

Honeywell

RTH5100B Non-programmable Thermostat

OPERATING INSTRUCTIONS

The RTH5100B Thermostat provides electronic control of 24 Vac single stage heating and cooling systems or 750 mV heating systems.



For assistance with your Honeywell product please visit www.honeywell.com/yourhome or call Honeywell Customer Care toll free at 1-800-468-1502.

Read and Save these Instructions



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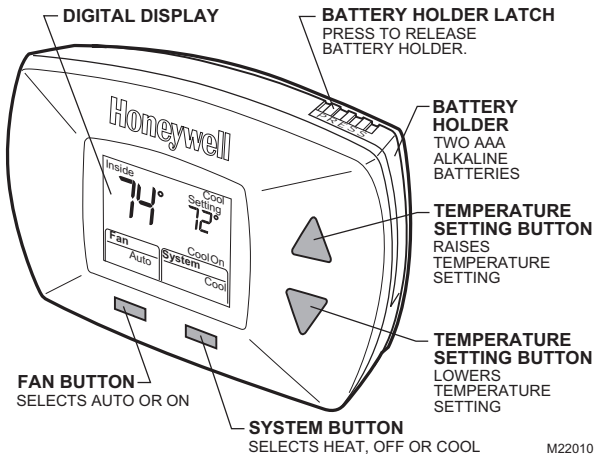
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Features

- **Large, Clear, Backlit Display: Easy-to-see and read—even in the dark.**
- **Precise Comfort Control: $\pm 1^{\circ}\text{F}$ of your set temperature.**
- **Simplified Operation: Soft-key controls. Simultaneously displays both room temperature and temperature setting.**
- **Easy Change Battery Holder.**
- **Built-in Compressor Protection: Minimum-off timer protects compressor from restarting too early after a shutdown.**

Get To Know Your Thermostat

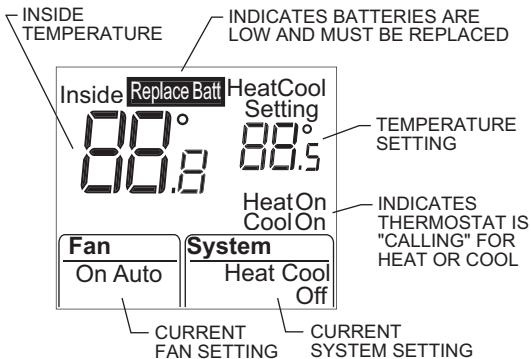
Thermostat



M22010

Get to Know Your Thermostat (Cont)

Display



M22011

Operate Your Thermostat

Set System Setting

Press the System button to select Heat, Off or Cool:

Heat—Thermostat controls the heating system.

Off—Both the heating and cooling systems are off.

Cool—Thermostat controls the cooling system.

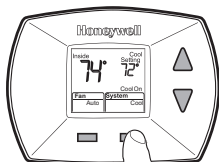


CAUTION

Equipment Damage Hazard.

Air conditioning compressor damage possible.

Do not operate cooling system when outdoor temperature is below 50 °F (10 °C).



PRESS THE
SYSTEM BUTTON
TO SELECT HEAT,
OFF OR COOL

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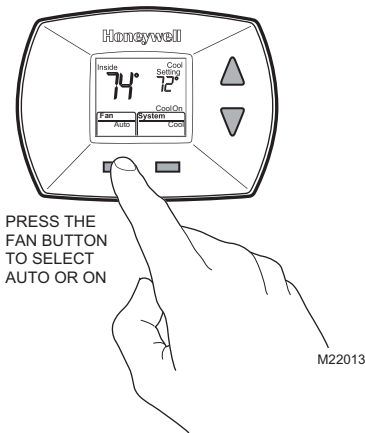
Operate Your Thermostat (Cont)

Set Fan Setting

Press the Fan button to select Auto or On:

Auto—Normal setting for most homes. The fan runs only when the heating or cooling system is on.

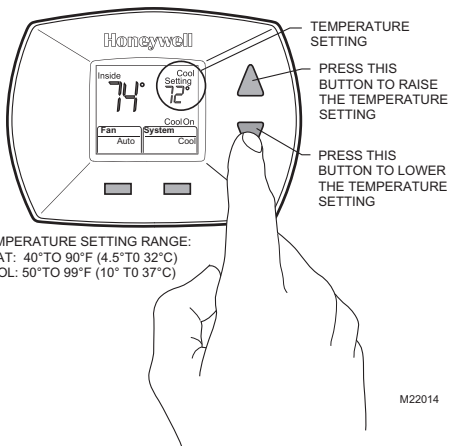
On—The fan runs continuously. Use this setting for improved air circulation or for more efficient air cleaning.



Operate Your Thermostat (Cont)

Change Temperature Setting

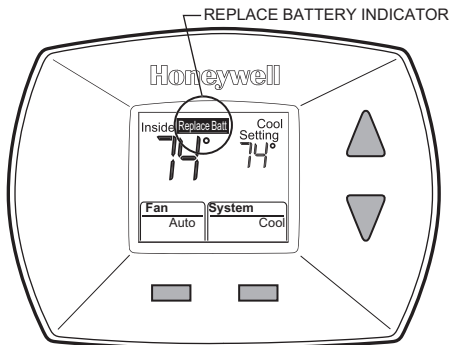
Press the Up or Down button to select the desired temperature setting.



