

Staticmaster®

Overhead Ionizing Blower User Manual

Model 6220

(Auto-Balanced Ionization System)



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Please Observe The Following

NOTICE

Please review the information in this manual prior to installing and operating the ionizer in a work environment.

NOTICE

Please keep this document in a convenient place to refer to as a guide.

*WARNING

If the Staticmaster® is used in a manner not specified in this manual, the protection provided by its design may be impaired.

+*WARNING

This product is designed to be used by manufacturers for electronic industry applications and generates high voltage. Do not open and modify it, or operate without being completely assembled. High voltage internal parts can cause electrical shock.

+*WARNING

Before performing maintenance, turn the Staticmaster® off, disconnect from the power source, and do not wear a wrist strap. High voltage internal parts can cause electrical shock.

*WARNING

Do not use this product in a flammable atmosphere.

*WARNING

Do not submerge in water. If liquid enters product, disconnect power cord and allow to thoroughly dry before using again.

*WARNING

If there is any damage on power cable or communication cable, replace these prior to use.

*WARNING

This product will generate ozone along with ions, if the user smells ozone, please refresh the air in working environment.

1. Features and Descriptions

1-1. Features

Model 6220



Power cord

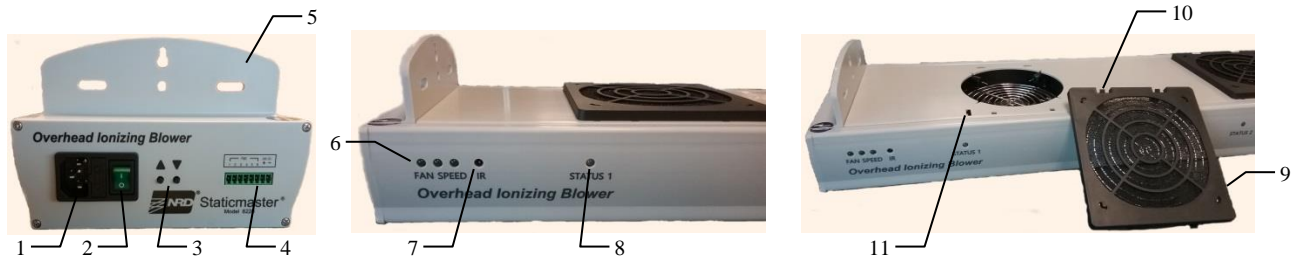


Optional Remote Control



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1-2. Descriptions



1. AC Power Terminal – 110~240V AC power connects from process tool when possible.
2. ON/OFF Switch - Power ON/OFF Switch.
3. Fan Speed Control – Select from low, medium, and high fan speed.
4. FMS (Facility Monitoring System) - FMS will allow you to monitor the status of ionizers and alarm connection.
5. Bracket – Refer to section 8 for dimensions.
6. Fan Speed Indication LED – 1 LED: Low speed, 2 LEDs: Medium speed, 3 LEDs High speed.
7. IR Receiver – for optional Remote Control.
8. LED Indicator for Operation and Alarm.
9. Fan Filter Grill.
10. Fan Filter Grill Hook.
11. Fan Operation Sensor Hole.

2. Installation

2-1. Locate the Staticmaster®:

- 12” (300mm) to 48” (1200mm) from the target to be neutralized for optimal performance, making sure that the airflow will not be restricted.
- A working electrical outlet within reach of the 6’ (1800mm) long detachable cord that is supplied with the Staticmaster®.

2-2. The Staticmaster® should be installed directly above the target area to be neutralized.

2-3. Power Connection

- Connect the power cord to the AC power terminal on the end of the Staticmaster®.
- Plug the power cord into a 120 VAC, 60 Hz electrical outlet.

2-4. Turn the Staticmaster® “ON”.

2-5. Adjust the Staticmaster® fan speed to achieve the desired airflow on the work area.



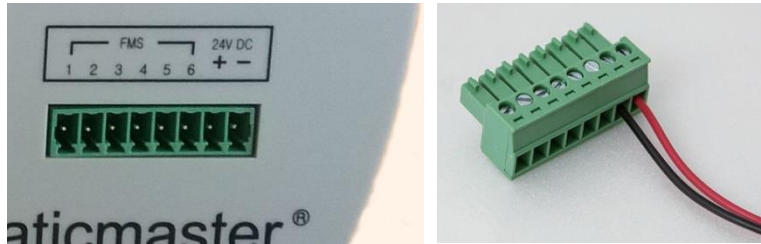
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3. FMS Connection

3-1 . Interface Terminal Connection

Pin No.	Description	Facility Monitoring System Output Signal			
		Condition	FMS 1~2	FMS 4~5	FMS 3~6
FMS 1	Alarm signal relay output	Normal state	Open	4~5mA	Open
FMS 2	Alarm relay common	Alarm State	Closed	17~20mA	Closed
FMS 3	Out of balance signal relay output	No Power	Closed	0mA	Closed
FMS 4	Current output for each operation				
FMS 5	Reference ground for current output				
FMS 6	Out of balance relay common				

3-2. Interface Terminal Cabling



4. Maintenance

NOTE: Turn power off prior to doing regular maintenance or emitter point cleaning.

