# SeaWater Pro

Mini Portable Watermaker Desalinator & Water Purifier Assembly Manual



SeaWater Pro WATERMAKERS

START UP PROCEDURE:



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# Mini Portable Water Maker

Seawater Pro WATERMAKERS

The SeaWater Pro Mini Portable Watermaker filters and desalinates water at 14 gallons per hour. The Mini Portable Watermaker gets its name from its easy-to-carry design. Weighing in at only 50 lbs. (22 kg) including its 22 x 14 x 9-inch protective carrying case, this watermaker is ready to go whenever, wherever!

•The Standard A/C 110 Volts makes 14 GPH
•Capable of operating utilizing an inverter or a generator
•Purify freshwater or desalinate sea water
•Splash resistant construction
•1 Year Warranty
•Easy-to-carry high-impact protective carrying case
•Housing: 22 x 14x 9 IN (600 x 230 MM)
•Weight: 50lbs. (22 kg.)
•Pre-Filter 2.5" x 5" (SpiroPure P5-478)



### Seawater Pro Watermakers

# Our team at SeaWater Pro would like to congratulate you on your purchase of a new Mini Portable Watermaker!

We trust that you will be thoroughly satisfied making the freshest water from our revolutionary, compact, easy-to-carry portable watermaker system. With your new SeaWater Pro system in hand, making fresh water on the go has never been easier because we believe that you should never plan your trip around water.

Designed from the ground up, this system is constructed for durability and maximum portability. This device is ideal not only for boaters but anyone with a need to desalinate water on the go.





# **General Cautions & Warnings**

Safety is one of our highest priorities at SeaWater Pro Watermakers. Knowing what things to avoid is a crucial component of proper installation and operation. To ensure the highest level of safety to the installer or operator of the SeaWater Pro Mini Portable Watermaker, the following safety measures should be adhered to:

### **General Cautions**

1. Do NOT exceed the recommended operational pressure of 850-900 PSI.

2. The high-pressure pump is shipped with a red oil plug cap installed to prevent oil spillage. Before the initial operation of the system, replace the red plug cap with the breathable orange oil plug, included in the accessory bag before every use.

- 3. Reinstall the shipping cap while the unit is in storage.
- 4. ONLY operate the unit horizontally. Alternate angle configurations will lead to compromised pump lubrication.

### Water Cautions and Consumption

1.Do not allow chlorinated water to flow through the system. Oxidants, such as chlorine or bleach, can lead to impaired performance of the system.

2. The Mini Portable Watermaker is shipped containing a preservative/storage pickling solution. Allow a minimum of 30 minutes of initial operation to properly flush out the preservative solution before drinking the water. Repeat this process each time the system is freshly pickled.

### Heat Hazard

1. Handle with caution if the system has been run for more than an hour. System can heat up to approximately 110 degrees Fahrenheit. 2. Keeping the housing case lid open while utilizing the system will help to prevent overheating of the system.

### **Electrical Hazard**

1.Do NOT operate the system when wet. 2.Do NOT use without appropriate G.F.C.I. power cord; electrical shock can occur if an improper cord is used.











### **Initial Water Consumption**

First use of the system from the factory contains a pickled preservative; allow the system to run for **at least 30 minutes before consuming** your fresh water.

Upon unboxing ensure that the following items are setup:



1.Open the lid of the unit. You will see a blue boost pump with a black hose attached on the left side of the box. This piece has a 30 PSI gauge mounted on top.



### **Prepping the Boost Pump & Pre-Filter System**

2. Unscrew the blue top on the boost pump and install the micron filter (included in the shipping box; one is already included in the boost pump upon purchase) into your boost pump.
After each usage, a new boost pump filter should be installed.



Install the provided boost pump strainer, included in the accessory bag, by removing the green plug on the boost pump. The green plug should be saved for future storage and transport.



 Remove the red oil plug from the high-pressure pump and replace it with the orange breathing oil plug, included in the accessory bag.







