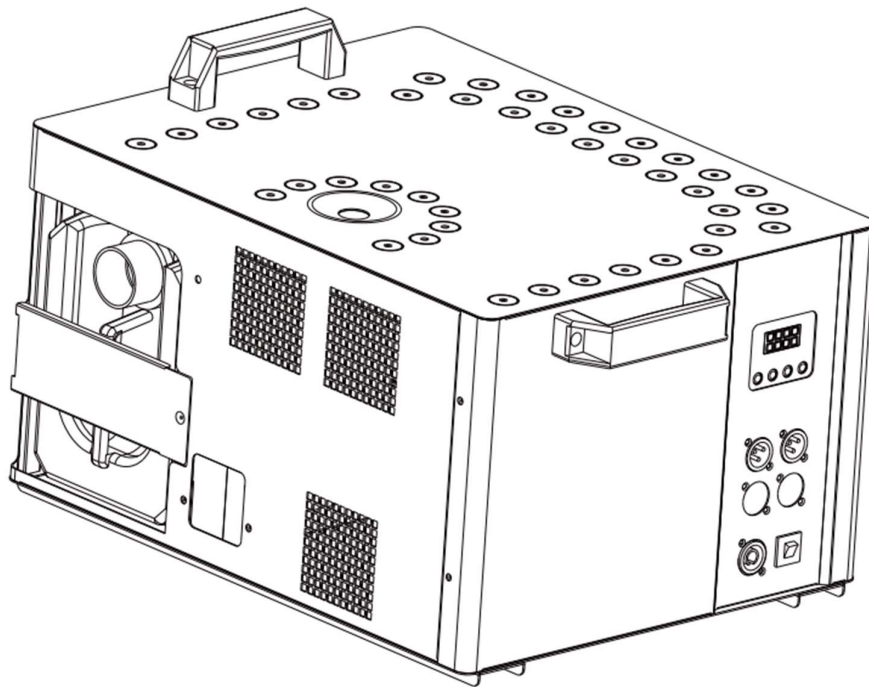




# SUPER JET



## ***USER MANUAL***

# **OPERATION MANUAL**

Thank you for buying this FOS product. To take full advantage of all possibilities and for your own safety, please read these operating instructions very carefully before you start using this unit.

## **FEATURES**

1. This extremely powerful vertical fogger produces explosive columns of smoke over 15m high..
2. This is the ideal alternative to very expensive and difficult to use CO2 jet effects
3. The smoke column is illuminated by 2 independently controllable LED rings (35 RGB LEDs with 315Watt total power)
4. The 3200W heater, together with the high-pressure compressor, provides very fast succession of powerful smoke bursts.
5. Can also operate upside down to produce powerful downward smoke columns. Controllable via 6 or 9 DMX channels
6. Works also in ECO mode: power consumption only 1600W
7. Recommended fog fluid: "Super fast dissipating" fog fluid
8. Connections: PowerCON TRUE1 +XLR 3pin +XLR 5pin

## **BEFORE USE**

1. Before you start using this unit, please check if there's no transportation damage. Should there be any, do not use the device and consult your dealer first.
2. Important: This device left our factory in perfect condition and well packaged. It is absolutely necessary for the user to strictly follow the safety instructions and warnings in this user manual. Any damage caused by mishandling is not subject to warranty. The dealer will not accept responsibility for any resulting defects or problems caused by disregarding this user manual.
3. Keep this booklet in a safe place for future consultation. If you sell the fixture, be sure to add this user manual.

