



- WATER SOFTENER —

# AWS 5000



**USER MANUAL- AWS 5000** 

Dear Customer,

Thank you for welcoming AWS 5000 into your home.

Aquaguard Select Water Softener efficiently removes excess Calcium and Magnesium salts dissolved in your water to make it **100% soft**.



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## PARTS/COMPONENTS

Material	Quantity
Vessel (12*48)	1
Strainer Top	1
Strainer Bottom	1
UPVC Pipe	1
O Ring 1"	2
O Ring 2.5"	1
Interconnecting Cable	1
Flow Sensor	1
Softener Multiport Valve	1
F2F Connector 1"	1
Hex Nut	1
Pipe Lock Nut 10 mm	1
AC/DC Power Adaptor	1
Geolex Media™ 8 mm	15 kg
Water Softener Media	50 Itr
Brine Tank	1
Drain Pipe	1
Brine Strainer Assembly	1

## FEATURES





High-Grade Resin



High-Efficiency Multiport Valve



Robust Vessel (NSF Certified)

## **INSPECTION & PREPARATION**

### I. Installation Safety Guide

- AWS 5000 works on standard 100-240 V AC supply power plug only.
- Control valve should be higher than drain outlet, and not far from the drain hose.
- If the drain valve is placed at a level higher than control valve, then the brine solution will not be sucked from the brine tank due to pressure difference.
- While going from cycle 4 (fast rinse) to Cycle 5 (filling cycle), there are chances of high pressure and water may flow through the drain pipe.
- Placement of the vessels should be as shown in the below picture.
- Handle with care when moving the water softening system. Do not turn upside down, drop, drag, or set on areas with sharp protrusions.





### **Device location (Fig-A)**

- Water softener should be located close to the drain.
- Ensure the unit is installed with enough space for operating and maintenance.
- Brine tank needs to be placed close to softener.
- The unit should be kept away from the heater, and not to be exposed outdoor.
   Sunshine or rain will cause a system damage.
- Avoid installing the system on a acidic/alkaline, magnetic or strong vibration platform, because above factors will cause a system disorder.
- 1. Install control valve (Fig-B)
- Glue the riser pipe to the bottom strainer with UPVC glue and put it into the vessel tank.
- Ensure that the 'O' ring inside control value doesn't fall or get misplaced while fitting onto vessel.
- Fill Geolex media followed by water softener resin media into the vessel. Plug the top
  of riser pipe to prevent media entering the pipe.
- Fix the top strainer into the Multi-port valve.
- Insert the riser tube into control valve.

#### 2. Install Animated Connector (Fig- C)

• As Figure shows, put the sealing ring into nut of animated connector, and screw in water inlet.

#### 3. Install Flow Meter (Fig- C)

As Figure shows, put the seal ring into nut of flow meter, screw in water outlet; insert the Probe wire into flow meter.

### 4. Install Drain Pipeline (Fig- D)

• As the Figure shows below, slide the drain hose connector into drain outlet. Locate the drain hose well as the Figure D show.

### 5. Connect Brine Tube (Fig- E)

- Slide 3/8"brine tube hose connector over end of brine tube.
- Insert tube bushing into the end of brine tube.
- Tighten nut onto brine line connector and connect the other end of brine tube with brine tank with help of a strainer.



### Note:

 MPV valve should be higher than drain outlet, and not far from the drain hose. If drain outlet higher than control valve, a check valve must be installed in drain outlet. Or else, the waste water will flow backwards into water outlet when brine is refilled.



## **MPV SETTINGS**



Switch Operation (Press Up and Down arrow together to unlock)1st press-> Change to Clock Time - 02:002nd press-> A - 0.1 / 0.2 (Select; A02)3rd press-> 5.0.0 (Water treatment capacity in one cycle)<br/>(Need to set as per the OBR calculation)4th press-> 2. - 0.4 (Backwash) minutes (0-99 min)5th press-> 3. - 09 (Brine & Slow rinse) minutes (0-99 min)6th press-> 4. - 04 (Fast rinse) minutes (0-99 min)7th press-> 5. - 0.5 (Fill cycle) minutes (0-99 min)8th press-> H - 1.0 Recharge between days (1 to 40 days)9th press-> b - 0.110th press-> Back to normal

Value	Desired Settings	Instruction
A	A-02	A-01 : Time based (Regeneration starts at the regeneration time) A-02 : Flow based (Regenerate immediately when the available volume of treated water drops to zero)
F	F-00	Regeneration process interval time
В	B-01	Output control mode (especially for connecting an external booster pump/SV)
н	H-05	Maximum interval of regeneration
2		Back wash time
3		Brine and slow rinse time
4		Fast rinse time
5		Brine refill time
M3		Water treatment capacity in one cycle
Note: Please change the required settings based on the Input Water Hardness & Input Flow Rate.		

### INTERCONNECTING CABLE



- The interlock connector needs to be connected with the same colour of the interlock connector on the main board.
- Use interlock cable to connect Black socket of one valve with the Blue socket of another valve in series.

# TROUBLESHOOTING CHART

PROBLEM	CAUSE	CORRECTION
1) The control fails to regenerate automatically	A) Disconnected meter cable	A) Reconnect the meter cable
	B) Dust accumulated on flow sensor impeller	B) Clean flow sensor
	C) Electronic controller or sensor damaged	C) Replace or repair
2) Regeneration at wrong time	A) Timer improperly set, due to power failure	A) Reset timer
3) Loss of capacity	A) Increase draw water hardness	A) Change the MPV settings to the new capacity
	B) Brine concentration or quantity	B) Keep salt at all times in the brine tank. Clean it when required. Salt may be bridged.
	C) Rinse fouling	C) Check whether drain pipe squeezed or not
4) Poor water quality	A) Check items listed in Problem #3	A) Check items listed in Correction #3
	B) Bypass is open	B) Close the bypass
5) Excessive salt use	A) High salt setting	A) Adjust salt setting/Increase fast rinse time
	B) Excessive water in brine tank	B) Refer to problem #7 tank
6) Loss of water pressure	A) Fouling of inlet pipe	A) Clean or replace the pipeline
	B) Fouled resin	B) Clean the resin. Pretreat to prevent
7) Excessive water in brine tank	A) Plugged drain line	A) Check drain line and clean flow control
	B) Brine valve plugged or damaged	B) Clean or replace the brine valve
	D) Low inlet water pressure	<ul> <li>D) Increase water pressure to allow injector to perform properly</li> </ul>
8) Softener fails to brine draw	A) Plugged drain line	A) Clean drain line and flow control
	B) No water in the brine tank	B) Check for restriction in brine tank
	C) Low water pressure	C) Increase water pressure

9) Control cycles continuously	A) Faulty timer setting	A) Change the MPV settings
10) Continuous flow to drain	A) Foreign material in the control	A) Call authorised service engineer to clean valve
	B) Internal control leak	B) Same as above
	C) Piston jammed in brine or back wash position	C) Same as above
11) E1	<ul> <li>A) Locating board or wire damged</li> <li>B) Control board damaged wiring of</li> <li>motor with control board damaged</li> </ul>	<ul> <li>A) Check loose contact of locating board /wire</li> <li>B) Replace control board</li> <li>C) Replace MPV</li> </ul>
12) E3 & E4	Control board faulty	Replace MPV

# **SPECIFICATIONS**

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Vessel size	12 x 48 inch
Multiport valve	Automatic
Input supply	100-240V AC 50Hz
Operating supply	12VDC,1500mA
Resin volume	50 L
Geolex media	15 Kg
Max. Input water flow rate	3000 LPH
Salt storage capacity	25 Kg
Brine tank capacity	80 L
Max. Iron in input water	1 ppm (Max)
Max. Input Turbidity	1 NTU (Max)
Max. Hardness (ppm)	2100 ppm
Input water pressure	1-3 kg/cm <sup>2</sup>
Max. operating temperature	50°C

### WARRANTY TERMS AND CONDITIONS

The goods are warranted against defects arising from faulty designs, workmanship and materials 12 months from the date of installation or 15 months from the date of sale, whichever is earlier, subject to the following conditions.

- 1. The customer will notify the company, in writing, promptly of any defects noticed and give the company or its authorised agent adequate opportunity to inspect, test and remedy them for which the customer will deposit the goods, if so required by the company, with the company's office/service centre along with the original invoice, in the city when they are sold.
- 2. The inspection and test reports of the company's office/service centre will be final and binding under the warranty for determining defects, repairs/alterations required or carried out or certifying work of the goods thereafter.
- 3. Aquaguard Select Water Softener may require initial setting post-installation, depending on varying water conditions and power supply. In case of any service requirement post-installation, please contact the company's service centre.
- 4. The company or its authorised agent will be entitled to retain any defective part replaced under the warranty.
- 5. Notwithstanding anything to the contrary contained or implied by this warranty.
  - a) The company's liability under this warranty shall be limited to the first sale of the goods by the company to the customer and will not apply or extend to any secondary sale of goods by the customer.
  - b) The company's liability under this warranty shall be limited only to defects in the goods which occur under the condition of normal operation of the goods and their proper and prescribed use. The warranty does not cover or extend to defects which are determined by the company or its authorised agents or resulting from or attributable to negligence, abuse, misuse, faulty care, operation or maintenance or repairs, alterations to the goods or any part thereof by others or the use of the goods on electrical supply for which they are not designed or damage caused by lighting or other electrical disturbances or interruptions.
  - c) The company's liability under this warranty shall remain valid only if the goods are duly installed by the company or its authorised agency at the location specified in the invoice and such installation is undertaken by the company or its authorised agent or franchise.
  - d) Consumable items like sediment filter and regeneration media are not covered under this warranty.
  - e) The customer will have no claim against the company, its employees and its authorised agents or franchise under or pursuant to this warranty in respect of death or injury to the customer or any other person or loss or damage to any property caused by or due

to equipment failure, breakdown or accident, fire or operation, or utilisation of the goods otherwise than in accordance with the User Manual by or due to any other cause or circumstances beyond the control of the company.

f) The company's liability, under this warranty, shall in no event and under no circumstances exceed the price paid by the customer to the company for the goods stated in the invoice.

#### General

For the purpose of this warranty, the following expressions shall have the following meanings respectively.

- 1. The "Goods" shall mean the goods described in the order form.
- 2. The "Customer" shall mean the original purchaser of the goods from the company.
- 3. The "Company" shall mean "Eureka Forbes Limited".
- 4. General terms and conditions shall mean the terms and conditions agreed upon by the customer and the company printed on the order form.
- 5. "Invoice" shall mean the invoice issued by the company to the customer describing the goods and indicating, inter alia, the total purchase price thereof and name of the customer.
- 6. "User Manual" shall mean the instructions for installation, use and maintenance contained in the leaflet supplied by the company.

#### **Post-warranty**

- 1. The customer may be offered a yearly service contract at the prevailing company rates and terms.
- 2. In case the customer does not wish to enter the service contract, he has the option of calling the company's service centre and having the Aquaguard Select Water Softener serviced on an actual basis i.e., by paying the labour cost and the spares needed to attend to that service/complaint call at the prevailing company rates. Such service will be rendered by the company in towns/places where the company has its service centres.
- 3. The company will provide free servicing of the goods brought to its service centre by the customer, provided that all expenses of transporting the goods to and from the service centre shall be borne by the customer directly.
- 4. If during such servicing it is necessary for the company to replace or repair the defective components or parts, the customer shall be required to pay the same as per the company's prevailing price list.
- 5. Eureka Forbes Limited reserves the right to offer an Annual Maintenance Contract/ ensure availability of spares only up to 7 years from the date of invoice.

#### Note:

#### Add Salt

The system needs salts to regenerate its capacity. Please check the salt storage in time during usage and keep unmelted salt in the brine tank. Open the system's slide and put salt into the tank adequately. It is recommended you add 10 kg salt in each exhausted cycle. Don't pour/dispose the brine solution on lawns, septic tanks, or use to water plants. Dispose properly in a safe place / intended disposed drain line.

