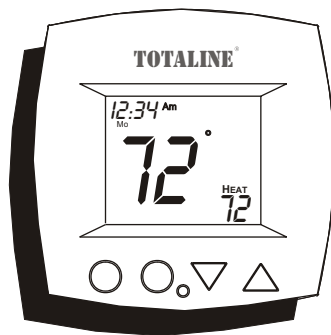


2 - Wire Programmable Digital Thermostat



- 2 - Wire Operation
- No Batteries Required
- Simple, Single Setpoint
- 7 Day Programmable
- 4 Time Periods
- Very Easy to Program
- Large, Easy To Read Display
- Thermoglow™ Backlight
- Locking Keypad

• Heat only, or Cool only

Meets California Title 24

TOTALINE

Star

Replacement Components Division © Carrier Corporation 4/01

Table Of Contents

FRONT PANEL	2
DISPLAY	3
QUICK START <i>Set the clock and go</i>	5
BASIC OPERATION	6
PROGRAMMING <i>Time Periods</i>	8
ADVANCED SETUP	12
ABOUT ADVANCED OPERATION	16
WARRANTY	19



CAUTION

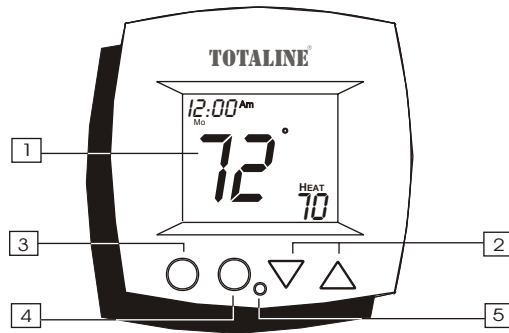
Follow *Installation Instructions* before proceeding.

SET THERMOSTAT TO MODE "OFF" PRIOR TO
CHANGING SETTINGS IN SETUP OR RESTORING
FACTORY DEFAULTS.

Replacement Components Division © Carrier Corporation 4/01

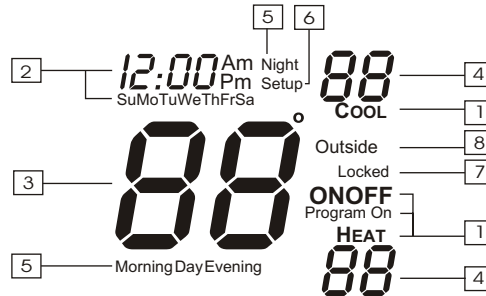
P/N P474-1020

Front Panel



- 1 **Liquid Crystal Display**
with Thermoglow™
- 2 **Up/Down Buttons**
- 3 **On/Off Button**
- 4 **Outside Button**
- 5 **Heat or Cool Indicator**
Heat = Red, Cool = Green

