





## REVERSE OSMOSIS SYSTEM

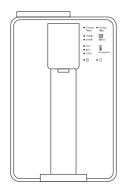
ECOPERLA MAESTRO original product of Ecoperla

## USER MANUAL

## **USER'S MANUAL**

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## ECOPERLA MAESTRO REVERSE OSMOSIS SYSTEM

### **1. PRESENTATION AND INTRODUCTION**

We welcome you. Thank you for trusting our product. Complying with the advanced reverse osmosis technology, this model is designed thought for a long duration in all families. This system is placed on the countertop.

No chemicals or electricity are needed to produce quality water. The equipment is able to eliminate over 95% of total dissolved solids, +99% of all organic remains, +99% of all bacteria and reduces up to 99% chlorine, improving the taste and quality of water. This equipment also eliminates harmful materials such as lead, copper, barium, chromium, mercury, sodium, radmium, fluoride, nitrite or selenium, which may be present in your water, providing pure and healthy water.

IMPORTANT: KEEP THIS MANUAL.

#### 2. WHAT IS REVERSE OSMOSIS?

Reverse osmosis was originally designed to make seawater drinkable for the Navy. It is deal for anyone with a low sodium diet. A reverse osmosis membrane has a much smaller pore size than a bacterium orr parasite. When working properly, it will remove all miccroorganisms from tap water producing sterile water.

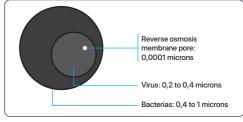
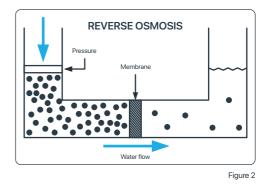


Figure 1

Reverse osmosis is the reversal of the natural flow of the osmosis. In the water purification system, the objective is to dilute the salt solution, but separating the pure water from the salt and other contaminants.

When the natural flow is reversed, the water in the salt solution is forced to pass through the membrane in the opposite direction by applying pressure (the term reverse osmosis). Through this process, we are able to produce pure water by removing salts and other contaminants.



#### **3. WATER QUALITY**

In the drinking water, you will notice an improvement in taste, just as it will be better for your coffee maker, for making ice cubes or for making juices. When cooking with purified water you will be able to taste the flavor of the food better. It will be a healthier water for your children and good for your plants.

This water treatment is recommended for those who suffer from hypertension, as it is a water of low mineralization. It is ideal for steam irons. Osmotized water will help prolong the life of your appliances.

### **4. WATER POLLUTION**

Environmental water is increasingly polluted by domestic, agricultural and industrial waste.

Domestic wastes (human wastes, washing wastes or chemical cleaning products), which have increased considerably due to the increase in population centers close to traditional channels, in many case end up in natural aquifers.

Residues of agricultural origin, such as slurry and excrement, chemical fertilizers, nitrates, herbicides and pesticides, as well as industrial residues, appear more and more in natural aquifers.

The water supply companies filter the water and add chemicals (e.g. chlorine) to disinfect it and this prevent infectious diseases such as typhus, diphtheria, etc.

For this reason, the water we receive in our homes could carry traces of chemicals and residues of chlorination, such as trihalomethanes, very harmful to health, in addition to sodium, calcium and other minerals in excessive amounts.

#### **5. PRELIMINARY WARNINGS**

## 🚺 WARNING

All the contents of this part are related to safety, so please comply with it. The considerations in this part are only for the proper use of this product.

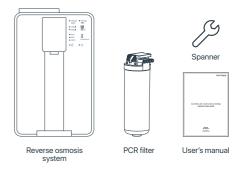
The precaution terms explain the degree of hazards and possible accidents.

