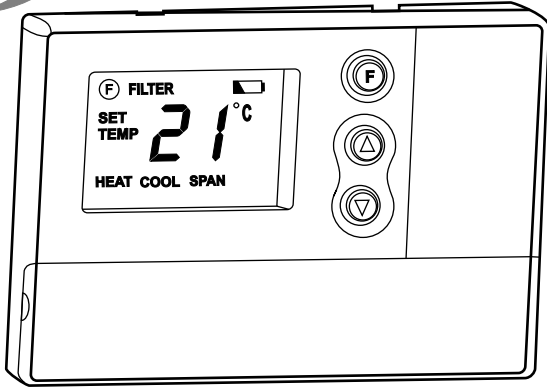# Smart Temp

Model 44-233
Electronic Manual Thermostat
Owners Manual

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 result, if properly installed your new electronic programmable thermostat will provide you with years of trouble free and reliable service.

The Smart Temp 44-233 has been designed to be attractive, highly reliable 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.

Your Smart Temp model 44-233 is a non programable thermostat capable of controlling both Heating & Cooling systems. As this thermostat is non programable it does not require a complicated set up procedure. Simply select your required mode of operation and set your desired temperature. The 44-233 will then control your Heating or Cooling system to maintain your set temperature.

Please note: Even though this thermostat is capable of controlling both a heating and a cooling system, you may not have a heating or cooling system installed in your home.

Selecting Mode

Your thermostat has 3 modes of operation as selected by the "Mode" switch. These functions are described below. The mode switch is found under the lower flap - see Fig 2 below.
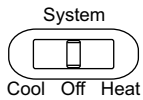
Off
In this position your thermostat will not control your heating or cooling system regardless of your set temperature and the room temperature.
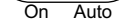
Heat
When "HEAT" is selected your thermostat will turn on your home heating system if your room temperature falls below your heating set temperature. When your thermostat calls your heating system to operate and supply warm air into your home, the word "HEAT" will be shown in the LCD to confirm heating is required. If the word "HEAT" flashes in the LCD there is a 4 minute system time delay in progress. There is NO control of your cooling system in this mode.

Cool
When "Cool" is selected your thermostat will turn on your home cooling system if your room temperature raises above your cooling set temperature. When your thermostat calls your cooling system to operate and supply cooled air into your home, the word "COOL" will be shown in the LCD to confirm cooling is required. If the word "COOL" flashes in the LCD there is a 4 minute system time delay in progress. There is NO control of your heating system in this mode.

Selecting Fan Operation

Your thermostat can control your heating or cooling system fan in two ways as described below. The fan switch is found under the lower flap - see Fig 2 right.

Auto
In this position the fan will turn on and off when the heating or cooling turns on and off. This is the recommended position for this switch.

On
In this position the Heating and Cooling systems fan will operate continuously, 24 hours a day 7 days a week. This mode is ideal when you wish to improve the ventilation in your home without changing the temperature.

Setting your desired Temperature
To adjust your desired temperature first select the operational mode, either heating or cooling.

Next, press and hold either the up button or the down button. The LCD will show the words "SET TEMP" and either "HEAT" or "COOL". The set temperature will then start to move in the required direction.

When your desired temperature is shown in the LCD take you finger from the button and the LCD will return to the normal display. Your new set temperature is active.

If heating or cooling is desired the word HEAT or COOL will be shown in the LCD to confirm this function is required.

LCD Back light
The LCD will illuminate when ever a button is pressed to assist with the adjustment in poorly lit areas. The back light will stay on for 7 seconds after the last button has been pressed.

Low Battery Warning
Your thermostat operates on two ALKALINE "AA" batteries. When these batteries are low the back light function is suspended and the low battery symbol flashes. Replace the batteries as soon as possible when this symbol is noted. If no action is taken within a few days the thermostat will shut down until the batteries are replaced.
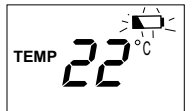
Filter Warning
The 44-233 records your heating and cooling usage. When the total accumulated run time reached 400 hours the filter warning symbol flashes to remind you to clean your return air filter if installed.
Press ands hold the filter button for 5 seconds to reset this counter.

Error Messages
If your thermostat displays E1, E2, Hi or Lo replace your batteries with 2 new "AA" Alkaline batteries even if you have just replaced them. If the problem persists please call your installer or Smart Temp Australia P/L
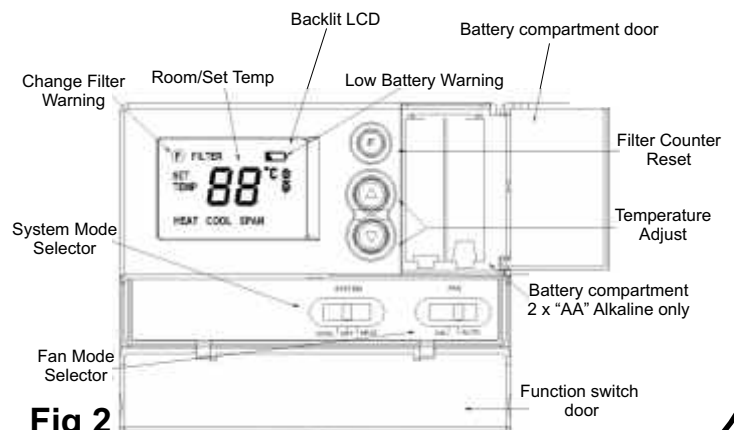
Fig 2

Change Filter Warning — Room/Set Temp — Backlit LCD — Low Battery Warning — Battery compartment door

System Mode Selector — Filter Counter Reset — Temperature Adjust — Battery compartment 2 x "AA" Alkaline only

Fan Mode Selector — Function switch door

Installation Instructions

Installation

Remove the wall plate from the rear of the thermostat by pressing the release tab on the base and or top of the thermostat.

Position the wall plate on the wall and pull the wires through the large opening. Mount the wall plate with the supplied wall anchors or other suitable means, ensure the thermostat base is level to add to the appearance of the installation.

Referring to the supplied wiring diagrams, connect the system wires to the appropriate terminals on the thermostat base plate. Ensure the screws are tightened securely to prevent potential future problems caused by loose connections. Push excessive wire length back into the wall cavity.

If the opening in the wall is large there may be a potential for a draft to blow through the wall cavity and onto the temperature sensor on the back of the thermostat. To ensure correct thermostat operation it is important to block this hole. Failure to do so may cause inaccurate or erratic system performance.
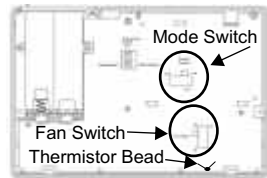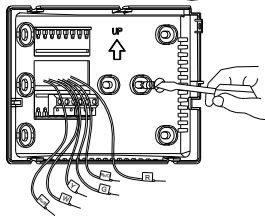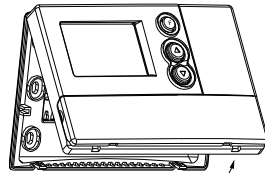
On the back of the 44-233 thermostat there are two clearly marked selector switches. These switches are used to select the type of system the thermostat is controlling (heat pump or heat with add on cool) and whether the fan is called by the thermostat (HE) or by the gas heater (HG) in heating mode.

These switch locations are shown in the diagram above. Adjust these switches to their correct position to suit the system this thermostat is controlling.

Snap the two halves of the thermostat back together taking particular care to align the thermostat pins with the clips on the base plate of the thermostat. Also, care must be taken that while snapping the thermostat halves together the small black thermistor bead is not crushed between the two case halves.

Test all thermostat modes by both raising the set temperature above the ambient temperature in heat mode and verifying correct heater operation. Next lower the set temperature to below the ambient temperature with the thermostat in Cool mode verify the correct operation of the equipment.

Note: This thermostat has a 4 minute compressor protection delay. When the compressor stops the thermostat will not restart the compressor for 4 minutes. When the delay is active, the word "Heat" or "Cool" will flash in the LCD.

System Span Settings

The 44-233 thermostat cycles the heating and cooling with a 1C hysteresis .(Span setting 2). Should you wish to reduce or increase this settings the "Span" value can be changed.

Press and Hold both the Temp + and Temp - buttons until the LCD shows "Span X". Use the Temp + or Temp - button to enter a new setting. To save the settings dDon't touch any buttons for 5 seconds to exit this mode.

  Span 1 = Fast Cycle rate, heating & cooling runs shorter.
  Span 2 = Default, optimum value.
 Span 3 = Slow Cycle rate, heating & cooling runs longer.

The Smart Temp 44-233 thermostat has been designed to switch voltages up to 24volt only. Should you wish to control mains (240VAC) equipment the optional Smart Pak (P/N SP - 03N) interface will be required.

Please contact your place of purchase or Smart Temp Australia should this interface be required.
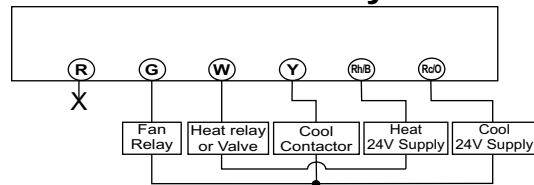
The Smart Temp 44-233 is a battery powered thermostat and does NOT require the use of a neutral. If this thermostat is replacing an existing equipment powered thermostat, disregard the neutral wire.
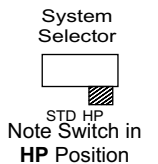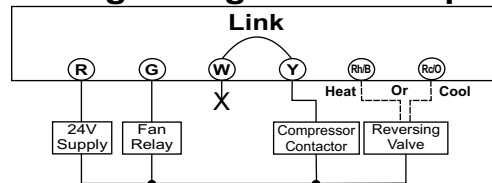**Failure to heed this warning WILL result in thermostat damage.**
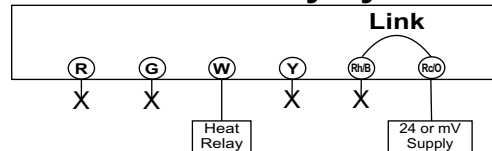
4 Wire Heat/Cool System
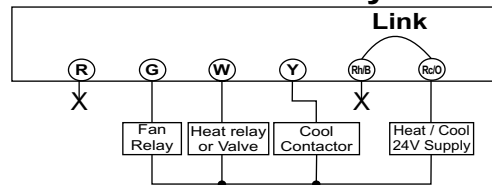
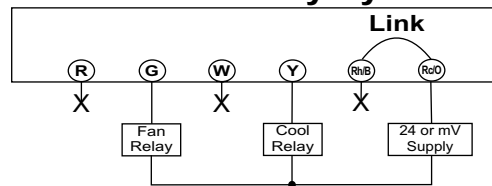### 5 Wire Heat/Cool System

Single Stage Heat Pump

2 wire Heat only System

3 wire Heat only System

3 wire Heat only System