

“No Salt Softener” That Really Works

Aqua-Rex is a Physical Water Conditioner; it is an alternative to a conventional water softener. It is not quite as good as a softener but it doesn't need salt, servicing or replacement cartridges and you don't get that slippery feel to the water. It is simple to install, just wrap the wires around the pipe, securing them with zip ties, no pipe cutting or inserting a bypass or waste. It only takes a few minutes, then plug it into an outlet. It is a truly “fit and forget” product with a design life in excess of 25 years.

Aqua-Rex does three things. It makes calcium form as a powder in suspension in the water, like chalk dust, so it can be carried away by the flow of water instead of sticking to pipes or heating surfaces. Secondly it gets rid of old scale. Any calcium that is already stuck to surfaces, in pipes, showerheads or heaters, will break away from the surface where it is attached and then gradually wear down into finer particles. This process happens very quickly, within a few weeks of installation, and then it settles down to producing just fine powder from the new scale. The third thing it does is to partially soften hot water, (more lather—less detergents, better for skin and hair) but this is a by-product of the process, it is not the process itself.

Aqua-Rex is actually a very low powered radio transmitter, it is NOT a magnet. It generates ultra high frequencies which change the characteristics of certain minerals in the water, principally iron, so that they then attract the calcium when it starts precipitating. Calcium Bicarbonate, the dissolved form of calcium, is unusual in that it has to stick to something when it starts forming, it won't just form on itself. Normally it sticks to pipes and heaters but, by generating what we call nucleation seeds out of existing minerals in the water, the scale is attracted to them rather than the surfaces. It becomes a very scale friendly environment so more scale forms than normally, albeit as a powder in the water. There is therefore less dissolved calcium remaining in the hot water, so the water is chemically softer.

Quite how Aqua-Rex breaks down the existing scale is still a mystery. There are lots of theories but none of them explain all the phenomena that we see actually happening in the field. We just accept it is going to happen and plan a strategy to deal with the scale that will come out of the system.

One of the unique characteristics of this radio transmission technology is the signal travels both upstream and downstream from the unit. This means that installing one on the cold inlet to the water heater will actually treat all the cold water in the house. It can be installed anywhere on a cold pipe and it gives whole house treatment, its not just a heater treater.



The Aqua-Rex WK1 – treats the whole home for around \$300



The Aqua-Rex WK5 – treats up to 6” pipes for commercial applications and cooling towers.

As well as treating the whole home with the WK1 at around \$300, Aqua-Rex has a range of units to treat up to six inch pipes. These are used on any kind of application where scale forms: swimming pools, cooling towers, misters or irrigation systems. You can put it on any type of pipe—it is great for tankless heaters, (in the UK we have been treating them for 18 years), normal heaters or boilers—gas or electric, on hotels, apartment buildings, prisons, offices, military bases, manufacturing plants, hospitals, assisted living, social housing—any where that scale forms. Aqua-Rex is available from many Plumbing Supply Houses. Details are on the website www.aqua-rex.com. **It's technology you can trust; try it and see for yourself.**

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