



AQ-UV-10C and AQ-UV-15C

# Whole House **UV Filter** Owner's Manual





Welcome to Aquasana. Enjoy the peace of mind that comes from knowing our award-winning water filter technology is working for you.

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AQ-UV-10C AND AQ-UV-15C

# Whole House UV Filter

## TABLE OF CONTENTS

Box Contents .....	1
Before Installing .....	2-3
Precautions.....	4
System Configuration .....	5
Installation Steps.....	6-10
Use & Care .....	11-12
Operating the Controller.....	12-14
Equipment Specifications .....	15
Warranty .....	16
Water for Life® Program.....	17



Parts and pieces included with your system will vary depending on your specific order. Please call Customer Support with any questions or concerns **866-662-6885**.

### Tools & Supplies recommended for installation:

- Pipe cutter, hacksaw, or other specialized tools required to cut into your existing plumbing (e.g. if you have PEX piping)
- Philips head screwdriver
- Wrench (for tightening fittings)
- Inlet/outlet connections
- Plumber's tape
- Cotton gloves
- Piping (PEX, PVC, etc.)
- Fittings for 1" MNPT

### Water Quality Parameters

Aquasana recommends the installation of a pre-filter of at least 5-microns prior to the Aquasana UV Filter system. For the UV Filter to effectively sterilize bacteria and viruses, the UV light must be able to pass through the water it is treating. Treated water should be tested for at the least the parameters listed below:

**Hardness:** <7 gpg (120 mg/L) (If hardness level is 7gpg or slightly below, the Quartz Sleeve must be cleaned periodically for efficient UV penetration; if above the water must be softened)

**Iron (Fe):** < 0.3 ppm (0.3 mg/L)

**Manganese:** <0.05 ppm (0.05 mg/L)

**Turbidity:** <1 NTU

**Tannins (organics):** <0.1 ppm (0.1 mg/L)

**UVT (transmittance):** >85%

If your water exceeds the listed parameters above, Aquasana strongly recommends that pre-treatment equipment be installed (equipment required will depend on parameters being treated). Contact the Aquasana Sales Department to have your water tested: 866-662-6885.

### Prior to Installation

- **For all installations:** Anticipate the need for additional parts and pieces including but not limited to pex tubing, clamps, and mounting screws to install unit properly (available at local home improvement stores or through your plumbing contractor).
- We recommend that a licensed plumber or certified technician install the UV Filter. Installation of the UV Filter must comply with existing state and local plumbing codes. Some local codes may require the use of a licensed plumber or certified installer when disrupting a potable water line. Aquasana and its manufacturer are not liable for consequential or incidental damages due to improper installation.
- It is recommended your UV Filter be installed indoors and out of direct sunlight. If this is not possible and the system is outdoors or in a sunny area, the unit must be protected from both direct sunlight and freezing temperatures.



Scan to view the  
Whole House UV Filter  
installation video.

## Specifications

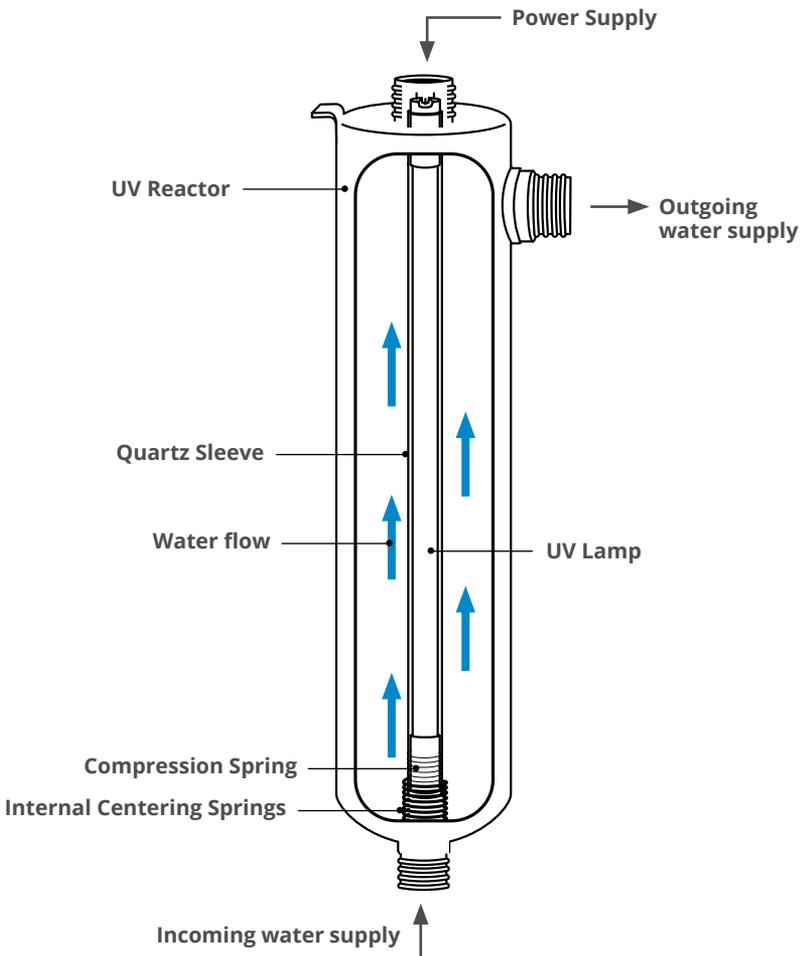
This UV Filter is designed and tested for use with genuine Aquasana parts including replacement filters and all hardware. Use of parts from other manufacturers may result in loss of contaminant reduction, performance, system damage, or failure. Use of parts from other manufacturers will also void your warranty.

