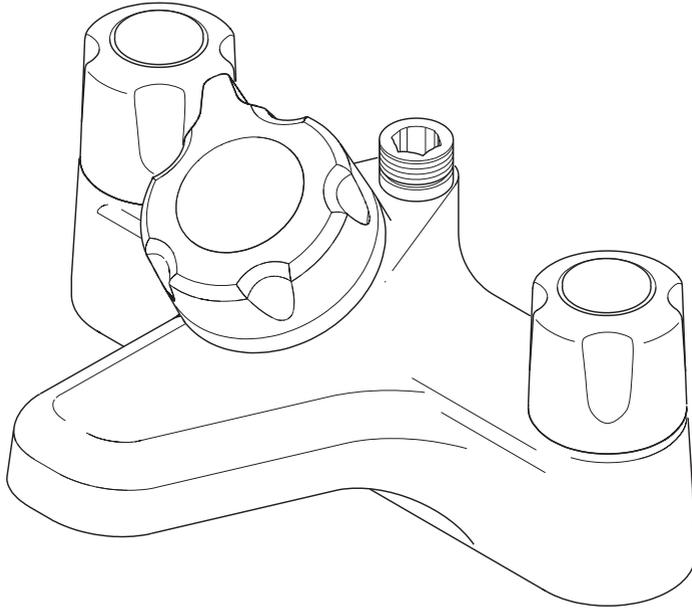


Mira Extra

Bath and Thermostatic Shower Control



These instructions must be left with the user

Installation & User Guide

Showering perfection

mira
SHOWERS

SAFETY : WARNINGS

This Mira Extra Thermostatic Mixer is precision engineered and should give continued safe and controlled performance, provided:

1. It is installed, commissioned, operated and maintained in accordance with manufacturers recommendations.
2. Periodic attention is given, when necessary, to maintain the product in good functional order.

Warning!

If only the hot tap is turned on then the bath fill outlet will deliver the temperature of water stored in the hot water cylinder.

Caution!

1. **Read all of these instructions and retain this guide for later use.**
2. Make sure that this guide is left with the user. Pass on this guide in the event of change of ownership of the installation site.
3. Follow all warnings, cautions and instructions contained in this guide, and on or inside the shower.
4. Installation must be carried out in accordance with these instructions, and must be conducted by designated, qualified and competent personnel.
5. Installations **must** comply with Local Water Company or Water Undertakers Regulations/Bye-laws.
6. This appliance 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 appliance by a person responsible for their safety.
7. Children should be supervised to make sure that they do not play with the appliance.
8. Sunburn or skin conditions can increase your sensitivity to hot water.
9. If water leaks from the pressure relief valve, maintenance will be required before the appliance can be safely used.
10. If the shower is dismantled during installation or servicing then upon completion the product must be inspected to ensure there are no leaks.
11. **DO NOT** commission this appliance if water leaks from the unit.
12. **DO NOT** operate this appliance if water leaks from this appliance.
13. The shower head must be de-scaled regularly. Lack of regular shower head cleaning will lead to poor performance and cause early failure of the appliance. Refer to the Shower Fittings User Guide for more information.
14. 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.
15. Care is required when adjusting flow or temperature, make sure that the temperature has stabilised.

16. Rapid/Excessive movement of the flow and/or temperature control levers may result in momentary unstable blend temperatures.
17. Make sure that you fully understand how to operate this shower and make sure that it is properly maintained in accordance with the instructions given in this manual.
18. Having completed the installation, make sure that the user is familiar with the operation of the appliance.
19. When this appliance 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.

INTRODUCTION

Description

The Mira Extra Bath and Thermostatic Shower Mixer provides conventional manual bath fill through independent hot and cold tap heads and thermostatic shower control via a central sequential control knob. A unique wax capsule enables precise thermostatic shower control whilst the patented internal waterways remove the need for a divertor mechanism.

Product range

The Mira Extra Bath and Thermostatic Shower Mixer is available in chrome or light golden colour finish.

Guarantee

For **domestic installations**, Mira Showers guarantee the Mira Extra Bath and Thermostatic Shower Mixer against any defect in materials or workmanship for a period of **one year** from the date of purchase.

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

For terms and conditions refer to the back cover of this guide.