The first press of the Up or Down button turns on the backlight. The second press of the Up or Down button changes the temperature setting.

Replace Batteries

1. When the Replace Battery indicator is flashing, replace batteries promptly with two fresh AAA alkaline batteries.



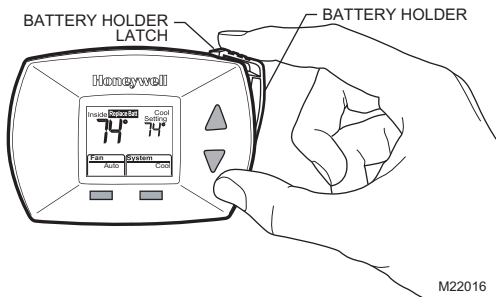
M22015



The thermostat does not lose any settings when the batteries are replaced; all settings are permanently stored in memory.

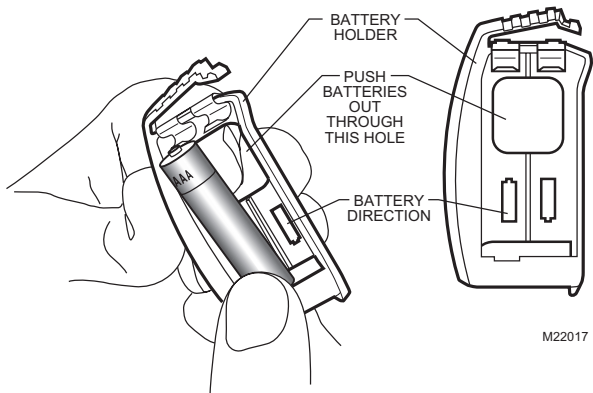
Replace Batteries (Cont)

2. Press the battery holder latch to release the battery holder.
3. Remove the battery holder from the thermostat.



Replace Batteries (Cont)

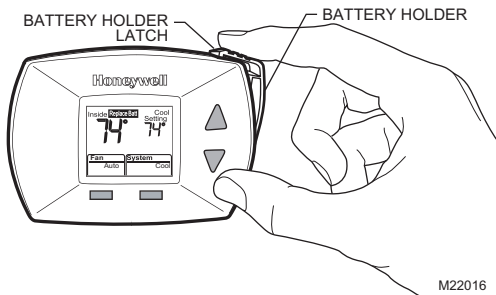
4. Remove the old batteries and insert two fresh AAA alkaline batteries as marked on the battery holder.



M22017

Replace Batteries (Cont)

5. Insert battery holder as shown.



M22016

Review Battery Tips

1. Replace the batteries as soon as Replace Batt flashes in the display. The Replace Battery indicator flashes in the display two months before the batteries run down completely.
2. Always use fresh AAA alkaline batteries. Non-alkaline batteries do not last as long and can leak, causing thermostat damage.
3. Although the thermostat has a Replace Battery indicator, replace the batteries once a year to prevent the thermostat and heating/cooling system from shutting down due to lack of battery power.

NOTE: Replacing the batteries once a year also helps prevent battery leakage that can damage the thermostat.

4. As a precaution, replace the batteries when leaving your home for more than a month to prevent your heating/cooling system from shutting down if the batteries run down completely.

Built-in Compressor Protection

The RTH5100B Thermostat has built-in compressor protection (minimum-off timer) that prevents the compressor from restarting too early after a shutdown.

The minimum-off timer is activated after the compressor turns off.

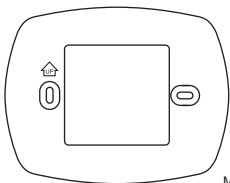
If there is a call during the minimum-off timer, the thermostat flashes “Cool On” or “Heat On”^a in the display.

When the minimum-off timer expires, “Cool On” or “Heat On”^a appears solidly in the display and the compressor and fan turn on.

^a Heat Pumps only.

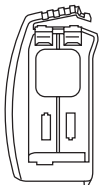
Accessory/Replacement Parts

1. Cover Plates—Used to cover marks on the wall
Part Number:
50001137-001 (Small) Cover Plate
50002883-001 (Large) Cover Plate
To order, call Honeywell Customer Care at
1-800-468-1502.



M22185

2. Replacement Battery Holder—
Part Number 50000951-001 Battery Holder
To order, call Honeywell Customer Care at
1-800-468-1502.



