

Staticmaster® Model 6110 Air Assist Bar Ionizer



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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

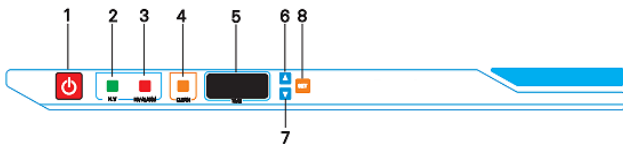
If there is any damage on power cable or communication cable, replace these prior to use.

*WARNING

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

Description

The Staticmaster® Air Assist Bar Ionizer Model 6110 delivers a high volume of ionized air to neutralize static charge. The target's neutralization time will be optimal when placed 12" to 48" directly in front of the ionizing blower. Neutralization time will increase as the distance increases.



1. Power button
2. HV-High voltage normal indicator
3. HV Alarm-High voltage abnormal indicator
4. Clean: Running time exceeds the set cleaning time interval. The yellow LED light indicates that the device needs to be cleaned.
5. LED displays the cleaning time of the emitter points
6. Adjust the cleaning time (Increase)
7. Adjust the cleaning time (Decrease)
8. Set the cleaning time interval (adjustable 1-999 Hours)

Features

- Small and light weight.
- Special shape emitter point reduces the consumption of compressed air.
- Easy to load and unload the emitter points, convenient for maintenance
- Auto ion balance system, within $\pm 15V$
- Equipped with HV normal indicator light and abnormal alarm indicator
- Can set clean time interval through LED display, according to the room environment
- High safety in operation

Installation

Proper location and positioning of the static bar(s) and power supply is essential to satisfactory performance and life of the equipment. Because each application is unique, careful thought is required to establish the best location and installation. The following guidelines will help to determine that.



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Installation (continued)

Typically, the best place to install the static bar is immediately ahead of the problem. For example, if an operator gets “shocked” from a rewind roll, then the static bar should be located so that it would be the last thing the material passes before it winds onto the roll. Another example is stacking paper at the end of a sheeter. Allowing the sheet to pass by the static bar last would assure a static “neutral” sheet enabling it to slide properly into place.

Static bars will operate efficiently above, below or on either side of the material. Keeping the ionizing points facing downward tends to minimize contamination from falling on them.

This is a stationary static eliminator, light weight, no static interference, equipped with HV normal and abnormal indicator light. This is a pulse AC type, distributing positive and negative ions from the emitter points with an air flow. This static eliminator has superior ion balance.

1. Install the device with a gap of 0.5in/10mm.
2. Install additional devices 4in/100mm distance when emitter points face each other.
3. Install additional devices 16in/400mm distance when place side by side.
4. When installing, ensure the air supply, is clean, dry compressed air, remove the hex screw from both sides and fix with 1/8 quick fitting.
5. Connect compressed air before connecting to power. Do not install the unit on a shock or thumb device.

Setting Cleaning Time Interval of Emitter Points:

1. Set the cleaning time interval according to different environments.
2. Set Procedure.
 - The last character on the LED display is H (Hour)
 - Press and hold the SET button for three (3) seconds, the 3rd character will blink, use the increase and decrease button to reach the desired character.
 - Press SET button again, the 2nd character will blink, and increment as above.
 - Press SET button again, the 1st character will blink, and increment as above.

- Wait 5 seconds, the characters will stop blinking and the cleaning time interval is set.
3. Cleaning alarm of the emitter points
 - When the set cleaning time interval has arrived, the buzzer will sound and the device needs to be cleaned manually.

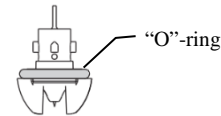
Maintenance of Emitter Points

Caution: Turn power off before performing any maintenance, removal, or repositioning of any static neutralizing equipment or power supplies.

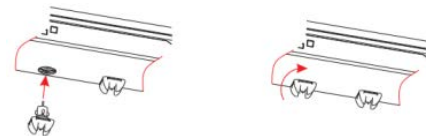
1. Clean emitter points using cotton swab with DI water or Isopropyl Alcohol. **Caution**, emitter points are very sharp.
2. Replace the emitter points if the static elimination performance does not recover after cleaning or the ion balance alarm indicator is still lit.



- Remove the emitter point in a counter-clockwise direction.



- Make sure the “O”-ring is positioned on the emitter point.



- Install the new emitter point in a clockwise direction.



- Turn air knobs to secure.
3. Clean the emitter points routinely as needed for optimum performance.



