

# Reverse Osmosis Systems

*RO Pad model*

*User's Manual*



## ***Dear Customer!***

*Thank you for purchasing this water treatment system. Congratulations, you made the perfect choice.*

*We're sure, that the product will meet your expectations to enjoy drinking healthy, pure water.*

*We make every effort to ensure that the devices manufactured by Global Water are reliable and can be operated for many years.*

*We use the latest technology and top-quality components.*

*Our goal is to provide you with healthy, delicious and perfectly clean water!*

*Some of the advantages of this system:*

***Quality***—*incomparable water quality and operation method.*

***Durability***—*correct operation and high quality components.*

***Economy***—*savings resulting from not purchasing bottled water.*

***Convenience***—*high performance and easy operation.*

*We wish you many years of successful operation and satisfaction with the quality of the filtered water.*

## **Safety:**

Before the installation please read carefully all instructions below and follow all safety rules concerning starting and operating the device. Any questions? Please contact the Global Water Technical Support. Following all the recommendations in this manual will ensure a safe and optimal use of your device. Failing to follow the instructions below may result in material and health damage.

1. Be very careful when using electrical tools.  
Never immerse the power adapter, plug or cord in water or other liquids.  
Carry out the installation with great caution to avoid electric shock.  
Do not touch electrical parts with wet or damp body parts.
2. Keep the device out of reach of unauthorized persons, small children or irresponsible ones.
3. Do not use the device if it is damaged.
4. The device is intended for indoor operation only.
5. The unit and the hoses must not touch the hot parts of other kitchen appliances (cooker, oven, etc.)
6. Hoses must not be dangling from the countertop and not be exposed to mechanical damage.
7. This device is intended for home use only.
8. Keep this manual for the life of the device.  
All warnings and recommendations of the manufacturer should be observed by the user.
9. The manufacturer is not responsible for damage caused by improper installation, maintenance or service.
10. If you encounter any problems, please contact the Global Water Technical Support.

## **Precautions:**

1. Do not make any modifications or repairs yourself.
2. Never clean the unit with aggressive chemical cleaning agents.
3. Do not expose the device to sunlight or heat.

## **Technical Specification:**

1. The reverse osmosis system may only be operated with municipal or well water. Water salinity (TDS) should not exceed 2000 ppm.
2. Connect to the cold water supply pipe.  
Minimum supply water temperature must not be less than 5°C (41°F).  
Maximum supply water temperature must not exceed 40°C (104°F).
3. Water pressure must not be less than 1.5 bar (22 psi).  
Water pressure must not be higher than 6.0 bar (87 psi).
4. Maximum nitrate content in feed water: 27 mg / L  
Maximum nitrite content in feed water: 3 mg / L  
Maximum content of iron, manganese and hydrogen sulphide in feed water: 0 mg / L  
PH range of feed water: 4.0 - 10.0
5. The device must be connected to a functioning sewage system.

## The Kit Includes:

1. Filtration System: 1 set.
2. Drain Clamp: 1 set.
3. Water Supply Connection: 1 set.
4. Filter Tap: 1 pc.
5. Flexible Hoses: 1 set.
6. Membrane Housing Wrench: 1 pc.
7. Power supply: 1 pc.
8. Filter Protection Pressure Reducing Valve: 1 pc.

