

Aquarium Reef Reverse Osmosis 5 Stage RODI Water Filtration System

Oceanic 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. Oceanic 5 Stage RO/DI systems have 1 sediment filter, 1 GAC 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. Attach the **Red** line to the source water connection adapter.
3. 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.
4. 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.
5. 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.)
6. Your Oceanic RO/DI System is now ready for use.

Replacement Filters and DI Resin:

OCEANICWATER.COM

Standard Replacement Water Pre-filters for 10" Housing: Sediment, Carbon Block, GAC + 1.25 lbs of DI Resin – **MODEL # PREF5DI125**



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5 STAGE RO/DI

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.

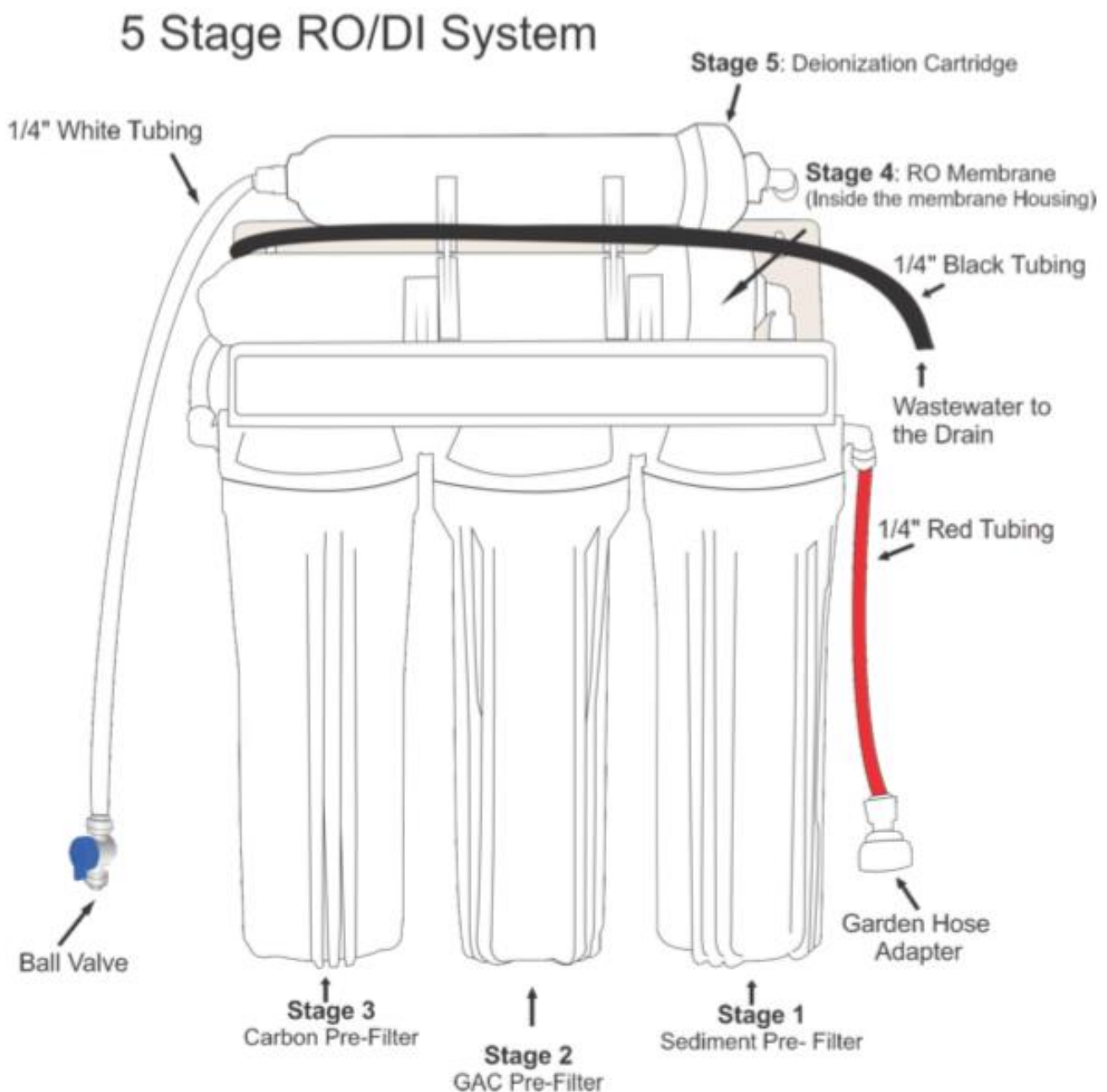
OPERATING PRESSURE	OPERATING TEMPERATURE
	
50 PSI - 100 PSI (2.95 KG/CM²)	39 F - 113 F
At 45 PSI the unit work but the flow rate would be significantly low.	Between 39° F and 50° F the flow rate will be very slow. This is the outside temperature not the home temperature.

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.

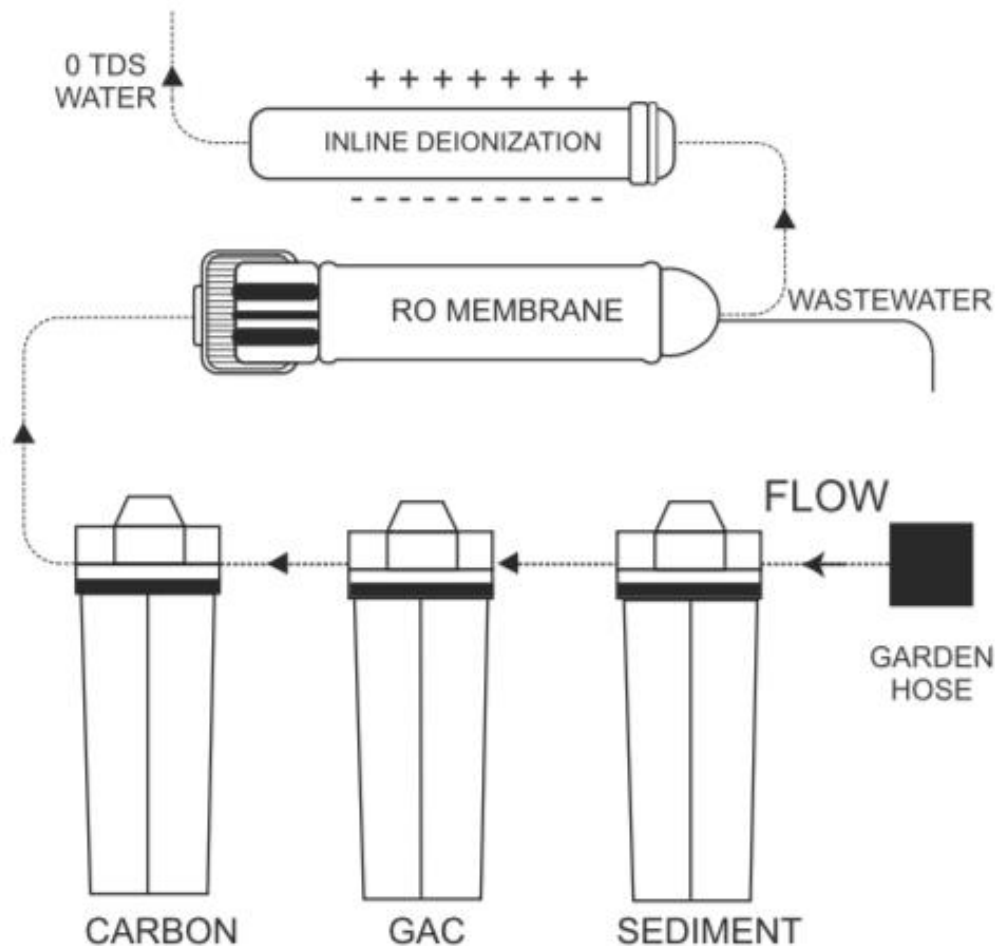
5 STAGE RO/DI

INSTALLATION OVERVIEW



5 STAGE RO/DI

REVERSE OSMOSIS FLOW CHART



Although the system is air tested, during transit the tubing can become loose. To prevent any leaks it is crucial to check each connection is



securely in the system. First pull and then push each tube in to ensure it is securely inside. Make sure the elbow connectors are secure and use the small blue locks to clip on to the connectors to prevent any leaks in the future.

5 STAGE RO/DI

SYSTEM ASSEMBLY

INSTALLING SIDE ELBOWS & INSERTING TUBING.

STEP 1: QUICK OVERVIEW



- ▶ The unit has two connectors (90° ¼") which need to be installed on the sides of the unit.
- ▶ After installing the elbow connectors the tubing needs to be inserted.
- ▶ We do not pre-installed them as they get damaged during the shipping process.
- ▶ System assembly is the same for RO/DI & portable/replacement drinking water system.

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STEP 2 : ELBOWS. CONNECTORS



- ▶ In the box, there should be a small packet with all the fittings,
- ▶ 2 elbow will have teflon tape pre-applied. Use those to screw into the end of each side.

STEP 3 & 4 : INSERTING THE FITTINGS

- ▶ Screw the elbow on to both sides of the unit.
- ▶ Make sure you do not tighten the elbows too much or the fittings will
- ▶ If the fittings break they are easy to replace and at the end of the next page we explain how to fix broken elbows.



5 STAGE RO/DI

STEP 5 : DOUBLE CHECK

- ▶ Make sure all fittings are secure. Image #2 is how the unit should look like.

Image #1



Image #2



STEP 6 : INSERT RED TUBING

- ▶ Insert the red tubing in the elbow which is near the first stage.
- ▶ This red tube connects to your faucet adapter or garden hose adapter and is your incoming water supply.
- ▶ Make sure you hear a slight click sound that confirms the tubing is properly secure.

5 STAGE RO/DI



STEP 7 INSERT WHITE TUBING

- ▶ Near the 3rd stage there should be white tubing loose at the back of the unit. This is NOT the white tubing used for the outgoing water connected to the ball valve.
- ▶ Insert the white tubing in the elbow connector.
- ▶ Make sure you hear a slight click sound to confirm the tubing is properly secure.

HOW TO REPLACE DAMAGED ELBOWS:

- ▶ Take a pair of scissors and open them.
- ▶ Push one side into the broken elbow and turn it anti-clock wise.
- ▶ With your hand twist them on where the broken elbow was.
- ▶ Do not lighten the elbow too much as they might break.

PLEASE NOTE:

- After installing the system and before running water, kindly make sure all the tubing is properly pushed in and secure by first pulling and then pushing all the tubing in.
- Tighten all canisters (housing) with the wrench before turning on the water supply.

5 STAGE RO/DI

FREQUENTLY ASKED QUESTIONS

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

A: 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?

A: 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 DI resin 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 DI exhaustion.