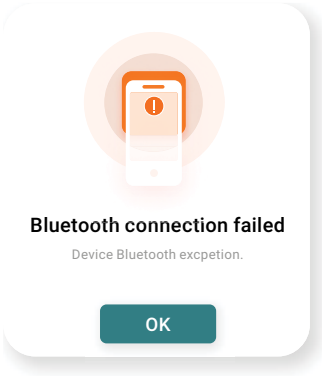
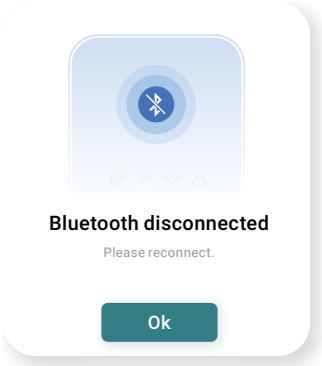
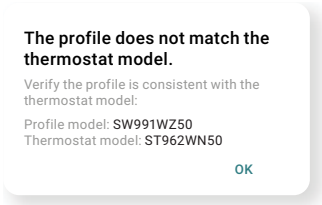
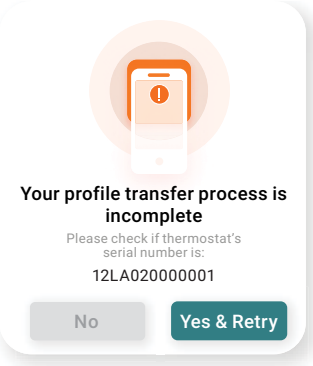
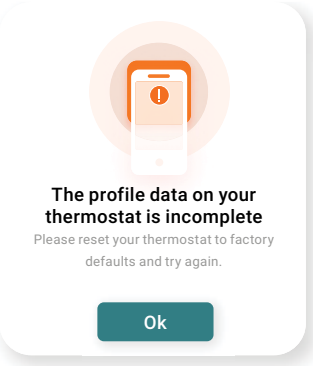
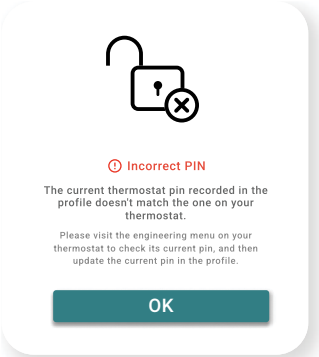
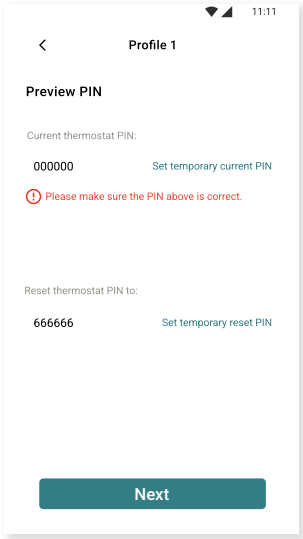
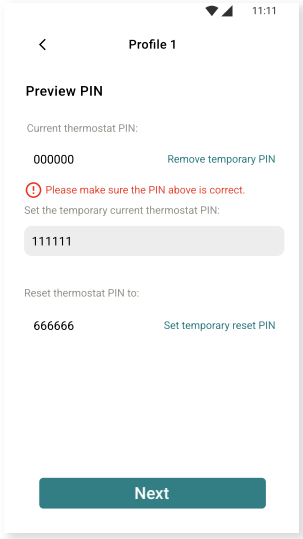
Error Messages and Troubleshooting

Popup Error Message	Solution
5. 	Tap OK. Your smartphone will automatically start searching for any thermostats that are nearby. If several thermostats are found, tap Connect to the right of the ST962WN50 thermostat you want to connect to.
6. 	Tap OK. Your smartphone will automatically start searching for any thermostats that are nearby. If several thermostats are found, tap Connect to the right of the ST962WN50 thermostat you want to connect to.
7. 	Tap OK. Then tap < on top left to go back to the Connect Device page. Tap Scan QR Code or Search for Device. OR Tap OK. Your smartphone will automatically start searching for any thermostats that are nearby. If several thermostats are found, tap Connect to the right of the ST962WN50 thermostat you want to connect to.

