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<u>NOTE</u>: When printing this manual, make sure mounting template pages are printed at 100%.

# Installation, Operation & Maintenance

Read and Follow All Safety Instructions. Save These Instructions.





Manufacturers / Engineers / Sales / Service Germicidal Ultraviolet – Equipment & Lamps

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These instructions generally describe the installation, operation and maintenance of the **AeroLogic**<sup>®</sup> Germicidal Ultraviolet Fixtures. Questions that are not specifically answerable by these instructions should be directed to the factory. Atlantic Ultraviolet Corporation<sup>®</sup> takes all possible precautions when packaging equipment to prevent damage. Carefully inspect and report all damages. Do not install damaged equipment. Follow all instructions on any labels or tags. Carefully inspect all packing materials before discarding to prevent the loss of accessories, mounting hardware, spare parts or instructions.

The information and recommendations contained in this publication are based upon data collected by the Atlantic Ultraviolet Corporation<sup>®</sup> and are believed to be correct. However, no guarantee or warranty of any kind, expressed or implied, is made with respect to the information contained herein. Specifications and information are subject to change without notice.



## SAFETY WARNINGS

- All personnel should be alerted to the potential hazards indicated by the product safety labeling on this unit.
- The following conventions are used to indicate and classify precautions in this manual and on product safety labeling. Failure to observe precautions could result in injury to people or damage to property.



This is the safety alert symbol. It is used to alert you to potential personal injury hazards. Obey all safety messages that follow this symbol to avoid possible injury or death.



Danger indicates an **IMMINENTLY** hazardous situation, which, if not avoided, **WILL** result in death or serious injury.



Caution indicates a **POTENTIALLY** hazardous situation, which, if not avoided, **MAY** result in minor or moderate injury.



This symbol/pictorial is used to identify an **ELECTRICAL SHOCK** or **ELECTROCUTION** hazard.



This symbol/pictorial is used to identify the need to wear approved ultraviolet blocking eye wear.



This symbol/pictorial is used to identify the need to wear protective gloves.

# SAFETY INSTRUCTIONS

**AWARNING** To guard against injury, basic safety precautions should be observed, including the following:

1. Read and follow <u>ALL</u> safety instructions.



**AWARNING** Avoid exposure to direct or reflected germicidal ultraviolet rays. Germicidal ultraviolet rays are harmful to the eyes and skin.

- 2. Intended for indoor use only.
- 3. Do not alter design or construction.
- 4. Do not use this fixture for other than its intended purpose, as described in this manual.
- 5. Do not mount under any source of moisture or condensation, such as humidifiers, cooling coils, etc.
- 6. Do not remove any labels or devices.
- 7. **ACAUTION** Germicidal ultraviolet rays may break down plastic, rubber or other non-metallic materials, with inadequate resistance to ultraviolet. Shield all plastic, rubber or other non-metallic parts such as; plastic drain pans, wire insulation, flex ducts, humidifiers, filters, etc. which may be exposed to direct or reflected germicidal ultraviolet rays.
- 8. **AWARNING** Do not operate without proper electrical ground.
- 9. Do not operate the unit if there is visible or suspected damage to the unit or, if applicable, there is damage to power cord and/or plug.
- 10. Utility power supplied, to the fixture, **MUST** match power requirements listed on the fixture label.

### 11. **AWARNING** Always disconnect power to the unit before performing any service or maintenance.

- 12. Ultraviolet light must be contained within duct and visible only through supplied sight glass assembly.
- 13. Read and follow all notices and warnings on the unit.
- 14. SAVE THESE INSTRUCTIONS.

## CAUTION

It is the user's responsibility to determine and validate the suitability of this equipment for use in the user's system or process. No warranty or representation is made by the manufacturer with respect to suitability or performance of this equipment or to the results that may be expected from its use. The user should periodically inspect, clean as necessary and confirm the presence and good legibility of the product safety labels. Contact the factory for replacement labels in the event that any of the labels are missing or illegible.



Warning indicates a **POTENTIALLY** hazardous situation, which, if not avoided, **COULD** result in death or serious injury.

CAUTION S

Caution used without the safety alert symbol indicates a potentially hazardous situation, which, if not avoided, may result in property damage.

This symbol/pictorial is used to identify an **ULTRAVIOLET LIGHT** hazard.



This symbol/pictorial is used to identify the need to wear approved ultraviolet blocking face shield.



This symbol/pictorial is used to identify components which must not be disposed of in trash

## SAFETY LABELS -

Warning Germicidal UV (70-0037)

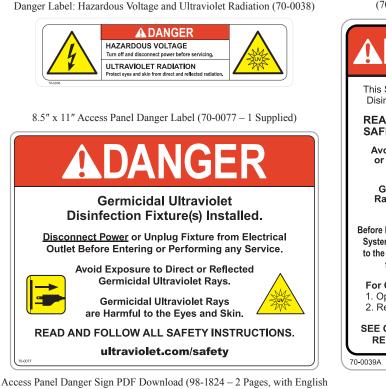
A WARNING This luminaire is designed for use with germicidal ultraviolet lamps and must be installed in compliance with competent technical directions so that the user's eyes and bare skin will not be subjected to injurious rays.

Hg - Lamp Contains Mercury (70-0011)

Hg - LAMP CONTAINS MERCURY. Do not put in trash. Dispose in accord with local, state or federal law. o. 70-001

Location of Safety Labels





and Spanish) available at: ultraviolet.com/ultraviolet-air-pdf-library

#### (70-0039A – 2 Supplied) DANG This System has an Ultraviolet Disinfection Fixture Installed. **READ AND FOLLOW ALL** SAFETY INSTRUCTIONS. Avoid Exposure to Direct or Reflected Germicidal Ultraviolet Rays. Germicidal Ultraviolet Rays are Harmful to the Eyes and Skin. Before Performing any Service to this System: Always Disconnect Power to the System and Unplug Fixtures from Electrical Outlets. For Optimum Performance: 1. Operate Unit Continuously. 2. Replace Lamp(s) Annually. SEE OWNER'S MANUAL FOR **REPLACEMENT LAMPS.**

