Fog machine DSK-1500VS

User's Manual

Table of contents

1. Safety instructions

![Warning triangle icon]

- This device is suitable for indoor use (not outdoors) only.
- Unauthorized modifications will invalidate the warranty.
- Repairs are to carry out by skilled workers only.
- Use only fuses of the same type and original parts as spare parts.
- To avoid fire and electric shocks protect the unit from rain and humidity.

1.1. For safe and efficient operation

Be careful with heat and extreme temperatures!

Do not place the device in a location where it is exposed to extreme temperatures.
Operate the device only in an ambient temperature between 0°C (32°F) - 40°C (104°F). Do not expose the device to direct sunlight or heat sources.

Keep away from humidity, water and dust!
Avoid placing the device in a location with high humidity or excessive dust. Place no liquids on or near the system.

Place the device on a firm ground!
To avoid vibrations always place the device on a firm ground.

Do not use chemicals for cleaning!
Use a clean and dry cleaning rag to remove dust. Metal parts can be cleaned with a damped cleaning rag. Before cleaning always unplug the device from the power supply.

If the device is not working properly!
If problems occur unplug the device from the power supply. The user should not try to service the device independently. All repairs and service must be performed by a qualified technician.

Take proper care with the power cord!
Never pull the power cord to disconnect the device from the power supply, but remove the plug with plug housing in the hand. If you do not use the device for an extended period, unplug the device from the power supply.

ATTENTION!

Damages caused by the disregard of this user manual are not subject to warranty. The dealer will not accept liability for any consequent secondary failures. Only skilled workers are allowed to carry out the electrical connections. All electrical and mechanical connections have to be carried out according to the European safety standards.

2. Intended use of the device

This device was developed for professional use on stages, in discos, theatres etc. The device is only approved for a connection up to 230 V 50/60 Hz alternating current and only for indoor use.

Regular breaks during operation increase the lifetime of your device.

Avoid convulsions or any form of forceful impact during the installation or the startup of the device.

Take care that no cables are lying around. You would endanger your own safety and also the safety of a third party.

It is not allowed to operate or store the device in an environment in which spray water or rain is expected. Humidity or very high atmospheric humidity could reduce the isolation of the device and could cause deathly electric shocks.

If using fog machine you have to ensure that the fog saturation of the room must allow a good visibility of at least 10m.

Operate the device not during thunderstorms. Surge voltages could destroy the device. Unplug the power supply during thunderstorms.

Surrounding objects or surfaces should not be in contact with the device.

Make sure that during the installation and removal of the device the area below the place of installation is basically cordoned off. This also applies to implementation of service.

Make familiar yourself with the functions of the device before start-up. People without the experience should not handle with the device. The most cause of functional disorder is inappropriate handling.

Keep the device away from children and never operate it unattended.

Never aim the nozzle on people a keep a distance from 50 cm to the nozzle. ATTENTION. The ejected fog is very hot!

Keep a minimum distance of 50 cm to other objects.

Use only the recommended, high quality water-based fluid from your dealer. Other fluids may cause damages. Do not use flammable additives, such as oil, gas, perfumes, etc. in your fluid.

Never aim the nozzle on open fire or flammable objects.

Make sure to top off the fluid in time. If the machine operated without fluid it can cause damages to the pump or the heating block. Before top off the fluid please unplug the device from the power supply.

Never drink the fluid. I fit does happen, please contact a doctor. If the fluid had contact with the eyes or mucous membranes, rinse immediately with water bodies.

Operate the unit only in a horizontal position.

Never use solvents or aggressive detergents for cleaning. Use instead of this a damped cleaning rag.

To prevent damages during transport use for transport the original packing or provided accessories.

For reasons of safety unauthorized changes are forbidden!

A usage of the device which differs from usages which are described in this manual can cause damages of the device. In this case the warranty expires. Additional you should notice that every different usage is related with dangers and can cause e.g. an electrical short, fire, electric shock or crash.

2.1. Overhead installation

Danger of life!

You have to observe the regulations of BGV C1 (formerly VBG 70) and EN60598-2-17 Installations are to carry out by skilled personnel only.

The suspension devices have to be build and measured so they can withstand for an hour the tenfold of the payload without suffering a permanent detrimental deformation.