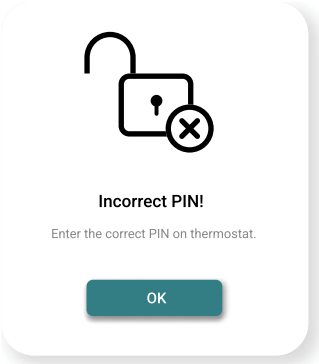
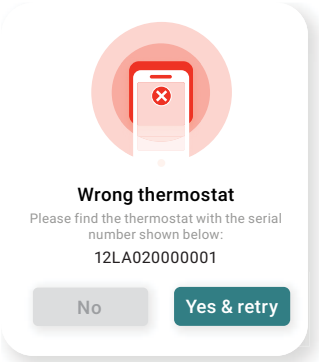
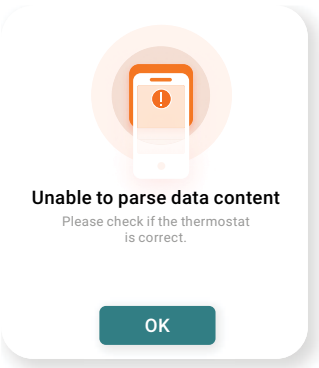
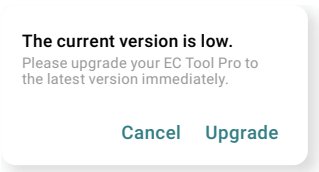
Error Messages and Troubleshooting

Popup Error Message	Solution
8. 	Tap Yes & retry to install the profile transfer via Bluetooth, or Tap No, then Back to quit installation. **Note** • To check the thermostat's serial number, check the label on the back of the thermostat or refer to the engineering menu About This Unit on pages 38-40. • If you quit the installation in this step, you need reset your thermostat to factory defaults first before you install a profile on it next time. ⚠ CAUTION The serial number shown on the prompt is the serial number of your previously installed thermostat recorded this profile. Both thermostat and profile must have the same serial number for a safe profile transfer. Otherwise, both the thermostat you are setting up, but with a different serial number, and the other with the same serial number as the profile, may damage.
9. 	Tap OK to restore the thermostat to factory default settings, and try to install the profile on your thermostat via Bluetooth again.

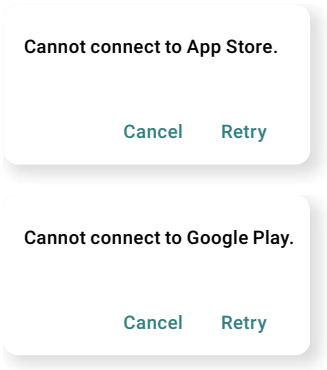
Error Messages and Troubleshooting

Popup Error Message	Solution
10.   	1. Tap OK to set a temporary current pin. 2. Check the thermostat's PIN in the engineering menu PIN & Room Name. 3. Tap Set temporary current pin, then enter the temporary current PIN. 4. Tap Next to go on installing the profile. • To remove temporary current pin, tap Remove temporary pin. OR 1. Tap Manage to Go to the homepage of Manage tab. 2. Check the thermostat's PIN in the engineering menu PIN & Room Name. 3. Select the profile you are installing in Manage tab, then tap Edit to enter the correct current thermostat PIN. 4. Try again to install the profile on your thermostat via Bluetooth.

Error Messages and Troubleshooting

Popup Error Message	Solution
11. 	1. Tap OK. 2. Check the thermostat's PIN in the engineering menu PIN & Room Name. 3. Select the profile in Manage tab, then tap Edit to enter the correct current PIN on thermostat. 4. Try again to install the profile on your thermostat via Bluetooth. **Note** To check the thermostat's PIN, refer to Engineering settings on pages 38-40.
12. 	Find the thermostat with the same serial number shown on the prompt, then tap Yes & retry to confirm and install the profile via Bluetooth. OR Tap No, then Back to quit the installation. **Note** To check the thermostat's serial number, check the label on the back of the thermostat or refer to the engineering menu About This Unit on pages 38-40. ⚠CAUTION The serial number shown on the prompt is the serial number of your previously installed thermostat recorded this profile. Both thermostat and profile must have the same serial number for a safe profile transfer. Otherwise, both the thermostat you are setting up, but with a different serial number, and the other with the same serial number as the profile, may damage.
13. 	Tap OK, then check if your thermostat's model number is ST962WN50. If yes, tap Installation tab and install a profile on your thermostat.
14. 	Tap Upgrade to update your EC Tool Pro to the latest version.

