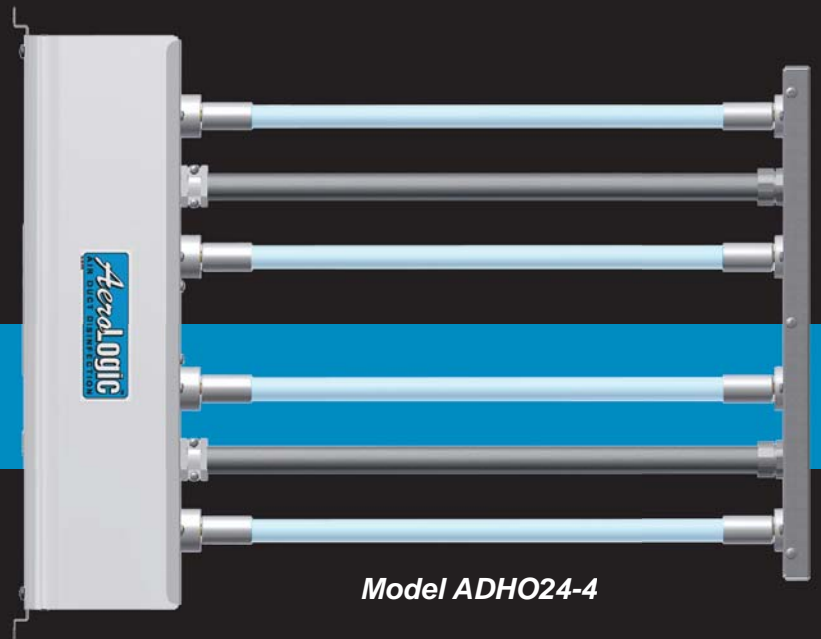


AeroLogic®

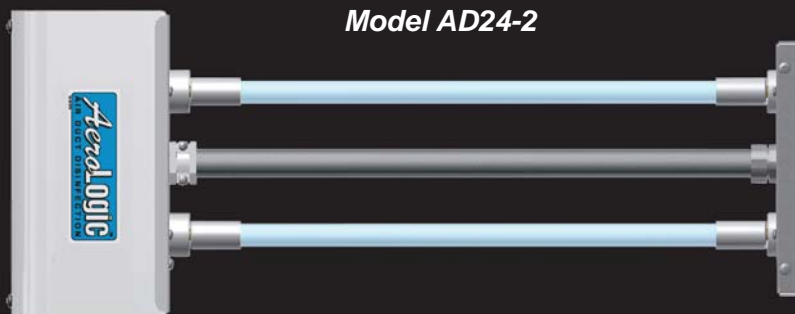
ULTRAVIOLET AIR DUCT DISINFECTION



Model AERO-24



Model ADHO24-4



Model AD24-2

ATLANTIC  ULTRAVIOLET
CORPORATION®

ABOUT US

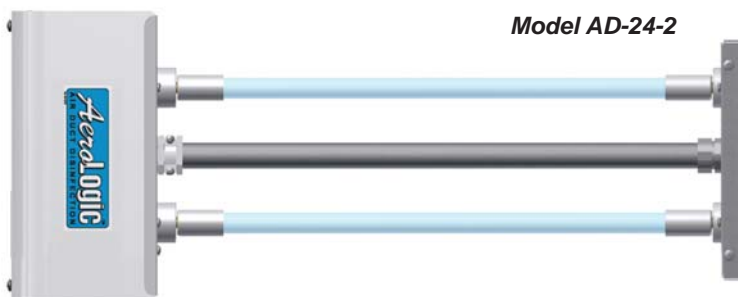
Since 1963, Atlantic Ultraviolet Corporation has pioneered the discovery and development of beneficial uses of ultraviolet energy. Over the years these efforts have led to the development of valuable, cost effective and environmentally sound techniques and products now known and respected throughout the world.



Atlantic Ultraviolet's application specialists assist customers in the selection of germicidal lamps and equipment. Their specialized knowledge is a valuable resource in formulating effective and cost-conscious ultraviolet solutions. Extensive inventories and a dedicated staff enable Atlantic Ultraviolet to fulfill its commitment to provide fast deliveries and responsive customer service.



Model AERO-24



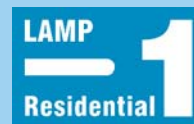
Model AD-24-2

GERMICIDAL ULTRAVIOLET

Ultraviolet is a unique and rapid method of disinfection utilizing germicidal ultraviolet lamps that produce short-wave radiation at 254 nanometers (nm) that is lethal to bacteria, virus and other microorganisms.

An ever growing range of industries and consumer applications have found ultraviolet to be the ideal solution for their air and surface treatment needs.

