

Your Product Guarantee

This product has been designed for domestic use only, it is not recommended for Commercial or Healthcare use.

For Domestic installations, Kohler Mira guarantee this product against any defect in materials or workmanship for a period of five years from the date of purchase (shower fittings for one year). 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 only applies in the United Kingdom and the Republic of Ireland.

Activating Your Guarantee

Registering your guarantee is quick and simple. To ensure your product is covered, please register online www.mirashowers.co.uk/support/guarantee-registration.

What is Covered

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 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.

What is Not Covered

- 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, chemical attack, 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 or indirect 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 repaired or modified by persons not authorised by comply with the requirements of the TMV2 or repaired or modified by persons not authorised by TMV3 healthcare schemes.
- Accidental or wilful damage.
- Products purchased ex-showroom display.

Any questions regarding your guarantee? Give us a call on 0800 001 4040.

UK

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E: askus@mirashowers.com
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Eire

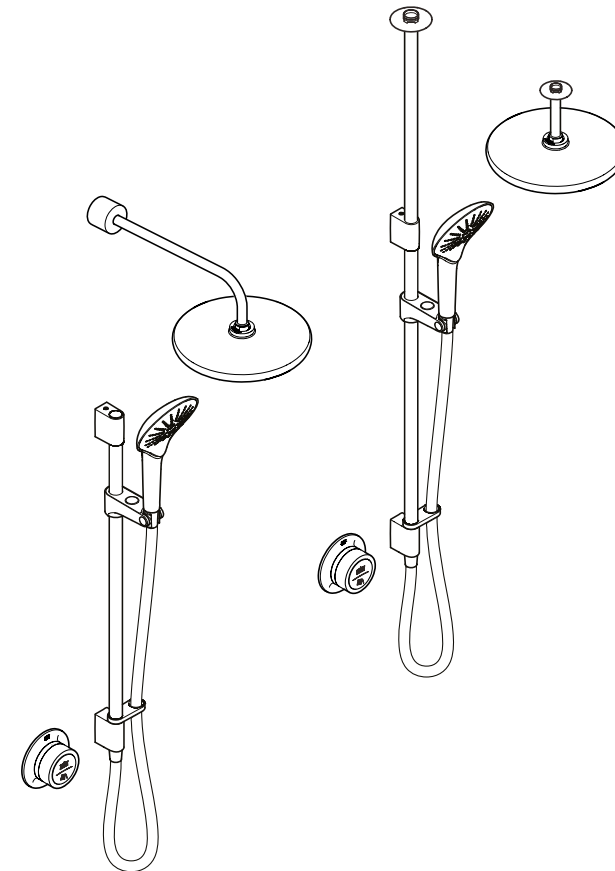
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Mira is a registered trade mark of Kohler Mira Limited.
The company reserves the right to alter product specifications without notice.



Mira Mode Maxim

Digital Mixing Valve



Installation and User Guide
Please leave these instructions with the user

mira
SHOWERS

Thank you for purchasing a Mira Mode Maxim. To enjoy the full potential of your new product, please take time to read this guide thoroughly, having done so, keep it handy for future reference. For step-by-step installation videos, datasheets or spares information, please visit the Mira Showers website.

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Important Safety Information

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 product. Failure to follow the instructions provided with this product will invalidate the guarantee.

Warning! To reduce the risk of fire, electric shock or injury please read the important information listed below.

1. Installation of this product must be carried out in accordance with these instructions by qualified, competent personnel. Read all instructions before commencing installation.
2. 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.
3. 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.
4. Isolate the electrical and water supplies before commencing installation. Mains connections are exposed when the valve module cover is removed.
5. The valve module must be earthed, ensure supplementary bonding is provided in accordance with the wiring regulations.
6. The valve module must be permanently connected to a 3A fused connection unit and be provided with means for disconnection incorporated in the fixed wiring in accordance with the wiring regulations.
7. We strongly recommend that a 30mA RCD is included in the electrical supply to the valve module.
8. **DO NOT** install the valve module, controller or the On/Off Remote Button in areas with high humidity and temperature (i.e. steam rooms and saunas).
9. **DO NOT** install the valve module or fittings where they may be exposed to freezing conditions. Ensure that any pipework that could become frozen is properly insulated.
10. **DO NOT** perform any unspecified modifications, drill or cut holes in the product other than instructed by this guide. When servicing only use genuine Mira Showers replacement parts.
11. **DO NOT** operate the product if water is leaking from inside the valve module. Isolate electrical and water supplies to the product and refer to the fault diagnosis section.
12. **DO NOT** apply power to the product if it is thought to have been exposed to freezing conditions. Isolate electrical and water supplies to the product and contact Kohler Mira Ltd.
13. **DO NOT** allow children to play with the product.
14. **DO NOT** allow children to clean or perform any user maintenance without supervision.
15. **DO NOT** remotely operate or alter any of the Mira Mode Maxim shower settings if it is already occupied and / or being used by another person.
16. If the valve module is dismantled during installation or servicing then, upon completion, an inspection must be made to ensure all electrical connections are secure and that there are no leaks.
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. The Mira Mode Maxim can be used by children aged from 8 years and above and persons with reduced physical, sensory or mental capabilities or lack of experience and knowledge if they have been given supervision or instruction concerning the use of the appliance in a safe way and understand the hazards involved.
19. Always check the water temperature is safe before bathing or showering.
20. **DO NOT** use excessive force when making connections.
21. Avoid layouts where the shower hose will be sharply kinked. This may reduce the life of the hose.
22. Special consideration should be given to the fixing arrangements when installing onto a dry lined, stud partition, shower cubicle or laminated panel wall structures. Installers may wish to obtain alternative proprietary cavity fixings, or choose other options, however, these methods of fixing are beyond the scope of this guide.
23. The position of the shower fittings must provide a minimum air gap of 25mm between the handshower and the spill over level of any bath, shower tray or basin. There must be a minimum distance of 30mm between the handshower and the spill over level of any toilet, bidet or other appliance with a Fluid Category 5 backflow risk.

Guarantee

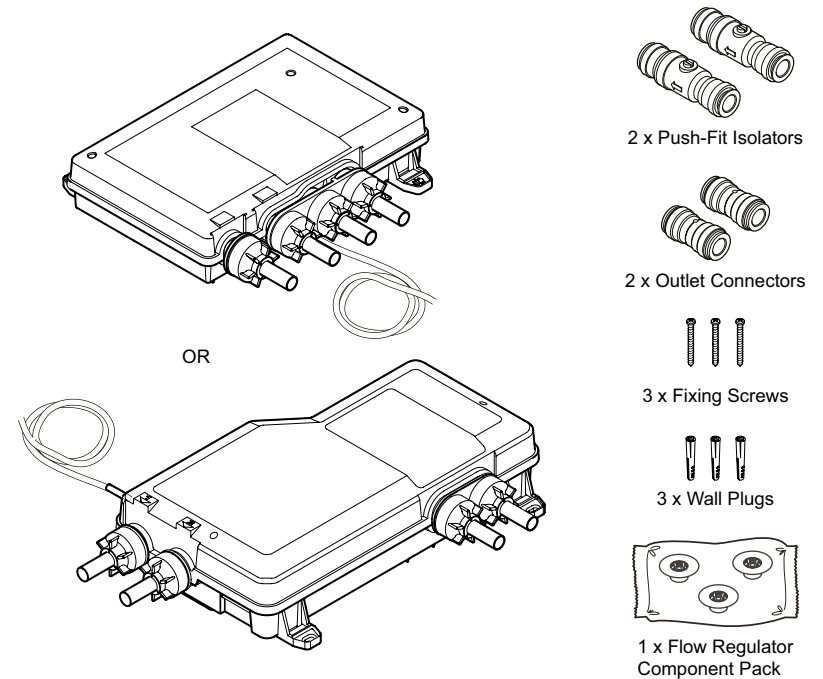
The Mira Mode Maxim has been designed for domestic use only, it is not recommended for Commercial or Healthcare use. For domestic installations, Kohler Mira Ltd., guarantee the Mira Mode Maxim against any defect in materials or workmanship for a period of five years from the date of purchase (shower fittings for one year).

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

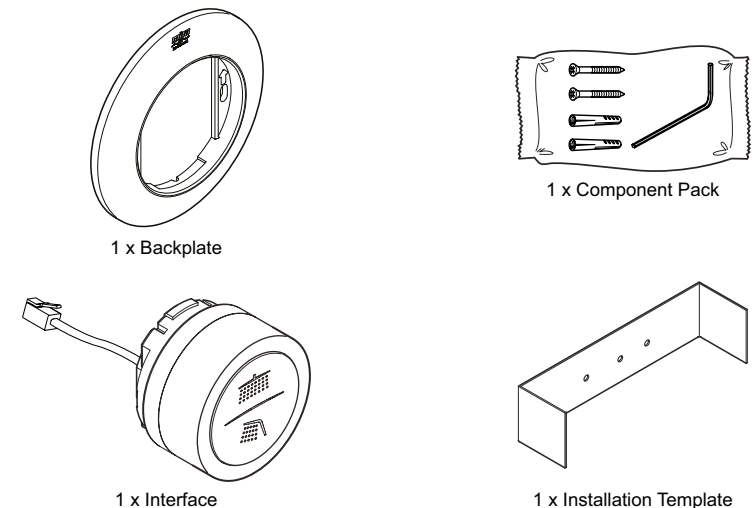
Recommended Usage	
Domestic	✓
Light Commercial	✗
Heavy Commercial	✗
Healthcare	✗

