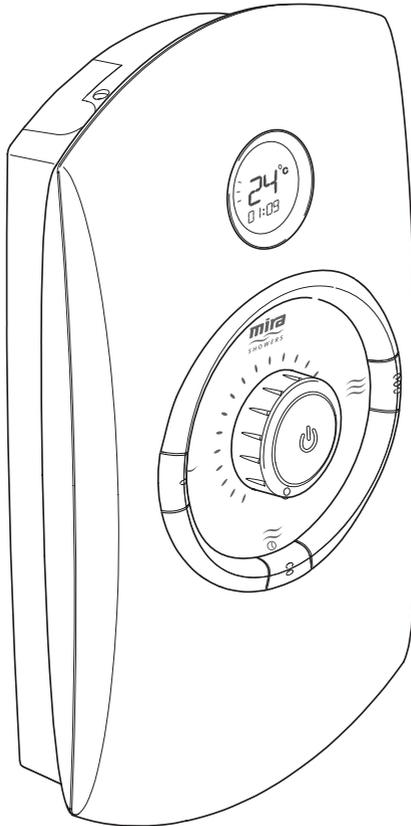


Mira Orbis

9.0, 9.8 & 10.8 kW



These instructions must be left with the user

Installation and User Guide

Showering perfection

mira
SHOWERS

INTRODUCTION

Thank you for purchasing a quality Mira Orbis Thermostatic Electric Shower. To enjoy the full potential of your new shower, please take time to read this guide thoroughly, and keep it handy for future reference.

Products manufactured by Kohler Mira Ltd are designed to be safe provided, that they are installed used and maintained in good working order, in accordance with our instructions and recommendations.

Follow all warnings, cautions and instructions contained in this guide, and on or inside the shower.

Mira Orbis Thermostatic electric showers have separate controls for power selection and for temperature/flow adjustment. A unique flow regulator stabilises any temperature changes caused by water pressure fluctuations, which can result from taps being turned on or off or toilets being flushed.

When this shower has reached the end of its serviceable life, it should be disposed of in a safe manner, in accordance with current local authority recycling, or waste disposal policy.

Mira Orbis models covered by this guide:

Product	Model Number	Colour
Orbis 9.0	J01A	White/Chrome
Orbis 9.8	J01B	White/Chrome
Orbis 10.8	J01C	White/Chrome
Orbis 9.8 (Black)	J01D	Black/Chrome

Guarantee

For **domestic installations**, Mira Showers guarantee the Mira Orbis against any defect in materials or workmanship for a period of **two** years from the date of purchase (shower fittings for one year).

For **non-domestic installations**, Mira Showers guarantee the Mira Orbis against any defect in materials or workmanship for a period of **one** year from the date of purchase.

Recommended Usage	
Domestic	✓
Light Commercial	✓
Heavy Commercial	✗
Healthcare	✗

Patents and Design Registration

Design Registration:	000738141-0002
Patents:	GB: 2 341 667, 2 404 000, 2 428 286, 2 427 460 Eire: 82835, 85128, 85163, 85912

IMPORTANT SAFETY INFORMATION

WARNING - This shower can deliver scalding temperatures if not operated, installed or maintained in accordance with the instructions, warnings and cautions contained in this guide and on or inside the appliance.

TO REDUCE THE RISK OF FIRE, ELECTRIC SHOCK OR INJURY:

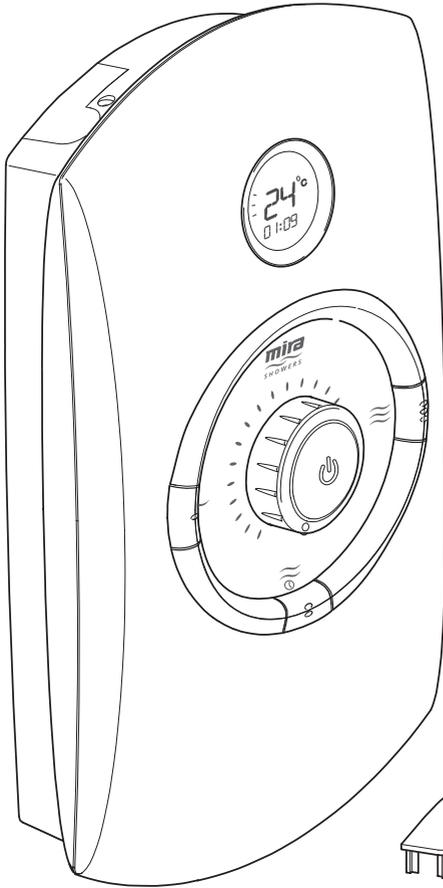
1. Installation of this shower must be carried out in accordance with these instructions by qualified, competent personnel.
2. Isolate the electrical and water supplies before commencing installation. The electricity must be isolated at the consumer unit and the appropriate circuit fuse removed, if applicable. Mains connections are exposed when the cover is removed.
3. **DO NOT** install the shower in areas with high humidity and temperature (i.e. Steam rooms and saunas).
4. **DO NOT** install the shower where it may be exposed to freezing conditions. Ensure that any pipework that could become frozen is properly insulated.
5. **DO NOT** switch the shower on if there is a possibility that the water in the shower is frozen.
6. **DO NOT** switch the shower on if water starts leaking from the shower case. Isolate the electrical supply to the shower immediately.
7. **DO NOT** connect the outlet of the shower to any tap, control valve, trigger handset or showerhead other than those specified for use with this shower - scalding water temperatures and product damage may occur. Only Kohler Mira recommended accessories should be used.
8. The water supplies to this product must be isolated if the product is not to be used for a long period of time. If the product or pipework is at risk of freezing during this period they should also be drained of water.
9. **DO NOT** perform any unspecified modifications to the shower or its accessories. When servicing only use genuine Kohler Mira replacement parts.
10. If the shower is dismantled during installation or servicing then upon completion the product must be inspected to ensure all electrical connections are tight and that there are no leaks.
11. Read all installation instructions before installing this shower.
12. Upon completion of the installation, make sure that the user is familiar with the operation of the shower, and leave this guide and the user guide with the owner.

If you experience any difficulty with the installation of your new shower, then please refer to “**Fault Diagnosis**”, before contacting Kohler Mira Limited. Our telephone and fax numbers can be found on the back cover of this guide.

PACK CONTENTS



Tick the appropriate boxes to familiarise yourself with the part names and to confirm that the parts are included.

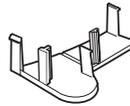


1 x Mira Orbis
Electric Shower



1 x Olive

1 x Compression Nut



2 x Case Inserts

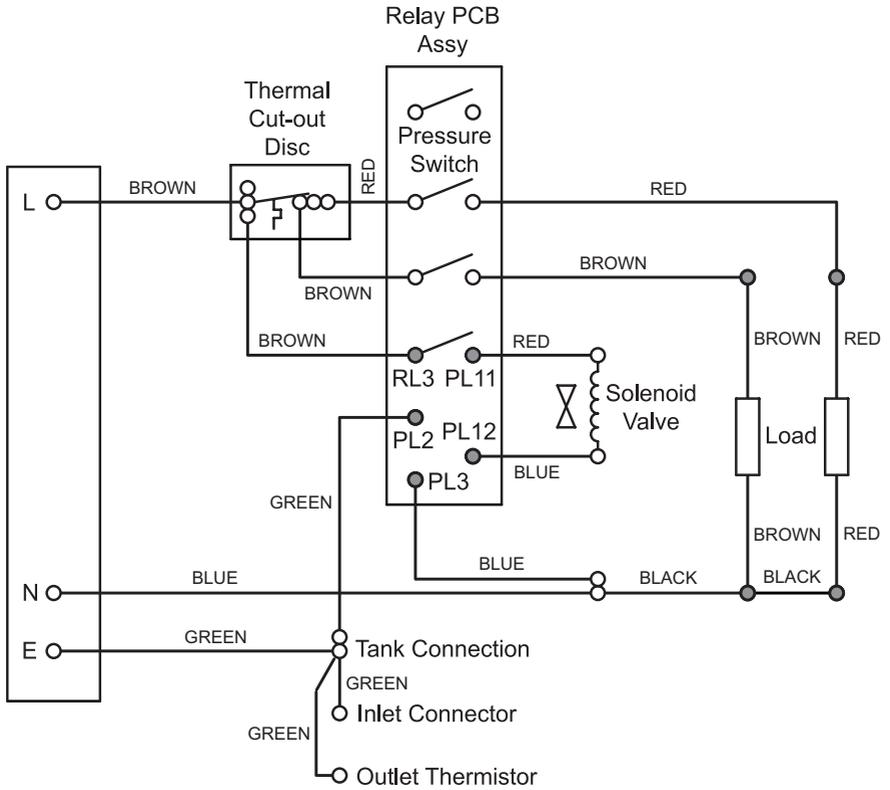
Documentation

1 x Installation and User Guide

1 x Installation Template

1 x Guarantee Registration Document

WIRING DIAGRAM



SPECIFICATIONS

European Conformity Information

The Mira Orbis shower complies with the following European directives: 2006/95/EC Low Voltage Directive, 2004/108/EC EMC Directive.

The Mira Orbis shower is a high power appliance and is subject to conditional connection. If the main electrical supply fuse is rated less than 80 Amps, the local electricity supply company must be contacted to confirm if the electrical supply is adequate.

The Mira Orbis shower complies with the requirements of the UK's water regulations.

