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Dallas, Texas, USA



**THIS MANUAL MUST BE LEFT WITH THE HOMEOWNER
FOR FUTURE REFERENCE**

NOTICE

Use this thermostat only as described in this manual.

HOMEOWNER'S MANUAL

iComfort Wi-Fi® Thermostat

Touch-Screen Programmable Communicating Thermostat

CONTROLS

507342-01
2/2014
Supersedes 507200-01

TP Technical
Publications

General

Congratulations on choosing the iComfort Wi-Fi® touch-screen, programmable thermostat! The state-of-the-art technology built into this device makes it easy for you to adjust your home's comfort settings while at home or from a remote location (via Internet access)! Help screens are just a touch away. Use this manual as an introduction to a whole new world of home comfort.

WARNING

Do not switch system to cool if the outdoor temperature is below 45°F (7°C). This can damage the cooling system.

0214



507342-01

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Precise Comfort™ Technology

When the iComfort Wi-Fi® thermostat is used with a Lennox indoor or outdoor unit which includes a compatible communicating control, it becomes part of a **Precise Comfort™** system.

- **Precise Comfort™ Cooling (XC/XP25)** — This feature keeps the room temperature within 1/2 degree of the desired cooling setpoint. The airflow is adjusted in increments as small as 1% to provide ultimate temperature control.
- **Precise Comfort™ Heating (SLP98V)** — This feature keeps the room temperature within 1/2 degree of the desired heating setpoint. The airflow

is adjusted in increments as small as 1% to provide ultimate temperature control.

iComfort Wi-Fi® Thermostat

The communicating iComfort Wi-Fi® thermostat is an electronic 7-day programmable touch-screen thermostat with a color display. It also offers enhanced capabilities which include: humidification measurement and control, dew point adjustment control, dehumidification measurement and control, Humiditrol® Enhanced Dehumidification Accessory (EDA) compatibility, and equipment maintenance reminders. The thermostat's autochangeover mode permits control of heating, cooling, humidification, and dehumidification without user involvement.

The iComfort Wi-Fi® thermostat can connect to the internet using your home's Wi-Fi access point. After online registration has been completed, weather information is automatically sent to the thermostat. You also will have full access to the thermostat from any remote location using an internet connection via computer, smartphone, Android™ device, iPhone® or iPad®.

The thermostat stores system parameters in nonvolatile memory to retain data and settings when electrical power fails or is turned off. The thermostat also includes on-board help screens.

Indoor Air Quality accessories are supported with time-based maintenance notifications which remind you when to check or replace media filters, UVC bulbs, humidifier pads and PureAir™ catalytic inserts.

Thermostat Lock-Out

A lock icon at the bottom center of the screen (shown in the picture), indicates the thermostat is either partially or fully locked.



When the thermostat is partially locked, any user can adjust the temperature up or down to hold a setting for a selectable time period. To lock the thermostat, access "Screen lockout" through the FEATURES screen "display settings" described on Page 8.

When the thermostat is fully locked, no one can make any changes to the thermostat's settings. To unlock the thermostat, touch and hold the lock icon for 5 to 6 seconds.

Start-Up

In event of power failure —The thermostat will reboot after power is restored. When the reboot is complete, the HOME screen will return.

WHAT THE HOME SCREEN TELLS YOU...

After the thermostat and the system have been fully connected and powered on, the thermostat's Home screen is displayed. Figure 1 shows a display and describes what the thermostat is telling you.

When the system mode is set to **heat or cool**, the system is operating in *manual* mode; When a particular *program* has been selected, program name will be displayed on the system mode button (e.g., **summer program is on**).

OTHER INFORMATION...

The system will run until the indoor temperature is within the range specified by the selected cooling and heating setpoints (70 to 75 degrees in this example).

The "Wi-Fi" button in the bottom left corner provides access to the Wi-Fi setting screen. Wi-Fi with a Δ beneath it indicates a prior connection to the server has been lost. When the Wi-Fi connection is re-established, the triangle goes away.

Away Mode sets the thermostat for energy-saving system operation while you are gone for an extended period of time. In this mode, the system will only come on if the indoor temperature falls below 62 degrees (for heating), or if the indoor temperature rises above 85 degrees (for cooling).

WHAT YOU CAN DO FROM THE HOME SCREEN...

The Home Screen provides you with convenient access to adjust heating and cooling setpoints, as well as humidity levels in your home.

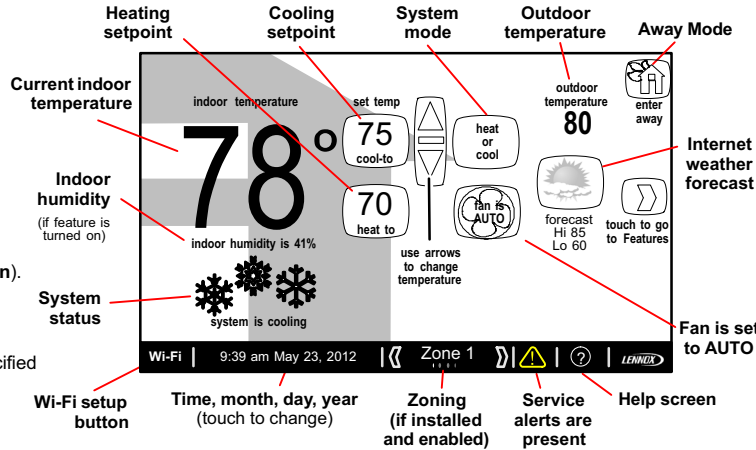


Figure 1. Home Screen (Typical)

From this screen you may:

- adjust temperature settings
- access menus to change the program mode
- change how the fan operates
- access the "Features screen" (fig. 3) by touching D
- access and view active service alerts by touching the Δ icon
- access help screen by touching the "?" icon

Temperature adjustment and system mode of operation selection are described fully beginning on Page 14.

If the installer has activated the indoor humidity feature, you will be able to set the desired humidity level in your home even if no physical humidifier or dehumidifier is present. See Page 17 for details on humidity control.

User Preference Quick Reference Chart (Use tools shown on page 5 to make changes)

User Setting	① Feature Button	Default	Page	Tools	Available Settings
Set up a program	edit programs	save energy	See details Page 6		—
Heating mode	system settings	COMFORT	7	toggle	Normal, Comfort (heat pump only)
Humidification settings	system settings	ON		toggle	OFF, ON (<i>only visible if humidifier is installed</i>)
Dehumidification settings	system settings	MODERATE		toggle	ClimateIQ = Dry, Moderate, Humid (communicating outdoor unit only) de-humidifier = Off, Medium, High (non-communicating outdoor unit only)
Humidity display	system settings	OFF		toggle	OFF, ON
Background theme	display settings	cobalt	16	toggle	cobalt, cotton, carbon
Temp scale is		(F)			(F) Fahrenheit, (C) Celsius
Screen saver		ON			ON, OFF
Screen lockout		Unlocked			Unlocked, partially (locked), (fully) locked
Language s		English	ENGLISH, FRANÇAIS, ESPAÑOL		
Outdoor temp display		OFF	Off, internet, sensor		
Backlight Intensity		80%	20 to 100% (in 20% increments)		
Press to CLEAN SCREEN			—	(view only)	Deactivates touchscreen for 30 seconds to allow cleaning. Use damp cloth to clean.
Zoning is ON	zoning settings	ON	Not applicable		ON, OFF (only visible if zoning installed)
Sensor screen ALWAYS ON		ON			ALWAYS ON, POWER SAVE
View alerts	alerts	—	See details Page 9		—
Replace filter 1	reminders	Disabled	See details Page 11		Disabled, 3 Months, 6 Months, 12 Months, 24 Months, Custom Time
Replace filter 2					
Replace humidifier pad					
Replace UV bulb					
Maintenance reminder					
PureAir□ maintenance required					
Dealer name	service	(These may show installer input data; but owner may change)	See details Page 13		(keyboard)
Dealer address					
Dealer phone					
Dealer email					
Dealer website					
Dealer number					
System desc					
Thermostat info	service	Display only	Model Number, Serial Number, Hardware Revision, Software Revision and Wi-Fi Revision.		

