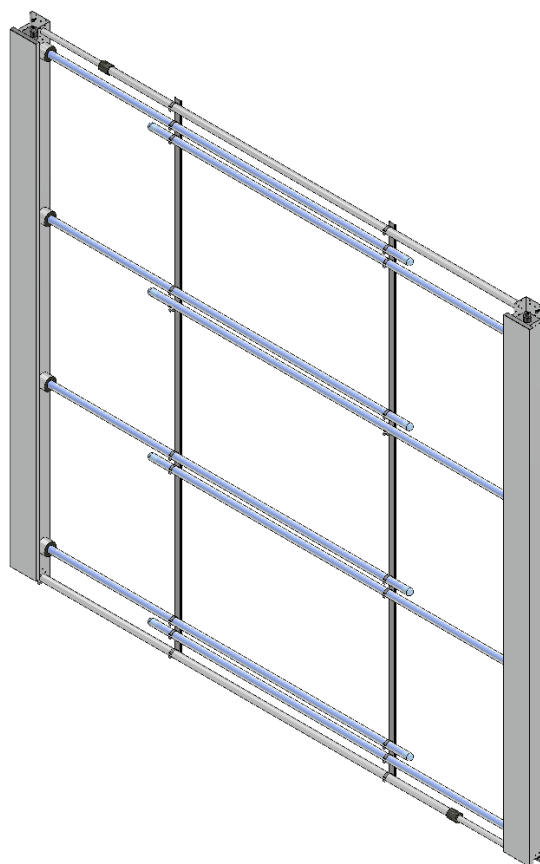


Ultravation®

Better Air | Better Water | Better Living™

UVMATRIX SI SERIES SURFACE IRRADIATION OWNERS GUIDE



Models: UVMatrix™ SI-4/G36, UVMatrix™ SI-4/G64, UVMatrix™ SI-6/G36, UVMatrix™ SI-6/G64, UVMatrix™ SI-8/G36, UVMatrix™ SI-8/G64, UVMatrix™ SI-10/G36, UVMatrix™ SI-10/G64.

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Ultravation's UVMatrix SI systems are protected by US patents 6,809,326B2, 6,838,057B2 and 7,419,642B2.

Shipping and Packaging List:

2 Electrical Housing
 2 Expandable Poles
 4¼x20 Phillips head pole screws
 UVC Warning Label
 Warranty Card
 2 - Center Lamp Support's
 Appropriate Quantity and length of T3 Lamps
 Appropriate Quantity of Quartz retaining nuts
 1 O-Ring per lamp
 8 – ¾" Self-tapping mounting screws
 20-48 #8X1/2" Cover screws (dependent on model)
 Wiring Diagram (dependent on model)

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

The UVMatrix™ SI Series systems are required to be wired from a disconnect switch so the power can be turned off for maintenance.

It is recommended that the UVMatrix™ SI Series systems be wired through a safety interlock switch that will disengage power to the equipment in the event that a door or access panel is opened.

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.

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.

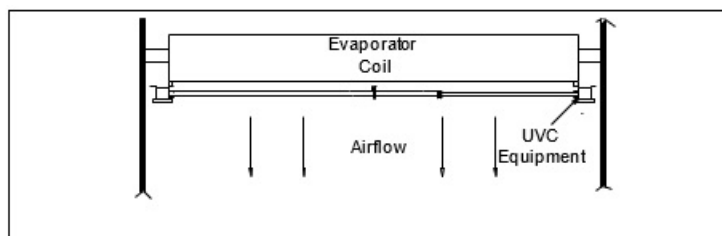
WARNING:

No openings in the air handler or duct are allowed which would give direct line- of-sight to the UV light.

CAUTION: Equipment Damage Hazard. Ultraviolet light can cause 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 tape, or metallic shields.

