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> Aquatic Life RO Buddie 3-Stage Reverse Osmosis Water Filter System 50 GPD Instruction Manual

Aquatic Life 540016

Aquatic Life RO Buddie 3-Stage Reverse Osmosis Water Filter System 50 GPD Instruction Manual

Model: 540016

1. PRODUCT OVERVIEW

The Aquatic Life RO Buddie is a compact 3-stage reverse osmosis water filtration system designed to produce up to 50 gallons of filtered water per day. This system is ideal for aquariums, hydroponics, and other applications requiring purified water.

It effectively removes up to 98% of Total Dissolved Solids (TDS) from water, ensuring optimal water quality for sensitive aquatic environments and plants.





Image 1.1: The Aquatic Life RO Buddie 3-Stage Reverse Osmosis Water Filter System, showing its compact design with three filter cartridges.

Key Features:

- **3-Stage Filtration:** Utilizes sediment, carbon block, and RO membrane filters.
- **High Efficiency:** Produces up to 50 gallons per day (GPD) of purified water.
- **TDS Reduction:** Removes up to 98% of Total Dissolved Solids.
- **Chlorine Removal:** Carbon block filter eliminates chlorine.
- **Sediment Capture:** Sediment filter traps sand, silt, and rust.

2. COMPONENTS AND FILTRATION STAGES

The RO Buddie system consists of three distinct filtration stages, each designed to remove specific impurities from your water.

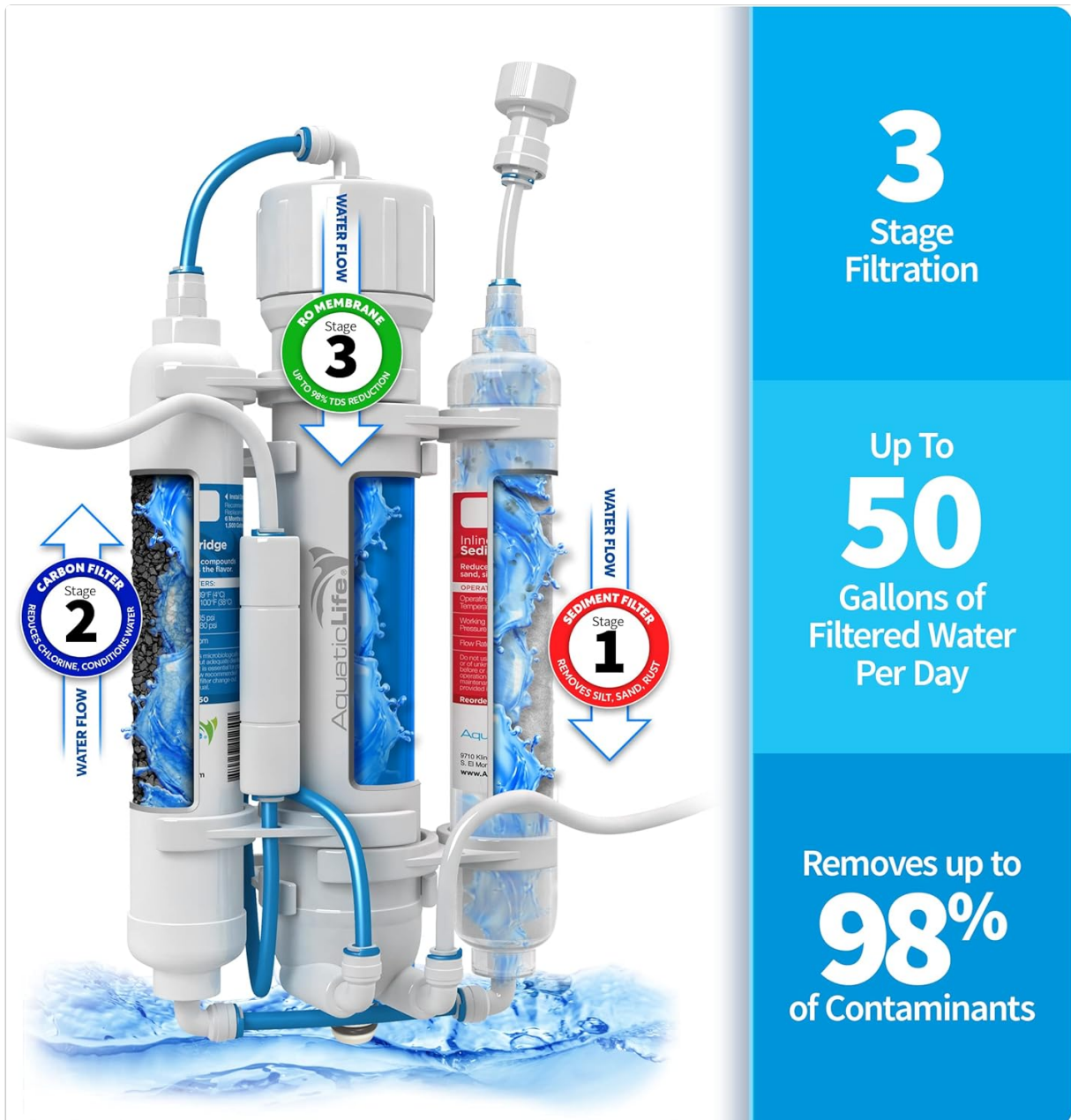


Image 2.1: Visual representation of the 3-stage filtration process, illustrating water flow through each filter.

