


## Deluxe Programmable Thermostat



## FEATURES

- Program up to four time periods and temperature setpoints for each daily schedule.
- Set different schedules for each day of the week.
- Backlit for easy readability of display when a key is pressed.
- Press Information  key for present setting information and outdoor temperature (select models).
- Select fan operation for each period of each day (select models with fan key).
- Temporarily set the temperature warmer or cooler.
- Daylight Time key for easy switching in and out of Daylight Savings Time.
- Program end of Hold (1 to 255 days) for added comfort and energy savings.
- Copy key for easier programming.

## PROGRAMMING

The keyboard is located behind the thermostat cover with three frequently used keys by the display. The thermostat display shows day, time, program period, temperature, system and fan operation selection.

The thermostat can be set for four times and up to eight temperatures for each day of the week (28 independent time and 56 temperature settings). *The s and t keys provide quick temporary temperature changes to increase your comfort. The Hold Temp key provides energy efficient operation for extended periods of time.*

Before starting the programming procedure, you can use the following charts to organize your program schedule. The factory preprogrammed time, temperature and fan settings are shown in brackets. If you choose not to program a daytime energy savings period, press the period key (Leave or Return) until the time is blank. The fan setting feature is available on select thermostat models

## DELUXE PROGRAMMABLE THERMOSTAT

Period	Start Time	Heat Setpoint	Cool Setpoint	Fan Setting
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### Monday

Wake	[6:00 AM]	[70°F (21°C)]	[78°F (25.5°C)]	[Auto]
Leave	[8:00 AM]	[62°F (16.5°C)]	[85°F (29.5°C)]	[Auto]
Return	[6:00 PM]	[70°F (21°C)]	[78°F (25.5°C)]	[Auto]
Sleep	[10:00 PM]	[62°F (16.5°C)]	[82°F (28°C)]	[Auto]

### Tuesday

Wake	[6:00 AM]	[70°F (21°C)]	[78°F (25.5°C)]	[Auto]
Leave	[8:00 AM]	[62°F (16.5°C)]	[85°F (29.5°C)]	[Auto]
Return	[6:00 PM]	[70°F (21°C)]	[78°F (25.5°C)]	[Auto]
Sleep	[10:00 PM]	[62°F (16.5°C)]	[82°F (28°C)]	[Auto]

### Wednesday

Wake	[6:00 AM]	[70°F (21°C)]	[78°F (25.5°C)]	[Auto]
Leave	[8:00 AM]	[62°F (16.5°C)]	[85°F (29.5°C)]	[Auto]
Return	[6:00 PM]	[70°F (21°C)]	[78°F (25.5°C)]	[Auto]
Sleep	[10:00 PM]	[62°F (16.5°C)]	[82°F (28°C)]	[Auto]

### Thursday

Wake	[6:00 AM]	[70°F (21°C)]	[78°F (25.5°C)]	[Auto]
Leave	[8:00 AM]	[62°F (16.5°C)]	[85°F (29.5°C)]	[Auto]
Return	[6:00 PM]	[70°F (21°C)]	[78°F (25.5°C)]	[Auto]
Sleep	[10:00 PM]	[62°F (16.5°C)]	[82°F (28°C)]	[Auto]

### Friday

Wake	[6:00 AM]	[70°F (21°C)]	[78°F (25.5°C)]	[Auto]
Leave	[8:00 AM]	[62°F (16.5°C)]	[85°F (29.5°C)]	[Auto]
Return	[6:00 PM]	[70°F (21°C)]	[78°F (25.5°C)]	[Auto]
Sleep	[10:00 PM]	[62°F (16.5°C)]	[82°F (28°C)]	[Auto]

### Saturday

Wake	[6:00 AM]	[70°F (21°C)]	[78°F (25.5°C)]	[Auto]
Leave	[8:00 AM]	[62°F (16.5°C)]	[85°F (29.5°C)]	[Auto]
Return	[6:00 PM]	[70°F (21°C)]	[78°F (25.5°C)]	[Auto]
Sleep	[10:00 PM]	[62°F (16.5°C)]	[82°F (28°C)]	[Auto]

