

THM701

7 Day Programmable Thermostat

UPM
ELITE



**TOUCHSCREEN
TECHNOLOGY**



Features:

- Interfaces with heating/air conditioning systems for automatic temperature control
- Automatic change-over for HEATING/COOLING programs
- Interfaces with humidifier for automatic humidity control
- Sets and displays house temperature (°C / °F)
- Touchscreen LCD display with backlight
- Displays day, hour and minute (in 12 or 24 hour clock format)
- Temperature can be set in half degrees
- Copy 1 day's program to another day
- Automatic ventilation
- Selectable cycle rates for furnace ON/OFF intervals
- Usage monitor
- Filter change reminder
- Compatible with millivolt & 24V heating systems
- Includes mounting hardware and 3 "AA" batteries

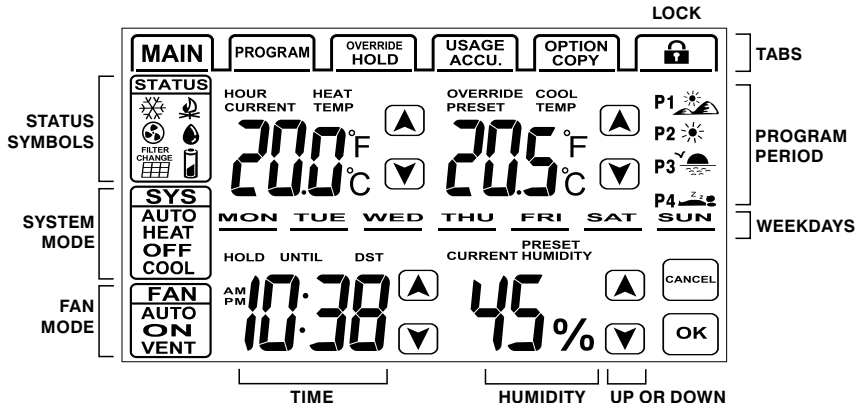
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Operation and Programming Guide

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.



FAN - the fan is running (FAN symbol will flash).



HUMIDITY - the humidifier is in use.



FILTER CHANGE - the furnace filter should be changed.



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



LOCK - the thermostat settings are locked and setting cannot be changed.

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

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.

Select °C or °F (Celsius or Fahrenheit)

- 1** Press OPTION for 3 seconds just after batteries are installed.
- 2** Select Option oP9 with the (left) arrows to choose between °F or °C mode.
- 3** To choose Fahrenheit select value 1 with the (right) arrows. (1 = °F)(0 = °C Default)
- 4** Press OK to exit
(*see option section for more details)

SET CLOCK

SET WEEKDAY

The thermostat control panel features several tabs at the top: MAIN, PROGRAM, OVERRIDE HOLD, USAGE ACCU., OPTION, and a lock icon. The main display area is divided into several sections. On the left, there is a STATUS section with a flame icon, a SYS section with 'HEAT' selected, and a FAN section with 'AUTO' selected. The central display shows 'HEAT' and 'COOL' modes with temperatures of 20.0°C and 20.5°C respectively, each with up and down arrow controls. Below this is a WEEKDAY selection row with 'MON' through 'SUN' and a 'P1' icon. At the bottom, the DST section shows '10:38 AM' with up and down arrow controls, and the CURRENT HUMIDITY section shows '45%' with up and down arrow controls. There are 'CANCEL' and 'OK' buttons on the right side of the panel. A 'SET TIME' button is located below the panel.

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

Note: Clock operates by the days of the week but does not track the date or year.

Choose 12 or 24 hour clock

- 1 Press the OPTION tab for 3 seconds.
- 2 Select Option oP1 with the (left) arrows
- 3 Choose value with the (right) arrows:
0 = 12 hour mode (Default)
1 = 24 hour mode
- 4 Press OK to exit
(*SEE OPTION Section for more details, and to select Daylight Savings Time)

Set Time and Weekday





- 1 Press the Clock area for 3 seconds.
(The clock numbers will begin to flash)
- 2 Set the time with UP or DOWN arrows.
(Scroll to current hour and minute.)
- 3 Press OK then select the WEEKDAY by touching that day.
(The selected weekday will be display with a flashing underline.)
- 4 Press OK to exit

Program Heating and Cooling

This thermostat is equipped with 7 DAY PROGRAMMING. Monday + Tuesday + Wednesday + Thursday + Friday + 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.

