

X2S Programmable Thermostat

RTH2CWF / RTHC2CWF / RTH2SMC

EN Installation and User Guide



Features 3

Compatibility 3

Mounting and Wiring 4

Setup with Resideo Connect App 16

Configuration 17

How to use your Resideo Connect App 21

System Operation 22

Troubleshooting and Support 27

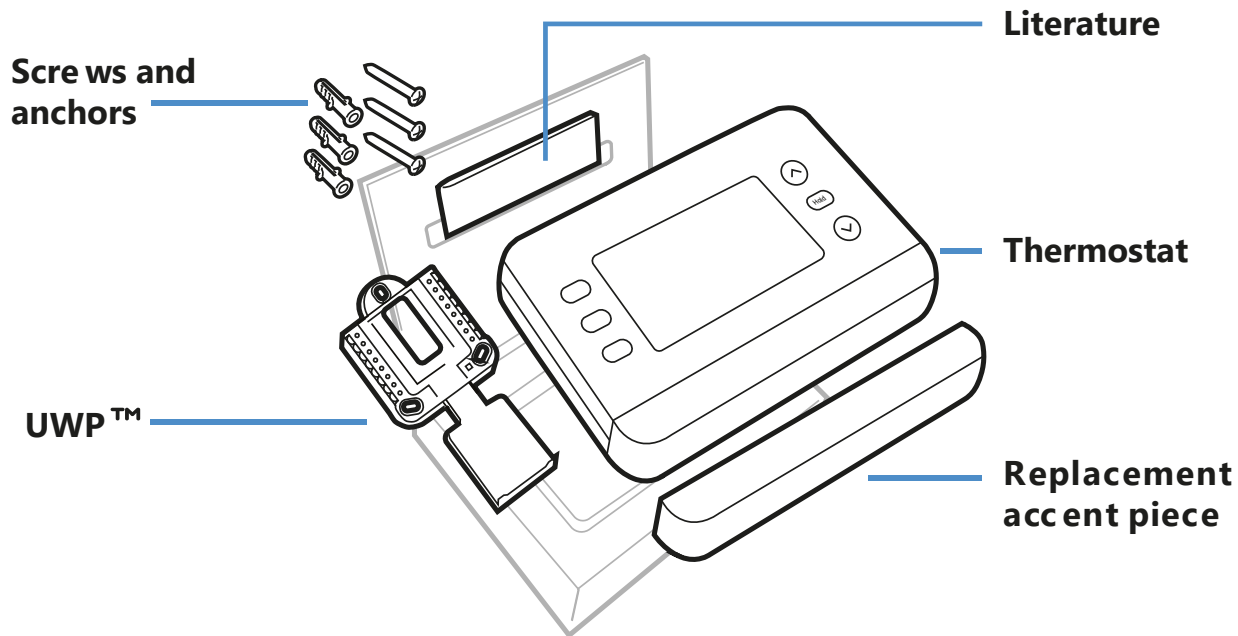
Frequently Asked Questions 29

Regulatory Information 30

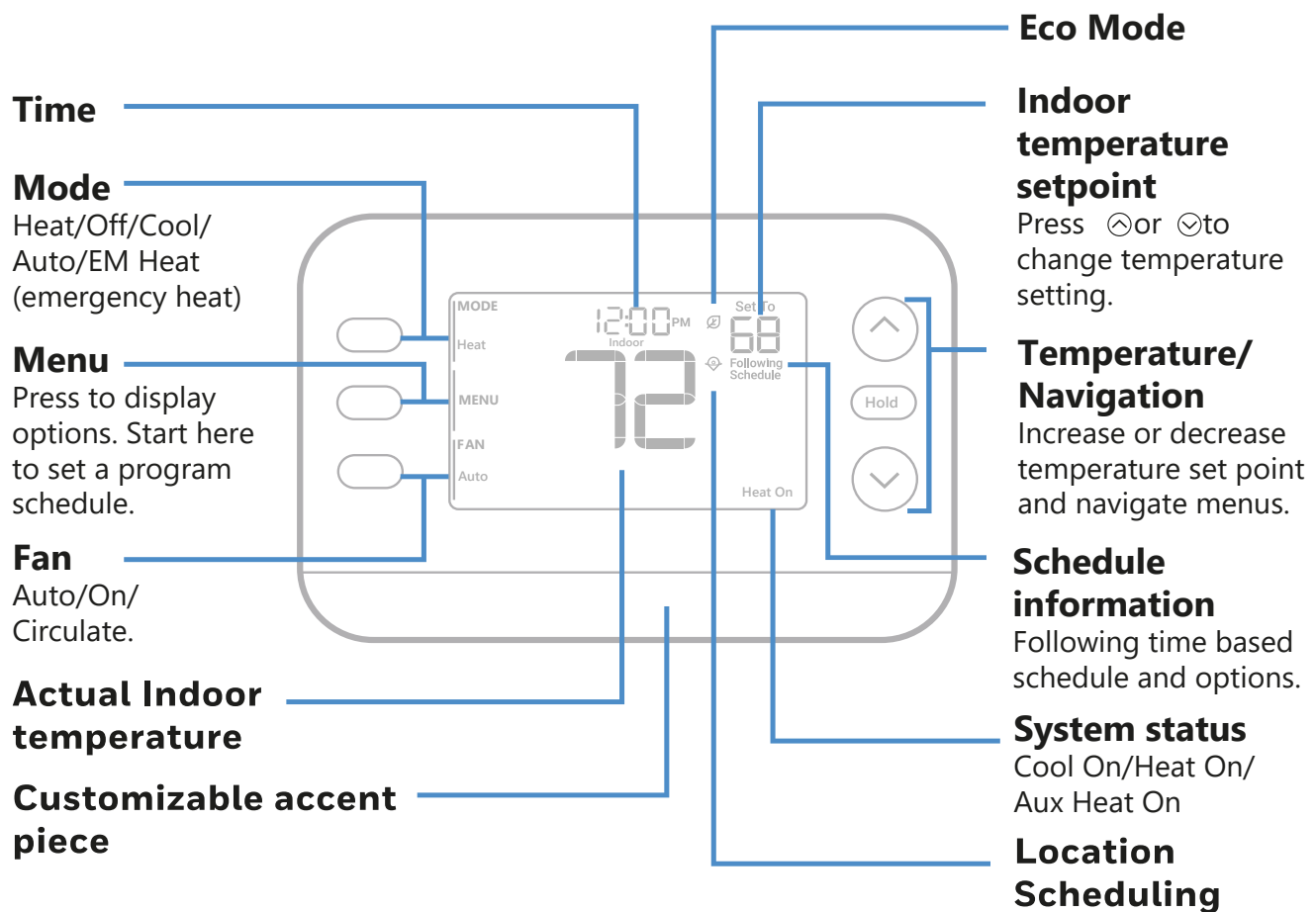


READ AND SAVE THESE INSTRUCTIONS

Package Includes



Thermostat Overview



Features

Get the most from the X2S Smart Thermostat.

Programming Options

1. **Location-Based Scheduling (Auto Away)** – The thermostat uses your smartphone’s location to know when you’re away, and saves you energy. Through geofence technology, it senses your return and helps make you comfortable upon arrival. You can always manually change your preset Home and Away temperature either on the thermostat or on the Resideo Connect App.
2. **Smart scheduling** – Use a combination of geofencing and time scheduling to fit your busy, active lifestyle.
3. **Time-Based scheduling** – Program your thermostat for one week; each day (each day is a different schedule); Mon-Fri, Sat, Sun; or Mon-Fri, Sat-Sun. All days with four adjustable periods per day.

Additional Smart Features

1. **Smart Alerts** – Push notifications remind you of filter changes and warn you of extreme indoor temperatures.
2. **Smart Response** – Learns your heating and cooling system to deliver the optimal temperature at the right time.
3. **Auto Change From Heat to Cool** – Automatically determine if your home needs heating or cooling to provide maximum comfort.

