Milano
Digital Shower

Installation Guide

Contents

Safety Information

Please read carefully...

✔ This product must be installed by a qualified and competent person in accordance with all relevant current water supply regulations.

✔ All showers requiring an electrical connection must be installed by a qualified person following the latest version of BS7671 (Wiring Regulations) and certified to current building regulations.

✔ Before any electrical connections are made, the electricity supply must be turned off. Any electrical installation must be carried out only by a qualified person.

✔ This product is not intended for use by persons (including children) with reduced capabilities unless they are supervised or understand the instructions for the safe use of this product.

✔ The shower must be not used with a hot water supply temperature over 75°c.

✔ Hot and Cold water should be balanced and set at a pressure of at least 1 bar minimum.

✔ The processor is supplied factory pre-set at a maximum temperature of 38□. The maximum temperature can be calibrated to be higher.

✔ This product is suitable for domestic use.

Installation Information

Processor

✔ The units need a constant supply of water at a stable temperature delivered at 1 bar of pressure or more. Other water using products on the system should not significantly affect either the temperature or flow. If a pump is used to boost pressure in a Gravity fed system it should be installed on the supply side of the Processor and Diverter. Ensure that all instructions are followed for a successful installation.

✔ *Important:* The processor must be installed in a location that is safely accessible for servicing and maintenance purpose.

✔ This processor must not be installed in situations where either the ambient temperature is likely to exceed 40□ or where freezing may occur.

Control Panel

✔ The control panel must not be installed in situations where the ambient temperature is likely to fall below 5◻ or rise above 40◻. It is water proof and is powered by a low voltage supply, so can safely be installed in a showering area.

Cables

✔ Cables which are chased into the wall must be protected by a conduit or sheathing to allow removal for service or maintenance.

✔ Surface mounted cables should be protected by a conduit, even in a loft, where there may be a risk of damage from vermin.

✔ Please check for hidden pipes or cables before drilling any holes.

Pipework

✔ Long pipe runs, on both inlet and outlet, will reduce the flow rate at the shower head, 22mm pipe should be used for supply and reduce down to 15mm as close to the processor as possible to reduce pressure losses and help maintain flow rate. To optimize performance minimize the number of elbows used.

✔ Install isolating valves on the supply pipes to enable easy maintenance.

✔ All copper pipework must be cross-bonded and connected to an earth point.

✔ Before connecting pipework to the valves, flush for at least 5 minutes to ensure that any debris is washed out.
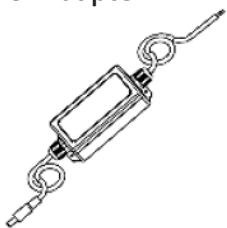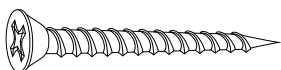
Box Contents
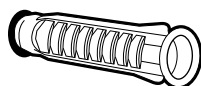
Control Panel x 1
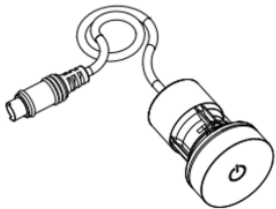
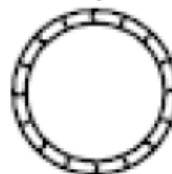

Processor x 1
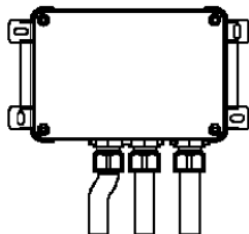
Power Adapter x 1

Screw 3.5x25mm x 8

Wall plugs x 8

Red o-ring x 2

Please note : Red o-rings should be fitted on all female connectors during assembly to ensure they are watertight

