

**DIGITAL SHOWER
CONTROLLER AND VALVE
INSTRUCTION MANUAL**



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Safety Information

Please read these instructions carefully before starting installation and keep in a safe place for future reference.

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 safety use of this product.

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

Hot and cold water supply should be balanced pressure of at least 1 Bar.

When you first operate the system, water temperature has been pre-set to 38°C by factory, however you can adjust it between 25°C and 45°C.

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

This processor must not be installed where either the ambient temperature is likely to exceed 40°C or where freezing may occur. Remember that loft spaces can become very cold in winter.

Cables which are chased into the wall must also be protected by a suitable sized conduit or sheathing to allow removal for servicing and maintenance.

Surface mounted cables must also be protected by a suitable approved conduit, even in a loft, where there may be a risk of damage from vermin.

The user control is supplied from a low voltage source.

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

This product is suitable for domestic use and, with a reduced guarantee period, for commercial use.

This product is suitable for thermal storage cistern and combination boiler system which can guarantee continuous hot water supply.

Pipe sizing

Long pipe runs, on both inlet and outlet, will reduce the flow rate at the shower head, 22mm pipe work should be used on inlets 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.

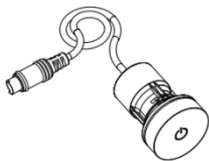
Install isolating valves on the supply pipes to enable easy maintenance.

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

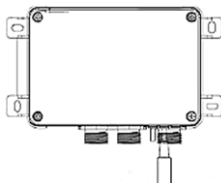
After installation

IMPORTANT: After finishing installation, firstly, open both cold and hot inlet valves to inspect for water leakage from joins in the water system. If it is OK, connect the power supply. Then, press the Power On/off button to turn on the system, and inspect for any water leakage from joins in the outlet water system. After confirming no leakage on the inlet and outlet water system, then start functional commissioning. The mixer and diverter units should be installed with service access, as filters may need cleaning or plumbing checked.

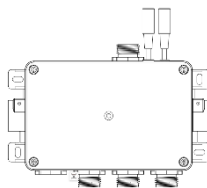
Pack Components



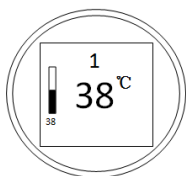
Control Panel*1pc



Processor*1pc



Three Outlet Diverter*1pc



Display Panel*1pc



Power Adapter*1pc



7.5m Extension Cable*1pc



Screw 3.5*25mm*8pcs



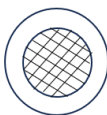
Wall Plugs*8pcs



Communication Cable*1pc



Red O-ring*5pcs



Washer Filter*1pc

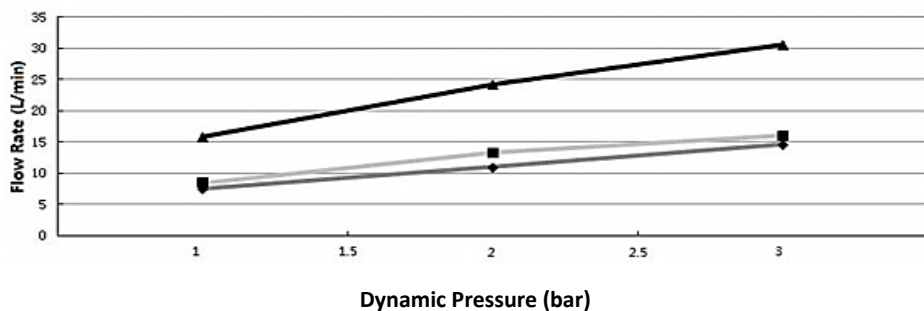


Instruction Manual*1pc

Note:  The filter must be fitted in the diverter inlet. For water supply to processor, we suggest you to fit filters when connect pipes.

Red O-ring should be fitted to all female connectors during assembly; it is used to guarantee waterproof purpose. Pipework and plumbing fittings should be sourced locally to suit the configuration of your installation.

