



HVAC

SynAIRgPure™ 2.0

With MCI™ (Multi-Cluster Ionization) Technology



Welcome

Thank you for your purchase of the SynAIRgPure™ 2.0 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. Record your warranty at www.BLSWarranty.com

Name _____

Phone #: _____

Please record the serial number of your pureAir HVAC.

Serial #: _____

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SynAIRgPure™ 2.0 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.

SynAIRgPure™ 2.0 HVAC is easily mounted into air conditioning and/or heating systems where contaminants can grow. When the HVAC system is in operation, SynAIRgPure™ 2.0 HVAC with MCI™ (Multi-Cluster Ionization) Technology is a proprietary and unique Photocatalytic Oxidation (PCO) technology which creates from natural humidity (H₂O) in the air friendly oxidizers including vaporous hydrogen peroxide (H₂O₂), hydroperoxides (HO₂), superoxide ions (O₂⁻) and Hydroxyl Radicals (HO⁻). These oxidizers revert back to oxygen & and water vapor after oxidation of pollutants.

MCI™ Ionization

The optional MCI multi-cluster ionization module further increases SynAIRgPure™ 2.0 HVAC's air purification capabilities by adding the benefit of clustered ionization. This process creates additional oxidizers while also charging particulates in the air, causing them to clump together until they fall out of your breathing space. For more, see www.multiclusterionization.com

Warnings & Cautions



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



WARNING: NO potential shock from the MCI Attachment. Disconnect from power source before any maintenance.



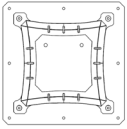
CAUTION: To reduce the risk of shock, this equipment may have a grounding type plug with a third (grounding) pin. This plug will only fit into a grounding type Power Inlet. If the plug does not fit into the outlet, contact a qualified electrician or HVAC specialist to install the proper outlet. DO NOT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



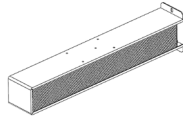
CAUTION: Device may be mounted in the duct system where the ambient temperature is no greater than 140 degrees F.



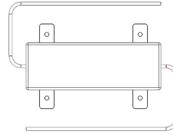
Product Contents



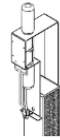
Ballast Housing & Mounting Plate



Replaceable ARC[®] Cell
(Includes UV Lamp)



Power Supply
(100-240 VAC to 24 VDC) and pigtail included

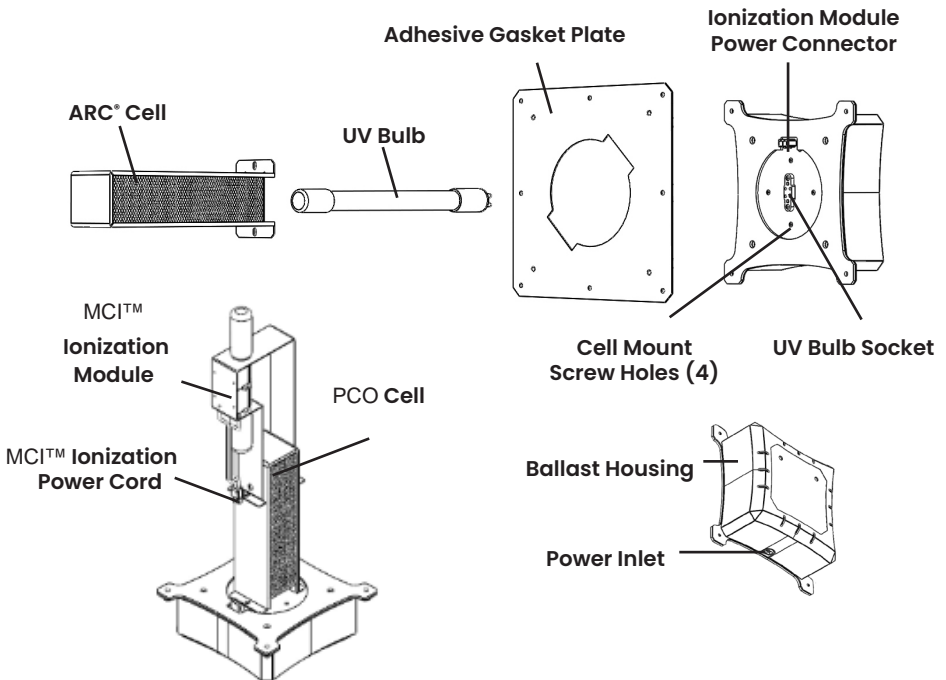


MCI[™] Ionization Module Kit (Optional)

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





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

A rectangular opening will need to be cut into the existing duct work to install the unit properly.



