

# AQUALISA

# ilux<sup>®</sup>

## Digital

### Exposed standard and pumped

### Pre Summer 2007



#### **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.

# Shower systems



**ilux Digital exposed with adjustable oval head**



**ilux Digital exposed with adjustable round head**

# Components

## Components (pumped)



## Components (standard)



# 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 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 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 ilux 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.

ilux 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 ilux 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 ilux Digital standard shower system is designed to operate up to a maximum static pressure of 800kPa ((8 bar)(115psi)). Where pressures are likely to exceed 800kPa ((8 bar)(115psi)), 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 OSCILLATE; THIS IS NOT NECESSARILY CHANGING THE OUTLET TEMPERATURE.**

# Important information

## 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.**

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

# Step-by-step instructions



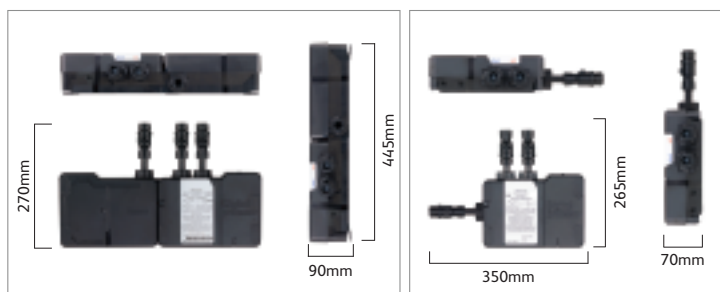
In addition to the guide below it is essential that the written instructions overleaf are read and understood and that you have all the necessary components (shown overleaf) before commencing installation.



The ilux 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

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 overleaf.



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.



The distance between the Digital processor and shower 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

Locate a suitable entry spot in the ceiling for the riser rail, avoiding joists and services.

!

The centre of the riser rail stands 35mm from the wall.

8

Drill a hole through the ceiling minimum  $\varnothing 30\text{mm}$ , maximum  $\varnothing 40\text{mm}$ .

9

Mount the template to the wall in the required position ensuring vertical alignment using a spirit level to facilitate if necessary. Carefully mark the three fixing holes. Check the position of the ilux Digital unit before removing the template, then drill and prepare suitable wall fixings for the three mounting screws.



!

The maximum distance from the top fixing to the ceiling is detailed on the template. If there is coving or an alternative obstruction then this distance must still be accounted for otherwise the copper pipe could be visible within the showering area.

If the ceiling height is over 2.4m (8ft), a Digital riser rail extension kit will be required. Contact our Customer Service Department to purchase a riser rail extension kit (part no. 223217).

10

Fix the top wall bracket to the appropriate position using the screw provided (if suitable) ensuring that the arrow on the bracket is facing upwards.



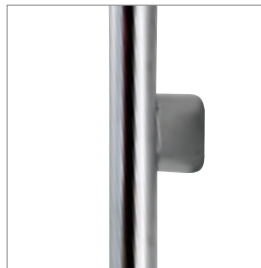
11

Secure the mounting bracket using the three screws supplied (if suitable) ensuring that the bracket is mounted in the correct orientation as shown.



12

Before mounting the rail assembly to the wall ensure that both the hose restraint and the handset holder are below the position of the top wall bracket. Offer the rail assembly vertically onto both the top rail bracket and controller mounting plate. Slide the rail assembly downwards to lock into position.



!

To remove the controller from the rail assembly, depress the fixing clip, using a small flat bladed screwdriver and carefully unhook and pull the controller away from the rail.



13

Connect the 15mm copper pipe to the mixed water outlet on the Digital processor using the push fit elbow provided. 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.

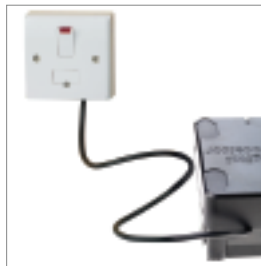
!

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.

14

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.



!

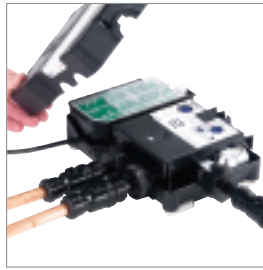
THIS APPLIANCE MUST BE EARTHED

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.

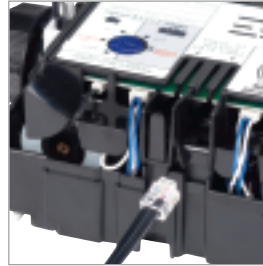
15

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.



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.



!

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.

17

Attach the shower hose, ensuring the hose washer is correctly fitted then flush the system through for a few seconds by switching the processor on.

18

Turn off the shower and pass the hose through the gel hanger/hose restraint.



19

Disengage the pivot clip from the bottom of the handset.



20

Ensure the hose washer is in the correct position and screw the pivot into the hose hand tight only.

21

Re-insert the pivot into the handset and engage the pivot clip prior to placing the handset into the handset holder.



