# heatmiser<sup>®</sup>



Model: DT-RP

#### Model: **DT-RP**





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#### What is a Room Thermostat?

A room thermostat simply switches the heating system on and off as necessary.

It works by sensing the air temperature, switching on the heating when the air temperature falls below the thermostat setting, and switching it off once this set temperature has been reached.

Setting a room thermostat to a higher temperature will not make the room heat up any faster. How quickly the room heats up depends on the design & size of the heating system.

Similarly reducing the temperature setting does not affect how quickly the room cools down. Setting a programmable room thermostat to a lower temperature will result in the room being controlled at a lower temperature, and saves energy.

The way to set and use your room thermostat is to find the lowest temperature settings that you are comfortable with, and then leave it alone to do its job.

The best way to do this is to set the room thermostat to a low temperature – say 18°C, and then turn it up by 1°C each day until you are comfortable with the temperature. You won't have to adjust the thermostat further. Any adjustment above this setting will waste energy and cost you more money.

If your heating system is a boiler with radiators, there will usually be only one room thermostat to control the whole house. But you can have different temperatures in individual rooms by installing thermostatic radiator valves (TRVs) on individual radiators.

If you don't have TRVs, you should choose a temperature that is reasonable for the whole house. If you do have TRVs, you can choose a slightly higher setting to make sure that even the coldest room is comfortable, then prevent any overheating in other rooms by adjusting the TRVs.

Room thermostats need a free flow of air to sense the temperature, so they must not be covered by curtains or blocked by furniture. Nearby electric fires, televisions, wall or table lamps may also prevent the thermostat from working properly.



#### **Installation Procedure**



#### Do

Mount the thermostat at eye level. Read the instructions fully so you get the best from our product.



#### Don't

Do not install near to a direct heat source as this will affect functionality. Do not push hard on the LCD screen as this may cause irreparable damage.

This Slimline Series thermostat is designed to be flush mounted and requires a back box of 35mm (minimum depth) to be sunk into the wall prior to installation.

#### Step 1

Carefully separate the front half of the thermostat from the back plate by placing a small flat head terminal driver into the slots on the bottom face of the thermostat.

#### Step 2

Place the thermostat front somewhere safe.

Terminate the thermostat as shown in the diagrams on pages 19-21 of this booklet.

#### Step 3

Screw the thermostat back plate securely into the back box.

#### Step 4

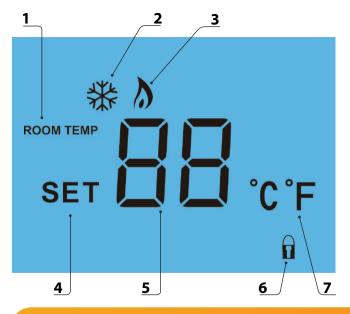
Clip the front of the thermostat back onto the thermostat back plate.









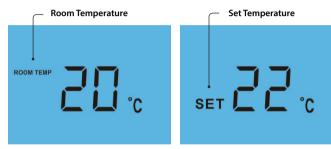


## LCD Display

- 1. Room Temp Indicates the current temperature sensor mode.
- 2. Frost Icon Displayed when the thermostat is in frost protection mode.
- Flame Icon Displayed when the thermostat is calling for heat, the flame icon will flash when the optimum start function is in operation.
- 4. Set Indicates when changes are being made to programs or temperature set points.
- 5. Current Temp Indicates the current sensor temperature.
- 6. Keypad Lock Indicator Displayed when the keypad is locked.
- 7. Units of Temperature Degrees Celsius or Fahrenheit.

## Temperature Display

The temperature display information is driven by two different inputs; the sensor measurement and the target temperature you have set.



This is the current room temperature.

This is the temperature you are trying to achieve in your home.

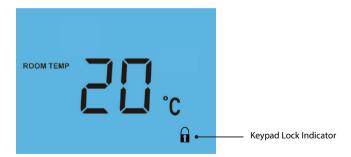


### **Locking the Thermostat**

The thermostat has a keypad lock facility. To activate the lock follow these steps.

- You will see the lock symbol appear on screen ......
  To unlock, repeat the steps above until the lock symbol disappears.

Note: The keypad lock indicator is only displayed when the lock is active.





### **Temperature Control**

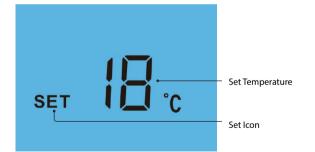
The Up/Down keys allow you to adjust the set temperature .....

▲ ▼

When you press either key, you will see the word SET and the desired temperature will be displayed on screen.

Use the Up/Down keys to adjust the SET value ......

Press A to confirm settings and return to main display .....



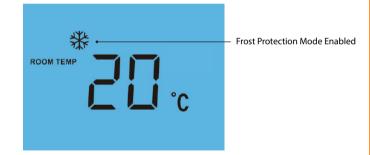
## Frost Mode

Pressing the Power button once will place the thermostat in frost protect mode.

In this mode, the thermostat will display the frost icon and will only turn the heating on should the room temperature drop below the set frost temperature (see page 14).

Should the heating be turned on whilst in frost mode, the flame icon will be displayed.

To cancel the frost protect mode, press the Power button once again.





### **Heating On/Off**

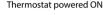
The heating is indicated ON when the flame icon is displayed.

When the flame icon is absent, there is no requirement for heating to achieve the set temperature but the thermostat remains active.

Press the Power button once to turn the thermostat back ON .....



Thermostat completely OFF







\*See Feature 3 on page 14



### **Optional Features Explained**

### THE FOLLOWING SETTINGS ARE OPTIONAL AND IN MOST CASES NEED NOT BE ADJUSTED

Feature 01 - Temperature Format: This function allows you to select between °C and °F. Feature 02 – Switching Differential: This function allows you to increase the switching differential of the thermostat. The default is 1°C which means that with a set temperature of 20°C, the thermostat will switch the heating on at 19°C and off at 20°C. With a 2°C differential, the heating will switch on at 18°C and off at 20°C.

Feature 03 – Frost Protect: You can set whether the thermostat will maintain the frost temperature when the thermostat display is turned off. As a default, this is enabled.

Feature 04 – Frost Protect Temperature: This is the temperature maintained when the thermostat is in frost mode. The range is  $07 - 17^{\circ}$ C. The default is  $12^{\circ}$ C and is suitable for most applications.

**Feature 05 – Output Delay:** To prevent rapid switching, an output delay can be entered. This can be set from 00 - 15 minutes. The default is 00 which means there is no delay.

Feature 06 – Communication Address: Not used on this model.

**Feature 07 – Temperature Up/Down Limit:** This function allows you to limit the use of the Up and Down temperature arrow keys. This limit is also applicable when the thermostat is locked and so allows you to give others limited control over the heating system.

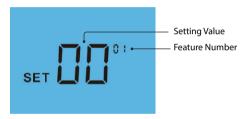
**Feature 08 – Sensor Selection:** On this thermostat you can select which sensor should be used. Built in sensor or remote air sensor.



### **Adjusting the Optional Settings**

To adjust the optional settings, follow these steps.

- Press and hold the Power button to turn the thermostat OFF .....
- Press and hold the Clock key until the display appears as shown below .........



- Use the Clock key to cycle through the features ......
- Use the Up/Down keys to change the setting ...... Press A to confirm settings .....
- Press the Power button once to turn the thermostat back ON





### **Optional Settings - Feature Table**

FEATURE	DESCRIPTION	SETTING
01	Temperature Format	00 = °C 01 = °F (°C = Default)
02	Switching Differential	01° - 03°C (01°C = Default)
03	Frost Mode	00 = Enabled 01 = Disabled (00 = Default)
04	Frost Protection Temperature	07° - 17°C (12°C = Default)
05	Output Delay	00 - 15 Minutes (00 = Default)
06	Communications ID No.	Not used on this model
07	Up/Down Temperature Limit	00° - 10°C (00 = Default)
08	Sensor Selection	00 = Built in Sensor 01 = Remote Air Sensor



### **Re-calibrating the Thermostat**

If you need to re-calibrate the thermostat, follow these steps.

- Press and hold the Power button to turn the thermostat OFF ......
- Use the Up/Down keys to configure the new temperature ......

  Press A to confirm settings
- - Calibration Temperature Setting
    Set Icon

## Fact

### **Factory Reset**

The thermostat has a reset function to restore all settings to their factory defaults.

To perform a factory reset, follow these steps.

- Press and hold the Power button to turn the thermostat OFF .....
- When the icons have disappeared from the screen, the thermostat has been successfully reset.

All icons displayed simultaneously.

Factory reset is complete.

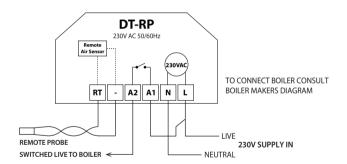


#### Wiring Diagram - DT-RP to Boiler S/L

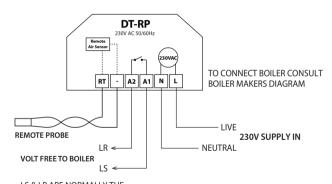
## (1999) W

#### Wiring Diagram - DT-RP to Boiler Voltfree

#### THIS UNIT MUST BE PROTECTED BY A FUSE OR RCD



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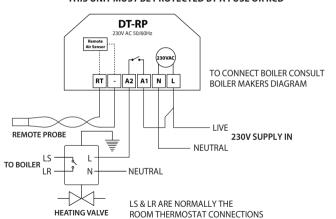
LS & LR ARE NORMALLY THE ROOM THERMOSTAT CONNECTIONS



### Wiring Diagram - DT-RP to Valve

## Notes

#### THIS UNIT MUST BE PROTECTED BY A FUSE OR RCD






### **Heating Professionals:**

Request a copy of our product installation guide containing detailed technical specifications for our complete product range: www.heatmiser.com/guide

#### Want More Information?

Call our support team on: +44 (0)1254 669090

Or view technical specifications directly on our website: www.heatmiser.com









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