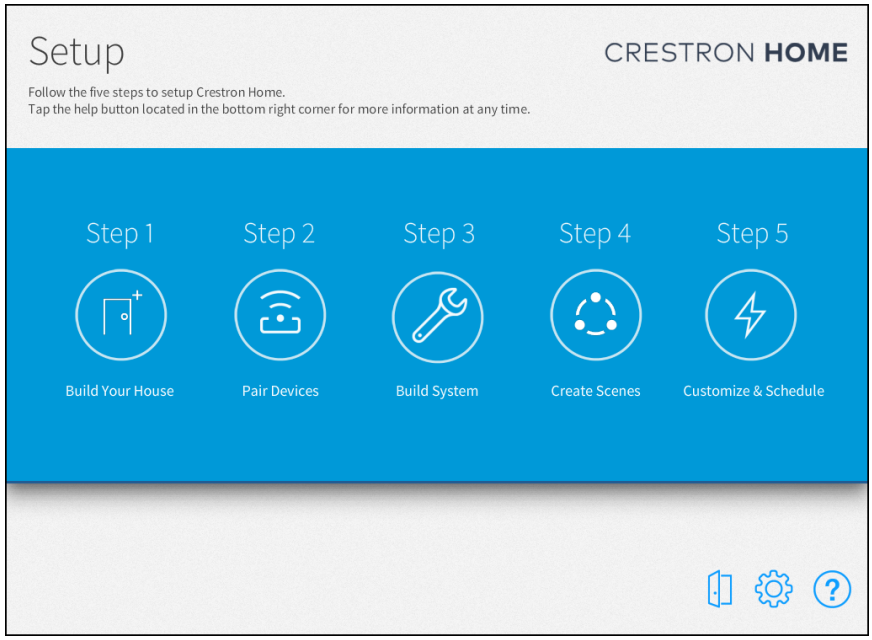
- **Dealer Name:** Enter the Crestron dealer responsible for the installation.
- **Dealer Email:** Enter the email address of the Crestron dealer responsible for the installation.
- **Dealer Phone #:** Enter the phone number of the Crestron dealer responsible for the installation.

12. Tap the **Privacy Statement**, **myCrestron Residential Monitoring Service Terms of Use**, **Mobile Apps Terms of Use**, **Software License Agreement**, and **Legal Information** links to review Crestron's legal terms regarding the setup, configuration, and use of the Crestron Home system. Tap the **I agree to the above terms** check box to accept these legal terms.

1. Tap the **Get Started** button (**>**) to complete the initial setup procedure.
2. The main **Setup** screen is displayed. Configure the system as described in Configure a Crestron Home™ System on page 22.

NOTES:

- **Step 1: Build Your House:** Rooms that are entered in the Crestron Home Configurator are placed in the **Build Your House** section. Use the **Build Your House** screen to modify or delete rooms and to create room groups.
- **Step 2: Pair Devices:** In-wall and centralized modules that are entered in the Crestron Home Configurator are placed in the appropriate rooms in the **Pair Devices** screens. The modules are added as virtual devices.



Appendix H: Restore a Crestron Home Processor to Factory Settings

If the Crestron Home processor is no longer communicating with Crestron Toolbox via USB or Ethernet, use the following procedure to restore the device to its factory default settings.

CAUTION: All configured settings and device pairings are lost following a factory restore.

NOTE: Use a small, pointed object (such as the tip of a pen) to press the buttons on the Crestron Home control processor.

To factory reset the Crestron Home processor:

1. Press and release the **HW-R** button on the Crestron Home processor.
2. Within 3 seconds, press the **SW-R** button on the Crestron Home processor five times, with under a 1-second gap between each press.
3. Wait up to 15 minutes for the self-recovery process to complete.
4. Attempt to make a connection to Crestron Toolbox via USB. (USB is the only valid connection type.)
5. Once the device has been discovered, use the Text Console tool in Crestron Toolbox to check for a prompt. The standard device prompt should display.

   NOTE: Repeat steps 1–5 if the first attempt does not correct the issue. If the Crestron Home processor is still unresponsive, contact Crestron Technical Support for assistance.

6. The restore process may enable SSL (Secure Sockets Layer) on the Crestron Home processor. After communication returns following the restore, issue the ssl off command using the Text Console tool to disable SSL.

   NOTE: If a connection cannot be established using the Text Console tool, change the connection type from **Auto Detect** to **SSL** in the **Edit Connections** dialogue.

7. Reload the firmware via the Package Update Tool in Crestron Toolbox to ensure that any touch screen projects are also reloaded to the Crestron Home processor.

If the Crestron Home processor is still communicating with Crestron Toolbox via USB or Ethernet, or if the `initialize` command was issued to the Crestron Home processor as part of a troubleshooting procedure, issue the restore command using the Text Console tool, and then follow the post-restore process (steps 6–7 in the above procedure).

Appendix I: Create and Upload a Custom Device Driver

Custom device drivers expand the functionality of the Crestron Home system by allowing additional third party devices to be paired with the system. Use the Device Learner tool in Crestron Toolbox to create driver files that may be loaded directly into the Crestron Home processor. Device controls are mapped from the driver file to buttons on Crestron remote controls and user interface control pages.

NOTE: For additional information about drivers, please visit the Crestron SDK Repository at www.crestron.com/developer.

NOTE: For more information on using the Device Learner tool to create device drivers, refer to the embedded Crestron Toolbox help file.

Refer to the following tables for each supported device class when mapping buttons to device controls.

Each button mapping table (except for remote controls) includes the following information:

- **Button:** A button used by the device class that may be mapped to a command
- **Crestron Home Command:** The command that is sent from the Crestron Home system to the device when the button is activated
- **Driver Command:** The command that is sent from the device driver to the device when the button is activated
- **Standard Command:** The standard command that is associated with the button in the Device Learner tool

A standard command table is also provided for each device class that includes the following information:

- **Standard Command:** The name of the standard command in the Device Learner tool
- **Aliased Command List:** A list of aliased commands for the standard command

  Aliasing is used when a command does not exist for a certain device. In this scenario, the driver moves to the next command in the list, and repeats the process for each subsequent command that does not exist.
- **Required/Optional:** Indicates whether the command is required or optional (**Required** commands must be included to build the driver package file.)

Apple TV ® User Interface Digital Media Extender Button Mapping

Apple TV Button Mapping

Button	Crestron Home Command	Driver Command	Standard Command
▶||	FirstPlayPause[1]	Not supported	Play_Pause
MENU	Menu	Menu	Menu
^	Up	Up	Up_Arrow
>	Right	Right	Right_Arrow
v	Down	Down	Dn_Arrow
<	Left	Left	Left_Arrow
OK	Select	Select	Select

[1] If this command does not exist for the device, this button is mapped to the **Play** command instead.

Apple TV Standard Commands

Standard Command	Aliased Command List	Required/Optional
Play_Pause		**Required**

Apple TV Standard Commands

Standard Command	Aliased Command List	Required/Optional
Dn_Arrow	Down, DN, Dw_Arrow, Navigation_Down, Menu_Down, Cursor_Down, v, -, tilt_down, tilt_dn, tilt-down, tilt-dn, tiltdown	**Required**
Left_Arrow	Left, Navigation_Left, Menu_Left, Cursor_Left, <, Track-, pan_left, pan_lt, l, LT, panleft	**Required**
Right_Arrow	Right, Navigation_Right, Menu_Right, Menu_RT, Cursor_Right, >, pan_right, pan_rt, pan-right, pan-rt, rt, panright	**Required**
Up_Arrow	Up, Navigation_Up, Menu_Up, Cursor_Up, ^, +, tilt_up, tilt-up	**Required**
Select	OK, Navigation_Select, Select	**Required**
Menu	Root_Menu, Disc_Menu, DiscMenu/List, DVD_Menu, DVD-Menu, DVDMenu	**Required**

Blu-ray Disc Player Device Button Mapping

Blu-ray Disc Player Button Mapping

Button	Crestron Home Command	Driver Command	Standard Command
◀◀	Rewind	ReverseScan	Rscan
▶	Play	Play	Play
▶▶	FastForward	ForwardScan	Fscan
⏮	PreviousTrack	ReverseSkip	Track-
⏸	Pause	Pause	Pause
⏭	NextTrack	ForwardSkip	Track+
■	Stop	Stop	Stop
⤮	ToggleShuffle	Not supported	Shuffle
⏏	Eject	Eject	Eject
↺	ToggleRepeat	Repeat	Repeat_1

Blu-ray Disc Player Button Mapping

Button	Crestron Home Command	Driver Command	Standard Command
BACK	Back	Back	Back
TOP MENU	TopMenu	TopMenu	TopMenu
EXIT	Exit	Exit	Exit
POP-UP MENU	PopUpMenu	PopUpMenu	PopUpMenu
SETTINGS	Settings	Options	Options
HOME	Home	Home	Home
+	NextDisc	Not supported	Disc+
-	PreviousDisc	Not supported	Disc-
^	Up	Up	Up_Arrow
>	Right	Right	Right_Arrow
v	Down	Down	Dn_Arrow
<	Left	Left	Left_arrow
OK	Select	Select	Select
	Red	Red	Red
	Green	Green	Green
	Yellow	Yellow	Yellow
	Blue	Blue	Blue

Blu-ray Disc Player Button Mapping - Numbers

Button	Crestron Home Command	Driver Command	Standard Command
1	Digit1	Digit1	1
2	Digit2	Digit2	2
3	Digit3	Digit3	3
4	Digit4	Digit4	4
5	Digit5	Digit5	5
6	Digit6	Digit6	6
7	Digit7	Digit7	7
8	Digit8	Digit8	8
9	Digit9	Digit9	9
0	Digit0	Digit0	0
ENTER	Enter	Enter	Enter
CLEAR	Clear	Not supported	Not supported

Blu-ray Disc Player Standard Commands

Standard Command	Aliased Command List	Required /Optional
Rscan	Rscan, Rew, Rewind, Review, Reverse_Scan, Rewind_Scan, Previous_Scan, Prev_Scan, R_Srch, Rsrch, Scan-, <<, &Rscan, A_Rew, ReverseScan	**Required**

Blu-ray Disc Player Standard Commands

Standard Command	Aliased Command List	Required /Optional
Play	Play_Pause, Play/Pause, A_PLAY, >, PLAY/SLOW, VOD-PLAY, PLAY_MODE	**Required**
Fscan	FFWD, F_SCAN, SCAN, FF, >>, F_Srch, FSRCH, FFW, Forward, Fast_Forward, SCAN+, SEARCH, A_FFWD, SEARCH>>, SEARCH_ MODE, &Fscan	**Required**
Pause	A_PAUSE, Pse, PAUSE_STEP, VOD-PAUSE, Play_Pause, Play/Pause	**Required**
Dn_Arrow	Down, DN, Dw_Arrow, Navigation_Down, Menu_Down, Cursor_ Down, v, -, tilt_down, tilt_dn, tilt-down, tilt-dn, tiltdown	**Required**
Left_Arrow	Left, Navigation_Left, Menu_Left, Cursor_Left, <, Track-, pan_left, pan_lt, l, LT, panleft	**Required**
Right_ Arrow	Right, Navigation_Right, Menu_Right, Menu_RT, Cursor_Right, >, pan_ right, pan_rt, pan-right, pan-rt, rt, panright	**Required**
Up_Arrow	Up, Navigation_Up, Menu_Up, Cursor_Up, ^, +, tilt_up, tilt-up	**Required**
Select	OK, Navigation_Select, Select	**Required**
TopMenu	Top, Top_Menu, Tmenu	**Required**
Exit	ESC, CANCEL/OSD, CANCEL, Navigation_MenuBack_F11	**Required**
Track+	Track/Chapter_+, Advance, Jump, Skip_Fwd, Chapter/Track_Fwd, Next, F_Srch/Skip, FF, NextTrack, TRK+, Track_+, NEXT_TRK, F_TRK, F_TRACK, NEXT_SCENE, SCENE+, >>|, F_Scene, FTRK, >>	**Required**
Track-	Track/Chapter_-, Chapter/Track_Rev, Skip_Rev, Previous, PreviousTrack, TRK-, Track_-, PREV_TRK, R_TRK, R_TRACK, PREV_ SCENE, SCENE-, |<<, R_Scene	**Required**
Back		**Required**
Disc+	Disc_+, Disc_Skip+, NEXT_DISC_ F_DISC	Optional
Disc-	Disc_-, Disc_Skip-, PREV_DISC, R_DISC	Optional
PopUpMenu	PopUp_Menu	Optional
0	Disc_Key_0, Direct_Channel_Entry_0, 0_Space, Number_0_or_ Number_10, Keyboard_0, NUM_0, kpd_0, kpd-0, key_0, key-0, Dial_ 0, Dial0, Key0	Optional
1	Disc_Key_1, Direct_Channel_Entry_1, Number_1, Keyboard_1, NUM_1, kpd_1, kpd-1, key_1, key-1, Dial_1, Dial1, Key1	Optional
2	Disc_Key_2, Direct_Channel_Entry_2, 2_ABC, Number_2, Keyboard_ 2, NUM_2, kpd_2, kpd-2, key_2, key-2, Dial_2, Dial2, Key2	Optional
3	Disc_Key_3, Direct_Channel_Entry_3, 3_DEF, Number_3, Keyboard_ 3, NUM_3, kpd_3, kpd-3, key_3, key-3, Dial_3, Dial3, Key3	Optional

Blu-ray Disc Player Standard Commands

Standard Command	Aliased Command List	Required /Optional
4	Disc_Key_4, Direct_Channel_Entry_4, 4_GHI, Number_4, Keyboard_4, NUM_4, kpd_4, kpd-4, key_4, key-4, Dial_4, Dial4, Key4	Optional
5	Disc_Key_5, Direct_Channel_Entry_5, 5_JKL, Number_5, Keyboard_5, NUM_5, kpd_5, kpd-5, key_5, key-5, Dial_5, Dial5, Key5	Optional
6	Disc_Key_6, Direct_Channel_Entry_6, 6_MNO, Number_6, Keyboard_6, NUM_6, kpd_6, kpd-6, key_6, key-6, Dial_6, Dial6, Key6	Optional
7	Disc_Key_7, Direct_Channel_Entry_7, 7_PQRS, Number_7, Keyboard_7, NUM_7, kpd_7, kpd-7, key_7, key-7, Dial_7, Dial7, Key7	Optional
8	Disc_Key_8, Direct_Channel_Entry_8, 8_TUV, Number_8, Keyboard_8, NUM_8, kpd_8, kpd-8, key_8, key-8, Dial_8, Dial8, Key8	Optional
9	Disc_Key_9, Direct_Channel_Entry_9, 9_WXYZ, Number_9, Keyboard_9, NUM_9, kpd_9, kpd-9, key_9, key-9, Dial_9, Dial9, Key9	Optional
Stop	A_STOP, [], VOD-STOP, Stop_Presenting, StopPresenting	Optional
F_Step	NEXT, NEXT_STEP, FORWARD, FWD, STEP, SLOW, ||>, STEP_FORWARD, FRAME_FORWARD, FRAME_+, FRAME+	Optional
R_Step	Prev, PREV_STEP, REVERSE, REV, STEP_BACK, STEP_<, <||, FRAME_BACK, FRAME_-, FRAME-	Optional
Replay	REPLAY_GUIDE, INSTANT_REPLAY, REPLAY/BACK, REPLAY_ZONES	Optional
Enter	#, Disc_Key, Enter, Direct_Channel, Enter, #_Enter, Partition_1_Keypad_Enter, Keyboard_Enter, ENT	Optional
Eject	OPEN, OPEN/CLOSE	Optional
Blue	F1_Blue	Optional
Green	F3_Green	Optional
Red	F2_Red	Optional
Yellow	F4_Yellow	Optional
Options		Optional
Repeat_1	REPEAT, RPT, RPT_A, RPT_1, LOOP, A-B, AB	Optional
Shuffle		Optional

Digital Video Server Button Mapping

Digital Video Server Button Mapping

Button	Crestron Home Command	Driver Command	Standard Command
◀◀	Rewind	ReverseScan	Rscan
▶	FirstPlayPause[1]	Not supported	Play
▶▶	FastForward	ForwardScan	Fscan
|◀	PreviousTrack	ReverseSkip	R_Step
❚❚	Pause	Pause	Pause
▶|	NextTrack	ForwardSkip	F_Step
⮌	Replay	Replay	Replay
HOME	Home	Home	Home
MENU	Menu	Menu	Menu
BACK	Back	Back	Back
EXIT	Exit	Exit	Exit
^	Up	Up	Up_Arrow
>	Right	Right	Right_Arrow
v	Down	Down	Down_Arrow
<	Left	Left	Left_Arrow
OK	Select	Select	Select

[1] If this command does not exist for the device, this button is mapped to the Play command instead.

Digital Video Server Standard Commands

Standard Command	Aliased Command List	Required/Optional
Rscan	Rscan, Rew, Rewind, Review, Reverse_Scan, Rewind_Scan, Previous_Scan, Prev_Scan, R_Srch, Rsrch, Scan-, <<, &Rscan, A_Rew, ReverseScan	Required

Digital Video Server Standard Commands

Standard Command	Aliased Command List	Required/Optional
Play_ Pause	Play_Pause, Play/Pause, A_PLAY, >, PLAY/SLOW, VOD-PLAY, PLAY_MODE	Required
Fscan	FFWD, F_SCAN, SCAN, FF, >>, F_Srch, FSRCH, FFW, Forward, Fast_Forward, SCAN+, SEARCH, A_FFWD, SEARCH>>, SEARCH_MODE, &Fscan	Required
Pause	A_PAUSE, Pse, PAUSE_STEP, VOD-PAUSE, Play_Pause, Play/Pause	Required
Dn_ Arrow	Down, DN, Dw_Arrow, Navigation_Down, Menu_Down, Cursor_ Down, v, -, tilt_down, tilt_dn, tilt-down, tilt-dn, tiltdown	Required
Left_ Arrow	Left, Navigation_Left, Menu_Left, Cursor_Left, <, Track-, pan_ left, pan_lt, l, LT, panleft	Required
Right_ Arrow	Right, Navigation_Right, Menu_Right, Menu_RT, Cursor_Right, >, pan_right, pan_rt, pan-right, pan-rt, rt, panright	Required
Up_ Arrow	Up, Navigation_Up, Menu_Up, Cursor_Up, ^, +, tilt_up, tilt-up	Required
Select	OK, Navigation_Select, Select	Required
Menu	Root_Menu, Disc_Menu, DiscMenu/List, DVD_Menu, DVD-Menu, DVDMenu	Required
Back		Required
Stop	A_STOP, [], VOD-STOP, Stop_Presenting	Optional
F_Step	NEXT, NEXT_STEP, FORWARD, FWD, STEP, SLOW, ||>, STEP_ FORWARD, FRAME_FORWARD, FRAME_+, FRAME+	Optional
R_Step	Prev, PREV_STEP, REVERSE, REV, STEP_BACK, STEP_<, <||, FRAME_BACK, FRAME_-, FRAME-	Optional
Replay	REPLAY_GUIDE, INSTANT_REPLAY, REPLAY/BACK, REPLAY_ ZONES	Optional
Exit	ESC, CANCEL/OSD, CANCEL, Navigation_MenuBack_F11	Optional

DVR and AVR Button Mapping

DVR and AVR Button Mapping

Button	Crestron Home Command	Driver Command	Standard Command
◀◀	Rewind	ReverseScan	Rscan
▶	Play	Play	Play
▶▶	FastForward	ForwardScan	Fscan
⏮	PreviousTrack	ReverseSkip	Track-
⏸	Pause	Pause	Pause
■	Stop	Stop	Stop
↺	Replay	Replay	Replay
◉	Record	Record	Record
PG+	PageUp	PageUp	Page_Up

DVR and AVR Button Mapping

Button	Crestron Home Command	Driver Command	Standard Command
PG-	PageDown	PageDown	Page_Down
CH+	ChannelUp	ChannelUp	CH+
CH-	ChannelDn	ChannelDn	CH-
GUIDE	Guide	Guide	Guide
MENU	Menu	Menu	Menu
BACK	Back	Back	Back
INFO	Info	Info	Info
ON DEMAND	OnDemand	Not supported	On_Demand
FAV	ToggleFavorite	Not supported	Favorite
EXIT	Exit	Exit	Exit
^	Up	Up	Up_Arrow
>	Right	Right	Right_Arrow
v	Down	Down	Down_Arrow
<	Left	Left	Left_Arrow
OK	Select	Select	Select
	Red	Red	Red
	Green	Green	Green
	Yellow	Yellow	Yellow
	Blue	Blue	Blue
A	LetterA	A	A
B	LetterB	B	B
C	LetterC	C	C

DVR and AVR Button Mapping

Button	Crestron Home Command	Driver Command	Standard Command
Thumb Down	UserFeedbackNegative	ThumbsDown	Thumbs_Down
Thumb Up	UserFeedbackPositve	ThumbsUp	Thumbs_Up
LAST	LastChannel	Last	Last
LIVE	Live	Live	Live

DVR and AVR Button Mapping - Numbers

Button	Crestron Home Command	Driver Command	Standard Command
1	Digit1	Digit1	1
2	Digit2	Digit2	2
3	Digit3	Digit3	3
4	Digit4	Digit4	4
5	Digit5	Digit5	5
6	Digit6	Digit6	6
7	Digit7	Digit7	7
8	Digit8	Digit8	8
9	Digit9	Digit9	9
0	Digit0	Digit0	0
ENTER	Enter	Enter	Enter

DVR and AVR Standard Commands

Standard Command	Aliased Command List	Required/Optional
Rscan	Rscan, Rew, Rewind, Review, Reverse_Scan, Rewind_Scan, Previous_Scan, Prev_Scan, R_Srch, Rsrch, Scan-, <<, &Rscan, A_ Rew, ReverseScan	Required
Play	Play_Pause, Play/Pause, A_PLAY, >, PLAY/SLOW, VOD-PLAY, PLAY_MODE	Required
Fscan	FFWD, F_SCAN, SCAN, FF, >>, F_Srch, FSRCH, FFW, Forward, Fast_Forward, SCAN+, SEARCH, A_FFWD, SEARCH>>, SEARCH_MODE, &Fscan	Required
Pause	A_PAUSE, Pse, PAUSE_STEP, VOD-PAUSE, Play_Pause, Play/Pause	Required
Dn_ Arrow	Down, DN, Dw_Arrow, Navigation_Down, Menu_Down, Cursor_ Down, v, -, tilt_down, tilt_dn, tilt-down, tilt-dn, tiltdown	Required
Left_ Arrow	Left, Navigation_Left, Menu_Left, Cursor_Left, <, Track-, pan_ left, pan_lt, l, LT, panleft	Required
Right_ Arrow	Right, Navigation_Right, Menu_Right, Menu_RT, Cursor_Right, >, pan_right, pan_rt, pan-right, pan-rt, rt, panright	Required
Up_ Arrow	Up, Navigation_Up, Menu_Up, Cursor_Up, ^, +, tilt_up, tilt-up	Required
Select	OK, Navigation_Select, Select	Required
Menu	Root_Menu, Disc_Menu, DiscMenu/List, DVD_Menu, DVD-Menu, DVDMenu	Required
CH+	CH_+, CHANNEL+, Channel_Up, CHAN_UP, CHAN+, CHAN-UP, CH_UP, CH-UP, TUNE+	Required
CH-	CH_-, Channel_Down, CHAN_DOWN, CHAN-, CHANNEL_DN, CHAN_DN, CHANNEL-, CHAN-DOWN, CHAN-DN, CH_DN, CH-DN, TUNE-	Required
Back		Required
Last	RECENT, JUMP, LC, PC	Required
Guide	Channel_Guide, Electronic_Program_Guide	Required
Info		Required
0	Disc_Key_0, Direct_Channel_Entry_0, 0_Space, Number_0_or_ Number_10, Keyboard_0, NUM_0, kpd_0, kpd-0, key_0, key-0, Dial_0, Dial0, Key0	Required
1	Disc_Key_1, Direct_Channel_Entry_1, Number_1, Keyboard_1, NUM_1, kpd_1, kpd-1, key_1, key-1, Dial_1, Dial1, Key1	Required

