

KAM

I N S T R U C T I O N M A N U A L

KSM Vegas LED

High power smoke machine with multicolour LED FX

M A N U A L V E R S I O N 1 . 0
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Due to continuous product development, please ensure that you have downloaded the latest instruction manual for this product from the Kam website at www.kam.co.uk

For the latest updates and information on the entire Kam range visit:

www.kam.co.uk

Kam products are manufactured by: **Lamba plc**, Unit 1, Southfields Road, Dunstable, Bedfordshire, United Kingdom LU6 3EJ

Telephone: (+44) (0)1582 690600 • Fax: (+44) (0)1582 690400 • Email: mail@lambapl.com • Web: www.lambapl.com

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Thank you for purchasing this Kam product, we are sure that it will serve you for many years to come.

To optimise the performance of this product, please read these operating instructions carefully to familiarise yourself with the basic operations of this unit. Please retain them for future reference. This unit has been tested at the factory before being shipped to you.

To prevent or reduce the risk of electrical shock or fire, do not expose the unit to rain or moisture. To prevent a fire hazard, do not expose the unit to any naked flame sources. Unplug this apparatus during lightning storms or if it is unlikely to be used for long periods of time.

When installing the unit, please ensure you leave enough space around the unit for ventilation. Slots and openings in the unit are provided for ventilation to ensure reliable operation of the product and to protect it from overheating. To prevent fire hazard, the openings should never be blocked or covered.

The unit is powered by mains electricity, always handle the power cable by the plug. Never pull out the plug by pulling on the cable. Never touch the power cable when your hands are wet as this could cause an electric shock. Do not tie a knot in the cable. The power cable should be placed such that it is not likely to be stepped on. A damaged power cable can cause a fire or give you an electrical shock. Check the power cord periodically, if you ever find that it is damaged, replace it before using the unit again. Contact your retailer for a replacement.

The voltage of the available power supply differs according to country or region. Be sure that the power supply voltage of the area where this unit is to be used meets the required written on the unit.

The lightning flash symbol inside a triangle is to alert the user to the presence high voltage within the unit's enclosure that may be of sufficient power to constitute a risk of electrical shock to persons.

Caution: to prevent the risk of electric shock, do not attempt to open the unit. No user-serviceable parts inside. Refer all servicing to qualified service personnel.

The exclamation mark inside a triangle is intended to alert the user to the presence of important operating and maintenance instructions in the literature accompanying the appliance.

Select the installation location of your unit carefully. Avoid placing it in direct sunlight or locations subject to vibration and excessive dust. Do not use the unit where there are extremes in temperature (below 41°F / 5°C or exceeding 95°F / 35°C).

Unpacking and safety Please unpack your new product carefully. Your new product should reach you in perfect condition. Please check that no damage has occurred during transit. If any damage is found, do not operate your unit. Please contact the retailer you purchased it from immediately. If there is any damage to the mains cable do not use the device. Always disconnect the unit from the mains supply when carrying out any cleaning of the unit.

Power supply

Use the plug to connect to the main power supply with the following connections:

Wire	Connection
Brown	Live
Blue	Neutral
Yellow/Cyan	Earth



Manufacturer declarations

In compliance with the following requirements: **RoHS Directive (2002/95/EU)** and **WEEE Directive (2002/96/EU)**.
If this product is ever no longer functional please take it to a recycling plant for environmentally friendly disposal.

CE declaration of conformity

R&TTE Directive (1999/5/EU), EMC Directive (2004/108/EU), Low Voltage Directive (2006/95/EU).
The declarations are available on application from certification@lambapl.com

Before putting the devices into operation, please observe the respective country-specific regulations.

