

RO System

RL-CA100

User Manual

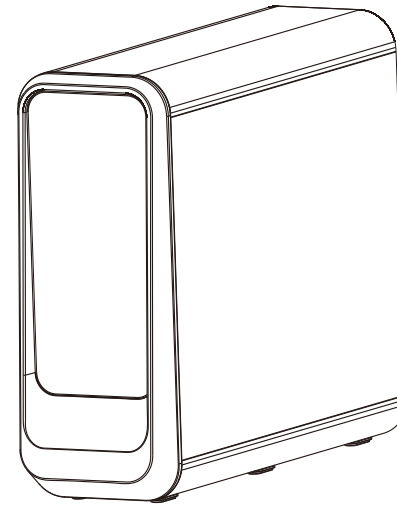
Please read this manual in details before using the product and
keep it properly in order to consult in the future

0WRX.466.824
Rev.A.2403

Notice:

1. In order to ensure the safety and correct use of this water purifier, please contact the installation and maintenance service providers authorized by Runlucky company to install and maintain the device. Otherwise, Runlucky company will not be responsible for any accidents caused by installation and maintenance.
2. In order to ensure the quality of the outlet water, the filter element should be replaced in time. This water purifier must use the special replacement parts or accessories of Runlucky company, otherwise, Runlucky company will not be responsible for any accidents caused by any quality problems, performance degradation or financial losses.
3. Before carrying out any operation on this water purifier, please read and understand the instruction manual carefully.
4. It is strictly forbidden to tilt the water purifier during transportation, installation and use. Please do not try to install the water purifier in reverse or upside down. It is strictly forbidden to install the water purifier in a place that may be exposed to freezing, direct sunlight or rain.
5. This water purifier is suitable for water temperature of 5~38°C. Please ensure that the water purifier is far away from the heat source and do not intervene in the hot water pipeline.
6. The applicable water pressure of this water purifier is 0.1~0.4MPa. If the tap water pressure exceeds this range, the corresponding pressurization or decompression device must be installed (to be purchased separately).
7. The power adapter and socket used for this water purifier should be placed in a safe location where there is no risk of electric shock, especially where water cannot be splashed.
8. The waste water discharged in the process of water treatment needs to be properly discharged through the drain pipe, and the drain pipe cannot be blocked, otherwise it is easy to cause high TDS value (total dissolved solids) of the outlet water, blockage of the reverse osmosis membrane or no service.
9. If the water purifier is not used for a long time, it is necessary to activate the washing function to clean it when it is activated again. Do not take water for drinking during the washing process.
10. Regularly check whether there is water leakage of the water purifier or water pipe fittings, so as to avoid water leakage and cause damage to home property.
11. Regularly check whether the power supply and wires are loose or damaged to avoid major accidents caused by leakage.
12. The replaced filter element should be placed in the recycling bin. Please pay attention to environmental protection and do not discard it at will.

RO System RL-CA100



Product image is for illustrative purposes only and may differ from the actual product (including color)!

Dear user:

Thank you for using this products!

In order to use this product correctly, please read this manual carefully before installing and using the product, and keep it for future reference.

