



# 20+ ULV FOGGER

## User Manual





# 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 leaks.
- 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

20 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**

Is 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.  
This will prolong the life of the machine.

## 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.

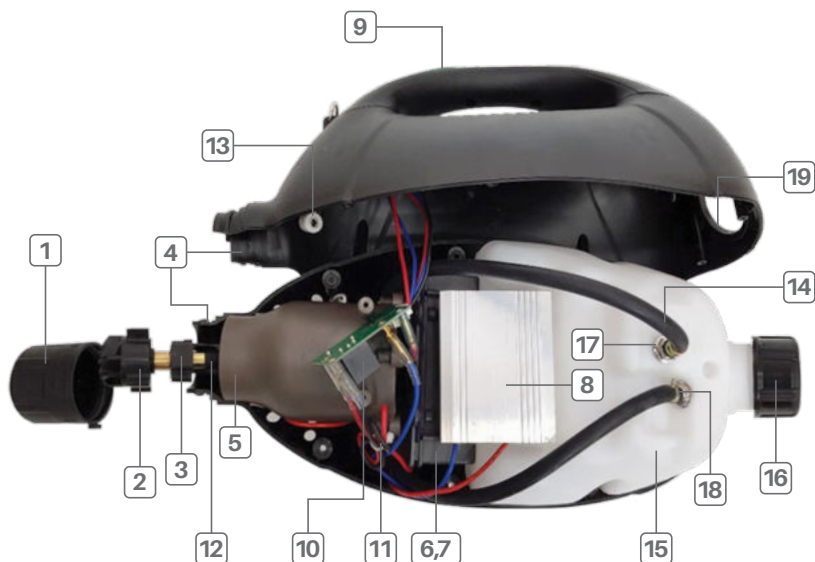


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### WARNING

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



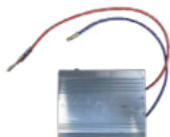
6 Battery-Assy



# 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		ULV 20+
Specifications	Dimensions	480x200x250mm
	Tank Capacity	2L
	Net Weight	3.2kg
	Nozzle Diameter	1.5Ø
	Vent Diameter	15Ø
	Air Flow	100 L/M
	Spray Distance	2-6 meters (Horizontal)
	Flow Rate	10-20 LPH
	Droplet Size	5-50 Microns
	Cable	Cordless
	Spray Angle	80 Degrees
Motor	Voltage	100V
	Motor Wattage	350W
	RPM	20,000 RPM
Battery	Voltage	21.6V
	Capacity	5,700mAh
	Continuous fogging time (when fully charged)	45 minutes
Charger	Input Voltage	110-240V, 50-60Hz
	Output Voltage	25.2V
	Current (I)	2.5A
	Charging Time	2.5-3hrs