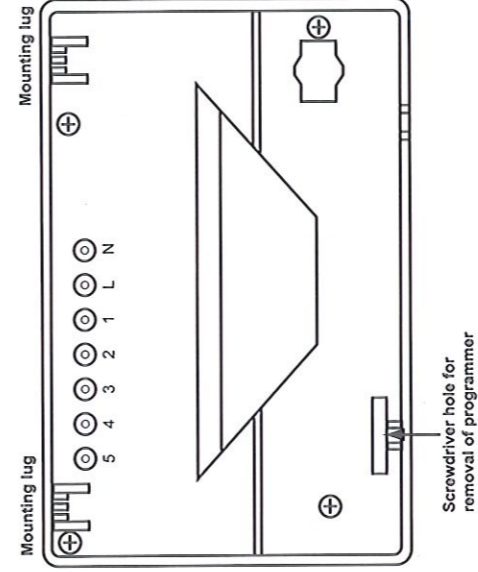


## Programmer EP2

## Installer's Guide

You can rely on **POTTERTON**

Diagram A Back view of the programmer



### 1 About the Programmer

The programmer is a time control, which switches the system on and off to give central heating, and hot water to the customer's requirements. The EP2, has the following features:

- Indicator lights which light up when the controlled medium switches on
- 7 Day, 5 day - 2 day, 24 hour programming
- A copy facility to copy ON/OFF times to next day

### 2 Contents of the Package

Programmer  
Mounting Plate  
Customer's Guide

### 3 Data

Supply Voltage 230V – 50Hz  
Switch Rating 2 Amps resistive / 1 Amp inductive (0.6 Power Factor)  
Max Ambient Temperature 50°C  
Dimensions height 104mm, width 161mm, depth 49mm

### 4 Where to site the Programmer

The programmer can be fitted to:

- Any non-metallic flat surface.
  - A double or single flush-mounted outlet box.
  - A double surface-mounted outlet box.
- Boxes must conform to BS1363: 1967: Part 2.

We recommend a clearance of about 150mm above and below the programmer to allow for fitting, removal and testing.

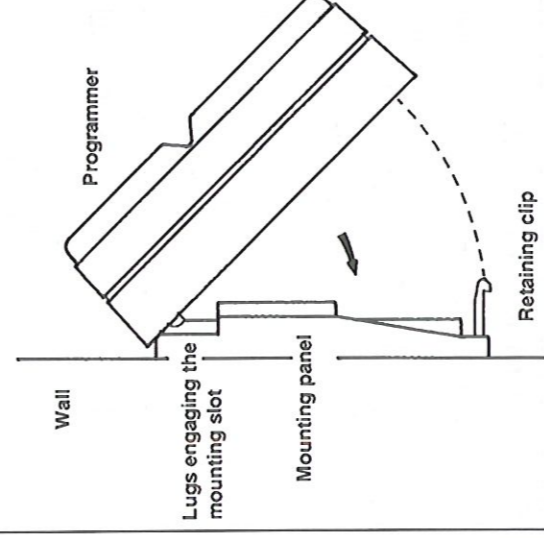
**Warning: Do not fit the programmer to a single surface-mounted outlet box as it would allow access to live wires. Do not fit the programmer to a metal surface. If a plastic surface box is used for mounting the programmer, it should not be fitted to an unearthed metal or metallised surface.**

### 5 Installing the Programmer

These are three main steps in installing the programmer

1. Fixing the mounting panel.
2. Wiring up the mounting panel.
3. Fixing the programmer to the mounting panel.
4. Configure the programmer.

Diagram B Side view of the programmer and mounting panel.



### 6 Fixing the Mounting Panel

Screw the mounting panel to the surface you have chosen (Diagram N). Make sure the surface is not metal.

### 7 General Facts about the Wiring

The wiring to and from the programmer must conform to the latest IEE regulations. The electricity supply must be connected through an isolation switch (Class A all poles 3mm gap) fused at 3 amps.

The programmer is designed for fixed wiring only. Each terminal is designed to take up to three 1mm solid conductors, or three 0.75mm standard conductors.

