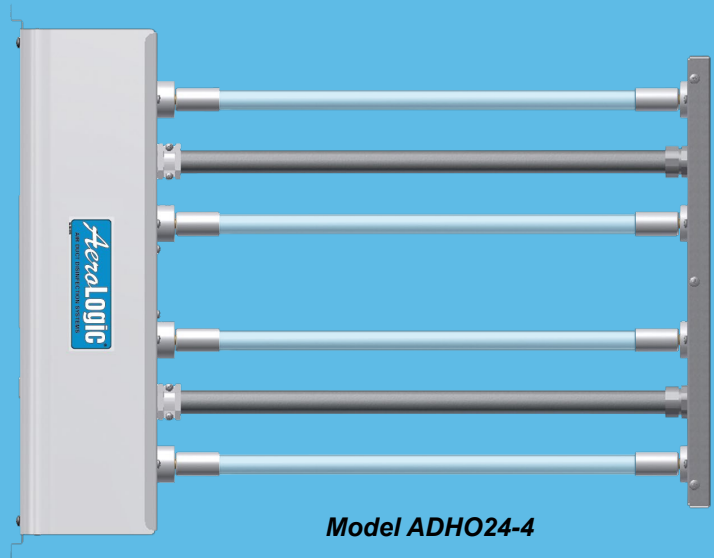


AeraLogic®

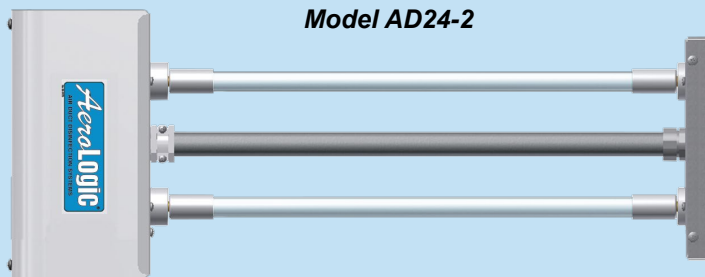
AIR DUCT DISINFECTION SYSTEMS



Model AERO-24



Model ADHO24-4



Model AD24-2

SINCE 1963

ATLANTIC **AU** **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.

The UV Application Specialists at Atlantic Ultraviolet Corporation® 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 Corporation® to fulfill its commitment to provide fast deliveries and responsive customer service.

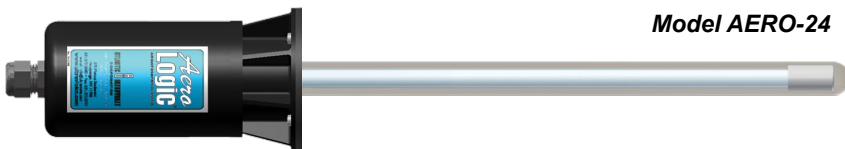


GERMICIDAL ULTRAVIOLET

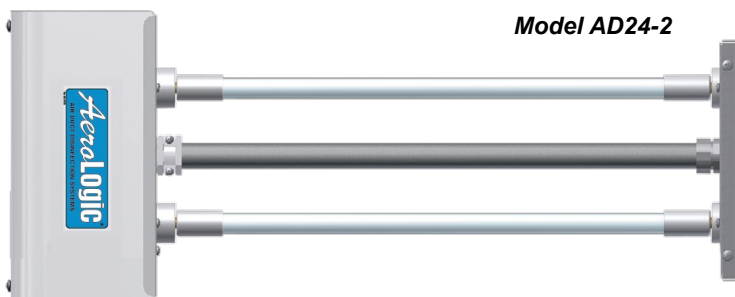
Ultraviolet is a unique and rapid method of disinfection. It utilizes germicidal ultraviolet lamps producing short-wave radiation at 254 nanometers (nm)—a wavelength highly lethal to bacteria, virus, and other microorganisms.

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.



