# **AQUALISA**

# Midas

Thermostatic exposed shower valve and bath/shower mixer systems

Installation guide



## Index

Introduction	on	p.4
	- Safety information - Product specification	p.4 p.4
Connection	n to supplies - Flushing - Filters - Isolating valves - Pressures	p.4 p.5 p.5 p.5 p.5
Gravity sys	tem - Siting - Pump installation - Stored water capacities	p.5 p.5 p.6 p.6
Balanced high pressure systems		p.6
Combinatio	on boiler systems	p.6
Typical wat	ter systems	p.7
System components		p.9
Valve installation instructions		p.12
	<ul><li>Midas range exposed valves</li><li>Midas range bath/shower mixer</li></ul>	p.12 p.13
Shower hed	ad installation - Midas 100 head - Midas 200 head - Midas 300 head	p.16 p.16 p.18 p.20
User guide	<ul><li>Shower controls</li><li>Midas range exposed valve</li><li>Midas range bath/shower mixer</li></ul>	p.22 p.22 p.22
User guide	- Shower head - Adjustable height heads	p.23 p.23
Cleaning &	a maintenance	p.23
Commissio	ning	p.24
Trouble sho	ooting guide	p.25

## Important information

#### Introduction

The Midas product range is available as either exposed shower valve systems or exposed bath/shower mixer systems complete with adjustable height heads. All shower heads feature variable spray patterns. Midas thermostatic valves provide close temperature stability and fail safe protection on appropriate high and low pressure systems.

The Midas 100 shower valve is suitable for use with gravity, high pressure and combination boiler systems. The Midas 100 bath/shower mixer is suitable for use with high pressure and combination boiler systems. Please refer to the product specification section below.

The Midas 200/300 features a specific low pressure exposed valve for use on gravity systems and an exposed valve and bath/shower mixer suitable for use on high pressure and combination boiler systems. Please refer to the product specification section below.

In the event of any product problems, please contact the Aqualisa customer helpline on 01959 560010 for assistance.

### Safety information

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

The Midas range is designed for domestic use only.

## Product specification

Midas 100 shower valve, product is suitable for gravity stored, gravity boosted, balanced high pressure and combination boiler systems. Pressure range 0.1 – 10 bar max (static).

Midas 100 bath/shower mixer, product is suitable for balanced high pressure and combination boiler systems. Pressure range 1.0 – 10 bar max (static).

Midas 200/300 low pressure shower valve, product is suitable for gravity stored and boosted gravity systems only. Pressure range 0.1 – 1.0 bar max (static).

Midas 200/300 high pressure shower valve, and Midas 200/300 bath/shower mixer, product is suitable for balanced high pressure and combination boiler systems. Pressure range 1.0\* – 10.0 bar max (static).

\* The combination boiler MUST have a minimum rating of 24kW (80,000 Btu) and be of the type fitted with a fully modulating gas valve.

If in any doubt, please contact the appliance manufacturer before installation commences.

#### Connections

The Midas product range is designed for conventional supplies with HOT on the Left and COLD on the Right as viewed from the front.

Supply lines must be flushed clear of any debris before installation of the unit. Any debris accumulation in the shower valve and head may result in damage and poor performance.

#### 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.

#### **Filters**

To ensure optimum ongoing performance, the Midas product range is protected by inlet filter assemblies in the internal waterways. Debris accumulation may result in progressively reduced flow through the showerhead and noisy operation.

As this condition is not covered by our standard warranty terms, it is suggested that the cartridge be removed and the filters checked by a competent person at least every 12 months. In the event of any difficulties please contact the Aqualisa customer helpline for assistance.

## Isolating valves

Suitable full way isolation valves must be fitted to both supplies in accordance with current Water Supply Regulations and our terms of warranty.

Due to their restrictive characteristics, stopcocks and ball type valves that reduce the pipe bore size must not be used on gravity or pumped installations.

#### Pressures

The Midas product range is designed to control static pressure up to 10 bar. Where pressures are likely to exceed 10 bar, a pressure reducing valve (PRV) must be fitted into the incoming mains supply. A setting of 3 bar is recommended. It should be noted that daytime pressures approaching 8 bar can rise above the stated maximum overnight.

A suitable PRV is available from Aqualisa.

The Midas product range is not suitable for mixed supply systems, e.g. gravity hot and mains cold.

## Gravity fed hot and cold supplies

The Midas 100 shower valve and the specific low pressure Midas 200/300 shower valves are suitable for use with gravity systems. Services must be installed according to good plumbing practice having regard to pipe sizing, long pipe runs and low-head situations.

The cold supply for the valve assembly must be taken directly from the cold storage system. The hot supply may be taken from the vent/draw off pipe of the hot water cylinder at a point below the cylinder connection or alternatively from the underside of the horizontal draw off.

Rising pipe work must not be connected into the horizontal draw-off from the cylinder or to any point in the vent/draw off pipe above the cylinder connection.

#### CYLINDER TEMPERATURE IN EXCESS OF 65°C MAY RESULT IN POOR SHOWER PERFORMANCE.

To minimise pressure loss we recommend that the hot and cold supplies are run in 22mm as close as reasonably possible to the mixing valve before reducing to 15mm to suit the intended inlet connection fittings.

#### Siting

For optimum performance, with gravity fed systems, the distance between the bottom of the storage cistern and the shower head should not be less than 1m (when using an adjustable height shower kit). Please refer to the system layouts on page 7.

## **Pump installation**

UNDER NO CIRCUMSTANCES MUST A PUMP BE FITTED DIRECTLY TO THE WATER MAIN.
PLEASE REFER TO THE MANUFACTURERS PUMP INSTALLATION GUIDE FOR PUMP INSTALLATION INFORMATION

Care should be taken to ensure that there is adequate flow through the pump to activate the flow switches.

A pump must only be used to boost the pressure from tank-fed supplies. A typical layout is shown on page 7.

A minimum 1 bar twin ended booster pump may be fitted with any Midas product, but for optimum performance a Low Pressure Midas 200/300 variant should be used. If fitting a booster pump to a Midas 100 or a High pressure Midas 200 or 300 product, we recommend a twin ended booster pump larger than 1 bar is used.

## Stored water capacities

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

### Balanced high-pressure system

The Midas high pressure product range is designed to operate with unvented hot water storage systems up to a maximum pressure of 10 bar. The cold water supply must be drawn from the same mains supply as that to the hot water system (down stream of the cylinder manufacturers pressure limiting valve, where supplied) and the hot supply from the nearest convenient draw off point. Account must be taken of pressure drops that may occur when other draw-off points are used while the shower is in use. A typical layout is shown on page 8.

### Combination boiler/multipoint system

The Midas high pressure product range is suitable for use with combination boiler systems. The combination boiler MUST have a minimum rating of 24kW (80,000 Btu) and be of the type fitted with a fully modulating gas valve.

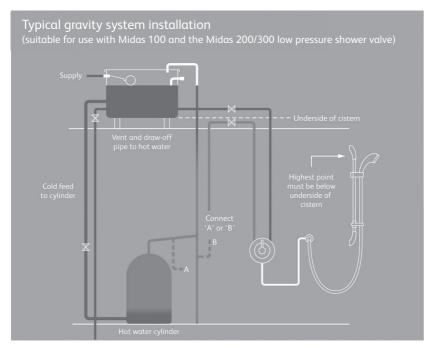
This is sufficient to operate one outlet point at a time. The Midas cartridge is designed to operate from the mains at a maximum of 10 bar. If the mains pressure exceeds 10 bar a 'drop tight' PRV must be fitted on the supply pipe after the main stopcock.

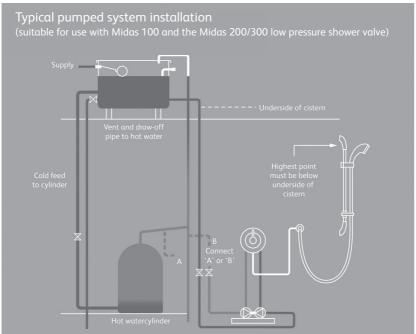
If in any doubt, please contact the appliance manufacturer before installation commences.

The cold supply can be taken from the nearest convenient mains supply and the hot supply can be taken from the nearest hot water draw-off point. Account must be taken of the pressure drops that will occur when other draw-off points are used while the shower is in use. A typical layout is shown on page 8.

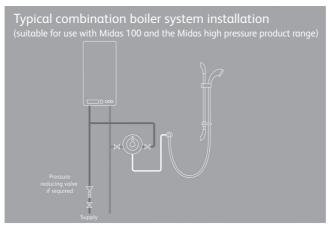
When fitted to combination boiler systems, Midas exposed shower valves have been designed to give optimum temperature control and stability from fully modulating combination boilers and instantaneous gas water heaters.

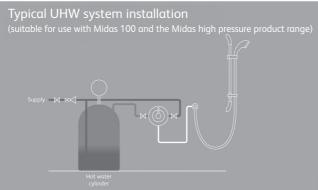
## Typical system diagrams

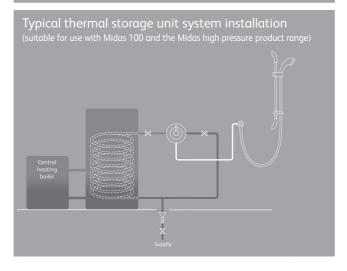


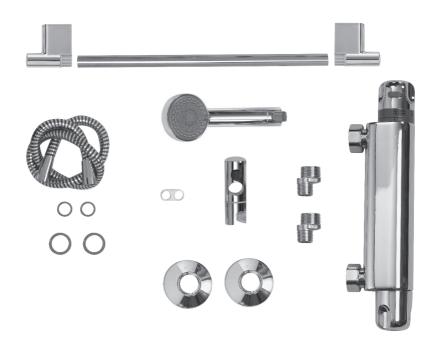


## Typical system diagrams continued









Exposed shower valve with adjustable height head



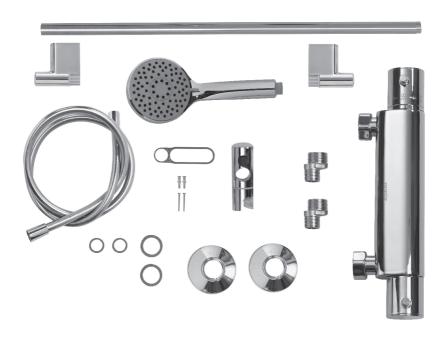
Bath/shower mixer with adjustable height head



Exposed shower valve with adjustable height head



Bath/shower mixer with adjustable height head



Exposed shower valve with adjustable height head



Bath/shower mixer with adjustable height head

## Midas exposed valves

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. Failure to install the product in accordance with these instructions may adversely affect the warranty terms and conditions. Do not undertake any part of this installation unless you are competent to do so. Prior to starting ensure that you are familiar with the necessary plumbing regulations required to install the product correctly and safely.

Bar valve fixing accessories are available separately. The MD300EFB is a first fix fixing bracket. If using the MD300EFB bracket, ensure sufficient threads are left from the finished wall surface, after the cover plates have been fitted, to ensure adequate purchase for the exposed valve.



The BAR001FIX bar valve fixing kit provides a method of surface siting exposed bar valves onto a finished wall surface, using 15mm concealed pipe work.

If required, fit the bar valve fixing accessory following the relevant installation instructions provided with the accessory kit and proceed to step 6 below.

The exposed valve and fixing bracket assembly MUST NOT be used as a grab rail support method.



Eccentric elbows are provided to allow for inlet pipework adjustment between 130mm – 170mm centres. Construct suitable connections terminating in ½"BSP female fittings.

When using the eccentric elbows provided we recommend leaving sufficient threads from the finished wall surface, after the cover plates have been fitted, to ensure adequate purchase for the exposed valve. If using alternative fixings please refer to the installation instructions provided to ensure adequate threads are left to connect the exposed valve after the cover plates have been fitted to the finished wall surface.

If required, apply jointing tape to the threads and fit the eccentric elbow connectors sufficiently to achieve a water tight seal, terminating at 150mm centres to suit the exposed valve inlets.



- Ensuring adequate provision to allow the water to discharge safely to waste, turn on the supplies to flush the system through. Attach pressure test equipment and pressure test the system in accordance with Water Supply Regulations.
- Ensure the ¾" supply connections are temporarily capped to prevent any dirt or dust ingress into the pipe work during the making good process. Remove the caps prior to connecting the shower valve.



Apply a thin bead of mastic to the rear of the cover plates. Place the cover plates onto the exposed \( \frac{3}{4}\)" threads, flush with the finished wall surface.



6

Ensuring the fibre washers are positioned within the valve inlets, offer the valve into position. Tighten the fixing nuts using a suitable tool taking care not to overtighten.



7

Attach the hose to the valve hose outlet to allow the water to discharge safely to waste. Turn on the supplies to the shower and turn the shower on to flush the system through. Turn off the shower.



If required, refer to the commissioning instructions on page 24 to adjust the maximum temperature override button position. Follow the shower head system installation instructions on pages 16 to 21 to complete the installation.

## Midas bath/shower mixers - wall mount installation

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. Failure to install the product in accordance with these instructions may adversely affect the warranty terms and conditions. Do not undertake any part of this installation unless you are competent to do so. Prior to starting ensure that you are familiar with the necessary plumbing regulations required to install the product correctly and safely.

Bar valve fixing accessories are available separately. The MD300EFB is a first fix fixing bracket. If using the MD300EFB bracket, ensure sufficient threads are left from the finished wall surface, after the cover plates have been fitted, to ensure adequate purchase for the exposed valve.



The BAR001FIX bar valve fixing kit provides a method of surface siting exposed bar valves onto a finished wall surface, using 15mm concealed pipe work.

If required, fit the bar valve fixing accessory following the relevant installation instructions provided with the accessory kit and proceed to step 6 below.

The exposed valve and fixing bracket assembly MUST NOT be used as a grab rail support method.





Construct suitable connections at 150mm centres terminating in %" BSP male threads (available separately from Aqualisa customer services, part no. 525301).



Ensuring adequate provision to allow the water to discharge safely to waste, turn on the supplies to flush the system through. Attach pressure test equipment and pressure test the system in accordance with Water Supply Regulations.



Ensure the  $\frac{\pi}{2}$  supply connections are temporarily capped to prevent any dirt or dust ingress into the pipe work during the making good process. Remove the caps prior to connecting the shower valve.



Inlet pipe cover plates are available separately from Aqualisa customer services, supplied with part no. 525301, or complete with the easy fit fixing bracket. If required, apply a thin bead of mastic to the rear of the cover plates. Place the cover plates onto the exposed %" threads flush with the finished wall surface.



5

Ensuring the fibre washers are positioned within the valve inlets, offer the valve into position. Tighten the fixing nuts using a suitable tool taking care not to overtighten.



6

Turn on the supplies to the bath/shower mixer and turn the flow control knob on to flush the system through. Turn off the bath/shower mixer.



If required, refer to the commissioning instructions on page 24 to adjust the maximum temperature override button position. Follow the shower head system installation instructions on pages 16 to 21 to complete the installation.

## Deck mount installation

The Midas range bath/shower mixers feature inlet pipe centres of 150mm. However deck mount adaptors are provided to allow installation to baths at standard 180mm centres.



Ensuring the fibre washers are fitted within the valve inlets, attach the deck mount adaptors to the bath/shower mixer. Tighten the connections using a suitable tool, taking care not to overtighten.



2

Place the rubber washers onto the tap tails and offer the assembly into position onto the bath.



3

Place the back nuts onto the tap tails and secure the assembly to the underside of the bath.



4

Using suitable connections connect the tap tails to the hot and cold supplies.



5

Turn on the supplies to the bath/shower mixer and turn the flow control knob on to flush the system through. Turn off the bath/shower mixer.

If required, refer to the commissioning instructions on page 24 to adjust the maximum temperature override button position. Follow the shower head system installation instructions on pages 16 to 21 to complete the installation.

## Midas 100 adjustable height head installation

Hold the front and rear of the grey rail end and carefully, but firmly, pull the chrome cover away from the rail end assembly as shown.



- Prepare two fixing points 470mm vertically apart using a spirit level to facilitate if necessary using suitable fixings to accept No. 8 non-rusting screws (not supplied).
- Ensuring the handset cradle is on the left side of the rail, pass the rail through the handset holder whilst keeping the slider button depressed .



Current water supply regulations state the handset should not be allowed to pass a point 25mm above the spill over level of the bath or shower tray. If this cannot be achieved, the hose restraint must be fitted. This is fitted to the rail under the handset holder.

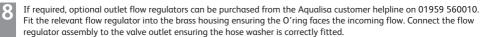


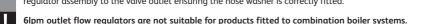
Fit the rail into the rail end bodies ensuring the indents in the rail are facing the finished wall surface



- 6 Secure the rail assembly to the wall using No 8. non-rusting round head screws of suitable length ensuring the rail and rail end bodies remain firmly engaged.
- Fit the rail end covers into position and push firmly into place.







- Onnect the hose to the bottom of the valve outlet ensuring the hose washer is correctly fitted to allow the water to discharge safely to waste and run the shower for a few seconds to clear any debris in the outlet assembly.
- Turn off the shower and pass the hose through the hose restraint.
- Ensuring the hose washers are in the correct position, depress the anti-swivel locking button on the handset and secure the handset to the hose. Place the handset into the handset holder.



The tension of the handset station of the handset holder is factory set. However, it may be necessary, especially for showers fitted to high pressure systems, to tighten the tension as required. Tighten the screw inside the handset station taking care not to over-tighten.



## Midas 200 adjustable height head installation







Ensuring the lever is in the upright position, pass the rail through the handset holder.



Current water supply regulations state that the handset should not be allowed to pass a point 25mm above the spill over level of the bath or shower tray. If this cannot be achieved, the hose must be passed through the gel hook which has also been designed to be utilised as a hose restraint.

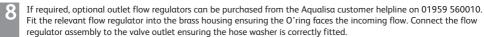


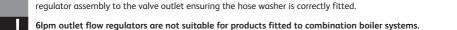
Place the rail assembly onto the bottom fixing bracket taking care to engage the rail location slots on the bracket lugs.



- Place the top fixing bracket into position and secure to the wall using the screws provided, if suitable.
- Slide the rail end covers onto the rail brackets and click into position.







- Connect the hose to the valve outlet, ensuring the hose washer is correctly fitted to allow the water to discharge safely to waste and run the shower for a few seconds to clear any debris in the outlet assembly.
- 10 Pass the hose through the gel hook.



Ensuring the hose washers are in the correct position, depress the anti-swivel locking button on the handset and secure the handset to the hose. Place the handset into the handset holder.



## Midas 300 adjustable height head installation

Hold the front and rear of the grey rail end and carefully, but firmly, pull the chrome cover away from the rail end assembly as shown.



- Prepare two fixing points 765mm vertically apart using a spirit level to facilitate if necessary, using the fixings provided if suitable.
- Ensuring the handset cradle is on the left side of the rail, pass the rail through the handset holder whilst keeping the slider button depressed.



Current water supply regulations state the handset should not be allowed to pass a point 25mm above the spill over level of the bath or shower tray. If this cannot be achieved, the hose restraint must be fitted. This is fitted to the rail under the handset holder.



Fit the rail into the rail end bodies ensuring the indents in the rail are facing the finished wall surface



- Secure the rail assembly to the wall using the screws provided ensuring the rail and rail end bodies remain firmly engaged.
- Fit the rail end covers into position and push firmly into place.





- 6lpm outlet flow regulators are not suitable for products fitted to combination boiler systems.
- Connect the hose to the bottom of the valve outlet ensuring the hose washer is correctly fitted to allow the water to discharge safely to waste and run the shower for a few seconds to clear any debris in the outlet assembly.
- Turn off the shower and pass the hose through the hose restraint.
- Ensuring the hose is in the correct position, offer the hose onto the handset. Push the handset onto the hose to lock the anti kink swivel connector and secure the handset to the hose. Once tightened carefully pull the handset away from the hose to release the integral anti kink swivel connection. Place the handset into the handset holder.

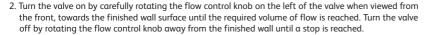


The tension of the handset station of the handset holder is factory set. However, it may be necessary, especially for showers fitted to high pressure systems, to tighten the tension as required. Tighten the screw inside the handset station taking care not to over-tighten.



#### Midas 100 shower valve and bath/shower mixer

- 1. When the temperature lever knob on the right of the valve when viewed from the front has the red maximum temperature override button at the top of the knob, the valve is in the mid blend position. The mid blend temperature is dictated by the temperature of the incoming supplies. To select a comfortable showering temperature, depress the red button and slowly rotate the knob away from the finished wall surface to increase the temperature and towards the finished wall to decrease the temperature, using the temperature markings as a guide.
  - N.B. Should it be necessary to reset the maximum temperature position, please refer to the commissioning instructions on page 24. We recommend the MAXIMUM outlet temperature is set to 46°C.



N.B. With all Midas shower valve and Midas bath/shower mixers fitted to combination boiler systems, it may be necessary to adjust the flow control knob and reduce the flow to achieve a comfortable showering and bathing temperature.





#### Midas 200/300 shower valve and bath/shower mixer

When the temperature lever knob on the right of the valve when viewed from the front has the maximum temperature override button at the top of the knob, the valve is in the mid blend position. The mid blend temperature is dictated by the temperature of the incoming supplies. To select a comfortable showering temperature, depress the button and slowly rotate the knob away from the finished wall surface to increase the temperature and towards the finished wall to decrease the temperature, using the temperature markings as a guide.

N.B. Should it be necessary to reset the maximum temperature position, please refer to the commissioning instructions on page 24. We recommend the MAXIMUM outlet temperature is set to 46°C.



## Midas 200/300 low pressure flow control

Turn the valve on by carefully rotating the flow control knob on the left of the valve when viewed from the front, towards the finished wall surface until the required volume of flow is reached. Turn the valve off by rotating the flow control knob away from the finished wall until a stop is reached.



## Midas 200/300 high pressure flow control

Turn the valve on by carefully rotating the flow control knob on the left of the valve when viewed from the front, towards the finished wall surface until a stop is reached. To increase the volume of flow, depress the eco stop button and rotate the flow control knob further. Turn the valve off by rotating the flow control knob away from the finished wall until a stop is reached.

N.B. With all Midas shower valve and Midas bath/shower mixers fitted to combination boiler systems, it may be necessary to adjust the flow control knob and reduce the flow to achieve a comfortable showering and bathing temperature.



To divert from bath fill to shower, with the valve running, lift the diverter knob and twist a quarter turn to lock the knob into position. To divert back from shower to bath, twist the diverter knob a further quarter turn until it sits flush on the bath spout.



## User guide - Shower head

#### NEVER ATTEMPT TO MAKE ANY ADJUSTMENT TO THE SHOWER HEAD BY PULLING ON THE SHOWER HOSE.

 To select the preferred height for the shower head, dependent on the system purchased, depress the handset holder button or levers fully to enable the slider to be moved up or down the rail.



Midas 100



Midas 200



Midas 300

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



Midas 100/200



Midas 300

To select the desired spray pattern rotate the shower spray plate clockwise or anti-clockwise.



Midas 100/200



Midas 300

## Cleaning & maintenance

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

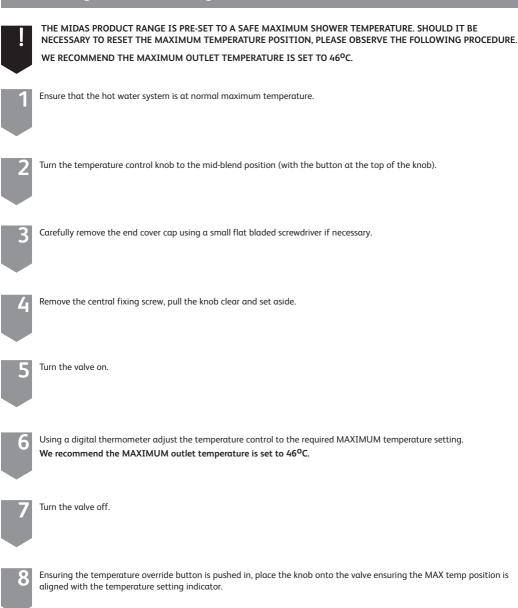
#### ! DO NOT USE ABRASIVE CLEANERS.

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.

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

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

## Midas range commissioning



! Should unacceptable damage to the temperature knob end cap occur when removing it from the temperature knob, please contact Aqualisa customer service on 01959 560010 to arrange a replacement.

Secure the knob to the valve and refit the knob insert.

## Trouble shooting guide

Symptom	Possible cause	Action
Water output is either all hot or all cold, or cold only	Reversed inlet supplies	Check that the supplies correspond with the inlet markings
Water output is not hot enough	The temperature of the hot water cylinder is too low  Water flow through the hot water appliance is too fast  Water flow through the hot water appliance is too fast  (If fitted on a combination boiler)	The cylinder temperature should be at least 15°c hotter than the blend Check the flow rate recommendations with the heater manufacturer  Adjust the flow control knob on the mixer valve to reduce flow until a comfortable showering or bathing temperature is achieved
Flow rate is poor and water temperature is low	Airlock in the hot water supply	Check that the pipe work is laid out in accordance with correct practices, paying particular attention to potential air-traps
Water temperature swings regularly between hot and cold	Cold water pressure is too high	If the static water pressure exceeds 10 bar, install a pressure reducing valve (PRV) in accordance with the installation guide
Poor flow rate	Twisted hose  Debris in shower head  Debris in filters	Check for debris and clear as necessary

Notes			



# **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:509301 Issue 04 Sep 12