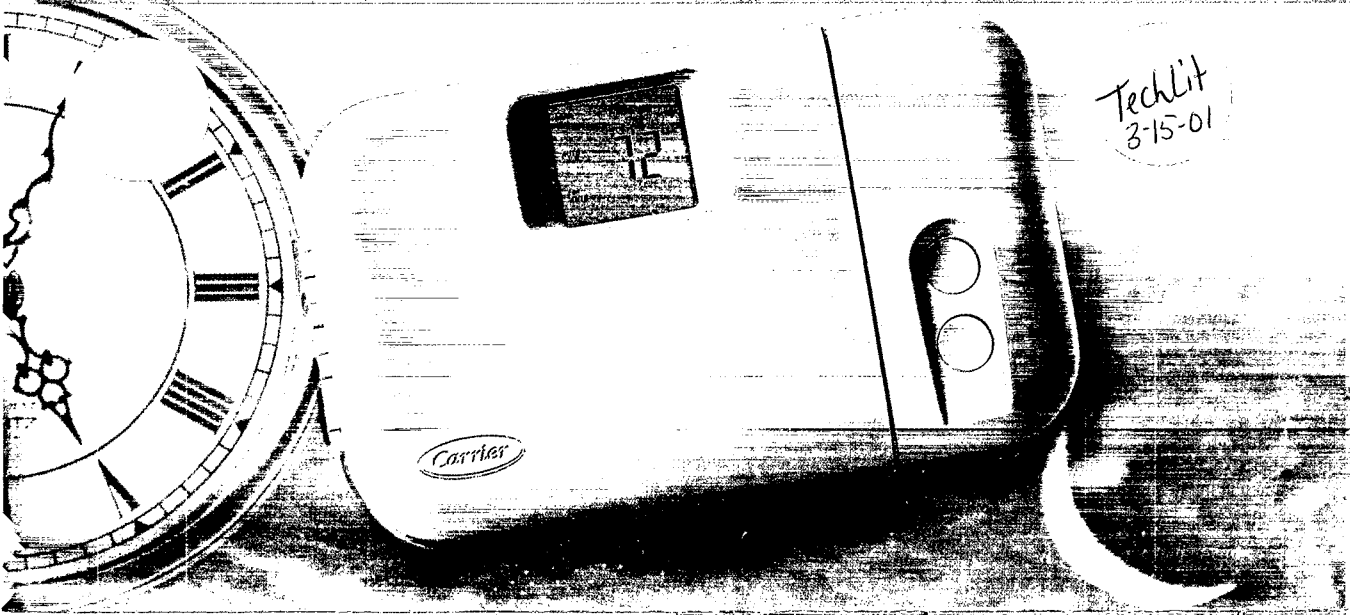


Carrier®

## HOMEOWNER'S GUIDE



## COMFORT

Intelligent, easy to use

Congratulations on your purchase of a new Carrier thermostat. Your new thermostat combines computer-like intelligence with extremely simple operation in an elegant package. Designed to maximize the performance of your Carrier total indoor comfort system, our thermostats provide reliable, accurate temperature control while blending into any home's decor. As you read on, you'll quickly see how easy it is to set up and operate your new thermostat and enjoy the comfort of your home.



\* **Auxiliary Heat Indicator** lights up when a heat pump system's auxiliary heat is on.

\* **Trouble Indicator** alerts you when the system needs professional service.

**Room Temperature Display** shows current room temperature.

\* **Energy Savings Indicator** lights up when system is operating at maximum efficiency.

\* **Outdoor Temperature Display** shows the outdoor temperature.