Model AERO-24



Model AD24-2



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 models available to handle various duct sizes and configurations.

Low Maintenance

Requires only annual lamp replacement and periodic cleaning.

PRINCIPLE OF OPERATION

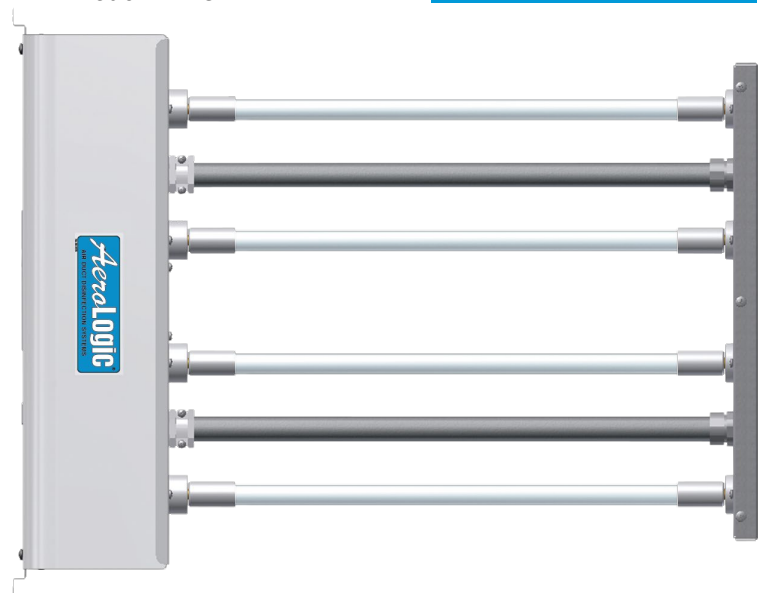
AeroLogic® is primarily used for installation in new and existing HVAC (Heating, Ventilating & Air Conditioning) systems. The air that passes over the installed **AeroLogic®** is subjected to the rays from the germicidal ultraviolet lamp (or lamps). These germicidal rays destroy airborne microbes including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

Model ADHO24-4



AeroLogic® One Lamp Air Duct Model

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 to help control the spread of airborne cold, flu virus, and 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 **AeroLogic®** is 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 lamp output required under these conditions and recommend the **AeroLogic®** model needed.

STER-L-RAY®

Germicidal Ultraviolet Lamp

Lamp is instant starting and provides the utmost in quality, sustained output and longevity.
(See page 11 for more information.)

Construction

Designed for use in residential applications, the **AeroLogic® One Lamp Air Duct Model** is constructed of lightweight, anodized aluminum alloy. The anodized aluminum alloy 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 ballast provides high lamp output; is lightweight, efficient, and operates cool for longer life.

CRYSTAL CLEAR™ Quartz Sleeve

A unique feature of the **AeroLogic® One Lamp Air Duct Model** 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, ensuring optimum ultraviolet output.

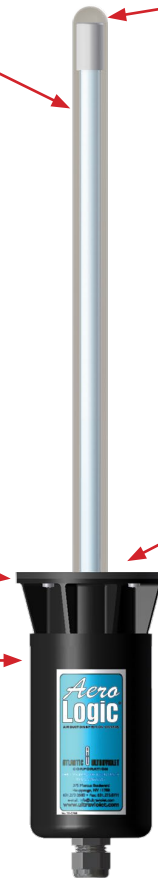
Steadfast™ Bayonet Socket Mount Lampholder