Error Messages and Troubleshooting

Popup Error Message	Solution
15. 	Tap Retry to connect to App Store or Google Play for upgrading your EC Tool Pro App.

If an error alert displays on your thermostat's screen, the screen will turn off after five minutes of idleness. To wake the thermostat screen from idle, press any of the four hard buttons (Mode/,Fan/, Down/, or Up/) on the thermostat display unit. From there, you can check the current error alert again.

Error Alert Examples

Note
T = Thermostat

Error Messages and Troubleshooting

Error Code	Error	Severity Rating
E01	Low voltage - Thermostat's voltage is insufficient and not within the normal range.	Critical
Reason	**Solution**	**Note**
Wiring error or circuit problem	Power off the HVAC equipment, check the wiring and circuit, and then power up it again after making sure the current and circuit is normal.	The standard power supply of the thermostat is 24V, and the normal voltage range is 18-30V. The voltage range of E01 alarm occurs when the voltage detected is 30.1-33V and 17.9-9V.

Error Code	Error	Severity Rating
E02	High internal heat - Thermostat's internal temperature is above 167°F (75°C).	Critical
Reason	**Solution**	**Note**
Wiring error or circuit problem	Power off the HVAC equipment, check wiring and circuit, and then power up thermostat again after its internal temperature is below 167°F (75°C).	

Error Code	Error	Severity Rating
E03	Clock is not set or RTC lost power.	Critical
Reason	**Solution**	**Note**
The clock hasn't been set yet, or RTC lost power during the power outage.	After powering up the thermostat again, press Fan, Down, and Up for at least eight seconds to enter Set Date & Time menu to set date & time, time zone, and turn Daylight Saving Time on or off, or install the profile into thermostat by Bluetooth feature.	RTC will lose power due to both a dead or failing backup battery and HVAC power failure. The RTC backup battery is a non-replaceable battery designed for an operational life of 10 years.

Error Messages and Troubleshooting

Error Code	Error	Severity Rating
E04	RTC (Real time clock) IC is not working.	Critical
Reason	**Solution**	**Note**
RTC IC is damaged.	Replace the existing thermostat with a new one.	RTC IC is non-replaceable.

Engineering Menus

Engineering Settings

If no profile has been installed on your thermostat, the thermostat will enter its engineering mode when it is powered up. If a profile has been installed on your thermostat, press and hold the Fan/ , Down/ , and Up/ buttons simultaneously for at least eight seconds at home screen to enter the engineering mode menu. If the thermostat is not at home screen or you are setting temperature on the thermostat, you will not enter the engineering mode even if you press and hold these three buttons simultaneously for at least eight seconds.

Engineering Menus

Engineering Mode Menu

Follow these steps to set up your thermostat on its four-level engineering menus:

1. Press Down/▽ and Up/△ to rotate through the menu items. The last item loops back to first item at the end of items in menu. Press Mode/ or Fan/ to enter a sub-menu item.
2. Press Down/▽ and Up/△ to change the setting in the sub-menu item. Press Mode/ or Fan/ to confirm the setting and return to menu item selection. Settings will not be changed unless you confirm the setting by pressing the Mode/ or Fan/ button.
3. To leave Engineering Mode, navigate back to the first level until (Exit) menu item appears and press Mode/ or Fan/ .

Check Date & Time	This menu may display: 1. Factory default time. 2. User setting time. 3. The message Clock is not set yet. One of the time zones may display in this interface: (EST) -5, (CST) -6, (MST) -7, (PST) -8, the four time zones of United States and (UTC) +8, the coordinated Universal Time
Set Date & Time	Follow these steps to set the clock date and time. 1. The four digits of the year will start to flash on the display. 2. Repeatedly to select the year, and then press Mode or Fan. 3. Press Up or Down to cycle through the years until the required year is displayed and leave it to activate. 4. Repeat step 2 to change your month > day > time > AM/PM > Time Zone > Daylight Saving Time. A check mark will appear when the setting is activated. **NOTE** • If you do not press any button for about five minutes while setting the clock, the current setting page will stay on the screen when waking up the screen. • You can also set time zone and turn daylight saving time on or off in the menu Set Time Zone and Daylight Saving Time respectively.
Set Time Zone	• Press Up or Down or to go through the time zones and press Mode or Fan to select your desired time zone. It will take three to four seconds to update the setting. A check mark will appear when the setting is activated. • Four time zone options: (EST) -5, (CST) -6, (MST) -7, (PST) -8 • If you have set the date and time in “Set Date & Time“ menu, then change the time zone in this menu, the set date and time will be automatically updated to the new time zone.
Daylight Savings Time	If you select Daylight Saving Time On or Daylight Saving Time Off, it will take three to four seconds to update the setting. A check mark will appear when the setting is activated.