**Mode Button** selects OFF, HEAT, COOL or AUTO operation. Heat pump thermostats include EMERGENCY HEAT mode.

**Program Button** starts the programming process and moves you from one step to the next.

**Copy Previous Day Button** "memorizes" the current day's comfort schedule and copies it into the next day's schedule.

**Change Day Button** advances you to the next day to be programmed and advances the day of the week display.

**Set Time Button**

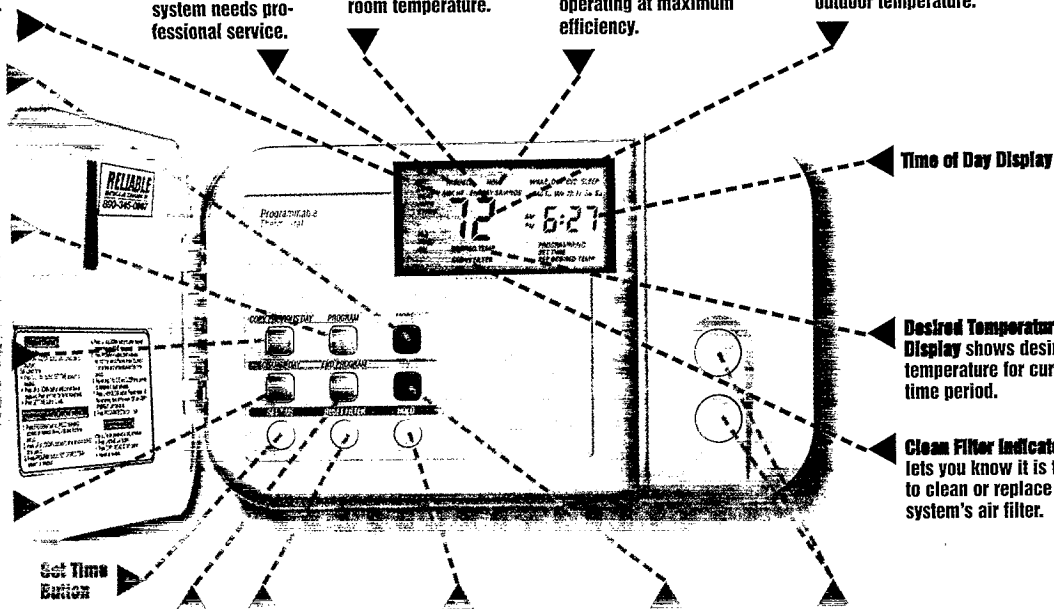
**Program End Button** "locks in" the most recently entered temperatures and schedule.

**Reset Filter Button** restarts the timer that determines the next air filter change or cleaning.

**Hold Button** maintains the current temperature and overrides programmed temperature changes until reset.

**Fan Button** chooses ON or AUTO fan operation.

**Up and Down Buttons** change the desired temperature setting, turn on the LCD backlight, are used for programming and, on selected models, access outdoor temperature.



**NOTE:** Not all messages displayed in the above illustration will appear at once in any situation.

\* Available on selected models.

# CONTROL FEATURES

**Comfort at your command**

**Making life easier**

This is no ordinary thermostat. Carrier listened to the needs of homeowners nationwide and delivered a product to meet those needs. The result is a thermostat that interacts with people as effectively as it does with your heating and cooling system. It's a simple, yet powerful control that puts comfort at your command

Take a few minutes to review the features and functions listed above. Carrier gives you control over your comfort with simple instructions, responsive push buttons and an easy-to-read backlit display. Once set, this thermostat reliably monitors indoor temperatures and responsively meets your comfort demands.

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## Auto Changeover

Your thermostat provides complete, automatic control over heating and cooling with auto changeover. Auto changeover means your system will automatically heat or cool as needed to maintain your desired temperature setting.

Here's how it works. As outdoor conditions change, your system must adjust to keep indoor temperatures consistent. There will be times when the system must switch between heating and cooling to maintain acceptable levels of indoor comfort. Your thermostat will allow for a 3° temperature variation from the desired temperature

before changing to heating or cooling. This temperature band keeps the system from changing unnecessarily from one mode to another. Auto changeover makes your life easier because you no longer have to manually switch the thermostat between heating or cooling operation. Just set your desired temperature and let the system do the rest!

*NOTE: With auto changeover, you probably won't want to enter large temperature differences in your comfort program. Your comfort program is typically used to save energy. Auto changeover will direct the system to cool or heat to reach your desired setback temperature, eliminating the energy savings*

## Smart Recovery

Smart recovery is a feature of your new thermostat designed to save energy by gradually adjusting temperatures.

When it's time for a programmed temperature change, smart recovery begins working in advance, turning the system on and off as needed to slowly adjust the indoor temperature. During these transition periods, you may notice that the actual temperature and your desired temperature setting don't match. That's smart recovery in action, adjusting temperatures in small increments for greater energy efficiency. This is more energy efficient than simply allowing the

system to operate at full capacity until the desired temperature has been met.

*NOTE: Smart recovery does not apply to cooling operation or when the desired temperature is reduced. With a heat pump system, the thermostat will start adjusting the temperature 1.5 hours before the scheduled temperature change. With other heating systems, the thermostat will start adjusting the temperature 1 hour before the scheduled change.*


## Personalize Your Comfort

Before you program your thermostat, take a moment to plan your temperature schedule. Enter start times and temperatures next to the appropriate blanks. This chart will help determine those needs, and should be your guide during programming.

