

Blue Lagoon TA220

Blue Lagoon Tech UV-C 16 Watt Water Purifier Instruction Manual

1. PRODUCT OVERVIEW

The Blue Lagoon Tech UV-C 16 Watt unit is designed to provide clean, fresh, and clear water for your pool in an efficient and environmentally friendly manner. UV-C radiation effectively neutralizes bacteria, viruses, and other primitive organisms, preventing their reproduction. This device can significantly reduce chlorine concentrations, typically by 50% to 80%. Its 316L stainless steel interior reflects UV-C radiation, enhancing efficiency by up to 35%.

The unit features a special T5 UV-C lamp with a unique lamp socket, ensuring effective and safe water disinfection while maintaining excellent water quality.



Figure 1: Blue Lagoon Tech UV-C 16 Watt Water Purifier, shown in a vertical orientation with blue PVC connections and a stainless steel core.

Key Features:

- Dutch-engineered product.
- Up to 35% increased UV-C energy output due to internal reflection.
- Integrated transformer for a stable power supply.
- Designed for easy installation and maintenance.
- Durable 316L stainless steel housing.

2. SAFETY INFORMATION

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

Warnings:

- **UV-C Radiation Hazard:** Never look directly at the UV-C lamp when it is operating. UV-C radiation is harmful to eyes and skin. Ensure the unit is completely powered off before opening or performing any service.
- **Electrical Safety:** Always disconnect the power supply before performing any installation, maintenance, or troubleshooting. Ensure the unit is properly grounded. Do not operate with a damaged power cord or plug.
- **Water and Electricity:** This device operates with water and electricity. Ensure all connections are watertight and installed according to local electrical codes.
- **Damage Inspection:** Do not operate the unit if the quartz sleeve is broken or damaged. A damaged quartz sleeve can expose the UV-C lamp to water, leading to electrical hazards and unit failure.
- **Children:** Keep this device and its components out of reach of children.
- **Installation Environment:** Install the unit in a dry, well-ventilated area, protected from direct sunlight, freezing temperatures, and excessive heat.

3. PACKAGE CONTENTS

Verify that all components are present and undamaged upon unpacking:

- Blue Lagoon Tech UV-C Unit (16 Watt)
- UV-C Lamp (T5, 16 Watt)
- Quartz Sleeve
- Lamp Socket / Integrated Transformer
- Mounting Brackets
- Connection Adapters (if included)
- Instruction Manual (this document)

4. SETUP AND INSTALLATION

The Blue Lagoon Tech UV-C unit is designed for straightforward installation. Follow these steps carefully:

1. **Unpack and Inspect:** Carefully remove all components from the packaging. Inspect the unit, UV-C lamp, and quartz sleeve for any signs of damage. Do not proceed with installation if any part is damaged.
2. **Choose Location:** Select a suitable location for the UV-C unit. It should be installed after the pool filter and before any heating elements or chemical dosing systems. Ensure there is sufficient space for future maintenance, especially for lamp replacement. The unit should be protected from direct sunlight and

freezing temperatures.

3. **Mount the Unit:** Securely mount the UV-C unit using the provided mounting brackets. Ensure it is level and stable.
4. **Connect Water Lines:** Connect the water inlet and outlet of the UV-C unit to your pool's circulation system. Use appropriate plumbing fittings and ensure all connections are watertight. The maximum operating pressure is 2 bar.
5. **Install Quartz Sleeve and Lamp:**
 - Carefully insert the quartz sleeve into the unit. Ensure it is seated correctly and the O-rings are in place to prevent leaks.
 - Gently insert the UV-C lamp into the quartz sleeve. Handle the lamp by its ceramic ends to avoid touching the glass, as oils from your skin can reduce lamp life.
 - Connect the lamp socket/transformer to the UV-C lamp. Ensure a secure connection.
6. **Power Connection:** Once all water connections are secure and leak-free, connect the power cord to a properly grounded electrical outlet.
7. **Leak Check:** Before powering on the UV-C lamp, turn on your pool pump and check for any leaks around the unit and its connections. Address any leaks immediately.

Desinfiziert Wasser auf effiziente und sichere Weise



Figure 2: Blue Lagoon Tech UV-C unit shown horizontally, illustrating its compact design for integration into a pool's filtration system.

5. OPERATION

After successful installation and leak checking, the Blue Lagoon Tech UV-C unit is ready for operation. When the pool pump is running and water flows through the unit, the UV-C lamp will activate, emitting germicidal UV-

C light. This light disinfects the water as it passes through the unit.

The unit operates continuously with your pool's circulation system. There are no user-adjustable settings for the UV-C disinfection process itself. Ensure your pool's filtration system is operating correctly to maximize the effectiveness of the UV-C unit.

6. MAINTENANCE

Regular maintenance ensures optimal performance and longevity of your Blue Lagoon Tech UV-C unit. Always disconnect power before performing any maintenance.

