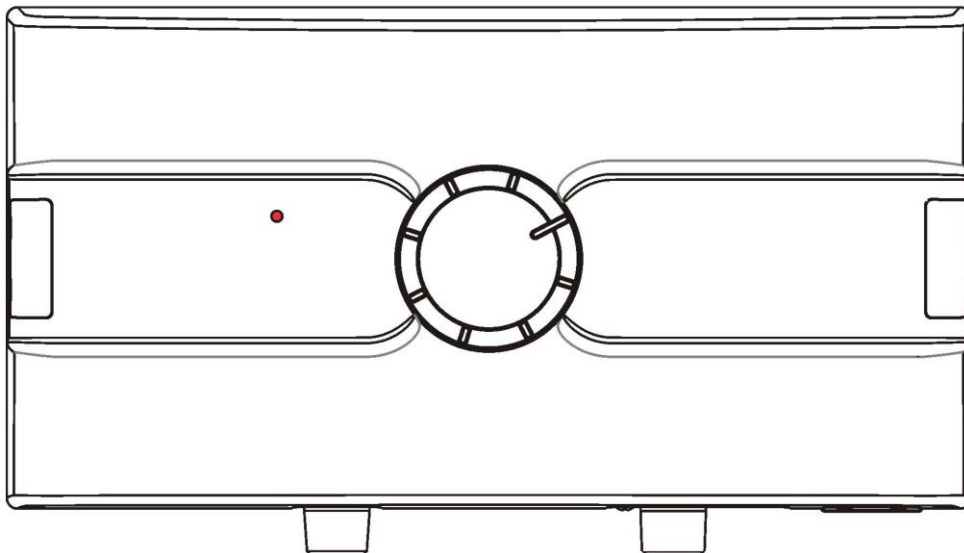


REDRING

Powerstream-Eco



REDRING POWERSTREAM-ECO

**UNVENTED INSTANTANEOUS
WATER HEATER**

Installation and User Guide

IMPORTANT:

**This booklet should be left with the user after
installation and demonstration.**

**It should be kept in a safe place, as you may need to
refer to it for general instructions or future
maintenance**

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INTRODUCTION

Thank you for purchasing a quality *Redring Powerstream-Eco* manufactured in England.
To enjoy your new unit at its best, please take time to read this manual thoroughly to familiarise yourself with all instructions, BEFORE beginning installation.

If you experience any difficulty with the installation or operation of your new water heater, then please refer to the "What to do if things go wrong" section in this manual before contacting us.

REDRING AFTER SALES SERVICE

We offer a technical advisory service on the telephone to installers and other customers with problems in the field.

RING 0844 372 7766 (UK ONLY)

RING YOUR LOCAL DEALER (Export Variants)

Or alternatively email us on:

Service.request@redringxpelair.com

Remember to quote the exact type of unit, as written on the front of the unit and on this leaflet. The model and serial number are located on the bottom face of the unit.

Make a note of those numbers here, and be sure to quote them if you call for advice.

Model Number: _____ **Serial Number:** _____

Note: You may be charged for a service call if you do not have the serial number.

IMPORTANT SAFETY INFORMATION

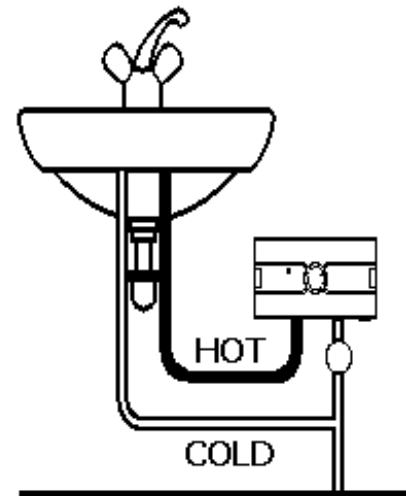
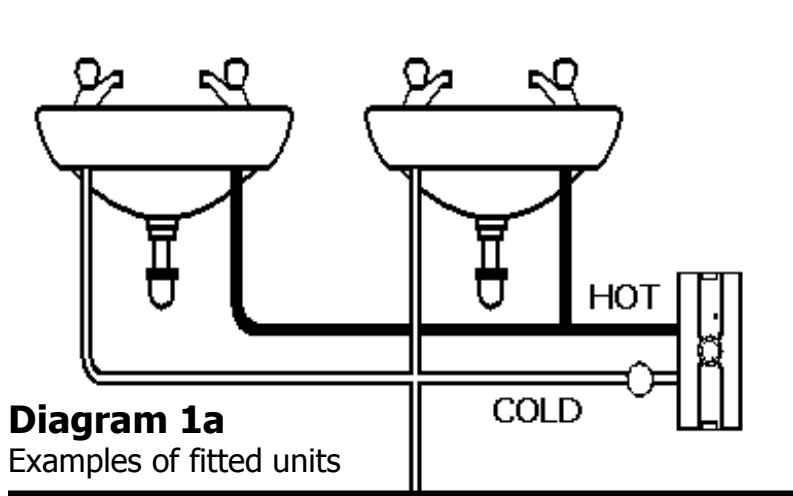
- Your *Powerstream-Eco* has been designed for convenience, economy and safety of use, provided that it is installed, used and maintained in good working order and in accordance with our instructions and recommendations.
- **All wiring and installation must be supervised by a suitably qualified person.**
- **THIS APPLIANCE MUST BE EARTHED.**
- The installation must be in accordance with the current edition of BS.7671 (*the "IEE Wiring Regulations"*) and "Part P" of the "*Building Regulations*" in force at the time of installation. Installations outside England and Wales must also conform to any local regulations in effect.
- This appliance is intended to be permanently connected to the fixed electrical wiring of the mains supply with its own dedicated supply.
- Ensure that the mains water supply meets the requirements listed.
- This appliance must **NOT** be fitted where it may be subjected to freezing conditions. **DO NOT** switch the appliance on if you suspect it of being frozen. Wait until you are sure it has thawed out.
- **The unit MUST NOT be mounted upside down (diagram 1b).**
- **The unit MUST NOT be fitted to any type of THERMOSTATIC mixer valve or tap.**
- If a non-return valve is fitted in the Inlet feed to the unit, then the installation should also include a 3.5 BAR Pressure Reducing Valve and a 6 BAR Pressure Relief (Expansion) Valve.
- **Isolate the mains electrical and water supply before removing the front cover of the appliance.**

THIS APPLIANCE CAN BE USED BY CHILDREN AGED FROM 8 YEARS AND ABOVE AND PERSONS WITH REDUCED PHYSICAL, SENSORY OR MENTAL CAPABILITIES, OR LACK OF EXPERIENCE AND KNOWLEDGE IF THEY HAVE BEEN GIVEN SUPERVISION OR INSTRUCTION CONCERNING USE OF THE APPLIANCE IN A SAFE WAY AND UNDERSTAND THE HAZARDS INVOLVED. CHILDREN SHALL NOT PLAY WITH THE APPLIANCE. CLEANING AND USER MAINTENANCE SHALL NOT BE MADE BY CHILDREN.

