L40

Residential Control System

Programmable Smart Wi-Fi Thermostat

RESIDENTIAL
PRODUCT SPECIFICATIONS (EHB)

2 Heat / 1 Cool
Universal

The L40 is a Smart Wi-Fi, electronic 7-day, universal, programmable, touchscreen thermostat.

- LCD display with backlight shows the current and set temperature, and system status (operating mode and schedules)
- Touchscreen interaction
- Ergonomic design
- Smooth Setback Recovery starts system early to achieve setpoint at start of program period
- Compressor short-cycle protection (5 minutes)
- Real-time clock keeps time during power failures and automatically updates to daylight savings
- Maintenance reminders let user know when to service or replace filters, PureAir® metal insert, humidifier pads, ultraviolet lamps, ventilation and ventilation filter
- 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
- Permanent memory storage of settings
- Wallplate furnished

APPROVALS

- ENERGY STAR® certified
- Factory preset program settings conform to EPA ENERGY STAR® recommended setpoints

APPLICATIONS

- Fully programmable thermostat provides universal system compatibility, precise comfort control and easy programmability
- Provides temperature control for gas, electric and heat pumps for single-stage heating or cooling systems (including dual-fuel operation)

HOME AUTOMATION

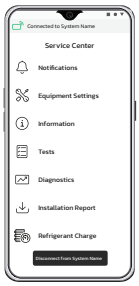
- Amazon® Alexa-enabled
- Works with Google Assistant
- Works with Control4® and Building36® integration

WARRANTY

- Limited five years in residential applications

NOTE - Refer to Lennox® Basic Limited Warranty at www.Lennox.com for additional details.

Control temperature, fan operation, set programs/schedules and set Away mode in the Lennox® Home App.



All thermostat commissioning and settings are made in the Lennox® Smart Tech App.

CONTENTS

Commissioning - Initial Setup (Thermostat) 12
Dealer Service Center - Installer Settings (Thermostat) 13
Home Automation 3
Homeowner Settings 4
Mobile Apps (Homeowner/Installer) 2
Specifications 16

WORKS WITH amazon alexa

works with the Google Assistant

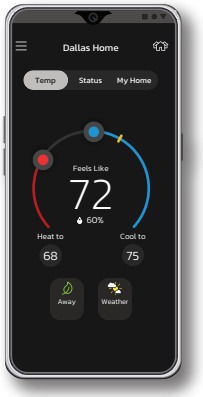
Building36® AN ALARM.COM COMPANY

Control4 CERTIFIED

Form Number 210878 | March 2025
Supersedes all previous versions

MOBILE APPS (HOMEOWNER/INSTALLER)

LENNOX HOME (Homeowner)



The free Lennox Home App is available for use on smartphones.

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

Download on the App Store

ANDROID APP ON Google play

LENNOX PROS APP (Installer)

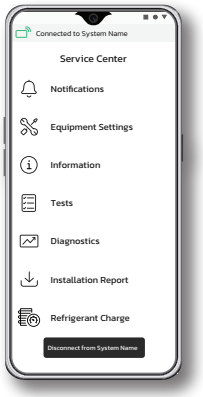
Download on the App Store

ANDROID APP ON Google play

LennoxPROs mobile application has all the information HVAC Professionals and businesses need in one place.

- Product Catalog
- Residential/Commercial products
- Parts and Supplies
- Clearance Center
- Real-Time Product Availability
- Technical Tools
- AHRI Residential Match-up Tool
- OEM Repair Parts
- Technical Documents
- Sales Tools
- Marketing Brochures
- Commercial Quick Quote
- Warranty Tools
- Warranty Lookup
- Training Center
- My Learning

LENNOX SMART TECH (Installer)



Allows the installer to commission the system and remotely turn the system on and off during setup or service call from a smartphone.

Alerts and Notifications sent to Dealer to notify when servicing or maintenance is required.

Share avanced diagnostics with the Dealer to aid in servicing and troubleshooting.

Allows quick connection to the thermostat via Bluetooth for easier system configuration changes via a Smartphone.