Specifications

Electrical Parameters

Input Supply Voltage : **AC110V-230V 50Hz-60Hz**

Supply voltage of control panel, processor and diveter : **DC12V**

Maximum load : **18W**

Water Pressures

Inlet cold water static pressure : **1bar-10bar**

Inlet cold water dynamic pressure : **1bar-5bar**

Inlet hot water static pressure : **1bar-10bar**

Inlet hot water dynamic pressure : **1bar-5bar**

Outlet water flow rate @ 3 bar : **25L/min**

Temperatures

Maximum Temperature (FACTORY PRESET) : **38°C**

Maximum Temperature (SETTING RANGE) : **25°C-45°C**

Minimum Temperature : **25°C, Full cold water selectable**

High Temperature Protection : **49°C**

Temperature Stability : **+/- 1°C at recommended supply conditions**

Hot water range : **55-75°C**

Cold water range : **5-25°C**

Ambient temperature : **5-40°C**

Humidity : **95% non-condensing**

Times

Power off water protection time : **≤3s**
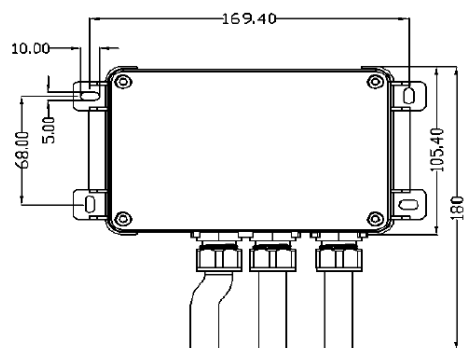
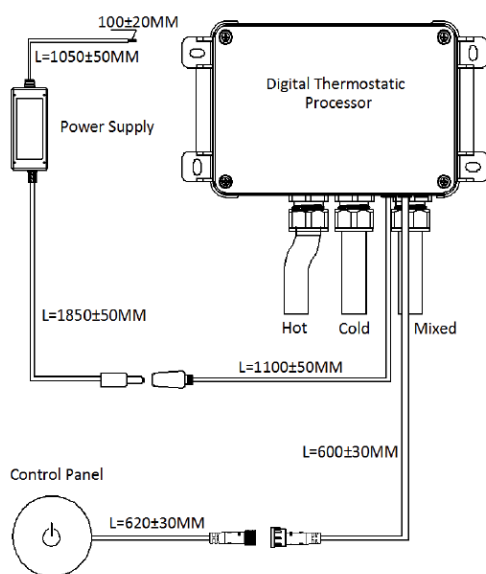Cold water supply failure protection : **≤2.5s**

IP RATING : **IPX4**

General Installation Schematic

IMPORTANT : Do not seal the processor in the wall, you must leave a method of easy access for maintainence purposes.
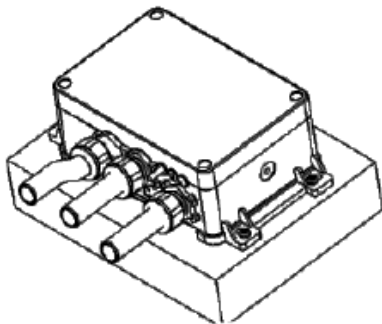

System Connection Schematic

Installation

Step 1 : Mark the fixing holes for the processor and diverter in the required position (as per the drawing on page.5)

Step 2 : Drill out the holes and insert wall plugs.

Step 3 : Secure the Processor position with the fixing screws.

Step 4 : The processor is fitted with copper tails. We recommend using push fit connectors for installation.

Push Fit connector to the shower fittings (Diverter)


Push fit fitted to both inlets
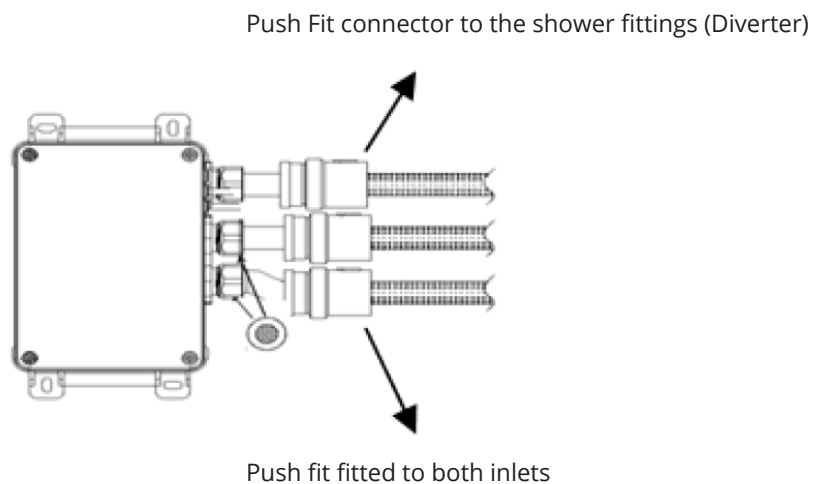
NOTE: Flush out the hot and cold supply pipes for 5 minutes minimum before connecting.

