

AQUALISA

# Quartz®

Digital

Bath with bath waste filler



**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.

# Quartz Digital Bath with bath waste filler



Quartz Digital Bath  
standard with bath  
waste filler

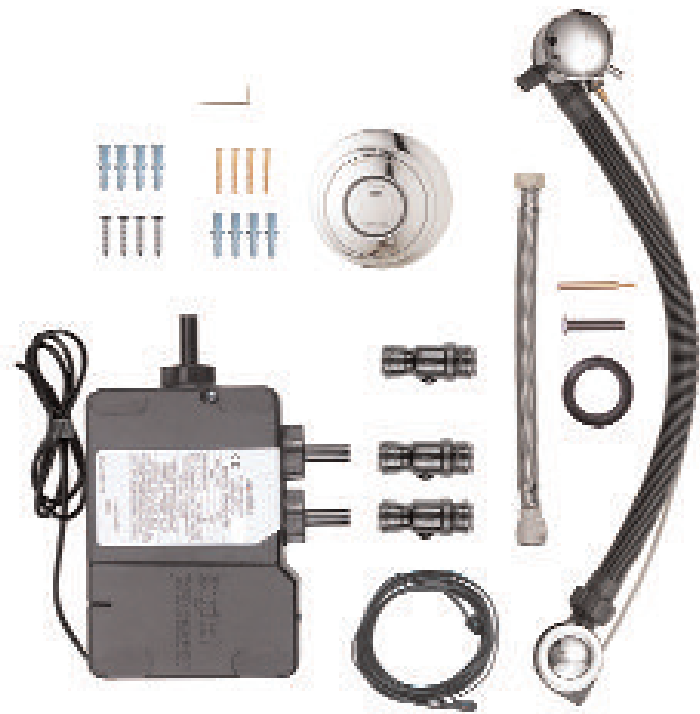
**QZ.A1.BTX.05**

Quartz Digital Bath  
pumped with bath  
waste filler

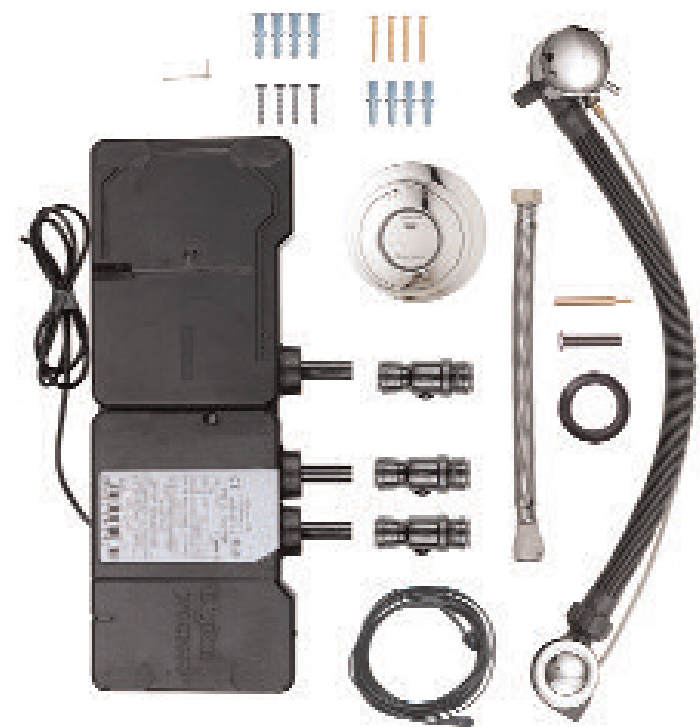
**QZ.A2.BTX.05**

# Components

## Components (standard)



## Components (pumped)



# 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 bath 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 70°C.

We do not recommend the use of Quartz 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.

Quartz 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 Quartz Digital pumped bath 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 Quartz Digital standard bath 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, BATH FLOW RATE MAY VARY WITH CHANGES TO THE MAIN INLET TEMPERATURE. INLET TEMPERATURE CHANGE MAY ALSO CAUSE THE DIGITAL CONTROLLER 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.

**THESE FITTINGS ARE NOT SUITABLE FOR STAINLESS STEEL TUBE.**

# Important information

## **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 Quartz Digital operation and hand them this guide. Complete and post the guarantee card or register online at [www.aqualisa.co.uk](http://www.aqualisa.co.uk)

# Step-by-step instructions



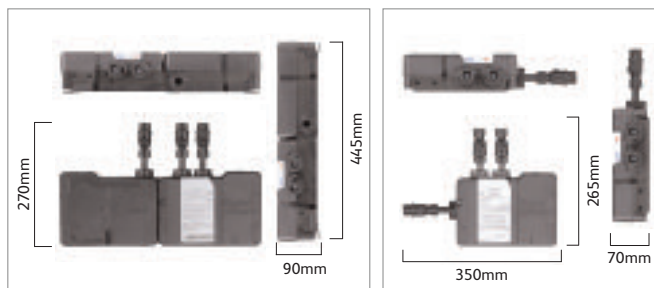
In addition to the guide below it is essential that the written instructions overleaf are read and understood and that you have all the necessary components (shown overleaf) before commencing installation.



The Quartz Digital bath 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.

3

Choose the position for your Digital processor as close to the bath control as possible.

The processor may be sited in the roof space above the proposed bath 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 overleaf.

!

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

THE PROCESSOR MUST BE SITED IN A POSITION SO THAT ACCESS CAN BE GAINED FOR TESTING AND SERVICE PURPOSES.

4

Place the Digital processor on a solid mounting surface, and place 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.

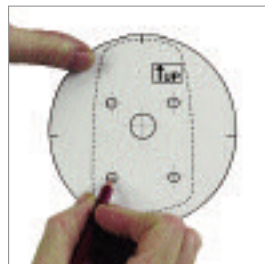


!

DO NOT SOLDER NEAR TO PLASTIC COMPONENTS.

7

Place the paper template on the wall in the desired location for the bath control and mark all fixing points and the data cable entry point. Remove the template 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.

8

Drill and prepare the four wall fixings for the controller using the fixings provided.

9

Feed the control connection end of the data cable through the centre hole in the mounting template. Run a bead of silicone sealant in the mastic groove on the back of the mounting plate and press into position onto the finished wall surface. Ensure the data cable is held securely by the narrow middle slot of the mounting plate and fix to the wall using the screws provided.



10

Plug the data cable into the rear of the controller and slide onto the mounting plate. Secure the controller to the back plate with the fixing screw located at the base of the controller using a small Posidrive screw driver.



11

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.**

!

**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.**



12

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.



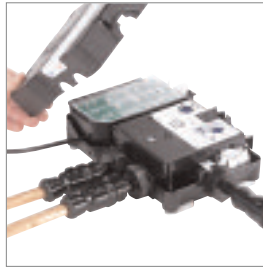
**THIS APPLIANCE MUST BE EARTHED**

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.

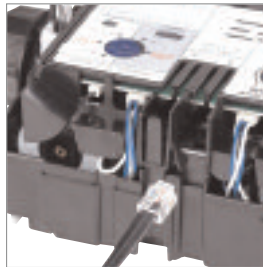
13

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



14

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.



A further data cable socket has been provided for use with a secondary Digital dual switch start/stop controller. This can be accessed by carefully snapping and removing the entry pillar and connecting the cable as described above.

15

The Digital processors are supplied factory set with the flow rate at either 'NORMAL HP' or 'NORMAL GRAVITY' mode depending on which bath 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 bath 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.**

16

Run the bath 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.**

# Step-by-step instructions



If an alternative bath outlet or bath spout with hand shower combination is used, due to the restrictive characteristics of some of these products, outlet flow rate may be affected. Aqualisa Products Ltd cannot guarantee outlet flow rate if an alternative outlet solution is used. Please refer to the manufacturer's installation guide for full fitting instructions.

Aqualisa Products Limited reserves the right to revoke the guarantee if an overhead shower kit system is fitted with a bath controller.

## Bath waste filler

1

Carefully pull the bath waste filler knob away from the assembly and set aside.



If necessary unscrew and remove the lever and set aside. Loosen the grub screw using the hexagonal key provided and carefully pull the knob clear.



2

Disassemble the outlet assembly adopting the following procedure.



3

Disassemble the bath waste assembly adopting the following procedure and set aside.



4

Offer the bath waste into position ensuring the rubber washer is correctly aligned between the waste assembly and bath base.



5

Reassemble the bath waste assembly as follows:

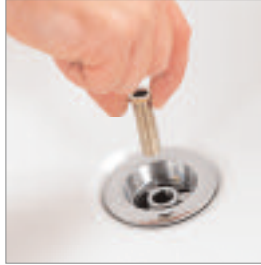


!

Ensure the bath waste is tightened using a suitable tool.

If required the height of the plug fitting can be adjusted.

A spare long waste screw and lift pin has been provided for use with thick wall baths. If required, replace the standard short screw and lift pin with the long screw and lift pin during reassembly. Adjust the new lift pin assembly to ensure the plug seals and moves clear when operated, as required.



6

Connect the bath waste to a suitable waste pipe.

7

Offer the outlet assembly into position through the rear of the bath, ensuring the rubber washer is correctly aligned between the outlet assembly and bath wall.

!

For thin wall baths, replace the large 5mm black rubber washer with the 10mm rubber washer provided and place over the outlet assembly shaft ensuring correct alignment between the outlet assembly and bath wall.



8

Reassemble the outlet assembly on the bath adopting the following procedure.



!

The knob has been designed so the lever will be in the 12 o'clock position when the bath waste filler is not in use and in the 4 o'clock position when in use.

9

If fitted, unscrew and remove the lever from the assembly knob and set aside.



10

Secure the knob to the outlet assembly using the grub screw and hexagonal key provided.



11

Refit the lever to the knob and tighten securely.

12

Attach the flexible hose to the ½" BSP blended inlet connection.



!

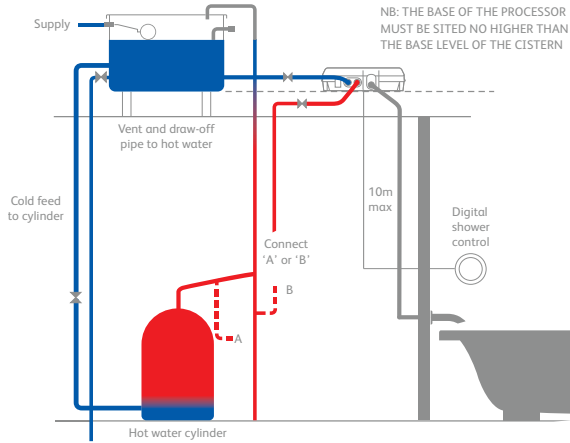
The inlet blanking plug is supplied factory fitted to the left hand inlet when viewed from the front. The blanking plug can be removed and repositioned on the right hand inlet as required.

13

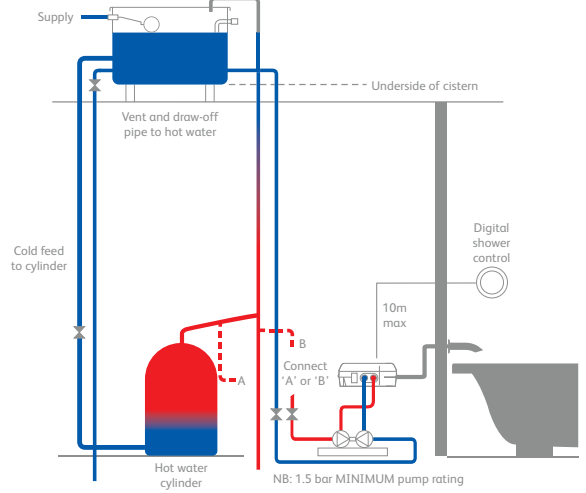
Connect the flexible hose to the blended supply pipe.

# Typical installations

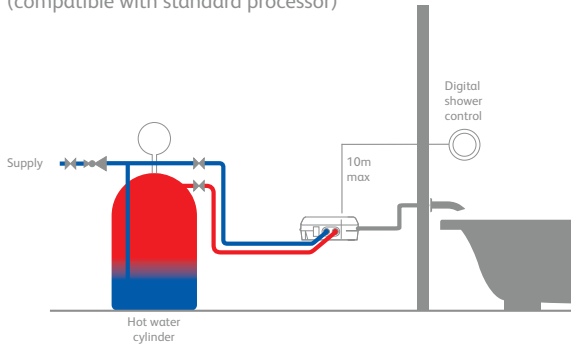
**Typical gravity system installation**  
(compatible with pumped processor)



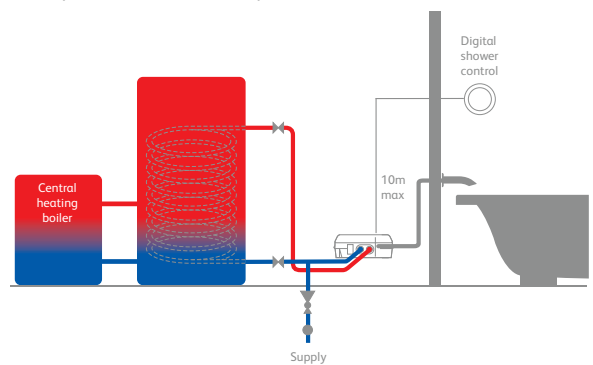
**Typical pumped system installation**  
(compatible with standard processor)



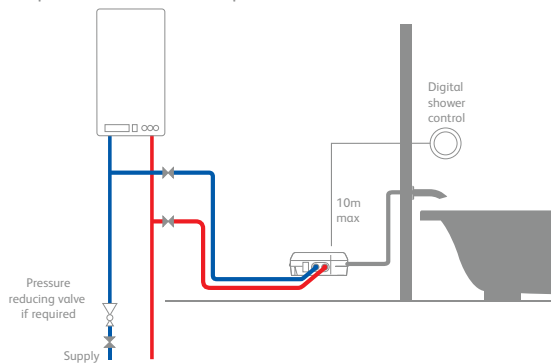
**Typical HP system installation**  
(compatible with standard processor)



**Typical thermal storage unit system installation**  
(compatible with standard processor)



**Typical combination boiler installation**  
(compatible with standard processor)







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