

Honeywell



User Guide

Wi-Fi Color Touchscreen
Programmable Thermostat

RTH9580 Wi-Fi

In the box you will find

- Thermostat
- Wallplate
- Screws and anchors
- Quick Start Guide
- Thermostat ID Card
- Wire labels
- User Guide

Features of your Wi-Fi thermostat

With your new thermostat, you can:

- Connect to the Internet to monitor and control your heating/cooling system.
- View and change your heating/cooling system settings.
- View and set temperature and schedules.
- Receive alerts via email and get automatic upgrades.
- View outdoor temperature and humidity (requires Wi-Fi set up and registration).



Welcome



Congratulations on your purchase of a Honeywell Wi-Fi color touchscreen programmable thermostat. When registered to Honeywell's Total Connect Comfort Solutions, you can remotely monitor and control the heating and cooling system in your home or business—you can stay connected to your comfort system wherever you go.

Honeywell's Total Connect Comfort is the perfect solution if you travel frequently, own a vacation home, a business, or manage an investment property or if you are simply looking for peace of mind.

 This thermostat works with common 24 volt systems such as forced air, hydronic, heat pump, oil, gas, and electric. It will not work with millivolt systems, such as a gas fireplace, or with 120/240 volt systems such as baseboard electric heat.

 **MERCURY NOTICE:** Do not place your old thermostat in the trash if it contains mercury in a sealed tube. Contact the Thermostat Recycling Corporation at www.thermostat-recycle.org or 1-800-238-8192 for information on how and where to properly and safely dispose of your old thermostat.

 **NOTICE:** To avoid possible compressor damage, do not run air conditioner if the outside temperature drops below 50°F (10°C).

Need help?

Visit wifithermostat.com or call 1-855-733-5465 for assistance before returning the thermostat to the store.

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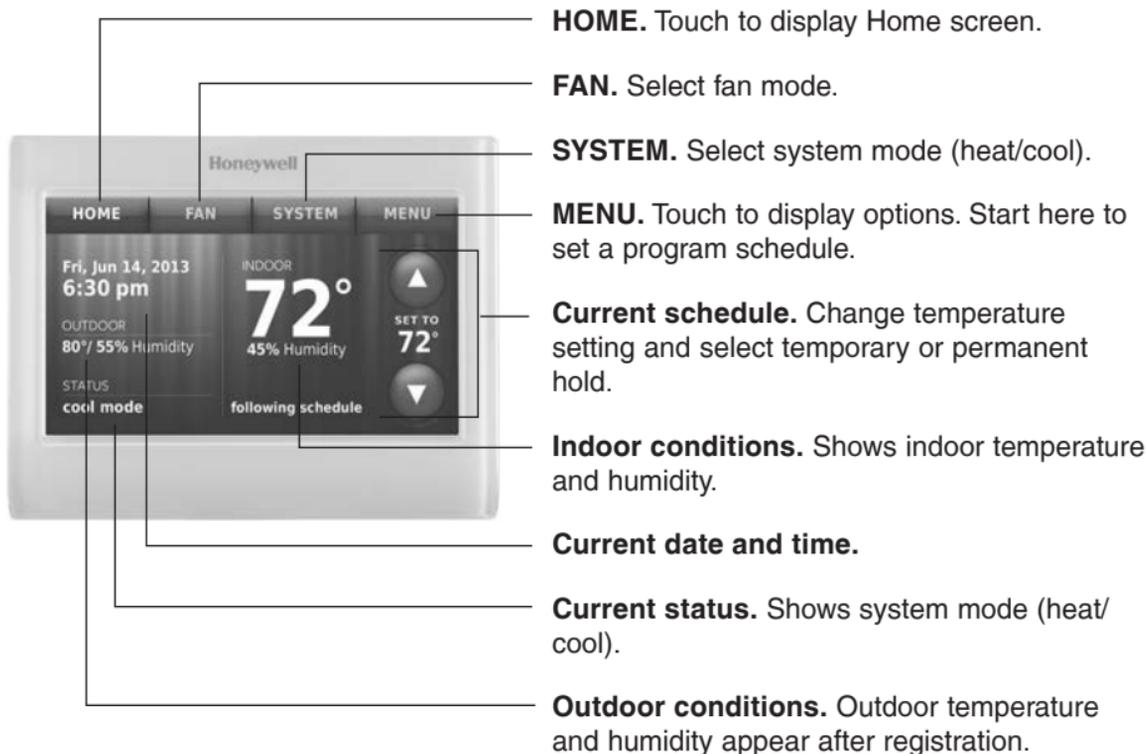
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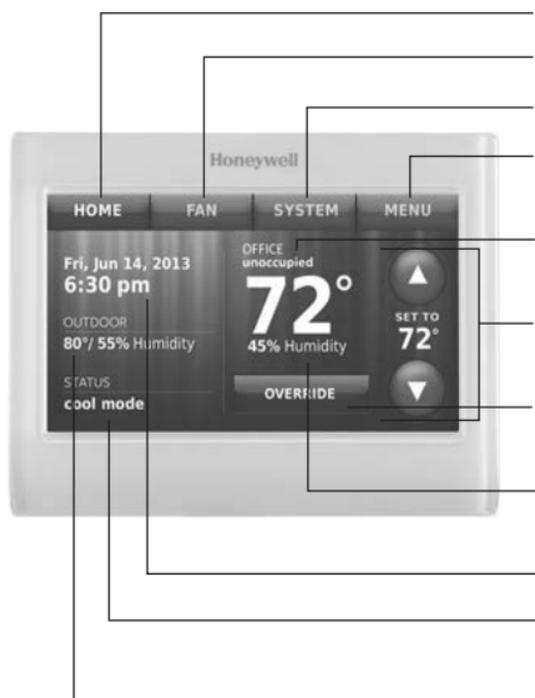
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Quick reference: home use



Quick reference: business use



HOME. Touch to display Home screen.

FAN. Select fan mode.

SYSTEM. Select system mode (heat/cool).

MENU. Touch to display options. Start here to set a program schedule.

Thermostat location. Quickly identify which thermostat is in control of a specific area.

Current schedule. Touch an arrow to change temperature setting and set a temporary hold.

Override. Touch to temporarily override the program schedule.

Indoor conditions. Shows indoor temperature and humidity.

Current date and time.

Current status. Shows system mode (heat/cool).

Outdoor conditions. Outdoor temperature and humidity appear after registration.

Setting up your thermostat

Setting up your Wi-Fi programmable touchscreen thermostat is easy. It is preprogrammed and ready to go as soon as it is installed and registered.

- ① Install your thermostat.
- ② Connect it to your home wireless network.
- ③ Register online for remote access.



Before you begin, you may want to watch a brief installation video. Use the QR Code® at the front of this guide, or go to wifithermostat.com/support

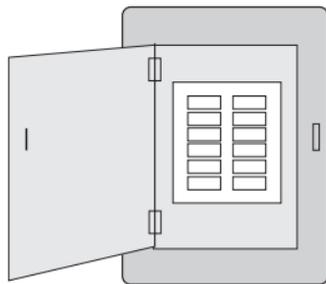
Installing your thermostat

You might need the following tools to install this thermostat:

- No. 2 Phillips screwdriver
- Pen
- Pencil
- Level (optional)
- Drill and bits (3/16" for drywall, 7/32" for plaster) (optional)
- Hammer (optional)
- Electrical tape (optional)

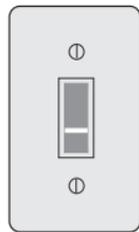
- 1 Switch OFF power to your heating/cooling system.

Important! To protect your equipment, switch OFF the power to your heating/cooling system at the breaker box or the system switch.



Circuit
breaker
box

or



Heating/cooling
system power
switch

Installing your thermostat

- 2 Remove old thermostat faceplate and leave wires connected.



- 2a Take a picture of the wire connections for later reference.

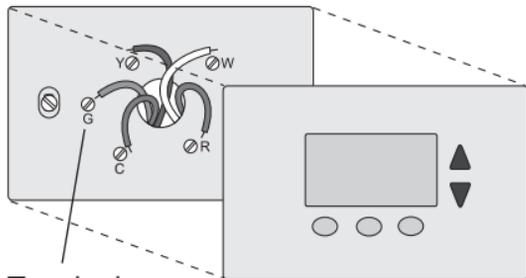


- 2b If no wire is connected to a terminal labeled C or no C terminal exists on the old thermostat, view the Alternate Wiring videos at wifithermostat.com/videos

Important! C wire is required and is the power source for your thermostat. Without a C wire, your thermostat will not power up.



Note: You will need a picture of your wire connections to wire the new thermostat.



Terminal designation



If you have an older thermostat with a sealed mercury tube, turn to page 2 for proper disposal instructions.

Installing your thermostat

3 Label the wires.

Use the supplied sticky tags to label each wire as you disconnect it. Label wires according to the old thermostat terminal designations, not by wire color.

Note: If no tag matches a terminal designation, write the appropriate letter on a blank sticky tag.