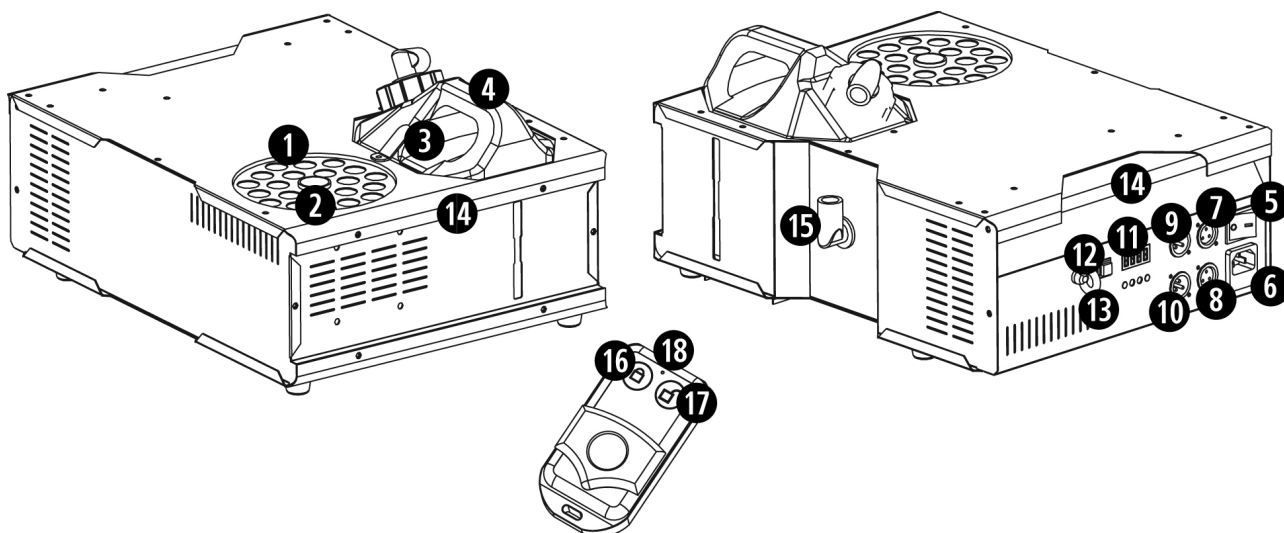
Package contents

1 x smoke machine / 1 x wireless remote control / 1 x instruction manual (this document) / 1 x mains cable

Safety instructions

Please read the following notes carefully because they include important safety information regarding this product.

1. Always plug in the power plug last and disconnect from the mains when the device is not in use or before cleaning.
2. Do not install and operate the device in rain or extreme heat, moisture or dusty environments.
3. This device is for indoor use only and in a dry environment.
4. If the device has been exposed to drastic temperature fluctuations, do not switch the unit on immediately but wait until it reaches room temperature.
5. Do not shake the device and avoid brute force when installing or operating.
6. Do not use the device during thunderstorms. Disconnect the unit from the mains.
7. Do not use solvents or aggressive detergent to clean the device. Use a soft, clean cloth.
8. Do not modify the device or the connected power cord.
9. In the event of a serious operating problem, stop using the unit immediately. Never try to repair the unit by yourself. Repairs carried out by unskilled people can lead to damage or malfunction. Please contact your Authorised Kam Retailer. Always use the same type of spare parts.
10. Never connect the device to a dimmer pack.
11. Make sure the power cord is never crimped or damaged.
12. Never disconnect the power cord by pulling or tugging on the cord.
13. Avoid direct eye exposure to the LED light source while it is on.
14. Never drink the smoke fluid.
15. **IMPORTANT – the smoke aperture on the unit can get VERY HOT. Never touch this area whilst the unit is in operation and always leave the unit to cool down before touching the area.**



1. LED back lights
2. Smoke aperture
3. Fluid tank security bracket
4. Fluid tank
5. Power on switch
6. Mains power input

7. DMX512 input (3 pin)
8. DMX512 input (5 pin)
9. DMX512 output (3 pin)
10. DMX512 output (5 pin)
11. Control LED display
12. Manual Fog button

13. Safety eyelet
14. Handles
15. 360° rotatable oil pipe
16. Remote On button
17. Remote Off button
18. Remote function LED

Setup and operation

1. Unpack your unit then remove the tank.
2. Unscrew the top cap of the tank.
3. Fill the tank with smoke fluid (do not over fill the tank).
4. Screw on the cap securely. Replace the tank in the unit ensuring that the fluid tank security bracket is holding the tank in place.
5. Check that the pipe is fed down towards the bottom of the bottle so that a consistent flow of fluid is supplied to the machine.
6. Connect the IEC mains cable to the rear of the unit and then to the mains power. Turn the unit on using the Power on button.
7. Warm-up time is usually between 3-4 minutes. During warm-up the LED display on the rear of the unit flashes the word 'HEAT'.
8. When the machine is ready, the Control LED display will **stop** flashing.
9. Press the Manual Fog button on the rear of the unit for 5 seconds so that the fluid has a chance to flow through the heater. The unit is now ready to use.
10. It is recommended that the unit produces smoke with small pauses in between so that the temperature is maintained and the thermostat doesn't switch off.
11. **Wireless remote operation** - press the left button and the unit will output smoke until you press the right hand stop button.