Please visit [aquasana.com](http://aquasana.com) for replacement parts.

**Model: AQ-UV-10C / AQ-UV-15C**

Replacement bulb: AQ-UV-L330C/AQ-UV-L420C

## Understanding Your UV Filter System



**Read all precautions and installation instructions carefully and completely before installing.**

### Safety Precautions

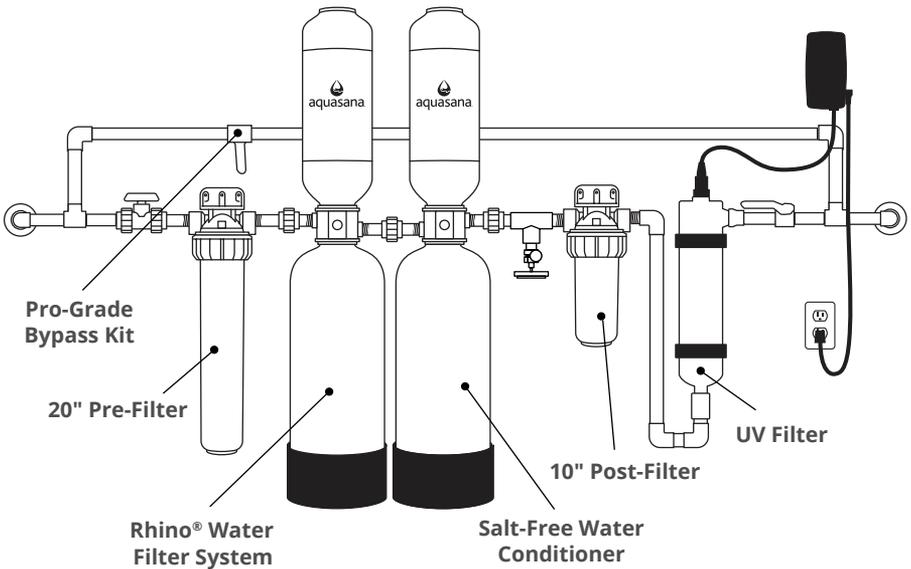
- **ALWAYS** disconnect the power cord from the electrical outlet before servicing the system.
- **NEVER** look directly at an illuminated UV Lamp without adequate eye protection and always protect your skin from direct exposure to the UV light. Energy given off by the UV Lamp is harmful to your eyes and skin.
- To avoid possible electrical shock, use the unit only with a properly grounded electrical outlet. If installing on metallic plumbing, two grounding clamps and #4 copper wire are essential for safety.
- The UV Filter should be directly installed into a ground fault circuit interrupter (GFCI). If the use of an extension cord is required, the cord must be manufactured with a minimum of 16-gauge wire and care should be taken to avoid potential tripping hazards.
- **NEVER** perform any maintenance to the system unless you are comfortable in doing so. Contact the manufacturer for service instructions if required.
- **DO NOT** use this system for any purpose other than what it was intended for. Misuse of this system could potentially cause harm to the user or others.
- **DO NOT** install this UV Filter where the line pressure may exceed 100 psi. The operating pressure range for this filter is between 20psi - 100psi.
- Install on cold water lines only (40° – 90°F).
- Properly tighten all fittings to ensure a leak-free assembly.
- NSF certified plumber's tape (thread sealing tape) is the only sealer that can be used on threaded fittings. **DO NOT** use pipe dope or PVC primer/glue on threaded fittings. Exposure to these compounds will damage nipples causing leaks.
- **DO NOT** plug the unit in if the system or any of the components are wet. Aquasana UV Filters are intended for indoor use only and away from leaking plumbing.
- In areas with high pressure, a pressure relief valve and a water hammer arrestor may be necessary.

