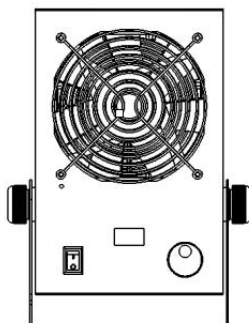




QUICK 443C STATIC ELIMINATOR

Instruction Manual



Thank you for purchasing our products. Please keep the instruction manual properly for future reference.

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1.Safety Instructions



CAUTION

- During the installation and use of this product, all electrical safety regulations of the country and regions must be strictly observed.
- The power supply must be disconnected when disassembling the product. Do not operate with power on.
- If the product does not work properly, please contact the supplier or our company, and do not disassemble or change the product in any way. We are not responsible for any problems caused by unauthorized maintenance or modification.



WARNING

- The product should be used away from places where there is magnetic interference.
- Don't install the product in a place where the surface is easy to shake or be impacted, as it may damage the product.
- Don't place the product in places where it may be exposed to rain or moisture.
- Don't use in flammable and explosive environments.
- After power on, don't touch the ion emitter.
- Please keep the air outlet and inlet unblocked and ensure there is no obstruction.
- In order to avoid electric shock and ensure the performance of static elimination, please make sure the ion grounding terminal is completely grounded.
- Please unplug the power cord when the product is not used for a long time.

2.Overview

The static eliminator is designed to eliminate static electricity of sensitive electronic components. It can be used for inspection, assembly, test and laboratory, and can also be used in some situations where electrostatic charges are problematic.

This static eliminator is desktop design with LED display of ion balance, air flow stepless adjustable. When the ion balance of this static eliminator exceeds the setting range, there will be an alarm sound.

3.Product Characteristics


- DC static eliminator with multiple ion emitters, high ion density and good stability.
- The LED displays the ion balance in real time, and it has ion self-balancing function and good stability.
- The alarm range of ion balance can be set by yourself. When the fan fails or the ion balance is abnormal, there will be an audible and visual alarm.
- Speed-adjustable fan generates large area ion airflow, air flow stepless adjustable.
- With RS485 communication port, the machine can connect with computers, and up to 99 units can be connected, convenient for data control.
- Filter mesh fixed by magnet, easy cleaning for ion emitter.
- The output ratio of positive and negative ions is adjustable, which can be used to adjust the ion balance.
- Compliant with safety certification, with electromagnetic protection function, will not cause electromagnetic interference to other equipment.

4.Product Specifications

Product Model	443C
Power Consumption	20W (Max)
Ion Balance	$\pm 10V$
Range of Ion Balance Alarm Values	$\pm 15V \sim \pm 50V$
Operation Ambient	0~50°C, 40%~60%RH
High-voltage Output	DC $\pm 5.0KV$
Effective Range	40cm*150cm
Audible Noise	<45dB
Dimension(L*W*H)	244.5*152.5*80mm
Weight	About 2.5 kg

5.Static Eliminating Time Testing

Static eliminating time(S):

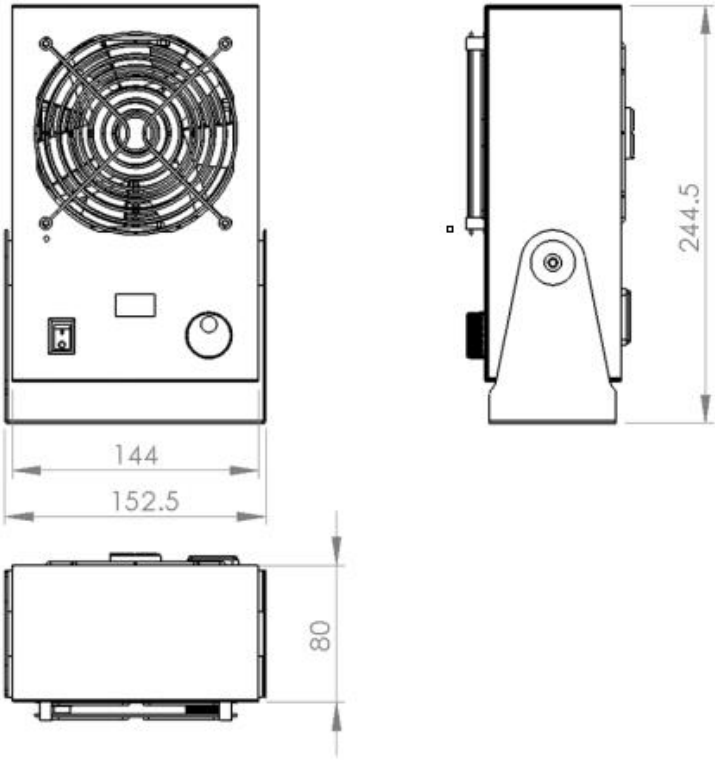
	30cm	60cm	90cm	120cm	
	1.8	3.3	5.9	9.0	15cm
	1.2	2.5	5.2	8.3	Center Line
	1.8	3.3	5.9	9.0	15cm