Catalogue

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1. Product Profile

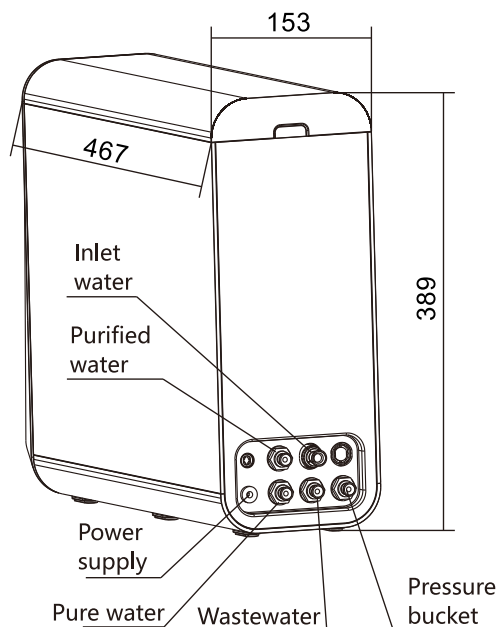
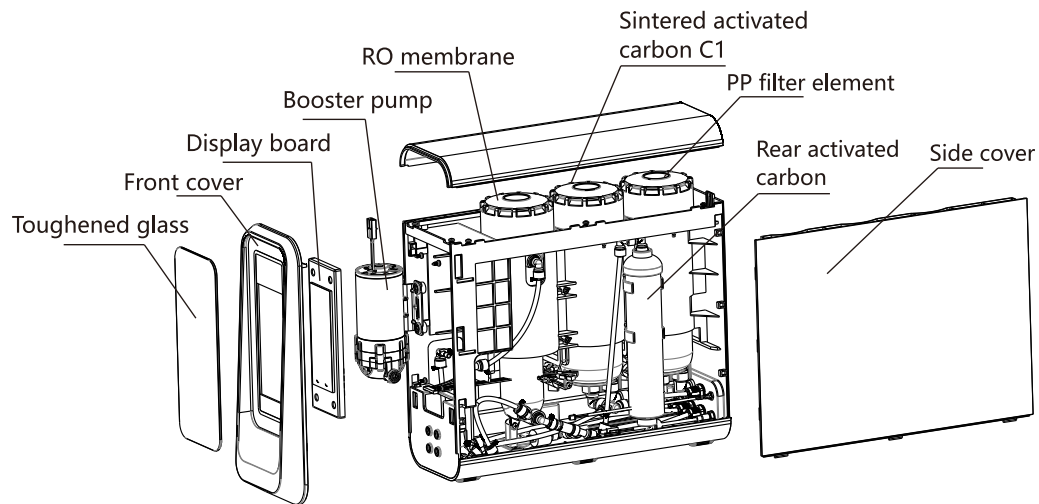
Product Features

1. Adopting a standard 10" filter element to reduce the cost of replacing the filter element;
2. Adopting high-strength filter bottles for safer use;
3. Internal pipeline connection makes maintenance and after-sales more convenient;
4. Using a large panel for more intuitive display.

Basic Parameters

Model No.	RL-CA100
Product Name	RL-CA100 type RO System
Rated Frequency	50/60Hz
Type of Protection Against Electric Shock	Class II
Water Source	Tap Water
Inlet Water Pressure	0.1~0.4MPa
Environment Temperature	4°C~40°C
Water Temperature	5°C~38°C
Rated Voltage	100-240V
Rated Power	24W
Pure WaterFlow	0.26L/min
Rated Pure Treated Water	4200L
PurifierWater Flow Rate	2L/min
Rated PurifierTreated Water	4000L

Assembly & Parts



2. Matters Need Attention

- The installation and use of this water purifier should comply with the relevant requirements of this instruction manual. Please contact the dealer for the installation and maintenance services of this water purifier, and it will be completed by professionals. Damage caused by improper installation and use is not covered by the warranty!
 - Do not install the water purifier in reverse, and do not connect the water inlet pipe to the water outlet.
 - Do not reverse the installation order of the water purifier filter element, so as not to affect the normal functioning of the water purifier.
 - Do not disassemble or modify the water purifier without authorization, otherwise it may cause the water leakage, fail to work normally, or even cause safety accidents.
 - The applicable water pressure of this water purifier is 0.1~0.4MPa. If the tap water pressure exceeds this range, the corresponding pressurization or decompression device must be installed (to be purchased separately).
 - Before use, please confirm that the actual power supply used is 100-240V~50/60Hz.
 - When unplugging the power adapter, please do not pull the power cord forcibly. If the power cord or plug is damaged, cut off the power immediately and call the after-sales service in time.
 - Do not allow the supply and drain lines or the water purifier to freeze. If the water temperature or outside temperature drops below 5°C, please close the water inlet three-way valve of the water purifier first, then open the drinking faucet and let the machine start treating water for about 5 minutes, then the water in the filter element can be drained.
 - It is not allowed to place heavy objects or corrosive items on the water purifier, so as to avoid damage to the water purifier, resulting in water leakage, electricity leakage, etc., which may cause safety problems and property losses.
 - Do not cover the water purifier to prevent it from dissipating heat, otherwise it may cause damage to the water purifier or a fire accident.
 - Do not use raw water whose water quality is seriously exceeding the standard, otherwise the filter material may be "fouled" or ineffective, which may affect the water quality, and even has to replace the filter material in advance.
 - When the water purifier is working, please ensure that each inlet and outlet pipes are unobstructed.
- When any of the following situations occur, please immediately cut off the power supply of the water purifier and the water supply source (that is, close the water inlet three-way valve), and contact the service provider in time:
- If the pipeline or related parts of the water purifier leak;
 - If the relevant parts of the water purifier fail to function;
 - If there is any other abnormal phenomenon or failure.