Check the contents:

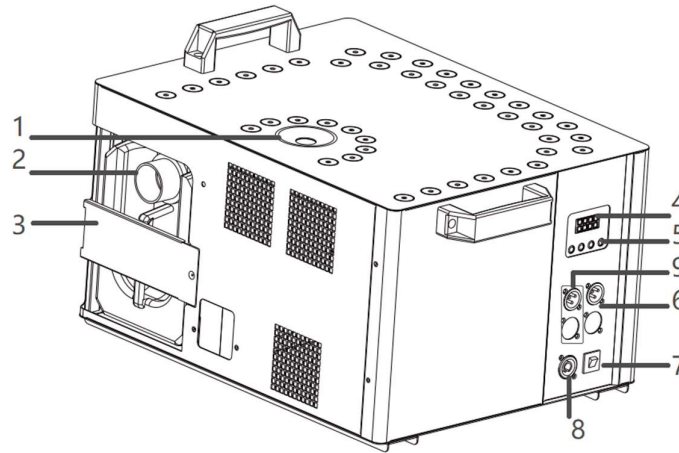
Check if the carton contains the following items:

- Operating instructions
- Super Jet
- Power cable

## **SAFETY INSTRUCTIONS:**

1. To reduce the risk of electric shock, do not remove the top cover.
2. RISK OF ELECTRIC SHOCK, DO NOT OPEN.
3. No user-serviceable parts inside. Refer servicing to qualified service personnel only.

4. This symbol means: Read instructions.
5. The minimum distance from objects. The minimum distance between fogger output and objects must be more than 1 meter.
6. To protect the environment, please try to recycle the packing material as much as possible.
7. To prevent fire or shock hazard, do not expose this appliance to rain or moisture.
8. To avoid condensation to be formed inside, allow the unit to adapt to the surrounding temperatures when bringing it into a warm room after transport. Condensation sometimes prevents the unit from working at full performance or may even cause damages. This unit is for indoor use only.
9. Don't place metal objects or spill liquid inside the unit. Electric shock or malfunction may result. If a foreign object enters the unit, immediately disconnect the mains power.
10. Locate the unit in a well ventilated spot, away from any flammable materials and/or liquids.
11. Don't cover any ventilation openings as this may result in overheating.
11. Prevent use in dusty environments and clean the unit regularly.
12. Keep the unit away from children.
13. Inexperienced persons should not operate this device.
14. Maximum safe ambient temperature is 40°C. Don't use this unit at higher ambient temperatures.
15. The unit's surface temperature may reach up to 85°C. Don't touch the housing with bare hands during its operation.
16. Make sure to always place the unit on a stable surface, never install the fogger above the audience, a little liquid can always drip from the fog output.
17. Allow the device about 10 minutes to cool down before you start servicing.
18. Always unplug the unit when it is not used for a longer time or before you start servicing.
19. Check that the available voltage is not higher than the one stated on the rear panel of the unit.
20. The power cord should always be in perfect condition. Switch the unit immediately off when the power cord is squashed or damaged. It must be replaced by the manufacturer, its service agent or similarly qualified persons in order to avoid a hazard.
21. Never let the power-cord come into contact with other cables!
22. This unit must be earthed in order to comply with safety regulations. In order to prevent electric shock, do not open the cover.
23. **Never** repair a fuse or bypass the fuse holder. **Always** replace a damaged fuse with a fuse of the same type and electrical specifications!
24. In the event of serious operating problems, stop using the fixture and contact your dealer immediately.
25. The housing must be replaced if they are visibly damaged.
26. Please use the original packing when the device is to be transported.
27. Due to safety reasons it is prohibited to make unauthorized modifications to the unit.



## DESCRIPTION:

1. **NOZZLE:** High pressure fog output.

**WARNING: HOT powerful output! Keep a minimum distance of 1m.**

2. **FOG FLUID RESERVIOR:** to be filled with CE-certified smoke fluid. Make sure that the fog fluid container is never empty during operation; this will damage the pump of the fogger.

3. **RESERVIOR PLATE:** used to fix the reservoir in the machine.

4. **DISPLAY:** shows the various menus and the selected functions.

### 5. CONTROL PANEL:

> **MENU button:** press several times to navigate through the option menu.

> **UP button:** used to increase the selected value.