HOW TO INSTALL YOUR *POWERSTREAM-ECO*

WARNING: ALL WIRING AND INSTALLATION MUST BE SUPERVISED BY A SUITABLY QUALIFIED PERSON.

WARNING: DO NOT INSTALL THIS UNIT WHERE IT MAY BE SUBJECTED TO FREEZING CONDITIONS.



The Powerstream-Eco is recommended to supply a **MAXIMUM** of two washbasins (see diagram 1a) **OR** a washbasin and shower (see diagram 4b)

If the Powerstream-Eco is connected to a mixer tap then only **NON-**Thermostatic types should be used (water mixes at the outlet pipe only).

The Powerstream-Eco is **NOT** to be fitted to a bath or kitchen sink other than for hand-washing purposes. (See Guarantee exclusions on page 16 and product flow rate tables on page 14).

The unit **MUST NOT** be mounted upside down (diagram 1b).

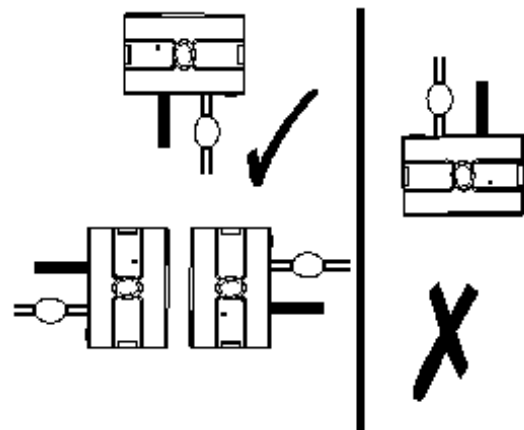


Diagram 1b
Acceptable unit orientation

BEFORE YOU START

Check that the mains electric is capable of supplying the required current. See the rating plate for current requirements.

Check the pressure of the main water supply.

To operate correctly, the unit requires the following running pressures.

Check the rating plate to see which applies:-

Model	Dynamic Water Pressure			
	Basin		Shower	
	Minimum	Maximum	Minimum	Maximum
Up to 9.5kW	10 psi (0.7 bar) (69 kPa)	150 psi (10.3 bar) (1035 kPa)	15 psi (1.1 bar) (103 kPa)	150 psi (10.3 bar) (1035 kPa)
Up to 10.8kW	15 psi (1.1 bar) (103 kPa)	150 psi (10.3 bar) (1035 kPa)	20 psi (1.4 bar) (138 kPa)	150 psi (10.3 bar) (1035 kPa)

FIXING THE UNIT TO THE WALL

Deciding the position

- If being used in a public place, position the unit out of reach to discourage vandalism.
- Fit the unit onto a flat piece of wall, well away from any potential splashes of water or spray.
- Position the unit either upright or lengthways (diagram 1a/b), whichever is most convenient for plumbing and wiring.

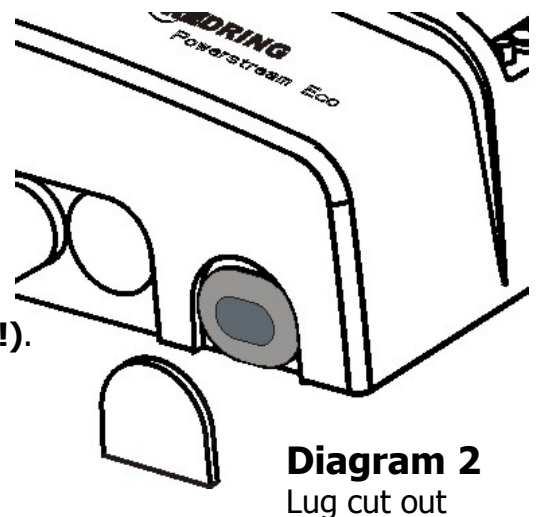
IMPORTANT : TO MAINTAIN THE INTEGRITY OF THE IPX4 PROTECTION RATING, THE UNIT MUST NOT BE MOUNTED UPSIDE DOWN (DIAGRAM 1B)

Remember to keep the lengths of hot water pipe to a minimum in order to save energy.

- If the unit is to supply a basin, you can fit it either above or below the basin.

Deciding the wiring route

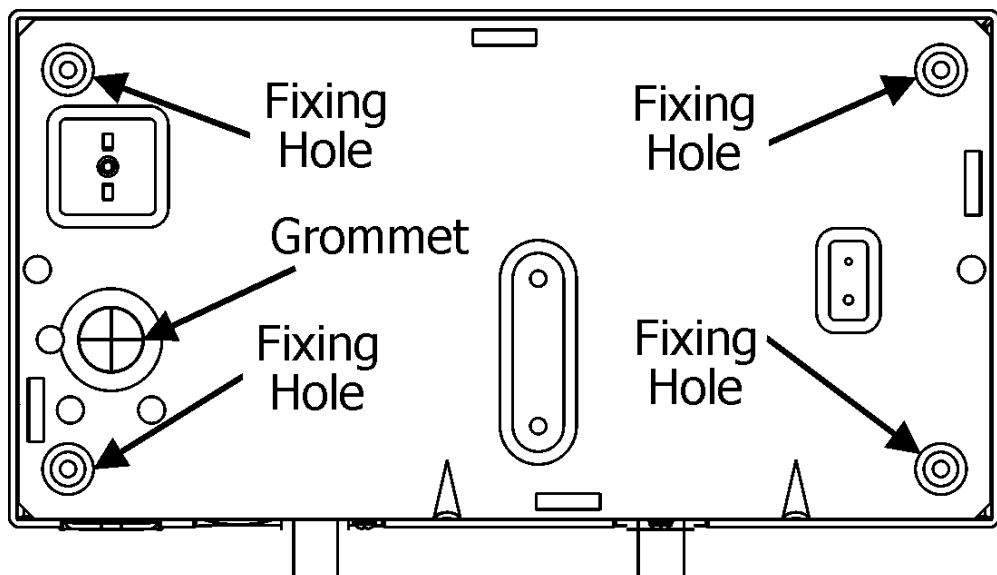
- You have a choice of whether to feed the electric cable through the side or through the back of the unit.
- If it going through the side of the unit, cut out the plastic lug to expose the grommet (diagram 2).
- If is going through the back of the unit, cut through the grommet on the backplate with a sharp knife (**Take Care!**). Make sure you do not remove the grommet from the backplate (diagram 3). Feed the cable through the grommet before you fix the unit to the wall.



