Installation guide

Concealed with adjustable height or fixed head

Digital

iSys™

AQUALISA

Important information

Safety information

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

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

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 supervision or instruction concerning safe use of the product, understanding the hazards involved, by a person responsible for their safety.

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

Cleaning and user maintenance shall not be made by children without supervision.

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

The shower must not be used with a hot water supply temperature over 65˚C.

The processor is supplied factory pre-set at a 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 iSys 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.

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.

iSys Digital is supplied with a 5 year guarantee.

Installation of Digital Gravity Pumped processor (for gravity stored systems)

The iSys Digital Gravity Pumped shower system is designed to operate up to a 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 HP/Combi processor (for balanced high pressure and unvented systems, combination boiler systems and separately pumped gravity systems)

Pressures: The iSys Digital HP/Combi 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 RATE AND FLOW CONTROL RANGE. 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 **MINIMUM** pump rating of 1.5 bar. For optimum performance a 2.5 bar pump should be used for all separately pumped installations.
A twin ended pump is required for use with single outlet Digital products.
A universal type twin ended pump (works on both positive and negative head conditions) is required for use with Digital Divert products.

The minimum actual capacity of the cold water storage cistern should be not less than 225 litres (80 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.

THESE FITTINGS ARE NOT SUITABLE FOR STAINLESS STEEL TUBE. COMPRESSION FITTINGS MUST NOT BE USED.

Pipe sizing

Long pipe runs, on both inlet and outlet, will reduce the flow rate at the shower head, 22mm pipe work should be used on inlets and reduce down to 15mm as close to the valve as possible to reduce pressure losses and help maintain flow rate. If using 15mm pipe, copper pipe is preferred, to optimise performance minimise the number of elbows used. If long pipe runs are unavoidable on the outlet, use copper pipe rather than plastic, particularly if a diverter is used, and minimise the number of elbows as the pipe inserts are very restrictive.

Flushing

Some modern fluxes can be very 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 iSys Digital operation and hand them this guide. Complete and post the guarantee card or register online at www.aqualisa.co.uk

Customer helpline

01959 560010

Got a query? Need a stockist? Our helpline is open from 8.30am to 5.00pm Monday to Friday to answer any questions, guide you through any aspect of your shower installation or advise you of your local stockist.

Product literature

0800 652 3669

Call our literature hotline to receive the latest Aqualisa product brochure containing details of our full range of domestic products.

Website

www.aqualisa.co.uk

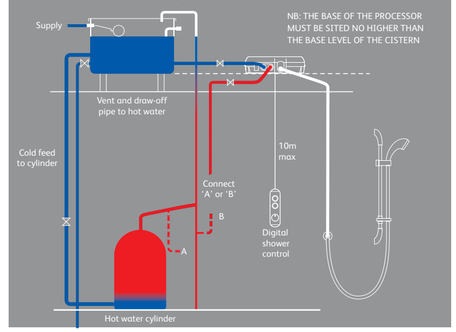
Visit our website for comprehensive product information, details of your nearest stockist and installers, technical advice and more.

Republic of Ireland

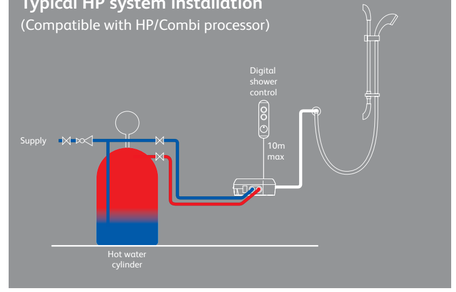
Our products are also available in the Republic of Ireland. If you need any technical advice, details of local stockists or have any other queries, please phone:

Sales enquiries: 01-864-3363
Service enquiries: 01-844-3212

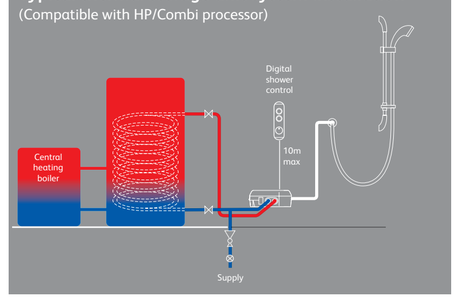
Typical gravity system installation
(Compatible with Gravity pumped processor)



