

H-X2 DMX

GIANT AUTOMATIC DRY ICE MACHINE

USER MANUAL

1 BEFORE YOU BEGIN

1.1 What Is Included




- H-X2 DMX Giant Automatic Dry Ice Machine × 1
- Power Cord × 1
- Warranty Card × 1
- User Manual × 1

1.2 Unpacking Instructions

Carefully unpack the product immediately and check the container to make sure all the parts are in the package and are in good condition.

If the box or the contents(the product and included accessories) appear damaged from shipping, or show signs of mishandling, notify the carrier or dealer/seller immediately. In addition, keep the box and contents for inspection.

1.3 Symbols

Symbol	Meaning
	<i>Caution</i>
	Critical installation, configuration, or operation information. Not following these instructions may make the product not work, cause damage to the product, or cause harm to the operator.
	<i>Important</i>
	Important installation or configuration information. Failure to comply with this information may keep the product from working correctly.
	<i>Information</i>
	Useful information.

1.4 Disclaimer

The information and specifications contained in this User Manual are subject to change without notice.DJPOWER assumes no responsibility or liability for any errors or omissions and reserves the right to revise or to create this manual at any time.

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1.5 Safety Notes

Please read the following Safety Notes carefully before working with the product. The notes include important safety information about installation, usage, and maintenance.

1.5.1 About Dry Ice and CO2

Dry ice is a solid form of carbon dioxide. The term "dry ice" is used because of its ability to sublime-the process of transforming from a solid directly to a gas without any liquid formation. Dry ice reaches a temperature of -189.5F(-87.5°C).

When immersed in hot or boiling water, dry ice sublimates and agitates the water. The releases cold CO2 gas causes the water vapor to form water droplets in the air. This expansion of gas and moisture pushes its way out of the machine. Because the CO2 is cold and heavy, the moisture sinks to the floor. The droplets in the air create the fog effect.

- Dry ice should never be stored in a sealed container. It can lead to a pressure build-up and a risk of an explosion.
- DO NOT cover or plug the output nozzle during operation. Compressing the dry ice may lead to an explosion.
- Do not handle dry ice with bare hands. Thick gloves must be worn.
- Do not swallow dry ice. It may lead to severe internal injuries.
- Before breaking the dry ice, cover it with a piece of cloth or place the block in a cloth bag. Eye protection must be worn.
- Do not use in a confined space. Make sure the room is well ventilated before beginning usage.

1.5.2 Personal Safety

- Always connect the product to a grounded circuit to avoid the risk of electrocution.
- During warm up and operation, water tank will be scolding hot. Do not touch.
- The product is very hot during operation and it remains hot for a long time after operation has stopped.
- Do not touch the product's nozzle. Keep a minimum distance of 6.5 ft.(2 m) from the nozzle to the nearest object.
- Do not use the product as a space heater.
- Always disconnect the product from the power source before cleaning.
- Drain the water tank before transporting the product.

1.5.3 Mounting and Rigging

- For safety reasons, we do not recommend mounting the product in any capacity. Operate the product while it is on the ground only.
- The product is for indoor use only! To prevent risk of fire or shock, do not expose the product to rain or moisture. Do not use when the machine is soaked in water and wipe with a dry cloth.
- CAUTION: When transferring product from extreme temperature environments,(e.g. cold truck to warm humid ballroom) condensation may form on the internal electronics of the product. To avoid causing a failure, allow product to fully acclimate to the surrounding environment before connecting it to power.
- Do not mount the product on a flammable surface(linoleum, carpet, wood, paper, carton, plastic, etc.).
- Do not use in a confined space. Always install the product in a location with adequate ventilation, at least 20 in(50 cm) from adjacent surfaces.

1.5.4 Power and Wiring

- Always make sure that the voltage of the outlet to which you are connecting the product is within the range stated on the decal or rear panel of the product.
- Make sure the power cord is not crimped or damaged.
- Never connect this product to a dimmer pack or rheostat.
- Never disconnect the product from power cord by pulling or tugging on the cord.
- To eliminate unnecessary wear and improve its lifespan, during periods of non-use completely disconnect the product from power via breaker or by unplugging it.

