



Honeywell RTH7600 Series Touchscreen Programmable Thermostat Installation Guide

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Honeywell

Quick Installation Guide
RTH7600 Series
Touchscreen Programmable Thermostat





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RTH7600 Series Touchscreen Programmable Thermostat

Installation is Easy

- Label wires and remove your old thermostat
- Install and wire your new thermostat
- Set your new thermostat to match your heating/cooling system
 - This thermostat works with virtually all System Types
 - It is preset for the most common system

We are here to help.

Call 1-800-468-1502 for wiring assistance before returning the thermostat to the store.



- **Remove Old Thermostat**

Remove old thermostat but leave wallplate with wires attached.



- **Label Wires with Tags**

Label the wires using the supplied wire labels as you disconnect them.

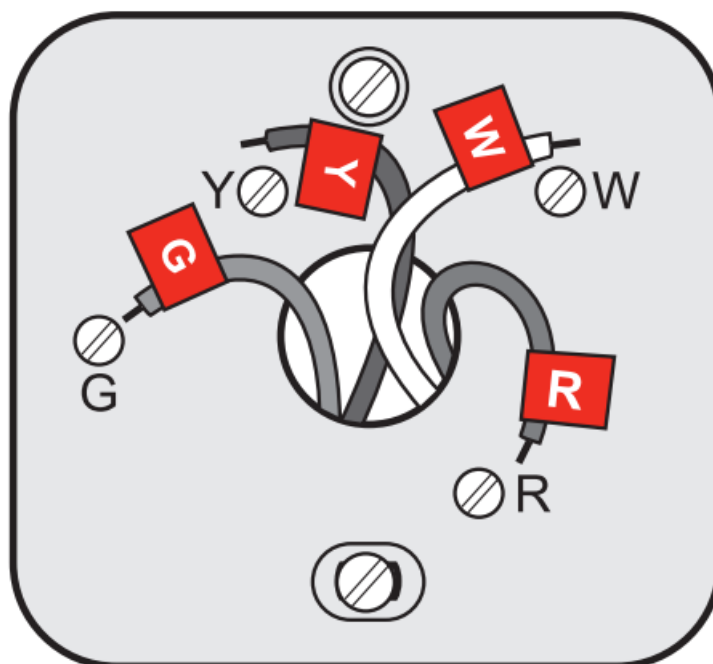
Wiring Labels Apply these wiring labels to each wire with the appropriate terminal designation as you remove it from the existing thermostat.									
B	B	Y2	Y2	C	C	E	E	F	F
G	G	H	H	L	L	O	O	P	P
R	R	RC	RC	RH	RH	T	T	U	U
V/VR	V/VR	W	W	W1	W1	W2	W2	W3	W3
X	X	X1	X1	X2	X2	Y	Y	Y1	Y1

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www.honeywell.com/yourhome

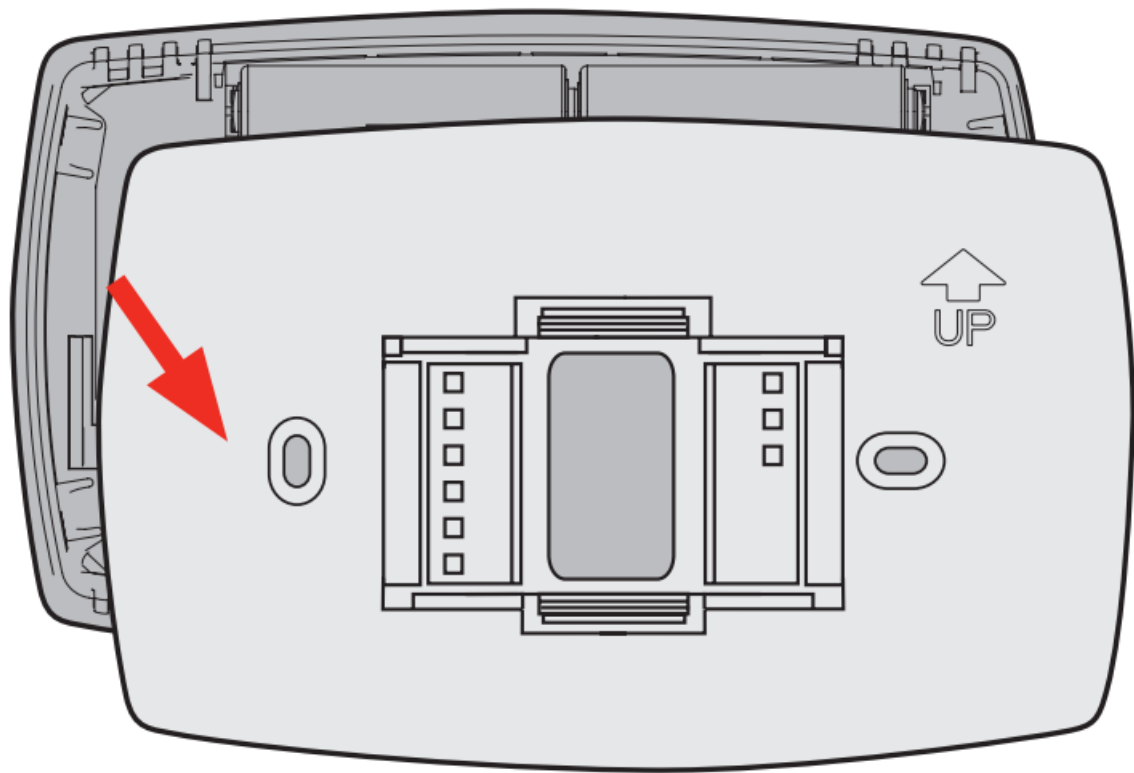
Wire Labels



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- **Separate Wallplate from New Thermostat**

Remove wallplate from the new thermostat and mount onto wall.

