

UV-AIRE AIR PURIFYING SYSTEM

Model: CUV-OMK (Outdoor Mounting Kit)



AIR DUCT MOUNTED ACCESSORY
WITH RESPECT TO ELECTRICAL SHOCK,
FIRE AND CASUALTY HAZARDS ONLY
E524561



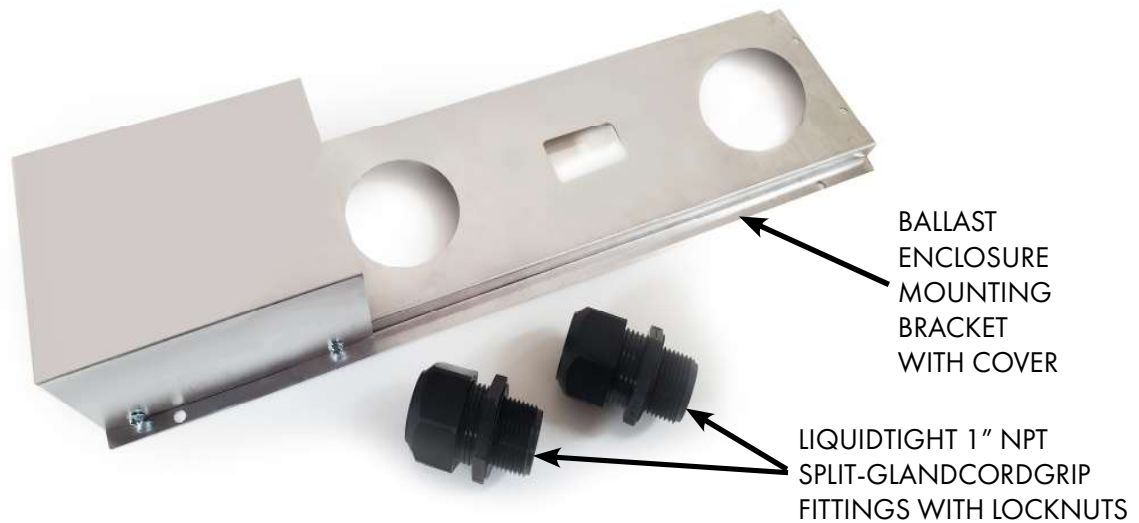
READ THESE INSTRUCTIONS CAREFULLY AND COMPLETELY BEFORE PROCEEDING WITH THE INSTALLATION

This device **MUST** be installed by a qualified agency in accordance with the manufacturer's installation instructions. The definition of a qualified agency is: any individual, firm, corporation or company which either in person or through a representative is engaged in, and is responsible for, the installation and operation of HVAC appliances, who is experienced in such work, familiar with all the precautions required, and has complied with all the requirements of the authority having jurisdiction. Please retain these instructions after installation.

PRODUCT OVERVIEW

The Outdoor Mounting Kit (OMK) is intended for mounting of the CUV Power Enclosure on the exterior of outdoor HVAC equipment such as a rooftop unit (RTU). It creates a fully weatherized mounting for the Power Enclosure for protection from rain, wind, snow & ice, and sunlight. Follow instructions provided with the CUV/DUV model UV-Aire Air Purifying System for positioning and mounting of the lamps and lamp support rods included with the system.

⚠ WARNING: Do not install the Power Enclosure in any area that may possibly result in submergence of the Enclosure in standing water or any other fluid!



ITEMS INCLUDED WITH CUV/DUV SERIES UV-AIRE AIR PURIFYING SYSTEM:


1. Ballast Enclosure Mounting Bracket with Cover
2. (2) Liquidtight 1" NPT Split-Gland Cordgrip Fittings with Lock Nuts
3. Mounting Screws/Nuts/Washers for Ballast Enclosure (not included) and Bracket


TOOLS REQUIRED:

- 1-3/8" diameter step drill or hole saw
- 5/16" hex nut driver or socket wrench (nut driver, drill/driver tip or tip holder)
- 3/8" hex wrench or suitable pliers
- 1-5/8" hex or adjustable wrench or slip-joint adjustable pliers


SAFETY CONSIDERATIONS


Understand the signal words **DANGER**, **WARNING**, and **CAUTION**. These words are universally used for overall safety. **DANGER** identifies the most serious hazards which will result in severe personal injury or death. **WARNING** signifies hazards which could result in personal injury or death. **CAUTION** is used to identify unsafe practices resulting in minor personal injury or product and property damage.