DVR and AVR Standard Commands

Standard Command	Aliased Command List	Required/Optional
2	Disc_Key_2, Direct_Channel_Entry_2, 2_ABC, Number_2, Keyboard_2, NUM_2, kpd_2, kpd-2, key_2, key-2, Dial_2, Dial2, Key2	Required
3	Disc_Key_3, Direct_Channel_Entry_3, 3_DEF, Number_3, Keyboard_3, NUM_3, kpd_3, kpd-3, key_3, key-3, Dial_3, Dial3, Key3	Required
4	Disc_Key_4, Direct_Channel_Entry_4, 4_GHI, Number_4, Keyboard_4, NUM_4, kpd_4, kpd-4, key_4, key-4, Dial_4, Dial4, Key4	Required
5	Disc_Key_5, Direct_Channel_Entry_5, 5_JKL, Number_5, Keyboard_5, NUM_5, kpd_5, kpd-5, key_5, key-5, Dial_5, Dial5, Key5	Required
6	Disc_Key_6, Direct_Channel_Entry_6, 6_MNO, Number_6, Keyboard_6, NUM_6, kpd_6, kpd-6, key_6, key-6, Dial_6, Dial6, Key6	Required
7	Disc_Key_7, Direct_Channel_Entry_7, 7_PQRS, Number_7, Keyboard_7, NUM_7, kpd_7, kpd-7, key_7, key-7, Dial_7, Dial7, Key7	Required
8	Disc_Key_8, Direct_Channel_Entry_8, 8_TUV, Number_8, Keyboard_8, NUM_8, kpd_8, kpd-8, key_8, key-8, Dial_8, Dial8, Key8	Required
9	Disc_Key_9, Direct_Channel_Entry_9, 9_WXYZ, Number_9, Keyboard_9, NUM_9, kpd_9, kpd-9, key_9, key-9, Dial_9, Dial9, Key9	Required
Record	REC, A_RECORD, O	Required
Stop	A_STOP, [], VOD-STOP, Stop_Presenting, StopPresenting	Optional
F_Step	NEXT, NEXT_STEP, FORWARD, FWD, STEP, SLOW, ||>, STEP_FORWARD, FRAME_FORWARD, FRAME_+, FRAME+	Optional
R_Step	Prev, PREV_STEP, REVERSE, REV, STEP_BACK, STEP_<, <||, FRAME_BACK, FRAME_-, FRAME-	Optional
R_Skip		Optional
Enter	#, Disc_Key, Enter, Direct_Channel, Enter, #_Enter, Partition_1_Keypad_Enter, Keyboard_Enter, ENT	Optional
Track+	Track/Chapter_+, Advance, Jump, Skip_Fwd, Chapter/Track_Fwd, Next, F_Srch/Skip, FF, NextTrack, TRK+, Track_+, NEXT_TRK, F_TRK, F_TRACK, NEXT_SCENE, SCENE+, >>|, F_Scene, FTRK, >>	Optional

DVR and AVR Standard Commands

Standard Command	Aliased Command List	Required/Optional
Track-	Track/Chapter_-, Chapter/Track_Rev, Skip_Rev, Previous, PreviousTrack, TRK-, Track_-, PREV_TRK, R_TRK, R_TRACK, PREV_SCENE, SCENE-, |<<, R_Scene	Optional
Blue	F1_Blue	Optional
Green	F3_Green	Optional
Red	F2_Red	Optional
Yellow	F4_Yellow	Optional
Replay	REPLAY_GUIDE, INSTANT_REPLAY, REPLAY/BACK, REPLAY_ZONES	Optional
Page_Up	PGUP, PREV_PAGE, PAGE+, Page_+	Optional
Page_ Down	PGDN, NEXT_PAGE, PAGE-, PAGE_ND, Page_-	Optional
Thumbs_ Down	Th_down, Thumb_DN	Optional
Thumbs_ Up	Th_up, Thumb_Up	Optional
Live	RETURN_TO_LIVE	Optional
A		Optional
B		Optional
C		Optional
D		Optional
Exit	ESC, CANCEL/OSD, CANCEL, Navigation_MenuBack_F11	Optional
Favorite	FAV	Optional
On_ Demand	OnDemand	Optional
List		Optional
Tivo		Optional
DVR	List, TIVO, TV-DVR, TV/DVR	Optional

Remote Control Button Mapping

Remote Control Button Mapping

Button	Crestron Home Command	Driver Command	TSR-310 Support	HR-310 Support	HR-150 Support	HR-100 Support
0	Digit0	Digit0	Yes	No	Yes	No
1	Digit1	Digit1	Yes	Nuo	Yes	No
2	Digit2	Digit2	Yes	No	Yes	No
3	Digit3	Digit3	Yes	No	Yes	No
4	Digit4	Digit4	Yes	No	Yes	No
5	Digit5	Digit5	Yes	No	Yes	No
6	Digit6	Digit6	Yes	No	Yes	No
7	Digit7	Digit7	Yes	No	Yes	No
8	Digit8	Digit8	Yes	No	Yes	No
9	Digit9	Digit9	Yes	No	Yes	No
	Clear	Not Supported	Yes	Yes	Yes	Yes
ENTER	Enter	Enter	Yes	Yes	Yes	Yes
	TogglePower	PowerToggle	Yes	Yes	Yes	Yes
	(Turns on the remote's keypad backlight)	Not applicable	No	No	Yes	Yes
	NextFavorite (for all devices except for Roku)For Roku, acts the same as the Menu button	Not applicable	Yes	No	No	No
	The first of these available commands for the device: Home, Menu, TopMenu	Home, Menu, TopMenu	Yes	Yes	No	No
	VolumeUp	VolumeUp	Yes	Yes	Yes	Yes
	ToggleMute	Mute	Yes	Yes	No	No
MUTE	ToggleMute	Mute	No	No	Yes	Yes
	VolumeDown	VolumeDown	Yes	Yes	Yes	Yes

Remote Control Button Mapping

Button	Crestron Home Command	Driver Command	TSR-310 Support	HR-310 Support	HR-150 Support	HR-100 Support
	ChannelUp	ChannelUp	Yes	Yes	Yes	Yes
	Info	Info	Yes	Yes	No	No
INFO	Info	Info	No	No	Yes	Yes
	ChannelDown	ChannelDown	Yes	Yes	Yes	Yes
MENU	The first of these available commands for the device: Menu, Home, TopMenu	Home, Menu, TopMenu	Yes	Yes	Yes	Yes
GUIDE	The first of these available commands for the device: Guide, Home, TopMenu	Guide, Home, TopMenu	Yes	Yes	Yes	Yes
Directional pad, normal (non-color button) mode	Up, Right, Down, Left	Up, Right, Down, Left	Yes	Yes	Yes	Yes
Directional pad, color button mode	Green, Red, Yellow, Blue	Green, Red, Yellow, Blue	Yes	Yes	No	No
Directional pad, center button	Select	Select	Yes	Yes	No	No
Directional pad, SELECT	Select	Select	No	No	Yes	Yes
EXIT	The first of these available commands for the device: Exit, Back	Exit, Back	Yes	Yes	Yes	Yes
	(Turns on the directional pad's color button mode)	Not applicable	Yes	Yes	No	No

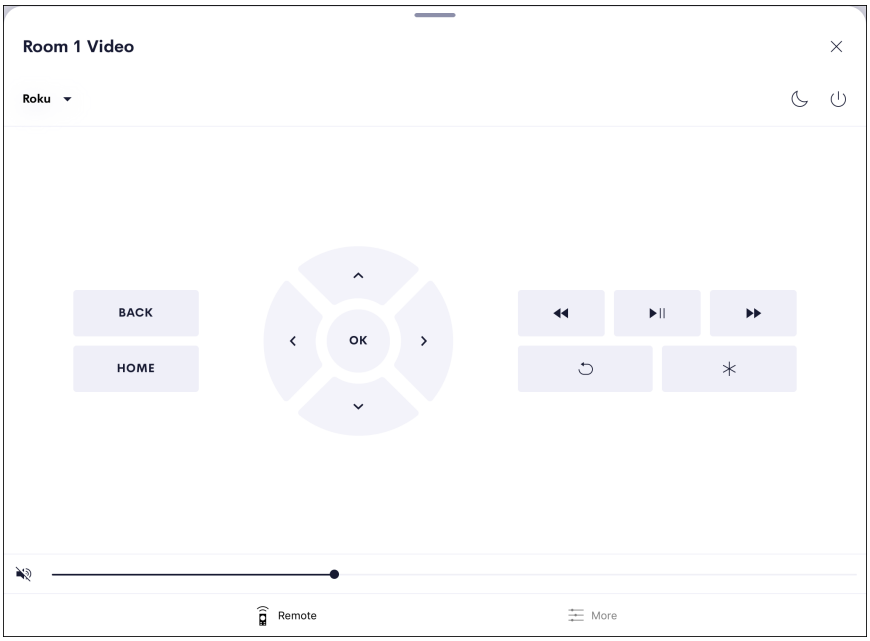
Remote Control Button Mapping

Button	Crestron Home Command	Driver Command	TSR-310 Support	HR-310 Support	HR-150 Support	HR-100 Support
LAST	The first of these available commands for the device: LastChannel, Back	Last, Back	Yes	Yes	Yes	Yes
	Rewind	ReverseScan	Yes	Yes	Yes	Yes
	Play (if available)Otherwise, sends TogglePlayPause	Play, PlayPause	Yes	Yes	Yes	Yes
	FastForward	ForwardScan	Yes	Yes	Yes	Yes
	The first of these available commands for the device: PreviousTrack, Replay, PreviousTunerPreset, PreviousDisc	ReverseSkip, Replay, Not supported, PreviousDisc	Yes	Yes	No	No
	The first of these available commands for the device: PreviousTrack, Replay, PreviousTunerPreset, PreviousDisc	ReverseSkip, Replay, Not supported, PreviousDisc	No	No	Yes	Yes
	Pause (if available)Otherwise, sends TogglePlayPause	Pause, PlayPause	Yes	Yes	Yes	Yes
	The first of these available commands for the device: NextTrack, Advance, NextTunerPreset, NextFavoriteChannel, PreviousDisc	ForwardSkip, ForwardSkip, Not supported, Not supported, Not supported	Yes	Yes	No	No

Remote Control Button Mapping

Button	Crestron Home Command	Driver Command	TSR-310 Support	HR-310 Support	HR-150 Support	HR-100 Support
	The first of these available commands for the device: NextTrack, Advance, NextTunerPreset, NextFavoriteChannel, PreviousDisc	ForwardSkip, ForwardSkip, Not supported, Not supported, Not supported	No	No	Yes	Yes
	Stop	Stop	Yes	Yes	Yes	Yes
DVR	RecordingMenu	Not applicable	Yes	Yes	Yes	Yes
	ToggleRecord	Record	Yes	Yes	Yes	Yes
	Press and hold button while speaking to issue a voice command	Not applicable	Yes	No	No	No

Roku® Streaming Player User Interface Button Mapping



Roku Button Mapping

Button	Crestron Home Command	Driver Command	Standard Command
◀◀	Rewind	ReverseScan	Rscan
▶	FirstPlayPause[1]	Not supported	Play_Pause
▶▶	FastForward	ForwardScan	Fscan
✳	Asterisk	Asterisk	*
↺	Replay	Replay	Replay
HOME	Home	Home	Home
MENU	Menu	Menu	Menu
BACK	Back	Back	Back
^	Up	Up	Up_Arrow
>	Right	Right	Right_Arrow
v	Down	Down	Down_Arrow

Roku Button Mapping

Button	Crestron Home Command	Driver Command	Standard Command
<	Left	Left	Left_Arrow
OK	Select	Select	Select

[1] If this command does not exist for the device, this button is mapped to the Play command instead.

Roku Standard Commands

Standard Command	Aliased Command List	Required/Optional
Rscan	Rscan, Rew, Rewind, Review, Reverse_Scan, Rewind_ Scan, Previous_Scan, Prev_Scan, R_Srch, Rsrch, Scan-, <<, &Rscan, A_Rew, ReverseScan	Required
Play_Pause	Play_Pause, Play/Pause, A_PLAY, >, PLAY/SLOW, VOD-PLAY, PLAY_MODE	Required
Fscan	FFWD, F_SCAN, SCAN, FF, >>, F_Srch, FSRCH, FFW, Forward, Fast_Forward, SCAN+, SEARCH, A_FFWD, SEARCH>>, SEARCH_MODE, &Fscan	Required
Dn_Arrow	Down, DN, Dw_Arrow, Navigation_Down, Menu_ Down, Cursor_Down, v, -, tilt_down, tilt_dn, tilt-down, tilt-dn, tiltdown	Required
Left_Arrow	Left, Navigation_Left, Menu_Left, Cursor_Left, <, Track-, pan_left, pan_lt, l, LT, panleft	Required
Right_Arrow	Right, Navigation_Right, Menu_Right, Menu_RT, Cursor_Right, >, pan_right, pan_rt, pan-right, pan-rt, rt, panright	Required
Up_Arrow	Up, Navigation_Up, Menu_Up, Cursor_Up, ^, +, tilt_up, tilt-up	Required
Select	OK, Navigation_Select, Select	Required
Menu	Root_Menu, Disc_Menu, DiscMenu/List, DVD_Menu, DVD-Menu, DVDMenu	Required
Back		Required
Replay	REPLAY_GUIDE, INSTANT_REPLAY, REPLAY/BACK, REPLAY_ZONES	Required
Home	Tivo, Options	Required
*	Kpd-*, key_*, key-*, Dial_*, Dial*, Dial_Star, DialStar, Key*, Asterisk	Required

Load Device Driver Files

To side load a custom device driver file into the Crestron Home processor:

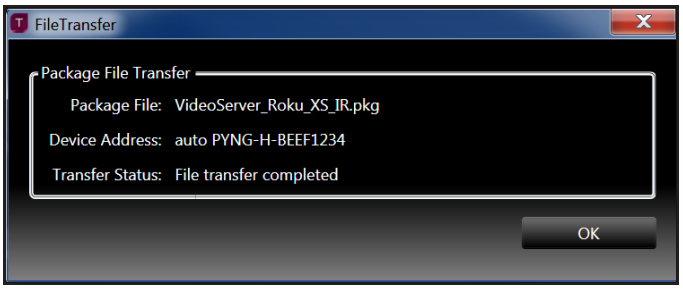
1. Connect to the Crestron Home processor over FTP or by using the File Manager tool in Crestron Toolbox.
2. Upload the custom driver package file or IR file into the Crestron Home processor's \User\ThirdPartyDrivers\Import directory.
3. Navigate to the driver using the **Third Party Devices** menu in the **Pair Devices** screen. The screen refreshes automatically to display the driver after it has been loaded into the system.
4. Add the custom third party device to a room. For more information, refer to Third Party Devices on page 57.

Additionally, device drivers may be loaded directly to the Crestron Home processor via the Device Learner tool:

1. Navigate to **File** > **Send .PKG to Device**.
2. Save the driver package file to the User Database.
3. Select the Crestron Home processor using the **Address Book** tool, and then click **OK**.

Once the transfer is complete, a pop-up dialog is displayed showing the package file, the device hostname/IP address, and the transfer status.

NOTE: If a device driver is loaded into the Crestron Home processor that shares the same ID (manufacturer, model name, and communication type) as an existing driver, the latest file will overwrite the existing entry.



Delete Device Driver Files

To delete a custom device driver file from the Crestron Home processor:

NOTE: Drivers may be deleted to reclaim disk space, to remove a known bad version of an existing driver, to allow the cloud to download the latest version of a Crestron Certified Driver, or to remove a test driver.

1. Connect to the Crestron Home processor over FTP or by using the File Manager tool in Crestron Toolbox.
2. Navigate to the Crestron Home processor's \User\ThirdPartyDrivers\Storage\Rad directory.
3. Delete the appropriate driver file(s) from the directory.

Mapping Virtual Sources

Certain A/V receivers use virtual sources, which require mapping on the A/V receiver itself (and not through the Crestron Home system) to map switching commands to connectors. For these A/V receivers, the source selections on the handheld remote are mapped to a physical connection on the back of the receiver using the receiver's web-based or on-screen configuration interface.

Receivers that use virtual mapping behave in the Crestron Home system as follows:

- The source selections in the Crestron Home system mimic the selections on the handheld remote.
- The receiver's physical connectors (such as HDMI) will always be labeled as "GenericAV" in the Crestron Home interface. This is done to allow the mapping in the receiver to be changed without requiring an update to the Crestron Home interface.

For example, if a Blu-ray Disc player source is mapped to the Component 1 input, and the mapping was changed to use the HDMI 1 input instead, the Blu-ray Disc player is still selected as the source in the Crestron Home interface. The connection label will show GenericAV even though the connector has been changed to HDMI 1.

Additionally, if a Sonos CONNECT is mapped to the Audio In 5 (CD) input, and the mapping was changed to use the Optical 1 (CD) input instead, the Sonos CONNECT is still selected as the audio source in the Crestron Home interface. The connection label will show GenericAV even though the connector has been changed to Optical 1 (CD).

Appendix J: Source Routing Behavior for Media Sources

When a media source is routed to a room from the media screen in the user control interface, the behavior of the media source varies depending on the device type and the routing action that is performed.

This appendix describes the expected source routing behavior for various media sources within the Crestron Home system.

When a media source is routed to a room:

- For audio-only media devices (such as the CEN-NSP-1, Autonomic streaming devices, and CEN-TRACK devices), if the device is not yet playing, it should begin to play automatically.
- A Sonos device does not begin to play when the "Sonos Favorites" source is selected. The Sonos device begins to play once a specific favorites channel is selected from inside the channel's user interface.
- The Crestron Home system does not attempt to start devices automatically unless the device supports automatic play functionality.
- Audio only devices will be favored as much as possible while routing an audio only source to an endpoint.
- Audio routes will follow video routes as much as possible while routing audio/video sources to an endpoint.

When a room is turned off, or a new media source is routed to a room:

- For the CEN-NSP-1, Autonomic streaming devices, and CEN-TRACK devices, a discrete pause command is executed. If this command is not available, no command is executed.
- For DVD players, a discrete pause command is executed. If this command is not available, no command is executed.
- For streaming devices (such as Amazon Fire® streaming devices or Apple TV digital media extenders), a discrete pause command is executed. If this command is not available, no command is executed.
- For cable boxes, no action is attempted.
- If the existing media source is still playing, no action is attempted.

NOTE: The Crestron Home system does not execute a discrete pause command when:

- Switching between sources that are part of the same device and part of the same audio output channel (such as the Autonomic MMS-2A).
- Switching between sources that are part of the same device that has single audio output channel (such as the CEN-NSP-1).

The Crestron Home system also supports a "Device No Longer Used" feature. When a source is no longer being used by the Crestron Home system, a power off command is sent to the device after one minute.

Media endpoints (such as speakers and displays) are powered off immediately.

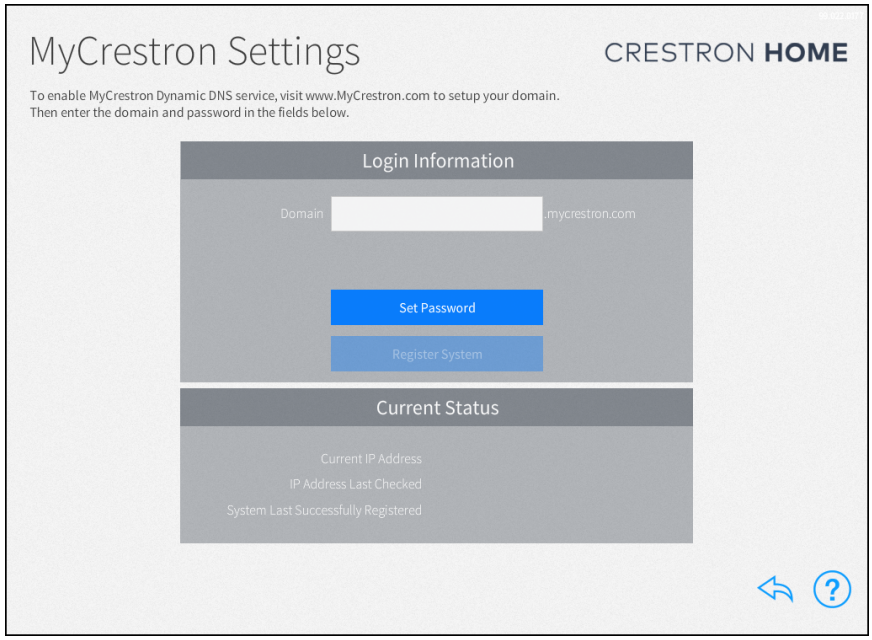
Appendix K: Enable Remote System Access

The Crestron Home system may be monitored remotely using the myCrestron Dynamic DNS service. Use the following procedures to enable remote system access via myCrestron.

Register the System with myCrestron

To register the Crestron Home system with a myCrestron account.

1. Tap **MyCrestron Dynamic DNS Service** on the **Installer Settings - System Control Options** screen to display the **MyCrestron Settings** screen.



NOTE: A myCrestron domain name must be registered at www.mycrestron.com prior to registering the system with myCrestron.

2. Enter the domain name of the myCrestron account in the **Domain** text box.
3. Tap Set Password and then enter the password for the myCrestron account in the **Password** field.
4. Tap **Register System**.

If the registration is successful, a success message is displayed, and the **System Last Successfully Registered** date updates in the **Current Status** panel.

Configure Port Mapping on a Router

Many routers do not allow for direct port forwarding of common ports, including 80, 443, 23, and others. Port mapping is ideal in this scenario, as an arbitrary external port is forwarded to the internal port being used.

For example, port 80 (internal) to port 80 (external) may be blocked, but mapping from port 8080 to port 80 or port 8081 to port 80 is allowed.

Map the following ports to ensure proper functionality.

NOTE: Only map ports that are required for the necessary functions.

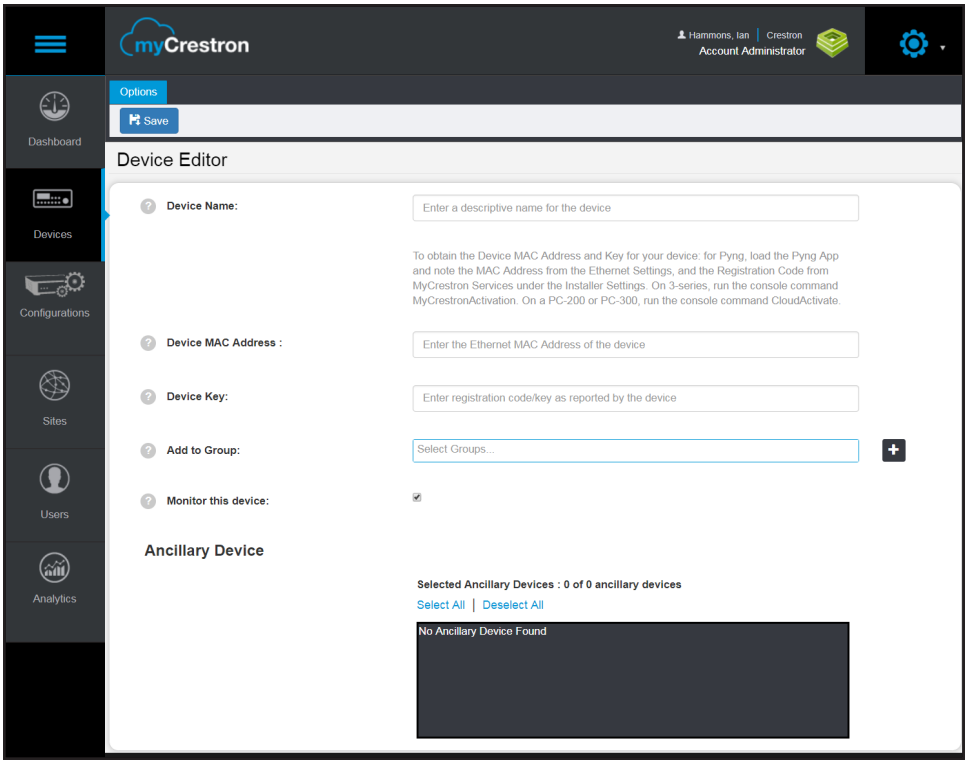
- **50001:** Used for access to the system by the Crestron Home Setup App and Crestron Home App.
- **843 (Web XPanel Interface):** Used for an Adobe® software Flash® Policy Server request. For more information, refer to OLH article 5793 at https://support.crestron.com.
- **443 (HTTP):** Used for serving files from the \HTTP\ folder on the processor (Crestron Home web XPanel interface, app manifest file, and so forth).

  NOTE: The webport command may be issued using the Text Console tool in Crestron Toolbox to change the processor's HTTP port (if the router is not capable of port mapping).

Add the Crestron Home Processor to the myCrestron Residential Monitoring Service

To add the Crestron Home processor to a myCrestron account for remote monitoring:

1. Log into https://portal.my.crestron.com using the myCrestron.com subdomain that is paired with the system.
2. Click **Add Device** from the menu at the top of the screen. The **Device Editor** panel is displayed.