## Pick an appropriate installation location

### For Point of Entry (POE) systems

Choose a location where the main cold water line is accessible. Install the system after other water treatment equipment (softener or filters), but before any branches.

**If you have added components to your UV Filter, note the correct sequencing below. Improper sequence of equipment will affect performance, and could possibly damage your filter.**



### ⚠ WARNING

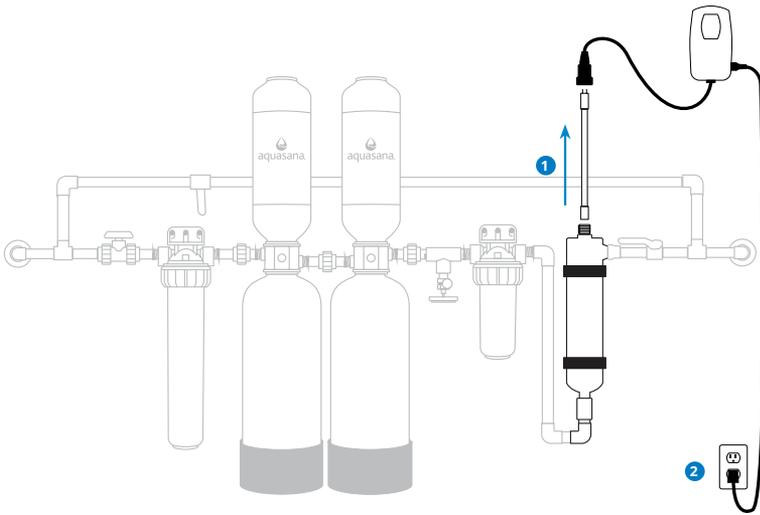
**For Stand-Alone Point of Entry (POE) -** Aquasana does not provide instructions for this type of installation. Aquasana recommends that a 5-micron Pre-Filter be installed before the UV Filter.

## 1 Installation Checks and Options

1. To facilitate future lamp replacements, ensure there is enough space at the UV Lamp connector end to safely remove the UV Lamp and/or quartz sleeve.

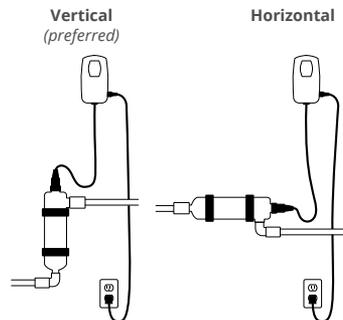
**NOTE:** Leave at least an additional UV Reactor length to facilitate UV Lamp and sleeve removal.

2. The controller will require a ground fault circuit interrupter (GFCI or GFI) outlet and should be mounted beside or above the UV Reactor.



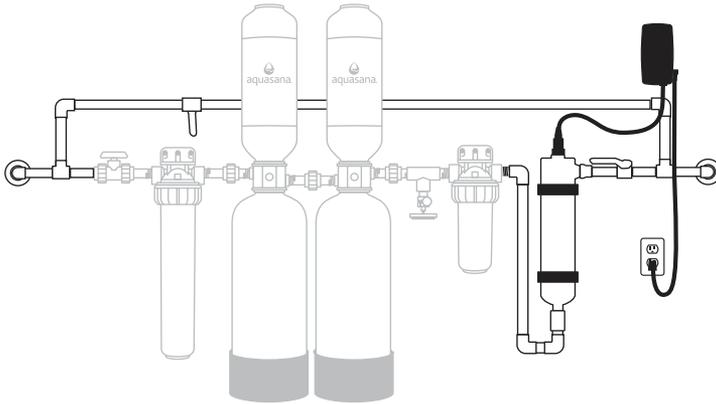
3. For water supplies where the maximum flow rate is unknown, a flow restrictor is recommended so that the rated flow of your particular Aquasana system is not exceeded. The flow restrictor should be installed on the outlet port of the UV Reactor.
4. The UV Reactor can be installed either horizontally or vertically using the clamp provided.

