

# Premium UV Domestic Filter System

User-Manual



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## User-Manual

Initial Setup & Specifications.....	3
What comes included.....	4
Why is Filtering Rainwater so Important .....	5
The stages of Filtration .....	6
How do Ultraviolet Sterilization systems work .....	6
How to replace a Filter Cartridge .....	7
How to replace a Quartz Sleeve .....	8
How to clean a Quartz Sleeve.....	9
Service & Inspection.....	10



## Initial Setup

The UV filter comes already setup, ready to go. It is recommended to have a ball valve before the entry and after the exit of the pump for easy isolation if any problems occur. The quartz sleeve needs to be replaced annually for the best water. The filter should be kept on to keep the UV bulb in it's best condition.

This premium UV filter has a 12 month warranty for hardware & 3 month warranty for consumables (UV lamp & filter cartridges).

**REQUIREMENT:** Your Premium UV filter requires a voltage surge protector (otherwise this voids the warranty).

## Specification

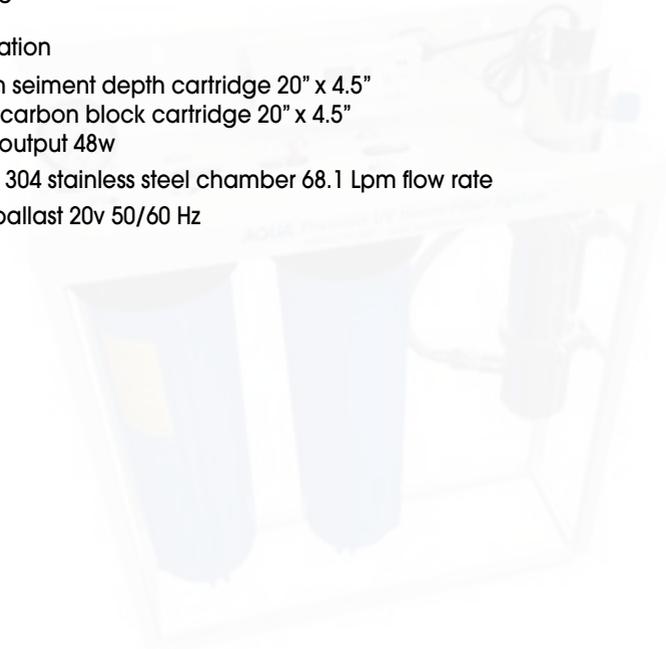
Height 790mm  
Length 640mm  
Width 200mm  
Weight 20kg

3 Stage filtration

- 20 micron seiment depth cartridge 20" x 4.5"
- 5 micron carbon block cartridge 20" x 4.5"
- UV lamp output 48w

UV sterilizer 304 stainless steel chamber 68.1 Lpm flow rate

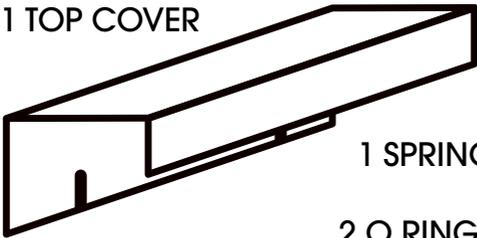
Electronic ballast 20v 50/60 Hz





2 OWNERS MANUALS

1 TOP COVER



1 SPRING



2 O RINGS



2 NUTS



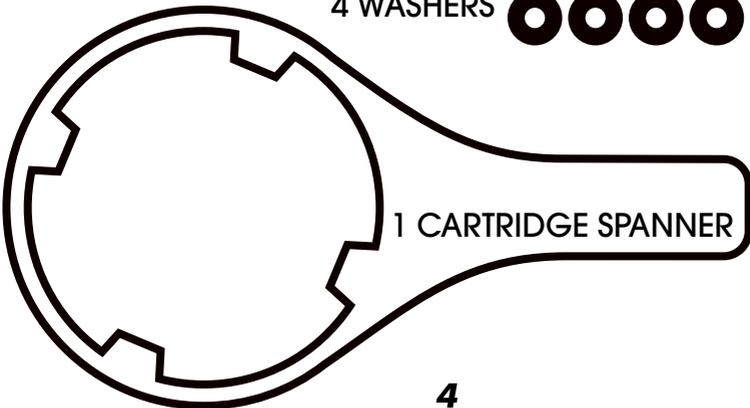
2 BOLTS



4 WASHERS



1 CARTRIDGE SPANNER



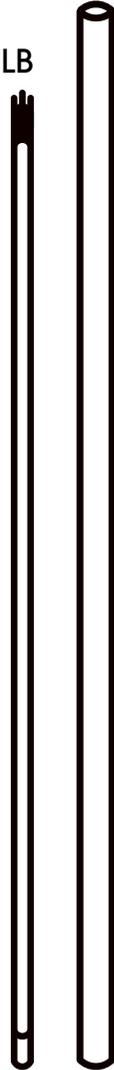
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1 POWER CABLE

1 QUARTZ SLEEVE

1 UV BULB



# Why is filtering Rainwater so important

Rain water tank filters are an important investment for the protection of your family and your home. They provide protection from dirt particles and organic matter which cause discoloration, taste and odor to the water.

