

THIS MANUAL MUST BE LEFT WITH THE HOMEOWNER FOR FUTURE REFERENCE

## HOMEOWNER'S MANUAL

## icomfort Wi-Fi™ Thermostat

**Touch Screen Programmable Communicating Thermostat** 

CONTROLS 506921-01 09/12 Supersedes 05/12



### 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 keep your home comfortable while at home, and it allows you to adjust your home's comfort settings from wherever you have access to the internet!

Help screens are just a touch away; this manual will get you started experiencing a whole new world of home comfort.





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# WARNING

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

# NOTICE

Use this thermostat only as described in this manual.

## icomfort Wi-Fi™ Thermostat

The communicating icomfort Wi-Fi™ thermostat is an electronic 7-day programmable touch screen thermostat with color display. It also offers enhanced capabilities which include humidification measurement and control, dew point adjustment control, dehumidification measurement and control, Humiditrol<sup>®</sup> Enhanced Dehumidification Accessory (EDA) capability, 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 wireless Wi-Fi access point. After online registration is completed, weather information is automatically sent to the thermostat, and you will have full access to the thermostat from anywhere using a remote internet connection via computer, smartphone, or iPad.

The thermostat stores system parameters in nonvolatile memory (retains data when electrical power fails or is turned off), and includes on-board help screens

Indoor Air Quality accessories are supported with time-based notification of consumables including media filters, UVC bulbs, humidifier pads, and Pure-Air™ catalyst service / replacement.

### Thermostat Lock-out

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



Partially-locked, any user can adjust the temperature up or down to set a "hold" for a selectable time.

Fully-locked, no one can make any changes to the thermostat's settings. To unlock, press and hold the "lock" icon for 5-6 seconds.

To lock the thermostat, access "Screen lockout" through the dashboard's "display settings" described on Page 7.

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## Start up

In event of power failure—If a power failure occurs, when the power comes back on, the thermostat will reboot and when complete, the HOME screen will return.

## What the Home screen tells you...

After the thermostat and the system has been fully connected and powered on, the icomfort Wi-Fi™ thermostat's Home screen is displayed. Figure 1 shows a display and describes what the thermostat is telling you.

Note that set to **heat or cool** communicates that the system is operating in <u>manual</u> mode; if it were in <u>program</u> mode, the heat or cool button would read **summer program is on** (or other named program).

#### Other information...

Until and unless the indoor temperature is at or between the two settings (70 to 75 degrees in this example), the system should run until it does measure within that temperature range.

"Wi-Fi" in the bottom lift corner is the "button" to access the Wi-Fi settings screen. Wi-Fi with a △ beneath it indicates a prior connection to the server has been lost. If a connection had been lost, then re-established, the triangle goes away.

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

# What you can do from the Home screen...

Typically, what every homeowner wants from an air conditioning system is to be able to control that system using a convenient device to adjust heating, cooling, and the level of humidity in the home.

From this screen you may:

- adjust temperature settings
- access menus to change the program mode
- change how the fan operates
- access the "dashboard" (fig. 3) by pressing ①
- access and view active service alerts by pressing the \undersigned icon
- access help screen by pressing the "?" icon.

Adjusting the temperature and changing the system mode of operation is described fully beginning on Page 14.

Adjusting the humidity, even if no physical humidifier or dehumidifier is present, may also be available, provided the installer has implemented the feature during setup.

See Page 16 for details on humidity control.

fan is set

to AUTO

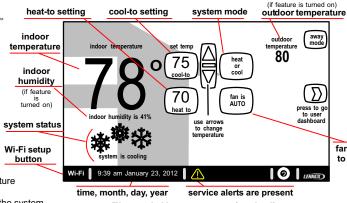


Figure 1. Home screen (typical)