 **DANGER: Before performing maintenance or service on system, ensure power is de-energized prior to service. Electrical shock can cause injury or death.**


 **WARNING: UV light will break down plastic materials not rated for UV exposure.**

- The unit must be mounted at least 20" from the above stated type of materials.
- If it is necessary to mount the unit in direct line of site of these types of materials, they must be shielded with aluminum foil, metal foil tape or sheet metal.


 **WARNING: Before installing or servicing UV-Aire system, always turn all power OFF and have unit unplugged. Electrical shock can cause personal injury or death. Never expose eyes or skin to direct UVC light from any source.**


 **WARNING: The electrical supply circuit connected to this UV appliance shall be routed through an electrical interlock switch placed on the HVAC system duct access panels and doors to prevent accidental UV exposure when servicing the air ducts or equipment. Interlock shall break all supply conductors.**


 **WARNING: DO NOT mount the UV Lamps outdoors. The magnetic mount power enclosure is designed to be mounted indoor or with accessory mounting kit for outdoor locations.**

 **WARNING: Never touch broken UV lamp or internal contents of UV lamp. The lamp contains mercury.**

- In case of accidental exposure to internal contents of lamp, wash hands and any other affected skin area with mild detergent. Remove affected clothing immediately. If skin surface is pierced, seek medical attention immediately.
- If UV lamp breaks, clean and dispose of with the same care as a fluorescent lamp.
- UV lamps must be disposed of in accordance with local, state and federal environmental disposal laws.


 **CAUTION: Equipment damage hazard. Ultraviolet light can cause color shift or surface degradation and sometimes structural degradation of non-metallic components. Select mounting location that prevents exposure to plastic flexible duct components, polyurethane foam insulation material, rubber hoses, wire insulation, etc. If mounting options are limited, items above should be protected with ultraviolet resistant material such as aluminum foil, aluminum duct tape, or metallic shields or metallic tapes.**

 **CAUTION: If you touch the glass of the lamp, you should wipe the glass clean with isopropyl alcohol and a lint free wipe. If the lamp is not cleaned, the oil film left on the glass lamp surface from your hand causes a reduction in the light intensity.**

 **CAUTION: Never expose eyes or skin to UVC light from any source.**

- Looking directly at the UVC light may cause permanent eye damage or blindness.
- Never operate the UV-Aire Air Purifying System out of the plenum.
- Designed for a closed duct system. Do not mount near a supply or a return air opening.
- All duct openings in direct line of site of the UV light must be sealed with aluminum tape or equivalent sealing methods.

 **CAUTION: UV Lamps are fragile. To prevent accidental breakage, handle UV lamp with care.**

 **CAUTION: Resistance to UV radiation: Polymeric cabinet, structural, and current carrying parts and wiring which are subjected to UC-C irradiance from a UV lamp system shall be shielded from or out of the line-of-sight of the UVC light, or be constructed of a material that is capable of withstanding UVC exposure levels expected in the product without degrading.**

CONSIDÉRATIONS DE SÉCURITÉ

Comprenez les mots indicateurs **DANGER**, **AVERTISSEMENT** et **PRUDENCE**. Ces mots sont universellement utilisés pour la sécurité globale. **DANGER** identifie les dangers les plus graves qui entraîneront des blessures corporelles graves ou la mort. **AVERTISSEMENT** signifie les dangers qui pourraient entraîner des blessures corporelles ou la mort. **LA PRUDENCE** est utilisée pour identifier les pratiques dangereuses entraînant des blessures corporelles mineures ou des dommages aux produits et aux biens.



DANGER: Avant d'effectuer la maintenance ou l'entretien du système, assurez-vous que l'alimentation est coupée sous tension avant l'entretien. Les chocs électriques peuvent causer des blessures ou la mort.



AVERTISSEMENT: La lumière UV décomposera les matières plastiques non conçues pour l'exposition aux UV.

- L'unité doit être montée à au moins 20 » à partir du type de matériaux indiqué ci-dessus.
- S'il est nécessaire de monter l'unité en ligne directe de site de ces types de matériaux, ils doivent être blindés avec du papier d'aluminium, du ruban de feuille de métal ou de la tôle.



