

ETN24-P-3S-HU

(Cool and Heat)

Owner's Manual - Installation
and Operating Instructions



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Please read this manual carefully before installation and use.

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1. Options and Accessories

Remote sensor option:

- TS01: Temperature Sensor with 80cm cable.
- RS01: for remote temperature sensing (1 required); for averaging temperature at 4 locations (4 required) – the thermostat will control on the average temperature of all 4 locations
- RS02: for averaging temperature at 2 locations (2 required) – the thermostat will control on the average temperature of both locations

Remote Control (Purchase separately)

- RT03: Hand held remote control

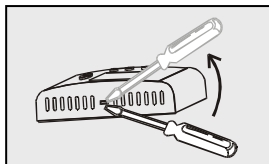
Humidity Duct Sensor (Purchase separately)

- GHU/DUCT: Humidity duct sensor

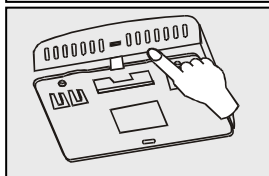


For details on where to purchase accessories, please contact Meitav-tec for you're nearest location or visit our web site at www.meitavtec.com

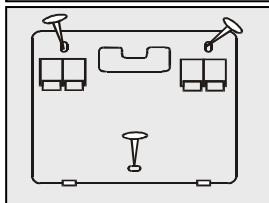
2. Installation Instructions



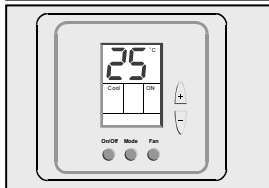
Separate the front panel from back panel by depressing the tongue located in the top of the unit.



Pull the back panel out.

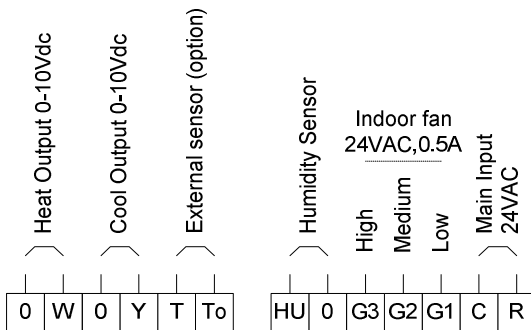


Line the back panel up against the wall or flat surface. Install three screws as required.



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. Wait for 15 seconds for the LCD display to appear (completion of power circuit charging and for self-diagnostics).

3. Wiring Connections



5. External sensor connection

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
Temp °F	45	50	55	60	65	70	75	80	85	90
Res. k	115.8	100.9	88.1	77.1	67.7	59.6	52.5	46.4	41.2	36.6

- Disconnect power to the thermostat 24Vac.
- Connect external sensor to terminals T - 0.
- Reconnect power to the thermostat.

The length of the cable for the external sensor is 30 meters with standard cable.

If longer distance is needed then the cable MUST be shielded.

6. Technician Settings

Set differential for damper 2°C...10°C, proportional output range 0-10Vdc or 2-10Vdc, ambient humidity (RH) indication, set point for humidity (set RH) and differential for proportional output 4%-20% RH.



Note: If no key is pressed for 5 seconds – the thermostat will automatically return to normal display mode.

Enter settings.

- Set temperature to 10°C.
- Press and hold the Mode button (5 seconds) to enter settings – a number (range 2-10) will flash on the display.

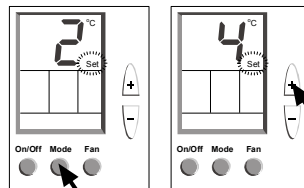
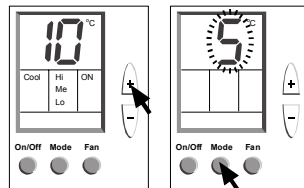
Set differential for 0-10Vdc.

The temperature Differential defines the ratio between the opening level of the damper and the temperature demand.

The damper will be fully opened when the demand (demand = ambient temp – set temp) equals the differential.

(Differential range: 2°C...10°C)

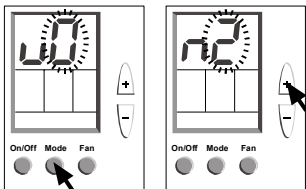
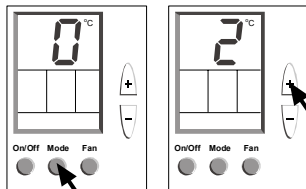
- Press the **Mode** button again – a number will appear on the display.
- Adjust the differential using the (+) or (-) buttons.