1. Stage 1: Sediment Filter

This inline sediment cartridge removes larger particulate matter such as sand, silt, dirt, and rust, protecting subsequent filters.

2. Stage 2: Carbon Block Filter

The carbon block filter removes chlorine, chloramines, and other organic compounds that can damage the RO membrane and affect water taste/odor.

3. Stage 3: RO Membrane

The reverse osmosis membrane is the core of the system, reducing Total Dissolved Solids (TDS) by up to 98%. It filters water down to 1/10,000 of a micron, removing lead, copper, and other dissolved contaminants.



**ALL YOU NEED
to start making
GREAT WATER!**

Image 2.2: An exploded diagram showing all individual components included with the RO Buddie system, such as filters, tubing, and connection adapters.

3. SETUP AND INSTALLATION

Carefully follow these instructions for proper setup and to prevent leaks.

3.1 Unpacking and Inspection

- Remove all components from the packaging.
- Inspect all parts for any signs of damage. Contact customer support if any components are damaged or missing.
- Ensure all filter caps are securely tightened before installation.

3.2 Connecting to a Water Source

The RO Buddie includes various adapters to connect to most standard faucets or garden hoses.

STANDARD CONNECTIONS FIT MOST FAUCETS

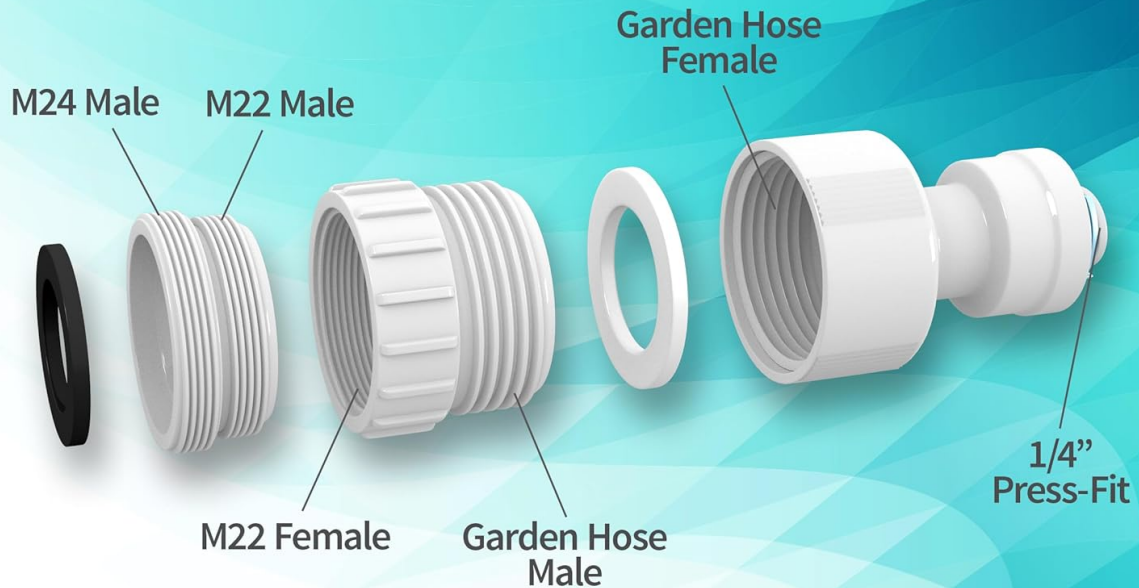


Image 3.1: An illustration detailing the various standard connection adapters (M24 Male, M22 Male, M22 Female, Garden Hose Male/Female, 1/4" Press-Fit) included for faucet compatibility.

- Identify the appropriate adapter for your faucet. The system typically connects to a standard kitchen faucet aerator or a garden hose connection.
- Remove the existing aerator from your faucet.
- Thread the correct adapter onto the faucet. Use Teflon tape on threaded connections to prevent leaks.
- Connect the blue input tubing from the RO Buddie to the adapter's 1/4" press-fit connection.

3.3 Waste Water and Product Water Connections

- The system has two output lines: one for purified (product) water and one for waste water.
- Direct the waste water line to a drain or a bucket for disposal.
- Direct the product water line to a clean container for collection.

