LENNOX

icomfort.

So simple. So smart. So comfortable.

indoor conditions

current temp

7070 heat to

humidity is 45% (OK)

program is **OFF**

press for more

LENNOX

September 28, 2009 7:51 AM

HOMEOWNER'S MANUAL

icomfort Touch® Thermostat

Touch Screen Programmable Communicating Thermostat

CONTROLS
506053-01
12/10
Supersedes 10/10

General

The icomfort Touch® thermostat is shipped complete with mounting hardware, installation and setup instructions, warranty information, and a Homeowner's Manual.

Most operational information is contained in the thermostat's HELP screens, however this Homeowner's Manual provides general information and tips on how to access the HELP screens.

Table of Contents

⚠ 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 Touch® Thermostat

The communicating icomfort Touch® thermostat is an electronic 7-day universal multi-stage 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® 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 thermostat stores system parameters in nonvolatile memory (retains data when electrical power fails or is turned off), and includes onboard help screens. The thermostat supports heat pumps or non-heat pump units, with up to 4 stage heat / 2 stage compressor operation. (2 stages of heat pump heating and 2 stages of auxiliary backup heat are provided. Also, 2 stages of emergency heat are provided).

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

Thermostat Lock-out

A "lock" icon at the bottom center screen (shown in the picture), indicates the thermostat is either partially- 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 seconds.

To lock the thermostat, access "Screen lock-out" through the User Preferences described on Page 6.

Start up

In event of power failure—If a power failure is experienced, when the power comes back on, the screen will show a DISCOVERY BAR (shown below) while the thermostat reboots. When the reboot is complete, the HOME screen will return.

SYSTEM DISCOVERY IN PROGRESS

01.60.00.9999
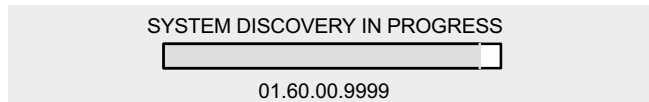
After the thermostat and your system are fully connected and powered on, the icomfort Touch™ Home screen is displayed. Figure 1 shows one of the more basic displays. Note that it's program is OFF, that the current and "heat to" temperatures are the same (system is not running) and there are no alerts.

From this screen you may manually adjust the temperature setting using the up/down arrows, or access the "User dashboard" screen (figure 3) by pressing the home screen in the **press for more** area.
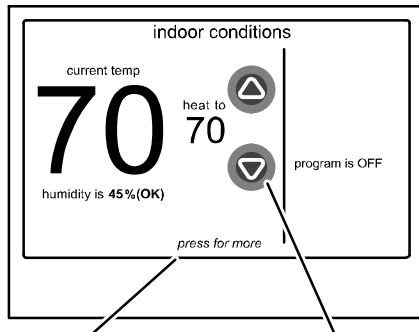
press to go to user dashboard   use arrows to change temperature

Figure 1. Home screen - not programmed, not running

The Home screen shown in figure 2 reflects a more complex display. Note that it's program is ON, that it is set to either heat or cool as necessary, and that the "current" and "set " temperatures are different (therefore, the system is running). In the example, notice also that there are service alerts present.
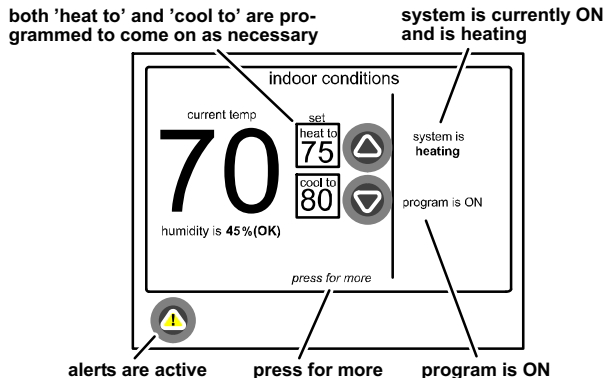
both 'heat to' and 'cool to' are programmed to come on as necessary   **system is currently ON and is heating**

alerts are active   press for more   program is ON

Figure 2. Home screen - programmed, running - active alerts

From this screen you may still adjust temperature settings, but when you do so, you will be prompted to set a specific time to allow the change to remain in effect. The user may also access the "dashboard" by pressing the screen in the **press for more** area, and view active service alerts by pressing the screen on the ⚠ icon.

User Dashboard and HELP Screens

The user dashboard allows you to set the system to operate the way you want it to operate. From the dashboard, you can access indoor settings (shown in figure 3), programs, indoor humidity, alerts and HELP.
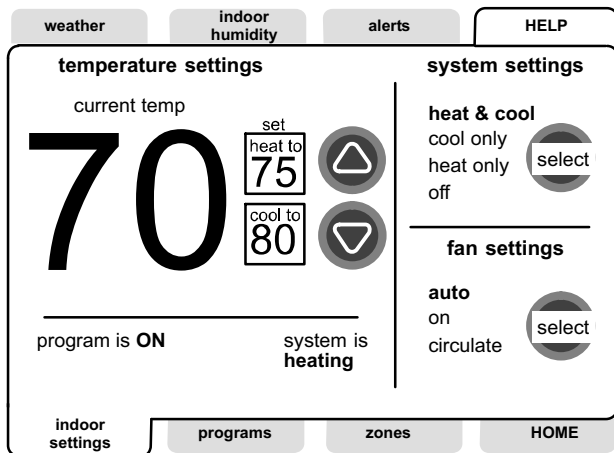

Figure 3. User dashboard - indoor settings

HELP screens guide you through all your setup procedures. This manual does not detail all the HELP available. Use the on-board HELP to get answers to all your setup questions.

