

AQUALISA

HiQu

Digital

Concealed Shower with diverter

Installation guide



HiQu Digital concealed with diverter



HiQu Digital concealed
with diverter

Components (HP/Combi)



Literature not shown.

Components (Gravity Pumped)



Literature not shown.

Important information

Safety information

This product must be installed by a competent person in accordance with all relevant current Water Supply Regulations.

ALL PRODUCTS REQUIRING AN ELECTRICAL CONNECTION MUST BE INSTALLED BY A QUALIFIED PERSON FOLLOWING THE LATEST REVISION OF BS 7671 (WIRING REGULATIONS) AND CERTIFIED TO CURRENT BUILDING REGULATIONS.

This system should be installed so that other taps or appliances operated elsewhere within the premises do not significantly affect the flow.

The Digital Shower must not be used with a hot water supply temperature of over 65°C.

The processor is supplied factory pre-set at maximum temperature of 45°C. The maximum temperature is fully adjustable to suit site conditions. If adjusted, we recommend the outlet temperature is set to a MAXIMUM of 46°C.

THE DIGITAL PROCESSOR MUST BE INSTALLED IN AN ACCESSIBLE LOCATION FOR SERVICING AND MAINTENANCE.

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

The control must not be installed in situations where the ambient temperature is likely to fall below 5°C or rise above 40°C.

We do not recommend the use of HiQu Digital in steam therapy facilities.

This appliance must be earthed.

Cables which are chased into the wall must be protected by a suitably sized conduit or sheathing to allow for removal in the event of service and maintenance purposes. Ensure that the conduit is run to avoid the controller fixing holes.

Surface mounted cables must also be protected by a suitable approved conduit, even in a loft, where there may be a risk of damage from vermin.

The power lead must only be replaced by the manufacturer or his accredited agent.

The user control is supplied from a safety low voltage source.

This product is suitable for domestic use only.

HiQu Digital is supplied complete with a 5 year guarantee.

This product is not intended for use by persons (including children) with reduced physical, sensory or mental capabilities or lack of experience and knowledge, unless they have been given initial supervision or instruction concerning the use of the product by a person responsible for their safety.

Children should be supervised to ensure they do not play with the product.

Installation of Digital pumped processor (for gravity stored systems)

The HiQu Digital Pumped Shower system is designed to operate up to maximum static pressure of 100kPa ((1 bar)(10 metres head)(14.5psi)).

Under no circumstances must the pumped processor be connected directly to the water main or in line with another booster pump.

The minimum actual capacity of the cold water storage cistern should be not less than 225 litres (50 gallons). The capacity of the hot water cylinder must be capable of meeting anticipated demand.

Installation of Digital standard processor (for balanced high pressure and unvented systems, combination boiler systems and separately pumped gravity systems)

Pressures: The HiQu Digital Standard Shower system is designed to operate up to a maximum static pressure of 700kPa ((7 bar)(100psi)). Where pressures are likely to exceed 700kPa ((7 bar)(100psi)), a pressure reducing valve must be fitted to the incoming mains supply. A setting of 400kPa ((4 bar)(60psi)) is recommended. It should be noted that daytime pressures approaching 600kPa ((6 bar)(80psi)) can rise above the stated maximum overnight.

Special notes for combination boiler systems

The appliance must have a minimum domestic hot water rating of 24kW (80,000BTU) and be of the type fitted with a fully modulating gas valve. If in any doubt, please contact the appliance manufacturer before installation commences.

PLEASE NOTE: DUE TO PERFORMANCE CHARACTERISTICS OF COMBINATION BOILERS, SEASONAL INLET TEMPERATURE CHANGE WILL AFFECT THE PROCESSOR OUTLET FLOW RATE RESULTING IN VARYING SHOWER FLOW RATES. INLET TEMPERATURE CHANGE MAY ALSO CAUSE THE TEMPERATURE LED'S TO FLASH; THIS IS NOT NECESSARILY CHANGING THE OUTLET TEMPERATURE.

Special notes for separately pumped gravity systems

We recommend a twin ended pump with a MINIMUM pump rating of 1.5 bar. For optimum performance a twin ended 2.5 bar pump should be used.

The minimum actual capacity of the cold water storage cistern should be not less than 225 litres (50 gallons). The capacity of the hot water cylinder must be capable of meeting the anticipated demand.

