

T8002 Programmable Thermostat

INSTALLATION INSTRUCTIONS

APPLICATION

The T8002 Thermostat provides single-stage, programmable temperature control for 24 Vac heating-cooling systems with manual changeover from heat to cool. See Table 1. Heating cycle rate is selectable at 1, 3, 4, 5, 6, 9, or 12 cph. Cooling cycle rate is fixed at 3 cph. Temperature indication can be set for °F or °C. See Table 1.

The T8002 Thermostat is powered with three AA alkaline batteries. Setpoints and programming are held permanently by non-volatile memory.

The T8002 Thermostat includes a thermostat, wallplate, batteries, and Owner's Guide.



MERCURY NOTICE

If this control is replacing a control that contains mercury in a sealed tube, do not place your old control in the trash. Dispose of it properly.

Contact your local waste management authority for instructions regarding recycling and the proper disposal of a control.

INSTALLATION

When Installing this Product ...

1. Read these instructions carefully. Failure to follow them could damage the product or cause a hazardous condition.
2. Check the ratings given in the instructions and on the product to make sure the product is suitable for your application.
3. Installer must be a trained, experienced service technician.
4. After installation is complete, check out product operation as provided in these instructions.



CAUTION

Hazardous Voltage.

Can damage heating/cooling system.

Disconnect power at furnace or main breaker/fuse box.

Location

Install the thermostat about 5 ft (1.5m) above the floor in an area with good air circulation at average temperature. See Fig. 1. Do not install the thermostat where it can be affected by:

- drafts or dead spots behind doors and in corners.
- hot or cold air from ducts.
- radiant heat from the sun or appliances.
- concealed pipes and chimneys.
- unheated (uncooled) areas such as an outside wall behind the thermostat.

Table 1. T8002 Thermostat Description.

Model	System	Changeover	System Selection	Fan Selection	Powering Method
T8002	Heat-Cool	Manual	Cool-Off-Heat	Auto-On	Batteries



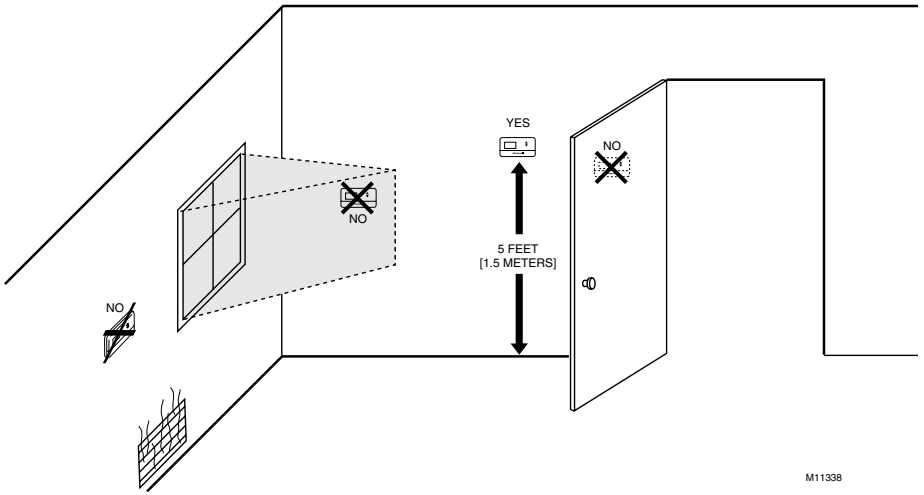


Fig. 1. Selecting typical thermostat location.

Mounting Wallplate to Wall

IMPORTANT

Level only for appearance. The thermostat functions normally even when not level.

Mount the wallplate to the wall with the screws provided (see Fig. 2) as follows:

1. Place the wallplate at the desired location on the wall.
2. Pull the thermostat wire through the wallplate entrance hole.
3. Fasten the wallplate to the wall using the anchors and screws provided.
4. After wiring the wallplate, plug the hole with non-flammable insulation to prevent drafts from affecting the thermostat.