Vertical installation is the preferred method with the inlet at the bottom (UV Lamp connection at the top) as it allows any air that may be in the lines to be easily purged from the system.



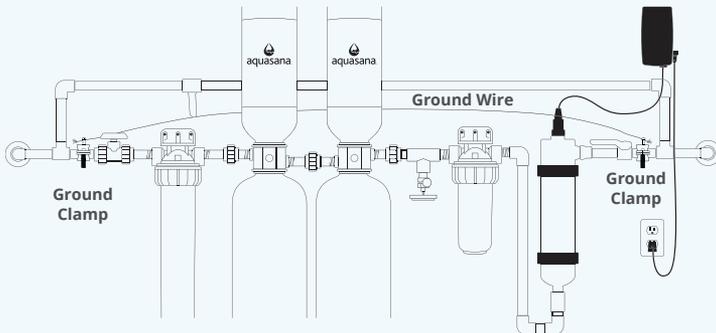
## 2 Bypass Assembly

The use of a bypass assembly is recommended as it will allow you to isolate the UV Reactor. This will allow for easier access in case maintenance is required.



## 3 COPPER PIPES ONLY (proceed to the next step for PVC pipes)

When installing on metallic plumbing, ensure you take the following precautions. Securely install two (2) grounding clamps and a #4 copper wire (not included) across the location where the system will be installed. Tightly clamp at both ends, as shown in the illustration.



### ⚠ WARNING



**ELECTRICAL SHOCK Hazard** - Prior to installation on metallic plumbing, securely install two grounding clamps and a #4 copper wire per installation instructions. Failure to follow these instructions can result in death or electric shock.

#### 4 Plumb In UV Filter

1. Use the mounting brackets to mount the UV Reactor to wood or drywall. If mounting to an alternate material, you will need to purchase the proper corresponding fasteners.
2. Plumb UV Filter and additional filtration add-ons into the system at this time. Screw post-filter support brackets onto the wall and attach filter. Use PVC pipe, elbows and reducers to connect from post-filter to UV inlet.
3. Properly connect system together accordingly (slip fittings, barbed fittings, NSF certified PVC glue, etc.). Ensure all parts are flowing through in the correct direction of water flow.
4. Once installation is complete, allow proper time for glue to dry according to manufacturer instructions.

#### 5 Insert the Quartz Sleeve

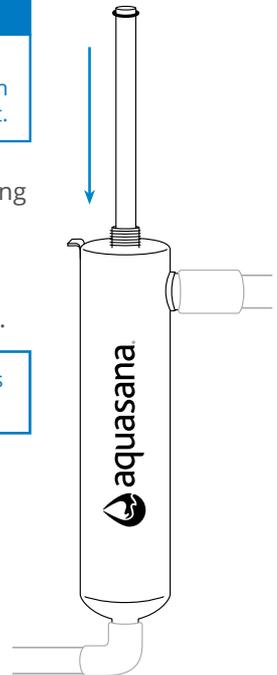
##### ⚠ WARNING

**DO NOT** touch the quartz sleeve with your hands. Use cotton gloves for this procedure as oils from hands can leave residue on sleeve and UV Lamp blocking UV light.

1. Gently remove the quartz sleeve from packaging and slide the sleeve into the UV Reactor. Align the quartz sleeve so it's centered and gently push it in to lock it into the internal centering springs on the opposite end of the UV Reactor.

**NOTE:** Pushing too hard when the quartz sleeve is not aligned can damage the centering springs.

2. Slide the O-Ring onto the quartz sleeve until it is butted up against the UV Reactor.



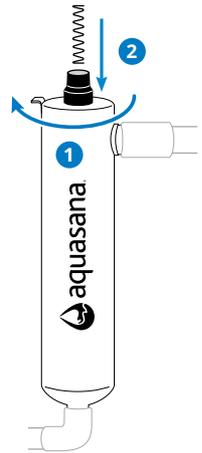
## 6 Add Gland Nut and Compression Spring

1. Hand tighten the gland nut over the quartz sleeve onto the threaded end of the UV Reactor.

**NOTE: DO NOT** use tools for this step. It has a positive stop to prevent over-tightening.

2. Insert the compression spring into the quartz sleeve.

**NOTE: DO NOT** install a UV Lamp inside the quartz sleeve without the compression spring in place.



## 7 Check For Leaks

When all plumbing connections have been completed, and you've allowed proper time for glue to dry according to manufacturer instructions, slowly turn on the water supply and check for leaks. Make sure the bypass valves are functioning properly and that the water is flowing through the UV Reactor.