Display

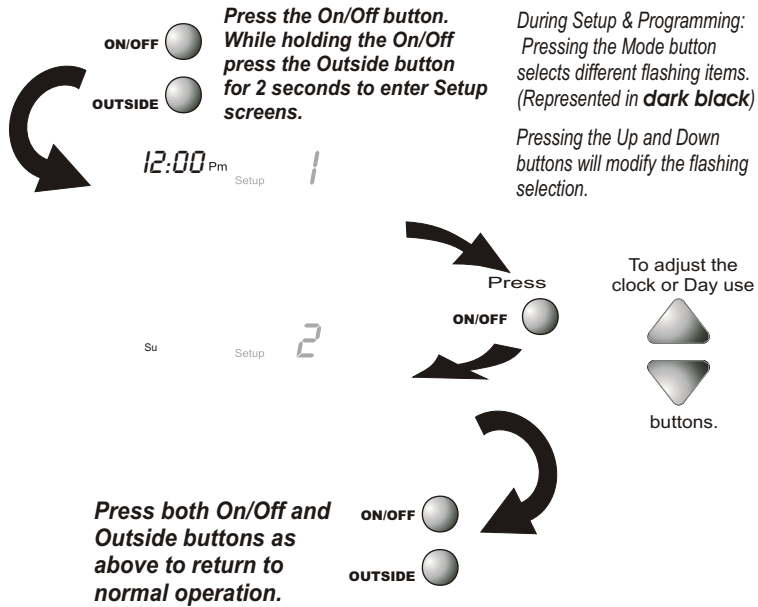


- 1** Mode Indicators
 Selects the operation mode of the equipment.
HEAT - indicates the heat mode.
COOL - indicates the air conditioning mode.
OFF - indicates the entire system is turned off.
PROGRAM ON - indicates the stored program is enabled to run. *Page 6.*
- 2** Clock with Day of the Week
 Indicates the current time and day. This clock is also used to program the time periods. *Page 5.*
- 3** Room Temperature Display
 Indicates the current room temperature, or can be configured to display the setpoint. *Page 7.*
- 4** Desired Set Temperature
 Indicates desired room temperature(s). *Page 7.*

Display

- 5 Morning, Day, Evening & Night Indication
Indicates the program time period.
Page 8-11.
- 6 Setup Indication
Indicates the thermostat is in the programming mode. *Page 12.*
- 7 Locked Indication
Locked appears after the right combination of buttons are pressed, rendering the buttons inoperative. *Page 16.*
- 8 Outside Indication
Outside temperature appears after pressing the Outside button if the thermostat is connected to an optional Outside Sensor.

Quick Start *Set the Clock and Go*

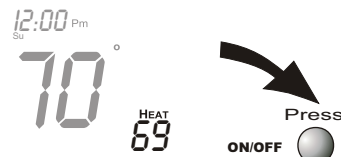


The thermostat is preprogrammed from the factory to operate without the need for further programming. To optimize the installation of this thermostat follow the instructions in the Advanced Setup section.

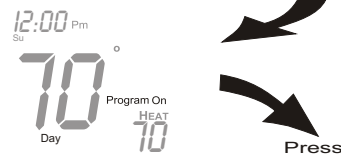
Basic Operation

Select Mode

The **HEAT** setting indicates the temperature the room has to reach before the furnace will turn on to heat the room.



Program On will activate the stored timer operation. (Morning, Day, Evening, Night)



OFF indicates the heating system is turned off.

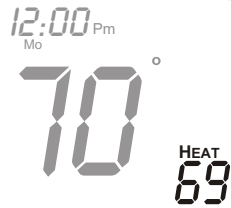



*NOTE: The operating mode of this thermostat may be changed from the factory default HEAT operation, to COOL operation in the Advanced Setup Section.
In the following pages Cool operation may be substituted for Heat operation if the factory default is changed in Advance Setup Step #3.*

The Program On operating mode will be bypassed if the factory default is changed in Advanced Setup, step #4.

Basic Operation

Select Desired Temperature



Adjust the
desired Set Temperature
with

buttons.

Pressing the up/down buttons in Heat or Cool will adjust only the Heat or Cool set temperature.

Outside Temperature




This feature is only available if an optional wired, or wireless Outside Sensor is connected to the thermostat.





Pressing the Outside button will display the outside temperature. A subsequent press of the Outside button will return the display to the previous screen. Normal operation will continue while the Outside temperature is being displayed.



Programming

4 Time periods

 **Press the On/Off button. While holding the On/Off, press the Up button for 2 seconds to enter time period programming.**





 Select the Day of the Week.

Mo


 Adjust the start time for Morning.

6:00^{Am}
Mo

Morning


 Adjust the heating setpoint for Morning.
(35° - 99°)

6:00^{Am}
Mo

70

HEAT

Morning

Press



Press



Press



Press



Continued

Programming

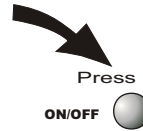
4 Time Periods



Adjust the start time for Day.

8:00^{Am}
Mo

Day



Adjust the heating setpoint for Day.
(35° - 99°)

8:00^{Am}
Mo

62^{HEAT}
Day



Adjust the start time for Evening.