Rainwater can contain harmful bacteria such as E-Coli, giardia, Salmonella, Campylobacter and cryptosporidium which can easily be transferred through animal fecal matter from birds, possums and vermin that may come into contact with the rainwater supply.



5

## First stage of Filtration

The first stage of rainwater filtration is achieved through a single cartridge 20 micron sediment depth cartridge filter 20" x 4.5". Dirt particles, colour, and taste will be captured by filter cartridges. These systems have a large surface area meaning there is no noticeable restriction to flow or pressure of the water supply. On average, filter cartridge changes can be performed on an annual basis with this size of filter cartridge.

## Second stage of Filtration

After the first stage the water is run through a 5 micron carbon block cartridge 20" x 4.5". The carbon block filter catches and blocks particle sized dirt as well as taste and odor, this is the second line of defence.

## Third stage of Filtration

After stage one and two have removed the dirt and sediment particles, sterilization of the rainwater supply is achieved through a high quality Ultraviolet Sterilization system before it enters the house.

## How do Ultraviolet Sterilization systems work

Ultra-Violet Water Sterilization systems are an effective and economical way of eliminating 99.9% of harmful bacteria from the rainwater supply. The water is exposed to Ultra-Violet light as it passes through the stainless steel UV chamber. This process exposes any harmful bacteria to Ultra-Violet light at a wavelength of 254nm. The UV light penetrates the cell walls of harmful, illness-causing microorganisms by attacking their DNA which eliminates their ability to reproduce.

## How to replace a Filtration cartridge

Your filtration cartridge should be replaced every 6-12 months depending on the quality of the water. In areas where the water has a high amount of sediment, it is recommended that you replace the filters every 3-6 months.

1. Turn off water supply. Press red pressure relief button. Rotate valves to OFF.
2. Unscrew housing with included spanner. Remove large o-ring, wipe o-ring clean and set aside
3. Remove and discard used filter cartridge. Wash housing with dish soap and warm water. Rinse completely. Fill 1/3 with water, add roughly 1 tablespoon of Bleach and scrub to disinfect. Rinse thoroughly.
4. Lubricate O-ring with clean silicone grease and insert it back into groove. It is important to make sure the O-ring is seated level in the groove. Otherwise the housing may not have a proper seal.
5. Replace new filter cartridge over standpipe in the bottom of the housing.
6. Screw housing onto cap and hand-tighten. **DO NOT OVER-TIGHTEN**. Make sure cap standpipe slips into cartridge.
7. Turn on water supply. Rotate handle slowly to ON position for valve. Press pressure-release button. Check for leaks before leaving installation

# How to replace a Quartz Sleeve

1. Close all faucets/ball valves and turn off the water supply or water pump
2. Press the red pressure release button to release the pressure from the cartridges.
3. Unplug the power.
4. Check to make sure the UV system is not too warm. You may want to allow the system to cool down for 10 minutes.
5. Carefully remove the protective cover.
6. Remove the lamp plug but make sure the strain relief wires remain connected.
7. Latex gloves are recommended from now on for removing the lamp as the oils from the skin can damage the UV lamp.
8. Remove the lamp assembly along with the sleeve bolt from the chamber.
9. Unscrew the UV lamp by holding the sleeve bolt.
10. Unscrew the sleeve bolt and remove o-rings with the quartz sleeve.
11. Clean or replace the quartz sleeve. To clean, use a cloth soaked in CLR, vinegar or some other milk acid. Rinse with water.
12. Insert new o-rings and tighten the sleeve bolt to the quartz sleeve.
13. Install and secure the new lamp into sleeve being careful not to over tighten which can break the sleeve.
14. Insert and secure the lamp assembly.
15. Carefully align connections by rotating the ring clamp and installing the lamp plug.
16. Insert the safety cap and plug the system in again.
17. Open the faucets and turn on the water supply.
18. Check for leaks.

# How to clean a Quartz Sleeve

Your quartz sleeve should be cleaned every 12 months and replaced every 2-3 years. Completely replacing the quartz sleeve every 24-36 months will ensure the UV system continues to operate properly.

1. Close all faucets/ball valves and turn off the water supply or water pump
2. Press the red pressure release button to release the pressure from the cartridges.
3. Unplug the power.
4. Check to make sure the UV system is not too warm. You may want to allow the system to cool down for 10 minutes.
5. Carefully remove the protective cover.
6. Remove the lamp plug but make sure the strain relief wires remain connected.
7. Latex gloves are recommended from now on for removing the lamp as the oils from the skin can damage the UV lamp.
8. Remove the lamp assembly along with the sleeve bolt from the chamber.
9. Unscrew the UV lamp by holding the sleeve bolt.
10. Unscrew the sleeve bolt and remove o-rings with the quartz sleeve.
11. Clean the quartz sleeve with a cloth soaked in CLR, vinegar or some other milk acid. Rinse with water. Make sure not to use a towel or cloth that is abrasive or that could scratch the sleeve.



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