

## **H-SF900 PRO WATER MIST FLAMER**

### **USER MANUAL**

# 1 BEFORE YOU BEGIN

## 1.1 What Is Included




- H-SF900 Machine
- Power Cord
- Water Hose
- Warranty card

## 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
	<b>Caution</b>
	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.
	<b>Important</b>
	Important installation or configuration information. Failure to comply with this information may keep the product from working correctly.
	<b>Information</b>
	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 Personal Safety

- Always connect the product to a grounded circuit to avoid the risk of electrocution
- Make sure that children, unauthorized people and animals do not obtain access to the machine
- Eye protection is always required when operate the machine closely.

### 1.5.2 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, don't tilt.
- This product can be used for indoor and outdoor! To prevent risk of fire or shock, do not expose the product to rain or moisture.
- CAUTION: When transferring product from extreme temperature environments, (e.g. cold and dry to warm and humid) may pose a risk of electric shock due to the condensation water generated.

### 1.5.3 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.

### 1.5.4 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.
- Never carry the product by the power cord or any moving part. Always use the handles.
- Drain the tank before transporting the product.
- The maximum ambient temperature is 40 °C. Do not operate the product at higher temperatures.
- Always disconnect the product from the power source before cleaning.
- 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.
- To reach better effect, clean water tank regularly when not use the machine.



**Please save this manual for future use. Sell the machine again, be sure to attach the instructions.**

## 2 INTRODUCTION

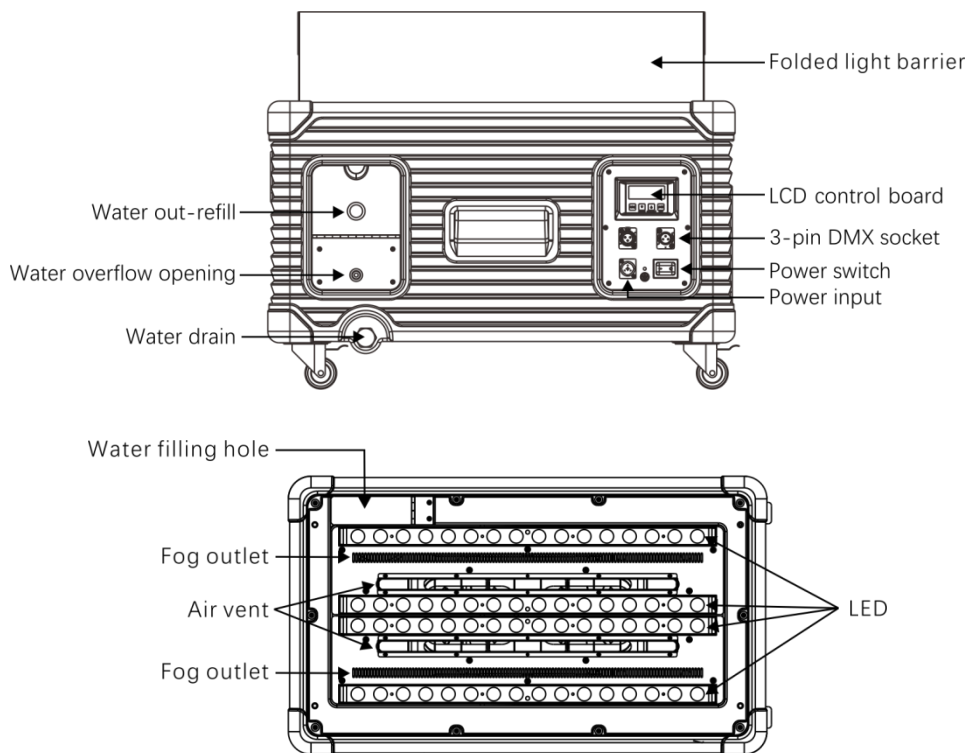
### 2.1 Description

In order to solve the limitation that real fire cannot be used in some occasions, DJPOWER has developed the H-SF900 Colored Water Mist Flamer. IP55 level, and can be used normally in rainy. It is a device that uses the principle of ultrasonic water mist mixing. With 48 LEDs, which can simulate a colored flame effect and the color is adjustable. High strength composite material integrated chassis, durable and rust-free. Automatic refill function of tap water pipeline. With water storage tank, automatically replenish water in the atomization chamber, continuous use, ensuring continuous long-term operation. The water level control system ensures a more stable machine output. It is suitable for various occasions that need to create a fiery atmosphere indoors and outdoors.

