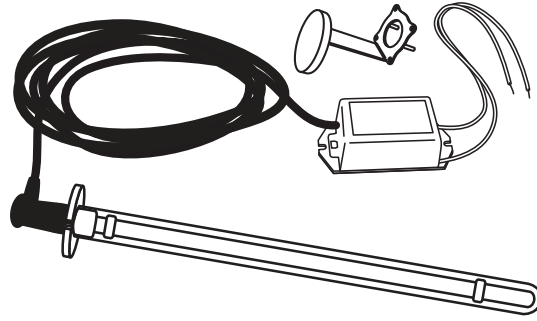


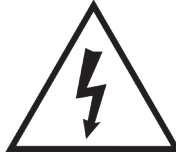
## Blue-Tube UV-X Installation Instructions

Blue-Tube UV-X is installed inside the HVAC system to reduce biological contamination for reduced system maintenance and improved indoor air quality.



DESIGNED &  
ASSEMBLED  
IN THE U.S.A.

US patent #7,704,463



### IMPORTANT!

- Only qualified technicians should install this product\*
- Install in accordance with relevant building codes
- Read instructions carefully including safety warnings

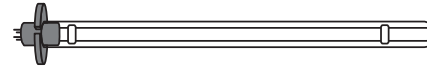
### WARNING!

PROTECT SKIN & EYES FROM UV LIGHT  
TURN OFF UNIT OR DISCONNECT  
BEFORE SERVICING

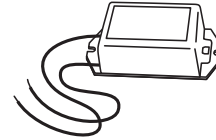
\*Installation of this product by anyone other than licensed HVAC or electrical contractors voids warranty.  
© Fresh-Aire UV

## Blue-Tube UV-X Parts\*

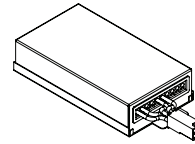
**A** PART: TUVL-315 LIFE: 3 Year



**B** "ER" 18 - 32 VAC Power Supply



**C** "ST" 110 - 277 VAC Power Supply



**D** Lamp Cable



**E** Self-tapping Screws



**F** Quick Nuts (plastic)



**G** Tap-in Connector



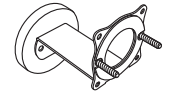
**H** Panel sticker



**I** Sight Glass

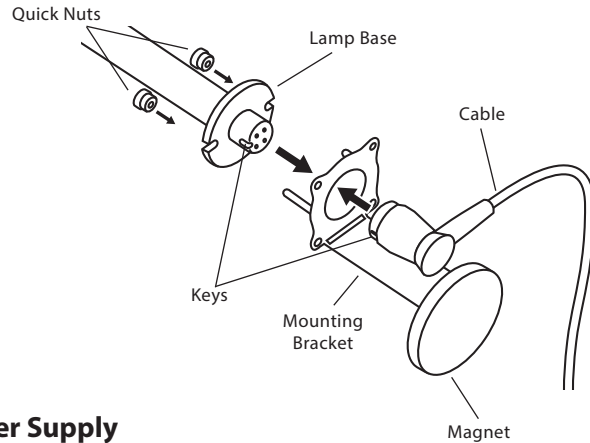


**J** Magnetic Mounting Bracket



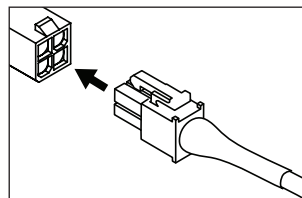
## STEP 1: Lamp, Cable & Mounting Magnet Assembly

1. Pass lamp base through hole in magnetic mounting bracket.
2. Align keys on lamp and cable, press firmly together.
3. Fasten the lamp base to the magnetic mounting bracket using quick nuts.

