Planning the Installation

Always observe the Water bye-laws. Please ensure there is only one rising main to the property. Check the water pressure (see note 1), locate the rising main, drain facilities and electricity supply. Allow room for access, maintenance and filling with salt.

Siting the Softener

Where possible this should be close to the rising main. Take care to allow for hard water draw off points, ie; drinking tap and outside tap. The distance between the unit and a drain should be as short as possible.

IMPORTANT – DO NOT locate the unit where it or its connections (including the drain and overflow lines) will ever be subject to room temperatures under 32°F (0°C) or over 120°F (49°C). If you are siting the water softener within a cupboard, please ensure that the base is adequately supported. If you are planning to install the water softener above ground level, e.g; in the loft, the following instructions should be strictly adhered to. The water softener should be installed within a container of not less than 25 gallons capacity, to which there shall be an over-flow pipe not less than 3/4” in diameter. The overflow shall be connected not less than 6” below the height of any electrical components mounted on the water softener.

Plumbing Systems

Traditional:

For traditional plumbing systems with storage tanks our standard models are recommended and should be installed using the kit supplied. Where water pressure is likely to exceed 5 bar/72psi at peak times a pressure limiting valve should be fitted.

Systems Using Combination Boilers and Unvented Fully Pressurised Systems:

For these systems we recommend the use of our ‘Hi-Flo’ hoses in conjunction with full flow lever isolating valves.

Backflow Prevention Device

In single dwellings a check valve complying with BS6282 Part 1 should be correctly fitted. All other installations require a double check valve.

Drinking Water

The tap to be used for drinking water must be left on the hard water supply (see Fig 1).
Check Materials

Before commencing, please ensure you check the contents of the installation kit.

Copy to be confirmed

1.0 Pressure Test

It is VERY IMPORTANT to perform a pressure test and it MUST be carried out before you commence any further work. Low or high pressure could result in damage or non-operation of the water softener. Test the pressure with a gauge at the kitchen tap or outside tap. If in doubt we advise you to fit a pressure limiting valve. If daytime pressure is above 5 bar/72psi fit a pressure limiting valve. If daytime is less than 1.7 bar/25psi a pressure pump is required.

2.0 Connect Bypass Valves

Use the three valves provided to form a bypass arrangement as shown in Tee off to Hard Water Services. The non-return valve must be fitted to the rising main prior to the inlet valve. Note: ensure there is only one rising main to the property, also bear in mind the possibility of the rising main being teed off to other locations before the main stopcock.

3.0 Inlet and Outlet Connections

The inlet and outlet connections may be run in hose as shown (supplied with kit) or in copper tube. DO NOT use washing machine hoses as they will contaminate the water. If using the supplied hoses screw onto inlet and outlet connections (Fig 1). We recommend the use of hose as it facilitates plumbing and any subsequent servicing (see Plumbing System section on front page).

4.0 Drain Connection

Push the flexible drain hose onto the white barbed connector as shown in Fig 1 and secure with the jubilee clip provided. Run the drain hose to a stand pipe trap or to a drain. A minimum air gap of 20mm must exist between the end of the drain hose and the top of the drain grid. Softened water will have no adverse effect on a septic tank. You may extend the hose using 15mm copper tube if required. You can extend up to 9 metres if you have 40psi daytime pressure. Drain hose must not be kinked or restricted in any way as this will cause overflowing.

4.1 Frost Protection

If the drain hose is run outside it must be vented, to empty the pipe after regeneration, or insulated. This is to prevent freezing, which would otherwise prevent regeneration and cause overflowing.

Note: A Drain Vent is available from the supplier, if required.

4.2 Raised Drain Hose

If you have a water pressure of 40psi or more, you can raise the drain a maximum of 2 metres.

5.0 Overflow Connection

The hose for the overflow should be cut from the length of drain hose. The overflow hose should be connected to the 1/2" hose spigot on the rear of the cabinet (see Fig 1). No clip is required. Run the hose downhill to the outside of the building without kinks or restrictions or to a stand pipe. Take care that overflow does not discharge where damage could occur. If the water softener is fitted in a cellar the overflow can be run to a storage tank. Do not elevate overflow hose.
6.0 Test and Check All Models for Leaks

Turn on main stopcock slowly, set the bypass valve to shut position, inlet and outlet valves to open positions. PLEASE CHECK FOR LEAKS! The water softener is now letting water pass through it to the drain. The first water produced may be amber coloured and this is quite normal.

7.0 Electrical Connection

Connect the transformer supplied to a suitable electrical supply and plug the end of the fly lead to the socket on the bottom left hand side of the control facia. The motor will now run and drive the control to the soft water position, this can take up to ten minutes.

8.0 Set Programmer

Obtain your water hardness by using test kit provided. To set the programmer, please refer to the instructions on the facia panel.

9.0 Fill with Salt

Now fill the cabinet, about three to six inches from the top with tablet salt. If you are using granular salt, only fill the cabinet half way. Note: Maximum salt capacity is 25kg.

10.0 Raised Drain Hose

Pour nine litres of tap water into the cabinet.

11.0 Installation Complete

Your installation is now complete and will provide you with softened water.

12.0 Blending Control

All water softener units are factory set to produce water which is 100% soft. If you prefer water that is less soft, turn the green blending control knob (see Fig 1) anti-clockwise until the water meets your requirements.

Our Service department is happy to help you with any queries or questions you may have. You can contact us on 01376 334200 for both service and technical advice. Before calling out one of our Service Engineers, please check through the installation and programming instructions as call-outs that are not attributable to a fault on the water softener are chargeable.
**User Instructions**

### 1.0 Regeneration

You may, on occasion, hear water running in to the drain. This would indicate that your water softener is regenerating. During regeneration the timer display will show any of the following to indicate that your water softener is in regeneration mode RL, R1, R4, R5 or R6. Should your machine display an error code e.g. E1 or E2 please contact our service department on the telephone number below.

### 2.0 To Bypass the Water Softener

Turn the inlet, outlet and bypass taps through 90° as shown in Fig 2. Please switch off the electrical supply.

### 3.0 User Maintenance

Your Aqua-Dial water softener requires a minimum amount of maintenance, just simply keep topped up with salt. The water softener will require topping up from time to time depending on individual household usage (see point 9). In the unlikely event that a high water level occurs within the cabinet, please take the following action;

A. Bail out any excess water in the cabinet.

   NB: The water level inside the cabinet under normal circumstances should be one third to half full, without the addition of salt.

B. Initiate a manual regeneration by means of pushing the ‘TAP’ emblem on the keypad (see below).

Whilst we would expect your water softener to provide you with many years of trouble free softened water, we do recommend that the machine is serviced on a bi-annual basis. For a competitive quote, please contact

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As part of our policy of continuous improvement, Aqua-Dial reserves the right to alter specifications without prior notification.

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