



## Technical specification:

Temperature measuring range: -30°C~300°C (-22 °F ~ 572 °F)  
 Sensor: NTC thermistor 100K 3950 1% with 2 meters wire  
 Power cord: 1 meter 14AWG with American standard plug  
 Measurement accuracy: 0.1 degree  
 Input Voltage: 100-240VAC  
 Relay output: Maximum load 15 Amp  
 Dimensions: 148\*97\*37mm

## Features:

Plug and play thermostat with 2 Types of timer( F1 and F2 mode).  
 Maximum load of 16Amp with input range 100-240VAC for different countries.  
 Cooling and heating mode functions with start and stop temperature.  
 Pin point L shape sensor with heat resistance SS braided wire.  
 Equipped with buzzer for high or low temperature alarm settings.  
 Temperature calibration.

## Parameter Setting Summary:

[ Press  $\nabla$  or  $\triangle$  button  $\rightarrow$  Set Start & stop temperature

Press and hold SET button for 3 Seconds select With  $\nabla$  or  $\triangle$  button  $\rightarrow$

- [ P1: Calibration of sensor
- [ P2: Select °C or °F degree
- [ P3 : Set Low Alarm Temp
- [ P4: Set High Alarm Temp

Press SET button select With  $\nabla$  or  $\triangle$  button  $\rightarrow$

- [ F1: Countdown timer
- [ F2: Set point countdown timer

## Parameter setting description:

Press and hold SET button for 3 seconds, chose your parameter modes (P1,P2,P3,P4) and parameter values with up and down keys. For timer setting mode (F1,F2) only press SET key. After setting each parameter mode, wait for 5 seconds and controller exits the parameter setting.

## Setting start, stop temp and heating or cooling mode:

You can set the start and stop temperature with up and down keys. The controller automatically recognizes the heating or cooling mode as follows,

Heating mode: when the start temp value is less than stop temp.

Cooling mode: when the start temp is higher than stop temp.

## P1 - Temperature calibration:

You can calibrate temperature reading in this function. The value can be positive, negative (from -10 to 10 degree) or 0.

## P2 - Select Fahrenheit or Celsius unit:

Here you can select Fahrenheit or Celsius unit.

## P3 , P4 - High and low temperature alarm functions:

If the temperature passes the higher or lower alarm temperature values, the controller makes a beeping sound and the display will show "HHH" or "LLL". The default settings are P3=-30 and P4=300.

## F1-Countdown timer, F2-Set point countdown timer:

The left LED display is the hour setting and the right is the minute setting. The setting range is 999 hours and 999 minutes. As soon as you set the timer, thermostat starts working and as long as you are in F1 or F2 mode the timer will run but if you come out of F1 or F2 mode the thermostat will exit countdown timer mode. In the timer mode you can see the time will decrease by minute. When the time reach to 0, the long beep buzzer shows the thermostat is disconnected and stops working.

F1: As soon as you set the time, the countdown timer will start and the small LED starts blinking.

F2: When the temperature reaches to start temperature value, the countdown timer will start and the small LED starts blinking.

## Error messages and troubleshooting:

1) When the controller displays E1 or E2 , it shows that the sensor is disconnected. The controller will make a beeping sound and the heating output relay will be closed (so the heater is off) .

2) When the controller displays "LLL" or "HHH", it shows low or high temperature alarm.

## Caution :

◆ The maximum current load of the heating or cooling source must not exceed the output relay contact capacity (15Amp), otherwise it will damage the unit and may cause fire.

◆ For disconnecting the sensor please make sure that it will be pulled out from the connector not the wire, otherwise it will damage the wire junction.