

Model: 540235
Classic Dual Deionization Filtration Unit
Installation, Operation & Maintenance Guide



WARNING: Please read carefully before proceeding with installation. Your failure to follow any attached instructions and operating parameters may lead to the product's failure.

Thank you for purchasing an Aquatic Life Classic Dual Deionization Water Filtration Unit. When maintained properly, this unit will provide you with years of high quality filtered water.



OVERVIEW

Water quality is often measured by the amount of Total Dissolved Solids (TDS) in the water. After water is filtered by an RO Membrane (not included), there is usually a small amount of TDS left in the water. In certain non-drinking water applications, it is important to remove the remaining TDS from the water. This is accomplished by filtering the water through a resin that is charged with Cation and Anion resins (H⁺ and OH⁻). As the resin absorbs the TDS, it will change color. When the entire resin has changed color, it is time to replace the DI Cartridge.



NOTE: Filter Cartridges and Membrane life may vary based on local water conditions and amount of use.

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Contents (Model #540235)			
1	Dual DI Unit Housing with Mounting Bracket	1	Canister Wrench
2	Color-changing Deionization Cartridges	1	Set Mounting Screws
1	Blue Tubing 1/4" x 4 Ft	1	Installation, Operation and Maintenance Guide

Tools & Materials Recommended for Installation	
Phillips Screwdriver	Single Edge Razor Blade

OPERATING GUIDELINES

DO NOT use with water that is microbiologically unsafe or of unknown quality without adequate disinfection before or after the unit.

The maximum incoming water pressure for the unit is 80 PSI. If the pressure is more than 80 PSI, a pressure regulator is required.

Reverse Osmosis filtered water should not be run through a copper tube.
The pure RO/DI water can leach copper from the pipe, eventually leading to holes in the pipe.

DO NOT operate the unit unattended.

MOUNTING THE DEIONIZATION UNIT

The Aquatic Life Classic DI Unit is designed to be mounted to a secure surface. This will allow for the cartridges to easily be replaced as needed.

A metal bracket with screw holes is provided.

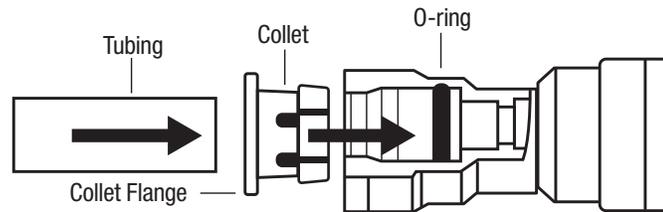
Use screws designed for the type of surface that the DI Unit will hang on. Leave the screws extending about 1/8" from the surface and then hang the metal bracket on the screws.