Wiring

IMPORTANT

Use an 18-gauge maximum wire to wire the thermostat.

All wiring must comply with local electrical codes and ordinances. Disconnect the power supply to prevent electrical shock or equipment damage.

The shape of the terminals allows inserting straight or wraparound wiring connections; either method is acceptable. A letter code is located near each terminal for identification. See Fig. 3.

NOTE: To ensure accurately mounting the thermostat, restrict all wiring to the shaded area in the center of the terminals. See Fig. 4.

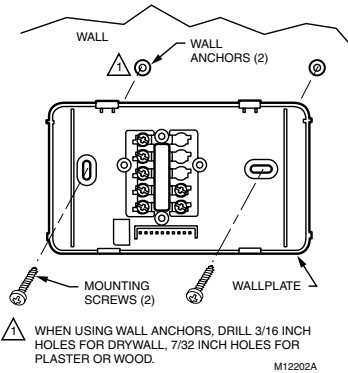


Fig. 2. Mounting wallplate to wall.

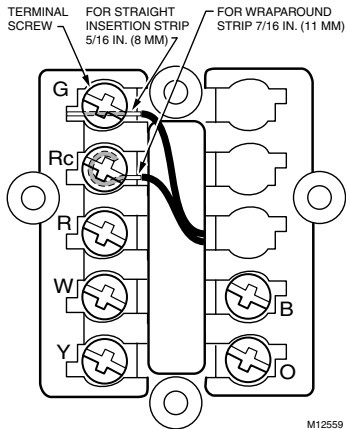


Fig. 3. Connecting wiring.

The thermostat is adaptable to most 18 to 30 Vac heating-cooling systems. Refer to Fig. 5, 6 and 7 for typical wiring hookups.

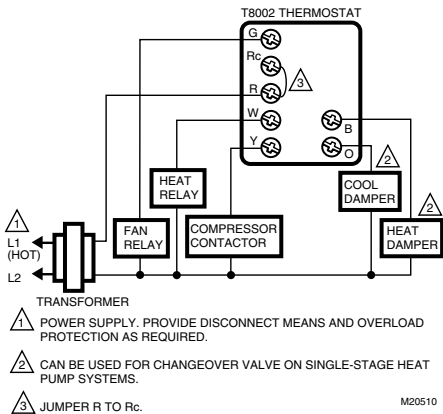


Fig. 5. Typical heat-cool system hookup with single transformer.

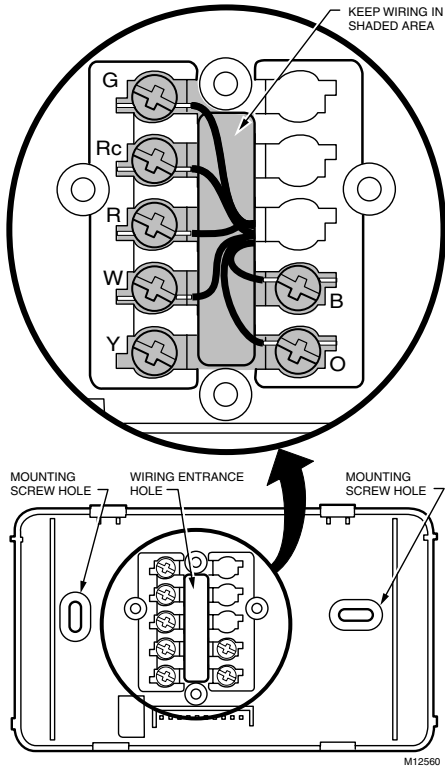


Fig. 4. Restricting wiring to shaded areas.

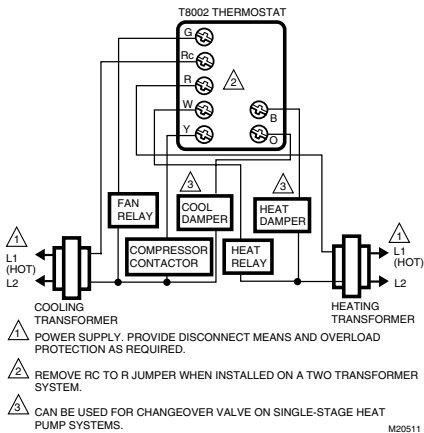


Fig. 6. Typical heat-cool system hookup with two transformers.