NOTICE:

Ultraviolet coil irradiation equipment is designed for installation in HVAC (heating, ventilation, and air conditioning) systems. It is recommended a trained technician install this unit. Installation near an A/C coil will help keep the coil free of microbial growth and eliminate odors associated with such growth. The UVMatrix™ SI is designed to operate constantly and should **not** cycle on and off with a blower motor. The preferred location to install the unit is on the supply side of the evaporator coil exiting the HVAC system. Placement between 4-24 inches to the coil surface assures less untreated area as shown below:



Installation Steps: (see next page for diagrams)

In most cases the UVMatrix™ SI adjustable rack will need to be assembled inside the air handler, bring components into air handler to begin assembly.

Connect the adjustable horizontal support tubing using a single screw (supplied) at each end of the tubing. (Total 4)

Extend vertical power supply housings outward until the entire coil surface is exposed by the UVC lamps.

Clip center lamp support arm onto the adjustable tubing in the center of the UV Assembly.

Secure equipment into place by mounting directly to the coil frame or to vertical supports supplied either by third party manufacturers or utilizing Ultravation VXP accessories.

Have a qualified electrician supply 120V to 277V to the supplied terminal strip located under the cover of each power supply housing.

NOTE: Ballast pictured may not match received unit.

ATTENTION!

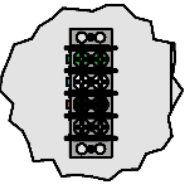
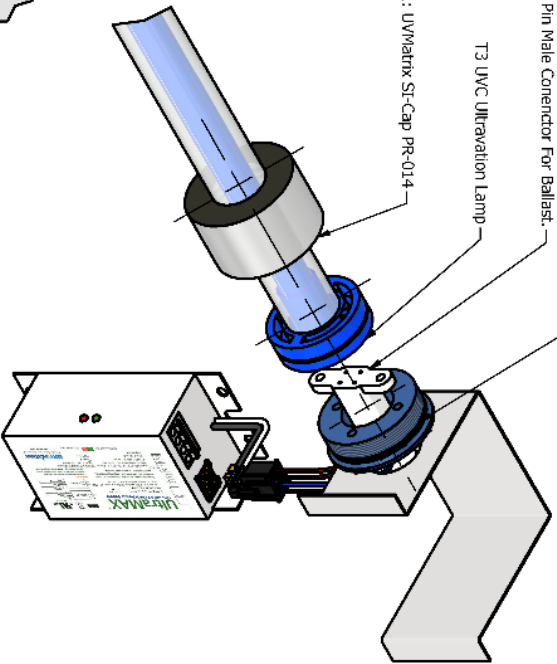
Your SI unit cover has been installed with minimal hardware to facilitate field installation. When the unit has been installed, ensure that all required cover screws (included) have been fitted.

AS-1H-0103: Lamp Conn Assembly W/ 6 Pin Male Connector For Ballast.

PL-OH-0042: UVMatrix SI-Base PR-015

T3 UVC Ultravation Lamp

PL-OH-0041: UVMatrix SI-Cap PR-014



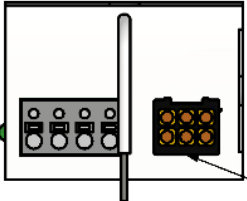
Black: Line Voltage

White: Neutral/ Line Voltage 2

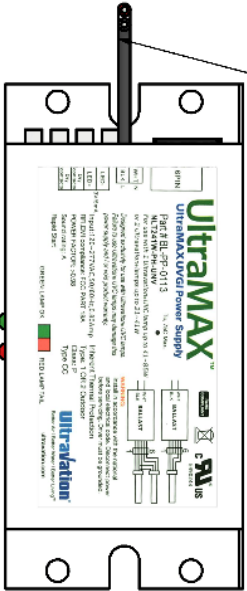
Green: Ground

*MOUNTING HARDWARE SUCH AS SCREWS ARE NOT LISTED

Please refer to this sheet to familiarize with UV Matrix SI Parts.