1.5.5 Operation

- Do not operate this product if you see damage to the housing or cables. Have the damaged parts replaced by an authorized technician at once.
- The area in front of the product may become wet during operation. Make sure not to use near smooth floors as they may become slippery.
- The output of the machine will create damp or wet conditions under and around the H-X2 DMX. Use caution! Do not use while it near electrical equipment, power outlets, or any place that may cause danger through moisture.
- Close and latch the lid. Do not touch or allow the water to splash to avoid scalds and burns.
- Never carry the product by the power cord or any moving part. Always use the handles.
- The maximum ambient temperature(Ta) is 104 F(40C). Do not operate the product at higher temperatures.
- Do not continue to use the machine once visibility is reduced to 20 in.(50 cm) or below.
- This product contains no user-serviceable parts. Any reference to servicing in this User Manual will only apply to properly trained, certified technicians. Do not open the housing or attempt any repairs which can lead to damage or malfunction.
- In the event of a serious operating problem, stop using the product immediately.



Keep this User Manual for future consultation. If you sell the product to another user, be sure that they also receive this document.

2 INTRODUCTION

2.1 Description

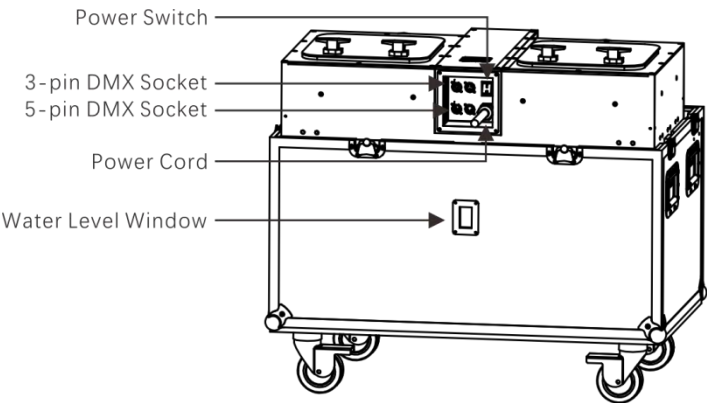
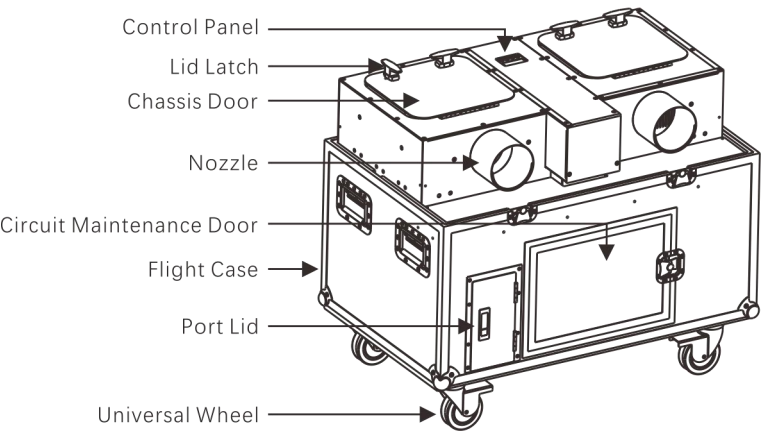
H-X2DMX is a professional dry ice machine which produces huge volume of thick, white fog that hugs the floor and dissipates without rising. The powerful machine heats enough water to create fog from 30kg of dry ice to cover around 400 square meters in very short time. The unique design allows the remaining dry ice to be stored temporarily in the machine for next uses within 5 hours. Heating up time is around 35 minutes. Output and flows are easily controlled by on-board LCD or DMX controller.

