Installation Notes
APCO® is usually installed on the supply side duct just above the air system but can also be installed on the return side if necessary. The APCO® unit should be oriented so that the air flows past the UV Light first then into the Matrix Element.

If a second optional UV lamp is used (APCO Dual) select a location inside the air system that will allow it to shine on the greatest surface area or the area with the most evident microbial growth. To install the secondary UV light use the Optional 2nd Remote UV Light Installation Instructions provided with APCO Dual.

Typical installations include:
- APCO single in air handler
- APCO dual in air handler
- APCO single in Furnace
- APCO dual in Furnace

Attach Power Unit to Duct & Mount UV Lamp
1. Fit the APCO® Main Unit through hole in duct. Attach directly to metal duct using (4) Quick Nuts and attach lamp connector (be sure to align the four connector pins).
2. Attach the cover with machine screws.
3. Mount UV Lamp using (2) Quick Nuts and attach lamp connector (be sure to align the four connector pins).
4. Connect to load side of 24 VAC transformer.

Parts List
- APCO® Main Unit
- UV Lamp 1 Year*
- UV Lamp 2 Year*
- Duct Plate
- Gasket
- Power Cord (ER Model)
- Self-tapping Screws
- Quick Nut (plastic)
- Machine Screws (on cover)
- Tap-in Connector
- Spade Connector
- Optional Remote UV Lamp 1 Year
- Optional Remote UV Lamp 2 Year
- Sight Glass
- 2” Mounting Bracket
- Warning Sticker

Duct Mounting
1. Use gasket to trace outline onto duct.
2. Cut hole in duct. For metal duct ship to
3. Duct Board Mounting
4. Remove paper backing from the other side of the gasket then fix mounting plate and gasket to the duct.
5. Bend mounting plate flanges around the edges of the hole to secure mounting plate. Use tape around edges of mounting plate for air leaks and additional hold.

Connecting to Power

IMPORTANT
Before connecting to power confirm which APCO model is being installed. Turn off main power source before installation. Model information is printed on the Power Unit cover.

Power Unit DI/DER
4 PIN CONNECTOR
APCO LAMP
CONNECTOR
4 PIN
UV LAMP
CONNECTOR
COMMON / BLUE
L1 - BLACK
L2 or N - WHITE
GND - GREEN
L3 - RED
L4 - WHITE STRIPE
24 VAC TRANSFORMER
Connect to load side of 24 VAC transformer.

Power Unit E/R
4 PIN CONNECTOR
APCO LAMP
CONNECTOR
4 PIN
UV LAMP
CONNECTOR
COMMON / BLUE
L1 - BLACK
L2 or N - WHITE
GND - GREEN
L3 - RED
L4 - WHITE STRIPE
24 VAC TRANSFORMER
Connect to load side of HVAC.

Lifetime Power Supply Warranty:
This warranty supersedes any and all other warranties, written or implied, and expressed or implied, including any warranty of merchantability, any warranty of fitness for a particular purpose or any warranty of non-infringement. No person is authorized to make any extension or modification of this warranty. This warranty does not cover products or parts purchased from any source other than licensed HVAC or electrical contractors. This warranty does not cover parts installed by unlicensed HVAC or electrical contractors. This warranty does not cover parts damaged as a result of misuse, abuse, or use in any way other than the intended use, accidental acts of God, illegal operation, operation outside the specifications, modification, or alteration. Triatomic Environmental, Inc. shall have no responsibility for changes caused by the customer for installation or removal of warranted items. This warranty does not cover parts or equipment used with the Fresh-Aire UV that is not manufactured by Triatomic Environmental, Inc. or unsecured with this equipment.

Consequential and incidental damages are not recoverable under this warranty. Manufacturer assumes no liability for any harm, which may occur as a result of the use of the equipment herein and shall not be liable for loss or damage, whether or not caused by manufacturer’s negligence or resulting from express or implied warranty or breach thereof. Consequential damages to the use of the warranty shall be limited, but not be limited, to the cost of repair or replacement of the equipment or otherwise. Some states do not allow the exclusion of incidental or consequential damages, so the above limitations or exclusions may not apply to you.

There are no warranties which extend beyond the description of the face hereon.

How Do You Get Service?
In order to be eligible for service under the warranty you MUST retain your warranty registration and or written service as freshaireuv.com. If you are unsure of whether your product is covered under our warranty, we will perform an additional cost or replacement. Replacement parts may be exchangeable. Your determination that the product is not covered under the warranty, or that this warranty is void, the product will be returned to you. If there is no charge for inspections.

How Does State Law Apply?
This warranty gives you specific legal rights, and you may also have other rights which vary from state to state.

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Optional 2nd Remote UV Light Installation Instructions

The optional Fresh-Aire Remote UV Light works with the APCO system for enhanced disinfection, reduced system maintenance, and improved indoor air quality.

**IMPORTANT!**
- APCO Dual lamps are wired in series - both must be connected for lamps to light
- Only qualified technicians should install this product
- Install in accordance with relevant building codes
- Read instructions carefully including safety warnings

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### Mounting Options

![Mounting Options](image)

**WARNING**

- Protect eyes from UV light
- Turn off unit or disconnect before servicing

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#### Air Handler Interior Surface Installation

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 “Z” 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.
4. Use plastic quick-nuts to attach the UV lamp to the “Z” bracket as shown.

#### Coil “A” plate or Duct Installation

1. Snap the “Z” 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 “Z” bracket as shown.

#### Remote UV Light Configuration

**IMPORTANT!** Only the APCO Dual model has the electrical capacity and attached cable for the optional Remote UV Light. Simply connect the lamp lead to the power cable on the left side of the APCO Power Unit.

To add a second UV light to an existing APCO system that is not a Dual model install a separate Fresh-Aire UV AHU Series 1 or Blue-Tube UV system.

#### Sight Glass Installation

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 orange circle on the sticker. Press the UV safety viewport into hole.
3. Turn on the power and use the sight glass to confirm that the UV Lamp is operating.

#### Lamp Replacement

The germicidal UV lamp in the Fresh-Aire Remote UV Light needs to be replaced periodically. A TUVL-115P lamp should be replaced every year. The TUVL-215P should be replaced every 2 years. Note: UV lamps will continue to emit visible light but lose germicidal effectiveness over time. You can upgrade to a 2 year with your existing power supply.

**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.