

# Ultravation®

Professional Indoor Air Quality Products

## UVS & UVE REMOTE LAMP AIR DISINFECTION SYSTEMS OWNERS GUIDE



**Models: UVS- 1200T, 1900T, 1202T, 1902T**  
**Models: UVE- 1200T, 1900T, 1202T, 1902T**

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**LEAVE FOR HOMEOWNER**

### Shipping and Packaging List:

- UVS or UVE Electrical Housing
- 6- 3/4 inch 5/16 self tapping sheet metal screws
- Warning Label
- Residential Warranty Card

#### UVS- 1200T, 1202T, 1900T, 1902T

- \*\*1200T and 1900T Series- 1 12" or 17" T3 Lamp
- \*\*1202T and 1902T Series- 2 12" or 17" T3 Lamp
- \*8 or 12 T3 Lamp mounting plate mounting screws
- \*2 or 4 T3 Lamp mounting screws
- \*1 or 2 T3 Lamp mounting plate

#### UVE- 1200T, 1202T, 1900T, 1902T

- \*\*1200T and 1900T Series- One 12" or 17" T3 Lamp
- \*\*1202T and 1902T Series- Two 12" or 17" T3 Lamp
- \*1 or 2 T3 Lamp mounting plate w/ mounting Hardware

#### UVE- 1224T, 12242T, 1924T, 19242T

- \*\*1224T and 1924T Series- One 12" or 17" T3 Lamp
- \*\*12242T and 19242T Series- Two 12" or 17" T3 Lamp
- \*1 or 2 T3 Lamp mounting plate w/ mounting Hardware
- \*1 or 2 T3 Lamp mounting bracket assembly

\* Number depends on 1 or 2 T3 Lamps

\*\* T3 Lamp gasket included

### Safety Precautions:

It is recommended that this unit be installed and maintained by a trained technician:

**WARNING: UV Hazard. Always protect eyes from ultraviolet light. NEVER look at UV lamps in operation. Unplug or disconnect power before re-lamping or servicing.**

**WARNING: Severe eye damage or temporary blinding may occur.**

**WARNING: DO NOT operate outside of Air Handler. Mount lamp base to duct first.**

**WARNING: No openings in duct are allowed which would give direct line-of-sight to the UV light.**

In the event of accidental breakage or replacement of the ultraviolet lamp, please ensure that the lamp is disposed of in accordance with local and state environmental laws regarding fluorescent lamps containing mercury.

#### **Notice:**

All wiring inside of the duct or air handling system in direct line of site of the UV lamp must be shielded with aluminum foil tape or equivalent non-combustible material. When installing this unit, select a mounting location that prevents ultraviolet light exposure to plastic flexible duct liner or other plastic components with unknown resistance to ultraviolet light. Ultraviolet light may cause color shift or structural degradation of plastic HVAC components

## Installation Steps for Remote UVC Units:

1. Determine a suitable location to install unit housing. Mounting location should be of sufficient strength as to support the unit; otherwise reinforcement of the ductwork may be necessary. Lift into place against ductwork. Fasten unit in place with four or six self-tapping screws (supplied).

2. Select location for UV lamp module(s). Drill a 1" hole. Insert UV lamp module into hole. Attach to HVAC system with 2 self-drilling screws (provided).

3. Plug plastic lamp connector onto *installed* UV lamp module. Be sure the connector is pushed fully onto the lamp.

3a. If unit is a UVE Model, please skip step #4

**4. Before power is applied to the unit:** Complete step 1 if battery is not in holder.

1. Insert coin battery (+ side out, see drawing) into battery holder on circuit board, **LED** should turn **RED** for approx. 15 seconds.

\*If **LED** does not turn **RED** rotate battery around while in holder.

2. Depress black **RESET** button (hold down for 10 sec.) on circuit board, the **LED** should turn **GREEN** while the button is depressed.