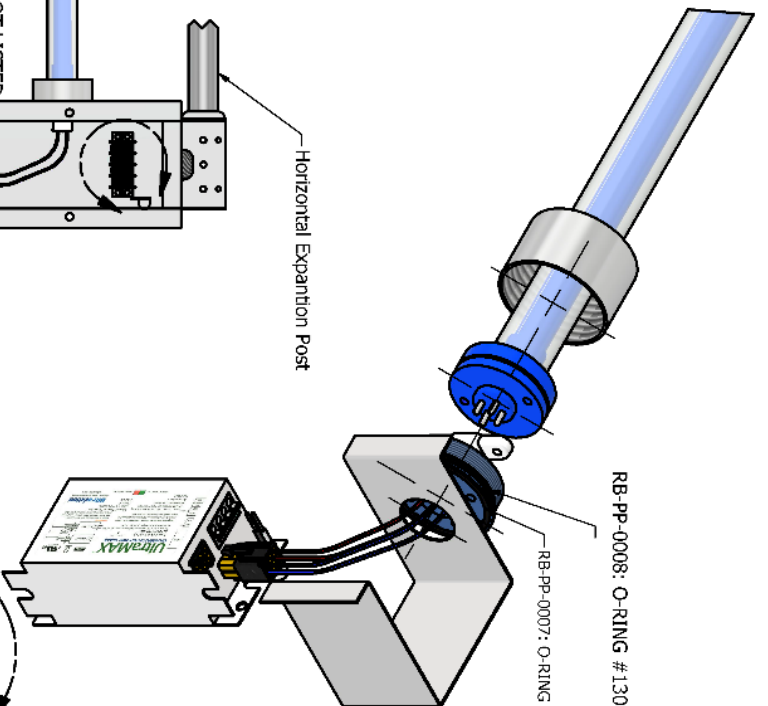


WHITE: NEUTRAL
BLACK: HOT WIRE

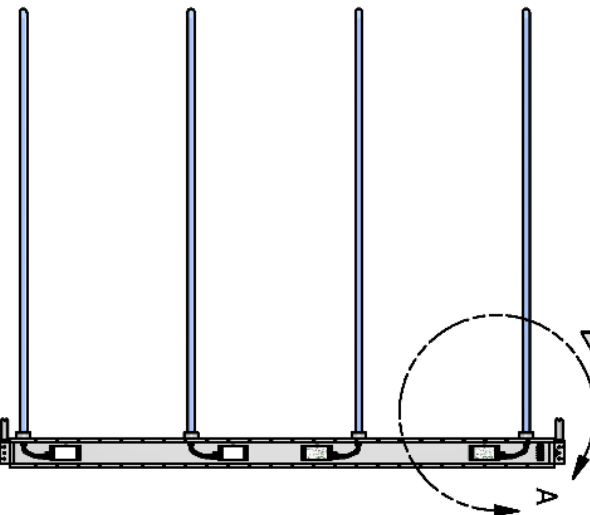


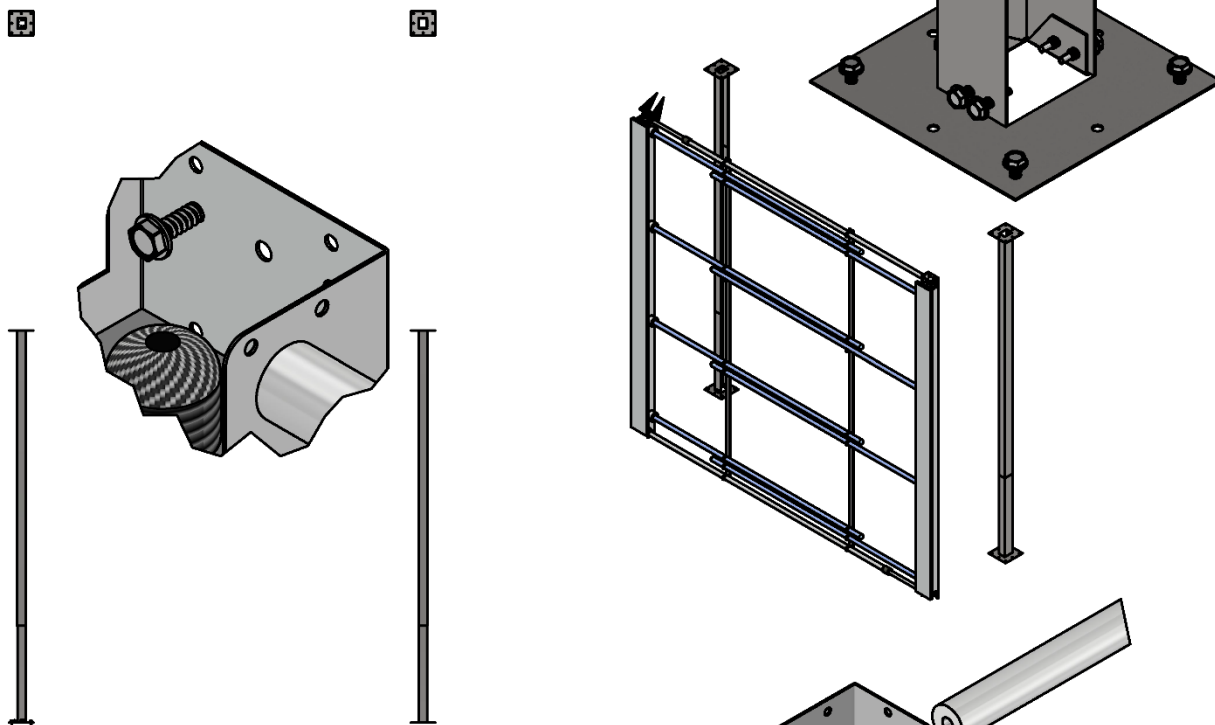
RB-PP-0008: O-RING #130

RB-PP-0007: O-RING



Horizontal Expansion Post





Installation Instructions:

Power Off:

Before beginning the installation process, ensure that the power to the system is turned off to prevent any accidents or injuries.

Vertical or Horizontal Expansion:

Decide whether you will be using the vertical expansion posts (VXP) or attaching the unit directly to the air handler with self-tapping screws.

