

Trane XL824 Smart Control User Guide



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

When connected with Nexia™ Home Intelligence, 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.



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.

To enjoy the full benefit of your XL824 Smart Control, it should be connected to a Nexia™ Home Intelligence account. Nexia is a cloud-based platform that helps the smart products in your home work together through a single, convenient application. The XL824 can serve as the central hub of an entire network of home automation devices.

Nexia™ Home Intelligence 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 950, 850, XL824 and 624 are allowed on your Nexia™ Home Intelligence account for no additional cost. A monthly subscription charge may apply beyond this number of devices.

Contents

Start Here!.....	3
Navigating the Control	
Home Screen	4
Temperature Control Panel Screen.....	5
Menu Screen	6
Settings Screen	7
Scheduling	
Schedule Screen	8
Changing Periods.....	9
Adding Periods	10
Deleting Periods	11
Overriding Schedules	12
Configuring 1-Touch Presets.....	13
Nexia™ Home Intelligence	
Including/Excluding Z-Wave Devices	15
Z-Wave Repeater Screen	16
Security Settings	
Screen Lock Off.....	17
Screen Lock On	17
Guest Access	17
Other Features	
Automatic Software Upgrades.....	18
Manual Software Upgrades.....	18
Smart Optimization.....	18
Notices	
FCC Notice	19
ICC NOTICE	19



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™ Home Intelligence, 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:

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

Home networking troubleshooting tips can be found at www.nexiahome.com/trane.

Nexia™ Home Intelligence Registration (requires Internet connection)

- Your XL824 Control comes equipped with remote access and other features from Nexia™ Home Intelligence.

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

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!

Navigating the Control

Home Screen

The diagram illustrates the home screen of a smart thermostat with the following elements and annotations:

- Date and Time:** "Tue, Dec 16" and "4:19 PM" are displayed at the top. An annotation points to the date with the text "Date and Time appear here".
- Notifications and System Alerts:** An annotation points to the top status bar with the text "Notifications and System Alerts appear here".
- Weather Forecast:** A button on the right side is annotated with "Press here for 5-Day Weather Forecast, Radar Display and Alerts".
- Network Status:** A signal strength icon on the right is annotated with "Network Status".
- Energy Savings Mode:** A button with a dollar sign icon is annotated with "Press to activate Energy Savings Mode, to define Away preset see 1-touch settings".
- Away Preset:** The text "Away" is displayed next to the energy savings button.
- Heating and Cooling Set Points:** "78°" and "70°" are shown next to the away preset. An annotation points to these with the text "Heating and Cooling Set Points".
- System Status Display:** A "Status" button at the bottom right is annotated with "Press to see System Status Display".
- Indoor Temp:** "76°" is the current indoor temperature. An annotation points to this area with "Press in this area to open the Temperature Control Panel".
- Outdoor Temp:** "37°" is the current outdoor temperature. An annotation points to this with "Press here for 5-Day Weather Forecast, Radar Display and Alerts".
- Indoor Humidity:** "16%" is the current indoor humidity. An annotation points to this with "Press to set Indoor Humidity Target".
- System Idle:** The text "System Idle" is displayed below the indoor temperature.
- Following Schedule Home:** The text "Following Schedule Home" is displayed below the system idle status.
- Menu:** A button with a list icon is annotated with "Press Menu for additional menu screens".
- Auto System Mode:** A button with a house icon is annotated with "Press to change System Mode (Auto/Heating/Cooling/Off/Emergency Heat)".
- Circulate Fan Mode:** A button with a fan icon is annotated with "Press to change Fan Mode (Auto/On/Circulate)".
- Auto Air Cleaner:** A button with a fan and filter icon is annotated with "Press to change Air Cleaner Cycle options (Auto/Quick/Allergy)".
- Plus Symbol:** A "+" symbol is annotated with "Plus symbol indicates compressor and auxiliary heat called simultaneously".

