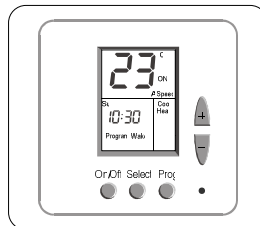## Installation

The ETN24 is designed for wall 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 to measure room temperature, the module 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.
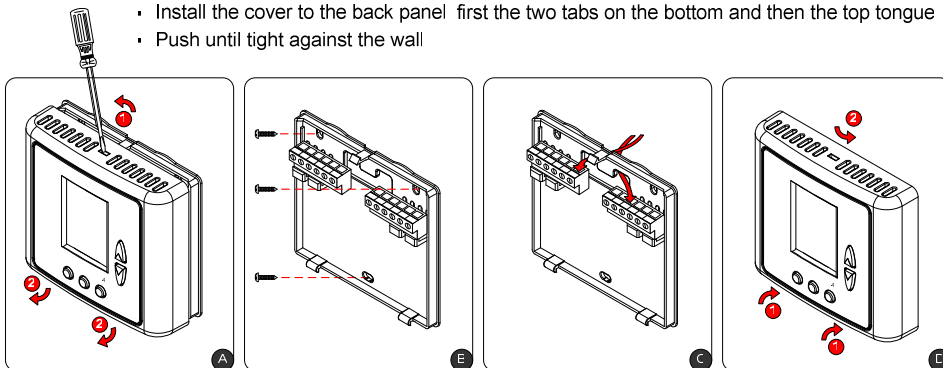
General points to follow:
- Disconnect power to the main board before installing the unit
- The unit should not be installed on an outside wall or where there is an air draft
- The unit must not be exposed to a direct sunlight
- The standard height to install this unit is 1.5 meter (5 feet) from the floor

Installation procedure:
- Separate the front panel from back panel by pressing the tongue located in the top of the unit and pull the back panel out
- Line the back panel up against the wall or flat surface. Install three screws as required
- Make electrical connections as shown on enclosed electrical wiring diagram
  - Install the cover to the back panel, first the two tabs on the bottom and then the top tongue
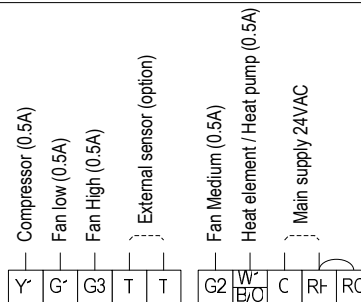 - Push until tight against the wall

Wiring

Before connecting or disconnecting any wires, ensure that all power supplies have been switched off and all wires are potentia -free to prevent equipment damage and avoid electrical shock.

All wiring to the thermostat is low (safe) voltage and must be separated from power line voltage wiring.

Do not run wiring close to transformers or high frequency generating equipment. Complete and verify all wiring connections before applying power to the controller to which the module is connected.

Compressor (0.5A)	Fan low (0.5A)	Fan High (0.5A)	External sensor (option)		Fan Medium (0.5A)	Heat element / Heat pump (0.5A)		Main supply 24VAC	
Y	G1	G3	T	T	G2	W/ B/O	C	RH	RC

RC-RH - When using one transformer, RC RH terminals must be shorted

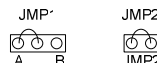## DIP Switch and Jumpers Configuration

Default DIP switch position

The DIP Dwitch is located on the top of the back side of the thermostat (above the connectors).

Switch	Internal/External Sensor		HP		HC		Time delay for compressor	
	Internal sensor	External sensor	Heat Pump in heat "B"	Heat Pump in cool "O"	Oil/Gas heat	Electric heat	No delay	3 Minutes
1	ON*	OFF	X	X	X	X	X	X
2	X	X	ON		OFF*		X	X
3	X	X	ON	OFF	ON	OFF*	X	X
4	X	X	X	X	X	X	ON	OFF*
5	OFF*	ON	X	X	X	X	X	X
6	ON*	OFF	X	X	X	X	X	X

*Default

For **complete reset of the unit** use **JMP1 (**3 pins) as follows: move the jumper from "A" position to "B" position, wait 30 seconds and move the jumper back to "A" position. **JMP2** (2 pins) is **not in use** and must always stay shorted.
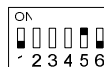
JMP1   JMP2

