

User Manual

Static Eliminator DC Ion Fan



Part Number: MP7410644

Safety and Warnings

- | | |
|---|---|
|  Warning | Failure to comply with a WARNING may result in serious injury or death. |
|  Attention | Failure to comply with a ATTENTION may result in injury to the operator, or damage to the items involved. |
|  Danger | Danger high voltage, warning electric shock |

Warning

- Read all information before use.
- Power off when not in use or unattended. Place the soldering iron handle the iron stand. This tool must be placed on its stand when not in use.
- Keep this product away from flammable materials. When using, please inform other people in the area near the machine. Please do not touch the machine because of high temperature
- Do not apply to the same place for a long time.
- Be aware that heat may be conducted to combustible materials that are out of sight.
- Do not leave the appliance unattended when it is switched on.
- This appliance is not intended for use by persons (including children) with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they have been given supervision or instruction concerning use of the appliance by a person responsible for their safety.
- Children should be supervised to ensure that they do not play with the appliance.
- Cleaning and user maintenance shall not be made by children without supervision.
- If the supply cord is damaged, it must be replaced by the manufacturer, its service agent or similarly qualified persons in order to avoid a hazard.

Attention

- Before switching on the power supply, ensure that the voltage of the product conforms to the applicable local voltage to avoid permanent damage to the machine
- Do not touch the fan and ion emitting needle when power is on.
- Do not fill stuffs through the air inlet and outlet location.
- The unit generates high voltage inside, please clean up ion needle by professionals.
- Do not use this product if you are inexperienced or have no sufficient necessary knowledge without the guidance of related personnel.
- Do not use this product under wet environment or with wet hands to prevent electric shock.
- To ensure the normal operation of this product's grounded function, make sure that the power supply is well grounded when connecting the machine.
- Before carrying out any cleaning or maintenance work, always make sure that the appliance is disconnected from the mains supply by unplugging the power cord from socket-outlet.
- Please use the accessories from the original factory when replacing the product parts.
- Do not play or do other similar dangerous actions when using this equipment, because it can easily lead to injury to others or yourself.
- Do not use it for any purpose other than the function of the product, to avoid machine damage or personal injury.
- Do not modify this product and its accessories, otherwise the original warranty will be invalidated or damage may occur to the product.
- When plugging and unplugging the power cord and handle plug, please hold the plug body and do not pull the cord.
- Do not hit the product or its accessories too hard during the operation; otherwise damage may occur to the product.

Package list and description

Contents



Ion Fan



Power Cord x 1



Ground Wire x 1

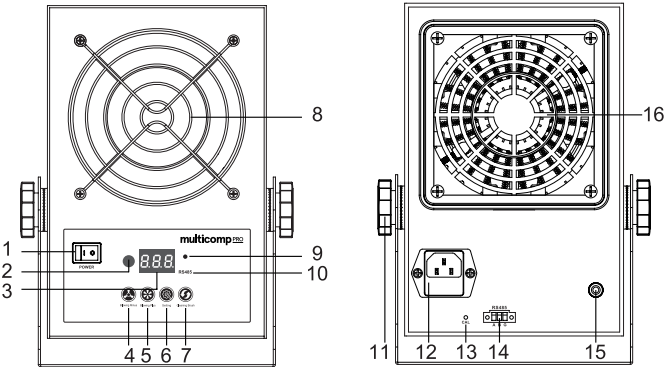


User Manual



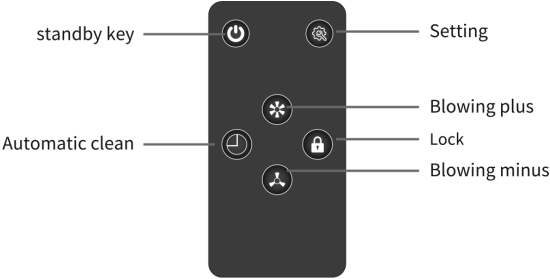
Remote Control

Panel Description



- | | |
|-----------------------|-------------------------------|
| 1 . Power switch | 9. Indicator light |
| 2. Infra red receiver | 10. RS485 indicator |
| 3. LED display | 11. Adjustment knob |
| 4. Airflow reduction | 12. Power interface |
| 5. Airflow increase | 13. Calibration |
| 6. Menu setting | 14. RS484 interface |
| 7. Cleaning brush | 15. Metal ground rod |
| 8. Dust proof cover | 16. Auto cleaning device mask |