Flow Performance



Inlet Cold Water Flow Rate
 Inlet Hot Water Flow Rate
 Outlet Mixed Flow Rate

Above performance curve of testing data is obtained when inlet cold water temperature is 20°C, and inlet hot water temperature is 65°C at water pressure of 3 bar.

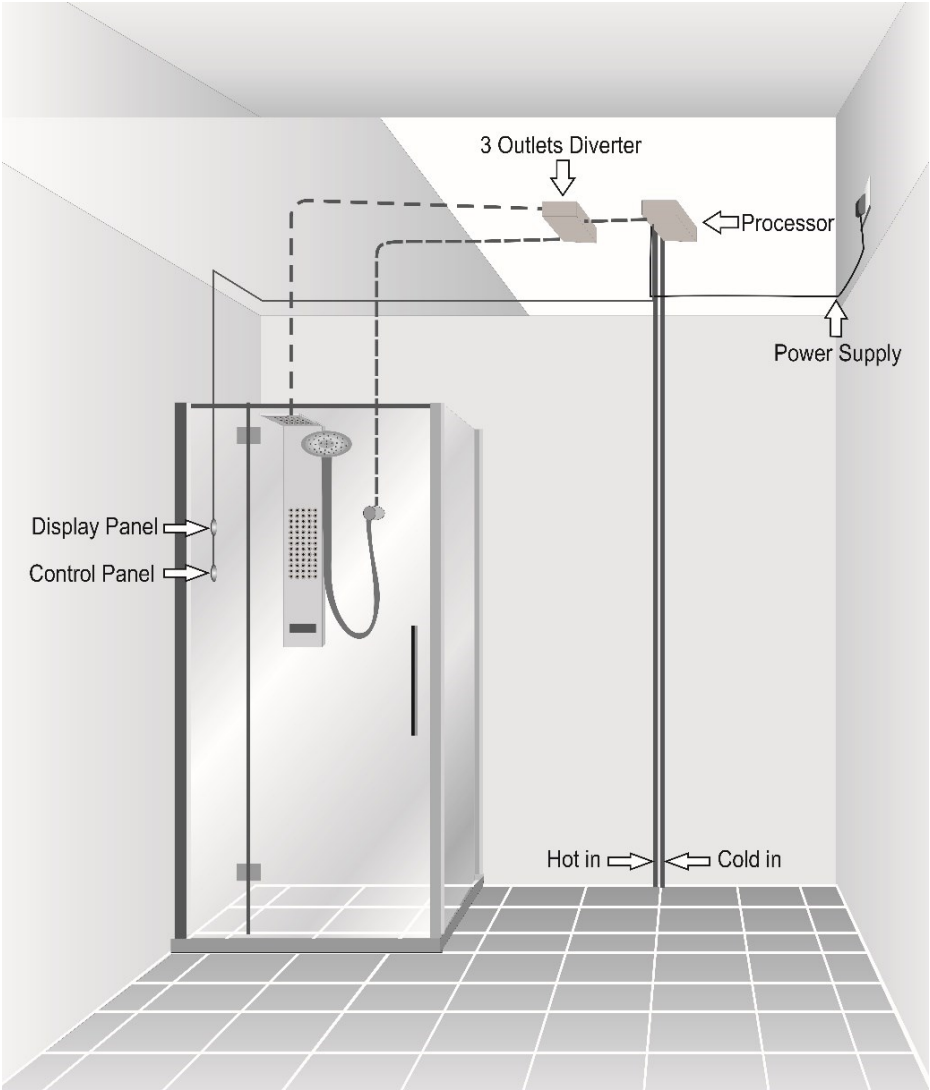
System Specifications

Electrical Parameters	
Input Supply Voltage	AC110V-230V 50Hz-60Hz
Supply Voltage of Control Panel & Processor & Diverter	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

