

# MPRT RF WIRELESS PROGRAMMABLE THERMOSTAT

### **INSTALLATION INSTRUCTION**

The MPRT RF consists of a room unit and a relay box. The Room Unit senses the room temperature and if heat is called for, it transmits a radio signal to the relay box which in turn activates the heating.



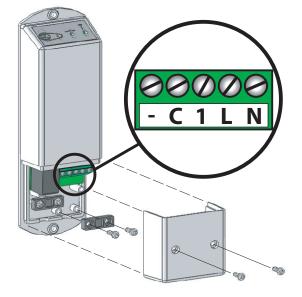


### **RELAY BOX**

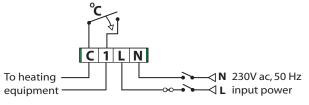
#### WIRING THE RELAY BOX.

The relay box is powered by 230V ac, 50Hz. The figure below shows both low voltage and 230V ac wiring options for switching the heating equipment.

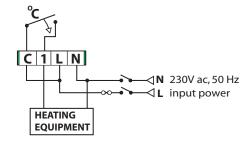
**WARNING:** Installation and maintenance to be carried out only by suitably qualified personnel and in accordance with current IEE wiring regulations.



# Volt Free/Low Voltage Switching of Heating Equipment.

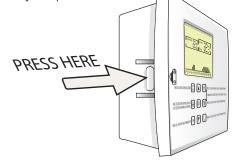


### 230V ac Switching of Heating Equipment

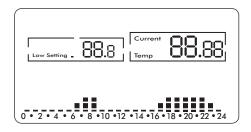


### **ACTIVATING THE ROOM UNIT**

Release the cover from the base by pressing at the arrow. Remove the plastic strip which is preventing the battery connection in the battery compartment.



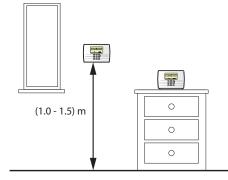
The LCD should display as shown below. Reassemble the cover to the base.



### LOCATING THE ROOM UNIT

The room unit can be mounted on its plastic stand and placed on a sideboard or other item of furniture. Alternatively it can be wall mounted using the two screws provided.

WHEREVER the Room Unit is mounted/used it should be out of direct sunlight, out of draughts, and clear of any heat source (e.g. radiators, fires or electronic equipment). For optimum use the unit should be sited between 1 and 1.5metres from the floor.



#### LINKING THE ROOM UNIT TO THE RELAY BOX

Place the relay box in linking mode by holding down the button on the relay box for 4 seconds.

The green LED will light continuously indicating that the relay box is ready for a configuration signal. With the room unit close to the relay box, hold down OK for 10 seconds. The  $OH = I_{10} = I_{10}$  message appears and the bar graph takes on a wavy pattern indicating that the room unit is transmitting its configuration address to the relay box.

The link has been successfully established when the green LED blinks regularly at about 4 times per second. Press **Press O** on the room unit to exit linking mode.

**Note:** The range of the room unit can be tested during the linking procedure by taking it successively further away from the relay box and verifying that the green LED continues to blink regularly at about 4 times per second.

### SETUP FOR SMART-START.

To toggle the Smart-Start function between enabled and disabled, hold and volume for 10 seconds. The volume button can now be used to toggle Smart-Start between active and deactivated.

# CONFIGURING FOR WEEKLY OR DAILY TIMING.

To toggle between weekly or daily time settings, hold A and down for 10 seconds. The two button can now be used to toggle between enabled and disabled.

#### RELAY BOX OPERATION. KEY TO LEDS

Yellow LED Lighting = Manual Mode. Yellow LED not Lighting = Automatic Mode.

Red LED Lighting = Heating On. Red LED not Lighting = Heating Off.

Green LED Lighting = Waiting on a configuration signal from the room unit.

Green LED Quick Blink = Linking to room unit.

Green LED Slow Blink = ERROR - Check the following:

- The room unit batteries are not exhausted.
- ullet The radio transmission range is not excessive.
- The room unit is not within 50cm of an apparatus emitting electrical interference.
- No other apparatus is continuously transmitting on the 433.92MHz radio frequency.

### USING MANUAL MODE.

Press (2) to force heating on.

Press (2) to cease forcing heating on.

Press (2) again to return to Auto Mode.

