

## Specifications:

<b>Input Voltage:</b>	110VAC to 240VAC
<b>Power (VA):</b>	5 Watts
<b>Frequency:</b>	50/60 HZ
<b>Output Voltage</b>	5 KV
<b>Power Supply Dimensions:</b>	2.0" W x 1.0" H x 3.0" L
<b>Flexible Bar Dimensions:</b>	1.25" W x 0.05" H x 36" L
<b>Power Supply Weight:</b>	0.5 lb.
<b>Service Temp. Range:</b>	-40°F to 140°F
<b>Electrical Approvals:</b>	UL and cUL approved
<b>Plasma Output:</b>	Approx. 240M ions/cc per foot of flexible ribbon
<b>Indication:</b>	Green LED "Power On" LED "OFF" = No power or fault
<b>Mounting:</b>	Flexible applications - adhere to solid surface
<b>Orientation:</b>	Install in air stream of application

## Packaging:

1 each **4900-30**

## Installation Instructions:

The iWave-F is a highly versatile ion generating device that is designed to be typically installed at the base of the cooling coil for ductless and duct air conditioning systems; but the device can be installed in supply air as well. The iWave-F is an ideal, no replacement part device that can be integrated into wall or ceiling cassette indoor coils of mini-splits, PTAC units or commercial systems where there may not be enough room to install the iWave-C between the filter and coil. It can also be used to inhibit mold in ice machine applications. The 36 inch ion generating bar can be used for coils up to 48 inches wide. For coils beyond the 36 inch ionizer length, simply center the ionizer bar on the coil to make sure the ionization best covers the coil width. For coils shorter than 36 inches, see the section on iWave-F modification directions on the back page.

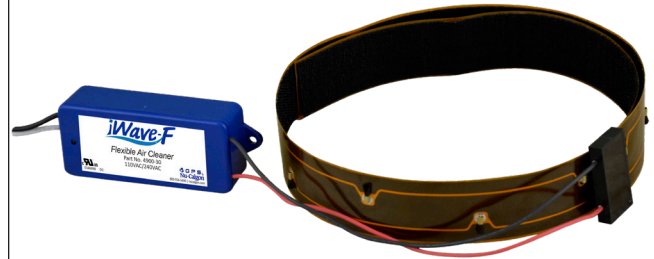
Attach the provided velcro strip across the width of the coil near its base so the iWave-F treats the coil as well as the breathing zone. Using the velcro backing on the iWave-F attach this to the existing velcro strip on the unit. For ice machines, install on top and/or side panel of equipment, above the water line so it creates a plasmafield inside the machine. Connect the appropriate leads of the iWave-F to 110VAC to 240VAC power and reassemble the equipment and turn on power to the unit.

## Mini-Split Instructions:

1. Turn power off to mini-split.
2. Open front cover of indoor unit.

## Indoor Air Quality

### **iWave®-F** *Flexible Air Cleaner*



3. Remove filter screens.
4. Measure the length of coil and affix ionizer bar to solid surface (often plastic) on top of the coil. If there is no plastic surface, the iWave-F can be affixed directly to the top of the fins. (See Figure 6.) The width of the plastic region will easily accommodate the iWave-F ionizer bar so it can treat the coil, barrel blower and breathing zone of the room. For coils between 36-48 inches, center the ionizer bar on top of the coil and affix. For coils less than 36 inches, refer to the iWave-F modification directions below.  
**Critical:** Keep top of iWave-F strip a minimum of two inches away from metal surfaces to prevent emitter grounding, leading to performance reduction.
5. Depending on mini-split model, the area available to mount power pack will vary. Either affix with velcro backing to back cabinet wall or side of coil.
6. Run wires to the electrical compartment to hook up to 110VAC to 240VAC power source to where iWave-F will power on with the indoor fan. For 110/120VAC and 208/240VAC input, connect black wire (hot) and white wire (Neutral or Other AC Phase) to applicable electrical terminal block. .
7. Trim wires to length hook up to appropriate terminal connections and connect. Harness/secure wires within the equipment as necessary. The LED on iWave-F power pack will turn green when power is supplied.
8. Reassemble filter screens, close the front cover and turn on power to mini-split.

**iWave-F Modification Instructions on Back.**



## iWave-F Modification Instructions:

For typical minisplit (or ice machine) applications, no adjustment in iWave-F length is necessary. For an irregular application where the iWave-F is too long for the coil which it's being applied, perform the following steps:

1. Measure how much past the end of the coil the iWave-F lies.
2. Bend the iWave-F back on top of itself (DO NOT bend under with velcro backing facing each other) so the brush pairs on the top will lay next to the brush pairs on the bottom, shown in Figure 1.
3. Using the provided velcro strip attach the iWave-F to the coiling coil starting at the power entry side of the iWave-F. DO NOT press down on the end of the iWave-F that will need folded to shorten the length, see Figure 2.
4. Fold the iWave-F back to achieve the length required, lining up the bottom and top layer brush pairs as shown in Figure 1, and place a piece of electrical tape across the joint. See Figure 2.
5. Continue to use electrical tape down the iWave-F towards the end, making sure that the tape joints are between the brush pairs. DO NOT allow the tape to cover the brush pairs. See Figure 3.
6. DO NOT crease the end of the iWave-F flat. As a guide, use a #2 Phillips screwdriver inside the fold joint to ensure the proper bend is achieved. See Figure 4.
7. Once the iWave-F has been folded and taped to the length required, push it down on the coil.
8. A successful fold procedure will create "pockets" for the carbon fiber brushes to emit the ions.



Figure 1



Figure 2



Figure 3



Figure 4

## Typical Location Install on Ductless Wall System:

Figure 5

Affix iWave-F power pack to back of cabinet.



Affix iWave-F to the top of coil on plastic strip (or top of fins) to treat coil, blower and living space.

**Cleaning:** If required, use a wet wipe or damp cloth to clean the ionizer bar. A soft bristle brush, like toothbrush, can also be used to clean debris from ion emitters. Do not expose the iWave-F to corrosive cleaners. Contact Nu-Calgon for further guidance with coil cleaner options.

## Limited Warranty:

The iWave-F is warranted for three years and covers any defects in material or workmanship under normal use. If during the warranty period a claim is made, the product will be replaced. GPS' warranty does not cover labor, return shipping charges, damage from connecting the unit to the wrong voltage, or improper iWave-F installation in system. See GPS' standard warranty, terms and conditions available at [www.nucalgon.com](http://www.nucalgon.com) for further information. Contact your local Nu-Calgon account manager with further questions.