Plumbing	Variant		
	Orbis 9.0	Orbis 9.8	Orbis 10.8
Minimum Dynamic Pressure	70 kPa (0.7 bar)	70 kPa (0.7 bar)	100 kPa (1.0 bar)
Maximum Dynamic Pressure	500 kPa (5 bar)		
Maximum Static Pressure	1000 kPa (10 bar)		
Minimum Static Pressure	20 kPa (0.2 bar)		
Maximum Inlet Temperature	30°C		
Minimum Inlet Temperature	2°C		
Inlet Connection	1/2" BSP Male / 15 mm Compression Fitting		
Maximum Water Hardness	200 ppm CaCO ₃		
Outlet Connection	1/2" BSP Male		

Electrical	Variant		
	Orbis 9.0	Orbis 9.8	Orbis 10.8
Nominal Power at 230 V ac	8.3 kW	9.0 kW	9.9 kW
Nominal Power at 240 V ac	9.0 kW	9.8 kW	10.8 kW
Recommended MCB Rating	40 A	45 A	45 A
Maximum Supply Cable Size	16 mm ²		
Recommended RCD Rating	30 mA tripping current		
Recommended Isolator Switch	45 A double-pole with 3 mm contact separation		
Appliance Sealing Rating	IP X4 - Suitable for installation in Zone 1		
Maximum Ambient Temperature	30°C		
Minimum Ambient Temperature	2°C		

Dimensions	
Height	388 mm
Width	212 mm
Depth	88 mm

INSTALLATION REQUIREMENTS

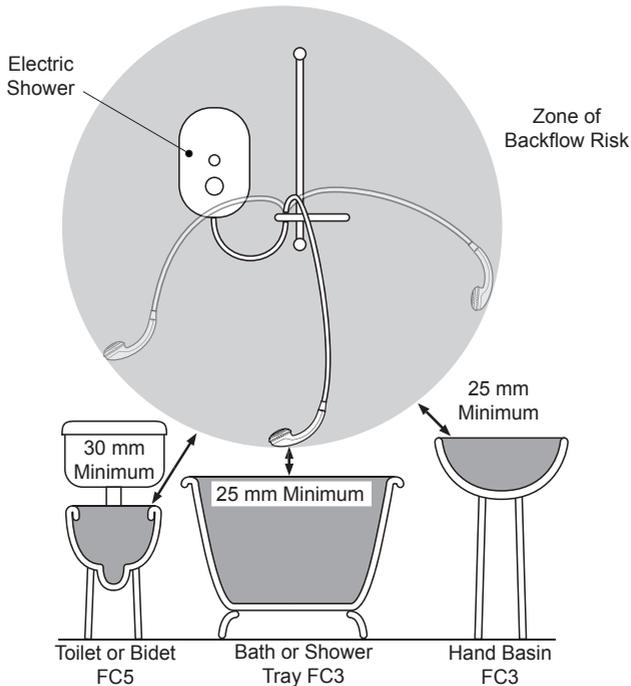
Please read the Important Safety Information and specifications sections at the front of this guide, and the requirements detailed in this section before installing the shower.

WARNING - TO REDUCE THE RISK OF FIRE, ELECTRIC SHOCK OR INJURY:

Plumbing

1. The plumbing installation must comply with all national or local water regulations and all relevant building regulations, or any particular regulation or practice specified by the local water supply company.
2. Do not install the product in a position in which service access is limited.
3. Decide on a suitable position for the shower (minimum distance of 200 mm from the ceiling to allow for cover fit and removal).
4. The position of the shower and shower fittings must provide a minimum gap of 25 mm between the showerhead and the spill over level of any bath, shower tray or basin and a minimum gap of 30 mm between the showerhead and the spill over level of any toilet, bidet or other appliance with a Fluid Category 5 backflow risk (see diagram on page 8).
5. The shower is suitable for installation within the shower area and is fitted with a pressure relief valve. It must be positioned over a water catchment area with the controls at a convenient height for the user.
6. The shower must be fitted to a waterproof flat and even wall surface.
7. **DO NOT** fit the shower to the wall and tile up to the case.
8. **DO NOT** seal the gap between the shower and the wall surface.
9. The showerhead should be positioned so that it discharges down the centre line of the bath or across the opening of a shower cubicle.
10. The showerhead must be directed away from the shower unit, during normal use the showerhead must not spray directly on to the shower unit.
11. **DO NOT** apply excessive force to plumbing connections; always provide mechanical support when making plumbing connections. Any soldered joints should be made before connecting the shower.
12. This shower is not designed to be plumbed directly from the rear. For rear-entry supply, add an elbow to the supply pipe and connect as a rising or a falling supply.
13. If pipework and/or electrical cables enter the shower from the rear through a hole in the wall provision must be made to prevent water ingress back into the wall structure.
14. Only use the inlet connector supplied with the shower. **DO NOT** use any other type of fitting.

15. A full bore/non restrictive servicing valve must be fitted in a readily accessible position adjacent to the shower to facilitate maintenance of the shower.
DO NOT use a valve with a loose washer plate (jumper) as this can lead to a build up of static pressure.
16. A water treatment device should be installed where the water hardness may exceed 200 ppm. Malfunctions caused by excessive limescale formation are not covered by this shower's guarantee (see back page for details).
17. The installation must not cause the hose to be sharply kinked during normal use.
18. **DO NOT** perform the electrical installation until the plumbing has been completed and checked for leaks.



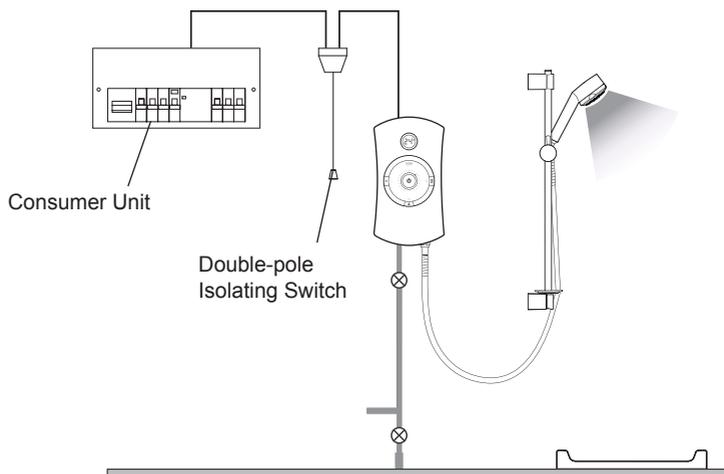
Hose Retaining Ring fitted and shower fittings fixed at a suitable height preventing dirty water backflow.

Note! There will be occasions when the hose retaining ring will not provide a suitable solution for Fluid Category 3 installations, in these instances an outlet double checkvalve must be fitted, this will increase the required supply pressure typically by 10kPa (0.1 bar). Double checkvalves fitted in the inlet supply to the appliance cause a pressure build up, which affect the maximum static inlet pressure for the appliance and must not be fitted. For Fluid category 5 double checkvalves are not suitable.

WARNING - TO REDUCE THE RISK OF FIRE, ELECTRIC SHOCK OR INJURY:

Electrical

1. The electrical installation must comply with BS 7671 (commonly referred to as the IEE Wiring Regulations) and all relevant building regulations, or any particular regulation or practice specified by the local electricity supply company.
2. Ensure that all circuit protection devices, switches and cabling are adequate for the rated current of the shower and that the rating of the electricity supply company fuse and the consumer unit is adequate for the additional demand.
3. The shower **must** be earthed. Ensure any supplementary bonding complies with the relevant regulations.
4. This shower is intended to be permanently connected to the fixed electrical wiring of the mains system. A separate supply **must** be provided from the consumer unit to the shower.
5. **DO NOT** supply any other electrical equipment including extractor fans or pumps via this product.
6. This shower must be provided with means for local disconnection that is incorporated into the fixed wiring in accordance with the relevant local wiring regulations. This **must** be a double pole switch, which has at least 3 mm contact separation in each pole. The switch can be a ceiling mounted pull-cord type within the shower room or a wall mounted switch fitted in the applicable zone area.
7. A 30mA Residual Current Device (RCD) must be incorporated into the electrical supply to this shower in accordance with wiring regulations.
8. **DO NOT** apply excessive force to the terminal block.
9. All electrical connections should be checked for tightness to prevent overheating before switching on the electrical supply.
10. **DO NOT** switch on the electrical supply until the plumbing has been completed and checked for leaks.



INSTALLATION

Warning! Isolate the electrical and water supplies before installing the shower. The electricity must be turned off at the mains and the appropriate circuit fuse removed, if applicable.

Note! An installation template is supplied to help you install the Mira Orbis.

Wall fixings are not supplied. For solid wall structures a red rawl plug and a no. 8 x 1½" countersunk brass or stainless steel screw should be used. For other wall structures such as panels alternative fixings may be required. A minimum of 3 fixing screws should be used.