- Equipment Configuration Profile (ECP):
  - Allows dealers to create unique equipment profiles specific to products sold at their dealership
  - Can be imported into the homeowner's smart thermostat reducing setup times

Download on the App Store

ANDROID APP ON Google play

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

HOME AUTOMATION

Amazon® Alexa

The L40 Smart Thermostat is an Amazon® Alexa-enabled, smart-home-compatible thermostat.

Allows the homeowner to tell Alexa to control system mode and heating cooling setpoints.

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

WORKS WITH amazon alexa

Download on the App Store

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.

Google Assistant

Control basic functions of the L40 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 Lennox® Support Website for Google Assistant Integration.

works with the Google Assistant

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Control4® Smart Home | Operating System

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

Control4 gives the customer an easy-to-use interface to control the Lennox® L40 thermostat.

Settings include:

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

For additional information please visit the Support Website for Control4 Integration.

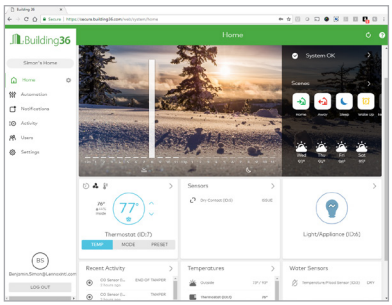
Control4 CERTIFIED

NOTE - For integration with Lennox® L40 Thermostats, the customer must contact their Control4 dealer directly to download and install the necessary driver for their operating system.

Control4® is a registered trademark of Control4 Corporation. All rights reserved.

Building36® Practical Home Automation

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



Building36® gives the customer an easy-to-use interface via the Building36 Dashboard or the Building36 Home Mobile App to control the Lennox' L40 thermostat

Settings include:

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

Building36® AN ALARM.COM COMPANY

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

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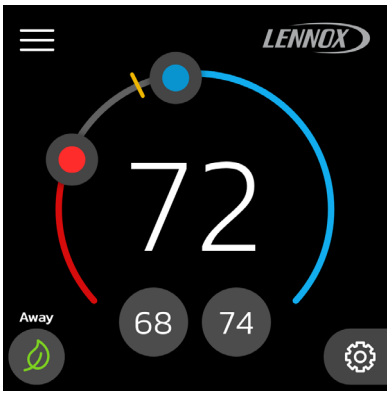
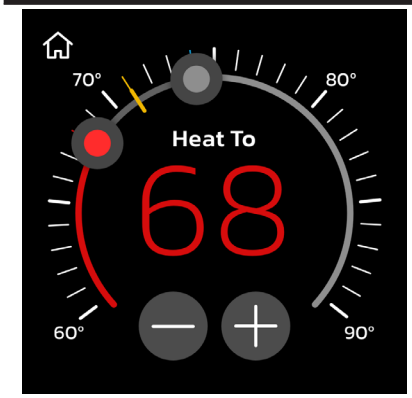
HOMEOWNER SETTINGS

HOME SCREEN	Notes
	All thermostat settings can also be made in the Lennox® Home App. If screen is dark, touch screen to turn on the backlight.
Temperature Settings	
Large display of current inside temperature (°F or °C)	Touching the heat or cool setpoint indicators on the round temperature band, or touching the heating or cooling buttons displays the heat or cool menu screens (see page 6).
Heating and Cooling Setpoint Indicators on the round temperature band	Both heating and cooling setpoint indicators on the round temperature band and the heating or cooling setpoint buttons are displayed if System is set to Heat/Cool.
Current cooling setpoint temperature Button (right-side)	
Current heating setpoint temperature Button (left-side)	Indicator mark on the round band marks the temperature setting. Various animated icons appear above the current temperature depending on system operation..
Menu Button	Touch to display **Menu** screen (see page 7).
Away Button	Touch to display **Away Mode** screen (see page 6).
Configuration Button	Animated icons also appear here for configuration, maintenance notification, Wi-fi status, peak monitoring, or upcoming functions.
Notifications Button	Only displayed if there are active notifications Touch to display any active notifications.
Mode Icons (Split Systems) Heat / Cool Heat Only Cool Only Emergency Heat (emergency heat operating as main heating source) Off	Touch the **Menu** button on the home screen, touch **Mode** to display the Mode Screen. Animated versions of these icons are also displayed on the Home screen above the actual temperature to indicate current system operation. The **Off** icon is displayed below the actual temperature if the system is not running. Touch the Off icon to display the Mode Screen directly.

HOME SCREEN (Continued)	Notes
Fan Status Icons (Split Systems) Fan On Fan Auto Fan Circulate	Touch the **Menu** button on the home screen, touch **Fan** to display the Fan Screen.
Miscellaneous Icons System Tests Schedule Hold Service Urgent Peak Monitoring	System Tests is displayed when system is configured for different equipment. Schedule Hold is displayed when a current schedule override is in effect. Service Urgent is displayed if there is a critical issue with the system. Peak Monitoring allows the utility company to control the energy savings time period. You can select cancel to exit this mode. By canceling homeowner is opting out of the current active energy savings events. (Also see ???) Peak Monitoring Registration is set up in the Lennox® Home App.

HOMEOWNER SETTINGS

HEAT MENU SCREEN



Heating setpoint display
Heating Setpoint Indicator on the round temperature band
Plus (+) and Minus (–) buttons
Home button (return to Home Screen)

Notes

- On the Home Screen, touching the heat setpoint indicators on the round temperature band, or touching the Plus (+) and Minus (–) buttons displays the heat menu screen.
- 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 60 to 87°F.
- A wider setpoint range (40 to 99°F) can be set in the Lennox®Home App.
- During a scheduled time period, touching either the setpoint indicator on the temperature band or the heat-to button will initiate a schedule hold (see page 8).

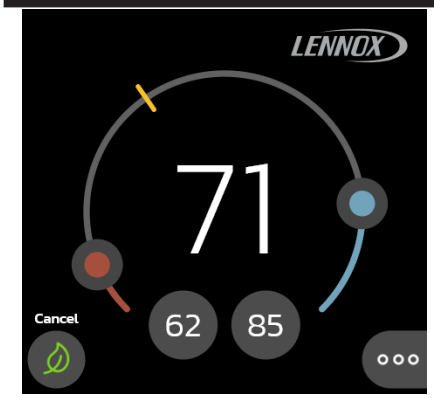
COOL MENU SCREEN

Cooling setpoint display
Cooling Setpoint Indicator on the round temperature band
Plus (+) and Minus (–) buttons
Home button (return to Home Screen)

Notes

- On the Home Screen, touching the cool setpoint indicators on the round temperature band, or touching the Plus (+) and Minus (–) buttons displays the cool menu screen.
- 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 63 to 90°F.
- A wider setpoint range (40 to 99°F) can be set in the Lennox®Home App.
- During a scheduled time period, touching either the setpoint indicator on the temperature band or the cool-to button will initiate a schedule hold (see page 8).

AWAY SCREEN

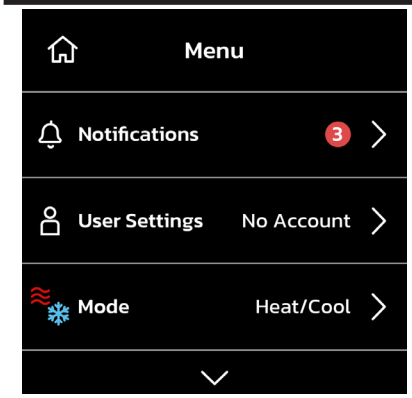


Set heating or cooling setpoints during unoccupied periods
Heating and Cooling Setpoint Indicators on the round temperature band
Current away cooling setpoint temperature Button (right)
Current away heating setpoint temperature Button (left)
Cancel Away Mode Button

Notes

- Touch the Away button to access the Away setpoint screen.
- Touch the heat or cool setpoint indicators on the round temperature band, or touch the heating or cooling buttons to change the away setpoints.
- Touch Cancel to end away mode and return to current system operation.
- Away setpoints are adjustable in the Lennox® Home App:
  40 to 87°F Heating
  60 to 90°FCooling

