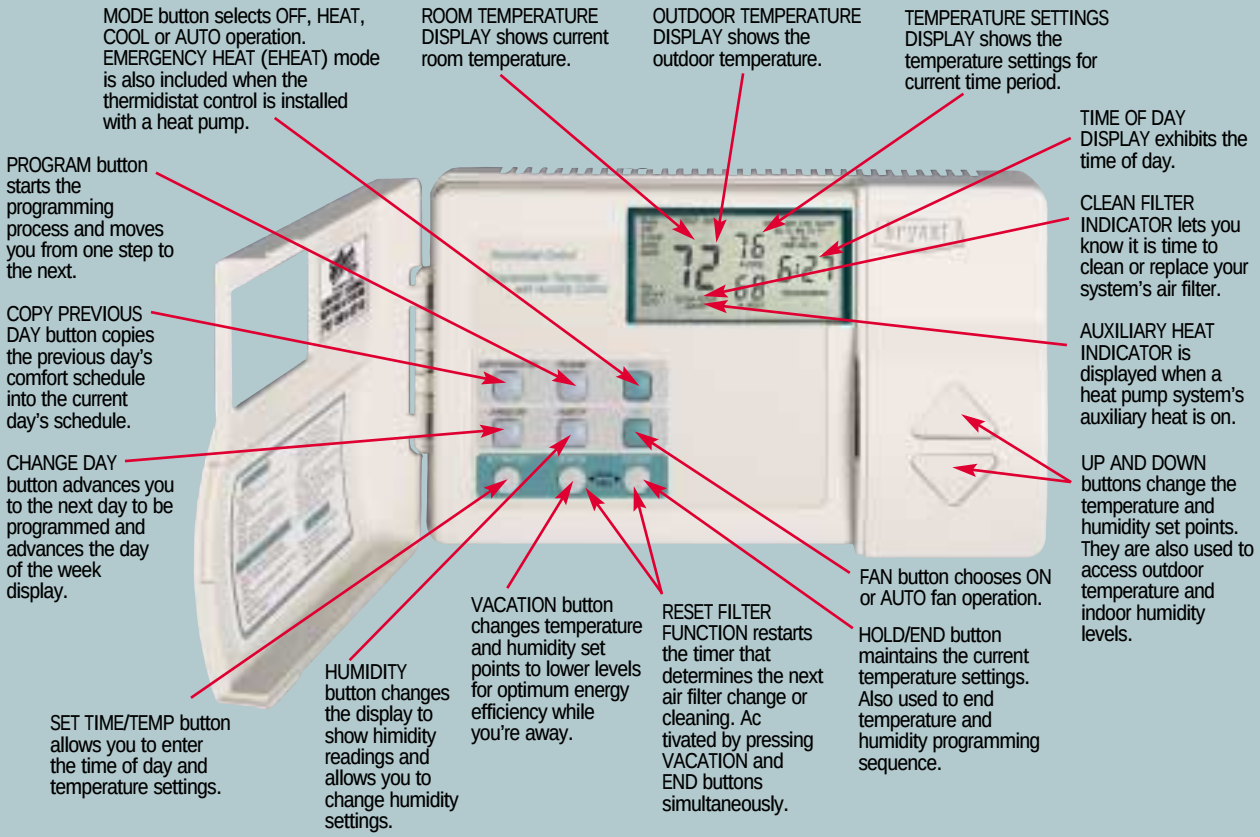
COMFORT CONTROL

bryant®

Programmable Thermidistat™ Control Homeowner's Guide

Easy-To-Use, Trusted Comfort.

Congratulations! As the owner of a new Thermidistat™ Control, you have made a commitment to enjoying enhanced home comfort. This Thermidistat Control provides reliable and consistent indoor temperatures with the added comfort of proper humidification. Combining the brains of a computer and the simplicity of a garage door opener in an attractively designed package, Bryant makes enjoying the comfort of your home easier than ever. Just follow the instructions in this guide, then relax knowing your Thermidistat Control is in command of your comfort.



