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Residential Communicating Control System iComfort® Ultra Smart Thermostat

RESIDENTIAL PRODUCT SPECIFICATIONS

The iComfort® S30 Ultra Smart thermostat recognizes and connects to all iComfort® 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



Thermostat also recognizes model and serial number information for iComfort® Communicating products to simplify system setup

- Advanced iComfort® controls in specific heating and cooling units and the PureAir™ S Air Purification System communicate information about various operating parameters to the thermostat to constantly maintain the most efficient operating conditions possible
- Additional conventional (not iComfort® Communicating) indoor air quality comfort products (Healthy Climate® Humidifiers, Humiditrol® Enhanced Dehumidification Accessory, Healthy Climate® HRV/ERV Heat/Energy Recovery Ventilators, Fresh Air Damper, Healthy Climate® Germicidal Lights) can be added to the system for a complete total-comfort system
- Conventional outdoor units (not iComfort® Communicating) can easily be added and controlled by the iComfort S30 Ultra Smart thermostat
- Conventional HVAC systems (not iComfort® Communicating) can be controlled by the iComfort S30 Ultra Smart thermostat with the addition of the optional iComfort® Equipment Interface Module (EIM)
- Optional iHarmony® Zoning System (for specific HVAC systems) allows wholehome zoning (up to 4 zones) with complete control from the iComfort S30 Ultra Smart thermostat and individual In-Zone Thermostats
- A simple easy-to-use touchscreen allows complete system configuration.
 Scheduled maintenance alerts, system warnings and troubleshooting are also displayed on thermostat screen
- Up to four separate schedules are available plus Schedule IQ™
- One-Touch Away Mode A quick and easy way to set the cooling and heating setpoints while away
- Smart Away™ Schedule IQ™ uses geo-fencing technology to determine when the homeowner is within a predetermined distance from the home to operate the system when leaving, away and arriving
- Weather-On-Demand Live up-to-date weather data and seven-day forecasts
- Easy to read 7 in. high definition color display (measured diagonally)
- · Installer setup screens allow quick and simple system configuration without a manual
- Installer can also run tests on complete system or individual components for easy maintenance and troubleshooting
- Dealer Dashboard features online real-time monitoring of installed iComfort systems
- Serial communications bus (RSBus), with less wiring than a conventional heating/cooling system, allows system communication. Uses 4-wire, 18-gauge standard thermostat wiring
- High Definition Color Display, Mag-Mount, Smart Hub Controller, wallplate (for retrofit installations) furnished for easy installation

Home Automation for Apple HomeKit™, Amaxon Alexa®, Google Assistant and IFTTT Integration

See page page 11 for additional information













WARRANTY

EQUIPMENT WARRANTY

- Limited five years in residential installations
- Limited one year in non-residential installations

NOTE - Refer to Lennox Equipment Limited Warranty certificate included with unit for specific details

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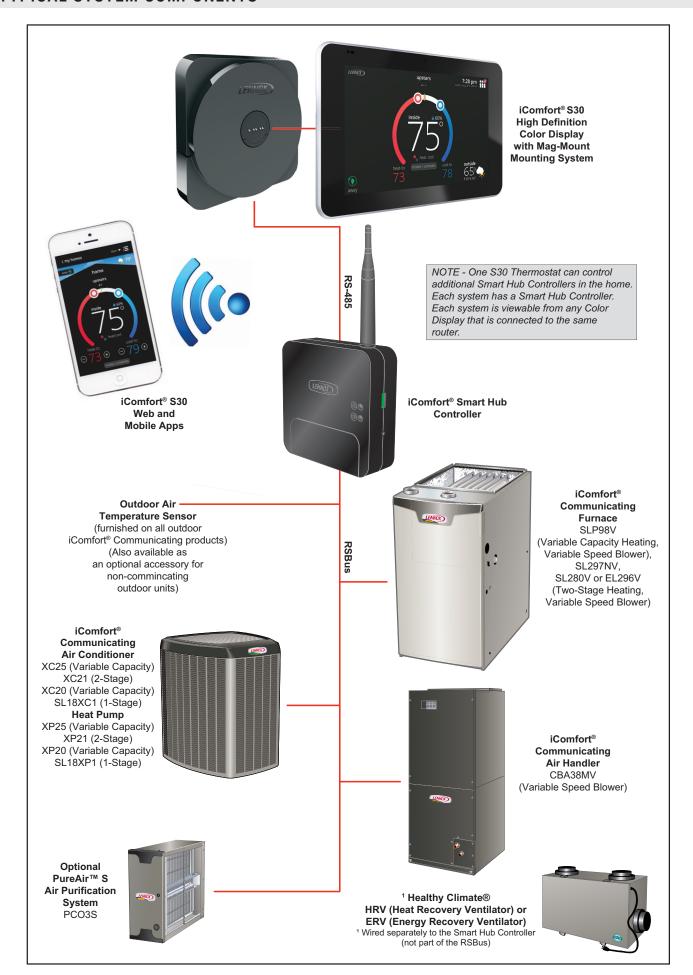
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ICOMFORT® S30 COMPONENTS

HIGH DEFINITION COLOR DISPLAY



- Easy to read 7 in. high definition color tablet-like display interfaces with the Mag-Mount Wall Mount and the Smart Hub Controller to operate the HVAC systems within the home
- Contains a temperature sensor to monitor and control temperatures in the home through the display
 - Temperature Measurement Range 0 to 150°F
- Display can control multiple HVAC systems in the home through multiple Smart Hub Controllers.
- Multiple displays (thermostats) in the home can operate any Smart Hub Controllers installed in the home.
- All user settings are made on the display (or on the mobile App) and stored in the Smart Hub Controller

MAG-MOUNT WALL MOUNT SYSTEM



- Secure wall mount for the High Definition Color Display
- Sends data between the Display/Mag-Mount and the Smart Hub Controller through 4-wire, 18-gauge standard thermostat wiring
- Internal microcontroller transfers data between the Smart Hub Controller and the Display
- Contains a humidity sensor to monitor and control humidity levels in the home through the display
 - Humidity Measurement Range 10 to 90% relative humidity
 - Communication to Smart Hub Controller Two wire serial RS-485 interface, 3.3-V signaling, up to 400 feet
 - Communication to Display Two wire serial, 1.8-V signaling
 - Power Input (from Smart Hub Controller) 12VDC
 - Power Output (to High Definition Color Display) 5VDC
- Full communication between the High Definition Color Display/Mag-Mount and the Smart Hub Controller
- Spring-loaded push connectors for easy wiring hookup
- Electrical interface connects the Mag-Mount to the High Definition Color Display when the Display is mounted
- Blue LED indicates power status
 - · Solid blue indicates power is connected
- Blinking blue indicates no communication

NOTE - Only visible when the HD Display is removed.

- Body and cover is constructed of high impact ABS plastic
- Magnets and tabs secure the Display to the mounting surface
- · Wallplate and mounting hardware is included

ICOMFORT® S30 COMPONENTS (CONTINUED)

SMART HUB CONTROLLER



- Stores user's system settings from the High Definition Color Display or mobile Apps in non-volatile memory
- Built-in Wi-Fi connection to the Internet is accomplished through the Smart Hub Controller and the home Wi-Fi network (LAN)
- Wi-Fi connection to the Internet is accomplished through the Display directly or using mobile Apps.
- ② Supports wireless bands 802.11b, 802.11g and 802.11n.
- One Smart Hub Controller can connect to and control other Smart Hub Controllers in the home through the home Wi-Fi network
- Multiple Smart Hubs in a home can be assigned to a group (up to nine groups with up to eight Smart Hubs in each group). All Smart Hubs in a group can communicate with other Smart Hubs in the same group over the home Wi-Fi network.
- USB port allows field firmware upgrades for the S30 thermostat components
- Firmware updates can also be pushed from the Lennox server to the Smart Hub Controller
- Full RSBus communication between the Smart Hub. Controller and HVAC equipment using 4-wire, 18-gauge standard thermostat wiring
- Spring-loaded push connectors for easy wiring hookup
- Power (24VAC) to the Smart Hub Controller is supplied by the indoor unit
- · Mounting hardware for Smart Hub Controller is field furnished

- Dealer Commissioning / Manual Reboot Button is located on the side of the case

Quickly press the button to begin the commissioning process. Press and hold the button for 5 seconds to reboot the Smart Hub..

- Two LEDs status icons on the front of the case show current operating conditions:
 - System Status Indicator LED
 - Green System is normal (No system errors)
 - · Red HVAC Error (System has a critical alert which requires attention)
 - Cvan HVAC Error (Indoor unit is not connected or unable to communicate)
 - Magenta Thermostat Error (Mag-Mount or HD display not connected)
 - · Amber Wi-Fi (Wi-Fi is not connected, no Wi-Fi is within range, or Wi-Fi hardware error)
- If multiple errors are present at the same time the System Status LED will display each condition for one second on/one second off and then display the next color and continue this sequence until all errors have been displayed. Priority for errors are: Red (HVAC), Cyan (Alert), Magenta (Thermostat) and Amber (Wi-Fi).
- Commissioning Status Indicator LED



- Blue System is normal (No mobile device is directly connected using Wi-Fi to the Smart Hub)
- Green (flashing) Commissioning button has been activated and Smart Hub is awaiting for a connection with a mobile device
- Green (solid) Mobile device is connected to the Smart Hub
- See Installation and Setup Guide for additional information.

