

iSpring RO500-ORB

iSpring RO500-ORB Reverse Osmosis System

User Manual

1. IMPORTANT SAFETY INFORMATION

Please read all instructions carefully before installing and operating the iSpring RO500-ORB Reverse Osmosis System. Failure to follow these instructions may result in property damage, personal injury, or system malfunction.

- Always turn off the water supply and relieve pressure before performing any maintenance or filter changes.
- Ensure all connections are secure to prevent leaks. Use thread sealant tape on all threaded connections.
- Do not install the system in direct sunlight or in areas where it may be exposed to freezing temperatures.
- Use only genuine iSpring replacement filters and parts to ensure proper performance and to maintain warranty validity.
- Keep the system away from electrical outlets and appliances.
- If you are unsure about any installation or maintenance step, consult a qualified plumber or contact iSpring customer support.

2. PRODUCT OVERVIEW

The iSpring RO500-ORB is a tankless, high-efficiency reverse osmosis water filtration system designed to provide clean, great-tasting water directly from your tap. It features multiple stages of filtration to remove a wide range of contaminants.

2.1 System Components

The system typically includes the following main components:

- Main RO Unit (with integrated filters)
- RO Faucet
- Feed Water Adapter (FWA)
- Drain Saddle Valve
- Tubing (various colors for different connections)
- Power Adapter
- Filter Wrenches



Figure 1: Exploded view of the iSpring RO500-ORB system showing all major components and their typical placement.

2.2 Filtration Stages

1. **PP Sediment Filter:** Removes rust, sand, dirt, and other large particles.
2. **Carbon Block Filter:** Absorbs chlorine, taste, odor, and organic chemicals.
3. **RO Membrane:** Filters out dissolved solids, heavy metals, bacteria, and viruses.
4. **Post Carbon Filter:** Provides final polishing for improved taste.

3. INSTALLATION AND SETUP

Before beginning installation, ensure you have all necessary tools and that the water supply is turned off. It is recommended to have a bucket and towels ready for any minor spills.

3.1 Tools Required

- Adjustable Wrench
- Drill with 1/4" and 1/2" drill bits (for faucet and drain saddle)
- Phillips Head Screwdriver
- Utility Knife or Tubing Cutter
- Thread Sealant Tape

3.2 Step-by-Step Installation

1. Install the RO Faucet:

Choose a suitable location on your sink or countertop. Drill a 1/2" hole. Insert the faucet stem, securing it with the rubber washer, metal washer, and nut from underneath. Ensure the faucet is oriented correctly.



Figure 2: Illustrates the process of drilling a hole and mounting the RO faucet on a kitchen sink.

2. Install the Feed Water Adapter (FWA):

Turn off the cold water supply. Disconnect the cold water line from the existing faucet. Install the FWA onto the cold water supply valve, then reconnect the cold water line to the FWA. Ensure all connections are tight and use thread sealant tape.

3. Install the Drain Saddle Valve:

Select a location on the drain pipe above the P-trap. Drill a 1/4" hole through one side of the drain pipe. Attach the drain saddle valve, ensuring the hole in the saddle aligns with the drilled hole. Tighten the bolts evenly.

4. Connect Tubing:

Connect the appropriate colored tubing from the FWA to the "IN" port on the RO unit, from the "PURE" port to the RO faucet, and from the "DRAIN" port to the drain saddle valve. Ensure all quick-connect fittings are fully inserted and secured with locking clips.



Figure 3: Detailed view of how to connect the various colored tubes to the RO unit, faucet, FWA, and drain saddle.

5. Mount the RO Unit:

Place the RO unit under the sink in a convenient location. Ensure there is enough space for filter changes. The unit can be placed on the cabinet floor or mounted to the cabinet wall using screws (not included).

6. Connect Power:

Plug the power adapter into the RO unit and then into a standard electrical outlet. The system will perform a self-check.

7. **Flush the System:**

Slowly turn on the cold water supply. Open the RO faucet and let the water run for at least 30 minutes to flush out any carbon fines and air from the system. Close the faucet and check for leaks. Repeat flushing if water still appears cloudy or has an unusual taste.

4. **OPERATING INSTRUCTIONS**

The iSpring RO500-ORB system is designed for simple operation once installed.

4.1 **Daily Use**

- To dispense purified water, simply lift the handle on the RO faucet.
- To stop the flow, push the handle down.
- The system will automatically turn on when the faucet is opened and turn off when closed.