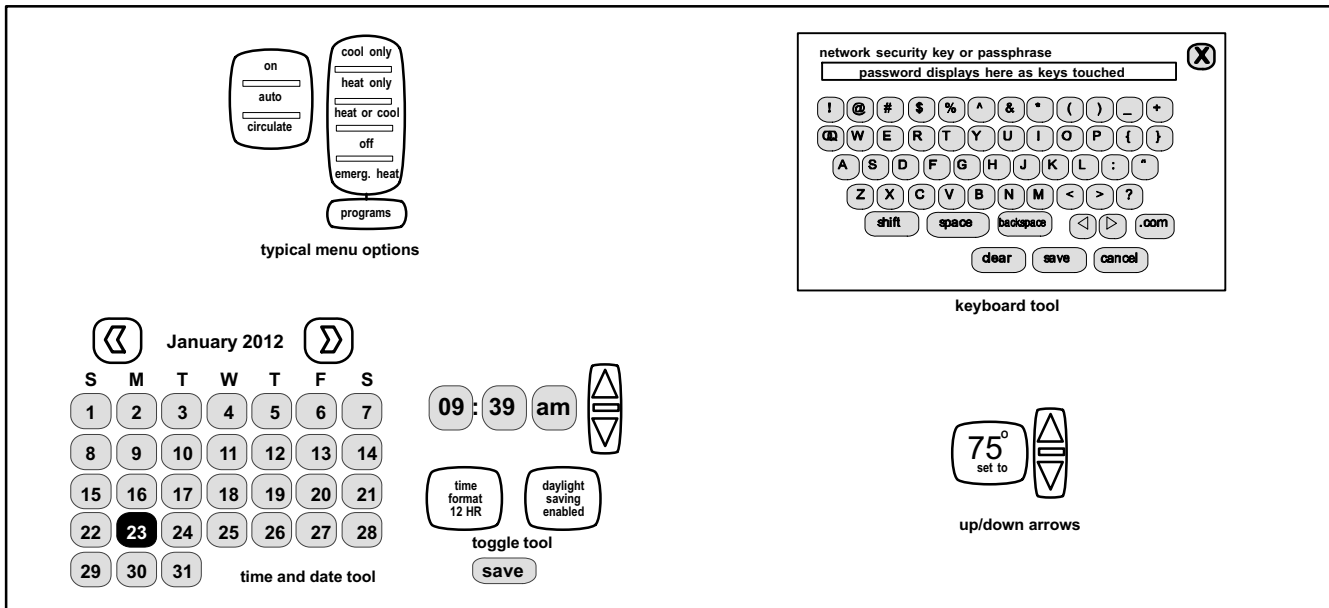



Figure 2. User Preference Change Tools

User Features and Help (?) Screens

From the Home screen, touch the  button to go to the Features screen. The Features screen (figure 3) allows you access to edit programs, system settings, display settings, zoning settings, alerts, reminders, service and help (?).

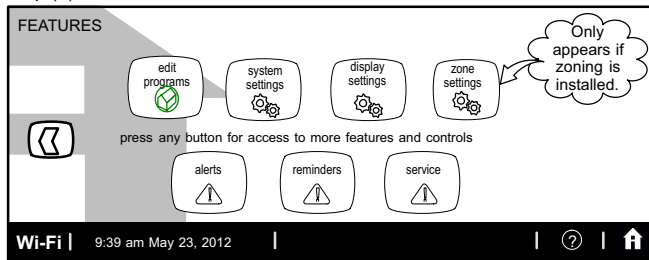


Figure 3. User Features - Indoor Settings

EDIT PROGRAMS

Touch **edit programs** button (see fig. 3). Figure 4 shows the EDIT PROGRAMS screen. Figure 5 shows pop-up menus that appear when the selections are touched and it illustrates changes made to the program.

Edit the "season programs" to reflect your preferences. (The **Save energy** program uses high-efficiency Energy Star settings to promote energy conservation.)

- **select programs** - Select a preset program; or touch and hold any button to enable the keyboard to change program names to suit your preferences.
- **select days** - Select week/weekend, individual days, all 7 days.
- **time** - Use up/down arrows to change time in 15 minute increments.
- **cool-** and **heat-to** - Use up/down arrows to change temperature in 1 degree increments.
- **fan mode** - Select on, auto, or circulate.

In the example in Figure 4, the evening time has been disabled by touching and holding the time button for that time period. (Touch **add setting** to re-enable that time period.) Use the **restore** button to restore defaults for the preset programs. Touch "X" button after changing; a pop-up prompts with **back**, **discard** and **save** options. Select **save** to save and return to the FEATURES screen.

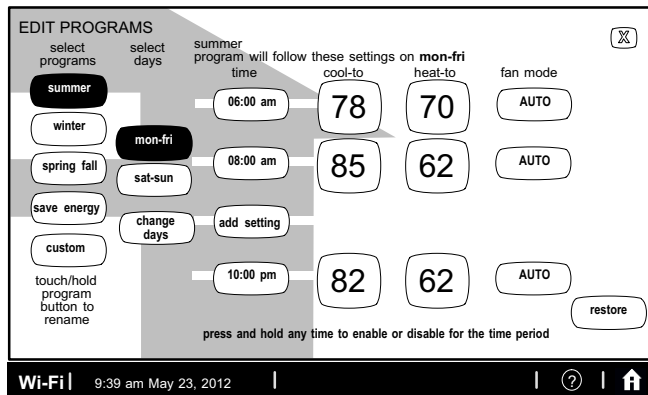


Figure 4. EDIT PROGRAMS Screen

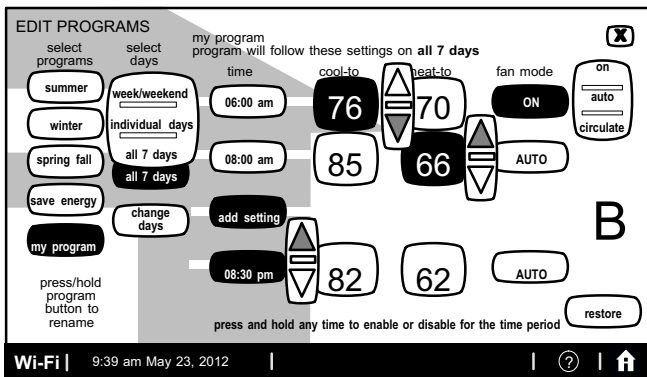


Figure 5. EDIT PROGRAMS Screen

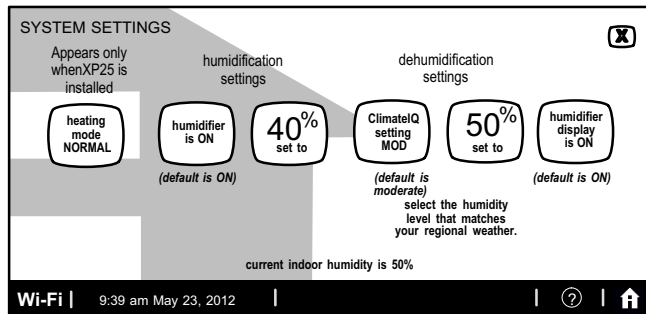



Figure 6. SYSTEM SETTINGS Screen (Example Only) - Communicating Indoor Unit

SYSTEM SETTINGS

For more information concerning humidification and dehumidification, go to page 19.

- Touch **system settings** button from the **FEATURES** screen. Figure 6 shows the **SYSTEM SETTINGS** screen with its defaults. Figure 7 shows how the devices can be configured.
- Touch **set to heating mode** button (**XP25 only**). (button may read: **COMFORT** or **NORMAL**). Select and change by touching heating mode icon: **COMFORT** or **NORMAL**.
- Touch buttons under appropriate humidification or dehumidification setting titles to select preferences.

Humidifier display is visible on the **SYSTEM SETTINGS** screen and can be changed to **OFF** from this screen. The resulting display shows the default values for **humidifier** and **ClimateIQ**. Use the arrows to change either.

When **humidity display** is **ON**, text near the screen bottom shows the current humidity. Touch the **"X"** button to return to **FEATURES** screen or touch the Home icon  to return to the Home screen.

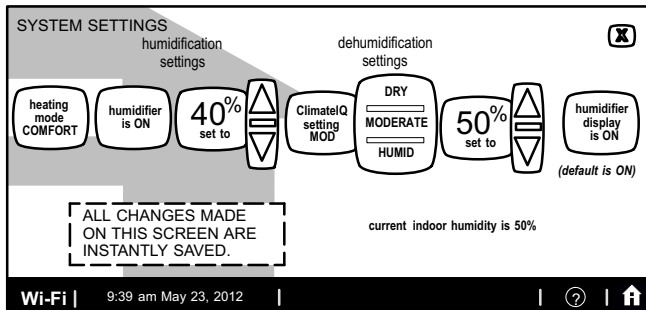


Figure 7. SYSTEM SETTINGS Screen - Making Adjustments

DISPLAY SETTINGS

Touch **display settings** from the **FEATURES** screen (see figure 3). Figure 8 shows the **DISPLAY SETTINGS** screen and defaults.

- Touch **Temp scale** button to toggle between °F and °C options.
- Touch **Background theme**, **screen saver**, **screen lockout**, **language**, **outdoor temp display** buttons to select options from pop-up menus (figure 9).
- Touch **backlight intensity** button and use up/down arrows to change the intensity of backlighting in 20% increments.

Touch the **press to CLEAN SCREEN** button to enable a 30-second touchscreen lock to allow screen cleaning. Use a damp cloth to clean the screen.