Remote control pairing

If for some reason the remote control and smoke machine aren't 'communicating' you may need to re-pair the two. Start by turning the smoke machine off for ten seconds, then turn on the unit, whilst the unit is starting up, press and hold down either button on the remote control until the LED display on the rear of the unit flashes twice to indicate a pairing. Note: this can take up to 12 seconds.

Manual fog button

After the warm-up process is completed, the LED control display stops flashing. To activate smoke output without using the remote, press the button located on the rear of the unit. The smoke machine will only output while the button is pressed. Once the button is released, the fog will stop output.

LED Control display

The built-in control panel on the rear of the machine features four operating buttons and a display which shows the operation status of the unit. The control panel allows the user to customize the colour of the LEDs, the DMX starting address, wireless remote and the fluid sensor. The four buttons underneath the LED Control display work as follows:

MENU button: press to scroll through the operating modes

UP button: scroll up through the options

DOWN button: scroll down through the options

ENTER button: confirm a selection

When using either manual or remote control modes, please observe point 10 and do not run the unit for long periods of time without pausing.

Control menu settings

Display	Function
Addr	Set the DMX address 000 - 512
CoLo	Set the LED colours
rEno	Turns the wireless remote On or Off
OrL	Turns the fluid level sensor On or Off

Colour selections

Press the button MENU so many times until **CoLo** is shown in the display. Then press ENTER to select the menu item. Use the buttons ▲ and ▼ to make your settings. Press ENTER to confirm your settings.

Setting	Function
rand	Random colour change
oFF	LEDs off
Co 1	Red
Co 2	Green
Co 3	Blue
Co 4	Pink
Co 5	Purple
Co 6	Orange
Co 7	Yellow
Co 8	Light blue
Co 9	White

* After setting above colour, the LED will show the corresponding colour when the wireless remote is used. When random colour change is selected, the LEDs will change their colour when the wireless remote control is used and the interval is 1 second.

* When a DMX controller is used, the colour will be controlled by the controller instead of the manual settings with the control panel.

DMX512 operation

The smoke machine is equipped with 8 control channels. To be able to operate the machine with a DMX controller, the DMX starting address must be set for the first DMX channel. To achieve this, press the button MENU so many times until "Addr" is indicated in the display. Then press ENTER to make your settings. Use the buttons ▲ and ▼ to set the address between 001 and 512. Press ENTER to confirm your settings. You may now start operating the machine via your DMX controller. The section below describes all functions of the 8 control channels.

Channel 1 – smoke output

DMX value	Function
000 – 009	Off
010 – 255	On

Channel 2 – brightness red LEDs

DMX value	Function
000 – 009	Off
010 – 255	Dimming from 1 – 100%

Channel 3 – brightness green LEDs

DMX value	Function
000 – 009	Off
010 – 255	Dimming from 1 – 100%

Channel 4 – brightness blue LEDs

DMX value	Function
000 – 009	Off
010 – 255	Dimming from 1 – 100%

Channel 5 – brightness red, green and blue LEDs (colour mixing)

DMX value	Function
000 – 009	Off
010 – 255	Dimming from 1 – 100%

Channel 6 – colour change speed

DMX value	Function
000 – 009	Off
010 – 255	Slow → fast

Channel 7 – strobe control

DMX value	Function
000 – 009	Off
010 – 255	Slow → fast

Channel 8 – Master control

DMX value	Function
000 – 009	Off
010 – 255	Dimming from 1 – 100%

Important note regarding the priority level for the three types of methods used to control the operation of your unit.

If using the wireless remote or manual control and then you connect the unit to a DMX controller, the DMX will take priority control.