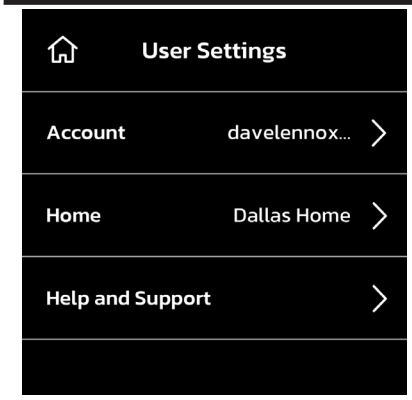
HOMEOWNER SETTINGS

MENU SCREEN	Notes
	Touch the **Menu** button on the home screen to display the **Menu** screen. Touch each item to display the selected screen. Scroll down to see all menu items. Touch the **Home** button to return to the Home Screen.
Notifications - Displays system operating and service reminder messages (see page 7)	
User Settings (see page 8)	
Mode (see page 8)	
Schedule (see page 9)	
Fan (see page 9)	
Wi-Fi (see page 9)	
Thermostat Settings (see page 9)	
Advanced Settings (see page 13)	

NOTIFICATIONS SCREEN	Notes
	Number of notifications will be displayed over the Menu Button on the Home Screen. Touch the Menu button to go to Notifications. Touch the **>** to display the complete message for each notification. Alerts homeowner of critical and required service or maintenance issues. Notification settings (Filter replacement time, etc.) are set in the Lennox® Home App.
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)	
Info (Blue Alert) - Displays information about installer access, Wi-Fi status, new devices found, software updates and additional useful information and tips to operate the system efficiently	

HOMEOWNER SETTINGS

USER SETTINGS SCREEN



Account

Configure Thermostat Button

Move Out (Yes/No)

Home

Help and Support

Notes

If no account is set up touch **>** touch the **Configure Thermostat** button to begin setting up account.

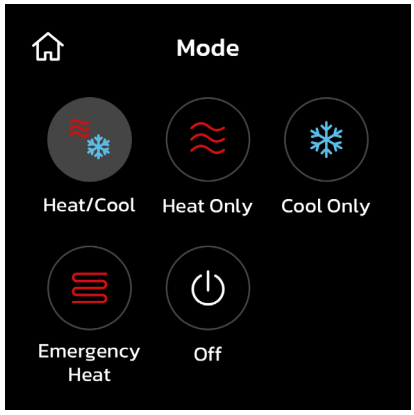
If an account is set up the homeowner's e-mail address will be displayed.

Home displays the current home name and address that the thermostat is associated with.

Move Out signs out of the current account and removes the thermostat from the current account.

To view more account information or to change the password use the Lennox® Home App.

MODE SCREEN (Split Systems)



Heat/Cool Button

Heat Only Button

Cool Only Button

Emergency Heat Button (heat pump systems only)

Off Button

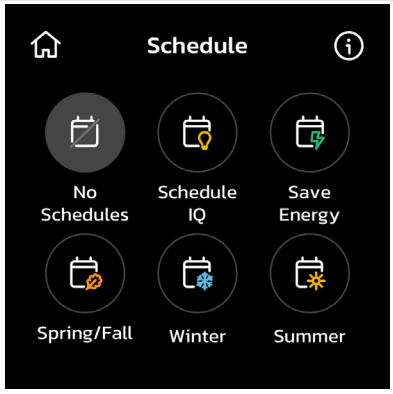
Notes

Touch **Mode** on Menu screen to access screen.

Touch each button to set the mode of operation.

Touch the **Home** button to return to the Home Screen.

