



**RESIDENTIAL  
PRODUCT SPECIFICATIONS**

The CS5500 is an electronic 7-day, single-stage, programmable, touchscreen thermostat with maintenance reminders.

- Easy to read 4.3 in. color screen (measured diagonally).
- LCD display with backlight shows the current and set temperature, time and system status (operating mode and schedules)
- Menu-driven programming guides user through the scheduling process showing only necessary information on each screen
- Touchscreen interaction
- Ergonomic design
- Smooth Setback Recovery starts system early to achieve setpoint at start of program period
- Compressor short-cycle protection (5 minutes, adjustable)
- Real-time clock keeps time during power failures and automatically updates to daylight savings
- Maintenance reminders let user know when to service or replace filters, PureAir® metal insert, humidifier pads, ultraviolet lamps, plus two user or installer defined custom reminders
- Up to three separate schedules for individual days of the week, week/weekend (5/2 day) or all 7-days the same with up to 4 time periods per day
- Temporarily override the program schedule as desired by time
- Programmable fan offers increased air quality when combined with a whole house air indoor air quality product.
- Permanent memory storage of programs
- Wallplate furnished

**APPROVALS**

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

**WARRANTY**

- Limited five years in residential applications

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

**APPLICATIONS**

- Fully programmable thermostat provides precise comfort control and easy programmability
- Provides temperature control for gas, oil and electric for 1 heat / 1 cool single stage Conventional Heating/Cooling (Non-Heat Pump) Systems Only



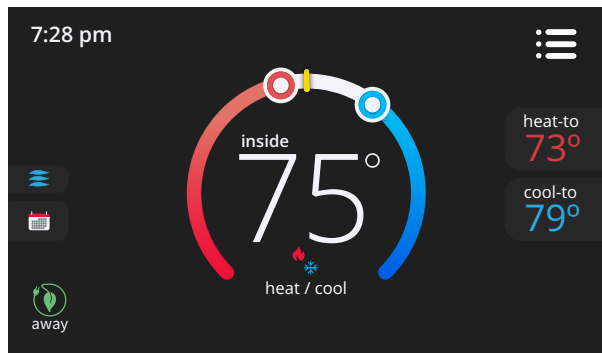
**1 Heat / 1 Cool  
Conventional Heating/Cooling  
(Non-Heat Pump) Systems Only**

Features . . . . . 2  
 Installer Settings . . . . . 7  
 Specifications . . . . . 8  
 User Settings . . . . . 2

## FEATURES

### USER SETTINGS

#### HOME SCREEN



Touch blank screen to turn on the backlight.

#### Temperature Settings

- Large display of current inside temperature (°F or °C)
- Heating and Cooling Setpoint Indicators on the round animated temperature band
- Current cooling setpoint temperature Button (cool-to)
- Current heating setpoint temperature Button (heat-to)

Touching the heat or cool setpoint indicators on the round temperature band, or touching the **heat-to** or **cool-to** buttons displays the heat or cool menu screens (see page 3).

Both heating and cooling setpoint indicators on the round temperature band and the **heat-to** and **cool-to** buttons are displayed if System is set to Heat/Cool mode.

#### Time Display

- Displays current time (supports daylight savings time changes)

#### Mode

- Displays current system operating mode below current indoor temperature (heat/cool, heat only, cool only, active schedule or off)

#### Menu Button

Touch to display **menu** screen (See page 2).

#### Mode/Schedules

Touch current operating mode on home screen under temperature display to access **Select Mode** screen (See page 3).



#### Away Mode Button away

Touch to display **away mode** screen (See page 3).

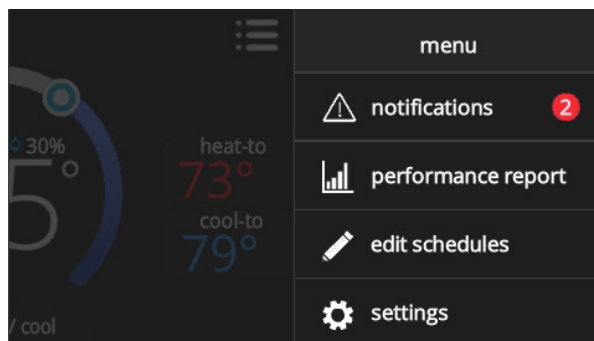
- Heating (system operating)
- Cooling (waiting)
- Cooling (system operating)

If **waiting** is displayed next to the cooling icon, it indicates an active compressor delay.

