Great Water M1D2 Water Softener

Installer and User Guide

Effective January 2019



Great Water Limited Unit 9b Camphill Industrial Estate West Byfleet Surrey KT14 6EW

> 01932 245783 www.greatwater.co.uk info@greatwater.co.uk

Important: please don't forget to register your Warranty for 7 years Parts and 2 Years Labour Guarantee

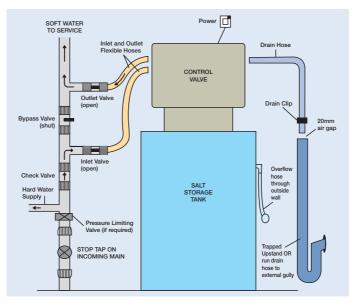
Programming and Installation Instructions

Thank you for choosing a Great Water product. Please read the following instructions carefully to ensure a trouble free installation.

1. Planning The installation

- · Always observe the relevant water regulations.
- Make sure your selected location allows sufficient space and access for salt filling and maintenance.
- Make Sure your mains water pressure is within the specified parameters of 1.5 5 Bar. If the daytime pressure exceeds 3.5 Bar then we recommend a Pressure limiting valve be installed to 5 Bar
- · Identify how and where you will be able to run your waste and overflow connections
- Identify your available power source.

The water softener should be installed as per the diagram below.



Notes

- a. Keep the distance to the drain as short as possible and ensure that the drain and overflow connections are not subject to freezing.
- b. If siting the softener in a cupboard or in a loft ensure that the base is flat strong enough and adequately supported for the weight of the water softener including salt (approx. 40kg)
- c. If the softener is to be sited in a loft it is strongly recommended that the softener be housed within a 25 gallon storage (safety) tank with a minimum ¾" overflow connection. It is essential that the overflow connection be as low as possible on the safety tank and in any event below the height of the overflow connection from the water softener.
- d. Check valve. Domestic ion exchange water softeners are considered a Fluid category 2 risk. Therefore a type EA or EB single check valve should be fitted to the pipework immediately before the tee feeding the water softener as a suitable backflow prevention.
- e. Drinking Water it is recommended that a hard water supply be used for the kitchen cold drinking water and any outside taps.

CHECK

Check that you have the correct installation kit for your application before commencing the works.

- 15mm Standard Kit (SK-15) Suitable for Conventional plumbing systems with roof tanks.
- **15mm High Flow Kit (HFK–15)** Suitable for 15mm systems with mains fed appliances e.g. Combi Boilers, Electric Showers etc.
- 22mm Pressurised System Kit (PSK-22) Suitable for unvented and pressurised systems with 22mm plumbing connections.

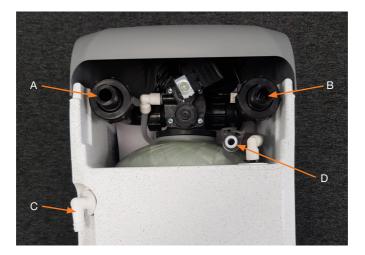
Available from your merchant supplier.

WATER PRESSURE – Be Careful – Daytime pressure of 3.5 Bar (50 psi) can easily exceed 100psi overnight. If in doubt fit a pressure limiting valve set to 5 bar.

2. Inlet and Outlet Connections

Connect the elbow end of the hoses provided to the inlet and outlet connections on the rear of the softener.

Important: under no circumstances should you use washing machine hoses or plumb the water softener in solid copper pipe.



- A = Inlet Connection
- B = Outlet Connection
- C= Overflow Connection
- D = Waste connection

3. Drain Connection

Connect the clear Drain/Overflow hose to the connection D at the rear of the softener using the herbie clip provided to secure it.

Run the drain hose to either an upstand or an outside drain. A minimum 20mm air gap should exist at the and of the drain line to prevent the risk of back siphonage.

If necessary it is possible to extend the drain hose by connecting to a 15mm copper tube. The maximum run for this is 4 meters with a minimum daytime pressure of 40psi (2.8 Bar). If a run of over 4 meters is required then 22mm pipe should be used.

Ensure the drain hose is adequately fixed to the copper pipe.

The drain hose must not be kinked or be likely to kink over time as this will cause overflow from the machine.

If necessary the **waste pipe only and not the overflow** can rise by up to 1 meter if the daytime pressure exceeds 2.8 Bar.

The waste from a water softener is suitable for treatment via a septic tank where necessary.

Under no circumstances should the softener waste and overflow share the same pipe.

4. Overflow Connection – Important

The hose for the overflow should be cut from the clear braided hose supplied.

