

**Aprilaire®**

**Model 8800 Universal  
Communicating Thermostat**




**Owner's Manual**

**Includes  
Operating Instructions and  
Warranty Information**

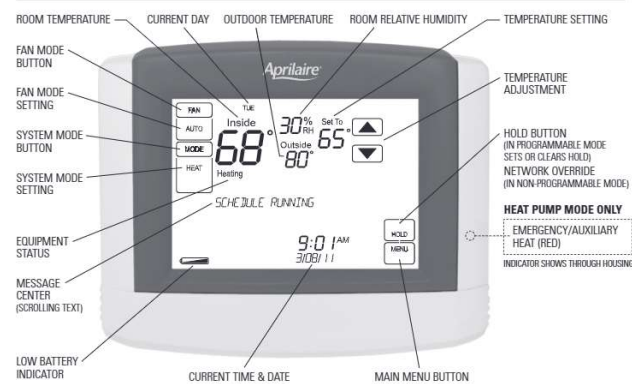
**READ AND SAVE THESE INSTRUCTIONS**

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ABOUT YOUR NEW THERMOSTAT	
 <b>WA</b> Do not use sharp instruments to press	
THERMOSTAT FEATURES	
<ul style="list-style-type: none"> <li>• Large touch screen with adjustable backlight – constant</li> <li>• Message center provides feedback and instructions.</li> <li>• 7 day programmability or separately programmable week</li> <li>• Thermostat can be removed from the wall for easy programming</li> <li>• Front battery door access for fast, easy replacement.</li> <li>• Displays room temperature, room humidity, temperature</li> <li>• Air filter, humidifier, dehumidifier, and HVAC service indicators</li> <li>• Programmable fan control with fan circulation mode.</li> <li>• Easy to use temperature control can override program schedule</li> <li>• Progressive recovery ensures proper temperature at the time of return</li> <li>• Built in compressor protection prevents damage to your HVAC system</li> <li>• RS485 communications ready.</li> <li>• Universal system compatibility.</li> <li>• Configurable to control a humidifier and dehumidifier.</li> </ul>	

## ABOUT YOUR NEW THERMOSTAT

### CONTROLS & DISPLAY OVERVIEW – HOME SCREEN



**NOTE:** BACKLIGHT IS ACTIVATED WITH FIRST BUTTON PRESS AND AUTOMATICALLY TURNS OFF.

## ABOUT YOUR NEW THERMOSTAT

### CONTROLS & DISPLAY OVERVIEW – MAIN MENU



OPERATION

SELECT SYSTEM MODE

(EM HEAT/HEAT/OFF/COOL/AUTO)

Press **[MODE]** to select:

**EM HEAT:** (only for heat pumps with auxiliary heat) Thermostat controls auxiliary heat. Heat pump will not operate in EM HEAT mode.

**HEAT:** Thermostat controls only the heating system.

**OFF:** Heating and cooling systems are off.

**COOL:** Thermostat controls only the cooling system.

**AUTO:** (if enabled in installer setup) Thermostat automatically selects heating or cooling depending on the indoor temperature.

Press **[DONE]** to save and exit, or **[CANCEL]** to exit without saving. The thermostat will save and exit if nothing is pressed within 10 seconds.

CHANGE TEMPERATURE SET POINT

Press ▲ or ▼ to adjust the current set point. (See Program Schedule Holds on pages 17-19 for more information.)

OPERATION

SELECT FAN SETTING (ON/AUTO/CIRC)

When the fan mode is changed during a program event it remains in that mode until the next event starts. The fan must be programmed to FAN ON in the schedule to run continuously through all events.

Press **[FAN]** to select:

**ON:** Fan runs continuously. Use this mode for maximum air circulation/cleaning.

**AUTO:** Fan runs only when the heating or cooling system is on.

**CIRC:** Same as AUTO, but ensures the fan is on for at least 20 minutes per hour. Use this mode for a balance of energy savings and air circulation/cleaning.

Press **[DONE]** to save and exit, or **[CANCEL]** to exit without saving. The thermostat will save and exit if nothing is pressed within 10 seconds.

## OPERATION

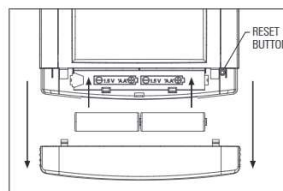
### BATTERY REPLACEMENT

Batteries are not required for proper operation. The thermostat is a 24VAC powered device with a battery back-up for the clock.

