UV-A 1/2 GPM



UV-A 1GPM













- More effective against viruses than chlorine.
- Environmentally and user friendly, no dangerous chemicals to handle or store, no risks of overdosing.
- Low initial capital cost as well as reduced operating expenses when compared with similar technologies such as ozone, chlorine, etc...
- Immediate treatment process.

- Extremely economical, hundreds of gallons may be treated for each penny of operating cost.
- No chemicals added to the water supply. No change in taste, odor, pH, conductivity, nor the general chemistry of the water.
- Automatic operation without special attention or measurement, operator friendly.
- Simplicity and ease of maintenance, periodic cleaning, (if applicable), and annual lamp replacement, no moving parts to wear out.
- No handling of toxic chemicals, no need for specialized storage requirements.
- Easy installation, only two water connections and a power connection
- Compatible with all other water purification processes, (reverse osmosis, filtration, water conditioning and softening, BioSand).

UV sterilizer for saltwater, freshwater for drinking water & aquariums & garden. This UV-A and UV-C sterilizer is a quality unit. If used correctly and creates crystal clear water.

Bacteria and other parasites and the risk for infection of the fish decreases It has been specifically developed for drinking and aquarium use, has been designed and Manufactured to the highest standards and has been extensively tested.

UV energy required for 99.9% destruction of various micro organisms.

This table shows the amount of ultraviolet energy required, (at 253.7nm wavelength), for 99.9% destruction of various microorganisms measured in microwatt seconds per centimeter squared.

New lamps will output UV energy in the range of 35,000 to 40,000 microwatt seconds per centimeter squared. This output will slowly deteriorate over a one year period but never fall below the minimum 25,000 value.

Microorganism	Common Name	UV energy (microwatt-second s per square centimeter)	Microorganism	Common Name	UV energy (microwatt-seconds per square centimeter)
Bacillus anthracia	Anthrax Virus (not spores)	8,700	Bacillus anthracia	Antrhax Spore	
Bacillus subtilis	vegetative	11,000	Clostridium Tetani	Tetanus/Lockjaw	23,000
Corynebacterium diphtheria	Diphtheria	6,500	Escherichia coli	E. coli	7,000
Legionella bozemanii	Pontiac Fever	3,500	Legionella pneumophila	Legionnaires Disease	3,800
Leptospira interrogans	Infectious Jaundice & Leptospirosis	6,000	Mycobacterium tuberculosis	Pulmonary Tuberculosis	10,000
Moraxella catarrhalis	Meningitis, Endocarditis, Pneumonia,Bronchitis,Otitis Media,Sinusitis,Bactoremia	8,500	Proteus vulgaris	Urinary Tract Infection, Bacteremia, Pneumonia and Focal Lesions	6,600
Salmonella paratyphi	Para-Typhoid,Fever, Enlargement of Spleen	6,100	Salmonella typhimurium	Gastroenteritis	15,200
Salmonella typhose	Typhoid fever, Enteric fever, Typhus Abdominales	6,000	Sacina lutea	Reproductive Problems	26,400
Shigella flexNeri	Dysentery	3,400	Shigella sonnei	Enteric Infection	7,000
Enterococcus faecalis	Urinary Tract Infection and Bacterial Endocarditis	10,000	Streptococcus hemolyticus	Various Infections	5,500

1.Operating principle:

The UV sterilizer AQUA SAFE clears the water with the help of ultraviolet radiation. This Radiation is emitted by a special lamp. The UV-A and UV-C radiation kills all forms of life that are Directly exposed to the radiation – micro

algae, bacteria, protozoa and other parasites.

2. Special features:

Spiral water flow – The unique spiral water flow and the big volume of the AQUA SAFE units ensures an optimum water clarification. The water is directed in a spiral way around the quartz tube, with a long contact time. Due to this, the UV-A and UV-C radiation is used with maximum Efficiency Routable connections – The inlet and outlet connections of the AQUA SAFE can be rotated for 360°. This saves space and facilitates the installation.

3. Sizes/technical data:

Aqua safe UV-A and UV-C sterilizers are produced in Many sizes and capacities:all UV-A & UV-C have sound and LED alarm if the lamp burned or not working.

AQUA SAFE UV: 110-240 volt .and house UV can be stainless steel 304 or 316.

4. Safety advice:

a) The radiation of the UV lamps is dangerous. Direct contact with eyes or skin can result in irreversible Damages. Therefore, the unit must always be switched off, before it is opened.

- b) Switched on, when the water flow is on.
- c) The units may not be submerged or operated under water.
- d) Do not install the system if some damage has Been detected.

5. Connection(Installation):



1. To avoid the device falling down, please use a clip to fixit properly.

2. Plug the UV light tube into blaster(TRANSFORMER), which has 4 sockets then insert through nut.

3. Connect water inlet and outlet to water supply, visual inspect if there is any water leakage, do not supply power unless there is no any leakage.

4. Warning beep sound will occur and warning indicator will red light if the UV tube is damaged or misplaced.

Do not see the UV tube directly when the device is functioning to avoid hurt your eyes.

6. Maintenances and cleaning:

The UV lamps have a life span of approx 8.000 hrs. After 5.000 hrs, the UV output of the lamps Decreases to 85%. The lamps have to be changed regally. We recommend cleaning the quartz tube whenever the lamps are changed.

Switch the power off, stop the water flow and drain the water from the unit
Open the large screw cap. Careful, The lamp is fixed with the socket in the screw cap. If the screw cap is open, you can carefully remove:

1) Housing

- 2) Ballast
- 3) UV Lamp
- 4) Connection piece
- 5) Holding plate

3. To clean the quartz tube, it can be removed from the housing. Normally it is very tight and has to be lifted up a little bit(careful, do not use too much force). Take it out by hand. The quartz tube can be cleaned with water Use PH7 soap or lemon acid .Use alcohol wipes the tube after you clean it.

Check if there is any water leakage after installation. and a soft cloth. If there are calcium deposits on the tube, it can be cleaned with finger or commercial decalcifies.

Afterwards, flush it with water the plastic end part of the quartz tube can be fitted with grease for easy remounting.

Clean Quartz tube every 4-6 month and check is there is any damage.

4. The remounting is made in the opposite. The quartz tube is pushed into the housing, the lamp is fastened into the socket and both are carefully mounted in the housing. The screw cap is fixed tight finally the connection pieces are remounted and the hoses are secured with the clamps.

5. The electronic ballast is maintenance free. If the lamp stops working or does not start any more, although a new lamp is mounted, the ballast has to be changed. This has to be done by a specialist use original Aqua Medic parts, only.

7. Lamp replacement:

The lamp is especially stressed when switched on or off.

The lamp used in this device is a high pressure mercury lamp and hence it must be handled extremely carefully. Even a cold lamp can explode if handled in a wrong way.

Exchange of a lamp should be done only by experienced and advised personnel, observing especially the following.

 When handling the lamp always wear safety goggles and leather gloves, which will protect the arteries too.

 Storage and transport of the lamp should be done only in the original packaging, never leave the lamp unprotected.

Never bend the contacts and cables of the electrodes or electrode connectors.
Never put mechanical force to the lamp and its parts.

8. Guarantee:

Should any defect in material or workmanship be found within 2 year the day of sale against factory production faults.

the lamp and quartz not covered by the guarantee.

Under takes to repair or, at our option, replace the defective part free of charge

always provided.

The product has been installed correctly, is used for the purpose that was intended by us, is used in accordance With the operating instructions and is returned to us carriage paid. The warranty term is not applicable on the all Consumable products. Breakage of the lamp or the quartz tube are excluded as well Proof of Purchase is required by presentation of an original invoice or receipt indicating the dealer's name, the Model number and date of purchase, or a Guarantee Card if appropriate. This warranty may not apply if any Model or production number has been altered, deleted or removed, unauthorized persons or organizations have executed repairs, modifications or alterations, or damage is caused by accident, misuse or neglect.

