

5+1+1 Day Programmable Thermostat with outdoor temperature transmitter



Model No:
52-2546-6

NOMA[®]
MD

Features:

- 5+1+1 day programming (weekdays + Sat + Sun) with 4 programs per day
- Ideal for central heating furnace systems
- Interfaces with heating/air conditioning systems for automatic temperature control
- Separate Heat/Cool programs with built-in protection for the air-conditioner compressor
- Interfaces with humidifier for automatic humidity control
- Temperature display and programming in Celsius or Fahrenheit
- Precision temperature control, set in half degrees
- Displays outdoor temperature from a remote transmitter
- Selectable cycle rates for more energy efficient heating
- Usage monitor - tracks accumulated heating "ON" time
- 12 or 24 hour clock display
- LCD display with backlight
- Furnace filter change reminder

SPECIFICATIONS

Rating: 24V millivolt heating systems

Installation kit includes:

- 3 AA batteries
- Mounting hardware

*** NOT COMPATIBLE WITH ANY
HIGH VOLTAGE CIRCUIT
OR BASEBOARD HEATER**

Table of Contents

Installation Guide	1
System Testing	4
Fan Operation Jumper HE/HG	6
Wiring	10
Operation and programming guide	16
Unit Diagram	17
Full LCD Display	18
Set °C or °F	20
Set Clock	21
Program Heating / Cooling	22
Temporary Override Function	26
Hold Function	26
Humidity Display / Control	27
HEAT / COOL switch / Fan Ventilation	28
Pre-comfort Recovery	29
Usage Monitor	29
Filter Change	29
Battery Changing	30
Backlight	30
Outdoor temperature transmitter	31
Option Section	35
Specifications	38
Troubleshooting	38



Installation Guide

Installation Guide

Introduction

This thermostat can replace common residential thermostats and it is designed for use with most central heating and air conditioning systems that use **low voltage** control. Please see the compatibility chart on the next page for more details.

- 3 "AA" size batteries required (included)
- Built-in protection timing for the air conditioner compressor

Warning

It is recommended to consult a wiring professional to ensure the safe installation of your thermostat.
The only way to guarantee wiring safety is to have a qualified professional on site. Since each residence may be wired differently, UPM's customer service line cannot offer any wiring advice. UPM assumes no responsibility for customer errors in installation or wiring or any resulting damages.

*** NOT COMPATIBLE WITH ANY HIGH VOLTAGE 120/240 VOLT CIRCUIT.**

Compatibility

Generally, equipment with **low voltage** control is compatible with the Heating/Cooling Programmable Thermostats.

System Type	Compatible with Thermostat
Gas - Standing Pilot	Yes
Gas - Electronic Ignition	Yes
Gas - Fire Boiler	Some models
Gas - Millivolt System	Yes
Oil - Fire Boiler	Some models
Oil - Fire Furnace	Yes
Electric Furnace	Yes
Electric Air Conditioner	Yes
Baseboard Electric Heater (120/240V)	No
Heat Pump/Single-Stage (some models)	No
Heat Pump/Multi-Stage equipment	No

*** NOT COMPATIBLE WITH ANY HIGH VOLTAGE 120/240 VOLT CIRCUIT.**

System Testing

It is very important that you fully test your heating, cooling and humidity equipment, both before and after installing your new thermostat. The first test will determine if the equipment is operational at the beginning of the process; the second test will ensure that the wiring and installation were completed correctly.

It may be tempting to only test the heating equipment if you install the thermostat in the winter, or to only test the air conditioning and humidifier if you install it in the summer. However it is highly recommended to test all equipment at the time of installation.

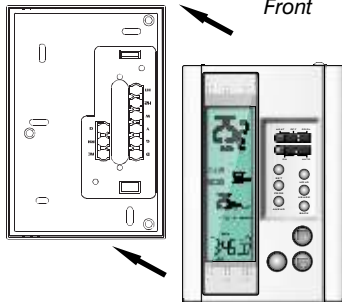
SYSTEM TESTS: (BEFORE AND AFTER INSTALLATION)

- Make sure power is on for all heating and cooling appliances.
- Ensure the thermostat is switched to HEAT mode.
- Raise the temperature setting to see if furnace will activate. (May take up to 10 minutes)
- Ensure the thermostat is switched to COOL mode.
- Reduce the temperature setting to see if the air conditioner will activate.
(Note: Do not activate air conditioning if the temperature is below 10°C (50°F) as this may damage the outdoor compressor.)
- Ensure the thermostat is switched to HEAT mode.
- Increase you humidity setting to see if the humidifier will activate.
- For heating systems with more than three wires, put the fan in the ON position.
(The fan should come on immediately.)

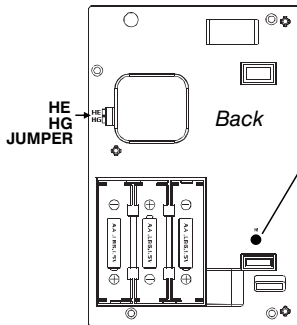
**** IMPORTANT - Getting Started ****

Remove thermostat backplate and install 3 "AA" size batteries (included).
Ensure the batteries are installed in the correct direction for polarity.
Ensure the HE / HG JUMPER is in the correct position (see next page).

