

GLOW THERMOSTATIC ELECTRIC SHOWER



Installation and User Guide

IMPORTANT:

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

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IMPORTANT:

This appliance can be used by children aged from 3 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.

The shower spray head MUST be cleaned regularly to remove scale and debris. The frequency of the cleaning will vary according to the local water quality. If the water outlet temperature becomes hot or the spray pattern becomes noticeably uneven, immediately check the shower handset for blockage. See User Guide Section 4 for cleaning instructions.

Do not operate shower if frozen, or suspected of being frozen. It must be completely thawed out before using.

INSTALLATION GUIDE

1. Pack Contents

Ple	ase make sure ALL components are included before starting the installation
	Shower Unit
	Shower Handset
	Riser Rail Tube
	Riser Rail Brackets x 2
	Riser Rail Height Adjuster
	Flexible Shower Hose
	Soap Dish
	Screw Pack
	Installation and User Instructions
	ErP Label
2.	Installation Check List
	Check that the water supply will satisfy requirements
	Check that water and cable entry points of the unit meet requirements
	Check that the electric supply will satisfy requirements
	Select a suitable position for the shower
	Follow plumbing installation section
	Follow electrical installation section
	Fit to the wall and connect the shower supplies
	Commission the shower in the way described

3. Important Safety Information

All Redring products are safe and without risk provided they are installed, used and maintained in good working order in accordance with our instructions and recommendations.



MAINS SERVICE CONNECTIONS: The shower unit is supplied for right entry and left entry, please see Section 8 and 9 for "Plumbing Connections" and "Electrical Connections" for installation information.



IMPORTANT: To comply with water regulations, building regulations or any specific local water company regulations and in accordance with BS EN 806, a double check valve should be fitted where it is possible that the shower head may come into contact with used water, for example in the bath or a shower tray.



IMPORTANT: Check that there are no hidden cables or pipes before drilling holes for the wall plugs. Choose a flat piece of wall to avoid the possibility of distorting the back plate and making the front cover a poor fit. Exercise great care when using power tools near water. The use of a residual current device (RCD) is recommended.



IMPORTANT: Before connecting the water supply to the shower unit the water supply pipe should be flushed out to remove all debris. After flushing the pipework make the connection to shower inlet and ensure the shower is positioned squarely on the wall with all fixing screws tightened.



IT IS VERY IMPORTANT: To ensure that the terminal block screws are fully tightened and that no cable insulation is trapped under screws, and tighten periodically in accordance with BS 7671. The earth continuity conductor of the electrical installation must be effectively connected to all exposed metal parts of other appliances and services in the room in which the shower unit is installed to conform with BS 7671. The unused supply terminal block must not be used for any other purpose.



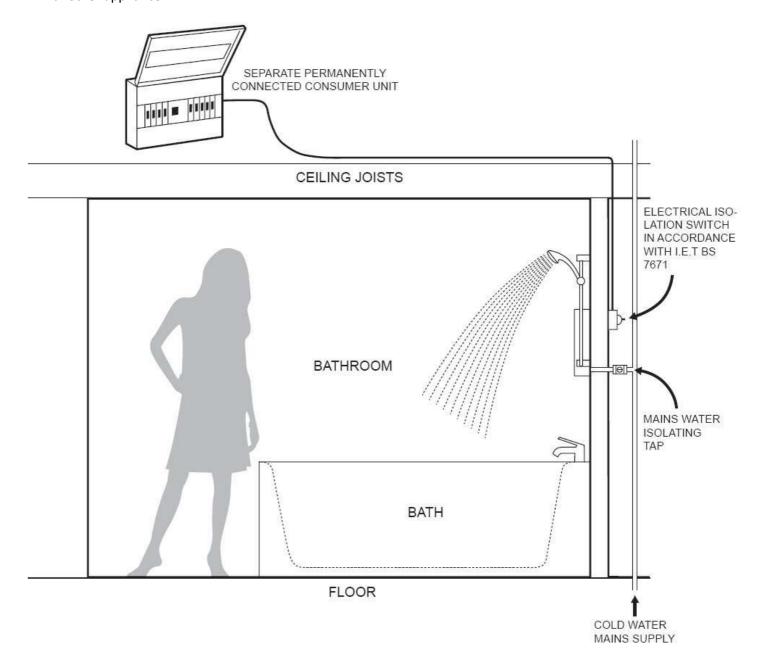
IMPORTANT: Ensure that the commissioning instructions are followed before pressing the Start button. The unit MUST be filled with cold water before the shower is used: Press Cooler button for more than 3 seconds in order to cold fill the tank. (See Page 14 for details).



IMPORTANT: The shower unit MUST be fitted with a WRAS (Water Regulations Advice Scheme) listed mains water isolating valve.

4. General Installation Layout Guide

- Plan your installation carefully. Check on the nearest and most accessible rising main water supply, this may be beneath the bath or in the loft, where it feeds the water storage tank. Use only the cold rising water main.
- If possible, avoid connecting the shower unit where it will be affected by water drawn off by another appliance.
- For example, the mains feed to a toilet, as this may cause a drop in pressure to a level that is too low for the shower unit to work correctly.
- A WRAS (Water Regulations Advice Scheme) listed isolating valve must be fitted between the rising main and the unit to comply with water regulations and to allow for routine maintenance and servicing.





