

## Wave Power Plus UV Sterilizer

<u>Item#</u>	<u>Model#</u>	<u>Lamps</u>	<u>Watts</u>	<u>Max UV Flow Rate</u> <u>(GPM)</u>	<u>Max Pond Volume</u> <u>(4 hr. turnover)</u>
3309-B	VS-20X3	2	172 HO (high output)	118	28,320 gals
3310-B	UVS-40X3	2	238 HO	172	41,280 gals

Wave Power Plus ultraviolet high output sterilizers are for pond applications where clear water is a necessity. The 6" diameter body insures efficient sterilization and are made of stainless steel. They are completely watertight and weatherproof, corrosion resistant, and safe for indoor and outdoor use. They are not submersible. The light can be monitored through the clear union at the output valve. The T6 style high output quartz lamps average 9,000 hours before reaching the end of their useful lamp life (60% efficiency), and produce 70-80,000 microwatts of bacteria-killing power. Watertight lamp removal ports makes for safe operation and easy lamp installation and replacement. All Wave Power Plus sterilizers include 2 quartz sleeves, 2 bulbs, a ballast assembly, a UV resistant housing and a ten foot power cord. The units have ballasts mounted in a NEMA4X enclosure. Standard units are 120V/60Hz (230V 50/60Hz available by special order). Ten year limited warranty on the body does not include lamps or quartz sleeves. (Lamps and quartz sleeves are not warrantied: product is tested before packaging). Ballasts have a five year limited warranty.

Use the included glove to handle the quartz lamp tube so as to not to transfer any oil from your hand onto the surface. Contamination of the tube can degrade lamp performance or cause premature failure of the lamp.



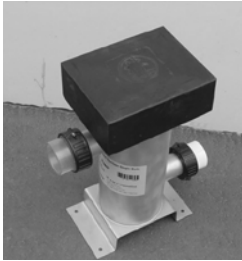
When placing or mounting the sterilizer unit it must be positioned vertically with the inlet tube at the bottom in order to maintain a full flow of water through the unit. Do not place the unit on its side, lying down horizontally, or with the inlet and outlet tubes horizontal as this will not maintain at full flow of water through the unit, causing it to overheat. When placed on end vertically do not orient it with the inlet tube at the top as this will not maintain a full flow of water through the unit.



The quartz sleeve is already installed inside the sterilizer unit. These instructions are to help you install the quartz lamp into the quartz sleeve and to attach the ballast to the quartz lamp. **BEFORE INSTALLING THE LAMP, HOWEVER, CONNECT THE STERILIZER TO YOUR SYSTEM TO MAKE SURE IT IS WATERTIGHT.** There should be no water seepage around the clear thermoplastic coupling or at any other connections in the sterilizer housing. Run your system for approximately ten minutes to make sure it does not leak before installing the lamp. If necessary, you can tighten the clear thermoplastic coupling by turning it slightly clockwise to seal. Once you have



determined that your system and the sterilizer are set up correctly and it is watertight you can install the lamp.



Before inserting the lamp into the quartz sleeve, drop the blue ball cushion into the quartz sleeve. This cushion will help prevent the lamp from hitting the quartz sleeve, causing damage or breakage. Care must be taken to hold the lamp straight, slowly and accurately slide it through the clear thermoplastic coupling into the quartz sleeve so as not to break either the glass sleeve or lamp. Once the lamp is fully inside the sleeve hold it by the metal end with the tip just outside of the opening of the clear female coupling. Brace your finger against the clear female coupling, while holding the metal tip, in order to steady the lamp while you attach the square four pin connector with your other hand. Carefully push the pin so that it is seated flush against the end of the metal lamp tip. Push the lamp fully into the unit until it touches the opposite end. This is to make sure it is fully past the clear female coupling so it does not overheat and prematurely burn out. Next you need to seal the opening.

Do not turn the clear thermoplastic coupling. When replacing a lamp please follow these directions in reverse precisely. If your lamp is burnt out, pull the metal tip of the lamp out through the opening of the clear females coupling, and brace your finger that is holding the metal tip against the clear female coupling in order to steady the lamp while you unplug the square four pin connector with your other hand. Carefully slide the lamp slowly out of the unit. Failure to proceed in this order will cause damage to the wires of the ballast voiding your warranty. PLEASE BE SURE TO ALWAYS USE THE INCLUDED GLOVE WHEN HANDLING THE QUARTZ LAMP so as to avoid contamination of the tube.

In the event that you do break the quartz sleeve or the quartz lamp our patented system will make it easy to replace. Carefully remove the lamp following the directions above, paying special attention to loose glass pieces and sharp broken edges. Next, unscrew the opposite end of the sterilizer unit to remove the rest of any broken glass pieces paying special attention to loose glass pieces and sharp broken edges. We sell both replacement sleeves and lamps to fit your unit. If you are replacing the quartz sleeve remove the clear silicone seal off of the top of the broken quartz sleeve and replace it onto the new sleeve. You will need to unscrew and remove the clear female coupling in order to insert the new quartz sleeve through the black two end male coupling. Do not turn the black two end male coupling as it is already installed watertight onto the unit. Next carefully insert the new quartz sleeve straight into the sterilizer unit and feel to make sure it is indexed correctly; push it completely into the unit. Screw the clear plastic female coupling onto the black two end male coupling and carefully hand tighten. DO NOT USE TEFLON TAPE ON THE THREADS OF THE BLACK TWO END MALE COUPLING WHEN ATTACHING THE CLEAR PLASTIC FEMALE COUPLING ONTO IT. This will cause the connection to become too thick creating pressure which will immediately crack the quartz sleeve. Next run your system for approximately ten minutes to make sure it is watertight and there are no leaks. When you are certain there are no leaks you can proceed as above to install the lamp according to the directions above.

If you should have any questions when installing your lamp into the sterilizer unit please call us at 951-360-7878 and we would be happy to help. Thank you.