- Schedule

Touching icon will display **transitioning next schedule setting** next to the icon.

#### MENU SCREEN



Touch each item to display the selected screen.

#### Notifications

- Displays system operating and service reminder messages (see page 4)

#### Performance Report

- Displays the number of hours each month the system has been operating (see page 4)

#### Edit Schedules

- Displays the schedules screen. Up to three separate schedules can be set (see page 4)

#### Settings

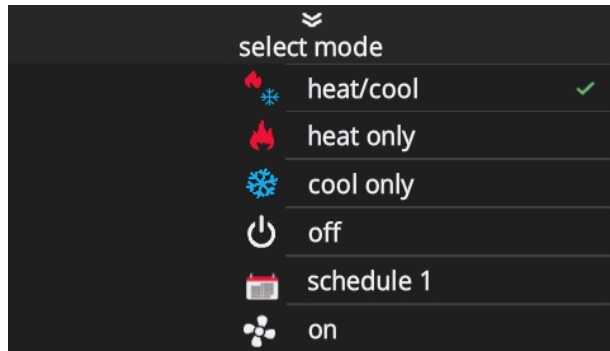
- Displays various user settings (fan, heat/cool, reminders, general, display) (see page 5)

Touch left side of screen to return to the Home Screen.

## FEATURES

### USER SETTINGS (continued)

#### SELECT MODE SCREEN



Touch current operating mode on home screen under temperature display to access **Select Mode** screen.

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

#### Select Mode

- Heat/Cool
- Heat Only
- Cool Only
- Off
- Schedule 1

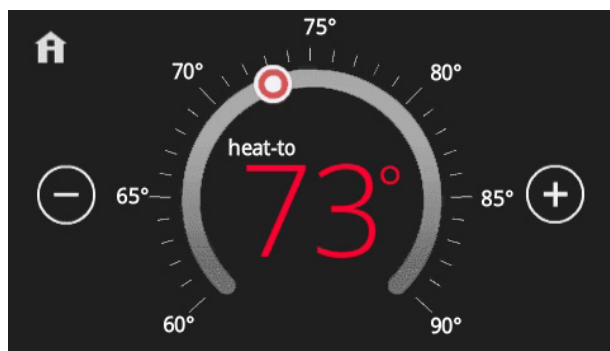
If additional schedules are available they will be displayed.

- On
- Auto
- Circulate

A checkmark indicates which mode is active.

Scroll down to see all modes available on the screen.

#### HEAT MENU SCREEN



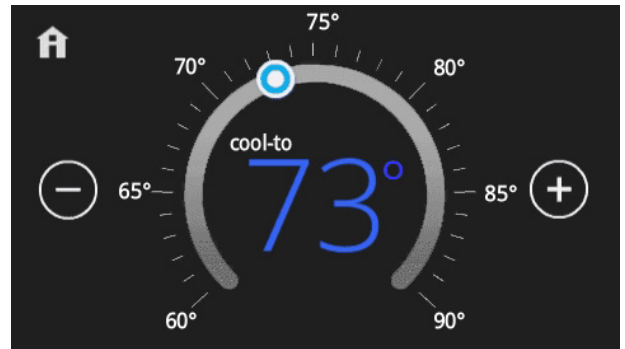
On the Home Screen, touching the heat setpoint indicators on the round temperature band, or touching the **heat-to** button displays the heat menu screen.

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

Touch the red heat setpoint indicator on the round temperature band, or touch the **plus** or **minus** buttons to change the heating setpoint in one degree increments.