3. Release the black **RESET** button and the **LED** should return to **RED**.

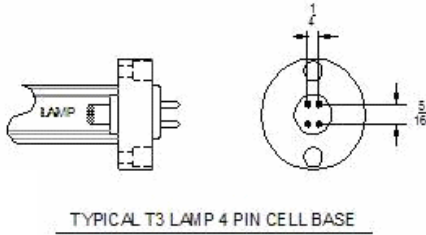
You now have set the internal clock to zero insuring an accurate measurement of lamp life operating hours.

**NOTE:** When replacing lamps after 9000 hours of operation (**shut off power to the unit**) only steps 2 & 3 will be required to set the clock back to 0 to begin counting the operating hours of the new lamp.

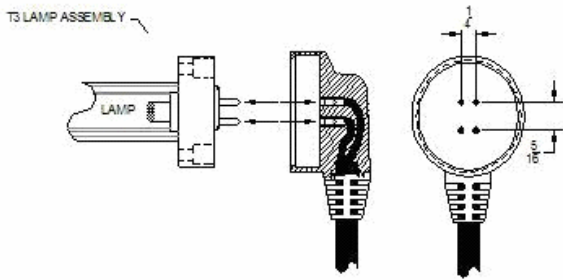
5. Plug in unit/ make electrical connections. **THIS SHOULD BE DONE IN ACCORDANCE WITH ALL STATE AND LOCAL ELECTRICAL AND BUILDING CODES.**

6. Turn on unit and inspect operation.

### Remote Lamp Installation

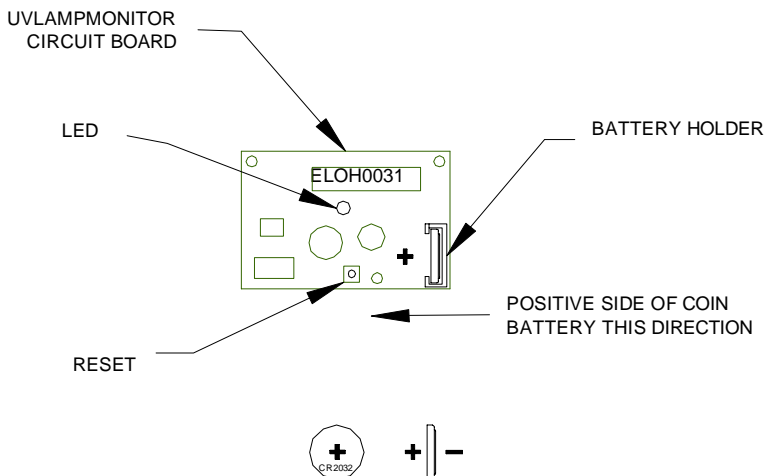


TYPICAL T3 LAMP 4 PIN CELL BASE



TYPICAL T3 LAMP 4 PIN CONNECTOR BASE

### UVS Battery Location

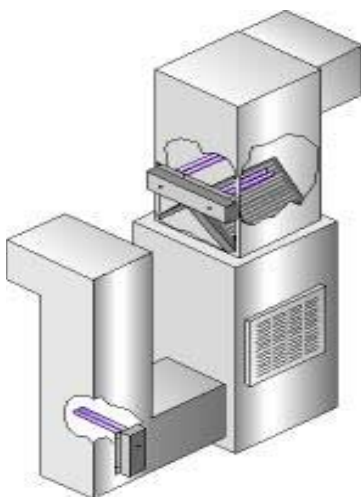


## Maintenance:

Maintenance typically consists of an annual replacement of the ultraviolet lamps.

UV lamps undergo a photochemical process during operation. This slowly reduces the amount of UV light generated to disinfect against airborne pathogens.

When installing new lamps, ensure that the lamp glass is free from any fingerprints or debris, as this may alter the path of the UV energy. Use rubbing alcohol and a dry cloth to remove any surface contaminants.