IMPORTANT!



This appliance can be used by children aged from 3 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.

5. Important Installation Information

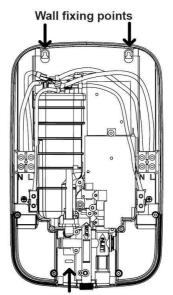
Shower installation must be carried out by a suitably qualified person and be in accordance with BS 7671 (IET wiring regulations), building regulations, water regulations and / or any specific local water company regulations in force and should be in accordance with BS EN 806.

- This shower unit is designed to be connected to a 15mm cold water mains supply.
- To enable the heating elements to be activated the shower must be connected to mains water supply with a minimum static pressure of 0.1MPa, 15lb/sq. in, 1bar at a minimum flow rate of 8 litres per minute. The maximum static pressure is 1MPa, 145lb/sq. in, 10bar.
- The shower unit must not be fitted where it may be exposed to frost, for example, in an outdoor area.
 The shower must not be used if suspected of being frozen. Frost damage is not covered by the warranty.
- Plumbers jointing compound must not be used. In instances of difficult joints use P.T.F.E. Tape. The use of jointing compound will invalidate the product warranty.
- Do not solder fittings near the shower unit as heat can travel along pipe work and damage components.
- Complete all plumbing connections before making the electrical connections.

NOTE: For the 9.5kW model, at the minimum pressure, the flow rate must be 9 L/min.

6. Fixing the Shower to the Wall

- Position the shower on the wall so that it will NOT be in the direct water spray from the shower handset when fixed.
- The shower handset must be prevented from being immersed in the bath or shower tray when hanging down. The hose retaining ring on the soap dish can be used for this purpose. (See diagram on Page 8).
- Remove the front cover fixing screws. Carefully remove the front cover ensuring the flying lead plug is disconnected from the PCB in the backplate.
- Having decided on the water and cable entry points and chosen a flat piece of wall, hold the shower vertically against the wall and mark the top two fixing holes whilst ensuring the shower is square.
- Carefully drill the two holes as marked using a 5.5mm masonry drill, after first making certain there are no pipes or wires behind the proposed holes.
- Insert the wall plugs and screws provided leaving the screw head proud by approximately 5mm. The shower can now be hung on these screws.
- Make sure that the shower is positioned vertically and square, now mark and drill the lower slotted fixing hole. Then fix the shower to the wall. Do not fully tighten the screws at this stage.
- The shower back plate and removable corner mouldings have moulded cut out sections which are clearly indicated to allow the chosen service entry option to be cut out prior to final fix.



NOTE: The bottom screw should only be fitted during final installation.

TIPS

- A piece of insulating or masking tape applied to the wall before marking out the fixing holes will help stop the drill from wandering, particularly on tiled surfaces.
- When working near a basin or bath, insert the plug in the waste fitting so that small parts cannot be lost.
- Take care not to drop accessories or tools into bath or shower tray.

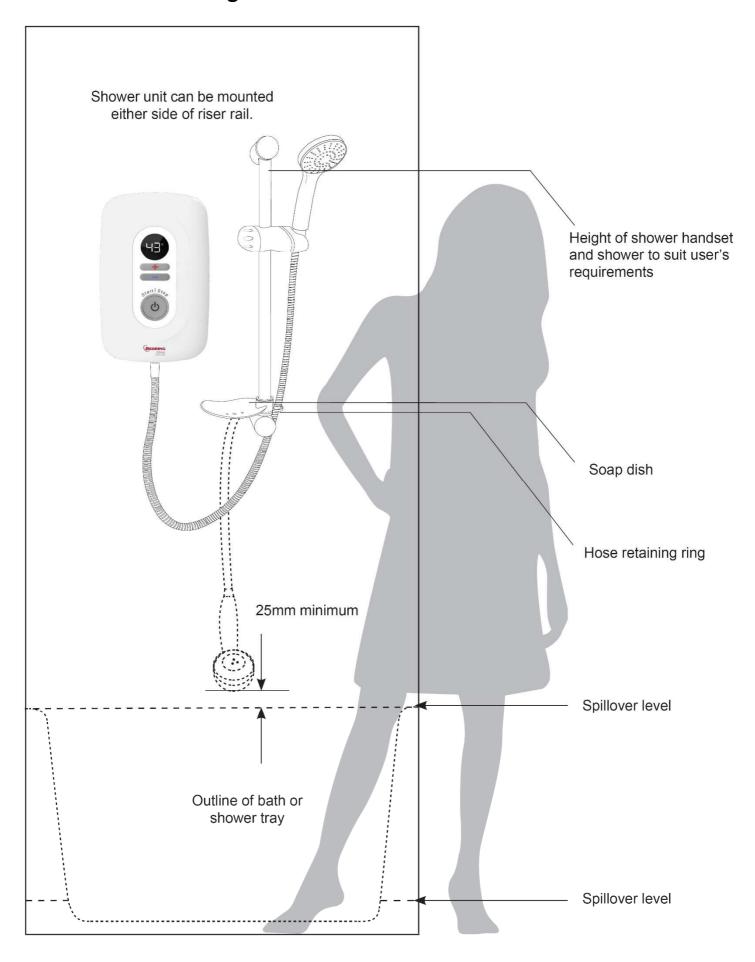


IMPORTANT!



