

PSF-16 AND PSF-24

UPPER AIR UV

INSTRUCTION MANUAL



SAVE THIS MANUAL FOR FUTURE REFERENCE

TABLE OF CONTENTS

PAGE	SECTION
3	Introduction
4	Safety Information
5	Requirements and Advisories
6	Installation (Drawings and Specifications)
9	Troubleshooting
10	Maintenance
12	Product Limited Warranty

INTRODUCTION

What is UVGI?

Ultraviolet germicidal irradiation (UVGI), also more informally known as UV, harnesses the power of short-wavelength UV-C (UVC) light to kill or inactivate microorganisms. It disrupts their DNA and destroys their cellular function, causing the death of the microorganism and/or rendering it helpless. UVGI is a well-established means of disinfection and can be used to prevent the spread of certain infectious diseases.

PSF-16 and PSF-24

The PSF-16 and PSF-24 or “the product” are upper air UV devices designed for use in indoor spaces that meet the specifications described in this manual to actively disinfect airborne pathogens and improve indoor air quality.

QUICK FACTS

PSF-16 - 16”W x 5.375”D x 7”H unit.

PSF-24 - 24”W x 5.375”D x 7”H unit.

PSF-16 For 250 sq. ft. rooms.

PSF-24 For 400 sq. ft. rooms.

Requires at least 7 ft ceiling heights and 120V to operate.

Wall mounted

Plugged into an outlet.

Peak Emission = 0.000995W/m²(253nm)

Designed to keep UV-C rays away from the room, below.

Includes UV-C lamps.

PSF-16 - One Integrated 105cfm fan

PSF-24 - Two Integrated 105cfm fans

Constructed of stainless steel and non-corrosive aluminum.

Manufactured in the USA.

See Installation (Drawings and Specifications) in this manual for more about the product.

Contact

For product questions or feedback, visit email info@aerapy.com or call **866-994-2473**.

Be sure to read and understand the information in this manual.

Note: Images in this manual maybe slightly different than the product you receive.



Important Safety Information



Overexposure to UV-C light can lead to skin and eye injury.

- ◆ NEVER use the product in a manner not specified in these instructions.
- ◆ ALWAYS use proper Personal Protective Equipment described elsewhere in this manual when maintaining, installing or testing this product.
- ◆ ALWAYS disconnect power to this product prior to performing any service or maintenance.
- ◆ NEVER operate the product with the cover open or removed.
- ◆ NEVER override any safety switch. Doing so can expose personnel to UV-C light that can lead to skin and eye injury.
- ◆ NEVER use solvents or flammable liquids in or near this equipment other than the cleaning product described elsewhere in this manual.
- ◆ NEVER operate in a hazardous or flammable environment.
- ◆ NEVER operate the product near or under any other equipment that can drip water onto this product.
- ◆ NEVER immerse the product in water.
- ◆ NEVER move the product while the unit is in operation.
- ◆ NEVER use damaged bulbs.
- ◆ NEVER insert non-standard bulbs into the bulb receptacle.
- ◆ NEVER attempt to secure wiring or replace ballasts without proper knowledge and training.
- ◆ NEVER alter the design or construction of this product.
- ◆ NEVER use this product for anything other than its intended purpose as described in this manual
- ◆ NEVER plug this unit into an outlet that supplies power that does not match the product label.
- ◆ NEVER modify the power cord for this product if one is originally supplied with the product.
- ◆ Contact the manufacture if there are any questions about connection to power.
- ◆ NEVER operate the equipment without a proper electrical ground.
- ◆ NEVER operate the product if it is damaged or the cord is frayed or damaged.
- ◆ NEVER remove caution labels included on this product.
- ◆ Only qualified service technicians complying with your local electrical code should install the product.
- ◆ Read and follow all safety instructions.
- ◆ The product is intended to be used indoors (only).
- ◆ Always only use UVC bulbs specified elsewhere in this manual.
- ◆ Always remove the power cord from the outlet prior to maintaining or cleaning the product.
- ◆ Always clean the product as described elsewhere in this manual with the proper cleaning agents. Using other cleaning agents could damage the product.
- ◆ Always follow all safety measures from the Material Safety Data Sheet (MSDS) for any cleaning agent you use with/within the product.

