

# ATLANTIS WATER TREATMENT LTD

### INSTALLATION INSTRUCTIONS

## MODEL OT210

Congratulations on your new purchase. Atlantis Water Softeners are built with pride to the highest possible standards. Please take care with the installation to ensure trouble free operation. If you have any queries please feel free to contact our Technical Department. We have many years experience and our technical staff will be pleased to advise you on 01440 761500.

#### **BEFORE INSTALLATION**

Test the water pressure (see Item 1). Locate the rising main, drain facilities and electricity supply. Ensure there is only one rising main. Always observe the Water bylaws. Allow room for salt filling, maintenance etc.

#### **FIND THE BEST LOCATION**

The softener requires:

A mains water supply, a power supply, a drain outlet & overflow.

If possible site the softener near to the rising main. Make provision for any hard water draw off points, for example outside taps and drinking water taps. IMPORTANT: Make sure that the softener and pipe work is not subjected to freezing or unduly high temperatures. If installing above ground level we recommend that 3/4" rigid overflow pipe is used.

#### **INLET & OUTLET CONNECTIONS**

Your softener will have either a standard or a high flow kit, depending upon what was ordered. The standard 15mm kit is for use on traditional plumbing systems with a 15mm main, and a storage tank in the loft. The Hi-flo 22mm kit is for us on mega-flow type unvented systems with a 22mm main.

#### **DRINKING WATER**

A tap to be used for drinking water must be left on the hard water supply.

#### **INSTALLATION KIT**

#### The standard 15mm kit comprises:

- 1 pair of standard inlet hoses (white)
- 1 white overflow hose (1.5m)

3m red drain hose

- 1 x 3/4" overflow nut
- 1 x 3/4" flexible hose adaptor elbow
- 1 Transformer
- 1 Water Hardness test kit
- 3 x 3/4" washers and 1 x 3/4" screen washer
- 1 set of bypass valves
- 1 x ½" to 3/8" speedfit drain adaptor
- 1 drain saddle clamp

#### The Hi-flo 22mm kit comprises:

- 1 pair of Hi-flo hoses (black)
- 1 white overflow hose (1.5m)

3m red drain hose

- 1 x 3/4" overflow nut
- 1 x 3/4" flexible hose adaptor elbow
- 1 Transformer
- 1 Water Hardness test kit
- 3 x 3/4" washers and 1 x 3/4" screen washer
- 1 set of bypass valves
- 1 x ½" to ¾"speedfit drain adaptor
- 1 drain saddle clamp
- 2 x 19mm straight connectors
- 4 x 3/4" nuts
- 4 x jubilee clips
- 2 x 19mm bent connectors

#### 1. TEST PRESSURE

The water pressure needs to be between a minimum of 25 PSI and a maximum of 70-PSI (daytime). Excessive pressure will cause noisy regeneration, overflowing and generally shorten the life of the softener. If the water pressure is too high fit a pressure-limiting valve, if it is too low a pressure pump is required. Test the pressure at the cold kitchen tap or an outside tap. Test kits and pressure-limiting valves are available from your supplier or direct from Atlantis.

#### 2. BYPASS VALVES

Turn off the water supply and make up a bypass arrangement as shown in fig. 3. You will need to tee off to any hard water outlets before the bypass set. If fitting a pressure-limiting valve ensure it is fitted before the inlet to the softener.

#### 3.WATER INLET AND OUTLET CONNECTIONS

If you are using the flexible hoses ensure that the rubber washers are in place and screw on to inlet/outlet valves. Connect the other ends of the hoses to the inlet/outlet of the water softener. Tighten firmly to avoid leaks

#### 4. DRAIN CONNECTION

Screw the speedfit connector on to the brass non-return valve (as shown in fig. 3). Push the red drain hose **fully** into the speedfit connector. Find a suitable location for the drain clamp then fit the adhesive seal inside, now clamp in place and drill through the threaded connection into the drain pipe with a 8mm drill. Push nut over drain hose and screw on to drain clamp. The hose can be run to a standpipe or an outside gully.

Note: IMPORTANT. The drain and overflow must be run separately - NOT joined together.

Note: IMPORTANT. If running the drain outside ensure it is properly insulated otherwise it will freeze and cause the softener to overflow.

Provided you have a minimum of 40-PSI inlet pressure you may extend the drain hose up to 30 feet. If the supplied hose is too short it may be extended using 15mm copper tube. The discharge from the softener may be run into a septic tank if required.

Note: IMPORTANT. Ensure that the drain hose is not kinked or restricted, as this will cause the softener to overflow.

Running the drain hose uphill - Provided you have at least 40-PSI inlet pressure the drain hose may be raised up to eight feet.

