

GROWONIX

TUNED FOR GROWING



CRS-5K

CONDENSATE RECYCLING
SYSTEM

WWW.GROWONIX.COM



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Built in the U.S.A.

INTRODUCTION

OUR MISSION

Durability, Reliability, Efficiency, Purity, and Conservation form the foundation on which we design and build all of our products. Consistent and superior quality sets us apart from other manufacturers and increases our value to you - our customer. Whether you are a hydroponics hobbyist, serious enthusiast, or large-scale gardener, GrowoniX is committed to bringing you the best solution for water purification systems.

WHAT IS REVERSE OSMOSIS?

Reverse osmosis (RO) is a filtration method that removes many types of large molecules and ions from solutions by applying pressure to the solution when it is on one side of a selective membrane. This filtering process ensures that the solute (waste water) is contained within the pressurized chamber while the pure solvent (RO water) is allowed to pass freely through the membrane.

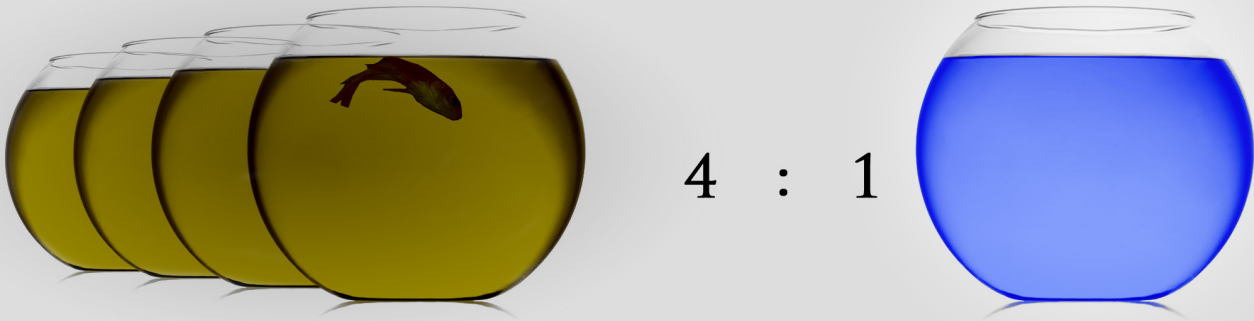
TUNED FOR GROWING - IN TUNE WITH OUR CUSTOMERS

Traditional RO systems have waste ratios of approximately 4:1, which means there are 4 gallons of waste water produced for every 1 gallon of purified water. GrowoniX line of water filters achieve waste ratios of 2:1 with all 200-400 GPD systems, and an astounding 1:1 ratio with the 600-1000 GPD systems.

GrowoniX has created a complete product line that will address the needs of hydroponic operations of all sizes. Our filters will significantly reduce your water use while dramatically increasing your yields.

THE TRADITIONAL WAY





takes 4 gallons of waste water to produce 1 gallon of pure water



THE GROWONIX WAY



FEATURES

-  PURIFIES CONDENSATE WATER THAT IS NORMALLY DISCHARGED FROM THE HVAC & DEHUMIDIFICATION SYSTEMS AS WASTE.
-  BRINGS YOUR FACILITY CLOSER TO ZERO DISCHARGE BY MINIMIZING WASTE WATER.
-  CONDENSATE WATER IS A BYPRODUCT OF AIR CONDITIONING, DEHUMIDIFIERS, COOLING TOWERS, ETC.
-  CONDENSATE WATER IS RELATIVELY CLEAN BUT HAS ISSUES THAT THE CRS-5K IS DESIGNED TO TREAT.



No Assembly Required

NO ADDITIONAL PRE-FILTERS NEEDED

WHY USE A GROWONIX CRS-5K?

Condensate water is a byproduct of air conditioning, dehumidifiers, cooling towers, etc. This water is low in Ph, full of heavy metals, and can grow bacteria, mold, and fungus. Tho often overlooked, condensate water, when properly treated, can be a source of fresh water. The CRS-5K is designed to completely purify condensate water that is normally discharged from the HVAC system as waste.

The condensate water feed flow rate shall not exceed 4.0 GPM; however, slower is better to guarantee optimum filtration. Upon a higher condensate flow rate, another CRS-5K can be added to increase filtration capacity. Additional CRS-5K units retain the same basic installation instructions.

Do not plumb additional CRS-5K units inline. They should be plumbed parallel.



The CRS system is designed to ONLY treat condensate runoff water. Do Not attempt to use the CRS to treat any other water source.

PART #	MAX FLOW RATE	UV AMP	FILTER CAPACITY AT 1 PPM
CRS-5K	4 GPM	.37	28,000 Gals

PRECAUTIONS

* Check UV lamp, Quartz sleeve, cord, and plug to ensure that they are not damaged prior to installation. *

Never touch the UV lamp directly, always use rubber gloves.