4 Remove wallplate.

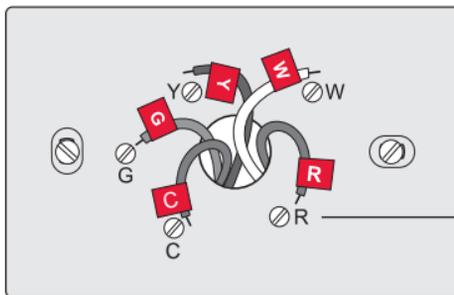
Remove the old wallplate from the wall after all wires have been labeled and disconnected.

Note: Wrap the wires around a pencil to prevent them from falling back into the wall.



Sticky tag

Blank tags



Installing your thermostat

- 5 Mount wallplate for Wi-Fi thermostat.

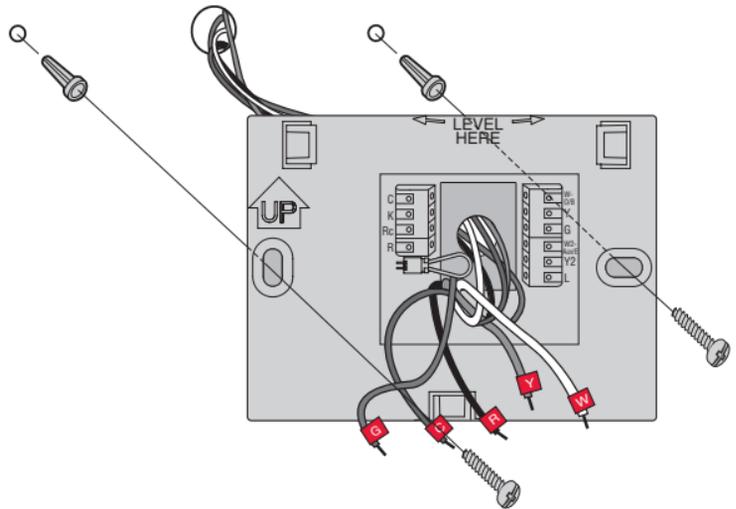
Mount your new wallplate using screws and anchors included with the thermostat.

If necessary:

Drill 3/16-in holes for drywall.

Drill 7/32-in holes for plaster.

Note: You may be able to use your existing wall anchors. Hold the wallplate up to the existing anchors to check for alignment.



Wallplate

Installing your thermostat

Important! The Wi-Fi thermostat requires a C wire to operate. The C, or common, wire brings 24 VAC power to the thermostat. Many older mechanical or battery operated thermostats do not require a C wire. If you don't have a C wire, try:

- Looking for an unused wire that is pushed into the wall. Connect that wire to C and check that it is connected to the 24 VAC common at your heating/cooling system. Check the video section at wifithermostat.com

Note: Not all heating/cooling systems label the 24 VAC common C. Check your system manual or contact the manufacturer to find out which terminal is the 24 VAC common.



View the Alternate Wiring videos at wifithermostat.com/videos

Wiring

For **conventional** heating/cooling systems (natural gas, oil or electric furnace, air conditioner), see page 12. See “Glossary” on page 73 for further definition.

For a **heat pump** system, see page 14. See “Glossary” on page 73 for further definition.

Installing your thermostat

Wiring (Conventional System)

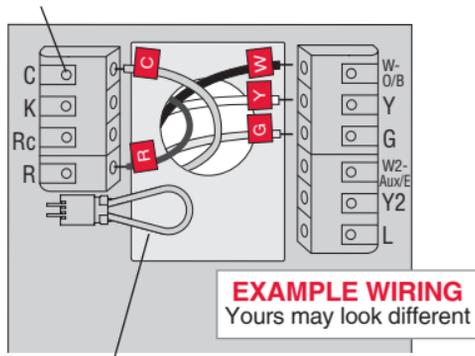
- 6A Wire the Wi-Fi thermostat to your conventional system.
- Starting with the C Wire, match the sticky tag on the wire to the terminal labels.
- You must have a C wire. See page 11.**
- Straighten wire and gently slide into terminal hole until it clicks into place. (If you need to remove a wire, use a pen tip to press the terminal release and then pull wire out.)

Note: Refer to the wiring picture you took in Step 2.

Tip: To make it easier to slide the wire into place, use a pen tip to hold down the terminal release.

Note: The wiring for your application might be different than the wiring shown below.

Terminal release



Remove jumper loop **ONLY** if you have both **R** and **Rc** wires.



Labels don't match?

See alternate wiring keys on pages 16-17.

Installing your thermostat

Wiring (Conventional System continued)

- c In the image on the right, check the box next to each connection. You will use this checklist in Step 9.
- d Verify wire is firmly secured by gently pulling on wire.
- e Repeat steps a–d for all other wires.
- f Push any excess wire back into the wall opening after all wires are installed.
- g Continue to page 20.

Important!



Check the box for each wire you connect. You will need this information in Step 9.

C	<input type="checkbox"/>	<input type="checkbox"/>	W-O/B
K	<input type="checkbox"/>	<input type="checkbox"/>	Y
Rc	<input type="checkbox"/>	<input type="checkbox"/>	G
R	<input type="checkbox"/>	<input type="checkbox"/>	W2-Aux/E
		<input type="checkbox"/>	Y2
		<input type="checkbox"/>	L



Labels don't match?

See alternate wiring keys on pages 16-17.

Installing your thermostat

Wiring (Heat Pump System)

- 6B Wire Wi-Fi thermostat to your heat pump.
- Starting with the C Wire, match the sticky tag on the wire to the terminal labels.

You must have a C wire. See page 11.

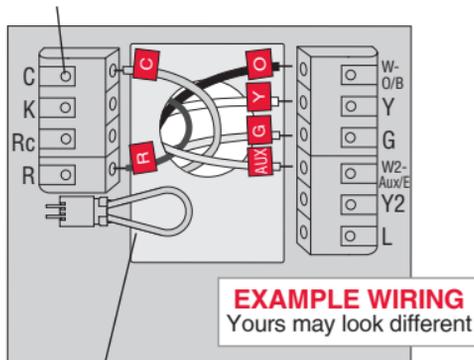
- Slide wire gently into terminal hole until it clicks into place. (If you need to remove a wire, use a pen tip to press the terminal release and then pull the wire out.)

Note: Refer to the wiring picture you took in Step 2.

Tip: To make it easier to slide the wire into place, use a pen tip to hold down the terminal release.

Note: The wiring for your application might be different than the wiring shown below.

Terminal release



Remove jumper loop **ONLY** if you have both **R** and **Rc** wires.



Labels don't match?

See alternate wiring keys on pages 18-19.

Installing your thermostat

Wiring (Heat Pump System continued)

- c In the image on the right, check the box next to each connection. You will use this checklist in Step 9.
- d Verify wire is firmly secured by gently pulling on wire.
- e Repeat steps a–d for all other wires.

Note: If old thermostat has separate wires on **AUX** and **E**, use a wire nut to attach both wires to a separate wire. Slide this third wire into the **W2-Aux/E** terminal.

- f Push any excess wire back into the wall opening after all wires are installed.
- g Continue to page 20.

Important!



Check the box for each wire you connect. You will need this information in Step 9.

C	<input type="checkbox"/>	<input type="checkbox"/>	W-O/B
K	<input type="checkbox"/>	<input type="checkbox"/>	Y
Rc	<input type="checkbox"/>	<input type="checkbox"/>	G
R	<input type="checkbox"/>	<input type="checkbox"/>	W2-Aux/E
		<input type="checkbox"/>	Y2
		<input type="checkbox"/>	L



Labels don't match?

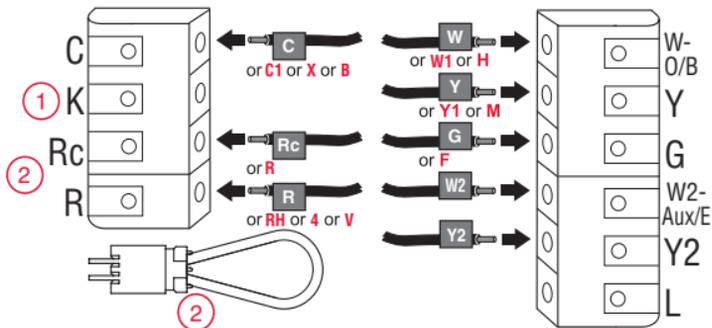
See alternate wiring keys on pages 18-19.

Installing your thermostat

Alternate wiring (Conventional System)

Use this if your wire labels don't match the terminal labels.

Note: You must have a C wire or equivalent. See page 11.



See key to ① – ② on page 17.