SAVE THESE INSTRUCTIONS FOR FUTURE REFERENCE



WARNING! Wear essential protective equipment when maintaining, installing or testing this product. While the lamp is operating, wear gloves and clothing with long sleeves with no gaps and ultraviolet resistant face shield is required when entering the space above 6 ½ feet from the floor.



REQUIREMENTS AND ADVISORIES



WARNING!

Product must be installed at a minimum of 6 feet from the floor. Product must be installed horizontally.



The product can be:

- ◆ Wall-mounted with fasteners included.
- ◆ Power cable included for connection to a standard 120VAC outlet.
- ◆ For convenience and at the customer's discretion, this product can be controlled by a wall switch that operates the outlet.

Highly preferred to Install horizontally.

The product requires:

- ◆ 120V, 60HZ ONLY (PSF-16 0.75A, PSF-24 1.5A)
- ◆ Fuse 3A, 250VAC, STYLE 3AG
- ◆ Ceiling height of at least 7 feet (prime condition being that the unit is installed well above the heads of room occupants in an area to be air-disinfected).
- ◆ 24/7 operation for optimum disinfection.

Advisory: The UV rays that may be emitted from the product may discolor or cause some fading of some interior finish materials (e.g., polymer) that are exposed to the UV rays over time. Some polymer is UV-resistant, but there is no proven test to show the level of discoloration or fading, and this depends on the material and distance to the material.

INSTALLATION (DRAWINGS AND SPECIFICATIONS)

IMPORTANT SAFEGUARDS

When using electrical equipment, basic safety precautions should always be followed including the following:

READ AND FOLLOW ALL SAFETY INSTRUCTIONS

- a) This equipment is designed for use with germicidal UV radiation sources and must be installed in compliance with competent technical directions to prevent risk of personal injury from UV radiation.
- b) UV radiation can pose a risk of personal injury. Overexposure can result in damage to eyes and bare skin. To reduce the risk of overexposure this equipment must be installed in accordance with the manufacturer's site planning recommendations. This may include instructions on the relative location of each germicidal system component, the minimum distances between UV-generating devices and other objects or surfaces, and protection from line-of-sight exposure to UV radiation unoccupied spaces located above the equipment mounting area (e.g. upper floor balconies, open staircases, etc.)
- c) UV and optical radiation can be reflected by surrounding surfaces such as ceilings and walls. Since the reflective properties of surfaces can vary widely, it should be considered as part of site planning. Follow the manufacturer's recommendations for selecting appropriate ceiling and wall finishes.
- d) IT IS THE RESPONSIBILITY OF THE INSTALLER TO ENSURE THAT PERSONS WILL NOT BE EXPOSED TO EXCESSIVE UV OR OPTICAL RADIATION DURING EQUIPMENT OPERATION. THIS WILL REQUIRE THE INSTALLER TO CONDUCT AN ASSESSMENT OF IRRADIANCE OR ILLUMINANCE LEVELS IN THE SURROUNDING OCCUPIED SPACES PRIOR TO OCCUPANCY.
- e) Equipment should be mounted in locations and at heights where it will not readily be subjected to tampering by unauthorized personnel.
- f) Maintenance and servicing of this UV generating equipment shall be performed by authorized personnel. Service personnel must wear appropriate Personal Protective Equipment (PPE) if the equipment will be in operation during the maintenance or servicing work. Contact the equipment manufacturer for PPE recommendations and guidance.
- g) When replacing lamps, replace them only with the lamps for which the equipment is marked and intended.
- h) The use of accessory equipment not recommended by the manufacturer may cause an unsafe condition.
- i) Do not use this equipment for other than intended use.
- j) Contact information for the installer's use and reference that includes at least the germicidal system manufacturer's name, address, and either a telephone number or website address.

