



User Guide

Color Touchscreen
Programmable Thermostat

ComfortSense® 5500

Model: 13H13
507500-02
5/2017
Supersedes 507500-01

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Features

The ComfortSense® 5500 Series thermostat is an electronic 7-day, single-stage, programmable, touchscreen thermostat. Features are:

- Large, clear color display that shows the current and set temperatures and time.
- Ergonomic design.

- Smooth Setback Recovery starts system early to achieve setpoint at start of program period.
- Compressor short-cycle protection (5 minutes).
- Real-time clock keeps time during power failures and automatically adjusts for daylight savings time and leap year.
- Program hold options allow user to override the program schedule as desired by time and date.
- Select individual days or groups of days to set programming.
- Programmable fan offers increased performance when combined with whole home indoor air quality products.



WARNING

This product contains a chemical known to the State of California to cause cancer, birth defects, or other reproductive harm.

Temperature Dial Indicator

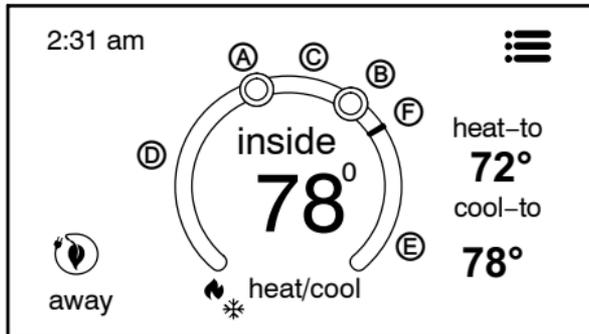


Figure 1. Temperature Dial Feature

- A. This is the **heat set point position indicator** on the dial. This object will be red in color.
- B. This is the **cool set point position indicator** on the Dial. This object will be blue in color.
- C. This is the location area where no system demand is active. In figure 1, the example would be any temperature between 73°F and 77°F.
- D. When there is an active call for heating, this area of the dial will fade back and forth from white to red.
- E. When there is an active call for cooling, this area of the dial will fade back and forth from white to blue.
- F. The yellow line indicates the actual room temperature on the temperature dial indicator.