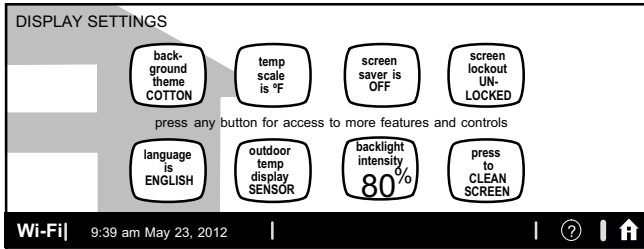


Figure 8. Display Settings (defaults)

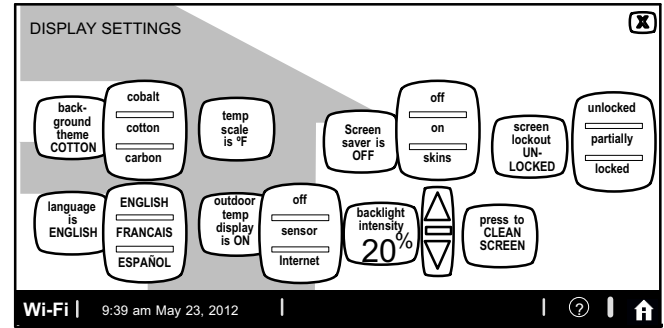


Figure 9. Display Settings (Adjusting)

ZONE SETTINGS

Touch **display settings** button (see figure 3). Figure 10 shows the **zone settings** screen and defaults.

- Touch the **zoning** button to toggle this option **ON** or **OFF**.
- Touch the **Sensor Screen** button to toggle this option **ALWAYS ON** or **POWER SAVE**.

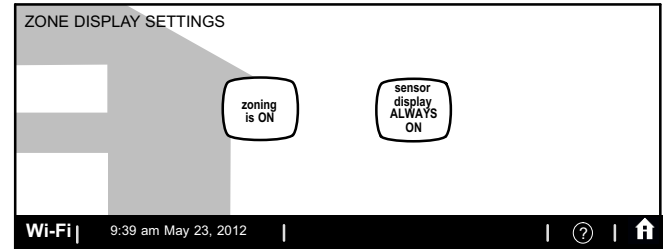


Figure 10. Zone Settings

ALERTS

Figure 12 shows how an alert appears when it occurs after the system has been put into operation. Use information on this screen to contact your HVAC serviceman. Use the **X** to close the alert message and return to the previous screen.

A **red alert** (red icon) identifies a problem that could prevent the system from working properly or from working at all. If the system is allowed to run after a red alert has been issued, damage to the system may be caused. **A red alert is your signal to call for service immediately.**

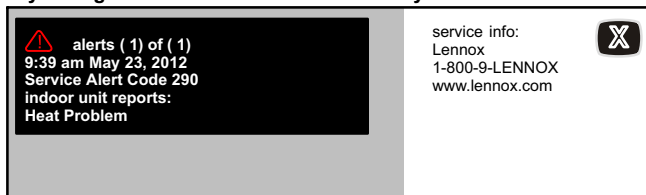


Figure 11. Typical Red Alert

A **service alert** (yellow icon) tells you to perform routine service, or to call the dealer to service one or more of the following: Filters, Humidifier Pad, UV Light, PureAir[®] Air Purification system and Maintenance. These alerts will appear based on elapsed time set per the reminders. For information on clearing a service alert or setting the alert to remind you later, see reminders on page 11.

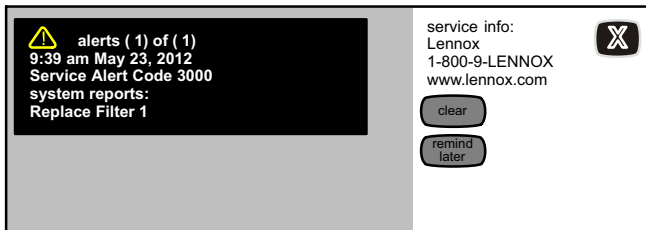


Figure 12. Typical Service Alert

ACCESS ALERTS THROUGH THE FEATURES SCREEN

Touch the Home screen alert icon (△) or the **alerts** button on the **FEATURES** screen (see figure 3). Any alerts will appear similar to those shown in figure 13. Touch the **select alert time period for viewing** button to view alerts that occurred in the last 24 hours, last 30 days, or last 12 months. Contact your HVAC serviceman to report the alerts and related problems.

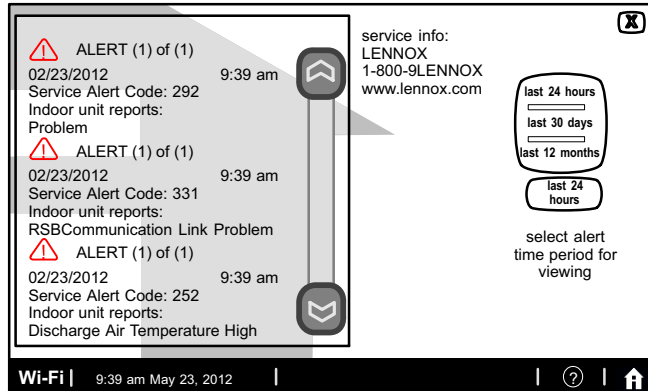


Figure 13. Alerts Viewed from FEATURES Screen Option

Navigate to different screens (see figure 14). You can clear alerts and set new reminders after routine service. You may also select **remind later** to be reminded at a time that is more convenient for performing the service. If a red alert (red Δ) is present, contact the party identified under **service info**.

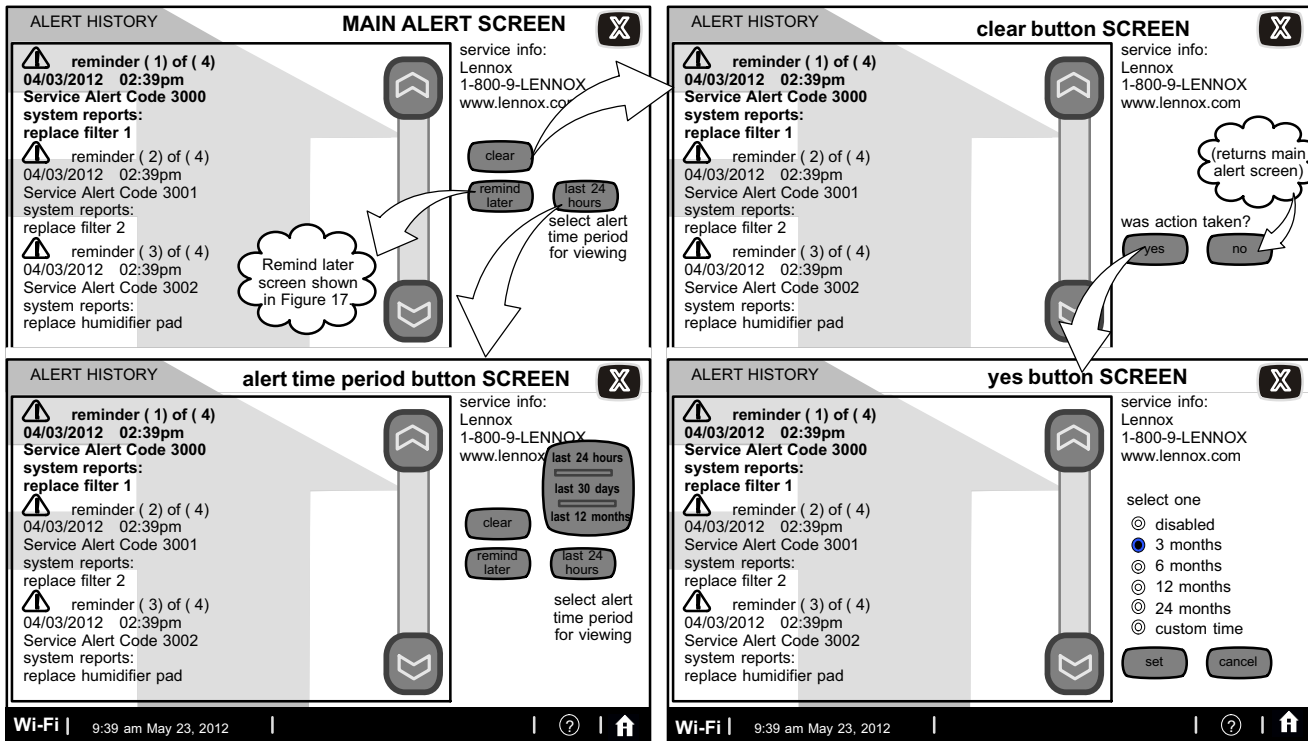


Figure 14. Alerts

SERVICE ALERT CODES

Number	Value	Number	Value	Number	Value	Number	Value	Number	Value
3000	Filter 1	3002	Humidifier Pad	3004	Maintenance	4000	User Wi-Fi state change, disable	4002	Image file download failed
3001	Filter 2	3003	UV Light	3005	PureAir Maintenance	4001	Firmware download failed		

REMINDERS

Reminders alert you to perform routine maintenance, such as replacing filters. Access the reminders from the **FEATURES** screen **reminders** button.

SETTING REMINDERS

NOTE - A previously set service time can be changed using the "custom time" option.

Use one of the "month" reminders to be reminded when routine service is due.

Use **custom** to access the time/date screen (figure 16) to set an exact date and time for a reminder to appear. Use the arrows to select a month; then, select the desired day of the month. Touch **save** when finished.