1 Remove the three cover retaining screws.

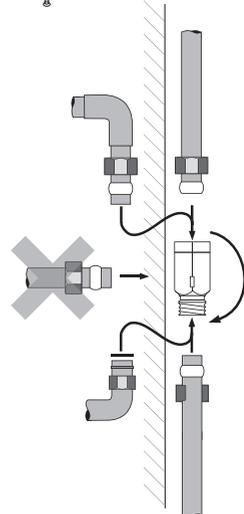
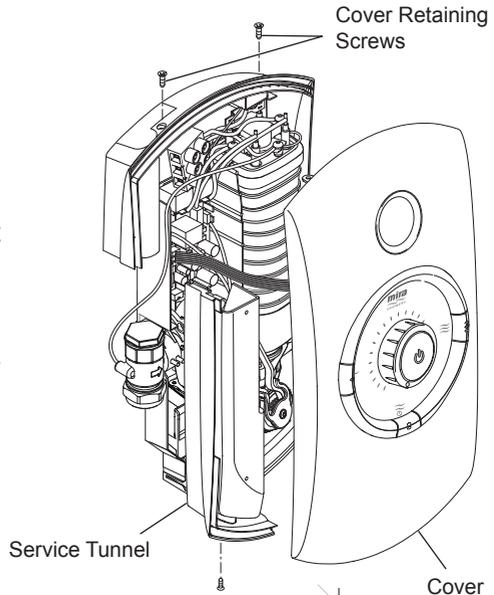
2 Carefully remove the cover, making sure that you do not strain the multi-connector.

3 Carefully remove the multi-connector from the socket on the control PCB in the case

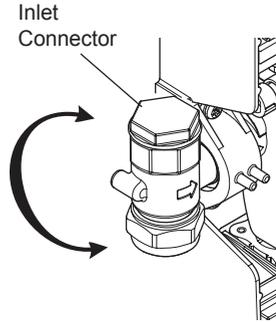
4 Remove the service tunnel.

5 Determine the direction and route of the incoming water supply: falling (entering the shower from the top), or rising (entering the shower from the bottom).

Note! - DO NOT use an incoming supply entering the shower directly from the back. Add an elbow to the supply pipe and connect it as a rising or falling supply.



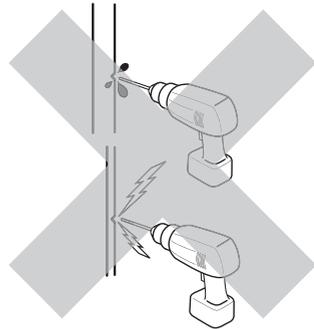
6 Rotate the inlet connector to suit the direction of the incoming water supply.



7 Upper and lower case inserts are supplied and should be fitted. Trim the inserts to fit incoming electrical or water supplies before fitting.

8 **Thoroughly flush the mains-fed cold water supply pipe. The supply must be clean and free from debris BEFORE connecting the Mira Orbis.**

To flush the pipework, turn on the water supply and drain a minimum of 10 litres (2 gallons) of water into a bucket or catchment area. Turn off the water supply.

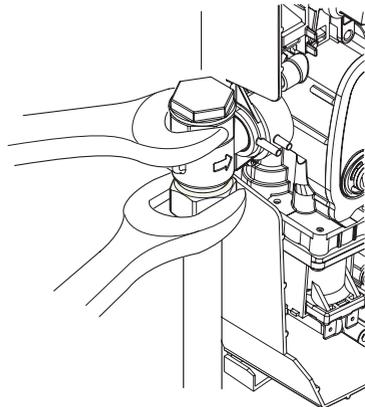


9 Using the installation template supplied, mark the positions of the **three** fixing holes.

Note! Ensure that there are sufficient lengths of supply pipe and electrical cable to reach the connection points.

Caution! Do not drill into buried cables or pipes.

10 Drill and plug the top two fixing holes. Secure the shower to the wall with appropriate screws provided. Drill the bottom fixing hole with the product in place. Alternative fixings (not supplied) may be necessary for some wall structures. Avoid drilling into any supply cable/pipe.

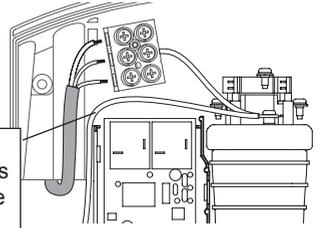


11 Install the mains-fed cold water supply pipe. Do not overtighten.

- 12** Feed cable into Case. Fit Earth sleeve (not supplied) and strip insulation.

Do not twist cable cores.

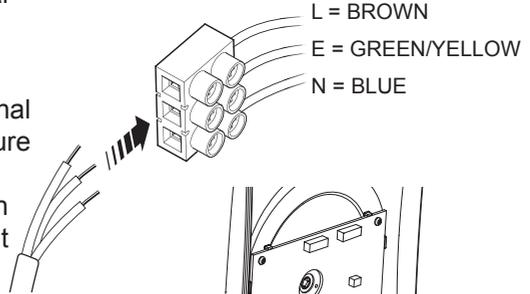
Important! Make sure that the inlet earth wire is routed as shown. Failure to do so may cause product malfunction.



- 13** Loosen the screws in the terminal block and insert the wires.

- 14** Tighten the screws in the terminal block, ensure the wires are secure and tight.

Note! Ensure the earth bonding complies with relevant regulations.



- 15** Before refitting the cover, pull the plastic tab off the battery to activate it.

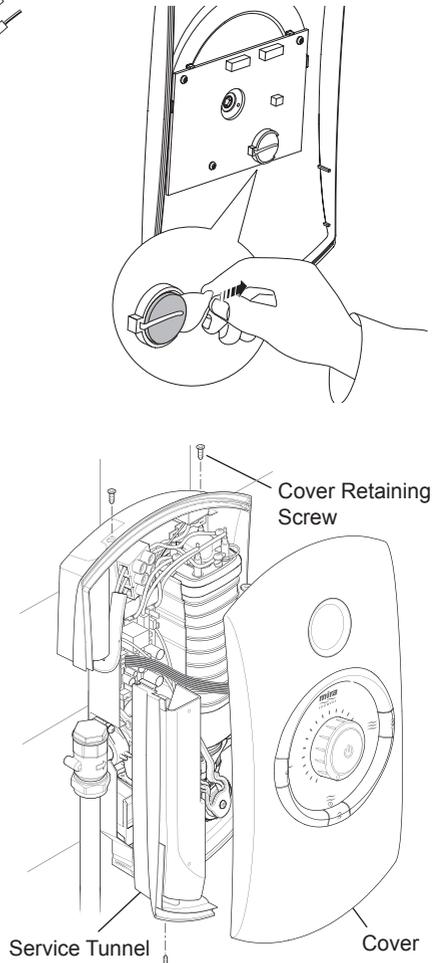
- 16** Refit the Service Tunnel.

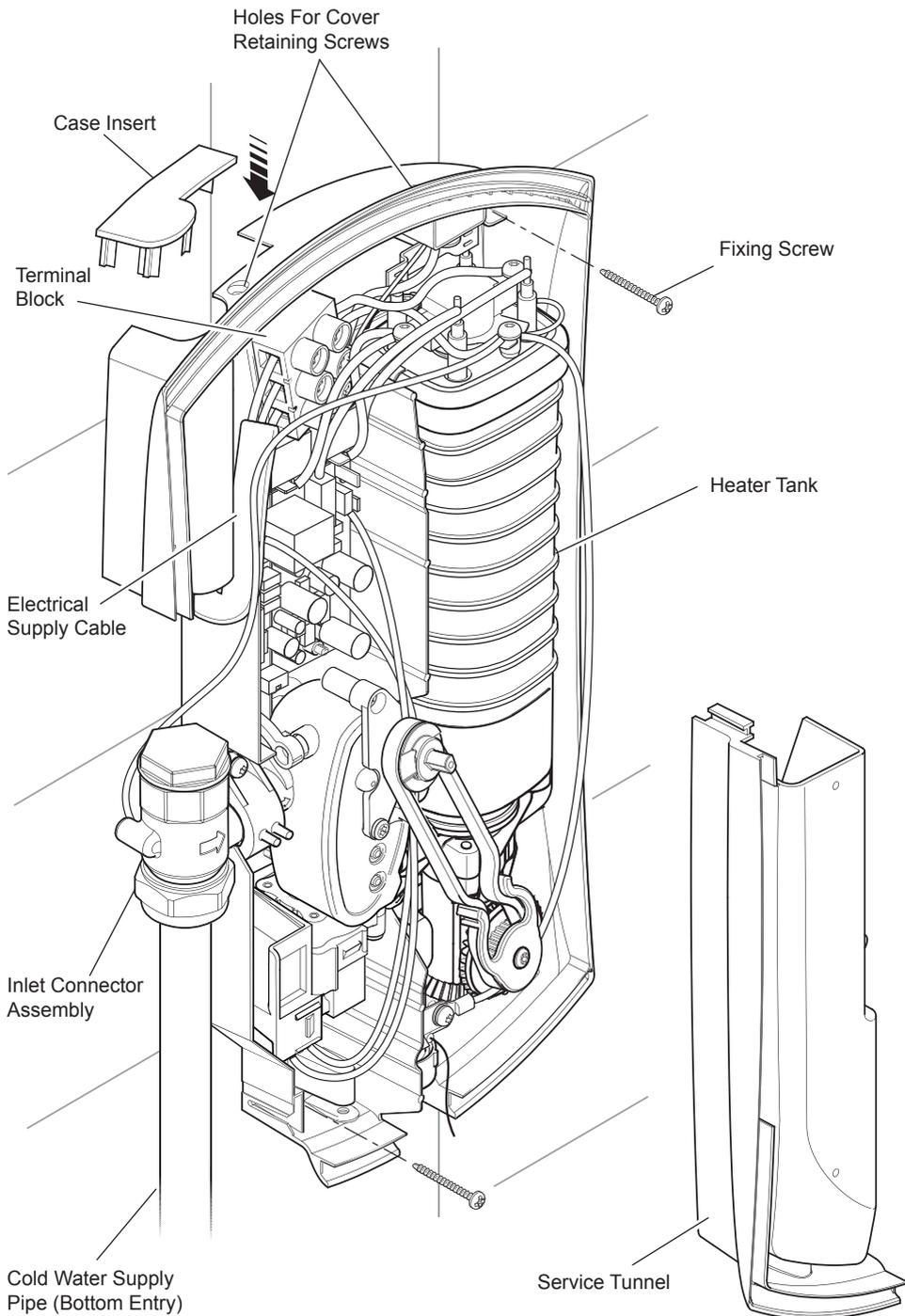
- 17** Connect the multi-connector to the socket on the PCB.