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

Year-Round Comfort.

Bryant's Thermidistat™ Control provides enhanced, year-round comfort. 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, and you've never had quite this much comfort available through one control.

Simple, Convenient Control.

Bryant puts your family's comfort at your fingertips with simple instructions, responsive push buttons and an easy-to-read, lighted display. Once set, the thermidistat control accurately monitors indoor conditions and reliably meets your desired comfort levels. Plus, you have the convenience of temporarily bypassing your settings without disrupting your permanent comfort schedule.

TABLE OF CONTENTS

PROGRAMMING THE THERMIDISTAT CONTROL
Setting the current day....1
Setting the current time....1
Setting the mode operation....2
Setting the fan operation....3
Personalize your comfort....5
Setting your comfort schedule....6
Copying a daily schedule....10
Setting the humidification level....10
Setting the dehumidification level....13
Setting the “cool to dehumidify” function....14
OPERATING THE THERMIDISTAT CONTROL
Changing your comfort schedule....16
Overriding your comfort schedule....16
Checking the outdoor temperature and indoor humidity....17
Checking current programmed time and temperature settings....18
Checking current humidification and dehumidification settings....19
Clean filter feature....20
Vacation feature setup....21
Vacation feature operation....24
AUTO CHANGEOVER....25
SMART RECOVERY....26
What if…
The auxiliary heat indicator is displayed....27
The clean filter indicator is displayed....27
The hold indicator is displayed....27
The out indicator is displayed....28
You have a power outage....28
You have a system error message....28
Warranty....30
Common Terms and Where to Find Them....31

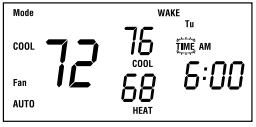
Setting the current day

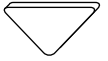
1 *CHANGE DAY* Press the CHANGE DAY button. The day of the week will change.

2 Stop on the desired day. The Thermidistat Control then follows the program schedule for that day.

Setting the current time

1 *SET TIME/TEMP* Press the SET TIME/TEMP button. The word TIME flashes on the display.



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 is properly selected.

3 When the correct time appears on the display,

press the HOLD/END button.

NOTE: If you choose not to press the HOLD/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/TEMP button and the UP button. In the Fall, you may set back the time 1 hour by simultaneously pressing the SET TIME/TEMP button and the DOWN button.

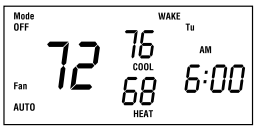
Setting mode operation

1

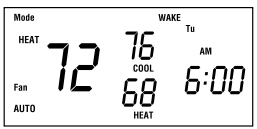
Press MODE button.

2 When the MODE button is pressed, the words

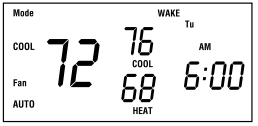
OFF,

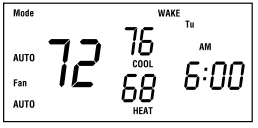


HEAT,



COOL,





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

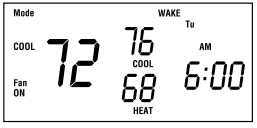
NOTE: In AUTO mode, your system will heat OR cool as needed to reach your temperature settings.

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

Setting the fan operation

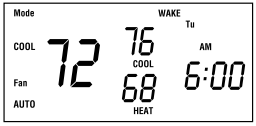
1 *FAN* Press the FAN button to switch between ON and AUTO fan settings.

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 indoor temperature settings.



Personalize Your Comfort

Before you program your Thermidistat Control, take a moment to plan your temperature schedule. Each day of the week is divided into 4 time periods: WAKE, DAY, EVENING, and SLEEP. For each time period, enter a start time, heating temperature, and cooling temperature in the appropriate blank. Once completed, this chart will be your guide during programming.

NOTE: Your Thermidistat Control requires your cooling temperature to be at least 2° higher than your heating temperature.