OVERVIEW

Wiring

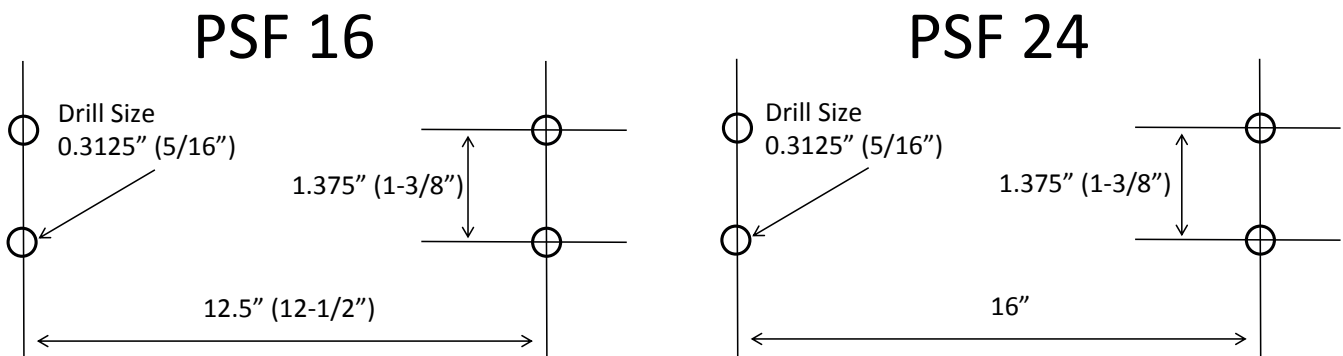
- ◆ Plug the unit directly into a standard wall outlet.
- ◆ Remove face plate and install UV-C lamps (carefully align lamp base inside lamp socket between the metal aligning with 4 pins on lamp base and slots in the socket. Push lamp in until snaps in place). **Gloves must be used when handling the UV Lamps during initial installation and subsequent service/maintenance activities.**

Locations

- ◆ This product must be installed securely to a wall at least 6' above the floor.

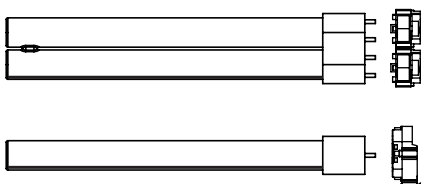
Mounting

1. Drill 4 holes per the below drawing
2. Insert an anchor into each hole
3. Using a phillips screwdriver, partially screw in the bottom screws.



4. Remove the front panel from the unit
5. Lift the unit into place.
6. Using a Philips screwdriver, screw in the remaining 2 top screws. Tighten the bottom 2 screws.
7. Insert the bulb.

Carefully align lamp base inside lamp holder between the metal tabs inside the holder and align with pin on lamp base and the slots in the holder. Push lamp in until it snaps in place. **Use soft cotton gloves to touch bulb.**



8. Replace the front panel.
9. Attach the power cord to the unit, and plug it into a standard 120VAC wall outlet.
10. Turn on the unit with the power switch on the right side.
11. Verify the operation (Fan is on, Light can be seen through the Aerapy logo)



WARNING! Temporary eye and skin damage may result from DIRECTLY viewing the light produced by these lamps. To reduce the risk of exposure to UV-radiation, take UV-radiation protective measures for personnel during servicing. WEAR EYE & SKIN PROTECTION



Specifications

Model	PSF-16	PSF-24
Dimensions	16"W x 5.375"D x 7"H	24"W x 5.375"D x 7"H
Weight	9lbs	12lbs
Volts	120VAC, 60Hz	120VAC, 60Hz
Amps	0.75A	1.5A
Lamps and Watts	1ea 35 Watts	1ea 60 Watts
Fan	1ea 105CFM	2ea 105CFM
Fuse	3A, 250VAC, STYLE 3AG	3A, 250VAC, STYLE 3AG

TROUBLESHOOTING

ISSUE: Lamp flickers or lamp is out.

Probable cause and solution: Lamp is not securely seated in socket.