All inlets and outlet are pre-assembled to ensure water tightness. There is no need to further tighten the brass nuts, otherwise it might affect water sealing over time.

Ensure hot and cold water supply connect with the correct inlets. Hot and cold water inlets are labelled in red and blue, respectively.

Ensure that all the pipe work is perpendicular to the processor , not at an angle. Otherwise, external force applied on the inlet might cause leaking over time.
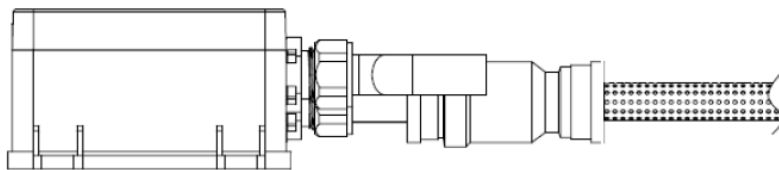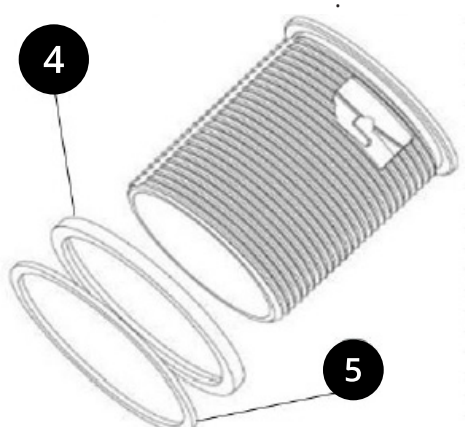
When connecting the water supplies do not apply lateral force to the inlets.

Panel Installation
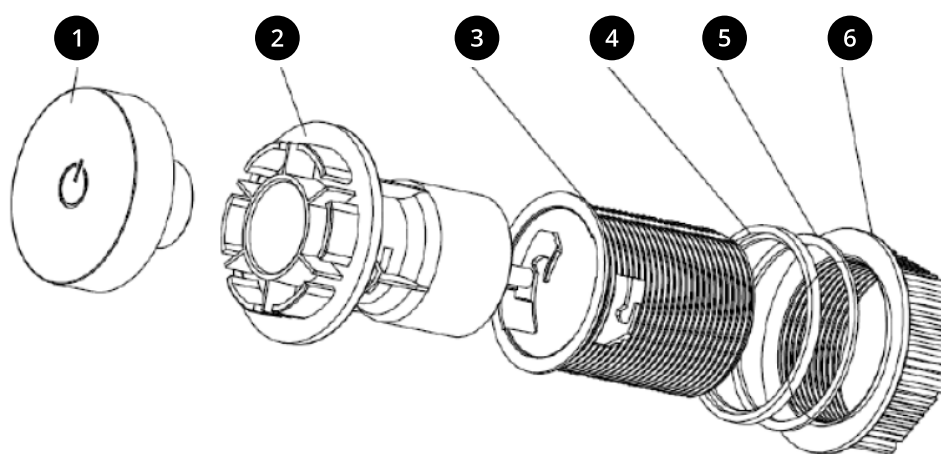
| 1 Control Knob | 2 Control Body | 3 Installation bracket | 4 Chrome Plated ring |