The thermostat has a memory backup that saves the thermostat's settings in case of a power interruption. The system settings will be retained but the clock will reset after 90 seconds with no battery or AC power.

Replace the batteries every year or when the low battery indicator comes on.

The reset button located under the battery cover can be used to reset the thermostat to factory defaults.



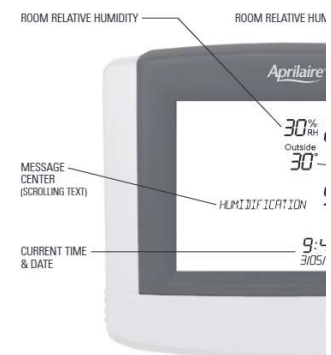
### ⚠ WARNING

The reset button should only be used by the installer.

## HUMIDISTAT FUNCTIONS

### HUMIDISTAT CONTROL SCREEN

The Model 8800 has the option of being configured as a hi

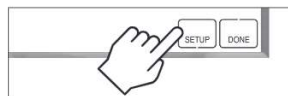


## HUMIDISTAT FUNCTIONS

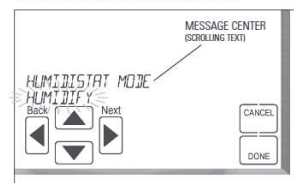
### HOW TO ENTER THE SETUP MENU TO CHANGE HUMIDISTAT MODE

Press **[MENU]** to enter the main menu.

Press **[SETUP]** to enter the setup menu.



Press **[Next]** or **[Back]** to page through the settings, until you get to the Humidistat Mode Setting (the setting is displayed in the message center).



Press **▲** or **▼** to adjust the setting. (Selected option flashes.)

Press **[DONE]** to save and exit, or **[CANCEL]** to exit without saving.

The thermostat will discard changes and exit if nothing is pressed within 60 seconds.

## NETWORK FEATURES

### NETWORK OVERRIDE

The network override feature is only available to be enabled or humidistat mode. When enabled, this feature can be used to override the thermostat's current mode.

### SECURITY

A four digit security PIN can be enabled to restrict access to the thermostat with the master PIN 7777.

### STATUS INDICATORS

The status indicator is located at the top of the screen. When bars flash across the screen, the message center will display received communications in the last 15 minutes.

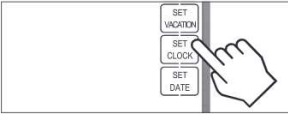


PROGRAMMING

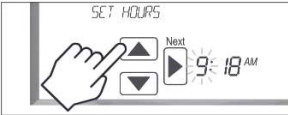
SET TIME

Press **[MENU]** to enter the main menu.

Press **[SET CLOCK]** to enter clock menu.



Press **▲** or **▼** to set the hour.



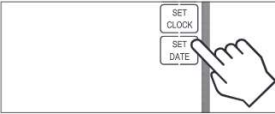
Press **[Next]**, then **▲** or **▼** to set the minute.

Press **[DONE]** to save and exit, or **[CANCEL]** to exit without saving. The thermostat will save and exit if nothing is pressed within 20 seconds.


SET DATE

Press **[MENU]** to enter the main menu.

Press **[SET DATE]** to enter date menu.



Press **▲** or **▼** to set the month.



Press **[Next]**, then **▲** or **▼** to set the day.

Press **[Next]**, then **▲** or **▼** to set the year.

Press **[DONE]** to save and exit, or **[CANCEL]** to exit without saving. The thermostat will save and exit if nothing is pressed within 20 seconds.

PROGRAMMING

UNDERSTANDING PROGRAM SCHEDULES

The daily schedule is split into four events:

**WAKE:** temperature you would prefer to wake up to.

**LEAVE:** temperature when you are away from the house.

**RETURN:** temperature you would prefer to return home to.

**SLEEP:** temperature you would prefer while sleeping.

The times shown in the table below are the defaults. The settings can be changed to fit your schedule. (See Changing Program Schedules section.)

This thermostat is pre-set to use the following program set (see table below). These settings are intended to reduce your energy usage for all events.