External sensor Connection (option)

⚠ Important: The external sensor must be Meitav-tec type only

Temp °C	7.2	10.0	12.8	15.6	18.3	21.1	23.9	26.7	29.4	32.2
Res KΩ	115.8	100.9	88.1	77.1	67.7	59.6	52.5	46.4	41.2	36.6

Connecting the external sensor

- Disconnect power to the thermostat
- Move switch 5 to ON position and switches 1 and 6 to OFF position
- Connect the temperature sensor to the T-T terminals
- Reconnect power to the thermostat

Notes
- The wire length for the external sensor can be up to 100 feet (30 meters) with standard cable
- If the distance is greater than 100 feet the wire MUST be shielded

There is a wide range of sensors for different applications: duct, rooms etc. There are also options for averaging the temperature. For details please contact our technical line or visit our web site
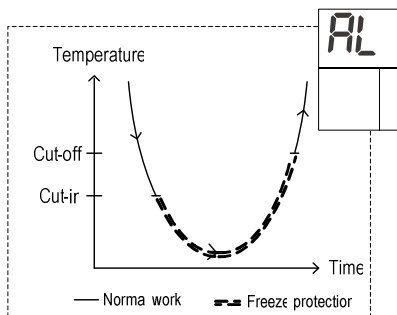
Freeze Protection

When the temperature drops below the freeze protection cut-in temperature*, the thermostat will turn on the Heat and Fan outputs in order to protect the system from freezing.
This function will be activated when the thermostat is either in On or Off position.
The display will alternate between "AL" and the room temperature.
The thermostat will return to normal mode when the temperature rises above the freeze protection cut-off temperature*.
*adjustable – refer to the technician settings section of the operating manua

Temperature

Cut-off

Cut-in

Time

— Normal work   ▬▬ Freeze protection

ETN24-SUPER-FP-PROG-EU-C
Owner's manual & Technnician Settings

Tel: +972-3-9626462
Fax: +972-3-9626620
www.meitavtec.com

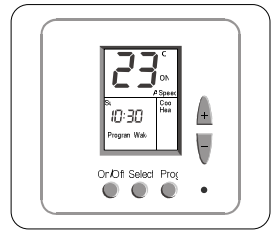🌀 meitav-tec
support@meitavtec.com

Operating instructions

On/Off

- Press the [On/Off] button to turn the thermostat ON
- Press and hold the [On/Off] button (4 sec.) to turn the thermostat OFF

Set point

- Press the [+] or [-] button – the set point temperature will appear on display
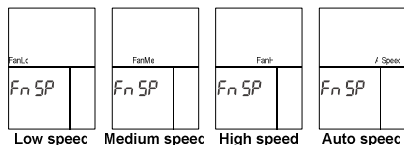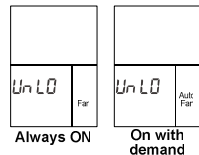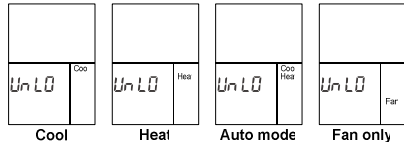 Adjust using the [+] and [-] buttons

Modes / Auto fan / Fan speeds

- Press the [Select] button once to enter **Modes** selection
- Use the [+] and [-] buttons to switch between modes
  - "Cool"………………… Cooling
  - "Heat"………………… Heating
  - "Cool" & "Heat"……… Auto mode
  - "Fan"………………… Fan only

Cool	Heat	Auto mode	Fan only

- Press the [Select] button again to enter **Auto fan** selection
- Use the [+] and [-] buttons to switch between
  - "Fan"…………… …… Fan is on continuously
  - "Auto Fan"…………… *Fan cycles on with demand

  *Auto Fan is not available in "Fan only" mode

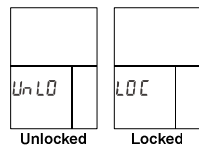 * In Heat mode with Oil/Gas heat configuration (e furnace):
  - Auto Fan – The fan will never be activated
  - Fan – The Fan will work continuously

