

Product Introduction Manual

Thanks for choosing our softener series products. The softener we produced is characterized by its excellent effect of softening, stable performance, compact-sized, and it's also easy-to-operate. To help you understand and grasp quickly the basic operation and usage knowledge, please read this carefully.

Parameter Set

Resin Tank Size	Default Parameter						Maximum Interval Regeneration Days	Periodic Water Production Coefficient
	Backwash Time(min)	Brine & Slow Rinse Time (min)		Brine Refill Time (min)		Fast Rinse Time(min)		
		Grey injector	Cyan injector	F105/F116Y/F117Y/F136	Other valves			
0713	05	32		10:00	2:30	05	30	30k
0815	05	36		14:40	3:40	06		
0913	05	36		17:40	4:20	04		
1013	05	45		22:00	5:25	05		
1015	05	45		23:00	5:40	06		
0717	05	32		12:30	3:10	07	30	40k
0817	05	36		16:45	4:05	07		
0917	05	45		22:55	5:40	06		
1017	06	50		24:40	6:10	07		
1024	07	70	52	20:40	8:40	09		
0835	07	65	50	19:30	8:10	08	30	50k
0935	07	80	55	25:00	10:30	10		
1035	08		60	28:00	11:50	10		
1044	10		75	34:00	14:20	12		

Parameter Set (By users)

Item	Parameter Set Range	Factory Default	Actual Value
Time of Day	00:00 ~ 23:59	Current Time	
Regeneration Time	00:00 ~ 23:59	Brine dry mode (F105&F136)	00:00
		Except brine dry mode	02:00
Raw Water Hardness	50 ~ 999mg/L	150mg/L	

1. Notes on the Safe Use

- ※ Do not plug the power supply into a socket using several devices at the same time. (Power range: AC100~240V/50~60Hz)
- ※ Do not place the device in a slanted workplace or somewhere may cause external force to the valve.
- ※ Forbid installing the device near heat source or in the open air. Please cut off water resource and power when malfunction happens. (Ambient Temperature: 4~40°C; Relative Humidity: ≤90%, 25°C).
- ※ Make sure a check valve is equipped between device and water heater when a heating stove or water heater is connected behind the device, in case of hot water reflux. (Inlet water temperature: 5~38°C).
- ※ Do not attempt to disassemble, repair or alter. When problem occurs, please contact the manufacturer to solve.

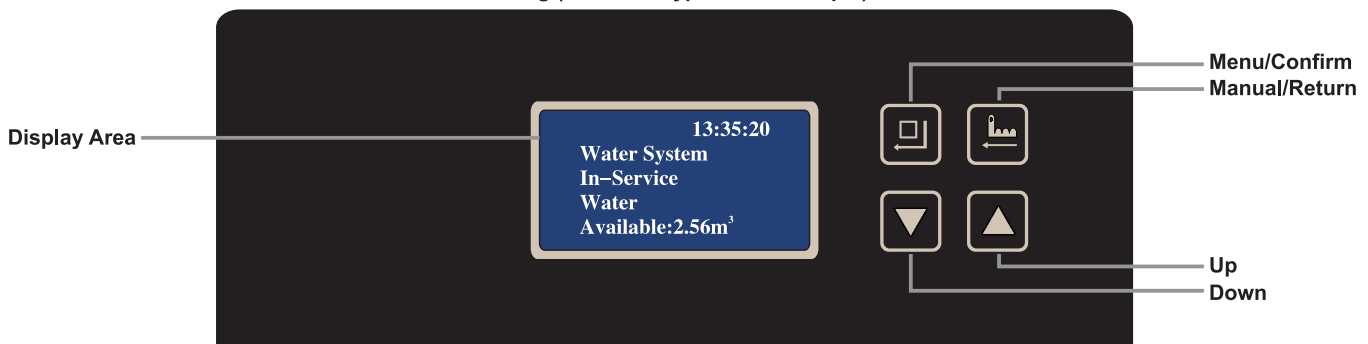
2. Notices Before Using the Product

- ※ Check the device if water leakage exists after installation. If leakage happens, please close inlet valve and restart the device till leakage eliminated.
- ※ Check water pressure, the suitable pressure for softener is 0.15~0.6MPa. Booster pump or relief valve is necessary when the inlet pressure is lower or higher than standard.
- ※ Use reagent to measure the inlet water hardness and input the hardness value into valve program to determine the cycle soft water capacity. For this series products, please make sure the hardness of inlet water is lower than 450mg/L.
- ※ Check the brine tank to make sure there is salt and water for regeneration. Add water and salt into brine tank when the device is put into use for the first time. Saturated brine should be enough for one time regeneration. (Only for initial use of the device).
- ※ Separate sewer line for the device is required, 15~25mm clearance must be maintained between the drain pipe and floor drain in case of the siphon happens and cause valve damage by the waste water.

3. Using Tips.

- ※ When use for the first time, please switch on the power and turn the system into backwash status. Slowly open the inlet valve to 1/4 position to exhaust the air. Then, open the inlet valve completely to rinse for 2~3 minutes to clean out the foreign material or broken resin particle.
- ※ When use the softener for the first time or the device is idle for a long period, it is normal that the outlet water is yellow. Please put into use after 2~3 minutes' rinsing.
- ※ Sometimes the brine in the brine tank will forms salt bridge. There is a space under the brine which prevents the salt from being dissolved and hinders the resin regeneration. It is suggested to check regularly. If there is salt bridge, please mash it.
- ※ Without being used for a long time or the pressure of the inlet water is unstable, please close the inlet port and turn off the power. Before using again, please firstly conduct a regeneration cycle through manual operation so as to ensure the quality of soft water.
- ※ During the operation, please check the brine tank regularly to ensure there is brine in the tank. And when adding brine, please make sure that salt level is higher than water level.
- ※ There is no soft water during regeneration, but continuously supplies water to the softener. It is not recommended to use a large amount of bypass water during this period to avoid affecting the regeneration effect of the system.
- ※ Please strictly use the salt of more than 99% purity only. Any salt with additive or large particles is forbidden to add.

4. The Function of Control Panel and Parameter Setting (Take LCD type as an example)



- “” Lights on, indicating the buttons are locked. Press and hold both “” and “” for 5 seconds until the “” lights off.
- Press “” under the service status, the system turns into setting interface: Time of day, regeneration time, water hardness can be selected in this interface by press “” and “”.
- Press “” and turn into option inquiry interface. When the digits flash. It turns into setting interface, and you can adjust the parameters by press “” and “”. After the setting, press “” and turn into setting interface by saving the settings with a “Di” sound. Use the same way to adjust the other

parameters. Press “”, the adjusted parameter will not be saved, back to setting interface.

- Press “” under the service status, the system will turn into regeneration status immediately. Press “” in regeneration status or fast rinse status, it will turn into next status instantly. Press “” and it will back to service status interface.
- Press and hold “” and “” for 3 seconds within 6 seconds after connecting to power, the system will turn into language choose interface (English, Chinese or other languages).
- Background parameter setting: according to product model and specification, the basic parameters will be set before it goes on sale, you don't need to reset. If you need any inquiry or reset, please contact with the professionals for service.

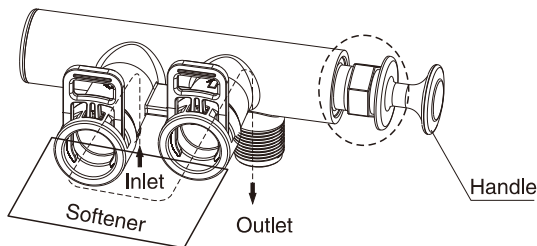
5. Trouble-shooting

Before maintenance please check following information:

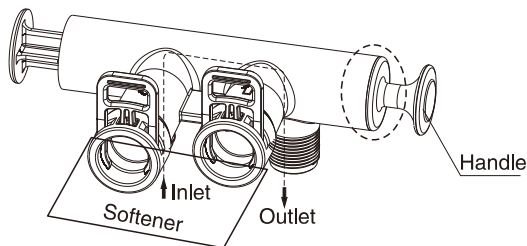
Problem	Cause	Correction
Control valve fails to work	1. Power plug isn't plug in. 2. Socket breaks down. 3. Electricity is interrupted. 4. Adapter is damaged.	1. Connect to power. 2. Repair or replace socket. 3. Check electricity. 4. Replace adapter.
Regeneration time is not correct	1. Time of day does not set correctly. 2. Power failure more than 3 days.	Reset time of day
Leakage	1. Connector looses. 2. O-ring is broken.	1. Screw tight connector or reconnect. 2. Replace O-ring.
Noise	Air goes into device.	Re-backwash, empty air.
High hardness of outlet water	1. Not good quality of raw water. 2. Too long time of regeneration mode. 3. Bypass valve opens.	1. Connect with supplier. 2. Shorten regeneration cycle time. 3. Close bypass valve.
Brine failure or brine deficient	1. Low inlet pressure. 2. Brine pipe is blocked. 3. Injector is broken. 4. Brine pipe air leakage.	1. Increase inlet pressure, more than 0.15MPa. 2. Check and eliminate the blockage. 3. Replace injector. 4. Check brine pipe components, eliminate leakage.
Brine tank water overflows	1. Overlong refilling time. 2. Too much water left after brine draw.	1. Shorten brine refill time. 2. Check brine & slow rinse status.
No soft water after regeneration	1. Valve controller is damaged. 2. Low inlet pressure. 3. No salt in brine tank. 4. Injector is blocked. 5. Riser pipe O-ring is broken.	1. Replace the controller. 2. Increase inlet pressure. 3. Add salt and manual regenerate. 4. Disassemble injector then clean, assemble it. 5. Replace o-ring.
Too big or too small flow rate of backwash	1. Without drain line flow control. 2. Foreign material in drain line flow control.	1. Install drain line flow control. 2. Clean foreign material.
Salty water	1. Low inlet pressure. 2. Drain pipe or DLFC is blocked. 3. Excessive amount saturated brine in brine tank. 4. Short time of fast rinse.	1. Install pressure pump. 2. Eliminate block. 3. Decrease amount of refill water. 4. Extend fast rinse time.
Drain port continually drains	1. The blackout control valve is not reset. 2. Leakage happens in control valve. 3. Foreign material gets stuck in control.	1. Adjust program position to service. 2. Replace control valve. 3. Eliminate foreign material.

6. Maintenance

※ Before check-up, please turn off the softener inlet valve or bypass valve to bypass position. (Take F70D bypass valve for example. If it uses the other model of bypass valve, please refer to the appendix instruction.)



Service



Bypass

※ Prohibit the use of harmful health detergents or chemical to clean, wipe the device.

※ Wipe with moistened soft fabrics to clean equipment surface dust and foreign matter, avoid the water into the valve internal erosion electrical components causing damage.

User record

Date	Information	Remark