

LSE Lighting TRTD10784

LSE Lighting #20 UV Lamp Instruction Manual

Compatible with Pura UV20, UV20-1, UV20-2, UV20-3 Water Purification Systems

1. INTRODUCTION

This manual provides essential information for the safe and effective use of your LSE Lighting #20 UV Lamp. This 22W T5 quartz bulb is designed as a replacement for Pura UV20, UV20-1, UV20-2, and UV20-3 water purification systems. Please read these instructions thoroughly before installation and operation to ensure proper function and safety.

2. SAFETY INFORMATION

WARNING: Ultraviolet (UV) light can cause severe eye and skin damage. Never look directly at an illuminated UV lamp. Always wear appropriate UV-protective eyewear and skin protection during installation, maintenance, or when the lamp is exposed.

- Always disconnect power to the UV system before attempting any installation, removal, or maintenance.
- Do not touch the quartz glass bulb with bare hands. Oils from your skin can create hot spots on the bulb, reducing its lifespan and efficiency. Use clean gloves or a soft cloth when handling.
- Ensure the UV system is properly grounded.
- Keep the lamp away from children and pets.
- Dispose of old lamps according to local regulations for hazardous waste, as they contain mercury.

SURFACE UV LAMPS



Image: EPA Establishment Registered Manufacturer logo, indicating compliance with environmental standards.

3. PRODUCT OVERVIEW

The LSE Lighting #20 UV Lamp is a high-quality, 22-watt germicidal ultraviolet bulb designed for water purification. It features a 4-pin base (all pins on one end) for easy and secure installation. This lamp emits UV-C light, which is effective in neutralizing microorganisms in water, contributing to a safer water supply.



Image: The LSE Lighting #20 UV Lamp, a 22W T5 quartz bulb with a 4-pin base.



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Image: A close-up view of the 4-pin base, showing the electrical connections.



Image: An illustration of the UV lamp emitting light while submerged in water, demonstrating its function in water purification.

4. SPECIFICATIONS

Feature	Detail
Model Number	TRTD10784
Wattage	22 Watts
Bulb Type	T5 Quartz Germicidal UV Lamp
Base Type	4-Pin (all pins on one end)
Length	463mm (approx. 18.2 inches)
Average Life	12,000 Hours
Compatibility	Pura UV20, UV20-1, UV20-2, UV20-3

Feature	Detail
Material	Glass
Indoor/Outdoor Usage	Indoor

5. SETUP AND INSTALLATION

Follow these steps carefully to replace your UV lamp. Refer to your Pura UV system's original manual for specific instructions related to your unit.

1. **Power Disconnection:** Locate the power outlet for your UV water purification system and unplug it. Ensure the system is completely de-energized before proceeding.
2. **System Cool-down:** Allow the system to cool down for at least 10 minutes if it has been recently operating.
3. **Access the UV Chamber:** Depending on your Pura UV model, you may need to remove a protective cover or unscrew a housing to access the UV lamp and quartz sleeve.
4. **Remove Old Lamp:** Carefully disconnect the lamp connector from the old UV lamp. Grasp the ceramic end of the lamp (not the glass) and gently pull it straight out of the quartz sleeve. If the lamp is stuck, twist it slightly while pulling.
5. **Inspect Quartz Sleeve:** While the lamp is out, inspect the quartz sleeve for any cracks, scratches, or mineral deposits. Clean the sleeve with a soft cloth and a mild acid solution (like vinegar) if deposits are present, then rinse thoroughly with clean water. Replace the sleeve if it is damaged.
6. **Install New Lamp:** Wearing clean gloves or using a soft cloth, carefully insert the new LSE Lighting #20 UV lamp into the quartz sleeve. Ensure the 4-pin base aligns correctly with the lamp connector. Push firmly but gently until the lamp is fully seated.
7. **Connect Power:** Reconnect the lamp connector to the new UV lamp. Ensure a secure connection.
8. **Reassemble System:** Replace any covers or housings that were removed.
9. **Power On:** Plug the UV system back into the power outlet. The system should now operate, and the indicator light (if present) should show the lamp is functioning.

6. OPERATION

Once installed, the LSE Lighting #20 UV Lamp operates continuously when the UV system is powered on. The lamp emits UV-C radiation that passes through the quartz sleeve and into the water flowing through the chamber. This radiation inactivates bacteria, viruses, and other microorganisms, providing disinfected water.

- Verify that the system's indicator light (if applicable) confirms the lamp is operating.
- The UV lamp does not alter the taste, odor, or chemical composition of the water.

7. MAINTENANCE

Regular maintenance ensures the continued effectiveness of your UV water purification system.

- **Lamp Replacement:** The LSE Lighting #20 UV Lamp has an average effective life of 12,000 hours (approximately 1 year of continuous use). For optimal performance and water safety, it is recommended to replace the UV lamp annually, even if it appears to be working. UV-C output diminishes over time, reducing

its germicidal effectiveness.

- **Quartz Sleeve Cleaning:** The quartz sleeve should be cleaned periodically (e.g., every 6-12 months) to remove any mineral deposits or fouling that can block UV light transmission. Refer to the 'Setup and Installation' section for cleaning instructions.
- **System Inspection:** Periodically check the entire UV system for leaks, corrosion, or any signs of damage.

8. TROUBLESHOOTING

If your LSE Lighting #20 UV Lamp or system is not functioning as expected, consider the following common issues:

- **Lamp Not Lighting:**
 - Check if the system is plugged into a live power outlet.
 - Ensure the lamp connector is securely attached to the lamp pins.
 - Verify that the lamp is fully seated in the quartz sleeve.
 - The lamp may have reached the end of its operational life and requires replacement.
 - Inspect the ballast (power supply) for any indicator lights or signs of malfunction. If the ballast is faulty, it may need replacement.
- **Reduced Water Quality (despite lamp being on):**
 - The quartz sleeve may be dirty, blocking UV light. Clean the quartz sleeve as described in the 'Maintenance' section.
 - The lamp may be past its effective lifespan (12,000 hours) and needs replacement, even if it still glows.
 - Water flow rate might be too high for effective disinfection. Consult your UV system's manual for recommended flow rates.
- **Water Leakage:**
 - Turn off the water supply and disconnect power immediately.
 - Check all connections, O-rings, and the quartz sleeve for proper seating and damage. Replace any damaged components.

If troubleshooting steps do not resolve the issue, contact LSE Lighting customer support or a qualified technician.

9. WARRANTY AND SUPPORT

LSE Lighting products are manufactured in EPA Registered Establishment No. 96823-PA-1 and engineered in the USA, ensuring quality and reliability. While specific warranty details for this replacement bulb are not provided in the product information, LSE Lighting stands by the quality of its products.

For technical assistance, product inquiries, or support, please visit the official LSE Lighting website or contact their customer service department. When contacting support, please have your product model number (TRTD10784) and purchase information available.

LSE Lighting Contact Information:

Website: [Visit the LSE Lighting Store on Amazon](#) (for general brand information)

Refer to your purchase documentation for direct manufacturer contact details.