SCHEDULE SCREEN

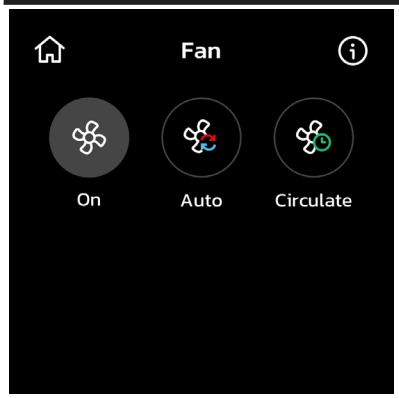


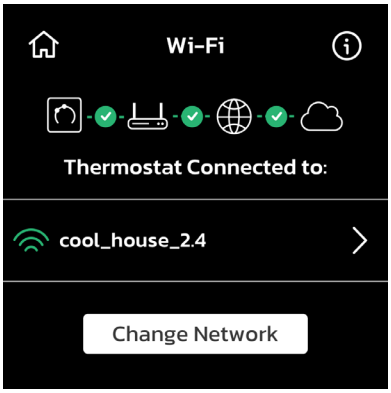
Notes

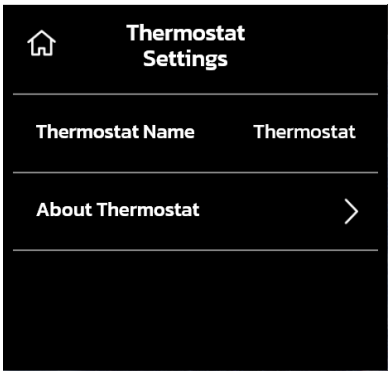
Touch to start a schedule.

Schedules are modified in the Lennox® Home App.

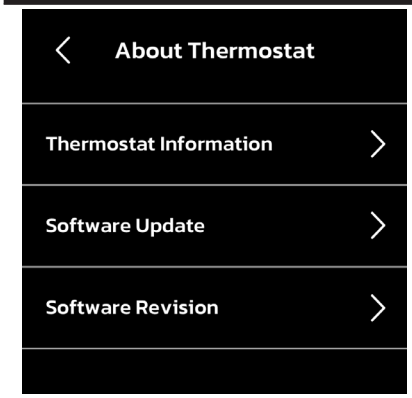
HOMEOWNER SETTINGS

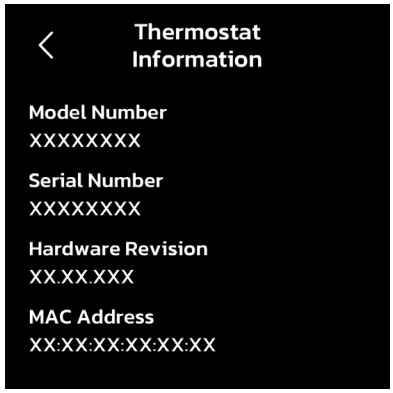
FAN SCREEN (Split Systems)	Setting	Default	Notes
			Touch the **Menu** button on the home screen to display menu. Touch the **Fan** menu to display the Fan screen. Touch the **Home** button to return to the Home Screen.
On Button			Touch each button to set the fan operation.
Auto Button			
Circulate Button	9 to 27 minutes	**21 minutes**	Fan runtime adjustment is selected in the Lennox® Home App.

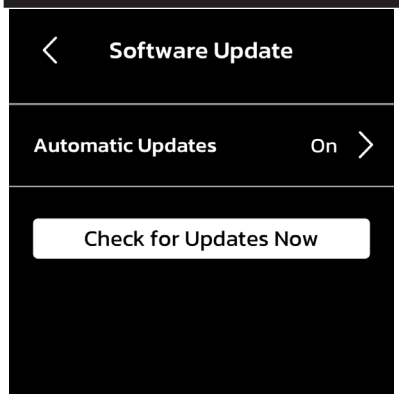
WI-FI SCREEN	Notes
	A graphical representation of the home network showing the connection status from the Thermostat to the Internet to the Lennox server. Touch the **>** to see current network SSID, IPAddress, Security level and RSSI. Touch the **i** button for additional information about a particular network (name, SSID, security, RSSI, etc.) available on the Lennox® Home App. Touch **Change Network** displays thermostat connectivity through the Lennox® Home App. A red "X" means that there is an issue with a connection point that must be resolved.
Current Active Network Button	
Change Network	

THERMOSTAT SETTINGS SCREEN	Notes
	System Name is set in the Lennox® Home App. Thermostat Name is set in the Lennox® Home App.
System Name (not shown)	
Thermostat Name	
About Thermostat (see page 10)	

