



# Air Fantastic

## Central Air Purifier (CAP)

### Owner's Manual

**For use with Models:  
CAP3000, CAP5000**



For safety and to ensure proper use carefully read the contents of this manual before operating or installing the unit.



# Thank You for Choosing Air Fantastic® CAP system!

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Congratulations, you own the most advanced induct air purifier available! Before operating the CAP System please read this manual in its entirety. Doing so will give you important information to keep you safe from harm and ensure you get the most benefits from your System. For additional information please contact us:

Mail: Air Fantastic, LLC  
Attn: Customer Service  
4406 Eagles Landing Dr.  
Austin, TX 78735

Web: [www.airfantastic.com](http://www.airfantastic.com)  
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# Important Safety Instructions

When operating any electrical appliance, basic precautions should always be followed for safety.


## RISK OF FIRE, ELECTRIC SHOCK, OR INJURY


- Carefully read the entire contents of this manual.
- Do not use outdoors, in moist areas or on wet surfaces.
- Do not use the unit in areas of extreme heat or in the presence of flammable gas.
- Do not allow any foreign objects to enter the ballast cooling vents.
- Do not attempt to service or repair the unit yourself. Any attempt to repair the unit yourself could cause serious injury and will void the warranty.
- Do not handle the plug or appliance with wet hands.
- Do not pull on power cord to unplug. To unplug grasp the plug, not the cord.
- Do not use with damaged power cord or plug. If appliance is not working properly, has been dropped, damaged, left outdoors, or dropped into water, call a customer service representative at 1-877-424-7326.

Cooling Vents





**WARNING: RISK OF ELECTRICAL SHOCK. CAN CAUSE INJURY OR DEATH. UNPLUG OR DISCONNECT UNIT FROM POWER SUPPLY BEFORE SERVICING.**

 Store and transport -4° F ~ 180° F, humidity 10% ~ 90% (Non Condensing).

 Do not operate unit in ambient temperatures above 150° F.


 **KEEP OUT OF REACH OF CHILDREN**

 Only use the power adapters included with the purification system.


 **WARNING: UV LIGHT HAZARD.**  
Harmful to skin and eyes. Can cause temporary or permanent loss of vision. Never look at the lamp while illuminated. To prevent exposure to ultraviolet light, be sure the power is disconnected until installation is completed and before servicing.

 UV lamps contain Hg (Mercury).

High or long term exposure to Hg can lead to serious health risks. UV lamps should be disposed of according to disposal laws in your area. UV lamps should never be disposed via standard waste receptacles. They often break when thrown into a dumpster, trash can or compactor, or when they end up in a landfill or incinerator. Learn more about proper disposal methods and find disposal centers at [www.earth911.org](http://www.earth911.org).

 Never touch UV lamp with bare hands. Oils from your skin can create hot spots causing UV lamp to break when illuminated.

 Never remove the outer housing of any components.

<b>WARNING</b> OPTICAL RADIATION EXPOSURE HAZARD	
	DO NOT ATTEMPT TO OPERATE UNIT WITHOUT PROPERLY INSTALLING UNIT FIRST.
PERMANENT EYE AND SKIN DAMAGE MAY RESULT.	

# Features and Benefits

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## **Easy Operation**

The Central Air Purifier is designed to operate continuously and should remain in operation 24 hours a day, 7 days a week for best results.

## **Easy Installation**

The Central Air Purifier comes complete with installation hardware and takes just minutes to install.

## **Low Maintenance**

There is virtually no maintenance to perform. Our proprietary LongLife Quad-Ion Cell, complete with the UVC lamp installed, should be replaced every **two** years.

## **Energy Efficient Green Technology**

The Central Air Purifier is an energy efficient air purification system. Other PCO devices require several hundred watts to operate. The CAP3000 operates on just 13 watts of electricity and the CAP5000 operates on just 18 watts.

## **NANO Nickel Catalyst**

Every unit utilizes our proprietary catalyst. Our catalyst utilizes TiO<sub>2</sub> and four additional proprietary catalyst metals to provide remarkable results. This technology reduces many biological and organic contaminants including mold, bacteria, viruses and VOCs.

## **Proprietary UVC Lamps**

At the core of the Quad-Ion Cell is a UVC lamp. The 254 nm germicidal lamp kills mold, bacteria, viruses and breaks down VOCs. They are American made lamps that utilize a proprietary LongLife coating doubling the average life to two years. A standard quartz lamp maintains 65% of its UVC output at 9,000 hours. With LongLife technology, our UVC lamps maintain up to 80% of their output at 16,000 hours. Our lamps also utilize two-tube linear technology that protects against breakage and mercury leakage, abrupt temperature changes, and high moisture without decreasing efficiency.

