



# HVAC



Owner's Manual

# Welcome

Thank you for your purchase of the pureAir HVAC Air Purification Enhancement System. This unit is designed to be installed into an existing HVAC system, and used as a virtually maintenance-free enhancement to current air purification technology.

Please read and follow all service procedures outlined in this manual.

Please record the name and phone number of your distributor or contractor.

**Name** \_\_\_\_\_

**Phone #:** \_\_\_\_\_

Please record the serial number of your pureAir HVAC.

**Serial #:** \_\_\_\_\_

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# About pureAir HVAC

pureAir HVAC is a new generation Air Purification Enhancement System. Designed to work with existing purification technology to reduce odors, smoke, and a broad spectrum of indoor air contaminants.

pureAir HVAC is easily mounted into air conditioning and/or heating systems where contaminants can grow. When the HVAC system is in operation, pureAir HVAC produces the ARC® (Photocatalytic Oxidation) Process consisting of hydroperoxides and superoxide ions, which are friendly oxidizers that revert back to oxygen and hydrogen after the oxidation of a pollutant.

## Warnings & Cautions

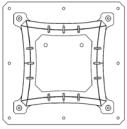


**WARNING:** UV Light in operation. Disconnect unit from power supply before servicing. Failure to follow warnings may result in severe eye damage.

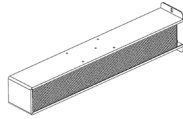


**CAUTION:** To reduce the risk of shock, this equipment may have a grounding type plug with a third (grounding) pin. This plug will only fit into a grounding type power outlet. If the plug does not fit into the outlet, contact a qualified electrician or HVAC specialist to install the proper outlet. DO NOT alter the plug in any way.

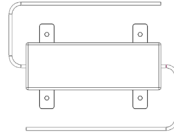
# Product Contents



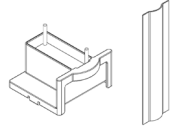
**Ballast Housing & Mounting Plate**



**Replaceable ARC® Cell**  
(Includes UV Lamp)



**Power Supply**  
(100-240 VAC  
to 24 VAC/VDC)

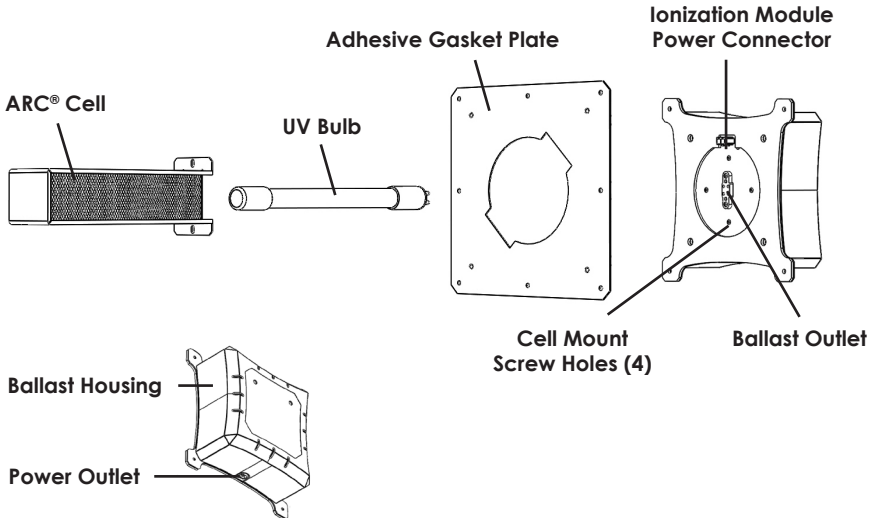


**Bipolar Ionization  
Module Kit (Optional)**

# Installation Hardware

- (8) #8 3/4" Hex Head Self-Tapping Screw
- (4) #8 - 32 Knurled Thumb Nuts
- (2) #8 - 32, 3/8" Screw
- (4) #6 - 32, 3" Threaded Bolt & Wall Anchor
- (2) 18 - 22 Gauge Wire Nut (only used with hard-wiring)

# Unit Diagram



# Installation Tools

- Utility Knife
- 1/8" Drill Bit
- Phillips Head Screwdriver
- Tin Snips
- Power Drill/Driver
- 4" Hole Saw
- 5/16" Wrench/Socket

# Installation Requirements

The unit should be installed after the air handler in the HVAC system in the supply plenum.\*

**\*Additional pureAir HVAC units are recommended in the Return Plenum for added protection and to help keep the internal HVAC parts clean.**

An opening of 4" across will need to be cut into the existing duct work to install the unit properly.