Under no circumstances should this shower unit be recessed (it must be fitted onto the finished wall surface). Do not tile up to or seal around the unit at this may prevent air circulating and any condensation escaping.

7. Product Positioning Guide



8. Plumbing Connections

The shower back plate incorporates into the lower right and left side a removable corner section to allow easy access when deciding on and connecting to the water mains supply.

 Remove the bottom right or left hand side corner section giving access to the water inlet connection point.

IMPORTANT: Before connecting the mains water supply to the shower, flush out the pipe work to remove all swarf and system debris. This is achieved by connecting a suitable hose (e.g. Garden hose) to the pipe work and turning on the mains water supply at the isolating stop tap long enough to clear the debris to waste.

- 2. Turn off the mains water supply at the isolating tap.
- 3. Having decided on the direction of the water inlet supply: Top (falling) Bottom (rising) or rear / side inlet, it is necessary to remove the appropriate knock out (thinned out plastic) cross section from the back plate before commencing with the installation. The connection to the unit is made using a 15mm copper, stainless or plastic pipe with a 15mm compression elbow or 15mm push fit elbow.

IMPORTANT: Do not use excessive force when making the connection to the unit.

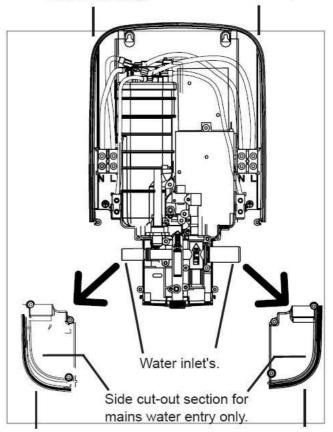
- 4. If left hand water entry is desired, remove spring clip and then blanking cap. Replace blanking cap onto right spigot, ensuring it is fully seated, then snap spring clip back into groove for retainment.
- 5. Now tighten the back plate fixing screws so the unit is firmly fixed to the wall.
- 6. If rear entry pipe work is used we recommend the use of a suitable sealant to seal around the incoming pipe work to prevent water entering the wall.

7. Turn on the mains water supply and check for leaks, paying particular attention to the water inlet connections. At this stage no water can flow through the unit.

IMPORTANT: Remember to replace the lower corner section before refitting the front cover.

Top cut-out section for mains water and cable entry.

Top cut-out section for mains water and cable entry.



Bottom cut-out section for mains water and cable entry. Bottom cut-out section for mains water and cable entry.

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IMPORTANT!



Installation must comply with water regulations, building regulations, any specific local water company regulations and should be in accordance with BS EN 806. A double check valve must be fitted with all flexible shower accessories where it is possible that the shower handset may come into contact with used water e.g. In the bath or shower tray.



IMPORTANT!



Before turning on the water supply to the shower unit the water supply pipe should be flushed out to remove debris. After flushing the pipework ensure that the shower unit is positioned squarely on the wall and tighten the screws.

Tighten all plumbing connections and check the pipework for leaks.

9. Electrical Connections

The electrical installation must be in accordance with the current BS 7671 (I.E.T. wiring regulations) and part P of the building and / or local regulations.

The shower unit is designed for a single phase 50 Hz AC electrical supply.

Electrical Specifications			
Normal Power Rating at 240V Normal Power Rating at			
8.5kW - (40A MCB rating)	7.8kW - (40A MCB rating)		
9.5kW - (40A MCB rating)	8.7kW - (40A MCB rating)		

IMPORTANT: The heating elements on the UK models are manufactured to 230-240V specification and will give a lower kW rating if the voltage supply is below 240V.

The shower unit **must be permanently connected** to the electrical supply, direct from the consumer unit via an electrical isolation switch with a minimum contact gap of 3 mm. The switch must be readily accessible and clearly identifiable and sited out of reach of a person using the shower over a fixed bath or shower tray, unless the switch is pull cord operated. The wiring must be connected to the switch without the use of a plug or socket outlet.

The supply cable size is determined by the kW rating of the product (as detailed on the rating plate fixed to the back plate) and the distance between the shower and the consumer unit. The table below is for guidance only. You should always consult a qualified electrician to establish the correct cable for your installation.

DIRECT CLIPED Cable Run Guide					
kW	NOMINAL CURRENT	MINIMUM RATING	FUSE		CABLE UN
RATING	AT 240V	ISOLATING SWITCH	RATING	6mm²	10mm²
8.5	35.5A	40 A	40 A	23 m	38 m
9.5	39.6A	40 A	40 A	21 m	32 m

1. The incoming cable should be hidden. Connect as follows:

Earth cable to terminal marked **Neutral** Neutral cable to terminal marked **Neutral** Neutral Cable 10 N

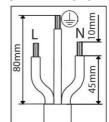
- The outer sheath of the supply cable must be stripped back to a suitable length and the earth conductor must have an earthing sleeve fitted.
- Connect the cable to the terminal block.
 Ensure that ALL the retaining screws are
 VERY tight and that NO cable insulation is
 trapped under the screws. Loose connections
 can result in cable overheating.