- Do not use other accessories without the manufacturer's approval. If found breakdown due to this reason, warranty will terminate automatically.
- Please check and make sure the product is in good condition after removing the packaging, and check whether the accessories are complete.
- **3.** Children and incapacity persons should use the product under the supervision of the guardian.
- In case of failure, unplug the power plug immediately and do not place the defective product in working condition.
- This product should be repaired in the authorized maintenance center. If not, it will easily cause other unsafe factors.
- 6. The filtered water production flow of reverse

osmosis membrane will be affected by the water quality and water temperature. When the water quality does not meet the standard and the water temperature is less than 25 °C, the water production flow will be less than the standard value.

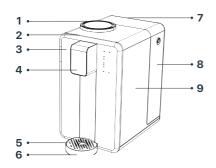
- If the power cord is damaged, to avoid danger, it must be replaced by the manufacturer, it's maintenance department or similar department professionals.
- Concentrated water "waste water" can be recycled, and it is recommended to be selectively used for domestic water use (watering flowers, mopping floors, etc.)

#### **6. CONTENTS OF THE BOX**



#### 7. PRODUCT SPECIFICATION SHEET

- Power: 2100W (+5/-10%)
- Voltage: AC 220V/50Hz
- Purified water flow rate: 0.2L/min
- Hot water capability: ≥24L/h
- Source water tank: 4.0L
- Purified water tank: 0.8L
- Product size: 351 x 215 x 347 mm
- Product weight: 7.3 kg
- Capacity: 2.000 L.
- Source water temp .: 5-38 °C
- Environment temp.: 5-40 °C
- Inlet water pressure: 0.1-0.4MPa



- 1. Filter tap.
- 2. Top cover.
- 3. Front panel.
- 4. Water outlet.
- 5. Water box tap.
- 6. Water box.
- 7. Source water tank cover.
- 8. Source water tank.
- 9. Outer housing.

## 🔔 NOTE

The product, user interface and other inserts in the manual are schematic diagram for reference only. Due to the update and upgrade of the product, the physical product and the schematic diagram is different, subject to the actual product received.

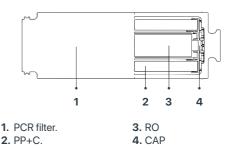
### 9. PRODUCT FEATURES

- 5 in 1 composite RO reverse osmosis filtration, precision of 0.0001 micron, the water can be direct drinking.
- The bacterial removal rate reached 99.999%, and the heavy metal removal rate reached 99.9%.
- Instant hot water without waiting, non-heat storage design, refused to thousand rolling water.
- Child lock function, anti-dry burning mode, plateau mode, intelligent temperature control, filter element life reminder.
- No installation, slim design, no waste water, plug in for use.
- Internal TDS monitoring function, automatically remind the water to change when the original water is unqualified.
- Water tank with anti-bacteria function.

### **10. PCR FILTER FEATURES**

Thick PP+Carbon filtration: Removes dirt, corrosion, sediment, red worms, sand and other physical particles to protect the RO membrane.

Precise RO Membrane filtration: Reverse Osmosis Membrane with the filtration precision 0.0001 micron removes bacterial,virus, antibiotics and other harmful substances, heavy metal and pesticide residues from water.



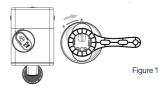
## 11. INSTALLATION

11.1. PRE-INSTALLATION TIPS

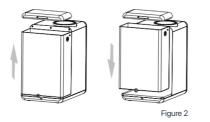
- The machine must be placed on a flat, firm and dry surface, and do not place it in direct sunlight.
- The first three buckets of water for the first use of the machine shall be emptied to clean the machine pipeline.
- If the wrench is lost accidentally, please open the cover of the original water tank, unscrew the fixing screw, open the upper cover, and remove the filter element counterclockwise.

#### 11.2. STEPS TO FOLLOW

 Installation of PCR composite filter element: as shown in figure (1), align the corresponding filter element to "unlock", use wrench to press the filter element downward and rotate in the direction of the arrow until aligned with "lock", tighten the filter element.



2. As shown in figure (2), open the cover of the original tank, lift the original tank, fill the water and put it back in place.



