#### Aquarium Reef Reverse Osmosis 4 Stage RODI Water Filtration System

Premier Reverse Osmosis Deionization Systems only take a few minutes to have connected and making purified water. All of the plumbing on the RO/DI unit will be complete and all you will need to do is connect the tubing to a suitable source water connection, and direct the product and waste water lines. Premier 4 Stage RO/DI systems have 1 sediment filter, 1 carbon block, 1 membrane, and 1 deionization stage making them perfect for water that is treated with low amounts of chlorine or clean well water.

Red Tubing - Source water RO intake
Blue Tubing - Purified product water from the DI
Black Tubing - Waste water

- 1. Unpackage the RODI system and select the source water adapter of your choice and with your home's water turned **OFF**, install the source water adapter to a **cold**-water line. Connecting any reverse osmosis system to a hot water line may cause irreversible damage to the membrane.
- 2. To install Membrane: Insert the Membrane filter into the membrane Housing with the end with the 2 black O-rings going in first. Hand Tighten the cap to the membrane housing.
- 1. Attach the Red line to the source water connection adapter.
- 2. Direct the **Blue** product water line to a suitable water storage/collection container. This is the water that you will want to use in your aquarium.
- 3. Connect/Direct the **Black** waste water line to a drain. Waste water is considered a brine solution that should not be used in aquariums. The brine will be extremely hard, and high in TDS.
- 4. When all three connections are made, slowly turn on the source water supply and allow the system to run for one hour discarding any water produced through the **Black** or **Blue** lines. While the system is priming it is a good time to check for leaks from any fittings or connection points.
  - (Discarding the first couple gallons of product water allows your carbon blocks to flush any potential fines and preservation oils from the surface of the membranes.)
- 5. Your Premier RO/DI System is now ready for use.

Replacement Filters and DI Resin:

#### WWW.PREMIERWATERSYSTEMS.NET

Standard Replacement Water Pre-filters for 10" Housing: Sediment, Carbon Block + 1.25 lbs of DI Resin – MODEL # PREFT4DI125

Or Model # RODI4-RC - 3 Replacement Filters

PREMIER WATER SYSTEMS
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# FREQUENTLY ASKED QUESTIONS

## Q: Is it normal for the DI stage to not fill completely with water?

Yes, air gets trapped in the top of the canister and has no way to escape. This does not interfere with system performance, but if desired open the canister slightly while the unit is running to allow the air to escape. Re-tighten the canister when the water reaches the top.

# Q: Is it normal for TDS to be higher when the system is first turned on?

A: Yes, this is called "TDS creep" and is normal on all RO systems. Allow the RO system to run for 10 minutes before testing TDS.

### Q: Is it okay to leave water in the canisters between uses?

A: Yes, it is advised to keep them wet between uses, and store in a cool, dark location away from environmental extremes. Exposure to sunlight or freezing can cause damage to the filters and canisters and should be avoided.

#### Q: How often should I use the flush kit?

 We suggest flushing the membrane for a few minutes before and after use. There is an auto flush kit available for a more automated solution.

# Q: My pressure gauge reads less than 50 psi, do I need a booster pump?

A: The membrane will not perform 'optimally' below recommended pressure, but the reduced performance may not be substantial enough to warrant a booster pump. As it approaches 35 psi the performance drop will become significant and you will likely want to purchase a booster pump.

### Q: My DI resin seems to be depleting quickly, what's wrong?

A: Usable lifespan of the Diresin cartridge will vary widely. Feeding the resin from the RO membrane with one TDS will have approximately five times the usable life as feeding it with five TDS. Outside of that, carbon dioxide in your water supply or a poorly performing RO membrane are the biggest causes of early Diexhaustion.

# **OPERATING PARAMETERS**

The system is tested and treated on regular water and will be destroyed if extreme cold or hot water is run through the system.

RO systems thrive on PSI, If your output is slow please test your water PSI to get optimal performance. Water pressure is not testable by the naked eye. We advice at least 55 - 85 PSI. Low water pressure puts stress on the membrane leading to more waste water and less production. The best solutions for low PSI would be adding a booster pump or low pressure membrane.

Between 39° F and 50° F the flow rate will be very slow. This is the outside temperature not the home temperature.	At 45 PSI the unit work but the flow rate would be significantly low.
39 F - 113 F	50 PSI - 100 PSI (2.95 KG/CM²)
	0
OPERATING TEMPERATURE	OPERATING PRESSURE

If you local pressure exceeds 95 PSI, a pressure regulator must be installed which will reduce the PSI to prevent damages to your system.

It is It is recommended that total TDS (Total Dissolved Solids) does not exceed 2000 PPM.