### **Prepping the Boost Pump & Pre-Filter System**

- 4. Install the ¼ inch blue freshwater hose into the membrane and attach the flow meter to the ¼ inch blue hose. Be sure that the green storage water cap is not installed. This blue hose provides fresh drinking water.
  - •The line will be installed on the left side of the membrane into a plastic push lock fitting.





Flow Meter Attached the flow meter to the ¼ blue hose.









### **Prepping the Boost Pump & Pre-Filter System**

5. Once the filter is in place and the oil cap has been changed, submerge your boost pump into the water and be sure the feed hose's "Quick-Lock" fitting and the Boost Pump adapter are connected.





•Ensure that the pressure regulator is rotated counterclockwise to the depressurized position of 0 PSI.

•Plug in Boost Pump.

•Water will start running through the clear brine hose; ensure that this hose is placed where the brine water can be returned to the water source.

•Plug in high-pressure pump using the G.F.C.I. button as the ON switch.

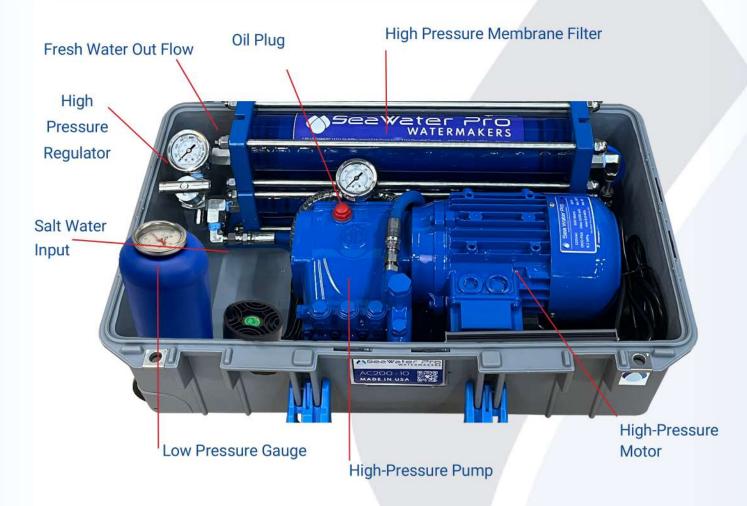




6. Once the motors are on and water is priming the system, you should now adjust the pressure regulator *slowly* to 800 PSI.

• When the system has reached operating pressure, fresh water will begin to generate. Water source solubles can alter the maximum PSI threshold.





#### To properly shut down the Mini WaterMaker system:

- 1. Fill a 5-gallon bucket with 4-gallons of freshwater. Rinse the system using 2 of the 4 gallons.
- 2. Depressurize the system to 0 PSI.
- 3. Add 1 gallon of propylene glycol to the remaining 2 gallons of freshwater.
- 4. Preserve the watermaker. See Preserving Tips on the following page.
- 5. Turn off the high-pressure pump using the OFF switch.
- 6. Unplug the boost pump.
- 7. Remove the used boost pump pre-filter.

8. Preserve Membranes with 1 part 100% food-grade Propylene Glycol and 2 parts unchlorinated water produced by the watermaker itself.

- Approximately 4 gallons
- 9. Store all cords and hoses within the housing case.





# System Maintenance

#### **General System Maintenance:**

After each use of the system, SeaWater Pro manufacturer recommends spraying the entire system with Yamalube, a silicone protectant and lubricant.

This will help to limit oxidation of the system. This spray can be purchased on Amazon or directly from the SeaWater Pro manufacturer.

•Additional part kits can be purchased through SeaWater Pro manufacturer website.

#### Membrane Maintenance:

Depending on the type of water being run through the system, the membranes will last approximately 5 to 6 years. Membranes can be purchased directly from the SeaWater Pro manufacturer website. To prevent damage, avoid taking in petroleum distillates with the system (i.e., conditioner, shampoo, cooking grease, or other non-dissolvable materials).



