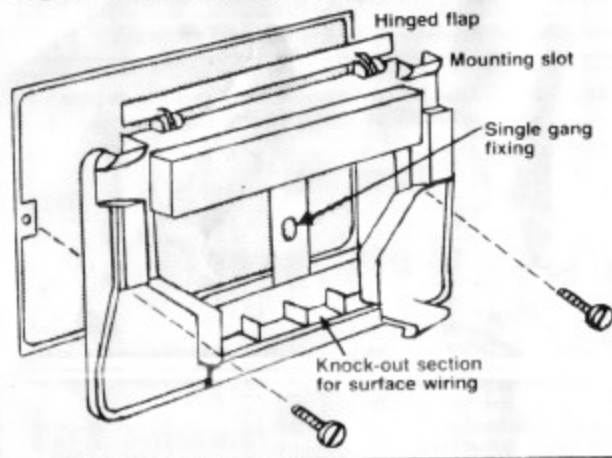


Diagram N Fixing the mounting panel



## 16 Removing the programmer

See Diagrams A and B

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

To remove the programmer, 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.

## 17 Setting the programmer

See the Customer's Guide

**Finally**—please leave behind the Customer's Guide.

## Service and Parts Offices

### Northern/Scottish Regional Service Office

8 The Gills, Otley, Leeds LS21 2AH 0943 465666

### South Western/Midland Regional Service Office

Brooks House, Coventry Road, Warwick CV34 4LL 0926 496896/7

### Southern Regional Service Office

10 Hardwicks Way, London SW18 4AJ 081 870 4131

Parts Department and Technical Services Dept.

All descriptions and illustrations in the guide 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.

**POTTERTON**  
INTERNATIONAL LIMITED

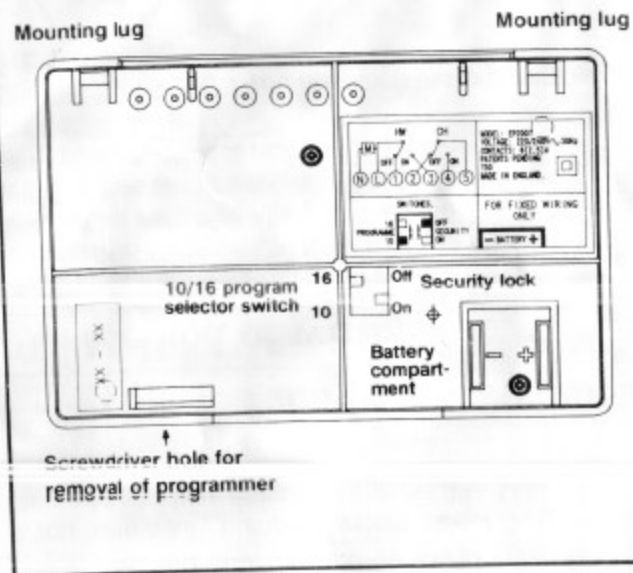
Registered in England No. 439502  
Registered Office: Portobello Works,  
Errisote Road, Warwick CV34 6QU  
Sales Office: Brooks House, Coventry  
Road, Warwick CV34 4LL Tel: 0926-

# Installer's Guide

for the EP2001/EP3001 Electronic Programmer.

**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 to the customer's requirements. The EP2001/EP3001 have the following features:

- A security lock switch to prevent people changing the set times in the programmer's memory.
- A screen backlight so that the customer can see the display if the programmer is fitted in a dark place.
- Indicator lights which light up when the central heating or hot water switch on.
- Weekday/weekend programming on the EP2001.
- Daily programming on the EP3001.