**Warning: Disconnect the mains supply before wiring the programmer.**

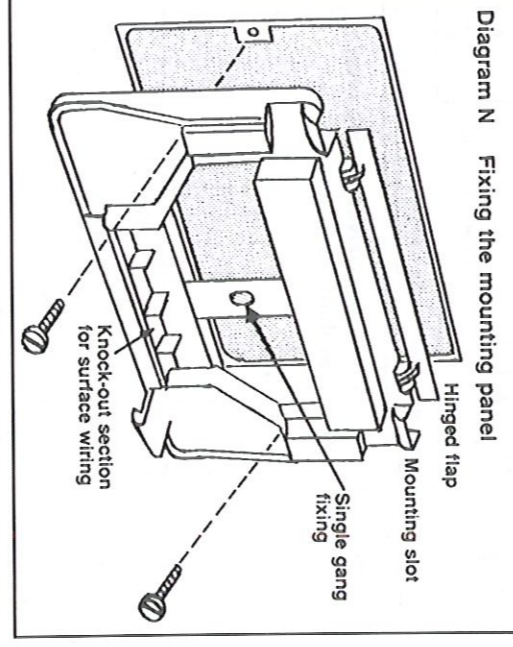


Diagram N Fixing the mounting panel

### 15 Removing the Programmer

See Diagrams A and B

**Warning: Immediately disconnect the mains supply before removing the programmer.**

To remove the programmer, loosen the fixing screw, insert a screwdriver into the rectangular slot in the groove at the bottom of the case. Do not turn the screwdriver. Push up the retaining clip and hinge up the programmer until it is horizontal. Lift off the programmer.

### 16 Removing the Programmer

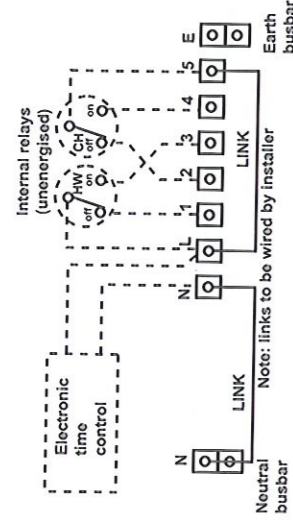
See the Customer's Guide

Finally - please leave behind the Customer's Guide.

POTTERTON  
A Trading Division of Baxi Heating UK Ltd (1987) 151  
Brook House, Coventry Road, Warwick, CV34 4LL  
After Sales Service 0844 871 1560 Technical Enquiries 0844 871 1555  
Website www.potterton.co.uk  
eSoc

- Disconnection means: Type 1B  
- Pollution degree: 2  
- Rated impulse voltage: 4000V  
All descriptions and alterations, provided in this bullet have been carefully prepared but we reserve the right to make changes and improvements in our products which may affect the accuracy of the information contained in this bullet. All goods are sold subject to our standard Conditions of Sale which are available on request.

Diagram C Internal wiring of the programmer



## 8 Choosing the correct wiring diagrams

To help you, we show examples of the more common system wiring arrangements.

If you have a pumped central heating and gravity hot water system, select Diagram D then add whichever one of Diagrams E to G is appropriate for the system.

If you have a fully pumped system, select Diagram H then add whichever one of Diagrams J to M is appropriate for the system.

## 9 Method of wiring

- Connect the internal links on the mounting panel, as shown in Diagram C.
  - Connect the other wiring and ensure all the wires are fully inserted into the terminals.
  - Ensure the correct polarity of the L and N connections.
- See also section 11 if you are fitting this programmer in place of another.

## 10 Notes on the wiring diagrams

### Thermostat connections

**bor** = break on temperature rise (sometimes called 'calling for heat' or 'heating').  
**mor** = make on temperature rise (sometimes called 'satisfied' or 'cooling').  
**c** = common

### Relay connections (coil de-energised)

**n/c** = normally closed  
**n/o** = normally open  
**c** = common

### Motorised valves

The colour coding of the cables on the valves varies among manufacturers. The colours shown in these diagrams cover most of the types available.

Some **mid-position diverter valves** need special relay junction boxes to operate the system. Such valves are not shown in the diagram. Please ask the valve manufacturer for details.

## 11 Configure the Programmer

Need to set Programmer operation. Select Fully Pumped or Gravity system. Apply Power.

