

24 Volt Multistage Heat / Cool & Heat Pump
thermostat with 1 Speed Fan Control
Auto Changeover - Programmable

Congratulations on the purchase of your new Electronic Thermostat!

Your new Smart Temp SMT thermostat has been built using the best components and design philosophy. As a consequence of this, if properly installed your new electronic programmable thermostat will provide you with many years of trouble free and reliable service.

The Smart Temp SMT has been designed to be attractive, highly reliably and simple to use. Please take the time to read these simple instruction to familiarise yourself with the function and features offered in this product.



To turn the System On

With each press of the "On/Off" button, the SMT will toggle between "On" and "Off" modes. The SMT will resume at the appropriate program for the current time of day.

Programming your SMT

Your SMT thermostat will automatically adjust your homes temperature up to 4 times per day to suit your individual living requirements. For clarity, these times (or programs) are identified as

Wake - the temperature you would like to wake to each morning.

Day - the temperature you would prefer you home to be during the day.

Return - the temperature you wish your home to be when you return at the end of the days work.

Sleep - The temperature you wish your home to maintain while you sleep.

Programming the SMT is an extremely simple process and requires the use of the "Prog" button (used to start the Programming process and advance through the various steps) and the Temp "+" and "-" buttons to adjust the necessary values (times and temperatures for example).

Setting the Clock



Diag 1

Note: Your SMT thermostat will automatically resume normal function if there are no buttons pressed for approximately 30 seconds. It is recommended that once you start to programme your SMT that you do not pause or you may have to commence the programming procedure from the beginning.

Step 1: Press the "Prog" button once and the display will change as in Diag 1. The word "CLOCK" will show (to indicate that we are now setting the real time clock to the current time and day). The hour will be flashing to indicate that this value can be adjusted if necessary by using the "+" & "-" buttons. Set the hours value to the correct time.

Step 2: Press the "Prog" button again and now the minutes display will flash indicating that if necessary the minutes value can be adjusted by using the "+" & "-" buttons. Set the minutes value to the correct time.

Step 3: Press the "Prog" button again and now the Day display will flash indicating that if necessary the current Day can be adjusted with the "+" & "-" buttons. Set the Day value.

The Real time clock was just set using 3 basic button presses. Programming the SMT to automatically adjust the homes temperature is as equally a simple process. Simply press the "Prog" button to select the value that requires adjustment (if necessary) and then the "+" & "-" buttons to adjust flashing digit to the desired value.

Optional Remote Control

Operate your SMT from a remote location using the optional Infra Red Remote control. Ideal for the elderly, disabled or for those who require a more convenient control method.



Setting the Program

Step 1: If you have not just set the clock or do not need to set the clock - press the "Prog" button 3 times to move past the "Clock" set section of the programming procedure (Being the Hours, minutes and day adjustments).

Step 2: The SMT display will be as shown in Diag 2 indicating that this "Wake" adjustment is for the 5 weekday Hours as indicated by the Hour segments flashing as well as the Mo (Monday) to Fr (Friday) display being shown. Also, the SMT confirms that this is the Wake program by showing the word "Wake" on the LCD. Pressing the "+" or "-" button adjust the hours that you wish the wake time to commence.



Diag 2

Step 3: Press the "Prog" button again and now the Minutes segments will be flashing, indicating this is the adjustment for minutes for the "Wake" program Mo (Monday) to Fr (Friday). By pressing the "+" or "-" button adjust the minutes to the value that you wish the wake time to commence.



Diag 3

Step 4: Again pressing the "Prog" button will advance you the next step in programming your SMT, setting the Heating and Cooling temperatures for the weekday "Wake" program. That is, the temperature you wish you home heated to (if it is cold out) or cooled to (if it is warm out) at the Wake time you have just set. Noting Diag 3 you will see that the SMT is showing that the "Cool" temperature can be adjusted. Again, by using the "+" & "-" buttons this value can be set.