4.2 **System Indicators**

The main RO unit may feature indicator lights or a display to show system status, such as filter life or operational mode. Refer to the specific model's display for detailed information.



Figure 4: Example of the system's display panel, showing filter life indicators and operational status.

5. **MAINTENANCE**

Regular maintenance, primarily filter replacement, is crucial for the optimal performance and longevity of your RO system.

5.1 **Filter Replacement Schedule**

Filter Type	Replacement Frequency
PP Sediment Filter	Every 6-12 months
Carbon Block Filter	Every 6-12 months
RO Membrane	Every 2-3 years
Post Carbon Filter	Every 12 months

Note: Filter life may vary based on local water quality and usage.

5.2 **Replacing Filters**

1. **Turn off Water Supply:** Close the cold water supply valve and open the RO faucet to relieve pressure.
2. **Disconnect Power:** Unplug the power adapter from the electrical outlet.
3. **Remove Old Filters:** Depending on the filter type, either twist and pull out the old filter cartridge or use the provided filter wrench to unscrew the housing. Refer to the specific filter replacement instructions for your model.
4. **Install New Filters:** Insert the new filter cartridges, ensuring they are properly seated and sealed. For twist-and-pull filters, align and push until secure. For housing filters, hand-tighten the housing, then use the wrench for a final snug turn.
5. **Reconnect Power and Water:** Plug in the power adapter and slowly turn on the cold water supply.
6. **Flush New Filters:** Open the RO faucet and let water run for 10-15 minutes to flush out air and carbon fines from the new filters. Check for leaks.



Figure 5: Visual guide demonstrating the process of removing and installing new filter cartridges.

6. TROUBLESHOOTING

This section provides solutions to common issues you might encounter with your iSpring RO500-ORB system.

Problem	Possible Cause	Solution
No water from faucet	Water supply off, clogged filters, kinked tubing, power off.	Check cold water supply valve. Replace filters if due. Inspect tubing for kinks. Ensure power adapter is plugged in.
Slow water flow	Clogged filters (especially RO membrane), low water pressure.	Replace filters. Check household water pressure (minimum 40 PSI required).
Water has bad taste/odor	Expired carbon filters, new system not flushed properly.	Replace carbon filters. Flush the system for a longer duration (30-60 minutes).
Leaks	Loose connections, improperly seated O-rings, cracked housing.	Tighten all connections. Inspect O-rings for damage and reseal them. Contact support if housing is cracked.
Excessive drain water	Clogged RO membrane, low feed water pressure.	Replace RO membrane. Ensure adequate feed water pressure.

If the problem persists after attempting these solutions, please contact iSpring customer support for further assistance.

7. SPECIFICATIONS

Parameter	Value
Model	RO500-ORB
Dimensions (Main Unit)	Approx. 18" H x 5.5" W x 17" D
Operating Temperature	40-100°F (4-38°C)
Operating Pressure	40-80 PSI
Feed Water pH	6.0-11.0
Max TDS	750 ppm
Daily Production Rate	Up to 500 GPD (Gallons Per Day)
Power Supply	100-240V AC, 50/60Hz

8. WARRANTY AND CUSTOMER SUPPORT

8.1 Product Warranty

iSpring offers a manufacturer's warranty on the RO500-ORB system. Please refer to the warranty card included with your product or visit the official iSpring website for detailed terms and conditions. The warranty typically covers defects in materials and

workmanship under normal use and service.

- Warranty registration may be required.
- Proof of purchase is necessary for all warranty claims.
- Consumable filters are generally not covered under the standard product warranty.

8.2 Customer Support

For technical assistance, troubleshooting, replacement parts, or warranty inquiries, please contact iSpring customer support:

- **Website:** www.ispringfilter.com
- **Email:** support@ispringfilter.com
- **Phone:** 1-800-761-8787 (Toll-Free)
- **Operating Hours:** Monday - Friday, 9:00 AM - 5:00 PM EST

When contacting support, please have your product model number (RO500-ORB) and purchase date available.

ASK A QUESTION ABOUT THIS MANUAL

Ask about setup, troubleshooting, compatibility, parts, safety, or missing instructions. Manuals+ will review the question and use this page's manual context to help answer it.

Name

Anonymous

Email

you@example.com

After a successful submission, we securely hash the supplied account or form email before sending it to Microsoft Advertising for conversion attribution. [Privacy details](#).

Question

Example: How do I reset this device or fix this error?

Details

Model number, symptoms, what you tried, or the section of the manual you are using.

Submit question