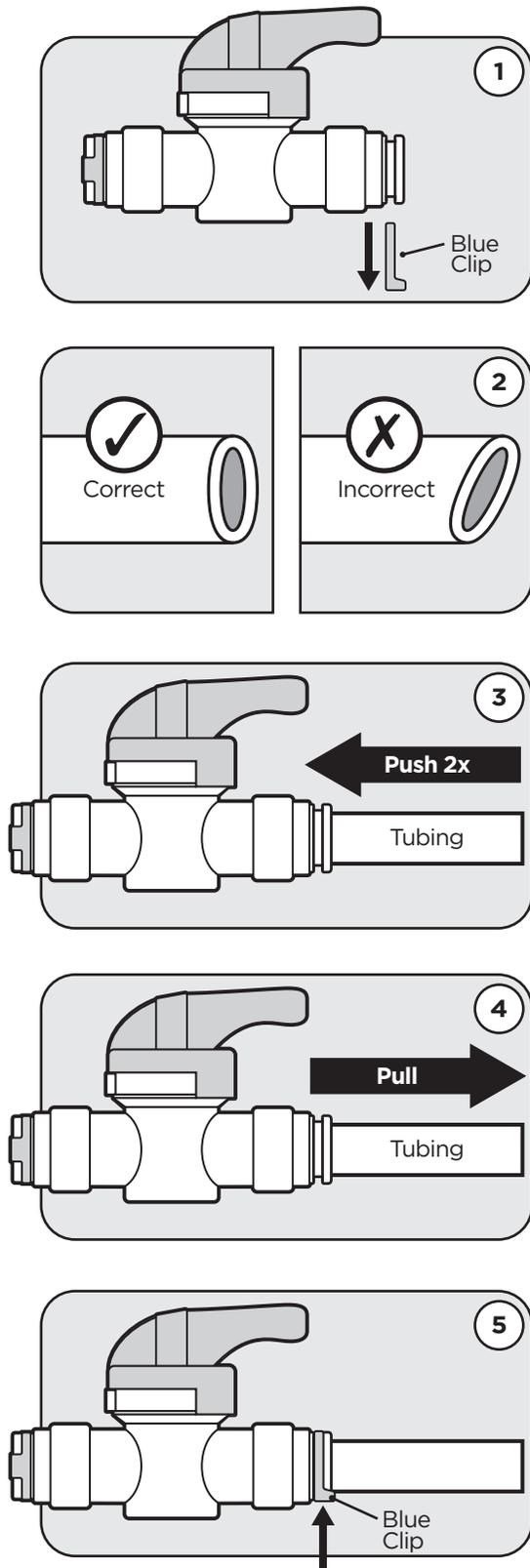
HOW TO USE THE BUDDIE FIT™ PRESS FITTINGS

Making the connections with the 1/4" tubing is easy with the Buddie Fit™ press fittings included.

To properly connect the 1/4" tubing to the press fittings, follow these simple steps:



1. Remove the blue clip from the press fitting.
2. Make sure the end of the tubing is cut evenly and not at an angle.
3. Push the tubing into the fitting. You will hit the first stop. The tubing is still not secured properly. Push the tubing a second time and you will feel the tubing insert completely into the press fitting.
4. Pull back on the tubing to ensure it is secure.
5. Insert the locking blue clip back onto the end of the press fitting.



NOTE: To remove a piece of tubing, remove the blue clip and press down on the collet where the tubing enters the fitting. While the collet is depressed, remove the tubing from the fitting.



NOTE: We recommend cutting the tubing with a razor blade or something similar so the tubing is not pinched. If the tubing is pinched, it will not seal properly. All tubing connections will have a “double push” into the connectors. You should feel a two-step insert to verify the tubing is inserted completely into the connectors.

INSTALLING THE CARTRIDGES

Step 1 -Use the Canister Wrench in a clockwise direction to gain access to the Deionization Cartridges. For proper operation, the water must flow into the right canister first and water flows out of the left canister.



NOTE: Use care to center the cartridges in the middle of each Canister prior to re-attaching the Canisters.



Step 2 - Reattach the Canisters to the housing.

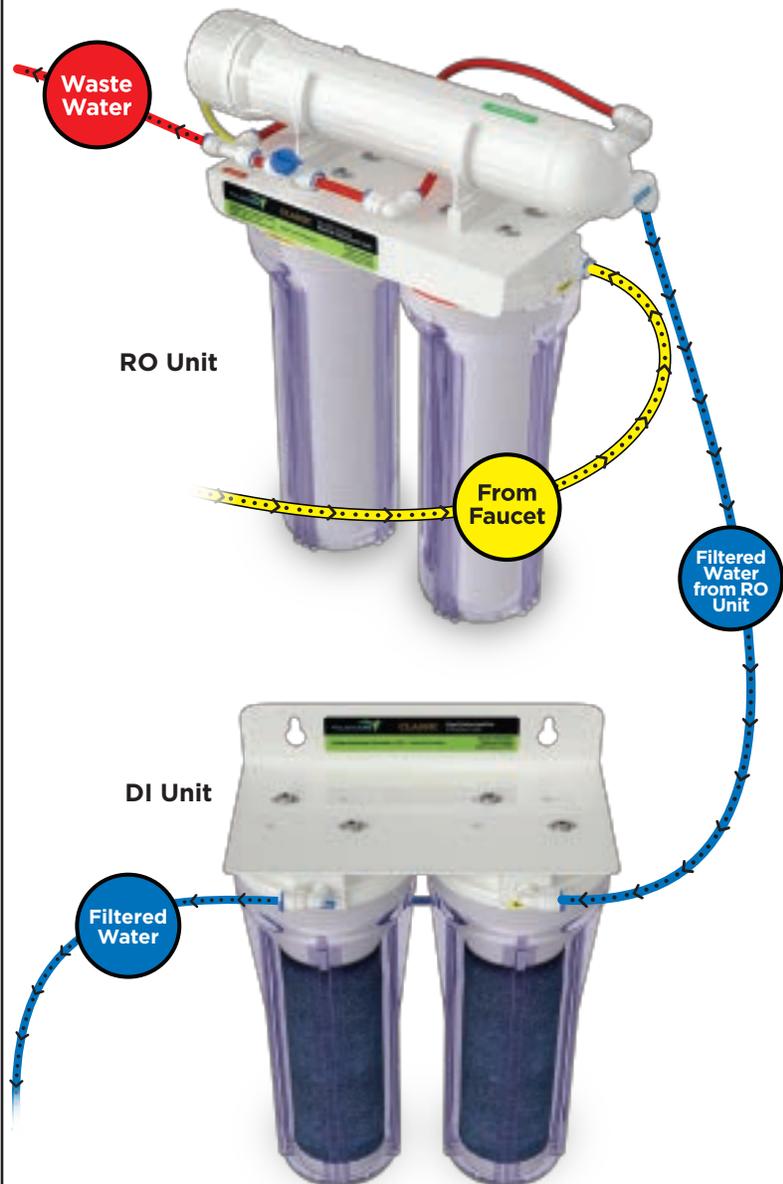
INSTALLATION

Step 1 -Cut the blue tubing as needed. Connect one end of the blue tubing to the clean water exiting a Reverse Osmosis filtration unit.

Step 2 -Connect the other end of the blue tubing to the port on the right side of the Dual DI Filtration Unit (Labeled "Supply").

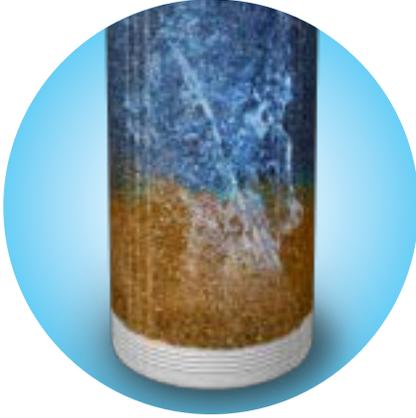
Step 3 -Use a second piece of the blue tubing to route the water from the left port of the Dual DI Filtration Unit to the desired water collection point.

Plumbing Diagram



UNIT MAINTENANCE

The Aquatic Life Deionization Cartridges are designed to change color when the resin inside is exhausted. When the entire cartridge has changed color, it is time to replace the cartridge.



OPERATION & CONSIDERATIONS

- Clear canisters have a limited life and should be replaced on an annual basis to prevent possible failure.
- Operating pressure greater than 80 PSI requires a pressure regulator.
- With initial operation, check for leaks. If a leak is observed, verify that the tubing is pushed into the push-fitting far enough to seal the tubing against the O-ring and that the canisters and caps are sealed properly with their O-rings.
- Many of the components in the Classic Dual DI Unit are plastic and subject to damage by ultraviolet light.
- Never store or operate the unit in direct sunlight or other bright lights.
- Do not store or operate the unit in temperatures above 100°F.
- Do not store or operate the unit in freezing temperatures.
- Do not leave the unit unattended while connected to a water supply.

MAXIMUM CARTRIDGE BENEFIT

To get the most benefit out of each cartridge we recommend replacing one cartridge at a time to allow the second cartridge to completely exhaust.

- Discard Cartridge in Canister 1 when completely tan
- Move Cartridge in Canister 2 to Canister 1
- Install new Cartridge in Canister 2



TROUBLESHOOTING

Q. Why is my Resin depleted so quickly?

A. This is caused when too many Total Dissolved Solids (TDS) are allowed to enter the cartridges. Check the following:

1. If a new RO Membrane has been installed, the preservative in the Membrane must be flushed PRIOR to allowing the Membrane-filtered water to flow through the DI cartridges.
2. If the RO Membrane is not seated properly in the Membrane Housing, water can by-pass the membrane and higher TDS water will deplete the DI resin cartridge quickly.
3. If the RO Membrane has been damaged (such as chlorine damage), it might not work properly and higher TDS water will deplete the DI cartridge quickly.
4. When the RO unit is shut off, water pressure equalizes around the Membrane. This causes higher-TDS water to collect on the filtered water side of the Membrane. When the RO unit is turned back on, the initial output of RO filtered water will have a higher TDS. In some instances, it is necessary to discard the first few gallons of membrane filtered water before letting the filtered water enter the DI Unit.
5. DI Resin is depleted when it comes in contact with carbon dioxide in the air. If you are using a cartridge that was not sealed in plastic wrap or used bulk resin that wasn't stored/packaged in an air-tight container, the resin may already have lost its adsorption properties.
6. High levels of CO₂ in your water will deplete the DI Resin quickly. If your water has high levels of CO₂, it will be necessary to gas-off the CO₂ in the water before pumping it through the DI Resin. This is often accomplished by filling a container with RO water and adding an air-store to the container for a period of time. Then the water can be pumped through the DI Resin to remove the remaining TDS.

Q. Can I replace the resin in the cartridges?

A. Yes, bulk color-changing resin is available to replace the resin in the cartridges. A 1 Liter bag of Aquatic Life DI Resin will fill three 10" Cartridges. A 5 Liter bag of DI Resin will fill fifteen 10" Cartridges. Always wear gloves and eye protection when working with DI Resin.

Q. Why does my DI Cartridge not last as long as the next guy?

A. The resin in DI Cartridges remove a set amount of TDS from water. The higher the TDS going into the DI Cartridge, the quicker the resin will be depleted. For example, if the water going into your DI Cartridge is 1 TDS and your neighbor has water with 10 TDS going into his DI Cartridge, your DI Cartridge will last 10 times longer than your neighbors.

ADDITIONAL PURCHASE CONSIDERATIONS

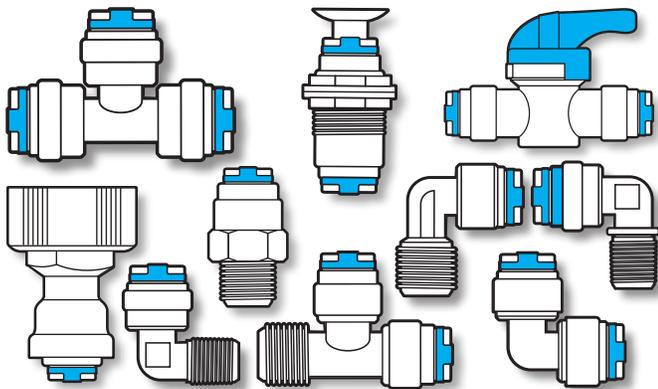
Depending on your installation and application needs, you may find other Aquatic Life products helpful with this RO Unit.
Visit www.aquaticlife.com for the complete line of Aquatic Life filtration products and accessories.



5L Bulk Resin
(Item # 330396)



Classic 3 Stage 50 GPD RO Unit
(Item # 540229)



Aquatic Life Buddie Fit™ Press Fittings

Easily plumb 1/4" water units with these press-fit connectors. Available in a variety of connections that include adapters to threaded fittings as well as elbows, tees and check valves.



Aquatic Life Tubing - 50 Ft rolls
Blue (Item # 500297) Red (Item # 500298)
Yellow (Item # 500299)

Ideal for applications where a longer run of tubing is required. This 1/4" polyethylene tubing is durable, flexible and easy to plumb. Available in Blue, Yellow and Red for quick identification of supply, waste and filtered water.

LIMITED LIFETIME WARRANTY

The Aquatic Life Classic Deionization Filtration Units are warranted to the original purchaser to be free of defects in material and workmanship by Lifetime Products LLC. Lifetime Products will replace or repair components of the Unit that Lifetime Products has deemed to be broken within the limits of the warranty without charge. The customer is responsible for any freight involved with shipping the item back for inspection and shipment of replacement items. Lifetime Products is not liable for cost of removal, installation, transportation or any other charges in connection with a warranty claim.

1. Lifetime Products is not liable for anything that we deem as abuse of the Units, including but not limited to, misuse of product outside of intended use, equipment modifications, unauthorized repairs, improper installation, damage from freezing, hot water, fire or other acts of God outside of Lifetime Products control.

This warranty will be void if defects occur due to failure to observe the following conditions:

- Incoming water to the DI cannot exceed 100°F.
- Incoming water pressure must be between 40 and 80 PSI.
- Do not use outdoors or in a location that is subjected to direct sunlight or freezing.

This warranty will not be effective unless and until the Aquatic Life product is shown to have been used in accordance with the installation and maintenance instructions accompanying the product.

2. Filter Cartridges are considered a disposable item and not covered under warranty.
3. All mechanical devices with moving parts have a normal life span and will need to be replaced periodically. For this reason, mechanical devices such as ball valves, auto shut off valves, pressurized tanks, float valves, pressure gauges and check valves have a limited replacement warranty of 2 years.
4. The customer is responsible for proper installation which includes complete and continual leak inspection. Most of the Unit components are made from plastic and eventually can break or crack from stress. Lifetime Products cannot be held liable for any damage caused by leaks.

There are no other warranties which extend beyond what is described above. To receive warranty service, contact Lifetime Products at customersupport@aquaticlife.com.

You may be required to ship the items in question back for inspection, repair or replacement. This warranty is provided solely to the original consumer purchaser of the product and may not be transferred or assigned. If Lifetime Products chooses to replace the equipment, Lifetime Products may replace it with reconditioned equipment. Parts used in repairing or replacing the equipment will be warranted for 90 days from the date the equipment is returned to you or the remainder of the original warranty period, whichever is longer.

THIS CONSTITUTES LIFETIME PRODUCTS ENTIRE WARRANTY AND LIFETIME PRODUCTS MAKES NO OTHER WARRANTIES, WHETHER EXPRESS OR IMPLIED, WITH RESPECT TO THE PRODUCT. LIFETIME PRODUCTS, LLC SPECIFICALLY DISCLAIMS ANY AND ALL IMPLIED WARRANTIES, INCLUDING, WITHOUT LIMITATION, WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. IF LIFETIME PRODUCTS, LLC CANNOT LAWFULLY DISCLAIM IMPLIED WARRANTIES UNDER THIS LIMITED WARRANTY, ALL SUCH WARRANTIES, INCLUDING WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE LIMITED IN DURATION TO THE DURATION OF THIS WARRANTY.

LIFETIME PRODUCTS IS NOT RESPONSIBLE FOR DIRECT, SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES RESULTING FROM ANY BREACH OF WARRANTY OR CONDITION, OR UNDER ANY OTHER LEGAL THEORY. LIFETIME PRODUCTS, LLC EXPRESSLY DISCLAIMS ALL ALLEGED DAMAGES FOR LOSS OF MARINE LIFE, PERSONAL INJURY, AND/OR PROPERTY DAMAGE.

Some states and provinces do not allow the exclusion or limitation of incidental or consequential damages or exclusions or limitations on the duration of implied warranties or conditions, so the above limitations or exclusions may not apply to you. This warranty gives you specific legal rights, and you may also have other rights that vary by state or province.

Lifetime Products, LLC shall not have any obligations under this warranty unless the owner notifies Lifetime Products, LLC in writing of any alleged defect(s) within 30 days of discovery of the defect(s).

Any notice to Lifetime Products, LLC must be delivered by United States or electronic mail to the following address: U.S. Mail: Lifetime Products, LLC, 9710 Klingerman St., S. El Monte, CA 91733 or electronic mail: customersupport@aquaticlife.com. Lifetime Products shall be allowed a reasonable period of time to investigate any warranty claim and to perform any testing Lifetime Products deems necessary to determine the cause of the defect. This warranty shall be interpreted under the laws of the State of California.

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Toll Free: 888-548-3480 | Local: 818-768-6943

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