#### **Boost pump Filter Maintenance:**

The boost pump filter should be changed regularly. When shipped, the system will include a number of extra filters for initial usage. These filters can be purchased directly from SeaWater Pro manufacturer.





#### WINTERIZATION PROCESS:

Seawater Pro, LLC. is a company that specializes in the production of high-quality watermakers. In order to ensure that our products maintain their optimal performance and longevity, the company recommends implementing freeze protection for the preservation of their watermakers during the winter months.

Freeze protection involves the use of special additives, such as 100% food-grade propylene glycol and water [1 propylene glycol:2 water gallon ratio], to help prevent water from freezing inside the watermaker's components and causing damage. When water freezes, it expands, and this can cause internal components to crack or break, leading to costly repairs. By implementing freeze protection, Seawater Pro, LLC. ensures that their watermakers are protected from these potentially costly damages.

To effectively implement freeze protection, it is important to follow the proper winterization procedures. This involves draining all water from the system, adding the appropriate amount of propylene glycol and water to the components, and running the system on boost pump pressure **ONLY** to ensure that the freeze-protection solution is evenly distributed throughout the system. **DO NOT PRESSURIZE THE SYSTEM!** By doing this, the watermaker is protected from freezing temperatures and can be easily restarted in the spring.

In addition to freeze protection, Seawater Pro, LLC. recommends regular maintenance and servicing of their watermakers to ensure optimal performance. This includes regular filter changes, cleaning of the system, and inspection of the components for any signs of wear or damage.





# Winterization: Liquid Pickling

### 100% Food-Grade Propylene Glycol

Propylene glycol is an odorless chemical compound that is used as an anti-freeze solution in various industries. Unlike its cousin, ethylene glycol, propylene glycol is non-toxic and safe for human consumption. It has a low freezing point of -60°C, which makes it an ideal coolant for extreme cold temperatures.

Seawater Pro, LLC, a Florida-based company, manufactures 100% propylene glycol-based products that are used in marine desalination systems. Seawater Pro's propylene glycol is specially manufactured with a light blue colored tint. Our anti-freeze solutions are designed to protect against freezing temperatures and corrosion, making them a popular choice for boat owners. Seawater Pro's anti-freeze solutions are made with pure propylene glycol, which provides maximum protection against freezing. Products are also biodegradable and environmentally friendly, making them a preferred choice for those who are looking for eco-friendly anti-freeze solutions that won't harm marine life or the environment.

100% food-grade propylene glycol is an excellent anti-freeze solution that is safe, effective, and environmentally friendly. Companies like Seawater Pro, LLC. are dedicated to producing highquality products that meet the needs of their customers. As a boat owner or watermaker user, understanding that propylene glycol-based anti-freeze solutions can help protect your equipment from the damaging effects of freezing temperatures is imperative.

#### FREEZE PROTECTION: WARNING

There is a high probability of damaging your watermaker by exposing it to severe cold or icy conditions. The following procedure will protect your watermaker against freeze damage.

**DO NOT USE ETHYLENE GLYCOL** (FOUND IN AUTOMOTIVE ANTIFREEZE PRODUCTS) FOR FREEZE-PROTECTING YOUR WATERMAKER. ETHYLENE GLYCOL IS A TOXIC SUBSTANCE AND MUST NOT BE INGESTED OR COME INTO CONTACT WITH YOUR SYSTEM.

**USE ONLY FOOD-GRADE NON-TOXIC PROPYLENE GLYCOL.** DO NOT USE PROPYLENE GLYCOL BLENDED WITH SUPPLEMENTARY ADDITIVES.







# Winterization: Liquid Pickling

#### Freeze Protection for Watermakers: Winterization Tips from Seawater Pro, LLC

One of the biggest risks to a watermaker during the winter months is freeze damage. Water left inside of the system can freeze, expand, and cause irreversible damage to delicate components. To ensure your watermaker stays in good condition throughout the winter, it's important to take steps to protect it from freezing temperatures.

