



User's Manual

Handheld Electrostatic Sprayer

Model:
VHProtector



NOTICE TO USERS

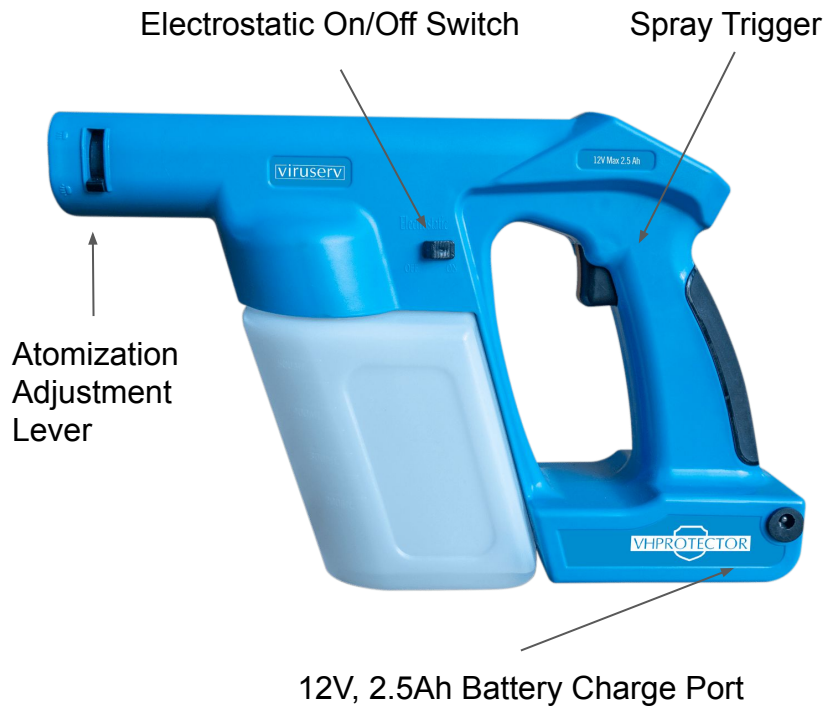
The User's Manual is a part of the electrostatic sprayer. Please keep it in good condition. To use and maintain the VHProtector in good working condition, please read this User's Manual carefully before operation. If you have any doubt, contact your supplier.

The electrostatic sprayer shall be operated, maintained, and repaired by persons familiar with it, and know how to operate it safely. Viruserv shall not be liable for decreased reliability, machine damage, or personal injury arising from unauthorized modifications to the electrostatic handheld sprayer.

PACK LIST

- VHProtector
- 2.5 Ah DC battery charger
- 14mm plastic nozzle removal tool
- Collapsible funnel
- User Manual

FUNCTIONS



2.

FUNCTIONS



3.

OPERATION

1. Plug the lithium battery charger (12V, 2.5Ah) into charging port and charge until red light turns green.
2. Detach Tank from gun.
3. Use funnel and pour disinfectant into Tank.
4. Slide Tank back into position until the Tank Lock clicks and secures the Tank to the gun..
5. Pull Spray Trigger to start disinfecting.
6. Place Atomizing Adjustment Lever in the lowest position for the finest spray setting.
7. When finished, pour any remaining disinfectant out of Tank.
8. Pour in some water and spray for a minimum of 15-seconds to clean out any disinfectant.
9. Pour out any unused rinse water.
10. Return to storage location and plug lithium battery charger into charging port.

SPRAYING METHOD

- Do not walk into the chemicals as you are spraying.
- Typically, keeping the electrostatic gun 2~3 feet away from the object with the Atomization Adjustment Lever at the finest setting, provides adequate coverage, but your application may require adjustments.
- Always follow the chemical manufacturers guidelines for PPE, disposal, and other safety measures.

WARNING

The metal ring around the nozzle applies the electrostatic charge to the droplets. Touching the metal ring while spraying will cause a shock.

I) Safety and Operational Considerations

- Attention must be paid to the filtration of liquid and water to avoid clogging the nozzle and affecting operation. If the nozzle is blocked, the particles must be removed before starting operation.
- Operators must be aware of the properties and protective methods used to avoid direct physical contact with chemicals. Spraying with chemicals that have a corrosive effect on plastics and metals should be avoided. Do not spray with wettable powder to prevent clogging the nozzle.
- After the electrostatic sprayer has been used, the exterior shall be cleaned and wiped down with water promptly before being placed in an appropriate storage location.
- Cleaning method: fill the reservoir with water and spray the machine for 15-seconds, pour out the remaining rinse water and wipe clean.

- Do not submerge the electrostatic gun in water. Do not use the electrostatic sprayer in a flammable or explosive environment.
- Care should be taken to keep the exterior in a clean and dry condition during operation and limit physical contact with passers-by during spraying.
- **Do not touch the metal ring during operation.**
- After charging, leave it for 10-minutes before using.
- The battery should be charged for maintenance at least once-a-month.
- Proper use and maintenance of the battery can significantly extend the life of the battery.
- The electrostatic spray gun is equipped with tens of thousands of high-voltage electricity and disassembly of the machine is strictly prohibited.
- The use of special working fluids, such as strong acids and bases, is not permitted.
- Chemicals should be used following the safety instructions provided by the manufacturer.

WORKING PRINCIPLES

- The sprayer uses a 12V 2.5 Ah lithium battery as the power source to drive the water pump and high-voltage electrostatic generator at the same time. When the high-speed pump squeezes out the electrostatic charge from the nozzle, the droplets are sprayed under the combined action of gravity, external force, and electrostatic force directly to the target.

SCOPE OF APPLICATIONS

- The VHProtector can be used for sanitary epidemic prevention and disinfection of factories, warehouses, schools, airports, hospitals, restaurants, retail locations, and more.

SPECIFICATIONS

- Empty weight: 1.5 lbs
- Size: 11.5 x 7 x 3 inches
- Tank Capacity: 17 ounces
- Battery capacity: 12V, 2.5Ah Lithium
- Charger Input: AC 110
- Continuous working time: 3~3.5 hours
- Electrostatic voltage output: 1.5 - 3 kV
- Pressure: 0.15 - 0.4 mpa
- Median droplet diameter: 90 microns (60~120)
- Flow Rate: 3-ounces per minute
- Spray distance: 1.5~3 feet

PROBLEMS / CAUSES / FIXES

No	Problems	Causes	Fixes
1	The nozzle is not spraying, or low flow-rate	1) The filter at the bottom of the inlet hose is blocked.	1) Clean the filter at the bottom of the inlet hose.
		2) The inlet valve is blocked.	2) Pass the inlet valve with thin wire.
		3) The nozzle is blocked.	3) Replace or clean the nozzle.
		4) The battery has low power.	4) Charge or replace the battery.
		5) The pipeline is blocked.	5) Have a professional disassemble gun to clean or replace the pipeline.
2	Spray is not normal	1) The nozzle is not tightened properly.	1) Tighten/Loosen nozzle with supplied tool.
		2) The nozzle is damaged.	2) Replace the nozzle
		3) Diaphragm pump problem	3) Repair the diaphragm by a professional.
3	Spray not working	1) Battery has no charge.	1) Charge or replace the battery.
		2) The fuse is loose	2) Replace the fuse.
		3) Poor spray trigger contact.	3) Repair or replace the trigger switch.

AFTER-SALES SERVICE

- This VHProtector has been strictly inspected and passed factory quality-control. If the new device is unable to operate as designed, please contact your supplier.

WARRANTY COVERAGE

- One-year warranty for the whole machine and one-year for major parts, except for normal wear-and-tear. The main components include the battery, charger, high-voltage generator, and water pump. One-month warranty on all wear parts. Wear parts include seals, nozzles, etc.
- The battery IS NOT covered under warranty if it is over-discharged, or improper charging maintenance causes a shortened battery life. Additionally, the battery IS NOT covered under warranty if there is an electrical surge while charging the battery.
- The pump IS NOT covered under warranty due to external forces, corrosive liquid immersion, or chemical impurities.
- If repairs are required, please contact your supplier.
- In the event of human-caused damage during the warranty period, warranty personnel may charge for the cost of repair.