

Instruction Manual

Over-Head Fan-Type ionizer 【DTY-HA01】

Thank you very much for your purchase of DTY-HA01. Although this product is not classified as a high-voltage device under any electrical equipment standard, it uses a high voltage. Please read this manual diligently to carefully and correctly handle this unit. Keep this manual on hand for your reference and consult it repeatedly as required.

1. Safety Precautions

⚠ WARNING

This product is not designed to be explosion proof. Do not locate it or use it in any location or environment where flammable gas or solvents are used. Doing so creates the risk of fire and explosion.

High voltage is applied to the discharge needle. Keep your fingers and other body parts, as well as wires, tools, and other conductive objects away from it. Such conditions can cause electric shock and malfunction.

The tip of the discharge needle is a sharp point. Exercise sufficient care when handling the needle. Careless handling creates the risk of personal injury.

Never attempt to disassemble, repair, or modify the product in any way. Doing so can cause accident or malfunction.

Be sure to turn off power before performing wiring, installation, or inspection work. Failure to do so can cause accident, electric shock, or malfunction.

For information about other warnings, refer to the "Safety Precautions" section in the Static Electricity Removing Unit Ionizer catalog (Catalog No. R0003-2).

⚠ CAUTION

This product has a high-voltage generating device built in. Keep it away from areas where water or oil can get on it, and do not locate it in areas that are subjected to high temperatures and humidity. In particular, do not use this product in areas subjected to high humidity and condensation.

Always be sure to ground the ionizer. Failure to do so can cause poor static electricity removal and malfunction.

When the product is no longer usable or is no longer needed, dispose of it appropriately as industrial waste.

Make sure to grasp the plug when removing the power cord. Pulling the power cord by the cord may cause it to break, or become damaged and have its core be exposed, which may cause a short circuit, or current leakage and electrocution.

Be sure to perform wiring correctly. Incorrect or improper wiring can cause malfunction.

This product has a high-voltage generating device built in. While power is being applied to the product, keep metal objects away from the discharge needle to avoid abnormal discharge. Such conditions can cause malfunction of or damage to the product and/or its peripherals.

This product cannot be used if the medium or ambient atmosphere includes any of the substances below. Organic solvents, phosphate type hydraulic oil, sulfur dioxide gas, chlorine gas, or acids.

The life of the discharge needle depends on operating environment conditions. Periodic maintenance is required because performance will deteriorate if the product is used in a bad operating environment (high humidity, etc.) or if the discharge needle is not cleaned.

For information about other precautions, refer to the "Safety Precautions" section in the Static Electricity Removing Unit Ionizer catalog (Catalog No. R0003-2).

2. Outline

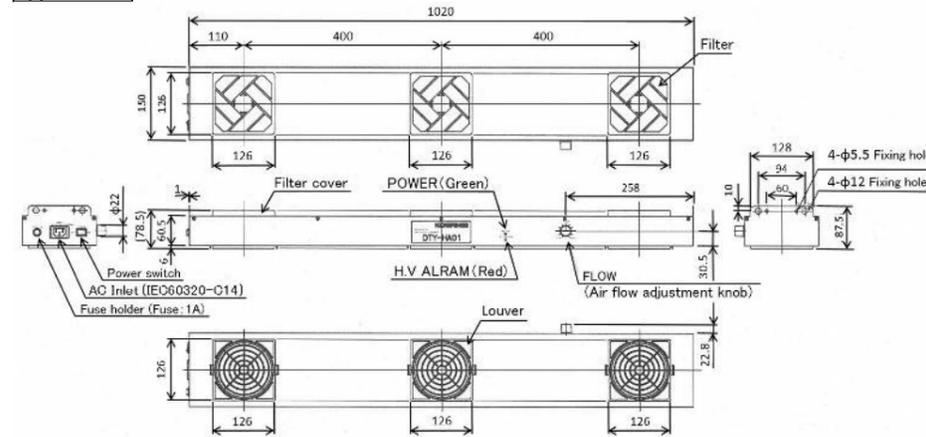
- This product uses a fan to blow air ionized with the corona discharge of an electrode to eliminate the static electricity in electrically charged materials that are located at a distance.
- This product is an overhead type requires no desk space, and can neutralize electricity over a large area.
- The high voltage output of the product are monitored and displayed on a monitor panel.
- The front louver can be easily removed/attached for easy electrode maintenance. This product also includes a safe circuit design that ensures that the high voltage output and fan stop when the louver is removed.