2.2 Features

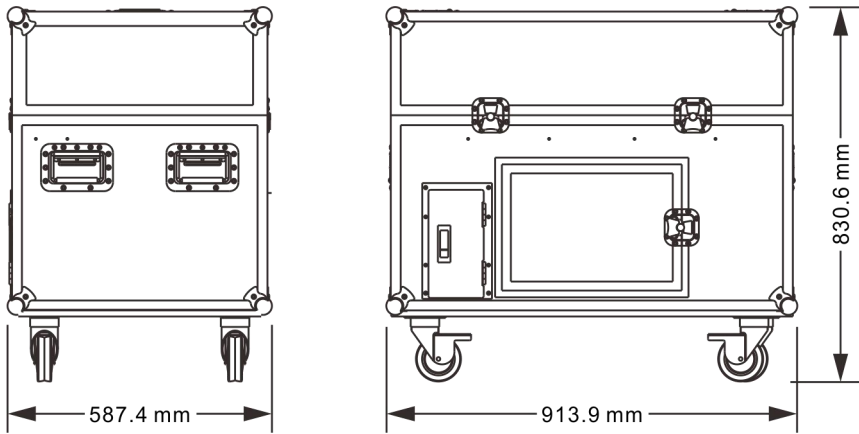
- Long time storage of dry ice, more than 5 hours even during the heating up.

- Easy and convenient to use, allow DMX-512 control, multiple units could be linked and controlled together.
- Output on and off repeatedly can be easily controlled anytime according to the actual need to save and store the dry ice as much as possible.
- Adjustable output via either DMX control or the on-board LCD control.
- Automatic Output Compensation (AOC) function would prevent the continue output from getting weak but allow the unit to maintain the same output strength, after a period of continuous output and dry ice consuming.
- Water level window and temperature display for easily checking the status of the unit.
- Chinese and English user-friendly display and operation.

2.3 Product Overview



2.4 Product Dimensions



3 TECHNICAL SPECIFICATIONS

AC Power	Input Voltage & Rate	220-240 V, 50/60 Hz
	Current Limiter Type	Air Switch
	Current Limiter Specifications	63 A
	Nominal Total Power Consumption (230 V)	12,000 W
	Typical Current (230 V)	52.2 A
	Power Cord Type	10.00 mm ²
	Power Cord Length	3.0 m
	Power Plug Type	Bare Wire
	Power Input Connector	Hard-wired
Heating	Total Heating System Power Consumption	12,000 W
	Main Heating System Power Consumption	12,000 W
	Standard 1 st time Heat-up Time	35.0 min
	Re-heat Up Time	25.0 min
Capacity	Water Tank Capacity	75 L
	Dry Ice Capacity (Dry Ice Basket Volume)	33.8 L
	Dry Ice Capacity (Weight approx.)	30.0 kg
	Dry Ice Storage Time	5.0 h
Output	Adjustable Output	√
	Adjustment Level/Range	0-5
	Max Coverage	400 m ²
	Maximum Continuous Duration (100% Output)	3 min
	Continuous Output	√
	Max Continuous Output Level	100%
Accessory	Consumable Type for Standard Output Test	Columnar Dry Ice
	Diversion Pipe (Qty, Length, Nozzle Diameter)	Optional: 2 pcs, 5 m, 125 mm
	Diversion Nozzle (Nozzle Diameter)	Optional: 2 pcs, 125 mm
	Flight Case	√
	Power Cord	√

Placement	Horizontal	√
Features	Physical Thermostat	√
	Adjustable Output	√
	Automatic Output Compensation (AOC)	√
	Low Water Level Shutdown	√
Control	Built-in Manual Control	LCD
	Control Protocol	DMX-512
	DMX Channel Range	1
Weight & Dimensions	Net Weight	115.0 kg
	Gross Weight	120.8 kg
	Machine Dimensions	913.9 × 587.4 × 830.6 mm
	Packing Dimensions	990 × 670 × 865 mm
	Packing Volume	0.71 cbm
Consumables	Consumables	Dry Ice & Water

4 SETUP

4.1 AC Power

The machine has a fixed voltage power supply and can work with an input voltage of AC 220 V-240 V 50/60 Hz, depending on the specific model.

To determine the product's power requirements (circuit breaker, power outlet, and wiring), use the current value listed on the label affixed to the product's back panel, or refer to the product's specifications chart. The listed current rating indicates the product's average current draw under normal conditions.



Always connect the product to a protected circuit (circuit breaker or fuse). Make sure the product has an appropriate electrical ground to avoid the risk of electrocution or fire.



