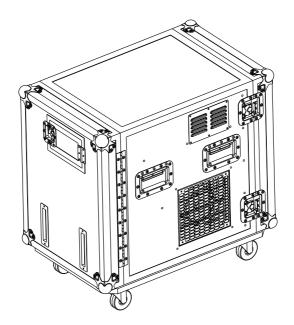


PRO STAGE EFFECTS



**DFZ-4000C** 

WAVE HAZE MACHINE USER MANUAL

## 1 BEFORE YOU BEGIN

### 1.1 What Is Included

DFZ-4000C 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

C. .... la a l

Symbol	Meaning
<u></u> ♠	Caution
_	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.
$\overline{\mathbf{(i)}}$	Important
•	Important installation or configuration information. Failure to comply with this information may keep the product from working correctly.
$\overline{\odot}$	Information
	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.

Copyright © 2022 DJPOWER. All rights reserved.

## 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.

### 1.5.2 Power and Wiring

- The product is for indoor use only! 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 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.
- Be sure that no ventilation slots on the product's housing are blocked or clogged by dust. If necessary, remove the dust.

## 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.
- Do not use the product as a space heater.
- Make sure there are no flammable materials close to this product while it is operating.
- The maximum ambient temperature (Ta) is 104 °F (40 °C). Do not operate the product at higher temperatures.
- Do not cover the ventilation slots when operating to avoid internal overheating.
- Do not cover or plug the output nozzle during operation.
- Never carry the product by the power cord or any moving part.
- Drain the tank before transporting the product.
- Always disconnect the product from the power source before cleaning.
- In the event of a serious operating problem, stop using the product immediately.
- 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.
- Use only DJPOWER Consumable PRO-C/PRO-A



Keep this User Manual for future use. If you sell the product, be sure that the purchaser receives this document.

# 2 INTRODUCTION

## 2.1 Description

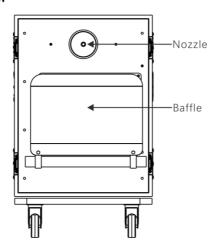
DFZ-4000C is specially designed for big shows. Using professional smoke generation modules and fine control circuits, it has strong mist production capabilities. The angle of fan is adjustable, it sends billows of smoke evenly and quickly over a wide space. It is perfect for theaters, large clubs, stage productions, rental companies and industrial applications.

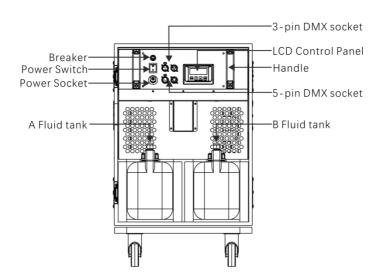
### 2.2 Features

- Integrated flight case, compact volume, compact size, applicable for shipping
- With quiet fan, haze output is quieter.
- · Manually adjustable angle baffle, can control the angle of fog output
- Send billows of smoke evenly and quickly over a wide space.
- Dual fluid tank supply function in turn, tank A run out of fluid, it can automatically switch to barrel B
  for fluid supply.
- Advanced No-Fluid protection, more stable and convenient for using.
- Built-in LCD control and DMX control, support for kinds of situation.
- Please use DJPOWER professional haze fluid PRO-C or PRO-A.

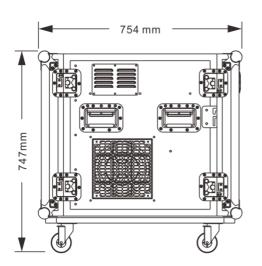
Note: The actual effect may be affected by the using environment.

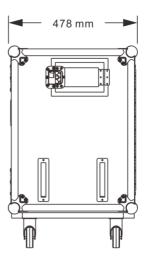
### 2.3 Product Overview





## 2.4 Product Dimensions





# 3 TECHNICAL SPECIFICATIONS

	Input Voltage & Rate	AC 220-240 V, 50/60 Hz
AC Power	Current Limiter Type	Breaker
AC Power	Current Limiter Specifications	15 A, 250 V
	Total Power Consumption	2600 W
Heating	eating Heat Up Time Appr. 7	
Capacity	Fluid Tank Capacity	5 L X 2

	Adjustable Volume	√	
	Max Output Volume	Appr. 33,000 cuft/min	
Output	Max Output Distance	Appr. 8 m	
	Fluid Consumption (100% Output)	Appr. 10.5 min/L	
	Maximum Continuous Duration (100% Output)	Appr. 70 S (100% Output)	
	Horizontal	√	
	Upstand	×	
Placement & Mounting	Sidelong	×	
	Hang Upside Down	×	
	Rigging & Trussing	×	
	On-device Manual Control	√	
	Wireless Control	×	
Control	Wired Control	×	
	Control Protocol	DMX512	
	DMX Channel Range	2	
Consumable	Consumable	PRO-C or PRO-A	
	Net Weight	58.5 kg	
Weight &	Gross Weight	63 kg	
Dimensions	Machine Dimensions	754 × 478 ×747 mm	
	Packing Dimensions	800 × 526 ×795 mm	

# 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 DMX Linking

You can link the DFZ-4000C 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

## 4.3 Mounting

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

#### 4.3.1 Orientation

Always mount this product in a safe position and make sure there is adequate room for ventilation, configuration, and maintenance.