### Sunday

Wake	[6:00 AM]	[70°F (21°C)]	[78°F (25.5°C)]	[Auto]
Leave	[8:00 AM]	[62°F (16.5°C)]	[85°F (29.5°C)]	[Auto]
Return	[6:00 PM]	[70°F (21°C)]	[78°F (25.5°C)]	[Auto]
Sleep	[10:00 PM]	[62°F (16.5°C)]	[82°F (28°C)]	[Auto]

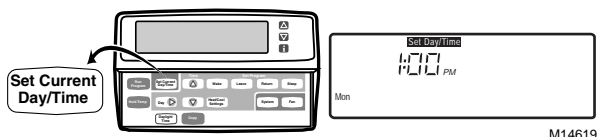
# Setting the Current Day and Time

## IMPORTANT

*Always press the keys with your fingertip or similar blunt tool. Sharp instruments like pens and pencil points can damage the keyboard.*

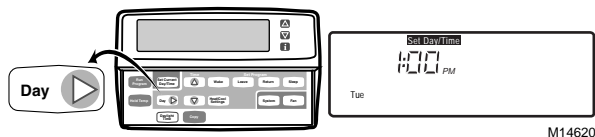
1. Press Set Current Day/Time.

NOTE: On initial power up or after an extended power loss, 1:00 pm flashes on the display until a key is pressed.



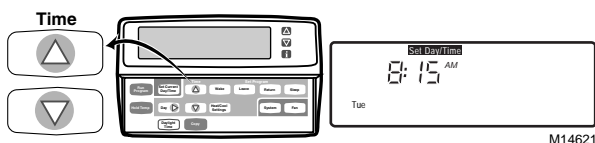
2. Press Day until the current day is displayed.

NOTE: Sun = Sunday, Mon = Monday, Tue = Tuesday, Wed = Wednesday, Thu = Thursday, Fri = Friday, Sat = Saturday.

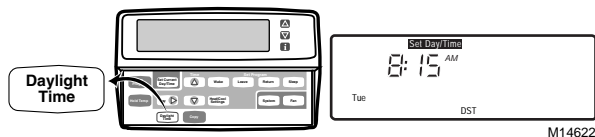


3. Press Time s or Time t until the current time is displayed.

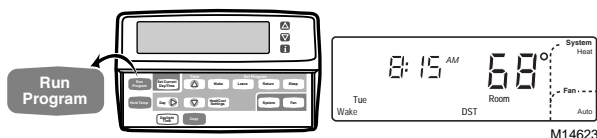
NOTE: Tapping the Set Current Day/Time will change the time in one hour increments.



NOTE: If the current time is Daylight Savings Time, press Daylight Time until DST is displayed.



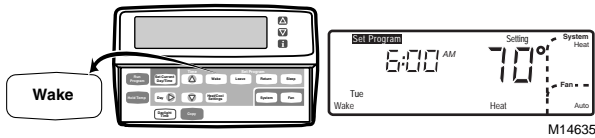
4. Press Run Program.



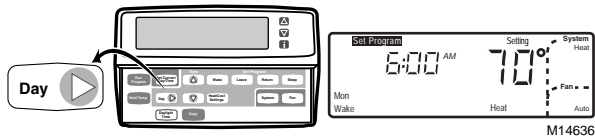
# Programming the First Day

Start by programming the Wake time and temperature (and fan operation on select models) for any one day:

1. Press Wake.

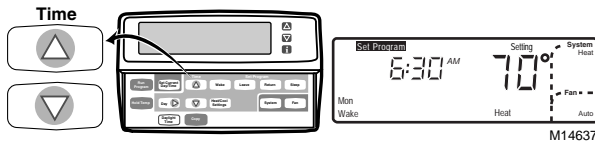


2. Press Day until the desired day is displayed.



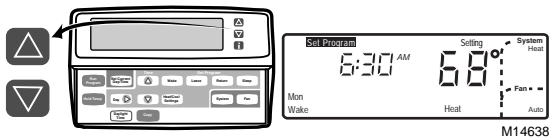
3. Press Time s or Time t until the desired Wake time is displayed.

NOTE: The program times are in fifteen minute intervals.  
(Example: 8:00, 8:15, 8:30).



4. Press increase s or decrease t key until the desired Wake temperature is displayed.

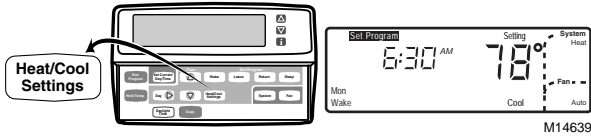
NOTE: The setpoint temperature range is 40 to 90°F (7 to 31°C) for heating  
and 45 to 99°F (9 to 37°C) for cooling.



