



CalSoft Electrical Specification



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SOFTENER CAPACITY

	Litres of water softened per day					
Water Hardness as CaCO3	200 ppm	300 ppm	400 ppm	500 ppm	600 ppm	
450 g salt setting	1260	840	630	500	420	
750 g salt setting	1960	1310	980	780	650	
1000 g salt setting	2240	1490	1120	900	750	

Note : 1° Clark = 14.3 ppm hardness as CaCO3

Maximum persons in the house based on 150 l/person/day

Water Hardness as CaCO3	Up to 200 ppm			400 ppm- 500 ppm	
450 g salt setting	8	6	4	3	3
750 g salt setting	13	9	7	5	4
1000 g salt setting	15	10	7	6	5

Note : 1° Clark = 14.3 ppm hardness as CaCO3



CONNECTIONS

Inlet: $3/_{4}$ " bsp male parallel **Outlet:** $\frac{3}{4}$ bsp male parallel **Overflow:** $1/_{2}$ " hose connector **Drain:** $1/_2$ " hose connector Electrical supply: 240v 50Hz, 3 pin UK plug, fused 3 amp



OPERATING CONDITIONS

Maximum operating water pressure: 8 bar Minimum operating water pressure: 1 bar (with water flowing) Maximum operating water temperature: 20°C Minimum operating water temperature: protect from freezing Type of salt: tablet or block Timer: 24 hour remote socket mounted

OVERALL DIMENSIONS

Height: 485 mm

Depth: 440 mm Width: 250 mm

OPERATING DATA

Salt used per regeneration: adjustable to 450, 750 or 1000 g Maximum flow: 50 litres/minute Approximate regeneration water volume: 30 litres Approximate flow rate to drain: 1 litre/minute Regeneration time: 30 minutes Salt storage: 15kg Resin volume 8.9 litres



The above information was correct at the time of print but Calmag reserves the right to alter any of the above data without notice.

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Before you proceed

Water hardness: Before you proceed you must be sure the softener is capable of providing enough softened water for your needs. This is done by checking the hardness of the water in your home and following the recommendations of the capacity chart below

Maximum number of people in the house.

Water	450	750	1000
hardness	salt	salt	salt
	setting	setting	setting
Up to			
200 ppm	8 people	13 people	15 people
200 to			
300 ppm	6 people	9 people	10 people
300 to			
400 ppm	4 people	7 people	7 people
400 to			
500 ppm	3 people	5 people	6 people
500 to			
600 ppm	3 people	4 people	5 people

See page 6 for salt setting.

Water pressure: This can be tested with a gauge. The ideal daytime water pressure is 2 to 6 bar, but it must not be below 1 bar or above 8 bar.

If the pressure is above 6 bar we recommend the installation of a pressure reducing valve set at 6 bar, this valve is available from your local plumbers merchant.

Drinking water: We advise that a drinking water filter kit is installed. Your merchant can provide you with an easy to install drinking water filter kit.

IMPORTANT: Softened water should not be used for baby food or drinks,

also people on a low sodium diet should not drink softened water.

Packaging: Remove the softener carefully from the packaging, lift off the cover from the top of the softener and remove the packaging from the inside the cover and cabinet.

Find a place for your softener: It should ideally be local to the water supply for the whole house, an electric power socket, a drain, next to an outside wall for the overflow, and easily accessible for loading with salt. A good site is under the kitchen sink.

Pipe size: Your softener is supplied with a 1/2" inlet and outlet hose, together with 3m of drain hose, which may be cut and used for the overflow pipe, and all fittings.

Using the hoses provided install the softener as per the plumbing section. This shows an installation to a 15mm water supply pipe. If your water supply pipe is 22mm or larger, consult your merchant and he will provide you with a high flow hoses and bypass kit. Note : The 1/2" hoses and bypass kit are suitable for homes with a cold water storage tank, if however your home has a combination or direct hot water system we recommend you install the softener using the high flow hoses and bypass kit. Product code CalSoft HFK.





Plumbing

- 1. Turn off the mains water supply to the house by closing the stopcock. Then drain the pipe by opening the kitchen tap.
- 2. Cut the pipe after the stopcock and install the inlet, outlet and bypass valves. To comply with regulations a check valve must be installed between the stopcock and the softener.



3. Connect a hose between the softener inlet and the inlet valve, then, connect a hose between the softener outlet and the outlet valve.



- 4. Turn off the inlet, outlet and bypass valves.
- 5. The drinking water tap connection and the garden tap connection should be made in the pipe between the stopcock and the bypass valve.
- 6. Run the drain tube to the nearest waste pipe, typically a washing machine type standpipe. Cut off the excess tube. Secure the pipe so that it cannot fall out of the standpipe.
- 7. Push the overflow hose on to the overflow connection on the side of the cabinet and run it downhill to the outside of the house, keep the hose as short as possible.

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Setting the Timer

Plug in the timer to a socket and plug the lead from the softener into the front of the timer. Set the time of day by rotating the programme ring clockwise until the time lines up with the time indicator.



Salt Setting

The softener has been shipped to you set on 450. If you do need to reset this simply remove the bung. Then undo the thumb nut, holding the screw from the inside.

Move the screw and the tube it secures to either the 750 or 1000 hole. Hand tighten the thumb nut on the screw and replace the bung.



Setting to work

Open the mains stop cock then the inlet, outlet and bypass valves. Open the kitchen sink tap for a few minutes to remove all the air and any colour from the water, and then close the tap. Leave for 10 minutes, checking for leaks.

Note: the inside of the cabinet will start to fill with water, don't worry this is normal, it will stop just above the top of the platform inside the cabinet. If it does not fill with water, simply fill to just above the platform using a bowl.





Close the bypass valve.

Switch on the power to the timer. Now manually regenerate the softener by switching the manual regen switch on the timer for 30 minutes. Then switch off. During the regeneration water will go to drain.

The softener will now start softening the water. Taps directly connected to the softener will give softened water immediately. It will take a while for softened water to fill your storage tank



The inlet, outlet and bypass valves should now look like this.

and work its way through your hot water system. You should have partially soft water in a few days and completely soft water in a week or so.



Filling with salt

This softener is designed to use water softener salt. Fill the bin with salt as shown. Tablet salt is recommended.

Operation

Checking salt: Regularly check there is salt in the salt compartment. If it is getting low, top up with salt.

Turn off the softener: If you should need to turn off the softener, you must close the inlet and outlet valves, and open the bypass valve.



The softener will no longer operate.

Turn on the softener To start the softener operating again follow the instructions under Setting to work.

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