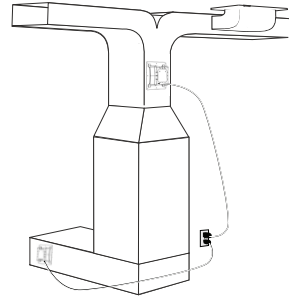
## Electrical Requirements

The unit is powered by connection to 24VAC from HVAC System or 24VDC from 100-240VAC transformer (included).



**WARNING:** Long term use of an extension cord is not recommended due to safety considerations.

**pureAir HVAC Supply Plenum**



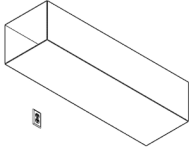
**pureAir HVAC Return Plenum**  
(Recommended Option)

# Technical Information

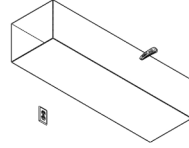
Model	5" Cell	9" Cell	14" Cell
<b>Coverage</b> (Square Footage)	Less than 1,000 ft <sup>2</sup>	750 - 2,500 ft <sup>2</sup>	2,250 - 5,000 ft <sup>2</sup>
<b>Coverage</b> (Cubic Footage)	6,000 ft <sup>3</sup>	16,000 ft <sup>3</sup>	40,000 ft <sup>3</sup>
<b>HVAC System</b>	2 - 2.5 Tons	3 - 3.5 Tons	5+ Tons
<b>Electrical (VA)</b>	13 W	17 W	27 W
<b>Dimensions</b> (HxWxD)	9.75" x 9.75" x 8.75"	9.75" x 9.75" x 12.0"	9.75" x 9.75" x 17.75"
<b>Weight</b>	2.3 lb	2.5 lb	2.7 lb

# Installation

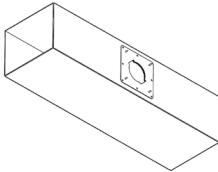
1. Locate a suitable area of duct for the installation.



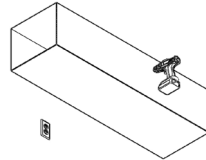
2. Cut away any insulation to expose the duct.



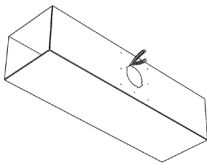
3. Use the Mounting Plate to trace the main hole and the eight (8) Screw Hole Locations.



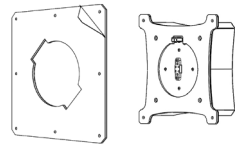
4. Use a 1/8" Drill Bit to drill the 8 screw hole locations just marked. (If you are using Tin Snips, add 4 additional holes around the large marked circle.)



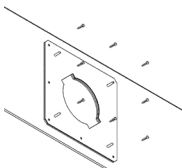
5. Use a 4" Hole Saw or the Tin Snips to cut around the traced hole.



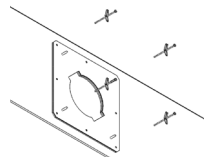
6. Unscrew the Knurled Thumb Nuts and remove the Mounting Plate from the unit ballast. Peel the backing from the adhesive side and press the plate onto the duct over the cut opening.



7. (A) Install the Mounting Plate to the Duct using the Eight (8) Self-Tapping Screws.

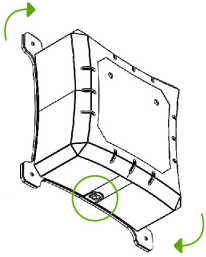


- (B) For Fiberglass Ductwork, attach using the 2" Bolts with Toggle Bolt Anchors.

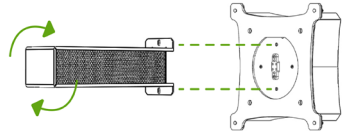


# Installation (Continued)

8. Orient the Ballast to allow the Power Outlet to face the the ideal direction.

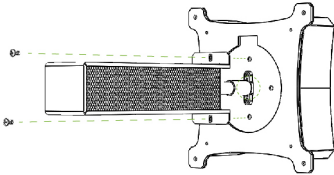


9. Align the ARC Cell's screw holes with the holes on the Ballast in a way which will allows air to pass through the Cell once mounted into the duct.



