

# TechPure

## 24V GERMICIDAL UV SYSTEM

### Installation Instructions

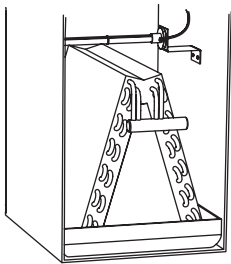
This product emits germicidal ultraviolet (UV-C) light to help disinfect the cooling coil, drain pan, and internal surfaces of HVAC systems for improved indoor air quality.

#### BEFORE INSTALLING

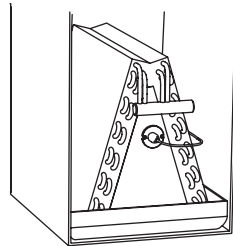
- Read all instructions carefully. Failure to do so could damage the equipment or cause harm to yourself or others.
- Acknowledge all warnings.
- Only qualified technicians should perform the installation.

U.S. Patent Nos. 5,334,347, 5,817,276, 6,245,293, 6,267,924, 6,280,686, 6,313,470, 6,627,000, 6,539,727, 6,932,494, 6,550,257.

### 1 Choose Installation Type



Above A-Coil/Slab Coil



A-Coil Delta Plate

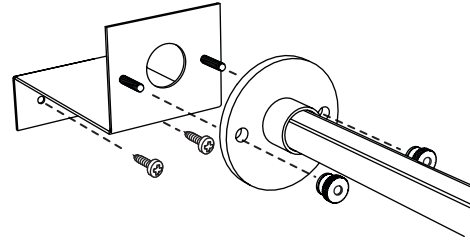
- Choose desired installation type/location. See "UV Installation Notes" for important information regarding lamp placement.
- Refer to "24V Installation Notes" for important electrical information.

#### ⚠ WARNING

##### UV Light Hazard.

Can cause serious eye and skin damage.  
Do not look at UV-C light.  
Wear UV-C eye and skin protection

### 2 A-Coil/Slab Coil Lamp Installation



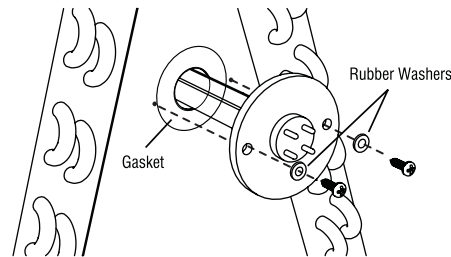
- Disconnect power to the air handler and open access panels.
- Magnetic Bracket Installation - Slit insulation on the back or side wall of air handler and attach magnetic bracket to the wall.  
**Note:** If not using magnet, remove the magnet and use the self-tapping sheet metal screws in the hardware package to mount the bracket in the desired location.
- Slide lamp into bracket and attach lamp connector sliding protective boot over lamp connector before securing lamp to bracket using the provided knurled nuts. (Refer to step 4 for proper lamp connection.)

#### ⚠ NOTICE

##### Clean lamp prior to installation.

Use a cotton cloth to remove dirt and fingerprints. Failure to clean the lamp could shorten the lamp's lifespan.

### 3 A-Coil Delta Plate Lamp Installation



- Drill a 7/8" hole into the delta plate and place gasket (included) around hole.
- Insert lamp directly into hole and secure the lamp to the delta plate with two self-tapping screws. Use rubber washers to help prevent cracking of lamp base. (Screws and rubber washers included.)

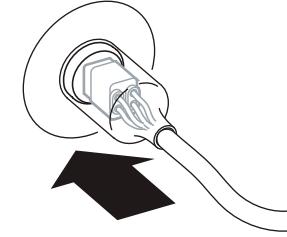
**Note:** A-Coil delta plate installation does not use lamp bracket.

#### ⚠ WARNING

##### UV Light Hazard.

Can cause serious eye and skin damage.  
Do not look at UV-C light.  
Wear UV-C eye and skin protection

### 4 Connect Lamp



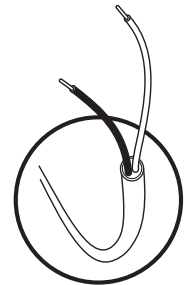
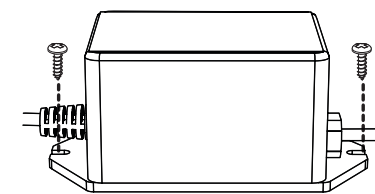
- Hold back the protective boot to expose the lamp connector. The lamp connector can only be attached one way. If the connector does not attach easily, rotate 90 degrees and try again. After the lamp connector is attached, slide the protective boot over the lamp/connector to seal against moisture.

#### ⚠ NOTICE

##### Fully Seat Lamp Connector.

Failure to properly seat lamp connector could result in improper lamp operation and/or compromise water resistance.

### 5 Install Power Supply



Recommend connecting wires to dedicated 40Va transformer. (Field supplied.)

- Install the power supply in a suitable location inside the control panel of the air handler using two self-tapping screws (included.)
- Connect the power supply to **continuous** 24V power.

The device must be installed in compliance with all national and local electrical and mechanical codes. Failure to do so will void warranty.

#### ⚠ WARNING

##### Electric Shock Hazard.

Can cause injury or death.  
Disconnect all electrical power supplies before servicing.

#### ⚠ WARNING

##### For Use with 24V Only.

Do not exceed voltage rating. Severe damage to device and/or fire could result. Verify proper voltage.

