

# INSTALLATION, OPERATING & MAINTENANCE INSTRUCTIONS FOR

## AQUAREX® WK1 AND WK1-E



**WK1**



**WK1-E**

### LOCATION

The best place to fit an Aqua-Rex physical water conditioner is on the cold pipe where it goes into the water heater. Anywhere on the cold supply pipe is also OK as long as it is after all filters and any other water treatment system except UV.

The signal generated by Aqua-Rex travels both upstream and downstream through the water thus treating all the water in the home, even when fitted only to the water heater or softener loop. You can fit it anywhere on the cold water supply on any pipe material; Copper, PEX, CPVC or PVC.

**REFER TO THE SPECIFIERS GUIDE FOR MORE DETAILED INFORMATION ABOUT COMMERCIAL SYSTEMS WITH BOILERS AND HEAT EXCHANGERS.**

It is available as a download from the website [www.aqua-rex.com](http://www.aqua-rex.com).

### PUMPS

Pumps reduce the effectiveness of Aqua-Rex so always fit a unit after a pump, never in front of one. In a home with a hot water return we recommend installing Aqua-Rex on the cold pipe to the water heater.

### FLEXIBLE CONNECTORS

These connectors can have spiral grooves or parallel grooves. On a spiral groove just follow the grooves from the center of the pipe to the ends. You can't fit wires properly on parallel grooved pipe so change the pipe for a spiral groove version.

## MAIN EARTH BOND

If there is a main earth bond close to the point of installation, make sure the Antennas are downstream (after) the earth bond.

## INSTALLATION

When you have decided where the best place is to install the aerials then decide whether it is best to attach the control box to a wall or to hang it from the pipe itself. The important thing is to have less than 15 inches of aerial between the box and the first coil of wire. Make sure there is slack in the wire to the box so no stress is placed on the box or the first cable tie.

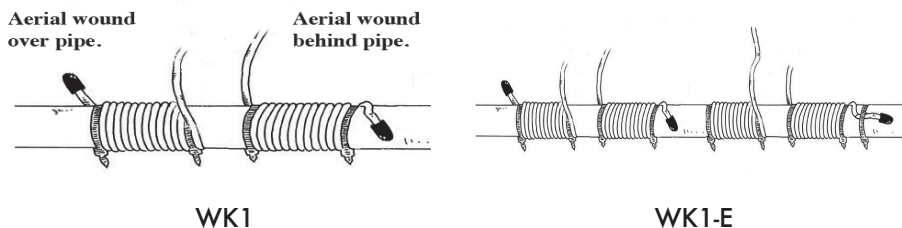
Antennas on all Aqua-Rex units are paired. They must be wound in opposite directions going away from a CENTRAL point. They must be tight on the pipe.

One antenna should start by passing behind the pipe and the other antenna should pass in front. Secure each end of the antennas with a cable tie.

Do not use tape. You must secure both ends properly. The wires must not be loose. All four antennas of the WK1-E must be wrapped around the pipe.

## ALL MODELS

Do not allow gaps between the antenna and the pipe. Windings must be tight and close together except in the grooves of a flexible connection.



**Do** maximise the number of windings per antenna, a minimum of 12.

**If there** is going to be surplus antenna wire, arrange for it to be at the end with the cap rather than the end nearest the control box.

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

## POWER SUPPLY

Both units have a standard USB plug and a USB power supply. Any USB power supply outlet can be used to provide power.

## LIGHTS

The single LED light will flash to indicate the unit is working.

All units have a built in "Guard chip" which senses any irregularity in the micro-chip performance and re-sets the system automatically. No manual intervention or re-setting is required in the event of brownouts or power outages.

## WHAT WILL YOU NOTICE?

Within three to four weeks, existing scale will become softer and will be easy to break off or wipe away. You may notice cloudy water coming from the hot faucets and some loose scale deposits at the bottom of your bath or basin. This is an indication that de-scaling has commenced. If the system was severely scaled, an increase in hot water flow may be observed. You may notice the water becoming hotter more rapidly, with better lathering and the water feeling softer with more foam.

## DE-SCALING THE SYSTEM

You may find that chunks of scale break away from within the pipes and these, in rare circumstances, can block pipes, shower sprays, aerators, heaters and heat exchangers. Be aware that this may happen and can reduce flow until the blockage is cleared. Aerators on faucets and shower heads need to be checked for build up.

## WARNING

**Filters and strainers on appliances and blending valves should be checked on a regular basis for the first few months after installation until the old scale no longer appears.**

## DISHWASHERS

**Aqua-Rex is not very effective for treating water in a dishwasher as it's performance is reduced by the internal pump.** Make sure you use an appropriate hard water detergent and hard water rinse aid such as Lemishine. If you use the correct liquids you will have excellent results.

## SHOWER HEAD AND BATHROOM UNITS

Encrustation of scale will be reduced substantially. Shower heads will be cleaner and will require little or no de-scaling. Loose chunks of scale may become trapped behind the shower heads and aerators which will require cleaning out. You may find deposits of grit blocking very fine shower heads.

## SILICA SCALE

Neither water softeners nor Aqua-Rex can treat silica scale. Silica does not react to acids such as vinegar or muriatic acid while calcium does.

## THERMOSTATS

Because of the increased efficiency of the water heater after the scale is removed you may need to turn down the thermostat to reduce the chance of scalding from the hotter water. You should expect energy savings to occur.

## WATER SOFTENERS

If you have been using a conventional salt filled water softener you should switch over to the by-pass. You may notice an initial deterioration of water quality. **Be patient!** This will gradually improve once your Aqua-Rex has become fully effective.

Aqua-Rex doesn't remove calcium from the water like a conventional softener but it makes it form a powder in suspension in the hot water instead of being dissolved. This means there is less dissolved calcium and the water is softer. If you measure the TOTAL calcium before and after Aqua-Rex it will be the same because normal softener tests can't distinguish between dissolved and suspended calcium. You won't get that slippery feel to the water that the added Sodium produces but you will still get better lather and it is kinder to your skin.

## MAINTENANCE

The Aqua-Rex needs no maintenance or servicing, but check occasionally that the lights are flashing. If the Aqua-Rex stops working, first check that the power outlet is functioning.

If the unit fails to work, or you are not happy with the results, then **PLEASE CONTACT US FIRST FOR ADVICE BEFORE RETURNING THE UNIT.**

Neither Aqua-Rex LLC nor its parent company, Lifescience Products Ltd will accept responsibility for consequential loss as a result of the performance or otherwise of the Aqua-Rex unit.

### 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 of the unit will be reimbursed in full. Call us first before returning it to wherever it was purchased, together with your full name and address and proof of purchase, showing the price paid.

### 20 YEAR MANUFACTURER'S WARRANTY

Lifescience Products Ltd guarantees to repair or to replace the Aqua-Rex treatment unit in the event that it suffers from any manufacturing defect during the first twenty years after purchase. The unit should be returned to us properly boxed and wrapped, together with the proof of purchase, showing the price paid. This warranty excludes external transformers.

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