Diag 4

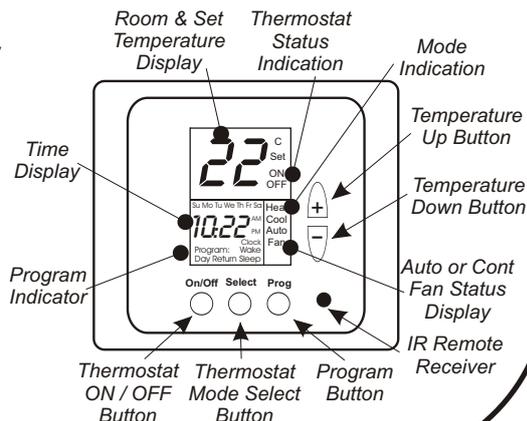
Step 5: Pressing the "prog button again, the SMT will permit adjustment for the heating temperature for the weekday "Wake" program. Adjustment of this value is done with the "+" or "-" buttons - Diag 4.

Note: The Heating set point must be at least one deg Celsius below the cooling set point. Moving the heating set point to high, will "push" the cooling set point up ensuring the minimum temperature separation.

The remainder of the programming process is completed by simply repeating this procedure, pressing the "Prog" button to advances you through Hours, Minutes, Heat Temp, Cool temp for the "Day" program, then Hours, Minutes, Heat Temp, Cool temp for the "Return" program, then the Hours, Minutes, Heat Temp, Cool temp for the Sleep program. Once the weekday program has been set, you can continue the programming for the Saturday and Sunday Wake, Day, Return & Sleep Programs.

To review your program, simply press the "Prog" button to advance you through the various settings

Tip If at any time you wish to exit programming mode and return to normal mode, press the On/Off button twice.



Understanding the Mode of Operation

Your SMT thermostat will automatically control your Heating system, your cooling system and the fan speed for the heating and cooling system.

Most users will prefer to let the SMT operate fully automatically, switching between heating and cooling and regulating fan speeds to automatically maintain the comfort levels you have previously set. Some users however may wish to manually switch between heating and cooling modes, or manually control the fan speed.

By using the "Select", the various operational modes such as heating or cooling can be adjusted, as well as fan speeds.

The various modes are described below

To Adjust the Set (or desired) Room Temperature

When no buttons are pressed, the LCD indicates the current room temperature. When the up (+) or down (-) buttons is first pressed the LCD will flash rapidly and indicate the Set (or desired) room temperature. The word "SET" will also be displayed in the LCD to confirm the set temperature is being adjusted.

Heat Only Mode: In heat mode, the thermostat will only activate the system heating when the room temperature falls below the set (or desired) room temperature. Heat will be displayed in the LCD to indicate this mode is set. When the SMT is calling for the system to heat, the word "HEAT" will flash slowly in the LCD. In this mode, the SMT will not turn on the cooling system regardless of how warm the room becomes.

Cool Only Mode: In cool mode the thermostat will only activate the system cooling when the room temperature raises above the set (or desired) temperature. Cool will be displayed in the LCD. When the SMT is calling for the system to cool, the word "COOL" will flash slowly in the LCD. In this mode, the SMT will not turn on the heating system regardless of how cool the room becomes.

Auto Season Change over Mode: In Auto mode the thermostat will automatically activate the system heating or cooling to maintain the set (or desired) heating and cooling temperatures. The LCD will indicate Auto Season Mode by displaying both "Heat & Cool" in the LCD. When the SMT is calling for the system to heat or cool the appropriate word will flash slowly in the LCD.

Fan only Mode: In fan only mode the SMT will only run the system fan regardless of the set and room temperature. The SMT will not attempt to control the Air Conditioning System heating or cooling functions.

Fan only mode is typically used to improve building ventilation and not to control room temperature.