Engineering Menus

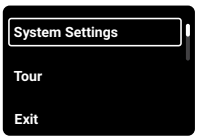
Filter Change Reminder	If no profile has been installed on your thermostat or Filter Change Reminder is disabled, this menu will not appear in the engineering mode menu.
Check Filter Change Time	The screen may display the days left or the filter change reminder. 1. The days remaining of seven days or above. 2. The days remaining (shown in red text) of the last six days or below. 3. The red message The filter change time has expired / Replace your filter immediately displays when time is out. The filter change reminder/ displays on the screen at the same time.
Reset Filter Change Time	Select Reset to restart the countdown of filter change time. The countdown days, namely filter change time, have been and can only be configured in the EC Tool Pro app.
About This Unit	About This Unit [Model number] ST962WN50 Firmware Version No. [Firmware version No. (E.g., W01B21)] Serial No. [Your thermostat's serial number (e.g., 12LA020000001)
PIN & Room Name	If a profile has been installed on your thermostat, it will display: About PIN & Room Name PIN [The six-digit password set in the profile (e.g., 666666)] Room Name [The room name set in the profile (e.g., Guestroom1)] If no profile has been installed on your thermostat, it will display: About PIN & Room Name PIN 000000 (the factory default password) Room Name UNKNOWN
Tour	If no operation is performed in five seconds, the system returns. Nothing will be saved during Tour mode.

Configuration via the Thermostat Menu

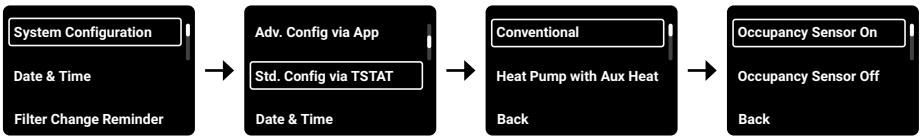
This Seasons thermostat has an onboard programming menu that will allow you to configure the thermostat for a PTAC-Conventional or PTAC-Heat Pump system as well as adjust the basic temperature setpoints. For access to all setpoints and features, use the EC Tool Pro App to create a custom profile for your system.

Note
To access the Engineering Menu after configuration is completed, press and hold Fan/ Down/ Up/ for 10 seconds. The onboard programming menu will allow you to configure PTAC-Conventional and PTAC-Heat Pump systems and their basic setpoints. For additional system support and access to all of the setpoints and features , use the EC Tool Pro app to create a custom profile for your HVAC system.

1. Turn on the power to your HVAC system. When the thermostat powers up, you will see the Main menu. Select System Settings by pressing the Mode/Fan button.

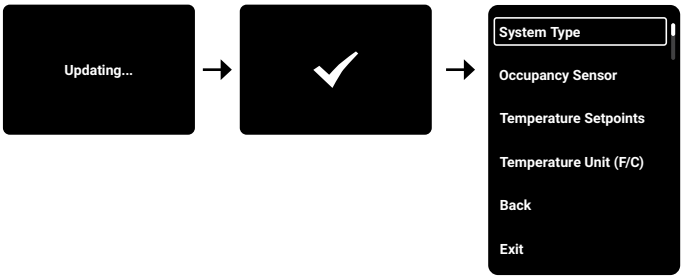


2. Then select System Configuration and choose Std. Config via TSTAT. You will then choose the system you have in your facility and then set the Occupancy Sensor to either on or off. If you choose to have the Occupancy Sensor on, you will then need to set the time, date, time zone, and daylight savings time.



Note
To verify your system type, review the product model number label. If your model number is SP__E_-__, select Conventional System. If SP__H _-__, select Heat Pump with Aux Heat System.

3. Once you are done with the settings, press the Mode/Fan button and you will see the thermostat updating. Once it has been updated, you can continue within settings or scroll down to the Exit button. Test your system to verify functionality and replace the cover.