3. Installation and Use

Installation Method

1. Installation Preparation

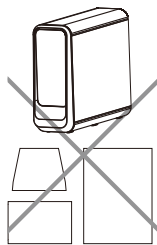
This device must be installed by professional installers!

- ① Professional installers prepare installation tools and necessary measuring and qualified inspection instruments. Check whether the water purifier is in good condition, and whether the accompanying documents and accessories are complete.
- ② Carefully read this "User Manual" to understand the function, usage, installation requirements and installation method of the water purifier to be installed.
- ③ Use a pressure gauge to check the water pressure of the tap water in the water pipe. The inlet water pressure is required to be in the range of 0.1~0.4MPa. If it is lower or higher than this range, a booster pump or a pressure reducing valve (to be purchased separately) should be installed.
- ④ Before installation, please turn off the power of the main water inlet valve and power socket.

2. Installation Location

Assist the user to select the installation location of the water purifier.

1. The water purifier cannot be installed above fire-prone appliances such as gas stoves, microwave ovens, or washing machines with plastic casings.



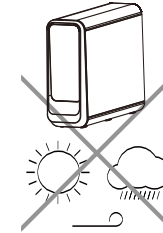
2. Avoid places where flammable gases may leak or environments with strong corrosive gases.



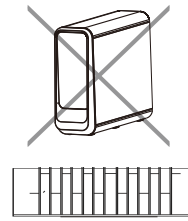
3. Avoid places where strong electricity or strong magnetic fields are directly affected.



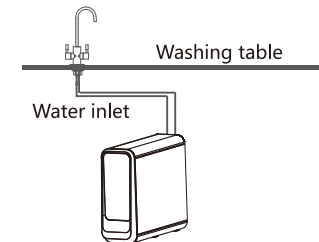
4. Avoid direct sunlight, rain, and wind.



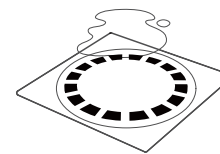
5. Avoid places prone to vibration.



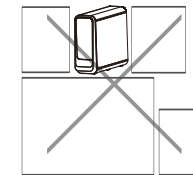
6. Minimize the pipeline connection length of each water outlet of the water purifier to reduce pipeline pressure loss.



7. There must be a sewer or floor drain near the installed machine that can discharge waste water, so as to avoid nowhere to drain.



8. In order to facilitate heat dissipation and facilitate future maintenance, relocation, etc., a certain space must be reserved for the installation location of the water purifier.



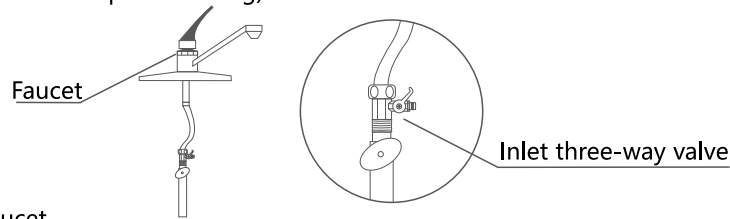
9. The bearing capacity of the installation surface should not be less than 4 times the total weight of the water purifier after filling with water to ensure safety.