Seawater Pro, LLC is a leading manufacturer of watermakers for boats and adventure lovers. Their team of experts has provided some tips and recommendations for winterizing your watermaker to protect it from freeze damage.

#### 1. Drain the System

Before winterizing your watermaker, it's crucial to ensure that all water is drained from the system. This means opening all valves and disconnecting any water hoses. Use compressed air to blow out any remaining water from the system. Be sure to open all faucets and drains to ensure that all water has been removed.

#### 2. Use 100% Food-Grade Propylene Glycol Anti-Freeze

Using 100% food-grade propylene glycol as an anti-freeze is an effective way to ensure that your watermaker is protected throughout the winter months. It is a non-toxic, marine-specific anti-freeze. Use a 1 propylene glycol: 2 water gallon ratio in a bucket, mixed thoroughly, with boost pump pressure **ONLY** to circulate the solution throughout the system. Then cap off all inlets and outlets to prevent drying out the membranes.

#### 3. Remove Pre-Filters

It's important to remove all pre-filters from the watermaker before winterizing it. This will prevent the filters from becoming damaged due to freezing temperatures. Be sure to store the filters in a dry, warm location to prevent damage.

#### 4. Keep the System Dry

After all water has been drained from the system, it's important to keep the system dry to prevent any moisture buildup. Use a dry cloth to wipe down all components, and ensure that the system is completely dry before storing it for the winter.

By following these simple steps, you can help protect your watermaker from freeze damage, and rest assured that your Seawater Pro watermaker will remain in excellent condition throughout the winter months. Seawater Pro, LLC is committed to helping its customers keep their watermakers in top condition all year round.





#### Post-Winterizing: Tips from Seawater Pro, LLC

After successfully winterizing your watermaker using Seawater Pro, LLC products, there are a few important steps you should take to ensure that your system is ready to return to operation.

#### 1. Check all Connections

Inspect all hose and pipe connections to make sure they are tight and secure. Reconnect highpressure hose from pump to membranes.

#### 2. Ensure Pre-filters are Reinstalled

Reinstall the pre-filters once the system is ready to be operated again.

#### 3. Lubricate Moving Parts

Apply a light coat of lubricant to any moving parts, such as the pump or motors. This will ensure the system runs smoothly when it is reactivated.

#### 4. Pre-Assembly

When ready to use the system again, use boost pump pressure to run the system's (depressurized) brine water overboard for 30 minutes before making product water. Once the brine has been run overboard for 30 minutes, connect the freshwater product hose from the system to the tank.

#### 5. Boost Pump Assembly

Follow the steps on Page 3 for Boost Pump assembly procedures. Enjoy fresh water!

For further questions regarding how to maintain your system, reach out to us at 954-800-8800 or email seawaterprollc@gmail.com





### Warranty Conditions / Warranty Statement:

#### GENERAL

SeaWater Pro water makers and desalination systems are exclusively manufactured in the U.S.A. under our highest quality standards. Our patented pressure regulators ensure that our customers have a top-tier and effective experience with the utilization of our systems. Each of these handcrafted products undergo a thorough quality control inspection as they are being manufactured and prior to delivery.

Upon purchase of a water maker system SeaWater Pro voluntarily provides a manufacturer warranty for manufacturing defects and materials under the following conditions:

The following conditions, which encompass the prerequisites and purview of our voluntary warranty, are outlined.

#### WARRANTY PROVIDER

SeaWater Pro, LLC 3233 NW 2nd Avenue Fort Lauderdale, FL 33315 USA Phone 954-800-8800 info@seawaterpro.com

#### WARRANTY COVERAGE

I. This warranty extends exclusively to SeaWater Pro water makers that were purchased directly from the manufacturer's factory; this warranty does not cover third-party sales by dealers or pre-existing water maker systems owned by the consumer. This warranty excludes land-based installations; it is explicitly applicable to boat installations only.

#### DURATION OF WARRANTY

II.SeaWater Pro LLC. warrants the water maker and select parts to be free of all defects in material and workmanship for 1 year from the original purchase date. This warranty extends exclusively to the original buyer, the first lawful end customer; this warranty is

non-transferable.