	Wake	Day	Evening	Sleep
	Time / Heat° / Cool°	Time / Heat° / Cool°	Time / Heat° / Cool°	Time / Heat° / Cool°
Monday	/ /	/ /	/ /	/ /
Tuesday	/ /	/ /	/ /	/ /
Wednesday	/ /	/ /	/ /	/ /
Thursday	/ /	/ /	/ /	/ /
Friday	/ /	/ /	/ /	/ /
Saturday	/ /	/ /	/ /	/ /
Sunday	/ /	/ /	/ /	/ /

HUMIDITY SETTINGS

Humidify	Dehumidify

SUGGESTED SETTINGS

Humidify–

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

De-humidify – 50% - 60% suggested depending on installation, area of the country, and your heating & cooling equipment.

VACATION SCHEDULE

Heat	Cool	Humidify	Dehumidify

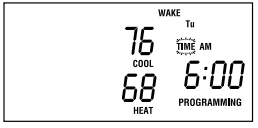
Setting your comfort schedule

Before you begin programming, refer to page 5 of this manual to plan your personal comfort schedule.

1 *PROGRAM*

Press the PROGRAM button.

The word PROGRAMMING appears on the display and the word TIME flashes on the display.



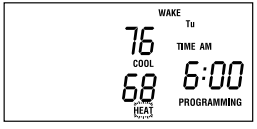
Above the clock, the word WAKE, DAY, EVE, or SLEEP will appear. The day to be programmed is displayed with a 2-letter abbreviation: MO, TU, WE, TH, FR, SA, or SU.

NOTE: Your Thermidistat Control will always start the programming process in the current time period and current day. You may wish to begin programming on a different day or time period. To change the time period, press the PROGRAM button as needed until the correct time period, WAKE, DAY, EVE, or SLEEP appears. Press the CHANGE DAY button to display the desired day.

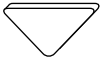
2 Using your personalized comfort schedule as a guide, press the UP and DOWN buttons to set the time for the indicated time period.

SET TIME/TEMP

3 Press the SET TIME/TEMP button. The word HEAT flashes on the display.



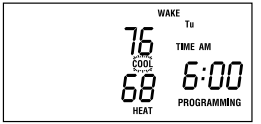
NOTE: Pressing the SET TIME/TEMP button allows you to select between HEAT, COOL, and TIME settings.

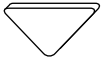
4  Press the UP and DOWN buttons to adjust the heating temperature setting to match your personalized comfort schedule.

5

Press the SET TIME/TEMP button to select the cooling temperature setting for this time period.

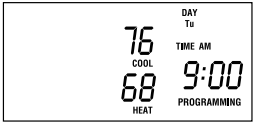
The word COOL flashes on the display.



6  Press the UP and DOWN buttons to adjust the cooling temperature setting listed in your personalized comfort schedule.

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.

7 PROGRAM Press the PROGRAM button to advance to the next time period. Following your personalized comfort schedule, enter times and temperatures for DAY, EVE, and SLEEP time periods.



You have now programmed 1 day into your Thermidistat Control. At this time, you can either repeat steps 1-7 until all days of the week have been programmed, OR you can copy the schedule onto the remaining days of 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 3 minutes, the programming mode will automatically shut off. Anything you have programmed will be saved.

8 HOLD/END Press the HOLD/END button when you finish entering your comfort schedule.

NOTE: Once you've programmed your comfort schedule, the Thermidistat Control 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 the Thermidistat Control 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.
Suggestion: Start with Monday so the following 4 days can be copied.

2

Press the CHANGE DAY button to move to the next day.

3

Press the COPY PREVIOUS DAY button.

The previous day's schedule will be entered into the new day.

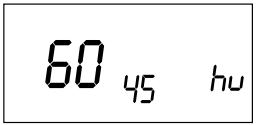
4 Continue this process by repeating steps 2 and 3.

Setting the humidification level

1

Press the HUMIDITY button to enter the humidity programming mode.