3. Installation Operation

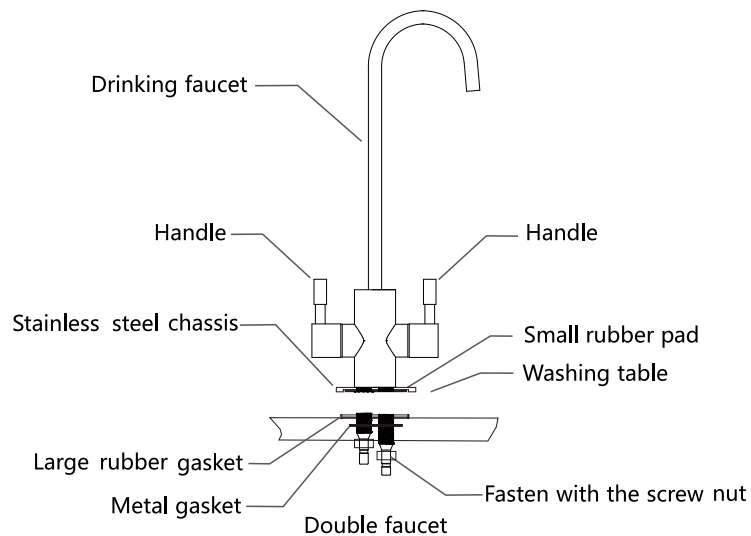
① Install the water inlet three-way valve

Close the water inlet valve of the faucet and unscrew the metal hose connected to the water inlet valve. Take out the water inlet three-way valve of the water purifier, screw one end of the inner thread of the water inlet three-way valve to the water outlet of the water inlet valve, and screw the metal hose to the outer thread of the other end of the water inlet three-way valve (the external thread must be wrapped with an appropriate amount of raw material tape for sealing).



② Install the faucet

Drill one small hole with a diameter of 28mm in the appropriate position of the water intake table, first unscrew the nut under the drinking faucet, put the stainless steel chassis and rubber gasket on the wire hose in turn, pass the wire hose through the table, and then insert the small rubber gasket, plastic gasket and locking gasket from the wire hose of the drinking faucet, (if no corresponding gasket, can not add), put on the nut to fix the drinking faucet on the table. Insert one end of the quick connector of the accessory kit into the socket at the bottom of the purifier faucet, and insert 1/4" PE pipe of appropriate length into the other end of the quick connector (see the figure below) to complete the installation. If you need to fix the drinking faucet to the wall, use the drinking faucet hanger.



③ Connect the waste water channel

Take a piece of 1/4" PE pipe of appropriate length, insert one end of the water pipe into the "Wastewater" of the water purifier host, and put the other end into the sewer or recycling container, and fix it with a cable tie.

④ Connect to the purifier water channel

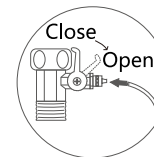
Insert the other end of the 1/4" PE pipe connected to the drinking faucet into the "Purified water" of the water purifier host.

⑤ Connect the pure water channel

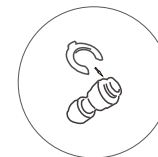
Insert the other end of the 1/4" PE pipe connected to the drinking faucet into the "Pure water" of the water purifier.

⑥ Connect the inlet water channel

Take a piece of 3/8" PE pipe of appropriate length, insert one end of the water pipe into the "Inlet water" of the water purifier host, and insert the other end into the three-way valve connected to the water inlet.



Connect to outlet of the water inlet three-way valve



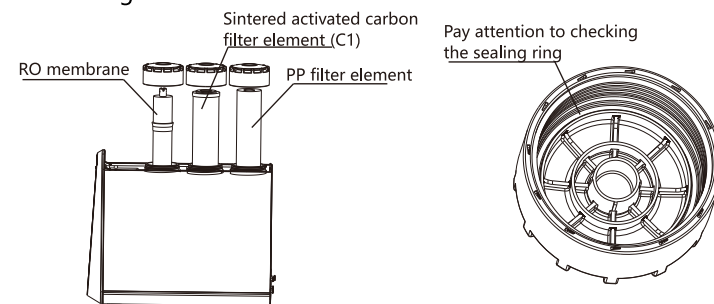
Assembly the clip

⑦ Connecting the pressure bucket

Firstly, install the ball valve onto the pressure bucket, and then take a 1/4" PE pipe of appropriate length to insert one end of the water pipe into the pressure bucket and the other end into the pressure bucket interface of the machine.