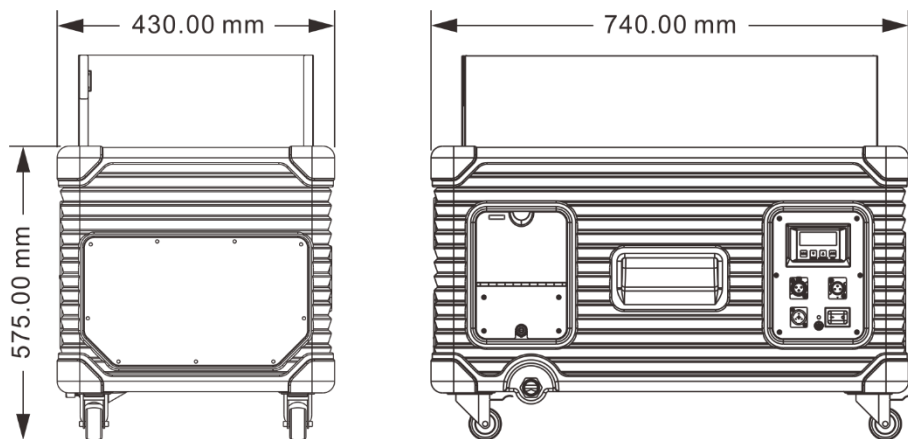
### 2.2 Description

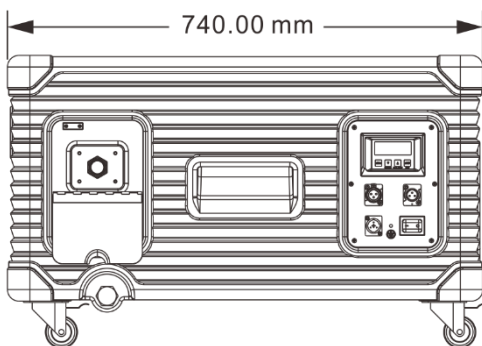
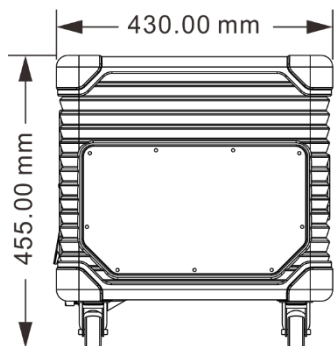
- The rainproof structure design of the whole machine, IP55 waterproof grade
- The housing is made of high-strength integrated composite materials, which is rust-free and durable.
- With 48pcs RGBAW+UV LED lights, brighter colors
- The flame effect of color, luminance, height and size is adjustable
- Automatic refill function of tap water pipeline; The water tank is equipped with an automatic water replenishment system that activates when the water level is low, ensuring long-term operation
- With water storage tank, which can automatically replenish water in the atomizing chamber when it is not connected to the tap water pipeline
- Drain holes design for water tank, which drains quickly
- Specially designed folded light barrier for easy transportation

### 2.3 Product Overview



## 2.4 Product Dimensions





### 3 TECHNICAL SPECIFICATION

<b>Voltage</b>	Input Voltage & Rate	AC 100 V-240 V, 50/60 Hz
	Total Power Consumption	800 W
<b>Light</b>	LED	RGBAW+UV
	Total LED Quantity	48 pcs
<b>Atomizer</b>	Total Power Consumption	600 W
	Unit Quantity	2 pcs
	Power Consumption of each Unit	300 W
<b>IP Rate</b>	IP Rate	IP 55
<b>Capacity</b>	Main Water Tank Capacity	Appr. 14 L
	Adjustable Water	Appr. 3.5 L
	Upper Water Tank Capacity	Appr. 9 L
<b>Output</b>	Adjustable Flame Concentration	high/ low
	Adjustable Flame Volume	1-100
	Adjustable Flame Luminance	OFF、1-100
	Adjustable Flame Color	√
	Adjustable Height	1-11
	Continuous Output	√
	Max Continuous Output Duration (100%)	Appr. 210 min
	On-device Manual Control	LCD control board
<b>Control</b>	Wireless Control	×
	Wired Control	×

<b>Accessory</b>	Control Protocol	DMX-512/RDM
	DMX Channel Range	5
	Folded light barrier	√
	Water hose	√
<b>Weight &amp; Dimension</b>	Net Weight	35 kg
	Gross Weight	37.9 kg
	Machine Dimensions	740 × 430 × 575 mm (State of work)
		740 × 430 × 455 mm (State of packing)
	Packing Dimensions	810 × 500 × 530 mm
<b>Consumable</b>	Consumable	Water

## 4 SET UP

### 4.1 AC Power

The machine has two kinds of voltage power supply, it can work with an input voltage of AC 100 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 Power Plug

The Flame Machine H-SF900 comes with a power input cord terminated with a Lockable Powercon connector on one end and an EU plug on the other end (EU & China 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:

Connection	Wire (U.S.)	Wire (Europe)
AC Live	Black	Brown
AC Neutral	White	Blue
AC Ground	Green/Yellow	Green/Yellow

## 4.3 DMX Linking

You can link the H-SF900 to a DMX controller using a 3-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, don't tilt, and make sure there is adequate room for ventilation, configuration, and maintenance.