Press **HELP** tab in the top right corner; the "User help access" screen (figure 4) appears. From this screen, you can access help related to the previously displayed screen, you can deactivate the pressscreen temporarily for cleaning the screen, and you can access the user settings option to make adjustments such as Fahrenheit/Celsius, 12Hr/24Hr display, etc. (see Page 6).
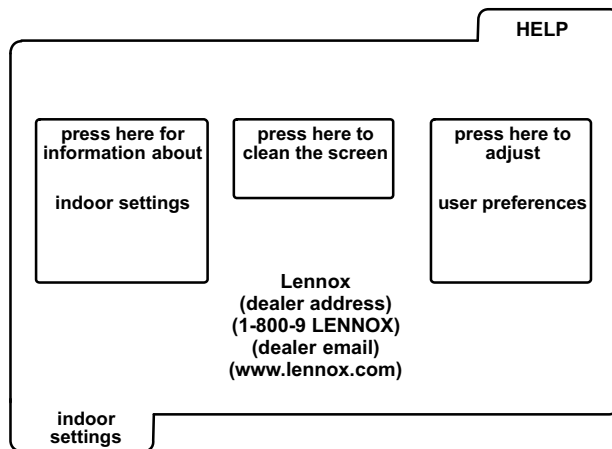

Figure 4. User help access

User Dashboard and HELP Screens (continued)

Clean screen

Press the '**press here to clean the screen**' box. A 30-second timer appears and the screen is not sensitive to touch during the countdown. Clean the screen using a mild lens cleaning solution and soft cloth.
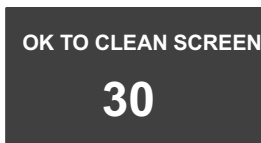
OK TO CLEAN SCREEN

30

Figure 5. Clean screen

HELP screens

For this example, the indoor settings page is open. Press the "**press here for information about indoor settings**" box (as shown in figure 4) to access HELP.

If multiple "pages" of help are available, the first page of help will appear (as shown in figure 6). Multiple presses will scroll through the available pages of help. (The example shows only two of the available pages.)

User preferences

The third box in the user help access screen (figure 4) is "**press here to adjust user preferences**". This allows the user to change many settings in the thermostat. Details are provided in the follow pages (see Page 6).

Desired heat and cool settings

"up/down" arrows allow you to change the selected (heat or cool) desired setting

Shows the current temperature in the room

Prese inside the framed area to select the heat or cool settings

(HELP 1 of 7) press anywhere on the screen for the next help item; NOTE - not all HELP pages are shown in this example.

page 1

System settings indicate how the temperature is controlled in your home

"select" allows you to toggle between options
- heat & cool - system switches between heating and cooling automatically based upon indoor temperature
- heat only - system provides heating only
- cool only - system provides cooling only
- off - system is off

system settings
heat & cool
cool only
✔ heat only
off
(select)

page 6

Figure 6. Typical HELP screens (indoor settings shown)

icomfort Touch™ 7-Day Programmable Communicating Thermostat

User Preferences

Press inside the "**press here to adjust user preferences**" box to access the User Settings screen. A complete list is available on Page 6.
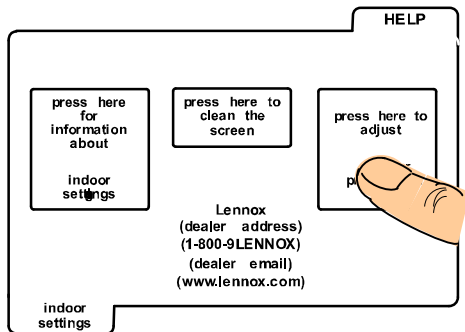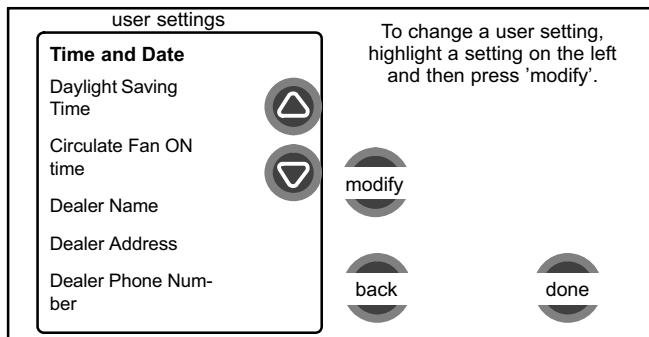