Remove Backplate



Front



Reset Button:
to restore
default settings

Install 3 AA Batteries

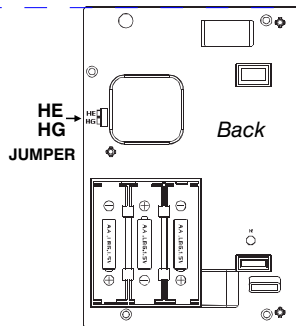
Fan Operation Jumper HE/HG

Depending on your home's heating system you may need to change the jumper setting for the fan operation. The jumper is located on the back of the thermostat.

- **HG** - Use this setting for gas and oil-fire powered furnaces. This setting allows the fan operation to be controlled by the heating system; not the thermostat. This is the correct setting for most systems.
- **HE** - Use this setting for electric powered furnaces. With this setting the thermostat will turn on the fan immediately with the heating system.

The jumper is pre-installed in the HG position as a factory default. So there is no need to change the jumper if this setting is correct.

To change the jumper setting to the HE position, pull out the small black rectangular block and align it to the new position and push it in fully.



AFTER INSTALLING THE BATTERIES

CELSIUS DEFAULT; Since Celsius (°C) is the default mode no action is required to use the thermostat in this mode.


(°C or °F) It is **VERY IMPORTANT** that you choose Fahrenheit (°F) before you begin using the thermostat. If you proceed to set the clock and program settings with the default Celsius(°C)and **THEN** change to the Fahrenheit (°F)setting: the clock, programs and all system settings will be deleted.

(RESET) If the display does not appear after installing the batteries, press the reset button on the back of the unit.

SEE OPTION SECTION: The thermostat has a number of **OPTIONS** which the user can change. **(NOTE: *Adjust these settings before programming the thermostat, because changing certain options will erase all programming.)**

Installation

The following tools may be required for installation:

 **screwdriver**



Masking Tape

(To wrap the exposed wires temporarily and to label the disconnected wires)



Wire Stripper/Cutter

(If necessary, to strip the wires)



Power drill with a 3/16" bit

(If necessary, to drill holes on the wall)



Level

(If necessary, to level the thermostat)



3 "AA" size batteries (included)

- "AA" SIZE +

- "AA" SIZE +

- "AA" SIZE +

Choosing location for new thermostat

Thermostat should be mounted:

- Approximately 5' (1.5 m) from floor
- Near or in a frequently used room, preferably on an inside partitioning wall
- On a section of wall without pipes or duct-work

Thermostat should NOT be mounted:

- Near a window, on an outside wall, or next to a door leading outside
- Exposed to direct light or heat from a lamp, sun, fireplace, or other temperature-radiating objects which may cause false readings
- Near or in direct airflow from heat registers and air conditioners
- Near concealed pipes and chimneys
- In areas with poor air circulation, such as behind a door or in an alcove

Note: Do not operate the cooling system when outside temperature is below 10°C (50°F) to avoid damaging the compressor.

Replacing old thermostat

- **Test the system to make sure that your heating and cooling systems are working properly before installation. If either does not work, contact a heating/air conditioning service person to fix the problem before installation.**
- **TURN OFF POWER to system at the furnace, or at the fuse/circuit breaker panel.**
- Carefully unpack your new thermostat and mounting plate; save package of screws, instructions and receipt. Remove cover from old thermostat. If it does not snap off when pulled firmly from the bottom, check for a screw used to secure the cover. Loosen screws holding thermostat to the wall and lift away the thermostat.

Wiring

NOTE: WIRING COLORS ARE NOT ALWAYS STANDARDIZED, SO IT IS VERY IMPORTANT TO LABEL ALL WIRES ACCORDING THE LETTER DESIGNATION ON YOUR OLD THERMOSTAT.

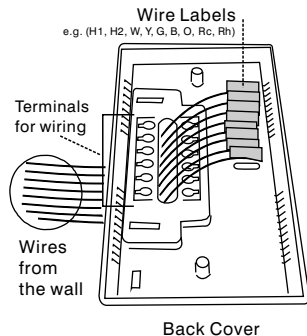
(The wires are usually designated 'W', 'Y', 'G', 'RH', 'RC', 'W', 'B', 'O' or humidistat wires.)

- Disconnect wires from old thermostat or sub-base. As you disconnect each wire, use masking tape to label it with the old terminal designation.
- Take care not to let the wires fall back into the wall or let the ends of the wires touch one another.
- If there is an extra wire that is not connected to your old thermostat, then you won't need to connect it to the new thermostat.

Connecting the wires to the terminals

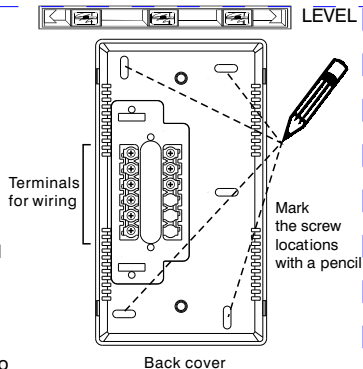
Connect the previously labeled wires to the corresponding terminals, matching the designations. Use a screwdriver to loosen the terminal, wrap the wires around the terminal, then tighten to securely fasten the wires. Make sure the wires do not touch or short-circuit with other terminals. After aligning the wires to the correct terminal push excess wires back into the wall hole.

