



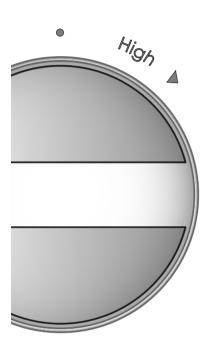


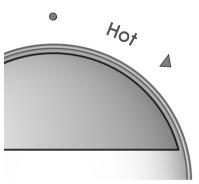
Intertek



Water Inlet Entry Points

8
Electrical Cable
Entry Points





Patents Pending, Registered Design



**Electric Shower** 

Installation and Instruction Manual

**(**E

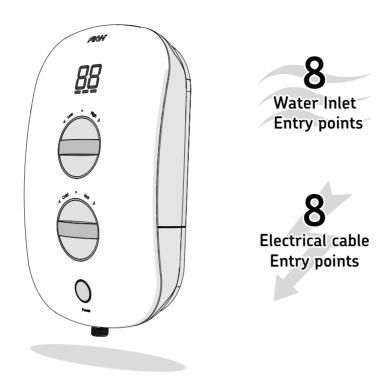


Installer - please read all instructions carefully before installation and leave this manual with the end user for future reference



### **Product Features**





The iTherm Electric Shower has been designed to allow for easy operation. The large ergonomic control knobs and LED interface clearly indicate the temperature and flow rates. The iTherm Electric Shower also allows for easy flexible installation with its inlet layout.

Thermostatic Control - The outlet water temperature is thermostatically maintained

**Automatic Shut Down -** The shower automatically shuts down after 30 minutes operation (this can be bypassed 30 seconds prior to shut down)

**Phased Shut Down -** Flushes the shower with cold water to avoid the possibility of scalding if the shower is restarted within a short period of time

#### Flexible Installation

- 8 Water Inlet Points
- 8 Cable Inlet Points

Dual power blocks for left or right wiring Retro-fit footprint 3 year warranty 8.5kW or 9.5kW options available



### Contents

ntroduction

Introduction	2-3	Plumbing	20-23	
Product Features	2	Water Requirements	20	
Contents	3	Plumbing Connections	21	
		Plumbing Entry Points	22	
User	4-8	Check List	23	
User Safety Information	4			
User Operating Instructions	5-6	Electricals	24-27	
User Volume Setting	7	Electrical Requirements	24-25	
Cleaning Recommendations	8	Electrical Entry Points	26	
User Troubleshooting	9	Connecting Waste Pump	27	
User Warranty	10	Check List	27	
Installer	11-19	Commissioning	28-32	
Main Components	11	Cold Water Flushing	28	
Specifications	12	Temperature & Mode Settings	29	
Important Safety Information	13	Functional Checks	30	
Installation Requirements	14	Commissioning Tests	31	
Positioning of the Shower	<u> 15</u>	Troubleshooting For Engineers	32	
Disassembly	16			
Fitting to the wall	<u> 17</u>	General		
Reassembly- Bottom Cover	18	Contact Us	36	
Reassembly- Front Cover	19			

Failure to install this AKW product in accordance with supplied instructions or the making of unauthorised modifications will invalidate any warranty and may affect product safety.

These instructions are provided to advise the minimum standards of installation and recommends the best practice for the installation. Due to the very wide variability of possible installation conditions AKW cannot provide all circumstances for the installation. AKW cannot accept any liability in connection with this information or its use. This information is provided on the condition that the person receiving it shall make their own tests to determine the suitability for their particular purpose. None of the foregoing affects your statutory rights.





# **User Safety Information**

Do not operate shower if you suspect the water in the heater tank is frozen or the appliance has been susceptible to freezing conditions.

Do not operate the shower if the spray handset or hose is damaged or blocked.

Do not restrict flow out of the shower by blocking or obstructing spray handset.



## User Operating Instructions

#### 1. Temperature Indicator

This digital display is an indication of the water temperature inside the unit, not the outlet temperature. When the Temperature Control is adjusted (4), the target temperature will display and flash. It will stop flashing once the desired temperature has reached its target.

The display may flash again when it goes outside the desired target temperature (+-2°C). Any slight up or down fluctuations on the display during use are normal.

### 2. Flow Range Indicator

This digital display is an indication of the current flow rate setting.

Low Medium — — —

#### 3. Flow Control

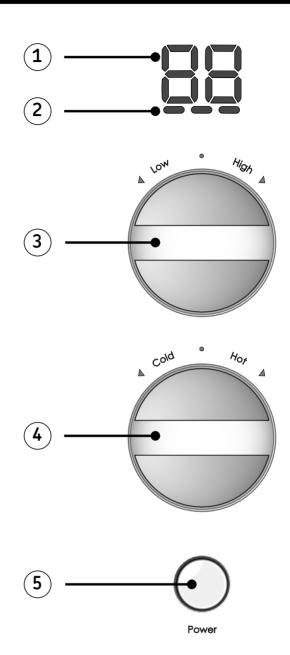
Adjustable flow control

## 4.Temperature Control

Adjustable temperature control

#### 5. Power Button

Push button to power on/off the shower



### Starting the Shower

Switch on the mains power at the isolating switch.

When the power is first turned on, the outer light ring around the power button will be lit and the shower is in standby mode.

To switch on, press and release the power button, the temperature and flow rate will be indicated on the display.

To switch off, press and release the power button to stop water flowing. Your iTherm shower will enter into phased shut-down mode to allow for the hot water to flow for a short period of time while the heater cools down before automatically turning off.

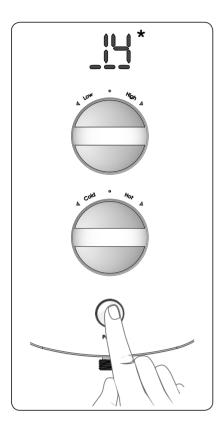


# User Operating Instructions

## Cold Water Setting

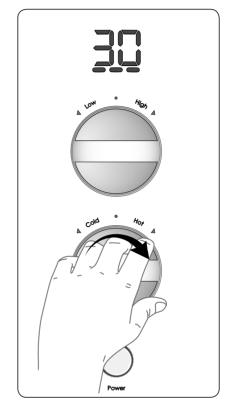


Turn on power at pull cord/switch.



