

INSTALLATION & MAINTENANCE INSTRUCTIONS FOR THE Aqua-Rex WK5 PHYSICAL WATER CONDITIONER

DESCRIPTION

The Aqua-Rex WK5 is a physical water conditioner which removes existing limescale deposits and reduces further encrustation of scale. Once the treated water has been heated, it will have a lower level of residual calcium bicarbonate than untreated water and will therefore be effectively softer.

The unit has six aerials arranged in three pairs.

The standard 30 foot aerials will allow fifteen turns around a 6 inch diameter pipe.

The signal generated by the aerials travels through the water irrespective of whether the water is flowing or not.

The signal travels both upstream and downstream of the unit and will treat static water in a storage tank if fitted to the down service.

LOCATION

Refer to the Aqua-Rex Specifiers Guide for guidance for correctly locating the unit.

The control box should be installed within 18 inches of the pipe being treated.

FIXING THE CONTROL BOX

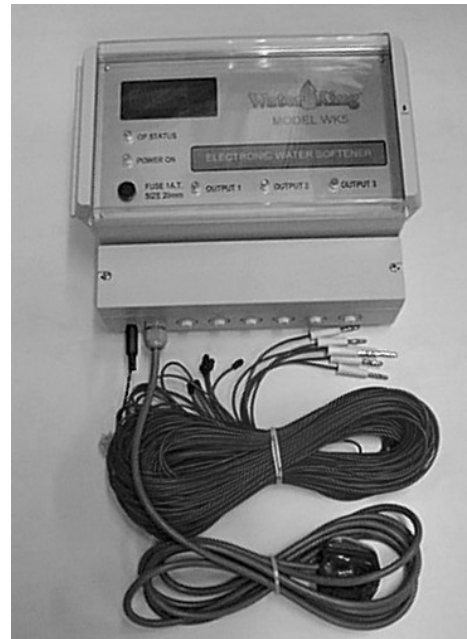
On the back of the control box there is a top hanging bracket. A further two side screw slots are located behind the bottom cover. The control box may be hung from the pipe if there is no adjacent wall.

AERIAL WINDING

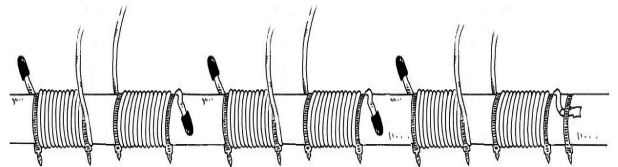
The six aerials are arranged as three pairs. The two aerials on the left of the box make up one pair, the two aerials in the centre make up the second pair and the two aerials on the right make up the third pair. Each aerial of each pair must be wound in opposite directions from a central point. When facing the pipe, one aerial should start by passing behind the pipe and the other should pass in front of the pipe. Secure each end of the aerial with a cable tie. Repeat the process with the other pairs of aerials.

Aqua-Rex WK5

The unit is manufactured to IP 65 standard.



Do not allow gaps between windings or between the aerials and the pipe. Windings must be tight and close together.



Make as many windings per aerial (a minimum of 15) as the wire permits.

You do not need to have the same number of windings on all aerials.

If there is going to be surplus aerial wire, ensure it is at the end with the cap rather than the end with the plug. Surplus aerial wire can be cut off.

Leave a gap of at least 3/4 inch between each aerial.

You can wind the aerials either side of a "T" junction or elbow, on a horizontal or a vertical pipe.

GROUNDING AN AERIAL

Aqua-Rex performs better when one aerial is grounded to a metal pipe and we recommend this is done to enhance the unit's performance.

Select one of the six aerials. Remove the black end cap and strip 1/2 inch of insulation leaving the wire exposed. Secure it with a cable tie to the pipe, ensuring there is good electrical contact by scraping off any paint so the bare metal is exposed. Never ground more than one aerial .

POWER SUPPLY

The unit is supplied with two internal transformers wired to 5 feet of external cable. The incoming supply is fused at 1 Amp, the fuse being accessible externally. If a longer mains cable is to be fitted, then the bottom cover can be removed to allow access to the mains terminal block. The standard input is 240 or 120

COMMISSIONING

To commission the unit, plug in to the mains supply and switch on at the mains. Switch on the "Mains On" switch on the front panel. The Alpha-numeric character display will show 'INITIATING, PLEASE WAIT', the red POWER ON light will illuminate, the L.V. POWER ON and the yellow OUTPUT lights will begin to flash.

After the unit has gone through internal checks and initiation successfully, the OP STATUS green light will illuminate and the BMS contacts will close. Thereafter, the unit will continue to cycle through all outputs and perform checks. The display will report what is happening throughout.

In the unlikely event of one of the outputs failing, the other outputs will continue to function but the OP STATUS light will switch off and the BMS contact will open. Please note, the signal generating circuits are independent and operate at differing frequencies consequently the OUTPUT lights will start by flashing in synchronism but will drift apart in time.

The output levels are set at the optimum level to maximise the effectiveness of the unit.

MAINTENANCE

Once installed, the WK5 requires no maintenance. However, a routine inspection to check that the lights are still flashing is recommended. If they are not flashing sequentially then re-boot the system by switching the unit off at the mains supply and leave for 1 minute. Switch the unit on again and the system should re-set itself. Under normal circumstances the extra Guard chip built into the unit will reset the system automatically if the program is upset by a power spike.

While the guard chip ensures resetting of the output signal in all normal circumstances, it is possible for the Liquid Crystal Display (LCD) to jam in which case rebooting the system either at the on off switch or loosening the fuse should reset it.

FUSE

20 mm 1 Amp.T. (time delay)

BMS

The BMS socket connection detects the presence of a power supply to the unit. If the fuse fails the BMS will detect no power supply.

Aqua-Rex LLC cannot accept responsibility for consequential loss as a result of the performance or otherwise of the Aqua-Rex unit.

2230 W Chapman Ave.
Suite 247
Orange
CA 928868
877 640 2170
www.aqua-rex.com
info@aqua-rex.com

100 Day Money Back Guarantee

If, for any reason whatsoever, you are dissatisfied with your Aqua-Rex product, you may return it at any time during the first 100 days after purchase and the purchase price will be reimbursed in full. Simply return it to wherever it was purchased, together with your full name and address and proof of purchase, showing the price paid.

5 Year Manufacturer's Warranty

Aqua-Rex LLC guarantees to repair or to replace the Aqua-Rex treatment unit in the event that it suffers from any manufacturing defect during the first five years after purchase. The unit should be returned to us properly boxed and wrapped, together with the proof of purchase, showing the price paid.