

Instruction manual

We welcome customers from all over the world

We strongly recommend that you take good care of your product and make sure to follow the instructions in the user manual at all times. If your use meets the following requirements, the products you own can provide you with longer-term and better service.

1 For safety reasons, please observe the following

Please read the user manual carefully before using,checking the following safety measures to avoid personal damage and damage to the equipment. To avoid danger, use properly as directed.

WARNING

- This product must not be disassembled without authorization, which will cause product failure, electric shock or even fire, and there is no warranty.If repairs are required, please contact us directly.
- Do not use in hazardous places such as explosives and flammables.
- Do not use the product in direct sunlight or where the surrounding temperature and humidity are beyond the rated range.
- Please do not use the product in places with strong electromagnetic and electric field interference, and will be directly subject to vibration or shock.
- If you do not clean it, you will not be able to fully eliminate static electricity, which may cause fire or malfunction.
- Cleaning should be done regularly (based on 1 week), as if you do not clean it, you will not be able to fully exert your ability to eliminate static electricity.
- High voltage applied to the discharge needle may cause electric shock, so do not touch the ion needle during power-on.
- If used in a confined place, the air ions contain ozone, so be sure to ventilate.
- Do not look directly at the white LED and infrared, as this may cause injury to the eyes.
- Be sure to ground the product (F.G.) If the terminal is not grounded, it may not be able to remove static electricity normally.
- This product is specially designed and produced for general industry, and any abnormal use will have the potential danger of failure, electric shock and fire.

CAUTION

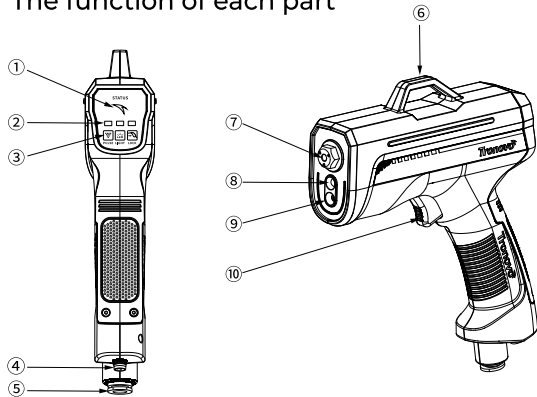
- Do not use this product for purposes other than static electricity.
- Do not use this product outside of the specifications as it may cause an accident or malfunction.
- Do not use fluids or corrosive gases other than dry and clean air, as this may cause accidents or malfunctions.
- Do not use in air containing oil mist and dust, as air containing oil mist and dust will cause product performance to deteriorate.Shortened or damaged maintenance intervals. Install an air filter or air dryer for proper treatment.
- Be sure to perform wiring and inspection work with the power turned off. Failure to do so may cause electric shock or malfunction.
- After wiring, please confirm the wiring status before turning on the power supply.
- If the discharge continues without an air supply, the increase in ozone concentration will oxidise the product and may result in a malfunction or accident.
- When supplying air through an ON/OFF valve, etc., please discharge it ON/OFF at the same time.
- Do not use this product in places with excessive water vapor, dust, water, oil, or high temperature and humidity.
- Do not touch the tip of the discharge needle with a hard object such as a tool, as it may cause an accident or malfunction.
- Do not turn on the power supply while the discharge pin unit is being removed.
- Do not use for a short period of time (1S) after the power is turned on.
- Please fix the product body and bracket firmly when setting, as insufficient fixation may cause accidents and malfunctions.
- If this product cannot be used or is not needed, dispose of it appropriately as industrial waste.

2 Outline

This product is an air gun type static eliminator that uses corona discharge to generate ions, and is equipped with an intermittent blowing function for effective dust removal.It can be switched with the continuous blowing function.

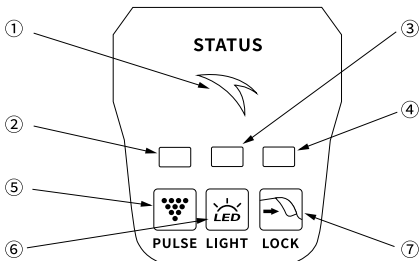
With a built-in high-brightness LED dust detection light and laser-assisted positioning, dust adhering to the workpiece can be easily seen. By high-speed air The combination of gas and ions not only removes foreign matter, but also prevents foreign matter from re-attaching.