⑧ Installing filter element

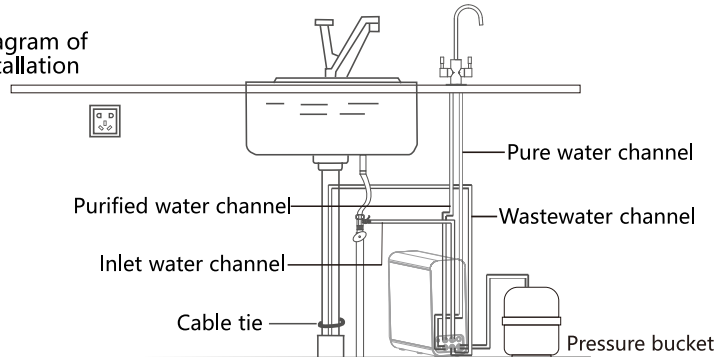
Take out the filter elements from the accessory package one by one, and install the PP filter element, sintered activated carbon filter element (C1), and RO membrane filter element into the filter bottle according to the stickers on the machine. Be careful not to install them in the wrong position, tighten the filter bottle cap with the matching wrench, and check whether the sealing ring of the filter bottle cap is in the slot during installation.



⑨ Install under the cabinet

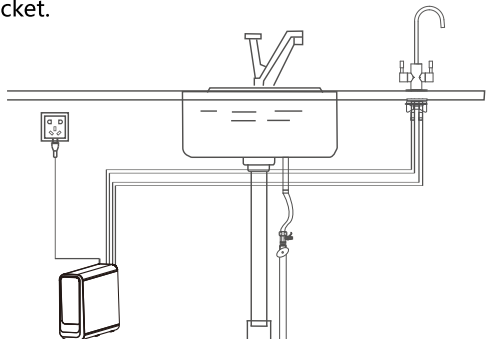
Place the water purifier connected to the pipeline under the table, pay attention to the flat surface, and try to lean the water purifier against the inner wall to avoid the water purifier from tipping over. The final completed installation is shown in the following figure.

Schematic diagram of waterway installation



⑩ Connect the power supply

After connecting all the water channels of the water purifier, insert the power plug into the power socket.



Schematic diagram of circuit installation

Note:

A. When installing the water pipe, the nut should be screwed in right place, and the water pipe should be inserted in right place when it is matched with the quick-connect joint, and the clip should be inserted to fix it, otherwise it will be easy to loosen and cause water leakage.

B. When cutting the water pipe, please use pipe scissors or a blade, and the incision should be flat, otherwise it will easily cause the water leakage of water purifier.

C. The pipeline between the water inlet of the water purifier and the water inlet three-way valve should not exceed 1m, otherwise it may cause the water inlet pressure of the water purifier to be too small, resulting in discontinuous water flow during use, and the water purifier frequently starts and stops, making a clicking sound.

4. Inspection and Trial Running

① After confirming that the water connection is correct, user must also confirm that the water source and power supply are normal before trial running.

② Open the main water inlet valve of the tap water and the switch of the water inlet three-way valve of the water purifier.