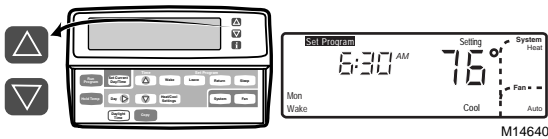
NOTE: Press Fan to modify fan operation. Auto means the fan will run only when the heating or cooling equipment is operating. On means the fan will run continuously for the entire period.

5. Press Heat/Cool Settings to switch to other system temperature setpoint.

NOTE: The program times are the same for both heating and cooling.



6. Press increase  $\uparrow$  or decrease  $\downarrow$  key until the desired temperature setpoint is displayed.

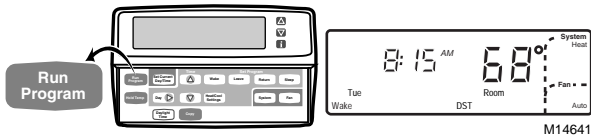


7. Press Leave, Return or Sleep and repeat steps 3, 4, 5 and 6 for programming the rest of the day. The first day is now programmed.

### IMPORTANT

*Repeat steps 1 through 7 for each day of the week that has a different program than the first day. Refer to Copying a Day section to copy any program day to another.*

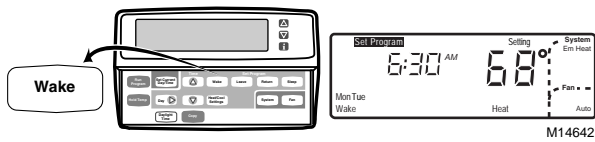
8. Press Run Program when all days are programmed.



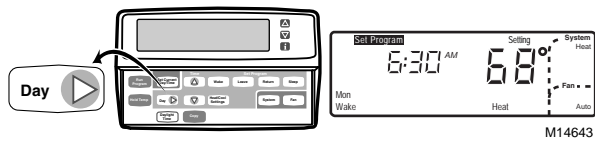
# Copying a Day

NOTE: The thermostat must be in the program mode to use the copy feature. Go to step 2 if the thermostat is already in the program mode.

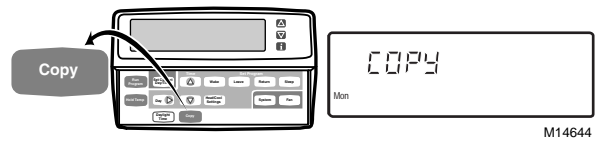
1. Press Wake.



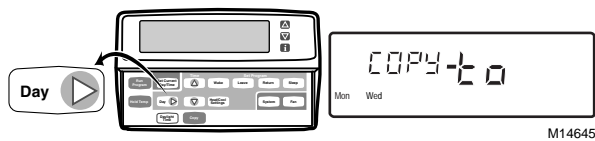
2. Press Day to select the day to be copied if different from the day displayed.



3. Press Copy.

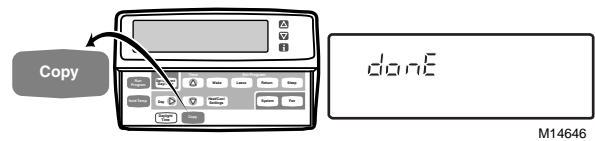


4. Press Day until the day to be copied to is displayed.



5. Press Copy.

NOTE: done will be displayed for two seconds and then the normal program display will be shown.



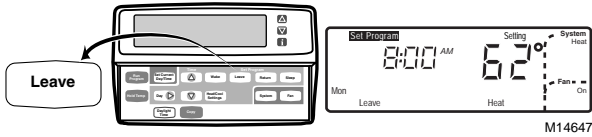
6. Repeat steps 2 through 5 for all the days desired.  
7. Press Run Program.



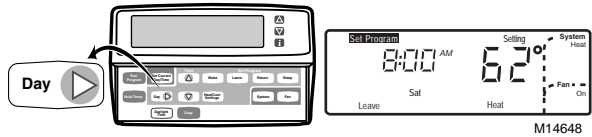
## Clearing Program Period

**NOTE:** The thermostat must be in the program mode to use the clear feature. Go to step 2 if the thermostat is already in the program mode.

