



Installation and User Instructions

BlueDragon® Pro 1

Model. H400



BlueDragon® RO/DI Setup Procedure

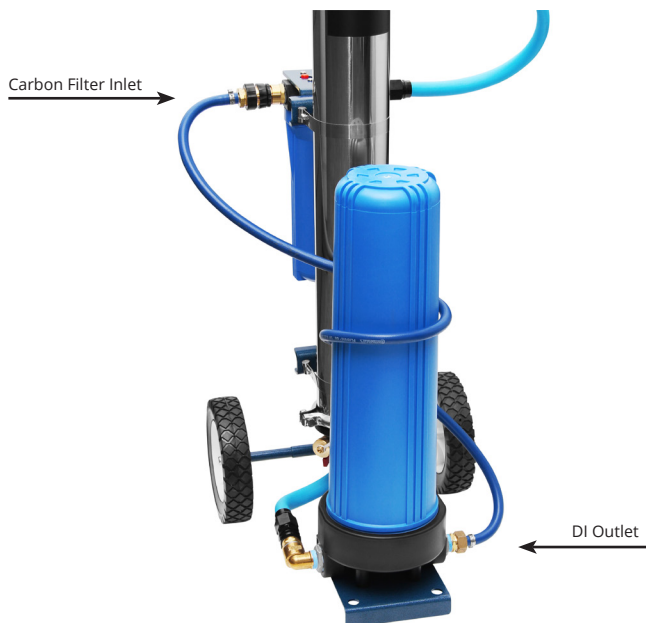
1. Unpack unit and inspect for any damage that may have occurred during shipping.
2. Be sure to inventory all items that were to be included with your order.
3. Any damage or missing components must be reported within 24 hours to the supplier.
4. Your BlueDragon® Pro 1 is shipped complete in one (01) box.



Operation Instructions

First time use

1. Connect the garden hose to inlet of carbon filter housing.
2. Connect the waste hose to by-pass valve and turn the valve fully open.
3. Connect water-fed tubing to outlet on DI filter housing.
4. Turn tap water supply on and allow the system to flush for 15- 20 minutes.
5. Slowly turn the by-pass valve to about 15% closed, it will take a few minutes for all the air to purge out of the system before water comes out of the water-fed tubing.
6. You are now fully charged and ready to operate.



Every day use

1. Connect garden hose to inlet on carbon housing.
2. Turn the by-pass valve fully open and allow water to run for 4-5 minutes.
3. Connect water-fed tubing to outlet on DI filter housing.
4. Turn the by-pass valve to about 15%-20% closed.

Shutdown Procedure

1. Turn by-pass valve fully open and allow water to run 4-5 minutes.
2. Turn off the water supply and turn off by-pass valve.
3. Disconnect garden hose from inlet housing.
4. Disconnect tubing from DI housing.
5. Disconnect the waste hose and connect it to DI outlet to the carbon filter inlet to transport system.

After the first initial setup you will not need to charge the system unless you replace a filter.

Carts can be used standing or laying down.

Maintenance

It is important to check the TDS level of the water coming from the system occasionally. This can be done by filling a cup with the water from your water-fed hose and testing it with your handheld TDS meter.

Once the TDS levels are above 10 ppm you will slowly start to see spotting on windows and should change your DI filter resin.

The carbon block cartridge should be checked 3-4 months, carbon filter is rated for 5,000 gallons @ .75 GPM. The carbon filters main job is to remove chlorine. Check to see if your carbon filter is working properly and efficiently with a chlorine test kit, failure to do so can damage your RO membrane.

Your BlueDragon® is a water purification system that needs to be maintained. Running water through the RO membranes every 2-3 weeks will help to keep RO's working at peak performance. Do not drain your system. It is important to keep the filters hydrated.

Filter Replacement Schedule and Procedure

Your carbon filter protects your system from getting damaged by chlorine and water disinfection agents. It is recommended that you change your carbon filter every 5,000 gallons. Failure can result in damage to the RO membrane.

DI resin has a limited lifespan based on the amount of dissolved solids it is removing from

the water. The DI resin needs to be replaced as needed to get clean streak free windows. Order SKU H447.

