

## Oceanic HYDRO-PAL

# Oceanic RO HYDRO-PAL 4-Stage RODI Compact Reverse Osmosis Water Filtration System User Manual

Model: HYDRO-PAL | Brand: Oceanic

## 1. INTRODUCTION

This manual provides essential instructions for the installation, operation, and maintenance of your Oceanic RO HYDRO-PAL 4-Stage RODI Compact Reverse Osmosis Water Filtration System. Please read this manual thoroughly before installation and use to ensure proper function and longevity of your system. This system is designed to provide high-quality filtered water for various applications, including drinking and aquarium use.

## 2. PRODUCT OVERVIEW

The Oceanic RO HYDRO-PAL is a compact, pre-assembled 4-stage Reverse Osmosis Deionization (RODI) system. It effectively removes various contaminants from tap water, providing purified water. The system includes pre-filter cartridges, a reverse osmosis membrane, and a deionization cartridge.



**Figure 2.1:** The Oceanic RO HYDRO-PAL 4-Stage RODI Compact Reverse Osmosis Water Filtration System. This image displays the complete, pre-assembled unit with its various filter stages.

## 2.1 Filtration Stages

The 4-stage system utilizes a combination of filtration methods to achieve high purity water:

1. **Inline Sediment Filter:** Removes dirt, rust, dust, chemical resistance, sand, and scale particles.
2. **Inline Carbon Filter:** Used to polish the taste of the water and remove any residue. Made with quality apricot shell, olives, walnut shell, and palm shell, ensuring clean water.
3. **RO Membrane:** Removes up to 99% of total dissolved solids (TDS) and contaminants such as arsenic, lead, fluoride, chromium, radium, bacteria, and viruses.
4. **Deionization (DI) Cartridge:** Removes almost all remaining mineral ions, such as cations like sodium, calcium, iron, and copper, and anions like chloride and sulfate, producing ultra-pure water.



**Figure 2.2:** Detailed diagram illustrating the four stages of filtration within the Oceanic RO HYDRO-PAL system, highlighting the function of each filter cartridge.

### 3. SAFETY INFORMATION

- Always turn off the water supply before performing any maintenance or filter changes.
- Ensure all connections are secure to prevent leaks.
- Do not expose the system to freezing temperatures, as this can damage components.
- Operate the system within the specified pressure and temperature ranges to avoid damage.
- Keep the system away from direct sunlight and heat sources.
- This system is designed for cold water use only.

### 4. SETUP AND INSTALLATION

The Oceanic RO HYDRO-PAL system comes pre-assembled for ease of installation. A garden hose adapter is included for convenient connection to a water source.

#### 4.1 Unpacking

- Carefully remove all components from the packaging.
- Verify that all parts are present: pre-assembled RO unit, cartridges, membrane (pre-installed), garden hose adapter, and tubing.
- Inspect the system for any visible damage. If damage is found, do not proceed with installation and contact customer support.

#### 4.2 Connection to Water Supply

1. Locate a cold water source, such as a garden hose spigot or a utility sink faucet.
2. Attach the provided garden hose adapter to the cold water supply.
3. Connect the inlet tubing from the RO system to the garden hose adapter. Ensure a tight, leak-free connection.
4. Identify the purified water outlet and the drain line. Position the drain line to discharge into a suitable drain.
5. Ensure the purified water outlet is directed to a collection container.

## 4.3 Initial Flush

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

1. Turn on the cold water supply slowly.
2. Allow the system to run for at least 30-60 minutes, or until the water runs clear and any air bubbles are purged.
3. Discard the water produced during this initial flush.
4. Check all connections for leaks. Tighten any leaking connections.

## 5. OPERATION

The Oceanic RO HYDRO-PAL system operates by continuously filtering water when connected to a pressurized water source. It is rated for up to 75 gallons per day (GPD) production.

### 5.1 Operating Requirements

- **Minimum Water Pressure:** 40 PSI
- **Maximum Water Pressure:** 80 PSI
- **Optimal Water Temperature:** 77°F (25°C)
- **Maximum Water Temperature:** 105°F (40.5°C)
- **Typical Rejection Rate:** 1:3 (purified water to drain water ratio)

Operating outside these parameters may reduce system performance or cause damage.



**Figure 5.1:** Visual representation of the operating parameters for the Oceanic RO HYDRO-PAL system, including pressure and temperature ranges, and its suitability for reef tanks and aquariums.

## 6. MAINTENANCE

Regular maintenance, primarily filter replacement, is essential to ensure the continued performance and longevity of your RO system.

### 6.1 Filter Replacement Schedule

- **Sediment and Carbon Pre-filters:** Replace every 6-12 months, depending on water quality and usage.
- **RO Membrane:** Replace every 2-3 years, or when the purified water TDS level significantly increases.

- **Deionization (DI) Cartridge:** Replace when the TDS of the purified water starts to rise above 0 ppm, typically indicated by a TDS meter. The lifespan varies greatly depending on the incoming water quality.

