



works with the
Google Assistant



iComfort[®] E30 / S30

Smart Thermostats

User Guide

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Features

This iComfort® *thermostat* is an electronic communicating, color display touchscreen and 7-day programmable interface which communicates directly with a Smart Hub Controller. After on-line registration is completed, the system may then be accessed by the homeowner from anywhere via computer or mobile device (Internet connection required).

Comfort Features include:

- Three languages supported (English, Français and Español).
- Wi-Fi Connected.
- **Smart Away**® - Uses the thermostat to control the home temperature while unoccupied (geo-fencing).
- **FEELS LIKE**® - Controls the system using outdoor / indoor temperatures and indoor humidity to create the optimal comfortable conditions in the home.
- **Climate IQ**® - Monitors current climate conditions and automatically removes excess humidity when necessary (requires Lennox communicating outdoor unit).
- **Schedule IQ** feature, you only need to program the thermostat once. Whenever there's a change in your routine, the thermostat adapts heating and cooling to match.
- **Perfect Temperature** (Single Set Point) - In non-zoning applications this allows a single temperature setting to be used to cool or heat the home.
- 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).
- Dual-fuel capable (Lennox communicating heat pump only) with two balance points.
- Humidification measurement and dew point adjustment controls.
- Heat • Cool mode -- Permits control of heating, cooling, humidification, and dehumidification without user involvement.
- Enhanced Performance reports are available through the homeowner web portal.
- Equipment maintenance reminders.
- Screen saver picture upload.

These thermostats work with:

- Amazon® Alexa, Apple® HomeKit™, Google Assistant™ and IFTTT.

- PureAir™ Air Purification Systems - Indoor air quality with time based notification of consumables including media filters, UVC bulbs, humidifier pads, and PureAir® system catalyst service / replacement.
- PureAir™ **S** Air Purification Systems (**S30 Only**) - Indoor air quality with time or sensor based notification of consumables including media filters, UVC bulbs, humidifier pads, and PureAir® system catalyst service / replacement.
- iHarmony® zoning system (2 - 4 zones) (**S30 Only**).
- Humiditrol® *Enhanced Dehumidification Accessory* (EDA).

! 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.

Home Screen

Temperature Dial Feature

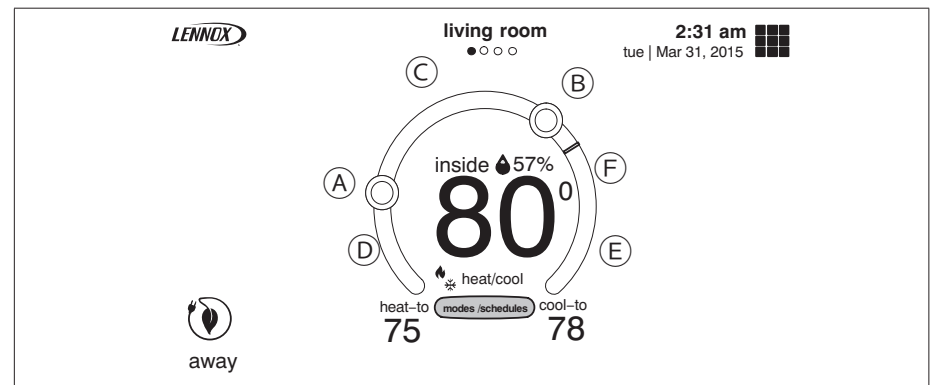


Figure 1. Temperature Dial Feature

- A. This is the maximum heat position indicator on the dial. This object will be red/white in color. Selecting this object will bring up the temperature adjustment dial for the heat-to setting adjustment.
- B. This is the maximum cool position indicator on the dial. This object will be blue/white in color. Selecting this object will bring up the temperature adjustment dial for the cool-to setting adjustment.

C. This is the location where no system demand will be active. For example, in figure 1, the system would be off between A and B locations.

NOTE: By default, the system is configured not to allow the heating and cooling settings to be any closer than three degrees when the system is running in Heat • Cool mode (auto-changeover).

D. When there is an active call for heating, this area of the dial will have a red background with yellow and dark red flames animation.

E. When there is an active call for cooling, this area of the dial will have a blue background with snow flakes animation.

F. The yellow line indicates the actual room temperature on the temperature dial indicator.

Screen Elements

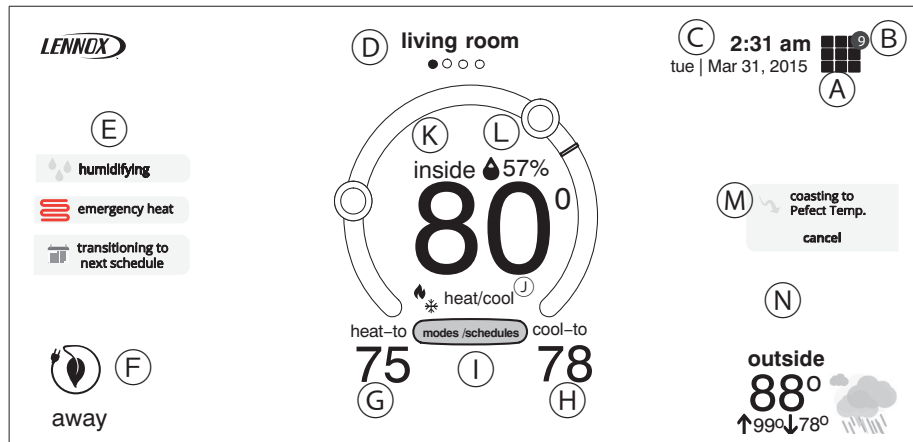


Figure 2. Screen Elements

- A. The MENU button is for accessing following options:
 - Settings (see “System Settings” on page 8.)
 - Notifications (also reminders) (see “Notifications (Critical, Warnings and Reminders)” on page 20.)
- B. A circle with a number indicates new notifications. Touch **menu** > **notifications** to display active notifications. Types of notifications include: critical, warnings, reminders and general information. This can also be sorted by last 24 hours, last 30 days, last 12 months or all notifications.
- C. This is the current time, day of the week and date (month/day/year). This information can be adjusted from **menu** > **settings** > **general** > **date & time screen**.
- D. For information on home screen zone navigation, go to “Home Screen Zone Navigation” on page 22.

E. System Status - Left Side of Screen: This area displays various functions that are either pending or currently active. Indicators are humidifying, dehumidifying, cooling, heating, ambient lockout, emergency heat, cleaning air, transitioning to next schedule, load shedding and fan is running. Indicators are:

Table 1. Home Screen and System Status Icons

Icon	Screen Text	Purpose
Home Screen Icons		
	Menu	Selecting this icon will bring up user and installer menus.
	Away	When the away icon is touched, 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 on the available temperature setting (i.e., heat-to or cool-to). To exit away, press the cancel icon. In a zoning system, all zones are set to a single heat-to and cool-to setting. Note that when manually selecting Away from the home screen, the Smart Away feature (if enabled under settings) will be temporarily disabled until Away is canceled. See page 10 for additional information.
	Smart Away is Canceled for Now	If you are enrolled in Energy Savings with your utility company (California only), this will appear if your system is in Smart Away mode and a energy savings event is started.
	Available zones	In a zoning system, indicates up to four zones screens (S30 only).
System Status - Left Side of Screen		
	Heating	System is heating the home
	Cooling	System is cooling the home.
	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 1. Home Screen and System Status Icons






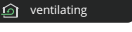


Icon	Screen Text	Purpose
	Defrosting	The system is defrosting the outdoor unit coil (only when required).
	Emergency Heat	All heat pumps operating in northern climates below 35°F (1.6°C) normally need a supplemental heating source. Usually it is in the form of electric heating provided by the indoor 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 when you use your supplemental heat (2nd stage) by itself, without the use of your heat pump (1st stage heat). Not available for non-heat pump systems.
	Auxiliary Heat	Is only available with heat pump system. 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.
	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 your 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 your 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 home screen.
	Ventilating	Indicates the system is actively ventilating.
	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 is running	Fan set to Auto. Fan will follow the fan setting in the selected schedule.

Table 1. Home Screen and System Status Icons









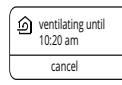



Icon	Screen Text	Purpose
	Fan is running	Fan set to circulate. Fan is following schedule and cycles during periods of equipment inactivity. Circulate run time is dependent on user settings.
	Allergen Defender is working	When Internet weather is enabled and pollen count is high in the home's location, the fan will run between heating or cooling systems to help clean the air.
	System Under Test	Typically occurs when the system has had 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. Recycle power to system may resolve issue.
	Load shedding, wait time 45 min	
	Changing set point range	Temperature is being adjusted.
	Turning feels like on	Indicating the system is transitioning to “feels like” mode.
System Status - Right Side of 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 is greater than the desired set point.
	Coasting to Perfect Temp	
	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.
	Peak Monitoring until 5:00 pm CANCEL	The utility company will automatically set the energy savings time period. You can select cancel to exit this mode. By canceling you will be opting the system out of the current active energy savings events. A pop-up screen will ask you to verify this is what you wish to do.

Table 1. Home Screen and System Status Icons

Icon	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.	Along with this icon is the option to cancel the schedule hold.

F. Away: Smart Away is used to set the temperature while the home is unoccupied. Default low temperature setting of 62°F (16.5°C) and high temperature setting of 85°F (29.5°C) . See “Away” on page 10 for further details.

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

G. Pressing on the heat-to area will allow the temperature setting to be changed.

H. Pressing on the cool-to area will allow the temperature setting to be changed.

NOTE: If the system is running on a schedule, any adjustment will display schedule will hold until next period or select duration of hold. Touch hold or duration to select the desired time. The hold period can be canceled by pressing the cancel icon on the right side of the Home Screen.

I. Select Mode: Touch modes/schedules to select the system mode of operation, run a schedule, fan mode operation and turn the system off. To exit this screen, press the home icon.

“Figure 3. Select Mode” shows the various modes of operation that may be available. To select a mode for the system or a specific zone, press the desired operation. The gray shaded area indicates the item has been selected.

NOTE: Options are dependent on system configuration. For example, emerg heat will be auxiliary heat for heat pump systems only.

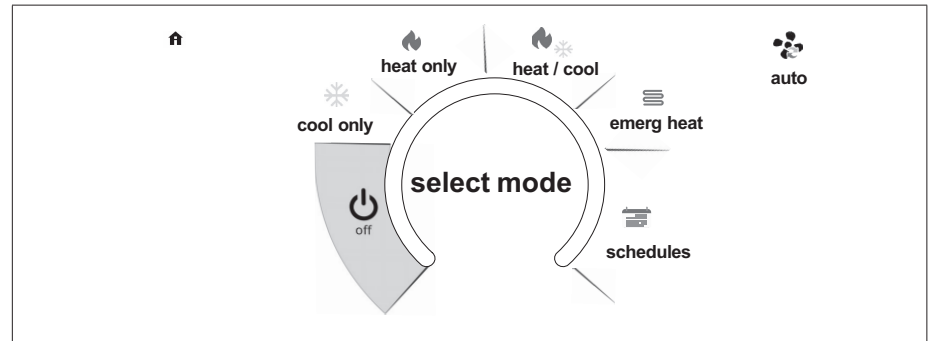


Figure 3. Select Mode

- **Off:** System is off. In addition, if system is off, Alexa will be unable to adjust the temperature.
- **Cool Only:** System will run only in cool mode.
- **Heat Only:** System will run only in heat mode.
- **Heat • Cool:** This is the auto-changeover mode. System will heat or cool your home at the temperature set point you desire.
- **Emergency Heat:** Selecting this setting will run the air handler’s electric heat or furnace instead of the heat pump for heating. This selection is only available with systems using a heat pump.
- **Fan Operations:** There are three fan modes of operation, which are auto, on and circulate. Pressing on the fan icon will allow selection of the desired fan mode. See “Table 1. Home Screen and System Status Icons” on page 4 for icon appears and fan behavior for each mode.
- **Schedules:** When selecting schedules, the available options are Schedule IQ, summer, winter, spring/fall and save energy. Schedules are all predefined and can be changed or renamed by selecting **edit schedules**. For **summer, winter, spring/fall** and **save energy** schedules, each time setting and specific fan operation can be set as well. Options are on, auto and circulate. Other functions are rename the schedule and restore defaults. Press the home icon to exit the screen or after no activity for 25 seconds the system will return you automatically to the home screen.