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Wire Markings:

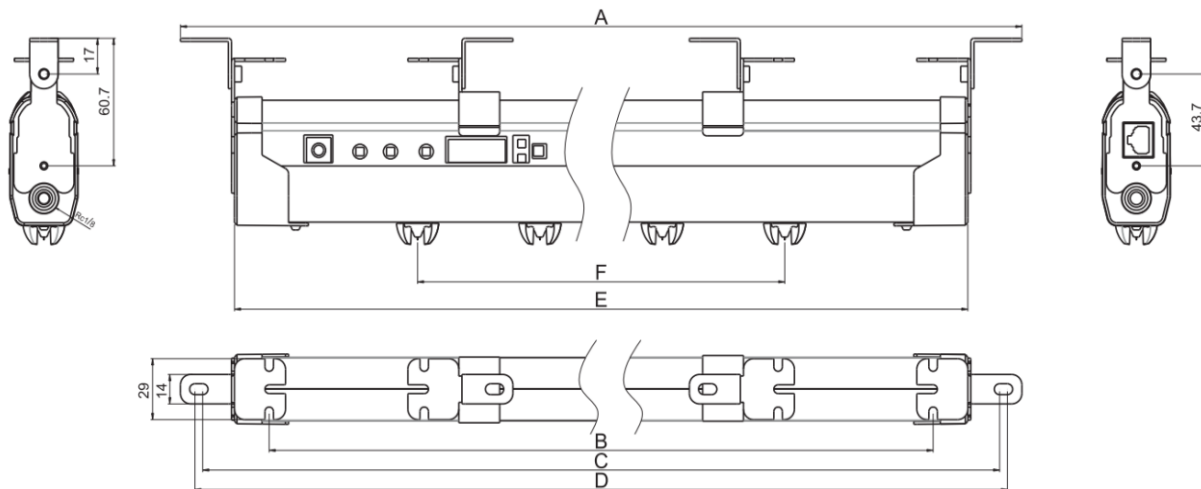
| Cable Color | Cable Function |
|-----------------------------|--|
| Brown | DC power (DC 24V \pm 10V) |
| Brown and White | DC power (DC 24 V \pm 10V) |
| Blue | GND power |
| Blue and White | GND power |
| Orange and White | HV abnormal alarm indicator light output |
| Green | HV normal, abnormal output |
| Green and White | HV normal alarm indicator light output |
| Orange | Neutral |
| Shielded cable/Ground cable | Shielded cable/Ground cable |

Specifications:

Parts Included:

- | | |
|----------------------------|----------|
| 1. Ionizing Air Assist Bar | 1 unit |
| 2. Adaptor | 1 piece |
| 3. Holder | 2 pieces |
| 4. Quick Fitting | 2 pieces |

Dimensions:



| Model | Overall Length A inches/mm | Installation Interval B inches/mm | Installation Interval C inches/mm | Installation Interval D inches/mm | Static Elimination E inches/mm | Electrode Interval F inches/mm |
|-----------|-------------------------------|--------------------------------------|--------------------------------------|--------------------------------------|-----------------------------------|-----------------------------------|
| 6110-0360 | 16.25/413 | 12.83/326 | 15.40/391.2 | 15.70/398.8 | 14.17/360 | 7.08/180 |
| 6110-0600 | 25.70/653 | 22.28/566 | 24.85/631.2 | 25.14/638.8 | 23.62/600 | 16.53/420 |
| 6110-0840 | 35.15/893 | 31.73/806 | 34.29/871.2 | 34.59/878.8 | 33.07/840 | 25.98/660 |
| 6110-1080 | 44.60/1133 | 41.18/1046 | 43.74/1111.2 | 44.04/1118.8 | 42.51/1080 | 35.43/900 |



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Emitter Points:

| Model | Number of Emitter Points | Dimensions inches/mm | Weight Lb/Kg |
|-----------|--------------------------|-------------------------------------|--------------|
| 6110-0360 | 4 | 15 x 3 x 2in / 360 x 68.5 x 33.4mm | 0.85/0.39 |
| 6110-0600 | 8 | 24 x 3 x 2in / 600 x 68.5 x 33.4mm | 1.41/0.64 |
| 6110-0840 | 12 | 34 x 3 x 2in / 840 x 68.5 x 33.4mm | 1.96/0.89 |
| 6110-1080 | 16 | 43 x 3 x 2in / 1080 x 68.5 x 33.4mm | 2.51/1.14 |

Technical Specifications:

Input voltage: 24 VDC ±5VDC

Ionization Technology: Corona

LED Indicator: H.V. (Green) - high voltage normal indicator
 Alarm (Red) - discharge abnormal and electric circuit abnormal
 Cleaning (Yellow) - reached set cleaning time interval

Air Supplied: Compressed Air (clean and dry air)

Imposed Voltage: High frequency ±2200 VAC

Ion Balance: Within ±20 V (Distance 300mm/12in, Compressed air 0.3MPa/40psi)

Decay Time: 2.0 Seconds, ±1000V to 100V, ANSI/ESD Association STM 3.1 @ 1 foot center (Distance 300mm/12in, Compressed air 0.3MPa/40psi)

Cleaning Timer: 0-999 Hour setting

Ozone generated ppm: 0.03ppm (Distance 50mm/2in, Compressed air 0.2MPa/30psi)

Air range: 0.01 – 0.5MPa / 1.5 – 70 psi

Applied environment temperature: Indoor 0-40°C / 30-104°F

Applied environment humidity: 15%-75% Rh (no condensation)

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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