10. Mount the Cell onto the Ballast, ensuring that the UV Bulb's prongs fully insert before fastening the screws.

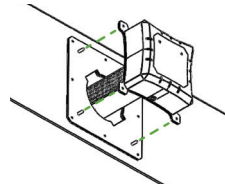
**Note: The UV bulb can only be inserted one way, but it can rotate inside the cell to accommodate your required cell orientation.**



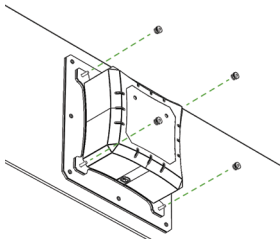
## IONIZATION MODULE INSTALLATION

If you have the ionization module, follow the instructions on Page 8 before Step 11.

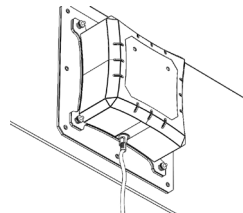
11. Place the unit through the hole in the mounted faceplate so that airflow always passes through the honeycomb.



12. Thread the four (4) Knurled Thumb Nuts onto the Threaded Bolts, making sure a seal is created along the backside of the Ballast Housing.



13. Plug the Power Cable into your unit and then into the outlet. Ensure that both the Unit Power LED and Cell Power LED are active.



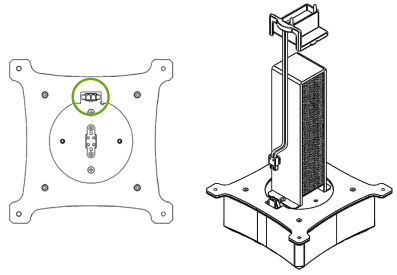
# Bipolar Ionization Module

## (Installation & Replacement)

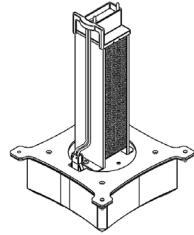
The Bipolar Ionization Module easily attaches to the ARC Cell® and creates positive and negative ions, which aid in the cleaning of your space.

NOTE: We recommend replacing the Bipolar Ionization Module annually, along with the ARC® Cell.

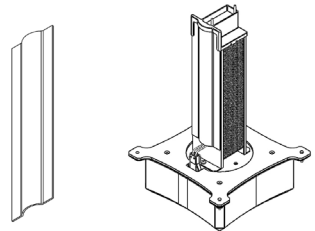
1. Align the ionization module's clips with the honeycomb sides of the cell, ensuring the power lead is close to the connector side of the ballast. Push the clips over the edge of the cell to lock it into place.



2. Plug the power lead from the ionization module into the connector on the ballast.



3. Slide the power lead cover into the track on the side of the module, making sure the power lead extends out the bottom, and secure it to the side of the cell using the attached two-sided tape.



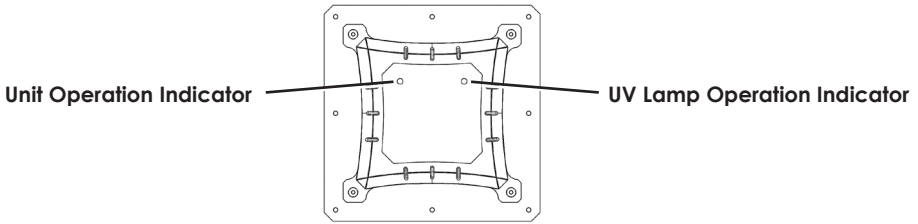
To remove the module, reverse the steps, then lift one edge of the module out and up to separate it from the cell.



# Maintenance/UV Lamp Indicator

Your pureAir HVAC unit requires no periodic maintenance beyond the normal replacement of the ARC<sup>®</sup> Cell. It is recommended, for optimum performance, that the ARC Cell be replaced annually.

The UV Lamp Operation Indicators on the face of the unit will glow when the unit is in use. If the unit has power (Unit Operation Indicator) but the UV Lamp Operation Indicator does not glow, the ARC Cell needs replacing.



## Cell Disposal

Please do not throw used ARC Cells in the garbage. The special germicidal UVC bulbs used in the unit contains a very small amount of mercury. Manage in accordance with disposal laws.

(Visit [www.lamprecycle.org](http://www.lamprecycle.org) for proper instructions.)

Dispose of the spent ARC Cells and UV Lamps at your local recycling center or by local regulations. You may also send your spent ARC Cells and UV Lamps, in the same container you received your replacement, to:

GreenTech Environmental Reclamation  
6118 Kingsport Hwy 36  
Johnson City, TN 37615

## Replacement Parts

Your HVAC unit requires no periodic maintenance beyond the normal replacement of the ARC Cell and Ionization Module on an annual basis. The cell and ionization module are working when the indicator lights are on. For optimal performance, annual maintenance is encouraged.