3. Enter the following information in the appropriate fields:
    - **Device Name:** Enter a descriptive name for the Crestron Home processor.

      NOTE: The Device MAC Address and Device Key are available on the **Installer Settings > System Configuration > MyCrestron Monitoring**.
    - **Device MAC Address:** Enter the device MAC address.
    - **Device Key:** Enter the device registration key.
    - **Add to Group:** If desired, add the Crestron Home processor to a myCrestron device group.
    - **Monitor the device:** Click the check box to enable or disable remote monitoring for the Crestron Home processor. A filled check box indicates that the device will be monitored.
    - **Ancillary Device:** If desired, select any ancillary devices that are connected to the Crestron Home processor.
4. Click **Save**. The Crestron Home processor is added to the myCrestron account.

Appendix L: Create and Upload a Custom Television Provider

When a third-party cable box device is added to the Crestron Home system, the system prompts the user to select a television provider from the available options. After a television provider is selected, the appropriate channel names and icons are made available to the media controls for the cable box.

However, the Crestron Home system does not provide native support for all television providers in all regions. As a workaround, a custom television provider file must be created and uploaded to the Crestron Home system. The television provider file obtains the channel names and icons from files that are hosted on an external web server.

Use the following procedures to create and upload a custom television provider into the Crestron Home system.

Create a Channel JSON File

The television provider file obtains channel data from an externally hosted JSON file. To create a custom channel JSON file:

1. Open a text editor or code editing program.
2. Create the channel list file schema as shown below. The value for the `lastUpdated` parameter should be set to the current date (for example, "071618").

```
{
 "lastUpdated": "Date",
 "data": [

 ]
}
```

3. For each channel, create a child object within the data array that contains the following parameters. Refer to the example on the following page.
   - **name:** The channel name (string)
   - **channel:** The channel number (string)
   - **index:** An index identifier that increments for each successive channel in the JSON file (integer)
   - **id:** The unique ID of the channel (string)

- **imageId:** The unique ID of the channel icon PNG image file, which is uploaded along with the provider file (string)

```
{
 "lastUpdated": "Date",
 "data": [{
 "name": "WPIO",
 "channel": "1.1",
 "index": 1,
 "id": "wpio",
 "imageId": "wpio"
 },
 { "name": "WPII", "channel": "2.1", "index": 2, "id": "wpii",
"imageId": "wpii" }]}
```

2. Save the file with a JSON file extension (for example, "customChannels1.json").

> **NOTE:** Crestron recommends that the filename of the JSON file match the actual name of the television provider.

Create Channel Icon Image Files

The television provider file obtains channel icon data from externally hosted PNG files. Any PNG image may be used that represents the channel logo; this image is displayed when its associated channel is selected with the Crestron Home media controls.

Note the following when creating custom channel icon files:

- The image must be in PNG format.
- The channel icon filename must exactly match the imageId parameter value for the associated channel. (For example, to use a channel icon file with a "wpii.png" filename, the `imageId` parameter value for the associated channel must be "wpii".)
- Images with dimensions less than 150 x 150 pixels are not resized. Images with dimensions larger than 150 x 150 pixels are scaled down with an aspect ratio kept to a maximum of 150 pixels (length or height, depending on which is greater).

Once all channel icons have been created, package all of the files together into a separate .zip file.

Upload the Channel JSON and Icon Files to a Web Server

Once the channel list JSON file and all channel icon files are created, upload the JSON files and the zipped channel icon files to a location on a web server. The television provider file must be able to access this location to obtain channel and icon data.

NOTE: The JSON and channel icon files may be used to service any customers using the exact same provider.

Create and Upload a Television Provider File

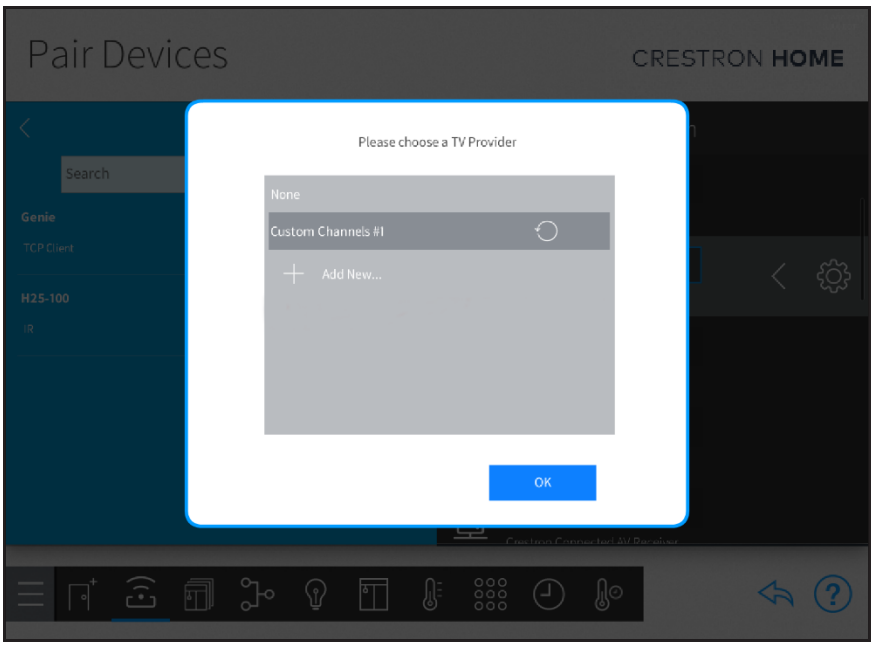
To create and upload a custom television provider file:

1. Open a text editor or code editing program.
2. Create the television provider file schema with the following parameters. Refer to the example below.
   - **id:** The unique ID of the custom television provider file (string)
   - **name:** The name of the custom television provider that is displayed in the Crestron Home system (string)
   - **eTag:** The value set for lastUpdated in the channels JSON file, which is populated automatically from the JSON file (Enter a "null" value when first adding this parameter.) (string)
   - **channelsLastUpdated:** Not used for custom television provider files (Enter a "null" value when first adding this parameter.) (string)
   - **custom:** Indicates whether the television provider file is custom (Boolean)
   - **channelFile:** The URL of the channels JSON file on the external web server (string)
   - **imageFile:** The URL of the channel icons .zip file on the external web server (string)

   ```
   {
    "id": "custom1",
    "name":
    "Custom Channels #1",
    "eTag": null,
    "channelsLastUpdated": null,
    "custom": "true",
    "channelFile": "http://yourdomain.com/customchannels1.json",
    "imageFile": "http://yourdomain.com/customimages1.zip"
   }
   ```
3. Save the file with an .exprovider file extension (for example, "custom1.exprovider").
4. Connect to the Crestron Home processor over FTP or by using the File Manager tool in Crestron Toolbox.
5. Upload the custom television provider file into the Crestron Home processor's \User\TvProviders\Import directory.

6. In the Crestron Home application, use the **Third Party Devices** menu in the **Pair Devices** screen to add a new cable box or to edit the television provider settings for an existing cable box.

   When prompted to select a television provider, the custom television provider is displayed in the list of providers.



7. Select the custom cable provider, and then tap **OK**.

Update the Television Provider File

If the channel lineup for the cable provider changes, the channels JSON file and channel icon .zip file must be updated and uploaded to the web server.

To update the channel provider data in the Crestron Home application:

1. Make the necessary changes to the channels JSON file and channel icons .zip file.

   NOTES:

   - Ensure that the lastUpdated parameter has been updated in the channels JSON file to the current date. The channel provider data will update automatically when an updated .exprovider is imported into the system.
   - If the provider name must be edited, update the name parameter in the .exprovider file. Ensure that the id field is not changed. Then, import the updated .exprovider file into the Crestron Home processor as described in the "Create and Upload a Custom Television Provider" section on the previous page.

2. Overwrite the existing channels JSON file and the channel icons .zip file on the web server.

   NOTE: Overwriting the existing files on the web server updates the channel data for all customers that are using the associated custom television provider file.

3. In the Crestron Home application, navigate to any cable box in the system.
4. Tap the gear button next to the cable box name.
5. Click the **Provider** tab to edit the cable provider settings. Refer to the image above.
6. Tap the refresh button next to the custom television provider name. The channel lineup and icons update in real time.

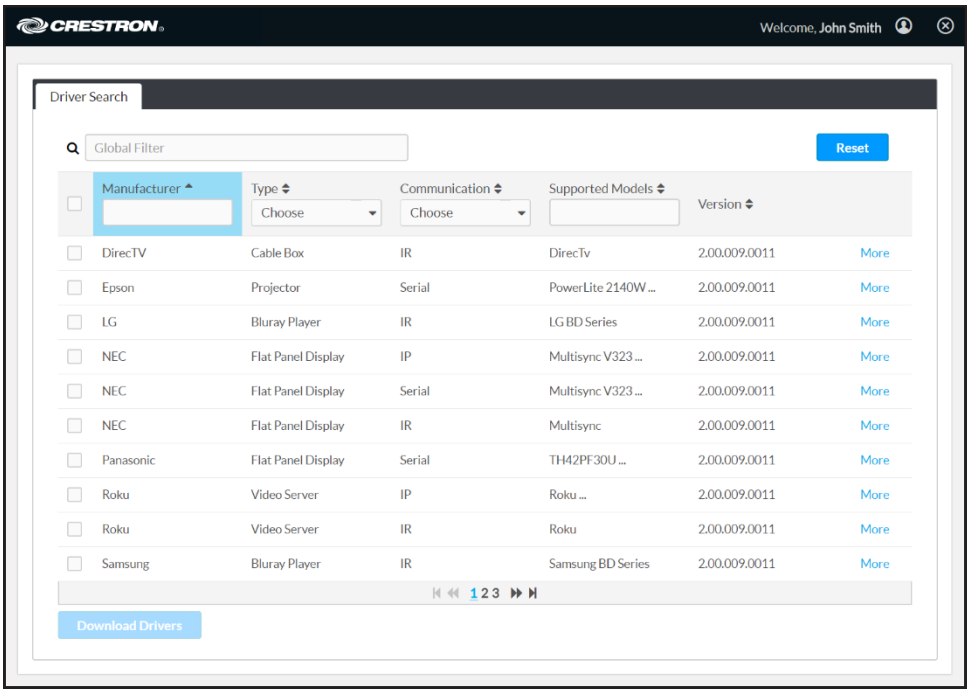
Appendix M: Update Crestron Certified Drivers

When a third-party device is added to the Crestron Home system using a Crestron Certified device driver, a copy of the driver PKG file is stored in the Crestron Home processor file structure. However, the PKG file is not updated automatically in the system when an updated version of the driver is made available in the cloud.

To update a Crestron Certified device driver:

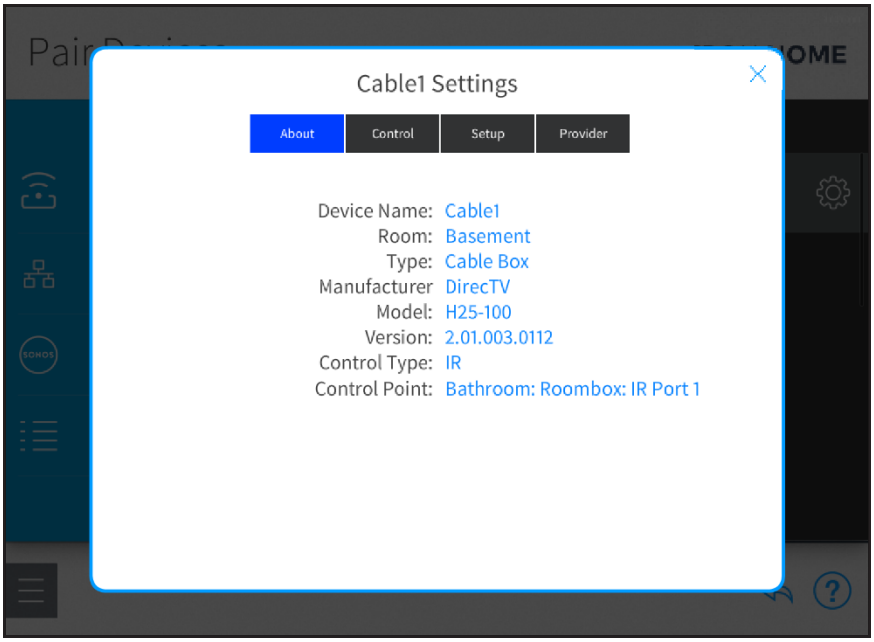
1. Log in to the Crestron Certified Drivers web portal at https://drivers.crestron.io. The **Driver Search** page is displayed.

   NOTE: New users to the Crestron Certified Drivers web portal must create an account in order to search for and download device drivers.



2. Navigate to the desired device driver(s) in the web portal. Use the **Version** tab to confirm the version of the device driver(s).
3. Select the device driver(s) by clicking the check box to the left of a driver name.
4. Once all drivers have been selected, click **Download Drivers** to download the drivers to the host computer. All selected drivers download as PKG files within a single zipped file.
5. Connect to the Crestron Home processor over FTP or by using the File Manager tool in Crestron Toolbox.
6. Upload the updated device driver files into the Crestron Home processor's \User\ThirdPartyDrivers\Import directory.

7. Apply the updated driver to its associated third party device as follows:
    - **IR devices:** Add the device(s) to the system after the updated driver file is uploaded. Existing IR devices that were added using an older version of the driver must be deleted and added back to the system.
    - **Serial and TCP/IP devices (or any other DLL-based devices):** Delete all devices that were added using the older firmware. Wait 60 seconds without making any other changes to the system configuration, and then reboot the Crestron Home processor. After the Crestron Home processor has rebooted, add the device(s) back to the system.
8. Confirm that the device was added with the updated device driver file, tap the gear button next to the device name. The driver version is shown next to **Version** in the **About** section of the device settings dialog box.



Appendix N: Connect to a 2N® Door Station

A 2N door station may be integrated with the Crestron Home system and controlled from a TSW-xx60 series touch screen. To add a 2N door station to the Crestron Home system:

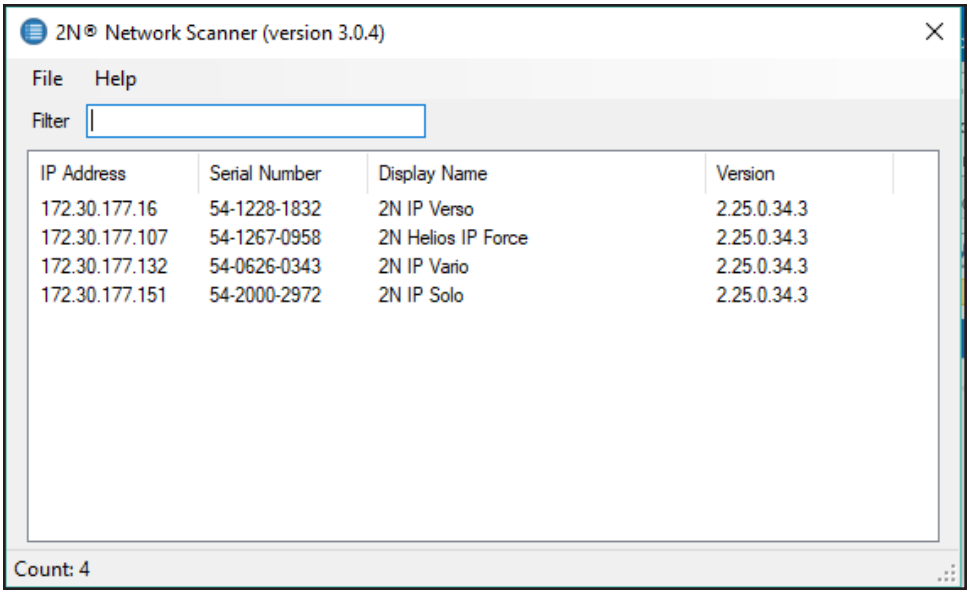
NOTES:

- Ensure that the 2N door station the same subnet as the Crestron Home system and is discoverable on the network prior to setup.
- For additional technical information, refer to the 2N WiKi and the 2N device documentation.
- For information on configuring the touch screen for 2N door station support, refer to the TSW-560/TSW-760/TSW-1060 Supplemental Guide (Doc. 7927) at www.crestron.com/manuals.
- Minimum firmware requirements:
  - TSW-xx60 Touch Screen: 2.003.0040
  - 2N Door Station: 2.25.0

Discover the 2N Device

To discover the 2N device on the network:

1. Download and install the 2N Network Scanner application from https://www.2nusa.com/en_US/products/2n-network-scanner.
2. Open the application. All discovered 2N door stations on the network are displayed.



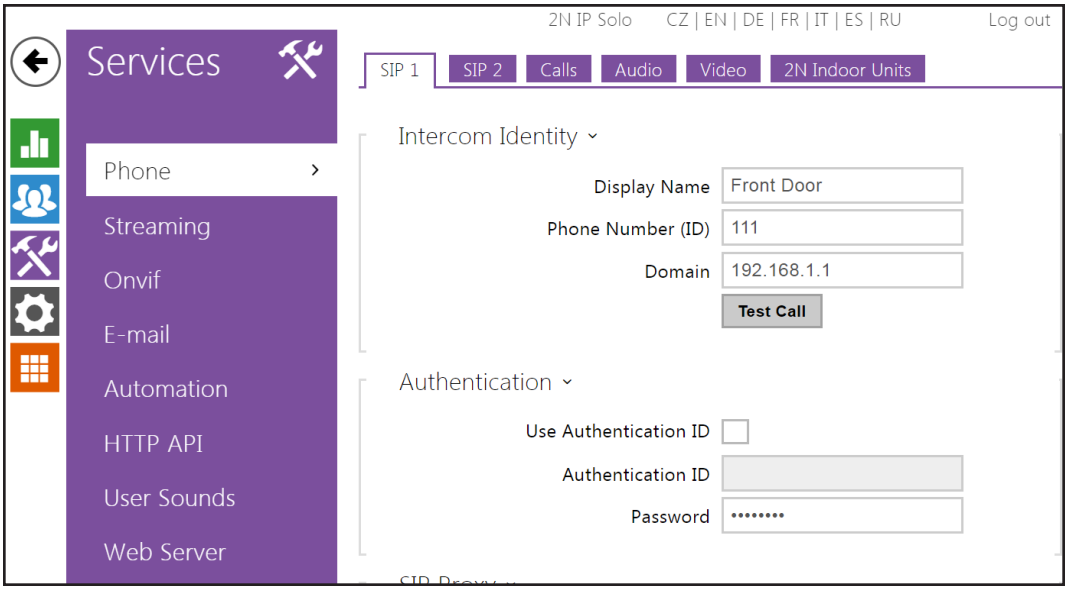
Configure 2N Device Settings

Use the following procedures to configure the 2N device for integration with the Crestron Home system.

Services Settings

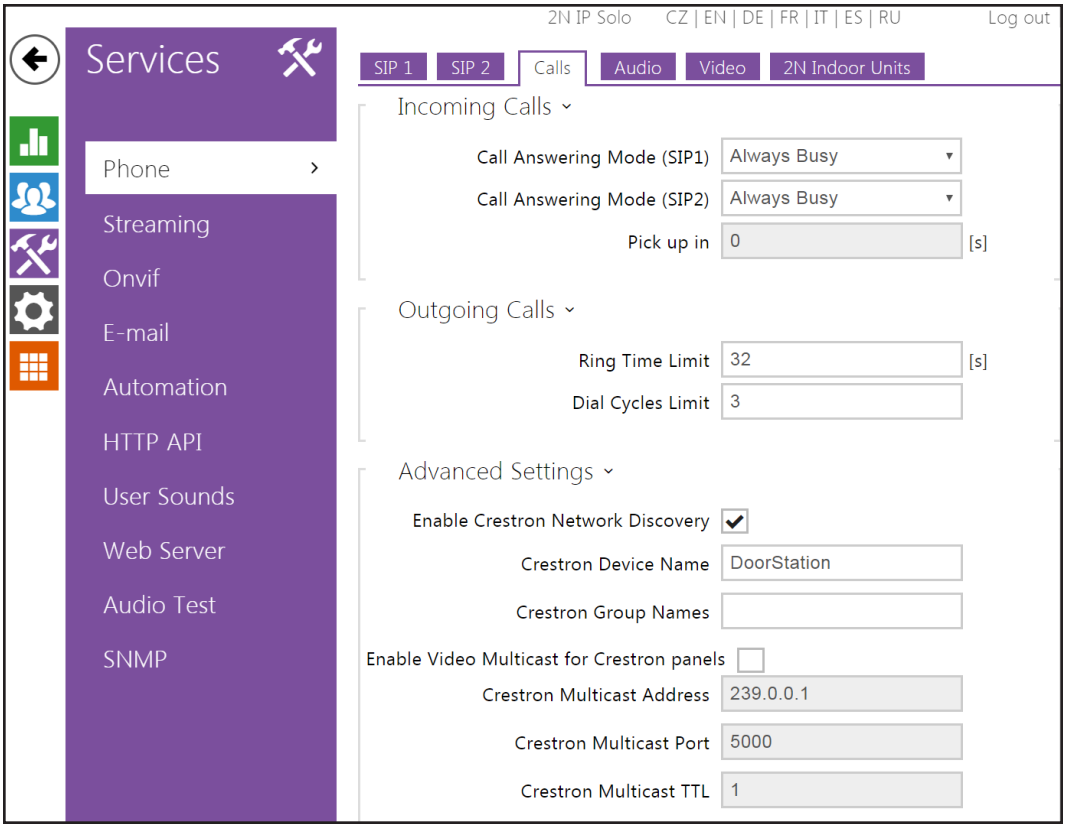
1. Launch the web configuration utility for the appropriate 2N device by entering its IP address into a web browser. For more information on the 2N web configuration utility, refer to the 2N device documentation.
2. Click the purple tool icon to display the **Services** menu.
3. Navigate to **Phone** > **SIP 1**, and enter the following information under Intercom Identity:
   - Enter a name for the door station in the **Display Name** text field. This name will be shown on the touch screen to identify the door station when a call is received.
   - If configuring the door station to support Rava® SIP intercom calls, enter the Rava extension for the door station in the **Phone Number (ID)** text field.

     NOTE: If there are multiple door stations on site, each door station will have a unique extension number.



4. Select the **Calls** tab.

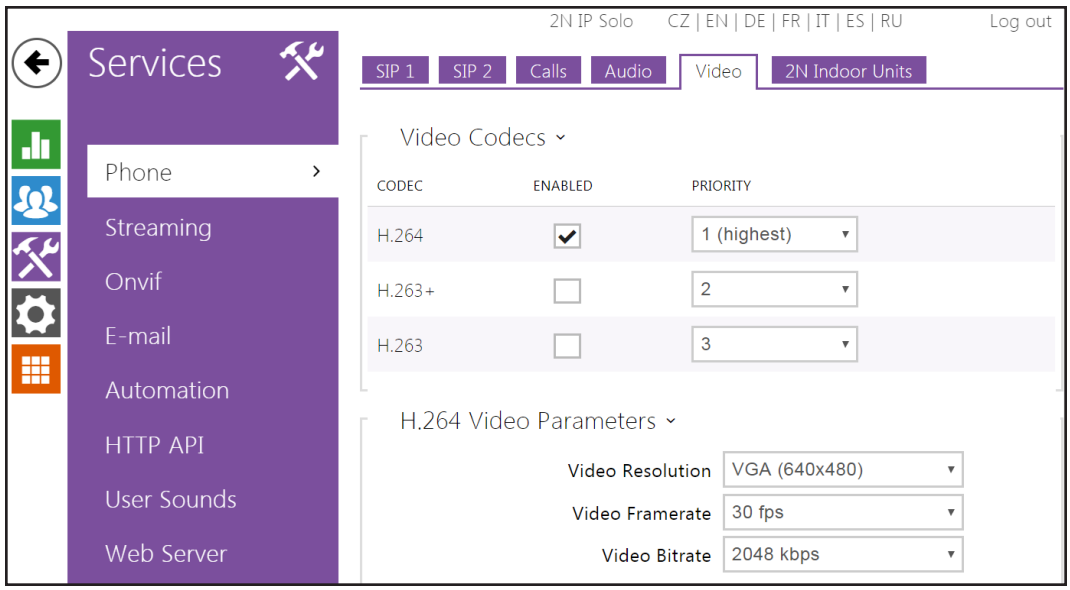
5. Click the check box to display a check mark next to **Enable Crestron Network Discovery** under **Advanced Settings**. The 2N device is now discoverable in Crestron Toolbox.