### UV Lamp Monitor: (UVS SERIES ONLY)

LED Color	Audible Visual Alarm	Unit Status
Green	No audible	OK
Solid Red	No Audible	replace lamp within 30 days
Flashing Red (Every 5 seconds)	Beep every 3 Minutes	Lamp has exceeded 1 yr. of operation, replace lamps and <b>reset</b>
Pulsing Red (Every 1 second)	Beep every 1 second	UV lamp(s) are not lit (verify if possible)

Please contact your local dealer or Ultravation directly for replacement lamps and batteries. There are NO user serviceable parts inside. Refer servicing to qualified service personnel.

## Troubleshooting:

The Ultravation air disinfection equipment is designed to provide many years of trouble free operation. In the unlikely event of a problem, please contact your local dealer or Ultravation directly. Before calling for service, you should have your Model No; Serial No; Manufacturing Date;

**If you are troubleshooting the unit, check the following: It is recommended that this unit be installed and maintained by a trained technician. Never perform maintenance on the UV unit without disconnecting power.**

Verify the unit has power (120-277 volt)

Power switch is in the ON position

Safety interlock switch is depressed by the cover

Lamps are securely plugged into their sockets, no loose wires.

The electronic circuit of a 2-lamp system only operates when both lamps are operating.

Verify fuses are not blown, visually inspect or perform a continuity test of the fuse.

Verify what signal if any the UV Lamp Monitor LED is emitting. (See below).

Check Battery Voltage, should read about 2.8 -3.0 V (UVS only)

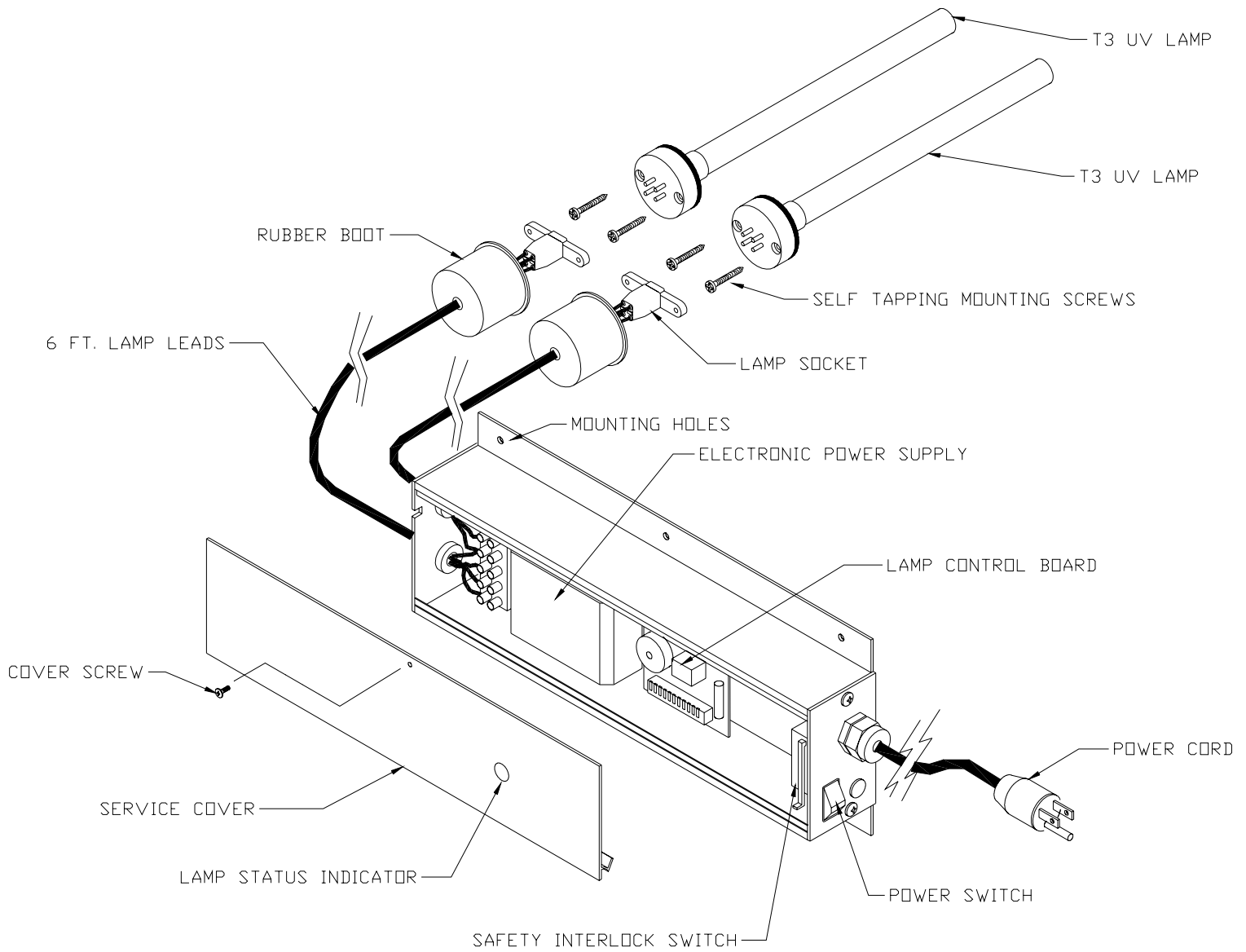
DC lower voltages can cause erratic LED readings