3. Specifications

List of Specifications	
Model No.	DTY-HA01
Input voltage	100 V to 240V AC, 50/60Hz
Power consumption	42VA
Fuse	1 A
Output voltage	± 7,500 V o-p approx.
Ion balance (NOTE1)	± 10 V or less
Static charge removal time (NOTE1)	4.0 sec. or less
Display LED	Power: Green / High voltage alarm: Red
Airflow	2.6 to 4.0 m ³ /min x 3fan
Quantity of produced ozone	0.005 ppm or less (at the center of the fan outlet [150 mm], at minimum flow rate)
Ambient temperature	0 to 40°C
Ambient humidity	15 to 85% (No condensation allowed)
Dimensions: (mm)	1020W×60.5H×150D (Main unit only)
Weight	5.0 kg approx.
Accessories	Instruction manual (this document), Power cord, Cleaning brush

Note1: Typical value at a distance of 450 mm from the center of the fan outlet, at maximum flow rate.

Appearance

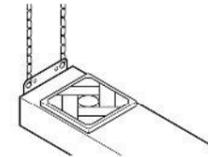


4. Installation

- Make sure to turn the power of the product OFF before removing the power cord for installing the product.

- Using the fixing holes on both sides of the main unit, suspend it from the ceiling with a chain. Alternatively, using brackets, it is possible to install this product in a variety of ways, such as on a shelf, vertically, or as a standing type.

Note1: Install this device such that air flow is not obstructed.

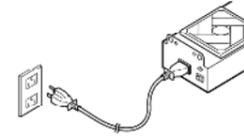


5. Wiring

- Connect the power cord to main unit and insert the plug into an alternating current (AC 100 to 240V) power outlet.

*This product is available with input voltage of AC100V - 240V. However, an attached power cord is available with input voltage of AC100V only (less than AC125V). If you use this product with input voltage of AC125V higher, prepare another power cord which suited to input voltage.

- When connecting to a grounded power outlet, use the 3-pin plug. When connecting to an ungrounded (2-pin) power outlet using the adapter included with the product, be sure to ground the earth terminal. If it is not securely grounded, the product may not be able to work up to the fullest performance.



6. Operation

- (1) Turn the power switch of the product ON, and green POWER LED becomes light up. The electrode becomes charged with high voltage, releases corona discharge, and generates neutralizing ions. At the same time, the fans spin, and blow neutralizing air from the front of the main unit. Charged materials placed in the neutralizing air will be immediately neutralized.
- (2) The flow of the neutralizing air can be adjusted using the air flow adjustment knob.
- (3) The operating status is displayed on the front monitor panel. If there is a high voltage output irregularity, the red H.V. ALARM LED lights up.
- (4) Turn the power switch OFF to stop the products.

7. Maintenance

- Before care and maintenance of the product, make sure to turn the power of the product OFF before removing the power cord. Otherwise accidents or operating problems may occur.
- The tip of the discharge needle is sharp, be careful not to touch the discharge needle.

- When the product is used for long periods of time, the discharge needle and the air inlet/ outlet section will get dirty. Clean the discharge needle and the air inlet/ outlet section regularly, otherwise you could not get the desired effect, and accidents and operating problems may occur.

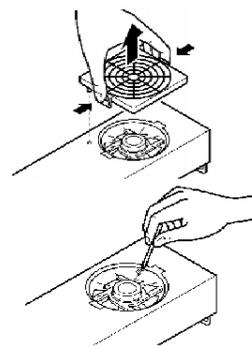
- The maintenance required depends on the environment of use. As a reference, cleaning both the discharge needle unit and fan filter should be done once 3,000 hours.