1. Press Wake, Leave, Return or Sleep.

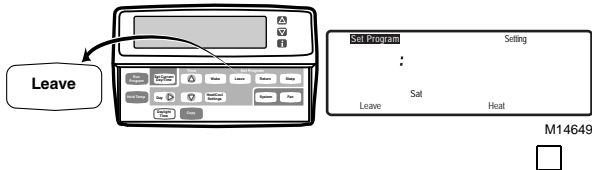


2. Press Day until the desired day is displayed.



3. Press Leave, Return or Sleep until the start time and temperature setting are cleared (approximately 3 seconds)

**NOTE:** Wake cannot be cleared..




4. Repeat steps 2 and 3 for all the periods to be cleared.
5. Press Run Program.

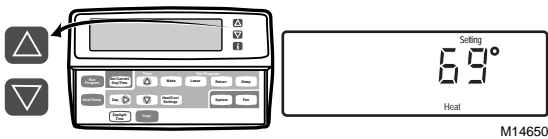
# OPERATING THE DELUXE PROGRAMMABLE THERMOSTAT

## Setting Temporary Temperatures

### Changing Temperature Setting Until the Next Program Period

Press increase s or decrease t key until the desired temperature setpoint is displayed.

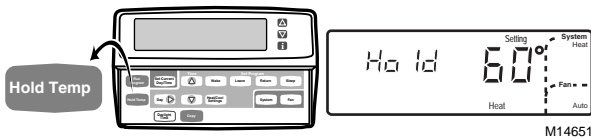
NOTE: If s or t appear under the temperature display, it means that both the heating and cooling setpoints are being adjusted. Tapping the key will change both the heat and cool setpoints by one degree. Press  after the desired setpoint is reached to check the setpoints.



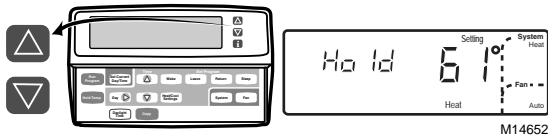
NOTE: The temporary temperature setting is displayed for approximately 3 seconds. The setting is cancelled when the next period starts or when Run Program is pressed.

### Changing Temperature Setting Indefinitely

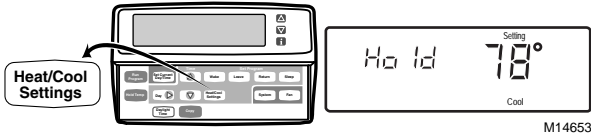
1. Press Hold Temp.



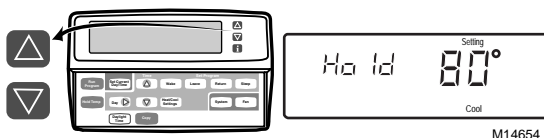
2. Press increase s or decrease t key to change the setting, if desired.



3. Press Heat/Cool Settings to change between heat and cool settings.



- Press increase  $\uparrow$  or decrease  $\downarrow$  key to adjust temperature settings.



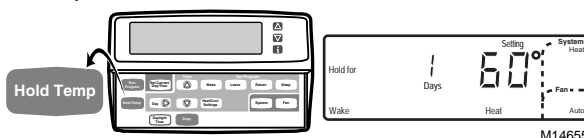
M14654

NOTE: The display changes from the setpoint to the room temperature after approximately 3 seconds.

- Press Run Program to cancel the Hold and to return to the program.

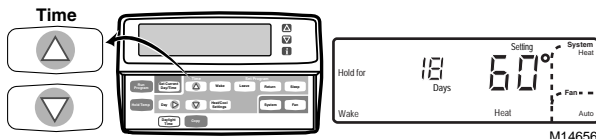
## Changing Temperature Setting Until a Designated Day and Period

- Press Hold Temp twice.