SYSTEM COMPONENT TYPES						
System Type	iComfort [®] Thermostat	Outdoor Unit Type (iComfort® Communicating or Non-Communicating)	¹ Indoor Unit Type (iComfort [®] Communicating)	¹ Indoor Unit Type (Non-Communicating) ² Equipment Interface Module (EIM) Required		
Air Conditioner	Required	Either type may be used	EL296V, SL280V, SL297NV or SLP98V Furnace	Most Furnaces		
	Required	Either type may be used	CBA38MV Air Handler	Most Air Handlers		
Heat Pump	Required	Either type may be used	EL296V, SL280V, SL297NV or SLP98V Furnace	Most Furnaces		
	Required	Either type may be used	CBA38MV Air Handler	Most Air Handlers		

¹ Indoor unit must contain the iComfort® Communicating Control or optional Equipment Interface Module (EIM). A non-communicating outdoor unit may be used (but some system features will be reduced).

CONTROL ORDERING INFORMATION





iComfort S30 Ultra Smart Thermostat Components

Description	Catalog No.
iComfort S30 Ultra Smart Thermostat (includes high definition display with Mag-Mount wall mount and Smart Hub Controller)	12U67
Dimensions: High Definition Display (H x W x D) - 5 x 7-1/2 x 1 in.	
Mag-Mount (H x W x D) - 3-1/4 x 3-1/4 x 1/2 in.	
Smart Hub Controller Case (H x W x D) - 4-1/2 x 4-1/2 x 1-1/2 in.	
Antenna length - 7-1/4 in.	
Equipment Interface Module (EIM) - For most non-communicating HVAC systems including dual-fuel capable non-communicating heat pumps	10T50
Dimensions: (H x W x D): 6-1/8 x 7-1/2 x 1-3/8 in. (156 x 191 x 35 mm)	
¹ Optional Outdoor Air Temperature Sensor	X2658
² Discharge Air Temperature Sensor	88K38

¹ The Optional Outdoor Air Temperature Sensor may be used with an iComfort® equipped outdoor unit for a secondary (alternate) sensor reading. The Optional Outdoor Air Temperature Sensor may be ordered for use with a conventional outdoor unit.

NOTE - The Optional Outdoor Air Temperature Sensor is REQUIRED for dual-fuel applications with a non-communicating heat pump outdoor unit.

² Not for use with XC20/XP20 or XC25/XP25 outdoor units. Indoor unit must be factory iComfort® Communicating when iComfort® S30 thermostat is used with XC20/XP20 or XC25/XP25 outdoor units.

² Required with Air Handler applications when using EVENHEATER® option. Optional on all other applications for service diagnostics.

FEATURED INDOOR/OUTDOOR PRODUCTS

Dave Lennox **Signature**® Collection SLP98V Variable-Capacity, Variable-Speed Furnaces

ENERGY STAR® qualified



- 98.7% AFUE energy efficiency
- Variable-capacity operation
- Multi-position design
- iComfort® Communicating control
- Precise Comfort® technology
- AirFlex™ technology
- Fully insulated cabinet
- SureLight® Control delivers operation reliability
- Silicon nitride igniter
- Also available SL297NV, SL280V and Elite® EL296V Two-Stage, Variable-Speed Gas Furnaces

Dave Lennox *Signature*® Collection XC25 Variable Capacity Air Conditioners

- ENERGY STAR® qualified
- Up to 26.00 SEER cooling efficiency
- iComfort® Communicating control
- Precise Comfort® Technology
- SilentComfort™ Technology
- · Quiet operation, as low as 59 dB
- R-410A refrigerant
- Dependable and efficient variable capacity scroll compressor
- SmartHinge™ louvered coil protection.
- Also available XC21 Two-Stage or SL18XC1 Single-Stage Air Conditioner and Elite[®] XC20 Variable Capacity



Dave Lennox **Signature**® Collection XP25 Variable Capacity Heat Pumps

• ENERGY STAR® qualified



- Up to 23.50 SEER and 10.20 HSPF heating efficiency
- iComfort® Communicating control
- Precise Comfort® Technology.
- SilentComfort™ Technology
- Quiet operation, as low as 58 dB.
- R-410A refrigerant
- Dependable and efficient variable capacity scroll compressor

III

SmartHinge[™] louvered coil

protection

 Also available - XP21 Two-Stage or SL18XP1 Single-Stage Air Conditioner and Elite[®] XP20 Variable Capacity

Dave Lennox **Signature**® Collection CBA38MV Variable-Speed Air Handlers

- 4-way multi-position design
- iComfort® Communicating control
- Variable-speed blower motor
- Quantum™ Coil
- R-410A refrigerant compatible
- Automatic comfort control for lower, summertime humidity levels
- Anti-microbial drain pan resists the growth of mold and mildew

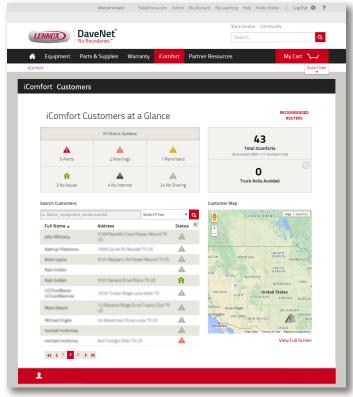
iComfort® Equipment Interface Module (EIM)

- Allows the iComfort® S30 Thermostat to be used with most non-communicating HVAC systems (24VAC)
- The EIM emulates an iComfort®
 Communicating communicating indoor
 unit (with reduced communication
 features)
- See the Equipment Interface Module (EIM) Product Specifications bulletin for additional information



ATTENTION - The Lennox iComfort® S30 Ultra Smart thermostat with Equipment Interface Module (EIM) will work with most 24VAC furnaces, air conditioners, air handlers and heat pumps (up to 3 stages of heat and 2 stages of cooling), EXCEPT it will NOT work with any brand of communicating HVAC equipment other than LENNOX®.

DEALER DASHBOARD



- Displays each Lennox dealer's iComfort® S30 ultra smart thermostat installations in one convenient location
- Accessible through the Dealer Dashboard at www.LennoxPros.com.

All Status Updates

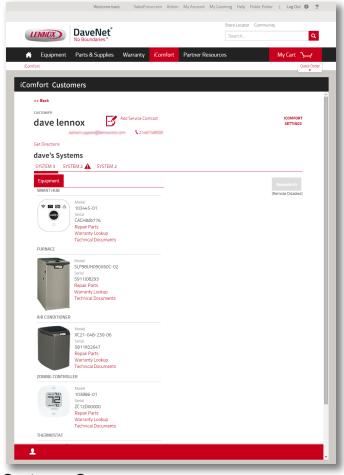
- A quick way to view all specific issues
- Alerts
- Warnings
- Reminders
- Issues
- No Internet
- Sharing

Search Customers

- A list of customers with installed iComfort® S30 ultra smart thermostats, and their locations
- Name
- Address
- Status
- Customers can be searched by Homeowner's Name, Zip/ Postal Code, Equipment Type, serial number or model number.
- Clicking the Excel icon will download a spreadsheet of customer's information to the dealer's computer.
- Selecting a customer from the list displays detailed System Overview Screen including owner information, system components, system status and any alerts.

Map

- Map shows all customer's locations, any current alerts and the location of the nearest Lennox PartsPlus® stores in the area
- · Click View Full Screen button to open a larger view



Customer Screen

- Displays a customer's information, systems installed, any active alerts, warnings or reminders
- Tabs for Systems, Alerts and a list of installed Equipment



Links are shown under each Equipment Type for Repair Parts, Warranty Lookup and any Technical Documents that are available.

Add Service Contract Button

 Allows dealer to add a service contract with start/end dates and notes

Remote In Button

 Allows dealer remote control of Dealer Control Center on customer's thermostat (if enabled)



Remote In thermostat controls have the same appearance and functions as the touchscreen display, making it easy to make any settings and adjustments.



Button is grayed out if **Remote In** is disabled at the thermostat.

Get Directions Button

Displays a map to customer's home

REMOTE ACCESS (HOMEOWNER/INSTALLER)



Wi-Fi remote temperature monitoring and adjustment through a home wireless network via desktop PCs, laptops, and apps for smartphones or tablets. Controls on the devices have the same appearance and functions as the touchscreen display, making it easy to make any settings and adjustments.

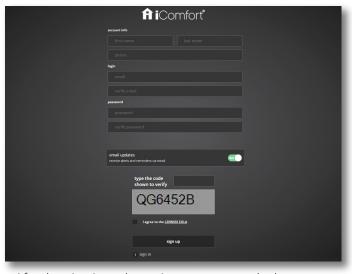
HOMEOWNER LOGIN



 The Login screen is accessible to the homeowner at: www.LennoxiComfort.com



Thermostat must be registered before logging into the Homeowner Remote Access Website. Please refer to the homeowners manual for additional information.



- After logging in and creating an account, the homeowner can enter specific information for the iComfort® S30 ultra smart thermostat (single or multiple systems), set up multiple homes and specify what alerts and reminders they would like to receive
- The homeowner can control all iComfort® S30 ultra smart thermostats on the network remotely through the website

Multiple Thermostat Control

- One home one iComfort® S30 Thermostat
- Two or more homes one iComfort® S30 Thermostat
- One home multiple iComfort® S30 Thermostats
- Two or more homes multiple iComfort® S30 Thermostats

HOMEOWNER REMOTE ACCESS

MOBILE APPS

iComfort® Thermostat App (Homeowner)

The free iComfort® Thermostat app is available for use on iPhone® and iPad®. Android™ devices.

Control cooling/heating temperatures, fan operation, set programs and set Away mode for multiple locations.

