



OPERATING INSTRUCTION MANUAL

BFN-HFN9 (AC TYPE IONIZER)

PRODUCT INTRODUCTION

Air ionizers are widely used by manufacturing industries today. The air ionizers' concept is to add very nearly equal numbers of positive and negative ions to the air enable to increase the electrical conductivity of the air. It neutralized the static charge on insulated and isolated objects by producing a balanced source of positively and negatively charged ions.

BFN-HFN9 Ionizing Air Nozzle has outstanding Ion-eliminating performance; it is your ideal device to prevent static pollution and damage in the ESD area for electronic production lines and maintenance platforms.



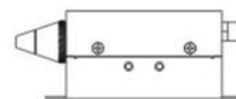
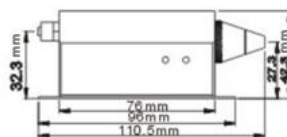
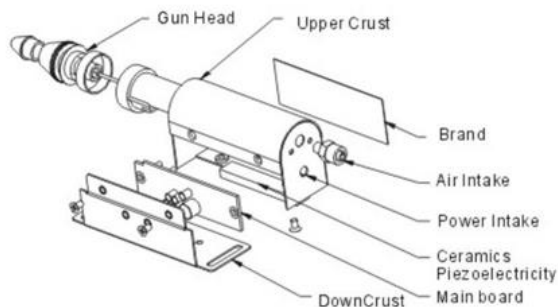
Notes:

Please read the user guide carefully before operation. All BFN static eliminate series cannot be used under flammable and explosive environment. Don't use temporary common socket as power, all BFN ionizing blower series must be used with the power socket which has a standard power cable, and do not use the socket that has no grounding.

SPECIFICATION

Power Supply	DC24V/500mA (AC110/60Hz, AC220/50Hz)	Working Condition	Temperature: 0°C – 50°C Humidity: 20% – 85%
Air Pressure	≤ 0.6 MPa	Working Distance	100mm ~ 800mm
Dimension (mm)	W30 x H43 x D110 ±3	Decay Time	≤ 1.0 sec @ 300mm
Material	Cold Rolled Steel Plates	Ion Balance	≤ ± 15V
Weight	146g	Ozone Concentration	0.002 PPM

STRUCTURE



PACKING LIST

- BFN-HFN9 Ionizing Air Nozzle
- BFN-HFN9 Power Supply
- Snake Shape Stand
- Warranty Card
- User Manual
- Calibration Certificate

SAFETY

- Do not operate the ionizer in flammable and explosive environment
- Keep away from humid, corrosive, flammable, dusty environment, and do not allow any water or moist to enter into the product's body
- The incoming compressed air must be clean and dry
- Make sure power is cut-off before conducting cleaning and maintenance. Make sure the ionizer is completely dry (include the metal crust) before using after cleaned by alcohol or other preparations.
- Do not disassemble or repair the ionizer by yourself.

FEATURES

- Modern industrial design, ergonomically, easy installation, high efficiency
- In-build piezoelectric transformer, no exposed high voltage wire, ensure the safety usage
- Eliminate static voltage quickly, have failure indicator
- Special tungsten alloy ion pin, long lasting and abrasion resisting, easy to clean
- Optional snake shape stand
- Optional high effective air filter for cleanroom usage

INSTALLATION AND APPLICATION

Fix the air nozzle properly using a M3 bolt on proper plane; make sure of the effective distance is between 100mm to 800mm. The air should blow to the controlled area. The dry compressed air pressure must be less than or equal to 0.6MPa, exceeding the required air pressure may reduce the efficiency of the air nozzle or damage it.

Decay time is related to the strength of air flow provided by the ionizer, the farther the ionizer the longer the decay time. We strongly advise user to keep the BFN-HFN9 at a distance between 100mm to 800mm for better ionization effect.



Caution: If the red LED lights up (Alarm), stop the usage of the air nozzle. Keep away from humid, corrosive, flammable, dusty environment, and do not allow any water or moist to enter into the product's body.

