



CLIMATISATION
FORTIER & FRÈRES



Lennox[®] S40 Smart Thermostat

User Guide

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Dallas, Texas, USA

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Features

The Lennox® S40 Smart thermostat recognizes and connects to all Lennox communicating products to automatically configure and control the heating/cooling system (based on user-specified settings) for the highest level of comfort, performance, and efficiency.

Display Features

- » 7" Capacitive touchscreen display
- » Screen resolution: 1280 x 800
- » Screen ratio: 16:9
- » Dots per inch: 72dpi

External Component Locations

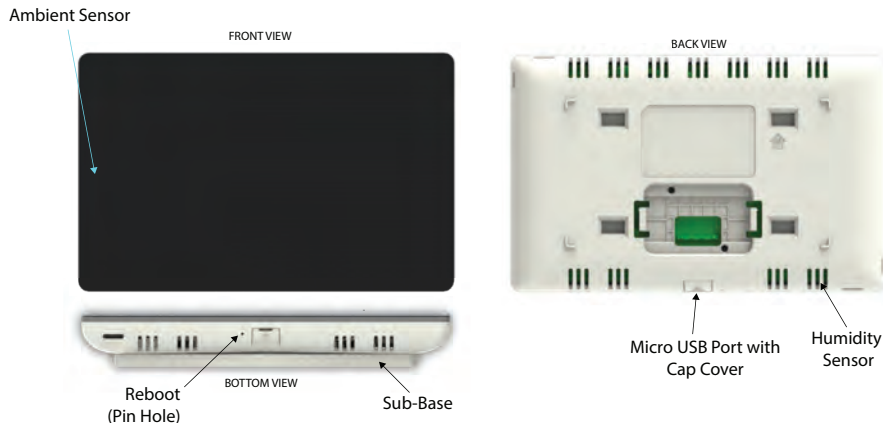


Figure 1. Thermostat External Components

Reboot Button, Micro USB Connection and Built-in Sensors

- **Ambient sensor** - This sensor determines ambient light levels around the thermostat. If screen brightness is set to **AUTO**, the thermostat automatically adjusts screen brightness based on surrounding room light. To set to **AUTO**, go to **Menu > Settings > Display** and enable **Auto Brightness**.
- **Humidity sensor** - This is the intake location for the built-in humidity sensor. Do not block the intake location. The indoor humidity percentage displays (enabled by default) on the home screen. The humidity percentage display can be disabled by going to **Menu > Setting > Display**.
- **Temperature sensor** - Detects the room temperature.

- **Reboot button** - Using a paper clip, press and hold this button for approximately six (6) seconds to reboot the thermostat. No settings are lost using this procedure.
- **Micro USB Port with Cap Cover** - For future use.

Comfort Features

- **Smart Away®** mode brings Lennox innovation to energy savings by doing what regular programmable thermostats cannot. Rather than simply following a set schedule, *Smart Away* lets the **Lennox® S40 Smart Thermostat** adapt to the homeowner's life, perfectly. *Smart Away* works with the GPS in home occupants' smartphones to detect when the house is empty. When it's sure that nobody is home, it sets the temperature to save energy. When the **Lennox® S40 Smart Thermostat** detects that someone is on the way home, it returns the system to normal operation so everyone always comes home to comfortable air.
- **FEELS LIKE™** brings Lennox innovation to comfort by optimizing and automating all the factors that affect how air feels. With the **Lennox® S40 Smart Thermostat**, simply set a single temperature. The thermostat will then take into account all the factors that affect comfort (including heating, cooling and humidity) and create the ideal environment. It's very similar to the "feels like" temperature on a weather report.
- **Allergen Defender** brings Lennox innovation to cleaner air by monitoring the air quality and pollen levels in your zip code. When high levels of pollutants or allergens are reported, the **Lennox® S40 Smart Thermostat** automatically increases fan speed to create more clean air per hour in your home.
- **Climate IQ®** monitors current climate conditions and automatically removes excess humidity when necessary (requires Lennox communicating outdoor unit).
- **Schedule IQ™** monitors for changes in the homeowner's routine. If there is a change in routine, the S40 Smart Thermostat adapts heating and cooling to match preset heating and cooling temperatures.
- **Perfect Temperature** (Single Set Point) allows a single temperature setting to be used to cool or heat the home (non-zoning applications only).
- Supports air conditioning or heat pump units with up to four stages of heat / two stages of compressor operation (two stages of heat pump heating, two stages of auxiliary back-up heating and two stages of emergency heating).
- Variable - capacity / Multiple - stage Heat • Cool, universal compatibility (gas/electric/heat pump/air conditioner). When the S40 is used with the variable speed equipment homeowners can save up to 30% on their energy costs over single stage equipment and 15% over two stage equipment.
- Dual-fuel capable when using Lennox communicating heat pump unit with two balance points.

- Humidification measurement and dew point adjustment controls.
- Heat • Cool mode - Controls heating, cooling, humidification, and dehumidification without user involvement.
- Compatible with **Lennox® Smart Room Sensors** for better temperature averaging throughout the home.

Optional Accessories

- **Lennox® Wireless Extender** - Use to increase the range for the *Lennox® Smart Air Quality Monitor* and *Lennox® Smart Room Sensors*.
- **Lennox® Smart Room Sensor** - Use for temperature averaging [up to a maximum of six (6) devices].
- **Lennox® Smart Air Quality Monitor** - Provides alerts, recommendations, and triggers air purification on demand. The *Lennox® Smart Air Quality Monitor* detects and tracks particulates, carbon dioxide and volatile organic compounds (TVOCs) inside the home. When poor quality air is detected, it triggers the system to cycle and clean the air.
- **PureAir™** and **PureAir™ S** - Air purification systems with time-based notifications of consumables including media filters, UVC bulbs, and *PureAir* system catalyst service / replacement.
- **Lennox® Smart Zoning** - Supports up to four zones.
- **Humiditrol®** Enhanced Dehumidification Accessory (EDA).
- ERV/HRV and fresh air dampers are supported when using a **Lennox® Equipment Interface Module**.

IMPORTANT

Due to Lennox' ongoing commitment to quality, features and options are subject to change without notice and without incurring liability.

Improper installation, adjustment, alteration, service or maintenance can cause property damage or personal injury. Installation and service must be performed by a qualified installer or servicing agency.

Download Lennox Smart Applications

Scan the QR codes listed as follows to download the specific application that is compatible with your mobile device.

Lennox® S40 Smart Thermostat App



Google Play
(Android™)



App Store
(iOS)

Additional Support

All QR codes listed below are Android™ and iOS compatible.



Smarter Together Support



Smarter Together Support
(Spanish & French)



Home Owner S40 Training Videos



Smarter Together - FAQs

Setup and Customization Process

The S40 Smart Thermostat has a built-in Setup and Customization Process that walks the homeowner through steps like accepting the End User License Agreement and thermostat features like *Setting a Schedule* and *One-Touch Away*. If the homeowner chooses to bypass the setup and customization process, a *S40 Pending Setup* badge displays on the home screen. The badge displays until the homeowner clears it.

Setup Process

NOTE: The Setup Process is completed in conjunction with the S40 Smart Thermostat and the Lennox Smart Thermostat mobile app.

The Setup Process allows homeowners to:

- » Choose the language for their S40 Smart Thermostat (English, Spanish or French)
- » Accept the End User License Agreement (EULA)
- » Select & connect the **Lennox® S40 Smart Thermostat** to the home Wi-Fi network
- » Scan QR codes to download the Lennox Smart Thermostat App
- » Pair the **Lennox® S40 Smart Thermostat** to the *Lennox Smart Thermostat App*

After the Lennox dealer installs the **Lennox® S40 Smart Thermostat**, a *S40 Setup Pending* badge displays on the home screen. Lennox recommends completing the Setup Process to experience the full potential of the **Lennox® S40 Smart Thermostat**.

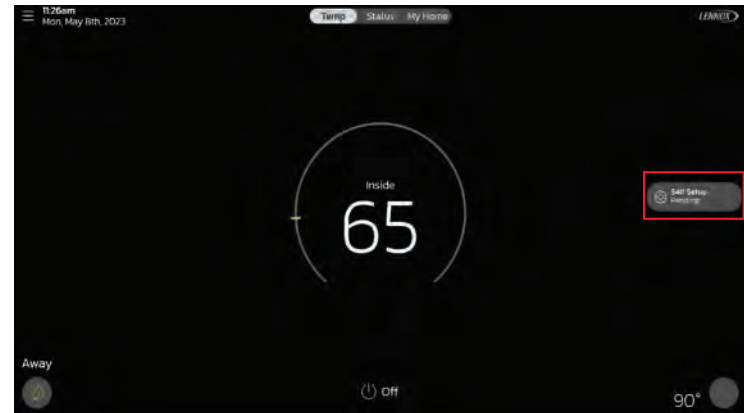
Customization Process

NOTE: The Customization Process is completed through the Lennox Smart Thermostat mobile app only.

The Customization Process allows homeowners to start using the top features of the **Lennox® S40 Smart Thermostat** according to their preferences. After completing the Setup Process, a “Customization is pending” badge appears on the home screen. See “Customize the S40 Smart Thermostat” on page 12 for more information.

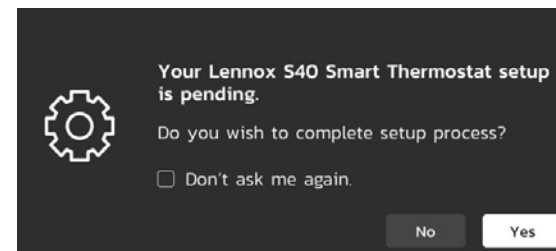
Set Up the S40 Smart Thermostat

The *S40 Setup Pending* badge displays on the thermostat’s home screen after the dealer or installer has completed their portion of the Setup Process. Homeowners can then complete the Setup Process by adding the **Lennox® S40 Smart Thermostat** to their user account and later customizing their thermostat. See “Customize the S40 Smart Thermostat” on page 12.



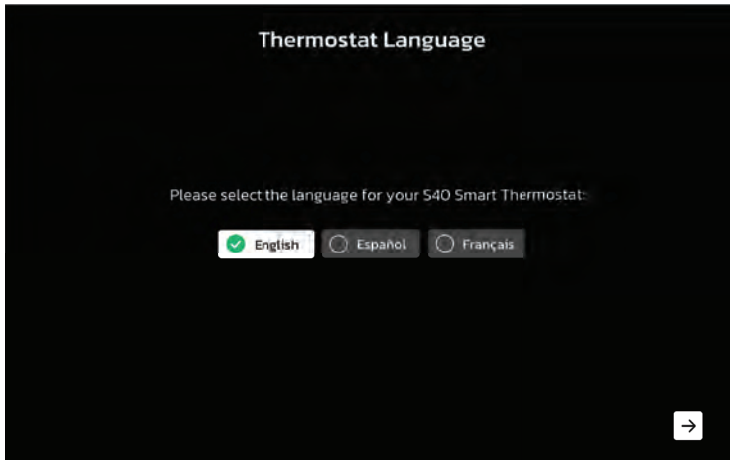
1. Press the **S40 Setup Pending** badge.

The following dialog displays.

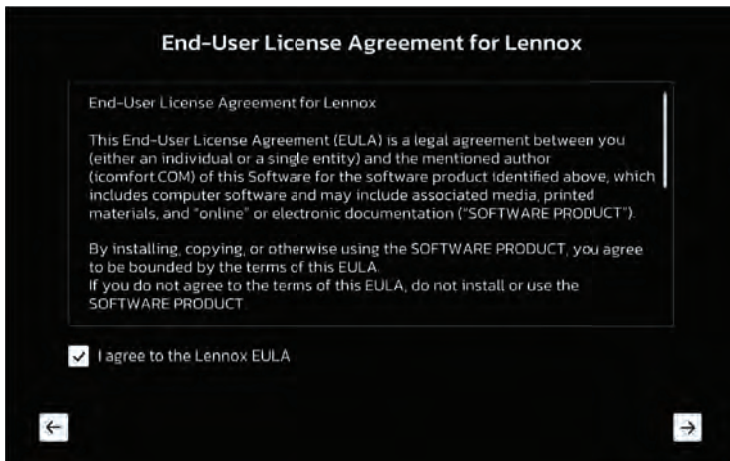


2. Press **Yes**.

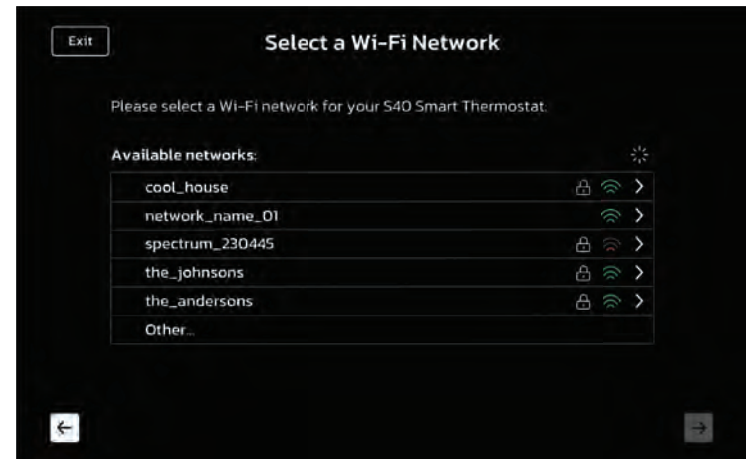
The *Thermostat Language* screen displays.



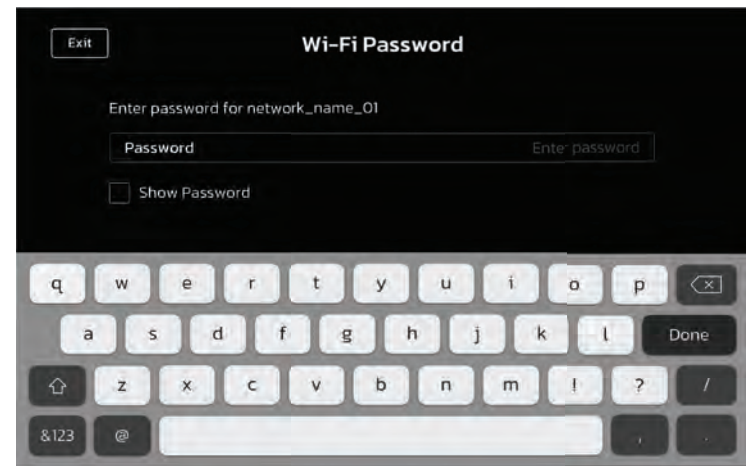
3. Select the preferred language for the **S40 Smart Thermostat** and press →.
- The *End-User License Agreement for Lennox* screen displays.
4. Review the End User License Agreement (EULA) and select the **I Agree to the LENNOX EULA** and press →



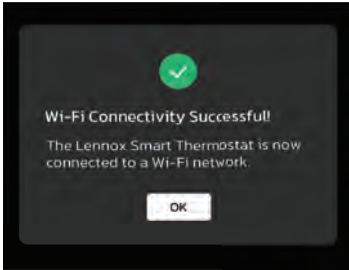
The *Select a Wi-Fi Network* screen displays.



5. Select the home's Wi-Fi network from the list of available networks. If the home uses a hidden network, see "Connecting to a Hidden Wi-Fi Access Point" on page 19.
6. Enter the Wi-Fi password via the virtual keyboard.

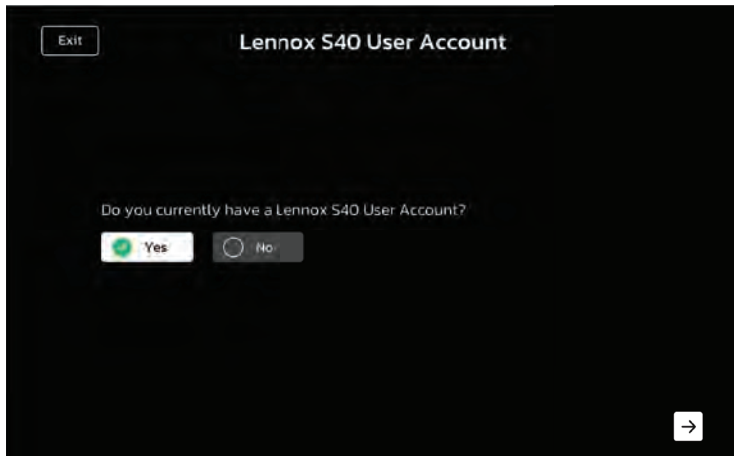


7. Press →
- A confirmation dialog displays when the connection is established.



8. Press **OK**.

The system asks whether the homeowner has an S40 User Account.



ADDING THERMOSTAT TO S40 USER ACCOUNT

This phase of the Setup Process walks the homeowner through the steps of adding their **Lennox® S40 Smart Thermostat** to their account.

NOTE: See “Selecting Yes” on page 8 if the homeowner has a *Lennox S40 User Account*. See “Selecting No” on page 9 for instructions on how to set up a user account if the homeowner does not have a *Lennox S40 User Account*.