AVERTISSEMENT: Avant d'installer ou d'entretenir le système UV-Aire, éteignez toujours toute la mise hors tension et débranchez l'appareil. Les chocs électriques peuvent causer des blessures corporelles ou la mort. N'exposez jamais les yeux ou la peau à la lumière UVC directe de quelque source que ce soit.



AVERTISSEMENT: Le circuit d'alimentation électrique connecté à cet appareil UV doit être acheminé par un interrupteur de verrouillage électrique placé sur les panneaux d'accès et les portes des conduits du système CVC afin d'éviter toute exposition accidentelle aux UV lors de l'entretien des conduits d'air ou de l'équipement. Le verrouillage doit briser tous les conducteurs d'alimentation.



AVERTISSEMENT: NE MONTEZ PAS les lampes UV à l'extérieur. Le boîtier d'alimentation à montage magnétique est conçu pour être monté à l'intérieur ou avec un kit de montage d'accessoires pour les emplacements extérieurs.



AVERTISSEMENT: Ne touchez jamais la lampe UV cassée ou le contenu interne de la lampe UV. La lampe contient du mercure.

- En cas d'exposition accidentelle au contenu interne de la lampe, lavez-vous les mains et toute autre zone de la peau affectée avec un détergent doux. Retirez immédiatement les vêtements touchés. Si la surface de la peau est percée, consultez immédiatement un médecin.
- Si la lampe UV se casse, nettoyez et jetez-la avec le même soin qu'une lampe fluorescente. sur l'élimination de l'environnement.



LA PRUDENCE: Risque d'endommagement de l'équipement. La lumière ultraviolette peut provoquer un changement de couleur ou une dégradation de la surface et parfois une dégradation structurelle de composants non métalliques. Choisissez l'emplacement de montage qui empêche l'exposition aux composants de conduits flexibles en plastique, au matériau isolant en mousse de polyuréthane, aux tuyaux en caoutchouc, à l'isolation des fils, etc. Si les options de montage sont limitées, les éléments ci-dessus doivent être protégés avec un matériau résistant aux ultraviolets tel qu'une feuille d'aluminium, du ruban adhésif en aluminium, des boucliers métalliques ou des rubans métalliques.



LA PRUDENCE: Si vous touchez le verre de la lampe, vous devez essuyer le verre avec de l'alcool isopropylique et une lingette non pelucheuse. Si la lampe n'est pas nettoyée, le film d'huile laissé sur la surface de la lampe en verre de votre main provoque une réduction de l'intensité lumineuse.



LA PRUDENCE: N'exposez jamais les yeux ou la peau à la lumière UVC provenant de quelque source que ce soit.

- Regarder directement la lumière UVC peut causer des lésions oculaires permanentes ou la cécité.
- Ne faites jamais fonctionner le système de purification de l'air UV-Aire hors du plénum.
- Conçu pour un système de conduits fermés. Ne pas monter près d'une ouverture d'alimentation ou d'air de retour.
- Toutes les ouvertures de conduits en ligne directe du site de la lumière UV doivent être scellées avec du ruban d'aluminium ou des méthodes d'étanchéité équivalentes.



LA PRUDENCE: Les lampes UV sont fragiles. Pour éviter toute casse accidentelle, manipulez la lampe UV avec soin.



LA PRUDENCE: Résistance au rayonnement UV: Les pièces et le câblage en polymère de l'armoire, de la structure et du courant qui sont soumis à l'irradiance UC-C d'un système de lampe UV doivent être protégés ou hors de la ligne de mire de la lumière UVC, ou être construits dans un matériau capable de résister aux naevus d'exposition aux UVC attendus dans le produit sans se dégrader.