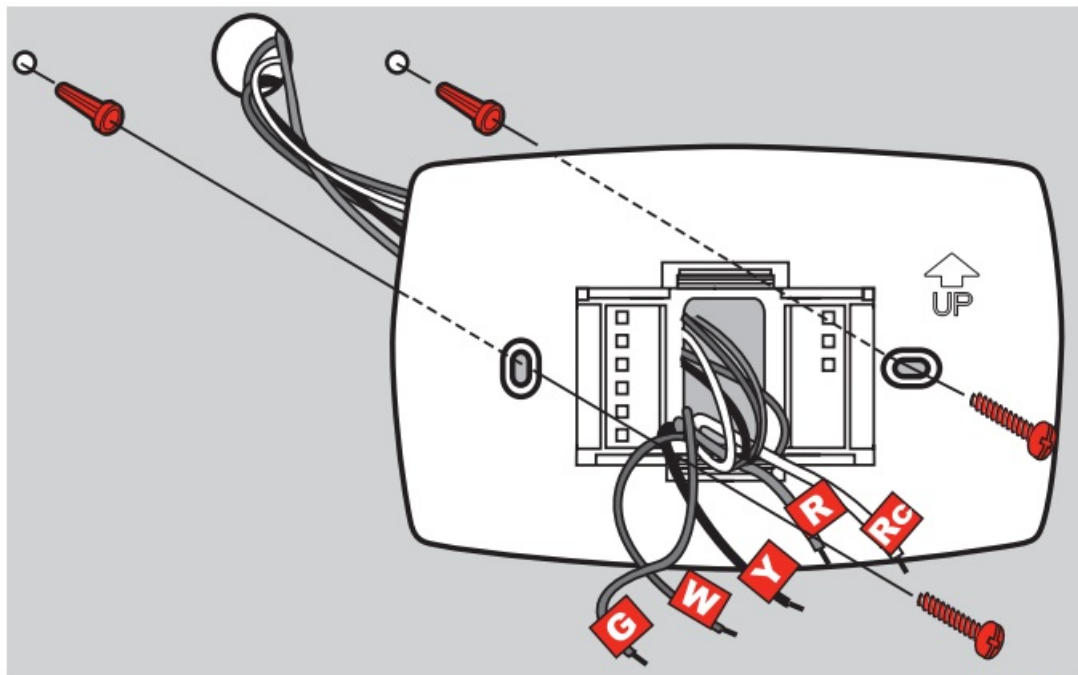


Wallplate

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- **Mount Wallplate**

Mount the new wallplate using the included screws and anchors.



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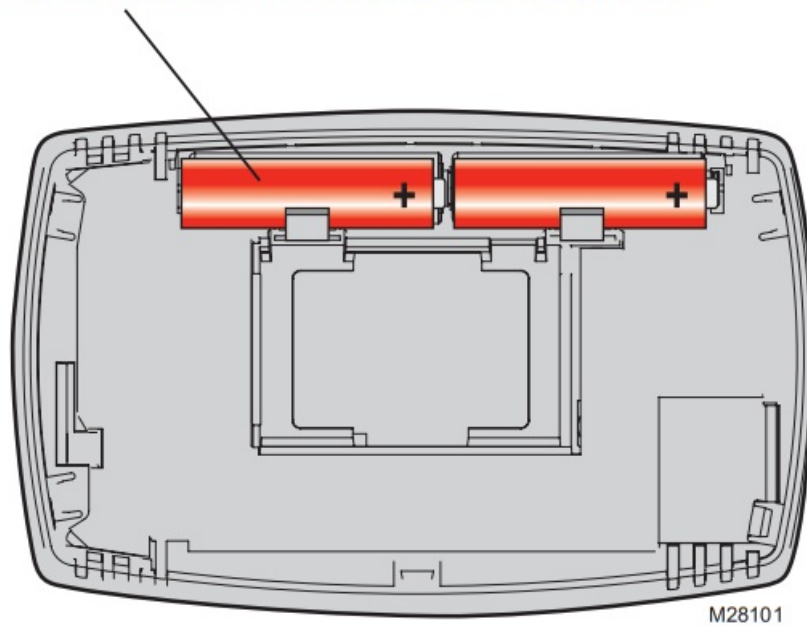
Drill 3/16-in. holes for drywall

Drill 3/32-in. holes for plaster

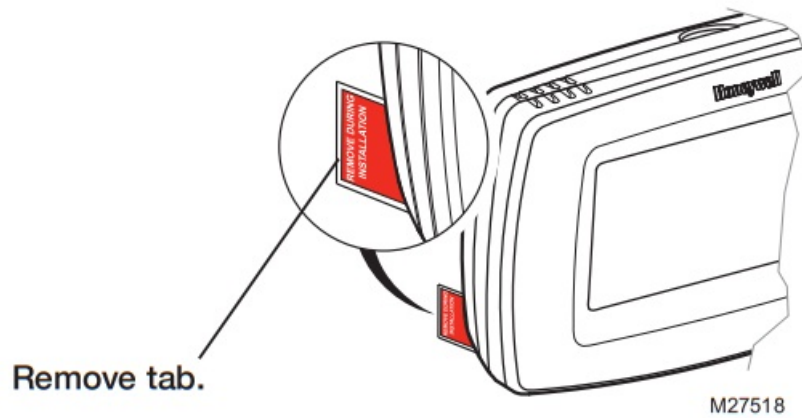
- **Connect Wires**

Simply match wire labels.

Install two AA alkaline batteries and remove tab.

