

iSpring RO500AK

iSpring RO500AK-BN Tankless Reverse Osmosis Water Filter Instruction Manual

Brand: iSpring | Model: RO500AK

1. PRODUCT OVERVIEW

The iSpring RO500AK-BN is a state-of-the-art tankless reverse osmosis water filter system designed for under-sink installation. It provides up to 500 gallons per day (GPD) of purified, alkaline remineralized water, featuring a 2:1 pure-to-drain ratio for reduced water waste. This system is NSF 58 certified for effective TDS reduction and offers a compact, space-saving design.

NSF / ANSI 58 Certified

Deliver Tastier and Dependable Water



Figure 1: The iSpring RO500AK-BN Tankless Reverse Osmosis Water Filter System.

Key Features:

- **NSF 58 Certified:** Independently tested and certified for TDS reduction, ensuring high-quality purified water.
- **500 GPD Fast Water Flow:** Delivers up to 0.4 gallons per minute, filling an 8 oz cup in just 10 seconds.
- **Tankless Design:** Saves up to 70% of under-sink space compared to traditional RO systems.
- **Alkaline Remineralization:** A carbon alkaline filter balances pH and adds beneficial minerals for enhanced taste and wellness.
- **2:1 Pure to Drain Ratio:** Significantly reduces wastewater by up to 400% compared to traditional RO systems.
- **Easy Installation & Maintenance:** Designed for convenient DIY setup with tool-free filter replacements.
- **Automatic Self-Cleaning:** Activates after 24 hours of inactivity to rinse the RO membrane, extending its lifespan.

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Video 1: Overview of the iSpring RO500 Tankless Series. This video provides a comprehensive look at the system's features and benefits.

2. SETUP AND INSTALLATION

The iSpring RO500AK-BN system is designed for straightforward DIY installation. Ensure you have all necessary components and tools before beginning. The system requires access to an electrical outlet.

Pre-Installation Checklist:

- Verify all parts are included in the package.
- Clear out the under-sink space where the system will be installed.
- Ensure access to a 100-240V power outlet.
- Gather necessary tools: flashlight, spanner wrench, power drill, towels, utility knife.
- The system unit should be placed only on flat surfaces; do not mount on a wall.
- The system requires drilling a 1/4-inch hole into the under-sink drain pipe for wastewater.
- A 1/2-inch hole may be required in the sink or countertop for faucet installation.



Figure 2: Dimensions of the iSpring RO500AK-BN Tankless RO System, highlighting its compact design for under-sink placement.

Installation Steps (Summary):

1. **Feed Water Adapter Installation:** Turn off cold water supply, unscrew faucet connector hose, install feed water adapter, re-install hose, and tighten.
2. **Drain Saddle Installation:** Choose a suitable spot on the drain pipe (horizontal recommended), drill a 1/4-inch hole, paste sticky pad, insert tubing through quick fitting and front plate, install back plate, and tighten screws.
3. **Drinking Faucet Installation:** Clean and dry sinkhole area, insert rubber ring into faucet base, insert faucet into sinkhole, secure with rubber washer, plastic washer, and wing nut from underneath.
4. **System Tubing Connection:** Connect the 3/8-inch white tubing from the feed water adapter to the

system's inlet port. Connect the 1/4-inch red tubing from the drain saddle to the system's drain port. Connect the 1/4-inch white tubing from the drinking faucet to the system's drinking faucet port. Secure all connections with C-clips.

5. **Power Connection:** Connect the power cord to the system power inlet and plug the power adapter into a 100-240V power outlet.

Your browser does not support the video tag.

Video 2: Detailed installation guide for the iSpring RO500 series. This video walks through each step of the installation process.

3. OPERATING INSTRUCTIONS

Once installed, the iSpring RO500AK-BN system operates efficiently to provide clean water. The system features indicator lights to keep you informed about its status.

System Startup:

1. Turn on the cold-water supply valve and the feed water adapter. Check for any leaks at the connections.
2. The system will perform an automatic flushing cycle (status light flashing RED).
3. Once flushing is complete, the status light will turn off, and all filter lights will remain solid BLUE (System Standby).
4. Turn on the drinking faucet to purge air from the system. Let the water run for 30 minutes to ensure proper flushing and check for leaks.
5. The system is now ready for use. When dispensing water, the status light and all filter lights will remain solid BLUE.