Note: Test steps should be proceeded in the environment of $22\pm 2^{\circ}\text{C}$ & $45\pm 5\%$ RH.

- 1) The ion balance and static eliminating time are tested with an electrostatic tester according to the ion standard of the American ESD Association (in line with the international ESD standard ANSI/ESD-S20.20-2021).
- 2) The static eliminating time from 1000V to 100V tested according to the position in the table above.
- 3) The test value will vary with difference of temperature, humidity, air pressure and ambient environment.

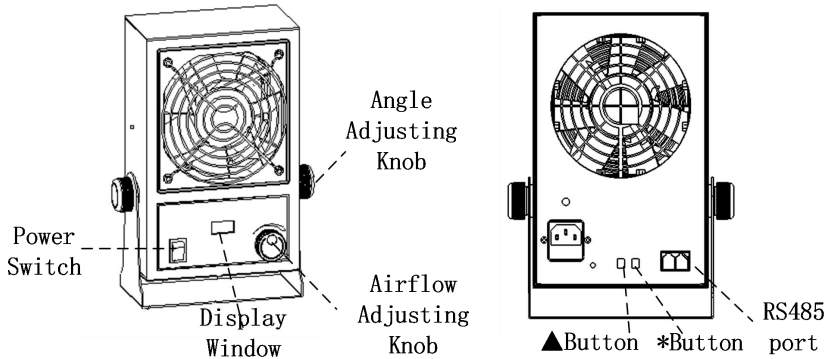
6.Functional Descriptions

6.1. Dimensions



Unit: mm

6.2. Part Descriptions



7. Installation

- 1) The base of the static eliminator can be directly placed on the workbench or fixed on the wall and partition.
- 2) When using the static eliminator, it should be placed in working area where static electricity need to be eliminated. The ion air should cover a large area as much as possible, and it should be about 300-900mm away from the object to be eliminated.

8.Operation

1) Connect the power cord

2) Turn on/off the power switch


Turn on the power switch, the power indicator light is on, and the static eliminator starts working with ion airflow out. Turn off the power switch, the power indicator light is off, and the static eliminator stops outputting ion airflow.

3) Airflow adjustment

Adjust the airflow adjusting knob to select suitable airflow. Adjust clockwise to increase the air volume; adjust counterclockwise to decrease the air volume.

9.Menu Setup

1) On the back of the machine, there are two buttons "▲" and "*", which are used to set the ion balance alarm range and the password to enter the menu settings. The initial password is 000.

2) Turn off the power switch, press "*" button and turn on the power switch at the same time, the LED window displays "  ", and then display "-", indicating it has entered the password inputting state.

3) In the password inputting state, there are 2 chances to input the correct password. The input method is as follows:

① Set the hundreds digit first, and press the "▲" key to change the displayed value. When the required digit is displayed, press the "*" key to enter the tens digit setting.

② The setting method of tens digit and one digit is the same as that of hundreds digit.

③ If the input password is correct, press the "*" key to enter the menu interface immediately;

④ If the inputting password is wrong, it will come into the secondary password inputting.

⑤ If the password input for the second time is wrong, press the "*" key to enter the working interface, and the LED window displays the current ion balance.

4) Input the initial password 000 to enter the menu setting, there are three menus for selection: "-1-", "-2-" and "-3-". In the menu interface, press the "▲" key to selection, then press the "*" key to confirm and enter this menu setting.

"-1-" : Exit the menu interface

After selecting this menu, press the "*" key to exit the menu setting immediately.