Pack Contents

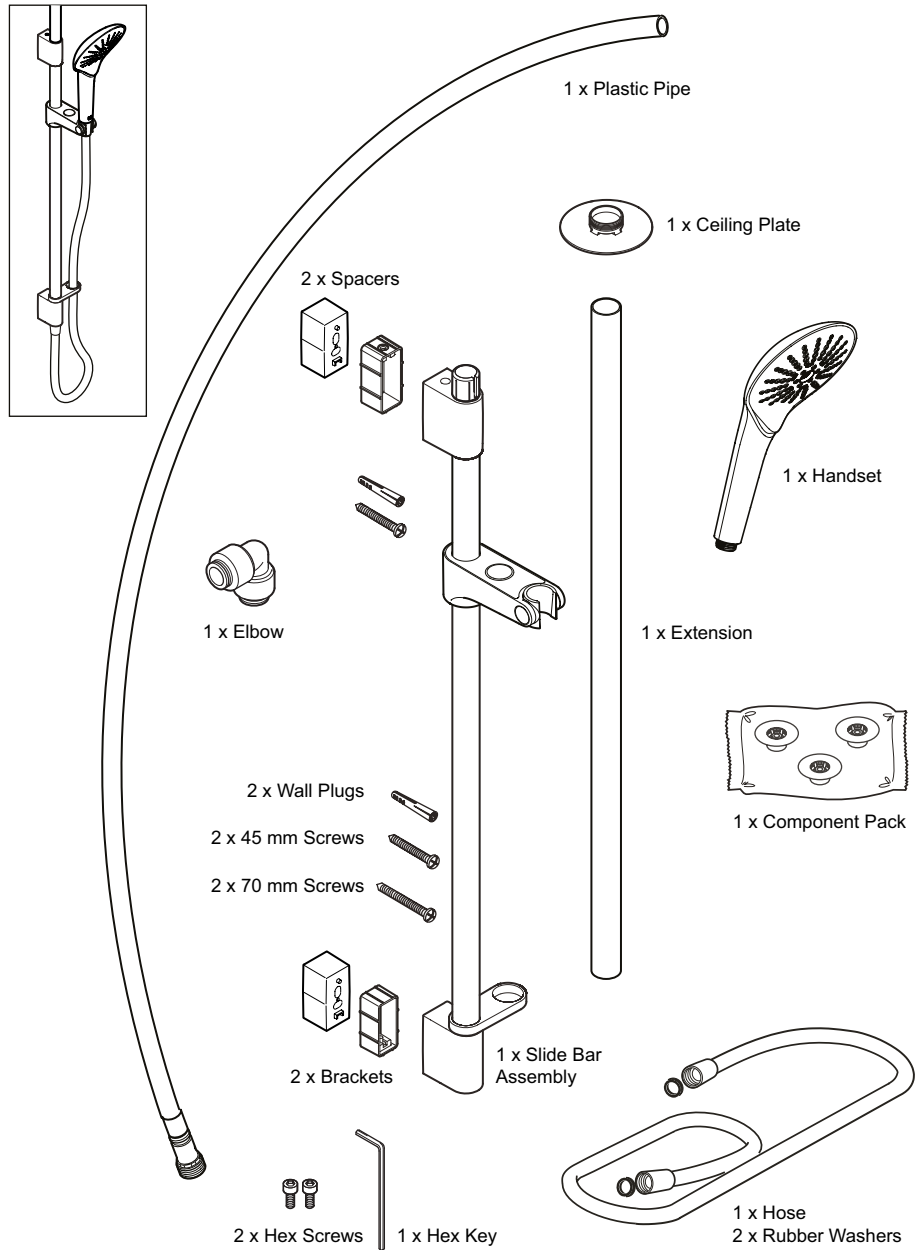
Digital Mixing Valve



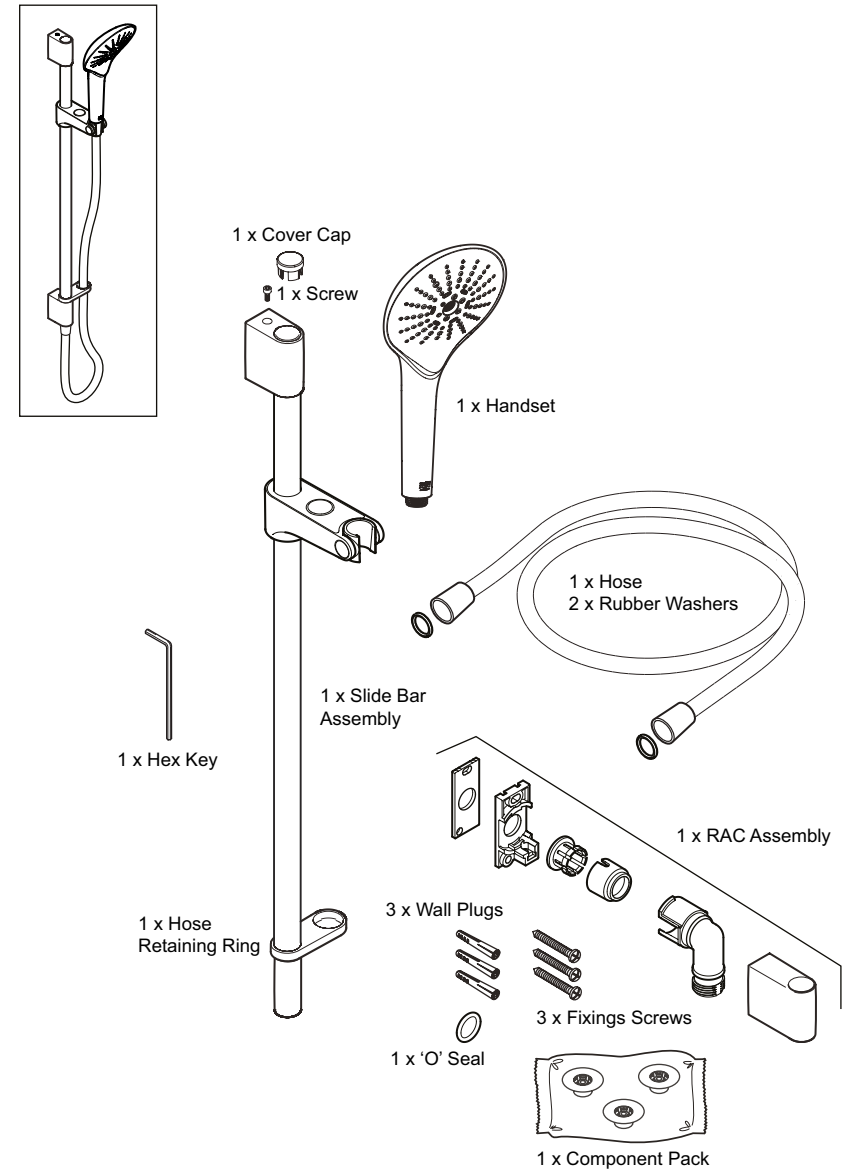
Interface



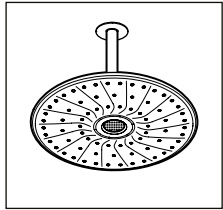
Ceiling Fed Shower Fittings



Rear Fed Shower Fittings



Ceiling Fed Deluge Head



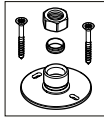
1 x Concealing Plate



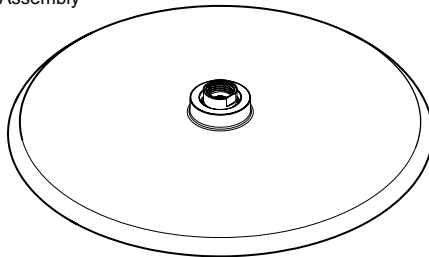
1 x Elbow



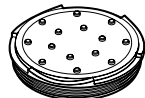
1 x Ceiling Mount Plate Assembly



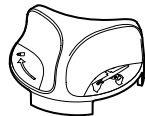
1 x Deluge Head



1 x Brazed Pipe Assembly



1 x Rain Core

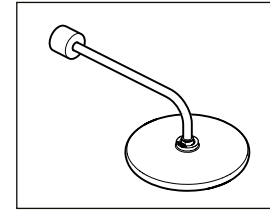


1 x Core Removal Tool

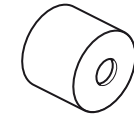
1 x Chrome Supply Tube



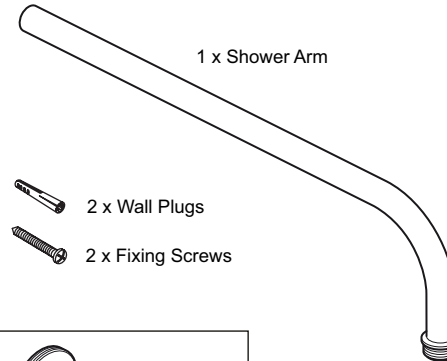
Rear Fed Deluge Head



1 x Concealing Shroud



1 x Shower Arm



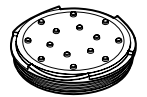
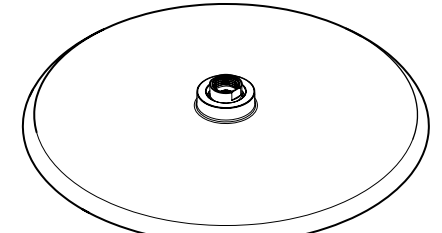
2 x Wall Plugs



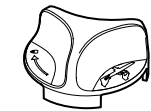
2 x Fixing Screws



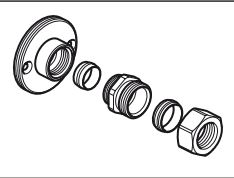
1 x Deluge Head



1 x Rain Core

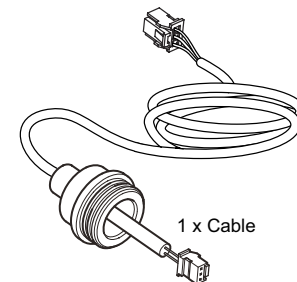


1 x Core Removal Tool

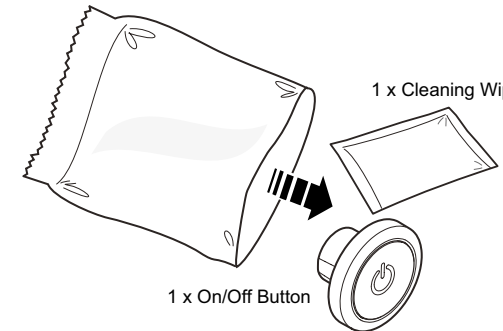


1 x Backplate Assembly

Optional On/Off Button



1 x Cable



1 x Cleaning Wipe

1 x On/Off Button

Specifications

Standards and Approvals

The Mira Mode Maxim complies with all relevant directives for CE marking. The Mira Mode Maxim is a type 1 electronic, independently mounted control for surface mounting. The Mira Mode Maxim is in compliance with the essential requirements of the RED directive 2014/53/EU. A copy of the declaration of conformity may be obtained by visiting www.mirashowers.co.uk/for-the-expert/resources/product-approvals.

General	
Pollution Degree	2
Rated Impulse Voltage	2.5 kV
Connections	15mm Compression/Pushfit

Mira Digital Mixing Valve High Pressure (Not suitable for pumped gravity systems)

Pressures	
Maximum Static Pressure	1000 kPa (10 bar)
Maximum Maintained Pressure	500 kPa (5 bar)
Minimum Maintained Pressure	100 kPa (1 bar)
Supply Pressure Differential	Nominally Equal
Temperatures	
Maximum Temperature (setting range)	35°C - 45°C (Factory Preset 45°C)
Minimum Temperature	Thermostatic control down to 30°C Full Cold also selectable
Hot Water Range - Supply	55°C - 65°C
Cold Water Range - Supply	1°C - 20°C
Temperature Stability	± 1°C at recommended supply conditions
Ambient Temperature	1°C - 40°C
Maximum Relative Humidity	95% non-condensing
Flow Rates	
Nominal Flow Rate*	Valve capable of up to 16 l/min @ 1 bar
Electrical	
Supply Voltage	230V ac 50 Hz
Maximum Load	20W

Mira Digital Mixing Valve Pumped (Not suitable for mains pressure systems)

Pressures	
Maximum Static Pressure	100 kPa (1 bar) 10m head
Maximum Maintained Pressure	100 kPa (1 bar) 10m head
Minimum Maintained Pressure	1 kPa (0.01 bar) 0.01m head
Supply Pressure Differential	Nominally Equal
Temperatures	
Maximum Temperature (setting range)	35°C - 45°C (Factory Preset 45°C)
Minimum Temperature	Thermostatic control down to 30°C Full Cold also selectable
Hot Water Range - Supply	55°C - 65°C
Cold Water Range - Supply	1°C - 20°C
Temperature Stability	± 1°C at recommended supply conditions
Ambient Temperature	1°C - 40°C
Maximum Relative Humidity	95% non-condensing at 30°C
Flow Rates	
Nominal Flow Rate*	Valve capable of up to 16 l/min @ 0.01 bar
Electrical	
Supply Voltage	230V ac 50 Hz
Maximum Load	200W

Controller

Electrical Supply	12 Vdc SELV 2W max. Derived from valve module
Ingress Protection	IP X4 - Suitable for installation in Zone 1
Maxim Ambient Temperature	40°C

On/Off Remote Button

Electrical Supply	3.3 Vdc SELV 2mW max. Derived from valve module
Ingress Protection	IP X4 - Suitable for installation in Zone 1
Maxim Ambient Temperature	40°C

Shower Fittings

Minimum maintained water pressure	0.1 bar (10 kPa)
Maximum maintained water pressure	5.0 bar (500 kPa)

General Installation

The installation must be carried out in accordance with these instructions, and must be conducted by designated, qualified and competent personnel.

The Digital Mixing Valve may be installed in a loft space, under the bath or in a convenient cupboard space, provided there is enough room for maintenance (e.g. Removal of Digital Mixer Valve lid). Failure to do so may result in an inability to carry out any maintenance. Safe and easy access to the product should be available at all times.

When planning your installation, make sure that the Controller is installed within the cable length range supplied (Cable length 9.5 metres).

When installing a mixer valve in an area not regularly accessed, consideration for potential leaks must be taken into account. While such events are unlikely, it is advisable to periodically check the installation for traces of water on or around the product.

If possible, site the valve in a location where any leak would be contained or routed to avoid areas sensitive to water damage.

Full bore isolating valves must be installed to both inlets (supplied) and it is recommended to fit isolators on the outlet, close to the Digital Mixing Valve for ease of maintenance.

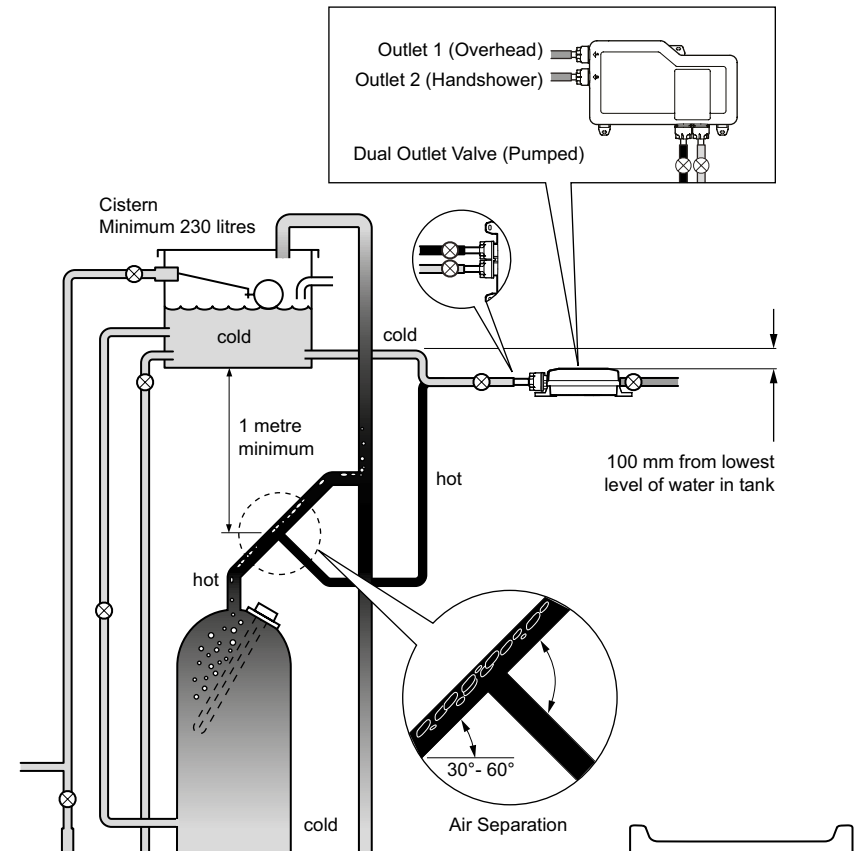
Caution! Risk of product and property damage. The Digital Mixing Valve must be installed in a dry, ventilated area where it will not freeze.