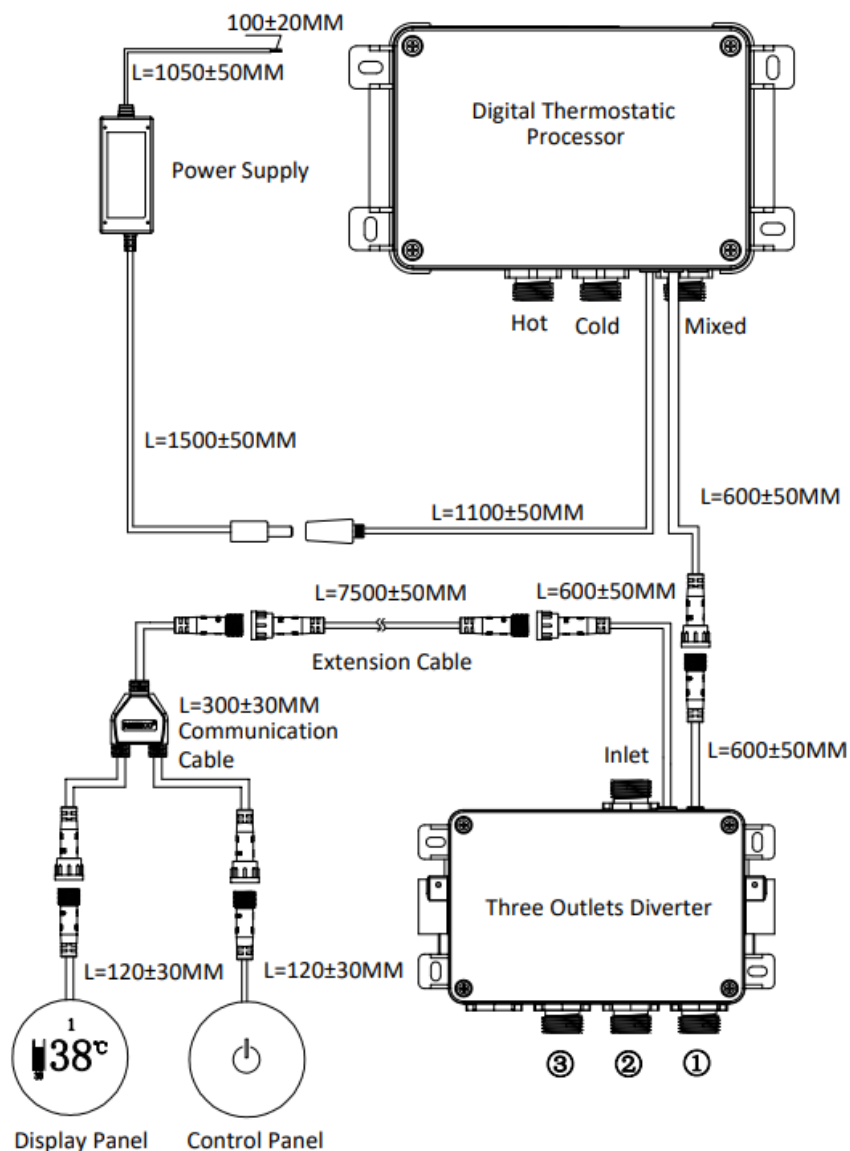
Inlet Hot Water Dynamic Pressure	1bar-5bar
Outlet Water Flow Rate (at 3bar)	25 L/min
Temperatures	
Maximum Temperature (Factory Preset)	38°C
Maximum Temperature (Setting Range)	25°C-45°C
Minimum Temperature	25°C, Full Cold water selectable
High Temperature Protection	49°C
Temperature Stability	+/- 1°C at recommended supply conditions
Hot Water Range	55-75°C
Cold Water Range	4°C-25°C
Ambient Temperature	4°C-40°C
Humidity	95% non-condensing
Times	
Power Off Water Protection Time	≤3s
Cold Water Supply Failure Protection	≤2.5s
IP Rating	IPX4
The panels are suitable for installation in the showering area.	