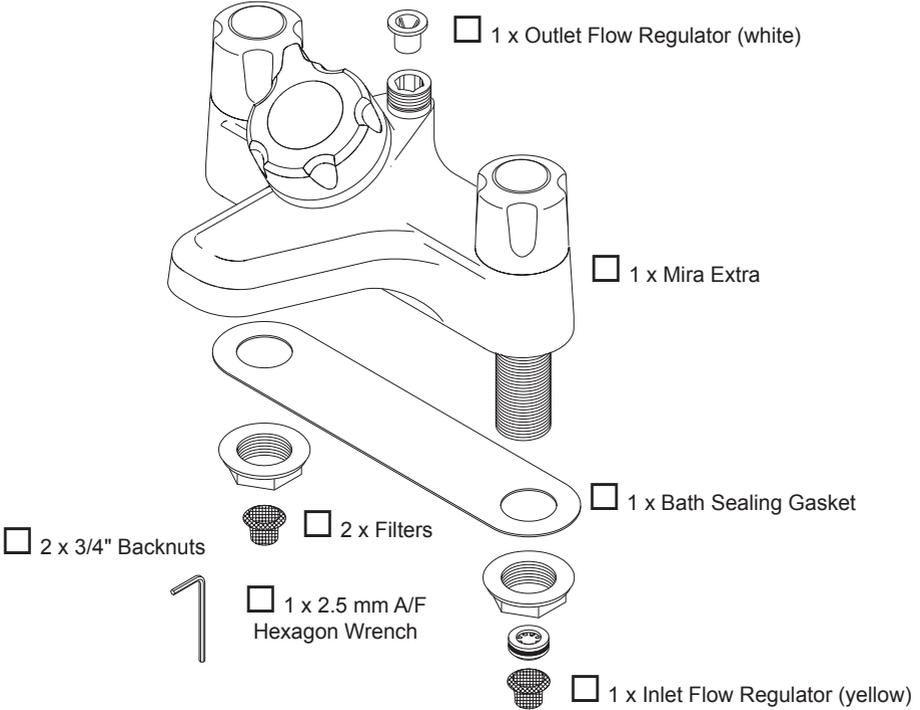
Recommended Usage

Application	
Domestic	✓
Light Commercial	✓
Heavy Commercial	✗
Healthcare	✗

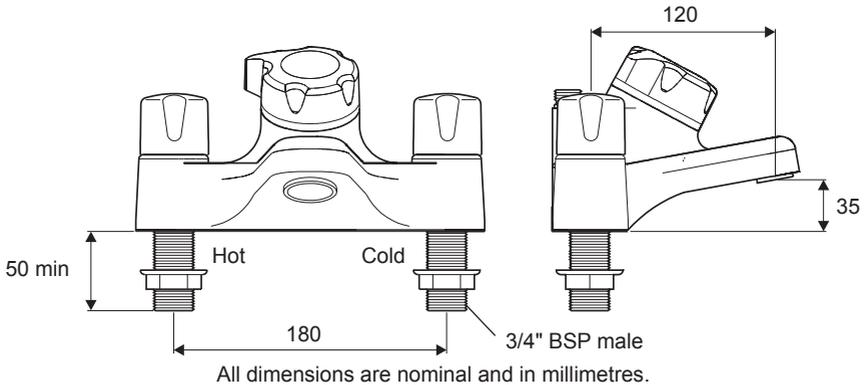
PACK CONTENTS

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

Mira Extra Bath and Thermostatic Shower Mixer



DIMENSIONS



SPECIFICATIONS

Pressure range

Minimum maintained pressure (gas water heater) **1.0 bar**

Minimum maintained pressure (gravity feed) **0.1 bar**

Maximum static pressure **10.0 bar**

Maximum pressure loss ratio **5:1**

Note! For combination type boilers it may be necessary to fit the flow regulator (supplied) to restrict the flow through the boiler to ensure it produces a sufficiently hot water temperature.

Flow Regulator Installation

Flow regulators are supplied with this product and should be fitted in High Pressure systems to either;

1. Reduce Excessive Force & Flow Rate
2. Reduce Noise through the mixer due to high or unequal pressures
3. Stabilise incoming supply temperatures

Temperature selection

The bath taps will provide water at the hot and cold supply temperature from the bath fill outlet.

The single sequential central knob allows the shower temperatures selected to range from the cold water supply temperature through to a preset maximum.

The maximum blend temperature for the shower is factory set at **42°C**. This can be reset according to site requirements.

Maximum blend temperatures can be set using typical inlet supply temperatures:-

Cold 10 - 15°C.

Hot 60 - 65°C.

Maximum hot water inlet supply temperature **82°C**.