Also controls individual zone settings if system is equipped with the optional iHarmony® Zoning System.





iComfort® Mobile Setup App (Installer)

Allows the installer to commission the system and remotely turn the system on and off during setup or service call from any iPhone®, iPad® and Android™ device (click icon).





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



HOMEOWNER REMOTE ACCESS

HOME AUTOMATION

Amazon® Alexa

The iComfort® S30 Ultra Smart Thermostat is an Amazon® Alexa-enabled, smart-homecompatible thermostat.

Allows the homeowner to tell Alexa to adjust the temperature.

Works in conjunction with the Amazon Alexa app (click icon):







See User Guide for additional information about device setup and available voice commands.

Amazon's trademark is used under license from Amazon.com, Inc. or its affiliates.

Apple HomeKit™

The iComfort® S30 Ultra Smart Thermostat works with Apple HomeKit, making it easy to control the S30 thermostat from an iPhone, iPad or iPod device.

Use Siri® voice commands to control the S30 thermostat, set configurable "scenes" to control multiple HomeKit accessories with a single Siri command, and set location-based scene triggers to activate scenes when arriving or leaving the home (geo-fencing).











See Installer Setup on page 36 for additional information.

Also see the User Guide for additional information

Apple HomeKit $^{\text{TM}}$ and Siri $^{\text{B}}$ are trademarks of Apple Inc.

Google Assistant

Control basic functions of the S30 thermostat using Google 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 install the Google Assistant

app (Android and IOS) to enable voice control.

NOTE - The Google Assistant app may already be installed on the Android device.

For additional information please visit the <u>iComfort®</u> Support Website for Google Assistant Integration.



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IFTTT



IFTTT, an acronym for If This Then That, is a free service that automates connectivity between apps and services, enabling users to utilize "recipes" that will coordinate small tasks between Internet and web services.

Download the IFTTT app from Google Play or the App Store $^{\text{TM}}$ on a compatible phone or tablet. Then follow the on-screen steps to finish setup.

For additional information please visit the <u>iComfort®_Support Website for IFTTT Integration</u>.



PERFORMANCE REPORTS



NOTE - Performance Reports are <u>only</u> available through a web portal.

NOTE - Performance Reports are not available on the iComfort® S30 thermostat directly or the Mobile Apps.

- Homeowner access is available at www.LennoxiComfort.com
- Dealer access is available through the Dealer Dashboard at www.LennoxPros.com
- Displays graphs for daily (10 days) or hourly (24 hours) system operation
- Select a day on the graph (click) to display that day's Performance Report. Click "Hour" at the top of the screen or double-Click a particular day to display that day's Hourly Report.
- Dealer has the ability to view screens for individual hours and minutes (selectable at top of screen). Status bar at top of screen also displays additional information about system operation (user changes, alerts, reminders).
- Display temperatures in °F or °C
- Display 12 or 24 hour time in hourly view

Linear Graph

- · Cooling/Heating Setpoint (SP) Range
- Perfect Temperature Setpoint (SP) Range
- Humidification/Dehumidification Setpoint (SP) Range
- Indoor/Outdoor Temperature Range
- Indoor/Outdoor Humidity Range

Bar Graph

- Cooling Demand
- Heat Demand
- · Humidifier Demand

Table Display

- Indoor/Outdoor Temperature Average and Setpoints
- · Indoor/Outdoor Humidity Average and Setpoints
- Cooling Demand %
- Heat Pump Demand %
- · Gas or Electric Heat Demand %
- Click the (i) button on cooling or heating demands for additional information.
- Fan Operation (On, Auto, Circulate)
- Mode (Cool, Heat, Emergency Heat, Schedules)
- Fan Operation and Mode are only displayed when viewing hourly reports.

Circle Graph

- Total system runtime, number of runtime hours for cooling and heating demands plus separate graphs for humidify, dehumidify and fan only runtime
- Hide/Show Pane on right allows user to hide or show different parameters on display.
- Only certain parameters are displayed depending on the type of system installed (air conditioner, heat pump, dual-fuel) and how the system is configured.
- Year-to-year and month-to-month comparison reports are also available.

NOTE - Dealer has the ability to view and generate reports (PDF) for up to 12 months to email to homeowner.

USER SETTINGS

HOME SCREEN (Thermostat ON)



Touch blank screen to turn on the backlight. If proximity sensor is on (approximately 12 in. range) display will turn on automatically.

Temperature Settings

- Large display of current inside temperature (°F or °C)
- Heating and Cooling Setpoint Indicators on the round animated temperature band
- Current cooling setpoint temperature Button (cool-to)
- Current heating setpoint temperature Button (heat-to)
- Touching the heat or cool setpoint indicators on the round temperature band, or touching the **heat-to** or **cool-to** buttons displays the heat or cool menu screens (see page 16).
- Both heating and cooling setpoint indicators on the round temperature band and the **heat-to** and **cool-to** buttons are displayed if System is set to Heat/Cool mode or if an active schedule is set to Heat/Cool mode.

Current Outdoor Temperature

Displays current outdoor temperature in °F or °C



Weather Forecast Display

· Displays current weather forecast

Touch to display **Weather Forecast** screen (see page 16).

Time and Date Display

• Displays current date and time

Humidity Display

Displays current inside relative humidity above current indoor temperature

Modes/Schedules

- Displays current system operating mode below current indoor temperature (cool only, heat only, heat/cool, active schedule running or off)
- Touch to access **Modes/Schedules** screen (see page 15).

Menu Button

- Touch to display **settings** screen (see page 17).
- Any Notifications will be displayed over the top-right corner of the Menu Button.



Away Mode Button away

Touch to display away mode screen (see page 16).

System Status Icons (left side of screen)



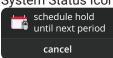
Up to four status icons can be displayed at one time on the left side of the screen.

PureAir status is only displayed if the optional PureAir™ S Air Purification System is part of the system. Touch the status indicator to display the PureAir S Performance screen. See page 23.

USER SETTINGS

HOME SCREEN (Thermostat ON)

System Status Icons (right side of screen)





Schedule Hold is displayed when a current schedule override is in effect. **Cancel** returns to current schedule (see page 15).



Coasting allows the current temperature to reach desired setpoint without system operation by "coasting" to the set heating or cooling setpoint. **Cancel** returns to current schedule.



Ventilating is only displayed if the optional Fresh Air Damper or HRV/ERV Heat/Energy Recovery Ventilator is part of the system. Touch **Cancel** to stop ventilation operation. Also see page 18.



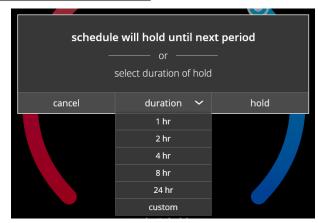
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Save Energy allows the utility company to control the energy savings time period (California only). You can select cancel to exit this mode.

By canceling user is opting out of the current active energy savings events. Also see page 37.

USER SETTINGS

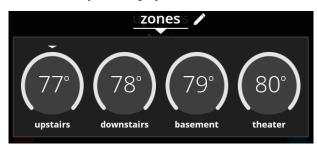
SCHEDULE HOLD SCREEN



The **schedule hold** screen is displayed after changing the temperatures on the heating or cooling screens while a schedule is running. Preset 1, 2, 8, 24 hours or custom setting (using the Time Tool) sets and hold the temperature for a preset or custom time period until the next time period setting. **Cancel schedule hold** button on Home Screen cancels the held setting.

ZONING SCREEN

NOTE - Zoning is only available for systems using the iHarmony® Zoning System.



- Zone indicator markers at the top of the Home Screen are only visible when the iHarmony® is part of the complete system (see page 19).
- When zoning is enabled, the Home Screen displays current zone settings for an individual zone. The current zone name is displayed at top of the Home Screen.
- Touch the zone indicator markers below the active zone name to show the zones available. Touch the individual zone buttons to switch between different Zoning Home Screens. Multiple systems will show zones for each system.
- Touch the pencil icon to edit any zone name with the keyboard tool (maximum 30 characters).
- All settings (Temperature, Modes/Schedules, Fan, Away Mode, etc.) for an individual zone are the same as a system without zoning.
- If a zone is set for only cooling or heating, only that setpoint will be displayed.
- If any Zone is set for Away Mode (on the Home Screen), Away Mode is enabled for the whole system (all zones) until canceled.

MENU SCREEN



Touch each item to display the selected screen.

Notifications Button

 Displays system operating and service reminder messages (see page 23)

Settings Button

- Displays various user settings (wi-fi status, system name, away, feels like[™], fan, ventilation, heat/cool, humidity, iHarmony[®] zoning, notifications, advanced settings, general, display, home info, account) (see page 17)
- Touch anywhere on a blank part of the screen to return to the Home Screen.

MODES/SCHEDULES SCREEN



Touch **modes/schedules** on home screen under current operating mode to access screen.

Select system mode, operate a specific schedule or change blower operation

Select Mode

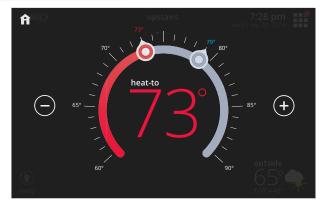
- Off Button
- · Cool Only Button
- · Heat Only Button
- Emergency Heat Button (heat pump systems only)
- Schedules (see page 22)

Fan Button

- On
- Auto
- Circulate
- Touch anywhere on a blank part of the screen to return to the Home Screen.