**If the unit has been tested before shipping, please install it within 7 days of receipt.**

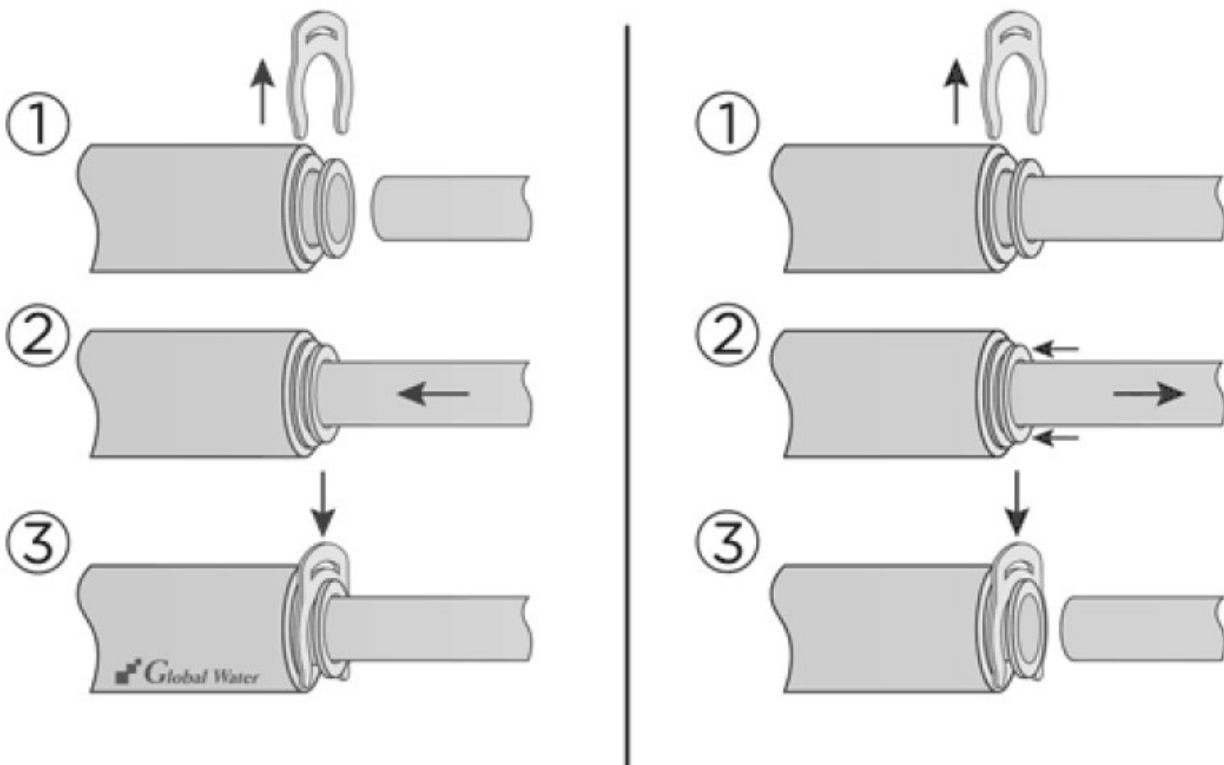
### Good to know:

All seals during assembly and service should only be made with generally available Teflon tape. Non-threaded connections are made with quick couplings.

### How to Use the Quick Couplings

To connect a hose to a quick coupling correctly, cut it straight at right angles. After cutting the hose, check its tip at a length of about 2.5 cm, to make sure there are no cuts, scratches or other damage. Then insert the end of the hose into the coupling collar until it stops, that is, until the hose is seated inside the sealing o-ring.

To disconnect the hose from the coupling, push the collar to the coupling body and pull out the hose.



## ***Installation:***

Installation of the system is divided into three stages:

1. Water supply connection
2. Tap installation
3. Drain clamp installation

## ***Quick Start:***

1. Install the water supply connection, pressure reducing valve, the drain clamp and the tap.
2. Connect the tubing.
3. Turn on the water supply valve and power supply and check for leaks.
4. The system is ready for operation.

## ***Water Supply Connection Installation:***

The accessory kit includes a water connection (chrome tee) 1/2" with a ball valve.

After pointing the cold water supply pipe before the kitchen tap, turn off the raw water shut-off valve and install the chrome tee. Seal it with Teflon tape.

Screw in the ball valve into the 1/4" hole to supply water to the unit.

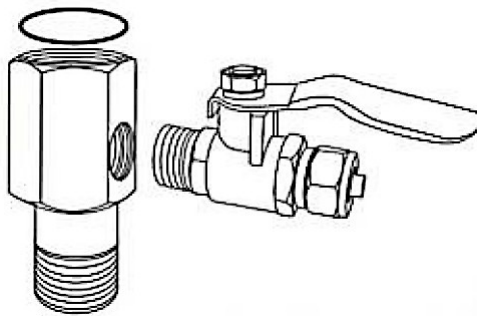
Fix the 3/8" flexible hose to the valve and cut it to the appropriate length.

