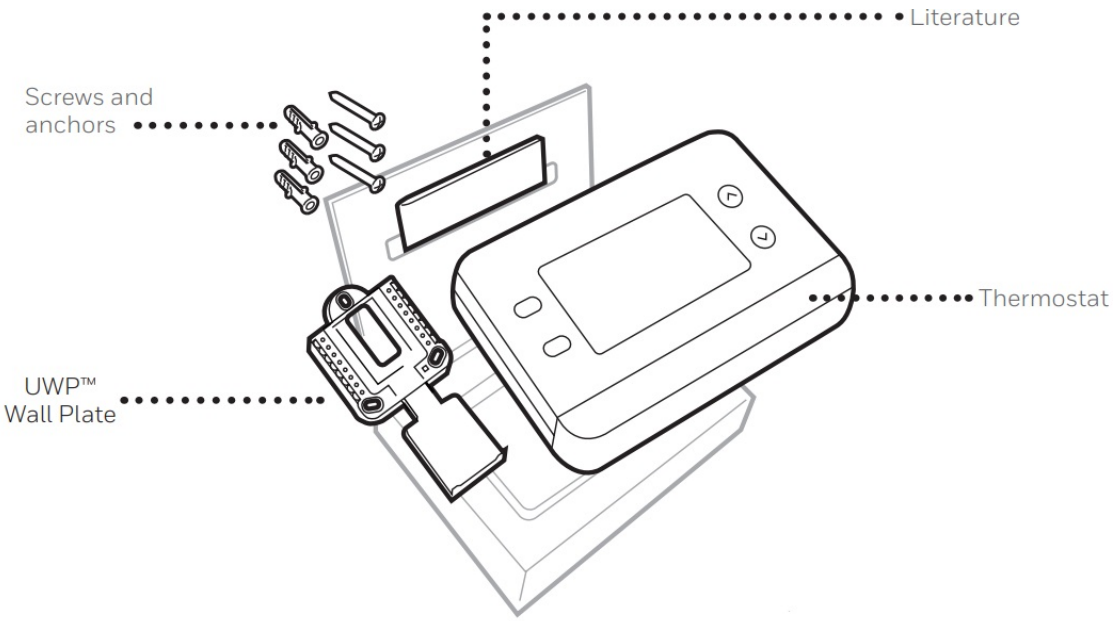
Contents [ hide ]



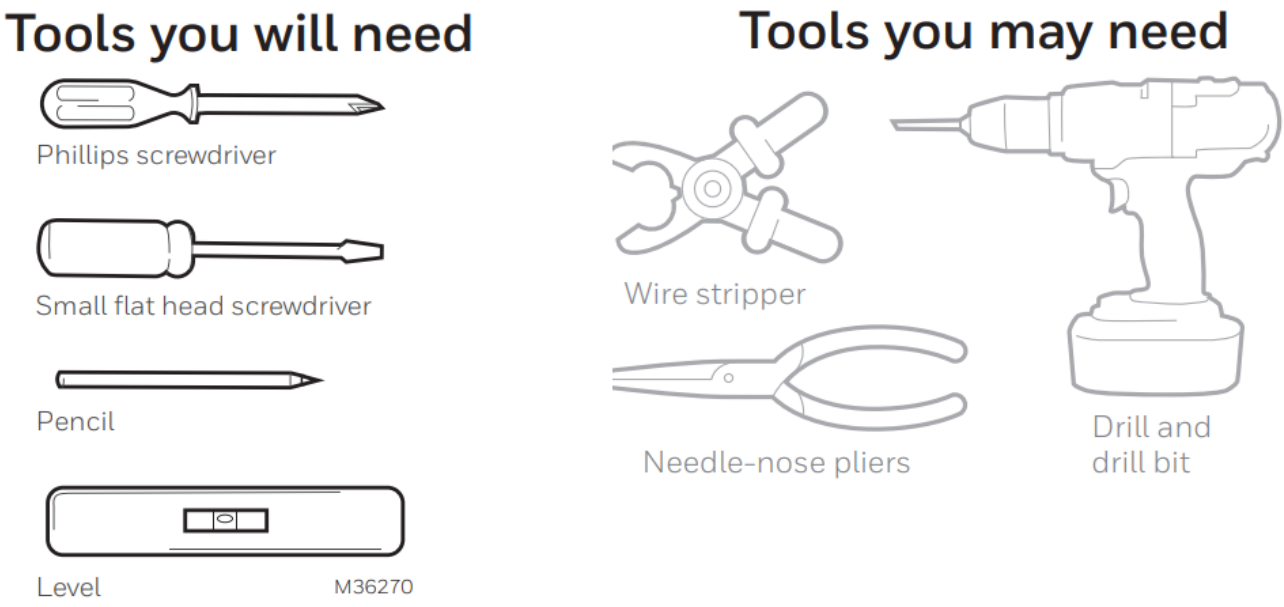
Honeywell Home

# Honeywell Home X1N Non Programmable Thermostat


## Package includes




## TOOLS

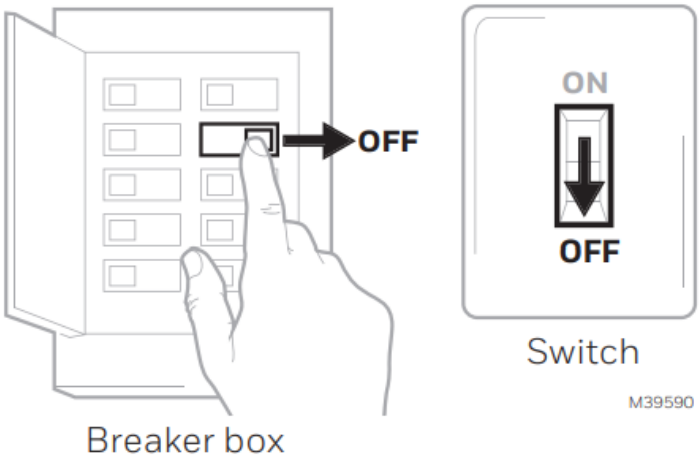



**READ AND SAVE THESE INSTRUCTIONS**

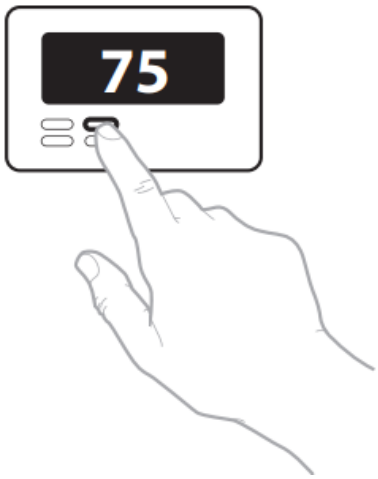
## Installation and Wiring

### Removing the old thermostat

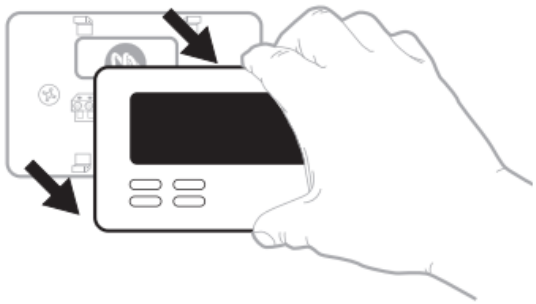
1. Turn power OFF.
    - To protect yourself and your equipment, turn off the power at the breaker box or switch that controls your heating/cooling system. Note that some systems may have separate heating and cooling breakers.