*NOTE: This thermostat remembers only one temperature schedule at a time. You may need to re-enter the heating or cooling program as the seasons change. If your time settings are the same all year long, you will only have to enter new temperature settings for the appropriate times.*

	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
	Time/Temp	Time/Temp	Time/Temp	Time/Temp	Time/Temp	Time/Temp	Time/Temp
Wake	/	/	/	/	/	/	/
Day	/	/	/	/	/	/	/
Evening	/	/	/	/	/	/	/
Sleep	/	/	/	/	/	/	/


## Setting the current day

- 1**  CHANGE DAY Press the CHANGE DAY button.

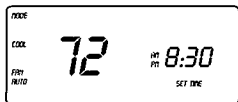
The day of the week will change.


- 2** Stop on the desired day. The thermostat then follows the program schedule for that day.

## Setting the current time

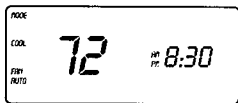
- 1**  SET TIME Press the SET TIME button.

The LCD readout will show SET TIME.



- 2**  Press the UP or DOWN buttons until the correct time is displayed. To quickly advance to the proper time, press and hold the UP or DOWN button. To ensure accurate programming, be sure that AM or PM are properly selected.

- 3** When the correct time appears on the LCD readout, press the SET TIME button again to exit SET TIME mode.



*NOTE: If you choose not to press the SET TIME button, the SET TIME mode will automatically shut off after 15 seconds.*

## Setting your comfort schedule

Before you begin programming, refer to page 3 of this manual to plan your personal comfort program.

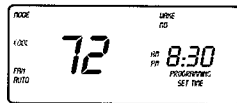
**1**

PROGRAM



Press the PROGRAM button.

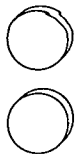
The word PROGRAMMING appears on the LCD display.



Above the digital clock, the word WAKE indicates this is the first time period for the first day you are programming. Below the digital clock, the words SET TIME are displayed.



2



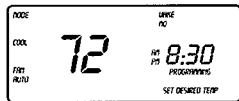
Press the UP or DOWN buttons to set the time according to your personalized schedule.

3



Press the PROGRAM button.

SET DESIRED TEMP is displayed below the digital clock.



4



Press the UP or DOWN buttons to adjust the temperature to match your personalized schedule.

5



Press the PROGRAM button to advance to the next time period. Following your personalized schedule, enter times and temperatures for DAY, EVE, and SLEEP time periods. You have now programmed 1 day into your thermostat. At this time, you can either repeat steps 1–5 until all days of the week have been programmed, OR you can copy the schedule onto the remaining days of

# Programming the Thermostat

the week. See the section on “Copying a Daily Schedule” for details.

*NOTE: During programming if you have not touched a button or made an entry within 60 seconds the programming mode will automatically shut-off. Anything you have programmed will be saved.*

**6**

END PROGRAM





Press the END PROGRAM button when you finish entering your schedule. The newly programmed information is now stored.


*NOTE: Once you've programmed your comfort schedule, the thermostat will continue operating on that program until you enter an alternative schedule. It may be appropriate to adjust temperatures as seasons change.*

## Copying a daily schedule

Typically, your Monday through Friday comfort schedule will be the same. That's why this thermostat model includes a COPY PREVIOUS DAY button. When programming, this eliminates the need to re-enter identical information for each day.

- 1 Program a daily schedule.
- 2  Press the CHANGE DAY button to move to the next day.  
CHANGE DAY
- 3  Press the COPY PREVIOUS DAY button.  
COPY PREVIOUS DAY  
The previous day's schedule will be entered into the new day.
- 4 Continue this process by repeating steps 2 and 3.

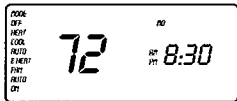
## Setting the fan

- 1  Press the FAN button to switch between ON and AUTO fan settings.  
FAN  
When the ON mode is selected, the fan runs continuously for improved air circulation.  
When the AUTO mode is selected, the fan runs only as needed to maintain your desired indoor temperature.


## Setting mode operation

**1**  Press MODE button.

**2** On the LCD readout, the words OFF, HEAT, COOL, and AUTO will rotate as the MODE button is pressed.




If you have a heat pump, the LCD readout will show OFF, HEAT, COOL, AUTO, and EMERGENCY HEAT.