- Depending on your heating/cooling equipment, you may need to connect 2 to 7 wires to the thermostat.
- If you have two 'R' wires, then connect each wire to its corresponding terminal and **remove** the JUMPER between the RC and RH terminals.
- If you are unsure of the connections please consult a certified electrician for the safe installation of your thermostat.

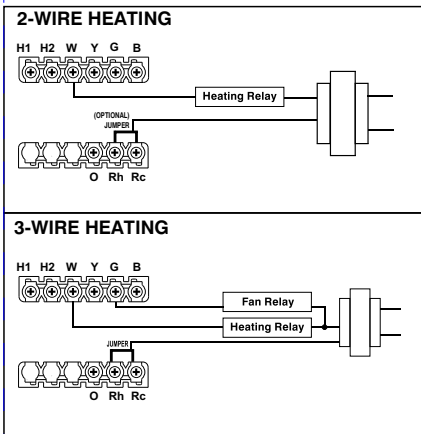


Mounting the thermostat back cover

- The back cover should be mounted vertically with the terminals to the left.
- Thread the existing wiring through the big center hole from the back and set the back cover vertically on the wall.
- Select the mounting holes and mark the locations with a pencil. If necessary, use a level to make sure the thermostat is leveled.
- Remove the back cover from the wall and drill two 3/16" holes in the marked screw positions. Insert the wall anchors into the holes completely. If necessary, use a hammer to tap-in lightly.
- Mount the back cover to the wall with the screws.
- Attach the thermostat body to the back cover (that is already mounted on the wall) by carefully aligning the two pieces and pressing firmly until they snap together.



Wiring Diagrams



Wiring Key

Regular Wiring

G - Fan output

Y - Cool output

H1 / H2 - Humidifier control

Rc - Common for Cooling and Fan

Rh - Common for Heating

W - Heat output

2 Wire Heating

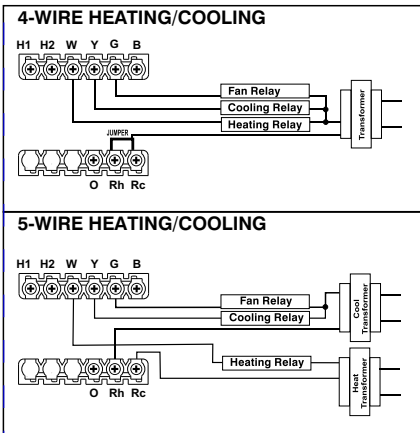
Rc / Rh - Common

(Rc and Rh jumper is optional)

3 Wire Heating

Rc / Rh - Common (Rc and Rh must be connected with jumper)

Wiring Diagrams



Wiring Key

Regular Wiring

G - Fan output
Y - Cool output
H1 / H2 - Humidifier control
Rc - Common for Cooling and Fan
Rh - Common for Heating
W - Heat output

4 Wire Heating

Rc / Rh - Common (Rc and Rh must be connected with jumper)

5 Wire Heating

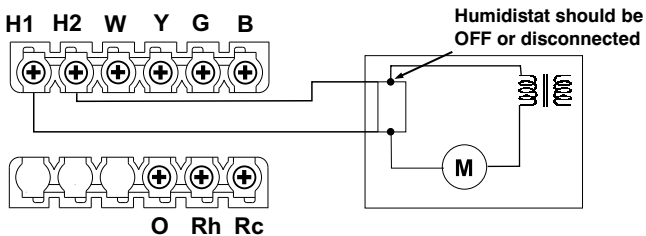
2 separate transformers (Heat / Cool)
Rc / Rh - Common (wire separately, jumper must not be installed)

Humidifier Wiring

- To wire a humidifier, the 2 wires connecting the original humidistat need to be connected to the 2 terminals marked 'H1' and 'H2' on the thermostat.
- The original humidistat should be removed or set to 'OFF' position.

Note: The 2 humidifier control terminals 'H1' and 'H2' are electrically isolated from the Heat/Cool terminals.

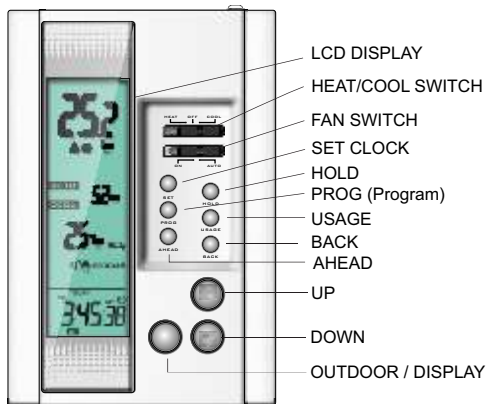
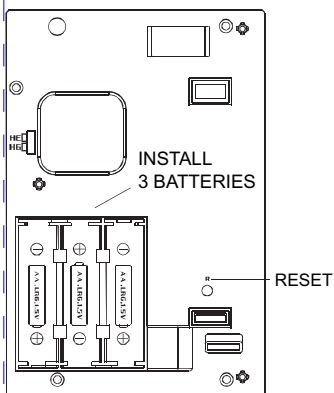
Note: H1 and H2 terminals are non polarized and there is no function difference between H1 and H2.