3.4 Mounting (Optional)

The compact design allows for flexible placement, including wall mounting.



Image 3.2: The RO Buddie system shown mounted on a wall in a laundry room, demonstrating its compact size and versatile installation options.

- Use the provided mounting brackets and hardware to secure the unit to a sturdy surface if desired.
- Ensure the mounting location is convenient for water connections and drainage.

4. OPERATING INSTRUCTIONS

4.1 Initial Flush

Before first use, it is crucial to flush the system to remove any manufacturing residues and carbon fines.

- Connect the system to your water source.
- Turn on the water supply slowly.
- Allow water to run through the system for at least 30-60 minutes. This flushes the carbon filter and prepares the RO membrane.
- Discard the water produced during this initial flush.

4.2 Normal Operation

- After the initial flush, the system is ready for use.

- Turn on the water supply. Purified water will begin to flow from the product water line, and waste water from the waste line.
- The system operates continuously as long as water pressure is supplied.
- Monitor the water pressure. Optimal performance is achieved with water pressure between 40-65 PSI.

4.3 Water Production Rate

The system is rated for 50 GPD (Gallons Per Day). Actual production rates can vary based on incoming water pressure, temperature, and TDS levels. Lower pressure or temperature will result in lower production.

5. MAINTENANCE

Regular maintenance ensures the longevity and optimal performance of your RO Buddie system.

5.1 Filter Replacement Schedule

The lifespan of filters depends on the quality of your incoming tap water and usage volume.

- **Sediment Filter:** Replace every 3-6 months or when visibly dirty.
- **Carbon Block Filter:** Replace every 6-12 months.
- **RO Membrane:** Replace every 1-2 years, or when TDS rejection rates significantly decrease (e.g., product water TDS increases).

5.2 Replacing Filters

1. Turn off the water supply to the RO Buddie system.
2. Disconnect the system from the water source.
3. Carefully unscrew the housing of the filter to be replaced. You may need a filter wrench.
4. Remove the old filter cartridge and dispose of it properly.
5. Insert the new filter cartridge, ensuring it is seated correctly.
6. Screw the housing back on tightly. Hand-tighten, then use a wrench for a quarter turn. Do not overtighten.
7. Reconnect the system to the water source and slowly turn on the water. Check for leaks.
8. Flush the new filters as described in the "Initial Flush" section (Section 4.1) before collecting water for use.

6. TROUBLESHOOTING

Problem	Possible Cause	Solution
Low or No Product Water Flow	<ul style="list-style-type: none"> • Low incoming water pressure. • Clogged sediment or carbon filter. • Clogged RO membrane. • Low water temperature. 	<ul style="list-style-type: none"> • Ensure water pressure is between 40-65 PSI. • Replace sediment and/or carbon filters. • Replace RO membrane. • Ensure water temperature is above 77°F (25°C) for optimal performance.

Problem	Possible Cause	Solution
High TDS in Product Water	<ul style="list-style-type: none"> • Damaged or exhausted RO membrane. • Improperly seated RO membrane. • High incoming water TDS. 	<ul style="list-style-type: none"> • Replace RO membrane. • Re-seat the RO membrane correctly. • Ensure pre-filters (sediment, carbon) are not exhausted.
Water Leaks	<ul style="list-style-type: none"> • Loose connections or filter housings. • Damaged O-rings. • Cracked housing. 	<ul style="list-style-type: none"> • Tighten all connections and filter housings. Do not overtighten. • Inspect and replace any damaged O-rings. • Contact customer support for replacement parts if housing is cracked.
Excessive Waste Water	<ul style="list-style-type: none"> • Normal operation for RO systems. • Clogged RO membrane (can increase waste ratio). 	<ul style="list-style-type: none"> • RO systems inherently produce waste water. • Consider replacing the RO membrane if the waste ratio becomes significantly higher than usual.

7. SPECIFICATIONS

- **Model Name:** AQUATICLIFE RO Buddie Three Stage Reverse Osmosis, 50 Gallons
- **Model Number:** 540016
- **Brand:** Aquatic Life
- **Filtration Stages:** 3 (Sediment, Carbon Block, RO Membrane)
- **Production Rate:** Up to 50 Gallons Per Day (GPD)
- **TDS Rejection:** Up to 98%
- **Product Dimensions:** 7.25"L x 4"W x 13.75"H
- **Item Weight:** 3.1 Pounds
- **Installation Type:** Freestanding / Wall-mountable
- **UPC:** 810957010164

8. WARRANTY AND SUPPORT

The Aquatic Life RO Buddie system comes with a manufacturer's warranty.

- **Warranty Description:** Manufacturer Warranty
- For warranty claims, technical support, or to purchase replacement parts, please visit the official Aquatic Life website or contact their customer service department.
- Always refer to the manufacturer's official instructions for the most up-to-date information.

