Installation, Operation & Maintenance Guide



### Thank you for purchasing an **Aquatic Life Classic Dual Deionization Water Filtration Unit.**

When maintained properly, this unit will provide you with years of service.





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.

For technical assistance or warranty issues, please contact Aquatic Life at

1-888-548-3480 or 1-818-768-6943

or email customersupport@aquaticlife.com

Thank Gou!

### **OVERVIEW**

The cartridges on your unit are designed for easy installation and replacement. It is important the cartridges are installed post membrane filter to prolong the life of the deionization (DI) cartridge.

After the water is filtered by a membrane (not included), there is usually a small amount of total dissolved solids (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 filter.

Contents (Model #540235)			
1	Dual Deionization Unit Housing with Mounting Bracket	1	Blue Tubing, ¼" x 4 FT.
2	Color-changing Deionization Cartridges	1	Set Mounting Screws
1	Cartridge Wrench	1	Installation, Operation and Maintenance Guide

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 water can leach copper from the pipe, eventually leading to holes in the pipe.

**DO NOT** operate the unit unattended.

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

## 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.





**NOTE:** If your model includes rubber plugs on any of the ports, it is now OK to remove the plug by simply pulling it out.

### **INSTALLING THE CARTRIDGES**

Step 1 – Use the canister wrench to loosen the canisters and gain access to the cartridges. Remove the plastic wrap from the cartridges and reinsert into the canisters before tightening. 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.

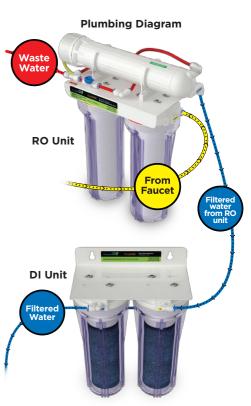


### INSTALLATION

**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.

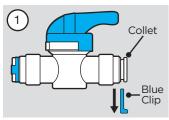
**Step 2** – Connect the other end of the blue tubing to the port on the right side of the Dual DI Filtration Unit (labeled "Supply").

**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.

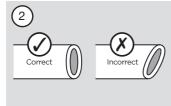


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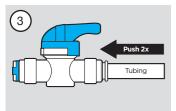
### USING THE BUDDIE FIT™ PRESS FITTINGS



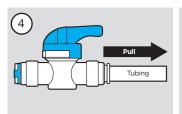
Remove the blue clip from the press fitting.



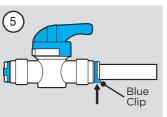
Cut tubing evenly and not at an angle.



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 (5/8") into the press fitting.



Pull back on the tubing to ensure it is secure.



Insert the locking blue clip back onto 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.

### **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.

### **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:

- 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 though the DI cartridges.
- 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, it is necessary to discard the first few gallons of water before letting the filtered water enter the DI unit.
- 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 absorption 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 one liter bag of Aquatic Life DI resin will fill three 10" cartridges. A five 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, your DI cartridge will last 10 times longer than your neighbors.

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### ADDITIONAL PURCHASE CONSIDERATIONS

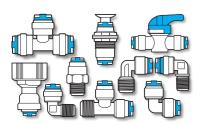
Depending on your installation and application needs, you may find other Aquatic Life products helpful with this DI unit. **Visit www.aquaticlife.com** for the complete line of Aquatic Life filtration products and accessories.



5L Bulk Resin (Item # 330396)



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



### **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.



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.

### **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.

### As Required – By Visible Color Change Deionization Color-Changing Resin Cartridge (Item # 330091)



NOTE: When changing out the exhausted color changing resin cartridge, it is recommended that the second cartridge move to the first position. The new cartridge should then be installed in the second position. This will maximize the use of the resin.



NOTE: The life span of the filter cartridges are dependent on multiple factors. These include the quality of the incoming water supply (TDS levels, chlorine, etc.) as well as the amount of use. Our recommended replacement intervals are based on average usage.

### PRODUCT REGISTRATION

Thank you for purchasing an Aquatic Life product—we know you'll enjoy it!

### BENEFITS OF REGISTRATION:

### **Confirmation of Ownership**

Provides a record in the event you need to contact us about your product in the future.

### **Your Safety**

Allows us to contact you with important product notifications.

### **Improved Product Support**

Helps us continue to tailor our products and services to meet your needs.

## Register Online at www.aquaticlife.com

Lifetime Products is committed to reducing our carbon footprint and we appreciate your time in registering electronically. If you do not have access to the Internet, you can **call us at 888-548-3480.** 

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



### **3-YEAR LIMITED WARRANTY**

Lifetime Products LLC warrants that this filtration unit (excluding cartridges and clear canisters) shall be free from defective components and leaks or cracks due to defects in materials or workmanship for a period of three (3) years from the date of purchase. If a defect is shown, Lifetime Products LLC will, at Lifetime Product's sole discretion, either repair or replace the product without charge. No cash refunds will be made. 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 warranty does not apply to damage resulting from accident, misuse, abuse, lack of reasonable care, failure to follow safety and installation instructions.

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

The Aquatic Life TI Unit should only be connected to a potable municipal or potable well cold water supply.

Do not use with water that is of unknown quality without adequate disinfection before or after the unit.

- Incoming total dissolved solids (TDS) not to exceed 1,800 ppm.
- Incoming water to the RO cannot exceed 100°F.
- Incoming water pressure must be between 40 and 80 PSI.
- Incoming water pH must not be lower than 2 or higher than 11.
- Incoming water iron content must be less than 0.2 ppm.
- Incoming water hardness must not exceed 10 grains per gallon or 170 ppm.
- 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.

THIS CONSTITUTES LIFETIME PRODUCTS ENTIRE WARRANTY AND LIFETIME PRODUCTS MAKES NO OTHER WARRANTIES, WHETHER EXPRESS OR IMPLIED, WITH RESPECT TO THE PRODUCT. PRODUCTS, **SPECIFICALLY** LIFETIME LLC 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.

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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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