Home Screen

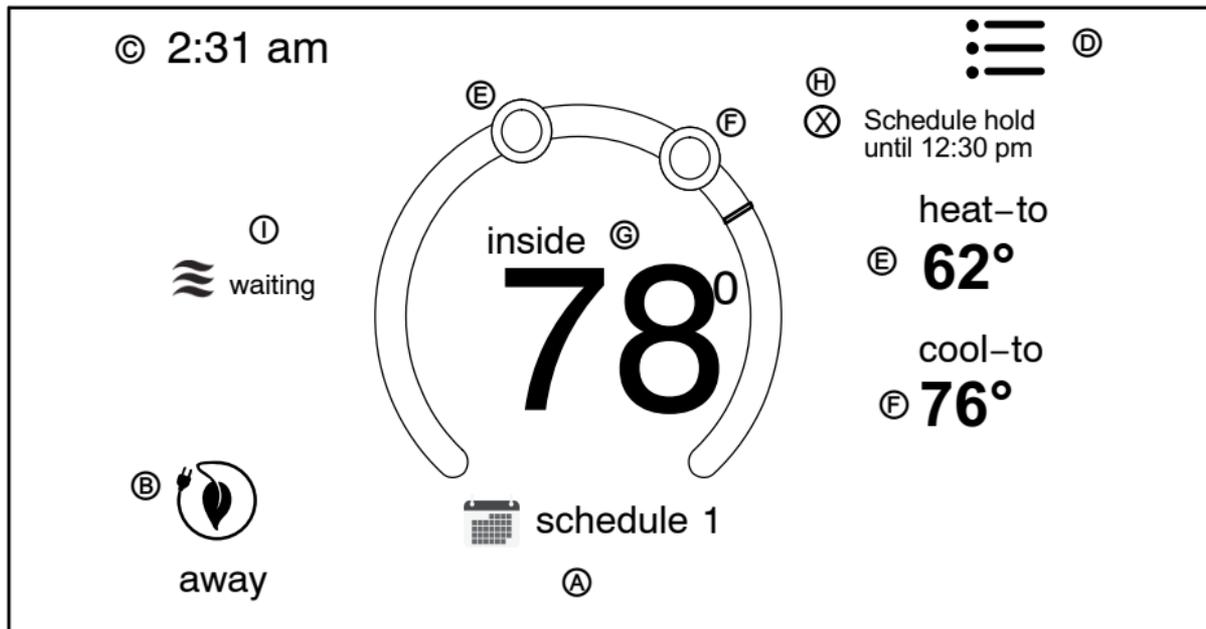


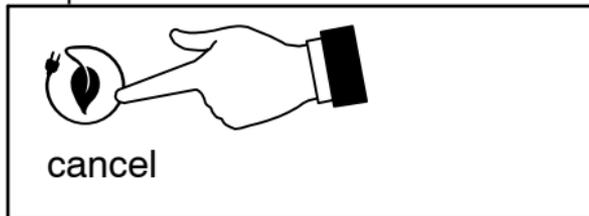
Figure 2. Home Screen

Touch the screen to turn on the backlight if it is off.

A. OPERATING MODE - touch to access the screen that will list available modes. Selectable modes are heat/cool, heat only, cool only, off, emergency heat, schedule 1, schedule 2, and schedule 3. In addition fan operation can be set to on, auto or circulate.

B. AWAY - Selecting AWAY will allow the user to set the heating and/or cooling mode temperatures when away from home.

Touch **cancel** to exit this screen and return to the home screen and normal system operations.



C. Displays current time.

D. Menu - This will allow access to **notifications, performance report, schedules and settings.**

E. This allows you to set the **heat-to** (if enabled) temperature. Selecting the **heat-to** or temperature dial position indicator will take you to the temperature setting detail screen. The temperature dial will change from white to red when heating is active.

F. This allows you to set the **cool-to** (if enabled) temperature. Selecting **the cool-to** or temperature **dial position indicator** will take you to the temperature setting detail screen. The dial will change from white to blue when cooling is active.

G. Displays the current indoor temperature.

H. Indicates the schedule is on hold until the next time period or permanent.

1. Place the schedule on hold by touching on either the **heat-to** or **cool-to** location on the screen. If an adjustment is required for the temperature setting, this can be done now.
2. After approximately three seconds the screen will display the override setting options.
3. From the override setting screen, the options are **1 hour**, **2 hour** or **Permanent**. Make selection and then touch **set**.
4. For the 1 or 2 hour setting the home screen will indicate **schedule hold until time indicated** (i.e., 11:57 pm). To exit schedule hold, touch ⊗.
5. For the permanent setting the screen will indicate **schedule hold permanently**. To exit schedule hold, touch ⊗.

NOTE - When in any hold status, the mode status area on the screen will go to the current status mode. For example, from schedule 1 to heat/cool.

I. **System Status Icons** - Equipment operation information appears along the left side of the home screen. The displayed icons will indicate cooling or heating demand, cooling compressor delay, or cooling demand.

Table 1. System Status Icons

Screen Icon	Description
	Red flames indicates the system is heating.
	Blue flames indicates the system is cooling.
 waiting	Snowflake indicates the next mode of operation will be cooling. Waiting indicates there is a compressor delay which has a default of five minutes and is not adjustable.

Table 1. System Status Icons (continued)

Screen Icon	Description
	Red flame with a plus indicates the system is running in emergency heat mode.
	Transitioning to next schedule temperature setting. This icon will only appear if smooth setback recovery is enabled under the installer setup. When enabled, it will begin recovery up to two hours before the programmed time so that the programmed temperature is reached at the corresponding programmed event time. Assume 12°F per hour for gas/electric heating and 6°F per hour for first stage compressor based cooling. When smooth set back recovery is disabled, the control will start recovery at the programmed time set in the schedule.

Selection Mode

Touch anywhere in the area indicated below to select how the system will operate.