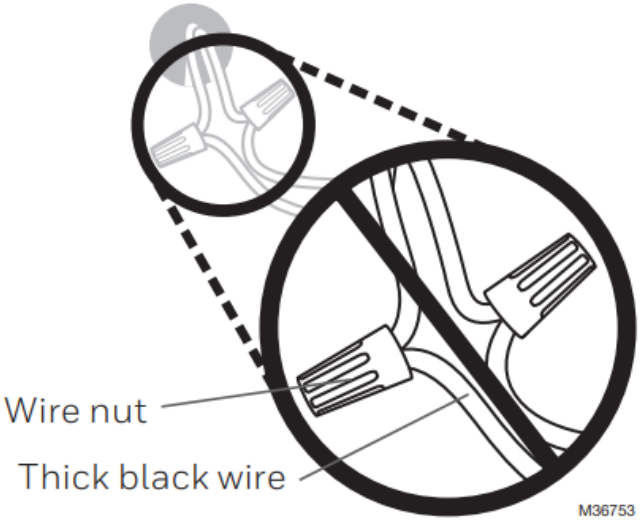

2. **Check that your system is off.**
    - Change the temperature on your old thermostat to be above room temperature in heat mode or below it in cool mode. If you don’t hear the system turn on within 5 minutes, the power is off. Note: If you have a digital thermostat that has a blank display, skip 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!



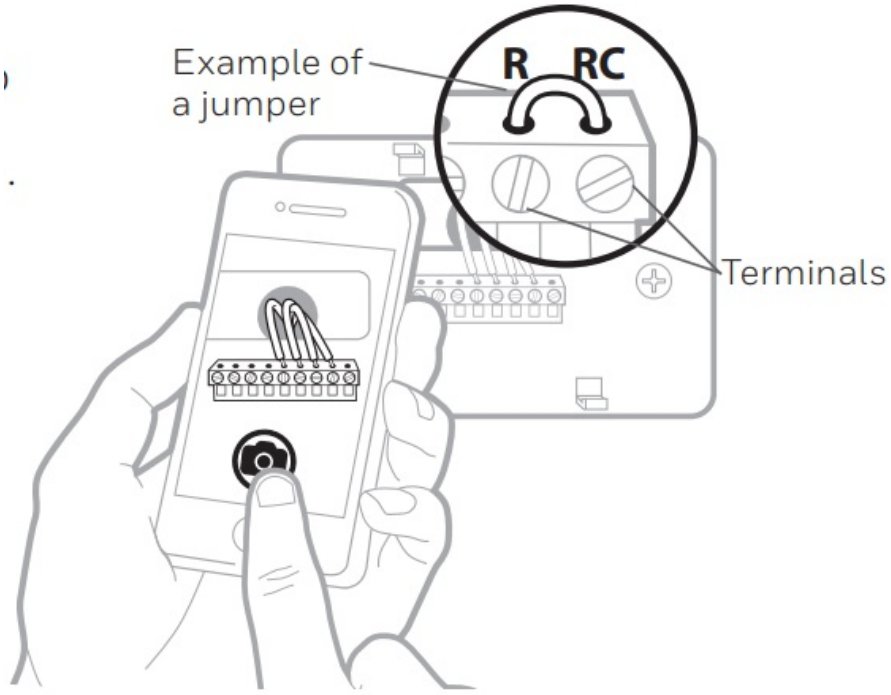
4. **Make sure there are no 120/240V wires.**
    - Do you have thick black wires with wire nuts?
    - Is your thermostat 120V or higher?
    - If you answered yes to either of these questions, you have a line voltage system and the thermostat will not work.




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.

- **Tip**: 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. Record 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 | _____ |

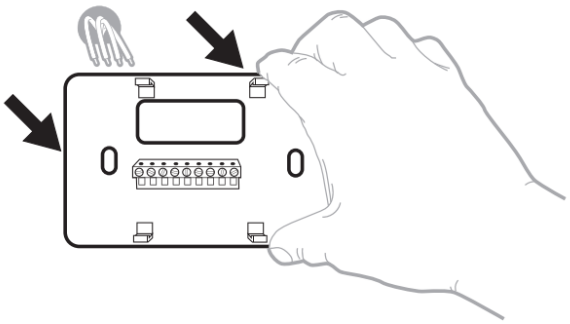
8. **Write down the color of the wires.**
   - Check mark the wires that are connected to terminals. Next to the check mark, write down the color of the wire. Do not include jumpers as a part of your count.
   - **Check all that apply (Not all will apply):**
     - Important: The X1N is for single-stage systems only. If unsupported wires are used, the thermostat will not operate the equipment as intended.

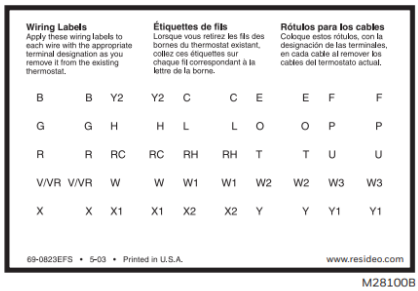
| Terminal | Wire Color |
|---|---|
| ☐ Y | |
| ☐ Y2 | Not Supported |
| ☐ G | |
| ☐ C | |

| Terminal | Wire Color |
|---|---|
| ☐ A or L/A | Not Supported |
| ☐ O/B | |
| ☐ W2 or AUX | Not Supported |
| ☐ E | Not Supported |
| ☐ W | |
| ☐ K | Not Supported |

M39566

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.
     - **Tip**: To prevent wires from falling back into the wall, wrap the wires around a pencil.

