



THERMIDISTAT™ CONTROL

# Homeowner's Guide



comfort

## Custom made indoor weather.

Now that you own Carrier's Thermidistat Control, it's time to customize your indoor weather. Carrier's intelligent, easy-to-use indoor weather command center combines computer-like intelligence with extremely simple operation in an elegant package. It maximizes the performance of your Carrier indoor weather system so you can enjoy custom made indoor weather that fits your lifestyle. By precisely controlling indoor temperatures and humidity levels, our Thermidistat Control keeps you comfortable while conserving energy. Just follow the simple instructions outlined in this manual and let Carrier's Thermidistat Control deliver the customized comfort and energy savings that you deserve.



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

**SET DHUM Button** allows you to change dehumidification set point.

**SET COOL Button** allows you to enter your desired cooling set point.

**SET HEAT Button** allows you to enter your desired heating set point.

**SET HUM Button** allows you to change humidification set point.

**SET TIME Button** allows you to enter the time of day.

**MODE Button** selects OFF, HEAT, COOL, or AUTO operation. EMERGENCY HEAT (EHEAT) mode is also included when the Thermostat Control is installed with a heat pump.

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

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

**Temperature Settings Display** shows the temperature settings for current time period.

**Time of Day Display** exhibits the time of day.

**Clean Filter Indicator** lets you know it is time to clean or replace your system's air filter.

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

**VACATION Button** changes temperature and humidity set points to lower levels for optimum energy efficiency while you're away.

**RESET FILTER Function** restarts the timer that determines the next air filter change or cleaning. Activated by pressing VACATION and END buttons simultaneously.

**END Button** completes the temperature and humidity set-up sequence.

**Up and Down Buttons** change the temperature and humidity set points. They are also used to access outdoor temperature and indoor humidity levels.

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

**• Available on selected models.**

control

## Comfort command center.

Carrier's Thermidistat Control is the command center of your indoor weather system. By providing both temperature and humidity control, this simple yet powerful device lets you take the steam out of summer, the static out of winter and helps eliminate that annoying moisture build-up on your windows when it's cold outside. It's never been quite this easy.

features

## Making life easier.

Carrier puts your family's comfort at your fingertips with simple instructions, responsive push buttons and an easy-to-read backlit LCD display. Once set, the Thermidistat Control reliably monitors indoor conditions and responsively meets your comfort demands for consistent, energy-efficient indoor weather.

# TABLE OF CONTENTS

## SETTING UP THE THERMIDISTAT CONTROL

Setting your indoor temperature set points ...	1
Setting the current time .....	2
Setting the mode operation .....	3
Setting the fan operation .....	5
Setting the humidification set point .....	6
Setting the dehumidification set point .....	9
Setting the "cool to dehumidify" function ..	10

## OPERATING THE THERMIDISTAT CONTROL

Checking current temperature .....	12
Checking the outdoor temperature and indoor humidity .....	12
Checking current humidification and dehumidification set points .....	13
Clean filter feature .....	14

Vacation feature setup .....	15
Vacation feature operation .....	19

## AUTO CHANGEOVER .....

## WHAT IF...

The auxiliary heat indicator is displayed ....	21
The clean filter indicator is displayed .....	21
You have a power outage .....	22
You have a system error message .....	22

## Warranty .....

## Common Terms and Where to Find Them .....

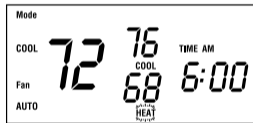
# SETTING UP THE THERMIDISTAT CONTROL

1



## Setting your temperature set points

Setting the desired heating set point

- 1  Press the SET HEAT button.



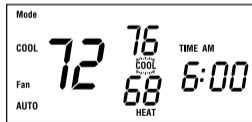
The word HEAT flashes on the display.

- 2   
 Press the UP or DOWN button until the correct heating set point is displayed.



- 3  Press the END button to exit.

Setting the desired cooling set point

- 1  Press the SET COOL button.




The word COOL flashes on the display.

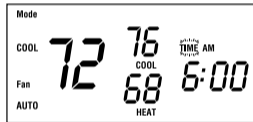
**2**   Press the UP or DOWN button until the correct cooling set point is displayed.

**3**  Press the END button to exit.



*NOTE: Your COOL setting must be at least 2° higher than your HEAT setting. Your Thermidistat Control will automatically change your previously set temperature to maintain that 2° difference.*

## Setting the current time


**1**  Press the SET TIME button.



The word TIME flashes on the display.

**2**   Press the UP or DOWN button until the correct time is displayed. To quickly advance to


the proper time, press and hold the UP or DOWN button. Be sure that AM or PM is properly selected.