Power Outages

When a temporary or extended power outage occurs or there is a power loss that affects the HVAC equipment, the thermostat display will turn off. Once power is restored to the system, the thermostat will automatically resume HVAC control based on the last known settings prior to the outage with a few possible exceptions:

Before Powering Off	After Powering On Again
	HVAC mode, fan mode, temperature unit and set temperature remain unchanged.
The schedule icon/ is on the screen.	The schedule icon/ is still on the screen.
The schedule held icon/ is on the screen.	The schedule held icon/ is still on the screen if the next schedule event hasn't begun yet.
An error alert with E01-E04 error code(s) displays on the thermostat screen.	The error alert is still there if the problem wasn't automatically fixed during the restart.

Before Powering Off	While Powering Off	After Powering On Again
The schedule icon/ is on the screen.		The schedule hold icon/ changes back to the schedule icon/ if the next scheduled event has been executed at its preset start time.
An error alert with E01-E04 error code(s) displays on the thermostat display.		The error alert is cleared from the display if the problem has been automatically fixed during the restart.
The thermostat is in override mode.		The thermostat exits override mode.
	A new profile is installed on the thermostat.	The new profile is activated and the thermostat settings are updated with the new profile.

Restore Factory Defaults

The thermostat can be reset to factory default. Resetting to factory default will remove all stored programs and parameters. Once the reset is complete, the thermostat must be reprogrammed before it will function again.

To perform a factory reset:

1. The thermostat must be connected to a 24v power source.
2. When your thermostat is on the home screen, press and hold Fan/, Down/ , and Up/ simultaneously for at least eight seconds to enter the Engineering Mode.
3. With the thermostat in Engineering Mode, press and hold Mode/ , Fan/ , Down/ , and Up/ simultaneously for eight seconds to restore the factory default settings.

After the reset is complete, the thermostat will return to the default engineering menu.

Operation

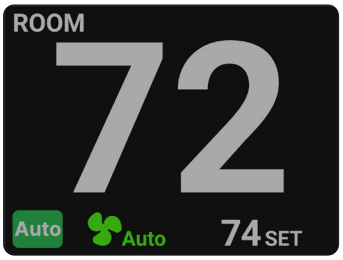
Wake up Screen

There are two types of idle screens. If Always-on display is enabled via the EC Tool Pro app, the thermostat's screen will go dim after eight seconds of idleness and the idle screen can show the current HVAC mode, fan mode, room temperature, and the set temperature.

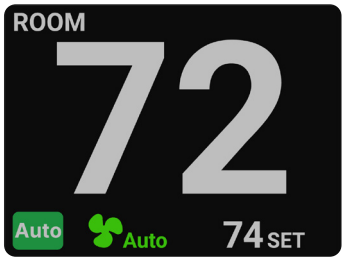
When the thermostat is c-wire powered and Always-on display is enabled via the EC Tool Pro app, the thermostat's screen will go dim after eight second of idleness. The idle screen will show the current HVAC mode, fan mode, room and set temperatures. If the thermostat is powered by AA batteries, then the display will turn off when not in use to preserve battery life.

There are three brightness levels for the dimmed display. Dimmed display brightness is set to level two by default. level three is the brightest, while level one is the dimmest. You can adjust the level of dimmed display brightness via the EC Tool Pro app.

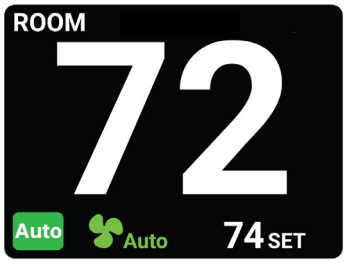
Levels of Dimmed Display Brightness



Level 1 (minimum)



Level 2 (default)



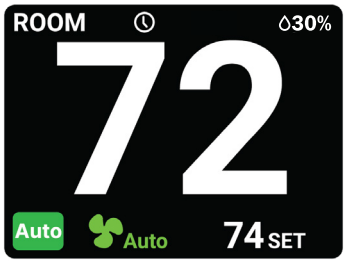
Level 3 (maximum)

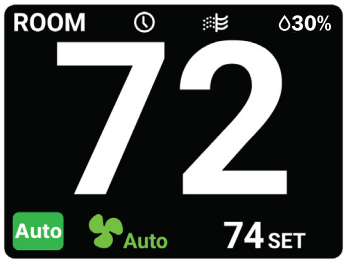
If the Always-on display is disabled (or when powered by AA batteries), the display will dim, then turn black after eight seconds of idleness.

To wake the thermostat screen from idle, press any of the four hard buttons (Mode, Fan, Down, or Up) on the thermostat.