2" x 4" Duct Danger Label

# **PRODUCT APPLICATION -**

### **C**ONSTRUCTION

The AeroLogic® Air Duct Disinfection Unit consists of:

- STER-L-RAY<sup>®</sup> Germicidal Ultraviolet Lamps, which deliver ultraviolet energy in the specific wavelength of 254 nanometers (nm) which effectively destroys airborne microbes including: virus, bacteria, and mold spores.
- Units use **Surelite**<sup>™</sup> Electronic Ballasts available in 120v 50/60Hz or 230v 50/60Hz.
- A standard, NEMA 5-15 three-prong plug is provided on 120VAC 50/60Hz units. Units which are 230v 50/60Hz are provided . with a continental European plug.
- A separate **Promate**<sup>™</sup> sight glass assembly provides a <u>safe</u> visual indication of germicidal ultraviolet lamp operation without the risk of ultraviolet exposure.
- All electronics and wiring are housed in an enclosure constructed of stainless steel. Stainless steel construction provides strength, durability, and will withstand most harsh environments.

### **PRINCIPLE OF OPERATION**

The AeroLogic<sup>®</sup> design has been carefully conceived to provide adequate germicidal ultraviolet dosage for air stream or surface disinfection in new or existing HVAC (Heating, Ventilating & Air Conditioning) Systems. The dosage, as it applies to ultraviolet disinfection, is a function of time, and the intensity, of ultraviolet radiation, to which the air stream or surface is exposed. The exposure time, in seconds, is the total time it takes the air to move through the ultraviolet field, produced by the germicidal lamps. Exposure time is related to the airflow rate; the higher the airflow, the lower the exposure time or the lower the airflow, the higher the exposure time. The UV intensity is the amount of energy emitted by the germicidal lamps.

- Air moving in the HVAC System duct passes over the germicidal ultraviolet lamp of the AeroLogic® and is exposed to the ultraviolet rays emitted by the germicidal lamp.
- **Promate**<sup>™</sup> Sight Glass Assembly installed on the duct allows a <u>safe</u> visual indication of germicidal ultraviolet lamp operation.

## LIMITATION OF USE

- The **AeroLogic**<sup>®</sup> requires professional installation so all wiring complies with applicable state, local and national electrical and mechanical codes.
- **AeroLogic**<sup>®</sup> requires knowledgeable planning for: location, installation, and supervision to prevent ultraviolet exposure of occupants.



**ACAUTION** Overexposure to germicidal ultraviolet rays will result in the irritation of the eyes and reddening of the skin. For this reason, it is of the utmost importance that your ultraviolet application be carefully planned and implemented so as to avoid exposure, of personnel, to direct or reflected ultraviolet rays.

- The American Conference of Governmental Industrial Hygienists (ACGIH) has established a Threshold Limit Value (TLV) for occupational exposure to radiant ultraviolet energy.
- Currently the ultraviolet radiant exposure incident for unprotected eyes or skin should not exceed 0.2 microwatts per square centimeter (μW/cm<sup>2</sup>) at 254 nanometers (nm) for an eight (8) hour period.
- Safety and maintenance procedures <u>MUST</u> be implemented to prevent accidental exposure of personnel, who maintain the HVAC system. All work performed on the HVAC system must be monitored to ensure that it does not adversely impact the safety or effectiveness of the installation.

## UNPACKING -



IN ORDER TO PERFORM THIS TASK, BE SURE TO WEAR THE FOLLOWING SAFETY EQUIPMENT: SAFETY GLASSES OR A FACE SHIELD, AS WELL AS GLOVES.

- Remove the AeroLogic<sup>®</sup> Air Duct Disinfection Unit from its shipping carton.
- Atlantic Ultraviolet Corporation<sup>®</sup> takes all possible precautions when packaging this unit to prevent damage. Carefully inspect the unit, power cord and plug for damage and report all damage immediately. Do not assemble or operate if there is any damage, visible or suspected.
- **STER-L-RAY**<sup>®</sup> Germicidal lamps are packed separately, to ensure maximum protection for the lamps. Keep the lamps aside until ready for installation.
- Carefully inspect all packing materials to prevent the loss of accessories, mounting hardware, spare parts, or instructions.
- Do not discard packing materials until unit is assembled and start up is complete.

The AeroLogic® ADHO18-2, ADHO24-2, ADHO30-2, ADHO36-2, ADHO48-2, and ADHO64-2 units include:

- 1 2 lamp AeroLogic<sup>®</sup> unit with line cord
- 2 STER-L-RAY® Germicidal Ultraviolet Lamps
- 4 No. 8-18 x <sup>1</sup>/<sub>2</sub>" Self-Drilling Screws
- 1 **Promate**<sup>™</sup> 2-in. Sight Glass Assembly with
- 4 No. 8-18 x 3/8" Self-Drilling Screws
- 1 Operating Instructions
- 2 2" x 4" Duct Danger Labels (70-0039A)
- 1 8.5" x 11" Access Panel Danger Label (70-0077)

The AeroLogic® ADHO18-4, ADHO24-4, ADHO30-4, ADHO36-4, ADHO48-4, and ADHO64-4 units include:

- 1 4 lamp **AeroLogic**<sup>®</sup> unit with line cord
- 4 STER-L-RAY® Germicidal Ultraviolet Lamps
- 4 No. 8-18 x <sup>1</sup>/<sub>2</sub>" Self-Drilling Screws
- 1 **Promate**<sup>™</sup> 2-in. Sight Glass Assembly with 4 No. 8-18 x 3/8" Self-Drilling Screws
- 1 Operating Instructions
- 2 2" x 4" Duct Danger Labels (70-0039A)
- 1 8.5" x 11" Access Panel Danger Label (70-0077)