Figure 7. Setting user preferences

Figure 8. User settings

setting	default	variables
Time and Date	—	(Time/date elements screen)
Daylight Saving Time	Enabled	Enabled, Disabled
Circulate Fan ON Time	35%	15 to 45% (in 1% increments)
Dealer Name	(these may show installer input data but owner may change)	(Typewriter input screen)
Dealer Address		(Typewriter input screen)
Dealer Phone		(Typewriter input screen)
Dealer Email		(Typewriter input screen)
Dealer Website		(Typewriter input screen)
Language Displayed	English	English
Temperature Display Scale	(F)	(F) Fahrenheit, (C) Celsius
Clock Format	12H	12 Hour, 24 Hour
Screen Lock-out	Unlocked	Unlocked, Partially Locked, Fully Locked
Backlight Setting	Always On	Power Save, Always On
Backlight Intensity	100%	20 to 100% (in 20% increments)
Outdoor Temp Display	Disabled	Disabled, Enabled
Indoor Humidity Display	Enabled	Disabled, Enabled
Filter 1 Timer	Disabled	Disabled, 3 Months, 6 Months, 12 Months, 24 Months, Custom Time
Filter 2 Timer	Disabled	Disabled, 3 Months, 6 Months, 12 Months, 24 Months, Custom Time
Humidifier Pad Timer	Disabled	Disabled, 3 Months, 6 Months, 12 Months, 24 Months, Custom Time
UV Bulb Timer	Disabled	Disabled, 3 Months, 6 Months, 12 Months, 24 Months, Custom Time
Maintenance Timer	Disabled	Disabled, 3 Months, 6 Months, 12 Months, 24 Months, Custom Time
PureAir Timer	Disabled	Disabled, 3 Months, 6 Months, 12 Months, 24 Months, Custom Time

User Preferences (continued)

Most of the user preferences are modified using one of two methods. One uses a typewriter-style keyboard for entering text for screens such as Dealer Name as shown below. (For Time and Date, see Page 8).
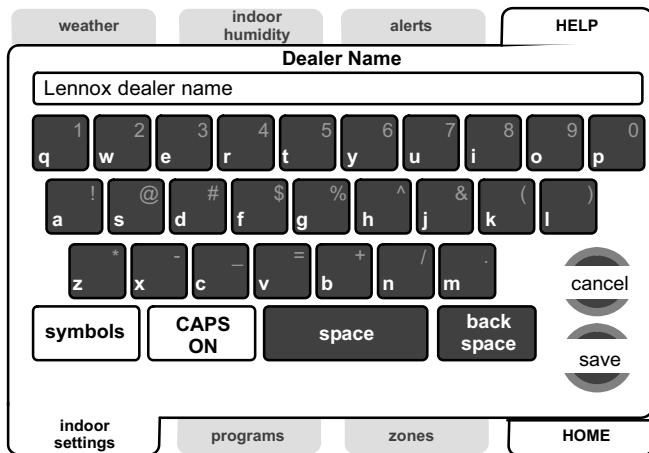
Another input tool uses a menu of options and a **select** to toggle between settings. An example of this is the Daylight Saving Time screen shown below.
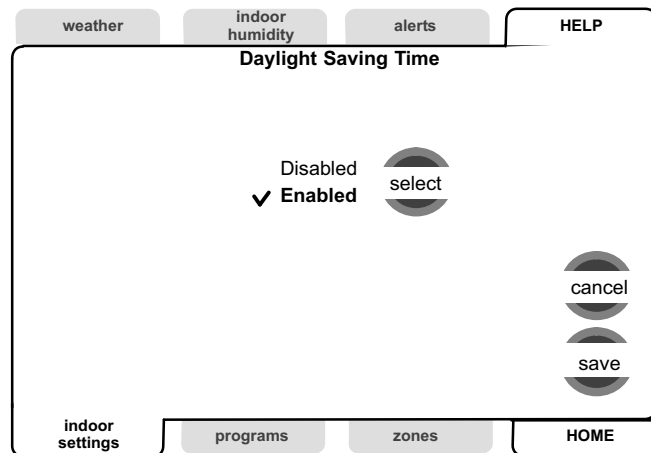

Figure 9. "Typewriter" input tool

Figure 10. "Option select" input tool

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Setting time and date

To input **Time and Date** information, use the arrows to highlight that variable (figure 11); then use **modify** to proceed to the "Time and Date" screen (figure 12).
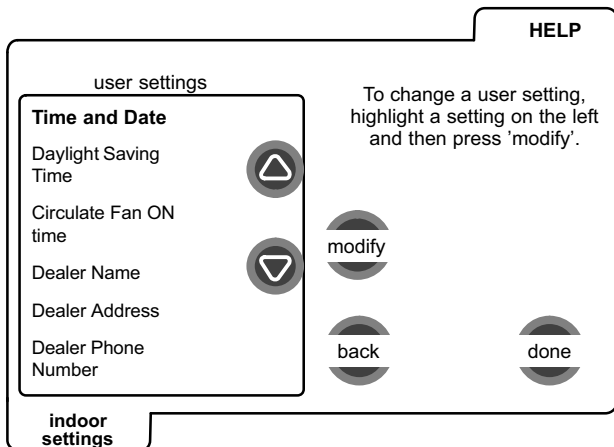

Figure 11. User setting selection screen

When the "Time and Date" screen appears (figure 12), enter the correct date as follows:

- Press one of the time and date boxes - the text will change to white type in a dark box (for example, press the **10** box in figure 12).

- Press the up/down arrows to change the data.

