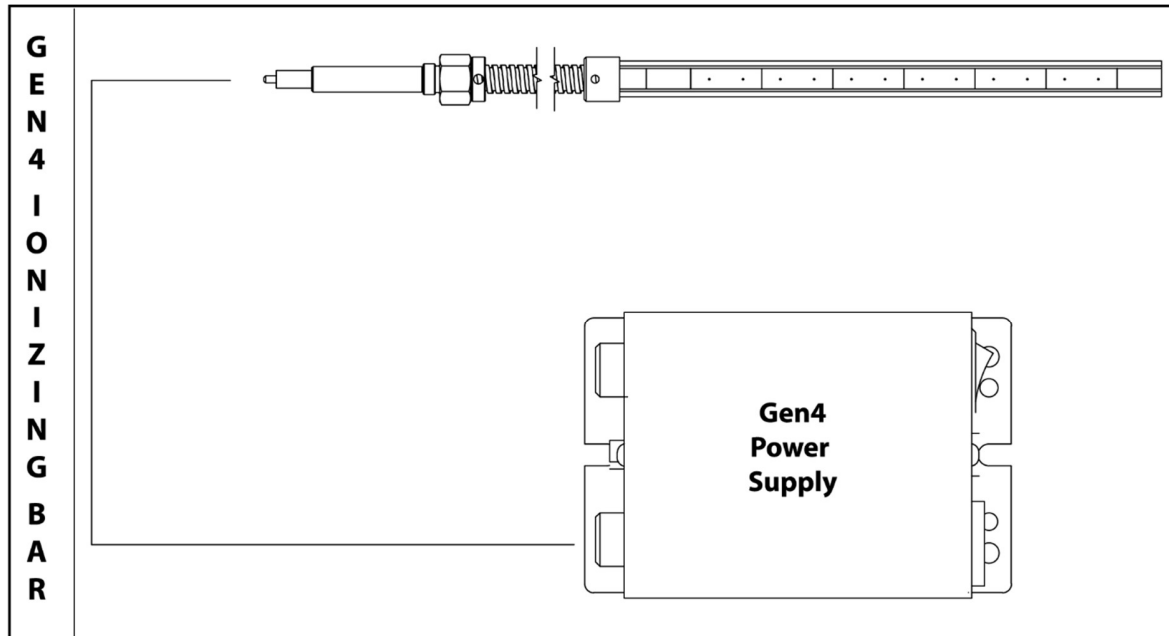


## GEN4 IONIZING BAR INSTALLATION & MAINTENANCE



### USING THE GEN4 IONIZING BAR

The Gen4 Ionizing Bar should be used at a location after the material has received its static charge. This shockless ionizer delivers a high concentration of positive and negative ions for fast static decay within 4" (102mm) of any surface.

Screw the bayonet connector of the high voltage power cable into the power supply. Make sure the hex swivel fitting is fully seated against the power supply terminal. Upon installation, the ionizer cable should be isolated from grounded metal surfaces by using non-conductive stand-offs/wire ties by at least 1" of air gap. Alternatively, the ionizer cable can be shielded in plastic conduit with dielectric strength equivalent to at least 1" of air (approximately 75kV/inch).

The Gen4 Ionizing Bar is supplied with a flange that has holes for mounting. For best performance, mount within 4" (102mm) of the charged surface.

