Kam

INSTRUCTION MANUAL

LED Mushroom 1 DMX
Classic DMX lighting effect

Classic RGBW LED beam effect light
8 lenses create circular movements
Plug & Play operation
Sound-to-light with built-in programs
Auto mode
Strobe effect
7 channel 512 DMX compatible
Extreme bright red, green, blue and white LEDs
No fan necessary due to cool LED operating temperature
Adjustable hanging bracket
Mains fused IEC

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

www.kam.co.uk

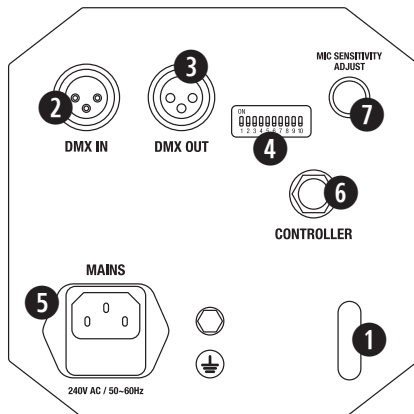# Kam LED Mushroom 1 DMX

Classic DMX lighting effect

INTRODUCTION

Thank you for purchasing the Kam LED Mushroom 1 DMX. To optimise the performance of this product, prior to use, please read these operating instructions carefully to familiarise yourself with the basic operations of this unit.

The Kam LED Mushroom 1 DMX is a superb lighting effect that will excite both you and your audiences alike. Please keep these instructions in a safe place for future reference. This unit has been tested in the factory before being shipped to you. There is no assembly required.

WARNINGS

To prevent or reduce the risk of electrical shock or fire, do not expose this unit to high temperature, rain or moisture. There are no serviceable parts in the unit, please have all servicing and adjustments made by a qualified service engineer. This appliance is to used by qualified personnel only.

REAR PANEL FUNCTIONS

1. Safety chain loop
2. DMX input
3. DMX output
4. 10 point dip switches
5. Mains fused IEC input (240V)
6. Kam EZ1 controller input
7. Microphone sensitivity adjustment
8. Internal microphone (not shown)

OPERATION

Connect your Kam LED Mushroom 1 DMX to the mains supply 240V AC, the unit is now ready to go.

STAND ALONE OPERATION

In stand alone mode you can use the Kam LED Mushroom 1 DMX without a controller. To use the unit in sound-to-light mode (without a controller) set all DIP switches to OFF. The unit features a built-in internal microphone which provides the sound-to-light function. You can adjust the sensitivity with the rotary control on the rear panel.

AUTO MODE

In order to use the unit in Auto mode, set DIP switch 9 to ON and 10 to OFF.
Speed can be adjusted via DIP switches 4 to 8.
If DIP switches 4 to 8 are set to OFF, the in-built programs run at the highest speed.
If DIP switch 4 is set to ON, the in-built programs run at a slower speed.
If DIP switch 5 is also set to ON, the in-built programs run at an even slower speed.
When DIP switch 8 is set on ON, the in-built programs run at the slowest speed.

MASTER / SLAVE OPERATION

The master/slave function enables several units to be synchronized and controlled by one Master unit. On the rear panel you can find XLR male and XLR female sockets, these can be used for connecting several devices. Choose the unit which is to control the effects, this unit then works as the Master and controls all other Slave units which are connected to it via DMX cables. Connect an XLR cable to the DMX out of the Master unit to the DMX IN socket of the slave unit. Continue linking other units in the same way, linking the DMX OUT of the last connected unit to the DMX IN of the next unit. Set all DIP switches to OFF in order to determine the Master unit. Set DIP switches 1 and 10 to ON in order to determine the slave devices.

DMX CONTROL OPERATION

You can control multiple units individually via a DMX controller. Every DMX channel has a different occupation with different features. For DMX controlled operation set DIP switch 10 to ON.

Building a serial DMX chain
Connect the DMX output of the first unit in the chain to the DMX input of the next unit using an XLR cable. Always connect one output with the input of the next unit until all units are connected.