6.1. UV-C Lamp Replacement

The effectiveness of the UV-C lamp diminishes over time. It is recommended to replace the UV-C lamp annually (or as specified by the manufacturer) to maintain optimal disinfection performance.

1. **Disconnect Power:** Turn off the power supply to the UV-C unit at the main breaker.
2. **Allow Cooling:** Allow the lamp to cool down for at least 10-15 minutes before handling.
3. **Remove End Cap:** Carefully unscrew and remove the end cap that houses the lamp socket.
4. **Disconnect Lamp:** Gently pull the lamp socket away from the UV-C lamp.
5. **Remove Old Lamp:** Carefully slide the old UV-C lamp out of the quartz sleeve. Dispose of the old lamp according to local regulations for fluorescent bulbs.
6. **Insert New Lamp:** Gently slide the new UV-C lamp into the quartz sleeve. Handle the new lamp by its ceramic ends.
7. **Reconnect Lamp:** Reconnect the lamp socket to the new UV-C lamp, ensuring a firm connection.
8. **Reassemble:** Screw the end cap back onto the unit, ensuring it is hand-tight to prevent water ingress.
9. **Restore Power:** Restore power to the unit. Verify the lamp is operating (a visual indicator may be present, or observe the water clarity over time).

6.2. Quartz Sleeve Cleaning

Mineral deposits and debris can accumulate on the quartz sleeve, reducing the transmission of UV-C light and decreasing the unit's effectiveness. Clean the quartz sleeve periodically, or whenever you replace the lamp.

1. **Disconnect Power and Drain:** Turn off the power supply and, if possible, isolate and drain the water from the UV-C unit to prevent spillage.
2. **Remove Lamp:** Follow steps 1-5 from the "UV-C Lamp Replacement" section to remove the UV-C lamp.
3. **Remove Quartz Sleeve:** Carefully remove the retaining nut or collar that holds the quartz sleeve in place. Gently slide the quartz sleeve out of the unit.
4. **Clean Sleeve:** Clean the quartz sleeve using a soft cloth and a mild acid solution, such as vinegar or a diluted descaling agent. Gently wipe away any deposits. Rinse thoroughly with clean water.
5. **Inspect O-rings:** Inspect the O-rings for any signs of wear or damage. Replace if necessary to ensure a watertight seal.
6. **Reassemble:** Carefully reinsert the clean quartz sleeve into the unit, ensuring O-rings are properly seated. Secure it with the retaining nut/collar.
7. **Reinstall Lamp:** Follow steps 6-9 from the "UV-C Lamp Replacement" section to reinstall the lamp and restore power.

Sorgt für frisches, sauberes und klares Wasser



Figure 3: Illustrates the process of inserting or removing a component, likely the UV-C lamp or quartz sleeve, during maintenance.

7. TROUBLESHOOTING

This section provides solutions to common issues you might encounter with your Blue Lagoon Tech UV-C unit.

Problem	Possible Cause	Solution
No UV-C light visible / Unit not operating	<ul style="list-style-type: none">• No power supply• Faulty UV-C lamp• Faulty transformer/ballast	<ul style="list-style-type: none">• Check power connection and circuit breaker.• Replace UV-C lamp (see Section 6.1).• Contact qualified technician for transformer replacement.

Problem	Possible Cause	Solution
Water not clearing / Reduced effectiveness	<ul style="list-style-type: none"> • Old UV-C lamp • Dirty quartz sleeve • Insufficient water flow • Poor overall pool filtration/chemistry 	<ul style="list-style-type: none"> • Replace UV-C lamp (see Section 6.1). • Clean quartz sleeve (see Section 6.2). • Check pool pump and filter for proper operation. • Ensure proper pool chemistry (pH, alkalinity, etc.).
Water leaks from unit	<ul style="list-style-type: none"> • Loose connections • Damaged O-rings • Cracked housing/quartz sleeve 	<ul style="list-style-type: none"> • Tighten all plumbing connections. • Inspect and replace O-rings if worn or damaged. • Inspect housing and quartz sleeve for cracks. Replace damaged parts.

8. SPECIFICATIONS

Model Number	TA220
UV-C Lamp Power	16 Watts
UV-C Lamp Type	T5
Maximum Pool Capacity	15,000 Liters
Recommended Flow Rate	5 m³/hour
Maximum Flow Rate	23 m³/hour
Maximum Pressure	2 bar
Product Dimensions (L x W x H)	56 x 15 x 9.5 cm
Product Weight	3.24 kg
Housing Material	316L Stainless Steel
Manufacturer	Sibo B.V.
Country of Origin	Netherlands

9. WARRANTY AND SUPPORT

Information regarding specific warranty terms and customer support contact details is not available in the provided product data. Please refer to the product packaging or the manufacturer's official website for warranty registration and support inquiries.