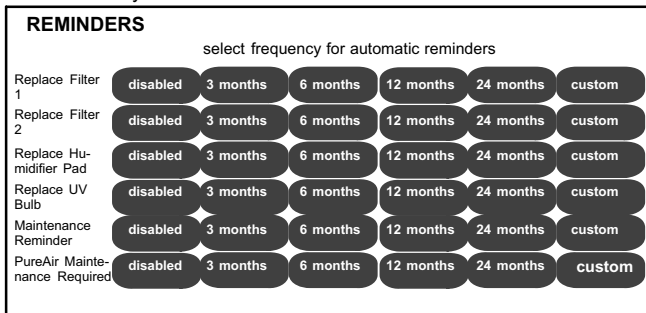


Figure 15. Set New Alert Date

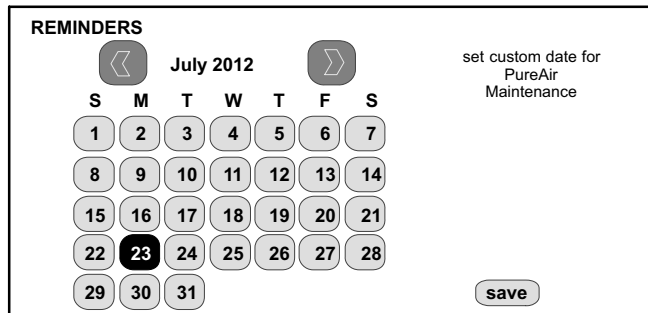
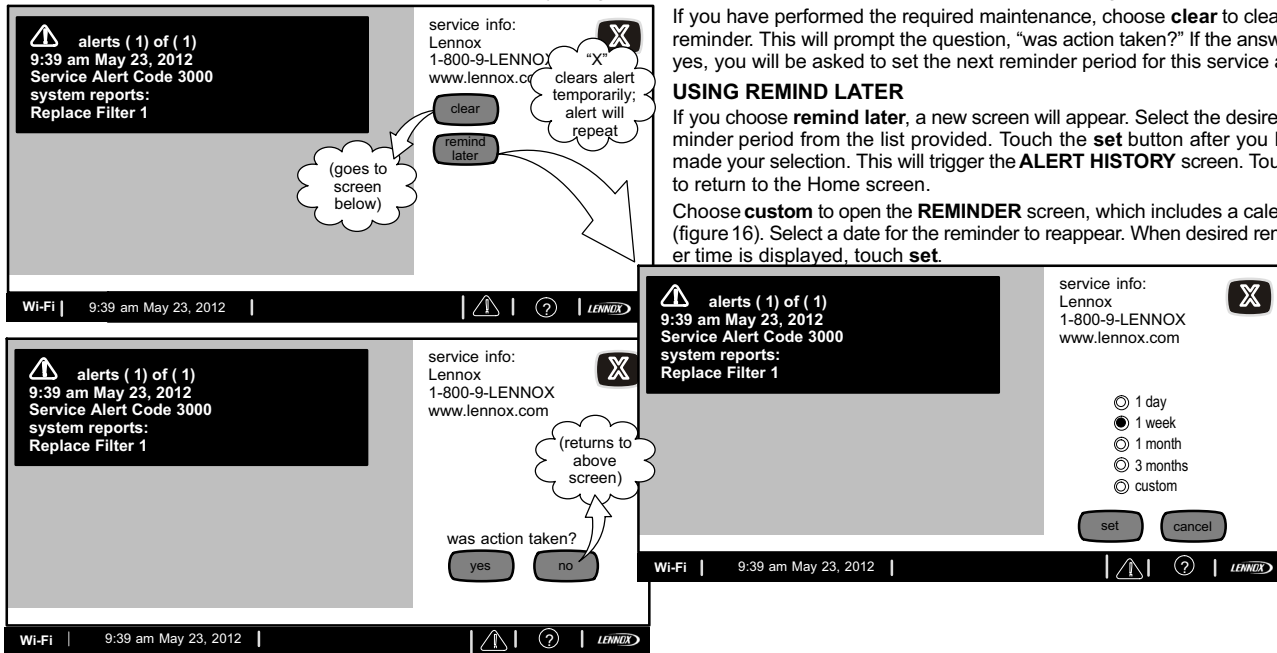


Figure 16. Setting Custom Time

Service reminders can be cleared or the date can be revised by using the service alert's **clear** and **remind later** buttons on the right side of the screen.



If you have performed the required maintenance, choose **clear** to clear the reminder. This will prompt the question, "was action taken?" If the answer is yes, you will be asked to set the next reminder period for this service alert.

USING REMIND LATER

If you choose **remind later**, a new screen will appear. Select the desired reminder period from the list provided. Touch the **set** button after you have made your selection. This will trigger the **ALERT HISTORY** screen. Touch **X** to return to the Home screen.

Choose **custom** to open the **REMINDER** screen, which includes a calendar (figure 16). Select a date for the reminder to reappear. When desired reminder time is displayed, touch **set**.

Figure 17. Viewing, Clearing and Changing Reminder Time

SERVICE INFORMATION

Service information is normally completed by the installer at time of initial installation.

Should you wish to change this information, proceed to the consumer portal. Select My Account, then My Dealer tab and touch **change dealer** button.

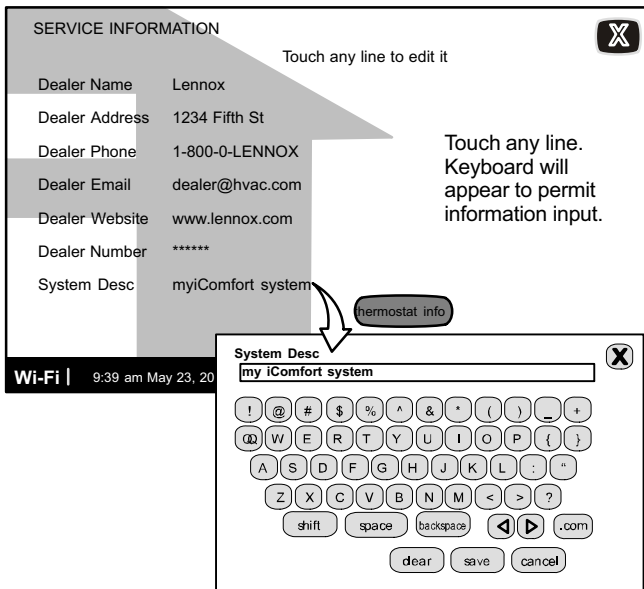


Figure 18. Service Information

HELP (?)

When you touch the help icon (?) at the bottom, right-hand corner of the screen, an array of (?) icons are displayed on the screen. When you touch one of these help (?) icons, a pop-up describes the function of the nearest active button(s). Figure 19 shows an example of the HELP screen and a pop-up.

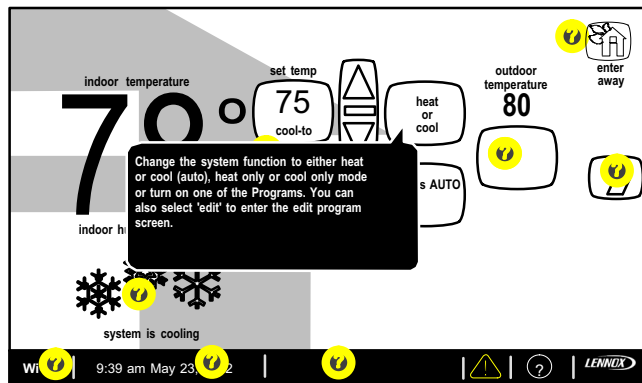


Figure 19. Typical Help (?) Screen

Adjusting Room Temperature, Away Mode, Program Change, Clock and Weather

Adjust temperature when programming is OFF — When the programming is OFF, the system mode button (shown in figure 20, labeled **heat or cool**) indicates a manual mode (no mention of “program”). In this mode, touch one of the two **set temp** buttons to change the temperature setting. The up/down arrows appear, allowing you to adjust the “cool to” (or “heat to”) values to the desired temperature setting.

This setting will remain until you decide to change it again. (The inset shows an alternate configuration of button layout in non-program mode.)

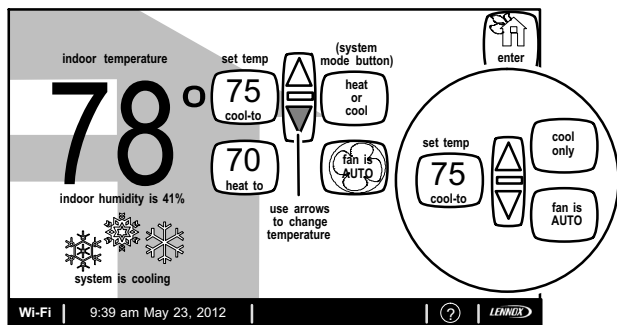


Figure 20. Adjusting Temperature with NO Program Running

Away Mode (Vacation) — The **enter away mode** button on the home screen (upper right-hand corner) sets the system for manual operation and allows you to set the thermostat for energy-saving operation while you are gone for an extended period of time. In this mode, the system will only come on if the indoor temperature falls below a set value in the heating mode (62° F default), or if the indoor temperature rises above a set value in the cooling mode (85° F default). You may adjust these settings as desired (see figure 21). To exit the away mode, touch **cancel away mode**.

