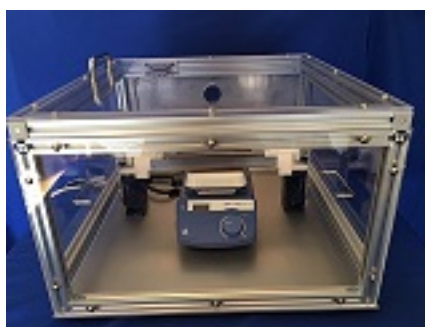




instruction manual

Non-contact electrification device

Model: E L C G — 0 5 N 3



Element Co., Ltd.

5-13-3 Onodai Minami-ku, Sagamihara shi,
KanagawaPrefecture,252-0331

Tel 042-786-5063

Fax 042-786-5065

Website: <http://www.kocho.jp>

Precautions for use when using this product, be sure to refer to the instruction manual for your safety. Please observe the following notes.

1. This product is intended for general electronic equipment. This product Medical equipment and transportation equipment whose damage may affect the human body and facilities Please do not use in applications such as or in environments subject to vibration. Please contact us when using other than general electronic equipment.
2. This product is equipped with an overcurrent and short circuit protection circuit, Avoid using a short circuit state, as it may cause a failure.
3. Do not use this product under nonstandard electrical and environmental conditions. It may break down under excessive input voltage or high temperature.
4. Avoid using this product in a place with much dust or where corrosive gas is generated.
5. This product generates high voltage. Do not touch the high voltage output directly. Touching may cause electric shock, injury or death.
6. When touching this product, shut off the input power and leave it for a sufficient time.を Make sure that the high voltage accumulated inside is discharged and touch it.
7. This product sucks dust and dust. Sufficient creepage distance when used Use with consideration for insulation distance, wiring treatment, etc.
8. If a failure or abnormality occurs during use, immediately shut off the input and start operation. Please stop and contact us.
9. This product is a power supply designed and manufactured for equipment integration, equipment and research. Be sure to attach a warning label because high voltage is generated.
10. Since this product generates high voltage, a grounding of 3rd class or more Make sure to secure the ground wire with the shortest possible wire. Please contact us if you have any problems with wiring.

<Characteristics>

This product is a system that charges a sample with a corona electrode. Also equipped with a grid electrode for equalizing the charge. Separate type of corona charging unit and control unit. Removable safety cover that can store the entire corona unit. We have prepared.

Be sure to mount the safety cover before use. The output of the high voltage power supply is shut off when the safety cover top door is opened.

The maximum voltage applied to the corona electrode is -9kV .

The work table uses a commercial hot plate.

Ground plate of $W100\text{mm} \times D100\text{mm} \times t3\text{mm}$ on the upper surface. Install, place the sample on it, and perform corona charging.

<Specification>

Control unit

1, high voltage power supply

(1) Corona power supply 0 to -10.0kV 3.00mA Maximum applied voltage 0 to -9kV VR1 digital panel meter for voltage and current display

(2) Grid power supply 0 to -3.00kV 3.00mA Maximum applied voltage 0 to -3kV VR1 digital panel meter for voltage and current display Both (1) and (2) are turned on with one HV ON switch.

2, rear panel interface

(1) CORONA high voltage connector for corona electrode

(2) GRID 2P high-voltage terminal block for grid

(3) 10P terminal block PIN placement

(4) 1, HVON1 * Wiring to the safety cover

2, HVON2

3, COM * High-voltage power ON status signal COM

4, NO, * * NO

5, NC,

NC6-10 PNC (no connection) :

3, our original corona electrode One $0.05\Phi\text{mm}$ gold-plated tungsten wire* Please be careful not to break the wire as it is a very thin line.

4, one of our original grid electrodes)

<Advance preparation>

1. The POWER switch of the control unit is OFF Check that the HV ON switch is OFF.
2. Please connect 2-3P AC cable to AC outlet (3A or more). Please connect three or more types of ground wires to the E terminal on the rear panel of the control unit
3. Ground wiring is yellow green from one Teflon coated wire for work table and Z-axis stage Two wires, one wire, are connected from the E terminal of the main unit.* One Teflon garment for the ground plate when using your hot plate
Please connect to the E terminal.
4. High voltage connector CORONA is a corona electrode with the attached connector We are wiring in one place.
5. Finely adjust the height of the corona electrode and grid electrode using each manual stage.
6. The grid electrode wiring is the grid electrode wiring and corona guard wiring. We will wire two high voltage wires to 2P of the 2P terminal block for the rear panel grid electrode.

<Operation procedure>

1. The operation method differs depending on the manual operation and the timer operation.
2. When operating manually, set the TIMER / THRU switch to THRU Please set to the side. By turning on the HVON switch The CORONA voltage and GRID voltage are output.
3. Set the CORONA voltage value with CCV.
4. Set the grid voltage with GCV. Carefully consider the distance between each electrode so that arc discharge does not occur.
5. If you want to repeat the work, please use the timer operation.
Turn off HVON switch and TIMER / THRU switch Please set TIMER side.
When the STRAT switch is ON, the CORONA voltage for the set time is output. (Initial setting is 20 SEC. set the timer value to 999 SEC. can be set.) * If you want to stop suddenly, turn on the STOP switch.
6. The operation of the hot plate is in the box where the hot plate is packed. Please refer to the instruction manual.