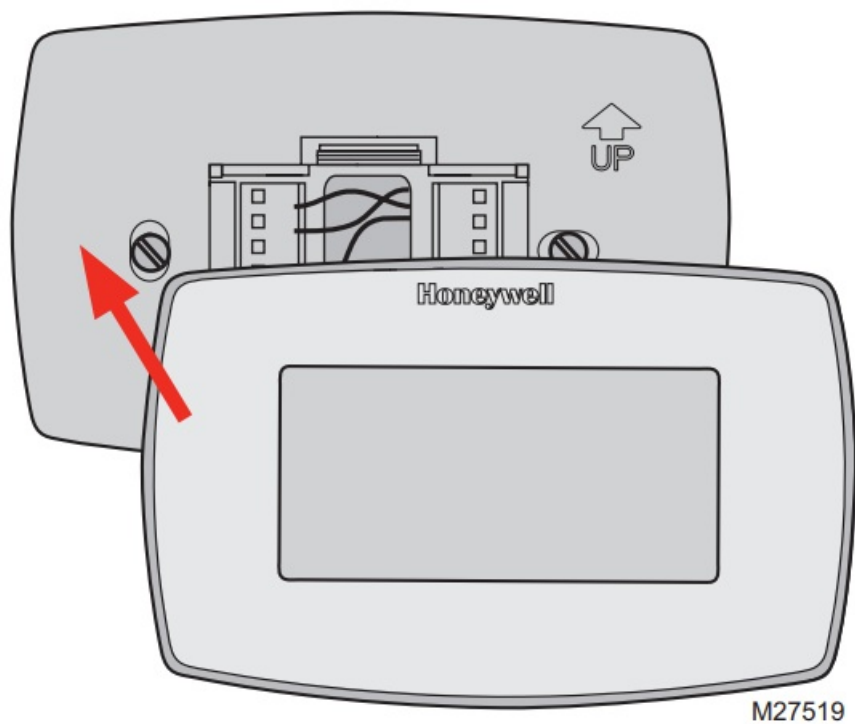


Back of thermostat



- **Install Thermostat onto Wallplate**

Install thermostat onto the wallplate on the wall.



- **Turn Power Back On**

Turn the power back on to the heating/cooling system.



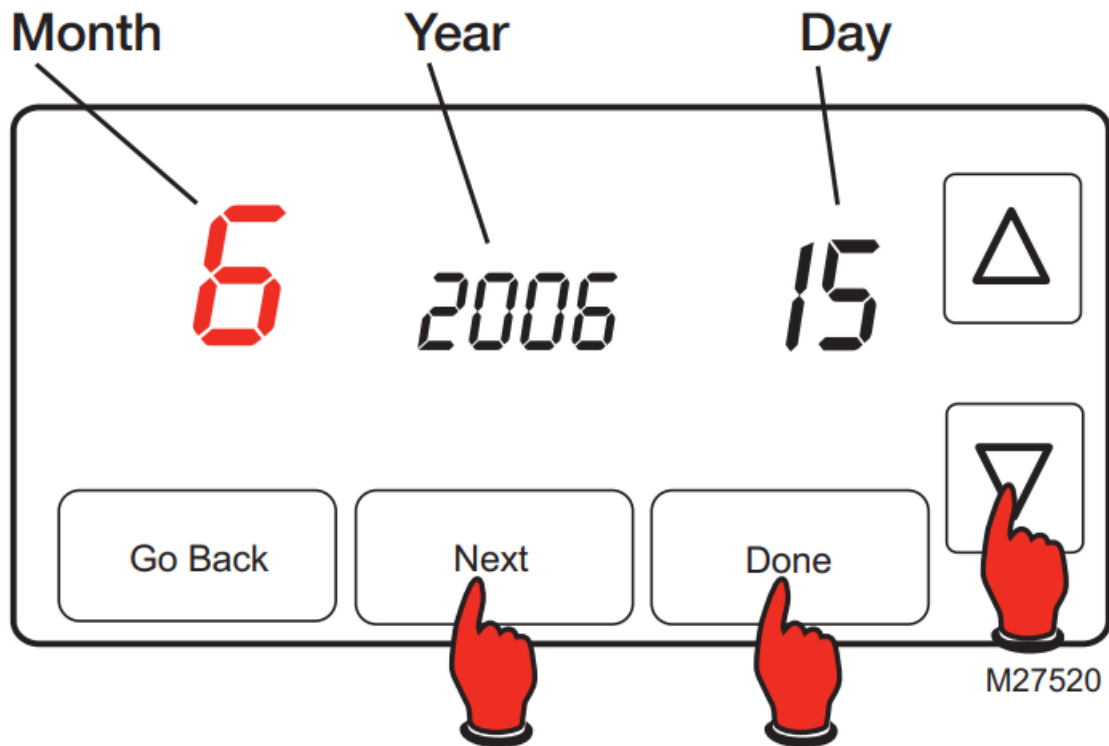
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- **Set Time and Date**

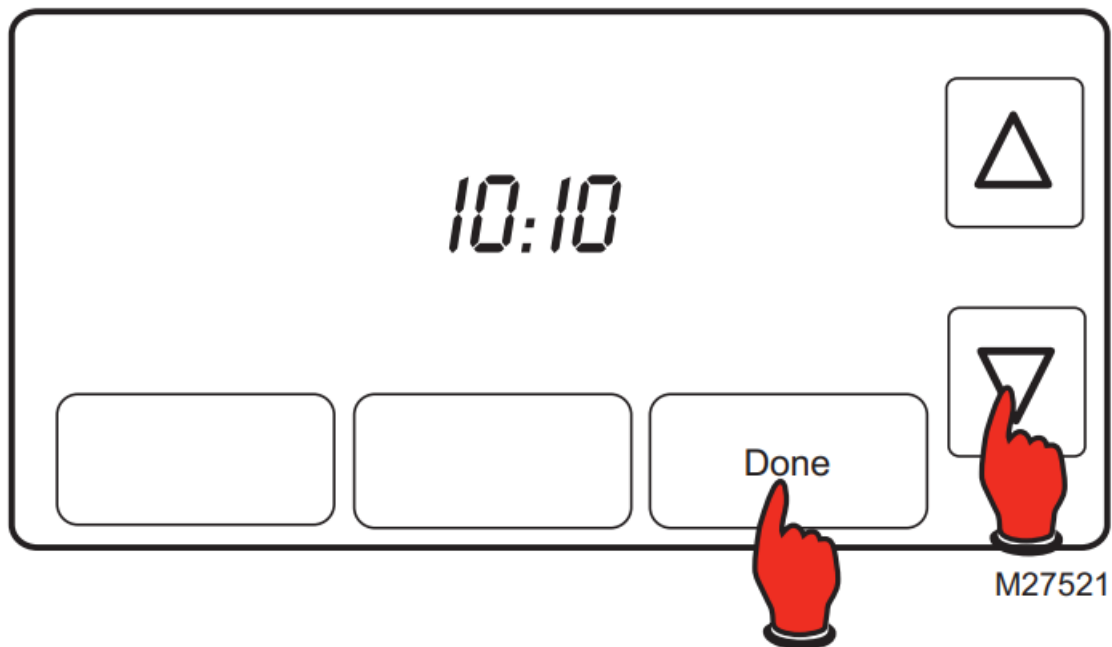
Press \blacktriangle or \blacktriangledown to set month, then press NEXT.

