

Part Numbers P274-0100-C, P274-0200-C, P274-0300-C

**IMPORTANT:** Read entire instructions before programming the thermostat.

## GENERAL

Totaline® thermostats are wall-mounted, low-voltage thermostats which maintain room temperature by controlling the operation of an HVAC (heating, ventilation and air conditioning) system. Separate heating and cooling set points and auto-changeover capability allow occupied and unoccupied programming for energy savings.

During power interruption the internal memory stores temperature and mode settings for an unlimited time. Batteries are not required.

## OPERATION

**Thermostat Display** — The thermostat display is located in the top center of the thermostat. See Fig. 1. The following information can be displayed on the screen:

- mode (OFF, HEAT, COOL, EHEAT, or AUTO)
- fan setting (ON or AUTO)
- auxiliary heat status (P274-0200-C, -0300-C only)
- room temperature
- desired temperature
- reset filter
- outdoor temperature (P274-0200-C, -0300-C only)

**Thermostat Buttons** — The thermostat has buttons which are used to change the set points of the thermostat and set the thermostat modes. The buttons are accessible from behind the thermostat cover. To access the buttons, pull on the hinged thermostat cover. The buttons are: MODE, FAN, and RESET FILTER. See Fig. 1.

The UP and DOWN buttons are used to change the current, desired temperature set point and to scroll through programming set points. The UP and DOWN buttons are located on the front of the thermostat.

### Setting Indoor Temperature Set Points

1. Press the UP or DOWN button one time. The LCD (liquid crystal display) will illuminate and the current temperature set point will be displayed. Next to the temperature display, HEAT or COOL will be displayed. SET TEMP will appear above the temperature display.
2. To change the temperature set point, continue to press the UP or DOWN buttons until desired temperature is reached. Press the MODE button to set temperature for another setting (Heat or Cool).

3. The thermostat will automatically return to regular operation within 5 seconds.

NOTE: The cool setting must be at least 2 degrees higher than the heat setting for proper operation.

**Fan Operation** — The FAN button selects fan operation. The fan can operate in either Fan ON or AUTO mode.

Press the FAN button to switch between fan ON or AUTO mode. When the fan is set to ON, "FAN" is displayed in the LCD on the thermostat. The fan will run continuously for improved air circulation while in the ON position.

When the fan is set to AUTO mode, the fan runs only as needed to maintain indoor air temperature.

NOTE: The "FAN" indicator will not be displayed in the LCD when thermostat is operating in AUTO mode.

**Mode Operation** — The Mode button selects the operating mode of the thermostat. Pressing the MODE button will rotate the following options on the LCD: OFF, HEAT, COOL, AUTO, and EHEAT (heat pump models only). The mode for each selection will be displayed on the thermostat when selected.

NOTE: If AUTO is selected, the thermostat will enter Heating or Cooling mode based on the room temperature and the heating and cooling set points.

**Display Outdoor Temperature** — To display the outdoor-air temperature on thermostats offering this feature, simultaneously press the UP and DOWN buttons for twenty seconds. The outdoor temperature will then be displayed on the LCD.

NOTE: Two dashes "--" appearing on the LCD indicates that the thermostat either does not have this feature installed or the temperature sensor is not properly connected.

**Reset Filter Display** — The thermostat will display "FILTER" on the LCD when it is time to change or clean the filter.

After cleaning or changing the filter, press the RESET FILTER button to restart the timer and turn off the indicator.

**Auto Changeover Operation** — The thermostat will provide automatic changeover from Heating to Cooling mode and Cooling to Heating mode when required. The thermostat will automatically switch to maintain the desired temperature setting. The thermostat does not need to be manually changed from heating to cooling or cooling to heating operation.

**Battery Changeout** — If the installation requires the usage of batteries, the batteries will require replacement every 12 months.

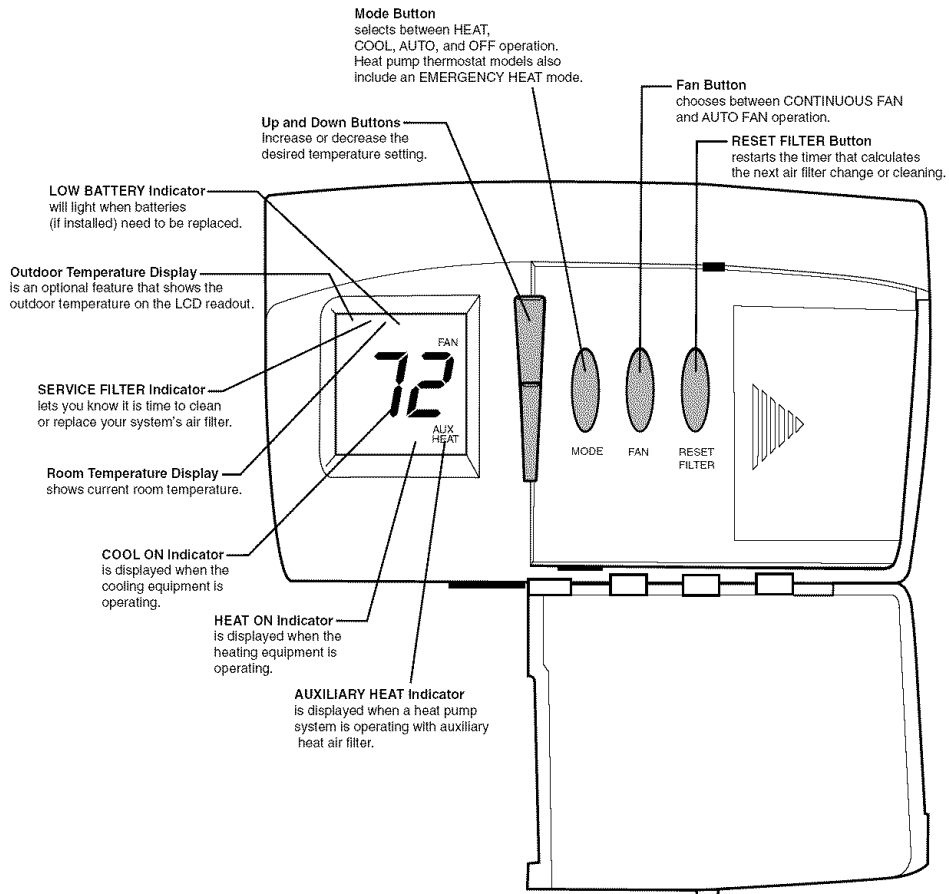
Open thermostat door and slide the battery compartment door to the right. Remove two AA alkaline batteries. Install two new AA alkaline batteries following the polarity markings (+ / -) on the thermostat.

NOTE: If installation is hard-wired, batteries are not required and will not need to be replaced.

**Error Codes** — If the thermostat displays "--", "E2", "E3", or "E4" in the LCD, an error is present. See Table 1 for error codes and descriptions.

**Table 1 — Error Codes**

SYMPTOM	WHAT TO CHECK
Blank LCD	Check for 24 vac between R and C at terminal connections or battery.
"--" (2 dashes) on temperature display	Temperature sensor reading out of range. Check sensor for damage. If recycling power does not clear display, thermostat should be replaced.
"E2" on temperature display	Brownout condition or too low of voltage to thermostat. Double check wiring and check for 24 vac between R and C. E2 will clear 15 sec after proper voltage is restored.
"E3" on temperature display	The outdoor temperature sensor is open, not connected, or shorted.
"SERVICE FILTER" on temperature display	After the selected number of hour of blower operation "FILTER" will display on LCD. This is to remind the home owner to "check" the filter. Press RESET FILTER button to clear display and reset timer to 0.
Cooling will not come on	Select COOL mode. Set desired temperature to 10° F below room temperature. Simultaneously press FAN and INCREASE TEMPERATURE buttons to defeat timers. Check for COOL ON icon and 24 vac at Y (first-stage) terminal. If present, thermostat is okay and problem is with equipment or wiring. If not present, replace thermostat.
Heating will not come on	Select HEAT mode. Set desired temperature to 10° F above room temperature. Simultaneously press FAN and INCREASE TEMPERATURE buttons to defeat timers. Check for HEAT ON and 24 vac at Y (first-stage) terminal (with heat pump) or W/W1 (with air conditioner) terminal. If present, thermostat is okay and problem is with equipment or wiring. If not present, replace thermostat.



**Fig. 1 — Thermostat Display and Buttons**



**RESIDENTIAL THERMOSTAT  
LIMITED ONE-YEAR WARRANTY**

**ONE-YEAR WARRANTY** — This CARRIER CORPORATION product is warranted to be free from defects in material and workmanship under normal use and maintenance for a period of one year from the date of original installation. A new or remanufactured part to replace the defective part will be provided without charge for the part itself, through a qualified servicing CARRIER CORPORATION dealer or service, PROVIDED the defective part is returned to our distributor. The replacement part assumes the unused portion of the warranty.

**THIS WARRANTY DOES NOT INCLUDE ANY ADDITIONAL LABOR ALLOWANCE OR OTHER COSTS** incurred for diagnosis, repairing, removing, installing, shipping, servicing, or handling of either defective parts or replacement parts. SUCH COSTS MAY BE COVERED BY a separate warranty provided by the installer.

**LIMITATIONS OF WARRANTIES** — ALL IMPLIED WARRANTIES (INCLUDING IMPLIED WARRANTIES OF MERCHANTABILITY) ARE HEREBY LIMITED IN DURATION TO THE PERIOD FOR WHICH THE LIMITED WARRANTY IS GIVEN. THE EXPRESSED WARRANTIES MADE IN THIS WARRANTY ARE EXCLUSIVE AND MAY NOT BE ALTERED, ENLARGED, OR CHANGED BY ANY DISTRIBUTOR, DEALER, OR OTHER PERSON WHATSOEVER.

CARRIER WILL NOT BE RESPONSIBLE FOR:

1. Normal maintenance as outlined in the installation and servicing instructions or owner's manual.
2. Damage or repairs required as a consequence of faulty installation or application by others.
3. Failure to start due to voltage conditions, blown fuses, open circuit breakers or other damages due to the inadequacy or interruption of electrical service.
4. Damage or repairs needed as a consequence of any misapplication, abuse, improper servicing, unauthorized alteration, or improper operations.
5. Damage as a result of floods, winds, fires, lightning, accidents, corrosive atmosphere, or other conditions beyond the control of CARRIER CORPORATION.
6. Parts not supplied or designated by CARRIER CORPORATION.
7. CARRIER CORPORATION products installed outside the continental U.S.A., Alaska, Hawaii, and Canada.
8. Electricity or fuel costs or increases in electricity or fuel costs from any reason whatsoever including additional or unusual use of supplemental heat.
9. ANY SPECIAL INDIRECT OR CONSEQUENTIAL PROPERTY OR COMMERCIAL DAMAGE OF ANY NATURE WHATSOEVER. Some states do not allow the exclusion of incidental or consequential damages, so the above limitation may not apply to you.

Model No.	Unit Serial No.
Date of Installation	Installed by
Name of Owner	Address of Installation



**Your Assurance of Quality**

**ALL Totaline® products are backed with a one-year warranty by Carrier Corporation, the world's largest manufacturer of air conditioning, heating, and refrigeration products.**