- 18** Refit the Cover. Make sure that it fits correctly. Do not overtighten screws.

- 19** Do not use alternative screws to secure the Cover. This can cause internal damage to the appliance. Do not seal around the back of appliance.

- 20** Install the shower fittings in accordance with the manufacturer's instructions.





COMMISSIONING

If you are unsure how an electric shower works, please read through the **User Instructions** section before continuing.

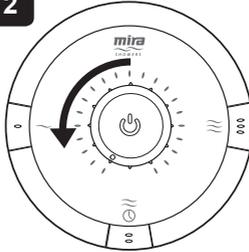
Note! The temperature display throughout this guide will depend upon inlet supply conditions and product settings.

1



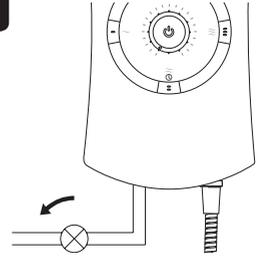
Electrical supply is turned off at the mains.

2



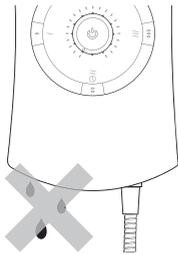
Turn control to full cold.

3



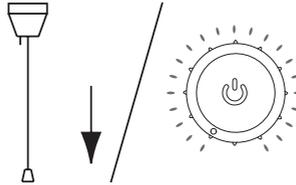
Turn the water supply fully on.

4



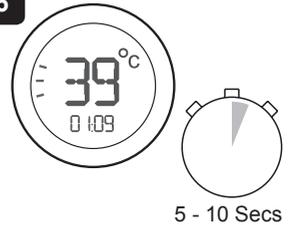
Check for water leaks.

5



Switch on the electrical supply and press the 'Start/Stop' button

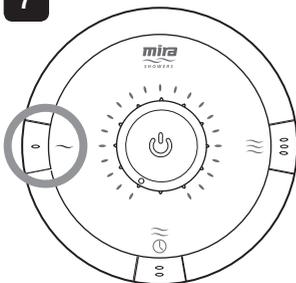
6



5 - 10 Secs

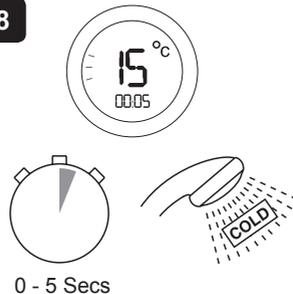
The temperature indicator becomes illuminated, showing time. Temperature will be displayed after a few seconds.

7



Press the 'Low' button, light on the display comes on

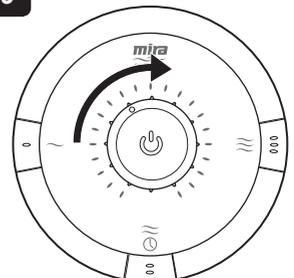
8



0 - 5 Secs

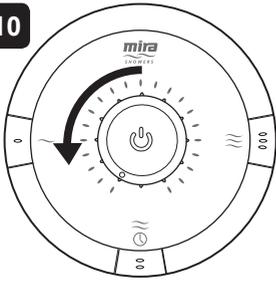
Water will be at full force and at a cool temperature as indicated by the temperature indicator.

9



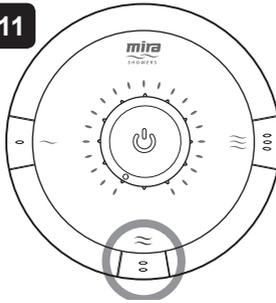
Turn the control slowly. Temperature remains cool and flow is reduced

10



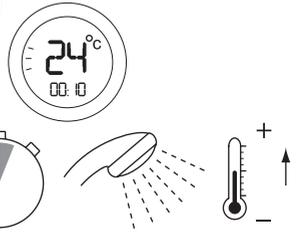
Turn control to full cold.

11



Press the 'Medium' button, light on the display comes on

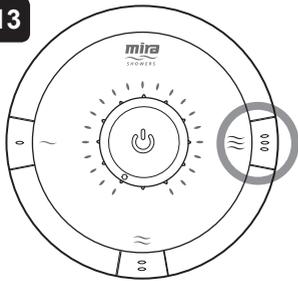
12



0 - 10 Secs

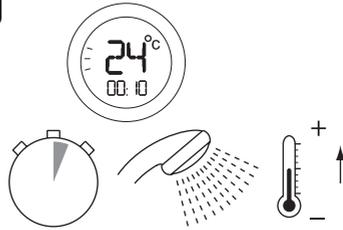
The temperature will rise slightly as indicated by the temperature indicator.

13



Press the 'High' button, light on the display comes on

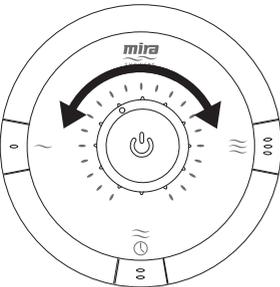
14



5 - 10 Secs

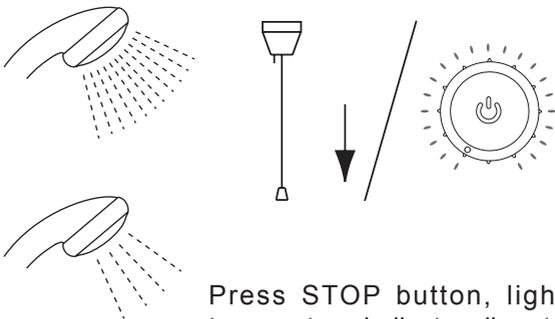
The flow rate will increase.

15



Adjust temperature as required. Flow rate will adjust automatically.

16



Press STOP button, light on the temperature indicator dims to standby state. When the shower has stopped running the temperature display will only show the clock. The water flow will continue for a few seconds before stopping. Isolate power. Display will go blank.

17



0 - 5 Secs

The shower will purge water from its tank for a few seconds.

18



Residual water may drain over a few minutes.

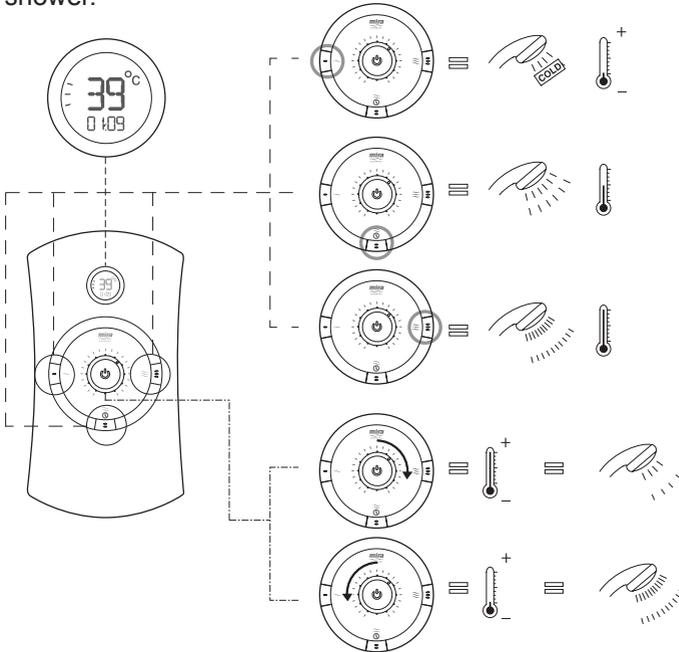
Note! A slight hissing sound may be heard from the Mira Orbis during operation. High mains water pressure and high shower temperatures will affect the tone. This is quite normal in use.

USER INSTRUCTIONS

How Your Electric Shower Works

Heated water is produced by adjusting the flow of cold water passed through a heater tank.

The temperature indicator shows the temperature of the shower.