## 2 Contents of the package

- Programmer and battery
- Mounting panel
- Fixing screws
- Customer's Guide

## 3 Data

**Supply voltage** 220-240VAC 50Hz.

**Switch rating** 6 amps resistive/2.5 amps inductive (0.6 power factor).

**Working temperature** 50°C.

**Dimensions** Height 104 mm, width 160 mm, depth 41 mm.

## 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.
- Boxes must conform to BS 1363: Part 2.

We recommend a clearance of 150mm above and below the programmer

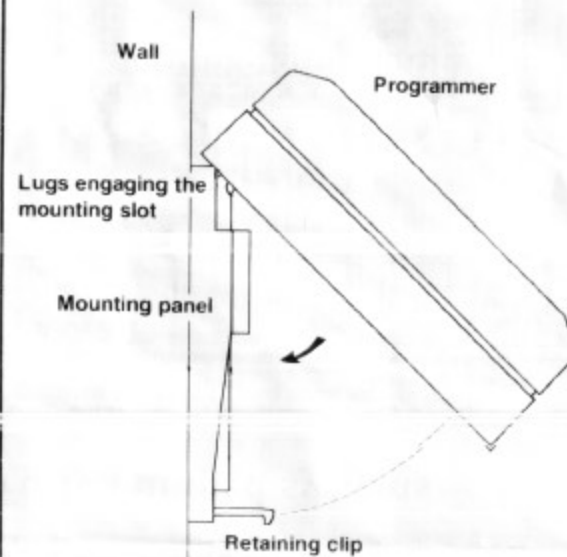
**Warning: Do not fit the programmer to a single surface-mounted outlet box as it would allow access to live wires. Do not fit the programmer to a metal surface.**

## 5 Installing the programmer

There are four main steps in installing the programmer:

- 1 Fixing the mounting panel.
- 2 Wiring up the mounting panel.
- 3 Connecting the battery—you can then set the times and security switch if you wish.
- 4 Fixing the programmer to the mounting panel.

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.

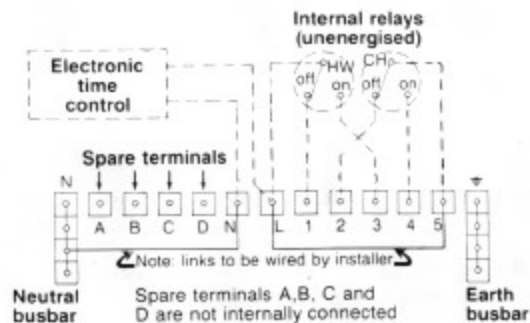
## 7 General facts about the wiring

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 6 amps or less.

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

**Warning: Disconnect the power supply before wiring.**

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 to 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 10 if you are fitting this programmer in place of another.

## 10 Notes on the wiring diagrams

## 12 Choosing 10 or 16 programs

We supply the programmer set for 10 programs to suit simple systems. But for complex systems you can reset it for 16 programs. By **complex system**, we mean there is an independent electrical control of hot water. So if your system can give central heating **without** hot water, set the programmer for 16 programs—

- Turn the programmer over.
- See Diagram A. With a screwdriver, move the program selector switch to 16.

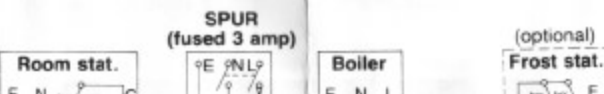
## 13 Connecting the battery

Remove the battery from the back of the programmer. Make sure you have the correct polarity, with the battery + sign towards the + sign on the backplate. Press the battery into the battery compartment.

You can now set times into the programmer's memory and set the security lock switch if you wish. **Please note:** the battery may have gradually discharged during storage; you will then need to connect the programmer to the mains supply before you can set times into the programmer's memory. The battery will then recharge.

## Pumped central heating and gravity hot water

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



## 14 Fixing the programmer to the mounting panel

See Diagrams A, B and N

- 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.

## 15 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 the testing is done, remove the programmer (see section 16) 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

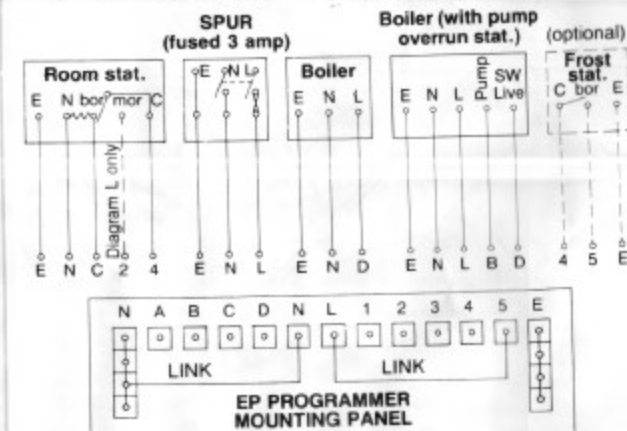


Diagram J Mid-position diverter valve (spring return): 16 Programs



fall').