Temperature Control Panel Screen

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

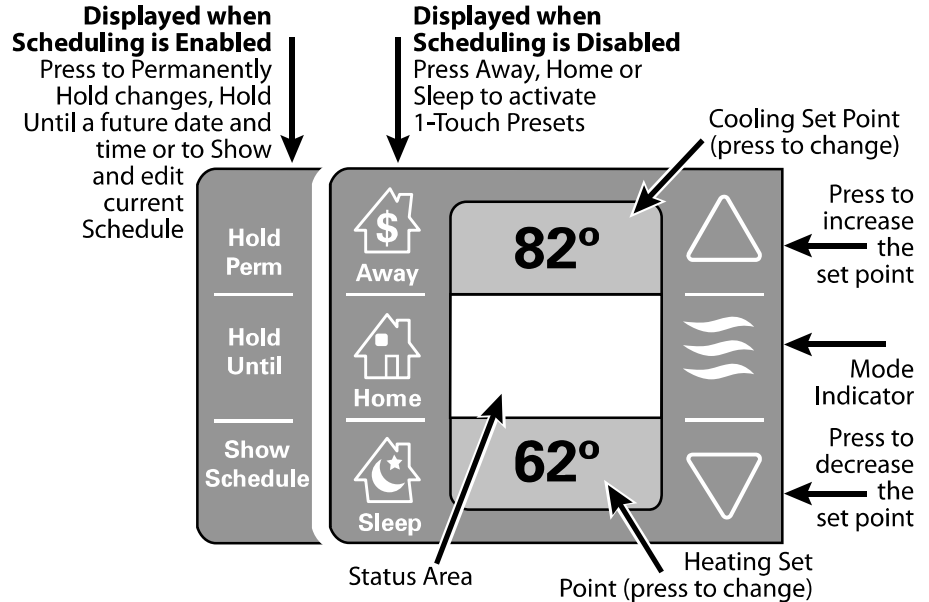
Press in the **INDOOR TEMPERATURE** area to reveal the Temperature Control Panel. Use the **UP** and **DOWN** arrows to manually adjust the target temperature. Press in the **INDOOR TEMPERATURE** area again to commit the changes and hide the Temperature Control Panel.

With Scheduling Disabled, the new target temperature is permanently set and will remain in effect until it is changed again or a 1-Touch Preset is activated. See "Configuring 1-Touch Presets" on page 13 for more information.

With Scheduling Enabled, the new target temperature is set and, by default, will hold until the next scheduled period occurs. The Hold Until time is displayed on the Home Screen.

To make the new temperature permanent when Scheduling is Enabled, press **HOLD PERM** after setting the new temperature. See "Overriding Schedules" on page 12 for more information.

To display and edit the current schedule, press **SHOW SCHEDULE** when Scheduling is enabled.



Menu Screen

Press to view or edit your schedule (when scheduling is enabled) or edit 1-Touch Presets (when scheduling is disabled)
Enable/Disable Scheduling at Menu>Settings>Schedules

Press to view 5-Day Weather Forecast, Radar and Weather (requires Nexia registration)

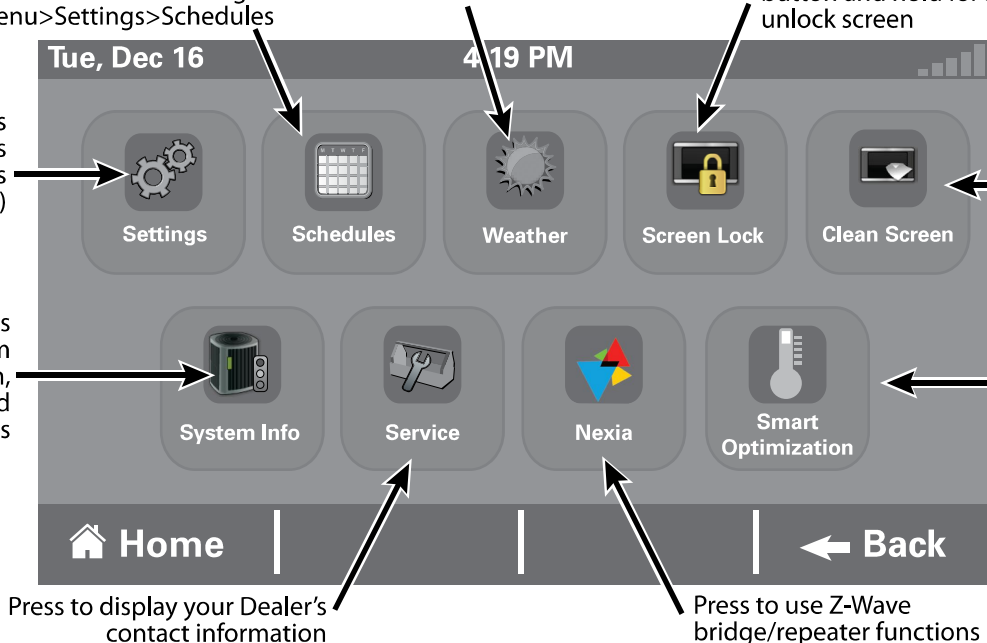
Press to access Screen Lock and Guest Access settings.
Press the Home Screen>Menu button and hold for 5 seconds to unlock screen

