

# Simplex Water Softener Installation Instructions

Congratulations on your new purchase. Our Water Softeners are built with pride to the highest possible standards. Please take care with the installation to ensure trouble free operation.

## **BEFORE INSTALLATION**

Test the water pressure (see Item 1). Locate the rising main, drain facilities and electricity supply. Ensure there is only <u>one</u> 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 the standard overflow pipe and connector are replaced with \(^3\)\circ^n rigid overflow pipe and tank connector.

# **INLET & OUTLET CONNECTIONS**

Your softener is supplied with 3/4" BSP connections as standard. We recommend the use of the Softenergeeks Hi-Flo 22mm installationwith this model.

## **DRINKING WATER**

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

#### 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.

#### 2. BYPASS ARRANGEMENT

Turn off the water supply and fit the bypass manifold as shown or install a set of three bypass valves. You will need to tee off to any hard water outlets before the inlet. 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

Use a jubilee clip to connect the white drain hose to the drain barb on the rear of the control valve. 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. Connect the brine tube.

A length of red brine tube has been connected to the control valve. Push the free end into the connector on the brine tank.

# 6. CONNECTING THE OVERFLOW

Use the flexible white overflow pipe supplied or a rigid 3/4" pipe if required.

Note: IMPORTANT. It is essential that the overflow runs downhill.

If fitting above ground level, then adequate provision needs to be made for any overflow or leakage that may occur. If terminating the overflow outside, ensure that this is not done where damage could occur.

## 7. 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 first water produced may be amber coloured this is normal.

## 8. CONNECT POWER SUPPLY

Plug the power supply into a suitable outlet and connect the end of the flying lead (if fitted) into the socket on the softener.

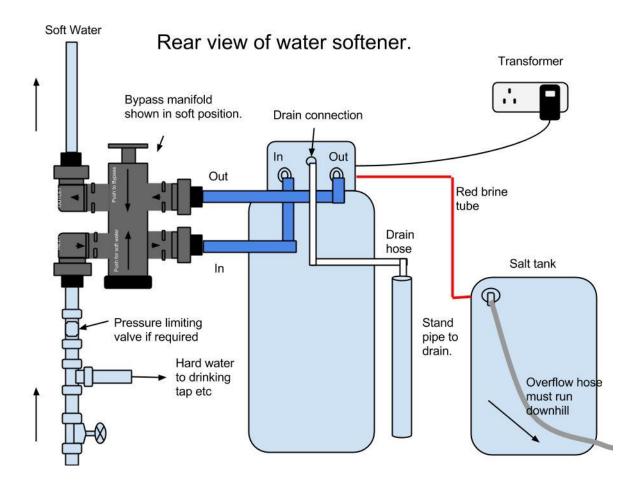
#### 9. SET PROGRAMMER

See separate instruction sheet.

# 10. ADD SALT

Fill cabinet with tablet salt. If using granular salt only fill the cabinet half way.

# **Installation Diagram**



## **HOW IT WORKS**

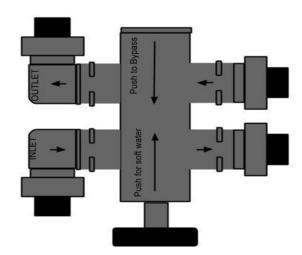
Hard water enters the softener through the inlet and travels down through a bed of ion exchange resin. As the hard water flows through the resin the calcium and magnesium ions in the hard water are exchanged for sodium ions. The softened water then travels out through the flow meter and into the house. 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.

# **SWITCHING OFF YOUR WATER SOFTENER**

To switch off your water softener push the piston on the bypass valve to the bypass position, then turn off the electrical supply.

# To Bypass Push Piston to Bypass as Shown



For technical help please go to softenergeeks.co.uk