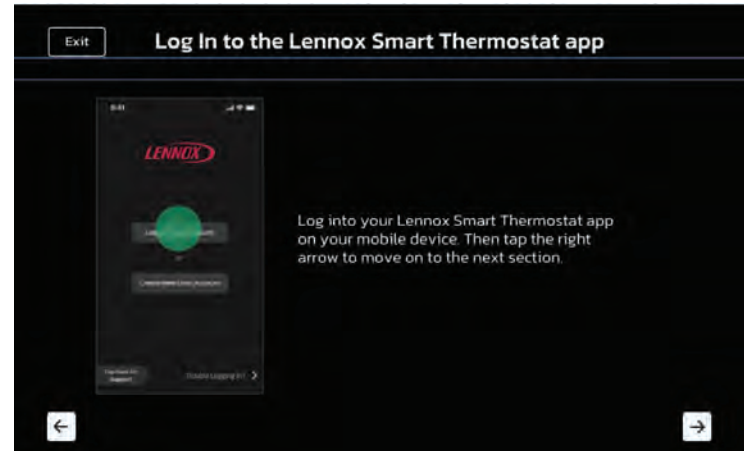
Selecting Yes

The system asks if the *Lennox Smart Thermostat App* is installed on the user’s mobile device.

1. Press **Yes**, → .

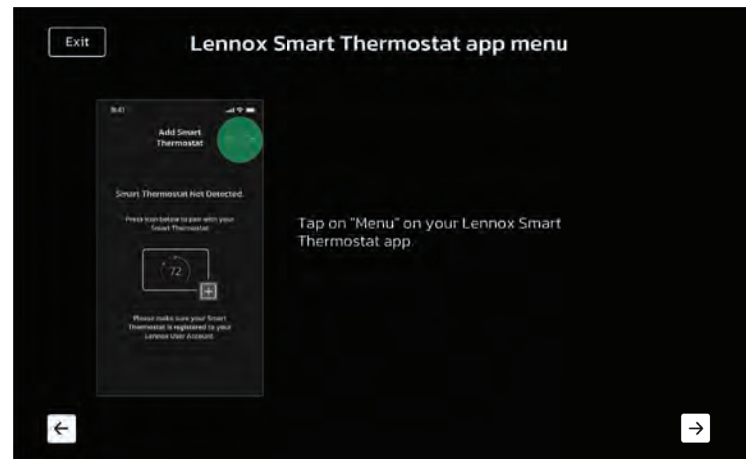
NOTE: If the *Lennox Smart Thermostat app* is not installed on the mobile device, see “Download Lennox Smart Applications” on page 5

The *Log In to the Lennox Smart Thermostat App* screen displays.



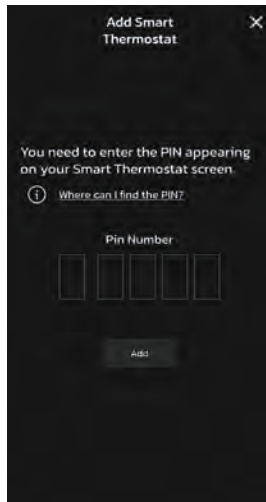
2. Press →.

The *Lennox Smart Thermostat App Menu* screen displays.

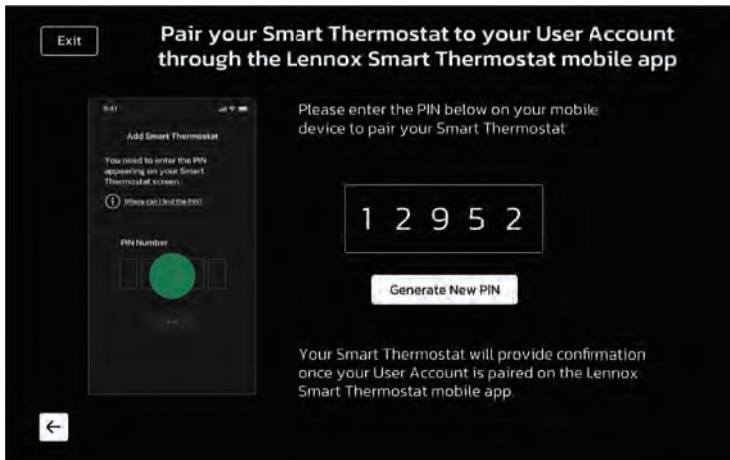


3. Follow the on-screen instructions.

- a. Tap **Menu** on the *Lennox Smart Thermostat app*.
- b. Select **Add Thermostat** (or press the thermostat icon on the screen).
The *Add Thermostat* screen displays.

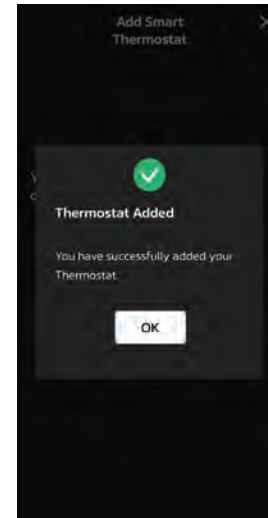


4. Return to the *S40 Smart Thermostat* and press →
The thermostat generates a PIN number.



5. Enter the PIN number into the **PIN number** field in the *S40 Smart Thermostat App* and press **Add**.

The *Thermostat Added* dialog displays. This message confirms the thermostat successfully paired with the mobile device and has been added to the user account.



6. Press **OK**.

The *Create Home or Select Existing Home* screen displays.
See “Create Home or Select Existing Home” on page 11.

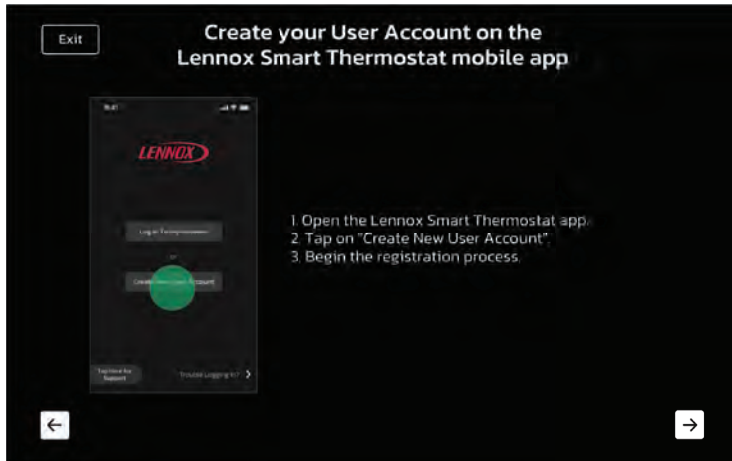
Selecting No

The *Download the Lennox Smart Thermostat App* screen displays.

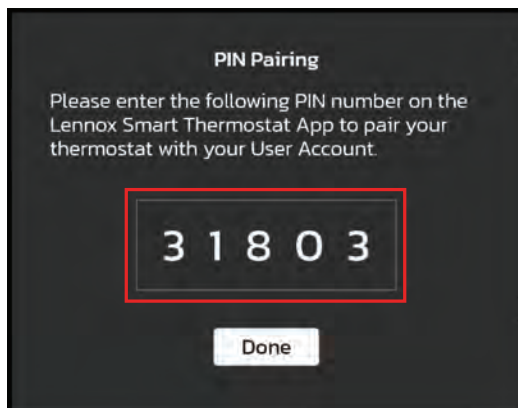


1. Scan the QR code and download the *S40 Smart Thermostat App*.
2. Return to the *S40 Smart Thermostat* and press → .

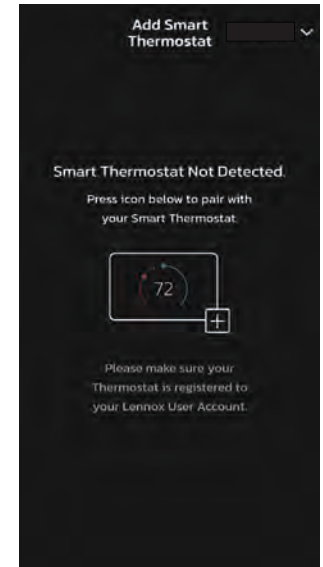
The *Create your User Account* screen on the *Lennox Smart Thermostat Mobile App* screen displays.



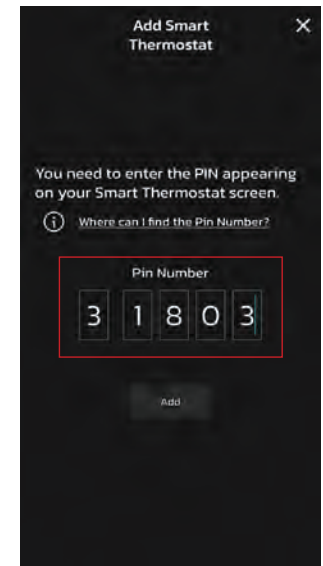
3. Follow the directions on the screen:
 - » Open the *Lennox Smart Thermostat App*
 - » Tap on **Create New User Account**
 - » Begin the registration process.
4. Press → on the thermostat screen. The thermostat generates a PIN number.



5. Return to the *Add Smart Thermostat* screen in the *S40 Smart Thermostat App*.
6. Press +.



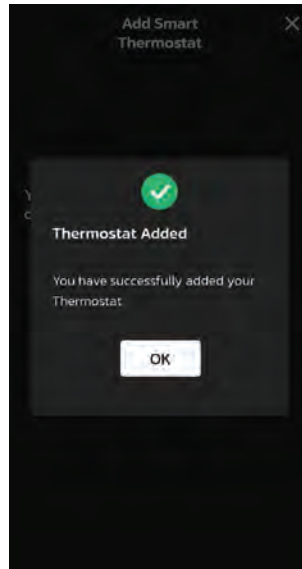
7. Enter the temporary PIN from the thermostat in the **PIN Number** field.
8. Press **Add**.



The *Thermostat Added* message displays.

11. Press **OK**.

The *Create Home or Select Existing Home* screen displays.



The **Add Home** screen displays.


1. Complete the following fields:

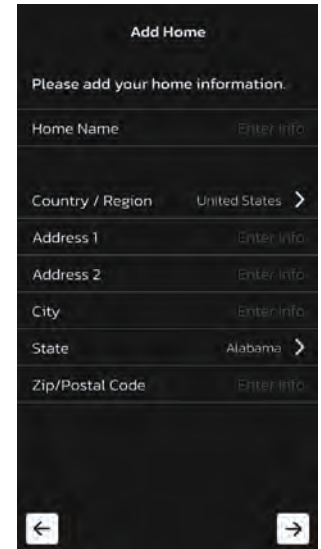
- » Home Name
- » Country/Region
- » Address 1
- » Address 2
- » City
- » State
- » Zip/Postal Code

2. Press →.

The system returns to the home screen.

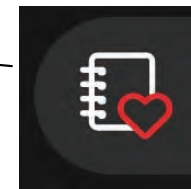
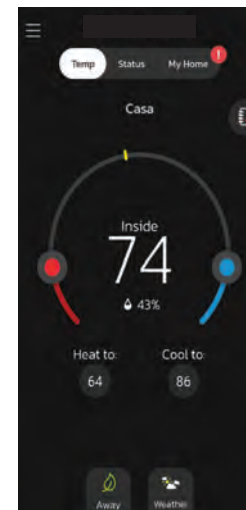
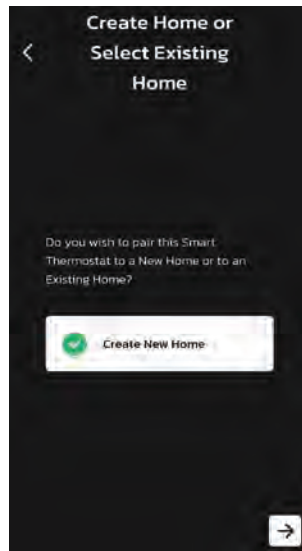
The newly entered Home Name now displays on the home screen of the thermostat.

Notice there is a badge  on the mobile screen.



CREATE HOME OR SELECT EXISTING HOME

1. Select **Create New Home** and press → to advance to the next screen.



Badge

The badge is the customization reminder. See "Customize the S40 Smart Thermostat" on page 12.

Customize the S40 Smart Thermostat

The customization process guides homeowners through the process of personalizing the top features of the **Lennox® S40 Smart Thermostat**. Before the homeowner can customize their thermostat, it must first be set up and connected to a Wi-Fi network by a Lennox Dealer or installer. After the setup process is complete, a badge displays on the home screen.

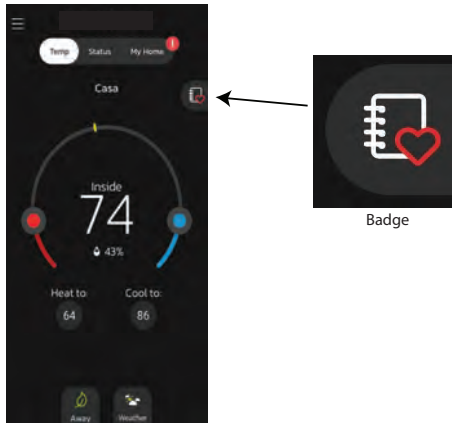


Figure 2. Customization Badge - S40 Smart Thermostat App

CUSTOMIZATION PROCESS

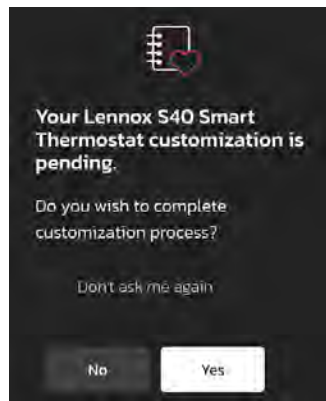
The customization process guides users through ten screens to personalize their **Lennox® S40 Smart Thermostat**.

1. Press the badge to begin the process.

The S40 Smart Thermostat customization dialog displays.

2. Press **Yes** to begin the customization process.

The *Set Schedules for Energy Efficiencies* screen displays.



Screen 1 - Set Schedules for Energy Efficiencies

1. Press **Yes** to set a schedule for energy efficiency or press **No** and → to bypass this step.

NOTE: Homeowners can press **Exit** at any point of the customization process to end the process. If at a later point the homeowner wishes to continue the process, the system will pick up where it last ended.

Pressing Yes

The **Save Energy** screen displays. This screen enables users to set a schedule.

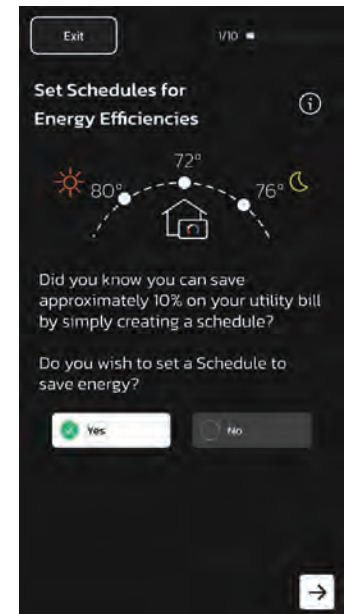
- a. Press **Add Period** to customize a new schedule.
- b. Press **Options**.
- c. Enter a name for the schedule in the **Schedule Name** field.
The new name immediately displays at the top of the screen.
- d. Press **Day Grouping** to select *All Days*, *Individual Days*, or *Weekdays/Weekends*.
This selection determines when the Energy Efficiency schedule will operate.
- e. Press **System Mode** to select **Cool Only**, **Heat Only**, or **Heat/Cool**.
- f. Press **Field Mode** to select **On**, **Auto**, or **Circulate**.

NOTE: Homeowners can reset Energy Efficiency schedules by pressing *Restore to Default Settings*. All schedules are cleared and new schedules can be set.


- g. Press **Back** to return to the **Save Energy** screen.

NOTE: Users can press **Add Period** to employ more than one schedule or delete a schedule by pressing **Delete Period**.

- h. Press → to advance to the next screen.



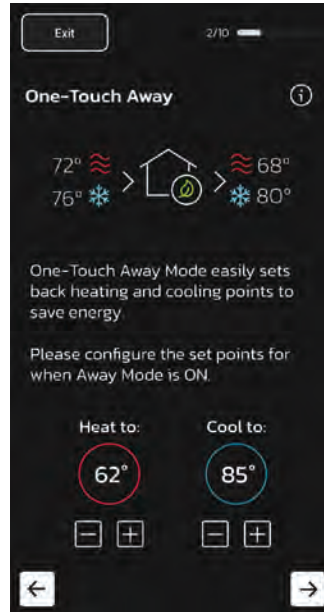
Screen 2 - One Touch Away

The thermostat reduces system output and energy use (when home occupants are away) with just a touch of the **Away** icon . Touch the icon again once occupants are home and the thermostat will restore normal heating and cooling schedules.

1. Press (-) or (+) to adjust the temperature for **Heat to** and **Cool to**.

The thermostat references the programmed temperature when the **Away** button is pressed.

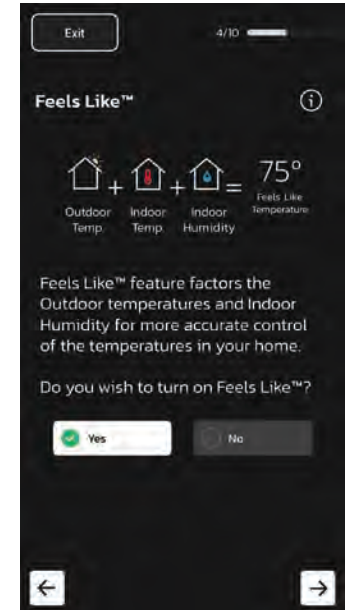
2. Press → to advance to the next screen.



