

Installation and User Manual

RO Water Purifier Model: KRAUSEN 75 LIGHT

Respected customers:

Thank you for purchasing our company's water purifier!

The water purifier in your possession now is in the leading position among products in the world water treatment fields. The pure water it produces is not only drinkable but also good for your health.

For the purpose that the machine is properly installed, utilized and maintained so that it can work in its best condition to ensure the constant supply of pure water, we suggest that you read this manual in details and follow our advice before installing.

If you should encounter any difficulty in installing or using the machine, please contact the local dealer who will carry out repairs or maintenance for you without hesitation.

Contents **Page**

Safety Warnings.....	3
Product Introduction.....	5
Installation Methods.....	8
◆ Pre-Installation Preparations.....	8
◆ Instructions for Proper Installation.....	8
◆ Installation Notes.....	11
Testing.....	12
Usage Methods.....	12
Maintenance and Upkeep.....	13
◆ Filter Replacement Time.....	13
◆ Filter Replacement Methods.....	13
◆ Notes	14
Failure Diagnosis & Solutions.....	14
After-Sales Service.....	15
Packing List.....	16

Safety Warnings (Be sure to read and remember these safety considerations)

In order to avoid property damage and harm to you and others, make note of the following safety precautions.

★Ignoring the following safety precautions could result in a risky situation:

! Warnings If you ignore contents in this section, it may cause permanent damage to the water purifier or cause serious property damage.

! Notes If you ignore the contents in this section, it may lead to damage of some parts of the water purifier or may result in some property damage.

! Warnings

Do not disassemble or modify this water purifier on your own!



Unauthorized disassembly or modification of the machine could lead to machine malfunctions or leakage accidents.

Please check with the store where you purchased this product for product consultation in order to arrange for repairs.

Do not put things on the top of the machine!



Obstructing the heat dissipation may lead to machine damage or fires.

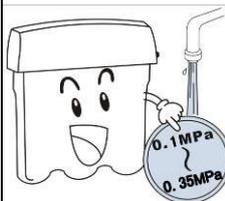
Do not put heavy objects on the water purifier!



If heavy objects are placed on the water purifier, it may result in damage to the water purifier's dust cover or internal components, which could lead to leakage, the machine working improperly, or even serious property damage.

Do not use this water purifier under high water pressure conditions!

Operating under high pressure conditions may cause the water purifier pipes to rupture, resulting in leakage, the machine working improperly, or even serious property damage. Recommended inlet pressure is 0.1MPa to 0.35MPa.

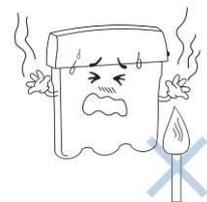


Do not let the machine come in contact with corrosive materials!



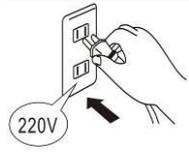
These materials could corrode the outer cover and affect the water parts or some toxic and hazardous compounds could penetrate the water purifier pipes, leading to contaminated water production and machine leakage, which could even cause bodily and property damage.

Do not put the water purifier close to the fire!



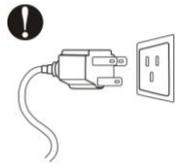
Do not put the water purifier near a fire source or place where the temperature is too high, this may cause deformation or melting of the machine, causing damage or leakage, which could lead to serious bodily and property damage.

Do not use a power source exceeding the machine's specified value, only use 220V AC power!



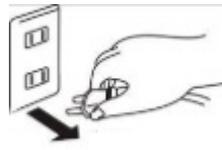
The outlet used for the machine's current must be greater than the machine's specified value; otherwise it may lead to overheating or fire.

The machine must be connected in reliable grounding line socket and accord with the relevant national standards!



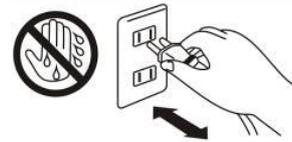
Otherwise it may lead to electric shock, short circuiting, or fire.

When installing or repairing, the machine must be disconnected from the power source!



Otherwise it may lead to electric shock.

Do not touch the power plug with wet hands!



Otherwise it may lead to electric shock.

Notes

Do not use the water purifier when the sewer is blocked up!



If it is used while the sewer is blocked, it may cause the waste water to back up or pollution to get inside the water purifier.

The waste water discharge pipe and wastewater ratio device cannot be blocked!



When the waste water discharge pipes and waste water ratio device are clogged, it may lead to high TDS effluent, the RO membrane

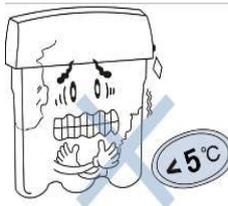
may get blocked or the water purifier may not work.