THIS PRODUCT IS NOT SUITABLE FOR USE WITH A SINGLE ENDED PUMP.

Connections

This product incorporates 'push fit' type connections. Tube should be cut using a rotary type cutter and lubricated using a silicone-based lubricant or petroleum jelly (Vaseline or similar) prior to insertion into the fitting.

If plastic pipe is used, the tube insert must not increase the tube diameter or extend the cut-off length by more than 2mm.

TO MAXIMISE FLOW RATES WE RECOMMEND USING COPPER PIPE WITH THE MINIMUM AMOUNT OF ELBOWS. THESE FITTINGS ARE NOT SUITABLE FOR STAINLESS STEEL TUBE.

Pipe sizing

Long pipe runs, on both inlet and outlet, will reduce the flow rate at the shower head. If long pipe runs are unavoidable, use copper pipe rather than plastic. If plastic pipe is used, minimise the number of elbows as the pipe inserts are very restrictive. Consideration should be given to using 22mm plastic or copper pipe especially if a diverter is installed.

Flushing

Some modern fluxes can be extremely corrosive and, if left in contact, will attack the working parts of this unit. All soldering must be completed and the pipe work thoroughly flushed out in accordance with current Water Supply Regulations prior to connection of the product.

After installation

Familiarise the end user with the HiQu Digital Shower operation and hand them this guide. Complete and post the guarantee card or register online at www.aqualisa.co.uk

Installation instructions

This product must be installed by a competent person in accordance with the relevant current Water Supply Regulations.

In addition to the guide below it is essential that the written instructions overleaf are read and understood and that you have all the necessary components (shown overleaf) before commencing installation.

The HiQu Digital Shower system is supplied with universal fixings intended to secure it to a suitable wall.

1

To ensure safe operation and installation of this product, the processor and the Digital diverter **MUST** be installed in one of the orientations shown.



Please note the orientations match the processor orientations and are shown on the Digital diverter valve label.

HP/Combi processor



Processor connected directly to diverter valve



Processor connected to diverter with additional pipe

Gravity Pumped processor



Processor connected directly to diverter valve



Processor connected to diverter with additional pipe



IMAGES SHOWN ARE AERIAL VIEWS AND ARE FOR ILLUSTRATIVE PURPOSES ONLY.

2

Isolation valves are supplied with the Digital processor and diverter valve and must be fitted on both inlets and the blended water outlets. All pipe work should be run in 15mm pipe. All pipe work should be supported. For externally pumped gravity fed installations, 22mm pipe work should be run as close to the processor as possible before reducing down to 15mm.



The inlet supply centres are 48mm. The inlet supply centres deviate from EN1111 and EN1287, but are deemed to be a special case.

Please note arrow on isolation valve to indicate direction of flow.

Compression fittings should not be used on the inlet and outlet spigots and may affect the warranty if fitted.

Choose the position for the Digital processor as close to the Digital diverter as possible, within range of the 2m connecting data cable provided. The Digital processor and diverter assembly must be sited as close to the shower controller as possible, within range of the 10m data cable provided for connecting the processor to the controller. The processor and diverter may be sited in the roof space above the proposed shower site, in the airing cupboard or behind a screwed bath panel if more convenient. If siting in the roof space, ensure that freezing cannot occur and that no insulation material is placed under or over the processor and diverter.

Please refer to the system layout diagrams overleaf.



THE PROCESSOR AND DIVERTER MUST BE SITED IN A POSITION THAT IS SAFELY ACCESSIBLE FOR SERVICING AND COMMISSIONING PURPOSES. WHEN FITTED IN THE LOFT SPACE, THE ROUTE TO AND THE AREA AROUND THE PROCESSOR MUST BE BOARDED TO ENSURE A SAFE WORKING ENVIRONMENT.

The optimum position for the Digital processor and diverter is in the roof space above the shower site to take full advantage of the ease and speed of installation - please refer to the note above.

The distance between the Digital processor and shower control must be within range of the 10m data cable supplied.

The Digital diverter valve inlet has been designed to enable connection directly inline with the HP/Combi Digital processor outlet isolation valve connection or off the Gravity Pumped Digital processor outlet using the cranked elbow connection fitting.