- ◆ Remove and securely reset lamp. Lamp is defective or at the end of its life cycle.
- ◆ Replace with new lamp. See Product Limited Warranty in this manual for details on the 1-Year (9,000 Hours) details for the UV lamps.

Probable cause and solution: Ballast(s) is defective or failing.

- ◆ Replace ballast.*

Probable cause and solution: Product is not getting power.

- ◆ Check all power conduits/wiring to product for continuity.
- ◆ Possible power switch on the product is failing or defective.*
- ◆ Wiring in product is loose.*
- ◆ Check fuse.

ISSUE: Fan is on, but no lights are on.

Probable cause and solution: Ballast is defective or failing.

- ◆ Replace ballast.*

*If this is the case and if the product is under the 5-year limited warranty described in this manual, return to Aerapy for inspection/repair. If the product is out of warranty, a nominal fee will be charged. See Product Limited Warranty details in this manual.

To prevent damage to lamp or socket:

Follow lamp replacement instructions carefully. Insert the 4 pin base of the lamp into the lamp socket and push lamp straight into socket. A “click” will be heard or felt when the lamp is properly seated. Removal is performed by reversing this action.

Always use gloves to avoid surface contamination of the lamp. Always dispose of lamps in accordance with local waste disposal laws.

Ballast replacement requires proper training, tools, and skills. DO NOT attempt to secure wiring or replace ballasts without proper knowledge and training to do so. See Product Limited Warranty.



CAUTION: Disconnect the product from power or the outlet prior to cleaning.



MAINTENANCE

Lamps

Semi-annually (optional): Clean lamps

- ◆ De-energize the product.
- ◆ Remove lamp from the product.
- ◆ Using a soft cotton cloth and isopropyl alcohol, wipe lamps and allow to dry.
- ◆ Reinstall the lamps in the product.
- ◆ Reinstall cover and test lamps to ensure that all lamps energize.

DO NOT look directly at the lamps. See Safety Overview.

Annually: Replace lamps. Lamps have a maximum life cycle of 9,000 continuous energized hours.

- ◆ De-energize the product.
- ◆ Remove the used lamps from the product.
- ◆ Wearing soft cotton gloves or using a soft cotton cloth, with isopropyl alcohol, wipe new lamps before replacing and allow to dry.
- ◆ Install new lamps.
- ◆ Inspect the lamps from below the product to ensure that all lamps are energized.

DO NOT look directly at the lamps. See Safety Overview.

Fan Filter

The product includes a fan to circulate the air in the room and is equipped with a metal pre-filter. Over time, this filter may accumulate dust, hair, or any other particles in the air. To avoid blocking the airflow of fan, clean periodically by:

- ◆ Removing the filter.
- ◆ Washing and air drying the filter.
- ◆ Reinstalling the filter.

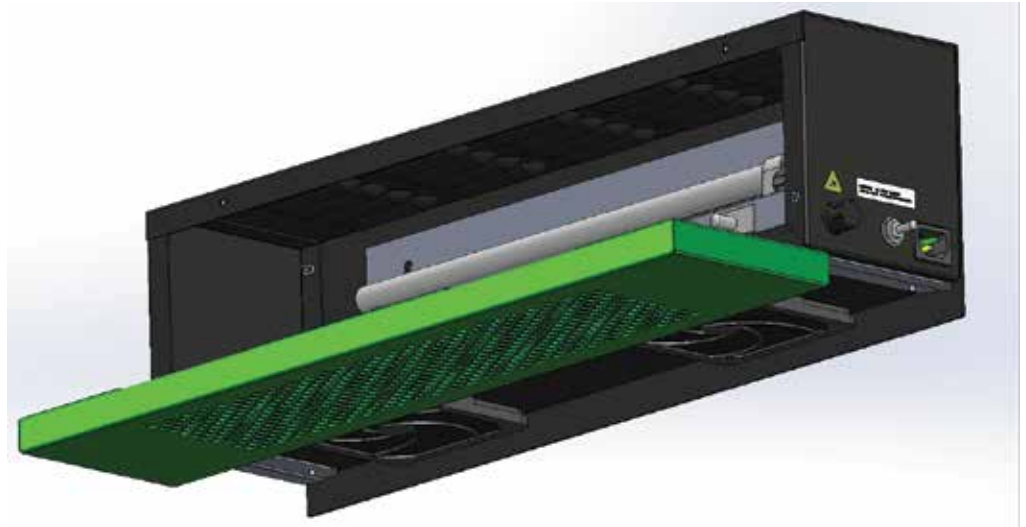
Replacement parts and lamps can be purchased by calling (866) 994-2473.