**3**  Continue to press the MODE button until you reach the desired setting.

*NOTE: In AUTO mode, your system will heat OR cool as needed to reach your desired temperature.*

## Changing your comfort program

-  Press the PROGRAM button to begin the programming process.

*NOTE: Entering new information always deletes old selections. Refer to the table of contents to locate the type of programming you desire.*

## Overriding the program

There are two ways to override the existing program.

- Pressing the HOLD button.* By pressing the HOLD button, the thermostat will

maintain the current temperature and ignore programmed changes for an indefinite period of time. Press the HOLD button a second time and the thermostat will resume normal operation, adhering to the programmed desired temperature. The thermostat will change the temperature setting as needed upon the next program cycle. Pressing HOLD will not alter your program setting.

- Pressing the UP or DOWN buttons.* By pressing the UP or DOWN button, the words DESIRED TEMP appear on the

LCD along with the programmed desired temperature. Pressing the UP or DOWN button again will temporarily change the temperature as needed. The thermostat will automatically restore normal operation and temperature at the next programmed time.

## Checking the outdoor temperature

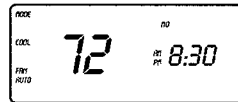


1

Press the UP and DOWN buttons simultaneously.


2

The outdoor temperature will show on the LCD readout.

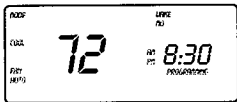



*NOTE: If 2 dashes (--) appear, your thermostat does not include the outdoor temperature function or the function is not working properly. Check with your dealer if you are unsure.*


## Checking current programmed time and temperature settings

- 1**  Press the PROGRAM button.


The current settings will appear on the LCD readout.



- 2**  Continue to press the PROGRAM button to rotate through all of the programmed entries of that day.

- 3**  Press the CHANGE DAY button to view next day's settings
- 4** Repeat steps 2 and 3 to review entire seven day schedule.

**CAUTION:** Pressing any other buttons while reviewing current selections could alter the set program.

- 5**  Press the END PROGRAM button to exit the program mode.

**NOTE:** Thermostat will display current temperature. To view your desired temperature, push the UP or DOWN button once.

## **The AUXILIARY HEAT indicator is lit...**

The AUXILIARY HEAT indicator appears on the heat pump version of the thermostat only. It lights up when your system is operating on auxiliary heat.

*NOTE: This indicator does not reflect a problem with your system.*

## **The CLEAN FILTER indicator is lit...**

The CLEAN FILTER indicator tells you when to clean or replace your system's air filter. Press the RESET FILTER button after clean-

ing or replacing the filter to turn off the indicator and reset the system.

*NOTE: This indicator does not reflect a problem with your system.*

## **The ENERGY SAVINGS indicator is lit...**

The ENERGY SAVINGS indicator applies only to 2-stage or heat pump applications. When lit, your system is operating at maximum efficiency to maintain your comfort.

*NOTE: This indicator does not reflect a problem with your system.*



## **The HOLD indicator is lit...**

The HOLD indicator reminds you that your thermostat's program has been bypassed. This function will hold the current temperature indefinitely, so it can be used to hold an energy-saving desired temperature for several days if needed. Press the HOLD button to resume normal system operation.

*NOTE: This indicator does not reflect a problem with your system.*

## **You have a power outage...**

An internal power source eliminates the need to reprogram the thermostat after

power outages. The comfort program you have entered will be maintained indefinitely. Clock and day settings will be maintained for 72 hours or more.

## **The TEMPERATURE SENSOR FAILURE indicator is lit...**

The TEMPERATURE SENSOR FAILURE indicator sends an E1 reading to the LCD display. This means your thermostat's temperature sensor is no longer able to measure temperatures. You will need to contact your dealer to repair the problem.

An E2 reading on the LCD display means there is not enough voltage for the system to operate. Contact your dealer for further information.

## **The TROUBLE indicator is lit...**

The TROUBLE indicator means your system is not functioning properly. You will need to contact a repairman to review your indoor comfort system. Only select systems have this feature.

This thermostat includes a one-year limited warranty. For detailed warranty information, please refer to the All Product Limited Warranty Card included in your information packet. This thermostat is also eligible for manufacturer's extended system warranties. Ask your dealer for details on extended warranties for longer-term protection.

