

UltraMAX[™] EZUV[™]

Signature Series

Homeowner / User Guide

SS-2412-EZ
SS-2419-EZ



Professional Indoor Air Quality Products

1-866-GO-UV-AIR (468-8247)
ultravation.com



DC-OH-0229A

Thank you for purchasing an Ultravation[®] Professional Indoor Air Quality Product UltraMAX[™] EZUV[™] Signature Series UV Air and Surface Disinfection for HVAC

Package Contents:

- Light Shield
- T3 Enhanced UVC Light
- ESP3 24VAC Power Supply with power switch and diagnostics
- Magnetic Mount
- 6 - 3/4 inch 5/16 self tapping sheet metal screws
- Warranty Card

UVLampMonitor Status



Your UltraMAX[™] EZUV[™] is equipped with an electronic power supply that monitors operation and protects the UV lamp filaments. It also monitors elapsed time and reminds after 18,000 hours of operation that lamps need to be replaced. Below is a chart that describes how to interpret the display.

LED	Audible Alarm	Unit Status
Blue	No Sound	Normal
Flashing Red	6 second beep	Replace Lamp(s)

To silence alarm, press reset for one second.

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 HVAC system 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 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 non UV-rated 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. If installing where UV light can directly contact fiberglass duct board, contact manufacturer of fiberglass product for advice on UV rating. If unknown, install metal sheathing or foil tape to completely protect fiberglass duct board from UV light exposure.



UL Listed. The *health* aspects associated with the use of this product and its ability to aid in disinfection of environmental air have not been investigated by UL.

Lamp Replacement and Reset Procedure

It is recommended that a certified technician perform these operations.

Note to technician: When replacing lamps, turn off power to the unit first. Then follow installation instructions for lamp replacement.

After the lamps are in place, the Service Indicator Light must be reset.

Steps for resetting the Service Indicator Light

1. Restore power to the EZUV Signature Series unit and turn it on.
2. Press down and hold the RESET button for 10 seconds. The LED will turn blue while button is depressed.
3. Release the RESET button.
4. The LED should remain blue after button is released.

REPLACEMENT PARTS AND ACCESSORIES

12" T3 UVC Lamp	AS-IH-1001
17" T3 UVC Lamp	AS-IH-1003
12" Light Shield with magnet	94-066-M
17" Light Shield with magnet	94-067-M
Optional PCO plate	94-004

Please contact your local dealer or use the Authorized Contractor Locator on Ultravation.com for replacement lamps and parts.

Troubleshooting

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 HVAC professional or Ultravation directly. Before calling for service, you should have the model number, serial number, and purchase date.

If you are troubleshooting the unit, please check the following:

- To save energy and maintain performance, the EZUV Signature Series automatically turns off if the lamp has not been changed after two years. If this is the case, replace the lamp and press the reset button on the side of the power supply.
- Verify that the UV lamp(s) is on or off—but never look at a UV lamp in operation! You can safely confirm operation by way of the UV viewport installed with the unit.
- Verify the unit has power. Check voltage requirement on power supply label and confirm proper power is supplied.
- Be sure lamps are securely plugged into their sockets, no loose wires, and in the correct orientation (see other side of this sheet).
- If possible install a new lamp to determine whether the problem is the lamp or the power supply.



Remember: DO NOT look at UV light without proper eye protection.

Lifetime Warranty

Ultravation[®] EZUV[™] Signature Series features Ultravation's lifetime warranty, 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, Ultravation will elect to repair or replace the product free of charge. Ultravation will return repaired or replaced warranted products pre-paid to the customer, 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.

Ultravation, Inc.

P.O. Box 165, 212 Ideal Way, Poultney, Vermont 05764
Phone: 1-866-GO-UV-AIR (468-8247) • Fax: 802-287-9203
www.ultravation.com • info@ultravation.com

Copyright © 2008-2013 Ultravation Inc.



Professional Indoor Air Quality Products

Ultravation.com

Installation and Maintenance

We recommend that this unit be installed and maintained by a trained HVAC professional technician.

Installation steps for external mounting of power supply:

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. Fasten the unit in place with two self-tapping screws (supplied).
2. Select location for UV lamp module. Drill a 1" hole. Install mounting plate over drilled hole with screws provided. Insert UV lamp into hole. Attach to mounting plate system with two self-tapping screws (supplied).
3. Attached the rubber lamp connector fully onto the installed UV lamp assembly. Be sure the four pinholes are orientated properly to the four matching pins on the lamp (see diagram at right).
4. Connect power wires to a dedicated minimum 40VA transformer or hardwire to appropriate voltage based on requirements listed on power supply label.

This should be done in accordance with all state and local electrical and building codes.

Notes: The UV lamp assembly can be removed independently, by removing the two screws in the lamp holder.

The rectangular pin pattern allows connection in two positions (see other side of this sheet).

A UV status viewport lens is supplied to verify lamp operation. Drill a 3/8" hole within a 3" radius around the lamp, and on the "lamp side" of the "V" in the light shield. Snap viewport into place.