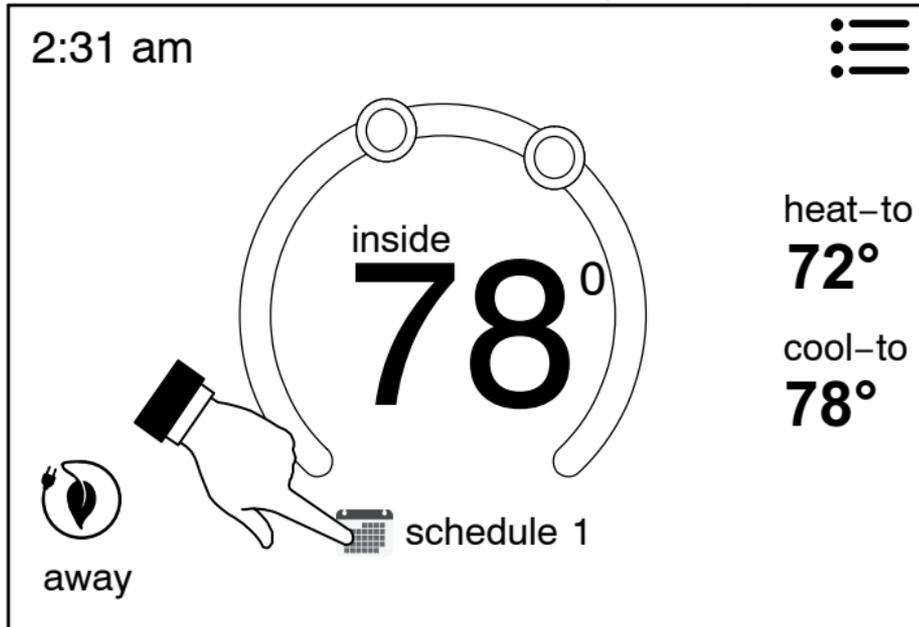


Figure 3. Home Screen (Accessing Mode Screen)

Select Modes

1. **HEAT/COOL** allows the thermostat to switch between heating and cooling automatically.
2. **HEAT ONLY** allows only heating demand.
3. **COOL ONLY** allows only cooling demand.
4. **OFF** indicates system has been turned off.
5. **EMERGENCY HEAT** allows heat pump system to use a secondary heat source to come on and reach the desired user temperature setting faster.
6. **SCHEDULES** (1, 2 or 3) See *Edit Schedules* on page 13 for customizing schedules).
7. **ON, AUTO** and **CIRCULATE** - Select by touching the desired fan operation **ON**, **AUTO** and **CIRCULATE**. When selected a green check mark will be indicated.

If **FAN** mode **AUTO**, **ON** or **CIRCULATE** is selected during scheduling for the current period, the thermostat will indicate the current fan mode in the information display (**FAN ON** or **FAN CIRC**).

In the **CIRCULATE** mode, the fan will follow the setting configured under **menu > settings > fan > select fan mode**. Under **circulate** the **circulate off time** can be set from 1 to 30 minutes.

Fan Operation

The desired fan mode is selected in addition to selected mode of operation.

Table 2. Fan Operation

	on	Fan is NOT following the schedule and runs continuously until it is changed from the select mode .
	auto	Fan will follow the fan setting in the selected schedule.
	circulate	Fan is following schedule and cycles during periods of equipment inactivity. Circulate off time is set by the user.

Menu

Touch the three lines in the upper right-hand corner of the screen to access the **menu**. Selectable options under **menu** are **notifications**, **performance report**, **edit schedules** and **settings**.

