



# ECO-F01 BENCH TOP AC IONIZING BLOWER INSTRUCTION MANUAL

## 1 Introduction

ECO-F01 Benchtop Ionic Blower has outstanding ion eliminating function. It's the ideal equipment for protecting ESD protected area, such as, electronic production line, maintenance bench, etc from pollution or interruption of static.

## 2 Safety Rules

NOTE : Please read this operating instruction manual thoroughly and completely before installation and operation. All the ECO series ionic 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.

- Prohibit to operate the blowers in flammable and explosive environment.
- Prohibit to insert objects into the air outlet or inlet.
- Ensure the air input and output freely.
- Reliable grounding is necessary before operating.
- Do not expose to sunshine or rain.
- Ask professional staff to install and make sure the installation is fasten enough.

## 3 Features

- Slim Size
- Easy to operate
- Large ion air output
- Flexible air speed adjustment(Non-step speed variation)
- Little noise, large output volume
- Convenient to maintain
- Suitable for many different situation

## 4 Specification

- |                                                |                                               |
|------------------------------------------------|-----------------------------------------------|
| ● Power Supply: AC 220V 50Hz or AC 110V 60Hz ※ | ● Operating Current: 0.13Amps (in high speed) |
| ● Air Output: 100CFM.(maximam)                 | ● Ion Balance : $\leq  \pm 10 V$              |
| ● Effective coverage: 300mm~900mm              | ● Operating Temperature: 0°C~50°C             |
| ● Operating Humidity: 55%RH ( $\pm 5\%$ )      | ● Material: cold rolled steel plates          |
| ● Dimension: D 80mm X W140mm X H222mm          | ● Colour: off-white+black(bracket)            |
| ● Weight: 2.8kg                                |                                               |

※Please confirm the voltage of ionizing blower and use the suitable one before power on.

## 5 Packing List

- 1 ECO-F01 Ionizing Blower
- 1 Operating Instruction Manual
- 1 Inspection Report
- 1 Warranty Card

## 6 Installation

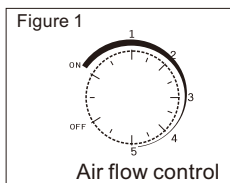
Install ECO-F01 ionizing blower above or in the front of the ESD protected area. The effective distance between air outlet and device, which need to be protected, is 300mm~600mm.

NOTE : The air should blow the hands and area needed to be protected rather than human body. Ensure the objects, which need to be protected, is in the effective coverage and no barriers between air outlet and the object.

## 7 Power supply

The ECO-F01 Ionizing Blower's power supply is AC220V 50Hz or AC 110V 60Hz. If your power supply is different from the standard power supply above, please consult the supplier. We will make some change according to your requirements.

## 8 Operation



When the ion blower is fixed completely, please check the power cord and turn on blower. The blower is turned on when you hear a "Pa" sound. At this time, the ion indicator is on. At the beginning, the air speed is maximal. You can adjust the speed according to the practical situation.

## 9 Neutralization time

The neutralization time depends on the air speed and air output. The higher the speed & the larger the air output is, the shorter the neutralization time will be.

If the object with static charges involved by ion airflow, the charges on the surface will be eliminated. Those charges reserved in the coverage scope will not be polluted again.

## 10 Regular maintenance

The cleaning and maintenance will directly affect the blower maintenance for ECO-F01 is quite easy. You only need to turn the black knob at the centre of air outlet for 360° several times. Cleaning frequency should base on its operation environment and the specific situation. The blower itself will absolutely not send out particles and dust and can completely measure up with the requirements of clean room.

## 11 Cleaning

Try to clean the cover and crust with alcohol periodically.

NOTE : Please ensure that the power supply is turned off before cleaning. Please use the blower after it electric shock or other accident.

## 12 Neutralization performance

To test the ion output, decay time and ion balance by comprehensive static tester.

Ion Output Test (at the highest air speed):

\*NOTE : The test result will vary with the test conditions.

| Test distance | Decay time      |
|---------------|-----------------|
| 300mm         | $\leq 2.0$ Sec. |

## 13 Inspection

According to ANSI/ESD-STM3.1 ionizing elimination equipment inspection processor, we need a piece of 15cm\*15cm metal test plate and the standard tester TREK 156A to test the decay time (from  $\pm 1000V$  decrease to  $\pm 100V$ ).

## 14 Calibration

The performance of ECO-F01 is quite stable and assured. All the ion balance devices are built-in model and pre-setting is less than  $\pm 10V$ , users needn't test, please take above processes for reference. If the decay time becomes longer, please clean the ion needles. If ion balance worse than required, please contact with supplier directly.

## 15 High voltage warning

NOTE : ● Prohibit to insert objects into the air outlet or inlet.

- Prohibit to use improper method to test the blower, or it may destroy internal devices.
- Prohibit to operate the blowers in flammable and explosive environment.

## 16 Warranty

- The warranty period of ECO series products is 1 year from delivery. ( Destroy by man or wrong usage is not suitable for the warranty period. )
- Free technology guide and lifetime maintenance are available.



www.bfn.com.cn



Manufacturer:

SHENZHEN HORB TECHNOLOGY CORP. LTD.

Address: Floor 5-7, Block B, Funing Hi-Tech Industrial Park, No.71-2 Xintian Rd, Fuyong Town, Baoan District, Shenzhen, China.

Domestic free hotline : 800-830-9665

■ Suppliers Information

2014 HORB Corporation/printed in China