Thank you for purchasing an Ultravation® Professional Indoor Air Quality Product

Package Contents:
- UMX/UME Electrical Housing
- Ten 3/4 inch 5/16 self-tapping screws
- UVC warning label
- Warranty card
- Remote mount Viewport label
- Remote mount Viewport
- Two wire nuts (for 24V systems)
- Light Shield (24V systems, one for each lamp)
- Four T3 lamp mounting screws (remote lamp models)
- Remote mount Viewport label
- Two T3 lamp mounting gaskets
- UMX/UME - 1924T, 1900T, 1036T3
- One 17" T3 UVC lamp
- One T3 lamp mounting gasket
- UMX/UME - 1924T2, 1920T, 2036T3
- Two 17" T3 UVC lamps
- Two T3 lamp mounting gaskets

UMX/UME - 1224T, 1200T, 1000T3
- One 12" T3 UVC lamp
- One T3 lamp mounting gasket

Important information about UV lamp replacements:
Replace UV lamps each year in order to maintain optimum effectiveness in the reduction of pathogens such as bacteria, viruses and microscopic mold. Lamps operating after a period of two years do not provide adequate reduction of pathogens and must be replaced. Lamps operating beyond 18,000 hours (two years) draw excessive electrical current which may result in damage to the UV system. If UV lamp(s) have been operating for more than two years, the system must be turned off until replacement lamp(s) are installed. Failure to do so may void the warranty.

Introduction

UltraMax UV systems produce no ozone. No harmful by-products or off-gassing takes place in the sterilization process or the photocatalytic process.

Warranty

Ultravation warrants this product against any defects in material or workmanship for a period of ten years after date of consumer purchase. Warranty 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 or removal of warranted items. Liability is limited only to the replacement or repair of this product. Liability is limited only to the replacement or repair of this product.

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.

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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 replacing lamps or servicing.

WARNING: Severe eye damage or temporary blinding may occur.

WARNING: DO NOT operate outside of air handler. Mount lamp base to duct first.

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

Important information about UV lamp replacements:

Disconnecting power is required for lamp replacement. New lamps will NOT light if power has not been disconnected. Power must be off for at least five seconds.

Safety Precautions:
- Always protect eyes from ultraviolet light.
- Do not look at UV lamps in operation.
- Unplug or disconnect power before replacing lamps or servicing.
- Replacement lamps must be UV-rated to avoid overheating and failure.
- Ultraviolet light can degrade plastic HVAC components. If installing where UV light can directly contact fiberglass duct board or other plastic components with unknown resistance to ultraviolet light, use aluminum foil tape or equivalent non-combustible material to shield.
- Ultraviolet light may cause color shift or structural degradation of plastic components.

Options
Refresh™ PCO (Photocatalytic Oxidation)
- Whole house odor reduction module w/gasket
- Four 3/4 inch 5/16 self-tapping sheet metal screws

IL3 (Internal Light Shield) – 1 Per Lamp
- One lamp clip
- One heavy duty mounting magnet
- Associated hardware

UV LAMP REPLACEMENT SAFETY RESET
Disconnecting power is required for lamp replacement. New lamps will NOT light if power has not been disconnected. Power must be off for at least five seconds.

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UltraMax’s T3™ system is protected by US patents 6,809,326 & 6,838,057 • Copyright © Ultravation, Inc. All rights reserved.
Installation

Installation steps for remote lamp mounting, remote lamp replacement, and external mounting of power supply:

1. Remove the cover from the electronic housing.
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. Fasten unit in place with two self-tapping screws (supplied).
3. Re-fasten housing cover to the power supply.

UV Lamp Installation:

1. Select location for UV lamp module, drill a 1” hole for each lamp. Fasten mounting plate over drilled hole with screws provided.
2. Insert UV lamp module into 1” opening. Attach to mounting plate with the two provided self-tapping screws.
3. Plug the lamp connector into the installed UV lamp assembly. Be sure the four pins-holes are oriented properly to the four mating pins of the lamp (see diagram, below).
4. Connect full time power to unit. (The UV system should be powered constantly, not cycled with HVAC system power).

IMPORTANT: T3 Lamp Connection

Lamp pins are in a rectangular pattern (NOT square). The plug can be connected to the lamp in either of the two ways that match the pin pattern. The T3 UV lamp assembly can be removed independently, simply by removing the two screws in the lamp base.

**ELECTRICAL POWER CONNECTION 24VAC UNITS**

All 24 volt UV equipment for HVAC systems (regardless of manufacturer) must be installed using a separate, dedicated minimum 40VA transformer to avoid the possibility of voiding UL certification of the HVAC system. This product may be equipped with a 1.75 amp in-line fuse for both surge and electrical arc protection. Replace only with AGC 1.75 AMP (2 AMP max) fuse. (available from Ultradation or authorized distributor, part number EL-PP-0001). Failure to do so will defeat the design and void the warranty.

Troubleshooting, continued

- If you have an in-line fuse, verify that the in-line surge protection fuse is still functional. If needed, replace only with an AGC 1.75 AMP (2 AMP max) fuse.
- Determine what signal, if any, the UV Lamp Monitor LED is emitting. (See the UVLampMonitor chart below.)

Remember: DO NOT look at UV light without proper eye protection.

Note: If just one UVC lamp of a 2-lamp system operates, make sure the lamp connection is correct (see T3 connection illustration at left).

Note: A flashing red every 1 second and a beep every 1 second does not necessarily mean the lamps are defective or no longer emitting UV, it is sensing that the lamp or lamps in the unit are not on. This could be caused by other factors. In this case, a service technician should be contacted.

Lamp Replacement and Reset Procedure

See “UV Lamp Installation” for replacement procedure.

Note: When replacing lamps disconnect power to the unit first.

After the lamps are in place, complete steps 1-4 below to reset the service indicator light to 0. For optimum air stream disinfection it is recommended that the UV-C lamp(s) be replaced on an annual basis.

Setting the Service Indicator Light (FOR UMX SERIES ONLY):

We recommend that a certified technician perform this operation. (For integrated lamp UMX models the cover must be removed and power left on – the reset switch is inside the unit.)

1. To set or reset the annual service indicator the unit must have power connected.
2. Press down and hold the square yellow RESET button (hold down for 10 sec.). It is located below LED Viewport on the end of the electrical housing. The LED turns GREEN while the button is depressed.
3. Release the square yellow RESET button. The LED will now glow green continuously indicating the reset procedure was successful.

There are NO user serviceable parts inside. Refer servicing to qualified service personnel.

**UVLampMonitor (UMX Models Only)**

The below chart indicates how to interpret UVLampMonitor status.

<table>
<thead>
<tr>
<th>LED Color</th>
<th>Audible Alarm</th>
<th>Unit Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>Solid Red</td>
<td>No Sound</td>
<td>Replace lamp within 30 days</td>
</tr>
<tr>
<td>Pulsing Red (1 sec)</td>
<td>1 sec beep interval</td>
<td>Lamp(s) has exceeded 1 year of operation</td>
</tr>
<tr>
<td>Flashing Red (5 secs)</td>
<td>3 min beep interval</td>
<td>Replace lamp(s) and reset alarm</td>
</tr>
</tbody>
</table>

Remember: DO NOT look at UV light without proper eye protection.

For installation of integrated lamp models follow illustration on supplied template DC-IH-3333

**Ultravation**

Professional Indoor Air Quality Products

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