Press \blacktriangle or \blacktriangledown to set day, then press NEXT.

Press \blacktriangle or \blacktriangledown to set year, then press DONE.



Press \blacktriangle or \blacktriangledown to set time, then press DONE to save and exit.



If your system type is...

If your system type is:

- Single Stage Heat and Cool
- Congratulations, you're done!

If your system type is:

- Multistage Heat and Cool
- Heat Pump* without Backup Heat
- Heat Pump* with Backup Heat
- Heat Only
- Cool Only

Continue with advanced installation on next page to match your thermostat to your system type.

*Heat Pump—an air conditioner that provides cooling in the summer, and also runs in reverse in the winter to provide heating.

If you are not sure of your system type or if you have other questions, call us toll-free at 1-800-468-1502.

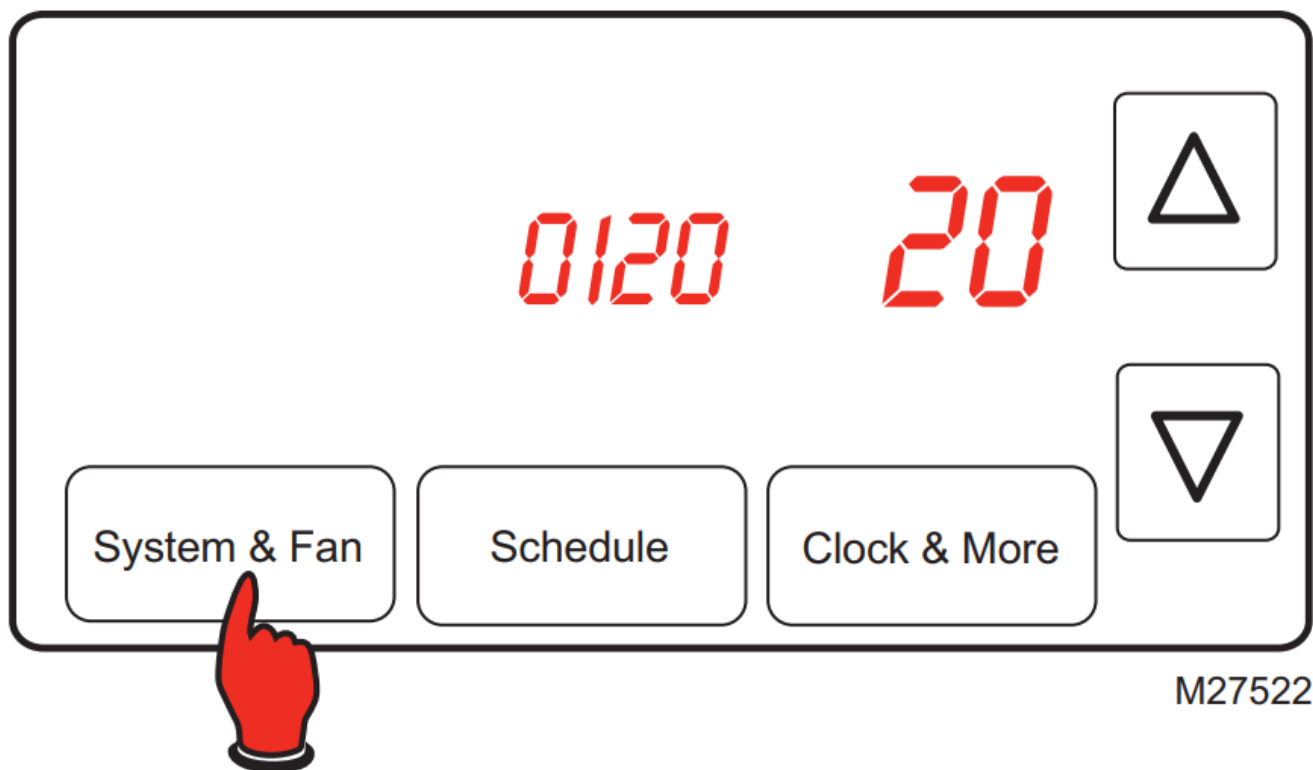
This thermostat works on 24 volt or 750 mV systems. It will NOT work on 120/240 Volt systems.