Remote control button description



Specifications

Rated operating voltage	: AC 220-240V~50/60Hz
Output voltage	: DC 4KV - 5KV
Ozone protection	: <0.01 PPM
Power	: 20W
Air volume	: ≤ 2.4m ³ /min
Static elimination time	: ≤ 1.2S\
Ion balance	: ≤ ±10V
Range of Ion balance alarm values	: ±15V - ±50V
Ion balance adjustable	: yes
Effective range	: 400×1500mm
Screen	: LED display
Ion emission needle	: Terminal
Computer control	: Support
Work conditions	: Use in indoor environments with normal oxygen levels
Dimension	: 146mm(L) × 85mm(W) × 238mm(H)
Weight (N.W.)	: approx 3.16Kg

Operating instructions

Operation

- Place or fix static eliminator AC Ion fan in a stable working environment, connect the power cord to the power socket on the rear panel.
- Turn on the power switch, the screen displays the version number, air volume level, and the indicator light flashes blue, after the cleaning brush starts to work for 3-5 seconds, the static eliminator ac ion fan will enter normal operation state and the indicator light will display as green.



(version 1.0)



Working interface

Air volume adjustment:

- Under the main menu, short press “” or “” key, adjust the appropriate air volume level according to the work requirements. (Air volume range: F01-F05, F01 minimum air volume F05 maximum air volume)



Air volume level display

- [] Blowing minus
- [] Blowing plus

Menu setting

- Timing automatic clean setting
 - Under the main menu, short press “” key to enter automatic clean menu. (factory default: automatic clean per 8 hours)
 - Short press “” or “” key to enter automatic clean time. (Set range: (01-999 hours)
 - Wait for 5 seconds after set, the system will automatically save the setting or press “” to save the setting and enter next menu.



Timing automatic clean setting

Cleaning key:

Timing automatic clean setting

Short press “” key, the cleaning brush will start to clean ion emitting needle.

Recommendation: Depending on the dust condition, manually clean it once a week.

Ion balance alarm value setting

Use the remote control to lock the machine panel, panel keys can not be operated, if the user remote control is lost or run out of battery, long press “” + “” key for 3s, to unlock the panel.



Lock display

Restore factory setting:

Long press “” key for 10s, to restore factory setting.

Factory default:

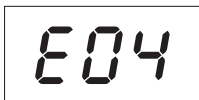
Timing automatic clean time [808] Address [R01]

Ion balance alarm value [R01]

Alarm function:

- Fan fault alarm:

When the fan fails, the screen displays the fan fault code [E04], the indicator light will be displayed as red, the buzzer will ring, ion fan stop working.

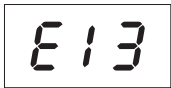


Fan fault code

When the fan runs normally and meets obstacles, the fan will automatically short-circuit and stop working, the indicator light will be displayed as red, the buzzer will ring. Restart after the obstacle cleared, the machine will return to normal operation.

High voltage fault alarm:

When the high voltage is detected as OV, the screen displays the high voltage fault alarm code **E13** the indicator light will be displayed as red, the buzzer will ring, the ion fan stops working and enters standby state

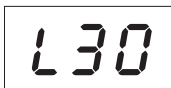


High voltage fault alarm code

Ion balance alarm value setting:

1. Under the timing automatic clean setting, short press “” key to enter ion balance alarm values setting.
(factory default: **L30**)
2. Short press “” or “” to set the ion balance alarm values parameter (Set range: L 15-L50).
3. Wait for 5 seconds after set, the system will automatically save the setting, or press “” to save the setting and enter next menu.