## **Rotational UV Shield Technology**

The Quad-Ion Cell incorporates a proprietary UV shield technology. This technology places you in control of how much or how little UV light is emitted from the unit. You will learn more about this technology later in the manual.

## **Made in USA Quality**

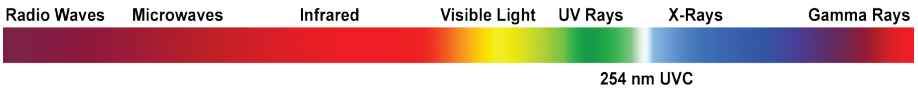
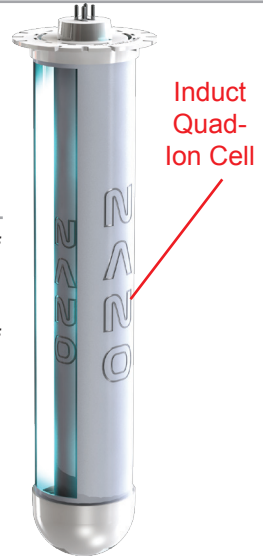
The CAP System is made in America with quality American engineered parts. From durable light weight titanium anodized aluminum, down to the UV stabilized polycarbonate housing, every part of the CAP System Induct is made with pristine quality and assembled by hand in the USA.

# Indications For Use

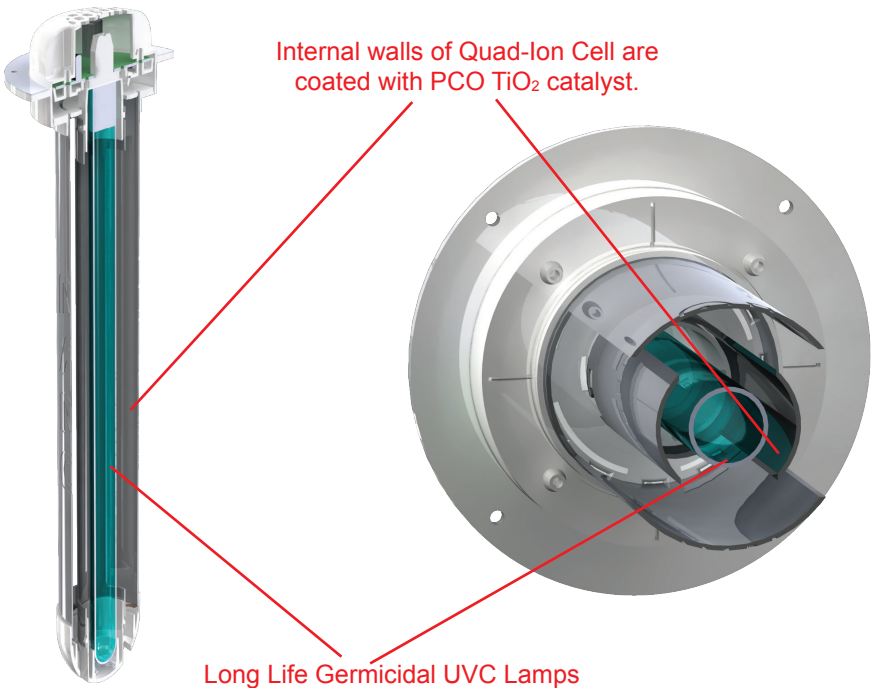
CAP System devices are intended for the removal of airborne contaminations of pathogens and/or harmful molds and volatile organic compounds present in rooms or enclosed areas.

## Technology

The device utilizes a PCO reaction chamber comprised of an Quad-Ion Cell coated internally with a  $\text{TiO}_2$  based catalyst that reacts with photons from the 254nm UVC germicidal lamp for the removal of airborne contaminations of pathogens and/or harmful molds and volatile organic compounds present in rooms or enclosed areas.



By utilizing a broad spectrum 254nm UV light we achieve the same oxidizing and ionizing benefits found in nature, created by the sun. Combining the UV light with our catalyst we achieve remarkable results.



## Status Indicator Lights

The Status Indicator Lights are located on the side of the Ballast Cover. The indicator lights will provide you with important information about the operating status of your unit. The ballast and UVC lamp utilize this set of indicator lights to give you detailed status information and ensure components are working properly. The indicator lights will provide you with the following information:

### “Lamp Status” Indicator

#### Green

Unit has power, ballast and UVC lamp are operating efficiently.

#### Red

Unit has power, UVC lamp is defective or not properly connected. Unplug the device. Make sure UVC lamp is properly connected. Plug unit back into power source. If the light is still red please contact an Air Fantastic representative.