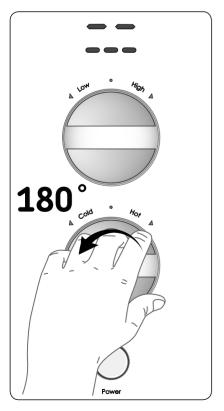
### Step 1

Press the power button



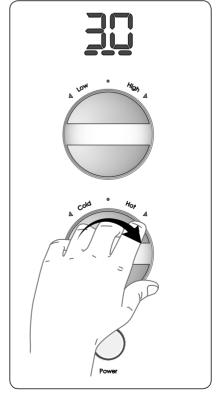
### Step 2

Turn the
Temperature
control knob
clockwise until
the temperature
display is shown
like the
illustration



### Step 3

Turn the Temperature control knob 180° anti-clockwise and the shower will enter cold flow (no heating)



### Step 4

To adjust the shower back to 30°C, turn the Temperature Control knob by two clicks (NOT 180°).

\*Inlet water temperature will vary dependent on season and location



## **User Volume Setting**

The iTherm Electric Shower has audible tones enabled in its factory settings. This can be enabled/disabled for your preference. Please contact a qualified local installer and refer them to Page 29 to change it to your preference.

When enabled, audible tones occur in the following state:

- Single beep when switched on
- 2 beeps when Temp/Flow are at the end of their adjustment range
- Multiple (approx. 8) when in phased shut-down
- Multiple beeps for 30 seconds after the shower has been running for 30 minutes



## Cleaning Recommendations

Always isolate power supply before cleaning.

The shower unit and surrounding areas should be cleaned periodically to remove any accumulation of dirt or other waste materials, using domestic bathroom and kitchen cleaning materials with a soft cloth.

After cleaning always wash down with water then wipe thoroughly with a damp cloth to remove any cleaning material residue.

Do not use abrasive pads or cloths. Do not use strong or concentrated acidic, alkaline or other cleaning materials as these may damage or discolour the product.

It is recommended to clean the riser rail with warm soapy water prior to use. It is also recommended to run hot water through the shower hose after installation to remove any twists or kinks from being in transit.



# **User Troubleshooting**

Fault	Cause	Remedy	
No Water Flow	Water isolating valve in off position	Turn on water supply	
	Filter blocked	Turn off water supply, remove filter and clean	
	Power supply not on	Turn on power supply	
Water temperature too hot	Insufficient water flowing through the shower	Clean the handset Increase the flow by adjusting the temperature control knob to cooler setting.	
		Reduce the power setting	
Shower runs hot and cold during use	Water pressure is below minimum requirement. This may be caused by other appliances on the same pipework drawing water	Check running pressure (minimum of 0.5bar) (1bar Recommended) Wait until pressure increases	
Water from pressure relief outlet-PRD activated	Obstruction in hose or handset	Call AKW Technical Enquiries	
Fault LED's Display (See Page 32 for reference)	Low Flow/Low Pressure Inlet Thermistor Fault	Call a qualified service engineer and refer to Page 32	
	Outlet Thermistor Fault		
	Uncontrolled over Temperature		

If the shower does not work as expected, switch off at the pull-cord or isolating switch, wait 30 minutes for the shower to reset then switch back on again.



### **User Warranty**



AKW guarantee your shower against any defects in manufacturing or materials for 3 years from the date of purchase. Within this period AKW will decide to repair or replace as we may choose. To be free of charge, proof of purchase is required. Work is to only be undertaken by AKW or our approved agents with prior agreement. Any action taken under this warranty does not extend the stated 3-year expiry date.

This guarantee is in addition to your statutory and other legal rights. None of the foregoing affects your statutory rights.

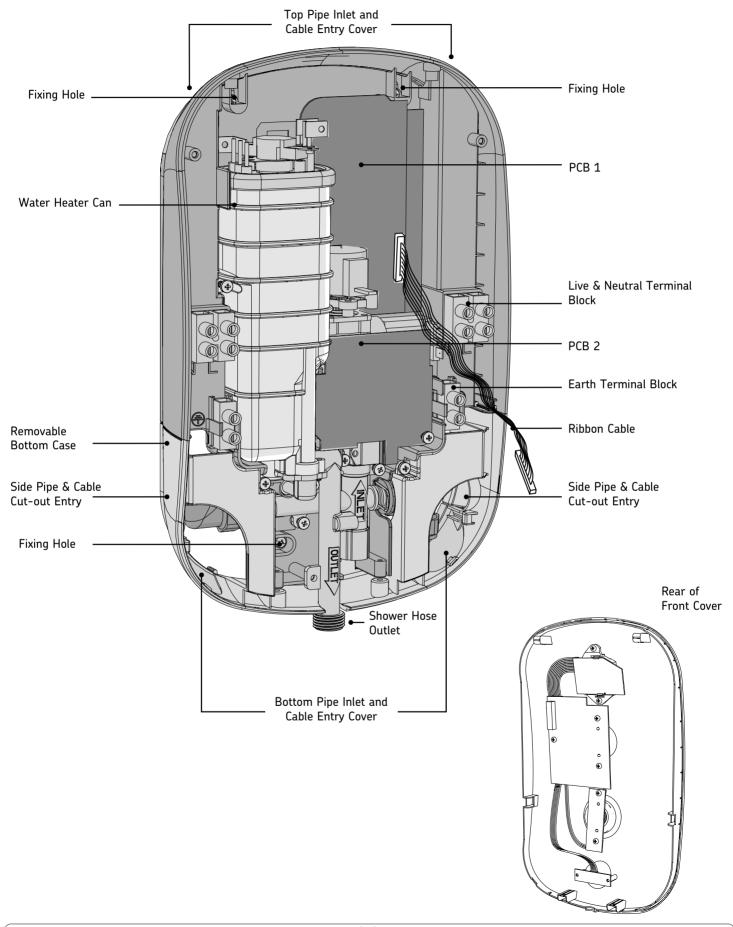
#### Not covered by this warranty:

- Damage or defects that result from inappropriate use or accidental damage. incorrect installation, or lack of maintenance including the build up of grime, dirt or lime scale, water-borne debris
- Failure to install in accordance with this installation guide
- Damage resulting from inappropriate cleaning or water ingress
- Damage resulting from water freezing
- Damage resulting from PRD activation from either blocked hose or shower handset
- Damage or defects that result from repairs, modifications undertaken by persons who are not AKW authorised service staff or agents

If you need any advice or if you have any questions please contact the Technical Enquiries with your model number and date of purchase.