- Press other boxes and adjust with the arrows for all time and date information. When time and date are correct, press **save** to save the changes and return to "User setting selection screen" (figure 11).
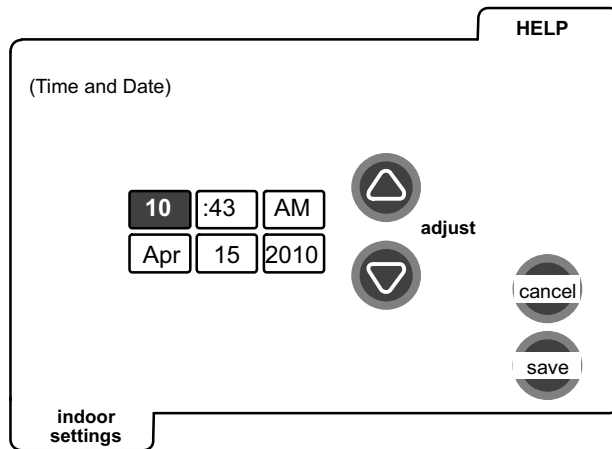

Figure 12. Set current time and date

Return to Home screen

When all the user preferences are complete, press **done**. The HELP screen (figure 11) will go away and the Home screen (similar to figures 1 or 2 on Page 3) will return.

Setting/adjusting indoor temperature from HOME screen

Temperature changes may be made from the HOME screen at any time, if the homeowner wishes.

Program NOT on

If the program is NOT on, change temperature by pressing an up or down arrow until the "heat to" (or "cool to") number is at the desired temperature. This setting will remain until you decide to change it again.
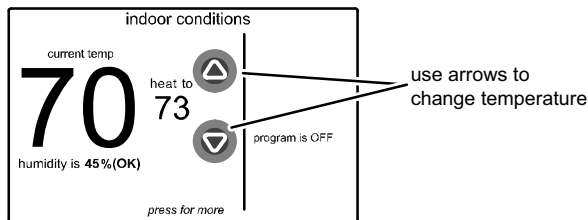

use arrows to change temperature

Figure 13. Adjusting temperature without program running

Program ON

If the program is ON, change temperature by pressing an up or down arrow until the "heat to" (or "cool to") number is at the desired temperature. While doing so, the **set hold** menu appears, giving a list of options you can choose. Make your selections as described in figure 14.
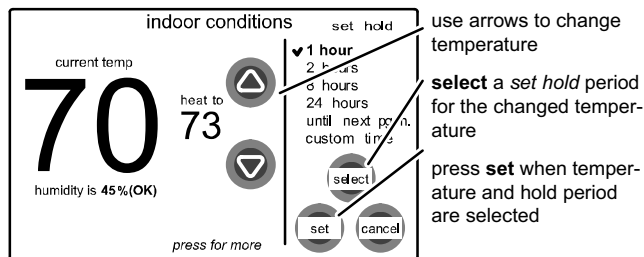

use arrows to change temperature

select a *set hold* period for the changed temperature

press **set** when temperature and hold period are selected

Figure 14. Adjusting temperature with program running

After a hold is set, the **set hold** options and buttons will disappear and a message will state when the hold expires, along with a **cancel** option should you choose to revert back to the program (figure 15).
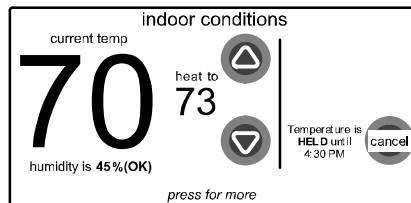

Figure 15. HOLD reminder

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Indoor settings screen

In addition to making temperature adjustments, you may wish to make other changes to how your system works. From the HOME screen, press the screen near **press for more.**
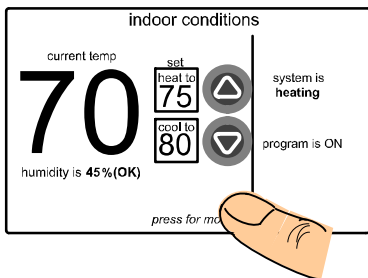

Figure 16. Accessing Indoor settings screen

The indoor settings screen (figure 17) opens. From this screen, you may make temperature changes or select other system or fan settings. Use either of the **select** buttons to scroll through the available options. With this screen displayed, pressing either arrow key brings up the **set hold** menu as described before (see figure 14).

Fan settings are controlled by the program, however, when changed using this screen, the program is overridden until the next program event.

The system settings **heat & cool** option allows the system to automatically switch between heating and cooling as the indoor temperature changes. The other options, **cool only** and **heat only** allow only that portion of the system to satisfy a corresponding cool/heat demand.
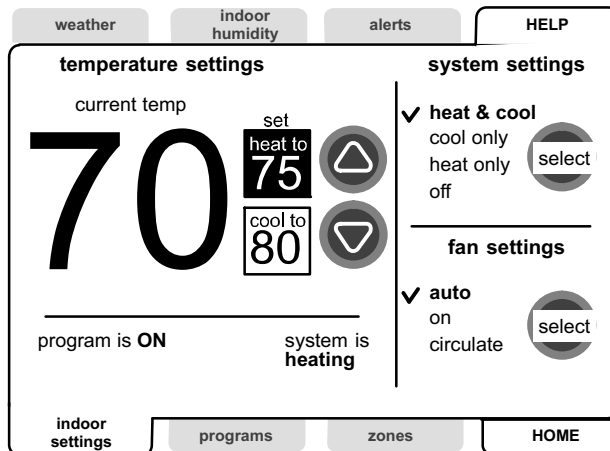

Figure 17. Indoor settings

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.