### “Lamp Replacement” Indicator

#### Blue Solid

The UVC lamp is within its two year life span. No action is needed.

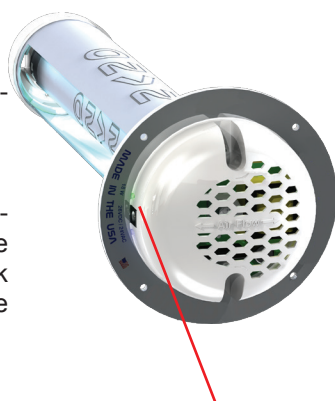
#### Blue Flashing

The UVC lamp is outside its two year life span, has begun to decrease in efficiency and should be replaced.

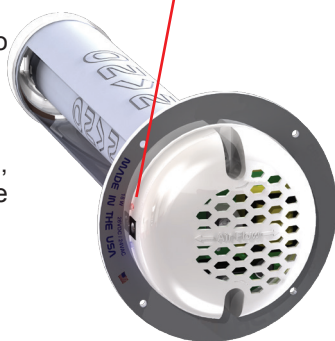
### No Lights Illuminated

There are two possibilities.

1. The unit is not properly connected to the power supply.
2. The ballast exceeded the safe operating temperature. The thermal protector opened the circuit disconnecting power to the ballast. The circuit will automatically reset when the ballast cools.



Status Indicator Lights

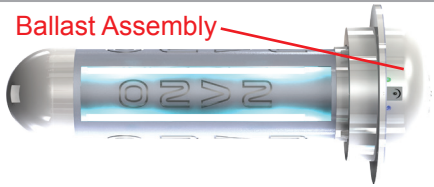


## Power Adapter

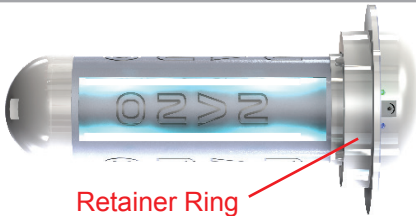
The CAP System is powered using a 24 VDC power adapter with a rated input voltage of 100 - 240 VAC, Out 24 VDC and 1.5 A and 6 foot supply cord. For your safety and to ensure proper function of your CAP System we recommend that ONLY the power adapter included with the original purchase be used.

## Ballast Assembly

The CAP System components are protected with a sturdy American made polycarbonate outer housing. This housing should never be removed unless by an Authorized Air Fantastic Representative.



## Retainer Ring



The Cap System Ballast Assembly and Quad-Ion Cell are mounted to the Retainer Ring. The Retainer Ring mounts to the duct of your HVAC system and utilizes an adhesive foam gasket to prevent unwanted air leaks.

## Rotational UV Shield



Since UV lamps were first used in HVAC systems there has been one constant complaint from engineers and contractors. UV light can degrade many of the components used within an HVAC system causing premature system failure.

Air Fantastic has designed the perfect solution. With the development of our proprietary Rotational UV Shield you can control how little or how much UV light is emitted from the unit, while allowing for a constant stream of air to pass through the Quad-Ion Cell for treatment.

The Rotational UV Shield can be rotated 360° exposing more or less of the UVC lamp.

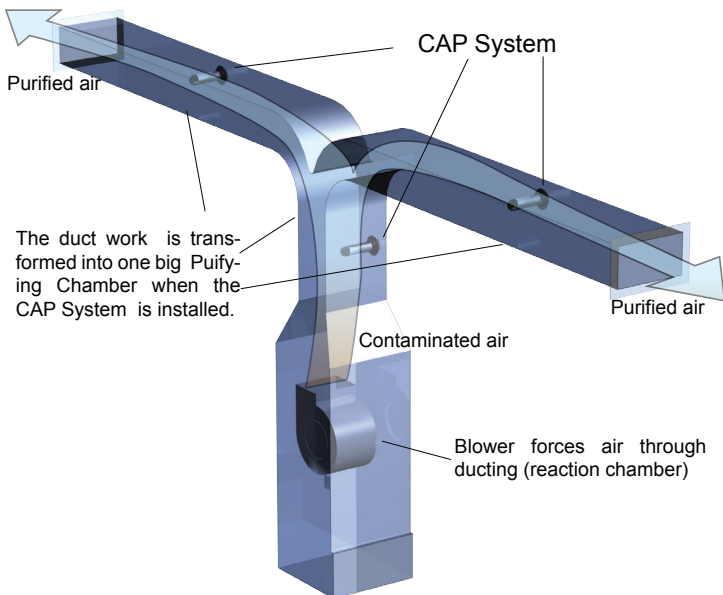
## Placement and Installation

### Placement Suggestions

The CAP System units are designed to be installed within the duct of an HVAC system. They can be mounted in either the supply side or return side of your HVAC system. It should be placed within 10 feet of an electrical outlet. To help you determine the optimal placement of your new CAP System we have listed a few examples on the following page. We recommend that you always work with an authorized dealer and licensed HVAC engineer or contractor when determining optimal placement.