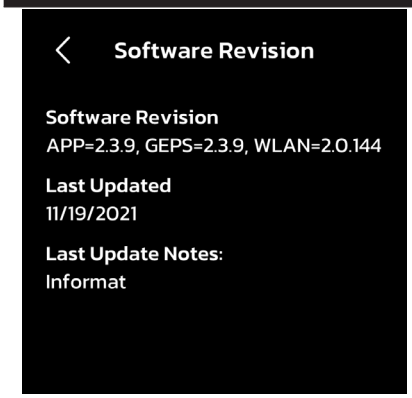
HOMEOWNER SETTINGS

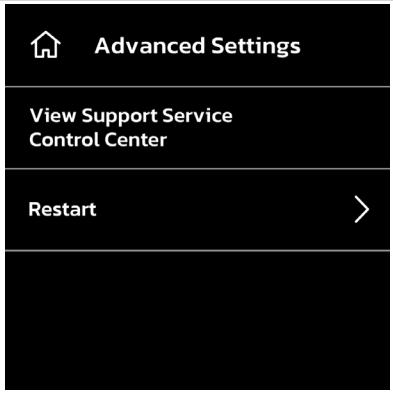
ABOUT THERMOSTAT SCREEN	Notes
	- - -
Thermostat Information (see page 10)	
Software Update (see page 10)	
Software Revision (see page 11)	

THERMOSTAT INFORMATION SCREEN	Notes
	- - -
Model Number	
Serial Number	
Hardware Revision	
MAC Address	

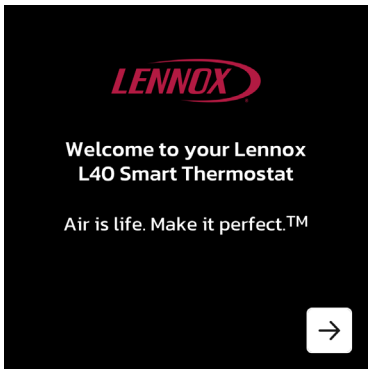
SOFTWARE UPDATE SCREEN	Setting	Default	Notes
			Click the **Check for Updates Now** button to manually download and install any available software updates.
Automatic Updates	On/Off	**On**	
Check for Updates Now button			

HOMEOWNER SETTINGS

SOFTWARE REVISION SCREEN	Notes
	- - -
Software Revision Number	
Last Updated	
Last Update Notes	

ADVANCED SETTINGS SCREEN	Setting	Notes
		Touching View Support Service Control Center displays a warning “The following screens are intended for use by qualified Lennox equipment installers only.”. Restart Thermostat restarts the system without affecting settings.
View Support Service Control Center - See page 13		
Restart	Restart Thermostat	

COMMISSIONING - INITIAL SETUP (THERMOSTAT)



After power is applied to the thermostat for the first time it displays the Lennox® "splash screen".

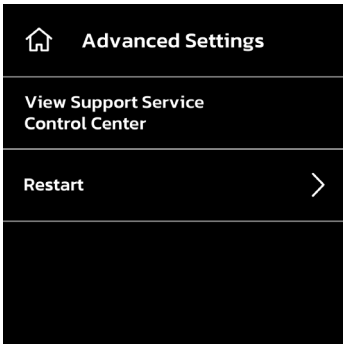
The Installer is then presented with the several Setup Screens to configure the system prior to operation.

NOTE - Full thermostat and system configuration is set in the **Lennox® Smart Tech Thermostat App (recommended)**. See page 2.

