

INSTRUCTION MANUAL

CONFORMING TO IEC 61000-4-2 Ed 2.0

CHARGE DISSIPATIVE BRUSH

05-00125A

NOISE LABORATORY CO., LTD.
Edition1.03
AEC00256-00E-0D

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1. IMPORTANT SAFETY PRECAUTION

This product is the charge dissipative brush which is designed for trained electrical technicians to discharge electric charges which accumulate on equipment or device under test (EUT/DUT) when the electrostatic discharge (hereinafter "ESD") immunity test prescribed in the standard EN/IEC61000-4-2 is conducted to the EUT/DUT. Do not use this product for other purpose.

If the EUT/DUT is charged in the ESD test, there might be risk of troubles to human bodies or instruments by careless electric shocks. For taking precautions against possible accidents and proceeding proper tests safely, read carefully the chapters of "IMPORTANT SAFETY PRECAUTIONS" and "BASIC SAFETY PRECAUTIONS" of the instruction manuals of the electrostatic simulator and the discharge gun as well as this instruction manual beforehand.

2. PREFACE

Thank you for your purchasing the charge dissipative brush MODEL: 05-00125A (the Unit). In order to obtain the highest performance of the Unit, thoroughly understand the contents of this manual (the Manual).

- The Manual will help operators handle and utilize the Unit in safety.
- Keep the Manual on a place where it is readily available.

-- Features --

- Conforming to the IEC 61000-4-2 Ed 2.0 with two pieces of 470kΩ incorporated as bleeder resistors.
- Adopting the carbon brush (diameter: 0.15mm) which has a superb electrostatic dissipative capability.

3. BASIC SAFETY PRECAUTIONS

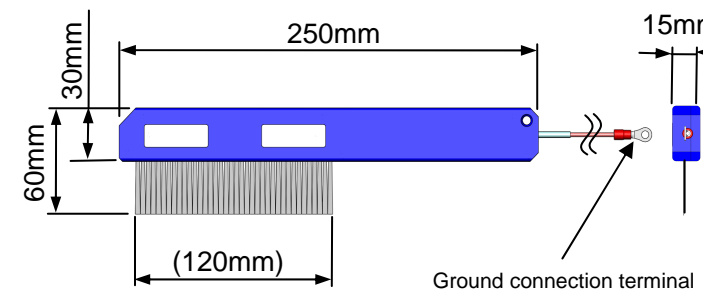
⚠ CAUTION 注意

- Connect the ground terminal of this product securely to the ground plane of the ESD test environment. If connection is incomplete, the EUT/DUT might not be discharged well and also the accumulated electric charge on the EUT/DUT might cause an electric shock. 【Precaution for human body, handling, environment, and connection】
- Do not drop this unit and avoid giving strong shock to it. Failure to follow to this instruction may cause a broken wire or damaged brush. 【Precaution for handling and connection】
- If repair or maintenance work is necessary, only service engineers qualified by Noise Laboratory can conduct it.

4. CONTENT

05-00125A Unit itself	1
Ground connection screw (M4xL8 with washer)	1
Instruction Manual.....	1

5. SPECIFICATIONS



ITEMS		SPECIFICATIONS
Resistance	Grip internal	940kΩ ±5% (470kΩ x2)
	Brush part	1.3 x 10 ⁴ Ω ·cm (Specific electrical resistance)
Material	Grip internal	MC nylon
	Brush part	Base: Nylon 66, compounded Nylon 6 and conductive carbon black (Diameter: 0.15mm)
Ground connection cable		Length:2m, With M4 round type terminal
Dimensions		W250×D15×H60 mm
Weight		Approx.160g (Without cable)

6. USAGE

☆Use this product with Noiseken's ESD test environment ESS-801/ESS-801GL according to the following procedure.

- Connect the ground terminal of this unit to the ground plane of the ESS-801/ESS-801GL. The ground plane has holes for connecting the discharge resistor cable: 05-00054B. Connect this unit together with the discharge resistor cable with using M4 screws which are supplied with this product and the ESS-801 / ESS-801GL.
- When conducting ESD test, stroke the surface of the EUT/DUT softly as the need arises. Since sparks are often invisible in case that the test voltage is low, frequent discharge is recommendable in such cases.

Notice

Do not press the brush part against the EUT/DUT or bend that part forcibly. Failure to follow this instruction may reduce electrostatic dissipative capability of this product and make the brush hair fallen or broken, which may damage this product as the result.