The distance between the Digital diverter valve and processor must be within the the 2m range of the patch lead data cable connection provided.

4

Place the Digital processor and diverter valve on a solid mounting surface, and place the fixing feet into suitable positions. Mark then drill and prepare suitable fixings before securing the processor and diverter to the mounting surface using the screws provided, if suitable.



5

Flush through both hot and cold supply pipes.

!

The maximum hot water inlet temperature must be no more than 65°C.

6

Attach the supply pipes to the Digital processor, ensuring that the cold and hot feeds are fitted into the appropriately marked inlets.



!

DO NOT SOLDER NEAR TO PLASTIC COMPONENTS.

7

Prepare and run a pipe from the mixed water outlet on the Digital processor through to the Digital diverter inlet. (The Digital diverter can be fitted directly onto the processor outlet if required on the HP/Combi system installation. A cranked elbow is supplied for the Gravity Pumped system for ease of installation. Refer to aerial view images in instruction 1).

8

Connect the mixed water outlet pipe from the Digital processor to the inlet pipe on the Digital diverter ensuring the isolation valves are connected to the diverter valve outlet, with the arrows correctly aligned according to the direction of flow. Using pipe clips as appropriate, ensure that all pipe work is perpendicular to the Digital processor and Digital diverter, i.e. not putting any strain on the fittings.



!

TO ENSURE OPTIMUM PERFORMANCE USE THE MINIMUM AMOUNT OF ELBOWS ON ALL PIPES LEADING TO AND FROM THE DIGITAL PROCESSOR AND DIGITAL DIVERTER.

TO MAXIMISE FLOW RATES WE RECOMMEND USING COPPER PIPE WITH THE MINIMUM AMOUNT OF ELBOWS ON ALL PIPES LEADING TO AND FROM THE DIGITAL PROCESSOR AND DIGITAL DIVERTER.

9

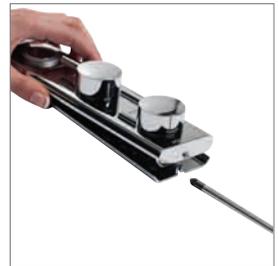
Prepare and run the pipes to the proposed siting for the shower hose outlet, fixed head arm or bath outlet, depending on the accessories purchased. Ensure the pipe work connections have been flushed through.

!

If fitting a bath outlet, a suitable non restrictive double check valve (not supplied) MUST be fitted to the blended outlet pipe in line with current Water Supply Regulations.

10

Undo the fixing screw, remove the controller assembly away from the back plate and set aside.



11

Place the shower control back plate onto the finished wall surface in the desired location and mark the fixing and data cable entry points.

!

The data cable should be run in conduit to allow for replacement if required.

12

Drill and prepare the fixing points and 15mm data cable entry point using the fixings provided, if suitable.

13

Apply a thin bead of mastic to the mastic groove at the rear of the back plate. Secure the back plate to the wall using the screws provided (if suitable).



14

Connect the data cable to the rear of the controller.

15

Hook the top of the controller into position and secure the controller onto the back plate assembly.



!

To remove the controller from the back plate, undo the screw and remove from the base of the controller assembly. Carefully pull the controller away from the back plate and set aside.





BEFORE ANY ELECTRICAL ADJUSTMENT IS ATTEMPTED, THE ELECTRICITY SUPPLY MUST BE TURNED OFF AT THE MAINS SWITCH.

ELECTRICAL INSTALLATION MAY ONLY BE CARRIED OUT BY A QUALIFIED PERSON.

16

Unscrew the single fixing on top of the processor and Digital diverter box and carefully tilt the lids up and off the location lugs and pull the lids clear.



17

Connect the 10m low voltage data cable into the socket adjacent to the temperature adjuster as indicated on the label. Feed the cable out of the processor box ensuring it is correctly routed within the data cable channel.