**3**  When the correct time appears on the display, press the END button.

*NOTE: If you choose not to press the END button, the word TIME will stop flashing after 15 seconds.*

*NOTE: If you live in a Daylight Savings Time area, you may advance the time 1 hour in the spring by simultaneously pressing the SET TIME button and the UP button. In the fall, you may set the time back 1 hour by simultaneously pressing the SET TIME button and the DOWN button.*

## Setting the mode operation

**1**  Press the MODE button.

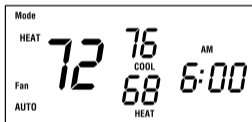


# SETTING UP THE THERMIDISTAT CONTROL

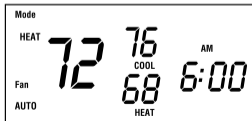
4

2 When the MODE button is pressed, the words

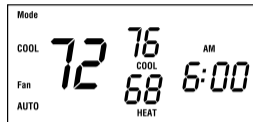
OFF,



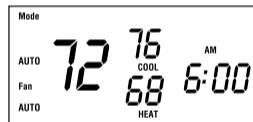
HEAT,



COOL,



and AUTO




will rotate on the display.

If you have a heat pump, the display will show OFF, HEAT, COOL, AUTO, and EHEAT.


# SETTING UP THE THERMIDISTAT CONTROL

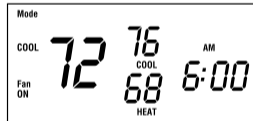
5

*NOTE: In AUTO mode, your system will heat OR cool as needed to reach your temperature settings. AUTO mode may be disabled.*

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

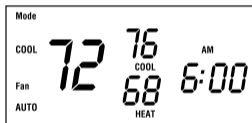
## Setting the fan operation

**1**  Press the FAN button to switch between ON and AUTO fan settings.




When the ON mode is selected, the fan runs continuously for improved air circulation.

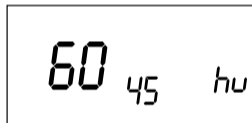
*NOTE: If the indoor humidity level is above the dehumidify setting, the fan will shut off for 5 minutes after the air conditioner shuts off. During this period, a triangle next to the word ON will flash.*



When the AUTO mode is selected, the fan runs only as needed to maintain your preferred indoor temperature settings.

## Setting the humidification set point


- 1  Press the SET HUM button to enter the humidify mode.

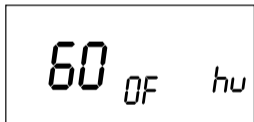


The current indoor humidity (large number) and humidify set point (small number) are displayed along with the humidify indicator (hu).


# SETTING UP THE THERMIDISTAT CONTROL

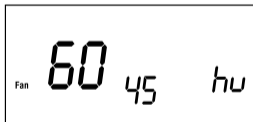
7

- 2**  With the humidify indicator (hu) displayed, press the UP or DOWN button to adjust the humidify set point. Humidity levels can be set from 10% to 45%.



Or, to turn humidification off, press the MODE button until "OF" appears on the display. (See suggested settings on page 27.)

- 3**  Press the MODE button to select between:
- FAN indicator displayed — fan and humidifier on every time humidification is needed.



*NOTE: With the FAN indicator displayed, you will realize maximum humidification, but the air may feel cold because the heat*

# SETTING UP THE THERMIDISTAT CONTROL

8

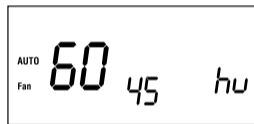
*source is not always on. Without the FAN indicator displayed, you will conserve water and electricity with adequate humidification.*

b. AUTO indicator displayed — humidify setting automatically changes according to outdoor weather. This reduces the chance of moisture buildup on windows in colder weather.

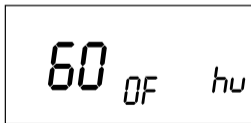


*NOTE: This feature requires the use of an outdoor air temperature sensor.*

c. AUTO and FAN displayed — combines the features of a and b.




d. OF displayed — humidify function is turned off.



e. Humidify setting only displayed — humidify setting does not change according to outdoor temperature.




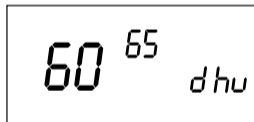
**4**  Press the END button to exit the humidify mode.

## Setting the dehumidification set point


*NOTE: This function is for use with variable-speed equipment only.*

SET DHUM

**1**  Press the SET DHUM button to enter the dehumidify mode.



The current indoor humidity (large number) and dehumidify set point (small number) are displayed along with the dehumidify indicator (dhu).

- 2**  With the dehumidify indicator (dhu) displayed, press the UP or DOWN button to adjust the dehumidify set point. Dehumidify levels can be set from 50% to 90%. Or, to turn dehumidification off, press the MODE button until "OF" appears on the display.






(See suggested settings on page 26.)


- 3**  Press the END button to exit.