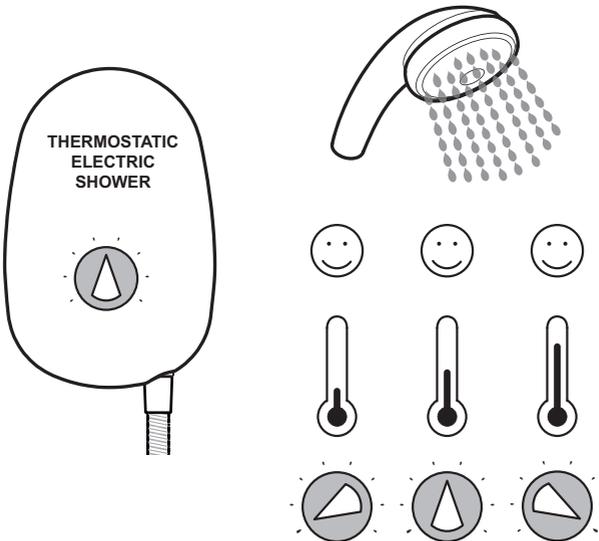
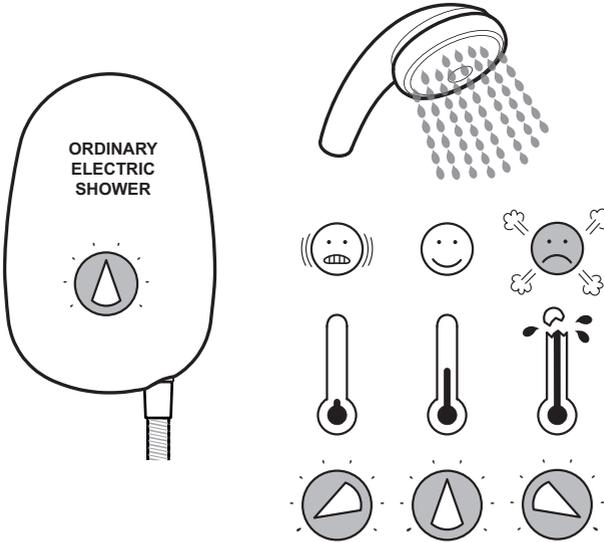


The shower has three heater settings.

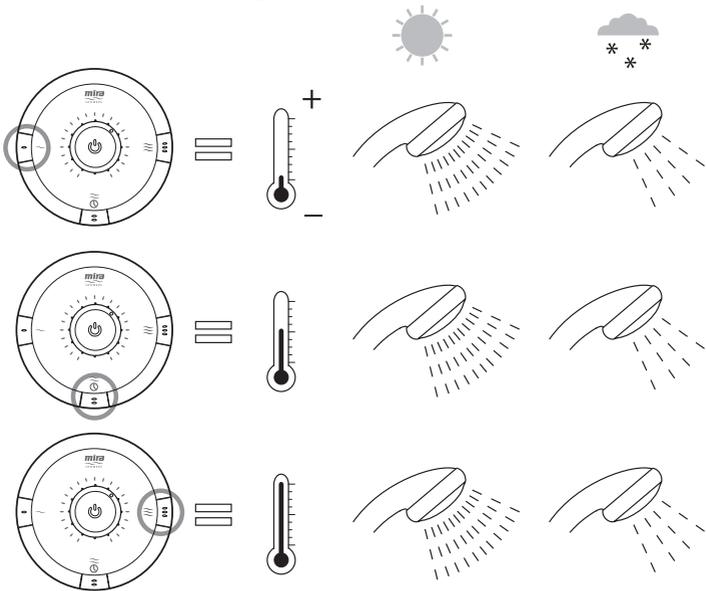
The warmer the shower, the lower the flow rate and vice versa.

Thermostatic (Temperature-Stable)

The shower's top priority is to keep the desired water temperature constant. Electric showers with thermostatic control are able to keep a stable temperature across the range from hot to cold, whilst also dealing with fluctuations in electrical and water supplies. As a result, there is a **temperature limit** the shower cannot go beyond. For safety, this temperature is factory set and cannot be adjusted to make the shower hotter or colder.



The Effect of Seasonal Changes

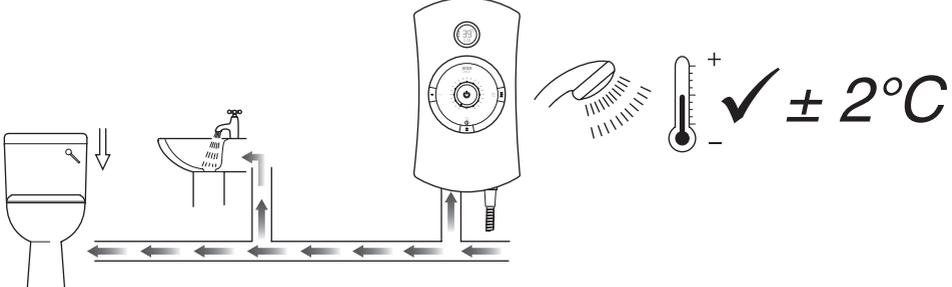


- For a cold shower select 'Low'.
- For a summer warm shower select 'Medium'.
- For a winter warm shower select 'High'.

During extremes of mains water supply temperature, adjust heater setting to obtain a better showering temperature.

The Effect of Other Water Devices

Example of how shower temperature stabilises due to pressure changes.



Water inlet pressure fluctuations due to other draw offs (e.g. flushing toilet). Shower temperature will be controlled to within $\pm 2^{\circ}\text{C}$ of the set temperature provided that the supply conditions remain within the required operating parameters (refer to section: 'Specifications').

USER SAFETY INFORMATION

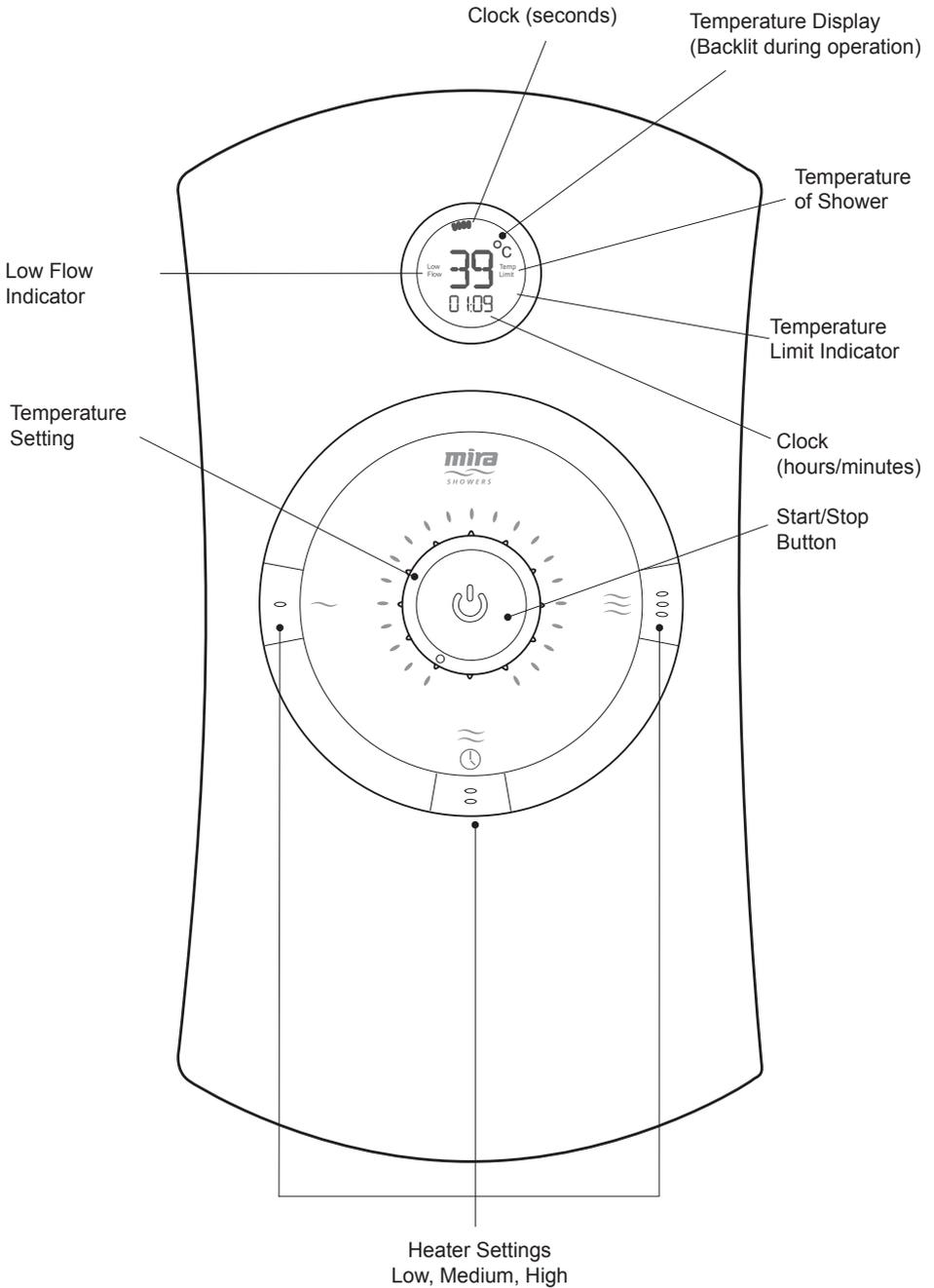
WARNING - THIS SHOWER CAN DELIVER SCALDING TEMPERATURES IF NOT OPERATED, INSTALLED OR MAINTAINED IN ACCORDANCE WITH THE INSTRUCTIONS, WARNINGS AND CAUTIONS CONTAINED IN THIS GUIDE AND ON OR INSIDE THE APPLIANCE.