To adjust humidity controls (either to humidify or dehumidify) select the indoor humidity tab (figure 18). Some systems may have a humidifier and some may have a dehumidifier, while still other systems may have both. You can control either or both from this screen.

Use **select** to tell the system which humidity control you want to address. Remember that the "humidify" control only operates while heating and "dehumidify" only operates while cooling. Also, use select to turn the humidification/dehumidification OFF.

Use **switch** to change which operation you want to change. As shown in figure 18, the humidifier will be controlled. As shown in figure 19, the dehumidifier will be controlled.
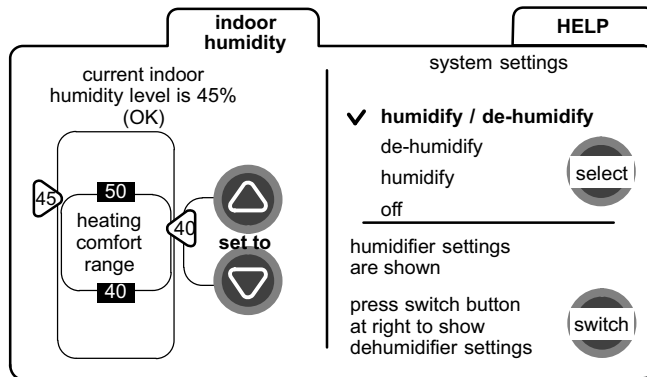

Figure 18. Humidifier controls

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Setting humidity controls (continued)

The number inside the right-pointing arrow ("45" in figure 19) indicates the sensed humidity level. The number inside the left-pointing arrow ("40") is your current humidity setting.

If your system is configured to both humidify and dehumidify and you have selected humidify/de-humidify, press **switch** to toggle between the humidifier and dehumidifier controls.

Use the up/down arrows to adjust the control to your preferred level of humidity. Figure 19 shows the **dehumidifier control** which is adjustable between 40 and 60% relative humidity (RH.
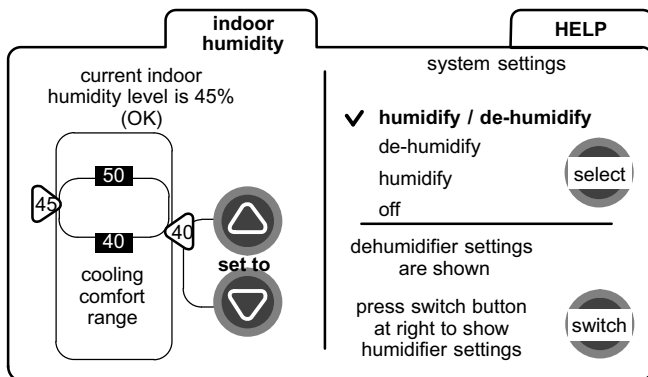
Press **switch** to toggle to the humidifier settings. Use the up/down arrows to adjust the control to your preferred level of humidity. Figure 20 shows the **humidifier control** which is adjustable between 15 and 45% relative humidity (RH.

The industry standards for humidification and dehumidification are shown in the figures as "heating comfort range" and "cooling comfort range".
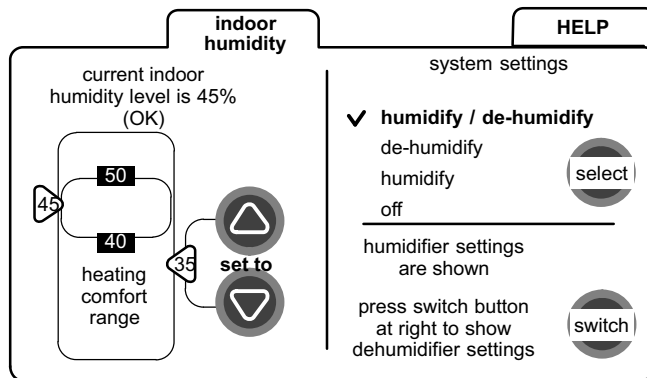

Figure 19. Dehumidifier controls

Figure 20. Humidifier controls

Setting up a custom program

On the Home screen, press the **press for more** area to go to the dashboard; then press the **program** tab. Using this screen (figure 21), you can **select** program ON or OFF, **view /edit** the current program (figure 22), or you can **restore** the original energy saving program. If you select **restore**, a confirm screen will appear as shown in the lower half of figure 21.
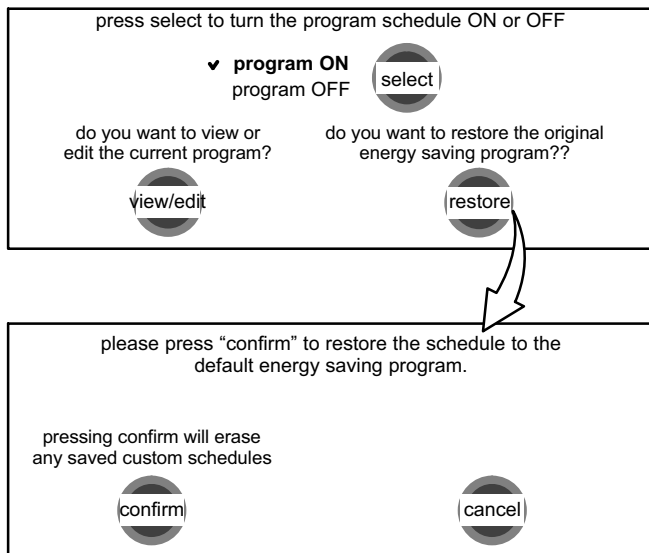
The original energy saving program will always remain in memory and can be restored at any time.