Screen 4 - Feels Like™

The **Feels Like™** feature factors in the outdoor temperature and the indoor humidity for more accurate control of the temperatures in the home.

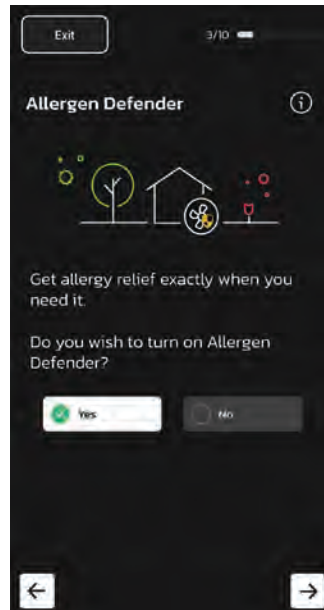
1. Select **Yes** to activate **Feels Like™** or select **No** to opt out the feature.
2. Press → to advance to the next screen.



Screen 3 - Allergen Defender

The Allergen Defender feature monitors for poor air quality and high pollen levels in the area (based on the ZIP code registered in the thermostat) and automatically increases the fan speed to clean the indoor air when outdoor air quality is less than ideal.

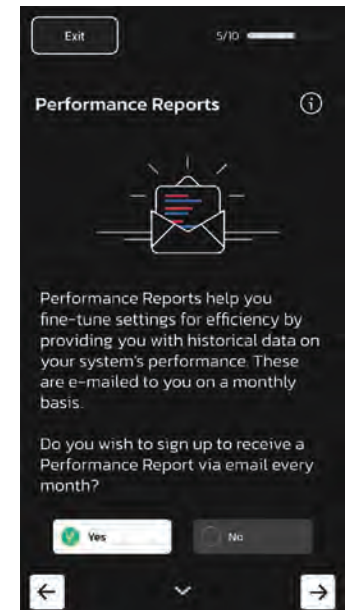
1. Select **Yes** to activate **Allergen Defender** or select **No** to opt out the feature.
2. Press → to advance to the next screen.



Screen 5 - Performance Reports

The **Performance Reports** feature provides data on the system's performance. Users that opt in are emailed a monthly performance report. This report can be useful if there is a need to fine-tune the system.

1. Select **Yes** to receive a monthly report or select **No** to opt out the feature.
2. Press → to advance to the next screen.



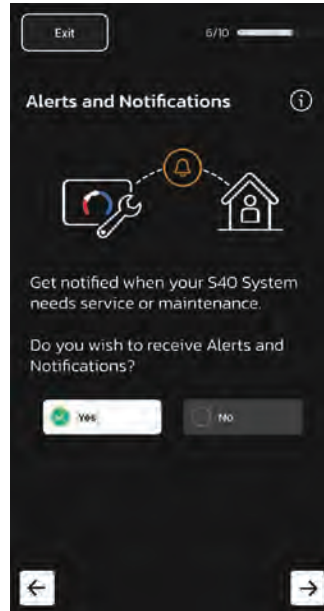
Screen 6 - Alerts and Notifications

The **Alerts and Notifications** feature notifies homeowners when their S40 System requires service or maintenance.

1. Select **Yes** to receive alerts and notifications or select **No** to opt out the feature.

NOTE: Alerts and notifications are sent to the email registered in the user account.

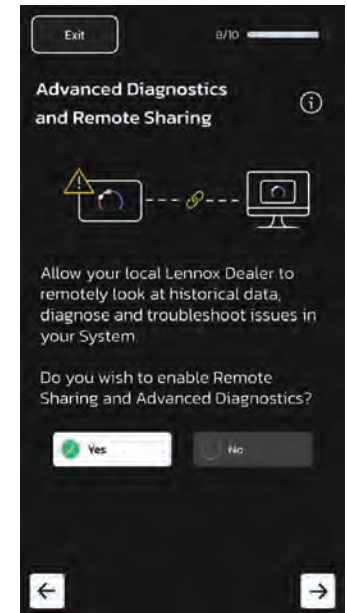
2. Press → to advance to the next screen.



Screen 8 - Advanced Diagnostics and Remote Sharing

The **Advanced Diagnostics and Remote Sharing** feature enables the homeowner's local Lennox Dealer to remotely diagnose and troubleshoot system issues.

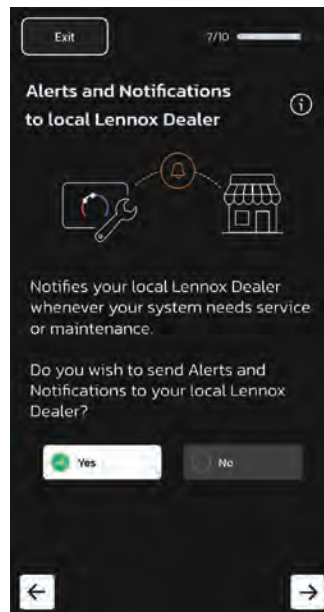
1. Select **Yes** to grant permission for remote access to the system by a local Lennox Dealer or select **No** to opt out the feature.
2. Press → to advance to the next screen.



Screen 7 - Alerts and Notifications to Local Lennox Dealer

The **Alerts and Notifications to Local Lennox Dealer** feature notifies the homeowner's local Lennox Dealer that the S40 System requires service or maintenance.

1. Select **Yes** to alert the local Lennox Dealer or select **No** to opt out the feature.
2. Press → to advance to the next screen.



Screen 9 - Screensaver

Homeowners can select from four screensaver options:

- » Off
- » Weather
- » Power Save
- » Photo

1. Select **Yes** to upload a photo as a screensaver or select **No** to opt out the feature.

Selecting No

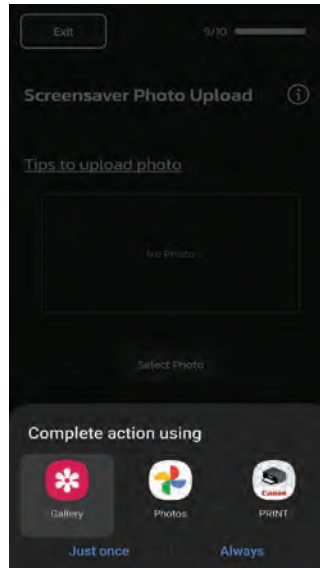
Press → to advance to the next screen.

NOTE: See "Display Settings" on page 27 for detailed instructions on how to change the display to one of the remaining three options.



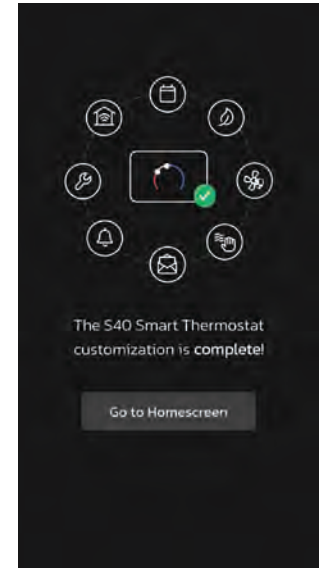
Selecting Yes

- a. Press **Select Photo** to navigate and select the photo of choice.
 - b. Press **Upload Photo**.
The selected photo displays in the **Photo** field.
2. Press → to advance to the next screen.



S40 Smart Thermostat Customization - Complete

This screen displays after the thermostat has been successfully customized. Homeowners can begin using their thermostats by pressing **Go to Home screen**.



Screen 10 - Smart Home Devices

The **Smart Home Devices** feature enables homeowners to access their **Lennox® S40 Smart Thermostat** via the following smart home devices:

- » Amazon Alexa
- » Google Home
- » Control 4

Tap the logo of choice for information on how to integrate the **Lennox® S40 Smart Thermostat**.

Press → to advance to the next screen.



Create a New User Account

1. Download the **Lennox Smart Thermostat App** from either the Apple App Store or on Google Play to your mobile device.
2. Verify that the thermostat is connected to the home Wi-Fi and that all indicators are green and check marked as illustrated in “Figure 3. Thermostat Connectivity Status” on page 19.

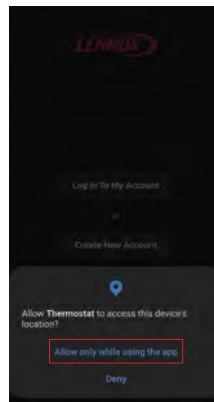
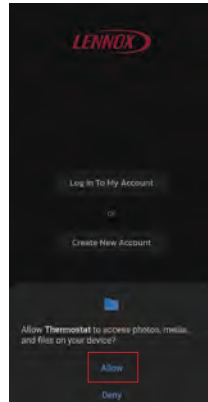
NOTE: The **Lennox® S40 Smart Thermostat** must be set up before the homeowner can add the thermostat to their new account (and is usually completed by the dealer or installer). See *Set Up the Lennox® S40 Smart Thermostat in the Lennox® S40 Smart Thermostat Installation and Setup Guide*.

3. Launch the **Lennox Smart Thermostat** app.
4. Select **Allow**.
This is required if the homeowner intends to upload a photo as a screensaver on the thermostat.

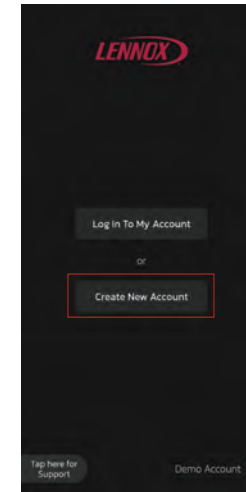
The **Allow Thermostat to access this device's location** pop-up dialog displays.

This is required if the homeowner intends to use the **Smart Away** feature to control the thermostat.

5. Select **Allow only while using the app**.



6. Select **Create New Account**.



The *Registration* screen displays.

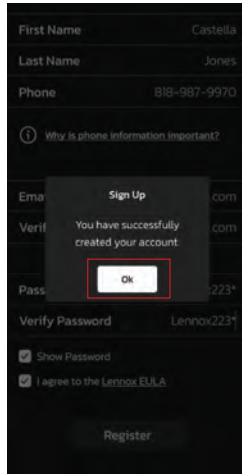
Please complete the registration form.

First Name	Enter Name
Last Name	Enter Last Name
Phone	Enter Phone
<i>Why is phone information important?</i>	
Email	Enter Email
Verify Email	Verify Email
Password	Enter Password
Verify Password	Verify Password
<input type="checkbox"/> Show Password	
<input type="checkbox"/> I agree to the Lennox EULA	

Register

7. Complete all fields on the *Registration* screen.
8. Select the box to agree to the **Lennox End User License Agreement**.
9. Press **Register**.

The *Sign Up* pop-up dialog displays.



10. Click **OK**.

The *Add Smart Thermostat* screen displays.



Manually Adding S40 Smart Thermostat to Account

IMPORTANT

The preferred method to creating a new Lennox thermostat account and adding the thermostat to the account is through the Lennox Smart Thermostat App.

1. Verify that the thermostat is connected to the home Wi-Fi and that all indicators are green and check marked as illustrated in “Figure 3. Thermostat Connectivity Status” on page 19. From the home screen, go to **Menu > Settings > Wi-Fi**.
2. From your thermostat’s home screen, go to **Menu > User Account**.
3. Select **Create New Account**.
4. Enter account details such as your first and last name, phone, email address, and password.
5. Select whether you want to receive e-mail updates and reminders.
6. Select allow your dealer to receive notifications (highly recommended).

IMPORTANT

Please verify that your dealer has already added their account and contact information when they installed your thermostat. That information can be found at **Menu > Lennox Dealer Support Access > Local Lennox Dealer Info**. If this information is missing, please contact your local Lennox Dealer and get the information you need to complete your dealer contact information.

7. Select agree to **EULA** (End User License Agreement).
8. Enter your information and select **Next**. Enter your country/region, address, city, state, and zip code.
9. Select **Create Account**.
10. It is important that you provide your **Lennox Home Comfort System Dealership remote sharing** and **Advanced Diagnostics and Troubleshooting (On / Always)** options.

Tips for Connecting the Thermostat to the Home Wi-Fi

MULTIPLE S40 THERMOSTATS IN THE HOME

If the home will have multiple S40 thermostats then they all **MUST** be on the same 2.4GHz Home Wi-Fi network in order to communicate with each other.

Wi-Fi CONSIDERATIONS

- This thermostat cannot connect to a home wireless router that uses more than 32 characters in the wireless access point name (visible or hidden).
- This thermostat will support up to a 63 character Wi-Fi password. Passwords cannot contain blank spaces or % symbol.
- If the home Wi-Fi connection is unsecured, then Wi-Fi security **MUST** be enabled. Consult router documentation on how to enable Wi-Fi security
- This thermostat supports the following Wi-Fi security protocols: **WEP, WPA, WPA2 and WPA3**.
- Never use a home guest account.
- Always use a secure connection physically located in the home where the thermostat is located.
- Lennox S40 and S30 Smart Thermostats are not designed to communicate with each other even when on the same network.

SUPPORTED Wi-Fi NETWORK TYPES

Supported wireless network types are listed as follows:

Table 1. Supported Wi-Fi Standards

Standard	Description
802.11b	Compatible.
802.11g	Compatible.
802.11n (Wi-Fi 4)	Compatible.
802.11ac (Wi-Fi 5)	Compatible. NOTE: MIMO is not supported.
802.11ax (Wi-Fi 6)	Not directly supported. Wi-Fi 6 routers are 100% backwards compatible with Wi-Fi 5 and older Wi-Fi devices. NOTE: MIMO is not supported.

Manually Connect to Wi-Fi

CONNECTING TO A VISIBLE HOME Wi-Fi ACCESS POINT

1. Go to **Menu > Settings > Wi-Fi** (from Thermostat's home screen).
2. Slide the option to the **ON** position to enable **Wi-Fi**.
3. Select **Not Connected** to display a list of available access points.
4. Select the home Wi-Fi network.
5. Enter the home Wi-Fi network password and select **Join** to continue.

NOTE: Select *Show Password* to view characters entered.

6. Verify the **Thermostat Connectivity Status** indicator appears as illustrated in “Figure 3. Thermostat Connectivity Status”. All connect icons will need to display green check marks across all connections.

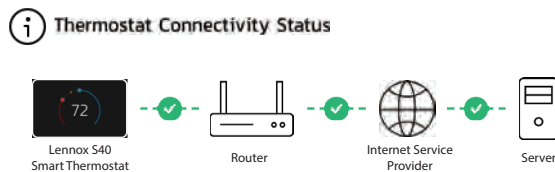


Figure 3. Thermostat Connectivity Status

CONNECTING TO A HIDDEN Wi-Fi ACCESS POINT

1. Go to **Menu > Settings > Wi-Fi** (from the thermostat's home screen).
2. Slide the option to the **ON** position to enable **Wi-Fi**.
Wi-Fi network indicator will show not connected.
3. Select **“not connected”**.
4. Scroll down and select **other**.
The **“enter new network information”** screen will appear.
5. Enter the name of the hidden network.
6. Select the Wi-Fi access point **Security**. Options are: **none, WEP, WPA, WPA2** and **WPA3**. Once a security type is selected, a password field will appear.
7. Enter the Wi-Fi password to connect to the home Wi-Fi network.

NOTE: Select *Show Password* to view characters entered.

8. Select **Join**.

9. Verify the **Thermostat Connectivity Status** indicator appears as illustrated in “Figure 3. Thermostat Connectivity Status”. All connect icons will need to display green check marks across all connection

Electromagnetic Interference Causing Poor Connectivity

The thermostat and router should be located away from other devices that could possibly interfere with wireless communications. Some examples of other devices that could interfere are:

- Microwave ovens
- Wireless cameras
- Portable phones and bases
- Baby monitors
- Wireless speakers
- Bluetooth devices
- Garage door openers
- Neighbor's wireless devices

To eliminate a possible source of interference, temporarily disable any devices and see if Wi-Fi performance has improved.

Wi-Fi Terminology

The following terminology is used in this troubleshooting section:

- **Received Signal Strength Indication (RSSI)**. This indicates the signal strength of the Wi-Fi router being received by the scanning device (i.e., smart phone). The higher the RSSI number (or less negative in some devices), the stronger the signal.
- **Internet Protocol Address (IP address)**. This is an address assigned by your home router for each network device (e.g., computer, printer, thermostat).

Received Signal Strength Indicator (RSSI)

The RSSI can be viewed from the thermostat.

1. Select **Menu > Settings > Wi-Fi >** and select **right arrow** next to the Wi-Fi network name and then select it again (from the home screen).
2. When selecting the right arrow (>) the second time, a screen will appear which will display an option to forget the network. In addition IP address, subnet mask, router IP, DNS, MAC Address, Speed, wireless type, BSSID and RSSI.

NOTE: If the RSSI signal strength is anywhere between -9 to -69, then the signal strength is sufficient. If outside this range, then either relocate the router closer to the thermostat, add a repeater, or move the thermostat. Adjusting antenna on router or extender/repeater may resolve the issue.

