

Smart Temp SMT-120 Digital Heat Only Thermostat

A. Installation, Mounting:

CAUTION:

1. Turn off SMT-120, electronic source and the electrical devices (e.g. Heater, Cooler) which will be connected before installation, Switching Heater to Cooler or vice versa and maintenance.
2. The installer must be a trained service engineer

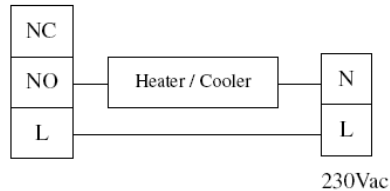
1. Installation Location:

The thermostat should be mounted on an inner wall 1.5m above the floor in position where it is readily affected by changes of the general room temperature with freely circulating air. Prevent direct exposure to sunlight; dripping or splashing area. Do not place this unit at a location where air circulation is low, or where it has great temperature changes (e.g. near door). Do not place the thermostat near heat generating sources (radiators, hot air vents, TV or lights).

2. Wiring:

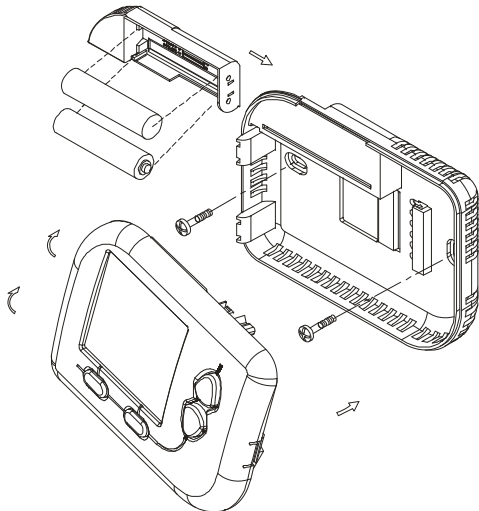
For SMT-120, there are 3 wiring terminals at the back of the thermostat which is labeled as "NC", "NO" and "L".

Wiring Diagram:



Connect L to Live and NO to Heater or Cooler. Where NC is a Normally Close Valve.

3. Mounting:



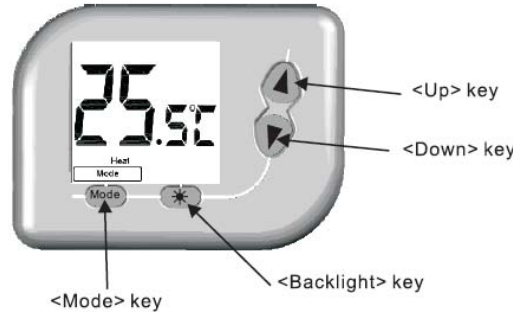
1. Ensure the surface is level.
2. Place the cables at the hole near the terminal block.
3. Insert 2 pcs of wall anchors into the holes of the wall.
4. Fasten the thermostat with 2 pcs of long screws through the 2 mounting holes.

B. Start/Reset:

1. When the system is reset, all the LCD segments are ON and the measured temperature will be displayed after a while.
2. Low Battery Check will be done at startup. **Low Batt** displays when low battery
3. Latch relay will be turned off at startup

C. Normal display mode:

1. Temperature detection starts and LCD displays the room temperature.
2. Below 0°C / 32°F, SMT-120 will display **LO**.
3. Above 40°C / 99°F, SMT-120 will display **HI**.



5. Press **<Up>/<Down>** to adjust heat/ cool setting temperature
6. Press **<Mode>** to select heat/ cool/ off mode
 - By default, Press **<Mode>** to switch from Off to Heat or Vice versa
 - To switch to Cool Mode, Press and hold **<Mode>** for 2 seconds in Off Mode.
 - Cool Mode will then be activated.
 - Use the same method to change back to Heat Mode.
7. Defrost function will be activated with **Defrost** displayed when temperature is below 5°C / 40°F in either Heat or Off Mode in Heat/Off pair. Heater is on regardless of the setting temperature.

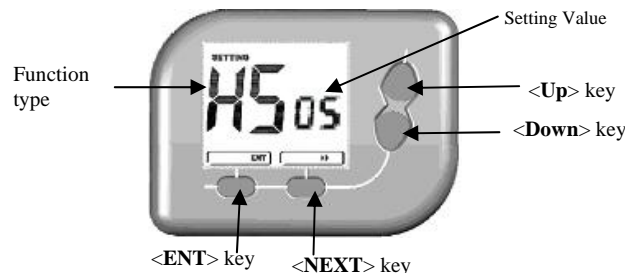
D. Temperature Setting display mode

To adjust heat/ cool setting

1. Press **<Up>** or **<Down>** keys to adjust Heat/Cool setting temperature in normal display mode.
2. Heat/ Cool setting temperature flashes.
3. In Heat mode, only heat setting temperature can be adjusted.
4. In Cool mode, only cool setting temperature can be adjusted.
5. In Off mode, no setting temperature can be adjusted.
6. The operation will resume to normal display mode after no key is pressed for 10 sec.

E. Function Setting display

1. Press and hold **<Backlight>** and **<Down>** keys for 2seconds.
2. LCD changes to the display of Function setting selection.



3. Press **<Up>/<Down>** to adjust Function type/ Setting.
4. Press **<NEXT >** to select Function type/ Setting.
5. Press **<ENT>** to return to normal display mode.

Table of the Internal Setting:

Function type	Setting
HS Span of Heater	+/- 0.3°C / 0.5°F (by default) +/- 0.5°C / 1°F
dU Temperature Display Unit	°C (by default) °F
CS Span of Cool	+/- 0.3°C / 0.5°F (by default) +/- 0.5°C / 1°F
Cd Compressor/ Heater Minimum-Off Delay	1 1 minute compressor off delay (by default)
	2 2 minutes compressor off delay
	3 3 minutes compressor off delay
	4 4 minutes compressor off delay
	5 5 minutes compressor off delay

* When Function is being set, output "NO" must turn off automatically and SMT-120 enter off mode.

F. Replaceable batteries instruction

- Batteries shall be correct battery type and installed with proper polarity.
- Do not use old and new batteries simultaneously.
- Batteries shall be removed if consumed or if product is to be left unused for a long time.
- Use 1.5V/cell alkaline batteries 2 pieces.

G. Maintenance:

Caution: Switch off the electric source before maintenance the thermostat. We recommend that the maintenance should be performed by trained personnel.

- 1/. No heating/ cooling control
 - Check the thermistor sensor performance by measuring the corresponding variable resistance under different temperature, if it is in good condition and the LCD value will change accordingly, then trace the control circuit or the LCD connection, otherwise replace it
 - If the control circuit has problem, replace the PCB if necessary

H. Specification:

1. Temperature measurement: 0°C~40°C / 32°F ~ 99°F
2. Accuracy: ±0.5°C/ 1°F
3. Temperature Controllable range: Heat/Cool setting: 5°C~35°C / 40°F ~ 95°F
4. Resolution: 0.1°C /0.5°F
5. Power Supply: 2 x AAA alkaline batteries
6. Rating: 230Vac ~ 50/ 60Hz 5(1)A.
7. Terminals: 2mm² cable
8. Operating temperature: 0 – 50 °C / 32 – 122 °F
9. Storage temperature: -5 – 50 °C/ 23 – 122 °F
10. Sensing Element: NTC thermistor
11. Degree of protection IP-20

1 Year Warranty Return to Base.


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