**Troubleshooting:** *The most common leak is from the O-Ring not making a proper seal on the UV Reactor. For new installations, review steps 5 and 6.*

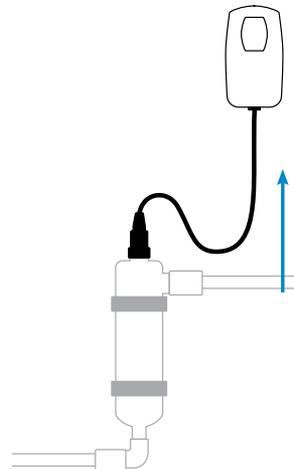
*If you experience leaks during this step while replacing your UV Lamp, drain the UV Reactor, remove the O-Ring, dry it, and reapply silicon grease. Reinstall the O-Ring ensuring that it is properly sealed against the UV Reactor and check again for leaks.*

## 8 Mount Controller

Mount the controller to the wall above the UV Reactor.

**NOTE:** Ensure that no moisture can deposit on any of the connections. Always mount the controller vertically.

**NOTE: DO NOT** plug the controller power cord in before the last step.



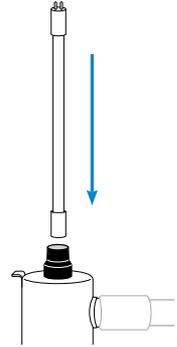
## 9 Insert UV Lamp

### ⚠ WARNING

Always hold UV Lamps by their ceramic ends, not by the Lamp bulb. Again, use cotton gloves for this step.

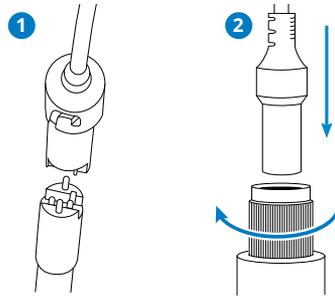
Remove the UV Lamp from its packaging. Insert the UV Lamp into the UV Reactor.

**NOTE: DO NOT** touch the key's exposed contacts.



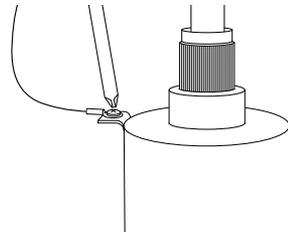
## 10 UV Lamp Connection

1. Plug the UV Lamp connector into the UV Lamp. Note the keying for proper alignment.
2. Insert the UV Lamp connector into the gland nut and turn the connector approximately  $\frac{1}{4}$  turn to lock the connector to the gland nut.



## 11 Ground Screw Connection

Tighten the captive ground screw to the ground lug on the UV Reactor using a Phillips head screwdriver to ensure proper grounding as shown.



## 12 Plug-In UV Filter

Your system is now ready to be plugged into the appropriate GFCI protected outlet. Refer to the following System Disinfection section before any water is allowed to flow through the system.

## System Disinfection

Use the following steps to fully disinfect the lines throughout the entire home after new installation, replacement of UV Lamp, or after loss of power.

1. Remove the filter cartridge from the post-filter and fill it with 1-2 cups of household bleach (most are 5.25% chlorine). Replace the sump and slowly turn on the water supply.
2. Choose a water outlet. Turn on the water and run water until bleach can be smelled to ensure disinfection. Repeat this step for all faucets, toilets, shower heads, appliances, outdoor taps, etc. Once complete, wait at least 30 minutes before continuing to the next step.
3. Put the filter cartridge back into the post-filter and flush the chlorine solution by opening all faucets in the home until chlorine can no longer be detected.

## Cleaning the Quartz Sleeve *(Cont. on next page)*

The quartz sleeve should be cleaned at least once every 12 months, but depending on water quality, may require cleaning more often.

1. Unplug UV Filter from the electrical outlet.
2. Turn off the main water inlet valve or turn off the inlet valve on the Pro-Grade Bypass Kit to enable the bypass system. Connect garden hose to drain valve and release the water pressure.