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

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

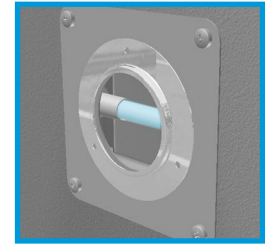
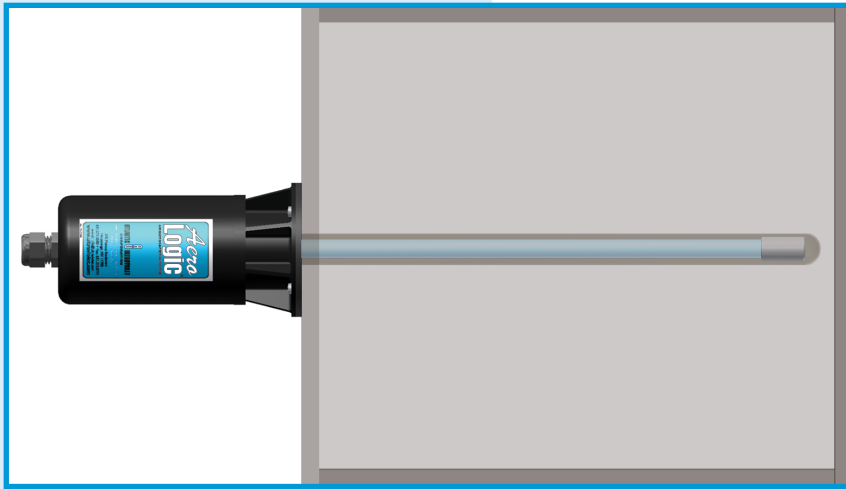
A Sight Glass Assembly allows for visual inspection of the lamp, without the need to remove the **AeroLogic®** from the duct (see page 5).

Mounting Hardware and Gasket - (included)



Model AERO-24

(see page 10 for Optional Accessories)



Promate™ Observation Port / Sight Glass Assembly

A Sight Glass Assembly allows for visual inspection of the lamp, without the need to remove the AeroLogic® from the duct.

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

The AeroLogic® One Lamp Air Duct Models - 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-LAMP RESIDENTIAL AIR DUCT MODELS

Model	Lamp ①	Lamp Watts ②	Total Ultraviolet Output ③	Dimensions	
				Length (Into Duct) ④	Overall Length
AERO-8	05-1119-R	10.0 Watts	2.7 Watts	7-5/32"	14-7/16"
AERO-12	05-1366-R	14.0 Watts	4.0 Watts	10-7/64"	17-25/64"
AERO-14	05-0218-R	18.4 Watts	5.8 Watts	14"	21-9/32"
AERO-16	05-1370-R	21.0 Watts	7.3 Watts	15-31/32"	23-1/4"
AERO-18	05-1523-R	23.0 Watts	8.0 Watts	17-1/32"	24-5/16"
AERO-20	05-0117-R	25.6 Watts	8.5 Watts	20"	27-9/32"
AERO-24	05-0097A-R	30.0 Watts	10.4 Watts	23-7/32"	30-1/2"
AERO-26	05-0219-R	32.0 Watts	11.0 Watts	26"	33-9/32"
AERO-32**	05-1382-R	41.0 Watts	15.0 Watts	32"	39-9/32"
AERO-44**	05-0197-R	55.0 Watts	21.0 Watts	44"	51-9/32"

① Rated average lamp life is 10,000 hours.

② Total lamp watts.

③ Ultraviolet Output at 254 nanometers at 100 hours and 80° 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 models are standard. Specify when ordering.
- Available in various voltages. Consult factory with specific power requirements.
- Models with other lamp sizes may be available. Consult factory with specific requirements.

AeroLogic® 1 and 2 Lamp Air Duct Model

Utilize the **AeroLogic® 1 and 2 Lamp Air Duct Disinfection System** in your home or commercial / industrial building HVAC system to reduce and/or eliminate the growth of bacteria, mold, and spores. The **AeroLogic®** also helps control the spread of airborne cold, flu virus, and 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 **AeroLogic®** is 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 lamp output required under these conditions and recommend the **AeroLogic®** model needed.

STER-L-RAY®

Germicidal Ultraviolet Lamps

Lamp(s) are instant starting and provides the utmost in quality, sustained output and longevity.

(See page 11 for more information.)