DMX addressing
Each device occupies 7 channels. To ensure that the control signals are properly directed to each device, the unit requires addressing. This has to be adjusted for every unit by changing the DIP switches as set out in the table below. The starting address is defined as the first channel from which the device will respond to the controller. Please make sure that you do not have any overlapping channels in order to control each unit correctly and independently from the other units in the DMX data link.

DMX control
After having addressed all the units, you may now start operating them via your DMX controller.

DIP switch number		1	2	3	4	5	6	7	8	9
DMX starting address		1	2	4	8	16	32	64	128	256
Unit 1 - channels 1-7	ON	▲								
	OFF		▽	▽	▽	▽	▽	▽	▽	▽
Unit 2 - channels 8-14	ON				▲					
	OFF	▽	▽	▽		▽	▽	▽	▽	▽
Unit 3 - channels 15-21	ON	▲	▲	▲	▲					
	OFF					▽	▽	▽	▽	▽
Unit 4 - channels 22-28	ON		▲	▲		▲				
	OFF	▽			▽		▽	▽	▽	▽
Unit 5 - channels 29-35	ON	▲		▲	▲	▲				
	OFF		▽				▽	▽	▽	▽

Channel 1	Red
000 – 255	0 – 100% Dimming

Channel 2	Green
000 – 255	0 – 100% Dimming

Channel 3	Blue
000 – 255	0 – 100% Dimming

Channel 4	White
000 – 255	0 – 100% Dimming

Channel 5	Strobe
000 – 010	Off
011 - 255	Flash with increasing speed

Channel 6	Built-in programs, auto mode, sound-to-light mode
000 – 010	No function
011 – 034	Program 1
035 – 058	Program 2
059 – 082	Program 3
083 – 106	Program 4
107 – 130	Program 5
131 – 154	Program 6
155 – 178	Program 7

179 – 202	Program 8
203 – 226	Program 9
227 – 250	Auto mode: built-in programs
251 – 255	Sound-to-light mode

Channel 7	**Motor**
000 – 000	No rotation
001 – 127	Rotation - clockwise / with increasing speed
128 - 255	Rotation - counter-clockwise / with decreasing speed

OPTIONAL KAM EZ1 MINI CONTROLLER

A three button mini controller is available to simply control your lighting effects. Visit www.kam.co.uk to find out which Kam lighting product are compatible. The Kam EZ1 mini controller has three functions: Button 1 selects the blackout function. Button 2 selects the built-in programs / hold to strobe. Button 3 selects the speed mode (fast, mid and slow). When the LED indicator flashes, it is in Fast mode, when the LED indicator is permanetly on, it is in Mid mode and the when LED indicator stays off, it is in Slow mode.

CLEANING AND MAINTENANCE

We recommend frequent cleaning of the unit. Please use a soft lint-free and moistened cloth. Never use alcohol or solvents! There are no serviceable parts inside the device except for the fuse. Maintenance and service operations are only to be carried out by authorized dealers.

REPLACING THE FUSE

Only replace the fuse by a fuse of same type and rating. Before replacing the fuse, unplug mains lead. Procedure: Step 1: take out the fuse holder under the power supply / Step 2: remove the old fuse from the fuse holder. Step 3: install the new fuse in the fuse holder. Step 4: replace the fuse holder in the housing. If the power supply cable of this device becomes damaged, it has to be replaced by authorized dealers only.

TECHNICAL SPECIFICATIONS

5mm LEDs:	**18 x green / 21 x blue / 20 x red / 21 x white x 2**
Power supply:	**220-250V AC, 50-60Hz**
Power consumption:	**30W**
DMX channels:	**7**
DMX-512 connection:	**3 pin XLR**
Sound-to-light:	**Via built-in microphone**
Max ambient temperature:	**Ta 45°C**
Max housing temperature:	**TB (steady state) 60°C**
Min distance from flammable surfaces:	**0.50m**
Min distance to lighted object:	**0.10m**
Fuse:	**F 1A / 250V**
Weight:	**5.5Kg**

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