Proportional output range

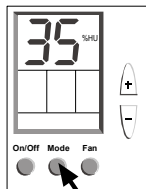
0-10Vdc or 2-10Vdc

- Press the **Mode** button again – a number will appear on the display.
- Using the (+) button, change the scale to 2-10Vdc “2” will appear on the display.
- Using the (-) button, change the scale to 0-10Vdc “0” will appear on the display.



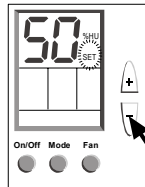
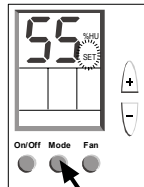
Ambient humidity (%RH).

- Press the **Mode** button again – the current ambient humidity and “HU%” will appear on the display.



Humidity set point (40%-70% RH)

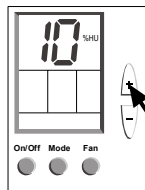
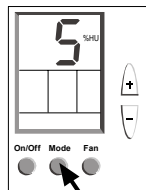
- Press the **Mode** button again – the Humidity set-point, “%HU” and “SET” will appear on the display (“SET” will blink).
- Adjust the humidity set point using the (+) or (-) buttons.



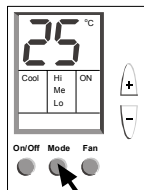
Differential for proportional output 4%-20% RH.

The humidity Differential defines the ratio between the opening level of the damper and the humidity demand. The damper will be fully opened when the demand (demand = ambient humidity – set humidity) equals the differential. The proportional output is active in cooling mode only!
(Differential range: 4%...20% RH)

- Press the **Mode** button again – the differential for proportional output will appear on the display.
- Adjust the differential using the (+) or (-) buttons.



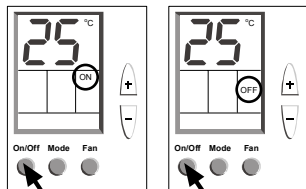
- Press the **Mode** button again to return to normal display mode.



7. Operating manual

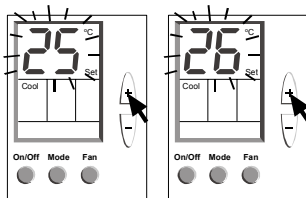
7.1 On/Off button

- Press the **On/Off** button to activate or deactivate the thermostat - The word "ON" or "OFF" will appear on the display.



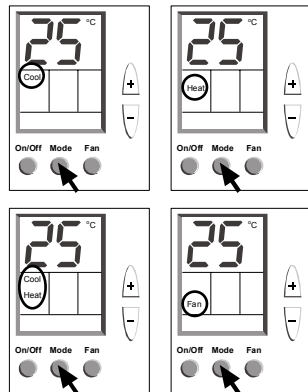
7.2 Temperature set-point adjustment

- Press the (+) or (-) buttons - the set-point temperature will flash and "COOL" and "SET" will appear on display.
- Adjust the cooling set-point temperature using the (+) or (-) buttons.



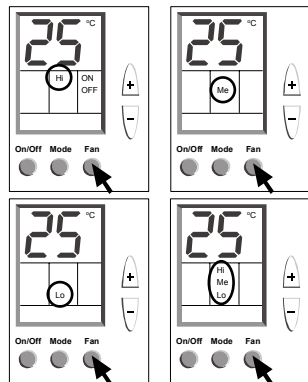
7.3 Modes

- Press the **Mode** button to switch between:
Cool – “Cool” will appear on the display.
Heat – “Heat” will appear on the display.
Auto Change-over – “Cool” and “Heat” will appear on the display.
In Auto change-over mode the active mode will flash.
Fan Only – “Fan” will appear on the display.



7.4 Fan Speeds

- Press the **Fan** button to switch between the fan speeds.
High speed - “Hi” will appear on display.
Medium speed - “Me” will appear on display.
Low speed - “Lo” will appear on display.
Auto speed - “Hi”, “Me”, “Lo” will appear on display.
In Auto Speed – the active speed will flash.



