

**VECTOR FOG**



# DC20+ ULV FOGGER

## User Manual

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# SAFETY PRECAUTIONS

- 1 The battery charger is for AC 110V — 240V power supply/60Hz. Unplug the charger after the battery is fully charged (green light).
- 2 Do not use any damaged power cord, plug, charger or socket.
- 3 Do not touch the plug, charger or switch with wet hands.
- 4 The charger is not waterproof. Do not use or store this at humid atmosphere or wet places.
- 5 Do not charge or store the machine over 95°F (35°C) or under 50°F (10°C). Do not expose and use the machine over 104°F (40°C).
- 6 Do not drop, heat, cut, or disassemble the machine.
- 7 Do not use the machine close to combustible or inflammable materials.
- 8 When using the machine inside vehicles, secure the position of the machine to prevent electric shocks and chemical teaks.
- 9 Please wear safety equipment (mask, anti-contamination clothing, gloves, etc.) while using noxious material.
- 10 Do not inhale the cold fog generated from the machine. The micro-droplets produced by this machine can float in the air for a long time and are quickly absorbed by the lungs. Depending on the chemical being used, this could result in serious injuries or death.
- 11 Only use the designated charger to charge the battery.
- 12 Do not fill in the solution tank while charging the battery.
- 13 Do not disassemble, modify, or alter the charger and the machine. Modifications or alterations will invalidate the warranty.
- 14 Do not lean the machine on its side with chemical inside the tank. This can cause chemical leaks resulting into faulty machine.
- 15 Do not fill the solution tank with powder, viscous liquid and flammable solution such as strong acid, strong alkaline, petrol, etc.
- 16 If the machine or the charger is faulty, please contact the supplier.

# PRODUCT OVERVIEW

DC20 PLUS is a cordless motor operated machine that generates cold fog, mist or aerosol formed of tiny droplets known as ultra low volume (ULV). This machine is generally used to apply disinfectants, insecticides, deodorizers, biocides and fungicides. Due to the droplet size produced by this machine (5-50 microns), it is ideal for removing germs, insects, fungi and odors as the cold fog will penetrate each and every hidden corner of the fogged area.

## SPECIAL FEATURES

### **Cordless Machine with Built-in Battery**

Can be operated anywhere without power cord after the battery has been charged.

### **Special Designed Nozzle**

Specially designed to adjust the droplet size between 5-50 microns while controlling the minimum flow rate to 0.25 LPM.

### **Solution Compatibility**

Compatible with different types of solutions such as water, oil, air freshener and others.

### **Quiet Cordless ULV Fogger**

Generally more quiet than thermal foggers, which is useful in urban areas.

## MULTIPURPOSE USE

- Pest control for apartments, flat, houses and building.
- Regular fumigation to prevent Epidemic disease for schools, buses, subways, trains, planes and institutions.
- Removing indoor and outdoor odors for a clean environment.
- Disinfecting animal shelters to eradicate harmful microorganisms.

# OPERATION

## CHARGING

- All new machines only come with 30% battery life.
- The battery needs to be fully charged
- Unplug the charger when fully charged.
- When the battery is under 30%, the indicator on the handle turns red.

- 1 Connect the charger to the power cable.
- 2 Connect the charger to the charging port on the handle.
- 3 Plug-in the power cord to the main power supply
- 4 Battery takes 3 hours to recharge

**4.1 Red light:** Ongoing charge

**4.2 Green light:** Fully charged



1



2



3



4.1



4.2

## REMARK

- ✦ Use the designated charger only.
- ✦ Use the charger for recharging purposes only.
- ✦ Do not use the machine while recharging.

# OPERATION

## FILLING THE TANK

- Pre-mix the chemicals prior to filling the tank.
- Fill the tank with chemical mixture through the solution inlet.
- Close the cap of the tank securely to prevent chemical leakage.