Thermostat Home Screen Details

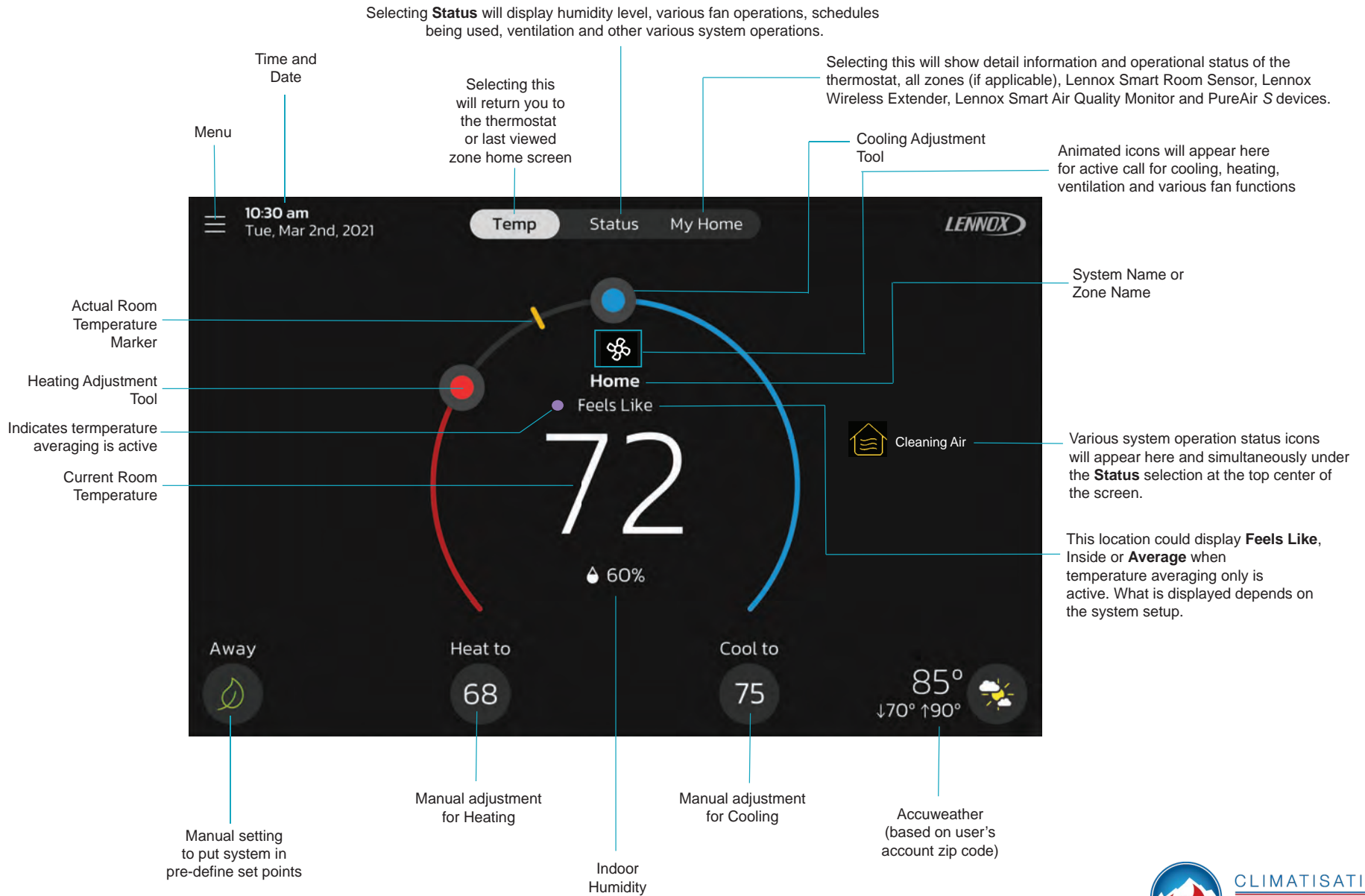


Figure 4. Thermostat Home Screen

Temperature Settings

Large display of current inside temperature (°F or °C)

Heating and Cooling Set point Indicators on the round temperature band

Current cooling set point temperature Button (Cool-To)

Current heating set point temperature Button (Heat-To)

Selecting the heat or cool set point indicators on the round temperature band, or selecting the Heat-To or Cool-To buttons displays the heat or cool menu screens.

Both heating and cooling set point indicators on the round temperature band and the Heat-To and Cool-To buttons are displayed if the system is set to Heat/Cool mode or if an active schedule is set to Heat/Cool mode.

Current Outdoor Temperature and Weather Forecast

Displays current outdoor temperature in °F or °C and the current weather forecast.

The default outdoor temperature is supplied by the outdoor air temperature sensor or the Wi-Fi data connection (homeowner selectable on the thermostat). The outdoor sensor is furnished as standard with Lennox® Communicating outdoor units, optional for conventional units.

Time and Date Display

Displays current date and time

NOTE: *Date and time are automatically set based on the address zip code if the thermostat is connected to the Internet and user account completed. Manual adjustment can be made if the thermostat is not connected.*

Humidity Display

Displays the current inside relative humidity below current indoor temperature.

Away

The user can manually put the system into away mode by pressing the **Away** icon located on the bottom left-hand side of the *Home* screen. When the system is in **Away**, a status notification (**Away is Active**) displays on the right-hand side of the *Home* screen.

In order to exit **Away**, select **Cancel** located on the bottom left-hand side of the *Home* screen. Selecting the **Away is Active** status notification will display the current set point range for high and low temperature settings. There is also the option to select **Cancel** here as well by selecting **Yes**.

While in **Away**, the **Away Set points** are used to control the high and low temperature setting for the thermostat and all zones simultaneously if Smart Zoning is installed. The **Away Set points** can be changed from the default values by going to **Menu > Settings > Away**.

Temp

Returns to the thermostat *Home* screen or the home screen for a specific zone if Smart Zoning is installed. Displays current temperature screen for the current system where the thermostat and sensors are located.

Select *Temp* from the *Status* or *My Home* screen to return to the thermostat *Home* screen or last zone viewed.

Status

Displays current system operating status for the current system/area where the thermostat and sensors are located. Details include humidity levels, Feels Like™ being active, any of the various fan modes, and various other system background activities.

My Home

This screen displays Lennox Smart Home devices and equipment such as multiple S40 Smart Thermostats on the same home network, Smart Room Sensors, Wireless Extenders, Air Quality Monitor, PureAir S and Zoning Control are all optionally purchased items and will appear on this screen if installed.

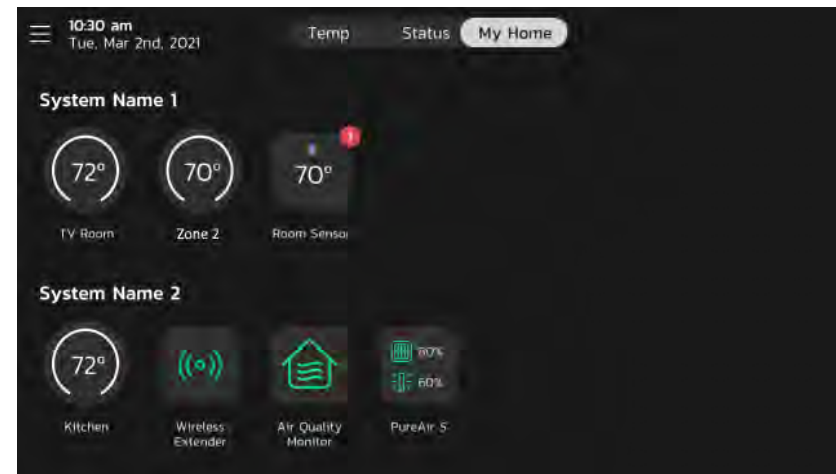


Figure 5. My Home Screen

- » Selecting any item on this screen will display the detail screen for that device.
- » A yellow or red dot with an explanation point indicates there is an alert condition for that specific device.

Thermostats and Zones

Selecting the icon will bring up either the thermostat *Home* screen or the home screen for a specific zone selected, if a zoning system is installed. For further details concerning zoning control, see “Smart Zoning System” on page 38.

Lennox Smart Room Sensor

! IMPORTANT

The Lennox Smart Room Sensor is currently not compatible with systems using the Lennox Smart Zoning System (iHarmony) installed.

NOTE: *The Lennox Smart Room Sensor is an optional accessory sold separately.*

Selecting this option displays the details of the sensor selected, including the current room temperature in which the sensor is installed.

Additional details include:

- » whether the sensor is participating in temperature averaging
- » humidity level in the room
- » whether the room is occupied or unoccupied
- » battery percentage
- » Wi-Fi connection strength

See “Lennox Smart Devices” on page 41 for further details.

Lennox Smart Air Quality Monitor

NOTE: *The Lennox Smart Air Quality Monitor is an optional product sold separately.*

Selecting this option will display the **Current Air Quality**. Color indicators are **Green** indicates good, **Yellow** indicates fair and **Red** indicates poor.

In addition a Bluetooth signal strength indicator is provided to show the signal status.

There are also three options that can be selected. Those options are **Monitor Settings**, **Air Pollutants** and **More Information**.

When selecting Monitor Settings the following options are available:

- **Air Quality Monitor Name** allows the user to rename the sensor using the virtual key board.
- **Device Type** will always show Monitor.
- **About Air Quality Monitor** will list model and serial numbers along with firmware version.
- **Level of Indoor Air Cleanliness**. Options are **High**, **Medium** and **Basic (Most Economical)**

Information concerning **Air Pollutants** and **More Information** can be found further in this guide (see “Lennox Smart Air Quality Monitor” on page 43).

Lennox Wireless Extender (BLE)

NOTE: *The Lennox Wireless Extender BLE (Bluetooth Low Energy) is an optional product sold separately.*

Select this icon to prompt the wireless strength indicator. There is an additional selection called **Extender Settings**.

The *Extender Setting* screen includes:

- **Extender Name:** Shows the current name of the extender; can also be renamed from this screen.
- **Device Type:** Extender
- **About Extender:** Lists the model, serial number and firmware version.

See “Lennox Wireless Extender” on page 42 for further details.

PureAir S

NOTE: *The Lennox PureAir S is an optional product sold separately.*

Select this option to display the **PureAir S** filter life. Red indicates 1-10% filter life left, yellow indicates 11-30% filter life left and green indicates 31-100% filter life left.

Also available are:

- **More Info:** Information is listed here on the **PureAir S** product.
- **Reminders:** You can set service reminders here for 1 day, 1 week, 1 month, 3 months or custom.
- **Service Contracts:** This will list the service contact if it has been entered into the thermostat.

Home and Status Screens Icon Descriptions

Table 2. Home and Status Screens Icon Descriptions









Icon	Function or Screen Text	Purpose
	Menu	Select this icon to prompt the user and installer menus.
	Menu with Notification Icon	If there are one or more notifications this icon will appear over the menu icon. The number in the center indicates how many active notifications are present.
	Feels Like™ is Active or Turning Feels Like™ on	Optimizes and automates factors that affect comfort (including heating, cooling, and humidity) and creates the ideal environment. It's very similar to the "feels like" temperature on a weather report. If the "Feels Like™" feature is enabled, <i>Feels Like™</i> displays below the system name on the <i>Home</i> screen.
	Smart Away is Active or Away is Active	When the <i>Away</i> icon is selected, the system will automatically use energy saving settings - heat-to 62 (16.5) and cool-to 85 (29.5). Temperatures can be adjusted by pressing the available temperature setting (i.e., heat-to or cool-to). To exit <i>Away</i> , press the <i>Cancel</i> icon. In a zoning system, all zones are set to a single heat-to and cool-to setting. Note that when manually selecting <i>Away</i> from the <i>Home</i> screen, the Smart Away feature (if enabled under settings) will be temporarily disabled until <i>Away</i> is canceled.
	Heating	System is heating the home. This animated icon will appear above the system name on the <i>Home</i> screen.
	Cooling	System is cooling the home. This animated icon will appear above the system name on the <i>Home</i> screen.
	Humidifying	If humidification equipment is installed and configured, the system will display this message when adding humidity to the air in the home.
	Dehumidifying	The system can be used in cooling mode to help remove excessive humidity as determined by the user setting. Go to Menu > Settings > Humidity > and turn on dehumidify . Then adjust the acceptable low and high humidity levels in the home with the dehumidification set-point slider.

Table 2. Home and Status Screens Icon Descriptions









Icon	Function or Screen Text	Purpose
	Defrosting	The heat pump system is defrosting the outdoor unit coil. Not available for non-heat pump systems.
	Emergency Heat	All heat pumps operating in northern climates below 35°F (1.6°C) normally need a supplemental heating source. Usually it is in the form of electric heating provided by the indoor unit. Other sources could be gas, oil, or hot-water back-up systems as well. The supplemental heat is also referred to as “second-stage” or “back-up” heating, with “first-stage” being the heat pump only. Emergency heat is supplemental heat (2nd stage) is used solely, without the use of a heat pump (1st stage heat). Not available for non-heat pump systems.
	Auxiliary Heat	If outdoor temperature is above the high balance point, only the heat pump will operate - default 50°F (10°C) high. If outdoor temperature is below the low balance point, only auxiliary heating will operate - default 25°F (-4.0°C) low. If outdoor temperature is in-between the high and low balance point, both the heat pump and auxiliary heat sources can operate. Not available for non-heat pump systems.
	Will start soon	A five minute safety delay prevents the compressor from operating too soon after shut-down to allow internal pressures to equalize.
	Ambient lockout	This indicates that either the outdoor temperature is above or below the balance point temperature settings. The low balance point setting prevents heat pump heating below the set point and back up heat will be used. Typically the default is 25°F (-4.0°C), but that setting can be adjusted by the dealer. At 25°F (-4.0°C) or below for example, only auxiliary heating (electric or gas) is used. If the high balance point is set to 50°F (10°C) for example, which is also adjustable by the dealer, then auxiliary heat will not be allowed. Only heat pump heating will be used. Anytime the outdoor temperature is below or above the balance point temperature settings, the ambient lockout notice will appear on the <i>Home</i> screen.
	Fan is running	Fan set to ON . Fan is NOT following the schedule and runs continuously until it is changed from the selected mode.
	Fan in auto mode is active.	Fan set to Auto . Fan will follow the fan setting in the selected schedule.
	Fan in circulate mode is active.	Fan set to Circulate . Fan is following schedule and cycles during periods of equipment inactivity. Circulate run time is dependent on user settings.

Table 2. Home and Status Screens Icon Descriptions













Icon	Function or Screen Text	Purpose
	Fan in Allergen Defender mode is active	Allergen Defender: Go to Menu > Settings > Fan to turn on or off Allergen Defender . Internet weather must be enabled and the pollen count is high for the following pollens (Grass, Ragweed, Mold, Tree and Overall Pollen) the fan will run between heating or cooling demands to help clean the air. Works best with MERV 11 or higher filter. Allergen Defender only runs when no other fan modes (On, Auto or Circulate) are being utilized.
	System Under Test	Typically occurs when the system has suffered a power interruption. The thermostat starts to look for the indoor and outdoor controls. Sometimes the outdoor control takes longer to boot up and therefore does not respond to inquiry by the thermostat. Recycling power to the system may resolve the issue.
	Aux Heat	Auxiliary heating is active.
	Load shedding, wait time 45 min	Action to reduce the load on something, especially the interruption of an electricity supply to avoid excessive load on the generating plant.
	Service Urgent	Service Urgent indicates that a service call is needed to get the system running. Selecting the icon prompts a pop-up screen: Service Urgent . The system has encountered a problem. Alarm ID: xxxx and a description of the alarm is provided. Select OK to cancel the pop-up screen.
	Coasting to Perfect Temp	Coasting allows the current temperature to reach the desired single set-point without the system doing any work. The red arrow indicates the temperature is less than the desired set point. The blue arrow indicates the temperature is greater than the desired set point.
	Coasting to Perfect Temp	
	Ventilating or Ventilating unit (specific Time)	This indicates the system is actively ventilating and the precise time the cycle will end. Selecting cancel will terminate the current ventilation session. Selecting the icon will display a pop-up screen. Ventilating until x:xx pm . Do you wish to cancel? Options are No or Yes .
	Peak Monitoring until x:xx pm - x:xx pm	The utility company will automatically set the energy savings time period. You can select cancel to exit this mode. Canceling the function opts the system out of the current active energy savings events. A pop-up screen will ask to verify this is the intention. Selecting the icon will display a pop-up screen. Peak Monitoring will be active from x:xx pm to x:xx pm .