It is important to leave a little more hose between the valve and the unit for later use.

The ball valve is equipped with a clamping nut.

Push the hose through the nut and tighten it to the valve.

Press the other end of the hose into the appropriate connector on the housing all the way in.



## ***Pressure Reducing Valve Installation:***

**A water pressure regulator is necessary for the proper operation of the device.**

It reduces excessive pressure occurring in the water supply network and prevents pressure spikes.

The pressure valve should be installed on the water supply hose before the device in the direction of the arrow indicating the direction of water flow through the valve.

To install the valve, cut the water supply hose and plug the valve.

The water pressure regulator is equipped with no-clips push-fit quick couplings.



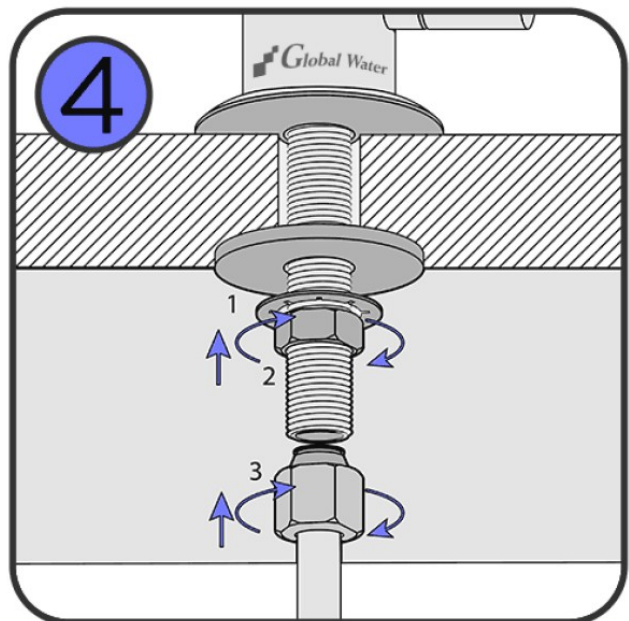
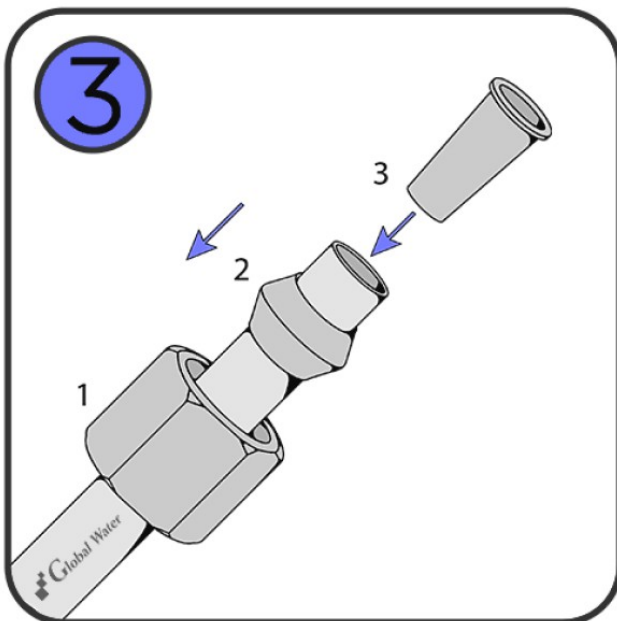
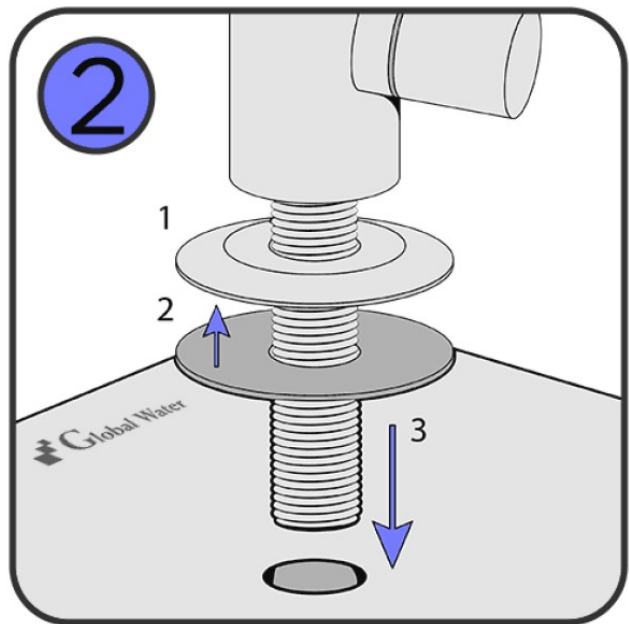
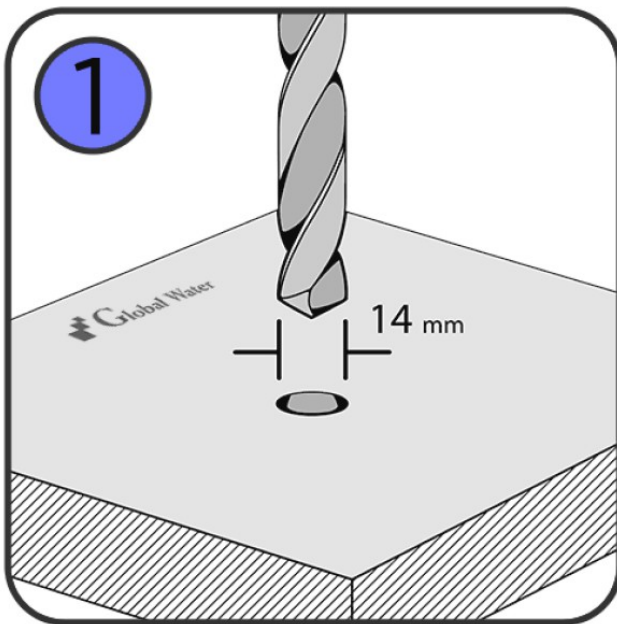
## Filter Tap Installation:

Determine the location for the clean water tap. Be sure to position it in a way the water stream from the tap spout is aiming the sink.

Before installation, make sure that there are no obstructions under the countertop or the edge of the sink where you intend to drill the holes. Drill holes with a 12-14 mm bit. When the holes are made, install the filter tap with its accessories:

Put the rubber washer over the drilled hole, put the chrome washer on it, and insert the filter tap.

From the bottom, tighten the brass nut with the locking washer before it. To connect the hose to the tap thread under the counter, put the metal nut and the plastic round gasket onto the hose. Put the plastic insert into the hose end and tight everything together to the tap thread.

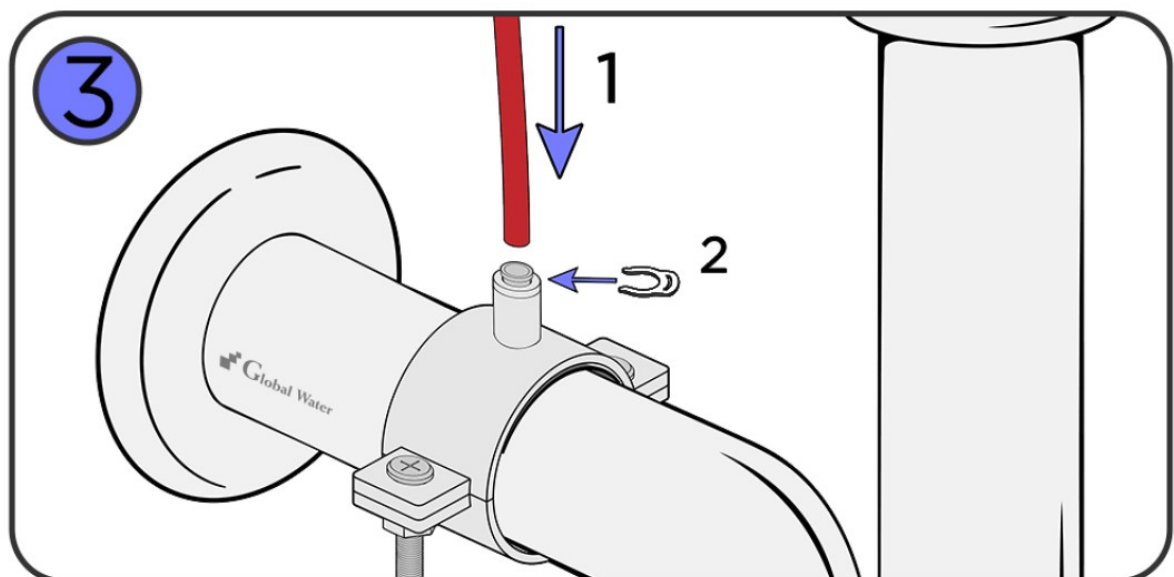
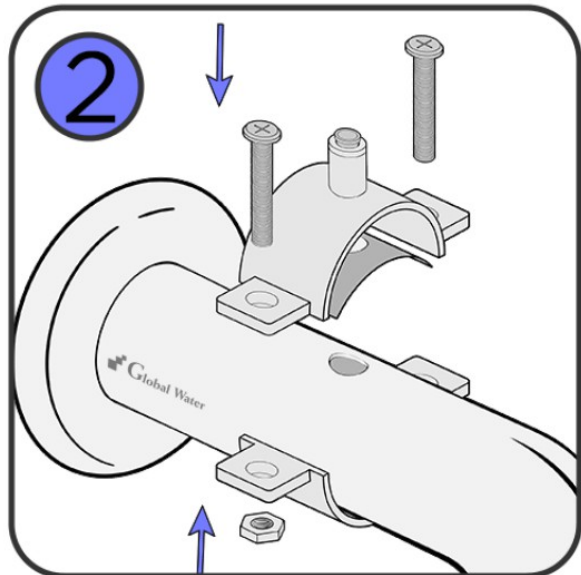
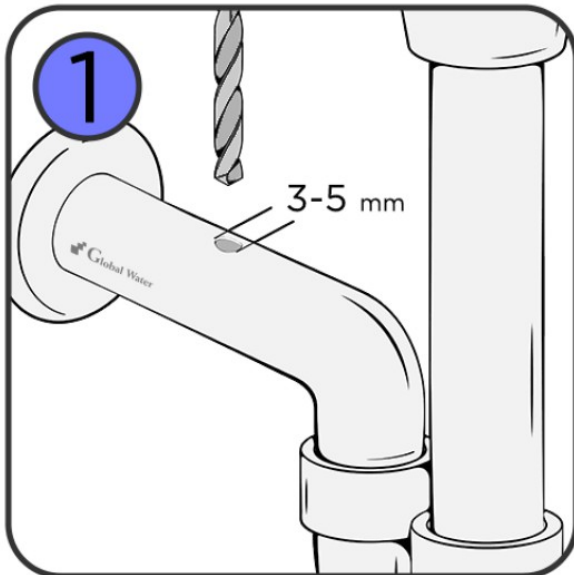
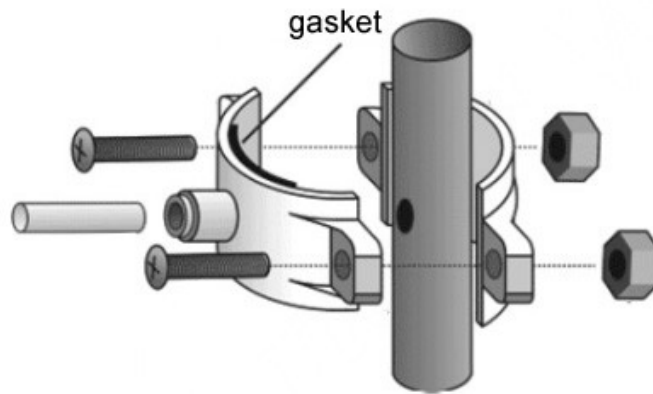


## Drain Clamp Installation

The drain clamp should be mounted after the drain trap on the drain pipe from the sink. When the clamp is mounted, drill a 5 mm hole in the sewer pipe through the hole for the hose.

