



Model FMT24-HC22

Operating Instructions

**24 Volt Heat Cool Thermostat
Two Stage Heating Two Stage Cooling
Auto Changeover - Non Programmable**

**Congratulations on the purchase of your new
Electronic Thermostat!**

Your new Smart Temp 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 years of trouble free and reliable service.

The Smart Temp FMT 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 FMT will toggle between on and off mode. The FMT retains in memory the last temperature set point and operational mode. These values are used when turned on.

To Adjust the Set (or desired) 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 change to indicate the Set (or desired) temperature. The word "SET" will also be displayed in the LCD to confirm the set temperature is being adjusted.

When the desired 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 temperature is now active.

To select the System Mode

First press the "Select" button (the current mode will start to flash rapidly in the LCD) and then by pressing the up (+) or down (-) buttons the FMT will toggle between Heat, Cool, Heat & Cool (Auto season change over) or fan only modes. Once the desired mode is displayed in the LCD stop pressing buttons, after a few seconds the display will stop blinking and the new desired mode is set.

Heat Mode: In heat only mode, the thermostat will only activate the system heating when the room temperature falls below the set (or desired) temperature. Heat will be displayed in the LCD to indicate this mode is set. When the FMT is calling for the system to heat, the word "HEAT" will flash slowly in the LCD.

Cool Mode: In cool only 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 FMT is calling for the system to cool, the word "COOL" will flash slowly in the LCD

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 1 Deg C. For example, if the set temperature is 21 deg C, the FMT will activate the system cooling when the room temperature raises to 22 deg C or activate the system heating if the room temperature falls to 20 deg. The LCD will indicate Auto Season Mode by displaying both "Heat & Cool" in the LCD. When the FMT is calling for the system to heat or cool the appropriate word will flash slowly in the LCD.

Continuous Fan only Mode: In continuous fan only mode the FMT will only run the system fan regardless of the set and room temperature. The FMT will not call for system heating or cooling. Fan only mode should be used to improve building ventilation.

To select the Fan Mode.

The FMT can control the system fan in a number of ways. In addition to the previously described Continuous Fan Only Mode (where the system fan will run continuously without a call for system heating or cooling), the FMT can also control the System Fan to run only during a call for heating or cooling, or to run continuously AND call for system heating and cooling when required. To select the appropriate Fan mode press the "Select" button twice, (or until the words "Fan" or Auto Fan" are displayed in the lowest section of the LCD - These words will be flashing quickly). Pressing the up (+) or down (-) buttons will toggle the FMT between "Fan" and "Auto Fan" mode. Once the desired mode is displayed in the LCD, stop pressing buttons and after a few seconds the display will stop blinking and the new desired fan mode is set.

Fan Mode

In Fan mode the system fan will run continuously, however the FMT will also control the room temperature as dictated by the Heating, Cooling or Auto modes described above. The FMT 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 FMT will only turn on the system fan when there is a call for system heating or cooling. The LCD will indicate that this mode is active by displaying the words "Auto Fan" in the lowest section of the LCD.

Advanced functions

The FMT is capable of a number of advanced functions that can be accessed and adjusted through the advance function menu. It is highly recommended that unless you are familiar with HVAC terminology or wiring that you do not access these functions or make changes to these settings. Incorrect settings may cause damage to the air conditioning system or the thermostat.

The advanced function mode will permit the changing of the following parameters in the following order.

Minimum Cool Set Point: This setting is the lowest cooling temperature the FMT will accept REGARDLESS of the users set temperature as described on the previous page. This feature may be useful where you wish to control energy usage by limiting the control range of the FMT. The Default setting is 10 deg C.

Maximum Heat Set Point: This setting is the highest heating temperature the FMT will accept REGARDLESS of the users set temperature as described on the previous page. This feature may be useful where you wish to control energy usage by limiting the control range of the FMT. The default setting is 30 deg C

Temperature Display Mode: The FMT will indicate the set and room temperatures in deg C or Deg F. The default display is Deg C.

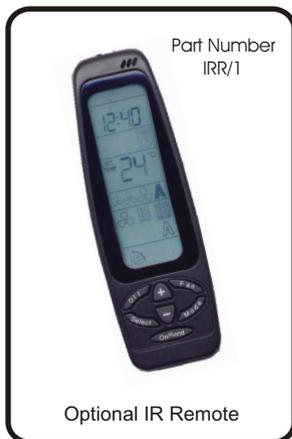
Electric or Oil (Gas) control: When in Electric mode, the FMT will call for fan with a call for heat or cool. In Oil (Gas) mode the FMT will let the Oil or Gas Furnace make it's own fan call (i.e. The FMT will not call for fan). The default setting is "E" (electric)

System Time Delay: To prevent damage to the air conditioning system the FMT will prevent rapid cycling between heat & cool modes via a built in 30 second time delay mode. Should it be required, this protection feature can be turned off.

The FMT will return to normal operation mode after 5 seconds of the last button being pressed. It is therefore important that you make any adjustments quickly to avoid having to restart at the beginning of the advanced function mode.

To access the Advance Functions Menu

1. Adjust the set temperature to 10 deg C.
2. Press and hold the "Select" button until the word "COOL" is shown and the temperature display flashes in the LCD.
3. If you wish to adjust the minimum cool set point use the up (+) or down (-) buttons to adjust, otherwise go to step 4.
4. Press the select button, "Heat" will be displayed and the temperature will flash in the LCD. If you wish to adjust the maximum heat set point use the up (+) or down (-) buttons to adjust, otherwise go to step 5.
5. Press the "select" button, the letter "C" or "F" will be displayed flashing in the LCD. Press the up (+) or down (-) buttons to toggle between Deg C or Deg F display mode. Otherwise go to step 6
6. Press the "Select" button and "EO" will be displayed on the LCD. One letter, either the "E" or "O" will be flashing (Selected) Pressing the up (+) or down (-) buttons will toggle between "E" Electric or "O" oil (gas) mode, otherwise fo to step 7.
7. Press the "Select" button and "30" will be displayed on the LCD. One number, either the "3" or "0" will be flashing (Selected). Pressing the up (+) or down (-) buttons will toggle between "3" 3 minute time delay or "0" 0 minutes time delay mode, otherwise fo to step 8.
8. Press the "Select" button or wait longer than 5 seconds to return to normal mode.
9. Re adjust the set (or desired) temperature to its original value.



Heat / Cool Connections

Y1	Cool
Y2	Cool 2
W1	Heat 1
W2	Heat 2
G	Fan
RH	24v Active Heat
RC	24v Active Cool
C	24v Neutral

Typical Connection