ArmorLite™ Safety Shield

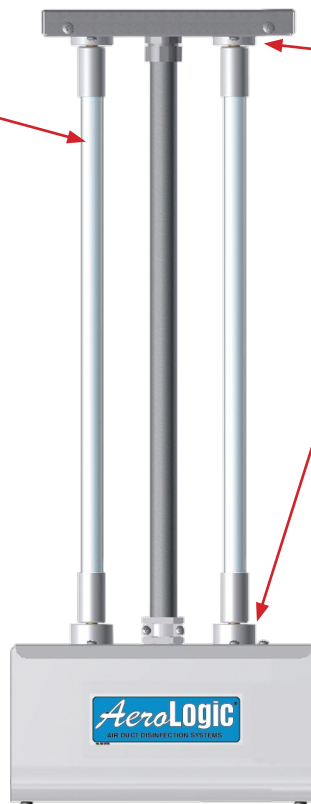
Protective coating can be applied to **STER-L-RAY®** Germicidal Lamps used in the **AeroLogic® 1 and 2 Lamp Air Duct Models** to ensure protection for employees, products and work environments by eliminating the dangers associated with fragments of broken lamps and mercury contamination. (See page 10 for Optional Accessories.)

Construction

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

Surelite™ Ballast

State-of-the-art electronic ballast(s) specifically developed for the operation of ultraviolet lamps. Versatile ballasts provide high lamp output; are lightweight, efficient, and operate cool for longer life.



Model AD-24-2

(see page 10 for Optional Accessories)

Steadfast™ Lampholders

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

Promate™ Observation Port / Sight Glass Assembly and Mounting Hardware

(included)
A Sight Glass Assembly allows for visual inspection of the lamp(s), without the need to remove the **AeroLogic®** 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.

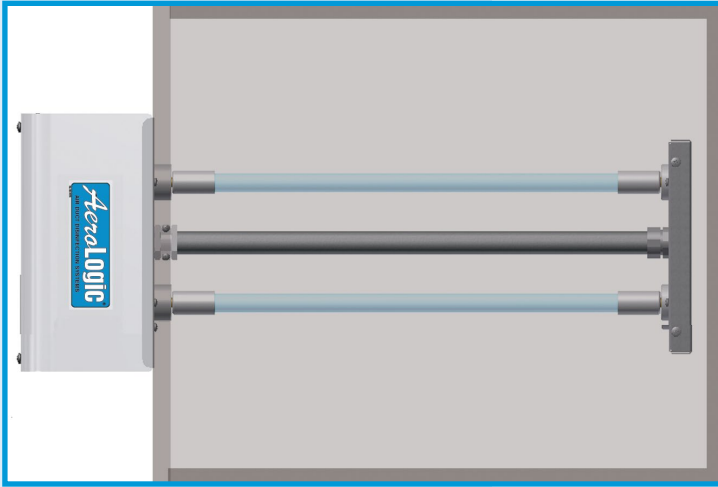
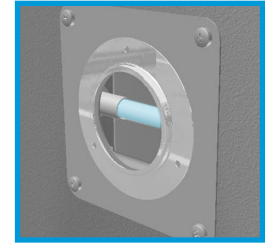


Figure 2 - Partial Internal Mount - Lamps installed inside and ballast enclosure on outside of duct.

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



Promate™ Observation Port / Sight Glass Assembly

A Sight Glass Assembly allows for visual inspection of the lamp, without the need to remove the **Aerologic®** from the duct.