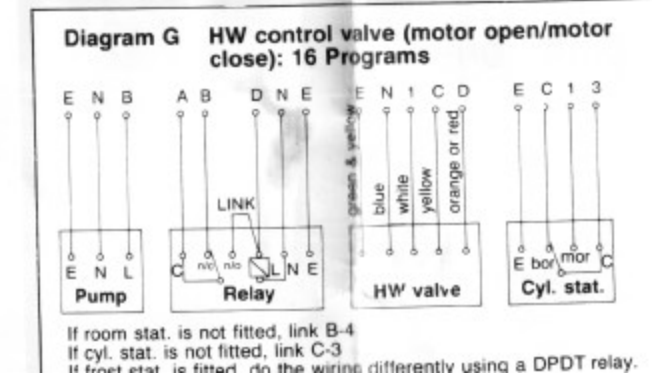
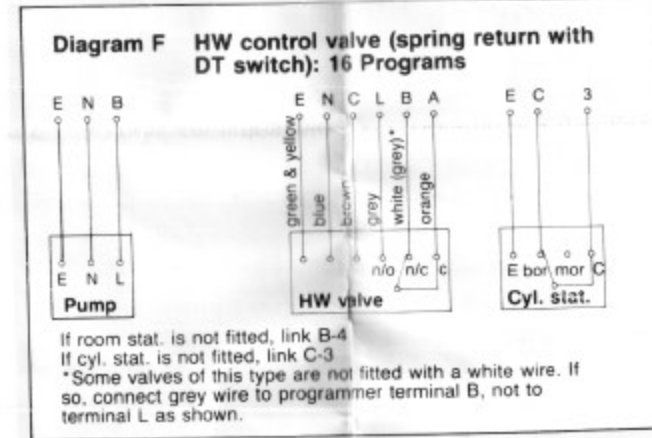
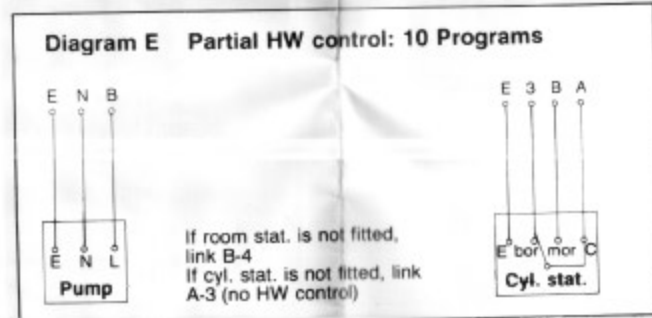
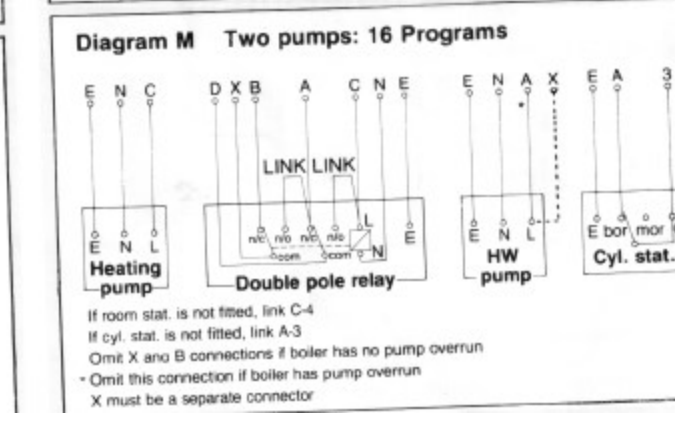
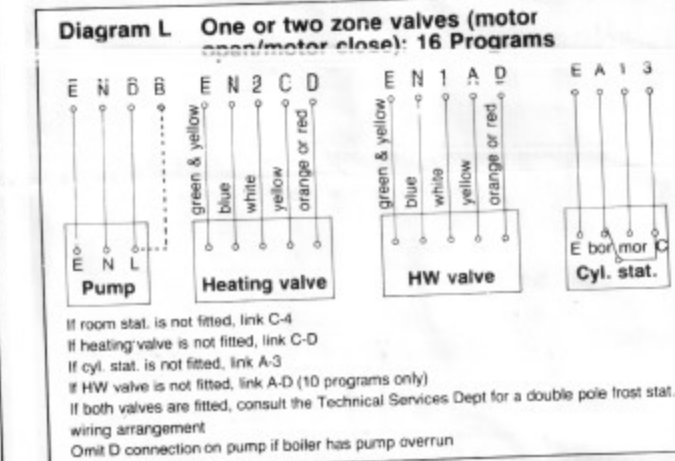
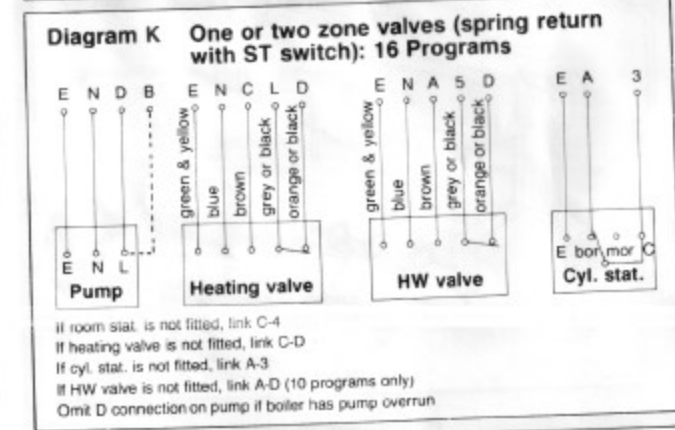
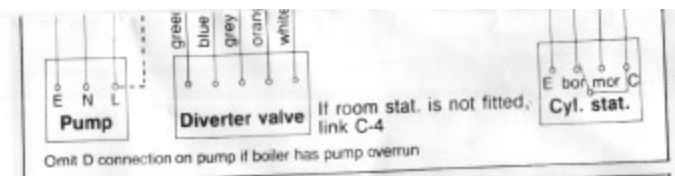
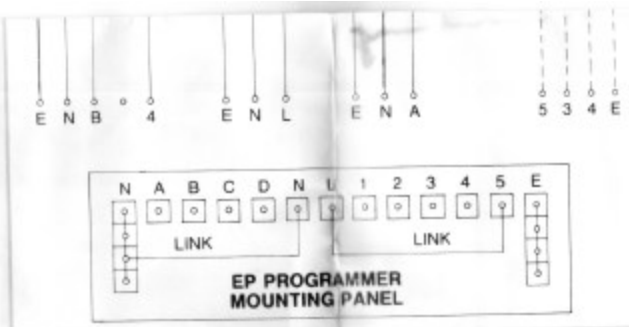
mor=make on temperature rise (sometimes called 'satisfied' or 'cooling' or 'break on temperature fall').  
c=common

### 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. If valve is different from colours mentioned, please contact valve manufacturer direct.



## 11 Replacing another programmer

If you are replacing an EP2000 or EP3000 you can use the existing mounting panel without changing any wiring.

Follow these steps if you are fitting this programmer in place of a Potterton Miniminder, Glow-worm Mastermind, Landis & Gyr RWB2 Control or Microgyr, Smiths Centroller 1000 or Drayton Tempus 7:

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

- Carefully label each wire with its connection number.
- 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.

If room stat. is not fitted, link B-4  
If cyl. stat. is not fitted, link C-3  
\*Some valves of this type are not fitted with a white wire. If so, connect grey wire to programmer terminal B, not to terminal L as shown.

If room stat. is not fitted, link B-4  
If cyl. stat. is not fitted, link C-3  
If frost stat. is fitted, fit the wiring differently using a DPDT relay.