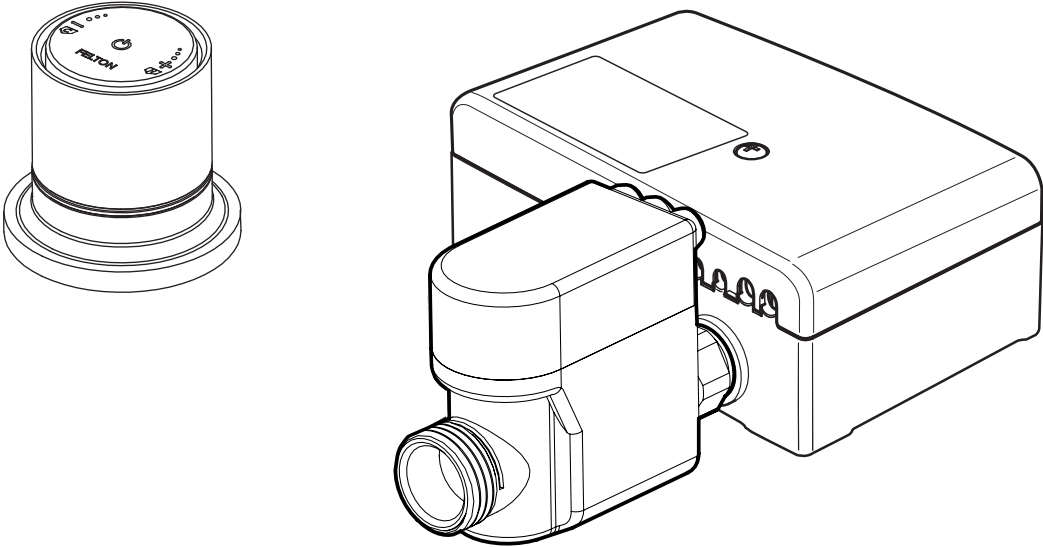


# INSTALLATION GUIDE

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TATE

Smartflow® Digital Shower Mixer



FELTON



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## CONTENTS

Notice	4
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## NOTICE

PLEASE READ THE MANUAL CAREFULLY BEFORE STARTING THE INSTALLATION. AFTER COMMISSIONING AND TESTING THE SYSTEMS FUNCTIONALITY, THIS DOCUMENT MUST BE GIVEN TO THE END USER OF THE SYSTEM.

### PRODUCT TO BE DISCONNECTED BEFORE LINE TEST

In case of a power cut, the unit will remain inactive until the power is back on.

### GENERAL

This installation manual contains instructions for the correct installation of the **Tate Digital Controller**. The warranty will be invalidated if the product is not installed according to these instructions.

Installation must be carried out by qualified installers in accordance to this installation manual. AS/NZS3500 standards, rules and safety regulations do apply.

### PLACE OF INSTALLATION

The **Tate Digital Controller** must be installed in an accessible place and in accordance to this installation manual. This ensures a problem-free service and maintenance procedure.



### **DANGER OF ELECTRIC SHOCK!** **ELECTRICAL INSTALLATION**

Before opening the housing, the mains connection must be switched off. Work on electrical parts and connections must be carried out by qualified electrician. Country-specific standards and regulations do apply.

### PRECAUTIONS

1. This appliance is not intended for use by persons (including children) with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they have been given supervision or instruction concerning use of the appliance by a person responsible for their safety.
2. Children should be supervised to ensure that they do not play with the appliance.
3. If the supply cord is damaged, it must be replaced by the manufacturer, its service agent or similarly qualified persons in order to avoid a hazard.
4. This appliance contains battery that are only replaceable by skilled persons.
5. An electronic copy of the installation and user guides are available on the Felton website – please visit [www.felton.co.nz](http://www.felton.co.nz)

### MAINTENANCE

Felton products are made of high quality materials and require only minimal maintenance. The following maintenance tips help to preserve the surface and prevent damage through incorrect cleaning. Fittings and control parts should be wiped dry after used. Only use mild cleaning products that contain soap. The following must not be used: Scourers, abrasive sponges, hydrochloric acid, lime, plaster or cement removers, solutions or cleaning agents containing acid (pH $\leq$ 4), lime scale remover or vinegar-based cleaner – and cleaning agents where the chemical solution is not known which may be sold as special cleaner for fittings.

#### WATER PATH

Input	2×M10 × 1
Output	1/2" BSP
Flow	max. 22 l/min at 300kPa
Pressure range	Min 150kPa - Max 500kPa
Difference of pressure	Max. 100kPa/14.5psi
Maximum outlet temperature	45°C
Hot inlet temp range	55°C - 80°C
Cold inlet temp range	5°C - 25°C

#### ELECTRONICS

Power supply	100V-240V AC/50-60Hz
Power consumption	Standby < 0.5W, max. 18W

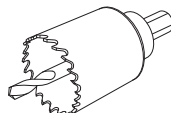
## TOOLS REQUIRED



1. Pencil



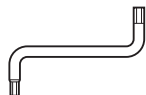
2. Drill bit  $\phi$ 5mm



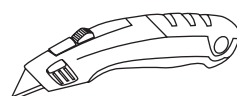
5.  $\phi$ 30-32mm hole saw



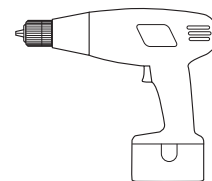
3. Phillips screwdriver



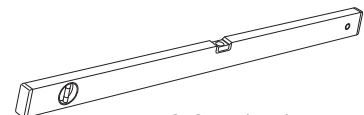
4. Torx screwdriver  
(included in box 1)



6. Utility knife

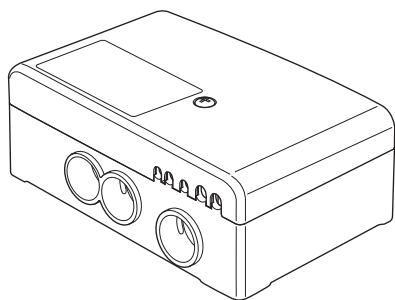


7. Drill

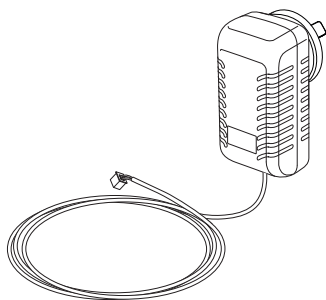


8. Spirit level

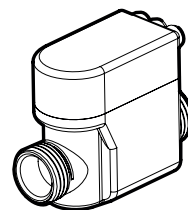
## BOX 1 DIGITAL MIXER



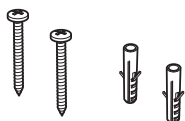
1. Temperature Control Unit



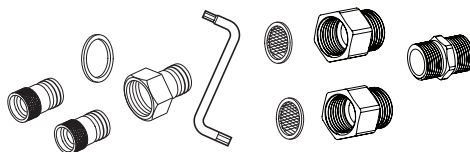
2. 12V AC Adapter (Cable length: 1m)