RTH 7600

System setup

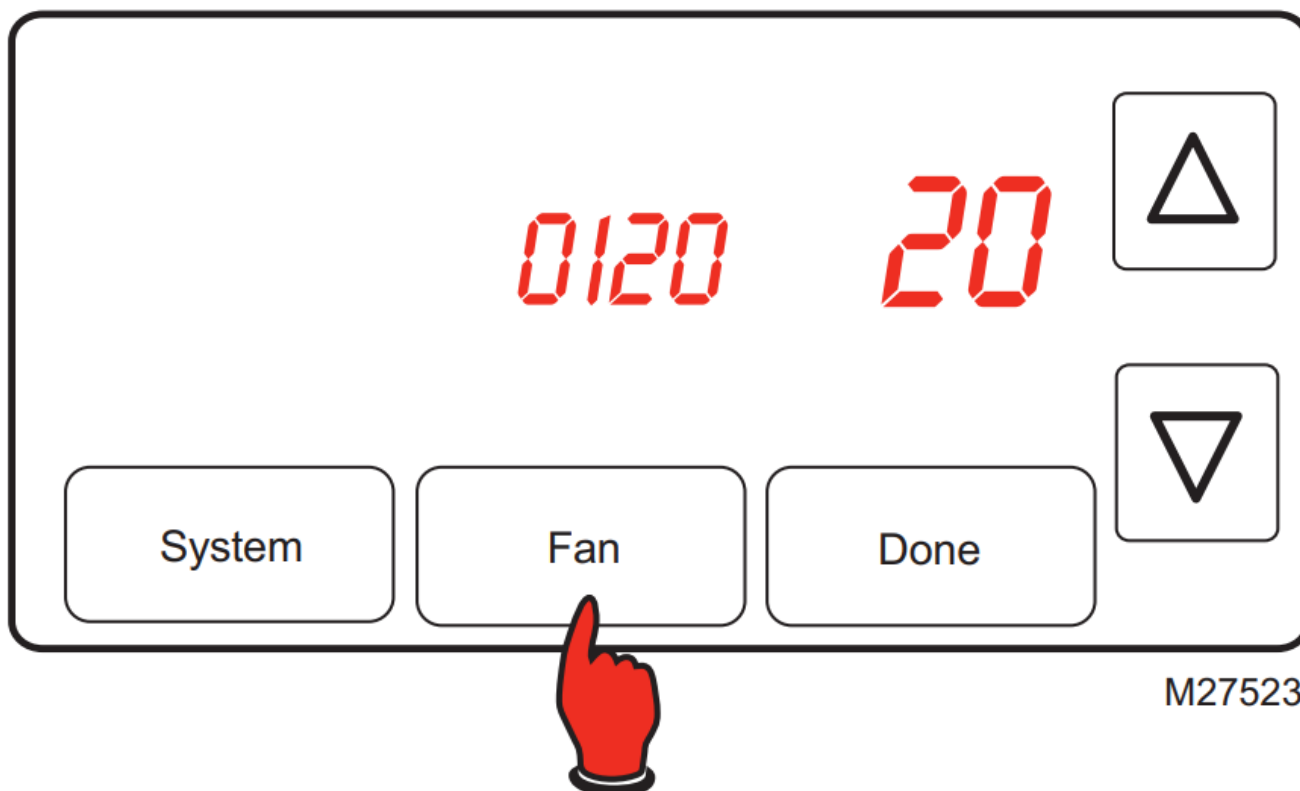
Step 1

Press System & Fan.



Step 2

Press and hold the center key until the screen changes (approximately 5 seconds).

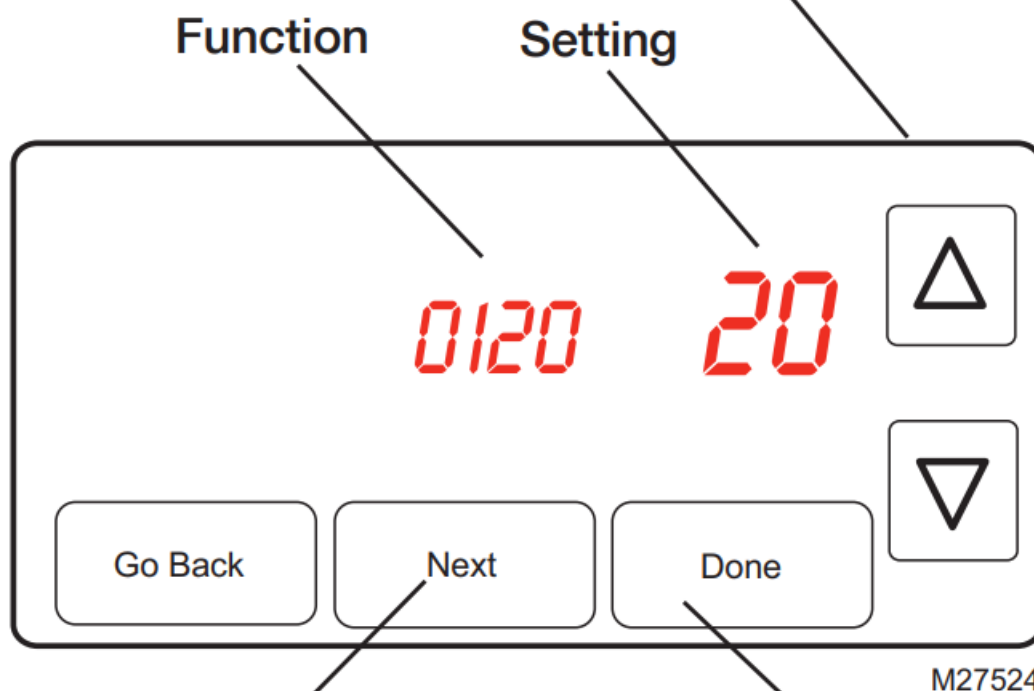


Advanced Installation Guide

Changing settings

See pages 15–20 to change Function Settings.

Press ▲ ▼ to change setting.



Press **NEXT** to advance to next function.

Press **DONE** to save & exit.











NOTE: Some functions in the following pages may not appear due to previous selections made.

















NOTE: If you set the time and date as shown on page 10, press NEXT to function 0170 and go to page 16.

See page 14 to navigate between functions.