OPERATION GUIDE

TURN ON THE AIR NOZZLE

Make sure the power supply of BFN-HFN9 is power on, insert the power plug to the air nozzle power jack. Connect the compressed air tubing, the green LED (Power Indicator) of the air nozzle lights up, ionized air comes out, and now the air nozzle can be use.



Caution: Before use, make sure that the dry compressed air pressure must be less than or equal to 0.6MPa, exceeding the required air pressure may reduce the efficiency of the air nozzle or damage it. When red LED lights up, stop using the air nozzle. Immediately inform the maintenance personnel.

INSTALLATION TO THE SNAKE STAND

BFN-HFN9 air nozzle has the snake shape stand that can be installed in different work area. Adjust the snake shape stand in which the nozzle is pointed at the protecting or controlled area.

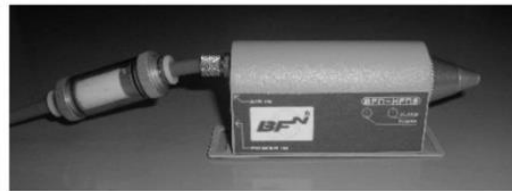
Fix the air nozzle to the snake port on top of the snake shape stand with M3 bolts, connect the snake port power plug to the air nozzle power socket, and connect the air tubing to the air connector, now the air nozzle is fixed. Put the stand on the operation area, connect the compressed air pipe to the air connector at the bottom, and plug in the power supply to the power socket of the stand. Switch on, the green LED on air nozzle lights up, ionizing air comes out, and the air nozzle is ready to use.

AIR FILTER INSTALLATION

BFN-HFN9 air nozzle can optional install air filter to double ensure the cleanliness of the ionized air and meet the cleanroom requirement.

The 2 ends of an air filter have a quick installation tubing connector. Connect one end to the compressed air tubing and another end to BFN-HFN9 air juncture.

! Attention: Air filter connection has a single way air directional requirement. The tubing connection requirement for air-in and air-out must be strictly followed.



REGULAR MAINTENANCE

Cleaning and checking periodically (using CPM) to make sure BFN-HFN9 is working properly.

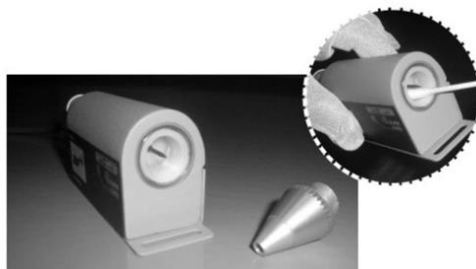
■ Ion Needle Cleaning

BFN blower series do not release dusts themselves; they can completely measure up the different requirements of cleanroom environment. But it is necessary to clean blowers to ensure it can work normally due to the particles and dust floating around which may pollute the blowers.

The unique design makes the cleaning easy and convenient for inner parts.

1. Disconnect the power supply and the air tubing connection.
2. Clockwise turn the nozzle out, this will reveal the ion pin.
3. Clean it with soft wiper or cotton swabs with 35% industrial alcohol. You can clean according to the periodic checking data or at practical situation.
4. Wait until the area cleaned is fully dry before connecting the power supply and air tubing connection.

! Attention: Make sure that the power is cut off before cleaning and maintenance procedure be executed. Make sure that the air nozzle is completely dry before using to avoid damage to the product and to the user as well. Be careful when dismantling the air nozzle head, ion pin is pointed and sharp.



CALIBRATION

BFN-HFN9 has stable performance, but the parameters may change according to the affection of operating temperature and humidity, and fluctuation of voltage.

Users can test ion balance or offset voltage and static decay time by portable ionizer testing device such as Charged Plate System (CPS) at the working area. Periodic checking is requested.

User is requested to calibrate the CPS equipment that used to verify the performance of the ionizer at least one time a year.

Operating manual is only for BFN-BFN9 users. It includes the tester's components, operation and some concerning information, some upgrading property with continuing stability, slightly difference will be allowed with operation and manual.



Suppliers Information

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