

# ET33 LCD Electronic Thermostat for Floor Heater ET39 LCD Electronic Thermostat for Heater only

## 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 avoid to be mounted on hot surfaces ( e.g. TV, heater, refrigerator), or exposed to direct sunshine, or droughts, or equipment radiation or in laundry room or other enclosed space. Do not expose this unit to dripping or splashing.

## Mounting Instruction:

### 1/. Remove Cover:

- 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 lock

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

- Ensure the surface is level
- Place the cable 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

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

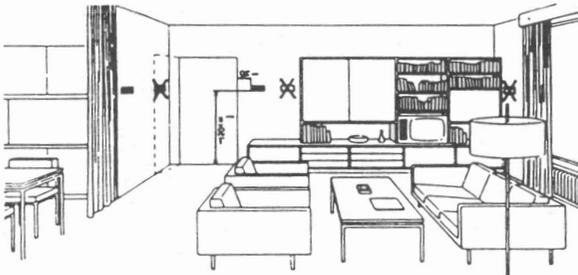
- Adjust the bottom plate on the wall or junction box and ensure the plate is at surface level and cover the junction box comfortably
- If necessary, pull the cables out at the middle hole of the bottom plate
- Place the 2pcs of wall anchors at the wall if necessary
- Fasten the plate with the 2pcs of 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

### 4/. Electrical Connection:

- For ET33: Wire the attached sensor cable @ T1, T2 according to the circuit diagram attached inside the top cover
- Wire the proper cables at the terminal block
- 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

### 5/. Install the Cover:

- Align the shaft of the rotary volume in horizontal direction (@ '5a')
- Align the rotary knob with the pointer at the top (@ '5b')
- Place the cover in direction (@ '6') and ensure the top locks are fastened
- Press the cover in direction (@ '7') and fasten the cover with 2 screws(@ '8') (@ '9')
- Check the rotary knob can be moved smoothly, otherwise reinstall the cover with the rotary knob realigned properly



### 6/. Temperature setting up:

- Select the comfortable temperature by rotating the indicator to the position of suitable temperature and by reading the LCD display with the icon
- After about 10~20 secs, the icon disappears and the room temperature displays.

## 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 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 rotary volume performance by rotating the rotary knob, the icon should appear with the temperature setting changes. Otherwise, align the rotary knob or the LCD connector properly. If the problem is not fixed, then replace the PCB
- Check the thermistor sensor performance by measuring the corresponding variable resistance under different temperature condition, 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

## Type Designation:

ET33: For heating with floor heater

ET39: For heating only

## Technical Data:

Temperature Range:	5 to 35°C adjustable
Switching Differential:	Approx. 1°C
Operating Voltage:	120VAC/230VAC
Frequency:	50/60Hz
Rating:	120VAC/230VAC 50/60Hz 16(3)A max
Sensing Element:	NTC thermistor
Time Constant:	Approx. 2 min
Terminals:	2 sq. mm Cable
Operating Temperature:	0 to 40°C
Storage Temperature:	0 to 50°C
Operating Humidity:	5 to 90% non-condensing