USER SETTINGS

HEAT MENU SCREEN



- On the Home Screen, touching the heat setpoint indicators on the round temperature band, or touching the **heat-to** button displays the heat menu screen.
- Heating setpoint display
- Heating Setpoint Indicator on the round temperature band
- Plus (+) and Minus (-) buttons
- Touch and move the red heat setpoint indicator on the round temperature band, or touch the **plus** or **minus** buttons to change the heating setpoint in one degree increments. Adjustable 40 to 90°F.
- During a scheduled time period, touching either the setpoint indicator on the temperature band or the heat-to button will initiate a temporary override (schedule hold) (see page 15).

COOL MENU SCREEN



- On the Home Screen, touching the cool setpoint indicators on the round temperature band, or touching the **cool-to** button displays the cool menu screen.
- Cooling setpoint display
- Cooling Setpoint Indicator on the round temperature band
- Plus (+) and Minus (-) buttons
- Touch and move the blue cool setpoint indicator on the round temperature band, or touch the **plus** or **minus** buttons to change the cooling setpoint in one degree increments. Adjustable (60 to 99°F).
- During a scheduled time period, touching either the setpoint indicator on the temperature band or the cool-to button will initiate a temporary override (schedule hold) (see page 15).

AWAY SCREEN



Set heating or cooling setpoints during unoccupied periods.

- Heating and Cooling Setpoint Indicators on the round temperature band
- Current cooling setpoint temperature Button (cool-to)
- Current heating setpoint temperature Button (heat-to)
- Cancel Away Mode Button
- Away mode temperature settings can be adjusted on the Away Settings screen (see page 17).
- Touch **cancel** button to end away mode and return to current system operation.

WEATHER FORECAST SCREEN



Displays current local weather conditions

- Wi-Fi must be enabled to access weather forecast screen.
- Weather information is provided by <u>Accuweather</u>. Configured in the Display settings (see page 21).
- Current conditions (temperature, high-low temperature forecast for current day, precipitation percentage, wind and relative humidity)
- · Hourly forecast
- 7-Day forecast
- Pollen conditions (tree, weed, grass, mold)
- UV Index
- · Air Quality
- Touch individual pollen, UV and air quality circle to see the conditions scale (low-medium-high).

USER SETTINGS

SETTINGS SCREEN



Access to all user settings

- Wi-Fi
- Name
- Away
- Feels Like™
- Fan
- Ventilation
- Heat/Cool
- Humidity
- iHarmony Zoning (if installed)
- Notifications
- Advanced Settings (Installer Settings)
- General
- Display
- · Home Info
- Account



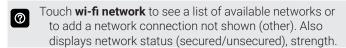
Touch a parameter on the left side of the screen to display that particular screen.

WI-FI SCREEN



A graphical representation of the home network showing the connection status from the High Definition Display to the Smart Hub to the Internet to the Lennox server.

- Wi-Fi (on/off)
- Wi-Fi Network



- Touch the i button for additional information about a @ particular network (name, SSID, security, RSSI, etc.).
- Touch a particular network ID to connect to that network. @ Enter password to connect.
- A red "X" means that there is an issue with a connection point that must be resolved.

NAME SCREEN

• Enter system name (Home 1, Home 2, etc) using the keyboard tool

AWAY SETTINGS SCREEN



Controls the temperature in the home while away.

- Smart Away[™] On/Off (use the iComfort mobile app to control temperature in the home while away)
- Reset Smart Away (turns off all mobile devices)
- Away Setpoints (60 to 90°F, default is **62°F heating** and **85°F cooling**)

FEELS LIKE SCREEN



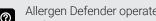
Accurately controls temperature in the home by determining the "feels like" temperature based on outdoor temperature, indoor temperature plus indoor relative humidity.

· On/Off

FAN SCREEN



Allergen Defender (cleaning air)



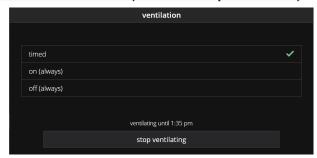
Allergen Defender operates the indoor blower during times of reported high pollen levels. Wi-Fi connection is required.

Set how long to circulate the air each hour.

 Circulate (18 to 54 minutes, default is 20 minutes)

USER SETTINGS

VENTILATION SCREEN (Fresh Air Damper/HRV/ERV)



- Timed or ASHRAE
- On (always)
- Off (always)
- Ventilate Now Button
 - 10 Minutes
 - 20 Minutes
 - · 30 Minutes
 - 40 Minutes
 - 50 Minutes
 - 1 Hour
 - 1 Hour 30 Minutes
 - Custom



Timed or ASHRAE setting allows homeowner to set a pre-determined time to operate the Fresh Air Damper or HRV/ERV equipment. Touch the **Ventilate Now** button to set time and start operation. Touch the Stop Ventilating button to cancel operation.

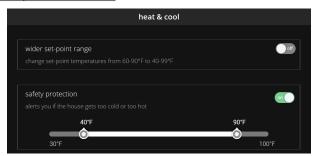
On (always) operates the ventilating unit anytime the system or fan is operating.

Off (always) disables the ventilating unit anytime the system is operating.



If AHSRAE is set in the Installer Settings the Fresh Air Damper or HRV/ERV will operate according to ASHRAE 62.2 standard "Ventilation and Acceptable Indoor Air Quality in Low-Rise Residential Buildings". See page 35.

HEAT/COOL SCREEN



Adjustments for heating and cooling setpoints, auxiliary heat, safety protection and other settings.



Depending on system mode setting, heat/cool, heat only or cool only is displayed in the User Settings.

Perfect Temp

(Non-Zoning Systems Only)

Control heating and cooling temperatures with a single setpoint.

· On/Off

· On/Off

Wider Setpoint Range

Control heating and cooling temperatures with a wider setpoint range

(Changes temperature range from 60-90°F to 40-99°F) Select Heat Pump Mode



Normal - Heats the home with the highest efficiency Comfort - Heats the home with warmer air but with reduced efficiency

Auxiliary Heat (Heat Pump Systems Only)

- On/Off
- Allows auxiliary heat operation if temperature drops below set balance point (-20 to 75°F, adjustable)



Selecting Auxiliary Heat displays a slider to adjust balance point levels.

Safety Protection

 Safety Protection (30 to 50°F, adjustable)



Safety Protection alerts the homeowner if the house is too cold or hot.

USER SETTINGS

HUMIDITY SCREEN (Humidity Control)



- Off (default)
- Humidify
 - · Normal, Max, Dewpoint
- Dehumidify
 - Normal, Max, Climate IQ[®] (Auto)
 - Dewpoint (on/off)
- Humidify + Dehumidify



Dewpoint setting is only available with remote Outdoor Temperature Sensor. Sensor is furnished as standard with iComfort® Communicating outdoor units, optional for conventional units (-15 to 15%, adjustable, default is 0%).



Humidification Control Center

normal setting is recommended for moderate climates. Operates the humidifier when there is a call for heating and humidification.

max setting is recommended for drier climates. Operates the humidifier when there is a call for humidification

Dehumidification Control Center

normal setting is recommended for moderate climates. Operates the dehumidifier when there is a call for cooling and dehumidification.

max setting is recommended for humid climates. Operates the dehumidifier when there is a call for dehumidification only. May cool beyond desired setpoint by 2 degrees.

Climate IQ® setting monitors regional weather conditions and automatically removes excess humidity when necessary.



NOTE - Climate IQ® settings are only available for iComfort® Communicating outdoor units (SL18XC1/ SL18XP1, XC17/XP17, XC21/XC21, XC20/XP20, XC25/XP25) without any optional humidification/ dehumidification equipment installed.

 Humidification Setpoint (15 to 45% relative humidity, adjustable, default **40%**)

 Dehumidification Setpoint (40 to 60% relative humidity, adjustable, default **50%**)

 Overcooling Setpoint (Max or Climate IQ® only) (0 to 4°F, adjustable, default 2°F)

· Humidification (left slider) + Dehumidification (right slider) Setpoint

(15% to 60%, adjustable, default 15% humidification and 40% dehumidification)



Adjustable sliders allows Dehumidification/Humidification/ Overcooling Setpoint adjustment.



Depending on humidity/dehumidity mode settings selected not all settings above may be visible.

IHARMONY ZONING SCREEN (if equipped)



NOTE - Zoning is only available for systems using the iHarmony® Zoning System.

System components include the iComfort® S30 thermostat, iHarmony® Damper Control Module (DCM), individual In-Zone Thermostats and Motorized Dampers.

NOTE - Single-stage outdoor units can only be used with two equal load zones when using the iHarmony Zoning System.

Variable capacity and two-stage outdoor units can utilize up to four zones when using the iHarmony zoning system.



See iHarmony Zoning System Product Specifications for additional information.

- Zoning (on/off)
- · Zone 1 (master)
- · Zone 2
- Zone 3
- 7one 4



Touch any zone name to edit with the keyboard tool (maximum 30 characters).

NOTIFICATIONS (REMINDERS) SCREEN



- Replace Filter 1
- · Replace Filter 2
- · Replace UV Lamp
- Replace Humidifier Pad
- Maintenance Reminder and PureAir™ Maintenance
 - Disabled (default for all notifications)
 - 3, 6, 12, 24 Months or Custom date
 - · Set for Calendar Time or Runtime
 - Sensor-Based (PureAir only)



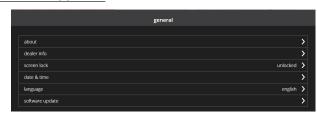
Touch **custom** to access the **Set Date Tool** screen to input custom date settings.

