

Owner's Manual



Congratulations. By purchasing this system, you have taken the first step in ensuring safe drinking water. Designed using the most advanced UV technology available today, your UV system is designed to provide you with years of trouble-free operation with minimal maintenance required.



Date of installation:

Installed by:

Installer phone#:

Serial #:

(Found on label on back of UVMAX A DWS)



VIQUA[™]

A TROJAN TECHNOLOGIES COMPANY

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SYMBOLS:



Caution



Protective Ground



Electrical Warning



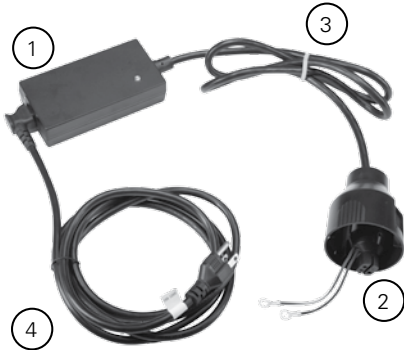
Fragile



Eye Protection

COMPONENTS

For replacement components please contact your installer or contact VIQUA directly for a referral: 1 800 265 7246 (North America), 519 763 1032, or info@viqua.com.



Components

Part	Part Number
1 Power supply (includes Safety cap, Lamp cord)	650414 (120 V) 650415 (230 V)
2 Safety cap	603000
3 Lamp cord	–
4 Power cord	602636 (120V) 602637 (230V)
5 Lamp (includes O-rings)	602803
6 O-ring	–
7 Sleeve bolt	602665
8 Sleeve (includes O-rings)	602730
Sediment Filter	AWP110
Carbon Filter	C-01

SPECIFICATIONS

Specifications

Operating Parameters

Maximum operating pressure	125 PSI (862 kPa)
Minimum operating pressure	4 PSI (27.5 kPa)
Maximum ambient air temperature	122 °F (50°C)
Minimum ambient air temperature	32°F (0°C)
Maximum humidity	100%
Maximum hardness	120 ppm (7 grains per gallon)
Maximum iron	0.3 ppm
Minimum UVT	75%

Flow Rates*

Maximum rated flow at dose of 16 mJ/cm ²	3 GPM (11 LPM)
Maximum rated flow at dose of 30 mJ/cm ²	1.5 GPM (4 LPM)
Maximum rated flow at dose of 40 mJ/cm ²	1 GPM (4 LPM)

Electrical

Voltage	120-230V AC
Frequency	50-60 Hz
Max. current	0.5 Amp
Max. power consumption	22 Watts
Lamp power	14 Watts

Other

UV Chamber Material	304 SST
Inlet/Outlet	3/8" NPT (female)

Other

Rated service life of lamp	1 year
Installation Kit	Yes
Visual "Power On"	Yes
Audible Lamp Failure	Yes

*Flow rates shown are at 85% UVT.

The warranty period for lamps and sleeves may be verified using date codes in addition to purchase receipts and VIQUA's database of registered owners. VIQUA will advise you whether the defective item needs to be returned to a VIQUA dealer for failure analysis. Replacement lamps and sleeves provided under warranty will be sent to your UVMAX™ dealer.

This warranty on lamps and sleeves does not include shipping and handling charges which will be collected from you by the dealer. Parts replaced under this one (1) year warranty will be covered under warranty to the end of the original one (1) year warranty period. This warranty is also subject to the conditions and limitations outlined under the heading "General Conditions and Limitations" below.

Warranty for Replacement Lamps and Parts

VIQUA warrants replacement lamps, purchased for annual routine maintenance, and other parts purchased to repair product components that are no longer covered by the original warranty, to be free from defects in material and workmanship for a period of three (3) months from the date of purchase. During this time, we will repair or replace, at its option, a defective replacement lamp or part free of charge except for shipping and handling charges.

The warranty period on replacement lamps and parts will be verified using date codes and/or purchase receipts. VIQUA will advise you whether the defective item needs to be returned to your dealer for failure analysis. Replacement lamps and parts provided under warranty will be sent to your dealer.


General Conditions and Limitations


















None of the above warranties cover damage caused by improper use or maintenance, accidents, acts of God or minor scratches or imperfections that do not materially impair the operation of the product. The warranties also do not cover products that are not installed as outlined in the applicable Owner's Manual.

The limited warranties described above are the only warranties applicable to the UVMAX™ products listed. These limited warranties outline the exclusive remedy for all claims based on a failure of or defect in any of these products, whether the claim is based on contract, tort (including negligence), strict liability or otherwise. These warranties are in lieu of all other warranties whether written, oral, implied or statutory. Without limitation, no warranty of merchantability or of fitness for a particular purpose shall apply to any of these products.

