The XL 850 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 XL 850 Smart Control quickly and easily.

Start using your new XL 850 now! See “Start Here!” on page 3.
Congratulations!

Thank you for choosing the XL 850 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 XL 850 Smart Control right away.

To enjoy the full benefit of your XL 850 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 XL 850 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.

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

This product is compatible with Honeywell’s Enviracom® 2.0 protocol. Enviracom® is a registered trademark of Honeywell.

Up to four smart controls of any combination of the 950, 850, XL 850 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.
The User Setup Wizard guides you through the XL 850's User configurable settings.

To complete the setup wizard and connect the XL 850 to Nexia™ Home Intelligence, you need:
- An internet browser and high-speed connection to the Internet (wired or wireless)
- Your wireless (WiFi) network name and password
- A valid e-mail address

To access the User Setup Wizard, press:

**Accessing the User Setup Wizard**

**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 XL 850 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 XL 850 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 XL 850 Control comes equipped with remote access and other features from Nexia™ Home Intelligence.

NOTE: If you are having difficulty enrolling the XL 850 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 XL 850 Smart Control!
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)

Press to access all user settings (see Settings Screen)

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 the Home Screen>Menu button and hold for 5 seconds to unlock screen

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

Enable and Disable Smart Optimization

Press to access System Information, Notifications and Alarms

Press to display your Dealer’s contact information

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

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
Use the Up and Down Arrows to change values
Press in the red or blue area, then adjust the Set Point using the up and down arrows
Press in the gray area to rename the Period
Press here for the Guided Schedule Tool
Press here to copy this day’s schedule to other days
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 XL 850 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.
The XL 850 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.
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.

### Delete Periods Screen

<table>
<thead>
<tr>
<th>Time</th>
<th>Wake</th>
<th>Away</th>
<th>Home</th>
<th>Sleep</th>
</tr>
</thead>
<tbody>
<tr>
<td>6:00 am</td>
<td>78°</td>
<td>85°</td>
<td>78°</td>
<td>82°</td>
</tr>
<tr>
<td>8:00 am</td>
<td>70°</td>
<td>62°</td>
<td>70°</td>
<td>62°</td>
</tr>
</tbody>
</table>

**Press the trash can to mark a period for deletion**

Press **Apply** to save changes and exit
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.
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 XL 850 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.
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 XL 850 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 XL 850 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

Including Z-Wave Devices
1. From the HOME>MENU Screen on the XL 850 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 XL 850 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.

Your XL 850 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 XL 850 will automatically configure itself as your Z-Wave bridge.

If you already have a Z-Wave bridge on your account, the XL 850 will automatically function as a Z-Wave repeater, improving your system’s communication quality. See the section titled Z-Wave Repeater for additional information.
In existing Z-Wave networks already configured with a Z-Wave bridge, the XL 850 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 XL 850 Control as a Z-Wave bridge.

When the XL 850 Control is functioning as a Z-Wave repeater, the Z-Wave Repeater Screen allows you to exclude the XL 850 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 XL 850 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 XL 850 Control from your account. This will disconnect the XL 850 from your account and remove the repeater from your Z-Wave network.

1. From the HOME>MENU Screen on the XL 850 Control, touch NEXIA.
2. Press UNREGISTER to remove from your Nexia account.
Security Settings

Security setting options on the 850 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.

<table>
<thead>
<tr>
<th>Screen Lock</th>
</tr>
</thead>
<tbody>
<tr>
<td>Off</td>
</tr>
<tr>
<td>On</td>
</tr>
</tbody>
</table>

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.

Apply | Cancel
Other Features

Automatic Software Upgrades
When the XL 850 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 XL 850, 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 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.

Quiet Mode
Quite Mode limits compressor operation (heating and cooling mode) to minimum speed from 10 p.m. to 9 a.m. This is to support local noise ordinances in the upper northwest and other regions.

Characteristics of Quiet Mode

- During heating mode, indoor heat is allowed if the system cannot maintain space conditions while Quiet Mode is active
- Quite Mode is only available for VSPD systems using an 850 control
- Quite Mode is disabled by default. To enable press “System Mode” on the home screen, then select “System Options” and “Enable”
- When active, Quiet will be displayed below the indoor temperature on the 850 home screen
**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.

June 2016

032-5091-04