- P1: MORNING** : This is typically for the morning when you may prefer a warmer temperature.
- P2: DAY** : This is an energy-savings mode for the time you are away from home. The setting can be adjusted to minimize energy consumption.
- P3: EVENING** : This is for the time you return home and want the house at a comfortable temperature, typically warmer settings during winter and cooler settings during summer.
- P4: NIGHT** : This is the time when you are usually asleep. You may choose to set temperature for energy savings or comfort as desired.

SCHEDULE OF PRE-PROGRAMMED TIME AND TEMPERATURE SETTINGS

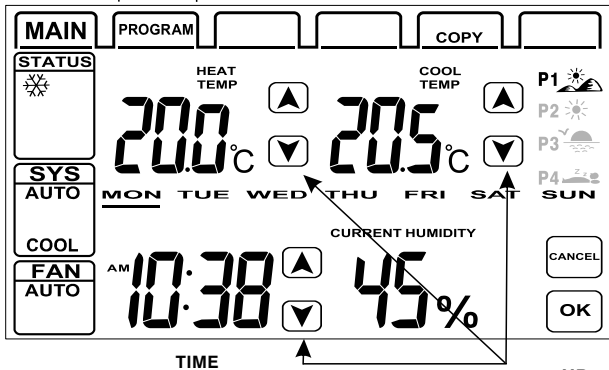
	PERIOD	P	TIME	HEAT SETPOINT	COOL SETPOINT
P1 	MORNING	P1	6:00am	69.0°F (20.5°C)	77.0°F (25.0°C)
P2 	DAY	P2	8:00am	63.5°F (17.5°C)	84.0°F (29.0°C)
P3 	EVENING	P3	5:00pm	70.0°F (21.0°C)	77.0°F (25.0°C)
P4 	NIGHT	P4	10:00pm	62.5°F (17.0°C)	79.0°F (26.0°C)

Note: The program periods can be set to the different or the same temperatures.

For example: Period 1, 2, or 3 can all be set to (22°C) if you are home all day and want the temperature to stay warm, but at night it can be set cooler. (17°C)

PROGRAM Display

1) Select the PROGRAM tab to enter the program mode.



5) Select COPY, then other weekday(s) to copy PROGRAM 1-4 settings

3) Select PROGRAM PERIOD
P1 - Morning
P2 - Day
P3 - Evening
P4 - Night

2) Select any WEEKDAY, the selected day will be underlined

4) Use the UP or DOWN arrows to set the start time and temperature for each program period.

Heating / Cooling Program

- 1 Select PROGRAM tab to display program settings.
 - HEAT TEMP (displays heating temperature settings / adjust with up or down arrows)
 - COOL TEMP (displays air conditioning temperature settings / adjust with up or down arrows)
 - PROGRAM (touch the program area to sequence between program periods P1, P2, P3 or P4)
 - CLOCK AREA (displays the time the program period will start)
- 2 Select any WEEKDAY to view its settings: (MON, TUE, WED, THU, FRI, SAT, SUN)
- 3 Select (P1=MORNING PERIOD) to set it's program settings.
- 4 Adjust the HEAT / COOL / CLOCK (temperature and start time) settings with the UP / DOWN arrows.
- 5 REPEAT above steps to set the times and temperatures for P2 (DAY), P3 (EVENING) and P4 (NIGHT).
- 6 To accept settings select OK, to undo settings press select CANCEL. To continue to program the rest of the week by each day press the PROGRAM tab again or select COPY and then weekday(s) to copy the 4 program periods to the selected day(s).