The overflow connection is the $\frac{1}{2}$ " spigot at the rear of the cabinet (C in Fig 2) no fixing clip is required however the hose should be pushed securely on to the spigot.

The overflow must be run downhill and terminate immediately through an outside wall without kinks or restriction.

5. Flush pipework and Test for Leaks

With the water softener inlet and outlet valves in the closed position and the by-pass valve open slowly open the mains stop valve to flush the pipework. Check For leaks.

6. Electrical connection

With the power off, connect the transformer to a suitable 13amp power supply. **IMPORTANT:** make sure the power supply is continuously live.

Connect the fly lead to the plug at the rear of the water softener.

7. Check Your Water Hardness

Using the test kit supplied

Run the hard water for one minute.

Take a 10ml sample.

Add drops of the green solution to the sample. This will turn red.

Count the drops while gently mixing the drops with the sample.

The sample will turn from red to green.

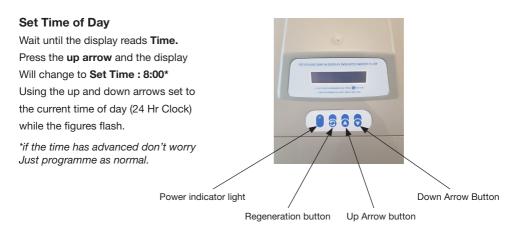
The **number of drops required** to change the sample green **is the water hardness setting** you will need for setting the controller.

8. Setting The Controller

Turn on the power and the softener will display Welcome

The display will automatically alternate between Time and Hardness.

To commission the water softener you will need to set both Time (24hr Clock in hours and minutes) and Hardness as determined above.



Set Water Hardness

Wait until the display changes to **Hardness** then press the up arrow and the display will change to Set Hardn:10

Using the up and down arrows set the display to the number obtained in your hardness test.

That's it you've finished the programming. The display will now revert to the alternating display.

If at any time you need to re-programme or re-set any figure then just wait until the display changes to the relevant setting and press the up arrow to get started.

9. Flush the Water Softener - IMPORTANT

Close the by-pass valve and open the inlet and outlet valves (fig 1) and Check for leaks.

Open a mains soft tap and allow this to run for at least 5 minutes. This will purge any air and resin dust (which may appear brown or orange in colour) from the system.

Fill the softener with a good quality Tablet salt. To within 100mm of the top of the cabinet.

The water softener will not generally have water in the salt tank and is known as a dry salt softener. When regenerating the softener will add water to the salt tank as required.

Part of this commissioning only, add 1 litre of water to the salt tank.

If at any time the softener has a significant amount of water in the salt tank and the softener is not regenerating then please contact us for advice or a service visit.

Great Water: 01932 245783 info@greatwater.co.uk

Standard Water Softener Warranty

Your new M1D2 water softener has been designed to give you many years of trouble-free service and is guaranteed against faulty materials and workmanship for a period of 24 months from date of purchase. Under the provision of this warranty agreement the warranty liability is limited to the repair or replacement cost of the unit only and is subject to the terms shown below.

This warranty provides benefits, which do not affect your statutory rights. Great Water Limited (GWL) will replace or exchange any necessary parts to repair free of charge any domestic water softener supplied by GWL or its agents located within the defined "Hard water area"* of Mainland England. See Hard Water Map on the next page. Installations outside this area will automatically be subject to a 24-month parts only "exchange" warranty.

Please note the following general exclusions apply to our warranties.

Repairs due to breakdown caused by but not limited to:

- Call out caused by incorrect installation if you have any queries when installing your water softener, please call for technical advice 01932 245783.
- The installation kit is only covered by the OEM 12 month parts exchange warranty. Under no circumstances should you plumb in the Water Softener in rigid copper pipework or use any other hoses than those provided by Great Water Limited.
- Use of the unit for purposes for which it was not designed or intended. This water softener is designed for mains cold water applications only. For any other applications please contact 01932 245783.
- Damage caused by excessive water pressure. We strongly recommend a 5 bar (72.5 psi) pressure limiting valve be installed where daytime static pressure exceeds 3.5 bar (50.7 psi).
- Any defect caused by malicious or willful action, negligence, misuse, or third party interference.
- · Any defect or damage caused by dirty or fouled mains water supply.
- Any defect or damage caused by fire, lightning, flood, frost, or other extraneous cause including failure of the public electricity supply.
- · Consequential loss arising as a result of a defect occurring in the water softener or installation.
- · Any salt used or wasted as a result of a defect or damage within the water softener.
- Any water used or wasted as a result of a defect or damage within the water softener
- Any damage to equipment other than the water softener resulting from hard water.
- Any damage to equipment other than the water softener resulting from softened water.
- The effect of aggressive water, the degradation and/or blinding and/or chlorine attack on the ion exchange resin within the water softener.
- Call out due to incorrect salt type, running out of salt, salt fines, or salt bridging.
 Use Only Good Quality Tablet Salt. For advice on correct salt type please call 01932 245783

Note: Proof of purchase will be required in order to support any warranty claim. Failure to produce your Proof of purchase will result in the warranty being 27 months from date of manufacture.