Atlantic Ultraviolet equipment and systems are manufactured in the USA.



ADVANTAGES

Economical

System requires very little power to operate.

Safe

No risk of over-exposure.

Fast

Disinfects both air and exposed surfaces in seconds.

Easy

Simple installation and maintenance.

Automatic

Continuous disinfection without special attention.

Durable

Polished Stainless Steel and/or Aluminum.

Versatile

Numerous units available to handle various duct sizes and configurations.

Low Maintenance

Annual Lamp replacement and periodic cleaning is all that is required.

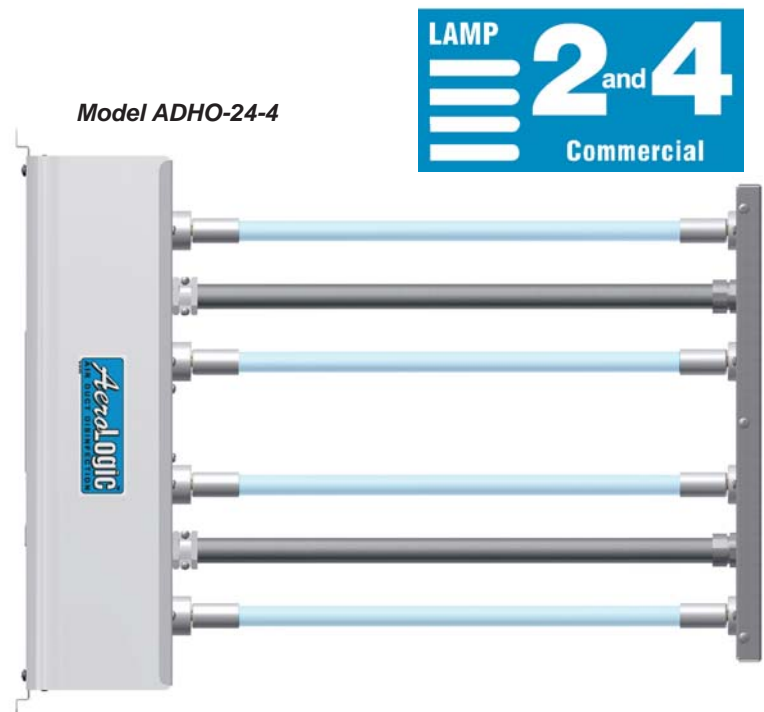
PRINCIPLE OF OPERATION

AeroLogic® is primarily used for installation in new and existing HVAC (Heating, Ventilating & Air Conditioning) systems. The air that passes over the installed **AeroLogic®** is subjected to the rays from the germicidal ultraviolet lamp (or lamps). These germicidal rays destroy airborne microbes including bacteria, mold and virus.

The **AeroLogic®** Air Duct installation presents centralized and non-intrusive applications that are useful on their own or in conjunction with additional air circulation and filtration technologies. When used together, these systems provide high level protection solutions.

The **AeroLogic®** design has been carefully conceived to provide adequate germicidal dosage for air stream or surface disinfection. 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.

Our UV application specialists would be happy to perform the necessary calculations to insure the unit we provide is appropriate for your particular application.



SPECIAL FEATURES - AeroLogic® One Lamp Air Duct Unit

AeroLogic® One Lamp Air Duct Unit

Utilize the **AeroLogic® One Lamp Air Duct Disinfection System** in an HVAC system for reduction and/or elimination of the growth of bacteria, mold and spores, and helps to control the spread of airborne cold and flu viruses as well as other airborne transmitted diseases.

The following information is required to size an ultraviolet system for duct air treatment.

- Duct or plenum size
- Length of compartment or duct where units are to be installed
- Air speed typically provided in cfm (cubic feet per minute)
- Approximate air temperature

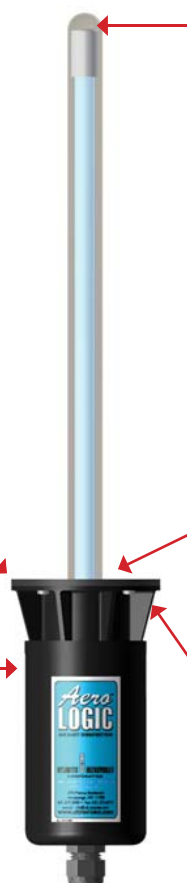
With this information an ultraviolet application specialist can calculate the approximate contact time and the lamp output required under these conditions and recommend the **AeroLogic®** model needed.

Construction:

Designed for use in residential applications the **AeroLogic® One Lamp Air Duct Unit** is constructed of lightweight, anodized aluminum alloy. The hard coat anodize offers an increased surface hardness, for durability, and corrosion resistance similar to that of stainless steel. This rugged construction along with a water-resistant power cord, rated for indoor/outdoor use, and liquid-tight cord grip all work to form a “drip-proof” assembly.