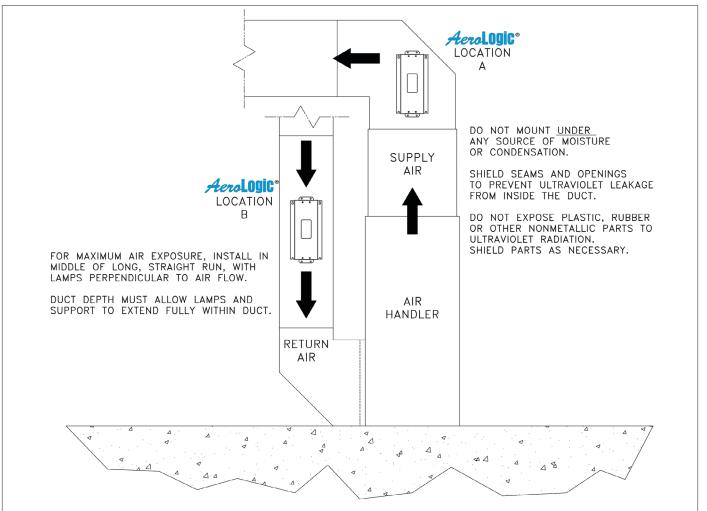
# INSTALLATION

### UNIT PLACEMENT

Proper unit placement is essential. To ensure safe and effective operation, the location should:

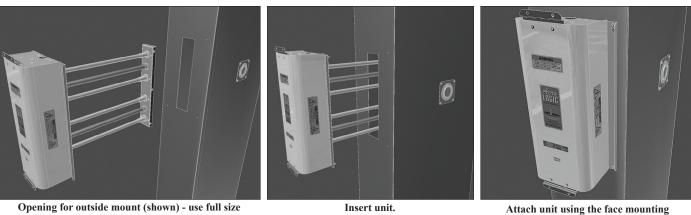
- Have enough duct width to mount unit with lamps perpendicular to airflow, within the longest duct length for increased exposure time.
- Be able to support the weight of the **AeroLogic**<sup>®</sup> unit. If the duct construction does not seem capable of supporting the unit, the duct must be reinforced, to support the weight, before installing.
- Be on the supply air plenum, LOCATION A (preferred), or on the return air plenum, LOCATION B (alternative).
- Have properly grounded, electrical outlets within reach of the unit's power supply cord.
- Not be mounted under any source of moisture or condensation, such as humidifiers, cooling coils, etc.
- Not be mounted near any duct openings, joints, seams, etc. If necessary, seal all openings, joints, seams, etc. using aluminum tape or equivalent ultraviolet-resistant material.
- Prevent exposure of any plastic, rubber or other non-metallic materials, with inadequate resistance to ultraviolet, such as; plastic drain pans, wiring insulation, flex ducts, humidifiers, filters etc. If necessary, shield all plastic, rubber or other non-metallic materials using aluminum tape, conduit, sheet metal or equivalent ultraviolet resistant material.
- Be free of any components that would be damaged by or interfere with the installation.
- Be easily accessible for viewing lamp operation through **Promate**<sup>™</sup> Sight Glass Assembly.
- Be easily accessible and allow enough clearance for routine cleaning or maintenance.
- Be downstream from air filters. Dust particles reduce the effectiveness of the unit.
- Other mounting positions and locations are possible; contact factory for any questions regarding this.

#### Figure 1 – Unit Placement



## **INSTALLATION**-

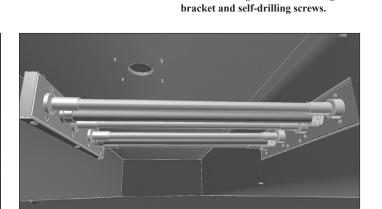
### Figure 2 – Unit Installation - Outside Duct Mount



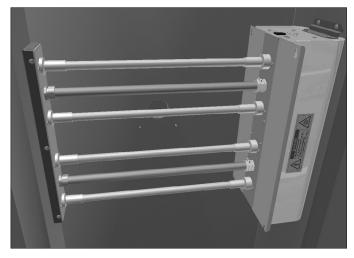
Opening for outside mount (shown) - use full size template on page 12 and 13 to cut opening.



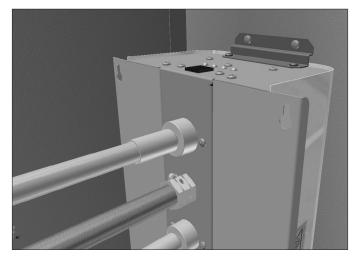
Lamp operation can be seen through sight glass assembly.



View inside duct.



Full inside installation using rear mounting brackets (shown).