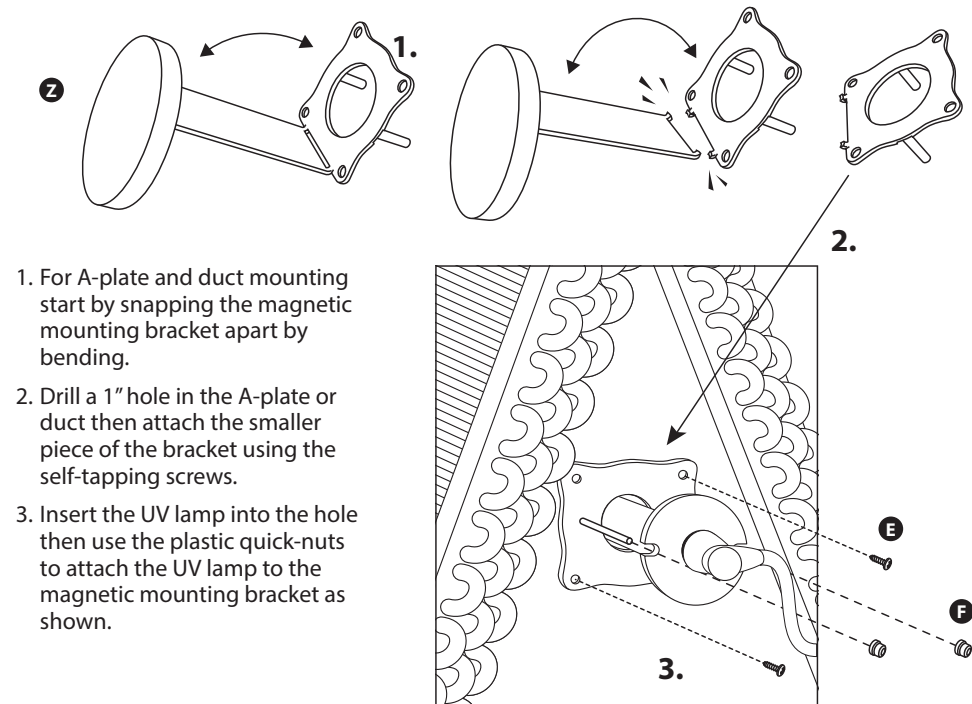


## STEP 2: Cable Routing & Power Supply

1. Determine the best location for the power supply close to the air system's electrical components.
2. Route the lamp cable through the air system to the power supply.
3. Connect the lamp cable to the power supply by aligning the square connectors, then press firmly together until latch catches.



## STEP 1B: Coil A-Plate or Duct Mounting

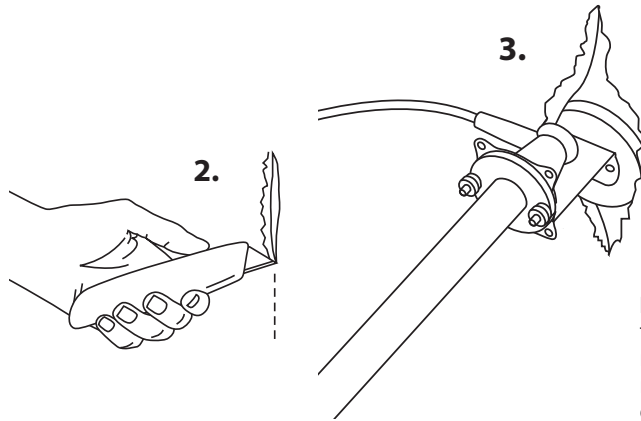


1. For A-plate and duct mounting start by snapping the magnetic mounting bracket apart by bending.
2. Drill a 1" hole in the A-plate or duct then attach the smaller piece of the bracket using the self-tapping screws.
3. Insert the UV lamp into the hole then use the plastic quick-nuts to attach the UV lamp to the magnetic mounting bracket as shown.