During a scheduled time period, touching either the setpoint indicator on the temperature band or the heat-to button will initiate a temporary override. See page 4)

#### COOL MENU SCREEN



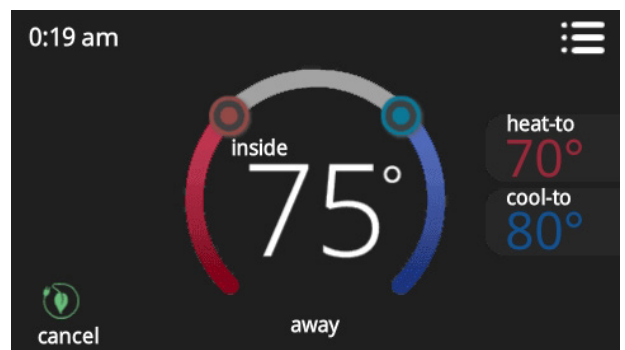
On the Home Screen, touching the cool setpoint indicators on the round temperature band, or touching the **cool-to** button displays the cool menu screen.

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

Touch the blue cool setpoint indicator on the round temperature band, or touch the **plus** or **minus** buttons to change the cooling setpoint in one degree increments.

During a scheduled time period, touching either the setpoint indicator on the temperature band or the cool-to button will initiate a temporary override. See page 4)

#### AWAY SCREEN



Set heating or cooling setpoints during unoccupied periods.

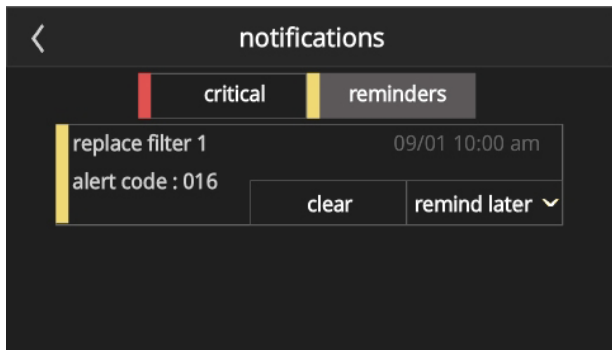
- Heating and Cooling Setpoint Indicators on the round temperature band
- Current cooling setpoint temperature Button (cool-to)
- Current heating setpoint temperature Button (heat-to)
- Cancel Away Mode Button

Touch **cancel away** button to end away mode and return to current system operation.


## FEATURES

### USER SETTINGS (continued)

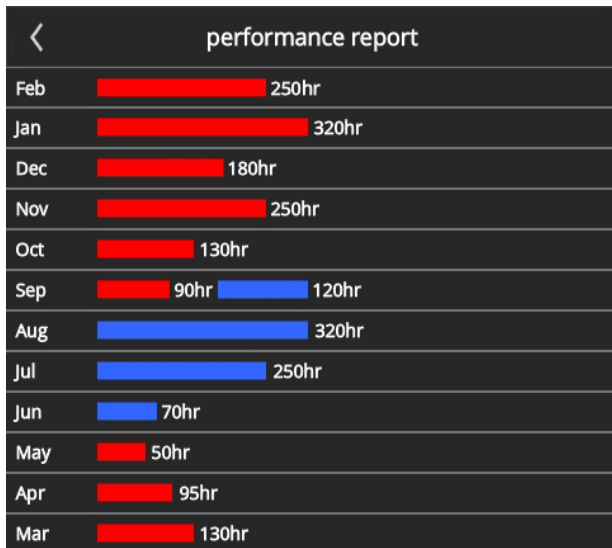
#### NOTIFICATIONS SCREEN



Displays faults, errors and service information.

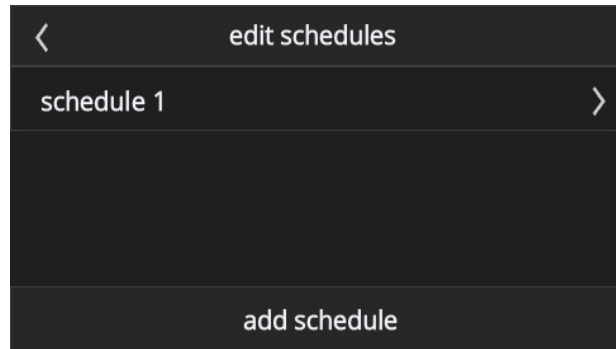
 If any faults, errors, or service information appears, buttons are displayed underneath the notification, **remind**, **clear**, **service**, or **reset**. Touch to select the desired action.