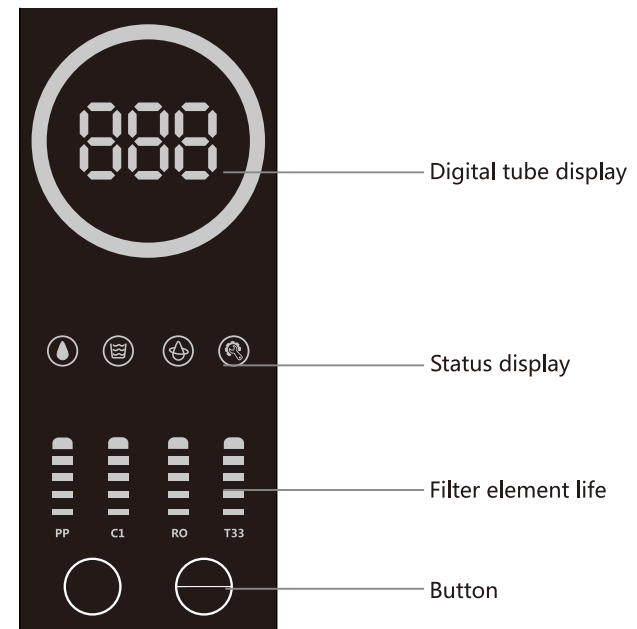
③ Slowly open the drinking faucet and let it drain for 5-10 minutes until the water is clear before turning off the faucet. Open the ball valve on the pressure bucket and observe if the machine is producing water normally. Wait for about 30 minutes and observe if the standby water is full.

④ If the water is normal and full, open the faucet to drain the pressure bucket, then close the faucet to continue waiting for the water to be full. It will take about 3 buckets of water to be drained before it can be used normally.

⑤ During the treating water process, please check whether the pipeline is leaking or leaking water. If found, please immediately check if the PE pipe is not fully inserted or tightened.

Instructions

1. Operation Panel Interface



Digital tube display

Status display

Filter element life

Button

2. Display Interface Description

After the power is turned on, all the indicator lights are on for 6 seconds, then digital tube display "100", the system automatically enters the rinse state, and automatically enters the standby state after the rinsing time for 30 seconds.

①. Service

When the machine starts service, the outer circle of the display area rotates to display, and the service light is constantly on, when exiting service, return to standby mode.

②. Rinse (Rinse status light is on)

Several states of rinsing:

1. Power on again after power off, the machine will automatically rinse for 30 seconds.
2. Cumulative service for 20 minutes, and automatic rinsing for 30 seconds after service is completed.
3. Continuous standby for 24 hours, the machine enters the automatic rinsing state for 30 seconds.
4. Press the "Washing" button manually, the machine will enter the rinsing state for 30 seconds, and then enter the standby state after the end.

③. Filter element life reminder

The filter element lifespan bar represents the usage of the filter element, with each grid representing 20% of the filter element lifespan. When the life of the filter element is exhausted, all corresponding filter element lifespan bars are extinguished.

After replacing the corresponding filter element and performing the reset operation, the system exits the above alarm.

④. Timeout protection

When the machine works continuously for 4 hours, the machine is forced to stop. At this time, the panel displays "E1" flashing and buzzing, and the machine does not treat water. Re-power on or press any key to exit the timeout protection state, and the machine resumes normal work.

3. Reset Operation When the System Reminds to Replace the Filter Element

When the life of the filter element is exhausted, the corresponding filter element lifespan bars are extinguished, the corresponding filter element indicator flashes, and the buzzer buzzes for 5 seconds each time water is treated. After replacing the filter element, press and hold "Reset" button for 3 seconds, and the filter element life reminder will be removed, the lifespan bars are all lit up.

If the filter element is replaced before the filter element life has reached the filter element reminder time, after the filter element is replaced, press and hold "Reset" button for 3 seconds and the PP filter element light always on. If the value of the PP filter element life needs to be reset, please short press "Reset" button within 7 seconds, the value of the PP filter element life will be reset to zero, and the timing will be restarted; if you want to clear the value of the RO filter element life, during the PP filter element light flashes for 7 seconds, short press "^{Set}/_{Washing}" button, at this time, the RO filter light is on, and short press "Reset" button while the filter light is always on, the lifespan of other selected filter elements can be reset to zero.

4. Manual Washing Button Operation

Touch the "^{Set}/_{Washing}" button to let the machine rinse for 30 seconds. Touch the "^{Set}/_{Washing}" button again to exit the washing mode.

