



TRANSFORMING TECHNOLOGIES, LLC
OUTSTANDING ALTERNATIVES IN STATIC CONTROL

BFN™ Static Eliminators

BFN 8412 Ionizing Blower



Instruction Manual

Description

BFN® Series Ionizers

Dependable, Balanced and Fast. BFN® AC ionizers, from Transforming Technologies, are built to last. Reliable AC ionization technology is combined with superior mechanical design to assure years of optimal static neutralizing performance.

- A full 1 year warranty.
- CE certification.
- All BFN® AC ionizers use titanium alloy emitter points for long life.

All BFN series AC ionizing blowers are designed for safe operation under normal use. Safety switches under the front and rear removable finger guards shut off the unit, protecting the operator during maintenance.

- Do not operate BFN series products in flammable or explosive environments.
- Do not insert foreign objects into the air inlet or outlet.
- Make certain the BFN ionizer is properly grounded before operation.
- Disconnect the BFN ionizer from any power source before removing the finger guards.
- Do not open or attempt to repair any BFN series product. Breaking the manufacturing seal will void warranty.

Description

Please read these operating instructions thoroughly before operating the BFN 8412 unit. All BFN series devices require a grounded power source for proper operation. BFN series products are NOT suitable for use in flammable or explosive environments.

BFN 8412 AC Extended Range Ionizing Blower

The BFN 8412 extended range ionizing blower, with AC technology, provides excellent balance and stability for secure workstation protection. Designed to cover a broad **3' x 6' area**, the **8412 uses AC technology to continuously produce a balanced output of positive and negative air ions.**

BFN series AC ionizers from Transforming Technologies create a dense and well-balanced ionization current. They are unique in their ability to deliver fast decay times with low offset voltages. Continuous balance and decay protection is assured by the reliable AC design. An integrated heater, emitter point cleaner, removable front and rear fan guards, safety switch combine to make the BFN 8412 a powerful and reliable ionizer.

Features

- Reliable AC output
- Extended Range
- Integrated heater and emitter cleaner
- Variable fan speed control
- Removable finger guards with auto shut-off sensor

Product Specifications

Power Input

120 V AC, 60 Hz., 350W (max)
 2.5A max. when heater is on
 220 V AC, 50Hz.

Dimensions

19.7" W x 7.28" H x 7.9"D
 (50.0 W x 18.5 H x 20.0 D cm)

Weight

15.2 lb (6.9 kg)

Air Volume

50 CFM – 230 CFM (low— high)

Effective Coverage

3'x6' area coverage

Balance

0 ±10 volts

Decay Time

< 1.5 seconds @12", 1000V-
 100V, fan speed on high

Heated Air Temperature

| Fan Speed | Above Ambient |
|-----------|---------------|
| Low | 10° F |
| Hi | 7° F |

(measured 6" in front of unit)

RH Operating Range

20-60%, non-condensing

Indicators

ON/OFF status light indicator,
 detects presence of HV on
 emitter points

Temperature

32-122° F (0-50° C)

Ozone Production

< 0.003 ppm, 12" in front of
 unit, EPA EQQA577019

Audible Noise

46dB(A) (Distance 1 meter)

Enclosure

Steel

Finish

Powder coat, off white

Approvals

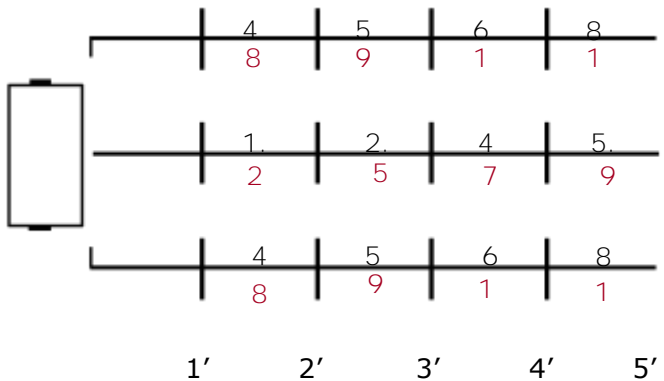
CE

Packing list:

- BFN 8412 ionizing blower
- Power cord
- Instruction manual
- Certificate of Conformance

Black: Hi Fan Speed
 Red: Low Fan Speed

Offset voltage and discharge time determined as per EOS/ESD Standard **No.3 using 6" x6"** 20 pF charge plate monitor. Discharge times are in seconds from 1000V to 100 V. Discharge times are slightly longer for 230V, 50 Hz



Tested in accord with ANSI /ESD STM3.1-2006

Operating guide

1. Power Connection

Properly locate and install the ionizer into the proper position and connect the power cord. Rotate the on/off, fan speed knob clockwise to turn on the unit. Continue rotating the knob to achieve the desired fan speed.

2. Bracket Adjustment

To adjust the angle of operation of the BFN 8412 ionizer, loosen the mounting knobs that secures the bracket and loosen the left gear completely. Now adjust the unit to the required angle and re-tighten the knobs.

Note: Failure to loosen the bracket knobs sufficiently may result in damage to the bracket mounting system.

3. Periodic Maintenance

The only maintenance required for BFN series ionizers is the periodic cleaning of the emitter points, inlet and outlet finger guards and the fan assembly. Emitter point cleaning affects the static decay ability of the ionizer and is important for maintaining its optimal performance.

Emitter point cleaning: All BFN series ionizing blowers include an integrated emitter point cleaning brush on the inlet fan guards. Slide the emitter point cleaner to the left, then to the right several times, until points are clean. When finished, return the point cleaning brush to its resting position.

Internal fan cleaning: All BFN series ionizing blowers offer convenient cleaning of the internal fan assembly. Use the following procedure to maintain cleanliness.

Air outlet disassembly

- A. Press the two buttons on the bottom of plastic cover until they release from slots.
- B. Press the top of the front cover in and lightly pull the front cover upwards
- C. Completely remove cover and set aside.



Internal Fan Cleaning

After removing both front and rear fan guards, the emitter points and fan assembly will be unobstructed, for easy deep cleaning. Use a soft brush, Isopropyl Alcohol and compressed air to remove any foreign matter.

Note: The frequency of cleaning required for optimal performance from BFN ionizers depends on the environment in which the BFN series ionizer operates.

When finished cleaning, replace both front and rear fan guards.

Air Outlet Assembly

- A. Line up the plastic latches with the corresponding grooves of the unit.
- B. Press the top and bottom of the front cover in and lightly push the front cover down
- C. Make sure the cover is locked in to the unit.



Caution: BFN series products have safety relay switches where the front and rear fan guards attach to the unit. These relays disable the fan/ionizer operation when either fan guard is removed. Take care when attaching the fan guards to assure proper functioning of the product.

Periodic Verification:

BFN ionizer have no user serviceable parts and the technology requires no calibration because of the inherently stable ionization output from the AC emission. Periodic verification is recommended, per ANSI/ESD SP3.3-2006 Periodic Verification of Air Ionizers. Verification frequency may be set by the individual user, but is recommended to be not less than one time per year.

Service and Warranty

Transforming Technologies, LLC provides a limited warranty for the BFN Series Ionizers. All new products are guaranteed to be free from defects in material and workmanship for a period of one (1) year from the date of shipment. Liability is limited to servicing (after evaluating, repairing or replacing) any product returned to Transforming Technologies. The company does not warrant damage due to misuse, neglect, alteration or accident. In no event shall Transforming Technologies be liable for collateral or consequential damages. To receive service under warranty, please contact Transforming Technologies Technical Support.

About Transforming Technologies

Since 1998, Transforming Technologies has helped electronic manufacturing facilities to protect their products and processes from the many serious problems associated with static electricity.

Transforming Technologies offers a wide range of unique and outstanding products to detect, protect, eliminate and monitor electrostatic charges. Our products are integral components of an effective static control program.

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