USER SETTINGS

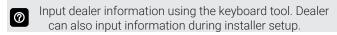
ADVANCED SETTINGS (INSTALLER SETTINGS)

See page 24

GENERAL SCREEN



- About
 - · Thermostat Information
 - Control Model Number
 - Control Serial Number
 - · Control Software Revision
 - Software Revision
 - · Last Updated
 - · Control Hardware Revision
 - Software Update
 - Automatic Updates (on/off)
 - · Check for Updates Now Button
 - · Smart Hub
 - Control Model Number
 - · Control Serial Number
 - · Control Hardware Revision
 - · Control Software Revision
 - · Software Revision
 - · Last Updated
 - Software Update
 - Automatic Updates (on/off)
 - · Check for Updates Now Button
- Dealer Information
 - Name
 - · Country/Region
 - Address 1
 - · Address 2
 - City
 - State
 - · Zip/Postal Code
 - Phone
 - Email
 - Website



- · Dealer Access
 - Remote View (on/off)
 - Remote Control (on/off)
 - Alerts and Notifications (on/off)



Homeowner can allow/disallow dealer access to system information, alerts and notifications, and remote control of the system for troubleshooting, etc.

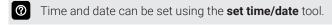
GENERAL SCREEN (continued)

- Screen Lock (Prevents tampering with thermostat settings)
 - Unlocked (no security)
 - Partially Locked (prevents tampering with the menu settings, setpoints can be adjusted)
 - Locked (prevents tampering with the thermostat)



Lock icon on Home Screen indicates a locked or partially locked screen. To unlock, touch and hold the lock icon for 5-6 seconds.

- · Date & Time
 - 12 or 24 Hour setting
 - Daylight Savings Enabled or Disabled
 - · Time Zone
 - Set Time
 - · Set Date

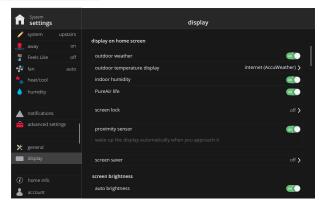




Setting date and time is disabled if there is a wi-fi connection to the thermostat.

- Language
 - · English (default)
 - French
 - Spanish

USER SETTINGS DISPLAY SCREEN



Change display settings.

- · Display Status on Home Screen
 - Outdoor Weather (on/off)
 - Outdoor Temperature Display
 - Internet (Accuweather)
 - Sensor
 - Indoor Humidity (on/off)
 - PureAir Life (if equipped)
 - Outdoor Air Quality (on/off)
- Wi-Fi must be enabled to receive weather provider information.
- The default outdoor temperature is supplied by the Outdoor Air Temperature Sensor or the Wi-Fi data connection. The outdoor sensor is furnished as standard with iComfort® Communicating outdoor units, optional for conventional outdoor units.
- Proximity Sensor (on/off)
- Proximity sensor turns on the display backlight at a specific distance from the screen.
- Screen Saver (on/off)
 - Off
 - · Weather (animated)
 - Power Save
 - Photo
- Weather displays the current weather conditions screen.

Power Save displays a blank screen until the screen is touched or the proximity sensor is activated.

Photo allows the homeowner to upload a photo to use as the screensaver from www.myicomfort.com.

- · Screen Brightness
 - Auto Brightness (on/off)
- If **Auto Brightness** is turned off a slider appears to manually adjust the brightness of the display.
- · Temp Scale
 - · Fahrenheit °F
 - Celsius °C
- Clean Screen
 - 30 Second Countdown timer without affecting settings

HOME INFO SCREEN



- · Home Name
- Country/Region
 - United States
 - Canada
 - Australia
- Address
- Address 2
- City
- State
- · Zip/Postal Code
- Input home information using the keyboard tool.
- · Remove Home Button
- Remove Home button deletes the information for a home.

ACCOUNT SCREEN



Enter email and password to sign into account, recover a password, create a new account or generate a PIN number to link the Smart Hub with the account and any mobile Apps.

- New Account
 - Enter homeowner's information, email and set password information
 - Allow dealer to receive service alerts and remotely troubleshoot the system (checkbox)
 - Lennox End License user Agreement (EULA) (checkbox)
 - · Create Account Button
 - Generate Pin Button
- Generate Pin button allows registering at the Homeowner Remote Access website.
- Registration is completed on the thermostat after establishing a wireless connection.

USER SETTINGS

SCHEDULES SCREEN



Set schedules for specific times of the year or edit/create custom schedules.



Touch **Modes/Schedules** on the Home Screen to access the **schedules** screen.

Touch **schedules** to see available schedules. Select a schedule to run it.

Touch edit schedules to change settings.

- Schedule IQ™
- Summer
- Winter
- · Spring/Fall
- Save Energy
- · Edit Schedules



Schedule IQ™ schedule determines when to operate the system based on individual "home day", "home night" and "away" time and temperature settings. Schedule is controlled by the Smart-Away™ proximity sensor (geo-fencing) in the thermostat and the iComfort® S30 mobile App. Multiple Apps on multiple devices can control one system.

EDIT SCHEDULES SCREEN



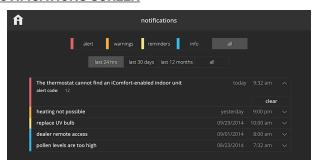
Touch a schedule at the top of the screen to edit individual schedules.

Adjust individual times and temperatures for the day.

- Time (4 time periods per day)
- Touch each time period to change using the **set time** tool.
- Touch each time period and select **delete period** if you want to remove a time period. You can remove all time periods except one if desired.
- Individual Sliders to adjust cooling and heating temperatures for each time period (Adjustable 60 to 90°F)
- Day Options Button
 - Individual Days (Monday, Tuesday, etc.)
 - Week/Weekend (Monday-Friday and Saturday-Sunday)
 - · All Days
- When using **individual days** select < or > next to the day to advance to the next day.
- When using **week/weekend** select < or > next to the days to advance to the next group of days.
- O Using **all days** follows the same schedule for each day.
- Select Mode Button
 - Heat/Cool
 - · Heat Only
 - Cool Only
- Fan Button
 - On
 - Auto
 - Circulate
- Rename
- Rename a schedule with the keyboard tool (maximum 16 characters).

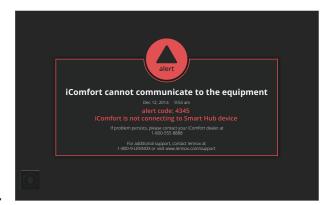
USER SETTINGS

NOTIFICATIONS SCREEN



Alerts homeowner of critical and required service or maintenance issues.

- Critical (Red Alert) Displays information that service is required for a major system component as soon as possible
- Warnings (Orange Alert) Displays information about system operation
- Reminders (Yellow Alert) Displays required maintenance information (filter replacement, humidifier pad replacement, UV light replacement, PureAir™ Air Purification System servicing and Maintenance)
- Reminders may include additional information such as the Lennox model number, order number, filter size, etc. for a replacement item.
- Info (Blue Alert) Displays information about dealer access, Wi-Fi status, new devices found, software updates and additional useful information and tips to operate the system efficiently
- All Displays all notifications
- · Filter results by a specific time
 - · Last 24 Hours
 - · Last 30 Days
- · Last 12 Months
- · All results
- Reminders can be cleared or a "remind later" setting can be set (1 day. 1 week, 1 month, 3 months or custom).
- Touch **custom** to access the **Set Date Tool** screen to input a custom date reminder.
- Any Notifications will also be displayed over the top-right corner of the Menu Button on the Home Screen and also on the individual icons on the Menu Screen.



@

Any alert notifications will also "pop up" on the Home Screen.

PUREAIR™ S PERFORMANCE SCREEN



Displays filter life and purifier (UVA lamp/PCO cartridge insert) life status.

INSTALLER SETTINGS

SYSTEM DISCOVERY SCREEN



After power is applied to the thermostat for the first time, it displays the iComfort® "splash screen" and checks the system for installed communicating devices.



NOTE - Immediately after the Splash Screen is displayed the Apple HomeKit WAC screen is displayed. See page 36.

During the setup process, alerts may be displayed to inform the installer of any information that affects the setup process.



If **critical low battery** is displayed, the system will automatically start charging the HD display internal battery. Charging takes approximately 3-10 minutes.

The setup process involves up to seven steps depending on the equipment included in the system.

1 - DEALER INFORMATION SCREEN



Dealer inputs their dealer number and/or phone number. Once the thermostat is connected to a Wi-Fi network the rest of the information will be automatically populated.

- Dealer Information
 - Name
 - Email
 - Website
- Dealer Address
 - · Address 1
 - Address 2
 - City
 - State
 - Zip/Postal Code



Installer can also use the keyboard tool to manually input dealer information before a wireless connection is established.

DEALER ID/PHONE NUMBER WARNING SCREEN



NOTE - If the installer does not input a dealer number or phone number, a warning screen pops up warning that this thermostat will not be visible on the LennoxPros® website and that the dealer will not be able to remotely monitor this system or receive email alerts.

2 - GENERAL INFORMATION SCREEN



- Language
 - · English (default)
 - Français
 - Español
- · Country/Region
 - United States
 - Canada
 - Australia
- Time
- Date
- Time Zone
 - Pacific
 - Mountain
 - Central
 - Eastern
- · Daylight Savings On/Off
- Temperature Unit
- Fahrenheit
- Celsius

INSTALLER SETTINGS

3 - HOME ADDRESS SCREEN



Enter the information for the home that this thermostat is installed in

- Address 1
- · Address 2
- State
- City
- · Zip/Postal Code

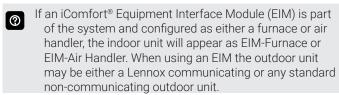


Use the keyboard tool to manually input this information.