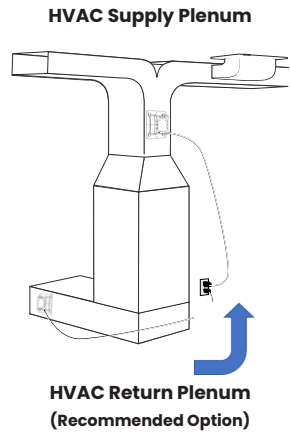
CAUTION: Long term use of an extension cord is not recommended due to safety considerations.

Electrical Requirements

The unit is powered by pigtail connection to 24VAC (not thermostat circuit) from HVAC System or 24VDC from 100-240VAC transformer (included).



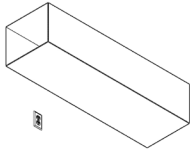
WARNING: Device may be mounted in the duct system where the ambient temperature is no greater than 140 degrees F.



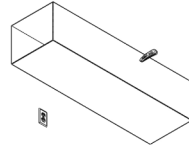


Installation

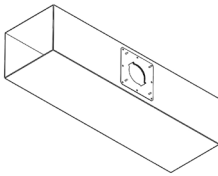
1. Locate a suitable area of duct for the installation.



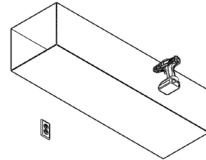
2. Cut away any insulation to expose the duct.



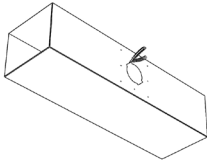
3. Unscrew the Knurled Thumb Nuts and remove the Mounting Plate from the unit ballast. Use the Mounting Plate to trace the main hole and the eight (8) Screw Hole Locations.



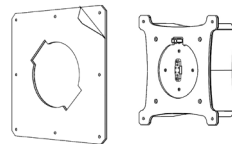
4. Use a 1/8" Drill Bit to drill the 8 screw hole locations just marked. (If you are using Tin Snips, add 4 additional holes around the large marked circle.)



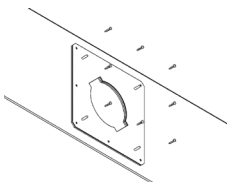
5. Use a Metal Saw or the Tin Snips to cut around the traced hole. Be sure to notch the hole as indicated.



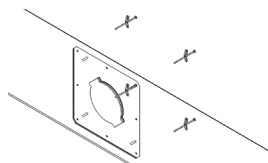
6. Peel the backing from the adhesive side and press the plate onto the duct over the cut opening.



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

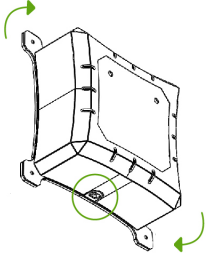


- (B) For Fiberglass Ductwork, attach using the 2" Bolts with Toggle Bolt Anchors.



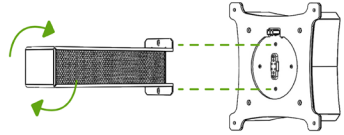


8. Orient the Ballast to allow the Power Inlet to face the ideal direction for cable management.



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

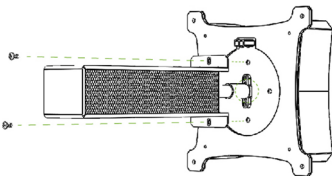
Note: For SynAIRgPure™ 2.0 units, if possible, orient the Power Cord on the side with the Ionization Module Power Connector.



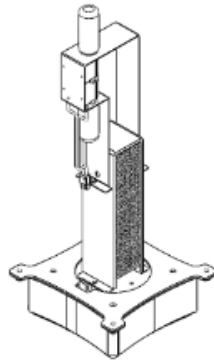
10. Mount the Cell onto the Ballast, ensuring that the UV Bulb's prongs fully insert before fastening the screws.

Note: The UV bulb can only be inserted one way, but it can rotate inside the cell (by holding the white ceramic end of the bulb) to accommodate your required cell orientation.