"-2-" : Ion balance alarm value setting interface

After selecting this menu, press the "*" key to enter the menu setting, and press the "▲" key to set the ion balance alarm value. The range of ion balance alarm value: 15~50 (ie $\pm 15V \sim \pm 50V$).

Note: The default value of the system is "30", if the ion balance exceeds -30V to +30V, and it will alarm immediately.

"-3-" : Password modification interface

After selecting the menu, press the "*" key to enter the menu setting, then press the "▲" key to input the password. The password modification method is the same as the password input. To change the password, you need to input the new password twice, and please make sure the two passwords you input are the same to change the password successfully.

The static eliminator has on-line function, with the specially designed communication software, it can monitor the working condition of the static eliminator (up to 99 units can be monitored at the same time).

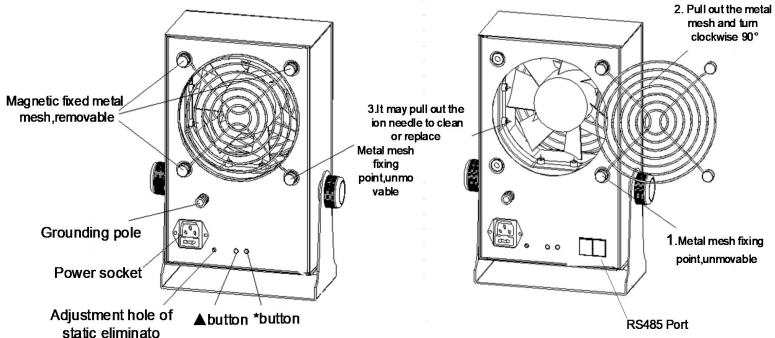
10.Maintenance

10.1. Replacing the Ion Emitter

⚠ Warning: There is a high voltage inside the static eliminator, so when professionals clean or replace the ion emitter, they must discharge the two adjacent ion emitters before proceeding.

- 1) The metal mesh from the back of the static eliminator is magnetic fixed, which can be rotated to open for ion emitter maintenance.
- 2) Ion emitter cleaning: remove the brush attached to clean the emitter.
- 3) Replacing the ion emitter

The ion emitter is fixed by plugging and can be removed with needle-nose pliers and replaced with a new emitter.



10.2. Ion Output Measurement

Measure the static eliminating time and ion balance with the 432A charge plate monitor.

11. Troubleshooting

11.1. Error Display

When there is a problem with the ion output, the LED window will display various error markers and sound alarm.


- "Err": indicates no ion output or sensor error.
- "--": The ion balance is positive but the deviation is too large.
- "---": The ion balance is negative but the deviation is too large.

11.2. Troubleshooting

ERROR: The air is flowing but the static is not eliminated

CHECK: Does the dust or other objects cover the ion emitter?

ACTION: Clean the ion emitter.

 **Note: If the problem cannot be solved according to the above list, please contact our company or local agent.**

Warranty Card

●The warranty period of this product is calculated from the date of Purchase. During the warranty period, if the product breaks down during normal use, show the original warranty card and enjoy free service in the authorized repair company(or our company). Please keep the purchase certificate and this warranty card and show it before maintenance.

●During the warranty period, the following repairs need to be paid:

- a.Unable to offer valid warranty card or certificate;
- b.The purchase date, sales company and other items are not completely filled or the warranty card is altered;
- c.Damage caused by failure to follow the use methods and precautions in the manual;
- d.Damage caused by disassembly, repair and modification of products without authorization of the manufacturer;
- e.Replacement of vulnerable and consumable parts.

●All items of the warranty card shall be completely filled in by the agent or user to obtain a 12-month warranty period.

●Please keep this warranty card properly It will not be re-offered after.

QUICK INTELLIGENT EQUIPMENT
CO., LTD.

ADD: NO.11, FengXiang Road, Wujin
High-Tech Industrial Development
Zone, Jiangsu, China

TEL: 86-519-86225678

FAX: 86-519-86558599

POSTCODE: 213167

WEBSITE: www.quick-global.com

Warranty Card

Type: _____

Model No.: _____

Serial No.: _____

Delivery Date: _____

Warranty File Card

Type: _____

Model No.: _____

Serial No.: _____

Delivery Date: _____

Address : _____

Postcode: _____

Telephone: _____

Contact Person: _____

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