3 The function of each part



Part number	Feature description
①	Status indicator
②	Function indicator
③	Function buttons
④	Power connector
⑤	Tubing Quick Couplings (Ø8mm)
⑥	Hooks, which can be used to hang this product when not in use
⑦	Blow-off nozzles
⑧	Dust detection lamp
⑨	Laser-assisted positioning
⑩	Activate the trigger

4 Functions and status displays



Numbering	Name	Panel display	Type	Content
①	Status indicator		LEDLamp	Operational status indication
②	Pulse indicator		LEDLamp	No light on-direct injection blow mode Green light on-Pulse blow mode
③	Lighting and laser indicators		LEDLamp	No lights-lighting and laser off Orange light on-illumination off, laser on Blue light on-illumination on and laser off Purple light on-the illumination is on, and the laser is on
④	Trigger linkage indicator		LEDLamp	The light is not on-the trigger works in mode Green light on-Trigger lock mode
⑤	Pulse control keys		keystroke	Continuous and pulsed blow mode switching
⑥	Lighting and laser control keys		keystroke	Switch on and off the light mode
⑦	Trigger linkage control key		keystroke	Trigger working mode switching

5 Work matrix

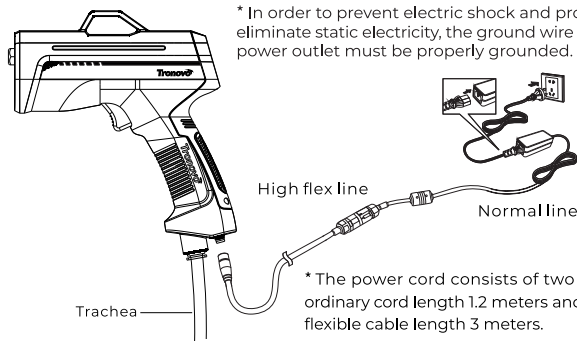
Description of common working modes and lighting status.

Function	Function lights (Lights up: extinguish:)					Illustrate
	Pulse lights	Dust detection lights and lasers			Trigger indication	
	Green	Orange	Blue	Purple	Green	
Mode 1						Blow continuously, trigger normal action Dust detection light and laser positioning turned off
Mode 2						Pulse blowing, trigger normal operation Dust detection light and laser positioning turned off
Mode 3						Blow continuously, trigger lock Dust detection light and laser positioning turned off
Mode 4						Pulse blowing, trigger locking Dust detection light and laser positioning turned off
Mode 5						Pulse blowing, trigger normal operation The dust detection light is turned off and the laser positioning is turned on
Mode 6						Pulse blowing, trigger normal operation The dust detection light is turned on and the laser positioning is turned off
Mode 7						Pulse blowing, trigger normal operation The dust detection light is turned on, and the laser positioning is turned on
Mode 8						Pulse blowing, trigger locking The dust detection light is turned on, and the laser positioning is turned on

6 Piping connections

As shown in the figure below, air is supplied from the air piping interface under the main unit. Use an air sleeve with an outer diameter of ø8 mm.

Please use the AC adapter specified by us, insert the connector of the cable into the connector of the air gun type main unit, and rotate the screw to fix the connector.



* In order to prevent electric shock and properly eliminate static electricity, the ground wire of the power outlet must be properly grounded.

NOT USE ④ ② 0V / F.G.
+24V DC ③ ① NOT USE

Power interface pin description

By air purging, dust can be prevented from adhering to the electrode needle (supply air pressure: 0.15 to 0.7 MPa), and at the same time, the static elimination speed and the static elimination area can be increased.

CAUTION

- * Please be sure to ensure the supply of air. Without an air supply, static electricity cannot be effectively eliminated.
- * Be sure to use clean and dry air. Failure to do so may result in an accident or malfunction.
- * Be sure to keep the air pressure below 0.7 MPa. Failure to do so may result in an accident or malfunction.
- * Clean air supplied with a clean gas free of dust and oil mist (compressed air quality class 1,1,1 to 1,3,1).
- * In addition, please use a gas that does not contain organic matter or an inert gas.