user setting	dashboard button	Default	page	tools	variables		
Fan Setting		auto	Page 6	menu	auto, on, circulate		
Humidifier	system settings	OFF		toggle	OFF, ON		
Indoor Humidity Display	- system settings				OFF, ON		
Dehumidifier					OFF, ON		
Time and Date		_	Page 7	time/date	(Time/date elements screen)		
Daylight Saving Time	clock settings	Enabled		toggle	Enabled, Disabled		
Clock Format		12H			12 Hour, 24 Hour		
Background Theme		cobalt			cobalt, cotton, carbon		
Temperature Display Scale		(F)		toggle	(F) Fahrenheit, (C) Celsius		
Power Save		ON			ON, OFF		
Screen Lock-out	dia alama a della ara	Unlocked	D 7		Unlocked, Partially Locked, Fully Locked		
Language Displayed	display settings	English	Page 7	menu	English, French, Spanish		
Outdoor Temp Display		OFF		toggle	OFF, ON		
Backlight Intensity		100%	1	arrows	20 to 100% (in 20% increments)		
Clean Screen		_		(view	(30 sec. timer deactivates touch screen to clean screen; use damp cloth to clean)		
Weather	weather	_	Page 8 only)		(shows 5-day weather forecast if connected to internet via Wi-Fi)		
Setup a program	edit program	save energy	See details Page 8		_		
View alerts	alerts	_	See details Page 9		_		
Filter 1 Timer							
Filter 2 Timer							
Humidifier Pad Timer		Disabled	0 1-4-:	l- D 44	Disabled O Mantha O Mantha 40 Mantha O4 Mantha Occident Torre		
UV Bulb Timer	reminders	Disabled	See detai	ls Page 11	Disabled, 3 Months, 6 Months, 12 Months, 24 Months, Custom Time		
Maintenance Timer	7						
PureAir™ Timer	7						
Dealer Name							
Dealer Address		(these may					
Dealer Phone	1	show install-	See details Page 13		(keyboard)		
Dealer Email	service information	er input data					
Dealer Website	1	but owner			, , , , , ,		
Dealer Number	1	may change)					
System Desc	1						

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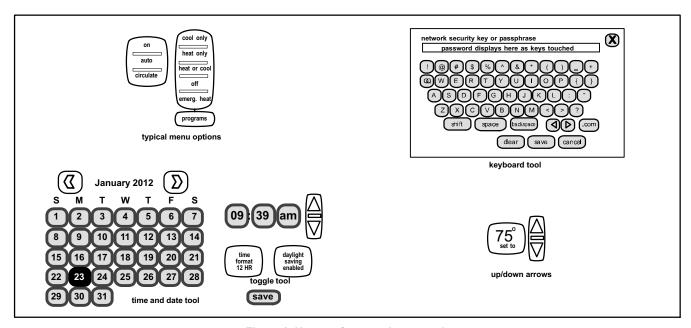


Figure 2. User preference change tools

## User Dashboard and Help (?) Screens

From the Home screen, press the ① button to go to the dashboard. The dashboard (figure 3) allows you to set the system to operate the way you want it to operate. From the dashboard, you can access system settings, clock settings, and display settings, weather, edit programs, alerts, reminders, service and help (?).

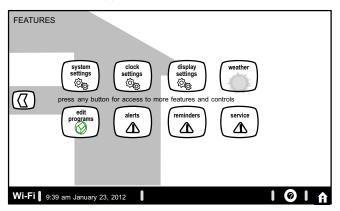


Figure 3. User dashboard - indoor settings

## System settings

<u>Press button:</u> system settings. Figure 4 "A" shows the screen with its defaults. Figure 4 "B" shows how the devices can be configured.

<u>Press button:</u> set to AUTO. (button may read: set to ON or set to CIRCUL...). Select from pop-up menu: on, auto, or circulate.

<u>Press buttons:</u> humidifier, humidity display, or dehumidifier to turn each on. The resulting display shows the default values of humidifier and dehumidifier; 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 dashboard or the Home icon of for the Home screen

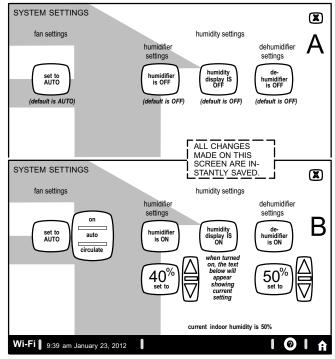


Figure 4. System Settings

## **Clock settings**

Press clock settings (see figure 3). Figure 5 shows the Set current time and date screen. Use the horizontal arrows to scroll to month and year; then touch a day of month to select it. Touch time format and daylight saving to toggle these options. Use the up/down arrows to change time. Touch am/pm to select morning or afternoon (am/pm does not appear if 24HR format is selected).

