



OPERATING INSTRUCTION MANUAL

BFN-701⁺ (DC 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-701⁺ DESKTOP DC Ionizing Blower have 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.



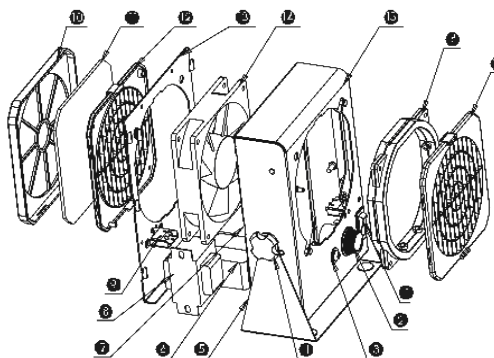
Notes:

Please read the user guide carefully before operation. All BFN static eliminate series cannot be used under flammable and explosive environment. Don't used 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	AC110 (±15%)/60Hz AC220 (±15%)/50Hz	Working Condition	Temperature: 0°C – 50°C Humidity: 20% – 85%
Working Current	0.05A (Max Fan Speed)	Working Distance	300mm – 900mm
Dimension (mm)	W175 x H220 x D75	Decay Time	≤ 2.0 sec @ 300mm
Material	Aluminium Plates	Ion Balance	≤ ± 5V
Weight	1.5kg	Air Output	120 CFM

STRUCTURE



No	Description	No	Description	No	Description	No	Description
1	Power Switch	6	High Voltage Bag	11	Dust Proof Net	16	Ion Rack
2	Air Speed Controller	7	Control Board	12	Back Cover Plastic Panel	17	Front Cover Plastic Panel
3	Ion Lamp (LED)	8	Transformer	13	Back Cover		
4	Angle Knob	9	Micro-switch	14	Fan / Blower		
5	Bracket	10	Dust Proof Net Cover	15	Main Crust of Ionizer		

PACKING LIST

- BFN-701⁺ Desktop Ionizer
- Warranty Card
- Power Cable
- User Manual
- Calibration Certificate
- RS232-RS485 Converter (Optional)
- SALM-NSA (Optional)
- SALM-NS4 (Optional)

SAFETY

BFN-701⁺ is reliable and has safe circuit design, excellent grounding distribution, has a micro-switch installed at the position of detachable covers to prevent accident by automatic power cut-off when covers fall-off.

- Do not operate the ionizer in flammable and explosive environment
- Do not insert object into the air outlet
- Make sure it is grounded well before using
- 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

- Alarm or non-alarm function available (Option)
- Thin, light, convenient and practical
- With large ion output that can eliminate static voltage quickly
- Adjustable air speed of the fan
- Detachable front and back cover for easy and convenient cleaning and maintenance
- With safety toggle switch for security protection

INSTALLATION AND APPLICATION

Put BFN-701⁺ on table or fix the bracket by M6 bolts on proper plane, make sure of the effective distance is between 300mm – 900mm, make sure air covers all protection area by adjusting the angles. The air should blow to the controlled area and not directly pointed to human body.

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-701⁺ at a distance between 300mm to 600mm for better ionization effect.

OPERATION GUIDE

TURN ON THE BLOWER

When the ion blower is installed and fixed, please check the power cable and turn on the power switch to “ON”. At this time, the ionizer indicator is on. At the beginning, the air speed is at maximum level enable to provide full-pressure start. Then adjust the speed according to the practical situation.



Attention: Do not insert objects into air inlet, and make sure ionizer is grounded well before using.

ANGLE ADJUSTMENT

Loosen the turning axis knob which locks up the bracket, then adjust to the required angle. Then finally, lock the two turning axis knobs tightly.



Attention: Do not adjust the angles of the ionizer blower in a situation that the turning axis knob is loosen completely enable to avoid possible damage to the ionizer blower.

REGULAR MAINTENANCE

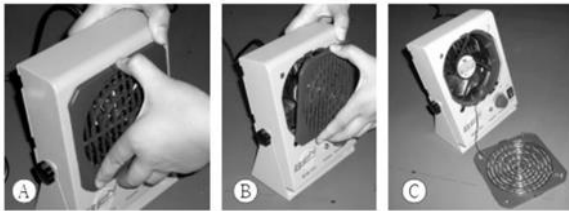
Cleaning and checking periodically (using CPM) to make sure BFN-701⁺ is working properly.

■ 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.

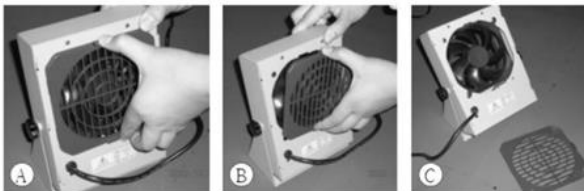
The unique design makes the cleaning easy and convenient for inner parts.

1. Take off the front cover



- Ⓐ Press the button on the top front cover downwards and make the button separate from the metal crust.
- Ⓑ Pull the front cover upwards lightly, make it separate from the metal crust completely.
Attention: there are orientating forelock and corresponding apertures between front cover and metal blower body, please be careful when pulling out the front cover
- Ⓒ Make the front cover completely separate from BFN 701+. **Attention:** there is a flexible cord which connect the metal induction netting of front cover with inner BFN701+ please do not break it.

2. Take off the back cover



- Ⓐ Press the button on the top back cover downwards and make the button separate from the metal crust.
- Ⓑ Pull the back cover upwards lightly, make it separate from the metal crust completely.
Attention: there are orientating forelock and corresponding apertures between back cover and metal blower body, please be careful when pulling out the back cover
- Ⓒ Make the back cover completely separate from BFN701+

3. Now you can use soft brush and compressed air to clean, or use tampons/cotton swabs with 35% industrial alcohol. You can clean according to the periodic checking data or at practical situation.

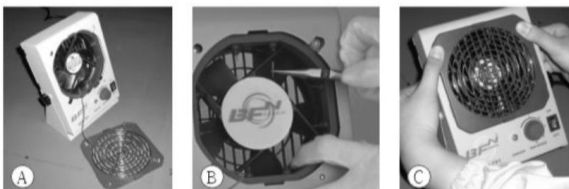
! Attention: Make sure that power is cut off before cleaning and maintenance. Make sure that the ionizer is completely dry before using to avoid any damage to the product and to the user as well. Please be careful when disassembling the ionizer.

4. Install the front and back cover after cleaning.

! Attention: To avoid damage, please be careful when installing the covers. There are pressed blocks protecting safety loop under the covers which pushes the jiggle switch. The ionizer will not work properly if jiggle switch is not pressed by the block pin.

■ Ion Pin Replacement

It is quite easy to replace ion pin needle of BFN-7 blower series due to its unique insert-extract ion needle design.



- Ⓐ Take off the front cover
Attention: Do not damage the induction cable)
Extract the ion needle by sharp-tip tweezers, and insert a new one. **Attention:** make sure the ion needle reach the bottom of the hole. Be careful and do not hurt your hand.
- Ⓑ
- Ⓒ Install the front cover according to the process as following

CALIBRATION

BFN-701⁺ have 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-701⁺ 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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