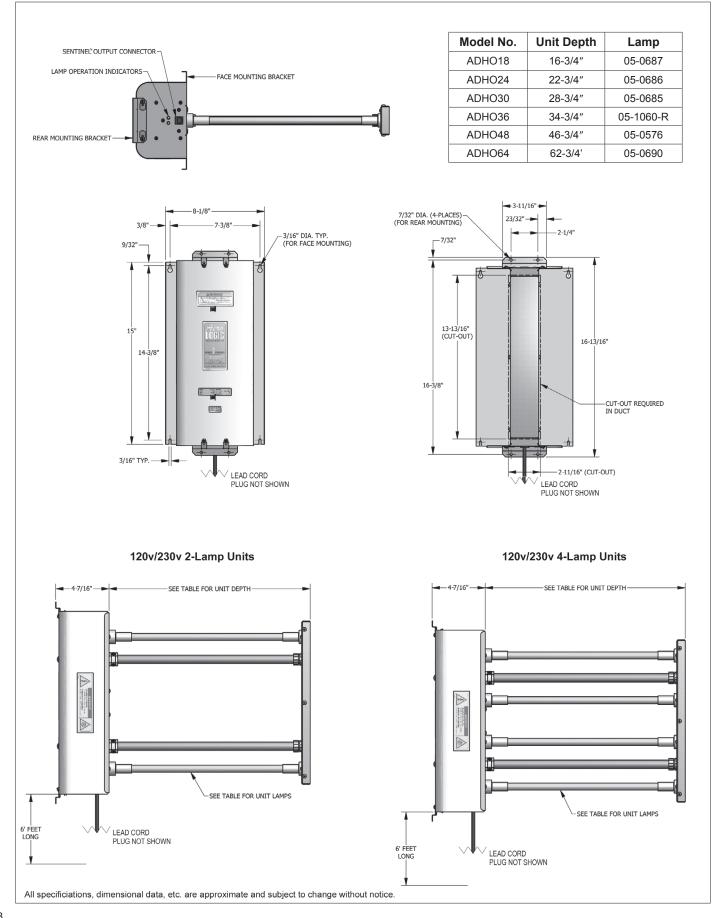


Attach with self-drilling screws

#### Figure 3 – Unit Installation - Inside Duct

### DIMENSIONAL DATA

#### Figure 4 – Dimensional Data



## DIMENSIONAL DATA - MOUNTING TEMPLATES

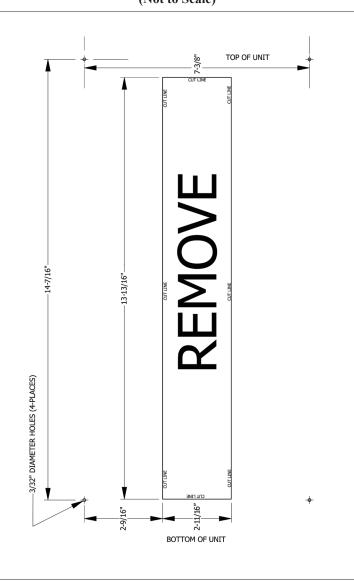
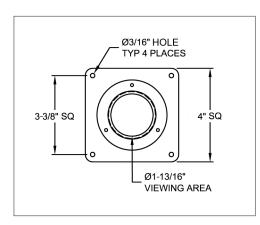


Figure 5 – Unit Mounting Template (see page 12 and 13) (Not to Scale)

Figure 6 – Promate<sup>™</sup> Sight Glass Mounting Template (see page 15) (Not to Scale)

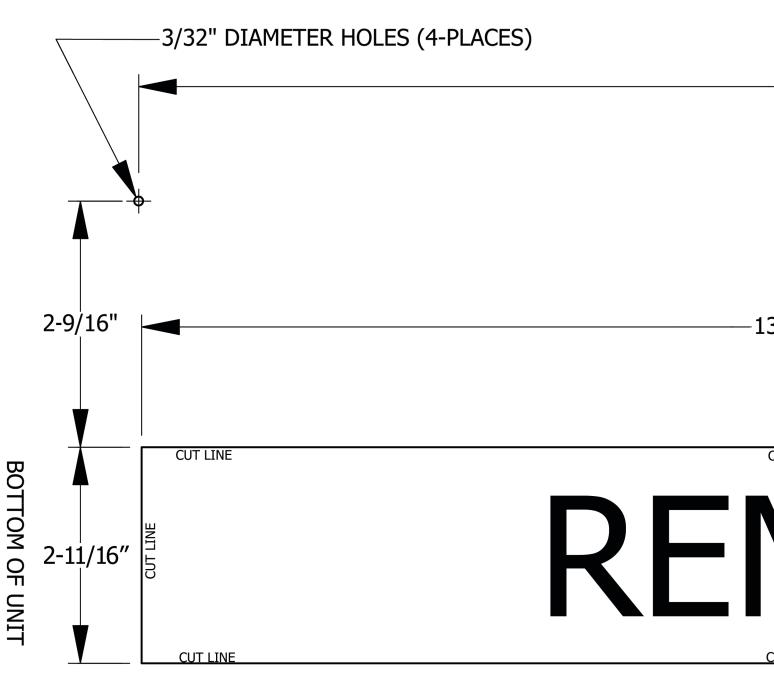


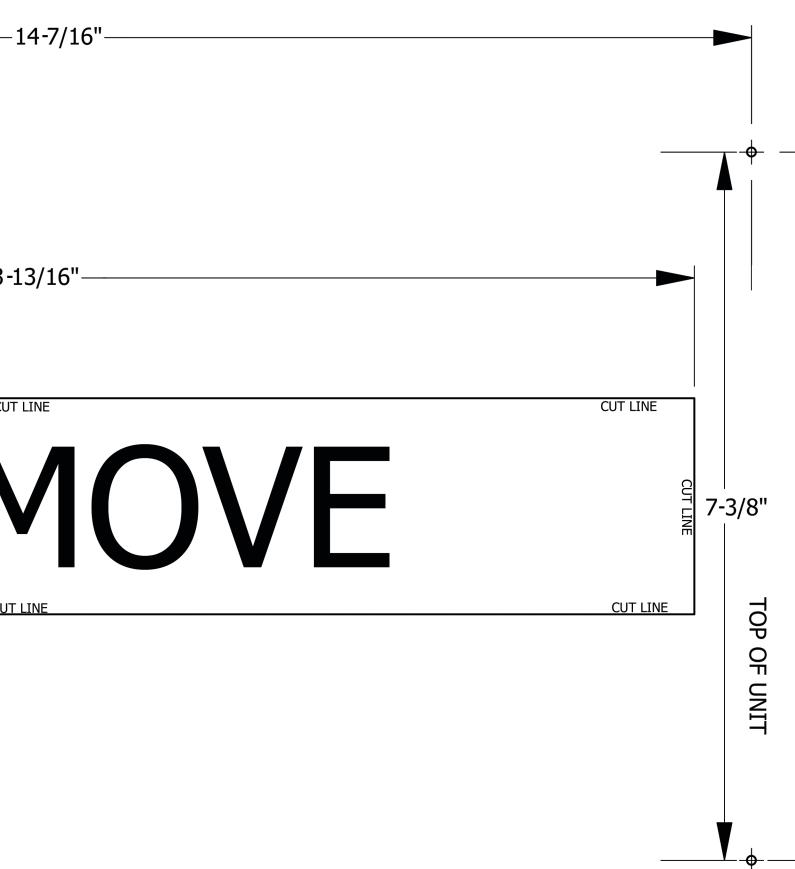
All specifications, dimensional data, etc. are approximate and subject to change without notice.

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Figure 7 – Unit Mounting Template – Full Scale (<u>NOTE</u>: Make sure this template is printed at 100%.)





