

TAT220/FH/SUPER

Owner's manual and Technician settings



Index

1. Owner's Manual	3
1.1 Turning the unit On or Off	3
1.2 Adjusting the set-point temperature	3
1.3 Off timer	3
1.4 Lock buttons display	3
2. Installation instructions	4
3. Wiring connections	4
4. DIP Switch settings – temperature display	4
5. Technician settings	5
5.1 Enter technician settings	6
5.2 Set point temperature limit for heat	6
5.3 Lock buttons	6
5.4 Offset for calibration of temperature reading	6
5.5 Enable or disable the LCD backlight	6
5.6 Operation when returning from power blackout	6
5.7 Parquet temperature protection value	6
5.8 Temperature sensor operation	6
5.9 Proportional heater output differential	6
5.10 Proportional heater voltage range	7
5.11 Proportional heater output delay	7
5.12 Enable/Disable Occupancy sensor	7
5.13 Occupancy sensor polarity	7
5.14 Occupancy sensor delay	7
5.15 Occupancy sensor delay	7
5.16 Operation when returning from unoccupied to occupied mode	7
5.17 Set-point temperature resolution	7

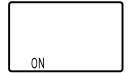
1. Owner's Manual

1.1 Turning the unit On or Off

- Press the [On] button to turn the unit On.
The word "ON" will appear on display.
- Press the [Off] button to turn the unit Off.
The word "OFF" will appear on display.



Unit OFF



Unit ON

1.2 Adjusting the set-point temperature

- Press the [+] or [-] buttons – the set-point temperature will flash.
- Press the [+] or [-] again to adjust the set-point temperature.



Note: the temperature display can be changed by technician to set-point only, by changing the position of DIP switch S2 to ON. Please refer to DIP switch configuration.

1.3 Off timer

The timer is programmed to turn the unit off automatically after the pre-configured duration has elapsed.

- Press and hold the [On] button for 4 seconds – the hours will appear on display.
- Use the [+] and [-] buttons to adjust the timer (range: 0-10 hours).
- Press the [Off] button or wait 30 seconds to return to normal mode.



No timer



10 Hours
timer



Timer indication
on normal
display

Notes:

- When active, the clock icon will appear on display.
- Every time the thermostat is turned on, the timer will restart counting down.
- In order to cancel the timer, follow the steps above and set the hours to "00".
- After an electrical blackout, depending on technician configuration, the timer function as follows:
 - A. When the thermostat is configured to remain off after electrical blackout -
The timer will be cancelled and the thermostat will remain off
 - B. When the thermostat is configured to return to its previous state (on or off) after electrical blackout -
The timer will be start over and the clock symbol will flash.

1.4 Lock buttons display

The buttons can be locked through technician settings.

When a locked button is pressed, a "lock" symbol appear on display.

2. Installation instructions

The thermostat is designed for flush mounting in the room to be controlled.

It should be located where the occupant can easily read the LCD display and use the controls.

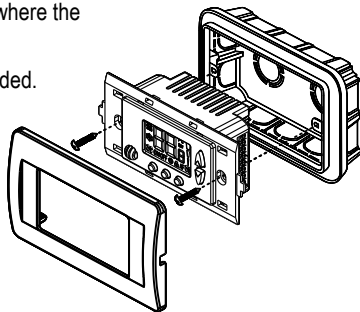
If the built in temperature sensor is being used the unit should be placed where the temperature is representative of the general room conditions.

Cold or warm air draughts; radiant heat and direct sunlight should be avoided.

The standard height to install this unit is 1.5 meter (5 feet) from the floor.

Installation procedure:

1. Disconnect power to the unit.
2. Connect the wires as shown in the enclosed wiring diagram.
All terminals accept 1x0.5mm²/24 AWG.
3. If needed, change DIP switches position.
4. Install the panel in the electrical box (Gewiss Box - GW 24 203). Tighten up the 2 screws.
6. Adapt the front frame-panel into its place, by pushing it towards the wall.