> **FOG/DOWN button:** used to decrease the selected value. When no dmx cable is connected, this button will start the manual working mode.

> **ENTER/STOP button:** used to confirm the selected value. When no dmx cable is connected, this button will stop the manual working mode

6. **DMX INPUT:** 3-pin +5-pin male connector, used to connect the fogger directly to a DMX-controller or to the previous unit in the DMX chain.

7. **BREAKER:** first locate and solve the problem that caused the breaker to be activated. When the problem is solved, push the button to reset the breaker.

8. **MAINS CONNECTOR:** insert the supplied mains cable here and connect it to in a mains wall socket with earth connection.

9. **DMX OUTPUT:** 3-pin + 5-pin female connector, used to connect the fogger with the next unit in the DMX chain.

## MENU SETTINGS:

### READY TO WORK

This message will be shown on the display as soon as the machine is ready to be used.

When the unit is just started up, the heating element of the fogger needs some time to warm up until it reaches its ideal working temperature. Also the air reservoir needs time to be put under pressure.

### **DMX512 ADDRESS**

**Used to set the start address when the unit is used in a DMX chain.**

Press the MENU button until DMX512 ADDRESS is shown on the display. Use the DOWN and UP buttons to change the DMX address.

Once the correct address is shown on the display, press the ENTER button to confirm.

### **DMX512 MODE**

**Used to choose the DMX channel mode.**

Press the MENU button until DMX512 MODE is shown on the display.

Use the DOWN and UP buttons to change the DMX mode (5CH or 11CH).

Once the correct mode is shown on the display, press the ENTER button to confirm.

### **LED COLOR SETTING FOR MANUAL CONTROL**

**Used to set the colors that should be produced when the machine is used in MANUAL mode. A separate setting can be made for the inner led ring and the outer led ring.**

1. Press the MENU button until LED COLOR SETTING FOR MANUAL CONTROL is shown on the display.

2. Press ENTER to move on to the options

3. LED SELECTION INNER LED (or OUTER LED) will appear on the display

4. Use the DOWN and UP buttons to select the desired LED group (INNER LED or OUTER LED) Press ENTER to move on to the available color options for the selected LED group.

5. Use the DOWN and UP buttons to select the desired color mode:

> OFF > RED

> GREEN

> BLUE

> YELLOW

> LIGHT BLUE

> PURPLE

> WHITE

> SLOW SCROLL

> FAST SCROLL

6. Once the correct mode is shown on the display, press the ENTER button to confirm..

7. You can repeat these actions to set the color for the other LED group

### **FLUID SENSOR**

**Used to switch the fluid sensor ON or OFF. We strongly advise you to have the fluid sensor ON to avoid using the unit when the fog fluid container is empty (what can damage the unit)**

1. Press the MENU button until FLUID SENSOR is shown on the display.

2. Use the DOWN and UP buttons to change to select ON (sensor ON) or OFF (sensor OFF/no detection).

3. Once the correct mode is shown on the display, press the ENTER button to confirm.

## **HALF POWER MODE**

If for any reason, you don't need to use the full potential of the unit, HALF POWER MODE can be switched on.

When OFF, the heater will work at FULL POWER(3200W) and reheating is fast.

When ON, the heater will work at HALF POWER (1600W) but reheating will also be slower.

1. Press the MENU button until HALF POWER MODE is shown on the display.
2. Use the DOWN and UP buttons to switch the half power mode ON or OFF.
3. Once the correct mode is shown on the display, press the ENTER button to confirm.

## **GENERAL OPERATING INSTRUCTIONS**

### **WARNING:**

**the unit has a HOT and powerful output ! Keep a minimum distance of 1m .**

1. Put the fogger on a flat and very stable surface. Make sure that nobody can put their hands just in front of the output. The fog is very hot and can cause serious burning!!!
2. Make sure the fog liquid tank is not empty. Always use good quality fog liquid to fill up the tank. Close the tank immediately to prevent dirt to enter the reservoir!
3. Make sure to plug the fogger in a mains wall socket with earth connection.
4. Switch the fogger on and wait for about 3 to 4 minutes.(warm up time).