Display shows flashing digit which denotes the operation (Refer to table for options):

Press +/- to set

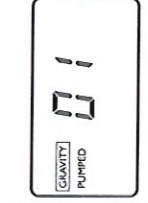
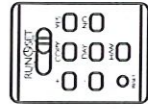
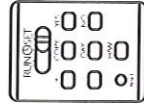
Programmer Operation

Press 'YES' to accept setting

Now select Fully

Pumped/Gravity system type using +/- buttons

Press 'YES' to accept setting and end configuration.



| ID No | Old EP | No of ON/OFFS | Independent or Linked | 24hr/weekday weekend/7 day Wday/Wend |
|-------|--------|---------------|-----------------------|--------------------------------------|
| 1     | N/A    | 2             | Independent           | 24 hour (Daily) Wday/Wend            |
| 2     | N/A    | 2             | Independent           | 7 day                                |
| 3     | N/A    | 2             | Independent           | 24 hour (Daily) Wday/Wend            |
| 4     | N/A    | 3             | Independent           | 7 day                                |
| 5     | EP6002 | 3             | Independent           | 24 hour (Daily) Wday/Wend            |
| 6     | N/A    | 3             | Linked                | 24 hour (Daily) Wday/Wend            |
| 7     | EP2002 | 2             | Linked                | 7 day                                |
| 8     | EP3002 | 2             | Linked                | 24 hour (Daily) Wday/Wend            |
| 9     | EP2000 | 3             | Linked                | 7 day                                |
| 10    | N/A    | 3             | Linked                | 24 hour (Daily) Wday/Wend            |
| 11    | N/A    | 3             | Linked                | 7 day                                |
| 12    | N/A    | 3             | Linked                | 24 hour (Daily) Wday/Wend            |

## 12 Replacing another Programmer

It is possible to replace a Potterton EP Programmer with this product.

Follow these steps if you are fitting the programme in place of a Potterton Miniminder, Glow-worm, Mastermind, Landis & Gyr RWB2 Control or Microgyr, Smiths Controller 1000 or Drayton Tempus 7.

### Warning: Immediately disconnect the mains supply before removing the programmer.

- Carefully label each wire with its connection no.
- Disconnect the wiring and remove the old mounting panel.
- The new mounting panel can be fitted using the same fixing holes as the old mounting panel. See Diagram N
- If the old control is fitted to a single surface box, you must replace it with a double box
- Fit the new mounting panel and connect the wires (the wiring identification is the same)
- Connect the internal links on the mounting panel, as shown in Diagram C
- Check the system fuse is 3 Amps

## Pumped Central Heating and Gravity Hot Water

Diagram D Basic diagram for gravity hot water and pumped heating system

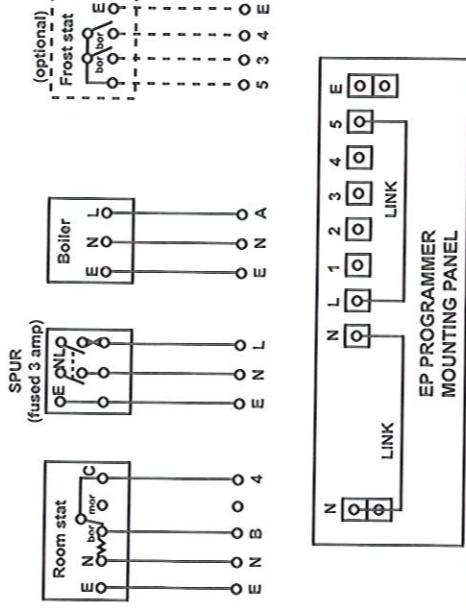


Diagram E Partial HW control: 10 Programs

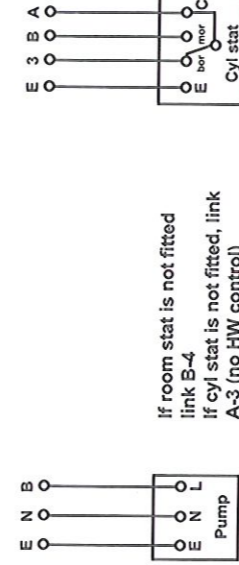


Diagram F HW control valve (spring return with DT switch): 16 Programs

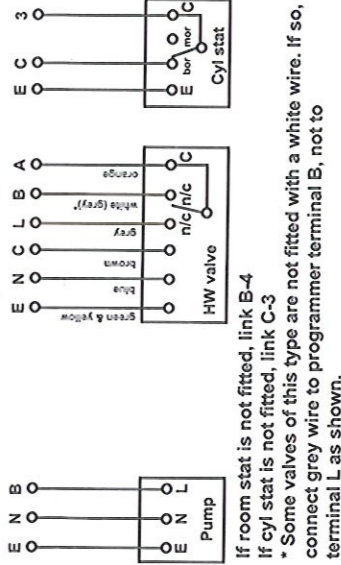
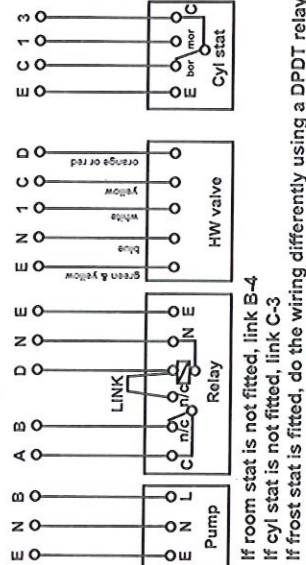