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## MOUNTING TEMPLATE

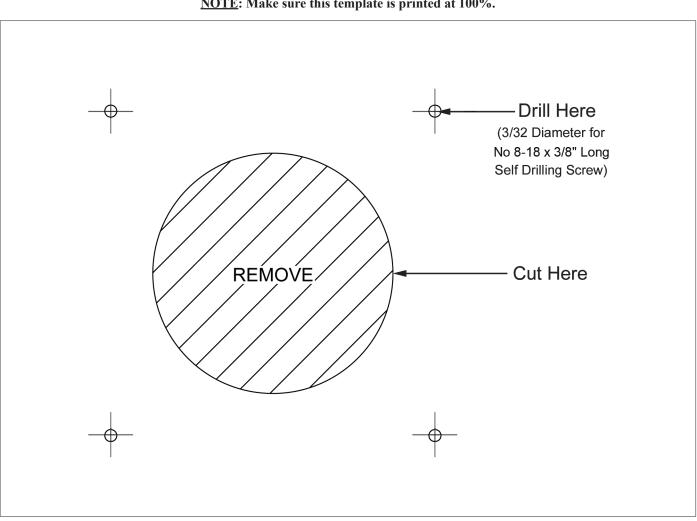
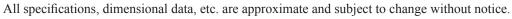


Figure 8 – 2" **Promate**<sup>™</sup> Sight Glass Mounting Template – Full Scale <u>NOTE</u>: Make sure this template is printed at 100%.



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### UNIT AND LAMP INSTALLATION, REPLACEMENT, OR CLEANING

IN ORDER TO PERFORM THIS TASK, BE SURE TO WEAR THE FOLLOWING SAFETY EQUIPMENT: SAFETY GLASSES OR A FACE SHIELD, AS WELL AS GLOVES.

#### Always disconnect power to the unit before performing any service or maintenance.

#### **ACAUTION** Ultraviolet lamps are easily damaged and may cause injury if broken. Exercise care when handling.

- 1. Disconnect power to the HVAC system.
- 2. Using mounting template provided, (See Figure 7 on pages 12 and 13) mark the centers of the four (4) mounting holes and edges of the rectangular openings for lamp assembly and sight glass assembly.



# **A**CAUTION Mechanical hazard. Duct sheet metal has sharp edges. Wear protective gloves when working on or around duct sheet metal.

- 3. Cut out the rectangular openings for lamp assembly. Remove burrs and sharp edges where possible.
- 4. Test fit unit to duct. Lamp assembly should pass through rectangular opening, with no interference. Base plate should fit flush to duct and mounting holes of the base plate should be aligned with the center marks on duct.
- 5. Remove unit from duct; make any adjustments necessary until unit fits correctly.
- 6. Install **Promate**<sup>™</sup> Sight Glass Assembly (see "Sight Glass Location & Installation" on page 18).

**ACAUTION** Ultraviolet lamps are easily damaged and may cause injury if broken. Exercise care when handling.

- 7. Install lamp(s) in **AeroLogic**<sup>®</sup>. To install, insert lamp pin into spring-loaded lampholder. Carefully press lamp against the spring-loaded lampholder. Align upper lamp pin with stationary lampholder. Slowly ease the pressure until lamp is fully seated in lampholders.
- 8. Verify that the lamp is properly seated.
- 9. Repeat until all lamps have been properly installed.
- 10. Moisten a clean, lint-free cloth with denatured alcohol and wipe each lamp.
- 11. Clean the outer surface of duct around cutouts.
- 12. Fit AeroLogic® to duct, align with the mounting hardware locations. (You must use a minimum of 4 screws)
- 13. Insert No.18 x 1/2" mounting hardware into each of the marked centers, screw in approximately half their length.
- 14. Finish tightening hardware.
- 15. Apply warning labels, in a conspicuous location, near the **AeroLogic**<sup>®</sup> unit and at the air handler. Clean duct surface before applying warning labels.
- 16. Plug **AeroLogic**<sup>®</sup> into properly grounded, electrical outlet. If unit is supplied without a plug for direct wiring, connect wire leads to appropriate power connections. All wiring must comply with applicable state, local and national electrical and mechanical codes.

**AWARNING** Do not operate without proper electrical ground

# **AWARNING** Avoid exposure to direct or reflected germicidal ultraviolet rays. Germicidal ultraviolet rays are harmful to the eyes and skin.

17. Restore power to HVAC system.



Verify operation by viewing lamps through sight glass assembly and lamp operation indicators. If the unit is not operating properly, go to **"Troubleshooting"** section on page 19.



While wearing protective eye wear, inspect HVAC system for any ultraviolet light leakage. No ultraviolet light should be visible from any duct opening, joint, seam, or the **AeroLogic**<sup>®</sup> unit itself. The installation should also be inspected using a sensitive ultraviolet meter, to ensure that the ultraviolet radiant exposure of personnel/occupants is within acceptable limits. (See "**Zenith**<sup>™</sup> **UV-C Detector**" in the "**Optional Accessories**" section on **page 19**)

20. If necessary, seal any openings, joints, seams, etc. using aluminum tape or equivalent ultraviolet resistant material.



**ACAUTION** Mechanical hazard. Duct sheet metal has sharp edges. Wear protective gloves when working on or around duct sheet metal



# IN ORDER TO PERFORM THIS TASK, BE SURE TO WEAR THE FOLLOWING SAFETY EQUIPMENT: SAFETY GLASSES OR A FACE SHIELD, AS WELL AS GLOVES.

The **AeroLogic**<sup>®</sup> Air Duct Disinfection Unit comes standard with a 2-inch **Promate**<sup> $^{\text{TM}}$ </sup> Sight Glass Assembly, which is installed separately. The ultraviolet blocking sight glass allows for a <u>safe</u> visual inspection of the lamps, without the need to remove the unit from the duct.

- 1. Select a suitable location near the **AeroLogic**<sup>®</sup> installation.
- 2. Using the Sight Glass Mounting Cutout (See Figure 8 on page 15) mark the centers of the mounting holes and clearance hole for the sight glass.
- 3. Cut out the opening for the sight glass. Remove burrs and sharp edges where possible.
- 4. Using the supplied No.8-18 x 3/8" long hardware, mount the sight glass assembly to the duct.