Installation steps for internal mounting of power supply:

1. Mount power supply inside of the air handler but out of the air stream as much as possible. Place the power supply close to the control panel for ease of connecting to 24 VAC or appropriate voltage according to the power supply label.
2. To utilize the internal mounting bracket, first install the bracket inside the air handler in a location that will position the UV lamp such that it bathes the entire surface to be treated. Plug the lamp connector onto the lamp and snap into the bracket.
Note: The rectangular pin pattern can be mated in two positions only.
3. Connect power wires to a dedicated minimum 40VA transformer. **This must be done in accordance with all state and local electrical and building codes.**

Maintenance

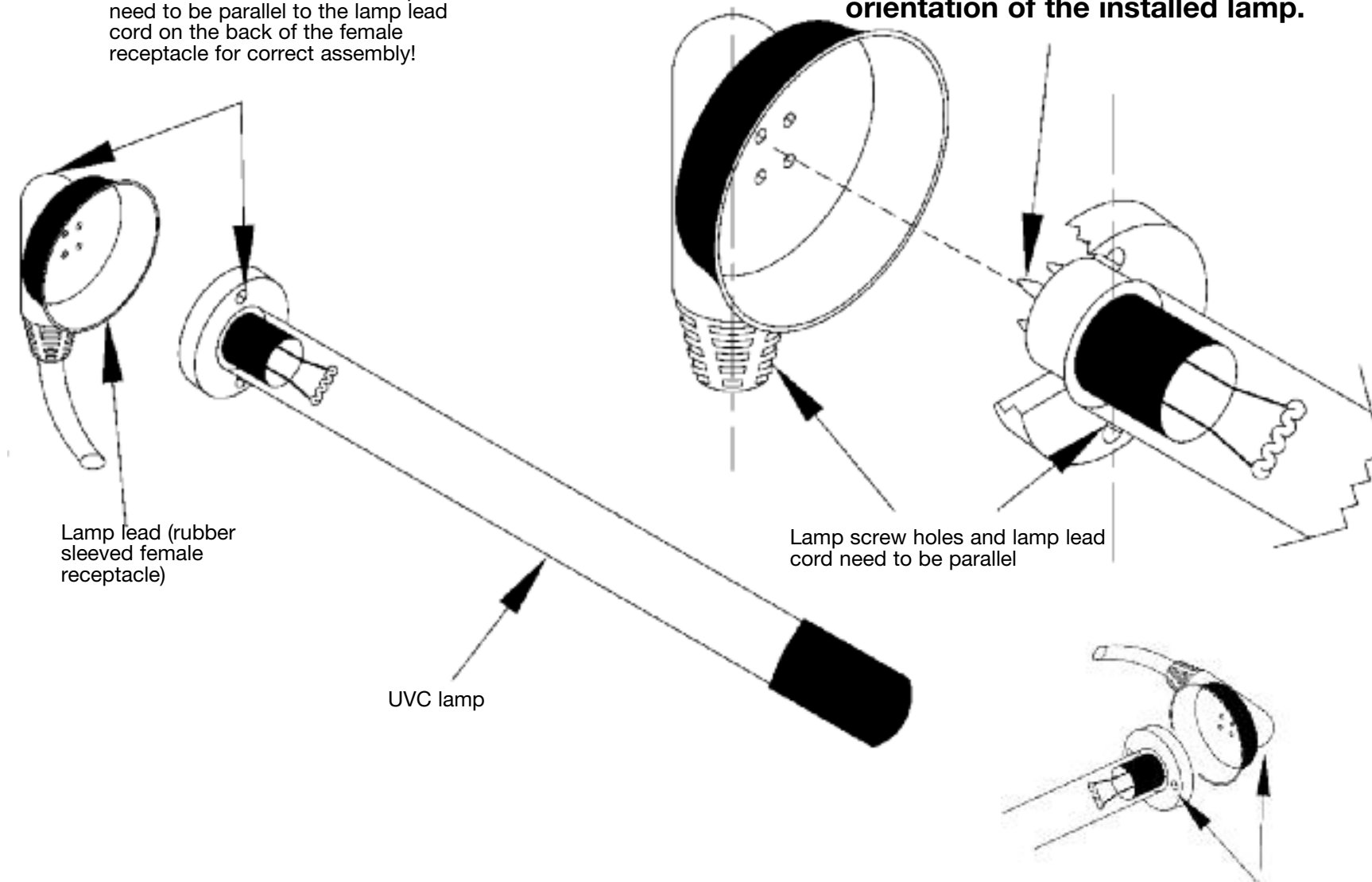
Never perform maintenance on the UV unit without disconnecting power. Typical maintenance consists of replacement of the ultraviolet (UV) lamps. UV lamps undergo a photochemical process during operation, that slowly reduces the amount of UV light generated to disinfect the air and surfaces. For optimum air stream disinfection UV lamps should be replaced annually. For surface disinfection, lamp replacement should be performed no later than every two years (see below, "Important Information about UV lamp replacements"). 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 contamination.

Important information about UV lamp replacements

Replace UV lamp(s) annually in order to maintain optimum effectiveness in the reduction of pathogens such as bacteria, viruses and microscopic mold. Lamps operating after a period of 18,000 hours (two years) no longer provide adequate UV-C. When the UV lamp(s) reach the end of the 18,000 hour useful operating life, the unit automatically turns off. The UV lamp must be replaced and the power supply reset. **Do not reset the power supply without replacing the UV lamp as worn out UV lamps draw excessive electrical current which may result in damage to the UV system, and may void the warranty.**

Important! Read before installation

The screw holes on the UV lamp need to be parallel to the lamp lead cord on the back of the female receptacle for correct assembly!



Note that lamp connector pin pattern is NOT square.

It can be mounted from either side and top or bottom depending on the orientation of the installed lamp.

Electrical

NOTICE: All 24 volt UV equipment for HVAC systems (regardless of manufacturer) must be installed using a separate, dedicated minimum 40VA transformer to avoid the possibility of voiding UL certification of the HVAC system.

Ultravation[®]
Professional Indoor Air Quality Products

Ultravation.com

DC-OH-0229A