### **▲ WARNING**

**DO NOT** turn off water or drain water from lines before disconnecting power to the UV Filter.

3. Using a screwdriver, remove the ground screw from the ground lug on the UV Reactor.
4. Unplug the lamp connector from the UV Reactor by pushing the lamp connector in and turning the lamp connector 1/4 turn counter-clockwise. Disconnect the lamp connector from the lamp.

### **▲ WARNING**

The UV Lamp may be hot!

5. Remove the UV Lamp.

**NOTE: DO NOT** touch the UV Bulb. Only touch the ceramic ends.

6. Unscrew the gland nut from the UV Reactor exposing the end of the quartz sleeve.

### Cleaning the Quartz Sleeve *(Cont. from previous page)*

7. Remove the quartz sleeve and O-Ring by gently twisting and pulling the sleeve. It's recommended that you use cotton gloves during this step.
8. Using a soft, lint-free cloth or towel wipe the sleeve down using a commercial scale cleaner (i.e. CLR® or LIME-A-WAY®). This removes scaling or iron deposits that may be on the outside of the quartz sleeve.

**▲ WARNING** DO NOT get any moisture or liquids inside the quartz sleeve.

9. Replace the O-Ring and slide the quartz sleeve into the reactor. Follow steps 5 and 6 in the manual to complete installation.

### OPERATING THE CONTROLLER

Aquasana UV Filters come with a featured controller that includes an LED visual screen with audible warnings in a water-tight case.

Even though the UV system has a visual and audible warning built into the controller, a green LED does not necessarily indicate that the water coming from this system is in fact potable (safe to drink). These systems do not measure the level of disinfection; they simply measure the “on-off” status of the UV Lamp. Please have your water checked for microbiological contaminants on a regular basis.

#### ▲ WARNING

While the LED is red and the buzzer is sounding the water from the system should NOT be consumed. If any water does pass through the system during this period, please follow the disinfection procedure as outlined in this manual before the water is consumed.

These systems feature a tricolor LED that indicates system status and a 4-digit display to indicate UV Lamp life remaining. Pressing the button will change the display to indicate total running time.

- **Green LED:** UV Lamp is on and within operating range
- **Red LED & Audible Buzzer:** UV Lamp is not on or UV Lamp life has expired

***To remedy this condition, an expired UV Lamp must be replaced with a new genuine Aquasana UV Lamp. See the data plate located on the UV Reactor for replacement model numbers.***



## Lamp Countdown Sequence

The system counts down the number of days until a UV Lamp change is required.



### 375-31 Days Remaining

LED will count down the days with a green indicator light.



### 30 Days Remaining

LED will change to a yellow caution indicator light.



### 7 Days Remaining

Yellow caution indicator light, and system will additionally repeat an audible chirp.



### Past 0 Day Threshold

LED changes to solid red with a continuous buzzer.



### Defer Audible Chirp

The audible chirp or alarm can be deferred for seven days by holding the Controller button down for a period of five seconds. The number of deferrals used will be displayed as below. Once the deferral expires, the alarm will sound once again.

***The deferral can be repeated up to three times.***

## Lamp Replacement

After the UV Lamp is expired, it must be replaced with a genuine Aquasana replacement. See data plate on UV Reactor for model number.

Replace the UV Lamp by unplugging the power to the UV Controller and refer to installation manual (or installation steps starting with step 9).

To reset the timer in the controller, firmly hold down the button on the controller for 10 seconds. The controller will read “rSt3”, “rSt2”, “rSt1” and then beep. The button can now be released, the UV Lamp countdown timer has been reset.

## System Troubleshooting

**Hard Alarms:** The following give a constant audible alarm.

SYSTEM DISPLAY	PROBLEM	RESOLUTION
	The system has detected a problem with the UV Lamp.	Reset UV Lamp protection circuit by unplugging the unit for 10 seconds. Replace the UV Lamp with a genuine Aquasana replacement part as indicated on the data plate on the UV Reactor.
	Although the UV Lamp is illuminated, due to its age the UV output is insufficient for proper disinfection.	Replace the UV Lamp with a genuine Aquasana replacement part as indicated on the data plate on the UV Reactor.

### ⚠ WARNING

After any hard alarm, the home or facility should be disinfected. Follow the steps under the “System Disinfection” section.

## Boil Water Advisory

If any failure occurs on a Aquasana UV system, the water must not be used for human consumption until the system is returned to a safe operational mode. If the water is used for human consumption during this period, the water must be boiled (minimum 20 minutes at a full boil) prior to consumption.