NOTES:

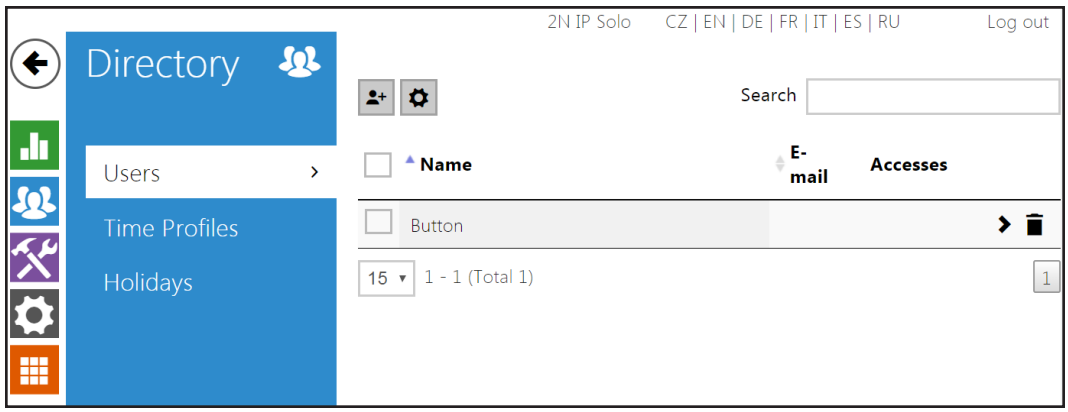
- Video unicast may be used if three or fewer Rava-enabled touch screens will be used with the 2N device. Otherwise, click the check box to display a check mark next to **Enable Video Multicast for Crestron panels**, and enter the Crestron multicast settings in the appropriate text fields.
- If multicast is used and there are multiple 2N door stations on site, specify the unique multicast address for each door station.
- Multicast may not be supported if it is used with an SIP server.

6. Select the **Video** tab, and enter the following settings:
   - Click the check box to display a check mark next to **H.264**.
   - Select **VGA (640x480)** from the **Video Resolution** drop-down menu.
   - Select **30 fps** from the **Video Framerate** drop-down menu.
   - Select **2048 kbps** from the **Video Bitrate** drop-down menu.



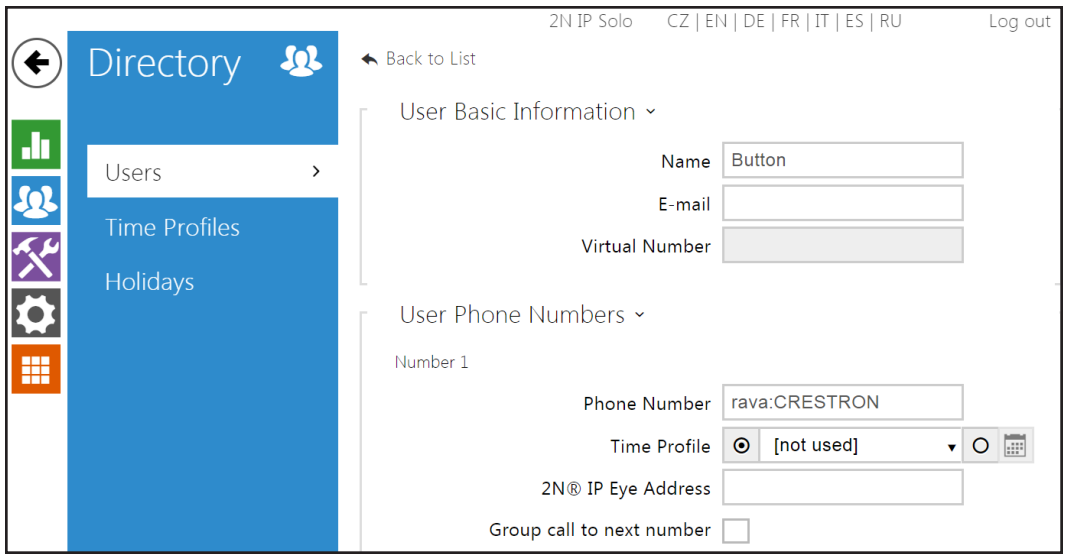
Directory Settings

1. In the web configuration utility, click the blue users icon to display the **Directory** menu.
2. Navigate to **Users**, and click the add user button to create a new user.



NOTE: 2N devices also refer to users as "buttons," as this refers to the buttons on the 2N door station that are used to dial specific dwellings or ring groups.

3. Enter "rava:CRESTRON" in the **Phone Number** text field.

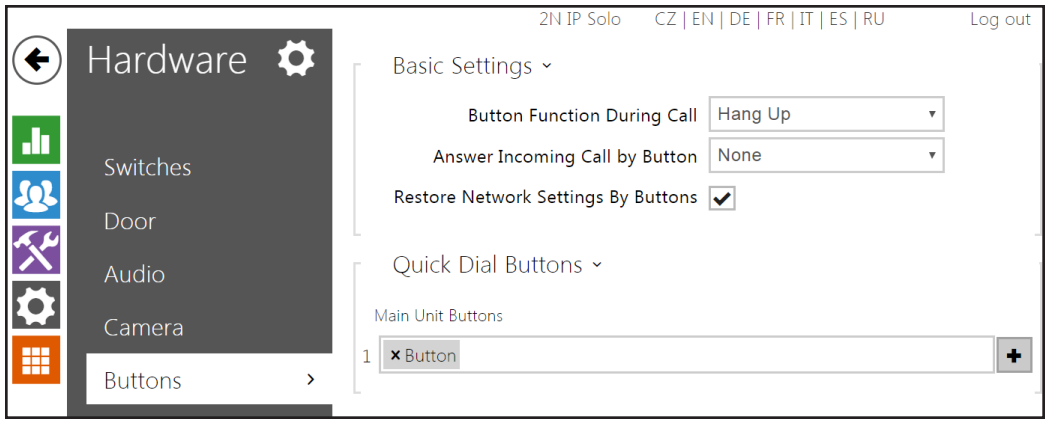


NOTE: CRESTRON is the default ring groups for all shipping TSW-x60 touch screens. To use a different group name, issue the `SIPPAGEGROUP [GROUPNAME]` command to the touch screen using the Text Console tool in Crestron Toolbox, where `[GROUPNAME]` is the desired group name (all capital letters with no spaces). Then, enter "rava:[GROUPNAME]" in the **Phone Number** text field.

For example, if a `SIPPAGEGROUP FIRSTFLOORGROUP` command was issued to the touch screen, enter "rava:FIRSTFLOORGROUP" in the **Phone Number** text field.

Hardware Settings

1. In the web configuration utility, click the gray gear icon to display the **Hardware** menu.
2. Navigate to **Buttons**.
3. Add the button (user) created in the previous procedure to the **Main Unit Buttons** menu by clicking the plus button next to the menu.



Advanced Configuration

If the 2N door station has been configured to send calls to a mobile device via the 2N Mobile Video app, calls may be sent to both the mobile device and the Crestron Home touch screen by configuring two phone numbers for the 2N device.

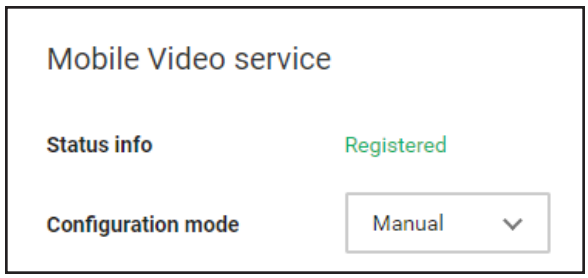
All 2N Mobile Video app settings must be configured and propagated to the door station before configuring the 2N device for call forwarding. For more information on configuring the mobile app, refer to www.my2n.com.

To configure the 2N door station for use with the app and the touch screen:

NOTE: The 2N door station must be configured to support a connection to the touch screen(s) prior to attempting this procedure. For more information, refer to Configure 2N Device Settings on page 573.

1. Open the **DEVICE DETAIL** tab for the configured 2N door station in the 2N Mobile Video web configuration interface.
2. Under **Mobile Video service**, select **Manual** from the **Configuration mode** drop-down menu.

   Mobile Video service - Configuration mode

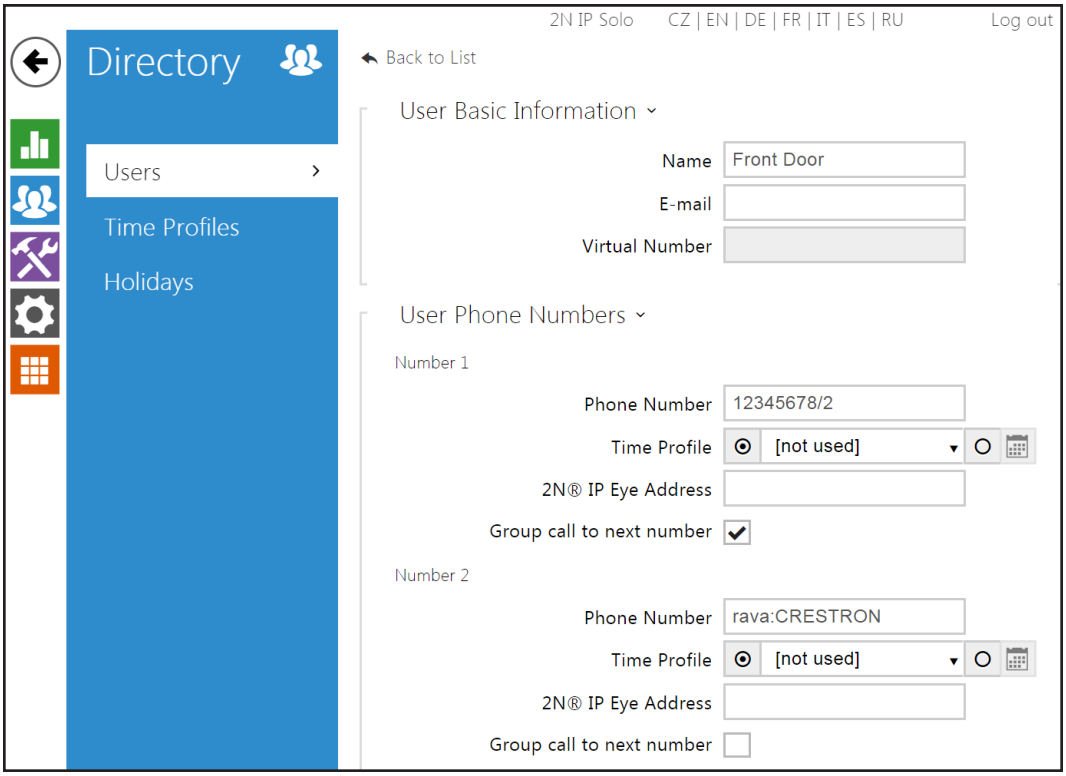
   NOTE: If Configuration mode is set to automatic, the mobile app may overwrite the existing 2N IP intercom settings, including the touch screen connection.
3. In the 2N device web configuration utility, click the blue users icon to display the **Directory** menu.
4. Navigate to **Users**, and click the desired user to edit user settings.

5. Enter the following information under **User Phone Numbers**:

   NOTE: The phone number for the mobile device is entered automatically in the Phone Number text field for Number 1 if the mobile device has been configured using the 2N Mobile Video app.

   - For **Number 1**, click the check box to display a check mark next to **Group call to next number**.
   - For **Number 2**, enter "rava: [GROUPNAME]" in the **Phone Number** text field, where [GROUPNAME] is the desired ring group name. For more information, refer to Directory Settings on page 575.

2N Configuration Utility - Users Settings



Appendix O: Upgrade Crestron Home Processors

Upgrade to the latest Crestron Home processor by transferring the system data to a new Crestron Home processor. Data can also be transferred between Crestron Home processors as a means of transferring system data from a test system to a live system or as a means of system recovery for a failed processor.

System data can be transferred using a deployment code (recommended), manually transferred between processors using an FTP client, copied from the CP3-R or CP4-R, or downloading a golden configuration from the myCrestron Residential monitoring system.

Method 1: Use a Deployment Code (Recommended)

Using a deployment code allows system data to be quickly and automatically transferred to a Crestron Home processor. The system data is downloaded from the myCrestron Residential Monitoring Service and then loaded onto the Crestron Home processor.

		FROM			
		PYNG-HUB	CP3-R	CP4-R	MC4-R
TO	PYNG-HUB	Yes			
	CP3-R		Yes		
	CP4-R	Yes	Yes	Yes	
	MC4-R	Yes	Yes		Yes

NOTES:

- The Crestron Home processor must added to the myCrestron Residential Monitoring Service prior to using a deployment code. Refer to Add the Crestron Home Processor to the myCrestron Residential Monitoring Service on page 563 for details.
- The replacement control processor must be connected to the same network and have the same subnet mask as the old control processor. Using a private switch and connecting all devices to it is best.
- If replacing a PYNG-HUB control processor with an MC4-R, audio related components, routing, etc. are not transferred to the Crestron Home processor. Audio components, audio sources, and audio routing must be configured after the procedure is complete.

Generate a Deployment Code

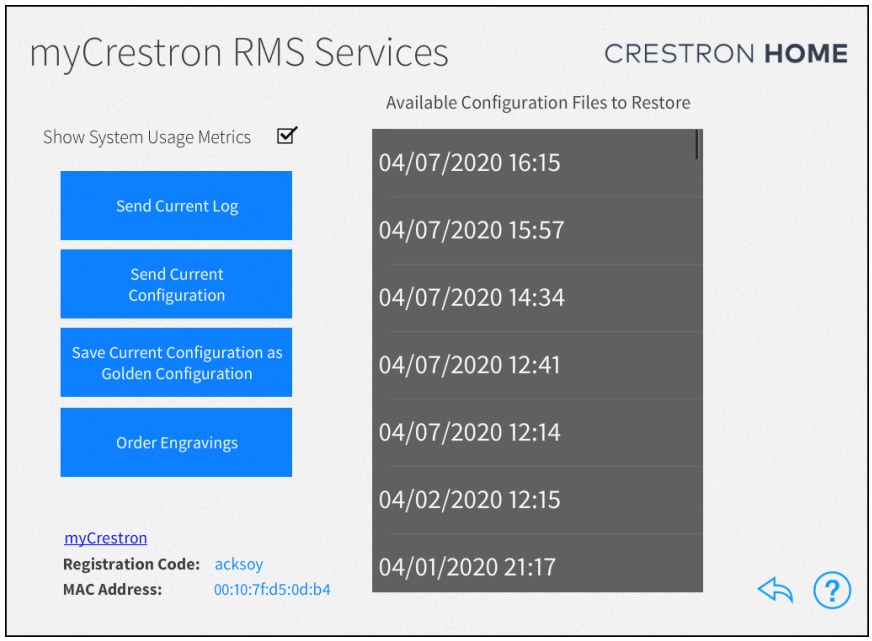
1. Tap the gear button on the bottom right of the **Setup** screen to display the **Installer Settings** screen.

   NOTE: If using a PYNG-HUB control processor, tap **MyCrestron Services** on the **Installer Settings** screen to display the **MyCrestron Services** screen and then

proceed to step 4.

2. Tap **System Configuration** on the **Installer Settings** screen to display the **Installer Settings - System Configuration** screen.
3. Tap **MyCrestron Monitoring Services** on the **Installer Settings - System Configuration** screen to display the **MyCrestron Services** screen.
4. Tap **Save Current Configuration as Golden Configuration** to save the current configuration as a golden configuration. Tap **OK** in the dialog box that is displayed to save the current configuration or tap **Cancel** to cancel saving the configuration. The Golden Configuration is automatically uploaded to the myCrestron Residential Monitoring Service (https://portal.my.crestron.com).

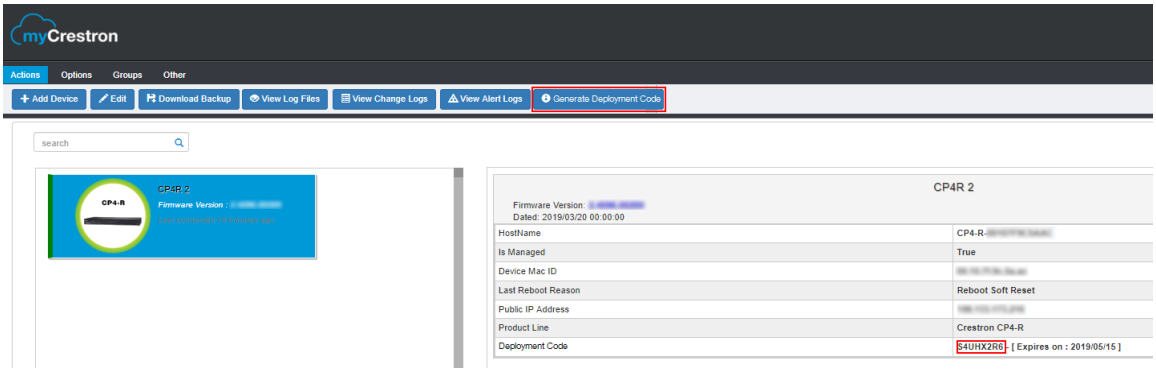
NOTE: Golden configurations represent known, working system states that may always be restored safely, and are indicated by a star icon in the **Available Configuration Files to Restore** menu.



5. Log into the myCrestron Residential Monitoring Service (https://portal.my.crestron.com) using the account that is associated with the system.
6. Select the processor from the device list.
7. Write down the Hostname of the existing control processor. The hostname will be needed when setting up the new Crestron Home processor.

8. Click **Generate Deployment Code**. The deployment code is displayed in the main window. Write down the code.

   NOTE: The deployment code expires after 14 days.



9. Disconnect power and then remove all connections from the control processor. Remove the control processor from the system.

   NOTES: If the control processor was registered with the Amazon® Alexa® voice control account or the Google Assistant™ voice control account, remove the control processor from the service. The homeowner's Amazon or Google credentials are required to remove the control processor from the voice service. For more information, refer to Remove Voice Control Services on page 234.

10. Install the replacement control processor and make all connections.

    NOTE: When a PYNG-HUB control processor is replaced with a CP4-R control processor, an infiNET EX wireless gateway must be added to the system. Install the new CEN-GWEXER infiNET EX wireless gateway(s) prior to powering the system on.

11. Power on the control processor.
12. Set up the new control processor. Refer to Set Up the Crestron Home System using a Deployment Code on the facing page.

Set Up the Crestron Home System using a Deployment Code

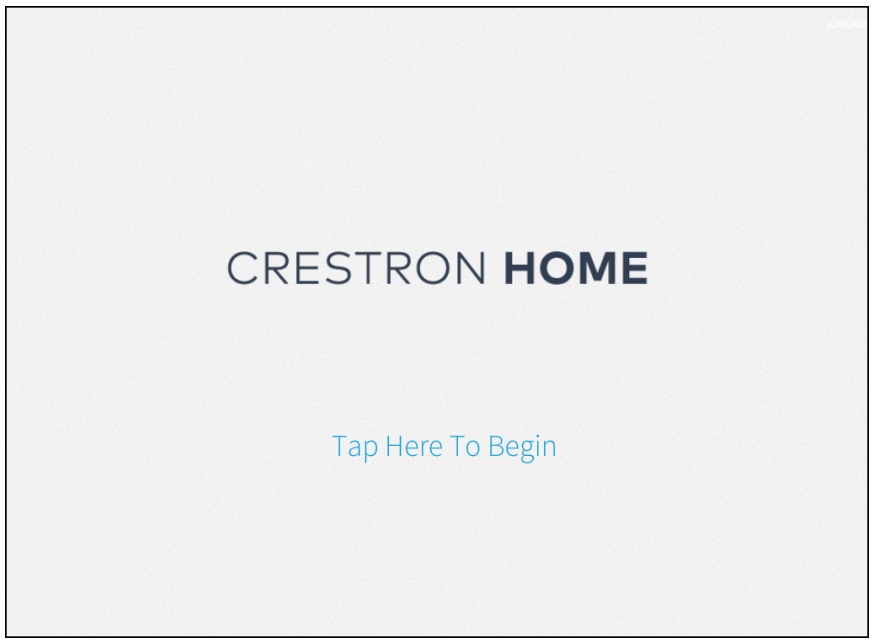
CAUTION: The imported system configuration will replace the configuration that is currently on the system. All information on the device will be lost if it is not backed up using the myCrestron Residential Monitoring Service. This process cannot be undone.

NOTES:

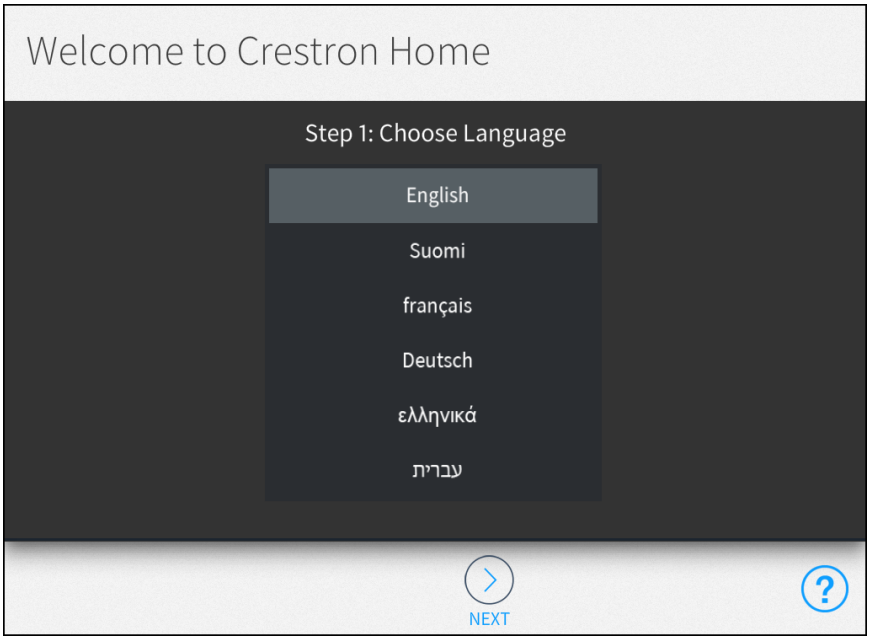
- Tap the help button (?) at any time to display help screens that explain the functions and features of each setup screen and provide instructional videos. The iPad device or setup device must be connected to the network to access videos.
- Tap the **BACK** button (**<**) at any point during the setup process to return to the previous screen.

1. Tap the Crestron Home Setup app icon on the iPad device home screen.
2. The Crestron Home Setup app connects to the Crestron Home processor automatically. A splash screen is displayed. Tap the **Tap Here to Begin** text.

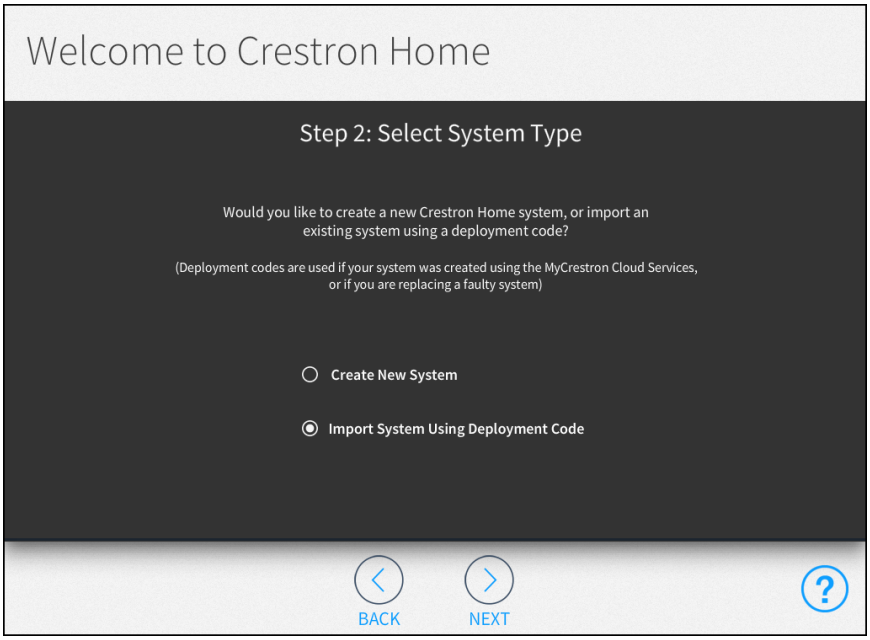
   NOTE: If the Crestron Home Setup app does not connect to the Crestron Home processor automatically, enter the Crestron Home processor's hostname and tap **Connect**. The default hostname for a CP4-R is "CP4-R-[MAC Address]" (excluding punctuation). For example, "CP4-R-123A567B91C3." The MAC address label is located on the bottom or rear of the device.