Continuous Fan Mode

In Continuous Fan mode the system fan will run 24 hours per day, but unlike the Fan Only mode described above the SMT will also control the room temperature as dictated by the Heating, Cooling or Auto modes set above. The SMT will indicate that this mode is active by displaying the word "Fan" in the LCD.

Auto Fan Mode

In Auto Fan mode the SMT will only turn on the system fan on when there is a call for system heating or cooling and off again when the room is at the desired temperature. The LCD will indicate that this mode is active by displaying the words "Auto Fan" in the LCD.

Key Board Lock

Your SMT has the ability to lock the keyboard from an authorised tampering. Pressing and holding the mode button for 15-20 seconds will lock the thermostat. Repeat this procedure to unlock the thermostat. "LC" will be displayed when the keyboard is locked and a button has been pressed. Note - this function will NOT work if the set temperature is 10Deg C (Service mode).

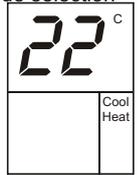
Specifications

| | |
|----------------|----------------|
| Range: | 5° to 30° c. |
| Resolution: | 1.0°c |
| Accuracy: | 0.3°c |
| Load rating: | 2 Amps. |
| Memory Backup: | 14 hours |
| Voltage: | 24VAC. |
| Connectors: | Screw type. |
| Material: | PC/ABS |
| Size: | 80 x 90 x 22mm |
| Weight: | 145g |
| Warranty: | 1 years RTB |
| I.R. Receiver: | Installed |

Setting the Mode of Operation

Like the programming steps previously explained, adjusting the various operational modes are accomplished equally as simply and with a minimum of button presses.

Step 1: Pressing the "Select Button" once will enter the mode selection menu. The LCD will look similar that shown in Diag 5. Pressing the "+" or "-" buttons will permit you to toggle between Fan only mode, cool only mode, Heat only mode or Auto Mode (Heat/Cool Displayed).



Diag 5

Step 2: Pressing the "Select Button" again will permit you to select either Fan or Auto Fan modes with the "+" & "-" buttons. Diag 6 shows a typical LCD.



Diag 6

Pressing the "select" button again returns the SMT to normal mode. The new settings will now take effect.

Program Override Mode

Your SMT thermostat will permit you to temporarily override your pre programmed temperatures to accommodate a temporary change in circumstances, such as spending a day at home during the week.

In normal mode, press the "+" or "-" buttons will permit you to temporarily adjust the current programs Cool and Heat Temperature. These changes will take effect immediately and last until the next program change when they will be discarded. Diag 7

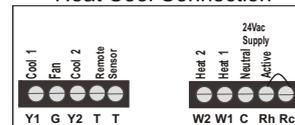


Diag 7

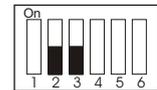
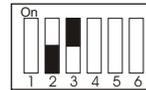
Wiring Diagrams and Dip Switch Configuration

Heat Cool Connection

Diag 8



Heat / Cool System (Gas Heat Fan Controlled by Plenum) Sw 2 OFF - Sw 3 Off
Heat / Cool System (Electric Fan ON with Heat Call) Sw 2 OFF - Sw 3 ON



Black Denotes Switch Position

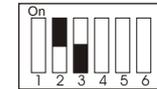
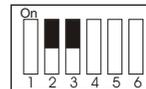
***Default Position**

Heat Pump Connection

Diag 9



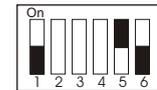
Heat Pump System (Reversing Valve Energised in Heat) Sw 2 ON - Sw 3 ON
Heat Pump System (Reversing Valve Energised in Cool) Sw 2 ON - Sw 3 Off



Sensor Configuration

Internal Temp Sensor Sw 1 & 6 ON - Sw 5 Off

Remote Temp Sensor Sw 5 ON - Sw 1 & 6 Off



***Default Position**

Dip Switch #4 Time Delay

On= No Delay

Off = 3 Min Time Delay