## CAP System Placement Recommendations

- **Above coils** - The CAP System unit should be mounted directly above the coils with UV Shields rotated 90° to the open position. The unit should be oriented so that the UV light shines directly on the coils ("air flow" label should be pointing at the coils). Larger air handlers may require multiple units.
- **Reduce contaminants in duct-** In residential or light commercial applications a single unit can be mounted in the plenum on the supply side of the HVAC system. In large commercial applications air can become recontaminated as it travels through the ducts. Therefore it may be necessary to mount several units throughout the duct. The UV Shield can be rotated to the closed position when installing the unit in close proximity to seals and gaskets or electrical components to protect them from the UV rays. When Rotational UV Shields are in the closed position the CAP System should be installed with the "air flow" label running parallel with the duct ensuring air flow through the device.
- When possible, the UV Shield should be rotated the open position for optimal efficiency to expose more contaminants to UVC radiation.
- **Reduce airborne contaminants in a room** - The CAP System unit should be installed in close proximity to the air outlet vent that supplies air to the room being treated. The UV Shield should be rotated to the closed position to prevent human exposure to UV rays. When Rotational UV Shields are in the closed position the CAP System should be installed with the "air flow" label running parallel with the duct ensuring air flow through the device.
- **Coverage** - As a general recommendation the CAP3000 should be used in areas up to 3000 square feet and the CAP5000 should be used for areas between 3000 and 5000 square feet. Areas of higher contamination, areas above 5000 square feet or with ceilings above 10 feet may require additional units for best results.





## Preparing to Install Your New CAP System

The CAP System was designed to be simple and effective. Remove the unit, power adapter, power cord, mounting hardware (eight self tapping screws) from the box. We recommend keeping the box and all packaging material for shipping the unit should it ever need to be returned for repairs.

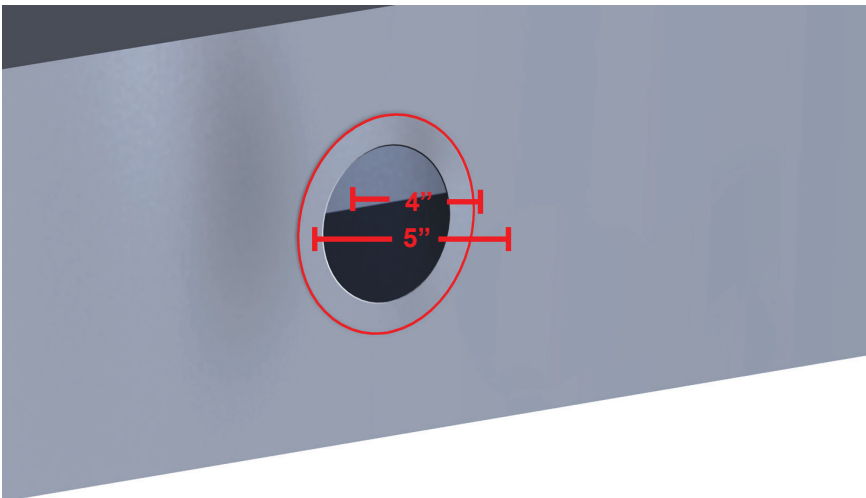
## Installation Instructions

Installation and servicing of air-conditioning equipment can be hazardous due to system pressure and electrical components. Only trained and qualified service personnel should install, repair, or service air-conditioning equipment. Air Fan-tastic and its affiliates are not responsible for any damage to the HVAC system, CAP System or injury to yourself or others if you elect to install the device without utilizing qualified technicians.

Use the suggestions on page 6 to determine the optimal mounting location(s).