- The discharge needle is a part having a product life time. If the charge removal performance is not restored after cleaning the discharge needle, it is recommended to replace the entire discharge needle unit with a new one. The expected life span is seemed to be 20,000 hours In case of natural wear and use.

- If you use the discharge needle unit or fan filter for replacement mentioned, please purchase below.
 - DTY-ZEM-FA : Discharge needle unit
 - DTY-ZFR-FA : Fan filter (6 pcs.)

Cleaning the Front Louver

- (1) Push in the tabs on both sides of the front louver, and pull it towards yourself to remove it from the main unit. Clean the louver using the included cleaning brush. If the louver is extremely dirty, wash it with water (or a neutral detergent).
- (2) Re-attach the front louver to the main unit after drying it thoroughly.

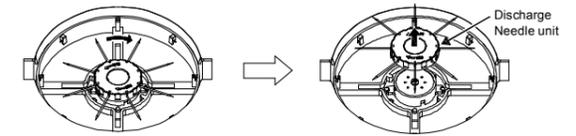


Cleaning the Discharge needles

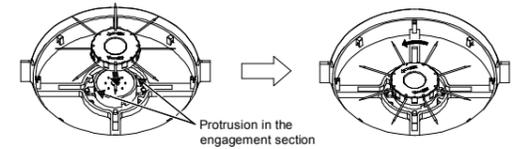
- (1) Remove the front louver.
- (2) Clean the discharge needles using the included cleaning brush. If the discharge needles are extremely dirty, it is recommended you add IPA (isopropyl alcohol) to the cleaning brush.

Replacing the Discharge needle unit

- (1) Remove the power cord and move the main unit to the horizontal place.
- (2) Remove the front louver.
- (3) While securely holding down the Main Unit in place, remove the Discharge Needle Unit by gripping the Finger Grip at the center of the Discharge Needle Unit and turning it in the direction of FREE (clockwise), and releasing the Unit.



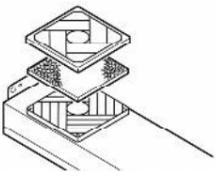
- (4) Prepare a new set of discharge needle unit.
- (5) Align the protrusion on the Main Unit in the section to be engaged with the discharge needle unit with the engaging section on the discharge needle unit. Press the discharge needle unit into the Main Unit, so that both units will be engaged with each other. Turn the discharge needle unit in the LOCK direction (counterclockwise) until the discharge needle unit is securely locked with the Main Unit.



Note1: Turn the discharge needle unit until securely locked. The correct installation of the discharge needle unit on the Main Unit is essential for the optimum operation of the Product.

Cleaning the Filter

- (1) Check that the power is turned OFF.
- (2) While securely holding down the main unit in position, remove the filter cover. The filter cover may be easily removed by gripping the side of the filter cover and pulling it.
- (3) Clean the soiled and clogged the filter. If the filter is extremely dirty, wash it with water (or a neutral detergent), and drying it thoroughly.
- (4) Re-attach the filter to the main unit.



8. Troubleshooting

Problem	Main case	Remedy
The power cannot be supplied to the product.	Power cord not connected	Check to see if the AC plug is securely inserted into the product and the wall outlet.
	Louver not installed	Check the Louver to confirm that it is correctly installed.
H.V. ALARM LED (red LED) lights up.	Abnormal discharge	Check that the discharge needle is free from conductive materials.
		Clean the discharge needle. But H.V. ALARM LED remains light even after the discharge needle has been cleaned, clean the area around the needle is dirty.
	Internal circuit is broken	Turn off the power, and then turn the power back on.

※ If any other abnormal condition than above has been observed, immediately turn OFF the power from the Product, and please contact the shop where you purchased the Product (the agency), or the nearest service station of our company.



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The specifications or the appearance of this product are subject to change any time without prior notice.