## UV FILTER SPECIFICATIONS

MODEL	AQ-UV-10C	AQ-UV-15C
Flow Rate 30mj/cm2 @ 95% UVT	10 gpm	15 gpm
	38 lpm	56.8 lpm
	2.3 m3/hr	3.4 m3/hr
Flow Rate 40mj/cm2 @ 95% UVT	7.0 gpm	12 gpm
	26 lpm	45.4 lpm
	1.6 m3/hr	2.7 m3/hr
Port Size	1" MNPT	1" MNPT
Electrical	90-265V / 50-60Hz. 1.5A Max	
Plug Type	American: NEMA 5-15P - "1" suffix (i.e. AQ-UV-10C)	
Lamp Power (Watts)	34	45
Power (Watts)	36	48
Replacement Lamp	AQ-UV-L330C	AQ-UV-L420C
Replacement Sleeve	AQ-UV-Q330	AQ-UV-Q420
UV Reactor Dimensions	3.5 x 16.5" (8.9 x 41.8 cm)	3.5 x 20.0" (8.9 x 50.8 cm)
Chamber Material	304L Stainless Steel, A249 Pressure Rated Tubing	
Controller Dimensions	8.6 x 4.2 x 4" (21.7 x 10.8 x 10.2 cm)	
Operating Pressure	20-100 psi (1.38-6.89 bar)	
Operating Water Temperature	36-104° F (2-40° C)	
Lamp Change Reminder	YES	
Lamp Out Indicator	YES	
Shipping Weight	11.5 lbs (5.2 kg)	12.9 lbs (5.6 kg)



# AQ-UV-10C and AQ-UV-15C UV Filter Limited Warranty

## WHO IS COVERED

AQUASANA AND ITS SUPPLIERS, (herein collectively referred to as "Manufacturer") warrants to the original owner who purchased and installed the system (hereinafter "Owner").

## WHAT IS COVERED

This Limited Warranty covers defects in materials or workmanship during the limited Warranty period of your of your Aquasana UV Filtration System including sub-components purchased with original system, except as provided below. The system is warranted only when it is installed, operated, and maintained in accordance with the instructions accompanying the system found on Aquasana.com. A UV filter should be installed in such a manner that, if the system or any connection thereto should leak, the resulting flow of water will not cause damage to the area in which it is installed. For detailed instructions read the manual accompanying the UV filter and review drawings in the manual.

## FOR HOW LONG

**UV CHAMBER** Aquasana warrants the UV chamber (stainless steel UV Reactor) to be free from defects in material and workmanship for a period of **ten (10) years** from the date of purchase by a consumer ("Warranty Period").

**ELECTRONICS** Aquasana warrants the electrical (power supply) components to be free from defects in material and workmanship for a period of **three (3) years** from the date of purchase by a consumer ("Warranty Period").

**UV LAMPS & QUARTZ SLEEVES** Aquasana warrants UV Lamps, sleeves and UV sensors to be free from defects in material and workmanship for a period of **one (1) year** from the date of purchase by a consumer ("Warranty Period").

## WHAT AQUASANA WILL DO

1. If the UV Filter or any component part proves to Manufacturer's satisfaction to be defective in material or workmanship with the warranty period list above, the Manufacturer will provide a replacement that fulfills the remaining estimated lifespan of your original purchase and send it to you with installation instructions. If industry standards, product improvements or product obsolescence prohibit Manufacturer from furnishing an identical model replacement UV filter under this Warranty, the Owner will be furnished with a new UV filter of comparable remaining capacity and functionality; however, the Owner will be charged for the additional value of the replacement. The Warranty period for any replacement will run for the balance of the original warranty length, depending on the part.
2. Return of Defective UV Filter and Component Parts - Manufacturer reserves the right to examine the alleged defect in the UV filter or component part(s), and it will be the Owner's obligation to return the UV filter and/or component part(s) to the Manufacturer at the Manufacturer's request.
  - a. When returning the UV filter and/or component part(s), they must be individually tagged and identified with the water filter's model number, date of purchase, and date of installation.