Never connect the product to a rheostat (variable resistor) or dimmer circuit, even if the rheostat or dimmer channel serves only as a 0 to 100% switch.

4.2 AC Plug

The Giant Automatic Dry Ice Machine H-X2 DMX comes with a power input cord terminated with a hard-wired connector on one end and a bare wire on the other end (U.S. market). If the power input cord that came with your product has no plug, or if you need to change the plug, use the table below to wire the new plug.

	Wire (U.S.)	Wire (Europe)	Screw Color
AC Live	Black	Brown	Yellow or Brass
AC Neutral	White	Blue	Silver
AC Ground	Green/Yellow	Green/Yellow	Green

4.3 DMX Linking

The machine can work with a DMX controller. You can link the H-X2 to a DMX controller using a 3- or 5-pin DMX connection. If using other DMX-compatible products with this product, you can control each

individually with a single DMX controller. Instructions for connecting and configuring this product for DMX operation are in the User Manual.

4.4 Mounting

Before mounting the product, read and follow the safety recommendations indicated in the Safety Notes.

4.4.1 Orientation

For safety reasons, we do not recommend mounting the product in any capacity. Operate the product while it is on the ground only, and make sure there is adequate room for ventilation, configuration, and maintenance.

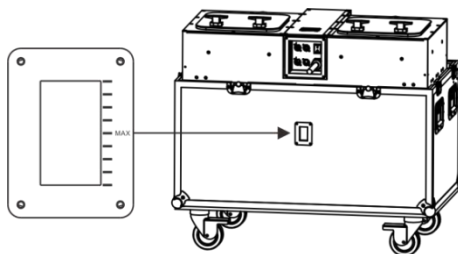
4.4.2 Rigging

- Make sure that the structure or surface onto which you are mounting the product can support the product's weight (see the Technical Specifications).
- When mounting the product on the floor, make sure that the product and cables are away from people and vehicles.


5 OPERATION

5.1 Preparing for Operation


- After checking that all the parts are intact and complete, position the machine on flat.
- Open the lids at both side and fill with water to the recommended water level **when power off**. The container can hold up to 20 gallons (75 liters).




- Connecting the power cord to a grounded circuit. Before power on, make sure it is connected with the rated voltage.
- Turn on the machine, it will immediately start heating up.

 **Using 12,000 W tubular electric heating element for 35 mins to get the best operating temperature.**

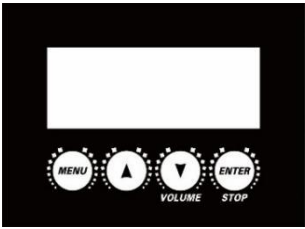
- Raise the basket to its highest level by pressing the <ENTER> button.
- The basket with up to 66 lb (30 kg) of dry ice, close and latch the lid.

 **The dry ice should be loaded at the last possible moment**

 **For ideal effect, please put the dry ice in the inner bracket, and do not move it, or it can cause serious injury.**

5.2 On-device Control Panel

To access the control panel functions, use the four buttons located underneath the LCD display.



Button	Function
<MENU>	Selects an operation mode or to backs out of the current menu option
▲	Scrolls up the list of options or selects a higher value.
▼/ <VOLUME>	Scrolls down the list of options, selects a lower value, or increase the output volume level. Multiplex <▼> button. (When it is in the Standby Page, press <▼> button to trigger the output.)
<ENTER>/<STOP>	Activates a menu option or a selected value. Multiplex "stop" button.



5.3 On-device Control Mode & Operation

5.3.1 Programming

- Refer to the Menu Map to understand the menu options. The menu map shows the main level and a variable number of programming levels for each option.
- To go to the desired main level, press <MENU> repeatedly until the option shows on the display. This will take you to the first programming level for that option.
- To select an option or value within the current programming level, press ▲ or ▼ until the option shows on the display. If there is another programming level, you will see that first option, or you will see the selected value.
- Press <MENU> repeatedly to exit to the previous main level.
- Press <ENTER>/<STOP> to go back to standby page at any time.