Compressed air quality rating specified in ISO8573-1

Grade	Maximum particle size (μm)	Contains moisture at dew point (°C) pressure 0.69 MPa	The amount of oil remaining (mg/m³)
1	0.1	-70 (-83)	0.01
2	1	-40 (-58)	0.1
3	5	-20 (-42)	1

Example: "Class 1,3,1" means a solid particle of 0.1 μm, a dew point of -20 °C under pressure, and an oil concentration of 0.01 mg/m³.

7 How it works

CAUTION

- * Do not contact the metal part of the nozzle with the conductive parts of the external machine or objects with different potentials.
- * Do not modify the nozzle and install other parts.
- * Do not look directly at the white LEDs and lasers as this may cause damage to the eyes.

The power supply is turned on

After connecting the AC adapter to the power supply, the STATUS operation indicator lights up green, and the ion dust removal starts when the trigger trigger is pulled, and stops working when the trigger switch is released. The ion generation and solenoid valve operation sequence is gas first and then electricity.

Choice of blowing function

There are two ways to blow in

① Blow continuously

Press the trigger to start blowing to remove dust, and release the trigger to stop blowing.

② Pulse blowing

Press the PULSE key , and the upper indicator shows green Press the trigger to turn on the pulse blowing dust removal mode,Intermittent blowing through pulses saves air and improves dust collection.

Dust detection lamp

Dust can be easily spotted, press the LIGHT button , the indication shows blue or purple, and the dust detection light is turned on. It can be used in conjunction with triggers and pulses. Help staff check dust before and after dust removal.

Standard for the irradiation range of dust detection lamps
distance 50 mm Ø100 mm
distance 100 mm Ø200 mm

Laser-assisted positioning

The laser positioner that can quickly lock the position, press the LIGHT button , the indication shows orange or purple, the laser assisted positioning is turned on, and can be used in conjunction with the trigger and pulse.

Selection of trigger settings

The trigger has two ways of action.

① Normal action

In this mode of action, the trigger and purge are linked.

② Trigger lock

Press the LOCK key to indicate a green trigger lock.

It can be used in conjunction with pulse, dust detection light, and laser positioning functions.

8 Maintenance

Regular maintenance is important to maintain the performance of the product, so please follow the following items for regular maintenance. After long-term use, dust and dirt can adhere to the needle and its surroundings, so it should be cleaned regularly. If you do not clean it, you will not be able to fully exert the effect of static suppression, which may cause accidents or malfunctions.

⚠ CAUTION

* Please be sure to carry out maintenance and maintenance operations when the power is turned off and disconnected.

* Please pay attention to whether the tip of the ion needle is sufficiently clean.

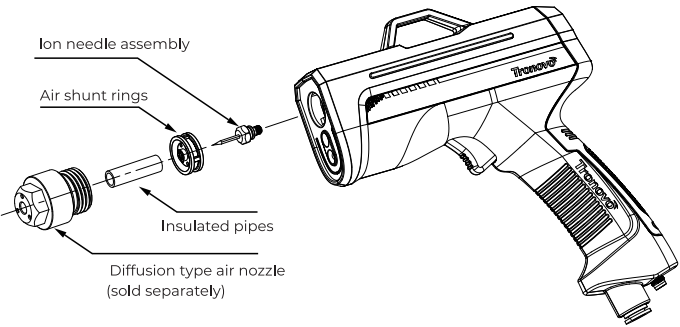
* The ion needle is very sharp, please do not touch it. If you touch the ion needle directly with your fingers, it may cause injury.

Maintenance varies depending on the usage environment, but please do it once a month. The ion needle has a service life, if the power removal effect cannot be restored after cleaning, it is recommended to replace the ion needle assembly. It is recommended to replace the needle assembly with a benchmark of 10,000 hours.