NOTE: Any adjustments made to the schedule are automatically saved.

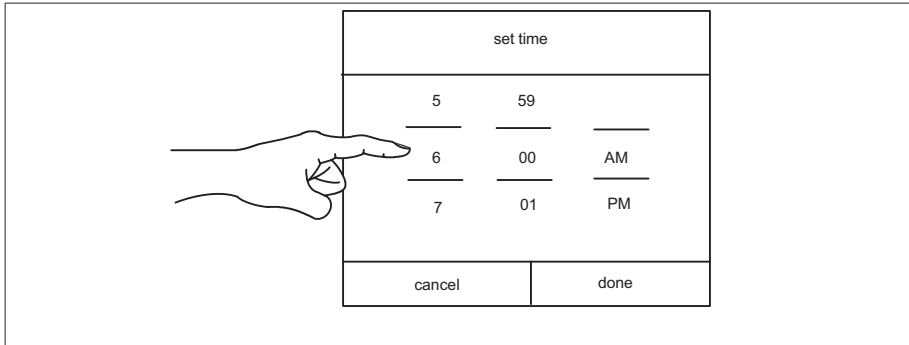


Figure 4. Set Schedule Time Screen
Schedule IQ

This schedule operates in Heat • Cool mode and by 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 time and temperature settings which can be adjusted using the edit schedules option.

Table 2. Editing Schedule IQ

@ home day wake up x.xx am	Default time is 7:00AM with a low temperature setting of 67°F (19.5°C) and high temperature setting of 80°F (26.5°C). Temperatures for this setting can be adjusted by sliding the low and high temperature circle left or right on the slider.
@ home night sleep x.xx pm	Default time is 11:00PM with a low temperature setting of 66°F (19°C) and high temperature setting of 84°F (29°C). Temperatures for this setting can be adjusted by sliding the low and high temperature circle left or right on the slider.
away	Smart Away is used to set the temperature while the home is unoccupied. Default low temperature setting of 62°F (16.5°C) and high temperature setting of 85°F (29.5°C).

J. Indicates the actual mode of operation the system is running.

K. This is the “inside” room temperature.

NOTE: If the “feels like” option is enabled, feels like will appear above the temperature. This feature can be enabled in the user settings.

L. This icon and number represents the humidity level inside the home at the thermostat location only. This will only be displayed if enabled in the user settings for display. The rain drop will be displayed as different levels based on humidity percentage are detected in the home.

M. System Status - Right Side of Screen: Various status information will appear on the right side of the screen as well. See “Table 1. Home Screen and System Status Icons” on page 4 for section on those status updates.

N. This area of the screen will display either the outdoor temperature or weather forecast depending on system settings. The outdoor weather option under

menu > settings > display > outdoor weather has to be ON and outdoor temperature is set to either Internet (AccuWeather) or sensor.

Press on the weather section of the Home screen to display detail information concerning local weather. The weather displayed is also dependent on the user correctly adding the home info. Go to **menu > settings > home info** and verify or add the home information. If only the outdoor sensor is to be used, go to outdoor temperature and set to sensor.

NOTE: If Internet and weather provider are selected, weather information will only be displayed once the thermostat has been setup, connected to the Internet and user login to their account.

NOTE: If a **double lines** appear in this area, either the thermostat is not setup to use either an external temperature sensor or Accuweather, thermostat has lost connection to the Internet or Lennox server. Another possibility is you are not logged into your account. Also on rare occasion it could be a temporary service outage by the weather service provider.

System Settings

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

All of the reference functions in this section are also available using the:

- Consumer Portal (<https://www.lennoxicomfort.com>).
- Lennox iComfort mobile app (on Android or iOS mobile devices).

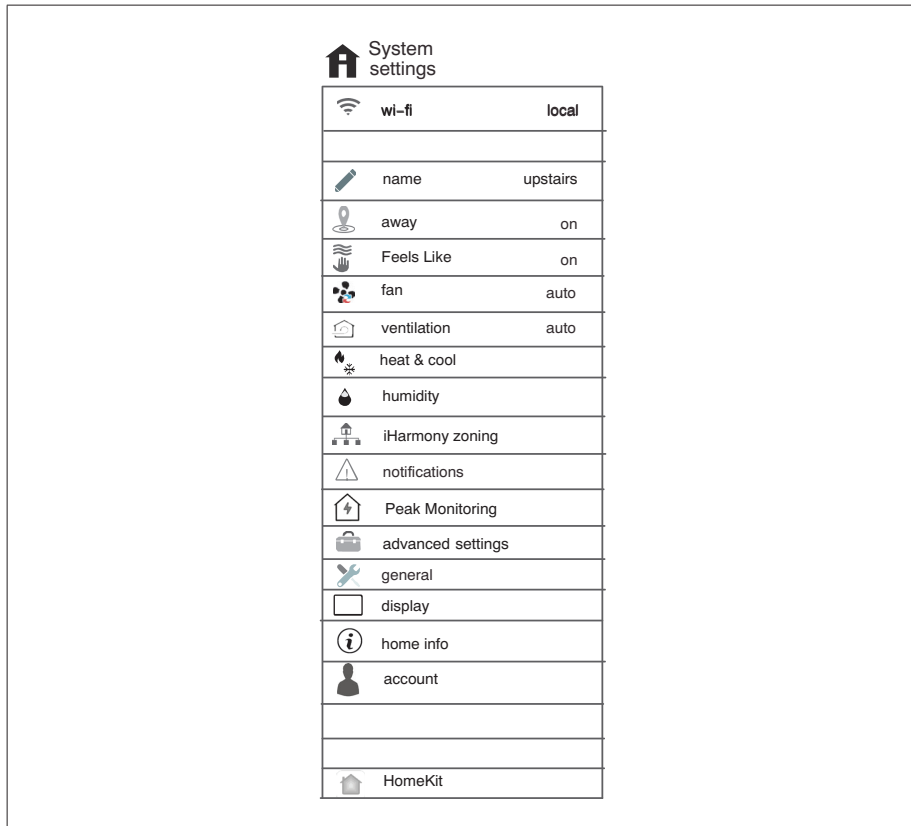


Figure 5. User Setting Menu

Wi-Fi

The following information is for connecting the thermostat to a secure home wireless network that has Internet access.

NOTE: A router with Bonjour capabilities is required for this function. Check the router functions if the Smart Hubs will not connect. Apple Bonjour®

is an implementation of zero-configuration networking (Zeroconf), a group of technologies that includes service discovery, address assignment, and host name resolution.

IMPORTANT

Never use a home guest account.

Never use an open router connection (non-secure).

Always use a secure connection physically located in the home where the thermostat is located.

Visible Access Point

1. Slide the option to ON to enable Wi-Fi.
2. Wi-Fi network will show not connected. Press on not connected.
3. Select a network will be displayed listing all detected networks within range. Select your home network by pressing on the network name.

NOTE: The thermostat can connect to a home wireless router that uses up to 32 characters in the access point name (visible or hidden).

4. When connecting to a secure home Wi-Fi network, a password will be requested. Enter your home Wi-Fi network password and press join to continue.

NOTE: If you wish to see the characters you are typing, check show password. The thermostat will support up to a 63 character password.

Hidden Access Point

1. Slide the option to ON to enable Wi-Fi.
2. Wi-Fi network will show not connected. Press on not connected.
3. Select **other**.
4. The “enter new network information” screen will appear. Enter the name of the hidden network.

NOTE: The thermostat can connect to a home wireless router that uses up to 32 characters in the access point name (visible or hidden).

5. **Select Security.** Options are: none, WEP, WPA and WPA2. If your home Wi-Fi connection is unsecured, then Wi-Fi security must be enabled using WEP, WPA or WPA2 via the router before proceeding. Consult your router documentation on how to enable Wi-Fi security.
6. Once security encryption is selected, a password field will appear. Enter the password to access your home Wi-Fi network.

NOTE: If you wish to see the characters you are typing, check show password. The thermostat will support up to a 63 character password.

7. Press join.

Whether connecting to a visible or hidden network, if successful, a check mark will appear above both the router and Internet icons.

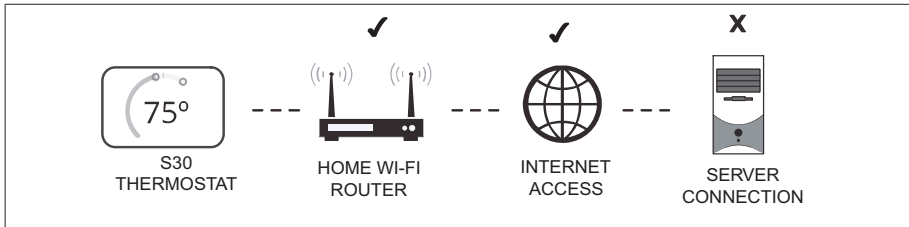


Figure 6. Connection Status (Incomplete)

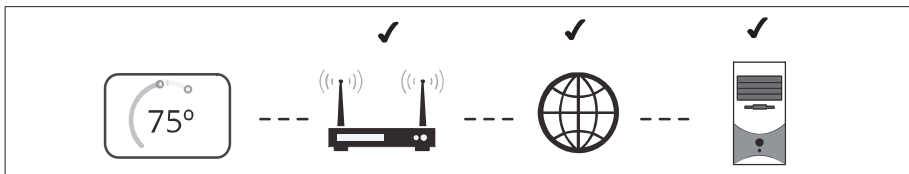


Figure 7. Connection Status (Complete)

Troubleshooting Wi-Fi Connection

The following terminology is used in this troubleshooting section:

- **Received Signal Strength Indication (RSSI).** This is an indication of the signal strength of the Wi-Fi router being received by the scanning device (i.e., smart phone). Therefore, the higher the RSSI number (or less negative in some devices), the stronger the signal.
- **Wireless Bands 802.11a, g and n.** These are wireless networking standards that extends bandwidth throughput up to 130mbps using the 2.4GHz band.
- **Internet Protocol Address (IP address).** This is an address assigned by your home router for each network device (e.g., computer, printer, thermostat).

Electromagnetic Interference Causing Poor Connectivity: Locate the thermostat and router away from other devices that could possibly interfere with wireless communications (especially those operating on 2.4GHz frequency). Some examples of other devices that may 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.

Received Signal Strength Indication (RSSI)

The ideal signal strength range for the thermostat is -1 to 69 RSSI. The signal strength can be viewed from the thermostat interface.

1. Press **NETWORK SETTINGS**. This screen shows a graphical view of buttons representing OPEN and SECURE wireless networks, along with button for adding a network.
2. Select the access point that has already been established and connected. When selecting the info icon, a screen will appear which will display an option to forget the network and IP address assigned to the thermostat by your router, sub-net mask, router, DNS and RSSI. 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 Smart Hub. Adjusting antennas on router and/or Smart Hub may resolve any connectivity issues.