5. Notes for Use:

○ After installing the product, connect the water source first, and then connect the power supply; for the first use, it is necessary to fill three buckets of water in sequence, turn on the faucet, and drain it before using pure water normally.

○ Regularly check whether the water pipe fittings of the water purifier are leaking to avoid property damage.

○ When you go out for a long time or do not use this product for a long time, please disconnect the water supply (close the inlet water ball valve) and the power supply. If it has not been used for 24 hours, please drain the water for 5~10 seconds before use; if it has not been used for more than 5 days (more than 3 days in summer), please drain the water for 5 minutes before using it again. The filter element after passing the water cannot be nonuse for a long time, especially in summer, generally the nonuse days cannot exceed 7 days.

○ When any of the following situations occur, please disconnect the water supply of the water purifier (close the water inlet ball valve) and the power supply immediately, and contact the service provider to deal with it in time:

- a. When the pipeline or related parts of the water purifier leak;
- b. When the relevant parts of the water purifier fail to function;
- c. When there are any other abnormal phenomena or failures.

4. Trouble-Shooting

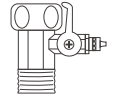












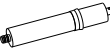
Common Faults and Solutions

Problem	Cause	Solution
Water purifier does not start	Power is not connected.	Connect to power.
	Main controller failure.	Notify maintenance department for maintain.
The water purifier does not stop	Booster pump loses pressure.	Notify maintenance department for maintain.
	The composite filter element is clogged.	Replace the composite filter.
	The composite filter element is not installed in right place.	Check whether the composite filter element is installed properly.
	RO filter element is clogged.	Replace the RO filter element.
The water purifier stops but the waste water does not stop	Inlet valve failure.	Notify maintenance department for maintain.
	RO membrane is damaged.	Replace the RO filter element.
Display does not show any information	Operator failure.	Notify maintenance department for maintain.
The flow of purified water is small or no water	Filter element is clogged.	Replace the filter element.
	Inlet water pressure is low or water cut off.	Use it after the water pressure is normal.
	Booster pump loses pressure.	Notify maintenance department for maintain.
	Water inlet solenoid valve is damaged.	Notify maintenance department for maintain.
	Pressure bucket leaking.	Replacing the pressure bucket.
Water leakage	The pipeline or filter element behind the booster pump is blocked.	Notify maintenance department for maintain.
	Fitting or filter element is not locked.	Check whether the fitting or filter element is locked.
	Wading sealing ring is aged.	Notify maintenance department for maintain.
	Inlet water pressure is too high.	Install the pressure reducing valve.
	Socket or filter housing is damaged.	Notify maintenance department for maintain.

If the fault listed above is the problem of the water purifier itself, please ask the professionals authorized to repair it.

5. Repair and Service

Attachment List

Type	Accessories	Simple picture	Quantity	Accessories	Simple picture	Quantity
Universal	Tee valve		1 pc	User manual		1 pc
	1/4" PE pipe		1 roll	I type quick connector		2 pcs
	3/8" PE pipe		1 roll	Double-tap		1 set
	3/8" clip		1 pc	Transformer		1 pc
	1/4" clip		9 pcs	Wrench		1 pc
	PP filter element		1 pc	Pressure bucket ball valve		1 pc
	Sintered activated carbon filter element		1 pc			
	RO membrane filter element		1 pc			

1. The shape of the accessories listed above is for illustrative purposes only and may differ from the actual product.

2. Transformer parameters: input 100-240V~50/60Hz; output 24V~/2A.

Maintenance

1. Filter element maintenance instructions

Filter element name	Recommended replacement cycle	Function
PP carbon fiber composite filter element	3-6 months	Effectively intercept solid impurities such as sediment and rust
Sintered activated carbon filter element	6-12 months	Effectively remove organic matter such as pesticide residues; Remove off color, odor, and residual chlorine to improve taste.
RO membrane filter element	12-24 months	Effectively filter out bacteria, viruses, heavy metal ions, etc. in water to improve water quality.
Rear particulate activated carbon filter element	6-12 months	Effectively remove organic matter such as pesticide residues; Remove off color, odor, and residual chlorine to improve taste.

