



## TE110 LCD Electronic Thermostat 24V

### Mounting Location:

This thermostat is restricted to be used indoors only. It should be mounted 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/humidity with freely circulating air. Avoid mounting on hot surfaces (e.g. TV, heater, refrigerator), do not expose unit to direct sunshine, drought or equipment radiation. Do not mount in a laundry room or other enclosed spaces. Do not expose this unit to dripping or splashing.

### Mounting Instruction:

#### 1/. Remove Cover:

- Place all switches into the middle position
- Place the screwdriver at the bottom of the locks and loosen the screws (@ '1') & (@ '2')
- Remove the top cover. Carefully push forward (@ '3') and then upward (@ '4') to loosen the top locks

#### 2/. Mounting without the bottom plate (Diagram 1):

- Ensure the surface is level
- Place the cables at the hole near the terminal block
- Use wall anchors provided if necessary.
- Fasten the thermostat with 2 long screws through the 2 mounting holes

#### 3/. Mounting with the bottom plate (Diagram 2):

- Adjust the bottom plate on the wall or junction box and ensure the plate is at surface level, cover the junction box comfortably
- If necessary, pull the cables out of the middle hole of the bottom plate
- Use wall anchors provided if necessary
- Fasten the plate with 2 long screws
- Pull the cables at the hole near the terminal block
- Fasten the thermostat with 2 screws through the 2 mounting holes

#### 4/. Electrical Connection:

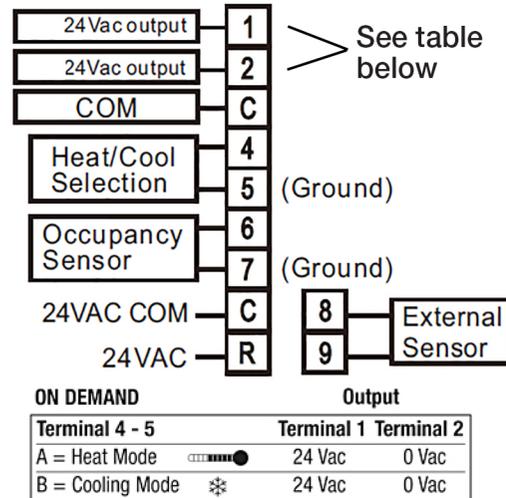
- Wire the proper cables at the terminal block according to the circuit diagram attached inside the top cover
- Do not use metal conduit or shielded wire
- It is recommended to add a fuse or protective device in the line circuit

#### 5/. Installing the Cover:

- Ensure the rubber key is firmly attached on the PCB (@ '6a')
- 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 that the rubber keys can be moved smoothly, otherwise reinstall the cover and realign properly

#### 6/. Temperature setting up:

- Select the comfortable temperature by pressing ▲ or ▼ to the desirable temperature set point. The set point will flash after releasing the keys.
- The display of the room temperature will return after 10 seconds
- When the thermostat is in heating mode a thermometer will appear in the display. It will flash when there is a demand for heat.
- When the thermostat is in cooling mode a snow flake will appear in the display. It will flash when there is a demand for cooling.



A = Heat mode terminal 4 and 5 Open  
B = Cooling mode terminal 4 and 5 Closed

#### 7/. Backlight:

Backlight will illuminate by pressing ▲ or ▼, it will return after 10 seconds once the keys are released

#### 8/. Jumper Selections:

	ON	OFF (default setting)
J1	°F	°C
J2	External Sensor	Internal Sensor
J3	Normal temperature range	Limited temperature range
J4	Delay	No Delay

#### 9/. Adjusting the Set point (J3)

With Jumper #3 we can select a normal or limited temperature range. See tables below.

#### Normal set point range:

Temperature unit	Economy (Unoccupied) and Heat	Normal (Occupied)	Economy (Unoccupied) and cool
°F (1°F resolution)	42-82°F	50-90°F	58-98°F
°C (0.5°C resolution)	6.0-28.0°C	10.0-32.0°C	14.0-36.0°C

#### Limited set point range:

Temperature unit	Economy (Unoccupied) and Heat	Normal (Occupied)	Economy (Unoccupied) and cool
°F (1°F resolution)	56-68°F	64-76°F	72-84°F
°C (0.5°C resolution)	14.0-20.0°C	18.0-24.0°C	22.0-28.0°C

#### 10. Comfort mode and Economy mode :

Occupancy sensor open: represents occupied, thermostat will run in comfort mode.  
Occupancy sensor closed: represents unoccupied, thermostat will run in economy mode and LCD will display the key. Set point will change by 4°C or 8°F. User cannot adjust set point in economy mode.

#### 11. Economy override:

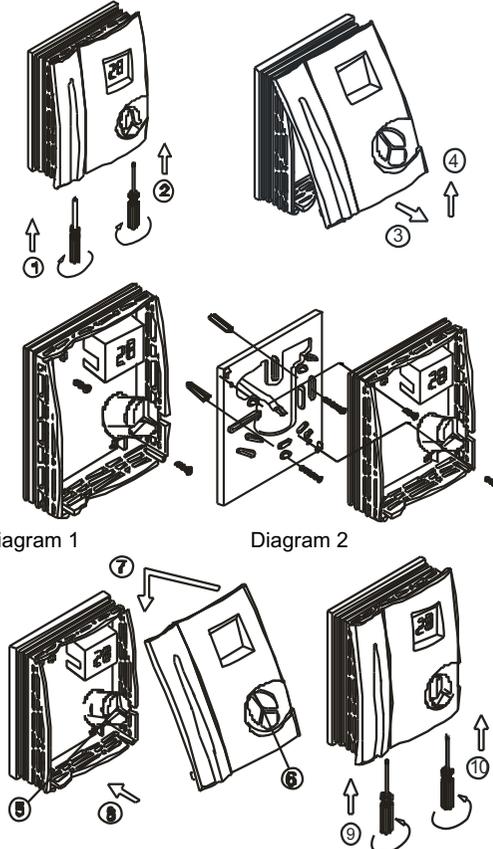
This function only operates in economy mode. Hold key for 2 seconds to enable this function. Hold key for 2 seconds to disable this function. When economy override mode is enabled, user can use ▲/▼ key to adjust the set point. Thermostat will remain in the override for 2 hours and then will go back to economy mode.

#### Maintenance:

**Caution: Switch off the electrical source before maintaining the thermostat. We recommend that all maintenance be performed by a trained professional.**

#### Technical Data:

Temperature Range: 10 - 32°C / 50 - 90°F  
Power Supply: 24Vac ±10%  
Frequency: 50/60Hz  
Relay Contact Current: 5(1)A Max.  
Sensing Element: NTC thermistor  
Terminals: 2mm Cable  
Operating Temperature: 0 - 50°C / 32 - 122°F  
Storage Temperature: -10 - 60°C / 14 - 140°F



#### Dimension in mm (inches)

