

X-ION MINI **SWITCH**

OPERATION MANUAL



FRONT VIEW

**HEIGHT
ADJUSTABLE
HANDLE**

**TWIN
21" RO
MEMBRANES**

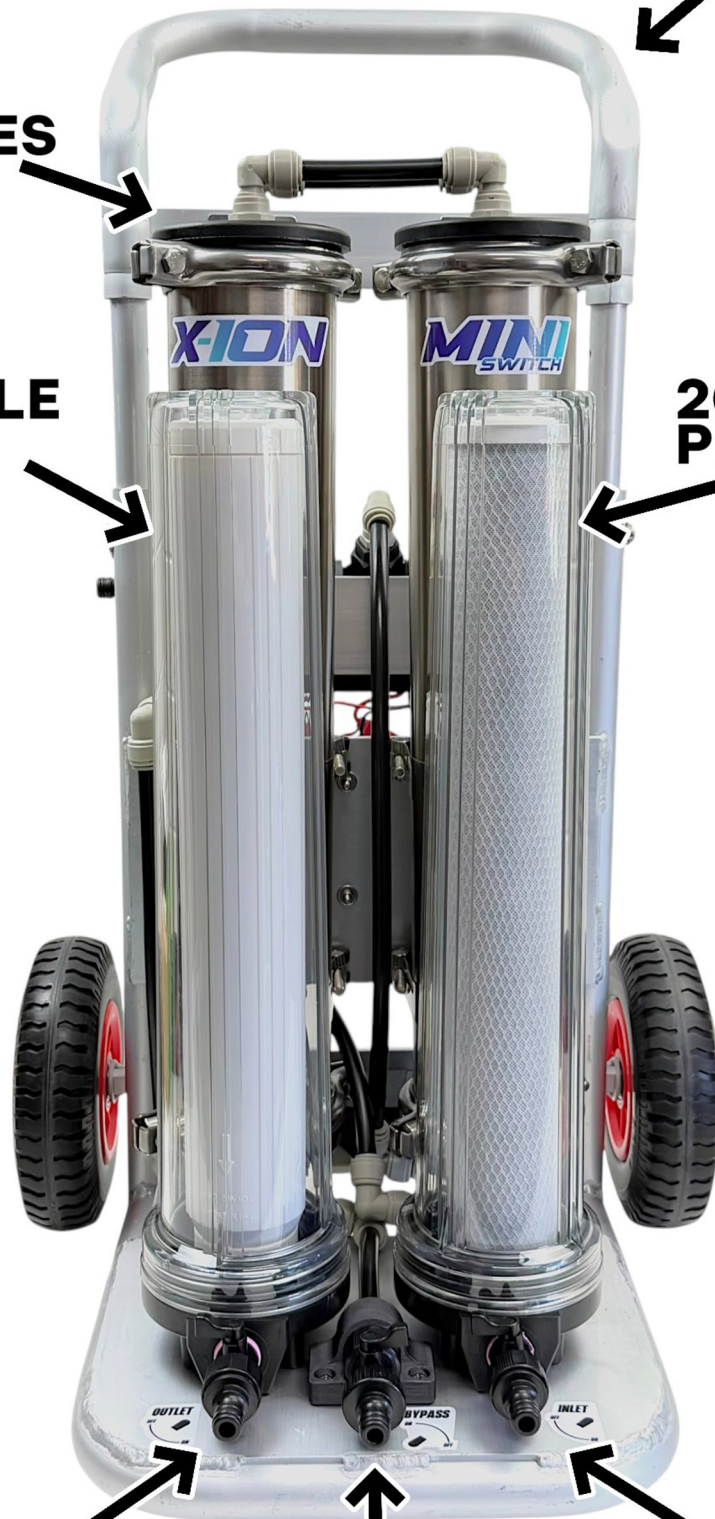
**REFILLABLE
DI RESIN
CANISTER**

**20" CARBON
PRE-FILTER**

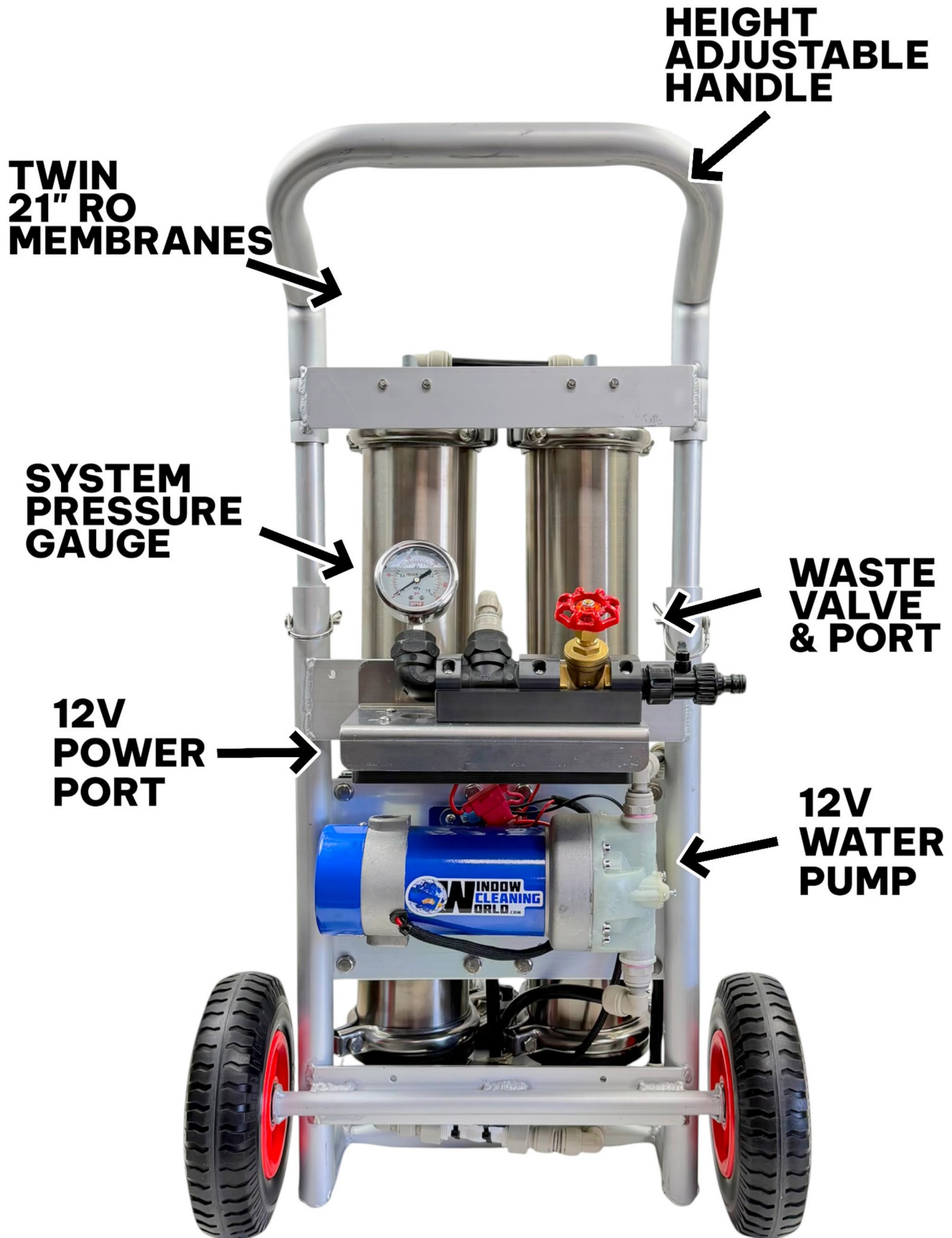
**RO/DI
OUTLET PORT**

**RO ONLY
BYPASS PORT**

INLET PORT



REAR VIEW



Important Safety & Usage Warnings

Please read before operating your X-ION Lite system:

Never fully close the waste valve. This increases backpressure and can overload or damage the pump.

**Do not run the pump under heavy or maximum load.
Always restrict waste flow gradually.**

Keep the pump as cool as possible during use. On hot days, keep it in the shade or cover it with a breathable pump cover.

The pump and electronics are not waterproof. Protect them from rain, overspray, and standing water. Do not store outside where exposed.

Never block the flow of pure water at the brush unless the system has been turned off first by using the Remote Control.

Use 12mm(ID) Delivery Hose and 10mm(OD) Pole Tube for best flow.

Using 8mm(ID) delivery hose with the X-ION Mini Switch RO is possible but it does put more load on the system.

These warnings are essential to protect your pump, preserve membrane life, and maintain your system's warranty.

Unpack/first look:

Unpack unit and inspect for any damage during shipping.

Report any damage or missing parts as soon as possible.

First Test Run and Normal Operating Steps:

- Connect water supply to the system Inlet**
- Connect a hose to the waste port for waste water removal**
- Connect Hose Reel and Pole Tube Kit to OUTLET or BYPASS**
- With the Red Waste Valve open (counter clockwise) turn on water supply 100%**
- Water will run through the system purging out any air**
- While the system is purging, unroll hoses and connect your water-fed pole and brush**
- After all air has been purged, connect your 12v Power Supply and Turn on the system**
- Gradually decrease the waste flow until the optimal flow sprays from your brush - Do not quickly close valve 100%**
- If any faults are found, report to your supplier immediately**

Note: If connecting to BYPASS, the OUTLET valve must be closed.

If connecting to OUTLET, the BYPASS valve must be closed.