Compatibility

For indoor use only

Compatible with most heating, cooling, and heat pump systems

Required: 24 VAC power (“C” wire)

Does not work with electric baseboard heat (120–240V) 3

Does not support input (S terminals) for indoor and outdoor sensors

Does not support relay (U terminals)

Android or iOS smartphone, tablet, or device

Compatible with a 2.4 GHz or 5 GHz WiFi network

Mounting and Wiring

Tools you will need:

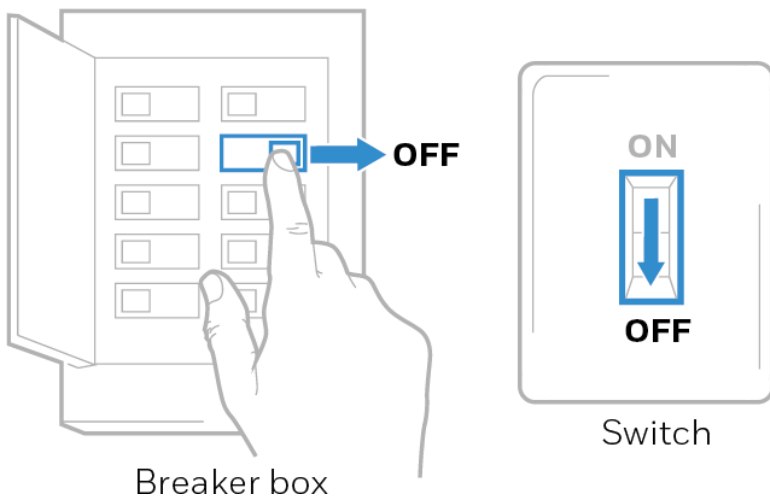
- Phillips screwdriver
- Small flat head screwdriver
- Pencil
- Level

Tools you may need:

- Wire stripper
- Needle-nose pliers
- Drill and drill bit

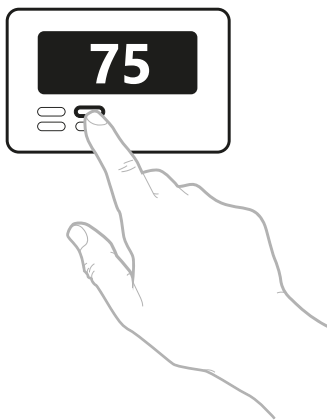
Removing the Old Thermostat

1. **Turn power OFF.** To protect yourself and your equipment, turn off the power at the breaker box or switch that controls your heating/cooling system. **Some systems may have separate heating and cooling breakers.**



2. **Check that your system is off.**

- a. Change the temperature on your old thermostat to be above room temperature in heat mode or below it in cool mode.
- b. If you don't hear the system turn on within 5 minutes, the power is off.

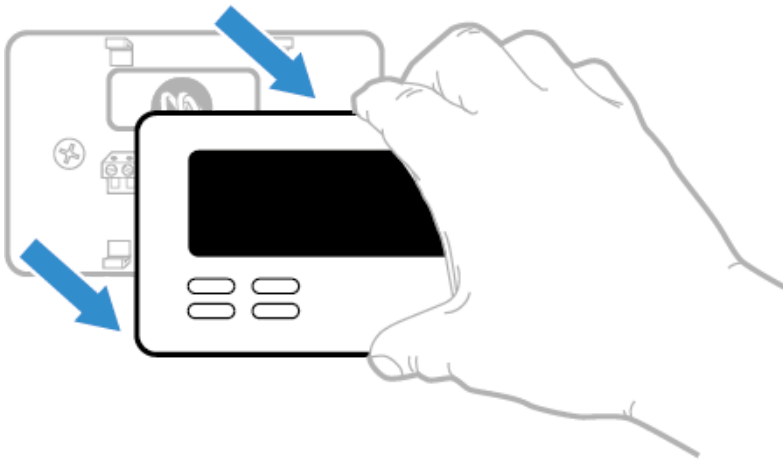


NOTE:

If you have a digital thermostat that has a blank display, skip this step.

3. **Remove the old thermostat's faceplate.** On most thermostats, you can take off the faceplate by grasping and gently pulling. Some thermostats may have screws, buttons, or clasps.

Do not remove any wires from your thermostat at this time!

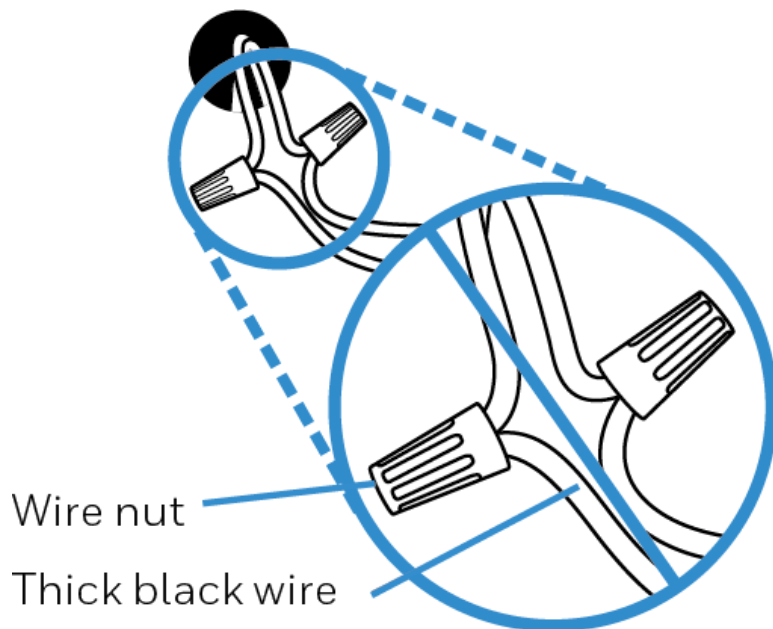


4. **Make sure there are no 120/240V wires.**

Do you have thick black wires with wire nuts?

Is your thermostat 120V or higher?

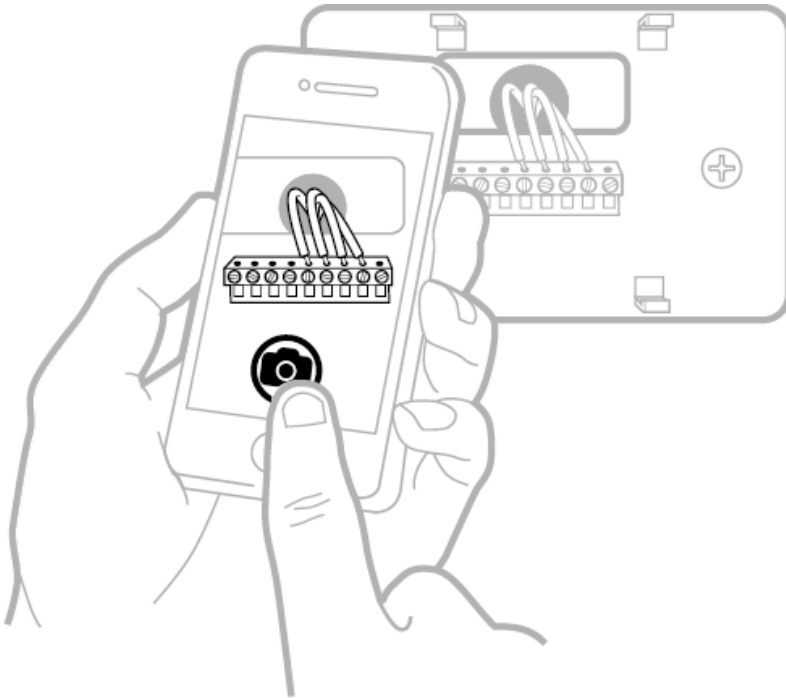
If you answered yes to either of these questions, you have a line voltage system and the thermostat will not work.



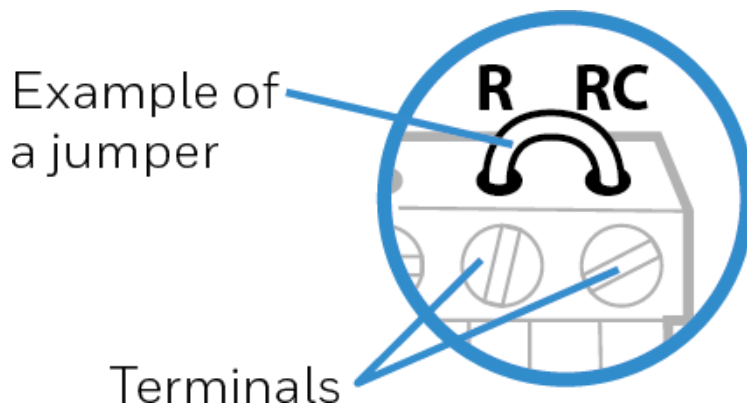
5. **Take a picture of how your wiring looks right now.** Be sure to include the letters next to the terminals where the wires are inserted. This will be a helpful reference when wiring your thermostat.

NOTE:

If the color of your wires has faded or if 2 terminals have the same wire color, use the wire labels provided in the package to label each wire.



6. **Make note of any jumpers.** A jumper connects one terminal to another terminal. It may look like a small staple or even a colored wire.



7. Make note of whether you have wires in the following terminals. Do not include jumpers as a part of your count. This thermostat does not need jumpers.