[When ion balance value exceeds the set value, the buzzer will ring]



Ion balance alarm value

Ion auto-balance function:

It has ion auto-balance function, auto-balance range ± 1 OV, and can display the balance voltage in real time.

Address setting:

1. Under the ion balance setting, short press “” key to enter address setting. (factory default: **A01**)
2. Short press “” or “” key to set the address parameter. (Set range: A01-255).
3. Wait for 5 seconds after set, the system will automatically save the setting, or press “” to save the setting and enter next menu.

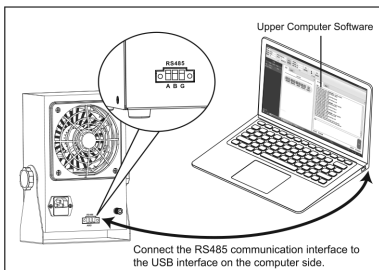


Address

RS485 Communication:

As shown in the diagram on the right, use communication cables to connect the RS485 interface of this product to the USB interface on the computer.

On the computer side, upper computer software can be used to control the ion fan machine with commands. (When sending commands, the “RS485” indicator on the machine panel will flash green).



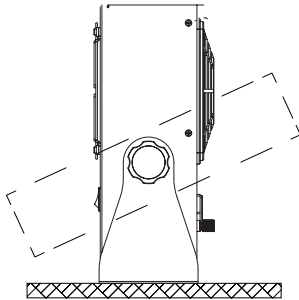
Please visit the product page on the Farnell website to download the corresponding driver software, DEMO software, and communication protocol documents.

Adjust angle of static eliminator AC Ion fan:

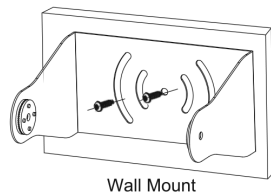
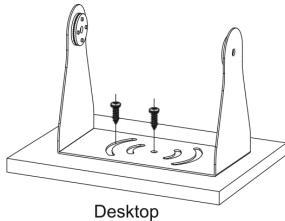
The orientation of the air outlet can be adjusted according to the operating environment, with 10° as one gear and 0-265 air outlet adjustable

It is recommended that the distance between the static eliminator ac ion fan and the workplace between 30cm and 90cm. If the static electricity need to be neutralized quickly, the recommended distance is 15cm

Under working, try to make the ion wind cover a large area of the work place. The direction of the ion wind can be adjusted by tilting the fan.



According to the use environment, the ion fan bracket supports placed on the table or hung vertically.



Static eliminator Ion fan maintenance

Automatic clean

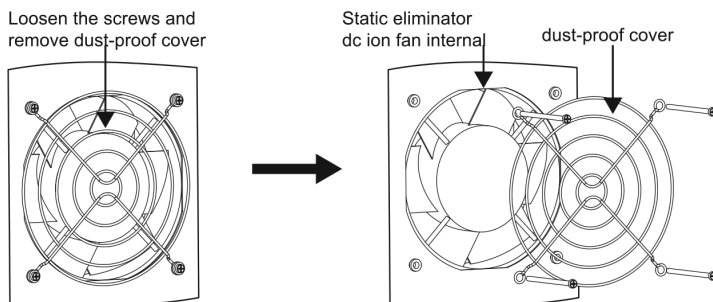
- Timing automatic clean can be set through the menu, which can reduce frequent manual maintenance. Depending on the dust condition, manually clean it once a week.
- Ion emitting needle change and clean

⚠ Danger

- The unit generates high voltage inside, professionals needed when change or clean up ion needle, turn off power before clean, and wait the ion emitting needle discharge for 5 mins

Clean dust-proof cover:

- Remove the cover dust-proof cover and dust-proof sponge from the static eliminator ac ion fan, and clean it with a soft brush, cloth or ultrasonic equipment.