Extended Warranty and After Sales Service

Extend Your Parts Guarantee to 7 Years

In order to extend your parts warranty free of charge, simply log on to www.greatwater.co.uk within 90 days of purchase, register your details, and we will confirm your new 7 year parts guarantee.

Additional Exclusion

Normally serviceable parts including but not limited to:

- · Dynamic seals deemed subject to "normal wear and tear"
- Scratches, scuffs or other wear and tear on cabinet

After Sales Service

Your water softener will treat on average 58 tonnes of water per person per year and is operating every time someone uses water in your home.

In order to keep your equipment in full working order and operating efficiently, Great Water Limited strongly recommends 2 yearly servicing.

We will inform you when this small service is due and arrange a convenient time for our engineer to call.

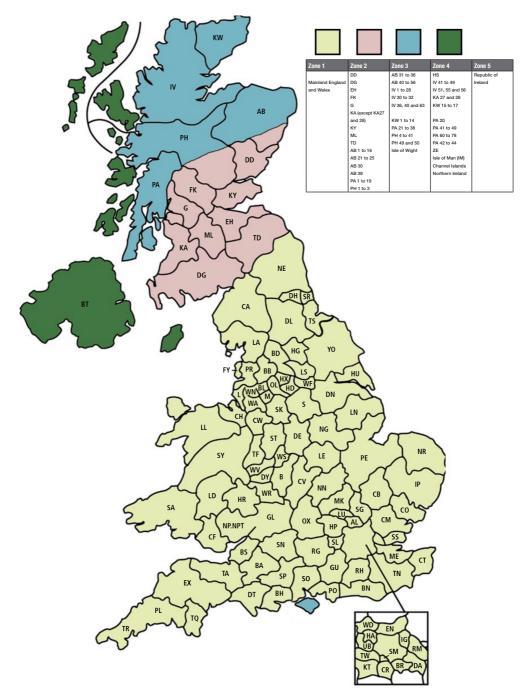
Hard Water Area of Mainland England

B, BA, BH, BS, CB, CM, CO, CT, CV, DT, GU, GL, HP, IP, LE, LONDON (ALL), LU, LN, ME, MK, NG, NN, NR, OX, PE, PO (MAINLAND), RG, RH, SG, SL, SN, SO, SP, SS, TN

Note: Be sure to register your Warranty at www.greatwater.co.uk to ensure that the appliance is registered with the factory and the warranty becomes validated.

The above does not affect your statutory rights

Hard Water Map



Extra Regenerations

To start an additional automatic regeneration press the regeneration button and release DO NOT HOLD THIS BUTTON IN.

The display will show **regen in 15 sec** and then begin a regeneration when the countdown reaches zero.

The display will change to **BRINE FILL** for a few minutes then **REGEN PENDING** for 2 hours. During this time nothing will appear to happen but the water softener is dissolving salt to a concentrated brine solution in order to carry out the regeneration. After The 2 hours have elapsed the water softener will automatically carry out the remainder of the regeneration cycle. Softened water is available to you during the **REGEN PENDING** period.

Further Information

Do not worry if your water softener regenerates during the day. This is the Self Protect Programme initiating an additional regeneration as the softener does not have sufficient softened water to last until the next scheduled regeneration time at 2.00am

A regeneration will generally last between 60 -90 minutes. During this time the softener automatically by-passes to ensure continuous water supply.

The normal default regeneration time is 2.00am when in most households little or no water is being used. If you want the water softener to regenerate at another time then simply adjust the clock. Eg for 4.00am regeneration set the clock 2 hours slow.

Salt should not be allowed to run down we recommend keeping the water softener at least half full.

Going on Holiday

We recommend that you turn off the water to the whole house when leaving the property for any extended period or holiday. On your return after switching the water back on introduce an extra regeneration as described above.

Don't worry if the water is discoloured on your return this is perfectly normal and safe. It will rinse away after a few litres of water have been used.



Great Water Limited

Unit 9b Camphill Industrial Estate, West Byfleet, Surrey KT14 6EW 01932 245783 www.greatwater.co.uk info@greatwater.co.uk