Surelite™ Ballast:

State-of-the-art electronic ballast specifically developed for the operation of ultraviolet lamps. Versatile, instant start ballast provides higher lamp output; is smaller, lighter, more efficient and operates cooler than magnetic ballasts.



Model AERO-24

(see page 10 for Optional Accessories)

Crystal Clear™ Quartz Sleeve:

A unique new feature of the **AeroLogic® One Lamp Air Duct Unit** is the use of a 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.

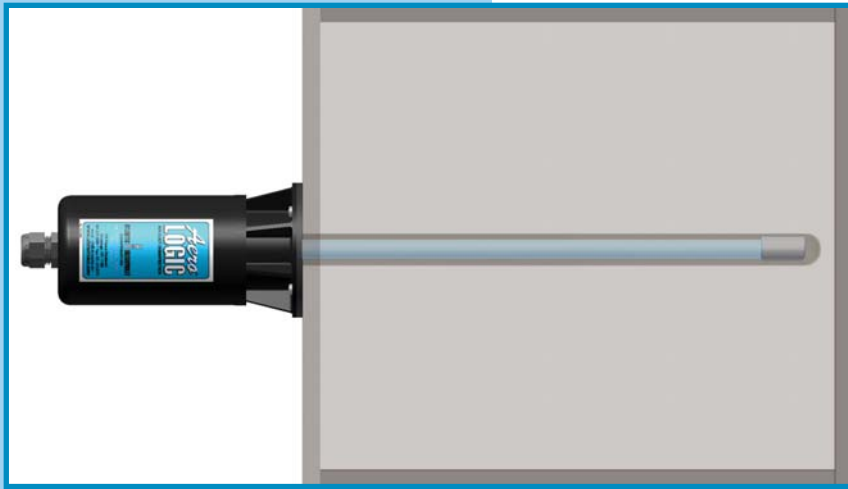
Steadfast™ Bayonet Socket Mount Lamp Holder:

Bayonet Socket Mount four-pin lamp holder fastens the lamp securely while providing convenient, “quick and easy”, lamp change.

Observation Port/Sight Glass Assembly and Mounting Hardware - (included)

A Sight Glass Assembly allows for visual inspection of the lamp, without the need to remove the unit from the duct (see page 5).

Mounting Hardware and Gasket - (included)



**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.

Figure 1 - Partial Internal - Lamps installed inside and ballast enclosure on outside of duct.

The **AeroLogic® One Lamp Air Duct Units** - primarily used for installation in new and existing HVAC (Heating, Ventilating & Air Conditioning) systems, are mounted onto the outside of the air duct.

SPECIFICATIONS - AeroLogic® One Lamp Residential Air Duct Units

Model	Lamp ^①	Power Consumption ^②	Total Ultraviolet Output ^③	Dimensions	
				Length (Into Duct) ^④	Overall Length
AERO-8	05-1119-R	12.0 Watts	2.7 Watts	7-5/32"	14-7/16"
AERO-12	05-1366-R	16.0 Watts	4.0 Watts	10-7/64"	17-25/64"
AERO-14	05-0218-R	22.0 Watts	5.8 Watts	14"	21-9/32"
AERO-16	05-1370-R	25.2 Watts	7.3 Watts	15-31/32"	23-1/4"
AERO-18	05-1523-R	27.6 Watts	8.0 Watts	17-1/32"	24-5/16"
AERO-20	05-0117-R	30.7 Watts	8.5 Watts	20"	27-9/32"
AERO-24	05-0097A-R	36.0 Watts	10.4 Watts	23-7/32"	30-1/2"
AERO-26	05-0219-R	38.4 Watts	11.0 Watts	26"	33-9/32"
AERO-32**	05-1382-R	49.2 Watts	15.0 Watts	32"	39-9/32"
AERO-44**	05-0197-R	66.0 Watts	21.0 Watts	44"	51-9/32"

① Rated average lamp life is 10,000 hours.

② Wattage is Lamp Watts only and does not include ballast loss (approximate).

③ Ultraviolet Output at 254 nanometers at 100 hours and 80 degrees F (approximate).

④ See Figure 1 above for illustration of Partial Internal Mounting.

** Not recommended for horizontal mount application

• 120 Volts 50/60 Hz and 230 Volts 50/60 Hz units are standard - specify when ordering

• Units are available in various voltages - Consult factory with specific power requirements.