Fixing to the wall

- Undo the retaining nuts and take the front cover off the unit. Hold the backplate in position against the wall whilst you mark the four fixing holes.
- Drill the holes and fix the unit to the wall using the screws supplied.

Diagram 3
Back of unit



Plumbing the unit

WARNING: IF A NON RETURN VALVE IS FITTED IN THE INLET FEED TO THE UNIT, THEN THE INSTALLATION SHOULD ALSO INCLUDE A 3.5 BAR PRESSURE REDUCING VALVE AND A 6 BAR PRESSURE RELIEF (EXPANSION) VALVE

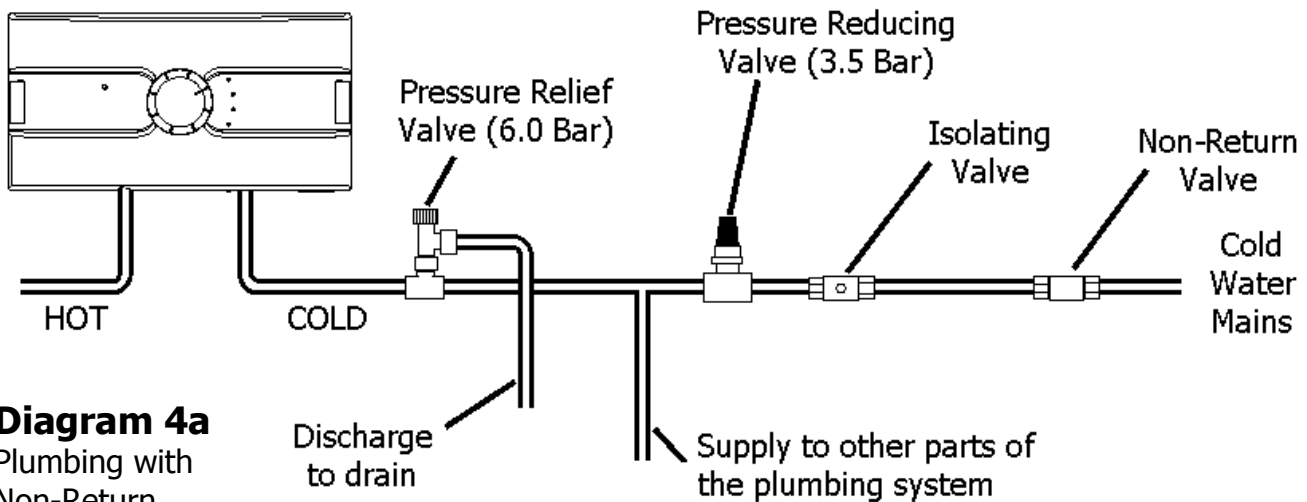


Diagram 4a
Plumbing with
Non-Return

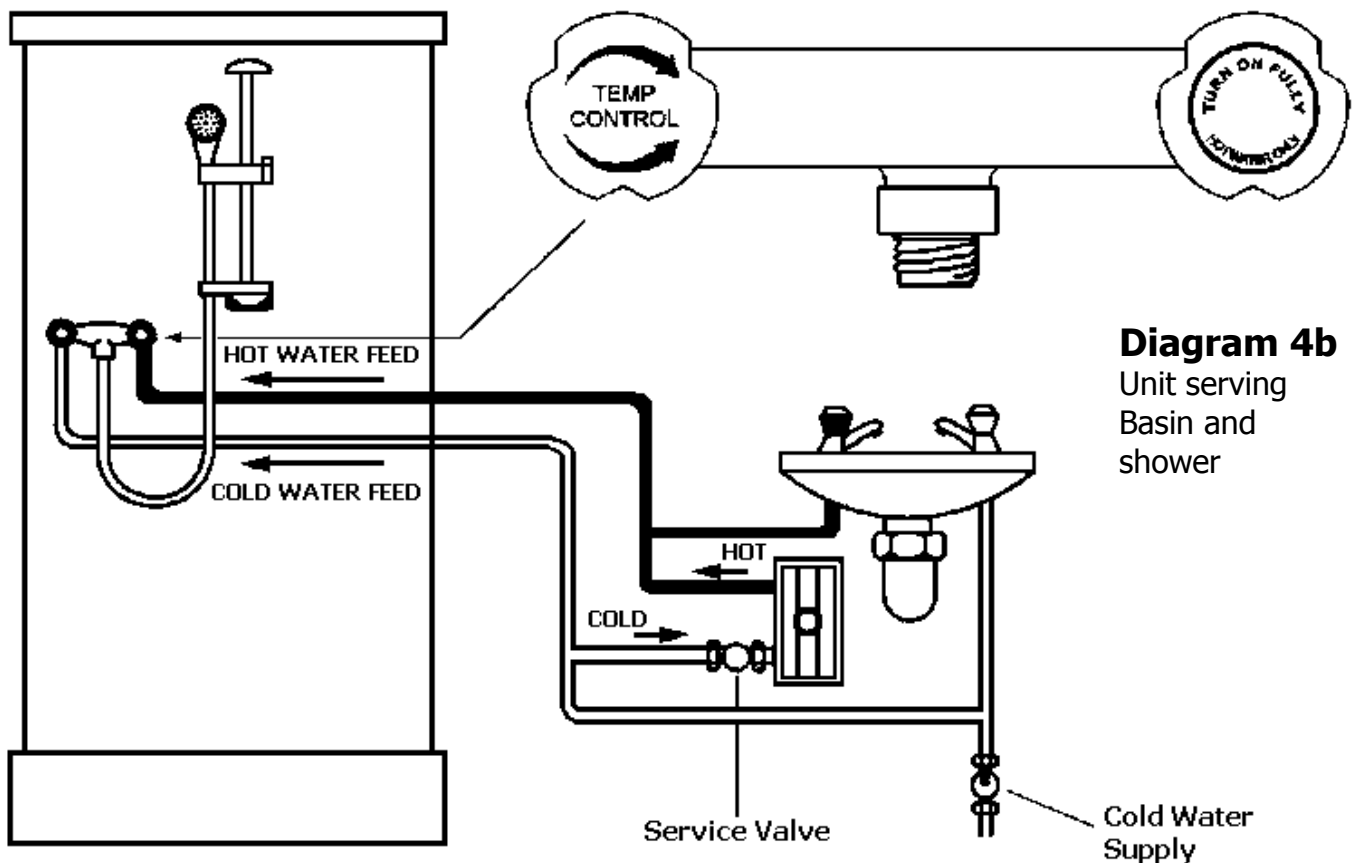


Diagram 4b
Unit serving
Basin and
shower

WARNING: ENSURE THAT THE MAINS WATER SUPPLY MEETS THE REQUIREMENTS LISTED ON PAGE 4 BEFORE CONTINUING WITH INSTALLATION.

WARNING: BEFORE CONNECTING THE PIPE WORK TO THE POWERSTREAM-ECO, ENSURE THAT THE PIPE WORK IS FULLY FLUSHED OUT.

Fitting the pipes

- The unit should be connected directly to the main cold water supply.
- We recommend that you use Ø15mm copper or stainless steel pipe for the inlet and outlet connections. (See addendum sheet for local installation requirements).
- Use PTFE tape for making screw joints. Do not use a jointing compound.
- Remember to keep the hot water pipe runs as short as possible.
- If the unit is to supply more than one basin outlet, the height should be the same at each outlet if they are to be used at the same time. If not, one outlet will take all the water.

In some cases, it may be worth fitting a second unit.

- When the pipework has been plumbed in, flush it through with water before you connect the unit, to remove any swarf or loose particles.

Connecting the unit to the pipes

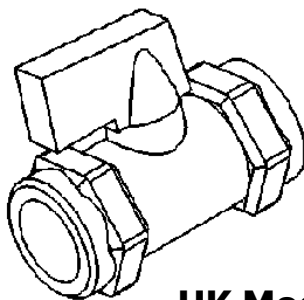
- The inlet and outlet are clearly marked on the unit.
UK models have Ø15mm straight shank connections.
Other export models are fitted with ½" NPT connections.
- The unit comes with a service valve (diagram 5) which should be fitted on the inlet of the unit.