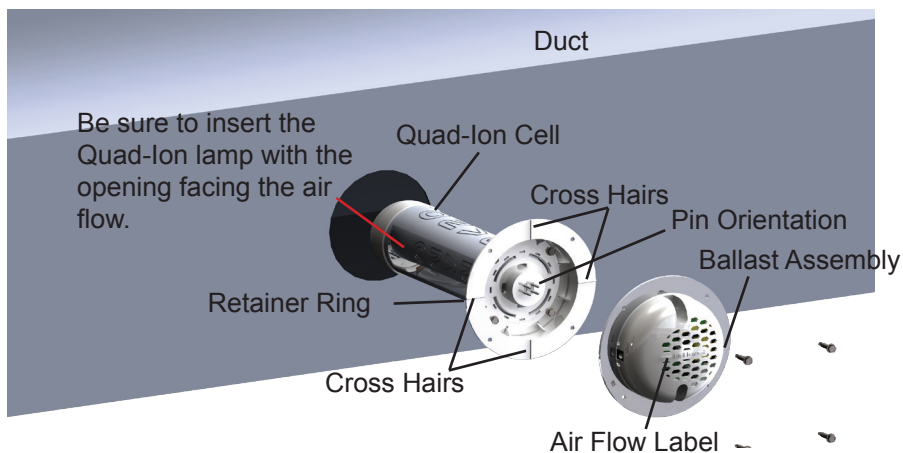
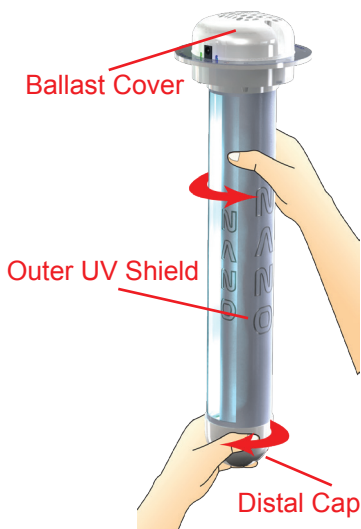
To complete the installation process you will need the following tools:

- Power Drill
  - 4 inch hole saw
  - 1/4 inch hex head screw driver
1. Using the steps on page 6, determine the optimal mounting location of your new CAP System. The mounting location should be within 10 feet of an electrical outlet.
  2. Thoroughly clean and dry at least a 12" X 12" area at the location where the CAP System will be mounted. If available, clean with rubbing alcohol & paper towel for a better adhesive seal to the duct. Be sure rubbing alcohol dries completely. Using a 4" inch hole saw, cut a 4" hole in the duct where the device will be mounted. Center the hole ensuring there will be at least a 5" diameter of duct around the outside of the hole.

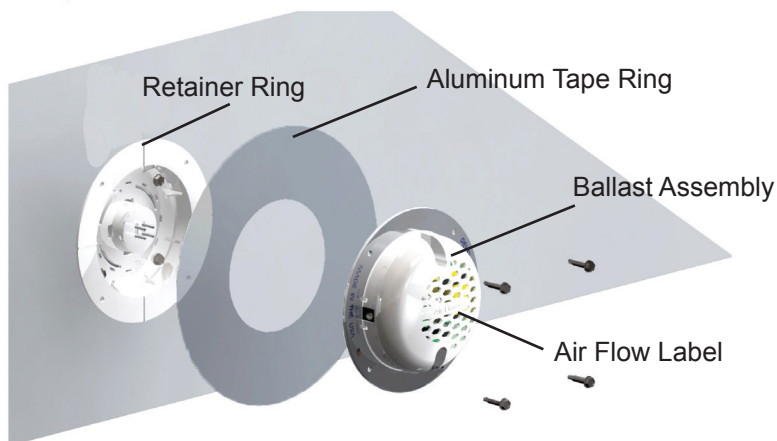


3. A trained service professional should be consulted to determine the extent of rotation. Rotate the UV Shield to the desired opened or closed position. Place one hand on the Distal Cap and the other on the Outer UV Shield. Rotate the Distal Cap clockwise while rotating the Shield counter clockwise until the desired position is reached. Rotation will require firm pressure.

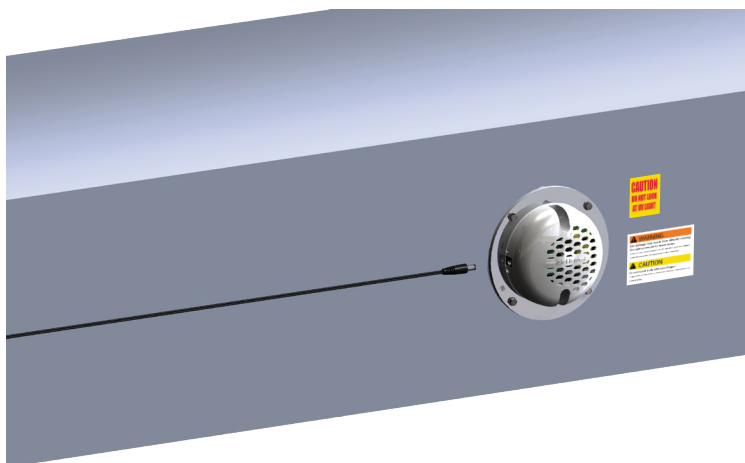
Note: The CAP unit is designed to require firm pressure during rotation. Never rotate the Ballast Cover and Distal Cap simultaneously in opposite directions. Doing so could possibly disassemble the unit and void the warranty.