Note: After one day is programmed, you can copy all 4 of that day's program settings to any other day using the COPY program function. (see the Copy Function section)

Note: Heat and Cool temperature settings must be at least 3 degrees different.

Note: Select AUTO on system settings to ensure heating and cooling programs will run automatically.

Humidifier Control

- 1 Verify the humidifier is correctly wired to the thermostat. (see installation guide or contact an electrician)
 - 2 Ensure HEAT mode is selected.
 - 3 Touch the HUMIDITY display area, and then set the humidity level using the UP / DOWN arrow keys.
 - 4 To de-activate the humidifier setting, scroll DOWN to it's lowest setting until "OFF" (oF%) displays.
- The humidifier will automatically turn on if the relative humidity is lower than the set humidity level.
 - Humidity is set in increments of 5%.
 - The humidity level can be set from 20% to 70%.

Note: The humidifier control only functions when thermostat is in HEAT mode.



Note: Humidity is a manual setting which remains constant (it is not pre-programmable).


Copy Program Function (MON, TUE, WED, THU, FRI, SAT, SUN)

This thermostat can copy program settings from one day to another using the COPY function.

- 1 Select the PROGRAM folder, then select the weekday you wish to copy. (This day will disappear)
- 2 Select COPY, then select the weekday(s) the settings are to be copied to. (days will be underlined)
*(Multiple days can be chosen, i.e. You can copy 1 day's settings to all 6 other days in a single operation. All four period settings (P1, P2, P3,P4) will be copied.)
- 3 To accept copied settings select OK, to undo settings select CANCEL.

Fan Control / Automatic Ventilation


- Select FAN/AUTO (for automatic control of the fan)
 -  In heating mode, the fan is controlled by the heating equipment.
 -  In cooling mode, the fan is controlled by the cooling equipment.
- Select FAN/ON (for the fan to run continuously)
- Select FAN/VENT (for automatic ventilation). (The fan will run five minutes per hour, this ventilation feature is designed for better air flow, without heating or cooling being applied.)


Note: When the fan is running, the FAN  symbol will flash.

System Mode: AUTO / HEAT / OFF / COOL

- AUTO - The heating or cooling system will activate according to pre-programed temperature settings.
- HEAT - The system is in HEAT mode and furnace or heating system is activated.
- OFF - If the thermostat is in the OFF mode, both the heating and cooling systems will be turned off, and all programs and settings will be disabled.
- COOL - The system is in COOL mode and air conditioner or cooling system is activated.

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

 will flash when the heating system is running.

 will flash when the cooling system is running.

Temporary OVERRIDE

This function will maintain a constant temperature until the next program period starts.

If the system is in AUTO mode, only the currently active mode (heat or cool) setting will be changed.

- ➊ On the MAIN tab press the UP / DOWN arrows beside the preset temperature to override the temperature.
(*The OVERRIDE tab will display to indicate the OVERRIDE function is active.)
(*The new temperature will then remain the same until the next program starts.)
- ➋ To undo select CANCEL

OVERRIDE UNTIL (Hour)

If you wish to select a specific OVERRIDE OFF time (different than the start time of the next program period) you may select the OVERRIDE UNTIL feature.

- ➊ On the MAIN tab press the UP / DOWN arrows beside the preset temperature to change the temperature.
(The OVERRIDE tab will display)
- ➋ Then select the OVERRIDE tab (UNTIL will display above the clock)
- ➌ Set the OFF time with the CLOCK arrows.
(*The new temperature will now remain the same until the selected OFF time.)
- ➍ To undo select CANCEL.

*Note: When these features are activated the words OVERRIDE or UNTIL are displayed on the LCD. Therefore it is not necessary to select OK to activate these features.

HOLD Function

This function will maintain a constant temperature indefinitely.