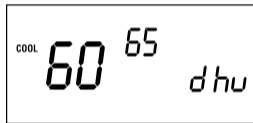
### Setting the "cool to dehumidify" function

This setting allows a standard comfort system to provide moderate dehumidification by running the air conditioner. The function can also be used with variable-speed equipment.

*NOTE: While in the "cool to dehumidify" mode, the indoor air temperature will not drop more than 3° below the cooling set point with a dehumidification demand.*

- 1**  Press the SET DHUM button. "dhu" is displayed.
- 2**   
 Press the UP or DOWN button to raise or lower the dehumidify set point. Dehumidification can be set from 50% to 90%.

- 3**  Press the MODE button until the COOL icon is displayed.



- 4**  Press the END button to exit.



## Checking current temperature

The Thermidistat Control will display the current temperature.

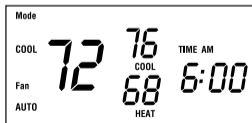


To view your current temperature set points,



press the UP or DOWN

button once. The heating and cooling set points will be displayed.



## Checking the outdoor temperature and indoor humidity

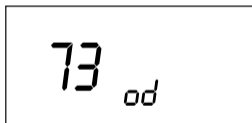
1



Press the UP and DOWN buttons simultaneously.



2



The outdoor temperature will appear on the display.



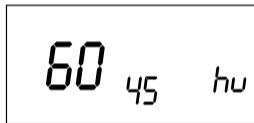
Then, the indoor humidity will be displayed.


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


## Checking current humidification and dehumidification set points

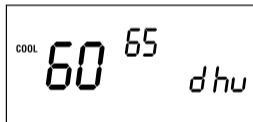
**1**  Press the SET HUM button.

The current indoor humidity (large number) is displayed along with the humidify set point (small number).



**2**  Press the END button.

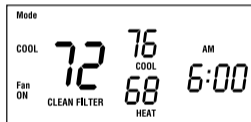
- 3**  Press the SET DHUM button. The current indoor humidity (large number) is displayed along with the dehumidify set point (small number).





- 4**  Press the END button.

## Clean filter feature

Your Thermidistat Control reminds you when it's time to change or clean your filter by displaying the CLEAN FILTER indicator.




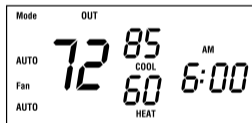
- 1**   Press the VACATION and END buttons simultaneously after you have changed or cleaned your filter to restart the timer.

## Vacation feature setup

The vacation feature allows a separate set of temperature and humidity set points to be stored for vacation and recalled with a single button press.

The vacation feature is preprogrammed for you with vacation settings for temperature and humidity. (Heat 60°, cool 85°, hu 10%, dhu 75%) If these are okay, skip ahead to “vacation feature operation.” If you wish to enter new settings, continue with this section.

- 1**  Press the VACATION button to display the vacation temperature settings.



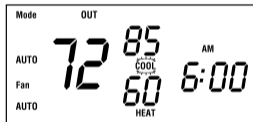
The OUT indicator is displayed.

**2** To change the cooling set point:

SET COOL



a.) Press the SET COOL button. COOL will flash on the display.



b.) Press the UP or DOWN button to adjust the setting.



END

c.) Press the END button to end.

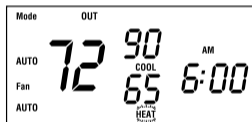


**3** To change the heating set point:

SET HEAT



a.) Press the SET HEAT button. HEAT will flash on the display.



b.) Press the UP or DOWN button to adjust the setting.



END

c.) Press the END button to end.

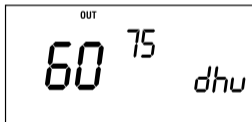


**4** To change the dehumidification set point:

SET DHUM



a.) Press the SET DHUM button. The "dhu" indicator will be displayed.



b.) Press the UP or DOWN button to adjust the setting.



MODE



c.) Press the MODE button to choose the dehumidification mode.

END



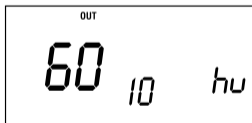
c.) Press the END button to end.

**5** To change the humidification set point:

SET HUM



a.) Press the SET HUM button. The "hu" indicator will be displayed.



b.) Press the UP or DOWN button to adjust the setting.



MODE



c.) Press the MODE button to turn the humidification feature off (OF).


END

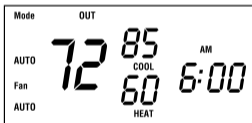


c.) Press the END button to end.


*NOTE: In dehumidify, you may enter a set point, choose "COOL" to dehumidify, or turn dehumidification off (OF). In humidify, you may enter a setting or turn humidification off (OF).*

## Vacation feature operation

**1**  Press the VACATION button when you are ready to leave. Be sure you have properly selected the mode (HEAT, COOL, AUTO).