SPECIFICATIONS—Aerologic® 1-LAMP & 2-LAMP RESIDENTIAL & COMMERCIAL AIR DUCT MODELS

Model	Lamp ①	Lamp(s) Watts ②	Total Ultraviolet Output ③	Lamp Extension (Into Duct) ④	Exterior Housing Dimensions		
					Height	Width ⑤	Depth
AD12-1	05-1500-R (1)	11.0 Watts	3.1 Watts	10-3/4"	8"	5-19/32"	2-7/8"
AD18-1	05-1340-R (1)	18.4 Watts	5.8 Watts	16-3/4"	8"	5-19/32"	2-7/8"
AD24-1	05-1348-R (1)	25.6 Watts	8.5 Watts	22-3/4"	8"	5-19/32"	2-7/8"
AD30-1	05-1352-R (1)	32.0 Watts	11.2 Watts	28-3/4"	8"	5-19/32"	2-7/8"
AD36-1	05-1343-R (1)	41.0 Watts	15.0 Watts	34-3/4"	8"	5-19/32"	2-7/8"
AD48-1	05-1334-R (1)	55.0 Watts	21.0 Watts	46-3/4"	8"	5-19/32"	2-7/8"
AD12-2	05-1500-R (2)	22.0 Watts	6.2 Watts	10-3/4"	8"	5-19/32"	2-7/8"
AD18-2	05-1340-R (2)	36.8 Watts	11.6 Watts	16-3/4"	8"	5-19/32"	2-7/8"
AD24-2	05-1348-R (2)	51.2 Watts	17.0 Watts	22-3/4"	8"	5-19/32"	2-7/8"
AD30-2	05-1352-R (2)	64.0 Watts	22.4 Watts	28-3/4"	8"	5-19/32"	2-7/8"
AD36-2	05-1343-R (2)	82.0 Watts	30.0 Watts	34-3/4"	8"	5-19/32"	2-7/8"
AD48-2	05-1334-R (2)	110.0 Watts	42.0 Wat	46-3/4"	8"	5-19/32"	2-7/8"

① Rated average lamp life is 10,000 hours.

② Total lamp watts.

③ Ultraviolet Output at 254 nanometers at 100 hours and 80° 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 models are standard. Specify when ordering.
- Available in various voltages. Consult factory with specific power requirements.
- Models with other lamp sizes may be available. Consult factory with specific requirements.

AeroLogic® 2 and 4 Lamp Commercial Air Duct Model

Utilize the **AeroLogic® 2 and 4 Lamp Air Duct Disinfection System** in your commercial or industrial building HVAC system to reduce and/or eliminate the growth of bacteria, mold, and spores, and to help control the spread of airborne cold, flu virus, and 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 **AeroLogic®** is 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 lamp output required under these conditions and recommend the **AeroLogic®** model needed.

STER-L-RAY® High Output Germicidal Ultraviolet Lamps

High Output (HO) germicidal lamps yield more UV watts than standard UV-C lamps of the same length. (See page 11 for more information.)

ArmorLite™ Safety Shield

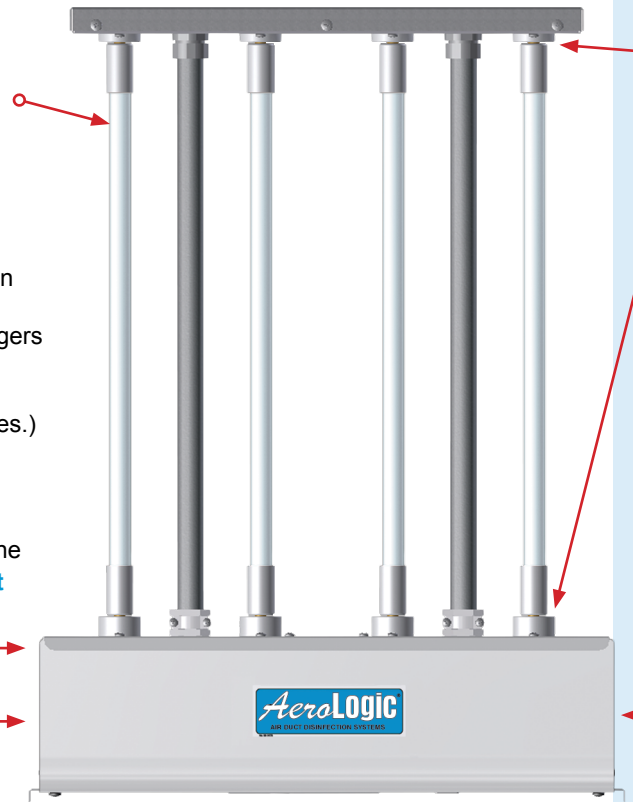
Protective coating can be applied to **STER-L-RAY®** Germicidal Lamps used in the **AeroLogic® 2 & 4 Lamp Air Duct Models** to ensure protection for employees, products and work environments by eliminating the dangers associated with fragments of broken lamps and mercury contamination. (See page 10 for Optional Accessories.)