Installing your thermostat

Alternate wiring key (Conventional System)

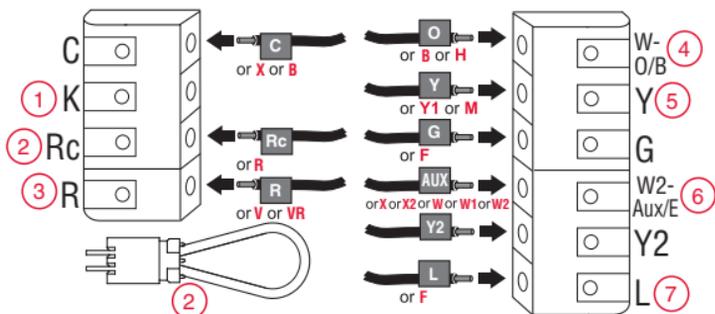
- ① Do not use **K** terminal. For future use.
- ②
 - If you have both an **R** and **Rc** wire, unplug the jumper loop by pulling on the wire loop.
 - If your old thermostat had both **R** and **RH** wires, connect the **R** wire to the **Rc** terminal, the **RH** wire to the **R** terminal, and unplug the jumper loop.

Installing your thermostat

Alternate wiring (Heat Pump System)

Use this if your wire labels don't match the terminal labels.

Note: You must have a C wire or equivalent. See page 11.



See key to (1) – (7) on page 19.

Installing your thermostat

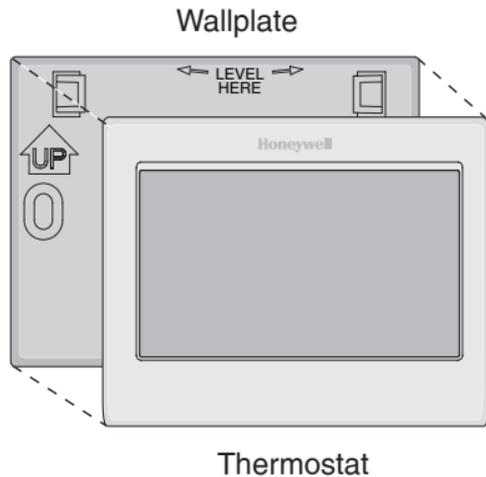
Alternate wiring key (Heat Pump System)

- ① Do not use **K** terminal. For future use.
- ② Leave jumper loop in place.
- ③ If your old thermostat had both **V** and **VR** wires, check wifithermostat.com for help.
- ④ 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, check wifithermostat.com for help. Attach the **O** wire to the **O/B** terminal. On the Type of Changeover Valve screen, select Cooling Changeover Valve. See page 66. If your old thermostat had an **O** wire and not a **B** wire, attach the **O** wire to the **O/B** terminal.
- ⑤ If your old thermostat had separate **Y1**, **W1**, and **W2** wires, check wifithermostat.com for help.
- ⑥ If the old thermostat has separate wires on **Aux** and **E**, use a wire nut to attach both wires to a separate wire. Slide this third wire into the **W2-Aux/E** terminal.
- ⑦ This is the system monitor. If the monitor finds a problem, you will see an orange alert button on the thermostat home screen.

Installing your thermostat

- 7 Attach thermostat to wallplate.

Align the thermostat with the wallplate and then snap into place.

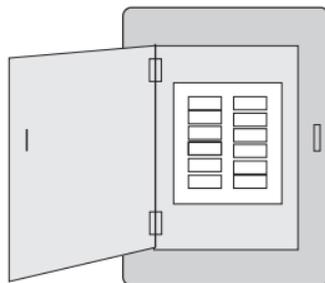


Installing your thermostat

8 Switch heating/cooling system ON.

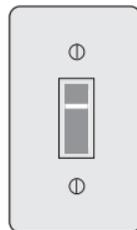
Important!

- 8a Verify that the C wire is connected at the thermostat and at the heating/cooling system.
- 8b Make sure the heating/cooling system door is firmly secured.
- 8c Switch power back ON for your heating/cooling system at the breaker box or its power switch.



Circuit
breaker
box

or



Heating/cooling
system power
switch

Installing your thermostat

Before connecting to your Wi-Fi network, you need to set initial thermostat options to define your heating/cooling system:

- Language
- Home or business

You can customize other options later.

9 Follow prompts on the screen to select appropriate options.

9a Touch the language you want the thermostat to display, then touch **Next**.

9b Select Home or Business installation, then touch **Next**.

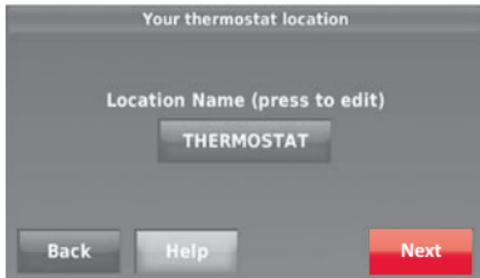


Installing your thermostat

9c Touch **Next**, or name the thermostat location—touch THERMOSTAT and follow the rest of the instructions.

9d Select what your thermostat will control and touch **Next**.

Note: Touch the orange Help button on any screen for more information.



Installing your thermostat

- 9e Select your system type and touch **Next**. The system type determines other selections for completing initial setup. Use the checklist from Step 6d when making selections.
- 9f Touch **Next** after making selections on each screen.
- 9g Touch **Done** on the last screen. The thermostat displays an option to connect to your Wi-Fi network.

Note: Touch the orange Help button on any screen for more information.



Connecting to your Wi-Fi network

After touching **Done** on the final screen of the initial set up (page 24), the thermostat displays an option to connect to your Wi-Fi network.

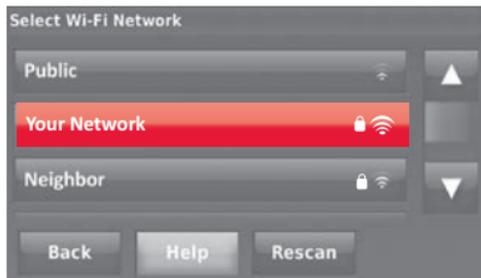
1 Connect the Wi-Fi network.

Touch **Yes** to connect the thermostat to your Wi-Fi network. The screen displays the message “Searching for wireless networks. Please wait...” after which it displays a list of all Wi-Fi networks it can find.

Note: If you cannot complete this step now, touch **I'll do it later**. The thermostat will display the home screen. Complete this process by selecting **MENU > Wi-Fi Setup**. Continue with Step 2.

2 Select the network.

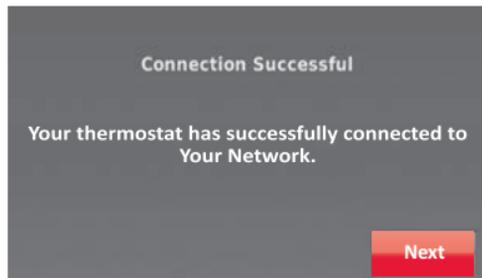
2a Touch the name of the network you want to use. The thermostat displays a password page.



Note: If your home network is not shown on the list, touch **Rescan**.

Connecting to your Wi-Fi network

- 2b Using the keyboard, touch the characters that spell out your home network password.
- 2c Touch **Done**. The thermostat displays “Connecting to your network. Please wait...” then shows a “Connection Successful” screen.
- 2d Touch **Next** to display the registration information screen.
- 2e Note your Thermostat MAC and Thermostat CRC. You need these numbers to complete online registration.

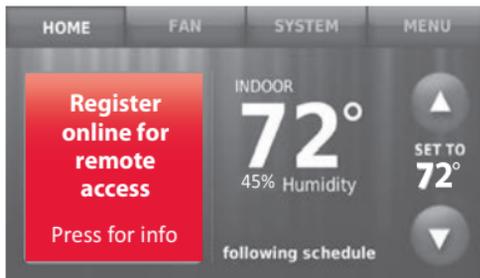
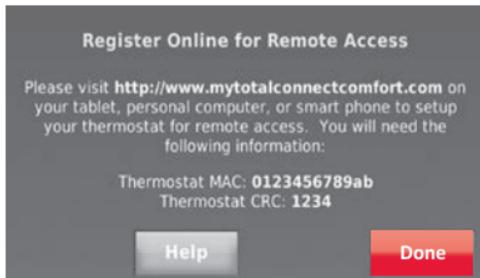


Connecting to your Wi-Fi network

To register your thermostat, follow the instructions beginning on page 30.

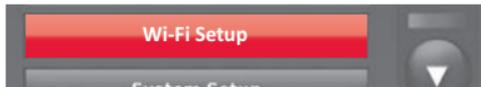
Note: The Register Online screen remains active until you complete registration and/or touch **Done**.

Note: If you touch **Done** before you register online, your home screen displays an orange alert button telling you to register. Touching that button displays registration information and an option to snooze the task.



Disconnecting your Wi-Fi network

- 1 Touch **MENU**.
- 2 Select **Wi-Fi Setup**.
- 3 Touch **Disconnect from Network**. The thermostat will display a question to confirm your selection.
- 4 Touch **Yes** to confirm that you want to disconnect from the network. The thermostat will display the Wi-Fi Setup screen.
- 5 Touch **OK** to display the menu.