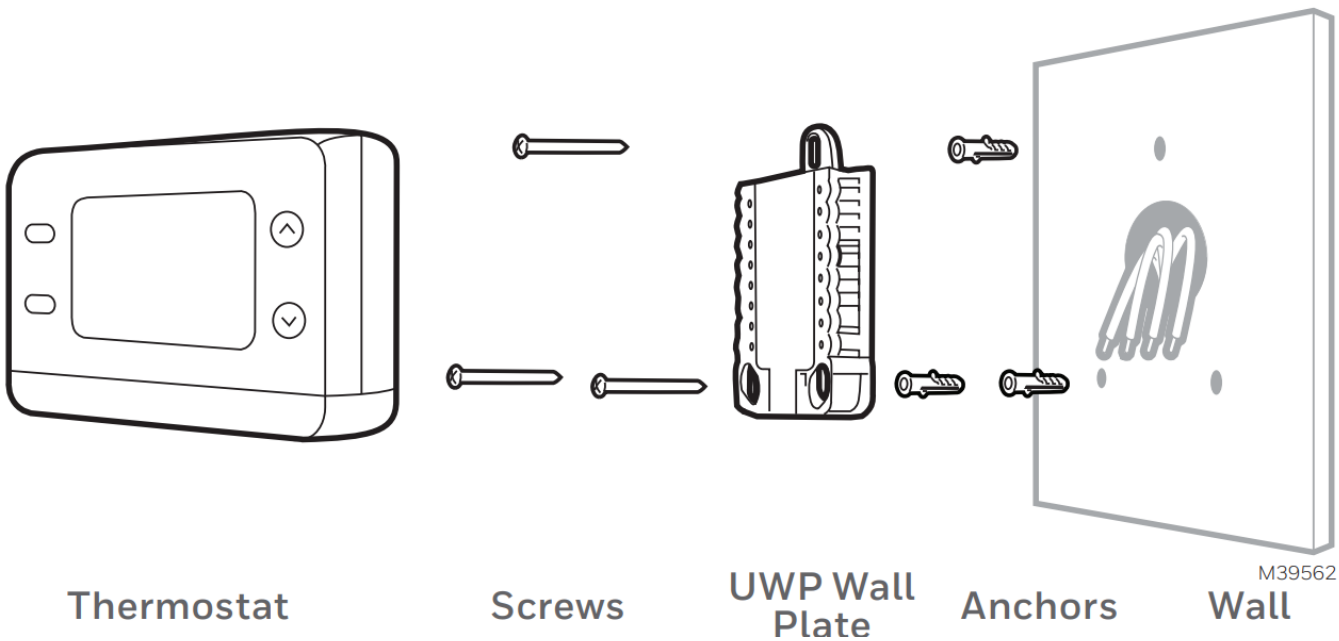




M28100B

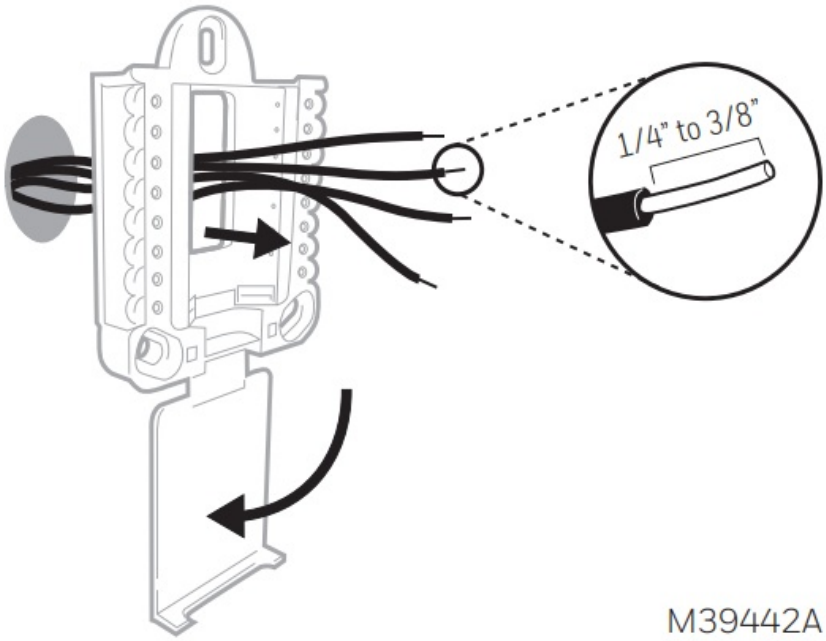
## INSTALLATION

### Installing Your X1N Thermostat

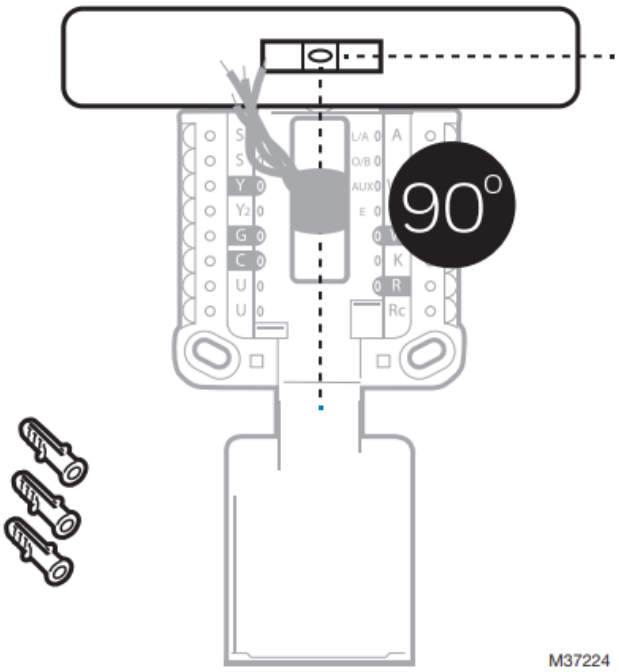


M39562

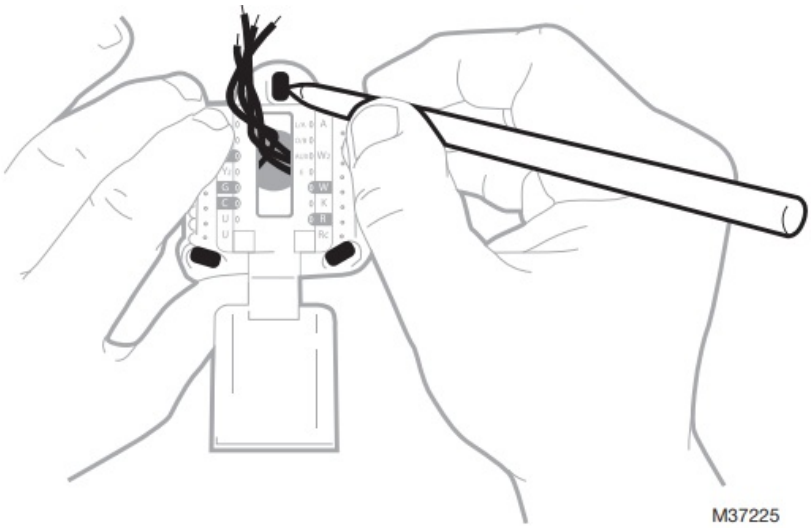
1. **Bundle and insert wires through the UWP.**
    - Pull open the UWP and insert the bundle of wires through the back of the UWP. Make sure at least 1/4-inch of each wire is exposed for easy insertion into the wire terminals.




