

## 1 Description

This thermostat can be used to control an electric heating system such as an electric baseboard heater, a radiant ceiling, a radiant floor, an electric convactor, etc. See minimum and maximum load requirement in section 10.

The thermostat cannot be used with the following:

- a resistive load under 2 A
- systems driven by a contactor or relay (inductive load)
- central heating systems

### SUPPLIED PARTS

- One (1) thermostat
- Two (2) 6-32 mounting screws
- Two (2) solderless connectors

## 2 Installation

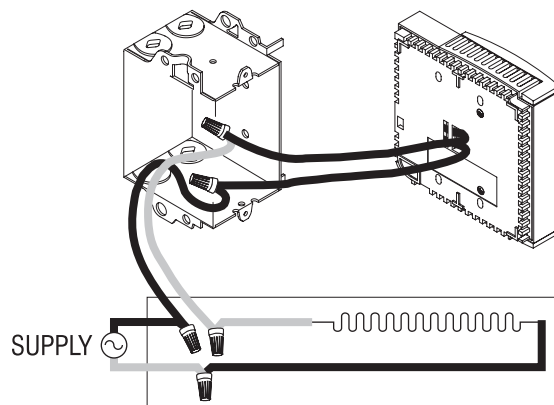
**TURN OFF POWER TO THE HEATING SYSTEM AT THE MAIN POWER PANEL TO AVOID ELECTRICAL SHOCK.**

- ▶ All cables and connections must conform to the local electrical code.
- ▶ Special CO/ALR solderless connectors must be used when connecting with aluminum conductors.
- ▶ Install the thermostat onto an electrical box.
- ▶ Install the thermostat about 5 feet high, on an inside wall facing the heater.
- ▶ Avoid locations where there are air drafts (such as the top of a staircase or an air outlet), dead air spots (such as behind a door), or direct sunlight.
- ▶ Do not install the thermostat on a wall that conceals chimney or stove pipes.
- ▶ The thermostat wires are not polarized; either wire can be connected to the load or to the power supply.

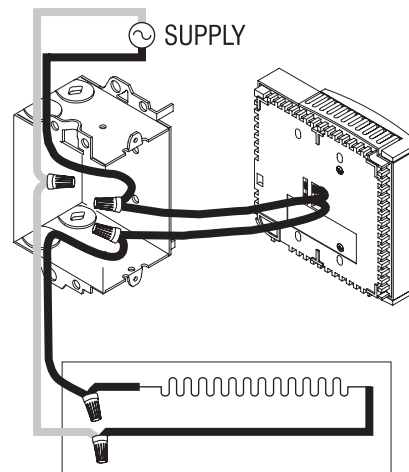
### 1) Connect the thermostat

Connect the thermostat wires to the power and to the load using solderless connectors for copper wires.

#### 2-wire installation



#### 4-wire installation

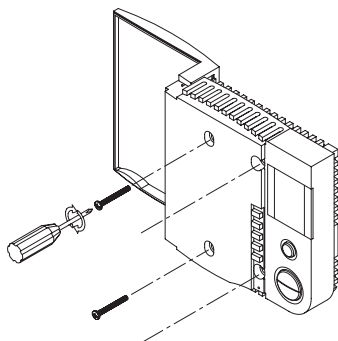


## 2) Mount the thermostat

Push the excess wires back inside the electrical box.

Secure the thermostat to the electrical box using the provided screws.

Insert the screws through either the right or left pair of mounting holes on the thermostat.

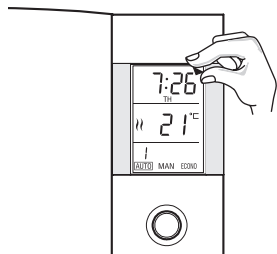


## 3) Complete the installation

Peel the sticker off the display.

Keep the thermostat's air vents clean and free from obstructions.

Apply power to heating system.



## 3 Temperature Display and Setting

The thermostat normally displays the actual (ambient) temperature.

- To view the setpoint, press once on either of the temperature adjustment buttons.
- To change the setpoint, press the appropriate button until the desired setpoint is displayed.

## 4 Configuration

The factory settings are indicated by the gray cells in the following table.