Standards and Approvals

The temperature of stored water should never exceed 65 °C. A stored water temperature of 60 °C is considered sufficient to meet all normal requirements and will minimise the deposition of scale in hard water areas.

INSTALLATION REQUIREMENTS

General

Read the section “**Important Safety Information**” first.

1. Products manufactured by us are safe and without risk provided they are installed, used and maintained in good working order in accordance with our instructions and recommendations.
2. Layout and sizing of pipework must be such that when other services are used, pressures at the Mira Bath and Thermostatic Shower Mixer do not fall below the recommended minimum.
3. **Do not** install the product in a position where it could become frozen.
4. Supply pipes **must** be flushed to clear debris before connecting the Mira Bath and Thermostatic Shower Mixer.
5. Conveniently situated isolating valves must be fitted for servicing purposes.
6. No form of outlet flow control should be fitted, only Mira shower fittings are recommended for use with this product.
7. Installations **must** comply with Local Water Company or Water Undertakers Regulations/Bye-laws.

The following diagrams and text illustrate typical examples of suitable plumbing systems for the Mira Bath and Thermostatic Shower Mixer.

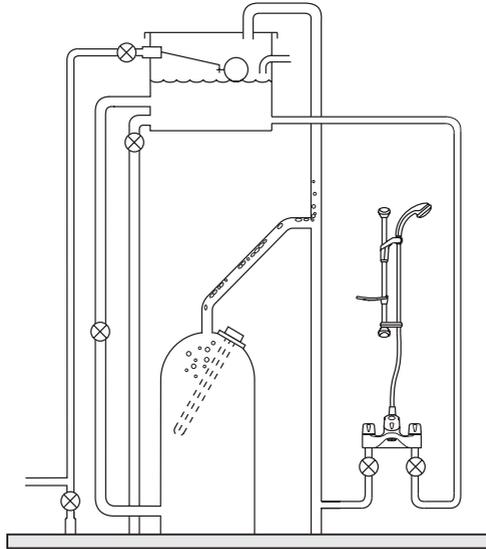
Typical Suitable Installations

Key to Symbols

	Float operated valve
	Stop or servicing valve
	Bath/Shower mixer
	Warning or overflow pipe
	Drop tight pressure reducing valve
	Twin impeller inlet pump
	Tempering Valve
	Mini expansion vessel

Gravity Fed Showers

The Mira Bath and Thermostatic Shower Mixer **must** be fed from a **cold water storage cistern** and **hot water cylinder** providing nominally equal pressures.

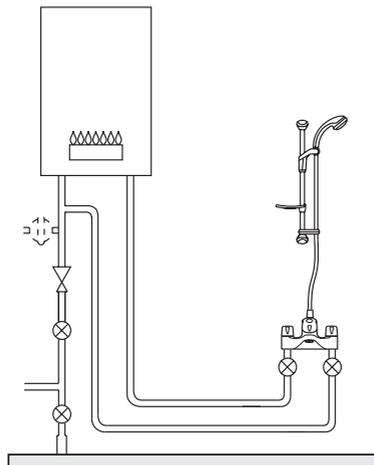


Gas Heated Showers

The Mira Bath and Thermostatic Shower Mixer **must** be installed with a multi-point gas water heater or combination boiler of a **modulating design**.

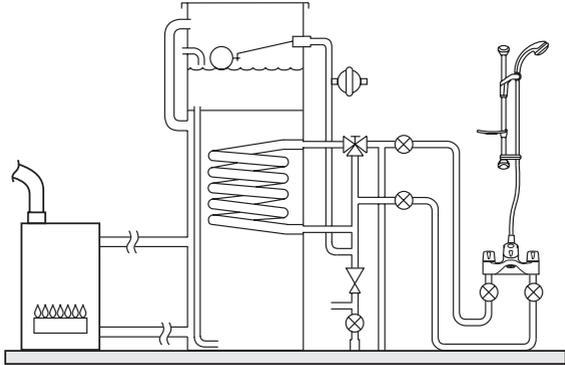
A modulating multi-point gas water heater or combination boiler is one in which the water draw-off rate controls indirectly the gas flow rate to the burner.

The concept is to produce relatively constant hot water output temperatures within the operating limits of the heating appliance. A pressure reducing valve will be required to ensure that cold water pressures do not exceed 5 bar maintained.



Mains Pressurised Instantaneous Hot Water, Heated from Thermal Store, Showers

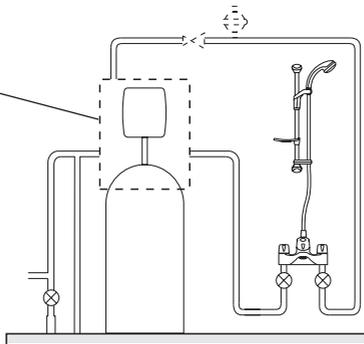
Packages of this type, fitted with a tempering valve can be used with the Mira Bath and Thermostatic Shower Mixer. The tempering valve provides a relatively constant hot water temperature and the Mira Bath and Thermostatic Shower Mixer compensates for any system temperature variations should they occur. The Mira Bath and Thermostatic Shower Mixer supply pressure range is 1 bar to 5 bar maintained. For pressures above 5 bar maintained a pressure reducing valve will be required.



Unvented Mains Pressure Showers

The Mira Bath and Thermostatic Shower Mixer can be installed with an unvented, stored hot water cylinder. Only a “competent person” as defined by “Part G” of “Schedule 1” to the “Building Regulations”, may fit this type of system. For packages with no cold water take off after the appliance pressure reducing valve it will be necessary to fit an additional pressure reducing valve, set at the same value as the unvented package. This does not apply to packages with a cold take off after the pressure reducing valve. The supply pressures should be between 1 bar and 5 bar maintained to the Mira Bath and Thermostatic Shower Mixer.

Safety devices have not been shown within dotted lines area for clarity of illustration.

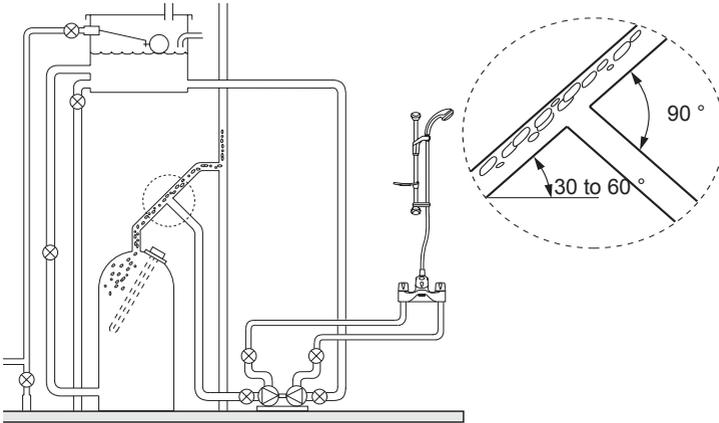


Pumped Showers

Details on pumped shower systems can be obtained from the Mira Installation, Operation & Maintenance Guide supplied with each Mira Pump and Mira publication, a guide to domestic pumped shower systems.

Inlet Pumps

The Mira Bath and Thermostatic Shower Mixer can be installed with an inlet pump (twin impeller). The pump ideally should be located on the floor next to the hot water cylinder and cylinder/vent arranged as shown to achieve air separation.



INSTALLATION

Important

Two flow regulators are supplied with the product. There is a white regulator that can be fitted in the outlet on top of the Mira Bath and Thermostatic Shower Mixer to limit the maximum flow rate to the shower fitting (see Fig. 6). There is a yellow regulator that can be fitted in the cold inlet for high pressure systems (refer to diagram on page 10). The selection table indicates when and where these can be fitted.

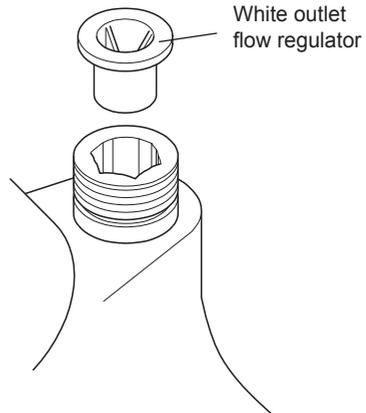


Fig. 6 Outlet Flow Regulator

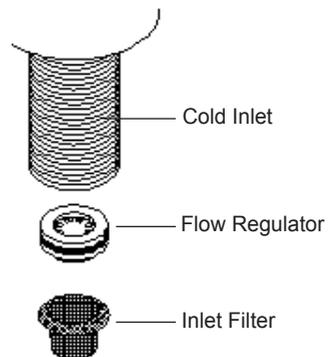
System	Figure Reference	Flow Regulators	
		Outlet	Cold Inlet
Unvented mains pressure showers.	4	†✓	* ✓
Mains pressurised instantaneous hot water, heated from thermal store, showers.	3	†✓	* ✓
Gas heated showers.	2		✓
Gravity fed showers.	1		
Pumped showers.	5	†	

Notes

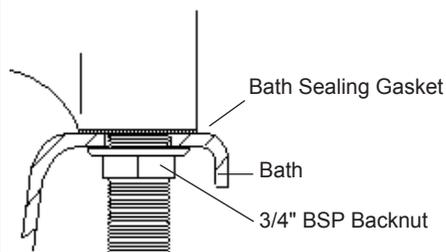
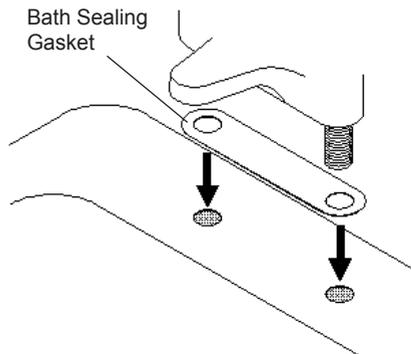
† There is no separate flow control for the shower fitting and the fitting of the white outlet flow regulator will reduce the force of the shower spray. Alternatively, if shower fittings with two different spray plates are used, the high capacity spray plate (larger holes) can be fitted to reduce the spray force of the shower.

* If the cold pressure is not under the control of the pressure reducing valve fitted to these unvented systems and the maintained mains pressures are above three bar then the yellow regulator should be fitted.

1. The hot water service must always be connected to the hot inlet. This is stamped on the bottom of the casting. Reversed connections may damage the product and will be dangerous to the person using the shower. The connections, when viewed from the front, are: **Hot – left**
Cold – right
2. Thoroughly flush the incoming hot and cold water supplies before final connection of the Mira Extra.
3. If necessary, fit the cold inlet regulator.



4. Insert the two inlet filters, largest diameter first, and push in until located against the factory fitted inlet check valves or flow regulator, if fitted (refer to diagram).
5. Fit the bath sealing gasket to the Mira Extra and fit the assembly to the bath (refer to diagram).
6. Fit the two 3/4" BSP backnuts and tighten. Trim the bath sealing gasket if necessary. Take care to prevent damage to the bath.
7. Connect the inlet supplies via tap connectors (not supplied).
8. This completes the installation of the **Mira Extra**.
9. To install the shower fittings, refer to the appropriate section in the **shower fitting Installation, Operation and Maintenance Guide**.



COMMISSIONING

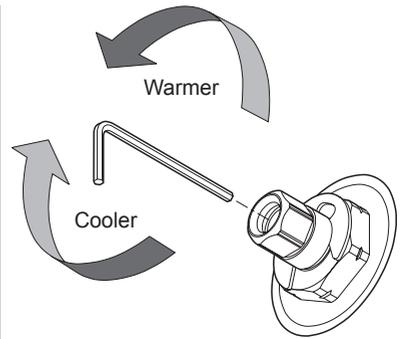
Maximum temperature setting

The Mira Extra has been fully performance tested and the maximum temperature has been preset to approximately 42°C under ideal installation conditions at the factory. Site conditions and personal preference may dictate that the maximum temperature has to be reset.

To reset the maximum temperature ensure that an adequate supply of hot water is available at a temperature at least 10°C in excess of that required from the shower control. Turn the knob fully anticlockwise then check the temperature at the discharge point (allowing sufficient time for hot water to reach the hot inlet of the Mira Extra). If the temperature is correct, turn the shower control fully clockwise to the off position as no further adjustment is necessary.

If the maximum temperature achieved at the discharged point is unsatisfactory then adjust the maximum temperature as follows:-

1. Before making any adjustments make sure that the correct flow regulators have been fitted. Refer to "**Installation**".
2. Turn the central knob fully anticlockwise.
3. Using hexagon wrench supplied, loosen screw on side of central knob and remove.
4. Use same hexagon wrench to locate screw in centre spindle. Adjust as follows, refer to diagram:
 Warmer - Turn anticlockwise
 Cooler - Turn clockwise
5. Turn the shower control off and refit the knob aligning the brand and re-tighten screw on side of central knob.
6. This completes the procedure for **Maximum Temperature Setting**.



OPERATION

The Mira Extra is fitted with three knobs which operate as follows:-

1. Bath Fill

The outside two vertical knobs controls the flow of water to the central bath fill outlet. Red and blue indicator trims relate to the hot and cold taps. Anticlockwise movement turns the water flow on.