Terminal	Wire Color
☐ R	_____
☐ RH	_____
☐ Rc	_____

8. Write down the color of the wires. Check mark the wires that are connected to terminals. Next to the check mark, write down the color of the wire. Do not include jumpers as a part of your count. Check all that apply (Not all will apply):

Terminal	Wire Color	Terminal	Wire Color
☐ Y	_____	☐ A or L / A	_____
☐ Y2	_____	☐ O/B	_____
☐ G	_____	☐ W2 or AUX	_____
☐ C	Required	☐ E	_____
		☐ W	_____
		☐ K	_____

IMPORTANT:

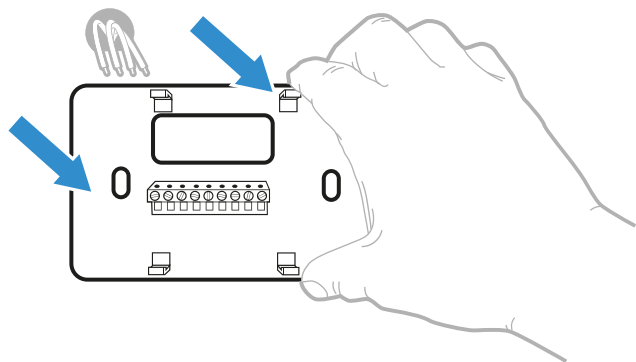
S and U terminals are not supported with this thermostat.

If there are wires in terminals that are not listed, you will need additional wiring support. Visit honeywellhome.com to find out if the thermostat will work for you.

9. **Disconnect the wires and remove the old wall plate.** Use a screwdriver to release wires from terminals. Then, use a wire label to identify each wire as it's disconnected. The letter on the wire label should match the letter on the terminal.

NOTE:

To prevent wires from falling back into the wall, wrap the wires around a pencil.



Wiring Labels

Apply these wiring labels to each wire with the appropriate terminal designation as you remove it from the existing thermostat.

Étiquettes de fils

Lorsque vous retirez les fils des bornes du thermostat existant, collez ces étiquettes sur chaque fil correspondant à la lettre de la borne.

Rótulos para los cables

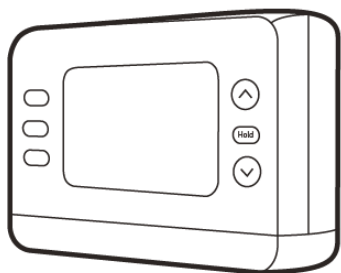
Coloque estos rótulos, con la designación de las terminales, en cada cable al remover los cables del thermostat actual.

B	B	Y2	Y2	C	C	E	E	F	F
G	G	H	H	L	L	O	O	P	P
R	R	RC	RC	RH	RH	T	T	U	U
V/VR	V/VR	W	W	W1	W1	W2	W2	W3	W3
X	X	X1	X1	X2	X2	Y	Y	Y1	Y1

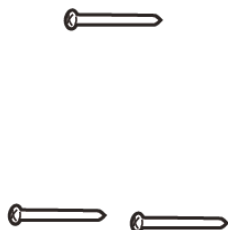
69-0823EFS • 5-03 • Printed in U.S.A.

www.resideo.com

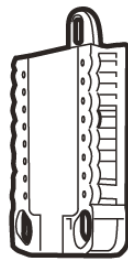
Mounting your X2S Thermostat



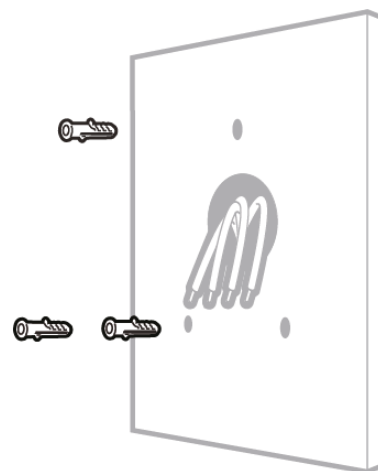
Thermostat



Screws

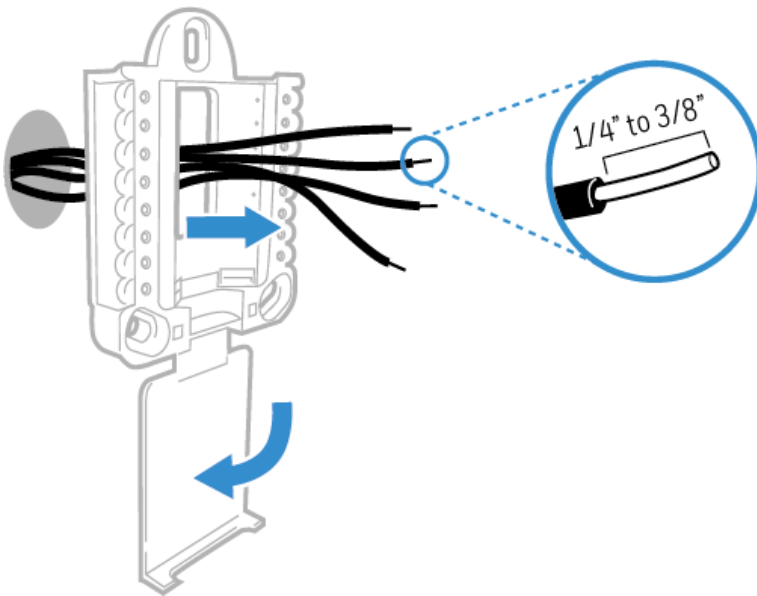


UWP Wall
Plate

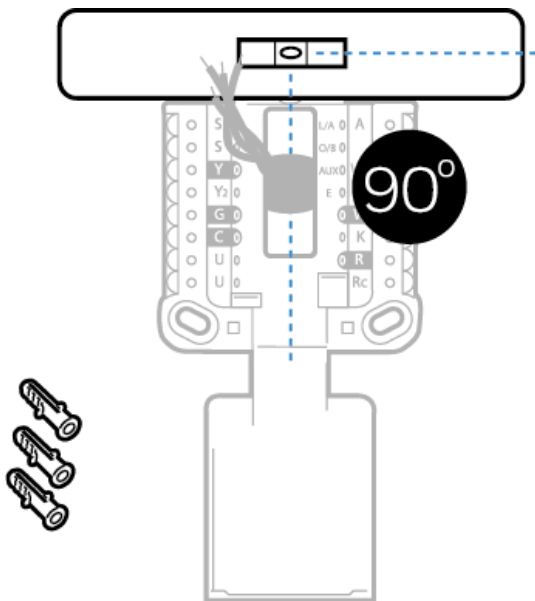


Anchors Wall

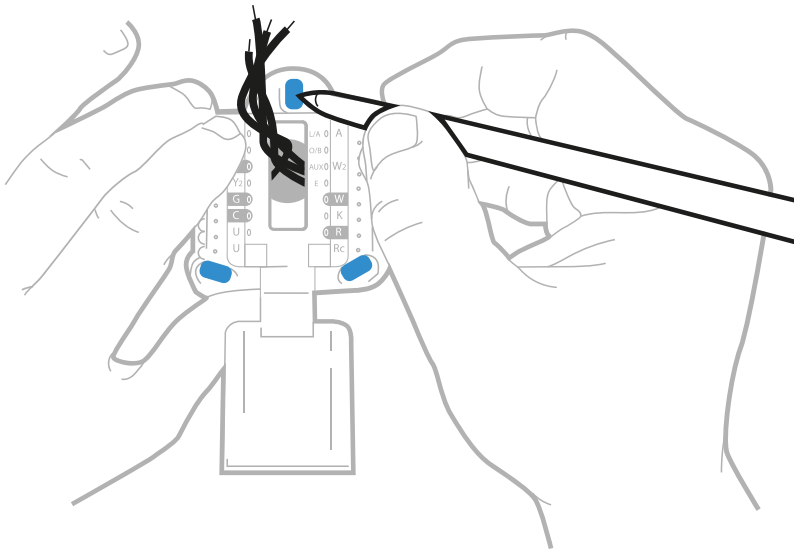
1. **Bundle and insert wires through the UWP Wall Plate.** Pull open the wall plate and insert the bundle of wires through the back. Make sure at least 1/4 inch of each wire's metal conductor is exposed for easy insertion into the wire terminal.



2. **Position the wall plate.** Center and level the wall plate over the hole in the wall.



3. **Mark the holes for the fasteners.** Use wall plate as a template.



4. **Drill holes for the anchors.** Use a 3/16th inch drill bit.
5. **Insert the wall anchors.** Use a hammer to carefully tap the anchors into the holes until flush with the wall.