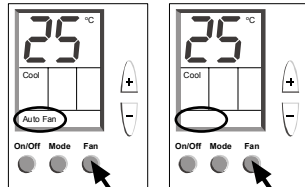
7.5 Auto Fan

The Auto Fan mode is available in all modes except for Fan Only mode

- Press and hold (5 seconds) the **Fan** button to select Auto Fan – “Auto Fan” will appear on display.

In Auto Fan mode – the fan will run only during demand for cooling.

- Press and hold the fan button again to cancel the Auto Fan mode.



8. RT03-HC-3S- Hand Held Remote Control - Non-Program – Purchase separately

8.1 General

This is an Infrared Remote Control Unit, which means it must be pointed at the thermostat (or extra receiver) to operate.

Every time you change a parameter in the Remote Control, you must send it to the thermostat by pressing the "ON/SEND".

8.2 RT03-HC-3S - Operating Manual

On/Send, Off

- Press the **On/Send** button to activate the air conditioner and/or updating information.
- Press the **Off** button to turn the air conditioner off.





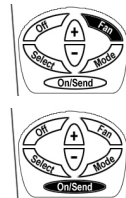
Temperature Set Point

- Select the desired temperature using the (+) or (-) buttons.
- Press the **On/Send** button to send information to thermostat.



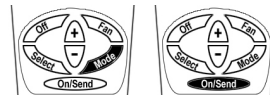
Fan

- Press the **Fan** button to change speeds between: Low, Medium, High, Auto Speed.
- Press the **Select** button 5 times – swing will flash.
- Switch between Fan On  and Auto Fan  using the (+) or (-) buttons.
- Press the **On/Send** button to send information to thermostat.



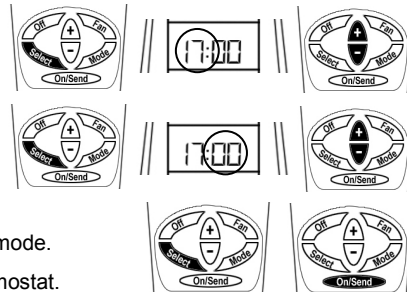
Mode

- Press the **Mode** button to change between COOL, HEAT, AUTO CHANGE-OVER and FAN ONLY.
- Press the **On/Send** button to send information to thermostat.



Real Time Clock and Day:

- Press the **Select** button – “CLOCK” and “SET” will flash.
- Press the (+) or (-) buttons - the hours will flash.
- Adjust the hours using the (+) or (-) buttons.
- Press the **Select** again - minutes will flash.
- Adjust the minutes using the (+) or (-) buttons.
- Press the **Select** button again to return to normal display mode.
- Press the **On/Send** button to send information to the thermostat.

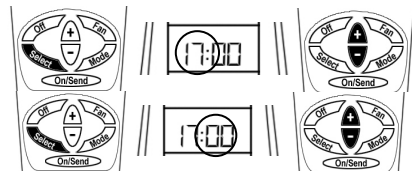


Timer:

-  **IMPORTANT:** If no button is pressed for 10 seconds the display will return to normal mode. When the **TIMER** is active – “**AUX**” will appear on the thermostats display.

Start Time:

- Press the **Select** button twice.
“PROGRAM” & “START” (flashing) will appear on display.
- Press the **(+)** or **(-)** buttons - the hours will flash.
- Adjust the hours using the **(+)** or **(-)** buttons.
- Press the **Select** button - the minutes will flash.
- Adjust the minutes using the **(+)** or **(-)** buttons.



Stop Time:

- Press the **Select** button.
“PROGRAM” & “STOP” (flashing) will appear on display.
- Press the **Select** button - the hours will flash.
- Adjust the hours using the **(+)** or **(-)** buttons.
- Press the **Select** button - the minutes will flash.
- Adjust the minutes using the **(+)** or **(-)** buttons.
- Press the **Select** button - the **TIMER** will blink
- Using the **(+)** or **(-)** buttons, Select **TIMER ON** or **OFF**.



- Press the **On/Send** button to send the information to the thermostat.
- If you did not change between TIMER ON or OFF, press the **Select** button to return to normal display mode.



Press the *On/Send* or *Off* button from the remote control or On/Off button from thermostat to manually override the timer settings. The manual override function will only be operative until the next automatic function of the program.

Comments

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