



**WK1**



**WK2**



**WK3**



**WK4**

## PHYSICAL WATER CONDITIONERS

### Introduction

Water-King is a non intrusive water conditioner that inhibits scale formation, removes existing scale deposits and partially softens hot water. It requires no plumbing and there is no need for ongoing maintenance nor servicing.

### The technology explained

Water-King uses pre-programmed micro-chips to transmit pulses of electrical charge into the water at varying frequencies and amplitudes. These “signals” cause some of the salts in the water to form sub-microscopic clusters. When the water is then heated, the clusters act as nucleation seeds upon which the calcium carbonate (limescale) precipitates. Instead of the hard encrustation on pipes and heating elements that normally occurs when water is heated, the precipitation takes the form of tiny calcium carbonate crystals that float suspended in the water. These invisible fine crystals are carried away with the flowing water.

### Applications

Field trials conducted over the past eight years have demonstrated the effectiveness of Water-King in most applications where conventional water softeners would normally be used. Water-King is less expensive to install and maintain than ion exchange softeners. In larger applications it is also less expensive and simpler to install than inline magnetic and electro magnetic systems. Water-King requires very little space, no special plumbing, no waste water connection nor access for the supply of salt and it’s storage. There is no head loss nor any additional corrosion problems.

### How Is The Water Softened Without Removing The Calcium ?

The clusters created by Water-King stimulate the conversion of more of the dissolved calcium bicarbonate in the water into crystals in suspension than would otherwise occur. The resulting hot water, with less calcium bicarbonate, is now chemically softer. Soap, which reacts adversely with calcium bicarbonate, will create more lather despite the fact that the total amount of calcium, dissolved and suspended, remains the same. Water-King is the only electronic device of its kind that has been proven by independent laboratory tests to produce softer water.

### Drinking Water

Unlike ion exchange softened water, where minerals are removed and replaced by sodium, Water-King treated water is suitable for drinking. There is no need for a separate drinking water supply, no health risks and no salt effluent. The problems of head loss and corrosion do not occur.

### Removal of Existing Scale Deposits

Water-King is very effective at removing existing scale deposits from water heaters, calorifiers and pipes. Descaling occurs with in a few weeks. The scale breaks away in lumps as it loses adhesion with the surface that is encrusting. In existing systems that are badly scaled it may be worth considering fitting a backwash filter, such as the Judo JRSF, to the hot flow from the water heater to protect blending valves and other appliances. For further information on the JRSF please [contact us](#).

### Lifecycle Costs

Running costs of all units is less than \$35.00 per annum. The design life is 25 years with a 5-year manufacturer’s warranty. Water-King has a no quibble 100-day money-back satisfaction guarantee,.