General Installation Schematic

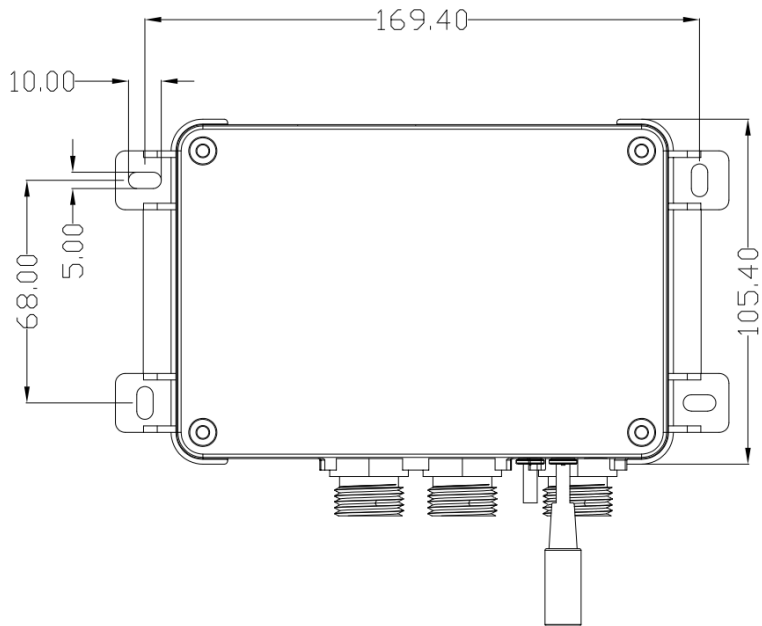
IMPORTANT: The processor must be located for convenient maintenance, not be sealed into the wall.



