

# RT-N Instructions

- ★ Digital Thermostat / Programmable Room Thermostat (Selectable)
- ★ Blue backlight
- ★ Network Functionality (Compatible with OSMA network products)

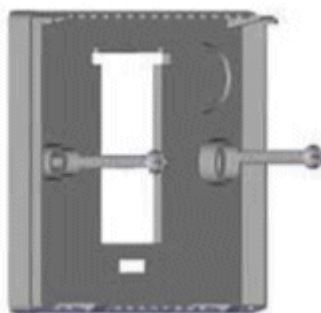
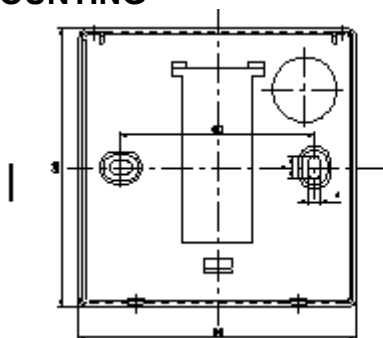


## SPECIFICATIONS

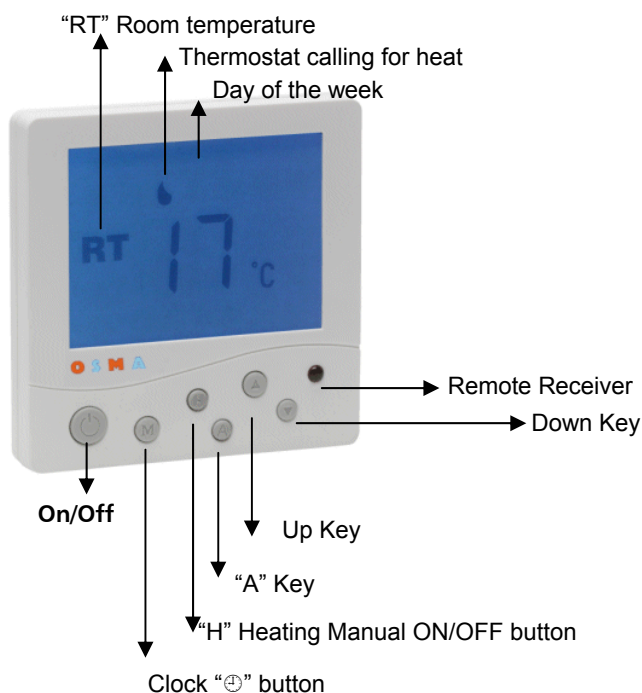
Set-point range: 5°C to 35°C  
Operating difference:  $\pm 1^\circ\text{C}$   
Switch current rating:  $< 3\text{A}$   
Sensing element : NTC  
Communication: RS485

Display: LCD  
Power supply: 12V from Network  
Dimensions: 86 × 86 × 13 mm  
Housing: ABS Flame Retardant  
Switching Voltage: Volt Free

## MOUNTING

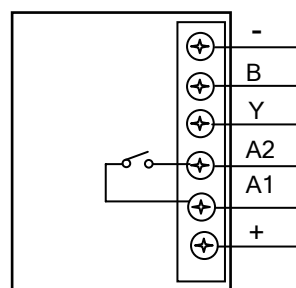


## BUTTON DESCRIPTION




## WIRING DIAGRAM

### OSMA RT-N





#### POWER ON/OFF

- ☞ To turn the RT-N on or off press “”

#### ENABLE PROGRAMMABLE MODE

- ☞ With the RT-N powered off, press “A” and down for 5 seconds.

Select 01 for basic thermostat mode

Select 02 for programmable thermostat mode

#### SETTING THE FROST PROTECTION TEMPERATURE

- ☞ With the thermostat powered off, press  
⊕ and “A” for three seconds. You are now prompted to  
enter the required frost temperature setting. This is set to  
12°C as a factory default. (Min = 07°C, Max = 17°C)


#### FROST MODE (THERMOSTAT OFF)

To enable this operation;


- ☞ With the RT-N turned off.

Press “⊕” for 3 seconds.

Select 01 (00=disabled)

When enabled, the RT-N will maintain the Frost Protection temperature whenever the power has been turned off by use of the “” button.

#### TEMPERATURE CALIBRATING:


- ☞ With the RT-N turned off, Press “⊕” and “H” for 3 seconds. The display will show the actual temperature
- ☞ Press “▲” or “▼” to adjust the temperature to the correct value.
- ☞ Press “” to turn off. The calibration setting will be stored.

#### NORMAL OPERATING MODE:

**RT** = When the RT-N is in the operating mode, RT is displayed and indicates the Room Temperature.

**SET** = Pressing the UP or DOWN key once will display SET and the current set-point temperature. You are able to increase/decrease the set-point temperature using the UP/DOWN keys. This temperature change is only temporary and will be maintained only until the next programmed setting.



#### KEYPAD LOCKING FUNCTION

- ☞ Press “A” and Up for 10 seconds
- ☞ 00 = disabled 01 = enabled
- ☞ To lock the keypad, press “A” and Up keys for 10 seconds.
- ☞ “” will be displayed to indicate the keypad is locked
- ☞ To unlock the keypad, repeat the steps above.


#### SETTING THE CLOCK

- ☞ Press “⊕” twice, “⊕” is displayed.
- ☞ Use the Up/Down key to select the minutes.
- ☞ Press “H” to accept the minutes setting
- ☞ Use the Up/Down key to select the hours
- ☞ Press “H” to accept the hours setting
- ☞ Use the Up/Down key to select the day of the week.
- ☞ To store the new settings, press “A”


#### MANUAL HEATING OVERRIDE (FROST PROTECTION)

- ☞ To put the PRT-N in to Frost Protection mode,  
Press “H”. A frost protection symbol “” will be shown.
- ☞ To cancel the Frost Protection mode, press H. The frost protection symbol “” will be removed.
- The frost protection temperature will be maintained in this mode. Repeat operation to cancel.

#### SETTING THE HEATING PROGRAM (Programmable Mode)

- ☞ Press “⊕” once, “” is displayed as well as the number 1 and “Mo Tu We Th Fr”
- This indicates that you are able to program switching time 1 for the week-day.
- ☞ Use Up/Down keys to set the required start time.
- ☞ Press “H” to accept this setting.
- ☞ Use the Up/Down key to set the required temp.
- ☞ Press “H” to accept this setting.
- ☞ Repeat for switching times 2-4 week-day.
- ☞ After you have programmed times 1-4 for the weekday, you are now able to set the switching times for weekend “Sa Su” will be displayed.
- ☞ Use Up/Down keys to set the required start time.
- ☞ Press “H” to accept this setting.
- ☞ Use the Up/Down key to set the required temp.
- ☞ Repeat for switching times 2-4 for the week-end

#### COMMUNICATION NUMBER

- ☞ With the RT -N in standby. Press “⊕” and “H” for 3 seconds. The display will show “XX” °C
- ☞ Press “A” to display the station number.
- ☞ Press “▲” or “▼” to adjust the thermostat comms number
- ☞ Press “” to turn off, It will be confirmed automatically.

#### TM1-N COMMUNICATION

- ☞ When a TM1-N is connected to the network - it will signal to the RT-N when to go into frost or heat mode.