## 6 Install UV Safety Viewport



- Adhere the provided UV safety label to the outside of the duct or air handler near the installation location and drill a 5/8" hole as indicated on the label. Press the UV safety viewport into hole.
- Close all access panels and reconnect power to the air handler.
- Verify that a blue glow can be seen through the UV safety viewport.

### ⚠ NOTICE

#### Replace Lamp Annually.

UV-C lamps expend their germicidal effectiveness over time. Replace the lamp annually even if the lamp appears to be operating normally.

## UV Installation Notes:

- If the UV device is installed on the inlet side (return air side) of a coil, make sure that the HVAC system is configured such that the blower is located between the return air filter and the in-let of the coil, such as would be found in a traditional up-flow, or horizontal furnace with the coil placed after the heat exchanger
- If the UV device is installed near an air filter, check with filter manufacturer for UV-C resistance properties.
- If the desired UV installation location is intended to irradiate an air filter, to neutralize the microbiological matter on the air filter surface, such as would be found in the return air drop of a basement application or in the return plenum of a horizontal system in an attic; take precautions as described in note above, and make sure the UV fixture is placed on the return side of the filter. **DO NOT INSTALL THE UV FIXTURE ON EITHER SIDE OF THE FILTER IN HALL / CLOSET RETURN AIR APPLICATIONS.**

## 24V Installation Notes:

Installing the 24V UV fixture may require an upgrade to the 24V transformer in the furnace, or air handler, depending upon the capacity of the OE specified by the manufacturer of the AHU / furnace.

1. Verify the available volt amps prior to connecting the UV fixture to the 24V circuit. Energize all 24V components so they reach their maximum amp load (Straight cool system - activate cooling. Heat pump - activate heating mode.)
2. After obtaining the available volt amps, determine if the existing transformer can accommodate a UV fixture amp load of 1.1A.
3. After installing the UV fixture, energize all 24V components at their full amp draw, including the UV fixture, and ensure that all systems are operational and that fuses remain intact.
4. Recommend connecting to a dedicated 40VA transformer if existing transformer can not accommodate amp load of 1.1A.

## Positional Lamp Shield Model Notes:

- Snap ON, Snap Off, position shield on lamp for protection of flex duct, air filters or other UV sensitive materials.
- Can be used with Bracket or Delta Plate installs.

## Warranty

TopTech warrants this UV-C Light to be free from defects in materials and workmanship under normal use and service, for a period of five (5) years from the date of purchase. This warranty does not cover UV-C lamp(s), which carry a one (1) year warranty from the date of installation. This warranty does not cover cosmetic damage, damage due to acts of God, damage as a result of handling or shipment, negligence, misuse, connection to improper voltage, improper maintenance, or abuse. This warranty is void if defect(s) result from failure to have this unit installed by a qualified, properly licensed, heating and air conditioning contractor in compliance with all local building and construction codes.

TopTech's exclusive obligation under this warranty shall be to supply, without charge, a replacement for any covered component of the UV-C Light which is found to be defective within the parameters defined herein. TopTech reserves the right to replace or repair the defective part or component.

TOPTTECH SHALL NOT BE LIABLE FOR ANY LOSS OR DAMAGE OF ANY KIND, INCLUDING ANY INCIDENTAL OR CONSEQUENTIAL DAMAGES RESULTING, DIRECTLY OR INDIRECTLY, FROM ANY BREACH OF WARRANTY, EXPRESS OR IMPLIED, OR ANY OTHER FAILURE OF THIS PRODUCT. (Some states do not allow the exclusion or limitation of incidental or consequential damages, so this limitation may not apply to you.) THE WARRANTIES SET FORTH HEREIN ARE EXCLUSIVE AND TOPTTECH EXPRESSLY DISCLAIMS ALL OTHER WARRANTIES, WHETHER WRITTEN OR ORAL, IMPLIED OR STATUTORY, INCLUDING BUT NOT LIMITED TO ANY WARRANTIES OF MERCHANTABILITY, WORKMANSHIP, OR FITNESS FOR A PARTICULAR USE. If the limited warranty is void due to failure to use a qualified contractor all disclaimers of implied warranties shall be effective upon installation.

How to make a warranty claim or have questions answered:

Should you have a warranty claim or questions about the warranty policy, contact the distributor or dealer from which you purchased the product. Proof of original purchase and proof of identity that the original purchasing party is filing the claim is required in order to initiate a warranty claim. Defective parts must be returned no later than thirty (30) days after the failure to the installing contractor together with the model number, serial number, and date of installation. All service and removal must be performed by a licensed HVAC contractor. You must pay shipping charges and all other costs of warranty service. Warranty is only valid the United States and Canada.

THIS WARRANTY SHALL NOT OBLIGATE THE MANUFACTURER FOR ANY LABOR COSTS AND SHALL NOT APPLY TO DEFECTS IN WORKMANSHIP OR MATERIALS FURNISHED BY THE INSTALLING CONTRACTOR AS CONTRASTED TO DEFECTS IN THE GERMICIDAL LIGHT ITSELF.

NOTE: Do not return any products or parts to the factory without a factory issued Return Authorization number issued by the TopTech customer service department.

In the event you have any questions concerning the use and care of this product or this warranty which have not been answered to your satisfaction by the distributor or dealer, please call or write the factory.