Water purifier inlet water temperature should not exceed 38°C!



If the inlet water temperature is over 38°C, it will damage the reverse osmosis membrane leading to membrane failure.

Do not use in conditions under 5°C!



If the temperature in the room is below 5°C, please be sure to take measures to prevent freezing, such as starting the

heater or air conditioner to prevent leakage or cracked pipes caused from water freezing inside the machine.

Product Introduction

1. Blown-up profile of the water purifier

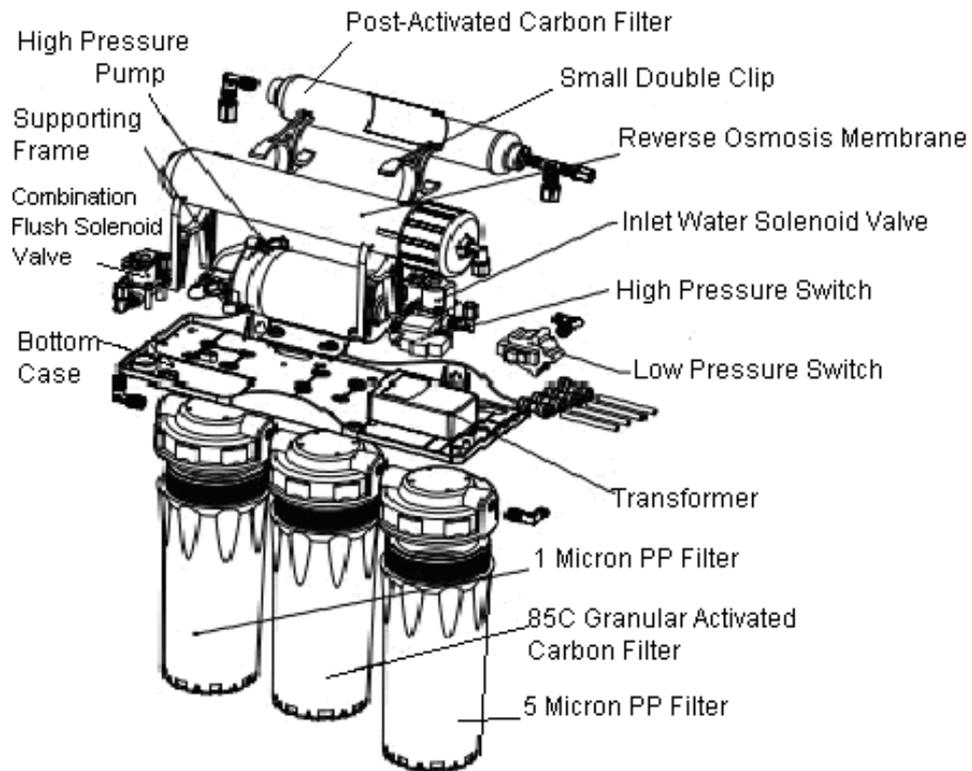


Diagram 1

2. Electrical diagram

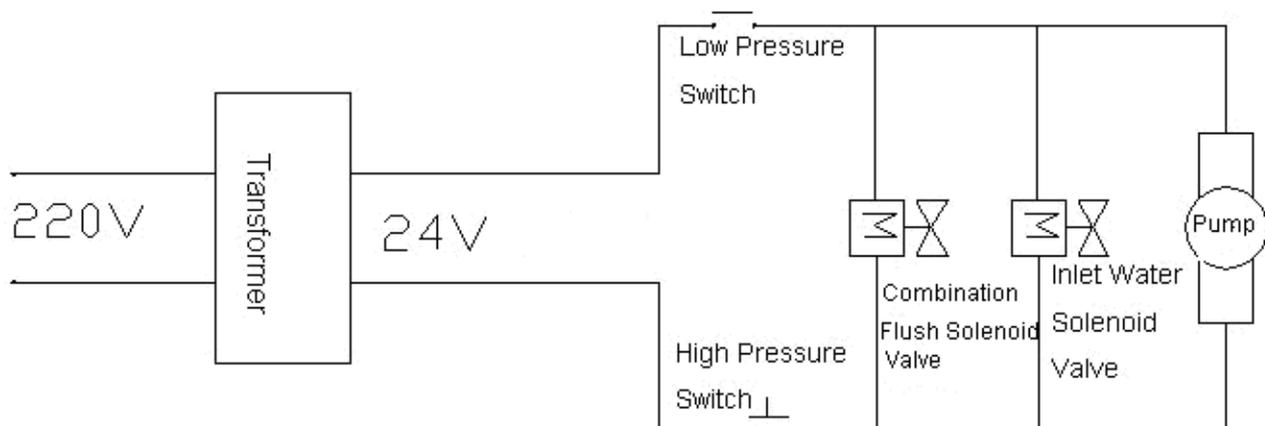


Diagram 2

3. Water Flow Chart

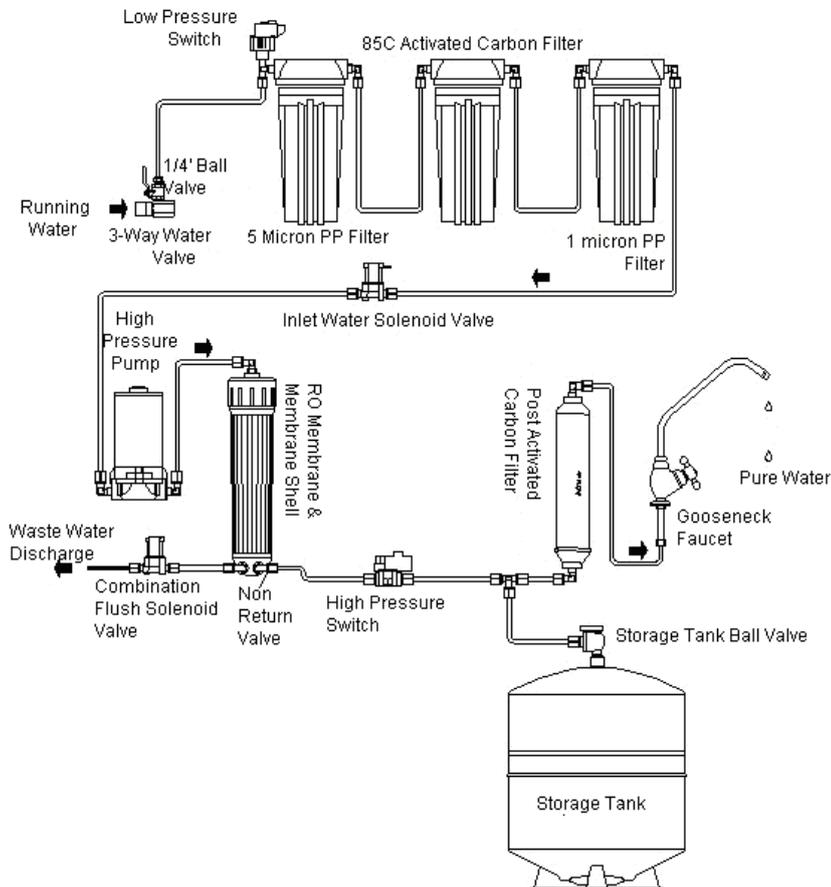


Diagram 3

4. Technical Parameters

Voltage	AC 220V 50HZ
Power Rating	28.8W
Suitable Water Pressure	0.05MPa~0.35MPa
Operating Pressure	0.4MPa~0.6MPa
Inlet Temperature	5-38°C
Maximum Inlet Water TDS Value	≤1000PPM
Maximum Daily Water Production Volume	75 Gallons, approximately 284 Liters
Flushing Method	Auto flush
Electric Shock Protection Type	Type II
Suitable Water Quality	Municipal tap water meeting the GB5749-2006 standards

Note: Due to product improvements, the above parameters may change but the product name plate shall stay the same. TDS refers to the influent total dissolved solids.

5. Water Purifier Main Parts Function Introduction

Using the current most advanced international RO technology, **standard configuration** is as follows:

- ① First is a 10-inch 5-micron PP filter:
The aperture of the PP filter is 5 microns, can effectively filter rust, sand, other larger particles and solid impurities in water.
- ② Second is a 10-inch 85C granular activated carbon filter:
This machine can effectively adsorb chlorine, humus, disinfection by-products, odors, colors, and other materials.
- ③ Third is a 10-inch 1-micron PP filter:
This machine can further remove small particles in the water, suspended solids, colloids, etc.
- ④ Fourth stage is RO membrane:
Aperture is .0001 micron (0.1 nm), reduces bacterium by 4,000 fold, reduces viruses by over 200 fold, so you can effectively remove bacteria, viruses, heavy metals, pesticide residues, and other harmful substances from the water.
- ⑤ The fifth-stage is a post-activated carbon filter:
Regulates water taste, keeps water fresh.

