

CT1700A *ultrastat*TM MOTION-ACTIVATED LINE VOLTAGE THERMOSTAT

Programmable control for baseboard heaters.

Temperature Setting Range: 44 °F to 80 °F [7 °C to 27 °C].
 Motion Detection: Infrared detection up to 23 ft [7m]; 60 degrees vertical and 110 degrees horizontal viewing angle.
 Light Detection: Photoresistive element with adjustable light level sensitivity.
 Switching: Triac based (spst).

Ratings: 10.5A maximum at 208 to 240 Vac, 50/60 Hz, 2500W. (To determine baseboard wattage, check the nameplate or measure the length of the baseboards the thermostat will control. Generally, if the length of the baseboards is more than ten feet per thermostat, the wattage is probably over 2500W. You need to call an electrician.)
 Not for use with central heating systems or fan-forced heaters.

Do-it-yourself model.

YOUR HONEYWELL THERMOSTAT

Your new Honeywell CT1700 adjusts room temperature to maximize comfort and energy savings by sensing light and motion. It provides 15% to 23% energy savings compared to nonprogrammable electric heating thermostats. The CT1700 replaces any two-wire, spst, line voltage thermostat used for controlling electric baseboard heat.

CONTENT	SECTION
PREPARATION	1
THERMOSTAT FEATURES	2
REMOVE OLD THERMOSTAT	3
WIRE AND MOUNT NEW THERMOSTAT	4
CHECK OUT THERMOSTAT	5
PROGRAMMING	6

Limited One-Year Warranty

Honeywell warrant this product 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 Inc. in Canada: Honeywell Limited/Honeywell Limitée
 Return Goods Department Product Services ON15-FFE
 1050 Berkshire Lane 740 Ellesmere Road
 Plymouth, MN 55441-4437 Scarborough, Ontario M1P 2V9

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 our Customer Assistance Center, Honeywell Inc., P.O. Box 524, Minneapolis, MN 55440-0524 or call 1-800-468-1502, Monday-Friday, 7:00 a.m. to 5:30 p.m., Central time. In Canada, write Retail Products ON15-02H, Honeywell Limited/Honeywell Limitée, 740 Ellesmere Road, Scarborough, Ontario M1P 2V9.

1

PREPARATION

Proper installation of your Honeywell thermostat will occur if you follow instructions *step-by-step*. It is recommended that as you read, understand and complete each step, you check ✓ it off with pencil or pen.

Check thermostat suitability for your home's system by reviewing the ratings listed on the front of these instructions.

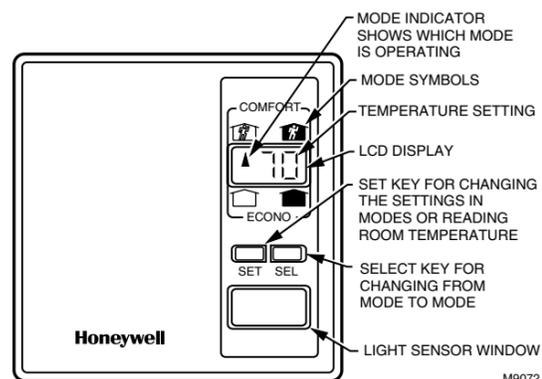
Make certain that your heating system is working, especially if it has been inoperative for a length of time. If the system does not work, contact your local electrician for assistance.

Carefully unpack your new thermostat.

Save instructions, receipt and proof-of-purchase.

2

THERMOSTAT FEATURES



3

REMOVE OLD THERMOSTAT



CAUTION
 To prevent electrical shock or equipment damage, disconnect power supply before beginning installation.

Begin by turning off power to the heating system.

Remove cover of old thermostat—cover normally snaps off when pulled firmly from the bottom. If it resists, check for a screw that locks on the cover.

Loosen the screws holding the thermostat base to the electrical box and lift away.

Disconnect wires from the old thermostat. If the old thermostat was not mounted to a vertical outlet box, install a box now.

Check the old wire insulation for cracks, nicks or fraying, and apply UL Listed/CSA Certified electrical tape where necessary, for adequate insulation.

Retain the old thermostat for reference later and until your new thermostat is functioning smoothly.

4

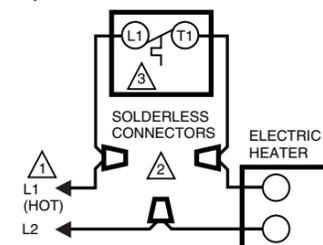
WIRE AND MOUNT NEW THERMOSTAT

Remove the CT1700A cover by grasping the top or bottom edges and pulling outward away from the thermostat base.

Connect wires to the thermostat, as shown in the wiring diagram, using approved solderless wire connectors.

NOTE: Special service CO/ALR wire connectors must be used when connecting with aluminum conductors; otherwise, a fire hazard can result.

Prebend and push the wires into the outlet box. Mount the thermostat on the outlet box using the screws provided.



1 POWER SUPPLY. PROVIDE DISCONNECT MEANS AND OVERLOAD PROTECTION AS REQUIRED.

2 SPECIAL SERVICE CO/ALR SOLDERLESS CONNECTORS MUST BE USED WHEN CONNECTING WITH ALUMINUM CONDUCTORS; OTHERWISE, A FIRE HAZARD CAN RESULT.

3 TRIAC CONDUCTS EVERY 15 SECONDS UNLESS ROOM TEMPERATURE IS ABOVE SETPOINT.
 M3643A

5

CHECK OUT THERMOSTAT

Turn on the power to the heating system. The thermostat will display "SC" for 15 seconds, showing the system is operating properly. If an "E" flashes continuously, the thermostat is defective. Return the thermostat for a replacement unit.

"Occupied-dark" indicator will flash for two minutes while the thermostat program is being initialized. Next, the actual operating program will be displayed. (It takes three minutes from turning on the power for the programmed temperature to be displayed.)

6

PROGRAMMING

Tap the SEL key to move between modes. The display changes in the following order: occupied-light, unoccupied-light, unoccupied-dark, occupied-dark, L, F or C.

NOTE: To lessen temperature changes when an occupant leaves an area, the CT1700 will not change from an occupied to unoccupied setting for 60 minutes (light setting) or for three hours (dark setting). If you notice your pet activating the program, cover up the lower half of the sensor window or program temperature changes for only light and not occupancy.

Sample Programs

Mode	KITCHEN		LIVING OR FAMILY ROOM		BEDROOM	
	Remarks	Temp. Setting	Remarks	Temp. Setting	Remarks	Temp. Setting
Occupied-light	Set for a comfortable temperature for eating or cooking.	68° F [20° C]	Set for a comfortable temperature for reading or watching TV.	68° F [20° C]	Set for a comfortable temperature for getting up in the morning.	68° F [20° C]
Unoccupied-light	Set the temperature desired when you are out of the room in the daytime.	60° F [15° C]	Set the temperature desired when you are out of the room in the daytime.	60° F [15° C]	Set the temperature desired when you are out of the room in the daytime.	60° F [15° C]
Unoccupied-dark	Program for when no one is using the kitchen.	60° F [15° C]	Program for when no one is using the room.	60° F [15° C]	Program for when no one is using the bedroom.	60° F [15° C]
Occupied-dark	This mode is primarily for sleeping rooms. Set temperature desired when no one is using the kitchen.	60° F [15° C]	This mode is primarily for sleeping rooms. Set temperature desired when no one is using the room.	60° F [15° C]	Set desired temperature for sleeping.	62° F [16° C]
LIGHT LEVEL	Use the least sensitive setting so the thermostat does not sense the light from an open refrigerator door at night.	L3	Use the most sensitive setting so the thermostat will sense the tv or small reading light.	L1	Use the average setting.	L2

Fahrenheit or Celsius Temperature Display

Select Fahrenheit or Celsius by tapping the SEL key until F or C appear in the LCD display. Tap the SET key to select the setting.

Program Temperature Setting

NOTE: If programming in Fahrenheit, only even numbered temperatures (i.e., 66, 68, 70) can be selected. The temperature setting range is 40° to 86° F [5° to 30° C].

Tap the SEL key until the indicator on the LCD points to the desired condition (i.e., occupied-dark). Press the SET key to select the desired temperature. Repeat for each condition.

Program Light Level

Consider the ambient outdoor and indoor lighting over a 24 hour period when setting the light level. The three light level settings are: L1—the most sensitive so it is used when you want the thermostat to respond to a low light level, like the TV or reading light; L2—average setting so it is used for most rooms; L3—the least sensitive setting so it is used in well-lit areas.

Tap the SEL key until the LCD displays L1, L2 or L3. Tap the SET key to change the light setting.

Review Program

Tap the SEL key to scroll between settings. If you want to change any setting, tap the SET key until the display shows the desired setting.

Reading Current Temperature

Tap the SET key. The room temperature and four indicators will be displayed for about ten seconds. The display range is 40° to 86° F [5° to 30° C]. When the room temperature is warmer than 86° F [30° C], the two upper indicators will be displayed. When the room temperature is colder than 40° F [5° C], the two lower indicators will be displayed.

Loss of Power

The CT1700 maintains the program during loss of power without batteries. The display will go blank and when power is restored, the display will go through the steps in the CHECK OUT THERMOSTAT section.