4 - EQUIPMENT FOUND SCREEN

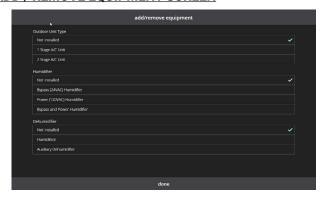


A visual representation of the iComfort® Communicating equipment discovered during the set-up.



- Touch the +/- icon at the upper-right of the screen to add @ non-communicating equipment.
- After non-communicating equipment has been added it 0 will also appear on the Equipment Found Screen.

ADD / REMOVE EQUIPMENT SCREEN



Add non-communicating equipment to the system to be controlled by the thermostat.

 Outdoor Unit Type (Not Installed, 1 Stage AC Unit, 2 Stage AC Unit, 1 Stage HP Unit, 2 Stage HP Unit)

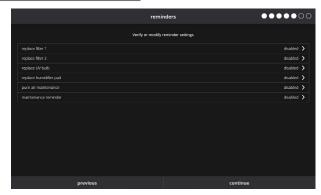


Outdoor Unit Type selection only appears if a communicating outdoor unit is not detected during setup.

- Outdoor Unit Capacity (18 to 60 kBtuh, default is 36 kBtuh)
- Outdoor Unit 1st Stage Capacity (30 to 100 kBtuh (default is 70 kBtuh)
- NOTE If Outdoor Unit is non-communicating type, screen 0 will display the above parameters to set.
- Ventilator Type (None, Fresh Air Damper, 1 Stage HRV, 2 Stage HRV, 1 Stage ERV, 2 Stage ERV)
- Humidifier (Not Installed, Power (120VAC) Humidifier, Bypass (24VAC) Humidifier, Bypass and Power Humidifier)
- NOTE If Air Handler is used, Bypass is the only Humidifier option.
- Dehumidifier (**Not Installed**, Humiditrol, Auxiliary Dehumidifier)

INSTALLER SETTINGS

5 - REMINDERS SCREEN



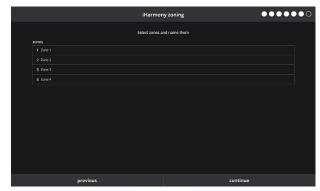
Set reminders for maintenance items.

- Replace Filter 1
- · Replace Filter 2
- · Replace UV Bulb
- Replace Humidifier Pad
- PureAir[™] Maintenance
- · Maintenance Reminder Settings
 - Disabled (default for all notifications)
 - 3, 6, 12, 24 Months, Custom date or Runtime



Touch **custom** to access the **Set Date Tool** screen to input custom date settings.

6 - IHARMONY ZONING SCREEN (if equipped)



Name the individual zones using the keyboard tool.



Touch any zone name to edit with the keyboard tool (maximum 30 characters). Common preset zone names (master bedroom, guest bedroom, living room, dining room, etc.) are also available to use.

7 - VERIFY AIRFLOW PER ZONE SCREEN



Verify blower settings for each zone.

- Blower Circulation Airflow (gray)
- Heating Circulation Airflow (red)
- Cooling Circulation Airflow (blue)



Touch the down arrow next to each zone to adjust the individual airflows. Use the plus and minus buttons to adjust airflow in 5 cfm increments.

INSTALLER SETTINGS

CONTROL CENTER SCREEN



Provides access to the dealer for performing various functions.

- Equipment Settings
- Notifications
- Tests
- Diagnostics
- · Installation Report
- Information
- Exit Button (returns to Home Screen)



The Control Center can also be accessed from the Home Screen under the Menu Button > Advanced Settings.

EQUIPMENT

Smart Hub

(About)

- Language Support
- Equipment Type name
- Control Software Revision
- · Control Model Number
- · Control Serial Number
- · Control Hardware Revision
- Protocol Revision Number
- Device Product Level
- 24VAC Average Power Consumption
- 24VAC Peak Power Consumption
- · Compatible Device List
- Application Code Memory Size
- Microcontroller Part Number

(Adjust Settings)

- Equipment Name (Keyboard tool)
- Temp Reading Calibration (-5 to 5°F, default is 0°F)
- Humidity Reading Calibration (-10 to 10% RH, default is 0%)
- Smooth Setback Recovery (Enabled/Disabled)

8X, XC/XP17/

- Electric Heat Control Mode (Air Handler) (Standard/ Evenheat)
 - EvenHeat Discharge Temperature (85 to 130°F, default is 85°F)

SLP98

 Gas Heat Control Mode (Staged, Variable Capacity or Load Tracking Variable Capacity)

Stage

Number of Gas Heating Stages (1, 2, 3, or 4, default is
 4)

ır. Cap

- Modulating Gas Heating Steady State PI Gain (Less Aggressive, More Aggressive or Standard)
- Modulating Gas Heating Step Change PI Gain (Less Aggressive, More Aggressive or Standard)
- Modulating Gas Heating Cycles Per Hour (4.0 to 10.0, default is 6.0)

J. Fue

 Gas Heating Activation Temp Difference (5 to 10°F, default is 1.5°F)

7) YC/Y

 Cooling Mode (two-stage cooling systems only) (Normal, Comfort)

Normal - 2nd stage is locked in until the demand is satisfied.

Comfort - 2nd stage is energized or de-engergized based on demand to maintain comfort.

C20, XC2

- Modulating Cooling Steady State Pl Gain (Less Aggressive, More Aggressive or Standard)
- Modulating Cooling Step Change PI Gain (Less Aggressive, More Aggressive or Standard)
- Modulating Cooling Cycles Per Hour (3.0 to 6.0, default is 4.0)

20, XP2

- Modulating HP Heating Steady State PI Gain (Less Aggressive, More Aggressive or Standard)
- Modulating HP Heating Step Change PI Gain (Less Aggressive, More Aggressive or Standard)
- Modulating HP Heating Cycles Per Hour (3.0 to 6.0, default is 4.0)
- Modulating HP Electric Heating Switching Point (0.0 to 2.0, default is 1.0)

ir Handleı

 Aux Heating Activation Threshold (0 to 10°F, default is 2.5°F)

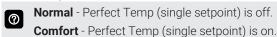
INSTALLER SETTINGS

EQUIPMENT (continued)

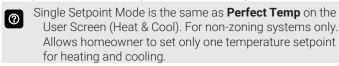
Smart Hub (continued)

(Adjust Settings)

 Temperature Control Mode (for Perfect Temp) (Normal, Comfort)



- Wall Insulation (poor, average, good) (default is good)
- · Single Setpoint Mode (Enabled/Disabled)



- SSP Heating Cancel Coast Increment Slope (0.0 to 0.75°F, default is 0.25°F)
- SSP Heating Cancel Coast Decrement Slope (0.25 to 2.0°F, default is 0.5°F)
- SSP Cooling Cancel Counter Increment Slope (-0.75 to 0.0°F, default is -0.25°F)
- SSP Cooling Cancel Counter Decrement Slope (-2.0 to -0.25°F, default is -0.5°F)
- SSP Heating Lockout Outdoor Temp (50.0 to 80.0°F, default is 70°F)
- SSP Cooling Lockout Outdoor Temp (30.0 to 60.0°F, default is 40°F)
- Auto Changeover Temp Deadband (3 to 9°F, default is 3°F)
- Max. Heat Setpoint (40 to 90°F, default is 90°F)
- Min. Cool Setpoint (60 to 99°F, default is 60°F)
- · Heat Cool Stages Locked In (Enabled/Disabled)
 - 1st Stage Differential (0.5 to 3.0°F, default is 1.0°F)
 - 2nd through 6th Stage Differential (0.5 to 8.0°F, default is 0.5°F)
- Staged Delay Timers (Enabled/Disabled)
 - 2nd through 6th Stage Delay (5 to 120 min. in 5 min. increments, default is 20 min.)
- Number of heating stages shown depends on equipment installed. Electric heat is staged at every 2 elements.

 Lock In 2nd Stage HP by Outdoor Temp (off, 40°F (4°C), 45°C (7°C), 50°F (10°C), 55°F (13°C)

Balance Point Control (Enabled/Disabled)

- High Balance Point (-17 to 75°F, default is 50°F)
- Low Balance Point (-20 to 72°F, default is 25°F)
- Min Dehumidification Setpoint (40 to 60°F, default is 40°F)

 Humiditrol Comfort Adjust (Maximum, Midpoint or Minimum Overcooling) Humidifier

- Humidification Control Mode (Display Only, Precision, Precision Dew Point Control, Basic, Basic Dew Point Control)
 - Dew Point Adjustment (-15 to 15°F, default is 0)
- Max. Humidification Setpoint (15 to 45% RH, default is 45%)
- Auto Changeover Humidification Deadband (5 to 10% RH, default is 5%)
- Outdoor Temperature Reading Calibration (-10 to 10°F, default is **0**)
- Auto Dehumidification Overcooling Threshold (0 to 10°F, default is 4)
- Severe Weather Protection (enabled/disabled)
- Heat Alert Temperature (80 to 100°F, default is 90°F)
- Freezing Alert Temperature (30 to 50°F, default is 40°F)

oning

- Zoning Gas Heating DAT Cooldown target (80 to 90°F, default is 85°F)
- Zoning Anticipated Discharge Air Temperature Adjustment (0 to 120 seconds, default is 60 seconds)
- Zoning Target Supply Air Temp for Cooling (40 to 60°F, default is 45°F)
- Zoning Target Supply Air Temp for Gas/Electric Heating (100 to 130°F, default is 110°F)
- Zoning Target Supply Air Temp for HP Heating (85 to 110°F, default is 90°F)
- Zoning Supply Air Temp Limit for Cooling (35 to 45°F, default is 40°F)
- Zoning Supply Air Temp Limit for Gas/Electric Heating (140 to 160°F, default is 140°F)

Humiditro

• Humiditrol and Auxiliary Dehumidifier Minimum Runtime (5 to 30 min., default is 15 min.)