Wiring

WARNING

IMPROPER WIRING OR CONFIGURING OF YOUR THERMOSTAT CAN CAUSE UNINTENDED OPERATION OF YOUR HVAC SYSTEM WHICH COULD LEAD TO PROPERTY DAMAGE, INJURY, INCLUDING DEATH. IF YOU ARE UNSURE OF WHAT TYPE OF SYSTEM YOU HAVE, REFER TO YOUR HEATING/COOLING SYSTEM EQUIPMENT LITERATURE OR CALL AN HVAC PROFESSIONAL.

The UWP Wall Plate you mounted has more terminals than you will need. Insert the matched wires you've already labeled into the terminal with same letter on the Wall Plate.

If the labels do not match exactly, review the alternate wiring sections below to find the diagram for your system type.

NOTE:

If you have difficulty inserting wires, you may have to press down the terminal push button next to the corresponding terminal.

1. **Set R-switch position and insert R-wire or wires.** Set the R-switch up or down based on your wiring notes in [Step 7](#) of the section Removing the Old Thermostat.

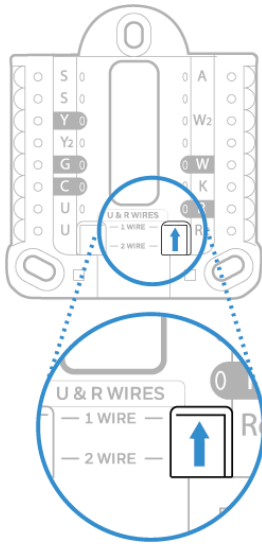
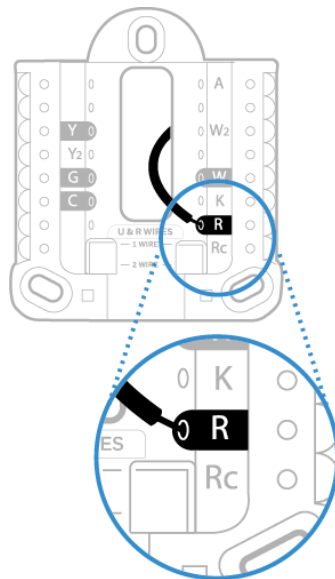
Insert wires into the inner holes of the terminals on the UWP. The tabs will stay down once the wire is inserted.

NOTE:

Alternate wiring options are shown on the following pages.

If you have 1 R-wire (R,Rh, or Rc)

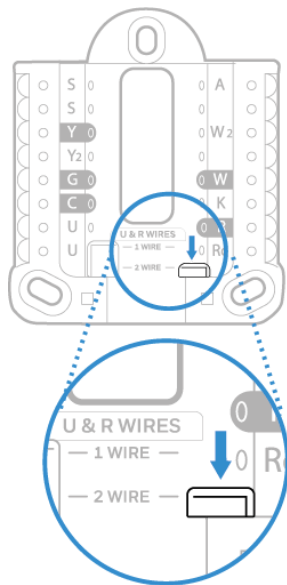
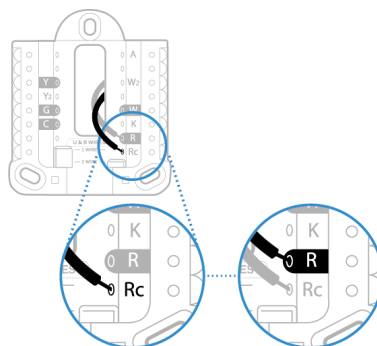
1. Set R-switch to the **up** position.
2. Insert your **R-wire (R, Rh or Rc)** into **R-terminal**.



or

If you have 2 R-wires (R or Rh, and Rc)

1. Set R-switch to the **down** position.
2. Insert your **Rc wire** into **Rc-terminal**.
3. Insert your **R or Rh wire** into **R-Terminal**.



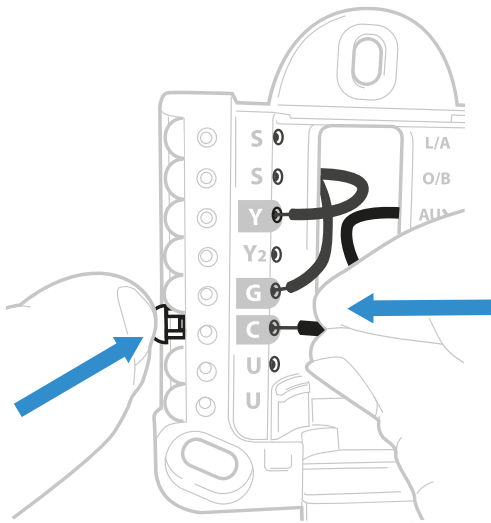
2. **Connect wires to the UWP.** Refer to the notes you recorded on the chart during removal.

Press down on the tabs to put the wires into the inner holes of their corresponding terminals on the UWP (one wire per terminal) until it is firmly in place.

Gently tug on the wires to verify that they are secure.

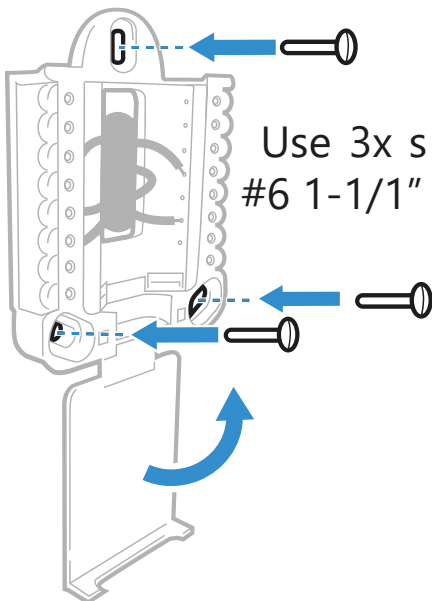
NOTE:

If you need to release the wires again, push down the terminal tabs on the sides of the UWP.



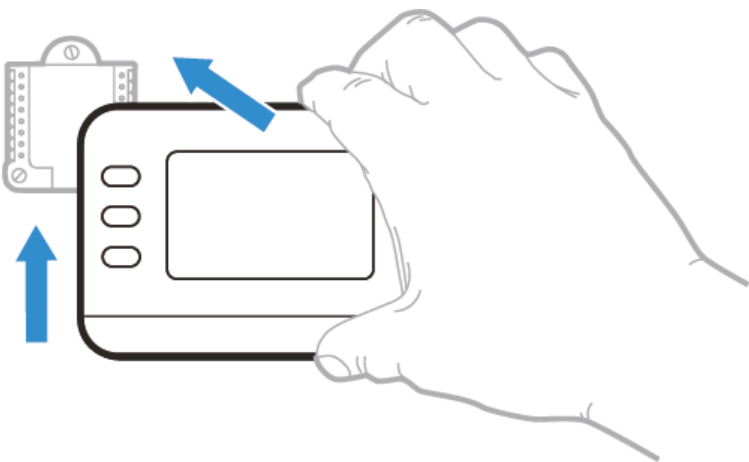
This wiring is just
and example;
yours may vary

3. **Confirm wiring matches snapshot.** Confirm wiring matches terminals from the photo you took during removal.
4. **Mount the UWP and close the door.** Mount the UWP using the provided screws. Install all three screws for a secure fit on your wall. Close the door after you're finished.

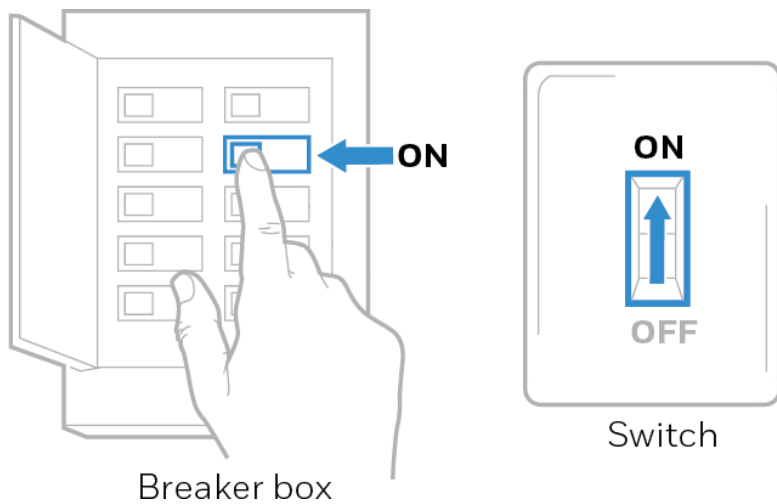


Use 3x supplied
#6 1-1/1" screws

5. **Attach the thermostat.** Align the thermostat onto the UWP and firmly snap it into place.



6. **Turn the power ON.** Turn on the power at the breaker box or switch that controls the heating/cooling system.