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Troubleshooting Tips

If . . .	Then . . .
Display is blank.	Check that fresh AAA alkaline batteries are installed as marked on the battery holder.
Temperature settings do not change.	Check that the temperature settings are: <ul style="list-style-type: none">• Heating 40°F to 90°F (4.5°C to 32°C).• Cooling 50°F to 99°F (10°C to 37°C).
Heating system does not turn on.	<ul style="list-style-type: none">• Set the system to Heat by pressing the System button.• Check the heat temperature setting to be sure it is set above the room temperature and “Heat On” shows solidly in the display.• Check the circuit breaker to be sure it is not tripped.• Check power switch at heating and/or cooling system to be sure it is on.• Check the furnace door to be sure it is closed securely.• Wait five minutes for the heating system to respond.• If all of this was checked, contact your local heating and cooling contractor.

Troubleshooting Tips (Cont)

If . . .	Then . . .
Cooling system does not turn on.	<ul style="list-style-type: none">• Set the system to Cool by pressing the System button.• Check the cool temperature setting to be sure it is set below the room temperature and “Cool On” shows solidly in the display.• Check the circuit breaker to be sure it is not tripped.• Check the power switch at the heating and/or cooling system to be sure it is on.• Check the furnace door to be sure it is closed securely.• Wait five minutes for the cooling system to respond.• If all of this was checked, contact your local heating and cooling contractor.
Cannot set System setting to Cool.	Check Installer Setup Number 1, Heating and/or Cooling System Type; make sure the setting matches the installed heating and/or cooling system. Refer to Installation Instructions, 69-1716.

Troubleshooting Tips (Cont)

If . . .	Then . . .
"Heat On" is not shown in the display.	Set the System setting to Heat and set the temperature setting above the room temperature. If "Heat On" is shown solidly in the display, but the heating system does not turn on, see "Heating system does not turn on" in the Troubleshooting Tips.
"Cool On" is not shown in the display.	Set the System setting to Cool and set the temperature setting below the room temperature. If "Cool On" is shown solidly in the display, but the cooling system does not turn on, see "Cooling system does not turn on" in the Troubleshooting Tips.
"Heat On" is flashing in the display (heat pumps only).	Compressor minimum-off timer is active. Wait up to five minutes for the heating system to turn on.
"Cool On" is flashing in the display.	Compressor minimum-off timer is active. Wait up to five minutes for the cooling system to turn on.

Troubleshooting Tips (Cont)

If . . .	Then . . .
Fan does not turn on in a call for heat (electric furnaces only).	Check Installer Setup Number 3, Fan Control in Heating, and make sure it is set to Electric Heat (Setting 1). Refer to Installation Instructions, 69-1716
Heat pump puts out cool air in the heat mode and warm air in the cool mode (heat pumps only).	Check Installer Setup Number 2, Heat Pump Changeover Valve, and make sure the setting matches the changeover required by the installed heat pump. Refer to Installation Instructions, 69-1716.
Both the heating and cooling systems are running at the same time.	Check Installer Setup Number 1, Heating and/or Cooling System Type, and make sure the setting matches the installed heating and/or cooling system. Refer to Installation Instructions, 69-1716.
	Check and make sure the bare portions of the wires are not touching.

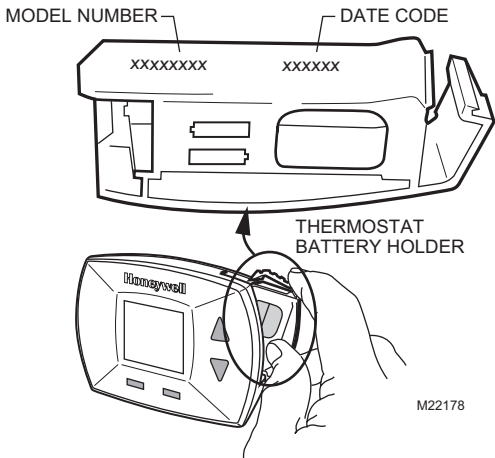
Troubleshooting Tips (Cont)

If . . .	Then . . .
Heating system is running in cool mode.	Check Installer Setup Number 1, Heating and/or Cooling System Type, and make sure the setting matches the installed heating and/or cooling system. Refer to Installation Instructions, 69-1716.
Heating system does not turn off and the heat temperature setting is set below the room temperature (“Heat On” is not shown in the display).	Check Installer Setup Number 1, Heating and/or Cooling System Type, and make sure the setting matches the installed heating and/or cooling system. Refer to Installation Instructions, 69-1716.

Customer Assistance

For assistance with your Honeywell product please visit www.honeywell.com/yourhome or call Honeywell Customer Care toll free at 1-800-468-1502.

Before calling, please have the thermostat model number and date code available.



Limited One-Year 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 defective or malfunctions, Honeywell shall repair or replace it (at Honeywell's option) within a reasonable period of time.

If the product is defective,

- (i) return it, with a bill of sale or other dated proof of purchase, to the retailer from which you purchased it, or
- (ii) package it carefully, along with proof of purchase (including date of purchase) and a short description of the malfunction, and mail it, postage prepaid, to the following address:

Honeywell Return Goods
Dock 4 MN10-3860
1885 Douglas Dr N
Golden Valley, MN 55422

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.

Limited One-Year Warranty (Cont)

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, Scarborough, Ontario M1V4Z9.



Honeywell

Automation and Control Solutions

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