#### 5. CONNECTING THE OVERFLOW

You can use the flexible overflow pipe supplied, OR you can use 3/4" rigid overflow pipe (not supplied). **Note: IMPORTANT. It is essential that the overflow runs downhill.** 

Use the white flexible hose where the softener is installed on a ground floor and the overflow run is short (see fig. 2). Use a rigid overflow pipe where the softener is installed above ground level or the overflow run is longer than the hose supplied (see fig. 1). If terminating the overflow outside, ensure that this is not done where damage could occur.

#### 6. TURN ON WATER SUPPLY

Slowly turn on the main stopcock; set the bypass valve to the shut position, and the inlet and outlet valves to open position. The softener is now letting water pass through to the drain. The first water produced may be amber coloured this is normal.

#### 7. CONNECT POWER SUPPLY

Plug the transformer supplied into a suitable outlet and connect the end of the flying lead into the socket on the rear of the softener.

#### **8. SET PROGRAMMER**

Obtain your water hardness setting by using the test kit provided. The chart on the box will indicate which is the correct hardness setting to use. To set the programmer, press the select button on the front of the softener repeatedly until the appropriate setting is illuminated.

#### 9. ADD SALT

Fill cabinet, about three to four inches from the top with tablet salt. If using granular salt only fill the cabinet half way. Maximum salt capacity 20kg.

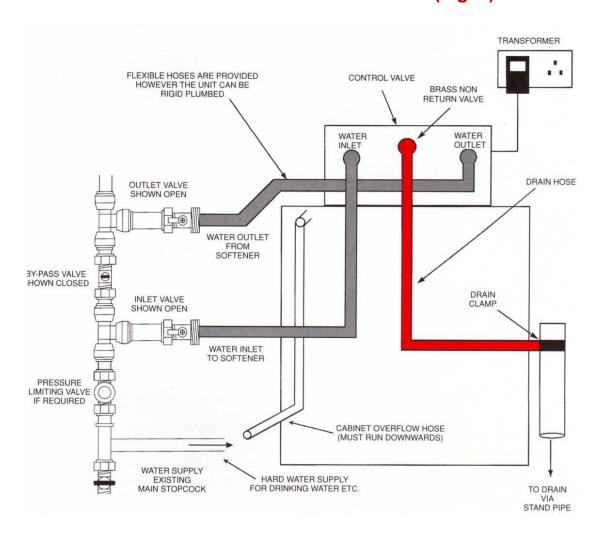






Flexible overflow (Fig. 2)

### **REAR VIEW OF WATER SOFTENER (Fig. 3)**



#### **HOW IT WORKS**

Hard water enters the softener through the inlet and travels down through a bed of ion exchange resin. As the hard water flows through the resin the calcium and magnesium ions in the hard water are exchanged for sodium ions. The softened water then travels out through the flow meter and into the house. The softening capacity of the resin is limited and it therefore needs to be recharged or regenerated as we call it. The frequency of regeneration depends on how much water is used and how hard the water is.

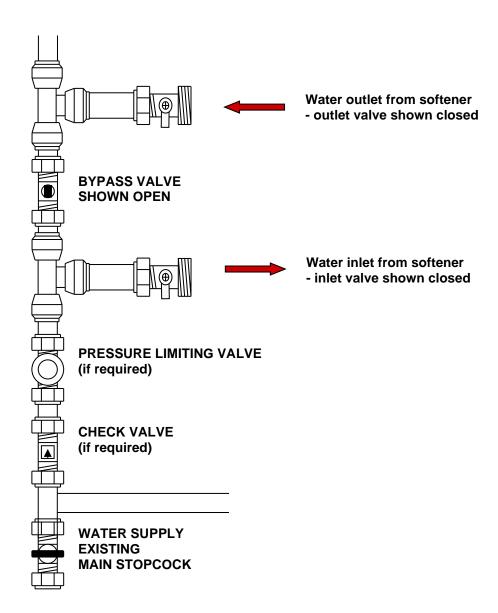
The electronic circuitry in your softener monitors water use and the remaining capacity. It then decides when to regenerate and whether to do a full or less than full regeneration. If the softener has some capacity left when the regeneration is started then only the exhausted resin is regenerated. When the softener is regenerating the right hand light flashes continuously. If the electronics detect a fault in the system then all four lights flash together.

For further information, full details of the flashing light sequences during regeneration, and Troubleshooting information, please refer to the Atlantis AT210 Owners Guide, supplied with your water softener.

Need help? If so call our technical department on 01440 761500. Please be sure to check through the installation and programming instructions before calling out one of our Service Engineers as call-outs not attributable to a fault on the softener are chargeable.

#### SWITCHING OFF YOUR WATER SOFTENER

To switch off your water softener, close the inlet and outlet valves and open the bypass valve by turning all three valves through 90 degrees, then turn off the electrical supply.





Scanning our QR code, will take you direct to our Installation Video, which gives you step-by-step instructions on how to install an Atlantis AT210 water softener

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