- ❶ Select the HOLD tab (The HOLD symbol will flash to indicate HOLD is activated)
- ❷ Press the UP / DOWN arrows beside the preset temperature to change the temperature.
*(The new temperature will then remain the same indefinitely until you select CANCEL)

HOLD UNTIL (Day)

- ❶ If you wish to select a specific day to turn the HOLD feature off (rather than having it lasting indefinitely) you may select the HOLD UNTIL day feature.
- ❷ Select the HOLD tab (The HOLD symbol will flash to indicate HOLD is activated)
Select the HOLD tab again, (HOLD UNTIL will display below the weekdays) then select a WEEKDAY.
*(The selected day will be underlined)
*(The new temperature will then remain the same until midnight of the selected weekday)
- ❸ To undo select CANCEL.

*Note: When these features are activated the words HOLD or HOLD UNTIL are displayed on the LCD. Therefore it is not necessary to select OK to activate these features.

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 (USAGE/ACCU TAB)

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


- Press the USAGE tab once to view the hours of usage PER DAY. (The USAGE tab then displays ACCU)
 - Then press any weekday to view the usage hours for that day.
 - Press the ACCU tab again to view the USAGE THIS WEEK. (Accumulated hours starting from Monday)
 - Press the ACCU tab again to view the 7 DAY USAGE. (Accumulated hours of today plus the last 6 days)
- Press CANCEL any time to exit the usage mode.
- 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 approximately a certain number of hours. It is an indication that the furnace filter should be changed at this time. The default number of hour is 1000 hours but the hour amount can be changed in the OPTIONS tab. (See "Option Section")

Changing Batteries

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.

To replace batteries:

- Select OFF to turn the thermostat to the OFF mode.
- Remove the thermostat from its mounting plate (back cover) carefully.
- Remove the old batteries and install new ones very quickly.
- Replace 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.

Memory backup for the Programs and Thermostat Settings

The thermostat has built-in permanent memory which stores all the set programs and thermostat settings if ever the batteries go completely dead or if the batteries are removed from the thermostat for an extended period of time. When the batteries are re-inserted, the thermostat will recall and resume with all the stored programs and settings. However, the clock itself will have to be reset.

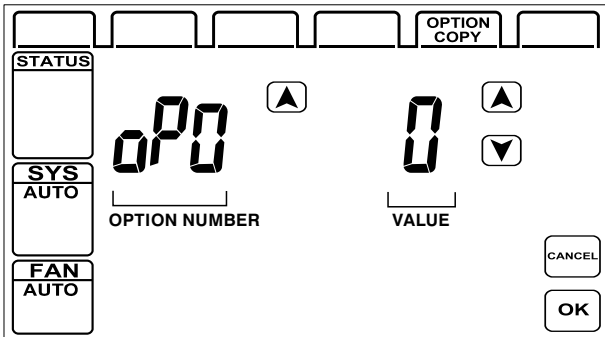
Backlight

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”.

Lock Function

To prevent accidental tampering of the programs or to clean the unit, select LOCK for 3 seconds. The LOCK symbol will flash to indicate the LOCK function is active. To unlock the keypad, select LOCK for 3 seconds again until a normal display returns.

OPTION SETTINGS (Select the OPTION tab and hold for 3 seconds)



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.) There are ten OPTION NUMBERS (oP0 to 0P9). Press the UP or Down arrows to select the OPTION and the VALUE. The variable settings are explained in the next few pages.

Optional Settings (Select the OPTION tab and hold for 3 seconds)

- 1) (oP0) - Daylight Savings Time
 - 2) (oP1) - Clock Format 12 or 24 hour
 - 3) (oP2) - LCD Backlight
 - 4) (oP3) - Key Click / Freeze Warning
 - 5) (oP4) - Pre-comfort Recovery
 - 6) (oP5) - Heat Cycle Rate
 - 7) (oP6) - HE/HG Fan Mode Selection (heating)
 - 8) (oP7) - Filter Change Reminder
 - 9) (oP8) - System Type
 - 10) (oP9) - °C or °F Display
-

1) (oP0) - Daylight Savings Time

Daylight savings time "ON" will advance your clock by one hour.