### PRECAUTIONS

#### **AWARNING** To guard against injury, basic safety precautions should be observed.

- Procedures should be adopted to ensure that the AeroLogic<sup>®</sup> is disconnected from power whenever personnel work on the HVAC system. Personnel who work in and around the system <u>MUST</u> be briefed on the precautions to be observed.
- The HVAC system <u>MUST</u> be re-inspected routinely for any ultraviolet light leakage. (Especially when maintenance or modifications are performed.)
- If there are any doubts or concerns about the safety or the effectiveness of the installation, or if a sensitive ultraviolet meter is required, please contact our UV Application Specialists.

## MAINTENANCE

**Always disconnect power to the unit before performing any service or maintenance.** 

- The **AeroLogic**<sup>®</sup> is designed to operate with a minimal amount of maintenance.
- A regular cleaning cycle of the **STER-L-RAY**<sup>®</sup> germicidal lamps and **Promate**<sup>™</sup> sight glass <u>MUST</u> be established, and carefully maintained, based on inspection and experience. The frequency of cleaning will vary with the conditions surrounding each installation. It is recommended that the ultraviolet lamps be cleaned at least once every three (3) months.
- The **STER-L-RAY**<sup>®</sup> germicidal ultraviolet lamps used in the **AeroLogic**<sup>®</sup> have a manufacturer's rated effective life of 13,000 hours. Lamps may operate longer than the rated effective life, but the reduction in ultraviolet output will make it impractical to use past the manufacturer's rated life. For maximum efficiency, lamp replacement is recommended every 13,000 hours of operation or about one (1-1/2) year of continuous use.
- Unless lamp replacement is due to failure or breakage, it is recommended that all lamps be replaced at the same time.
- For proper germicidal lamp replacement and cleaning procedure see "Unit and Lamp Installation, Replacement, or Cleaning" on Page 17.
- Contact factory with questions.

### BREAKAGE

#### **ACAUTION** Broken Quartz is SHARP.



Wear protective gloves when handling broken ultraviolet lamp(s). In the event of breakage, **DO NOT** use a household vacuum cleaner to pick up quartz fragments. Sweep up debris into a plastic bag and dispose of properly.

### DISPOSAL OF MERCURY ADDED LAMPS



Germicidal ultraviolet lamps, like standard fluorescent lamps contain small amounts of mercury. Mercury added lamps should not be placed in the trash. Dispose of properly. For further information regarding the disposal and recycling of lamps containing mercury, along with Federal and State requirements visit www.lamprecycle.org. For more information on **STER-L-RAY**<sup>®</sup> Germicidal Ultraviolet Lamps, visit AtlanticUltraviolet.com or Ultraviolet.com.

## TROUBLESHOOTING -

**Always disconnect power to the unit before performing any service or maintenance.** 

Use personal protection equipment, such long sleeves with no gaps between cuffs and gloves, and ultraviolet-resistant face shield, if troubleshooting **AeroLogic**<sup>®</sup>.

Table 1 – Troubleshooting

**IMPORTANT:** This unit is to be serviced **ONLY** by qualified and appropriately trained and/or licensed personnel.

Problem	Possible Cause	Corrective Action				
Unit not opporting	No electrical power	Verify that the unit is connected to a live power source.				
Unit not operating	Power connection to fixture is loose or disconnected	Verify power connection to fixture is fully engaged.				
	<b>STER-L-RAY</b> <sup>®</sup> Germicidal lamp(s) not properly seated	Confirm connection between lamp and lampholder is tight, and that lamp is making full contact with lampholder.				
STER-L-RAY <sup>®</sup> Germicidal Lamp not operating	<b>STER-L-RAY</b> <sup>®</sup> Germicidal lamp(s) faulty	Swap suspect lamp with known good lamp. If known good lamp does not operate, replace ballast.				
	Surelite <sup>™</sup> Ballast not functioning	Locate ballast and replace.				
Lamp Operation Indicators (LEDs) not operating	<b>STER-L-RAY</b> <sup>®</sup> Germicidal lamp(s) out	Check lamp(s) and replace.				

If the above measures fail to correct the problem(s), contact our Application Specialists. Contact options can be found in the "User Assistance" section of this manual, located on the back page.

## **OPTIONAL ACCESSORIES -**

 ArmorLite<sup>™</sup> Germicidal Ultraviolet Lamp Safety Shield: A protective coating applied to STER-L-RAY<sup>®</sup> lamps, and ensuring protection by eliminating the dangers associated with fragments of broken glass and mercury contamination. OR

**CRYSTAL CLEAR**<sup>imessilon</sup> **Quartz Sleeve:** Specially designed quartz sleeve to protect and insulate the germicidal ultraviolet lamp. The quartz sleeve protects the ultraviolet lamp from deposits of dirt and/or dust while insulating it from low air temperatures and the cooling affects of high air velocities in the air duct, insuring optimum ultraviolet output.

- 2. SENTINEL<sup>™</sup> Germicidal Ultraviolet Lamp Operation Indicator: Monitors lamp operation of two-lamp (35-4502A2) or four-lamp (35-4502A4) germicidal ultraviolet fixtures and is available with a 25, 50, and 100 foot cable.
- 3. Zenith<sup>™</sup> Germicidal Ultraviolet Detector (30-1015): A sensitive, hand-held, self-contained battery operated ultraviolet meter that can be used for:
  - Monitoring UV-C Germicidal Lamp Intensity & Aging
  - Measuring UV-C Germicidal Fixture Leakage
- 4. Additional Promate<sup>™</sup> Observation Port/Sight Glass Assembly: A sight glass assembly allows for visual inspection of the lamp, without the need to remove the unit from the duct. One 2 inch sight glass assembly is included with each unit. If needed, additional Promate<sup>™</sup> Sight Glass Assemblies are available in 1" (40-1044A2) and 2" (40-1040A1) diameters.
- 5. **Promate**<sup>™</sup> Safety Glasses (00-1299): Safety eyewear <u>MUST</u> be used as general-purpose safety protection and for additional shielding from germicidal ultraviolet rays.
- 6. **Promate**<sup>™</sup> Face Shield (00-0126): Adjustable headgear and lightweight visor offer eye and face protection from germicidal ultraviolet rays.
- Additional Duct Danger Labels (70-0039A): 2" x 4" label to be affixed to air duct where the AeroLogic<sup>®</sup> is installed. Two (2) labels are included with the purchase of this model, but additional labels may be purchased.
- 8. Additional Access Panel Danger Labels (70-0077): 8.5" x 11" label to be affixed to the the entrance of any area where AeroLogic<sup>®</sup> units are installed. These labels warn that power to the ultraviolet unit(s) <u>MUST</u> be disconnected before entering or performing any service. One (1) label is included with the purchase of this model, but additional labels may be purchased.