Ion needle assembly removal/installation steps

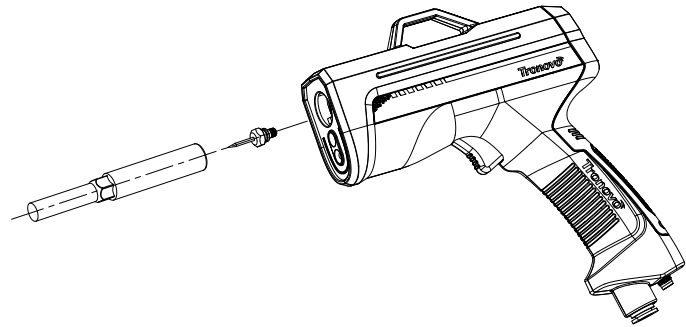
Confirm that the power is off.
Rotate the disassembly nozzle in a counterclockwise direction.
Rotate counterclockwise to disassemble the ion needle unit (3mm hexagonal deepening socket screwdriver can be used, etc.).
Wipe the electrode needle with a cotton swab dipped in isopropyl alcohol or ethanol and any dirt around it (the inner part of the nozzle, etc.).
Ion needle assembly installation: After cleaning, rotate the discharge needle unit in a clockwise direction to install the discharge needle unit, and the tightening torque should be 0.1 nm or less.

Remove or install the needle assembly as illustrated



Use a 3 mm hex socket to install the ion needle assembly

Accessories are sold separately with T05.00002 ion needle assembly



(Note 1): Please check the mounting position of the ion needle assembly, as it may not work properly due to assembly errors.
(Note 2): Do not apply excessive force when rotating the needle assembly.

9 Troubleshooting

Symptoms and displays	The main reason	Countermeasures
STATUS Status alerts The indicator light is red	The ambient temperature is too high Condensation foreign body F.G. is not connected The processor is working abnormally The drive module is faulty	Adjust the ambient temperature There is a possibility of abnormal discharge The nozzle has a conductive substance Confirm that the socket is grounded Inspect the product for foreign objects Please contact the service center for repair
STATUS Running normally Static electricity dissipates too slowly or unable to dissipate	Ionic needles are soiled or worn Whether or not air is supplied Insufficient voltage or current The drive module is faulty	Clean or replace the needle assembly Please standardize the use of supplied air Confirm that the adapter is original Contact the service center for repairs
Dust detection lamp Not bright or not bright enough	Whether the power cable is properly connected Insufficient voltage or current The LED light assembly is faulty	Connect the power cord properly. Confirm that the adapter is original Contact the service center for repairs
Laser infusion indication Not bright or not bright enough	Whether the power cable is properly connected Insufficient voltage or current The laser module is faulty	Connect the power cord properly. Confirm that the adapter is original Contact the service center for repairs