. Fuel

• HP Heating Lockout Time (60 to 240 min., default is 120 min.)

Zoning

- Zoning Minimum Zone Run Time (90 to 600 sec., default is 120 sec.)
- Zone 1 through 4 First Stage Differential (0.5 to 3.0°F, default is 1.0°F)

INSTALLER SETTINGS

EQUIPMENT (continued)

Smart Hub (continued)

 Smart Alert Enable (Disabled/Conservative/Medium/ Aggressive, default is Medium)



Smart Alert monitors some of the following conditions:

- Thermostat setpoint.
- Temperature readings.
- If the temperature is moving away from setpoint or toward setpoint.
- Local climate design temperatures.
- System run times.

NOTE - Not available with Zoning.



Smart Alert Settings

Disabled setting no monitoring of Smart Alert

Conservative delayed setting to display any Smart Alert messages.

Medium (Default)

Aggressive setting will shorten time to display any Smart Alert messages.



NOTE - Depending on type of system (conventional heating/cooling or heat pump system) and optional equipment not all system settings will be displayed.

- Ventilation Type
- See table on page 35 for Fresh Air Damper, HRV and ERV settings.
- Group ID (0 to 8 groups) (default is 1)



Group ID is used to group two or more thermostats in the same home to allow communication between them.

INSTALLER SETTINGS

EQUIPMENT (continued)

Air Conditioner or Heat Pump

(About)

- Language Support
- Equipment Type Name
- · Unit Model Number
- · Unit Serial Number
- Unit Nominal Capacity
- Number of Heating Stages (Heat Pump)
- · Number of Cooling Stages
- Heating Capacity by Stage (Heat Pump)
- Cooling Capacity by Stage
- Control Software Revision
- Control Model Number
- Control Serial Number
- · Control Hardware Revision
- Outdoor Air Temp Sensor
- Operating Temperature Limits
- · Protocol Revision Number
- · Device Product Level
- 24VAC Average Power Consumption
- 24VAC Peak Power Consumption
- Line Voltage Average Power Consumption
- Line Voltage Peak Power Consumption
- Outdoor Fan RPM Profile (single stage)
- OD Inverter Model Number (modulating)
- OD Inverter FW Revision (modulating)
- Unit Code
- · Compatible Devices List
- Application Code Memory Size
- Microcontroller Part Number

(Adjust Settings)

- Equipment Name (Keyboard tool)
- Compressor Short Cycle Delay (60 to 300 sec., default is 300 sec.)
- Defrost Termination Temp (Heat Pump only) (50 to 100°F, default is 50°F)
- Automatic Max Defrost (Heat Pump only) (On/Off, default is Off)
- Max Defrost by Weather (Heat Pump only) (On/Off, default is Off)



Max Defrost by Weather uses the default internet weather source to determine when a defrost cycle is required.

 Compressor Shift Delay (Heat Pump only) (On/Off, default is On)

25, XP20/

- High Normal Cooling Airflow (450 to 2000 cfm., default is 1800 cfm)
- Low Normal Cooling Airflow (450 to 2000 cfm., default is 900 cfm)
- High Normal HP Heating Airflow (450 to 2000 cfm., default is 1806 cfm)
- Low Normal HP Heating Airflow (450 to 2000 cfm., default is 1150 cfm)
- Dehum Airflow Adjustment Adder (0 to 30°F, default is 0°F)

SL18XP1, XP17/21

Fan Cycling (On/Off, default is Off)

 Reset Air Conditioner / Heat Pump (factory default settings)

INSTALLER SETTINGS

EQUIPMENT (continued)

Furnace

(About)

- · Unit Code
- · Language Support
- Equipment Type name
- · Unit Model Number
- Unit Serial Number
- Unit Nominal Capacity
- Number of Heating Stages
- Heating Capacity by Stage
- Indoor Blower CFM Range
- · Control Software Revision
- · Control Model Number
- Control Serial Number
- · Control Hardware Revision
- · Discharge Air Temp Sensor
- · Outdoor Air Temp Sensor
- Protocol Revision Number
- Device Product Level
- Factory Installed Transformer
- 24VAC Average Power Consumption
- 24VAC Peak Power Consumption
- Line Voltage Average Power Consumption
- Line Voltage Peak Power Consumption
- · Compatible Devices List
- Application Code Memory Size
- Microcontroller Part Number

(Adjust Settings)

· Equipment Name (Keyboard tool)

SLP98V

- Low Cooling Airflow (450 to 2000 cfm., default is 1400 cfm)
- High Cooling Airflow (450 to 2000 cfm., default is 2000 cfm)

7987

- Airflow Profile Cooling (default is A)
- On (50% for 30 sec., 82% for 7.5 Minutes; Off (50% for 30 sec. delay
- On (82% for 7.5 Minutes); Off (No delays)
- On (No delays); OFF (45 sec. delay)
- (No delays)
- Continuous Indoor Blower Airflow (450 to 2000 cfm, default is 760 cfm)
- Dehumidification Airflow % (60 to 80%, default is 70%)
- Delay Settings
 - Heating Indoor Blower OFF
 (60 to 180 sec., default is dependent on DIP switch setting in non-communicating furnace)
 - Heating Indoor Blower ON (15 to 45 sec., default is 30 sec.)



- Cooling Indoor Blower OFF (0 to 30 sec., default is 0 sec.)
- Cooling Indoor Blower ON (0 to 10 sec., default is 2 sec.)
- Heating Airflow Control Type Selections available if Discharge Air Temperature Sensor is installed (Fixed cfm, fixed Discharge Air Temperature)
- · With Discharge Air Temperature:
- Low Heating Discharge Air Temperature Available if Discharge Air Temperature Sensor is installed (110 to 140°F, default is 125°F)
- High Heating Discharge Air Temperature Available if Discharge Air Temperature Sensor is installed (120 to 150°F, default is 135°F)
- · With Fixed cfm:
- Low Heating Airflow (500 to 700 cfm, default is **492 cfm**)
- High Heating Airflow (1150 to 1575 cfm, default is 1403 cfm)



All furnace default airflow settings are dependent on furnace capacity.

Reset Furnace (factory default settings)

INSTALLER SETTINGS

EQUIPMENT (continued)

Air Handler

(About)

- Unit Code
- · Language Support
- Equipment Type name
- · Unit Model Number
- Unit Serial Number
- Unit Nominal Capacity
- · Number of Heating Stages
- · Heating Capacity by Stage
- Indoor Blower CFM Range
- · Control Software Revision
- · Control Model Number
- · Control Serial Number
- · Control Hardware Revision
- · Discharge Air Temp Sensor
- · Outdoor Air Temp Sensor
- · Protocol Revision Number
- Device Product Level
- Factory Installed Transformer
- 24VAC Average Power Consumption
- 24VAC Peak Power Consumption
- Line Voltage Average Power Consumption
- Line Voltage Peak Power Consumption
- · Compatible Devices List
- Application Code Memory Size
- Microcontroller Part Number

(Adjust Settings)

- Equipment Name (Keyboard tool)
- · Electric Heating Airflow
- Low Cooling Airflow (XC21, XP21)
- · High Cooling Airflow
 - · Airflow Profile Cooling (default is 1)
- No Delays
- On (No delays); Off (45 sec. delay)
- On (82% for 7.5 min.); Off (No delays)
- On (50% for 30 sec., 82% for 7.5 min.); Off (50% for 30 sec.)
- Low HP Airflow (XP21)
- · High HP Airflow
- Continuous Indoor Blower Airflow (450 to 2150 cfm, default is 800 cfm)
- Humidification Airflow (Humidifier)



All airflow parameters are determined by settings in communicating equipment and are dependent on the capacity of the unit.

- Dehumidification Airflow (Dehumidifier) (60 to 80%, default is 70%)
- @

Dehumidification Airflow is 60 to 80% reduction of the High Cooling Airflow parameter.