VIQUA - a Trojan Technologies Company does not assume any liability for personal injury or property damage caused by the use or misuse of any of the above products. VIQUA shall not in any event be liable for special, incidental, indirect or consequential damages. VIQUA's liability shall, in all instances, be limited to repair or replacement of the defective product or part and this liability will terminate upon expiration of the applicable warranty period.

SAFETY INSTRUCTIONS

 **WARNING** - To guard against injury, basic safety precautions should be observed, including the following:

1. **READ AND FOLLOW ALL SAFETY INSTRUCTIONS.**
-   2. **DANGER** - o avoid possible electric shock, special care should be taken since water is employed in the use of this system. Unless a situation is encountered that is explicitly addressed by the provided maintenance and troubleshooting sections, do not attempt repairs yourself; refer to an authorized service facility.
-   3. **CAUTION** - Do not operate with broken or faulty parts as this may result in exposure to ultraviolet radiation. Contact supplier for replacement parts.
-   4. Do not operate the system if it has a damaged cord or plug, or if it is malfunctioning or if it has been dropped or damaged in any manner.
-   5. Always unplug the system, shut off water flow and release water pressure before servicing or cleaning. Never yank cord to remove from outlet; grasp the wall plug and pull to disconnect.
-  6. Do not use the system for other than intended use. The use of attachments not recommended or sold by the manufacturer may cause an unsafe condition.
-   7. To prevent risk of electrical shock, connect this system only to a properly grounded, grounding-type power supply receptacle that is protected by a Ground Fault Circuit Interrupter (GFCI). Inspect performance of GFCI as per manufacturer's suggested maintenance schedule. If an extension cord is used, ensure it is of a sufficient rating and accepts the plug from this system; never use an adapter.
-  8. Visually inspect this system prior to installation. If the quartz sleeve or lamp is broken, cracked or damaged in any way, do not use. Contact the supplier for replacement parts.
-   9. Keep all connections dry and off the ground. Do not touch plug with wet hands.
-   10. The light emitted by the lamp will cause serious eye damage and burn unprotected skin. Do not plug system into an electrical outlet without first properly securing the lamp into the chamber. Unplug the system prior to removing the lamp from the chamber.
-  11. If the UV system malfunctions or fails, water must be boiled prior to consumption until the UV system is operational and the water lines have been shocked. System failure is indicated by the system's audible and visual alarms or the absence of any indicator light.

MANUFACTURER'S WARRANTY

- ⚠️ ⚡ 12. Intended for indoor use only. System must not be exposed to weather elements. In seasonal applications, chamber must be drained to prevent freezing.
 - ⚠️ 13. Installation of this system must be in accordance with local plumbing and electrical codes as well as any and all applicable regulations and laws.
 - ⚠️ ⚡ 14. The UV system is not to be used or played with by children. Persons with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, are also not to handle the UV system unless they have been given supervision or instruction.
15. SAVE THESE INSTRUCTIONS.

⚠️ ⚡ **Warning:** The UV light given off by this unit can cause serious burns to unprotected eyes and skin. Never look directly at an illuminated UV lamp. When performing any work on the UV disinfection system always unplug the unit first. Never operate the UV system while the UV lamp is outside of the UV chamber.

Note: The UV lamp inside of the disinfection system is rated at an effective life of approximately 9000 hours. To ensure continuous protection, replace the UV lamp annually.

Our Commitment

To maximize the superior quality of disinfection, each UVMAX™ product must be properly installed, and maintained. If you experience difficulty with your product, our Technical Support Centre is available to help you.

During the applicable warranty period noted below, we will provide warranty coverage, described below, for your product.

How to Get Help

To obtain help under this warranty, contact the VIQUA Technical Support Center at 1 800 265 7246 or by email at info@viqua.com. Please have available the model number, the date of purchase, the name of the dealer from whom you purchased your VIQUA product ("the source dealer"), as well as a description of the problem you are experiencing. A VIQUA technician will help you troubleshoot the problem and isolate the issue.

In order to establish proof of purchase when making a warranty claim, you will need your original invoice or complete and returned your warranty card through the mail or online.

Specific Warranty Coverage

Warranty coverage is specific to the following UVMAX™ products:

Ten-Year Limited Warranty for UVMAX™ UV Chamber

VIQUA warrants the UV chamber on the UVMAX™ products to be free from defects in material and workmanship for a period of ten (10) years from the date of purchase. During this time, VIQUA will repair or replace, at its option, any defective UVMAX™ UV chamber.

Please return the defective part to your dealer, who will return it to VIQUA - a Trojan Technologies Company. We will either make the necessary repairs or, if it is determined that a replacement is required, will provide a replacement part. We will then return the part to the dealer. This warranty does not include shipping and handling charges which will be collected from you by the dealer.

Parts repaired or replaced under this ten (10) year warranty will be covered under warranty to the end of the original ten (10) year warranty period. This warranty is also subject to the conditions and limitations outlined under the heading "General Conditions and Limitations" below.

Three-Year Limited Warranty for Structural, Hardware and Electrical Components

VIQUA warrants the structural, hardware, and electrical components to be free from defects in material and workmanship for a period of three (3) years from the date of purchase. During this time, VIQUA will repair or replace, at its option, any defective parts covered by the warranty.

Please return the defective part to your dealer, who will return it to VIQUA - a Trojan Technologies Company. We will either make the necessary repairs or, if VIQUA determines that a replacement is required, will provide a replacement part. We will then return the part to the dealer. This warranty does not include shipping and handling charges which will be collected from you by the dealer.

Parts repaired or replaced under this three (3) year warranty will be covered under warranty to the end of the original three (3) year warranty period. This warranty is also subject to the conditions and limitations outlined under the heading "General Conditions and Limitations" below.

One-Year Limited Warranty for Lamps and Sleeves

VIQUA warrants original lamps and sleeves to be free from defects in material and workmanship for a period of one (1) year from the date of purchase. During this time, VIQUA will repair or replace, at its option, any defective parts covered by the warranty.

11. Reinstall sleeve bolt with 2 new o-rings.



12. Screw lamp into sleeve hand-tight. Caution: Over tightening will break the sleeve.



13. Push lamp plug onto end of lamp.
 14. Push safety cap into place.
 15. Turn off the shut-off valves.
 16. Check for leaks.
 17. Connect the system to the power source.

CARTRIDGE REPLACEMENT

1. Shut-off the water flow to the unit via the main line shut-off valve.
2. Remove the filter sumps from the unit by turning counter-clockwise until the sump falls free from the head (be careful as the sumps will be full of water and they will be heavy).
3. Discard the used cartridge and clean the sump housing as required. Make sure to thoroughly rinse the sump with water to get rid of any cleaning agents.
4. Install the new cartridge in the reverse procedure as stated above turning the sump clockwise until the sump is tight. **DO NOT OVER TIGHTEN.**
5. Plug UV unit into the applicable outlet and power-up system.
6. Slowly turn on the water supply and allow any air that may now be present to bleed off from the system. This can easily be accomplished by partially opening a nearby faucet. Once the water runs without the presence of any air, return the system to use.

WATER CHEMISTRY

Water quality is extremely important for the optimum performance of your UV system. The following levels are recommended for installation:

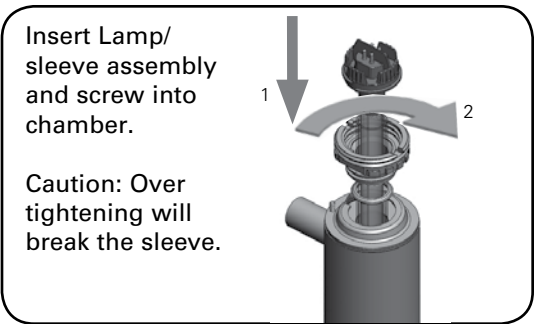
- Iron: < 0.3 ppm (0.3 mg/L)
- Hardness*: < 7 gpg (120 mg/L)
- Turbidity: < 1 NTU
- Manganese: < 0.05 ppm (0.05 mg/L)
- Tannins: < 0.1 ppm (0.1 mg/L)
- UV Transmittance: > 75% (call factory for recommendations on applications where UVT < 75%)

** Where total hardness is less than 7 gpg, the UV unit should operate efficiently provided the quartz sleeve is cleaned periodically. If total hardness is over 7 gpg, the water should be softened. If your water chemistry contains levels in excess of those mentioned above, proper pre-treatment is recommended to correct these water problems prior to the installation of your UV disinfection system. These water quality parameters can be tested by your local dealer, or by most private analytical laboratories. Proper pre-treatment is essential for the UV disinfection system to operate as intended.*

INSTALLING YOUR UV DISINFECTION SYSTEM

- CAUTION, electronic ballast must be connected to a grounded receptacle and the lamp connector ground wire connected to the stainless steel reactor chamber.
- The disinfection system is designed to be mounted vertically using the bracket at a single location such as the kitchen or bathroom sink.
- The ballast should be mounted either above or beside the reactor chamber. This will prevent moisture caused by condensation from entering the ballast enclosure, causing a potential for ballast failure.
- For safety purposes, the disinfection system should be connected to a ground fault interrupt circuit.
- The disinfection system is intended for indoor use only, do not install disinfection system where it may be exposed to the weather.
- Install the disinfection system on cold water line only.