#### PERFORMANCE REPORT SCREEN



• Displays the number of hours each month the system has been operating in heating mode (red) or cooling mode (blue) in an easy-to-read graph.


#### EDIT SCHEDULES SCREEN





Full 7 day programming.

Three separate schedules are available. Individual programming for each day of the week or by specific groups of days:


- Monday through Sunday (7 individual days)
- Monday through Friday + Saturday and Sunday (5 + 2)
- Monday through Sunday (All days have same program)
- Up to 4 time periods per day (**wake / leave / home / night**)
- Select time screen displays hours, minutes and AM or PM
  - Scroll to select desired time in 15 minute increments for each time period
- System mode for each schedule (**heat/cool, heat only or cool only**)
- Fan setting can also be programmed for **on, auto or circulate** operation for each time period
- Individual schedules and time period can have custom names (rename) for easy identification

 By default only one schedule is initially shown. Select **add schedule** to add up to two additional schedules. Touch and hold any schedule to delete it if not required.

 If a fan mode is selected under the **select mode** screen, it will override any fan setting in individual schedules.

 Use the keyboard tool to rename a schedule or time period (maximum 20 characters).

#### Temporary Override

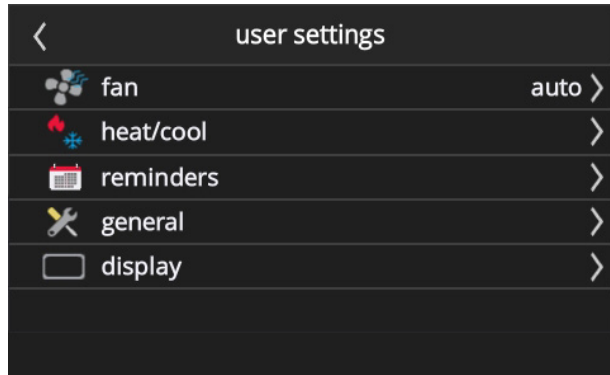
 During a timed schedule, touching the heat or cool setpoint indicators on the round temperature band, or touching the **heat-to** or **cool-to** buttons displays the temporary override screen.

Preset 1 or 2 hours or indefinitely until the next scheduled time period. Displays the schedule hold on the home screen and the time it expires. Touch the "X" on the home screen to cancel the override and return to the current schedule.

## FEATURES

### USER SETTINGS (continued)

#### USER SETTINGS SCREEN



#### Fan



- On
- Auto
- Circulate

**?** If set to **auto**, fan operates only when equipment is operating and follows a selected schedule.  
If set to **on**, fan runs continuously until it is changed from the select mode.  
If set to **circulate**, fan follows a selected schedule and also cycles during period of inactivity. Off time is dependent on user setting (1 to 30 minutes). Slide control appears when **circulate** is selected.

**?** In **auto** mode, fan can operate in **auto** mode, **on** mode or **circulate** mode if it is programmed as such for the current schedule.

#### Heat/Cool

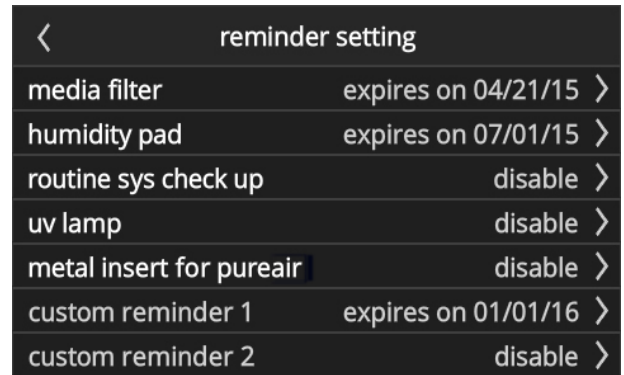


- Normal
- Setpoint Range:
  - Heating Limit, 90°F (default) adjustable (45 to 90°F)
  - Cooling Limit, 45°F (default) adjustable (45 to 99°F)

#### Cool Only

- Setpoint Range:
  - Cooling Limit, 45°F (default) adjustable (45 to 99°F)

#### Reminders



Reminders notify user when routine maintenance is required.