5.3.2 Menu Map

	Display	Description	Adjustable Range
Standby page	<div>Ready To Fog Temperature 85</div>	The machine is ready to work(Water level is normal) Shows current water temperature Press <ENTER>/<STOP> to go back to standby page at any time.	
Setting page	<div>Temperature Set 85</div>	Press ▲ and ▼ to set the optimal operating temperature (°C) The recommended operating temperature is 80 °C	70 - 85°C

Operating page	<div>DMX512 Address 1</div>	Press ▲ and ▼ to selects the DMX starting address	1 - 512
	<div>Language (语言) English</div>	Press ▲ and ▼ to select the language and save by <Enter>	Chinese / English
	<div>Volume Out 1 Temperature 85</div>	Press ▼ to trigger the output. Press ▲ and ▼ to set the output volume, the largest output level is 5.	1 - 5
	Press <ENTER>/<STOP> to stop the output and go back to standby page at any time.		
Warning & error page	 As the dry ice sublimates, the display shows the water temperature has dropped below its optimal operating temperature. This is normal and the H-X2 DMX will continue to operate until all the dry ice has been used.		
	<div>Water Level Low Pls Shut Down!</div>	LCD flickers when showing this page. Water level is too low. Heater stops working automatically. Please power off the machine and refill the water. Error alert will be released after restarting the machine.	
	 Due to water evaporation, you may need to refill the H-X2 DMX with water to let it keep making output.		
	<div>Out of Order! Pls Shut Down!</div>	LCD flickers when showing this page. The motor cannot rise or fall stops working automatically. Please power off the machine and check.	

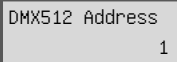
5.4 DMX Mode & Operation

Set the product in DMX mode to control with a DMX controller.

- Connect the product to a suitable power outlet.
- Turn the product on.
- Connect a DMX cable from the DMX output of the DMX controller to the DMX input socket on the product.

5.4.1 Starting Address

When selecting a starting DMX address, always consider the number of DMX channels the selected DMX mode uses. If you choose a starting address that is too high, you could restrict the access to some of the product's channels.



In this mode, each product will respond to a unique starting address from the DMX controller. All products with the same starting address will respond in unison.



While connect with DMX, the display will show DMX Address always, and you can set and change DMX starting Address by press ▲ and ▼.

5.4.2 DMX Channel Assignments and Values

The H-X2 DMX uses a 3- or 5-pin DMX data connection for the 1-channel DMX personality. Set the starting address in the 001 - 512 DMX range. This enables control of up to 256 products in the 2-channel personality.

Channel	Function	Value	Setting
1	Output volume	000 - 005	Stop output, reposition the dry ice basket
		006 - 055	Level 1 (MIN)
		056 - 105	Level 2
		105 - 155	Level 3
		156 - 205	Level 4
		206 - 255	Level 5 (MAX)

5.4.3 Automatic Output Compensation (AOC)

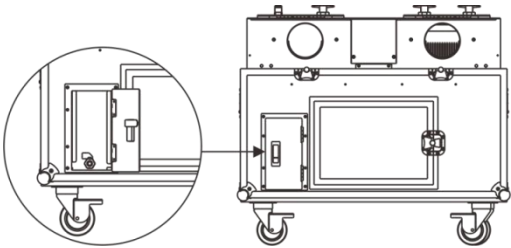
- Automatic Output Compensation (AOC) function would prevent the continue output from getting weak but allow the unit to maintain the same output strength, after a period of continuous output and dry ice consuming.
- When H-X2 DMX is working at any output volume level, the basket will drop down 1cm every 20s until it reaches the bottom of the water tank.

6 TECHNICAL INFORMATION

6.1 Maintenance

The H-X2 DMX requires minimal upkeep in order to maintain optimum performance. However, some steps are needed in order to clean and maintain the product for maximum usage. The recommended procedure is as follows:

- After use, wait for the machine and any remaining water inside to fully cool down.
- Drain all cooled water from the internal tank through the drain valve at the front of the machine.



6.2 Storage

Before storing the machine, clean it as described in the maintenance above; however, only follow steps 1 through 2.



Test-run your DJPOWER® H-X2 on a monthly basis to achieve the best performance.