Reconnecting your Wi-Fi network

- 1 Touch **MENU**.
- 2 Select **Wi-Fi Setup**.
- 3 Touch the name of the network you want to use. The thermostat may display a password page.
- 4 To enter a password, touch characters to spell out your home network password, then touch **Done**.
- 5 The thermostat displays “Connecting to your network. Please wait...” then a “Connection Successful” screen.
- 6 Touch **Next**.
 - If your thermostat is registered, you will see your signal strength and other status information. Touch **Done**.
 - If the screen displays “Register Online for Remote Access,” follow instructions on page 30.



Registering your thermostat online

To view and set your Wi-Fi thermostat remotely, you must have a Total Connect Comfort account. Use the following steps.

- 1 Open the Total Connect Comfort web site.

Go to mytotalconnectcomfort.com



View the Wi-Fi Thermostat Registration video at wifithermostat.com/videos



Registering your thermostat online

2 Login or create an account.

If you have an account,
click **Login**

– or –

click **Create An Account**

2a Follow the instructions on the screen.

2b **Check your email** for an activation message from My Total Connect Comfort. This may take several minutes.

Note: If you do not receive a response, check your junk mailbox or use an alternate e-mail address.

2c **Follow activation instructions** in the email.

2d Log in.



Registering your thermostat online

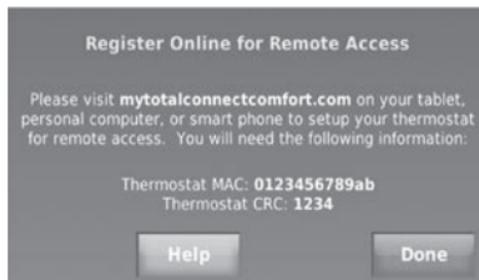
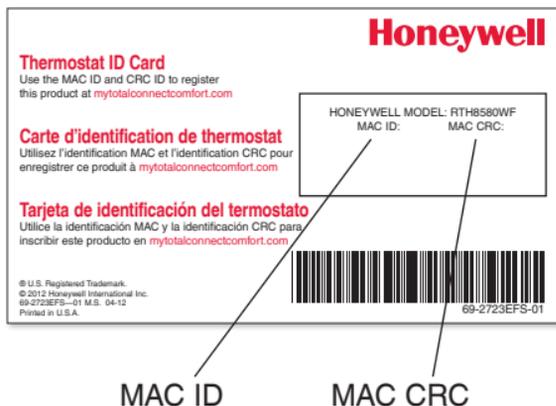
3 Register your Wi-Fi thermostat.

After you are logged in to your Total Connect Comfort account, register your thermostat.

3a Follow the instructions on the screen. After adding your thermostat location, you must enter the thermostat's unique identifiers:

- MAC ID
- MAC CRC

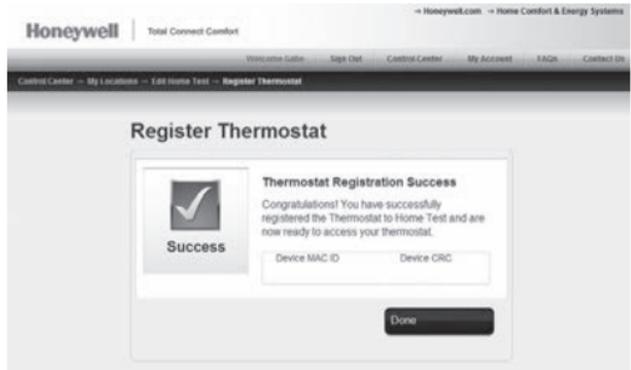
Note: These IDs are listed on the Register Online screen or on the Thermostat ID Card included in the thermostat package. The IDs are not case sensitive.



Registering your thermostat online

When the thermostat is successfully registered, the Total Connect Comfort registration screen will display a SUCCESS message.

You can now control your thermostat from anywhere through your laptop, tablet, or smartphone.



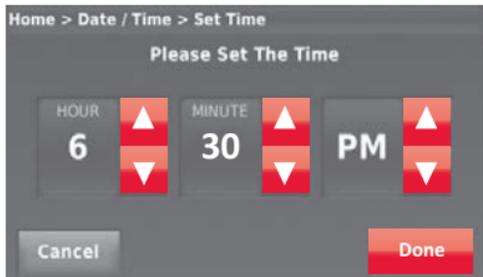
Total Connect Comfort free app is available for Apple® iPhone®, iPad® and iPod touch® devices at iTunes® or at Google Play® for all Android™ devices.



Setting the time/date

- 1 Touch the current time. The screen displays **Set Time/Set Date**.
- 2 Touch **Set Time** or **Set Date**.
- 3 Touch ▲ or ▼ until the proper time/date is displayed.
- 4 Touch **Done** to save or **Cancel** to ignore changes.

Note: This thermostat will automatically update for daylight saving time (if observed in your area) and all date/time information is stored. If the thermostat is connected to Wi-Fi and registered to Total Connect Comfort, the current time is updated from the internet.



Setting the fan

- 1 Touch **FAN** to display fan settings.
- 2 Touch **On**, **Automatic**, **Circulate**, or **Follow Schedule**.

- 3 Touch **Done** to save and exit.

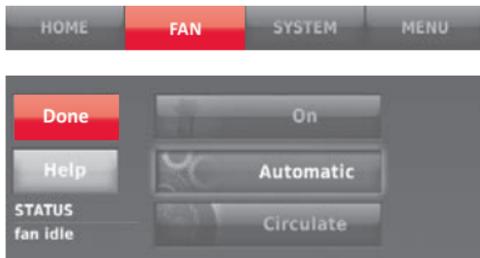
On: Fan is always on.

Automatic: Fan runs only when the heating or cooling system is on.

Circulate: Fan runs randomly about 35% of the time (home use only).

Follow Schedule: Fan controlled by program (see pages 37-42).

Note: Touch Auto or On to temporarily override the programmed fan schedule.



Setting system mode

- 1 Touch **SYSTEM** to display system settings.
- 2 Touch desired option:

Heat: Thermostat controls only the heating system.

Cool: Thermostat controls only the cooling system.

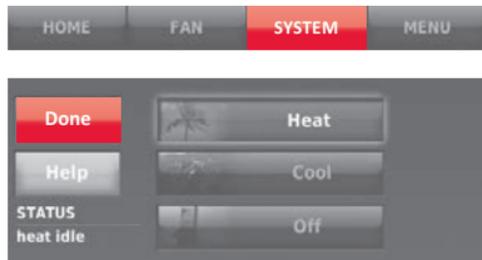
Off: Heating/cooling systems are off.

Automatic: Thermostat selects heating or cooling as needed depending on the indoor temperature.

Emergency Heat (heat pumps with aux. heat): Controls auxiliary/emergency heat. Compressor is locked out.

- 3 Touch **Done** to save and exit.

Note: The **Automatic** and **Emergency Heat** system settings may not appear, depending on how your thermostat was installed.



Preset energy-saving schedules

This thermostat uses default Energy Saver settings that can reduce your heating/cooling expenses. To customize settings, see next page.

	Period	Start time	Heat	Cool	Heat	Cool
			(Mon-Fri)	(Mon-Fri)	(Sat-Sun)	(Sat-Sun)
Home Use	Wake	6:00 am	70°	78°	70°	78°
	Leave	8:00 am	62°	85°	62°	85°
	Return	6:00 pm	70°	78°	70°	78°
	Sleep	10:00 pm	62°	82°	62°	82°

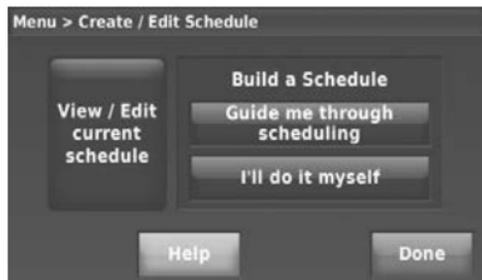
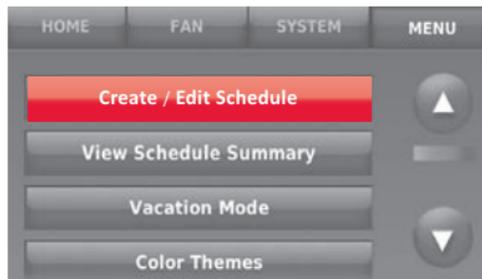
	Period	Start time	Heat	Cool	Fan
Business Use	Occupied 1	8:00 am	70°	75°	On
	Unoccupied 1	10:00 pm	55°	85°	Auto
	Occupied 2*	12:00 am	70°	75°	On
	Unoccupied 2*	12:00 am	55°	85°	Auto

* Period 2 is cancelled by default. If you activate it, the values shown above are default settings.

Adjusting program schedules

- 1 Touch **MENU**.
- 2 Select **Create/Edit Schedule**.
 - Touch **View/Edit** to view the full schedule and make a quick adjustment.
 - Touch **Guide Me** to create a schedule by answering simple questions.
 - Touch **I'll do it myself** to manually create a program schedule. See page 39.