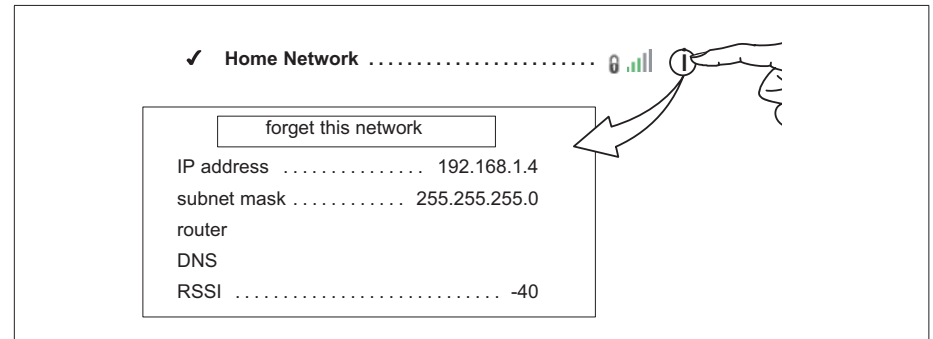


Figure 8. Verifying Signal Strength

Name

Renaming System

Selecting this option to name your system. There is also an option to unregister the system.

Unregistering the System

Using this feature will unregister the system from your consumer portal account if it has already been registered to your account. This will only remove the system that is currently being accessed.

NOTE: If you have multiple systems assigned to your account, only the system you are working from will be removed.

Away

NOTE: Most of the procedures listed in this section can be accomplished at the thermostat or using the Lennox iComfort Thermostat App or consumer web portal.

Manual Away

The user 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 user can press the “cancel” icon. In away mode, the away set points are used to control the system. The user can modify the away set points from the default values in **menu > settings > away**.

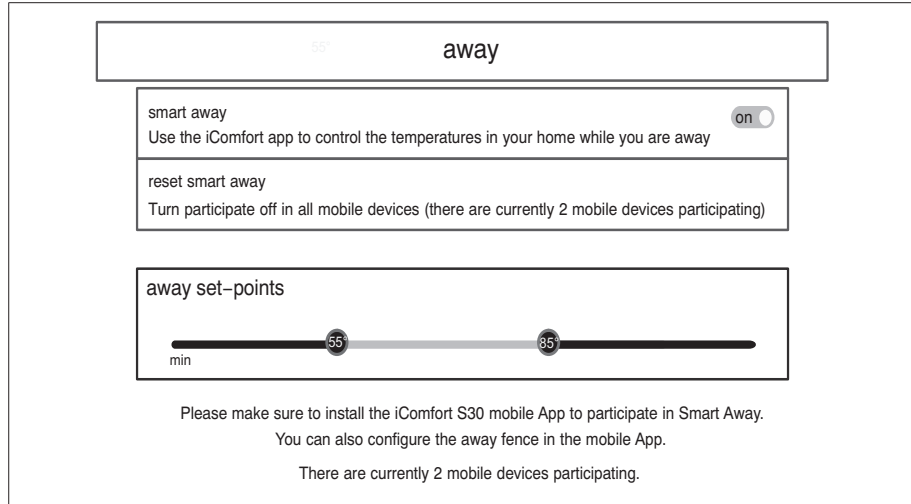


Figure 9. Away Settings

Smart Away

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

The Smart Away feature depends on:

- iComfort Thermostat App running on your mobile device (smart phone or tablet) and being logged in to your account.
- Requires Wi-Fi and location settings to be enabled on your mobile device. Android devices must also have the location mode set to “high accuracy.” Consult your mobile device user guide for instructions.

IMPORTANT

Starting with Android version 10, when allowing the mobile app access to device location, you must select “Allow all the time” for the Smart Away feature to work correctly.

Go to **Settings > Apps > iComfort > Permissions > Locations > Allow all the time** setting is enabled.

IMPORTANT

Starting with Android version 11, to ensure location services for the iComfort® Smart Away feature are not auto disabled by Android operating system, go to **Settings > Apps > iComfort > Permissions > “Remove permission if app isn’t used”** and ensure this setting is disabled (see figure below).

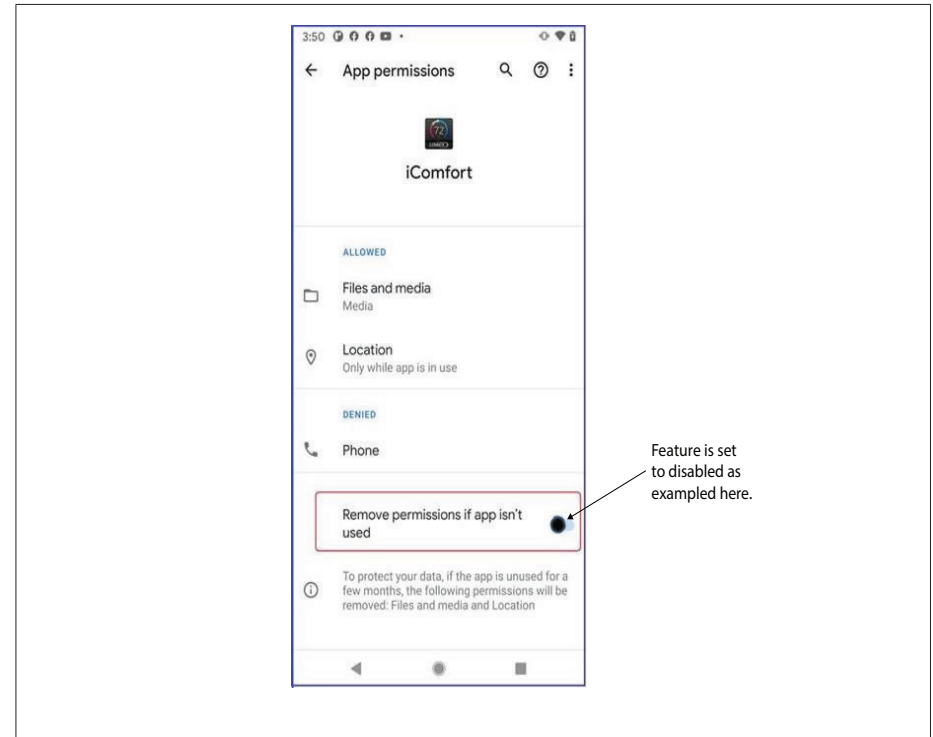


Figure 10. Remove Permission if App isn't Used

Smart Away can also be enabled from your mobile device once you have installed the Lennox iComfort Thermostat App and logged in. Go to the **menu > settings > away** and turn ON **Smart Away**. To allow the mobile device you

are on 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 user-set away set points will be used to control the system.

Example: Away set points are 65°F (18.5°C) for heating and 85°F (29.5°C) for cooling. When the away fence is set to two miles for all participating mobile devices, and the closest participating mobile device is within the 0-2 mile (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, and 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 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 indication until all devices have moved past their inner away fence, and the system will not reach the user-set 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 a energy saving event is active.

Feels Like

The feels like feature uses a combination of outdoor temperature and indoor humidity to come up with the feels like comfort level in the home.

NOTE: *Feels Like is not a temperature setting but the temperature that the space feels like based on current outdoor temperature and indoor humidity. To adjust **Feels Like**, lower indoor temperature, or both indoor temperature and humidity percentage settings.*

NOTE: *When **Feels Like** is set to on, the words **Feels Like** will appear above the indoor temperature display on the home screen.*

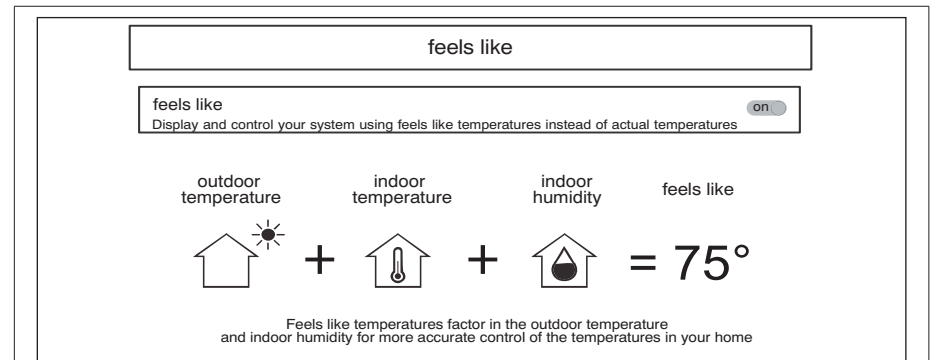


Figure 11. Feels Like Screen

Fan

Allergen Defender: Go to **menu > settings > fan** to turn on or off Allergen Defender. When Internet weather is enabled and pollen count is high in the home's zip code, the fan will run between heating or cooling systems to help clean the air.

Fan Mode Options: Circulate air can be adjusted on this screen. Adjustments between 9 to 27 minutes on how long the air will circulate each hour. The circulate option runs during any mode selected except when the system is turned off.

Ventilation

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

Menu Selection

When selecting this menu option, selections will be either:

- Timed or ASHRAE (either Timed or ASHRAE is set by your installer during setup of your thermostat).
- On (always)
- Off (always).

Factory default is ASHRAE. Your installer will need to change it to Timed if that mode is desired.

You 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 and 4 hours and custom. Custom will allow to set a specific time to run too.

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 the option to cancel the demand.

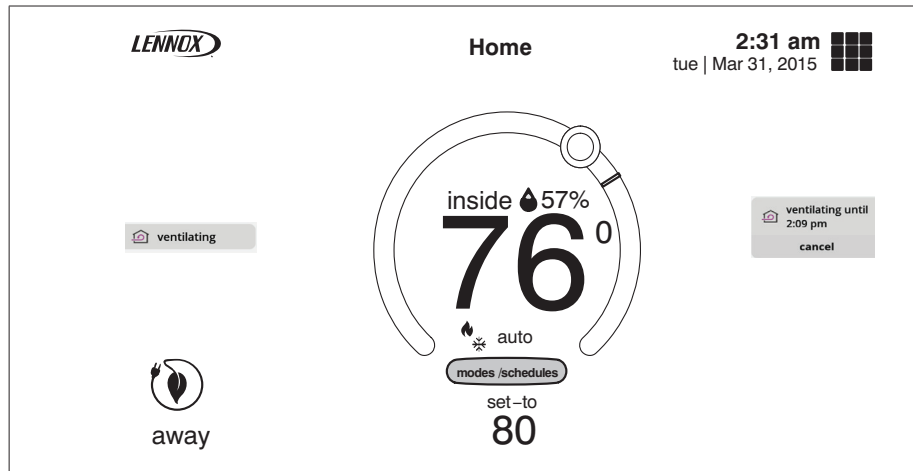


Figure 12. Ventilation Home Screen Notifications

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>.

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.

Settings

1. **Perfect Temperature:** 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 (see the following figure for screen example).

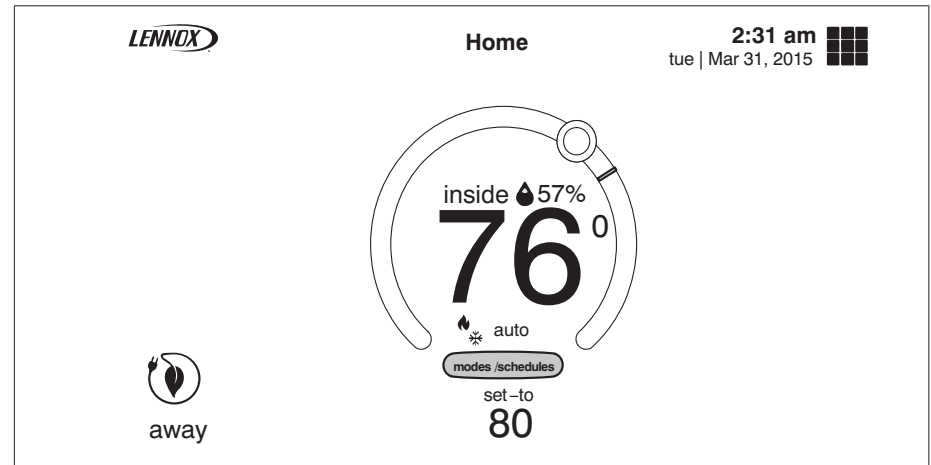


Figure 13. Perfect Temp

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 your 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.
3. **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).
4. **Balance Point Auxiliary Heat:** (only on heat pump systems): An additional heat source will be used automatically when the indoor temperature drops to a temperature that can be adjusted using the slider temperature setting tool.
5. **Balance Point 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.
6. **Safety Protection:** Alerts you if 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 iComfort Thermostat App.

