

# Ultravation®

Professional Indoor Air Quality Products

## UVPhotoMax™

### AIR DISINFECTION SYSTEMS OWNERS GUIDE



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**LEAVE FOR HOMEOWNER**

### **Shipping and Packaging List:**

- UV PhotoMax Electrical Housing
- 4- ¾ inch 5/16 self tapping sheet metal screws
- UVC Warning Label
- Warranty Card
- Remote mount Viewport Label
- Remote mount Viewport / Sight Stick
- One 12" Photo catalyst oxidation lamp
- 18" Sealing Gasket
- Two Wire Nuts (for 24V systems)
- 40 VA multi-tap transformer (for 24V systems)
- Duct board mounting plate

### **Safety Precautions:**

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

**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: Severe eye damage or temporary blinding may occur.**

**WARNING: DO NOT operate outside of Air Handler. Mount product to duct first.**

**WARNING: No openings in duct are allowed which would give direct line-of-sight to the UV light.**

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.

### **Notice:**

All wiring inside of the duct or air handling system in direct line of site of the UV lamp must be shielded with aluminum foil tape or equivalent non-combustible material. When installing this unit, select a mounting location that prevents ultraviolet light exposure to plastic flexible duct liner or other plastic components with unknown resistance to ultraviolet light. Ultraviolet light may cause color shift or structural degradation of plastic HVAC components

### **Warranty:**

Ultravation warrants this product against any defects in material or workmanship for a period of 10 years after date of consumer purchase, with the exception of the Ultraviolet Lamp, which is warranted for a period of one year after date of consumer purchase.

This warranty does not include damage to the unit from accident, misuse or improper installation. If this product should become defective during the warranty period, Ultravation will elect to repair or replace the product free of charge.

Ultravation will return repaired or replaced warranted products pre-paid, provided that the product was delivered pre-paid. Ultravation 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 Ultravation, Inc.

Ultravation, Inc. ~ P.O. Box 165 ~ 212 Ideal Way  
~ Poultney, Vermont 05764  
Phone: 866-468-8247 ~ Fax: 802-287-9203 ~  
[www.ultravation.com](http://www.ultravation.com)

### **Installation steps:**

1. Mounting holes are located on the outside flange; additional support can be acquired by using the larger mounting plate.
2. Determine a suitable location to install unit housing. Mounting location should be of sufficient strength as to support the unit; otherwise reinforcement of the ductwork may be necessary.
3. Using the supplied template cut the hole needed for the insertion of the advanced photo catalytic chamber.
4. Lift into place against ductwork. Fasten unit in place with four self- tapping screws (supplied).
5. The unit ships with the lamp in place. Remove cover to make sure the connector is seated on the lamp base.
6. Adjust the air cleaner per the directions on the next page (as indicated under the cover).
7. Put cover back on unit.
8. Plug unit in and inspect operation (For 24VAC units the unit is to be hard wired using the supplied 24VAC transformer.)

**Note: The UV lamp can be removed independently, simply by removing the 2 screws in the lamp holder.**

**Note: the pins are in a rectangular pattern and can only be mated in 2 positions.**

### **Installation Steps for UV Viewport:**

1. Find a location on the air handler or ductwork that will visible and be in direct line of site of UVC light.
2. Affix UV Viewport label to air handler or ductwork.
3. Drill a 3/8" hole through label and air handler or ductwork in marked location on label.  
or push the duct board sight stick into duct board.
4. Press in UV Viewport until it snaps into place (not used with duct board sight stick).

### **Maintenance:**

Typical maintenance of the PhotoMax system is recommended replacement of the Dual Spectrum Lamp every 2 years and replacement of the PCO Module is every 5 years.

UV lamps undergo a photochemical process during operation. This slowly reduces the amount of UV light generated to disinfect against airborne pathogens.

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.

### **Lamp Replacement:**

The UV Lamp is shipped installed in the equipment. However annual replacement is required for airstream disinfection. To replace the UV Lamp follow the steps below:

1. Turn power off and remove cover.
2. Pull advanced photo catalytic rod to its full out position.
3. Unplug lamp and remove screws.
4. Change lamp and connect lamp.
5. Readjust the advanced photo catalytic control.

### **Reset your Service Indicator**

1. To set or reset the annual service indicator the unit must have power to it.
2. Press down and hold the square yellow **RESET** button (hold down for 10 sec.) on circuit board (located below LED view port on the end of the electrical housing), **the LED** should turn **GREEN** while the button is depressed.
3. Release the square yellow **RESET** button.
4. LED should be Green.

**For optimum 24/7 air stream disinfection it is recommend the UV-C lamp is replaced on an annual basis.**

**Adjusting Your Advanced Photo Catalytic Air Cleaner:**

The UV PhotoMax equipment has a patented design to be a universal air cleaner with adjustability to the advanced photo catalytic process for a variety of sizes for treated space. When setting up your equipment, adjust the Advanced Photo Catalytic control knob ( under electronics cover)to the appropriate position based on the square footage of the home .

Fine adjustments may be required depending upon household living characteristics.

For more information please call Ultravation : 1866-468-8247 ext 16- Customer support.

**UVLampMonitor Status Table:**

<b>LED Color</b>	<b>Audible Visual Alarm</b>	<b>Unit Status</b>
<b>Green</b>	No audible	OK
<b>Solid Red</b>	No Audible	Reset lamp service indicator or replace lamp within 30 days Occurs at approx. 11 months of operation
<b>Flashing Red</b> (Every 5 seconds)	Beep every 3 Minutes	Lamp has exceeded 1 year of operation, reset or replace lamps
<b>Pulsing Red</b> (Every 1 second)	Beep every 1 second	UV lamp(s) are not lit (verify if possible)

**Upgrade for object purification:**

This product may be upgraded to power a single 12" or 17" Ultravation T3 lamp.

This may be necessary especially in the southern most states or where there is a constant demand for Air conditioning as this practice tends to lead to bacterial fouling of AC equipment.

In some cases it may be necessary to have a 3rd dedicated lamp for items such as blower motor assemblies or turning vanes.

Upgrades should be done by a trained technician only.

Consult your HVAC technician or call 1-866-468-8247 for more information.

**Replacement Parts:**

<b>Model</b>	<b>Description</b>	<b>Replacement Part Number</b>
Lamp	12" oxidation Lamp	ASIH1013
PCO Module	12" Advanced Photo Catalytic Module	94-056