

Model SMT-200

Operating Instructions

24 Volt Two Stage Heat Pump / Heat Cool thermostat
Auto Changeover - Non 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" button, the SMT will toggle between "On" and "Off" mode. The SMT retains in memory the last temperature set point and operational mode. These values are used when the SMT is turned on.

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.

When the desired set temperature is shown and there are no further button presses the LCD will stop flashing and again indicate the current room temperature. The new desired room temperature is now active and the SMT will control the Air Conditioning system to archive this new desired temperature.

To select the System Modes

Pressing the "Mode" button will permit you to select the operational mode of the thermostat. Each press of the mode button cycles between Heat only mode, Cool only mode, Auto mode (Indicated by the words Heat & Cool in the LCD) or fan only modes.

Heat 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 Air Conditioning equipment to cool the room.

Cool 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 Air Conditioning equipment to heat the room.

Auto Season Change over Mode: In Auto mode the thermostat will automatically activate the system heating or cooling to maintain the set (or desired) temperature to within +/- 0.8 Deg C (approx). For example, if the set temperature is 21 deg C, the **SMT** will activate the system cooling when the room temperature raises to 22 deg C and activate the system heating if the room temperature falls to 20 deg C. 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.

Emergency Heat Mode (EH)

Selecting this mode disables the use of compressors in heating when in Heat Pump mode. Heating is controlled only via W2 (AUX Heat) terminal . To select this mode Press and Hold the Fan button for 5 Second, the Display will show "H" using the Up or Down button you can toggle between "H" or "EH" modes. (Default is "H" normal heating operation with use of compressors, Y1 & Y2)

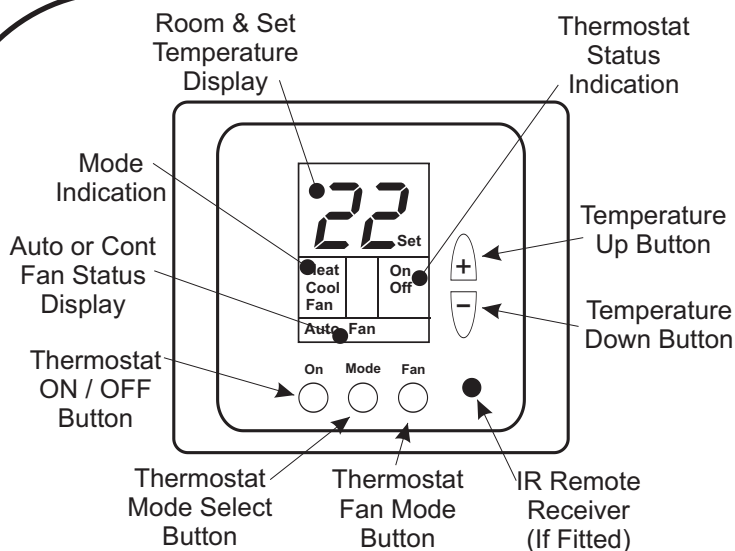
To select the Fan Mode (Accessed with the "Fan" Button).

Continuous Fan Mode

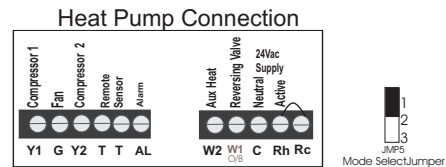
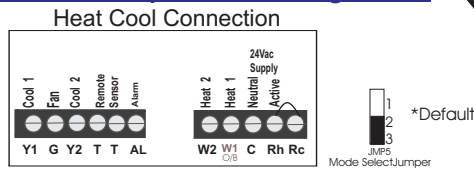
In Continuous Fan mode the system fan will run 24 hours per day, but unlike the Fan Only mode described above the SMT will also control the room temperature as dictated by the Heating, Cooling or Auto modes set above. The SMT will indicate that this mode is active by displaying the word "Fan" in the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

Auto Fan Mode

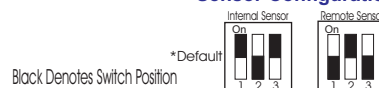
In Auto Fan mode the SMT will only turn on the system fan on when there is a call for system heating or cooling and off again when the room is at the desired temperature. The LCD will indicate that this mode is active by displaying the words "Auto Fan" in the lowest section of the LCD.