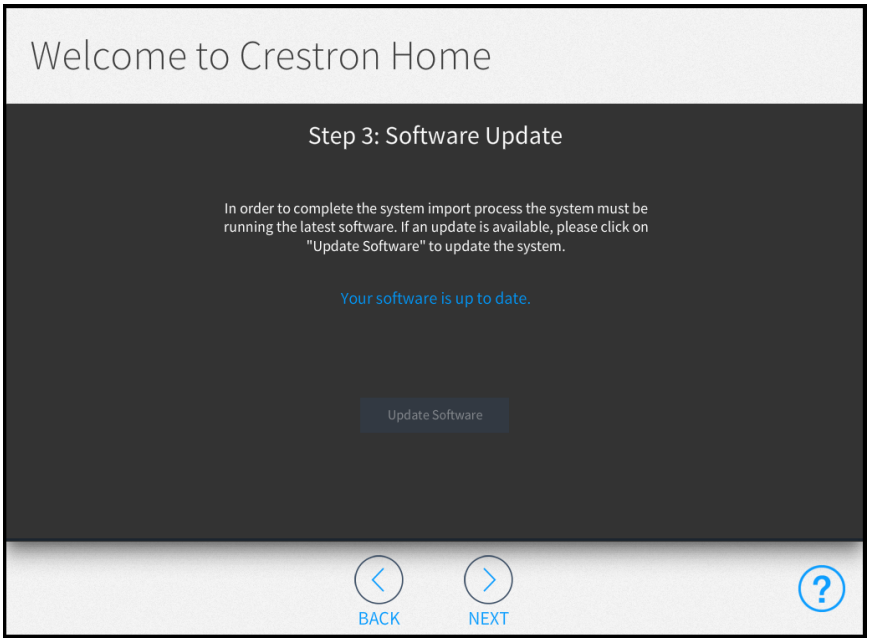
3. Select the language that will be displayed by the system and then tap the **NEXT** button (**>**).



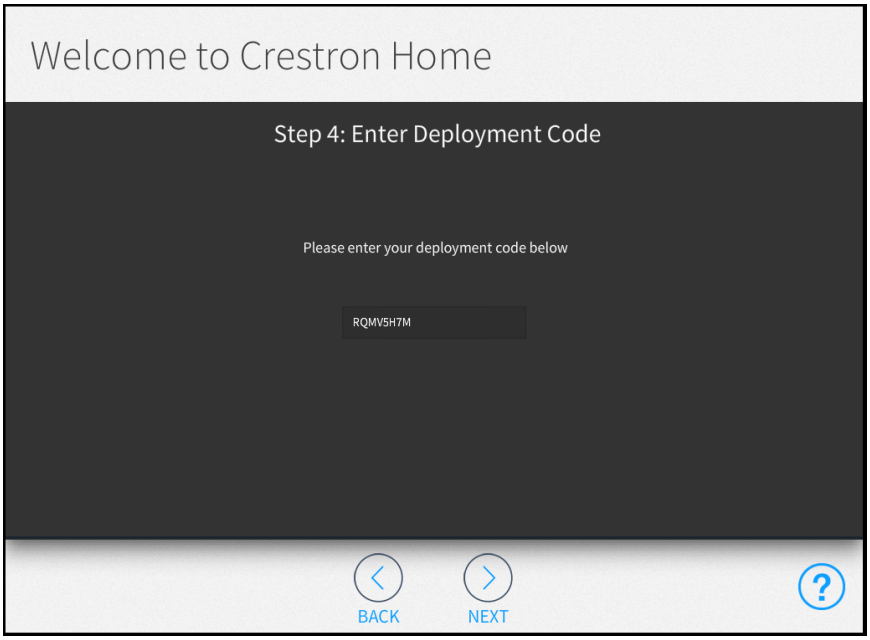
4. Tap the **Import System Using Deployment Code** radio button and then tap the **NEXT** button (**>**).



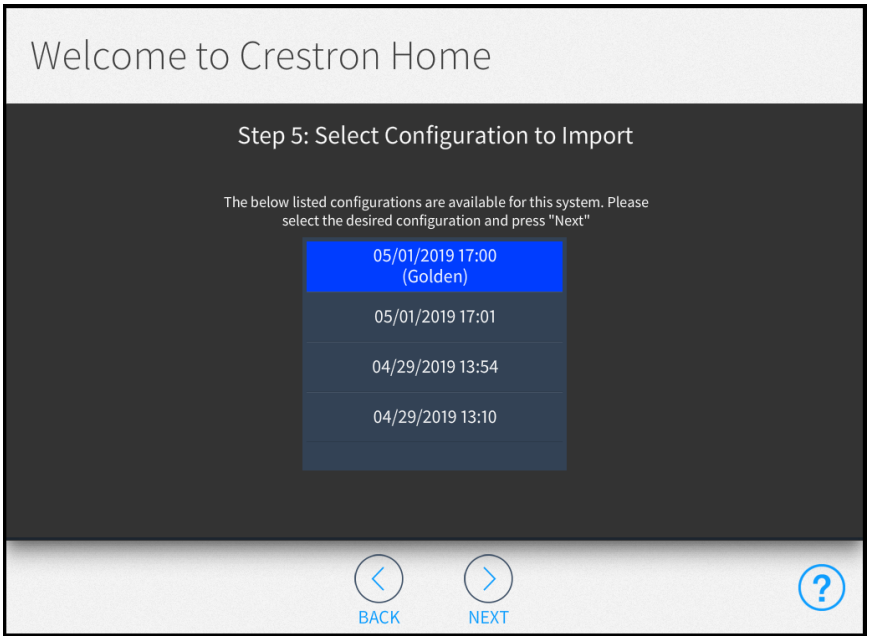
5. The Crestron Home software must be up to date to use a deployment code. If necessary, tap the **Update Software** button to update the software and then tap the **NEXT** button (**>**).



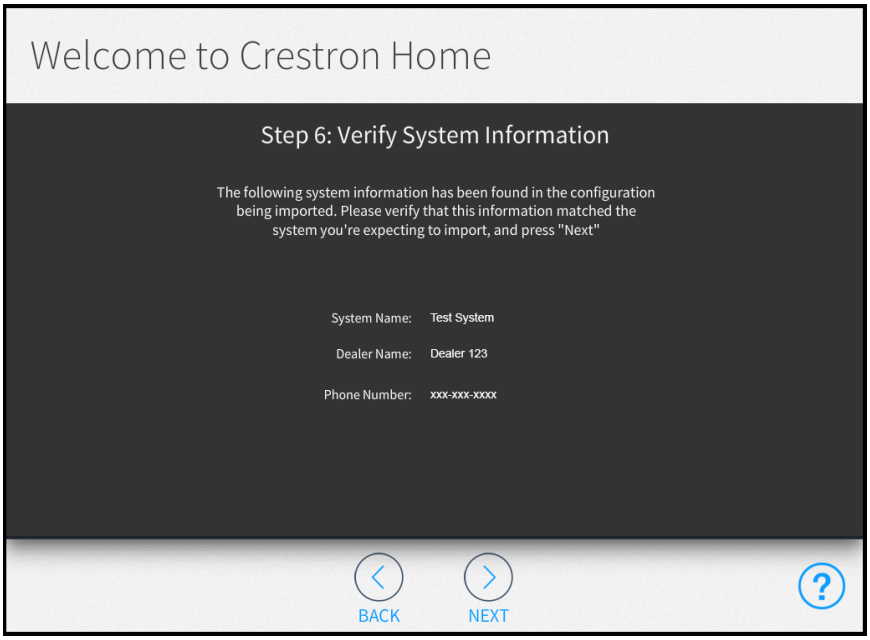
6. Enter the deployment code that was generated using the myCrestron Residential Monitoring Service and then tap the **NEXT** button (**>**). The deployment code is validated.



7. Tap the configuration that you wish to import and then tap the **NEXT** button (**>**). The configuration is downloaded from the myCrestron Residential Monitoring Service.



8. Verify that the system information is correct and then tap the **NEXT** button (**>**). The system information is loaded onto the Crestron Home processor.



NOTES:

- The **Step 7: Loading System Information** screen is displayed while the system information is loaded onto the Crestron Home processor.
- The system information is typically loaded to the Crestron Home processor very quickly. The **Step 7: Loading System Information** screen may be visible for a very short period of time.

9. The Crestron Home processor restarts after the system information is fully loaded onto the Crestron Home processor.
10. Update the hostname for the replacement Crestron Home processor.

    The hostname on the replacement control processor must match the hostname of the control processor that was written down during the Generate a Deployment Code on page 579.

    a. Tap **Ethernet Settings** on the **Installer Settings - System Configuration** screen to display the **Ethernet Settings** screen.
    b. Enter the hostname in the Host Name field.
    c. Tap the **Done** button.
    d. A dialog box is displayed to confirm the change. Tap the **OK** button to save the changes. The Crestron Home processor applies the new Ethernet settings and then reboots..

11. Reboot the following system components to restart the DNS server and resolve the hostname with the new Crestron Home processor:
    a. Router
    b. IP network devices
    c. Wi-Fi network devices.
12. Add the CEN-GWEXER to the system. Refer to Add an infiNET EX Wireless Gateway below

NOTE: If necessary, register the Crestron Home processor with an Amazon® Alexa® voice control account or a Google Assistant™ voice control account. For more information, refer to Voice Control Settings on page 230.

Add an infiNET EX Wireless Gateway

When a Crestron Home processor that has an internal infiNET EX wireless gateway is upgraded to a Crestron Home processor that does not have an internal infiNET EX wireless gateway (for example, a PYNG-HUB to a CP4-R) the data from the internal infiNET EX wireless gateway is stored on the new processor in a Virtual Gateway. When a new infiNET EX wireless gateway is installed and added to the system, the data is transferred from the Virtual gateway to the new gateway.

To replace the Virtual Gateway with a new infiNET EX gateway:

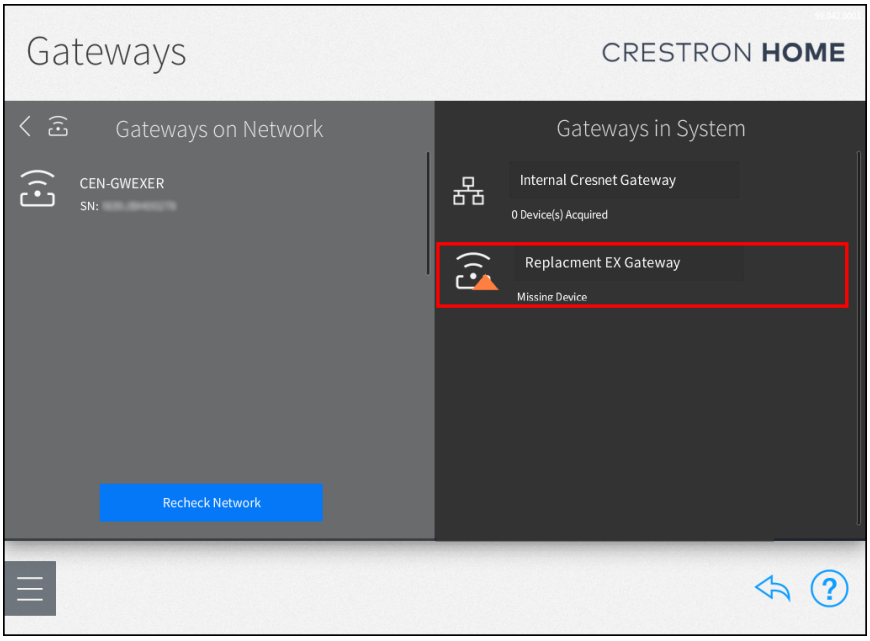
NOTES:

- The CEN-GWEXER must be running the latest firmware. To update the firmware, refer to Check for Device Updates on page 239.
- The CEN-GWEXER must be factory fresh or from within the same system.
- If the CEN-GWEXER was transferred out of a system, the CEN-GWEXER must acquire devices manually. Refer to Pair Crestron infiNET EX Devices on page 40 for details.
- Data from the gateway must be transferred to an identical model gateway (for example, from a CEN-GWEXER to a CEN-GWEXER).
- Verify that no USB connections are made to the CEN-GWEXER.
- Verify that Crestron software (for example, Crestron Toolbox software) is not connected to the CEN-GWEXER via USB or Ethernet cable.

1. Tap **Pair Devices** on the **Setup** screen or the Pair Devices button on the setup menu to display the **Pair Devices** screen.

2. Tap **Manage Gateways** in the **Device Types** menu. The local network is scanned for gateways that can be added to the Crestron Home system. Discovered gateways are displayed in the **Gateways on Network** menu.

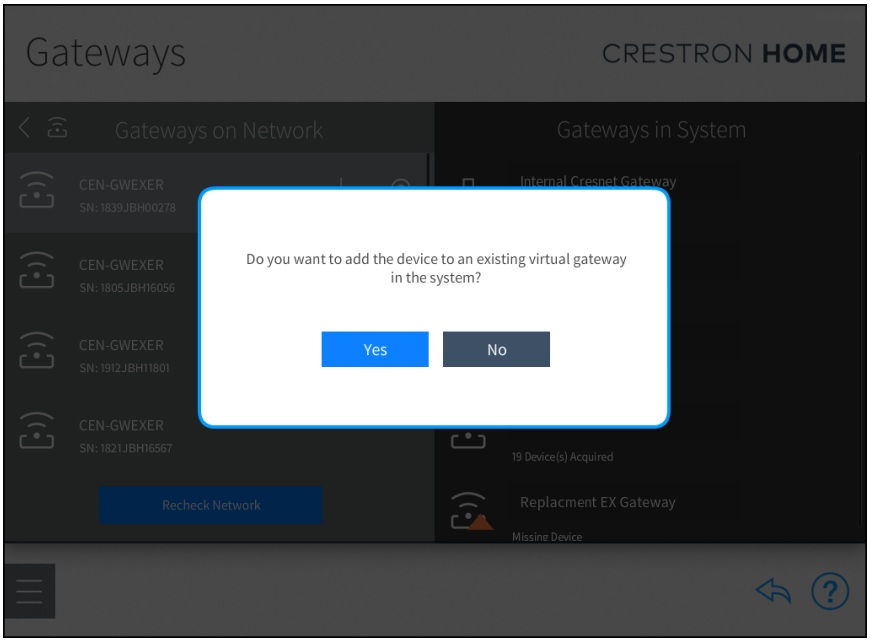
   NOTE: The Virtual Gateway is displayed in the **Gateways in System** menu with a yellow triangle on the device icon and named "Replacement EX Gateway."



   NOTE: Tap the **Recheck Network** button to scan the network for available gateways.

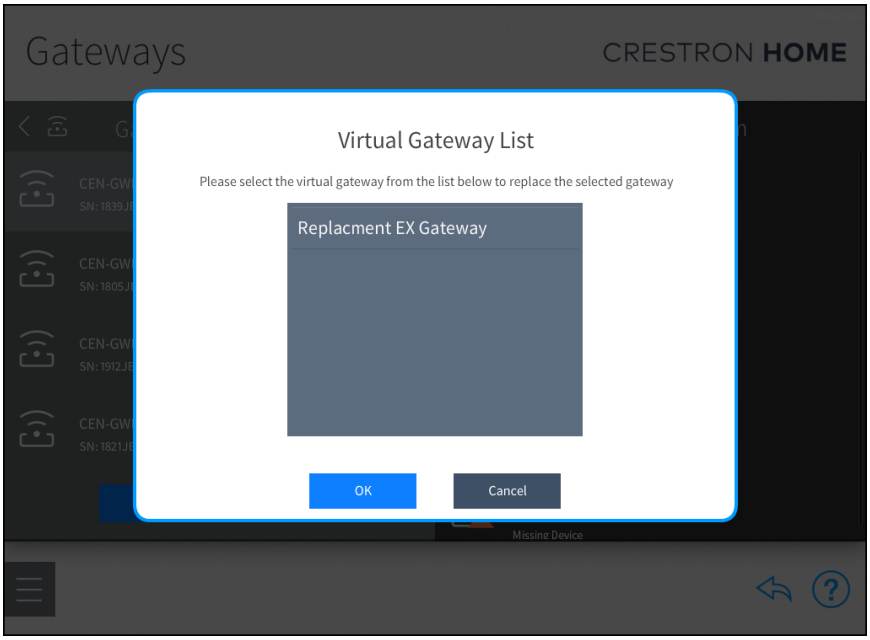
3. Select the new infiNET EX wireless gateway in the **Gateways on Network** menu and then tap the plus (**+**) button.

4. A dialog appears asking if the new infiNET EX wireless gateway is replacing a Virtual Gateway. Select **Yes** to add the new gateway to the system and to transfer data stored in a Virtual Gateway to the new gateway.



NOTE: Select **No** to add the new gateway to the system without replacing the Virtual Gateway. If **No** is selected, all infiNET EX wireless devices will need to be manually added to the system and programmed.

5. Select a Virtual Gateway from the **Virtual Gateway List** and then press **OK** to confirm the selection.



6. The data stored in the Virtual Gateway is transferred to the new gateway and the new gateway is displayed in the **Gateways in System** menu.
7. Configure the gateway after it is added to the room. Tap the gear button next to the device name to display a Settings dialog box. For details, refer to Configure the Device Settings on page 396.

Method 2: Transfer System Data using FTP Client

To transfer system data using an FTP client, the system data is transferred from a control processor to a PC and then the system data is transferred to the new control processor.

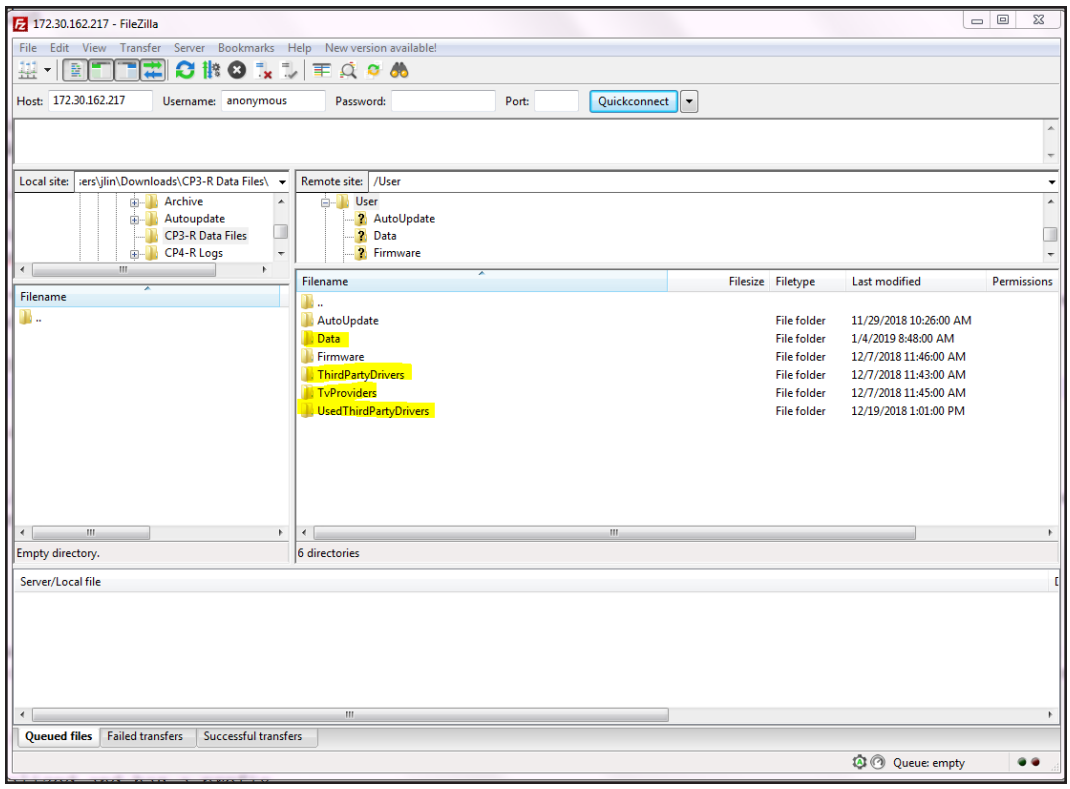
NOTES:

- Use an FTP client (such as FileZilla) to transfer files between the PC and the control processor.
- Use the Text Console tool in Crestron Toolbox™ software to issue the console commands.

1. Connect to the CP3-R using an FTP client.
2. Issue the following console commands to stop the program that is running on the Crestron Home control processor:
   - `Enableprogramcmd`
   - `Stopprog -p:0`

3. Copy the following folders (highlighted in the image below) from the CP3-R to a location on the computer.
    - User\Data
    - User\ThirdPartyDrivers
    - User\TvProviders
    - User\UsedThirdPartyDrivers

    CP3-R User Directory

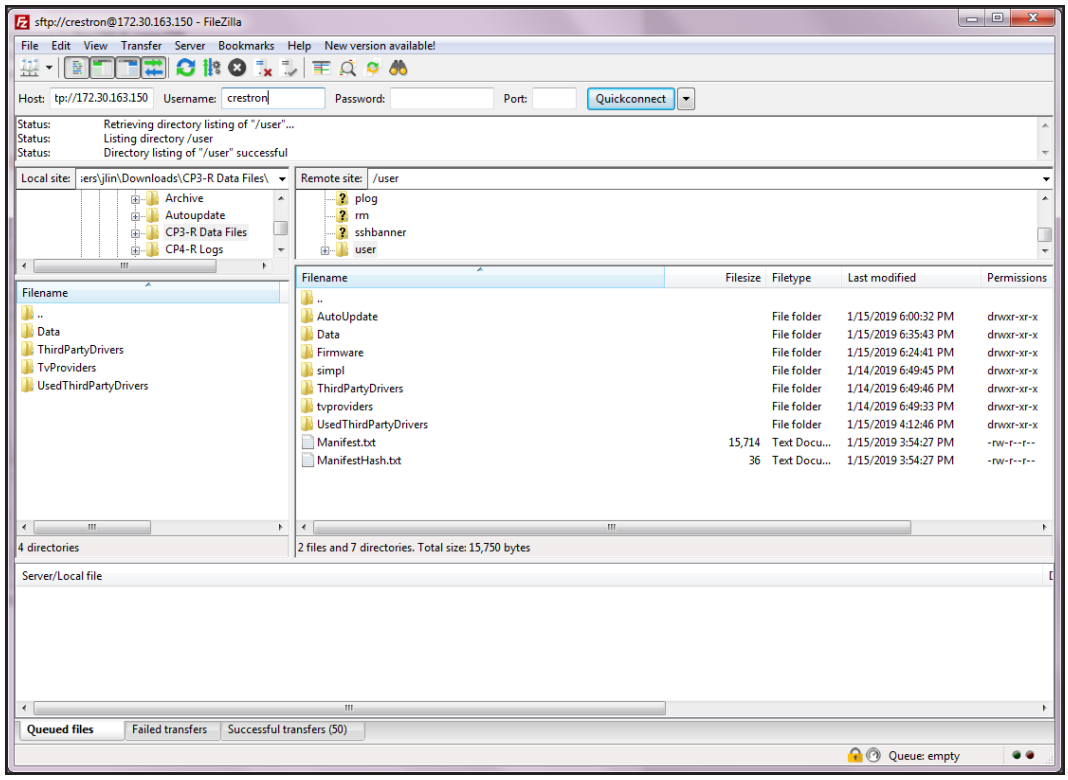


4. Connect to the CP4-R using the Text Console tool in Crestron Toolbox.
5. Issue the following console commands to stop the program that is running on the Crestron Home control processor:
    - `Enableprogramcmd`
    - `Stopprog -p:0`

6. Connect to the CP4-R over SFTP (Simple File Transfer Protocol) using the device login credentials.

   NOTE: The default username is "crestron" and there is no default password.

   CP4-R Connection over SFTP



   a. Delete all folders in the "User" directory except for "AutoUpdate."

   b. Copy the User folders saved in step 2 from the computer to the CP4-R "User" directory.

7. Connect to the CP4-R console and issue the `hostname [hostname]` command to change the CP4-R hostname to match what was used for the CP3-R.

8. If necessary, unregister the CP3-R from the Amazon® Alexa® voice control account or the Google Assistant™ voice control account. For more information, refer to Voice Control Settings on page 230.
    - If the existing Crestron Home system is still available, tap **Voice Control Settings** on the **Installer Settings - System Control Options** screen to display the **Voice Control Settings** screen and then click **Unregister**.
    - If the existing Crestron Home system is no longer available, navigate to https://echoadminportal.crestronfusion.com/#/. Ensure that the control system ID shown in the portal matches the MAC address of the CP3-R and then click **Unregister**.

