

# **Instruction Manual Guide**

# High Frequency Superior Air Ionizer

(KS120H)



Bondline Electronics Unit 4 Rivermead Industrial Estate, Rivermead Drive, Swindon, Wiltshire, SN5 7EX



# Introduction

Thank you for purchasing a KS120H Ionizing Air Ionizer. Please read this instruction manual in great detail before operating.

#### Description

KS120H Type High Frequency Superior Air Ionizer is the most efficient static elimination (neutralisation) device that prevents parts and components of electronic industry and precision instruments against ESD (Electro Static Discharge). Moreover, the device is widely used in plastic product, printing, spray coating, pellicle, film product, medicine and foodstuff packaging and so on. **This product is CE approved.** 

#### **Features**

**1)** Being small and light, the device performs strong static elimination capability.

**2)** The device provides excellent ion balance and high efficient static elimination. It can rapidly eliminate static charges for both near-by and distant objects. The device can maintain its special ascendant performance even after long use.

**3)** The device offers power supply input indication function (power supply switch indicator light), ionization indication function (green indicator light) and high volt power supply abnormality indication function (red indicator light).

**4)** The device has self-regulation of positive and negative ions. It persistently and automatically maintains its ascendant ion balance function. Regular ion balance rectification is not necessary.

**5)** The discharge needle is made of special alloy, which makes its discharge stability and wear resistance much stronger than those of tungsten one. This persistently stabilises its ionization and ion balance function.

**6)** Assembly and disassembly of the front louver is easy. Maintenance of the device and cleaning of the electrode can be performed with ease.

7) Adjustable blowing angle and air volume.

#### **Packing List**

Make sure each of the following items are included in the pack.

 1) Main Unit.
 1

 2) Power Cord.
 1

 3) Fixing Holders.
 1

 4) Instruction Manual.
 1



# **Specifications**

Technical information providing the specifications of the High Frequency Superior Air Ionizer.

Power Supply Voltage	AC100~240V 50/60Hz.
Current Consumption	36VA.
HV Output Voltage	AC2200V.
Air Flow	210~360CFM.
Weight	5kg.
Noise Level	62dB(A) (Distance 1m).
Allowable Humidity	Less than 0.01ppm.
Allowable Temperature	0∼40°C.

# **Abnormal HV alarm**

The high voltage power supply alarm indicator light illuminates when the high voltage power supply abnormally discharges as follows:

- **1)** The high voltage has a low output;
- 2) The high voltage has a short circuit;
- **3)** The high voltage discharges abnormally.

#### **Ionization Performance**

The ionization performance is tested according to American EOS/ESD-STM3. 1-2000 standard. References are as follows:

Specifications	
Effective Distance (mm)	600mm × 1220mm.
Ion Balance (V)	Within 0±5V.
Decay Time (sec)	±1000V→±100V within 2.5 (sec).

*Note:* The testing figures will vary due to different testing conditions. The test distance is 450mm.

#### **Operating Location**

After fixing the main unit with the fixing holders, you can hang the blower with a metal chain or fix it on the frame overhead the workstation. Choose the suitable blowing angle. Do not operate the device under inflammable or explosive atmospheres. In addition, do not insert any object through the air inlet louver. Keep it unobstructed.



#### Usage

**1)** Install the main unit and the fixing holder.

**2)** Put the fixing rubber pads between the main unit and the stand, then adjust the angle and tighten the knob bolt. The device can be used both on desk and on machines or product lines by using the mounting holes ( $3-\varphi 4.5$ ).

**3)** Connect the accessory power cord output terminal to the main unit, and then plug it in the AC power supply socket. (Caution: Do not use other DC regulated power supply at will.)

**4)** After the main unit is on, the electrodes will emit corona discharge and a great amount of ionized air is generated. Thereby, a great amount of ionized airflow is blown off by the fan through the front louver. The charged object in ionization area will be neutralised immediately.

5) The ionized airflow is adjustable by turning the knob.

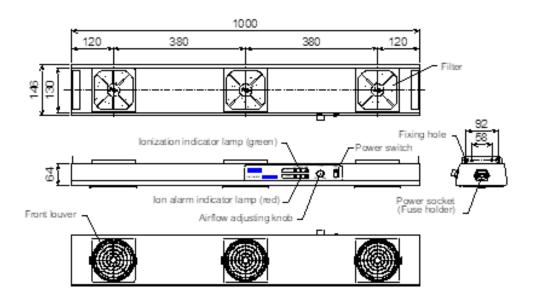
**6)** The device offers auto balance of positive and negative ions. No adjustment is necessary.

**7)** The red alarm indicator light illuminates when the high voltage power supply abnormally outputs. Turn the power supply off and check the problem, and then turn the power on after debugging.

**8)** Turn the power switch off after using.

#### **External Dimensions**

*Note:* The outside drawing may change slightly due to improvement. They should comply with the real device.



Email: sales@bondline.co.uk www.bondline.co.uk

Tel: +44(0) 1793 511 000



# **Daily Maintenance**

#### **Cleaning of the front louver:**

Dissemble the front louver by pressing the side wrench inwardly. Clean it with a cotton swab or water it with neutral washer. Assemble it when it is dry.

#### Cleaning of the discharge needle:

Dust and contamination will drift around the tip of the discharge needle after long use. Clean the discharge needle with a cotton swab. Periodical cleaning is necessary (once every 100 hours. If the discharge needle is dusty, clean it with an included cotton swab and alcohol. Do not damage or loosen the discharge needle. Be careful with your fingers when cleaning.

#### Disassemble of the discharge needle:

When you need to replace the discharge needle, please press and rotate the needle base in a clockwise direction. Use a tool to press the end of the needle to loose it and take it out .Put on the new needle and rotate the needle base in a counterclockwise direction.

#### **Cleaning of the filter:**

Water it with neutral washer. Assemble it when it is dry.