## 6.2 Replacing Filters

1. Turn off the water supply to the RO system.
2. Disconnect the inlet tubing.
3. Carefully remove the old filter cartridges by unscrewing or unclipping them from their housings.
4. Insert new, compatible filter cartridges, ensuring they are correctly oriented and securely seated.
5. Reconnect the inlet tubing and slowly turn on the water supply.
6. Flush the system as described in Section 4.3 to remove air and carbon fines from new filters.
7. Check for leaks after replacement.

## 7. TROUBLESHOOTING

Problem	Possible Cause	Solution
Low Water Production	Low incoming water pressure; clogged pre-filters or RO membrane; low water temperature.	Check water pressure (must be 40-80 PSI); replace pre-filters; replace RO membrane; ensure water temperature is within optimal range.
High TDS in Purified Water	Worn out RO membrane; exhausted DI resin; bypass in system.	Replace RO membrane; replace DI cartridge; check for proper connections and seals.
Water Leaks	Loose connections; damaged O-rings or fittings; cracked housing.	Tighten all connections; inspect and replace O-rings or fittings; contact support if housing is cracked.
Excessive Drain Water	Clogged flow restrictor; low water temperature.	Inspect and clear or replace flow restrictor; ensure water temperature is within optimal range.

## 8. SPECIFICATIONS

Feature	Detail
Brand	Oceanic
Model Name	HYDRO-PAL
Style	4 Stage RODI
Installation Type	Countertop
Power Source	Adapter (for optional pump, not included in basic model)
Product Dimensions	12 x 14 x 3 inches
Item Weight	5 pounds
Production Rate	Up to 75 Gallons Per Day (GPD)





Feature	Detail
Minimum Water Pressure	40 PSI
Maximum Water Pressure	80 PSI
Optimal Water Temperature	77°F (25°C)
Maximum Water Temperature	105°F (40.5°C)
Typical Rejection Rate	1:3 (Purified Water : Drain Water)



## 9. WARRANTY AND SUPPORT

For warranty information, technical support, or to inquire about replacement parts, please contact Oceanic Water Systems directly. Contact details may be found on the product packaging or the official Oceanic website.

For specific inquiries or to order a different adapter, you may contact Oceanic at **661-575-0033** prior to ordering.

## Related Documents - HYDRO-PAL

 <p>Reverse Osmosis Water Filtration System INSTALLATION INSTRUCTION &amp; OWNER'S MANUAL FOR ALL GENERAL RO SYSTEMS</p> <p>Please keep this Owner's Manual for future reference.</p>	<p><a href="#">Oceanic Reverse Osmosis Water Filtration System: Installation and Owner's Manual</a></p> <p>A comprehensive guide for installing and operating Oceanic Reverse Osmosis water filtration systems. This manual covers system inspection, required tools, operating parameters, component identification, feed water connection, drain saddle installation, faucet mounting, and detailed tubing connections for models like RO-90.</p>
 <p>OCEANIC REGULATOR OWNER'S GUIDE</p>	<p><a href="#">Oceanic Regulator Owner's Guide: Setup, Use, and Maintenance</a></p> <p>Comprehensive owner's guide for Oceanic SCUBA regulators, covering setup, safe operation, Nitrox/cold water diving, maintenance, and service intervals. Learn how to use and care for your Oceanic regulator.</p>
 <p>Oceanic VT3 Computer Diver DISTINCTIVE SPECIALTY INSTRUCTOR OUTLINE</p> <p><b>Introduction</b></p> <p><b>How to Use This Guide</b></p> <p><b>Course Philosophy and Goals</b></p>	<p><a href="#">Oceanic VT3 Computer Diver Distinctive Specialty Instructor Outline</a></p> <p>Comprehensive instructor guide for the PADI Oceanic VT3 Computer Diver Distinctive Specialty course. Details course standards, prerequisites, knowledge development objectives, open water dive requirements, and online training procedures for instructors using the Oceanic VT3 dive computer.</p>
 <p>TV LED Guide d'utilisation TV LED User Guide</p> <p>OCEALED3221B2</p> <p>OCEANIC</p>	<p><a href="#">Guide d'utilisation Oceanic TV LED OCEALED3221B2</a></p> <p>Manuel complet pour le téléviseur Oceanic TV LED OCEALED3221B2, incluant les instructions d'installation, d'utilisation, les conseils de sécurité et le dépannage.</p>

	<p><a href="#">Oceanic DataPlus Dive Computer Owner's Guide</a></p> <p>Explore the Oceanic DataPlus dive computer with this comprehensive owner's guide. Learn about its features, responsible diving practices, operational modes, and maintenance for recreational scuba divers using air or nitrox.</p>
	<p><a href="#">Oceanic OCEARTT85W Refrigerator 85L User Manual</a></p> <p>Comprehensive instruction booklet for the Oceanic OCEARTT85W refrigerator, detailing installation, usage, safety precautions, and maintenance for optimal performance.</p>