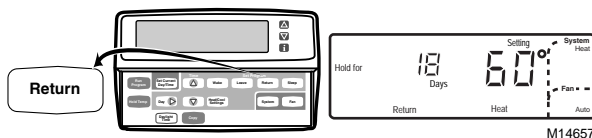
M14655

- Press Time  $\uparrow$  or Time  $\downarrow$  until the desired number of days is displayed (1 to 255 days). (Example: 18 = Hold will override the daily programs for 18 days)



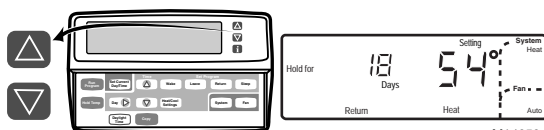
M14656

- Press Wake, Leave, Return or Sleep to select the period the program will start. (Example: Return = thermostat will stop the Hold at the Return period start time)



M14657

- Press increase  $\uparrow$  or decrease  $\downarrow$  key to adjust the temperature setting, if desired. (Example: Heat 54° = heating equipment will operate when the room temperature is below 54°F)



M14658

NOTE: When the System is set for Auto, both heat and cool settings are needed. If the System is set for Heat, only the Heat setpoint is needed or if Cool is selected, only the Cool setpoint is needed.

5. Press Heat/Cool Settings to change between heat and cool settings.
6. Press increase s or decrease t key to adjust the temperature setting, if desired. (Example: Cool 84° = cooling equipment will operate when the room temperature is above 84°F)

**NOTE:** In this example, the thermostat uses the Hold setting for eighteen days and returns to the daily programs at the Return period start time. The temperature settings are heating 54°F and cooling 84°F. Only the heating temperature is used because the System is set for Heat. The thermostat will use both the heating and cooling temperature settings when the System is set to Auto.

### IMPORTANT

*If the Hold needs to be cancelled before the designated time, press Run Program to return to the program.*

## Setting System and Fan

The system default setting is Heat and the fan default setting is Auto. Use the System and Fan keys to change the settings. The fan settings can be set for each program period individually. The system selection is for all the program periods.

System settings control the thermostat operation as follows:

Heat: The thermostat controls the heating.

Off: Both the heating and cooling are off.

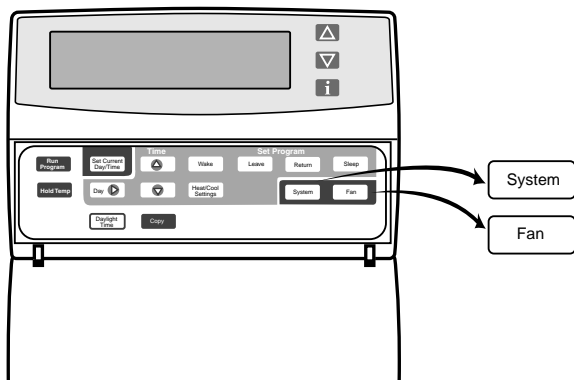
Cool: The thermostat controls the cooling.

Auto: The thermostat automatically changes between heating and cooling operation, depending on the indoor temperature (select models).

Fan settings control the system fan as follows:

On: Fan operates continuously.

Auto: Fan operates with equipment.



M14625

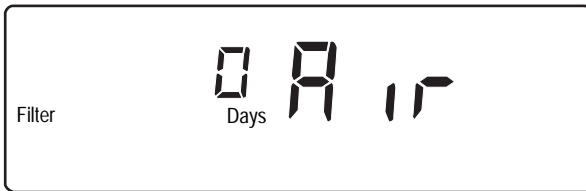
## Setting Temporary Fan Operation

If your thermostat has a Fan key and this feature, press Fan until the desired fan operation is selected. This fan setting will be in effect until the next regularly scheduled period starts.

## Viewing and Resetting Timer Settings

When the thermostat activates a timer, the thermostat flashes **Filter** until the timer resets.

1. Reset the timer by pressing the **i** key until the expired timer is displayed.



M20243

2. Press the Time s key to reset the timer.



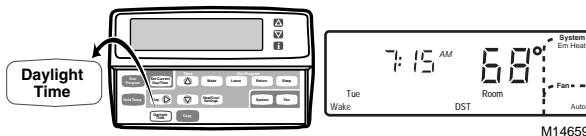
M20244

3. Press the Run Program key.

NOTE: You can view the number of days remaining at anytime by pressing the **i** key three or four times. If more than one timer is active, all active timers show sequentially when pressing the **i** key several times.

## Using Daylight Savings Time Feature

This feature allows you to change in and out of Daylight Savings Time with a key press. When pressed in the fall, the time will go back one hour. In the spring, the time will go ahead one hour and the display will show DST. See Setting the Current Day and Time section for initial setting instructions.