Models have either Ø15mm straight shanks or ½" NPT connections. Check to see which applies.
- The valve can be used to turn off the water supply to the unit if it needs servicing, or to reduce the main supply flow if it is too high (see "Powerstream-Eco commissioning" section on page 9).

Fitting the attachments

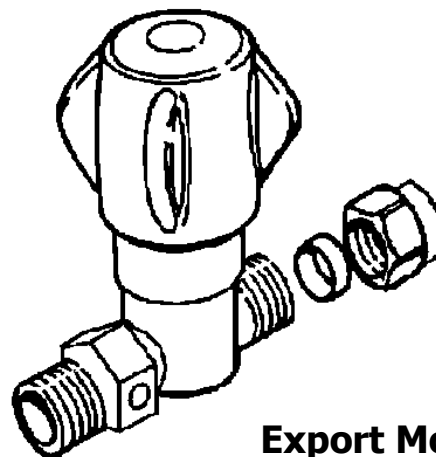
- If the unit is to supply a shower, you will also need a "Redring Mixer Unit". Available in chrome/white finish and suitable for surface or concealed pipe entry (see page 15 for details).
- If the unit is to supply a shower, and the shower handset can reach water in a bath or basin, you must fit a vacuum breaker to comply with Water By-laws.
Alternatively, use the hose-retaining feature built into the soapdish.
Because water can sometimes seep through, you should position the vacuum breaker where dripping will not do any damage.
- If the unit is to supply a basin or two basins, we recommend that you use "¼ turn lever control spray taps" (see page 15 for details).

Diagram 5

Service Valve supplied with:



UK Models



Export Models

MAKING THE ELECTRICAL CONNECTIONS

WARNING: THIS WATER HEATER MUST BE EARTHED.

The electrical installation must be in accordance with the current BS.7671 (IEEE Wiring Regulations) and "Part P" of the Building Regulations and/or local regulations

Wiring to the mains (Check the unit rating to see which applies)

Rating	Fuse/MCB	Isolating Switch	Cable Size
9.5 kW	40 amps	40 amps	6 mm ² / 10 mm ² *
10.8 kW	45 amps	45 amps	10 mm ²

* For cable runs over 10 metres or where cable is not flat clipped and surface mounted, the larger size is the minimum required.

A means for disconnection in all poles must be incorporated in the fixed wiring in accordance with the wiring rules.

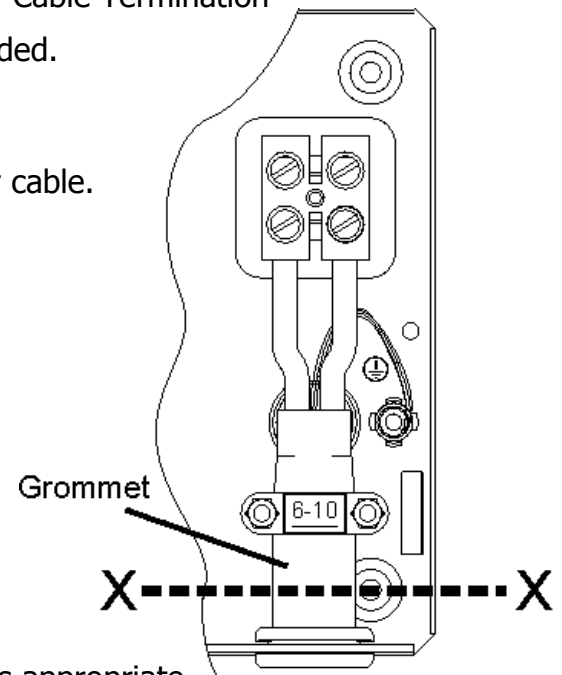
If the unit is fitted in a Bathroom:

A standard 45 amp cord operated isolator switch is recommended.