2. **Insert the wall anchors.**
    - It is recommended that you use the wall anchors included in the box to mount your thermostat. You can use the UWP to mark where you want to place the wall anchors.
        - a) Level the wall plate.
        - b) Mark the location of the wall anchors using a pencil.
        - c) Using a 3/16” bit, drill the holes.
        - d) Insert wall anchors.
        - e) Make sure anchors are flush with wall.

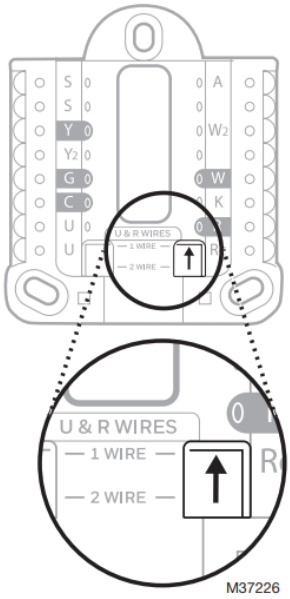



3. **Set R-switch position and insert R-wire or wires.**
    - Set the R-switch up or down based on your wiring notes in Step 7 in Removing the old thermostat.

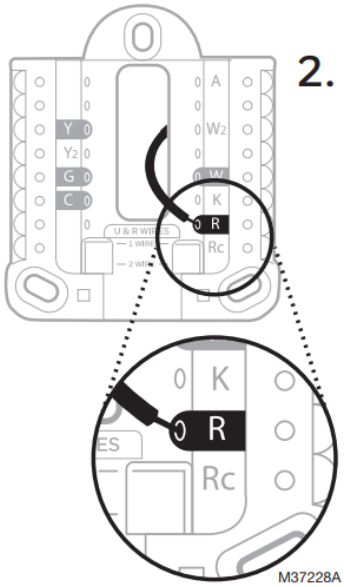



Insert wires into the inner holes of the terminals on the UWP. The tabs will stay down once the wire is inserted. Various wiring options are shown on the following pages

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

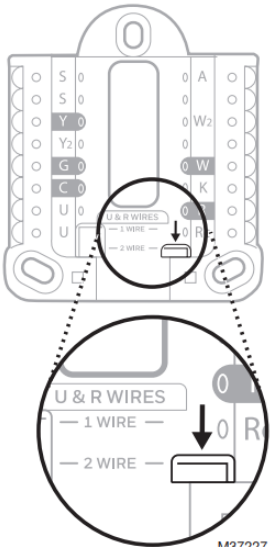



1. Set R-switch to the **up position.**

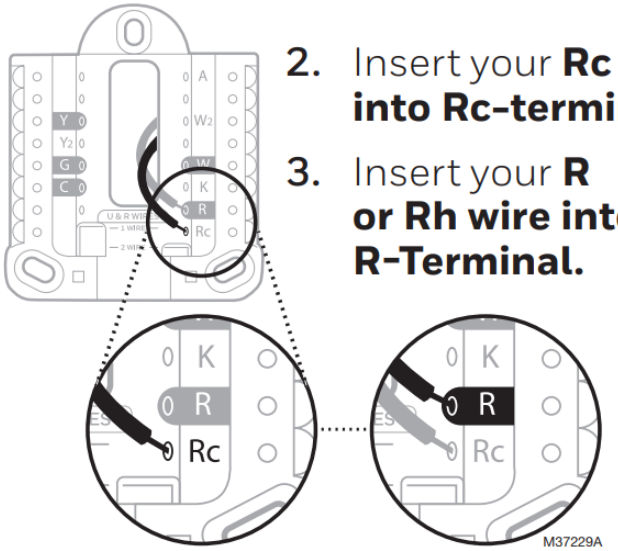



2. Insert your **R-wire (R, Rh or Rc) into R-terminal.**

**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.**

## Wiring

If labels do not match terminals, connect wires as shown below.

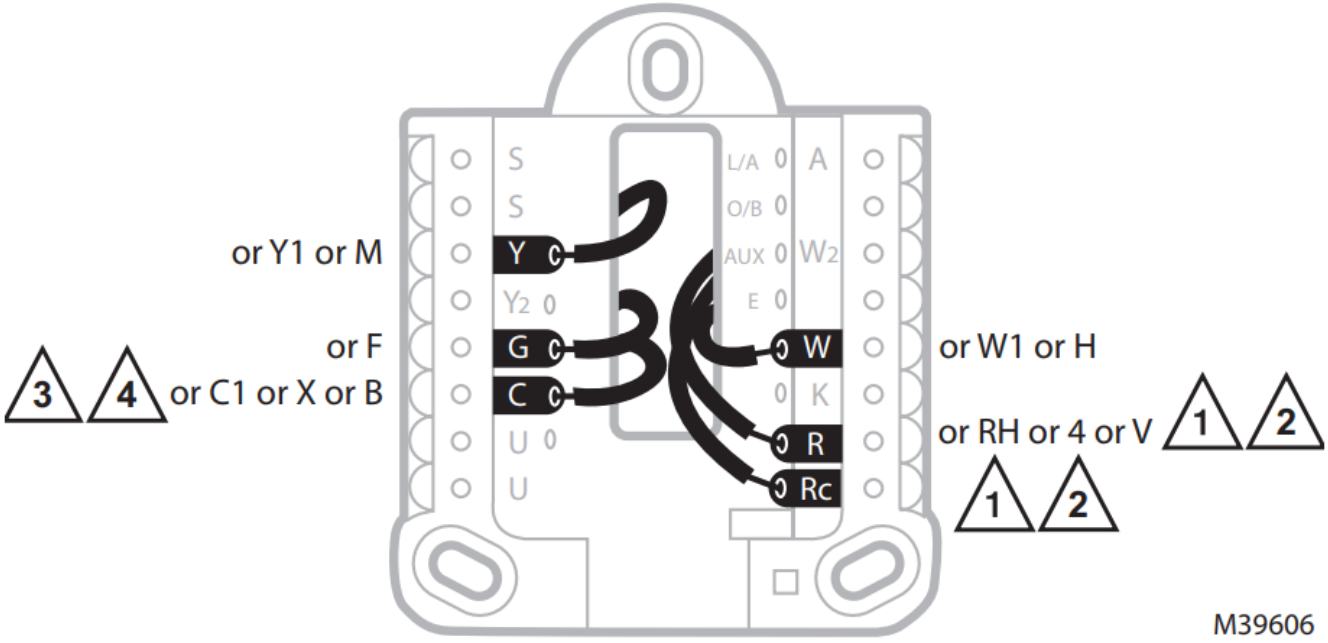
**Conventional Systems**

**Alternate wiring (for conventional systems)**

**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, wrap each separately with electrical tape and do not connect them.
4. C does not power the thermostat display or operations; batteries are always required.