The OUT indicator is displayed, and your system will automatically follow your vacation temperature and humidity settings.

**2**  Press the VACATION button when you return to resume normal operation.



Your Thermidistat Control 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 temperature set points.

Auto changeover makes life easier because you no longer have to manually switch the thermostat between heating or cooling operation. Just set your heating and cooling set points and let the Thermidistat Control do the rest!

*NOTE: If Auto Changeover mode is not necessary in your area of the country, your installer may disable the AUTO mode.*

### **AUXILIARY HEAT indicator is displayed...**

The AUXILIARY HEAT indicator appears on the heat pump version of the Thermidistat Control only. It is displayed when your system is operating on auxiliary heat.

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

### **CLEAN FILTER indicator is displayed...**

The CLEAN FILTER indicator tells you when to clean or replace your system's air filter. Press the VACATION and END buttons simultaneously after cleaning or replacing the filter to turn off the indicator and restart the timer.

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

### **OUT Indicator is displayed...**

The OUT indicator reminds you that your system is in vacation mode. This function automatically adjusts the temperature and humidity settings to levels appropriate for when you're away. Press the VACATION button to resume normal system operation.

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

### **EQUIPMENT ON Indicator is displayed...**

When the cooling equipment is operating, the word COOL preceded by a small triangle is displayed below the cooling set point. When the heating equipment is operating, the word HEAT preceded by a small triangle is displayed below the heating set point. If the equipment turn on is being delayed, the triangle and the word will flash.

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

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

An internal power source eliminates the need to re-enter your settings into the Thermidistat Control after power outages. The comfort settings you have entered will be maintained indefinitely. The clock will run for 8 hours.

### **You have a system error message...**

The display may appear as follows:

--, E3, E4, E5, or E6

-- indicates a problem with the indoor air temperature sensor

E3 indicates a problem with the outdoor air temperature sensor

E4, E5, or E6 indicates an internal failure.

This Thermidistat Control includes a 1-year limited warranty. For detailed warranty information, please refer to the All Product Limited Warranty Card included in your information packet.

This Thermidistat Control is also eligible for manufacturer's extended system warranties. Ask your dealer for details on extended warranties for longer-term protection.

## **Auxiliary Heat .....Pg. 21**

Most heat pump systems require a supplemental heating source, called auxiliary heat, to maintain your comfort when outdoor temperatures fall significantly. Your Thermidistat Control lets you know when your home is being warmed with supplemental heat.

## **Clean Filter .....Pg. 14**

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.

## **Dehumidification Set Point ....Pg. 9**

The amount of moisture to be removed from your home. You can check your actual humidity level and your desired dehumidification set point by pressing the SET DHUM button.

*Suggested settings:* 50% – 60% suggested depending on installation, area of the country, and your heating & cooling equipment.

## **Emergency Heat .....Pg. 4**

This indicates that auxiliary heat is being used without the heat pump.

## **End .....Pg. 1**

The END button returns the Thermostat Control to normal operation.

## Fan .....Pg. 5

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 energy savings. Press the FAN button to make your choice.

## Humidification Set Point .....Pg. 6

The amount of moisture desired in your home to be supplied by the humidifier. You can check the actual humidity level and your desired humidification set point by pressing the SET HUM button.

*Suggested settings:*

Outdoor Temp (F)	-20	-10	0	10	20
Suggested Hum Set Point	15	20	25	30	35



### **Mode .....Pgs. 3-5**

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 (EHEAT).

### **Outdoor Temperature .....Pg. 12**

Your Thermostat Control not only measures the indoor temperature, but it may also be equipped to measure and display the outdoor temperature as well. Press the UP and DOWN buttons simultaneously to read the outdoor temperature display.

### **Power Outage .....Pg. 22**

Complete loss of electricity. Your Thermidistat Control has an internal power source that allows the clock to continue to run for 8 hours or more without electricity. Settings are stored indefinitely without the aid of batteries.

### **Reset Filter .....Pg. 14**

The reset filter function turns off the CLEAN FILTER indicator and restarts the timer. Press the VACATION and END buttons simultaneously after you've cleaned and replaced the system's air filter.

## **Set Time .....Pg. 2**

This function allows you to set the proper time. Press the SET TIME button to activate.

## **Temperature Sensor .....Pg. 12**

Temperature sensors measure the current indoor or outdoor temperatures which are displayed on the Thermidistat Control.

## **Temperature Set Points .....Pg. 1**

These are the desired heating and cooling set points entered into the Thermidistat Control. The actual room temperature will automatically be displayed, but you can check the desired temperature for the current mode by pressing either the UP or DOWN button.

**Time .....Pg. 2**

The current time is displayed continuously on the display.

**Up and Down Buttons .....Pg. 1**

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

Manufacturer reserves the right to discontinue, or change at any time, specifications or designs without notice or without incurring obligations.

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