Wiring the Powerstream-Eco

- The unit has been designed to accept up to 16mm² supply cable. It will be necessary to cut the rubber entry grommet (diagram 6, point X to X) to enable 10mm² and 16mm² to be correctly installed. No cutting is required for 6mm² cable. In all cases the outer sheath of the cable **MUST** project through the grommet (diagram 6), if side entry is used. This will prevent water getting into the unit.
- Strip back the insulation on the **LIVE** (brown or red) and **NEUTRAL** (blue or black) mains wires about 8mm. Strip back any insulation on the **EARTH** (green/yellow or green) about 20mm.
- Feed the cable through the side or rear entry grommets, as appropriate.
- Connect the cables to the terminal block and earth stud (diagram 6)
- Make sure that the live and neutral terminal block screws are tightened securely (1Nm minimum)
- Make sure that the earth wire is wrapped around its terminal stud and into the saddle washer. The nut should be tightened securely (2Nm minimum).

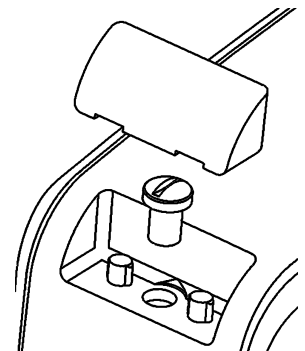
Diagram 6
Cable Termination



WARNING: FAILURE TO COMPLY WITH THESE INSTRUCTIONS COULD RESULT IN FAILURE OF THE TERMINAL BLOCK

- Fit the front cover and tighten the retaining nuts. Fit the retaining nut covers (see diagram 7).

Diagram 7
Retaining Nut Covers



Ensuring the earth continuity

- If the unit is fitted in a bathroom, to conform with the current BS.7671 (formally IEE regulations), the units earth continuity conductor must be effectively connected to **ALL** exposed metal parts of **ALL** other appliances in the room.

COMMISSIONING YOUR *POWERSTREAM-ECO*

CHECKING FOR LEAKS

- Let the water run through the unit for a few seconds. Close the outlet and check that no pipe joints leak.

ADJUSTING THE SERVICE VALVE

- If the unit is to supply a basin,
 - Turn on the hot water tap fully at the basin.
 - Ensure power selector is set to "High" (see adjusting power level below).
 - Turn the service valve on slowly until the neon illuminates on the product (max temperature).
 - Adjust the service valve until the water comes out of the tap at the required temperature. Allowing for the temperature to settle after each adjustment.
 - check that the unit works correctly when the basin tap is closed and then opened again: if not, adjust the service valve slightly.
- If the unit is to supply a shower,
 - Turn the hot water tap on the mixer unit fully on.
 - Ensure power selector is set to "High" (see adjusting power level below)
 - Turn the service valve clockwise until the neon light goes out, then turn it back until the neon just comes on.
 - check the water temperature at the handset and, if necessary, turn the cold tap on and adjust to get the desired shower temperature.

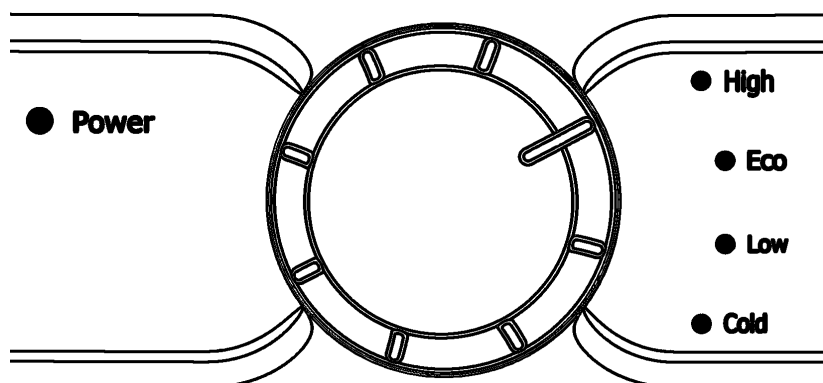
ADJUSTING POWER LEVEL

The Powerstream-Eco has four power levels, shown in table below, selected by rotating the central power knob (see diagram 8).

- High** Full power used for majority of applications.
- Eco/Medium** Medium power for handwashing or offering lower temperature outlet with no flow adjustment.
- Low** Summer use only where incoming water is warm.
- Cold** Allows the unit to run with no heat.

Diagram 8
Power Selection

	9.5kW Model	10.8kW Model
High Power	9.5kW	10.8kW
Eco / Medium Power	5.4kW	6.0kW
Low Power	4.1kW	4.8kW
Cold	No Power	No Power



Explain to the user that when the unit is used, the hot water tap should be turned fully on so that the unit will operate correctly.

HOW TO USE YOUR *POWERSTREAM-ECO*

WARNING: DO NOT USE THE UNIT IF YOU THINK IT MAY BE FROZEN, AS THIS COULD RESULT IN SERIOUS DAMAGE TO THE UNIT. WAIT UNTIL YOU ARE SURE THAT IT HAS COMPLETELY THAWED OUT BEFORE YOU SWITCH ON.

Basin

- Check that the power is switched on at the mains isolator switch.
- Turn on the hot water tap **FULLY**. If you do not turn the tap on fully, you will find that the temperature of the water will vary. The hot water temperature will have been set using the service valve (diagram 5). See "Selecting my power level" section
- If the unit has been used recently, run the water through for a few seconds to let the temperature settle down, we advise you DO NOT enter the water flow during this time.
WARNING: YOU MAY INITIALLY GET A SHORT BURST OF VERY HOT WATER FROM THE UNIT.
- If a second tap connected to the unit is also turned on, the hot water will be shared between the two and so the flow will drop.
- When you have finished do not switch off the power if you are going to use the unit again shortly

Shower

- Check that the power is switched on at the mains local isolator switch.
- Turn on the hot (or "flow") tap **FULLY** (diagram 9). Ensure unit is set to "High" setting.
- If the unit has been used recently, run the water through for approximately 20 seconds to let the temperature settle down, we advise you DO NOT enter the water flow during this time.
WARNING: YOU MAY INITIALLY GET A SHORT BURST OF VERY HOT WATER FROM THE UNIT.
- Turn on the cold (or "temperature") tap, if necessary, to adjust the temperature of the water.
- Make sure that no other outlets connected to the unit are used whilst you are in the shower, or the water flow will drop suddenly.
- When you have finished do not switch off the power if you are going to use the unit again shortly
- It is important to clean the shower handset regularly (see page 11).
- In order for the Powerstream-Eco to function correctly, the "Redring Mixer Kit" must be used. The kit, Cat No. 85-793620, comes complete with full accessories including a 3 position multi-function shower handset.

