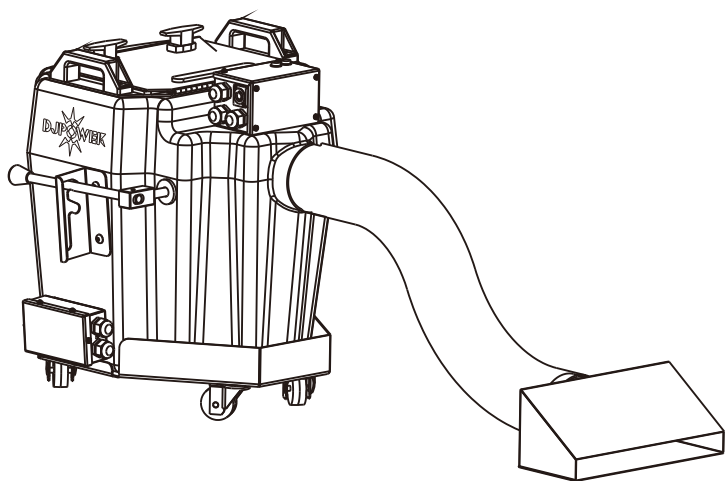


[ PRO STAGE EFFECTS ]



**X-1** USER MANUAL

**DRY ICE MACHINE**

GUANGZHOU DJPOWER ELECTRONIC TECHNOLOGY CO.,LTD



## • Foreword

Thank you very much for choosing the DJPOWER X-1 Dry Ice Machine. This item is a compact and portable dry-ice fogger generating huge amount of thick ground-hugging fog. It is pretty stable for the durable corrosion-resistant polyethylene housing.

Before start operating the unit, we strongly suggest to read the user manual carefully. Following the instructions in the user manual will ensure long-term stable and satisfactory effects. Please follow these operation, safety and maintenance instructions to ensure the machine's normal work and prolong its usage life.



Note: Requirements towards Solid CO<sub>2</sub>(Dry ice). Please use columnar dry ice. To achieve best effects, the size of dry ice should be as big as thumb.

How to get and store the dry ice.

Please prepare the dry ice before usage due to it will sublime with time. Storing it into a adiabatic or heat-isolated container can help mitigate the disappearance. Usually the seller of dry ice would supply the container when you buy the dry ice.

There are many shapes of dry ice, such as powder, granule, bulk, and globe. Among these, small globular one is the best, because there is no need to break it. If for a big massive one, you must break it into small pieces. Before that, please cover the bulk with cloth to avoid the dry ice fragments hurting people.

## • Introduction

X-1 is a professional dry ice machine which produces thick, white fog that hugs the floor and dissipates without rising. The powerful machine heats enough water to create fog from 8 kg of dry ice to provide 8 minutes of run time. Output and flow are easily controlled by adjustable multi-level control arm. Dual heaters allow for faster heat-up and recycle time. The unique design allows remaining dry ice to be stored temporarily in the machine for next uses within 20 min. A low water sensor increases safety.

## • Features

1. Aerodynamics based design instead of traditional fan-driven;
2. Rotational molded body with insulated high-intensity composite material, Light and compact, only 14 kg;
3. Durable and extremely low failure rate;
4. Dual heaters (3,000 W/6,000 W) allow for faster heat-up (only 15 min) ;
5. Clear water level display and low water sensor;

6. Create strong fog from at most 8 kg of dry ice one time to cover max 250 m<sup>2</sup>;
7. 5 minutes of run time when full on, 10 minutes of run time when 50% output;
8. All stainless-steel metal parts, firm, durable and extremely low failure rate;
9. Easy to pour out the remaining water after use;
10. Increase safety with low-water and temperature sensors that automatically shut off heaters;
11. Manipulate the output and flow with the adjustable, multi-level control handle;

- **Safety Precautions**

1. Ensure that any operation of the machine is supervised by trained and authorized personnel.
2. Do not modify the machine or use a machine which has been damaged .
3. Protect the machine from any direct weather effects and wet locations.
4. Do not continue to produce fog when visibility is reduced to 50 cm or below.
5. Avoid directing fog output at people, structures or objects within close proximity of the nozzle.
6. Ensure that adequate exhausting equipments are available in the event of an emergency.

- **The Dry Ice Fogger Principal**

Dry Ice is a solid form of carbon dioxide. With its ability to sublime, transform from the form of solid to gas without generating liquid and its low temperature up 87.5 Celsius degree, the dry-ice-based fogger come into being. When immersed in hot water or boiling water, the dry ice sublimates which will stir the water violently and spray many water droplets into the air. The released cold CO<sub>2</sub> gas will cause the water vapor in the air to form more droplets. This great expansion of gas pushed moisture out of the machine. Because when exposing to the relative cold air, it sinks to the floor, plus the droplets in the air, low fog effects then come into being.