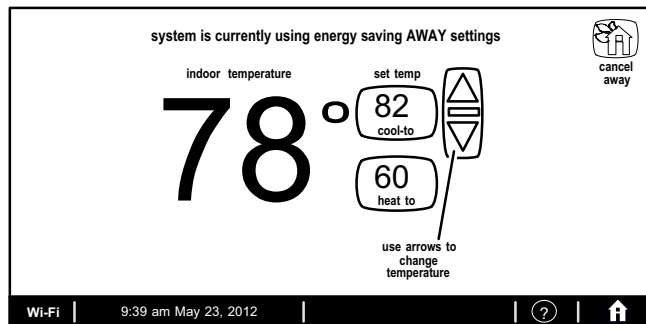


Figure 21. Adjusting Temperature with Program Running (Away Mode)

Turn Programming ON — If the programming is OFF, touch the system mode button (shown in figure 22, labeled **heat or cool**) to open the manual settings menu. **Programs** is the final selection in this menu. Select **programs** to display the program settings menu. (The menu will disappear if you don't make a selection within a few seconds). Select an option (e.g. **spring/fall**). The system mode button will display the selected program (e.g. **spring...program is ON**).

Turn Programming OFF — If the programming is ON, touch the system mode button (e.g. **spring...program is ON**) to return to manual mode. The program settings menu includes an option for manual. Select **manual** to display the manual settings. Select one of the manual settings (e.g. **heat only**). After the selection is made, the system mode button will display the selected manual option (e.g. **heat only**).

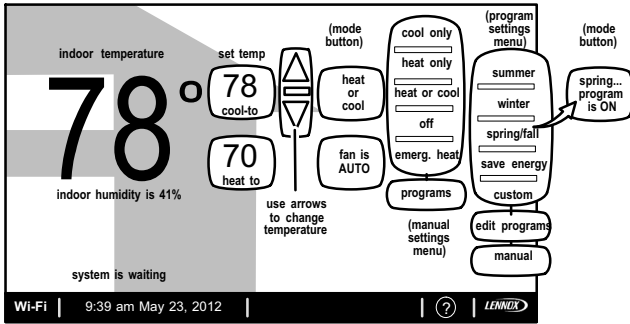


Figure 22. Turning on the Program

Adjust temperature when program is ON — Program HOLD

When the program is ON, the system mode button (shown in figure 23, labeled **spring...program is ON**) indicates which program is running. In this mode, touch a **set temp** button to trigger the appearance of an up/down arrow. Use the arrows to adjust the temperature setting for the “cool to” (or “heat to”) value (see figure 23).

While changing the temperature setting, the **other options** menu appears (see figure 24). This menu provides options for the length of time that you may choose to hold a temperature setting.

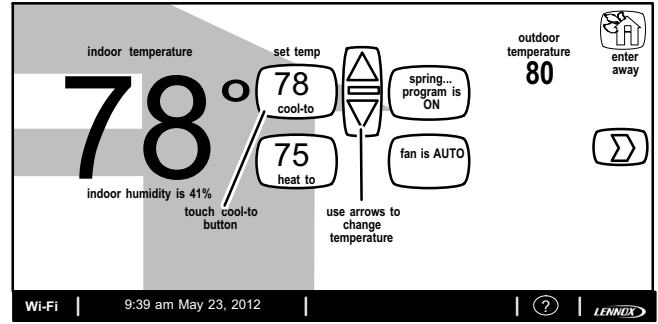


Figure 23. Adjusting Temperature with Program Running (cool-to and heat-to)

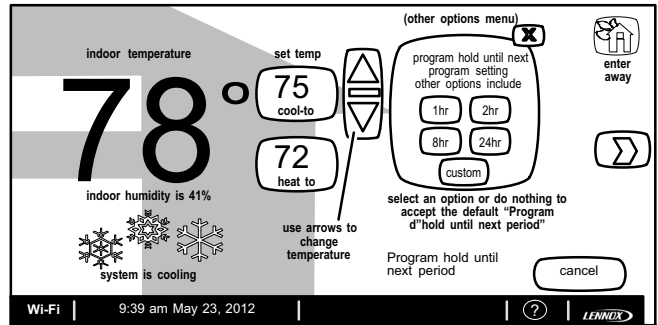


Figure 24. Adjusting Temperature with Program Running (other options)

You may select one of the hour buttons (1, 2, 8, or 24) if desired. If you select **custom**, a time/date screen appears and you have the option of setting the hold for any length of time (see figure 25).

After a hold is set, the **other options** menu disappears and a message will state when the hold expires, along with a **cancel** option should you choose to revert to the original program.

If you do not choose one of the "other options" the setting will be held until the next period (default).

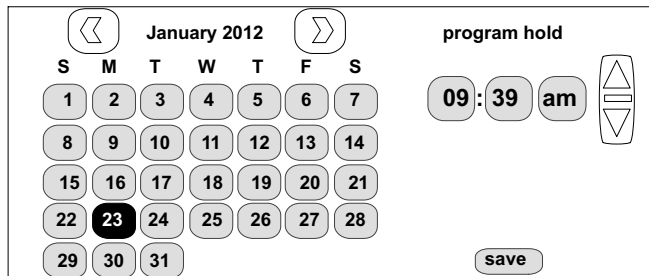


Figure 25. Adjusting Temperature with Program Running (program hold)

CLOCK SETTINGS

1. Touch the **clock display** on the Home screen (see figure 1 on page 3). Figure 26 shows the **CLOCK SETTINGS** screen.
2. Use the horizontal arrows to scroll to the desired month and year. Touch a day of the month to select it.
3. Touch **time format** and **daylight saving** to toggle these options (if desired).
4. Use the up/down arrows to change time.
5. Touch **am/pm** to select morning or afternoon (am/pm does not appear if 24HR format is selected).

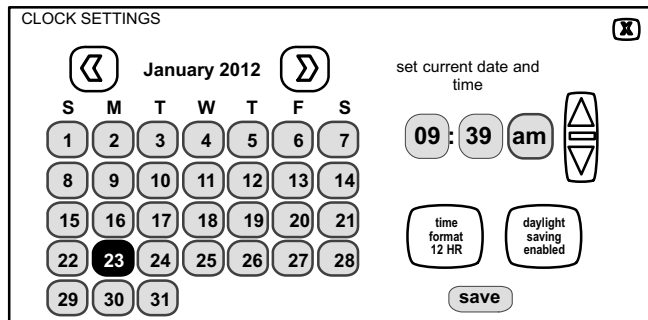


Figure 26. Set Current Time and Date

WEATHER

1. Touch the **weather icon** on the Home screen (see figure 1 on page 3) to view the **WEATHER** screen. Figure 27 shows a typical 5-day forecast screen.
2. Use "X" button to return to the Home screen.

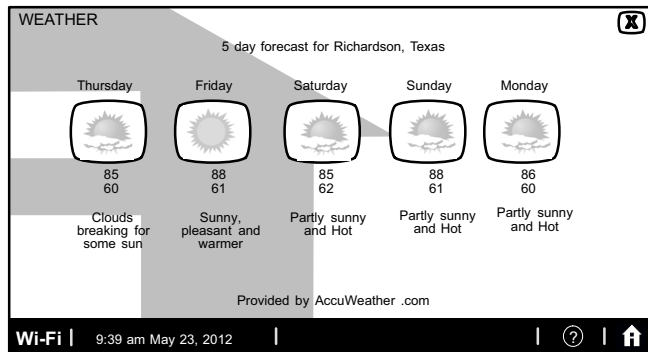


Figure 27. Typical Weather Screen

Setting Zoning Controls

When a zone control system has been installed and enabled by the installer, the homeowner has the option to control temperature or set away mode for each enabled zone. Touch the **zone location** button as shown below to display the **AVAILABLE ZONES** screen.

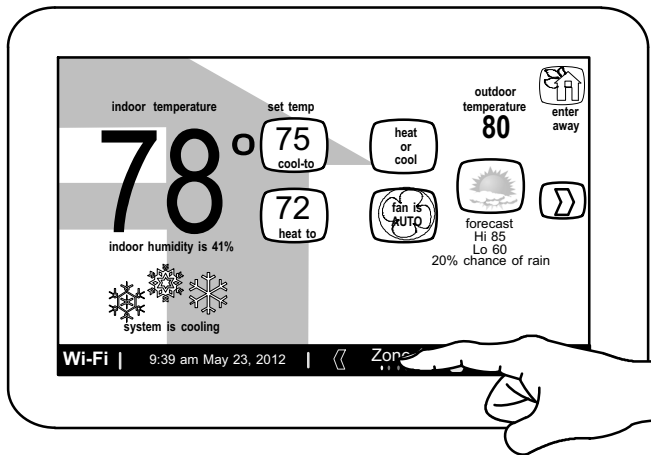


Figure 28 shows the AVAILABLE ZONES screen. This screen displays the current temperature, as well as the heating / cooling settings for each zone.

RENAMING ZONES

Touch the zone number of the zone you wish to rename. An on-screen keyboard will appear to allow you to rename a specific zone. Touch the **save** button when you are through.