Note:

- The total amount of purified water and the replacement cycle recommended above vary depending on the water quality and usage.
- The replacement cycle of filter elements at all levels recommended by this water purifier is based on the statistical estimation of the average index of tap water in various places. When there is a big difference between the actual water quality of the user's water and the utilization rate of the water purifier and the average index, the use of the filter element will be significantly different from the estimated period, such as premature blockage of the filter element, premature failure, etc. At this time, the replacement cycle of the filter element should be based on the actual use state as the basis for the replacement of the filter element, and should contact with the service provider in time.
- The estimation of the replacement cycle of the filter element of this water purifier is based on ordinary household water consumption, and is only suitable for household use, not suitable for public occasions with large water consumption.
- The maintenance of this water purifier and the replacement of filter element components are paid services.
- The size of the filter element used in this product is commonly used in the market, but the formula is different from the market. Therefore, the filter elements purchased in the market may not match and cause abnormal machine conditions.

2. Filter element replacement steps

- Close the inlet three-way ball valve and pressure bucket ball valve and open the pure water tap, let the machine run for a period of time to drain any residual water inside the machine and turn off the power.
- Use the matching filter element wrench to open the cap of the filter element that needs to be replaced, as shown in Figure 1. Remove the filter element, replace it and tighten the filter element cover. The rear activated carbon has been assembled at the factory, and the side cover needs to be removed for replacement, as shown in Figure 2.

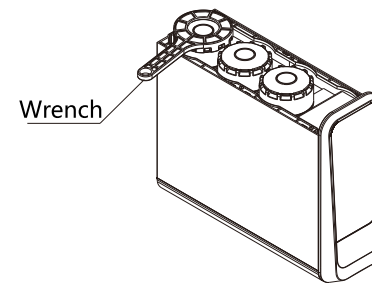


Figure 1

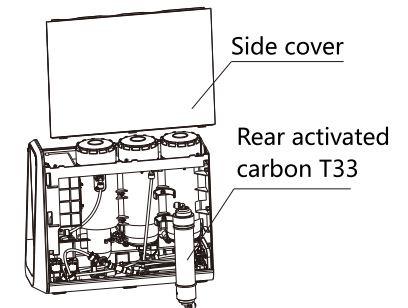


Figure 2

- After replacing the filter element, turn on the faucet, power on again, and reset the lifespan of the replaced filter element. If replacing the PP filter element or sintered activated carbon C1 filter element, turn on the purified water switch of the faucet and let the filter element repeat for 5-10 minutes. Once the water is clear, it can be used normally. Replace the RO membrane or rear activated carbon filter element, and it is recommended to drain at least the water from the first pressure bucket.

Note:

- In the process of restarting the water purifier to treat water, please check whether the connection of each circuit is reliable, whether the connection of the waterway is firm, and whether the filter element is in right place, so as to avoid leakage of water or leakage of electricity, which may cause damage to home property or personal safety.
- When the water purifier restarts the water treatment, it will automatically rinse for about 30 seconds. At this time, the flow of purified water will become smaller, which is a normal phenomenon. After 30 seconds, the normal flow can be restored.
- The replaced filter element cannot be used again.

6. Warranty Card

Dear client:

This warranty card is the guarantee proof of our RO system. It is kept by client self. You could get the after-sales services from the supplier. Please keep it properly. It couldn't be retrieved if lost. It couldn't be repaired free of charge under the below conditions:

1. Guarantee period expired. (18 monthes from the manufacturing date);
2. Damage resulting from using, maintenance, and keeping that are not in accordance with the instruction;
3. Damage resulting from repairing not by the appointed maintenance personnel;
4. Content in guarantee proof is unconfirmed with the label on the real good or be altered;
5. Damage resulting from force majeure.

Product Name	RO System				
Model		Code of Valve Body			
Purchase Company Name		Tel. / Cel.			
Problem					
Solution					
Date of Repairing		Maintenance Man Signature		Date of Accomplishment	