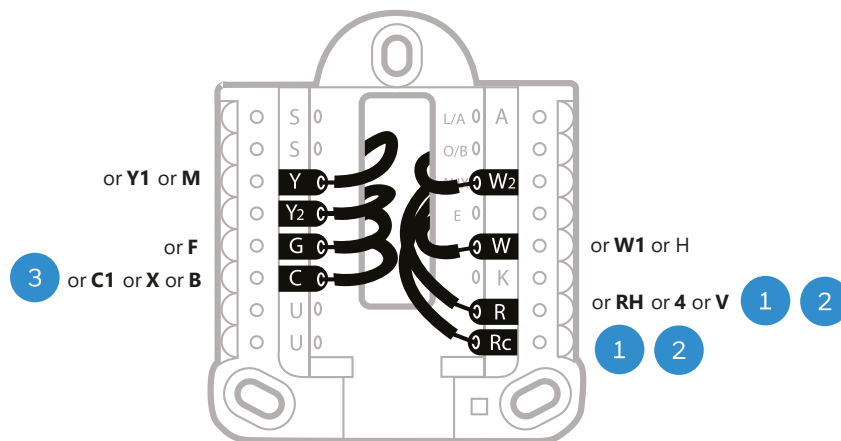
7. **Return to the thermostat.** Confirm the screen shows **SETUP**. If it does, either select **USING APP** and continue to [Setup with Resideo Connect App](#) or select **ON DEVICE** and continue to [Configuration](#).

Alternate Wiring for Conventional Systems

If labels do not match terminals, connect wires as shown below (see notes below).

WIRING NOTES:

1. If you must connect both **R** and **Rc** wires, set the **R Slider Tab** to the **down** position (2 wires).
2. If your old thermostat had both **R** and **RH** wires, set the **R Slider Tab** to the **down** position (2 wires). Then connect the **R** wire to the **Rc** terminal, and the **RH** wire to the **R** terminal.
3. If your old thermostat had only 1 **C** or **C1** wire, connect it to the **C** terminal. If your old thermostat had 2 **C** or **C1** wires, call support for assistance.

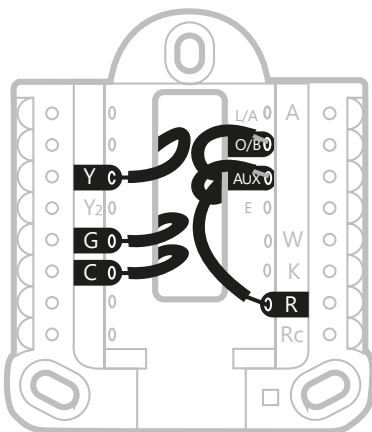


Heat Pump Wiring

1. Match each labeled wire with same letter on new thermostat.
2. Insert the wires into the matching terminal.

NOTE:

If you have difficulty inserting wires, you may have to press down the terminal push button next to the corresponding terminal. If the labels do not match the letters on the thermostat, see the diagram above.

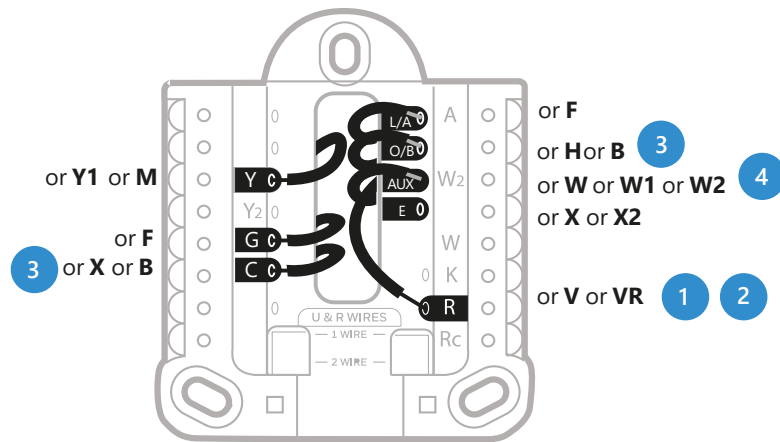


Alternate Wiring for Heat Pumps

1. Keep the **R Slider Tab** in the **up** position (1 wire).
2. If your old thermostat had both **V** and **VR** wires, **stop now** and contact a qualified contractor for help.
3. If your old thermostat had separate **O** and **B** wires, attach the **B** wire to the **C** terminal. If another wire is attached to the **C** terminal, **stop now** and contact a qualified contractor for help.
4. If your old thermostat had **Y1**, **W1** and **W2** wires, **stop now** and contact a qualified contractor for help.

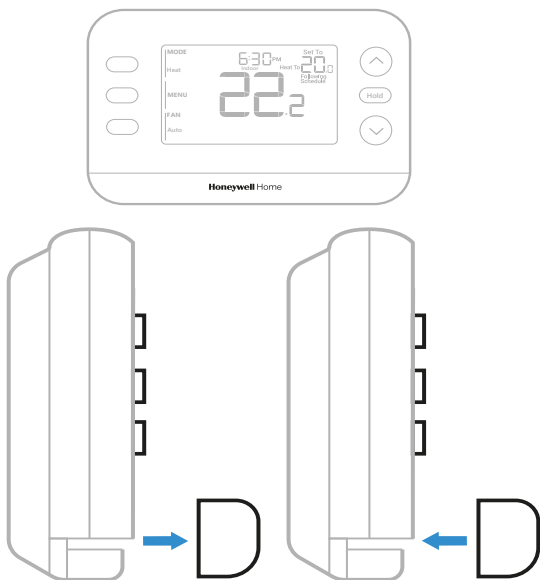
IMPORTANT:

Do **NOT** use **W** for heat pump applications. Auxiliary heat must wire to **AUX** or **E**.



Accent Piece Replacement

One white and one grey accent piece are provided with the X2S thermostats to accommodate different user preferences.



To replace the accent piece, pull it away from the thermostat...

...then snap the new one on.

Setup with Resideo Connect App

Start setup with the app. Touch **USING APP** on thermostat.

Your thermostat is ready to be configured using the Resideo Connect App.

- A. [Download the Resideo Connect App](#) from the App Store or Google Play.

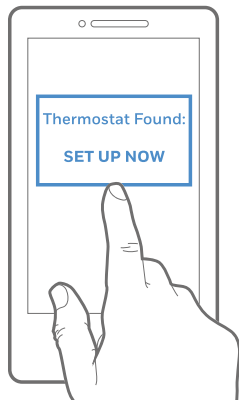


- B. Open the app. Your thermostat should appear under thermostat found. Tap **SET UP NOW** as shown below to continue. If your thermostat doesn't appear, create an account (if necessary), or sign in to your Resideo Connect App account. Then select the **X2Sthermostat** to install.
- C. The app will walk you through the rest of setup.

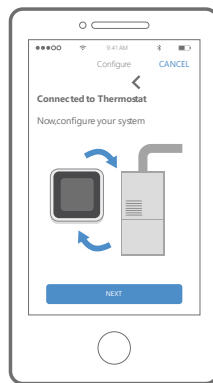
A



B



C



Configuration

Set Time and Date

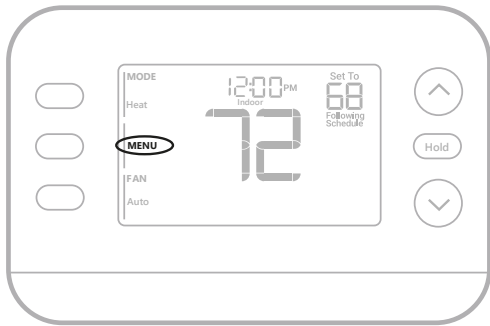
During installation the thermostat will already have the year flashing once you select **ON DEVICE**.

NOTE:

Time and date are set automatically when the customer registers the thermostat to a Resideo Connect App account.

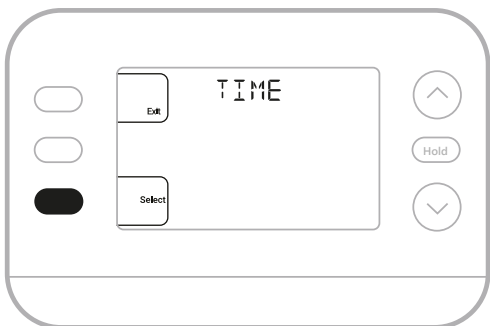
Time

1. Press **MENU** on the thermostat.
2. Press **^** or **v** to go to **TIME** and press **SELECT**.
3. Press **^** or **v** to choose 12 or 24 hour clock format and press **NEXT**.
4. Press **^** or **v** to adjust the hour and press **NEXT**.
5. Press **^** or **v** to adjust the minute and press **SAVE & EXIT**.



