



BFN803 OVERHEAD AC IONIZING BLOWER MANUAL

BFN-803 Overhead Ionizing Blower has the outstanding static-eliminating performance. It's the ideal equipment for preventing static pollution & interruption in the areas of electronics production line, maintenance station, air shower equipment, 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 this operating instruction manual thoroughly and completely before installing and operating the device. BFN series devices for eliminating electrostatic must not be used under flammable and explosive atmospheres. 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 socket with bad grounding system.

Safety

BFN-803 ionizing blowers have reliable safety loop design and excellent grounding equipments. In the meantime, there are jiggle switches beneath the front and back covers. If the front and back covers fall off, they can cut off the power by themselves immediately to avoid the accident.

- Forbid to operate the blowers in flammable and explosive environments;
- Forbid to insert objects into the air outlet;
- Make sure devices have reliable grounding 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 and 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;

Specification

- Supply Power: AC 220V($\pm 15\%$)/50Hz or AC 110V($\pm 15\%$)/60Hz
- Operating Current: 0.50A (when in the highest speed)
- Air Output: 240CFM~300CFM
- Effective Coverage: 300mm~1600mm
- Ion Balance: $\leq \pm 10V$
- Decay Time: $\leq 2.0s$ (decrease from $\pm 1000V$ to $\pm 100V$, at 300mm away from the air mouth)
Test Condition: 25°C, humidity 55%, measure up with the EOS/ESD criterion.
- Operating Condition: 0°C~50°C(temperature), 20%~85%(relative humidity)
- Colour: off white +sky blue (plastic)
- Dimensions: W985mm x H185mm x D115mm
- Material: cold rolled steel plates
- Net Weight: 8.0kg

Packing list

- BFN-803 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

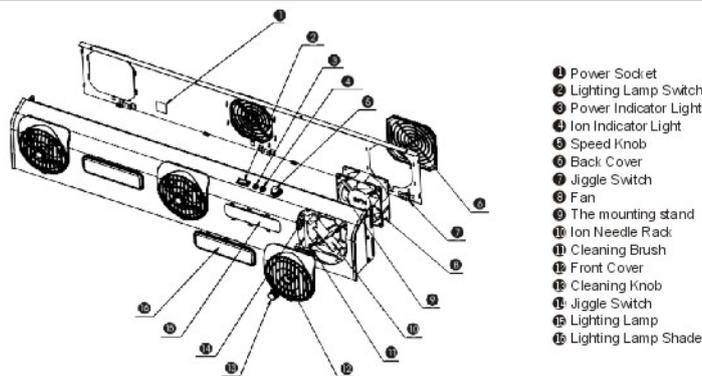


Figure 1: BFN-803 AC Ionizing Blower Structure Sketch Map

Installation and application

Fix the bracket on proper plane by using M6 bolts or hang it on proper plane by pendant chains. Ensure the protected area in the effective coverage from 300mm to 1600mm. And then, you can 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.

Elimination time is closely related to the strength or weakness of the ionizing air. Under the same air bunch circumstance, farther from the air outlet, weaker the air bunch is and the eliminating time will be longer relatively. We suggest that BF-803 work most efficiently at the distance of 300mm~1400mm.

Operating guide

■ Turn on the blowers

When the ionizing blower is installed and fixed, please check the power cords and turn the fan speed knob clockwise to “on”. You can hear a “Pa” sound when the blower is turned on. At this time, the ion indicator light is on. At the beginning, the air speed is maximal. You can adjust the speed according to the practical situation.

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

Regular maintenance

Ensure the ionizing blower can work normally by periodical cleaning and calibration.

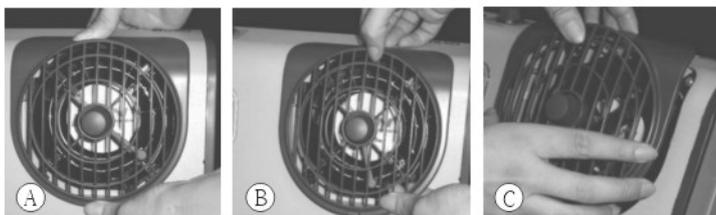
■ Cleaning

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

● Internal cleaning instructions to disassemble the air inlet or outlet

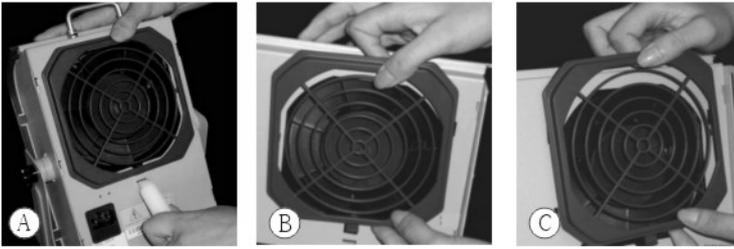
Cleaning for ion needle (projecting points of ionizer): Repetively turn the cleaning brush knob to make the ion needles clean. Suggestion: one time each day. After finishing cleaning work, turn the clean brush 45° right down to avoid affecting airflow.

The unique structure design of BFN-803 is very convenient for cleaning the inner parts of blowers. Please take the following pictures for reference:



- (A) Press the button on the bottom of plastic front cover upwards and make the button separate from metal crust
- (B) Lightly pull the front cover downwards and make it break away from the grooves of the blower.
- (C) 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 the following pictures for reference:

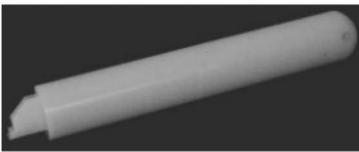


- Ⓐ Please press down the button on the bottom of back cover by special tool.
- Ⓑ Push the cover upwards.
- Ⓒ Slanting pull the back cover up by hands and make the back cover completely break away from the metal crust.

After disassembling the front and back covers, the inside fan and ion needle rack of BFN-803 will expose outside. At this time, we can use soft brush and compressed air to remove the dust or to wipe the blower by tampons with 35% industrial alcohol.

Suggestion: one time each month. Of course, you can clean the blower according to the practical pollution situation

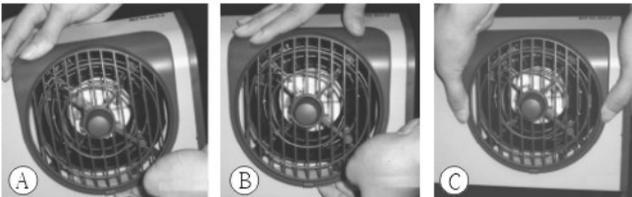
The special tool shown in the picture is used for taking apart the back covers of BFN 8 series ionizing blowers



▲ Note: Ensure the 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.

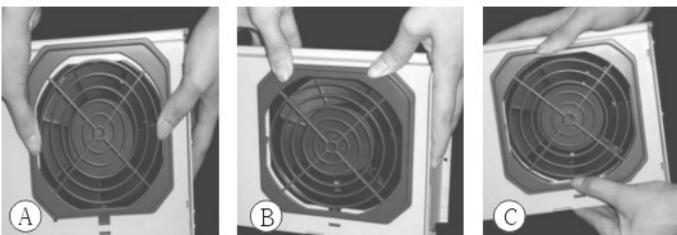
● Air inlet and outlet installation instructions after cleaning

After cleaning the fans and ion needle racks, we can assemble the plastic front and back cover. It is easy to operate. Please take the 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.

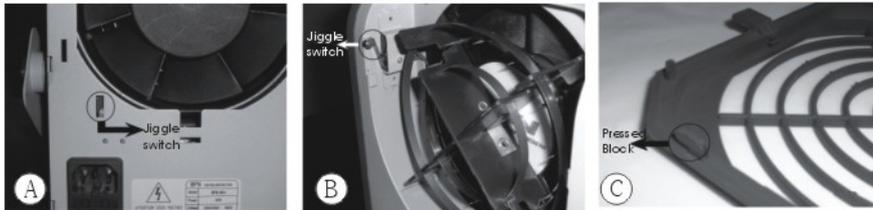
When assembling the back cover, Please take the following pictures for reference:



- Ⓐ Put the button on the bottom of back plastic cover into the groove of the bottom of metal crust and then insert Four plastic buttons of two sides into corresponding metal 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

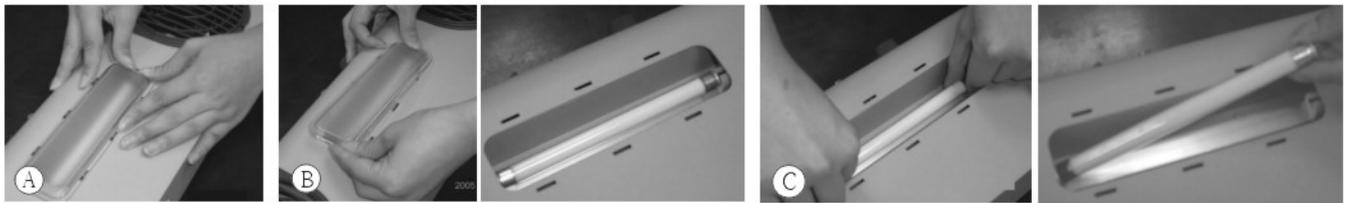
equipped can't work normally. Please refer to the following figures:



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

BFN803 replacement of lamp tube

BFN803 high-quality T4/5W energy-saving lamp of ionizing blower can be used working surface and it's brightness amounts to 25W incandescent lamp's brightness. Generally, no need to change. If it is necessary to change, please turn off the power supply and take the lamp cover down; and then press metal parts of the two ends of lamp tube and wrist them in order to separate from the lamp holder. Please take the following pictures for reference:



- (A) Push the lamp cover towards the left side until lamp cover can't be moved.
- (B) Lightly take the lamp cover up and the lamp tube will expose.
- (C) Handhold the metal parts of the two ends of lamp and turn around 90°, and then take the replaced lamp tube out from the lamp holder.



- (D) Handhold the metal parts of the two ends of lamp and insert it into lamp holder and turn around 90°. Finally assemble it into lamp holder.
- (E) After replacing the lamp, please put the plastic buttons into metal grooves and make the lamp cover touch Outer crust tightly. Finally, push the lamp cover to the right side until it can't be pushed.

Note: Ensure that the power supply is turned off before replacing the lamp tube. Handhold the metal parts of lamp tube to twist rather than handhold glass part when taking apart and assembling the lamp tube. To avoid causing accident or damage, please carefully take apart.

Calibration

BFN-803 ionizing blowers have 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-803users, 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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