## WHAT IS NOT COVERED

1. This Limited Warranty does not cover UV filters and any components that were not installed in compliance with the instructions or that have been abused or operated incorrectly.
2. This Limited Warranty applies only to products purchased from authorized Aquasana resellers.
3. The Limited Warranty stated herein is in lieu of any and all warranties, express or implied (whether written or oral), including, but not limited to, the implied warranties of merchantability and fitness for a particular purpose.
4. Manufacturer shall not be liable for any incidental, consequential, special, punitive, or contingent damages or expenses, arising, directly or indirectly, from any defect in the UV filter or the use of the UV filter, including but not limited to water damage.
5. Manufacturer shall not be liable for any water damage arising, directly or indirectly, from any defect in the water filter or component part(s) or from its use.
6. Manufacturer shall not be liable for any damage or product failures caused by any of the following:

- The UV filter or any of its component parts have been subject to misuse, alteration, neglect or accident.
  - The UV filter has not been installed in accordance with the applicable local plumbing and/or building code(s) and/or regulations or in their absence.
  - The UV filter is not installed, operated and maintained in accordance with the printed Manufacturer's instructions, including if the UV filter has any additional aftermarket equipment introduced into the sealed system not approved by the manufacturer.
  - The UV filter is exposed to highly corrosive conditions.
  - The UV filter is not operated within the factory calibrated temperature limits.
  - The UV filter is installed in direct sunlight or exposed to freezing temperatures.
  - The UV filter or any of its component parts fail due to sediment build-up.
  - Clogging due to purchaser's failure to replace the filter cartridges.
  - Damage caused by fire, flood or acts of God.
7. Manufacturer shall not be liable for any claims related to excessive noise, smell, or taste of water.
  8. This Warranty does not cover damage caused by the use of parts that are not genuine Aquasana parts.
  9. Except when specifically prohibited by the applicable state law, the Owner, and not the Manufacturer, shall be liable for and shall pay for all charges for labor or other expenses incurred in the removal, repair or replacement of the UV filter or any component part(s) claimed to be defective or any expense incurred to remedy any defect in the product. Such charges may include, but are not necessarily limited to:
    - a. All freight, shipping, handling and delivery costs of forwarding a new UV filter or replacement part(s) to the owner.
    - b. All costs necessary or incidental in removing the defective UV filter or component part(s) and installing a new UV filter or component part(s).
    - c. Any material required to complete, and/or permits required for, installation of a new UV filter or replacement part(s), and
    - d. All costs necessary or incidental in returning the defective UV filter or component part(s) to a location designated by the Manufacturer.

## HOW TO GET SERVICE

To receive service under this Warranty, you must contact Aquasana, Inc. (A. O. Smith Water Treatment (North America)) at 1-866-662-6885 or warranty@aquasana.com within the Warranty Period to describe the problem to a customer service representative who will verify that the product is under warranty and determine whether a part or the system will be replaced and whether you must send back the defective part. You will be required to provide a proof of purchase from an authorized Aquasana reseller and proof of proper installation.

## WARRANTY REGISTRATION

Warranty registration is not required for coverage under the Aquasana Limited Warranty and is not necessary for factory direct purchases made from www.aquasana.com. If you purchased from a retailer or an authorized reseller, please complete the online Warranty registration form at www.aquasana.com/warranty. Proof of purchase from an Aquasana authorized reseller is required. Once registered online, we will have a record of your purchase.

## HOW STATE LAW APPLIES

This Warranty gives you specific rights and you may have other rights which vary from state to state. Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you.



# water for life®

## Protect your investment and save money with Water for Life®.

Our Water for Life® program helps you protect the investment you've made in your family's health with an extended limited warranty on your new filtration system, a 15% discount on replacement filters, and free shipping.



### Extended Limited Warranty

Our performance promise to you – free replacement parts when needed.\*



### Discounted Replacements

The only way to lock in a 15% discount on replacement filters.



### Free Shipping

Replacements shipped to you right when you need them – at no extra cost.



### No Contract

Free to join and cancel anytime – no long-term commitment required.

## CONTACT US TO LEARN MORE



866-662-6885



[waterforlife@aquasana.com](mailto:waterforlife@aquasana.com)

\*Exclusions apply. Limited Warranty details are available at [aquasana.com](http://aquasana.com). Benefits are for the term of Water for Life® membership.



### LOVE IT?

Please let us know with a review on Aquasana or your retailer's site.



### NEED HELP?

Give us a call at **866-662-6885** and tell us what's going on.

**Aquasana, Inc.**  
6310 Midway Road  
Haltom City, Texas 76117  
866.662.6885 USA  
877.332.7873 Canada  
[www.aquasana.com](http://www.aquasana.com)