SELECTING POWER LEVEL

The Powerstream-Eco has four power levels to choose from changing these allows the level of heat to be changed in discreet steps. The user can set these easily by rotating the central knob to the desired setting (see diagram 8). In general, the lower the power level is the lower the flow rate will be, to achieve the same temperature. The control can be set up using the High setting and then the temperature reduced by selecting a lower power level i.e. Set unit up for showering and then select Eco/medium when using the unit to wash your hands.

CAUTION: The flow switch built into the Powerstream-Eco will switch off the heat if the flow rate is set too low. This will be indicated by the neon light going out.

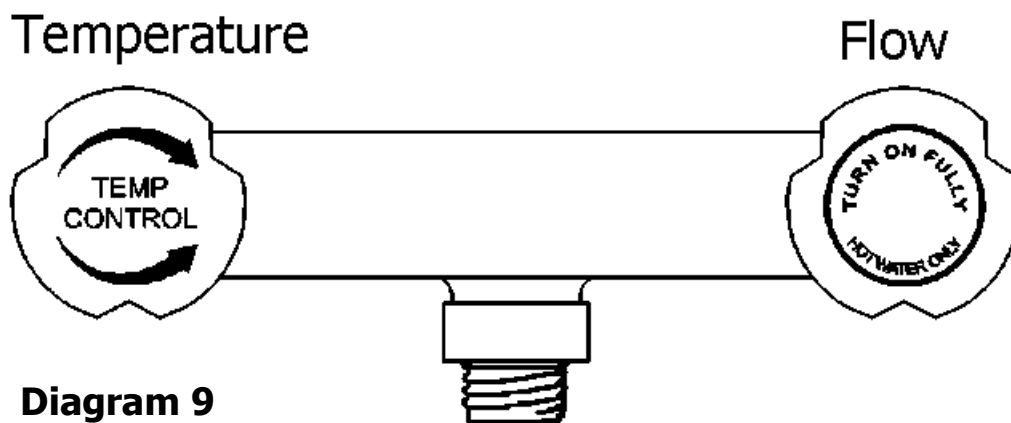


Diagram 9
Mixer Units

WARNING: YOU MUST REGULARLY INSPECT THE SHOWER HOSE FOR WEAR AND DAMAGE. REPLACE IF NECESSARY, OR EVERY TWO YEARS, WITH OUR APPROVED PART.

WARNING: IN ORDER TO MAINTAIN THE PERFORMANCE OF YOUR UNIT, YOU MUST CLEAN THE SHOWER HANDSET REGULARLY.

All water contains particles of lime-scale, which build up in the shower handset and unit reducing the performance.

It is therefore important to clean the shower handset by simply rubbing the rubber nozzles, or soaking in proprietary lime-scale remover and rinsing thoroughly before use.

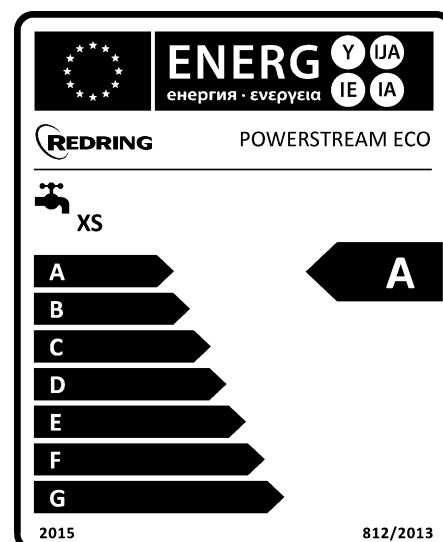
The frequency of this will depend on water hardness and experience.

ENERGY RELATED PRODUCT DIRECTIVE (ErP)

Please Note:-

This information shows how our products pass relevant European Union Energy Directives (ErP)

Manufacturer	Redring	
Product	RP1E	RP10.8E
Load Profile	XS	XS
Efficiency Class	A	A
Efficiency %	39	39
Consumption (kWh / annum)	468	471
Sound (dB)	15	15
Precautions	<i>Follow all product installation, care and maintenance instructions as listed in the main 'Instruction/Installation Manual'</i>	



WHAT TO DO IF THINGS GO WRONG (1)

SELF HELP

If the unit is not working satisfactorily, make the following checks before calling out the installer. Any one of these adjustments could restore the performance.

Symptom	Cause	What to do
Little or no water flow.	The main water supply is turned off.	Turn on the main supply fully at the stop valve. Set up unit as per commissioning instructions.
Cold water only - neon light off.	The main water supply is not turned on enough. Power selector set to "cold".	Turn on the main supply fully at the stop valve. Rotate power selector knob to high, Eco or low.
Water too cold - neon light on.	The water flow rate is too high. The inlet water temperature has dropped. Power selector set too low.	Adjust the service valve (see page 9). Adjust the service valve (see page 9) Set power select to "High". For a shower, adjust the spray pattern available on the multi-mode handset. Rotate power selector to Higher setting.
Water flow too low, or temperature too high.	The main water supply is too low The hot tap is not fully open. Power selector set too high.	Increase the supply water flow. Make sure that the service valve is correctly adjusted. Adjust the service valve so that the water is at the right temperature with the tap fully open (see page 9). Always turn the hot tap fully on. Rotate power selector to lower setting
Water goes from hot to cold.	The water flow or pressure is too low, and the thermal cut-out is operating. A second outlet has been turned on.	Increase the supply water flow Make sure that the service valve is correctly adjusted. Do not use the basin whilst using the shower.
Shower spray pattern deteriorates.	The shower handset is clogged.	Clean the handset using a descaling solution if required (see page 11).

WHAT TO DO IF THINGS GO WRONG (2)

PROFESSIONAL SERVICE

If the previous "Self Help" checks fail to restore the performance, you should seek professional help. The person who installed the Powerstream-Eco is probably the best one to investigate and correct it and is certainly the person to contact if you have had a problem in the guarantee period.

The following additional checklist is provided for the benefit of the qualified service person.

