



TE130 LCD Electronic Thermostat 24V

Mounting Location:

The thermostat is restricted to be used in indoor only. It should be mounting on an inner wall about 1.5m above the floor at a position where it is readily affected by changes of the general room temperature with freely circulating air. It is avoided to be mounted on hot surfaces(e.g. TV, Heater, refrigerator), or exposed to direct sunshine, or drought, or equipment radiation or in laundry room or other enclosed space. Do not expose this unit to dripping or splashing.

Mounting Instruction:

- Remove cover:
 - Place all the switches in the middle position
 - Place the screwdriver at the bottom of the locks and loosen the screws (@ '1' & @ '2')
 - Remove the top cover carefully forward (@ '3') and then upward (@ '4') to loose the top locks
- Mounting without bottom plate(Diagram 1):
 - Ensure the surface is level
 - Place the cables at the hole near the terminal block
 - Place the 2pcs of wall anchors at the wall
 - Fasten the thermostat with the 2pcs of long screws through the 2 mounting holes
- Mounting with bottom plate(Diagram 2):
 - Adjust the bottom plate on the wall or junction box and ensure the plate is at surface level and cover the junction box comfortably
 - If necessary, pull the cables out at the middle hole of the bottom plate
 - Place the 2pcs of wall anchors at the wall if necessary
 - Fasten the plate with the 2pcs of long screws
 - Place the cables at the hole near the terminal block
 - Fasten the thermostat with the 2pcs of screws through the 2 mounting holes
- Electrical connection:
 - Wire the proper cables at the terminal block according to the circuit diagram attached inside the top cover
 - Afterward, push all cables back into the wall
 - Do not use metal conduit or of cable provided with a metal sheath.
 - Recommend to add fuse or protective device in the live circuit.
- Install the cover:
 - Ensure the thermostat slide switches are at the middle(OFF)position (@ '5a')
 - Align the slide switch knobs at the middle position(@ '5b')
 - Ensure the rubber key is firmly on the PCB(@ '6a')
 - Ensure rubber key fitting location on the Cover is right towards to rubber key (@ '6b')
 - Replace the cover in direction(@ '7')and ensure the top locks are fastened
 - Press the cover in direction(@ '8')and fasten the cover with 2 screws (@ '9' & @ '10')
 - Check the slide switches and the rubber key can be moved smoothly, otherwise reinstall the cover and realign properly
- Temperature setting:
 - Select the comfortable temperature by pressing ▲ or ▼ to the desirable temperature
 - Return the room temperature display after 8 seconds with the 🖱 icon disappears

7/. Jumper selection

- CFJumper: When jumper connects CF, degree Fahrenheit(°F) is selected. Otherwise, degree Celsius (°C) is selected.
- LD jumper: If jumper connects LD, Long delay is selected. Otherwise, short delay is used

	HEATER	COOLER
Short delay	10sec	4mins
Long delay	4mins	4mins

- S0, S1 jumper On / Off
- No connection: +0.5°C, -0.5°C (+1°F, -1°F)
- S0 connect: +0.5°C, -1°C (+1°F, -2°F)
- S1 connect: +1°C, -0.5°C (+2°F, -1°F)
- S0, S1 connect: +1°C, -1°C (+2°F, -2°F)

If jumper selection is changed, a reset is required (power off and on) for the updates.

8/. Backlight:

- Press 🖱 the backlight will light up the LCD display for 8 seconds.

Installation:

Caution: Switch off the electrical source before installing the thermostat. We recommend that the installation should be performed by a trained professional.

1/. No fan states control

- Check fan slide switch performance, clean the contact or replace if necessary
- Check the PCB terminal block performance, clean the contact or replace if necessary

2/. No heating/cooling control

- Check relay on/off performance by applying DC voltage at the coil, if it works then trace the control circuit otherwise replace it
- Check rubber key performance by pressing ▲ or ▼, the 🖱 icon should appear with the temperature setting changes. Otherwise align the rubber key or the LCD connector properly. If the problem is not fixed then replace the PCB
- Check the thermistor 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

Technical Data:

Temperature control Range:	5 ~ 35°C, 40 ~ 95°F adjustable
Temperature measurement:	0 ~ 40°C, 32 ~ 99°F
Switching Differential:	±0.5°C, ± 1°F
Accuracy:	±1°C, ± 2°F,
Resolution:	0.5°C, 1°F
Operating Voltage:	24Vac
Frequency:	50/60Hz
Rating:	24Vac 50/60Hz 1A max
Sensing Element:	NTC thermistor
Time Constant:	Approx. 2 min.
Terminals:	2mm ² Cable
Operating Temperature:	0 ~ 40°C, 32 ~ 104°F
Storage Temperature:	0 ~ 122°F, -10 ~ 50°C