For more information and purchasing, contact our offices weekdays between 8:30 am and 5:00 pm Eastern time at: Atlantic Ultraviolet Corporation<sup>®</sup>, 375 Marcus Boulevard, Hauppauge, New York, 11788 • Tel: (631) 273-0500 • Fax: (631) 273-0771 Email: Sales@AtlanticUV.com • Shop: AtlanticUltraviolet.com • Learn More: Ultraviolet.com

# TECHNICAL DATA -

Model	Voltage [Hz]	Lamp Model [Quantity]	Power ① Consumption [Watts]	Ultraviolet © Output [UV Watts]	Rated Lamp Life [Hours]	
ADHO18-2	120v 50/60 Hz	05-0687(2)	84	23	13,000	
ADHO24-2	120v 50/60 Hz	05-0686(2)	94.4	34	13,000	
ADHO30-2	120v 50/60 Hz	05-0685(2)	124.8	46	13,000	
ADHO36-2	120v 50/60 Hz	05-1060-R(2)	153.6	56	13,000	
ADHO48-2	120v 50/60 Hz	05-0576(2)	201.6	80	13,000	
ADHO64-2	120v 50/60 Hz	05-0690(2)	378.8	108	13,000	
ADHO18-2	230v 50/60 Hz	05-0687(2)	82.8	23	13,000	
ADHO24-2	230v 50/60 Hz	05-0686(2)	96.6	34	13,000	
ADHO30-2	230v 50/60 Hz	05-0685(2)	119.6	46	13,000	
ADHO36-2	230v 50/60 Hz	05-1060-R(2)	147.2	56	13,000	
ADHO48-2	230v 50/60 Hz	05-0576(2)	193.2	80	13,000	
ADHO64-2	230v 50/60 Hz	05-0690(2)	317.4	108	13,000	
ADHO18-4	120v 50/60 Hz	05-0687(4)	168	46	13,000	
ADHO24-4	120v 50/60 Hz	05-0686(4)	201.6	68	13,000	
ADHO30-4	120v 50/60 Hz	05-0685(4)	249.6	92	13,000	
ADHO36-4	120v 50/60 Hz	05-1060-R(4)	307.2	112	13,000	
ADHO48-4	120v 50/60 Hz	05-0576(4)	403.2	160	13,000	
ADHO64-4	120v 50/60 Hz	05-0690(4)	657.6	216	13,000	
ADHO18-4	230v 50/60 Hz	05-0687(4)	165.6	46	13,000	
ADHO24-4	230v 50/60 Hz	05-0686(4)	193.2	68	13,000	
ADHO30-4	230v 50/60 Hz	05-0685(4)	239.2	92	13,000	
ADHO36-4	230v 50/60 Hz	05-1060-R(4)	294.4	112	13,000	
ADHO48-4	230v 50/60 Hz	05-0576(4)	386.4	160	13,000	
ADHO64-4	230v 50/60 Hz	05-0690(4)	634.8	216	13,000	

Table 2 – Technical Data

All specification, dimensional data etc. are approximate and subject to change without notice.

① Wattage is lamp watts only and does not include ballast loss.

<sup>(2)</sup> Ultraviolet output at 254nm at 100 hours and 80°F (approximate).

## **REPLACEMENT PARTS -**

Figure 9 – Exploded View (ADHO18-4)

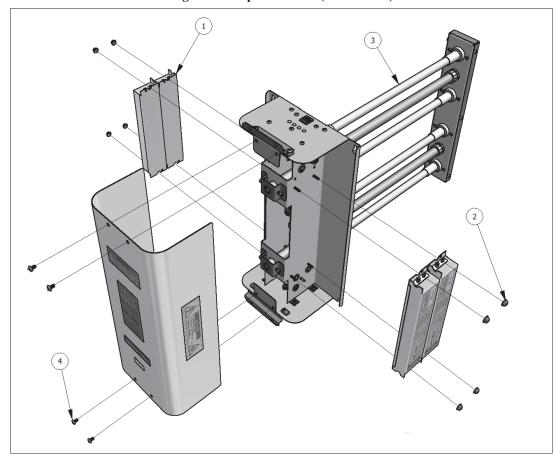


Table 3 – Replacement Parts

Item	Description		iption ADHO18-4		ADHO24-4		ADHO30-4		ADHO36-4		ADHO48-4		ADHO64-4		
No.		120v	220v	120v	220v	120v	220v	120v	220v	120v	220v	120v	220v		
1	<b>Surelite</b> ™ Ballast	10-0091	10-0127	10-0091	10-0127	10-0091	10-0127	10-0091	10-0127	10-0091	10-0127	10-0231	10-0231		
2	Nut #6-32 Speed Nut	50-1314 50		50-1	314	50-1314		50-1314		50-1314		50-1314			
3	<b>STER-L-RAY</b> <sup>®</sup> Germicidal Ultraviolet Lamp	05-0	0687	05-0686		05-0685 05-1060-R		060-R	05-0576		05-0690				
4	Cover Hardware	50-1	182	50-1	50-1182		50-1182		182	50-1	182	50-1	182	50-1	182
5	Line Cord (Not Shown)	35-1100	35-1452	35-1100	35-1452	35-1100	35-1452	35-1100	35-1452	35-1100	35-1452	35-1100	35-1452		

All specification, dimensional data etc. are approximate and subject to change without notice.