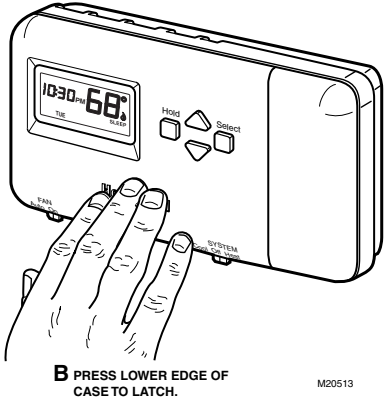
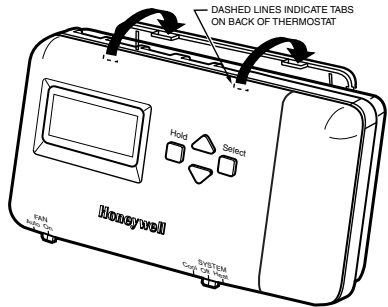
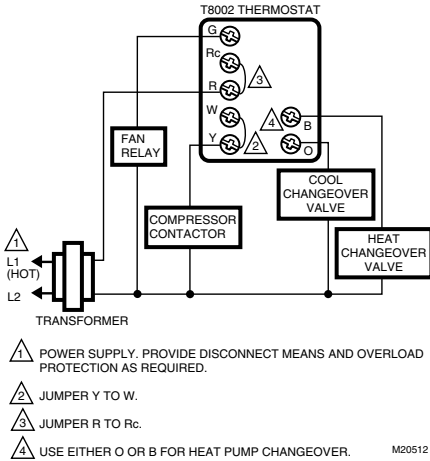
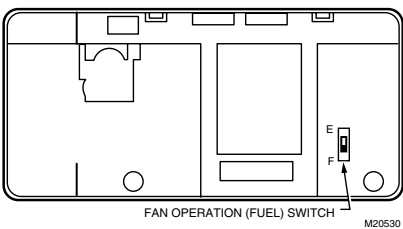


Fig. 9. Mounting thermostat to wallplate.

Setting Fan Operation (Fuel) Switch

The fan operation (fuel) switch is preset at the factory in the F position. See Fig. 8. This is the correct setting for most systems. If this system is an electric heat system or single-stage heat pump, set the switch to the E position, which allows the fan to turn on immediately with the heating or cooling equipment in a system where the G terminal is connected.



Mounting Thermostat to Wallplate

1. Slide System switch to Off position.
2. Engage the tabs at the top of the thermostat and wallplate.
3. Swing down the thermostat and press the lower edge of the thermostat onto the wallplate to latch. See Fig. 9.

Installing Batteries

The thermostat requires three AA alkaline batteries to operate:

1. Remove the battery door, located on the right side of the thermostat, by pulling outward from the bottom. See Fig. 10.
2. Insert the three AA alkaline batteries (included) as shown in Fig. 10.

NOTE: The thermostat shows a “bAtLo” message on the digital display to alert the homeowner one to two months before the batteries run out completely.

IMPORTANT

Homeowner should replace the batteries once a year to prevent leakage and/or the heating/cooling system from shutting down due to lack of battery power in the thermostat.

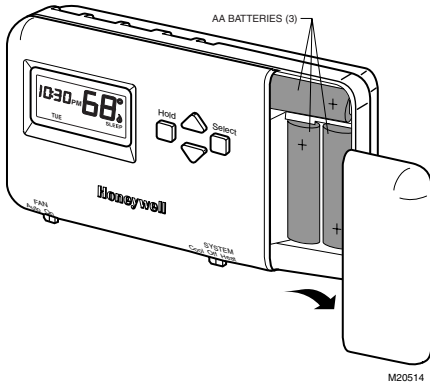
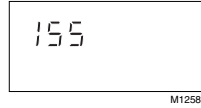


Fig. 10. Installing batteries.