Wiring Diagrams and Dip Switch Configuration



Sensor Configuration



"EC" or Economy Comfort Mode.

Your SMT thermostat is fitted with a unique Economy Comfort or Holiday Function

The EC function sets the thermostat mode to Auto changeover mode and limits fan speed to low (Auto fan mode). In EC mode the thermostat will activate the system heating when the room temperature falls below 10°C and system cooling when the room temperature is above 30°C.

The EC mode is ideal for situations where you do not wish the home to overheat or freeze during holidays or long periods of unattendance.

To activate EC mode simply press and hold the On/Off button for 5 seconds. The letters "EC" will be displayed on the thermostat to confirm this function is active.

To turn the EC mode off simply press and hold the On/Off button for 5 seconds. The thermostat display will return to normal.

Specifications

Range:	5° to 30° c.
Resolution:	1.0°C
Accuracy:	±0.3°C
Dead Band:	±0.8°C
Stage Delay:	1.2° c
EC Settings:	10°C & 30°C
Load rating:	2Amps.
Voltage:	24VAC.
Connectors:	Screw type.
Material:	PC/ABS
Size:	80 x 90 x 22mm
Flammability:	UL 94V-0
Weight:	145g
Warranty:	1 years
I.R. Receiver:	Optional
S.W rev	ESLC17 8D28

To access the Service Mode (Service Personnel only)

When commissioning the SMT thermostat ensure the following setting match the requirements of the Air Conditioning equipment being used.

To enter the service mode and make adjustments follow the steps below

1. Adjust the set temperature to 10 deg C using the Temp (-) button.
2. Press and hold the mode button for 5~8 seconds, the LCD will display the word "Cool" and a numeric value in the display (Default is 10). Using the Temp (+) or Temp (-) adjust this value (if required) to indicate the Minimum permitted temperature you wish the user to be able to select.
3. Press the mode button again, now the LCD will display the word "Heat" and a numeric value in the display (Default is 30). Using the Temp (+) or Temp (-) adjust this value (if required) to indicate the Maximum permitted temperature you wish the user to be able to select.
4. Press the mode button again, now the LCD will display the letters "C" or "F". Using the Temp (+) or Temp (-) adjust this value (if required) to indicate the desired temperature display format. Deg Centigrade (C) or Fahrenheit (F).
5. Press the mode button again, now the LCD will display the letters "EO". One letter will be flashing (Selected). Using the Temp (+) or Temp (-) adjust the flashing value to the required parameter (if required). "E" Electric mode if you wish the thermostat to call the equipment fan in Heat mode. In "O" Oil / Gas mode the thermostat will let the equipment call its own fan in heat mode.
6. If the Heat Pump / Heat Cool hardware selector jumper is in Heat Pump mode these additional parameters can be set by pressing the mode button again. The letters "HC" will appear in the display. One letter will be flashing (Selected). Using the Temp (+) or Temp (-) adjust the flashing value to the required parameter (if required). "H" Reversing valve will be energised in Heat mode, "C" indicates the reversing valve will be energised in Cool mode.
7. Pressing the mode button again. The numbers "30" will appear in the display. One number will be flashing (Selected). Using the Temp (+) or Temp (-) adjust the flashing value to the required parameter (if required). "3" indicates a 3 minute time delay between compressor calls is active, "0" indicates there will be no time delay period between compressor calls and assumes the equipment has its own short cycle protection.
Note, this value resets to "3" if the power fails.

Note: Please return the thermostat temperature settings to normal (i.e. Not 10 deg C)

Note: even though you may have set a Minimum & Maximum control temperature to values other than the default 10 and 30 deg respectively, the user can still select a desired temperature outside of the controlled range, however the SMT 200 will stop the air conditioning system at your control limits

Key Board Lock

Your SMT has the ability to lock the keyboard from unauthorised 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).

Alarm output

The SMT has an Alarm terminal that will activate if the room temperature falls below 6C. The Alarm output will automatically reset above 8 deg C.