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# ETN-24-SUPER-PROG

## (Europe Program – 5-1-1 – Celsius)

### Owner's Manual

### Installation and Operating Instructions



Please read this manual carefully before installation and use.

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#### 1. Options and Accessories

- Hand held remote control with weekly program.
- External sensor option:
  - RS01 for remote temperature sensing (1 required)
  - RS02 for average temperature sensing (2 required)



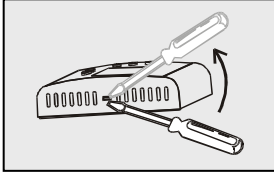
For details on where to purchase accessories, please contact **Meitav-tec** for your nearest location or visit our web site at **[www.meitavtec.com](http://www.meitavtec.com)**

## 2. Installation Instructions

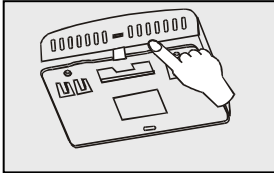


**It is very important to find the right place to install the thermostat.**

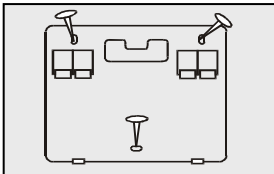
**Please make sure to follow all the installation instructions in order to get an accurate reading of the temperature.**



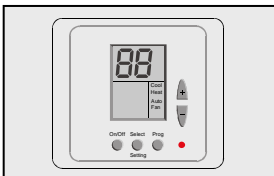
Separate the front panel from back panel by depressing the tongue located in the top of the thermostat.



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. (Next page)

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.

### 3. Wiring Connections



**Rc-Rh - If one transformer is in use, Rc-Rh must be shorted - (Default from Factory)**

**Table 3.1 - Connections for all applications**

Terminal	Function ETN	HC11	HC22	HP21	HP32
RC	24Vac RED (Bridged to RH)	N/A	N/A	N/A	N/A
RH	24Vac RED (Bridged to RC)	+	+	+	+
C	24VAC Common from transformer	+	+	+	+
W1 B/O	Heating 1 <sup>st</sup> Stage / Heat Pump	+(heat element)	+(heat element)	+(heat pump)	+(heat pump)
W2	Heating 2 <sup>nd</sup> Stage	N/A	+	+	+

T	External Sensor (option)	+(option)	+(option)	+(option)	+(option)
T	External Sensor (option)	+(option)	+(option)	+(option)	+(option)
Y2	Cooling 2 <sup>nd</sup> Stage	N/A	+	N/A	+
G	Fan	+	+	+	+
Y1	Cooling 1 <sup>st</sup> Stage	+	+	+	+

+ Connect terminal

N/A – Not Applicable (not in use)

## 4. DIP Switch Configuration



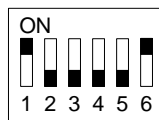
Before making any changes disconnect power to the main board.

**Table 4.1 – DIP Switch Selection**

Switch	Function		ON	OFF	Default
1	Internal Sensor Control		X		ON
	External sensor control			X	
2	Heat Pump (HP)		X		OFF
	Heat - Cool (HC)			X	
3	In HC mode: (Switch 2 OFF)	Electrical Heat		X	OFF
		Oil/Gas Heat	X		
	In HP mode: (Switch 2 ON)	Heat Pump in COOL		X	OFF
		Heat Pump in HEAT	X		
4	3 minutes compressor delay			X	OFF
	Without delay		X		
5	Internal Sensor Control			X	OFF
	External sensor control		X		
6	Internal Sensor Control		X		ON
	External sensor control			X	



Use this table together with the illustration above showing the switch configuration.



Default DIP switch configuration:

## 5. External sensor connection - option



The external sensor must be Meitav-tec type.



Before making any changes disconnect power to the main board.

**Table 5.1 - N.TC. Sensor: Temperature ~ Resistance Characteristics**

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



The default from factory is **INTERNAL SENSOR**.