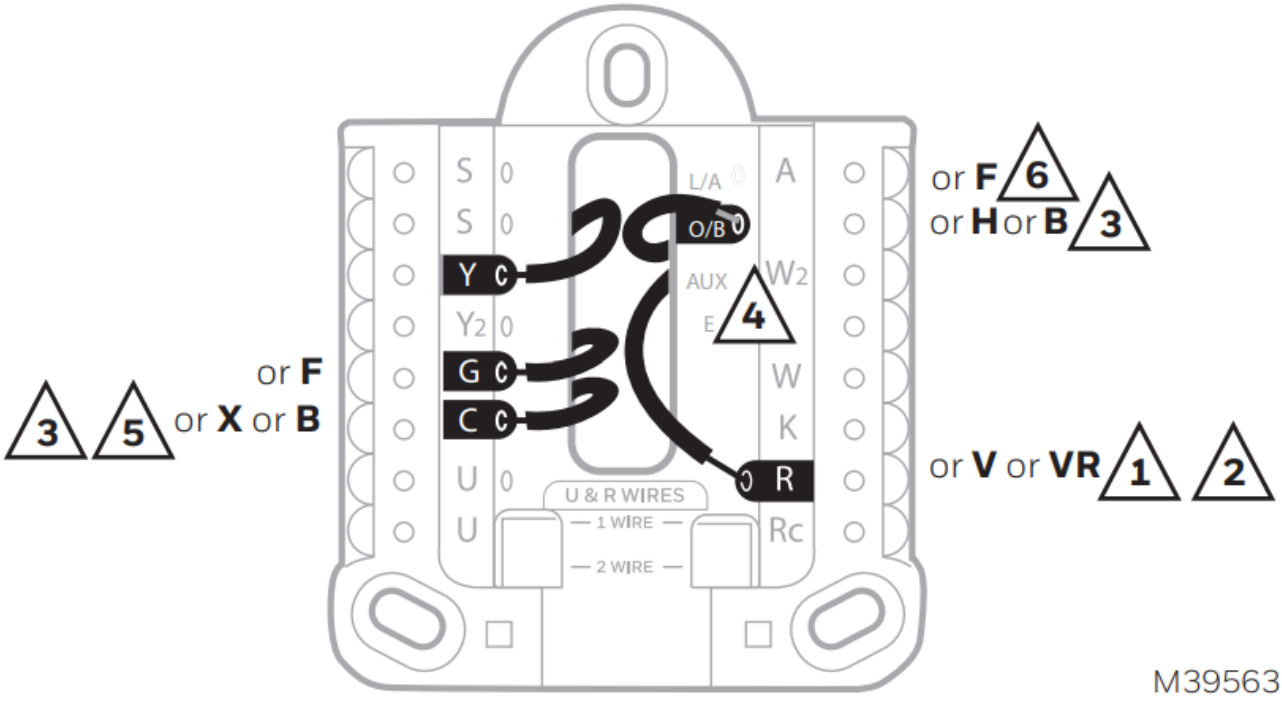



**Heat Pumps**

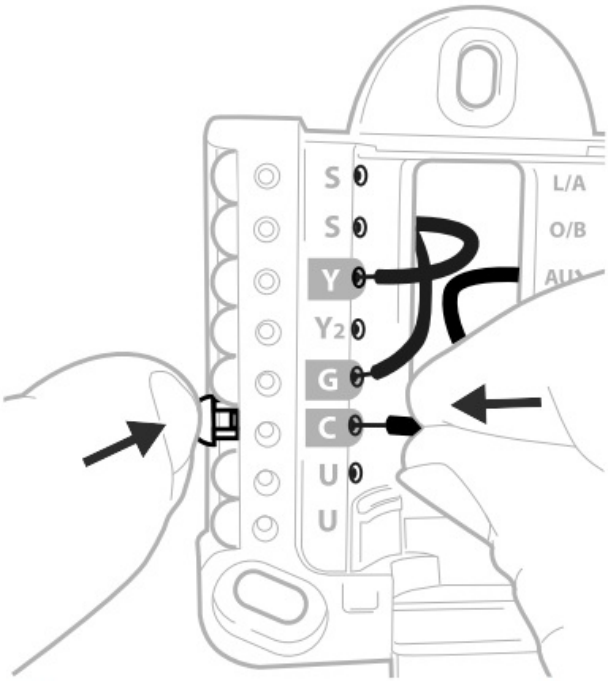
Alternate wiring (for heat pump systems only)

**WIRING NOTES:**

1. Keep 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 the O/B connection is used the thermostat will not support W, Aux/W2 or E wires.
5. C does not power the thermostat display or operations; batteries are always required.
6. This model does not support the heat pump fault alert (L/A terminal). If this is desired, please contact a contractor for a replacement model.

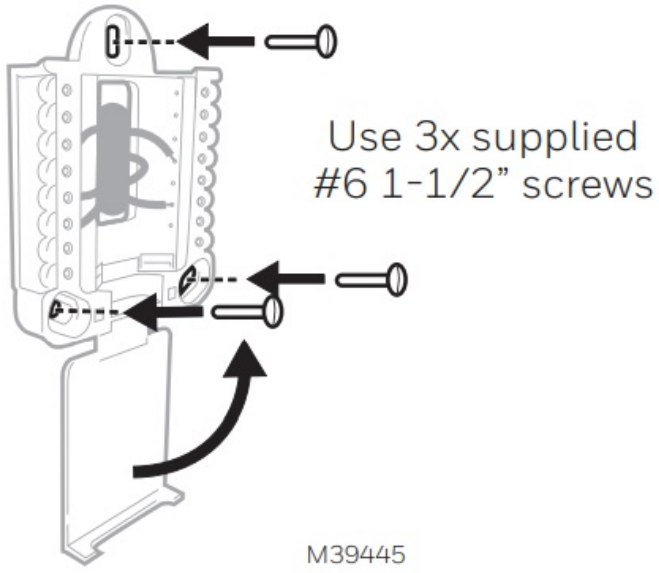



- **Connect wires to the UWP.**
  - Refer to the notes you recorded on the chart during removal. Depress the tabs to put the wires into the inner holes of their corresponding terminals on the UWP (one wire per terminal) until it is firmly in place.