Basically installation has to be made by using a second separate suspension. This can be e.g. a suitable net. The second suspension must be designed and attached so no part of the installation can fall down in case of failure.

During construction, reconstruction and deconstruction unnecessary stay in the range of moving areas, on lightning bridges, under elevated work stations or any other danger zones is forbidden.

The operator is obliged to following safety-related and mechanical facilities:

- Before the first start-up or after critical changes before restarting it has to be checked by an expert.
- Review in the frame of the inspection test at least all four years by an expert. .
- Review by a qualified person at least once a year.

How to carry out the overhead installation:

Ideally the device should be installed outside lounge areas of people.

IMPORTANT! Overhead installation requires a high level of experience. This includes knowledge of calculating the payload, used installation material and safety inspections of the used material and the projector whereas the required experience is not limited to this. Do not try to carry out installation yourself under any circumstances if you are not qualified. Contact a professional installer. An inappropriate installation can lead to injuries and/or damaged properties.

It is not allowed to install the device in the grip area of people.

If the device may hang from the ceiling or from high beams, the use of truss systems is mandatory. The device may not be installed so it can swing freely in the room.

Please note: Crashing down items can cause serious injuries! Do not install the projector, if you doubt the safety of a possible installation form!

Before installation make sure that the mounting surface has the ability to carry the tenfold point load of the own weight of the device.

Mount the device with the mounting-bracket to your trussing system using an appropriate clamp.

During overhead installation the device must be always secured by a safety rope which is designed to hold the twelvefold weight of device. Only safety ropes with quick-release safety fastener elements may be used. Hang up the safety rope in the hole of the mounting bracket. Direct the rope over the truss or an appropriate fastening point. Hang up the end in the fastening element and tie up the locking nut. A safety rope once exposed to failing load or damaged may not be used furthermore.

The maximum drop exceed must not exceed 20cm.

A safety rope once exposed to failing load or damaged may not be used furthermore. Adjust the desired inclination angle via the mounting bracket and tighten the screw.

2.2. Connections

2.2.1. Electrical connections

Connect the fixture to the mains with the enclosed power cable and plug. The earth has to be connected.

Cable (EU)	Cable (US)	Pin	International
Brown	Black	Live	L
Light blue	White	Neutral	N
Yellow/Green	Green	Earth	⊕

2.2.2. DMX connections

Make sure that you use shielded cable. 3pol or 5pol XLR cables are suitable.

2.3. DMX connection with terminator

Where the DMX cable has to run a long distance or the equipment is operated in an electrically noisy environment like a disco for installations, we recommend using a DMX terminator. This prevents corruption of the digital control signal by electrical noise. The DMX terminator is simply an XLR connector with a 120 Ω resistor between pins 2 and 3, which is then plugged into the XLR output socket of the last device in the series. Please look to the bottom drawings.

3. Introduction

Thank you for choosing the **DSK-1500VS**, a vertical fog machine with LEDs.

We recommend that you carefully read these operating instructions before commissioning the unit. Please follow the instructions in this manual. This is the only way to ensure safe operation, proper use and long service life.

As the world's first company **DJPOWER** has further developed the vertical fog machine **DSK-1500VS** so that it a higher and brighter fog output is possible. The patented technology makes it possible to color the fog in two different colors to create a unique flame effect. 32 RGB 3W LEDs allow an individual coloring of the fog. The device can be used both, upright and side wards standing and also hanging. The fog can reach a height of 6-8 m. The **IMMEDIATE-STOP** technology developed by **DJPOWER** prevents the device from being nebulized.

3.1. Features

- The patented technology allows the fog to be colored in two different colors, thus generating a unique flame effect.
- 32x 3W LEDs provide a color-intensive new effect.
- The advanced **NO-FLUID** protection protects your device from damage.
- Push the button directly on the unit to activate the unit without a remote control.
- Operation with a remote control.
- The heating system uses the **MIRROR PIPE PATENT** to prevent clogging.
- Operation via DMX.
- Please use only the recommended **FOG FLUID CO2**, other fluids can cause the unit to splash or clog.
- The special **FOG FLUID CO2** is ideal for the vertical fog effect.
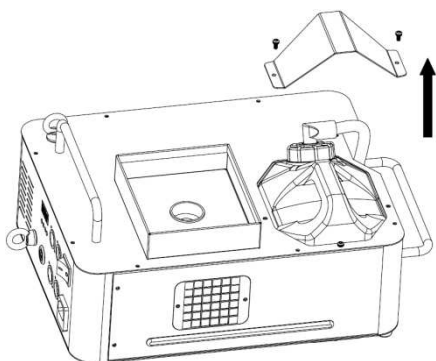
3.2. Item delivered

- 1x Fog machine **DSK-1500VS**
- 1x Power cord
- 1x Remote W5
- Manual (German / English)

3.3. Product description
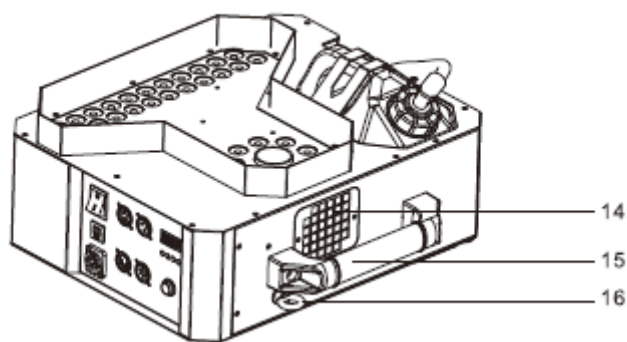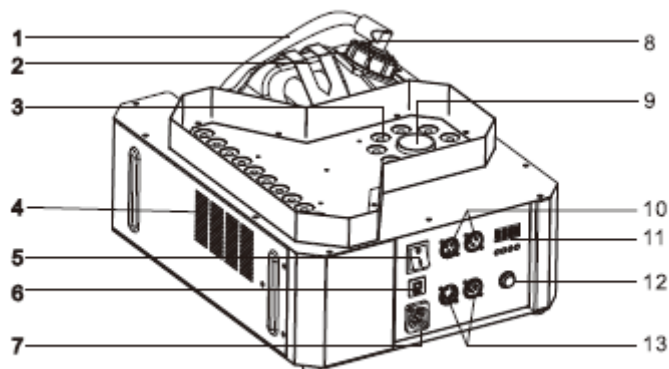
1. Fluid tube
2. Tank baffle
3. 32x 3W LEDs
4. Fan
5. On/Off switch
6. Fuse
7. Power supply
8. Tank
9. Nozzle
10. XLR 3pol INPUT/OUTPUT
11. Display
12. Fog button
13. XLR 5pol INPUT/OUTPUT
14. Fan
15. Handle
16. Safety eye

3.4. Overhead installation of the device

Remove the screws and the bottle lock to take out the tank.
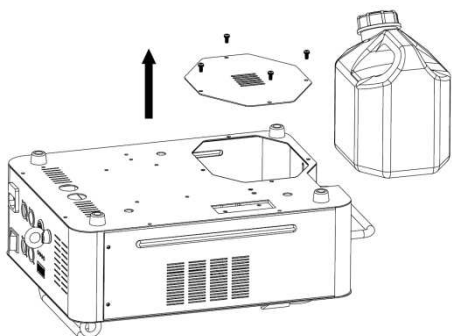
Turn the machine upside down and remove the screws to release the plate.

Fix the removable plate to the opposite side and fit the tank with the bottle lock again.

4. Start-up

Attention!

Remove before start-up every packing material.

1. After verifying that the unit is intact and complete, please place it on a level surface.
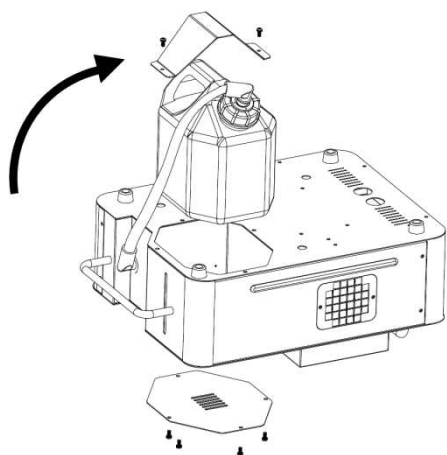2. Fill the tank with fluid (Please use fog fluid CO2). Please use only the recommended fluid as the device may be damaged and warranty void.
   Make sure that there is always enough fluid in the tank.
3. Connect the device to the power supply.
4. The device starts to heat up. This process needs 4 min, meanwhile the display shows „WARMING UP".
5. The heating process is finished. The display shows „Addr".

4.1. Operation

The operation can be made by the display, manual by using the fog button or with the remote.
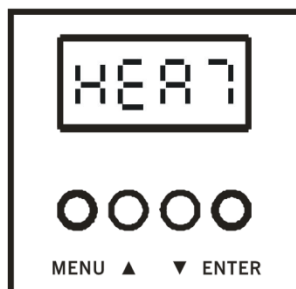
MENU	For call-up the structure of menu to make individual settings.
UP	To select a point of menu or increase a value.
DOWN	To select a point of menu or decrease a value.
ENTER	Confirm the selection or setting.

4.1.1. Structure of the menu

Menu	Settings	Function
Addr	0 – 512	Setting the DMX address.
CH-1 – CH-4	Advising the color settings for the single channels. Every button on the remote represents a channel: A = CH-1, B = CH-2, C = CH3 und D = CH4.	
	Co 1	Red
	Co 2	Green
	Co 3	Blue
	Co 4	Pink
	Co 5	Purple
	CO 6	Orange
	Co 7	Yellow
	Co 8	Sky blue
	Co 9	White
	Random	Color change
remo	On / Off	(De-)Activates the remote.
orL	On / Off	(De-)Activates the fluid sensor.

4.1.2. DMX chart

If the device is controlled by DMX the display shows the set DMX address. Please note that the LEDs will get out after approx. 10 seconds and the channel 8 must be activated again.

Channel	Value from	Value to	Function
1	0	9	No function
	10	255	Fog output
2	0	9	No function
	10	255	Dimmer LED ring red 0 – 100%.
3	0	9	No function
	10	255	Dimmer LED ring green 0 – 100%.
4	0	9	No function
	10	255	Dimmer LED ring blue 0 – 100%.
5	0	9	No function
	10	255	Dimmer LED strip red 0 – 100%.
6	0	9	No function
	10	255	Dimmer LED strip green 0 – 100%.
7	0	9	No function
	10	255	Dimmer LED strip blue 0 – 100%.
8	0	9	No function
	10	255	Color mixing

9	0	9	No function
	10	255	Color change slow – fast
10	0	9	No function
	10	255	Strobe slow – fast
11	0	9	No function
	10	255	Dimmer 0 – 100%

4.1.3. Remote

1. Activate the remote. (Cf. chapter 4.1.1).
2. Power off the device.
3. Power on the device again. The display shows a bar diagram. Press, while the bar diagram is shown in the display, any key on the remote. This process needs 12s.
4. The display blinks two times. The remote is connected successfully with the device.
5. With the buttons A, B, C and D the fog output and the corresponding color are activated (Cf. chapter 4.1.1).

Overall it is possible to assign up to five remotes to a device.

4.2. Fluid sensor

1. Activate the fluid sensor (Cf. chapter 4.1.1).
2. Once the fluid is empty the pump is deactivated. The display blinks.
3. Refill the fluid. To reset the fluid sensor there are three possibilities:
   a. Press the fog button until the fluid tube is completely filled with fluid.
   b. Press any key on the remote until the fluid tube is completely filled with fluid.
   c. At first set the DMX value of channel 1 to 0 and then to 255.

5. Technical data

Voltage	AC 220 V – 240 V; 50/60 Hz
Power consumption max.	1500 W
Fuse	8 A/250 V
LM type	LED single color (11x red, 10x green and 11x blue)
Power	96 W
Number x Power	32x 3 W
Heating Power	1100 W
Heating time	4 minutes
Tank volume	2,5 Liter
Output volume	906 m³/min
Fluid consumption @100%	159 ml/min
DMX 512	Yes
Number of DMX channels	8
Remote	Yes
Frequency of the remote	433 MHz
Power in	IEC
XLR in/out	3pol/5pol
Dimensions	417 x 382 x 205 mm
Weight	10 kg

For your notes:

For your notes:

For your notes:

For your notes:

Fog machine DSK-1500VS Art.No.: 115654

For your notes:

For your notes:

For your notes:

IMPORTER

B&K LUMITEC

2 rue Alfred Kastler
Zone Industrielle
67850 Herrlisheim - France

+33 (0) 3.88.96.80.90
+33 (0) 3.88.96.48.46
hello@bklumitec.com
www.bklumitec.com