### **TECHNICAL DATA: ROOM UNIT.**

Precision of measured temperature: 0.1°C Set temperature range: 6°C to 32°C Electrical Protection: Class II Ingress Protection: IP30 Batteries: 3 X LR6 AA 1.5V alkaline batteries Battery Life: 2 years approx. Radio Frequency: 433.92 MHz, < 10mW Statutory Compliance: R&TTE 1999/5/CE Pollution Situation: Normal

### **TECHNICAL DATA: RELAY BOX.**

Operating Temperature: 0°C to 50°C Electrical Protection: Class II Ingress Protection: IP44 Power Supply: 230V ac +/-10%, 50Hz Radio Frequency: 433.92 MHz, <10mW Communication Range: 30m in residential environments Output Relay Rating: 12A 250Vac Statutory Compliance: EMC 89/336/EEC, LVB/2006/95/EEC Pollution Situation: Normal

Software Class: A

MYSON CONTROLS MYSON LTD., EASTERN AVENUE, TEAM VALLEY, GATESHEAD, TYNE & WEAR, NE11 0PG SALES OFFICE No. 0845 402 3434

IN ACCORDANCE WITH OUR POLICY OF CONTINUAL PRODUCT IMPROVEMENT WE RESERVE THE RIGHT TO AMEND THE SPECIFICATION OF THESE PRODUCTS WITHOUT PRIOR NOTIFICATION.





### MPRT RF WIRELESS PROGRAMMABLE THERMOSTAT

### **USER INSTRUCTIONS**

### **ABOUT YOUR MPRT RF**

The **MPRT RF** consists of a room unit and a relay box. The ROOM UNIT is programmable a room thermostat. It measures the temperature of your room and then controls the heating to maintain the room at the chosen temperature. IMPORTANT : Do not place or fit the ROOM UNIT where it will be affected by heat from radiators, sunshine, or other heat source.



The relay box is wired to your heating equipment by your electrician. The room unit communicates with the relay box by radio waves, thus switching on/off your heating.

If your MPRT RF has already been installed you need only follow the section 'THREE EASY STEPS', to operate your heating.

### **"THREE EASY STEPS"**

On your room unit you set the value of three temperatures, Low, Medium and High.

"Low" is typically a night setting, "Medium" an afternoon setting, and "High" a morning and evening setting.

Your room unit will then operate your heating to maintain these temperature settings.

Follow steps 1 to 3 below.

### **1** SETTING THE CLOCK

Hold down HEAT	MON TUE WED
for 5 seconds.	THU FRI SAT SUN
This screen	TO ACCEPT & CONTINUE PRESS OK
appears:	TO CHANGE VALUE PRESS & OR

Use  $\blacktriangle$  and  $\bigtriangledown$  to alter the blinking text (hours). Press OK to proceed to minutes and change using  $\blacktriangle$  and  $\bigtriangledown$ .

PressOK to proceed to day and change using and v. PressOK.

The time is now set and the screen returns to normal.



## Press H.

This screen appears:

High Setting
TO ACCEPT & CONTINUE PRESS OK TO CHANGE VALUE PRESS ▲ OR ♥

Use ( ) or ( ) to set the "High" temperature. Your have now set your high temperature. Press ( ). The screen returns to normal.

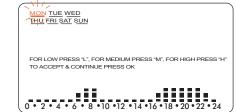
To set your "Medium" temperature, follow the same procedure as above except press M instead of H.

To set your "Low" temperature, follow the same procedure as above except press  $\fbox$  instead of  $\boxdot$  .

### **3** SETTING YOUR HEATING TIMES

ress HEAT TIMES . This screen

appears:



NOTE:

If the screen above appears without the days of the week displayed it means the room unit has been set up to give the same temperatures every day. If you wish to change this set up to enter for individual days press ( to exit. Then press and () together and hold down for 10 seconds. Press () to enable daily time settings. Press () to accept. Now press () and follow the instruction below.

(To revert to the same programme each day repeat the above process.)

When the daily programme is enabled, the bar graph shows the temperatures for the 24 hours of Monday. A Low temperature is indicated by –, a Mid temperature by  $\blacksquare$ , and a High temperature by  $\blacksquare$ . If you are happy with the temperatures entered for Monday, press OK.

Tuesday's temperatures appear.

If you are happy with these temperatures press OK again, and so on to Sunday.

Press OK. The screen returns to normal.

If you are not happy with the temperatures on any particular day, you can change them. For example, in the figure below, to change the settings on the left (LLLLLLMHHLL) to those on the right you would press the button sequence LLLLMMHHHH

0 • 2 • 4 • 6 • 8 • 10

### SMART START

0 • 2 • 4 • 6 • 8 • 10

"SMART START" varies the start-up times to ensure that the building achieves temperature by the required time.