(Adjust Settings)

- Delay Settings
 - Heating Indoor Blower OFF (0 to 10 sec., default is 10 sec.)
 - Heating Indoor Blower ON (0 to 5 sec., default is 0 sec.)
 - Cooling Indoor Blower OFF (0 to 30 sec., default is 0 sec.)
 - Cooling Indoor Blower ON (0 to 10 sec., default is 2 sec.)
 - HP Indoor Blower OFF (0 to 60 sec., default is 45 sec.)
 - HP Indoor Blower ON (0 to 30 sec., default is 0 sec.)
- · Reset Air Handler (factory default settings)

Zoning Control

(About)

- · Unit Code
- · Language Support
- Equipment Type name
- Control Software Revision
- Control Model Number
- Control Serial Number
- Control Hardware Revision
- Protocol Revision Number
- · Device Product Level
- 24VAC Average Power Consumption
- 24VAC Peak Power Consumption
- Compatible Devices List
- Application Code Memory Size
- Microcontroller Part Number
- Maximum Number of Zones
- Supported Damper Types

(Adjust Settings)

- Equipment Name (Keyboard tool)
- Zone 1 Temperature Reading Calibration (-5 to 5°F, default is 0°F)
- Zone 2 Temperature Reading Calibration (-5 to 5°F, default is 0°F)
- Zone 3 Temperature Reading Calibration (-5 to 5°F, default is 0°F)
- Zone 3 Temperature Reading Calibration (-5 to 5°F, default is 0°F)
- Reset Zoning Control (factory default settings)

INSTALLER SETTINGS

EQUIPMENT (continued)

Thermostat

(About)

- Model Number
- Serial Number
- Software Revision
- · Hardware Revision
- · Language Support
- Equipment Type name

(Adjust Settings)

- Screen Locked (Prevents tampering with thermostat settings)
 - Unlocked (no security)
 - Partially Locked (prevents tampering with the menu settings, setpoints can be adjusted)
 - Locked (prevents tampering with the thermostat)
- Display Outdoor Weather (on/off)
- Display Air Quality (on/off)
- Outdoor Temperature Source
- Off
- Internet
- Sensor
- Display Indoor Humidity (on/off)
- Screen Saver (on/off)
 - Off
 - Weather
 - Power Save



 $\label{prop:conditions} \textbf{Weather} \ \text{displays} \ \text{the current weather conditions screen}.$

Power Save displays a blank screen until the screen is touched or the proximity sensor is activated.

Auto Brightness (on/off)



If **Auto Brightness** is turned off a slider appears to manually adjust the brightness of the display.

- Brightness Value (0 to 100%, default is 80%)
- Proximity Control (on/off)
- Proximity sensor turns on the display backlight at a specific distance.
- Wide Setpoint (on/off)
- Reset Thermostat (factory default settings)

Reset Options

- · Restart Smart Hub
- Re-Configure System
- Reset HVAC Equipment (resets all HVAC equipment)
- Factory Reset Thermostat
- Factory Reset Smart Hub (resets Smart Hub to factory state)

NOTIFICATIONS SCREEN



Provides information for active and previous notifications. When selecting either a cleared or active notification a brief description and alert code will be displayed.

Notifications are categorized by Smart Hub, Air Handler or Furnace, Air Conditioner or Heat Pump, Zoning Control (if installed) and the iComfort® S30 Thermostat.

To expand a notification for more details of the alert code, touch the down arrow to expand the description.

Touch the **clear button** to move the notification to the cleared area.

TESTS SCREEN



A variety of system tests can be performed by the installer.

Various tests are available depending on equipment in the system. By default all items to be tested are enabled.

- · Verify Airflow Per Zone
 - · Blower Circulation Airflow
 - · Heating Circulation Airflow
 - · Cooling Circulation Airflow
- Touch the down arrow next to each airflow type to adjust the individual airflow. Use the plus and minus buttons to adjust airflow in 5 cfm increments. Press and hold arrow for rapid adjustment.
 - If no zoning is installed, zone airflow settings will be for zone 1 only. If zoning equipment is detected by the system, zones 1 through 4 will be listed.
- · Select Tests to Run
- Selecting a specific test will uncheck the item. When a specific set of tests are completed the results will be displayed on the screen next to the tested item. Touch and scroll to see all tested items. Touch **Continue** to advance to the next test.

INSTALLER SETTINGS

DIAGNOSTICS SCREEN





Allows the installer to test any iComfort® Communicating product in the system for a wide variety of conditions.

- Select Diagnostics to View
 - Deselect All
 - · Select All
- Touch each equipment row to select or deselect before running diagnostics. A checkmark appears if selected.
- Touch **start diagnostics** to start testing. Touch **stop diagnostics** to pause diagnostics. Touch the different
 equipment buttons on the left side of the screen to view
 the individual equipment results.

INSTALLATION REPORT SCREEN



Displays various parameters and settings for the system, outdoor equipment and indoor equipment at the time of installation.

- Installation report is based on various settings that were configured in the Equipment screens previously.
- Only certain parameters are displayed depending on the type of system installed (air conditioner, heat pump, dual-fuel).
- Dealer Portal (Web only) feature Dealer can generate a PDF file of the report to email to a homeowner.

INFORMATION SCREEN



View and edit the dealer information, general information and home information screens. Also see page 24.

- Dealer
- General
- Home



Touch the different buttons on the left side of the screen to view and edit the individual information screens.

INSTALLER SETTINGS

ERV	Ventilation Control Mode	Fresh Air Damper	1 Stage HRV	2 Stage HRV	1 Stage ERV	2 Stage ERV
<i>`</i> ≥	Timed					
FRESH AIR DAMPER / HRV / ERV	Ventilation Minutes Per Hour (0 to 60 min., default is 20 min.)	X	Х	Х	X	X
AMPE	Ventilation Rate (20 to 500 cfm, default is 130 cfm)		Χ		Х	
AIR D	Ventilation Rate for Low Speed (10 to 200 cfm, default is 50 cfm)			Х		Х
RESH	Ventilation Rate for High Speed (20 to 500 cfm, default is 130 cfm)			Х		Х
正	Ventilation High Outdoor Temperature Limit (<i>60 to 115°F, default is</i> 100°F)	Х	Х	Х	Х	Х
	Ventilation Low Outdoor Temperature Limit (–20 to 55°F, default is 0°F)	Х	X	Х	Х	Х
	Ventilation High Outdoor Dew Point Limit (45 to 80°F, default is 55°F)	Х	Х	Х	Х	Х
	ASHRAE (62.2)					
	Ventilation Rate (20 to 500 cfm, default is 130 cfm)		Х		Х	
	Ventilation Rate for Low Speed (10 to 200 cfm, default is 50 cfm)			Х		Х
	Ventilation Rate for High Speed (20 to 500 cfm, default is 130 cfm)			Х		Х
	ASHRAE Compliance Check	NO	YES	YES	YES	YES
	ASHRAE Infiltration Credit (0 to 200 cfm, default is 0 cfm)	Х	Х	Х	Х	Х
	ASHRAE House Floor Area Serviced by this Ventilator	Х	Х	Х	Х	Х
	ASHRA Number of Bedrooms	Х	Х	Х	Х	Х
	Ventilation Outdoor Condition Override - Enabled					
	Ventilation High Outdoor Temperature Limit (60 to 115°F, default is 100°F)	Х	Х	Х	Х	X
	Ventilation Low Outdoor Temperature Limit (–20 to 55°F, default is 0°F)	Х	X	Х	Х	X
	Ventilation High Outdoor Dew Point Limit (45 to 80°F, default is 55°F)	Х	Х	Х	Х	Х

INSTALLER SETTINGS APPLE HOMEKIT SETUP

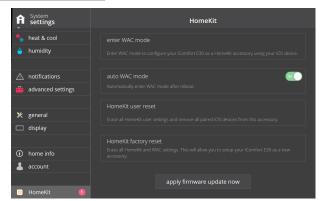


After power is applied to the thermostat for the first time, it displays the iComfort® "splash screen" (see page 24), then the Wi-Fi Accessory Configuration (WAC) Active screen for configuring the IOS device will appear on top of the dealer info setup screen.

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

- 1. Out of the Box Setup Procedure during Thermostat Commissioning.
- 2. Out of the Box Setup Procedure after Thermostat Commissioning.
- 3. HomeKit Manual Setup.

HOMEKIT SCREEN



- Enter WAC Mode
- · Auto WAC Mode (on/off)
- HomeKit User Reset (yes/no)
- HomeKit Factory Reset (yes/no)
- Apply Firmware Update Now



Enter WAC Mode

Changing to a new wireless access point or updating the existing wireless access point password.

Auto WAC Mode

Displays if the thermostat has never been connected to the home's wireless access point or a HomeKit Factory Reset was initiated. Default is ON.

HomeKit User Reset

Allows homeowner to remove any existing Apple HomeKit user settings and paired iOS devices. The thermostat retains 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

Allows homeowner to remove any existing thermostat Wi-Fi settings, Apple HomeKit user settings and paired iOS devices.

Apply Firmware Update Now

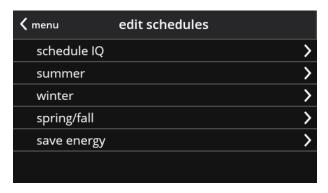
If visible, indicates there is a firmware update available.



See the User Guide for additional information about Apple Homekit setup.

ENERGY SAVINGS

SAVE ENERGY



NOTE - For California residents only.

- Energy Savings feature is currently a feature requirement for the State of California
- Enrolling into the energy saving program allows the user'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

ENERGY SAVINGS ENROLLMENT

- · Enrollment is a two-step process for consumers
- 1. User registers with their utility provider before the thermostat settings can be enabled to take advantage of the Energy Savings feature
- 2. Enable energy saving settings on the thermostat

ENERGY SAVING SETTINGS

- Peak Load Event Active Setpoints:
 - Default
 - Offset
 - · Custom Setpoints
 - · Peak Price Event Threshhold
- Peak Price Event Active Setpoints:
 - Default
- Offset
- · Custom Setpoints
- · Energy Savings Event Filter
- Energy Savings Settings Factory Reset (resets all parameters to factory settings and cancels enrollment)



- An energy saving event can be canceled when any of the following occur:
- Adjusting the temperature setpoint manually
- · Selecting a schedule
- · Changing the mode of operations
- Manually canceling the event from the home screen indicator

NOTE - See the iComfort® E30/S30 User Guide for additional information about enrolling in the Energy Savings program and thermostat settings available.

REVISIONS		
Sections	Description of Change	
Document	Updated to version 3.6. Added Energy Savings option (for California residents only).	



Visit us at www.lennox.com
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