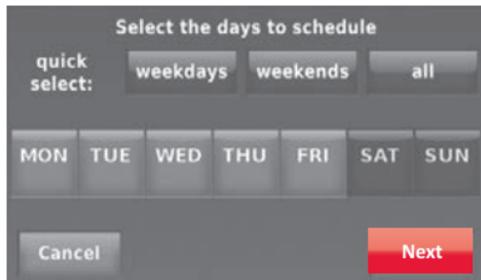
Note: To reduce costs, use the pre-set Energy Saver settings described on page 37.



Adjusting program schedules

If you selected **I'll do it myself** on the Create/Edit Schedule screen (page 38), follow these steps:

- 1 Select the days to schedule, touch **Next**.
- 2 Touch **Wake** to set your Wake time for selected days.

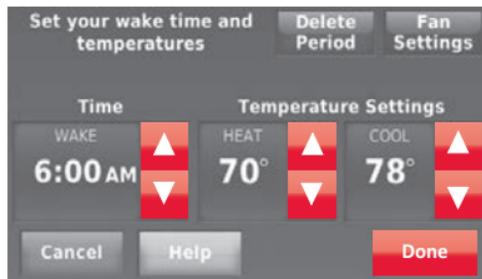


Adjusting program schedules

- 3 Touch ▲ or ▼ to set Heat and Cool temperatures for the Wake period, then touch **Done**.
- 4 Touch other time periods (**Leave**, **Return**, **Sleep**) to set time and temperatures for each.
- 5 Touch **Done** to save and exit.

Note: Touch **Delete Period** to eliminate any unwanted time period.

Note: Touch **Fan Settings** to customize fan settings for any time period.



Overriding schedules: home use

- 1 Touch ▲ or ▼ to adjust the temperature (right side of screen) and the Hold Until time (left side). The schedule will resume when the Hold Until time expires.
- 2 Touch **Switch to Permanent Hold** to keep the same temperature until you change it or resume the program schedule.
- 3 Touch **Cancel Hold** at any time to resume the program schedule.



Overriding schedules: business use

Touch ▲ or ▼ to adjust the temperature. It will be maintained until the hold time you set.

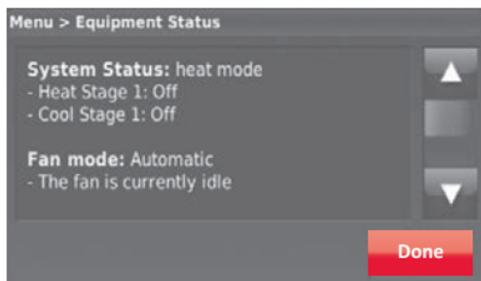
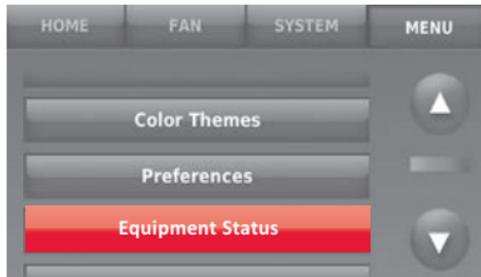
- To change the hold time, touch the Hold Until arrow buttons. This time can be adjusted up to the maximum time set on the Override Duration screen in Advanced Preferences (page 61).
- Touch **Override** to use a pre-set occupied temperature if a person uses the room during an unoccupied period. The new temperature will be maintained for 1 hour and can be adjusted up to the maximum time set on the Override Duration screen in Advanced Preferences (page 61).

The programmed schedule will resume when the override timer expires. Touch **Cancel Hold** at any time to resume the program schedule.



Viewing equipment status

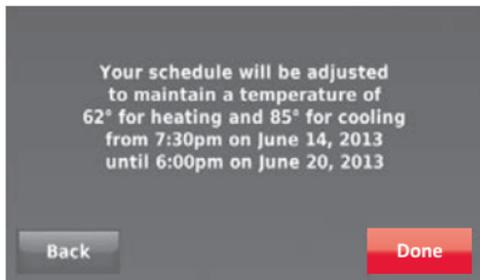
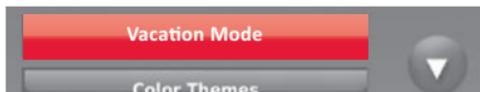
- 1 Touch **MENU**.
- 2 Select **Equipment Status**.
- 3 Touch ▲ or ▼ to view the status of all the equipment your thermostat is controlling. Depending on how your thermostat was installed, the Equipment Status screen can report data about the following systems:
 - Heating and cooling
 - Fan
 - Thermostat information



Setting vacation hold: home use

This feature helps you save energy while you are away, and restores comfortable settings just before you return home.

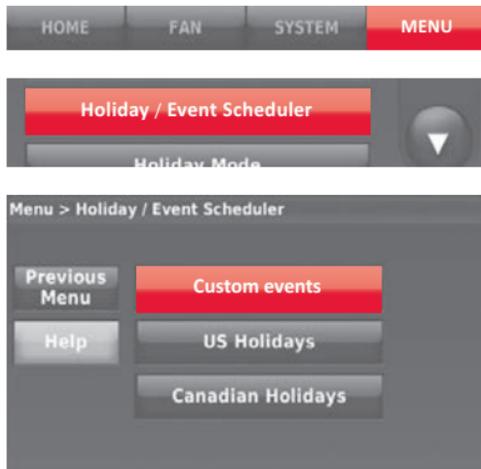
- 1 Touch **MENU**.
- 2 Select **Vacation Mode**.
- 3 Touch ▲ or ▼ to select the date you leave, then touch **Next** for further scheduling details, including times of day, temperature settings, return date, and return settings.
- 4 Review your selections on the last display, and touch **Done** to save your settings. Touch **Back**, then **Cancel** to ignore the changes.



Setting holiday/event schedules: business use

This feature helps you conserve energy when the workplace is unoccupied for special events and holidays.

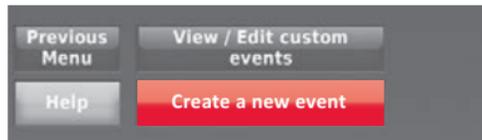
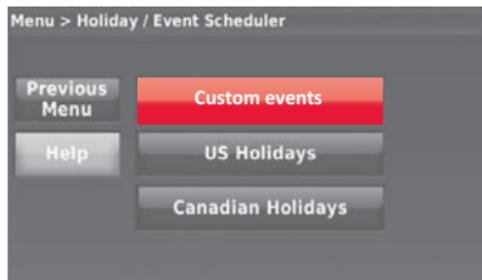
- 1 Touch **MENU**.
- 2 Select **Holiday/Event Scheduler**.
- 3 Select the item you want to schedule.
 - Custom Events lets you set up other days for special schedules.
 - US and Canadian Holiday options let you select from a list of holidays commonly observed in each country.
- 4 Make selections as prompted on each screen. For more information, see next two pages.
- 5 Touch **Done** to save your settings.



Setting custom events: business use

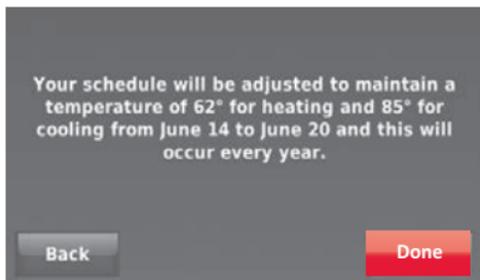
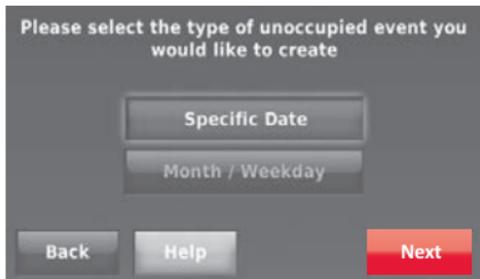
This feature lets you customize temperature settings to be maintained during a specific event. You can set up an event for a specific date or day in a month. The thermostat resumes normal scheduling after the event.

- 1 Select **Custom events** from the Holiday/Event Scheduler menu.
- 2 Select **Create a new event**.



Setting custom events: business use

- 3 Select **Specific Date** or **Month/Weekday**.
 - For **Specific Date**, you are prompted to select the start date, settings, end date, and frequency for the event.
 - For **Month/Weekday**, you are prompted to select the month, day of the week, week of the month, settings, length of event, and frequency of the event.
- 4 Review the settings and touch **Done** to save them. Touch **Back**, then **Cancel** to ignore the changes.



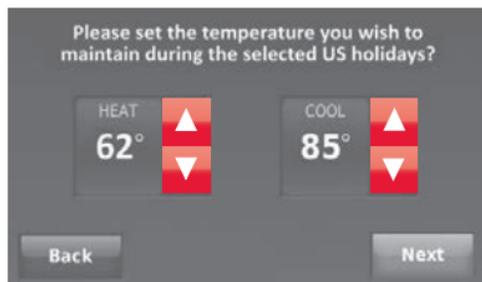
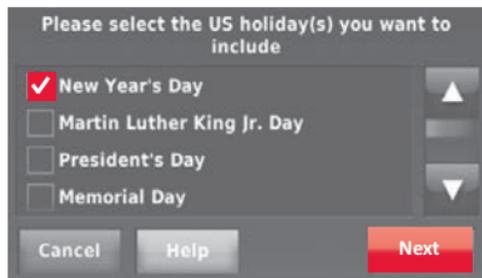
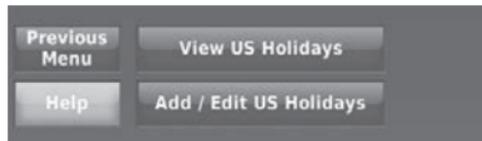
Setting holiday schedule: business use

This feature lets you customize temperature settings to be maintained on specified national holidays. The thermostat resumes normal scheduling between selected holidays.

- 1 Select **US Holidays** or **Canadian Holidays** from the Holiday/Event Scheduler menu.
- 2 Select **Add/Edit Holidays**. A list of national holidays is displayed.
- 3 Touch the check box next to each holiday for which you want to maintain specific settings, (Touch ▲ or ▼ to scroll through the holiday list.) then touch **Next**.

Set the holiday schedule for Occupied or Unoccupied temperatures, depending whether the building will be in use.

- 4 Touch ▲ or ▼ to select the Heat and Cool temperatures.
- 5 Review the settings and touch **Done** to save them. Touch **Back**, then **Cancel** to ignore the changes.

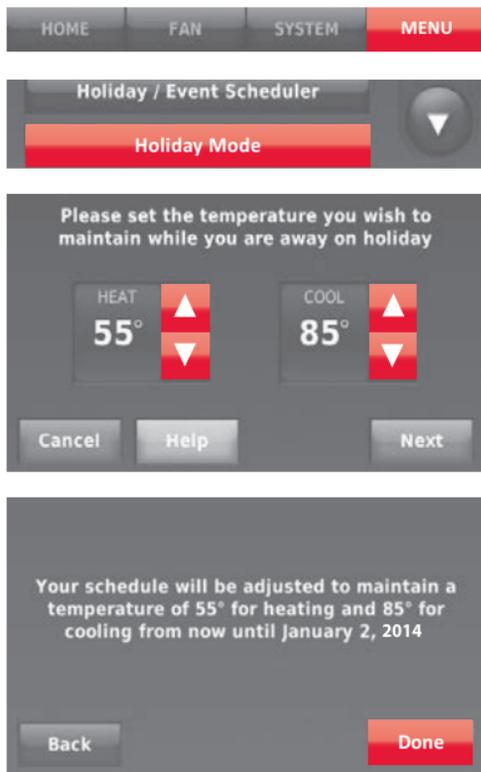


Setting holiday override: business use

This feature lets you customize temperature settings to be maintained from now until a specified date. The thermostat resumes normal scheduling on the date you select.

- 1 Touch **MENU**.
- 2 Select **Holiday Mode** to display temperatures while you are away on holiday.
- 3 Touch ▲ or ▼ to select the Heat and Cool temperatures, then touch **Next** to select return date.
- 4 Review the settings and touch **Done** to save them. Touch **Back**, then **Cancel** to ignore the changes.

Note: The cool temperature can only be set higher than the unoccupied program setting and the heat temperature can only be set lower than the unoccupied program setting.



Initiating occupancy mode: business use

This feature keeps temperature at an energy-saving level until you touch **Press to start occupancy**. When you arrive, touch the button to maintain a comfortable temperature while the room is occupied.

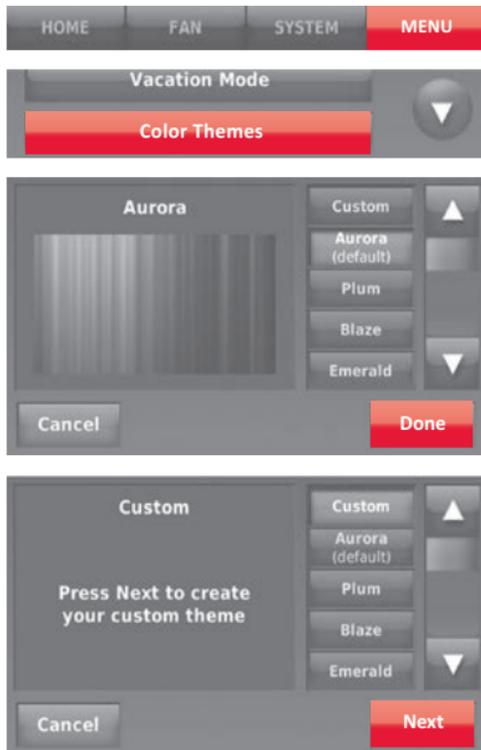
Touch the ▲ or ▼ buttons to set the temperature or the Hold Until time. The temperature is maintained until the time you set. Temperature returns to an energy-saving level after the timer expires, or the “Occupied” period ends.



Customizing screen color

You can customize your thermostat display to match your décor.

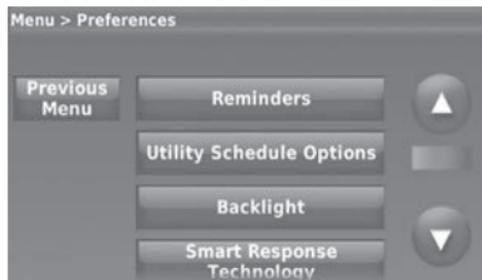
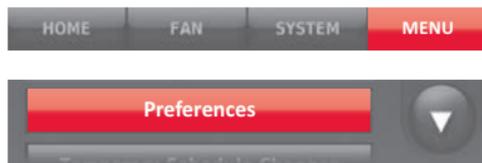
- 1 Touch **Menu**.
- 2 Touch **Color Themes**.
- 3 Select the name of a color to use a predefined background, or select Custom to define you own background color and text.
 - If you select a color name, the screen shows an example on the left. Touch **Done** to accept that selection.
 - If you touch **Custom**, the screen gives you instructions. Touch **Next** to step through the choices; touch **Done** when you are satisfied with your changes.



Setting preferences

Preference menu options let you select how the thermostat displays information or responds to certain situations.

- 1 Touch **MENU** and select **Preferences**.
- 2 Select an option and follow prompts:
 - Reminders
 - Utility Schedule Options
 - Backlight
 - Smart Response Technology
 - Advanced Preferences
 - Restore Default Schedule
- 3 Touch **Done** to save your settings.
Touch **Cancel** to ignore changes.

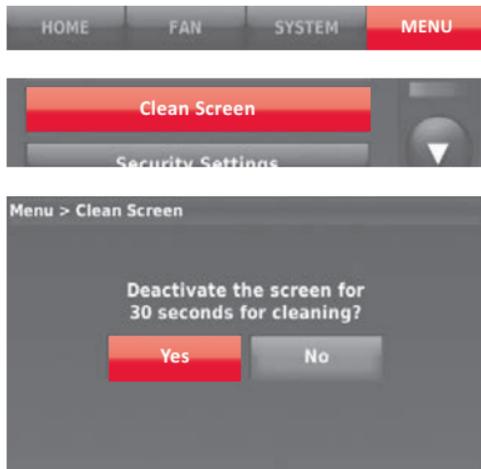


Cleaning the thermostat screen

When you select the Clean Screen option, the screen is locked so you don't accidentally change settings while you clean.

- 1 Touch **MENU**.
- 2 Select **Clean Screen**. A prompt asks if you want to clean the screen for 30 seconds.
- 3 Touch **Yes**. A countdown timer displays elapsed time until the screen is reactivated.

Note: Do NOT spray any liquid directly on the thermostat. Spray liquids onto a cloth, then use the damp cloth to clean the screen. Use water or household glass cleaner. Avoid abrasive cleansers.



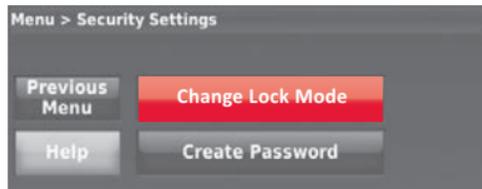
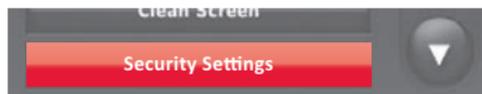
Adjusting security settings

You can adjust security options to prevent unauthorized changes to system settings.

- 1 Touch **MENU** and select **Security Settings**.
- 2 Select **Change Lock Mode**.
- 3 Select an option and follow prompts:
 - Unlocked:** Full access allowed.
 - Partially locked:** Only temperature can be changed.
 - Fully locked:** No access allowed.