The priority control levels are:

1. DMX
2. Manual fog button
3. Wireless controller

Fluid sensor on and off

To protect the pump, the machine uses an infrared fluid sensor to test if there is smoke fluid in the tube. If the sensor detects that there is not enough fluid in the tube, the machine will enter a protection mode after about 20 seconds and it will shut the pump down. The display will then start flashing.

To set the sensor, press the button MENU until the display indicates **orL** then press ENTER to make your settings. Use the buttons ▲ and ▼ to deactivate the fluid sensor (indication "Off") and to reactivate it (indication "On"). Press ENTER to confirm your settings.

Fuse Replacement:

Unplug the IEC power cable before replacing the fuse! Always replace with same type of fuse.

1. Using a flat head screwdriver, remove the fuse holder from the IEC housing.
2. Remove the bad fuse from the fuse holder.
3. Insert the new fuse into the fuse holder.
4. Install the fuse holder in the IEC housing.

Mounting:

Orientation: This unit can be operated both horizontally **and** vertically. When operated in a **vertical** position, ensure that the fluid tank is orientated so that the cap of the fluid tank is uppermost to the ceiling. The fluid tank security bracket should also be engaged so that the fluid tank cannot come out of its cradle from within the unit. Ensure that the fluid tank is not filled to the top as some of the liquid may spill out if the unit is operated in the vertical position.

Rigging: It is important never to obstruct the vents' pathways. Mount the fixture using, a suitable "C" or "O" type clamp. When selecting installation location, take into consideration the fluid reservoir access and routine maintenance. Safety cables must always be used, utilising the provided safety eye bolt. Never mount in places where the fixture will be exposed to rain, high humidity, extreme temperature changes or restricted ventilation.

General maintenance

To maintain optimum performance and minimise wear, the item should be cleaned frequently. Usage and environment are contributing factors in determining the cleaning frequency. As a general rule, fixtures should be cleaned after use to avoid dust build-up and blockages, which can result in poor performance, overheating and breakages. Be sure to unplug the unit from the mains **before** conducting any maintenance. Use a vacuum and a soft brush to remove dust collected on external vents and internal components. Clean the external case when the unit has **completely** cooled down with a dry cloth or tissue.

Regular maintenance

Be sure to power off fixture **before** conducting any maintenance. Every 40 hours of continuous operation, it is recommended to run a **cleaning solution** composed of 80% **distilled** water and 20% distilled **white vinegar** through the system to prevent the accumulation of particulate matter in the heating element.

The recommended cleaning regime is as follows:

1. Empty all haze/smoke fluid from the machine.
 2. Add the above **cleaning solution** to the tank (80% **distilled** water and 20% distilled **white vinegar**).
 3. Plug the unit in to the mains and allow it to warm up.
 4. Run the unit in a well-ventilated area until the tank is almost empty. **Do not allow the pump to run dry.**
- Cleaning is now complete. Refill with haze/smoke fluid. Run the unit briefly to clear any cleaning solution from the system.

Trouble shooting

Symptom	Solution
No Power	Check mains power.
	Check external fuse.
	Check internal fuse.
No smoke output	Check fluid level.
	Check remote.
	If using wireless remote control, check batteries.
Breaker/fuse keeps blowing	Possible electrical short. Contact retailer/distributor for further instructions.
Low smoke output	Run a cleaning solution through the smoke machine.
	Check that the smoke machine is plugged into the correct voltage.
Smoke machine is not heating up	Check the external fuse.
	Check the internal fuse.
	Possible faulty part. Contact your retailer/distributor for further instructions.
Remote control does not work	Check batteries in remote controller.
	Try using another controller.
	Possible faulty controller.
	Check the internal fuse.
	Check the external fuse.
Fluid indicator states no smoke but the container is full	Try resetting the smoke machine by turning the power off and then on again.
	Possible faulty part. Contact retailer/distributor for further instructions.

Specifications and features

Model	Kam KSM Vegas LED
Power supply	230V AC - 50Hz
Power	1500W
Fuse	F7A
Re-heat time	Approximately 4 minutes
Numbers of LEDs	21
LED type	3w
Output	40,000 CuFt per minute
DMX control channels	8
Tank capacity	2.5 Litres
Manual remote	Yes (optional)
Wireless remote	Yes
Gross weight	8.49kg