

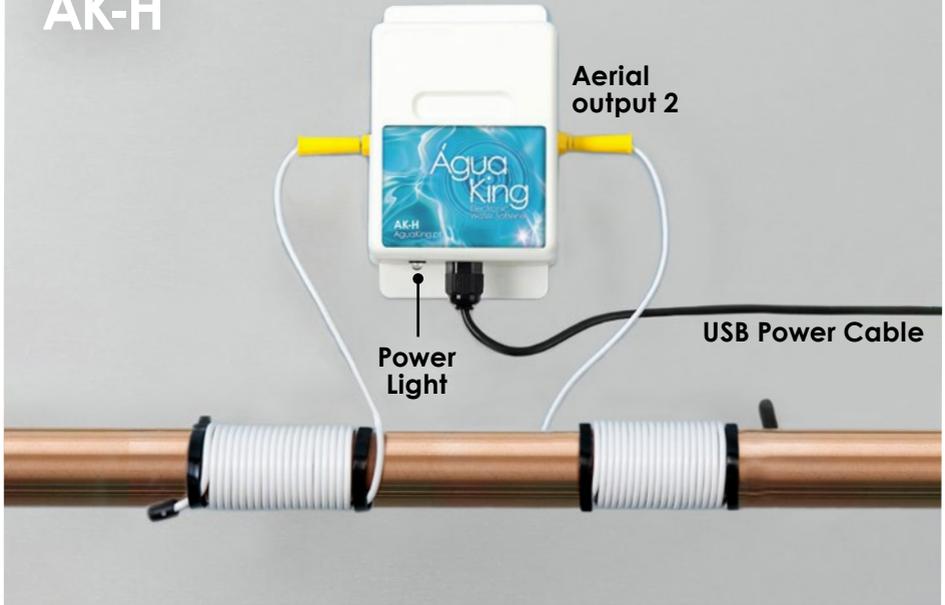
**Limescale,  
this is your  
20-minute  
warning**

**Água  
King**  
Electronic  
Water Softener

Installation,  
operation &  
maintenance  
instructions

**AK-H  
AK-HE**

# AK-H



# AK-HE



## Location

The best place to fit an ÁguaKing electronic water softener 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 ÁguaKing 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.

**Pumps:** Pumps reduce the effectiveness of ÁguaKing so always fit a unit after a pump, never in front of one. In a home with a hot water return we recommend installing ÁguaKing 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. If you have a stainless steel pipe with parallel grooves you need to jump over into a new groove each wrap. Make sure the wires are tight.

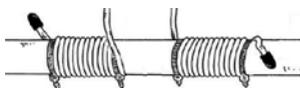
**Main earth bond:** If there is a main earth bond close to the point of installation, make sure the Antennas are downstream (after) the earth bond.

## Installation

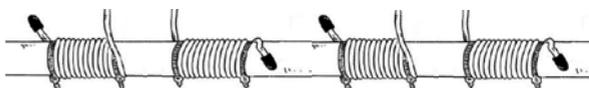
When you have decided where the best place is to install the aerials then decide whether it is best to attach the control box to a wall or to hang it from the pipe itself. The important thing is to have less than 375mm of aerial between the box and the first coil of wire. Make sure there is slack in the wire to the box so no stress is placed on the box or the first cable tie.

Antennas on all ÁguaKing 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 AK-HE must be wrapped around the pipe.

AK-H



AK-HE



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.

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 power supply outlet can be used to provide power. The single LED light will flash to indicate the unit is working.

Both 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 taps 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. 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 taps 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:** ÁguaKing 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. 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 ÁguaKing 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 ÁguaKing has become fully effective. ÁguaKing 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 ÁguaKing 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 & trouble shooting

The AKH and AKH-E needs no maintenance or servicing but do check occasionally to see that the LED light is flashing and that the wires are tight on the pipe. If the unit 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 transformer is cold that means it has failed. Contact us for a replacement. If the unit still fails to work, or you are not happy with the results, before you do anything else contact us on +44 608 811 070 or email us at [info@lifescience.co.uk](mailto:info@lifescience.co.uk)

Please do not remove the unit before contacting us. Very often the problem is very simple to resolve over the phone or by email.

### **100-day money back guarantee**

If you are dissatisfied with your ÁguaKing 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, address and proof of purchase, showing the price paid.

### **5-year manufacturer's warranty**

Lifescience Products Ltd, manufacturer of ÁguaKing, guarantees to replace your ÁguaKing treatment unit in the event of any manufacturing defect during the first five years after purchase. The unit should be returned properly boxed and wrapped, together with proof of purchase, showing the price paid. Lifescience Products Ltd cannot accept responsibility for consequential loss as a result of the performance or otherwise of the ÁguaKing unit.

**Água  
King**  
Electronic  
Water Softener

### **Want to know more?**

Pleased with what your new ÁguaKing AK-H or AK-HE is doing for your water at home? To find out about our complete range of electronic water softeners – for home, garden and pool – or to get installation or maintenance advice, go to [AguaKing.pt](http://AguaKing.pt)

Lifescience Products Ltd are experts in chemical-free water treatment technologies, with a global reputation for providing the very best in environmentally friendly, hard water treatment solutions.

LifeScience Products Ltd.  
Unit 19, Cheltenham Trade Park,  
Gloucestershire, UK, GL51 8LZ  
+44 608 811 070  
[info@lifescience.co.uk](mailto:info@lifescience.co.uk)