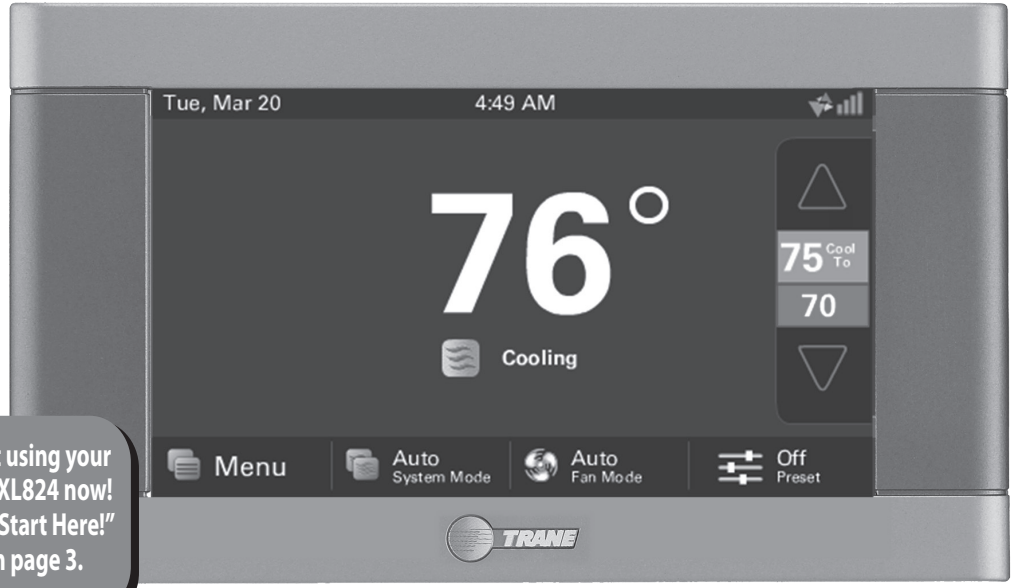
Trane XL824
Smart Control User Guide

The XL824 is an easy-to-use, programmable control with a color touch-screen.

When connected with Nexia™ smart home, you can control your home's heating and cooling system and up to 230 separate Z-Wave devices from a smart phone, PC or tablet from virtually anywhere.

This guide will help you configure and connect your XL824 Smart Control quickly and easily.



Start using your new XL824 now! See "Start Here!" on page 3.

032-5090-05

Congratulations!

Thank you for choosing the Trane XL824 Smart Control. The intuitive interface and powerful features incorporated into the compact design of the color touch-screen control represent the latest in climate control technology from the industry's leader in residential HVAC systems.

This guide will introduce you to the unit's many features and get you started using your XL824 Smart Control right away.

Get Connected

The XL824 Smart Control can be accessed remotely with your smart device and it can serve as the central hub of an entire network of smart home devices. To fully enjoy these benefits your XL824 must be connected to the Nexia™ platform. Nexia provides an all-in-one cloud based app that allows you to access your XL824 anytime/anywhere connecting your smart devices through Z-Wave technology. See the full line of available features and functions at:

http://www.nexiahome.com/

For tutorials search: XL824.

Nexia™ smart home allows you to:

- Monitor and control your HVAC system using an internet-enabled smart phone, tablet or computer from anywhere in the world.
- Build a network of up to 230 Z-Wave enabled products on one account.
- View weather information including outdoor temperature, five-day forecasts, radar and weather alerts.
- Receive text and e-mail notifications that inform you of happenings in your home.
- Receive software updates automatically.

Up to four smart controls of any combination of the 1050, 850, XL824 and 624 are allowed on your Nexia™ smart home account for no additional cost. A monthly subscription charge may apply beyond this number of devices.

Contents

User Setup Wizard....3
Navigating the Control....4
Temperature Control Panel....7
Adding Widgets....8
Home Screen Customization....9
Menu Screen....10
Settings Screen....11
Scheduling....12
Changing Periods....14
Adding Periods....15
Deleting Periods....16
Overriding Schedules....17
Configuring 1-Touch Presets....18
Setting Access Restrictions....20
Nexia™ smart home....21
Network Setup....22
Nexia™ Registration....24
Adding/Removing Z-Wave Devices (via XL824)....27
Adding Z-Wave Devices (via mobile app)....28
Advanced Z-Wave Settings....29
Other Features....31
Notices....32
FCC Notice....32
ICC NOTICE....32

Start Here!

The User Setup Wizard guides you through the XL824's User configurable settings.

To complete the Setup Wizard and connect the XL824 to Nexia™ smart home, you need:

- A high-speed connection to the Internet (wired or wireless)
- Your wireless (WiFi) network name and password
- An internet browser
- A valid e-mail address

Accessing the User Setup Wizard

To access the User Setup Wizard, press **MENU > SETTINGS > USER SETUP WIZARD**.

When the Setup Wizard is activated, the process cannot be cancelled. The Wizard will guide you through the following steps:

User Setup Wizard

Screen Settings

- Adjust the Screen brightness, backlight, screen saver and color themes.

Schedule Settings

- Set the XL824 scheduling feature to enabled or disabled. When Scheduling is disabled, 1-Touch Presets are available.

Guided Scheduling (Scheduling Enabled)

- Automatically create schedules based on answers to a series of questions.

1-Touch Presets (Scheduling Disabled)

- Configure heating and cooling target temperatures for Home, Away and Sleep conditions. The Presets are selectable from the Home Screen.

Network Setup

- Select your wireless network and enter your password. If your wireless network is available but not shown in the list, select Hidden Network, and manually enter your network's name (SSID).

NOTE: If you are having difficulty enrolling the XL824 to your account, visit the troubleshooting section on www.nexiahome.com/trane for help.

Nexia™ smart home Registration (requires Internet connection)

- Your XL824 control comes equipped with remote access and other features from Nexia™ smart home.

Weather (requires Nexia registration)

- Input the Zip Code of the location for appropriate weather information including five-day forecasts, radar display and weather alerts.

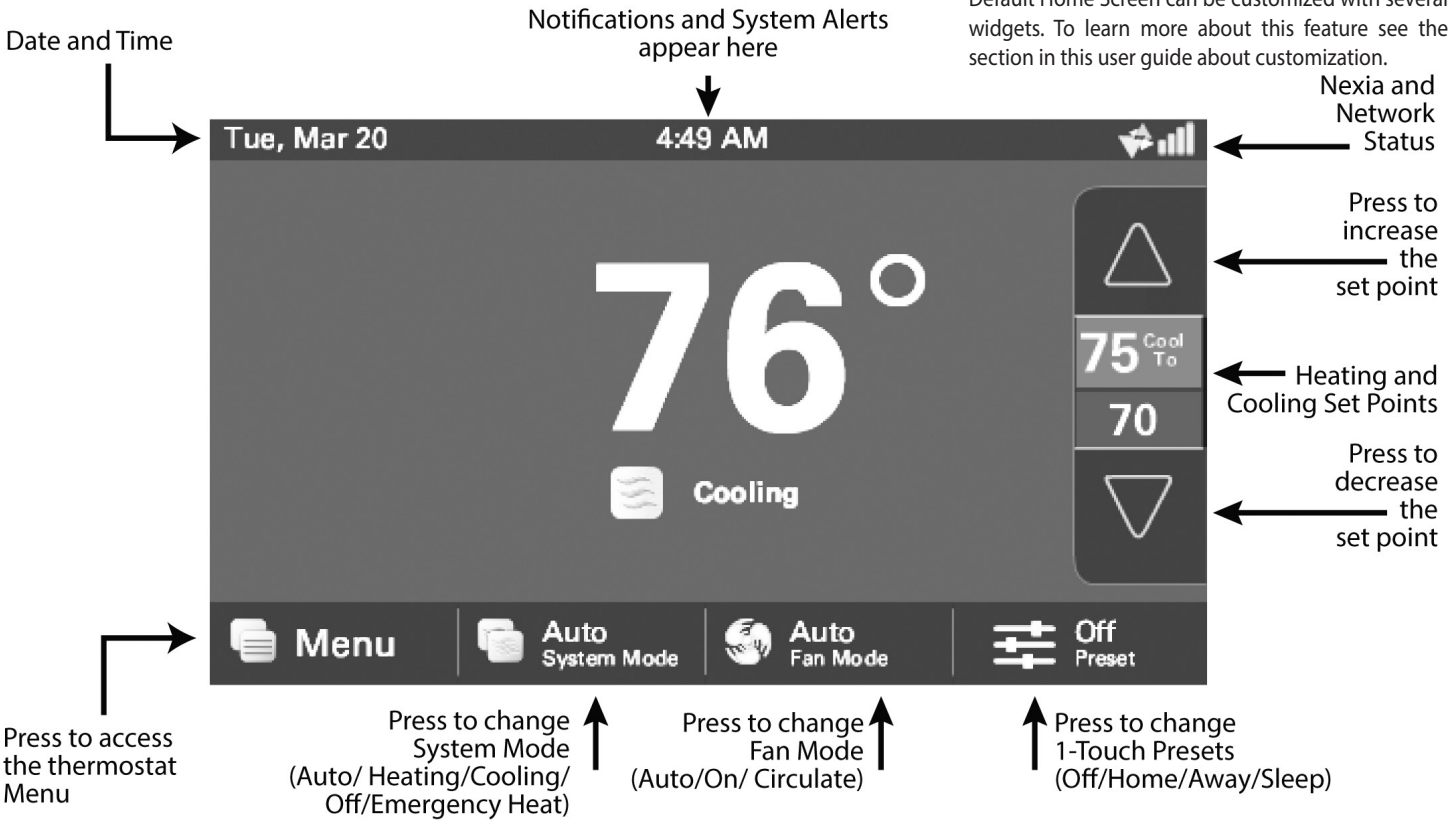
That's it! You can now begin enjoying the benefits of your new Trane XL824 Smart Control!

NOTE: Wireless Setup is not required when the XL824 is hard-wired to your home network.

Navigating the Control

Home Screen - Simple View

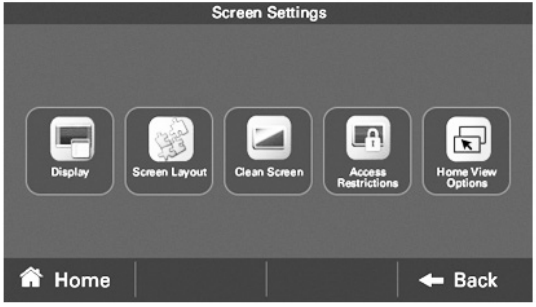
Default Home Screen can be customized with several widgets. To learn more about this feature see the section in this user guide about customization.

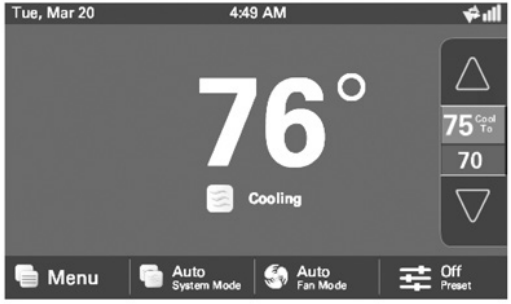


Home Screen View

Homeowners may toggle between Home Screen Options by pressing: **Home Screen** > **Menu** > **Settings** > **Home View Options**. Select **Simple** View or **Classic** View.

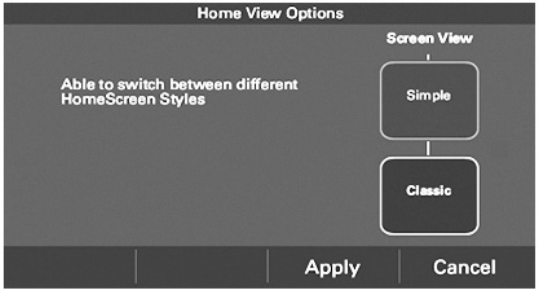
NOTE: Simple View is the default view.





Simple View

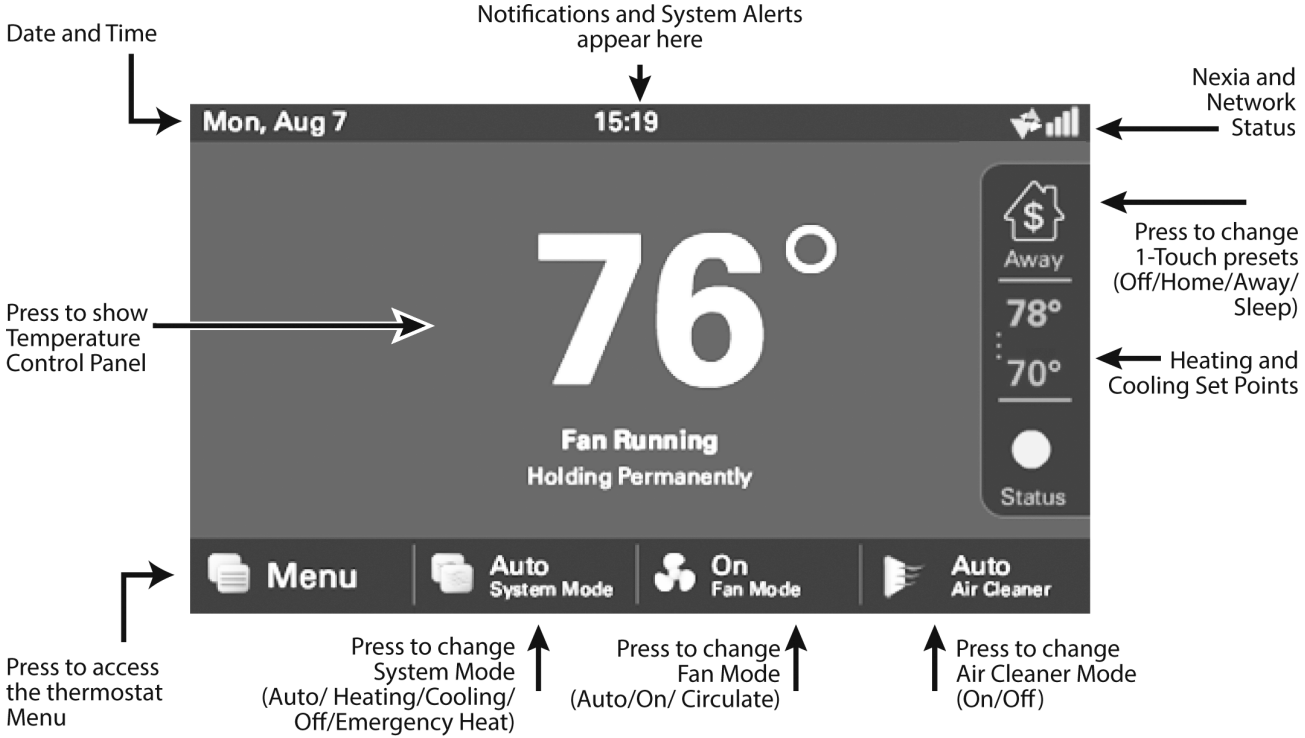
OR



Classic View

Home Screen - Classic View

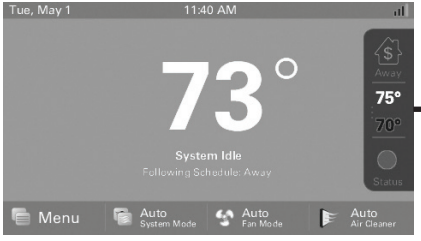
Home Screen can be customized with several widgets. To learn more about this feature see the section in this user guide about customization.



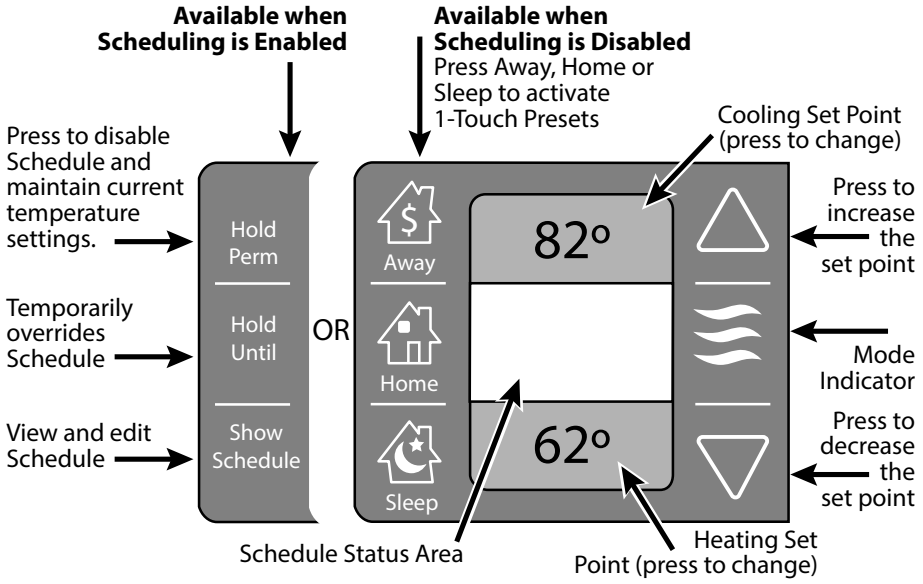
Temperature Control Panel

The Temperature Control Panel is where target temperatures are manually set and adjusted.

The panel is shown on the Classic View Home Screen only.

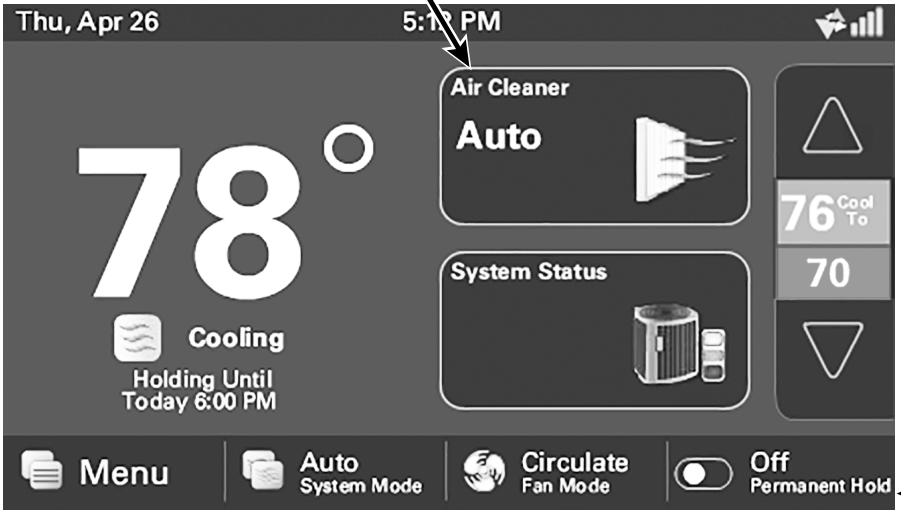


Touch Heating and Cooling Set-points to show panel.



Adding Widgets

Optionally, up to 2 widgets may be chosen to appear on your home screen. They can be selected by navigating to **Menu > Settings > Screen > Screen Layout**



When scheduling is enabled, the Preset button is disabled and a Permanent Hold button is displayed. The system will follow the custom schedule you've created. You may override the schedule by adjusting the temperature settings with the up/down arrows at the right of the screen. At the next period change, the schedule will resume.