The current indoor humidity (large number) is displayed along with the humidify setting indicator (hu) or dehumidify (dhu) setting indicator and the current humidify set point (small number).

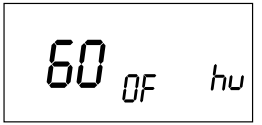


If the dhu indicator is displayed, press the HUMIDITY button again to display the hu indicator.

NOTE: To change between humidify (hu) and dehumidify (dhu), press the HUMIDITY button.

2

With the humidify (hu) setting displayed, press the UP or DOWN button to adjust the humidify setting. 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 6)

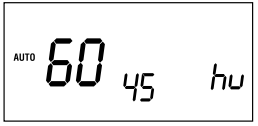
3

Press the MODE button to select between:

a. FAN indicator displayed — fan and humidifier on every time humidification is needed.

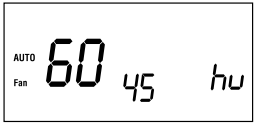
NOTE: With the FAN indicator on, you will realize maximum humidification, but the air may feel cold because the heat source is not always on. With the FAN indicator off, you will conserve water and electricity with adequate humidification.

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

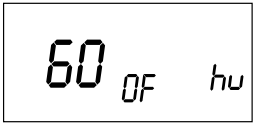


NOTE: This feature requires the use of the outdoor air temperature sensor.

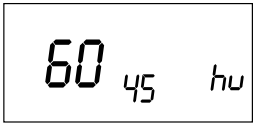
c. AUTO and FAN displayed — combines the features of a and b.



d. OF displayed — humidify function is turned off.



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



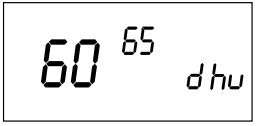
4 HOLD/END Press the HOLD/END button to exit the humidity programming mode.

Setting the dehumidification level

NOTE: This optional function is for use with variable capacity equipment only.

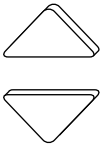
1 HUMIDITY Press the HUMIDITY button to enter the humidification programming mode.

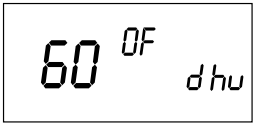
The current indoor humidity (large number) is displayed along with the humidify (hu) or dehumidify (dhu) setting indicator and the current dehumidify set point (small number).



If the hu indicator is displayed, press the HUMIDITY button again to display the dhu indicator.

NOTE: To change between humidify (hu) and dehumidify (dhu), press the HUMIDITY button.

2  With the dehumidify setting displayed, press the UP or DOWN button to adjust the dehumidify setting. 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 6)

3

Press the HOLD/END button to exit.

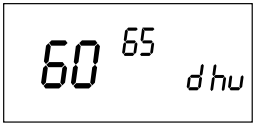
Setting the "cool to dehumidify" function

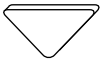
This setting allows a standard comfort system to provide moderate dehumidification by running the air conditioner. The function can also be used with variable-capacity equipment.

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 HUMIDITY button until ”dhu“ is displayed.



2 

Press the UP or DOWN buttons to raise or lower the dehumidify setting.

Dehumidification can be set from 50% to 90%. To turn dehumidification off, press the MODE button until OF appears on the display.

3

Press the MODE button until the COOL icon is displayed.

4

Press the HOLD/END button to exit.

Changing your comfort schedule

1

Press the PROGRAM button to begin the programming process.

2 Make necessary changes by following previous sections.

3

Press the HOLD/END button to end the programming process.

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

Overriding your comfort schedule

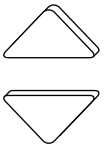
There are 2 ways to override the existing program.

1

Pressing the HOLD/END button.

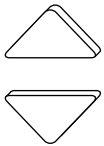
By pressing the HOLD/END button, the Thermidistat Control will maintain the current temperature settings and ignore the comfort schedule for an indefinite period of time. The word HOLD will appear in the display. Press the HOLD button a second time and the Thermidistat Control will resume normal operation, returning the temperature settings to the programmed comfort schedule. The Thermidistat Control will change the temperature setting as needed upon the next

program cycle. Pressing HOLD will not permanently alter your set program.