Note: If you choose to use a password for additional security, write it here for reference:

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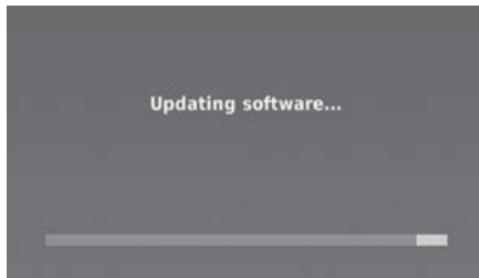


Software updates

Honeywell periodically issues updates to the software for this thermostat. The updates occur automatically through your Wi-Fi connection. All your settings are saved, so you will not need to make any changes after the update occurs.

Updates occur in the early morning. After your thermostat receives the software, it reboots, briefly displaying the Honeywell logo. The screen then shows “Updating software...” with a green progress bar. When the update is complete, your home screen will appear as usual.

Note: If you are not connected to Wi-Fi or registered at Total Connect Comfort, you will not get automatic updates.



Unregistering your thermostat

If you remove the thermostat from your Total Connect Comfort website account (for example, you're moving and leaving the thermostat behind), follow these steps:

- 1 On mytotalconnectcomfort.com log into your account.
- 2 Under My Account, select Edit My Profile.
- 3 Click the **Delete My Account** button.

Your thermostat will display an orange button that says Register Online.



Smart Response Technology

This feature (home use only) allows the thermostat to “learn” how long the heating/cooling system takes to reach programmed temperature settings, so the temperature is reached at the time you set.

For example: Set the Wake time to 6:00 am, and the temperature to 70°. The heat will come on *before* 6:00 am, so the temperature is 70° by 6:00 am.

Note: Select Smart Response Technology in the Preferences menu (page 52).

The message “in recovery” is displayed when the system is activated before a scheduled time period.



Pre-occupancy purge

This business use feature turns on the fan 1 to 3 hours before each “occupied” time period, to provide a comfortable work environment when you arrive.



Compressor protection

The thermostat keeps the compressor off for a few minutes before restarting, to prevent equipment damage. During this “off” time, the message “waiting for equipment” is displayed on screen.



Auto changeover

This feature is used in climates where both air conditioning and heating are used on the same day.

When the system is set to **Automatic**, the thermostat automatically selects heating or cooling depending on the indoor temperature.

Heat and cool settings must be at least 3 degrees apart. The thermostat will automatically adjust settings to maintain this 3-degree separation.

Note: Select **Auto Changeover** on the Heating and Cooling System Changeover screen under Advanced Preferences. See “Setting advanced preferences” on page 61.



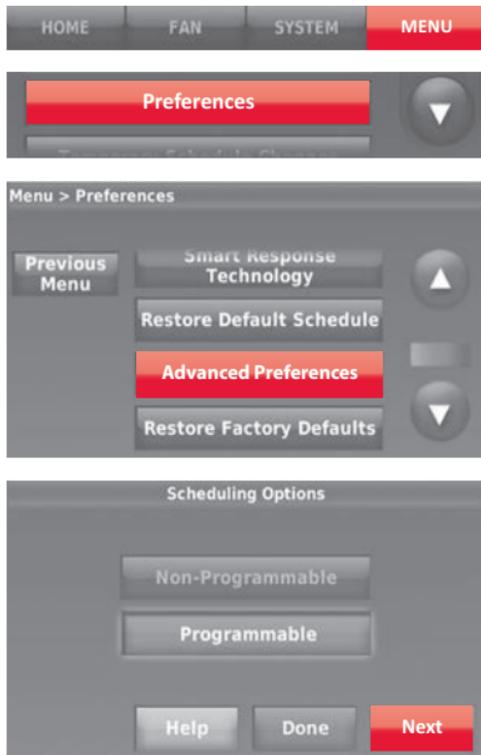
Setting advanced preferences

You can change options for a number of system functions. Although many options, such as language and temperature indication settings are the same for all setups, others depend on the type of system you have.

- 1 Touch **MENU**. The thermostat displays a list of options.
- 2 Select **Preferences > Advanced Preferences**. The thermostat displays the first screen of options that you can change.
- 3 On each screen, make changes as needed, then touch **Next** to display new options. Repeat this step until you have made all changes.

Tables on pages 62-63 explain the screens and options under Advanced Preferences.

- 4 When you have made all changes, press **Done** to save and exit.



Setting advanced preferences

Advanced Preferences Options (MENU > Preferences > Advanced Preferences)

Screen Title	Settings and Options
Scheduling Options	Select Non-programmable or Programmable. Programmable uses default or customized programming to automatically raise and lower temperature settings for different times of day.
Temperature Indication Scale	Select Fahrenheit or Celsius.
Heating and Cooling System Changeover	Select Manual or Automatic.
Number of Schedule Periods	Select 2 Periods Per Day or 4 Periods Per Day. (see page 37).
Pre-occupancy Purge Duration	Select how long the fan will run before each occupied period: Off, 1, 2, or 3 hours.
Type of Override	Select Standard to maintain the programmed periods or Initiate Occupancy to use energy-saving settings until a user presses Start Occupancy.
Override Duration	Select how long to maintain temperature during an override: 1-10 hours or No Limit.

Setting advanced preferences

Advanced Preferences Options (concluded)

Screen Title	Settings and Options
Early Recovery for Heating	Select No to begin recovery on schedule or Yes to ramp up temperature early.
Early Recovery for Cooling	Select No to begin recovery on schedule or Yes to ramp down temperature early.
Temperature Limits	Select the Minimum Cool and Maximum Heat Limit.
Keypad Lockout	Select Unlocked/Partially Locked/Locked.
Clock Format	Select 12 Hour or 24 Hour.
Daylight Saving Time	Select Off or On. If set to On, the system will automatically change time/date to account for daylight saving.
Indoor Display Offsets	Select the number of degrees to offset indoor temperature or percentage to offset indoor humidity.

Changing system setup

If your needs change, you can change the basic system settings you chose during thermostat installation (page 22).

- 1 Touch **MENU**. The thermostat displays a list of options.
- 2 Select **System Setup**. The thermostat displays the first screen of options that you can change.
- 3 On each screen, make changes as needed then touch **Next** to display new options. Repeat this step until you have made all changes. Tables on pages 65-66 explain the System Setup screens and options.
- 4 When you have made all changes, press **Done** to save and exit.



Touch the Help button to see information about screen options.

Changing system setup

Note: Touch the orange Help button on any screen for more information.

System Setup Options (MENU > System Setup)

Screen Title	Settings and Options
Language	English/Français/Español.
Thermostat installed in	Home/Business (Thermostat is used in a residential (default) or commercial setting).
Your thermostat location	Touch THERMOSTAT button to display a screen where you can enter a custom name using a keypad. If you have only one thermostat, you can leave the name as THERMOSTAT . For business installations you can check a box to display the thermostat name on the home screen.
Your thermostat controls	Select Heating or Cooling or both (default).
Your system type	Select Forced Air (default), Heat Pump, or Hot Water or Steam. Each option offers different choices on the following screens. See Step 9e under Installing your Thermostat on page 24.
Your forced air heating system type	Select how your forced air system is powered: Gas/Oil (default) or Electric.
Efficiency of your heating system	Select Standard Efficiency Forced Air (default) or High Efficiency Forced Air.

Changing system setup

System Setup Options (concluded)

Screen Title	Settings and Options
Your heating system type	If you selected Hot Water or Steam on “Your system type,” select the specific heating system here.
Number of cooling stages	Select 1 Stage (default) or 2 Stages. If you are unsure, note which wires you have connected: ‘Y’ wire only (1 stage) or ‘Y’ and ‘Y2’(refer to your check list in Step 6 on page 12.)
Number of heating stages	Select 1 Stage (default) or 2 Stages. If you are unsure, note which wires you have connected: ‘W’ wire only (1 stage) or ‘W’ and ‘W2’ (refer to your check list in Step 6 on page 12.)
Your fan control	Select whether your thermostat (default) or heating system controls the fan.
Type of changeover valve	If you selected Heat Pump on “Your system type,“ select whether it uses a cooling changeover valve (default) or heating changeover valve. f you are unsure, note which wires you have connected: refer to your check list in Step 6 on page 14.
Number of heat pump compressor stages	Select 1 Stage (default) or 2 Stages. If you are unsure, note which wires you have connected: ‘Y’ wire only (1 stage) or ‘Y’ and ‘Y2’(refer to your check list in Step 6 on page 14).
Your backup heat	No or Yes (default) you can determine whether you have backup heat by referring to your check list in Step 6 on page 14.

Frequently asked questions

Q: Will my thermostat still work if I lose my Wi-Fi connection?

A: Yes, the thermostat will operate your heating and/or cooling system with or without Wi-Fi.

Q: How do I find the password to my router?

A: Contact the manufacturer of the router or check the router documentation.

Q: Why isn't my thermostat connecting to my Wi-Fi router even though it is very close to the thermostat?

A: Verify that the password entered for the Wi-Fi router is correct.

Q: My thermostat is unable to register to the Total Connect Comfort website.