UV systems are designed for continuous operation. Frequent on/off switching will reduce ultraviolet radiation and service life will void warranty.

If the UV kit falls into water, turn main power off before attempting to retrieve it. Do not attempt to use this kit if it has been submerged in water.

Always disconnect the water supply and completely drain the water filter when temperatures drop below freezing for extended periods of time.

Never look directly at the UV lamp while device is in operation.

Disconnect power supply before servicing.

Make sure to only use GFI protected receptacles.

INFORMATION ON QUICK CONNECT FITTINGS

GROWONIX WATER FILTERS USE QUICK CONNECT FITTINGS THAT ALLOW FOR EASY MAINTENANCE.

MAKE A CLEAN TUBE CUT

Cut the tube squarely and if using plastic tubing, ensure that the cut has not made the tube out of round.

Also ensure that the tube has a smooth outside diameter without any burrs or score marks prior to inserting it into the fitting.

INSERT TUBE INTO FITTING

Push the tubing through the collet and dual o-rings until it bottoms out against the tube stop. The collet holds the tube in place and the dual o-rings provide a leak resistant seal.

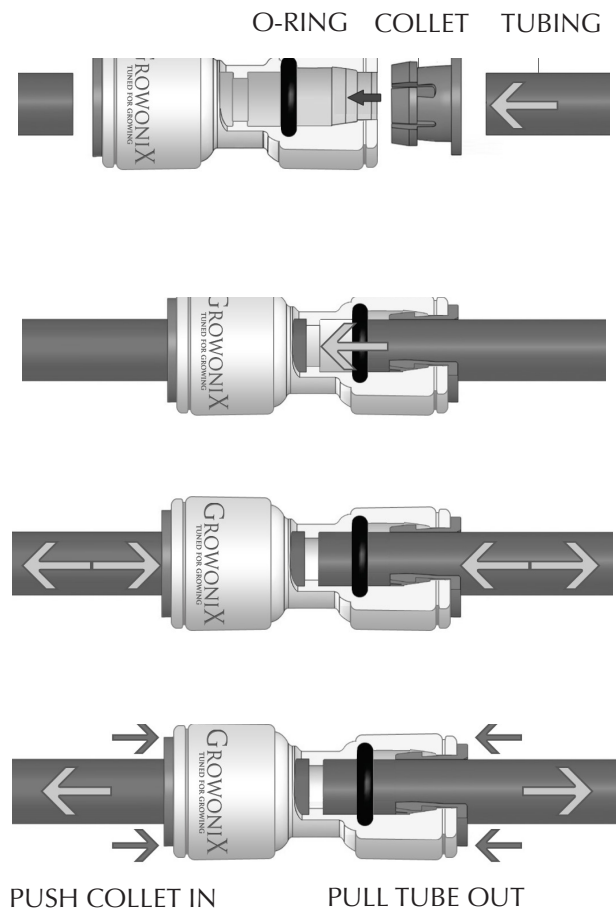
TEST AND INSPECT

Push and pull the tubing toward and away from the fitting to ensure that it has been installed properly.

Test and inspect the installation for any leaks.

TUBE REMOVAL

Relieve pressure from the tubing and fitting. Push uniformly around the collet flange against the fitting body while pulling the tubing away from the fitting to release it.



ACCESSORIES

METAL-REMOVAL CARTRIDGE



The Metals & Impurities Removal Filter is a very convenient and cost-effective water filtration process for producing highly purified water on demand for aquarium or hydroponic use.

Capacity 14,000 gallons

CRS-5K comes with 2 MRC-4520 cartridges.

PART #	SIZE	CAPACITY
MRC-4520	4.5" x 20"	14,000

SPUN SEDIMENT FILTER



Spun polypropylene: A true multi-staged depth filter utilizing separate layers of micron filtration. Constructed spun polypropylene, these filters offer superior dirt holding capacity at an extremely economic price. Great filter for changing frequently, especially in well water applications.

PART #	SIZE	MICRON RATING AVAILABLE
SF-4520-SP	4.5" x 20"	1m, 5m, 10m

UV STERILIZATION



Stainless steel ultraviolet filtration to remove 99.9% of micro-organisms in your water supply. A must for well water treatment, whole house filter systems, or anytime water will be stored.

Change bulb once every year.

PART #	DESCRIPTION	FLOW RATE	VAC
UV-LB	UV Sterilization	4 GPM	120 VAC
UV-LB-QS	Replacement quartz sleeve		
UV-LB-RL	Replacement UV bulb		

COMPONENT DIAGRAM



SETUP INSTRUCTIONS

The CRS-5K consists of the 3-Stage Filter/Cartridge assembly, and the 4th Stage UV Sterilizer mounted to the top of the bracket. The CRS-5K is designed to be placed on a level surface via its heavy duty floor stand or mounted to the wall as an option. The customer supplied pump should be placed within a 10 foot range of the CRS-5K system.