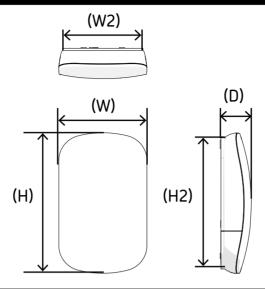


# Main Components





# Specifications



	Supply Source	Mains pressure cold water only
>_	Minimum Dynamic Pressure	50kPa (0.5 Bar)
IPРI	Maximum Static Pressure	1000 kPa (10 Bar)
S	Optimal Minimum Dynamic Pressure*	100 kPa (1 Bar) (Recommended to ensure high performance)
ING	Maximum Inlet Temperature	28°C
PLUMBING SUPPLY	Minimum Inlet Temperature	3°C
PLU	Inlet Connection	15mm pipe
	Outlet Connection	1/2" BSP Male Thread Fitting
ELECTRICITY SUPPLY	Nominal Rating at 240 V	9.5kW & 8.5kW
	Supply Fuse / Circuit Breaker Residual Current Device (RCD)	(9.5kW 40/45A) & (8.5kW 35/40A) 30 mA (must be fitted)
	Supply Cable	Refer to current wiring regulations
CIT		and BS 7671 to determine minimum
CTRI		cable size. No larger than 10mm²
LE(	Isolation Switch (e.g. Pull Cord)	45 Amp Double pole with 3mm
	-	contact separation.
	Height	(H) 380 mm
	Width	(W) 230 mm
PHYSICAL	Depth	(D) 85 mm
	Footprint Height	(H2) 345 mm
	Footprint Width	(W2) 210 mm
PH	Water Ingress Rating	IPX4
	Water and Cable Entry Points	Top, bottom, side or back.
	Shower Drain Pump Connections	Suitable for M Series (Flow Sensor) or AKW A4 (Flow Switch)

<sup>\*</sup>For Optimal Product Performance the recommended minimum dynamic water pressure should be 100kPa (1 Bar)



## Important Safety Information

This product must only be installed and serviced by a competent and qualified person e.g. NICEIC qualified person in accordance with both the current edition of the Wiring Regulations BS7671 and the current Building Regulations and following these instructions. Any actions to remove, modify or fix this shower by non AKW appointed engineers or service staff will invalidate this warranty.

All products manufactured and supplied by AKW are safe provided they are installed, used correctly and maintained in accordance with these instructions.

This Shower is fully thermostatic and will automatically compensate for any seasonal changes to the inlet temperature and flow rates as long as they remain within the specified conditions stated in the shower specification sheet on page 11.



ALWAYS Isolate or turn off the power supply and water supply before

any maintenance or cleaning is required.



ALWAYS Read these installation instructions carefully before installing

or servicing this product.

LEAVE THIS GUIDE WITH THE END USER FOR FUTURE

REFERENCE & SERVICING ADVICE.



ALWAYS Ensure the ribbon cable is correctly installed and no cables

have become trapped. Ensure the front cover is correctly

installed.



NEVER Open the front cover whilst in use.

Do not block the flow of water from the shower head, by placing it (smothering it) on your hand or any other part of your body or foreign object. Do not crush or kink the shower hose, this could damage the hose, cause leaks and

activate the Pressure Relief Device (PRD).



### Installation Requirements

#### Installation Requirements

The shower must only be connected to the mains cold water supply.

The shower must not be positioned where it will be subjected to freezing conditions.

The shower must always be mounted on a finished flat, waterproof tiled surface or waterproof wall board.

The outlet pipe acts as a vent and must never be blocked, restricted or connected to any other parts or fittings other than the AKW shower handset and hose supplied with this appliance.

#### Before you start work:

Take care when you unpack the product and make sure that you do not inadvertently discard any small parts. Check the contents supplied against the contents page handout. If any parts are missing or damaged, contact AKW General Enquiries.

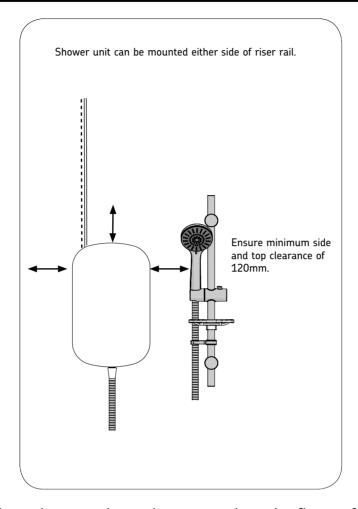
Check that finished walls are sound and free from cracks or loose tiles or grout. Make sure that all surfaces are clean, dry and free from loose debris or dust.

This product is not suitable for mounting into steam rooms or steam cubicles.

If it is intended to operate the shower in areas of hard water (above 200 ppm temporary hardness), a scale inhibitor may have to be fitted.



### Positioning of the Shower



For ease of servicing, the unit must always be mounted on the flat surface of tiled walls. Never tile up to the shower unit.

Do not seal the shower to the wall with silicone sealant.

The flat surface must cover the full width and length of the back plate, otherwise difficulty may arise when fitting the cover and subsequent operation of the unit may be impaired.

Refer to the illustration below for correct positioning of the shower controls and shower handset.

Position the shower unit vertically.

Check there are no pipes or electrical cables inside the wall before drilling.

The height of the controls is dependent upon the type of installation.

DO NOT obstruct the back and sides of the shower as this will prevent the Pressure Relief Device (PRD) from operating.

