

need to be concerned about the polarity of the wires.

### **PLUG / TRANSFORMER UNIT**

Plug in the transformer and switch on the power supply. The LED on the unit will flash, indicating that the unit is powered up and that the program is sequencing through the range of frequencies.

To protect the plug/socket from damp and rain, use the heat shrink tube supplied. Slide the heat shrink sleeve over the plug/socket and use a hair dryer to shrink it into place. This process will take a few minutes to generate enough heat. If you wish to unplug the power cable again, you will have to cut the sleeve away, carefully avoiding cutting the cable.

### **HOW THE UNIT WORKS**

Once the unit has been installed correctly on the pool circulation system it will pass a radio signal into the water which causes the calcium ions to precipitate in suspension in the water instead of on the surface of the pool.

Existing scale will also be removed over a few weeks and any staining will disappear with it. Some silica scale may re-appear but it should be considerably less than previously.

### **MAINTENANCE & TROUBLE SHOOTING**

The Aqua-Rex needs no maintenance or servicing but do check occasionally to see that the LED light is flashing. If the Aqua-Rex stops working, check first that the power supply to the transformer is functioning by plugging another appliance or lamp into the outlet and seeing if it works.

**If the unit still fails to work, or you are not happy with the results, before you do anything else contact us by email or phone. Please do not remove the unit before contacting us. Very often the solution to the problem is very simple.**

### **5 Year Manufacturer's Warranty**

Aqua-Rex LLC Guarantees that it will replace the WK1P unit should it suffer from a manufacturing defect during the first five years after the date of purchase. The unit should be returned to the dealer properly boxed & wrapped together with the invoice.

### **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.

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## ***INSTALLATION, OPERATING & MAINTENANCE INSTRUCTIONS*** **AQUA-REX WK1P**

**This product is intended for use on plastic pipe up to 2" diameter on re-circulating systems for swimming pools. It may also be used to treat domestic water supplies on pipe diameter up to 1" where it is exposed to wet or damp.**

**IT MUST NOT BE USED ON PIPE MORE THAN 1" OTHER THAN ON RE-CIRCULATING POOLS.**

The WK1P is fully waterproof so it can be left outside exposed to rain. The antennas and power supply are directly wired to the control box and cannot be removed from the unit. The circuit board is fully encapsulated in epoxy resin.

**The power supply transformer is only rated for internal use and must not be allowed to get wet. It must be protected in the same way as a normal home internal plug.**



## **GENERAL**

If this unit is to be used on domestic water services refer to the WK1 instructions which can be downloaded from [www.aqua-rex.com](http://www.aqua-rex.com). You may cut off the excess wire of the antenna.

The Aqua-Rex WK1P is designed specifically for use on swimming pools. It will substantially (though perhaps not entirely) reduce the amount of calcium scale deposits that occur around the waterline. By removing the scale from the tiles or liner, any staining that is retained by the scale will also disappear.

**It will not remove Silica Scale.** Calcium Scale reacts to vinegar or Muriatic Acid. Silica Scale does not.

It will reduce scale in the filter so the sand is free to act more effectively and may require less backwashing. It will help chlorine or other biocides to be more effective so that the amount used can be reduced for the same effect.

It may also help reduce dissolved solids by encouraging them to precipitate into suspended solids which can then be removed by the filter.

## **LOCATION**

The unit should be installed as close as possible to the pipe. It will operate on any type of pipe material, including corrugated and plastic up to 2" diameter.

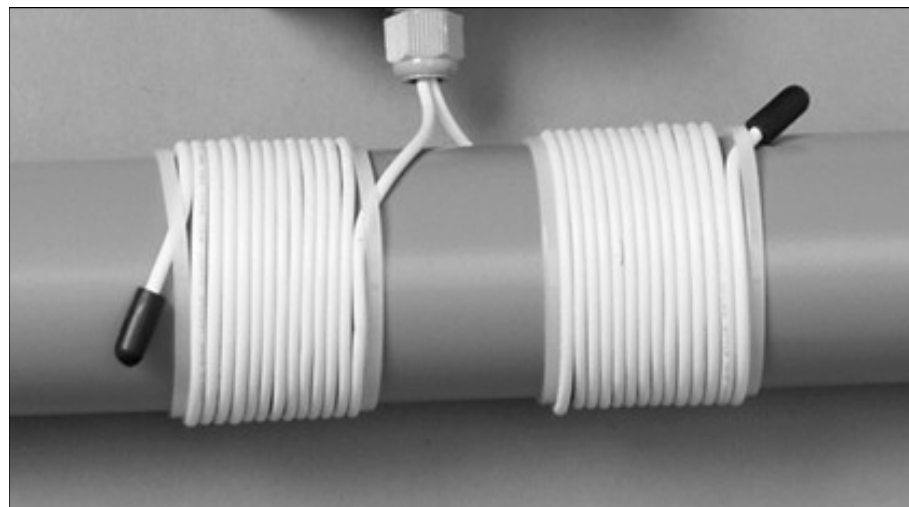
The optimum location is after the pump and before the filter, heater or any other treatment system.

## **SECURING THE ANTENNAS**

Once you have decided where to locate the unit you need to wrap the antennas around the pipe. It is normally easier to start by putting a plastic tie loosely around the pipe. Feed the end of an antenna wire through the tie and secure it so that there is the least amount of antenna left between the tie and the unit. The shorter this length of antenna, the more you have available to wrap round the pipe and the better the Aqua-Rex will work.

Wind the remaining antenna around the pipe so that there are at least 10 turns, more if possible. Secure the other end of the antenna with another plastic tie.

Repeat the process with the second antenna. Start it off in the opposite direction of the first antenna winding it behind the pipe if the



first one started off being in front of the pipe.

If your pool system has corrugated pipe, the antennae can be wound in the grooves, this will not effect the operation of the unit.

It is not important which antenna goes under or over the pipe just as long as they are wrapped around the pipe as tightly as possible. If they are loose the process doesn't work as well.

Do not cut off the end caps at the end of the wires as these prevent the antennas from corroding.

## **SECURING THE UNIT**

Use the fixing screw holes to attach the unit to a firm surface if there is one conveniently nearby. If

not, the unit can hang from the pipe by the antennas or it can be secured to the pipe with additional plastic ties.

## **POWER SUPPLY**

The Aqua-Rex requires a 110 volt outlet for the transformer. The transformer is rated for indoor use only, so it may be necessary to extend the low voltage power cable to an acceptable protected socket. The power cable is nine feet long in total. Additional cable may be spliced into the lead between the transformer and its plug. A waterproof seal should be made over the connections.

Satisfactory tests have been conducted on a cable extension of 500 yards. The low voltage power supply is 9v AC so there is no