The APCO MAG is installed in the ductwork of the central air system to reduce odors and airborne biological contaminants for improved indoor air quality. The APCO MAG also reduces microbial growth within the air system.

**Connecting to Power**

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

**WARNING**
- 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.

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

*Installation of this product by anyone other than licensed HVAC or electrical contractors voids warranty.

**TUV-APCO-MAG-12.5.16**

1. **Parts List**
   - APCO MAG Unit
   - APCO MAG 11 UV Lamp 1 Year*
   - APCO MAG 11 UV Lamp 2 Year*
   - APCO MAG 15 UV Lamp 1 Year*
   - APCO MAG 15 UV Lamp 2 Year*
   - ER Power Supply*
   - ST/DT Power Supply*  
   - S/DI Power Supply*  
   - Self-tapping Screws  
   - Quick Nut (plastic)  
   - Spade Connector  
   - Tap-in Connector  
   - "Z" Mounting Bracket
   - Sight Glass  
   - Warning Sticker

2. **Connecting to Power**

3. **Mount Lamp**

4. **UV Lamp Connection**

Make sure the flanges are aligned and then push the connectors firmly together. A tight connection ensures a proper water-resistant seal.

**CAUTION:**
UV lamps contain small amounts of mercury - dispose of lamps in accordance with local environmental regulations. For more information visit www.lamprecycle.org

**Manufacturer’s Warranty:**
This warranty supersedes and replaces any warranty statements orally made by the Sales Person, Distributor or Dealer or contained in the written instructions or other Brochures or informational documents in relation to this product. This warranty gives you specific legal rights, and you may also have other rights which vary from state to state.

1. **Lamp Replacement**
   The germicidal UV lamp in APCO MAG needs to be replaced periodically. TUVL-11P and TUVL115P lamps should be replaced every year. TUVL-211P and 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 lamp with your existing APCO system.

2. **Air Handler Interior Surface Installation**
   1. Determine the optimal position for placement of APCO MAG inside the air system.
   2. Use a utility knife to cut a slit in the insulation on the surface.
   3. Place the magnetic mounting bracket directly on the metal surface or remove the magnet and mount the bracket using the self-tapping screws provided. Use foil tape to close the cut in the insulation.

3. **2nd UV Lamp**

*Installation Notes*

The APCO MAG is usually installed inside the central air handling system. The unit should be oriented so that the air flows past the UV Light first then into the Matrix Element but a reversed installation is possible if mounting on the return side of the coil.

If a second optional UV lamp is used (APCO Mag Dual) select a location inside the air system that will allow it to shine on the greatest surface area of the system to reduce microbial growth.

To install the second UV light use the Optional 2nd Remote UV Light Installation Instructions provided with APCO Mag Dual.

4. **Typical Installations:**
   - APCO MAG single in air handler
   - APCO MAG dual in air handler
   - APCO MAG in Package Unit

5. **IMPORTANT:**
   Systems with high 24 VAC loads may require the installation of a separate 24 VAC transformer to power the UV lamps. A draw of 16 VA, may need to do load calculation. Volts under load X Amps under load.

**Lamp Replacement**

Replacement lamps for TUV-APCO-MAG11
Replaces TUVL-115P
Superior to TUVL-115P

Replacement lamps for TUV-APCO-MAG15
Replaces TUVL-215P
Superior to TUVL-215P

6. **Lamp Replacement**

Note: Use of replacement UV lamps other than Fresh-Aire UV® voids warranty.
The optional Fresh-Aire Remote UV Light works with the APCO system for enhanced disinfection, reduced system maintenance, and improved indoor air quality.

**Installation Notes**

Before installing the Fresh-Aire Remote UV Light it is necessary to determine the optimal mounting location inside the air system. First, look for the area with the heaviest mold growth. Also consider a location that will allow the germicidal UV light to shine on the greatest surface area.

Some typical mounting locations:
- Supply-side duct
- At the blower
- Across top of coils
- Coil face
- Coil "A" plate
- Return-side duct

**Remote UV Light Configuration**

**IMPORTANT!** Only the APCO MAG Dual model has the electrical capacity and attached cable for the optional Remote UV Light. Simply connect the lamp lead to the optional UV lamp cable on the power supply (PART# ST/DT, SI/DI).

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.

**Remote UV Lamp Connection**

1. When all the other components are properly installed connect the UV Lamp cable to the APCO Power supply cable.
2. Make sure the flanges are aligned and then push the connectors firmly together. A tight connection ensures a proper water-resistant seal.

**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.

**Warning**

PURGE EYES FROM UV LIGHT TURN OFF UNIT OR DISCONNECT BEFORE SERVICING

**CAUTION!** UV lamps contain small amounts of mercury - dispose of lamps in accordance with local environmental regulations. For more information visit www.lamprecycle.org

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