6:00^{Pm}
Mo

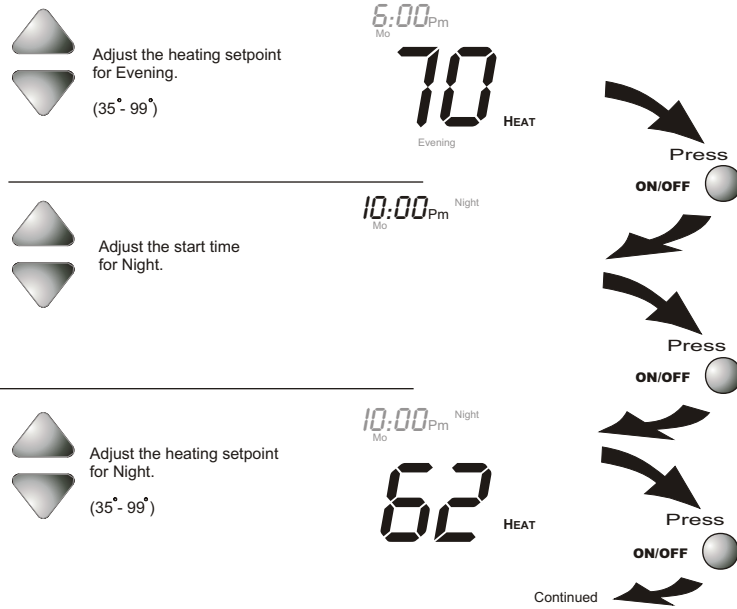
Evening




Continued


Programming

4 Time Periods




Copy Command

Yes  Select **Yes** to copy the stored program to the next day.



No  Select **No** to continue manually storing the time period programming for the next day.

NO
Tu
00 *py*

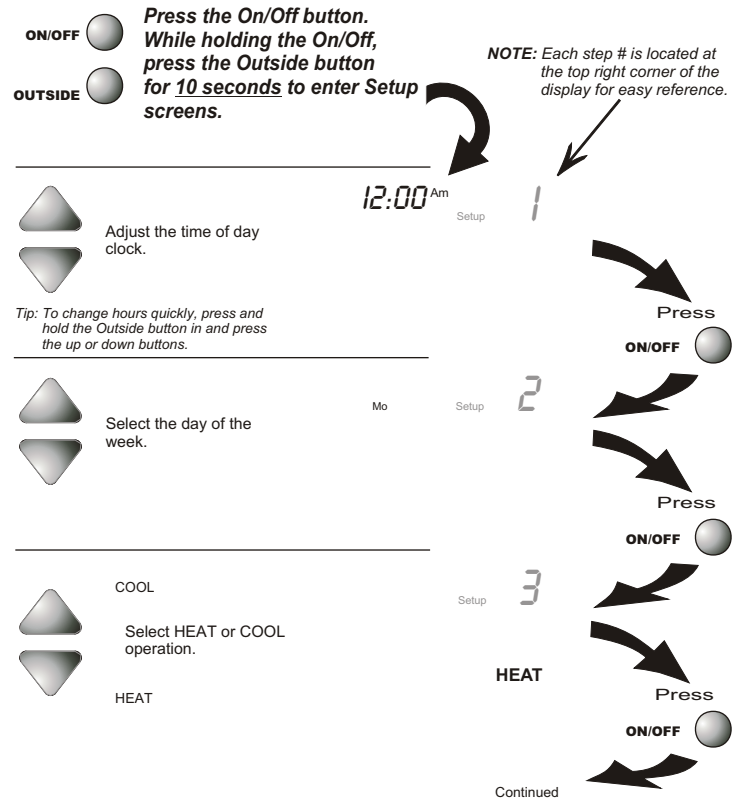
Press  ON/OFF

If **NO** was selected above, Continue Time Period Programming Morning through Night as done in previous steps starting on page 8 for the next day's schedule.




To Exit Programming


  Press the On/Off button. While holding the On/Off, press the Up button to exit time period programming.

Advanced Setup

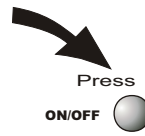




Advanced Setup

 ON
 Select the operation of the thermostat:
 ON is 7-day programmable,
 OFF is non-programmable
 OFF

Setup 4

ON Program






 Configure the display.
 1 = setpoint only
 2 = room temperature with setpoint.


dSP Setup 5

2

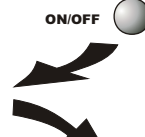





 Adjust the deadband from 1 - 6 degrees.


Setup 6

2

db

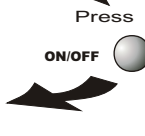
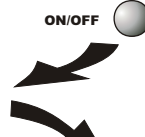



 Select the cycles per hour limit.
 d=cycles per hour limit defeated.
 d1=d + defeat 5 min.
 Compressor lockout, lockout is for Cool operation.


Setup 7

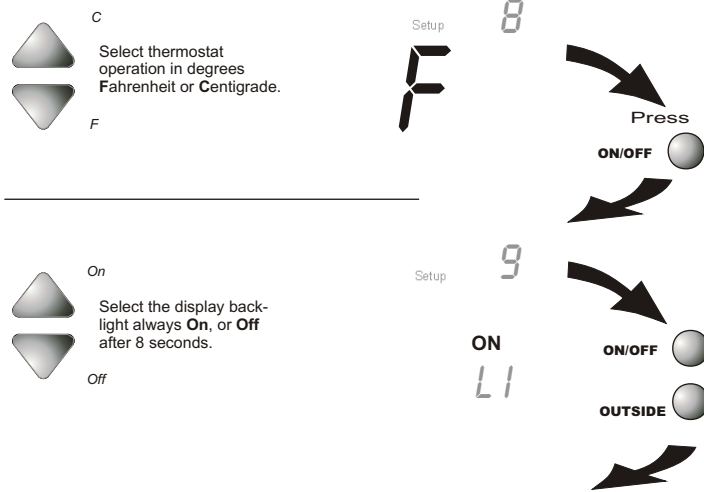
6

cy



Continued

Advanced Setup



**Press the On/Off button.
While holding the On/Off press the
outside button to leave the Setup screens.
If no buttons are pressed, the display will
leave the setup screens after 60 seconds.**

Advanced Setup

Advanced Setup Table

Step #	Description	Range	Factory Default
1	Time of day clock set	24 hour	12:00 Am
2	Day of the week	Sun - Sat	Monday
3	Operating Mode - Heat or Cool	Heat / Cool	Heat
4	Programmability flag	On / Off	On
5	Configurable Display	1 / 2	2
6	Deadband or Temperature swing	1 - 6	2
7	Cycles per hour	d, d1, 2 - 6	6
8	Fahrenheit or Centigrade	F / C	F
9	Thermoglow backlight	Off / On	On

SINGLE SETPOINT OPERATION

The thermostat display may be configured such that only the setpoint is visible.

This is done in Advance Setup Step #5, by selecting 1.

The room temperature may be viewed by holding in the On/Off button for 2 seconds. Releasing the On/Off button will return the display to the previous screen.

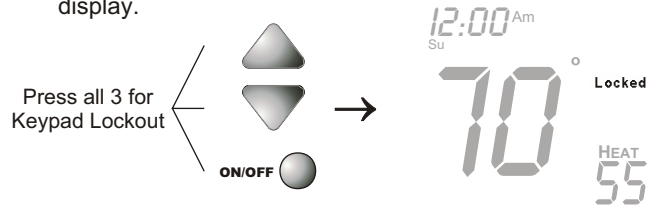
OUTDOOR SENSOR

An outdoor temperature sensor may be connected to this thermostat. Totaline offers wired or wireless models. Compatible models include: P474-0401RF/REC & P474-0400.

Consult the remote sensor instruction sheet for wiring connections.

About Advanced Features & Operation

- * **KEYPAD LOCK** - To prevent unauthorized use of the thermostat, the front panel buttons may be disabled. To disable, or 'lock' the keypad, press and hold in the On/Off button. While holding the On/Off button in, press the Up and Down buttons in together. The **Locked** icon will appear on the display.