To program your own schedule, press **view/edit** - a screen similar to figure 22 will appear. Shown below is the energy efficient heating and cooling schedule and is the same for every day of the week. Press **new** to begin a new schedule.
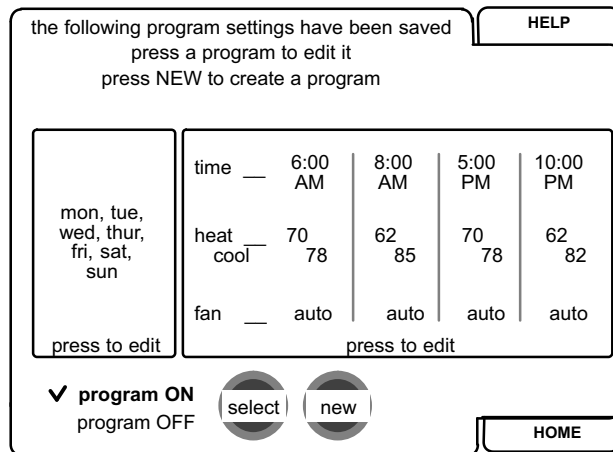

Figure 21. Accessing the program screen

Figure 22. Energy efficient heating & cooling schedule

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Setting up a custom program (continued)

The new schedule screen (figure 23) gives you the option of scheduling by groups of days or for specific days. Examples of how you may customize your program include:

- All 7 days use a common schedule (like the default).
- Monday through Friday use one common schedule and weekends use a second common schedule.
- Monday through Friday use a common schedule and Saturday and Sunday each use a unique schedule.
- All 7 day use a unique schedule.
- Saturday and Sunday use a common schedule and weekdays each use a unique schedule.

Select any box. Notice that the **next** button appears along with text to indicate the selection (**sat, sun** in the example). Press **next** to continue.
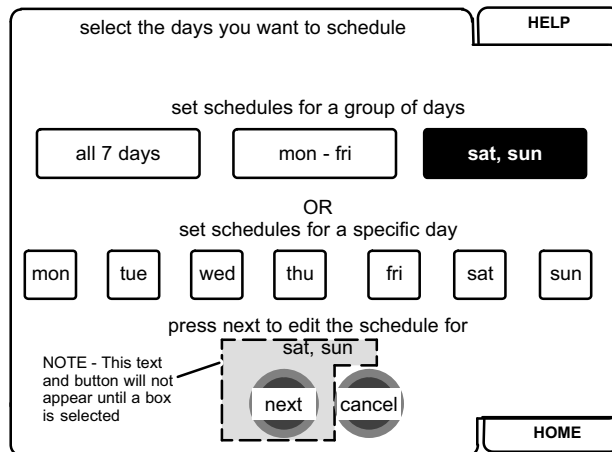

Figure 23. New (custom) schedule screen

Setting up a custom program (continued)

Press any of the boxes to highlight it (e.g., **8:00 AM** box in figure 24). Then use the up/down arrows to change the selected box.

Repeat with all boxes to select your preferred comfort levels, event start times, and fan operation mode.

Skipping an event

Using figure 24 as an example, if you wanted the same settings to be in effect from 6:00 AM until 5:00 PM, rather than change all the 8:00 AM settings to match the 6:00 AM settings, simply press and hold the 8:00 AM button until all the settings and the boxes "grey out". Effectively, this changes the thermostat from a 4-event-per-day to a 3-event-per-day thermostat.

To turn the event back on, press and hold the same time button until the boxes and settings are solid again.

After making any changes to this screen, a **save** button will appear. Press **save** to exit the screen and save your changes to a new custom program file.

Figure 24. Edit the schedule

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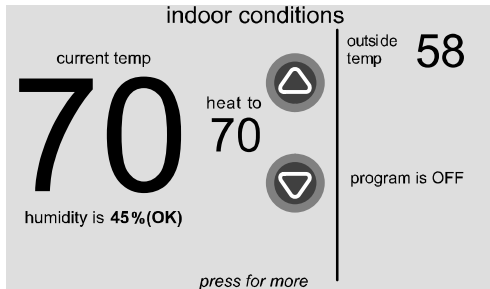## Displaying outdoor temperature and indoor humidity on Home screen

Figure 25. Outside temp and indoor humidity display ON

To have the Home screen display outside temperature and the indoor humidity as shown in figure 25, press the **press for more** area to go to the dashboard; then press the **HELP** tab (figure 26); then press the **press here to adjust user preferences** box.
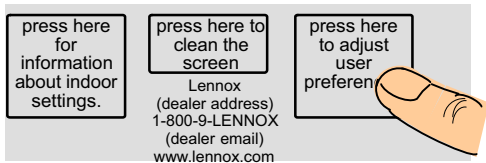