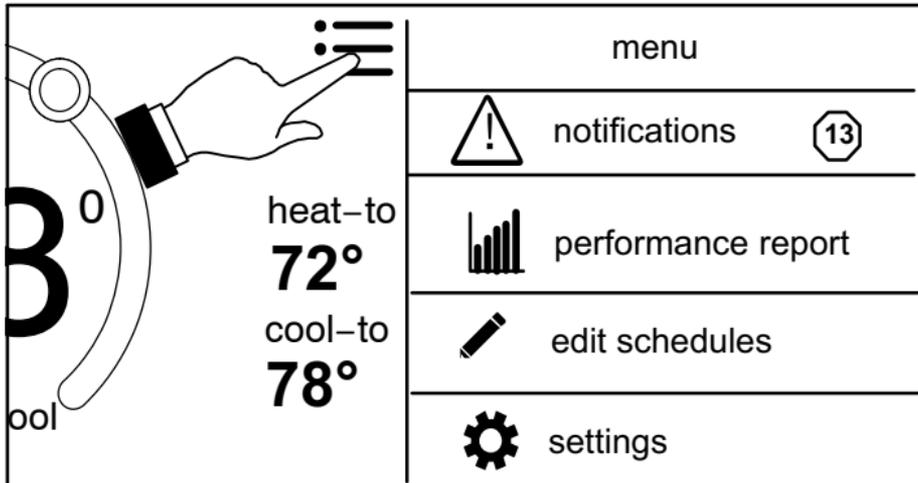


Figure 4. User Menu Screen

Notifications

When a system error or reminder occurs, a pop-up screen will appear indicating the condition.

- Error code notification pop-up can be dismissed by touching the back button. Contact the dealer to resolve the issue.
- For notification, touch either clear or set a future reminder.

Any active history for notifications (critical errors or reminders) will be listed under **settings > notification**.

If critical errors occur, they will also be displayed under **notifications** as illustrated in figure 5. Touch the contractor info option for assistance.

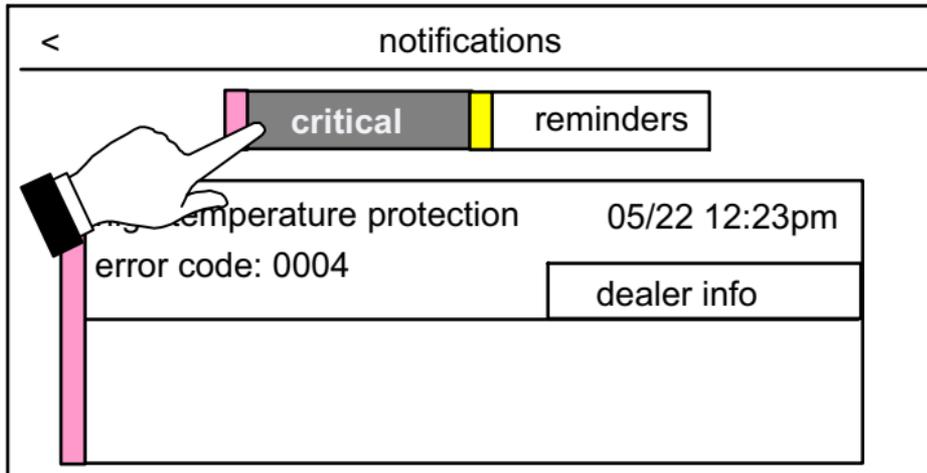


Figure 5. Notifications - Critical

When reminders occur, they will also be displayed under **notifications** as illustrated in figure 6. Touch the clear or remind later to redisplay active reminder for 1 day, 1 week, 1 month, 3 months or a custom date.