Using the system

- Closing the Waste Valve fully is not usually needed, however a small relief hole will allow some waste water to continue to flow. When the waste is fully closed, the pump works very hard, which drains the battery faster and unnecessarily strains the pump.

NEVER FULLY BLOCK THE WASTE OUTLET

**Blocking your membranes and significantly shorten their lifespan
Doing this will VOID your warranty.**

- Once the job is complete, open the waste valve completely to flush impurities from membranes. When the waste water TDS level is similar to the supply water TDS, your flush is complete. Doing this will ensure your membranes will last a long time.

Maintenance

- It is important to monitor the TDS levels often, this is to keep the system running without leaving spots on the glass.
- When final TDS level rises to more than 020ppm it is time to change resin. If TDS is equal or more than RO TDS, the resin needs changing.
- The Carbon filter will need to be changed periodically based on your water supply. As a recommendation, change every 3 months with regular system usage.

DI Resin Change - Change at 20ppm

- Change the DI Resin in the 2L refillable cartridge by unscrewing the clear housing.**
 - Unscrew the cartridge cap, empty spent resin and rinse clean**
 - Refill with fresh Mixed Bed Resin and lightly tap cartridge to compact resin down to completely fill.**
- Reinstall making sure the Housing O-Ring is in place.**
- Use silicone grease on the Housing O-Ring to ensure a proper seal**

RO Membrane Change

With proper use and flushing of your membranes, they may last 2 or more years with regular use, however differing water sources and usage rates will give differing results.

Healthy RO Membranes will reject around 95% of TDS from water. For example, your water source is 300ppm the Membrane pure water should be coming out at around 15-20ppm. When the rejection rate is lower to where your resin usage is increasing, Your membranes may need replacing.

It is recommended to change both 21” Membranes at the same time.

Tip: Take pictures of the RO so you have a reference when reassembling.

Remove the old membranes by:

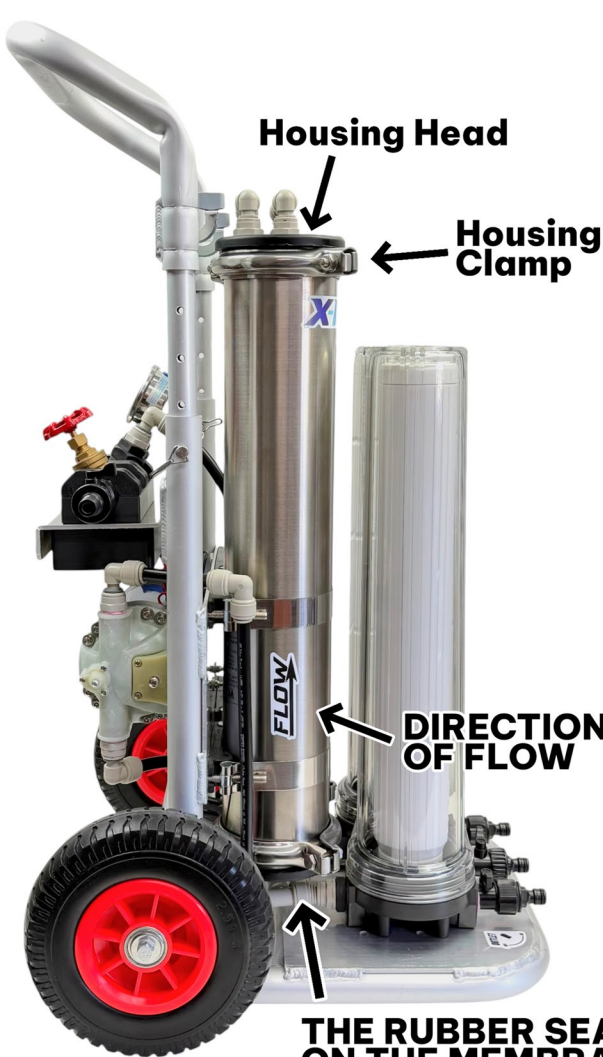
- Unbolting the clamps that hold the black plastic head on the RO Housing and remove.**
- Carefully pry the housing head from the housing.**
- Grip the RO membrane with pliers or multi-grips and pull upwards**
- Prepare new membranes by applying silicone grease to the rubber seal on the end**
- Insert membrane and replace housing head and clamps making sure they are the same orientation as before**

Important: The membranes are directional. Observe “Flow” Stickers on the Housings. The rubber seal on the membrane should always be on the inlet side of the housing, See images on the next page.

RO MEMBRANE FLOW (IN SERIES)



**THE RUBBER SEAL
ON THE MEMBRANE
SHOULD BE AT THE
TOP OF THIS
HOUSING**



**THE RUBBER SEAL
ON THE MEMBRANE
SHOULD BE AT THE
BOTTOM OF THIS
HOUSING**