Note: This machine also has an optional configuration:

Pretreatment Filter: KDF two stage filter, KDF three stage filter, sintered activated carbon filter
Post-filter: Alkaline filter, infrared mineralization activated carbon filter etc.

6. Water Purifier Accessory Functions

Storage Tank:	Used to store water filtered by the water purifier.
High Pressure Pump:	Boosts pressure to create a stable environment for the RO membrane.
Low Pressure Switch:	To prevent pump idling. When the inlet water pressure is less than 0.03 MPa or when the inlet water stops, the low pressure switch automatically shuts off the power source so the machine stops.
High Pressure Switch:	Prevents pump from fully turning. When the pressure tank is full or has reached the set pressure, power supply is automatically cut off to stop the machine.
Inlet Water Solenoid Valve:	Connects or cuts off incoming water. Operating pressure range is less than $\leq 0.6\text{MPa}$.
Non-return Valve:	Controls the flow direction.
Combination Flush Solenoid Valve:	(1) Automatically flushes the reverse osmosis membrane. (2) Controls waste water flow.
Transformer:	Converting AC 220V to DC 24V (the machine's safe operating voltage).

7. Water purifier features:

Large Flow Rate: It adopts the components of 75GPD RO membrane, the flow rate of which is 50% larger than the average, so the time of water producing is shortened and the amount of waste water is reduced by 25%.

Low Noise: This machine's imported parts have low noise, few vibrations, long service life, and operational quality and reliability;

Quick Connectors: This kind of connectors has a brand-new design and a quick connecting technology, making it convenient to equip, use and maintain.

Flushing RO Membrane: Flush with high pressure reverse osmosis membrane function, can prolong the reverse osmosis membrane life.

Plastic Shelf : The new type of plastic shelf and layer board compared with an iron plate, this kind of steel shelf is smaller, lighter, rustless and easy to carry.

Installation

Our company recommends that the machine be installed by professionals for drills and other power tools will be used during the installation process. If you would like to do it by yourself, please refer to the following steps and diagrams:

1. Preparations

- ① Confirm the location where the water purifier will be installed (it depends on the actual circumstances)
- ② Make sure you've got all the tools required for installation

Adjustable spanner	1
Drill	1
6.2mm drill bit	1 (waste water hole)
Hole saw, ϕ 14mm	1 (high-speed steel or marble hole saw)
Phillips and flathead screwdrivers	1 of each
Scissors	1 pair
14mm-16mm multi wrench	1
18mm-21mm multi wrench	1
Needle nose pliers	1
- ③ Confirm that you have all the connectivity accessories required for installation
- ④ Turn off the water and/or electricity before installing

2. Instructions

- ① Installation method of Inlet water metal hose and inlet water tee (if the metal hose diameter is 9mm, the inlet water tee must be purchased separately)
Firstly, close the inlet water valve.
Secondly, unscrew the metal hose from the inlet water valve.
Thirdly, take out the inlet water tee from the accessory box, thread female screw of the inlet water tee into the outlet of inlet water valve.
Lastly, thread one end of the newly unscrewed metal hose into the male screw of the inlet water tee.
(See Diagram 4)

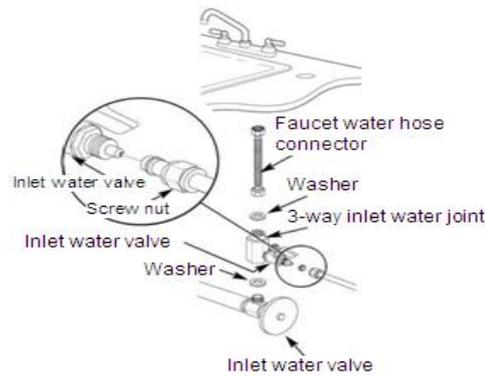


Diagram 4

② 3-way inlet water joint and inlet water ball valve installation method

Take out the inlet water ball valve from the water purifier accessories box, wrap appropriate Teflon tape on the male screw of the ball valve, (See Diagram 5) Smear a little silica gel on it if possible, then screw the ball valve into the corresponding hole of the 3-way inlet water joint, then screw the nut in place (See Diagram 6)

Take out the 9mm tube, cut down a proper length, then connect one end to the inlet water ball valve and wrench the screw nut (See Diagram 4). Connect the other end of the tube to the tie-in of the 5-micron filter housing. The screw nut must be wrenched firmly in case the tube would crack, causing leakage.