Choose the appropriate method based on your installation requirements.

Location Selection:

Determine the ideal location for installing the UV Matrix Si Series.

Ensure that there is sufficient space and access for installation and maintenance. Vertical Expansion Post (VXP) Installation:

If you choose to use the vertical expansion posts, follow these steps:

Install the bases as instructed.

Connect the vertical posts to the bases and assemble them securely.

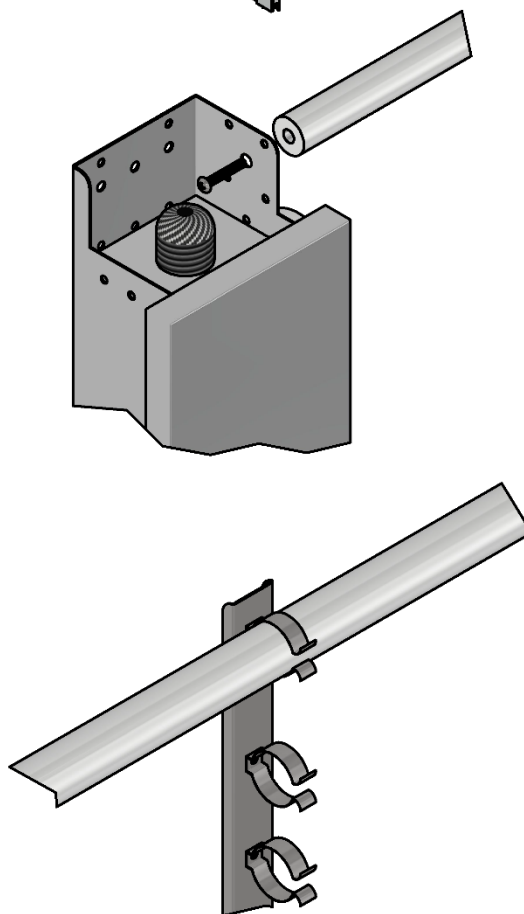
Horizontal Expansion Post Installation:

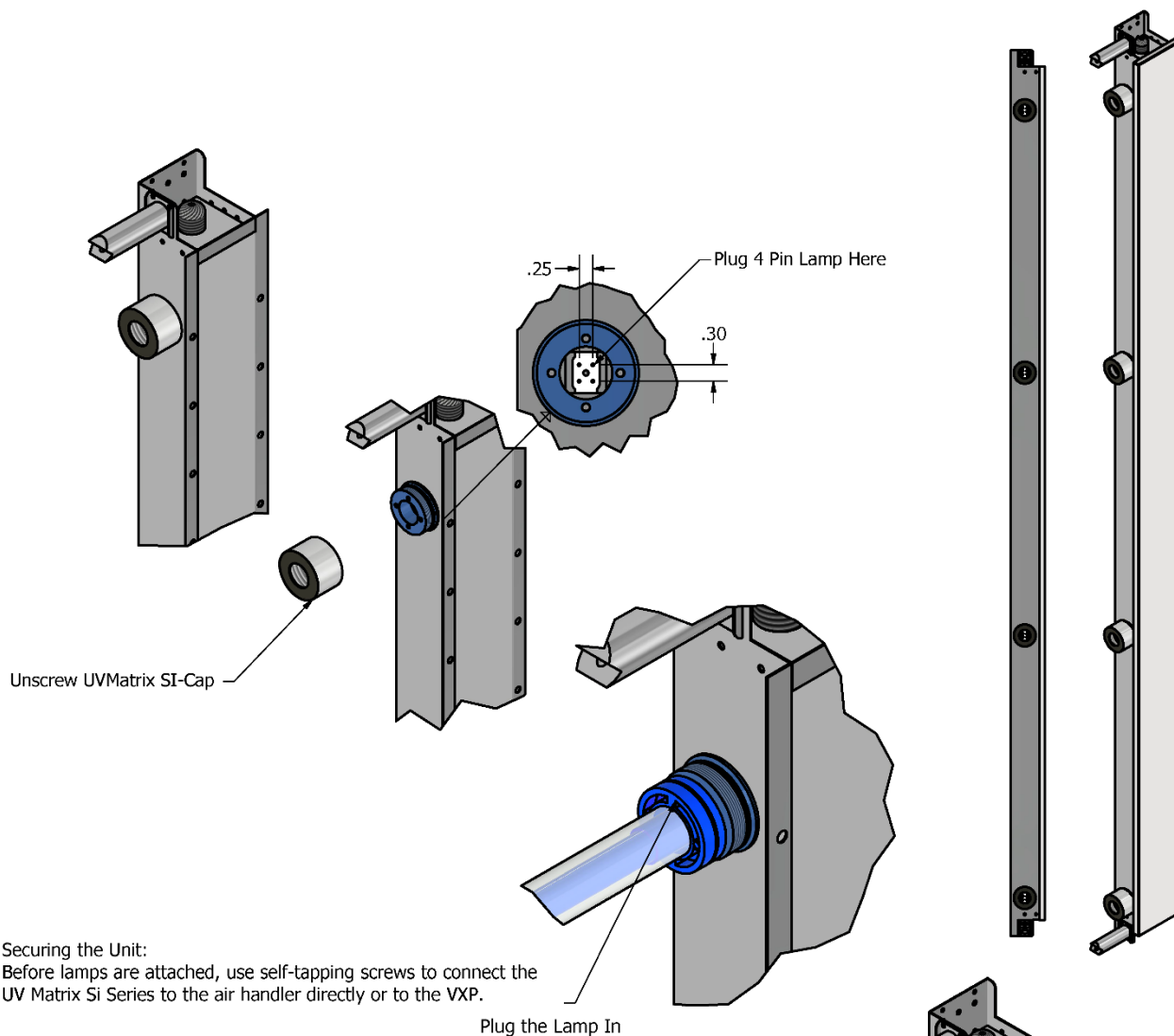
Attach the horizontal expansion post to the UV Matrix Si Series using screws.