Figure 26. HELP screen—user preferences

Using the arrows (see figure 27), scroll to Outdoor Temp Display and press **modify**; then press **select** to toggle between "Off" or "On". Press **save**. Change Indoor Humidity Display similarly. Press **done** when finished.
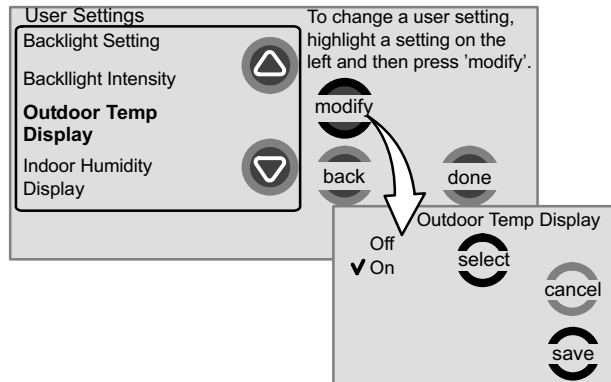

Figure 27. Turn on outdoor temp display on Home screen

Alerts

Press the Home screen alert icon ⚠ or the **alerts** tab in the dashboard to view active system or device active alerts. If a critical alert is present (see figure 28), press **service info** for information about who and where to contact (see figure 29).
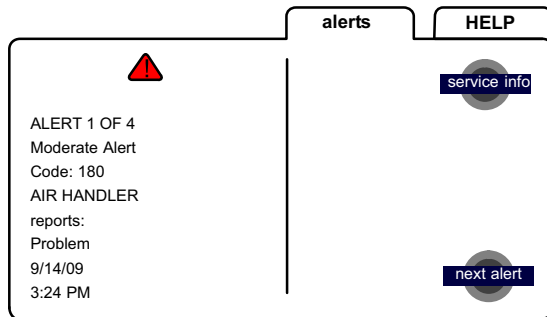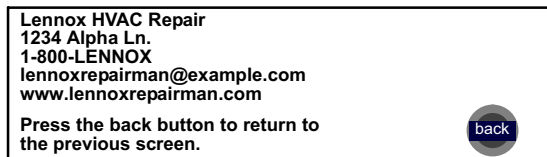

Figure 28. Alerts

Figure 29. Service info example

If an alert occurs during normal operation, a window similar to figure 30 may appear. A critical alert may require a service call, while a reminder alert may alert you to perform a routing service, such as replacing the filter.
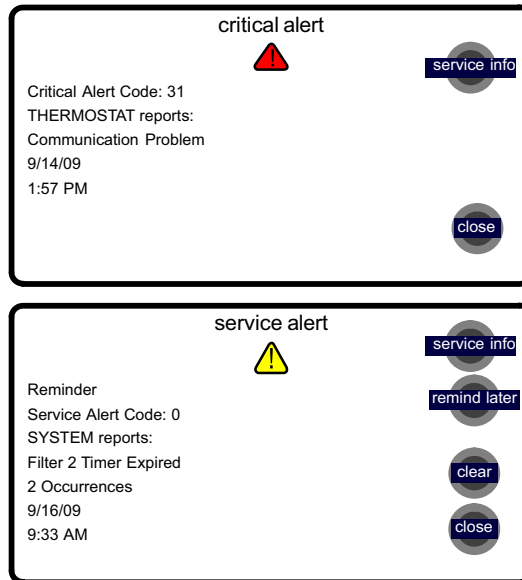

Figure 30. Alert window examples

icomfort Touch ™ 7-Day Programmable Communicating Thermostat

Alerts (continued)

A *critical alert* (red icon) identifies a problem that can prevent the system from working properly or at all, and if allowed to run, could cause damage to the system. You MUST call for service immediately.

A *service alert* (yellow icon), alerts you to service, or call the dealer to service, one or more of the following: Filters, Humidifier Pad, UV Light, PureAir™ Air Purification system, and Maintenance.

The service alerts will be displayed in the alert screen with more option buttons on the right side of the screen (see figure 31). Service reminders will always follow critical alerts.
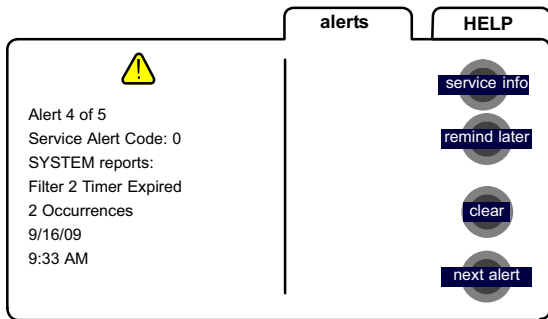

Figure 31. Typical alert screen

Using "remind later"