From there, you can check the current HVAC mode, fan mode, room temperature, and the set temperature.

The humidity, schedule and filter change reminder features are disabled by default. If these three features are enabled via the EC Tool Pro app, the current room humidity and schedule icon will also be displayed on both the dimmed screen and awake screen, but the filter change reminder will only be displayed on the screen when your filter life is low and it's time to replace.

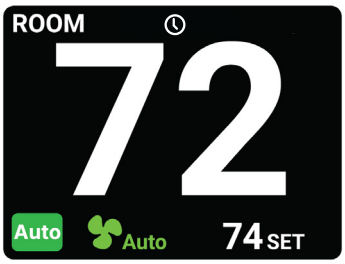




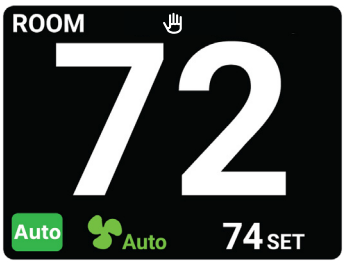
Note
If you press the up or down button to wake up the screen, the set temperature will go to the next available degree by +/-1°F or +/-0.5°C.

Schedule

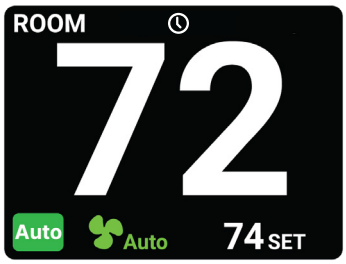
If a daily schedule has been programmed via the EC Tool Pro app, you will see a schedule icon displayed on the screen. Adjusting any settings will override the existing schedule and a hold icon will be displayed until the next scheduled event. You can exit the hold and return to your schedule at any time by pressing and holding the Fan button for three seconds.



Schedule Enabled



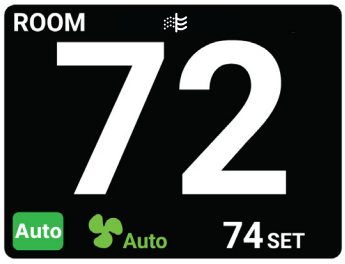
Schedule On Hold



Schedule Resumed

Filter Change Reminder

Filter change reminders are configured in the EC Tool Pro app and include run time options from 15 to 180 days. Once the HVAC system has run for this number of days, you will see a filter change reminder. After cleaning or replacing the filter, the system icon can be reset in the thermostat's engineering menu "Reset Filter Change Time". The filter change reminder will disappear until it's time to change your filter again.



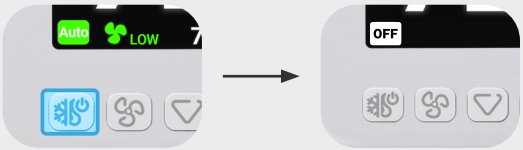
Set HVAC Mode

1. When the screen is awake, press Mode to cycle to the next available HVAC system mode.
2. Cycle through the modes until the required HVAC system mode is displayed and leave it to activate.

HVAC System Modes		
Auto	Auto	Auto mode (Auto-changeover) - The thermostat will switch the HVAC system mode (heat / cool) automatically after deadband limit is reached.
Heat		Thermostat set to only heat to the target temperature
Cool		Thermostat set to only cool to the target temperature
Off	OFF	HVAC system is turned off

Set HVAC Mode

Note
To quickly change the HVAC mode to Off mode, press and hold the Mode button for three seconds.



Set Fan Mode

1. When the screen is awake, press Fan to cycle to the next available fan mode.
2. Cycle through the modes until the required fan mode is displayed and leave it to activate.

Fan Modes in Auto, Heat, and Cool Modes

	Fan Mode	Fan Status
Fan modes available	Auto Auto	Fan cycles on/off with call for heat or cool.
	Low	Continuous low fan
	High Auto	Continuous high fan

Note
Available fan modes vary with fan speed settings and HVAC mode selection.

Fan Modes in Off Mode

	Fan Mode	Fan Status
Fan modes available	Off —	Fan is turned off.
	Low Low	Continuous low fan
	High High	Continuous high fan

Note
If you set the fan mode to Off, no icon will be displayed at the fan mode position on the screen.

Switch Temperature Unit Between °F and °C

When the screen is awake, press and hold up and down buttons at the same time for three seconds to switch to the opposite unit of temperature. If the screen had been displaying the default temperature unit °F, it will now display °C and vice-versa.