### 4.4.2 Rigging

DJPOWER recommends using the following general guidelines when mounting this product.

- Before deciding on a location for the product, make sure there is easy access to the product for maintenance and programming purposes.
- 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.
- Add enough water to the machine.
- Connect the Neutrik power cord to the machine. Please make sure the required and provided electricity voltage and the electricity outlet is grounded.
- Turn on the machine.

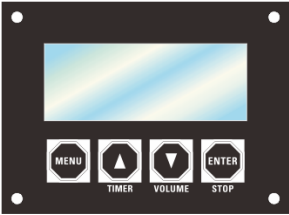
## 5.2 On-device Control Panel

This LCD display is optional in Chinese and English, which is convenient for customers to operate.

The condition to meet this mode is: disconnect the DMX signal (when the DMX signal is connected, this control mode is invalid).



The LCD controller contains 4 buttons:



Button	Function
<MENU>	Menu pages choose
<▲>	Increase, also "TIME" button for fog output regularly
<▼>	Decrease, also "VOLUME" button for fog output
<ENTER>	In/out, also for "stop" button

5.2.1 Menu Map

	Display	Description	Parameter Range
Starting pages	Ready H-SF900		
	Flame Height 100	Flame Volume Setting, press "▲" and "▼" to set Flame Height	1 ~ 100
	Flame Volume High	Flame Concentration Setting, press "▲" and "▼" to set Flame Volume	High/Low
	Flame Booster 11	Flame height setting, press "▲" and "▼" to set Flame Booster	1 ~ 11
	Flame Brightnes 100	Flame luminance setting, press "▲" and "▼" to set Flame Brightnes	OFF、1% ~ 100%
Working Setting Pages	Color Mode Built-in	Color Mode setting, press "▲" and "▼" to set Color Mode	Built-in、Inner-Outer
	Color Preset Real fire	Built-in Color setting, press "▲" and "▼" to set Color Preset	OFF、Real Fire、Red、Green、Blue、Yellow、Warm White、Cool White、Light Blue、Dark Blue、Light Green、Pink、Purple、Magenta
	Color Inner Red	Inner color setting, press "▲" and "▼" to set Color Inner	Red、Green、Blue、Amber、White、UV、Orange、Yellow、Light Yellow、Warm White、Cool White、Soft White、Bright Green、Light Aqua Green、Aqua Green、Ice-Snow Blue、Light Blue、

Display	Description	Parameter Range
		Bright Blue、Dark Blue、UV Blue、Light Purple、Purple、Light Magenta、Magenta、Light Pink、Pink
<div>Color Outner</div> <div>Red</div>	Outer color setting, press “▲” and “▼” to set Color Outner	Red、Green、Blue、Amber、White、UV、Orange、Yellow、Light Yellow、Warm White、Cool White、Soft White、Bright Green、Light Aqua Green、Aqua Green、Ice-Snow Blue、Light Blue、Bright Blue、Dark Blue、UV Blue、Light Purple、Purple、Light Magenta、Magenta、Light Pink、Pink
<div>Timer Interval</div> <div>10s</div>	Press “▲” or “▼” to set timer interval of TIMER mode	5 ~ 600s
<div>Timer Duration</div> <div>10s</div>	Press “▲” or “▼” to set timer duration of TIMER mode	5 ~ 300s
<div>Timer Flame Height</div> <div>100</div>	Press “▲” and “▼” to set Timer Flame Height	1~100
<div>Timer Flame Volume High</div> <div>High</div>	Press “▲” and “▼” to set Timer Flame Volume High	High/Low
<div>Timer Flame Booster</div> <div>1</div>	Press “▲” and “▼” to set Timer Flame Booster	1~11
<div>DMX address</div> <div>512</div>	DMX address setting	1~512
<div>RDM-UID</div> <div>512D00080001</div>	RDM-UID	
<div>Auto Run Last</div> <div>On</div>	The machine will automatically run previous setting when power on again	ON/ OFF

Display	Description	Parameter Range
Language Chinese	Select the language and save by ENTER	Chinese/ English
<b>On any page, press the “ENTER” return to the first page</b> <b>In working state, press the “ENTER” to stop working and return to the first page</b> <b>After entering the page, press “▲” or “▼” to change the current setting</b> <b>On the first page, press the “▲” to enter the timing function, and the relevant pages instruction as follows:</b>		
Timer Interval 10s	Press “▲” or “▼” to set timer interval of TIMER mode	5 ~ 600s
Timer Duration 10s	Press “▲” or “▼” to set timer duration of TIMER mode	5 ~ 300s
Timer Flame Height 100	Flame Volume Setting, press “▲” and “▼” to set Flame Height	1~100
Timer Flame Volume High	Press “▲” and “▼” to set Timer Flame Volume	High/Low
Timer Flame Booster 1	Timer Flame Booster	1~11
The above pages will be displayed cyclically, and the time (such as 10s) is based on the currently set value (the settings of the 1st and 2nd pages). <b>On the first page, press the “▼” to enter the working state, and the relevant pages instruction as follows:</b>		
Flame Height 100	Press “▲” and “▼” to set flame Height	1~100


### 5.3 DMX Mode & Operation


The Machine H-SF900 works with a DMX controller.

