

# Installation Instructions CPRST Programmable thermostat

Reference  
J400a

## NOTES

Electrical installation should be carried out by a suitably qualified person in accordance with the latest edition of the IEE Requirements for Electrical Installation (BS 7671 :2001).

This thermostat has a rating of 5A and can only be used for heaters up to 1kW 230V unless internal relays/contactors are fitted or an external contactor is connected. Ensure that any fan delay circuits are not compromised by fitting a contactor to the main supply.

## LOCATION.

The thermostat should be located on an internal wall at an height of about 1.5m so as to allow an unobstructed airflow around it. Avoid locations where the thermostat may be influenced by doors, windows, direct sunlight, the heater or any other heat source. The objective is to sense ambient air temperature.

## FIXING

Remove front cover by carefully pressing small screwdriver in slot to side of cover.  
Securely fix base via mounting holes, either to a standard BS4662 wall box or directly to a suitable surface.

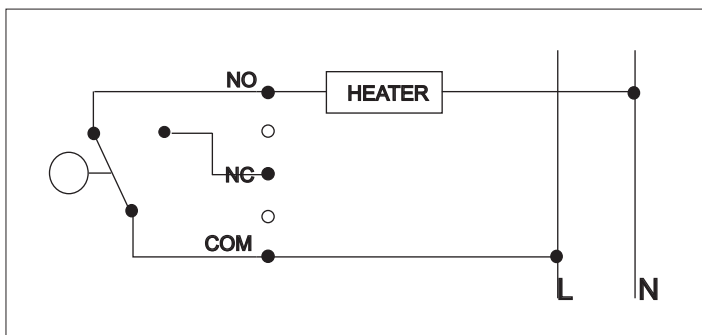
## CONNECTION

For heating use, wire Live supply to COM and Live feed to the heater to NO  
For cooling use, wire Live supply to COM and Live feed to the cooler to NC as shown in diagram.  
Ensure cables are securely fixed and not trapped when refitting cover.

## INSTALLING OR REPLACING BATTERIES

Isolate the unit before replacing batteries.  
Dispose of used batteries in accordance with regulations.

- 1) Pull out battery drawer on top left of unit.
- 2) Insert 2 AAA 1.5V alkaline batteries in accordance with the polarity markings on drawer.
- 3) Carefully replace drawer.
- 4) Check thermostat operates correctly, reset if not.



## SPECIFICATION

Temperature range	5°C to 35°C +/- 0.5°C
Switching capacity	24V to 250Vac 50/60Hz 5(3.5)A max.
Sensing element	NTC thermistor
Battery	2 x 1.5V AAA alkaline
Operating temperature	0°C to 60°C

## JUMPER SELECTION




Should it be necessary, there are certain adjustments that require switching of jumper links on the circuit board. They are accessed by carefully unclipping the LCD/PCB from the base.

1. Delay/No delay jumper, where a delay in switching is required for instance if compressor heat is connected.












	Heater	Cooler
No delay	10 sec	4 mins
Delay	4 mins	4 mins
2. 12/24 hour mode. - preset for 24 hour clock.
3. Heater/ cooler mode - preset for heater





## OPERATION

- 1) Press RST to reset. The CPRST will be ready to control the heater. Room temperature will be displayed.
- 2) If the battery is low  will be flashing. If  has been flashing for 48 hours without the batteries being replaced, the unit will cease to function and turn off the heater irrespective of current settings. - Replace batteries immediately.
- 3) The defrost function is activated and  displayed when temperature is 5°C or below. Output will be forced to ON for heating and OFF for cooling.
- 4) Below 0°C **Lo** will be displayed
- 5) Above 40°C **Hi** will be displayed

## TIME SETTING

1. Press  day of week (1-7) will flash, press  or  to set day of week
2. Press  again hour will flash, press  or  to set hour
3. Press  again minute will flash, press  or  to set minute
4. Press  again to return to step 1
5. Press  to confirm settings and return to normal mode
6. The unit will automatically return to normal mode after 10 seconds.

## PRESET PROGRAMS

The heater cooler turns on according to the activated program and the control temperature setting. When the heater/ cooler is On, program number and  /  icons are shown.







### Heating

	Mon - Fri	Sat	Sun
P1	06:00 (21°C)	08:00 (21°C)	08:00 (21°C)
P2	08:00 (16°C)	10:00 (16°C)	10:00 (16°C)
P3	18:00 (21°C)	18:00 (21°C)	18:00 (21°C)
P4	22:00 (16°C)	23:00 (16°C)	23:00 (16°C)

### Cooling

	Mon - Fri	Sat	Sun
P1	06:00 (24°C)	08:00 (24°C)	08:00 (24°C)
P2	08:00 (29.5°C)	10:00 (29.5°C)	10:00 (29.5°C)
P3	18:00 (29.5°C)	18:00 (29.5°C)	18:00 (29.5°C)
P4	22:00 (26°C)	23:00 (26°C)	23:00 (26°C)

## Program setting

1. Press **PRG** hour will flash, press  or  to change hour setting
3. Press **PRG** again minute will flash, press  or  to change minute setting
4. Press **PRG** again temperature will flash press  or  to change set temperature
5. Press **PRG** again to set next program
6. The unit will automatically return to normal mode after 10 seconds.






The program setting sequence is

Mon-Fri (P1>P2>P3>P4) > Sat (P1>P2>P3>P4) > Sun (P1>P2>P3>P4)








## Temporary /Permanent Override Mode

Temporary Override mode maintains override temperature until next program time is met.





Permanent Override mode maintains override temperature until cancelled by pressing **PRG**

1. Press  to change from Normal to Temporary Override  will be displayed.
2. Press  again to change from Temporary Override to Permanent Override  will be displayed
3. Press  again to return to Normal mode.

## Review and adjust Override Temperature

1. Press  /  and the Override temperature is show
  2. Press  /  for 5 secs, the Override temperature will flash.
  3. Press  /  to adjust the Override temperature.
  4. Press  to exit
- or the unit will automatically return to normal mode after 10 seconds.

## Off/ Sleep modes

1. Press  to select sleep mode,  is displayed. In sleep mode the heater/cooler is turned off irrespective of temperature setting.
2. Press  again to select off. In off mode the LCD is blank. The heater/cooler is permanently off.
3. Press  again to return to normal mode.

## WARRANTY

This product is guaranteed, in accordance with our Conditions of Sale, for a period of 12 months from date of purchase. We will repair or replace, at our discretion, any part found to be defective. We cannot accept responsibility for any consequential liability. The warranty will be invalid if the heater has not been installed in accordance with these instructions. This does not affect your statutory rights.

Please keep these instructions for future reference

The Manufacturers reserve the right to change the specification without prior notice EO&E

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