IMPORTANT: Failure to ensure that the retaining screws are VERY tight could result in a failure of the terminal block.

IMPORTANT: DO NOT switch on the electricity supply until the shower cover has been fitted.

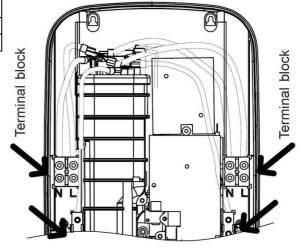
IMPORTANT: Ensure front cover umbilical is connected to the PCB in the backplate. (See diagram on Page 12).

IMPORTANT: Follow these cut back cable guidelines,



to ensure the product has a reliable electrical connection.

IMPORTANT: The unused supply terminal block must not be used for any other purpose.





IMPORTANT!



Ensure that the terminal block screws are fully tightened, and that no cable insulation is trapped under the screws.

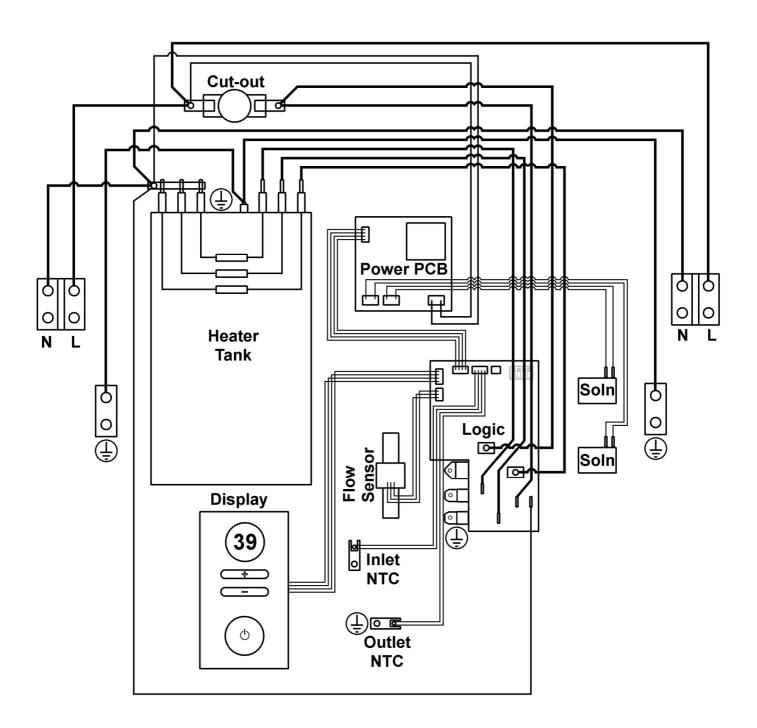
Terminal block screws should be tighten periodically in accordance with BS 7671.

The earth continuity conductor of the electrical installation must be effectively connected to all exposed metal parts of other appliances and services in the room in which the shower unit is installed to conform with BS 7671.

9. Electrical Connections (Continued).

IMPORTANT: The use of connections within the unit or other points in the shower circuit to supply power to other equipment such as an extractor fan or pump etc. will invalidate the warranty.

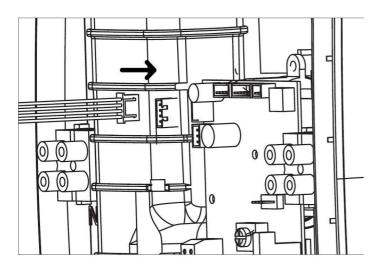
The diagram below shows the schematic wiring diagram.



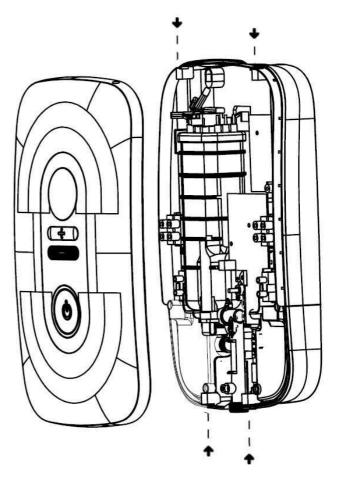
10. Fitting the Front Cover

- 1. Plug the flying lead into the socket on PCB.
- 2. Ensure the two bottom side sections are properly secured to the backplate.
- 3. Fit and secure the front cover back on to the unit.
- 4. Replace the 4 screws into the front cover, two in the top and two in the bottom.