## **Auxiliary Heat . . . . .Pg. 13**

Most heat pumps require a supplemental heating source, called auxiliary heat, to maintain your comfort when outdoor temperatures fall below \_\_\_\_\_. Your thermostat lets you know when your home is being warmed with supplemental heat.

## **Change Day . . . . .Pg. 8**

Change day is a function of your thermostat's programming. Once you've programmed a day's heating or cooling schedule, you move to the next day by pressing the CHANGE DAY button. This button also advances the day of the week display on the LCD readout.

## **Clean Filter . . . . . Pg. 13**

Your system's air filter will require regular cleaning to reduce the dirt and dust in the system and your indoor air. The CLEAN FILTER indicator lets you know when it's time to clean the filter.

## **Comfort Schedule . . . . . Pgs. 3, 5**

The comfort schedule is a personalized list of the desired temperature along with a corresponding time of day. This schedule includes four time periods per day, and can feature a different schedule each day of the week.

## **Copy Previous Day . . . . . Pgs. 7-8**

This programming function allows you to copy the previously programmed day for use in setting the current day's schedule. It is activated by pressing the COPY PREVIOUS DAY button.

## **Current Day and Time. . . . Pgs. 4-5**

The day of the week and current time are displayed continuously on the LCD display.

## **Desired Temperature. . . . .Pg. 10**

The temperature programmed into the thermostat as part of your comfort schedule.

The actual room temperature will automatically be displayed, but you can check the desired temperature by pressing either the UP or DOWN button.

## **Energy Savings . . . . .Pg. 13**

This indication assures you that your system is using the least possible energy to maintain your desired temperature. Under heavy demand conditions, your system may have to reduce its efficiency to provide the needed heating or cooling. The ENERGY SAVINGS indicator lights up to indicate maximum efficiency operation.

## **Fan . . . . .Pg. 8**

Your system's fan can run continuously or only as called for during heating or cooling. Continuous operation helps with air circulation and cleaning. Automatic operation provides better efficiency. Press the FAN button to make your choice.

## **Hold . . . . .Pg. 14**

This function allows you to override the programmed temperature settings. All programmed temperature changes will be ignored until you press the HOLD button again. Press the HOLD button to both lock and reset the system.

## **Mode . . . . .Pgs. 8-9**

Mode refers to the type of operation your system is set up to perform. Mode settings include: OFF, HEAT, COOL, and AUTO. Heat pump systems also include EMERGENCY HEAT.

## **Outdoor Temperature . . . . .Pg. 11**

Your thermostat not only registers the indoor temperature, but it may also be equipped to register and display the outdoor temperature as well. Press the UP and DOWN buttons simultaneously to read the outdoor temperature display.

## **Override . . . . .Pg. 10**

Temporarily disregard the thermostat's programmed temperature settings and schedules. You can override the system by pressing the HOLD button to maintain the current temperature or by pressing the UP and DOWN buttons to change the desired temperature.

## **Power Outage . . . . .Pg. 14**

Complete loss of electricity. Your thermostat has an internal power source that allows it to save clock settings for 72 hours or more without electricity. Programmed settings are

stored indefinitely without the aid of batteries.

## **Program . . . . .Pgs. 3-9**

The program function of your thermostat allows you to enter time and temperature information into the thermostat. To activate the program function, press the PROGRAM button.

## **End Program . . . . .Pg. 7**

The end program function saves your entered times and temperatures and returns to the thermostat's regular operation. Press the END PROGRAM button to complete your programming.

## **Reset Filter . . . . .Pg. 13**

The reset filter function turns off the CLEAN FILTER indicator and resets the system. Press the RESET FILTER button after you've cleaned and replaced the system's air filter.

## **Set Time . . . . .Pgs. 4-5**

This function allows you to set the proper time, ensuring accurate heating and cooling schedules. Press the SET TIME button to activate.

## **Temperature Sensor . . . . .Pg. 14**

The temperature sensor measures the current indoor or outdoor temperatures which are displayed on the thermostat.



## **Time of Day . . . . . Pg. 3**

When programming the thermostat, time of day refers to the four time slots available, including WAKE, DAY, EVE, and SLEEP. Time of day also refers to the time shown on the thermostat's LCD display.

## **Trouble . . . . .Pg. 15**

The trouble function indicates a problem with the system that requires servicing by a heating and cooling contractor. The TROUBLE indicator can only be reset by a repairman.

## **Up and Down Buttons Pgs. 4, 6, 11**

These buttons are used to set the clock and enter other time and temperature information.





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