WARNING: SWITCH OFF THE ELECTRICITY AT THE LOCAL ISOLATOR BEFORE REMOVING THE COVER TO MAKE CHECKS

Symptom	Cause	What to do						
Little or no water flows - neon light off.	The water pressure is very low.	Use a pump to boost the supply from a storage tank.						
Cold water only - neon light off.	The main water is connected to the OUTLET of the unit. The water pressure is too low. The thermal cut-out has triggered. The flow switch is not working.	Reconnect the main supply to the INLET (marked in blue). Use a pump to boost the supply from a storage tank. Reset it by opening the unit and pushing the button on the cut-out (diagram 10). Before you do this you must remove the cause of the problem. Contact Redring (see page 2).						
Water too cold - neon light on.	The power select is set too low. One element is not working. The Power Supply Voltage has dropped.	Change the power select to "High" (diagram 8). Switch off the electricity supply and check the resistance of the elements. You should get the following readings. <table border="0"> <tr> <td>Loading (kW)</td> <td>Resistance (Ohms)</td> </tr> <tr> <td>9.5</td> <td>10.6 / 13.8 approx.</td> </tr> <tr> <td>10.8</td> <td>9.6 / 12.1 approx.</td> </tr> </table> The heater should only draw the following currents: 40 amps for the 9.5kW model 45 amps for the 10.8kW model	Loading (kW)	Resistance (Ohms)	9.5	10.6 / 13.8 approx.	10.8	9.6 / 12.1 approx.
Loading (kW)	Resistance (Ohms)							
9.5	10.6 / 13.8 approx.							
10.8	9.6 / 12.1 approx.							
Water flow too low or temperature too high.	The service valve is fitted to the OUTLET. There are constrictions in the plumbing.	Fit the service valve to the INLET of the unit. Check the plumbing. Only use PTFE tape for making pipe joints.						
Water goes from hot to cold.	The service valve is fitted to the OUTLET.	Fit the service valve to the INLET of the unit.						

HOW YOUR *POWERSTREAM-ECO* WORKS

Water comes in through the inlet, via a flow switch.

The flow switch measures how much water is passing through the unit.

If it detects more than the preset level of:-

2.7 litres/minute for the 9.5kW model and 3.3 litres/minute for the 10.8kW.

The units heating elements are switched on. This is shown by the neon light glowing.

The water is heated instantly as it passes through the copper heat exchanger tube.

The temperature of the water coming out of the unit depends on:-

- The temperature of the mains water supply
- The water flow rate
- The power consumption of the unit (power level selected)

The temperature of the main supply can vary from 5°C in winter up to about 20°C in summer, with an average of about 12°C. The charts below show the water temperature (°C) you can expect from the unit, at the different power settings for different flow rates in litres/minute.

9.5kW Powerstream-Eco

Flow rate (litres/min.)	3.0			4.0			6.0		
Power level	High	Eco	Low	High	Eco	Low	High	Eco	Low
Summer temp °C	65°	46°	40°	54°	39°	35°	43°	33°	30°
Winter temp °C	50°	31°	25°	39°	24°	20°	28°	18°	15°

On average on "high" (12°C main water supply at 4 litres/minute) an outlet temperature of 46°C will be achieved.

10.8kW Powerstream-Eco

Flow rate (litres/min.)	4.0			5.0			6.0		
Power level	High	Eco	Low	High	Eco	Low	High	Eco	Low
Summer temp °C	58°	41°	37°	51°	37°	34°	46°	34°	31°
Winter temp °C	43°	26°	22°	36°	22°	19°	31°	19°	16°

On average on "high" (12°C main water supply at 5 litres/minute) an outlet temperature of 43°C will be achieved.

The unit includes a dual thermal cut-out (diagram 10) which is attached to the heat exchanger tube. It will switch off the heater elements if the water flow is reduced too much and the temperature goes above a set limit.

The first stage cut-out is cyclic and will automatically reset as the water temperature falls.

The unit will then function normally again.

Diagram 10
Thermal Cut-Out

The second stage cut-out when triggered needs to be re-set manually inside the unit (diagram 10).

This cut-out will only operate in exceptional circumstances.

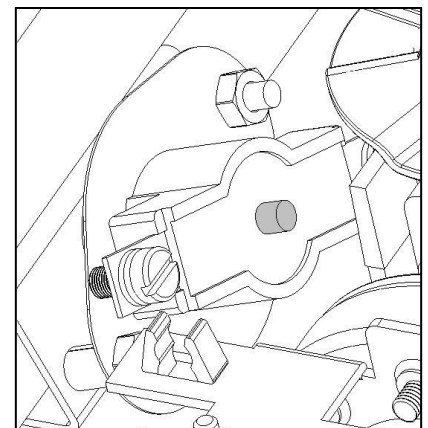
The unit can supply two outlets,

For example, a shower and a basin, or up to two basins

– but water from the unit will be shared between the outlets.

This is particularly important if a unit supplies a shower and a basin, as the basin should not be used while someone is using the shower.

The unit is NOT to be fitted to a bath or kitchen sink other than for hand-washing purposes.



ADDITIONAL ACCESSORIES AND COMMON SPARE PARTS

Please Note :- The fitting of Spare Parts must be supervised by a suitably qualified person.

Chrome and White Shower Mixer Unit Complete with full accessories Including 3 position multi-function handset	Catalogue No. 85-793620
¼ turn lever control spray tap for handwashing applications	85-793616
Thermal cut-out (manual reset)	93-793789
Printed front cover complete	93-794403
Control knob	93-794404
Screw cover set	93-794405
Flow switch assembly	93-794406
Heat exchanger 9.5kW 240V	93-794407
Heat exchanger 10.8kW 240V	93-794408
Power selector Assembly	93-794409

For further details, including a comprehensive list off accessories and spare parts,
Contact Redring After Sales Service (see page 2)