## **REPLACEMENT PARTS-**

Figure 10 – Exploded View (ADHO18-2)

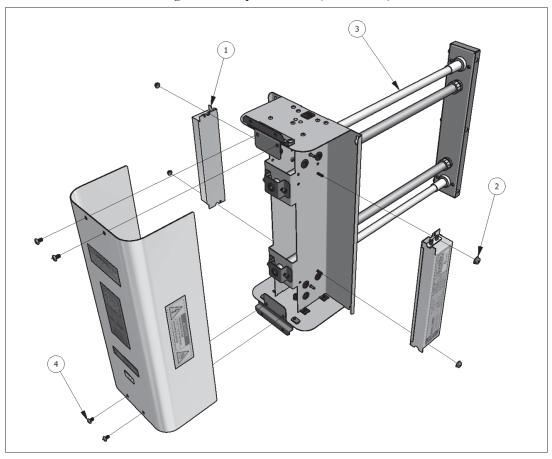


 Table 4 – Replacement Parts

Item	Description		ADHO18-2		ADHO24-2		ADHO30-2		ADHO36-2		ADHO48-2		ADHO64-2	
No.		120v	220v	120v	220v	120v	220v	120v	220v	120v	220v	120v	220v	
1	<b>Surelite</b> ™ Ballast	10-0091	10-0127	10-0091	10-0127	10-0091	10-0127	10-0091	10-0127	10-0091	10-0127	10-0231	10-0231	
2	Nut #6-32 Speed Nut	50-1314 50-1314		314	50-1314		50-1314		50-1314		50-1314			
3	<b>STER-L-RAY</b> <sup>®</sup> Germicidal Ultraviolet Lamp	05-0	)687	05-0686		05-0685		05-1060-R		05-0576		05-0690		
4	Cover Hardware	50-1	1182	50-1	1182	50-1182		50-1	182	50-1	182	50-1	182	
5	Line Cord (Not Shown)	35-1100	35-1452	35-1100	35-1452	35-1100	35-1452	35-1100	35-1452	35-1100	35-1452	35-1100	35-1452	

All specification, dimensional data etc. are approximate and subject to change without notice.

# USER ASSISTANCE

Atlantic Ultraviolet Corporation<sup>®</sup> makes every effort to ensure that the **AeroLogic**<sup>®</sup> Air Duct Disinfection equipment are products of superior quality and workmanship. This manual describes the installation, operation and maintenance of the **AeroLogic**<sup>®</sup> Air Duct Disinfection equipment Please read and become familiar with the contents of this manual before installing or using this unit. If after reading the manual you still have questions, or concerns, regarding the installation or use of this unit, contact our offices, weekdays between 8:30 am and 5:00 pm Eastern Time, at: Atlantic Ultraviolet Corporation<sup>®</sup> 375 Marcus Boulevard Hauppauge, New York, 11788 Tel: (631) 273-0500 Fax: (631) 273-0771 Email: Sales@AtlanticUV.com Shop: AtlanticUltraviolet.com Learn More: Ultraviolet.com

## PATENT NOTICE

No attempt has been made to determine the patent status of applications illustrated or described in this publication. Inclusion in this publication of any design or method of use, which may be patented, is not to be construed as promoting or sanctioning unauthorized use.

# WARRANTY & PRODUCT REGISTRATION -

We warrant this product to the original owner to be free from defects in material and workmanship when installed in accordance with Atlantic Ultraviolet Corporation specifications for a period of time as follows:

**UV Water Purifier Chambers** – Type 316 stainless steel chambers will have a Twelve (12) year Limited Warranty on the stainless steel chamber, from the date of original purchase while the Type 304 stainless steel chambers will have a Six (6) year Limited Warranty on the stainless steel chamber.

UV Air Disinfection Housing – Three (3) year Limited Warranty on the metal housing, from the date of original purchase.

Ballasts – Three (3) year Limited Warranty, from the date of original purchase.

UV Lamps, Monitoring Devices, Optional Accessories, and Other Parts – One (1) year Limited Warranty from the date of original purchase.

Within the warranty period we shall repair or replace such products, which are returned to us with shipping charges prepaid and which are determined by us to be defective. This warranty will not apply to any product, which has been subjected to misuse, negligence or accident; or misapplied; or modified; or repaired by unauthorized person; or improperly installed. Warranty will be null and void if any of the product's original labels are removed. This Limited warranty excludes the cost of labor.

The Buyer shall inspect the product promptly after receipt and shall notify us at our main office in writing of claims, including claims of breach of warranty, within thirty (30) days after the Buyer discovers or should have discovered the facts upon which the claim is based. Failure of the Buyer to give written notice of a claim within the time period shall be deemed to be a waiver of such claim.

The provisions of the above warranty are our sole obligation and exclude all other remedies or warranties, expressed or implied, including warranties of merchantability and fitness for a particular purpose, whether or not purposes or specifications are described herein. We further disclaim any responsibility whatsoever to the customer, or to any person for injury to person, damage to, or loss of property or value caused by any product which has been subjected to misuse, negligence, accident; or modified or repaired by unauthorized persons; or improperly installed.

Under no circumstances shall the Company be liable for any incidental, consequential or special damages; losses or expenses arising from the contract for this product, or in connection with the use of, or inability to use, our product for any purpose whatsoever.

Be sure to register your product and validate purchase within 30 days -registration is simple and will take less than 2 minutes to do.

#### <u>NOTE</u> – failure to register your purchase may jeopardize warranty.

Go to AtlanticUltraviolet.com and scroll down to the bottom of the page, under "Trust" click the "Warranty Registration Form", complete and click "Submit". Or click on "Warranty Registration PDF" to download the warranty registration card as a PDF, complete and mail to us at 375 Marcus Boulevard, Hauppauge, NY 11788, or simply fax to (631) 273-0771. If you prefer to register by phone, please call (631) 273-0500 and our customer service staff will be glad to assist you.

For your convenience, record the following information below. The model and serial number can be found on a label located on the **AeroLogic**<sup>®</sup> Air Duct Disinfection equipment. Keep this manual, along with proof of purchase, handy when contacting our offices.

Purchased From:	Date:
Model:	Serial No.: