

Rio & Kiva Owner's Manual and Installation Instructions Height adjustable bath













Rio & Kiva Owner's Manual and Installation Instructions

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Safety Information

Thank you for purchasing your Rio or Kiva bath.

WARNING:

Before installing or using this equipment you must read and fully understand these instructions.

Product Description:

The bath is powered by a 24 volt direct current control system with battery backup, for use in the event of a mains electrical supply failure. It is essential that the mains power remains switched on at all times to maintain a charge in the batteries.

The bath is intended for bathing children and adults, weighing up to 150kg who are capable of maintaining an upright sitting position.

Warranty:

This product is guaranteed against all defects in manufacture for a period of three years. This does not affect your statutory rights.

Equipment data labels







Technical Information

Water capacity, tub full without client:

Lifting capacity including client:

Duty cycle: IP rating: Supply voltage: Protection class: Power consumption: Dry weight of bath: Kiva: 280 litres (e) Rio: 200 litres (e) Kiva: 280 kg Rio: 250 kg

10% maximum, 2 mins use, 18 mins rest IP X5 230v, 50Hz Class 1 250w Kiva: 126kg Rio: 90kg

Add a further 14kg if a full length Neatfold stretcher is used.

Weight of spa option: Total output power: 6kg 1100w



No obstructions can be laid on the floor in the red shaded areas.



Instructions for use.

Daily maintenance (before using bath):

- Check the bath is permanently connected to a 230v mains electrical supply.
- Check there are no obstructions above or below the bath when in operation.
- Check the tub will raise and lower properly using the handset.
- Check the temperature of the water in the tub before use.

Instructions for use:

Before using, check that the bath will raise and lower using the handset and the electrical supply is turned on.

Filling the tub:

Ensure the water temperature is correct when filling the bath and before the client enters the tub.

Adjusting the height of your bath:

The bath is operated with a two button handset. Pressing one of the buttons will either raise or lower the bath as required.

Tap options:

Thermostatic mixers taps. TMV2 compliant.

- Rotate the temperature knob until it has reached the preset temperature.
- Depressing the red button and rotating the knob further will increase the water temperature up the system (boiler) temperature.
- Lift the spherical button to divert the water to the shower.
- For the flow rate, rotate the flow rate knob anti-clockwise until desired flow rate has been achieved.

Thermostatic mixer taps. TMV3 compliant.

- Use the large center knob to control the water temperature for both bathing and showering.
- Rotate the knob anti-clockwise to increase the temperature to the preset temperature for both bathing and showering. The bathing temperature will be 3°c hotter than the preset temperature for showering.
- The lever control is used to divert the water from the bath to the shower and control the flow rate. When the lever is in the central position, water will cease to run.











Low profile thermostatic taps



11 Shower control

Filling the bath:

- A handset is now supplied with the low profile taps, as shown in the image.
- The bath raise and bath lower buttons remain the same.
- The bath fill button is in the image shown on the right. This button on the handset now replaces the fill button that was fitted to the tub.
- To fill the bath to the first level, press the bath fill button once.
- To continue filling to the next level, press the bath fill button again. The tap will turn off once the second level sensor has been reached.
- During either of the filling operations, the flow can be stopped by pressing the bath fill button once.

22 Bath temperature control





Do not leave the bath unattended when filling. Thermostatic valves must be serviced on a regular basis to ensure safe operation.



Baths fitted with Neatfold stretcher

The Neatfold stretcher is designed as a personal support platform fitted to the top of the bath. It can be quickly and conveniently folded and stowed vertically if the bath is against a wall, or potentially alongside the bath, maximizing the space available in the room.

Carry out the following checks before using the Neatfold stretcher:

- Check the stretcher is secure and correctly positioned over the tub.
- Visually check the stretcher cover for damage and security before use.

To use the stretcher when stowed down the side of the bath:

- Stand in a suitable position beside the bath so that you can operate the Neatfold stretcher.
- Lift the assembly upwards so that it resembles Picture A.
- Hold onto the center of the stretcher frame at the point where the material has been removed (the handhold).
- Pull the stretcher at the handhold and the Neatfold can be folded horizontally down in place. A small jolt will be felt as the stretcher becomes horizontal, this is normal and part of the stretcher function.





• Ensure that the stretcher is now resting on the rim of the bath. The Neatfold is now ready for use (Picture C).

To stow the Neatfold:

- Hold the stretcher frame at the handhold.
- Push upwards and outwards gently so that the Neatfold starts to fold down the middle (Picture B).
- Once the Neatfold replicates Picture A, it is then ready to be stowed away down the side of the bath (Picture D).







Operating instructions for optional guards (if fitted)

- Ensure that the stretcher is correctly deployed.
- Carefully align and engage the two vertical tubes of the guard assembly into the black nylon recievers fitted to the stretcher.
- To remove the guard, lift the guard out vertically from its position and store in a safe place.

Caution:

The persistent or heavy use of oil based products may adversely affect the white stretcher material. Oils and other petro-chemicals should be avoided or used sparingly and any residue removed.

Cleaning:

The stretcher, frame, guard and guard bumper may be cleaned using most mild cleaning agents. Abrasive cleaners should be avoided in order to maintain the semi-gloss finish of the white high-tension stretcher material and the painted finish of the frame.

The stretcher and frame may be cleaned using a high temperature pressure water or nonchemical steam cleaner but under no circumstances should it be placed into an autoclave. Chemical agents and solvents must not be used i.e. drain cleaners, acetone, oven cleaners or acids. Attention should always be paid to instruction labels on the outside of the cleaning agent containers.





Operating the Spa system (optional)

Fill the tub with water. The spa unit is controlled using the round button attached to the bath tub. To turn the air pump on, pressing the button once will operate the spa at its lowest setting. Pressing the button for a second time will operate the spa at its medium setting. Pressing the button for a third time will operate the spa at its highest setting. Once the unit has been turned on, it will remain active for 20 minutes before automatically turning off. Pressing the button again will operate the spa system for a further 20 minutes. Use of the spa bath system for longer than 20 minutes is not recommended.

Hygiene management:

The spa system is designed to be self-maintaining with regards to hygiene. Approximately 20 minutes after use, the spa system will automatically turn itself on and operate for approximately 20 seconds. This is called the "Auto-Purge" cycle. Any water remaining within the jet system will be ejected, keeping the jets clean. When cleaning the bath, using the bath for showering only, or bathing without the spa system, it is recommended that a manual purge is performed. The Auto-Purge will then operate 20 minutes later.

Cleaning the bath:

The bath may be cleaned using most mild cleaning agents. Chemical agents and solvents must not be used, i.e. drain cleaners, acetone, oven cleaners or acids. The taps, side & end panels and handset should be cleaned using a warm soapy solution and wipe down with a damp cloth. Attention should always be paid to instruction labels for the cleaning agent.

Troubleshooting:

In the unlikely event that problems occur with theunit, carry out the following easy checks to determine where or not an engineer is required.

Fault: The Rio or Kiva bath doesn't travel up or down or moves downwards very slowly whilst beeping.

Cause: The mains power supply has been disconnected for some time and the unit's batteries are now flat.

Remedy: Examine the mains fuses/circuit breakers and reset as necessary and ensure that the mains voltage is fully reconnected. Allow the battery back-up system to re-charge for approximately 2 hours.

Fault: The bath doesnt move upward or downards at all.

Cause: The handset has been pulled from the socket fitted to the underside of the unit.

Remedy: Push the plug fitted to the handset more firmly into the socket.

Fault: Only one end of the bath moves up and down.

Remedy: You need to contact Astor Bannerman as there is a malfunction with the equipment. **Fault:** Water temperature is incorrect from thermostatic mixer tap.

Remedy: The thermostatic mixer taps will need recalibrating.

Fault: The water has stopped running.

Remedy: Check that you have both a hot and cold water supply.



Contents of packages:

No	Item No	Item Description	Quantity		
1	21.090.00.0369	Cable, armoured, 1.0, 3 core	4 metres		
2	20.013.60.0006	Handset, 2 button Rio/Kiva - Telephone connector	1		
3	20.032.00.0003	Holder, handset	1		
4	20.013.40.0011	Hose, inlet for Rio	2		
5	10.013.70.0005	Waste assembly, RIO	1		
6	21.090.00.0456	Fixing, fir tree, 6mm x 15mm	4		
7	21.090.00.0455	Rivet, button, white 4mm x 10mm long	24		
8	21.090.00.0495	Rivet, button, white, 4mm x 8mm long	8		
9	21.090.00.0360	Sucker pad, 48mm, bag of 100	1		
10	75.090.00.0457	Screw, No.6x3/4 s/less csk self-tap	4 for Kiva, 6 for Rio		
11	20.013.60.0005	Plug, Blind, Outlet (Actuator) for RIO control box	3		
12	20.013.40.0015	Hose, supply, TT13, Rio, Internal	1		
13	21.090.00.0563	Handset, Shower head, Nitro single mode chrome	1		
14	21.090.00.0611	Holder, shower head, suction, chrome	1		
15	21.090.00.0585	Hose, shower, stainless steel hi flow, 1.5m upgraded	1 (Just on a Rio)		
16	21.090.00.0584	Hose, Shower, stainless steel hi flow hose 2m, unpacked	1 (Just on a Kiva)		
Neatfold option:					
1	75.090.00.0243	Nut, M6, Nyloc stainless steel (box 100)	2		
2	21.090.00.0057	Washer, M6 plain, penny, 25mm OD, stainless steel, bag 100	2		
3	75.090.00.0179	Screw, M6 x 80mm, stainless steel, countersunk, slot, bag of 100	2		
4	20.069.30.0001	Strap, 300mm, loop, male/female buckle	1		
LTT Option:					
1 20.013.00.0037		Handset, Rio/Kiva, LTT Taps TiMotion	1		



Installation Assembly Diagrams





Commissioning Rio/Kiva LTT Mixers



Commissioning must be carried out in accordance with these instructions, and must be conducted by designated, qualified and competent personnel. Exercising the Thermostat; Thermostatic mixing valves with wax thermostats are inclined to lose their responsiveness if not used. Valves which have been in storage, installed but not commissioned, or simply not used for some time should be exercised before setting the maximum temperature or carrying out any tests. A simple way to provide this exercise is:

- Make sure that the hot and cold water are available at the valve inlets, and the outlet is open.
- Move the temperature control rapidly from cold to hot and back to cold several times, pausing at each extreme.

Bath Fill Maximum Temperature:

Note! For Type 3 Healthcare installations the maximum blend temperature is determined by the application, refer to the **TMV3 Requirements Manual.**

The maximum blend temperature obtainable by the user should be limited, to prevent accidental selection of a temperature that is too hot. All Rada thermostatic mixing valves are fully performance tested and the maximum temperature is preset to approximately 41°c (222 models -44°c) under ideal installation conditions at the factory. Site conditions and personal preference may dictate that the maximum temperature has to be reset following installation. This mixing valve is provided with two methods of temperature setting, an adjustable temperature control knob which allows the user to select the blend temperature between ambient cold up to a preset maximum, or if considered more appropriate, a locked cap can be fitted, allowing no user adjustment.

Maximum Temperature Setting:

Check that an adequate supply of hot water is available at the hot inlet of the mixing valve. The minimum temperature of the hot water must be at least 12°c above the desired blend, however during resetting this should be close to the typical storage maximum to offset the possibility of any blend shift due to fluctuating supply temperatures. Check that both inlet isolating valves are fully open and the inlet filters are clean. Temperatures should always be recorded using a thermometer with proven accuracy.

Commissioning bath fill

- 1. Remove the temperature knob and indicator trim or locking cap using a 3mm hexagonal key.
- 2. Pull of the temperature hub.
- 3. Using the temperature hub, rotate the spindle until the required maximum blend temperature is obtained at the discharge point (rotate clockwise to decrease temperature). If resistance is felt, do not use force to turn any further, as this can damage internal parts.
- 4. Once the desired maximum blend temperature has been achieved, refit the hub without disturbing the spindle. For adjustable temperature: Position the hub such that the lug is against the side of the stop of the cartridge face, thus preventing anticlockwise rotation past the maximum temperature stop. For locked temperature: Position the hub such that the lug is between the stops on cartridge face, thus preventing any rotation.



Commissioning shower mixer



Maximum temperature setting:

Before using the shower, the maximum temperature must be checked to make sure that it is at a safe level. It has been preset to approximately 43°c at the factory but due to variations in site conditions, the maximum temperature may need adjustment. **Note:** Make sure that the hot water temperature is at least 55°c and that there is sufficient supply. **Note:** For Type 3 valves in healthcare installations the maximum blend temperature is determined by the application, refer to the TMV3 Requirements Manual.

1. Turn on the mixer to the maximum temperature (i.e., fully anticlockwise) and allow the temperature to stabilize.

If the temperature is too hot or too cold, adjust as follows:

- 2. Use the 2.5mm hexagon key to slacken the grub screw retaining the control lever. Remove the control lever.
- 3. Unscrew the hub retaining screw.
- 4. Push the hexagon key down through the threads and rotate the hexagon key until the required maximum temperature is obtained at the shower. Anti-clockwise to increase the temperature, or clockwise to decrease the temperature (1/4 turn = approximately 1°c).
- 5. Once the desired maximum blend temperature has been achieved, turn off the mixer.
- 6. Refit the hub retaining screw.
- 7. Locate the bearing with the lug in the 8o'clock position.
- 8. Align the control lever at the 6o'clock position and refit, securing with the securing screw.
- 9. Check that the shower temperature is correct.
- 10. Fit the rubber plug to conceal the grub screw.



Preventative maintenance:



Carry out the following checks:	Daily	Weekly	Monthly	Annually
Full function test of the equipment.	\checkmark	\checkmark	\checkmark	\checkmark
Check the water temperatures from the mixer	\checkmark	\checkmark	\checkmark	\checkmark
Check the waste system for damage and leakage.		\checkmark	\checkmark	\checkmark
Examine the spa nozzles for security and check the spa function		✓	✓	\checkmark
Examine the supply hoses for damage and leakage			\checkmark	\checkmark
Service internal mixer components. (may require more frequent servicing in hard water areas)				✓
Calibrate mixer temperatures				\checkmark
Check cold supply failure shutdown				\checkmark
Check condition of backup battery				\checkmark
Optional Stretcher				
Check the condition of the stretcher covering	\checkmark	\checkmark	\checkmark	\checkmark
Check the security and position over the tub	\checkmark	\checkmark	\checkmark	\checkmark
Examine the optional guard for correct fitting and security	\checkmark	\checkmark	\checkmark	\checkmark
Examine the stretcher for wear or damage.			\checkmark	\checkmark



Astor-Bannerman (Medical) Ltd. Unit 11F Coln Park Industrial Estate Andoversford, Cheltenham Gloucestershire GL54 4HJ Tel: 01242 820820 f: 01242 821110

e mail: sales@astorbannerman.co.uk

WEB: www.astorbannerman.co.uk

CERTIFICATE OF CONFORMITY

Manufacturers Name: Astor-Bannerman (Medical) Ltd

Manufacturers Address:

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Unit 11F Coln Park Andoversford Cheltenham Gloucestershire GL54 4HJ

Equipment Type: Rio & Kiva height adjustable baths

I hereby declare that the above product conforms to the following specification:

98/37/EEC

Technical Director

For and on behalf of Astor-Banneman (Medical) Ltd

Date: 09 March 2011

Signed:

Directors: Dr. K D Kwok MBBS MRCP +J Stuart-Smith MBA BBc + P G Deverson MIOM Company registered in England No. 2849299 + VAT No. 630 6090 68





Notes:





Astor-Bannerman Ltd Unit 11f Coln Park Industrial Estate Andoversford Cheltenham GL54 4HJ Email: sales @astorbannerman.co.uk Tel: +44 (0) 1242 820820 Fax: +44 (0) 1242 821110

Technical Helpline: +44 (0) 1242 922972