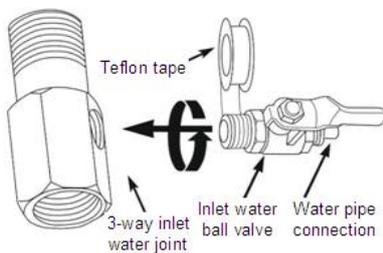


Diagram 5

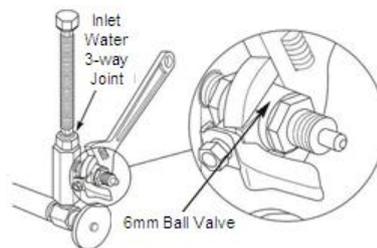


Diagram 6

③ Gooseneck faucet installation

Drill a $\phi 14\text{mm}$ hole in the counter where the faucet is to be installed, then take out the faucet from the water purifier accessory box. Start the faucet installation:

Firstly, put the stainless steel neck on the faucet main body (See Diagram 7), then lower the main part of the faucet into the already drilled hole, and then put the spacer on the lower part of the faucet. Screw the fixed nut into the bottom end of the faucet to fix the faucet on the counter. Finally put the appropriate length of 6mm pipe into the water inlet connection, put the 6mm pipe stopper into one end, put on the 6mm nut and screw it to the bottom of the faucet (see Diagram 7). If you want to fix the faucet on the wall, please use the faucet hanging piece (be sure to tighten the joints to prevent leakage when installing).

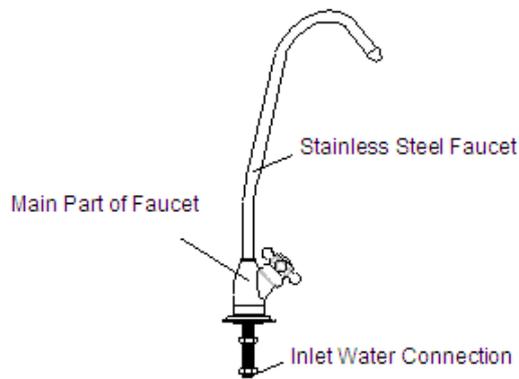


Diagram 7

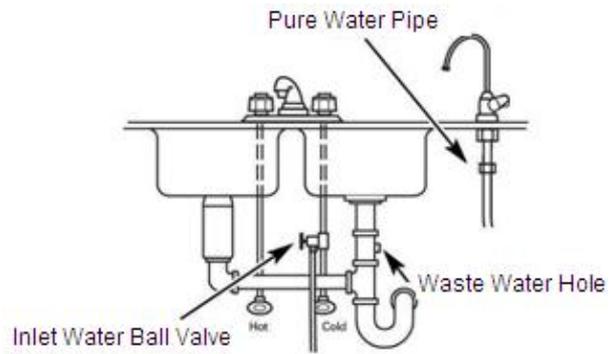


Diagram 8

④ Waste water pipe installation

Using a $\phi 6\text{mm}$ drill to punch a small hole then take out a 6mm water pipe with proper length, one end of which is put into the hole. (See Diagram 8)

Smear some silica gel on the joint of the 6mm pipe and the drain pipe to prevent leakage, then fix the waste water pipe on the drain pipe with a cable tie. (for large flow water purifiers you need to use waste water clip to insert it into the already drilled drain pipe hole)

⑤ RO Membrane Installation

Firstly, take the water purifier and inlet water pipe out from the packaging, open the water purifier outer cover, unscrew the nut from the cap of RO membrane housing, and then, unscrew the membrane shell cover by using the housing wrench. Take the RO membrane from its packaging and put the end of the membrane with O-rings into the reverse osmosis membrane shell firmly. (See Diagram 9) Finally, tighten the membrane shell cover with the wrench, connect inlet water pipe to the tie-in on the RO membrane shell cover, screw the nut then put the membrane shell into the big clip.

⚠ Warnings:

- ◆ Pay attention to the direction of the membrane when installing the RO membrane,
- ◆ Make sure that one end of the membrane has two O-rings. When installing the RO membrane,
- ◆ When installing, be sure to put the end with the O-ring into the end of the membrane shell with the pure water connection, when installing correctly you only need a little force to put the reverse osmosis membrane into the membrane shell, if you encounter too much resistance, please do not force the reverse osmosis membrane into the membrane shell, doing so may cause permanent damage to the membrane shell or membrane components (the membrane manufacturer does not assume responsibility for returned components due to damage during installation);
- ◆ Damage to the membrane shell and reverse osmosis membrane element caused as a result of the above reasons is not covered under the water purifier warranty.

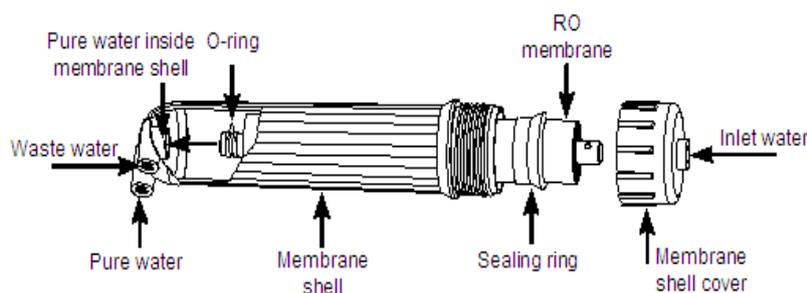


Diagram 9

⑥ Pre-filter installation

First take the pre-filter out of the packaging, tear off the packaging of the filters in the order they should be inserted, from right to left, first is the 5 micron PP filter; second is the granular activated carbon filter, noting that the rubber pad must be installed on the top of the activated carbon filter; third is the 1 micron PP filter (See Diagram 10).

⑦ Storage tank installation

First wrap Teflon tape around the water nozzle 4-5 times, Smear a little silica gel on it to prevent water seepage if necessary.

Then screw the water tank ball valve into the water nozzle,

Finally connect the water tube: stuff a pipe stopper into both ends of a 6mm tubing with a suitable length, one end of which should be connected to labeled storage tank connector on the water purifier and the other in the storage tank ball valve ,do remember to sleeve the screw nut. Finally put the storage tank on the base.(See Diagram 10)

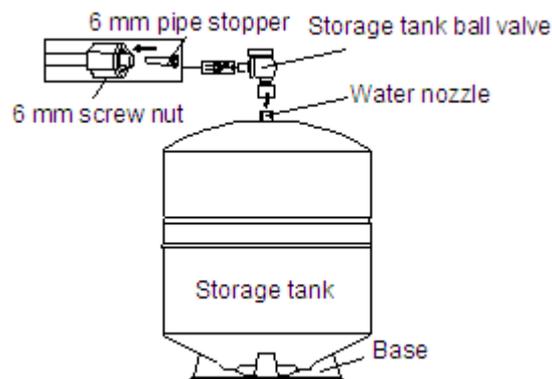


Diagram 10

3. Considerations

- ① When installing the water pipes, cannot install a drain stopper, in addition, for the water pipe bottom connector, the screw nut should have no wire teeth exposed.
- ② If the inlet water pipe is 9mm, should ensure that the inlet water tube and connector have 30-40cm of straight piping to avoid burst pipe accidents caused by bending in the pipe.
- ③ If the power cord wiring needs to be longer, then according to the wiring requirements use a $\Phi 8$ mm pinched tube to wrap around the connection, then on the outside wrap around insulating electrical tape, do not place it on the floor, it should be suspended in the air or in another place away from the ground.
- ④ When installing, if you need to make a hole in the wall, you should first make sure that there are no electricity or water lines in the location you plan to drill.
- ⑤ Do connect the power supply wire to the reliable standardized ground wire .If not, the manufacturers will not take any responsibilities caused by safety accidents.
- ⑥ Water is forbid during installation otherwise electric leakage may happen because of the switching power supply.

Testing

The source of water and power must be confirmed after the water route is connected right. Then follow these steps to troubleshoot the machine:

1. Open the tap water inlet valve as well as the water purifier inlet water ball valve, (See Diagram 11) plug in the power source and wait till the filters are full of water and pure water start to run from the gooseneck faucet.
2. Wait for the water purifier to operate stably (about 5-10 minutes), check each connection to make sure if it is secure and see if there is any leakage from the membrane shell, filters, etc.
3. Close the pure water gooseneck faucet and wait approximately for 30 seconds to check whether the waste water has stopped.
4. Open the gooseneck faucet to see if pure water is flowing, if not, check whether the tap water pressure is too low or whether the high pressure switch cannot be reset.
5. Shut off the inlet water ball valve when the machine is operating, After a while, observe the machine to see if it has stopped, if not ,please check the low pressure switch to see if it can be reset.
6. Only after everything is confirmed right, the water purifier can be used safely

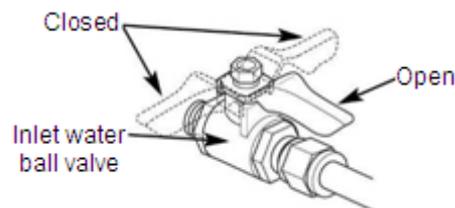


Diagram 11

Usage Methods

- 1、 The major components of this product are plastic, so please observe the machine constantly to ensure the security while using it.
- 2、 In order to prevent microbial contamination of membrane components during storage and transportation the reverse osmosis membrane element package contains a small amount of protective solution while the post-activated carbon filter will emit activated carbon powder the first time it is used. So for the first hour the water purifier is operated, do not open the water storage tank. It is recommended that the water produced is thrown out, otherwise the pure water taste may be unusual.
- 3、 When you start operating the water purifier the pure water TDS value may be a little high, after running for some time the TDS value for pure water will gradually decrease until it is stable.
- 4、 When you are using the water purifier, the inlet water ball valve should be opened and the pure water faucet needs to be turned on. When you are not using water turn off the water faucet, the high pressure switch will automatically cut off the water supply.
- 5、 In these “usage ”, “usage” refers to when the power supply is connected and/or the inlet water ball valve is open so the water purifier is in a working condition.

Maintenance

1、 Filter Replacement Time

- ① This machine's filter replacement cycle for the various filters is derived from statistical indicators on average tap water use estimates. If there are big discrepancies between the user's actual water quality and utilization rate and the average indicators, there will be more obvious differences between the filter's actual use time and the estimated cycle such as premature filter clogging, premature failure, etc. If this happens, filter replacement should be based on actual use, you should also promptly contact your local after-sales service department.
- ② This machine's estimated filter replacement cycle is based on average household water consumption and is suitable only for residential use, do not install this machine in places that require large volumes of water. If the water volume requirements are large, this company has appropriate machines for business purchase.
- ③ According to economic statistics on municipal tap water, a three person family on average uses 10L of water a day, according to the water volume and inlet water quality conditions, overall filter volume is approximately as follows (the following data is for reference only):

Ranks	Water Volume (tons)
First: 10-inch inline 5-micron PP filter	7.5
Second: 10-inch inline granular activated carbon filter	7.5
Third: 10-inch inline 1-micron PP filter	10
Fourth: RO membrane	depending on the actual water consumption
Fifth: Post-activated carbon filter	6

Note: It is recommended that filter element replacement is carried out by after-sales staff. Water quality has a great influence on the life of the filter, the RO membrane's lifespan is affected by many factors, the above table expresses lifespan under standard conditions, in actual usage, because the water quality may be different, the lifespan may exceed the above estimate, it may also be lower than the estimate, this data is for reference only. Under normal circumstances if the following situations are experienced, you should consider replacing the filter:

- ◆ Poor water quality, taste declines, TDS value of water rises;
- ◆ Water flow is significantly reduced, check to see if the filter or membrane is blocked (and determine that it was not caused by a temperature drop);
- ◆ If the filter's outer surface is covered in mud or the filter has significantly changed color;
- ◆ If serious filter clogging leads to no pure water from the water purifier.

2. Filter Replacement Method

- ① Replacing the 1st and 3rd stage PP filters
Firstly, shut off the inlet water ball valve, unscrew the 1st and 3rd stage filter cartridges by using the filter cartridge wrench and then remove the old filters, take the new filters out of the packaging, finally place the filters in the filter cartridges and tighten the filter cover.
(Note: place the 5 micron PP filter in the 1st stage filter cartridge, the 10-inch 85C granular activated carbon filter in the 2nd stage filter cartridge, the 1 micron PP filter in the 3rd stage filter cartridge)

② For replacement of membrane elements please refer to “RO Membrane Installation”(Page 9)

3. Notes

① RO membrane water production volume

This machine’s stated volume of 75GPD is tested with net pressure of 0.55MPa and inlet water temperature of 25°C, for the RO membrane component water volume is influenced by the inlet water pressure and water temperature, If not, the RO membrane element water production will be less than 75GPD.

② Disposal of old filters

They cannot be cleaned and reused after being disposed and it is recommended that they be thrown into the garbage.



Warnings

★Disconnect the water purifier water source (shut off the inlet water ball valve) and/or the power source immediately when any of the following situations occur, and carry out repairments.

- If the water purifier pipes or related components are leaking.
- If the water purifier’s related components stop working.
- If any components leak electricity.
- If there are any other anomalies or failures.

★Disconnect the water purifier water source (shut off the inlet water ball valve) and/or power source, when you go out or do not use the machine,

★ If any components of the water purifier are damaged, it is recommended that the water purifier be entrusted to the manufacturer or distributor, service center, or specialized technical personnel for replacement to prevent loss caused by improper operation, the manufacturer is not liable for losses caused by operation or use not in accordance with the instructions and reminders.

Failure Diagnosis and Solutions

Failures	Reasons	Solutions
The machine fails to start	● The power source is not connected	● Check the power source or the power source plug
	● Low inlet water pressure or no water	● Check the inlet water pressure
	● Low-pressure switch fails to connect the power source	● Replace it after connecting the inlet water and measure the resistance,
	● High-pressure switch cannot be reset	Replace it after letting off the pressure and measure the resistance, replace

	<ul style="list-style-type: none"> ● Switch power is damaged 	Replace it after measuring the output voltage
The high pressure pump is working properly, but no water is being produced	<ul style="list-style-type: none"> ● High-pressure pump has lost pressure 	<ul style="list-style-type: none"> ● Measure the water pump pressure, replace and replace it
	<ul style="list-style-type: none"> ● Inlet water solenoid valve is faulty, no water can get in (no pure water) 	<ul style="list-style-type: none"> ● Replace the solenoid valve
	<ul style="list-style-type: none"> ● A pre-filter is blocked 	<ul style="list-style-type: none"> ● Observe the pure water and waste water and replace the pre-filter
	<ul style="list-style-type: none"> ● Non return valve is blocked (waste water, no pure water) 	<ul style="list-style-type: none"> ● Replace the non return valve
	<ul style="list-style-type: none"> ● The RO Membrane is plugged 	<ul style="list-style-type: none"> ● Clean or replace the RO membrane
The machine is turned off but waste water has not stopped	<ul style="list-style-type: none"> ● Inlet solenoid valve failed, cannot effectively cut off the water supply 	<ul style="list-style-type: none"> ● Observe the waste water, replace the inlet solenoid valve
	<ul style="list-style-type: none"> ● Non return valve has lost pressure (small waste water flow rate) 	<ul style="list-style-type: none"> ● Replace the non return valve
After the machine is filled with water, the machine starts repeatedly	<ul style="list-style-type: none"> ● Non return valve has lost pressure 	<ul style="list-style-type: none"> ● Replace the non return valve
	<ul style="list-style-type: none"> ● High-pressure switch fails 	<ul style="list-style-type: none"> ● Replace the high pressure switch
	<ul style="list-style-type: none"> ● System is exhibiting a loss of pressure 	<ul style="list-style-type: none"> ● Check whether there is water leakage in the pipelines
The pure water hardly flows or even stops flowing	<ul style="list-style-type: none"> ● Pre-filter is plugged 	<ul style="list-style-type: none"> ● Replace the pre-filter
	<ul style="list-style-type: none"> ● RO membrane is plugged 	<ul style="list-style-type: none"> ● Wash or replace the RO membrane
	<ul style="list-style-type: none"> ● Inlet solenoid valve fails 	<ul style="list-style-type: none"> ● Replace the inlet solenoid valve
	<ul style="list-style-type: none"> ● Non return valve is plugged 	<ul style="list-style-type: none"> ● Replace the non return valve
	<ul style="list-style-type: none"> ● High pressure pump pressure is not enough 	<ul style="list-style-type: none"> ● Measure the high pressure pump water pressure, and replace it

After-Sales Service

1. The warranty is valid from the date of installation.
2. Warranty period: five-year machine warranty. The warranty does not include consumables (including filters and RO membranes).
3. Please keep the warranty in a safe place, for maintenance you must have your purchase invoice, only then is the warranty effective.
4. The warranty does not include no invoice, altered machine number, any arbitrary disassembly and repair, random operation and man-made damage.
5. If you encounter any abnormal phenomenon, please do not hesitate to turn off the water source, cut off the power, and contact your local vendor.

Notes:

The company reserves the right to change product design, configuration, and specifications without notice.

The company has the final explanation rights for any unclear parts, mistakes or printing problems.

Packing List

· Main machine (including RO membrane)	1 unit
6mm water pipe	1 roll
· Storage tank	1pcs
· Installation and User Guide	1 copy
· Goose-neck faucet	1pcs
· Filter cartridge wrench	1pcs
· Membrane shell wrench	1pcs
· Accessory pack	1 package
Consisting of: 12mm 3 way inlet water valve	1pcs
6mm Inlet water ball valve	1pcs
6mm blue pipe stopper	5pcs
6mm white screw nut	1pcs
Faucet hanging piece	1pcs
Storage tank ball valve	1pcs

Notes:

Unit Conversion: $0.1\text{MPa} = 1.02\text{Kg}/\text{cm}^2 = 14.5\text{Psi}$

$1\text{Psi} = 0.07\text{ Kg}/\text{cm}^2$

1 Gallon = 3.785 Liters

$75\text{GPD} = 75\text{ Gallons}/\text{Day} = 284\text{ Liters}/\text{Day} = 197\text{ Milliliters}/\text{Minute}$