Caution: Never touch the glass portion of the bulb during installation.



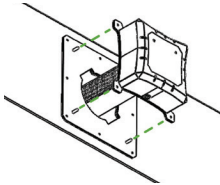
11. If you have SynAIRgPure™ 2.0 insert the MCI™ Ionization Power Cord into the Ionization Module Power Connector.



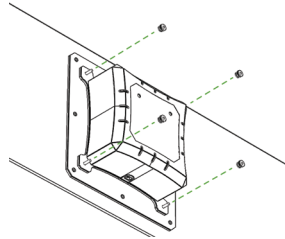


Installation Continued

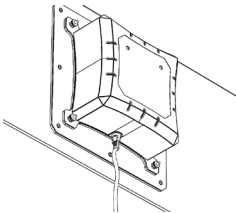
- Place the unit through the hole in the mounted faceplate so that airflow always passes through the honeycomb.



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



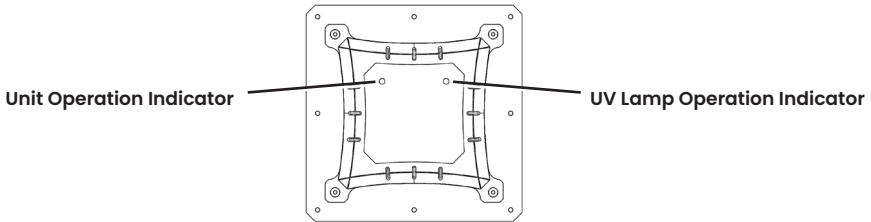
- Plug the Power Cable into your unit and then into the outlet. Alternative: You may choose to use the pigtail (included with the device) and connect directly to the transformer in the furnace or air handler. We strongly suggest this be done by a licensed HVAC mechanical contractor. Ensure that both the Unit Power LED and Cell Power LED are active.





Your SynAIRgPure™ 2.0 HVAC unit requires no periodic maintenance beyond the normal replacement of the PCO Cell and MCI™ Ionization Module. It is recommended for optimum performance, that the PCO Cell be replaced every year, the MCI™ cell every three years or when either light goes out.

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 PCO Cell needs replacing.



Cell Disposal

Please do not throw used PCO 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.

Dispose of the spent PCO Cells and UV Lamps at your local recycling center or by local regulations. You may also send your spent PCO 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 PCO Cell and Ionization Module on an every 1-3two years basis. The cell and ionization module are working when the indicator lights are on. However, even though the UV Light Lamp Operation Indication remains lit, we recommend every two years replacements for optimal performance.

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

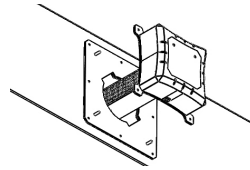


Changing the Cell

1. Unplug the unit's power cord from the outlet. Or turn off at breaker if connecting with pigtail direct to system.

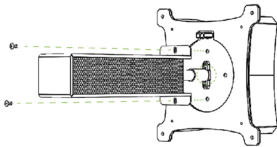


2. Remove the Thumb Nuts and unit from the duct.

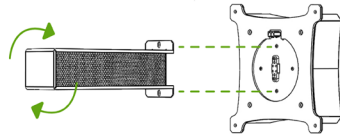


NOTE: If you have the SynAIRgPure™ 2.0 unit, unplug the DBI module from the ballast before you remove/replace the PCO Cell.

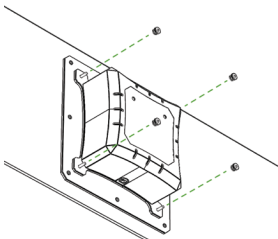
3. Remove the two (2) screws holding the cell on the rear of the Ballast Housing.



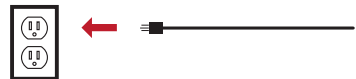
4. Replace the Cell and UV Lamp, ensuring airflow can pass through the cell, and fasten the new parts with the two (2) screws into place.



5. Replace the Unit and the Thumb Nuts.



6. Plug the Power Cable back into the outlet. If directly connected, turn on the power to make sure the unit is working properly. Ensure that both the Unit Power LED and Cell Power LED are active.



SEEKS, CAPTURES AND



**inactivates
indoor
pathogens.**

CHANGE IS IN THE AIR.

www.BLSWarranty.com

SynAIRgPure™ 2.0

Owner's Manual