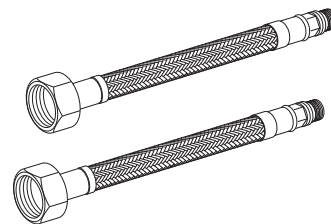
3. Flow Control Unit



4. Set of Screws: 2x 5x50mm

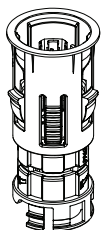


5. Adapter set



6. 2x Inlet hoses (supplied)

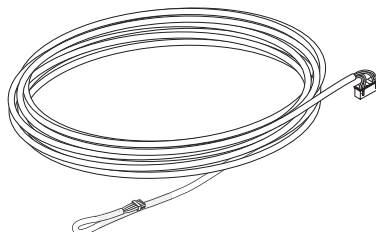
## BOX 2 CONTROL UNIT



1. Control Mounting Tube



2. Screw



3. Control Data Cable 10m



5. Control Sleeve



6. Control Wheel



7. Control Housing

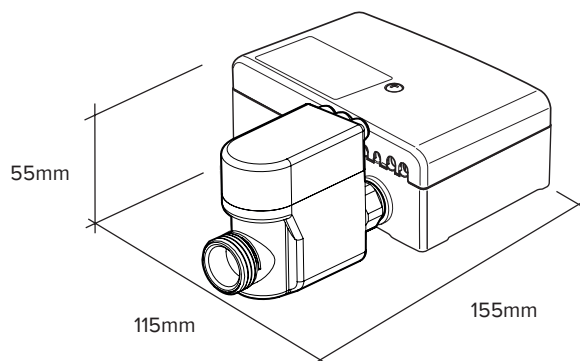


4. Cable Tie



8. Foam Seal

## MEASUREMENTS



## SCOPE OF APPLICATION



**Wire and Data Cable must be installed prior to the wall lining.**

It is recommended that the data cable is installed in conduit for ease of maintenance.

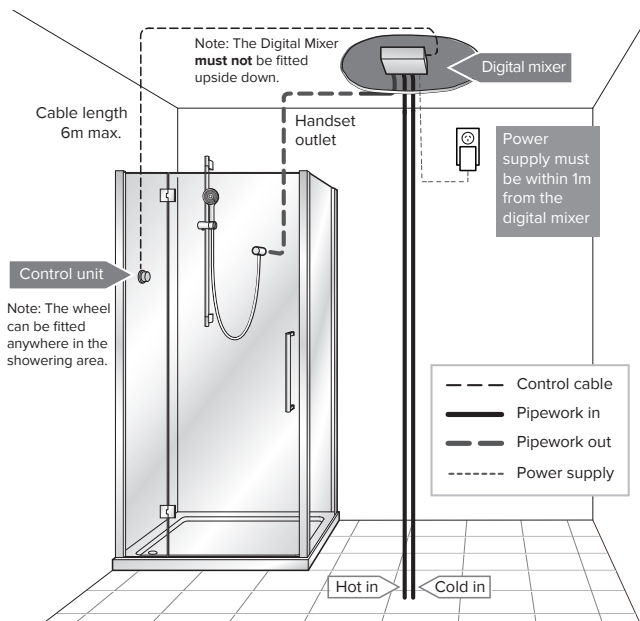
**Important:** The Digital Mixer must have an access panel and should not be sealed in the wall

**Warning:** Please ensure that all electrical installations are installed by a registered electrician and complies with the Electrical (Safety) Regulations of NZ.

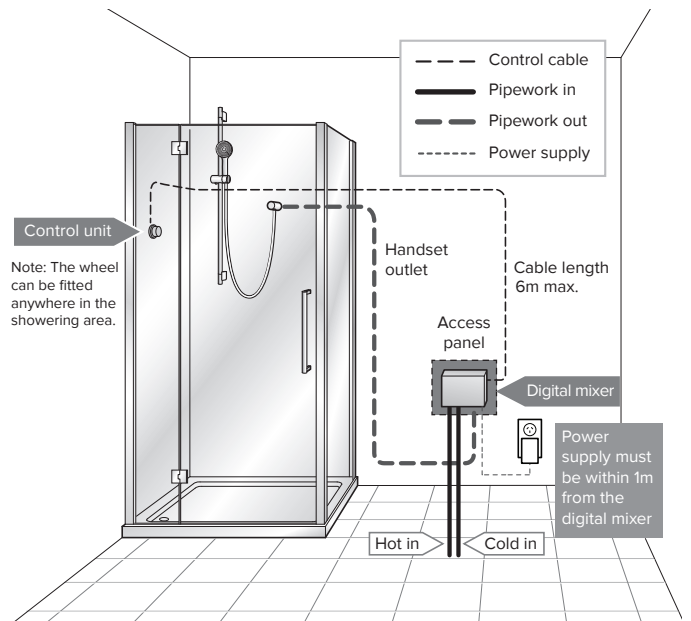
**Important:** The Digital Mixer must have an access panel.

## TATE SMARTFLOW DIGITAL SHOWER MIXER

A Ceiling Mounted (Recommended)

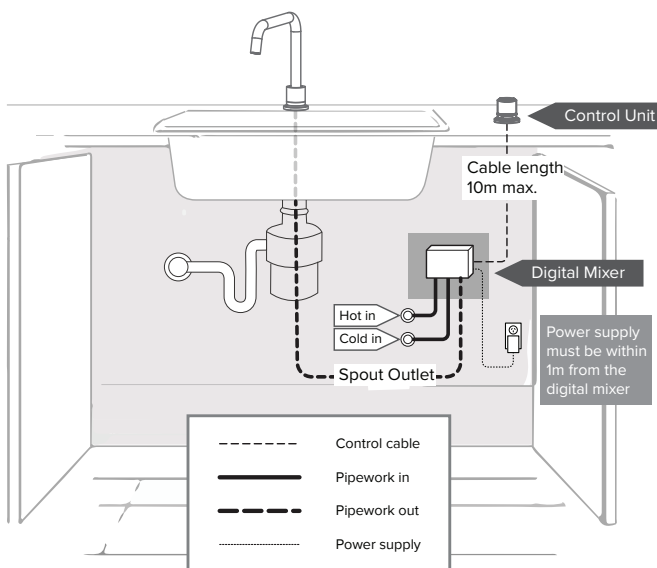


B Wall Mounted

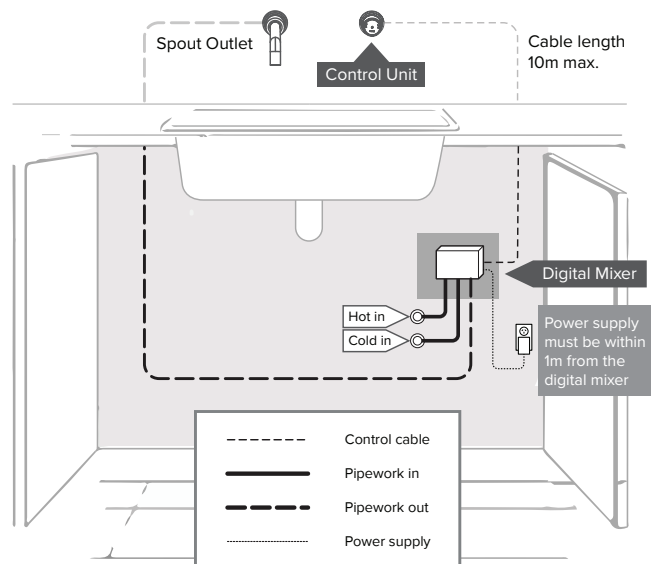


## ONLY APPLIES WHEN TATE SMARTFLOW DIGITAL SHOWER MIXER IS PAIRED WITH A SPOUT:

Under Sink (Recommended)

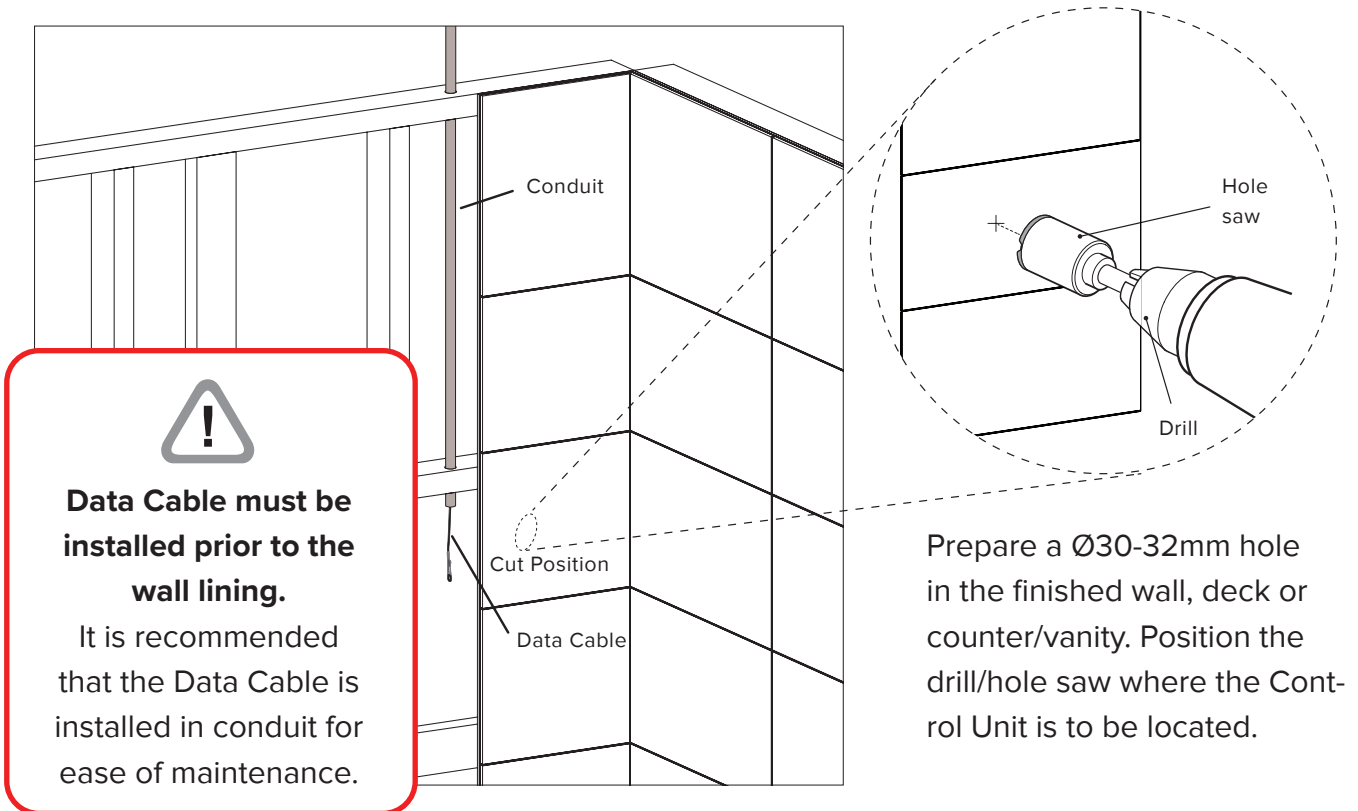


Under Basin (Recommended)

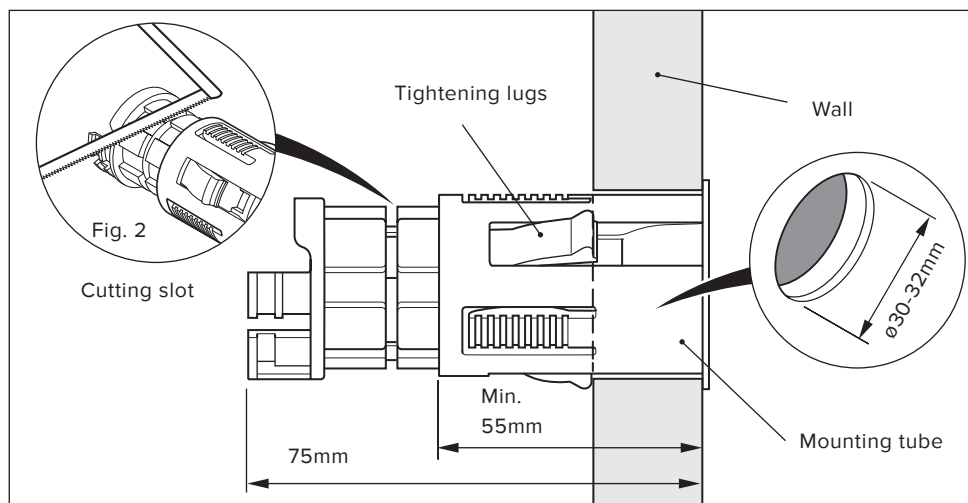


## CONTROL UNIT INSTALLATION

1 \*This Control Unit can also be installed as a Wall Mounted unit or a Deck Mounted unit

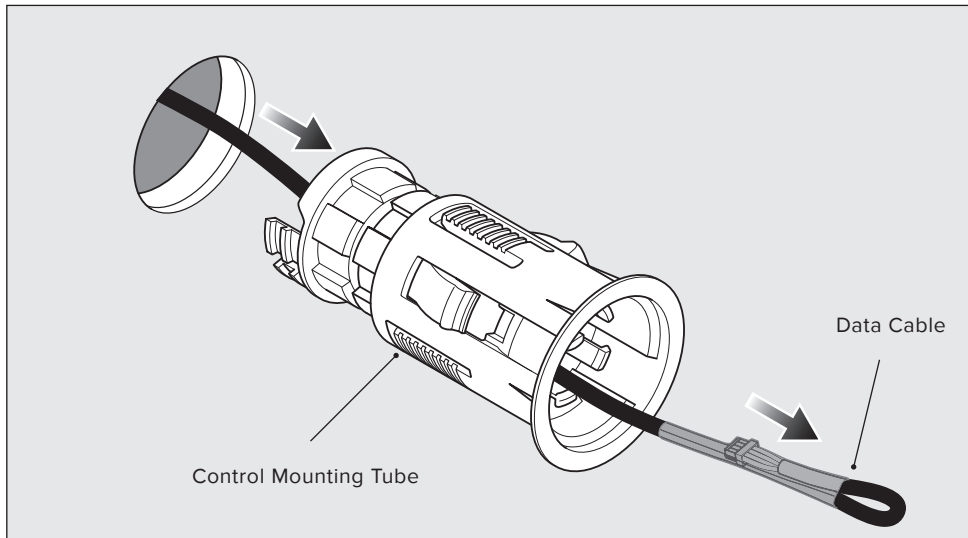


2



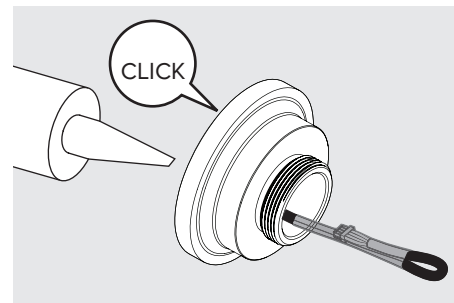
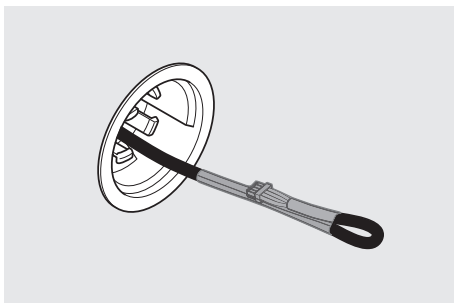
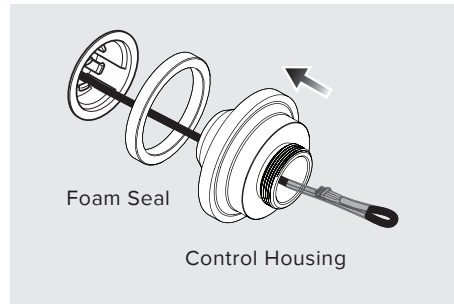
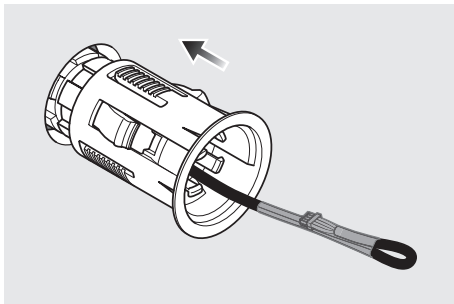
Please note: The Data Cable is 10 metres in length and therefore the Control Unit and Digital Unit need to be positioned accordingly within this distance. It is recommended that the Data Cable is installed in conduit for ease of maintenance. The Control Tube can be reduced in length if required by cutting along the cutting slot (see Fig. 2).

3



Using the Data Cable, thread the end with the small connector through the hole and Control Mounting Tube. This end of the cable is protected with a plastic sleeve, leave this on until later in the installation.

4



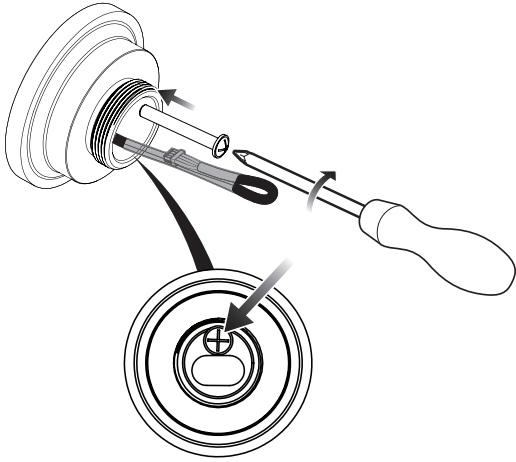
Push the Control Mounting Tube into the hole until the front flange sits against the wall.

Apply a silicone bead on the back of the Control Housing, then push the Control Housing into the Plastic Tube until it is firmly fitted on the unit.



5

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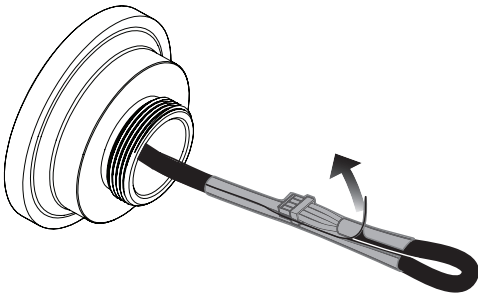


Tighten the screw inside the Control Housing and ensure the screw is aligned with the Plastic Mounting Tube.

This tightens the lugs on the inside of the wall. Tighten until there is no rotation of the Control Housing.

6

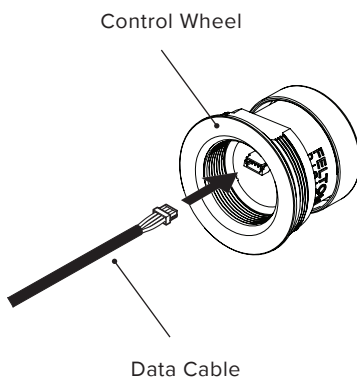
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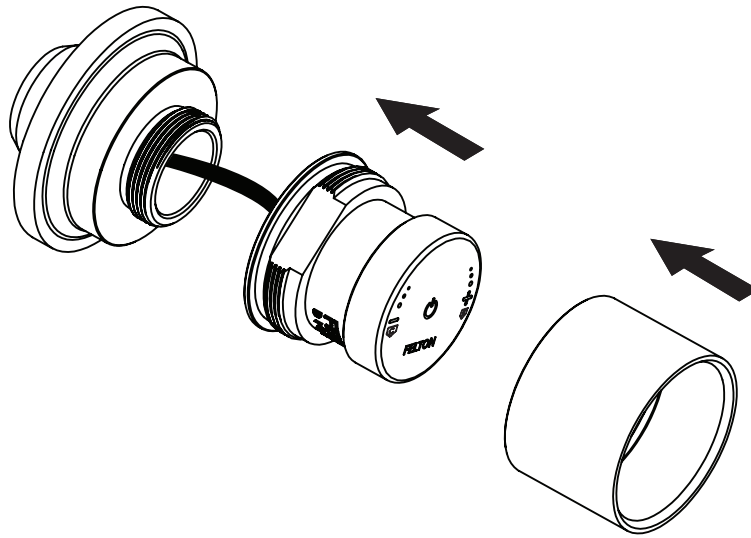
Pull the red strip to release the connector from the plastic sleeve.

7

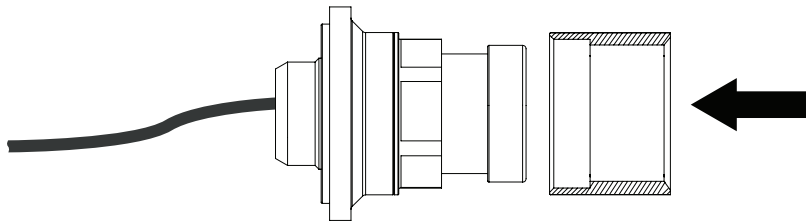
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Push the four pin connector into the socket on the back of the Control Wheel.



Thread in the cable and fit the Control Wheel onto the Housing.  
Fit the Control Sleeve onto the Control Wheel.

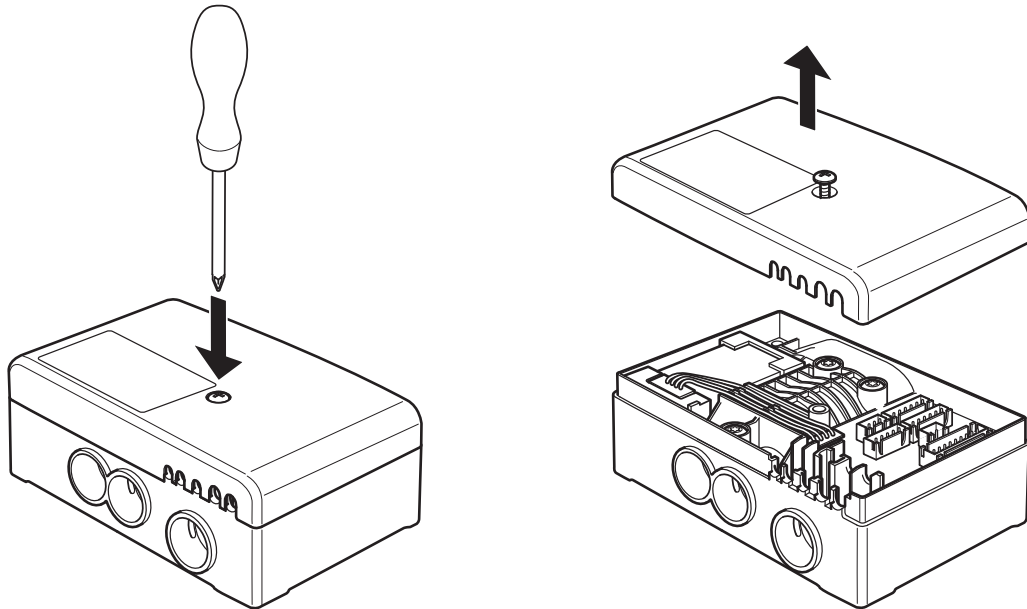


SIDE VIEW

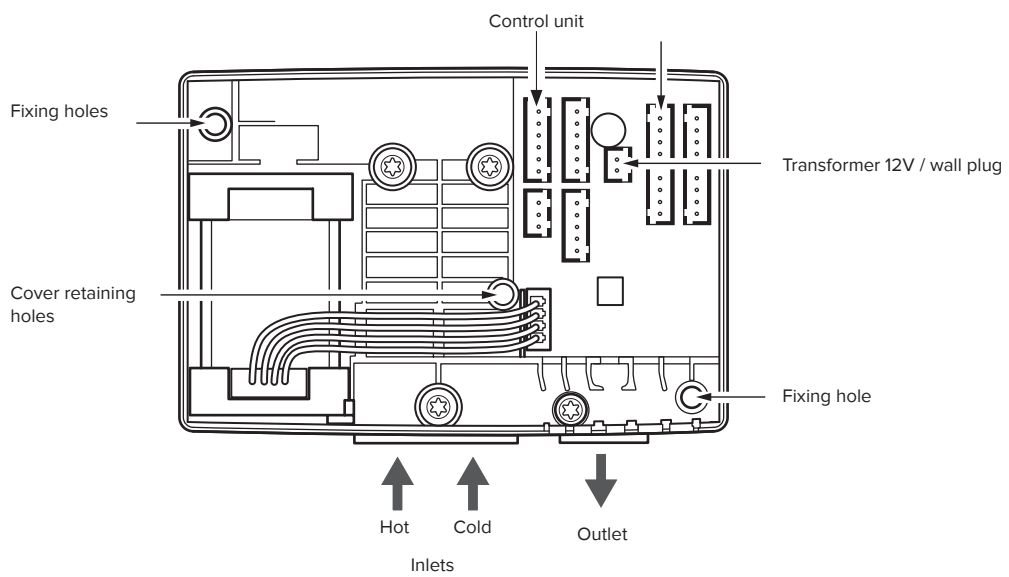
Ensure that you fit the Control Sleeve in the correct orientation.

## DIGITAL MIXER INSTALLATION

### 9 Remove the cover



### 10 Inside the Temperature Control Unit



# MOUNTING OPTIONS

Refer to Scope of Application on p6 for the plumbing layout

## MOUNTING FOR NOG

56mm

99mm

✓

✗

\* If installed vertically, use orientation shown

2 Install the Digital Mixer

## MOUNTING FOR CONCRETE

56mm

99mm

✓

✗

\* If installed vertically, use orientation shown

56mm

99mm

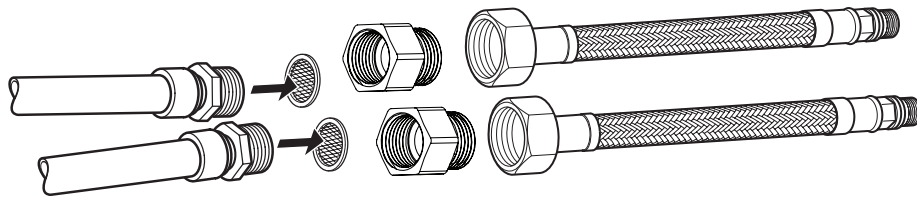
ø5mm

2 Drill fixing holes

3 Install the Digital Mixer

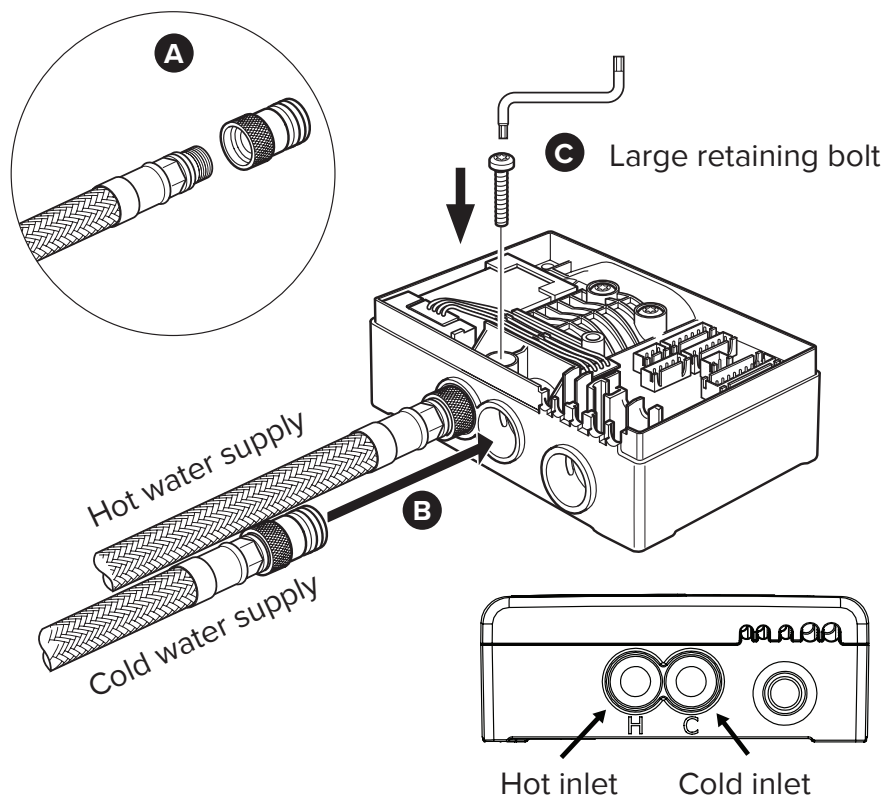
11. Connect the two Inlet hoses with the MF adaptors and filters to the water supply feed

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12.

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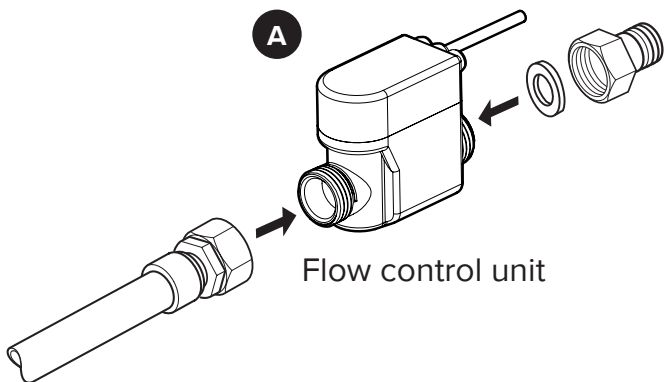
**A** - Connect the brass adaptors into the flexi hoses.

**B** - Fit both flexi hoses (with the brass adaptor on) firmly into the unit box.

**C** - Fit the large retaining bolt with a torx screw driver supplied.

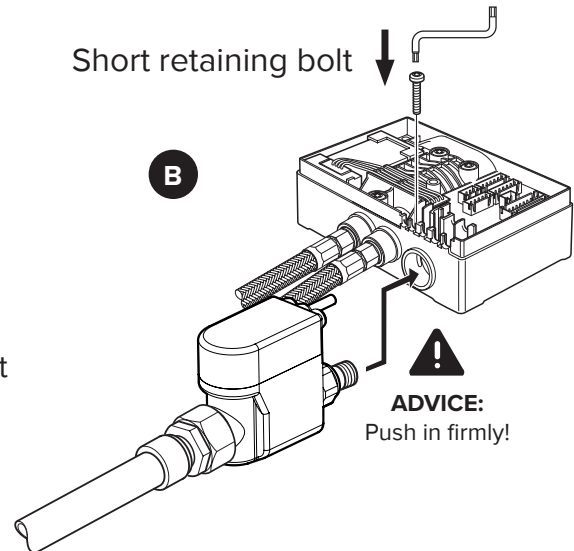
## CONNECTING THE FLOW CONTROLLER

13



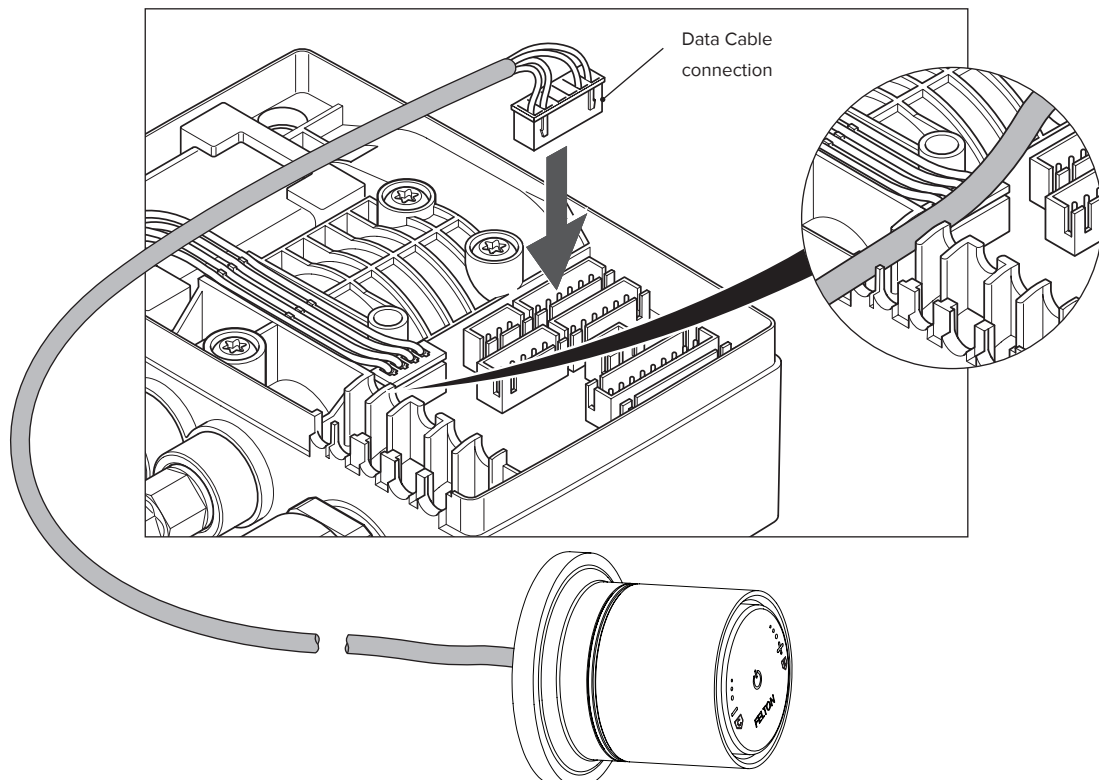
A. Fit the outlet pipe and the brass connector onto the Flow control unit.

B. Push a Flow control unit with outlet fitting back into the Digital Mixer and fit the short retaining bolt with torx screw driver supplied.

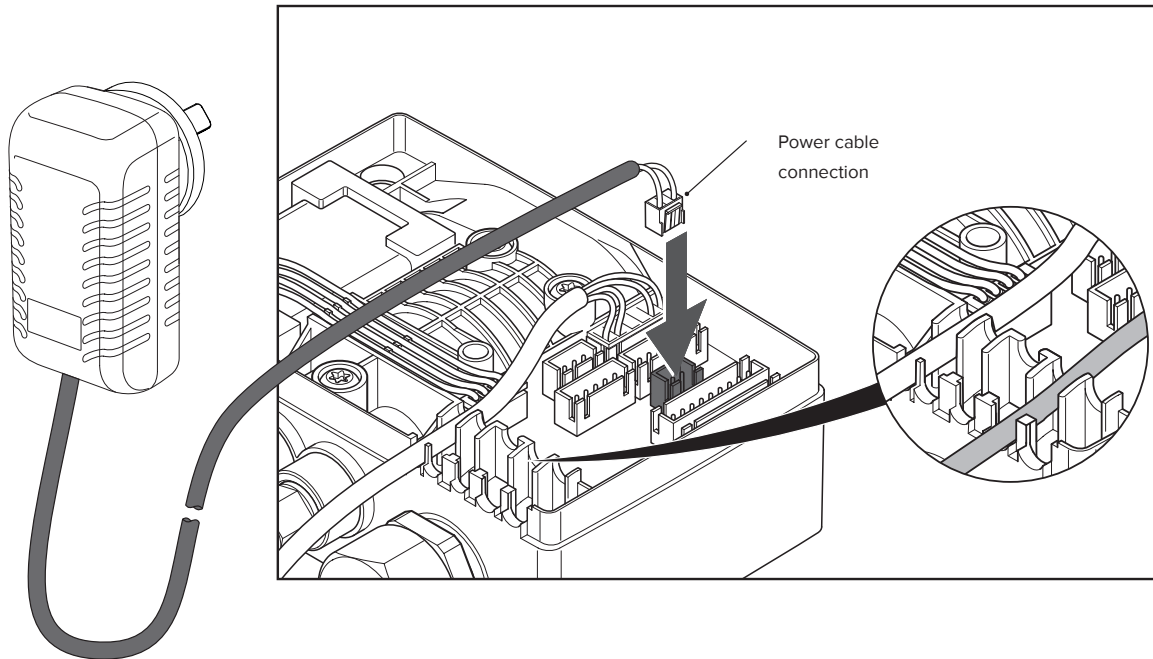


14

Connect the Data Cable coming from the Control Unit. Use the large 6 pin connector and push firmly into the socket. Feed the cable through the one of the guide slots in the front of the Digital Mixer.

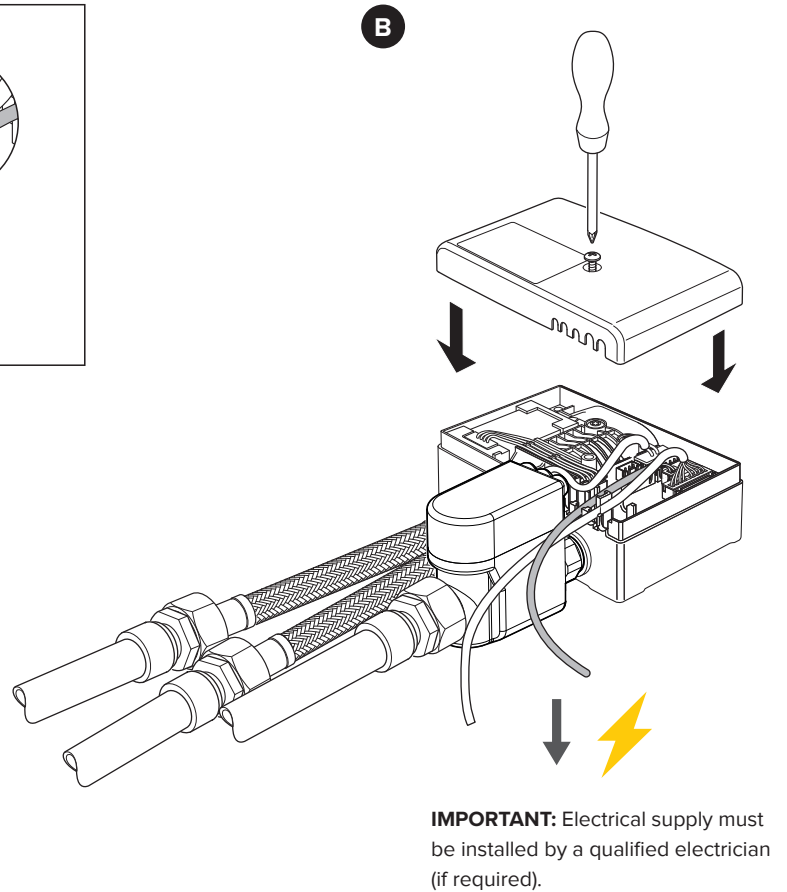
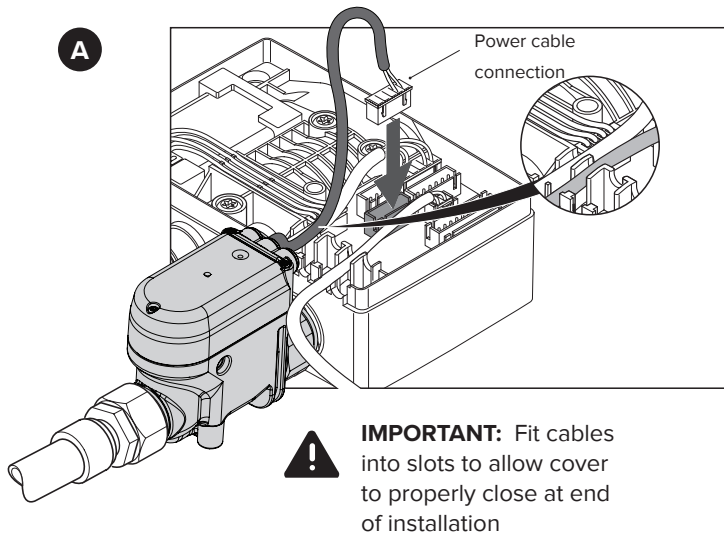


Connect the power cable coming from the transformer. Use the connector and push firmly into the socket. Feed the cable through the guide slot in the front of the Digital Mixer.



Fit the cover back on to the base. Using a Phillips screwdriver secure the cover in position. The unit is now ready for commissioning. Please see User Guide.

**Digital Mixer with Flow Control Unit installed:**

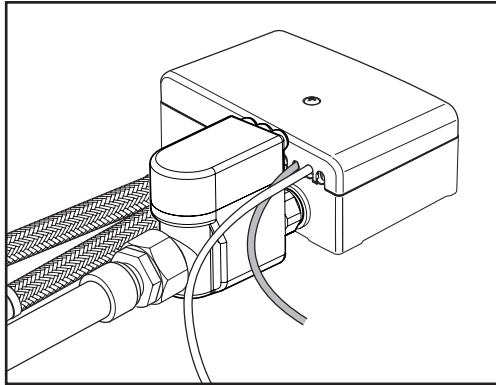


**Please Note: Leave the torx taped to the box for future use**



## OPERATIONAL TEST

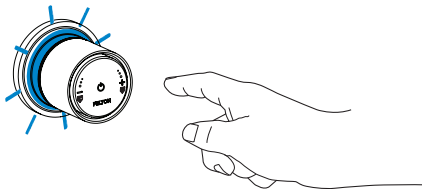
- 1 Ensure that the Digital Mixer is correctly installed according to the instructions above.  
Turn on the water supply and check the unit and plumbing for leaks. Once the plumbing is confirmed to be water-tight, connect the power supply and conduct the operational test below.



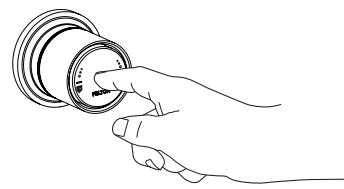
Digital Mixer with Flow Control Unit installed

## OPERATING THE CONTROL SYSTEM

- 1 **Open**  
Push the interface once. The interface turns on and the LED illuminates.



- 2 **Close**  
Push the interface again. The interface turns off and the LED goes off.



## TROUBLESHOOTING

ISSUE	PROBLEM	TROUBLESHOOT
<b>The device does not function (i.e. the LED light is not on)</b>	The AC adapter is not connected to the mains	Connect device to the mains power
	Mains power failure	Check household fuse box
	The AC adapter is not connected to the Control Unit	Follow <a href="#">Step 15</a> on Installation Guide
	The digital mixer is not working	Follow <a href="#">Step 14</a> on Installation Guide
<b>The water temperature does not match the indicated display</b>	Hot and cold water connections reversed	Check connections are correct
	Hot or cold water stop valve closed or only half opened	Fully open both stop valves
	Kink in supply hose	Check connection hoses
	Connecting pipe blocked	Flush pipes and clean filter
	No hot water	Check hot water tank and instantaneous connections
	Temperature sensor defect	Carry out function «Diagnostic Test» in User Guide
	Difference in supply pressure between hot and cold water is greater than 100kPa	Balance pressure to eliminate difference
<b>Constant flow of water</b>	Unit will not turn off	Carry out function «Diagnostic Test» in User Guide
<b>The water shuts off before maximum run time has been reached</b>	Flow sensor is defective	Carry out function «Diagnostic Test» in User Guide
<b>The device is working but has no water flow</b>	Motors are not calibrated	Carry out function «Diagnostic Test» in User Guide
	Stop valves closed	Open stop valves fully
	No water supply	Restore water supply
	Kink in supply hose	Check connection hoses
<b>Interface flashes green</b>	Cleaning mode active	Wait 45 seconds or press the digital mixer to cancel
<b>The Digital Control Unit is damp or wet</b>	Inlet and outlets of the digital mixer are not properly sealed	Inspect all connections, reseal if necessary
<b>The Control Unit does not respond to temperature and flow adjustment*</b>	The interface elements are connected incorrectly	Follow <a href="#">Step 14</a> on Installation Guide
	The interface is defective	Carry out function «Diagnostic Test» in User Guide
	The knob is not running smoothly	Remove and clean knob

**If issue persists or is not covered in the above, please contact our Felton Technical Team on 0800 743 358 or [sales@felton.co.nz](mailto:sales@felton.co.nz)**

## WARRANTY

5 year warranty applies to all **Felton** branded products including the electronic hardware and its components. Where products are promoted as having a “5 year warranty”, Felton Industries Limited guarantees the electronic components of these products (excluding batteries) to be free from defects in materials and workmanship under normal installation, use and service for a period of five (5) years from the date of purchase. Fair wear and tear is expressly excluded.

This warranty is effective for five (5) years from the date of purchase and covers electronic replacement parts only (excluding batteries) and 2 years from the date of purchase for plumber’s labour relating solely to repairing or replacing the Hardware, provided the product is installed by a registered plumber. You must retain proof of purchase of the Hardware (such as an invoice or receipt) and proof of installation by a registered plumber and provide these to Felton on request.

This warranty is for manufacturing defects only and does not cover any damage to product due to abuse, negligence or improper installation. This warranty is given on the understanding that the product is installed by a registered plumber and operated according to Felton’s installation guide and the Australian/New Zealand standard AS/NZS3500. This warranty is provided to persons who are a “consumer” under the Consumer Guarantees Act 1993 only and for use in domestic/residential dwellings only (not for commercial use).

**This warranty is subject to any other rights or remedies that you may have under the Consumer Guarantees Act 1993 (or any other applicable legislation) and to Felton’s Terms of Trade.**

This **5 year warranty** does not cover:

- 1) any consumable items (e.g. batteries, filters, installation fittings) supplied with the products.
- 2) damage, problems or unsatisfactory performance caused to the electronic hardware by:
  - a. Faulty or incorrect electrical wiring, incorrect power supply, voltage fluctuations, over voltage transient spikes or electromagnetic interference not originating within the electronic hardware.
  - b. Incorrect or poor installation or application
  - c. Operation at conditions outside the operating conditions specified in the Felton technical or sales data applicable to that electronic hardware.
  - d. Reconfiguration of the digital interface by the user – this is considered a service not a warranty.

## MAINTENANCE & CARE

Please see User Guide or visit [www.felton.co.nz](http://www.felton.co.nz)

For technical assistance please ring: 0800 743 358 or (09) 528 0810



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