22

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. As 'ECO' flow can be achieved by the ilux Digital controller, 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. As 'ECO' flow can be achieved by the ilux Digital controller, we recommend the processor is set to 'NORMAL GRAVITY' mode.**



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

23

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.**

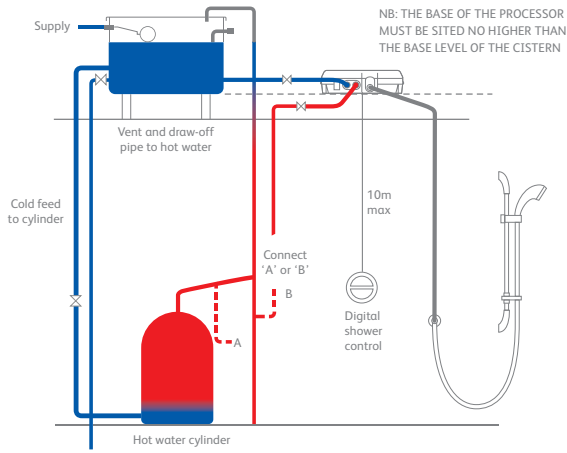
**ALL COPPER PIPE WORK MUST BE CROSS-BONDED AND CONNECTED TO A RELIABLE EARTHING POINT**



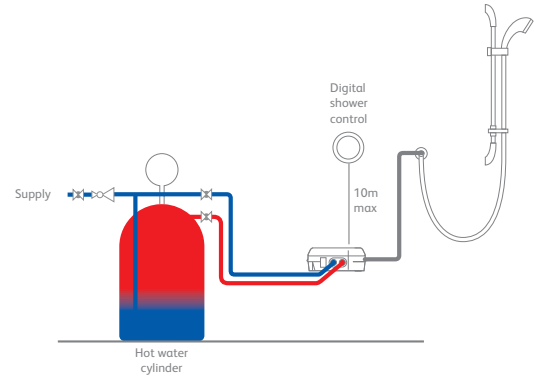
**Please refer to the separate ilux range user guide for full product operating instructions.**

# Typical installations

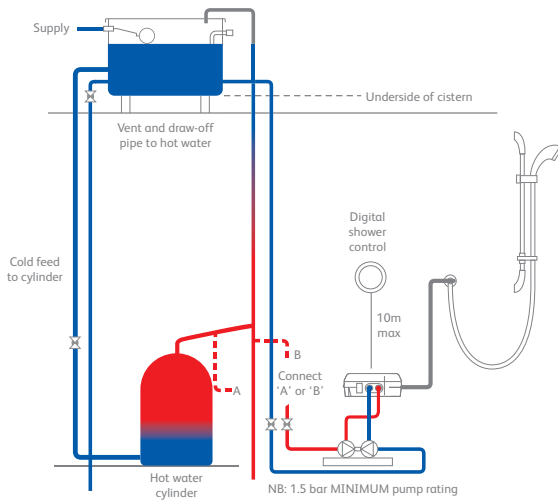
## Typical gravity system installation



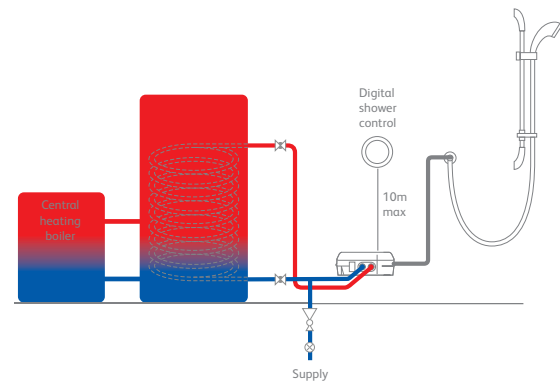
## Typical Thermal storage unit system installation



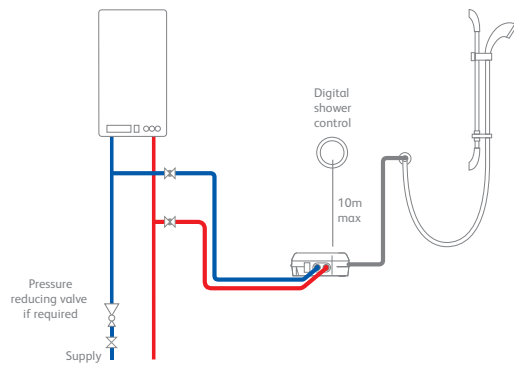
## Typical pumped system installation



## Typical UHW system installation



## Typical combination boiler installation





# AQUALISA

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

Sales enquiries: 01959 560010

Republic of Ireland 01-864-3363

Customer helpline: 01959 560010

Republic of Ireland 01-844-3212

Brochure Hotline: 0800 652 3669

Website: [www.aqualisa.co.uk](http://www.aqualisa.co.uk)

Email: [enquiries@aqualisa.co.uk](mailto:enquiries@aqualisa.co.uk)



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