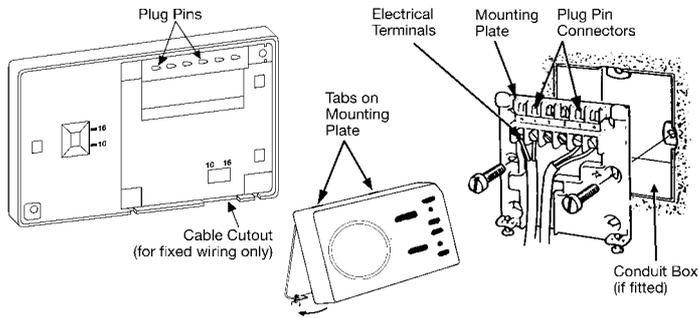


## RWB2 Programmer Installation Instructions



**IMPORTANT!**  
Please read this before installing your unit.

1. Select 10 or 16 way programme before clipping unit on to backplate. (See Fig. 6).
2. Complete wiring to backplate, clip programmer on to backplate, power up and rotate dial through a full 24 hour rotation.

### Mounting Location

To ensure convenience of use, the RWB2 should be fitted in a position which allows easy access. It is recommended that the unit is placed at a height of 1.4 metres from the floor.  
*NB* The RWB2 should not be installed in locations that are directly exposed to water splashes or steam from cooking utensils and kettles etc.

### Backplate

The RWB2 is supplied with the industry standard backplate to which the system must be wired. The backplate can be fitted directly to the wall or on to a conduit box. If a conduit box is fitted all wiring to the backplate should pass through the base. Only conduit boxes which comply with BS1363 or BS4662 (single gang should be used). The backplate is the same as that used with: RWB2, RWB20, RWB40, RWB200 series and RWBXP Programmers plus Potterton MINIMINDER and Glow-worm MASTERMIND.

When the RWB2 is used as a direct replacement no re-wiring is necessary, (except in the case of the RWB20 when a neutral will be required, if one is not present).

### Programmer Wiring Diagrams

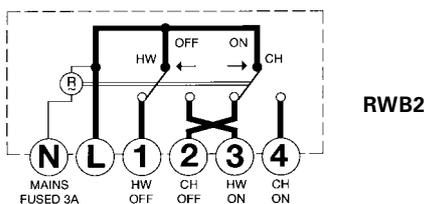


Fig 2

### Pumped Central Heating with Gravity Hot Water

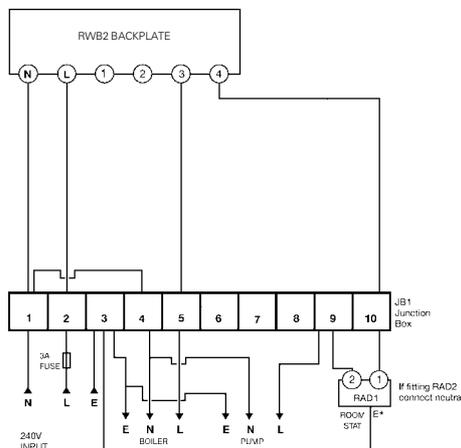


Fig 3

### Mid-position System

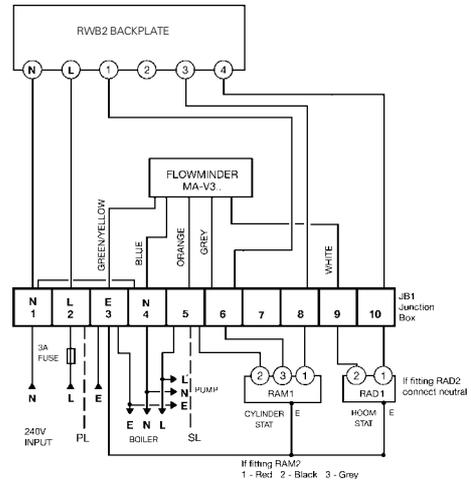


Fig 4

### Zone Valve System

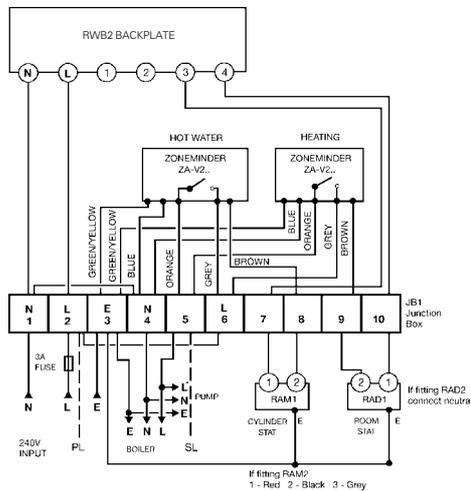


Fig 5

It is a good wiring practice that the supply to the unit should be via a two pole disconnection providing at least 3mm air gap.

Line voltage applied to terminals 3 and 4 when the programmer is in the ON position for HW and CH and to terminals 1 and 2 when it is in the OFF position. Terminals N, L, 1, 2, 3 and 4 connect the controls for domestic hot water and central heating applications. (See Figs. 3, 4 and 5).

The programmers are factory set to give 10 combinations of HW and CH, the 10 programme position is normally used when the hot water is on a gravity system. In this case it is not possible to have CH without HW. (See Fig. 3 for wiring diagram). If 16 programmes are required then refer to programme selection. (Fig 6).

The 16 programme position is normally used on a fully pumped system using 2 or 3 port valves, thus allowing independent control of HW and CH. (See Figs. 4 and 5 for wiring diagrams).

**Note:** All external wiring must comply with current IEE regulations. Wiring of this unit should be carried out by a qualified electrician. Whilst every effort is made to ensure the accuracy of the instructions given, you will appreciate that the discrepancies may occur due to a variety of reasons outside our control. If after wiring your system you find that it does not work properly you should:  
*Check that you have used the correct system and wired it correctly. Ensure that no wiring unit links have been missed and all screws are tight.*  
*Check with the Technical Help line, there may be a simple explanation. (Technical Help Line: 01952 602048 Mon - Fri 9am - 5pm).*

**N.B. These units are not suitable for control of immersion heaters.**

## Programmer range selectors

This programme is supplied in the 10 position mode suitable for the system as in Fig 3. When using systems shown in Figs 4 and 5 you should carry out the following:

1. Selector sliders must be in the following position:  
HW – OFF  
CH – OFF
2. Insert a small, flat bladed screwdriver into the square opening with the flat end horizontal, then push fully up to the top of the slot opening.
3. Also move switch from 10 to 16 position, ie from left to right.

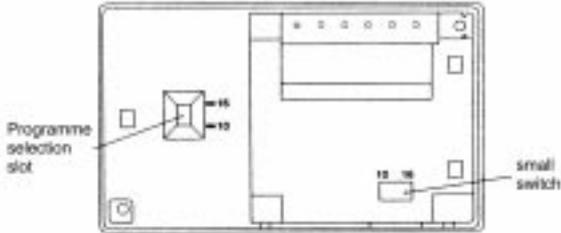


Fig 6

## Fitting the Unit to the Backplate

Tilt the bottom of the case away from the wall, locate the two slots in the top of the case, over the two tabs at the top of the backplate. Push the bottom of the case towards the wall, slotting the two backplate screws into the bottom of the case, and tighten the screws. This enables the contacts in the unit to engage with those in the backplate.

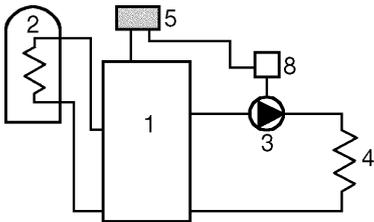
## Technical Data

### RWB2

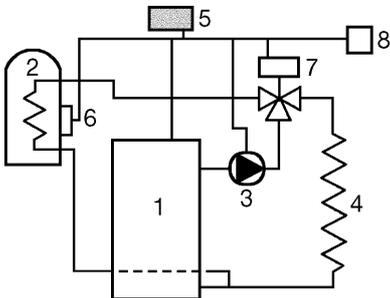
Voltage:	200/240V 50HZ
Frequency:	50 Hz
Contact rating:	5A (resistive) 2A (inductive)
Switching voltage:	240V
Ambient temperature range:	0°C to 30°C
Environmental humidity:	90% RH
Housing:	ABS resistant to fire as EN60730 standard
Safety Standard:	Conforms to EN60730, class A for use in normal pollution situation.

## Application Examples

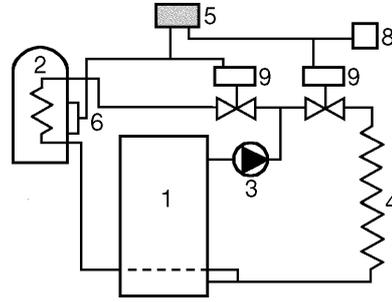
### Pumped Central Heating with Gravity Hot Water (10 programmes)



### Mid-position System (16 programmes)



### Zone Valve System (16 programmes)



### Key

- 1 Boiler
- 2 Hot water cylinder
- 3 Pump
- 4 Heating circuit
- 5 Programmer RWB2
- 6 Cylinder thermostat RAM
- 7 Three-way valve MA-V3..
- 8 Room thermostat RAD
- 9 Zone valve ZA-V2

# RWB2 Programmer

## User Instructions

### Introduction

The RWB2 is an advanced daily programmer combining the benefits of electronic reliability and ease of use with mechanical dial operation. Please take time to read these operating instructions carefully.

For installation see the enclosed instructions.

### Features

- Up to 2 ON/OFF periods per day.
- ADVANCE feature to bring forward the next ON or OFF period as required.
- BOOST feature to give an immediate 1 hour ON period at any time.
- Remembers last condition (ie ON or OFF) in the event of power failure.
- Suitable for either gravity hot water and pumped heating or fully pumped systems.

### Factory Settings

Before leaving the factory your RWB2 was programmed to switch your system ON and OFF at the following times:

ON at 6.00 a.m.      OFF at 8.30 a.m.  
ON at 4.30 p.m.      OFF at 10.30 p.m.

To activate this base programme: ROTATE CLOCK DIAL CLOCKWISE THROUGH A FULL 24 HR PERIOD, AND THEN SET DIAL TO CORRECT TIME. See **Adjusting the Clock (Dial Time)**.

Set clock dial to correct time. See **Adjusting the Clock (Dial Time)**.

### Operating Controls

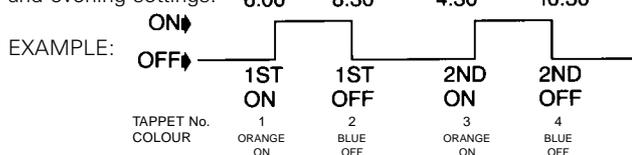
All controls for daily use are located on and to the right hand side of the dial.

### Setting the Switching Programme

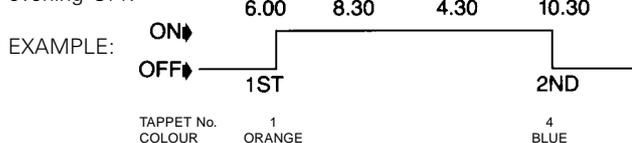
The top selector HEATING and the bottom selector HOT WATER allows you to select the daily pattern you require. To make your selection slide the relevant selector so that the vertical mark is pointing to the desired position as below.

**OFF** — Continuously OFF.

**TWICE** — The unit will switch ON and OFF according to the morning and evening settings.



**ALL DAY** — The unit will switch ON at the morning ON and OFF at the evening OFF.



**CONSTANT** — Continuously ON

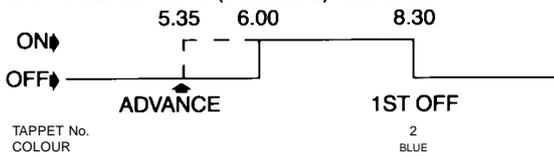
When the unit is in an 'ON' mode as above the LED lights for each circuit will be on.

### Using Override (Advance)

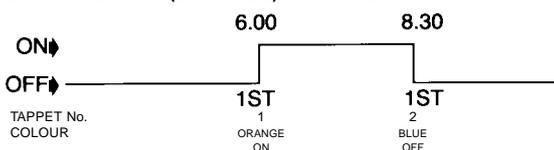
To advance the programme, that is to bring forward the next ON or OFF period as shown in the example below, press the override button for the relevant circuit (ie HEATING or HOT WATER). If both circuits are to be advanced each circuit should be treated as a separate function.

**NB** If the RWB2 has been set for a 10 position, ie gravity hot water, pressing the heating override will also bring on the hot water circuit.

EXAMPLE: **WITHOUT (OVERRIDE) ADVANCE**



EXAMPLE: **WITH (OVERRIDE) ADVANCE AT 5.35 AM**



### Using Boost

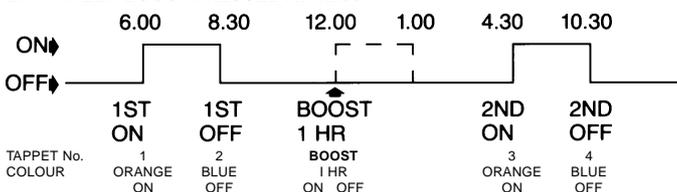
**BOOST** Pressing this button once brings the unit ON for 1 hour.

To activate **BOOST** push the **BOOST** button adjacent to the HOT WATER or CENTRAL HEATING selector. If both circuits are to be boosted each circuit should be treated as a separate action.

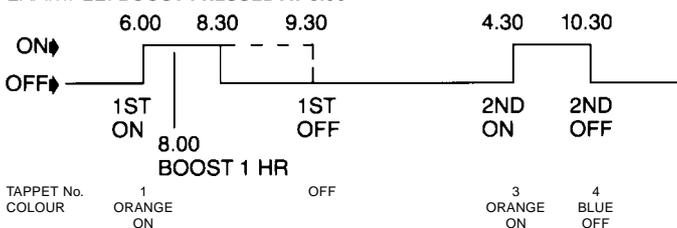
**(However if the unit has been set for a 10 position, ie gravity hot water, pressing the heating boost button will also bring on the hot water circuit). To cancel boost press the relevant override button.**

**NB** This feature operates in OFF, ONCE and TWICE modes only.

EXAMPLE: **BOOST PRESSED AT 12.00**



EXAMPLE: **BOOST PRESSED AT 8.00**



### Adjusting the Clock (Dial Time)

To set the clock to the correct time of day rotate the dial clockwise as shown by the arrow so that the correct time is adjacent to the raised line with time written against it. Please note the dial is a 24 hour dial with times shown numerically at two hour intervals and bars for hours between.

**NB** Do not rotate the dial anti-clockwise as this could cause damage to the mechanism.

## Changing the ON/OFF Times

The RWB2 is supplied with factory settings (See **Factory Settings**) which will operate unless you change the set times:

If you wish to change the factory settings to your own times you can do this easily:

No 1 tappet (orange) is the first ON during the 24 hour period

No 2 tappet (blue) is the first OFF during the 24 hour period

No 3 tappet (orange) is the second ON during the 24 hour period

No 4 tappet (blue) is the second OFF during the 24 hour period

To set the tappets to your own programme times hold the dial and slide the relevant tappet and rotate it in either direction to your desired time, then rotate dial through a full 24 hour rotation.

**NB** This should be carried out with the programmer connected and power supply switched on to the backplate.

## Power Failure

In the event of a mains power failure do not move the dial until power has been restored. If accidentally the dial has been moved during a power failure then rotate the dial through a full 24 hour rotation before resetting to actual time.