MENU	SETTING (default is BOLD)		Notes:
Language	**English**		- - -
	Español		
	Français		
Setup Route	**Smart Tech App (Recommended)**		All information is added using the app on a mobile device.
	L40 Thermostat		Partial information is added on the thermostat.
Dealer Information	Dealer ID Letter		Scroll to select letter.
	Dealer ID Number		Use keypad to input number.
Date and Time	Date		Scroll to set date and time. **NOTE** - Date and Time is automatically set when connected to the Internet.
	Time		
	Time Zone	Atlantic	
		Eastern	
		Central	
		Mountain	
		Pacific	
		Alaska	
		Hawaii	
		Samoa	
		Chamorro (Guam)	
	Daylight Savings	**On** or Off	
Temperature	Temperature Unit	**°F** or °C	- - -
Indoor Unit	**Not Installed**		- - -
	1 Stage Electric No Heat		
	1 Stage Electric		
	1 Stage Gas		
Outdoor Unit	**Not Installed**		- - -
	1 Stage AC Unit		
	1 Stage HP Unit		
	Outdoor Unit Capacity	18 to 60 kBtu (**36 kBtu**)	Adjustable 18 to 60 kBtu
	Balance Points	**Disabled** or Enabled	Heat Pump
Reminder	Replace Filter 1	3, 6, 12, 24 months, **disabled**	- - -
	Replace Filter 2		
	Maintenance Reminder		

DEALER SERVICE CENTER - INSTALLER SETTINGS (THERMOSTAT)

NOTE - INSTALLER SETTINGS SHOWN ARE ON THE THERMOSTAT ONLY!
ADDITIONAL SETTINGS ARE AVAILABLE ON THE LENNOX® SMART TECH APP. SEE page 2.

	Provides access to the installer for viewing and performing various functions. • Connect to Mobile App • Equipment Settings • Notifications • Installation Report • Information • Exit Dealer Service Center	The Service Center is accessed from the Home Screen under the Menu Button > Advanced Settings > View Support Service Control Center.

CONNECT TO MOBILE APP

Discover	Start Button		Connects to the strongest channel and broadcasts a Thermostat ID for connecting to the Lennox® Smart Tech Thermostat App. See page 2.
	Stop Broadcasting Button	**Yes**/No	Stops broadcasting.

EQUIPMENT SETTINGS

THERMOSTAT	SETTING (default is BOLD)	Notes:
About	Product Type	Equipment specifications.
	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	
	MAC Address	

DEALER SERVICE CENTER - INSTALLER SETTINGS (THERMOSTAT)

NOTE - INSTALLER SETTINGS SHOWN ARE ON THE THERMOSTAT ONLY!
ADDITIONAL SETTINGS ARE AVAILABLE ON THE LENNOX® SMART TECH APP. SEE page 2.

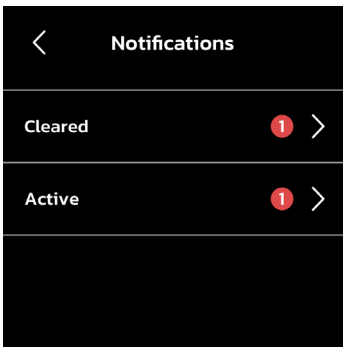
EQUIPMENT SETTINGS (Continued)

THERMOSTAT	SETTING (default is BOLD)			Notes:
Settings	Temp Reading Calibration		–5 to 5°F (**0°F**)	- - -
	Auto-Changeover - Temp Deadband		3 to 9°F (**3°F**)	
	Max Heat Setpoint		60 to 90°F (**90°F**)	
	Min Cool Setpoint		60 to 90°F (**60°F**)	
	Min Gas Heating Off Time		1.5 to 10 min. (**1.5 min.**)	
	1st Stage Differential		0.5 to 3°F (**1.0°F**)	
	2nd Stage Differential		0.5 to 8°F (**1.0°F**)	
	Smooth Setback Recovery		**Enabled**/Disabled	
	Balance Point Control		Enabled/**Disabled**	
	Staged Delay Timers		Enabled/**Disabled**	
	Outdoor Temperature		–10 to 10°F (**0°F**)	
	Aux Heating Activation		0 to 10°F (**2.5°F**)	
	Screen Saver		Off/**Power Save**/Dim	
	Wide Setpoint		**Off**	
	Reset Button		Resets the thermostat	
NON-COMMUNICATING EQUIPMENT				
Indoor	1 Stage Electric Heat	About	Model Number	- - -
			Serial Number	
	1 Stage Electric No Heat	About	Model Number	
			Serial Number	
	1 Stage Gas	About	Model Number	
			Serial Number	
Outdoor	1 Stage AC Unit	About	Model Number	- - -
			Serial Number	
		Outdoor Unit Capacity	18 to 60 kBtu (**36 kBtu**)	
		O/B Terminal	**O (Cooling)** or B (Heating)	
		Compressor Short Cycle Delay	60 to 300 sec (**300 sec**)	
	1 Stage Heat Pump	About	Model Number	
			Serial Number	
		Balance Point Control	**Disabled** or Enabled	
		Outdoor Unit Capacity	18 to 60 kBtu (**36 kBtu**)	
		O/B Terminal	**O (Cooling)** or B (Heating)	
		Compressor Short Cycle Delay	60 to 300 sec (**300 sec**)	
Add/Remove Equipment	Indoor			Change existing equipment. See Indoor/ Outdoor selections above.
	Outdoor			
Reset	Restart Thermostat			Restarts Thermostat.
	Reconfigure System			Resets existing outdoor/indoor units and settings.
	Factory Reset			Reset to factory default settings.