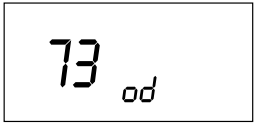
2  Pressing the UP or DOWN buttons.

By pressing the UP or DOWN button, the current temperature settings appear on the display. Pressing the UP or DOWN button again will temporarily change the temperature setting above the flashing indicator as needed. To change the other setting for this time period, press the SET TIME/TEMP button until the other setting indicator flashes. Pressing the UP or DOWN button again will temporarily change the other temperature setting as needed. The Thermidistat Control will automatically restore the comfort sched ule settings at the next programmed time.

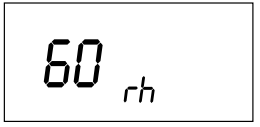
Checking the outdoor temperature and indoor humidity

1  Press the UP and DOWN buttons simultaneously.

2 The outdoor temperature will appear on the display.



Then, the indoor humidity will be displayed.



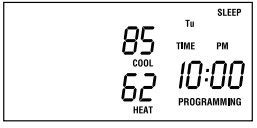
NOTE: If 2 dashes (--) appear, your Thermidistat Control does not include the outdoor air temperature sensor or the sensor is not working properly. Check with your dealer if you are unsure.

Checking current programmed time and temperature settings

1

Press the PROGRAM button.

2 The current time and temperature settings for the current day and time period are displayed for you to check.



3

Press the PROGRAM button again to advance to the next time period for the same day. Continue this process to review all settings for the day.

4

Press the CHANGE DAY button to view the next day's settings.

5 Repeat steps 3 and 4 to review entire 7 day schedule.

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

6

Press the HOLD/END button to exit the program mode.

Checking current temperature

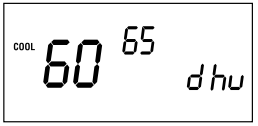
The Thermidistat Control will display current temperature. To view your current temperature settings, press the UP or DOWN button once. The heat and cool temperature settings will be displayed.

Checking current humidification and dehumidification settings

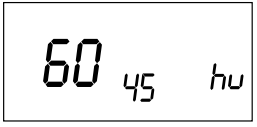
1

Press the HUMIDITY button.

The current indoor humidity (large number) is displayed along with the humidify or dehumidify settings (small number).



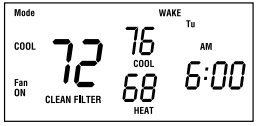
2 *HUMIDITY* Press the HUMIDITY button again to view the other setting.



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

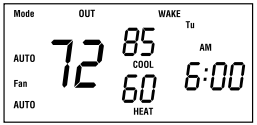
Vacation feature setup

The vacation feature allows a separate set of temperature and humidity settings 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.

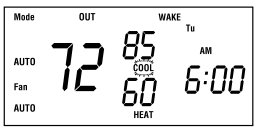
1 *VACATION* Press the VACATION button to display the vacation temperature settings.

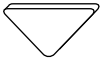
The OUT indicator is displayed.



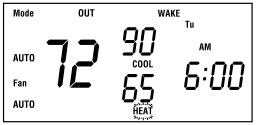
2 If you wish to change these settings, press the UP or DOWN button.

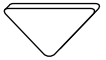
The current mode, either HEAT or COOL, flashes on the display.



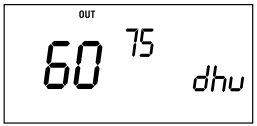
3  Press the UP or DOWN button to adjust the setting for the flashing mode.

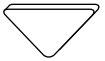
4 Press the SET TIME/TEMP button until the other mode indicator flashes.



5  Press the UP or DOWN button to adjust the setting for the flashing mode.

6 *HUMIDITY* Press the HUMIDITY button to display the current humidify or dehumidify setting.