Flying lead socket location



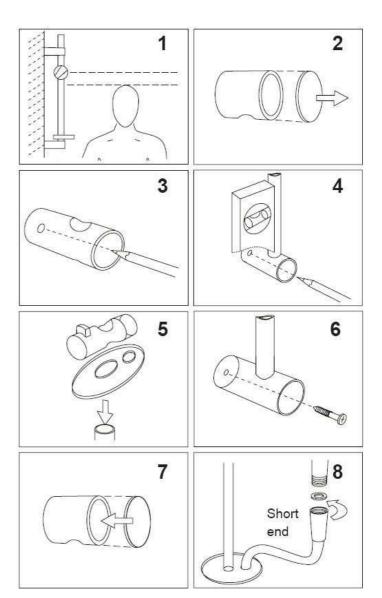
Front cover screw points



11. Riser Rail Fitting Instructions

- Establish position for the riser rail and mark the wall for the lower mounting bracket. Make allowances for the tallest person likely to use the shower regularly.
- 2. Remove covers from the wall brackets.
- 3. Position the top bracket and mark the wall for the screw fixing. Drill, plug the wall and fix the top bracket.
- 4. Fit the rail into the top bracket. Place the remaining bracket onto the rail. Ensure the rail is vertically aligned and mark the wall. Remove the rail and bracket, then drill and plug the wall.
- 5. Slide the height adjuster onto the rail, release mechanism with push button. Then fit the soap dish, dampening the rail will make it easier to slide on.
- 6. Replace the rail assembly into the top bracket. Refit the bottom bracket, ensuring the larger rail hole is facing outwards and fix to the wall.
- 7. Snap covers over both brackets.
- Firmly attach shorter conical end of flexible hose to shower handset making sure sealing washer is in place after first passing through the hose retaining ring with no kinks.

NOTE: The adjustable height adjuster grips the conical ends of the hose, not the handle of the shower handset.



TIPS

- A piece of insulating or masking tape applied to the wall before marking out the fixing holes will help stop the drill from wandering, particularly on tiled surfaces.
- When working near a basin or bath, insert the plug in the waste fitting so that small parts cannot be lost.
- Take care not to drop accessories or tools into basin or bath.



Check there are no hidden cables or pipes before drilling holes for wall plugs.

Exercise great care when using power tools near water.

The use of a residual current device (RCD) is recommended.

12. Commissioning The Shower

a) With the front cover removed and the power isolator switched off:

Select either Normal or Temperature Lock operation:

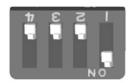
Normal operation (Factory default setting):



On the main Logic PCB : Set the red DIP switch N° 1 to the Off position. The switch on temperature is 43°C.

The outlet temperature can be adjusted by the user from 25°C to 47°C.

Temperature Lock operation: (Recommended setting for children and less abled users)



On the main Logic PCB : Set the red DIP switch N° 1 to the ON position. The switch on temperature is 40°C.

The outlet temperature can be adjusted by the user from 34°C to 41°C.

Note: Do not adjust the factory set positions of DIPs 2 or 3 or 4.

b) Fully refit the front cover (ensuring all side sections are correctly in place):

(See 10: Fitting the Front Cover)

- 1. Ensure the water supply is turned fully on.
- 2. Switch on the power to the unit using the isolator switch.
- Press and hold the Cooler button for at least 3 seconds until the shower gives a short bleep. The display will show "C" and the water will cold fill the shower. Check that water flows freely from the outlet.
- 4. While in cold running mode, the temperature display will show "C" and the heating elements will remain off. The Warmer button is deactivated during this mode.
- 5. To finish the Commissioning procedure simply press the Stop button.



IMPORTANT: The shower **MUST** be filled with cold water by pressing the Cooler button for 3 seconds. This must be done **BEFORE** pressing the Start / Stop button.





CAUTION



The shower unit must be full of water before pressing the Start / Stop button. (See Commissioning section above)

13. Troubleshooting Checklist For The Installer

IMPORTANT: The following check list is provided for the benefit of the qualified installer.

WARNING: SWITCH OFF THE ELECTRICAL ISOLATION SWITCH BEFORE REMOVING THE FRONT COVER TO MAKE CHECKS.

Q. Water too cold.

A. Check the circuit through the thermal cut out. Check circuit through the three sheathed heating elements.

NOTE: Above test to be done using a low voltage resistance meter whilst the power is switched **OFF** at the isolating switch.

Check working voltage.

Ensure you have completed commissioning process and refer to installation checklist (section 2).

- Q. Poor or no control over water flow.
- **A.** Check running water supply pressure is greater than one bar.
- Q. No water when start / stop button is pressed.
- **A.** Check the water supply isolating valves are fully open.

Q. Display doesn't come on.

A. Check that the connecting lead is attached from cover to backplate PCB.



A brand of the GDC Group Limited, trading as Glen Dimplex Heating & Ventilation.

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USER GUIDE

1. Important Safety Information

Redring products are safe and without risk, provided they are installed, used and maintained in good working order in accordance with our instructions and recommendations.



DO NOT operate the unit if the handset or shower hose becomes damaged.



DO NOT restrict flow out of shower by placing shower handset in direct contact with your body or other object.



WARNING: the outlet of the shower acts as a vent and must not be connected to anything other than the flexible shower hose and handset supplied or approved by the manufacturer.



DO NOT operate the shower if water ceases to flow during use or if water has got inside the unit because of an incorrectly fitted cover.



DO NOT place items such as soap, shampoo or other such bottles on top of the unit as liquid could leak through the joint between the cover and back plate and damage the sealing rubber.

1. Important Safety Information (Continued)



IMPORTANT: The shower spray head **MUST** be cleaned regularly to remove scale and debris. The frequency of the cleaning will vary according to the local water quality. If the water outlet temperature becomes hot or the spray pattern becomes noticeably uneven, immediately check the shower handset for blockage. See section 4 for cleaning instructions.



IMPORTANT: The electrical isolation switch must be turned off between uses.



IMPORTANT: Under no circumstances must any shower head that is not approved by the manufacturer be used with this product. Fit only shower heads recommended by the manufacturer and never fit any additional device as it may restrict the water outlet flow.



DO NOT connect the outlet to any tap or fitting other than those specified.

2. Operating The Shower

Normal Operation

- a) Switch On Electricity at ceiling / isolating switch.
- b) Press Start /Stop Button to **Start the shower**. (Confirmed with a single long bleep).

In Normal Mode:

The shower starts up at 43°C and can be adjusted from 25°C to 47°C.

In Temperature Lock Mode:

The shower starts up at 40°C and can be adjusted from 34°C to 41°C.

Note: Normal Mode or Temperature Lock Mode are set by the installer during Commissioning.

- The unit will start and the display will show the target temperature for two seconds (either 40°C or 43°C, depending on Mode setting), and then change to the actual temperature. (For example 25°C).
- The digit will flash and increase until display shows the target temperature.
- When the unit has reached the target temperature it stops flashing and sounds one long bleep and the unit is ready for use.
- The unit will only count up and give one long bleep once per shower session.

- c) Press the warmer button to Increase Temperature.
 To increase the water temperature press the + button. (Confirmed with two short bleeps).
 - The display will change to show the new selected temperature.
 - Wait for a few seconds for the shower to increase the temperature to the new setting.
 - Repeat this for your ideal setting, waiting each time for the temperature to be achieved.

Note: Pressing the warmer button when it is at maximum will sound 4 rapid bleeps and will not change the temperature.

- d)Press the cooler button to **Decrease Temperature**.
 - To decrease the water temperature press the ____ button.
 (Confirmed with one short bleep).
 - The display will change to show the new selected temperature.
 - Wait for a few seconds for the shower to decrease the temperature to the new setting.
 - Repeat this for your ideal setting, waiting each time for the temperature to be achieved.

Note: Pressing the cooler button when it is at minimum will sound four rapid bleeps and will not change the temperature.

e)Shower Flow Rate:

• The shower will automatically set the flow rate to the highest value that can be achieved. The actual flow rate will be lower in the colder months than in summer. The flow rate may also be lower when a high temperature is selected. (See Page 23, "How Your Shower Works" for more information).

f) Over-ride Temperature Lock Mode:

If the shower has been commissioned in Temperature Lock Mode then:

 The temperature lock feature can be over ridden, while the shower is running, by pressing the Warmer and Cooler buttons together for more than three seconds. (Confirmed with one long bleep).



- The shower will revert to Normal Mode (Unlocked).
- The temperature lock mode will return the next time the shower is used.
- g) Press Start /Stop Button to **Stop the shower**. (Confirmed with two long bleeps).
 - When you have finished showering press the start /stop button.
 (2 long bleeps).
 - The water will continue to run for a few seconds so that the unit is cooled down ready for the next time the shower is used.
 - Whilst this is happening the bleeper will sound and the display will count down from 6 to 1.
 - The unit will then switch off automatically.

h) Switch Off Electricity at ceiling / isolating switch.

IMPORTANT NOTE! Always use the Start/Stop button to switch the shower OFF.

If the ceiling isolator is used to stop the shower running, without first pressing the Stop button, then the shower may go into Over Temperature Shutdown the next time it is used.

THE SHOWER IS DESIGNED AND APPROVED TO EN-60335 WITH THE HANDSET PROVIDED. UNDER NO CIRCUMSTANCES MUST ANY HANDSET THAT IS NOT APPROVED BY THE MANUFACTURER BE USED WITH THIS PRODUCT.

Handset Operation

There are five defined spray plate setting modes (patterns) adjustable by rotating the spray plate (see Diagram).

These modes (patterns) have a positive click to identify them.

The spray plate rotates through a limited travel and changes spray pattern with every click.

So you can choose your favourite setting to enhance your shower experience.



Over Temperature Shutdown

If an abnormal condition occurs which causes the water to get too hot then the unit will automatically shutdown straight away and the water will stop flowing. This is to prevent any hot water coming out of the handset.

This is indicated by 8 short bleeps and the display flashing "Ot". This will continue until the water is at a safe temperature. The unit will then switch off automatically and will need to be restarted in the normal way (see "Normal Operation" section).



It can take a long time for the unit to reach a safe temperature. To speed up the temperature reduction, the hot water can be purged from the unit.

Purging

While the unit is in "Ot" (Over Temperature) shutdown mode. Press and hold the cooler button for more than 3 seconds.

This will switch the water on ONLY while the button is pressed.

Caution!! Water Will Be Hot:





Stand clear of the spray from the handset.

Keep pressing the button.

The unit will then switch off automatically when a safe water temperature has been reached.