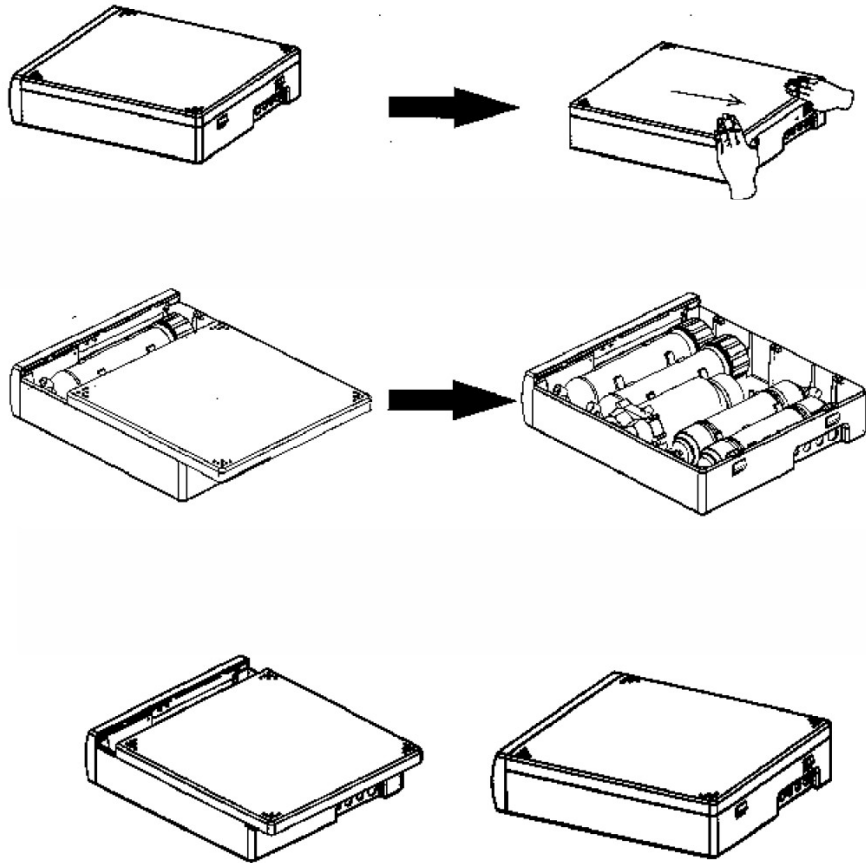
Then push the red hose into the coupling in the clamp.

Connect the other end of the hose to the tee connector and then connect the two red hoses to the flow restrictors on the housing of each membrane.



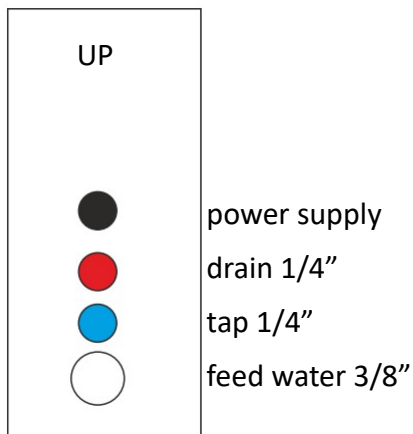


**How to Open the Body:**



**Tubing Installation:**

Back of the device



**Unit Position:**



## ***Checking Connections for Leakages:***

After performing the above installation steps, check the tightness of the connections, by slowly turning on the water supply line valve to the unit.

If the installation is watertight, turn on the valve completely and leave it in this position permanently.

If you notice a water leak:

- Check if all plastic fittings (elbows, tees) are screwed in tightly and sealed with Teflon Tape
- Do not use other sealants (e.g. plumbing hemp or flax).
- Notice, that unevenly cut or partially unplugged hose can cause leakage.

## ***Start-up:***

Turn the filter tap on and connect the power supply. The control computer initiates a 90-second rinse cycle. After the rinsing cycle is completed, open the filter tap and allow the water flow for at least 10 minutes.

Turn off the tap.