Date

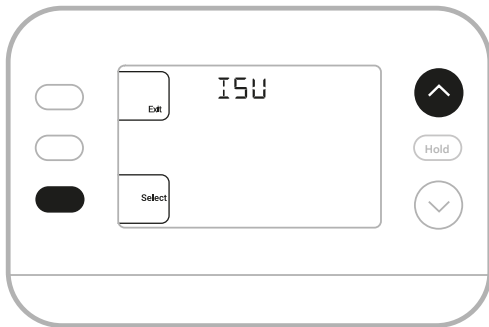
1. Press **MENU** on the thermostat.
2. Press **^** or **v** to go to **DATE** and press **SELECT**.
3. Press **^** or **v** to choose **YEAR** and press **NEXT**.
4. Press **^** or **v** to choose **MONTH** and press **NEXT**.
5. Press **^** or **v** to choose **DATE** and press **SAVE & EXIT**.



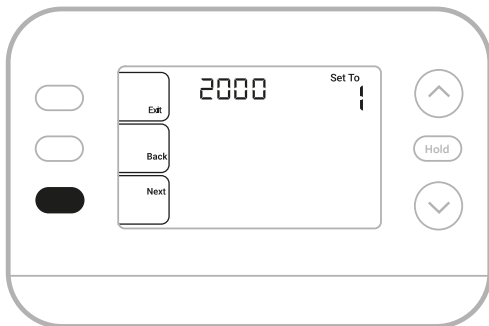
System Setup

On initial setup, the thermostat will enter the ISU menu after setting the time and date. If entering the ISU menu after initial setup, follow the steps below:

1. Press and **hold** the bottom left button and Up arrow  button for 5 seconds to access the **INSTALLER SETUP**.



2. The display shows the ISU number on the left and the ISU setting on the right. When an ISU number is displayed, press  or  to change the setting for that ISU.



3. After choosing the correct setting for an ISU, press **NEXT** to advance to the next ISU setting.
4. To finish setup, press the **SAVE & EXIT** button; this will save your settings and return to the Home screen.

Installer Setup Options (ISU)

NOTE:

Depending on system settings, not all options may be available.

WARNING

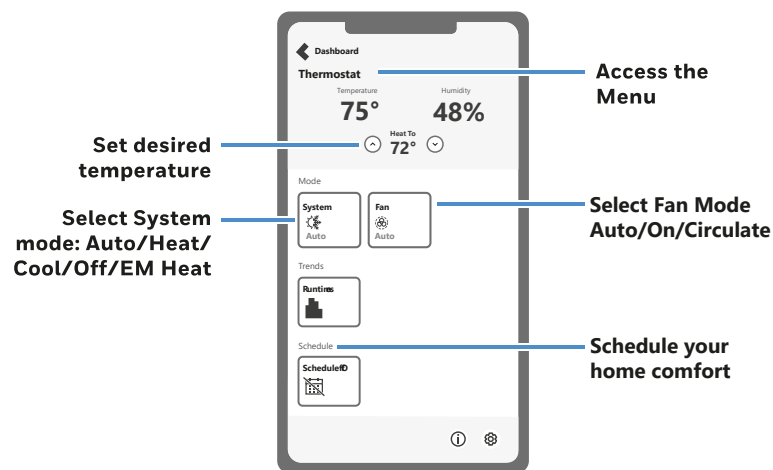
IMPROPER WIRING OR CONFIGURING OF YOUR THERMOSTAT CAN CAUSE UNINTENDED OPERATION OF YOUR HVAC SYSTEM WHICH COULD LEAD TO PROPERTY DAMAGE, INJURY, INCLUDING DEATH. IF YOU ARE UNSURE OF WHAT TYPE OF SYSTEM YOU HAVE, REFER TO YOUR HEATING/COOLING SYSTEM EQUIPMENT LITERATURE OR CALL AN HVAC PROFESSIONAL.

ISU	ISU Name	ISU Options (factory default in bold)	
1040	Scheduling Options (If you do not wish to set a schedule, use the default setting, then enter the Schedule Menu after completing setup and select Off)	1 = 1 week (all days the same) 2 = 5-2 Programmable (separate weekdays and weekend) 3 = 5-1-1 Programmable (separate Saturday and Sunday) 4 = 7-Day Programmable (each day separate)	
1050	Temperature Indication Scale	F = Fahrenheit	C = Celsius (Default varies by model)
2000	Heating System Type	1 = Conventional Forced Air Heat 2 = Heat Pump	3 = Radiant Heat (Boiler) 5 = None (Cool Only)
2010	Heating Equipment Type	<i>Conventional Forced Air Heat:</i> 1 = Standard Efficiency Gas Forced Air 2 = High Efficiency Gas Forced Air 3 = Oil Forced Air 4 = Electric Forced Air	5 = Hot Water Fan Coil (ISU 2010 not shown when 2000 = Heat Pump) <i>Radiant Heat:</i> 9 = Hot Water Radiant Heat 12 = Steam
2060	Reversing Valve Polarity	0 = 0 (O/B on Cool. 0 wire is connected to the O/B terminal and controls cooling.) 1 = B (O/B on Heat. B wire is connected to the O/B terminal and controls heat.) The literature that came with your heat pump equipment should indicate whether the reversing valve is energized in Heat or Cool mode.	
2070	Cool / Compressor Stages	0, 1 , 2 Select the number of Stages. For heat pumps, only 1 stage is supported.	

ISU	ISU Name	ISU Options (factory default in bold)	
2071	Heat / Backup Heat Stages	Heat Stages: 1 , 2 Backup Heat Stages: 0, 1	
2180	Aux Backup Heat Type (for Heat Pump Systems)	31=Electric Forced Air (This thermostat only supports electric backup heat. If your heat pump uses a gas or oil backup heat source, this thermostat should not be used.)	
3000	Auto Changeover	0 = Hidden (Manual only) 1 = Enabled (Automatic available. In auto mode, the thermostat automatically switches between heating and cooling to maintain the desired indoor temperature. This option is not recommended if the outdoor temperature often stays below 50F [10C] during winter months.)	
4090	Smart Response	0=No 1=Yes (Smart Response is a comfort setting. Heating or cooling equipment will turn on earlier, ensuring the indoor temperature will match the setpoint at the scheduled time.)	
4103	Minimum Heat Setpoint	32°F to 50°F Default 40°F 0°C to 10.0°C Default 4.5 °C Do not set this lower than 40F/4.5C unless this is installed in a location where pipes are not at risk of freezing	
7110	Air Filter Replacement Reminder (Run time only counts the time that Heat, Cool or Fan are running)	0 = Off 1 = 10 Run Time Days 2 = 20 Run Time Days 3 = 30 Run Time Days 4 = 45 Run Time Days 5 = 60 Run Time Days 6 = 90 Run Time Days 7 = 120 Run Time Days 8 = 150 Run Time Days 9 = 30 Calendar Days	10 =45 Calendar Days 11 =60 Calendar Days 12 =75 Calendar Days 13 =3 Calendar Months 14 =4 Calendar Months 15 =5 Calendar Months 16 =6 Calendar Months 17 =9 Calendar Months 18 =12 Calendar Months 19 =15 Calendar Months
14003	Backlighting	0 = On Demand 1 = Continuous	
14004	Backlight brightness	1 - 5 (Only displayed if Continuous Backlight selected.)	
14005	Idle screen selection	0 - Minimum Information shown 1 - Setpoint shown on idle screen	

ISU	ISU Name	ISU Options (factory default in bold)
		2 - Maximum display information shown
14006	Idle screen message center (Only available if Settings 0 or 1 are selected in 14005).	1 - Time 2 - Outdoor Temp* 3 - Outdoor Humidity* 4 - Indoor Humidity *These settings are only shown when thermostat is registered to the app.
14007	Home screen message center	1 - Time 2 - Outdoor Temp* 3 - Outdoor Humidity* 4 - Indoor Humidity *These settings are only shown when thermostat is registered to the app.
14010	Clock format	12/24
14015	Daylight Saving Time	0=Off 1=On

How to use your Resideo Connect App



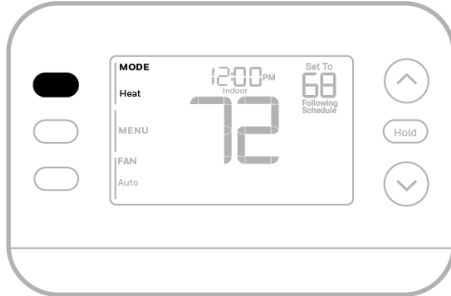
Interested in more Resideo products? Visit honeywellhome.com to learn about all available products connected by the Resideo Connect App(app is regularly enhanced and may change).