| 5 Foam Sealer | 6 Clamp nut |

Step 1 : Put the Foam Sealer and Chrome Plated Ring on the installation bracket

Step 2 : insert the installation bracket into the hole in the wall / installation surface .
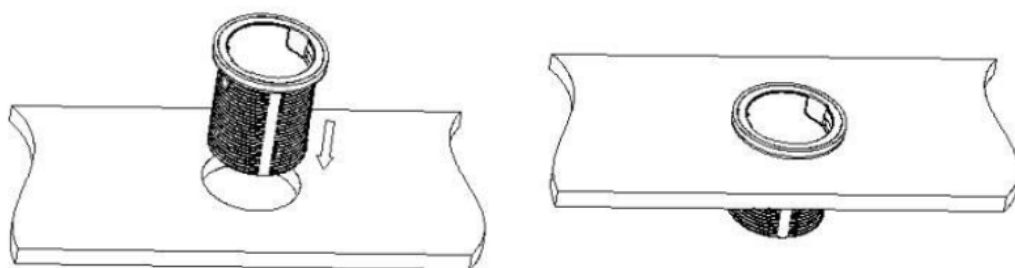
Step 3 : Screw the clamp nut onto the installation bracket to secure it to the wall.
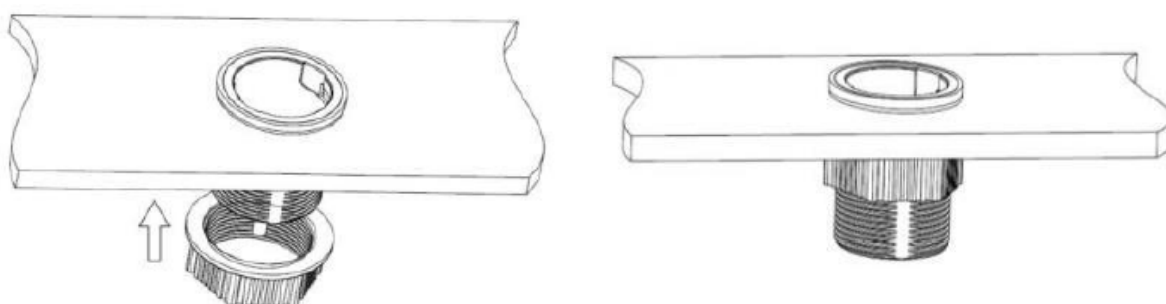
Step 4 : Insert the control body and turn clockwise to lock the control panel on the wall.
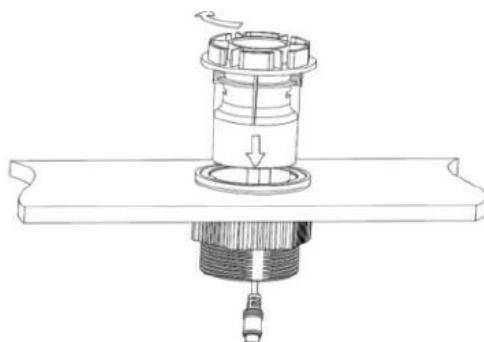
Step 5 : Push the control knob onto the control body to complete.
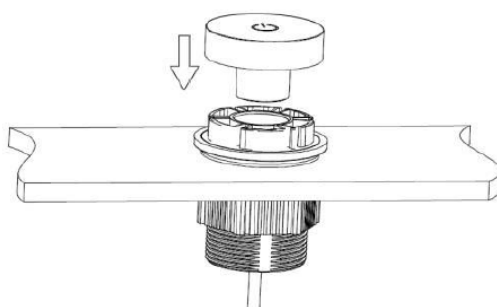
Step 6 : Attach the control and display panel to the communication cable coming from the wall or shower

panel. *Remember to put the red o-rings on any female connectors before connecting.*

Commissioning

Power on Processor - Turn on the mains supply to the processor and diverter so that the system is in

standby.