DEALER SERVICE CENTER - INSTALLER SETTINGS (THERMOSTAT)

NOTE - INSTALLER SETTINGS SHOWN ARE ON THE THERMOSTAT ONLY!
ADDITIONAL SETTINGS ARE AVAILABLE ON THE LENNOX® SMART TECH APP. SEE page 2.

NOTIFICATIONS



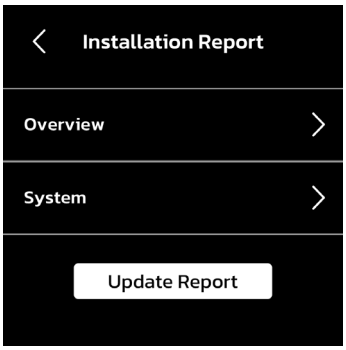
Provides information for active and previous (cleared) notifications. When selecting either a cleared or active notification a brief description and alert code will be displayed.

Notifications are color-coded to display - Urgent (red), Service Soon (orange) and maintenance (yellow)

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

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

INSTALLATION REPORT



Displays Installer and Customer information along with 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). Touch the different selections to view the individual information screens.
Update Report Button	Installer can generate a PDF file of the report to email to a homeowner. Reports are available at www.LennoxPros.com.

INFORMATION

Information Screen	Displays Dealer Information and General Settings from the Initial Setup Screen.	See page 12.

EXIT DEALER SERVICE CENTER

		Yes/**No**	Returns to the Home Screen.

SPECIFICATIONS

NOTE - For use with residential equipment only.

Order No. - **27V51**

Temperature Setting Range
- Heating - 60 to 87°F
- Cooling - 63 to 90°F
- Wider setting (configured on the Lennox® Home App):
  - Heating - 40 to 99°F
  - Cooling - 60 to 99°F

Power Supply
- 24VAC (18 to 30VAC maximum), 50/60Hz

Clock Accuracy
- ± 10 minutes per year

Terminals
Spring-loaded or screw type terminals for easy connections.

[1] Heat / 1 cool single-stage
- R - 24VAC power
- Y - 1st Stage Heating or Cooling
- W - 1st Stage Heating (AC or Emergency Heat) or 2nd Stage Heating (Heat Pump)
- G - Fan
- O/B - Reversing Valve (Cooling/Heating)
- C - Common 24VAC

[1] Configured in advance settings > terminal settings.

Dimensions
- Thermostat (H x W x D) - 3-3/4 x 3-3/4 x 7/8 in. (95 x 95 x 21 mm)
- Wallplate (H x W x D) - 4-7/16 x 4-7/16 x 1/4 in. (113 x 113 x 6 mm)

Backup
- Non-volatile memory maintains all programming in the event of a power outage

Visit us at www.Lennox.com

For the latest technical information, www.LennoxPros.com

Contact us at 1-800-4-LENNOX

NOTE - Due to Lennox' ongoing commitment to quality, Specifications, Ratings and Dimensions 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 and servicing agency.

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