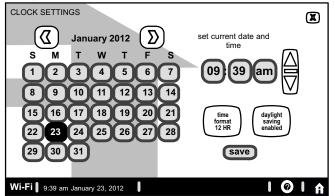


Figure 5. Set current time and date

## **Display settings**

Press **display settings** (see figure 3). Figure 6 "A" shows the *Display settings* screen and defaults.

<u>Press buttons:</u> **Temp scale** (°F/°C), **power save** (ON/OFF) and **outdoor temp display** (ON/OFF) to toggle these options.

<u>Press buttons:</u> Background theme, language and screen lockout; press to select options from pop up menus (figure 6 "B").

<u>Press button:</u> backlight intensity; use up/down arrows to change the intensity of backlighting in 20% increments.

Use the **press to CLEAN SCREEN** button to give yourself a 30 second timer to clean off the screen (use a damp cloth to clean).

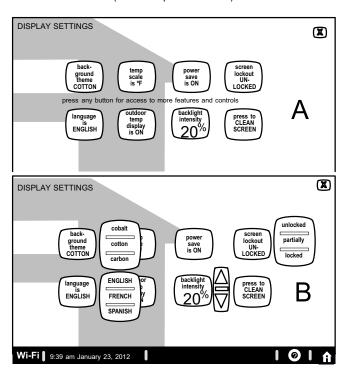


Figure 6. Display settings

#### Weather

<u>Press button:</u> weather (see fig. 3). Figure 7 shows a typical 5-day forecast screen. Use "X" button to return to the previous screen.

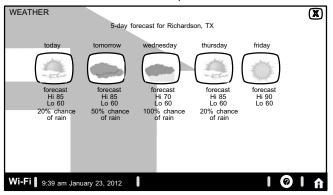


Figure 7. Typical weather screen

## Edit program

<u>Press button:</u> **edit program** (see fig. 3). Figure 8 "A" shows edit program screen. Figure 8 "B" shows pop up menus that appear when the selections are touched and it illustrates changes made to the program.

Edit the "season programs" to your preference. (Save energy uses high-efficiency EnergyStar settings to promote energy conservation).

**select programs** - select a preset program; or press and hold any button for the keyboard and change button names to user preference.

select days - week/weekend, individual days, all 7 days.

time - up/down arrows to change time in 15 minute increments.

**cool-** & **heat-to** - up/down arrows to change temperature in 1º increments. **fan mode** - on, auto, circulate.

Figure 8 "B" also shows that the evening time has been disabled; this is done by pressing 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. Press "X" button after changing; a pop-up prompts with **back**, **discard** and **save** options. Select **save** to save and return to the dashboard.

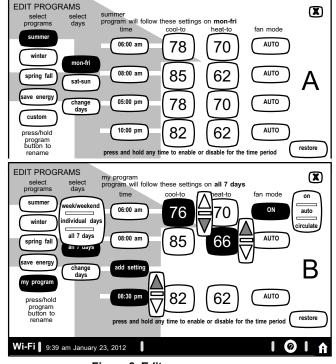


Figure 8. Edit program screen

#### Alerts

Figure 10 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 return to the previous screen.

A *red alert* (red icon) identifies a problem that could prevent the system from working properly or not working at all, and if allowed to run, could cause damage to the system. You MUST call for service immediately.

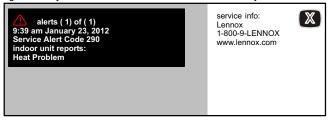


Figure 9. Typical red alert

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 and remind later, see reminders on Page 11.

