1200GPD RO Water System Manual

Catalogue

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1.Safety Precautions (Must read and remember)

To avoid potential harm or property damage, strictly follow these safety guidelines:

★ When installing water pipes, ensure no pipe plugs are missing. Insert the pipe into the connector fully and tighten the nut until no threads are exposed.
★ If the inlet pipe is a 3/8-inch hose, align it with the connector and maintain a 30–40 cm straight section to prevent bending-induced leaks or bursts.
★ If extending the power cord, insulate the connection with Φ8mm heat-shrink tubing and wrap it with electrical tape. Keep the connection elevated, away from the floor.
★ Before drilling into walls, confirm there are no hidden electrical wires or water pipes.

2.Product Introduction

2.1.Overview

This pure water machine employs the world's most advanced reverse osmosis (RO) technology. The RO membrane, with a pore size of 0.0001 microns (0.1 nanometers), effectively removes impurities, soluble salts, organic compounds, heavy metals, microorganisms, viruses, bacteria, and pesticide residues. The purified water retains only water molecules and dissolved oxygen, ensuring a refreshing taste.

2.2.Features

1)Modular Design: Detachable cabinets, front/rear doors for easy maintenance, wheels for mobility, and anti-corrosion electrostatic coating.

2)Safety: Water-electricity separation and top-mounted power supply to prevent leakage hazards.

3)RO Membrane System: High-efficiency low-pressure RO membrane with 0.0001-micron precision, 180L/H output, and 99% desalination rate.

4)Pre-treatment: Three-stage 20-inch filtration (5μm PP cotton → activated carbon → 1μm PP cotton) to extend RO membrane lifespan.

5)Automatic Control: LED control panel with TDS monitoring, low-water protection, alarms, and auto-shutdown.

6)Water Quality Monitor: Real-time TDS measurement for raw and purified water with temperature compensation.

7)Flow Meter: Displays hourly purified water output (L/H).

8)Booster Pump: High-efficiency, low-noise Delta pump.

9)Extended Lifespan: RO membrane lasts twice as long as standard membranes (depending on water quality).

2.3.Functions of main components

1st Stage: 5μm PP cotton for sediment and rust removal.

2nd Stage: Granular activated carbon for chlorine, odors, and organics.
3rd Stage: 1μm PP cotton for finer particles and colloids.
4th Stage: RO membrane (0.0001μm) for bacteria, viruses, and heavy metals.
5th Stage: Coconut-shell carbon (T33) to enhance taste and remove residual contaminants.
6th Stage:UV for disinfection.

3.Installation Instructions

Connect Water Pipes(inlet,outlet and wastewater pipes)

1)Shut off the water supply. Connect the inlet metal hose to the machine's inlet elbow and tighten.
2)Use the included 3/8-inch purified water hose and 1/4-inch wastewater hose, ensuring secure connections.

RO Membrane Installation

Open the membrane housing, insert the RO membrane (O-ring end inward), and tighten the housing with a wrench.

Warnings:

Align the membrane correctly.
Do not force the membrane into the housing to avoid damage.
Damage due to improper installation voids the warranty.

4.Debugging Methods

After confirming that the waterway connection is correct, it is also necessary to ensure that there is a water source and/or power supply. Then, proceed with the debugging of this machine, following these steps:

1)Open the water supply and power, and the water pump will start working. Wait until the filter cartridge is filled with water, and then pure water will start flowing out of the machine.
2) Let the system flush for 5–10 minutes until water flows steadily.Check for leaks at all connections.

3)Test the liquid level switch: Close it to stop wastewater flow and verify pump shutdown.
4)If no purified water flows, check for low water pressure or faulty switches.
5)When the machine is in operation, Close the inlet valve to confirm auto-shutdown.

5.Usage Instructions

1)Regularly inspect the machine for integrity.
2)Flush the RO membrane for 1 hour upon first use to remove preservatives.
3)Initial TDS values may be high but will stabilize.
4)Use the machine at least twice weekly to prevent microbial growth.
5)“Usage” refers to activating the machine via the inlet valve and power.

6.Maintenance

Replace Filters When:
Water quality declines (high TDS, poor taste).
Flow rate drops (not due to temperature).
Filters are discolored or clogged.
Filter Replacement:
Shut off the water supply. Use a wrench to replace the three filters one by one .
RO Membrane Replacement: Replace when performance drops irreversibly.
Notes:
RO output depends on pressure (0.5MPa) and temperature (25°C).
Dispose of used filters as general waste.

7.Troubleshooting

No.	Symptom	Cause	Solution
1	Power indicator off	No power supply	Check wiring and power source
2	Machine fails to start	Low water pressure/faulty switch	Increase inlet pressure to 0.2Mpa /replace switch
3	Control panel flickers	Power adapter/board failure	Replace adapter or control board
4	High-pressure warning persists	Faulty pressure switch/wiring	Inspect switch and connections
5	Tank overflows	Faulty upper limit switch	Check switch and wiring
6	Pump/valve unresponsive	Relay/wiring failure	Inspect relay and connections