TECHNICAL INFORMATION

Diagram 11
Internal Details

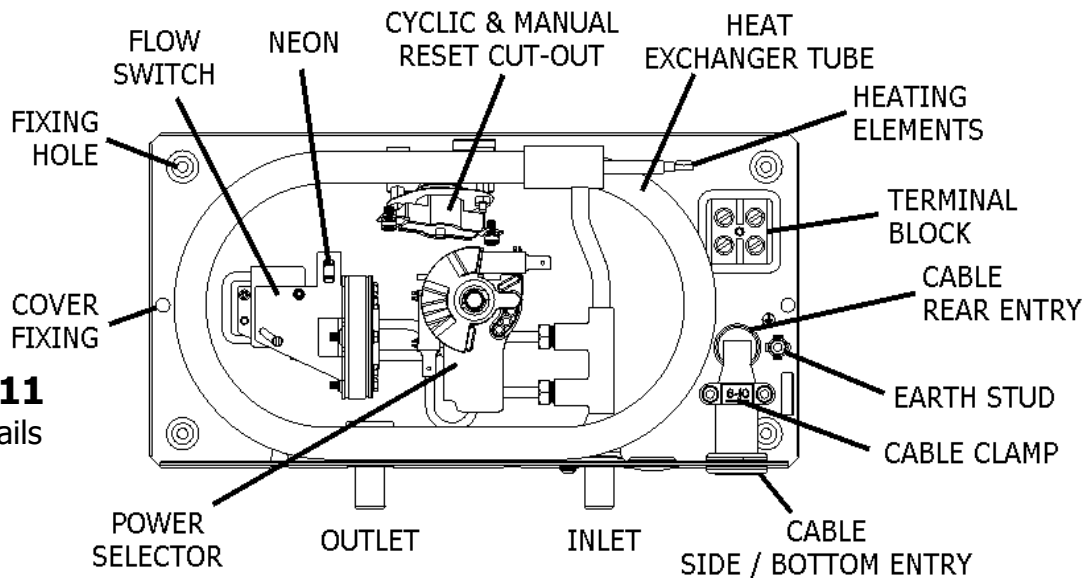
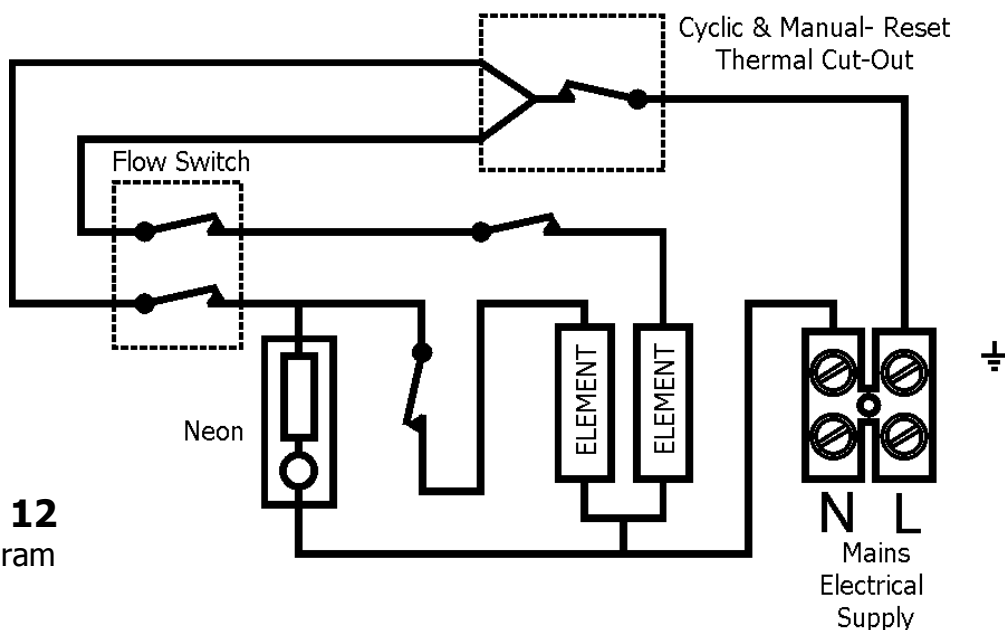


Diagram 12
Circuit Diagram



GUARANTEE AND CONTACT DETAILS

GUARANTEE

Terms and Conditions for UK (outside UK contact your local distributor)

In the unlikely event of a product breakdown during the guarantee period you should contact our Service and Repair Helpline who will be able to assist with the repair and advise of the best course of action to be taken.

Please DO NOT remove the product prior to making this call as this may invalidate your guarantee

Service and Repair Tel: 0844 372 7766 or email: technical.services@redringxpelair.com

We guarantee this product for a period of 24 months from the date of purchase.

Within the guarantee period we will resolve, **free of charge**, any manufacturing defects in the product resulting from faulty workmanship or material on condition that:-

- a) The product has been correctly installed and commissioned in accordance with our instructions and is being used on the supply circuit or voltage printed on the rating plate.
- b) The product has been used in accordance with these instructions and has not been tampered with or otherwise subject to misuse, neglect or accident.
- c) The product has not been taken apart, modified or repaired except by a person authorised by us.
- d) Evidence of the date of purchase in the form of an invoice or receipt will be required in order to qualify under the terms of this guarantee.
- e) For the service work to be undertaken free of charge, the work must only be undertaken by Redring Xpelair Group Limited, or our approved agents.
- f) Service under guarantee has no effect on the expiry date.

The guarantee on any exchanged parts or product ends when the original guarantee period ends.

EXCLUSIONS

This guarantee **DOES NOT** cover damage or defects arising from poor or incorrect installation, improper use or lack of maintenance, including the build-up of limescale.

The unit **MUST NOT** be fitted to any type of thermostatic mixer valve or tap.

The unit **MUST NOT** be fitted to a bath or kitchen sink other than for hand-washing purposes.

It is the responsibility of the installer to check that the installation parameters meet the requirements of the products, and any relevant regulations.

If we are called out to a fault, which is subsequently identified as being an installation fault, we will make a charge, it is important that the routine checks are completed before calling us out, as many issues can be simply diagnosed and resolved.

A charge will be made where a call under the terms of the guarantee has been booked and a failure was not product related, or an engineer arrives and is not able to gain access.

We make no guarantees as to response time for repairs.

We will endeavour to achieve the most timely response possible but while we indicate an average response time, this should not be taken as a guarantee.

The guarantee applies to a repair or replacement (at our discretion) of the product subject to the conditions above, and **DOES NOT** cover compensation for the loss of the product or consequential loss of any kind.

This guarantee does not apply to the repair or replacement of pressure relief devices, shower handsets, hoses, accessories, isolating switches, electrical cable, fuses and/or circuit breakers.

This guarantee does not affect your statutory rights.

 **Redring Xpelair Group**

REDRING XPELAIR GROUP LIMITED

NEWCOMBE HOUSE, NEWCOMBE WAY, ORTON SOUTHGATE, PETERBOROUGH PE2 6SE

TEL: +44 (0) 1733 456789 / FAX: +44 (0) 1733 319610

Website: www.redring.co.uk

We offer a technical advisory service on the telephone: RING 0844 372 7766 (UK ONLY)