Table 2. Home and Status Screens Icon Descriptions

Icon	Function or Screen Text	Purpose
	Transitioning to next schedule	The system is following an active schedule and is transitioning to the next temperature setting based on a time indicator.
	Schedule hold until next period	Selecting the icon will display a pop-up screen. Schedule will hold until next schedule setting. There is also the option to select duration of hold or cancel. Options to select are Cancel, Duration and Hold .
	Schedule Hold until xxxx	Two pop-up dialogs may appear. Schedule will hold. Do you wish to cancel? Options are Yes or No . Schedule will hold until xxxx. Do you wish to cancel? Options are Yes or No .
	Cleaning Air	When the Lennox Smart Air Quality Monitor has determined that there is poor air quality in the home it will run the indoor unit fan or any other indoor air quality devices installed to clean the air. Select this notification on the thermostat <i>Home</i> screen to view details concerning the air quality or postpone the air cleaning for a specified time period.
	Postponing Cleaning Air	From the thermostat <i>Home</i> screen, select Cleaning Air . Options to view details and postpone display. Selecting postpone displays a screen where homeowners can select to postpone cleaning for 1, 2, 4, 8 or 24 hours.

Menu

Select the Menu button on the *Home* screen to display the Menu screen. If multiple thermostat control systems are available they will be shown below the General menu settings.

General

Notifications

Filters for displaying notifications are **All Notifications** (options that can be checked off are **All Notification**, **Service Urgent** and **Maintenance**) The second filter option is **All Time Periods** and the selection options are **All Time Periods**, **Last 24 hours**, **Last 30 days** and **Last 12 months**.

User Account

This section is only accessible if the thermostat has an active connection to Wi-Fi. On this screen homeowners have the option to sign into an existing account or create a new account.

Also available is the **Generate Pin** option if setting up an account using the **Lennox Smart Thermostat App**.

Once the account has been created and thermostat added to that account, then information under this section can be edited at any time.

Selecting **User Account** directs homeowners to the **User Settings** screen. Homeowners can select their **Email** (>) to view and edit information such as correct **First** and **Last Name**, **Change Phone Number**, **Email and Password**, **View EULA** and toggle on **Email Updates** and **Monthly Report Email** (System Performance Information).

There is also a option to **Move Out** at the bottom of the **User Settings** screen. Selecting this option will remove the thermostat from the Lennox account. This would be done typically if the home is being sold or the homeowner is replacing the thermostat.

Display Settings

The available settings are:

- **Auto Brightness** with an option for either **ON** or **OFF**. When set to **OFF**, there is an adjustment bar to set the brightness level.
- **Screen Lock** with an option **Unlocked**, **Partially Locked**, and **Locked**.

Press and hold the lock icon for 3 seconds to unlock (Partially Locked and Locked)

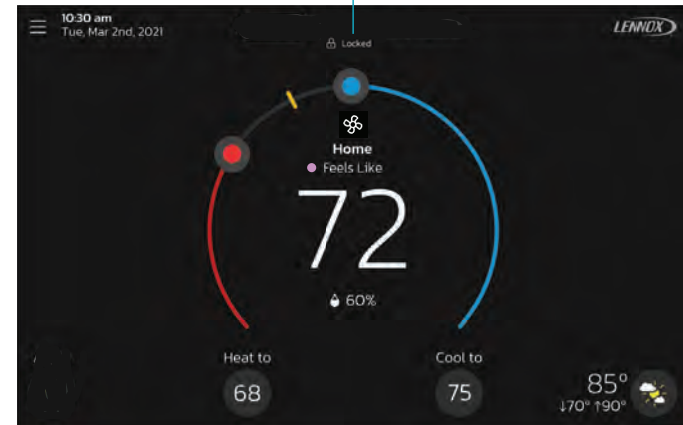


Figure 6. Unlocking

NOTE: Lock screen can also be used to clean the thermostat screen.

- **Proximity Sensor** which is **ON** by default. When set to **ON**, the display will automatically turn on when approached. When set to **OFF**, users must touch the screen to activate it.
- **Screen Saver** which by default is set to **OFF**. Options are **OFF**, **Weather**, **Power Save** (blank screen) and **photo**. Photo can be upload to the thermostat by using the **Lennox® S40 Smart Thermostat app**.
 - » Use the **Lennox Thermostat App**, select **Menu > Display Settings > Screensaver** and upload an image from this screen. If the upload is successful a confirmation screen will indicate so.
 - » From the thermostat **Home** screen, select **Menu > Display Settings >** and turn on Screensaver and then select **Photo**. The photo you just uploaded from the **Lennox Smart Thermostat App** should appear and ask you to **accept** or **reject**. Select **accept** to use the picture as a screensaver.
- **Home screen** settings are:
 - » **Outdoor Temperature by Source**. Options are Accuweather or outdoor temperature sensor. Default setting is Accuweather. To display Accuweather, there must be a good Wi-Fi and Lennox server connection. Also, the homeowner must be logged into their user account.
 - » **Outdoor Weather**. This options allows the homeowner to turn on or off outdoor weather on the **Home** screen.

Indoor Humidity. This options allows the user to turn on or off indoor humidity being displayed on the *Home* screen.

Lennox Dealer Support Access

⚠ IMPORTANT

A great investment has been made in the home's heating and cooling system and peak performance is expected by homeowners. With a simple, **ON / Always** option, this S40 Smart Thermostat forever changes HVAC equipment diagnostics, maintenance, and repair. It provides basic maintenance notifications and alerts, performance reports, and the ability for dealers to remotely diagnose and troubleshoot. This proactive and responsive HVAC care is valid for the lifetime of the HVAC system. Promising peace of mind by doing away with unnecessary dealer visits, avoiding potential repair costs, and ensuring nothing short of perfect air. In some instances, the dealer may be able to correct a problem without ever having to come to the homeowner's home, saving both parties time and money.

Local Lennox Dealer Info: Homeowners have the options to either display information already populated on this screen or edit the service contact information. This is where details such as Name, Country, Address, phone, email and website information can be added.

Dealer Support Access:

- » **Remote Sharing** - Allow service provider to remotely view the status of your system. By default this option is set to OFF.
- » **Alerts and Notifications** - Allows service provider to be notified when homeowner's system needs maintenance. By default this is set to OFF.
- » **Advanced Diagnostics and Troubleshooting**
 - » **Off** - Does not grant authorization to service provider to troubleshoot the system remotely.
 - » **On / Always** -Grants authorization to service provider to troubleshoot the system remotely.

System

NOTE: Lennox® recommends renaming the system to a name other than "System" or "system" especially if the homeowner intends to use voice control via a smart home device such as Amazon Alexa. If the homeowner decides to keep the name "System" or "system," the homeowner would need to address the system as "Thermostat" when using voice control via a third-party smart home device.

Mode

This screen allows the homeowner to set the operating mode of the system. Options are **Emerg Heat**, **Heat Only**, **Heat / Cool**, **Cool Only** and **Off**.

Schedule (Single Zone)

All schedule profiles shown in Figure 7 can be customized including schedule name, starting time for each period and related heating and cooling temperature settings for each period.



Figure 7. Schedule Options Screen

Schedule Profiles

- **No Schedule** - System is not following a schedule. All changes are performed manually.
- **Schedule IQ** - This schedule operating in heat / cool mode and answering a few simple questions will allow the system to know how to set the temperature for the home based on time settings. By default there are two times and temperature settings that can be adjusted using the edit schedules option.

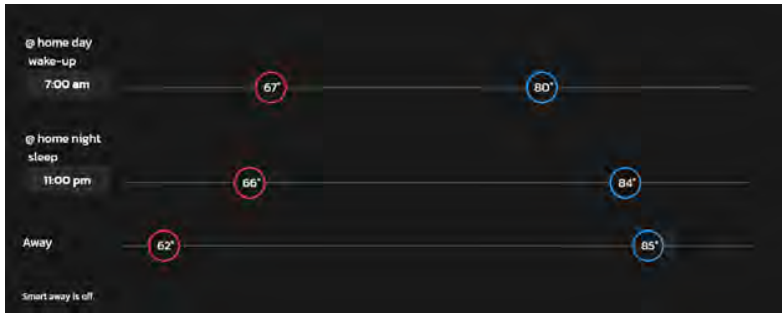


Figure 8. Schedule IQ Setup Screen

- » **At home day wake-up** default time is 7:00am and low temperature setting of 67°F and high temperature setting of 80°F. Start time can be adjusted by pressing the current time setting and can be adjusted as exemplified in Figure 9.
- » **At home night sleep** default time is 11:00PM and low temperature setting of 66°F and high temperature setting of 84°F.
- » **Away** - When away from home, Smart Away when enabled (see “Away” on page 31) is used to set the temperature while the home is unoccupied. The default low temperature setting of 62°F and high temperature setting of 85°F. Temperatures for any of the options above can be adjusted by sliding the low and high temperature circle left or right on the sliding scale.

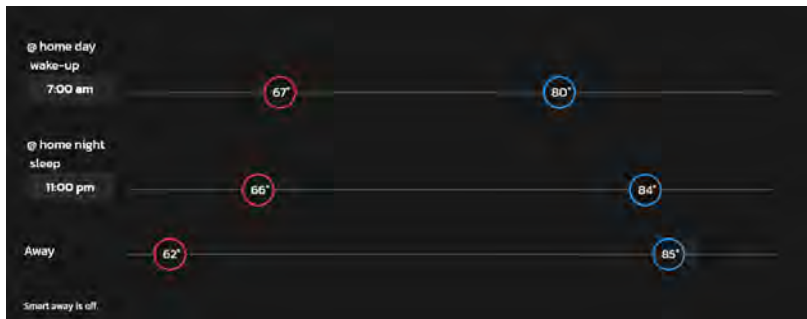


Figure 9. Schedule IQ Setup Screen

- **Summer** – Provides the average Summer indoor cooling set points for home temperatures. Temperatures and time periods can be adjusted to desired set points.

- **Spring/Fall** - Provides the average Spring/Fall indoor cooling set points for home temperatures. Temperatures and time periods can be adjusted to desired set points.
- **Winter** – Provides the average Winter indoor heating set points for home temperatures. Temperatures and time periods can be adjusted to desired set points.
- **Save Energy** – Provides the recommended Energy Star set points recommended by the Environmental Protection Agency energy savings.

NOTE: All of the above schedule profiles can be customized to meet your particular needs.

Schedule Options

On each schedule screen except for **Schedule IQ**, there is an option located in the top right-hand corner of the screen that will allow homeowners to customize their experience even further.

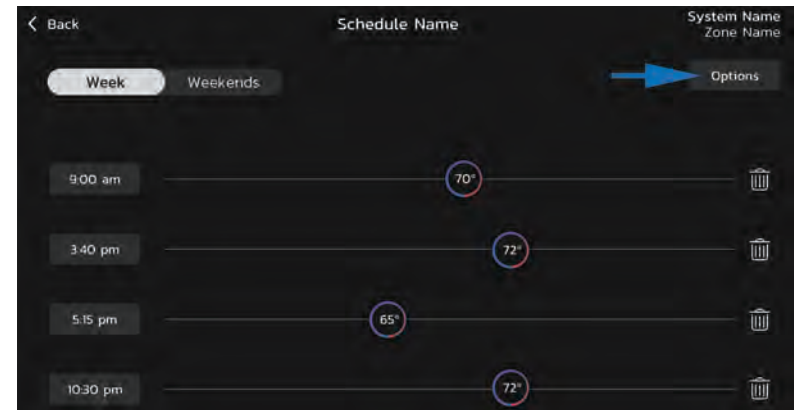


Figure 10. Schedule Screen Options

Homeowners can rename the schedule profile, assign day grouping, system mode, fan mode, fan duration and restore to default.

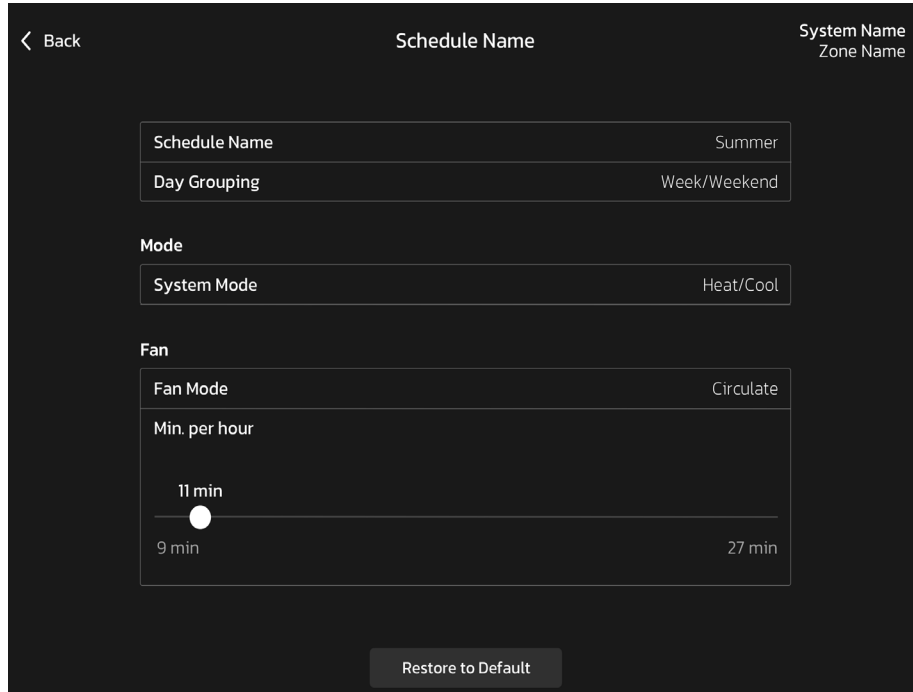


Figure 11. Schedule Name Screen

Schedules (Zoning)

For a zoning system, any profile that is assigned to a specific zone will be affected by any customization made to that specific schedule profile.

! IMPORTANT

If a unique schedule profile for a specific zone is desired, it is recommended to rename Summer, Spring/Fall, Winter and Save Energy to each specific zone. Doing so will allow for a unique schedule for a specific zone.

The following illustration is an example how to rename the schedule profiles to match a specific zone in order to have a unique schedule just for a specific zone.

NOTE: Profile labeled **No Schedule** cannot be renamed or edited. Profile **Schedule IQ** renaming is not allowed.

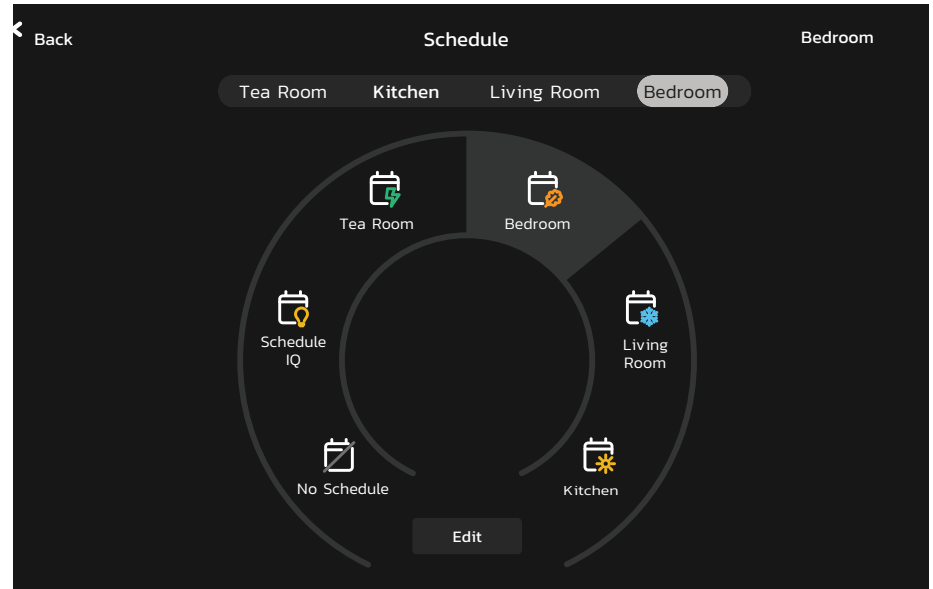


Figure 12. Unique Schedule Profile for Each Zone

Fan (On, Auto and Circulate)

Options are:

- **On** - indicates the system will run the fan continuously.
- **Auto** indicates the system will run during a call for heating or cooling only.
- **Circulate** will run predetermined number of minutes to an hour. The setting for this duration per hour can be found at **Menu > Settings > Fan**. Options are 9 to 27 minutes per hour.

Settings

The system setting screen allows the homeowner to connect to their home Wi-Fi router and give their system a name.

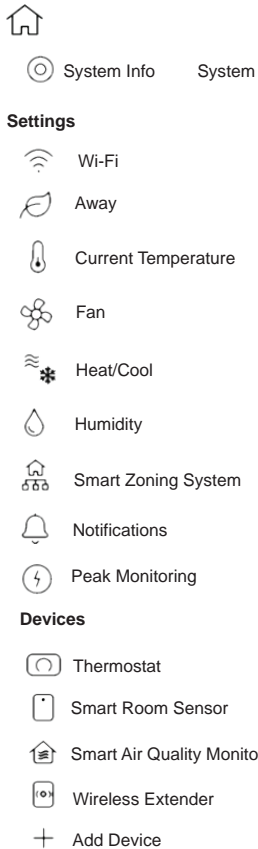


Figure 13. User Setting Menu

System Info

Selecting this menu item allows the homeowner to rename their system.

Settings

Wi-Fi

See “Figure 3. Thermostat Connectivity Status” on page 19 for information on how to connect to the home Wi-Fi network.

Away

NOTE: Most of the procedures listed in this section can be accomplished at the thermostat or using the Lennox® S40 Thermostat App or consumer web portal. See “Download Lennox Smart Applications” on page 5.