Construction

Designed for use in demanding applications; the ballast housing of the **AeroLogic® 2 and 4 Lamp Air Duct Models** are constructed in Type 304 Stainless Steel.

Surelite™ Ballasts

State-of-the-art electronic ballasts specifically developed for the operation of ultraviolet lamps. Versatile ballasts provide high lamp output; are lightweight, efficient, and operate cool for longer life.



Model ADHO24-4

(see page 10 for Optional Accessories)

Steadfast™ Lampholders

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

Promate™ Observation Port/ Sight Glass Assembly & Mounting Hardware

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

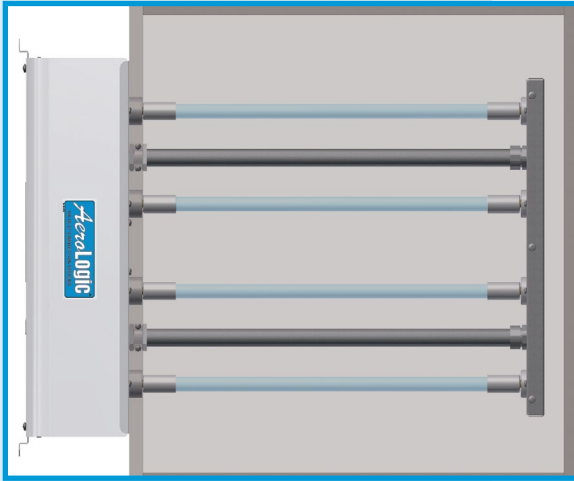
Lamp Operation Indicators

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

SENTINEL® Output Connector

(See page 10 for Optional Accessories.)

Mounting Hardware (included)



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

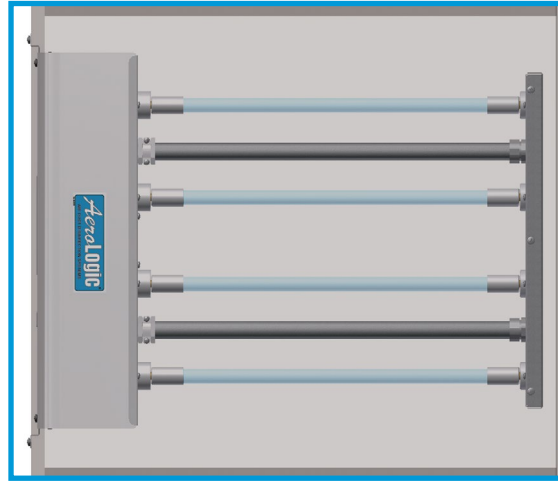
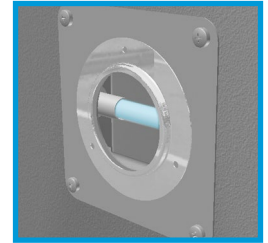


Figure 3

Full Internal Mount- Whole model installed within duct.



**Promate™
Observation Port /
Sight Glass Assembly**
A Sight Glass Assembly allows for visual inspection of the lamp, without the need to remove the AeroLogic® from the duct.