Value 0=DST OFF (Default)

Value 1=DST ON

2) (oP1) - Clock Format 12 or 24 hour

Choose value "1" for 24 hour clock. (12 hour is the default so no selection is required)

Value 0= 12 hour clock (Default)

Value 1= 24 hour clock

3) (oP2) - LCD Backlight

Select the amount of time the LCD light will stay on after a key is selected

Value 0= OFF (Backlight is always off)

Value 1= 2 Seconds (Backlight stays on for 2 seconds after a key is pressed) (Default)

Value 2= 8 Seconds (Backlight stays on for 8 seconds after a key is pressed)

4) (oP3) - Key Click / Freeze Warning

Choose whether or not a key click sound is audible when you press the LCD screen.

Choose whether or not a warning sounds if your ever home reaches freezing temperatures.

Value 0= OFF (Silent: Buzzer and clicks never sound)

Value 1= CLICK ON (Key click sound enabled, warning sound disabled) (Default)

Value 2= WARNING ON (Freeze warning buzzer enabled, key click sound disabled)

Value 3= CLICK AND WARNING ON (Both click and freeze warning buzzer enabled)

5) (oP4) - Pre-comfort Recovery

The thermostat will activate the furnace to begin blowing heat 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 pre-comfort cycle will range between a half hour to one full hour, depending on the number of degrees of temperature change required.

Value 0= OFF (Pre-comfort recovery disabled)

Value 1= ON (Pre-comfort recovery enabled)(Default)

6) (oP5) - Heat Cycle Rate

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

Value 0= OFF (Cycle rate disabled - fixed span)

Value 1= 3 cycles / hour

Value 2= 4 cycles / hour (Default)

Value 3= 6 cycles / hour

Value 4= 8 cycles / hour

7) (oP5) - HE/HG Fan Mode Selection

Depending on your home's heating system, you may need to change the HE/HG setting for the fan operation.

Value 0=HG Mode **(Use this setting for gas or oil-fired 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. (Default)

*Humidifier will not activate the fan

Value 1= HE Mode **(You must use this setting for electric furnace heating systems.** With this setting, the thermostat will turn the fan on immediately with the heating system.

*Humidifier will not activate the fan

Value 2= HG Mode (In this HG mode the humidifier will activate the fan)

Value 3= HE Mode (In this HE mode the humidifier will activate the fan)

8) (oP7) - Filter Change Reminder

Choose how many hours the furnace will be in use before filter change indicator will display.

Value 0= Disabled (Filter change icon will never display)

Value 1= 500 hours

Value 2= 1000 hours (Default)

Value 3= 2000 Hours

Value 4= 4000 Hours

9) (oP8) - System Type (Conventional Furnace)

Depending on your home's heating system, you may need to choose between a conventional furnace system or an alternative system.

Value 0= Conventional (Default)

Value 1= Alternative (O/B wire active when COOLING)

Value 2= Alternative (O/B wire active when HEATING)

10) (oP9) - °C or °F Display

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

Select value "1" for Fahrenheit, before setting any other thermostat settings.

Value 0= Celsius (Default)

Value 1= Fahrenheit

A stylized, light gray illustration of a pair of pliers on the left and a screwdriver on the right, positioned behind the main title text. The pliers are open, and the screwdriver has a flat head.

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 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

We recommend 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.

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

Compatibility


Generally, equipment with **low voltage** control is compatible with 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	No
Heat Pump/Multi-Stage	No

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

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 a Location for the 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 the 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

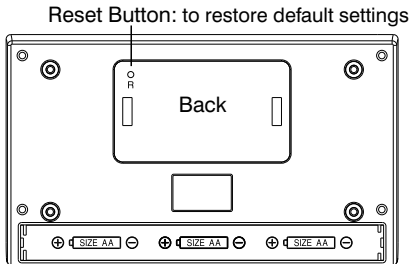
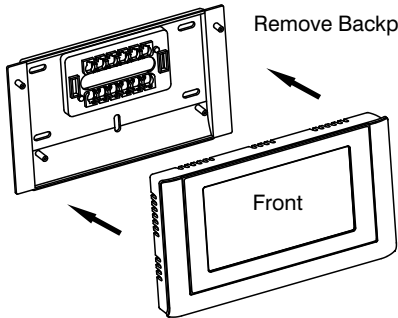
NOTE: WIRING COLORS ARE NOT ALWAYS STANDARDIZED, SO IT IS VERY IMPORTANT TO LABEL ALL WIRES ACCORDING THE LETTER DESIGNATION ON YOUR OLD THERMOSTAT.