    NOTE: The homeowner's Amazon or Google credentials may need to be entered to unregister the CP3-R .
9. Reboot the appropriate components:
    - Reboot the CP4-R by issuing the `reboot` command in the console.
    - Restart the DNS server. In most cases, this is accomplished by rebooting the router.
    - Reboot all connected touch screens and Ethernet devices.
10. Register Alexa to the CP4-R. For more information, refer to Voice Control Settings on page 230.
11. Reconfigure the myCrestron DNS service (if applicable). For more information, refer to Reconfigure myCrestron DDNS on page 599.

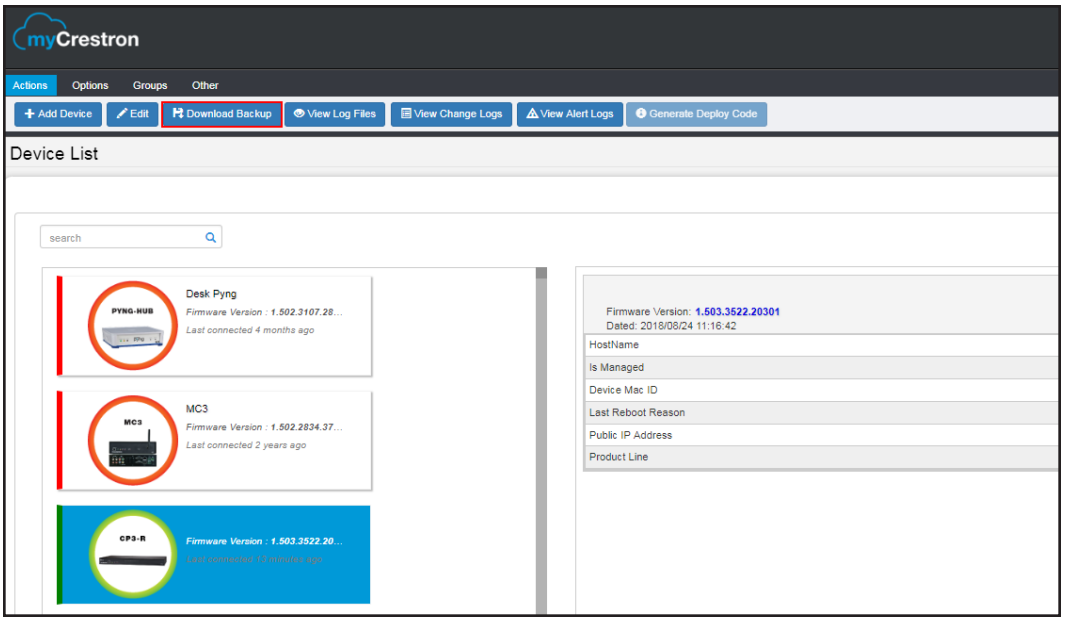
Method 3: Use a myCrestron Residential Monitoring System Golden Configuration

To transfer a Golden Configuration using an FTP client, the Golden Configuration is downloaded from the myCrestron Residential Monitoring Service to a PC and then the data from the Golden Configuration is transferred to the new control processor.

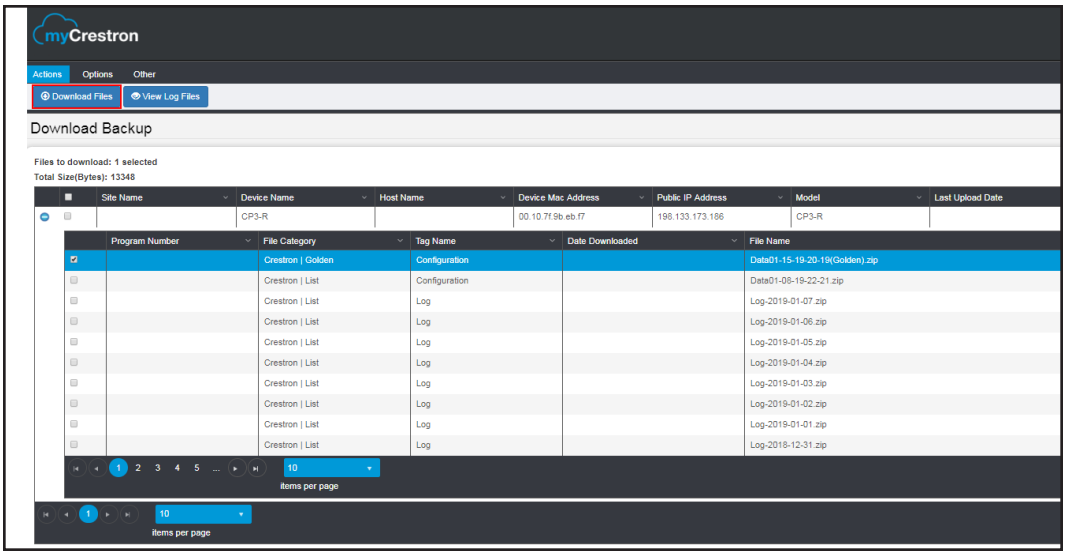
NOTES:

- Use an FTP client (such as FileZilla) to transfer files between the PC and the control processor.
- Use the Text Console tool in Crestron Toolbox™ software to issue the console commands.

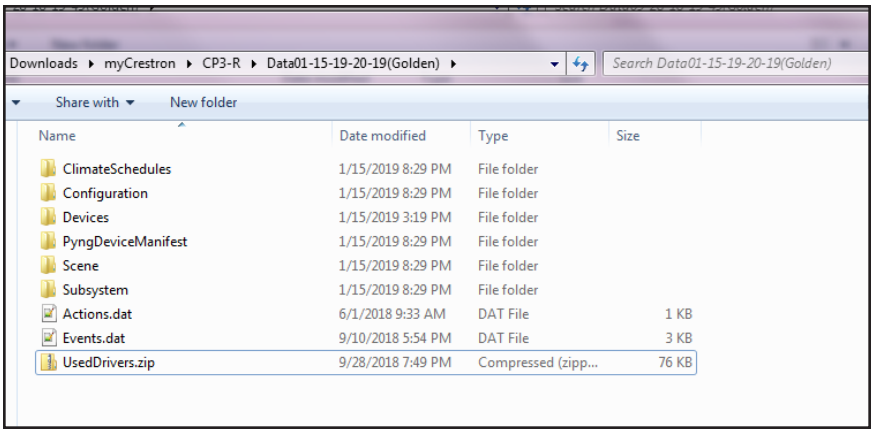
1. Log into https://portal.my.crestron.com using the myCrestron.com subdomain that is paired with the system.
2. Select the CP3-R from the device list.
3. Click **Download Backup**.



4. Expand the file list for the CP3-R and select the golden configuration. The file category for this configuration is "Golden" and the Tag Name is "Configuration."
5. Click **Download Files** and confirm to download the backup.



6. Extract the "data[MM-DD-YY-HH-MM](Golden).zip" file inside the myCrestron.zip file to the computer.

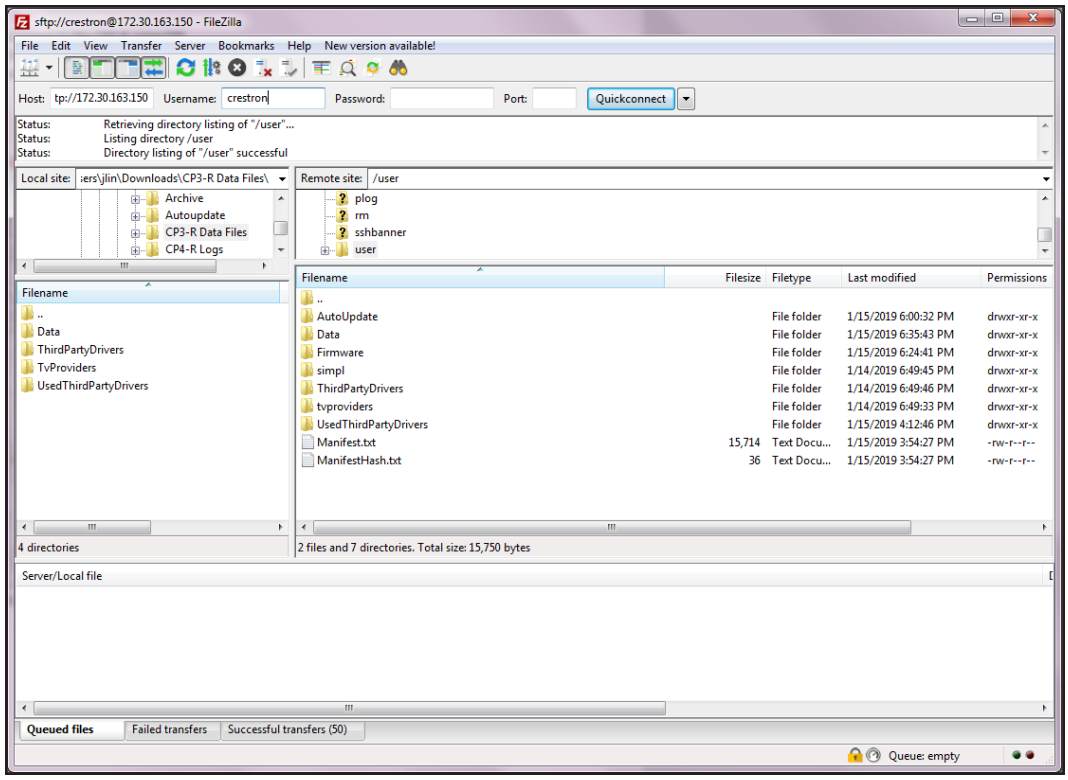


7. Connect to the CP4-R console using the Text Console tool in Crestron Toolbox.
8. Issue the following console commands to stop the program that is running on the Crestron Home control processor:
   - `Enableprogramcmd`
   - `Stopprog -p:0`

9. Connect to the CP4-R over SFTP (Simple File Transfer Protocol) using the device login credentials.

   NOTE: The default username is "crestron" and there is no default password.

   CP4-R Connection over SFTP



   a. Delete all folders in the "User" directory except for "AutoUpdate."

   b. Copy the content of the extracted "data[MM-DD-YY-HH-MM](Golden).zip" file from the computer to the "User" directory.

10. Connect to the CP4-R console and issue the `hostname [hostname]` command to change the CP4-R hostname to match what was used for the CP3-R.

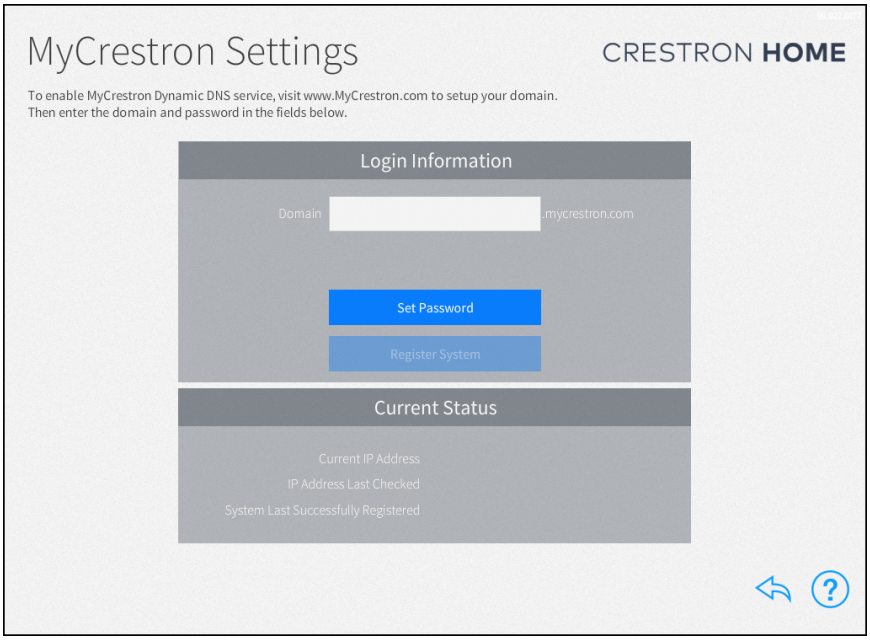
11. If necessary, unregister the CP3-R or CP4-R from the Amazon® Alexa® voice control account or the Google Assistant™ voice control account. For more information, refer to Voice Control Settings on page 230.
    - If the existing Crestron Home system is still available, tap **Voice Control Settings** on the **Installer Settings - System Control Options** screen to display the **Voice Control Settings** screen and then click **Unregister**.
    - If the existing Crestron Home system is no longer available, navigate to https://echoadminportal.crestronfusion.com/#/. Ensure that the control system ID shown in the portal matches the MAC address of the CP3-R or CP4-R and then click **Unregister**.

    NOTE: The homeowner's Amazon or Google credentials may need to be entered to unregister the CP3-R or CP4-R.
12. Reboot the appropriate components:
    a. Reboot the CP4-R by issuing the reboot command in the console.
    b. Restart the DNS server. In most cases, this is accomplished by rebooting the router.
    c. Reboot all connected touch screens and Ethernet devices.
13. Register Alexa to the Crestron Home processor. For more information, refer to Voice Control Settings on page 230.
14. Reconfigure the myCrestron DNS service (if applicable). For more information, refer to Reconfigure myCrestron DDNS on the next page.

Reconfigure myCrestron DDNS

Reconfigure myCrestron DDNS using the Crestron Home Setup App

1. In Crestron Home Setup app, tap the gear button on the bottom right of the Setup screen to display the **Installer Settings** screen.
2. Navigate to **System Control Options** > **MyCrestron Dynamic DNS** to display the **MyCrestron Settings** screen.
3. Record the domain and password shown for the Crestron Home processor.



4. Disconnect the Crestron Home processor from the network.
5. Dissociate the Crestron Home processor's MAC address from the myCrestron account:
   a. Navigate to https://www.crestron.com/Support/Tools/Applications/myCrestron-Dynamic-DNS-Service.
   b. Find and select the domain that was associated with the Crestron Home processor.
   c. Scroll to the "Utilities" section at the bottom of the page.
   d. Click **Clear Mac Address**. The Crestron Home processor's MAC address will be dissociated from the domain.
6. In the Crestron Home processor configuration utility, tap the gear button on the bottom right of the **Setup** screen to display the **Installer Settings** screen.
7. Navigate to **System Control Options** > **MyCrestron Dynamic DNS Service** to display the **MyCrestron Settings** screen.
   a. Enter the domain and password previously used for the Crestron Home processor.

b. Click **Register System** to register the Crestron Home processor with myCrestron.

Reconfigure myCrestron DDNS using Console Commands

1. Use Crestron Toolbox™ Software to connect to the Crestron Home processor with the Text Console tool.
2. Issue the `mycrestron` command.
3. Record the domain and password that are returned by the command.
4. Disconnect the Crestron Home processor from the network.
5. Dissociate the Crestron Home processor's MAC address from the myCrestron account:
   a. Navigate to https://www.crestron.com/Support/Tools/Applications/myCrestron-Dynamic-DNS-Service.
   b. Find and select the domain that was associated with the Crestron Home processor.
   c. Scroll to the "Utilities" section at the bottom of the page.
   d. Click **Clear Mac Address**. The Crestron Home processor's MAC address will be dissociated from the domain.
6. Connect to the Crestron Home processor with the Text Console tool.
7. Issue the `mycrestron [domain] [password]` command, where `[domain]` and `[password]` are the values returned in step 3. The Crestron Home processor should register with myCrestron within a minute.
8. Issue the `mycrestron` command to confirm the correct settings.

Appendix P: How to Create Images for the Crestron Home App

Custom images can be used in Crestron Home. Images may represent the residence that the Crestron Home system is installed in or a room within the residence.

Keep the following in mind when creating custom images:

- Plan Pictures Accordingly

  On most user interface devices, the picture will be displayed in a wide band.

  Images with a landscape orientation may display better than portrait orientation.

  A panoramic picture is not necessary.

- Use the Preview

  The Crestron Home app displays a preview of the cropped image.

  Use the preview to find the best location to crop the image.

- Use a Quality Camera

  Use a digital camera to create high quality images.

  The built-in camera on your phone or tablet may produce acceptable image. Verify the images are acceptable before use.

- Images are synchronized across all user interface devices. After an image is selected for a room it will be seen on all other user interface devices connected to the Crestron Home system. Review the images on each user interface device to ensure that the image is acceptable on all devices.

- Keep the Camera Steady

  For the best quality photos, use a tripod to keep the camera steady.

- Optimize the Lighting

  Turn on as many lights as possible to create the best image.

  Take all of the pictures when there is good exterior lighting.

  For example, the bright morning light tends to look great for rooms with windows. Try to take all of the room pictures at the same time so you have consistent lighting for the rooms with windows. If pictures of eastern facing windows are taken in the morning, west facing windows may need to be photographed in the afternoon.

- Use Existing Pictures

  Existing real estate pictures can be used since they often times are high quality images. Make sure that you have the rights to use these pictures.

  Coordinate with the homeowner to verify that the images accurately represent the room.

- Maintain Backups

  Keep a backup of the final set of room images. The homeowner has the ability to change the images and the only way to restore the image is to add it back to the system.

  Crestron Home configurations that are backed up to the cloud contain a copy of the room images so please make sure you register each Crestron Home processor with the myCrestron cloud. Otherwise, you will not be able to retrieve the system configuration later.

- We can't cover all of the best photography tips in this document, but there are a wealth of resources on the internet.The same type of internet content that describes how to get great room pictures for real estate also tends to apply to getting great looking room images for the Crestron Home app.

Appendix Q: Integrating Thermostats

Crestron Home™ OS can integrate with Crestron® thermostats, third-party thermostats, and BACnet™ network thermostats.

For additional information, refer to the following sections:

Crestron Thermostat

Crestron thermostats are supported natively in Crestron Home™ OS. To add a Crestron thermostat, refer to Crestron Wired and Wi-Fi Devices on page 45.

NOTE: For a comprehensive list of thermostats that are supported by Crestron Home™ OS, refer to Works with Crestron Home™ OS on page 351.

BACnet Network Thermostat

BACnet network thermostats can be integrated into Crestron Home OS to provide complete HVAC control of advanced VRF air conditioning systems.

Add a BACnet Thermostat

To add a BACnet thermostat, refer to Add a BACnet Thermostat on page 73.

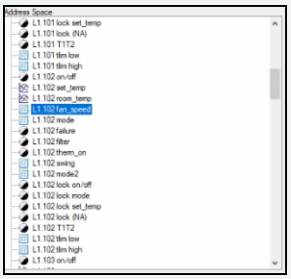
Configure a BACnet Thermostat

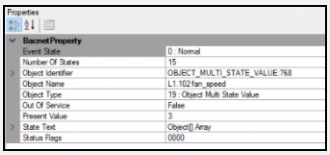
To configure a BACnet Thermostat:

NOTE:

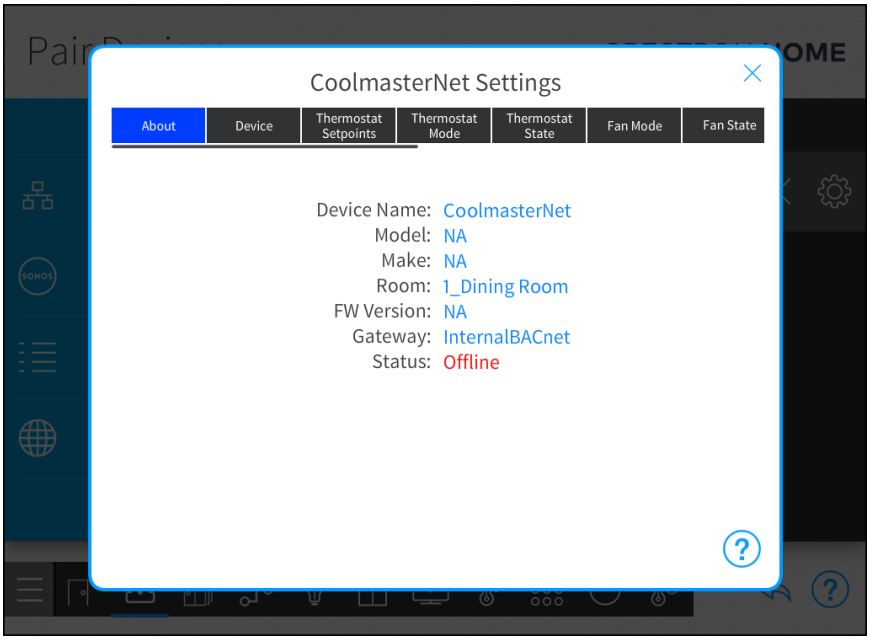
- Dual mode cannot be used if the heat and cool objects have the same Object ID.
- The BACnet thermostat must be properly installed and wired in order to function properly. Refer to the BACnet thermostat documentation for details.

- Use a BACnet explorer application, such as Yet Another Bacnet Explorer (YABE), to interface with the BACnet thermostat. YABE can display the address space for the HVAC setting and the Properties for each setting. Use the information in the Properties window to configure the BACnet thermostat.





1. Select the BACnet thermostat from the **Select a room** menu and then tap the gear button next to the device. The Settings dialog box is displayed.

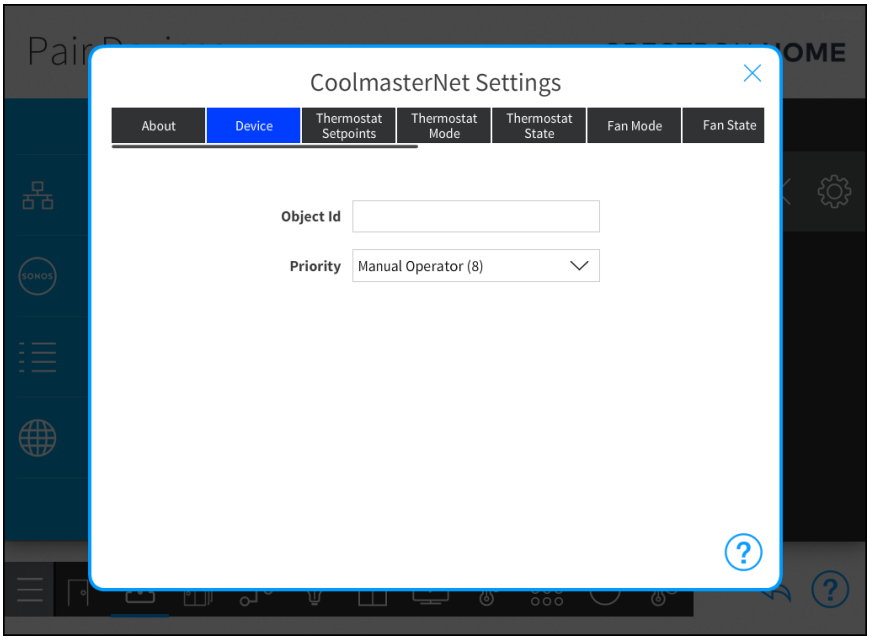


2. Configure the following settings:.

NOTES:

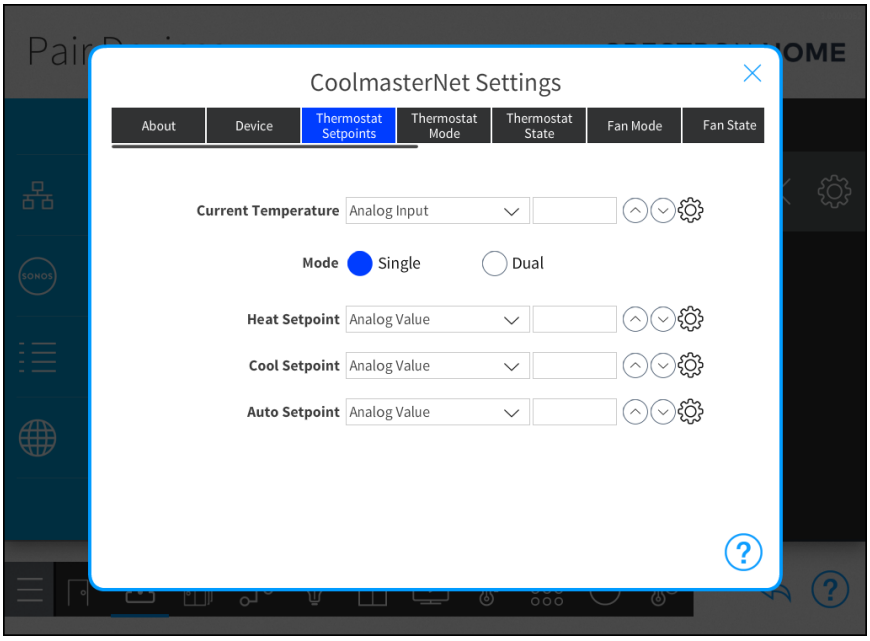
- The gear icon lights green to indicate that the setting is correct and that the Crestron Home processor and BACnet thermostat are communicating properly.
- The gear icon lights red to indicate that a setting is incorrect and that the Crestron Home processor and BACnet thermostat are not communicating.