Verify if in fact the UV lamps are on or off. **Do not look at the UV light without proper eye protection.**

If possible try new lamps in Unit to see if they light.

**NOTE:** If one lamp does not light in a 2 lamp system neither lamp will light.

PART DESCRIPTIONS:



## Power Consumption and Replacement Part Numbers:

Model	Number of Lamps	Power Consumption	Lamp Replacement Part #
UVE-1200	1-12 Inch	19 Watts	AS-IH-1001
UVE-1202	2-12 Inch	38 Watts	AS-IH-1001
UVE-1900	1-17 Inch	29 Watts	AS-IH-1003
UVE-1902	2-17 Inch	57 Watts	AS-IH-1003
UVS-1200	1-12 Inch	19 Watts	AS-IH-1001
UVS-1202	2-12 Inch	38 Watts	AS-IH-1001
UVS-1900	1-17 Inch	29 Watts	AS-IH-1003
UVS-1902	2-17 Inch	57 Watts	AS-IH-1003
UVE-1200T	1-12 Inch	19 Watts	AS-IH-1001
UVE-1202T	2-12 Inch	38 Watts	AS-IH-1001
UVE-1900T	1-17 Inch	29 Watts	AS-IH-1003
UVE-1902T	2-17 Inch	57 Watts	AS-IH-1003
UVS-1200T	1-12 Inch	19 Watts	AS-IH-1001
UVS-1202T	2-12 Inch	38 Watts	AS-IH-1001
UVS-1900T	1-17 Inch	29 Watts	AS-IH-1003
UVS-1902T	2-17 Inch	57 Watts	AS-IH-1003
UVE		5 Amp Fuse	EL-PP-0044
UVS		Battery	EL-PP-0030

## Warranty:

Ultravation warrants this product against any defects in material or workmanship for a period of 10 years after date of consumer purchase, with the exception of the Ultraviolet Lamp(s), which are warranted for a period of one year after date of consumer purchase.

This warranty does not include damage to the unit from accident, misuse or improper installation.

If this product should become defective during the warranty period, Ultravation will repair or elect to replace the product free of charge.

Ultravation will return repaired or replaced warranted products pre-paid, provided that the product was delivered pre-paid.

Ultravation shall have no responsibilities for charges incurred by the customer for installation or removal of warranted items.

Liability is limited only to the replacement or repair of this product

This warranty gives you specific legal rights, and you may also have other rights, which vary from state to state.

All returns must be accompanied by a return authorization number, which may be obtained by contacting Ultravation, Inc.

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