

Instruction Manual

Premium Ion Gun and Controller

(KSHP02)



Registered at Cardiff No. 2933918

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Introduction

Thank you for purchasing a Premium Ion Gun and Controller. Please read this instruction manual in great detail before operating the device. Keep this manual readily accessible for later reference.

Description

The KSHPO2 Premium Ion Gun and Controller is a hand-held device designed for elimination of static electricity and contamination. External power supply is unnecessary since the device has a small built-in HV power unit. It is without external HV wiring and it is safe to operate. The device is light, small and free from EMI. Equipped with auto-balance and abnormal HV monitoring system. CE approved.

Features

- 1) Built-in piezoelectric HV power unit, without HV wiring. Safe and easy to operate.
- 2) The electrode can work well in higher humidity.
- 3) Auto-ion balance; it can maintain balance within $0\pm 10V$ without any period adjustment.
- 4) Equipped with ionisation indicator light and abnormal HV alarm indicator light.
- 5) Special alloy discharge needle, suitable for cleanroom. This can make sure the ionising gun makes a good performance steadily.
- 6) The throttle on the controller controls the air volume.
- 7) Filter can be installed for cleanroom use.

Packing List

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

1) Ionising Air Gun.....	1
2) Power Cord.....	1
3) Controller.....	1
4) Controller Fixing Plate.....	1
5) Instruction Manual.....	1

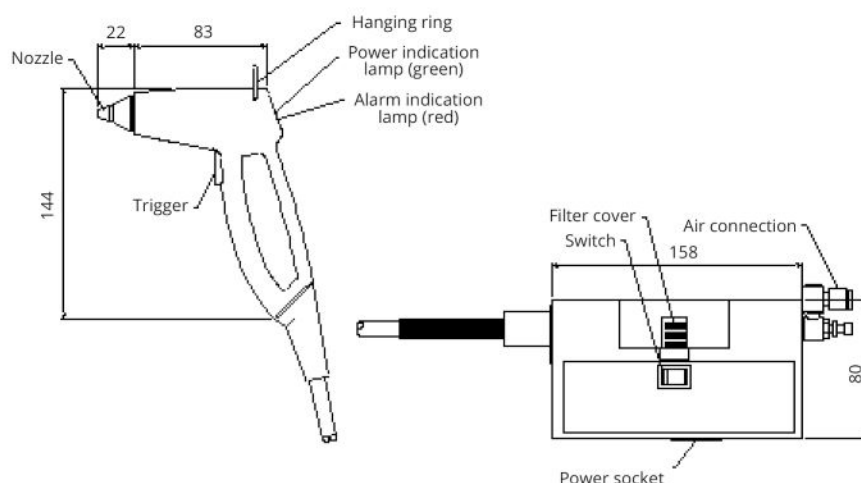
Note

1) The device is not explosion-proof. Keep it away from inflammable gas and solution as it may cause fire or explosion.

2) Make use of dry and clean air in order not to affect ionisation performance.

Appearance

Note: Appearance may change slightly due to improvement. They should comply with the real device.



Specifications

Information providing the specifications of the ionising air gun and controller.

Input Volt of Controller	AC100-240V 50/60Hz
Power Rating	12VA
Safety Performance	Abnormal HV alarm
Outside Air Pipe	φ6/φ4 soft pipe
Air Pressure	1-7 bars
Total Weight	900g
Ozone Density	Less than 0.01ppm
Ion Balance	Within 0±10V

Abnormal HV Alarm

The device is equipped with abnormal HV alarm. The red alarm indicator light illuminates when the following situations occur:

- 1) Low output HV;
- 2) Short circuit;
- 3) Abnormal discharge;
- 4) Wet air supply;
- 5) Turn on and off the device quickly.

Usage

- 1) Open the cover of the controller.
- 2) Connect the ionising air gun and the controller by plug, the air pipe end of the ionising air gun, into the controller. Screw to fix and cover the controller.
- 3) Provide clean air through air tube (Φ 4/ Φ 6 air hose on controller).
- 4) Plug in the power cord on the controller and turn on power supply. (Make sure the power cord grounding pole can work well).
- 5) Adjust air volume.

Note

**KSHPO2 Ionising air gun is installed with precision electronic parts.
Please avoid throwing and knocking.
Handle with care.**

Ionisation Performance

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

Specifications	3	4	5	6
Air Input	0.4	0.4	0.3	0.3
Filtering Precision	0.5	0.4	0.3	0.3
Temperature Range	Less than $0\pm 10V$.			

Note: The test results will vary slightly due to different test conditions.

Usage of Air Filter

Installation: Connect the filter to the plug part joining with the gun air pipe. Connect the plug part with the controller after pressing both sides of the top of the controller.

Specifications	
Air Input	Compressed air
Filter Precision	0.01 μm
Temperature Range	5-40°C

- 1) Pay attention to the inlet and outlet of the air filter.
- 2) Ensure the input air is free of water and oil.
- 3) Avoid sunshine. Use the filter inside a room.