4-1. Filter Cover Attach and Release

- Press down, on tabs, at the top of the filter cover and release or attach it on the main enclosure.



4-2. Emitter Point Cleaning

- Remove filter cover from top panel of main enclosure.
- Clean emitter points using cotton swab with DI water or Isopropyl Alcohol. **Caution**, emitter points are very sharp.
- After cleaning, make sure ionizer is dry before turning power on.
- If there is any damage or excessive wear on the emitter point, it is recommended to replace it.

NOTE: Cleaning requirements of emitter points will vary based on operating environment and use. Recommended cleaning interval is once a month to once every other month.



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4-3. Filter Cover Cleaning

- Remove filter cover from top panel of main enclosure.
- Clean filter cover with water or compressed air.
- After cleaning, make sure ionizer is dry before turning power on.
- If there is any damage on the filter cover, it is recommended to replace it.



4-4. Emitter Point Replacement

- Remove filter cover from top panel of main enclosure.
- Remove emitter points from sockets by gently pulling out toward the middle of the ionizer. **Caution**, emitter points are very sharp, using tweezers or pliers is acceptable.
- Insert new emitter points into sockets by gently pushing in as far as it will go. **Caution**, emitter points are very sharp, using tweezers or pliers is acceptable.

NOTE: Emitter point useful life also varies based on operating environment and use. Recommended replacement interval is once a year to once every other year.

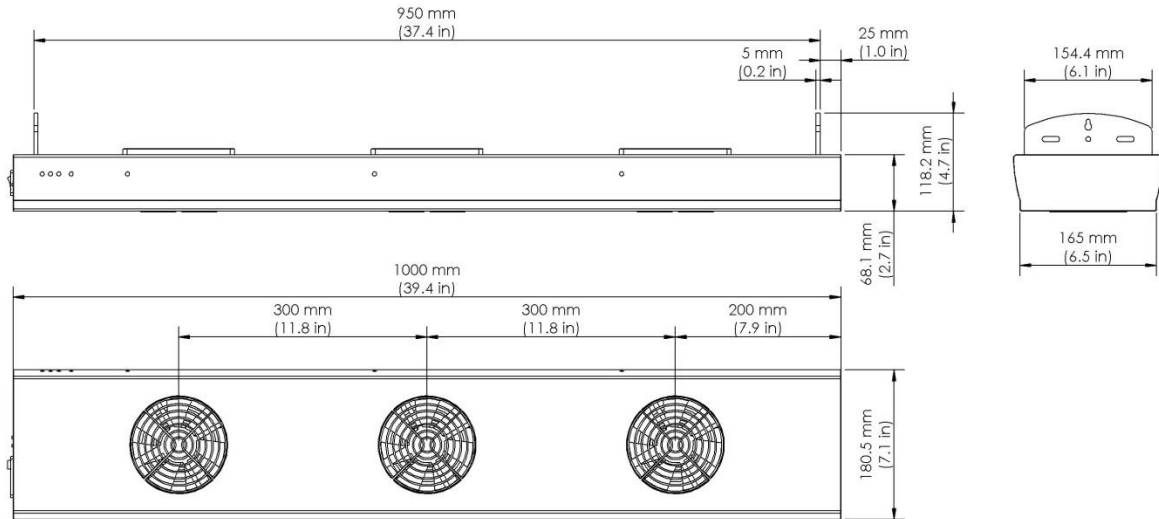
5. Specification

Input Voltage	110 ~ 240V AC
Ion Emission	Steady-State DC Technology
Balance	< ±20V
Discharge	less than 2 seconds per ANSI/ESD STM3.1
	3 Step Fan Speed Adjustment
Air flow	27 ~ 100 CFM
Emitter Point	Tungsten 99.99%
Alarm Function	Audio/LED Alarm at HV Power failure
Output Monitoring	FMS Interface
Material	ABS for Ionizer Enclosures and Brackets
Operating Environment	Temperature: 15~35 °C Relative Humidity: 35~75%
Dimensions (W×H×D)	4.7" x 7.1" x 39.4" (118×180×1000 mm)
Weight	7.9 lbs. (3.6 kg)



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6. Dimensions



7. Warranty

Limited Warranty

NRD expressly warrants that for a period of one (1) year from the time of purchase, the ionizer will be free of defects in material (parts) and workmanship (labor). Within the warranty period, the Ionizer will be tested, repaired, or replaced at discretion of NRD, free of charge. Any ionizer under warranty should be shipped prepaid to the NRD factory. Call Customer Service at (716) 773-7634 for a Return Authorization number and shipping instructions. Include a copy of your original packing slip, invoice, or other proof of purchase date.

If the ionizer is out of warranty, NRD LLC will quote repair charges necessary to bring your ionizer up to factory standards.

Warranty Exclusions

The forgoing express warranty is made in lieu of all other product warranties, expressed and implied, including merchantability and fitness for a particular purpose that is specifically disclaimed. The express warranty will not apply to defects or damage due to accidents, neglect, misuse, alterations, operator error, or failure to properly maintain, clean or repair products.

Limit of Liability

The user shall determine the suitability of the product for their intended use, and the user assumes all risk and liability whatsoever in connection therein.



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