Suitable Plumbing Installations

Dual Digital Mixing Valve (High Pressure)

1. Gas Heated System - The Digital HP shower can be installed with a combination boiler.
2. Unvented Mains Pressure System - The Digital HP shower can be installed with an unvented, stored hot water system.
3. Mains Pressurised Instantaneous Hot Water System - The Digital HP shower can be installed with systems of this type with balanced pressures.
4. Gravity Fed Showers

Caution! Risk of product damage. Do not fit the Mira Digital Mixing - High Pressure/ Combi Valve with Gravity Fed Systems.



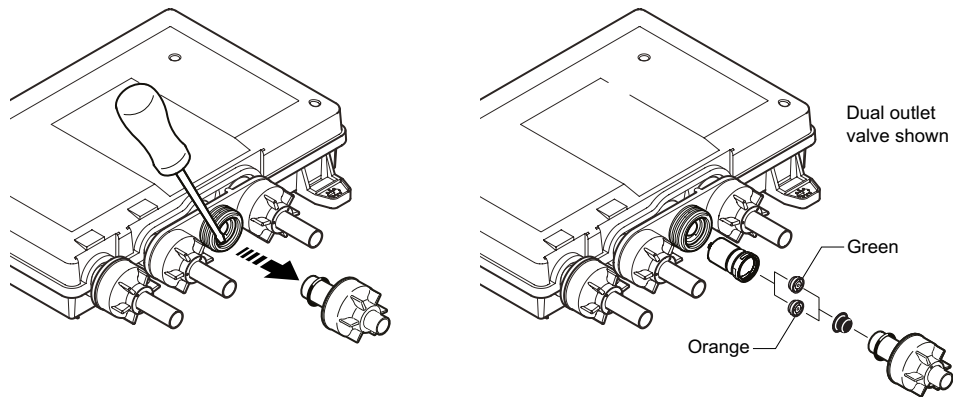
The shower control must be fed from a cold water storage cistern and a hot water cylinder providing nominally equal pressures. Pipework layouts and connections must be such that other draw-offs will not effect water supplies to the shower, shared supplies may lead to airlocking or water starvation. It is therefore best practice to have independent hot and cold supplies to the Low Pressure (pumped) Digital Mixing Valve.

Use of Flow Regulators with Combination Boilers

The Digital Mixing Valve can demand hot water quicker than some instantaneous water heaters/combination boilers can provide, especially in winter when the mains water is colder. A Hot inlet flow regulator may need to be used to ensure that the Digital Mixing Valve can deliver a full range of water temperatures.

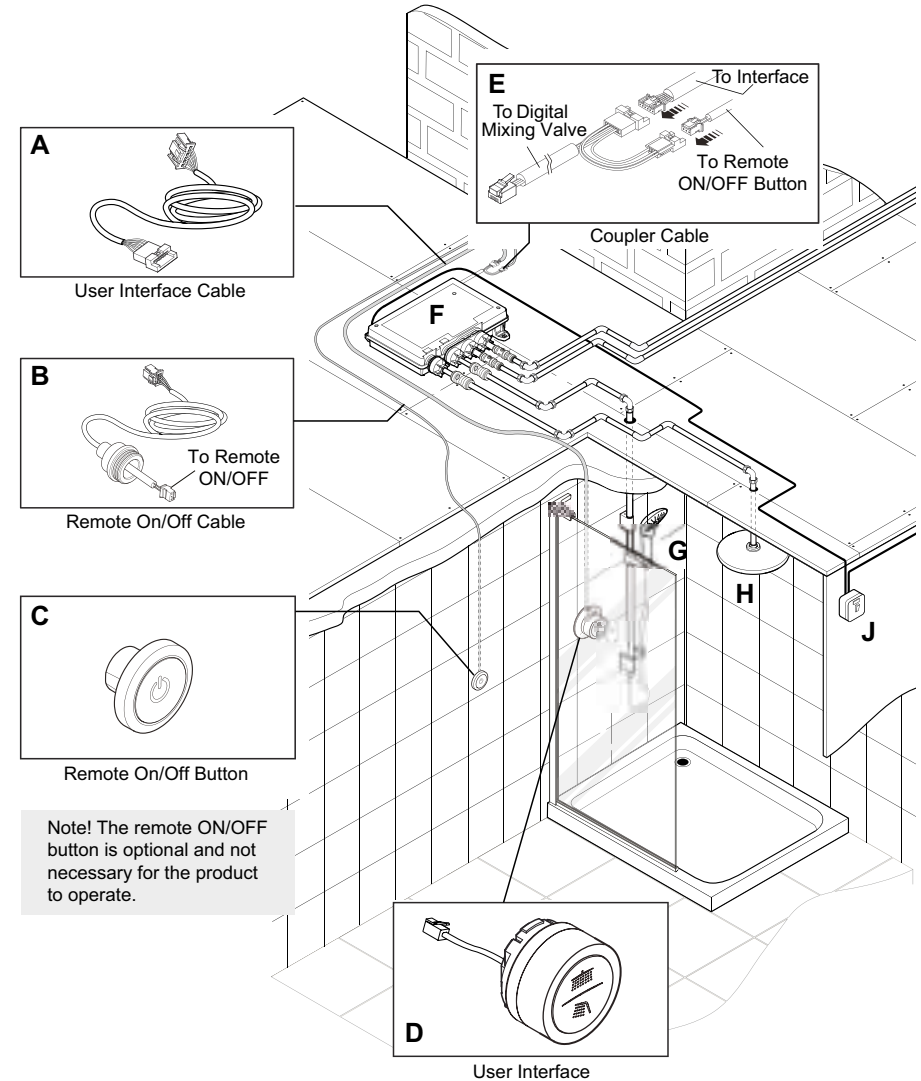
Note: The Mira Dual outlet Digital Mixing Valves do not have a factory fitted hot inlet flow regulator. These are supplied in the component pack. The table indicates which flow regulator should be fitted in the hot water inlet of the Digital Mixing Valve if installing to a combination boiler system.

Boiler Rating	24 kW (80,000 Btu/h)	30 kW (100,000 Btu/h)	36 kW (120,000 Btu/h)
Flow Regulator	7 litres/min	9 litres/min	Not required
Colour	White/Green	White/Orange	N/A



1. Unscrew hot inlet plastic nuts and remove pipe and seal to gain access to the checkvalve cartridge and filter.
2. Use flat blade screwdriver to carefully lever cartridge out.
3. Fit/remove the flow regulator from checkvalve cartridge behind filter as required.
4. Refit seal, pipe and plastic nut. Plastic nuts require hand tightening only.

Installation: Digital Mixing Valve



Key to Installation Schematic

Description	
A	Electrical Cable from the Controller to the Valve - 9.5 metres
B	On/Off Remote Button cable from the On/Off Remote Button to the Valve - 9.5 metres
C	On/Off Remote Button - placed outside of the enclosure
D	Controller
E	Coupler Cable - for connection between the valve and the remote lead and/or the Controller
F	Digital Mixing Valve
G	Mira Mode Maxim Ceiling Fed shower fittings - Rear Fed options are available
H	Deluge showerhead
J	3 AMP Switched Fused Spur - Outside of the bathroom - enables you to isolate the shower. Should be easily accessible for resetting product.

Important Installation Considerations

- Ensure Pumped for Gravity showers are not connected to any mains water pressure e.g. stored gravity hot water and cold mains water.
- High Pressure/Combi Valves should not be fitted to a Pumped Gravity System.
- The Digital Mixing Valve should not be installed where it can become frozen or be subjected to ambient temperatures in excess of 40°C.
- Position the Digital Mixing Valve so that there is enough room for maintenance (e.g. removal of the valve lid) and make sure safe and easy access is available at all times.
- Installing the Digital Mixing Valve onto shared water supplies may reduce its flow performance.
- Avoid installations where air locking could occur.
- Cold water cisterns should hold no less than 230 litres and Hot water cylinders no less than 210 litres. (Gravity system only).
- Your water supply system must be capable of delivering up to 16 l/min mixed water.
- Ensure water supply temperatures are within specification. Hot water 55°C to 65°C, Cold water 1°C to 20°C.
- To reduce any effects of water hammer secure all pipe work rigidly.
- Do not fit the valve in a position where Bluetooth® communication with the Digital Mixer Valve is poor e.g. mixer valve installed under metal bath, in front of metal cistern, on foil backed plasterboard.

- Water supply pipes must be flushed prior to connecting the mixing valve to the system so debris cannot enter the mixing valve internals.
- Fully commission the product after installation taking care to look for any leaks and correct operation.

General Installation Requirements

The installation must be carried out in accordance with these instructions, and must be conducted by designated, qualified and competent personnel.

A separate, permanently connected supply must be taken from the ring main to the appliance through a 3 AMP double pole switched fused spur providing a minimum 3mm contact separation gap in each pole.

The use of supply-line or zone strainers will reduce the need to remove debris at the Digital Mixer Valve. The recommended maximum mesh aperture dimension for such strainers is 0.5mm.

Pipework must be rigidly supported to avoid any strain on the connections.

Long outlet pipework (dead-legs) should be kept to a minimum to avoid temperature fluctuations.

Supply pipework layout must be arranged to minimize the effect of other outlet usage upon the dynamic pressures at the Digital Mixing Valve inlets.

To eliminate pipe debris it is essential that supply pipes are thoroughly flushed through before connection to the Digital Mixing Valve.

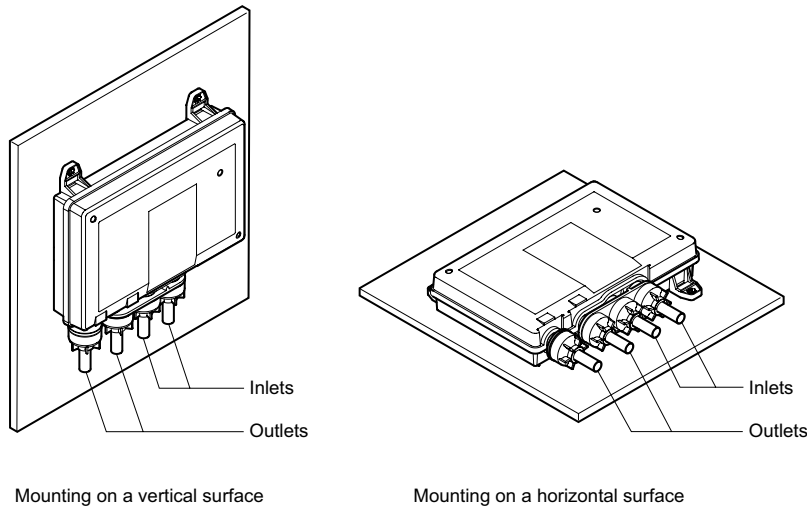
Cables routed through wall cavities, chased into solid walls, directed under baths or in attic spaces must be fitted in such a way that they can later be removed. To facilitate this appropriate cable conduit/trunking must be used at all times. The conduit/trunking must be at least 20mm diameter/square to allow for the safe removal of the connectors.

Failure to do so may result in an inability to carry out any maintenance or service. Safe and easy access to the product should be available at all times.

Valve Installation Orientation

The Digital Mixing Valve (which contains the thermostatic mixing valve) may only be orientated in the positions shown below. Failure to do so will compromise the ability of the unit to fail-safe and deliver constant blend. If the power supply cable is damaged, it must be replaced by the manufacturer or a service engineer.

Warning! Turn off the electrical and water supplies before proceeding with the installation of the appliance. The electricity must be turned off at the mains and the appropriate circuit fuse electrically isolated, if applicable. Caution! Risk of product damage. Do not run Pumped Valve (low pressure version) without a water supply.



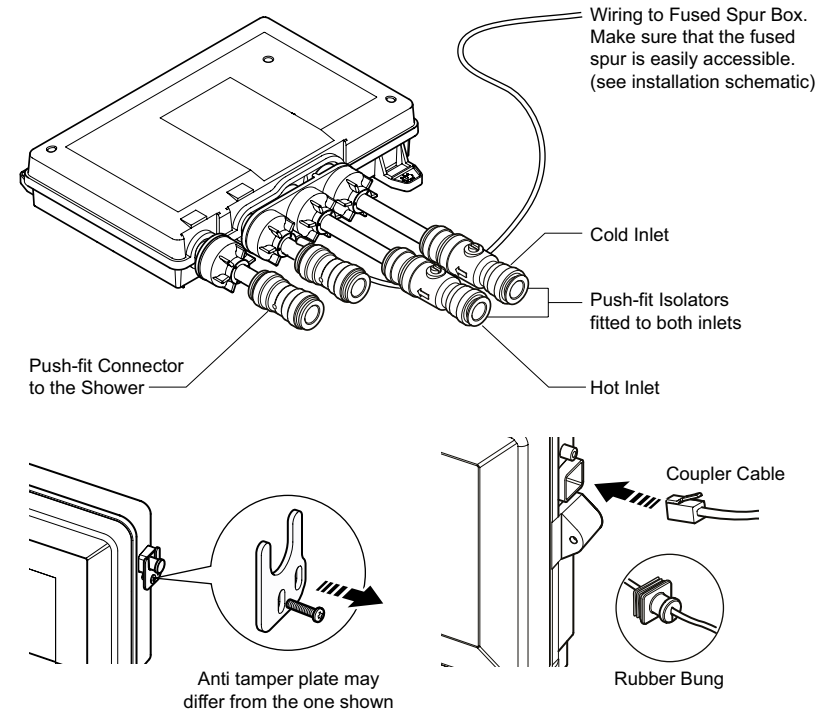
1. Isolate the electrical supply to Digital Mixing Valve.
2. Mark the fixing holes in the required positions. Drill and plug the fixing holes.

Note: Installers may wish to use alternative cavity fixings, when installing onto a dry lined, stud partition, shower cubicle or laminated panel wall structures. However, these methods of fixing are beyond the scope of this guide.

3. Secure the Digital Mixing Valve in position with the fixing screws (supplied).

Caution! Risk of product damage. Make sure both hot and cold supply pipes are flushed thoroughly prior to connection to the Digital Mixing Valve. Any product malfunction caused by pipework debris is not covered under the guarantee.

4. Connect the hot and cold water supply pipes to the Digital Mixing Valve.



5. Remove the anti-tamper plate and the rubber bung from the Digital Mixing Valve.
6. Connect the coupler cable to the valve. Make sure that it is connected correctly.
7. Fit the rubber bung over the cable and fit into the socket to seal the connection.

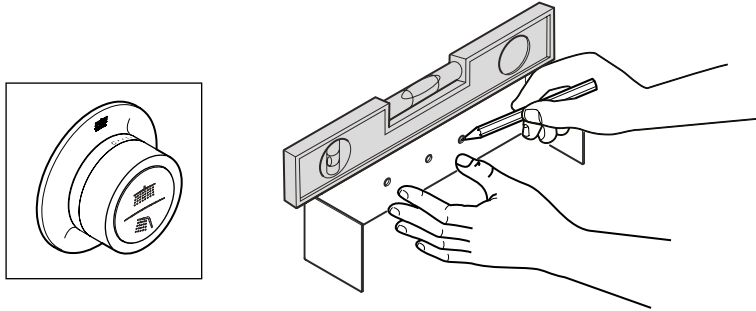
Note: The fittings of the anti-tamper plate may differ from the one illustrated. Make sure that you install it in the correct orientation to suit your product.

8. Re-install the anti-tamper plate and lock in position with the screw.
9. Install the Controller and Shower Fittings. Refer to the appropriate section in this manual.

Installation: Controller

- 1 Position the installation template (supplied) at the position on the wall where you intend to install the Controller.

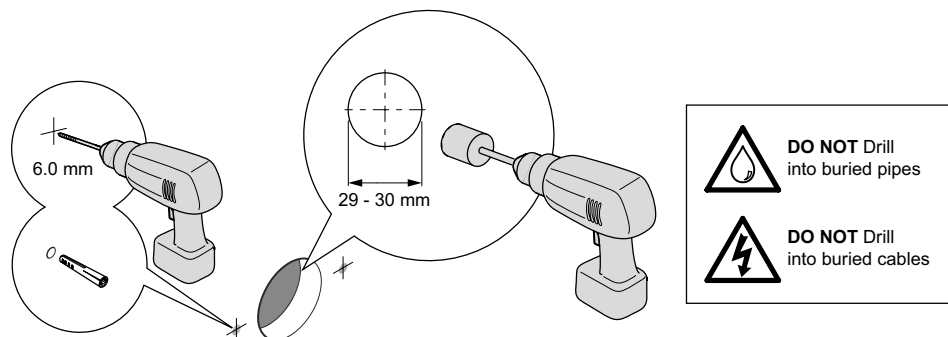
Make sure that the template is level and mark the positions of the fixing holes on the wall.



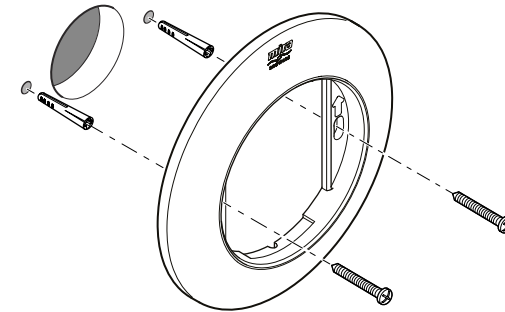
- 2 For solid walls drill the fixing holes for the backplate with a 6mm drill and insert the wall plugs (supplied). For other types of wall structure alternative fixings may be required (not supplied).

Note: The Controller must be installed on a flat and even wall surface avoiding any grout lines.

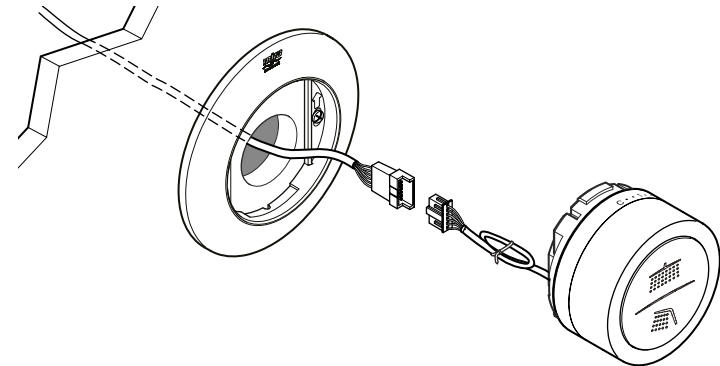
Using a suitable hole saw, drill the hole for the Controller cable as per the dimensions given. Route the cable from the digital valve through the wall.



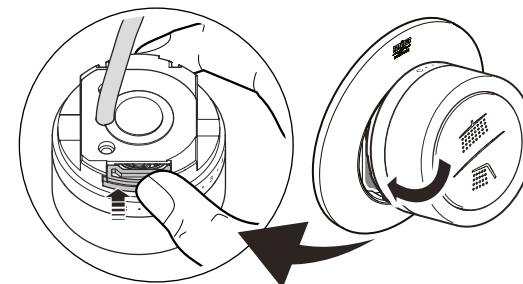
- 3 Fit the backplate to the wall in the orientation shown using the fixing screws (supplied). Tighten by hand, do not over tighten.



- 4 Connect the cable on the back of the Controller to the cable that comes from the valve.



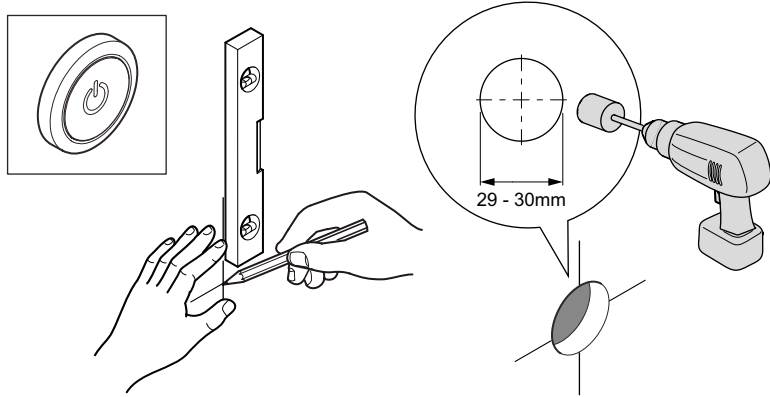
- 5 Locate the top of the Controller in the backplate and press down on the bottom button as you install in position.



Installation: On/Off Remote Button

- 1** Decide on a suitable location for the ON/OFF button. Mark the centre position and draw a vertical line using a spirit level to assist in the alignment of the ON/OFF button. Using a suitable hole saw, drill a 29-30mm diameter hole to a minimum depth of 50mm.

Note: The ON/OFF button must be installed on a flat and even wall surface avoiding any grout lines.

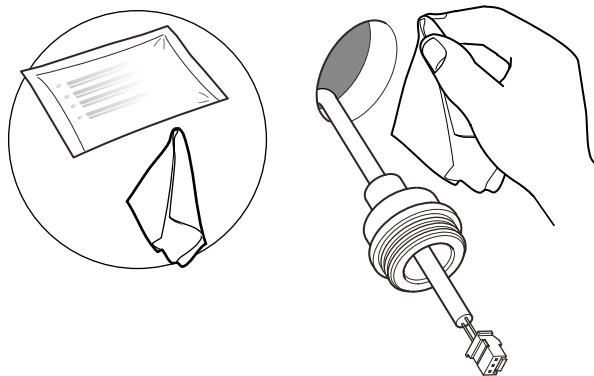


- 2** Route the cable from the digital valve through the hole in the wall.

Note: Make sure that you use appropriate cable conduit / trunking to facilitate maintenance.

Using the cleaning wipe (supplied) clean the surface around the mounting hole.

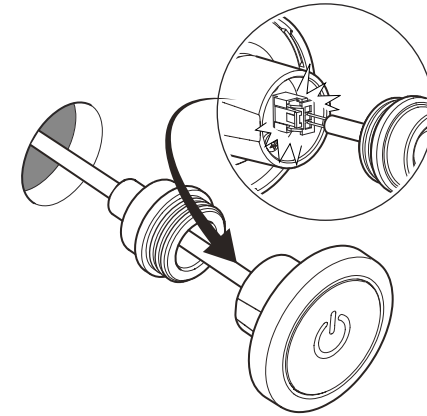
Note: Do not remove the line at this stage.



- 3** Connect the cable to the back of the On/Off Remote Button and push the rubber grommet into place.

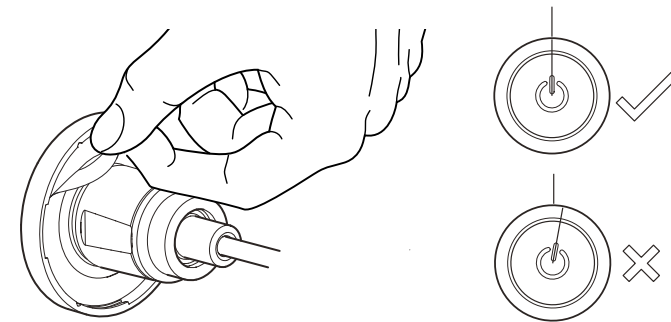
The alignment of the On/Off Remote Button cannot be adjusted when it is fitted.

Make sure to test fitment before removing the tape. This will ensure that there is no clearance issue.



- 4** Carefully remove the paper from the adhesive back.

Carefully, visually align the symbol to the vertical line on the wall. Locate into the hole in the wall and push firmly. Clean off the vertical line once the On/Off Remote Button is correctly installed. If required, the On/Off Remote Button can be removed from the backplate by rotating anticlockwise.



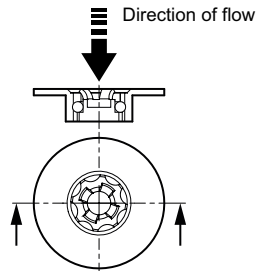
Installation: Shower Fittings

Use of Flow Regulators

It is recommended that appropriate flow regulators should be fitted to the handset and deluge head.

Note: The flow regulator in the deluge head should always be greater than the handset. The customer can use a combination of the provided flow regulators to meet their system and user requirements. The flow regulators provided are as follows:

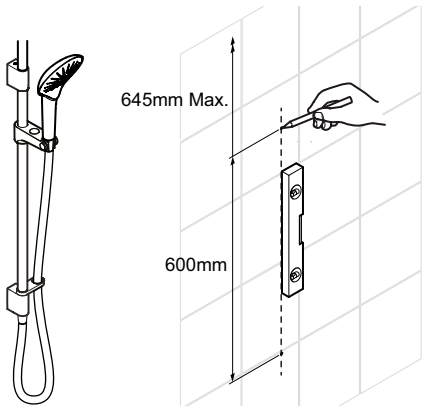
Colour	Flow Rate
White	12 litres/min
Lilac	9 litres/min
Pink	6 litres/min



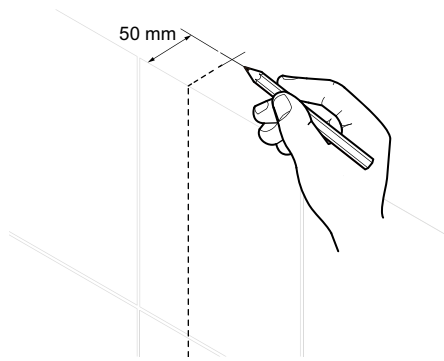
Installation: Ceiling Fed Shower Fittings

Fix at convenient height for all the family. Position the fittings so that water sprays down the centre of the bath, or away from the opening of a shower cubicle. Water should spray away from the Controller when the handshower is held on the slide bar.

1 Mark the positions of the fixing holes for the slide bar.

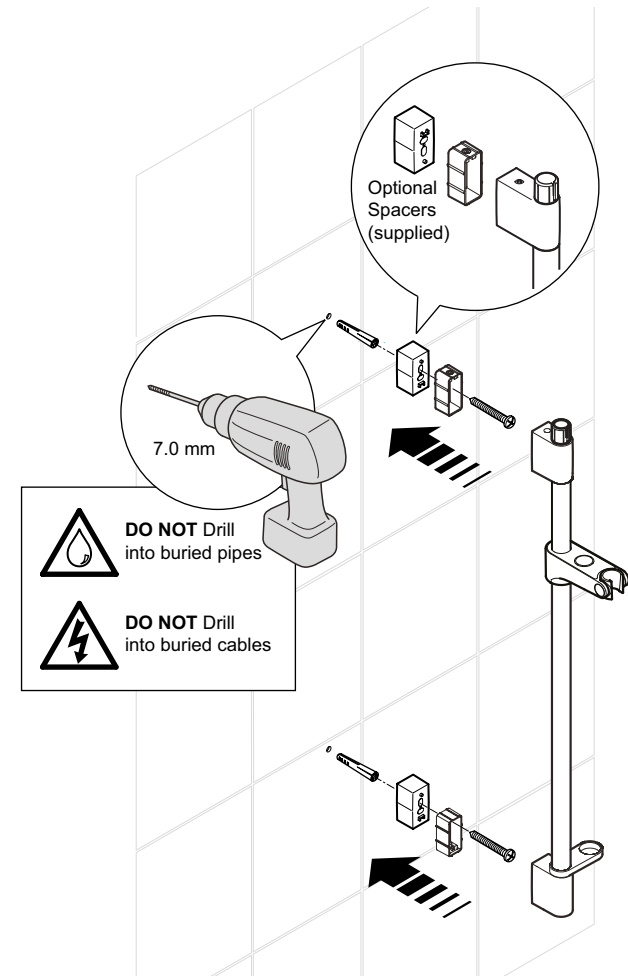


2 Mark the position of the hole on the ceiling. Cut the hole in the ceiling to a diameter of 29mm.

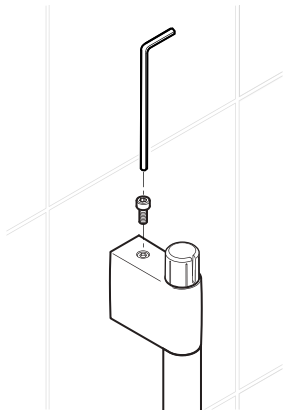


3 Drill the fixing holes in the wall. Fit the wall plugs and the slide bar supports and install the slide bar assembly to the wall.

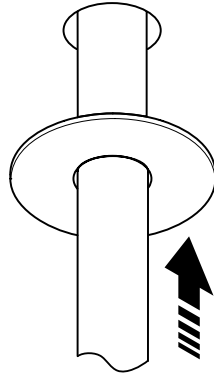
Important! If supplied slide bar spacers are required, centre distance for ceiling hole will increase to 75mm from wall. Use longer fixing screws if you are using the spacers.



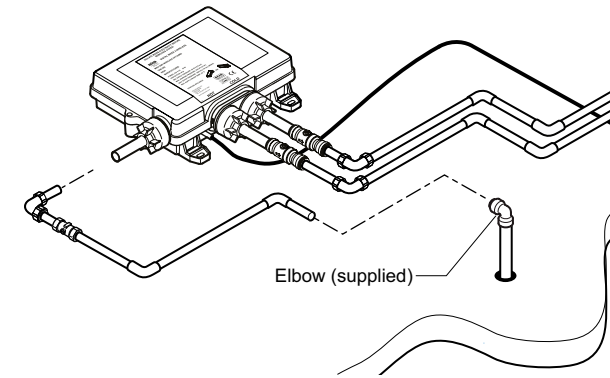
4 Install the screws top and bottom to secure the slide bar in position.



5 Install the falling supply tube.
Note: The falling supply tube may need to be shortened, use a hacksaw to shorten tube. Make sure the rough end is concealed in the ceiling.



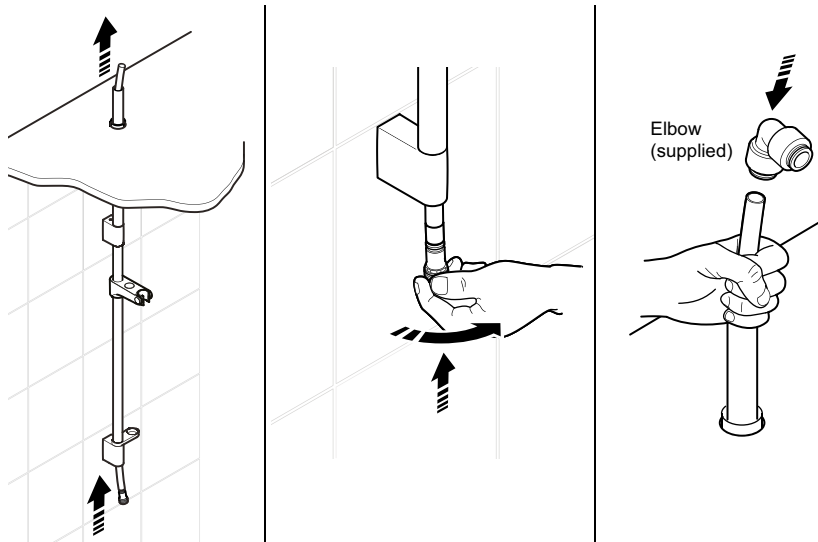
7 **Note: When shortening pipework for use with any push-fit fitting, follow manufacturer's guidelines for finishing and cleaning the pipe.**



6 a. Feed the plastic tube up through the slide bar and into the ceiling.
b. Push and twist plastic pipe end until it "clicks" and locks in place.

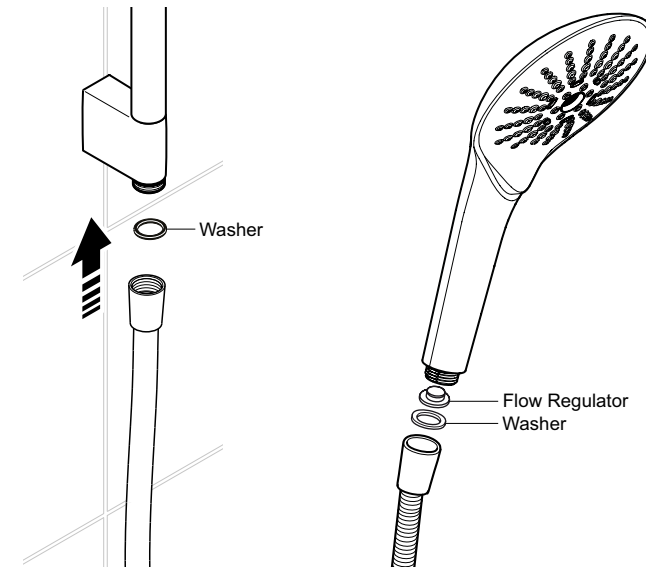
Caution! Do not allow any debris to block the plastic pipe.

Note: If plastic pipe requires shortening make sure there is enough length to fit elbow (supplied) or alternative push-fit/compression fittings (not supplied).



8 a. Fit the shower hose to the end of the slide bar assembly.
Note: Do not fit the handshower until after pipework has been fully flushed through. Refer to 'Commissioning'.

b. Fit the shower hose to the handset. Make sure that you fit the shower hose and flow regulator.

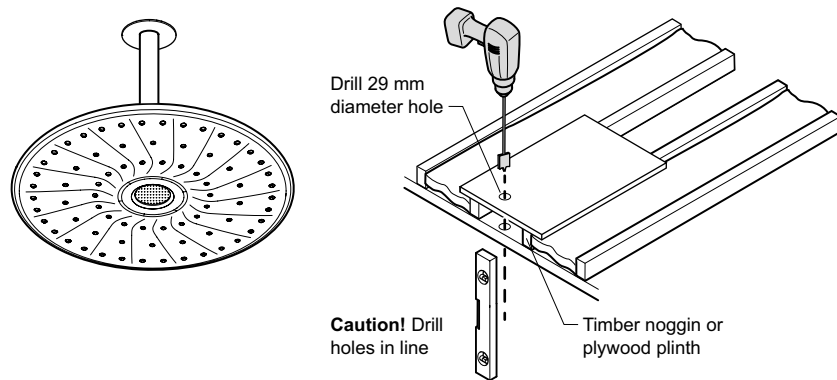


Installation: Ceiling Fed Deluge Head

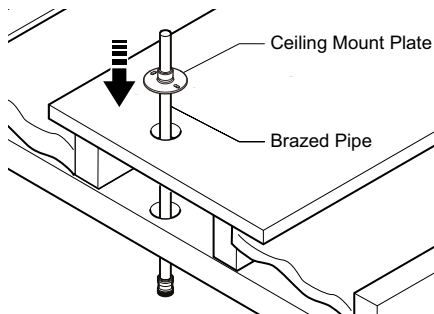
Fix Deluge Head to the ceiling at a convenient height for all the family. Position so that water sprays down over the centre of the bath, or away from the opening of a shower cubicle. The fitting of the Deluge Head into the ceiling will be easier with two persons. When you are working within the bath or shower tray area use a towel or blanket to protect the surface from damage.

- 1 Decide on a suitable position for the Ceiling-Fed Arm avoiding cables and pipes hidden between joists or rafters.

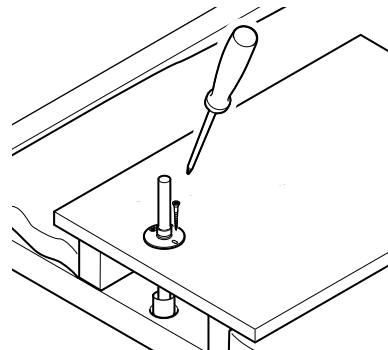
Note: A timber noggin or plywood plinth securely fixed to the joist should be used to mount the Ceiling-Fed Arm.



- 2 Push the brass pipe through the ceiling mount plate then push the threaded end of the brass pipe down through the hole made in the ceiling.



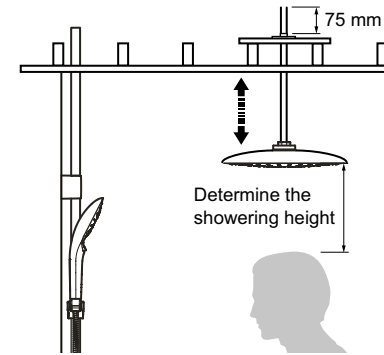
- 3 Centralise the brass pipe in the hole then screw the ceiling mount plate to the wooden support.



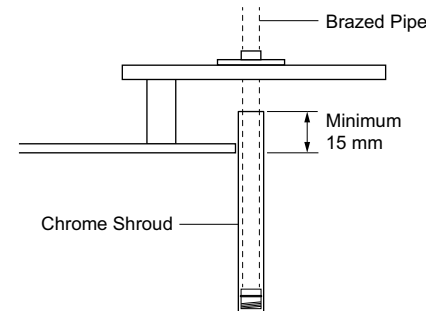
- 4 **Note: Make sure that the deluge head is not installed over the handshower.**

Offer the ceiling-fed arm to the brass pipe and determine the showering height required. Push or pull the brass pipe using a twisting motion to adjust the height. Check the height is correct and use a 15mm pipe cutter to cut the pipe to the desired length.

Note: Cut the brass pipe at least 75mm above the ceiling mount plate to allow room to fit the olive, nut and elbow.

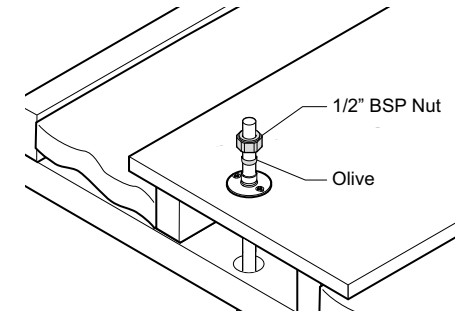


- 6 Offer the chrome shroud to the brass pipe and determine the length required to allow the shroud to conceal the brass pipe and protrude into the ceiling space a minimum of 15mm. Use a pipe cutter to cut the shroud to the desired length.



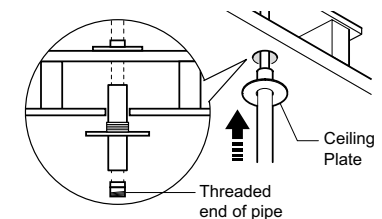
- 5 Secure the brass pipe to the ceiling mount plate with the olive and 1/2" BSP nut.

Note: This is not a water tight connection, tighten sufficiently to clamp the pipe in place.

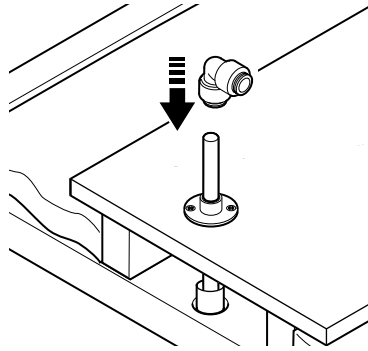


- 7 Push the chrome shroud into the ceiling plate then slide the chrome shroud over the threaded end of the brass pipe and up through the hole until the ceiling plate is secured in the hole and the ceiling plate is flat against the ceiling.

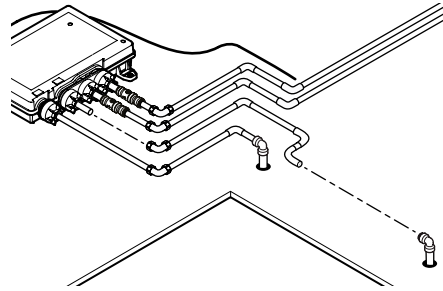
Note: If the hole in the ceiling is oversize use silicone on the underside of the ceiling plate to retain it.



- 8** Connect the elbow (supplied) onto the end of the brass pipe. Push all parts together fully and lock elbow onto pipe using clip supplied



- 9** Connect the shower control outlet pipework to the elbow. Fit an isolating valve between the shower control outlet and the elbow to enable easy maintenance. (Pipe and isolating valve not supplied). Lock pipe to elbow using clip supplied. Follow manufacturers guidelines for fitting alternative push-fit connections and flexible pipework.

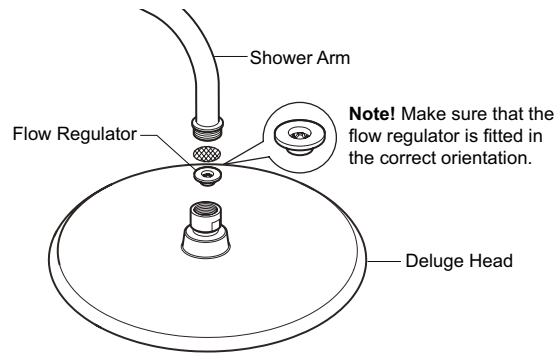
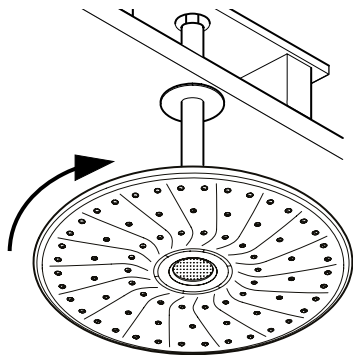


- 10** Ensure pipework is thoroughly flushed through before fitting the deluge head. Screw the fixed shower head onto the brass pipe outlet.

Note: Use two suitably sized wrenches to tighten (approximately 1/4 turn).

Slide the chrome shroud down to conceal the brass pipe. Turn on the shower control and check for leaks.

The CloudCore™ spray plate can be removed for cleaning or changed to the RainCore™ spray plate which is more suitable for hard water areas. Refer to 'Cleaning and Maintenance'.



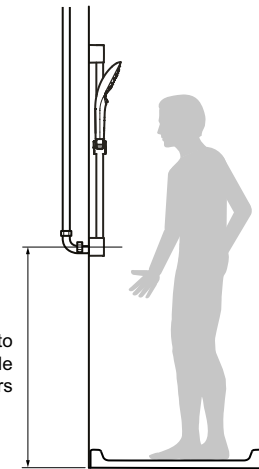
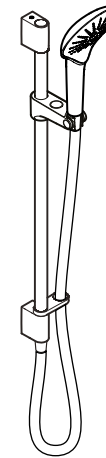
Installation: Rear Fed Shower Fittings

Suitable for solid, dry-lined, stud partition, shower cubicle or laminated panel walls. Plan installation location of the handshower and deluge showerhead before installing fittings kit.

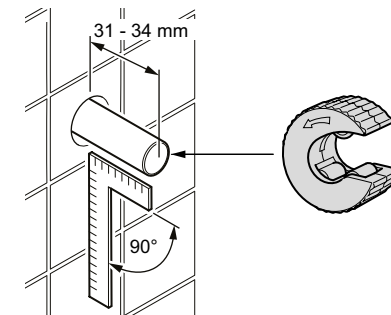
Note: Make sure that the deluge head is not installed over the handshower.

Fix at convenient height for all users. Position so that water sprays down the centre of the bath, or away from the opening of a shower cubicle. Water should spray away from the Controller when the Handshower is held on the slide bar.

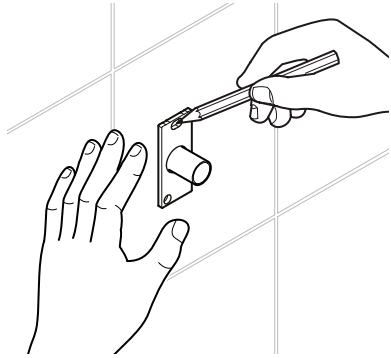
- 1** The right angle connector must be fitted to a waterproof, flat and even wall surface. The screws and wall plugs supplied are suitable for most solid wall installations. Alternative fixing screws for panel structures are not supplied. Use both fixing points to secure the right angle connector, be sure to use fixings appropriate for the chosen wall structure.



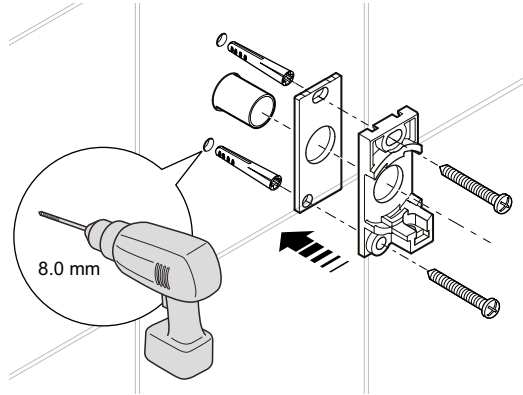
Using a suitable pipe cutter, trim the pipework back to the required depth from the finished wall surface. Remove all burrs and sharp edges.



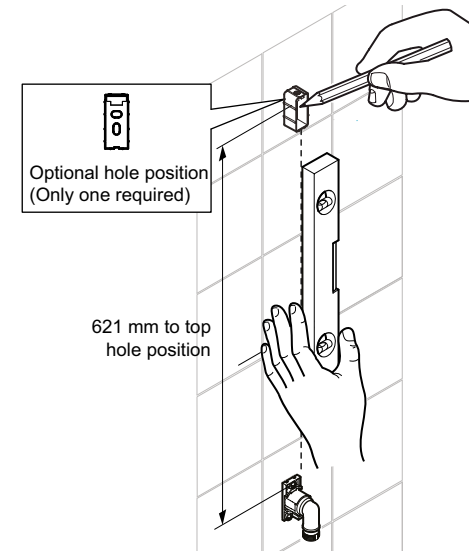
2 Mark the positions for the fixing holes for the RAC back plate.



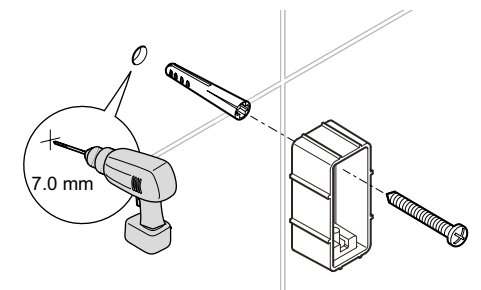
3 Drill the fixing holes, fit the wall plugs and secure the backplate to the wall with two fixing screws.



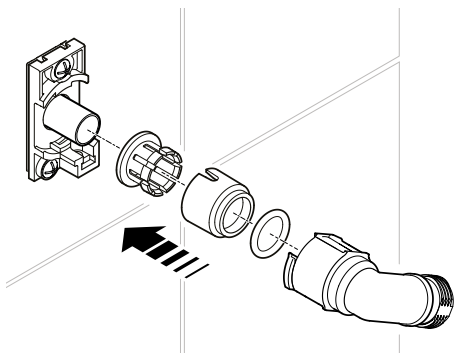
6 Temporarily hold the top support in position. Make sure that it is level and mark through the position of the fixing hole in the top support.



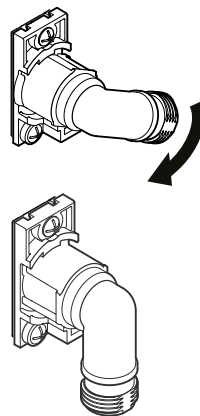
7 Drill the fixing hole for the top support and fit the wall plug.



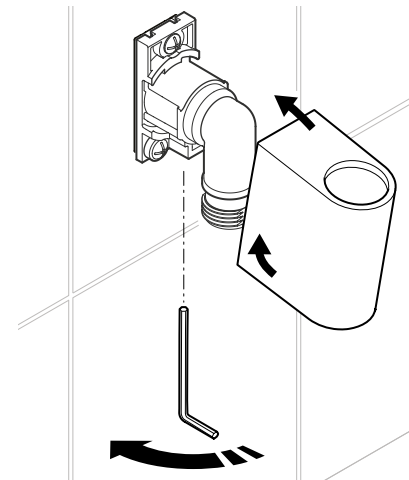
4



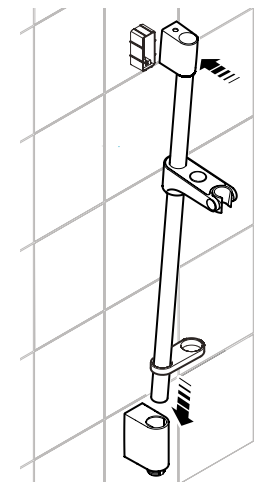
5



8 Fit the cover over the elbow and tighten the screw anti-clockwise.

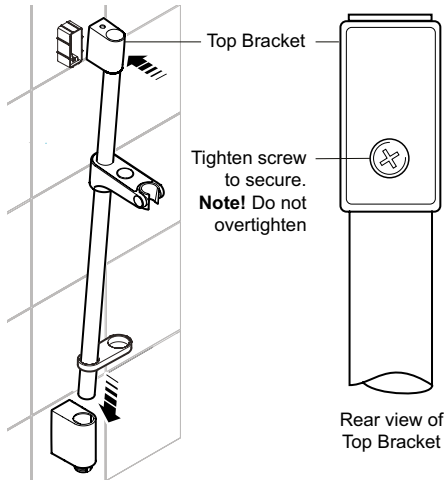


9 Fit all the components onto the slide bar and fit the slide bar assembly in position, making sure that it locates correctly.

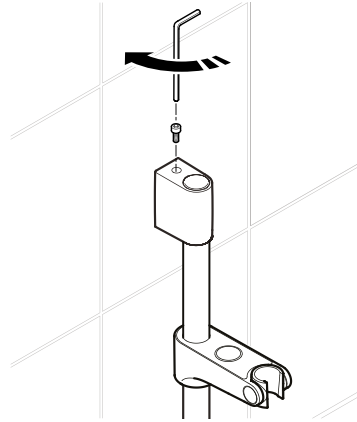


10 Carefully remove the slide bar assembly and tighten the screw on the back of the top bracket to secure in position.

Refit the fit the slide bar assembly in position.

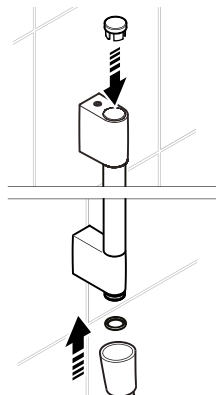


11 Secure the assembly in position with the screws. The top securing screw tightens clockwise, the bottom one anti-clockwise. Do not overtighten.

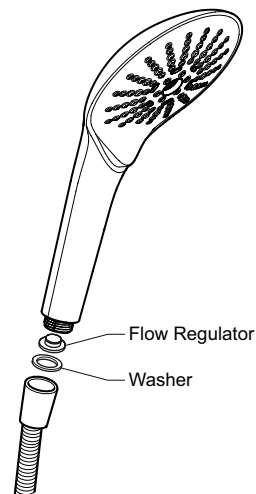


12 Fit the cap to the top of the slide bar and fit the hose to the bottom outlet.

Note: Do not fit the handshower until after pipework has been fully flushed through. Refer to 'Commissioning'.