Event designator	Start time	Temperature
WAKE	6:00AM	70°F
LEAVE	8:00AM	62°F
RETURN	5:00PM	70°F
SLEEP	10:00PM	62°F

## PROGRAMMING

### UNDERSTANDING PROGRAM SCHEDULES (CONTINUED)

Optionally, the thermostat can be set to a two event or commercial schedule. (See Setup Menu on page 20.)

Event designator	Start time	Set temperature		Fan
		Heat	Cool	
WAKE/OCCUPIED	6:00AM	70°F (21°C)	78°F (26°C)	AUTO
LEAVE/UNOCCUPIED	10:00PM	62°F (17°C)	82°F (28°C)	AUTO

### PROGRESSIVE RECOVERY

The Progressive Recovery feature allows the thermostat to activate the heating and cooling equipment prior to an event in order to reach the desired temperature at the start of the next scheduled event.

**Example:** If the WAKE time is 6 am, and the set temperature is 70°, the heat will come on before 6 am, so the temperature is 70° by the time you wake at 6 am.

## PROGRAMMING

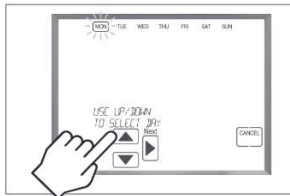
### CHANGING PROGRAM SCHEDULES

Press **[MENU]** to enter the main menu.

Press **[SET SCHEDULE]** to enter schedule programming.



Press **▲** or **▼** to select the day.



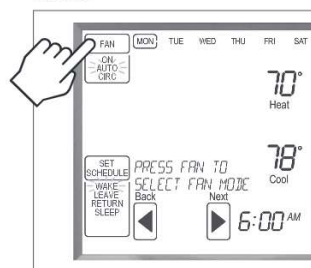
**Note:** This step is not displayed for weekday/weekend schedules.



## PROGRAMMING

### CHANGING PROGRAM SCHEDULES (CONTINUED)

Press **[Next]**, then **[FAN]** to set the fan mode of the first event.



Press **[Next]** to advance to the next event.  
Repeat above process for each remaining event.  
Press **[DONE]** to save the schedule for the day.

The thermostat will display the COPY option.



Press **[COPY]** to copy the schedule of the day just programmed to any other day.

OR

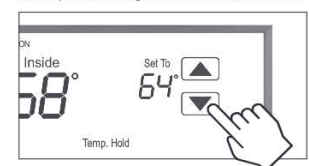
Press **[CANCEL]** to proceed to the next day and repeat the above process.

## PROGRAMMING

### PROGRAM SCHEDULE HOLDS – TEMPORARY

#### TEMPORARY PROGRAM HOLD

Press **▲** or **▼** to immediately adjust the temperature when the schedule is running. This will temporarily hold the temperature setting until the next scheduled event.

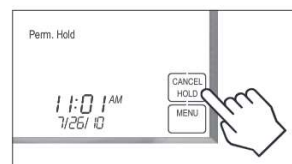


## PROGRAMMING

### PROGRAM SCHEDULE HOLDS – PERMANENT

#### PERMANENT PROGRAM HOLD

Press **[HOLD]** to permanently hold the temperature at its current setting while the schedule is running. This will override the temperature settings for all events. With the thermostat in Permanent Hold, the temperature setting and fan mode can be adjusted and will stay at that setting until the hold is cancelled.



To cancel the Permanent Hold, press **[CANCEL HOLD]**.

### PROGRAM SCHEDULE HOLDS – VACATION

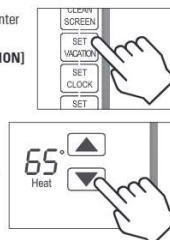
#### VACATION PROGRAM HOLD

This energy saving feature allows you to suspend the programmed schedule for extended periods of time. The temperature you select will be maintained 24 hours a day until the vacation program hold end date and time. Once the end date and time have been surpassed, the previously programmed schedule will resume. If you return earlier than expected, press **[CANCEL HOLD]** to resume the programmed schedule.

Press **[MENU]** to enter the main menu.

Press **[SET VACATION]** to enter vacation program hold.

Press **▲** or **▼** to adjust the temperature setting.

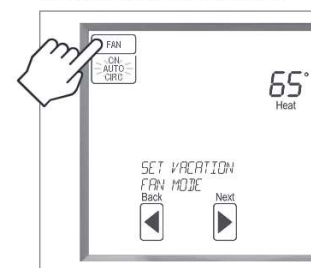


## PROGRAMMING

### PROGRAM SCHEDULE HOLDS – VACATION (CONTINUED)

#### VACATION PROGRAM HOLD (continued)

Press **[Next]**, then **[FAN]** to set the fan mode.