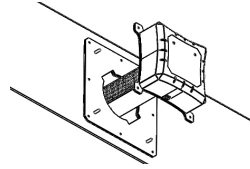
**If you need a cell replacement, contact your distributor or contractor and reference the cell type shown on your old cell.**

# Changing the Cell

1. Unplug the unit's power cord from the outlet.

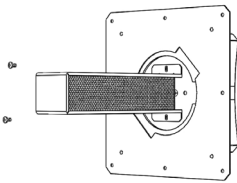


2. Remove the Thumb Nuts and unit from the duct.

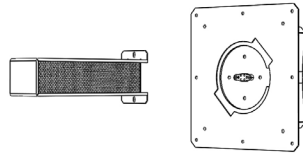


**NOTE: If you have the Ionization Module, follow the instructions on Page 8 to remove/replace that at this point.**

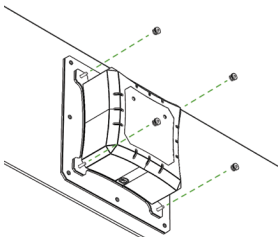
3. Remove the two (2) screws holding the cell on the rear of the Ballast Housing.



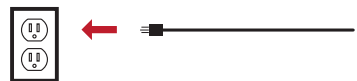
4. Replace the Cell and UV Lamp and fasten the new parts with the two (2) screws into place.



5. Replace the Unit and the Thumb Nuts.



6. Plug the Power Cable back into the outlet. Ensure that both the Unit Power LED and Cell Power LED are active.



# Warranty Information

Your pureAir HVAC unit consists of two(2) separate products. The housing and power supply, which protrude from the HVAC duct when installed, and the ARC® Cell which extends into the ductwork.

Your pureAir HVAC (Product) is warranted to be free from all defects in material and workmanship in normal household use for a period of **five (5) years** from date of purchase.\*

Your ARC® Cell, including the bulb, is warranted to be free from all defects in material and workmanship in normal household use for a period of **two (2) years** from date of purchase.

The warranty is granted only to the original purchaser. The warranty is subject to the following provisions:

Any damages or malfunctions caused by negligence, abuse, or use not in accordance with the Product Owner's Manual are not covered by this warranty. Likewise, any defects or damages caused by unauthorized service or the use of other than Genuine GreenTech Environmental Parts are not covered.

GreenTech Environmental will, at its option, repair or replace a defective Product or part(s) for the Product that is/are covered by this warranty. As a matter of warranty policy, GreenTech Environmental will not refund the customer's purchase price.

## OBTAINING WARRANTY SERVICE

To obtain warranty service you must return the defective product along with proof of purchase to the GreenTech Environmental Authorized Service Center. All shipping costs submitted under this Warranty shall be borne by purchaser. Unless this Warranty is expressly renewed or extended by GreenTech Environmental, any repaired or replaced part of unit shall be warranted to the original purchaser only for the length of the unexpired portion of the original warranty. For the location of the nearest GreenTech Environmental Authorized Service Center or for other service information, please visit us online at:

[www.GreenTechEnv.com](http://www.GreenTechEnv.com)

Before any product is sent for service, the customer should contact the GreenTech Environmental Service Center to obtain a Return Merchandise Authorization (RMA) Number. This RMA Number should be clearly written on the box before shipping. All components/parts including the remote (if applicable), manuals, and original packaging should be included in the return if available.

## FURTHER LIMITATIONS AND EXCLUSIONS ARE AS FOLLOWS

Any warranty that may be implied in connection with your purchase or use of the Product, including any warranty of merchantability or any warranty for Fitness For A Particular Purpose is limited to the duration of this warranty. Some states do not allow limitations on how long an implied warranty lasts, so the above limitations may not apply to you.

Your relief for the breach of this warranty is limited to the relief expressly provided above. In no event shall GreenTech Environmental be liable for any consequential or incidental damages loss of profit, or medical expenses caused by any misuse, abuse, accident, negligence, or failure to follow instructions. The company will not be responsible for any written or oral statements made that are inconsistent with this written warranty, or which are misleading or inconsistent with the facts as published by the company in the literature or specifications. Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion 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.

## REGISTRATION

Please register your Product within 10 days of purchase by contacting GreenTech Environmental at:

[www.GreenTechEnv.com/Warranty](http://www.GreenTechEnv.com/Warranty)

Registering your new pureAir product entitles you to the most up-to-date GreenTech Environmental warranty and promotion information.

OM REVISION: GTE-pureAir\_HVAC-OwnersManual-201216