#### 11.3. SYSTEM CLEANLINESS

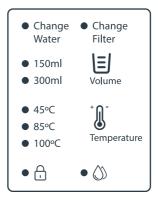
- 1. Take off the water tank from the whole machine, fill up the municipal tap water, the water quantity does not exceed the highest level of the water tank, and then put it on the whole machine.
- 2. Confirm that the power supply is switched on.
- 3. Deep press the "change water" button for 3 seconds, the machine enters into flushing state. after flushing, the machine began to produce purified water. When the pure water tank is full (about 15 minutes), remove the remaining water in tank, and place a container (volume≥1.5L) below water outlet for drain storage.

Deep press the "Dispense" button for 3 seconds 4. for the machine to start drainage, and repeat the above process three times.

**Suggestion:** for the first time use, after second time filling of water, stand still for 24 hours before the subsequent action.

If the water is found to be unclean or foreign matter or odor, please let it stand still for 24 hours before drainage and flushing until the water quality of the water is normal.

## **12. OPERATION KEYS AND INSTRUCTIONS**



- 1. Power on for hot water, in first 5 seconds comes out of room temperature water, then hot water.
- 2. For the first time of power-on, temperature, flow rate and display light are off by default, and when the operation is finished, return to the default state after 1 minute.
- 3. Plateau mode: long press the "water intake + cup quantity" combination key for 3 seconds, the machine enters into the plateau mode. In the plateau mode, the highest temperature of the boiling water stage is 87 degrees Celsius, and switch to the plateau mode sound 3 times, return to normal model sound 1 time. (recommended altitude over 1200M for Plateau mode).

### **12.1. PURIFIED WATER PRODUCTION**

- 1. When the original water tank is full, purified water production will start after dispensing in 10s.
- 2. If the original water tank is lifted, purified water production will stop immediately.
- **3.** When pure water tank is full, waste water solenoid valve will automatically open for 3s.
- 4. When the original water tank is short of water, if directly replenishing water without lifting the original water tank, press "change water" button, buzz 3 sounds to start auto rinse for 20 seconds before water purification process starts.

5. When the original water tank is short of water, lift the original water tank, the "change water" light flashes, put it back after replenishing water. The "change water"indicator light will be on after detecting short of the pure water, it will be Off when pure water is higher than the lowest level. Purification process starts after flushing for 20 seconds.

#### 12.2. FLUSHING

- 1. Each time the machine is powered on, auto flush for 20 seconds. The self-priming pump and the wastewater solenoid valve starts to work.
- 2. Press the "Change water" button, auto flush for 20 seconds.
- **3.** Purification process reaches an accumulative time of 30 min, auto flush for 20 s.
- **4.** After flushing, the machine enters into the auto water purification state.
- 5. Deep press "Change water" button for 3 seconds to starts flushing for 5 min, then press again to exit.

#### 12.3. EXAMINATION AND REPAIR

After the self-priming pump works continuously for 30 min, the machine enters into maintenance state. the full screen flashes, and all keys are invalid. The machine starts to work normally after faults are removed and powered on again.

## 12.4. DRAINAGE OF PURIFIED WATER

Deep press the "Dispense" button for 3 seconds, buzz for 1sound. the purification stops, drainage of water starts, until the pure water tank is empty. After 2 minutes, the machine starts to work again.

Cuando vaya a estar durante un largo periodo de tiempo sin utilizar la máquina, vacíe los depósitos por favor.

### 12.5. DISPENSE

· Child lock: press the child lock key to lock on, press

again to unlock. When the child lock light is on, outlet of cold water. when the child lock light is off, hot water is available.