3. How Your Shower Works

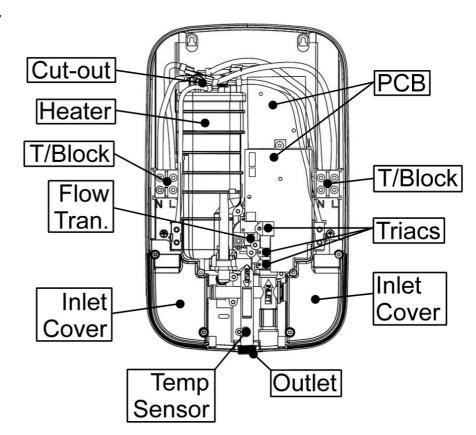
- a) Water is heated instantaneously as it flows over the heaters in the heat exchanger assembly.
- b) The thermostatic shower automatically adjusts the power to the heating elements and flow of water to achieve the selected water temperature. The electronics senses the incoming water temperature and the flow of water through the heat exchanger. It then works out how many heaters to switch on so that the shower temperature matches the temperature selected by the buttons.



- c) The amount of hot water available at the selected temperature is limited by the total power of the heater. The ideal flow rate is calculated and adjusted automatically.
- d) The water is turned on and off by the solenoid valve built into the Shower.
- e) A stabiliser is built into the shower to automatically compensate for small fluctuations in water pressure that frequently occur in households.

There are three further controls to cater for exceptional reductions in water pressure to prevent the shower from getting too hot:

 If the flow of water is less than 1 l/m the power to the elements is switched off, but the solenoid valve remains open allowing water to flow through the shower.



- If the outlet temperature sensor senses an excessive temperature then the flow of water and the heating elements will automatically switch off. The electronics will signal an over Temperature condition (see "Over Temperature Shutdown" section).
- A two stage mechanical thermal cut-out is mounted on the top of the heat exchanger independent of the electronics.

Cut-out stage one switches the power off to the elements if it senses an excessive temperature. The switch operates with an audible click and will reset if cold water is run through the shower.

Cut-out stage two only operates if an extreme temperature is sensed. The cut out will permanently switch off and it will then have to be replaced.

4. Routine Maintenance

Handset:-

In Order To Maintain The Performance Of Your Shower You Must Clean The Shower Head Regularly.

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

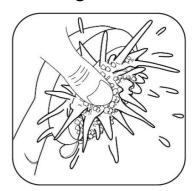
It is therefore important to clean the showerhead by simply rubbing the rubber nozzles or soaking in proprietary lime-scale remover and rinsing thoroughly before use.

The frequency of this will vary from weekly to quarterly depending on the water hardness and experience.

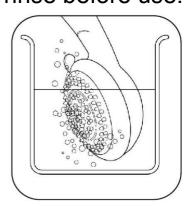
In some winter conditions, when the incoming mains water is particularly cold, it may be necessary to select a reduced spray pattern. This will ensure correct operation of the shower with a slightly lower water flow rate.

After use, it is normal for some water to drip from the spray head for a few moments. This helps prevent scale build up over prolonged use.

Daily Cleaning Rub surface while shower is running:



Periodical Maintenance Soak in limescale remover and rinse before use:



Shower Accessories:-

It is recommend that, as well as checking the showerhead as detailed above, the shower unit, riser rail, hose etc. be cleaned using a soft cloth.

The use of abrasive or solvent based cleaning fluid should be avoided, especially on any plated finishes.

We recommend that before any cleaning, the isolating switch be turned off, to avoid accidentally switching on the shower.



You Must Regularly Inspect The Shower Hose For Wear And Damage. Replace If Necessary, Or Every Two Years, With Our Approved Part.

5. Periodical Maintenance

Cleaning the Filter:-

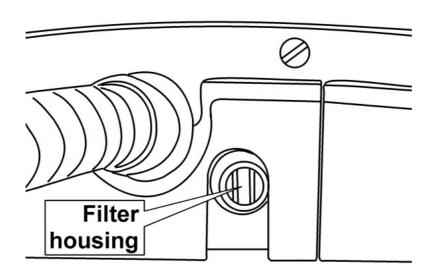
It is recommended that the filter is periodically cleaned in order to maintain the performance of the shower.



WARNING! Switch **OFF** the electricity at the isolating switch before removing the filter assembly.

The inlet filter is situated on the bottom edge of the shower.

To gain access to the filter remove the assembly using a large blade screwdriver to unscrew the filter cap.



Inspect the 'O' rings on the filter body for any damage when removed from the inlet assembly.

When cleaning the filter, DO NOT use a sharp object, as it will cause damage. It is preferable to use an old toothbrush or similar.



Refit the filter, making sure it is screwed fully home. Do not over tighten the filter cap on reassembly.

6. Troubleshooting

If the performance of the shower deteriorates in service, follow the checks in the "Self Help" table below before calling out the contractor.

Any one of the simple adjustments could restore the performance.

If these fail to restore the performance you should seek professional help.

The person who installed the shower is probably the best one to repair it and is certainly the person to contact if you have a problem in the warranty period.

SELF HELP CHECK LIST

a)Water too HOT	Press the cooler button.
	Clean spray plate holes on showerhead.
b)Water too COLD	Press the warmer button (See Page 18
	for allowed adjustment range).
c) Spray pattern poor	Clean spray plate. Select Outer/Inner
	only.
d)Display behaves	Switch OFF electricity at ceiling/wall
erratically	isolating switch, wait a few seconds,
	switch on again.
	(Note: The shower should be switched
	OFF each time, after use, at the
	ceiling/wall isolating switch).

e)Water does not flow when START/STOP button is pressed.	Note: If there is no water flowing then the shower will automatically switch OFF after about 5 seconds.
Lights ON.	Check the water supply is turned ON.
"Ot" flashing in display.	Unit in over temperature mode see section on "purging".
No lights.	Check ceiling/wall isolating switch is ON. Check power is ON.
f) The shower flow rate changes when I adjust the temperature setting.	This is normal. When the set point temperature is changed the shower automatically adjusts the flow in order to give the best performance.
g)The temperature fluctuates during a shower session.	The temperature will fluctuate when the shower automatically adjusts the flow rate. (This is normal). The temperature will fluctuate when the incoming water pressure changes; for example when a tap is turned on elsewhere in the property. (This is normal). After the change, the fluctuations will stop and the temperature will return to normal.

PROFESSIONAL SERVICE CHECK LIST

This additional checklist is provided for the benefit of the qualified service representative.



WARNING! Switch **OFF** the electricity at the isolating switch before removing the cover to make checks.

a)Poor temperature control.	Check inlet/outlet thermistors to see if they are in circuit. Check for blockage in the inlet filter.
b)Water too COLD	Check circuit through thermal cut-out. Check circuit through all 3 elements. Test should be done using a low voltage resistance meter whilst the power is switched OFF at the isolating switch. Check working voltage.
c) Poor or no control over water flow.	Replace dual solenoid assembly, c/w flow regulators.
d)No water when START/STOP button is pressed.	Check water supply. Check circuit through solenoid coils. If OK replace power supply PCB.
e) Unit has been switched OFF using START/STOP button but can be heard heating the water.	Replace main logic PCB, which includes the triacs.
f) Temperature buttons have a limited adjustment range.	The temperature adjustment range is : 25°C to 47°C for Normal Mode setting 34°C to 41°C for Temp. Lock Mode
g)Shower runs for about 5 seconds and then switches OFF by itself.	Flow transducer fault. Replace transducer.

7. Spares (Ring 0344 879 3588 UK ONLY)

Please Note:- The fitting of all spares should be supervised by a

suitably qualified person

Part No.	Description	Part No.	Description
93530178	Front cover	93530188	Inlet end cap and clip
	(without PCB)	93530190	Dual solenoid c/w flow
93530179	Front cover PCB		regulators
	c/w umbilical	93530191	Left hand back plate
93530180	Logic / triac PCB		removal section
93530181	Power supply PCB	93530192	Right hand back plate
	c/w umbilical		removable section
93530182	Flow transducer	93530193	Inlet filter housing
93530183	Thermistor	93530168	Shower handset
93530184	8.5kW Heater tank	93530164	Shower hose (1.5m)
93530185	9.5kW Heater tank	93530166	Wall bracket set
93530187	Thermal cut-out	93530165	Riser rail
	c/w power cables	93530169	Height adjuster assy

8. Energy Related Product Directive (ErP)

Manufacturer	REDRING		
Product	8.5 Glow	9.5 Glow	
	Thermostatic	Thermostatic	
Load Profile	XS	XS	
Efficiency Class	Α	Α	
Efficiency	39%	39%	
Consumption (kWh /	478	478	
annum)			
Sound (dB)	15	15	
Precautions	Please ensure all product installation,		
	maintenance and care instructions are		
	followed, as shown in this handbook.		

WARRANTY

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

Your Redring shower warranty is valid for the period of 36 months from the date of purchase. (Domestic use only).

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

- A) The appliance has been correctly installed in accordance with our instructions and is being used on the supply circuit or voltage printed on the rating plate.
- B) The appliance has been used in accordance with these instructions and has not been tampered with or otherwise subject to misuse, neglect or accident.
- C) The appliance 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 for an in-warranty repair.
- E) For commercial applications, the warranty period is limited to 12 months.
- F) For the service work to be free of charge, the work must only be undertaken by a GDHV service engineer, or a GDHV approved agent.
- G) Service under warranty has no effect on the expiry date. The warranty on any exchanged parts or product ends when the original warranty period ends.

EXCLUSIONS

This warranty DOES NOT cover damage or defects arising from poor or incorrect installation, improper use or lack of maintenance, including build-up of lime-scale. It is the responsibility of the installer to check that the installation parameters meet the requirements of the product, 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.

We make no warranties as to response times for repairs. We will endeavour to achieve the timeliest response possible but while we indicate an average response time, this should not be taken as a guarantee.

The warranty 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.

The warranty does not apply to the repair or replacement of spray-heads, hoses, accessories, isolating switches, electrical cable, fuses and/or circuit breakers.

This warranty does not affect your statutory rights.

After Sales Service

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

RING 0344 879 3588 (UK ONLY)

Remember to quote type of shower, as written on the front of the shower and on this leaflet.

The model and serial number are located on the bottom face of the shower.

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.

Full details of terms and conditions are available on request from:-



A brand of the GDC Group Limited, trading as:

Glen Dimplex Heating & Ventilation Millbrook House, Grange Drive, Hedge End, Southampton, SO30 2DF

Website: www.redring.co.uk