



**TRANSFORMING TECHNOLOGIES**  
*OUTSTANDING ALTERNATIVES IN STATIC CONTROL*

# **BFN** AC Ionizers

**BFN 803 Ionizing Blower**



**Instruction Manual**

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# 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 803 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 803: AC Overhead Blower Model

The BFN 803, 3 fan overhead ionizing blower, with AC technology, provides excellent balance and stability for secure workstation protection. This superior ionizer is equipped with 2 LED task lights, integrated emitter cleaners and safe, easy maintenance access.

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 emitter point cleaner, removable front and rear fan guards, safety switch combine to make the BFN 803 a user friendly ionizer.

## Features

- AC ionization output
- 2 LED Task Lights
- Integrated emitter cleaning device
- Variable fan speed control
- Removable finger guards with auto shut-off sensor

# Product Specifications

## Power Requirements

120 V AC, 60 Hz., 110W  
220 V AC, 50Hz.

## Dimensions

38.78" W x 6.75" H x 3.35" D  
(58.5 W x 17.2 H x 8.5 D cm)

## Weight

18.7 lb (8.5 kg)

## Air Volume

150 CFM – 300 CFM [low – high]

## Effective Coverage

2' x 4' area coverage

## Balance

0 ±10 volts

## Decay Time

< 3 seconds @ 18", directly under center of unit, 1000V-100V, fan speed on high

## Temperature

32-122° F (0-50° C)

## RH operating range

20-60%, non-condensing

## Ozone Production

< 0.003 ppm, 12" in front of unit, EPA EQOA577019

## Indicators

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

## Light Output

LED Lamp

## Light Color Temperature

2500 K

## Replacement Lamp

T4/5W fluorescent lamp

## Audible Noise

52dB(A), (Distance 1 meter)

## Enclosure

Steel

## Finish

Powder coat, off white

## Approvals

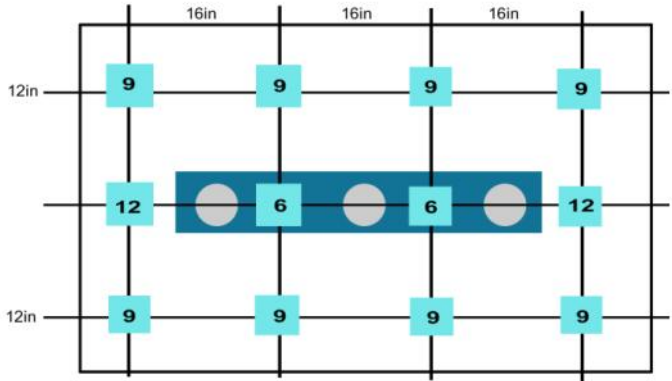
CE

## Packing list:

- BFN 803 ionizing blower
- Power cord
- Instruction manual
- Certificate of Conformance
- Mounting Brackets

# BFN 803 Performance

**Discharge time in seconds (1000 volts to 100volts) determined per EOS/ESD Association Standard NO.3; unit at 18" above test plate, fans at high speed. Discharge times are slightly longer for 230VAC, 50Hz unit.**



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. Mounting brackets located on the back right and left are used hang the ionizer from the ceiling. Rotate the on/off, fan speed knob clockwise to turn on the unit. Continue rotating the knob to achieve the desired fan speed.

**Note:** Do not insert any object into the air inlet or outlet.

**Note:** Unit must be properly grounded before operating.

# Operating Guide Cont.

## 2. 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. Turn the emitter point cleaners clockwise, then counter clockwise several times, until points are clean. When finished, return the point cleaning brush to its resting position. **CAUTION: Brushes do not spin 360 degrees. Stopping point is on the bottom right of fan guard. Do Not Force.**

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

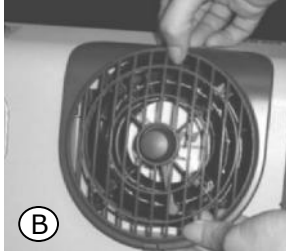
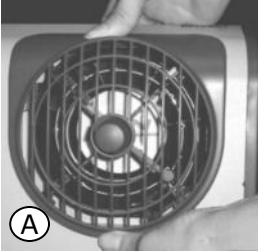
**Note:** Always disconnect the ionizer from the power source prior to internal cleaning.

### **Air Outlet Disassembly**

- A. Press the button on the bottom of the plastic front cover upwards and make the lower portion of the fan

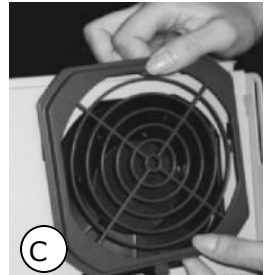
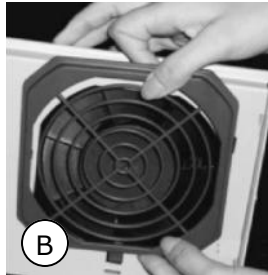
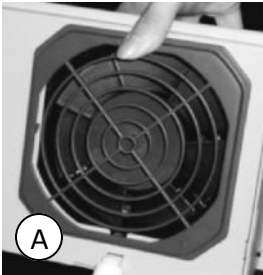
## Air Outlet Disassembly Cont.

- B. Lightly pull the front cover downwards until it separates from the blower.
- C. Completely remove cover and set aside.



## Air Inlet Disassembly

- A. Press the recessed release point on the bottom of the plastic rear cover using a flat blade screwdriver.
- B. Gently push the cover upwards.
- C. Lift the rear cover up and away from the metal casing.





## Internal Fan Cleaning

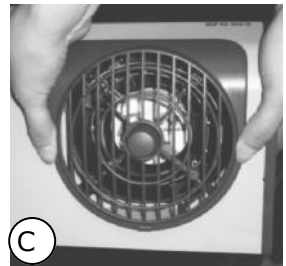
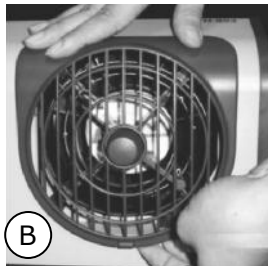
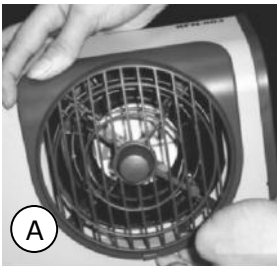
After removing both front and rear fan guards, the emitter points and fan assembly will be unobstructed, for easy deep cleaning. Use a soft brush, Isopropyl Alcohol and compressed air to remove any foreign matter.

**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. Slide the slot on the upper back side of the front fan guard onto the metal case.
- B. Push upward from the bottom of the front fan and gently press into the metal casing, until attached.
- C. Press the sides of the cover in to make sure cover is securely attached.



**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. Equipment needed is a Charge Plate Monitor.

## **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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