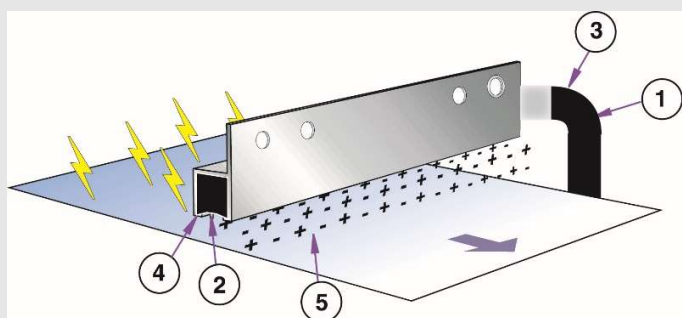
### ELECTRICAL SUPPLY

The Model 7960 Gen4 Power Supply (two outlet) and Model 7961 Gen4 Power Supply (four outlet) require a 115V, 50/60Hz source, or a 230V, 50/60Hz source. For proper operation, the Gen4 Ionizing Bar and Gen4 Power Supply must be properly grounded. If the unit is not grounded, the Gen4 Ionizing Bar will produce a shock and will not function properly. The hex swivel fitting on the Gen4 Ionizing Bar must be fully seated against the power supply terminal for proper grounding.

**Electrical Hazard:** Shockless (less than 40 microamperes short circuited). **Do not use near flammable materials or gases.**

**The Gen4 Ionizing Bar & Gen4 Power Supply Should Not Be Used In An Explosive Or Flammable Area.**

## HOW THE GEN4 IONIZING BAR WORKS



The electromagnetically shielded power cable (1) carries the 5kVrms power supply output to each inductively coupled stainless steel emitter point (2) of the Gen4 Ionizing Bar. An integrated wire (3) within the power cable creates a discharge path from the emitter points to the bar channel (4). The discharge at each emitter charges the molecules of the gases of the surrounding room air, resulting in a shower of ions that are positively and negatively charged (5). If the material surface has a negative charge, it will attract the positive ions from the Gen4 Ionizing Bar and become balanced or neutralized. If the material surface has a positive charge, it will attract the negative ions from the Gen4 Ionizing Bar to become balanced or neutralized. **The voltage potential at each emitter is high enough to ionize the surrounding air without generating a shock when any of the emitters are touched.**

## GEN4 IONIZING BAR PERFORMANCE

	Distance from Charged Surface		
	0.5" (13mm)	1.0" (25mm)	2.0" (51mm)
Dissipates 5kV* (seconds)	0.1	0.14	0.29

\*Model 8006 6" (152mm) Ionizing Bar tested

**EXAIR Gen4 Ionizing Bar and Gen4 Power Supplies are UL Component Recognized to U.S. and Canadian safety standards and meet the requirements of applicable European Directives.**



## CLEANING

The best method to determine how well the Gen4 Ionizing Bar is working is with the Model 7905 Static Meter. The static meter is easy to use and will accurately display the charge on a surface without touching it. To do this, simply measure the charge on the surface before ionizing (power supply off). Then, ionize the surface (power supply on). Measure the surface again. A "zero" volt reading indicates that the Gen4 Ionizing Bar is working properly. If a charge is still present, this may indicate the need for cleaning.

Keeping the ionizing bar free of moisture and dirt is very important to its effectiveness and life-span. A simple cleaning operation added to your planned maintenance schedule can eliminate potential performance problems. The frequency of cleaning required will depend upon the environment in which the ionizer is installed. Dirty industrial applications may require daily cleaning while clean-room applications may require only monthly cleaning. It is important to evaluate the cleaning needs of each individual ionizer installation.

A soft bristle brush (a toothbrush works well) should be used to clean the emitter points and channel to remove any particulate. Do not use anything that will bend or dull the emitter points. **Do not use any soaps or liquid cleaners.** They can destroy the effectiveness of the ionizing bar.

### **Never Clean An Ionizer With The Power On!**

Periodic cleaning will keep the ionizer operating at peak performance for the life of the unit.

## **MATERIALS OF CONSTRUCTION:**

Gen4 Ionizing Bar Channel: Aluminum

Plastic Parts: UL rated 94 HB

Emitter: Stainless Steel

**There are no user serviceable parts.**

If you have any questions or problems, please contact:

EPUTEC Drucklufttechnik GmbH  
 Haidenbucherstr. 1  
 86916 Kaufering  
 Phone: +49 8191 91 51 19 0  
 Fax: +49 8191 91 51 19 91  
 Email: [info@eputec.de](mailto:info@eputec.de) Website: [www.eputec.de](http://www.eputec.de)