## 4.3.2 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

To prepare the DFZ-4000C for operation, perform the following steps:

- After checking that all the parts are intact and complete, position the machine on flat.
- Take out the liquid bottle and remove the liquid cover.
- Pour the liquid PRO-C or PRO-J into the tank carefully, then tighten the cap. Put the tank into the
  machine and push the connector lightly to connect the tube and liquid tank. The machine damage
  caused by the use of other liquid is not covered by the warranty.
- 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, When the power cord connects to the electricity outlet, the machine will
  immediately start heating up and in the standby mode, during this time, the LCD panel will display
  "WARMING UP". It requires about 7min for heating up. The display changes to "Ready to work" when
  the machine finishes heating.

### 5.2 On-device Control Panel

LCD display has Chinese and English for alternative to cater to different customer's demands.

Please take note LCD control is void when the unit is connected to DMX.

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



Button	Function	
<menu></menu>	Switch menu pages to select a function	
<▲>	Increases the numeric value of current function	
	Trigger TMER output mode  Decreases the numeric value of current function	
	Trigger Manual output mode	
<enter></enter>	Save settings	
- LIVILIA	STOP turns the fog output off	

## 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 <TIMER> or <VOLUME>
  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 switch menu pages.
- Press <STOP> to go back to Standby Page.

### 5.3.2 Menu Map

	Display	Description	Parameter Range
Starting Pages	DFZ-4000C AC-220V 50/60Hz		
Preparing Page	Heating Up	The machine is heating up.  The machine can only work normally when it is heated to the preset temperature	
Standby Page	Ready To Work DFZ–4000C	Finished heating up, ready to work.	



The device will be heated automatically by default. When the power is turned on, the heating will start. If the heater temperature does not reach the set temperature, the display will display "heating", and "ready to haze" when it reaches the set temperature, indicating that the equipment is preheated and ready to work at any time.

Working Status Pages	Interval 5 S DFZ–4000C	TIMER mode interval output time	5-200\$
	Duration 5 S DFZ-4000C	Duration of output in TIMER mode	5-200\$
	Fog Output 100%	Press "▲" or "▼" to set fog output of VOLUME mode	5% ~ 100%
	Fan Speed High	Press "▲" or "▼" to set the volume of fan output"high""middle""low"	Low/High/低
	Timer Interval 5 S	Press "▲" or "▼" to set timer interval of TIMER mode	5 ~ 200 S
Setting	Timer Duration 5s	Press "▲" or "▼" to set timer duration of TIMER mode	5 ~ 200 S
Pages	Timer output 100%	Press "▲" or "▼" to set the Haze output in TIMER mode	5% ~ 100%
	DMX Address 512	Press "▲" or "▼" to select DMX starting address	1-512
	Fluid Sensor ON	Press "▲" or "▼" to set on or off the No-fluid sensor function	ON/OFF
	Language English	Press "▲" or "▼" to select the language and save by ENTER	Chinese/English
Warning page	Ready to work Fog fluid low Refill	Dual tanks low fluid, the display is flicker. After adding fluid, and press "ENTER" to pumping	
page	Fail Close	Thermocouple open circuit, please turn off the power.	

## 5.4 DMX Mode & Operation

The Machine DFZ-4000C works 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.

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 " $\blacktriangle$ " or " $\blacktriangledown$ ".

### 2 Channels

Channel	Function	Value	Description
1	Control the air volume	0-100	Small Fan speed Low
		101-200	Medium Fan speed Middle
		201-255	Big Fan speed High
2	Control the fog output	0-10	OFF
		11-255	Fog volume, low to high

## 5.5 Dual fluid tank working

DFZ-4000C is dual fluid tank supply function in turn, tank A run out of fluid, it can automatically switch to tank B for fluid supply.

### 5.1 Fluid-Free Protection

The machine USES hardware sensors to detect the presence of fluid in the current pipeline, making it safer, more responsive and better able to protect the pump.

## 5.2 Trigger "No-Fluid Protection"

Under the working condition of the machine smoke spraying, the machine execution program continuously detects that the fluid pipe is out of fluid within 1 minute, the machine enters the fluid-free protection state, and the fluid pump stops working at this time.

## 5.3 Clear the Fluid-free Protection state

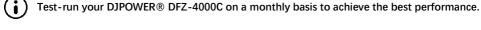
In the fluid-free state, the fluid-free state can be cleaned in three ways after the fluid drum is refilled with fluid.

- In standalone mode, press "ENTER" on the control panel and then press "VOLUME" again to exit fluid-free and pump automatically.
- In DMX control mode, push the push rod of channel 1 first to the low (OFF zone) and then up (ON zone), at which time the machine can work again.
- Turn off fluid-free protection in the menu.

#### TECHNICAL INFORMATION 6

#### 6.1 Machine Cleaning And Maintenance

- 1. DJPOWER original factory consumables are used to extend the service life of the machine. Do not let non-professionals disassemble the machine, not allowed to modify the machine, so as to avoid danger.
- 2. Excessive dust on the machine, liquid residue accumulation of dirty, will reduce the performance of the machine, and lead to poor heat dissipation. Use an air compressor, vacuum cleaner or soft brush to remove dust from the machine. The case can be wiped with a wet cloth.
- 3. Before storing the machine, pour distilled water into the fluid drum instead of smoke fluid and operate the machine in clean mode to avoid heating pipe clogging.



6.1

## Storage 6.1.1 Machine Storage

Before storing the machine, clean it and empty the fluid tank.

#### 6.1.2 **Trouble Shooting**

Errors	Symptom	Potential Cause	Remedies
No fluid	Fluid low	No fluid	Refill fluid
Fail	Turn off Power (display flicker)	Thermocouple open circuit	Contact Service

