



[www.sci-supply.com](http://www.sci-supply.com)

SS20412 – Miniature Van De Graaff Generator  
The Hornet

## Introduction

The Hornet is a miniature electrostatic high-voltage generator that can develop very high voltages up to @ 75,000 volts. It can be used independently to demonstrate electrostatic principles, or can be used to provide a high-voltage electrostatic source for electrostatic experimentation.

### Specifications

1. Adapter: Input: AC100-240V; output: DC 6V
2. Power: 10W
3. Electrode Ball: Diameter: 5" (125mm)
4. Discharge Ball: Diameter: 2" (50mm)
5. Size: (LxWxH) 6" x 5" x 12" (150mm x 125mm x 300mm)

### Components

1. Stainless Steel Main Electrode
2. Plexiglass Tube
3. Rubber Belt
4. Humidity Control Switch (Green)
5. Power Switch (Red)
6. DC Power Input Terminal
7. Discharge Wand Grounding Terminal
8. Discharge Electrode Wand
9. Power Adapter (6V)
10. Spare Belt



## Operation

### INITIAL SETUP

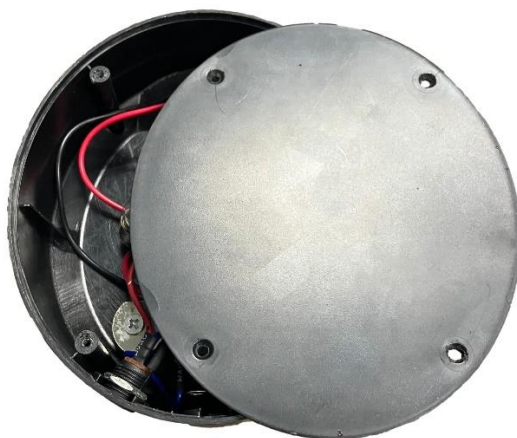
1. Remove the generator from the foam storage case. Place on a clean, level surface in close proximity to a power outlet.
2. Clean the surfaces of both stainless-steel electrodes (main electrode and discharge electrode). Please do not use any towel that has been exposed to antistatic fabric softeners. We recommend untreated paper towels.
3. Connect the cable on the discharge wand to the grounding terminal located on the back of the generator base. Plug in the AC adapter and attach the other end to the DC power input terminal on the back of the device.

### EXPERIMENTATION

1. Hold the insulating rod of the discharge wand and place the stainless-steel electrodes in close proximity to one another. **KEEP YOUR HANDS AWAY FROM THE MAIN STAINLESS COLLECTOR WHILE IN OPERATION!** Press the ON button, and begin experimentation.
2. Turn on the light using the green humidity control switch on the back of the main battery base.
3. When finished, turn off the power, and touch the stainless-steel electrodes together. This will ensure all of the static electricity will be discharged.

### MAINTENANCE

1. Periodic cleaning is a must. Surface pollutants, dust, and other build-up can significantly decrease the amount of output.
2. Removal of the bottom for belt changes and maintenance can be difficult. The base is flush fit and secured by 4 screws.
3. Pack the device in the foam storage provided, and store in a cool, dry place.



## Warnings

- Please operate this device at least 3 feet from any electrical devices. This device is capable of damaging electrical equipment.
- Keep away from children. Close adult supervision is required, and children should be kept at a safe viewing distance away from device.
- This device produces high voltage, and the operator should use proper care to insure safe operation. The static charges can be uncomfortable.
- This instrument is designed for intermittent use, and leaving the device running for long periods of time is not recommended.

**ENJOY**, and remember to visit [www.sci-supply.com](http://www.sci-supply.com) for more fantastic prices on quality scientific supplies.