The **AeroLogic® 2 and 4 Lamp Air Duct Models** - 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 (models perpendicular to airflow). Many other mounting positions can be achieved using brackets that are supplied with each AeroLogic®.

SPECIFICATIONS—AeroLogic® 2-LAMP & 4-LAMP COMMERCIAL AIR DUCT MODELS

Model	Lamp ①	Lamp(s) Watts 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)	80.0 Watts	23 Watts	16-3/4"	21-3/16"	16-13/16"	8-1/8"	4-7/16"
ADHO24-2	05-0686 (2)	102.0 Watts	34 Watts	22-3/4"	27-3/16"	16-13/16"	8-1/8"	4-7/16"
ADHO30-2	05-0685 (2)	130.0 Watts	46 Watts	28-3/4"	33-3/16"	16-13/16"	8-1/8"	4-7/16"
ADHO36-2	05-1060-R (2)	174.0 Watts	56 Watts	34-3/4"	39-3/16"	16-13/16"	8-1/8"	4-7/16"
ADHO48-2	05-0576 (2)	238.0 Watts	80 Watts	46-3/4"	51-3/16"	16-13/16"	8-1/8"	4-7/16"
ADHO64-2	05-0690 (2)	310.0 Watts	108 Watts	62-3/4"	67-3/16"	16-13/16"	8-1/8"	4-7/16"
ADHO18-4	05-0687 (4)	160.0 Watts	46 Watts	16-3/4"	21-3/16"	16-13/16"	8-1/8"	4-7/16"
ADHO24-4	05-0686 (4)	204.0 Watts	68 Watts	22-3/4"	27-3/16"	16-13/16"	8-1/8"	4-7/16"
ADHO30-4	05-0685 (4)	260.0 Watts	92 Watts	28-3/4"	33-3/16"	16-13/16"	8-1/8"	4-7/16"
ADHO36-4	05-1060-R (4)	348.0 Watts	112 Watts	34-3/4"	39-3/16"	16-13/16"	8-1/8"	4-7/16"
ADHO48-4	05-0576 (4)	476.0 Watts	160 Watts	46-3/4"	51-3/16"	16-13/16"	8-1/8"	4-7/16"
ADHO64-4	05-0690 (4)	620.0 Watts	216 Watts	62-3/4"	67-3/16"	16-13/16"	8-1/8"	4-7/16"

① Rated average lamp life is 13,000 hours.

② Total lamp watts.

③ Ultraviolet Output at 254 nanometers at 100 hours and 80° 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 models are standard. Specify when ordering.
- Available in various voltages. Consult factory with specific power requirements.
- Models with other lamp sizes may be available. Consult factory with specific requirements.

OPTIONAL ACCESSORIES



SENTINEL® Remote Lamp Indicator*

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

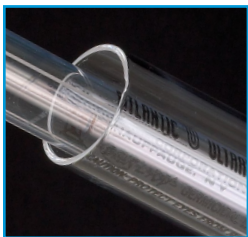
(Available for **AeroLogic® AD** models at the time of purchase. **SENTINEL®** output connector needs to be installed for easy plug-in and operation. The **AeroLogic® ADHO** models are manufactured with a **SENTINEL®** output connector as a standard feature.)



ArmorLite™ Safety Shield

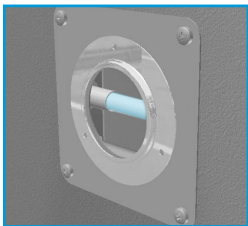
Protective coating can be applied to **STER-L-RAY®** Germicidal Ultraviolet Lamps to ensure protection for employees, products and work environments by eliminating the dangers associated with fragments of broken lamps.

(Lamp on right has **Armorlite™** coating. Available for **STER-L-RAY®** lamps used in **AeroLogic® AD** and **ADHO** models at the time of purchase. The coating is installed at the factory.)



