

## Specifications:

<b>Approvals</b>	OEM, UL 867
<b>Input Voltage:</b>	24 VAC
<b>Power (VA):</b>	10 VA
<b>Frequency:</b>	50/60 HZ
<b>Air Flow Capacity:</b>	2800 CFM (up to 6 tons)
<b>Dimensions:</b>	4" Dia. x 2.5" H
<b>Weight:</b>	0.6 lb.
<b>Service Temp. Range:</b>	-40°F to 160°F
<b>Electrical Approvals:</b>	UL and cUL
<b>Plasma Output:</b>	160 million ions/cc per polarity (320 million total ions/cc)
<b>Indication:</b>	Green LED "Power On" LED "Off" = No Power or Fault
<b>Mounting:</b>	Duct, Internal AHU Wall or Fan Inlet
<b>Orientation:</b>	Mount unit so air flows across brushes like a football through a field goal post

## Indoor Air Quality

### **iWave®-V** Air Ionization System



#### Fan Inlet Mount

- Internal magnets holding unit to fan inlet (shaft side).
- Use self-tapping screws to secure device, especially for high velocity applications or excessive vibration when using magnets.



#### Inside Wall/Cabinet Mount

- Internal magnets holding unit to wall duct or air handler metal panel.



#### External Duct Mount

- Use two self-tapping screws to hold unit to duct.
- Drill two 3/8" holes spaced 1-3/4" apart on center or drill one 2-1/4" hole.

**IMPORTANT!** Install in return air between air filter and cooling coil. Fiber brushes must be 2 inches away from metal and other wiring.

## Packaging:

1 each **4900-40**

## Installation & Wiring:

1. Disconnect air handler power before installing.
2. Mount unit in one of three ways as shown on the previous page—duct, internal wall or fan inlet.
3. Connect only 24 VAC nominal power—a dedicated power supply may be necessary on some residential systems to prevent excessive power draw on the control board. Check with AHU manufacturer if 10VA capacity is available—WHEN IN DOUBT USE A DEDICATED CIRCUIT!
4. Unit may be powered 24/7 or may be interlocked with fan—unit only delivers plasma and purifies when air is flowing.
5. Red wire goes to 24 VAC, black wire goes to neutral or ground.
6. Green LED will illuminate when powered and there are no faults.
7. Do not touch carbon fiber brushes while powered!
8. **IMPORTANT!** Ensure air flows across both brushes at the same time like a football through a field goal post.

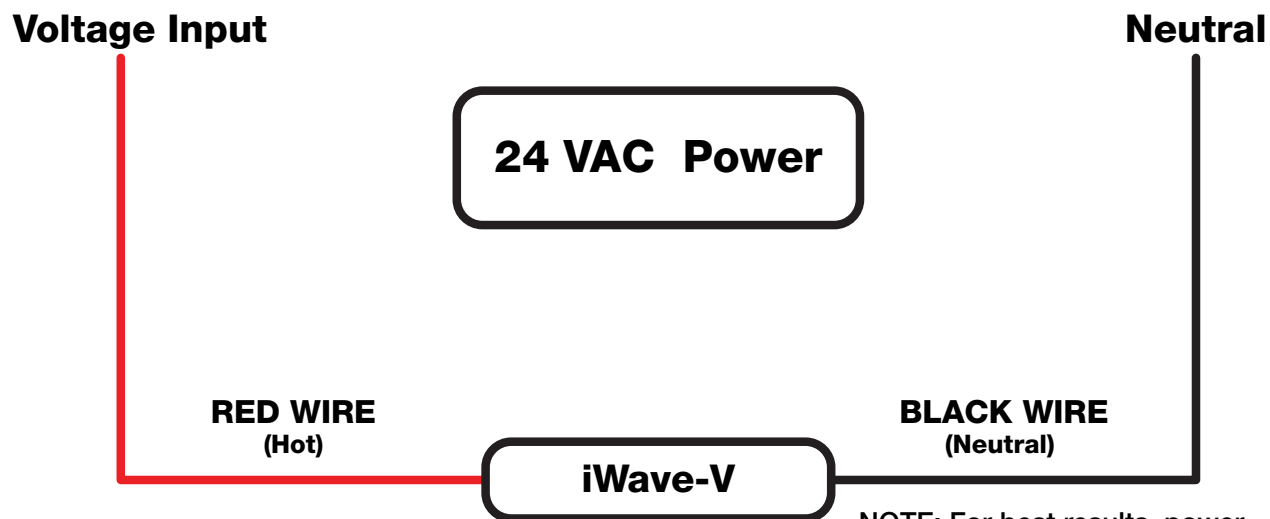
**Continued on back.**



Air Flow Direction



9. **CRITICAL!** Ensure all 24 VAC wiring stays away from carbon fiber brushes and is per NEC / local codes. Secure wires if necessary with wire/tape so they never move and touch brushes.
10. **CRITICAL!** Ensure the carbon fiber brushes are at least 2 inches away from anything metal and other wiring!
11. Mount the device after final particle filtration in the system. The best location to mount the device is after the particle filter and before the cooling coil; if this is not possible, after both the particle filter and cooling coil is acceptable on the supply. Mounting the device before the coil will ensure pathogens, mold and odors are controlled throughout the entire depth of the coil.
12. Leaving the fan in the “On” position will provide the best air purification results. If the fan cycles based on comfort cooling/heating setpoints, the air quality will not be the best possible.
13. Unit has a 250 VAC/1A in-line fuse—if 24 VAC is confirmed and LED is off, check fuse.



**NOTE:** For best results, power continually. From time-to-time, lint/dust must be brushed off the iWave-V emitters with a soft bristle brush. Turn off system first.

#### Maintenance:

1. Turn power off.
2. Wipe off the carbon fiber brushes as needed to keep the ion output at maximum levels. Use a cloth or nylon brush to gently clean the brushes when the power is off.
3. Brush cleaning intervals will depend on filtration effectiveness upstream of the device and may range from requiring cleaning every filter change to once per year. It is highly recommended to review the brush cleanliness while changing filters.
4. There are no parts to replace. Enjoy your new air cleaning system!

#### Limited Warranty:

The iWave-V offers a limited warranty for three years that covers any defects in material or workmanship under normal use. If you make a claim during the warranty period, you must provide proof of purchase and proof of proper installation by a licensed contractor for the warranty to be valid. The iWave warranty does not cover labor, return shipping charges, damage from improper installation or improper voltage usage. The iWave warranty begins on the date that the unit was purchased. Installation of your iWave by any person other than a licensed contractor will void the warranty. Contact your local Nu-Calgon account manager or [info@nucalgon.com](mailto:info@nucalgon.com) with further questions.