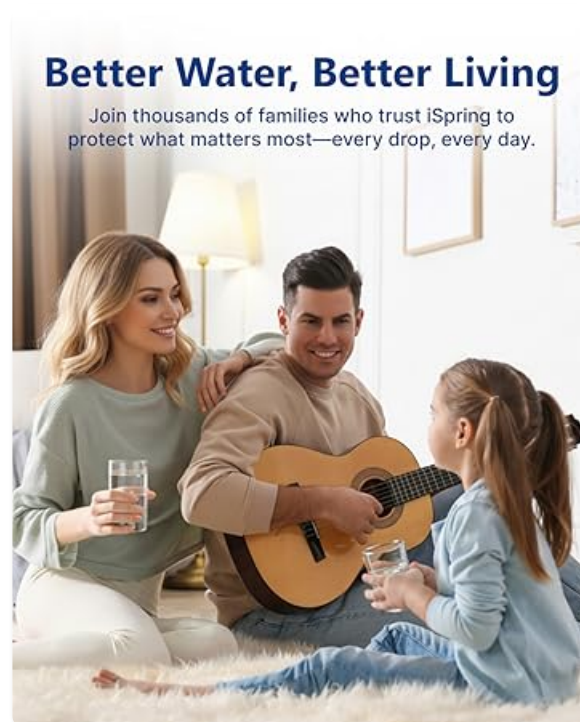


Figure 3: Illustrates the fast water flow rate of the iSpring RO500AK-BN system, capable of filling an 8 oz cup in 10 seconds.

Automatic Self-Cleaning:

The system features an automatic self-cleaning function that activates after 24 hours of inactivity. This process rinses the RO membrane, extending its lifespan and maintaining optimal performance.



Figure 4: The iSpring RO500AK-BN is NSF/ANSI 58 Certified, ensuring reliable and high-quality water. For official report, visit [NSF.org](https://www.nsf.org).

4. MAINTENANCE

Regular maintenance, primarily filter replacement, is crucial for optimal system performance and water quality. The iSpring RO500AK-BN system makes filter replacement quick and tool-free.

Filter Replacement Schedule:

Filter Stage	Filter Type	Model	Recommended Replacement Cycle
1st Stage	Composite Filter (Sediment & Carbon Block)	FCF500	~6 months
2nd Stage	Reverse Osmosis Membrane	MRO500	~24-36 months
3rd Stage	Carbon Alkaline Filter	FCA500	~12 months



Water You'll Feel Good About

From baby bottles to dinner prep, iSpring RO systems deliver ultra-clean water through advanced multi-stage filtration—quiet, compact, and ready whenever you need it.

Figure 5: Visual guide to the filter replacement schedule for the iSpring RO500AK-BN system.

Filter Replacement Process:

1. Twist the old filter counter-clockwise to remove it.
2. Unwrap the new filter and remove any protective covers.
3. Insert the new filter into the corresponding slot and twist clockwise to secure.
4. Reset the filter life indicator (refer to the user manual for specific instructions based on your system's firmware).



Home Starts with Better Water

Better water means brighter clothes, softer skin, and fewer worries. iSpring makes every part of home life a little better.

Figure 6: The twist-and-pull design allows for effortless, tool-free filter replacement.

5. TROUBLESHOOTING

The iSpring RO500AK-BN system is equipped with indicator lights and a built-in buzzer to alert you to potential issues. Refer to the user manual for detailed troubleshooting steps.

Common Alerts:

- **Low Pressure:** Indicates insufficient water pressure entering the system.
- **No Water:** Suggests an interruption in water supply.
- **Leak Detection:** The system will alert you if it detects a leak inside the cabinet.
- **Filter Service Life:** Indicator lights will change color (purple/red) and the buzzer will sound to signal when filters need replacement.

6. SPECIFICATIONS

Specification	Detail
Product Dimensions	17.5"L x 5.2"W x 16.25"H
Item Weight	21 Pounds
Installation Type	Under Sink
Purification Method	Reverse Osmosis
Capacity	500 Gallons Per Day (GPD)
Maximum Flow Rate	0.4 Gallons Per Minute
Pure to Drain Ratio	2:1
Supported Water TDS Level Maximum	1000 PPM
Operating Temperature Range	41°F - 100°F
Power Requirements	100-240V AC input, 24V DC output
Included Components	Tubing, System, Feed water adapter, Drain saddle, Faucet, Power supply, manual

7. WARRANTY AND SUPPORT

iSpring is committed to providing reliable products and excellent customer service.

Warranty Information:

- **30-Day Money-Back Guarantee:** If you are not satisfied with your purchase.
- **1-Year Manufacturer Warranty:** Covers defects in materials and workmanship.
- **Extended Coverage:** Available upon product registration.

Customer Support:

iSpring's dedicated customer service and technical support team, based in Atlanta, GA, is available to assist you for the lifetime of your product. For further assistance, please refer to the detailed instruction manual included with your system or visit the official iSpring website.



Figure 7: iSpring provides online support videos and tutorials for DIY installation and maintenance.