System Operation

Settings

1. Press the **MODE** button to cycle to the next available System mode.
2. Cycle through the modes until the desired System mode is displayed.

Available System modes vary by model and system settings.



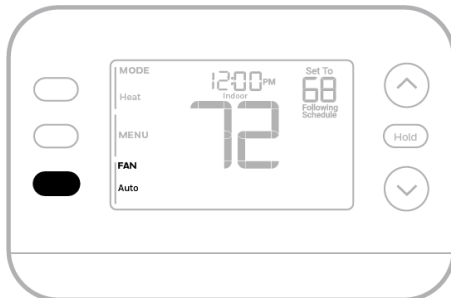
System modes:

- **AUTO**
- **HEAT**
- **COOL**
- **EM HEAT**
- **OFF**

Fan Operation Settings

1. Press the **FAN** button to cycle to the next available Fan mode.
2. Cycle through the modes until the desired Fan mode is displayed.

Available Fan modes vary with system settings.



Fan modes:

- **AUTO**: Fan runs only when the heating or cooling system is on.
- **ON**: Fan is always on.
- **CIRC**: Fan runs about 33% of the time to circulate air.

Program Schedule

You can program four time periods each day, with different settings for weekdays and weekends. We recommend using the presets shown in the table at right; these presets are designed to reduce your heating/cooling expenses.

WAKE: Set to the time you wake up and your desired temperature during the morning until you leave for the day.

AWAY: Set to the time you leave home and your desired temperature while you are away (usually an energy-saving temperature).

HOME: Set to the time you return home and your desired evening temperature until bedtime.

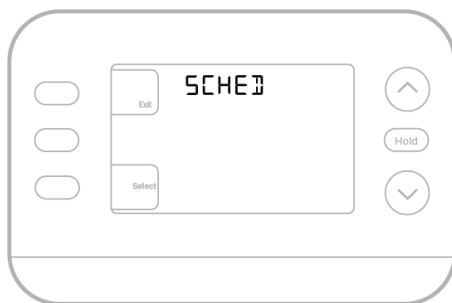
SLEEP: Set to your bedtime and your desired overnight temperature (usually an energy-saving temperature).

	Heat	Cool
Wake (6:00 am)	70°	78°
Awake (8:00 am)	62°	85°
Home (6:00 pm)	70°	78°
Sleep (10:00 pm)	62°	82°

Fahrenheit Deg.

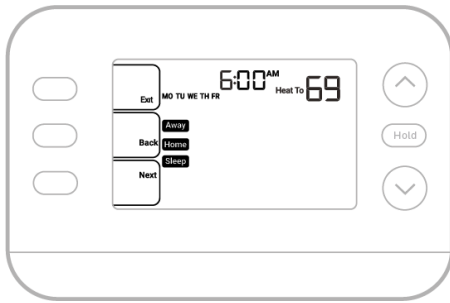
Adjusting Program Schedules

1. Press **MENU**. Press $\wedge$ or $\vee$ until **SCHED** is displayed.



2. A square appears around **ON** or **OFF** in the display. If you want to use a schedule, press $\wedge$ or $\vee$ to select **ON**. Press **SELECT** to edit the schedule or press **EXIT** to exit the menu.
3. If editing the schedule, press **SELECT** to edit the day or days flashing in the display.
4. The word *Wake* should be flashing. Press **NEXT**. Press $\wedge$ or $\vee$ to turn this schedule period on or off. Note that selecting **OFF** will disable this schedule period. Press **NEXT**.
5. If the schedule period was set to **ON**, the time will be flashing. Press $\wedge$ or $\vee$ to adjust the time for this period. Press **NEXT**.
6. The Heat setpoint will be flashing. Press $\wedge$ or $\vee$ to adjust the Heat setpoint for this period. Press **NEXT**.
7. The Cool setpoint will be flashing. Press $\wedge$ or $\vee$ to adjust the Cool setpoint for this period. Press **NEXT**.

8. The display will show the next schedule period flashing. Repeat steps 4 – 7 for the **Away**, **Home** and **Sleep** schedule settings. After completing all schedule settings for the day(s) selected, repeat these steps for the other days.
9. Press the **SAVE & EXIT** button at upper left.



When editing an existing schedule, you can advance to the setting you wish to change, edit that setting and press the **SAVE & EXIT** button to save changes.

Depending on what type of schedule the thermostat was set up for, days may be grouped or set individually.

Active Recovery

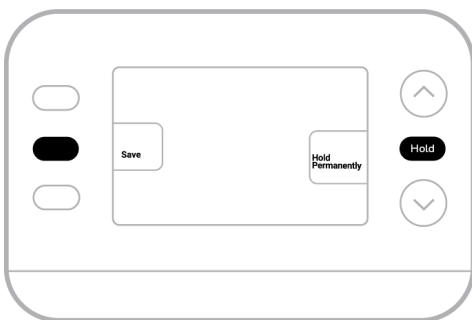
The **Smart Response** feature allows the thermostat to learn how long the furnace and air conditioner take to reach programmed temperature settings, so the temperature is reached at the time you set.

For example: Set the Wake time to 6 am and the temperature to 70°. The heat will come on before 6 am, so the temperature will be 70° by the time you wake at 6. The message **“Active Recovery”** is displayed when the system is running before a scheduled time period.

Program Schedule Override (Temporary)

1. Press **^** or **v** to adjust the temperature.
2. Once at the desired setpoint temperature, no further action is needed. The new setpoint temperature will be held until the next scheduled time period begins.
3. Press the **SAVE** button or wait for the display to time out and return to the Home screen.

To cancel the Temporary Hold, press and release the **HOLD** button to cycle through the settings until **CANCEL HOLD** is selected.



Program Schedule Override (Permanent)

1. Press **^** or **v** to adjust the temperature.
2. Once at the desired setpoint temperature, press and release the **HOLD** button to cycle through the settings until **HOLD PERMANENTLY** is selected.
3. Press the **SAVE** button or wait for the display to time out and return to the Home screen.

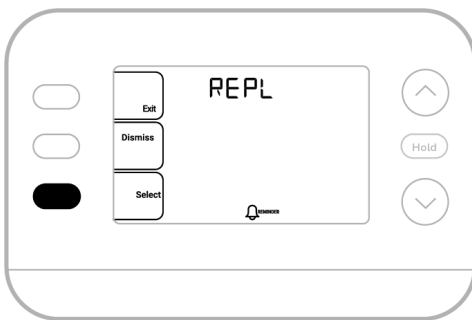
To cancel the Permanent Hold, press and release the **HOLD** button to cycle through the settings until **CANCEL HOLD** is selected.

Reminders

When a reminder is active, a icon  will appear in the lower part of the display.

1. Press **MENU** and use **^** or **v** until the active reminder is shown. Active alerts and reminders will be the first menu items shown.
2. Press **SELECT** to display the reminder.
3. Once selected you will see the reminder message in scrolling text. Press **DISMISS** to reset the reminder or press **EXIT** to return to the home screen without resetting the reminder.

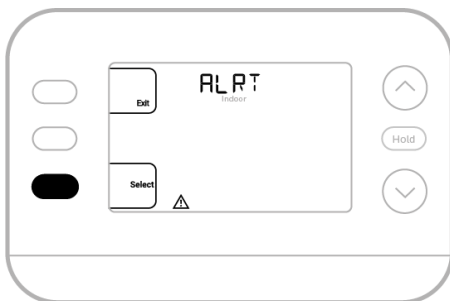
If there is more than one active reminder, press the **NEXT** button to view all reminders which have not been reset.



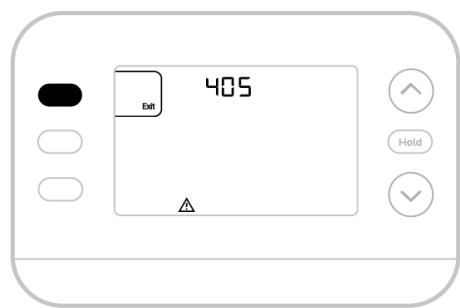
Alerts

When an alert is active, an  icon will appear in the lower part of the display.

1. Press **MENU** and use **^** or **v** until the **ALERT** is shown. Active alerts will be the first menu items shown.



2. Press **SELECT** to display the alert number.



3. An alert cannot be dismissed. If there is more than one active alert, pressing the **NEXT** button allows you to view any additional alert numbers. Press **EXIT** to return to the home screen.

Some alerts can be resolved by the homeowner, for example **Replace Batteries**. Other alerts may require a service call to the professional installer.

