1 For All™
Programmable
Digital Thermostat

- 7 Day programmable
- Pre-Programmed
- Occupied Comfort
- Unoccupied Energy Savings
- Auto Changeover
- Easy To Read Display
- Thermoglow™ Backlight
- Multi-Stage, One for All
- 3 Security Levels

Meets California Title 24

* Use with most Air Conditioning & Heating Systems including: 1 or 2 Stage Electric Cooling & Gas Heating, Heat Pump, Electric or Hydronic Heat.
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CAUTION
Follow Installation Instructions before proceeding.

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

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P/N P374-2200
Front Panel

Backlit LCD Display
Warmer or + Button
Cooler or - Button
Override Button
Heat or Cool Indicator
Red = Heat, Green = Cool

Mode
Fan
Holiday
Program
Set Clock
Mode Indicators
Selects the operation mode of the equipment.
- HEAT - indicates the heat mode.
- COOL - indicates the air conditioning mode.
- AUTO - indicates the system will automatically changeover between heat and cool modes as the temperature varies.
- OFF - indicates the entire system is turned off.
- PROGRAM ON - indicates the stored program is enabled to run. Page 6.

Clock with Day of the Week
Indicates the current time and day. This clock is also used to program the timer periods. Page 5.

Room Temperature Display
Indicates the current room temperature.

Desired Set Temperature
Indicates desired room temperature(s). Page 7.
**Display**

5. **Override Indication**
   Indicates the current program is currently being overridden for up to 4 hours. *Page 7, 16.*

6. **Occupied or Unoccupied Indication**
   Indicates the program number: Occupied 1, 2, 3, or Unoccupied. *Page 8-11.*

7. **Setup Indication**
   Indicates the thermostat is in the programming mode. *Page 12.*

8. **Fan Operation Indication**
   **Fan On** - indicates constant, continuous fan operation.
   When **Fan On** is not lit - indicates the fan will only operate when necessary to heat or to cool. *Page 12.*

9. **Locked Indication**
   **Locked** appears after the right combination of buttons are pressed, rendering the buttons inoperative. *Page 18.*

10. **Start / Stop Indication**
    Start or Stop appears when programming timer functions. *Page 9.*
Quick Start  Set the Clock and Go

Press the SET CLOCK button.

Press the SET CLOCK button as above to return to normal operation.

During Setup & Programming:
Pressing the Mode button selects different flashing items. (Represented in dark black)
Pressing the Up and Down buttons will modify the flashing selection.

This thermostat is preprogrammed from the factory to operate 1 or 2 Stage equipment without the need for further programming. To optimize the installation of this thermostat follow the instructions in the Advanced Setup section.

* The thermostat is not preprogrammed from the factory to operate electric heat or heat pump systems. To control these systems, follow the steps in the Advanced Setup section, pages 12 & 13.
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.

The COOL setting indicates the temperature the room has to reach before the air conditioner will turn on to cool the room.

AUTO will automatically select heat or cool based on room temperature demand.

Program On will activate the stored timer operation. (Occupied or Unoccupied Periods)

OFF indicates both heating and air conditioning systems are turned off.
Basic Operation

Select Desired Temperature

In any mode, adjust the desired Set Temperature with buttons.

Pressing the up/down buttons in Auto mode will adjust both the heat and cool set temperatures simultaneously.
Pressing the up/down buttons in Heat or Cool modes will adjust only the heat or cool set temperature.

Override

During programmed, unoccupied periods a press of the Override button will force the thermostat into Occupied 1 comfort settings, temporarily, for 30 minutes. Pressing the override button when the countdown timer is less than 30, will reset the timer to 30 minutes. If the timer displays 30 minutes, the next press will zero out the override timer, returning to unoccupied.

When in Override, the Override icon and the Occupied 1 icon appear on the display.

The time of day clock alternates with the time remaining in override.

During Override, the setpoints are adjustable, provided the keypad is not locked.

Page 7
Select the maximum # of occupied periods to be used on any one day. Typically 1.
(1, 2 or 3)

Adjust the cooling setpoint for occupied 1.
(35 - 99°F)

Adjust the heating setpoint for occupied 1.
(35 - 99°F)

Adjust the cooling setpoint for unoccupied periods.
(35 - 99°F)
Adjust the heating set-point for unoccupied periods.
(35 - 99)

Select the day for Occupied 1.
(M - Su)

Adjust the start time for occupied 1.

Adjust the stop time for occupied 1.