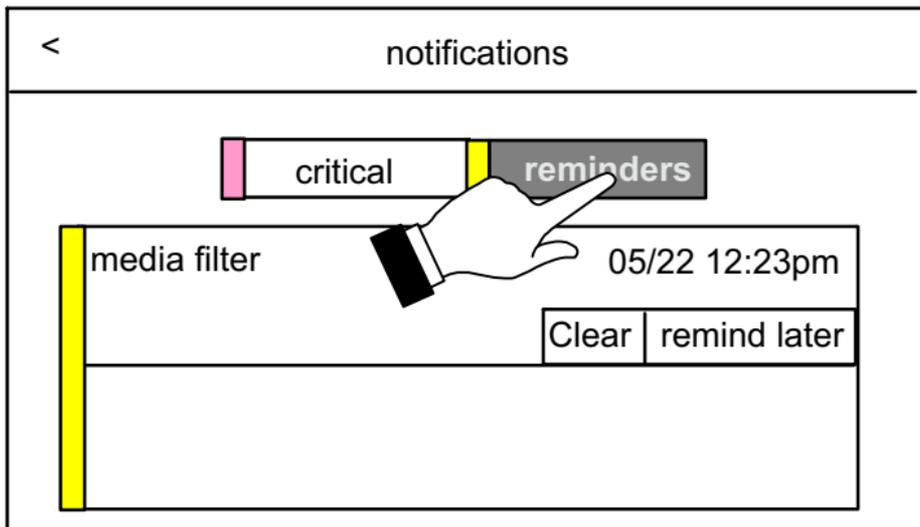


Figure 6. Notifications - Reminders

Performance Report

This will display the total number of hours each month that the system has been running. Example would be for mar (March) 23H or 23 hours. To return to the menu screen, touch the house icon in the upper left-hand corner of the screen. Red bar indicates heating and blue indicates cooling hours ran.

Edit Schedules

Any schedule can be edited by touching the right arrow next to the desired schedule.

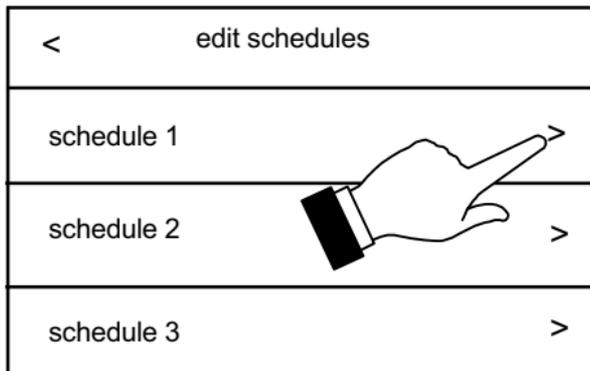


Figure 7. Edit Schedules Screen

NOTE: See Selection Mode on page 8 to run a specific schedule.

From the HOME screen touch the **MENU** and touch **edit schedules** option.

The edit schedules screen will allow section of up to three separate schedules. On the edit schedules screen, each schedule can be renamed and edited. See Figure 8 for editing schedules.

NOTE: The fan mode that is selected under the edit schedules screen will always override the fan mode selected under the **select mode** screen or **user settings > fan screen** if different

For example, if the **select mode** fan setting or **user settings > fan** is configured for Auto, and the schedule fan mode is set to circulate, then the system will follow the fan mode selected in the active schedule.