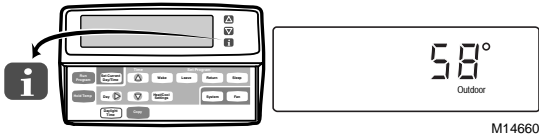


M14659

NOTE: Pressing Daylight Time more than once within a five minute period will scroll you through various time options (Example: one hour earlier or later with or without DST). Pressing Daylight Time six times in a five minute period will return you to your original setting.

Displaying the Outdoor Temperature

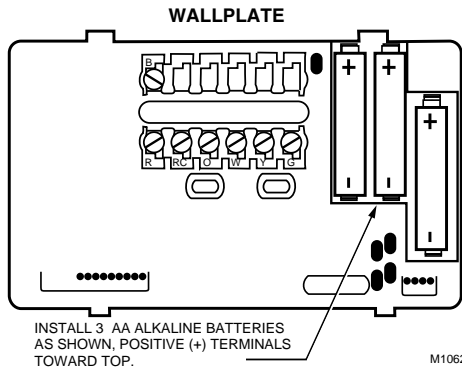
If your thermostat is equipped with an outdoor sensor, you can check the temperature at the sensor by pressing **i** once.



M14660

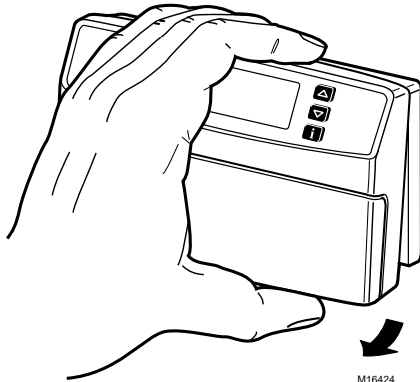
Replacing the Batteries (select models)

- Install the batteries in the wallplate so the positive terminals all point up (see illustration).



M10622

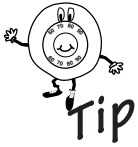
- If the thermostat is already mounted on the wall, remove the thermostat by placing your thumb between the thermostat and wallplate and pulling the thermostat up and away as shown.



M16424

When the batteries are running low, a REPL BAT message flashes for one to two months before the batteries run out completely. Replace the batteries as soon as possible once the message flashes.

If you insert new batteries within 20 to 30 seconds of removing the old batteries, the system retains the current time and day. If the display is blank, the batteries are dead or installed incorrectly. You must reset the time and day. Refer to Set the Clock for instructions.



As a precaution when leaving home for longer than a month, change batteries before leaving to prevent the system from shutting down due to lack of power. Always use fresh alkaline batteries. Nonalkaline batteries do not last as long. They also can leak, causing damage to the thermostat and the wall surface.

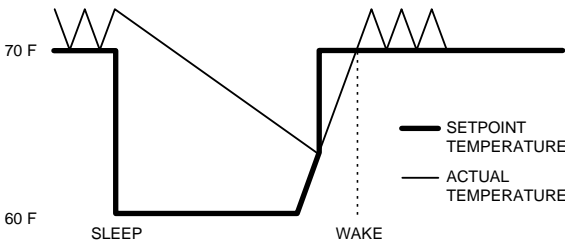
## Adaptive Intelligent Recovery™ Control

### Breakthrough Technology Senses Temperature More Like You Do

Your Deluxe Programmable Thermostat is so smart, it's almost human.

- Your body perceives temperature from a variety of sources, not only from the air in the room, but also from your surroundings—walls, windows and furnishings.
- Humans feel differences in temperature as slight as two degrees Fahrenheit.
- Common household thermometers and standard thermostats sense only air temperature, which might or might not reflect how hot or cold the room actually feels to a human being.
- Your new thermostat reads both the temperature of the wall and the air—and responds to temperature changes as little as one degree Fahrenheit—so room temperature is more likely to feel right to you and your family.

### The Optimum Comfort and Energy Savings Solution



#### HEATING MODE

THERMOSTAT USES THE SAME SCHEME TO RETURN TO LOWER COMFORT TEMPERATURE DURING THE COOLING SEASON.

M15084

The Deluxe Programmable Thermostat is actually a small but powerful computer. When calculating the time to turn on your heating or cooling system, it considers (1) air temperature, (2) wall temperature, and (3) the time you want the comfort temperature established.