- **Opening the package and inspecting the machine**

Please make sure the machine is in good condition after opening the package. If there is any damage, please contact with your dealer directly and do not power on the machine

- **The following parts should be included when you receive the package**

1. One X-1 Dry Ice Machine

2. One power cord
3. One user manual

### • Operation

1. Place the machine on a firm and level surface where it will be used. Take off the lid and fill with about 5 gallons (18 liters) water (hot or cold). Connect the unit to power, when the red light is on, it means the machine is heating up.
2. Plug the cord into a grounded 22-amp receptacle. The heater draws 11 amps at 230 volts.
3. While the machine is heating up, raise the built-in basket to its highest level and fasten it with the black handle on the side of the machine.
4. After steaming the water for approximately 15-30 minutes, the machine will be ready to use.
5. Using protective gear load, the basket can hold 10 kilograms (about 18 lbs) of dry ice. Please Note: Usually the dry ice being used here cover 2/3 of the whole basket. Put into the dry ice at the last possible moment when needed, because the steamy atmosphere in the machine will make the dry ice inside evaporate if it is put inside too long beforehand.
6. After holding the dry ice, tighten the lid, and screw the lid latch according to the instruction of imprint.
7. When the fog is in need, grasp the operation lever and slowly lower the handle. A full basket should not be plunged into the hot water completely, because the violent dry-ice sublimating would result in high and dangerous pressure in the housing. The operation lever is used to allow the basket to move up and down in the water. As the solid CO<sub>2</sub> is immersed, thick cloud-like fog will be produced from the nozzle. To increase the rate, lower the lever to the end. Fully raising the handle will quickly stop the fog output. Thus it is possible to realize the "ON" and "OFF" control by adjusting the operation lever.
8. When the machine is to be emptied, allow it to cool. Empty the remaining water in the machine to buckets where the machine stands rather than carrying it to drain. Do not move the machine with hot or boiling water in.

### • Maintenance

1. Keeping lid latch slightly oiled will protect them and allow them to operate easily.
2. Make sure no other barriers in the rubber lid seal, otherwise it will allow gas escape through the lid gasket.
3. When you heat up the machine, leave the lid off. This prevents the carry handles from getting hot before adding dry ice.
4. Do not pour cold water directly onto hot heating element as this will cause

premature failure.

5. To replace the components or repair a broken seal:
  - a. Remove components or clean.
  - b. Replace the rubber gaskets and sealing washers. Do not reuse the old ones.
  - c. Tighten bolts evenly to compress the seal.



DJPOWER company considers all of its product to be safe for use in the application it was intended.

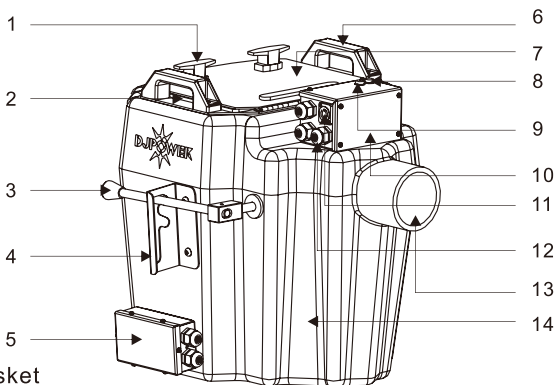
DJPOWER company takes no responsibility for misuse or incorrect use. Always refer to the Product Manual for proper use.

## • Technical Specifications

Voltage:	AC 220 V - 240 V 50/60 Hz
Main Power:	3,000 W
Assistance Power:	3,000 W
Total Power:	6,000 W
Heat-up Time:	30 min (3,000 W)
Shortest Heat-up Time:	15 min (6,000 W)
Electronic Temperature Control:	75 °C ~ 85 °C
Water Consumption:	18 L
Max Output Time:	4 ~ 5 min
Max Coverage:	Around 250 m <sup>2</sup>
N.W.:	14 kg
G.W.:	16 kg
Machine Size:	524/474/468 mm
Package Size:	600/550/560 mm
Consumables:	Columnar dry ice

## • Diagram

1. Rotary bolt lock
2. Sealing strip
3. Hand shank
4. Gear groove
5. Heater
6. Handle
7. Lid
8. Heating finished
9. Heating indicator
10. Line box
11. Assistant power
12. Main power
13. Nozzle
14. Airframe, built-in dry ice basket



- **Optional parts**

- 1.Optional (charge extra) movable rolling cart, convenient to be used.
- 2.Optional (charge extra) 2-meter hose, cater for different occasions.