WARNING! If only the hot tap is turned fully on then the bath fill outlet will deliver the temperature of water stored in the hot water cylinder.

Note! An amount of water may be retained in the bath spout after the taps have been turned off. This will drain over a short period of time.

2. Shower

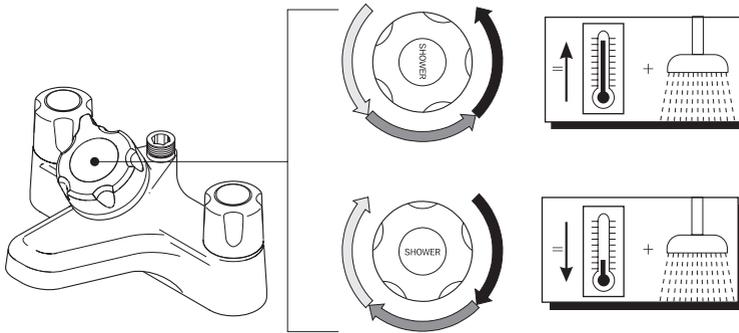
When the central inclined knob is turned on, anticlockwise, the sequence is:-
Cold water - Warm water - Preset maximum temperature.

A full description is as follows:-

Initial anticlockwise movement turns the water on at full flow of cold water, further anticlockwise movement increases the temperature. The flow rate is determined by the supply pressures at the inlets of the shower control, or by the effective output power of the gas heater appliance. Flow rates for gas water heaters and combination boilers can vary typically between 8 l/min (winter) and 15 l/min (summer).

Note! The shower performance will be degraded if the hot or cold bath fill tap is operated whilst the shower is in use.

Preset maximum temperature 42°C



MAINTENANCE

Fault Diagnosis

Malfunction	Cause	Remedy
Incorrect temperature at outlet.	a) Insufficient hot water. b) Flow regulators fitted incorrectly.	Check temperature setting of hot water (60°C - 65°C). Refer to installation selection chart and check shower control.
Flow of water too fast.	Flow regulators fitted incorrectly or not fitted	Refer to installation selection chart and check shower control.
Very low flow of water.	a) Flow regulators fitted incorrectly. b) Isolating valves not fully open c) Airlock or partially blocked pipework. d) Blocked shower head.	Refer to installation selection chart and check shower control. Check temperature setting of hot water (60°C - 65°C). Flush system and if appropriate fit float type automatic air vent. Remove and clean
Outlet temperature too warm or too cool.	a) Maximum temperature incorrectly set. b) If it is not possible to set maximum temperature, flow regulators may be incorrectly fitted.	Refer to Commissioning: Maximum temperature setting and action. Refer to installation selection chart and check shower control.
Outlet temperature either too hot or too cold when turned fully on.	Hot and cold supplies have been connected in reverse.	Check that the supply pipework is connected correctly Hot - left, Cold - right . If you have a combination type boiler it may not be producing sufficiently hot water at desired flow rate. Fit flow regulator (supplied) to shower valve outlet.

Malfunction	Cause	Remedy
Shower control cannot be shut off.	Pipework not flushed before connecting the shower control.	Fit new seals. Refer to the section Parts List .
Bath spout drips continuously when taps have been turned off.	a) Pipework not flushed before connecting the bath/shower mixer. b) Tap washers worn out. c) A small amount of water may be retained in the bath spout. This will drain over a short period of time.	Fit new seals. Refer to the section Parts List . This is normal.

General

The Mira Extra Bath and Thermostatic Shower Mixer is precision engineered to provide satisfactory performance provided it is installed and operated in accordance with our recommendations contained in this guide.

Bath/shower mixers are mechanical devices and should be serviced annually depending on the water conditions. Areas of the country that are affected by hard water should consider shorter service intervals.

When installed in very hard water areas (above 200 p.p.m. temporary hardness) your installer may advise the installation of a water treatment device to reduce the effects of limescale formation.

The exploded view and parts list illustrates the assembly of the product.

You may, if you wish, choose to engage the services of a Mira Service Engineer or Agent the terms of which are outlined on the back page of this guide.

Cleaning

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

Spray pattern deterioration can be caused by either debris trapped in the spray head or a limescale build up in the holes. The spray head can be removed and cleaned. Refer to the Installation, Operation and Maintenance Guide for the shower fittings.

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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The company reserves the right to alter product specifications without notice.