• Models with other lamp quantities and configurations available - Consult factory with specific requirements

AeroLogic® 1 and 2 Lamp Air Duct Unit

Utilize the **AeroLogic® 1 and 2 Lamp Air Duct Disinfection System** in your home, commercial or industrial building HVAC system, and reduce and/or eliminate the growth of bacteria, mold and spores, and helps to control the spread of airborne cold and flu viruses as well as other airborne transmitted diseases.

The following information is required to size an ultraviolet system for duct air treatment.

- Duct or plenum size
- Length of compartment or duct where units are to be installed
- Air speed typically provided in cfm (cubic feet per minute)
- Approximate air temperature

With this information an ultraviolet application specialist can calculate the approximate contact time and the lamp output required under these conditions and recommend the **AeroLogic®** model needed.

Construction:

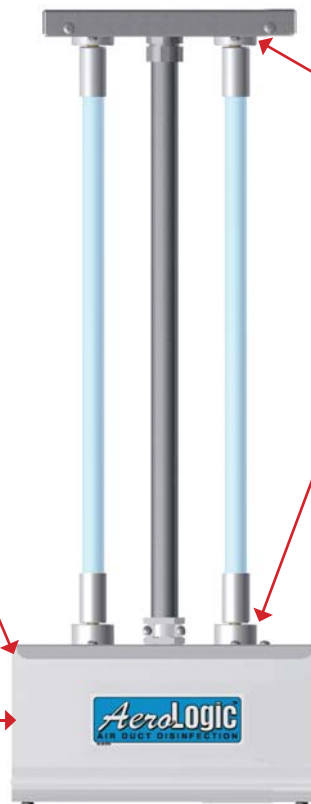
Designed for use in demanding applications; the ballast housing of the **AeroLogic® 1 and 2 Lamp Air Duct Units** are constructed in Type 304 Stainless Steel.

ArmorLite™ Safety Shield

Protective coating applied to **Ster-L-Ray®** Germicidal Lamps insures protection for employees, products and work environments by eliminating the dangers associated with fragments of broken lamps and mercury contamination (see page 10 for Optional Accessories).

Surelite™ Ballast:

State-of-the-art electronic ballast(s) specifically developed for the operation of ultraviolet lamps. Versatile, instant start ballast provides higher lamp output; is smaller, lighter, more efficient and operates cooler than magnetic ballasts.



Model AD-24-2

(see page 10 for Optional Accessories)

Steadfast™ Lamp Holders

Slimline base, single pin, lampholder set (includes one stationary end and one spring end) holds lamp(s) securely while providing convenient, “quick and easy” lamp change.

Observation Port/Sight Glass Assembly and Mounting Hardware - (included)

A Sight Glass Assembly allows for visual inspection of the lamps, without the need to remove the unit from the duct (see page 7).

Mounting Hardware and Gasket - (included)

Sentinel™ Output Connector

Optional (see page 10 for Optional Accessories)

Lamp Operation Indicators

(LEDs) Provides positive indication of each germicidal lamp operation.

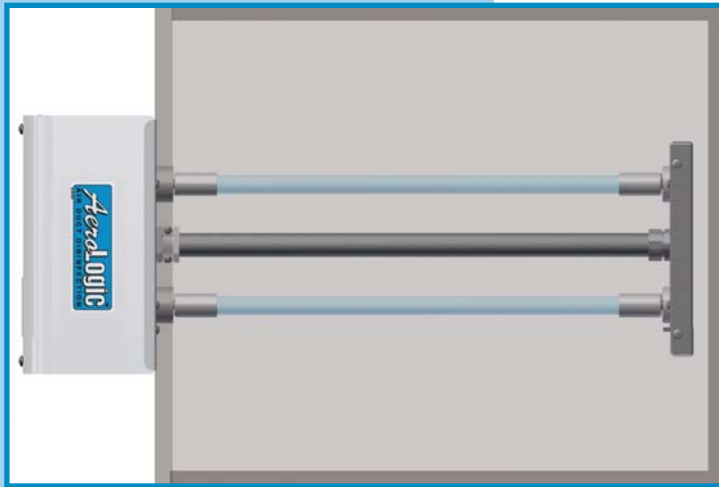
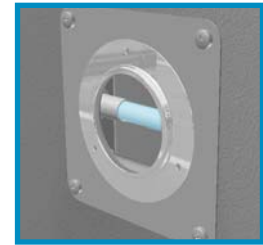


Figure 2 - Partial Internal - Lamps installed inside and ballast enclosure on outside of duct.



**Observation Port/
Sight Glass Assembly**

A Sight Glass Assembly allows for visual inspection of the lamp(s), without the need to remove the unit from the duct.

The AeroLogic® 1 and 2 Lamp Air Duct Units - primarily used for installation in new and existing HVAC (Heating, Ventilating & Air Conditioning) systems, and are mounted onto the outside of the air duct.

