



GERMCLEAN™ HANDHELD ELECTROSTATIC SPRAYER
Model ESP-3010

Instruction Guide



GERMCLEAN™ MODEL ESP-3010 HANDHELD ELECTROSTATIC SPRAYER

SPECIFICATIONS

RATED VOLTAGE	12.0VDC
MAXIMUM POWER	15W
CHARGING TIME	2 Hours
ENDURANCE TIME	3 Hours
TANK CAPACITY	500mL
BATTERY	12v/2.5Ah
ELECTROSTATIC GENERATOR VOLTAGE	4.6KV
PARTICLE DIAMETER	60-120µM
ENCLOSURE MATERIAL	PE
QUIESCENT SPRAY DISTANCE	≥4 Meters
OPERATING HUMIDITY	0-80%
SOUND PRESSURE LEVEL	60dB
NOZZLE TYPE	Cone Atomization
PUMP TYPE	Diaphragm Type
FLOW RATE	40µm
GROSS WEIGHT	1.1Kg
PACKING MEASUREMENT	39CM X 26CM X11CM



PRODUCT OVERVIEW

GermClean™ ESP-3010 electrostatic spray gun delivers electrically-charged disinfecting droplets that are actively attracted to surfaces, including the back, sides and crevices of objects, regardless of the direction of spray for wrap-around disinfection coverage. Completely touchless, GermClean™ ESP-3010 electrostatic spray gun is a quick and efficient means to completely disinfect a space efficiently and effectively. It can disinfect surfaces that can't always be reached with traditional spray and wipe methods in a fraction of the time. It is an emerging system that many industries are widely adopting for use in their new and improved disinfecting protocols.

1. GermClean™ ESP-3010 electrostatic spray gun consists of a 500ml disinfection liquid tank, a diaphragm pump, an electrostatic generator and a conical electrostatic nozzle.
2. The diaphragm pump is installed inside the GermClean™ ESP-3010 electrostatic spray gun, which have sufficient pressure to generate atomization effect.
3. The electrostatic nozzle charges the disinfectant liquid droplets and disperse the droplets upon ejected from the sprayer gun nozzle
4. The maximum pressure of the diaphragm pump is 0.4 kg. Disinfectant liquid can spray to a maximum distance of 0.8m by conical electrostatic nozzle. The maximum atomization diameter is approximately 60µm.
5. Electrostatic charge from GermClean™ ESP-3010 electrostatic spray gun can effectively reduce the size and uniformity of the sprayed droplets.

PRODUCT SCHEMATICS



USER INSTRUCTIONS

1. GermClean™ ESP-3010 electrostatic spray gun needs to be charged when the battery level reduces to one bar.
2. Slide the switch above the disinfectant liquid tank and pull downward to remove the tank.
3. To clean GermClean™ ESP-3010 electrostatic spray gun, fill water into the disinfectant tank and engage the trigger to spray for 3-5 minutes to clean the nozzle pipeline.
4. When spraying operation is completed. Remove all remaining disinfectant solution from the tank and clean the tank with water. Please ensure that the switch is turned off.

CLEANING AND MAINTENANCE

1. Always clean the GermClean™ ESP-3010 electrostatic spray gun after use. Fill the disinfectant liquid tank with water and trigger the switch to spray for 3-5 minutes to clean the nozzle pipeline.
2. Do not immerse the GermClean™ ESP-3010 electrostatic spray gun completely in water. This will damage the unit.
3. Always charge the battery when the battery level is low.
4. If the GermClean™ ESP-3010 electrostatic spray gun is not in used for a long time, charge the battery once a month to avoid the battery completely discharged.

WARNING

1. Wear safety protection equipment and follow the operating instructions accordingly when using the GermClean™ ESP-3010 electrostatic spray gun.
2. If spraying is done in windy area, make sure the spraying mist do not blow towards the body.
3. If the sprayer is leaking, turn off the switch and do not continue to use the sprayer until it is fixed.
4. Do not use the sprayer near burning flame or explosive area.
5. Do not spray disinfectant liquid on human or animal.
6. Do not use acid or highly poisonous content with the GermClean™ ESP-3010 electrostatic spray gun.



COMMON FAULTS AND MAINTENANCE INSTRUCTIONS

ITEM NO.	COMMON FAULTS	CAUSES	RECTIFICATIONS
1.	Liquid does not come out from the nozzle or the flow rate is very low	<ol style="list-style-type: none"> 1. The filter at the bottom may be blocked 2. The inlet valve is blocked 3. The nozzle is blocked 4. The pipeline is blocked 5. The battery power is low 	<ol style="list-style-type: none"> 1. Clean the small filter 2. Use a thin steel wire to clear the inlet valve 3. Clean the nozzle 4. Clean the pipeline 5. Charge the battery
2.	Sprayed jet not normal	<ol style="list-style-type: none"> 1. The nozzle is damaged 2. The nozzle is not adjusted properly 3. Diaphragm pump is faulty 	<ol style="list-style-type: none"> 1. Replace nozzle 2. Adjust nozzle properly 3. Repair the diaphragm
3.	Poor electrostatic effect	<ol style="list-style-type: none"> 1. Electrostatic generator malfunction 2. Mist spray atomization is not good 3. There is a leakage 	<ol style="list-style-type: none"> 1. Replace the electrostatic generator 2. Adjust the nozzle to enhance the atomization effect 3. Check and repair the leak
4.	Disinfection droplet leakage	<ol style="list-style-type: none"> 1. The disinfection liquid tan cover is not tightened properly 2. The liquid hose connection is leaking 	<ol style="list-style-type: none"> 1. Check the barrel seal and tighten the lid properly 2. Check the leak and replace the part
5.	Sprayer not working	<ol style="list-style-type: none"> 1. The battery is flat 2. The fuse is loose 3. Poor switch contact 	<ol style="list-style-type: none"> 1. Charge or replace the battery 2. Replace the fuse 3. Repair the switch

APPLICATION AREA

GermClean™ ESP-3010 electrostatic spray gun can be used in the following areas:

- Hotels: Reception areas, hotel rooms, gyms, dining rooms, pool facilities
- Hospitals: Waiting rooms, doctor's offices, surgical theaters, and examination areas
- Schools & Universities: Cafeterias, classrooms, gyms, buses, and locker rooms
- Food & Beverages: Restaurants, industrial kitchens, and vehicles
- Offices: Cubicles, office reception area, bathrooms, and boardrooms



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