***Your water filtration system is ready to go!***

## ***Water Production:***

**Please do not take water from the device continuously (non-stop) for more than 45 minutes—it may cause the pump to overheat. Always after such a long water intake is required min. 15 minutes break in the device work.**

## ***System Operation Test:***

1. Turn off the filter tap (do not take water). Wait for 5 min.
2. Check whether the waste water drain flow has stopped—there should be no drain flow when no clean water is being taken.
3. Turn on the filter tap (produce some water).
4. Waste water draining during clean water production indicates correct operation of the unit.
5. If in doubt, please contact Global Water technical support.

## ***Service and Maintenance:***

1. Never use the device when it is broken down or malfunctioning.  
Turn off the water supply and contact the service centre immediately.
2. For all repairs, periodical cartridges replacement and maintenance only manufacturer-approved parts should be used.
3. The manufacturer is not responsible for any repairs made outside the authorized service centre.

## ***System Operation Overview:***

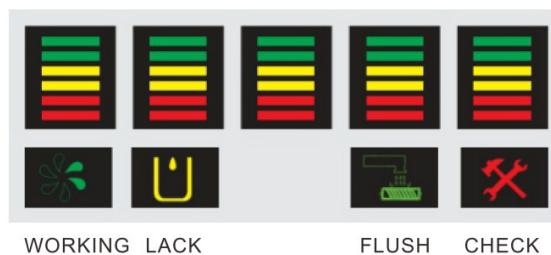
After connecting the device to the power supply, the control computer initiates a 90-second membranes rinse cycle. This cycle is initiated each time the power supply is connected to the device.

**During operation of the device all the LEDs on the display panel are on.**

A constantly flashing LED and a sound signal mean:

- no water supply or supply water pressure too low
- pre-filter cartridges clogged
- device rinsing (long cycle lasts 90 seconds, short 10 seconds)
- water leak within the unit

After prolonged production of clean water, the control computer every time initiates a short rinse cycle of the membranes.



## ***Cartridges Replacement Schedule:***

**Regular cartridges replacement is necessary for your device to work properly. The local conditions and feed water quality determine the time of replacement. We recommend not to exceed the following cartridge replacement periods:**

Set of Two Pre-Filter Cartridges, GW-SET-PAD

- recommended replacement: max every 6 months

RO Membranes 150 GPD

- recommended replacement: max every 24 months (depending on the water quality)

## ***How to Replace Cartridges:***

1. Switch off the power supply.
2. Turn off the raw water supply.
3. Turn the filter tap on for a moment to drain the water from the unit.
4. Disconnect the hoses from the unit (note: there is water in the hoses).
5. Open the housing cover.
6. Take out the pre-filter cartridges and take out the quick couplings.
7. Install new pre-filter cartridges and close the housing cover.
8. Connect the water supply and other hoses to the unit.
9. Connect power supply.



## ***How to Replace the Membranes:***

1. Switch off the power supply.
2. Turn off the raw water supply.
3. Turn the filter tap on for a moment to drain the water remained in the hoses.
4. Disconnect the hoses from the unit (note: there is water in the hoses).
5. Unscrew the membrane housing and replace the worn out element with a new one.
6. Unscrew the 2<sup>nd</sup> membrane housing, replace the worn out element and close the housing cover.
7. Connect the water supply and other hoses to the unit.
8. Switch on the power supply.
9. Turn on the filter tap for 30 minutes to flush the new membranes.

### ***Storing the Device:***

1. Always turn off the water supply if you will not be using the unit for an extended period of time.
2. Before you start to use it again, leave the clean water tap turned on for at least 15 minutes.
3. The system is designed for continuous operation so we do not recommend long breaks in its operation. If you did not use the device for a long time, it is recommended to replace all the cartridges.

### ***Service and Maintenance:***

1. Never use the device when it is broken down or malfunctioning.  
Turn off the water supply and contact the Global Water Technical Support immediately.
2. For all repairs, periodical cartridges replacement and maintenance only manufacturer-approved parts should be used.
3. The manufacturer is not responsible for any repairs made outside the authorized service centre.

Please scan QR codes bellow, to order Replacement Cartridges.