- 1** Prior to installation, inspect the CRS-5K for damage during shipping and call GrowoniX to report any issues with the system.
- 2** Shut down the HVAC system prior to plumbing.
- 3** Either plumb the condensate runoff into the input of the CRS-5K, or directly into a storage tank. If plumbed into a storage tank, then the stored untreated condensate water will need to be pumped through the CRS-5K.
Do Not exceed 4 gpm.
- 4** Assemble and insert the UV lamp and quartz sleeve into the body of the UV as shown in the **UV SETUP** on page 9.
- 5** Plumb the outlet from the UV filter to the reservoir or storage tank using all or part of the 1/2" tubing (included). This is the purified water line.
- 6** Upon turning the system on, it will take several gallons to fill the canisters of the system and the UV. Flush the filtration system with condensate water or RO water prior to using the treated water. **DO NOT use raw city or well water, as this will drastically reduce the life of the filters in each stage.** Run the product water line to the drain for this flush. We recommend running at least 5 gallons through the CRS-5K to drain.
- 7** After the flush is done, run the product water line to the reservoir and use the water for irrigation or any other application.

Brand new HVAC systems can contain a fair amount of oil from the manufacturing process. In order to not clog the CRS-5K filters, please discard the first 100 gallons of condensate water from the HVAC down the drain, and NOT through the CRS-5K.



SETUP DIAGRAM

Fig. 1 Diagram of holding tank to CRS-5K setup

Fig. 2 Diagram of A/C condensate pump to CRS-5K setup



UV SETUP

- First remove lamp from packaging. Try not to touch the bulb with your hands. The oils may cause hot spots on the bulb and early failure.
- Bulbs should be replaced yearly.

1



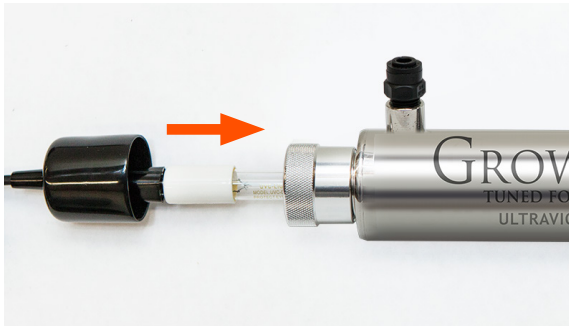
Attach the electrical connections to the end of the bulb. Make sure bulb is clean of grease and oil.

2



Make sure housing collar is firmly tightened. Do not over tighten as this will cause glass inner sleeve to break.

3



Insert bulb and wiring into sleeve.

4



Seat rubber boot over the collar.

5



Insert stem elbow fittings. Make sure they are completely seated.

6



Mount UV with clips to the RO filter.

**CONNECT WATER LINES, START THE SYSTEM AND CHECK FOR LEAKS.
IF NO LEAKS EXIST, PLUG IN THE UV FILTER AND ENJOY!**

REPLACING THE FILTERS

- Pre-filters should be changed when either brown discoloration occurs, or system flow rates have significantly declined.
- Always turn incoming water pressure off before servicing the unit.
- Always turn incoming water pressure on slowly, allowing air to be discharged before full water pressure is restored.

In order for the CRS 5K to produce quality water, it is necessary to monitor the amount of water produced by the system. Without regular filter changes, the quality of the product water will drastically drop, allowing harmful bacteria and metals to be discharged into product water.

- Spun Sediment Filter - Replace every 5,000 gallons (average)
- Metals & Impurities Removal Filters - Replace every 20,000 gallons
- The UV Sterilizer is always on. Replace bulb once per year, Ballast indicates when to change.
- Follow the Instruction Manual for the UV system.



Loosen pre-filter housings using supplied filter wrench. Empty standing water and remove old pre-filters. Clean interior of housings to remove standing sediment and debris.



Grease O-rings with food grade silicone grease.



REVERSE OSMOSIS SYSTEM WARRANTY

For a period of one year from the date of original purchase, we will replace or repair any part of the GrowoniX reverse osmosis water system that we find to be defective in operation due to faulty materials or workmanship with the exception of the replaceable filters and membranes.

GENERAL CONDITIONS

Damage to any part of this reverse osmosis system because of misuse; misapplication; negligence; alteration; accident; installation; or operation contrary to our instructions, incompatibility with accessories not installed by GrowoniX, or damage caused by freezing, flood, fire, or Act of God, is not covered by this warranty. In all such cases, regular charges will apply. This limited warranty does not include service to diagnose a claimed malfunction in this unit. This warranty is void if the claimer is not the original purchaser of the unit or if the unit is not operated under normal municipal water or well water conditions.