We regret we are unable to accept any liability for any consequential loss.

Please note that the product is not defective under the terms of this warranty where the product, or any of its Component parts, was not originally designed and / or manufactured for the market in which it is used.

These statements do not affect your statutory rights as a customer.

If your product does not appear to be working correctly or appears to be defective please contact your dealer in the first instance.

Before calling your dealer please ensure you have read and understood the operating instructions. If you have any questions your dealer cannot answer please contact us?

Our policy is one of continual technical improvement and we reserve the right to

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modify and adjust the specification of our products

A lamp producing Ultraviolet (UV) radiation is emitted through clear, pre-filtered, particle free water. This UV light is extremely effective in killing and eliminating bacteria, yeast's, viruses, molds and other harmful organisms known to man. Used in industry and hospitals to treat water. Must be used in conjunction with sediment and carbon filters to create pure drinking water. If sub-micron particles remain in the water, the UV light may not come in contact with the organism as the organism is hiding behind the particle. Many times used as a post disinfecting method for residential water treatment. Also used in the Pharmaceutical Industry as the final stage of water purification.

Water contaminants dose ultraviolet remove?

There are no micro-organisms known to be resistant to UV, unlike chlorination. UV is known to be highly effective against bacteria, viruses, algae, molds and yeasts, and disease. In practice, bacteria and viruses are the cause of most major waterborne pathogenic diseases. Of these enteric viruses, hepatitis virus and Legion Ella pneumophila have been shown to survive for considerable periods in the presence of chlorine, but are readily eliminated by UV treatment. For most microorganisms, the removal efficiency of UV for microbiological contaminants such as bacteria and virus generally exceeds 99.99%. Specifically, the following are moved to an efficiency of greater than 99.99%: E-coli, Salmonella typhl (Typhoid fever), Salmonella entertains (Gastroenteritis), Vibrato cholera (Cholera), Mycobacterium Tuberculosis (Tuberculosis), Legion Ella

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pneumophila (Legionnaires' Disease), Influenza Virus, Polio virus, and Hepatitis A Virus (better than 90%). Countertop UV systems are generally not recommended for removing oocysts such as guardian and cryptosporidium unless equipped with a 0.5 micron carbon block pre-filter since the exposure time the contaminant has to the UV ray is not always long enough to provide an adequate UV dose for disinfection of these more complex organisms. Whole house UV systems like the Trojan UV Max on the other hand, are capable or killing waterborne oocysts.

Frequently asked questions about ultraviolet purification:

1. What is UV?

Ultraviolet (UV) light is at the invisible, violet end of the light spectrum. Even though we can't see UV light, we are exposed to UV rays from all light sources, including the sun.

2. How does ultraviolet light purify water?

UV-C rays penetrate the cells of harmful bacteria and viruses in our drinking water, destroying their ability to reproduce. Without this ability, these organisms die and no longer pose a health threat. It is a simple but very effective process, with the system destroying 99.99% of harmful microorganisms.

3. Why not use chlorine instead?

Chlorine changes the tastes and odor of water. Chlorinating also produces harmful by-products called Trihalomethanes (THMs) which are linked to

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incidence of cancer.

4. Does a UV system use a lot of energy?

No, the UV unit will use about the same amount of energy as a 60 watt light bulb. It is a cost effective, natural way to increase water quality.

5. Why do UV purifiers require sediment pre-filtration?

UV systems require pre-filtration to maintain effectiveness as sediment and other

contaminants in the water can create a "shadow" which prevents the UV rays from reaching and disinfecting the harmful microorganisms.

6. How often does the UV light bulb (lamp) need to be replaced?

It is essential that you change your UV lamp annually. The ability of the lamp to emit UV light decreases over one year in operation. Remember - UV light is invisible! Even though the lamp is still glowing after one year, there might not be enough UV light reaching your water to be effective.

7. How often do your need to replace the sleeve?

The sleeve doesn't need to be replaced unless it is broken, but it will need to be cleaned several times a year in order to keep the bulb effective in delivering high water quality.

OUR UV PACKING:







