



# BFN801 DESKTOP AC IONIZING BLOWER MANUAL

BFN-801 MINI Desktop Ionizing Blower has outstanding static-eliminating performance. It's the ideal equipment for preventing static pollution & interruption in the areas of electronic production line, maintenance bench, etc. BFN 8 series have acquired the patents of the People's Republic of China. The patent codes are as follows: ZL200420045280.X; ZL200530053181.6; ZL200530053182.0; ZL200530053183.5

**▲ Note:** Please read these operating instruction manuals thoroughly and completely before stalling and operating the devices. All of the BFN series devices for eliminating static must not be used in flammable and explosive environments. Don't use common and temporary socket as power source. All the BFN series ionizing blowers must use the power socket equipped with safety standard power cord and mustn't change or use other power sockets with bad grounding system.

## Safety

BFN-801 Ionizing Blowers have reliable safety loop design and excellent grounding equipments. In the meantime, there are jiggle switches beneath the front and back covers, so if the front and back covers fall off the blowers, they can cut off the power immediately by themselves to avoid accident.

- Prohibit to operate the blowers in flammable and explosive Environments.
- Prohibit to insert objects into the air outlet;
- Reliable grounding is necessary before operating;
- Ensure that the power is cut off when cleaning and maintenance. After you wipe the blowers (including metal crust) by alcohol and other preparations, you mustn't operate the blowers until the blowers are completely dry.
- Don't take apart or repair blowers by yourself.

## Features

- Fashionable and novel appearance.
- Reasonable design, convenient and practical.
- With large ion output volume, can eliminate static quickly.
- Optional air speed (you can choose any air speed you like)
- Convenient maintenance, assemble and disassemble front and back cover, easy to clean.
- Strict safety protection fittings.

## Application

Designed especially for parts of maintenance bench, test bench, etc.; Can be applied to any situation.

## Specification

- Power Supply : AC 220V( $\pm 15\%$ )/50Hz or AC 110V( $\pm 15\%$ )/60Hz
- Operating Current: 0.18A (Fan fixed at the highest speed)
- Air Output: 80CFM~100CFM
- Efficient Scope: 300mm~900mm
- Ion Balance:  $\leq \pm 10V$
- Decay Time:  $\leq 2.0s$  (decrease from  $\pm 1000V$  to  $\pm 100V$ , at 300mm away from the air outlet)  
Test Condition: 25°C, humidity 55%, measure up with the EOS/ESD criterion.
- Operating Condition: 0°C~50°C(temperature), 20%~85%(relative humidity)
- Color: off white +sky blue (plastic)
- Dimension: W175mm x H255mm x D110mm
- Material: cold rolled steel plates
- Net Weight: 3kg

## Packing list

- BFN-801 ionizing blower: 1 set
- Instruction Manual: 1 copy
- Special tool: 1 piece
- Power supply: 1 piece
- Ex-work inspection report: 1 copy
- Warranty card: 1 copy

## Structure

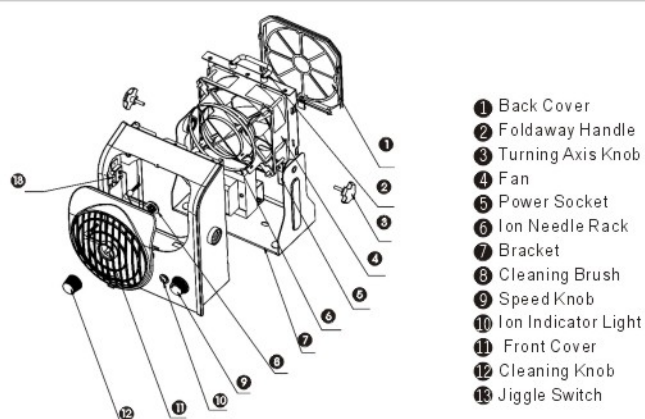


Figure 1: BFN-801 AC Ionizing Blower Structure Sketch Map

## Installation and application

Put blowers on the table-board or fix the bracket of blowers on the proper plane by using M6 bolts. Ensure the protected area in the effective coverage from 300mm to 900mm. And then, adjust the angles of ionizing blower in order to ensure the air covers the protected area. The air should blow the hands and area needed to be protected rather than human body.

Decay time is directly related to the strength & weakness of the ion air. Under the same air bunch circumstance, farther from the air outlet, weaker the air bunch is and decay time will be longer relatively. We suggest that BFN-801 work most efficiently at the distance of 300mm~600mm.

## Operating guide

### ■ Turn on the blower

When the ionizing blower is fixed, please check the cords and turn on the fan speed knob. The blower is turned on when listening a sound of poop. At this time, the ion indicator light turns on. At the beginning, the air speed is maximal and then you can adjust the speed according to the practical need.

**▲ Note:** Prohibit to insert any objects into air inlet or outlet and must have good grounding system before Operating.

## Angles adjustment

First, loose the turning axis knob locking up the bracket and then loose the left gear thoroughly. And then, adjust the angles you need. Finally, lock the turning axis knobs.

**▲ Note:** Prohibit to adjust the angles of the ionizing blower in the situation of not loosening the turning axis completely in order to avoid any damage to blower.

## Regular maintenance

Ensure the ionizing blower can work normally by the way of periodically cleaning and calibration.

### ■ Cleaning

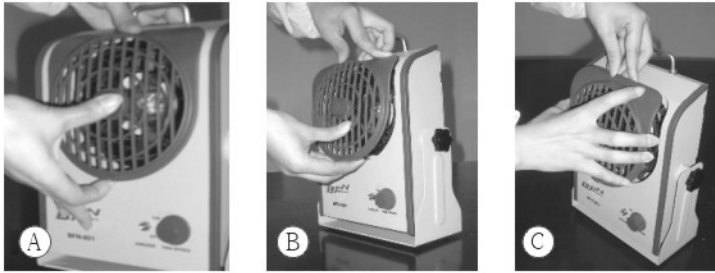
BFN series blowers themselves don't release dust. They completely meet the requests of clean environments. Sometimes the particles and dust floating around may pollute the ionizing blowers so it is necessary to clean them to ensure them work normally.

Internal cleaning instructions to disassemble the air inlet or outlet.

Cleaning for ion needle(projecting points of ionizer): Repetitively turn the cleaning brush knob to make the ion needles clean. Suggestion: one time each day. After finishing cleaning work, turn the clean brush 45° right down in order to avoid affecting airflow.

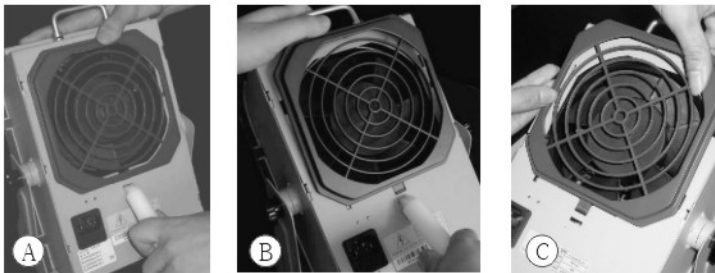


Cleaning for fan and ion needle rack. The unique structure design of BFN-801 is very convenient for cleaning the inner parts of blowers. Please take following pictures for reference:



- Ⓐ Press the button on the bottom of plastic front cover upwards and make the button separate from metal crust.
- Ⓑ Lightly pull the front cover downwards and make it break away from the grooves of the blower.
- Ⓒ Make it completely break away from the grooves of the Blower.

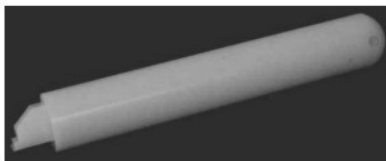
After taking apart the front cover, we can disassemble the plastic back cover. Please take following pictures for reference:



- Ⓐ Please press down the button on the bottom of back cover by special tool.
- Ⓑ Push the cover upwards.
- Ⓒ Slanting pull the back cover up by hands and make the back cover completely break away from the metal crust.

After disassembling the front and back covers, the inside fan and ion needle rack of BFN-801 will expose outside. At this time, we can use soft brush and compressed air to remove the dust or use tampons with 35% industrial alcohol to wipe dust.

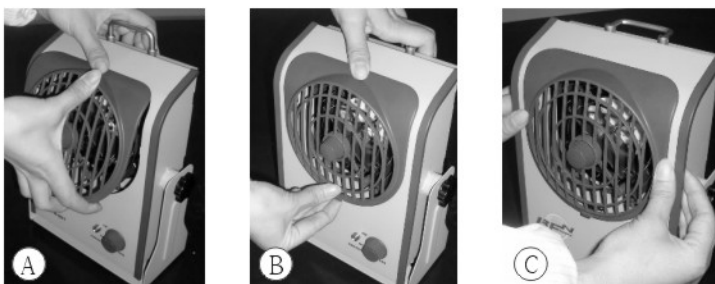
Suggestion: one time each month. Of course, you can clean the blower according to the practical situation. The special tool shown in the picture is used for taking apart the back covers of BFN 8 series ionizing blowers.



**▲ Note:** Ensure that power supply to be turned off before cleaning and maintenance. When using alcohol and other solvents to clean (including metal crust), please don't turn on the blower until it is completely dry. Otherwise, it is possible to cause damage to blower or hurt to human body. To avoid damage, please be careful when disassembly.

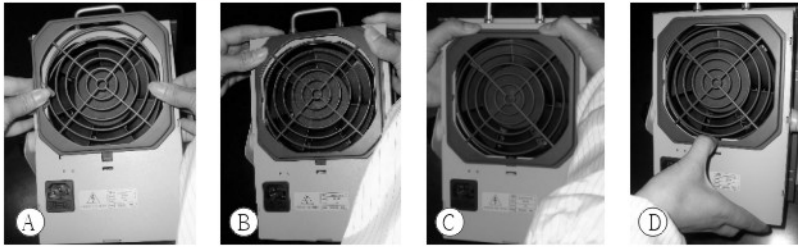
Air inlet and outlet installation instructions after cleaning.

After cleaning the fans and ion needle racks, we can assemble the plastic front and back covers. It is easy to operate. Please take following pictures for reference:



- Ⓐ Insert the button on the top of plastic covers into metal crust.
- Ⓑ Push the button on the bottom of the front cover upwards into metal crust.
- Ⓒ Press the buttons on other sides of covers into metal crust, and the whole cover into the metal crust.

When assembling the back cover, please take following pictures for reference:



- Ⓐ Put the buttons on the bottom of back plastic cover into the grooves of the bottom of metal crust and then insert four plastic buttons of two sides into corresponding metal grooves.
- Ⓑ Push the back plastic cover towards metal crust and ensure, That four buttons are in corresponding grooves.
- Ⓒ Push the two sides of back plastic cover down and let the whole cover into the metal crust.
- Ⓓ Lightly pull the bottom of the plastic back cover in order to make the button on the bottom lock tightly

**⚠ Note:** To avoid damage, you must be careful in the course of assembling. In the meantime, there are pressed blocks used for protecting the safety loop beneath the front and back covers and these pressed blocks can pin the jiggle switches. In the course of assembling, it is necessary to pin the jiggle switches, or the devices equipped can't work normally. Please refer the following figures:



- Ⓐ Jiggle switch beneath the plastic back cover (black circle as shown in the figure).
- Ⓑ Pressed blocks on the back of plastic cover (black circle as shown in figure).
- Ⓒ Jiggle switch beneath the plastic front cover (black circle as shown in the figure).

## Calibration

BFN-801 ionizing blowers has excellent steady capability, the parameters may vary with the affections of operating temperature and humidity and fluctuation of voltage.

Ion balance and static decay time test: can be tested at the working post by portable ionizer verification kit. We suggest one time each day at least.

Ion balance and static decay time calibration: can be carried out in labs by flat-plate electrostatic analysis instrument. Suggestion: one time each year at least.

This operation manual only for BFN-801 users, it includes the 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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