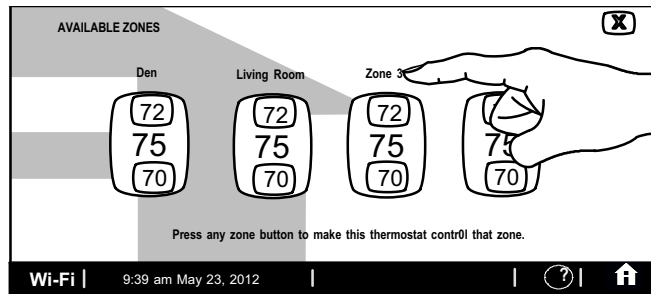


Figure 28. Home Screen - Selecting Available Zones Screen
ADJUSTING ZONE TEMPERATURES

Touch the current temperature reading of any zone that you wish to adjust. This will trigger the appearance of the temperature adjustment screen. Make desired adjustments for the particular zone as outlined beginning on page 14.

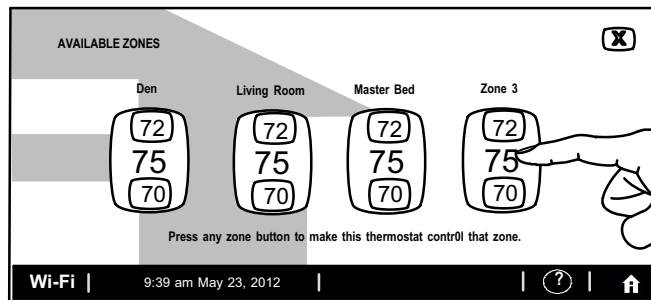


Figure 29. Selecting Available Zones

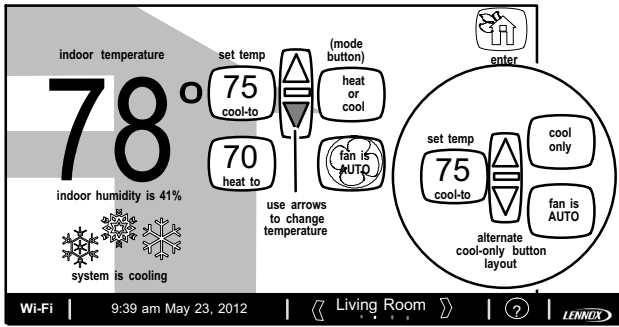


Figure 30. Adjusting Temperature

SETTING AWAY MODE PER ZONE

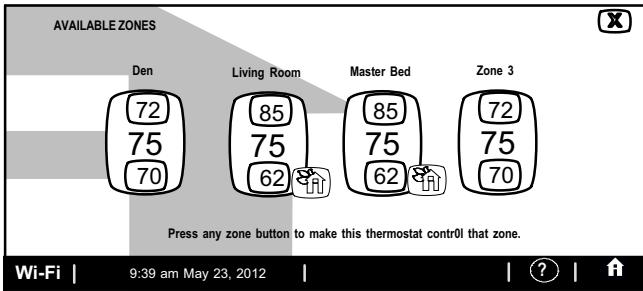


Figure 31. Home Screen - Selecting Away Mode for Individual Zones

The Zone 1 thermostat becomes the system master thermostat. If the Zone 1 thermostat is set for Away Mode (on the Home Screen), the away mode is enabled for the whole system (all zones) until canceled.

If zones 2, 3, or 4 are set for Away Mode on the Home Screen, the Away Mode icon appears at the lower-right of each zone button on the AVAILABLE ZONES screen.

ADJUSTING AWAY MODE TEMPERATURE OR CANCEL AWAY MODE PER ZONE

To adjust the Away Mode zone temperature setting or to cancel Away Mode for a specific zone, enter the Home Screen, select the desired zone and touch the **Cancel Away** icon located in the upper right-hand corner of the screen.

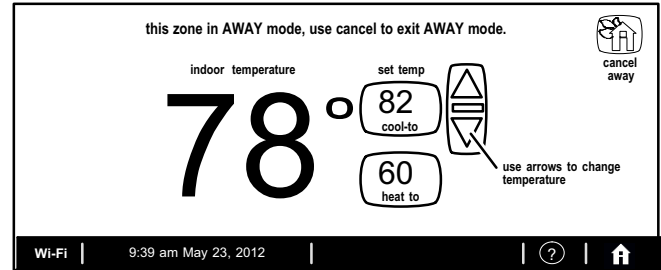


Figure 32. Adjusting Temperature or Canceling Away Mode with Program Running (Away Mode)

HOW TO DISABLE ZONING

From the Home screen, select the right arrow to proceed to the **FEATURES** screen. Select **zone settings** and then select **zoning is ON**. This will toggle zoning to OFF. Once disabled, zoning information disappears from the status bar along the bottom of the home screen. When zoning has been disabled, the master thermostat controls the entire system in single comfort mode.


NOTE - When Zoning is disabled, the in-zone thermostats are also disabled; however, each of the zone thermostats continues to display the current temperature for that zone. The iComfort® logo is also displayed to indicate that zoning is off.

Setting Humidity Controls


NOTICE

Humidifier and dehumidifier controls must be set up by the installer or these controls will not be visible. If your system has one or both of these features and the controls are not visible, contact your Lennox dealer for proper setup.

If the controls have been set up, they will appear and will be ON.

Heating Mode: When an XP25 heat pump is installed, the **heating mode** option is displayed. To adjust heating mode settings, touch the  button to go to the FEATURES screen; then touch the **system settings** button. Touch the heating mode icon to toggle between **NORMAL** and **COMFORT**. Default is **NORMAL**.

- **Normal** — Standard system operation
- **Comfort** — The system adjusts compressor operation to increase air temperature.

Humidification and Dehumidification Settings: To adjust humidification settings, touch the  button to go to the FEATURES screen; then select the **system settings** button. Some systems may have a humidifier and some may have a dehumidifier. Some systems will have both (as shown in figure 33). You can control either or both from this screen.

Humidification Settings: Touch the humidifier setting button you want to adjust. If it says humidifier is OFF, one touch will change it to ON and bring on the **set-to** button. When you touch the **set-to** button, the arrows appear, allowing you to change the humidity setting to the desired value.

Dehumidification Controls (iComfort® Outdoor Unit): Touch the humidifier setting button you want to adjust. If it says ClimateIQ™ setting DRY (off), one touch will display a selection for DRY, MODERATE and HUMID. Select MODERATE or HUMID to trigger the **set-to** button.

Which one you chose depends on the region of the country you live in. For example:

- if you live in a humid location like Miami, FL select **Humid**
- if you live in a moderate location like Denver, CO select **Moderate**
- if you live in a dry location like Phoenix, AZ select **Dry**.

Touch the **set-to** button to bring up the up/down arrows. Use these arrows to adjust the humidity level to the desired setting.

Three climate settings are available for iComfort® equipment: dry, moderate and humid.

- **Dry** - The system supplies higher indoor airflow at all compressor capacities. This will increase efficiency by operating at a higher sensible-to-total ratio.
- **Moderate** - The system controls indoor airflow to ensure balanced efficiency and comfort.
- **Humid** - The system lowers the indoor airflow at all compressor capacities. This setting improves humidity removal by operating at a lower sensible-to total-ratio.

Note: A cooling call has priority over a dehumidification call.

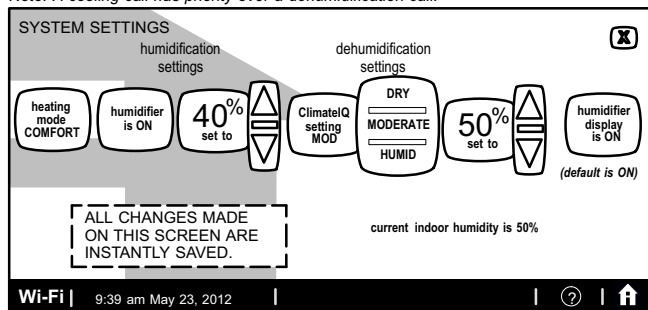


Figure 33. Humidification Settings (iComfort® Outdoor Unit)

Dehumidification Controls (Non-Communicating Outdoor Unit): Touch the humidifier setting button you want to adjust. If it says de-humidifier **OFF**, one touch will display a selection for **OFF**, **MEDIUM** and **HIGH**. Select **MEDIUM** or **HIGH** to bring on the **set-to** button. When you touch the **set-to** button, the arrows appear, allowing you to change to the desired humidity setting.

Three climate settings are available for non-communicating equipment:

- **OFF** - The system supplies higher indoor airflow at all compressor capacities. This will increase efficiency by operating at a higher sensible-to-total ratio.
- **MEDIUM** - The system controls indoor airflow to ensure balanced efficiency and comfort.
- **HIGH** - The system lowers the indoor airflow at all compressor capacities. This setting improves humidity removal by operating at a lower sensible-to total-ratio.

Remember that the humidification controls are only active while the system is in the heating mode. The dehumidification controls are only active while in the cooling mode.

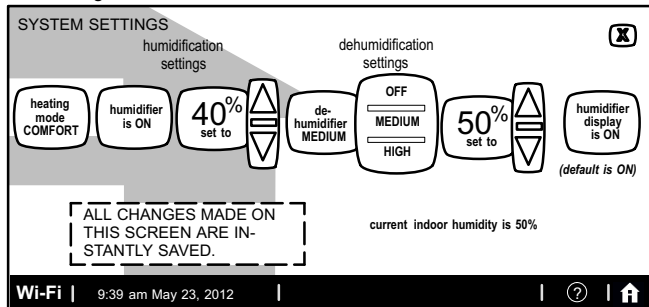


Figure 34. Humidifier Controls (Non-Communicating Outdoor Unit)

Connecting to a Home Wi-Fi Router

Check the router utility program or contact service provider for help. The Wi-Fi thermostat must be close enough to the Wi-Fi router to ensure a good communications signal between the thermostat and the router. (*Hint: use a smart phone with Wi-Fi and Wi-Fi finder application to locate and determine signal strength.*)

NOTE - The thermostat will not be able to reliably connect to the router if the received signal strength indicator (RSSI) shows a larger negative number than -70 i.e. -75, etc.

Secure Connection Recommended! Verify that the router is compatible with and set to operate in either 802.11b, 802.11g or 802.11n wireless network modes. Check router utility program or contact service provider for assistance.

Below are some possible conditions that will cause wireless interference with the thermostat resulting in poor signal reception.

- Portable phones and bases
- Baby monitors
- Wireless speakers
- Bluetooth devices
- Garage door openers
- Neighbors' wireless devices.

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

ENABLING WI-FI

To enable the Wi-Fi feature to communicate with a wireless router

1. Press and release **Wi-Fi** in the lower left corner of the HOME screen

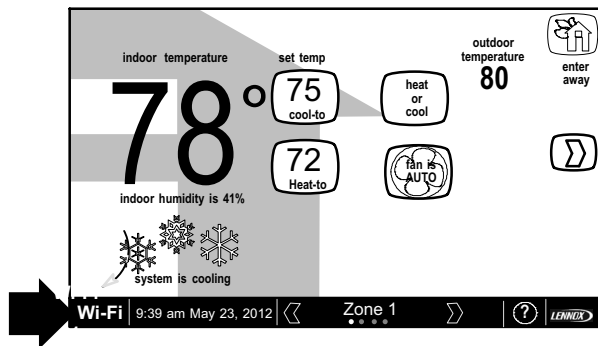


Figure 35. Press Wi-Fi

2. Press the **Wi-Fi disable** button to enable Wi-Fi.

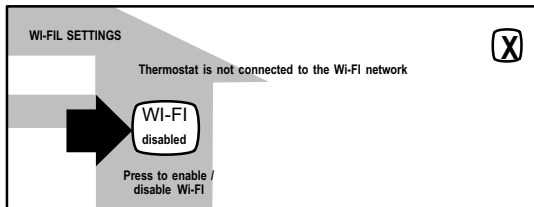


Figure 36. Enable Wi-Fi

3. The *User Agreement* screens will appear next. Press **next** as many times as necessary; then press **accept** after reading the User Agreement.

ESTABLISHING A WI-FI CONNECTIONS

There are two methods to setup your Wi-Fi connection. Select either *NETWORK SETTINGS* or *connection status*.

Method 1 — Network Settings Method

1. Press **NETWORK SETTINGS**; this screen shows a graphical view of buttons representing OPEN and SECURE Wi-Fi networks and a button for adding a network.

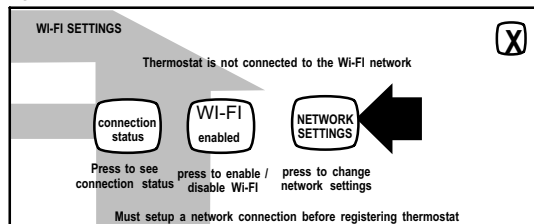


Figure 37. Enable Wi-Fi

- **Open** connection which which requires no password.
 - **Secure** connection which requires Wi-Fi password (security key).
 - **Add a network** is required when Wi-Fi identification (SSID) is being hidden (not broadcasting). You will need to know the Wi-Fi network name (SSID), security encryption type (if enabled), and security password (if security encryption is enabled).
2. When selecting a:
 - **unsecured** connection a screen will appear with two options, **connect** and **router info**. Press **connect** to continue.
 - **secured** connection a screen will appear requesting the Wi-Fi network password (security key). There are two options to select from which are **connect** and **router info**. Using the on-screen keyboard, enter the password (security key) and then press **connect** to continue.

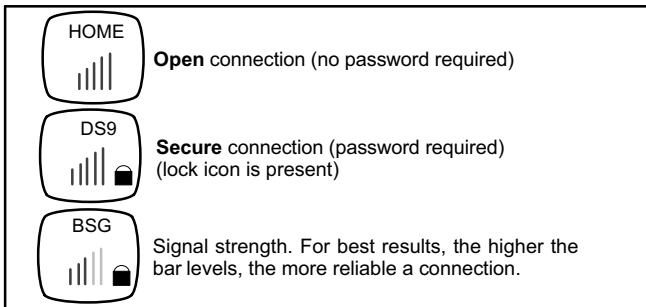


Figure 38. Typical Connection Type and Signal Strength

*NOTE - The **router info** button provides information concerning the home Wi-fi connection (i.e, RSSI, IP address, MAC address and wait state) all of which may be helpful in troubleshooting network connection issues).*

3. If connection is successful the screen will return to the available networks screens. Press **X** to return to the previous screen. If the connection was successful it will be listed connected as exemplated below.

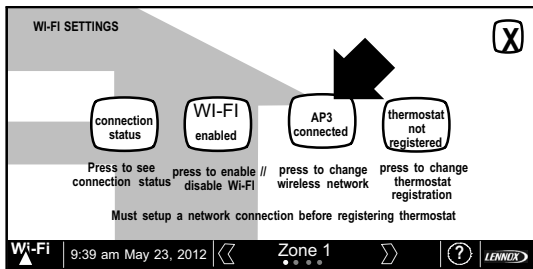


Figure 39. Network Connected

ESTABLISHING A WI-FI CONNECTIONS TO A HIDDEN NETWORK

1. When connecting to a hidden network, press the **add new network** icon to continue.
2. Enter the **network name (SSID)** using the onscreen keyboard and press the **save** button.
3. By default security is set to **none**. To enable the security option, press the **security is none** icon and select the security used for the Wi-Fi network (**WEP, WPA or WPA2**).
4. Press the **connect** icon to continue.
5. Using the on-screen keyboard, enter the password (security key). If the network name or security key combination is incorrect or incorrectly type, and access to the specified network failed, a message will alert you to retry.

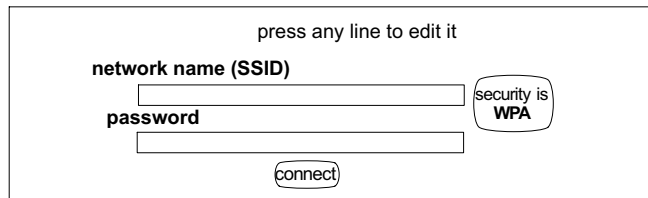
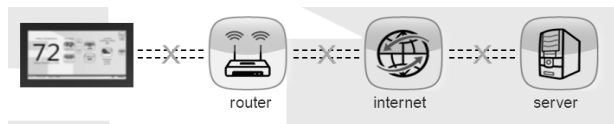


Figure 40. Network Manual Setup (Hidden Network)

6. If connection is successful the screen will return to the available networks screens. The network successfully connected will be listed and shown as connected as exemplated in figure 39.

Method 2 — Connection Status Method

1. Press connection status; this screen shows a graphical view of the current connection status.



- Select the router icon to choose the desired W-Fi network. When selecting a:
 - unsecured** connection a screen will appear with two options, **connect** and **router info**. Press **connect** to continue.
 - secured** connection a screen will appear requesting the Wi-Fi network password (security key). There are two options to select from which are **connect** and **router info**. Using the on-screen keyboard, enter the password (security key) and then press **connect** to continue.
- If connection is successful the screen will return to the available networks screens. Press **AP3** as exemplified in figure 41 to return to the previous screen. If the connection was successful it will be listed connected as exemplified below.

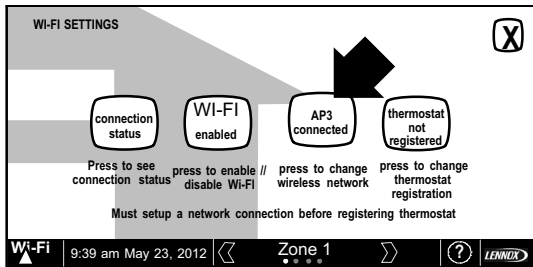
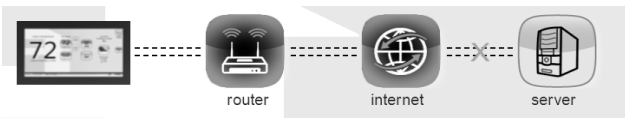


Figure 41. Network Connected

- Select **X** to return to the **WI-FI SETTINGS** screen. Select connection status again to verify that connection to the *router* and *Internet* is active. Both the *router* and *Internet* icons will have green backgrounds if connections are successful.



Troubleshooting Wi-Fi Connection

The following terminology is used in this troubleshooting section:

- Router Signal Strength (RSSI)**. RSSI is an indication of the signal strength of the Wi-Fi router being received by the scanning device (i.e., smart phone). Therefore, the higher the RSSI number (or less negative in some devices), the stronger the signal..
- 802.11b, g and n** are wireless networking specification that extends throughput up to 130mbps using the 2.4 GHz band.
- Internet Protocol Address (IP address)**. This is a numerical label assigned to each device (e.g., computer, printer, thermostat) participating in a computer network that uses the Internet Protocol for communication. An IP address serves two principal functions: host or network interface identification and location addressing.

Electromagnetic Interference Causing Poor Connectivity

Locate both the thermostat and router away from other devices that could possibly interfere with wireless communications. Some examples of other devices that could interfere are:

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

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

Router Signal Strength (RSSI)

The ideal signal strength range for the iComfort Wi-Fi® thermostat is -1 to -69 RSSI. The signal strength can be viewed from the thermostat interface. Use steps 1

- Press **NETWORK SETTINGS**; this screen shows a graphical view of buttons representing Wi-Fi options **OPEN** and **SECURE** wireless networks and a button for adding a network.

2. Select the access point that has already been established and connected too. There are two options to select from which are **connect** and **Router info**. Select **Router info** and verify the RSSI strength. If the signal is anywhere between -1 to -69, then the signal strength is sufficient. If outside this range, then either locate the router closer to the thermostat or add a signal repeater.

Remember that walls, appliances, equipment and other various barriers will reduce signal strength.

Router Signal Strength (RSSI)

The signal strength can be viewed from the thermostat interface. Use the following procedure to discover the Wi-Fi router signal strength at the installation location of the thermostat.

1. Touch **NETWORK SETTINGS** to display your Wi-Fi connection.

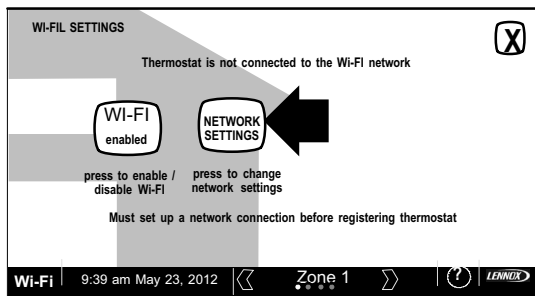


Figure 42. Network Settings

2. Select an access point that has already been established and connected. There are two options to select from: **connect** and **Router info**. Select **Router info** and verify the RSSI strength. If the signal is between -1 and -69, then the signal strength is sufficient. If the signal strength is outside of this range, install the router closer to the thermostat or add a repeater.

Rebooting the Thermostat to Establish Connection to the Server

If, after successfully connecting the thermostat to your wireless router, the following message appears on the screen:

Connection to server has not been established or it has been lost. Please wait until the connection is established,

wait five minutes. Perform the following procedure, if the server connection is still not established.

1. From the home screen, touch the **Lennox** logo (bottom right-hand corner of screen) and **hold** for 5 seconds.
2. A message screen stating *qualified Lennox equipment installers only* warning screen appears (figure 43).

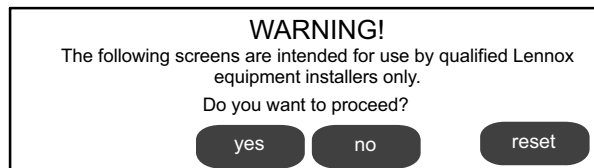


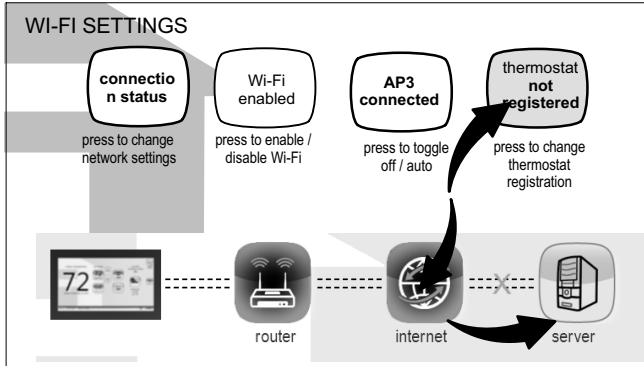
Figure 43. Qualified Lennox Equipment Installer Warning

3. Touch the **reset** button. The thermostat will reboot itself. The screen will go blank for two or three seconds. Then, the home screen will appear.
4. From the Home screen, touch and release **Wi-Fi** in the lower left corner of the HOME screen.
5. If the message **Connection to server has not been established or it has been lost**, it may take 10 to 15 more seconds to make connection to server. If **connection is established** continue to the next section. If connection fails, then contact Lennox Customer Care Department at 1-800-9-LENNOX (1-800-953-6669) for further assistance.

Registering the Thermostat

REGISTRATION FOR ONLINE ACCESS

1. From the WI-FI SETTINGS screen, press either the **thermostat not registered** icon or the **connection status** icon and select the **server** icon.



2. Enter homeowner email address and press the register button.

Register with iComfort Wi-Fi thermostat to enable remote access and online weather information

enter your email

System Desc

3. A pop-up screen will appear asking if the email address below is correct? Verify the email address is correct and press **yes**.

4. Another pop-up screen will appear notifying the user to check their email.

An email has been sent to
xxxxxxxxxx@lennoxind.com
with instructions on how to register your thermostat. If you haven't received the email, please check your spam folder and make sure that your email address is correct.

*NOTE - If the email address originally entered is incorrect, return to the **thermostat registered** screen and reenter the correct information and press register.*

5. After the server sends the email with the network link, registration and account creation must be completed from the homeowners personal computer.

NOTE - Time from pushing the registration button on the thermostat and receiving the consumer portal register link from your email on your computer is normally from 5 to 15 minutes depending on Internet speed and traffic.

NOTE - Registration cannot be completed from any mobile device.

6. After registration has been completed, press the connection status icon to verify the connection was successful. If the connection is successful the server icon background will be green.



7. After successful connection to the server is completed, the *firmware update* button will appear. The default setting is set to auto. If any firmware updates are available they will immediately start downloading and update the thermostat. The thermostat will reboot itself after the update is completed. Updates are done in the background and will not impair normal thermostat operations.

This auto update feature can be disabled by pressing the firmware update button to toggle to OFF however this is not recommended.

NOTE - Firmware updates will not affect installer or user thermostat settings. Both will be retained after the update.

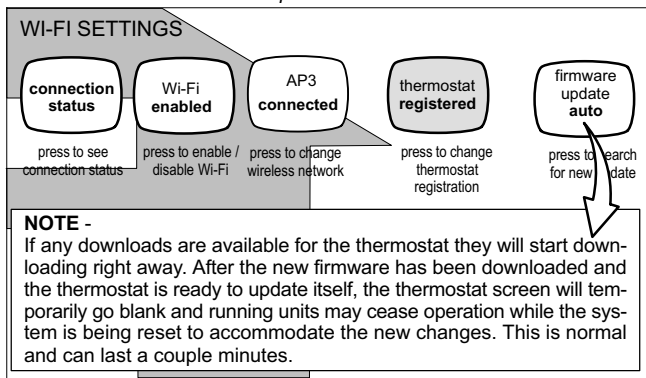


Figure 44. Registration for Online Access

Personal Computer Welcome Page; Interactive Demo; Online iComfort® information; Using Gelaskins

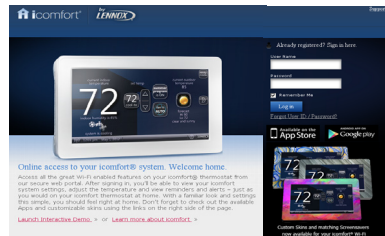


Figure 45. PC Welcome Screen

Access all the great Wi-Fi enabled features on your icomfort® thermostat from our secure web portal. After signing in, you'll be able to view your icomfort system settings, adjust the temperature and view reminders and alerts – just as you would on your icomfort thermostat at home. With a familiar look and settings this simple, you should feel right at home. Don't forget to check out the available Apps and customizable skins using the links on the right side of the page. From the welcome page, you may also click on links to launch an interactive demo or learn more about icomfort.

HOW DO I TURN ON SKINS ON THE ICOMFORT WI-FI THERMOSTAT?

From the thermostat **Home** screen, press **Ⓜ** then **display setting** then **screen saver** buttons. From the pop-up menu, select **skins**. The skin picture will appear after 30 seconds of inactivity.

HOW DO I UPLOAD A SKIN?

Skins should be ordered from website listed below:

[http:// www.gelaskins.com/lennoxicomfort](http://www.gelaskins.com/lennoxicomfort)

After ordering the skin, Gelaskins will email the image file (.jpg) to the homeowner. This "jpg" has been altered to display correctly on the icomfort Wi-Fi Thermostat. Images can be uploaded to the icomfort Wi-Fi thermostat from the consumer portal site (www.myicomfort.com) under the tab "skins".