(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.

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

Remove the thermostat backplate and install 3 "AA" size batteries (included). Ensure the batteries are installed in the correct direction.



Installing the Batteries and Selecting the Display in °C or °F

- Please consult page 27 for guidelines on how to install the 3 “AA” size batteries (included) into the thermostat following the polarity as marked. The LCD screen will immediately show the room temperature.
- Please consult page 4 for instructions on how to select °C or °F.

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.

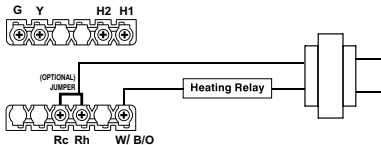
(SOFT RESET)If the display does not appear after installing the batteries, press the reset button on the back of the unit.

(HARD RESET)To clear all system settings and return the unit to factory defaults press and hold the **LOCK** tab, and at the same time, press and release the **RESET** button on the back of the unit.

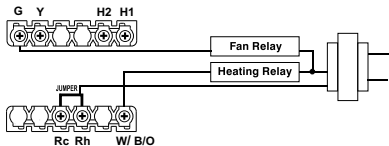
SEE OPTIONS SECTION: The thermostat has a number of **OPTIONS** which the user can change. **(NOTE: *Adjust these settings before programming the thermostat, because changing certain options will erase all programming.)**

Wiring Diagrams

2-WIRE HEATING



3-WIRE HEATING



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

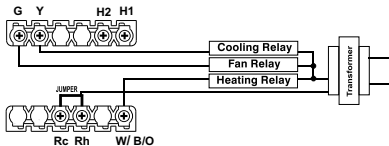
(Rc and Rh jumper is optional)

3 Wire Heating

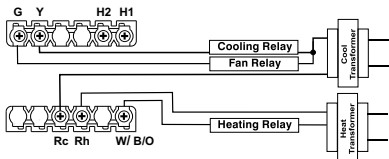
Rc / Rh - Common (Rc and Rh must be connected with jumper)

Wiring Diagrams

4-WIRE HEATING/COOLING



5-WIRE HEATING/COOLING



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)

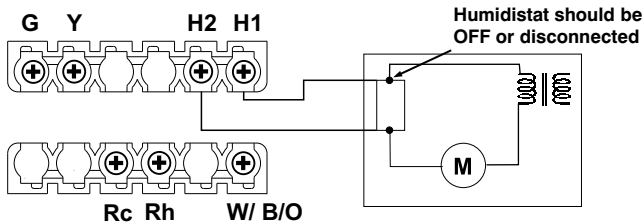
Rc / Rh - Common (wire separately, jumper must not be installed)

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.

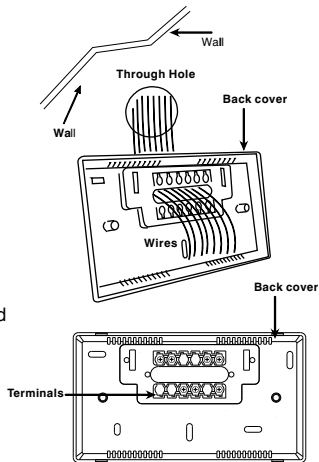
Note: H1 and H2 terminals are non polarized and there is no function difference between H1 and H2.



Connecting the Wires to the Terminals

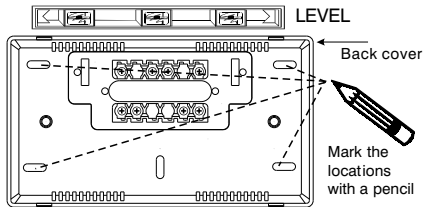
Connect the previously labeled wires to the corresponding terminals, matching the designations. Use a screwdriver to loosen the terminal, wrap the wires around the terminal then tighten to securely fasten the wires. Make sure the wires do not touch or short-circuit with other terminals.

