SELF-CLEANING AIR IONIZATION SYSTEM FOR RESIDENTIAL/COMMERCIAL A/C SYSTEMS

- A patented self-cleaning design
- Needlepoint ionization actively treats air in homes and buildings
- iWave is validated to meet UL 867 ozone requirements
- Duct-mount install for systems up to 12 tons (4800 CFM) - multiple units can be installed on larger systems
- Includes waterproof housing for installation indoors or outdoors
- No maintenance for the life of the iWave
- Patented multi-voltage input –24VAC-240VAC
- Reduces certain bacteria and viruses*
- Reduces odors, smoke and other airborne particles
- Keeps coil cleaner longer
- Programmable cleaning cycle with digital display
- Integral alarm contact for remote monitoring
- UL and cUL certified
- Three-year limited warranty

Indoor Air Quality

iWave®-C
Commercial Air Ionization System

Packaging

1 each   **4900-10**

Specifications

Input Voltage:	24VAC to 240VAC
Power (VA):	12 VA
Frequency:	50/60 HZ
System Size:	Up to 12 tons (4800 CFM)*
Ion Output:	200 millions ions/cc per polarity (400 million total ions/cc)
Dimensions:	4" W x 7" H x 7" L
Weight:	3 lbs.
Electrical Approvals:	UL and cUL certified
Service Temp. Range:	-40°F to 160°F
Waterproof Rating	NEMA 4X

For systems beyond 12 tons, multiple iWave-Cs can be used. Install a minimum of two feet apart for maximum ion output.

Description

iWave-C is a self-cleaning, bi-polar ionization generator for actively treating a building's air quality that does not require replacement parts in a year or two like competing UV lights or other ionizer technologies. In addition, the iWave-C produces and maintains unparalleled ionization output and capabilities. As the air flows past the iWave-C, the device emits positive and negative ions that actively treat the supply air, reducing certain bacteria and viruses* in the coil and living space. The ionization process also reduces smoke, odors (cooking, pet, VOCs), as well as other particles (no more sunbeams) in the air. iWave is validated to meet UL 867 ozone requirements.

Application

Although suitable for residential applications, the original iWave-C is specially designed for light commercial systems up to 12 tons (4800 CFM) with no maintenance or replacement parts needed. iWave-C can be easily duct-mounted indoors or outdoors, depending on the application. iWave-C always works at peak performance, producing over 200 millions ions/cc per polarity (400 million total ions/cc), making it superior to other market approaches. Special features include a programmable self-cleaning cycle, waterproof housing, digital display (for on-site visual monitoring) and integral alarm contact (for remote monitoring). In the event the ion emitters become damaged, they can be replaced on the iWave-C model.

iWave-C Installation Instructions

1. Turn power off to the unit.

2. Install in the duct, preferably after the prefilter and cooling coil so as to treat the coil and living space. However, the iWave-C can be installed farther down on the supply air duct. The weatherproof housing allows to be mounted indoor or outdoor. For commercial systems beyond 12 tons, multiple iWave-C units can be used; but install a minimum of two feet apart for maximum performance.

iWave-C Installation Instructions (Continued)

3. When the install location is found, cut or drill a 4 inch (100 mm) round hole in duct. Insert the iWave-C into the hole and secure with four tapping screws that are provided. When mounting the iWave-C to duct board, the included spring load wing nuts and bolts will be required. If installing the iWave-C in an alternate fashion other than specified in the instructions, such as internally, be sure it is secured properly. This can be done with a custom fabricated bracket designed specifically for that unit.

4. Follow all electric, mechanical and building codes when installing and wiring. The iWave-C can be powered with 24VAC voltage circuit or 110-240VAC high voltage circuit. The face panel of the unit is labeled showing which terminals are 24VAC, 110-240VAC input and neutral and come prewired from the factory with six feet of liquid-tight flex conduit to reach a junction box for wiring – never connect with an extension cord.

5. Use only one voltage source at a time and never connect low and high voltage simultaneously! Whichever voltage is not used, use a wire nut to protect the unused wire. The wires are color coded as follows:

   • Black wire = 24-240VAC input

   • White wire = Neutral

   • Green wire = Ground

   • Purple wires = Alarm Dry Contact

   The iWave-C is provided with alarm contact for use with a building management system. When the unit is powered and there are no faults, the alarm contact will be closed, providing continuity. The contacts are rated up to 250VAC at 1A.

   CAUTION! Never touch brushes while operating; shock may occur.

6. Once powered, the iWave-C initiates an internal check of all systems. After initializing, the display will blink between "ON", "GPS" and the number of days the unit has been powered. If there is a fault, the unit display will show "FALT".

Cleaning Cycle - The iWave-C comes with a preset cleaning cycle designed to clean the brushes every 5 days. At any time, the cleaning cycle test button on the front panel may be pushed and the unit will initiate a cleaning cycle. While the cleaning cycle is engaged, the display will change to "CLEA". To change the cycle frequency, hold the cleaning cycle button in for 5 seconds once the display shows "CLEA" and then press it until you see the number of days you want it to wait between cycles: 1 , 5, 10 or 20 days. Most applications will not need reprogramming from the factory default 5 day cleaning cycle.

When installed in applications where the iWave-C will be exposed to heavy concentrations of smoke, it is advised to gently clean the emitters with alcohol wipes 2-3 times annually. For more maintenance and troubleshooting tips, consult the instruction bulletin insert for the iWave-C (4-410) which can be obtained at www.nucalgon.com.

Self Cleaning Wiper (shown in 'home' position)

Neutral
24-240VAC Input
Alarm
Alarm
Ground
Self Cleaning Button

Three-Year Limited Warranty - The iWave-C 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 with further questions.
*Visit iwaveair.com for performance data.