

UltraMAX™ EZUV™



DC-OH-0224 REV A

Homeowner / User Guide

UMX-2412-EZ UMX-12019-EZ
 UMX-2419-EZ UMX-24012-EZ
 UMX-12012-EZ UMX-24019-EZ

Ultravation®
 Professional Indoor Air Quality Products
 1-866-GO-UV-AIR (468-8247)
 ultravation.com

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Thank you for purchasing an Ultravation® Professional Indoor Air Quality Product

The UltraMAX™ EZUV

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. Mount mounting plate over drilled hole with screws provided. Insert UV lamp module into hole. Attach to HVAC system with two self-tapping screws (supplied).
3. Plug 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 other side of this manual).
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 manual).

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 to accommodate installation of the viewport.

Important information about UV lamp replacements (See Lamp Replacement Safety Reset)

Replace UV lamps each year in order to maintain optimum effectiveness in the reduction of pathogens such as bacteria, viruses and microscopic mold. Lamps operating after a period of two years do not provide adequate reduction of pathogens and must be replaced. Lamps operating beyond 18,000 hours (two years) draw excessive electrical current which may result in damage to the UV system. If UV lamp(s) have been operating for more than two years, the system must be turned off until replacement lamp(s) are installed. Failure to do so may void the warranty.

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. This slowly reduces the amount of UV light generated to disinfect the air and surfaces. For optimum air stream disinfection UV lamps should be replaced on an annual basis. For surface disinfection, lamp replacement should be performed no later than every two years (see above, "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.

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.

LAMP REPLACEMENT SAFETY RESET

Disconnecting power is required for lamp replacement. NEW lamps will not light if power has not been disconnected. Power must be off for at least FIVE seconds.



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.

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:

- Verify if in fact the UV lamps are on or off (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.
- If you have an inline fuse verify that the surge protection fuse is still functional. If necessary, replace with a 1 to 2 AMP maximum AGC type fuse.
- Be sure lamps are securely plugged into their sockets, no loose wires, and in the correct orientation (see other side of this manual).
- 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.

REPLACEMENT PARTS AND ACCESSORIES

12" T3 UVC Lamp	AS-IH-1001
17" T3 UVC Lamp	AS-IH-1003
Light Shield	94-010
Optional PCO plate	94-004

Warranty

Ultravation warrants this product against any defects in the UVC lamp power supply for a period of ten years after date of consumer purchase, with the exception of the ultraviolet lamp, which is 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.

Ultravation, Inc.

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Important!

Read before installation

Electrical

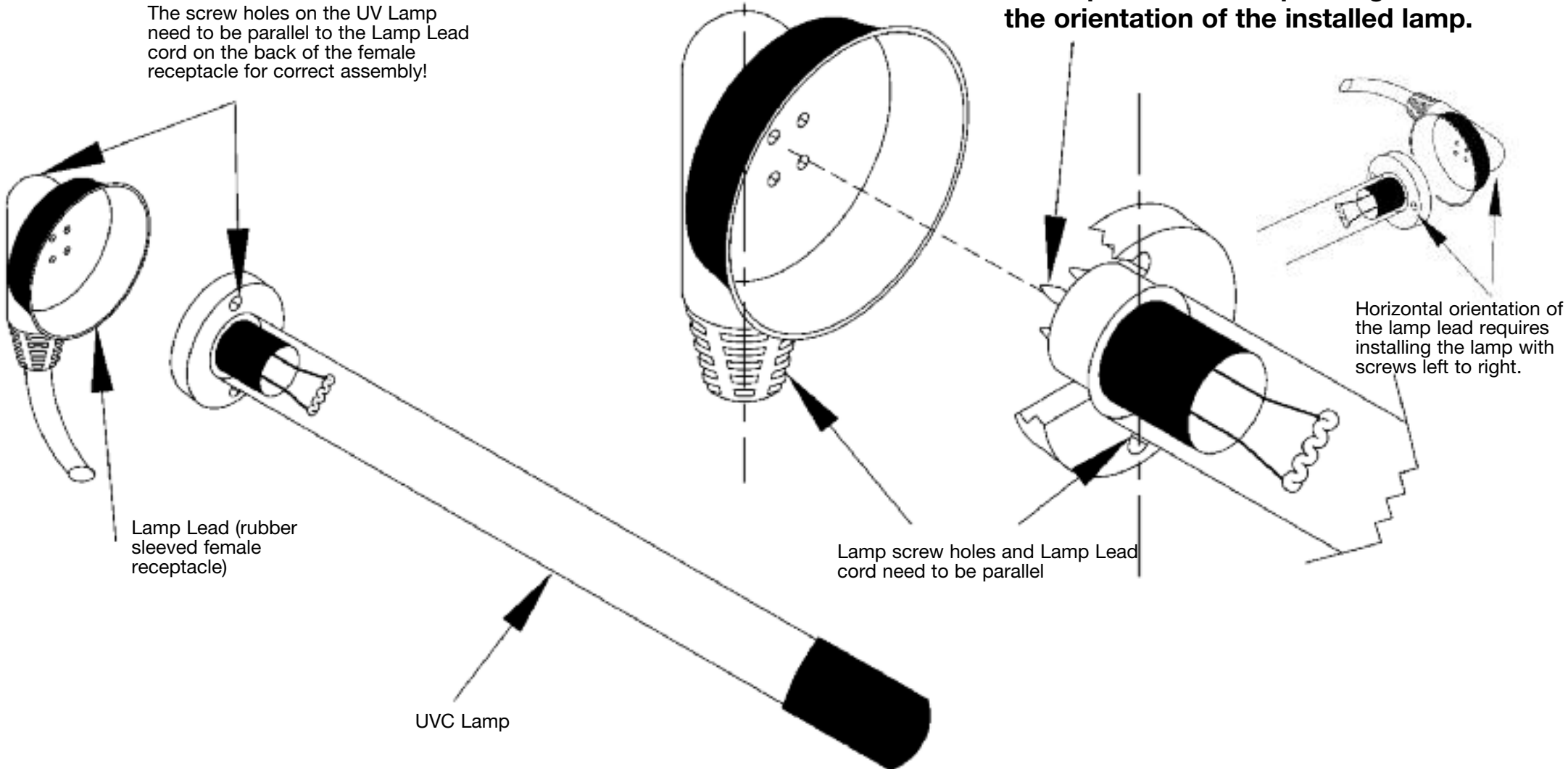
NOTICE: All 24 volt UV equipment for HVAC systems (regardless of manufacturer) must be installed using a separate, dedicated minimum 40VA transformer to avoid the possibility of voiding UL certification of the HVAC system.

IMPORTANT: Some EZUV models are equipped with an in-line fuse for both surge and electrical arc protection. Replace only with equal value fuse (available from Ultravation or authorized distributor, part number EL-PP-0001). *Failure to do so will defeat the design and void the warranty.*

Note that lamp pin pattern is NOT square.

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

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!



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