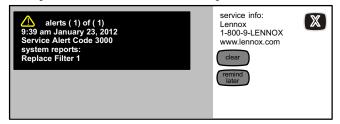


Figure 10. Typical service alert

## Access alerts through the dashboard

Press the Home screen alert icon (△) or the **alerts** button on the dashboard (see figure 3). Any alerts will appear similar to those shown in figure 11. 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.

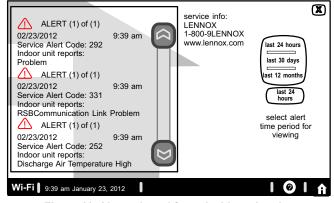


Figure 11. Alerts viewed from dashboard option

Navigate to different screens (see figure 12). You can clear alerts and set new reminders after routine service. You may also set a "**remind later**" to be reminded at a more convenient time for doing the service. If a red alert (red (1) is present, contact the party identified under **service info.** 

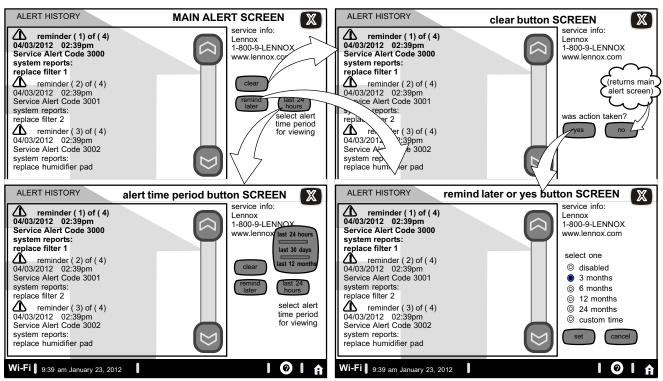


Figure 12. Alerts

#### Service Alert Codes

Number	Value	Number	Value	Number	Value	Number	Value	Number	Value
3000	Filter 1	3002	Humidifier Pad	3004	Maintenance	4000	User WiFi 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 services, such as replacing filters. Access the reminders from the dashboard 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 to perform the routine service again.

Use custom to pop-up the time/date screen (figure 14) to set an exact date and time for a reminder to appear. Use the arrows to select a month; then select a day of the month. Press save when finished.

REMINDERS



**July 2012** PureAir Maintenance 18 save

Figure 13. Set new alert date

Figure 14. Setting custom time

set custom date for

Service reminders can be cleared or date-changed through the service alert's clear and remind later buttons on the right side of the screen.

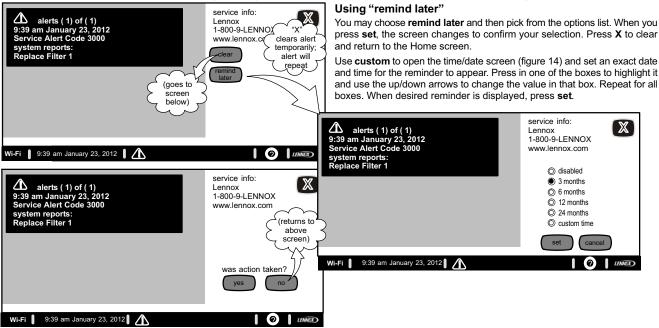


Figure 15. Viewing, clearing, and changing reminder time

#### Service Information

Service information is normally filled in by the installer at time of initial installation. However, you can change this information, when and if needed. Touch any line of text to produce a keyboard and then enter any new information. Touch the **save** button when finished entering information.

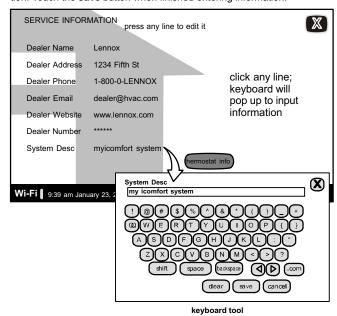


Figure 16. Service Information

## HELP (?)

When you touch the help icon (?) the screen changes to show an array of (?)'s located at "active" points on the screen. When you touch a (?) a popup describes what you can do by pressing the active button(s) nearest it. Figure 17 shows an example of the screen and a popup.

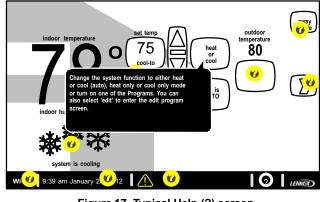


Figure 17. Typical Help (?) screen

## Adjust temperature and change programs

Adjust temperature when programming is OFF—When the programming is OFF, the mode button (shown in figure 18, labeled heat or cool) indicates a manual state (no mention of "program"). In this mode, change temperature by pressing a set temp button, which produces an up or down arrow, then use the arrows until the "cool to" (or "heat to") number is at the desired temperature.

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

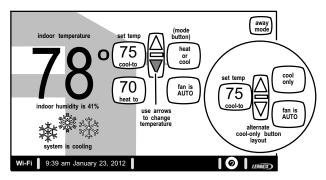


Figure 18. Adjusting temperature with NO program running

**Away Mode (Vacation)**—The **away mode** button on the home screen sets the system for manual operation and allows you to set the thermostat for energy saving while you are gone for an extended period of time. In this mode, the system will only come on if indoor temperature falls below a set degree (62 default for heating) or if indoor temperature rises above a set degree (85 default for cooling). You may adjust those settings as desired.

**Turn Programming ON**—If the programming is OFF, turn it on by pressing the mode button (shown in figure 19, labeled **heat or cool**). The manual settings menu includes an option to access programs. Select **programs**. The program settings menu takes the place of the manual settings menu. (Either menu will time out and disappear if you don't make a selection within a few seconds). Select an option (e.g. **spring/fall**), The menu disappears and the mode button will display the selected program (e.g. **spring...program is ON**).

**Turn Programming OFF**—If the programming is ON, turn it off by pressing the mode button (e.g. **spring...program is ON**). The program settings menu includes an option for manual. Select **manual**. The menu changes to the manual settings. Select one (e.g. **heat only**), The menus disappear and mode button will display the selected manual option (e.g. **heat only**).

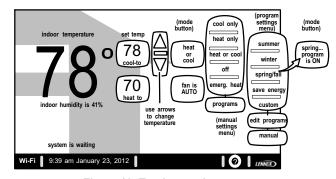


Figure 19. Turning on the program

## Adjust temperature when program is ON—Program HOLD

When the program is ON, the mode button (shown in figure 20, labeled spring...program is ON) indicates which program is running. In this mode, change temperature by pressing a set temp button, which produces an up or down arrow, then use the arrows until the "cool to" (or "heat to") number is at the desired temperature (see A in figure 20).

While changing the setting, the **other options** menu appears (see **B** in figure 20), giving a list of options you can choose.

You may select one of the hour buttons (1, 2, 8, or 24) if desired. If you select **custom**, a time/date appears and you have the option of setting the hold for any length of time (see **C** in figure 20).

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 back to the program.

Note that if you do not choose one of the "other options", the default setting will be that the program is held until the next period.

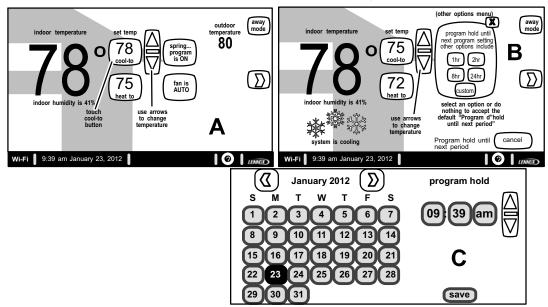


Figure 20. Adjusting temperature with program running

## Setting humidity controls

## NOTICE

Humidifier and dehumidifier controls must be setup 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 setup, they will appear and will be ON.

To adjust humidity controls (either to humidify or dehumidify), click the Dutton to go to the dashboard controls; then **select system** settings button. Some systems may have a humidifier and some may have a dehumidifier, while still other systems may have both (as shown in figure 21). You can control either or both from this screen.

Both controls work identically. Touch the button of the humidity control you want to address; if it says (de)humidifier is OFF, one touch will change it to (de)humidifier is ON and bring on the RH setting button below that button. When you touch the **set-to** button, the arrows appear, allowing you to change to the desired humidity setting.

Remember that the "humidify" control only operates while in the heating mode and "dehumidify" only operates while in the cooling mode.

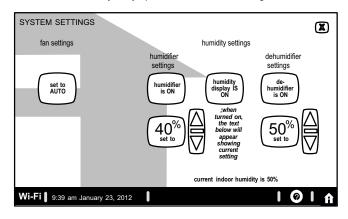


Figure 21. Humidifier controls

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#### Enabling the thermostat's Wi-Fi feature from the Home screen Secure Connection Recommended! network security key or passphrase $\mathbb{X}$ press any line to edit it Make sure the router is capable of, and set to operate none displays information here as keys pressed network name (SSID) in wireless network "b" mode. Check router utility security press here to enter network name WEP program or contact service provider for help. A seis WPA2 cure wireless network is recommended over an open WPA (unsecured) network. You will need the homeowner's password approval and router password to enable Wi-Fi in a se-WPA2 press here to enter Wi-Fi AP (router) password cured connection 7 END Enable Wi-Fi—To enable the Wi-Fi feature to communicate with a wireless router. soace 1. Press and release "Wi-Fi" in the lower left corner of the type the network security key or passphrase for (locked Wi-Fi Access Point [API) dear cancel HOME screen (see START HERE). The screen save changes from the Home Screen to the WI-FI SETpress here to enter Wi-Fi AP (router) password TINGS screen. WI-FL SETTINGS (3) 7 END connect Press the Wi-Fi enable button. Thermostat is not connected to a Wi-Fi network 3. Press next as necessary; then press accept after NETWORK SETTINGS reading the User Agreement. 5.1 4. Press NETWORK SETTINGS; this screen shows a NETWORK Wi-Fi SETTINGS disable etara lable graphical view of buttons representing Wi-Fi options 7 END OPEN and SECURE wireless networks and a button 5.0 UNSECUfor creating a new access point (AP). RED ACCESS 5.1 SECURE 5. Decide which of these buttons you need to select: POINT must setup a network connection before registering thermostal Access Points 5.0—OPEN Wi-Fi Port (no password required). 5? 5.1—SECURE Ports (requires router password). 5.2 CREATE NEW AP 5.2—Create new AP (Access Point). **5.2a**—When creating a new AP, you have the option 75 of selecting a security level (default is none; choose **User Agreement** from WEP, WPA, WPA2, depending on the security defined in the homeowner's router); the password field 75 WI-FI SETTII GS **START** next... appears. **HERE** 6. When you touch in one of the input fields (press here next... to enter...), the keyboard tool appears. Enter password (if simply logging into an existing network) or enter the Wi-Fi NETWORK accep decline network name if creating a new AP. If you mistype the enable SETTINGS 9:39 am January 23, 2012 password or if you cannot access the selected network, a message will alert you to retry. Press connect to complete the connection. Note that "Wi-Fi enable" button on the Wi-Fi SETTINGS screen must setup a network connection before registering thermostat changes to "Wi-Fi disable".

Figure 22. Wi-Fi setup

## Register the icomfort Wi-Fi™thermostat

From NETWORK SETTINGS screen, you can change to the desired network as shown in figure 23. Enter security key or passphrase. "X" back to the WI-FI SETTINGS screen.

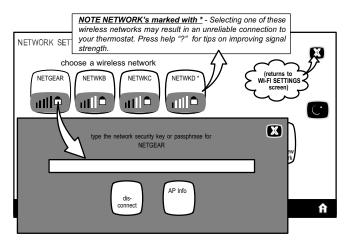


Figure 23. Change Networks

## Registration for online access

From the WI-FI SETTINGS screen, press the "thermostat not registered" button (see figure 24).

Enter homeowner email address twice and press the **register** button.

A pop up screen then appears to notify the user to check their home computer for instructions to complete the registration. After the server sends the email with the network link, registration and account creation must be completed on the homeowner's personal computer (see Page 19).

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

After registration has been completed, any available firmware downloads will immediately start downloading to the thermostat.

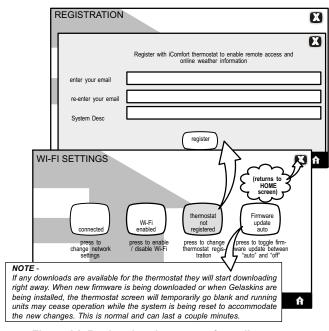


Figure 24. Registering the system for online access

For any issues with Wi-Fi connections, refer to Wi-Fi Troubleshooting Checklist 507037-01.

### Computer Login to the icomfort W-Fi™ server

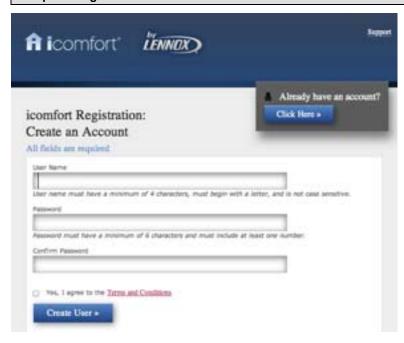


Figure 25. Computer login for online access

NOTE - This following information is customer setup instructions and is shown here to allow the installer to help walk the customer through the setup process.

After registering through your icomfort Wi-Fi™ thermostat interface, go to the homeowner's computer and locate the email sent from the server:

#### Dear Customer,

Congratulations on your purchase of a Lennox icomfort thermostat! You are only a few steps away from total control of your Lennox icomfort system. Registering your thermostat will allow you to remotely access it from anywhere in the world on any device with an internet connection. Please complete your Lennox icomfort registration by clicking the link below:

## Register

NOTE - if the customer has already setup an account, click the "Click Here" button to access that account.

Click on the Register link; the screen (to the left) will appear. Fill in the User Name and Password fields and check the agree to terms and conditions box. Click **Create User** button.

A series of pages and prompts follows to provide guidance through profile setup and user preference definitions.

## Personal Computer Welcome page; Interactive Demo; Online icomfort information; Using Gelaskins



Figure 26. PC Welcome Screen

#### Welcome home.

Access all the great Wi-Fi enabled features on your icomfort<sup>®</sup> 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 **m** then **display setting** then **power save** buttons. From the popup menu, select **skins**. The skin picture will appear after 30 seconds of inactivity.

### How Do I Upload a Skin?

Skins should be ordered from 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".

## For quick reference, locate this card in the thermostat package.

Follow these simple steps to connect the icomfort Wi-Fi<sup>™</sup> and enable remote features.



#### SIMPLE INSTRUCTIONS:

- Touch the wireless icon at the bottom left of the home screen
- 2. Begin the registration process by touching "Wi-Fi enable"
- Press the network settings button to select your home wireless network
  - Select your network from the list of available networks or enter it manually
  - b. Enter your wi-fi password
- 4. Touch "Register", then enter your email address (twice)
- An email will be sent to the email address you provided; open the email and click the link to confirm your registration
- 6. Setup your icomfort Wi-Fi account
- Access your icomfort Dashboard or log on directly at www.myicomfort.com for account access, alerts and reminders, plus remote monitoring and control



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comfort.

YOUR CUSTOMERS CAN DRESS UP THE POWERFUL FEATURES OF ICOMFORT WI-FI™ ANY WAY THEY WANT.



For another way to monitor and adjust your home temperature from anywhere at a glance, install the icomfort Wi-Fr app on your smartphone or tablet. Download it free!

#### CUSTOMIZABLE SKINS:

Customizable skin option allows your customers to cover and protect their thermostat with a removable decal that coordinates with their décor. Skins are available in any color, pattern or design, and your customers can use their own family ophotos or artwork.



To get started, go to www.gelaskins.com/Lennoxicomfort.

Date	Revision description	Date	Revision description
04-2012	Preliminary release	09-2012	Screen changes; added gelaskins
05-2012	Pilot release; add note to page 1; change registration screen		