- **Device:** Enter the BACnet ID to establish communications with the BACnet thermostat.

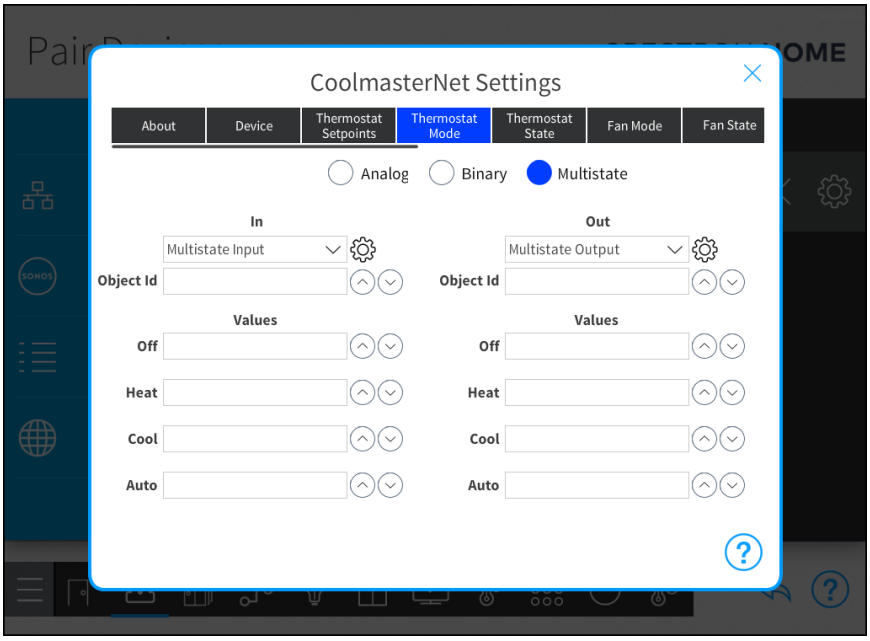


- **Thermostat Setpoints:** Enter the BACnet ID for the temperature setpoints.

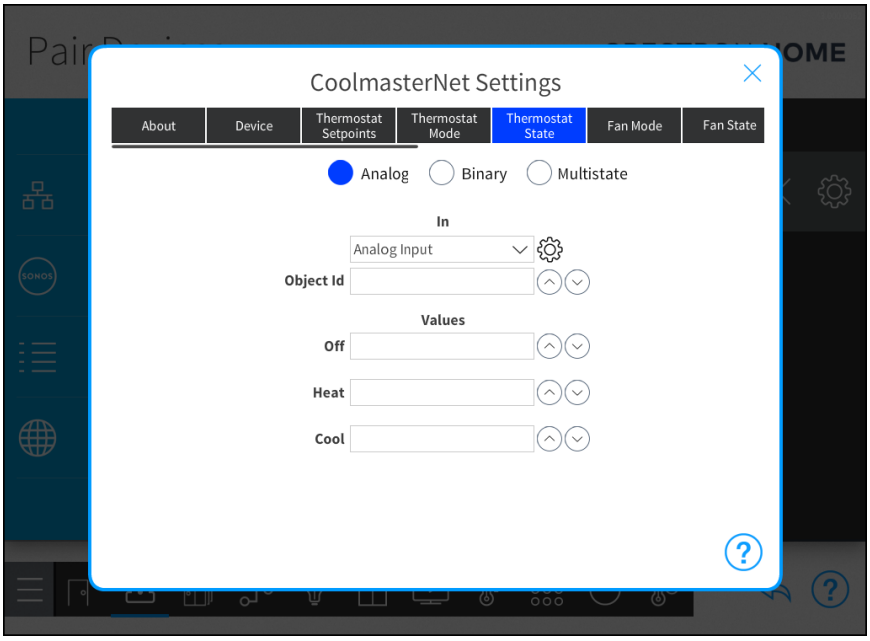
  NOTE: CoolMasterNet does not support Dual mode.



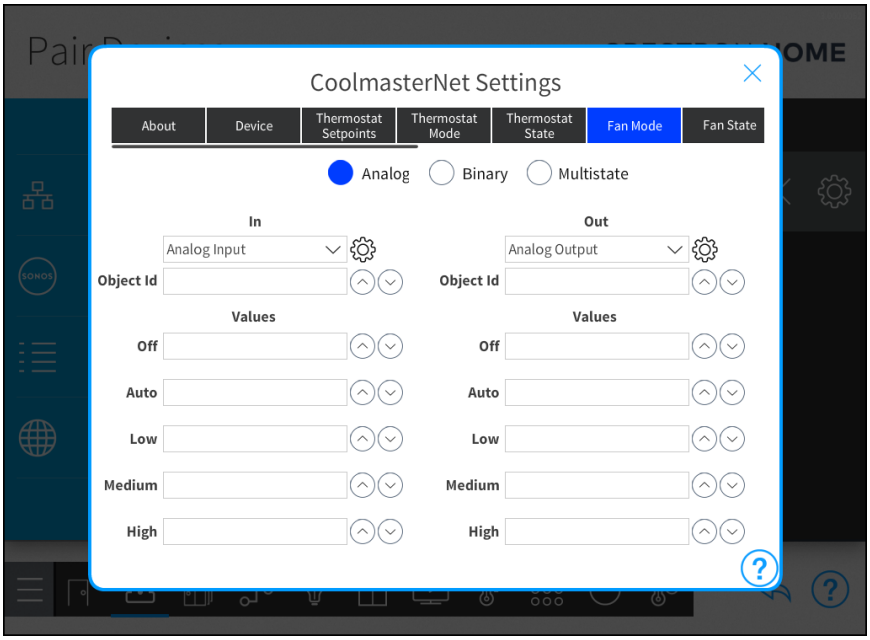
- Thermostat Mode: Enter the BACnet ID for the thermostat operating mode.



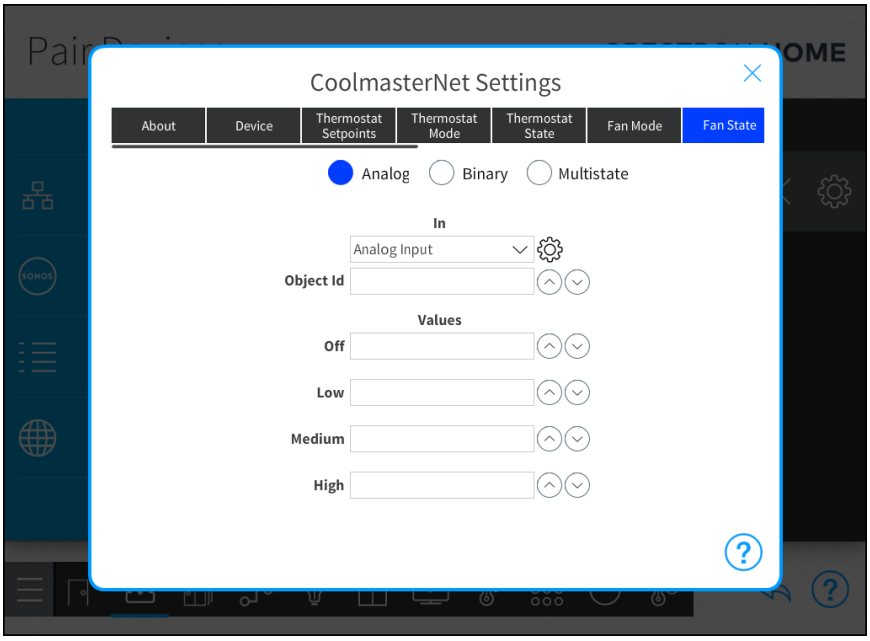
- **Thermostat State:** Enter the BACnet ID for the thermostat state.



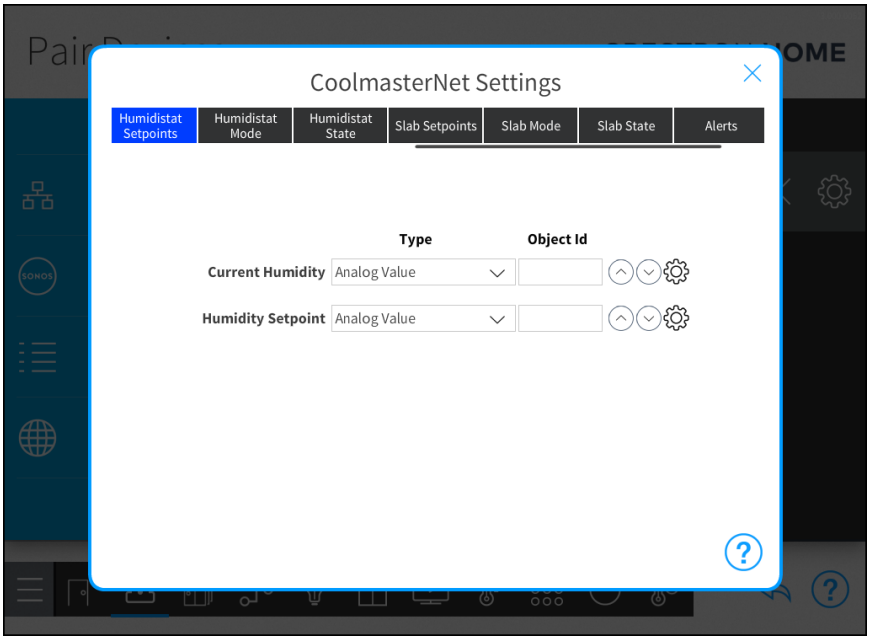
- **Fan Mode:** Enter the BACnet ID for the fan mode.



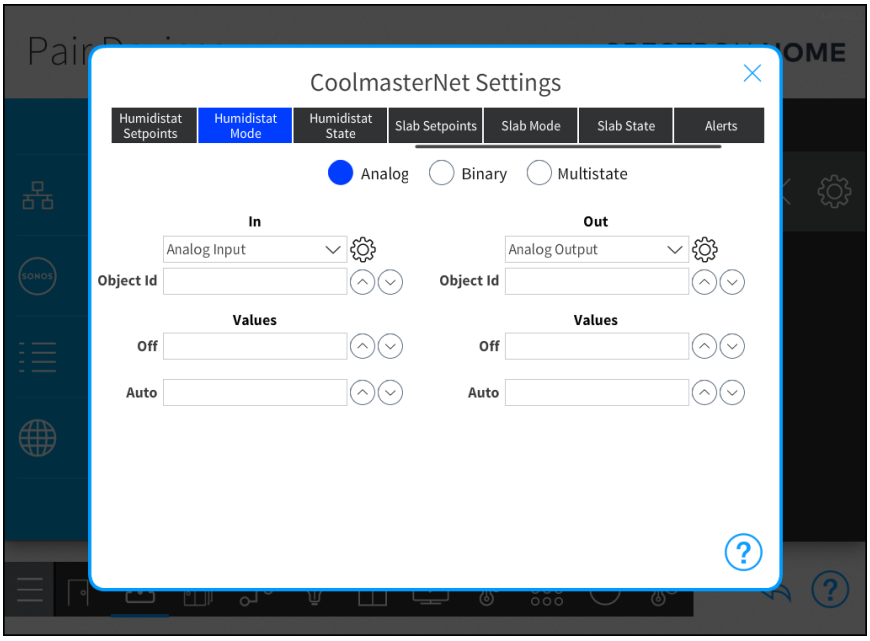
- **Fan State:** Enter the BACnet ID for the fan state.



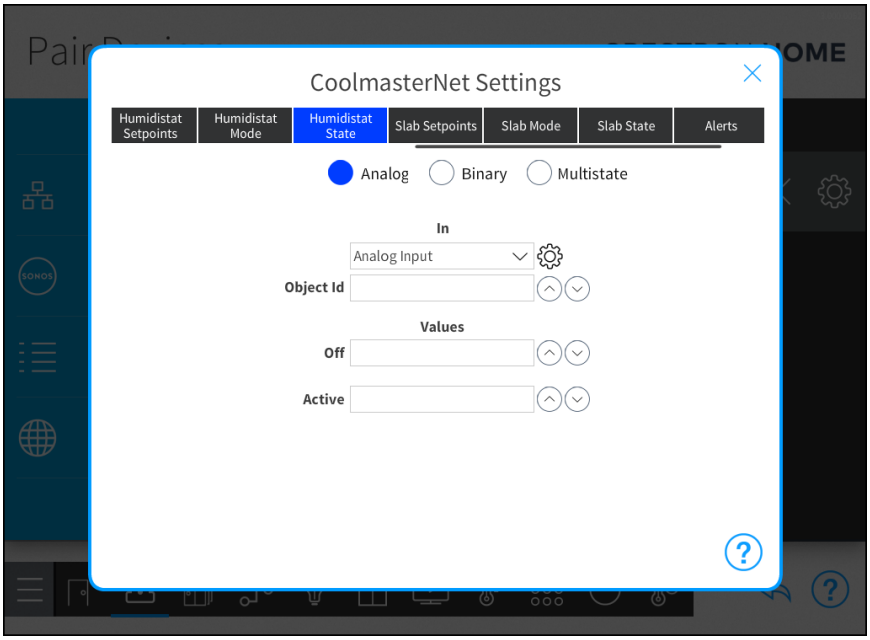
- **Humidistat Setpoints:** Enter the BACnet ID for the humidistat setpoints.



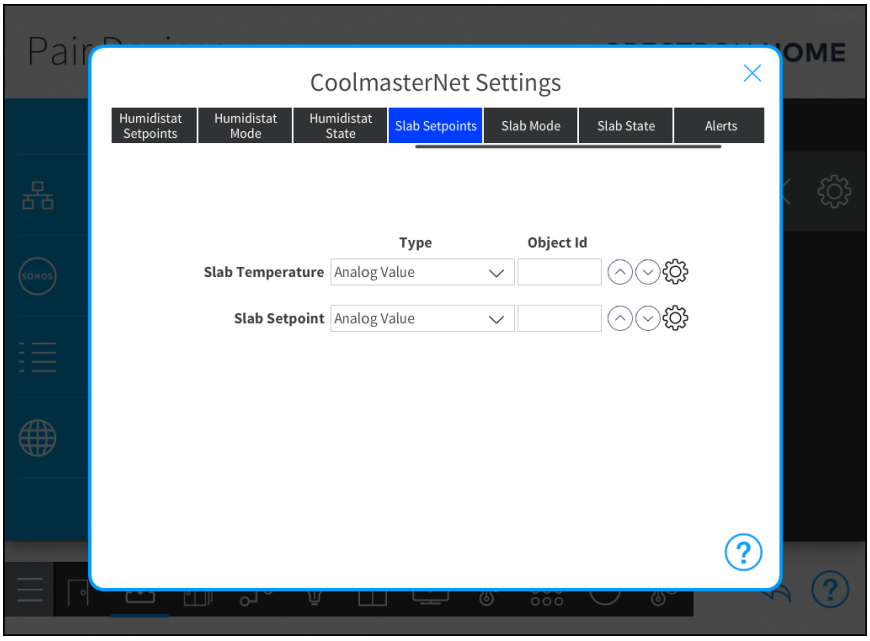
- **Humidistat Mode:** Enter the BACnet ID for the humidistat mode.



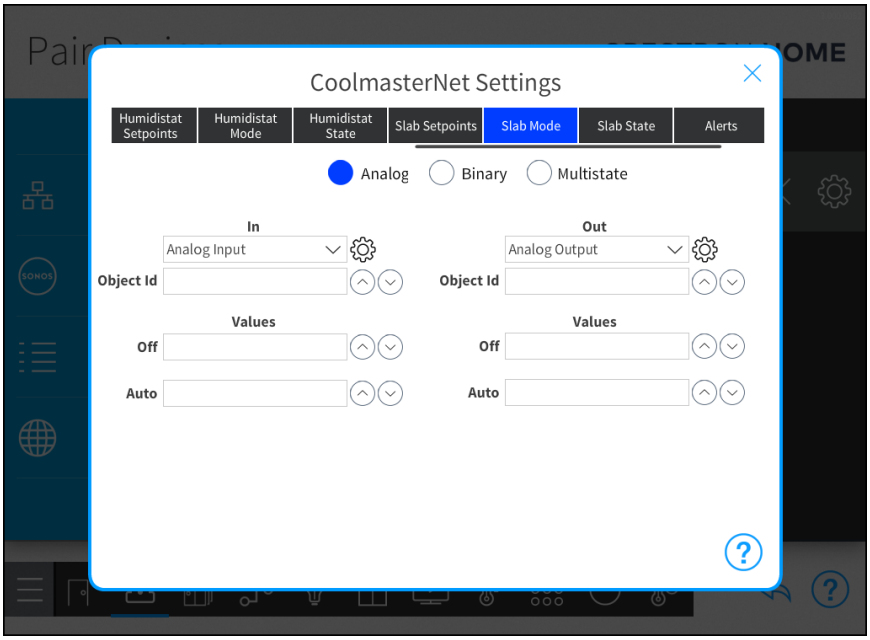
- **Humidistat State:** Enter the BACnet ID for the humidistat state.



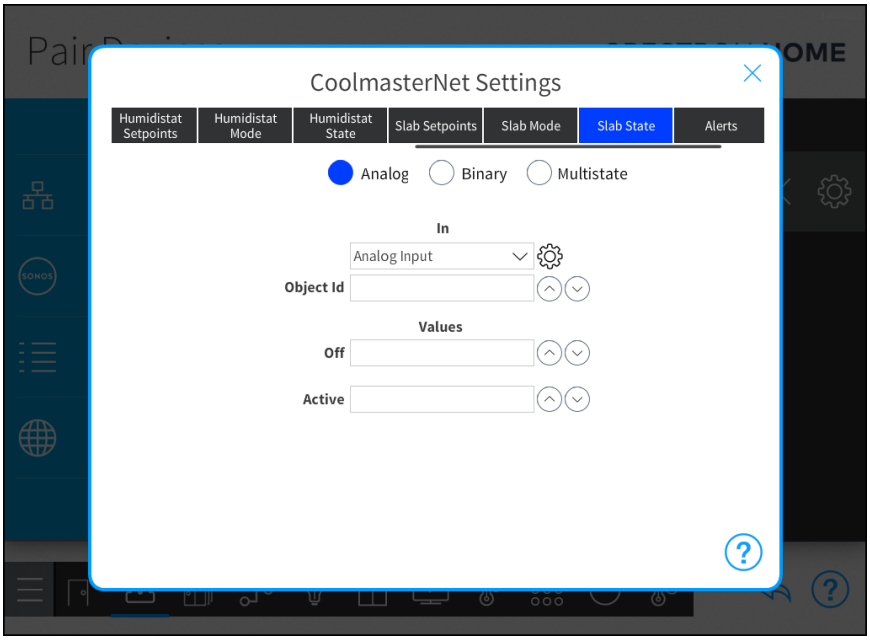
- **Slab Setpoints:** Enter the BACnet ID for the slab setpoints.



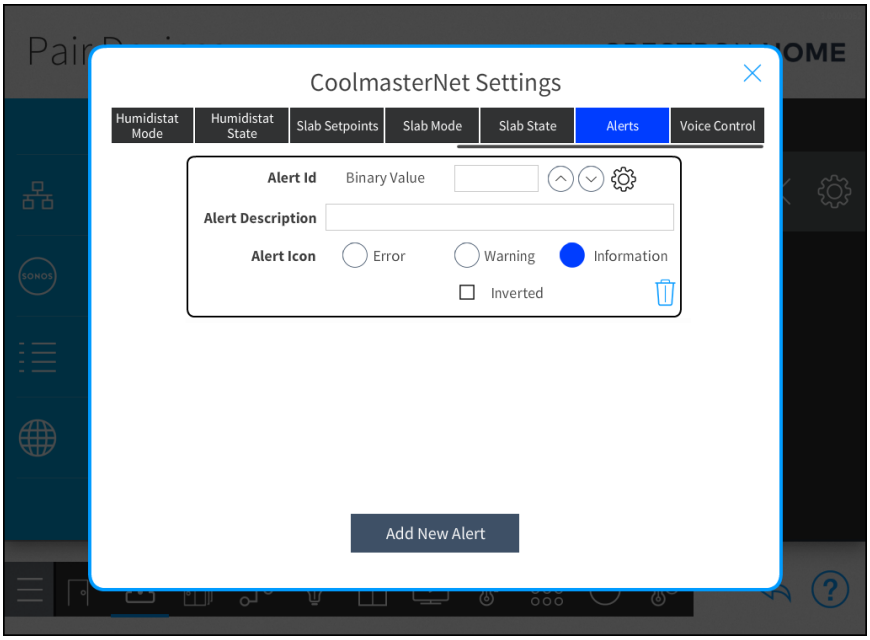
- **Slab Mode:** Enter the BACnet ID for the slab mode.



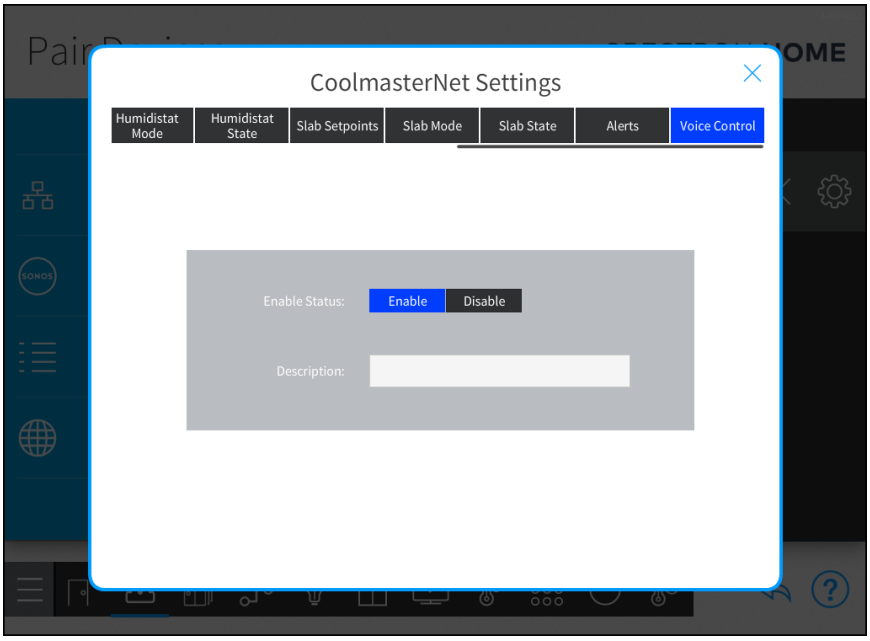
- **Slab State:** Enter the BACnet ID for the slab states.



- **Alerts:** Enter the BACnet ID for device alerts.

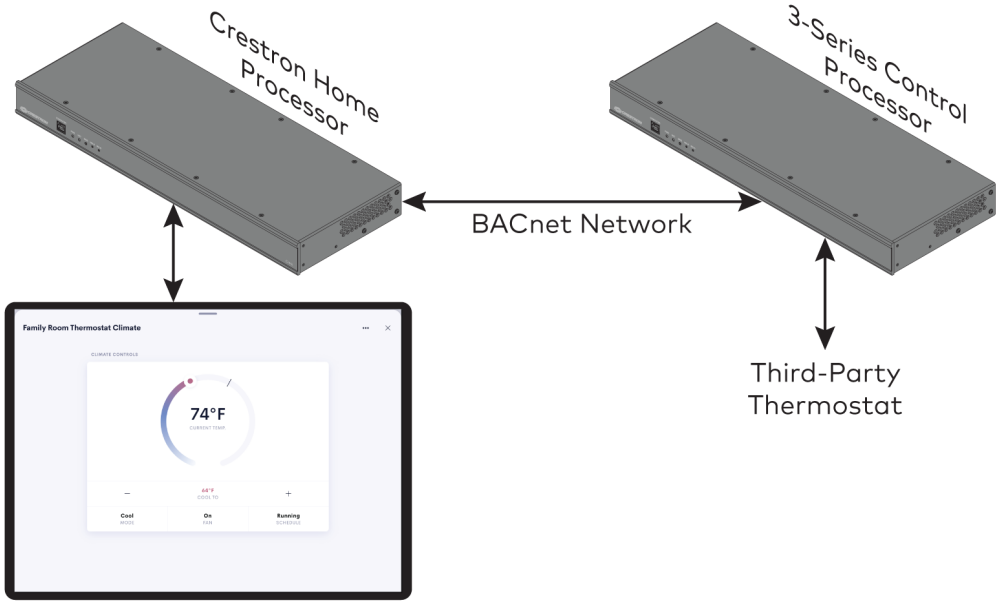


- **Voice Control:** Enable or Disable voice control for the device.



Third-Party Thermostat

Third-party thermostats can be controlled using a 3-Series® control processor that is programmed to control the third-party thermostat using a SIMPL module. The Crestron Home processor and the 3-Series control processor communicate using the BACnet network to control the thermostat.



To control a third-party thermostat:

1. Register the 3-series control processor as a BACnet Remote Device.
2. Create a hosted BACnet object for the thermostat items that will be controlled.
3. Create a SIMPL program that ties tie the BACnet objects to the third-party thermostat controls. BACnet objects to the third-party thermostat controls is a 1-to-1 relationship. For example, you could create a hosted analog value object and tie it to the current temperature on the third party thermostat.
4. Add a BACnet network thermostat to Crestron Home system:
    a. Tap the **Pair Devices** button on the **Setup** screen, or the Pair Devices button on the setup menu, to display the **Pair Devices** screen.
    b. Select the room where the device is installed from the **Select a room** menu.
    c. Select **Other** from the **Device Types** menu.
    d. Select **BACnet Thermostat** from the **Other** menu.
    e. Tap the plus button (**+**) and then assign a name to the to add the BACnet thermostat to the system.
5. Configure the BACnet network objects. For details, refer to Configure a BACnet Thermostat on page 603.

Appendix R: Security System Configuration

The following security systems can be configured for use with the Crestron Home system:

Honeywell Security System

The Honeywell security system must be configured to work with the Crestron Home system. Setup is performed using a Vista keypad with Alpha display (such as the Vista 6160).

NOTE: The Honeywell 4232CBM module is required in order to use Crestron Home system with a Honeywell Vista security system.

Models

The following models can be used.

- Honeywell VISTA-15P, VISTA-15PSIA, VISTA-20P, VISTA-20PSIA (Honeywell firmware version 9.1 or higher required)
- Honeywell VISTA-21iP, VISTA-21iPSIA (Honeywell firmware version 3.13 or higher required)
- Honeywell VISTA-128BPT, VISTA-128BPTSIA, VISTA-32FBPT, VISTA-128FBPT, VISTA-250FBPT, FA1660CT (Works with all Honeywell firmware versions)
- Honeywell VISTA-250BPT (Honeywell firmware version 10.3 or higher required)

Wiring

The Honeywell 4232CBM interface card should be connected to the Crestron Home system as shown below:

Crestron Home System	Honeywell 4232CBM
GND	GND
TX	RX
RX	TX

Setup

Setup is different based on the model of the system.

VISTA-15P, VISTA-15PSIA, VISTA-20P, VISTA-20PSIA, VISTA-21iP, VISTA-21iPSIA

NOTE: Do not include leading zeros (0) when entering values.

1. Enter [Installer Code]+800 to enter Programming mode. For example, if the Installer Code is 1234, enter 1234+800.
2. Press #91 to view the settings in the Options Selection menu. The Options Selection menu displays [Options] and [Call-Waiting] values. Write down the Options value that is displayed. This number will be entered in the following step.
3. Press *91 to change the Options Selection settings. Enter [Options]+[Call-Waiting] to assign the option and call waiting values.
    - Options: Enter the Options value that was written down in the previous step.
    - Call Waiting: To enable call waiting, enter 2. To disable call waiting, enter 3.

      NOTE: The call waiting selection will only have an effect on systems with an SIA in the model number, but it must still be entered on all systems.
4. Press #190 to view the settings in the Keypad 2 Device Address 17 menu. The Keypad 2 Device Address menu displays the [Partition-Number] and [Sound] values. Write down the Partition Number value that is displayed. This number will be entered in the following step.
5. Press *190 to change the Keypad 2 Device Address 17 settings. Enter 5+[Sound] to set the Partition Number to Partition 1 for Remote Services Sound to the value written down in the previous step.
6. Press #189 to view the settings in the Touch Screen Device (AUI) Enable menu. The Touch Screen Device (AUI) Enable menu displays [AUI 1], [AUI 2], [AUI 3], and [AUI 4] values. Write down the AUI 2, AUI 3, and AUI 4 values that are displayed. These numbers will be entered in the following step.
7. Press *189 to change the Touch Screen Device (AUI) Enable settings. Enter 5+[AUI 2] + [AUI 3] + [AUI 4] to set AUI 1 to 5 and to set AUI2, AUI 3, and AUI 4 to the values that were written down in the previous step.
8. Press *99 to exit programming mode. After the system resets, it should be ready for use with the Crestron Home system.

VISTA-128BPT, VISTA-128BPTSIA, VISTA-32FBPT, VISTA-128FBPT, VISTA-250FBPT, FA1660CT, VISTA-250BPT

1. Enter [Installer Code]+800 to enter Programming mode. For example, if the Installer Code is 1234, enter 1234+800.
2. Press #+93 to enter Menu Mode and then press 0 until DEVICE PROG? is displayed on the screen.

3. Press 1 to enter Device Programming mode and display the DEVICE ADDRESS screen.
4. On the DEVICE ADDRESS screen, program address 25:
    a. Press 25 and then * to program device address 25.
    b. Press 12 to set the device type to Remote Interactive Service (RIS).
    c. Press * to return to the DEVICE ADDRESS screen.
5. On the DEVICE ADDRESS screen, program address 5:
    a. Press 05 and then * to program address 5.
    b. Press 01 and then * to set the device type to Alpha Keypad.
    c. Press 1 and then * to assign the device to Partition 1.
    d. Press * until AUI ? is displayed on the screen. Press 1 and then * to set the device as a graphic/touch-screen keypad and return to the DEVICE ADDRESS screen.
6. On the DEVICE ADDRESS screen, program address 6:
    a. Press 06 and then * to program address 6.
    b. Press 01 and then * to set the device type to Alpha Keypad.
    c. Press 1 and then * to assign the device to Partition 1.
    d. Press * until AUI ? is displayed on the screen. Press 1 and then * to set the device as a graphic/touch-screen keypad and return to the DEVICE ADDRESS screen.
    e. Press 00* then press 1 to exit the DEVICE ADDRESS screen.
7. Press *99 to exit Device Programming mode. After the system resets, it will be ready for use with the Crestron Home system.

Set the Keypad Address

NOTE: The Crestron Home system communicates with the security system over address 1 and 17 for commercial installations and 5 and 6 for residential installations. Do not assign a keypad to address 1 and 17 for commercial installations and 5 and 6 for residential installations.

1. Power up the keypad and (within 60 seconds) press and hold the 1 and 3 keys at the same time for 3 seconds. The keypad enters Address mode.
2. Enter the two digit keypads address for the keypad.

    NOTE: The first keypad address is 16.

3. Press * to save the keypad address and exit Address mode.

Configuring Multiple Keypads

For systems with multiple keypads, do not assign keypad address 17 to any keypad. TheCrestron Home system uses address 17 to communicate with the Honeywell system.

NOTES:

- The Crestron Home system communicates with the security system over address 1 and 17 for commercial installations and 5 and 6 for residential installations. Do not assign a keypad to address 1 and 17 for commercial installations and 5 and 6 for residential installations.
- Keypad address 16 is factory enabled and cannot be disabled. Reserve this address for physical keypads.

Check Keypad Addresses

To view the keypad address and verify that a keypad address is enabled:

1. Enter [Installer Code]+800 to enter Programming mode. For example, if the Installer Code is 1234, enter 1234+800.
2. Enter the #+[Keypad-Address-Code] for the Keypad Address that you want to check:

Keypad Address Code	Keypad Address
190	17
191	18
192	19
193	20
194	21
195	22
196	23

3. They keypad displays the [Partition-Number] and [Sound] values. If the partition number is 01 or higher, the keypad address is enabled. If the partition number is 00, the keypad address is disabled.

Change a Keypad Address

1. Enter [Installer Code]+800 to enter Programming mode. For example, if the installer code is 1234, enter 1234+800.

2. Enter *+[Keypad-Address-Code]+[Partition-Number]+[Sound] to assign a keypad address, partition number, and sound value for the keypad. The keypad beeps to confirm the entry. For example, to assign keypad address 20, partition 1, and no suppression, enter *+193+1+0:

   a. Keypad Address Code: The address for the keypad.

Keypad Address Code	Keypad Address
190	17
191	18
192	19
193	20
194	21
195	22
196	23

   b. Partition Number: The partition where the keypad is located.

   c. Sound: The sound suppression value. The sound value 0 (no suppression) is common. Refer to the Honeywell documentation for the sound options.

Interlogix Security System

The Interlogix security system must be configured to work with the Crestron Home system.

NOTE: The Interlogix NX-587e virtual keypad module is required in order to use Crestron Home system with an Interlogix security system .

Wiring

The Honeywell 4232CBM interface card should be connected to the Crestron Home system as shown below:

NOTE: The serial port is configured to communicate at 9,600 baud, 8 data bits, 1 stop bit, and no parity. There is no hardware or software flow control.

Crestron Home System	Interlogix NX-587e (DB9F)
GND	Pin 5
TX	Pin 2
RX	Pin 3

The Interlogix NX-587e requires a RJ-14 (6-pin) telco cable to tie the adapter into the control panel.

RJ-14 (6-Pin)	Interlogix Control Panel Keypad Connection
GND	Pin 5
TX	Pin 2
RX	Pin 3

Setup

The Interlogix NX-587e virtual keypad module uses a fixed keypad address of 248 which limits it to a single instance per control panel. By default the Interlogix NX-587e virtual keypad module is assigned to control partition 1.

Texecom Security System

The Texecom security system must be configured to work with the Crestron Home system.

NOTES:

- The Premier Elite PC COM (JAA-001) cable is required in order to use Crestron Home system with an Texecom security system.
- Verify that the correct cable is used. Two cables are available with similar model names.
  - The JAA-**001** model (note that there are two zeros in the model name) is a white cable (pictured below). This is the correct cable to use and provides communications between the Crestron Home system and the Texecom security system.

  - The JAA-**0001** model (note that there are three zeros in the model name) is a black cable. The black cable is not compatible and cannot be used to communicate with the Crestron Home system and the Texecom security system.

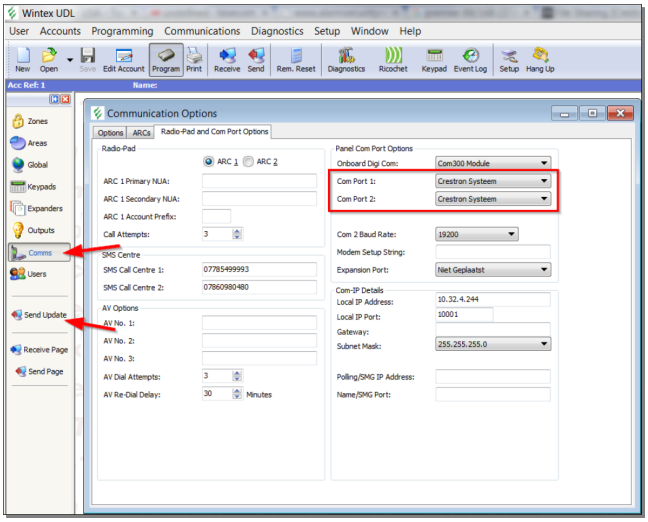
Wiring

The Premier Elite PC COM (JAA-001) should be connected to COM1 port on the Texecom security system. the Crestron Home system.

Setup

1. Connect to the security system using the Windex UDL software that is provided with the Texecom security system and retrieve all of the settings from the device. Refer to the Texecom manual for detailed instructions.
2. Click the **Comms** button to open the Communication Options window.
3. Select Crestron from the **COM Port 1** drop-down menu.

4. Click the **Send Update** button to send the new settings to the Texecom Security system.



DSC Security System

The DSC security system must be configured to work with the Crestron Home system.

NOTE: The DSC IT-100 Data Interface Module is required in order to use Crestron Home system with a DSC security system .

Wiring

The DSC IT-100 Data Interface Module should be connected to the Crestron Home system as shown below:

NOTE: The serial port is configured to communicate at 9,600 baud, 8 data bits, 1 stop bit, and no parity. There is no hardware or software flow control.

Crestron Home System	DSC IT-100 (DB9F)
GND	Pin 5
TX	Pin 2
RX	Pin 3

Setup

Wire the keypads and the DSC IT-100 Data Interface Module identically and in parallel. Terminate the devices on the keypad terminals on the control panel.

When the control panel is initially powered, there may be two faults on the system. To view the faults, enter *2 on the hardware panel. It may be necessary to set the time and date and also to disable the Telephone Line Monitoring (TLM).

Basic Setup Information:

NOTES:

- The default Master Code is 1234. If a 6-digit master code is enabled, the default master code is 123456.
- The default Installer Code is 5555.

Set the time and date:

1. Press *6 + [Master-Code] to access the User Functions menu.
2. Press 1 to access the time and date menu.
3. Enter the time and date using the following format [hhmm]+[MMDDYY]. Enter the time using the 24-hour time system (for example, 8:30 PM is entered as 2030).
4. Press # # to save and exit.

Disable the Telephone Line Monitoring (TLM).:

1. Press *8 + [Installer-Code] to access the Installer Programming menu.
2. Press 015 to access the Third System Options menu.
3. Press 7 to select TLM Disabled (off).
4. Press # # to save and exit.

For Stay mode to function, at least one zone must be set to 05 (Interior, Stay/Away). To configure the zones:

1. Press *8 + [Installer-Code] to access the Installer Programming menu.
2. Press 001, 002, 003, or 004 to enter the zone definitions for section 001, 002, 003, or 004. There are 16 zones in each section.
3. Configure the zones as needed. At least one zone needs to be set to 05 (Interior, Stay/Away).

   For example:

   Zone 1 - 01 (Delay 1)

   Zone 2 - 03 (Instant)

   Zone 3 - 03 (Instant)

   Zone 4 - 03 (Instant)

   Zone 5 - 05 (Interior, Stay/Away)

   Zone 6 - 05 (Interior, Stay/Away)
4. Press # # to save and exit.

Troubleshooting

The following table provides troubleshooting information. If further assistance is required, contact a Crestron customer service representative.

Refer to the following troubleshooting topics. If further assistance is required, contact a Crestron customer service representative.

Cannot Connect to the Crestron Home System after Firmware Downgrade

The firmware for the Crestron Home processor was downgraded from version 3.000.0416 or higher to version 3.000.0329 or lower and any of the following conditions are occurring:

- Cannot log in to the Crestron Home Setup app or web XPanel interface.
- Cannot log in to the Crestron Home processor using Crestron Toolbox software.
- Cannot change the Admin password using the Crestron Home Setup app or web XPanel interface.

Possible Cause(s)

Improved security features were incorporated in firmware version 3.000.0416 that interfere with backward compatibility.

Corrective Action(s)

The following corrective actions can be performed:

- **Reset the Passwords and then Reboot:** The password reset procedure is unobtrusive and should be attempted first.

  NOTE: If the Advanced User password or User Interface Device password is set, the Crestron Home processor must be factory reset.

- **Factory reset the Crestron Home Processor:** Factory reset the Crestron Home processor only if other corrective actions do not work.

Reset the Passwords and then Reboot

NOTES:

- The Admin password is reset to the default password.
- The Advanced User, User Interface Device, and Common Device passwords must be set manually.

To reset the passwords:

1. Press and hold the **SW-R** button on the Crestron Home processor (about 15 seconds) until the MSG LED flashes rapidly.
2. Disconnect power from the Crestron Home processor (for example, unplug) for 15 seconds and then reconnect power.

3. Change the default Admin, Advanced User, User Interface Device, and Common Device passwords:
    - **Admin password:** Refer to Troubleshooting on page 624
    - **Advanced User password:** Refer to Troubleshooting on page 624
    - **User Interface Device password:** Refer to Troubleshooting on page 624
    - **Common Device password:** Refer to Troubleshooting on page 624

Factory Reset the Crestron Home Processor

CAUTION: All configured settings and device pairings are lost following a factory restore.

NOTE: Use a small, pointed object (such as the tip of a pen) to press the buttons on the Crestron Home control processor.

To factory reset the Crestron Home processor:

1. Press and release the **HW-R** button on the Crestron Home processor.
2. Within 3 seconds, press the **SW-R** button on the Crestron Home processor five times, with under a 1-second gap between each press.
3. Wait up to 15 minutes for the self-recovery process to complete.
4. Attempt to make a connection to Crestron Toolbox via USB. (USB is the only valid connection type.)
5. Once the device has been discovered, use the Text Console tool in Crestron Toolbox to check for a prompt. The standard device prompt should display.

    NOTE: Repeat steps 1–5 if the first attempt does not correct the issue. If the Crestron Home processor is still unresponsive, contact Crestron Technical Support for assistance.

6. The restore process may enable SSL (Secure Sockets Layer) on the Crestron Home processor. After communication returns following the restore, issue the ssl off command using the Text Console tool to disable SSL.

    NOTE: If a connection cannot be established using the Text Console tool, change the connection type from **Auto Detect** to **SSL** in the **Edit Connections** dialogue.

7. Reload the Crestron Home firmware via the Package Update Tool in Crestron Toolbox to ensure that any touch screen projects are also reloaded to the Crestron Home processor.

If the Crestron Home processor is still communicating with Crestron Toolbox via USB or Ethernet, issue the restore command using the Text Console tool, and then follow the post-restore process (steps 6–7 in the above procedure).

Cannot Set or Change the Passwords

The firmware for the Crestron Home processor was downgraded from version 3.000.0416 or higher to version 3.000.0329 or lower and then upgraded to 3.000.0416 or higher and the following condition is occurring:

- Cannot set or change the Advanced User Interface Device password or User Interface Device password.

Possible Cause(s)

The password reset procedure was not performed when the firmware for the Crestron Home processor was downgraded from version 3.000.0416 or higher to version 3.000.0329 or lower

Corrective Action(s)

Reset the passwords and then reboot:

NOTES:

- The Admin password is reset to the default password.
- The Advanced User, User Interface Device, and Common Device passwords must be set manually.

To reset the passwords:

1. Press and hold the **SW-R** button on the Crestron Home processor (about 15 seconds) until the MSG LED flashes rapidly.
2. Disconnect power from the Crestron Home processor (for example, unplug) for 15 seconds and then reconnect power.
3. Change the default Admin, Advanced User, User Interface Device, and Common Device passwords:
    - **Admin password:** Refer to Troubleshooting on page 624
    - **Advanced User password:** Refer to Troubleshooting on page 624
    - **User Interface Device password:** Refer to Troubleshooting on page 624
    - **Common Device password:** Refer to Troubleshooting on page 624

Cannot Discover Cresnet® Devices

The Cresnet® device cannot be discovered by the Crestron Home system and the following condition is occurring:

- The Cresnet device is not discovered by the Crestron Home system.
- The Cresnet device is displayed in the Network Device Tree using Crestron Toolbox software.

Possible Cause(s)

The firmware for the Cresnet device or Crestron Home processor is not up to date.

Corrective Action(s)

Update the firmware for the Cresnet device and Crestron Home processor

Cannot Discover a CHV-THSTAT3F Thermostat

The CHV-THSTAT3F thermostat cannot be discovered by the Crestron Home system and the following conditions are occurring:

- The CHV-THSTAT3F thermostat is not discovered by the Crestron Home system.
- The CHV-THSTAT3F thermostat is displayed in the Network Device Tree using Crestron Toolbox software.

Possible Cause(s)

Three speed fan applications are not supported.

Corrective Action(s)

Update the CHV-THSTAT3F with CHV-TSTAT/THSTAT firmware.

Cannot Add a CSA-PWS10S-HUB-ENET Gateway

The CHV-THSTAT3F thermostat cannot be added to the Crestron Home system and a "Gateway Could Not Be Added" message is displayed.

Possible Cause(s)

The mode switch on the CSA-PWS10S-HUB-ENET is not set correctly.

Corrective Action(s)

Set the mode switch on the CSW-PSW10S-HUB-ENET to **CRES** or **ETH** to match the physical connection method.

Cannot Discover a Security System

The security system is not discovered by the Crestron Home system.

Possible Cause(s)

The security system is not compatible with the Crestron Home system.

Corrective Action(s)

Use a security system that is compatible with the Crestron Home system.

NOTE: For a comprehensive list of devices that are supported by Crestron Home™ OS, refer to Works with Crestron Home™ OS on page 351.

Disabled Atonomic® MMS Sources are Displayed in the Source List

A source was disabled in the Autonomic® MMS web user interface but it still appears in the Crestron Home source list.

Possible Cause(s)

The source was disabled after the Autonomic MMS device was added to the Crestron Home system.

Corrective Action(s)

Remove the Autonomic MMS device and then add it back to the system using. The Crestron Home system will display the correct sources.

The Web XPanel Interface is Unresponsive

There is no response when clicking buttons in the web XPanel or some page elements are missing.

Possible Cause(s)

The domain web setting for the web XPanel interface is set incorrectly.

Corrective Action(s)

In Installer Settings, select Web Settings, and then ensure that Domain is set to "*". For more information on web XPanel interface settings, refer to OLH article 5793.

Cannot Establish Communication with the Crestron Home Processor

The Crestron Home processor is not communicating with Crestron Toolbox via Ethernet or USB.

Possible Cause(s)

The Crestron Home processor needs to be restored to factory settings.

Corrective Action(s)

Factory reset the Crestron Home processor:

CAUTION: All configured settings and device pairings are lost following a factory restore.

NOTE: Use a small, pointed object (such as the tip of a pen) to press the buttons on the Crestron Home control processor.

To factory reset the Crestron Home processor:

1. Press and release the **HW-R** button on the Crestron Home processor.
2. Within 3 seconds, press the **SW-R** button on the Crestron Home processor five times, with under a 1-second gap between each press.
3. Wait up to 15 minutes for the self-recovery process to complete.
4. Attempt to make a connection to Crestron Toolbox via USB. (USB is the only valid connection type.)
5. Once the device has been discovered, use the Text Console tool in Crestron Toolbox to check for a prompt. The standard device prompt should display.

   NOTE: Repeat steps 1–5 if the first attempt does not correct the issue. If the Crestron Home processor is still unresponsive, contact Crestron Technical Support for assistance.

6. The restore process may enable SSL (Secure Sockets Layer) on the Crestron Home processor. After communication returns following the restore, issue the ssl off command using the Text Console tool to disable SSL.

   NOTE: If a connection cannot be established using the Text Console tool, change the connection type from **Auto Detect** to **SSL** in the **Edit Connections** dialogue.

7. Reload the Crestron Home firmware via the Package Update Tool in Crestron Toolbox to ensure that any touch screen projects are also reloaded to the Crestron Home processor.

If the Crestron Home processor is still communicating with Crestron Toolbox via USB or Ethernet, or if the `initialize` command was issued to the Crestron Home processor as

part of a troubleshooting procedure, issue the restore command using the Text Console tool, and then follow the post-restore process (steps 6–7 in the above procedure).

User Interface Devices Cannot Connect to the System

The user interface devices (TSW-xx60 series touch screens, TSR-310 handheld remotes, iOS® devices, and Android™ devices) cannot connect to the Crestron Home system.

Possible Cause(s)

- The User Interface Device Password is not set.
- The User Interface Device Password was incorrectly entered three times causing the IP address to be blocked for one hour..

Corrective Action(s)

The following corrective actions can be performed:

- **Set the User Interface Device Password:** For details, refer to Set or Change the User Interface Device Password on page 208.
- **Wait for IP Block to Clear:** The IP block is cleared after one hour.
- **Clear the Blocked IP Address:** Use Crestron Toolbox software to clear the blocked IP.

Cannot Enter Advanced User SettingsUser Interface Devices Cannot Connect to the System

The user interface devices (TSW-xx60 series touch screens, TSR-310 handheld remotes, iOS® devices, and Android™ devices) cannot connect to the Crestron Home system.

Possible Cause(s)

- The Advanced User username is incorrectly entered.
- The Advanced User functionality is not enabled.

Corrective Action(s)

The following corrective actions can be performed:

- **Set the User Interface Device Password:** For details, refer to Set or Change the User Interface Device Password on page 208.
- **Enter the correct username:** The Advanced User username is "advanceduser".
- **Enable the Advanced User functionality:** The Advanced User functions are enabled after setting the Advanced User password. For details, refer to Set or Change the Advanced User Password on page 207.

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