To switch to temperature readings from an **EXTERNAL SENSOR**:

1. Disconnect power to the thermostat.
2. Move DIP switches 1,5 and 6 as shown in the picture below

Switch 1 - OFF

Switch 5 - ON

Switch 6 – OFF



3. Connect the temperature sensor to T-T terminals.
4. Reconnect power to the thermostat.



The wire length for the sensor can be up to 30 meters (100 feet) with standard cable.



If the distance is greater than 30 meters (100 feet) then it **MUST** be shielded.

## 6. Operating Manual

### 6.1 Turning the thermostat On/Off

- Press the [On/Off] button to turn the thermostat ON or OFF - the words "ON" or "OFF" will appear on display.

### 6.2 Adjusting Temperature

- Press the [+] or [-] buttons – the set-point temperature will flash.
- Adjust the set-point temperature using the [+] or [-] buttons.
- Wait until display returns to normal.

### 6.3 Mode, Auto Fan

- Press the [Select] button – “UnLo” and the actual mode will appear on display.
  - Using the [+] and [-] buttons switch between:
    - Cool – “Cool” will appear on display
    - Heat – “Heat” will appear on display
    - Emergency heat – “E.Heat” will appear on display (available only in HP configuration)
    - Cool/Heat – auto change over – Both “Cool” and “Heat” will appear on display
    - Fan Only – Fan will appear on display
  - Press the [Select] button again – “Fan” or “Auto Fan” will appear on display.
  - Using the [+] and [-] buttons switch between:
    - Fan on (Auto fan off) – the fan will work continuously – “Fan” will appear on display.
    - Auto fan\* – the fan will work when there is demand for cool or heat – “Auto Fan” will appear on display.
- \*Auto Fan is not available when the mode is set to “Fan only” mode.
- \* In Heat mode, with Oil/Gas heat configuration (i.e., furnace):
- AUTO FAN - Fan will never be activated.
- FAN ON - The Fan will work continuously.
- Press the [Select] button again to return to normal display.

### 6.4 Lock/Unlock the buttons

Use the Lock option to prevent users from making unwanted changes.

When the thermostat is locked, the [Select], [Prog] and [+] and [-] buttons do not work.

The display will alternate between “Loc” and real time clock.

- Make sure both temperature set-points are **different than 10°C**.
- Lock the buttons - Press and hold the [Select] button (20 seconds) until “Loc” appears on display.
- Unlock the buttons - Press and hold the [Select] button again (20 seconds) until “UnLo” appears on display. Wait until display returns to normal.

### 6.5 Programming

The thermostat is a 5-1-1 programmable; weekdays Monday through Friday, Saturday and Sunday both have individual programs.