4. Note that the CAP System should be orientated with the "air flow" label running parallel with the length of the duct to ensure the four pins are in line with the Four Pin Connector. Before inserting the CAP System, use a 1/4" hex head screw driver to remove the four outer screws and pull off the Ballast Assembly from the Retainer Ring. Remove the wax paper from the gasket located on the bottom side of the Retainer Ring. Insert the Retainer Ring with the Quad-Ion Lamp attached into the 4" hole, aligning the cross hairs parallel to the duct. Press firmly on the Retainer Ring to adhere the gasket to the duct.
5. Place Aluminum Tape Ring over Retainer Ring aligning the center. Firmly press the Ballast Assembly onto the four pins protruding from the Quad-Ion Cell. Optional mounting configurations, such as opening the UV shields, may vary the orientation of the "air flow" label. It's only intended to serve as a general guideline.



6. Using a 1/4" hex head screw driver, secure the Ballast Assembly to the Retainer Ring with four self tapping 3/4" screws being careful not to overtighten stripping the screw holes. When mounting to a fiber glass duct the adhesive gasket will help secure the unit, but the four hex screws are still required to secure the Ballast Assembly.
7. Using a 1/4" hex head screw driver, secure the power adapter with four self tapping 1/2" screws.
8. Adhere the two included warning labels in close proximity to the CAP device. Make sure the duct is clean and dry before adhering the warning labels.



## Initial Start Up

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Plug the included power adapter into the CAP System. Connect the power adapter provided with this unit rated input 100-240 Vac Output 24 Vdc and 1.5 A to electrical outlet. The unit will start, with the green lights and blue lights illuminating.

It's designed for continuous operation. For maximum effectiveness, operate the unit 24 hours a day, 7 days a week.

## Maintenance

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The CAP System was engineered to be virtually maintenance free. The Quad-Ion Cell should be replaced every two years.

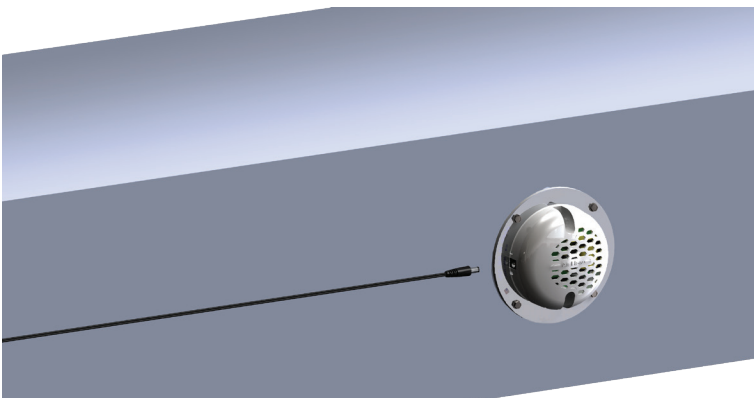
### Quad-Ion Cell Replacement Process

The Quad-Ion Cell comes complete with a new UVC lamp pre installed. The entire Cell should be replaced every two years. Failure to replace the entire Cell will decrease the effectiveness of the unit. After two years of use the blue Lamp Replacement light will begin to blink as a reminder that it's time to replace the Quad-Ion Cell. The CAP System utilizes a proprietary UVC lamp that can only be purchased from an authorized Air Fantastic dealer. The American made lamp utilizes a proprietary long life coating increasing the average life to two years. Our proprietary lamp also utilizes two-tube linear technology that protects against breakage, abrupt temperature changes, and high moisture. Attempting to use an alternative lamp will decrease the effectiveness of the unit, could cause permanent damage to the unit and will void the warranty.

Note: UV lamps contain Hg (Mercury) and should be disposed of according to disposal laws. Find disposal centers at [www.earth911.org](http://www.earth911.org).

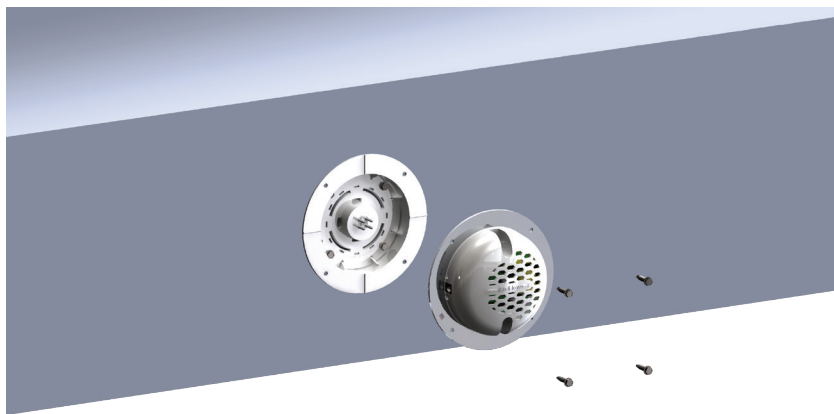
We recommend contacting an authorized Air Fantastic dealer to perform the replacement process. If you choose to perform the replacement process yourself please follow these directions:

1. Unplug the CAP device from its power source.

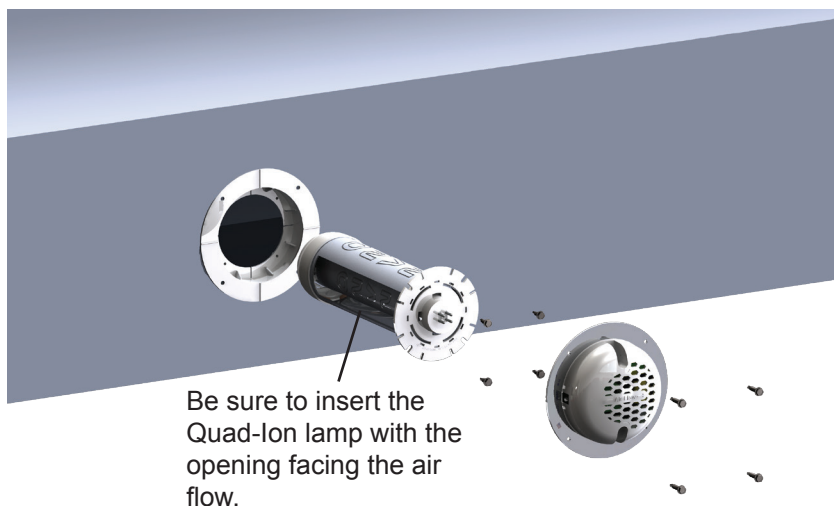


## Maintenance (Continued)

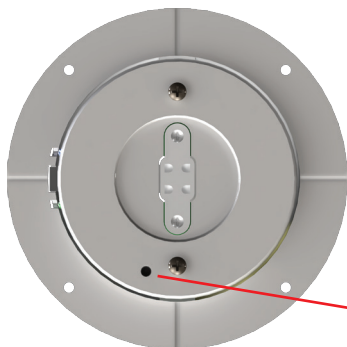
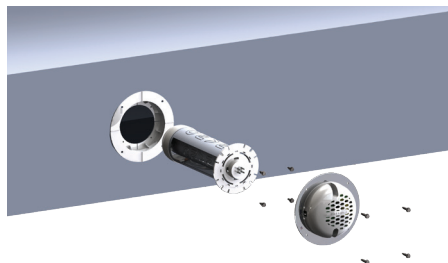
- Using a 1/4" hex head screw driver, remove the four screws securing the Ballast Assembly and pull the Ballast Assembly away from the Retainer Ring until the four pins have completely disconnected from the Ballast Assembly.



- Using a 1/4" hex head screw driver, remove the four screws securing the Quad-Ion Cell and pull the Quad-Ion Cell out from the Retainer Ring. Properly dispose of the Quad-Ion Cell. The four screws will be needed in step 4.



4. Insert the new Quad-Ion Cell into the Retainer Ring. Using the illustration, be certain the Quad-Ion Cell is installed using the correct pin orientation. Secure the Quad-Ion Cell with four 1/4" hex head screws. Do not overtighten the screws to prevent them from stripping.



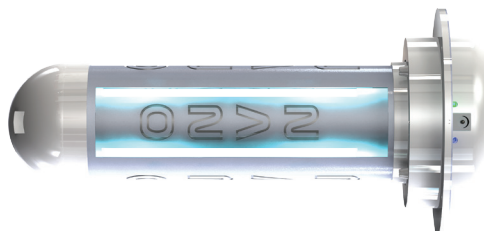
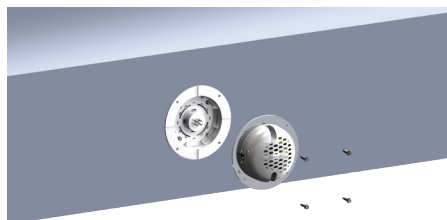
5. Using a small cylindrical object, such as a pen, press and hold the Lamp Reset Button for 3 seconds. This will reset the Lamp Replacement Indicator. The Lamp Reset Button is located on the bottom of the Ballast Assembly.