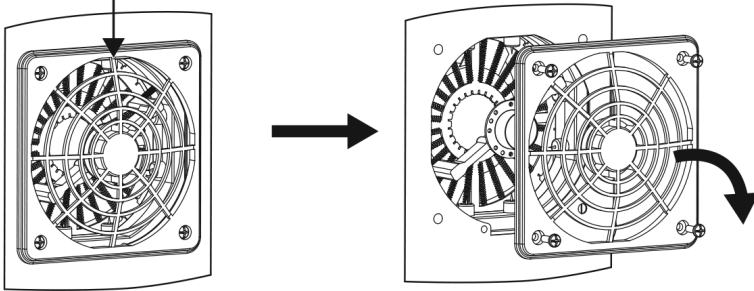


Automatic cleaning device:

- Remove the automatic cleaning device from the static eliminator AC Ion fan, after the Ion emitting needle has completely discharged, clean it with a soft brush, cloth or ultrasonic equipment.

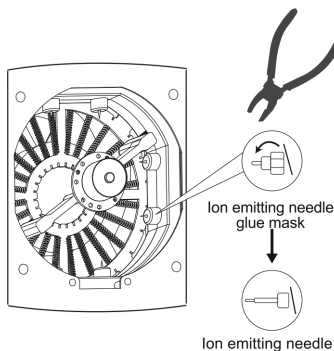
⚠ Note: The ion emitting needle is sharp, pay attention to safety when cleaning.

Loosen the screws and remove automatic cleaning device.



Change ion emitting needle:

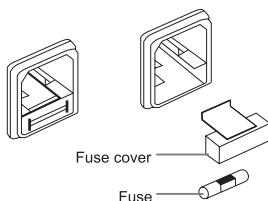
- Turn off power and wait for the ion emitting needle to discharge for 5 mins.
- Remove cleaning device.
- If the tip of emitting needle is passivated, it needs to be replaced;
- Use pliers to remove the ion emitting needle glue mask;
- Pull out the passivated emitting needle and replace it with a new one. (Please use only manufacturers approved parts)



⚠ Note: The ion emitting needle can be changed according to the use, otherwise it will have a serious impact on static electricity elimination ability.

Changing fuse:

- After power off, unplug the power cord from the power socket;
- Remove the fuse cover and remove the fuse;
- Replace new fuse; (Please use identical type and rating as original)
- Put the fuse cover back.



Maintenance

Danger

- This device should be maintained by qualified electric technician or service personnel squalified to check the fault or dean the machine.
- Before canying out any cleaning or maintenance work, always make sura that the appliance is disconnected from the mains supply by unplugging the power cord from socket-outlet

Description	Reason	Guide
Unable to start	Fuse unequipped or damaged	Check if the fuse is damaged (if so, please use identical type and rating as original)
	Poor contact of cover connector.	Check.whether the back cover connector is damaged or deformed. If there is any problem, replace it in time or adjust it to a reasonable position.
	Motherboard fault	Please contact your supplier for assistance.
Reduction in electrostatic removal capacity	Ion emitting needle dust affects performance.	Use automatic clean function.
	The upper limit value is too small.	Reset the upper limit.
The voltage on the screen is abnormal	Emitting needle passivation.	Please contact your supplier for assistance.
	Ion emitting cover dust affects performance.	Clean ion emitting cover.
	No high voltage output.	Please contact your supplier for assistance.



INFORMATION ON WASTE DISPOSAL FOR CONSUMERS OF ELECTRICAL & ELECTRONIC EQUIPMENT.

When this product has reached the end of its life it must be treated as Waste Electrical & Electronic Equipment (WEEE). Any WEEE marked products must not be mixed with general household waste, but kept separate for the treatment, recovery and recycling of the materials used. Contact your local authority for details of recycling schemes in your area.



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