**SOLUTION  
INLET**



## REMARK

- ➔ The tank capacity is only 2 Liters.
- ➔ Do not fill up the tank with solution while recharging the battery.
- ➔ Do not fill the solution tank with powder, viscous liquid and flammable solution such as strong acid, strong alkaline, petrol, etc.

# OPERATING THE UNIT



Turn on the machine by sliding the switch to the ON position.



Turn off the machine by sliding the switch to the OFF position.



Adjust the droplet size by turning the nozzle on the front of the machine. Clockwise reduces the droplet size. Anti-clockwise increases it.

# CLEANING

Clean the fogger after every use to extend the life of the fogger.

## CLEANUP OF WATER BASED LIQUIDS

### STEP A

When fogging is complete, pour any liquid left in the tank to a suitable container using a funnel. Operate the fogger for one minute with the nozzle opened to the largest droplet size setting (anti-clockwise). This will get rid of any existing liquid remaining in the fogger's internal tubes.

### STEP B

Fill the fogger with some clean water and operate again for one minute. Remove any excess water from the tank.

## CLEANUP OF EMULSIONS

After fogging, begin with "STEP A". Fill the tank with appropriate solvent for the chemical that was used. Operate the machine for 1 minute to flush any residual chemical left inside. Repeat "STEP B". Allow the machine to dry before storing in a safe place.

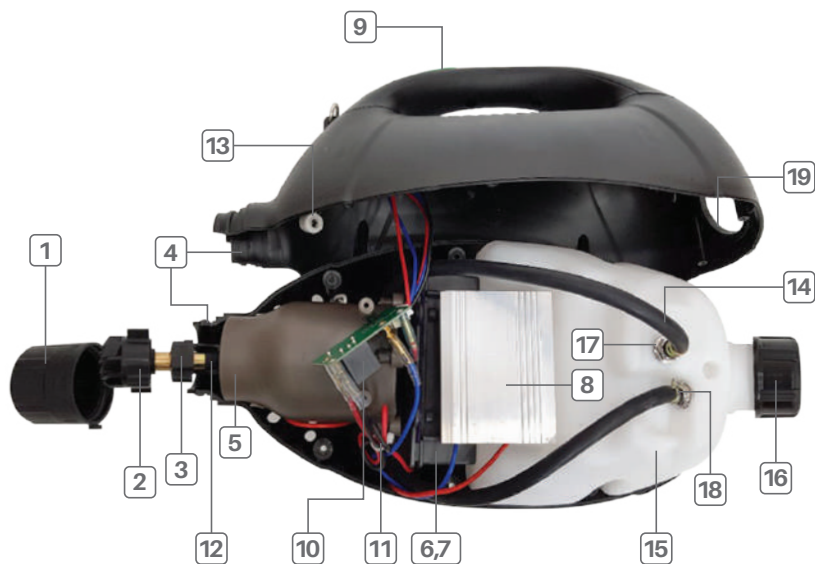


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### WARNING

Unplug fogger's power cord from the power source before attempting any cleaning or maintenance.

# PRODUCT



1 Air-Cap



2 Cap-Nozzle



3 Nozzle-Assy



4 Body-Assy



5 Motor-Assy



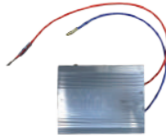
6 Battery-Assy



# PRODUCT



7 Battery



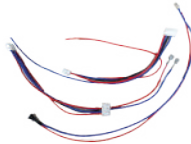
8 Invertor



9 Switch-Assy



10 PCB



11 Switch-PCB



12 Check Valve



13 Elbow



14 Hose



15 Tank-Assy



16 Tank-Cap



17 Air-Nipple



18 Water-Nipple



19 Packing



20 Battery Charger



21 Power Cable

# SPECIFICATIONS

Configuration		DC20 PLUS
Specifications	Dimensions	480 x 250 x 200mm (18.9" x 9.84" x 7.87")
	Tank Capacity	2L (0.5 gal)
	Net Weight	3.2 kg (7.05 lb)
	Nozzle Diameter	2.0Ø
	Vent Diameter	13Ø
	Coverage	1,500 sq ft (140 m²)
	Spray Distance	2 - 5m (Horizontal) (6.5-16 ft)
	Chemical Flow Rate	15 - 20 L/h (4 - 5.3 gal/h)
	Air Flow Rate*	100 L/min (26 gal/min)
	Droplet Size	5 - 50 Microns
	Spray Angle	80 Degrees
	Cable	Cordless
Motor	Motor	Ningbo Dechang AC 100V
	Motor Wattage	350W
	RPM	20,000 rpm
Battery	Voltage	22.0V
	Capacity	8,250mAh
	Continuous fogging time (when fully charged)	Up to 45 ~ 60 min
Charger	Input Voltage	110 - 240V, 50 - 60Hz
	Output Voltage	16.8V
	Current (I)	2.5A
	Charging Time	3.5 - 4hrs

\*Air Flow Rate: The amount of gas discharged from a fan per unit time is converted to a standard value.



# PRODUCT GUARANTEE

This product is guaranteed for twelve months from the date of original purchase. Any defect that arises due to faulty materials or workmanship will either be replaced or repaired during this period by the seller or authorized distributor from whom you purchased the unit. Transportation charges or duties shall be borne by Purchaser.

## **The guarantee is subject to the following provisions:**

- ✦ The guarantee does not cover normal wear, accidental damage, misuse, damage or used for a purpose for which is not designed; altered in any way; or subjected to any but the specified voltage if applicable.
- ✦ The product must be operated only by trained and skilled personnel and it must be correctly handled and operated in accordance with the instructions contained in this manual. The functional safety of the unit (e.g. by trial fogging with water) must be checked before putting the unit in operation. Any loose or leaking valves or lines should be repaired and fixed. If functional safety is not ensured, do not put the unit into operation.
- ✦ The guarantee will be rendered invalidated if the product is re-sold, fitted with non-original spare parts or damaged by inexperienced repair.
- ✦ Chemical solutions must be officially approved for the intended application and the material safety data sheet of the chemical solution should be revised prior to operation. Oxygen and

chlorine releasing chemicals (e.g. peroxides) and other acids should only be used with approved acid resistant equipment models. If not approved for acid resistance a Ph-value should be limited from 4,5-8,5. After use, fog with some clean water for about 3 minutes to remove any chemicals still left in the system. Ensure all the water is used up and the machine is dried prior to storage. Damage caused by corrosion due to humidity by wrongful storage will invalidate this guarantee

✦ Any formation of aerosols or fogs from flammable substances or acids releasing oxygen and a mixture with air and/or dust always involves the risk of fire or explosion if there is a source of ignition. Observe the explosion limit of a pesticide and avoid over dosage accordingly. Only use non-inflammable liquids (without a flash point) for treatments in rooms where a dust explosion hazard exists. Unit is not explosion proof.


✦ Operators owe a duty of care to prevent unreasonable risk of harm or injury. Operators should not fog towards hot surfaces or electric cables nor fog in rooms with a temperature exceeding 35°C. Only treat closed rooms. Position the unit in a safe and upright position with the hand piece hooked or carry it with the strap over your shoulder. In case of stationary use, do not leave the unit unattended. Secure treated rooms against unauthorized access (i. e. provide warnings outside). Always keep treated rooms closed and eliminate leakages. Ventilate treated rooms sufficiently before re-using them. If the machine stops fogging unintentionally, close the gas valve immediately and turn the chemical supply valve off (dripping of chemical may occur)

✦ Specifications are subject to change without notice. The manufacturer disclaims any liability for the incidental or consequential damages. The guarantee is in addition to, and does not diminish your statutory or legal rights. In the event of a problem with the product within the guarantee period call the **Customer Helpline: (UK)+44 (0)203 808 5797 | (KOREA) +82 (0)70 4694 2489 | (US) +1 201 482 9835**



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