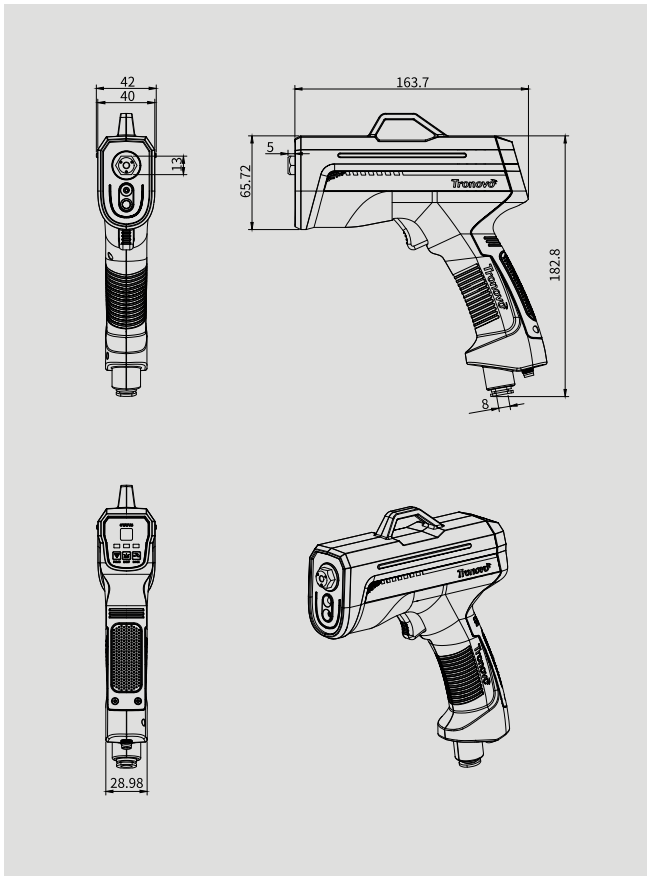
10 Warranty

Your Tronovo onizer comes with a one-year free warranty from the date of purchase. When purchasing a product, please ask for a formal purchase invoice and indicate the original purchase date for safekeeping. The product warranty card is a three-guarantee certificate (only refers to products purchased in Chinese mainland). Tronovo products enjoy the third national standard package regulations as well as related product quality and after-sales service regulations. The purchaser bears all mailing and shipping costs for repairing the device, including insurance. Except as otherwise provided by law, Tronovo shall not be liable for any breach of warranty obligations which expressly or impliedly apply to this product Liability for any direct and indirect damages. In the event of any conflict between the warranty card and other relevant instructions of Tronovo and the relevant laws and regulations of the country, the relevant laws of the country shall be complied with statutes and Regulations.

Not Covered by Warranty

1. The faulty product exceeds the warranty period.
2. The equipment cannot be used normally or destroyed due to human factors and abuse beyond the scope of use of the equipment.
3. In the event of accidental damage, Tronovo reserves the right to determine the warranty.
4. The customer disassembles, repairs, or modifies the product in a manner not mentioned in the instruction manual.
5. The serial number of the product is missing, altered or defaced to the point where it is illegible.

11 Dimensions

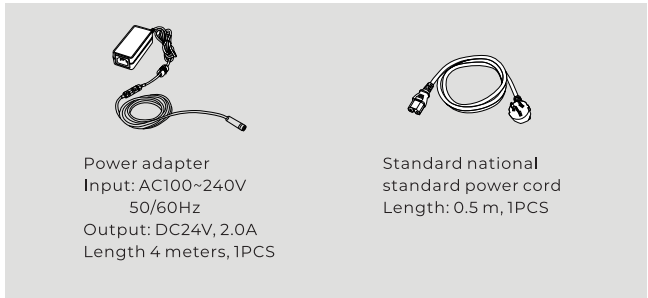


12 Confirm the packing list

The following documents and accessories are included in the product package.

- | | |
|--|------|
| 1. DG25P Pulse Ion Air Gun | 1PCS |
| 2. Power adapter + flexible extension cable | 1PCS |
| 3. Power cord | 1PCS |
| 4. Factory test report | 1PCS |
| 5. Certificate of Conformity and Warranty Card | 1PCS |

* This product is only available in electronic version



13 Product Specifications

Project	Class	Economical
	Model	DG25P
Voltage		24V DC±5% (100-240V~50/60Hz 1.5A)
Current		0.5A or less
Discharge		0.6S (Note 1)
Balance		≤ ±10V (AVE)*1 (Note 1)
Ionization techniques		High-frequency AC method
Use fluids		Air (Note 2)
Input gas		0.15~0.7MPa
Supply air temperature		0 to+50°C
Connect		Outer diameter ø8, inner diameter ø6
Ozone		≤0.03ppm @ 30cm (Note3)
Pulse mode		Support
Trigger linkage		Support
Lighting mode		Support
Operating environment		0~+50°C (note no condensation), 35~65%RH
Size / weight		182.8×163.7×42mm/Approx.350g
Material		Housing: Plastic, Nozzle: Stainless Steel Discharge Needle: Tungsten
Weight		The body is approximately 350 g
Warranty		One - year

(Note 1): Typical value when the external pressure is 0.4 MPa when the diffuser air nozzle is applied at 150 mm from the front of the ejection part.(Measured by samples that have been placed in an environment with a humidity of 65% RH or less for more than 24 hours)
(Note 2): Dry and clean air is air that passes through an air dryer (dew point of -20°C) and a filter (mesh size of 0.01 μm).Compressed air quality class 1,1,1 to 1,3,1 according to ISO8573-1:2010.
(Note 3): The power supply voltage is 24 V, 300 mm from the front of the ejection part, and a diffusion air nozzle is used.Typical value at an applied pressure of 0.25 MPa.
(Note 4): This is a representative value under Angstromstrom measurement conditions and is not a guaranteed value.

* For the convenience of product improvement, the appearance and specifications of the product may be changed without prior notice.