Adjust Set Temperature

When the screen is awake, press the up or down button to adjust the set temperature to the next available degree by +/-1°F or +/-0.5°C.

Set your desired temperature beyond range by override mode

The thermostat can be programmed to limit the maximum and minimum temperature settings that are available to occupants. This feature as well as the override timeout can be enabled or disabled as a parameter within the profile you used when programming the thermostat using the EC Tool Pro app.

When Temporary Override is enabled, occupants have the ability to temporarily override the minimum or maximum temperatures that have been defined via the EC Tool Pro app. To override the preset threshold, press the up or down button until the maximum temperature setting is reached, then press and hold the up or down button for three seconds. This will allow the occupant to override the current setting for the predefined period of time. Once the override time has expired, the system will automatically return to the current schedule or previous mode.

Set Temperature Range

	Cool	Auto / Heat
Available temperature range	49°F-89°F (9.5°C-31.5°C)	
Comfort point range	55°F-82°F (13°C-28°C)	
Setpoint range	Maximum setpoint range: Comfort point +1°F to 89°F (+0.5°C to 31.5°C) Minimum setpoint range: Comfort point -1°F to 49°F (-0.5°C to 9.5°C)	
Set temperature range in normal operation	Minimum setpoint - Maximum setpoint	
Override temperature range	Press Up button: Maximum setpoint +1°F to 89°F (+0.5°C to 31.5°C) Press Down button: Minimum setpoint -1°F to 49°F (-0.5°C to 9.5°C)	
Comfort point (default)	74°F (23.5°C)	
Setpoints (default)	Maximum: 77°F (25°C) Minimum: 64°F (18°C)	Maximum: 80°F (26.5°C) Minimum: 65°F (18.5°C)
Normal operation (default)	64°F-77°F (18°C-25°C)	65°F-80°F (18.5°C-26.5°C)
Override mode (default)	Press Up button: 78°F-89°F (25.5°C-31.5°C) Press Down button: 49°F-63°F (9.5°C-17.5°C)	Press Up button: 81°F-89°F (27°C-31.5°C) Press Down button: 49°F-64°F (9.5°C-18°C)

Occupancy Sensor

Unoccupied

If the time since last presence detection exceeds the minimum Occupancy threshold setting (30-120 minutes), the system predicts that the room is no longer occupied and your predefined Unoccupied Heat/Cool setpoints (or set-back temperatures) take effect. Once a room is considered unoccupied, the thermostat allows the ambient room temperature to drift to the Unoccupied minimum or maximum temperature setpoint. The thermostat will return to the default mode and comfort setpoint once presence is detected again.

Occupied

The guest room is considered “occupied” when the occupancy sensor detects movement. While the guest room is “occupied”, the room temperature will be maintained according to the mode and temperature set point selected by the user.

Enable/Disable Sensor

Enter Engineering mode by pressing and holding ▽ △ for eight seconds.

1. Enter System Setting by pressing or button.

2. Then select System Configuration by pressing or button.

3. Press ▽ then select Std. Config via TSTAT by pressing or button.

4. Press ▽ button and then select Occupancy Sensor by pressing or button.

5. Select Enable/Disable Sensor by pressing or button.

6. Select Occupancy Sensor On by pressing or button. To turn Occupancy Sensor off, press or button. After your selection, the thermostat will display Updating... for four seconds and then a check mark to confirm your selection. Either press any button or wait one second for the thermostat to time out and return to the Occupancy Sensor menu item.

7. To exit Engineering mode, press ▽ and then select Exit by pressing or button.

Restore Profile Defaults

Press and hold Mode and Up buttons at the same time for eight seconds to restore the default settings of the profile installed on your thermostat, which was configured via the EC Tool Pro app.

Maintenance

Your thermostat contains sophisticated electronic parts, so it must be treated with care.

Avoid rough treatment

Place the thermostat down gently. Save the original packing materials to protect your thermostat if you ever need to ship it.

Avoid water

Your thermostat can be damaged if it gets wet. Do not use the thermostat outdoors in the rain or handle it with wet hands. Do not install thermostat near a sink, bathtub, or display.

Electrical storms

Electrical storms can sometimes cause power surges harmful to electronic equipment. For your own safety, take caution when using electrical appliances during storms.

Cleaning your thermostat

Your thermostat has a durable plastic casing that should retain its luster for many years. Clean it only with a soft cloth slightly dampened.