Fan Filter Removal and Reinstallation

Remove the front cover by loosening the 4 front fasteners



Slide off the bottom cover



Pull off the fan cover(s), remove the foam and wash.

Reverse the above to reinstall the fan filter(s).



PRODUCT LIMITED WARRANTY

SCOPE of WARRANTY:

SCOPE of WARRANTY:

Aerapy warrants that all Aerapy products (the "Product") will be free from defects in materials and workmanship during the Applicable Warranty Periods of five years from the Date of Professional Installation. If the Product fails in normal use and service within the stated Warranty Period due to a defective part, Aerapy will, at its option, repair or replace the defective part. The replacement part will be warranted for only the unexpired portion of the original Applicable Warranty Period. If a part of the Product fails and an exact replacement is not available, Aerapy reserves the right to provide a substitute of equal or greater value, or provide a credit in the amount of the original cost of the defective part towards the purchase of a new Aerapy product similar in function and features to your Product. Replacement parts are NOT pro-rated, meaning that any part or component that fails during the warranty period will be replaced or credited (if replacement is no longer available) at original purchase cost.

EFFECTIVE DATE of LIMITED WARRANTY COVERAGE:

The Effective Warranty Date is the date of the Product's first installation, if properly documented; otherwise it is the date of purchase plus one (1) month.

APPLICABLE WARRANTY PERIODS for VARIOUS PARTS:

- ◆ UV Fixture: Product parts and components are warranted for an Applicable Warranty Period of Five (5) years after the Effective Date.
- ◆ UV Lamps: UV lamps are warranted for an Applicable Warranty Period of one (1) year after the Effective Date.
- ◆ Fans: Fans used in certain UV fixtures are warranted for an Applicable Warranty Period of one (1) year after the Effective Date.

PRODUCT LIMITED WARRANTY

STANDARD PROVISIONS and CONDITIONS:

EXCLUSIONS – THIS LIMITED WARRANTY WILL NOT APPLY:

- (a) To damages, malfunctions or failures resulting from failure to properly install, operate or maintain the Product in accordance with the manufacturer's instructions;
- (b) To damages, malfunctions or failures resulting from abuse, accident, fire, Hood and the like;
- (c) To parts used in connection with normal maintenance, such as cleaning or replacing air filters;
- (d) To Products that are not installed in accordance with applicable local codes, ordinances, facility requirements, and good trade practices;
- (e) To damages, malfunctions or failures caused by the use of any attachment, accessory or component, or to any modifications not authorized by the manufacturer;
- (f) To damages, malfunctions, or failures caused by misuse, accident, contaminated or corrosive atmosphere, vandalism, freight damages, fire, flood, freeze, lightening, acts of war, acts of God and the like.

SHIPPING COSTS:

This Limited Warranty does NOT cover shipping costs. You, or your installing contractor, will be responsible for the cost of shipping warranty replacement parts from our factory to the location of your product. You also are responsible for any shipping cost of returning the failed part to Aerapy, and for incidental costs incurred locally, including handling charges.

LABOR COSTS:

This Limited Warranty does NOT cover any labor expenses for service, or for removing or reinstalling Products. All such expenses are your responsibility, unless a labor service agreement exists between you and your installing contractor.



 CROWNTONKA®  ICS®  LOTEMP DOORS™  PREPRITE®  THERMALRITE®

Proud to be family-owned.