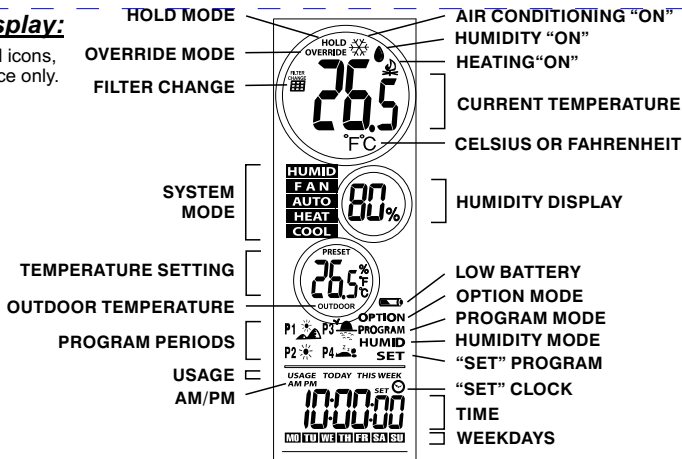
Operation and Programming Guide

Unit Diagrams: Back / Front Buttons



Full Display:

includes all icons,
for reference only.



Symbol Key:

These symbols appear to indicate the following:



COOLING - the air conditioning system is in use.



HEATING - the furnace or heating system is in use.



HUMIDITY - the humidifier is in use.



FILTER CHANGE - the furnace filter should be changed.



BATTERY - the batteries are low and need to be replaced.

**** IMPORTANT - Getting Started ****

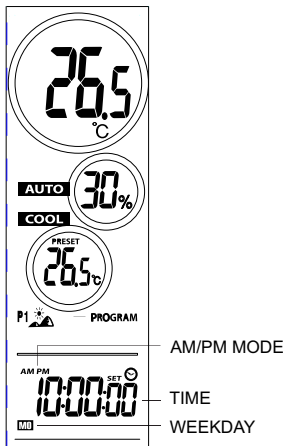
CELSIUS DEFAULT: Since Celsius (°C) is the default mode no action is required to use the thermostat in this mode.

The (°C or °F) setting is a **one time only** setting which must be done just after the batteries are installed. It is **VERY IMPORTANT** that you choose Fahrenheit (°F) at this time, because this setting **CANNOT** be changed afterwards unless you press the reset button. However, pressing reset will delete all the settings for the clock, temperature programs and options.

Select °C or °F (Celsius or Fahrenheit)

- 1 Insert the 3 batteries in the correct direction for polarity (see diagram pg5).
(The temperature mode will flash for 3 seconds, immediately after the batteries are installed or after the RESET button is pressed.)
- 2 Press UP or DOWN to select Fahrenheit (°F) mode.
After 3 seconds the flashing will stop, the temperature mode setting is now permanent.

SET CLOCK




Choose 12 or 24 hour clock

- 1 Press and hold the SET button for 3 seconds.
(The OPTION symbol will appear and 12hr will flash)
- 2 Press UP or DOWN to toggle between 12hr of 24hr display.
(Wait 15 seconds for normal display to return)
(*See *OPTION* Section for more details)

Note: 12 hour mode is the default
so no action is required to use the thermostat in this mode.

Set Time and Weekday

- 1 Press the SET button to start the time setting.
(The clock numbers and SET  symbols will begin to flash)
- 2 Press AHEAD or BACK to scroll to current hour and minute.
- 3 Press the SET button again
- 4 Press AHEAD or BACK to scroll to current weekday.
- 5 Press the SET button again to exit.

Program Heating

This thermostat is equipped with 5+1+1 DAY PROGRAMMING. Weekdays + Saturday + Sunday programming with 4 settings per day. This thermostat is pre-programmed for your convenience or you can set your own programs as desired. The program periods (P1, P2, P3, P4) allow you to set the temperature settings and start times throughout the day.

P1: MORNING This is typically the morning period, when you may prefer to wake up to a warmer temperature.

P2: DAY This is usually an energy-savings period, for the time when you are away from home. The temperature setting can be reduced to minimize energy consumption. If you are not away from home on a particular day you may override this setting by manually adjusting the temperature buttons.





P3: EVENING This is the period when you typically return home, and would like the house at a comfortable temperature. Generally, the temperature is set at warmer settings during the winter and cooler settings during the summer. If you do not often leave the house during the day, period 1, 2 or 3 can be set at the same temperature for comfort.

P4: NIGHT This is the period when you would typically be asleep. You may choose to set the temperature for energy savings or comfort as desired.

Set Program

The program periods (P1,P2, P3, P4) allow you to set the temperature settings and start times throughout the day. These are examples of possible temperature settings, the first being the factory default setting and second a custom setting.





1) DEFAULT / PRE-PROGRAMMED TIME AND TEMPERATURE SETTINGS

	PERIOD	P	TIME	HEAT SET POINT	COOL SET POINT
P1 	MORNING	P1	6:00am	20.5°C (69.0°F)	25.0°C (77.0°F)
P2 	DAY	P2	8:00am	17.0°C (62.5°F)	29.0°C (84.0°F)
P3 	EVENING	P3	5:00pm	21.0°C (70.0°F)	25.0°C (77.0°F)
P4 	NIGHT	P4	10:00pm	17.0°C (62.5°F)	26.0°C (79.0°F)

Example 1

This setting is a default and will activate automatically. Convenient for people who are away from home during the day and wish to maximize energy savings.

2) CUSTOM / PRE-PROGRAMMED TIME AND TEMPERATURE SETTINGS

	PERIOD	P	TIME	HEAT SET POINT	COOL SET POINT
P1 	MORNING	P1	7:00am	20.5°C (69.0°F)	25.0°C (77.0°F)
P2 	DAY	P2	8:00am	20.5°C (69.0°F)	29.0°C (84.0°F)
P3 	EVENING	P3	5:00pm	20.5°C (69.0°F)	25.0°C (77.0°F)
P4 	NIGHT	P4	11:00pm	17.0°C (62.5°F)	26.0°C (79.0°F)

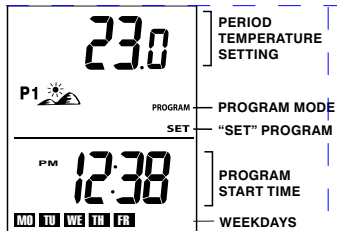
Example 2

This is custom program set by the user. Convenient for people who are at home during the day, and want the home warm all day, but want a cooler temperature at night.

Set Heating Program

5+1+1 day programming means that programming begins with the Monday to Friday settings, then Saturday, then Sunday. Scroll through the daily Program Periods in this order P1, P2, P3, P4 to select the start times and temperature settings for all four daily program periods.

- 1 Slide the system switch to the HEAT position.
- 2 Press the PROG key once. (P1 / SET will appear)
(The Monday to Friday icons will display.)
- 3 Use AHEAD or BACK to select the desired start time for (P1) Period 1.
- 4 Use UP or DOWN to set the desired temperature for (P1) Period 1.
- 5 Press PROG again to adjust the next Program Periods P2, P3, P4.
(Repeat the above steps until all four programs are adjusted to your needs.)
- 6 Press PROG again to program Saturday, adjust Period 1-4 settings.
- 7 Press PROG again to program Sunday, adjust Period 1-4 settings.
- 8 After the Sunday program is complete, press PROG again to end program mode.



Heating Program

Note:

- The PROG button can also be used to review the period settings.
- To accelerate the setting speed press and hold the AHEAD/BACK or UP/DOWN buttons.
- Temperature can be set in increments of 0.5°.
- Program time can be set in increments of 10 minutes.
- Heat and Cool temperature settings must be at least 3 degrees apart.

Cooling Program

- 1 Slide the system switch to the COOL position.
 - Then proceed with steps 2-8 as you would in the heating program.

Note:

Setting the cooling program is exactly the same as setting the heating program, except that the cooling program will activate the air conditioner while the heating program activates the furnace.

Temporary Override

- 1 Press the UP / DOWN buttons to select the override temperature. (The OVERRIDE symbol will display)

The thermostat will temporarily adjust the room temperature to this new setting, but will return to the regular program temperature at the beginning of the next scheduled program time. Only the currently active mode (heat or cool) setting will be changed. The thermostat has an automatic delay function to protect the heating and cooling system from irregular on/off sequences. Therefore, it is normal to have a several minute delay before the system activates.

Hold

- 1 Press the UP / DOWN buttons to select the desired temperature.
- 2 Press the HOLD button. (The HOLD symbol will display)

This function maintains a constant temperature and disables temperature program periods.

Press the HOLD button once to enter the HOLD mode. (HOLD symbol will appear)

(*When HOLD is activated, you may manually adjust the temperature by pressing UP or DOWN.

However all programs will be disabled. If no temperature changes are manually selected, the current temperature setting will remain the same indefinitely)

To cancel the HOLD function, press the HOLD button again. (HOLD symbol will disappear)

Humidity Display **HUMID**

The relative humidity inside your home is displayed with a % sign in the middle of the LCD screen.

Notes:

- The humidifier will automatically turn on if the relative humidity is lower than the humidity setting
- Humidity is set in increments of 5%
- The humidity level can be set from 20% to 70%
- If the humidity reading is LO% it means that the humidity level is below 20%
- If the humidity reading is HI% it means that the humidity level is above 70%
- The humidifier control only functions when thermostat is in HEAT mode
- Humidity is a manual setting which remains constant (it is not pre-programmable like temperature)

Humidity Control **HUMID SET**

- ① Verify the humidifier is correctly wired to the thermostat. (see installation guide or contact an electrician)
- ② Ensure HEAT mode is selected. (The humidifier will only activate if thermostat is in HEAT mode)
- ③ Press the PROG button repeatedly to scroll through all of the 12 programs, ending with P4 on Sunday.
(**HUMID SET** will appear and the humidity % sign will flash)
- ④ Press the UP / DOWN buttons now to adjust the humidity setting.
- ⑤ Press PROG button again to exit.

*To de-activate the humidifier, scroll DOWN to the lowest humidity setting, until (OFF%) displays.

HEAT / COOL Switch

Slide the HEAT/OFF/COOL switch to select heating or cooling.

- HEAT - When the thermostat is switched HEAT mode the furnace or heating system will be enabled.
- OFF - If the thermostat is switched to OFF mode, both the heating and cooling systems will be off, and all programs and settings will be disabled.
- COOL - When the thermostat is switched to COOL mode the air conditioner or cooling system will be enabled.

When the heating or cooling systems are ON, the following symbols will flash:

- ☀ The heating system symbol
- ❄ The cooling system symbol

Fan Control / Ventilation Switch **FAN**

Slide the ON/AUTO switch to select manual or automatic fan control.

- Select ON for manual control. (the fan will run continuously to improve air ventilation)
- Select AUTO for automatic ventilation. In AUTO mode the heating or cooling system will activate according to pre-programed temperature settings.

Note:

In heating mode, the fan is controlled by the heating equipment.
In cooling mode, the fan is controlled by the cooling equipment.

Pre-comfort Recovery

- This thermostat is equipped with a 'Pre-comfort Recovery' system that will activate the heating or cooling in advance of the actual set program time so that the room will be at the desired temperature at the start of the program time.
- It is normal for the system to be activated earlier than the actual set program time (up to one hour). The Pre-comfort Recovery can be disabled if desired. (See "Option Section")

Usage Monitor

The thermostat tracks the total number of hours the heating and cooling system is operating.


- Press the USAGE button once to view the hours of usage USAGE TODAY.
- Press the USAGE button again to view the hours of usage USAGE THIS WEEK.
- Press the USAGE button again to cancel. (Accumulated hours starting from Monday)
 - *USAGE TODAY automatically resets itself daily at midnight.*
 - *USAGE THIS WEEK automatically resets itself at the end of the week. (Midnight, Sunday)*

Filter Change



The FILTER CHANGE indicator will display on the LCD screen when the system "ON" time (HEAT, COOL or FAN) has accumulated to 500 hours of use. It is an indication that the furnace filter should be changed at this time. To reset the FILTER CHANGE counter, press and hold the USAGE button for 3 seconds. (The filter change icon will appear for a second.) This brings the filter usage counter back to zero.

Battery Changing

When the battery symbol  is visible on the LCD screen, it indicates that the batteries are running low and need to be replaced. **However, it is recommended that the batteries be replaced every year, even if the battery symbol does not appear.** Always use new high alkaline quality batteries. Do not place previously used, mixed brand or rechargeable batteries into your thermostat.

To replace batteries:

- Slide the HEAT/OFF/COOL switch to the OFF position.
- Remove the thermostat from its mounting plate (back cover) carefully.
- Remove the old batteries and install new ones very quickly.
- Return the thermostat to its original position.

NOTE: If new the batteries are inserted within 20 seconds of removing the old ones, the existing time will not be cleared. Otherwise, the display may show an incorrect time and the clock will have to be set again.

Backlight

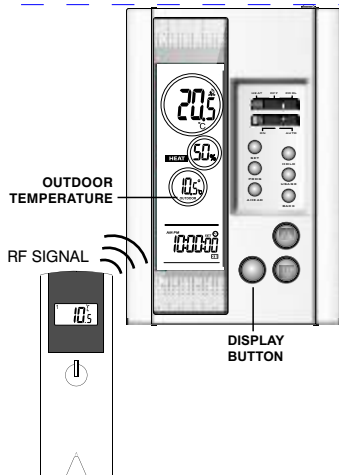
The backlight helps you to clearly see the thermostat display at night. However, frequent adjustments with the backlight enabled will reduce your battery life. To disable backlighting see the "Option Section". (The backlight function will work only in the dark, because the unit detects light with photo-sensitive sensors.)

Outdoor Temperature Transmitter

This thermostat has a remote transmitter, which sends a wireless RF signal to the thermostat. This allows your thermostat to display the outdoor temperature on the LCD screen. To synchronize, install batteries in both the thermostat and transmitter and place the units side by side.

- 1 Press the DISPLAY button for 3 seconds to synchronize the remote transmitter with the thermostat. (This will initiate an RF learn mode in which the thermostat searches for the outdoor transmitter signal for 3 minutes.)

In normal use, press the DISPLAY button at any time to toggle between the preset temperature and the outdoor temperature.

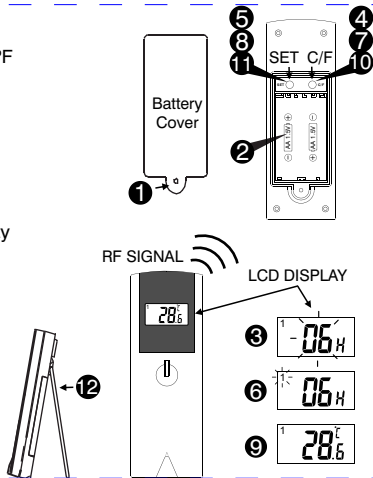


Outdoor Transmitter Settings

If you wish to change the transmitter display from °C to °F or if the transmitter does not synchronize immediately you may need to adjust the transmitter settings. There are 15 HOUSE CODE choices to reduce the chance of signal interference from other electronic devices.

To set the outdoor weather transmitter setting:

- 1 Remove the battery cover with a screwdriver
- 2 Insert 2 AA batteries in the correct direction for polarity
- 3 (H - HOUSE CODE will flash for 6 seconds)
- 4 Press C/F to select a HOUSE CODE (1-15)
- 5 Press SET
- 6 CHANNEL 1 will flash for 8 seconds.
- 7 Press C/F (CHANNEL 1 is the only option - Default)
- 8 Press SET
- 9 (Temperature reading will display)
- 10 Press C/F to select Celsius or Fahrenheit
- 11 Mount on wall or with table stand



Outdoor Temperature Transmitter

OUTDOOR TEMPERATURE DISPLAY:

The outdoor temperature is for display only, so it will not affect the operation of the thermostat in any way

SYNCHRONIZATION:

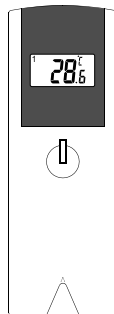
After the thermostat and outdoor transmitter are in sync, the outdoor temperature reading will be updated every 2 minutes.

Place the receiver and remote transmitter side by side (up to 1 metre apart), and allow the receiver and remote transmitter to synchronize for 10 minutes before you place the remote transmitter outdoor.

TRANSMITTER POSITION:

The remote transmitter should be placed in a dry shaded area.

NOTE: Fog and mist will not harm the remote transmitter but direct rain must be avoided.



Outdoor Temperature Transmitter

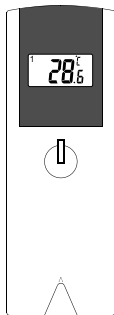
SIGNAL INTERFERENCE:

There are 15 HOUSE CODE choices to reduce the chance of signal interference from other electronic devices. If any signal interruption occurs changing the HOUSE CODE (1-15) may correct the problem.

Mount the remote transmitter upright avoiding metallic objects and frames, such as window sills. Verify that there are no obstacles like a transmission tower or a steep hill that would cause interference or block the signal between the remote transmitter and receiver.

Place the receiver unit at least 2 metres away from any electrical devices, such as your television, computer, cordless phone, or any radio controlled equipment.

You may need to reposition the remote transmitter to a different location and/or closer to the receiver for the best transmission.



Option Settings

This thermostat has 3 OPTION settings. The OPTION feature allows the user to choose variable settings from a list of choices. The OPTION settings display in the lower part of the LCD screen.

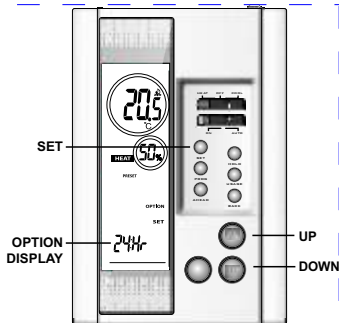
OPTION:

- 1) 12 or 24 Hour Clock Format**
- 2) Heat Cycle Rate**
- 3) Pre-comfort Recovery / LCD Backlight**

To enter the OPTION mode:

- 1** Press the SET button for 3 seconds.
- 2** Choose a setting with the UP/DOWN buttons.
- 3** Press SET again to advance to the next OPTION.

***See OPTION settings details on the following pages...**



OPTION Settings

OPTION 1) 12 or 24 hour Clock Format

- 1 Press the SET button for 3 seconds to enter the OPTION mode.
(12hr or 24hr hours will appear on the LCD Screen)
- 2 Press the UP or DOWN buttons to toggle between 12hr and 24hr format.
- 3 Press SET again to advance to OPTION 2.

OPTION 2) Heat Cycle Rate

Choose the furnace heat cycle (the total ON/OFF intervals which the furnace completes in one hour)

- 1 Press the UP or DOWN button to scroll between cycle options 0-4.

[r 0] = OFF (Cycle rate disabled - fixed span)

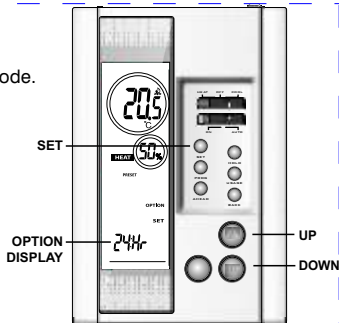
[r 1] = 2 cycles / hour (Circulating water heating or condensed gas furnace)

[r 2] = 3 cycles / hour (Commercial Furnace)

[r 3] = 5 cycles / hour (**Factory Default**, Gas or Oil Furnace)

[r 4] = 7 cycles / hour (Electric Furnace)

- 2 Press SET again to advance to OPTION 3



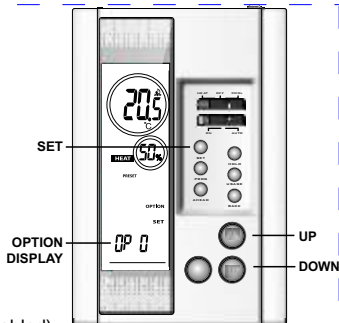
OPTION Settings

OPTION 3 Pre-comfort Recovery / LCD Backlight

Pre-comfort recovery means that the thermostat will activate the furnace to begin heating before a program period time begins. This feature ensures that a comfortable temperature will have been reached at the very beginning of the program period. The backlight will light up the LCD screen when buttons are being pushed in the dark.

- 1 Press the UP or DOWN buttons to scroll between pre-comfort recovery / backlight options 0-3.

- OP 0 = BOTH OFF (Pre-comfort recovery and backlight disabled)
- OP 1 = Pre-comfort recovery - ON Backlight - OFF
- OP 2 = Pre-comfort recovery - OFF Backlight - ON
- OP 3 = BOTH ON (Pre-comfort recovery and backlight enabled)



Specifications:

Number of programs: 5 + 1 + 1 Day with 4 settings per day

Temperature setting range: 5 – 35°C (41 – 95°F)

Temperature display range: 0 – 55°C (34 – 99.5°F)

Humidity setting range: 20 to 70%

Humidity display range: 20 to 95%

Battery: 3 x "AA" size batteries


TROUBLESHOOTING GUIDE

PROBLEM

LCD screen is blank.

SOLUTION

- Check if the batteries are installed correctly.
- Check if the batteries are fresh and of the correct type.
- Select RESET button on the back of the unit.

Battery symbol () is flashing.

- This is an indication that the batteries are running low. Replace with fresh alkaline batteries.
Note: We recommend to have the batteries replaced at least once a year even if the battery symbol is not flashing.

Heat will not come on.

- 1) Check and ensure that the thermostat is set to the HEAT_mode.
- 2) Check and ensure that the set temperature is **higher** than the current (room) temperature.
- 3) You may have to wait up to 5 minutes before the heat will turn on. The thermostat has a built-in time delay to prevent undesirable on/off sequences.
- 4) After a 5-minute wait, the heating should now be on. Whenever the heating system is running, the **HEAT** symbol will flash.
- 5) Double check the wiring. You may verify the correct wiring letter designation by seeing which wire is attached to which letter code inside your furnace. (see installation: wiring section)

PROBLEM**SOLUTION**

Heat will not come on but the HEAT symbol is flashing.	<ol style="list-style-type: none">1) Check if the furnace switch and/or pilot flame is turned on, as it may have been turned off.2) Allow several minutes for the heating system to heat up and the fan to activate. Most heaters will heat up the system for a short while before warm air can be ventilated by the fan. Also check that the HE/HG setting is set correctly, if not change the position. (see Fan Operation Jumper HE/HG section)3) If the heat still does not come on, double check the wiring installation.
Air conditioning will not come on.	<ol style="list-style-type: none">1) Check and ensure that the thermostat is set to the COOL or AUTO mode.2) Check and ensure that the set temperature is lower than the current (room) temperature.3) You may have to wait up to 5 minutes before the air conditioning will turn on. The thermostat has a built-in time delay to protect the air conditioner compressor from undesirable on/off sequences.4) After a 5-minute wait, the air conditioning should now be on. Whenever the cooling system is running, the COOL symbol will flash.
Air conditioning will not come on but the COOL symbol is flashing.	<ol style="list-style-type: none">1) Check if the air conditioning system's main switch is turned on, as it may have been turned off.2) Wait several minutes for the air conditioning system to activate. If the air conditioning still does not come on, check the wiring installation again.
The thermostat turns the heating or cooling systems on before my programmed set times.	This is normal if the Pre-comfort Recovery system is enabled. The Pre-comfort Recovery will activate the heating/cooling in advance of the actual programmed set time so that the room will be at the desired temperature at the start of the program time. You may disable this feature in the "option section".
Heating system seems to cycle too often.	Check and ensure that you have selected a Cycle Rate that matches your particular heating system. The default is set at Cr-3 for gas or oil forced air systems. If you find it still cycling too often, you may wish to try a slower cycle rate or disable the cycling. When disabled, the thermostat will operate at a fixed span of (plus or minus) $\pm 0.5^{\circ}\text{C}$ ($\pm 1.0^{\circ}\text{F}$). For example, if the programmed temperature is set at 20°C (68°F), the thermostat will turn the heat on if the current (room) temperature falls below 19.5°C (67°F) and turn the heat off when the current (room) temperature reaches 20.5°C (69°F).

PROBLEM

Cannot change the thermostat scale from °C to °F or vice-versa.

SOLUTION

Selecting the temperature scale is a one-time start-up process. After the first battery installation, or after you press the reset button, you may choose °F within 3 seconds. (°C is the default so it will display automatically after the RESET.) Otherwise, you CANNOT change the temperature scale to °F later on, unless you perform another reset which will clear all the programs and thermostat settings. The reset button is located on the back of the thermostat. Press RESET and °C will appear, then press the UP or DOWN buttons to select °F. The °F setting is now permanent.

Limited 3-year Repair Warranty

This product carries a three (3) year repair warranty against defects in workmanship and materials. This product is not guaranteed against wear or breakage due to misuse and/or abuse.

If the product is defective,

(i) return it, with a dated proof of purchase, to the retailer from which you purchased it

Attention:

UPM recommends consulting a licenced electrician to ensure the safe installation of your thermostat.

The only way to guarantee wiring safety is to have a qualified professional on site. Since each residence may be wired differently, UPM's customer service line cannot offer any wiring advice.

UPM assumes no responsibility for customer errors in installation or wiring or any resulting damages.

Improper installation constitutes product misuse and will invalidate this warranty.

Note: Shipping and handling for returns is not included under this warranty.

Customer Service

1-888-468-6876

*** NOT COMPATIBLE WITH ANY HIGH VOLTAGE 120/240 VOLT CIRCUIT.**