There are two program events per day: 1-Wake, 2-Day

#### **Switch between Programmable/Non Programmable configurations**

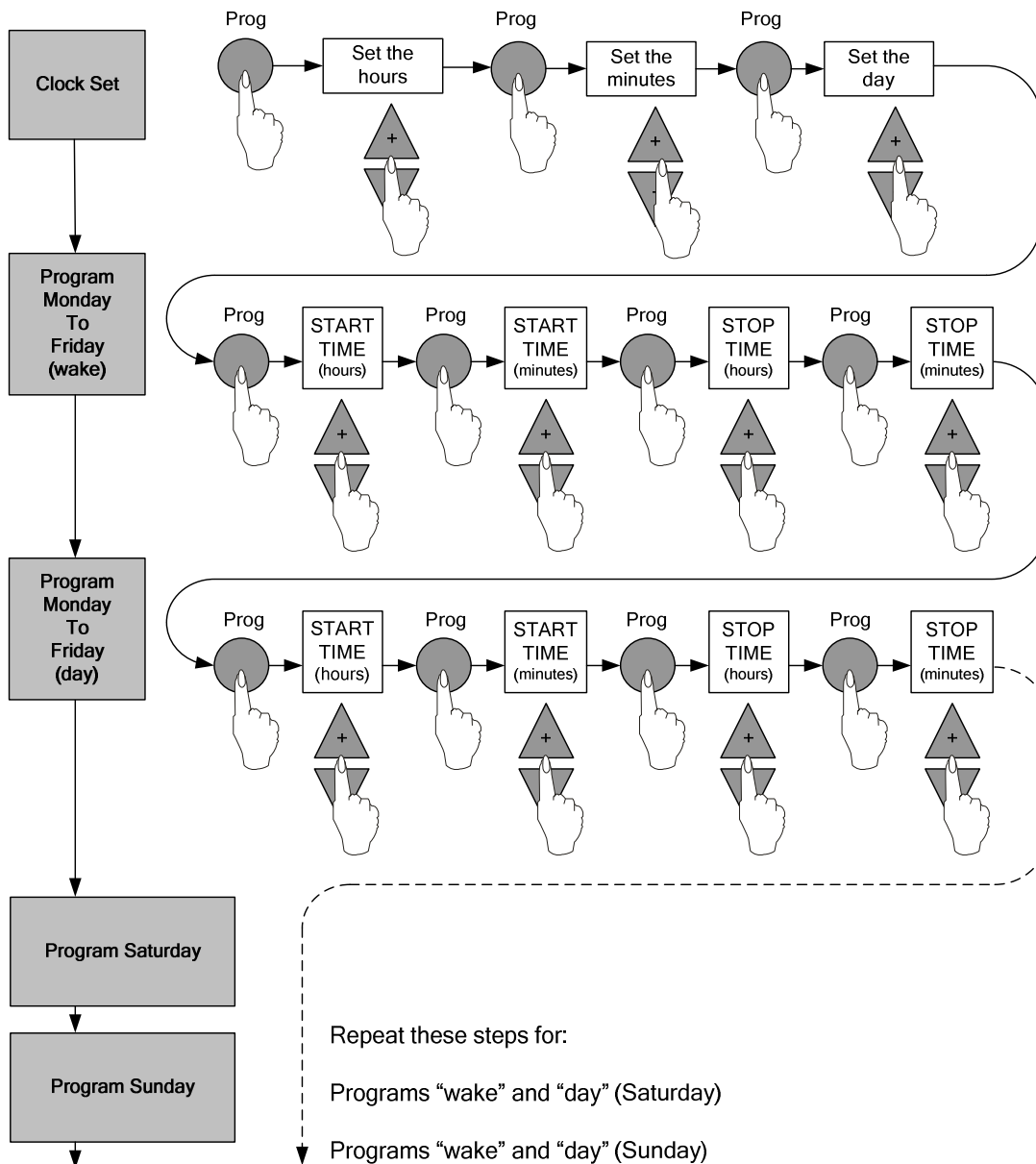
The ETN-24-Super –Prog (U.S Program-Celsius) is a Programmable thermostat by default.

To switch to a Non Programmable configuration the remote control MUST be used (see instructions below).

**Important:**

- While modifying the program you can quickly switch between days by pressing the “On/Off” button.
- Press the [Select] button to exit the program.
- If no key is pressed for 30 seconds, the thermostat will return to normal display.

**To modify the Program to your own needs simply follow the steps of the following chart:**



## 6. Technician Settings

### Temperature limits and Offset for temperature readings

- Adjust the set-point temperature for cooling to 10°C.
- Wait until display returns to normal.
- Press and hold the [Select] button (6 sec.) – “Cool” will appear on display.
- Adjust the temperature limit for cool using the [+] and [-] buttons  
(Range: 10...30°C, default 10°C)
- Press the [Select] button again – “Heat” will appear on display.
- Adjust the temperature limit for heat using the [+] and [-] buttons  
(Range: 10...30°C, default 30°C)
- Press the [Select] button again – “Offs” and the OFFSET temperature will appear on display (a number between -6...+6). The offset is used to calibrate the measured Room temperature- when needed.
- Adjust the Offset for Room temperature readings using the [+] and [-] buttons  
(Range: -6...+6°C, default 0°C)
- Press the [Select] button again to return to normal display.