CRYSTAL CLEAR™ Quartz Sleeve

Specially designed quartz sleeve to protect and insulate the germicidal ultraviolet lamp. The quartz sleeve protects the **STER-L-RAY®** Germicidal Ultraviolet Lamps 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, ensuring optimum ultraviolet output. (Standard feature in **AeroLogic® AERO** models, optional for **AeroLogic® AD** and **ADHO** models.)



Promate™ Observation Port/Sight Glass Assembly

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



Zenith™ UV-C Detector

The Zenith™ UV-C Detector is 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

(For use with ALL **AeroLogic®** models.)



Promate™ Safety Glasses

Safety eyewear should be used as general-purpose safety protection and for additional shielding from germicidal ultraviolet rays.



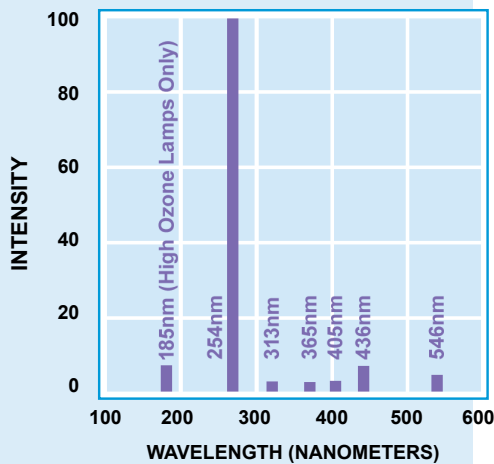
Promate™ Face Shield

Lightweight visor with adjustable headgear provides eye and face protection from germicidal ultraviolet rays.

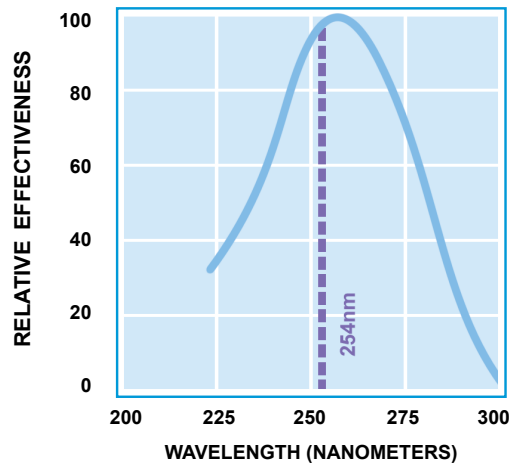
* Item must be ordered at same time as **AeroLogic®** Air Duct Model (installed at factory).

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 tubes that produce ultraviolet wavelengths lethal to microorganisms. Approximately 95% of the ultraviolet energy emitted from **STER-L-RAY®** germicidal lamps is at 254 nanometers, the region of germicidal effectiveness most destructive to bacteria, mold and virus.

STER-L-RAY® Germicidal Ultraviolet Lamps are instant start lamps that utilize tungsten filaments. Lamp life is governed by the life of the filaments and is affected by the frequency of starting. **STER-L-RAY®** lamps are well suited for a variety of air purification applications, which require high ultraviolet intensity.

STER-L-RAY® High Output (HO) Germicidal UV Lamps are similar in size and shape to conventional germicidal UV lamps but are capable of operating at higher UV output. Atlantic Ultraviolet's **Surelite™** ballasts have been extensively tested with **STER-L-RAY®** High Output (HO) lamps and are strongly recommended to achieve the best performance and longest lamp life.

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: LampRecycle.org.

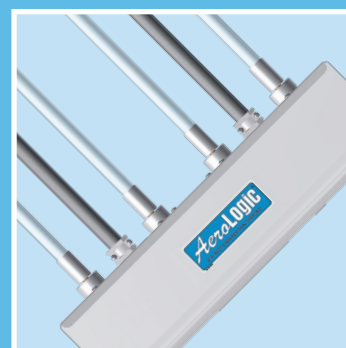
ULTRAVIOLET DOSAGE

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	12,300
<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	6,600

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

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