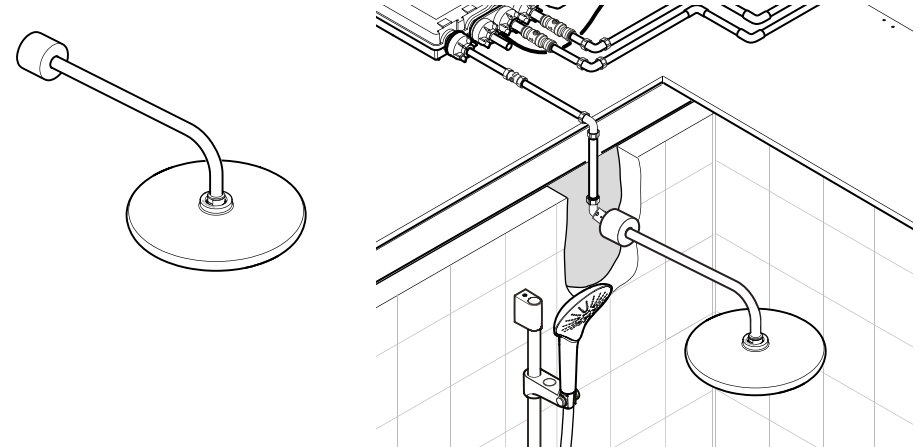
13 Fit the shower hose to the handset. Make sure that you fit the shower hose and flow regulator.



Installation: Rear Fed Deluge Head

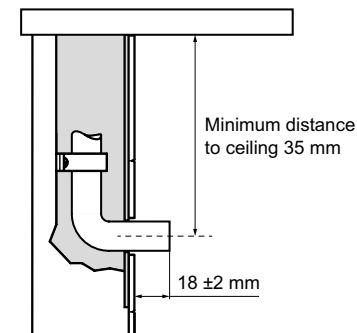
Fix at convenient height for all users. Position so that water sprays down the centre of the bath, or away from the opening of a shower cubicle. Make sure that the water sprays away from the Controller.

1 **Note: Make sure that the deluge head is not installed over the handshower.**



2 The outlet pipe must protrude 18mm (± 2 mm) from the finished wall surface and a minimum 35mm from the ceiling.

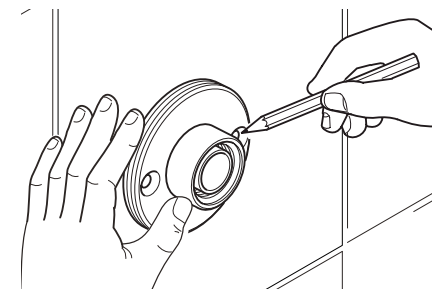
Note: Cut the pipe to the correct length and remove any burrs.



3 Mark the positions of the backplate fixing holes.

Caution! Be aware of hidden pipes or cables.

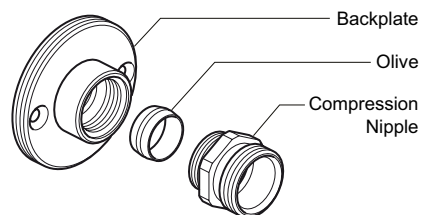
For solid walls drill the fixing holes for the backplate with a 6mm drill and insert the wall plugs (supplied). For other types of wall structure alternative fixings may be required (not supplied).



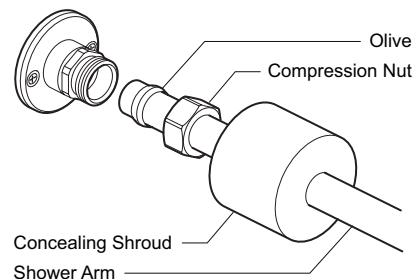
4 Carefully fit the backplate over the outlet pipe and secure with the fixing screws (supplied).

Caution! Take care not to damage the 'O' Seal in the back of the backplate.

Fit the olive and compression nipple over the outlet pipe and tighten the compression nipple.



5 Fit the concealing shroud, the compression nut and the olive onto the shower arm. Fit the shower arm into the compression nipple and tighten the compression nut. Hand tighten the concealing shroud onto the backplate.

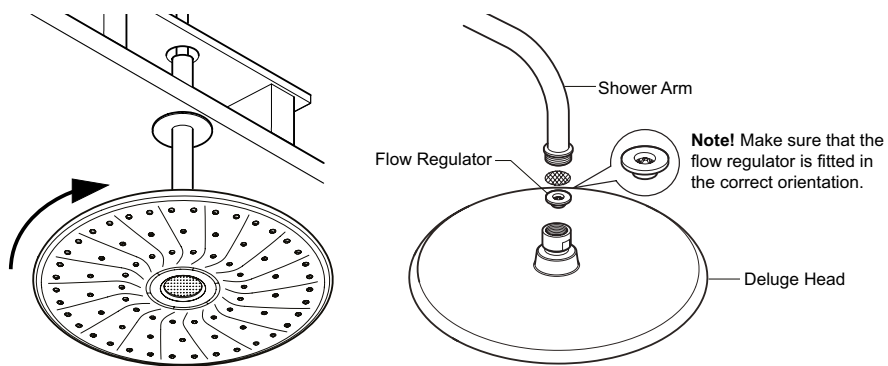


6 Ensure pipework is thoroughly flushed through before fitting the deluge head. Screw the fixed shower head onto the brass pipe outlet.

Note: Use two suitably sized wrenches to tighten (approximately 1/4 turn).

Slide the chrome shroud down to conceal the brass pipe. Turn on the shower control and check for leaks.

The CloudCore™ spray plate can be removed for cleaning or changed to the RainCore™ spray plate which is more suitable for hard water areas. Refer to 'Cleaning and Maintenance'.



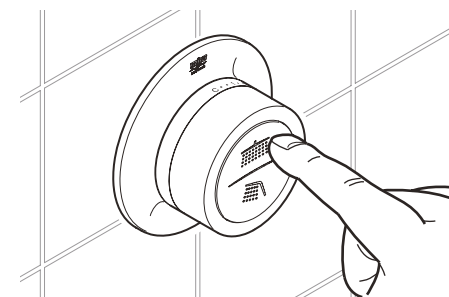
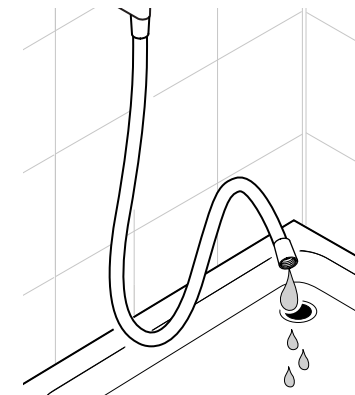
Commissioning

1 Turn on electrical supply to Digital Mixer Valve.

2 Make sure the end of the hose is in either the bath, shower tray or other water catchment area.

3 Press the button to turn the shower on and reduce temperature to full cold. For Low Pressure (pumped) version, let shower run in order to prime the pump. For long pipe runs, allow 3 - 4 minutes for priming.

Caution! Risk of product damage. Do not run Pumped Valve (low pressure version) without a water supply for longer than 5 minutes during priming.



4 Run cold water through (approximately 2 minutes) and check entire installation for water leaks. Press the Controller button to turn the shower off. Fit the second hose washer and handshower.

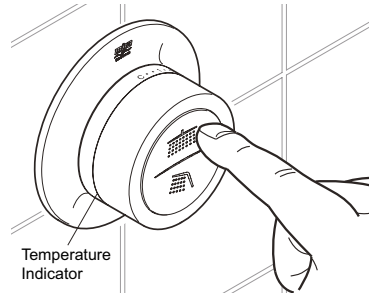
5 Press the Controller button to turn shower on. Test operation of shower by increasing/decreasing the temperature.

Set Up: Controller

Maximum Temperature Setting with the Controller

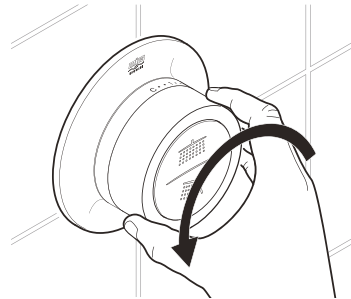
- 1 Hold down the Deluge showerhead Button (top half) for 10 Seconds approx. until the Temperature Indicator light pulses on/off.

Note: After 5 seconds the lights will pulse to indicate pairing mode, you need to continue to hold the button for the entire 10 seconds.



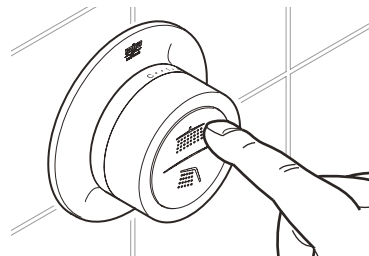
- 2 Adjust the temperature indicator in accordance to the table below to set the desired maximum temperature.

Temp. Indicator Position	Temp
C	Exit No Change
1-3	41°C
4-6	45°C
7-9	48°C
H	Exit No Change



Caution! Make sure that the maximum outlet temperature is suitable and safe for all users.

- 3 Press the Deluge showerhead Button to set the maximum temperature. The temperature indicator light will flash twice to confirm the setting has been completed.



Set Up: Mobile Phone

You can set up your shower using your iPhone or Android Phone with the Mira App.

- 1 Download the Mira App via the appropriate application store onto your compatible device:
Note: Not all Apple or Android devices are compatible, please ensure you are using up to date Apple or Android Software / Operating System.

Mira endeavour to ensure that the Mira Showering App is compatible with the latest versions of Apple and Android Operating Systems. If your device is not capable of running the latest versions of Operating Systems the Mira App may NOT be compatible with your device.

Your shower can be set up either by using the Controller or via the Mira APP. See "Setting up your Shower".

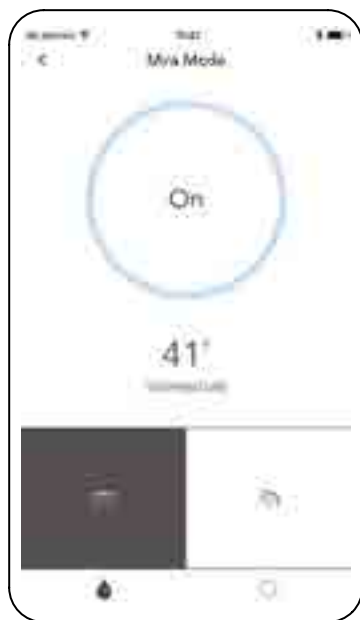
- 2 Once the Mira App has been installed, open the application on your device and follow the on-screen instructions to connect to your phone to your Digital Mixing Valve.



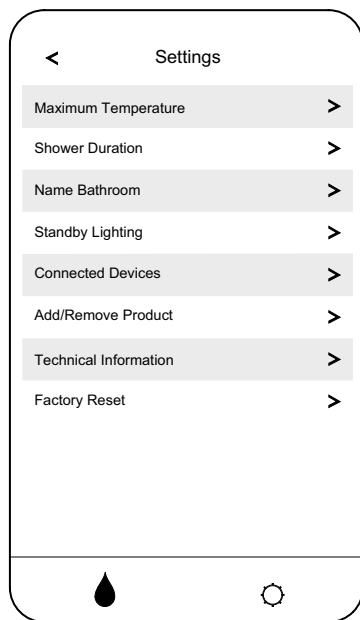
3 You can then use the Mira App to control your Digital Mixing Valve remotely via the water droplet symbol and/or adjust your setting using the gear symbol.

Warning! Never remotely operate or alter any of the Mira Mode Maxim shower settings if it is already occupied and / or being used by another person. This could result in flooding of the shower cubical or scalding of the user.

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Example Main Control Menu (varies by product)



Example Settings Menu (varies by product)

Fault Diagnosis

Read the section “Important Information” first. If any maintenance is required then it must be carried out by a competent tradesperson. Before replacing any parts make sure that the underlying cause of the malfunction has been resolved.

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

Symptoms	Probable Cause	Possible Remedy
Loss of control via the User Interface or On/Off Remote Button. Shower turning On/Off or altering blend temperature unexpectedly.	Another user is controlling the shower remotely with the mobile phone APP.	Not product fault. Ensure no one else uses the mobile phone APP whilst you are showering.
No water flow / will not turn on.	HP/Combi valve fitted to a Pumped Gravity water system.	HP/Combi valves are not suitable for Pumped Gravity water systems. Refer to 'Typical Installations'.
	No power to Digital Mixing Valve.	Check electrical connection and power supply.
	Inlet water supply isolators not fully turned on.	Check and remedy.
	Inlet water supply failure.	Check and remedy.
	Inlet filters or check valves blocked.	Check and remedy, refer to 'Maintenance'.
	Outlet hose or handset blocked.	Check and remedy. Refer to "Cleaning and User Maintenance".
	Digital Mixing Valve air locking.	Check for correct installation practices, repeat commissioning procedure and rearrange pipework to avoid airlock forming, refer to 'Typical Suitable Installations'.
	Digital Mixing Valve box failure.	Contact Customer Services.
Low flow.	Inlet water supply isolators not fully turned on.	Check and remedy.
	Inlet filters or check valves blocked.	Check and remedy, refer to 'Maintenance'.
	Outlet hose or handset blocked.	Check and remedy. Refer to "Cleaning and User Maintenance".
	Inlet water pressures too low.	Check maintained water pressure is within recommended range, refer to 'Specifications'.
	Digital Mixing Valve air locking.	Check for correct installation practices, repeat commissioning procedure and rearrange pipework to avoid airlock forming, refer to 'Typical Suitable Installations'.
	Digital Mixing Valve box installed above cold water storage cistern (Pumped valve only).	No product fault. Appliance not suitable for negative head installation, refer to 'Installation'.

Symptoms	Probable Cause	Possible Remedy
Low flow (cont.)	Digital Mixing Valve box failure.	Contact Customer Services.
Flow stops during showering	'Shower run time' setting is enabled. Shower run time reduces the shower run time to a user defined time.	No product fault, refer to 'using the shower' in the user interface manual or check the 'shower duration' within the APP.
	Outlet hose or handset blocked.	Check for correct installation practices, repeat commissioning procedure and rearrange pipework to avoid airlock forming, refer to 'Typical Suitable Installations'.
	Combination boiler cutting in and out (HP/Combi valve only) causing blend temperature fluctuations.	Refer to 'Use of Flow Regulators' for correct operation.
	Cold inlet water supply pressure too low or fluctuating.	Ensure the water supply pressures are stable and nominally equal, refer to 'Specifications'.
	Cold inlet water supply failure.	Check and remedy.
	Inlet filters or check valves blocked.	Check and remedy, refer to 'Maintenance'.
	Digital Mixing valve air locking.	Check for correct installation practices, repeat commissioning procedure and rearrange pipework to avoid airlock forming, refer to 'Typical Suitable Installations'.
	Reversed inlet supplies.	Check and remedy. This can be reversed easily via the APP - 'Settings' screen - 'Outlet Setup' screen.
	Digital Mixing Valve box failure.	Contact Customer Services.
Showering temperature too cool	Temperature adjustment on interface set too low.	Increase temperature by rotating temperature indicator.
	Inlet filters or check valves blocked.	Check and remedy, refer to 'Maintenance'.
	Outlet hose or handset blocked.	Check and remedy.
	Reversed inlet supplies.	Check and remedy.
	Hot inlet water supply temperature is too cool.	Increase hot inlet water temperature to between 55°C and 65°C, refer to 'Specifications'.
	Insufficient quantity of stored hot water.	Hot water supply running out, increase storage capacity to minimum 120 litres, refer to 'Specifications'.
	Inlet water supply pressures are unstable or imbalanced.	Ensure the water supply pressures are stable and nominally equal, refer to 'Specifications'.
	Combination boiler cutting in and out (HP/Combi valve only).	Refer to 'Use of Flow Regulators' for correct operation.
Outlet pipe run is too long.	Ensure outlet pipe work is thermally lagged.	

Symptoms	Probable Cause	Possible Remedy
Showering temperature too cool (cont.)	Digital Mixing Valve box failure.	Contact Customer Services.
Shower temperature too hot or fluctuates.	Temperature adjustment on Controller set too high.	Increase the temperature by rotating the temperature indicator.
	Hot inlet water supply temperature is too hot.	Reduce hot inlet water temperature to between 55°C and 65°C, refer to "Specifications".
	Inlet filters or check valves blocked.	Check and remedy, refer to 'Maintenance'.
	Combination boiler cutting in and out (HP/Combi valve only) causing blend temperature fluctuations.	Refer to "Use of Flow Regulators" for correct operation.
	Inlet water supply pressures are unstable or imbalanced.	Ensure the water supply pressures are stable and nominally equal, refer to 'Specifications'.
	Shower temperature affected by the use of adjacent hot/cold tap. Insufficiently sized pipework to feed both Digital Mixing Valve and taps at the same time.	Increase pipe sizes or separately feed shower, refer to 'Installation' for correct plumbing method.
	Digital Mixing Valve box or Controller failure.	Contact Customer Services.
	Internal leaking.	Pumped Gravity LP valve fitted to a HP/Combi water system.
Digital Mixing Valve box failure.		Contact Customer Services.
No shut off / continuous flow / shower fitting drain down.	Natural drain down of shower fittings.	No product fault. It is natural for all shower outlets to continue to expel water for a short period of time after use. It is not uncommon for larger deluge shower heads, particularly those connected to long outlet pipe runs and therefore holding large volumes of water, to drain down water several hours after use due to the changes in the ambient temperature. We would therefore recommend that all water outlets are kept enclosed within the water catchment area.
	Digital Mixing Valve box failure.	Contact Customer Services.
Noise.	Digital Mixing Valve air locking.	Check for correct installation practices, repeat commissioning procedure and rearrange pipework to avoid airlock forming, refer to 'Typical Suitable Installations'.

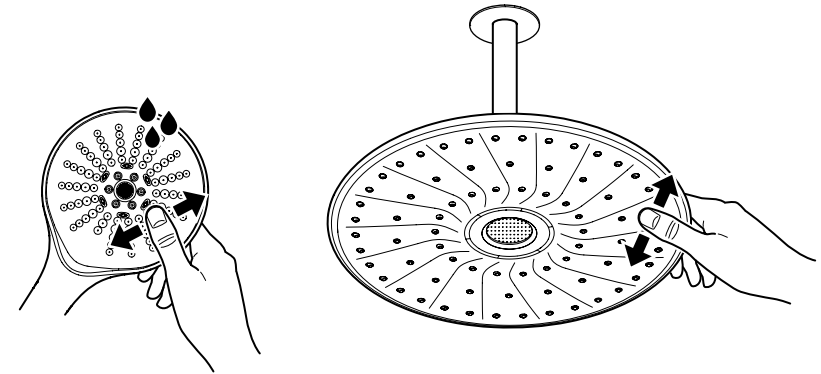
Symptoms	Probable Cause	Possible Remedy
Noise (cont).	Water hammer.	Ensure all pipework is securely fixed, refer to 'Installation'.
	Amplified acoustic noise from the pump due to structure of wall or flooring mounting.	The type of wall or flooring the appliance is fixed to will affect the perceived noise level; solid walls will provide a quieter operation.
	Digital Mixing Valve box failure.	Contact Customer Services.
Unable to download the Mira Mode Showering App.	Out of date mobile phone operating system.	Update mobile phone to the latest operating system. Note! The Mira Mode showering App will only run on the latest Apple and Android Operating Systems.
Repeated Mira Mode Showering App Failures.	Mira Mode Showering App corrupted.	Delete the Mira Mode showering App, reboot the mobile phone and re-install the Mira Mode showering App.
No Lights on interface.	Not connected to valve.	Check all cables and connections
	No power to valve.	Check power supply.
	Lights turned off in APP.	Refer to settings in the APP
	Faulty user interface.	Contact Customer Services.
Interface Button Flashing (2 times a second).	Wrong interface connected.	Check the App 'Technical Information' Screen. Text will be black if correct red if wrong. Contact Customer Services.
	Intermittent connection to valve.	Check all cables and connections.
	Stuck button on interface or Digital Mixing Valve fault.	Contact Customer Services.
Temperature Indicator and Interface button flashing (2 times a second). Showering temperature has got too hot and the Digital Mixer Valve has safely shutdown.	Hot inlet water supply temperature is too high.	Reduce hot inlet water temperature to between 55°C and 65°C, refer to "Specifications".
	Combination boiler cutting in and out (HP/Combi valve only) causing blend temperature fluctuations.	Refer to "Use of Flow Regulators" for correct operation.
	Cold inlet water supply pressure too low or fluctuating.	Ensure the water supply pressures are stable and nominally equal, refer to "Specifications".
	Cold inlet water supply failure.	Check and remedy.
	Inlet filters or check valves blocked.	Check and remedy, refer to "Maintenance".
	Digital Mixing Valve air locking.	Check for correct installation practices, repeat commissioning procedure and rearrange pipework to avoid airlock forming, refer to "Typical Suitable Installations".
	Reversed inlet supplies.	Check and remedy.
Fault with On/Off Remote Button.	Not connected to valve.	Check all cables and connections.
	Faulty On/Off Remote Button	Contact Customer Services.

Cleaning and Maintenance

Cleaning

Many household and commercial cleaners, including hand and surface cleaning wipes contain abrasives and chemical substances that can damage plastics, plating and printing and should not be used. These finishes should be cleaned with a mild washing up detergent or soap solution, and then wiped dry using a soft cloth.

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 nozzles.

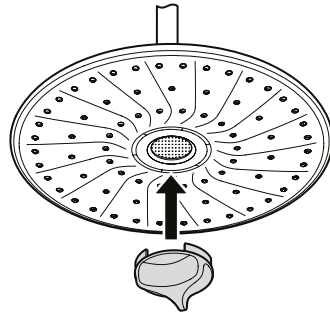


Inspecting the hose

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.

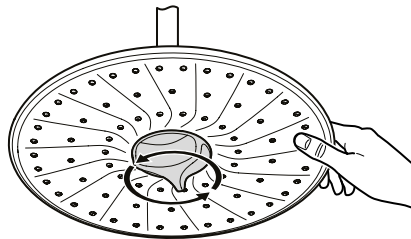
Cleaning the CloudCore™ spray plate

- 1 Insert the spray plate removal tool into the corresponding feature in the core sprayplate.

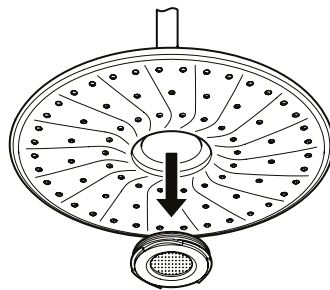
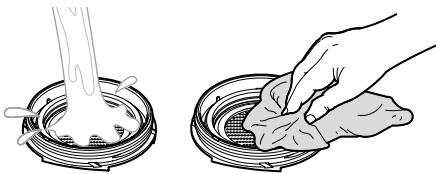


- 2 Hold the deluge showerhead with one hand and turn the removal tool anticlockwise to unscrew the core sprayplate from the showerhead.

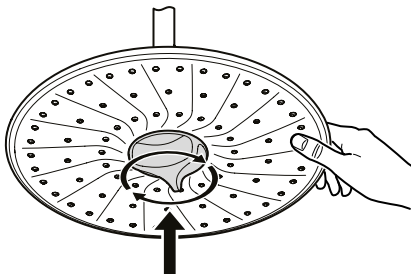
Note: There may be some residual water in core spray plate.



- 3 Clean the core spray plate silver mesh with mild washing up detergent or soap solution, rinse under water and wipe using a soft cloth or brush.



- 4 Replace with alternative or cleaned CloudCore™ or RainCore™ spray plate. Insert the spray plate tool into the corresponding feature and turn clockwise to tighten.



Replace/Clean the Check Valves/Filters

Read the section “Important Information” first.

Before replacing any parts ensure that the underlying cause of the malfunction has been identified. If the Digital Mixing Valve is dismantled during installation or servicing then upon completion the product must be inspected to ensure there are no leaks.

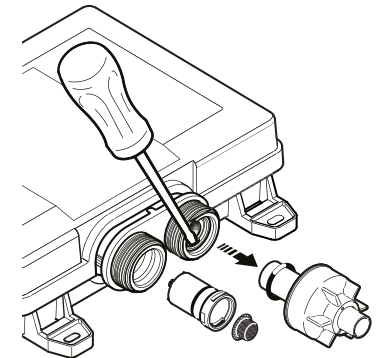
Warning! There are no user serviceable components beneath the cover of the appliance. Only a competent tradesperson should remove the cover.

Checkvalve Cartridges and Filters - Removal and Installation

Hot water entering the cold supply, or vice versa, indicates that immediate attention is necessary. This is carried out by removing and cleaning, or renewing as necessary, the checkvalve cartridges.

Note: Ensure for HP Mixer Valve that flow regulator is refitted in hot supply, if previously fitted.

Isolate the electrical and water supplies to the Digital Mixer Valve, and open an outlet fitting to release pressure and to assist the draining of residual water. Unscrew the plastic nuts and either withdraw the pipework or remove Digital Mixing Valve to gain access to the checkvalve cartridges and filters. Use a flat blade screwdriver to carefully lever the cartridges out. Remove the filters and clean or renew. Refit seals, pipes and plastic nuts. Plastic nuts require hand tightening only. Restore water supply and electrical supply. Test shower and check for leaks.



Disposal and Recycling

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. For more information about recycling, please contact your local council office.

Notes: