

# Company Seven

Astro-Optics Division

## Staticmaster Brush Certificate & Instructions 1952 by Nuclear Products Company, Costa Mesa, California



**Moderate resolution scan of original document in Company Seven's collection, that accompanied a 1952 Staticmaster brush.**

Showroom: 14300 Cherry Lane Court  
Laurel, Maryland 20707  
Telephone: 301-953-2000  
URL: <http://www.company7.com>

Correspondence: Box 2587  
Montpelier, Maryland 20709-2587  
E-Mail: [info@company7.com](mailto:info@company7.com)



# CERTIFICATE

All STATICMASTER units released to the public are hereby certified to be safe when used according to instructions printed on the reverse side of this certificate.

The radiation used in STATICMASTERS is completely harmless externally.

Protection from the possibilities of poisoning by ingestion or inhalation of the radioactive material is provided in the following manner:

1. *The radioactive polonium is made into foil and is self-protected by being sealed between a silver base and a gold covering.*
2. *The foil is protected by a stainless steel shield and grid which prevents direct physical contact.*

**NUCLEAR PRODUCTS COMPANY**  
2150 Newport Blvd., Costa Mesa, California

## INSTRUCTIONS

### THANK YOU

For purchasing a STATIC-MASTER. We are anxious that you obtain the best results from its use so we have prepared the following instructions after having made hundreds of tests.

### WHERE THE STATIC-MASTER IS USED

The STATIC-MASTER is ideally suited to many industries. Photographic, optics, plastics, and other fields will find the STATIC-MASTER to be a tool that will save time, effort and materials.

### THEORY OF THE STATIC-MASTER

The STATIC-MASTER operates on an extremely simple nuclear principle. The radiation emitted from the polonium foil is called alpha radiation, and is completely harmless externally. The radiation, or rays, are helium nuclei. When they complete their path in air of about one and one half inches they convert to regular inert helium atoms. Alpha rays travel through the air very rapidly, producing in their path dense ionization. It is this ionized air, (which is air composed of positive and negative electric charges) produced in abundance by the alpha ray source (the polonium foil) that immediately dissipates the static charge with which it comes into contact.

### How to Use the Static-Master



For maximum effectiveness the STATIC-MASTER grid, which houses the polonium foil should be not more than  $1\frac{1}{2}$ " nor less than  $\frac{1}{2}$ " from the surface of the work being

neutralized. Brush slowly, and always in the direction of the grid. Brush both sides for complete neutralization. This will neutralize the static charge on the surface, and at the same time clean off any dust or lint that has been attracted and held by the static charge prior to neutralization.

On large areas and particularly on Kodalith or other process films, the static charge is usually very great. To effectively clean and neutralize, remove the dust and lint as described in the preceding paragraph. Then make several rapid passes bringing the STATIC-MASTER close to the surface being neutralized, without actually touching it with the bristles. This permits the air to pass freely under the polonium and be ionized, with resultant neutralization of the "static."

The STATIC-MASTER may be kept in the darkroom at all times, without the danger of fogging unexposed film, for its radiation is non-penetrating and its effective range is only about 2".

NOTE: Static may reform on any surface that has been neutralized, if that surface is subjected to additional handling or rubbing.

### CAUTION:

DO NOT take the STATIC-MASTER apart or touch the radioactive strip (under the grid). If strip is touched or handled, wash hands thoroughly before eating or smoking.

Keep away from children who might chew on or take the brush apart.

Polonium, the radioactive substance used in the STATIC-MASTER, is completely harmless externally, and the simple precautions are given to avoid the possibility of taking the metal internally.

**NUCLEAR PRODUCTS COMPANY • Costa Mesa, California**