Manual Away

The homeowner can manually put the system into away mode by pressing the *Away* icon. When the system is in *Away* mode, the horseshoe is grayed-out and shows the *Away* status text. In order to exit away mode, the homeowner can press the *Cancel* icon. In away mode, the *Away* set points are used to control the system. The homeowner can modify the *Away* set points from the default values in **Menu > Settings > Away**.

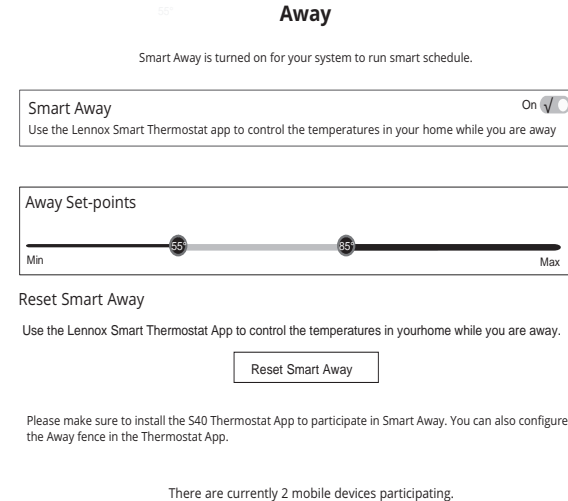


Figure 14. Away Settings

Smart Away

Both **Home Info** and **Account** options must be completed before this feature can be enabled.

The *Smart Away* feature depends on:

- *Lennox S40 Thermostat App* continuously running on the homeowner's mobile device (smart phone or tablet) and being logged in to their account.
- Requires Wi-Fi and location settings to be enabled on the homeowner's mobile device. Android devices must also have the location mode set to "high accuracy." Consult the mobile device user guide for instructions.

Smart Away can also be enabled from the mobile device once the Lennox S40 Thermostat App has been installed and launched. Go to the **Menu > Settings > Away** and turn ON **Smart Away**. To allow the mobile device to use this feature, turn ON participate. The *Away Fence* option will appear and by default, the setting is two miles (3 km). The range for this setting is 2 to 6 miles (3.00 to 9.50 km).

Inner and Outer Away Fences

The inner *Away Fence* is set by the user anywhere between 2 to 6 miles (3.00 to 9.50 km) on the mobile app. This setting can be different for each participating mobile device. When any of the participating mobile devices are located inside of its inner *Away Fence*, the system will not be in **Smart Away**. The system will use the temperature set points defined by the schedule or what was manually set. Once the inner *Away Fence* is set, the outer fence for each participating mobile device will be automatically calculated by the **Smart Away** algorithm.

Transition Set Points

When the closest participating mobile device is between the inner and outer *Away Fences*, the thermostat will show the **Smart Away** indicator. The system will use transition set points to heat or cool the home. The transition temperature set points are automatically calculated by the *Smart Away* algorithm using a combination of the home and away set points.

Away Set Points

Once all participating mobile devices have moved outside the transition range, the thermostat will continue to show the *Smart Away* indicator and the homeowner's *Away* set points will be used to control the system.

Example:

The away set points are 65°F (18.5°C) for heating and 85°F (29.5°C) for cooling.

- » If the *Away Fence* is set to two miles for all participating mobile devices and the closest participating mobile device is within the 0-2 miles (0 to

3.22 km) range of the home, the system is considered home. The system will use the set points from the schedule or what was manually set.

- » If the closest participating mobile device moves into the 2.1 to 8 miles (3.40 to 13.04 km) range, the system is considered in transition. The system will start to either increase or reduce the heating or cooling set point.

Once all participating mobile devices have moved beyond the 8.1 mile (9.50 km) range from the house, the system sets the set points to the *Away* set points (65°F for heating and 85°F for cooling).

Multiple Mobile Devices

It is possible to have more than one mobile device participating in **Smart Away** for this system. The *Away Fence* can be set to the same value or different values for each mobile device. The thermostat will not show the **Smart Away** indicator until all devices have moved past their inner *Away Fence*, and the system will not reach the homeowner *Away* set points until all devices have moved past their outer fence.

NOTE: *Smart Away* will be canceled when the system is enrolled in energy savings with a utility provider and an energy saving event is active.

Mobile Device Location Services

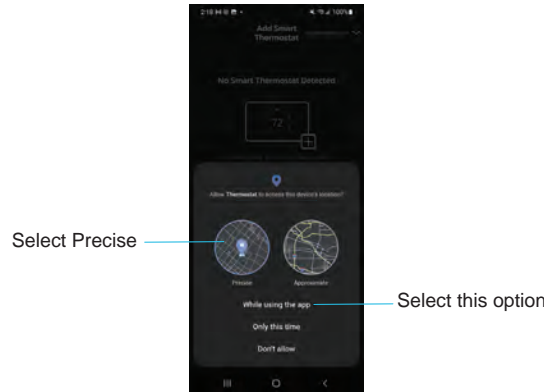
To use **Smart Away** on IOS devices, the mobile device must be running IOS 12, 13, 14 or 15. Location Services Settings are as follows:

1. Location services will need to be enabled for this feature to work. Go to **Settings > Privacy > Location Services**.
2. Select **Always Allow** for *Smart Away* to control the temperature in the home while occupants are away.
3. Select **Always Allow** with **Precise Location Enabled** for *Smart Away* to control the temperature in the home while occupants are away.
4. Select **Allow While Using App** for *Smart Away* to control the temperature in your home while occupants are away.

To use **Smart Away** on Android devices, the mobile device must be running Android Version 9 or higher. Location Services Settings are as follows:

1. (Android versions 9 and 10) When allowing the Lennox Thermostat app access to device location, the user must select **Allow all the time** for the *Smart Away* feature to work correctly. Go to **Settings > Apps > Thermostat > Permissions > Locations** and **Allow all the time** setting is enabled.

- (Android version 11) To ensure location services for the *Smart Away* feature are not auto-disabled by Android operating system, go to:
 - Settings > Apps and Notifications > Select All Apps > Thermostat > Permissions** and locate **Remove permission if app isn't used** and ensure this setting is **disabled**.
 - Settings > Locations > Apps access to location > Thermostat** and select **Allow all the time**.
- (Android version 12) When running the setup for the *Lennox® S40 Smart Thermostat App*, the user is asked to enable permissions for precise location. Select the two options illustrated here.



Current Temperature

Feels Like™

This feature is not a temperature setting, it is the temperature that the space feels like based on current outdoor, indoor temperature, and indoor humidity. When **Feels Like™** is set to **On**, the words **Feels Like™** will appear above the indoor temperature display on the *Home* screen.

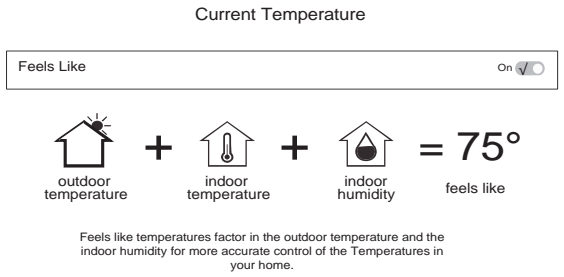


Figure 15. Feels Like™ Screen

Using Smart Room Sensors

When **Lennox Smart Room Sensors** are installed in the home the homeowner has the option to include individual Smart Room Sensors for determining a better **Feels Like™** control of the entire home. Using the temperature detected at each sensor will be factored into the **Feels Like™** result when enabled.

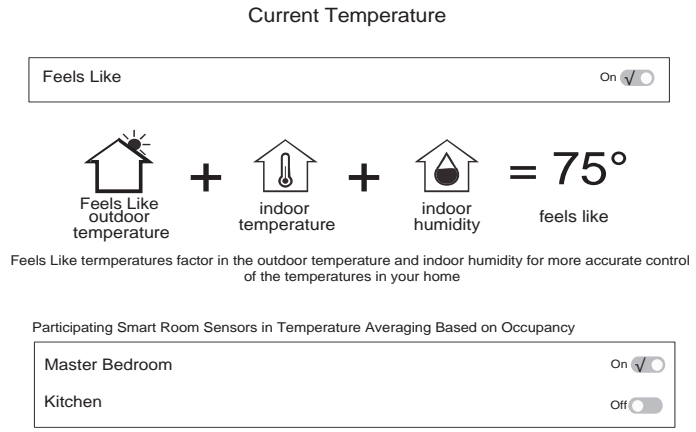


Figure 16. Feels Like™ Screen with Smart Room Sensors Selected

Sleep Mode

Sleep Mode allows one or more Smart Room Sensors to be the primary source for temperature in a room. Sleep Mode can also turn off the temperature sensor in the main S40 Smart Thermostat. For example, if the *Sleep Mode* is ON in the primary bedroom between the hours of 9 pm and 6 am, the Smart Room Sensor increases comfort while the primary room occupants are sleeping. The *Sleep Mode* setting overrides the main thermostat and any other sensor(s) not required during those hours. At least one Smart Room Sensor must be active during *Sleep Mode*, but multiple sensors can be set to *Sleep Mode*.



Go to **Menu > Settings > Current Temperature**. The *Sleep Mode* feature displays beneath *Participating Devices in Temperature Averaging Based on Sleep*.

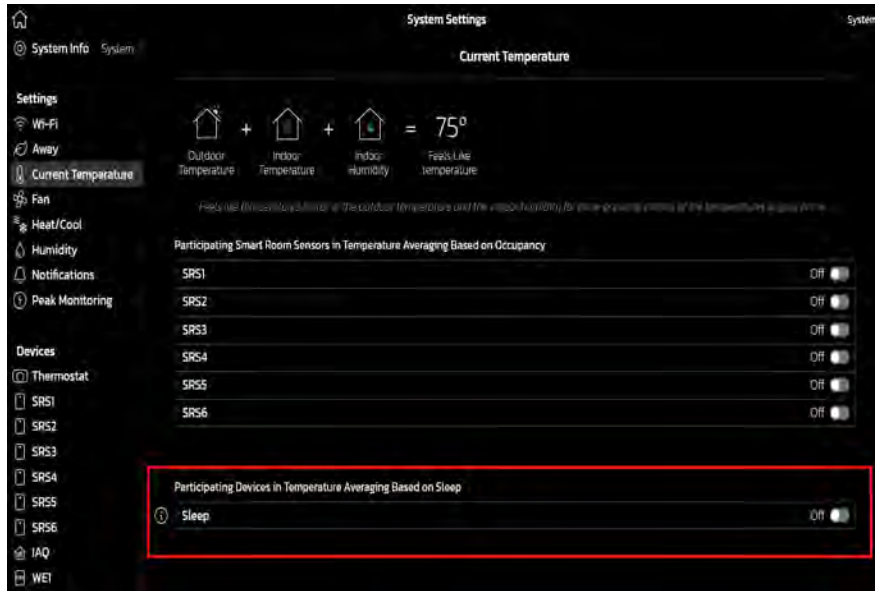


Figure 17. Thermostat - Sleep Mode Feature

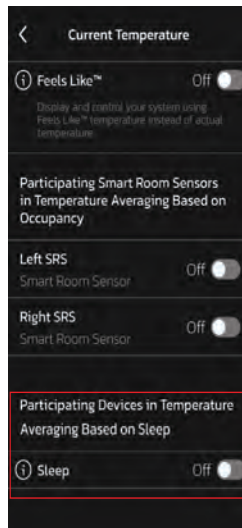


Figure 18. S40 Smart Thermostat App - Sleep Mode Feature

ENABLE/DISABLE SLEEP MODE

1. Click the toggle switch from **OFF** to **ON** to enable Sleep Mode.
2. Click the toggle switch from **ON** to **OFF** to disable Sleep Mode.

SET SLEEP MODE SCHEDULE

1. Click the toggle switch from **OFF** to **ON** to enable Sleep Mode. When Sleep Mode is enabled, the time scheduling fields **From** and **To** display (see Figure 19).



Figure 19. From and To Scheduling Fields

NOTE: When Sleep Mode is disabled, the *From* and *To* Scheduling fields are unavailable.

2. Click the double dash **--** in the **From** field. The Set Time dialog displays.



Figure 20. Set Time Dialog

3. Scroll to set the hour and minute to begin Sleep Mode.
4. Scroll to select between AM and PM and click **Set**.
5. Click the double dash in the **To** field.
6. Repeat steps 3 and 4 to set when the *Sleep Mode* ends.
7. Select the Smart Room Sensor(s) and/or thermostat to participate in temperature averaging. The sensor(s) and Sleep Mode schedule display as confirmation of selections. See "Figure 21. Thermostat - Sleep Mode Selections".

NOTE: At least one Smart Room Sensor must be **ON** in order to calculate the current temperature.



Figure 21. Thermostat - Sleep Mode Selections

Figure 21 shows Sleep Mode enabled, the Sleep Mode schedule, and the Smart Room Sensors that have been selected to function in Sleep Mode. Notice the selections are confirmed beneath the Smart Room Sensor list on the thermostat.

Fan

Allergen Defender

Go to **Menu > Settings > Fan** to turn on or off Allergen Defender. Internet weather must be enabled and the pollen count is high for the following pollens (Grass, Ragweed, Mold, Tree and Overall Pollen) the fan will run between heating or cooling demands to help clean the air. Works best with MERV 11 or higher filter.

Circulation Timer Adjustment

Air circulation can be adjusted on this screen. Adjustments between 9 to 27 minute duration per hour. The circulate option runs during any mode selected except when the system is turned off.

Heat / Cool

This screen allows changes to how the system operates. Options are single set-point, heat pump mode (normal or comfort), auxiliary heat and safety protection.

Perfect Temperature

1. This option will only be available in non-zoning systems. This option allows the user to control both heating and cooling temperatures with one single temperature setting. Factory default is off.

NOTE: *When set to Perfect Temp, the Heat • Cool position indicator changes. The blue color (cooling) indicator is on the left and heating (red) indicator is on the right. This is just the opposite on how it is displayed in normal Heat • Cool mode. Also the Heat • Cool mode indicator will display Auto instead.*

NOTE: *Perfect Temp is not compatible with Google Assistant. Google Assistant will not be able to adjust the home temperature.*

2. **Select Heat Pump Mode:** (only available with system using a heat pump). Options are normal and comfort. Default is normal. Descriptions for what each setting does is displayed on the screen.

Wider Set-Point Range

Changes the default low and high maximum temperature setting from 60-90°F to 40-99°F (15.5 - 32.0°C to 4.5 - 37.0°C).

Auxiliary Heat

When the outdoor temperature is above the high balance point, only the heat pump is allowed to run. When outdoor temperatures are below the low balance point, only the auxiliary heat source is allowed to run. When outdoor temperatures are between the high and low balance points, then both the heat pump and auxiliary heat source are allowed to run.

Auxiliary heat is the use of an additional heat source. When the heat pump BTU capacity is not sufficient to keep up with the home's heating demand; sometimes it is also called *supplemental heat*. When used in a dual-fuel mode, auxiliary heating is accomplished with a gas or oil fired unit. In this mode of operation, the heat pump must shut down and uses just the auxiliary heating unit for heating.

If the system is an air handler with electric heat, the auxiliary heat will be in conjunction with the heat pump when the home heating requires it. Another use of auxiliary heat with heat pump systems includes a setting called *Balance Point*. Balance point puts temperature limits on when the heat pump and electric heat can work together, or independently.

- » When the outdoor temperature is above the default high balance point of 50°F (10°C) (default), only the heat pump will be allowed to run (no auxiliary heat).
- » When the outdoor temperature is below the default low balance point of 25°F (-4.0°C) (default), only the auxiliary heat is allowed to run (no mechanical heat pump operation).

- » When the outdoor temperature is between the low and high balance point settings both heat sources are allowed to satisfy the heating demand.

Safety Protection

Alerts the homeowner when the home gets too cold or hot. This is set under this menu option on the setting for both low and high temperatures. The system will automatically turn on either cooling or heating if the home's interior temperature reaches either the low or high setting. A notification is also sent to the *Home* screen notification area and *Lennox S40 Thermostat App*.

Humidity

Some options that are available under this section are dependent on type of equipment (indoor and outdoor units) and whether a humidification accessory is installed.

ADJUSTMENT SLIDER TOOLS

- » **Dehumidification Set Point Percentage** - The slide bar adjustment tool allows desired humidity level in the home. Selection between 40% to 60% are available. Default is 55% when dehumidify is enabled.
- » **Humidification Set Point Percentage** - This adjustment tool is only visible when dew point is set to OFF. Range is 15% to 45% humidity. Default is 40%.
- » **Overcooling** - This adjustment allows selection between 0°F to 4°F (0°C to -2°C). This adjustment is only available when Max or Climate IQ (Auto) is selected. This selection will limit how much overcooling is allowed when trying to achieve the dehumidification set point. Default is 2°F (1.0°C).
- » **Dew Point** - This adjustment helps reduce the amount condensation that may build up on windows and other glass surfaces. A dew point slider bar option will appear under the humidity menu. By default the dew point slider is set to OFF. When dew point is set to ON, the slide bar adjustment will appear with a range of -15% to 15%. Default is 0%.