- Media Filter
- Humidity Pad
- Routine System Checkup
- UV Lamp
- Metal Insert for PureAir
- Custom Reminder 1
- Custom Reminder 2

**NOTE** - Reminders can be set to a preset date (3, 6, 12 or 24 months), a custom date, or disabled (default).

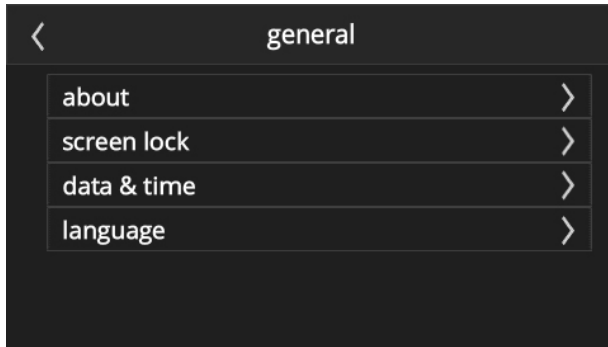
**?** A custom reminder date (month, day and year) can be set using the **set date** screen. Touch reminder for access.

## FEATURES

### USER SETTINGS (continued)


#### USER SETTINGS SCREEN (continued)

##### General




##### About (thermostat and service information)

- Thermostat Information
  - Model Number
  - Serial Number
  - Hardware Revision
  - Software Revision
- Service Information
  - Name
  - Address
  - Phone
  - Email
  - Website
  - Number

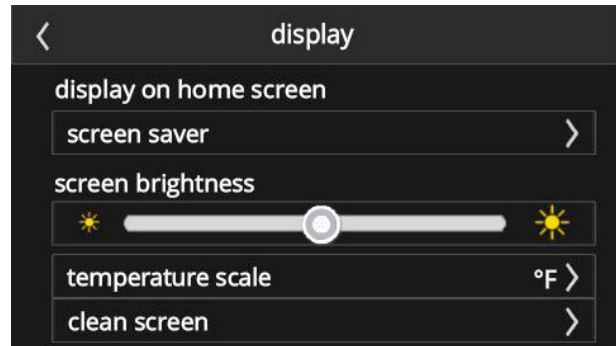
 Dealer can input their information during installer setup using the keyboard tool.

- Screen Lock (Prevents tampering with thermostat settings, 3-digit security code)
  - Unlocked (no security)
  - Partially (prevents tampering with the menu settings)
  - Locked (prevents tampering with the thermostat)
- Date & Time
  - 12 or 24 Hour setting
  - Daylight Savings - Enable or Disable (default)
  - Set Time
  - Set Date

 Time and date can be set using the **set date** screen.


- Language
  - English
  - Spanish
  - Portuguese
  - French

##### Display



##### • Screen Saver


- Enable
  - Off
  - Black
- Disable (default)

 Default screen saver displays only the time, inside temperature, and outside temperature (if enabled). Touch the home screen to display all information.

##### • Backlight

- Continuous On (default)
- Energy Save


##### • Screen Brightness

 Slide control allows screen brightness adjustment (0 to 100%).