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

5.3.1 Starting Address

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

 **DJPOWER® H-SF900 DMX set the starting address in the 001 - 512 DMX range and uses 5 DMX channels, which defines the highest configurable address to 508 to have all channels controllable.**

 **Connect a DMX cable from the DMX output of the DMX controller to the DMX input socket on the product, or press repeatedly “MENU” button until the LCD shows “DMX Address”. Press “▲” or “▼” to set DMX channels.**

5.3.2 DMX Mode Menu Map

When connected with DMX controller and receive DMX signal, the display will always show current DMX starting address, that can be changed anytime by pressing “▲” or “▼”.



5.3.3 DMX Channel Assignments and Values

Channel	Function	Value	Description
1	Flame Height	000 - 010	Close
		011 - 255	Bigger
2	Flame Volume	000 - 010	Close
		011 - 128	Low
		129 - 255	High
3	Flame Booster	000 - 010	Close
		011 - 021	First Gear
		022 - 045	Second Gear
		046 - 069	Third Gear
		070 - 093	Fourth Gear
		094 - 117	Fifth Gear
		118 - 141	Sixth Gear
		142 - 165	Seventh Gear
		166 - 189	Eighth Gear
		190 - 213	Ninth Gear
		214 - 237	Tenth Gear
		238 - 255	Eleventh Gear
4	Flame color	000 - 010	Close
		011 - 030	Real Fire
		031 - 050	Red
		051 - 070	Green

			071 - 090	Blue
			091 - 110	Yellow
			111 - 130	Warm White
			131 - 150	Cool White
			151 - 170	Light Blue
			171 - 190	Dark Blue
			191 - 210	Light Green
			211 - 230	Pink
			231 - 250	Purple
			251 - 255	Magenta
5	Flame Brightnes		000 - 010	Close
			011 - 255	Brighter

### 5.3.4 RDM Function

“RDM-UID” is the unique UID code of the machine.

You can use RDM long-range revise DMX address code.

## 5.4 Auto Run Last Settings

If the machine is shut off while it is operating at standalone mode (On-device & Wireless control), the “Auto Run Last Setting” will allow the machine to recover its previous same operating status when the unit is powered on again without pressing any button.

- **Shut off:** Get disconnected from power source, or turn off the power switch.
- **Power on:** Get connected with power source, or turn on the power switch.

# 6 TECHNICAL INFORMATION

## 6.1 LED Working Life

As the number of uses increases and time goes by, the brightness of the LED will gradually decrease. The denser LED design makes the operating temperature of the LED higher than that of a single LED. Using cluster LED at maximum intensity will reduce their lifetime. Under normal circumstances, the life of LED is 40,000-50,000 hours. Extending LED life can be achieved by improving ventilation around the product and reducing the surrounding temperature to the optimum operating range. In addition, limiting the overall projected intensity also helps to extend the lifetime of the LED.

## 6.2 Maintenance

H-SF900 needs regular maintenance to achieve the best performance. in order to achieve the best results, some cleaning and maintenance steps are essential:

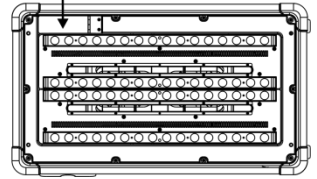
1、Cleaning the water tank after using H-SF900, steps as follow:

- 1) Open the drain nut, cleaning the water tank ;
- 2) Install the drain nut, store machine well.

2、Clean H-SF900 water tank regularly, steps as follow:

- 1) Open the drain nut, cleaning the water tank ;
- 2) Install the drain nut ;
- 3) Fill in water through the manual water filling port until the water is full ;
- 4) Open the drain water nut again, cleaning the water tank ;
- 5) Repeat steps 3 and 4 again ;
- 6) Install the drain nut and store the machine properly.

Manual Water Filling Port



**i** **Test-run your DJPOWER® H-SF900 on a monthly basis to achieve the best performance.**

## 6.3 Storage

### 6.3.1 Machine Storage

Before storing the machine, clean it as described in the cleaning procedure above.