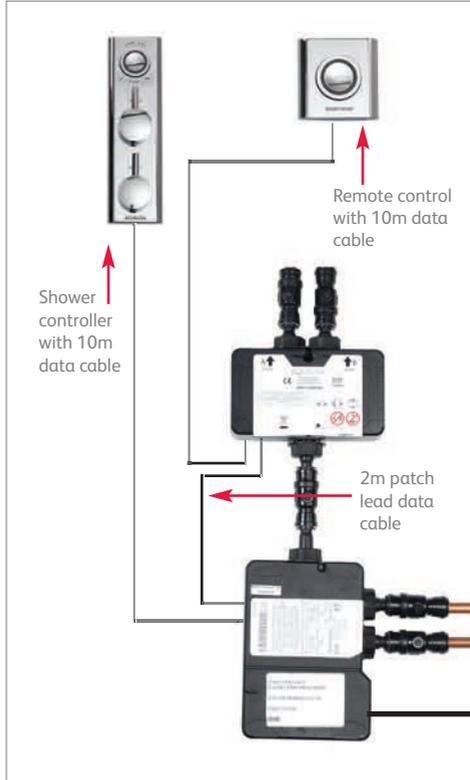


The processor secondary socket **MUST** be used to connect the processor to the diverter valve. This is located next to the processor main socket and is accessed by carefully snapping and removing the entry pillar.

Connect the 2m low voltage patch lead to both the diverter valve and secondary socket on the processor box. Feed the cable out of the processor and diverter ensuring it is correctly routed within the data cable channel.



! A secondary remote control is provided and **MUST** be connected to the Digital diverter as shown. Please refer to the separate installation guide to fit the remote control.



19

Connect the processor power lead to a double pole 3 amp fuse switched spur incorporated in the fixed wiring circuit, in accordance with current wiring rules. Ensure that this is located in an accessible, dry location and not in the bathroom.



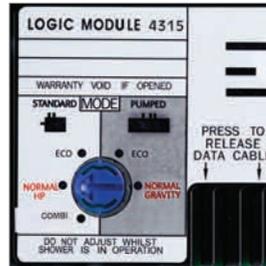
THIS APPLIANCE MUST BE EARTHED

We recommend protecting surface mounted cables in suitable approved conduit to avoid the risk of damage from vermin.

The data cable and power lead should also be clipped in place with 'P' clips or similar to avoid accidents.

20

The Digital processors are supplied factory set with the flow rate at either 'NORMAL HP' or 'NORMAL GRAVITY' mode depending on which shower system has been ordered.



STANDARD PROCESSORS ON BALANCED HP SYSTEMS:

Standard processors fitted to balanced high pressure systems may be set to 'NORMAL HP' or for water economy 'ECO' modes.

N.B. We recommend the processor is set to 'NORMAL HP' mode.

STANDARD PROCESSORS ON COMBINATION BOILER SYSTEMS:

For Standard Digital processors installed on combi boiler systems, for optimum performance we recommend setting the flow rate to the 'COMBI' mode.

N.B. The 'ECO' flow rate mode should not be selected for shower systems fitted to combination boilers.

PUMPED PROCESSORS:

Pumped processors fitted to gravity systems may be set to 'NORMAL GRAVITY' or for water economy 'ECO' flow rate modes.

N.B. We recommend the processor is set to 'NORMAL GRAVITY' mode.



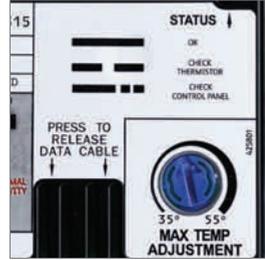
WHEN MAKING ANY ADJUSTMENT TO THE PROCESSOR SETTINGS THE POWER MUST BE ISOLATED.

21

Re-instate the electricity supply to the processor and press the 'Start/stop' button on the controller to turn the shower on.

22

Run the shower at maximum temperature (factory pre set to 45°C). If required, maximum temperature adjustment can be made with a flat bladed screwdriver using the 'MAX' TEMP ADJUSTMENT' control as indicated. When the temperature has been set to the desired position carefully replace the Digital processor lid and secure the fixing hand tight only.



! Site conditions can affect temperature settings, installer to adjust as required.

ALL COPPER PIPE WORK MUST BE CROSS-BONDED AND CONNECTED TO A RELIABLE EARTHING POINT.



The Waste Electrical and Electronic Equipment (Producer Responsibility) Regulation 2004

This product is outside the scope of the European Waste Electrical and Electronic Equipment Directive as interpreted within the UK.

In the UK this product can therefore be disposed of through commercial non-WEEE waste facilities.

The original manufacturer does not accept any liability under the WEEE directive.

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