Lamp Reset Switch

6. Firmly press the Ballast Assembly onto the four pins protruding from the Quad-Ion Cell. The Ballast Assembly should be orientated with the "air flow" label running parallel with the length of the duct to ensure the four pins are in line with the Four Pin Connector. Optional mounting configurations, such as opening the UV shields, may vary the orientation of the "air flow" label. It's only intended to serve as a general guideline.
7. Using a 1/4" hex head screw driver, secure the CAP system with four self tapping 3/4" screws being careful not to overtighten stripping the screw holes.

### Outer Housing Maintenance

Never use harsh cleaners, chemicals or abrasives on the plastic polycarbonate housing or anodized aluminum. Only a dry micro fiber towel or a towel lightly moistened with water should be used to remove any dust or other debris from the outside of the unit.



## CAP System Limited Warranty

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Air Fantastic gives you the following limited warranty for this product only if it was originally purchased directly from Air Fantastic or an Air Fantastic authorized dealer.

Air Fantastic will repair or replace, free of charge to the original purchaser, any part that is found to be defective in material or workmanship within two (2) years of the date of purchase.

This limited warranty does not apply to any part subjected to accident, abuse, alteration, misuse, lack of reasonable care, the affixing of any attachment not provided with the product, loss of parts, damage caused by acts of God, the use of voltages other than indicated on the label displayed on this product or service of this product by anyone other than Air Fantastic or an Air Fantastic authorized dealer.

Air Fantastic does not authorize any person or dealer to assume or grant any other warranty obligation with the sale of this product.

To obtain service, the customer must first register this unit by returning the enclosed Warranty Card. If you purchase this product from any source other than Air Fantastic or an Air Fantastic dealer, your purchase is "AS IS", which means Air Fantastic grants you no warranty, and that you, not Air Fantastic, assume the entire risk of the quality and performance of this product, including the entire cost of any necessary servicing or repairs of any defects.

Air Fantastic' liability for damages to you for any costs whatsoever arising out of this statement of limited warranty shall be limited to the amount paid for this product at the time of original purchase, and Air Fantastic shall not be liable for any direct, indirect, consequential or incidental damages arising out of the use or inability to use this product.

ALL EXPRESS AND IMPLIED WARRANTIES FOR THIS PRODUCT, INCLUDING IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, ARE LIMITED IN DURATION TO THE WARRANTY PERIOD, AND NO WARRANTIES, WHETHER EXPRESS OR IMPLIED, WILL APPLY AFTER THIS PERIOD.

Some states do not allow limitations on the duration of implied warranties, so the above limitation may not apply to you. This warranty gives you specific legal rights, and you may also have other rights which vary from state to state.

To obtain service and RMA number, contact an Air Fantastic representative at:  
1-877-424-7326

**NOTE: An RMA# is required for any warranty service work. All returned packages that do not have an RMA# will be refused.**

# Troubleshooting Guide

Problem/Question	Solution/Answer
What if my CAP won't turn on? The indicator lights are not illuminated.	Check to make sure the power adapter is firmly plugged into the electrical outlet and the CAP.
The Lamp Status indicator light has turned from green to red.	Reset the unit by unplugging it for the power source. Check to make sure the four pins on the Quad-Ion Cell are fully inserted into the Ballast Assembly. Re-connect the power. If the indicator light is still red contact Air Fantastic or an authorized dealer.
The Lamp Replacement indicator light is blinking.	This is an indication that it has been two years since the Quad-Ion Cell has been replaced. Contact an Air Fantastic authorized dealer to purchase a new Quad-Ion Cell.
<p>If the above does not repair the symptom please contact an Air Fantastic Customer Service Representative:</p> <p>Phone: 1-877-424-7326  E-mail: <a href="mailto:markm@airFantastic.com">markm@airFantastic.com</a>  Web: <a href="http://www.airfantastic.com">www.airfantastic.com</a></p> <p>Mail: Air Fantastic  Customer Service  4406 Eagles Landing Dr.  Austin, TX 78735</p>	

## CAP System Specifications

Operational	CAP3000 Coverage CAP5000 Coverage Ozone Warranty	Up to 3000 Sq. Ft. Up to 5000 Sq. Ft. < .05 ppm Two year limited warranty
Replacements	AFION9N, AFION14N	Replace every two years.
Electrical	CAP3000 Usage CAP5000 Usage	24 VDC, 0.50 Amps, 13 Watts 24 VDC, 0.68 Amps, 18 Watts
Mechanical	CAP3000 Dimensions Weight of Unit Shipping Weight  CAP5000 Dimensions Weight of Unit Shipping Weight	4" L x 4" W x 10.7" H 1 lbs 4 lbs  4" L x 4" W x 15.8" H 1.4 lbs 4 lbs