To maintain a temperature indefinitely, adjust the setpoint to the desired temperature and press the Permanent Hold button. It will then display ON, and the control will maintain that temperature setpoint until you manually change it. Press the Permanent Hold button again to turn Permanent Hold OFF. The Control resumes following the schedule.

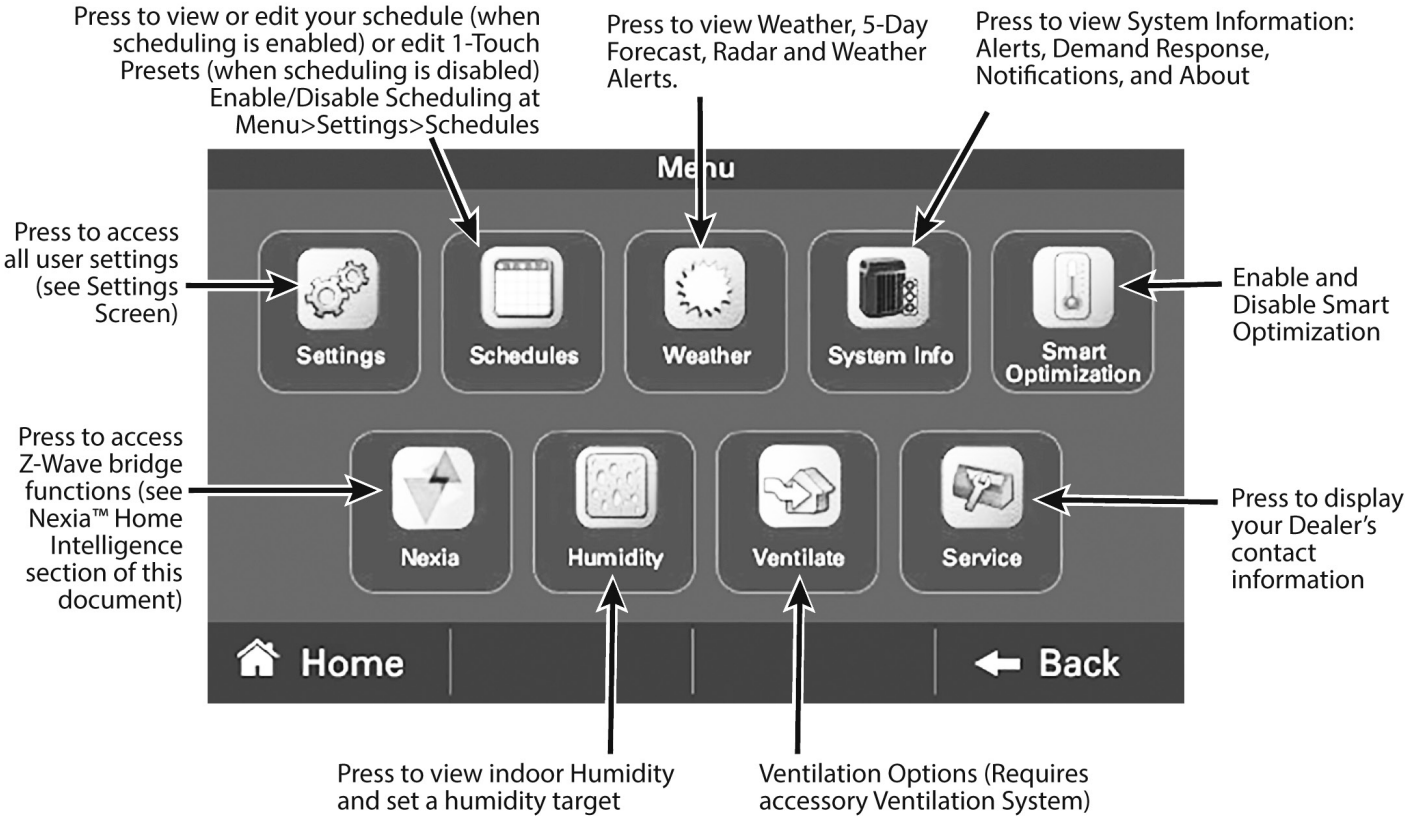
Home Screen Customization

Homeowners may customize the Home Screen by pressing:
Menu > Settings > Screen > Screen Layout

Choose up to two widgets to show up on the Home Screen. Make selection and press Apply.

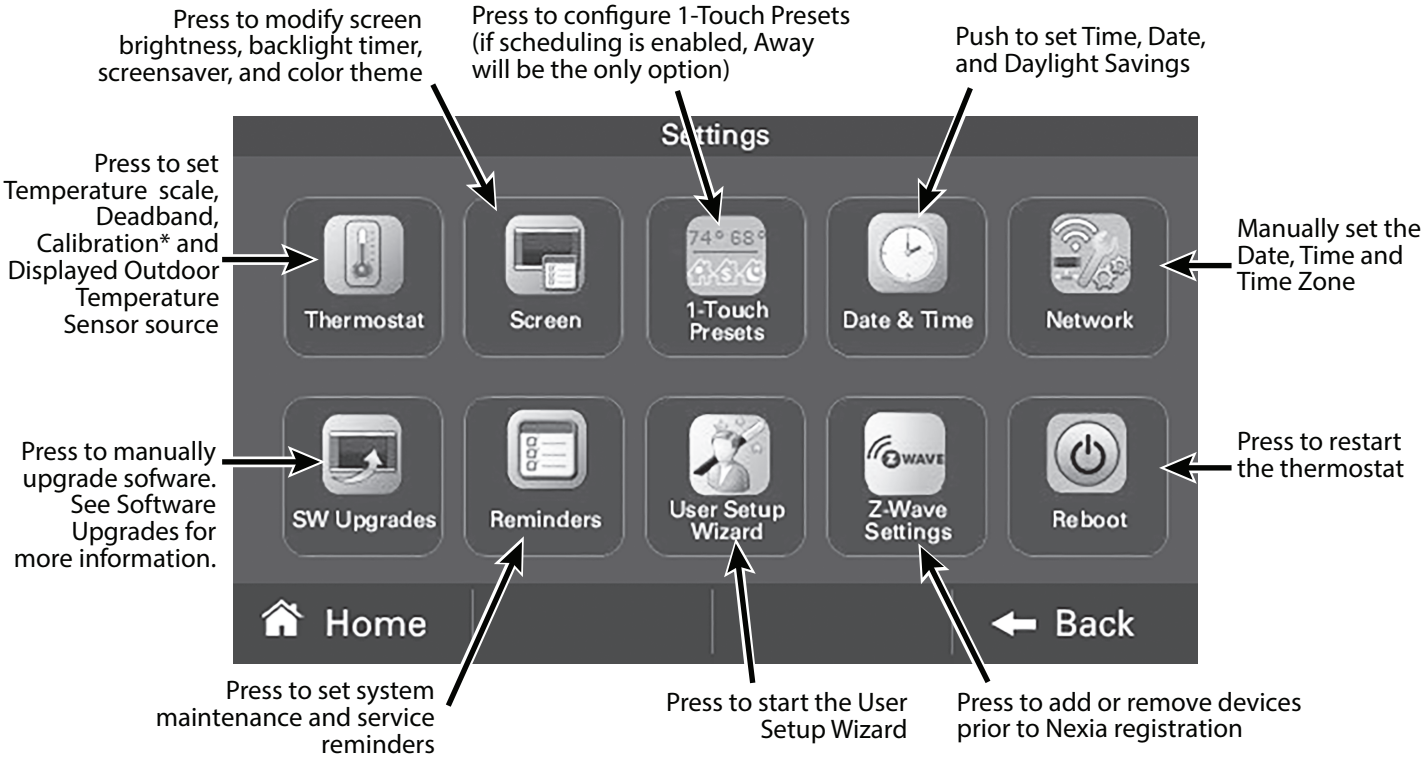
Menu Screen

Navigate to Menu Screen by pressing: **Home Screen > Menu**



Navigate to Settings Screen by pressing: **Home Screen > Menu > Settings**

Settings Screen

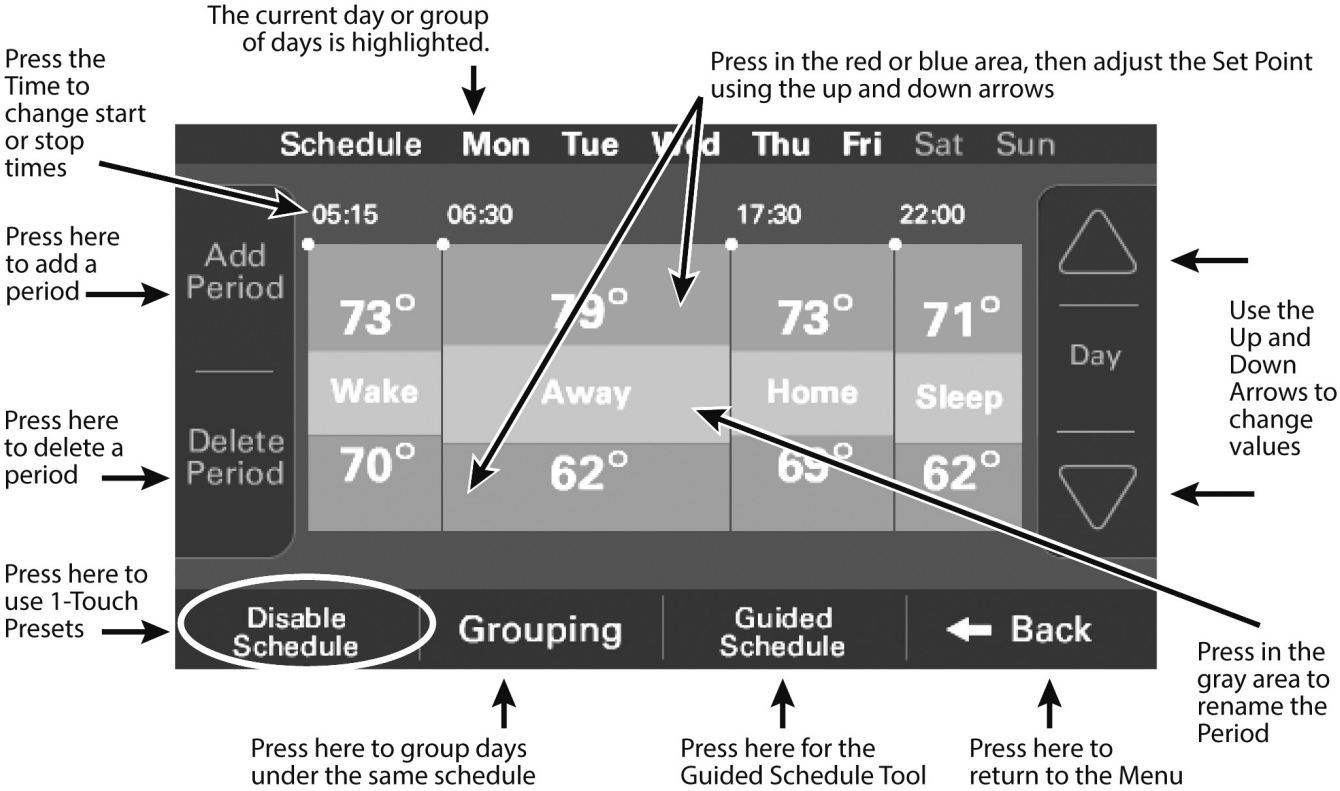


* Allow at least 1 hour for the Control to acclimate to the ambient room conditions. Temperature display may be inaccurate during the acclimation period.

Scheduling

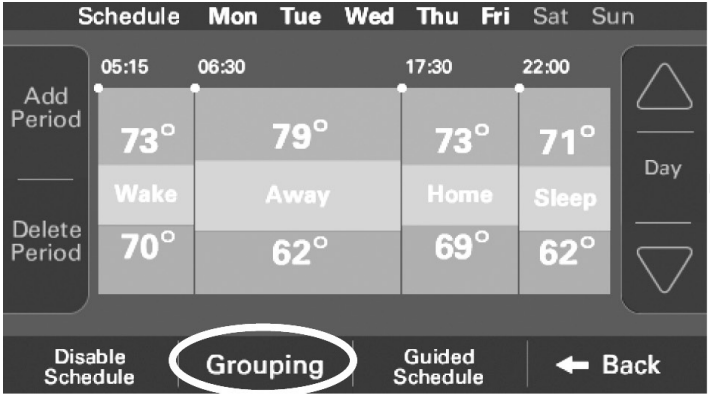
Schedule Screen

Navigate to Scheduling Screen by pressing: **Home Screen > Menu > Schedules**

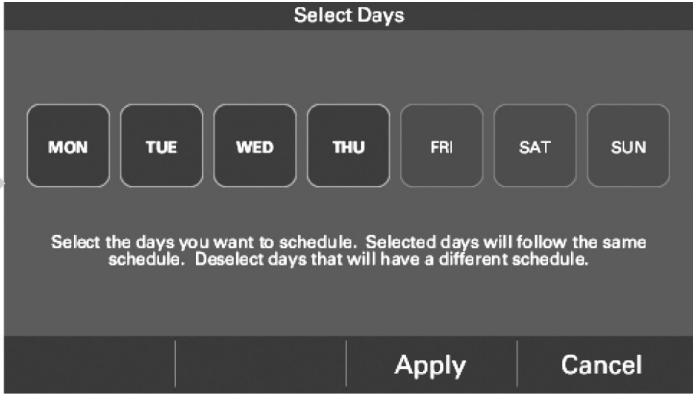


Grouping Screen

Navigate to Grouping Screen by pressing: **Home Screen > Menu > Schedules > Grouping**



Press the "Grouping" button to use the same Set Points and times for multiple days.



Then select the days to be grouped or removed from the group. Press Apply. The previous Scheduling screen will appear. Whenever a set point or period start or stop time is changed the entire group of days will change to the new set points and period times.

HINT: To copy a schedule between days, group them, press Apply, then open the grouping menu and de-select the days. Press Apply again.

Changing Periods

To change Periods press: **Home Screen > Menu > Schedules > Press Schedule time**

Changing Period Start or End Times

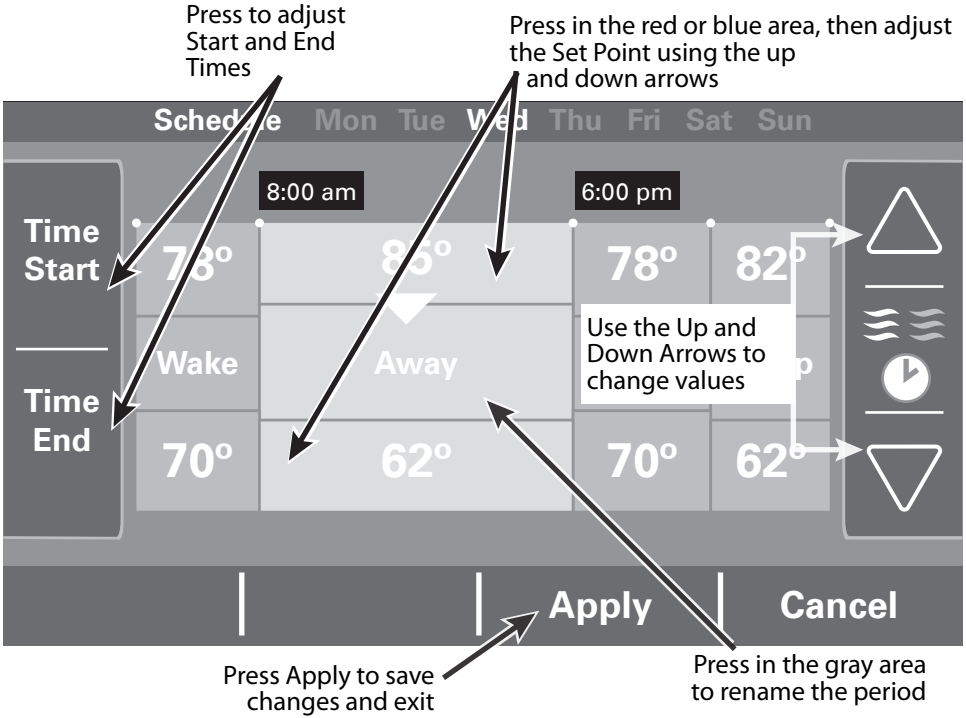
1. Press anywhere in the Period to make it active. Other Periods will dim and the Start and End times for this Period will be in a black box.
2. Press the **TIME START** or **TIME END** and adjust the time using the **UP** and **DOWN** arrows. Note: The XL824 uses intelligent technology and will not allow setting an illogical start or end time. Periods must be at least 30 minutes in duration.

Changing Period Set Points

1. Press the active Period's Cooling or Heating Set Point.
2. Adjust the Set Point using the **UP** or **DOWN** arrows.

Changing the Period Name

1. Press the **PERIOD NAME** (Wake, Away, etc.).
2. Select a predefined name or press **NEW** and select **NEXT**.
3. If selecting a new name, enter the name using the on-screen keyboard.
4. Press **NEXT**.



When all changes have been made, press **APPLY** to save and exit, or press **CANCEL** to discard all changes that were made to this Schedule.

Navigate to add Periods by pressing: **Home Screen > Menu > Schedules > Add Period**

Adding Periods

The XL824 Smart Control is capable of adjusting the temperature settings throughout the day according to a user-programmable schedule.

Each day of the week can have its own unique schedule, and each day can have a maximum of four Periods.

Important: Scheduling must be enabled before a schedule can be defined. To verify that Scheduling is enabled, navigate to **MENU > SETTINGS > SCHEDULES** and verify that **ENABLED** is highlighted.

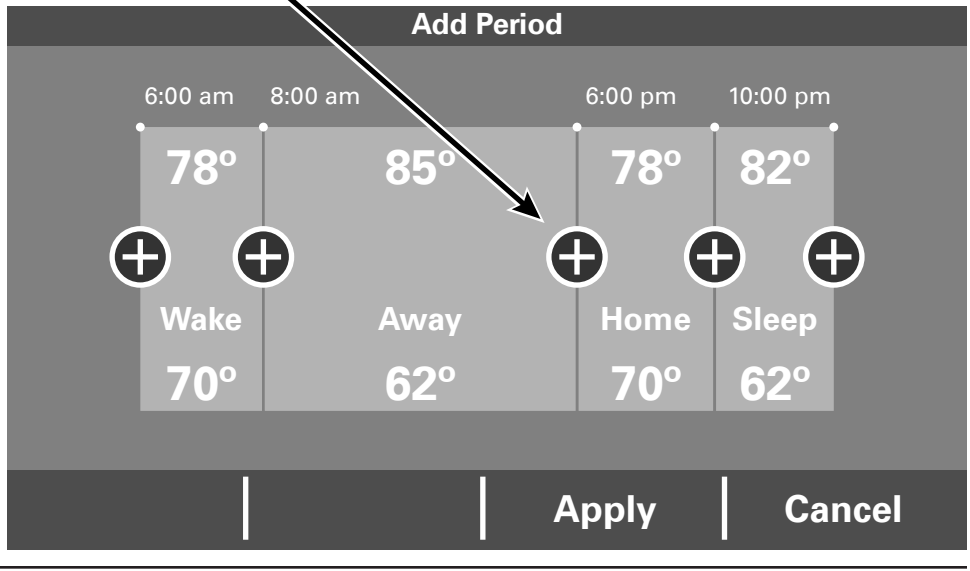
To set or modify schedules, navigate to **HOME > MENU > SCHEDULES** or select **SHOW SCHEDULES** from the Temperature Control Panel.

Periods define the time of day when the target temperature is adjusted. Each day can have from 1-4 Periods, and each day can have different number of periods. The Scheduling Screen shows the start time for each Period highlighted across the top row.

Adding Periods

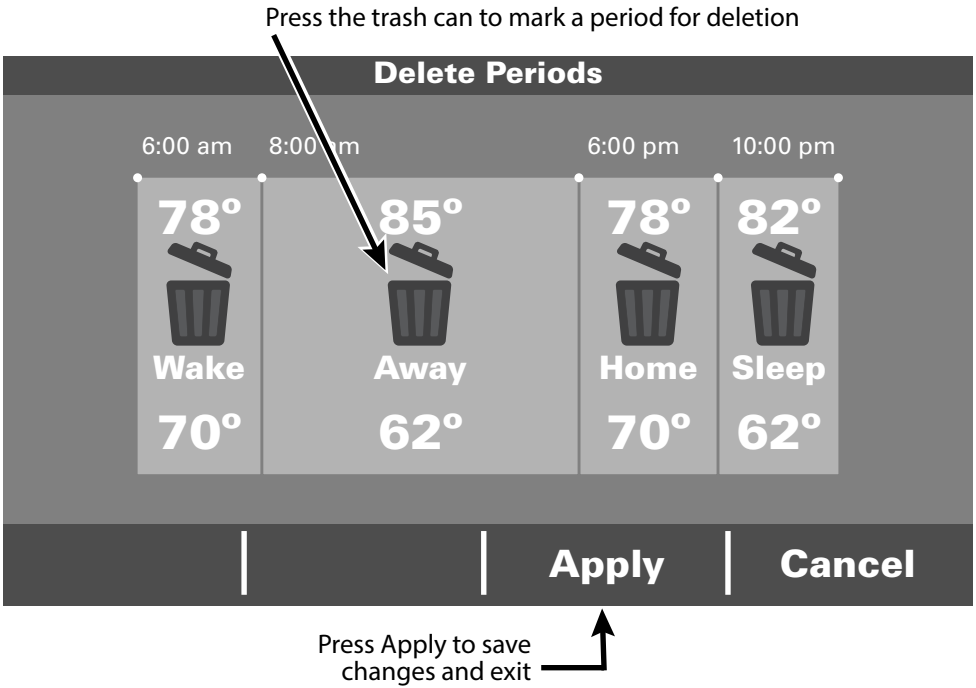
1. Press **ADD PERIOD**, the Add Period Screen is displayed.
2. Press the green circle where you would like to insert a Period.
3. Choose a name for the new Period or select **New** to define a custom name and press **NEXT**.
4. If selecting a new name, enter the name using the on-screen keyboard.
5. Press **NEXT**.
6. Add additional periods, the maximum per day is 4.
7. Press **APPLY** to save your changes and return to the Schedule Screen. The new period should be displayed.

Press the green target to insert a new period



Deleting Periods

Navigate to delete Periods by pressing: **Home Screen > Menu > Schedules > Delete Period**



Deleting Periods

1. From the Schedule Screen press **DELETE PERIOD**, the Delete Periods Screen is displayed.
2. Press the **TRASH CAN** icon in the Period(s) you wish to delete. Note that each day must have at least one Period.
3. Press **APPLY** to save your changes and return to the Schedule Screen. The changes should be reflected in the display.

Overriding Schedules

Note: These functions require Scheduling to be enabled. To enable Scheduling, go to **HOME > MENU > SCHEDULES > ENABLE SCHEDULE**.

Hold Until

Follow these steps to override a schedule until a specified time.

1. Press in the **INDOOR TEMPERATURE** area to reveal the Temperature Control Panel.
2. To change the Cooling Set Point, press the blue **COOLING SET POINT**. The Mode Indicator will display blue wavy lines.

   Use the **UP** and **DOWN** Arrows to adjust the Set Point to the desired temperature.
3. To change the Heating Set Point, press the red **HEATING SET POINT**. The Mode indicator will display red wavy lines.

   Use the **UP** and **DOWN** Arrows to adjust the Set Point to the desired temperature.
4. To change the duration of the Hold, press in the **STATUS AREA**. The day will appear in bold type.
5. Use the **UP** and **DOWN** arrows to select the day when the hold will cancel.
6. Press in the **STATUS AREA** again to toggle to the Time setting. The Time will appear in bold type.
7. Use the **UP** and **DOWN** arrows to select the time when the hold will cancel.
8. Press in the **INDOOR TEMPERATURE** area to return to the Home Screen.
9. The words "Holding Until" will appear under the Indoor Temperature.

Hold Permanently

Follow these steps to permanently override a schedule. The changes you make will be held until you cancel the hold.

1. Press in the **INDOOR TEMPERATURE** area to reveal the Temperature Control Panel.
2. To change the Cooling Set Point, press the blue **COOLING SET POINT**. The Mode Indicator will display blue wavy lines.

   Use the **UP** and **DOWN** Arrows to adjust the Set Point to the desired temperature.
3. To change the Heating Set Point, press the red **HEATING SET POINT**. The Mode Indicator will display red wavy lines.

   Use the **UP** and **DOWN** Arrows to adjust the Set Point to the desired temperature.
4. Press **HOLD PERM**. The words "Hold Perm" will appear in bold type.
5. Press in the **INDOOR TEMPERATURE** area to return to the Home Screen.

   The display will indicate Hold Permanently below the Indoor Temperature.

Cancelling an Override

To cancel Permanent Hold or Hold Until, follow these steps.

1. Press in the **INDOOR TEMPERATURE** area to reveal the Temperature Control Panel.
2. To cancel Hold Until, press **HOLD UNTIL** and the words "Hold Until" will dim.

   To cancel Permanent Hold, press **HOLD PERM**. The words "Hold Perm" will dim.
3. Press in the **INDOOR TEMPERATURE** area to return to the Home Screen.

   The words "Following Schedule" will appear below the Indoor Temperature.

Configuring 1-Touch Presets

Navigate to Configuring 1-Touch Presets by pressing:
Home Screen > Menu > Settings > 1-Touch Presets

1-Touch Presets provide predetermined Heating and Cooling Set Points for Home, Away and Sleep time periods.

Note: 1-Touch Presets require Scheduling to be disabled. To disable Scheduling, go to **HOME > MENU > SCHEDULES > DISABLE SCHEDULE**.

When scheduling is disabled, heating and cooling set points are maintained indefinitely. When a temperature change is desired, the user must manually adjust the XL824 Control to the new setting.

Configuring 1-Touch Presets

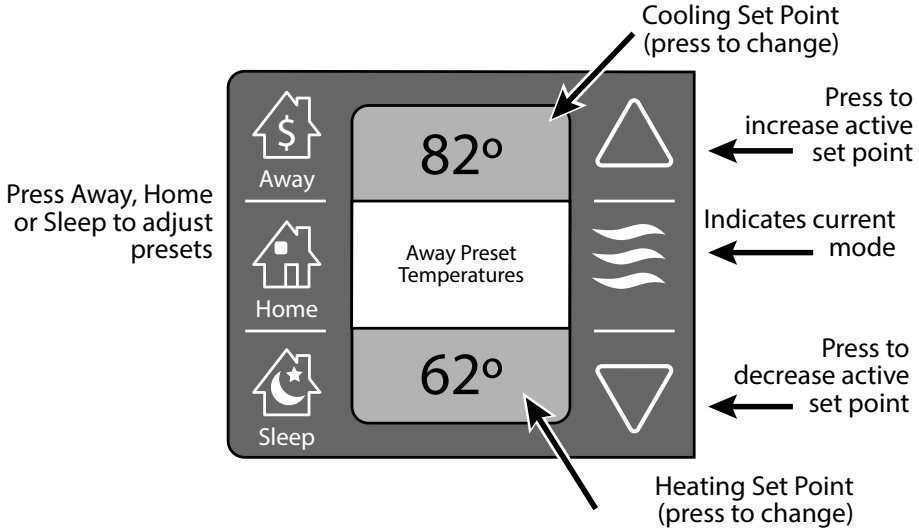
1. To change the Cooling Set Point, press the blue **COOLING SET POINT** to activate the setting. The current System Mode indicator will display blue wavy lines.

   Use the **UP** and **DOWN** Arrows to adjust the Set Point to the desired temperature.

2. To change the Heating Set Point, press the red **HEATING SET POINT** area to activate the setting. The current System Mode indicator will display red wavy lines.

   Use the **UP** and **DOWN** Arrows to adjust the Set Point to the desired temperature.

3. Repeat the process for Home and Sleep settings.



4. Press **APPLY**, then **HOME** to return to the Home Screen.

Note that when Scheduling is enabled, only the Away preset is available and can be used for energy savings.

Configuring 1-Touch Presets

1-Touch Presets provide predetermined Heating and Cooling Set Points for Home, Away and Sleep time periods.

Note: 1-Touch Presets require Scheduling to be disabled. To disable Scheduling, go to **HOME>MENU>SCHEDULES>DISABLE SCHEDULE,** or if scheduling is disabled touch icon on home screen.

When scheduling is disabled, heating and cooling set points are maintained indefinitely. When a temperature change is desired, the user must manually adjust the XL824 Control to the new setting.

Configuring 1-Touch Presets

1. To change the Cooling Set Point, press the blue **COOLING SET POINT** to activate the setting. The current System Mode indicator will display blue wavy lines.

   Use the **UP** and **DOWN** Arrows to adjust the Set Point to the desired temperature.

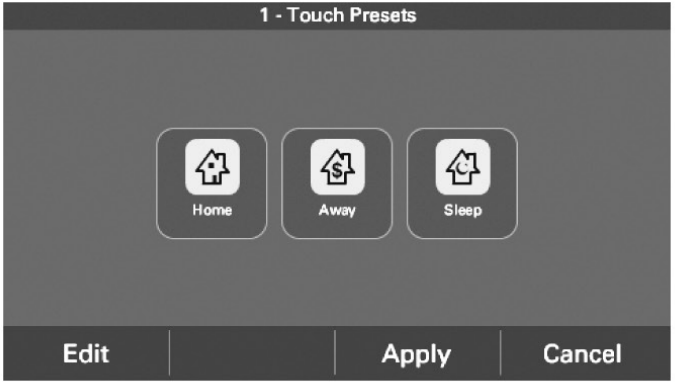
2. To change the Heating Set Point, press the red **HEATING SET POINT** area to activate the setting. The current System Mode indicator will display red wavy lines.

   Use the **UP** and **DOWN** Arrows to adjust the Set Point to the desired temperature.

3. Repeat the process for Home and Sleep settings.

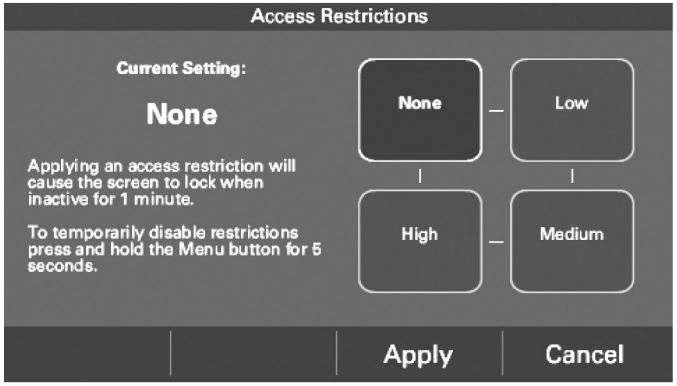
4. Press **APPLY**, then **HOME** to return to the Home Screen.

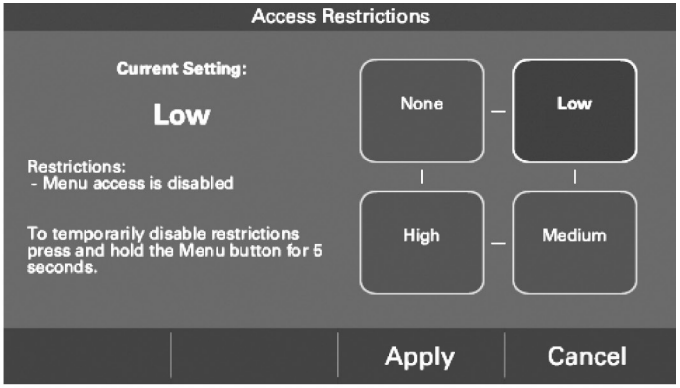
Note that when Scheduling is enabled, only the Away preset is available and can be used for energy savings.

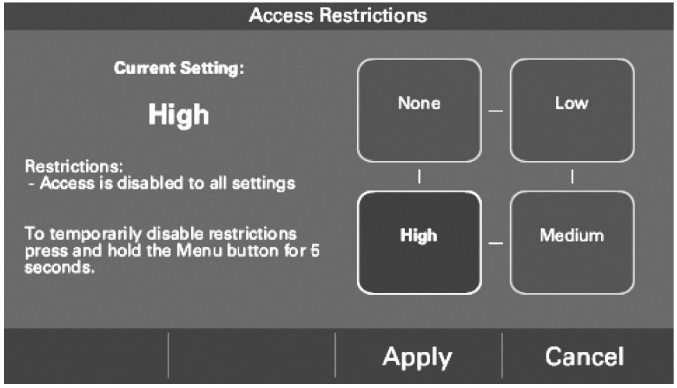


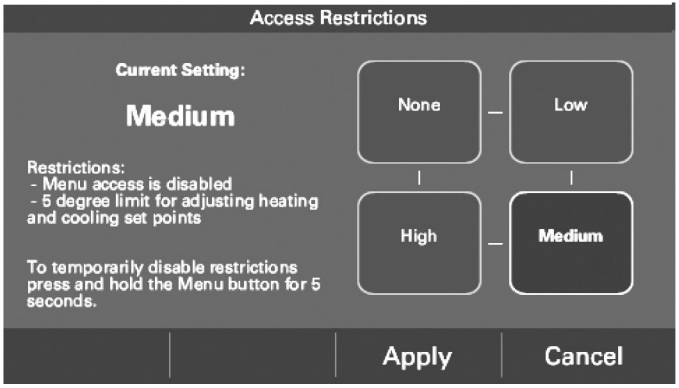
Setting Access Restrictions

To select access restrictions press: **Home Screen > Menu > Settings > Screen > Access Restrictions**









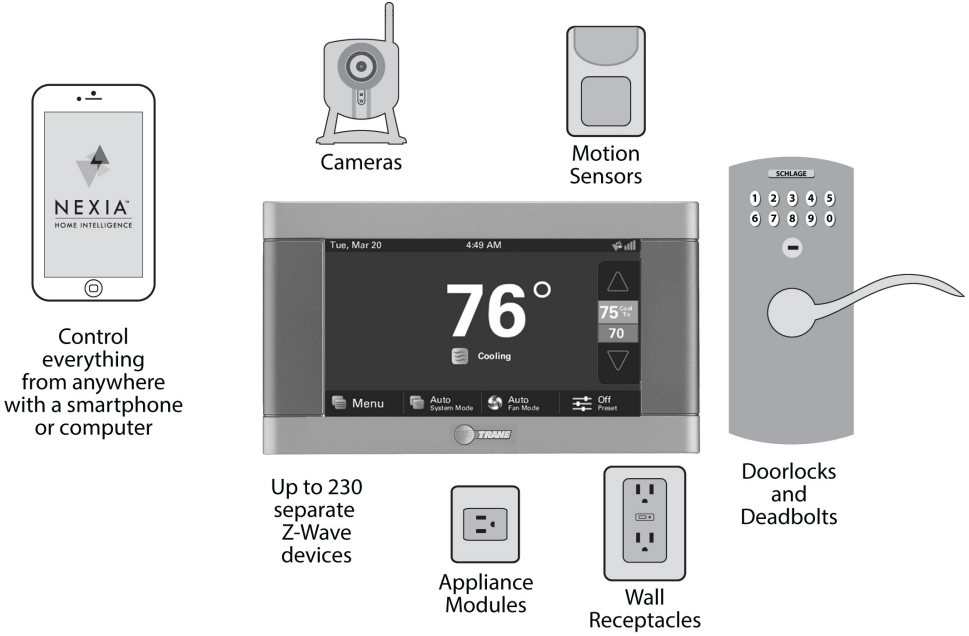
Nexia™ smart home

When enrolled to a Nexia™ smart home account, the XL824 is a Z-Wave Plus security-enabled device that can serve as a central hub for an entire network of home automation devices from different manufacturers and product categories, including all non-battery powered devices that will act as repeaters on your network. The XL824 can display local weather conditions, five-day forecasts and National Weather Service warnings and alerts. See the section on Including Z-Wave Devices for more information on taking advantage of this functionality.

A basic Nexia™ smart home account subscription is included with the XL824 Control at no additional charge.

Note: Adding additional devices may add charges to your Nexia™ smart home account.

To create your Nexia™ smart home account go to www.NexiaHome.com/trane.

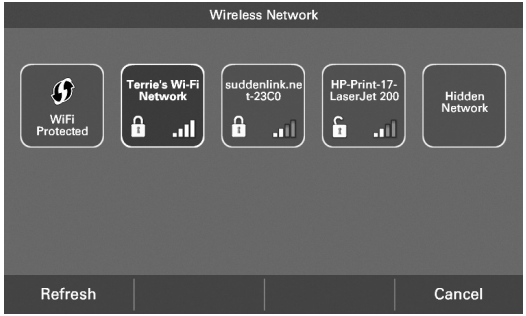


NEXIA™

Network Setup

There are three ways to connect the XL824 Control to a local network:

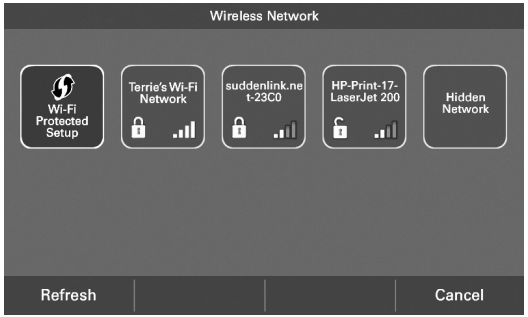
Option 1. Wi-Fi connection



Wi-Fi Step 1. Navigate **Home > Menu > Settings > Network > Connect to WiFI Network**. Select your network.

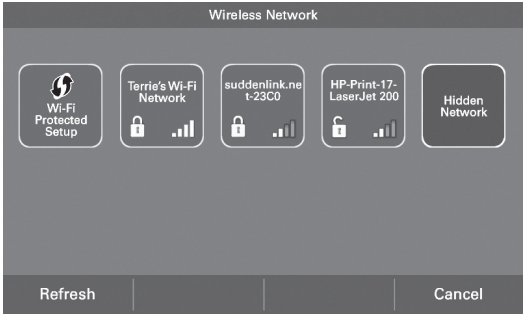
Wi-Fi Step 2. Enter your Password then press **CONNECT**.

Option 2. WPS for Wi-Fi connection

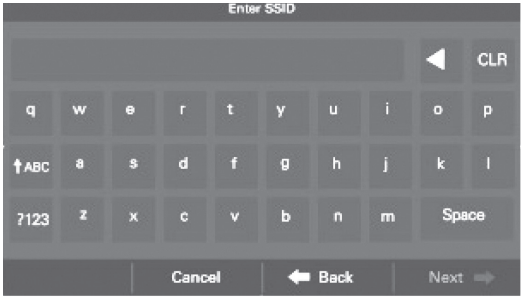


WPS Step 1. Press the WPS button on your router, then return to your XL824 Control and press the **WI-FI PROTECTED SETUP** button on the Wireless Network screen. Press **NEXT**.

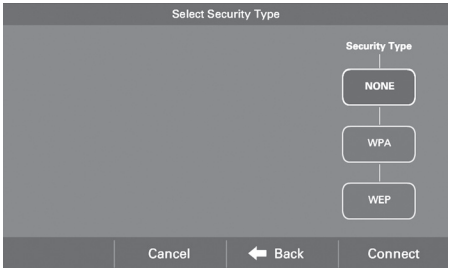
Option 3. Hidden Wi-Fi network connection



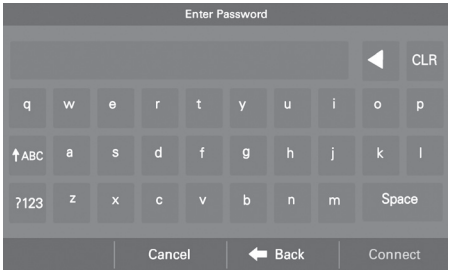
Hidden WiFi Step 1. Press **Hidden Network** which will be at the end of the list of available networks. If there are more than eight networks, you will need to scroll to the next page.



Hidden WiFi Step 2. Enter the name of the network you would like to connect to then press **Next**



Hidden WiFi Step 3. Select the security type for this network. If you select **None**, press **Connect**.



Hidden WiFi Step 4. If you select **WPA** or **WEP**, you will need to enter a password, then **CONNECT**.

Option 4. Ethernet connection

The XL824 also features an Ethernet jack on the back and may be connected to a router using CAT5 cable. The control will recognize an Ethernet connection. If an Ethernet cable is connected the User Wizard will skip the Wireless setup screens and display the Nexia Registration screen next.

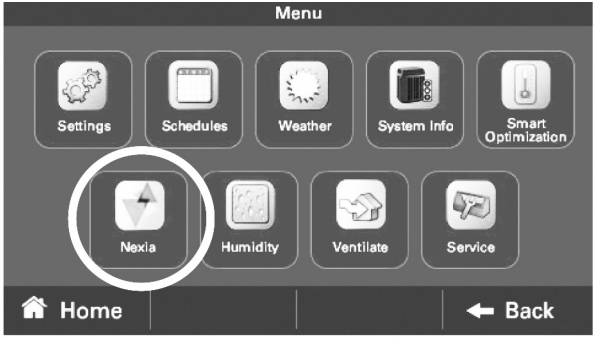
Nexia™ Registration

A Nexia registration button is located on the Menu screen of the XL824. After the control is registered with Nexia the button may be used to add devices or remove devices from a Z-Wave network.

Z-Wave Settings may be used to add or remove Z-Wave devices before connecting the control (thermostat) to a local area Wi-Fi network and registering the control with Nexia smart home.

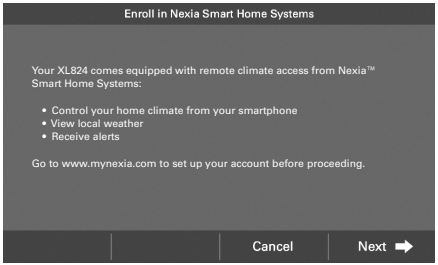
An installer can now add all of the Z-Wave devices a customer has purchased into the control's Built in Nexia Bridge prior to connecting the control to the homeowner's local area network and registering the control with Nexia. All of the Z-Wave devices will need to be installed in the home and configured with Nexia smart home prior to use.

If the Z-Wave devices are added prior to connecting the control with the homeowners local area network and then registered with Nexia, the Nexia portal will recognize all of the pre-enrolled devices after registration is complete, making enrollment easy and fast.

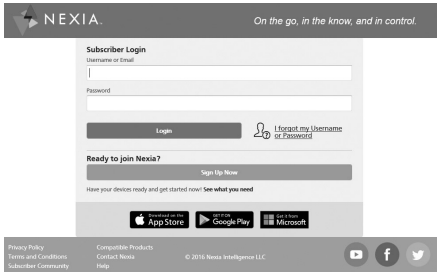


Nexia™ Registration

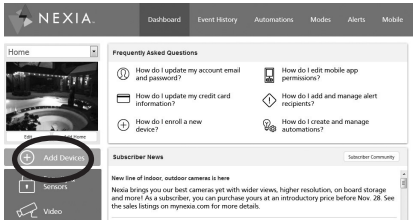
To control your home climate system from your web enabled smartphone, tablet or computer and follow these steps.



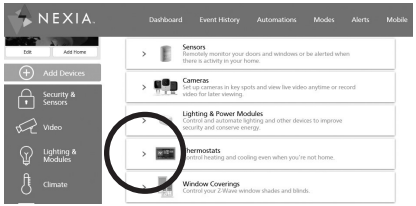
Step 1. Go to www.mynexia.com and set up a Nexia account. If you already have an account, log in and go to Step 3.



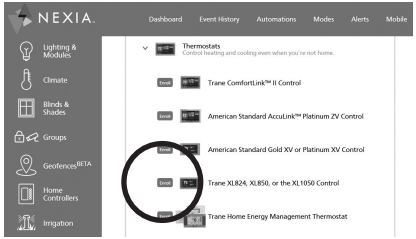
Step 2. Select **SIGN UP NOW** to set up an account or log in to an existing account.



Step 3. From the Nexia Dashboard select **ADD DEVICES**.

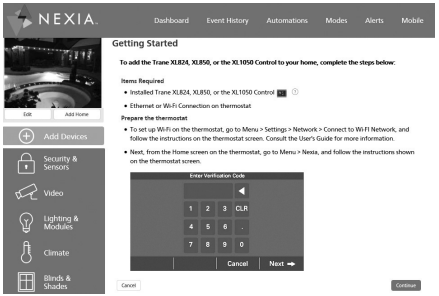


Step 4. Select the **THERMOSTATS** drop down arrow.

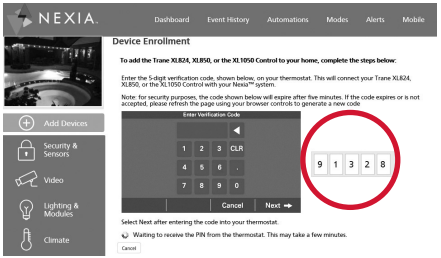


Step 5. Select the **ENROLL** button for XL824 Control.

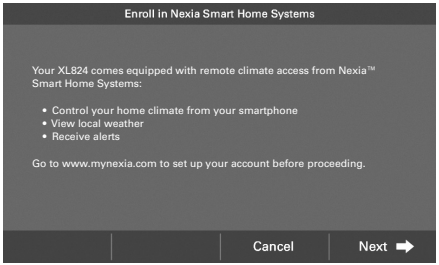
Nexia™ Registration



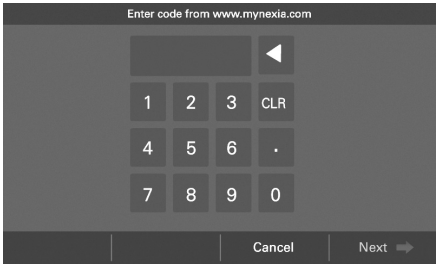
Step 6. Press **CONTINUE**.



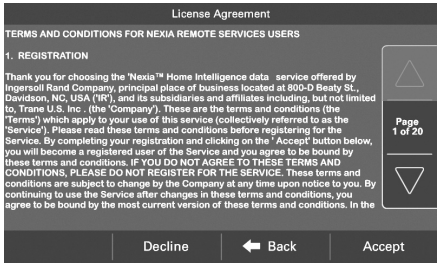
Step 7. Nexia will generate a Pin Code. Record the Pin Code.



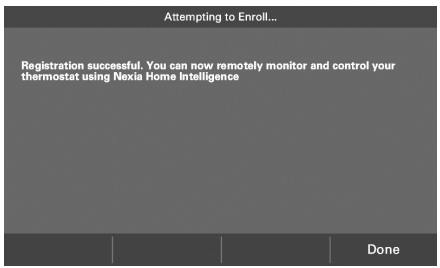
Step 8. Return to the XL824 control and Press **NEXT**.



Step 9. Enter the Pin Code and Press **NEXT**.



Step 10. Read the License Agreement, then **ACCEPT** or **DECLINE**.



Step 11. Registration successful. Press **DONE**.

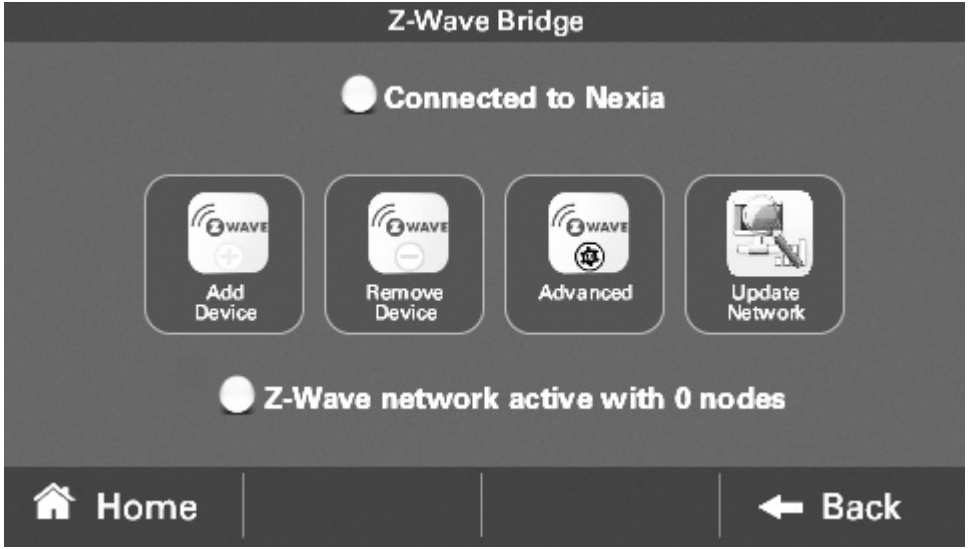
Adding/Removing Z-Wave Devices (via XL824)

To select Adding/Removing Z-Wave Devices press: **Home Screen > Menu > Nexia**

Your XL824 is designed to integrate seamlessly with a Nexia™ smart home system.

Adding Z-Wave Devices

1. From the **HOME** Screen, press **MENU**, then press **NEXIA**.
2. Press **ADD DEVICE** and follow the device manufacturer's instructions for setting the Z-Wave device into learn mode. You will have four minutes to set the device into learn mode after pressing the **ADD DEVICE** button.



Removing Z-Wave Devices

1. From the **HOME** Screen, press **MENU**, then press **NEXIA**.
2. Press **REMOVE DEVICE** and follow the manufacturer's instructions for setting the Z-Wave device into learn mode. You will have four minutes to set the device into learn mode after pressing the **REMOVE DEVICE** button.

Advanced Z-Wave Settings

Press **ADVANCED** for advanced Z-Wave functions including unregistering your bridge from Nexia or factory resetting your bridge. See the Advanced Z-Wave Settings section for more information.

Update Network

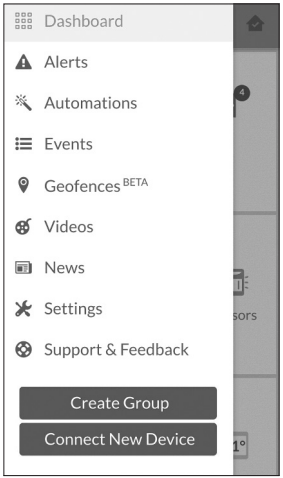
Press **UPDATE NETWORK** to update the network of your bridge. Updating the network can generate a lot of Z-Wave traffic over the network and can take up to 15 minutes to complete.

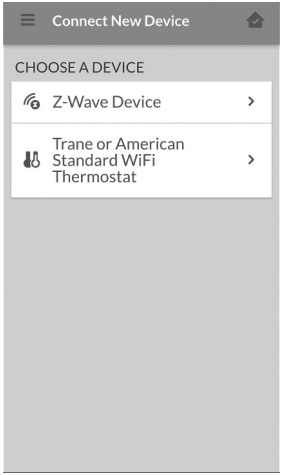
Adding Z-Wave Devices (via mobile app)

Alternatively, your XL824 allows you to add Z-Wave devices using the Nexia app on your mobile device.

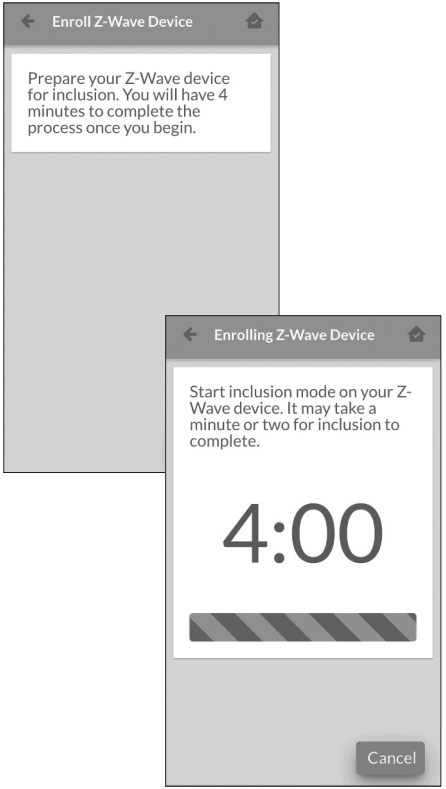
Adding Z-Wave Devices

1. Start the Nexia app.
2. Press the menu button in the top left corner.
3. At the bottom of this slide out menu, press *Connect New Device*.
4. Select *Z-Wave Device*.





5. When prompted, prepare the device to be added to the Z-Wave network by following the device manufacturer's instructions to put device into add mode. You will have four minutes to complete this process.



Navigate to Advanced Z-Wave Settings Screen by pressing:

Home Screen > Menu > Nexia > Advanced

Advanced Z-Wave Settings

Nexia's **ADVANCED SETTINGS** screen contains three very powerful functions. Each of these functions is very specific and should be approached with a measure of caution. They cannot be "undone."

Learn

To add the bridge to an existing network, follow your primary controller's instructions to put the primary controller into Add Mode. Then press the Learn button on the bridge.

This function copies a new Z-Wave network to the bridge from another controller. This function is not allowed if your bridge is a primary controller with included Z-Wave devices.

Unregister

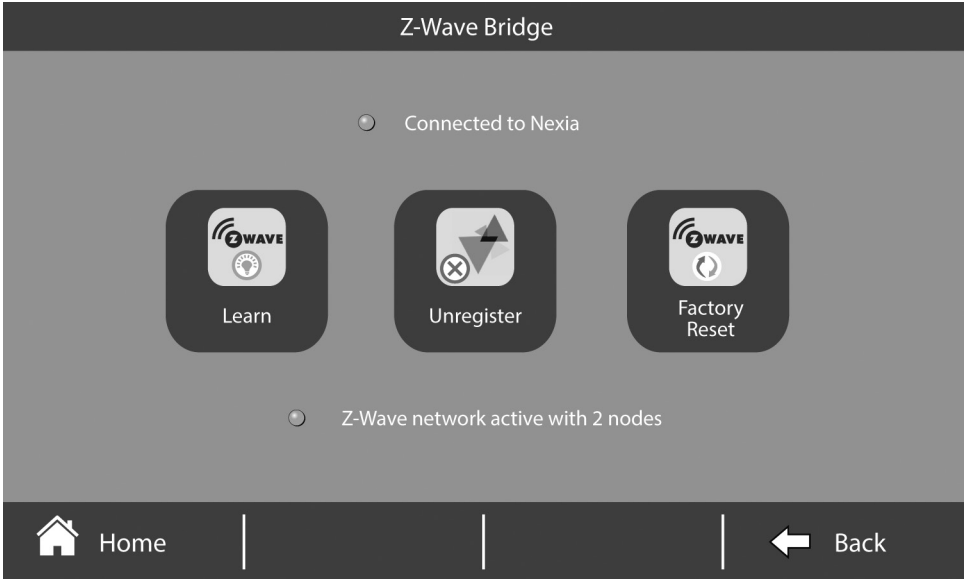
Removes the bridge from Nexia. All remote control features will be disabled.

Factory Reset

Resets all Z-Wave information and removes all devices from the bridge. If this bridge is the primary controller for your network, resetting it will result in all the devices in your network being removed. Following the reset, it will be necessary to remove and then add all of the devices back to your network.

Bridge Information

If this bridge is being used as a secondary or inclusion controller in the network, please reset this bridge only in the event that the primary controller is missing or otherwise inoperable.



Advanced Z-Wave Settings

Terminology	
The following terms may be used interchangeably by other devices, manufacturers, and Nexia.	
ADD	Add, include, inclusion, enroll, connect
REMOVE	Remove, exclude, exclusion
COPY	Copy, learn, replicate, replication

Association Group Information Table					
Group	Profile	Command Class and Command List	Group Name	Max Number of Devices	Trigger
1	General: Lifeline	Device Reset Locally Notification	Lifeline	5	Factory Reset

Other Information	
• Basic Command Class:	This device ignores Basic Set/Get commands. This device controls other devices with OFF (0x00) and ON (0xFF) as a minimum.

Smart Optimization

The XL824 Control is equipped with Smart Optimization. By executing a series of blower and active call on/off tests, Smart Optimization will customize the XL824 Control to each unique environment and increase the accuracy of the sensed indoor temperature and overall system performance.

Smart Optimization is enabled by default and will automatically execute approximately 18 hours after initial power up. Smart Optimization takes 90 minutes to complete and during the process, heating and cooling operations are disabled. The screen will indicate that the XL824 Control is in Smart Optimization mode.

To delay Smart Optimization for an additional 18 hours, touch the XL824 Control Screen and hold for five seconds.

To disable Smart Optimization altogether, navigate to **Home>Smart Optimization** and select **Disable** and press **Apply**.

To enable Smart Optimization, navigate to **Home>Smart Optimization** and select **Enable** and press **Apply**. Smart Optimization will execute in approximately 18 hours.

To manually trigger Smart Optimization, first disable, then re-enable the feature.

Automatic Software Updates

When the XL824 is connected to a Nexia™ smart home account, software updates will occur automatically and do not require user intervention.

Note: Internet services are required for automatic software updates.

Notices

FCC Notice

INFORMATION TO USER

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference and (2) This device must accept any interference received, including interference that may cause undesired operation. The antenna(s) used for this transmitter must be installed to provide a separation distance of at least 20 cm from all persons and must not be co-located or operating in conjunction with any other antenna or transmitter.

This equipment has been tested and found to comply with the limits for Class B Digital Device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures.

Reorient or relocate the receiving antenna

Increase the separation between the equipment and receiver

Connect the equipment into an outlet on a circuit different from that to which the receiver is connected

Consult the dealer or an experienced radio/TV technician for help

Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

ICC NOTICE

This device complies with Industry Canada license-exempt RSS standard(s). Operation is subject to the following two conditions: (1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of the device.

Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes : (1) l'appareil ne doit pas produire de brouillage, et (2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

The manufacturer has a policy of continuous product and product data improvement and it reserves the right to change design and specifications without notice.

Representative-only illustrations included in this document.

April 2018
032-5090-05