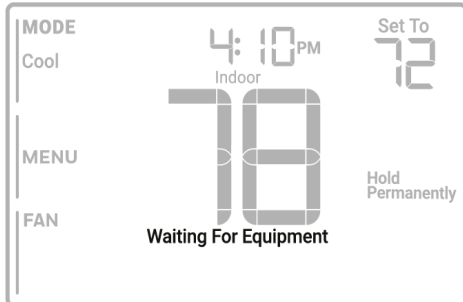
Alert Number	Alert Meaning
164	Heat Pump Fault. Heat pump is energizing L terminal to indicate a fault.
170	Thermostat Memory Failure. Internal problem with the thermostat memory.
171	Set Time and Date.
173	Internal Sensor Error. Issue with the built-in temperature sensor.
388	Register thermostat online*
399	No internet connection*
400	WiFi signal lost*
602	Humidity sensor failure*
607	WiFi communication error*

**If not using the app, WiFi and app related messages can be dismissed by going into the WiFi menu and turning WiFi to off.*

Waiting For Equipment

Damage can occur if your system's compressor is restarted too soon after shutdown. The **Built-in Compressor Protection** feature forces the compressor to wait for a few minutes before restarting. During the wait time, the display will show the message "Waiting For Equipment" under the room temperature reading.

When the safe wait time has elapsed, the message disappears, and the thermostat will show "Heat on" or "Cool on".



Troubleshooting and Support

Display is blank	<ul style="list-style-type: none">• Check circuit breaker and reset if necessary.• Make sure power switch for heating & cooling system is on.• Make sure wire connections (especially C wire) are secure.• Verify the R/Rc slider switch is set up if Rc doesn't have a separate wire attached.
Heating or cooling does not run	<ul style="list-style-type: none">• When running heat, display will show HEAT ON in lower right of display• When running cool, display will show COOL ON in lower right of display• If display shows WAITING FOR EQUIPMENT under temperature reading, it is in compressor delay mode to protect the system. Wait 5 minutes to see if the thermostat makes a Heat or Cool call• If display does not indicate a call for Heat or Cool or WAITING FOR EQUIPMENT, verify the mode setting, temperature setpoint and room temperature <p>If the Up or Down arrow is pressed:</p> <ul style="list-style-type: none">• Upper left of display shows mode setting• Upper right shows setpoint• Center of display shows room temperature <p>If the issue persists:</p> <ul style="list-style-type: none">• Check circuit breaker and reset if necessary• Make sure power switch at heating & cooling system is on• Make sure furnace door is closed securely
Heat or Aux Heat runs with Cooling	<ul style="list-style-type: none">• Verify there is not a wire attached to W for heat pump systems. See the Wiring section.• For heat pump applications the reversing valve is energized in Heat on some heat pumps and Cool for other heat pumps.

	<ul style="list-style-type: none"> • Verify that ISU 2060 is set correctly. • Verify that no wires are shorted. Look for exposed sections of wire at the UWP.
Heat or Aux Heat runs with no call for heat or cooling	<ul style="list-style-type: none"> • Verify display does not indicate HEAT ON, COOL ON or AUX HEAT ON • Verify there is not a wire attached to W for heat pump systems. See Wiring. • Verify that no wires are shorted. Look for exposed sections of wire at the UWP.
Cannot change setpoint to desired setting	<ul style="list-style-type: none"> • Verify the mode setting (Heat, Cool or Auto or Em Heat in upper left of display) <p>The setting ranges for these modes are:</p> <ul style="list-style-type: none"> • Heat or Em Heat: 32 °F to 90 °F (0 °C to 32.0 °C) • Cool: 50 °F to 99 °F (10.0 °C to 37.0 °C)
WAITING FOR EQUIPMENT <i>(shown in display under Room Temperature)</i>	The Compressor Protection feature is engaged. Wait a few minutes for the system to safely restart to avoid damaging the compressor.

2-year Limited Warranty

For warranty information go to resideo.info/US-Warranty-THERMOSTAT.



To receive a printed version of the warranty, call Resideo Customer Care toll-free at 1-800-633-3991 and a copy will be mailed free of charge.

FCC statement available at: <https://resideo.info/fcc-statement>.

Customer Assistance

For assistance with this product, please visit honeywellhome.com.

Or call Resideo Customer Care toll-free at 1-800-633-3991.

Frequently Asked Questions

Will the X2S Smart thermostat still work if WiFi connection is lost?

Yes, the temperature can be adjusted directly at the thermostat. However, some features, including geofencing, are managed only through the Resideo Connect App and will not function while the connection is down. The thermostat will automatically reconnect to WiFi once the network is restored.

A change was made on the Resideo Connect App but it has not shown up on the X2S Smart thermostat.

There may be a short delay after making temperature and setting changes in the Resideo Connect App.

Can there be multiple users for Geofencing?

Yes, there can be multiple users. Geofencing will trigger based on the last person to leave and the first person to return. To properly use geofencing with multiple users:

- Each user needs to create their own account.
- Each user should use their login ID and password across his or her devices, including smartphones and tablets.
- No two users should share the same account.

Can more than one user control the thermostat with the app?

Yes. Use the Resideo Connect App to invite other users to download the app and share control of your thermostats. In the app, go to the hamburger menu and select “My Locations”. Select the location you want to add users to and select “invite user”.

NOTE:

All individuals with access to a thermostat share the same user privileges. Users added will be able to change the thermostat’s settings, as well as add or delete other users.

Is there a way to extend the signal strength?

The range or distance of the WiFi signal is determined by the router. Check the router’s manual for additional information.

There is an alert that says WiFi Signal Lost. What does that mean?

The WiFi signal to the thermostat has been lost. Wait for the thermostat to reconnect or select a new network within the Resideo Connect App configuration menu. If the thermostat is unable to reconnect, you will need to troubleshoot the router to determine the cause.

Why is the thermostat showing up as offline (strike-through WiFi icon) on lower part of thermostat display?

If the thermostat displays a strike-through WiFi icon on its screen or shows up as offline on the Resideo Connect App, it is not connected to WiFi. If your thermostat was previously connected to WiFi and has lost connection, make sure the router is powered and broadcasting. The home’s WiFi network may need to be reset by power cycling the router. Consult the router’s instruction manual for directions on power cycling. When the network has been restored, the thermostat will automatically reconnect.

An activation email hasn’t been received.

An activation email will be sent. An activation email is needed to complete the account setup. If an activation email is not received after five minutes, check the Spam folder of the email account.

If you do not find it in the Spam folder, click on the Resend button and the activation email will be resent. If you still do not receive your activation email, please contact the Technical Support team at 1-800-633-3991 for help.

Regulatory Information

FCC REGULATIONS 47 CFR § 15.19 (a)(3)

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions:

1. This device may not cause harmful interference, and
2. This device must accept any interference received, including interference that may cause undesired operation.

47 CFR § 15.21 (USA only)

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

47 CFR § 15.105 (b)

See <https://resideo.info/fcc-statement> for additional FCC information for this product.

IC REGULATIONS

RSS-GEN

This device contains licence-exempt transmitter(s)/receiver(s) that comply with Innovation, Science and Economic Development Canada's licence-exempt RSS(s). Operation is subject to the following two conditions:

1. This device may not cause interference.
2. This device must accept any interference, including interference that may cause undesired operation of the device.

RF EXPOSURE STATEMENT



WARNING

THE ANTENNA(S) USED FOR THESE TRANSMITTERS MUST BE INSTALLED TO PROVIDE A SEPARATION DISTANCE OF AT LEAST 20 CM FROM ALL PERSONS AND MUST NOT BE CO-LOCATED OR OPERATING IN CONJUNCTION WITH ANY OTHER ANTENNA OR TRANSMITTER.

Safety and Environmental Notices

CAUTION

ELECTRICAL HAZARD: Can cause electrical shock or equipment damage. Disconnect power before beginning installation.

CAUTION

EQUIPMENT DAMAGE HAZARD: Compressor protection is bypassed during testing. To prevent equipment damage, avoid cycling the compressor quickly.

CAUTION

MERCURY NOTICE: If this product is replacing a control that contains mercury in a sealed tube, do not place the old control in the trash. Contact your local waste management authority for instructions regarding recycling and proper disposal.

CAUTION

ELECTRONIC WASTE NOTICE: The product should not be disposed of with other household waste. Check for the nearest authorized collection centers or authorized recyclers. The correct disposal of end-of-life equipment will help prevent negative consequences for the environment and human health.

FROM
resideo

Resideo Technologies, Inc.

Scottsdale, AZ 85254

www.resideo.com

© 2026 Resideo Technologies, Inc. All rights reserved.

The Honeywell Home trademark is used under license from Honeywell International Inc. This product is manufactured by Resideo Technologies, Inc. and its affiliates.

33-00689EFS-01 Rev. 4/26