Function	Settings & Options
0120 Year Setting(first two digits)	Press ▲/▼ to change the first two digits of the year: 20 = Year 20xx 21 = Year 21xx
0130 Year Setting (second two digits)	Press ▲/▼ to change the last two digits of the year: 01 – 99 (i.e., 2001 – 2099)

0140 Month Setting	Press   to change the current month: 01 – 12 (i.e., January – December)
0150 Date Setting	Press   to change the current date: 01 – 31
0170 Select System Type	<p>Press   to select your system type:</p> <p>1 Heat/cool: Gas, oil or electric heating with central air conditioning. 2 Heat pump: Heat pump without backup or auxiliary heat. 3 Heat only: Gas, oil or electric heat without central air conditioning. 4 Heat only with fan: Gas, oil or electric heat without central air conditioning. 5 Hot water heat only (no fan): Gas, oil or hot water heat without central air conditioning. 6 Cool only: Central air conditioning only. 7 Heat pump: Heat pump with backup or auxiliary heating. 8 Heat/Cool Multiple stages: 2 heat stages (wires on W and W2), 2 cooling stages (wires on Y and Y2). 9 Heat/Cool Multiple stages: 2 heat stages (wires on W and W2), 1 cooling stage (wire on Y). 10 Heat/Cool Multiple stages: 1 heat stage (wire on W), 2 cooling stages (wires on Y and Y2).</p>
0180 Heating Fan Control	<p>Press s/t to select your heating system & fan control: 0 Gas or oil heat: Use this setting if you have a gas or oil heating system (system controls fan operation). 1 Electric heat: Use this setting if you have an electric heating system (thermostat controls fan operation).</p>
0190 Heat Pump Changeover Valve (for heat pumps only)	<p>Press   to select whether your changeover valve is used in heating or cooling:</p> <p>0 Cooling changeover valve: Use this setting if you connected a wire labeled “O” to the O/B terminal (see page 22). 1 Heating changeover valve: Use this setting if you connected a wire labeled “B” to the O/B terminal (see page 23).</p>

0240 Heating Cycle Rate	<p>Press   to select your heating system:</p> <p>5 Gas or oil furnace: Standard gas/oil furnace (less than 90% efficiency).</p> <p>9 Electric furnace: Electric heating systems.</p> <p>3 Hot water or high-efficiency furnace: Hot water system or gas furnace (more than 90% efficiency).</p> <p>1 Gas/oil steam or gravity system: Steam or gravity heat systems.</p>
0270 Emergency Heat Cycle Rate (heat pumps only)	<p>Press   to select your heating system:</p> <p>9 Electric furnace: Electric heating systems.</p> <p>5 Gas or oil furnace: Standard gas/oil furnace (less than 90% efficiency).</p> <p>3 Hot water or high-efficiency furnace: Hot water system or gas furnace (more than 90% efficiency).</p> <p>1 Gas/oil steam or gravity system: Steam or gravity heat systems.</p>
0300 Manual/Auto Changeover	<p>Press   to select manual or automatic changeover:</p> <p>0 Manual changeover (Heat/Cool/ Off).</p> <p>1 Automatic changeover (Heat/ Cool/Auto/Off). Automatically turns on Heat or Cool based on room temperature.</p> <p>Note: System maintains minimum 3°F difference between heat and cool settings.</p>
0320 Temperature Format (°F/°C)	<p>Press   to set the temperature display format:</p> <p>0 Fahrenheit</p> <p>1 Celsius</p>
0330 Daylight Saving Time On/Off	<p>Press   to select an option:</p> <p>0 Off: No adjustment for daylight saving time.</p> <p>1 On: Auto-change to daylight saving time (for areas that do not use the new 2007 DST calendar).</p> <p>2 On: Auto-change to daylight saving time (2007 and beyond, for areas that use the new 2007 DST calendar).</p>
0500 Furnace Filter Change Reminder	<p>Press   to set the desired reminder interval:</p> <p>0 Off (no reminder)</p> <p>1 Reminder after 10-day run time (about 1 month)</p> <p>2 Reminder after 30-day run time (about 3 months)</p> <p>3 Reminder after 60-day run time (about 6 months)</p> <p>4 Reminder after 90-day run time (about 9 months)</p> <p>5 Reminder after 120-day run time (about 1 year)</p> <p>6 Reminder after 365-day run time (about 3 years)</p>

0530 Smart Response ® Technology	Press  to turn this feature on or off (see Operating Manual for more information about this feature): 1 On 0 Off
0640 Clock Format	Press  to set the clock display format: 12 12-hour clock (i.e., “3:30 pm”) 24 24-hour clock (i.e., “15:30”)

Press DONE to save and exit setup.

Wiring—conventional system

Alternate wiring (conventional systems)

