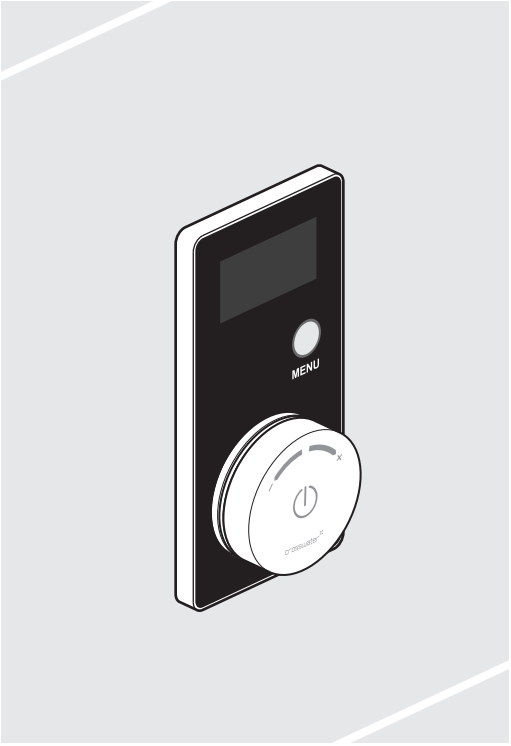
Elite water control system

Installation and maintenance guide



crosswater digital

DIGITAL WATER CONTROL AT YOUR FINGERTIPS

crosswater
digital

Contents

Important and safety information	2
Pack contents / Tools required	3
Flow performance	4
Typical wall mounted installation examples	5
Typical loft mounted installation examples	6
Installation instructions	7 - 16
Attaching the control	7 - 10
Connecting the processor	10 - 16
Cleaning / maintenance	17
Servicing / contact info	17
Guarantee	17
Processor fixing template	18

Important and safety information

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

This Installation Guide contains instructions for the correct connection of the Elite product. The warranty will be invalidated if the product is not installed according to these instructions. Crosswater accepts no liability for loss or damage resulting from installation or use of the product that is not in accordance with these instructions.

All Crosswater valves are mixed flow products, which, for optimum performance, require hot and cold supplies to be reasonably balanced, with no more than 0.5bar pressure difference between them.

This product MUST be installed by a competent person in accordance with all current relevant statutes and regulations, including building regulations and the Water Supply (Water Fittings) Regulations 1999 (together the Water Supply Regulations.)

All showers requiring an electrical connection MUST be installed by a qualified person following the latest revision of BS 7671 (Wiring Regulations) and certified to current building regulations. Before any electrical connections are made, the electricity supply must be turned off at the mains switch. All electrical installation must be carried out only by a qualified person.

We recommend that the temperature of the shower hot water supply should not exceed 65°C.

The processor is supplied factory pre-set at a maximum temperature of 45°C, in line with European Standards. The maximum temperature is fully adjustable to suit the site conditions.

Important: The processor must be installed in an accessible location for servicing and maintenance (and no warranty claim can be considered or liability accepted by Crosswater if lack of accessibility has prevented maintenance).

The processor must not be installed in situations where either the ambient temperature is likely to exceed 40°C or where freezing may occur.

The user controls must not be installed in situations where the ambient temperature is likely to fall below 5°C or rise above 70°C.

The minimum depth of wall required to fit the control fixing brackets is 70mm.

This appliance must be earthed.

Cables mounted on surfaces must be protected by a suitable approved conduit. This applies even in a loft, where there may be a risk of damage by vermin.

Cables that are chased into walls must also be protected by a conduit or sheathing to allow removal for service and maintenance.

The power lead must not be replaced by anyone other than the manufacturer or its accredited agent.

The user control operates from a low voltage source.

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

The Elite is suitable for domestic use only.

This product is supplied with a 5 year guarantee.

This product is not intended for use by children or persons with reduced physical or mental capabilities, and should not be used by such persons without appropriate instruction and supervision.

⚠ WARNING

CONTINUOUSLY TURNING THE CONTROL WHEEL IN THE CLOCKWISE DIRECTION MAY OVERRIDE THE PRE-SET MAXIMUM TEMPERATURE, RESULTING IN A RISK OF SCALDING.

ALWAYS TAKE CARE WHEN OPERATING THE CONTROL WHEEL, AND DO NOT LEAVE CHILDREN UNATTENDED WHILST THE PRODUCT IS IN OPERATION.

Pipe sizing

To reduce pressure losses and help maintain flow rate, 22mm pipework should be used on the inlets and reduced to 15mm as close to the processor as possible, and elbows should be kept to a minimum.

Pipe runs on both inlet and outlet should be as short as possible to avoid reduction of flow rate at the shower head.

If 15 mm pipe must be used, or long pipe runs are unavoidable on the outlet, copper pipe should be used rather than plastic, particularly if a diverter is fitted.

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

Flushing

The working parts of this unit may be corroded if left in contact with some modern fluxes, which can be extremely corrosive. After completing soldering the pipework should be thoroughly flushed out in accordance with the Water Supply Regulations prior to connection of the product.

After installation

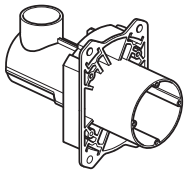
We recommend that the shower is not used for 24 hours after first being installed to allow the back up battery to become fully charged before use.

Please familiarise the end user with how the Crosswater Digital products work.

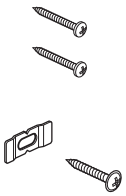
In the event of any warranty claims, all certificates of the registered electricians and plumbers must be provided to confirm that the product has been fitted in accordance with the Water Supply Regulations.

crosswater
digital

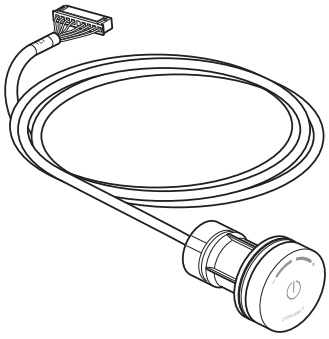
Pack contents



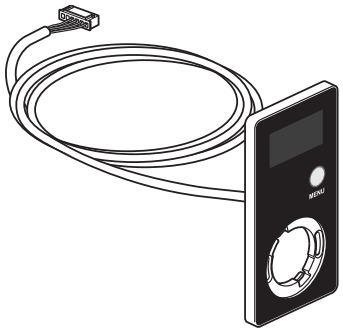
Control fixing bracket



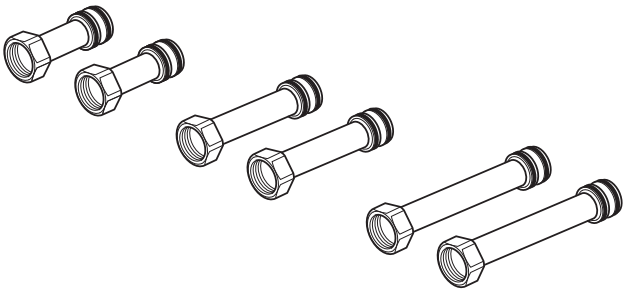
Control & facia fixings



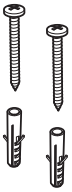
Elite control wheel



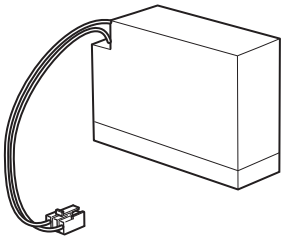
Elite facia control



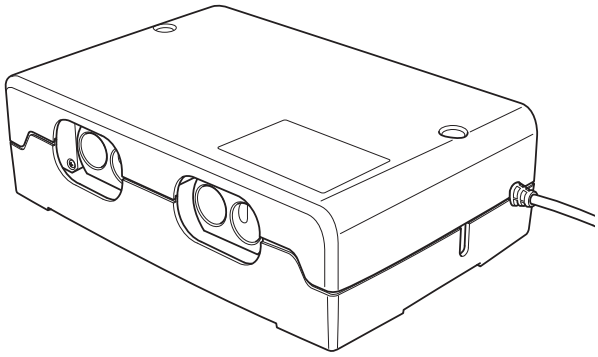
Inlet and outlet connectors



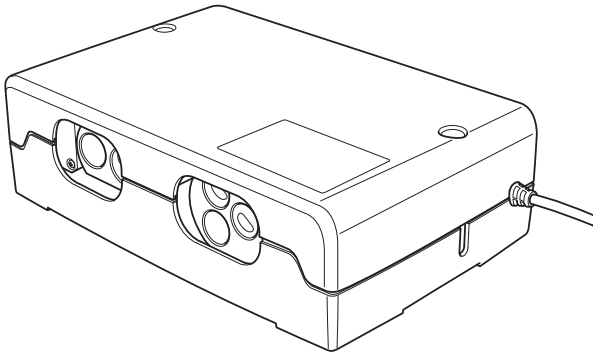
Processor fixings



Back up battery supply



Bath processor - Dual outlet option **- DGX322RV**

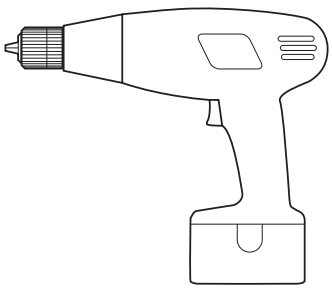


Shower processor - Triple outlet option **- DGX2500RV**

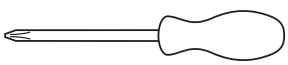
Tools required

Pencil

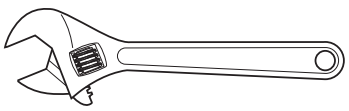
8mm drill bit



Drill



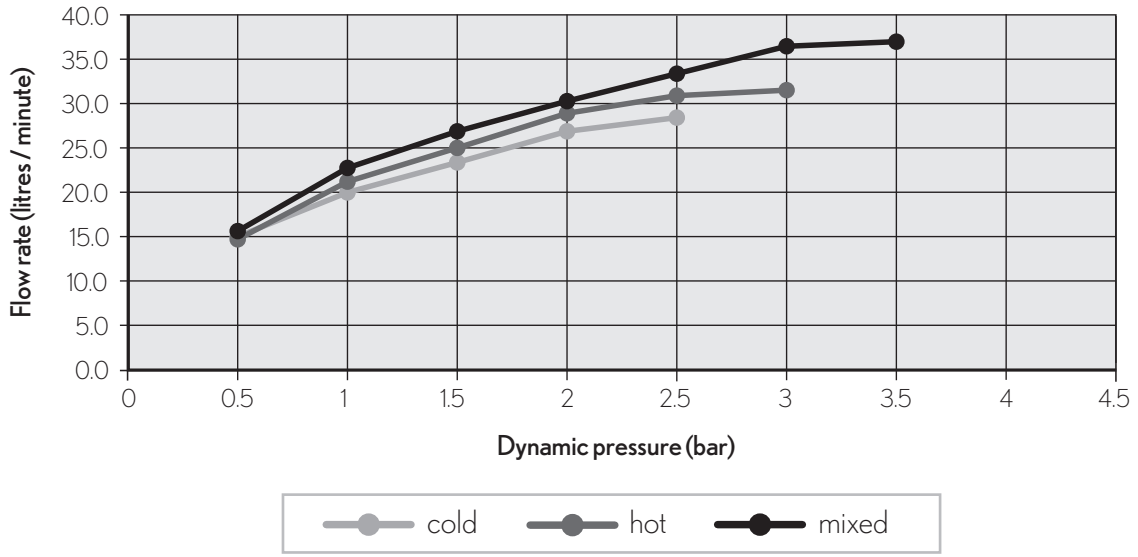
Crosshead screwdriver



Adjustable spanner

Flow performance

Elite 2 and 3 way



The Flow rate is depending on Dynamic water pressure of supply system to the processor.

Water pressure - recommended	
MP	minimum 0.5 bar
HP1	minimum 1 bar
HP2	minimum 2 bar
HP3	minimum 3 bar
HP4	minimum 4 bar

All products marked LP (Low pressure) and MP (Medium pressure) are also suitable for HP (High pressure) systems.

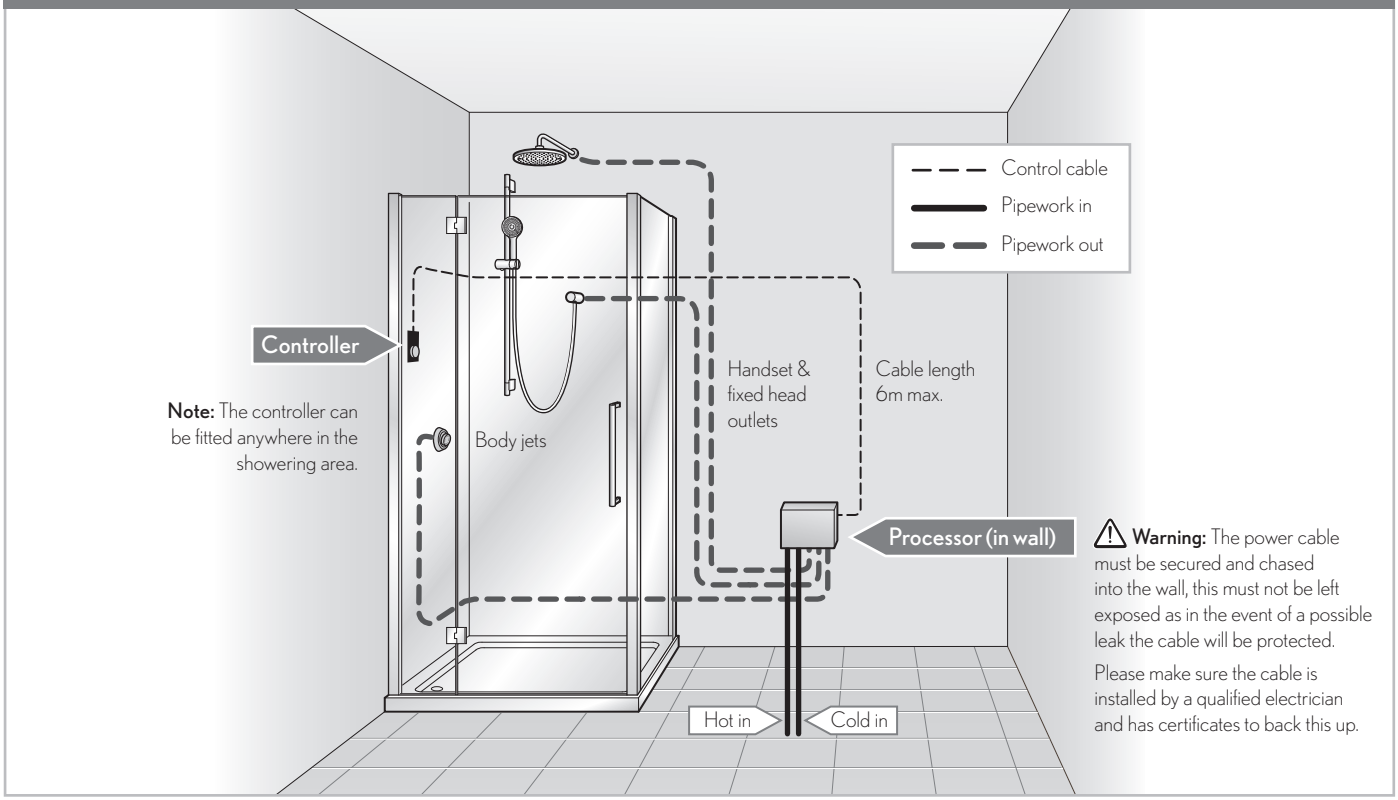
Please note: This product must work from a minimum water pressure of 05.bar and above.

crosswater
digital

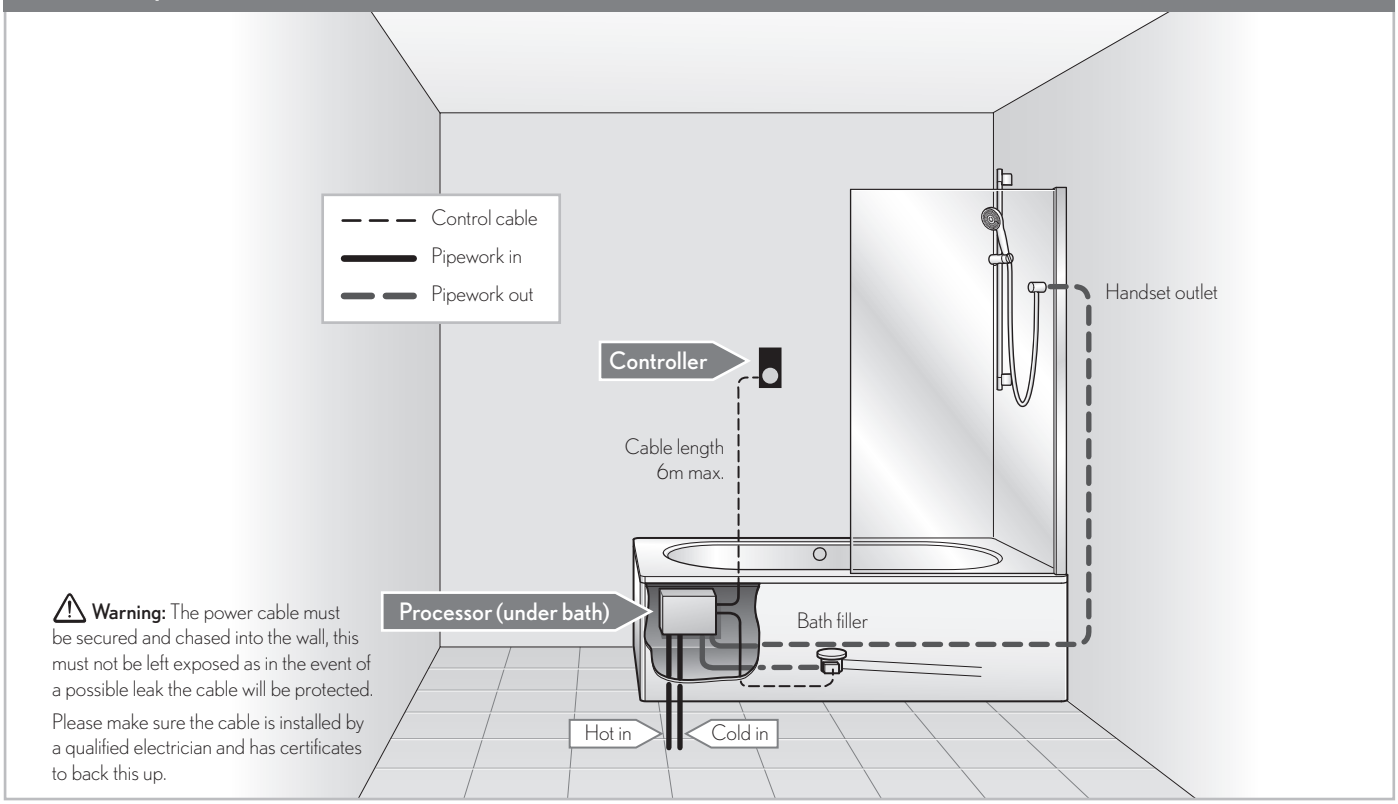
Typical wall mounted installation examples

Important: The Processor must be accessible and should not be sealed in the wall.

Elite Shower processor schematic - wall mounted - Shower handset, fixed head and body jets



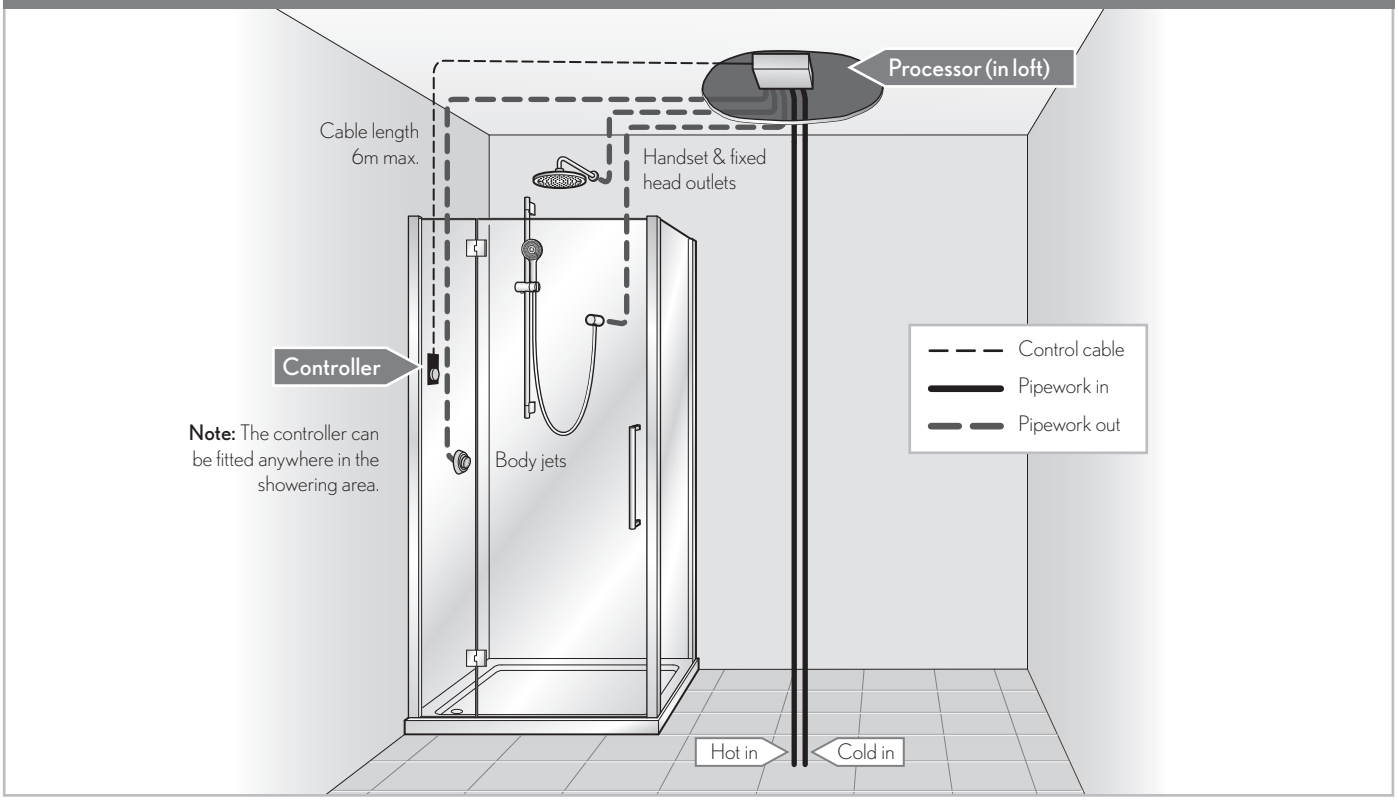
Elite Bath processor schematic - wall mounted under bath - Shower handset, fixed head and bath



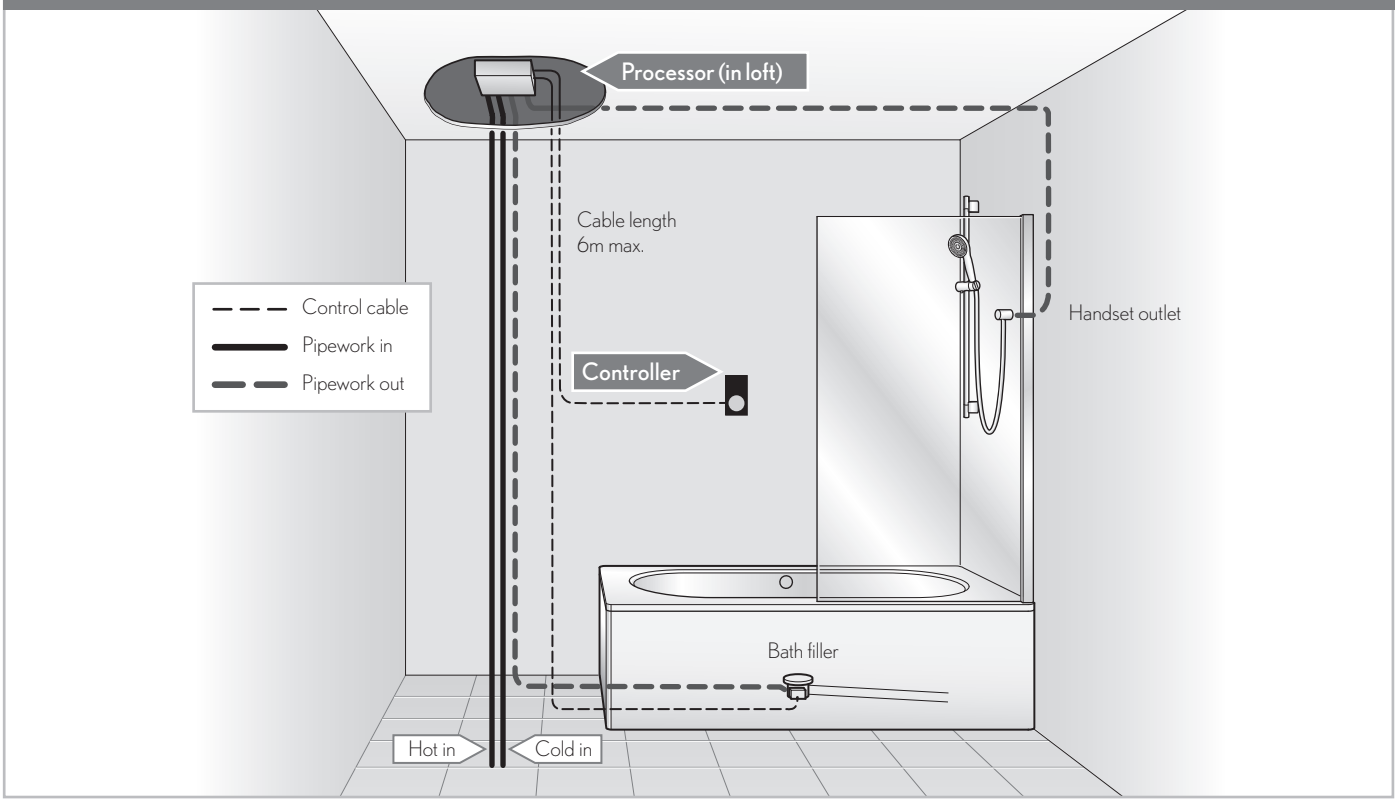
Typical loft mounted installation examples

Important: The Processor must be accessible.

Elite Shower processor schematic - loft mounted - Shower handset, fixed head and body jets



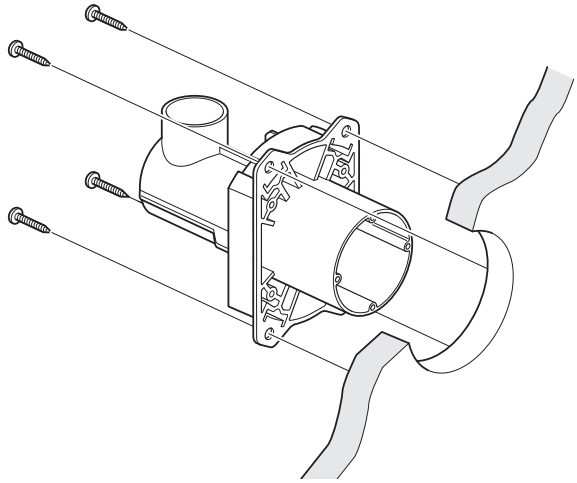
Elite Bath processor schematic - loft mounted - Shower handset, fixed head and bath



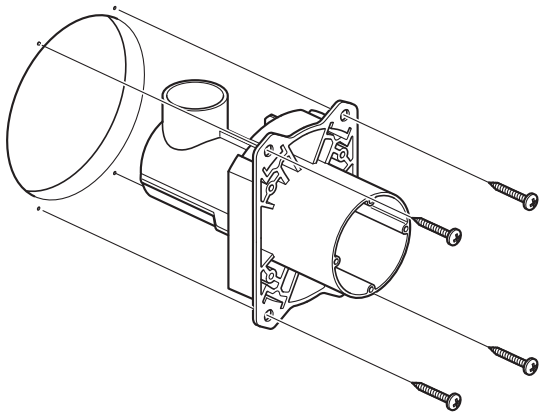
crosswater
digital

Installation instructions

Step 1 - Attaching the control fixing bracket



Bracket attached from 'behind'



Bracket attached from 'front'

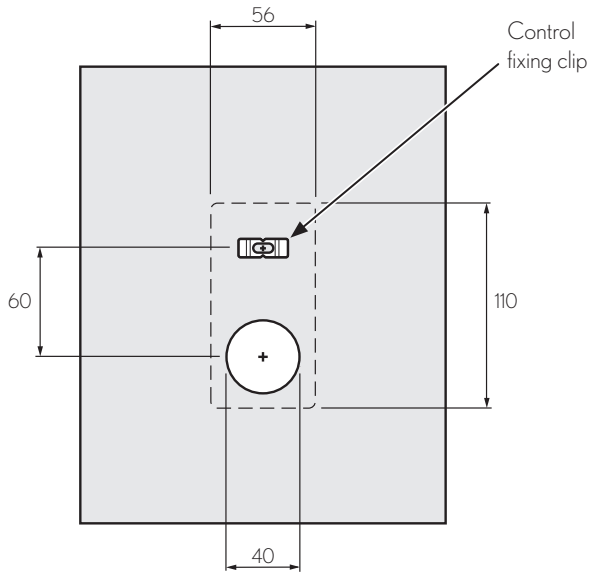
Prepare the wall to take the control fixing bracket. The installation of the control fixing bracket will depend on each individual situation i.e. if there is access from behind the shower.

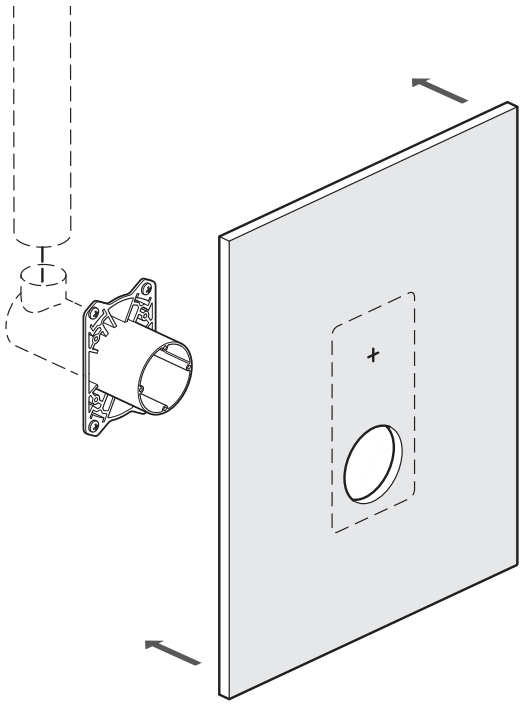
A 40mm diameter hole is required if fitting the bracket from 'behind' and 68mm diameter hole if fitting from the 'front'.

Conduits should be used in the walls where necessary to protect the cables and allow maintenance.

Attach the control fixing bracket using the screws supplied.

Step 2 - Finish the wall

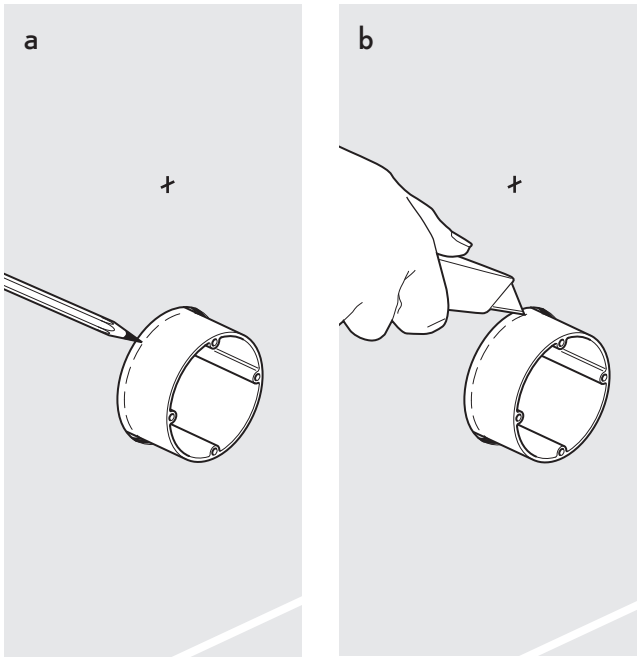




Finish the wall by tiling etc.

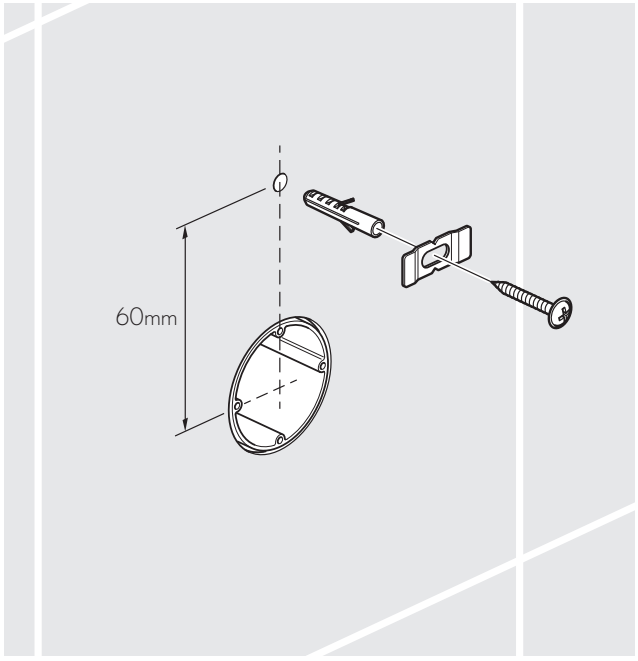
40mm diameter holes should be drilled in the tile etc to finish. (The dotted line on the 'tile' indicates the facia control.)

Step 3



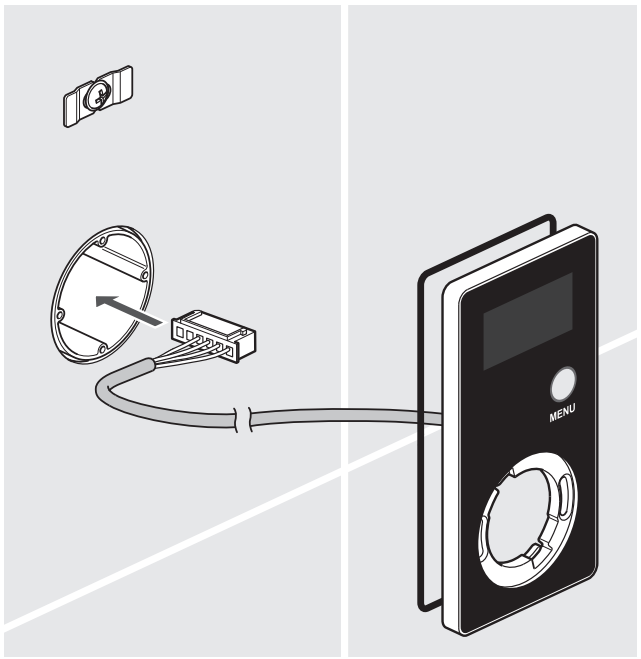
a: Draw a line around the bracket collar, flush with the wall.
b: Cut down the bracket collar as marked.

Step 4



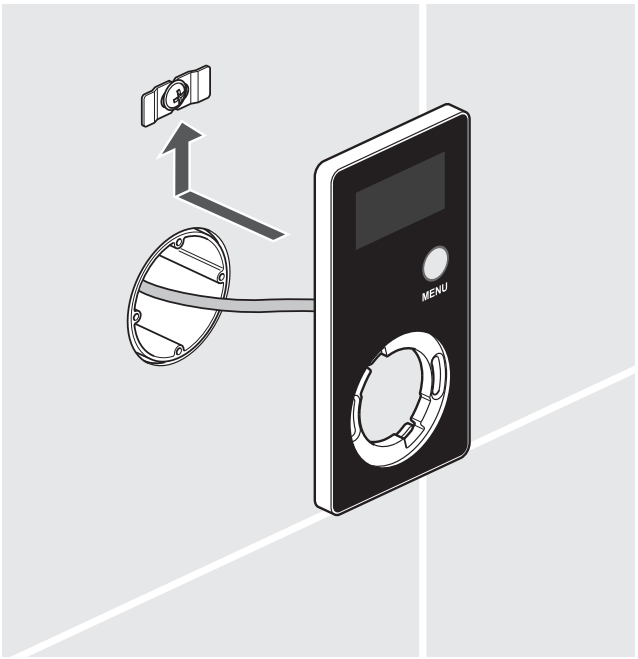
Fix the control fixing clip to the wall where shown using the fixings supplied.

Step 5



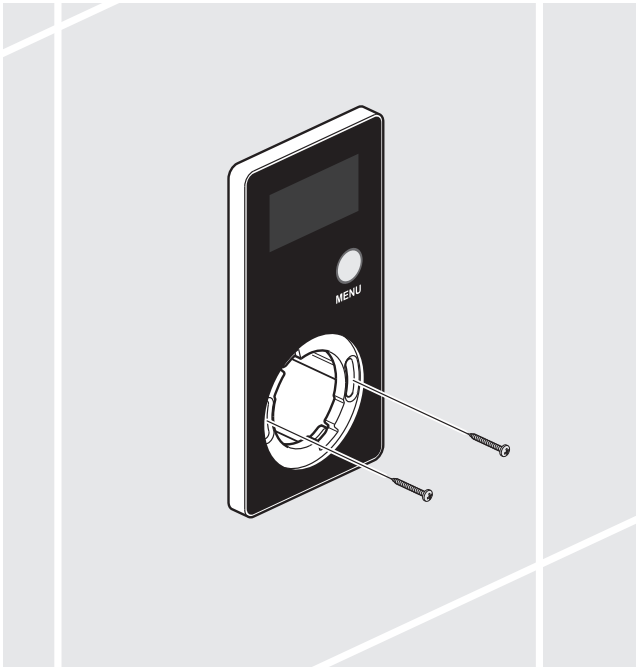
Ensure the seal is positioned on the back facia control. Feed the facia control data cable through the bracket.

Step 6



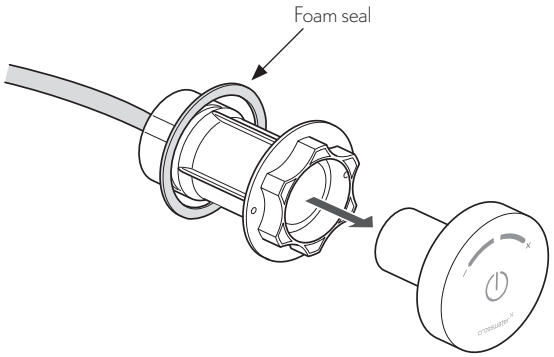
Position the facia control onto the fixing clip and 'slide' up to lock into position.

Step 7



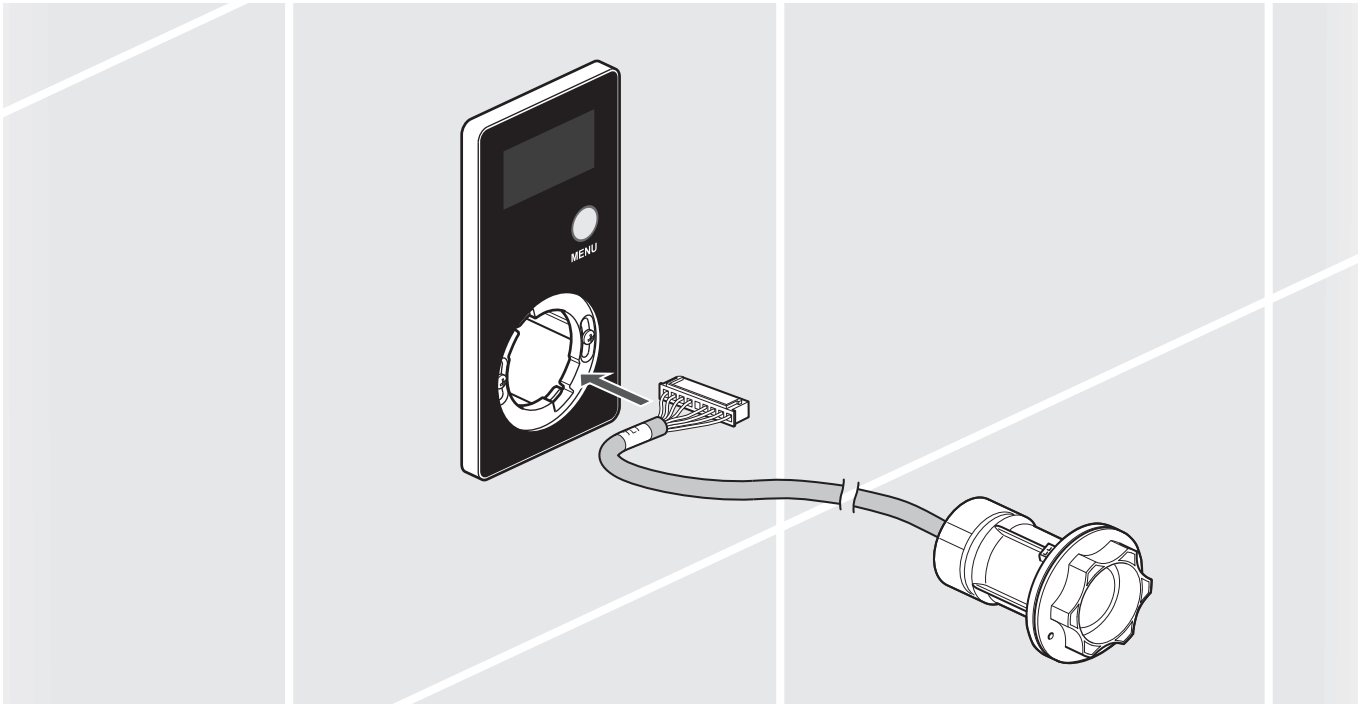
Fix the facia control to the control fixing bracket using the control fixing screws supplied.

Step 8



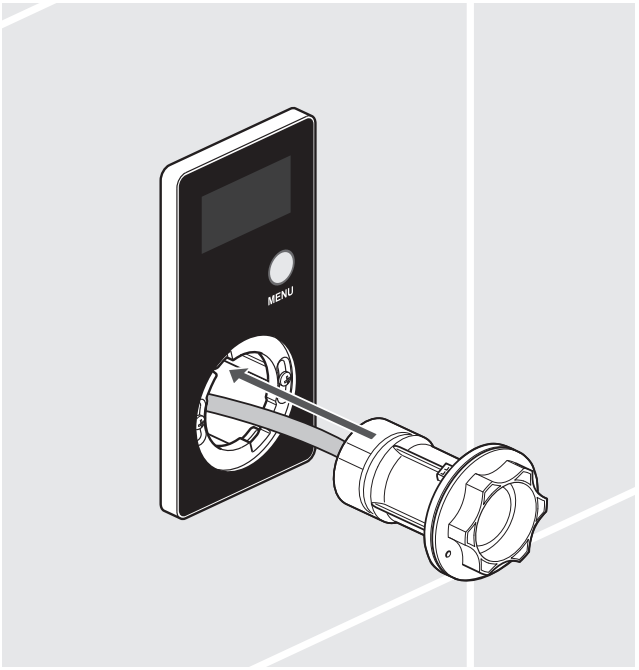
Carefully pull the 'front' control wheel off the control.
Feed the 'foam seal' onto the data cable and onto the control body.

Step 9



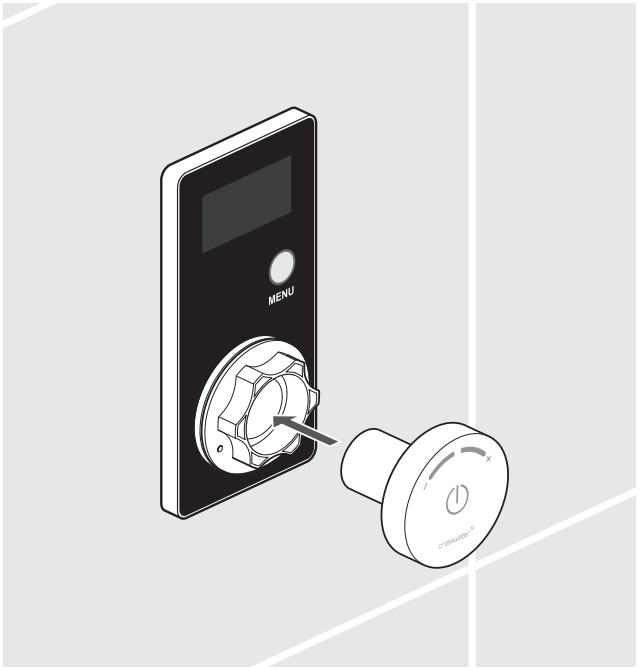
Feed the control wheel data cable through the facia control and bracket.

Step 10



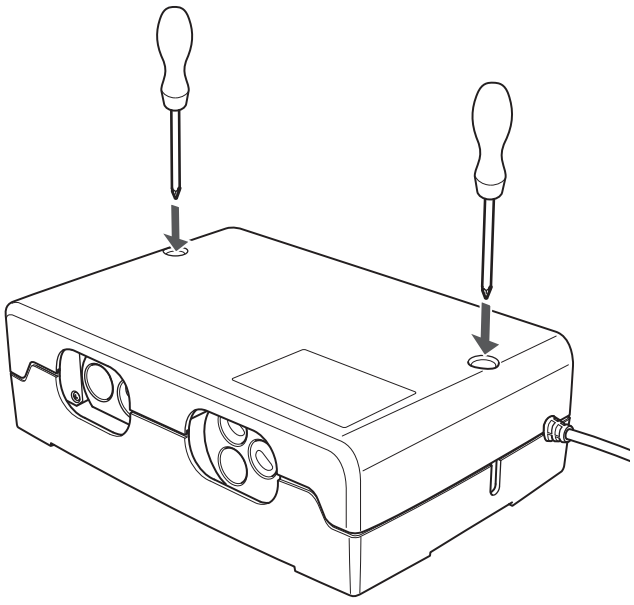
Position the control into the facia control, and turn clockwise to lock in position.

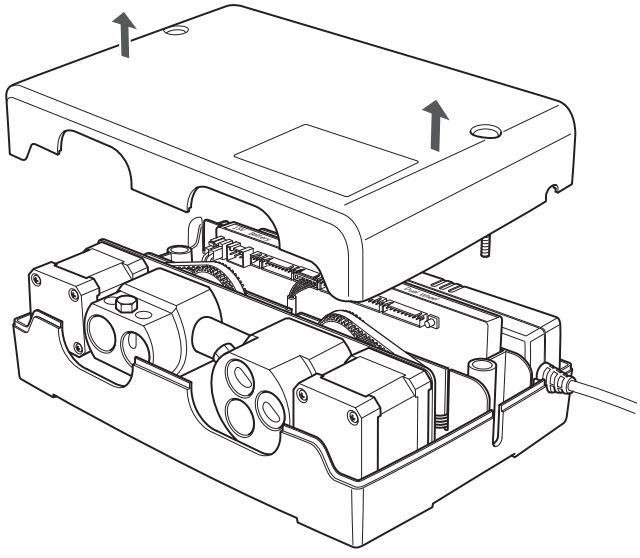
Step 11



Push fit the 'front' control wheel onto the control.
This completes the installation of the control.

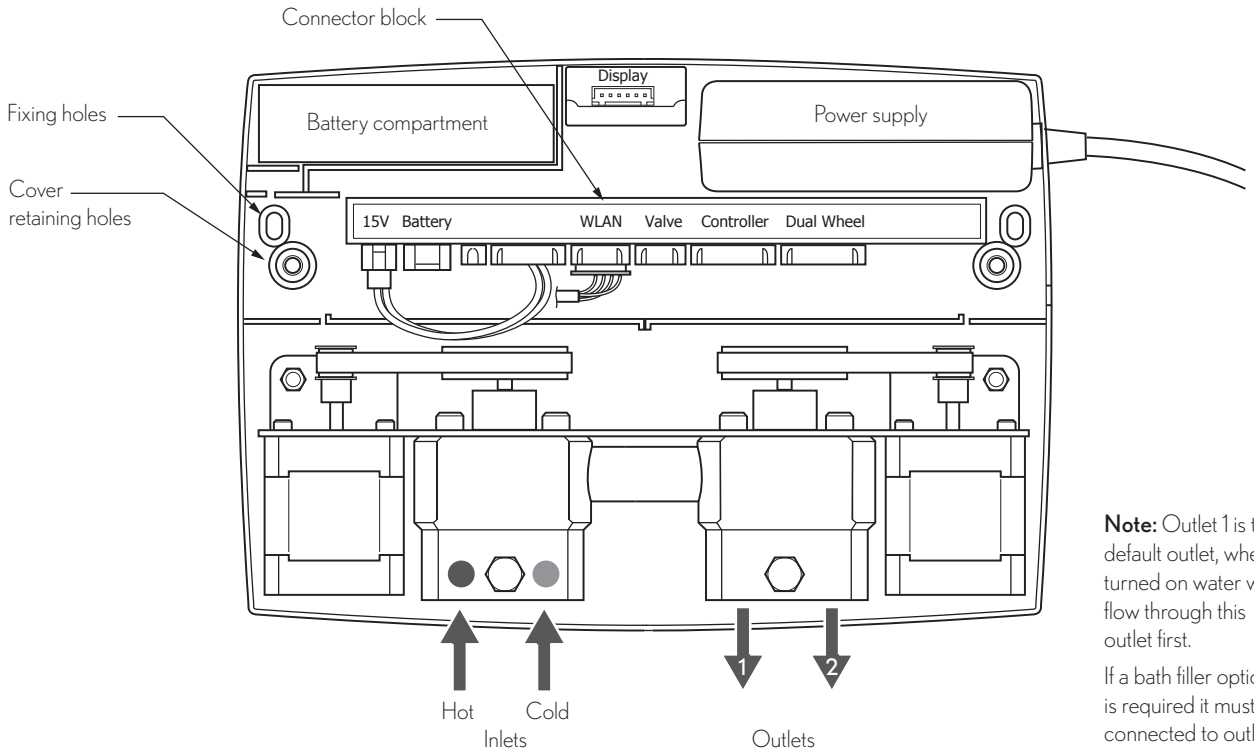
Step 12 - Connecting the processor (**Note:** The triple processor option is shown from now on as a typical example)





Remove the processor cover.

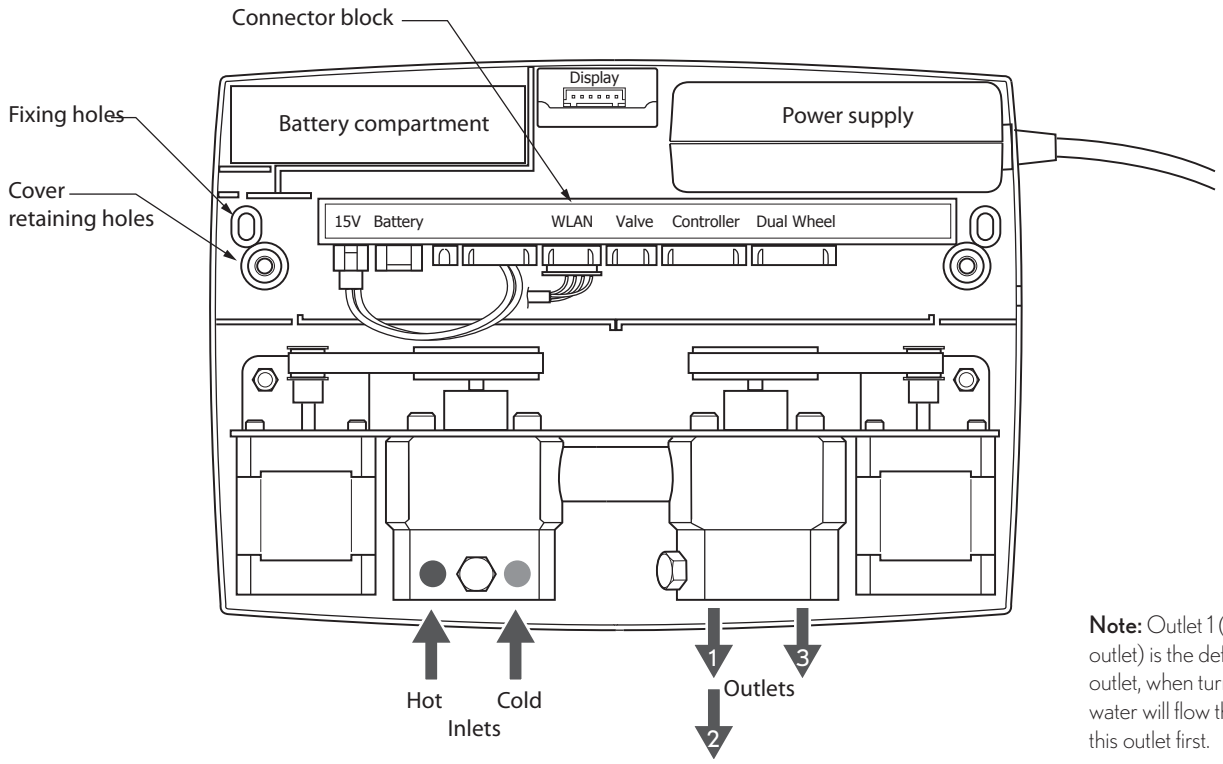
Inside bath processor - Dual outlet option



Note: Outlet 1 is the default outlet, when turned on water will flow through this outlet first.

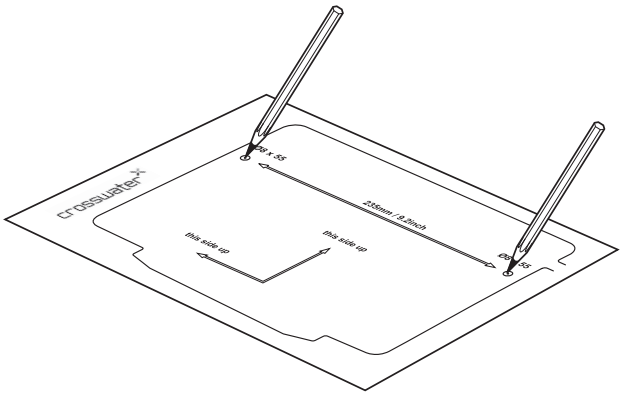
If a bath filler option is required it must be connected to outlet 1.

Inside shower processor - Triple outlet option



Note: Outlet 1 (the top outlet) is the default outlet, when turned on water will flow through this outlet first.

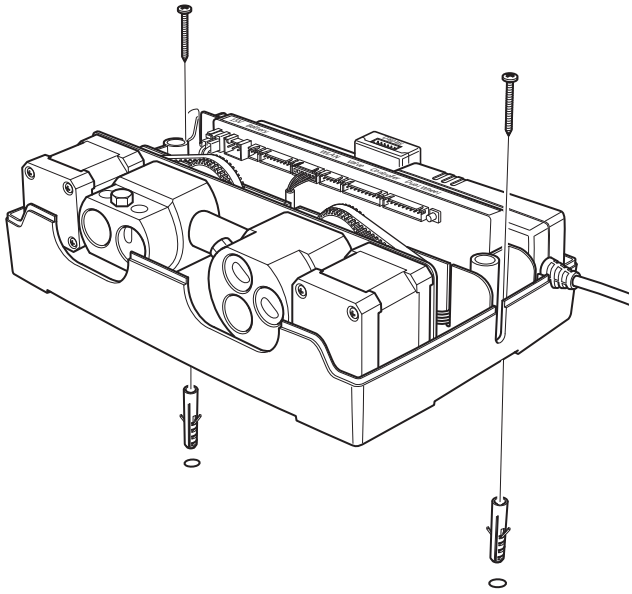
Step 13



Important: The location of the processor must be accessible and dry.

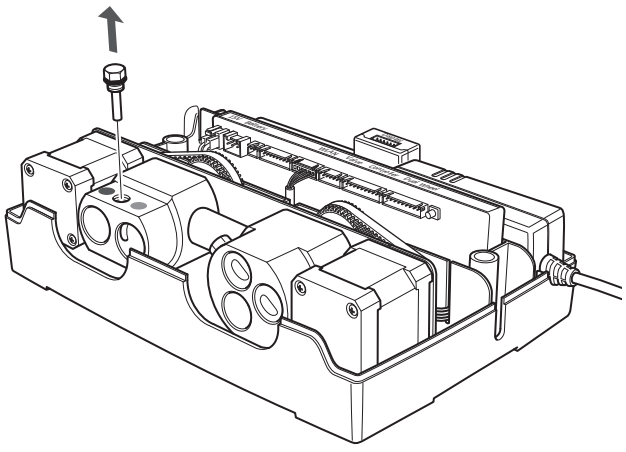
If required, use the template (found on the page 18) to mark the position of the processor fixing holes in the selected location.

Step 14



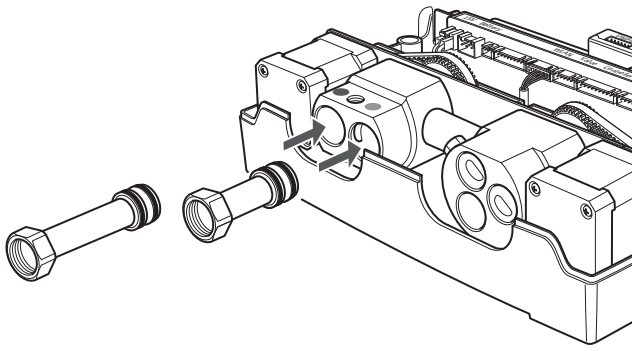
Fix the processor in position using the fixings supplied.

Step 15



Remove the inlet connectors retaining bolt.

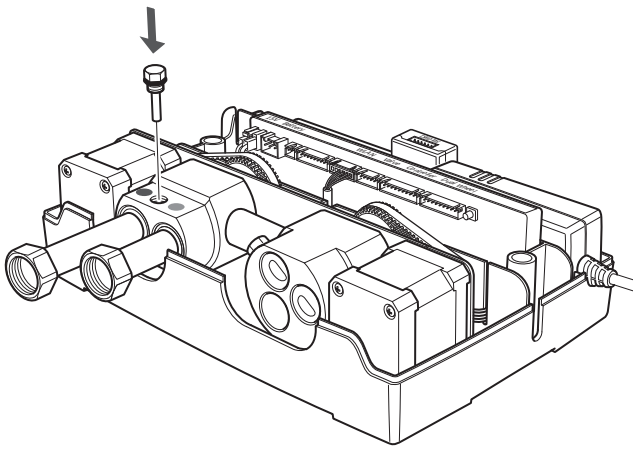
Step 16



Fully insert the inlet connectors into the inlet valves (one long and one short connector).

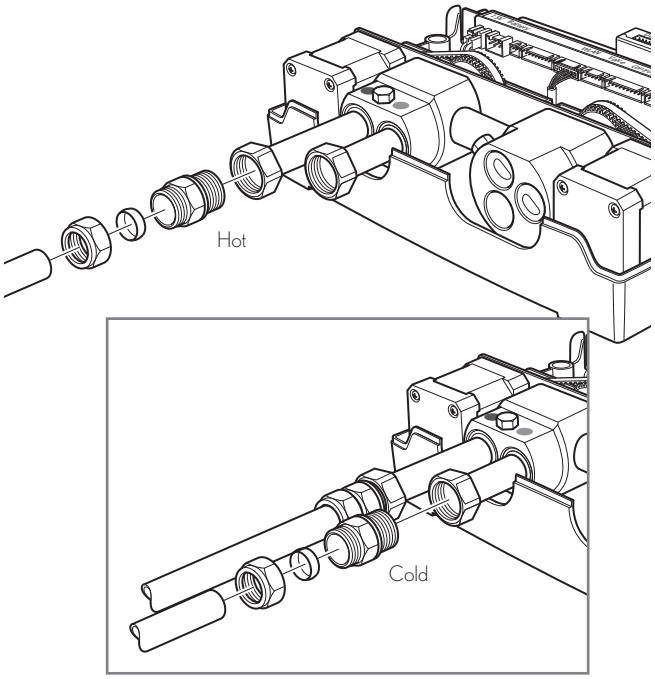
Note: If required, the 'nut' ends of the inlet connectors (and outlet connectors) can be cut off and compression fittings can be used to attach the pipework.

Step 17



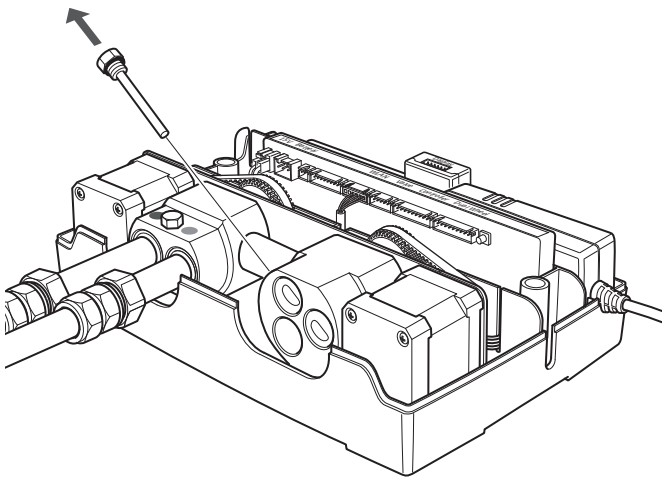
Re-insert the inlet connectors retaining bolt.

Step 18

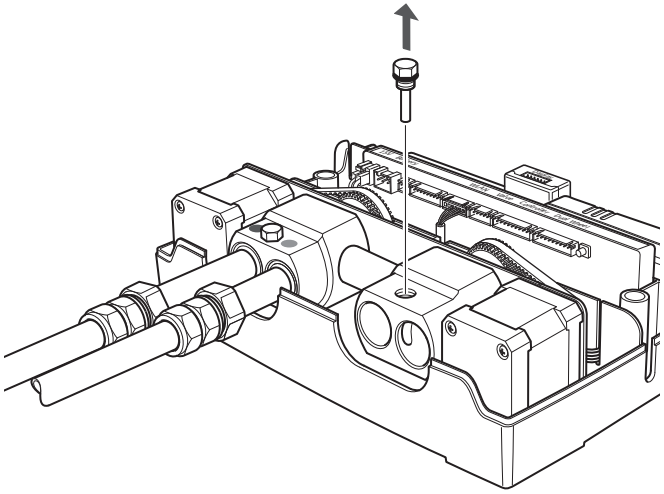


Important: Flush through the pipework before connection.
Attach the 15mm hot and cold water supply connections.

Step 19

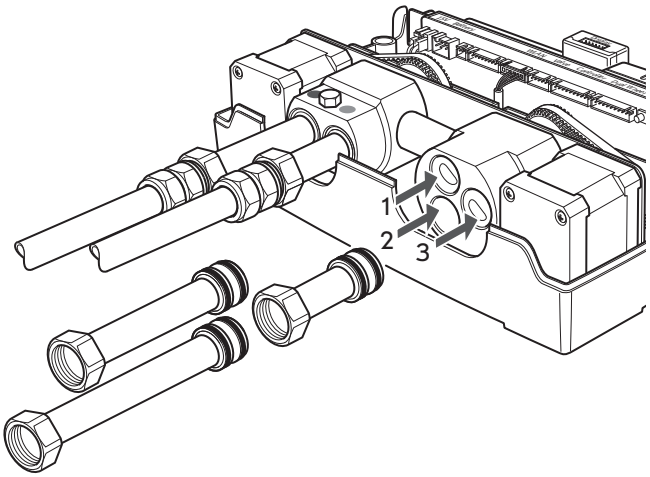


Shower processor - Triple outlet option:
Remove the outlet connectors retaining bolt.



Bath processor - Dual outlet option:
Remove the outlet connectors retaining bolt.

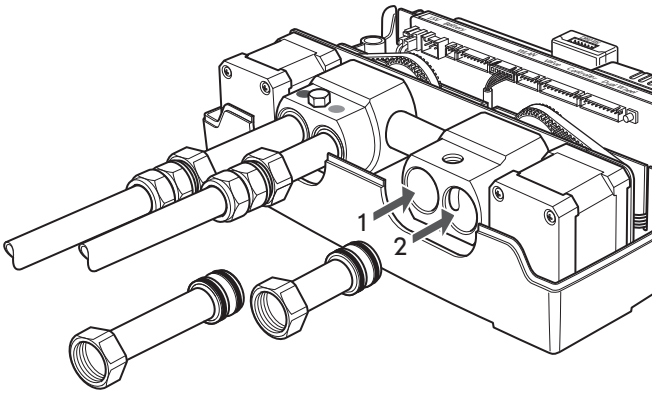
Step 20



Shower processor - Triple outlet option:

Fully insert the outlet connectors into the outlet valves.

Note: Outlet 1 (the top outlet) is the default outlet, when turned on water will flow through this outlet first.

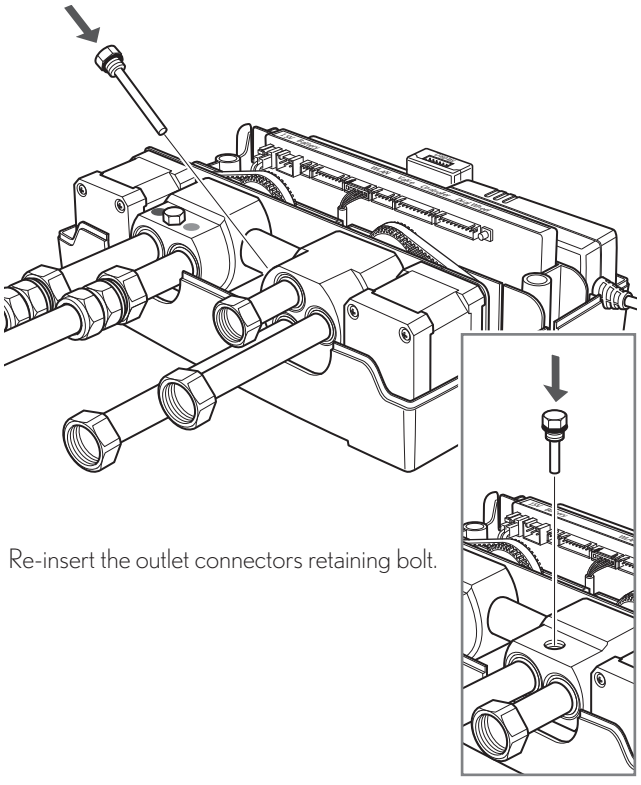


Bath processor - Dual outlet option:

Fully insert the outlet connectors into the outlet valves.

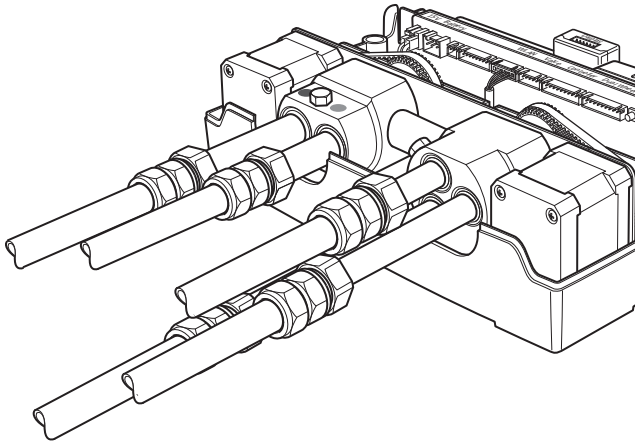
Note: Outlet 1 is the default outlet, when turned on water will flow through this outlet first. If a bath filler option is required it must be connected to outlet 1.

Step 21



Re-insert the outlet connectors retaining bolt.

Step 22



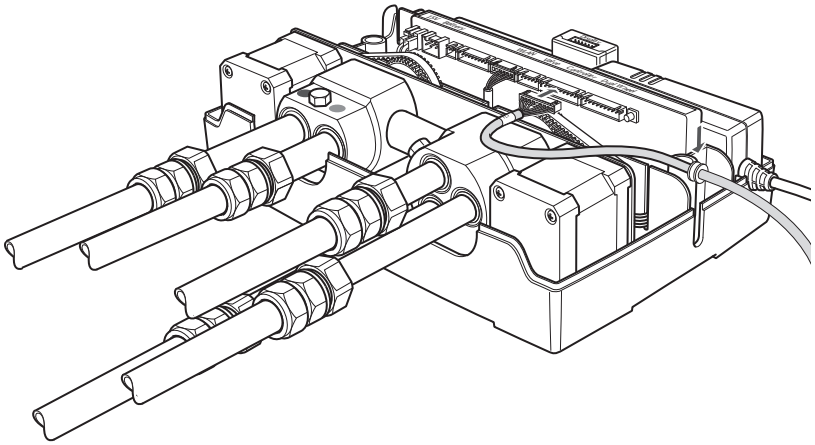
Attach 15mm pipework to the outlet connectors.

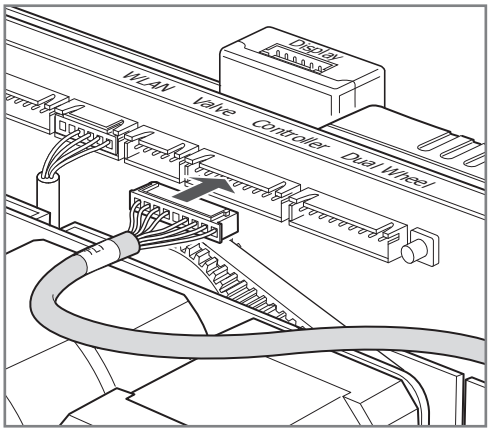
Note: Make a note of which pipe goes to what.

Note: Make sure that the pipework is perpendicular to the processor so that there is no strain on the fittings, use pipe clips as required.

Run a pipe from the mixed water outlet on the processor through the wall to the proposed position of the shower hose outlet etc.

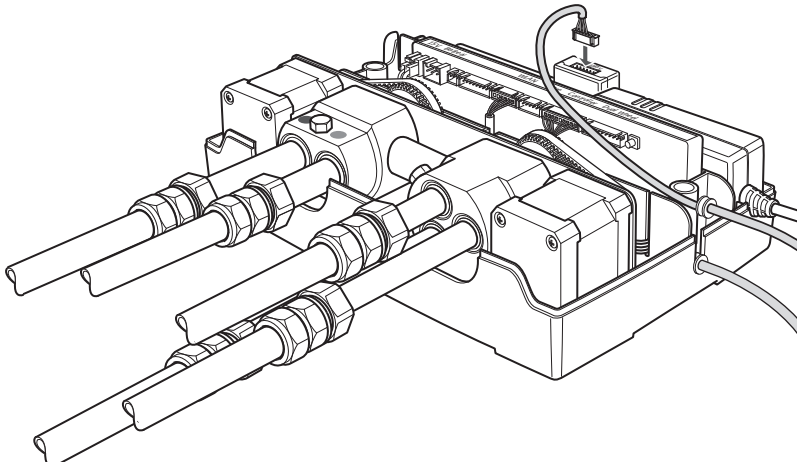
Step 23 - Connect control wheel data cable

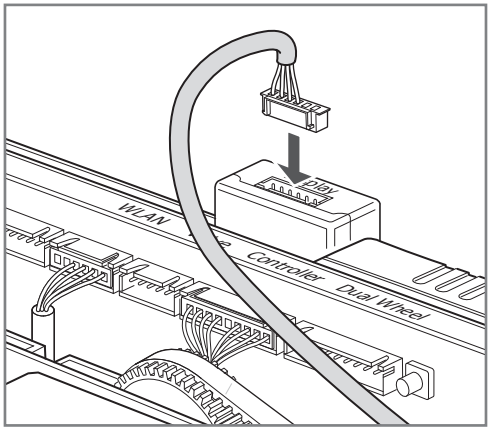




Connect the data cable from the control wheel to the 'Controller' connection in the processor.

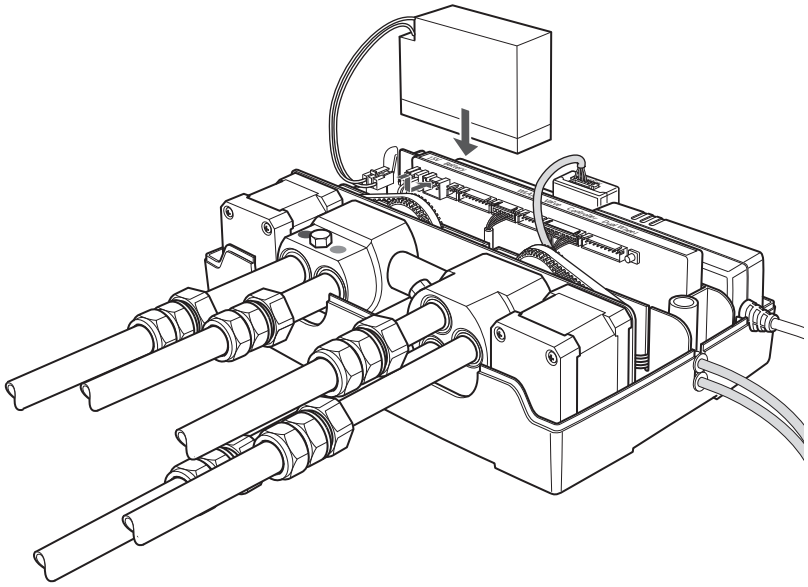
Step 24 - Connect facia control data cable

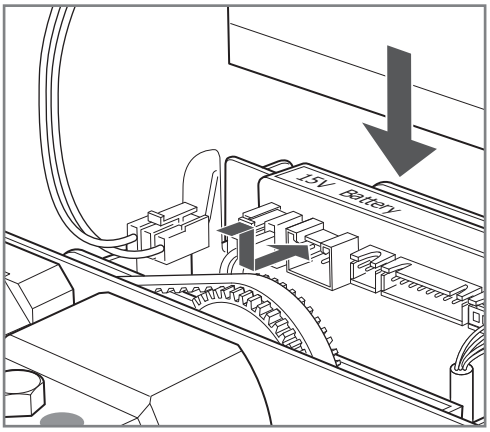




Connect the data cable from the facia control to the 'Display' connection in the processor.

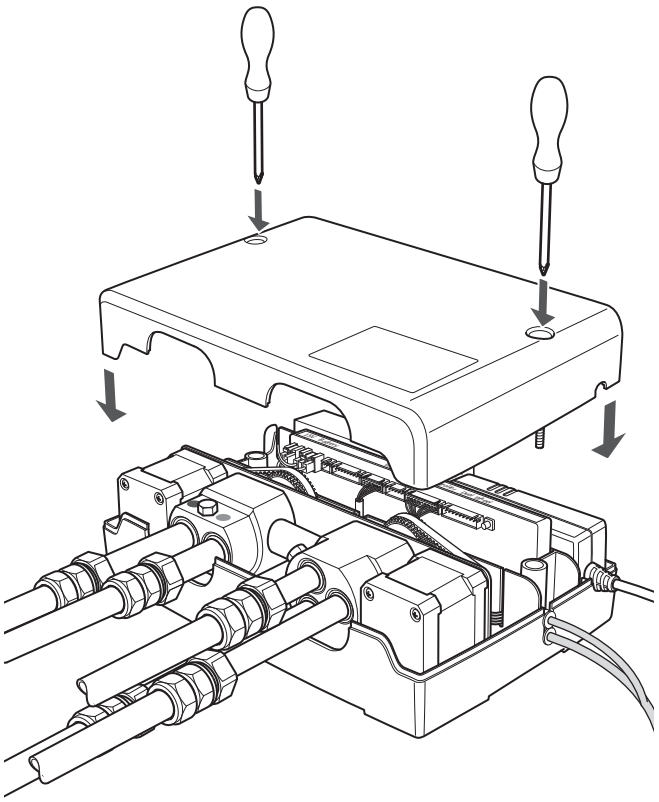
Step 25 - Connect back up battery





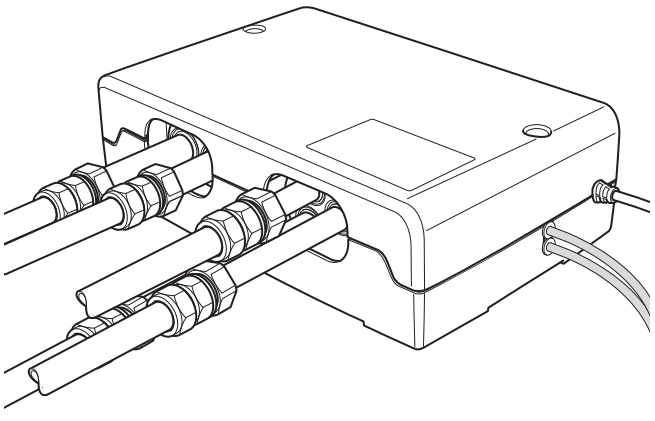
Connect the battery cable to the 'Battery for battery back up' connection and place the battery in the compartment.

Step 26



Re-fit the processor cover.

Step 27



Connect the processor power lead to a double pole 3 amp fuse switched spur incorporated in the fixed wiring circuit, in accordance with the current wiring regulations.

⚠ **Important:** All showers requiring an electrical connection MUST be installed by a qualified person following the latest revision of BS 7671 (Wiring Regulations) and certified to current building regulations.

Cleaning / maintenance

Clean the controls only with soapy water. The use of abrasive cleaners may damage the brass, and will invalidate your guarantee.

Servicing / contact info

In the unlikely event that you are experiencing difficulties with your new Crosswater Digital product, please contact the Crosswater Technical Advice team on:

0845 8738843 or via e-mail – Technical@crosswater.co.uk

Website: crosswaterdigital.co.uk

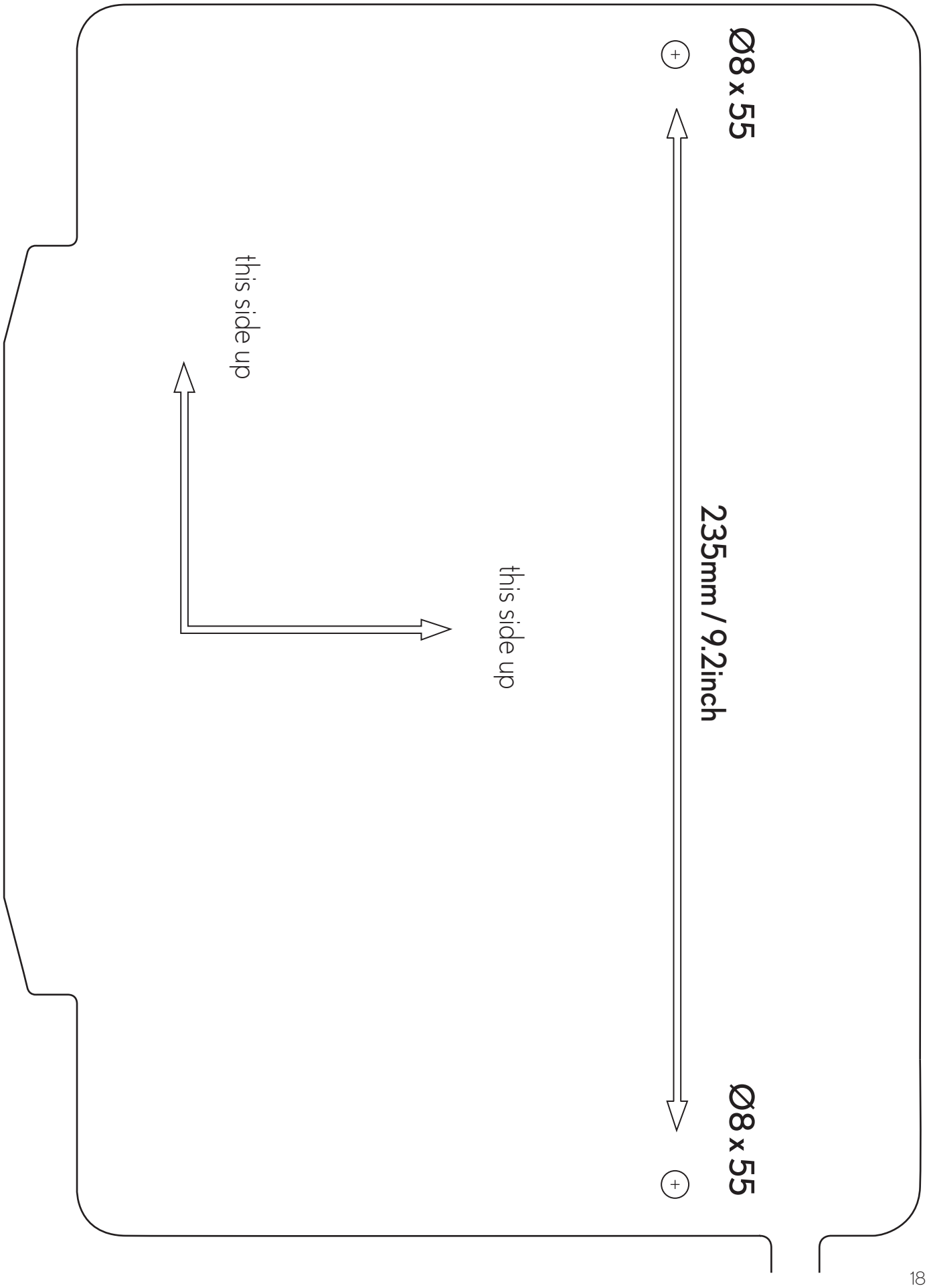
Guarantee

Digital Crosswater products, unless otherwise stated, carry a 5 year guarantee, which covers all manufacturing faults.
This guarantee does not cover damage caused during fitting, damage resulting from incorrect installation, or damage caused by misuse or inappropriate cleaning.

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

Digital processor boxes must be fitted in accessible locations, and it is the responsibility of the installer to ensure that any processor is. Crosswater cannot accept liability if the processor has been fitted in an inaccessible location.

crosswater



crosswater
digital

For any further information please contact Crosswater on: **0845 8738843**

Or visit our web-site at:
www.crosswaterdigital.co.uk

Crosswater reserves the right to make technical modifications without prior notice.