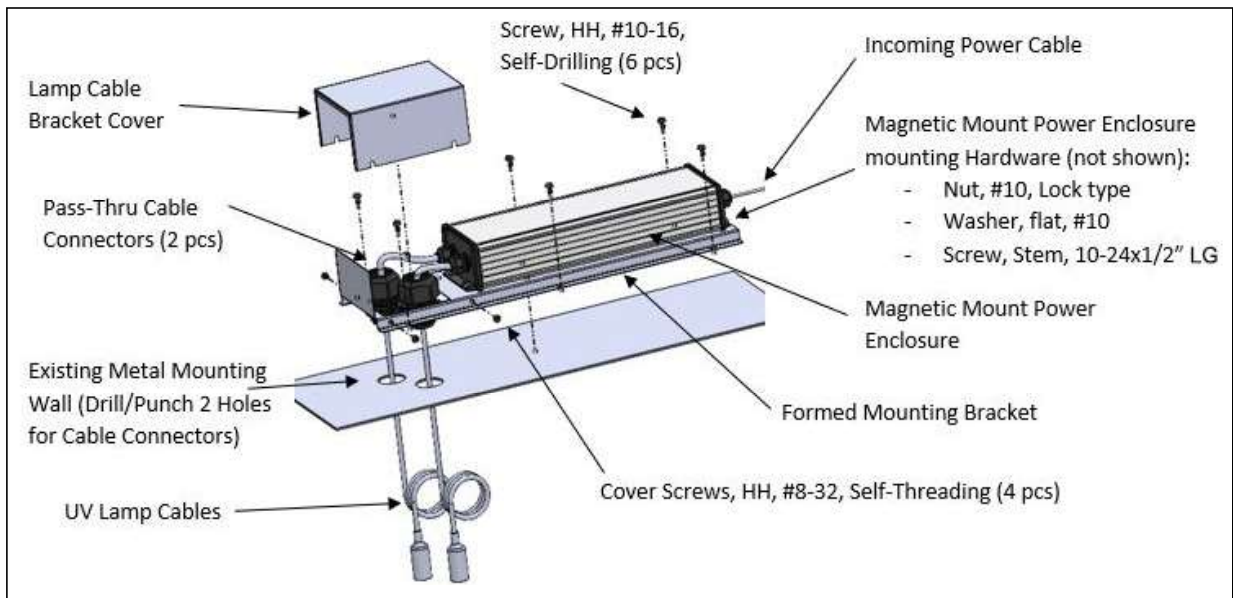


FIGURE 1: OUTDOOR MOUNTING KIT INSTALLATION

INSTALLATION PROCEDURE

Disconnect power to the equipment onto which the Ballast Enclosure will be installed, and to any electrical circuits that may be behind the mounting surface.

⚠ DANGER: Before performing maintenance or service on system, ensure power is de-energized prior to service. Electrical shock can cause injury or death.

Determine the mounting location. The following points should be considered when selecting a mounting location for outdoor mounting of the CUV Power Enclosure using the OMK mounting kit:

1. The lamp cables must pass through the backside of the OMK mounting bracket and through the supplied watertight cord grips installed on a wall of the HVAC equipment and reach to the lamp installations inside (see Figure 1).
2. The Power Enclosure may be mounted in any desired position.
3. The Power Enclosure power cable must be routed through any and all access panel safety interlock switch(es) that may be required to interrupt power to the Power Enclosure if any access panels or doors are removed or opened.
4. Do not install the Power Enclosure in any area that may pool with water and cause the Power Enclosure to be submerged in water or any other fluid.
5. Avoid exposure to direct sunlight and other heat sources if possible.
6. Follow instructions provided with the CUV/DUV model UV-Aire Air Purifying System for positioning and mounting of the lamps and lamp support rods included with the system, and install the lamp support rod assemblies and install the UV lamps.
7. Position the mounting template included with the OMK kit in the selected mounting location and tape in place.
8. Before proceeding, make sure that the selected mounting location allows installation of the mounting screws and cord grips without interfering with any wiring or mechanical elements (tubing etc.) inside of the HVAC equipment, and that the lamp cables will reach to the lamps, allowing for proper securing of the lamp cables (refer to cabling instructions in the CUV/DUV model installation instructions).
9. Mark or drill the locations of pilot holes for the OMK mounting bracket screws and the holes for the supplied watertight cord grips, and remove the template from the mounting surface.
10. Cut or drill the 1-3/8" holes for the watertight cord grips.
11. Remove the dome-shaped compression nuts and push the rubber compression glands out of the cord grips (see Figure 2) and set them aside for later use.
12. Install the cord grips on the HVAC equipment (see Figure 1) with the attaching plastic nuts on the inside of the HVAC equipment.