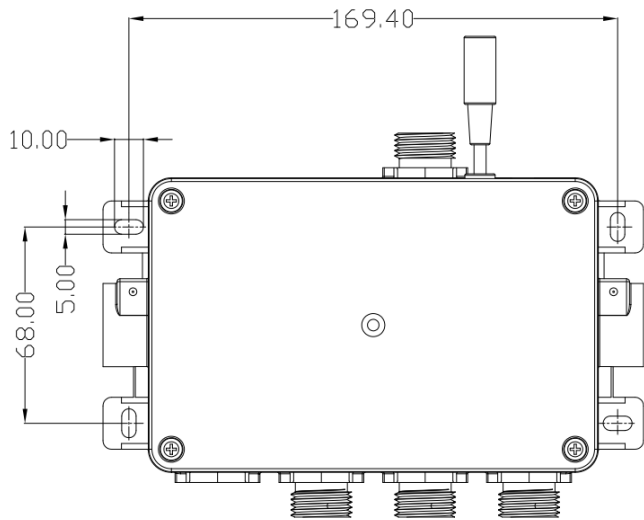
System Connection Diagram



Processor Installation Dimension



Diverter Installation Dimension

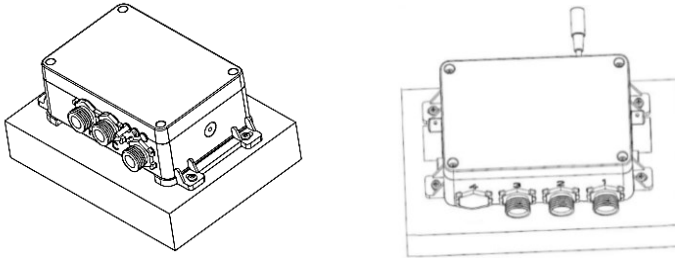


Processor & Diverter Installation Instruction

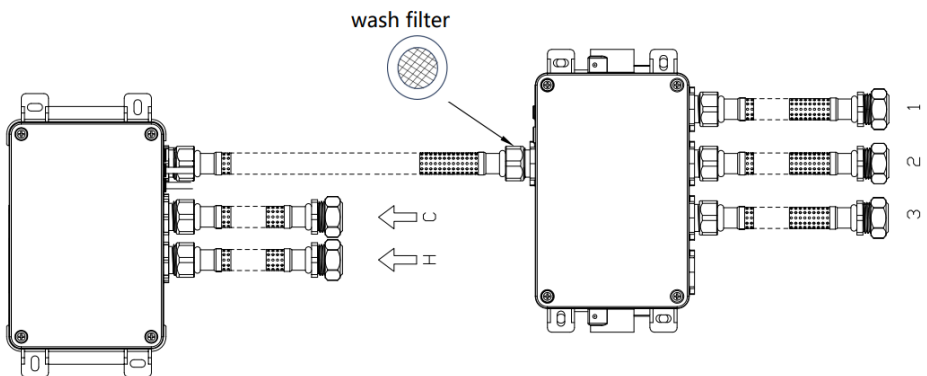
Step 1: Mark the fixing holes for Processor and Diverter in the required position.

Step 2: Drill and plug the fixing holes.

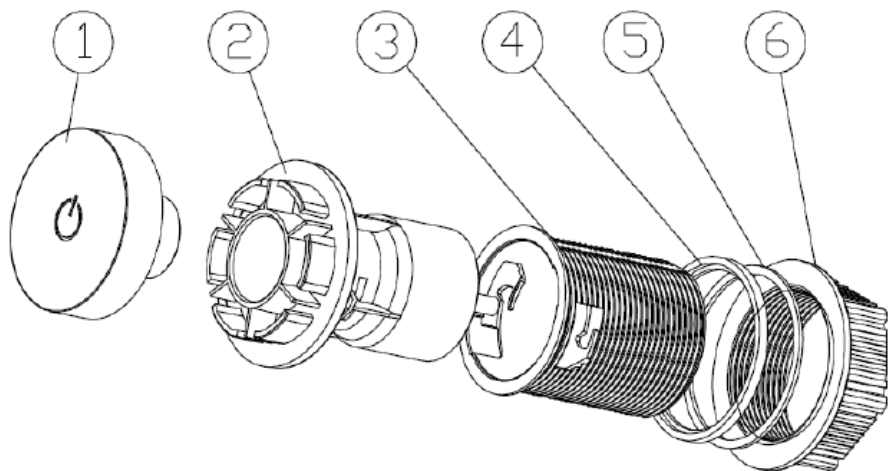
Step 3: Secure the Processor and Diverter in position with the fixing screws



Step 4: Connect water pipes to the Processor and Diverter. (Fit the washer filter before the diverter inlet)



Panel Installation Instructions



1- Control Knob

2- Control Body

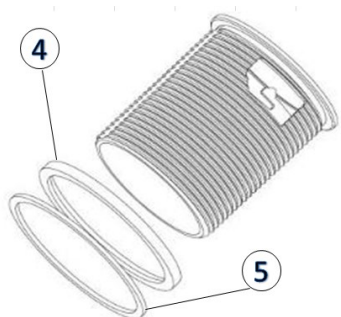
3- Installation Bracket

4- Chrome Plated Ring

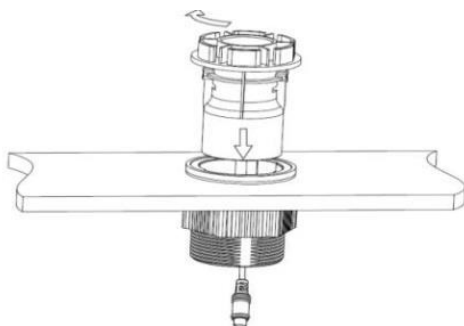
5- Foam Sealer

6- Clamp Nut

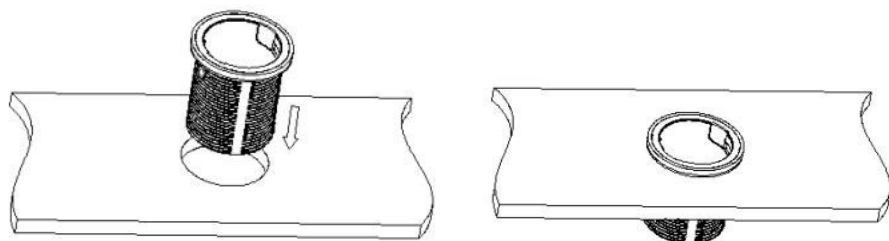
Step 1: Put the Foam Sealer and Chrome Plated Ring on the installation bracket.