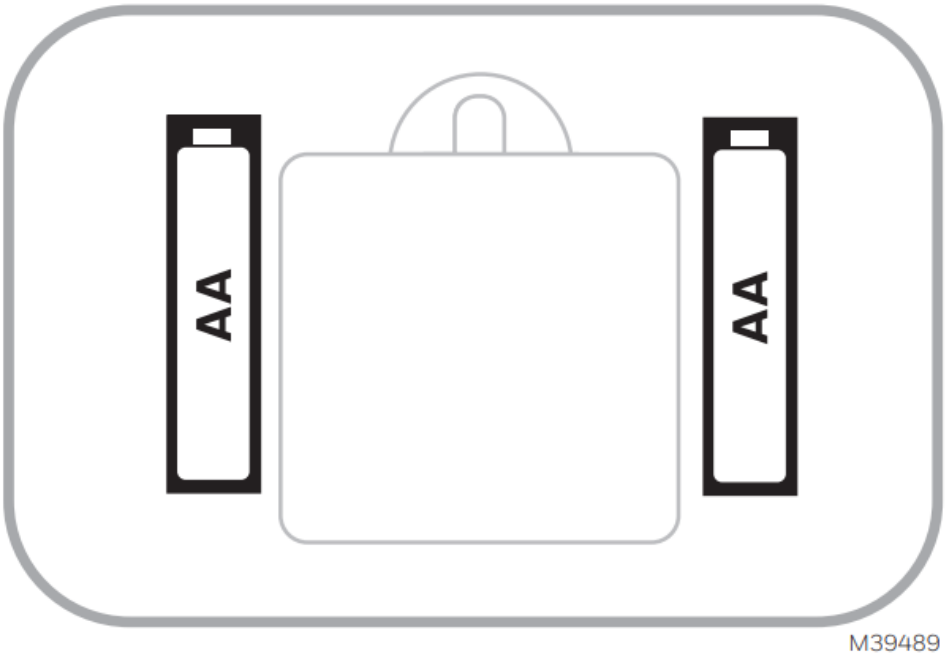



This wiring is just an example; yours may vary.

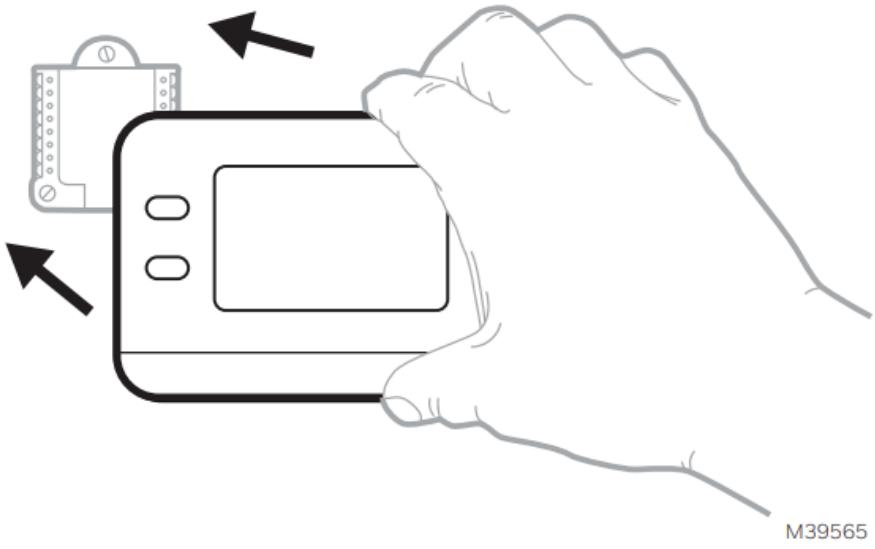
- **Confirm wiring matches snapshot.**
  - Confirm wiring matches terminals from the photo you took during removal.
- **Mount the UWP and close the door.**
  - Mount the UWP using the provided screws. Install all three screws for a secure fit on your wall. Close the door after you're finished.



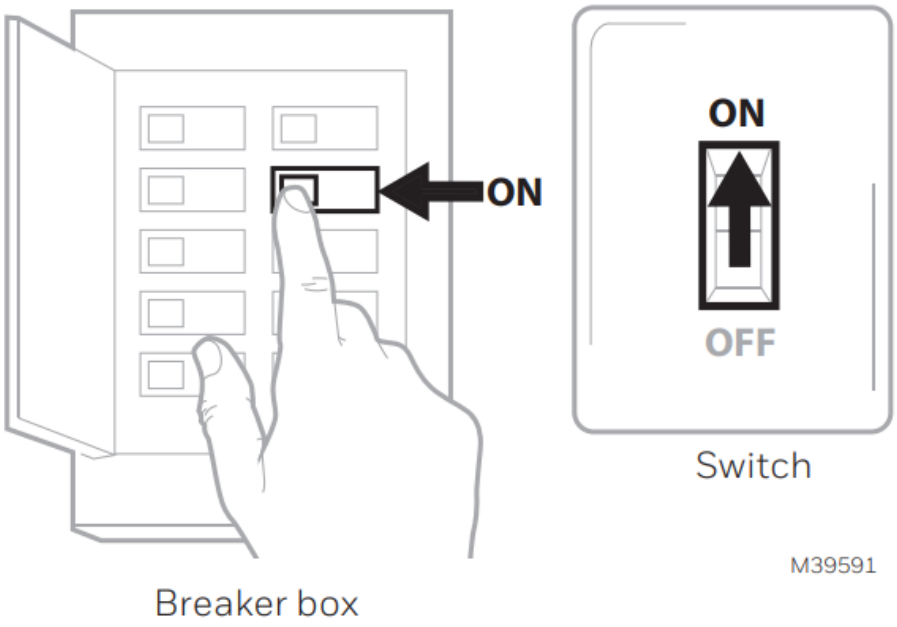

7. **Install batteries.**
    - Insert two AA alkaline batteries in the back of the thermostat as shown.