- During the Adaptive Intelligent Recovery™ time, the thermostat increases the temperature setpoint from the energy savings to the comfort temperature. The equipment may shut off before reaching the comfort temperature to avoid going past the comfort temperature. This saves energy by avoiding cycling the equipment and overshooting the comfort temperature. The thermostat displays **Recovery** whenever the thermostat activates the Adaptive Intelligent Recovery™ feature.



M14561

- This thermostat learns from experience. Each day it checks how closely it hit the recovery target and adjusts the next day recovery start time accordingly.
- It typically takes four to eight days after installation for the thermostat to adjust to the local weather, your lifestyle, the construction of your home and your heating/cooling system. The thermostat calculates the Leave/Return recovery separately from the Sleep/Wake recovery.
- With the thermostat, you can choose whether you want to use the Adaptive Intelligent Recovery™ setting or the conventional recovery. The thermostat comes preset to the Adaptive Intelligent Recovery™ setting. When conventional recovery is desired, call your service technician for assistance. Use the Adaptive Intelligent Recovery™ setting when you want to choose the exact time that the room reaches your comfort temperature. Use conventional recovery when you prefer to choose the exact time your heating or cooling system comes on to start recovery.

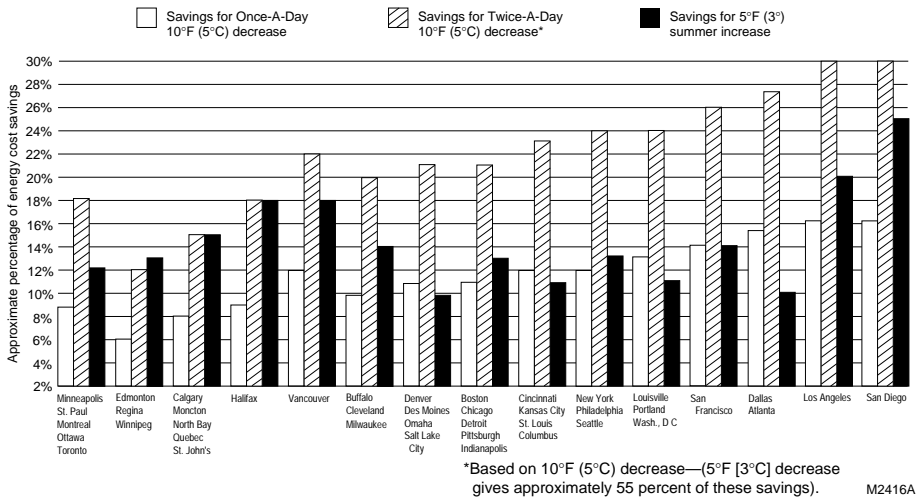


## Saving Energy Across the United States and Canada

- Save up to 30% in energy costs. The Deluxe Programmable Thermostat offers you complete comfort and a low cost easy way to save on your energy bills.
- The energy saving percentages listed on the following maps are based on setting the program down in winter or up in summer for eight hours.
- If the time period you choose for setback is longer, you could see even greater energy savings. The energy saving period must be at least two hours long to save any energy.

Find the city closest to your home. The energy savings listed will be similar to the savings you can expect.

TYPICAL ENERGY SAVINGS FOR REPRESENTATIVE CITIES IN THE U.S. AND CANADA



Notice: This equipment is a Class B digital apparatus, which complies with Canadian Radio Interference Regulations, CRC c. 1374.