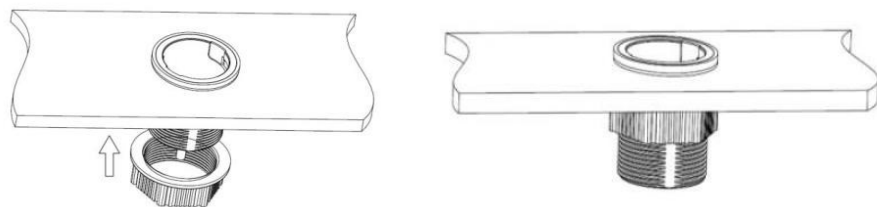
Step 2: Insert the Installation bracket into the hole of stainless steel plate.



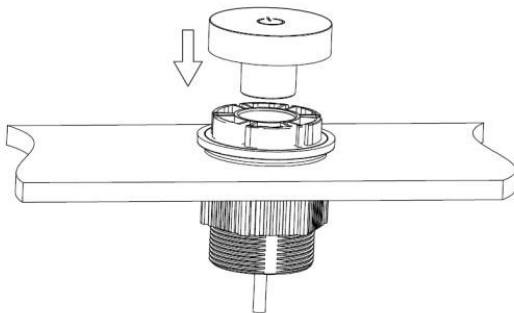
Step 3: Screw the clamp nut to fix the bracket.



Step 4: Insert the control body and turn clockwise to lock the control panel on the stainless steel plate.



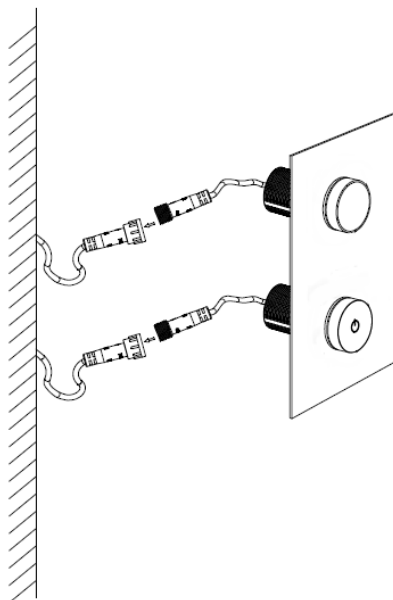
Step 5: Put and press down the control Knob on the control body to finish the installation.



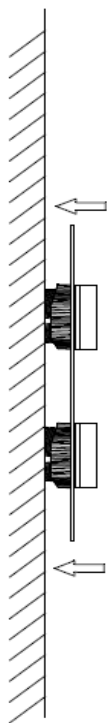
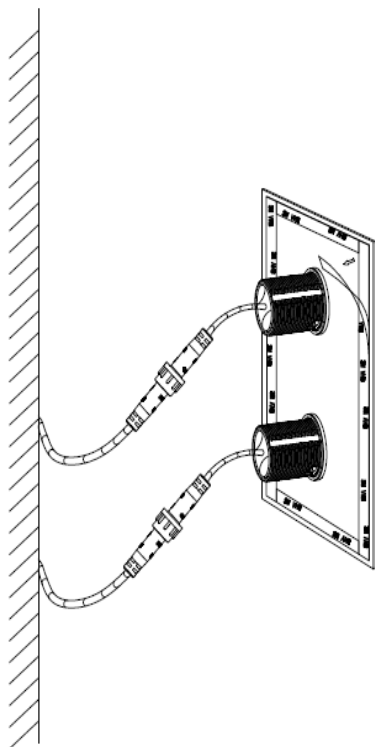
Step 6: Repeat the same steps to install the display panel.

