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SMT-200 rev3

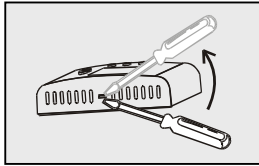
Owner's Manual – Installation and Operating Instructions



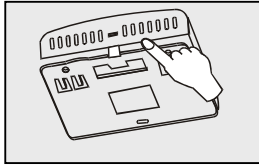
 Please read this manual carefully before installation and use.

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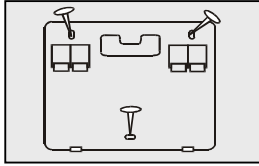
1. Installation Instructions



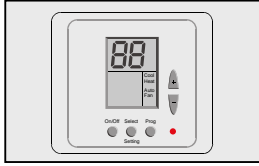
Separate the front panel from back panel by depressing the tongue located in the top of the unit.



Pull the back panel out.



Line the back panel up against the wall or flat surface. Install three screws as required.



Make electrical connections as shown on enclosed electrical wiring diagram.

Install the cover to the back panel; first the two tabs on the bottom and then the top tongue. Push until tight against the wall.

2. Wiring Connections

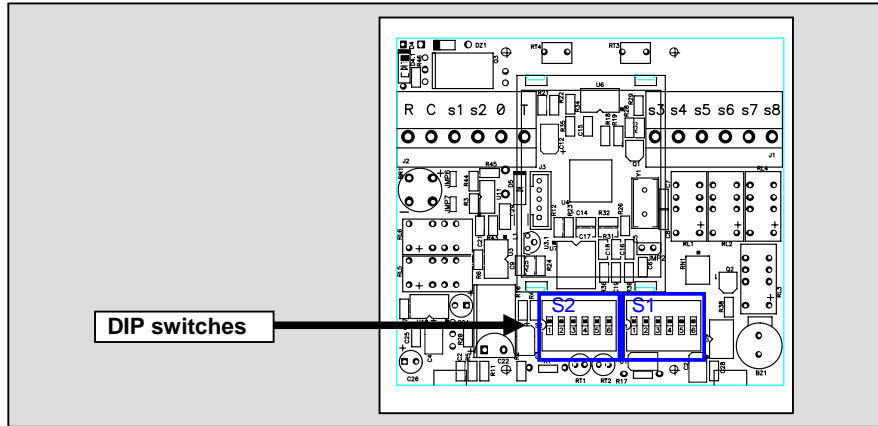
Choose the right configuration for your model.

TERMINAL	FUNCTION
R	24 Vac (Hot)
C	24 Vac (Common)
W3 B/O	Heat 3 / Reversing Valve
W1	Heat 1
O	Window / Door Contact
IN	Window / Door Contact

W2	Heat 2
To	External Sensor
T	External Sensor
Y2	Cool 2 / Compressor 2
G	Fan
Y1	Cool 1 / Compressor 1

3. DIP switch configuration

Location of DIP switches:



Factory default configuration for DIP switches:

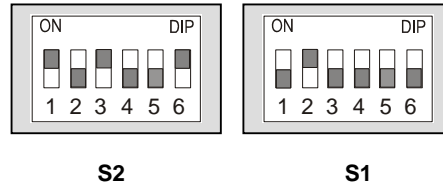


Table 3.1 – DIP switch selection

DIP switch S1:

Func. No.	Fan Mode in Econ.		Time Delay		Cool only or All modes		Window Contact	
	Auto Fan*	Continuous	4 Minutes*	No Delay**	Cool only	All modes*	OFF*	Change Set point "EC"
1	OFF*	ON	X	X	X	X	X	X
2	X	X	X	X	OFF	ON*	X	X
3	X	X	OFF*	ON	X	X	X	X
4	X	X	X	X	X	X	X	X
5	X	X	X	X	X	X	X	X
6	X	X	X	X	X	X	OFF*	ON

X = Not important * = Default switch ** = No delay for compressor – for test only

DIP switch S2:

Func. No.	Internal/External Sensor		COOL & HEAT (HC##)*	HEAT PUMP (HP##)	Display of Room Temp		HC / HP configuration			
	Internal *	External			Display	No Display	HC configuration		HP configuration	
							Electric. Heat*	Gas Heat	R/V in Heat	R/V in Cool
1	ON*	OFF	x	x	x	x	x	x	x	x
2	OFF*	ON	x	x	x	x	x	x	x	x
3	ON*	OFF	x	x	x	x	x	x	x	x
4	x	x	OFF*	ON	x	x	x	x	x	x
5	x	x	x	x	x	x	OFF*	ON	OFF	ON
6	x	x	x	x	ON*	OFF	x	x	x	x

X = Not important * = Default switch

4. External sensor connection - option



Important! The external sensor must be Smart Temp type.

N.TC. Sensor: Temperature ~ Resistance Characteristics

Temp °C	7.2	10.0	12.8	15.6	18.3	21.1	23.9	26.7	29.4	32.2
Temp °F	45	50	55	60	65	70	75	80	85	90
Res. k	115.8	100.9	88.1	77.1	67.7	59.6	52.5	46.4	41.2	36.6



The default from factory is INTERNAL SENSOR.

The length of the cable for the external sensor is 30 meters with standard cable.

If longer distance is required then shielded cable must be used.

There is a wide range of sensors for different applications, duct, room, etc.

For further details contact Smart Temp (03) 9763 0094 or www.smarttemp.com.au

5. Operating Manual

5.1 On/Off

- Press the ON/OFF button to activate or deactivate the thermostat.
- The word "ON" or "OFF" will appear in the display.

5.2 Set temperature

- Press the SET buttons (+) or (-) - the temperature will flash.
- Adjust the set temperature using the (+) or (-) buttons.

5.3 Selecting modes

Press the MODE button to switch between the four modes:

- Cool
- Heat
- Cool/heat (auto-change over),
- Fan only.
- Emergency heat selectable in heat mode in Heat Pump type (only).
 - Press and hold the MODE button (5 seconds) to activate Emergency heat (Heat Elements) and the compressor will be OFF.
This selection is for cold days when the outside temperature is very low and the Heat Pump is active in heat.
 - To return back to Heat mode press and hold the MODE button again (only in Heat mode).

5.4 Fan/Auto Fan function

- Press the FAN button to select AUTO FAN.
- Press the FAN button again to cancel.

In AUTO FAN the fan will only run when calling for heat or cool.

6. Technician Settings

6.1 Setting temperature limits and offset

- Press and hold the “ON” button (5 second) – “50” will appear on display.
- Using the (+) button set the number to “55”.

Setting Cool limit

- Press the ON button again - “COOL” will appear on display.
- Adjust set limit for cool using the (+) and (-) buttons.

Setting Heat limit

- Press the ON button again - “HEAT” will appear on display.
- Adjust set limit for heat using the (+) and (-) buttons.



Important: The user can change the set temperatures on the display regardless of the limit set, but the thermostat will only work to the required limits

Setting the offset (the offset is used for calibration of the measured temperature)

- Press the ON button again – the offset will appear on display.
- Adjust set offset using the (+) and (-) buttons (range -6°C/+6°C – default 0°C).

Set point for cool in economy mode

- Press the ON button again - “AUX” and “COOL” will appear on display.
- Adjust set limit for cool in economy mode using the (+) and (-) buttons.

Set point for heat in economy mode

- Press the ON button again - “AUX” and “HEAT” will appear on display.
- Adjust set limit for heat in economy mode using the (+) and (-) buttons.
- Press the ON button again to return to normal display.

6.2 Lock/Unlock the thermostat’s buttons

Lock the thermostat’s buttons

- Press and hold ‘ON’ button (5 second) – “50” will appear on display.
- Set the number to “45”.
- Press the ON button again.
- Using the (+) button to Set Lock “Lc”.



Unlock the thermostat’s buttons

- Press and hold ‘ON’ button (5 second) – “50” will appear on display.
- Set the temperature to “45”.
- Press the ON button again.
- Using the (-) button to Cancel Lock “UL”.



6.3 Door contact input

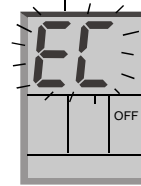
This input is normally open, can be used to connect door switch or window contact, etc.

The contact is Voltage free (2 terminals), normally open (activates when closed).

If the door contact closes the thermostat has two options (DIP switch selectable):

- Option A: The thermostat will be turned OFF.

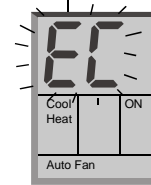
When the contact closes, the display will show:



- Option B: The thermostat will change the set point (Economy mode)

To change this options in the thermostat please refer to the dip switch explanation.

When the contact closes, the display will show:



When the thermostat set to OFF – the Door / window contact is not active.