Ensure the shower unit is positioned over a bath, shower tray or wet floor.

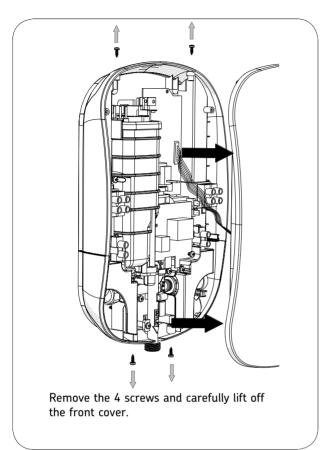
The showerhead must be directed away from the shower unit, during normal use the showerhead must not spray directly on to the shower unit.

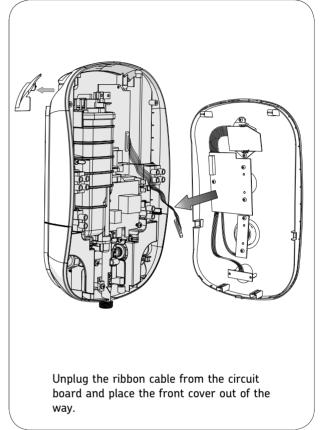


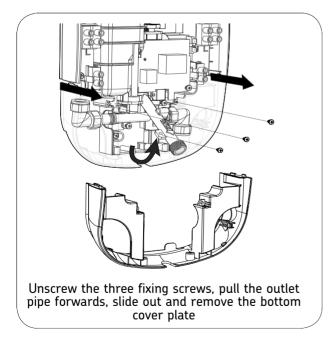
## Disassembly

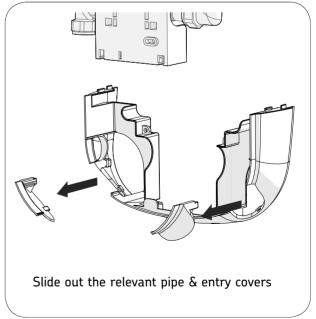


Ensure that the electrical supply is switched off at the mains. Ensure that the water supply is turned off.





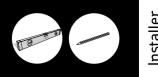




Note the unit can be temporarily hung using the top screws fixings whilst the cable and pipe work entries can be connected.

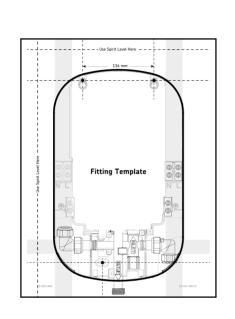


# Fitting to Wall

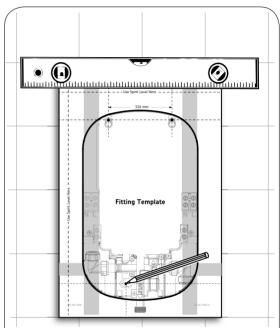




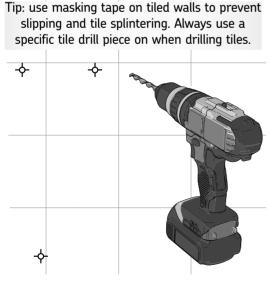
It is essential to remove any debris and/or brick dust that could otherwise damage the unit. Do not make any alternative or additional fixing points, as this will invalidate the warranty. Please check for hidden cables and water pipes.



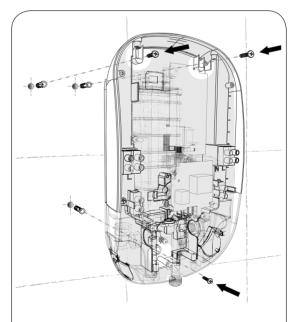
Use the fitting template provided



Ensure the template is level and temporarily hold in position with tape. Mark the 3 fixing points on the wall



Remove the fitting template from the wall and drill the marked fixing points. Before drilling, ensure there are no cables or water supplies running within the wall

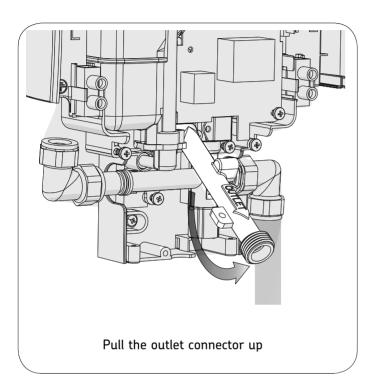


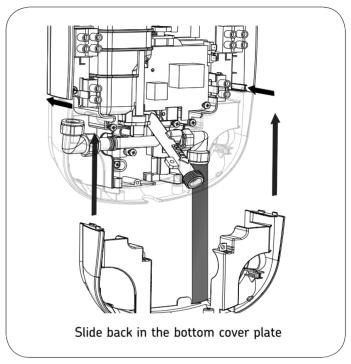
Insert wall plugs and screw the top two screws to the wall. Note: the bottom screw should only be fitted during final installation

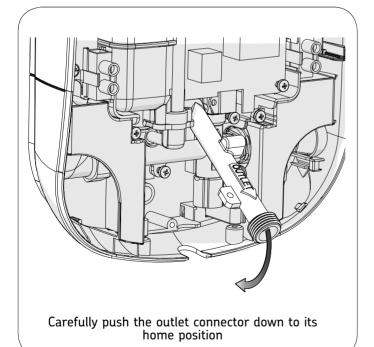


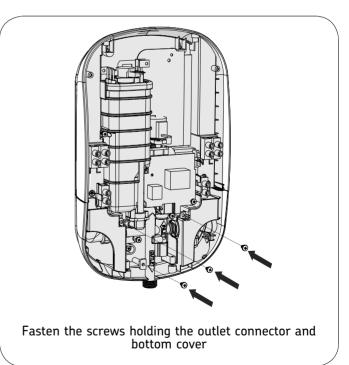
# Reassembly - Bottom Cover

Once the cable and pipe connections have been made, reassemble the bottom cover plates.











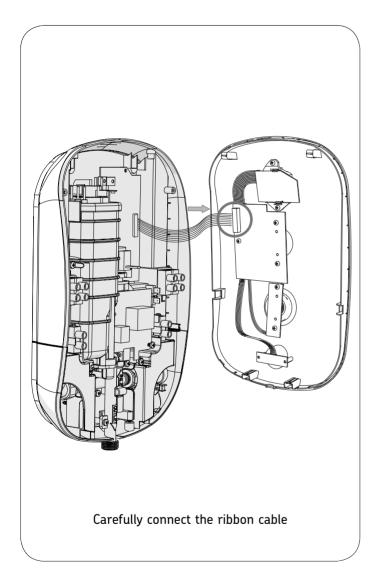
# Reassembly - Front Cover

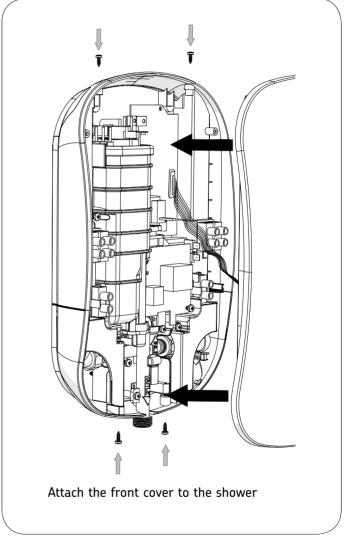
Ensure all connectors are correctly inserted before the cover is refitted.

Refit the Front Cover taking care not to trap the ribbon cable or any other wires.

Only use the supplied screws to secure the front cover. Failure to do so, can cause internal damage to the appliance.

Do not seal the shower to the wall with silicone sealant.







### Water Requirements

The shower hose retainer (supplied in the accessory pack) should be used. The installation should comply with Water Regulations and prevent water supply contamination.

To ensure activation of the heating elements, the shower must be connected to a mains cold water supply with a minimum running pressure of 50kPa (0.5 bar) with a maximum static pressure of 1000kPa (10 bar).

For optimal product performance the recommended minimum dynamic water pressure should be 100kPa (1 Bar). Dynamic pressure should not fall below 50kPa (0.5 bar) for example when other draw off's are used, such as a flushing the toilet as this can cause the shower temperature to fluctuate dramatically.

Note: An isolating stop valve must be provided on the cold water feed before connecting to the shower. We recommend the isolation valve (not supplied) should be fitted as close as is practicable to the water supply inlets of the shower heater whilst being accessible for maintenance and servicing purposes.

Do not install this appliance in a position where it can freeze.

#### Never fit the appliance to the hot water supply.

Note: If the stated flow rates are not available, it may not be possible to achieve optimum performance from the unit throughout the year.

Note: If the Pressure Relief Device fails, then call the installer in first instance as there may be a dynamic pressure problem.



## **Plumbing Connections**

**lumbing** 

Note - The manufacturer's rigorous quality systems may require operating the shower with water at the factory. Any water will be removed where possible, however there may be a small amount of water residue left in the shower. Sealing caps are used to prevent any excess water from entering and damaging the unit.

The plumbing installation must comply with Water Fitting Regulations, Building Regulations and should be in accordance with BS 6700. Plumbing work must be completed before any electrical connections are made.

Make sure there is a cold water feed near to the installation with a local service isolation valve.

Before assembly, flush the water supply pipes thoroughly to remove debris in the pipework (allow the water to run with the main stopcock open for about 3 mins), to prevent debris and dirt particles from blocking the filter which might affect the function of the shower.

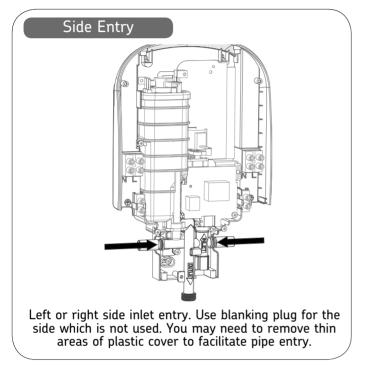
DO NOT solder pipes or fittings within 110mm of the shower appliance.

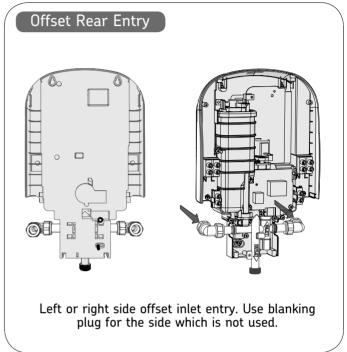
DO NOT fit any form of outlet flow control to the water heater.

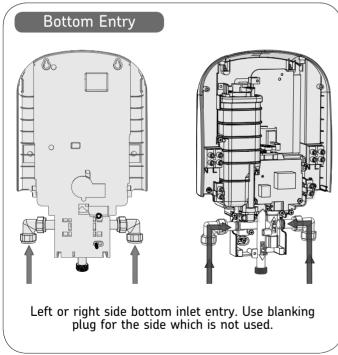
DO NOT use excessive force when making connections to the water supply inlet, the flexible hose or the spray head.

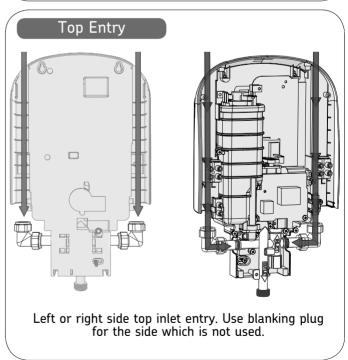
# Plumbing Entry Points

Determine pipework position and select the inlet option most suited to your situation. Always prime pipework and flush clear of debris. To prevent a dead leg occurring in the inlet pipework install the inlet plug into the unused inlet pipe, see separate instruction sheet.









Note - Some water from the factory testing may escape when the blanking plugs are removed.



### **Check List**

#### Connect pipework and secure the appliance to the wall

Determine the pipe inlet connection from the 8 entry points.

Separately flush the pipework to remove any debris before connecting to the shower

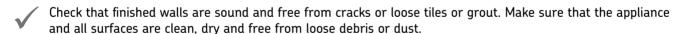
Note - For ease of installation and servicing, rear entry pipe is only recommended if the top, side or bottom entries are not possible. This pipework must not apply strain to the elbow fitting on the shower. Failure to observe this essential precaution will invalidate the warranty.

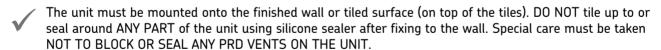
Securely fix the shower appliance to the wall and make sure it is vertical.

Connect the hose, but not the handset at this time. Point the hose into the bath, shower tray or wet floor without the handset connected.

After commissioning, ensure the shower filter is clear from any debris before leaving the installation site.

#### **Plumbing Check List**





- Turn on the water supply and check there are no leaks no water should flow through the shower at this point. The maximum static water pressure is 10 bar The minimum operating dynamic pressure must be at least 0.5 bar. Recommend that for optimum performance this is 1 bar.
- Place absorbent material around the inlet areas in case of leaks.
- Checked that there are no leaks
- Turn off the supply, dry off any water in and around the appliance <u>before</u> connecting or reinstating the electricity.



### **Electrical Requirements**





# Caution - Danger of Death 230V AC Lethal Voltage present on the AC supply.

WARNING - THIS APPLIANCE MUST BE EARTHED

The installation, supply cable and circuit protection must conform to the current wiring regulations and be sufficient for the amperage required and length of cable run. Before making electrical connections within the installation, ensure that the electrical supply has been isolated.

The shower must be connected to its own independent electrical circuit.

DO NOT connect any other device to the power source.

Check your consumer unit (main fuse box) has a main switch rating of 80A or above and that it has a spare fuse way which will take the miniature circuit breaker (MCB) necessary for the shower (see schematic of installation circuit). If your consumer unit has a rating below 80A or if there is no spare fuse way, then the installation may require a new consumer unit serving the property or just the shower. Contact the local electricity company if in any doubt.

The current carrying capacity of the cable must be at least that of the shower circuit protection. Refer to the current wiring regulations BS 7671 to determine minimum cable size. A maximum of 10mm² can be fitted to the shower. Site conditions must be assessed by a competent electrician to determine correct cable size and permissible circuit length.

Shower circuit cable separation from other circuits must meet wiring regulations.

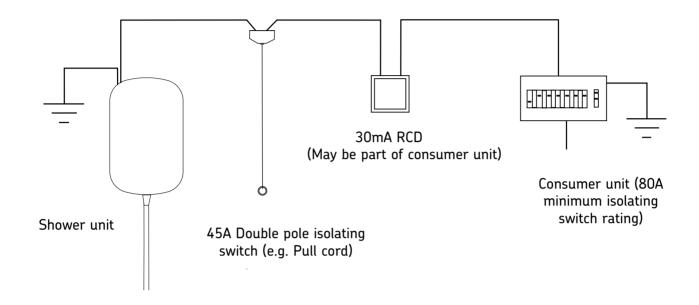
This appliance is only intended to be permanently connected to the live dedicated 230/240V 50Hz AC power supply and has an independent double-pole isolation switch. Other electrical equipment must not be connected to the same shower circuit. A 30mA residual current device (RCD) MUST be installed in all UK electric and pumped shower circuits. This may be part of the consumer unit or a separate RCD unit.

This appliance must be earthed.



### **Electrical Requirements**

All components must be rated and installed in accordance with wiring regulations. This appliance must be earthed.



For adequate circuit protection DO NOT use a rewire-able fuse. Instead use a suitably rated miniature circuit breaker or cartridge fuse.

A 30mA residual current device (RCD) must be installed.

A 45 amp double pole isolating switch with a minimum contact gap of 3mm in both poles must be incorporated in the circuit.

The isolating switch must have a mechanical indicator showing when the switch is in the OFF position, and the wiring must be directly connected to the switch.

The isolating switch must be accessible and clearly identifiable, although out of reach of a person using a fixed bath or shower. The cord of a cord-operated switch should be placed so that it is not possible to touch the switch body whilst standing in a bath or shower cubicle.

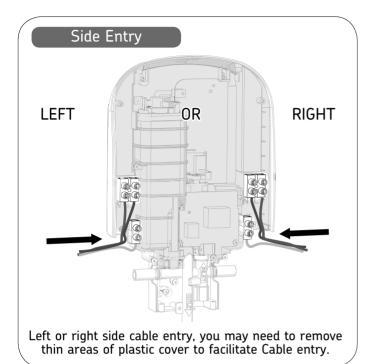
Where shower cubicles are located outside of a bathroom, all socket outlets in the room must be protected by a 30mA RCD. Consult the wiring regulations.

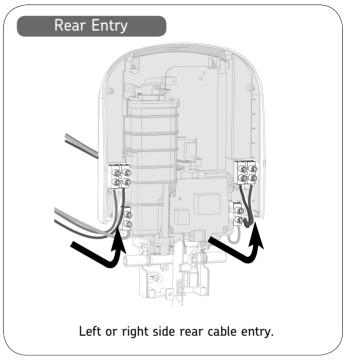
It is recommended to use the shortest cable route possible from the consumer unit to the shower.

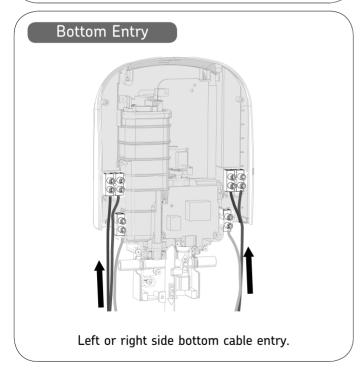
# Electrical Entry Points

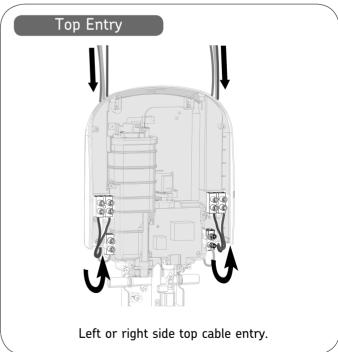
#### Determine cable entry position

L=Brown N=Blue E=Green









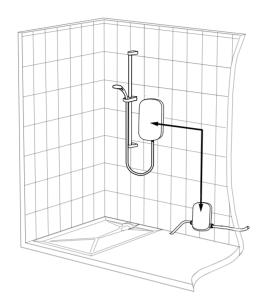
Trim and replace pipe and cable entry covers.

Note: Depending on cable size and entry point used, it may be necessary to strip back the outer cable sheath sufficiently to allow cables to be directed to the terminal connection block within the unit.

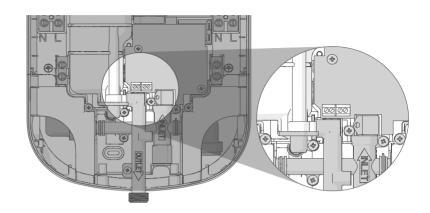


### **Check List**

### Connecting Waste Pump

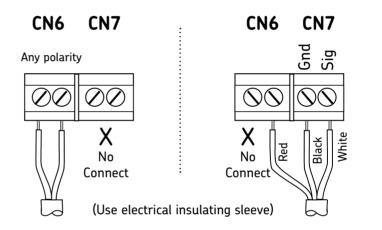


To connect the pump using wired connectivity, please follow the diagram shown. If you wish to connect the pump to the shower wirelessly, an optional wireless pump module is required. Please enquire using stock code: 29014 as a reference.



#### Fixed Speed Pump Connections

#### Digital Pump Connections



#### **Electrical Check List**

- Make sure the shower unit is fixed firmly in correct position and the mounting screw fixings are fully tightened.
- Ensure electrical connections are tightly secured.
- This shower appliance must be earthed: The earth conductor must be sleeved.
- The shower must be connected to its own independent electrical circuit connected to RCD consumer unit 30 mA (must be fitted) and in-turn have a dedicated isolating switch near the shower appliance.
- √ DO NOT connect any other device to the same power source as the shower.
- The current carrying capacity of the cable must be at least that of the shower circuit protection.
- Trim and replace the pipe and cable entry covers.
- DO NOT connect any other fittings to this shower.
- ✓ DO NOT use silicone sealant to seal the shower appliance to the wall.



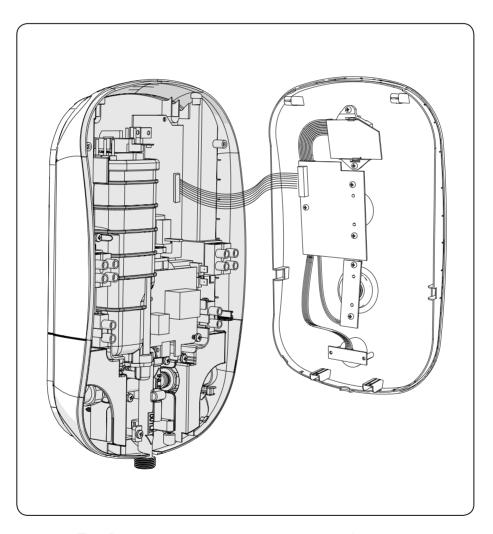
# Cold Water Flushing & Priming

Commissioning

Before operating the shower, it must be primed with cold water using the cold flush setting

Turn on power at pull cord/switch.

Put into cold water flush mode. To do this, refer to the dip switch mode settings on page 29. Once the shower is flushed and primed, reset the dip switch back to STD position.



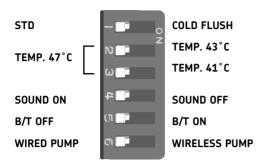
The Dipswitch is located on the inside of the cover



## Temperature & Mode Settings

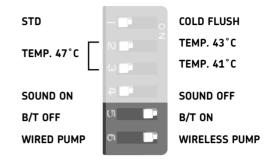
Commissionin

### **Factory Settings**



The shower is set in its factory setting when delivered.

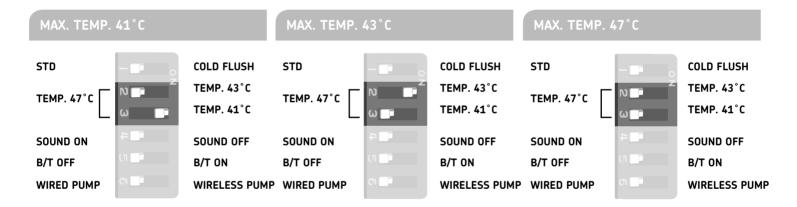
### **Pump Setting**



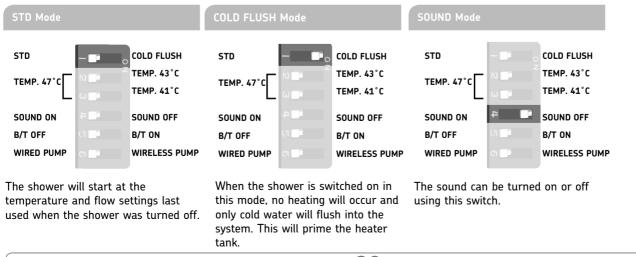
Refer to Pump Installation instructions for further detail.

### **Temperature Settings**

The shower maximum water temperature can be set to either 41°C, 43°C or 47°C (Factory) by setting the DIP switches located on the control PCB inside the front cover.



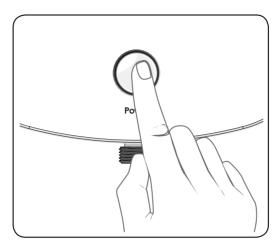
### **Mode Settings**





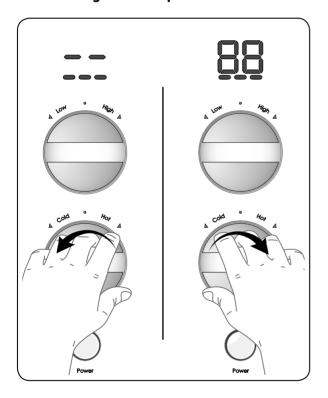
# Functional Checks & Testing

#### Checking the Power Button

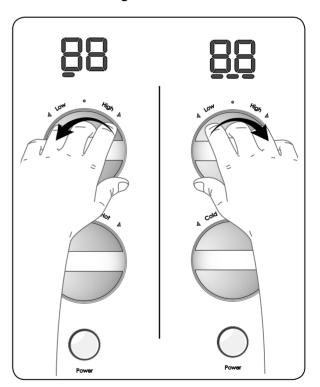


Press and release the power button

#### **Checking the Temperature Control**



#### **Checking the Flow Control**



Confirm the operation of the Temperature and Flow increase and decrease knobs, whilst ensuring all lights are functioning

Press the Power button to revert to standby mode

It is important to complete the installation and record the commissioning tests to provide a performance reference point for future tests.



# **Commissioning Tests**

1	N	٦.	4		٠.
	N	1	H	н	١.

All installation, commissioning and in-service testing must be undertaken by a suitably qualified engineer.

COMMISSIONING TESTS  Record the following information to provide a performance reference point for future in-se	rvice tests.
Shower Serial Number (SN)	_
Date of Commissioning//	
Max temperature setting is set to	_ °C
Mains Water supply Running Pressure	_ Bar
Water supply temperature	_ °C
Mains terminal Voltage	_ Vac
With shower turned on at Max flow and Max temperature setting, record the water temperature when it is stabilised	_ °C
Record details of test equipment (brand, model, serial number and calibration information) provide the above information, if necessary record on separate paper and attach to this insbooklet.	



### Troubleshooting for Engineers

Commissioning

In the event that the shower fails to respond to any push-button instruction or exhibits unusual performance characteristics during operation, turn off the electrical supply by operating the pull-cord switch or isolating switch. Wait for a few seconds for the shower to reset, then turn the power back on and push the on/off button. If the problem still persists, note which fault LED is lit/flashing, then refer to the Fault Finding section.

This Shower is fully thermostatic and will automatically compensate for any seasonal changes to the inlet temperature and flow rates as long as they remain within the specified conditions see shower specification page 12.

#### Fault Display



#### LP: Low Flow/Pressure

The shower contains a 'LOW PRESSURE' indicator which will operate, if the following conditions occur:

- Low water pressure (below 0.5 bar maintained). For optimum performance, a minimum constant 1 bar is recommended
- Blocked or partially blocked spray plate
- Blocked inlet filter
- Water supply flow rate is below 2 litres per minute

If any of the above low pressure conditions occur, the unit will STOP as this will cause the shower to be over temperature and the over temp LEDs will flash. Turn off the electrical supply by operating the pull-cord switch or isolating switch, then turn the power back on and instead of waiting for the shower heater element/tank to cool down, perform a COLD FLUSH see page 28. If the problem still persists then refer to Fault Finding. Ensure all plumbing connections are watertight. Check the hose and shower handset. If the filter is suspected to be blocked, clean it. If the problem still persists, contact AKW Technical Enquiries.



#### E1: Inlet Thermistor Fault

Requires internal repair/reset



#### E2: Outlet Thermistor Fault

Requires internal repair/reset



#### E3: Uncontrolled over Temperature

If the water temperature rise is uncontrolled the shower will turn off to prevent an unsafe temperature and E3 LED will flash immediately. The shower will not turn back on until the water inside the unit has cooled to a safe level. Perform a COLD FLUSH to cool the heating elements quicker, see page 28. If the fault persists, then a reset or internal repair may be required.



### Troubleshooting for Engineers

Commissioning

#### **Overheating**

This Shower is fully thermostatic and will automatically compensate for any seasonal changes to the inlet temperature and flow rates as long as they remain within the specified conditions see shower specification page 12.

The shower is fitted with an over-temperature indicator and a safety cut-out device. In the event of abnormal operation which could cause unsafe temperatures within the unit, the device will disconnect the heating elements and switch off the shower. The flow and the over temp LED will then flash.

If the water temperature rises above the desired maximum temperature setting momentarily then \*\*\*No. 10 temperature LED will flash at a (2Hz rate). The shower will control the water temperature back to the desired level.

If the water temperature rise is uncontrolled the shower will turn off to prevent an unsafe temperature and the \*\*Temperature LEDs 1 to 10 will flash immediately. The shower will not turn back on until the water inside the unit has cooled to a safe level. Perform a COLD FLUSH to cool the heating elements quicker, see page 28. If the fault persists the a reset or internal repair may be required. Ensure all electrical connections are tight to prevent overheat.

#### Low Flow/Pressure Failure

The shower contains a 'LOW FLOW/LOW PRESSURE' indicator which will operate, if the following conditions occur:

- Low water pressure (below 0.5 bar maintained) for optimum performance a minimum constant
   1 bar is recommended
- Blocked or partially blocked spray plate
- Blocked inlet filter
- Supply flow rate is below 2 litres per minute

If any of the above low pressure conditions occur, the unit will STOP as this will cause the shower to be over temperature and the over temp LEDs will flash. Turn off the electrical supply by operating the pull-cord switch or isolating switch, then turn the power back on and instead of waiting for the shower heater element/tank to cool down, perform a COLD FLUSH see page 28.

If the problem still persists then refer to Fault Finding. Ensure all plumbing connections are watertight. Check the hose and shower handset. If the filter is suspected to be blocked, clean it. If the problem still persists, contact AKW Technical Enquiries.

-Blank Page-

-Blank Page-



### Contact us

Orderline 01905 823299

**General Enquiries** 01905 823298

**Technical Enquiries** 01905 560219 technicalenquiries@akw-ltd.co.uk

Fax 01905 823297

Website www.akw-ltd.co.uk

Quotes & Orders Email orders@akw-ltd.co.uk

Sales & Enquiries Email sales@akw-ltd.co.uk

AKW, Pointon Way, Hampton Lovett, Droitwich Spa, WR9 OLR



Social









facebook.com/akwstyleability twitter.com/akwinstallers youtube.com/akwstyleability

linkedin.com/company/akw

As part of our continuous improvement programme we appreciate any feedback on our products and instructions. If you have any tips or comments please let us know!

.....

© 2016 AKW 14-019-002-08