Auxiliary Heat Overview

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 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.

Humidity

Some options that are available under this section are dependent on type of equipment (indoor and outdoor units) and 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 will help 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** only option is available when a humidification accessory is installed.
- **Dehumidify** only option is 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 dehumidifications options are as follows:

- **Normal** — 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. This option is only available on the iComfort S30.
- Both overcooling and dehumidification set point slider adjustment tools are available for both Max and Climate IQ (Auto).

Humidify + Dehumidify Settings

When this option is selection, 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 will allow you 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




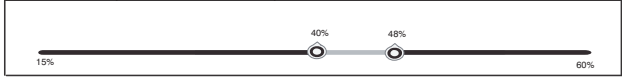
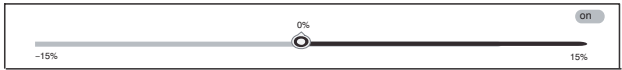
Function	Setting Mode	Description
Humidification Only	Normal	These thermostat modes allow the homeowner to control the relative humidity (RH) between 15% and 45%. The following conditions must be met for either mode to operate: <ul style="list-style-type: none"> • Humidification mode has been enabled • Unit is in HEAT mode • Humidification demand exists Additionally, the NORMAL mode requires that heat demand exists.
	Max	
humidification set-point 		
Dehumidification Only	Normal	Both Staged and Modulating Outdoor Units: This setting is recommended when the air outside is not too humid.
	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 your home below the set temperature in order to remove excessive indoor humidity. • Modulating Outdoor Unit: Recommend when the outdoor air is excessively humid. This setting adjusts cooling based on duct sensor data. This setting may cool your home below the set temperature. <p>NOTE: Discharge air temperature sensor (catalog number 88K38) is required.</p>
Dehumidification Only	Climate IQ (Auto)	Climate IQ (Auto) is applicable only to iComfort S30 controlled system with either communicating staged or modulating 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 your home below the set temperature.
	The below adjustment tools are only available with either Max or Climate IQ setting selected. overcooling 	

Table 3. Humidity Control Modes of Operations

Function	Setting Mode	Description
Dehumidification Only	dehumidification set-point 	
Humidification + Dehumidification	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. NOTE: <i>Dew Point - Adjustment requires an outdoor temperature sensor and is automatically controlled by the outside temperature.</i> dew point 	

¹ Variable capacity outdoor units are XC20, XP20, XC25 and XP25

Dehumidification Accessory Installed

When either an auxiliary dehumidifier or Humiditrol is installed the only setting available is dehumidification set point slider adjustment tool is available. The only adjustment tool will be the **Dehumidification Set Point Percentage**.

Humiditrol: When Humiditrol accessory is used there are an additional parameter settings that your installer can adjust. This setting option is available under the Dealer Control Center on the thermostat. The setting is called **Humiditrol Comfort Adjust**, and the settings options are:

- Maximum Overcooling
- Midpoint Overcooling
- Minimum Overcooling

The factory default for this setting is **Maximum Overcooling**. Please refer to the documentation included with the Humiditrol accessory for further details.

iHarmony Zoning (S30 Only Feature)

This section is applicable only to iComfort S30 controlled systems that have the iHarmony zoning system installed. Works only with Lennox communicating systems.

This option will only appear on the menu if an iHarmony® zoning system is installed.

1. Zoning: This section allows the user to turn ON or OFF zoning. If zoning is automatically detected by the system, the default is ON.
2. Zones 1 through 4: Pressing on the right arrow will bring up a screen so that each zone can be renamed if desired.

For more information concerning iHarmony zoning operation, see “iHarmony® Zoning Operations (S30 Only Feature)” on page 21.

Notifications (Reminders Only)

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 pd
- PureAir maintenance
- Maintenance reminder.

Peak Monitoring

NOTE: This feature requires thermostat firmware version 3.70.xxx or higher. Go to menu > settings > general > about to verify your thermostat firmware version.

Peak Monitoring is currently a feature requirement for the State of California. Enrolling into the energy saving program will allow your utility company to control your 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.

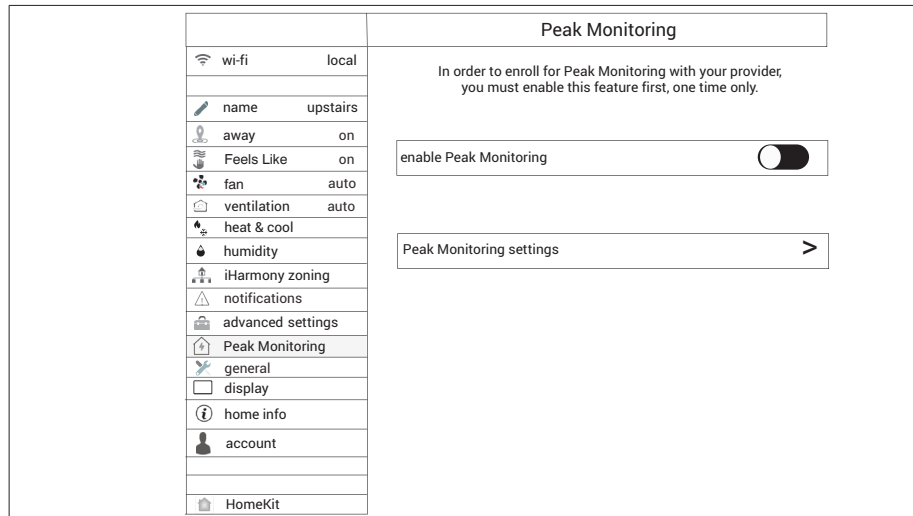


Figure 14. Peak Monitoring Savings

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 you 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 wanting you to first verify that your utility provider has a Demand

Response Program. If they do, select OK.

2. In 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 your energy provider and then select DONE.

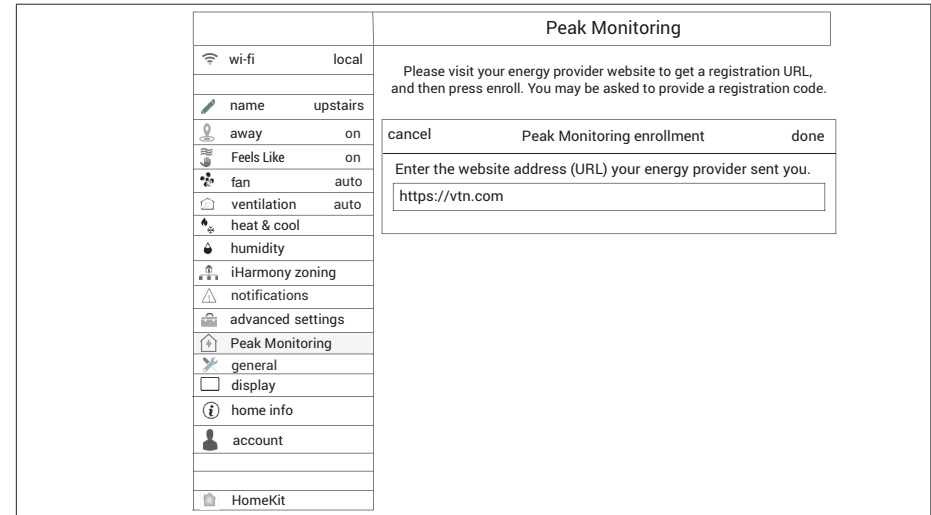


Figure 15. Peak Monitoring Enrollment

5. If enrollment is successful, the next screen will indicate enrollment status as enrolled and connection status as connected.

Peak Monitoring Settings

This screen will allow you to use your energy provider’s default temperature or pricing set points. You can also customize these settings by selecting the following.

1. **Peak load event active set-points** with the following options:
 - Default
 - Offset.
 - Custom set-points
 - Peak Price event Threshold
2. **Peak Price Event Active Set-points** with the following options:
 - Default
 - Offset.
 - Custom set-points
 - Peak Monitoring Events Filter

3. Factory Reset Peak Monitoring Settings - selecting this option will reset 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**

Advanced Settings

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

View Dealer Control Center

Allows installers and technicians to perform custom configurations tailored for the homeowners unique requirements.

Restart

Options are to restart Smart Hub, thermostat or both.

Pair Smart Hub to iComfort Dealer Mobile App

This allows an installer to pair their mobile device to start the initial commissioning of the system, or a technician to use a mobile device to perform custom configurations or troubleshooting.

General

This section provides information and setting changes for various displayed items.

About

This page will provide detailed information concerning the HD Display (thermostat info) and Smart Hub. Provided are: model number, serial number, hardware, software and Wi-Fi revisions.

In addition, for thermostat and Smart Hub, a software update option is listed. Select software update and set Automatic Updates to YES or NO (default is NO). You can also select check for updates now.

Dealer Info

This page will display or allow information to be changed concerning the dealer. Items included on this page are name, address1, address2, city, state, zip code, country/region, phone, email and website. There is a dealer access option at the bottom of the page. Press the > button to access the dealer access page.

Dealer Access

1. **Remote View:** This option allows the dealer access to remotely view your system. Options are ON and OFF. Default is OFF.
2. **Remote Control:** There are two options under this section, OFF and ON/ALWAYS. Selecting the desired option will place a green check mark next to the feature.
3. **Alerts and Notifications:** Default is OFF. Turning on this feature will allow automatic notifications to be sent to your dealer concerning maintenance.

Screen Lock

There are three options for screen locking. Default is unlocked.

- **Unlocked** - Changes can be made to any settings.
- **Partially Unlocked** - Screen is locked but temperature settings can be changed.
- **Locked** - No changes can be made.

To unlock partially locked or locked, press anywhere on the screen and hold for five seconds.

Date & Time

The following items can be set on this screen:

1. The clock can be changed to 24 hour (military). Default is OFF.
2. The following settings are only available if the system is not connected to the Internet.
 - **Daylight Savings** - ON or OFF. Default is ON.
 - **Time Zone:** Options are Pacific, Mountain, Central and Eastern. Default is Central. Select time zone and press **SET**.
 - **Set Time** - Local time can be adjusted. Press **SET** to finish.
 - **Set Date** - Current date can be set. Press **SET** to finish.

NOTE: *If the system is connected to the Internet, only changing to the 24 hour clock is available. To change either time zone or daylight Savings, temporarily disable Wi-Fi to make adjustments to those settings.*

Language

This allows the language used on the screen to be changed. Options are English, Français and Español. Default is English.

Display

The following setting options available are:

1. **Outdoor Weather** - Turn ON to display weather on the HOME screen.
2. **Outdoor Temperature Display** - Options are:
 - **Internet (AccuWeather)** - Will display weather provided by AccuWeather for the local area based on the homeowner zip code.
3. **Outdoor Air Quality** - Turn ON to display outdoor air quality on the weather screen.
4. **Indoor Humidity** - Turn ON to display indoor humidity above the indoor temperature on the HOME screen.
5. **Proximity Sensor** - When turned ON, the display will wake up automatically upon approach.
6. **Screen Saver** - Options for this feature are:

NOTE: For weather or screen saver photo (upload) to work, the thermostat has to be connected to the Internet, system registered, and the thermostat is logged into your Lennox account. See *menu > system settings > account* to verify. Screen saver will appear approximately 30 seconds after no screen interaction.

- **Off**
- **Weather** - If turned on, will allow up to 26 animated weather screen savers based on the AccuWeather outdoor weather forecast for the local zip code.
- **Power Save** - Screen is blank until the screen is touched or activated by proximity sensor if enabled.
- **Photo**
 - » Photo Upload
 - Logged into either www.lennoxicomfort.com or your Lennox iComfort mobile app and select your applicable thermostat if more than one exists. Select the menu icon and then select "upload photo".

- A photo upload screen will appear that will let you browse for a photo on your computer or mobile device. Navigate to the desired photo and select it. Then select Upload.

NOTE: It may take a few minutes depending of the photo size to upload to your thermostat. The following are approximate upload times, depending on your Internet access speeds, times may vary.

Table 4. Approximate Picture Upload Time

File Size	Upload Duration
1.59MB	1:25 minutes
2.05MB	1:49 minutes
2.77MB	1.51 minutes
5.91MB	2.24 minutes

NOTE: Picture requirements:

- Select a photo with 640 x 400 up to 1280 x 800 pixel resolution.
- Photo format supported are PNG (recommended), JPG, JPEG, GIF and BMP. On Apple IOS mobile devices the file format HEIC is supported.
- Maximum file size is 20 MB. Larger photos may take longer to upload to the display. Photo filename CANNOT have spaces or special characters.

» **Select Photo**

- Return to the thermostat and go to **menu > settings > display > screen saver**.
- Select photo and a screen will appear asking you to either accept or reject the photo.
- Accept it to make the photo your screen saver image.
- Repeat the above procedures for any additional E30 or S30 thermostats available through your web portal or mobile app.

» **Delete Photo**

- Return to the thermostat and go to **menu > settings > display > screen saver**.
- Select photo and a screen will appear asking you to either accept or reject/delete the photo.
- Select reject/delete.

» **Replace Photo**

- Return to the thermostat and go to **menu > settings > display > screen saver**.

- Select photo and the new photo will appear and you will be prompted to reject /delete, or accept.
- Select accept.

NOTE: *If photo option is selected for screen saver but no photo is uploaded or has been deleted, then the system will display the Lennox logo.*

7. **Screen Brightness** - Options are ON or OFF.

- If set to ON, control of screen brightness is automatically controlled by the system.
- If set to OFF, screen brightness can be adjusted using the sliding scale adjustment tool.

8. **Temp Scale** - User can set to either Fahrenheit or Celsius temperature display.

9. **Clean Screen** - Locks the screen and allows user 30 seconds to clean the screen. During this period, the screen will not respond to any input.

Home Info

Adding Home Information

This screen allows you to add your home information. Fields included are home name, country/region, address, address2, city, state and zip/postal code.

Remove Home

Using “remove home” function will remove all addresses and thermostat systems associated with your account.

To remove just one system, go to that system and navigate to **menu > name** and select “**unregistered system.**”

NOTE: *The remove home function does not delete your account but just removes all systems and addresses.*

Account

The account screen will allow the user to setup an account so they may access their system remotely from the consumer portal. Reasons to create an account:

- To enable remote access to the system using a mobile device with the iComfort Thermostat App installed. This will allow remote adjustment for temperature settings and other features.
- To enable the Smart Away feature discussed later in this instruction.
- To directly communicate to the dealer any issues the system may be incurring.

This menu allows four options:

Using Existing Account

If an iComfort account has already been created, then use the sign in option to access your account. Enter your email address and password to connect your system to your on-line account.

Creating a New Account

1. Use this option to create an account. Enter your email address and desired password. Select create new account.
2. The new account screen will appear. Enter your first name, last name and phone number (optional).
3. Enter an email address and repeat to verify.
4. Create a password under the set password location. Retype the password to verify.
5. Check the box that will allow your dealer to receive service alerts and possibly fix your issue remotely (recommended).
6. Check that you agree to the Lennox EULA. Press on LENNOX EULA to read the end-user license agreement.

If the setup and connection to the Lennox server is successful, a green check mark will appear above the server icon under the Wi-Fi menu option.

Generate Pin

If you have already created a consumer account through the consumer web portal (www.lennoxicomfort.com) then you can use the generate pin option to add your system to your account.

NOTE: *The generate pin option is not required if the account is setup from the thermostat .*

1. Create your account using either the iComfort Thermostat App or consumer website (www.lennoxicomfort.com).
2. The first time you login to your account the screen will indicate no iComfort detected. Select the ▼ icon next to your email address in the upper right-hand side of the screen. A drop down menu will appear and select **add icomfort.**
3. A add icomfort pop-up window will appear on the screen. Enter your pin number which was generated by the thermostat and press **add.** When successful, the setup will continue on to the next applicable screen.
4. If you have already associated an address to your account, you will have the option to select that address or add a new address.

Move Out

Using “move out” function will remove all addresses and thermostat systems associated with your account.

To remove just one system, go to that system and navigate to **menu > name** and select “unregistered system.”

NOTE: The move out function does not delete your account but just removes all systems and addresses.

HomeKit

See section “Apple HomeKit Integration” on page 24 for information on how to add your thermostat to Apple HomeKit.

Notifications (Critical, Warnings and Reminders)

Table 5. Notification Types

Notification Type	Color	What it means
Critical	Red	Indicates something has malfunctioned and needs immediate attention. Contact your service technician.
Warnings	Orange	Indicates an emerging or developing issues that will require attention. One example is excessive run times. Contact your service technician.
Reminders	Yellow	Indicates filter, UVA light replacement or maintenance is needed, based on run time or calendar schedule. See table 2 service codes.
Info	Blue	Indicates various system modes, for example away mode.

NOTE: Selecting the ALL option displays all of the above.

Table 6. Reminders (Service Alerts)

Number	Reminder
3000	Filter 1
3001	Filter 2
3002	Humidifier Pad
3003	UV Light
3004	Maintenance
3005	PureAir Maintenance
4001	User Wi-Fi state change, disable
4002	Firmware download failed
4003	Image file download failed

PureAir™ S (S30 Only Feature)

PureAir S is an air purification system that works only with the iComfort S30 Ultra Smart Thermostat and cleans the air in your home by addressing all three types of indoor air pollutants an:

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

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

PureAir S Home Screen Information

The current PureAir S status is located along the left side of the screen where other system status indicators (air filter and UVA bulb) are located.

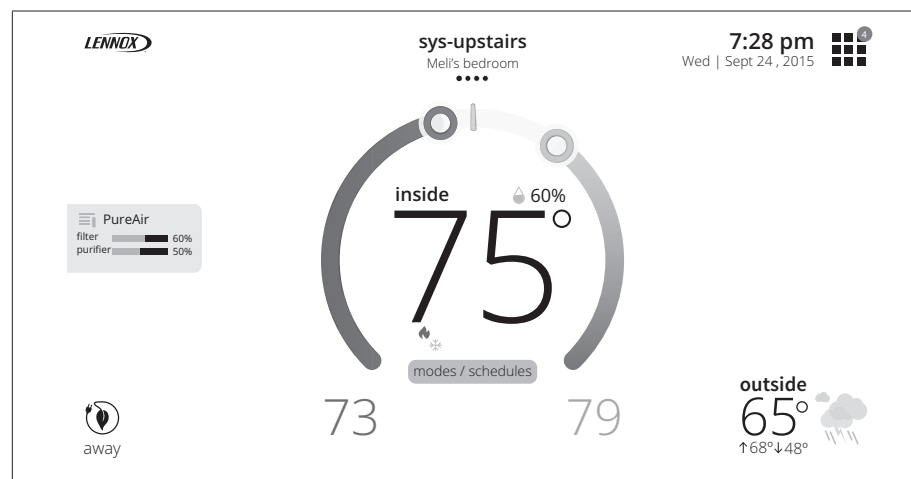


Figure 16. PureAir S Home Screen Status

Touching the PureAir status indicator will bring up a PureAir Performance status screen.

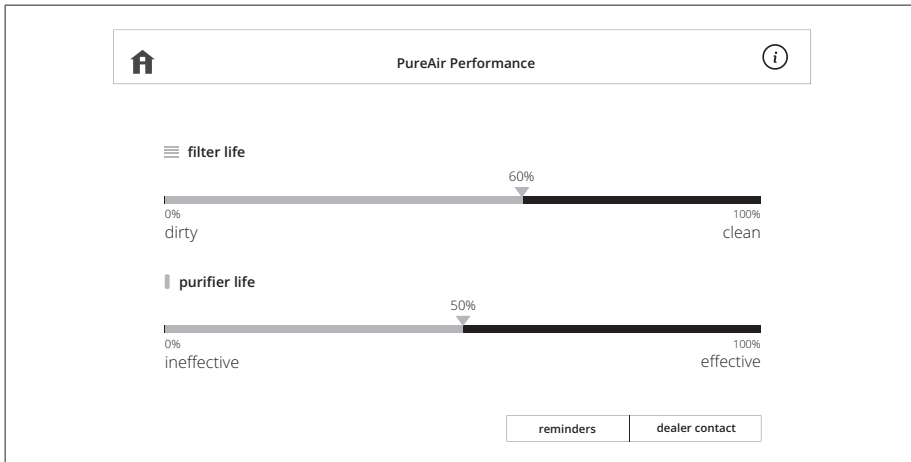


Figure 17. PureAir S Performance Status Screen

NOTE: Various pop-up screens will also appear when issues or reminders become active.

Notifications

When any active alerts or notifications are present, the information is available under **menu > notifications**. Items available are alerts, warnings, reminders and info.

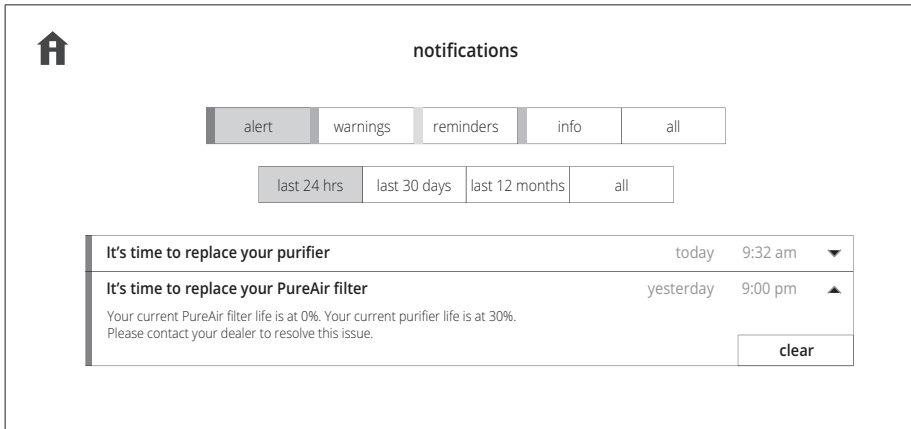


Figure 18. PureAir S Performance Status Screen

iHarmony® Zoning Operations (S30 Only Feature)

This section is applicable only to iComfort S30 controlled systems that have the iHarmony zoning system installed. Works only with Lennox communicating systems.

For user setting options available from home the home screen, go to **menu > settings > iHarmony zoning**. For additional information, go to “iHarmony Zoning (S30 Only Feature)” on page 15.

Heating / Cooling Changeover

The following is an example of how the 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:

- Then system will continue to fulfill the demand from zone 1 until satisfied, or a maximum time of 20 minutes has occurred.
- 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 will allow for system temperatures and operating pressures to stabilize.
- After a five 5 minute delay the system will begin operations to satisfied the cooling demand from zone 2.

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

Damper Operation

Cooling Operation Conventional Heat • Cool and Heat Pump Systems

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

Cooling demand is terminated when:

1. All zone demands for cooling are terminated.
2. 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 Conventional Heat • Cool and Heat Pump Systems

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

1. All zone demands for heating are terminated.
2. 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.

Dual-Fuel Operation

NOTE: Only Lennox communicating heat pump outdoor units may be used with a dual-fuel system.

When both a gas furnace and a heat pump are present on the system, the thermostat uses the balance points to determine which source to use for heating.

When the outdoor temperature is above the low balance point, the heat pump is always attempted first before using the gas furnace.

In order to use the gas furnace as a primary heating source (not defrost tempering) when the outdoor temperature is between the high and low balance points, the following conditions must occur:

- Heat pump must be used for a minimum of 30 minutes.
- Temperature in the zone not increase by more than 0.5°F.
- Heat pump has not gone into defrost in the 30 minute period.

If any single-zone satisfies the specified conditions, the heat pump will stop and the gas furnace is used to satisfy all heat calls for the next duration of the parameter heat pump lockout time. After the heat pump lock out has expired, the heat pump is again used as the primary heat source on the next call after the equipment has stopped.

Emergency Heat Operation - Heat Pump Systems

When the Lennox communicating thermostat emergency heat is enabled the unit will satisfy all heating demand with either gas or electric backup heat. When the Emergency Heat setting is OFF, the heat pump is used to satisfy heating demands.

Home Screen Zone Navigation

This will be displayed when the system is configured for zoning or more than one iComfort thermostat is installed in the home. The iHarmony system can support zones 2 through 4. Zone 1 is the actual thermostat itself. By default, the zones are labeled Zone 1, Zone 2, Zone 3 and Zone 4. There are also four dots underneath the name that indicates which zone is active on the HOME screen. Additional dots may be present if a second system is present. The

zone being displayed will be a solid white circle. See “Table 1. Home Screen and System Status Icons” on page 4 on how to rename each zone.

Each zone can also be renamed from **menu > settings > iharmony zoning**.

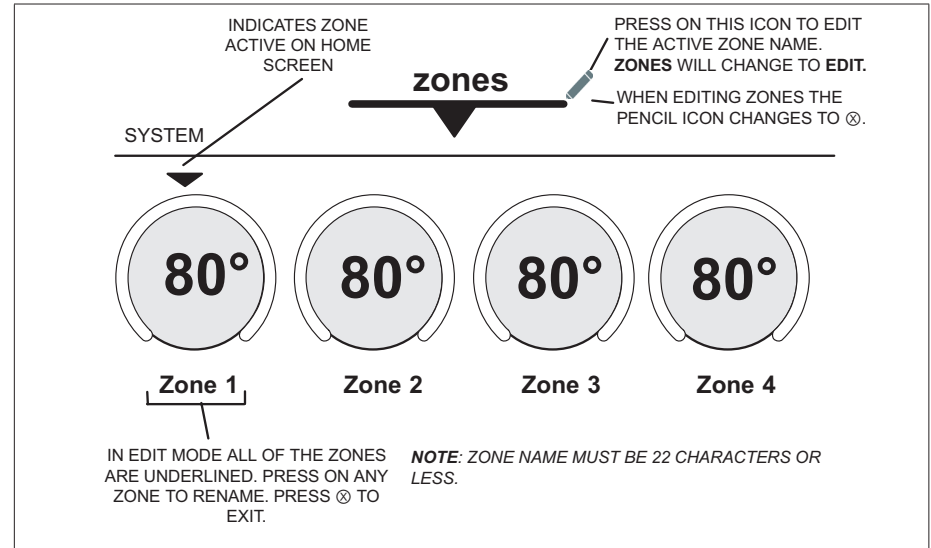


Figure 19. Zoning Pop-Up Display (single-zone)

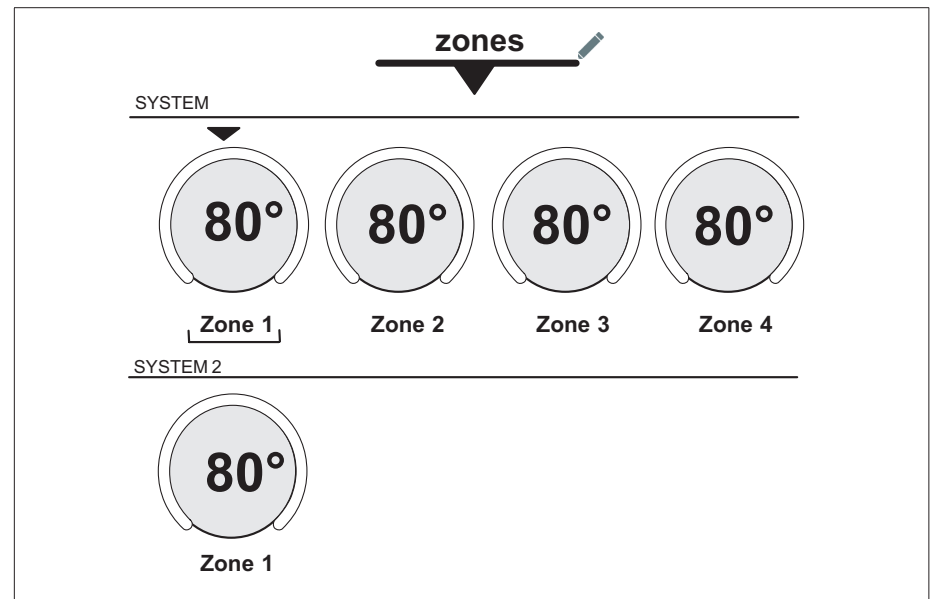


Figure 20. Zoning Pop-Up Display (multi-zone)

Reports

Installation Reports

Installation report is only available to the installer (dealer). Please contact your dealer for a copy of your report.

Performance Reports

Performance reports are only available through the consumer portal at:

www.lennoxicomfort.com

Your dealer also has access through the dealer dashboard.

NOTE: Your dealer has the ability to view and generate reports (PDF) for up to 12 months to email to homeowner.

Using the Secure Web Portal

Access all the great Wi-Fi enabled features on your iComfort® thermostat from our secure web portal. www.lennoxicomfort.com.

After signing in from your computer, tablet or smart phone, you will be able to view your iComfort system settings, adjust the temperature and view reminders and alerts – just as you would on your iComfort thermostat at home. With a familiar look and settings this simple, you should feel right at home.

From the web portal welcome page, you may also click on links to launch an interactive demo or learn more about iComfort.

Amazon Alexa, Google Assistant and IFTTT Integration

The most current information provided by Lennox is available on the Lennox iComfort Support Center at:

<http://www.support.lennoxicomfort.com/help/index.html>

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

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

IMPORTANT

For any of these third party applications to work with your thermostat, the thermostat **MUST** be connected to the Internet and you **MUST** be logged into your 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 you have added the thermostat to your Amazon Alexa app, then you can use Siri® to voice control.

Changing to Celsius

Using your 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 your Lennox thermostat supports half degree settings in Celsius, 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)

Alexa will control your 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 you ask Alexa to set the hallway temperature to 70 degrees, your thermostat will use this as a midpoint temperature, setting the Heat setpoint to 69 and Cool setpoint to 72. Alexa will confirm your request, saying "Hallway is in auto mode, aiming for 70 degrees".

NOTE:

1. You cannot change the mode (heat only, cool only, etc.) of your thermostat using Alexa.
2. If your thermostat is in 'away' or 'smart away' mode, any Alexa commands to change thermostat temperature will not work in this mode.

3. Currently, you can pair only one home that is listed in your Lennox iComfort Account with Alexa. In the situation where you have multiple homes associated with your iComfort account, you will not have a choice to choose the home for Alexa. You can check the homes on your account by visiting:

Additional Help

To learn more, go to Lennox consumer web portal at:

<http://www.support.lennoxicomfort.com/help/index.html>

or

Amazon's online help at <https://alexa.amazon.com>.

Google Home and Assistant

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

Once you have added the thermostat to your Google Home app, then install the Google Assistant app (Android and IOS) to enable voice control.

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

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 you set your heat set point to 60°F and your cooling set point to 80°F at the thermostat itself, then you have established a temperature range of 20 degrees. Any adjustment using Google Assistant, either through the app or by voice will maintain a 20 degree range differential as well. Let's say you change your heat set point to 65°F. Now your 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

To learn more, go to either the Lennox consumer help at:

<http://www.support.lennoxicomfort.com/help/index.html>

or

Google's online help at g.co/home/help.

IFTTT

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

Additional Help

To learn more, go to the Lennox consumer web portal at:

<http://www.support.lennoxicomfort.com/help/index.html> or IFTTT's online help at: <https://ifttt.com/about>.

Apple HomeKit Integration

Apple® HomeKit™ technology provides an easy, secure way to control your home's lights, doors, thermostats, and more from your iPhone®, iPad®, iPod touch® or Apple Watch®.

To control this HomeKit-enabled accessory, iOS 10.3.1 or later is recommended. Controlling this HomeKit-enabled accessory automatically and away from home requires an Apple TV® with tvOS 10.3 or later or an iPad with iOS 10.3 or later.

Apple, Apple Watch, iPad, iPad Air, iPhone and iPod touch are trademarks of Apple Inc., registered in the U.S. and other countries. HomeKit and HomePod are trademarks of Apple Inc.

Use of the Works with Apple HomeKit logo means that an electronic accessory has been designed to connect specifically to iPod touch, iPhone, or iPad, respectively, and has been certified by the developer to meet Apple performance standards. Apple is not responsible for the operation of this device or its compliance with safety and regulatory standards.

Overview

There are three options available for Wi-Fi Accessory Configuration Setup and HomeKit pairing which are:

- “Out of the Box Setup Procedure during Thermostat Commissioning” on page 25.
- “Out of the Box Setup Procedure after Thermostat Commissioning” on page 25.
- “HomeKit Manual Setup” on page 25.

For more information about Apple Homekit, go to:

<https://www.apple.com/ios/home>

The most current information provided by Lennox is available on the consumer portal at:

www.lennoxicomfort.com

Go to the bottom right-side of the page and select the click here for support icon.

Remote Access

With the Home app, on your iOS device, you can set up a home hub to control your HomeKit accessories remotely, grant access to the people you trust, and automate your accessories to do what you want, when you want. You can set up your HomePod, Apple TV 4K, Apple TV (4th generation), or iPad as a home hub to automate and remotely control your HomeKit accessories from your iOS device. The device that you set up as a home hub must remain in your home, connected to your home Wi-Fi network, and powered on.

Wi-Fi Configuration and Pairing Prerequisites

The following is required in order to setup Wi-Fi and pairing your thermostat to Apple Homekit:

- You are located in the home where the iComfort system is located.
- The home's wireless access point is up and running with Internet access.
- Your iOS mobile device's Wi-Fi is enabled and already connected to your home wireless network.
- Registered and active iCloud account.

Out of the Box Setup Procedure during Thermostat Commissioning

1. When the thermostat is first powered up, the Wi-Fi Accessory Configuration (WAC) Active screen will appear on top of the dealer info setup screen.



Figure 21. Wi-Fi Configuration

NOTE: You have 15 minutes to complete the procedure or it will time out at the thermostat and you will receive a WAC Failed message.

2. Proceed to “HomeKit Manual Setup” on page 25 to continue the procedure.

Out of the Box Setup Procedure after Thermostat Commissioning

1. When the thermostat is powered is cycled, the Wi-Fi Accessory Configuration (WAC) Active screen will appear on top of the thermostat's home screen.

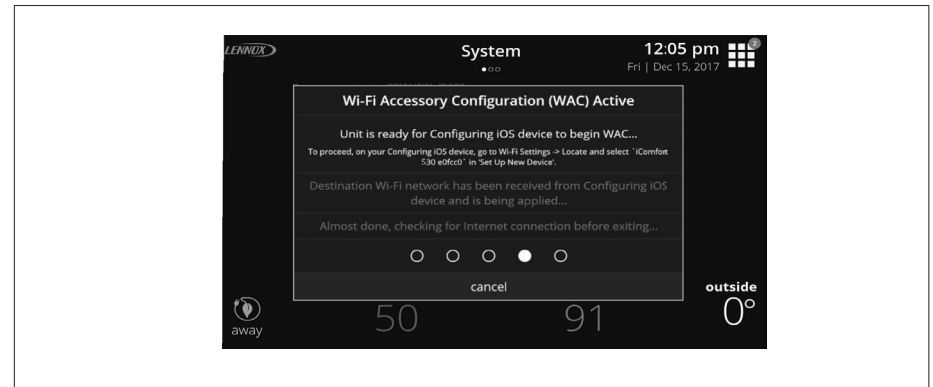


Figure 22. HomeKit Menu

NOTE: You have 15 minutes to complete the procedure or it will time out at the thermostat and you will receive a WAC Failed message.

2. Proceed to “HomeKit Manual Setup” to continue the procedure.

HomeKit Manual Setup

The following procedure is used when Apple Homekit was not configured during the thermostat's commissioning phase. This procedure could also be used if the thermostat had been configured by a previous homeowner.

1. From the thermostat's home screen, go to **menu > settings > Home Kit**. Select **HomeKit factory reset**.

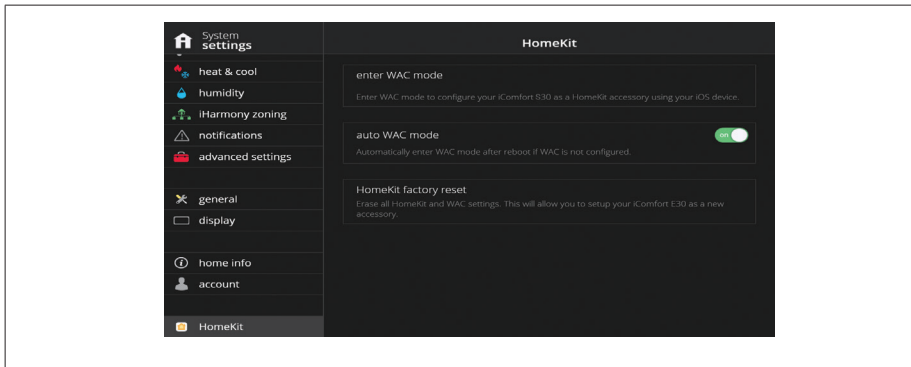


Figure 23. HomeKit Menu

2. A pop-up screen will appear asking you to confirm that you want to reset to default. Select **YES** to continue.

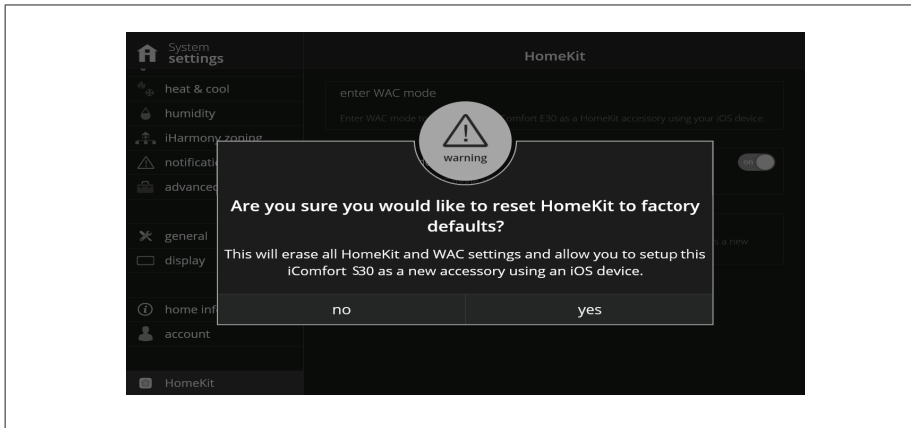


Figure 24. HomeKit Reset Screen

3. The following screen indicates that the thermostat is ready for configuring iOS device to begin WAC.

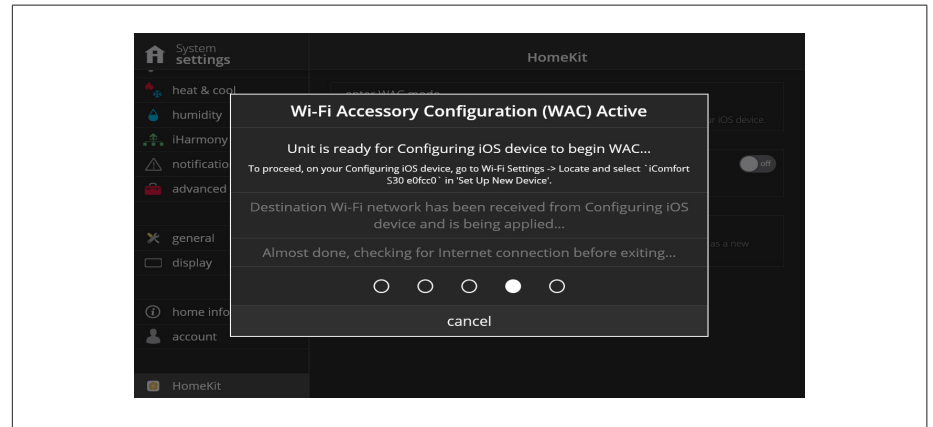


Figure 25. Wi-Fi Configuration

Wi-Fi Accessory Configuration (WAC)

1. The Wi-Fi Accessory Configuration (WAC) Active screen provides three setup status indicators. Those are:
 - Unit is ready for Configuring iOS device to begin WAC.
 - Destination Wi-Fi network has been received from Configuring iOS device and is being applied.
 - Almost done, checking for Internet connection before exiting.

NOTE: You will receive an error message indicating “network not configured” if the procedure failed.

NOTE: If there is no Internet connection available, you will get an error message indicating “Internet connection not available”.

2. Go to your iOS device’s Wi-Fi utility and look for either a E30 or S30 and a unique ID (example: S30 e0fc37). Select that SSID. Under **Setup New Device**, you should see iComfort S30 e0fc37.

NOTE: Please note that e0fe7 is an example and is a variable. Each iComfort E30 or S30 thermostat will have its own unique alpha-numeric sequence.

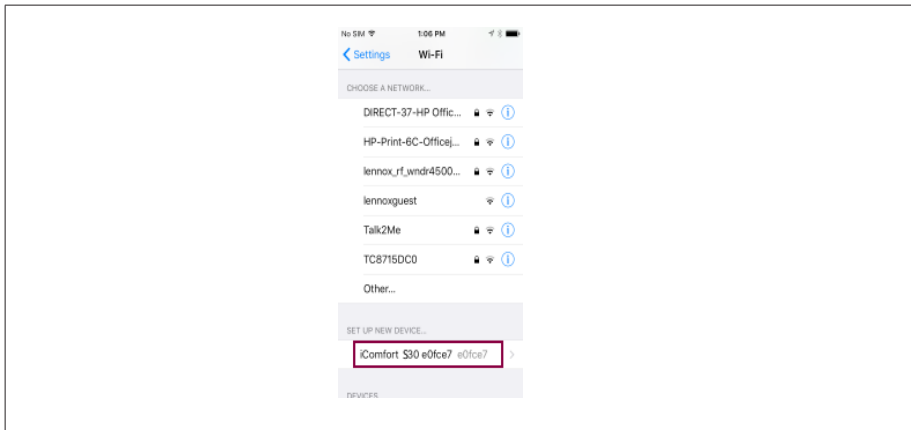


Figure 26. Setup New Device

3. Select the iComfort device to continue.
4. Under **Accessory Setup**, you should see a message indicating the accessory will be set up to join “your local network”.
5. Press Next to continue. If successful, you should see a accessory join message.

Apple HomeKit Pairing

1. To add the thermostat to a specific home if you have more than one. Go to your Apple Home application on your mobile (iOS) device and FIRST select the home.

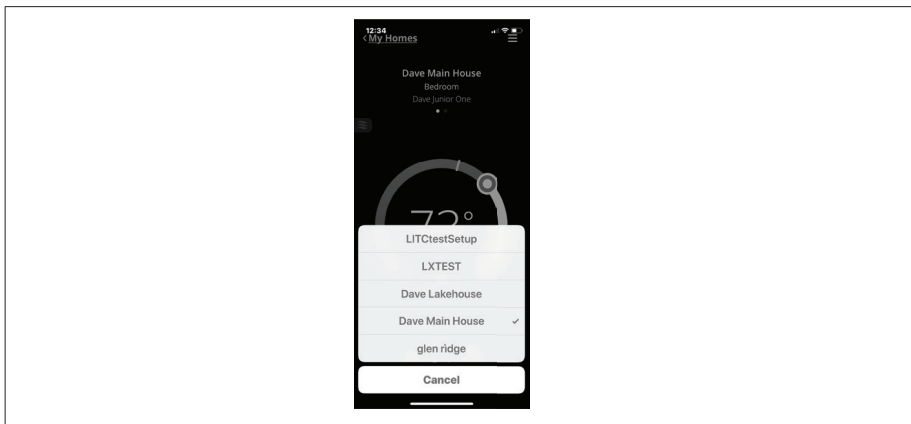


Figure 27. Typical Example of Home Selection.

2. Select **Add Accessory**.
3. Select either a iComfort E30 or S30.

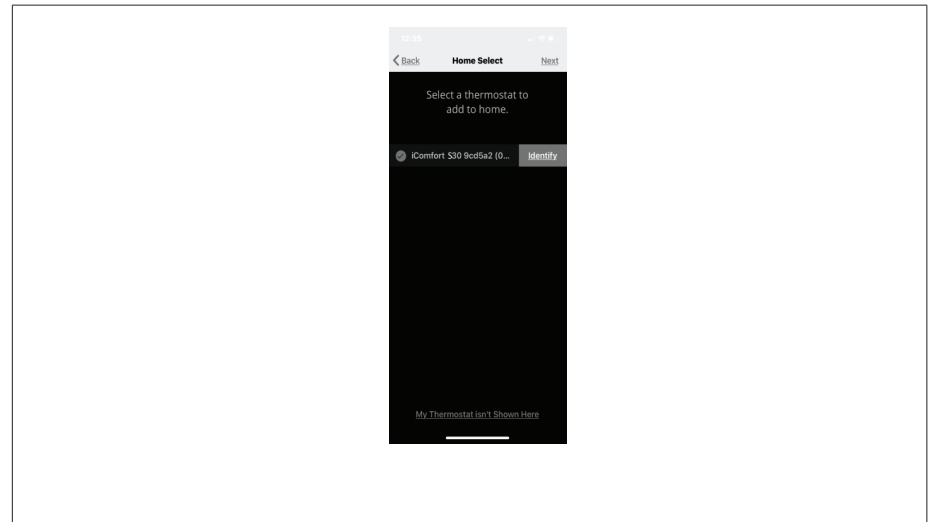


Figure 28. Typical Example of iComfort Accessory Selection

4. The following screen will appear on your Thermostat. Use your iOS device's camera to read the pairing code that appears on the thermostat's screen.

NOTE: *If your camera is unable to read the code, you will be given the opportunity to manually enter the code*

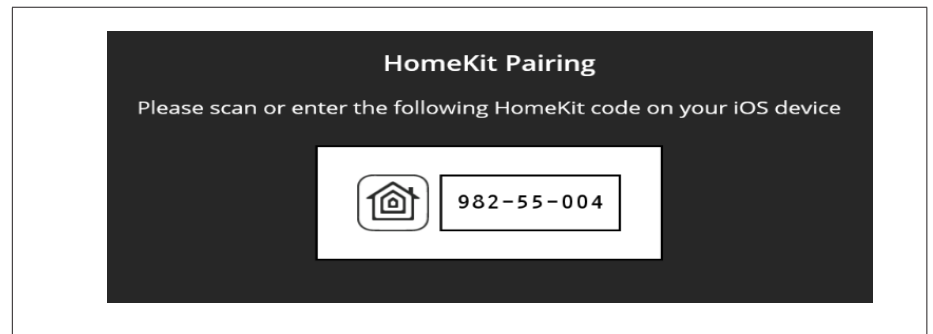


Figure 29. Pairing Code

NOTE: *You have 15 minutes to complete the procedure or it will time out at the thermostat.*

5. The following screens will indicated the pairing was successful.

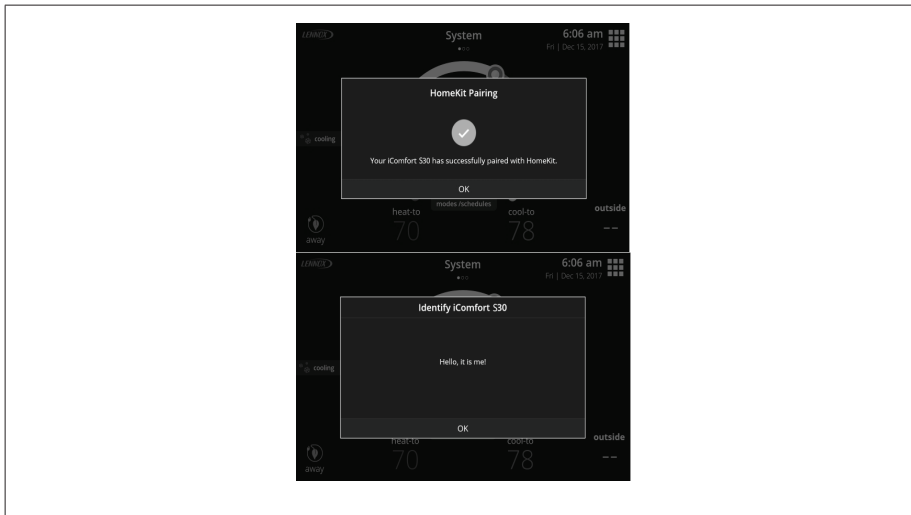


Figure 30. Pairing Successful

- Your E30 or S30 thermostat has been added to Apple Homekit. You can at this point assigned a location for the thermostat and include in your favorites.

Additional Apple HomeKit Menu Options

There are several functions available from the HomeKit menu.

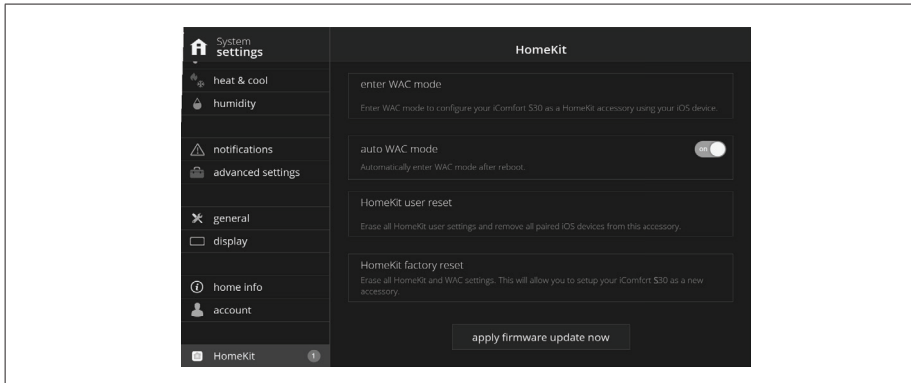


Figure 31. HomeKit Menu

Enter WAC Mode

This option is for changing to a new wireless access point or updating the existing wireless access point password.

Auto WAC Mode

By default this option is set to **ON**. If the thermostat has never been connected to the home's wireless access point or a HomeKit Factory Reset was initiated. Anytime the thermostat's power is cycled or restarted, the Wi-Fi Accessory Configuration (WAC) Active screen will always appear on thermostat boot-up. Selecting **OFF**, will disable this function.

NOTE: The thermostat can be restarted by going to menu > settings > advanced settings > restart and select restart smart hub or restart both

HomeKit User Reset

This option allows you to remove any existing Apple HomeKit user settings and paired iOS devices. The thermostat however will retain it's Wi-Fi connection settings. This option will only appear if the thermostat has already been added to a user's iCloud account.

HomeKit Factory Reset

This option allows you to remove any existing thermostat Wi-Fi settings, Apple HomeKit user settings and paired iOS devices. Use this option if you wish to remove the thermostat's Wi-Fi settings and set the Apple HomeKit function back to factory default.

Apply Firmware Update Now

If the button is visible, it indicates there is a firmware update available. Select the button to update the Apple HomeKit firmware if you desire to do so. Once started a pop-up will appear indicating that "Homekit firmware update is in progress. Please wait...".

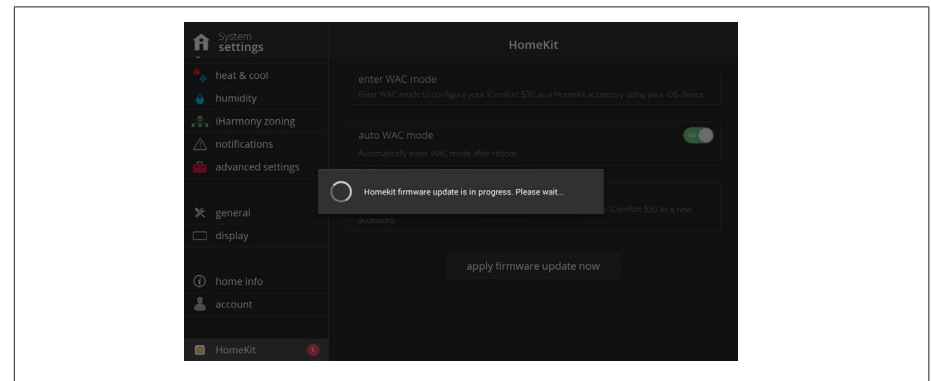


Figure 32. Firmware Update Progress Indicator

Reset HomeKit to Factory Reset

If your service technician needs to reset your E30 or S30 Thermostat, there is an option not to erase the Apple HomeKit settings if already configured.

1. The first screen to appear is the factory reset Smart Hub, the technician will select **confirm** to continue.
2. A second screen will appear that provides the option to reset, or not reset the Apple HomeKit settings to factory default. Select **NO**, to keep the settings.

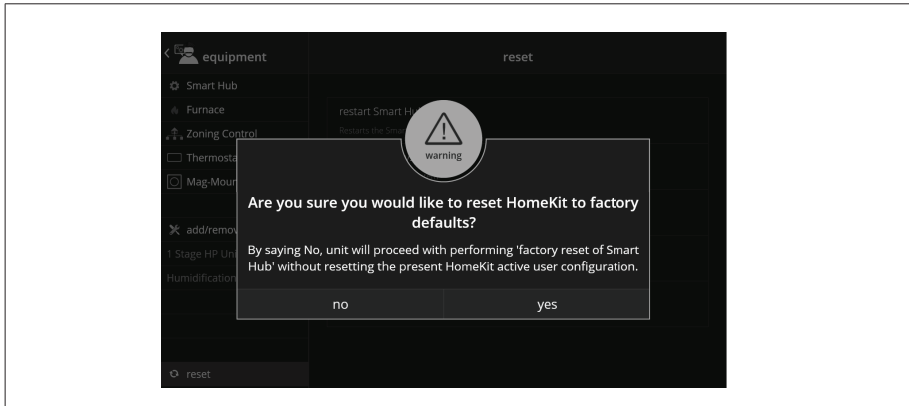


Figure 33. Apple HomeKit Factory Reset

Thermostat - Notifications or Actions Required

If there are notifications or actions required for Apple Homekit, a notification icon will appear on the home screen in the upper right-hand corner of the screen.

Currently there is only one purpose for this notification and that is to notify you that a Apple HomeKit firmware update is available.

Once the updated firmware has been applied, the notifications will disappear next to the HomeKit menu option. It will also disappear from the home screen.

NOTE: *There could be other active notifications not related to HomeKit.*

The following example shows there is action required for the HomeKit option.

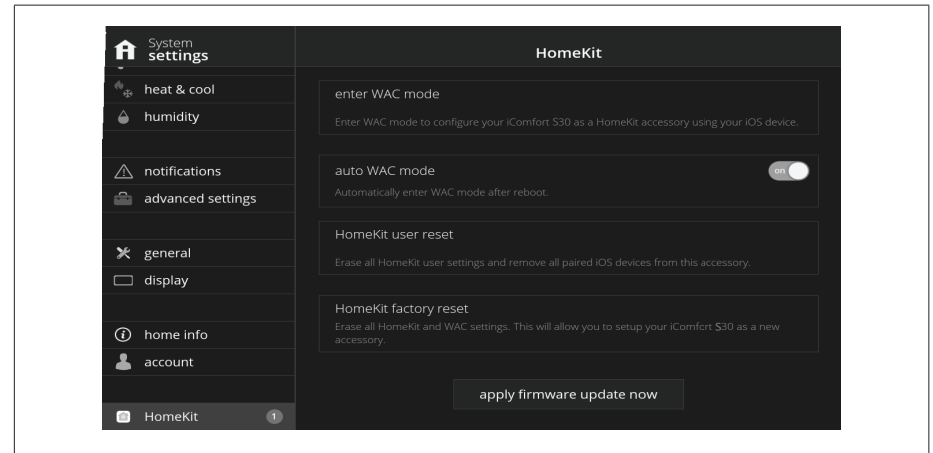


Figure 34. HomeKit Notification

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:

1. This device may not cause harmful interference, and
2. 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 equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. In order to avoid the possibility of exceeding the FCC radio frequency exposure limits, human proximity to the antenna shall not be less than 20cm during normal operation.

iComfort Thermostat App

This app is designed to be used with the Lennox iComfort E30 and S30 Thermostats. The iComfort Thermostat App allows the user to control their HVAC system from anywhere in the world as though they were standing in front of your own thermostat.

App Features

- Adjust and view your house temperature from anywhere in the world.

- Edit and view your thermostat schedule.
- Smart Away™ Mode uses the location on your mobile phone to detect when the house is empty and automatically change the temperature to a more energy-efficient setting. When a family member is on the way home it automatically returns the temperature to its regular setting.
- Much like a weather report will use a temperature and wind speed to determine a Wind Chill index to indicate the perceived temperature, the iComfort E30 and S30 Feels Like™ Temperature takes into account indoor and outdoor temperature and humidity to make a home feel exactly like the homeowner desires. Therefore, when the thermostat is set to 72 degrees, *your* home will “Feel Like” 72 degrees year-round.
- Allergen Defender on the iComfort E30 and S30 gives immediate allergy relief by monitoring air quality and pollen levels outside. When high levels of pollutants and allergens are detected, the fan automatically turns on to keep the home’s air clean.
- PureAir™ S is the smart whole-home air purification solution that means cleaner air in every room and every breath. It filters out particles, combats germs, and fight odors all while monitoring the filter and purifier lifespan, alerting you when replacement is needed.
- The thermostat’s advanced warning system predicts problems before they happen and alerts the homeowner.
- Safety protection notifies you if your house gets too hot or too cold.
- Get alerts, reminders and advanced warnings from your system wherever you may be.

You must own a Lennox iComfort E30 or S30 thermostat to use this app. The thermostat must also be connected to your home’s Wi-Fi router before the app can control the settings. For more information go to <https://www.lennox.com/products/comfort-controls/thermostats>.



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