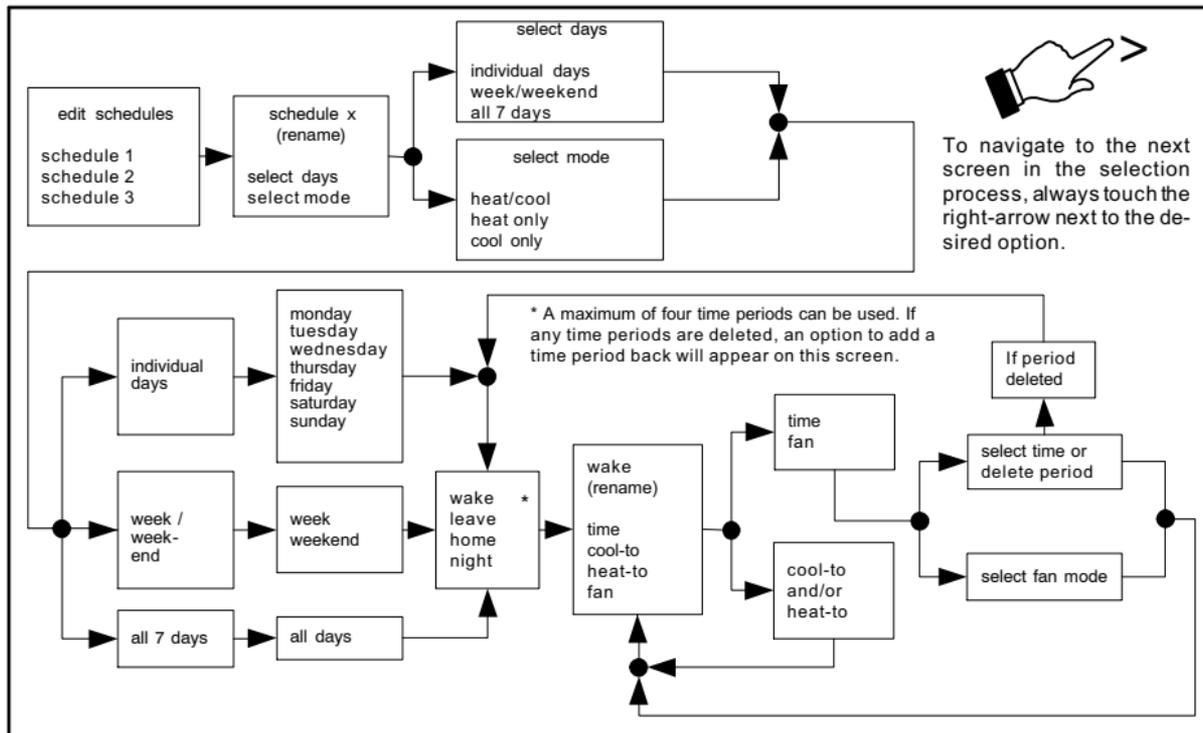


Figure 8. Renaming and Editing Schedules

Settings (user)

<	user settings	
	fan	>
	heat/cool	>
	reminders	>
	general	>
	display	>



Figure 9. User Setting Options

Table 3. User Settings (Fan)

Setting Selection	Function	Description
fan	on, auto and circulate	See table 2 for detail description.

Settings Descriptions (user)

Table 4 provides information for options that can be selected for each setting.

Table 4. User Settings (Heat/Cool or Cool Only)

Setting Selection	Function	Description
heat / cool (gas or electric heating is selected)	normal	Heats home to desired temperature setting. Options are on or off .
	setpoint range	Heating limit with a default of 90°F. Range is 45°F to 90°F Cooling limit with a default of 45°F. Range is 45°F to 99°F
cool only (option only appears if no heating equipment is available or configured)	setpoint range	Cooling limit with a default of 45°F. Range is 45°F to 99°F
reminders	<p>Select reminders. The reminder setting screen will appear and a list all of the predefined reminders plus the two custom reminders at the end of the list.</p> <p>NOTE: <i>Your installer will need to change the name of the two available custom reminders.</i></p> <p>Select the desired reminder to set a date. By default all reminders are set to disabled. Touch disable for a specific reminder to choose from 3mon, 6mon, 12mon, 24mon or custom date.</p> <p>When finished, touch < to return to previous menu.</p>	

Table 5. User Settings (General)

Setting Selection	Function	Description
general - provides information about the thermostat and settings for screen lock, date & time and language.	about	Displays information concerning thermostat model number, serial number, hardware and software revisions.
	screen lock	Setting options are unlocked, partially, and locked. To set partially lock, create a three digit code. Partially lock restricts access to the menu. To set locked , create a three digit code. Lock restricts access to anything on the screen. <i>NOTE: Partially Lock and Locked is set for one instance only. Either would need to be set each time it is desired to partially locked or locked the screen. Master code is 864 in case user forget their custom code.</i>
	date & time	Settings for 24-hour clock (military), daylight savings, set time and date.
	language	Languages available are English, Spanish, Portuguese and French.

Table 6. User Settings (Display)

Setting Selection	Function	Description
<p>display - Allows the user to control some information that is displayed on the home screen.</p>	screen saver	<p>Options are enable and disable. Default is enabled. When enabled only the time and inside temperature is displayed on the screen. Touching the screen will restore all other details.</p> <p>The backlight setting is also on the same screen. Options are continuous on or energy save. Default is continuous on.</p>
	screen brightness	A horizontal adjustment bar is provided to move from minimum to maximum brightness.
	temperature scale	°F for Fahrenheit or C° for Celsius.
	clean screen	This will disable the touchscreen for 30 seconds.

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