##### • Temperature Scale

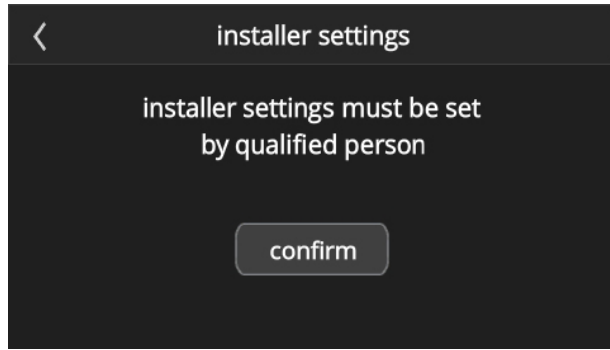
- °F (default)
- °C


##### • Clean Screen

 30 Second Countdown timer without affecting settings to allow cleaning of the display.

## FEATURES

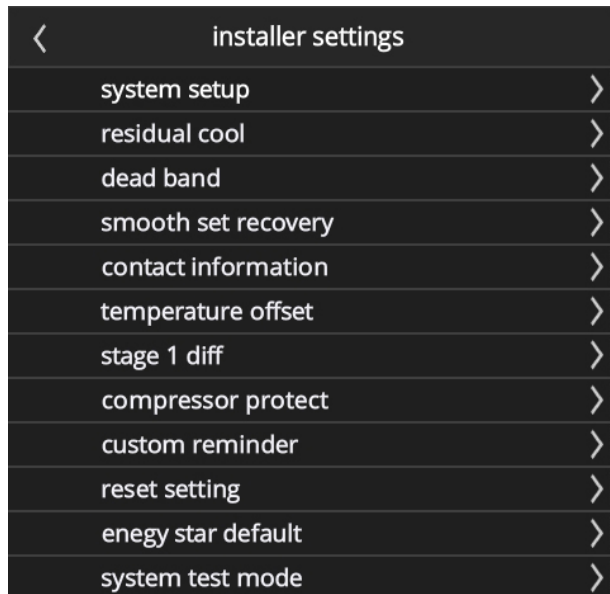
### INSTALLER SETTINGS




 From the Home Screen, touch **Menu**. Touch and hold **Settings** to access the Installer Settings Screen.

- System Setup
- Residual Cool
- Dead Band
- Smooth Set Recovery
- Contact Information
- Temperature Offset
- Stage 1 Diff
- Compressor Protect
- Custom Reminder
- Reset Setting
- ENERGY STAR Default
- System Test Mode

#### INSTALLER SETTINGS SCREEN



 Scroll down to see all selections available on the screen.

#### System Setup Indoor Unit Setting

- No Heat
- Gas/Oil
- Electric

#### Residual Cool

- 0 (default), 30, 60, 90, 120 seconds

#### Deadband


- 3°F (default), adjustable (3 to 8°F)

#### Smooth Setback Recovery

- Enable or Disable (default)

#### Dealer Information

- Name
- Address
- Phone
- Email
- Website
- Number

 Use the keyboard tool to input dealer information (maximum 30 characters).

#### Temperature Offset

- 0°F (default), adjustable (-5 to 5°F). Offset displayed temperature  $\pm$  5°F

#### Stage 1 Differential

- 1.0°F (default), adjustable (0.5 to 8.0°F)

#### Compressor Protect

- On (default) or Off

#### Custom Reminder

- Two custom reminders
- User defined reminders can be a custom text message (up to 20 alphanumeric characters)

#### Reset Setting

- Restores thermostat to original factory settings

#### Energy Saving Default


- Sets thermostat to conform to EPA ENERGY STAR® recommended setpoints:
  - Wake - 6 AM, 70°F Heat, 78°F Cool
  - Leave - 8 AM, 62°F Heat, 85°F Cool
  - Home - 5 PM, 70°F Heat, 78°F Cool
  - Night - 10 PM, 62°F Heat, 82°F Cool

#### System Test Mode

Installer run tests to check all cooling, heating and fan outputs. Tests confirm signals between thermostat and unit are being sent and received.

#### Test Outputs

- Y1 (1st stage cooling)
- W1 (1st stage heating)
- G (Fan)

 Touching the OFF button next to the test will change the status to ON and will enable the relay for that terminal. Touching again will turn the relay OFF.

## FEATURES

### SPECIFICATIONS

**NOTE** - For use with conventional residential heating/cooling (non-heat pump) systems only.

Order No. - 13H13

#### Temperature Setting Range

- Heating - 45 to 90°F
- Cooling - 45 to 99°F

#### Power Supply

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

#### Clock Accuracy

- ± 10 minutes per year

#### Terminals (1 heat / 1 cool)

- C - Common 24VAC
- G- Fan
- W1 - 1st Stage Heating
- Y1 - 1st Stage Cooling
- R - 24VAC Power

#### Dimensions

- Thermostat (H x W x D) - 3-5/16 x 4-5/16 x 7/8 in. (84 x 110 x 22 mm)
- Wallplate (W x H) - 5-3/4 x 4-1/2 in. (146 x 114 mm)

#### Backup

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



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For the latest technical information, [www.LennoxPros.com](http://www.LennoxPros.com)

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