

ELECTROSTATIC SPRAYER

CORDLESS BACKPACK
UF-0160L

Operating Instructions(ionized grounding type)



INSTRUCTION MANUAL

SAVE THESE INSTRUCTIONS FOR FUTURE REFERENCE

READ AND UNDERSTAND ALL WARNINGS AND INSTRUCTIONS BEFORE USING THIS ELECTROSTATIC SPRAYER!

Note

Thanks to the latest technology, the machine can be operated by wearing protective gloves without affecting the spray's ring-absorbing effect.



WARNING!

If the liquid spills from the mouth of the barrel, wetting the barrel's appearance and the operator's clothing and body, it may lose the effect of electrostatic adsorption and cause poisoning and electrostatic leakage to irritate the skin. Therefore, it is important to tighten the lid of the drum during operation to prevent spillage from the mouth of the drum. If spraying soluble powder should be cleaned in time after the water pump and nozzle, the operation should be charged in time. Keeping the spray rod connection tight and the barrel exterior dry and clean is important to ensure safe handling of the aerosol and the effect of electrostatic adsorption and comfortable handling. When using the air gun for spraying operations, it is important to note that the air gun motor should be turned on before starting the water pump for spraying; when closing the air gun, the water pump power should be cut off first, then cut off the air gun power, so as to prevent the air gun internal moisture caused by the motor damage and static electricity adsorption effect and the occurrence of high pressure leakage. Do not use liquids that are corrosive to plastics and metals to avoid damaging important components such as tanks, pumps and nozzles. This machine cannot use wettable powder.

The UF-0016L air-fed multi-functional electrostatic atomizer is a backpack type liquid electrostatic electric atomizer. This sprayer combines the advantages of electric spray, low volume spray, wind spray and electrostatic spray, etc. It has a series of advantages such as pesticide saving, water saving, pollution reduction, excellent effect, light body, range expansion, efficiency improvement, body consumption reduction, agricultural cost reduction, etc. It is the ideal efficient plant protection and disinfection equipment in the field of modern rural plant pest control and hygiene prevention and disinfection.

I. Safety and operational considerations

1. Great attention must be paid to the filtration of liquid and water to avoid clogging the nozzle and affecting operation. If the nozzle is blocked, in the case of a stoppage, the particles will be removed before starting the machine operation.
2. Operators must be aware of the properties and protective methods of the agents used to avoid direct physical contact with pesticides that could cause poisoning. Spraying with chemicals that have a corrosive effect on plastics and metals should be avoided. Do not spray with wettable powders to avoid damaging pumps and clogging nozzles.
3. After the machine has been used, the interior of the drum and the injection system shall be cleaned and wiped down with water in a timely manner before being placed in an appropriate location in the room for proper storage. Cleaning method: After spraying the liquid, fill the reservoir with water and spray the machine for 15 seconds, pour out the remaining water and wipe clean.

4. It is prohibited to submerge the nozzles and fuselage in water to prevent damage to motors and batteries and electronic components. It is prohibited to use this machine in a flammable and explosive environment.
5. Care should be taken to keep the barrel's exterior and handle in a clean and dry condition during operation, and it is prohibited to make physical contact with passers-by during operation, and to touch the spray rod and the barrel's charging socket with your hand during operation.
6. Please note that if an alarm sounds in the machine (lead-acid battery), it should be charged in time. Please leave it for 10 minutes after charging before using it. When the battery is not used for a long time, the battery should be charged for maintenance not less than once a month. Proper use and maintenance of the battery can greatly extend the life of the battery.
7. The machine is equipped with tens of thousands of volts of high-voltage electricity and it is strictly prohibited to disassemble the machine by itself.
8. The use of special working fluids such as strong acids and bases is prohibited.
9. Pesticides should be used in accordance with the safety instructions provided by the pesticide manufacturer.
10. Because of the high humidity and water vapor in the shed, please do not store the machine in the shed, so as not to cause moisture to the electrical wiring inside the machine, affecting the electrostatic adsorption effect of the spray and the phenomenon of electrostatic leakage.

II. Working principles

The machine uses 12V lead-acid battery or lithium battery as the power source, through the high-pressure electrostatic generator to make the liquid with a polar electrostatic charge, while through technical means to make the target material with another polar electrostatic charge. The liquid with a polar electrostatic charge is pressurized by a diaphragm pump and extruded directly through a fine nozzle hole, or the droplets are sent to a distance by an air gun. The small droplets with one polar electrostatic charge are directed to the front and back of the crop (target) with the other polar electrostatic charge under the combined action of external force and electrostatic force, and are firmly adsorbed by the crop stems and leaves, thus achieving efficient disinfection and insecticide.

III. Scope of application

This machine is suitable for the control of pests and diseases of low and sparse crops, tea, tobacco, flowers, fruit trees and other agricultural and forestry crops (especially suitable for large crops). It can be used for spraying insecticides, fungicides, herbicides, plant hormones, foliar fertilizers, etc. It can also be used for sanitary epidemic prevention and disinfection of factories, warehouses, stations, docks, hotels, high speed railways, airports, breeding farms and other environments and livestock, etc. It can be easily sprayed with various water agents, emulsions and soluble powders. Water pumps and nozzles should be cleaned promptly after spraying soluble powders.