You may choose **remind later** and then use **select** to pick from the options list (see figure 32). When you press **set**, the screen changes to confirm your selection. Press **done** to clear and return to the alerts screen.
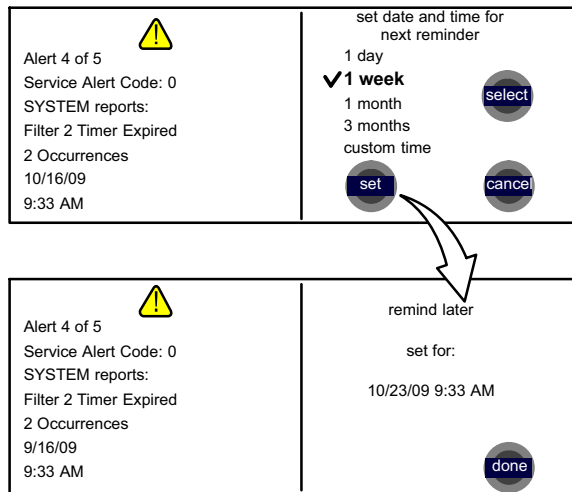

Figure 32. Remind later options

Alerts (continued)

When the alerts screen returns, the remind later option will will be re-placed by the **edit date** option and the selected reminder date will appear next to the option (see figure 33).
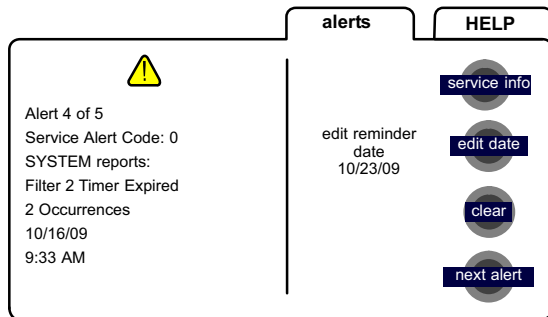

Figure 33. Edit reminder option

Use "Setting custom time" screen (figure 34) to set an exact date and time for the reminder to appear. Press in one of the boxes to highlight it and use the up/down arrows to change the value in that box. Repeat for all boxes. When desired reminder is displayed, press **set**.

After selecting a time period and pressing **set**, the "Remind later con-firmation" screen (figure 32) appears.
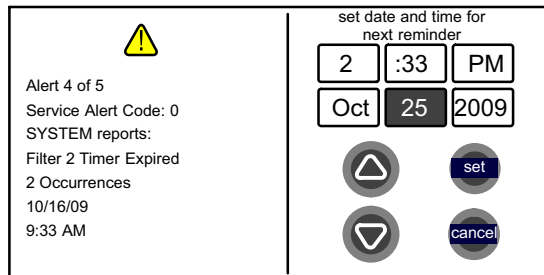

Figure 34. Setting custom time for alert

icomfort Touch ™ 7-Day Programmable Communicating Thermostat

Alerts (continued)

Using "clear"

Press **clear** (not available if Critical Alert) to request clearing of a service reminder. If you answer **no** to the "Action taken confirmation" screen (figure 35), the alert is not cleared. Action must be taken, either to perform the maintenance required, or instead of clearing, you may edit the time to again be reminded as described under **Using "remind later"**.
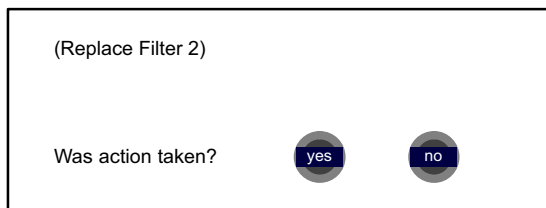
```
┌─────────────────────────────────────────────┐
│  (Replace Filter 2)                          │
│                                              │
│                                              │
│  Was action taken?        yes        no      │
│                                              │
└─────────────────────────────────────────────┘
```

Figure 35. Action taken confirmation

If you confirm action was taken, the "Set new alert date" screen (figure 36) appears. You may chose from the list of options or set a custom time (see figure 34).
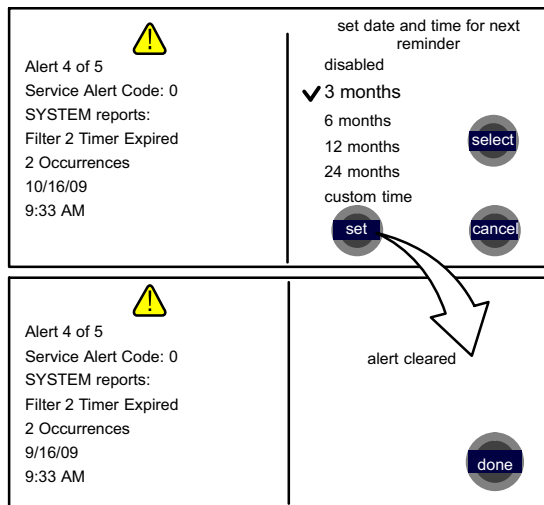
⚠️

Alert 4 of 5
Service Alert Code: 0
SYSTEM reports:
Filter 2 Timer Expired
2 Occurrences
10/16/09
9:33 AM

set date and time for next reminder
disabled
✓ 3 months
6 months
12 months
24 months
custom time

select

set   cancel

⚠️

Alert 4 of 5
Service Alert Code: 0
SYSTEM reports:
Filter 2 Timer Expired
2 Occurrences
9/16/09
9:33 AM

alert cleared

done

Figure 36. Set new alert date

Press **done** to return to the device alert screen (figure 31, page 18).

Date	Revision description
09-2010	Standardized product nomenclature. Add unlock section on page 2 Add turning on outdoor temp and indoor humidity display
12-2010	Add icomfort logo and update registered trademarks.