SETUP MENU

HOW TO ENTER THE SETUP MENU TO CHANGE SETTINGS

Press [MENU] to enter the main menu.

Press [SETUP] to enter the setup menu.

Press [Next] or [Back] to page through the settings (the setting is displayed in the message center).

Press ▲ or ▼ to adjust the setting. (Selected option flashes.)

Press [DONE] to save and exit, or [CANCEL] to exit without saving.

The thermostat will discard changes and exit if nothing is pressed within 60 seconds.

20

SETUP MENU		
USER SYSTEM SETTINGS TABLE		
The following table is the list of the settings and their details.		
System setting	Description	Factory default
HUMIDISTAT MODE	(only available if controller type is set to humidistat)	HUMIDISTAT OFF
TEMPERATURE SCALE	Set the thermostat to Fahrenheit or Celsius mode	Fahrenheit
AUTO DAYLIGHT SAVINGS	Enable or disable auto daylight savings	Disabled
BACKLIGHT INTENSITY	Backlight intensity as a percentage of full on	100%
EVENTS PER DAY	Number of program events per day	12
SECURITY	Enable PIN code security feature (only available if enabled in installer setup)	Disabled
SECURITY PIN	Sets security PIN code. The thermostat can also be accessed with the master PIN 7777 (only available if Security is enabled)	4-digits

SETUP MENU		
USER SYSTEM SETTINGS TABLE (CONTINUED)		
System setting	Description	Factory default setting (bold) and setting range
LOCKOUT TYPE	Level of lockout (only available if Security is enabled)	<b>OFF: No lockout</b> PARTIAL lockout FULL lockout
MODE LOCKOUT	System mode lockout setting (only available in partial lockout)	<b>DISABLED</b> ENABLED
FAN LOCKOUT	Fan mode lockout setting (only available in partial lockout)	<b>OFF: No lockout</b> TIMED: changes revert after temporary change period FULL: no fan mode changes allowed
SETPOINT LOCKOUT TYPE	Setpoint lockout setting (only available in partial lockout)	<b>OFF: No lockout</b> TIME-LIMITED: changes revert after temporary change period RANGE-LIMITED: set by max setpoint lockout TIME AND RANGE: set by max setpoint lockout and temporary change period FULL: no setpoint changes allowed
MAX SETPOINT CHANGE IN LOCKOUT	Setpoint range limit for temperature and humidity adjustments (only available in partial lockout)	<b>±5° F or C, ±5% RH</b> OFF to ±20° F or C, OFF to ±20% RH
TEMPORARY CHANGE PERIOD	Time-limited lockout temporary change period (only available in partial lockout)	<b>60 MINUTES</b> 0 to 255 MINUTES
DISPLAY REMOTE SENSORS	Enables the display of Support Module temperature and humidity values in the message center.	<b>DISABLE</b> ENABLE

## THERMOSTAT FIVE YEAR LIMITED W

Your Research Products Corporation Aprilaire® Thermostat unit is expres defects in materials or workmanship.

Research Products Corporation's exclusive obligation under this warrant which is found to be defective within such five (5) year period and which days after said five (5) year period by you to either your original supplier THIS WARRANTY SHALL NOT OBLIGATE RESEARCH PRODUCTS CORPORATION'S LIABILITY FOR PERSONAL INJURIES, RESULTING FROM ANY BREACH OF THIS WARRANTY IS EXPRESSLY EXCLUDED. THIS LIMITED WARRANTY IS V INSTALLED BY A QUALIFIED HEATING AND AIR CONDITIONING CONTR/ QUALIFIED CONTRACTOR, ALL DISCLAIMERS OF IMPLIED WARRANTIES Some states do not allow limitations on how long an implied warranty la so the above exclusions or limitations may not apply to you.

This warranty gives you specific legal rights and you may also have other This equipment if installed in strict accordance with the manufacturer's pursuant to Subpart J of Part 15 of FCC Rules.

### WARRANTY REGISTRATION

Please... Take a few minutes to visit us on-line at w If you do not have on-line access, please mail a postcard v and date of purchase to: Research Products Cc

**Your Warranty Registration information will n**



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