- Standby state: press the "Volume, Temperature, Dispense" button, lights of water volume and water temperature will be on. Press "Dispense" button to get water. During water dispense process, press "volume" button, "temperature" button to adjust to the corresponding selection, water stops to come out. Press "Dispense" button again to get water.
- · Volume state:
  - When light of 150mL is on and light of 300mL is off: outlet of 150mL water.
  - When light of 150mL is off and light of 300mL is on: outlet of 300mL water.
  - When lights of 150mL and 300mL are both off: outlet of 1000mL water.
- Non-standby state: press the "Volume" button to adjust the water output, press the "temperature" button to adjust water temperature. The water dispense ends with a beep.
- Normal state: the water dispense stops for 1min without operating, Functions of "Volume" and "Temperature" enters into standby state, lights of volume and temperature will be off.

During the heating process, when low water level is detected, the heating will automatically stop. The DC pump and heating pipe will be off of power.

During the heating process if "Dispense" button is pressed on, the heating stops, DC pump and heating pipe will be cut off of power.

#### 12.6. TDS VALUE DETECTION

When the inlet water TDS is abnormal, the "change water" light will flash in red.

## Suggested filter replacement cycle:

- Filter cartridge type: PCR composite filter.
- Replacement cycle: 24-36 months.

The replacement cycle of the filter completely differs in the user's water quality and water usage. If the safe replacement cycle is performed, the normal operation of the reverse osmosis system and water quality of the pure water produced by it can be ensured. Therefore, the above recommended replacement cycle of the filter is for your reference only.

## Filter life display:

## Filter early warning:

When the filter life is left 5%, the "Change filter" light will flash in white. It will buzz for 5 sounds, then stop, one sound per second.

## Lifetime consumption of filter:

When the filter element reaches the set service life, the "Change filter" light becomes red. when the service life reaches for the first time, the continuous alarm is 10 sounds.

The machine can work normally when any filter element is exhausted.

## New Filter Reset:

Deep press "Change filter" button for 5 seconds, it will buzz 1 sound, filter reset is done.

## 14. RECYCLING



The packaging material used is recyclable. We recommend that you separate plastic, paper and cardboard and hand them over to recycling companies.

According to WEEE guidelines (Waste of Electrical and Electronic Equipment / Waste of Electrical and Electronic Equipment must be collected separately.

If you need to dispose of this appliance in the future, DO NOT throw it away with the rest of your household waste. It should be taken to the nearest WEEE (Waste of Electrical and Electronic Equipment) collection point.

## **15. PROBLEM SOLVING**

The following situations can be handled by ourselves. If it cannot be solved, ask professional maintenance personnel for help to perform a thorough inspection and maintenance. It is normal for machines to make a slight noise during operation.

PROBLEM	POSSIBLE REASON	SOLUTION
The machine does not output water.	If the filter is blocked.	Change filter.
	If the machine is not powered on.	Check the power.
Output of water decreases.	If the filter is blocked.	Change filter.
	The temperature of source water is too low.	Use 5-38 °C water.
Machine does not work.	Power supply problem.	Check the power.
	Adaptor is invalid.	Change the adaptor.
Water is odorous.	If long time no use of machine.	Change water from source water tank.
	If long time no change of filter.	Change filter.
	If long time no cleaning of tank.	Clean tank regularly.
Abnormal noise during working.	Power supply problem.	Notify maintenance staff to adjust or replace with
	Transformer problem.	new components.
	Self-suction pump problem.	

## **CUSTOMER INFORMATION**

Mr. Mrs.:
Address:
ZIP Code and location:
Phone number:
Email:

#### SELLER'S DETAILS:

Business name:
Address:
ZIP Code and location:
Phone:
FAX:
Email:

# EQUIPMENT GUARANTEE DIRECTED TO THE END CUSTOMER:

All of our products have a two-year warranty as established by law upon purchase. If any repairs were to be made, it would have a 3 month warranty, regardless of the general warranty. In order to cover this guarantee, the product purchase date must be verified

The company undertakes to guarantee the **parts that are defective**, provided that they are not sent for examination at **our facilities** on behalf of the customer.

To make the warranty effective, the defective part must be accompanied by this warranty voucher, duly fulfilled and sealed by the seller.

All warranties will be given in our warehouses. In all cases our responsibility is **limited to replacing or repairing defective materials** without paying any compensation or other expenses.