7. INSPECTION

For maintenance of this product, daily checking is recommendable.

For checking, measure the resistance value between the metal part of the brush holder and the ground connection terminal by a tester. If the resistance value is around 940kΩ, this product can be used without any problem. If the actual measurement value is far from 940kΩ, some kind of defectiveness, such as detached wire, may occur. In such a case, please enquire Noise Laboratory or its sales agent.

The brush part is exchangeable. If the electrostatic dissipative capability of this product seems to reduce a lot due to broken brush hair, dirty brush, and so on, please ask Noise Laboratory to exchange it.

8. WARRANTY

Servicing terms

The following terms are applicable to servicing by Noise Laboratory Co., Ltd., (hereafter referred to as the Company) provided to maintain the intended performance of its products.

1. Scope
The following terms shall apply only to products made by the Company.
2. Technical servicing fee
In the event of a failure of a product within the warranty period (see warranty section), the Company will repair a product without charge. After the warranty expires, repairs will be billed at a nominal cost.
3. Ownership of defective parts
Any defective part exchanged under the Company's servicing belongs to it.
4. Limited liability
In the event that damages resulting from servicing by the Company are intentional or caused by negligence, the Company will pay the cost but at the purchase value of the relevant product maximum. But, notwithstanding the foregoing, the Company shall not be responsible for any incidental or consequential damages of any nature, including without limitation thereof loss of would-be profit or compensation demanded from a third party
5. Refusal to offer servicing
The company may not accept a repair order in the following cases:
 - More than 5 years have passed since the product discontinued
 - More than 8 years have passed after delivery
 - Required component for servicing already discontinued and no alternative is available.
 - Product changed, repaired or remodeled without obtaining a prior permission from the Company.
 - Product severely damaged to the extent it has lost its original form

Limited warranty

The company warrants its products to be free from defects in materials and workmanship under normal use and service for a period of one year from date of delivery. In the event of failure of a product covered by this warranty, the Company will repair the product or may, at its option, replace it in lieu of repair without charge.

Notwithstanding the foregoing, the Company shall not be responsible for any incidental or consequential damages of any nature, including without limitation thereof loss of would-be profit or compensation demanded from a third party. This warranty is valid only in Japan.

1. Scope
This warranty shall only apply to products made by the Company.
2. Period
One year from date of delivery. The warranty may be valid in 6 months after servicing if the same failure on the same component has repeated.
3. Exclusions
The followings are exclusions from this warranty:
 - Consumable parts (including HV relay)
 - Failure caused by misuse, neglect, accident or abnormal conditions of operation
 - Failure caused by remodeling on the user side without prior permission from the Company
 - Failure caused by servicing by unauthorized personnel by the Company
 - Failure due to force majeure including but not limited to, acts of God, fire, war, riot, rebellion and others
 - Failure due to shock or drop in or after transit
 - Failure due to operation in environment being out of ambient specifications.
 - A unit shipped to overseas

9. MAINTENANCE

1. When repair, maintenance or internal adjustment of this unit is required, a qualified service engineer takes charge of such work.
2. Maintenance on the user side is restricted to the outside cleaning and functional check of this unit. When cleaning the unit, wipe it softly with a soft cloth which was wrung firmly after absorbing a little water or neutral detergent.
3. Do not dissolve the Unit more than the status when it was shipped.

10. SUPPORT NETWORK

- If a symptom which seems a trouble is found, inform the model name and serial number of the product together with the symptom to Noise Laboratory or your nearest sales agent of Noise Laboratory.
- When the product is returned to Noise Laboratory, write the state of the trouble, contents of your request, model name and serial number in a repair order, and pack the product and repair order sheet in the former package of equivalent suitable for transit and send them back.

For repair and other services, contact:

International Dept.
Noise Laboratory Co., Ltd.
1-4-4 Chiyoda, Chuo-ku, Sagami-hara, Kanagawa
252-0237, Japan
Tel: +81 (0)42-712-2051
Fax: +81 (0)42-712-2050

11. APPLICATION FORM

We apply for buying INSTRUCTION MANUAL.

Model: 05-00125A

Applicant's address:

Company name:

Section:
Name of person in charge:

TEL:

FAX:

Cut off this page "APPLICATION FORM" from this booklet and keep it for future use with care.

When an INSTRUCTION MANUAL is required, fill out the above Application Form and mail or fax it to NOISE LABORATORY CO., LTD. or our sales agent.