Temperature display	°C	°F
Time display	24 h	12 h
Temperature control	Proportional (15-second cycles)	Conventional (± 0.5°C deadband)

**Warning:** Every time you reconfigure the thermostat, you must re-adjust its clock and reprogram the schedule.

### Temperature display

To change the temperature display between °C and °F:

- Press and hold **Day**.
- Insert a pointed object (e.g., paperclip) through the reset opening.
- Wait one second and release **Day**.

### Time display

To switch between the 12-hour format and the 24-hour format:

- Press and hold **Hour**.
- Insert a pointed object (e.g., paperclip) through the reset opening.
- Wait one second and release **Hour**.

## Temperature control

- Proportional control should be selected in most cases as it provides better temperature control.
- Conventional control must be selected if you have a fan-equipped heater or if proportional control causes light flickering (especially in rural regions).

The FAN indicator is displayed when conventional control is selected. To switch between the two types of control:

- Press and hold **Minute**.
- Reset the thermostat using a pointed object (e.g., paperclip).
- Wait one second and release **Minute**.

## 5 Clock and Day Setting

The clock must be set when **TIME** flashes on the screen.

- Press **Day** to set the day.
- Use **Hour** and **Minute** to set the clock.
- Press **[Return]** to exit.



## 6 Modes of Operation

The thermostat has three modes of operation:

### Automatic (programmable) mode

To use the Automatic mode, press the mode selection until **AUTO** is selected on the screen. The number of the current period will appear.

Use this mode when you want the thermostat to use the settings programmed into the schedule.

The schedule has 4 periods in a day. During each period, the thermostat uses the temperature that has been set for that period. The same program is used daily from Monday to Friday and another program is used for Saturday and Sunday.

The following schedule is pre-programmed into the thermostat:

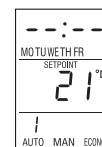
**NOTE:** The schedule must be reprogrammed every time you alter the thermostat's configuration.

Periods	Temperature	Monday to Friday	Saturday & Sunday
1 Wake	21°C (70°F)	6:00 AM	6:00 AM
2 Leave	16°C (62°F)	8:00 AM	--
3 Return	21°C (70°F)	6:00 PM	--
4 Sleep	16°C (62°F)	10:00 PM	10:00 PM

To temporarily override the current setpoint, set the desired temperature using the temperature adjustment buttons. The new setpoint will be used until the beginning of the next period.

To program the schedule:

- Press the mode selection button until **AUTO** is selected.
- Press **Program**.



Each time you press **Program**, the thermostat scrolls through the periods of the schedule in the following order (from left to right):

Weekdays (MO TU WE TH FR)				Weekend (SA SU)			
1	2	3	4	1	2	3	4

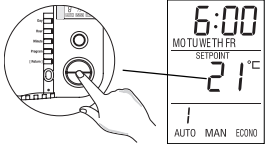
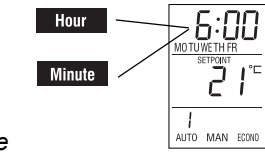
- 3 Set the start time for the displayed period using **Hour** and **Minute**. To skip a period, do not set the start time for that period.

**NOTE:** To reset a period, press the mode selection button.

- 4 Set the temperature for the period using the temperature adjustment buttons.

- 5 Repeat steps 2 to 4 for remaining periods.

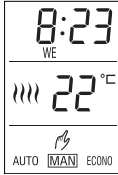
- 6 Press **[Return]** to return the thermostat to normal operation.



Manual (hold) mode

To use this mode, press the mode selection button until **MAN** is selected on the screen and set the desired temperature using the temperature adjustment buttons.

In Manual mode, the programmed schedule is not used. The temperature must be set manually.



Economy mode

To use the Economy mode, press the mode selection button until **ECONO** is selected on the screen. The Economy mode is ideal for weekend residences and is to be used only when you are not there. In this mode, the thermostat provides two temperature settings which can be used as follows:

- Setting 1 can be used to raise the temperature to a comfortable level by your expected arrival time.
- Setting 2 can be used to lower the temperature if you do not show up by the usual time.



A typical schedule is shown below.

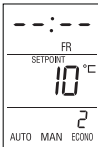
Settings		Day	Time	Setpoint
1	Raise the temperature	Friday	3:00 p.m.	21°C (70°F)
2	Lower the temperature	Friday	8:00 p.m.	15°C (59°F)

The Economy mode can be used as follows:

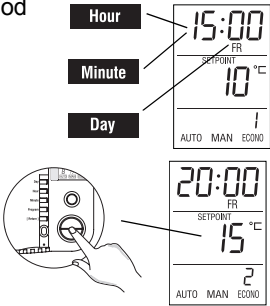
- Place the thermostat in Economy mode when you are away from your cottage.
- Upon your arrival, switch the thermostat to Automatic mode or Manual mode before setting 2 of the Economy mode starts.
- When departing, switch it back to Economy mode. The thermostat will then lower temperature (setting 2) during most of your absence and will raise temperature prior to your expected arrival (setting 1).

To enter the two temperature settings:

- 1 Press the mode selection button until **ECONO** is selected.
- 2 Press **Program**. The first period is displayed.



- 3 Set the start day for the displayed period using **Day**.
- 4 Set the start time using **Hour** and **Minute**.
- 5 Set the temperature for the period using the temperature adjustment buttons.
- 6 Press **Program** to select the next program (2).
- 7 Repeat steps 2 to 4 to set the day, time and temperature.
- 8 Press **[Return]** to return the thermostat to normal operation.



Thermostat Reset

**Warning:** After the thermostat is reset, you must re-adjust its clock and reprogram the schedule. You might need to set the thermostat's configuration.

- 1 Press and hold **Program**.
- 2 Reset the thermostat using a pointed object (e.g., paperclip).
- 3 Wait one second and release **Program**.

Power Outage

During a power outage, the thermostat display remains lit for approximately the next 15 minutes during which the low power (LP) indicator appears. The settings are stored in memory. However, if the power failure exceeds 5 hours, only the thermostat's clock must be re-adjusted. When power returns, the thermostat returns to the mode of operation preceding the power outage.

## 9 Troubleshooting

PROBLEM	SOLUTIONS
Thermostat is hot.	This condition is normal. Under normal operation, the thermostat housing may reach a temperature between 35°C (95°F) and 40°C (104°F).
Heater is always On.	The thermostat has not been correctly wired. Reset the thermostat.
Thermostat indicates that heating is On, but the heater is not On.	The thermostat has not been correctly wired. Reset the thermostat.
Wrong temperature is displayed.	The thermostat is exposed to air draft. Eliminate the draft. The sticker on the thermostat's screen has not been removed.
Wrong time is displayed.	The thermostat was without power for more than 2 hours.
Temperature does not change according to the programmed schedule.	Check that the thermostat is in Auto-mode. Check the schedule and clock settings.
The normal display disappears and reappears after a few minutes.	The thermal protection device on the heater is open. This can happen after a power failure or if the heater is obstructed by furniture or curtains.
Display looks faded when heating is activated.	The heating system is less than the required minimum load. This thermostat cannot be used below that rating.

## 10 Specifications

**Supply:** 120/240 VAC, 50/60 Hz

**Power consumption (off):** 860 mW

**Minimum load:** 2 A (resistive only)  
500 W @ 240 VAC  
250 W @ 120 VAC

**Maximum load:** 14.6 A (resistive only)  
3500 W @ 240 VAC  
1750 W @ 120 VAC

**Display range:** 0°C to 99°C (0°F to 99°F)

**Display resolution:** 1°C (1°F)

**Setpoint range:** 5°C to 27 °C (40°F to 80°F)

**Setpoint interval:** 1°C (1°F)

**Storage temperature:** -20°C to 50°C (-4°F to 120°F)

**Accuracy** -proportional: ± 0,15°C (0,27°F)  
conventional: ± 0,5°C (0,9°F)

**Dimensions:** 120 x 115 x 26 mm (4.8 x 4.5 x 1 inches)

**Approval:** CSA / UL

## ✓ 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,

- return it, with a bill of sale or other dated proof of purchase, to the place from which you purchased it, or
- 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, Scarborough, Ontario M1V4Z9.



## Customer Assistance

If you have any questions about the operation of your thermostat, please go to <http://yourhome.honeywell.com>, or call Honeywell Customer Care toll-free at **1-800-468-1502**.



As an ENERGY STAR® partner, Honeywell has determined that this product meets the ENERGY STAR guidelines for energy efficiency.