Diagram G HW control valve (motor open/motor close): 16 Programs



## 13 Fixing the Programmer to the Mounting Plate

See Diagrams A, B and N

Insert battery on rear of product (remove paper tab) Fit the lugs on the back of the programmer into the slots at the top of the mounting panel

Hinge down the programmer

Make sure the programmer is firmly held by the retaining clip

## 14 Circuit testing

**Warning: Circuit testing must be done only by a competent person.**

For temporary access to the terminals, there is a flap on top of the mounting panel. Lift it before fitting the programmer (See Diagram N).

When testing is done, remove the programmer (see section 14) and lower the flap. Ensure it is positively clipped down. Then refit the programmer.

## Fully pumped systems

Diagram H Basic diagram for fully pumped systems

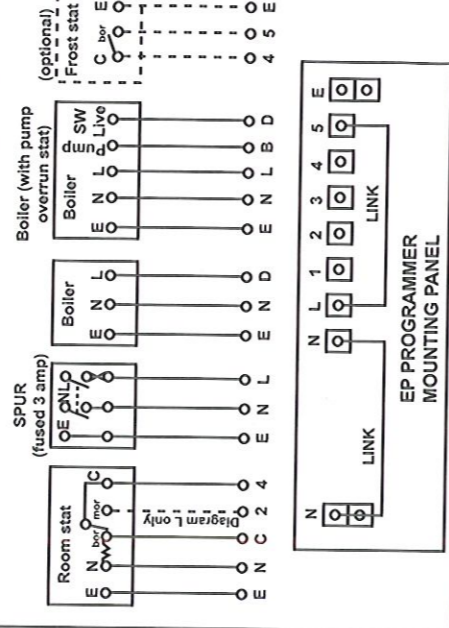


Diagram J Mid-position diverter valve (spring return): 16 Programs

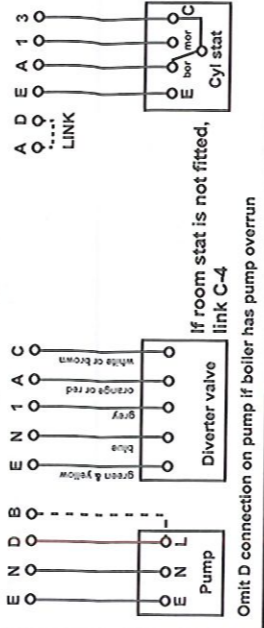


Diagram K One or two zone valves (spring return with ST switch): 16 Programs

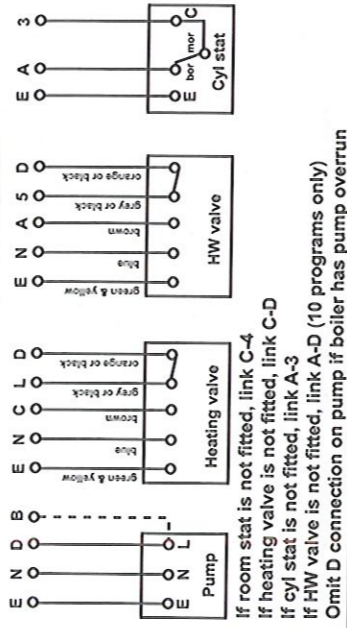


Diagram L One or two zone valves (motor open/motor close): 16 Programs

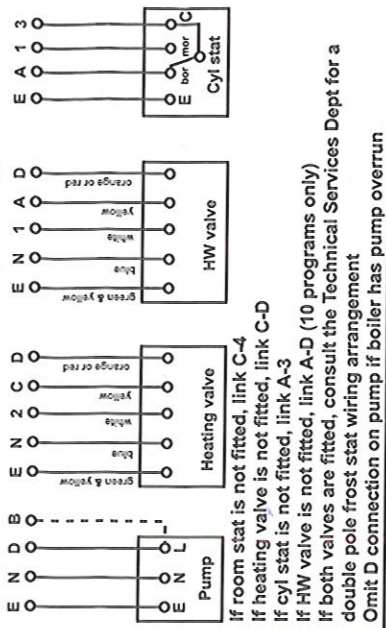


Diagram M Two pumps: 16 Programs