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

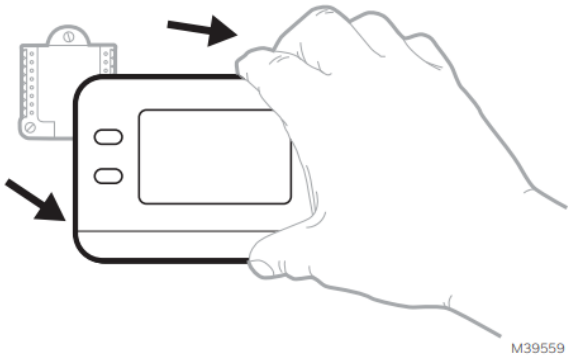


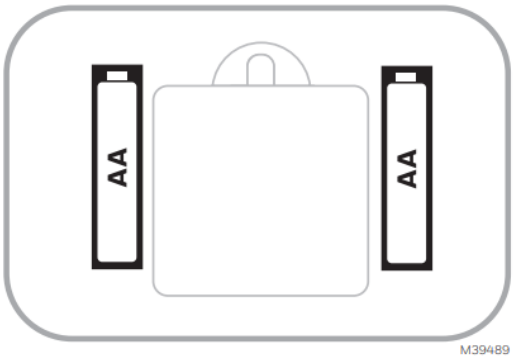
9. **Turn the power ON.**
    - Turn on the power at the breaker box or switch that controls the heating/ cooling system.




## Battery Replacement

The thermostat's display will let you know when the batteries are low and must be replaced. Remove the thermostat by pulling it away from its mount as seen at left below.




Be sure to use fresh AA batteries and insert them as shown in the diagram at right above. After inserting the new batteries, align the thermostat with the mounting plate and push gently until the thermostat snaps back into place as seen in Step 8 above.

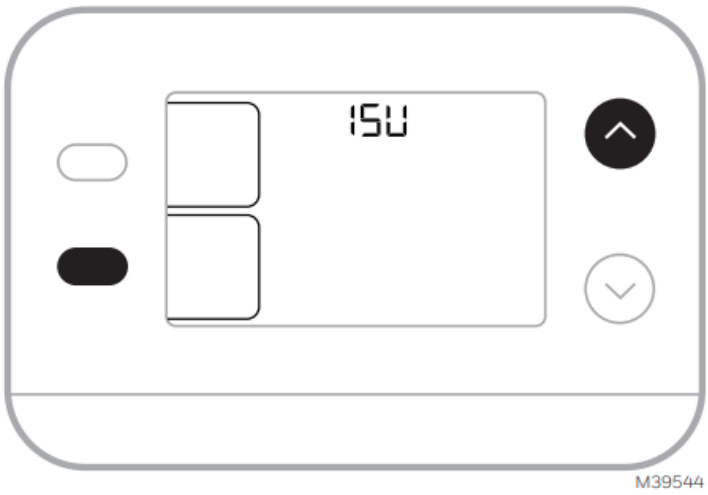
## Configuration

### System Setup

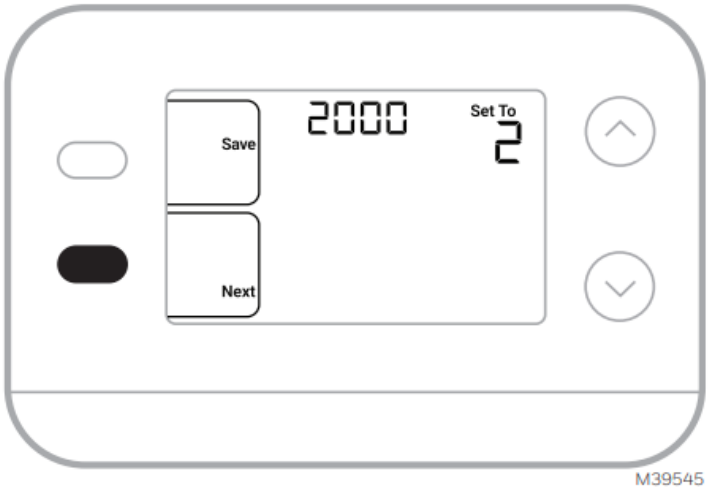
On initial setup, the thermostat will enter the ISU menu. If entering the ISU menu after

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 (ISU)
2. The ISU number is on the left. The ISU setting is on the right. When an ISU number is displayed, press ↑ or ↓ to change the setting.
3. After choosing the correct setting for an ISU, press NEXT to advance to the next ISU setting.
4. To finish setup, press the DONE button.



M39544



M39545

**Installer Setup Options (ISU)**

Depending on system settings, not all options may be available

| ISU | ISU Name | ISU Options (factory default in bold) |
|---|---|---|

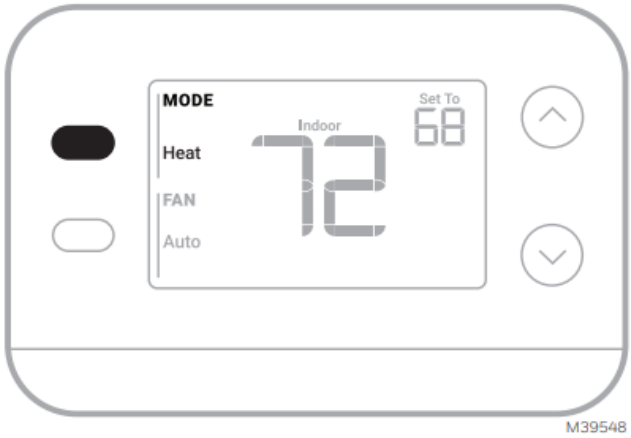
| | | | |
|---|---|---|---|
| 1050 | Temperature Indication Scale | F = Fahrenheit<br>C = Celsius *(Default varies by model)* | |
| 2000 | Heating System Type | **1 = Conventional Forced Air Heat**<br>2 = Heat Pump | 3 = Radiant Heat (Boiler ) 5 = None (Cool Only) |
| *If you are unsure what type of system you have, refer to your heating/cooling system equipment literature or call an HVAC professional. If you select the wrong system type, the thermostat will not operate the equipment as intended.* | | | |
| 2010 | Heating Equipment Type | *Conventional Forced Air Heat:*<br>1 = Standard Efficiency Gas Forced Air<br>**2 = High Efficiency Gas Forced Air**<br>3 = Oil Forced Air<br>4 = Electric Forced Air | 5 = Hot Water Fan Coil<br>**ISU 2010 not shown when 2000 = Heat Pump**<br>*Radiant Heat:*<br>**9 = Hot Water Radiant Heat**<br>12 = Steam |
| 2060 | Reversing Valve O/B | **0 = O (O/B on Cool. O wire is connected to the O/B terminal and controls cooling.)**<br>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 Stages/Compressor Stages | 0, **1** | |
| 2071 | Heat Stages | Heat Stages: **1** | |
| 3000 | System Changeover | **0 = Hidden (Manual only)** 1 = Enabled<br><br>(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 50°F [10°C] during winter months.) | |
| 4103 | Minimum Heat Setpoint | 32°F to 50°F **Default 40 °F**<br><br>0°C to 10°C **Default 4.5 °C** | Do not set this lower than 40°F/4.5°C unless installed in<br><br>a location where pipes are not at risk of freezing. |