III.Within the period of this warranty, SeaWater Pro LLC. will repair or replace, free of charge; any part proving defective in material or

workmanship. All warranty repairs and services must be performed by an authorized SeaWater Pro LLC. technician, or at an authorized SeaWater Pro LLC. service facility.

#### **PRODUCT COVERAGE:**

i. Seawater Pro Water Makers

ii. Select SeaWater Pro and select parts

iii. SeaWater Pro Membranes are not covered by this warranty.

IV. All expenses related to replacing or repairing a defective part under this warranty shall be assumed by SeaWater Pro LLC. except for

travel and shipping expenses, which shall be assumed by the buyer.





# Warranty Agreement

#### WARRANTY EXCLUSIONS

V.This warranty does not apply to any costs, repairs, or services for the following:

i.Repairs necessitated by use other than normal wear and tear.

ii.Damage resulting from misuse, abuse, accidents, alterations, or improper installation.

iii.Corrective work necessitated by repairs made by anyone other than SeaWater Pro LLC. authorized service technician.

1.SeaWater Pro Membranes are not covered by this warranty.

2. This warranty excludes land-based installations; it is explicitly applicable to boat installations only.

VI. This warranty right shall be forfeited in the event of:

i.Misuse of the product.

ii.Improper installation.

iii.Not abiding by the operating manual.

iv.Not performing outlined regular maintenance.

v.Any change in the product components.

VII.Further or other claims, particularly those related to any compensation for damage occurring outside the filter – provided such lia- bility is not mandated by law – shall not be accepted. Warranty claims made in a country that is different from the country of purchase can entail reasonable fees or other limitations that the warranty provider may set at its reasonable discretion.

#### LIMITATION OF DAMAGES

VIII.In no event shall SeaWater Pro LLC. be liable for consequential damages for breach of this warranty. Some States do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to the buyer.

#### **PROVISION OF WARRANTY SERVICES**

IX.Upon discovery of any defect, malfunction, or nonconformity in the SeaWater Pro water maker system, the buyer should contact the manufacturer directly in order to obtain warranty service and repairs:

X. The buyer should carefully pack the water maker system, preferably in the original packing materials, and deliver it, together with a copy of the original purchase receipt and a description of the problem, to the listed repair and service facility:

Warranty repairs are to be made at an authorized service center: SeaWater Pro, LLC 3233 NW 2nd Avenue Fort Lauderdale, FL 33315 USA Phone 954-800-8800 info@seawaterpro.com

If the buyer sends the product by U.S. mail, we recommend that the buyer insure it and send it return receipt requested. We accept no liability for products lost or misplaced in shipment.

#### NOTICE TO BUYER

Consumer Protection Some states do not allow the exclusion or limitation of incidental or consequential damages or allow limitations on how long an implied warranty lasts, 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 which vary from state to state. You have the right to bring any action at law or equity to resolve disputes concerning or to enforce the provisions of this warranty.

If the buyer disagrees over either's performance under the terms of this warranty, the buyer may submit the matter for resolution to SeaWater Pro, LLC. The buyer shall not be responsible for expenses incurred in submitting a dispute for resolution under the terms of this paragraph. The buyer is required to submit any dispute for resolution under this paragraph before pursuing any legal remedies to which he or she may be entitled.





### Congratulations on purchasing your new SeaWater Pro WaterMaker!

SeaWater Pro is committed to not only providing our customers with the best product available at the highest quality but also providing exceptional customer service. Below are some helpful links to our how-to videos. You can scan the QR codes with your smart phone to see the videos and download a digital copy of this manual.

Visit our Resources section on our website by scanning the QR code.



If you require additional instruction or have any other questions not covered in this manual, please contact us at seawaterprollc@gmail.com or call 954-800-8800.





# Connect With Us!

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Our products are proudly manufactured here in Fort Lauderdale, Florida USA!