Ensure that it is securely fastened on all four corners.

Center Support Attachment:

Connect the center support to the horizontal expansion post to provide additional stability.





Lamp Installation:
Unscrew the cap of the UV Matrix Si Series. Carefully connect the lamp to the socket, ensuring that the pins align properly. The pins only fit in one orientation. Reattach the cap through the lamp, ensuring that the lamps are steady on the center support to prevent breakage.

Screw the SI Cap Through the Lamp

It is recommended to have two people for this step to ensure proper installation.

Electrical Connection:
Open the covers of the UV Matrix Si Series. Attach the line voltage to the black wire and the neutral or second line voltage (in high voltage cases), ensuring proper grounding. Utilize the provided strain relief to prevent strain on the incoming power. The ballast is auto-sensing and can accommodate voltages ranging from 120V to 277V.

Cover Installation:
Secure the covers back in place to protect the internal components.

Power On:
After completing the installation, turn on the power to the UV Matrix Si Series. Avoid direct exposure to the UV light, as it can be harmful to the eyes.

Operation:
Ensure that power is always supplied to the lamps for the longevity of the lamp. The lamps should remain continuously on and should not turn on and off with the blower. This ensures effective operation and maximum efficiency of the UV system. By following these instructions carefully, you can enjoy the benefits of clean and purified air provided by your UV Matrix Si Series for years to come.

If you have any questions or encounter any issues during installation or operation, please refer to the troubleshooting section of this manual or contact our customer support for assistance.

Maintenance:

Maintenance typically consists of replacing ultraviolet lamps every two years. Outer Quartz sleeves should be kept clean; time intervals required to accomplish this are dependent on the application and environment. UV lamps undergo a photochemical process during operation. This slowly reduces the amount of UV light generated to disinfect against airborne pathogens. At the end of one year, a typical UV lamp will emit 40% less energy than when the lamp was 100 hours old. Ultraviolet lamps only lose 30% of original output during two years of operation. Therefore, you are still getting 70% output at the end of two years.

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.

Troubleshooting:

The Ultraviolet 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 Ultraviolet directly. Before calling for service, please be sure that:

Unit has 120V to 277V power.
Power disconnect is in the ON position.
Lamps are securely plugged into their sockets.

Please contact your local dealer or Ultraviolet directly for replacement lamps.

Refer servicing to qualified service personnel.

| Models | Replacement Lamp Part Number |
|--------------------|------------------------------|
| UVMatrix™ SI-*/G36 | AS-IH-0611 |
| UVMatrix™ SI-*/G64 | AS-IH-0610 |

“*” = Number of lamps required

Warranty:

Ultraviolet offers a limited 10 year warranty from date of installation, (minimum expected lifetime of product within normal operating conditions), on this product against any defects in material or workmanship, with the exception of the Ultraviolet Lamp(s), which are warranted for a period of one year after date of installation. This warranty does not include damage to the unit from accident, misuse, or improper installation. If this product should become defective, Ultraviolet will repair or elect to replace the product free of charge. Ultraviolet will return repaired or replaced warranted products pre-paid, provided that the product was delivered pre-paid.

Ultraviolet 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 Ultraviolet, Inc. Ultraviolet, Inc. ~ 67 Tubbs Av ~ Brandon, Vermont 05733
Phone: 802-287-9735 ~ Fax: 802-287-9203 ~ www.ultraviolet.com