To remove these filters, slide the universal housing wrench over the filter housing. Once snug turn the filter counter-clockwise, once the housing is loose you can unthread housing sump from the housing head. Remove the old filter and replace with a new one. All rubber seals and O-ring should be lubricated before reinstalling filter housings.

To change the RO membrane, disconnect the hose from the top of the filter housing. Remove stainless steel bracket by undoing the two 14 mm bolts. Pull housing cap off, cap has two slots to insert a flat object to help remove it from housing. Twist and lift up on the membrane to release from the bottom cap.

When installing the new filters you will need to lubricate all O-rings on the housing cap to ensure a tight seal. The white nipples on each end of the membrane will also need to be lubricated to seat into the O-rings in the top and bottom housing cap. It is recommended to use petroleum lubricant or any silicone safe lubricant. Put the new membrane into the housing the same way the old one was installed. There is a black O-ring on the membrane. This O-ring should go on the top end of the housing. Be sure to run water through the system and purge all air out before you connect any booster or pump to the system.



****RO membranes should not be allowed to dry or collect stagnant water in the bottom of the membrane. This will diminish performance and potentially fail. To prevent this, RO's should be run on a regular basis, 2-3 weeks after first use, even during off season.***

BlueDragon® Serviceable Housing

Hub Removal Instructions

Step 1:

Remove stainless steel bracket (14mm bolts).



Step 2:

Insert flat objects (flat head screwdriver) into side slots of housing cap.



Step 3:

Remove cap.



Any alterations to your system will void its warranty.

RO Preserve (SKU: H435)

Protection & Storage Solution For RO Membranes



Use RO Protect to prevent biologic fouling as well as mold from forming inside the RO membrane during off season or out of service for 5 week or more.

BlueDragon® RO/DI Long Term Storage Instructions

System Preparation

1. Remove the carbon filter and drain all water. Reinstall empty filter housing.
2. Remove DI filter and drain all water. Reinstall empty filter housing. Do not let filter dry out completely, filter can then be wrapped in plastic to prevent drying out and stored in a location that will not freeze.
3. Disconnect the waste hose and connect it from the DI outlet to the carbon filter inlet.
4. Disconnect hose from the top cap of RO housing and remove cap.
* See page 6
5. Open by-pass valve and let as much water drain out as possible from housing and RO membrane. Close valve after draining water.
6. Pour one packet of RO Protect into 1 gallon of pure water or distilled water. Make sure all the powder dissolves. The BlueDragon® with one housing will take about 2 gallons.
* Substitute water for Propylene Glycol (RV antifreeze) for freeze protection.
7. Slowly pour the entire solution into the RO housing and filling it to the top.
* Make sure you also fill the center of the membrane.
8. Reinstall the top housing cap and reconnect the hose.
9. BlueDragon® is ready to be stored.

System Restart

System Restart Procedure After RO Protect

1. Disconnect waste hose from carbon inlet and DI outlet, install waste hose to by-pass valve.
* RO Protect solution will start coming out.
2. Fully drain system.
3. Install new carbon filter.
4. Connect the water supply hose to the carbon inlet and open by-pass valve.
5. Allow the system to flush for a minimum of 10 minutes to flush out solution.
6. Close by-pass valve to the working position and run the system for an additional 5 minutes. Check your TDS to make sure your system is working properly.
7. Shutdown system.
8. Install DI filter cartridge into housing.
9. System is now ready to go.



Warranty Policy Limited Warranty

Windows 101 warrants the BlueDragon® against defects in material and workmanship under normal use and service to the original purchaser as detailed below. Wear items exempt from warranty include hoses, fittings, valves, filters and membranes. Warrants all other cleaning equipment components to be free from defects in materials and workmanship for a 1-year period. Parts replaced or repaired are warranted for the remainder of the original warranty period.

This warranty shall not apply to failures caused by misuse or abuse, improper maintenance as stated in the operation manuals, use of unauthorized repair parts.

Windows 101 disclaims and denies any liability for any direct, indirect, special incidental or consequential damage which may be suffered as a result of sale, delivery, servicing, use, loss of any product, downtime, labor, freight, or other charges not expressly included herein.

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