SPECIFICATIONS - AeroLogic® 1 and 2 Lamp Residential & Commercial Air Duct Units

Model	Lamp ①	Power Consumption ②	Total Ultraviolet Output ③	Lamp Extension (Into Duct) ④	Exterior Housing Dimensions		
					Height	Width ⑤	Depth
AD-12-1	05-1500-R (1)	12.0 Watts	3.1 Watts	10-3/4"	8"	5-19/32"	2-7/8"
AD-18-1	05-1340-R (1)	22.0 Watts	5.8 Watts	16-3/4"	8"	5-19/32"	2-7/8"
AD-24-1	05-1348-R (1)	30.7 Watts	8.5 Watts	22-3/4"	8"	5-19/32"	2-7/8"
AD-30-1	05-1352-R (1)	38.4 Watts	11.2 Watts	28-3/4"	8"	5-19/32"	2-7/8"
AD-36-1	05-1343-R (1)	42.9 Watts	15.0 Watts	34-3/4"	8"	5-19/32"	2-7/8"
AD-48-1	05-1334-R (1)	66.0 Watts	21.0 Watts	46-3/4"	8"	5-19/32"	2-7/8"
AD-12-2	05-1500-R (2)	24.0 Watts	6.2 Watts	10-3/4"	8"	5-19/32"	2-7/8"
AD-18-2	05-1340-R (2)	44.0 Watts	11.6 Watts	16-3/4"	8"	5-19/32"	2-7/8"
AD-24-2	05-1348-R (2)	61.4 Watts	17.0 Watts	22-3/4"	8"	5-19/32"	2-7/8"
AD-30-2	05-1352-R (2)	76.8 Watts	22.4 Watts	28-3/4"	8"	5-19/32"	2-7/8"
AD-36-2	05-1343-R (2)	85.8 Watts	30.0 Watts	34-3/4"	8"	5-19/32"	2-7/8"
AD-48-2	05-1334-R (2)	132.0 Watts	42.0 Watts	46-3/4"	8"	5-19/32"	2-7/8"

① Rated average lamp life is 10,000 hours.

② Wattage is Lamp Watts only and does not include ballast loss (approximate).

③ Ultraviolet Output at 254 nanometers at 100 hours and 80 degrees F (approximate).

④ Including flange

⑤ See Figure 2 above for illustration of Partial Internal Mounting.

- 120 Volts 50/60 Hz and 230 Volts 50/60 Hz units are standard - specify when ordering
- Units are available in various voltages - Consult factory with specific power requirements.
- Models with other lamp quantities and configurations available - Consult factory with specific requirements

AeroLogic® 2 and 4 Lamp Commercial Air Duct Unit

Utilize the **AeroLogic® 2 and 4 Lamp Air Duct Disinfection System** in your commercial or industrial building HVAC system, and reduce and/or eliminate the growth of bacteria, mold and spores, and help(s) to control the spread of airborne cold and flu viruses as well as other airborne transmitted diseases.

The following information is required to size an ultraviolet system for duct air treatment.

- Duct or plenum size
- Length of compartment or duct where units are to be installed
- Air speed typically provided in cfm (cubic feet per minute)
- Approximate air temperature

With this information an ultraviolet application specialist can calculate the approximate contact time and the lamp output required under these conditions and recommend the **AeroLogic®** model needed.

High Output Lamps:

High Output (HO) germicidal lamps yield 1/3 to 2/3 more ultraviolet output than standard lamps of the same length.

ArmorLite™ Safety Shield

Protective coating applied to **Ster-L-Ray®** Germicidal Lamps insures protection for employees, products and work environments by eliminating the dangers associated with fragments of broken lamps and mercury contamination (see page 10 for Optional Accessories).

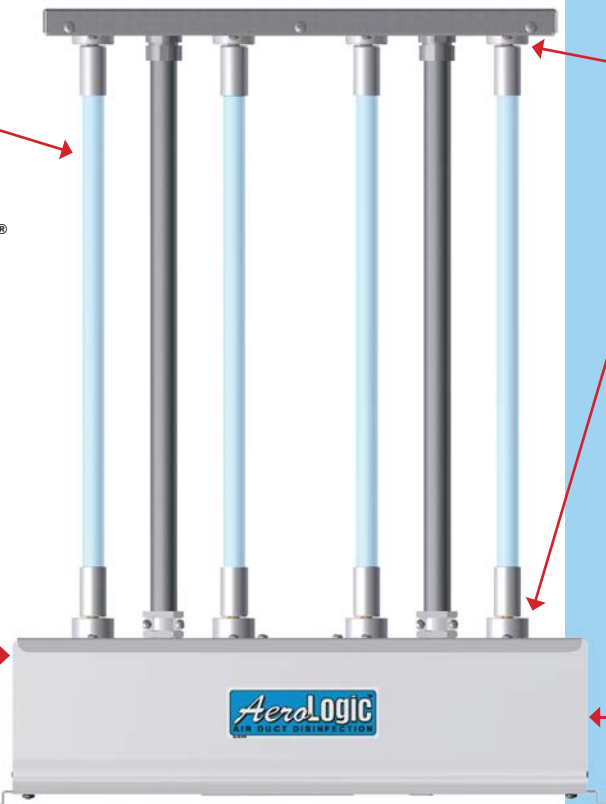
Construction:

Designed for use in demanding applications; the ballast housing of the **AeroLogic® 2 and 4**

Lamp Air Duct Units are constructed in Type 304 Stainless Steel.

Surelite™ Ballast:

State-of-the-art electronic ballasts specifically developed for the operation of ultraviolet lamps. Versatile, instant start ballast provides higher lamp output; is smaller, lighter, more efficient and operates cooler than magnetic ballasts.



Model ADHO24-4

(see page 10 for Optional Accessories)

Steadfast™ Lamp Holders

Slimline base, single pin, lampholder set (includes one stationary end and one spring end) holds lamp(s) securely while providing convenient, “quick and easy” lamp change.

Observation Port/Sight Glass Assembly and Mounting Hardware

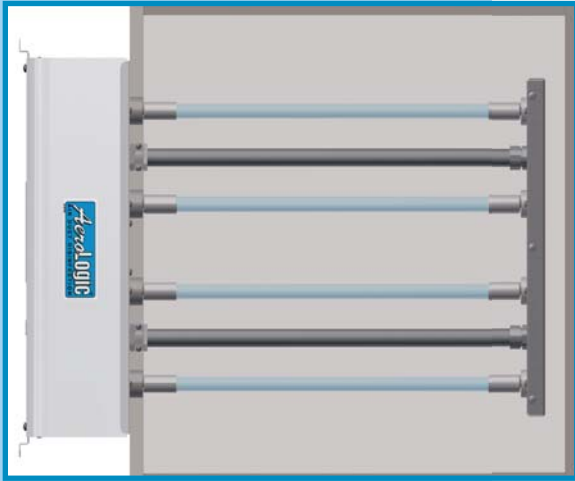
- (included) A Sight Glass Assembly allows for visual inspection of the lamps, without the need to remove the unit from the duct (see page 9).

Lamp Operation Indicators (LEDs) Provide positive indication of each germicidal lamp operation.

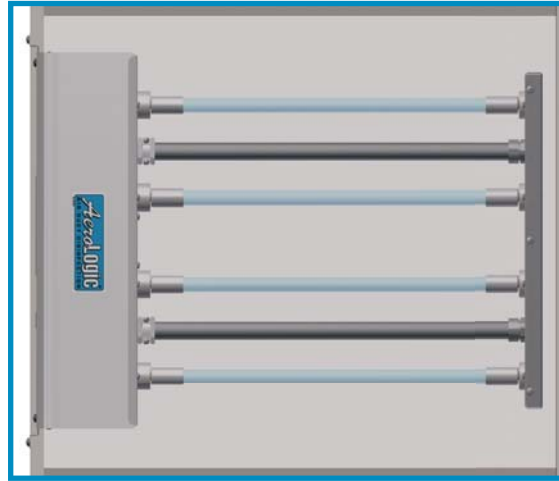
Sentinel™ Output Connector (see page 10 for Optional Accessories)

Mounting Hardware

- (included)

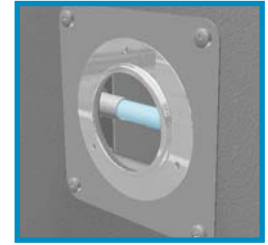


Partial Internal - Lamps installed inside and ballast enclosure on outside of duct.



Full Internal - Whole unit installed within duct.

Figure 3



**Observation Port/
Sight Glass Assembly**
A Sight Glass Assembly allows for visual inspection of the lamps, without the need to remove the unit from the duct.

The AeroLogic® 2 and 4 Lamp Air Duct units - primarily used for installation in new and existing HVAC (Heating, Ventilating & Air Conditioning) systems, and are mounted onto the inside or outside of the air duct. The two most common positions are shown above (units perpendicular to airflow). Many other mounting positions can be achieved using brackets that are supplied with each unit.

SPECIFICATIONS - AeroLogic® 2 and 4 Lamp Air Duct Commercial Units

Model	Lamp ①	Power Consumption ②	Total Ultraviolet Output ③	Depth (Inside Duct) ⑤		Exterior Housing Dimensions		
				Partial Internal	Full Internal	Height	Width ④	Depth
ADHO18-2	05-0687 (2)	105.6 Watts	23 Watts	16-3/4"	21-3/16"	16-13/16"	8-1/8"	4-7/16"
ADHO24-2	05-0686 (2)	147.4 Watts	34 Watts	22-3/4"	27-3/16"	16-13/16"	8-1/8"	4-7/16"
ADHO30-2	05-0685 (2)	184.3 Watts	46 Watts	28-3/4"	33-3/16"	16-13/16"	8-1/8"	4-7/16"
ADHO36-2	05-1060-R (2)	208.8 Watts	56 Watts	34-3/4"	39-3/16"	16-13/16"	8-1/8"	4-7/16"
ADHO48-2	05-0576 (2)	316.8 Watts	80 Watts	46-3/4"	51-3/16"	16-13/16"	8-1/8"	4-7/16"
ADHO64-2	05-0690 (2)	372.0 Watts	108 Watts	62-3/4"	67-3/16"	16-13/16"	8-1/8"	4-7/16"
ADHO18-4	05-0687 (4)	211.0 Watts	46 Watts	16-3/4"	21-3/16"	16-13/16"	8-1/8"	4-7/16"
ADHO24-4	05-0686 (4)	295.0 Watts	68 Watts	22-3/4"	27-3/16"	16-13/16"	8-1/8"	4-7/16"
ADHO30-4	05-0685 (4)	368.6 Watts	92 Watts	28-3/4"	33-3/16"	16-13/16"	8-1/8"	4-7/16"
ADHO36-4	05-1060-R (4)	416.0 Watts	112 Watts	34-3/4"	39-3/16"	16-13/16"	8-1/8"	4-7/16"
ADHO48-4	05-0576 (4)	633.0 Watts	160 Watts	46-3/4"	51-3/16"	16-13/16"	8-1/8"	4-7/16"
ADHO64-4	05-0690 (4)	744.0 Watts	216 Watts	62-3/4"	67-3/16"	16-13/16"	8-1/8"	4-7/16"

① Rated average lamp life is 10,000 hours.

② Wattage is Lamp Watts only and does not include ballast loss (approximate).

③ Ultraviolet Output at 254 nanometers at 100 hours and 80 degrees F (approximate).

④ Including flange

⑤ See Figure 3 above for illustration of Partial Internal Mounting.

- 120 Volts 50/60 Hz and 230 Volts 50/60 Hz units are standard - specify when ordering
- Units are available in various voltages - Consult factory with specific power requirements.
- Models with other lamp quantities and configurations available - Consult factory with specific requirements

OPTIONAL ACCESSORIES



Sentinel™ Remote Lamp Indicator

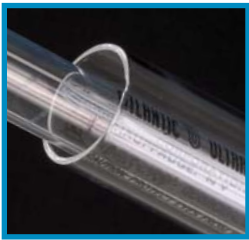
The Sentinel™ Remote Lamp Indicator monitors lamp operation of one, two, or four lamp ultraviolet fixtures and is available with a 25, 50 and 100 foot cable.

(Available for AeroLogic® AD units at the time of purchase, Sentinel™ output connector needs to be installed for easy plug-in and operation. The AeroLogic® ADHO units are manufactured with a Sentinel™ output connector as a standard feature.)



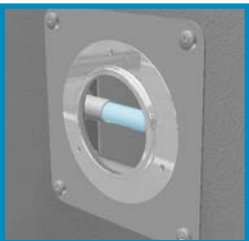
ArmorLite™ Safety Shield

Protective coating applied to Ster-L-Ray® Germicidal Lamps insures protection for employees, products and work environments by eliminating the dangers associated with fragments of broken lamps and mercury contamination. (Lamp on right has Armorlite™ coating; Available for AeroLogic® AD and ADHO units)



Crystal Clear™ 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. (Standard feature in AeroLogic® AERO units, optional for AeroLogic® AD and ADHO units)



Observation Port/Sight Glass Assembly

A Sight Glass Assembly allows for visual inspection of the lamp(s), without the need to remove the unit from the duct. Available in 1 and 2 inch diameters. One assembly and mounting hardware is included with each unit purchased. (Additional Assemblies Available for All AeroLogic® units)



Zenith™ Ultraviolet Meter

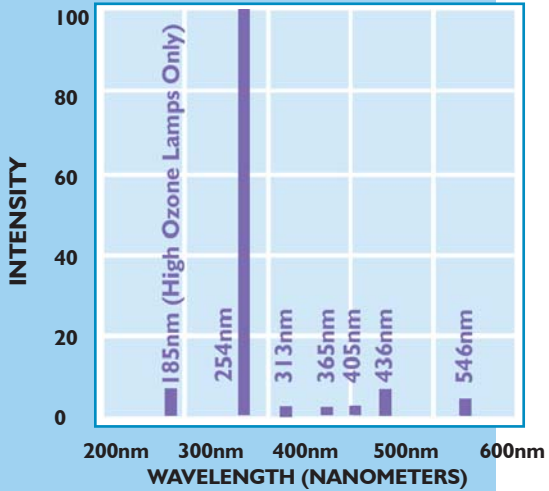
A sensitive, hand-held, ultraviolet meter that can be used to:

- Survey installations to ensure that the germicidal ultraviolet radiant exposure, of personnel within the treated area, is within acceptable limits. The Zenith™ Ultraviolet Meter provides accurate and easy-to-read levels of intensity that may be interpreted by anyone - not just engineers.
- Check the intensity of aging ultraviolet lamps

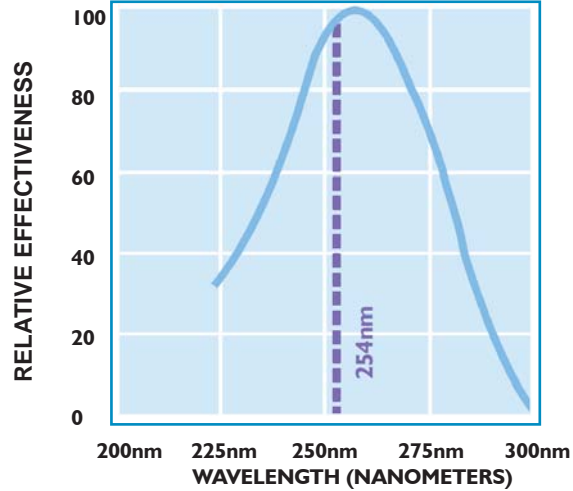
(For use with All AeroLogic® units)

GENUINE *STER-L-RAY*[®] GERMICIDAL LAMPS

Relative Spectral Energy Distribution (Typical)



Germicidal Effectiveness As Related to Wavelength



STER-L-RAY[®] Germicidal Lamps are shortwave, low pressure mercury vapor discharge tubes that produce ultraviolet wavelengths lethal to microorganisms. Approximately 95% of the ultraviolet energy emitted from *STER-L-RAY*[®] germicidal lamps is at the mercury resonance line of 254 nanometers, the region of germicidal effectiveness most destructive to bacteria, mold and virus.

STER-L-RAY[®] and the *STER-L-RAY*[®] logo are trademarks of Atlantic Ultraviolet Corporation.

CAUTION: Exposure to direct or reflected germicidal ultraviolet rays will cause painful eye irritation and reddening of the skin. Personnel subject to such exposure must wear suitable faceshield, gloves and protective clothing.

Hg - LAMP CONTAINS MERCURY, manage in accord with disposal laws, see: www.lamprecycle.org.

ULTRAVIOLET DOSAGE

Germicidal lamps provide effective protection against microorganisms. A small cross-section is shown below.

ORGANISM	ALTERNATE NAME	TYPE	DISEASE	DOSE*
<i>Corynebacterium diphtheriae</i>	<i>C. diphtheriae</i>	Bacteria	Diphtheria	6,500
<i>Legionella pneumophila</i>	<i>L. pneumophila</i>	Bacteria	Legionnaire's Disease	2,700
<i>Mycobacterium tuberculosis</i>	<i>M. tuberculosis</i>	Bacteria	Tuberculosis (TB)	10,000
<i>Pseudomonas aeruginosa</i>	<i>P. aeruginosa</i>	Bacteria		3,900
<i>Serratia Marcescens</i>	<i>S. marcescens</i>	Bacteria		6,160
<i>Staphylococcus aureus</i>	<i>S. aureus</i>	Bacteria		6,600
<i>Staphylococcus epidermidis</i>	<i>S. epidermidis</i>	Bacteria		5,800
Adeno Virus Type III		Virus		4,500
Coxsackie A2		Virus		6,300
Influenza		Virus	Flu	3,400

* Nominal Ultraviolet dosage ($\mu\text{WSec}/\text{cm}^2$) necessary to inactivate better than 99% of specific microorganism. Consult factory for more complete listing.

THE STANDARD OF EXCELLENCE IN ULTRAVIOLET



Manufacturers / Engineers / Sales / Service



375 Marcus Boulevard • Hauppauge, NY 11788 • 631.273.0500 • Fax: 631.273.0771 • E-mail: info@ultraviolet.com • ultraviolet.com

The information and recommendations contained in this publication are based upon data collected by the Atlantic Ultraviolet Corporation® 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.

Document No. 98-1519 • Revised February 2013 • ©2000-2013 by Atlantic Ultraviolet Corporation® • Made in the USA

