kelda

BubbleSpa®

Air-Powered Shower Technology

BubbleSpa with Wall Arm, Concealed TMV2 Mixer & Handset	95003000
BubbleSpa with Ceiling Arm, Concealed TMV2 Mixer & Handset	95004000

We at Kelda Showers are the inventors of Air Powered technology. Our patented technology delivers showers which provide elegant experience whilst using low amounts of water. Kelda showers are not only eco-friendly, but they are engineered to last too. They have been exposed and tested in the most demanding real-life environments to ensure they can withstand the pressures of high usage.

Kelda Showers is thrilled to introduce the World's first BubbleSpa® shower. At the forefront of luxury showering, Kelda is injecting magic into the showering experience to transform the everyday bathroom into a place of personal sanctuary and tranquility. Kelda's unique BubbleRain spray form creates very large droplets filled with air that fall softly on the body for a luxurious shower feel that revitalises the skin and rinses away stress.

Kelda BubbleSpa® designed in the UK. Enjoy a magical shower experience every time.

You can find more information on our website:
www. https://www.keldashowers.com

Table of Contents

Important Safety Information

This product requires a hot and a cold water supply in addition to an electrical connection (see Electrical section on pages 23 - 24 for details). This product is not an electric shower.

Products manufactured by Kelda Technology are safe and without risk provided they are installed, used and maintained in accordance with our instructions and recommendations.

DO NOT operate the unit if the showerhead becomes damaged.
DO NOT restrict flow out of shower by placing an obstruction in front of the showerhead nozzles.
DO NOT allow children to play with the shower
DO NOT allow children to use the shower without supervision

General

1. Read all of these instructions before installation and retain them for later use.
2. DO NOT take risks with plumbing or electrical equipment.
3. Isolate electrical and water supplies before proceeding with the installation.
4. The showerhead must be cleaned regularly with descalant to remove scale and debris (see Maintenance section on pages 28 - 33).
5. This product is not suitable for mounting into steam rooms or steam cubicles.
6. The shower should not be installed in an outdoor environment, including sheltered areas.
7. DO NOT spray water at the BubbleSpa showerhead as this risks damaging the electronics.

Plumbing

1. The plumbing installation must comply with water regulations, building regulations or any particular regulations as specified by local water company or water undertakers and should be in accordance with BS EN 806 (Specifications for installations inside buildings conveying water for human consumption. Operation and maintenance).
2. IMPORTANT! The hot and cold-water supply pipes must be flushed to clear debris from before connecting to water inlets on the shower.
3. DO NOT use excessive force when making connections to the mixer.
4. All plumbing connections must be completed before making the electrical connections.
5. Water Pressure: A 1.5 bar system is recommended as a minimum, if using a low pressure (Gravity fed) system a suitable pump will be required. Your BubbleSpa shower is designed to perform best between 8-10L/min and will not produce bubbles with a flow rate below 6L/min. Using the BubbleSpa shower without a Kelda supplied flow regulator will void the warranty and negatively affect the performance of the product.

Electrical

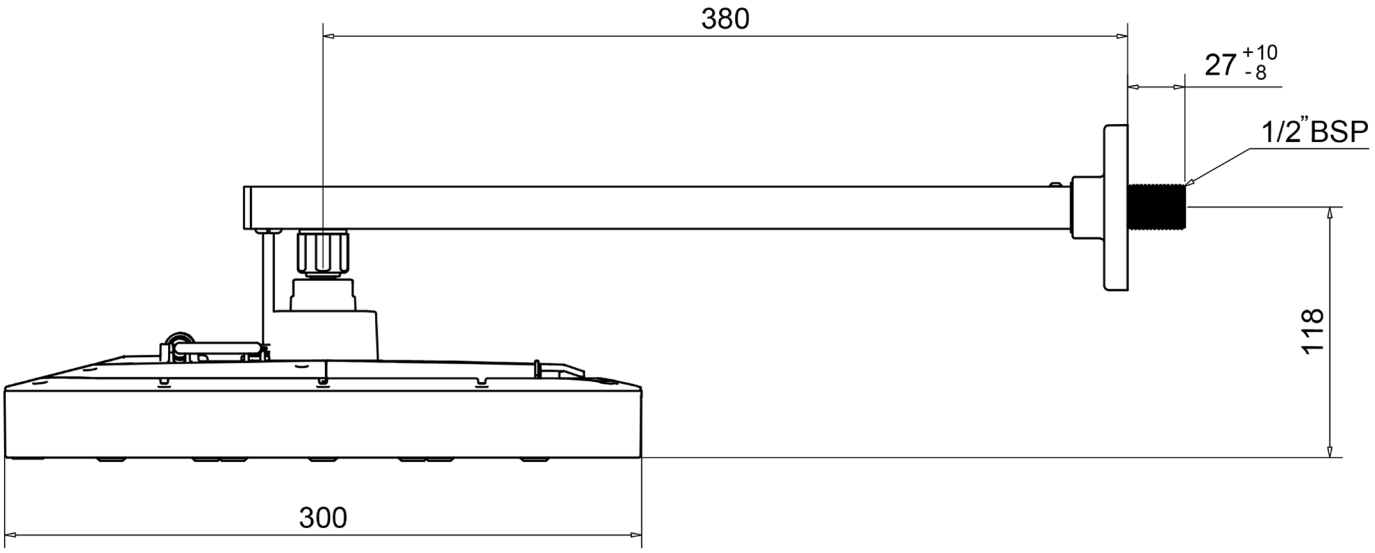
1. The installation must comply with BS 7671 ‘Requirements for electrical installations’ (IEE wiring regulations), building regulations or any particular regulations as specified by the local electrical supply company.
2. In accordance with ‘The Plugs and Sockets etc. (Safety) Regulations 1994’, this appliance is intended to be permanently connected to the fixed wiring of the electrical mains system.
3. A 32A 30 mA Residual Current Breaker Operator (RCBO) MUST be installed in all UK electric and pumped shower circuits. This may be part of the consumer unit or a separate unit.
4. Each shower must be connected to a 3A switched fused spur which is easily accessible. Switch off at fused spur for maintenance or if not in use for extended periods. This is a safety procedure recommended with all electrical appliances.
5. Make sure all electrical connections are tight to prevent overheating.
6. As with all electrical appliances it is recommended to have the shower and installation checked at least every two years by a competent electrician to ensure there is no deterioration due to age and usage.

Flashing Lights

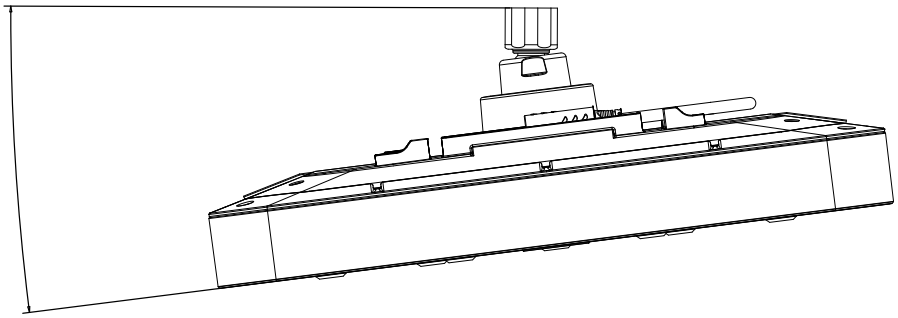
To enhance the visual impact of the bubbles this shower uses flashing light effects, with a minimum frequency of 72Hz. This is accordance with safety guidance from the IEEE (IEEE 1789-2015) and is safely above the 3-30Hz range (commonly identified as values to be avoided for people with photosensitive conditions).
The visual effect of the lighting modes will vary depending on ambient lighting and the environment in which it is installed (see page 27 for more details on Bubble Modes).
Anyone diagnosed with a condition which could be triggered by flashing lights should seek further medical advice.

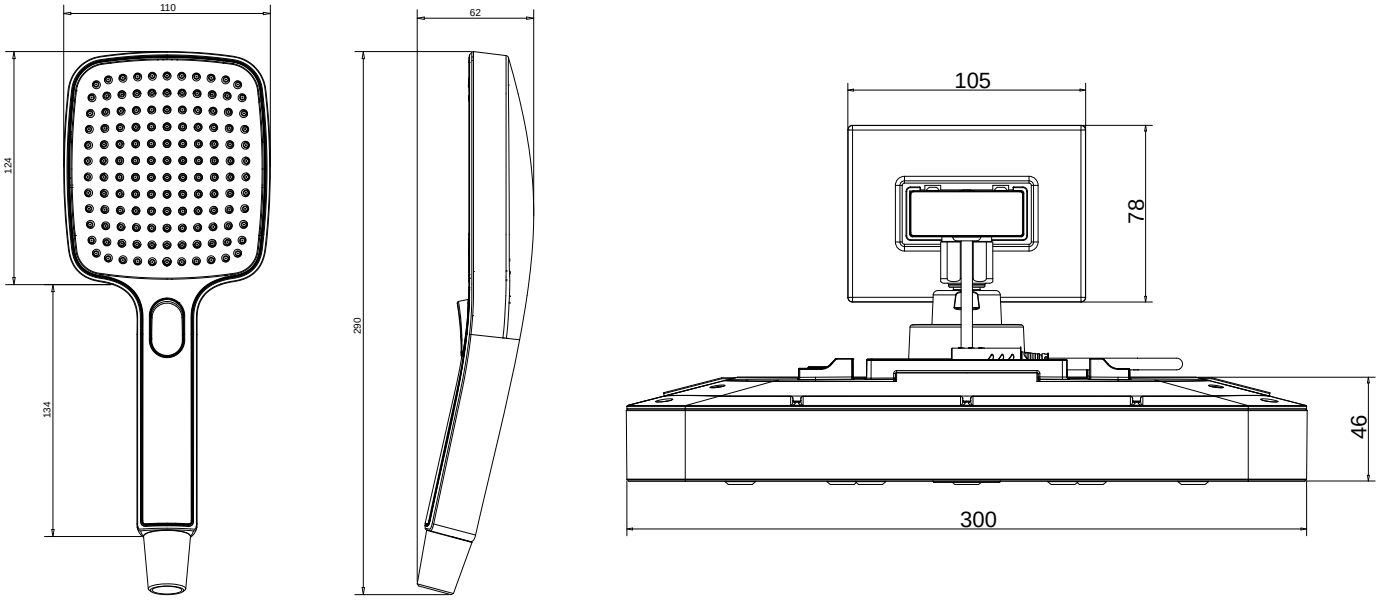
System Diagram

BubbleSpa Wall Arm



10° Max tilt
of Ball Joint



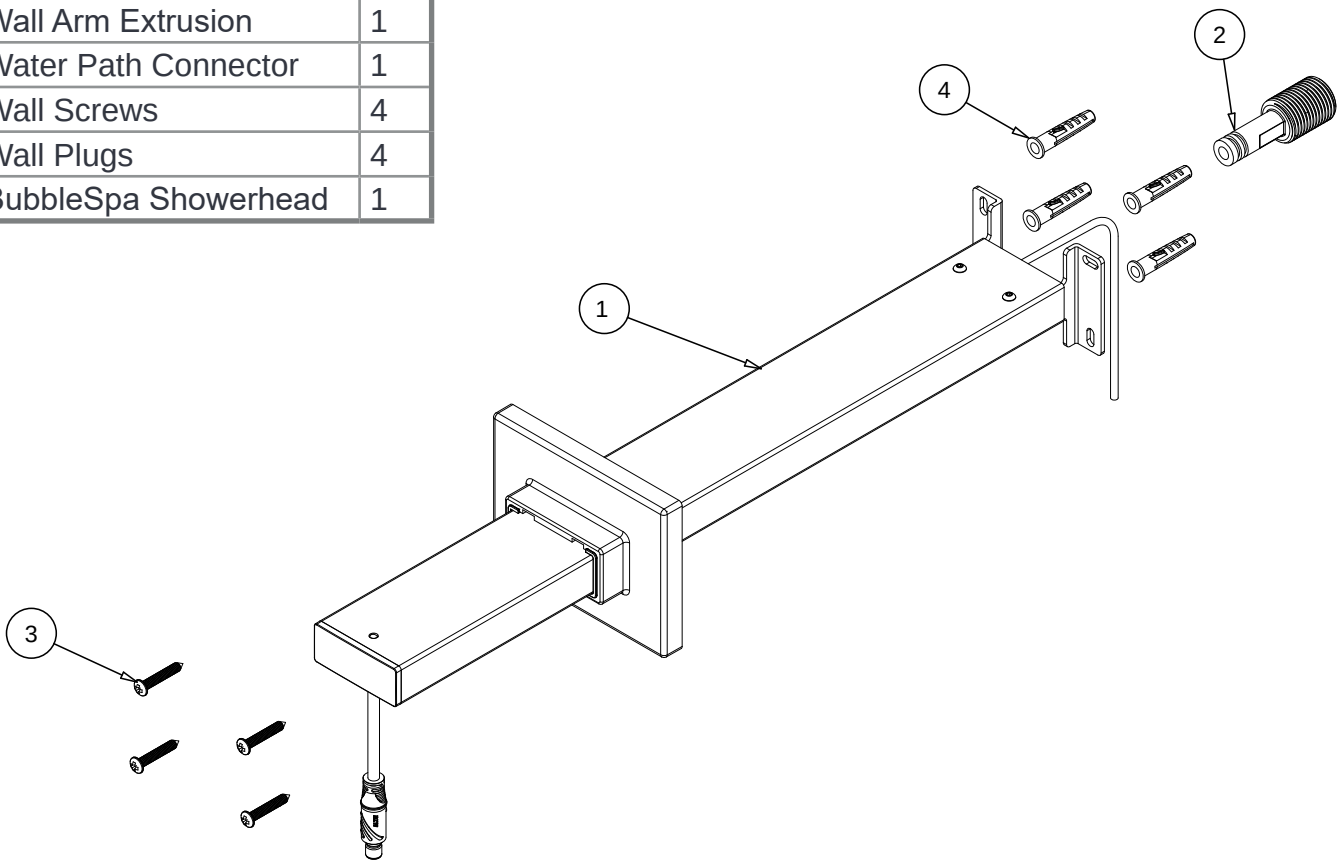


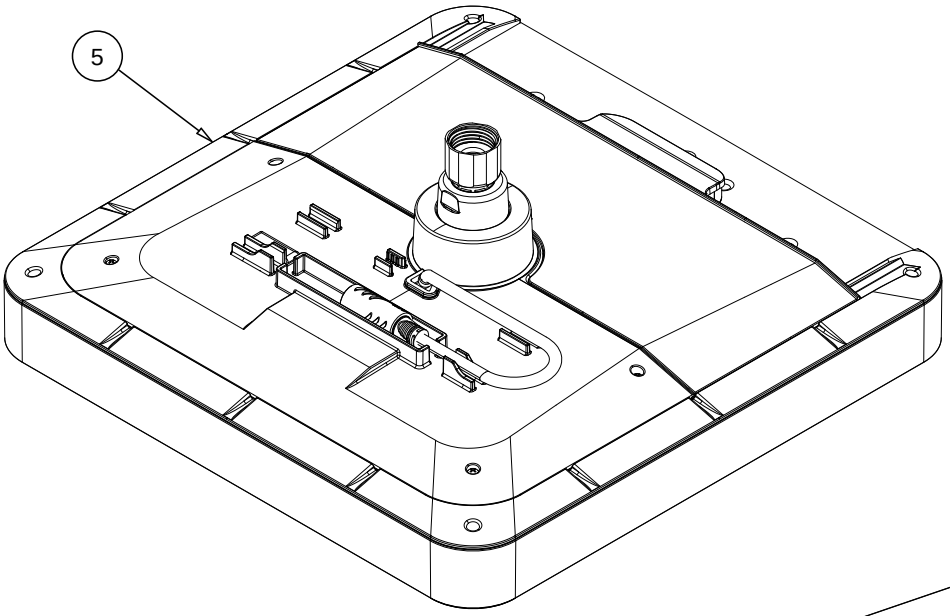
Tilting of the BubbleSpa showerhead can be in any direction. All dimensions are in mm unless otherwise stated.

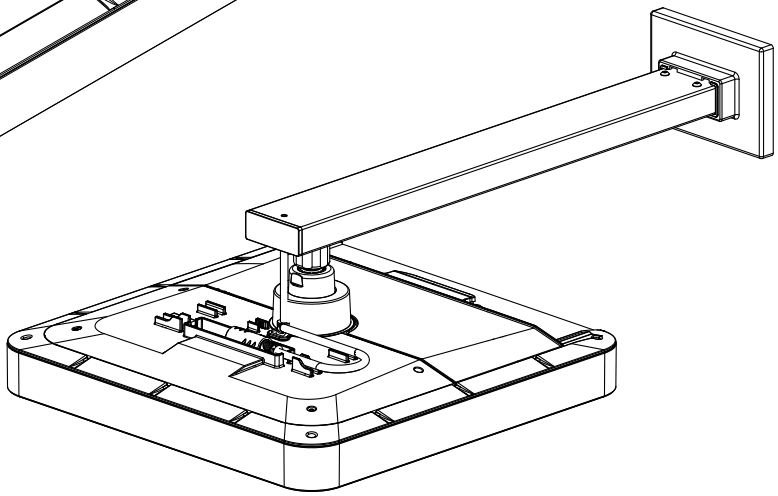
System Diagram

BubbleSpa Wall Arm & Valve

No.	Part	Qty
1	Wall Arm Extrusion	1
2	Water Path Connector	1
3	Wall Screws	4
4	Wall Plugs	4
5	BubbleSpa Showerhead	1

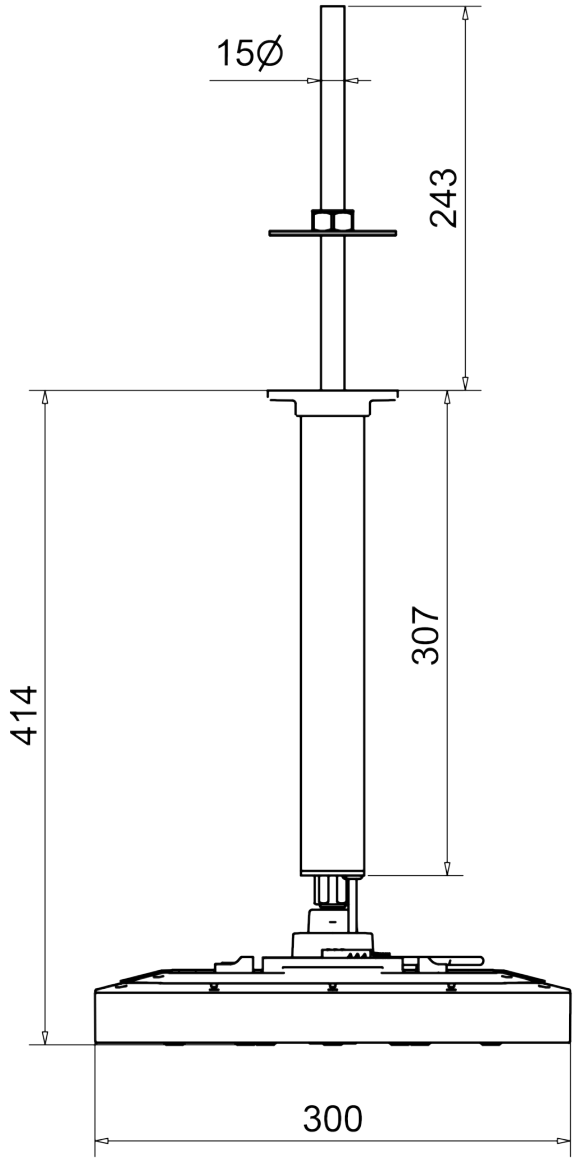


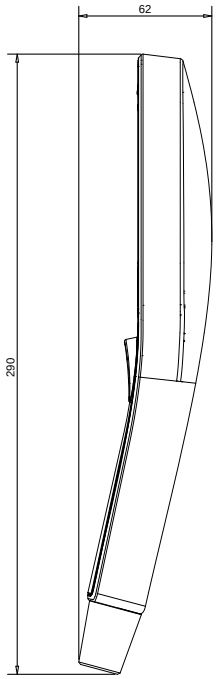


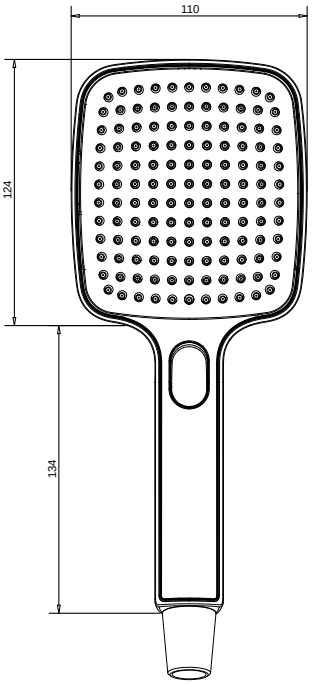


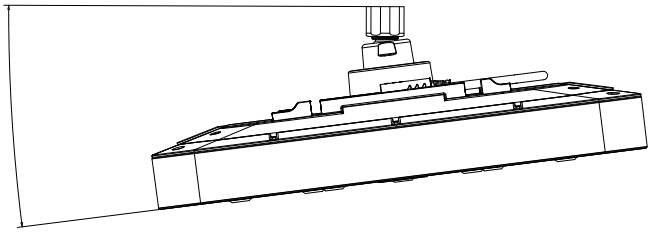
System Diagram

BubbleSpa Ceiling Arm & Valve







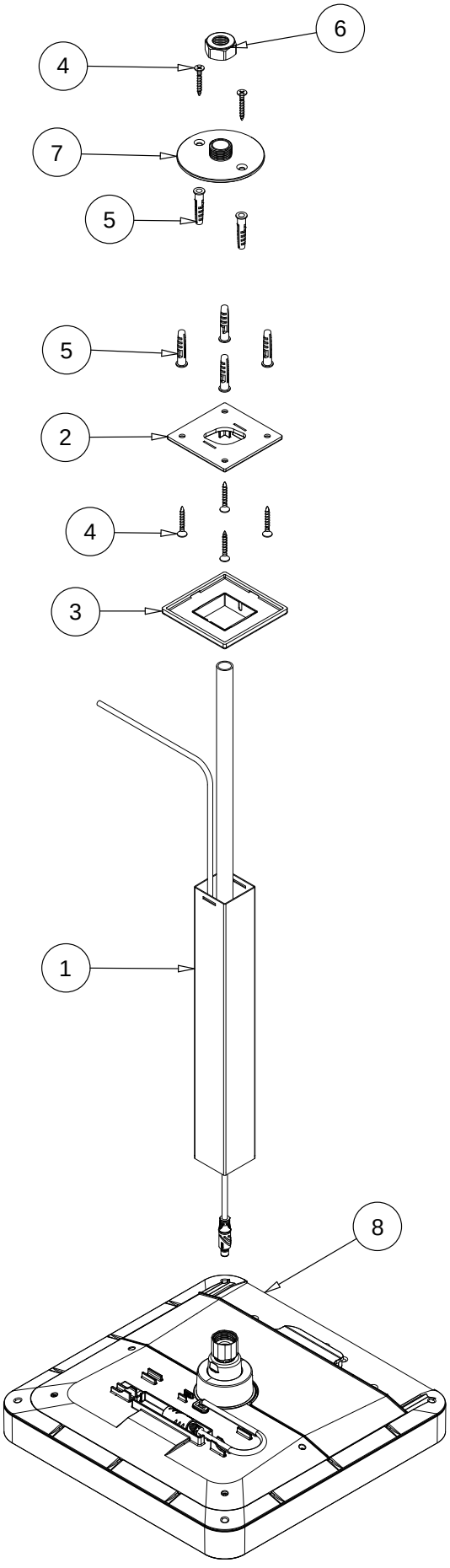


10° Max tilt
of Ball Joint

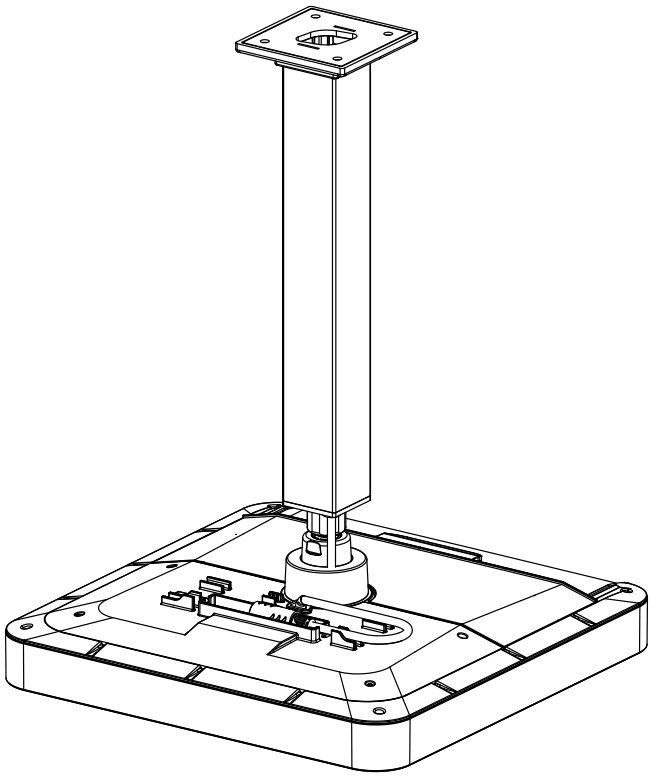
**Drawing shows the lengths of the parts as supplied. The Inner Pipe can be cut down to an appropriate length if necessary. The tilting of the BubbleSpa showerhead can be in any direction. All dimensions are in mm unless otherwise stated.*

System Diagram

BubbleSpa Ceiling Arm & Valve



No.	Part	Qty
1	Ceiling Arm Extrusion	1
2	Ceiling Arm Bracket	1
3	Ceiling Arm Trim	1
4	Wall Screws	6
5	Wall Plugs	6
6	½” BSP Nut	1
7	Mounting Plate	1
8	BubbleSpa Showerhead	1

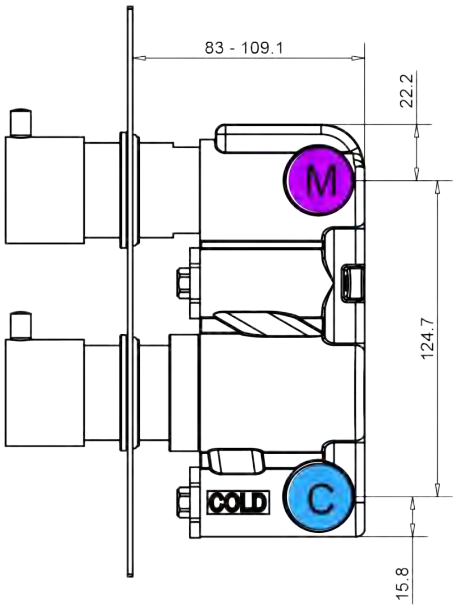


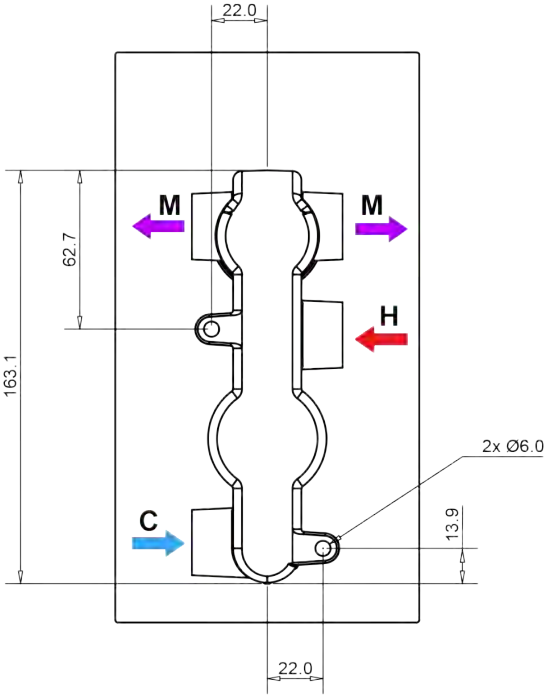
System Diagram

Concealed Valve

Mixed Outlet (M)

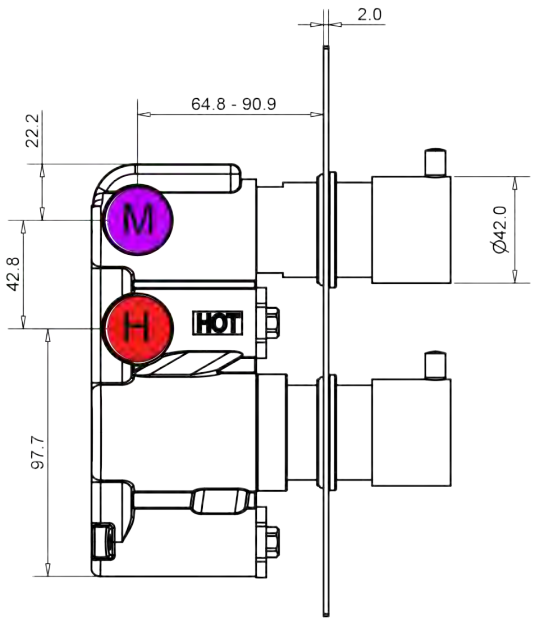
Cold Inlet (C)

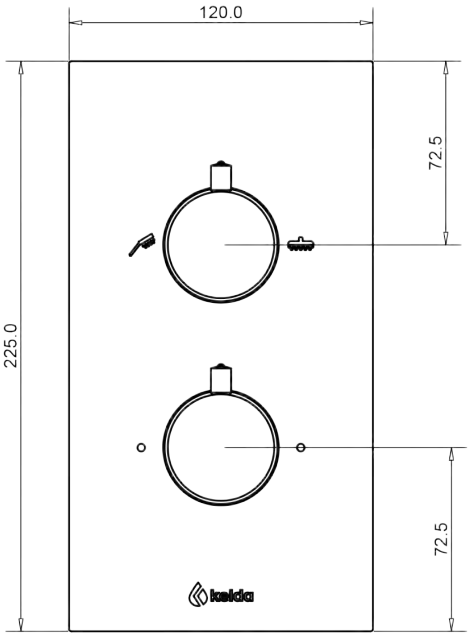




Mixed Outlet (M)

Hot Inlet (H)





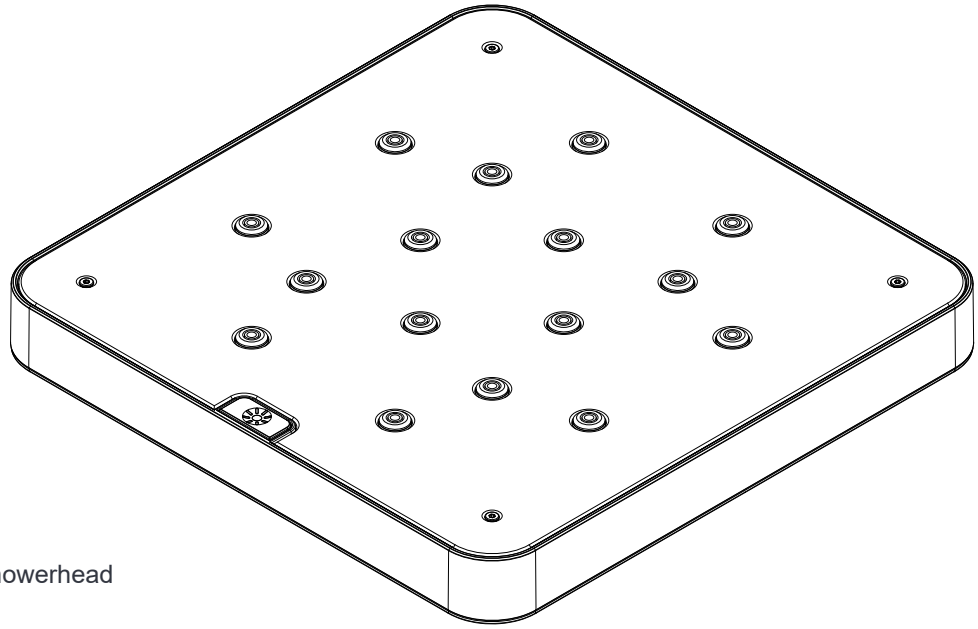
Inlets and outlets are all ½” female threads.
Minimum wall cavity depth: 83mm

Contents

BubbleSpa Wall Arm

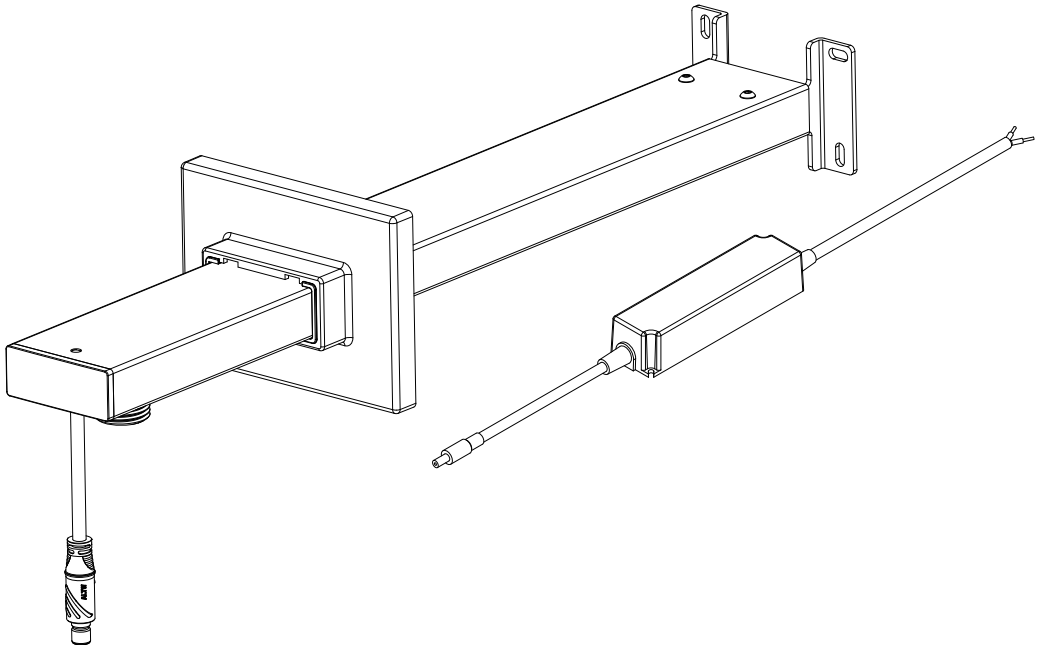
Your BubbleSpa shower includes the following assemblies and parts:

1 Showerhead



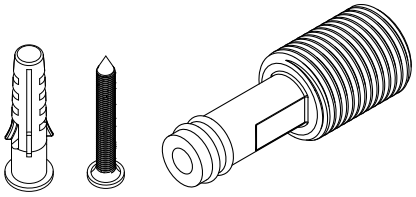
- x1 Kelda BubbleSpa Showerhead

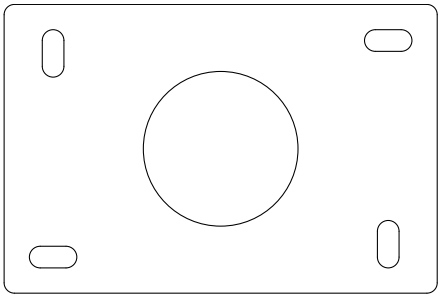
2 Wall Arm



- x1 Wall Arm Assembly
- x1 Power Supply

3 Installation





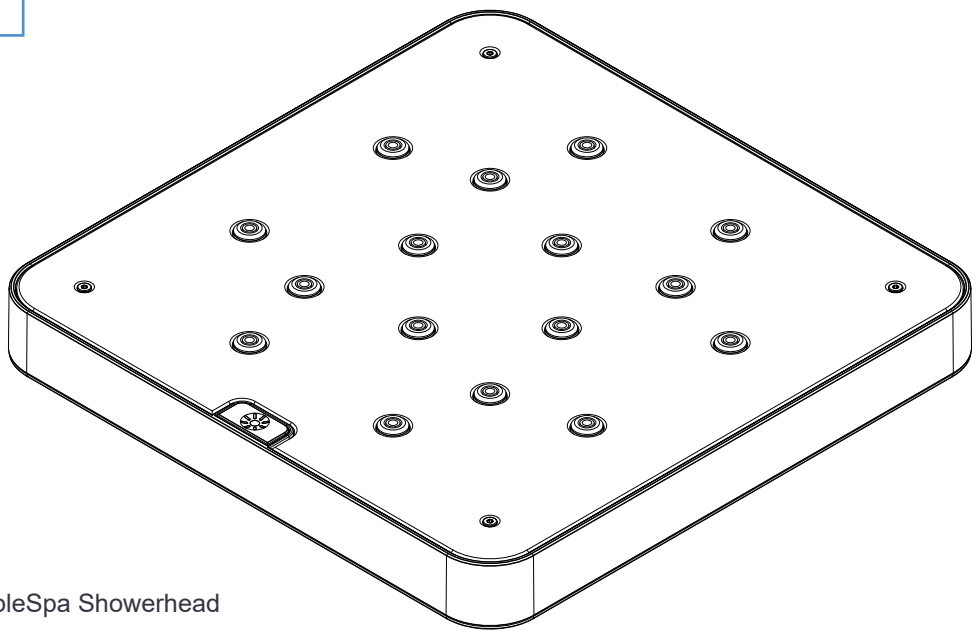
- x1 Water Path Connector
- x1 Hole Guide (cut out from page 38)
- x4 Wall Screws
- x4 Wall Plugs

Contents

BubbleSpa Ceiling Arm

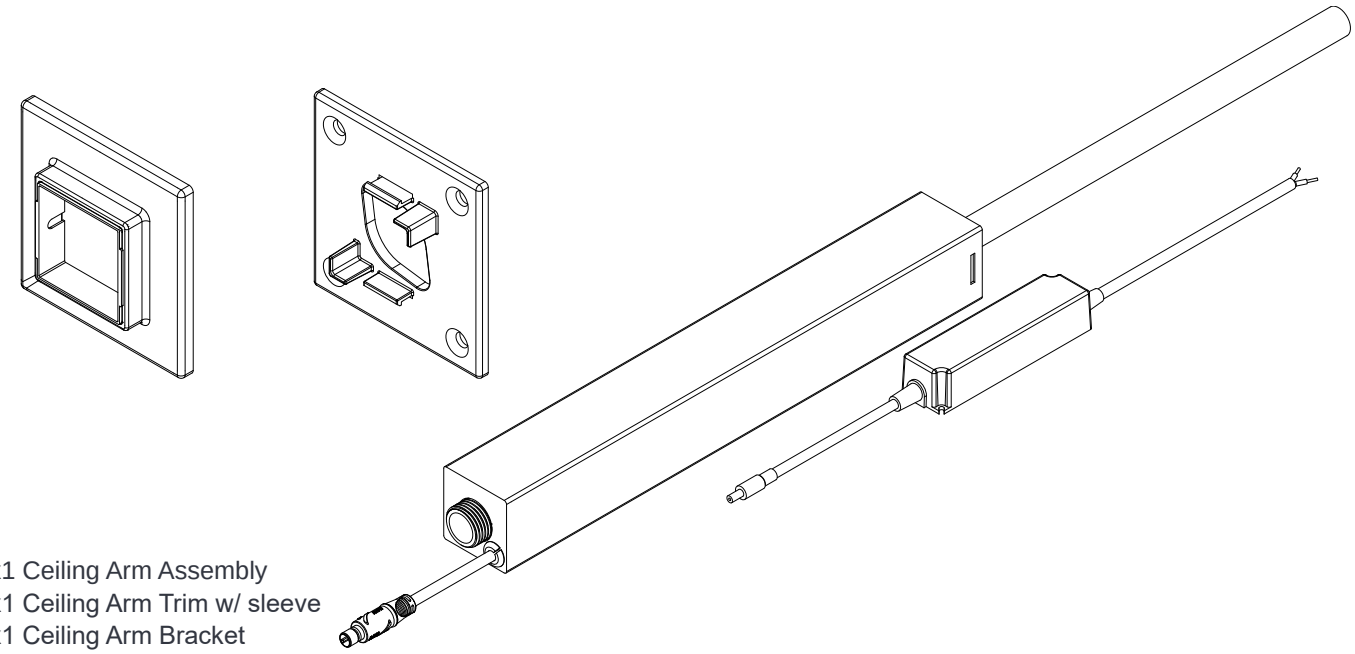
Your BubbleSpa shower includes the following assemblies and parts:

1 Showerhead



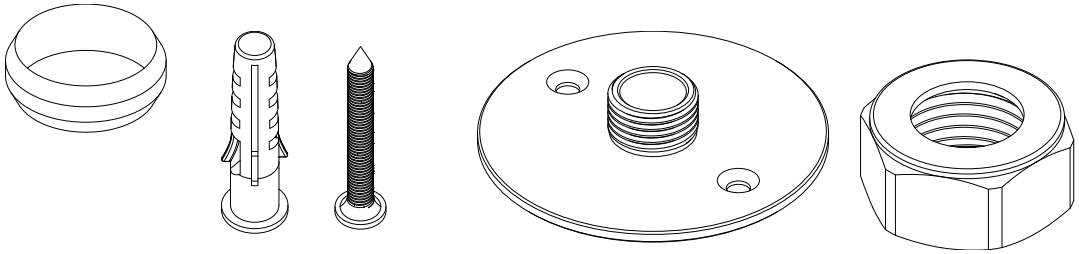
- x1 Kelda BubbleSpa Showerhead

2 Ceiling Arm



- x1 Ceiling Arm Assembly
- x1 Ceiling Arm Trim w/ sleeve
- x1 Ceiling Arm Bracket
- x1 Power Supply

3 Installation

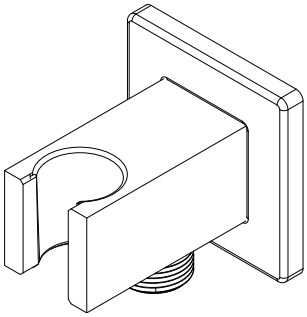


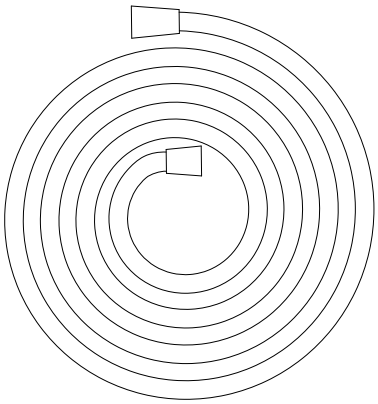
- x1 ½” BSP Nut
- x1 Olive
- x1 Mounting Plate
- x6 Screws
- x6 Wall plugs

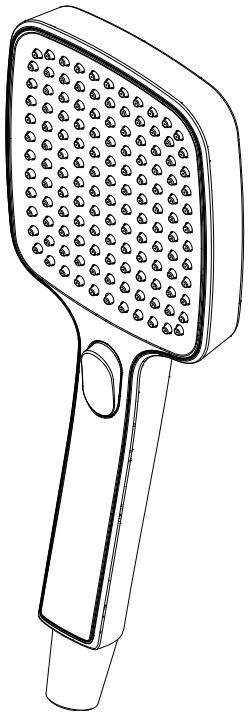
Contents

Handset & Valve

1 Handset



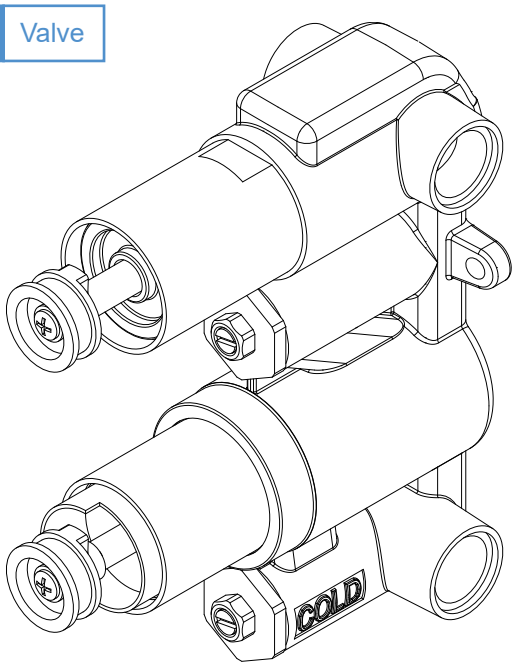


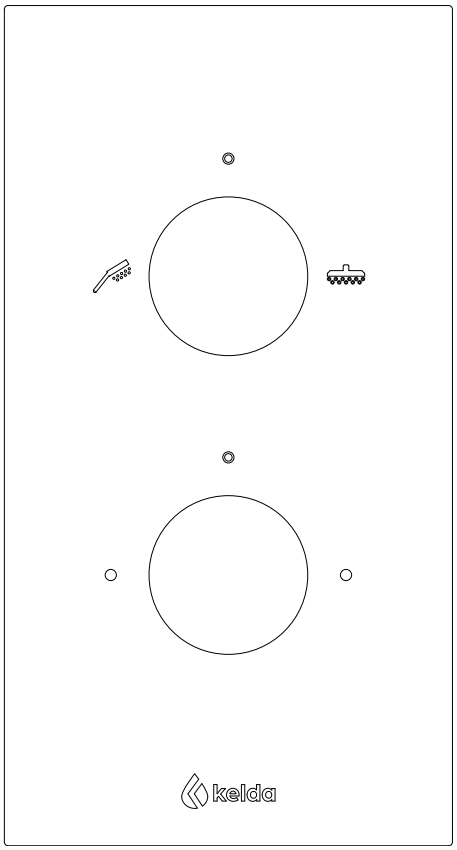


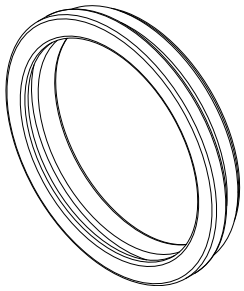
- x1 3-Function Handset
- x1 1.5 m Easy-Clean Shower Hose
- x1 Handset Holder

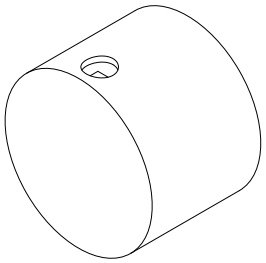
---

2 Valve

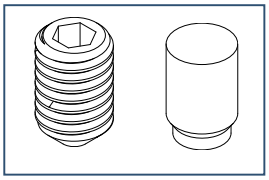




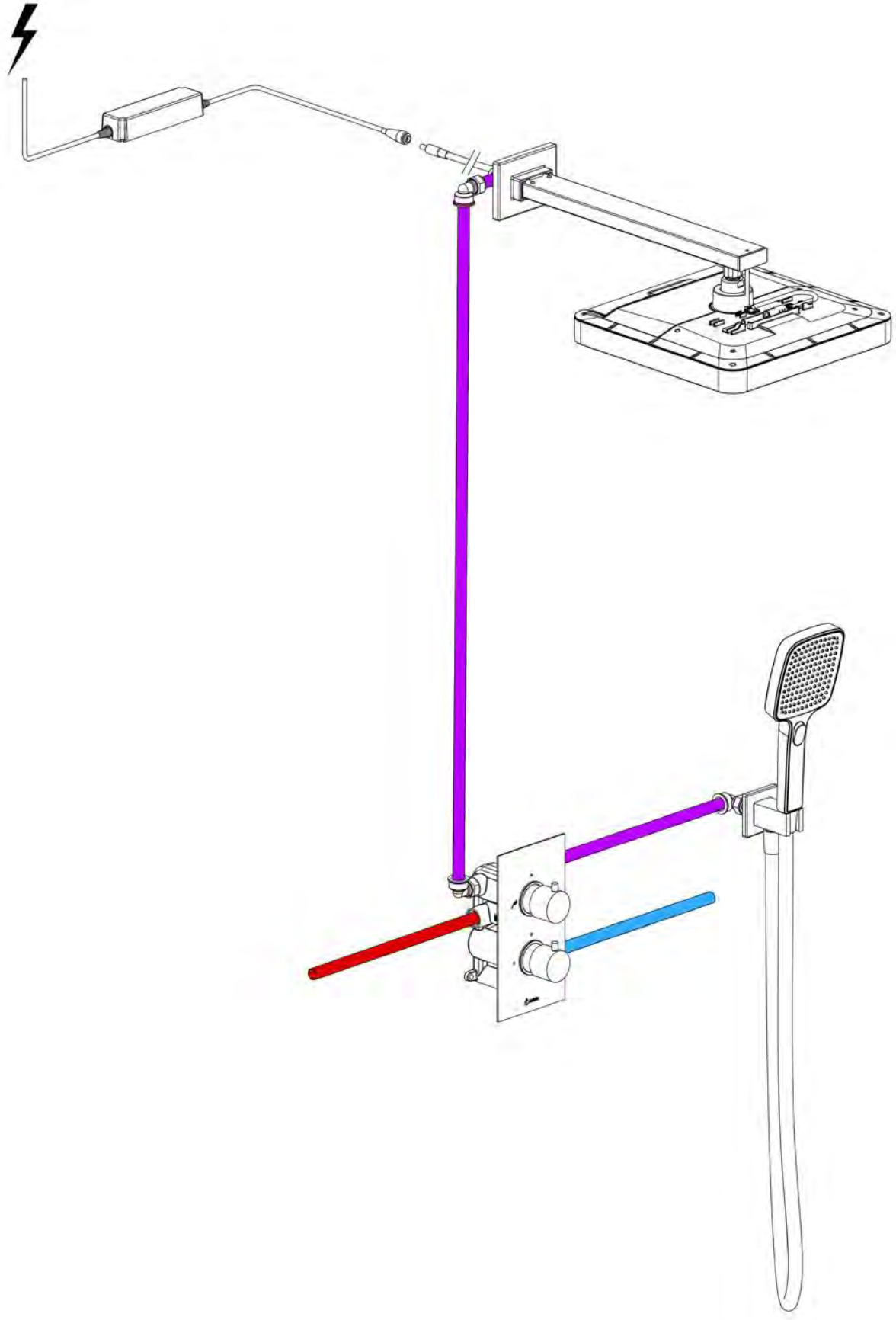




- x1 Guoren Valve
- x1 Kelda Plate
- x2 Trim Ring
- x2 Control Knob
- x2 Grub Screw
- x2 Knob Lever
- 3mm Hex Key



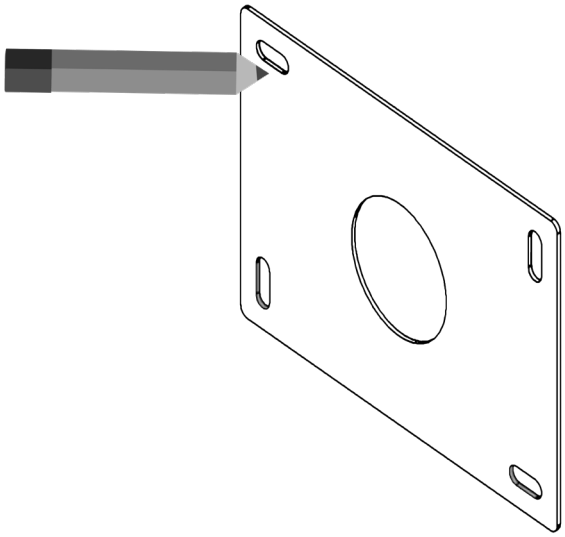
Wall Arm Installation



Wall Arm Installation

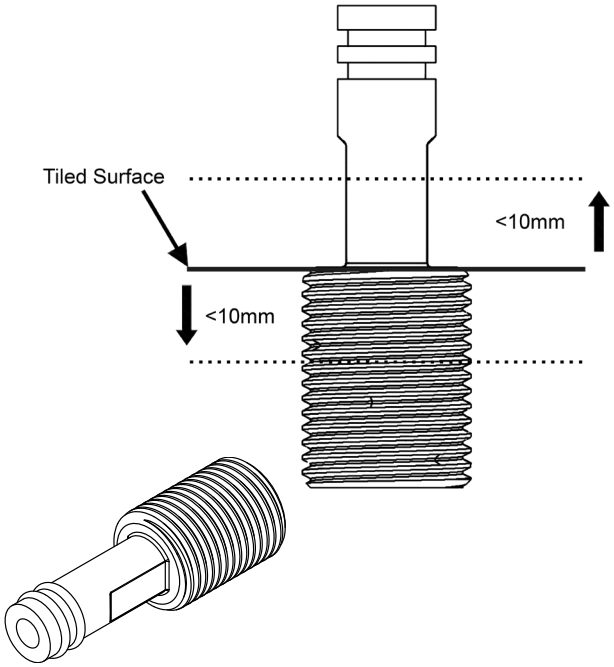
Warning: Read through to the end prior to commencing installation!

1



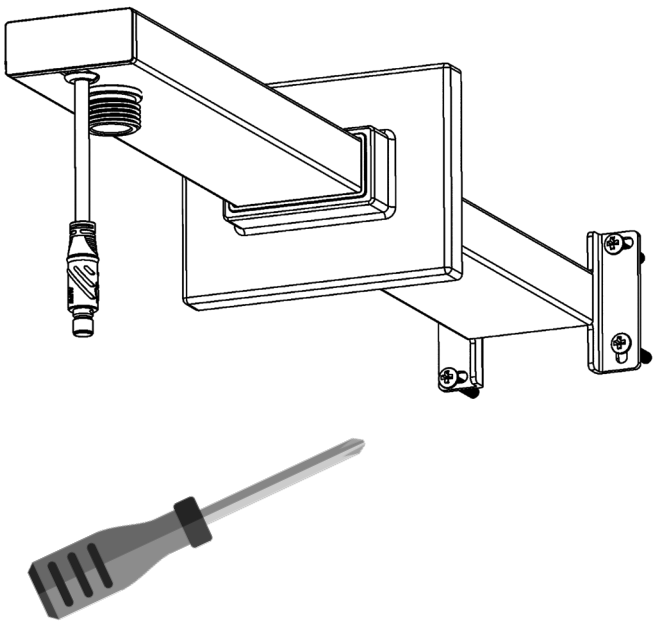
Using the guide provided on page 38, mark out and drill the holes for the Wall Arm Assembly around the pipe outlet. Ensure that the hole for the cable and outlet pipe is no bigger than 60mm diameter.

2



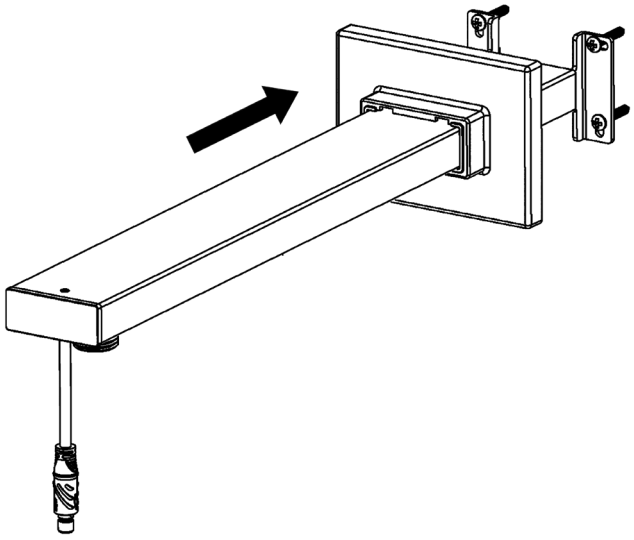
Screw the Water Path Connecter to the outlet pipe. Ensure that the Water Path Connector is no more than 10mm proud of the wall tiles and is no more than 10mm inside the wall.

3



Feed the power cable of the Wall Arm Assembly into the wall. Then screw the Wall Arm Assembly to the wall using the Wall Screws and Wall Plugs provided.

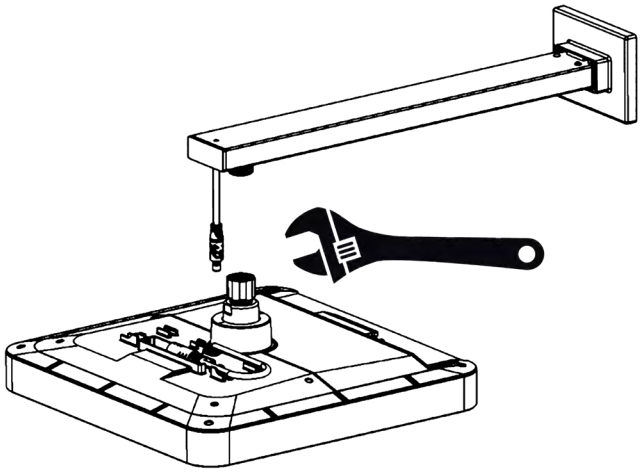
4



Slide the Wall Arm Trim and Trim Sleeve to the wall. Silicone may be added to the back of the Wall Arm Trim to fix it in position.

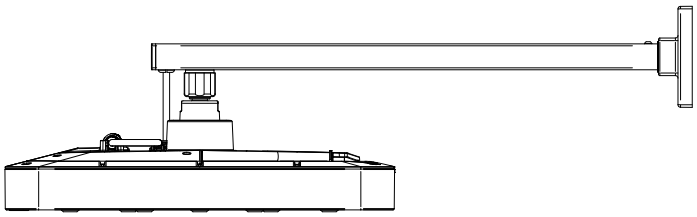
Wall Arm Installation

5



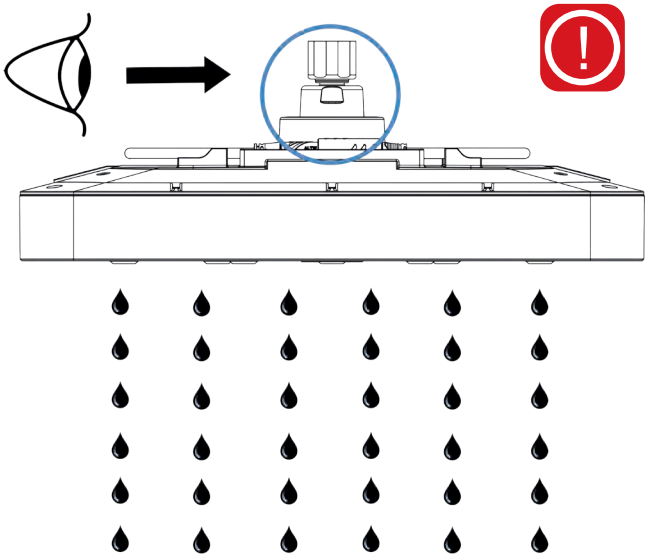
Screw the BubbleSpa showerhead onto the Wall Arm Assembly. Use a 23mm spanner on the top half of the Ball Joint and a 28mm Spanner on the bottom half of the Ball Joint.

6



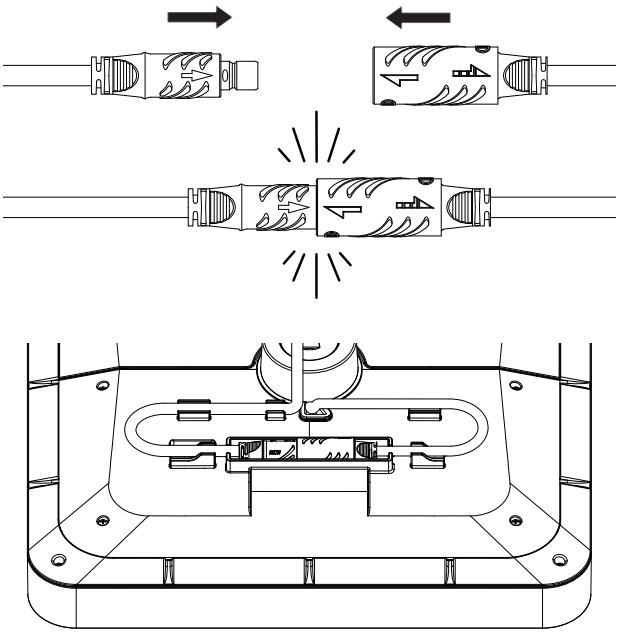
Ensure that the showerhead is horizontal. If the Wall Arm tilt sslightly, tilt the showerhead to from the ball joint to compensate. The ball joint allows for a maximum tilt of 10°.

7



Run the showerhead without power to test the water supply. Whilst the shower is running check the Ball Joint and Flow Sensor Cover (circled) for any leaks. It is important that there is no water leaking as this can damage the fan and PCB. Make sure to also check the mixer operation, the temperature and the flow rate.

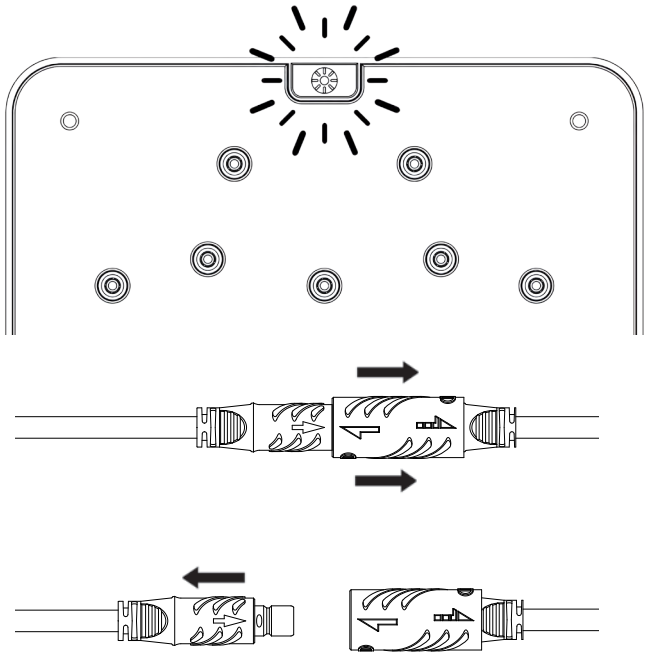
8



Switch off the water then attach the Power Cable by aligning the 2 arrows on the connectors and then pushing the connectors together until a click is heard. Then place the cables into the clips on the showerhead. Turn on the power supply to the showerhead.

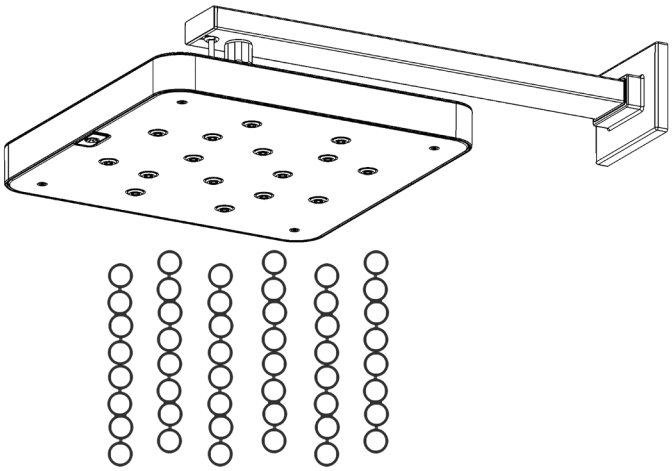
Wall Arm Installation

9



Once the power is turned on, the Button Light on the showerhead will light up. This is an indicator that power is being supplied to the showerhead. If you need to disconnect the power cable, first isolate the mains. Then pull back the outer layer of the larger connector then remove the small connector.

10

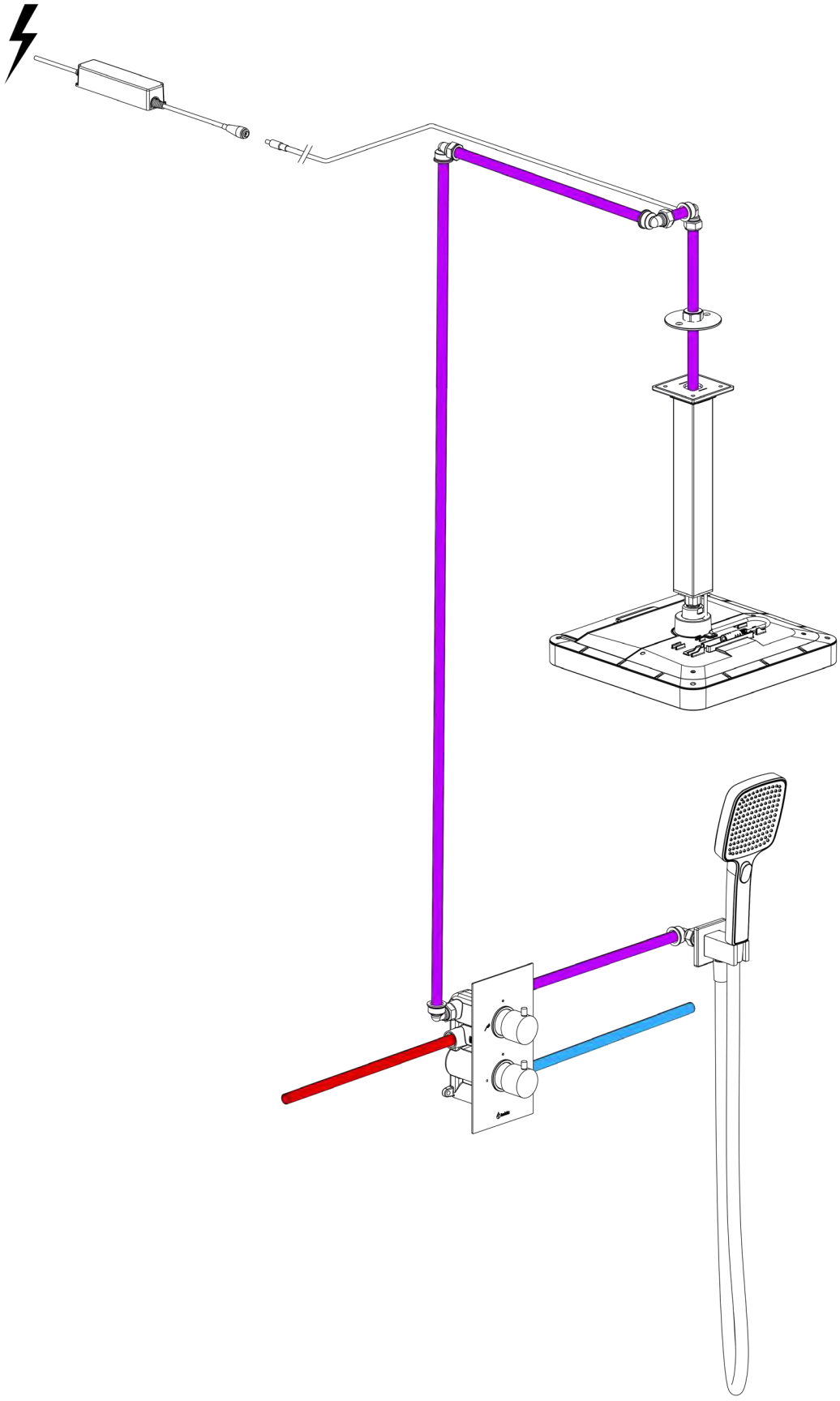


Run the showerhead with power to test the air and water supply, we recommend running this test at 38°C. Please note the bubbles don't form as consistently below 20°C. Once you are satisfied with the bubbles, remove the protective film from the faceplate and enjoy your BubbleSpa shower.

Warning!

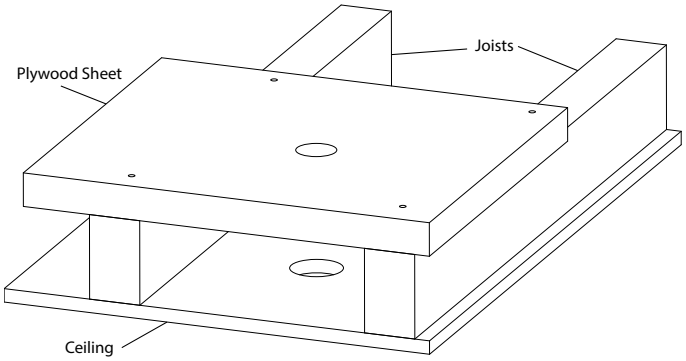
- Always check for hidden pipes and cables before drilling
- Run water through hot and cold pipes to clear debris from pipework before connecting Kelda BubbleSpa Shower

Ceiling Arm Installation



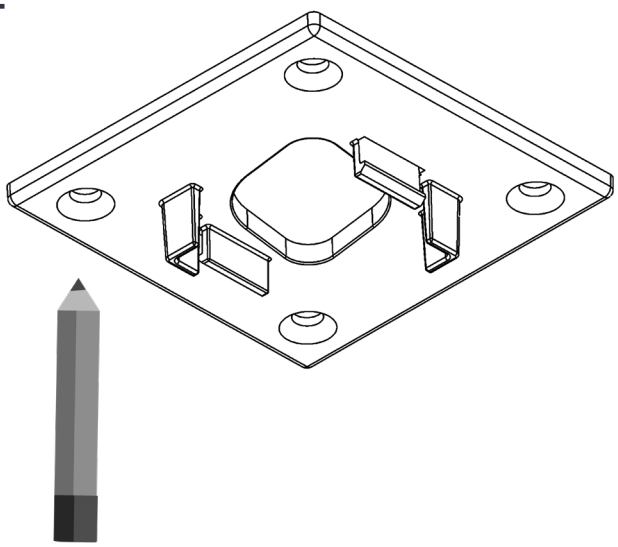
Ceiling Arm Installation

Warning: Read through to the end prior to commencing installation!



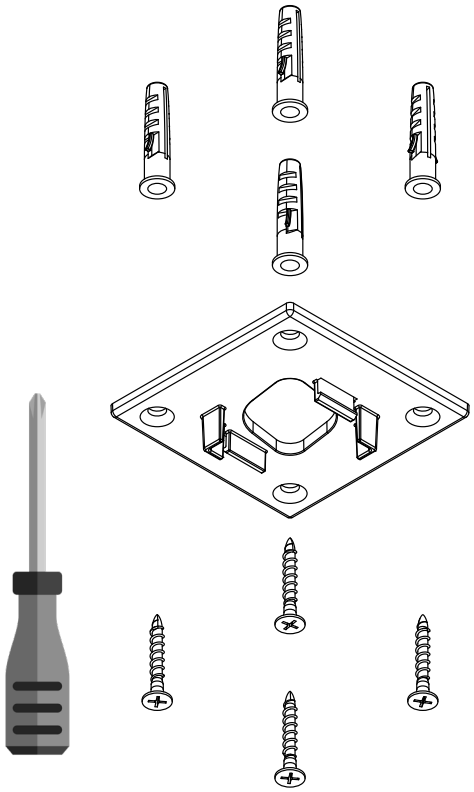
It is recommended to use a sheet of plywood supported by joists to fix the pipe mount permanently as shown above. Before installing, make sure the inner pipe of the Ceiling Arm Assembly is long enough to reach above the plywood sheer – cut the inner pipe if it is too long. Once the position of the shower has been determined, drill a hole that is bigger than 17mm but no larger than 60mm diameter in the ceiling.

1



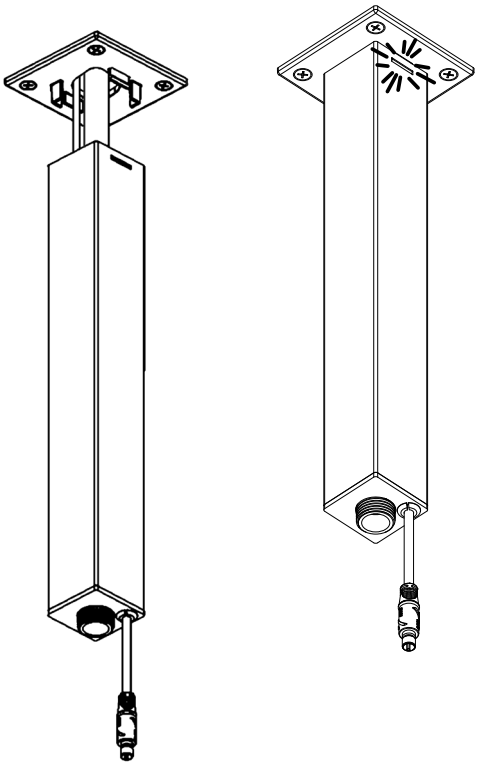
Using the Ceiling Arm Bracket as a guide, mark and drill the holes for the Wall Plugs on the ceiling of the shower cubicle.

2



Insert the Wall Plugs provided into the ceiling and screw the Ceiling Arm Assembly using the screws provided.

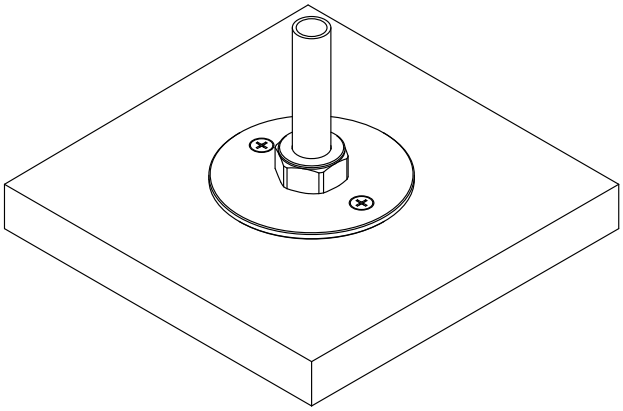
3



Feed the power cable of the Ceiling Arm Assembly into the void. Attach the Ceiling Arm Assembly to the Ceiling Arm Bracket. The Ceiling Arm Assembly will snap onto the bracket. The inner tube will go through the hole with sufficient length to attach the water supply. The inner tube may be cut to length if it too long.

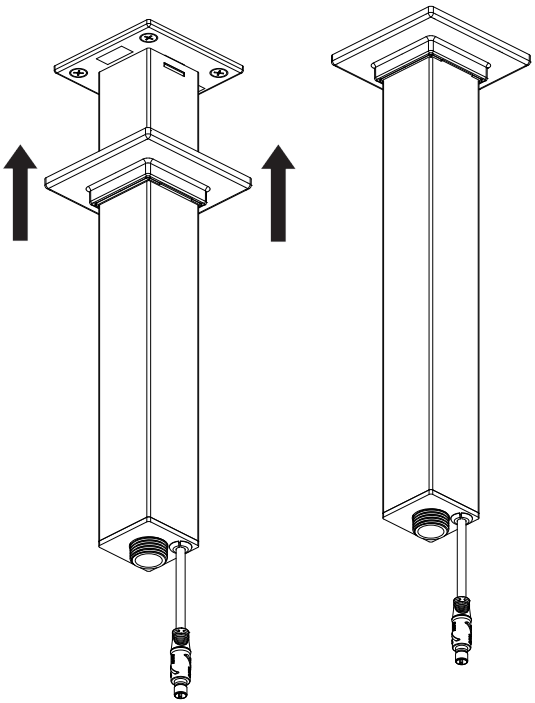
Ceiling Arm Installation

5



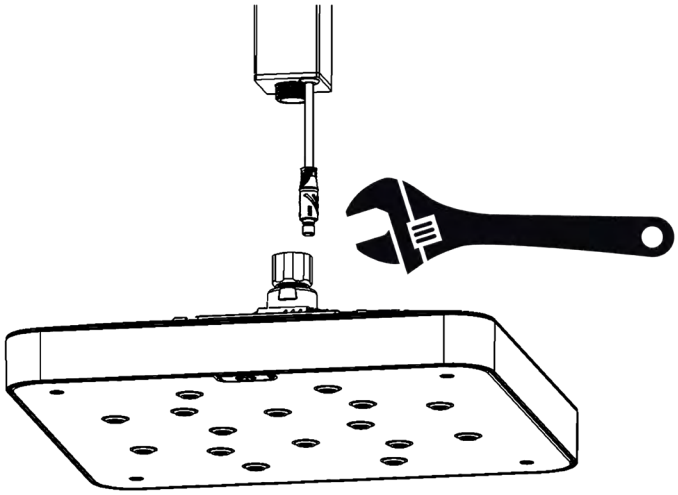
In the ceiling void, place the Mounting Plate over the inner tube. Attach the Mounting Plate to the plywood with the screws provided. Then place the olive and 1/2” BSP nut over the inner tube and tighten the nut.

6



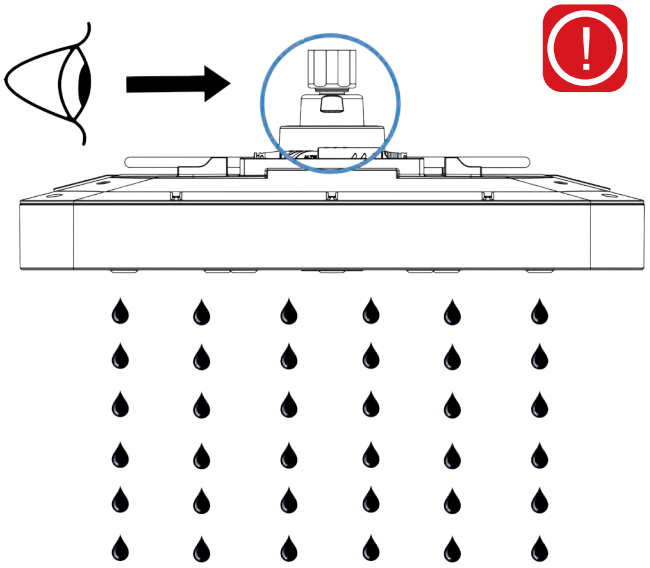
Peel back the double-sided tape on the Ceiling Arm Bracket and slide on the Ceiling Arm Trim. The Ceiling Arm Trim should stick to the tape. Silicone may be added on the back of the Ceiling Arm Trim to help it stick.

7



Screw the BubbleSpa showerhead onto the Ceiling Arm Assembly. Use a 23mm spanner on the top half of the Ball Joint and a 28mm Spanner on the bottom half of the Ball Joint.

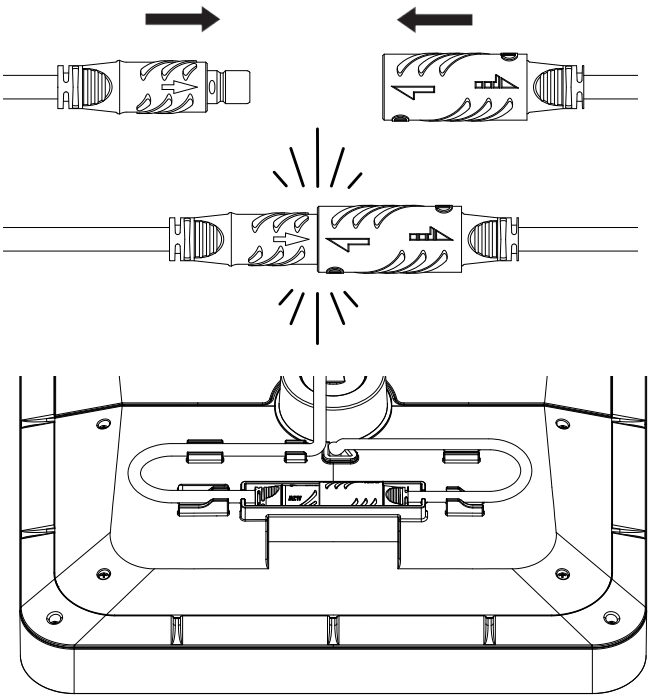
8



Run the showerhead without power to test the water supply. Whilst the shower is running check the Ball Joint and Flow Sensor Cover (circled) for any leaks. It is important that there is no water leaking as this can damage the fan and PCB. Make sure to also check the mixer operation, the temperature and the flow rate.

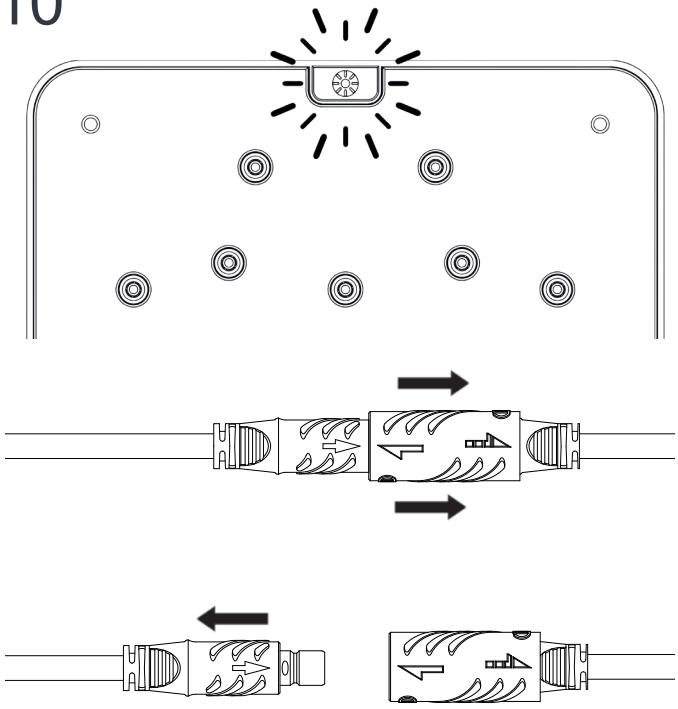
Ceiling Arm Installation

9



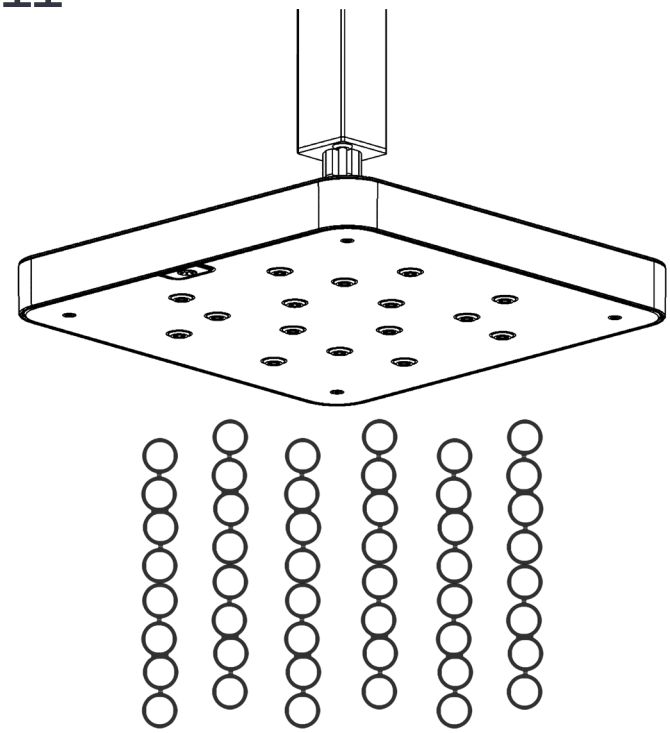
Switch off the water then attach the Power Cable by aligning the 2 arrows on the connectors and then pushing the connectors together until a click is heard. Then place the cables into the clips on the showerhead. Turn on the power supply to the showerhead.

10



Once the power is turned on, the Button Light on the showerhead will light up. This is an indicator that power is being supplied to the showerhead. If you need to disconnect the power cable, first isolate the mains. Then pull back the outer layer of the larger connector then remove the small connector.

11



Run the showerhead with power to test the air and water supply, we recommend running this test at 38°C. Please note the bubbles don't form as consistently below 20°C. Once you are satisfied with the bubbles, remove the protective film from the faceplate and enjoy your BubbleSpa shower.

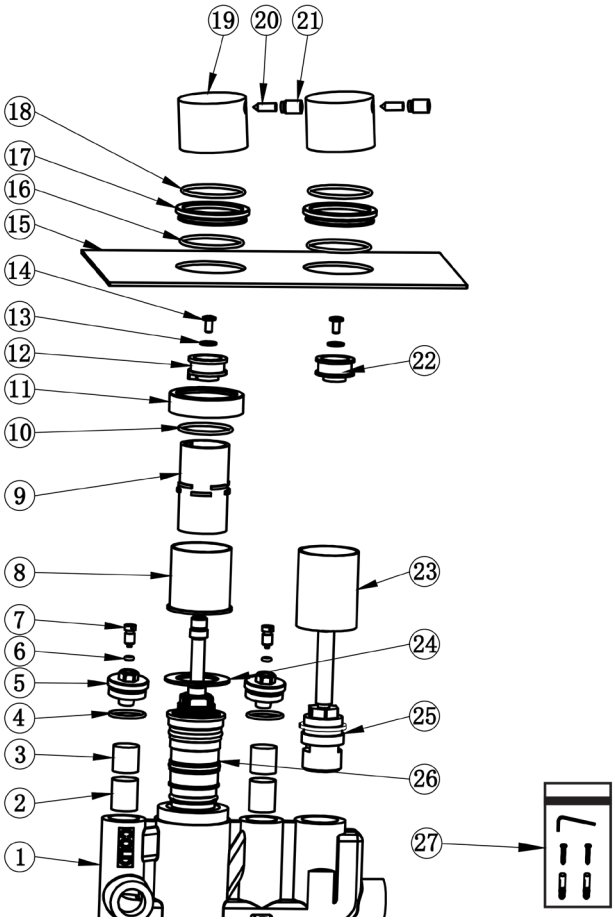
Warning!

- Always check for hidden pipes and cables before drilling
- Run water through hot and cold pipes to clear debris from pipework before connecting Kelda BubbleSpa Shower

Valve Installation

Warning: Read through to the end prior to commencing installation!

Exploded Drawing



No.	Part	Qty
1	Valve Body	1
2	Filter	2
3	Check Valve	2
4	O-ring Ø19x2	2
5	Check Valve Gland	2
6	O-ring Ø3.35x1.78	2
7	Screw on Check Valve Gland	2
8	Thermostatic Collar	1
9	Thermostatic Control Ring	1
10	O-ring Ø28x2	1
11	Thermostatic Gland	1
12	Thermostatic Adapter	1
13	Ø12 Flat Gasket	2
14	M4x10 Crossfit Screw	2
15	Kelda Plate	1
16	O-ring Ø36x1.9	2
17	Trim Ring	2
18	O-ring Ø37x1.5	2
19	Control Knob	2
20	Grub Screw	2
21	Knob Lever	2
22	Flow Adapter	1
23	Flow Collar	1
24	Nylon Gasket	1
25	Flow Cartridge	1
26	Thermostatic Cartridge	1
27	Screw Pack	1

Operating Specifications

Hot Water Supply Temperature
Max:85°C
Min:10°C higher than the maximum showering temperature required (measured at point of entry to mixer)
eg. Max required showering temperature is 50C then hot water supply must be 60°C - 85°C

Operating Pressures:
Maximum: 5 bar
Minimum: 1.5 bar

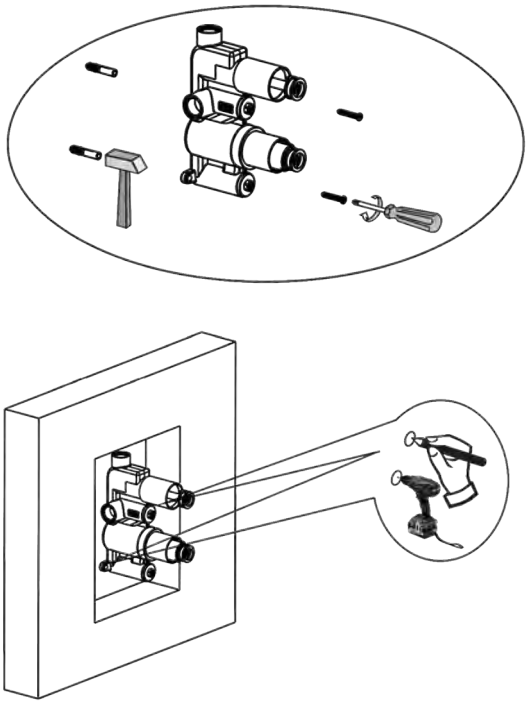
Before Installation

Ensure that the hot and cold water outlets are reasonably balanced in terms of pressure and flow. Ensure all pipes are flushed and clear of any dirt, metal, wood shavings, debris or foreign material. The valves must be set into the wall with a minimum of 83mm. When fitted into a partition wall or a soft substrate please use specialist fixings to hold the valves in place.

It is recommended to fit isolating valves to the inlet pipes for ease of maintenance. Care should be taken when installing to ensure the surfaces of the valves are not damaged.

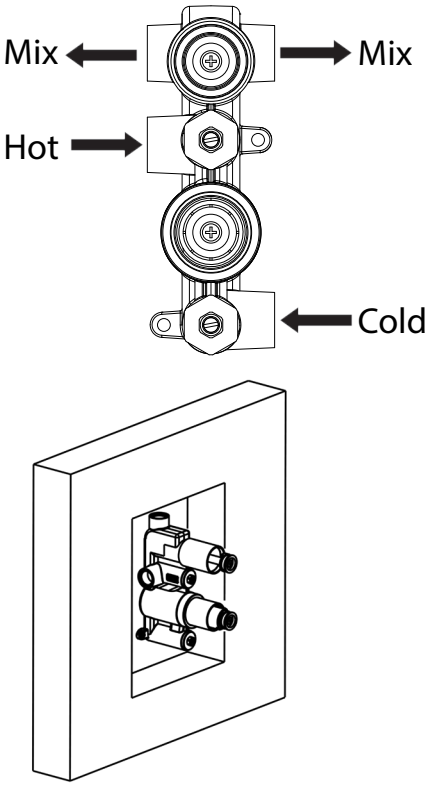
Valve & Handset Installation

1



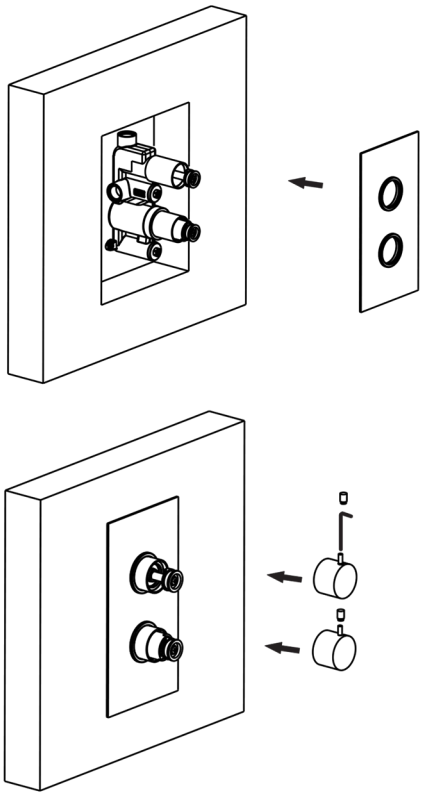
Determine the position of the valve and hold the valve inside the wall cavity. Mark out the fixing points for the screws. Remove the valve and drill in holes for the Wall Plugs. Secure the valve within the wall cavity using the Wall Plugs and Wall Screws.

2



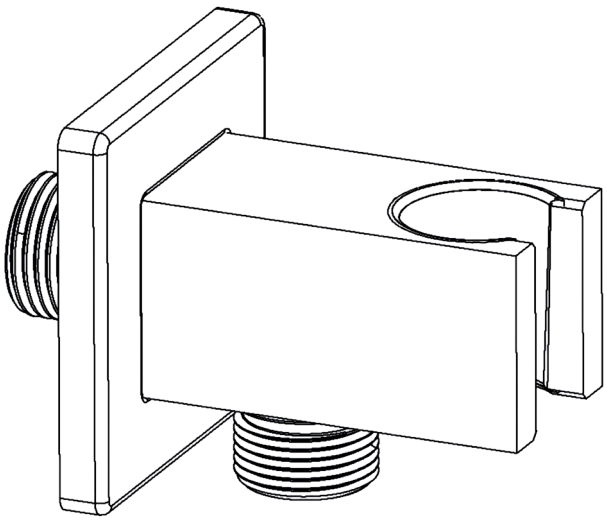
Connect the water inlets and outlets to the valve. Refer to page 8 and the image above for the inlet and outlet positions.

3



Fit the Kelda Plate using a bead of clear silicone sealant on the back. Place the Control Knobs onto the valve and secure them with the Grub Screws. Screw the Knob Levers onto the Grub Screws.

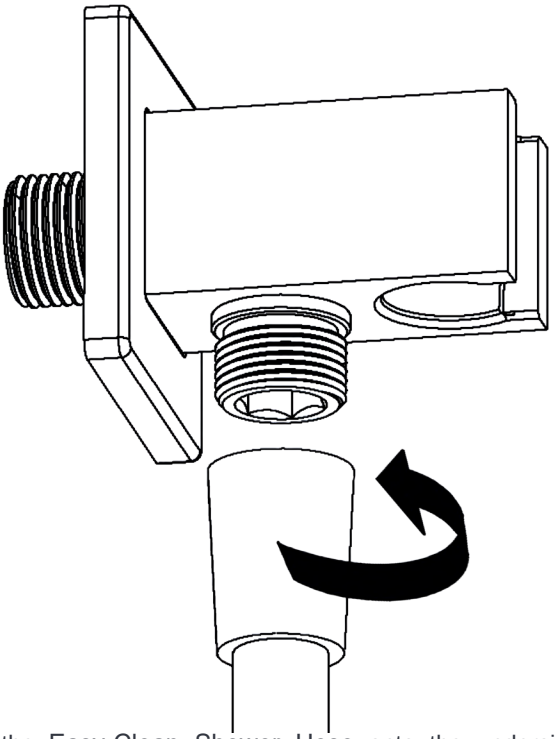
4



Once the female thread has been placed on the pipe, place a washer in the female thread and screw the Handset Holder into the wall. Ensure that the trim is on the Handset Holder before screwing onto the wall.

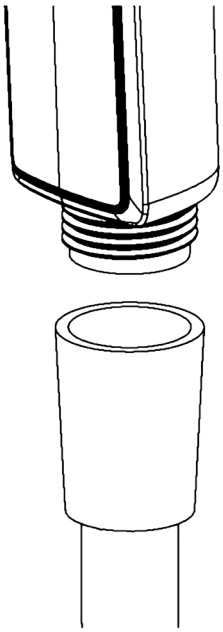
Valve & Handset Installation

5



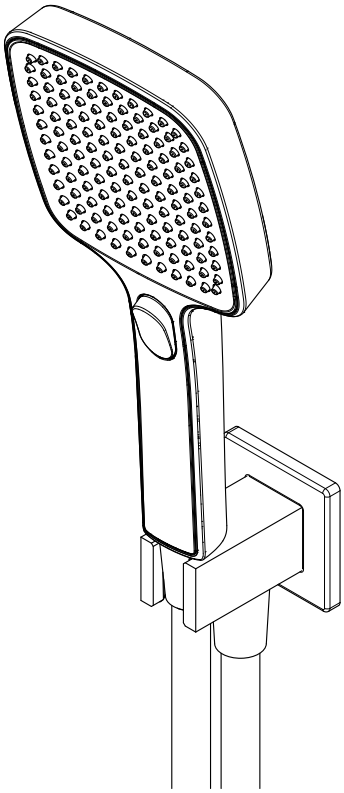
Screw the Easy-Clean Shower Hose onto the underside thread of the Handset Holder. Ensure that there is a washer inside the Hose before attaching.

6



Screw the other side of the Hose onto the thread at the bottom of the Handset. Ensure that the flow regulator is inside the Handset and that there is a washer inside the hose before screwing in the Hose.

7



The installation of the Handset is complete. Place the Handset onto the mount.

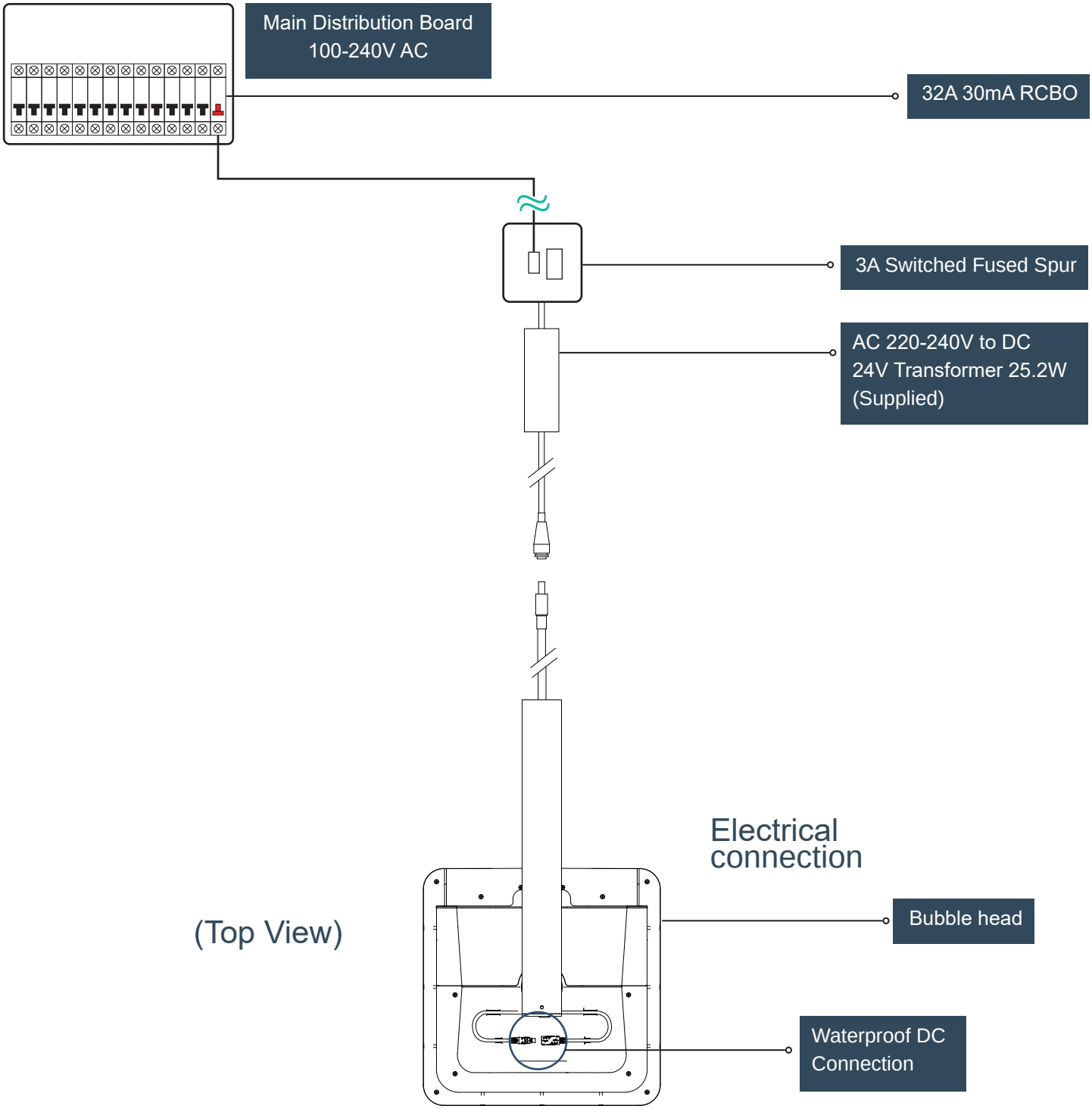
Warning!

- Always check for hidden pipes and cables before drilling
- Run water through hot and cold pipes to clear debris from pipework before connecting Kelda BubbleSpa Shower

Electrical Installation

This shower requires a 100-240 VAC, 47 ~ 63Hz single phase supply. A single 3 Amp switched fused spur should be used for each Panel. Up to 12 Kelda showers can run from a single 32A 30mA RCBO.

Before connecting to power supply, make sure that the mains terminal is able to sustain 240V and 3A. All electrical installation to be carried out by an approved electrician in accordance with Part “P” U.K. Building Regulations and to the latest IEEE standards, or the appropriate regulations in the country of installation.



**The BubbleSpa showerhead does not require its own [electrical port] on the RCB. Since BubbleSpa can be run from a port being used eg. Kitchen port or lighting. See next page for full details.*

Electrical Installation

Meanwell Customised 24V LPF Series Unit

IP67 - Fully Encapsulated
Class 2 Power Unit

Output	
DC Voltage	24V
Constant Current Region	13.2 ~ 24V
Rated Current	1.05A
Rated Power	25.2W

Input	
Voltage Range	90 ~ 305VAC
Frequency Range	47 ~ 63Hz
AC Current	0.4A / 115VAC 0.25A / 230VAC 0.2A / 277VAC

Protection	
Over Current	95-108% Constant current limiting, recovers automatically after fault condition is removed
Short Circuit	Hiccup mode, recovers automatically after fault condition is removed
Over Voltage	28-35V Shut down and latch off o/p voltage, re-power on to recover
Over Temperature	Shut down o/p voltage, recovers automatically after temperature goes down

Environment	
Working Temp.	Tcase= -35~+70°C
Max. Case Temp.	Tcase= +70°C
Working Humidity	20 ~ 95% RH non-condensing
Storage Temp. Humidity	-40 ~+80°C, 10 ~ 95% RH
Temp. Coefficient	+/-0.03%/°C (0 ~ 50°C)
Vibration	10 ~ 500Hz, 5G 12min./1cycle, period for 72min. each along X, Y, Z axes

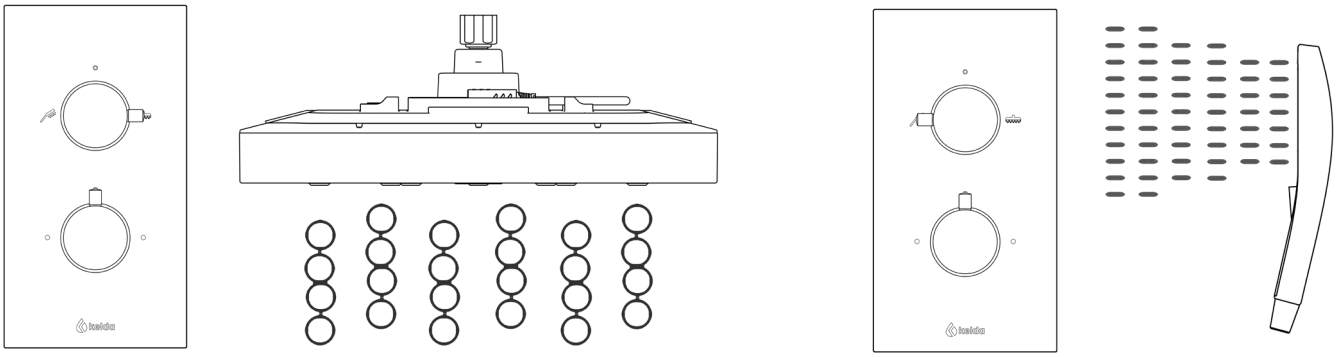
Safety & EMC	
Safety Standards	UL8750, CSA C22.2 No.250.0-08; ENEC BS EN/EN61347-2-13 independent, BS EN/EN62384, J61347-2-13, EAC TPTC 004, GB19510.14, IP67 approved; Design refer to UL60950-1
Withstand Voltage	I/P-O/P:3.75KVAC
Isolation Resistance	I/P-O/P: 100M Ohms / 500VDC / 25°C / 70% RH
EMC Emmission	Compliance to BS EN/EN55015, BS EN/EN61000-3-2 Class C (@load≥50%) ; BS EN/EN61000-3-3, GB17743 and GB17625.1, EAC TP TC 020
EMC Immunity	Compliance to BS EN/EN61000-4-2,3,4,5,6,8,11; BS EN/EN61547, light industry level (surge immunity Line-Line 2KV), EAC TP TC 020

SELV IP67 (CCC optional)

User Guide (Concealed Valve)

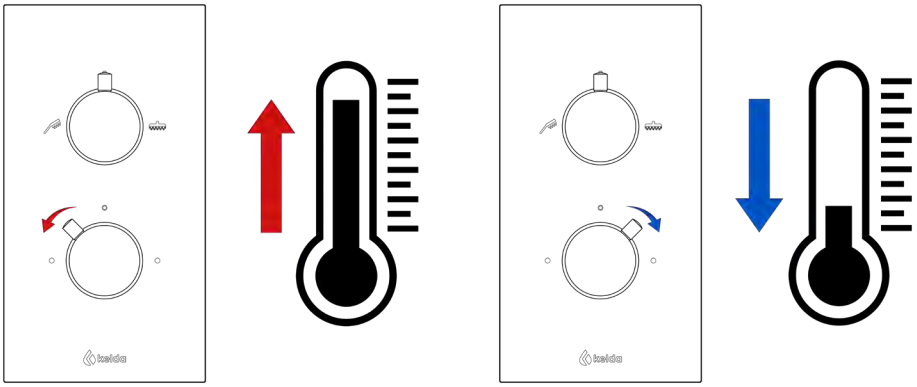
Selecting an outlet

The outlet is selected by rotating the top control knob on the concealed valve. The graphics on the faceplate denote each outlet with the overhead Bubble Spa showerhead being on the right and the 3 Function handset being on the left.



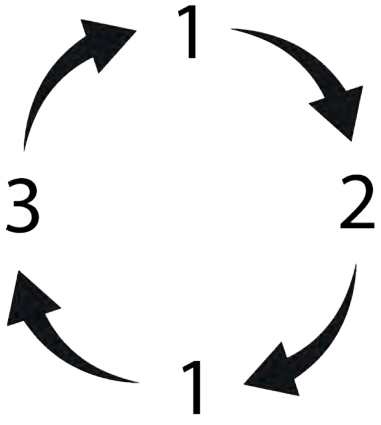
Adjusting the Temperature

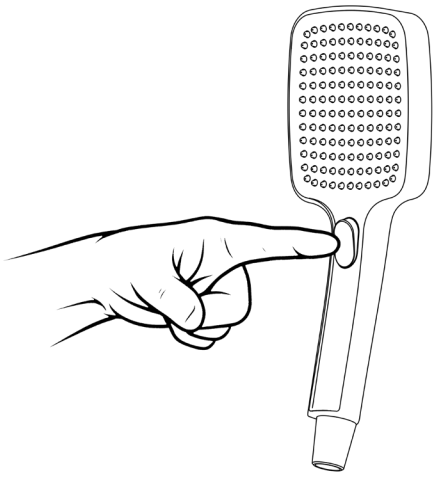
The temperature is adjusted by rotating the temperature Control Knob at the bottom of the concealed valve. Turn anti-clockwise to increase the temperature and turn clockwise to decrease the temperature. The default temperature should be calibrated to the water system of the residence upon commissioning (see page 30 to recalibrate).



Selecting a handset mode

The 3- Function handset cycles through three modes, All [1], Inner [2], Outer [3]. Use the chrome button on the front of the handle to cycle between modes.





User Guide (BubbleSpa Showerhead)

Bubble effect light settings

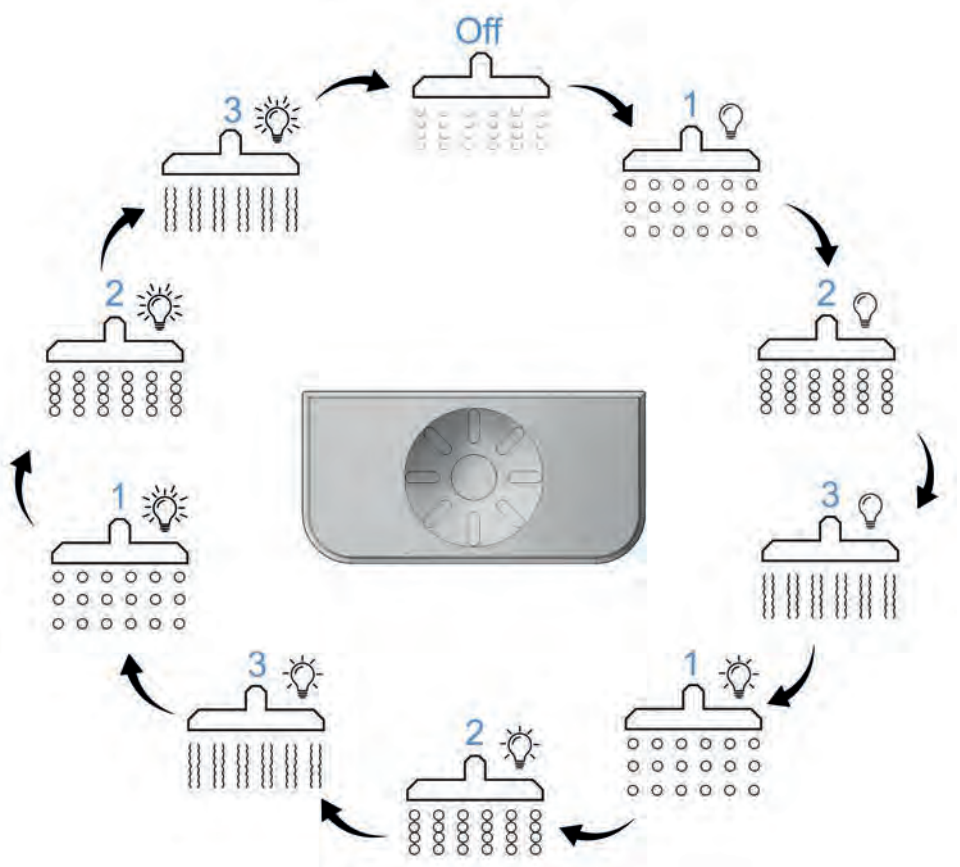
Your Kelda Bubble Spa showerhead comes with a selection of light modes to give you a satisfying Bubble experience no matter what your mood is or the time of day. The light modes can be activated both when the shower is on (Wet Working mode) or when the shower is off (Dry Demo mode).

Wet Working mode

Wet working mode is automatically activated when water flows through the BubbleSpa head. The default light setting is “1 Low” (see table below). The BubbleSpa shower will return to this setting in the event of the power supply being disconnected.

To change your Bubble light setting simply press the illuminated button in the faceplate.

Brightness	Bubble Mode		
Off	Bubbles not visible to the naked eye		
Low	1	2	3
Medium	1	2	3
High	1	2	3



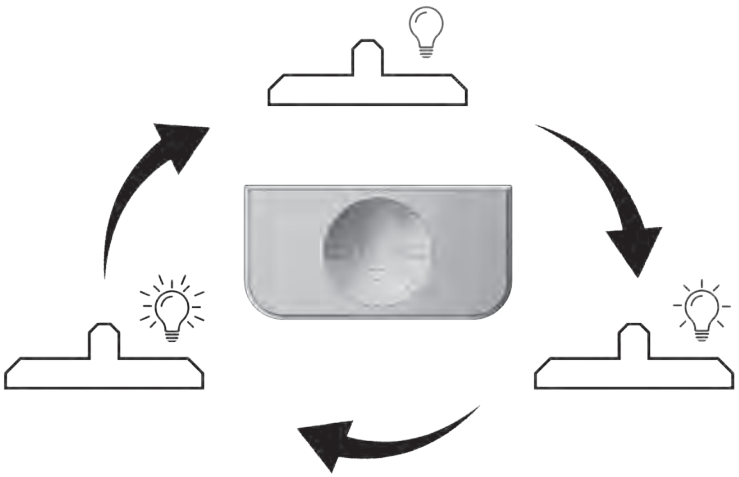
**Visual representation of how bubbles LOOK at different settings. Pressing the button does not change the frequency of bubbles or flow rate of the Bubble Spa shower.*

- The image above shows the cycle of Bubble Modes
- Pressing and holding the button (for 1-2seconds) will turn the light off regardless of which Bubble Mode is currently selected
- When the water is turned off the Bubble Mode is stored ready for your next shower
- “Off” is also saved as a setting – if you find the water on but the main LED array isn’t illuminated, it’s likely that the Bubble Mode was set to off by the last user. Simply press the button to cycle to the next Bubble Mode

User Guide (BubbleSpa Showerhead)

Dry ‘Demo’ mode

Brightness
Off
Low
Medium
High



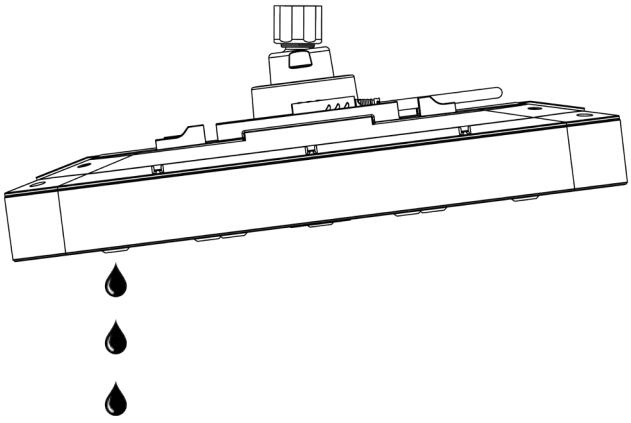
- To activate Demo mode press the button when the shower is off. To deactivate, press and hold for 2 seconds.
- Press the button to change the brightness of the light during dry mode
- The image above shows the Dry Mode cycle when the button is pressed
- Wet Working mode is automatically activated when water is turned on the Bubble Spa shower
- A longer press (1-2seconds) will turn the light off regardless of what mode is currently selected

Diagnostic Function

With the light and water off, press and hold the button for at least 5 seconds to engage the diagnostic tool. During this function the main light array and the fan will turn on. To switch off the fan and light, simply let go of the button. Use this tool to check the function of the fan and LED.

After Use

After using the showerhead, users are advised to tilt the showerhead. This drains the water inside of the water chamber.



Flashing Lights!

This product uses flashing lights at frequencies of 72Hz, 200Hz and 10,000Hz. The effect of the lighting modes will vary depending on ambient lighting and the environment in which it is installed. Anyone diagnosed with a condition which could be triggered by flashing lights should seek further medical advice.

Bubble Mode	Frequency
1	72Hz
2	200Hz
3	10,000Hz

Maintenance

Kelda showers are designed for easy maintenance and should give a safe and consistent performance, provided that:

1. Kelda showers are installed, commissioned, operated and maintained in accordance with this installation guide.
2. Periodic attention is given as necessary to maintain the product in good functional order.

Maintenance must be carried out in accordance with these instructions, and must be conducted by designated, qualified and competent personnel. Kelda showers are built with the highest quality components which are designed for a long life, but due care must be taken during maintenance to avoid damage.

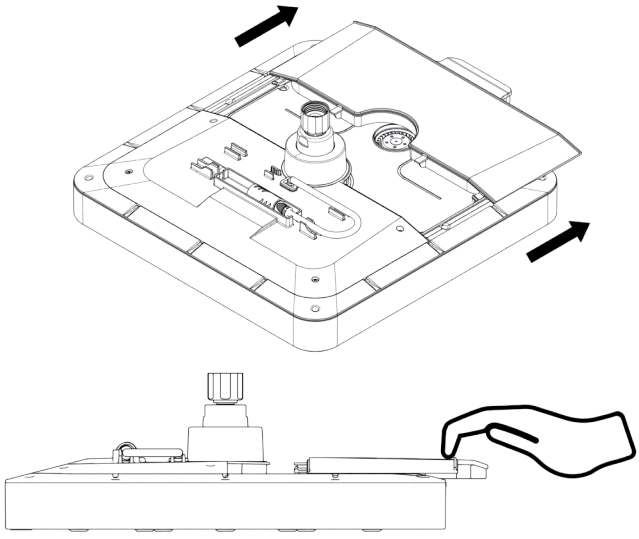
External Surfaces

External surfaces of the showerhead may be wiped clean with a soft cloth and if necessary, a mild cleaning or descaling solution can be used. Always remove cleaning agent residue as this can discolour the surface. Care must be taken not to allow bleach, chlorine or other strong cleaning agents onto or inside the product.

Cleaning Dust Filters

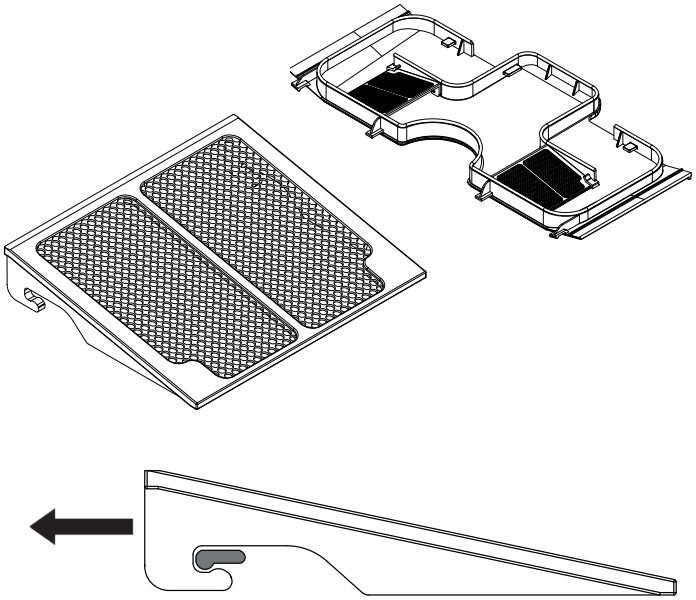
The Dust Cap can be removed from the BubbleSpa showerhead in order to clean the Dust Filters. The Dust Filters can be removed and cleaned. Ensure that the Dust Filters are dry upon replacement.

1



Switch off the water and power supply and disconnect the power cable. Then dismount the showerhead using a spanner and place it onto a soft cloth. Then slide the Dust Cap off the showerhead as shown with both hands. When dismounting the showerhead be careful not to get any water onto the fan or PCB.

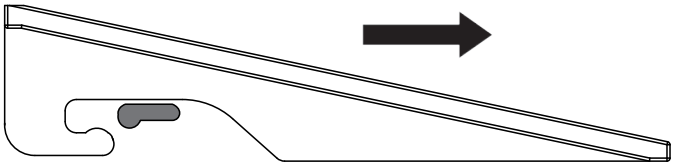
2



Remove the Dust Filters from the Dust Cap as shown and clean the Dust Filters.

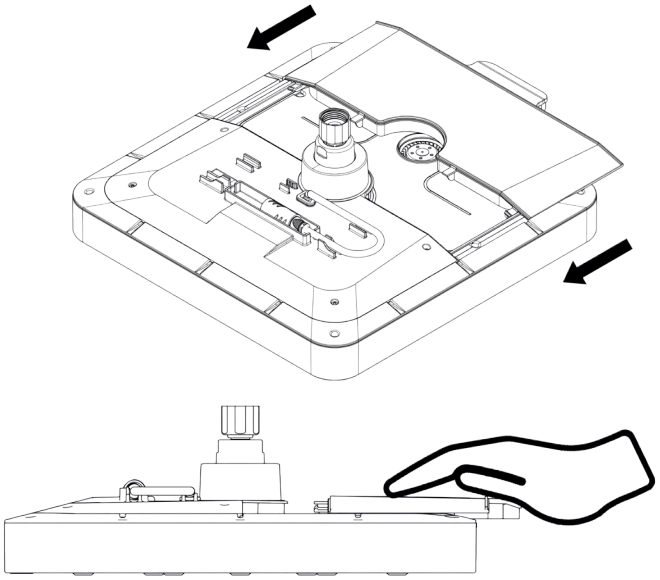
Maintenance

3



Dry the Dust Filters and place them back into the Dust Cap. Make sure the Dust Filters are secured tightly in the Dust Cap.

4



Slide the Dust Cap onto the showerhead. Make sure the Dust Cap is secured tightly and then mount the showerhead onto the arm using a spanner. Reconnect the power cable and switch on the power and water supply.

Things to avoid

To keep the BubbleSpa shower functioning well, please avoid the following:

- Blocking the nozzles while the BubbleSpa is running
- Hanging items on the BubbleSpa showerhead or arm assemblies
- Using the BubbleSpa shower without a PCB Cover or Dust Cover with Dust Filters

Be careful not allow water into the fan when:

- Fitting/ Removing the BubbleSpa showerhead
- Spraying any additional water source up at BubbleSpa shower
- Descaling the showerhead (page 32)

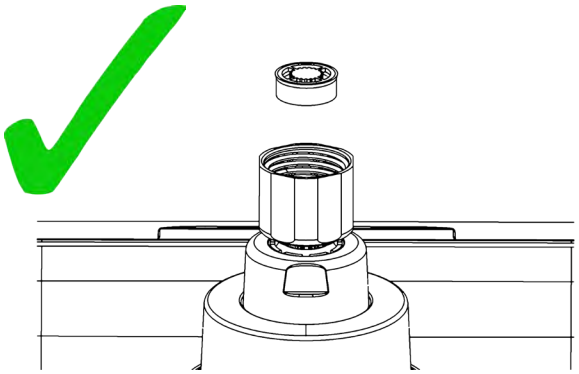
Warning!

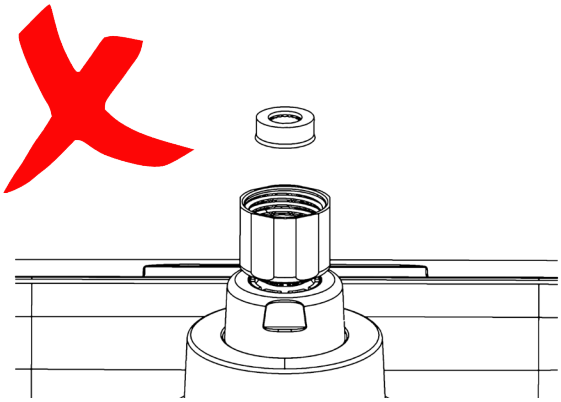
DO NOT SUBMERGE the BubbleSpa showerhead!

Maintenance

Changing Flow Regulator (Flow Restrictor)

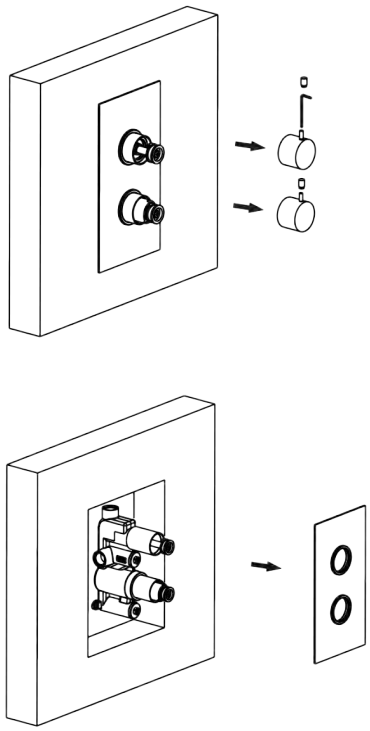
The BubbleSpa shower comes with a flow regulator installed. This can be changed by unscrewing the BubbleSpa showerhead from the Arm Assembly and removing the flow regulator from inside the Ball Joint. The flow regulator is underneath the filter. Place the new flow regulator, ensure that the orientation of the flow regulator is correct. Then place the filter back and screw the BubbleSpa shower back onto the Arm Assembly. The BubbleSpa shower operates at a range of 8L/min – 12L/min. Using the showerhead without a Kelda supplied flow regulator will void the warrenty and negatively affect the performance of the product.





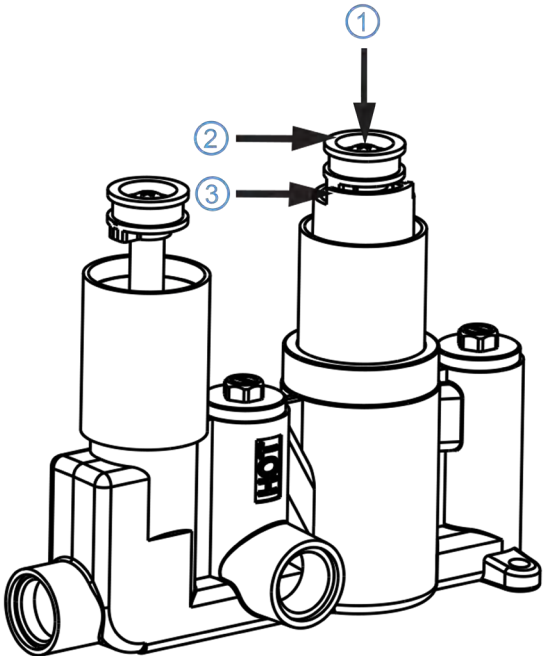
Resetting Valve Temperature

1



Unscrew the Knob Levers from the Grub Screws then unscrew the Grub Screws from the Control Knobs using the Hex Key. Remove the Control Knobs and remove the Kelda Faceplate.

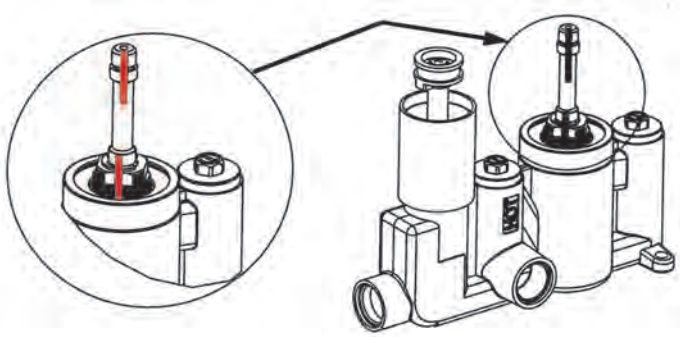
2



Remove the screw& washer [1], the Knob Adaptor [2] and Temperature Control Ring [3] from Thermostatic Cartridge.

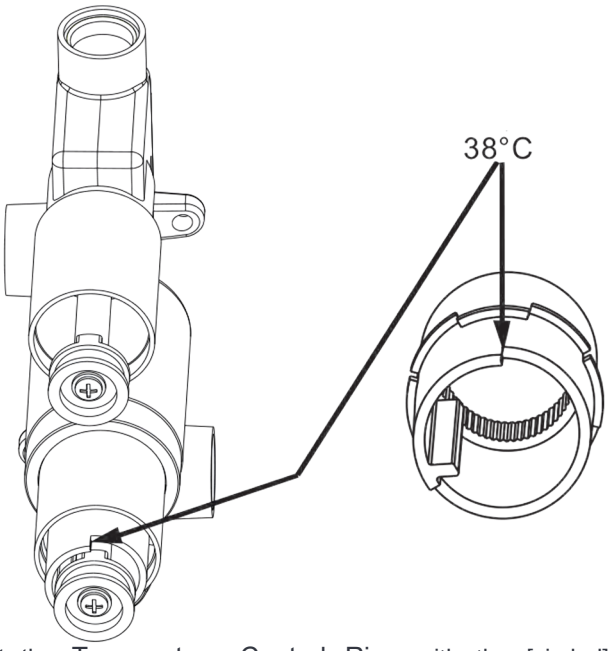
Maintenance

3



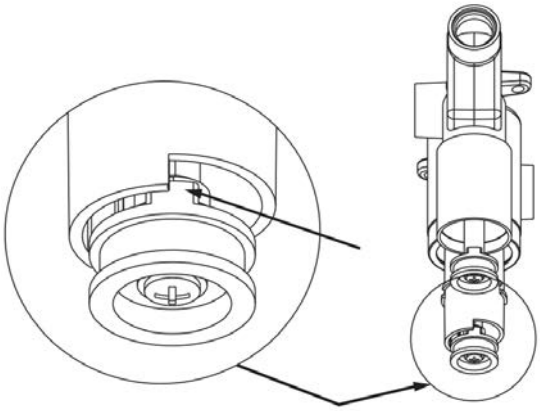
Keep the two marked lines in line whilst turning the spindle. Turn the spindle anti-clockwise to reduce the water temperature (or turn the spindle clockwise to increase the temperature). Measure the temperature of the water and adjust as required. Be careful not to get any water into the wall cavitiy.

4



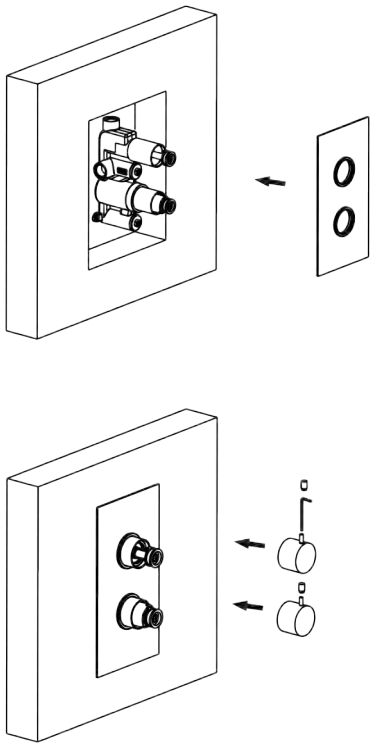
Re-fit the Temperature Control Ring with the [circled] protrusion pointing to the 12 o'clock position.

5



Re-fit the Knob Adaptor, screw and washer by reversing step 2. Make sure the protrusion [circled above] points to the 12 o'clock position.

6



Replace the Kelda Faceplate and secure it with silicone. Refit the Control Knobs onto the valve and secure them with the Grub Screws using the Hex Key. Finally screw the Knob Levers onto the Grub Screws.

Maintenance

Cleaning the Mixer Valve

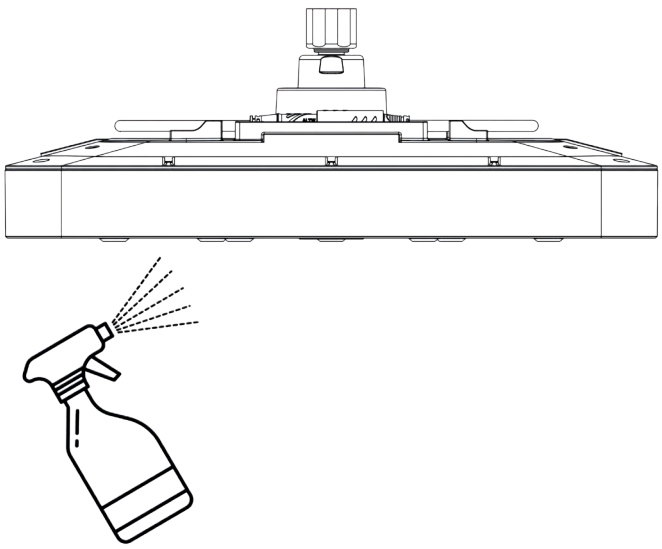
As water hardness varies per region, the filters inside the valve may become clogged which will result in reduced flow and reduced performance of the valve. To clean the valve:

1. Shut off the water supply with isolating valves on both hot and cold inlets.
2. Unscrew the Knob Levers and the Grub Screws. Then remove the Control Knobs and Kelda Faceplate.
3. Remove the Screw, the Knob Adaptor and Temperature Control Ring from Thermostatic Cartridge.
4. Now remove the cartridge with a wrench or similar tool.
5. Rinse the Filters to remove dirt thoroughly, soak them in a suitable de scaling agent.
6. The housing of the Thermostatic Cartridge must also be cleaned thoroughly with a clean cloth. The O-rings of the cartridge should be greased.
7. Reassemble the Thermostatic Cartridge ensuring Temperature Control Ring and Knob Adaptor point to 12 o'clock position as per step 4 & 5 of the 'Resetting Valve Temperature' section.
8. Ensure that the system is secured tightly. The water supply can now be turned on from the isolating valves.
9. Check water temperature is okay, and if not then calibrate as explained in page 30 and check again.

Whilst following these essential maintenance streps, please take due care to maintain the aesthetic quality of the valve - the chrome surfaces should be handled with care and cleaned using a soft cloth. Do not use any chemical cleaning products or abrasive items. If above instructions are not adhered to, this will invalidate your warranty.

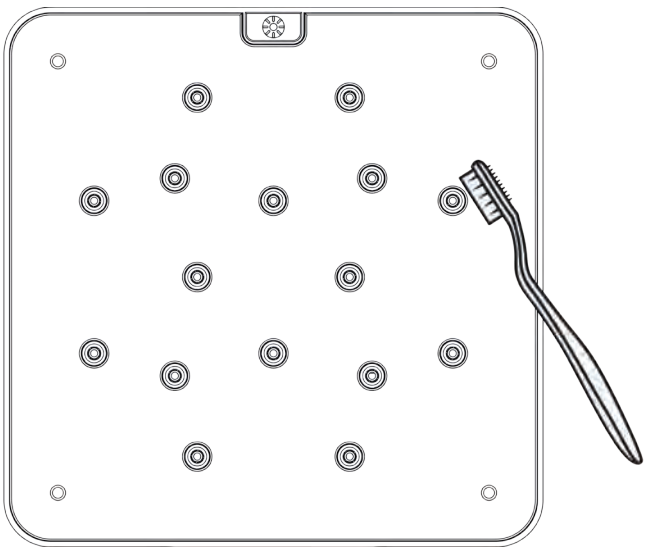
Descaling the BubbleSpa showerhead

1



Spray cleaning solution onto the faceplate.

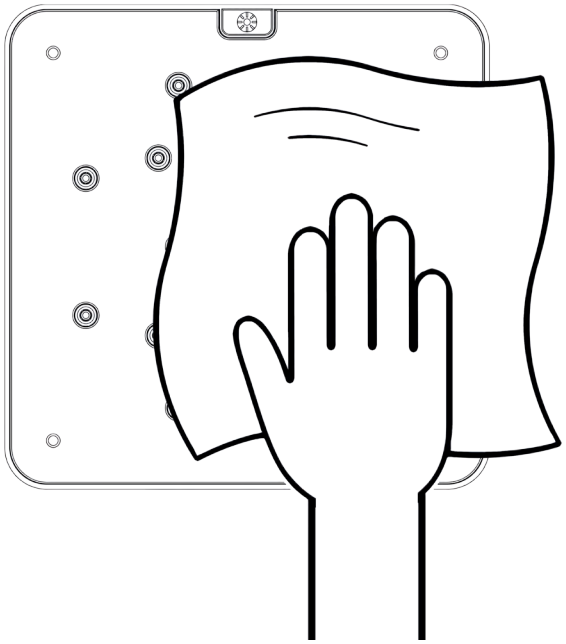
2



Clean the nozzles using a soft brush.

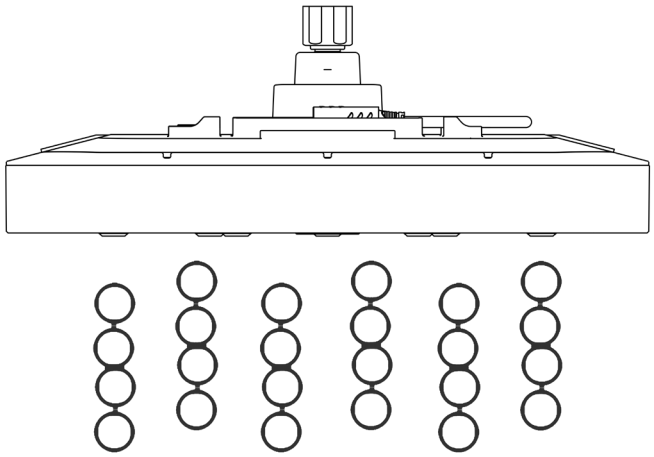
Maintenance

3



Wipe the faceplate using a damp cloth to remove the loosened debris.

4



Run the shower for 1-2 minutes to flush out any cleaning solution and debris.

The frequency of the maintenance required is dependent on the usage and the hardness of the water in your area.

Troubleshooting

Before troubleshooting, ensure that the correct installation, usage and maintenance procedures have been followed. Improper installation and improper use of the product can cause a lot of issues. The guide below is designed to help identify and solve minor issues which may occur. If the issue is still not resolved, please contact Kelda Customer Service:

info@keldashowers.com
+44 (0)2381 290640

DO NOT disassemble the BubbleSpa showerhead beyond the instructions contained in this manual. Disassembling the BubbleSpa showerhead will invalidate the warranty.

BubbleSpa Showerhead

Symptom	Likely Cause	Action/ Remedy
Poor/ No water flow:	Hot or cold water supply isolation valve closed	Check and open valve
	Blocked filter	Unscrew the BubbleSpa showerhead from the arm, remove and clean filter, replace filter. Clean the mixer valve filter (see next page)
	Mixer valve not functioning.	Check mixer valve (see next page)
Water flows from showerhead but no air:	No power to the fan	Check power light indicator, if off contact a qualified electrician If on, conduct hard reset by switching off electrical supply and waiting 10 seconds before turning on
	Fan Damaged	Use Diagnostic Function to see if the fan is working. If not, contact Kelda
	Debris in fan	Clean the Dust Filters
One/ a few nozzles aren't making bubbles:	No laminar flow through nozzle	Gently brush a finger against the nozzle whilst the shower is running
	Faulty nozzle is blocked	Descale the showerhead to remove debris (see page 32). Check the filter is installed correctly (both the showerhead and valve) and clean
	Insufficient water supply	Increase the water flow to the shower.
Multiple/ all nozzles aren't making bubbles	Insufficient water supply	The fan wont turn on below 6L/min therefore no bubbles will be produced. Increase the water flow to the shower.
	Limescale/ Debris build up in the nozzles	Descale the BubbleSpa showerhead (see page 32). It is reccomended not to leave the BubbleSpa showerhead unused for more than 2 weeks.
Water flow too strong:	Flow restrictor not installed.	Check if the flow restrictor is properly installed (see page 30)

Troubleshooting

Mixer Valve

Symptom	Likely cause	Action/Remedy
Outlet temperature too cold	No hot water reaching the valve	Check the water supply for any blockages
	Blocked filter	Remove filters and clean
	If the fault has been present since the valve was installed it is possible that the inlets were installed incorrectly	Check inlets are installed correctly (see page 8)
	The water supply will be colder in winter months due to outside temperature	It may be necessary to adjust the hot supply. i.e. increase the hot water temperature setting on boiler
Outlet temperature too hot	No cold water reaching the valve	Check the water supply for any blockages
	Blocked filter	Remove filters and clean (see page 32)
	If the fault has been present since the valve was installed it is possible that the inlets were installed incorrectly	Check inlets are installed correctly (see page 8)
	The water supply will be hotter in summer months due to outside temperature	It may be necessary to adjust the hot supply. i.e. decrease the hot water temperature setting on boiler.
Only hot or cold water from valve outlet	Possible that the inlets have been installed the incorrect way around	Check inlets are installed correctly (see page 32)
	If only cold water is coming out of the mixer it is possible there is a cartridge fault	Remove the thermostatic cartridge and service.
	Blocked filter	Remove filters and clean
Cannot adjust temperature	It's possible that the thermostatic cartridge is sticking due to limescale build up	Remove the thermostatic cartridge and service.
	Over ride temperature manually	Reset the temperature and increase it (see page 30)
Poor flow rate	Insufficient water pressure	The required minimum water pressure is 1.5 bar (0.15Mpa)
	Filters partially blocked	Remove filter and clean
	Flow valve not fully opening	Remove and check the condition of the Flow Cartridge
Water leaking from showerhead when the valve is turned off/closed	This can be normal for a short period time after the shower has been used Check that the pressures do not exceed of that stated for the product	N/A If pressures are too high adjust as necessary, refer to technical data
	Flow valve leaking	Remove and check the condition of the Flow Cartridge
Water leaking from shower valve /controls	Leaking from flow valve Leaking from thermostatic cartridge	Remove and check the condition of the Flow Cartridge. Remove and check the condition of the Thermostatic Cartridge.
	Check that the pressures do not exceed that stated for the product	Check that the pressures do not exceed that stated. If pressures are too high adjust as necessary. Refer to technical data

Customer care

Guarantee

Kelda Showers Ltd. guarantees this product against any defect in materials or workmanship for the period of two years from the date of purchase. To be covered by this guarantee, installation and maintainence should be carried out as described in this manual.

Not covered by this guarantee

Damage or defects arising from incorrect installation, improper use or failure to maintain in accordance with the instructions in this product manual, including the build-up of lime-scale. Defects or damage if the product is taken apart, repaired or modified by a person not authorised by Kelda Showers Ltd. or by their approved agents.

After-sales service

Our fully trained staff are ready to provide assistance, should you experience any difficulty operating your Kelda Showers Ltd. equipment.

Spare parts

All spares are guaranteed for 12 months from date of purchase. Spares that have been supplied directly from us can be returned within one month from date of purchase, providing that they are in good order and the packaging is unopened. Note: returned spares will be subject to a 15% restocking charge and authorisation must be obtained from Kelda Technology before return.
For the full list of spare parts, please refer to: www.keldashowers.com/

Customer care policy

If within a short space of time of installation the product does not function correctly, first check with the operation and maintenance advice provided in this installation guide to see if the difficulty can be overcome. Failing this, contact your installer to make sure that the product has been installed and commissioned in full accord with our detailed installation instructions. If this does not resolve the difficulty, please contact Kelda Technology, who will give you every assistance.

Declaration of conformity

Kelda Showers limited declares that the Deluxe Panel Shower complies with the essential requirements and other relevant provisions of the Low Voltage Directive (2014/35/EU) and the EMC Directive (2014/30/EU).

Patents:

Patents granted and pending:
1692638P/US

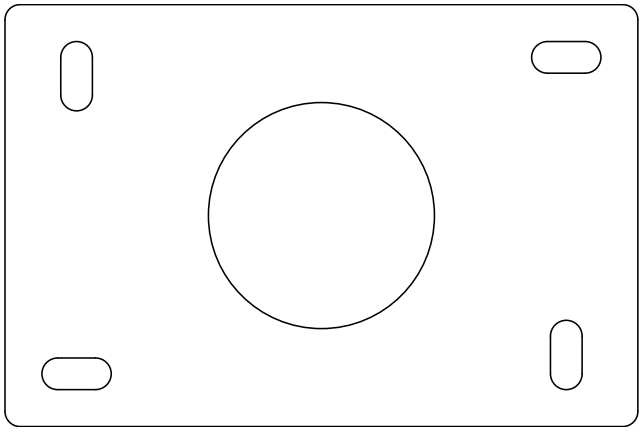
UK HEAD OFFICE

Unit 11, Brickfield Trading Estate, Chandler's Ford, Eastleigh,
SO53 4DR, UK

Tel: +44 (0)2381 290640

Web: www.keldatechnology.com

DISPOSAL
Do not dispose of with household waste. Please recycle where facilities exist.
Check with your local authority for recycling advice.



Cut out for installing the Wall Arm