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



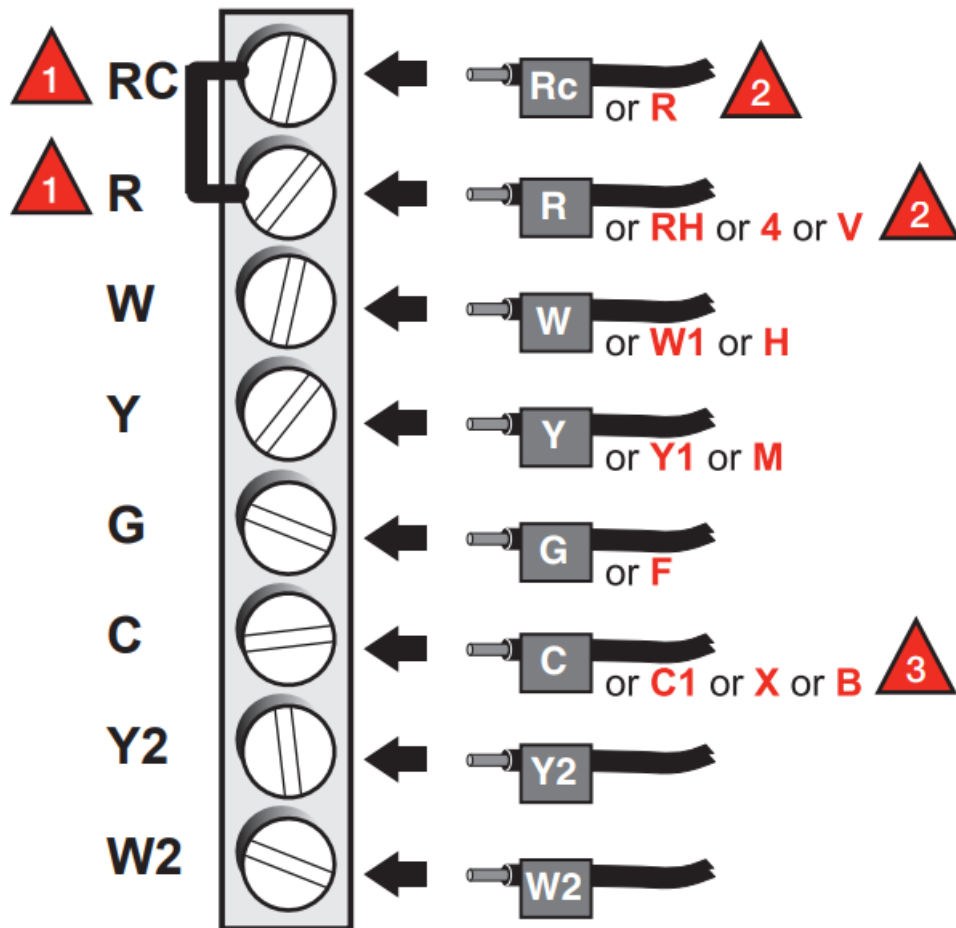
Remove metal jumper connecting R and Rc only if you must connect both R and Rc wires.



If your old thermostat had both R and RH wires, remove metal jumper. Connect the R wire to the Rc terminal, and the RH wire to the R terminal.



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.



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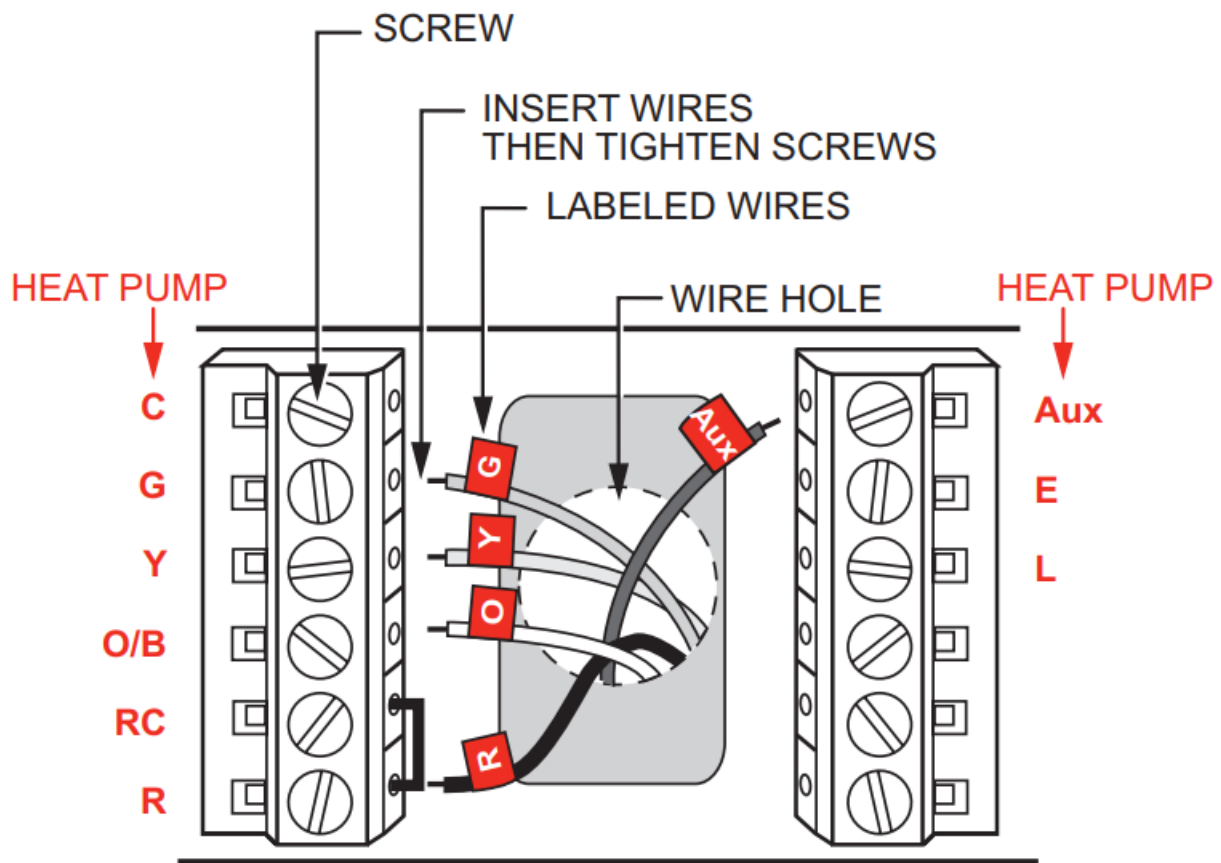
Wiring—heat pump

Connect wires: Heat Pump

1. Match each labeled wire with same letter on new thermostat.
2. Use a screwdriver to loosen screws, insert wires into hole, then tighten screws.
3. If E and Aux do not each have a wire connected, use a small piece of wire to connect them to each other.
4. Push any excess wire back into the wall opening.

Labels don't match?