1. For shipping purposes, the UV lamp and sleeve are shipped in a separate cardboard box. Carefully remove the UV lamp from the shipping box being careful not to touch the "glass" portion with your fingers. Insert the UV lamp into the quartz sleeve and chamber making sure the connection end is inserted last. Mount the disinfection system to the wall or cabinet.
2. If the disinfection system is to be hard plumbed, make sure you leave enough clearance in front of the lamp connector to facilitate lamp service (a length equal to the length of the unit should suffice).
3. This system is designed to install on the main cold water line. Install the disinfection system before any branch lines. Mount the system to the wall using the two mounting holes in the back of the disinfection system with appropriate fastening devices. Various connection methods can be used to connect the water source to the disinfection system, however union type connectors are recommended.
4. Prior to connecting the power source, check all connections to ensure that they are indeed secure, turn on water supply and check for any leaks. If satisfied that there are no leaks, proceed with the following steps.
5. Push lamp plug onto end of lamp.
6. Attach ground (green/yellow) and relief (red) wires from lamp. Plug to the ground lug on the chamber. Secure both wires with locking screw provided.
7. The power source provided with your disinfection system must be located within (5) feet of an electrical outlet. **DO NOT USE AN OUTLET THAT CAN BE SWITCHED OFF (IE. A WASTE DISPOSAL OUTLET).**

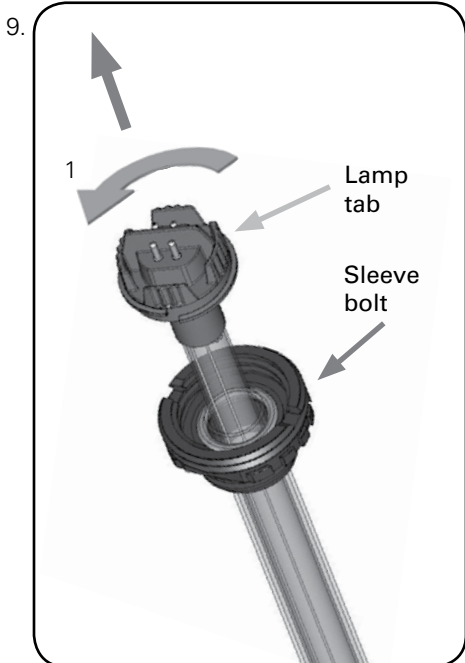
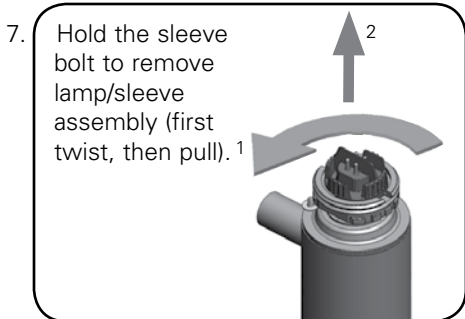


Note: If ballast enters alarm condition, power must be unplugged for several seconds to allow ballast to reset.

Note: As the system requires time to reach its full operating capacity, please allow the disinfection system to operate 3 - 5 minutes prior to using the water from the unit. In addition, to clear any air or debris from the system, open the faucet and allow water to run through the disinfection system for 2 - 3 minutes.

SLEEVE CLEANING AND LAMP REPLACEMENT

1. Turn off the shut-off valve situated by the inlet of the drinking water system.
2. Open a tap downstream of the UV system to release pressure. Then, close this tap.
3. Turn off the shut-off valve situated by the outlet of the drinking water system.
4. Disconnect the power.
5. Let the system cool down for 10 minutes.
6. Squeeze sides opposite of tabs to remove cover. The strain relief wire should remain connected.



8. **For sleeve cleaning only:**

Skip to step 14.

Note: Sleeve must be replaced if it cannot be completely cleaned or if it appears scratched or cracked.

For lamp or sleeve replacement: Clean sleeve and follow steps 10-13.

