

Solo water control system

Installation and maintenance guide

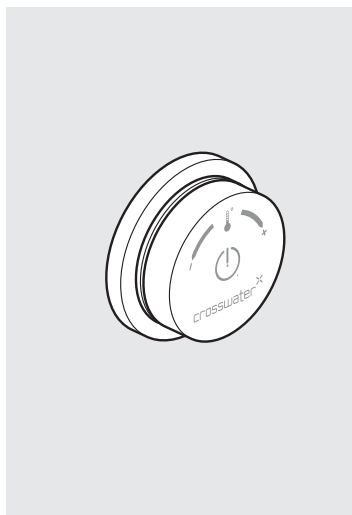


crosswater^x
digital

DIGITAL WATER CONTROL AT YOUR FINGERTIPS

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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 Solo 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 40°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 (35mm with the bracket cut down).

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.

Important and safety information - continued

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

The Solo is suitable for domestic or commercial use.

This product is supplied with a 5 year warranty.

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 15mm pipe is used, copper pipe should be used rather than plastic as there is less resistance to water flowing through.

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.

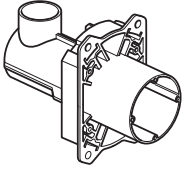
After installation

Important: Once powered up, the control must be programmed within one hour following the 'Activation set-up' section in the Operation and care guide. This will set the maximum temperatures, maximum run time, hygiene intervals and ambient light.

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.

Pack contents



Control fixing bracket



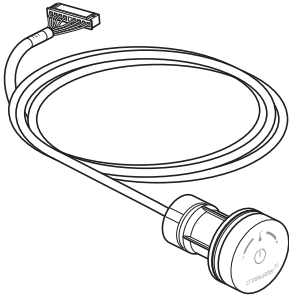
Control fixings



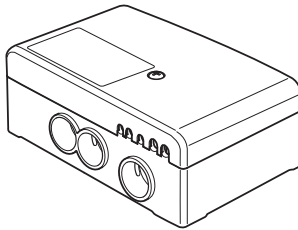
Back plate, Foam gasket & Adaptor ring



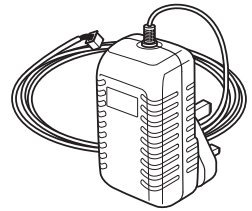
Foam seal



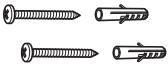
Solo control



Processor - Single outlet



Power pack



Processor fixings



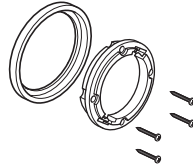
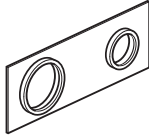
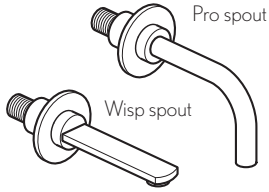
Outlet connector



Inlet connectors

Basin mixer wall spout - option contents

(additional parts required are sold separately)



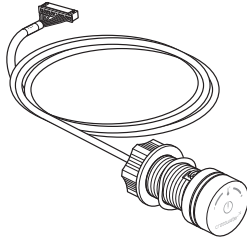
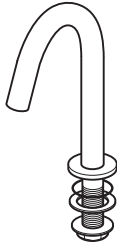
Basin mixer wall spout

Trim plate

DGXTRIM for trim plate and adaptor ring

Deck mounted basin mixer - option contents

(additional parts required are sold separately)



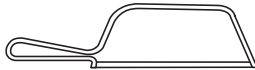
Deck mounted spout and fittings

Surface mounted control

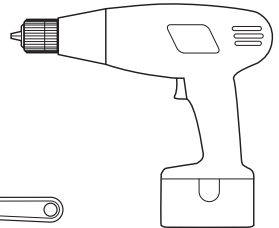
Tools required



Pencil



Hacksaw



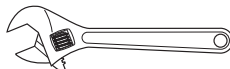
Drill



Suitable drill bit

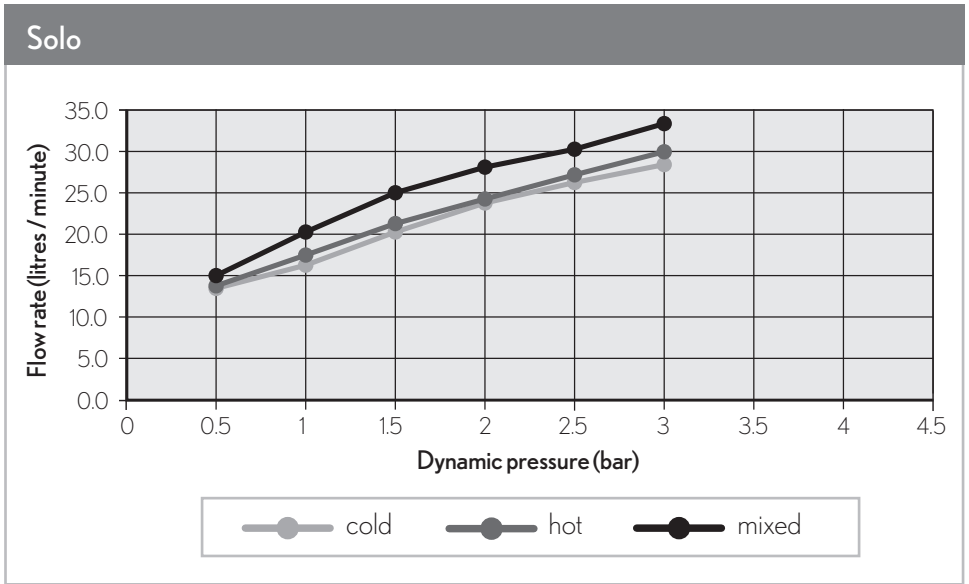


Crosshead screwdriver



Adjustable spanner

Flow performance



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

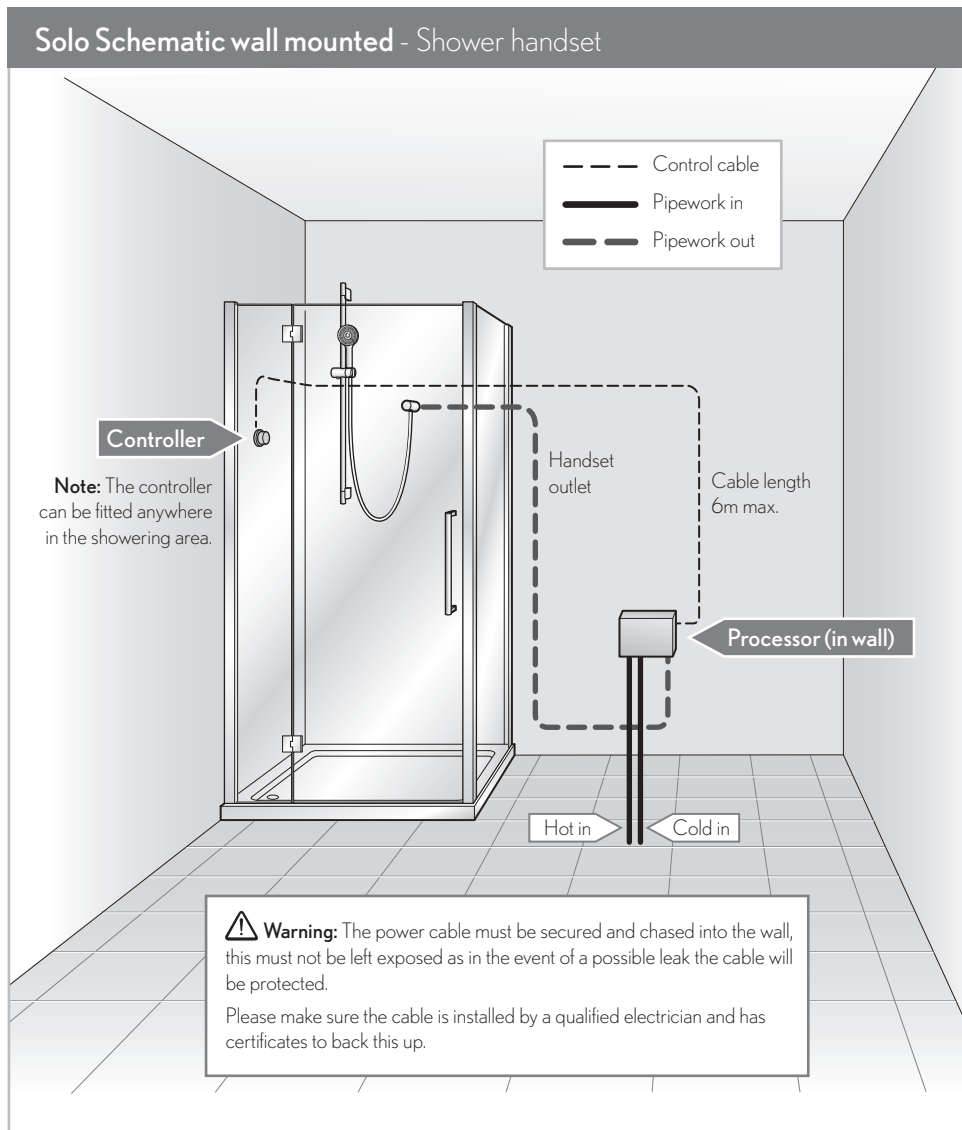
All products marked LP (Low pressure) and MP (Medium pressure) are also suitable for HP (High pressure) systems.

Please note: This product must work from a minimum water pressure of 0.5 bar and above.

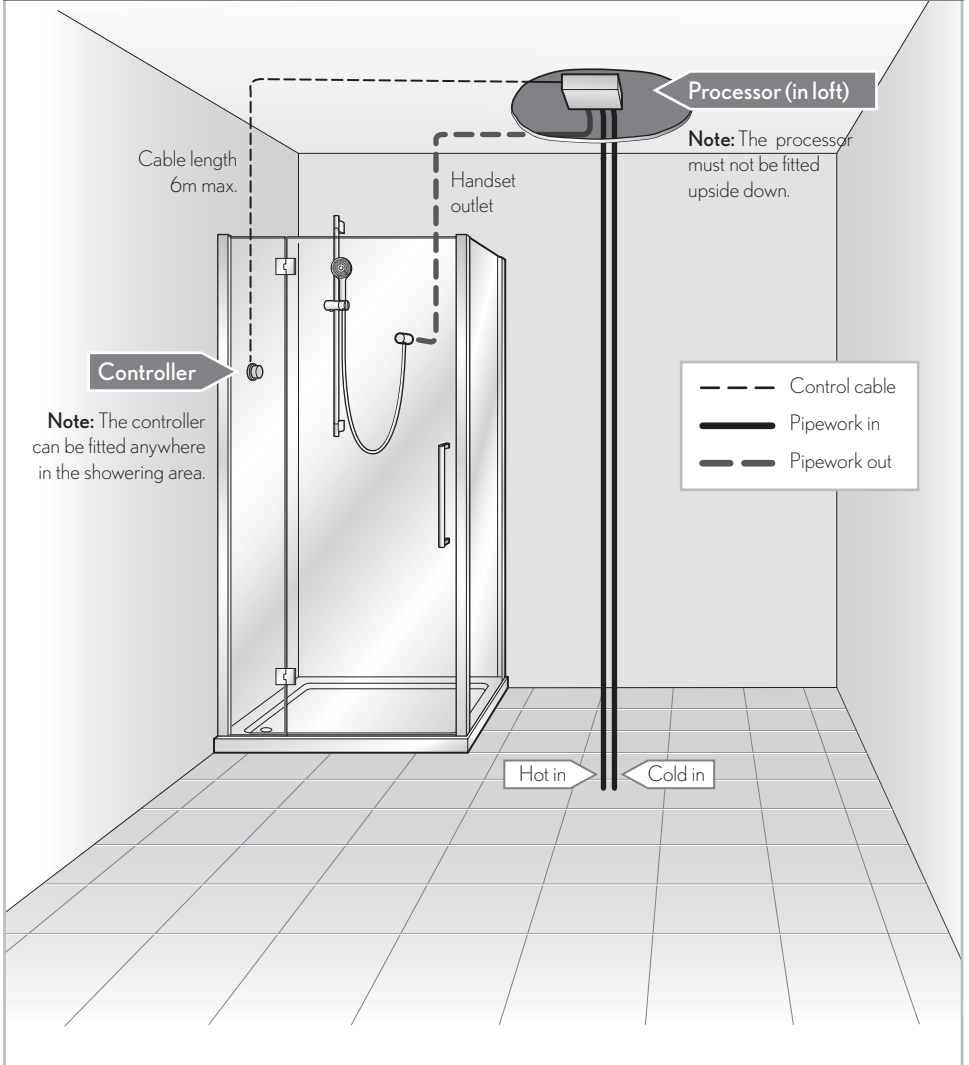
Please note: The flow chart is measured open ended as the outlets have no restrictions.

Typical mounted installation examples

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

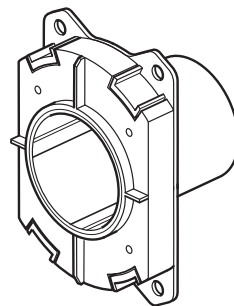
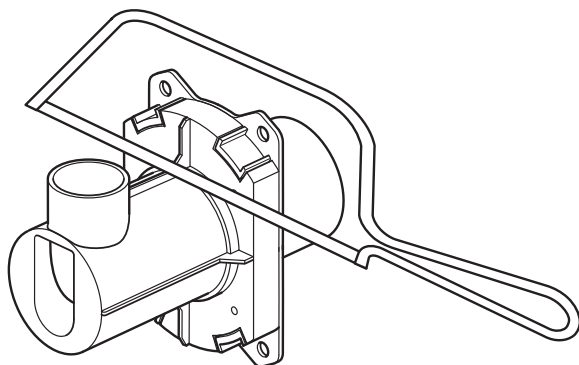


Solo Schematic loft mounted - Shower handset



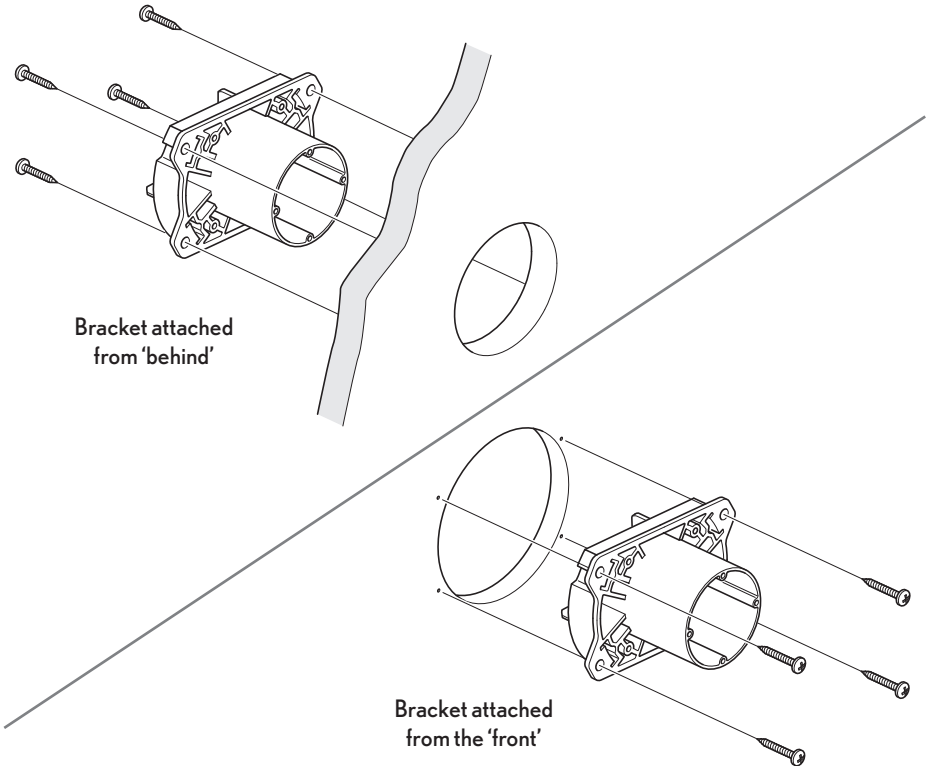
The Control - Installation instructions

Step 1 - Cutting down the control fixing bracket



To make the installation easier, we recommend that the control fixing bracket is cut down as shown using a hacksaw.

Step 2 - Attaching the control fixing bracket



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.

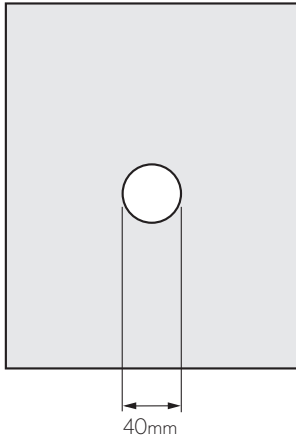
Bracket attached from behind: a 40mm diameter hole is required.

Bracket attached from the front: a 68mm diameter hole is required.

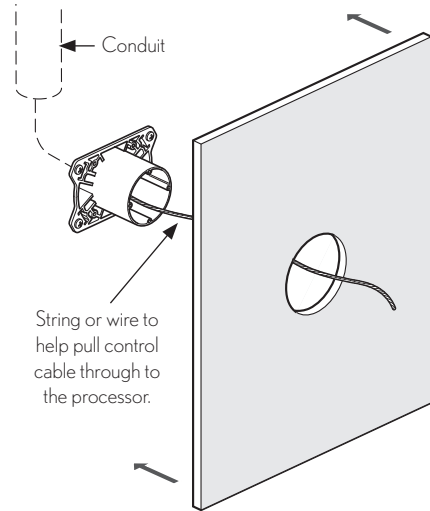
Conduits should be used in the walls where necessary to protect the cables and allow maintenance.

Attach the control fixing bracket using the screws supplied.

Step 3 - Finish the wall

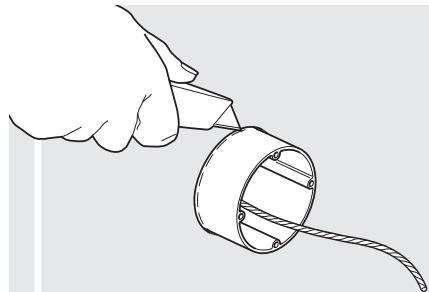
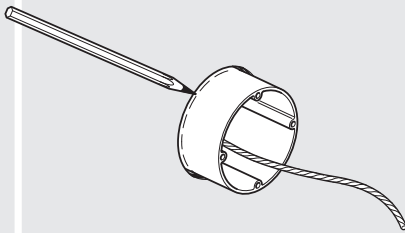


Hole size in tile

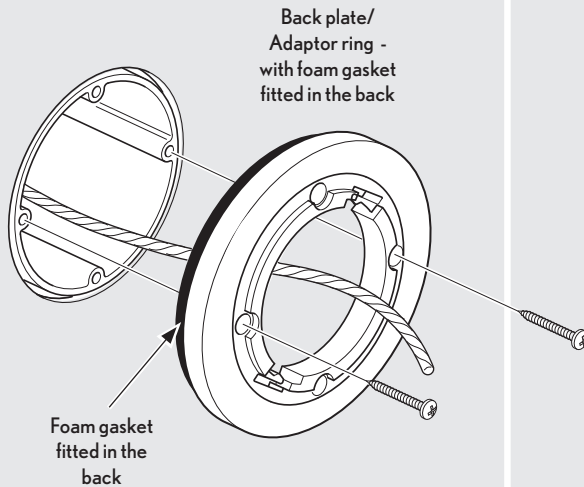


Finish the wall by tiling etc. A 40mm diameter hole should be drilled in the tile etc to finish.

Step 4



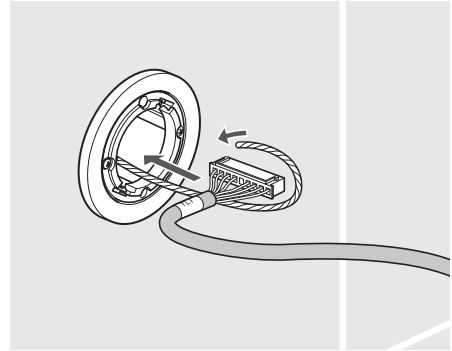
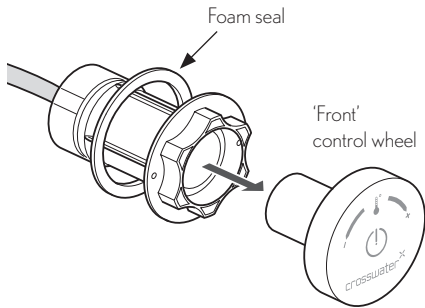
Draw a line around the bracket collar, **flush** with the wall. Cut down the bracket collar as marked.

Step 5

Attach the back plate/adaptor ring to the control fixing bracket using the 15mm screws supplied.

Note: The black adaptor ring **must** be flush with the brass back plate.

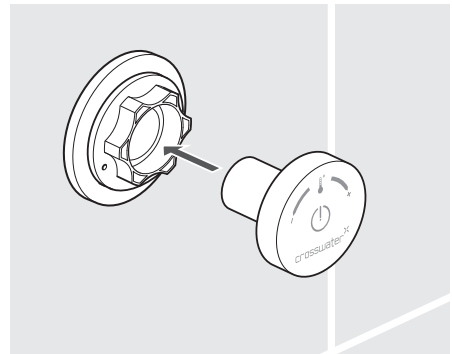
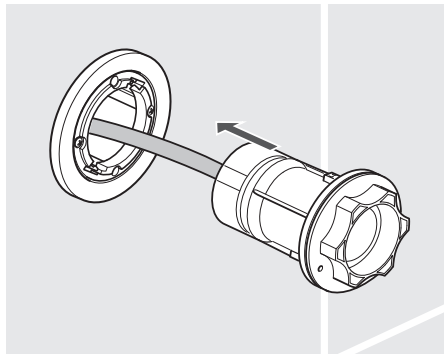
Step 6



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

Feed the control data cable through the bracket. **Note:** Attaching a length of string or wire to the control data cable will make it easier to pull the cable through to the processor.

Step 7

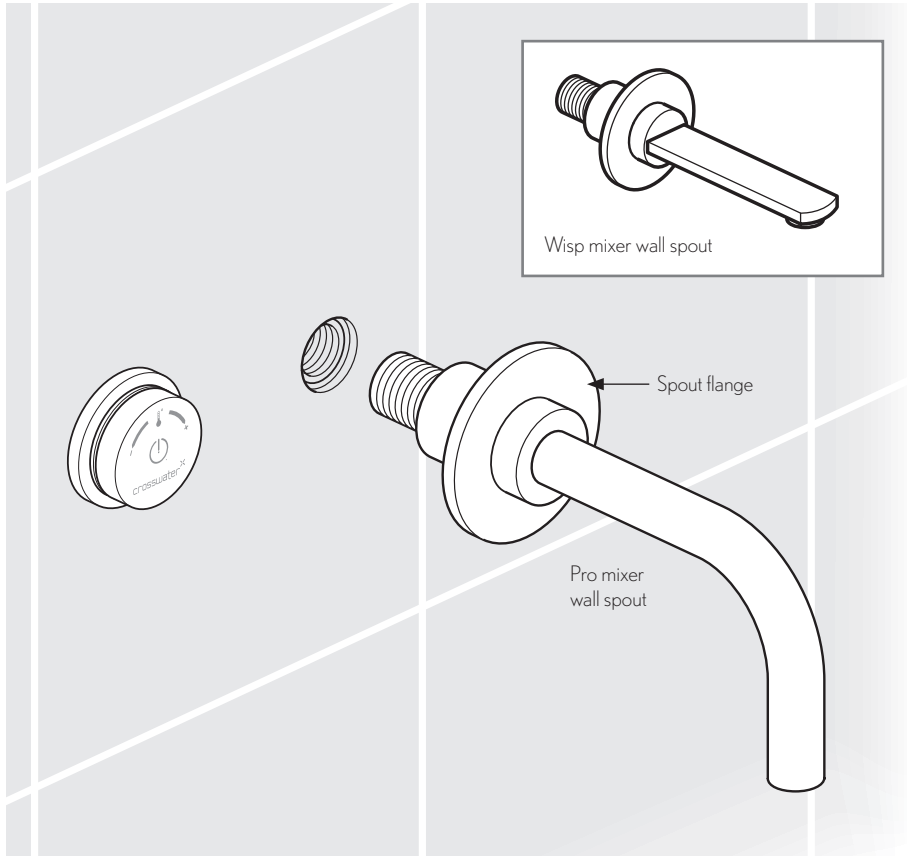


Position the control into the bracket and turn clockwise to lock in position.

Push fit the 'front' control wheel onto the control.

Basin mixer wall spout - option Installation instructions

Fitting the optional Basin mixer wall spout



Remember to turn off the mains water supply before connecting to any existing pipe work.
Install the Solo control following steps 1 - 7 (pages 9 - 13).

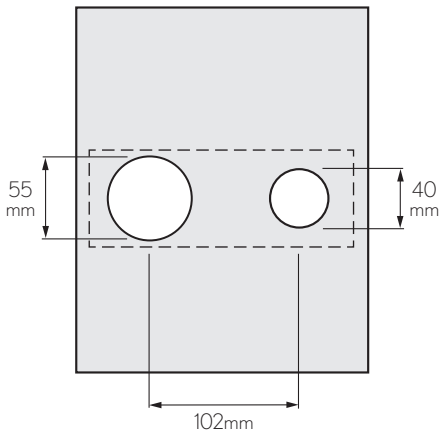
Prepare the wall to take the mixer tap wall spout, a 20mm diameter hole is required.

Connect the outlet from the processor to the wall fitting (not supplied). The spout has a ½" BSP male thread that can be screwed directly into the wall fitting.

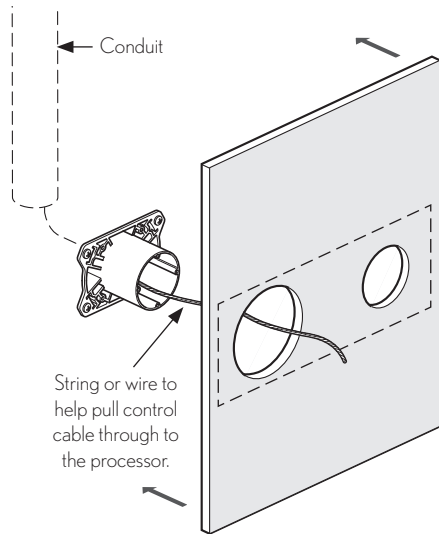
Finally pass the spout flange over the spout tube to cover the hole made in the tiles/wall.

Basin mixer wall spout with rectangular trim plate - option

Step 1 - Attaching the control brackets



Hole sizes and centres in tile



Install the control bracket following steps 1 - 2 (pages 9 - 10).

Prepare the wall to take the mixer tap wall spout, a 20mm diameter hole is required.

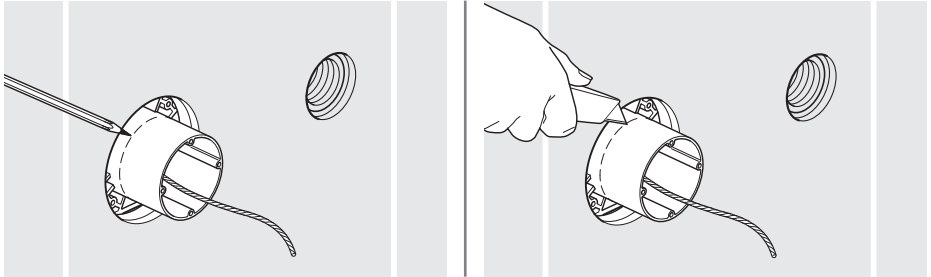
The spout has a 1/2" BSP male thread that can be screwed directly into the wall fitting.

If using the trim plate, the hole centres of the control and mixer wall spout **MUST** be 102mm apart.

Finish the wall by tiling etc. The control requires a 55mm diameter hole and the mixer wall spout needs a 40mm diameter hole drilled in the tile etc to finish.

(The dotted line on the 'tile' indicates the trim plate.)

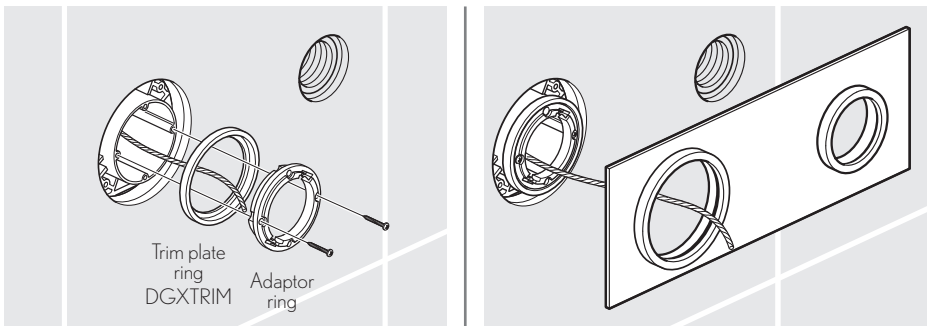
Step 2



Draw a line around the bracket collar, **flush** with the wall. **Note:** The collar must be flush with the tiled wall.

Carefully cut down the bracket collar as marked. **Note:** Feeding a string or wire through the bracket and conduit will make it easier to pull the cable through to the processor.

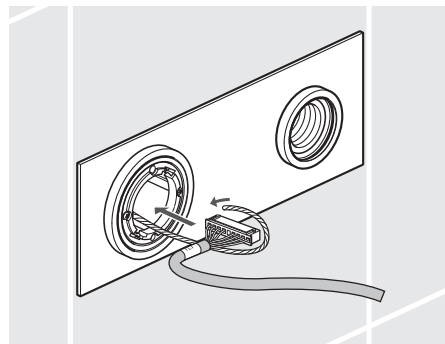
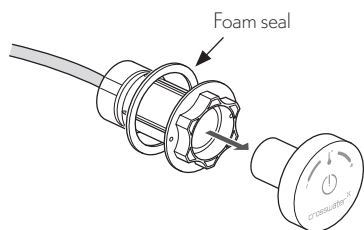
Step 3



Position the adaptor ring inside the trim plate ring 'DGXTRIM' (both supplied with trim plate), the adaptor ring **must be flush** with the rim of the trim plate ring. Fix through the adaptor ring holes into the bracket collar using the 15mm screws.

Peel off the backing paper from the adhesive seal on the back of the trim plate. Position and fix the trim plate in position on the wall.

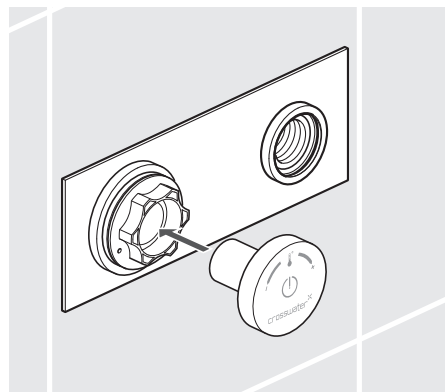
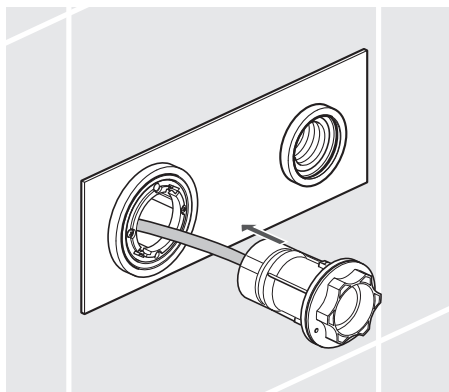
Step 4



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

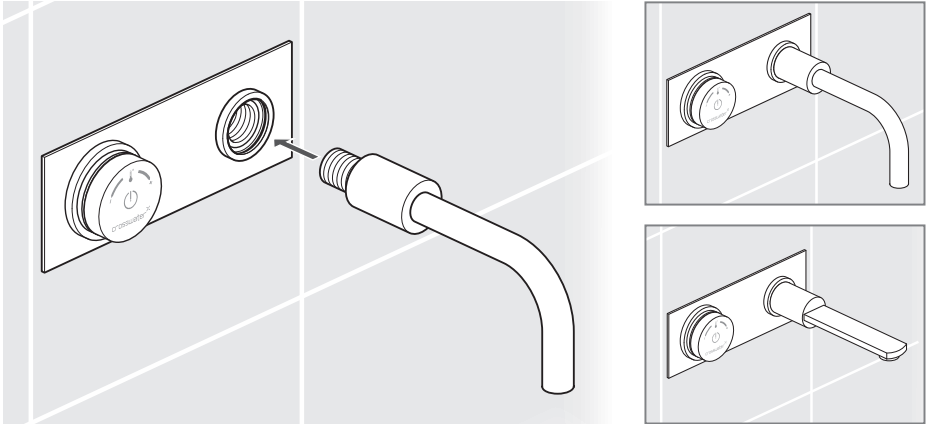
Feed the control data cable through the bracket.

Step 5



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

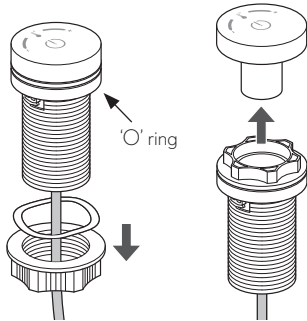
Push fit the 'front' control wheel onto the control.

Step 6

The spout has a 1/2" BSP male thread that can be screwed directly into the wall fitting (not supplied).

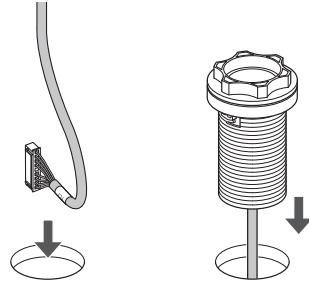
Deck mounted basin mixer control - option

Step 1



Unscrew and remove the nut and washer from the control bracket and data cable. Carefully pull the 'front' control wheel off the control.

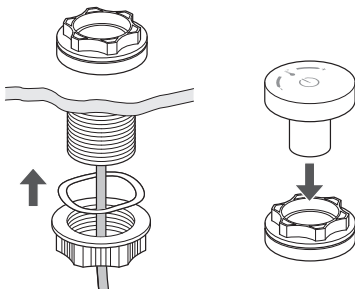
Step 2



Prepare the basin or worktop to take the control fixing bracket, a 35mm diameter hole is required.

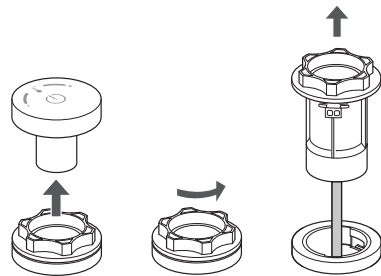
Feed the control data cable through the hole, then insert the control bracket.

Step 3



Feed the washer and nut onto the control data cable and screw hand tight onto the control bracket body, help may be required at this stage. Push fit the 'front' control wheel onto the control.

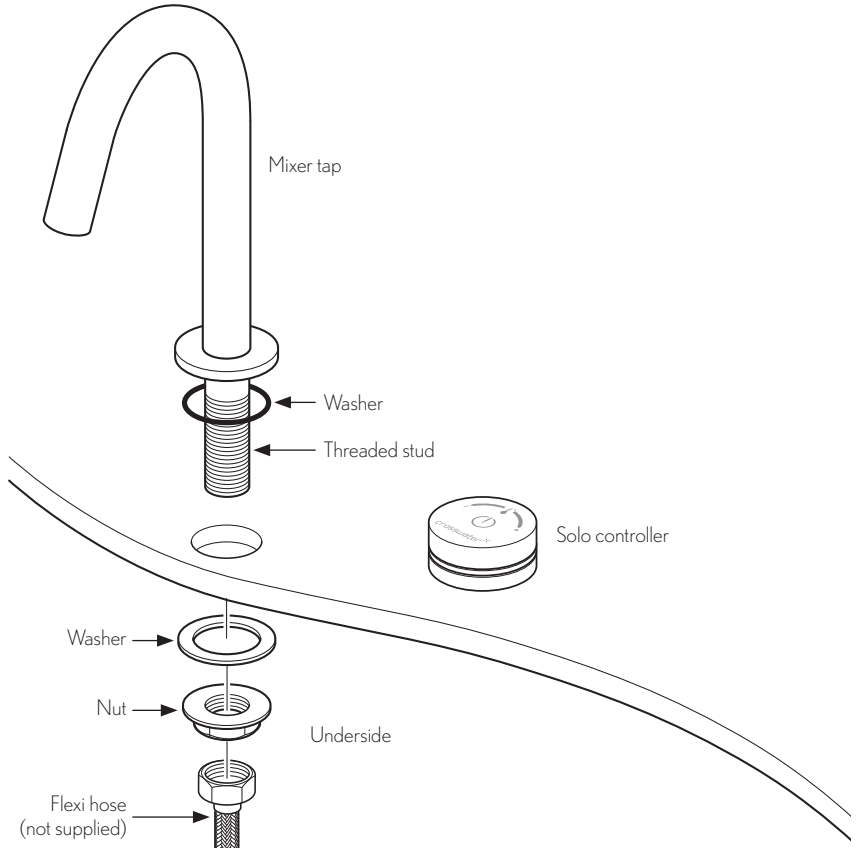
Step 4



If required the control body can be removed from the control bracket by pulling off the front control wheel, turning the control body anti-clockwise and lifting out. To refit, position the control body in the slots and turn clockwise.

Deck mounted basin mixer tap - option

Step 5



Remember to turn off the mains water supply before connecting to any existing pipe work.

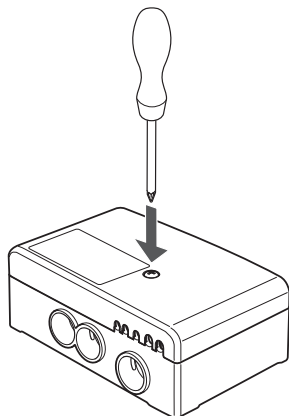
Prepare the basin or worktop to take the mixer tap, a 20mm diameter hole is required.

Pass the threaded stud of the mixer tap through the hole. From the underside secure the mixer tap using the washer and nut supplied - **only hand tighten at this stage.**

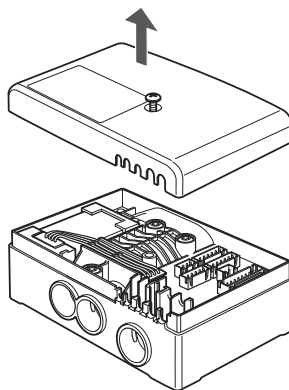
Once the mixer tap is correctly lined up, fully tighten the nut on the underside, take care not to over tighten the nut as the basin or work top may be damaged.

The Processor - Installation instructions

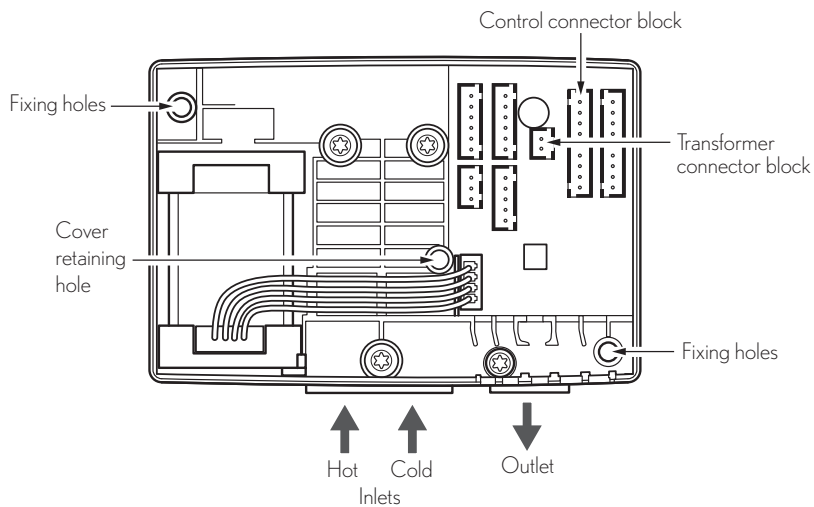
Step 1 - Connecting the processor



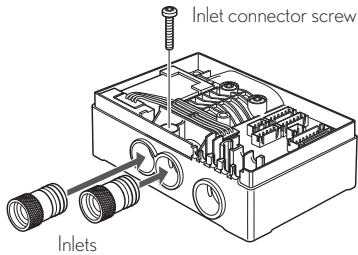
Remove the processor cover.



Inside the Processor

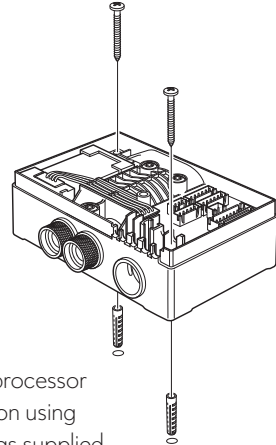


Step 2



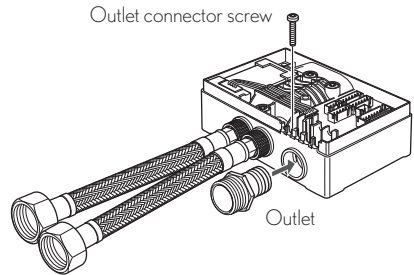
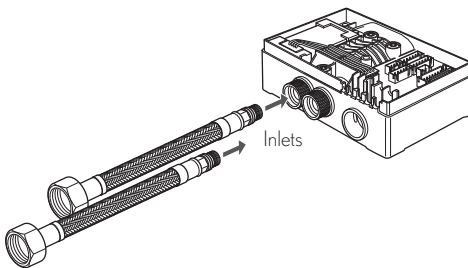
Remove the inlet connector screw, insert the inlet connectors and re-insert the screw.

Step 3



Fix the processor in position using the fixings supplied.

Step 4

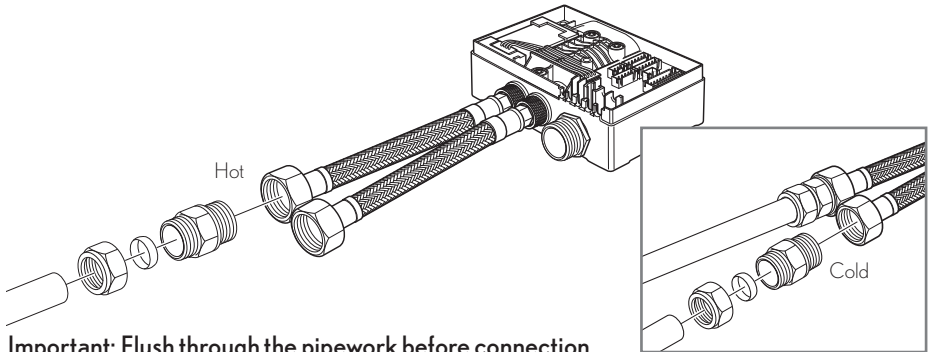


Screw 10mm flexi hoses* (not supplied) into the hot and cold inlets, ensure the flat gaskets are fitted between the inlet connectors and flexi hoses.

Remove the outlet connector screw, insert the outlet connector and re-insert the screw.

* The flexi hoses required are: 150mm, DN8-HF 1/2" FAxM10x1 (Note: without HF hoses the flow rate is significantly lower), we can supply the flexi hoses if required.

Step 5

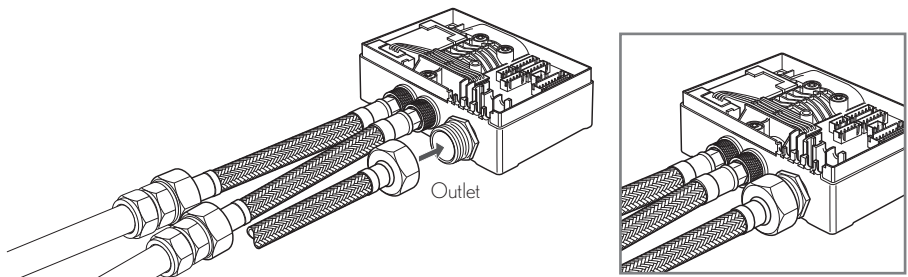


Important: Flush through the pipework before connection.

Attach the 15mm hot and cold water supply connections.

Note: Do not over-tighten the brass nuts to avoid cracks.

Step 6

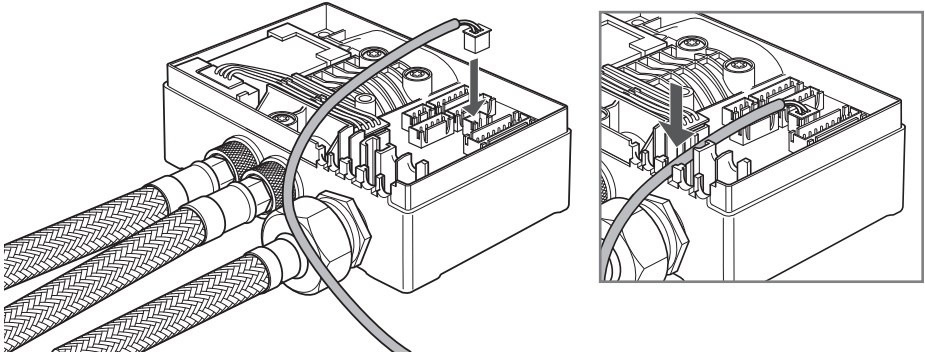


Attach 15mm pipework to the outlet connector, ensure a flat gasket is fitted between the outlet connector and flexi hose.

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.

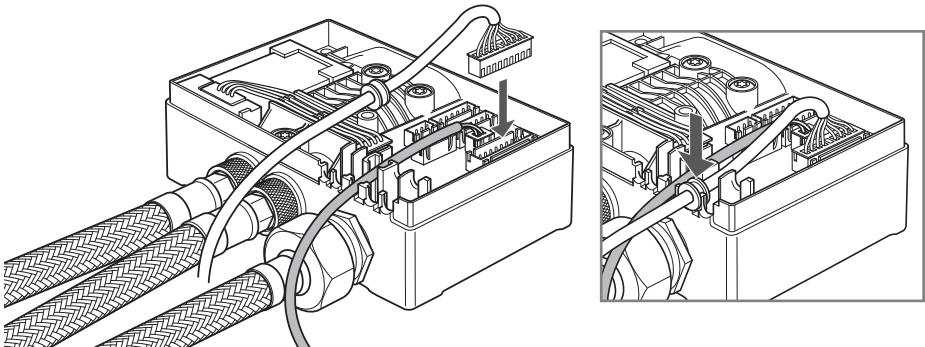
Run a pipe from the mixed water outlet on the processor through the wall to the proposed position of the shower hose outlet etc.

Step 7



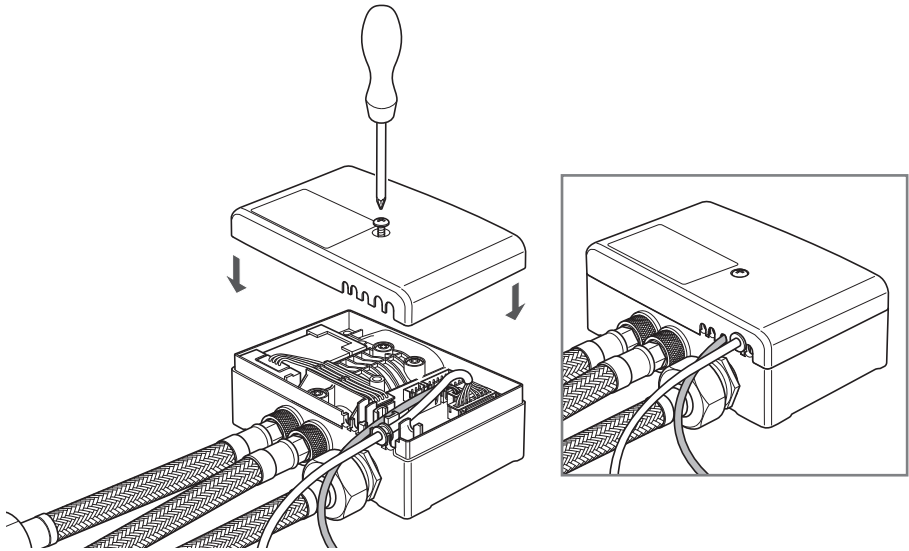
Connect the data cable from the 'Power pack' to the connector block in the processor. Ensure the cable locates as shown, see 'Inside the Processor' on page 14.

Step 8



Remove the 'sealed wrapping' from around the connector and connect the data cable from the 'Control' to the connector block in the processor. Ensure the cable locates as shown, see 'Inside the Processor' on page 14.

Step 9



Re-fit the processor cover. Plug the power pack into a power socket.

Step 10 - Control set-up

Important: Once powered up, the control must be programmed within one hour following the 'Activation set-up' section in the Operation and care guide. This will set the maximum temperatures, maximum run time, hygiene intervals and ambient light.

Cleaning / maintenance

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

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

Warranty

Digital Crosswater products, unless otherwise stated, carry a 5 year warranty, which covers all manufacturing faults. This warranty 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 warranty.

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.

Please refer to your local retailer, or contact our technical helpline for information regarding the use of the Solo in commercial premises, and the applicability of the warranty in such circumstances.

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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.