The smart start system is continually learning the temperature rise requirement, delaying the start up of the system, therefore saving energy during milder weather.

#### **SETUP FOR SMART-START.**

To toggle the Smart-Start function between enabled and disabled, hold A and disabled, hold and disabled.

The 1Hr button can now be used to toggle Smart-Start between active and deactivated.

### **OTHER SIMPLE FUNCTIONS**

### ONE HOUR OF HIGH TEMPERATURE.

If you press 1 Hr you will get an hour of High heat, irrespective or whether your times are set for Low or Mid heat. If you want to cancel this function you simply press 0.

### MANUAL OVERRIDE.

If you hold for 5 seconds, the room unit will go into manual mode. In this mode there is only one temperature. Press either for v to see this temperature change. Set it to the temperature you require. The thermostat will continue to control your heating at this temperature until you deactivate

manual override by pressing \_\_\_\_\_.

### **DEACTIVATING YOUR HEATING:**

If you press your heating will be deactivated. The screen will continue to indicate the room temperature but the heating will never come on.

To reactivate your heating simply press

#### Note:

Provided you deactivate via the MPRT RF, the system will have frost protection at 6°C. If the system is to be left shut down for a long period over winter, ensure there is sufficient battery life to maintain protection.

### MORE ADVANCED FUNCTIONS

### **KEYPAD LOCKING.**

Hold & OK for 5 seconds to lock the keypad. The locked symbol appears on the screen . No changes can be made to the settings. To unlock the screen hold & & OK for 5 seconds.

### **RETURN TO FACTORY SETTINGS.**

Holding and K down for 10 seconds returns the H, M and L temperatures to the values they had when they left the factory. It also returns the heating times to their factory values.

### COPY FUNCTION.

Pressing (A) and (OK) for 5 seconds when setting your heating times (step 3), will copy the current day's times into the next day.

### HOLIDAY FUNCTION.

Pressing  $\bigcirc$  while holding  $\bigcirc$  puts the room unit into holiday mode. Press  $\blacktriangle$  to enter the number of days you will be away on holidays. Press  $\bigcirc$  Now press  $\bigcirc$  or  $\bigtriangledown$  to alter the room temperature you require while away on holidays. Press  $\bigcirc$  to accept and exit. The function can be cancelled by pressing  $\bigcirc$ .

#### **SMART-START FUNCTION.**

The message "SMART START" displayed on the screen indicates that this function is operating.

Smart-Start works by switching the heat on in advance - so that the room can warm up. As an example, lets say you get out of bed at 8am and you want the room to be warm at that time.

Without Smart-Start you must programme your High temperature for 7am.

With Smart-Start you need only programme your High temperature for 8am.

Smart-Start will know that you want the room warm at 8am and bring the heating on before that.





But Smart-Start is even more intelligent than this. It remembers how cold it was on the previous mornings. Thus, in Winter it might start the heating 1 hour before 7a.m. and in Spring start half an hour before 7a.m. In this way it provides optimum comfort and energy saving.

#### Note:

In extreme low temperatures and dependant on your heating system capability, the desired temperature set may not be reached by the set time. Thus an earlier higher temperature may need to be set.

### **RELAY BOX OPERATION**

Once your Relay Box has been installed, it becomes part of your heating equipment. It operates automatically.

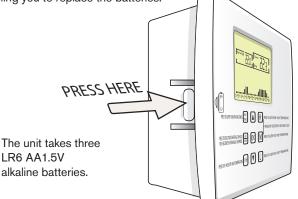




# REPLACING THE BATTERIES IN YOUR ROOM UNIT.

Dependant on type and manufacturer the batteries in your MPRT RF should last approximately 2 years.

When they go low, a battery symbol appears on the LCD screen telling you to replace the batteries.



To access the batteries release the cover from the base by pressing the base at arrow shown above. The batteries are then visible.

**NOTE:** Changing the battery in 1 minute or less will retain all your settings. If it takes longer than 1 minute, you may have to re-enter your settings.

MYSON CONTROLS MYSON LTD., EASTERN AVENUE, TEAM VALLEY, GATESHEAD, TYNE & WEAR, NE11 OPG SALES OFFICE No. 0845 402 3434

IN ACCORDANCE WITH OUR POLICY OF CONTINUAL PRODUCT IMPROVEMENT WE RESERVE THE RIGHT TO AMEND THE SPECIFICATION OF THESE PRODUCTS WITHOUT PRIOR NOTIFICATION.