Power on control panel - Press the knob once to turn on the system, and the knob will illuminate Purple. The

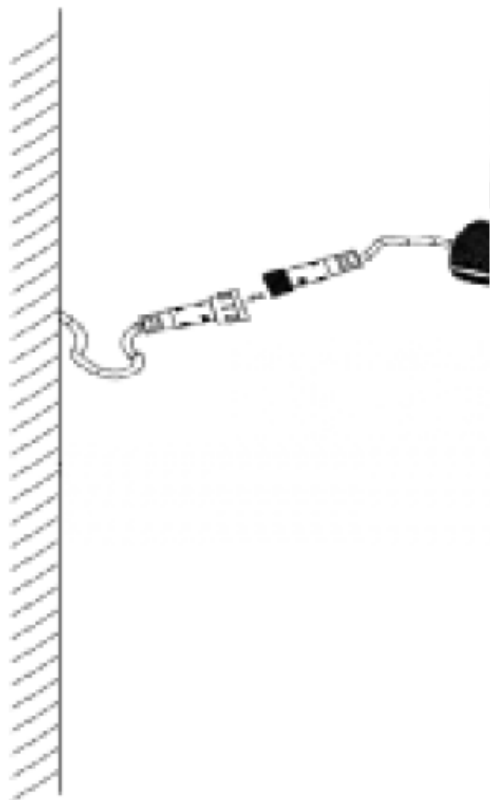unit is Factory pre-set temperature is 38°**C.**

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Temperature Adjustment

To increase the water temperature, turn the knob clockwise. The maximum temperature setting is 45$^{\circ C}$– the

knob will illuminate red when the temperature is between 40 and 45$^{\circ C}$, and you will see temperature on screen.
To decrease the temperature, just turn the knob anti-clockwise. The minimum temperature will depend on your

cold water supply. The knob will illuminate blue when the temperature is less than 25$^{\circ C}$, and the display screen
shows "COLD". In normal use, the system will remember the last water temperature setting when it is powered on
again.

Power Off - Press the knob again to turn off the water flow. The light under the knob will turn off.

Troubleshooting

No.	Error Message or Functional Issue	Possible Causes	Solutions
1	**Red Light Flashes 1**	Power Failure Protection	Press the knob to power on the tap
2	**Red Light Flashes 2**	Cold Water Supply Failure	Ensure cold water supply to the processor is installed and flowing correctly. Once cold water supply recovers, press the knob to clear the fault, then press again to power on the tap
3	**Red Light Flashes 3**	Outlet Temperature Sensor Failure	Replace processor.
4	**Red Light Flashes 4**	Inlet Temperature Sensor Failure	Replace processor
5	**Red Light Flashes 5**	Motor Failure	Replace processor.
6	**Red Light Flashes 6**	Data Communication Failure	Ensure the data connection cable between the faucet and the processor is installed correctly. Press the knob to clear the fault, then press again to power on the tap.

Troubleshooting

No.	Error Message or Functional Issue	Possible Causes	Solutions
7	**Red Light Flashes 7**	Hot Water Temperature is Too High (>85°C).	Reduce the temperature of your hot water supply to avoid risk of injury or damage to product
8	**Red Light Flashes 8**	Hot Water Temperature isToo Low	Ensure hot water supply to the processor is installed and that your heating system is working correctly

Warranty Information

- *To find the specific guarantee for your product please refer to the website.*

- *The guarantee starts from the date of purchase.*

- *The guarantee covers you against issues caused as a result of manufacturing related issues, it does not apply to issues that are found to be a result of poor installation.*

- *Labour costs for installation of the product are not covered under this warranty.*

Aftercare

Clean any marks with a soft dry cloth, for stubborn stains please clean with mild soapy water and buff out with a soft cloth.

DO NOT use abrasive or acidic cleaners, if you are unsure, please contact us first.

Recycling & Disposal

The Waste Electrical and Electronic Equipment Directive (WEEE Directive) is the European Community directive 2012/19/EU on Waste Electrical and Electronic Equipment (WEEE) which, together with the RoHS Directive 2002/95/EC, became European Law in February 2003. The WEEE directive aims to reduce the amount of electrical equipment being produced and to encourage everyone to reuse, recycle and recover it. In support of these guidelines and for environmental safety, do not dispose of any electrical equipment including those marked with the below symbols When replacing old electrical devices with new ones the retailer is legally obligated to take back your old items for disposal free of charge. You can also recycle your old electrical devices free of charge at your local recycling centre. Please contact your local council for more information.

Contact Us

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