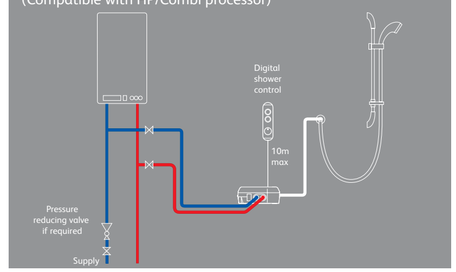
Typical HP system installation
(Compatible with HP/Combi processor)



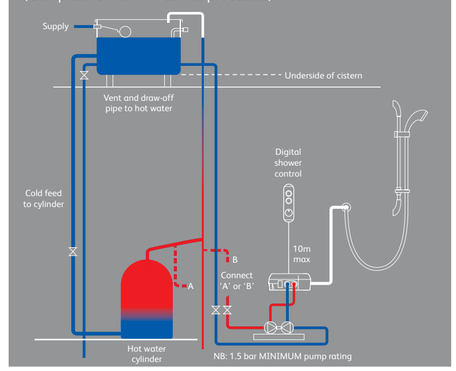
Typical thermal storage unit system installation
(Compatible with HP/Combi processor)



Typical combination boiler installation
(Compatible with HP/Combi processor)



Typical pumped system installation
(Compatible with HP/Combi processor)



AQUALISA

Aqualisa Products Limited
The Flyer's Way
Westerham Kent TN16 1DE

Customer helpline: 01959 560010
Brochure Hotline: 0800 652 3669
Website: www.aqualisa.co.uk
Email: enquiries@aqualisa.co.uk

Republic of Ireland
Sales enquiries: 01-864-3363
Service enquiries: 01-844-3212

Part No: 700979 Issue 01 Jan 14

Please note that calls may be recorded for training and quality purposes
The company reserves the right to alter, change or modify the product specifications without prior warning
® Registered Trademark Aqualisa Products Limited

iSys™ Digital

Concealed with adjustable height or fixed head

!

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

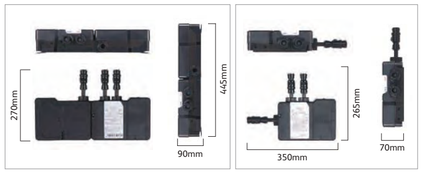
!

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 opposite) before commencing installation.

!

The iSys 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 MUST be installed in one of the orientations shown.



2 Isolation valves are supplied with the Digital processor and must be fitted on both inlets and the blended water outlet. 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.

3 Choose the position for your Digital processor as close to the shower control as possible. The processor 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. Please refer to the system layout diagrams.

!

THE PROCESSOR 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 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.

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

5 Flush out the 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 Run the pipe from the mixed water outlet on the Digital processor valve through the wall to the proposed siting for the shower hose outlet, fixed head arm or bath outlet, depending on the system purchased.

8 Undo the screw and remove the end cap from the controller assembly. Carefully pull the controller away from the back plate and set aside.

9 Place the back plate on the wall in the desired location for the shower control and mark the fixing points and the data cable entry point. Remove the back plate and drill a Ø16mm hole at the appropriate position for the data cable.

!

The data cable should be run in conduit to allow for replacement if required. Care should be taken to ensure the mounting holes do not pierce the data cable conduit. Ensure the data cable is the correct way round as both ends differ in type of connection used.

10 Drill and prepare the wall fixings for the two back plate mounting screws. Secure the back plate to the wall using the fixings provided, if suitable.

!

The data cable entry point within the wall should be filled with mastic to prevent water ingress.

11 Connect the data cable into the cable coming from the rear of the controller, in the correct orientation. Push the data cable into position ensuring the cable connection is fully pushed home. Tuck the remainder of the cable into the control before placing the controller into position on the back plate.

12 Locate the end cap into position at the bottom of the controller assembly.
Securely screw the controller onto the back plate assembly.

13 Connect the 15mm copper pipe to the mixed water outlet on the Digital processor. Using pipe clips as appropriate, ensure that all pipe work is perpendicular to the processor, i.e. not putting any strain on the fittings.

!

TO ENSURE OPTIMUM PERFORMANCE USE THE MINIMUM AMOUNT OF ELBOWS.

TO MAXIMISE FLOW RATES WE RECOMMEND USING COPPER PIPE WITH THE MINIMUM AMOUNT OF ELBOWS.

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.

14 Connect the processor power lead to a double pole 3amp switched fused spur, incorporated in the 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.

15 Unscrew the single fixing on top of the processor box and then carefully tilt the lid up and off the location lugs and pull the lid clear.

16 Connect the 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.

!

For single outlet systems, a further data cable socket has been provided for use with the secondary Digital remote control. This can be accessed by carefully snapping and removing the entry pillar and connecting the cable as described above.

17 **Fit the shower head system following the separate installation instructions provided.**

18 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.

HP/COMBI PROCESSORS ON BALANCED HP SYSTEMS:
HP/Combi Digital processors fitted to balanced high pressure systems may be set to 'NORMAL HP', or for water economy, 'ECO' modes.

HP/COMBI PROCESSORS ON COMBINATION BOILER SYSTEMS:
For HP/Combi 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.

GRAVITY PUMPED PROCESSORS:
Gravity Pumped Digital processors fitted to gravity systems may be set to 'NORMAL GRAVITY', or for water economy, 'ECO' flow rate modes.

!

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

19 For single outlet systems, re-instate the electricity supply to the Digital processor.
Press the 'Start/stop' button on the controller to turn the shower on.
The processor will start in the highest flow rate or 'Boost' mode.
Press the 'Boost' button to revert to the 'Normal' flow rate. The processor will now provide both 'Normal' and 'Boost' modes.

20 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.
iSys controllers are supplied with a temporary, clear protective film on the controls, please remove film once the product has been installed.

Shower Control User Guide

1. Turn the temperature dial to the required setting.

2. Press the 'Start/stop' button on the control, to turn the shower on.

3. The red and blue LED display's will flash until the selected temperature has been reached.
4. When the LED display's are constant, step into your shower and enjoy!
5. The temperature may be adjusted once in the shower.

6. Press the 'Boost' button on the control to increase the strength of the shower when desired. N.B. If installed on a combination boiler system, the strength of the 'Boost' button will depend on the performance capability of your combination boiler.
7. Press the 'Start/stop' button on the control, to turn the shower off.

Adjustable Head User Guide

1. To select the preferred height for the shower head. Depress the levers fully to enable the holder to be moved up or down the rail.

2. Angular adjustment is made by carefully but firmly pulling forwards or pushing back the shower head against the knuckle ratchet in the holder.

Fixed head user guide

1. The angle of the fixed shower head can be adjusted. The shower head is mounted on a multi directional ball joint to allow for angular adjustment in any direction by carefully holding the shower head and moving the head to the desired angle.

Cleaning and maintenance

Your iSys Digital shower system should be cleaned using only a soft cloth and washing up liquid.

DO NOT USE ABRASIVE CLEANERS

To reduce the need for chemical descaling in hard water areas, your shower head incorporates a 'clear flow' system, whereby any scale build up can be broken down by gently rubbing the flexible tips of the jets during use. This procedure should be completed regularly, as often as once a week in some hard water areas, as scale build up can affect the spray pattern and cause the shower to perform poorly. Failure to descale the shower head can affect the internal seals and may affect the warranty.

Cleaning and maintenance should not be undertaken by children without supervision by a person responsible for their safety.

Should chemical descaling of the head become necessary, remove the shower head fully and immerse in a mild proprietary descalent.

IIT IS IMPERATIVE THAT DESCALING IS CARRIED OUT STRICTLY IN ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS. SUBSTANCES THAT ARE NOT SUITABLE FOR PLASTICS AND ELECTROPLATED SURFACES MUST NOT BE USED.

iSys Digital concealed with wall fixed head

iSys Digital concealed with ceiling fixed head

iSys Digital concealed with adjustable head

Components
Fixed head - Ceiling (HP/Combi)

Literature not shown

Components
Fixed head - Ceiling (Gravity pumped)

Literature not shown

Components
Fixed head - Wall (HP/Combi)

Literature not shown

Components
Fixed head - Wall (Gravity pumped)

Literature not shown

Components
Adjustable (HP/Combi)

Literature not shown

Components
Adjustable (Gravity pumped)

Literature not shown