| | | | |
|---|---|---|---|
| 7110 | Air Filter Replacement Reminder (Run Time o nly counts the<br>time that Heat, Cool or Fan are running) | 0 = Off<br>1 = 10 Run Time Days<br>2 = 20 Run Time Days<br>3 = 30 Run Time Days<br>4 = 45 Run Time Days<br>5 = 60 Run Time Days<br>6 = 90 Run Time Days<br>7 = 120 Run Time Days<br>8 = 150 Run Time Days<br>9 = 30 Calendar Days | 10 =45 Calendar Days<br>11 =60 Calendar Days<br>12 =75 Calendar Days<br>13 =3 Calendar Months<br>14 =4 Calendar Months<br>15 =5 Calendar Months<br>16 =6 Calendar Months<br>17 =9 Calendar Months<br>18 =12 Calendar Month s<br>19 =15 Calendar Month s |
| 14005 | Idle screen selection | 0 – Minimum Information shown<br>2 – Maximum display information shown | |

## 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 with system settings.




**System modes:**

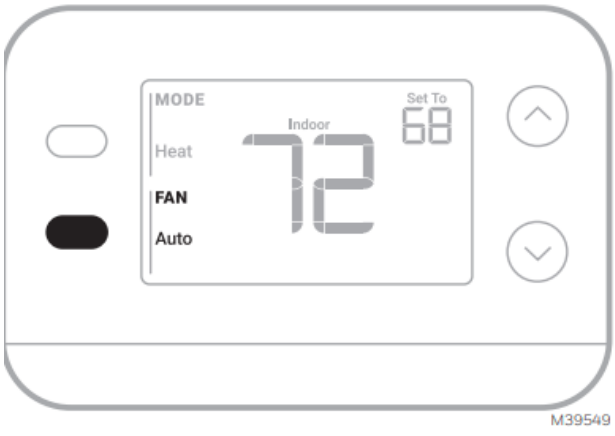
- AUTO
- HEAT
- COOL
- OFF

**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.




**Built-in Compressor Protection**

Damage can occur if your system’s compressor is restarted too soon after shutdown. This 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”.


## Alerts and Reminders

| Alert Number | Alert Meaning |
|---|---|
| 405 | Low batteries (see Battery Replacement section) |
| 407 | Critically low batteries (see Battery Replacement section) |
| 170 | Thermostat memory failure |
| 173 | Internal Sensor Error. Issue with the built-in temperature sensor. |
| 181 | Replace filter (Reset this timer after replacing furnace filter by pressi ng and holding the upper left and lower right buttons for 5 seconds.) |

- When an alert is active, an ⚠ icon will appear in the lower part of the display. Pressing the lower left button, then the upper right button will show the alert # over the temperature reading.
- When the filter Reminder is active the 🔔 icon appears as well as Replace Filter.

## Troubleshooting

| | |
|---|---|
| **Display is blank** | • Make sure fresh AA alkaline batteries are correctly installed (see Step 7 of the section **Installing the Thermostat**) |
| **Heating or cooling does not run** | • When running heat, display will show **HEAT ON** in lower right of display<br>• When running cool, display will show **COOL ON** in lower right of display<br>• 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<br>• If display does not indicate a call for Heat or Cool or **WAITING FOR EQUIPMENT**, verify the mode setting, temperature setpoint and room temperature<br>**If the Up or Down arrow is pressed**<br>• Upper left of display shows mode setting<br>• Upper right shows setpoint<br>• Center of display shows room temperature<br>**If the issue persists**<br>• Check circuit breaker and reset if necessary<br>• Make sure power switch at heating & cooling system is on<br>• Make sure furnace door is closed securely |

| | |
|---|---|
| **Heat runs with Cooling** | • Verify there is not a wire attached to W for heat pump systems. See Wiring section<br>• For heat pump applications the reversing valve is energized in Heat on some heat pumps and Cool for other heat pumps. Verify that **ISU 2060** is set correctly<br>• Verify that no wires are shorted. Look for exposed sections of wire at the UWP |
| **Heat runs with no call for heat or cooling** | • Verify display does not indicate **HEAT ON** or **COOL ON**<br>• Verify there is not a wire attached to W for heat pump systems. See Wiring section.<br>• Verify that no wires are shorted. Look for exposed sections of wire at the UWP |
| **Cannot change setpoint to desired setting** | • Verify the mode setting (Heat, Cool or Auto in upper left of display)<br>**The setting ranges for these modes are:**<br>• Heat: 32 ºF to 90 ºF (0 ºC to 32.0 ºC)<br>• Cool: 50 ºF to 99 ºF (10.0 ºC to 37.0 ºC) |
| **WAITING FOR EQUIPMENT** shown in display under room temperature | • The compressor protection feature is engaged. Wait a few minutes for the system to safely restart to avoid damaging the compressor. |

## MORE INFORMATION

**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.

## Warranty

**1-year Limited Warranty**

- For Warranty information go to Honeywellhome.com/support

**47 CFR § 15.105 (b)**

- See https://customer.resideo.com/en-US/support/residential/codes-and-standards/FCC15105/Pages/default.aspx 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.

- **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.
  - FCC statement available at: https://customer.resideo.com/en-US/support/residential/codes-and-standards/FCC15105/Pages/default.aspx
- **Customer Assistance**
  - For assistance with this product, please visit honeywellhome.com
  - Or call Resideo Customer Care toll-free at 1-800-633-3991
  - www.resideo.com

## FAQs

- **Q: Can the X1N thermostat be used with multi-stage HVAC systems?**
  - A: No, the X1N thermostat is designed for single-stage systems only. Using it with unsupported wires may result in improper equipment operation.
- **Q: What should I do if I have thick black wires with wire nuts?**
  - A: If you have thick black wires with wire nuts, you likely have a line voltage system, which is not compatible with the X1N thermostat. Please consult a

professional for further assistance.

# Documents / Resources

| | |
|---|---|
|  | Honeywell Home X1N Non Programmable Thermostat [pdf] Installation Guide<br>RTH11B, RTHC11B, X1N Non Programmable Thermostat, X1N, Non Programmable Thermostat, Programmable Thermostat, Thermostat |

## References

- User Manual

Honeywell Home

Honeywell Home, Non-Programmable Thermostat, PROGRAMMABLE THERMOSTAT, RTH11B, RTHC11B, Thermostat, X1N, X1N Non Programmable Thermostat

# Leave a comment

Your email address will not be published. Required fields are marked *

Comment *

Name

Email

Website

Save my name, email, and website in this browser for the next time I comment.

Post Comment

## Search:

e.g. whirlpool wrf535swhz

Search