



# ECO-F410/F412 HORIZONTAL AC IONIZING BLOWER INSTRUCTION MANUAL

## 1 PRINCIPAL

The charges produced when object is being removed, rubbed, squeezed or induced in industry process. When this kind charge attains more and more, the static electricity absorptions will take place, even discharge electricity will appear with a spark. This is dangerous for industrial production such as adhere, repel, electricity shock or explosion.

The main function of the ion blower is to ionize the air to produce ion airflow, which is consisted with many positive and negative charges. Then blow out the ion airflow by fans to neutralize the statics on the surface of products. If charges on the surface is positive, they will absorb the negative charges in the ion airflow to neutralize the static charge to control statics.

There two different kinds of fans, small fans & rolled fans, blow ion airflow to protected device.

The air speed can be adjusted among a large range by a switch.

## 2 FEATURES

- Rapid neutralization speed.
- Wide air speed adjustment range.
- With ion indicator
- Stable ion balance.
- Large coverage.
- Special cleaning tool for ionizer.
- Good grounding system for protection.

## 3 SPECIFICATIONS

### ECO-F410 HORIZONTAL IONIZING BLOWER

- Power supply: AC 220V 50Hz or AC110V 60Hz ※
- Operating current :  $\leq 1.5$  Amps. or  $\leq 3.0$  Amps.
- Air output: 200CFM. (MAX)
- Operating temperature:  $0^{\circ}\text{C} \sim 50^{\circ}\text{C}$
- Effective coverage: 300mm~1800mm
- Working humidity: 30%~75%RH
- Ion balance:  $\leq |\pm 10| \text{V}$
- Material: cold rolled steel plates
- Dimension: D 210mm X W390mm X H115mm
- Color: off-white
- Weight: 7.6kg
- Decay time:

Test Distance	Center Line
300mm	1.1s
600mm	2.2s
900mm	3.6s
1200mm	5.5s

### ECO-F412

### LENGTHENED HORIZONTAL IONIZING BLOWER

- Power supply: AC220V 50Hz or AC110V 60Hz ※
- Operating current :  $\leq 1.5$  Amps. or  $\leq 3.0$  Amps.
- Air output: 200CFM. (MAX)
- Operating temperature:  $0^{\circ}\text{C} \sim 50^{\circ}\text{C}$
- Effective coverage: 300mm~2000mm
- Working humidity: 30%~75%RH
- Ion balance:  $\leq |\pm 10| \text{V}$
- Material: cold rolled steel plates
- Dimension: D 210mm X W504mm X H105mm
- Color: off-white
- Weight: 8.2kg
- Decay time:

Test Distance	Center Line
300mm	1.1s
600mm	2.2s
900mm	3.6s
1200mm	5.5s

\*Ion balance and decay time measure up with the ESD criterion. Decay time based on voltage decreased from  $\pm 1000\text{V}$  to  $\pm 100\text{V}$ .

\*Test Equipment: TREK 156A.

\*Test result may vary with test condition.

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

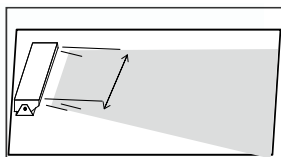
## 4 Packing List

- 1 HORIZONTAL IONIZING BLOWER
- 1 Operating Instruction Manual
- 1 Inspection Report
- 1 Warranty Card

## 5 SAFETY

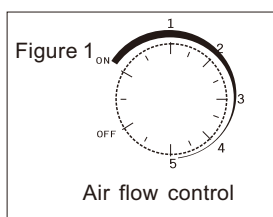
- Read the operation instruction before operation to avoid accident
- Reliable grounding is necessary before operating.
- Prohibit to insert objects into the air outlet or inlet.
- Prohibit to operate the blowers in flammable and explosive environment.
- Do not repair by yourself. If any question, do contact supplier.

## 6 INSTALLATION



Place the blower at bench board.  
Connect with power. Turn it on.  
Adjust air flow to make sure it can cover the protected area.  
Tighten the screws. Then, the blower can work.

## 7 OPERATION



Turn the speed controller clockwise to turn on the blower. Then, the ion indicator is on. It proves the blower is turned on and can generate ion airflow. Turn the speed controller to adjust the air speed, when you want high speed. If you turn the speed controller to OFF, the ion indicator is off. It proves that the blower is turned off and can't work.

The adjustment on airflow direction is as following: Loose the screw on the bracket. Incline the blower and choose the angle you need. Tighten the loosed screws on the bracket and fix the blower tightly.

If need warmer air, you can turn on the heater. Then, warm ion air is available. If want to clean the ion needle rack, you can slide the handle of cleaning brush left and right, till it's clean.

## 8 MAINTENANCE

The blower designed according to the aim of less repair & frequent maintenance.

Maintenance items:cleaning on ion needles, calibration on ion balance and calibration on decay time.We suggest cleaning the ion needles at least once per week and periodically calibrating the ion balance and decay time to ensure the blowers can work normally.

- Cleaning on Ion Needles: Slide the cleaning brush left and right to clean the tips of ion needles, till they are clean, once a week at the least.

- Cleaning on air inlet and outlet: There are filtration nets at the air inlet and outlet to keep the air clean and blow in and out freely. We can use soft brush or compressed air to clean.

- Ion balance test:Use static analysis meter to test the ion balance.

- Decay time test:Use static analysis meter to test the ion balance.

- Calibration:The ion output and performance of our ion blower is stable. While ion balance will vary with the voltage fluctuation and environments.

Standard ion balance: 0V ~  $\pm 10$ V, if ion balance and decay time are quite worse than standard value, please return the unit to factory for calibration.

## 9 WARRANTY

RULES: Quality first, credit first and customer the most important.

We will rigorously obey the rules and make promises as blow:

- Warranty period:

The warranty of this product is one year, counting from the dispatching date. If problems, due to the product itself, material and craftsmanship, happen to our products, we'll supply free repair service.

- Service after warranty period:

In order to serve clients better, we will not charge the manual work fee of repaired product after warranty period, while other fees will be charged.

- If our products disassembled by clients themselves without our authorization, we'll not supply free maintenance. We will deal with it according to specific situation.



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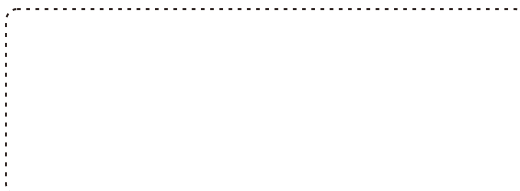
Manufacturer:

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.

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■ Suppliers Information



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