FIGURE 2: DOME-SHAPED COMPRESSION NUTS, RUBBER COMPRESSION GLANDS AND THE CORD GRIPS

INSTALL THE BALLAST ENCLOSURE, COVER AND BRACKET

1. Loosen the four screws attaching the Enclosure Bracket Cover to the Enclosure Mounting Bracket and remove the cover.

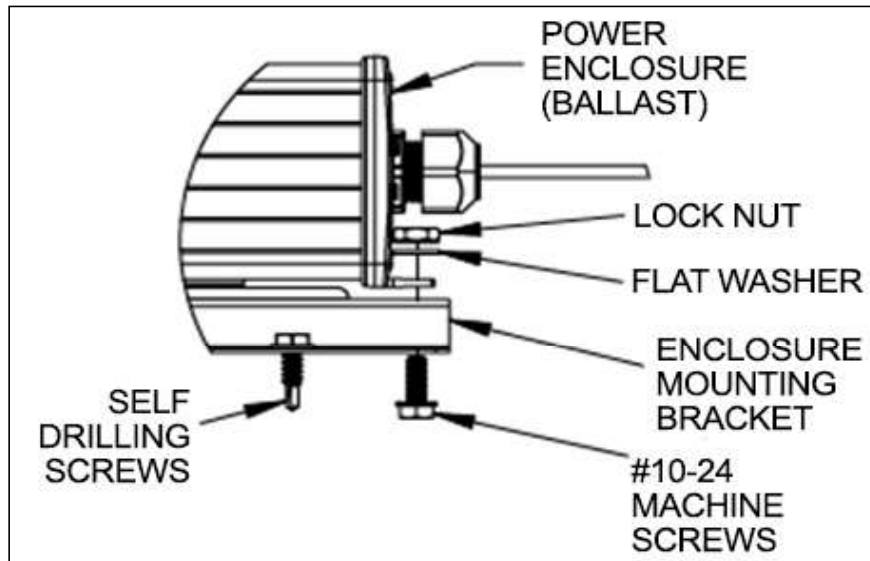


FIGURE 3: POWER ENCLOSURE MOUNTING

2. Using the 4 included #10-24 machine screws (5/16" hex head), flat washers and 3/8" locknuts, attach the Ballast Enclosure to the Enclosure Mounting Bracket (see Figure 3). NOTE: It is not necessary to remove the mounting magnets from the Power Enclosure, although they will not serve to permanently mount the Power Enclosure when attached to the OMK mounting bracket. Make sure the end of the enclosure having the two lamp cables coming out is at the end of the bracket with the large rectangular hole. TIP: many multi-tip screwdriver barrels are 5/16 hex size on the larger end.
3. Position the Mounting Bracket over the cordgrip fittings and install the (6) self-drilling mounting screws to attach the bracket to the mounting surface.

- Pass the ends of the lamp cables through the dome-shaped cord grip compression nuts and then through the cord grip bodies into the interior of the HVAC equipment, and push all excess cable through the cord grips.



IMPORTANT: Make sure to first pass the lamp cables through the compression nuts and then through the cord grip bodies!

- For each lamp cable, slip the lamp cable through the slit of the rubber compression gland to install the gland on the cable in between the compression nut and the cord grip body, and push the compression gland into place in the cord grip (see Figure 4).



FIGURES 4A & 4B: SLIP CABLES INTO THE CORDS GRIPS

- Install the compression nuts onto the cord grip bodies and tighten the nuts sufficiently for the cord grip to securely grip the cable and prevent water entry. Use care not to overtighten the compression nuts.
- Replace the OMK mounting bracket cover onto the bracket and tighten the cover screws.
- Route the lamp cables to the lamps and connect the cables to the lamps.
- Secure the lamp cables inside the HVAC equipment as necessary using the wire ties supplied with the CUV kit and/or cable clamps or other appropriate hardware (not included), to prevent accidental disturbance of or damage to the cables when accessing the interior of the HVAC equipment.
- Route the Power Enclosure's power cable to a power source that cuts off power to the Power Enclosure if any access panel or door is opened or removed that would allow physical exposure to UV rays from the lamps (please refer to the appropriate wiring diagram found in the CUV/DUV system instructions). The power cable is Type SO and is rated for outdoor exposure. For example, the power cable may be routed through an outdoor-rated junction box with an opening through the HVAC equipment wall into the interior of the equipment.
- Review and complete the installation per the instructions included with the CUV/DUV system. Make sure all warning labels and other installation labels are properly installed.
- Complete the Inspection Procedure as directed in the CUV/DUV instructions.

**This manual may be downloaded and printed from the Field Controls website:
www.fieldcontrols.com**

WARRANTY

**For warranty information about this or any Field Controls product, visit:
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