- c. Release the keys to display the three-digit software revision code. (Information displayed varies by model.)



- d. Press the ▲ key. FC (factory configuration) is displayed. (A typical example is shown, but information displayed varies by model. This information is for factory use only.)



Installer Setup

Setting °F/°C Indication and Heat Cycle Rate

The following instructions provide information to change the heating cycle rate to match the heating equipment and to choose either the Fahrenheit (°F) or Celsius (°C) display.

NOTE: All four steps must be completed to save changes to the °F/°C indication and the heat cycle rate.

1. Enter Installer Setup.
 - a. Use ▲ or ▼ keys to set the temperature set-point to 52°F (11°C).



- b. Press the ▲ and ▼ keys simultaneously for more than two seconds to enter Installer Setup.

Optional System Checkout

When in steps 1.c. and 1.d. only, the ▼ key can be pressed to turn heat or cool outputs on and off. Change the System switch setting to test heat or cool outputs. No action takes place if the System switch is in the Off position.

Examples:

System setting at Heat: If heat is on, pressing the ▼ key turns it off; if heat is off, pressing the ▼ key turns it on.

System setting at Cool: If cool is on, pressing the ▼ key turns it off; if cool is off, pressing the ▼ key turns it on. The five-minute minimum off time is bypassed.

NOTE: In Installer Setup only, each press of the ▼ key momentarily displays 1. Each press of the ▼ key momentarily displays 2. When the keys are released, these one-digit codes are no longer displayed.

2. Setting °C or °F.
 - a. Press the ▲ key again to display the current setting.



- b. Press the ▼ key to change the °C or °F indication.

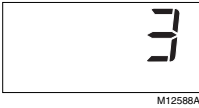


- a. Press the ▲ key to save all changes and return to normal operation.



3. Setting Heat Cycle Rate (see Table 2 for the cycle rate options and equipment).

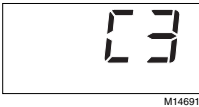
- a. Press the ▲ key to display the current heat cycle rate setting of 1, 3, 4, 5, 9, or 12 cph.



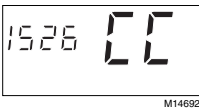
- b. If the desired cycle rate is displayed, press the ▲ key to display heating and cooling algorithm default.



- c. To change the heat cycle rate, press the ▼ key until your choice of 1, 3, 4, 5, 6, 9, or 12 is displayed.
- d. Press the ▲ key to display the heating and cooling algorithm configuration default.



- e. Press the ▼ key to change the heating and cooling algorithm to C1 or C3.
C1 = Standard algorithm.
C3 = Aggressive algorithm (Default. Can cause overshooting).
- f. Press the ▲ key. Current configuration (CC) is displayed. A typical example is shown, but CC varies by model. (This information is for factory use only.)



4. Exit Installer Setup.

Table 2. Heating Cycle Rate.

System	Cycles Per Hr
Steam, Gravity	1
Hydronic Heat, Condensing Gas Furnaces ^a	3
Gas or Oil forced Air (Default)	6
Electric Heat	9
Special Applications ^b	4, 5, 12

^aHigh efficiency furnace (90+).

^bRefer to the equipment manufacturer's instructions.

Operation

Setting Fan and System Switches

Fan and System settings are controlled manually by using the switches located at the bottom of the thermostat case. See Fig. 11.

FAN SWITCH

Fan switch settings are:

On: The fan runs continuously. Use for improved air circulation and air quality.

Auto: Normal setting for most homes. In cooling, the fan starts and stops with the cooling equipment. In heating, the fan is controlled directly by the heating equipment and may start a few minutes after the heating equipment turns on (most systems). When the fan operation (fuel) switch is in the E position, the fan starts and stops with the heating equipment.

Slide the Fan switch in the lower left corner of the thermostat to select the desired fan setting.