Step 7: Connect two panels with communication cable from wall or shower screen.

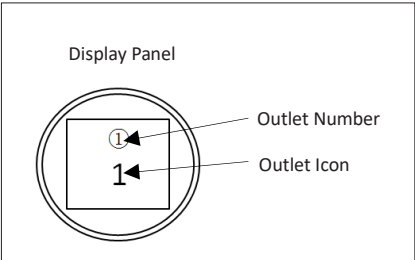
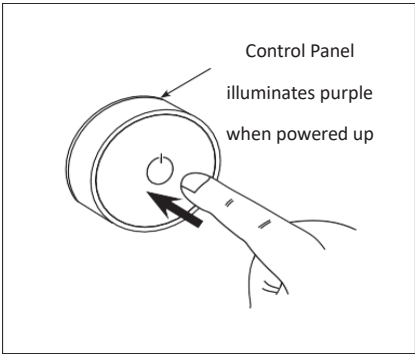
Remember to put red O-ring on female connectors before connection.



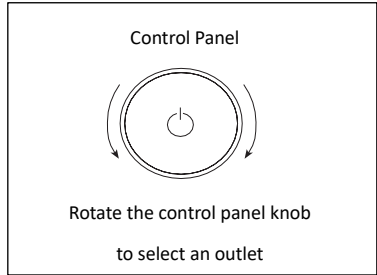
Step 8: Tear off 3M tape and apply adhesive before pushing the plate on wall or shower screen.



Outlet Selection



Icons	X	1	2	3	4
Light Flashing	Orange	Red	Green	Blue	White



Before using the shower for the first time the installer needs to check that the water/plumbing connections are correct.

Check that there are no leaks around the connections to the inlets and outlet

Power on Processor:

Turn on power to the diverter and processor, the system will currently be in standby mode.

Power on Control Panel:

Press the knob on the control panel, a purple halo will illuminate around the knob to indicate it is on and the display panel will activate. Water will start to flow, please note the factory pre-set temperature is 38°C.

Outlet Setting Up Procedure:

Prior to using the digital valve the outlets need to be configured.

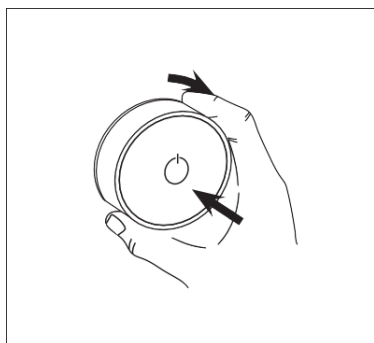
Start by pressing the control panel knob for 5 seconds, this will activate the menu on the display panel.

The number shown on the top of the display panel indicates the outlet number. Rotate the control panel knob, you will find each outlet have 2 options, like 1st outlet have "1" and "X", 2nd outlet have "2" and "X".

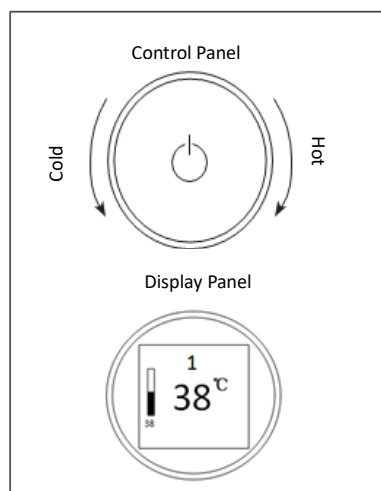
"1","2","3" and "4" means the outlet is needed, "X" is the BLOCK icon, means the outlet is not needed.

If you don't require one of the outlets, select the "X", this will prevent any water coming out of that outlet.

Once you have made your selection, press the knob once to confirm it. The system will then move onto next outlet, repeat the above step to make all outlet selection. Once you have set up all the outlets, the system will turn off automatically. Press the control panel knob again, system will run with your new customized settings.



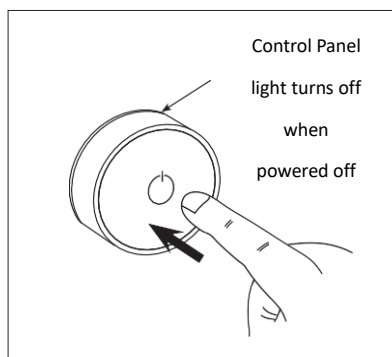
When the system is on, press down and rotate the control panel knob at the same time to select an outlet. The display will show the selection of icons you have programmed.



Temperature Setting:

To increase the water temperature, rotate the display panel clockwise. The maximum temperature setting is 45°C. To decrease the temperature, turn the knob anti-clockwise. The minimum temperature depends on your cold water supply. The knob will illuminate blue when the temperature is less than 25°C, and the display screen shows "COLD".

Temperature	Illumination Colour
40°C - 45°C	Red
25°C - 40°C	Purple
0°C - 25°C	Blue



Power off:

Press the control panel knob again to turn off the flow. The light under the knob will turn off.

Fault Diagnosis

Read the **Safety Information** section before using or servicing the product. If any maintenance is required then it must be carried out by a competent person.

Before replacing any parts, make sure that the underlying cause of the malfunction has been resolved. **All malfunctions will be indicated by fault code warning on the display screen after power on system for 150 seconds.**

Fault Code	Possible Causes	Fault Remedy
COLD INLET FAILURE	No cold water	Check cold water supply
	Hot water presser is too high	Adjust inlet hot water pressure($\leq$ 1mpa)
	Processor failure	Replace processor (This should be replaced by factory, call after-sales service)
TEMPERATURE CONTROL FAILURE	Outlet water temperature sensor failure	Replace processor (This should be replaced by factory, call after-sales service)
INLET TEMPERATURE SENSOR FAILURE	Hot water temperature sensor failure	Replace processor (This should be replaced by factory, call after-sales service)
OUTLET SWITCH FAILURE	Motor failure	Replace processor (This should be replaced by factory, call after-sales service)
CONNECTION ERROR	Cable is not connected	Ensure the data connection cable between the panels and the processor is installed correctly. Press the knob to clear the fault, then press again to power on the shower
	Pins are damaged	Check communication cable or replace it.

Fault Code	Possible Causes	Fault Remedy
INLET HOT WATER TEMPERATURE OVER 85°C	Inlet hot water temperature is over 85°C	Adjust inlet hot water temperature (<85°C)
INLET HOT WATER TEMPERATURE IS TOO LOW	No hot water	Ensure hot water supply to the processor is installed and that your heating system is working correctly
	Inlet hot water temperature is too low	Adjust inlet hot water temperature (≥55°C)
	Check valve in hot water inlet failure & cold water pressure is too high	Check the valve to ensure it's clean and there are no impurities inside
		Replace processor (This should be replaced by factory, call after-sales service)
	Inlet hot water pipe is too long, so mixed water cannot reach pre-set temperature within 2minutes	Restart the unit (for multiple times if needed)
INLET COLD WATER TEMPERATURE IS TOO HIGH	Inlet cold water temperature is too high	Adjust inlet cold water temperature (≤25°C)
		Adjust temperature on panel until it displays "cold "
	Check valve in cold water inlet failure & hot water pressure is too high	Check the valve to ensure it's clean and there are no impurities inside
		This should be replaced by factory, call after-sales service

Guarantee

The guarantee period of this digital thermostatic system is 18 months, which covers all manufacturing faults. This guarantee does not cover damage caused during fitting, damage resulting from incorrect installation or damage caused by misuse.

Please do not open the processor unit as this will invalidate the guarantee.