Press to access all user settings (see Settings Screen)

Disables the touch screen for 30 seconds for cleaning - use only a soft damp cloth to clean screen

Press to access System Information, Notifications and Alarms

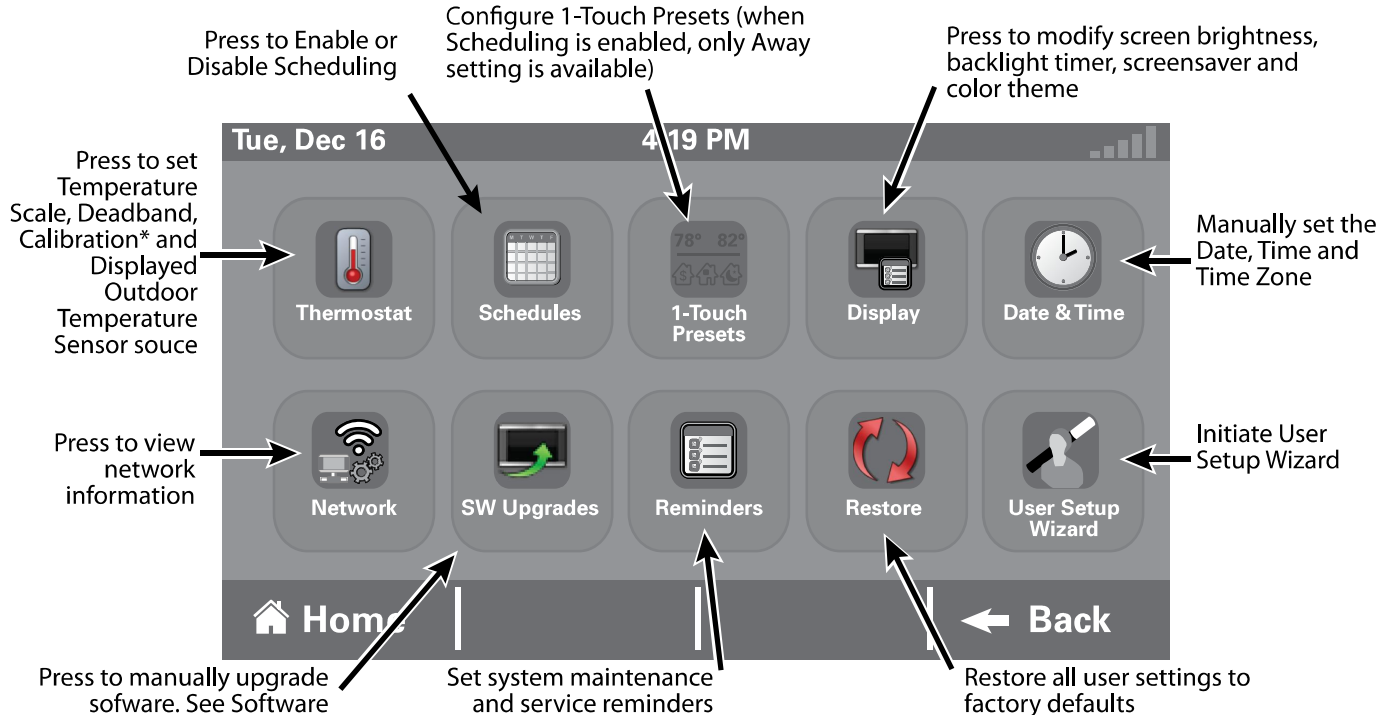
Enable and Disable Smart Optimization



Press to display your Dealer's contact information

Press to use Z-Wave bridge/repeater functions (see Nexia™ Home Intelligence section of this document)

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

To access the Schedules Screen, navigate to Menu>Schedules or select Show Schedules from the Temperature Control Panel.

Press the Time to change start or stop times

Press here to add a period

Press here to delete a period

The current day is highlighted

Press in the red or blue area, then adjust the Set Point using the up and down arrows

Use the Up and Down Arrows to change values

Press in the gray area to rename the Period

Schedule	Mon	Tue	Wed	Thu	Fri	Sat	Sun
6:00 am	8:00 am			6:00 pm	10:00 pm		
78°	85°			78°	82°		
Wake	Away			Home	Sleep		
70°	62°			70°	62°		

Home | Guided Schedule | Copy Day | Back

Changing Periods

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**.

Press to adjust Start and End Times

Press in the red or blue area, then adjust the Set Point using the up and down arrows

Use the Up and Down Arrows to change values

Press Apply to save changes and exit

Press in the gray area to rename the period

Schedule	Mon	Tue	Wed	Thu	Fri	Sat	Sun
Time Start	8:00 am	8:00 am			6:00 pm		
Time End	7:00 pm	6:20 pm			7:00 pm	6:20 pm	
Period Name	Wake	Away					
Temp	73°	85°			78°	82°	
Temp	70°	62°			70°	62°	

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.

Adding Periods

The XL 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 six 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 **MENU > SCHEDULES** or select **SHOW SCHEDULES** from the Temperature Control Panel.

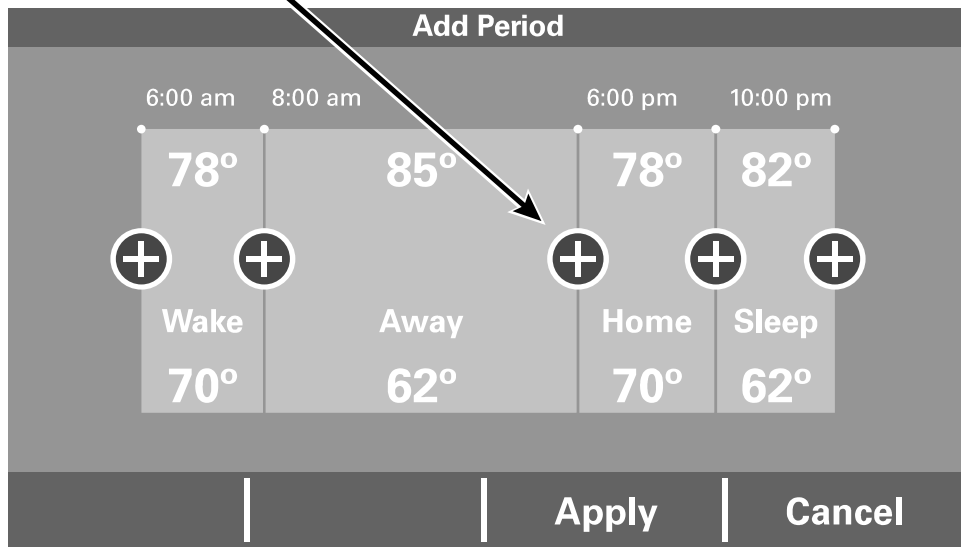
Periods define the time of day when the target temperature is adjusted. Each day can have from 1-6 Periods, and each day can have different number of periods. The Scheduling Screen shows the start time for each Period highlighted across the top row.

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 6.
7. Press **APPLY** to save your changes and return to the Schedule Screen. The new period should be displayed.

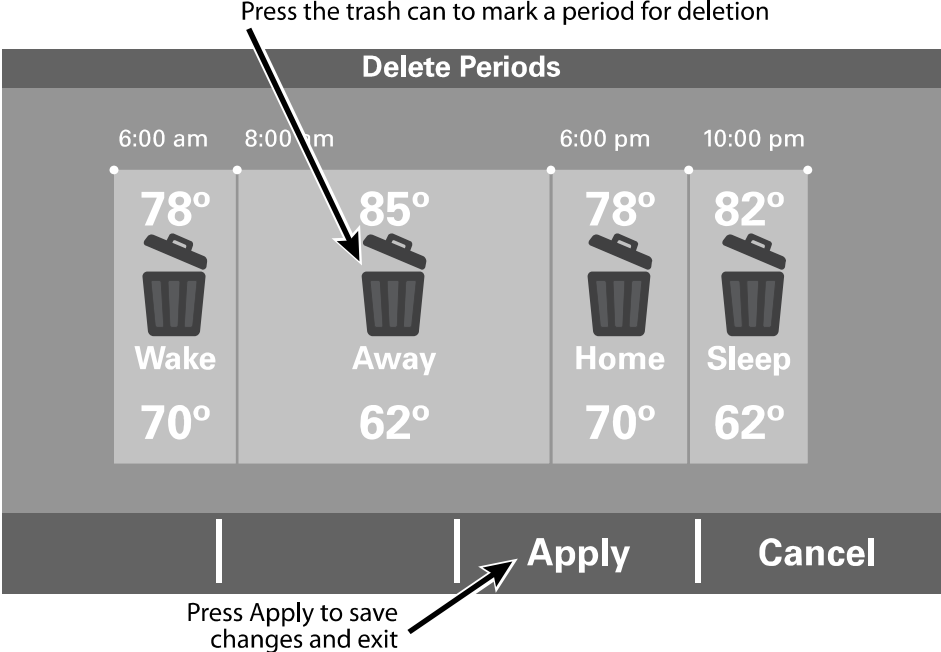
Press the green target to insert a new period



Deleting Periods

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 **MENU>SETTINGS>SCHEDULES** and select **ENABLE**.

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

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

Note: 1-Touch Presets requires Scheduling to be disabled. To disable Scheduling, go to **MENU>SETTINGS>SCHEDULES** and select **DISABLE**.

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

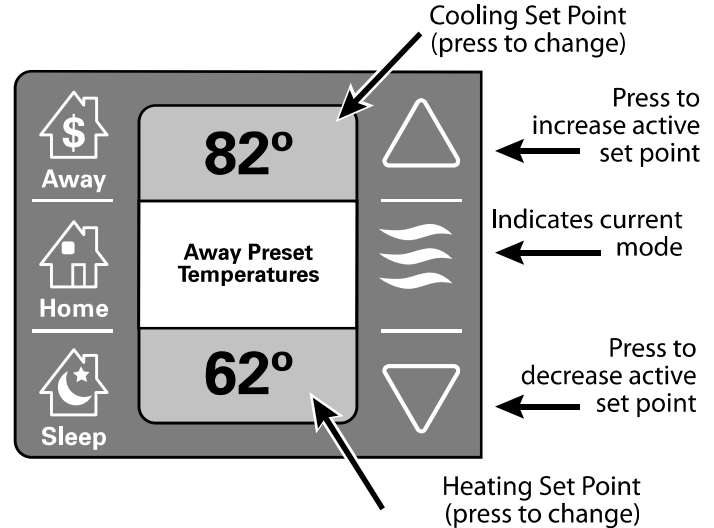
1. Press the **MENU** button and select **1-TOUCH PRESETS** and press **AWAY**.

2. 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.

3. 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.

Press Away, Home or Sleep to adjust presets



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

4. Repeat the process for Home and Sleep settings.
5. 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.

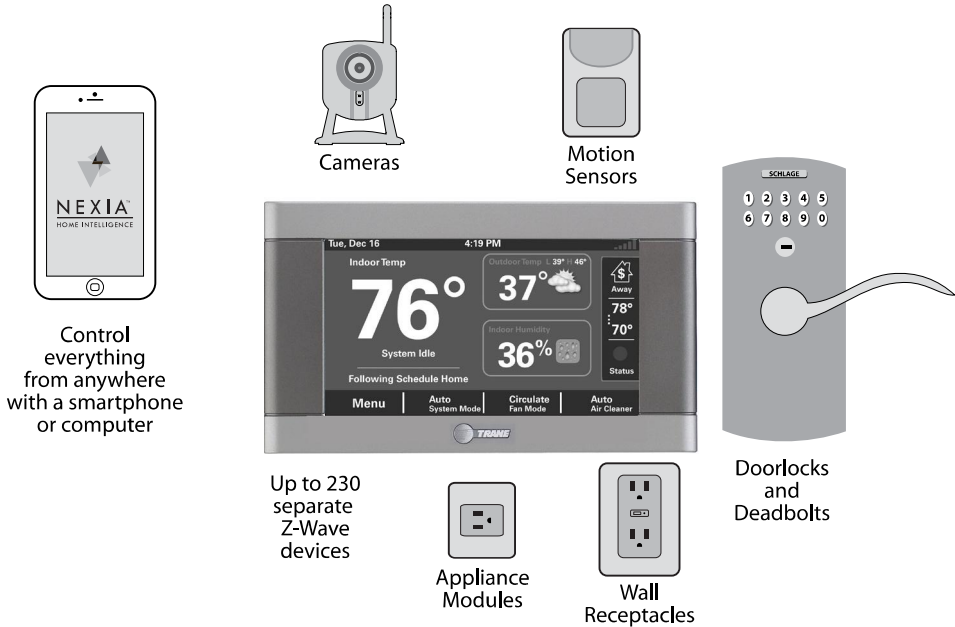
Nexia™ Home Intelligence

When enrolled to a Nexia™ Home Intelligence account, the XL824 is a Z-Wave security-enabled device that can serve as a central hub for an entire network of home automation devices and 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™ Home Intelligence account subscription is included with the XL824 Control at no additional charge.

Note: Adding additional devices may add charges to your Nexia™ Home Intelligence account.

To create your Nexia™ Home Intelligence account go to www.NexiaHome.com/trane.



Including/Excluding Z-Wave Devices

Your XL824 is designed to integrate seamlessly with Nexia™ Home Intelligence as part of a complete Z-Wave home automation system. If you do not have a Z-Wave bridge on your account, the XL824 will automatically configure itself as your Z-Wave bridge.

If you already have a Z-Wave bridge on your account, the XL824 will automatically function as a Z-Wave repeater, improving your system's communication quality. See the section titled Z-Wave Repeater for additional information.

Including Z-Wave Devices

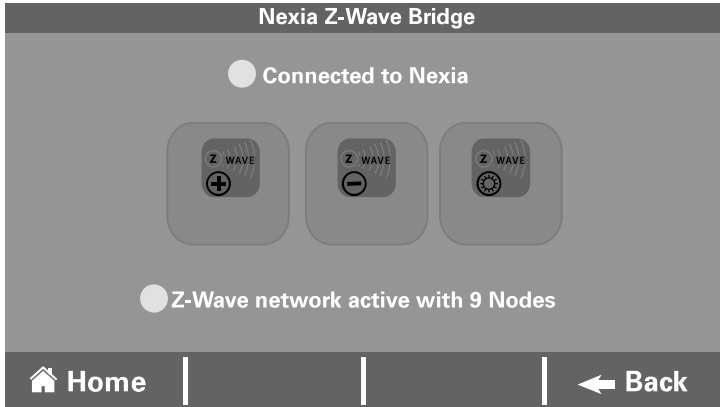
1. From the **HOME>MENU** Screen on the XL824 Control, press **NEXIA**.
2. Press **INCLUDE DEVICE** and follow the device manufacturer's instructions for setting the Z-Wave device into include mode. You will have four minutes to set the device into include mode after pressing the **INCLUDE DEVICE** button.

Excluding Z-Wave Devices

1. From the **HOME>MENU** Screen on the XL824 Control, touch **NEXIA**.
2. Press **EXCLUDE DEVICE** and follow the manufacturer's instructions for setting the Z-Wave device into exclude mode. You will have four minutes to set the device into exclude mode after pressing the **EXCLUDE DEVICE** button.

Advanced Z-Wave Functions

Press **ADVANCED** for advanced Z-Wave functions including unregistering your bridge.



Z-Wave Repeater Screen

In existing Z-Wave networks already configured with a Z-Wave bridge, the XL824 Control will automatically configure itself as a Z-Wave repeater. See the section titled Including/Excluding Z-Wave Devices for additional information on using the XL824 Control as a Z-Wave bridge.

When the XL824 Control is functioning as a Z-Wave repeater, the Z-Wave Repeater Screen allows you to exclude the XL824 Control from the network and to unregister the device from your account.

Exclude from a Network

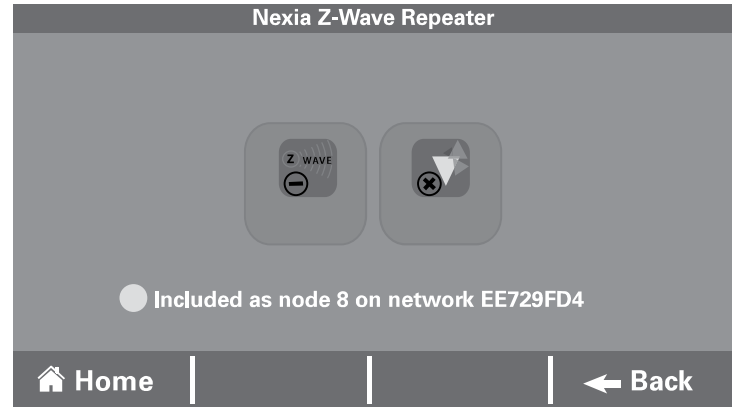
Press this button to remove the Z-Wave repeater from your Z-Wave network. This button is used in conjunction with the exclude button on the standalone Z-Wave bridge

1. From the **HOME>MENU** Screen on the XL824 Control, touch **NEXIA**.
2. Press **EXCLUDE FROM NETWORK** to remove Z-Wave repeater.
3. Press the **EXCLUDE** on the standalone Z-Wave network bridge to complete exclusion.

Unregister

Press **UNREGISTER** to unregister this XL824 Control from your account. This will disconnect the XL824 from your account and remove the repeater from your Z-Wave network.

1. From the **HOME>MENU** Screen on the XL824 Control, touch **NEXIA**.
2. Press **UNREGISTER** to remove from your Nexia account.



Security Settings

Security setting options on the 824 Control are Off, On and Guest Access. To access the Security Settings, press **MENU>SCREEN LOCK**.

Screen Lock Off

The Control and all settings are accessible.

Screen Lock On

After applying Screen Lock and after one minute of inactivity, the Control and all settings are locked. To temporarily access settings, press and hold **HOME>MENU** for five seconds.

Guest Access

When Screen Lock is **ON**, Guest Access options are available. This mode allows target temperature changes of up to 5° in either direction from the setpoint and access to the weather. All other settings are locked. To activate Guest Access, press **ON** and **APPLY**.

Screen Lock

Screen Lock allows you to lock the screen so users can't make unwanted changes.

Turning on Guest Access allows users to make up to 5 degree changes to setpoints. All other settings will remain locked.

Applying Screen Lock will cause the screen to lock after 1 minute of inactivity. Press and hold the "Menu" button for 5 seconds to temporarily unlock a locked screen.

Screen Lock

On

Off

Apply | **Cancel**

Other Features

Automatic Software Upgrades

When the XL824 is connected to a Nexia™ Home Intelligence account, software upgrades will occur automatically and do not require user intervention.

Manual Software Upgrades

The software may also be manually upgraded. This procedure requires a computer with an Internet connection, a USB Flash Drive and the included USB connector. From your computer, go to www.Trane.com/residential and select Thermostat & Controls. Click on the XL850, select Download Latest Version Software and follow the on-screen prompts.

Smart Optimization

The 850 Control is equipped with Smart Optimization. By executing a series of blower and active call on/off tests, Smart Optimization will customize the 850 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 850 Control is in Smart Optimization mode.

To delay Smart Optimization for an additional 18 hours, touch the 850 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.

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.



TRANE®

6200 Troup Highway
Tyler, TX 75707
©2014



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.

February 2015
032-5090-03