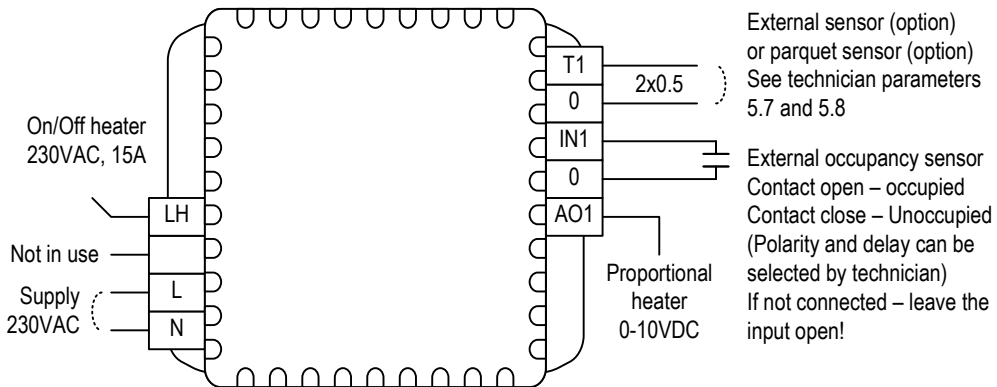


Risk of Electric Shock and Property Damage. Disconnect each of multiple power supplies before making electrical connections. Contact with components carrying hazardous voltage can cause electric shock and may result in severe personal injury or death.



The integrated circuits in the controller are sensitive to static currents. Take suitable precautions.

3. Wiring connections



Please note that the proportional heater and the on/off heater operate simultaneously.

4. DIP Switch settings – temperature display



Switch 2 Off
Normal temperature display
Ambient and set-point



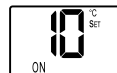
Switch 2 On
Set-point temperature display only!

Switches 1 and 3 are not in use!

5. Technician settings

5.1 Enter technician settings

- Adjust the set point temperature to 10°C and wait until display stops flashing.
- Press and hold the [Off] button *8 sec.) to enter technician settings.
- Press the [Off] button to proceed to the next parameter.
- Use the [+] and [-] buttons to select/adjust parameter values.



5.2 Set point temperature limit for heat

- Range: 10...30°C, default 30°C



5.3 Lock buttons

- "OP" - Open (enable all buttons).
- "LO" - Lock all buttons.



5.4 Offset for calibration of temperature reading

- Range: (-6)...(+6)°C
- Default 0°C



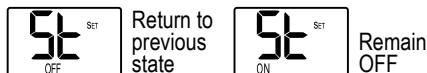
5.5 Enable or disable the LCD backlight

- bL ON – The backlight is enabled.
- bL OFF – The backlight is disabled.



5.6 Operation when returning from power blackout

- St ON – Remain Off
- St OFF – Return to previous state (On or Off)



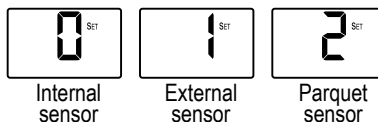
5.7 Parquet temperature protection value

- Range: 28...45°C, default 28°C
- In order to use parquet protection, make sure that the parquet sensor is connected and next parameter equals "2".



5.8 Temperature sensor operation

- "0" - Internal sensor (default)
- "1" - External sensor
- "2" - Parquet protection sensor



5.9 Proportional heater output differential

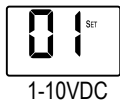
- Range: 2...10°C, default 2°C



5. Technician settings (Cont')

5.10 Proportional heater voltage range

- "00" - 0-10VDC (default)
- "01" - 1-10VDC
- "02" - 2-10VDC

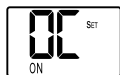


5.11 Proportional heater output delay

- OC ON - 1 Minute delay before output change
- OC OFF - No delay (default)



No delay



1 Minute delay

5.12 Enable/Disable Occupancy sensor

- "SO" - Enable occupancy sensor
- "SF" - Disable occupancy sensor



Enable
Occ.



Disable
Occ.

5.13 Occupancy sensor polarity

- "PO" - Normally open
- "PC" - Normally close (default)



Normally
open



Normally
close

5.14 Occupancy sensor delay

- Range: 00...60 Seconds, default 0 Seconds



Occ.
delay

5.15 Occupancy sensor delay

- Range: 00...60 Seconds, 60 Seconds



Occ.
delay

5.16 Operation when returning from unoccupied to occupied mode

- F1 - Remain Off
- F0 - Return to previous state (On or Off)



Return to
previous
state



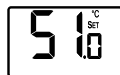
Remain
OFF

5.17 Set-point temperature resolution

- Range: 0.5°C or 1°C



0.5°C



1°C

- Press the [Off] button again or wait 30 seconds to return to the normal display. You can revert to the previous settings by pressing the button without the label.

- **Important: After finishing the settings, adjust the desired temperature using the [+] and [-] buttons.**

Notes



www.meitavtec.com