A: Verify that the thermostat is correctly enrolled on your home Wi-Fi network. At Menu > Wi-Fi Setup, check for the Wi-Fi-signal strength icon. Verify that the Wi-Fi router has a good internet connection. On your computer, verify that you can open the site at mytotalconnectcomfort.com If you cannot open the site, switch off the internet modem for a few seconds, then power it back on.

Frequently asked questions

Q: I registered on the Total Connect Comfort website but was unable to login using my new account.

A: Check your email and ensure that you received an activation email. Follow the instructions to activate your account and then login to the website.

Q: I have signed up on Total Connect Comfort website and have not received a confirmation email.

A: Check for the email in your Junk or Deleted folder.

Q: Is there a way to extend the signal strength?

A: Most standard routers can be set up to be a repeater. You can also purchase and install a Wi-Fi repeater.

For more FAQs, see wifithermostat.com

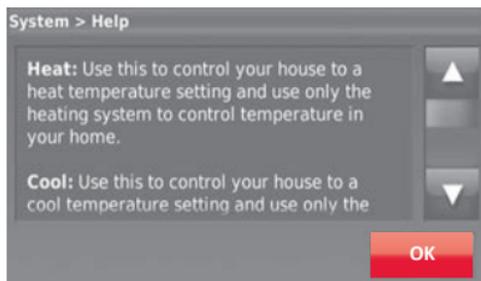
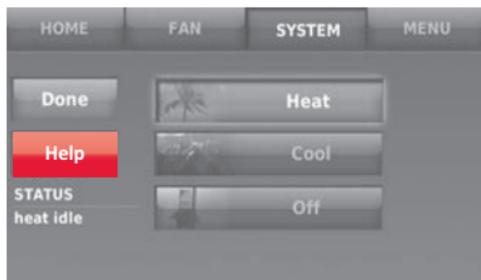
Getting help and responding to alerts

Your thermostat offers two types of assistance, if these assistance options do not answer your questions, review the FAQs (pages 67-68) and troubleshooting tips (pages 71-72).

On screen help

Most displays include an orange Help button.

- 1 Touch **Help** to display instructions for using the screen.
- 2 Touch **OK** to redisplay the original screen.

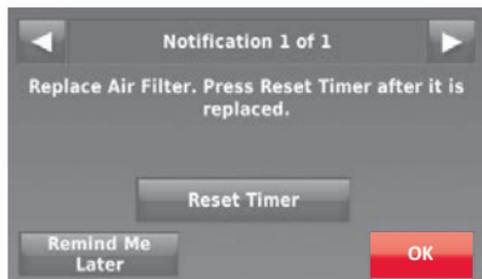


Getting help and responding to alerts

On screen alerts

Your home screen will display a large orange button when you need to correct a setting or system problem.

- 1 Touch the button, the thermostat displays instructions for completing the task to which you were alerted.
- 2 Touch **OK** on the instruction display, then carry out the task. When the task is complete, the alert button will no longer be displayed.



Troubleshooting

If you have difficulty with your thermostat, please try the following suggestions. Most problems can be corrected quickly and easily.

Display is blank

- Check circuit breaker and reset if necessary.
- Make sure power switch at heating and cooling system is on.
- Make sure furnace door is closed securely.
- Make sure C wire is connected (see page 11).

Cannot change system setting to Cool

- Check that System Setup screen “Your thermostat controls” or “Your system type” is set to match your heating and cooling equipment (see page 65).

Fan does not turn on when heat is required

- Check that System Setup screen “Your fan control” is set to match your heating equipment (see page 66).

“Wait” appears on the screen

- Compressor protection feature is engaged. Wait 5 minutes for the system to restart safely, without damage to the compressor.

Troubleshooting

Heat pump issues cool air in heat mode, or warm air in cool mode

- Check your setting for System Setup screen “Type of changeover valve” to make sure it is properly configured for your system (see page 66).

Heating or cooling system does not respond

- Touch **SYSTEM** to set system to Heat. Make sure the temperature is set higher than the Inside temperature.
- Touch **SYSTEM** to set system to Cool. Make sure the temperature is set lower than the Inside temperature.
- Check circuit breaker and reset if necessary.
- Make sure power switch at heating and cooling system is on.
- Make sure furnace door is closed securely.
- If “Wait” is displayed, the compressor protection timer is on. Wait 5 minutes for the system to restart safely, without damaging the compressor (see page 59).

Heating system is running in cool mode

- Check that System Setup screen “Your thermostat controls” or “Your system type” is set to match your heating and cooling equipment (see “System Setup Options (MENU > System Setup)” on page 65).

Glossary

C wire

The “C” or common wire brings 24 VAC power to the thermostat from the heating/cooling system. Some older mechanical or battery operated thermostats may not have this wire connection. It is necessary for establishing a Wi-Fi connection to your home network.

Heat Pump heating/cooling system

Heat pumps are used to heat and cool a home. If your old thermostat has a setting for auxiliary or emergency heat, you likely have a heat pump.

Conventional heating/cooling system

Non-heat pump type systems; these include air handlers, furnaces or boilers that run on natural gas, oil or electricity. They may or may not include an air conditioner.

Jumper Loop

In this thermostat, a plug with a wire loop located below the terminal block is used to connect the R and Rc terminals.

MAC ID, MAC CRC

Alphanumeric codes that uniquely identify your thermostat.

QR Code®

Quick response code. A two-dimensional, machine-readable image. Your wireless device can read the black and white pattern in the square and link its browser directly to a web site. QR Code is a registered trademark of DENSO WAVE INCORPORATED.

Regulatory information

FCC Compliance Statement (Part 15.19) (USA only)

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.

FCC Warning (Part 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.

FCC Interference Statement (Part 15.105 (b)) (USA only)

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

Equipment interface module, thermostats and outdoor sensor

To comply with FCC and Industry Canada RF exposure limits for general population/ uncontrolled exposure, 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.

Portable Comfort Control

This portable transmitter with its antenna complies with FCC and Industry Canada RF exposure limits for general population/ uncontrolled exposure. This device must not be co-located or operating in conjunction with any other antenna or transmitter.

Section 7.1.2 of RSS-GEN

Under Industry Canada regulations, this radio transmitter may only operate using an antenna of type and maximum (or lesser) gain approved for the transmitter by Industry Canada. To reduce potential radio interference to other users, the antenna type and its gain should be so chosen that the equivalent isotropically radiated power (e.i.r.p.) is not more than that necessary for successful communication.

Section 7.1.3 of RSS-GEN

Operation is subject to the following two conditions:

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

1-year limited warranty

Honeywell warrants this product, excluding battery, to be free from defects in the workmanship or materials, under normal use and service, for a period of one (1) year from the date of purchase by the consumer. If at any time during the warranty period the product is determined to be defective or malfunctions, Honeywell shall repair or replace it (at Honeywell's option).

If the product is defective,

- (i) return it, with a bill of sale or other dated proof of purchase, to the place from which you purchased it; or
- (ii) call Honeywell Customer Care at 1-855-733-5465. Customer Care will make the determination whether the product should be returned to the following address: Honeywell Return Goods, Dock 4 MN10-3860, 1885 Douglas Dr. N., Golden Valley, MN 55422, or whether a replacement product can be sent to you.

This warranty does not cover removal or reinstallation costs. This warranty shall not apply if it is shown by Honeywell that the defect or malfunction was caused by damage which occurred while the product was in the possession of a consumer.

Honeywell's sole responsibility shall be to repair or replace the product within the terms stated above. HONEYWELL SHALL NOT BE LIABLE FOR ANY LOSS OR DAMAGE OF ANY KIND, INCLUDING ANY INCIDENTAL OR CONSEQUENTIAL DAMAGES RESULTING, DIRECTLY OR INDIRECTLY, FROM ANY BREACH OF ANY WARRANTY, EXPRESS OR IMPLIED, OR ANY OTHER FAILURE OF THIS PRODUCT. Some states do not allow the exclusion or limitation of incidental or consequential damages, so this limitation may not apply to you.

THIS WARRANTY IS THE ONLY EXPRESS WARRANTY HONEYWELL MAKES ON THIS PRODUCT. THE DURATION OF ANY IMPLIED WARRANTIES, INCLUDING THE WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, IS HEREBY LIMITED TO THE ONE-YEAR DURATION OF THIS WARRANTY. Some states do not allow limitations on how long an implied warranty lasts, so the above limitation may not apply to you.

This warranty gives you specific legal rights, and you may have other rights which vary from state to state.

If you have any questions concerning this warranty, please write Honeywell Customer Relations, 1985 Douglas Dr, Golden Valley, MN 55422 or call 1-855-733-5465. In Canada, write Retail Products ON15-02H, Honeywell Limited/Honeywell Limitée, 35 Dynamic Drive, Toronto, Ontario M1V4Z9.



69-2809EF-03

Automation and Control Systems

Honeywell International Inc.

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Golden Valley, MN 55422

wifithermostat.com

Honeywell

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69-2809EF—03 M.S. Rev. 11-13

Printed in U.S.A.