NOTE: *Dew Point - Adjustment requires an outdoor temperature sensor and is automatically controlled by the outside temperature.*

Humidity Control

The following options are available under humidity control:

- » **Off**
- » **Humidify** option is only available when a humidification accessory is installed.
- » **Dehumidify** option is only available with or without a dehumidification accessory installed.
- » **Humidify + Dehumidify** option is only available when a humidification accessory is installed.

Humidification Control Center

When a humidification accessory is installed and humidify is enabled, the options are as follows:

- **Normal** — Recommended for moderate climates. This runs the humidifier when there is a call for heat and humidification.
- **Max** — Recommended for drier climates. This runs the humidifier when there is a call for humidification only.
 - » Dew Point percentage slider adjustment tool is available for both Normal and Max settings.
 - » Humidification set point percentage slider adjustment tool is only visible when Dew point is set to OFF.

Dehumidification Control Center

IMPORTANT

The following dehumidification settings are not applicable and ignored on systems employing iHarmony Zoning.

No Dehumidification Accessory Installed

When dehumidify is enabled and no dehumidifier accessory is installed, the dehumidification options are as follows:

- » **Basic** - Recommended for moderate climates. No dehumidification is active. Dehumidification set point slider adjustment tool only is available.
- » **Max** - Recommended when outdoor air is excessively humid. May over cool your home to achieve the desired dehumidification set point.

- » **Climate IQ (Auto)** - Automatically adjusts system run-time based on a combination of dehumidification set point and local weather conditions obtained from the Internet. May over cool your home to achieve the desired dehumidification set point.
- » Both overcooling and dehumidification set point slider adjustment tools are available for both **Max** and **Climate IQ (Auto)**. The overcooling adjustment slider tool limits overcooling between 0°F to 4°F.

Humidify + Dehumidify Settings

When this option is selected, a combination of both humidification and dehumidification settings are available.

When dew point is set to **OFF**. Then a dual purpose slider adjustment tool will appear. This tool allows the homeowner to adjust the set point percentage for both humidification (left slider) and dehumidification (right slider). Range is 15% to 60% humidity.

Table 3. Humidity Control Modes of Operations

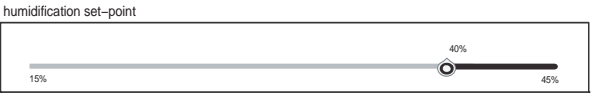
Function	Setting Mode	Description
Humidification Only	Normal	These thermostat modes allow the homeowner to control the relative humidity (RH) between 15% and 45%. The following conditions must be met for either mode to operate:
	Max	<ul style="list-style-type: none"> • Humidification mode has been enabled • Unit is in HEAT mode • Humidification demand exists Additionally, the NORMAL mode requires that heat demand exists.
 <p>humidification set-point</p> <p>A horizontal slider control for humidification set-point. The scale ranges from 15% to 45% with a central knob. The knob is currently positioned at 40%.</p>		

Table 3. Humidity Control Modes of Operations



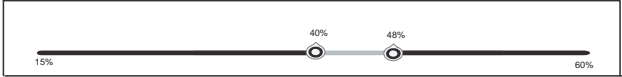
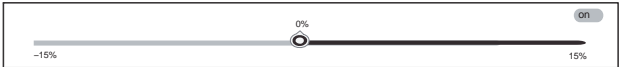
Function	Setting Mode	Description
Dehumidification Only	Normal	This setting is recommended when the air outside is not too humid and the outdoor unit is either staged or variable capacity.
	Max	<ul style="list-style-type: none"> • Staged Outdoor Unit. This setting is recommended when the outdoor air is excessively humid. This setting may cool the home below the set temperature in order to remove excessive indoor humidity. • Variable Capacity Outdoor Unit. Recommend when the outdoor air is excessively humid. This setting adjusts cooling based on installed duct sensor data. This setting may cool the home below the set temperature. <p>NOTE: Discharge air temperature sensor (catalog number 88K38) is required.</p>
Dehumidification Only	Climate IQ (Auto)	This feature is applicable only to Lennox communicating thermostats with either Lennox communicating staged or variable capacity outdoor units only. This setting automatically adjusts both indoor fan speed and cooling power based on local climate conditions using Climate IQ® technology. This setting may cool the home below the set temperature.
<p>The below adjustment tools are only available with either Max or Climate IQ setting selected.</p>  <p>overcooling</p> <p>A horizontal slider control for overcooling. The scale ranges from 0°F to 4°F with a central knob. The knob is currently positioned at 2°F.</p>		

Table 3. Humidity Control Modes of Operations

Function	Setting Mode	Description
Dehumidification Only	dehumidification set-point	
	humidification set-point + dehumidification set-point	
Dew Point	Dew point adjustment mode will change the humidification set point based on the outdoor temperature and a user-defined dew point adjustment setting.	<i>NOTE: Dew Point - Adjustment requires an outdoor temperature sensor and is automatically controlled by the outside temperature.</i>
	dew point	

Dehumidification Accessory Installed

When either an **Auxiliary Dehumidifier** or **Humiditrol** equipment is installed the settings available are **Off** and **Dehumidify**. When **Dehumidify** is selected a **Dehumidification Set-Point** adjustment tool is available and allows adjustments between 50% to 60%.

Smart Zoning System

NOTE: Lennox Smart Zoning Control only functions with Lennox communicating systems.

! IMPORTANT

The Lennox Smart Room Sensor is not compatible with systems using the Lennox Smart Zoning System (iHarmony).

For user setting options, go to **Menu > Settings > Zoning Control**. By default Zoning is **ON** on the Zoning Control screen. If the homeowner wishes to place the system into **central mode**, then this setting must be **OFF**. Each zone can be renamed on this screen.

Heating / Cooling Changeover

The following is an example of how the zoning system operates during a heating / cooling changeover.

When the system is satisfying a call from zone 1 for heating and receives a call for cooling from zone 2, the following will occur:

- The system will continue to fulfill the demand from zone 1 until satisfied or a maximum time of 20 minutes has been reached.
- If after 20 minutes the system is still operating based on satisfying the heating demand from zone 1, the system will terminate that demand.
- The system will then shut system down for five (5) minutes. This allows for system temperatures and operating pressures to stabilize.
- After a five (5) minute delay the system will begin operations to satisfy the cooling demand from zone 2.

The system will continue to operate in this manner each time it receives a zone call that is opposite of the current mode of operation (heating or cooling).

Cooling Operation

When a zone thermostat makes a demand for cooling, the zone damper opens and the cooling equipment begins operating.

Cooling demand is terminated when:

- » All zone demands for cooling are terminated.
- » The demand has exceeded the **Heat • Cool** changeover time limit (20 minutes) while a heat demand exists.

When cooling demand is terminated, a five minute minimum off time delay is initiated. Second stage cooling is energized when the discharge air temperature is 7°F higher than the set point of the cooling staging temperature settings.

Heating Operation

When a zone thermostat makes a demand for heating, the zone damper opens and heating equipment begins operating. Heating demand is terminated when:

- » All zone demands for heating are terminated.
- » The demand has exceeded the **Heat • Cool** changeover time limit (20 minutes) while a cooling demand exists.

When heating demand is terminated, a five minute minimum off-time delay is initiated.

Second-stage heating is energized if the discharge air temperature is lower than the set point of the heating staging temperature set point.

Notifications

This section allows the user to setup reminders for various accessories. By default all listed items are disabled. The reminders can be set for 3, 6, 12 or 24 months and a custom reminder by specific date can be set. Reminders options are:

- » Replace Filter 1 or Replace Filter 2
- » Replace UV Bulb
- » Replace Humidifier Pad
- » PureAir™ Maintenance
- » Maintenance Reminder

Table 4. Maintenance Alerts

Number	Reminder
3000	Filter 1
3001	Filter 2
3002	Humidifier Pad
3003	UV Light
3004	Maintenance
3005	PureAir™ Maintenance

Peak Monitoring

Peak Monitoring is currently a feature requirement for the State of California. Enrolling into the energy saving program will allow the homeowner's utility company to control the thermostat during peak energy events. An icon on the home page will indicate when the system is in an active energy savings event. Enrollment is a two-step process for consumers. The first step requires

the consumer to register with their utility provider before the thermostat settings can be enabled to take advantage of the Peak Monitoring feature.

Enable Peak Monitoring

Go to **Menu > Settings > Peak Monitoring** and turn on enable energy savings. This will automatically get the required certification for your thermostat.

NOTE: *If enabling energy savings is successful or not successful a pop-up screen will appear indicating either. If unsuccessful, try again in a few minutes.*

Enroll in Peak Monitoring

The next screen will allow the homeowner to enroll in energy savings. Follow the on-screen prompts to continue. Detail on-screen instructions are provided.

1. Toggle enable **Peak Monitoring** to **ON**. A pop-up message will appear asking to first verify that the utility provider has a Demand Response Program. If they do, select **OK**.
2. On the next screen, write down the registration code listed and then select **OK**.
3. On this screen, select "**enroll Peak Monitoring**", and type in the URL provided by the energy provider and then select **DONE**.
4. If enrollment is successful, the next screen will indicate enrollment status as enrolled and connection status as connected.

Peak Monitoring Settings

This screen allows homeowners to use their energy provider's default temperature or pricing set points. Homeowners can also customize these settings by selecting the following:

- **Peak load event active set-points** with the following options:
 - » Default
 - » Offset
 - » Custom set-points
- **Peak Price event Threshold**
- **Peak Price Event Active Set-points** with the following options:
 - » Default
 - » Offset
 - » Custom set-points
- **Peak Monitoring Events Filter**
- **Factory Reset Peak Monitoring Settings** - selecting this option resets Peak Monitoring settings to factory state.

Canceling Peak Monitoring Event

The option to cancel will appear along the right side of the *Home* screen. When in an active energy savings event and you attempt to update any of the following settings, a pop-up window will appear confirming you wish to exit the active energy savings event which could result in higher energy consumption during the event period:

- Adjusting the temperature set point manually
- Selecting a schedule
- Changing the mode of operations
- Manually canceling the event from the *Home* screen indicator

Cancel Enrollment

The option to cancel enrollment in Energy Savings can be found by going to **Menu > Settings > Peak Monitoring > Energy Savings Settings > Cancel Enrollment**.

Devices

Lennox Wireless Extenders and Smart Room Sensors can only be added or removed using the Lennox Thermostat App. For more information concerning Lennox Smart Devices, see “Lennox Smart Devices” on page 41.

The homeowner can add or remove Lennox Smart Room Sensors and Lennox Wireless Extenders to the thermostat only if at least one device has already been added first by the installer.

NOTE: For more information on setup, placement and pairing of Smart Room Sensors and wireless extenders, see the *Smart Sensor Installation and Setup Guide* provided with the device.

Devices

This section will list the Thermostat and Lennox smart devices such as Smart Room Sensors, Smart Air Quality Monitor and Wireless Extenders.

Thermostat

The homeowner can rename the thermostat and information about the thermostat. Information available in this section includes Model Number, Serial Number, Hardware Revision, Software Revision and Last Updated.

On the **Last Updated** screen is the settings for thermostat **Automatic Updates** and **Check for Updates Now**.

By default the **Automatic Updates** is set to **ON**.

Smart Devices

There is an alternate location where you can find information about each device. See “Lennox Smart Devices” on page 41 for further details available.

Equipment

PureAir™ S

PureAir S is an air purification system that cleans the air in the home by addressing all three types of indoor air pollutants:

- » Airborne particles (like pollen, dust and pet dander)
- » Germs and bacteria
- » Chemical odors and vapors

PureAir S uses a MERV 16 air filter, UVA light, and catalyst.

On this screen, the homeowner can turn ON or OFF the PureAir S Life. The homeowner can also send a maintenance reminder based on *Sensor*, *Calendar* or *Run-time*.

Ventilation

This option will only appear if a fresh air damper, ERV or HRV is installed and configured by the installer. Either ERV or HRV could be configured as single or two-stage if applicable.

Menu Selection

For **Ventilation Mode**, there are three possible selections which are:

- » **Installer Settings (Timed)** or (**ASHRAE**). Whether the option is timed or ASHRAE is determined by how the installer set the parameter default.
- » **On (always)**
- » **Off (always)**

NOTE: Factory default is **ASHRAE**. The installer will need to change it to *Timed* (if *Timed* mode is desired).

The homeowner can also select *ventilate now* to start a ventilation function immediately. Those menu options are 10, 20, 30, 40 and 50 minutes, 1 hour, 1-1/2 hours, 2 hours, 2-1/2 hours, 3 hours, 3-1/2 hours, 4 hours, and custom. Custom will allow you to set a specific run-time.

NOTE: On two-speed ventilators, when **ventilate now** is selected, the ventilator will come on at high speed.

NOTE: Once ventilation is started, a notification appears on the right-side of the *Home* screen indicating a time when that specific cycle will end and an option to cancel the demand.

What is ASHRAE?

ASHRAE 62.2 is a national standard that provides methods for achieving acceptable indoor air quality in typical residences. It was developed and is maintained by the American Society of Heating and Air-Conditioning Engineers (ASHRAE). One of the standard three main components is Whole House Ventilation which is exhausting stale indoor air and replacing it with fresh outdoor air.

The exhaust fan dilutes the air in the main living spaces with outside air to remove unavoidable contaminants from people, pets, cleaning, off gassing, etc. The whole house fan flow rate is determined based on the floor space and the number of bedrooms. The whole house fan provides multiple air exchanges within the home each day. The operation can be continuous or intermittent (much higher airflow cycled by a timer) if 1 zone or less. For more information about ASHRAE, go to <https://www.ashrae.org>.

Advanced Settings

This section is for installers and technicians ONLY to customize system settings and run various diagnostic tests.

View Support Service Control Center

Allows installers and technicians to perform custom configurations tailored for the homeowner's unique requirements.

Restart

Options are to restart Smart Hub, thermostat, or both.

Unregister System

Unregister System means that the thermostat will no longer be linked to the homeowner's email account.



Lennox Smart Devices

Lennox Smart Room Sensor

! IMPORTANT

The Lennox Smart Room Sensor is not compatible with systems that have the Lennox Smart Zoning System (iHarmony) installed.

The **Lennox® S40 Smart Thermostat** can support up to six **Lennox® Smart Room Sensors**.

Adding and Removing Smart Room Sensor

Please refer to the *Smart Room Sensor Installation and Setup Guide* for information on the devices, placement, and pairing using the Thermostat App.

! IMPORTANT

The first device must be added by the technician in order to create the smart devices network. Thereafter the homeowner can add or remove devices using the Lennox Smart Thermostat App.

View and Understanding the Smart Room Sensor Detail Screen

From the thermostat's *Home* screen, select **My Home**. Select the wireless extender icon. This screen displays the details for the *Smart Room Sensor*.

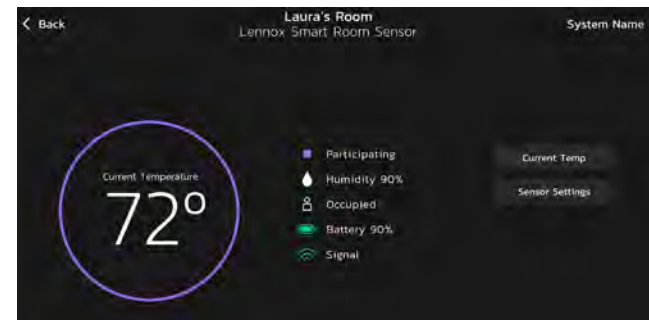


Figure 22. Smart Room Sensor Detail Screen

- Selecting **Current Temp** button is a short cut to the **Current Temperature**. There the homeowner can select sensors to participate in **Room Averaging using Occupancy Detection**.

- Selecting **Sensor Settings** will allow the homeowner to include or exclude a specific *Smart Room Sensor* from temperature averaging. Listed in this section are **Sensor name**, **Sensor type** and **About Sensor**. Selecting **Sensor Name** will allow renaming of the sensor, if desired.

Room Averaging using Occupancy Detection

The following two features can be set using either the thermostat or thermostat app using the system setting screen.

From the *Home* screen, go to **Menu > Settings > Current Temperature**.

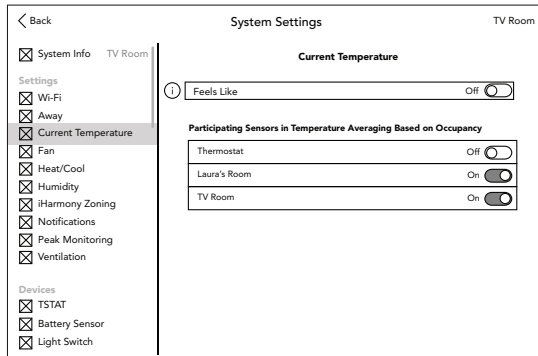


Figure 23. Occupancy Settings for Temperature Averaging

Occupancy Sensor Setting

The occupancy detection feature is built into every sensor. The settings are as follows:

- **OFF** - When the occupancy feature is turned **OFF**, the thermostat will always include the sensor in temperature averaging.
- **ON** - When the occupancy feature is turned **ON**, the thermostat will only include the sensor in temperature averaging if the room is **occupied**.

Sensor Temperature Difference Limit

This feature for temperature averaging limits how much of a difference in temperature readings there can be by comparing any Smart Room Sensor detected temperature to the **Lennox® S40 Smart Thermostat** detected temperature. By default, if the *Smart Room Sensor* temperature reading difference is less or greater than 7°F, it will be excluded from participating in temperature averaging.

The message “**Device is not participating as temperature readings are abnormally high/low**” will appear at the bottom of the Smart Room Sensor Detail screen.

Verify that the sensor is not in direct sunlight, discharge vents, unconditioned space or any other types of environmental conditions that could affect the Smart Room Sensor temperature reading.

NOTE: *If the Smart Room Sensor is in a suitable location and the actual room temperature does not match what the sensor is reporting, then the Smart Room Sensor may need to be replaced.*

Lennox Wireless Extender

Adding and Removing the Lennox Wireless Extender

Please refer to the Smart Room Sensor Setup and Installation guide for information on the devices, placement and pairing using the Lennox Thermostat App to the S40 Smart Thermostat.

View and Understanding the Wireless Extender Detail Screen

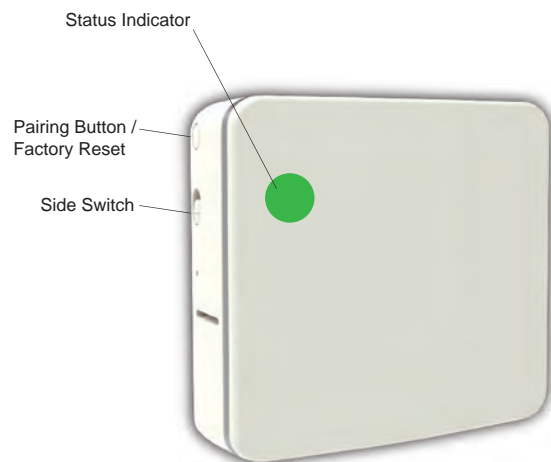
From the thermostat’s *Home* screen, select the **My Home** option. Then select the wireless extender icon. This will display the details for that wireless extender.

Wireless Signal strength indicators are illustrated as follows:



Figure 24. Wireless Extender Signal Strength Indicators

Lennox Smart Air Quality Monitor



Status Indicator Light Color Descriptions

NOTE: The light is only on if there is an issue with signal strength.

Table 1. Sensor Light - Two Color Descriptions

Function	Light Color	Description
Signal Strength	BLUE	<ul style="list-style-type: none"> A solid blue light indicates the signal strength is low or has lost connection to the thermostat. No blue light indicates signal strength is good.
Pairing	GREEN	A flashing green light indicates the unit is in pairing mode.

Adding and Removing the Smart Air Quality Monitor (SAQM)

This device can only be installed by a professional installer. A single **Lennox® S40 Smart Thermostat** can support one **Lennox® Smart Air Quality Monitor**.

How the Smart Air Quality Monitor Works

! IMPORTANT

The Lennox® S40 Smart Thermostat will begin displaying information from the Smart Air Quality Monitor once there is a blower/cooling/heating demand. Until the first thermostat demand, the SAQM will indicate it is calculating.



Figure 25. SAQM Calculating

When the Smart Air Quality Monitor detects poor indoor air quality (IAQ) in the home it will pass that information on to the thermostat which will attempt to clean the air. Depending on the IAQ equipment installed in the home, one of the following methods will be used by the thermostat:

- » **If no IAQ equipment installed** - The thermostat will run the indoor unit blower to circulate air.
- » **High Efficiency Filter** - The thermostat will run the blower motor to circulate the air through the filter cabinet.
- » **Pure Air** - The thermostat turns on system to run **Pure Air** to circulate the air through the **Pure Air** system.
- » **ERV / HRV** - The thermostat will check outdoor air quality and compare it to the indoor air quality. If outdoor air quality is better then it will bring in fresh outdoor air. If outdoor air is poorer it will run the indoor blower to circulate the indoor air.

Side Switch

The primary reason for this switch is to turn off the internal fan in case the device is installed in a bedroom.

The side switch on the **SAQM** when in the **UP** position turns on the internal fan and transmits air quality data to the thermostat.

When the switch is set to the **DOWN** position, it will turn off the internal fan and stop air quality data to the thermostat.

An alert code 70003 displays, which indicates the switch is **OFF**. The alert code will automatically clear once the switch has been set back to the **ON** position.

While the switch is in the **DOWN** position, the latest reading from the **SAQM** will be displayed on the thermostat. It will not update that information until the switch is moved back to the **UP** position.

⚠ IMPORTANT

The dealer and homeowner may receive an email indicating that Alert Code 70003 is a no cool, no heat condition. This is not true and the HVAC system will operate normally. This type of notification is due to alert code being classified as a Service Urgent.

Definition of Contaminants

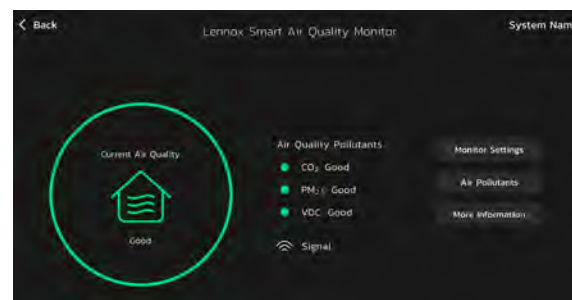
Table 5. Terminology

Term	Definition
PM _{2.5}	PM stands for particulate matter (also called particle pollution), the term for a mixture of solid particles and liquid droplets found in the air. The 2.5 is the fine inhalable particles, with the diameters that are generally 2.5 micrometers and smaller. Breathable air particles can include pet dander, bacteria, mold, chemicals from cleaning products, building materials, fuel-burning equipment such as furnaces, upholstered goods, cooking, sweeping, copy machines, skin flakes, clothing fibers, combustion, cooking, smoke, dust, dirt, spores, and pollen. Sources vary seasonally.
VOC	Volatile organic compounds (VOC) are a combination of gases and odors released/emitted/off-gassed from a variety of sources. VOCs include a variety of chemicals, some of which may have a short and long-term adverse health effects. Alternate terms are odors, gases, vapors and chemicals.
CO ₂	CO ₂ or carbon dioxide is an odorless, colorless, non-flammable gas. Carbon dioxide is a by-product of combustion, as well as a result of the metabolic process in living organisms (for example, exhaled air from lungs).
BLE	BLE stands for Bluetooth Low Energy. BLE is a variation of the Bluetooth wireless standard designed for low power consumption.

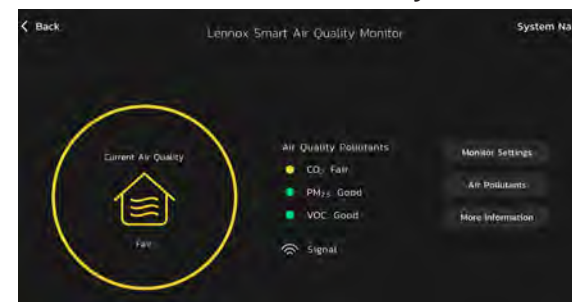
Smart Air Quality Details Screen

From the thermostat *Home* screen, select **My Home**. Select the Smart Air Quality Monitor icon to view the current details concerning your indoor air quality.

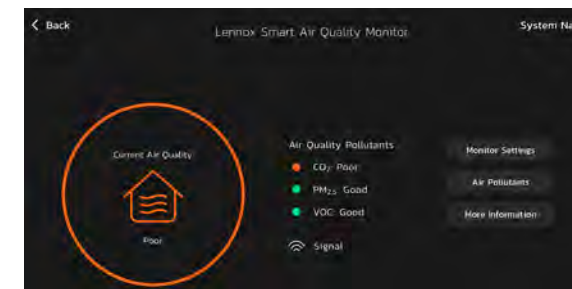
NOTE: Homeowners can sign up to receive monthly performance reports of their system's overall performance when customizing their thermostats. See "Screen 5 - Performance Reports" on page 13. Homeowners can also select to receive performance reports by pressing *Menu > User Account > Alerts and Reports*. Press the *Performance Reports* slide button to **ON**.



Good Air Quality



Fair Air Quality



Poor Air Quality



Poor Network Signal

When the system is cleaning the air an icon displays on the *Home* screen. A message displays under the *Status* screen.

Indoor Level of Air Cleanliness Setting

On the Smart Air Quality Monitor detail screen, select **Monitor Settings > Level of Indoor Air Cleanliness**. Options are *High*, *Medium* and *Basic* (most economical).

These options allows the installing technician to fine-tune the thresholds and determine *Good* air quality from *Fair* air quality. If the technician selects the *High* option, this results in the system cleaning pollutants and contaminants at lower levels.

NOTE: Only Volatile Organic Compounds (VOC) thresholds will be affected by these settings.

Likewise, *Basic* mode will trigger air cleaning at higher levels of VOC compared to *Medium*.



View Details and Postpone Cleaning Air

When the Lennox Smart Air Quality Monitor has determined that there is poor air quality in the home it will run the indoor unit fan or any other indoor air quality devices installed to clean the air. Selecting this notification on the thermostat *Home* screen allows the homeowner to view details concerning the air quality or postpone the air cleaning for a specified time period.

From the thermostat *Home* screen select **Cleaning Air**. There are two options: *View Details* and *Postpone*. Select *Postpone* to postpone by 1, 2, 4, 8, or 24 hours.

Third-Party Integration

The most current information provided by Lennox is available using the QR codes listed on the QuickStart Guides or product packaging.

Apple, the Apple logo, iPhone and iPad are trademarks of Apple Inc. registered in the US and other countries.

Android is a trademark of Google Inc. Use of this trademark is subject to Google permission.

Amazon, Amazon Echo, Amazon Alexa and all related logos are trademarks of Amazon.com, Inc. or its affiliates.

! IMPORTANT

For third-party applications to work with the thermostat, the thermostat **MUST** be connected to the Internet and the user **MUST** be logged into their Lennox® S40 Lennox Thermostat account.

Amazon Alexa

Download the Amazon Alexa app from Google Play or the App Store™ on a compatible phone or tablet. Then follow the on-screen steps to finish setup.

Once the thermostat has been integrated with the Amazon Alexa app, users can then use Amazon Alexa to voice control.

Changing to Celsius

Using the Amazon Alexa mobile app, select the three bar icon in the upper left-hand of the screen.

1. Select **Settings**.
2. Choose your Amazon device.
3. Select **Measurement Units** from the menu.
4. Toggle **ON** Temperature Units - Use metric measurements for temperature units.

NOTE: Even though the thermostat supports half degree settings in Celsius, Amazon Alexa only supports whole degrees. The first temperature adjustment that gets made will set the temperature to a whole degree, if it was not already.

Heat and Cool (Auto-Changeover)

Amazon Alexa controls the thermostat a bit differently when in Heat / Cool mode. In Heat / Cool mode, the system can automatically switch between heating and cooling as needed.

For instance, if Amazon Alexa is commanded to set the hallway temperature to 70 degrees, the thermostat will use 70 degrees as a midpoint temperature, setting the Heat set point to 69 and Cool set point to 72. Amazon Alexa will confirm the request by saying, "Hallway is in Auto mode, aiming for 70 degrees."

Amazon Alexa can change the thermostat mode (heat only, cool only, etc.) via voice commands. It is recommended to rename the system to a call name other than "System" or "system" during setup (such as "My System").

The following are examples of voice commands to a system named "My System":

- » Heat - "Alexa, set My System to HEAT."
- » Cool - "Alexa, set My System to COOL."
- » Auto - "Alexa, set My System to AUTO."
- » ECO - "Alexa, set My System to ECO."
- » OFF - "Alexa, set My System to OFF."

The following voice commands must be used for systems that remain as "System" or "system":

- » Heat - "Alexa, set Thermostat to HEAT."
 - » Cool - "Alexa, set Thermostat to COOL."
 - » Auto - "Alexa, set Thermostat to AUTO."
 - » ECO - "Alexa, set Thermostat to ECO."
 - » OFF - "Alexa, set Thermostat to OFF."
- If the thermostat is in *Away* or *Smart Away* mode, any Amazon Alexa commands to change thermostat temperature will not be successful.

- Currently, users can pair only one home that is listed in their Lennox User Account with Amazon Alexa. In the situation where there are multiple homes associated with the Lennox thermostat account, users will not have a choice to choose the home for Amazon Alexa. Users can view the homes on the account by visiting: Amazon's on-line help at <https://alexa.amazon.com>.

Additional Help

Google Home and Assistant

Download the Google Home app from Google Play or the App Store™ on a compatible mobile device and then follow the on-screen steps to finish setup. Once the homeowner has added the thermostat to their Google Home app, the homeowner should install and enable the Google Assistant app (Android and IOS) to enable voice control.

NOTE: *Google Assistant app may be already installed on Android devices.*

Perfect Temp and Schedule Mode Functions

Raising or lowering the temperature is not supported when using a schedule or Perfect Temp feature. When attempting to change the temperature when in either reference mode, Google Assistant will respond with *mode not supported*.

Heat / Cool Mode (Auto-Changeover)

Although Google Assistant supports heat / cool mode temperature adjustments, it will do so only by maintaining the currently established temperature ranged. For example, if the heat set point is 60°F and the cooling set point is 80°F at the thermostat itself, then a temperature range of 20 degrees has been established. Any adjustment using Google Assistant, either through the app or by voice will maintain a 20 degree range differential as well. Let's say the homeowner changes their heat set point to 65°F. Now the thermostat will indicate the heating is at 65°F and cooling is set at 85°F.

Adjusting the cooling set point will result in the range being maintained as well. In the Google Home app, the thermostat image will only display the approximate center temperature between the current heating and cooling set points. In this example it would display 75°F.

Additional Help

Google's Online help at <https://support.google.com/googlenest/gethelp>.

Smart Home Systems

Control4® Smart Home | Operating System

Control4® is a leading control and automation platform that works with thousands of smart devices integrating audio, video, lighting, security, intercom, and climate control into a seamless customer experience.

Control4® gives the customer an easy-to-use interface to control any Lennox Smart Thermostat.

Settings include:

- » Display all systems in the home and select a system
- » Display all zones in the system and select a zone
- » Turn system or zones on or off
- » Change manual modes (heat, cool, off)
- » Change heating/cooling set points for each zone/system
- » Change fan mode (on, auto, circulate)

For additional information please visit <https://www.control4.com>.

Building36®

Building36® is a leading control and automation company that delivers next-generation smart home solutions that communicate with thousands of smart devices. It integrates control for HVAC, water, video, lighting/appliance and security into one location.

Building36® gives the customer an easy-to-use interface via the Building36 Dashboard or the **Building36®** Home Mobile App to control the **Lennox® S40 Smart Thermostat**.

Settings include:

- » Display all systems in the home and select a system
- » Display all zones in the system and select a zone
- » Turn system or zones on or off
- » Change manual modes (heat, cool, off)
- » Change heating/cooling set points for each zone/system
- » Change fan mode (on, auto, circulate)

For additional information please visit <https://building36.com>.



Alert Code Priority Types and Notification Options

Table 6. Alert Code Priority Condition Visibility

Alert Priority	Alert Priority Description	Notifications Displayed or Email Notifications Sent						
		Displayed for Homeowner on Thermostat	Displayed for Dealer on Thermostat	Lennox® S40 Smart Thermostat Application	Lennox® Smart Technician Service Application**	LennoxPros Service Dashboard**	Homeowner Emailed*	Dealer Emailed
Service Urgent	System is in a No Heat/ No Cool or not operating. Dealer service call is needed to get the system running.	√	√	√	√	√	√	√
Service Soon / Service Urgent	This alert priority indicates that the system will likely recover on its own and no interaction is necessary. Typically, either after a specific timer period or a specific number of instances, some Service Soon alerts will escalate to Service Urgent .	X	√	X	√	√	X	X
Service Soon	System is not reaching set point or is partially operating. A dealer will need to service it within 24 - 48 hours.	X	√	X	√	√	X	X
Maintenance	Maintenance alerts are programmed in the thermostat as reminders to change filters, replace UV lamps, tune up systems.	√	X	√	X	√	X	X
Information Only-Dealer	This alert priority is for information and is directed to the dealer.	X	√	X	√	X	X	X

* For homeowner to receive email notifications, email updates has to be enabled. From the *Home* screen, go to **menu > user account > Email updates** and set to **ON**.

** For dealers to receive service alerts and service alert emails the feature needs to be enabled by the homeowner. From the *Home* screen, go to **Menu > User Account > Dealer Email updates** and set to **ON**.

FCC Statements

FCC Compliance Statement — PART 15.19

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

- » This device may not cause harmful interference, and
- » This device must accept any interference received, including interference that may cause undesired operation.

FCC Interference Statement — PART 15.105 (B)

This equipment has been tested and found to comply with the limits for a 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, uses 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 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.

RF Exposure Information

This device meets the FCC and ISED requirements for RF exposure in public or uncontrolled environments.

Canada License-Exempt RSS Standard(s) Operation

This device complies with Industry Canada license-exempt RSS standard(s). Operation is subject to the following two conditions:

- » This device may not cause interference, and
- » This device must accept any interference, including interference that may cause undesired operation of the device.

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

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