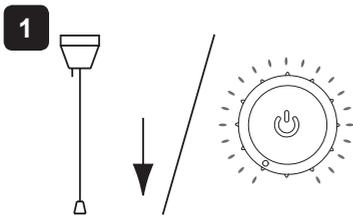
To reduce the risk of fire, electric shock or injury:

1. Make sure that you fully understand how to operate this shower before use, read all operating instructions and retain this guide for future reference.
2. This shower is not intended for use by persons (including children) with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they have been given supervision or instruction concerning the use of the shower by a person responsible for their safety.
3. Children should be supervised to ensure that they do not play with the shower.
4. **DO NOT** switch the shower on if there is a possibility that the water in the shower is frozen.
5. **DO NOT** switch the shower on if water leaks from the shower unit. Isolate the electrical supply to the shower immediately.
6. **DO NOT** switch the shower on if the case appears to be damaged or incorrectly fitted. Isolate the electrical supply to the shower immediately.
7. **DO NOT** connect the outlet of the shower to any tap, control valve, trigger handset or showerhead other than those specified for use with this shower - scalding water temperatures and product damage may occur. Only Kohler Mira recommended accessories should be used.
8. The showerhead must be de-scaled regularly, refer to the user maintenance section towards the rear of this guide for details.
9. The shower hose must be checked regularly and replaced if damaged, refer to the user maintenance section towards the rear of this guide for details.
10. **DO NOT** store bathroom items on top of the shower case. ie. Shampoo or shower gel containers.
11. Always check the water temperature before entering the shower. Sunburn or skin conditions can increase your sensitivity to hot water. Make sure that you set the shower to a cooler temperature.
12. **DO NOT** operate the temperature control rapidly, allow 10 – 15 seconds for the temperature to stabilise before use.
13. **DO NOT** block or restrict flow through the handset or hose whilst showering. eg. By placing in direct contact with your body.
14. Be aware that any adjustment to temperature control or power control whilst showering will affect the showering temperature and may result in a burst of hot water.
15. Care is required if the shower is turned off and then back on after a short time as this will result in a burst of hot water from the showerhead. Ensure temperature has stabilised before re-using shower.
16. Switch off the appliance at electrical isolating switch when not in use. This is for safety and is recommended with all electrical appliances.
17. If any of the following conditions occur, isolate the electricity and water supplies and contact your installer:
If the case is damaged or the cover is not correctly fitted and water has entered the shower case.
If the shower begins to make an odd noise, smell or smoke.
If the shower shows signs of a distinct change in performance indicating a need for maintenance.

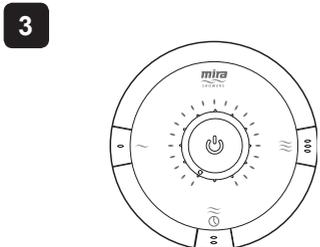
Using your Shower

Read the section “User Safety Information” first.

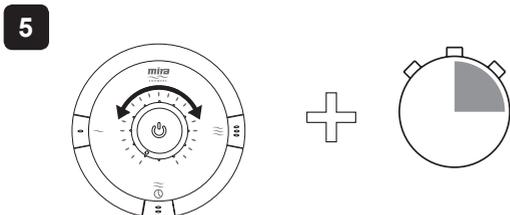




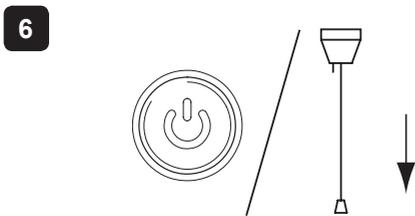
1 Switch on the electrical supply and press the 'Start/Stop' button



3 Set to the desired position.



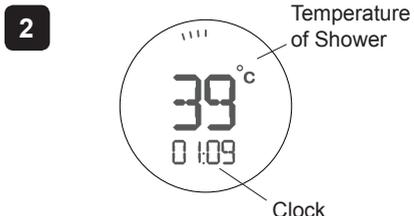
5 Allow 10 - 15 seconds for any temperature adjustments to reach the Showerhead.



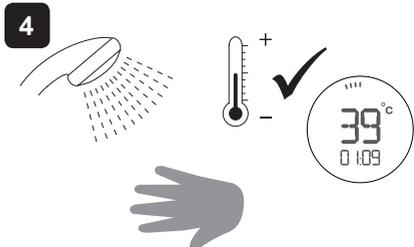
6 Press STOP button, the light on the button goes out. The Shower flow will continue for a few seconds before stopping. Switch off the electrical supply.

Note! After 40 minutes of continuous use, the shower will automatically switch OFF.

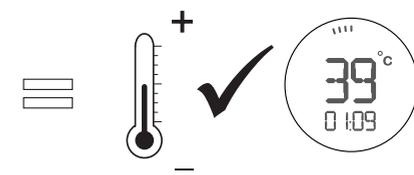
Note! At the end of every shower make sure that the showerhead points into the catchment area. A small amount of water may be retained in the showerhead after the shower has been turned off. This may drain over a few minutes.



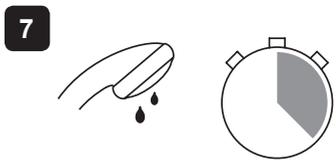
2 The temperature indicator becomes illuminated.



4 Check the water temperature before entering shower.

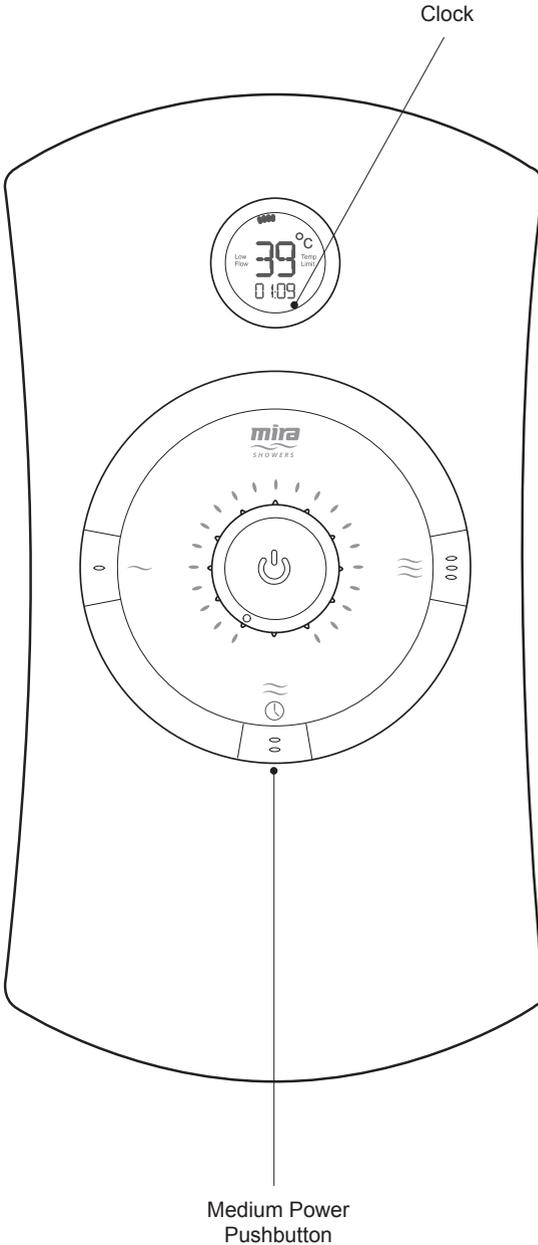


5 Allow 10 - 15 seconds for any temperature adjustments to reach the Showerhead.



7 Residual water may drain over a few minutes.

Clock Setting



1. Make sure that the product is in 'Standby' state (i.e. Isolator switch on).
2. Press and hold the 'Medium Power' button - the clock backlight will come on full brightness.
3. After a delay of a few seconds the hour segments of the clock start flashing
4. Press 'Medium Power' button repeatedly until desired 'hours' are displayed on the clock.
5. After a short delay of a few seconds the minute segments of the clock start flashing.
6. Press 'Medium Power' button repeatedly until desired 'minutes' are displayed on the clock.
7. After a short delay of a few seconds the minutes segments stop flashing and the clock backlight dims to its standby state.

LCD Indications

The table below shows what is shown on the LCD display once the shower has been installed and is in use.

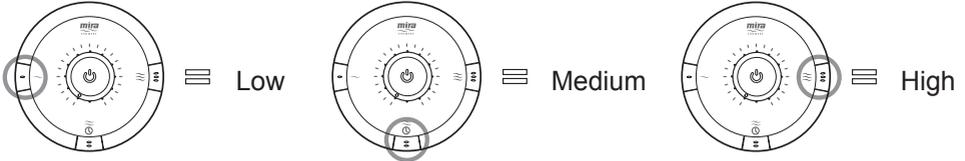
Product State	LCD Display	Backlight	Comments
Off	Blank	Off	Product turned off at pull cord
Standby	Clock shown	Dim	
Product turned on via Start / Stop button	Clock Shown Will display temperature after a few seconds	Full Brightness	On initial start up unit will turn onto low power. The next time you turn the unit on it will be at the previous setting
Switching Power	Clock Shown Will display temperature after a few seconds	Full Brightness	Flow will change accordingly
Product turned off via - on / off button	Clock shown including second indicators	Fade to Dim	
Low Flow	Clock shown Low Flow graphic displayed	Backlight flashes	Product will stop heating the water, flow will reduce.
Temp Limit	Clock shown Temp Limit graphic displayed	Backlight flashes	Product will stop heating for 10 seconds and then restart. Turn the temperature control down.

FAULT DIAGNOSIS

The trouble shooting information tabled below gives details on probable causes and remedies should difficulties be encountered whilst the shower is in operation.

Warning! There are no user serviceable components beneath the cover of the appliance. **Only a competent tradesperson should remove the front cover!**

Heater Settings



Symptom	LCD Back Light	Low Flow Warning	Heater Setting Low/Medium/ High	Probable Cause	Probable Remedy
Appliance fails to operate	OFF	OFF		Electrical supply isolated at double pole switch.	Switch on electrical supply via the pullcord or wall mounted switch.
	OFF	OFF		Fuse blown or MCB/RCD tripped, indicating possible electrical fault.	Renew the fuse or reset the MCB/RCD. If fault persists, contact your installer.
	OFF	OFF		Faulty Relay PCB.	Replace Relay PCB.
	OFF	OFF		Faulty Control PCB.	Replace Control PCB.
Shower cycles from hot to cold	ON	ON	Medium/High	Showerhead blocked.	Remove and clean.
	ON	ON	Medium/High	Inlet Filter blocked.	Remove and clean.
	ON	ON	Medium/High	Water pressure below minimum required for the appliance to operate.	Make sure incoming mains water stopcock and / or appliance isolating valve is fully turned on.
	ON	ON		Faulty Relay PCB.	Replace Relay PCB.
	ON	ON		Faulty Inlet Valve.	Replace Inlet Valve assembly.
	ON	OFF	High	Temperature limit reached (flashes on LCD).	Turn the temperature control down or reduce heater setting to Medium until a cooler temperature is achieved.
	ON	OFF	Medium/High	Thermostatic mechanism is faulty or damaged.	Replace.
	ON	OFF	Medium/High	Scaled Heater Tank assembly.	Replace.
ON	OFF	Medium/High	Damaged Hose.	Replace.	

Symptom	LCD Back Light	Low Flow Warning	Heater Setting Low/Medium/ High	Probable Cause	Probable Remedy
Showerhead dripping	OFF	OFF		Insufficient water supply pressure for shut off.	The minimum static pressure to ensure shut off and prevent dripping is 0.2 bar. Note! If other appliances are operating, static pressure may drop below 0.2 bar. Contact local water company.
	OFF	OFF		Inlet valve assembly faulty.	Replace.
Low or no flow rate	ON	ON	Any	Water supply pipework or inlet filter restricted by a blockage or partial blockage.	Flush supply pipe. Clean inlet filter.
	OFF	OFF		Insufficient water supply pressure / flow for operation.	Contact local water company.
	OFF	OFF		Faulty Relay PCB.	Replace Relay PCB.
	OFF	OFF		Faulty Control PCB.	Replace Control PCB.
	ON	ON	Any	Other outlets (e.g. toilet, garden hose, washing machine etc.) drawing water whilst the shower is being used.	Turn off the other appliances whilst the shower is in use.
Low or no flow rate	ON	OFF	Any	Hose Damaged.	Replace.
	ON	OFF	Any	Showerhead blocked. Heater tank excessively scaled.	Remove and clean. Replace. In hard water areas consider the use of a water softener.
No information shown on LCD display	ON	OFF	Any	Faulty Control PCB.	Replace Control PCB.
Operation of temperature control has little or no effect on water temperature.	ON	ON	Medium/High	Showerhead or inlet filter blocked.	Remove and clean.
	ON	OFF	Medium/High	Thermostatic valve faulty.	Replace.
	ON	OFF	Medium/High	Heater tank failure.	Replace.
	OFF	OFF		Relay PCB failure.	Replace Relay PCB assembly.

Symptom	LCD Back Light	Low Flow Warning	Heater Setting Low/Medium/High	Probable Cause	Probable Remedy
No change in temperature between Low/Medium/High setting.	ON	ON	Any	Insufficient mains water pressure.	Contact local water company.
	ON	OFF	Any	Possible failure of thermostatic valve or heater tank.	Check the continuity of the heater tank and replace parts as necessary.
	OFF	OFF		Control PCB failure.	Replace Control PCB assembly.
	OFF	OFF		Thermal Trip failed.	Replace thermal trip or check the continuity of the heater tank / replace parts as necessary.
Water will not turn off.	ON	OFF	Any	Inlet valve, solenoid, stop switch, relay PCB or Control PCB faulty.	Replace as necessary.
	ON	ON	Any	Supply pressure below 20 kPa (0.2 bar).	Contact local water company. Check mains water static pressure.
Appliance fails to produce hot water when set on 'Medium / High' heater setting.	ON	ON	Medium/High	Inlet valve assembly faulty.	Replace inlet valve assembly.
	ON	OFF	Medium/High	Faulty relay PCB.	Replace relay PCB.
	ON	OFF	Medium/High	Possible failure of the thermal switch.	Check the continuity of the heater tank / replace parts as necessary.
Unable to select a cool enough shower.	ON	OFF	High	Heater tank failure.	Replace.
	ON	OFF	High	Due to the rise in mains water supply temperature, the heater setting may be too high.	Press the 'Medium' heater setting and adjust the temperature control until a suitable temperature is reached.
Clock does not keep time	ON	OFF	Any	Battery needs replacing.	Replace battery.
	ON	OFF	Any	Faulty Control board.	Replace.
E1 displayed on screen	ON	OFF	Any	Check thermistor is plugged in.	Refit or replace.
<p>Note! The Mira Orbis Thermostatic Shower offers a water saving feature where the shower will automatically switch OFF after 40 minutes of continuous use.</p>					

USER MAINTENANCE

WARNING - TO REDUCE THE RISK OF FIRE, ELECTRIC SHOCK OR INJURY:

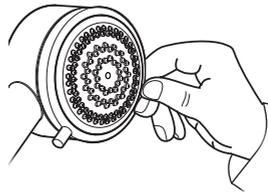
- There are no user serviceable parts inside the shower. Only qualified, competent personnel should remove the front cover, mains connections are exposed when the cover is removed.
- Switch the shower off at the isolator switch before performing any user maintenance or before cleaning the shower.
- **DO NOT** allow young children to perform user maintenance including cleaning of the shower.
- **DO NOT** use the showerhead to clean the shower.
- If the shower is not to be used for a long period, the electrical supply and water supply to the shower should be isolated. If the shower or pipework is at risk of freezing during this period a qualified, competent person should drain them of water.

Cleaning

Many household cleaners contain abrasives and chemical substances, and should not be used for cleaning plated or plastic products or fittings. These finishes should be cleaned with a mild washing up detergent or soap solution, and then wiped dry using a soft cloth.

De-scaling the Showerhead

Important! Keeping the showerhead clean and free from limescale will ensure that your shower and showerhead continue to perform to their maximum. A blocked showerhead can restrict the flow rate and may cause damage to your shower

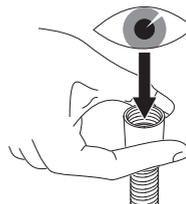


Use your thumb or a soft cloth to wipe any limescale from the soft nozzles

Inspecting the hose.

Important! The shower hose should be inspected periodically for damage or internal collapse, internal collapse can restrict the flow rate from the showerhead and may cause damage to the shower. Remove the shower hose from the shower, inspect and replace the hose if necessary.

Unscrew the hose from the showerhead and the shower outlet.



Inspect the hose.

Servicing

WARNING There are no user serviceable parts inside the shower.

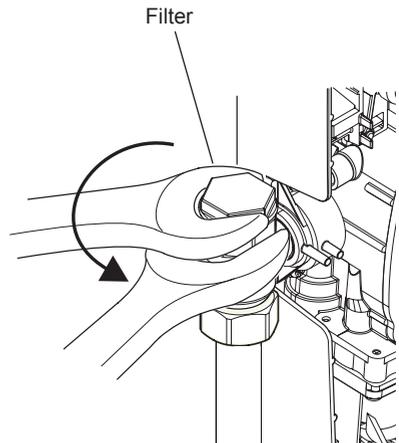
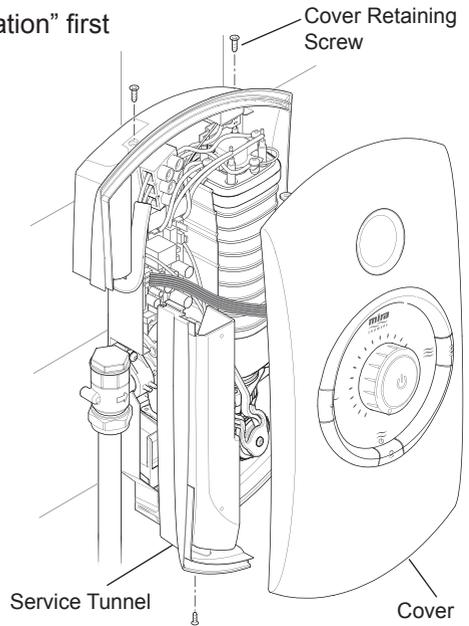
MAINS CONNECTIONS ARE EXPOSED WHEN THE COVER IS REMOVED.

Servicing of the shower must only be carried out by qualified, competent personnel following the instructions provided in this guide and those provided with any spare part. Before replacing any parts, ensure that the underlying cause of the malfunction has been resolved.

Inlet Filter - Cleaning / Renewing

Read the section “Important Safety Information” first

- 1** Make sure that the electrical supply is turned off at the mains and that the water supply is fully turned off.
- 2** Remove the three screws. Carefully remove the cover, making sure that you do not strain the multi-connector.
- 3** Carefully remove the multi-connector from the socket on the control PCB in the case. Remove the service tunnel.
- 4** Hold a wrench across the flats of the metal connector. Unscrew the filter using another wrench as shown. Clean or renew the Filter as necessary. Refit in reverse order making sure the Filter is screwed fully home.
- 5** Do not overtighten. Make sure plumbing connections are tight before restoring the electricity and water supply. Check for leaks.
- 6** Refit the Service Tunnel and connect the multi-connector to the socket on the PCB.
- 7** Refit the Cover. Make sure that it fits correctly. Do not overtighten screws.



Clock Battery Replacement Procedure

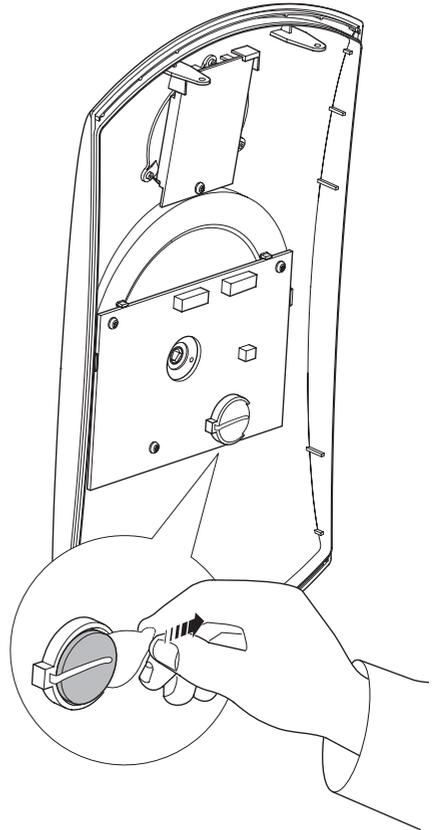
WARNING There are no user serviceable parts inside the shower.

Only a competent tradesperson should remove the front cover!

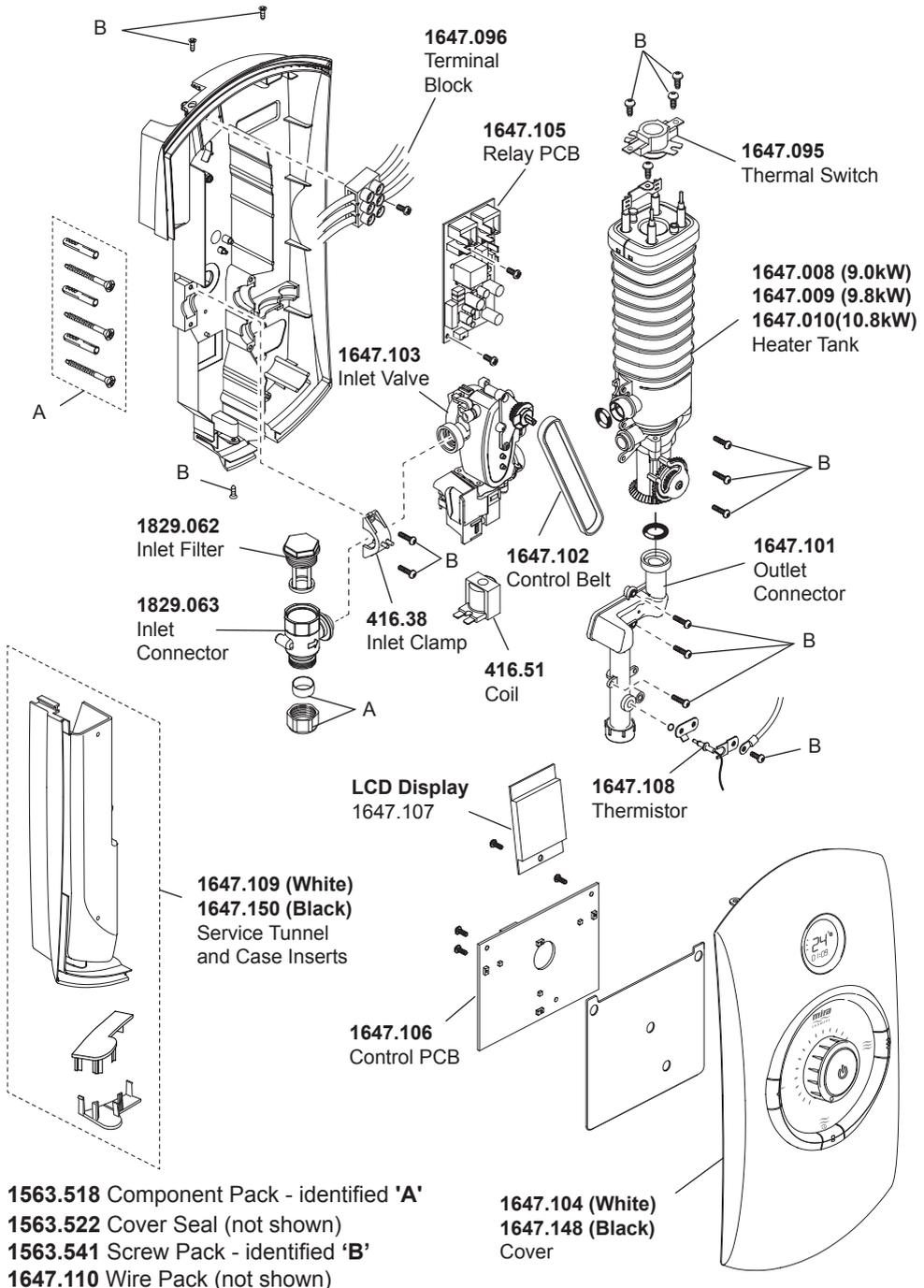
MAINS CONNECTIONS ARE EXPOSED WHEN THE COVER IS REMOVED.

Read the section “Important Safety Information” first.

- 1** Make sure that the electrical supply is turned off at the mains.
- 2** Remove the three screws. Carefully remove the cover, making sure that you do not strain the multi-connector.
- 3** Unplug the multi-connector from the socket on the relay PCB in the case. Remove the service tunnel.
- 4** Carefully remove the battery from the housing.
When the battery has reached the end of its serviceable life, make sure the battery is disposed of in a safe manner, in accordance with current local authority recycling, or waste disposal policy.
- 5** Refit a new battery, pull the plastic tab off the battery to activate it.
(Battery type BR2032 or CR2032)
- 6** Connect the multi-connector to the socket on the relay PCB.
- 7** Refit the Cover. Make sure that it fits correctly. Do not overtighten the three cover retaining screws.
- 8** Restore the electrical supply.
- 9** Reset the clock, refer to the ‘Clock Setting’ procedure.



SPARE PARTS



CUSTOMER SERVICE

Guarantee

Your product has the benefit of our manufacturer's guarantee which starts from the date of purchase.

To activate this guarantee, please return your completed registration card, visit our website or free phone 0800 0731248 within 30 days of purchase (UK only).

Within the guarantee period we will resolve defects in materials or workmanship, free of charge, by repairing or replacing parts or product as we may choose.

This guarantee is in addition to your statutory rights and is subject to the following conditions:

- The guarantee applies solely to the original installation under normal use and to the original purchaser only. The product must be installed and maintained in accordance with the instructions given in this user guide.
- Servicing must only be undertaken by us or our appointed representative. **Note!** if a service visit is required the product must be fully installed and connected to services.
- Repair under this guarantee does not extend the original expiry date. The guarantee on any replacement parts or product ends at the original expiry date.
- For shower fittings or consumable items we reserve the right to supply replacement parts only.

The guarantee does not cover:

- Call out charges for non product faults (such as damage or performance issues arising from incorrect installation, improper use, inappropriate cleaning, lack of maintenance, build up of limescale, frost damage, corrosion, system debris or blocked filters) or where no fault has been found with the product.
- Water or electrical supply, waste and isolation issues.
- Compensation for loss of use of the product or consequential loss of any kind.
- Damage or defects caused if the product is repaired or modified by persons not authorised by us or our appointed representative.
- Routine maintenance or replacement parts to comply with the requirements of the TMV 2 or TMV 3 healthcare schemes.
- Accidental or wilful damage.
- Products purchased ex-showroom display.

What to do if something goes wrong

If your product does not work correctly refer to this manual for fault diagnosis and check that it is installed and commissioned in accordance with our instructions.

If this does not resolve the issue, contact us for help and advice.

Extended Guarantees

A selection of protection plans are available that enable you to cover repair bills (excludes Eire). Ring 01922 471763 for more details.



Helpdesk Service - Ring our Customer Services Team for product advice, to purchase spare parts or accessories or to set up service visit. You can contact us via phone or e-mail, details below. Please provide your model name, power rating (if applicable) and date of purchase.



Mira Showers Website (www.mirashowers.co.uk)

Visit our website to register your guarantee, download user guides, diagnose faults, purchase our full range of accessories and popular spares, or request a service visit.



Spares and Accessories - We hold the largest stocks of genuine Mira spares and accessories. Contact us for a price or visit our website to purchase items from our accessory range and popular spares.



Service/Repairs - No one knows our products better than our nationwide team of Service Technicians. We can carry out service or repair work to your product both during and after the guarantee period. Ask about our fixed price service repairs.

To Contact Us: UK



0844 571 5000



Fax: 01242 282595



E-mail: Visit www.mirashowers.co.uk/contactus



Mira Customer Services Dept, Cromwell Road, Cheltenham, Gloucestershire, GL52 5EP

To Contact Us: Eire Only



01 531 9337



E-mail: CustomerServiceEire@mirashowers.com

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