

LIFEGARD AQUATICS R450108

Lifeguard Aquatics Pro-MAX 90W 3-inch Body UV Sterilizer Instruction Manual

Model: R450108

1. INTRODUCTION

The Lifeguard Aquatics Pro-MAX 90W 3-inch Body UV Sterilizer is designed to provide efficient water clarification and sterilization for aquariums and ponds. This unit utilizes ultraviolet light to control harmful microorganisms, algae, and pathogens, contributing to a healthier aquatic environment. Its patent-pending flow-through design with less restrictive angled inlet and outlet ports allows for versatile installation in various setups.

This manual provides essential information for the safe and effective installation, operation, and maintenance of your UV sterilizer.

2. SAFETY INFORMATION

Please read and understand all safety instructions before operating this product. Failure to follow these instructions may result in electric shock, fire, or serious injury.

- **Electrical Safety:** Always disconnect power before performing any maintenance or installation. Ensure the unit is connected to a properly grounded outlet. Do not operate with a damaged cord or plug.
- **UV Radiation:** Never look directly at the illuminated UV bulb. Exposure to UV-C light can cause severe eye and skin damage. The unit is designed to contain UV light safely when assembled correctly.
- **Water Safety:** This unit is designed for aquatic use. Ensure all electrical connections are kept dry. Do not submerge the ballast or electrical components in water.
- **Pressure:** Do not exceed the maximum operating pressure of 30 PSI.
- **Children:** Keep this product out of reach of children.

3. PACKAGE CONTENTS

Verify that all components are present before beginning installation:

- Lifeguard Aquatics Pro-MAX UV Sterilizer Unit (3-inch body)
- High Output UV Bulb (90W)

- Internal Protective Sleeve
- UL Listed Ballast with bulb countdown feature
- Mounting brackets and hardware

4. SETUP AND INSTALLATION

The Pro-MAX UV Sterilizer's unique design allows for flexible installation in various orientations to fit tight spaces. It features less restrictive angled inlet and outlet ports for easier plumbing integration.

4.1. Mounting the Unit

1. Select a suitable location near your aquarium or pond filtration system, ensuring it is protected from direct weather exposure if used outdoors.
2. Use the provided mounting brackets and hardware to securely fasten the UV sterilizer to a stable surface.

4.2. Plumbing Connections

Connect the UV sterilizer into your existing filtration system's plumbing. Water should flow through the unit after mechanical filtration to ensure optimal UV exposure.

- The angled inlet and outlet ports are designed for easy connection. Use appropriate plumbing fittings (not included) to connect the unit to your pump or filter return line.
- Ensure all connections are watertight to prevent leaks.
- The maximum flow rate for this unit is 4600 GPH. Ensure your pump's flow rate is within this limit for effective sterilization.

4.3. Electrical Connection

1. Carefully insert the UV bulb into the internal protective sleeve and then into the sterilizer unit, following the instructions provided with the bulb.
2. Connect the UL listed ballast to the UV sterilizer unit and then plug the ballast into a grounded electrical outlet.



Figure 1: The Lifeguard Aquatics Pro-MAX 90W UV Sterilizer, showing its black body, angled inlet/outlet ports, and the visible blue glow of the UV lamp indicating operation. The unit is designed for efficient water flow and sterilization.

5. OPERATING INSTRUCTIONS

Once properly installed and connected, the Lifeguard Aquatics Pro-MAX UV Sterilizer operates continuously to purify your water.

- **Power On:** After connecting the ballast to power, the UV bulb will illuminate, and the ballast's digital display will begin counting down the days until the next recommended bulb replacement.
- **Continuous Operation:** For optimal results, the UV sterilizer should operate 24 hours a day, 7 days a week.
- **Monitoring:** Periodically check the ballast display for the remaining bulb life.

6. MAINTENANCE

Regular maintenance ensures the longevity and effectiveness of your UV sterilizer.

6.1. UV Bulb Replacement

The UV bulb has a finite lifespan, typically around 9,000 hours (approximately one year of continuous use), after which its UV-C output diminishes. The UL listed ballast will count down the days until replacement is needed.

1. **Disconnect Power:** Always unplug the unit from the electrical outlet before attempting to replace the bulb.
2. **Allow Cooling:** Allow the unit to cool down for a few minutes before handling.

3. **Access Bulb:** Follow the specific instructions provided with your replacement bulb for safe removal of the old bulb and installation of the new one. This typically involves unscrewing an end cap and carefully sliding out the bulb and quartz sleeve assembly.
4. **Clean Quartz Sleeve:** While the unit is disassembled, gently clean the quartz sleeve with a soft cloth and a mild acid solution (like vinegar) to remove any mineral deposits or algae that may impede UV light transmission. Rinse thoroughly.
5. **Reassemble:** Carefully reassemble the unit, ensuring all seals are properly seated to prevent leaks.
6. **Reset Ballast:** After replacing the bulb, consult the ballast instructions to reset the bulb life countdown.

6.2. Cleaning the Unit

Periodically inspect the exterior of the unit for any debris or buildup. Clean with a damp cloth as needed. Ensure no water enters the electrical components.

7. TROUBLESHOOTING

If you encounter issues with your UV sterilizer, refer to the following common troubleshooting steps:

- **UV Bulb Not Illuminating:**
 - Check if the unit is properly plugged into a working electrical outlet.
 - Verify the ballast is securely connected to the UV sterilizer.
 - The bulb may have reached the end of its lifespan. Check the ballast countdown and replace the bulb if necessary.
 - Inspect the bulb for any visible damage.
- **Reduced Water Flow:**
 - Check for blockages in the plumbing leading to or from the UV sterilizer.
 - Ensure your pump is operating correctly and providing adequate flow.
 - The internal quartz sleeve may be dirty, restricting water flow. Clean the sleeve as described in the maintenance section.
- **Water Leakage:**
 - Immediately disconnect power.
 - Check all plumbing connections for tightness.
 - Inspect O-rings and seals for proper seating or damage. Replace if necessary.

If problems persist, contact Lifegard Aquatics customer support.

8. SPECIFICATIONS

Feature	Detail
Model Number	R450108
Power Output	90 Watts
Body Diameter	3 inches
Maximum Operating Pressure	30 PSI
Maximum Flow Rate	4600 GPH

Maximum Aquarium Size	650 Gallons
Maximum Pond Size	11000 Gallons
Product Dimensions	82.55 x 79.25 x 11.46 cm
Product Weight	7.26 kg
Manufacturer	Lifeguard Aquatics

9. WARRANTY AND SUPPORT

For warranty information or technical support, please refer to the documentation included with your purchase or visit the official Lifeguard Aquatics website. Keep your proof of purchase for warranty claims.

Manufacturer: Lifeguard Aquatics
Place of Business: CERRITOS, CA, 90703 US