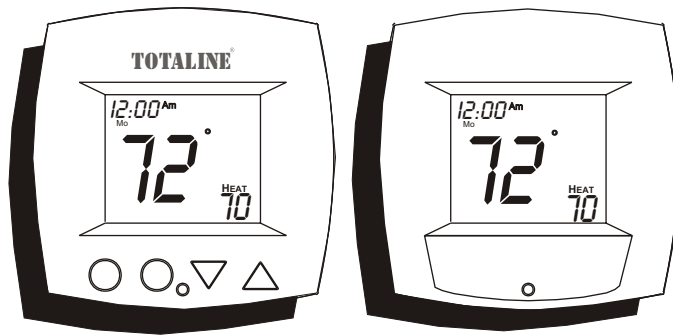


To **unlock** the buttons, again press and hold the On/Off button. While holding the On/Off button in, press the Up and Down buttons in together. The **Locked** icon will disappear from the display.

- * **FACTORY DEFAULTS** - If, for any reason it is desirable to return all stored settings back to the factory default settings, press the On/Off button. While holding the On/Off button in, press the Down button for 5 sec. All icons will appear. Press and hold in the Outside button until **Fd** appears. This resets all factory settings. **To calibrate room temperature**, press the On/Off button once more. At this point use the Up and Down buttons to calibrate room temperature, if needed. Press the On/Off button to return to normal operation. **NOTE CAUTION ON PAGE 1.**

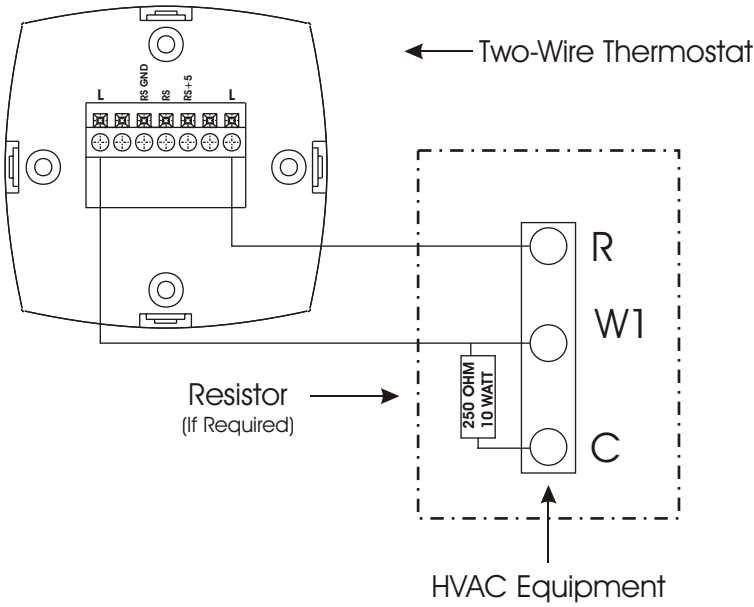
About Advanced Features & Operation

* OPTIONAL LOCKING COVER



About Advanced Features & Operation

**TWO-WIRE THERMOSTAT
INSTALLATION WIRING**



If the Two-Wire thermostat is losing time or showing PF or P- it may be necessary to install the 10 watt 250 ohm resistor that is supplied with the thermostat.

STEP #1

PREPARATION



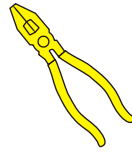
Proper installation of the thermostat will be accomplished by following these step by step instructions. If you are unsure about any of these steps, call a qualified technician for assistance.



Assemble tools as shown below.



*Flat Blade
Screwdriver*



*Wire cutter
& Stripper*



*Drill with 3/16
inch Drill Bit
(when not using
j-box)*



Make sure your Heater/Air Conditioner is working properly before beginning installation of the thermostat.



Carefully unpack the thermostat. Save the screws, wall anchors, and instructions.

STEP #2

REMOVE OLD THERMOSTAT



Turn off the power to the Heating/Air Conditioning system at the main fuse panel. Most residential systems have a separate breaker for disconnecting power to the furnace.



Remove the cover of the old thermostat. If it does not come off easily check for screws.



Loosen the screws holding the thermostat base or subbase to the wall, and lift away.