Select Occupied 1 to run on this day (On), or not to run this day (Off).
Programming  Occupied & Unoccupied Periods

The copy command becomes available after the maximum # of occupied periods are programed in a day. This example uses 1 as the maximum occupied periods ever programed in one day.

Select Yes or No to copy the previous day’s program to this day.

If Yes is selected:

Selecting Yes, then pressing mode will copy the previous day’s program and then will ask the same copy question again. If yes is selected each time, this routine will repeat until Saturday is copied to Sunday. After Saturday is copied to Sunday, the copy command is unavailable.

The copy command becomes available after the maximum # of occupied periods are programed in a day. This example uses 1 as the maximum occupied periods ever programed in one day.

Select the day for occupied 1. (Tu ~ M)

Adjust the start time for occupied 1.

Adjust the stop time for occupied 1.

Continued
## PROGRAMMING NOTES

- If only 1 Occupied period is selected in step 1 on page 8, Occupied 2 & 3 programming steps are skipped. Further, if only 2 occupieds are selected, Occupied 3 programming steps are skipped.
- Heat & Cool setpoints for Occupied 1 are the same for every day of the week. Heat & Cool setpoints for Occupied 2 & 3 can be adjusted differently for each day of the week, if desired.
- If the start time is set later in the day than the stop time, the program will run from the start time to midnight and from midnight to the stop time on the same day. For example: 9:00pm start, 8:00am stop, on Monday. In this example the program will run from 12:00am Monday to 8:00am Monday and again from 9:00pm Monday to 12:00pm Monday.
- The Unoccupied settings take effect at all times when: (1) the program is on and (2) the current time is outside a preset occupied period. For this reason start and stop times aren't necessary for unoccupied.
- If the same start and stop times are programmed in for an occupied period, then it will run 24 hours.
- If one occupied period starts and stops within another occupied period the lower occupied # has priority. For example: If Occupied 3 is programmed to be “on” 24 hours, and Occupied 2 is programmed to run that day, then Occupied 2 settings will take over from occupied 3 between Occupied 2 start and stop times.
Advanced Setup

Press the Mode button. While holding the Mode, press the Program button to enter Setup screens.

NOTE: Each step # is located at the top right corner of the display for easy reference. Steps 1 & 2 are accessed by pressing Set Clock.

Select Heat Pump operation (ON) or, Gas/Electric operation (OFF)

Select reversing valve type, O or B. Step 4 only appears if step 3 is ON.

Select Electric Heat ON or OFF. Step 5 only appears if step 3 is OFF.

Adjust the deadband from 1 - 6 degrees.
Adjust the minimum difference between cooling & heating setpoints.

Select the cycles per hour limit. d = cycles per hour limit defeated. d1 = d + defeat 5 min. Compressor lockout.

Select the display backlight always On, or Off after 8 seconds.

Reset the Service Filter counter to 0, to remove the icon from the display.

Adjust the number of hours the blower will run before the Service Filter icon appears on the display. 0 = off.

Press MODE

Press РОВХІД

Press MODE

Press MODE

Press MODE
Press the Mode button. While holding the Mode, press the Program button to enter Setup screens. If no buttons are pressed, the display will leave the setup screens after 60 seconds.
### Advanced Setup Table

<table>
<thead>
<tr>
<th>Step #</th>
<th>Description</th>
<th>Range</th>
<th>Factory Default</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Time of day clock set</td>
<td>24 hour</td>
<td>12:00 Am</td>
</tr>
<tr>
<td>2</td>
<td>Day of the week</td>
<td>Sun - Sat</td>
<td>Monday</td>
</tr>
<tr>
<td>3</td>
<td>Heat Pump</td>
<td>Off / On</td>
<td>Off</td>
</tr>
<tr>
<td>4</td>
<td>Reversing Valve Polarity</td>
<td>O / B</td>
<td>O</td>
</tr>
<tr>
<td>5</td>
<td>Electric Heat</td>
<td>Off / On</td>
<td>Off</td>
</tr>
<tr>
<td>6</td>
<td>Deadband or Temperature swing</td>
<td>1 - 6</td>
<td>2</td>
</tr>
<tr>
<td>7</td>
<td>Forced minimum difference heat/cool</td>
<td>1 - 6</td>
<td>2</td>
</tr>
<tr>
<td>8</td>
<td>Cycles per hour</td>
<td>3, 31, 2 - 6</td>
<td>6</td>
</tr>
<tr>
<td>9</td>
<td>Thermoglows backlight</td>
<td>Off / On</td>
<td>On</td>
</tr>
<tr>
<td>10</td>
<td>Reset Service Filter Icon</td>
<td>- -</td>
<td>- -</td>
</tr>
<tr>
<td>11</td>
<td>Service Filter run time set</td>
<td>0 - 1950</td>
<td>0</td>
</tr>
<tr>
<td>12</td>
<td>Fahrenheit or Centigrade</td>
<td>F / C</td>
<td>F</td>
</tr>
<tr>
<td>13</td>
<td>Security Levels</td>
<td>1 - 4</td>
<td>4</td>
</tr>
<tr>
<td>14</td>
<td>Maximum allowable Heat setpoint</td>
<td>35 - 99</td>
<td>80</td>
</tr>
<tr>
<td>15</td>
<td>Minimum allowable Cool setpoint</td>
<td>35 - 99</td>
<td>65</td>
</tr>
</tbody>
</table>
CLOCK BACKUP - In the event of a power loss, the thermostat internal clock will continue to keep proper time for a minimum of 48 hours without external power or batteries.