## TROUBLESHOOTING GUIDE

Symptom	Action
Display will not come on.	<ul style="list-style-type: none"> <li>• Check if the thermostat is mounted and latched on the wallplate—mount and latch the thermostat on the wallplate.</li> <li>• Check if the circuit breaker is tripped—reset the circuit breaker.</li> <li>• Check if the fuse is blown—replace the fuse.</li> <li>• Check if the system switch at the equipment is in the Off position—set to On position.</li> <li>• Check wiring between thermostat and HVAC equipment—replace any broken wires.</li> <li>• If 24 Vac is present, proceed with troubleshooting.</li> </ul>
Temperature settings will not change (Example: cannot set the heating higher or the cooling lower).	<ul style="list-style-type: none"> <li>• Check that the temperature setpoints are:               <ul style="list-style-type: none"> <li>- heating: 40 to 90°F (7 to 31°C)</li> <li>- cooling: 45 to 99°F (9 to 37°C).</li> </ul> </li> </ul>
“Filter” flashing in display.	<ul style="list-style-type: none"> <li>• Indicates a filter timer needs to be reset.</li> <li>- See Viewing and Resetting Timer Settings instructions.</li> </ul>
Heating will not come on.	<ul style="list-style-type: none"> <li>• Check that setpoint is above room temperature.</li> <li>• Check if the circuit breaker is tripped—reset the circuit breaker.</li> <li>• Check if the fuse is blown—replace the fuse.</li> <li>• Check if the system switch at the equipment is in the Off position—set to On position.</li> <li>• If 24 Vac is present, proceed with troubleshooting.</li> <li>• Wait five minutes for the system to respond.</li> <li>• Set system selection to Heat.</li> </ul>
Cooling will not come on.	<ul style="list-style-type: none"> <li>• Check that setpoint is below room temperature.</li> <li>• Check if the circuit breaker is tripped—reset the circuit breaker.</li> <li>• Check if the fuse is blown—replace the fuse.</li> <li>• Check if the system switch at the equipment is in the Off position—set to On position.</li> <li>• If 24 Vac is present, proceed with troubleshooting.</li> <li>• Wait five minutes for the system to respond.</li> <li>• Set system selection to Cool.</li> </ul>
System on indicator (flame=heat, snowflake=cool) is lit, but no warm or cool air is coming from the registers.	Wait a minute after seeing the flame or snowflake and then check the registers.

## WARRANTY

Honeywell warrants this product, excluding battery, to be free from defects in the workmanship or materials, under normal use and service, for a period of one (1) year from the date of purchase by the consumer. If, at any time during the warranty period, the product is defective or malfunctions, Honeywell shall repair or replace it (at Honeywell's option) within a reasonable period of time.

If the product is defective,

- (i) return it, with a bill of sale or other dated proof of purchase, to the retailer from which you purchased it, or
- (ii) package it carefully, along with proof of purchase (including date of purchase) and a short description of the malfunction, and mail it, postage prepaid, to the following address:

Honeywell Return Goods  
Dock 4 MN10-3860  
1885 Douglas Drive  
Golden Valley, MN 55422

This warranty does not cover removal or reinstallation costs. This warranty shall not apply if it is shown by Honeywell that the defect or malfunction was caused by damage which occurred while the product was in the possession of a consumer.

Honeywell's sole responsibility shall be to repair or replace the product within the terms stated above. HONEYWELL SHALL NOT BE LIABLE FOR ANY LOSS OR DAMAGE OF ANY KIND, INCLUDING ANY INCIDENTAL OR CONSEQUENTIAL DAMAGES RESULTING, DIRECTLY OR INDIRECTLY, FROM ANY BREACH OF ANY WARRANTY, EXPRESS OR IMPLIED, OR ANY OTHER FAILURE OF THIS PRODUCT. Some states do not allow the exclusion or limitation of incidental or consequential damages, so this limitation may not apply to you.

THIS WARRANTY IS THE ONLY EXPRESS WARRANTY HONEYWELL MAKES ON THIS PRODUCT. THE DURATION OF ANY IMPLIED WARRANTIES, INCLUDING THE WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, IS HEREBY LIMITED TO THE ONE YEAR DURATION OF THIS WARRANTY. Some states do not allow limitations on how long an implied warranty lasts, so the above limitation may not apply to you.

This warranty gives you specific legal rights, and you may have other rights which vary from state to state.

If you have any questions concerning this warranty, please write our Customer Assistance Center, Honeywell Inc., P.O. Box 524, Minneapolis, MN 55440-0524 or call 1-800-468-1502, Monday-Friday, 7:00 a.m. to 5:30 p.m., Central time. In Canada, write Retail Products ON15-02H, Honeywell Limited/Honeywell Limitée, 35 Dynamic Drive, Scarborough, Ontario M1V 4Z9.

**Honeywell**

**Automation and Control Solutions**

Honeywell International Inc.	Honeywell Limited-Honeywell Limitée
1985 Douglas Drive North	35 Dynamic Drive
Golden Valley, MN 55422	Scarborough, Ontario
	M1V 4Z9