Disconnect the wires from the old thermostat. Tape the ends of the wires as you disconnect them, and mark them with the letter of the terminal for easy reconnection to the new thermostat.



Keep the old thermostat for reference purposes, until your new thermostat is functioning properly.

STEP #3**INSTALL BACKPLATE & WIRE**

Remove the backplate connector from the rear of the thermostat. Install wires as directed below. When finished, snap thermostat on to backplate.



If the terminal designations on your old thermostat do not match those on the new thermostat, **refer to the chart below, or the wiring diagrams that follow.**

Wire from the old thermostat terminal marked	Function	Install on the new thermostat connector marked
G or F	Fan	G
Y1, Y or C	Cooling	Y1
W1, W or H	Heating	W1,O,B
Rh, R, M, Vr, A	Power	R
C	Common	C *
O/B	Rev. Valve	W1,O,B**
Y2	2nd Stage Cool	Y2
W2	2nd Stage Heat	W2
RS+5	Remote Sensor +5vdc	
RS	Remote Sensor Signal	
RS G	Remote Sensor Ground	
CK1	Dry Contact Switch 1	
CK2	Dry Contact Switch 2	

* C may not be used on all systems.

** O/B is used if your system is a Heat Pump.

Warranty

One-Year Warranty - This Product is warranted to be free from defects in material and workmanship. If it appears within one year from the date of original installation, whether or not actual use begins on that date, that the product does not meet this warranty, a new or remanufactured part, at the manufacturer's sole option, to replace any defective part will be provided without charge for the part itself; PROVIDED the defective part is returned to the distributor through a qualified servicing dealer.

THIS WARRANTY DOES NOT INCLUDE LABOR OR OTHER COSTS incurred for diagnosing, 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.

THIS WARRANTY APPLIES ONLY TO PRODUCTS IN THEIR ORIGINAL INSTALLATION LOCATION AND BECOMES VOID UPON REINSTALLATION.

LIMITATIONS OF WARRANTIES – ALL IMPLIED WARRANTIES (INCLUDING IMPLIED WARRANTIES OF FITNESS FOR A PARTICULAR PURPOSE AND MERCHANTABILITY) ARE HEREBY LIMITED IN DURATION TO THE PERIOD FOR WHICH THE LIMITED WARRANTY IS GIVEN. SOME STATES DO NOT ALLOW LIMITATIONS ON HOW LONG AN IMPLIED WARRANTY LASTS, SO THE ABOVE MAY NOT APPLY TO YOU. THE EXPRESSED WARRANTIES MADE IN THIS WARRANTY ARE EXCLUSIVE AND MANY NOT BE ALTERED, ENLARGED, OR CHANGED BY ANY DISTRIBUTOR, DEALER, OR OTHER PERSON WHATSOEVER.

ALL WORK UNDER THE TERMS OF THIS WARRANTY SHALL BE PERFORMED DURING NORMAL WORKING HOURS. ALL REPLACEMENT PARTS, WHETHER NEW OR REMANUFACTURED, ASSUME AS THEIR WARRANTY PERIOD ONLY THE REMAINING TIME PERIOD OF THIS WARRANTY.

THE MANUFACTURER WILL NOT BE RESPONSIBLE FOR:

1. Normal maintenance as outlined in the installation and servicing instructions or owners manual including filter cleaning and/or replacement and lubrication.
2. Damage or repairs required as a consequence of faulty installation, misapplication, abuse, improper servicing, unauthorized alteration or improper operation.
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 as a result of floods, winds, fires, lightning, accidents, corrosive environments or other conditions beyond the control of the Manufacturer.
5. Parts not supplied or designated by the Manufacturer, or damages resulting from their use.
6. Manufacturer products installed outside the continental U.S.A., Alaska, Hawaii, and Canada.
7. Electricity or fuel costs or increases in electricity or fuel costs from any reason whatsoever including additional or unusual use of supplemental electric heat.
8. 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 may not apply to you.

This warranty gives you specific legal rights, and you may also have other rights which may vary from state to state.
P/N 88-333

Form: OG-P474-03
Catalog: 53P4-741