## STEP 2: UV Lamp Installation

### Surface Mount

1. Determine the optimal position for placement of the UV lamp.
2. Use a utility knife to cut a slit in the insulation on the interior surface.
3. Place the magnetic mounting bracket directly on the metal surface or remove the magnet and hard-mount the bracket using the self-tapping screws provided. Use foil tape to close the cut in the insulation.



Typical UV lamp locations

**Important:** some materials inside the air system (including filter media, flex duct, wiring etc.) may not be UV light resistant. Use the optional UV shield (part #TUV-SHIELD-LPC) or cover the materials with reflective tape.

## STEP 3: Power Supply & Electrical

**IMPORTANT!** Check which power supply is included with your Blue-Tube UV-X before connecting to power. Turn off main power source before installation.

1. Find a suitable location for the power supply inside the control panel of the air handler. Install using the self-tapping screws.
2. Use the wiring diagrams to connect to power.

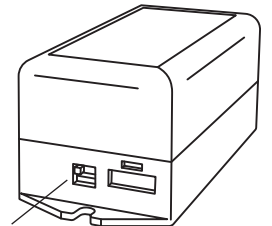
The low-voltage power supply connects to the air system's 24 VAC transformer (or add a 24 VAC transformer as needed).

Line-voltage power supplies connect directly to 120-277 VAC power.

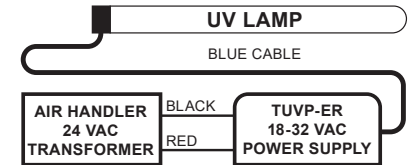
### "ER" Power Supply LED functions

LEDs are visible through the translucent Power Supply housing.

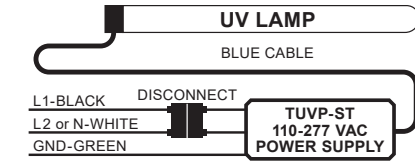
1. Confirm LED Switch is in left position to enable LED indicators.
2. Blue LED indicates normal operation.
3. Red LED indicates lamp fault
4. No LEDs indicates no power.



LED Switch



ER (low-voltage) models wiring



ST (line-voltage) wiring

**IMPORTANT! Must be wired to constant power - do not connect to blower relay.**

## STEP 3: Power Supply & Electrical Cont.

### IMPORTANT!

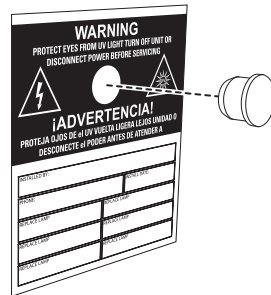
Systems with high 24 VAC loads may require the installation of a separate 24 VAC transformer to power the UV light.

Always use a separate 24 VAC transformer with "communicating" air systems.

Draws 20 VA, may need to do load calculation: Volts under load X Amps under load.

## STEP 4 : UV Warning Sticker & Safety Sight Glass

1. Find a suitable location on the outside of the duct-work near the UV Lamp installation and apply the Fresh-Aire UV® warning/lamp replacement sticker
2. Drill a ½" hole through the circle on the sticker. Press the Sight Glass 1 into hole.
3. Turn on the power and use the sight glass to confirm that the UV Lamp is operating.

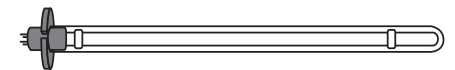


## Lamp Replacement

Germicidal UV lamps need to be replaced periodically. Systems will include one-year, two-year, or three-year UVC lamp(s).

**Note:** UV lamps will continue to emit visible light but they lose germicidal effectiveness over time.

PART: TUVL-315 LIFE: 3 Year



### CAUTION!

**UV lamps contain small amounts of mercury  
Dispose of lamps in accordance with local environmental regulations.**

For more information visit [www.lamprecycle.org](http://www.lamprecycle.org)

Note: Use of replacement UV lamps other than Fresh-Aire UV® voids warranty.

**FRESH-AIRE UV**  
The Indoor Air Quality Expert

**WWW.FRESH-AIREUV.COM**

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