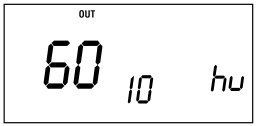
7  If you wish to change this setting, press the UP or DOWN button to adjust the setting.

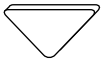
8

Press the MODE button to select the vacation humidify or dehumidify mode.

9

Press the HUMIDITY button to display the second setting — either humidify or dehumidify.



10  If you wish to change this setting, press the UP or DOWN button again to change the indicated setting.

11 *MODE* Press the MODE button to select the vacation humidify or dehumidify mode.

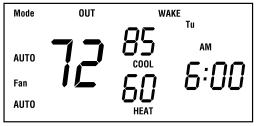
12 *HOLD/END* Press the HOLD/END button to end.

NOTE: In dehumidify, you may enter a setting, 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 *VACATION* 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 temperature and humidity settings.



2 *VACATION* 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 temperature set points and let the Thermidistat Control do the rest!

NOTE: If auto changeover is not necessary in your area of the country, your installer may disable the AUTO mode.

Smart recovery is a feature of your new Thermidistat Control 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 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: The Thermidistat Control will start adjusting the temperature 1.5 hours before the scheduled temperature change.

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 HOLD/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.

HOLD indicator is displayed...

The HOLD indicator reminds you that your Thermidistat Control's comfort schedule has been overridden. This function will hold the current temperature settings indefinitely, so it can be used to hold an energy-saving temperature setting 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.

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 reprogram the Thermidistat Control after power outages. The comfort schedule you have entered will be maintained indefinitely. 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 sensor
- **E3** indicates a problem with the outdoor air temperature sensor
- **E4, E5, or E6** indicates 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. 27

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.

NOTE: For additional energy savings opportunities, ask your dealer about locking out auxiliary heat at a selected outdoor temperature.

Change Day .....Pg. 1

Change day is a function of your Thermidistat Control'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 on the display.

Clean Filter .....Pg. 20

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 .....Pg. 5

The comfort schedule is a personalized list of the heating and cooling temperature settings along with a corresponding time of

day. This schedule includes 4 time periods per day, and can feature a different comfort schedule each day of the week.

Copy Previous Day .....Pg. 10

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 .....Pg. 1

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

Dehumidification Level .....Pg. 13

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

Emergency Heat .....Pg. 3

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

End .....Pg. 2

The HOLD/END button returns the Thermidistat Control to normal operation.

Fan.....Pg. 3

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.

Hold .....Pg. 2

This function allows you to override the programmed temperature settings.

Humidification Level .....Pg. 10

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 level by pressing the HUMIDITY button.

Mode. .....Pg. 2

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. 17

Your Thermidistat Control 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. 16

Temporarily disregards the Thermidistat Control's programmed temperature settings and schedules. You can override the system by pressing the HOLD/END button to maintain the current temperature indefinitely or by pressing the UP and DOWN buttons to change the temperature settings for the remainder of the current period.

Power Outage.....Pg. 28

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

Program .....Pg. 6

The program function of your Thermidistat Control allows you to enter time and temperature information into the Thermidistat

Control. To activate the program function, press the PROGRAM button.

Reset Filter.....Pg. 20

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

Set Time .....Pg. 1

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

Temperature Sensors.....Pg. 12

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

Temperature Settings .....Pg. 8

These settings are the temperatures programmed into the Thermidistat Control as part of your comfort schedule. 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 of Day.....Pg. 5

When programming the Thermidistat Control, time of day refers to the 4 time periods available, including WAKE, DAY, EVE, and SLEEP. Time of day also refers to the time shown on the Thermidistat Control's display.

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

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

Before purchasing this appliance, please read the important energy cost and efficiency information available from your dealer.

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

7310 West Morris Street, Indianapolis, IN 46231

Printed on recycled paper.

Copyright 1997 Bryant Heating and Cooling Systems

Form: OM17-24 Replaces: OM17-16 Printed in the U.S.A. 9-98 Catalog No. 13TS-TA10