IV. Technical

SPECIFICATIONS	
MODEL:	UF-0160L
BATTERY CAPACITY:	12V 8-16AH
WATER TANK:	16L
SPEED:	3000-15000 M2/hour
SPRAY AMPLITUDE:	About 2.5m(lance swing)/About 6m(gun swing)
VOLTAGE:	12V
EFFECTIVE OUTPUT VOLTAGE OF ELECTROSTATIC GENERATOR:	15-30KV
SPRAY FLOW:	4-12L/Hour
MEDIAN DROP DIAMETER:	40-90 um
CHARGER INPUT/ OUTPUT VOLTAGE:	AC110-240/DC12-14.8
CHARGER TIME:	3-3.5hours
CONTINUOUS WORKING TIME:	(spray rod) 3.5 hours / (spray gun) 1.5 hours
PACKING SIZE:	54x21x59 CM
20GP CONTAINER:	400 units
40HQ CONTAINER:	980 units
GROSS WEIGHT:	7.5 kgs
GUN WEIGHT:	1.5 kg

WIND GUN CONNECTION INSTRUCTIONS



1. When installing the nozzle, take care that it must be tightened.



2. Installation of nozzle shields.



3. Tighten the inlet and aerosol dispenser hose connections.



4. Connection of the power plug for the air gun to the power outlet for the aerosol sprayer.



5. Turn on the air gun power switch first.

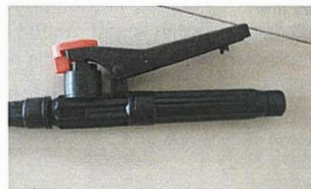


6. Then opening the power switch for the aerosol dispenser.

NOTE:

1. Activate the air gun power switch before activating the power switch at the base of the aerosol sprayer when in use.
2. When closing, turn off the power switch on the base of the aerosol sprayer first, then the power switch on the air gun, paying attention to the order of operation so as not to affect the effect of use.
3. When spraying, you should follow the wind and do not spray against the wind to avoid affecting the effect and contaminating your body.

HANDLE CONNECTION INSTRUCTIONS



1. Tighten the handle end to the aerosol dispenser water hose connection



2. Tighten the spray rod to the handle connection.



3. Meet in three different ways according to the requirements.



4. Turn on the power switch for the aerosol dispenser.



5. When spraying, hold the handle by hand and depress the flow switch.



6. When spraying is complete, turn off the power switch.

V. Method of use

1. Reference method of dispensing: first, according to the ratio of 3 liters / mu into the appropriate amount of water, and then refer to the instructions of the pesticide package, the amount of the indicated use per mu of land minus about 60%, after full dissolution and filtration into the barrel, dry the barrel appearance of water, tighten the lid of the barrel can be implemented after spraying. However, the liquid added to the barrel must be sufficiently filtered, otherwise it will cause clogging of the spray nozzle and affect the normal spraying operation and control effect. The specific ratio of liquid to water can also be adjusted according to the speed of travel of each person and the height of the crop, and in some cases, the relevant technical personnel should be asked to determine. When handling pesticides, the safety instructions provided by the pesticide manufacturer should be followed.

2. Operation sequence: after dispensing, tighten the lid of the barrel, the liquid storage barrel on the back, hold the handle of the spray rod, and then open the barrel base total switch, the nozzle toward the crop for spraying operation. When spraying the air gun, the air gun switch should be turned on first, then the barrel base switch. After spraying, the barrel base switch should be turned off before the air gun switch.

3. Spraying method: spraying from the windward end of the field to start, so that the nozzle is in front of the side of the windward end of the human body, so that the windward side forward walking side spraying pesticides, so that the spraying of fine mist with the wind drift down to adsorb on the crop to avoid human body pollution. The spraying speed can be more than one step per second, the spray rod spraying the spraying amplitude (including shaking) is about 2.5 meters, such as every 10 minutes to walk a distance of 300-400 meters, that is, an acre of land. It is more efficient when air-fed spray is used. The height of the nozzle from the crop can be self-adjusting between 0.2 m and 0.5 m to avoid re-spraying and leakage. Repeated spraying of crops to avoid overdose is prohibited.

4. Grounding device: In order to strengthen the electrostatic adsorption effect of the spray, the machine is equipped with ionized air ground electrode on the body. In the operation, the air ionization of the charge is used to strengthen the effect of electrostatic adsorption.

5. Spraying times: During the summer season, spraying is more effective before 11 a.m. and after 2 p.m. (except for greenhouse operations). However, in case of windy weather, the direction and range may be difficult to control due to the drift of the drug mist affected by the wind, so it is not suitable for use. It is also not suitable for use in rain, snow and heavy fog. The ambient temperature of this machine is above 0°C and below -40°C.

VI. After-sales service

This machine has been strictly inspected and passed the factory, and the quality of the "three bags" is implemented. If the new machine is found to affect the normal use of the quality of the new machine before the use of the package replacement; after the use of quality problems found by the county agent salesman responsible for providing maintenance services, can also directly contact the factory.

VII. Warranty Coverage

1. One year warranty for the whole machine and one year for major parts, except for wear and tear. The main components include: battery, charger, high voltage generator, water pump. One month warranty on wearing parts. Wear parts include: windshields, seals, spray rods, nozzles, etc.
2. Battery / lithium battery due to over-discharge or not timely charging after use and maintenance of the use of time shortened or damaged, do not enjoy free warranty; charger due to improper storage and use and damage caused by external forces, do not enjoy free warranty; water pump due to external forces, corrosive liquid immersion, chemical impurities caused by the cause of the damage, do not enjoy free warranty.
3. If repairs are required, they can be made directly at the dealer's designated repair point with the matching warranty card. If the warranty card is lost, it is not covered by the stated free warranty.
4. In the event of damage due to human causes during the warranty period, the maintenance personnel may charge for the cost of repair.
5. Other items are carried out in strict accordance with the relevant provisions of the national product quality "three packages".

Please direct questions and /or warranty claims to info@symteksystems.com