SYSTEM SWITCH

System switch settings (see Fig. 11) are:

Cool: The thermostat controls the cooling system.

Off: Both heating and cooling are off.

Heat: The thermostat controls the heating system.

Slide the System switch in the lower right corner of the thermostat to select the desired system setting.

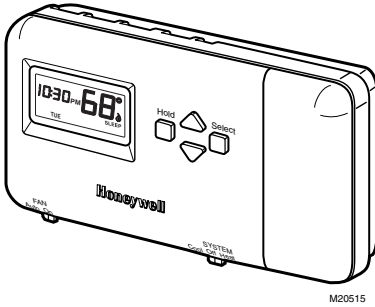
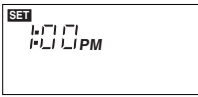


Fig. 11. Digital display and System switches.

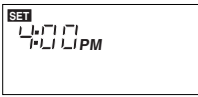
Setting Current Time and Day

1. To set current time:
 - a. Press Select twice.



M12591A

- b. Press the ▲ or ▼ key to set current time.



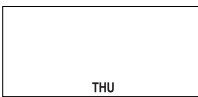
M12592A

2. To set day of week:
 - a. Press Select again.



M12593A

- b. Press ▲ or ▼ key to set current day.



M12594A

To use the preprogrammed time and temperature (see Table 3), press Hold to exit the time and day mode.

Setting Time and Temperature

The thermostat is preprogrammed with the time and temperature settings shown in Table 3. For instructions on programming the thermostat, refer to the Owner's Guide.

Table 3. Preprogrammed Time and Temperature Settings.

Period	Time	Heat Setpoint	Cool Setpoint
Wake	6:00 AM	70°F (21°C)	78°F (26°C)
Leave	8:00 AM	62°F (17°C)	85°F (29°C)
Return	6:00 PM	70°F (21°C)	78°F (27°C)
Sleep	10:00 PM	62°F (17°C)	82°F (28°C)

CHECKOUT

Heating

1. Slide the System switch to Heat and the Fan switch to Auto.
2. Press and hold the ▲ key to raise the temperature setting several degrees above the room temperature; the heating equipment should start. In conventional systems, the system turns on the fan through the use of a time delay relay or through a limit control. When the fan operation (fuel) switch is in the E positions, the fan starts immediately.
3. Press the ▼ key to lower the temperature setting below the room temperature. Heating equipment should stop.

Cooling



CAUTION

Compressor Damage Hazard.

Operating at too low of an outdoor temperature can cause compressor damage.

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

Allow compressor to remain off for five minutes before restarting.

Refer to manufacturer's recommendations.

1. Slide the System switch to Cool and the Fan switch to Auto.
2. Press the ▼ key to lower the temperature setting several degrees below the room temperature; the cooling equipment should start. The fan starts and stops with the cooling equipment.

NOTE: If the cooling system does not start immediately, remember that the thermostat has a built-in minimum off-time of five minutes to protect the compressor.

3. Press the ▲ key to raise the temperature setting above the room temperature. Cooling system should shut down.

Fan

1. Slide the System switch to Off and the Fan switch to On. The fan should run continuously.
2. Slide the Fan switch to Auto. The fan should turn off.

IMPORTANT

Be sure all equipment responds correctly to the thermostat.

Honeywell

Automation and Control Solutions

Honeywell
1985 Douglas Drive North
Golden Valley, MN 55422

Honeywell Limited-Honeywell Limitée
35 Dynamic Drive
Scarborough, Ontario
M1V 4Z9



Free Manuals Download Website

<http://myh66.com>

<http://usermanuals.us>

<http://www.somanuals.com>

<http://www.4manuals.cc>

<http://www.manual-lib.com>

<http://www.404manual.com>

<http://www.luxmanual.com>

<http://aubethermostatmanual.com>

Golf course search by state

<http://golfingnear.com>

Email search by domain

<http://emailbydomain.com>

Auto manuals search

<http://auto.somanuals.com>

TV manuals search

<http://tv.somanuals.com>