GrowoniX assumes no liability in connection with this reverse osmosis system. GrowoniX assumes no liability for any damages incurred through the use of this product. It is the responsibility of the end user to gauge the safe use of this product in the environment where it is applied. We do not authorize any person or representative to assume for us any other obligations on the sale of this reverse osmosis system. The information given out in the manual we believe to be true, but are offered to you in good faith without guarantee because each application of this product is different and beyond our control.

THE FOLLOWING STANDARD OPERATING CONDITIONS FOR RESIDENTIAL/COMMERCIAL REVERSE OSMOSIS SYSTEMS MUST BE MET FOR WARRANTY TO BE VALID.

	Water Pressure	pH Range	Maximum TDS	Water Temp
Standard System	40-80 psi	3-10	2000 ppm	40-110 F

GROWONIX RETURN POLICY

MERCHANDISE RETURN DETAILS AND PROCEDURE:

If any merchandise was defective —we will refund the full purchase price upon receiving and reviewing the merchandise returned in undamaged condition.

RMA NUMBER:

You must first obtain a Return Merchandise Authorization (RMA) number from GrowoniX.com. Any products sent to GrowoniX without an RMA number will not receive a refund and may be returned to the sender at their expense.

All refund amounts will be based on the manufacturer's warranty and GrowoniX return policy. Refunds will be issued back using the payment method you used when you placed your order. Refunds take up to 3-5 business days to process once we receive the return.

PACKAGING:

Please kindly re-pack the product in its original box, or a box of equivalent strength. The unit should be packed in the same manner as it came to prevent damage in shipping. Please return everything that was in the original box, including any free items if applicable. Be sure to drain out all water from wet systems and parts and wrap them in plastic bags before packing.

RETURN TO:

We will provide you with an GrowoniX warehouse address for return merchandise when we issue the RMA number.



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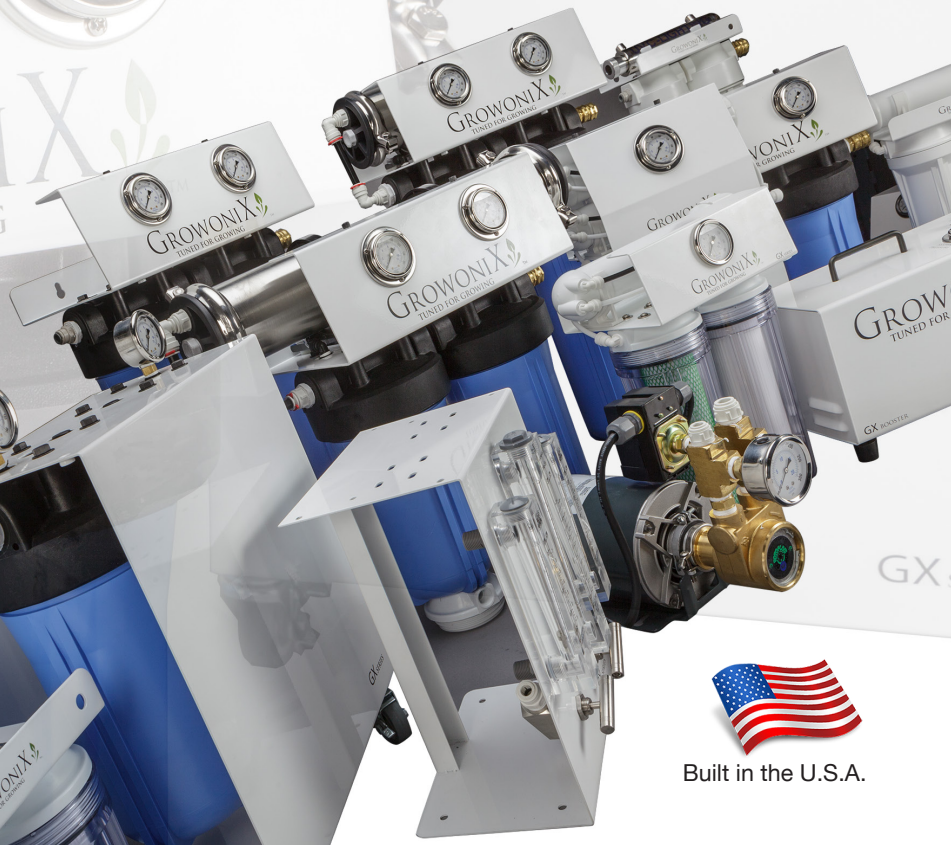
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