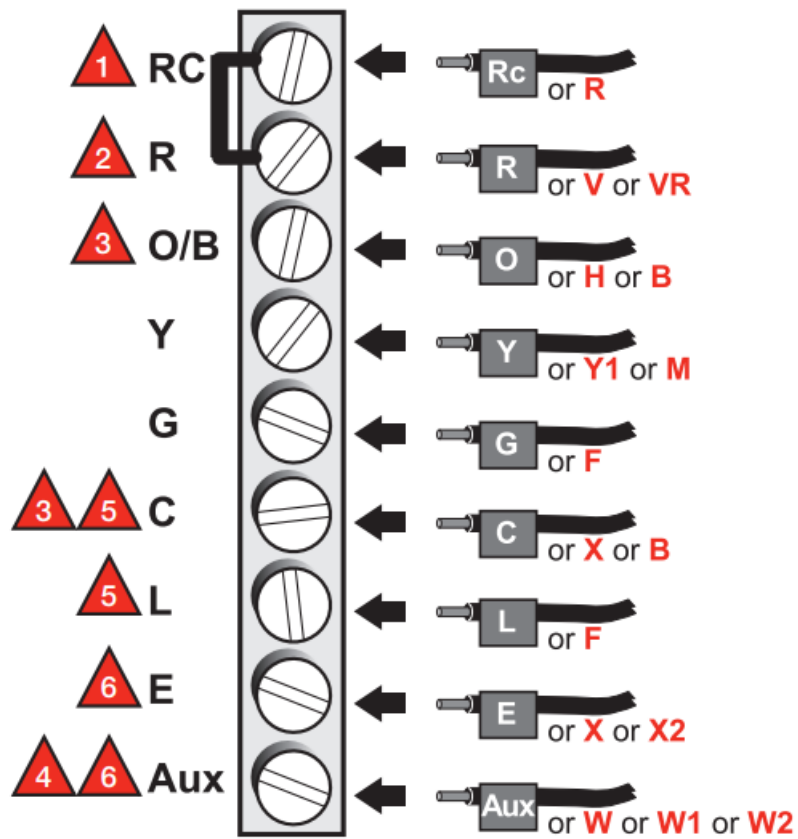
If labels do not match letters on thermostat, see page 23.



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Alternate wiring (for heat pumps only)

- 1** Leave metal jumper in place, connecting R & Rc terminals.
- 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.
- 5** If L terminal is used, C terminal wire must be connected (contact a contractor if there is no C wire).
- 6** If E and Aux terminals do not each have a wire connected, use a small piece of wire to connect them to each other.



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Troubleshooting

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

Display is blank	Make sure fresh AA alkaline batteries are properly installed (see page 7).
Cannot change system setting to Cool	Check Function 0170: System Type to make sure it is set to match your heating and cooling equipment (see page 16).
Fan does not turn on when heat is required	Check Function 0180: Heating Fan Control to make sure it is set to match your heating equipment (see page 17).
Heating system is running in cool mode	Check Function 0170: System Type to make sure it is set to match your heating and cooling equipment (see page 16).
Red light is on	If thermostat is in Emergency Heat mode the red light is normal. It shows that the thermostat is in emergency heat mode. If thermostat is not in Emergency Heat mode, contact a qualified service contractor for repair.
Heating or cooling system does not respond	Press SYSTEM to set system to Heat. Make sure the temperature is set higher than the Inside temperature. Press 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 & cooling system is on. Make sure furnace door is closed securely. Wait 5 minutes for the system to respond.
“Wait” appears on the screen	Compressor protection feature is engaged. Wait 5 minutes for the system to restart safely, without damage to the compressor.
Heat pump issues cool air in heat mode, or warm air in cool mode	Check Function 0190: Heat Pump Changeover Valve to make sure it is properly configured for your system (see page 17).

Customer assistance

For assistance with this product, please visit <http://DIYthermostats.honeywell.com> or call Honeywell Customer Care toll-free at 1-800-468-1502.

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 1-800-468-1502. 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 1-800-468-1502. In Canada, write Retail Products ON15-02H, Honeywell Limited/ Honeywell Limitée, 35 Dynamic Drive, Toronto, Ontario M1V4Z9.

This thermostat contains a Lithium battery which may contain Perchlorate material.

Perchlorate Material—special handling may apply, See www.dtsc.ca.gov/hazardouswaste/perchlorate

MERCURY NOTICE: Do not place your old thermostat in the trash if it contains mercury in a sealed tube. Contact your local waste management authority for instructions regarding recycling and proper disposal.

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

Automation and Control Solutions

Honeywell International Inc.
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Golden Valley, MN 55422
Honeywell Limited-Honeywell Limitée
35 Dynamic Drive
Toronto, Ontario M1V 4Z9

<http://DIYthermostats.honeywell.com>



Printed in U.S.A. on recycled
paper containing at least 10%
post-consumer paper fibers.

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US Patent No. 6,595,430; 7,114,554; 7,274,972; 7,225,054 and other patents pending.

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69-2206EF-01

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Documents / Resources

 <p>The image shows the cover of a Honeywell Quick Installation Guide for the RTH7600 Series Touchscreen Programmable Thermostat. It features the Honeywell logo at the top, the title 'Quick Installation Guide', a photograph of the thermostat unit, the model name 'RTH7600 Series Touchscreen Programmable Thermostat', a barcode, and the website 'firealarmresources.com' at the bottom.</p>	<p>Honeywell RTH7600 Series Touchscreen Programmable Thermostat [pdf] Installation Guide</p> <p>RTH7600 Series Touchscreen Programmable Thermostat, RTH7600 Series, Touchscreen Programmable Thermostat, Programmable Thermostat</p>
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References

-  [Fire Alarm Resources | Download fire alarm documents](#)
-  dtsc.ca.gov/hazardouswaste/perchlorate

Manuals+,