2 STAGE OPERATION - The 2nd Stage of heat or cool is turned on when (1) the 1st Stage has been on for a minimum of two minutes, and (2) the temperature spread from the setpoint is equal to or greater than: the setpoint plus the deadband, plus 2 degrees.

MINIMUM HEAT/COOL SETPOINT DIFFERENCE - The Heat and Cool setpoints will not be allowed to come any closer to each other than the value set in Advanced Setup step # 7, on page 13. This minimum difference is enforced during Auto changeover and Program On operation.

OVERRIDE - As explained on page 7, pressing the Override button during a programmed, Unoccupied period will force the thermostat into Occupied 1, temporarily, for 30 minutes. If the Override button is pressed during an Occupied period, the thermostat will be forced into Unoccupied and the occupied # (1, 2 or 3), it was forced out of will be turned off, only for that day. During Override periods the setpoints may be adjusted, but they will not be remembered after Override ends.
EMERGENCY HEAT - To turn on Emergency Heat press in the Fan button. While holding the Fan button press the Up button. The Cool setpoint display will read ‘EH’.

ENERGY SAVING SMART FAN - If Fan On is selected, the fan will run continuously at all times, except in Off, and will only run if there is a heating or cooling demand in Unoccupied periods.

During Emergency Heat the thermostat will turn on the fan and the 2nd stage of heat, when there is a demand for heat, locking out the 1st stage compressor. Exiting Emergency Heat is the same as entering. During Emergency Heat only OFF and HEAT are available. Note: Emergency Heat is only available when the thermostat is controlling a heat pump.
**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 the Mode button. While holding the Mode 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 Mode button. While holding the Mode button in, press the Up and Down buttons in together. The **Locked** icon will disappear from the display.

**ELECTRIC HEAT** - Selecting Electric Heat on, page 13, step 6, will cause the thermostat to turn on the fan immediately any time there is a heat demand. Since all gas furnaces control the fan, this feature should be off unless the heater is only electric.
DUAL SETPOINT BEHAVIOR - The adjustable setpoint range is: 35 - 99 degrees in Fahrenheit and 7 - 35 degrees in Centigrade. When in the modes Heat or Cool, this adjustable range is unhindered. When adjusting any Auto mode, including programming Occupied and Unoccupied periods, the thermostat will not allow the Heat setpoint to get closer to the Cool setpoint than the value programmed as the minimum difference in step 7, page 13. When entering the Auto mode from Cool, the Heat and Cool setpoints will remain spread apart by the amount that they were adjusted, prior to entering Auto. For example: If the Cool setpoint was set to 80 while in the Cool mode and the Heat setpoint was adjusted to 70 while in the Heat mode, upon entering the Auto mode the Heat and Cool setpoints would be 80 and 70. Both setpoints would then move up and down together, (in this example spread by 10 degrees), by pressing the up or down buttons. To move the Heat and Cool setpoints closer together, enter the Cool or Heat mode by pressing the Mode button, then adjust the setpoint(s) closer together. Heat is limited to how close it can come to Cool by step 7, page 13. The above applies if the Security level does not equal 4.

FACTORY DEFAULTS - If, for any reason it is desirable to return all stored settings back to the factory default settings, press the Mode button. While holding the Mode button in, press the Fan button for 5 sec. All icons will appear. Press and hold in the Fan button until Fd appears. This resets all factory settings. To return to normal operation, press the Mode button twice more.
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 MAY 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.
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.