- Depending on your heating/cooling equipment, you may need to connect between 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 Back Cover of the Thermostat

- The back cover should be mounted horizontally with the terminals on the top.
- Thread the existing wiring through the big center hole from the back and set the back cover horizontally on the wall.
- Select two appropriate 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 using the two screws. Make sure the metal terminals are on the top.
- 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.



Specifications:

Number of programs: 7 Day with 4 settings per day

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



Temperature display range: 0 – 50°C (32 – 122°F)

Humidity setting range: 20 to 70%




Humidity display range: 20 to 95%

Battery: 3 x “AA” size batteries

TROUBLESHOOTING GUIDE

PROBLEM	SOLUTION
LCD screen is blank.	<ul style="list-style-type: none">- 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.	<ul style="list-style-type: none">- This is an indication that the batteries are running low. Replace with fresh alkaline batteries. <p>Note: We recommend to have the batteries replaced at least once a year even if the battery symbol is not flashing.</p>
Heat will not come on.	<ol style="list-style-type: none">1) Check and ensure that the thermostat is set to the HEAT or AUTO 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  symbol will be animated.

PROBLEM**SOLUTION**

Heat will not come on but the  symbol is animated.	<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. (see optional settings) 3) If the heat still does not come on, check the wiring installation again.
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  symbol will be animated.
Air conditioning will not come on but the  symbol is animated.	<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**SOLUTION**

<p>Thermostat is set on AUTO mode, but the thermostat does not seem to automatically change-over from HEAT to COOL or vice-versa.</p>	<p>The thermostat has a built-in safeguard time delay of 30 minutes to prevent undesirable change-over sequences from HEAT to COOL or COOL to HEAT. For example, if the thermostat was just running the cooling system, it will take at least 30 minutes before it changes to heating. You may override this manually by pressing MODE to change the operation to HEAT or COOL only.</p>
<p>While adjusting the program temperature in the HEAT mode, the program temperature in the COOL mode also changes by itself; and/or vice-versa</p>	<p>This will occur when you set the HEAT and COOL program temperatures fairly close to one another. To prevent a mistake or overlap in temperature settings, the thermostat automatically restricts the two temperature settings from getting within 3°C (6°F) of one another. The COOL temperature setting will always be at least 3°C (6°F) higher than the HEAT temperature setting. For example, if the initial COOL program temperature was set at 24°C (75°F) and you decide to adjust the HEAT program temperature to 24°C (75°F), the thermostat will automatically push the COOL program temperature up to 27°C (81°F) to prevent overlapping.</p>
<p>Cannot change the thermostat scale from °C to °F or vice-versa.</p>	<p>Selecting the temperature scales is a one-time start-up process. After the first battery installation, you must HARD reset the thermostat and choose the desired display in °C or °F. Otherwise, you CANNOT change the temperature scale (°C or °F) later on unless you perform another HARD reset which will clear all the programs and thermostat settings.</p> <p>To perform a HARD reset and select °C or °F, first press reset and hold the LOCK key at the same time. The LCD screen will blank out momentarily. Once the display reappears, then release the LOCK key. To select °F, select option 10 in the Optional Settings tab. For °C, do not press any buttons and wait until the temperature display stops flashing.(°C is the default setting)</p>

Limited 5-year Repair Warranty

This product carries a five (5) 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, return it, with a dated proof of purchase, to the retailer from which you purchased it

Attention:

IT IS STRONGLY RECOMMENDED TO HAVE A CERTIFIED ELECTRICIAN ON SITE TO ENSURE THE SAFE INSTALLATION OF YOUR THERMOSTAT. The manufacturer assumes no responsibility for improper wiring, or any resulting damages. Installation by a non-professional automatically voids the warranty.

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

Customer Service Centre
1-888-468-6876

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