### **WARNING:**

**NEVER use the machine with an empty reservoir. This can damage the pump !**

## **DMX-OPERATION:**

**Important:** The electrical installation should be carried out by qualified personal only, according to the regulations for electrical and mechanical safety in your country.

### **Electrical installation:**

1. The DMX-protocol is a widely used high speed signal to control intelligent light and other equipment. You need to "daisy chain" your DMX controller and all the connected units with a good quality balanced cable.

2. Both XLR-3pin and XLR-5pin connectors are used, however XLR-3pin is more popular because these cables are compatible with balanced audio cables.

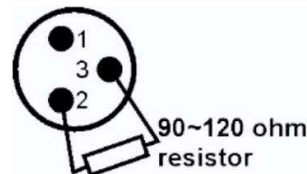
Pin layout XLR-3pin: Pin1=GND~Pin2=Negative signal (-)~Pin3 = Positive signal (+)

Pin layout XLR-5pin: Pin1=GND~Pin2=Negative signal (-)~Pin3=Positive signal (+) ~ Pins4+5 not used.

3. To prevent strange behavior of the light effects, due to interference, you must use a 90Ω to 120Ω terminator at the end of the chain. Never use Y-splitter cables, this simply won't work!

4. Make sure that all units are connected to the mains.

5. Each unit in the chain needs to have its proper starting address so it knows which commands from the controller it has to decode. In the next section you will learn how to set the DMX addresses.



**6 Channel mode:**

CH	Value	Function	Details
CH 1	016-255	Fog output	
CH 2	001-255	Red color	LED group 1 (LED around Nozzle)
CH 3	001-255	Green color	
CH 4	001-255	Blue color	
CH 5	016-050	Red color	LED group 2
	051-085	Red + Green color	
	086-120	Green color	
	121-155	Green + Blue color	
	156-190	Blue color	
	191-225	Blue + Green color	
	226-255	White color	
CH 6	016-255	Colors change	

**9 Channel mode:**

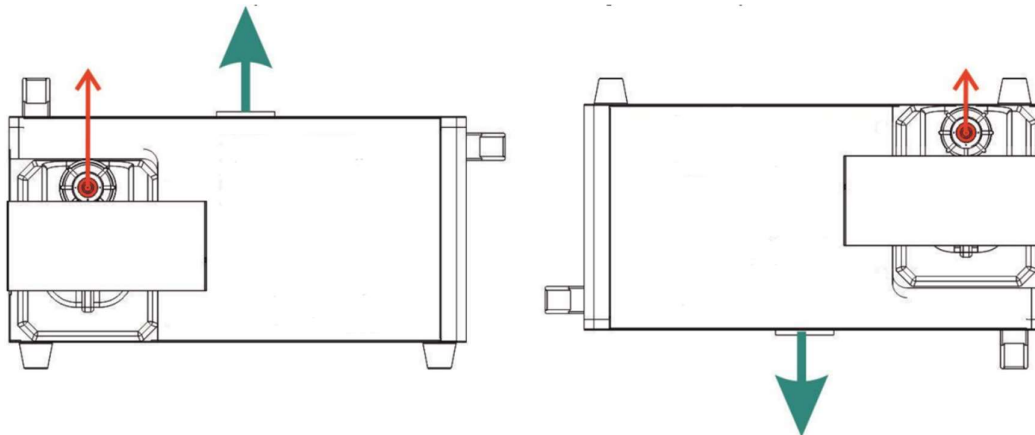
CH	Value	Function	Details
CH 1	016-255	Fog output	
CH 2	001-255	White color (with dimmer function)	LED group 1 (LED around the Nozzle)
CH 3	001-255	Red color (with dimmer function)	
CH 4	001-255	Green color (with dimmer function)	
CH 5	001-255	Blue color	
CH 6	016-255	Strobe effect from slow to fast.	
CH 7	016-036	Red color	
	037-056	Red green color	
	057-076	Green color	
	077-096	Blue color	
	097-116	Red blue color	
	117-136	Green blue color	
	137-156	White color	
	157-176	R/G/B colors change (slow smooth change)	
	177-196	7 colors change (slow smooth change)	
	197-216	R/G/B color change (fast change)	
	217-255	7 colors change (fast change)	
CH 8	016-050	Red color	LED group 2
	051-085	Red green color	
	086-120	Green color	
	121-155	Green blue color	
	156-190	Blue color	
	191-225	Red blue color	
	226-255	White color	
CH9	016-255	Colors change	

## OVERHEAD RIGGING

Important: The installation must be carried out by qualified service personal only. Improper installation can result in serious injuries and/or damage to property. Overhead rigging requires extensive experience! Working load limits should be respected, certified installation materials should be used, the installed device should be inspected regularly for safety.

1. Make sure the area below the installation place is free from unwanted persons during rigging, de-rigging and servicing.
2. Locate the fixture in a well ventilated spot, far away from any flammable materials and/or liquids. The fixture must be fixed at least 50cm from surrounding walls.
3. The device should be installed out of reach of people and outside areas where persons may walk by or be seated.
4. Before rigging make sure that the installation area can hold a minimum point load of 10 times the device's weight.
5. Always use a certified safety cable that can hold 12 times the weight of the device when installing the unit. This secondary safety attachment should be installed in a way that no part of the installation can drop more than 20cm if the main attachment fails.
6. The device should be well fixed; a free-swinging mounting is dangerous and may not be considered! Don't cover any ventilation openings as this may result in overheating.
7. The operator has to make sure that the safety-relating and machine-technical installations are approved by an expert before using them for the first time. The installations should be inspected every year by a skilled person to be sure that safety is still optimal.

If you want to hang the FOS Super JET upside-down to create downward fog jets, you have to modify the position of the reservoir. The cap of the reservoir should always be on top of the unit



1. Remove the tube (cap) of the reservoir
2. Remove the reservoir
3. Turn the machine upside-down Install the reservoir in the machine
4. Put back the tube (cap) of the reservoir.
5. Ready.



## MAINTENANCE

Switch off the unit, unplug the mains cable and wait until the unit has been cooled down. During inspection the following points should be checked:

1. All screws used for installing the device and any of its parts should be tightly fastened and may not be corroded.
2. Housings, fixations and installations spots (ceiling, truss, suspensions) should be totally free from any deformation.
3. The mains cables must be in impeccable condition and should be replaced immediately when even a small problem is detected.

### Cleaning the fogger:

To prevent obstructions in the heater, pump and tubes, the fogger should be cleaned on a regular basis: every 100h of continuous operation is a good reference.

Attention: We strongly recommend internal cleaning to be carried out by qualified personnel!

## SPECIFICATIONS

This unit is radio-interference suppressed. This product meets the requirements of the current European and national guidelines. Conformity has been established and the relevant statements and documents have been deposited by the manufacturer.

This device has been designed to produce decorative effect lighting and is used in light show systems.

Mains Input: 220-240V.50/60Hz

Heater: 3200 Watt (or 1600W when half power mode is switched ON)

Max. Power Consumption: 3500 Watt

DMX Channels: 6/9

Breaker: 20A/250V

Warm up time: 7 min

Max Output Height: 15m

Tank capacity: 3.8L

Fluid Consumption: 7.5 ml/sec

LEDs: 35x 9W RGB

Dimension: 490 x 340 x 260 mm

Weight: 24 kg

All the information is subject to change without prior notice

You can download the latest version of this user manual on our website: [www.fos-lighting.eu](http://www.fos-lighting.eu)