No refunds or claims of material will be accepted after 15 days of receipt. If within this period, the material must be sent to us packaged and **DIRECTED TO PAID PORTS TO OUR WAREHOUSES**.

## THE GUARANTEE DOES NOT EXTEND TO:

1. Replacement, repair of parts caused by wear, due to normal equipment use, such as resins, polyphos-

phates, sediment cartridges, etc. as indicated in the instruction manual of the equipment.

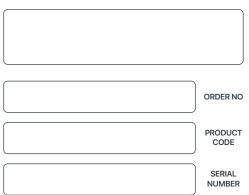
- 2. Damages caused by bad use of the device and those caused by transportation.
- 3. Handling, modifications or repairs made by third parties.
- **4.** Malfunctions due to bad installation, outside the technical service, or if the assembly instructions have not been followed correctly.
- Improper use of the equipment or that the working conditions are not those indicated by the manufacturer.
- 6. The use of non-original company parts.

## "CE" DECLARATION OF CONFORMITY:

We declare under our sole responsibility that the water purification system for water filtration for human consumption is adapted per the following norms or normative documents:

### "EN-12100-1, EN12100-2, EN-55014-1:2000/A1:2001, EN-61000-3-2:2000/2001, EN61000-3-3:1995/A1:2001, EN1558-2-6".

And it is in conformity with the essential requirements of the directives: **98/37/CE**, **73/23/CEE**, **89/336/-CEE**.



### STAMP OF THE AUTHORISED SELLER

## **EQUIPMENT INSTALLATION LOG**

**NOTICE:** Read this manual carefully. If you have any questions, please contact the technical support service (T.S.S.) of your distributor. The data marked with (\*) must be stamped by the installer and transcribed by him to the company.

ORDER NO
PRODUCT CODE

SERIAL NUMBER

#### INFORMATION PRIOR TO EQUIPMENT INSTALLATION:

Origin of the water to be treated:

Public supply network.

Other:

Previous treatment?	
Hardness inlet water:	°F
Inlet TDS:	ppm
Inlet pressure:	Bar
Chlorine concentration at the inlet:	ppm

## CONTROL OF INSTALLATION STEPS:

Washing of carbon prefilters.

- Carbon post filter wash.
- Membrane assembly.
- Sanitation according to the described protocol.
- Chlorine concentration in tap after rinsing:

] Flow	restrictor	check
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Maximum pressure switch setting.

- Inspection and fittings
- Pressurized system tightness.
- \* TDS produced water (countertop tap):

\_ ppm

Clearly inform about the use, handling and maintenance required by the equipment to ensure proper operation of water. Given the importance of proper equipment maintenance to guarantee quality water, the owner must be issued a maintenance contract made by trained technicians.

# EQUIPMENT GUARANTEE DIRECTED TO THE DISTRIBUTOR:

The selling company will be responsible solely and exclusively for the replacement of parts in the event of lack of conformity. Equipment repair and associated expenses (labor, shipping, travel, etc.) will not be borne by the selling company, since the manufacturer and / or distributor guarantees it is done at their facilities.

#### COMMENTS:

\*Result of installation and service commissioning:

- CORRECT (equipment installed and operating correctly. Water produced is suitable for the application).
  - Otras: \_\_\_\_\_

## AUTHORIZED INSTALLER:

## CONFORMITY OF THE OWNER OF THE EQUIPMENT:

The client owner has been informed about the maintenance of the equipment and how to contact the technical assistance service.

Comments: \_\_\_\_\_

## SYSTEM CONTROL AND MONITORING

NOTIFICATION	DATE	TECHNICAL DATA
Installation Maintenance Warranty Inspection Repair		Name: Signature or stamp:
<ul> <li>Installation</li> <li>Maintenance</li> <li>Warranty</li> <li>Inspection</li> <li>Repair</li> </ul>		Name: Signature or stamp:
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OBSERVATIONS: \_\_\_\_

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