Always ON	On with demand

- Press the [Select] button again to enter **Fan speeds** selection
- Use the [+] and [-] buttons to switch between
  - "FanLo"…………….. … Low speed
  - "FanMe"……………… Medium speed
  - "FanHi"……………… . High speed
  - "A Speed"………….. … Auto speed
  - "Auto Fan"…………… *Fan cycles on with demand

Low speed	Medium speed	High speed	Auto speed

- Press the [Select] button again to return to normal display

Lock Buttons

Use the Lock option to prevent users from making unwanted changes
When the thermostat is locked the [Select] [+] and [-] buttons are disabled
however the users can turn the thermostat ON or OFF The display will alternate
between "Loc" and real time clock

Unlocked	Locked

- Make sure both temperature set points are different than 10°C
- Lock the thermostat – Press and hold the [Select] button (20 seconds) until "Loc"
  appears on display
- Unlock the thermostat - Press and hold the [Select] button again (20 seconds)
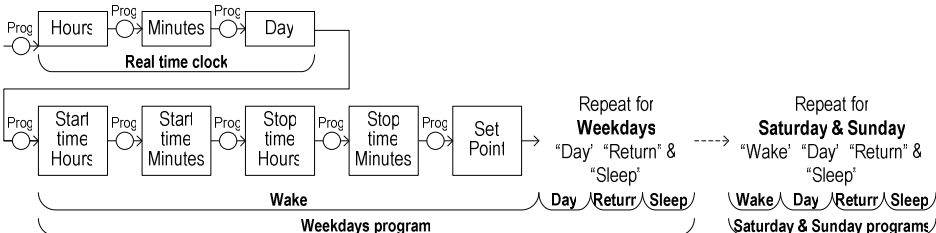 until "UnLo" appears on display

ETN24-SUPER-FP-PROG-EU-C
Owner's manual & Technnician Settings

Weekly Program

The thermostat can be programmed with up to 12 different programs with start time / stop time and set-point for each of the programs, 4 different programs for the weekdays (Monday to Friday), 4 different programs for Saturday and 4 different programs for Sunday. Daily programs are named: Wake, Day, Return and Sleep.

Enable/Disable/Override the weekly program

- Press & Hold the [Prog] button (10 sec.) to enable/disable the program. When the word "Program" appears on display, the weekly program is enabled and can be modified. When the word "Program" does not appear on display, the weekly program is disabled and cannot be modified.
- The occupant can temporarily change the set point temperature to be different than the set point temperature specified by the program. Changes will be affective until the next program event begins.
- To exit programming mode, press the [On/Off] button until normal display is reached or wait 30 seconds.
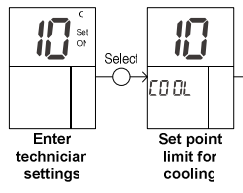

Technician Settings

- Adjust the set point temperature to 10°C. Wait until display stops flashing
- Press and hold the [Select] button (5 sec.) to **enter technician settings**
- Use the [Select] button to switch between different configurable parameters
- Use the [+] and [-] buttons to make adjustments or switch between options

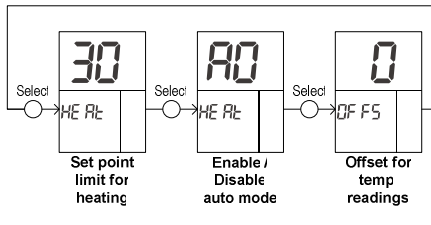### Set point temperature limit for cooling
- Indication: "Cool" and the set point Temperature limit for cooling. Range 10..30°C. default 10°C

Set point temperature limit for heating
- Indication: "Heat" and the set point temperature limit for heating. Range 10..30°C. default 30°C

Enable / Disable auto change over mode
- Indication: "AO" - enable (default), "AF" - disable

Offset for calibration of the measured temperature
- Indication: "Offs" and a number between (-6) and (+6). Range -6...+6°C. default 0°C

Freeze protection cut-in (see explanation)
Indication: "FPOn". Range 10..19°C. default 12°C

Freeze protection cut-off (see explanation)
Indication: "FPOf". Range 12..21°C. default 14°C

Enable / Disable Freeze protection
Indication: "FO" - enable (default), "FF" - disable

Enter technician settings — Set point limit for cooling

Set point limit for heating — Enable/Disable auto mode — Offset for temp readings

Freeze protection cut-in — Freeze protection cut-off — Enable/Disable freeze protection