# Kam

## INSTRUCTION MANUAL

# LED Swingfire DMX
## Wide angle DMX lighting effect

Instruction manual version 2.0

7 lens LED DMX controllable swing effect light
LED Derby with red, green, blue and white beams
Amazing 160 degree wide angle effect
Plug & Play operation
Sound-to-light with built-in programs
9 channel 512 DMX compatible
189 x extreme bright LEDs
No motor and no moving parts equals low maintenance and an extremely long life
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
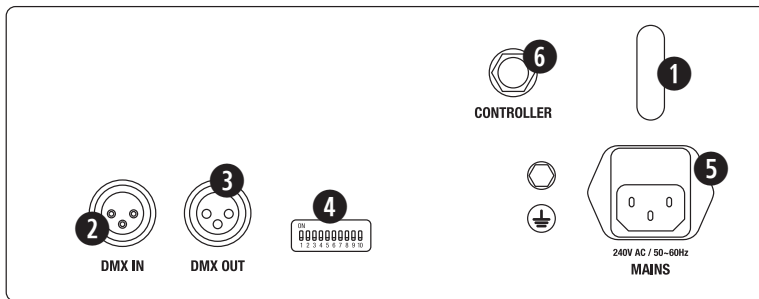
# Kam LED Swingfire DMX

Wide angle DMX lighting effect

**INTRODUCTION**
Thank you for purchasing the Kam LED Swingfire 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 Swingfire 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. Internal microphone (not shown)

**OPERATION**
Connect your Kam LED Swingfire 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 Swingfire 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.

**MASTER / SLAVE OPERATION**
The master/slave function enables several units to be synchronized and controlled by one master unit. On the rear panel you will 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 DIP switches 1 and 10 to ON in order to determine EZ1 controller mode or just to Master/Slave the units.

**DMX CONTROL OPERATION**
You can control the spots 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 9 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 - channel 1 | ON | ▲ | | | ▲ | | | | | |
| | OFF | | ▽ | ▽ | | ▽ | ▽ | ▽ | ▽ | ▽ |
| Unit 2 - channel 10 | ON | | ▲ | | ▲ | | | | | |
| | OFF | ▽ | | ▽ | | ▽ | ▽ | ▽ | ▽ | ▽ |
| Unit 3 - channel 19 | ON | ▲ | ▲ | | | ▲ | | | | |
| | OFF | | | ▽ | ▽ | | ▽ | ▽ | ▽ | ▽ |
| Unit 4 - channel 28 | ON | | | ▲ | ▲ | ▲ | | | | |
| | OFF | ▽ | ▽ | | | | ▽ | ▽ | ▽ | ▽ |
| Unit 5 - channel 37 | ON | ▲ | | ▲ | | | ▲ | | | |
| | OFF | | ▽ | | ▽ | ▽ | | ▽ | ▽ | ▽ |

**Channel 1**     **Lens 1 - LED groups/colours selection**

| | |
|---|---|
| 000 – 010 | Off |
| 011 – 024 | Red on |
| 025 – 038 | Green on |
| 039 – 052 | Blue on |
| 053 – 066 | Group 1 White on |
| 067 – 080 | Group 2 White on |
| 081 – 094 | Group 3 White on |
| 095 – 108 | White on |
| 109 – 122 | Red and Green on |
| 123 – 136 | Red and Blue on |
| 137 – 150 | Green and Blue on |
| 151 – 164 | Red and White on |
| 165 – 178 | Green and White on |
| 179 – 192 | Blue and White on |
| 193 – 206 | Red, Green and Blue on |
| 207 – 220 | Red, Green and White on |
| 221 – 234 | Green, Blue and White on |
| 235 – 255 | Red, Green, Blue and White on |

**Channels 2-7**    **Lenses 2-7 LED groups/colours selection**

As per channel 1

**Channel 8**     **Strobe**

| | |
|---|---|
| 000 – 010 | Off |
| 011 - 255 | Flash with increasing speed |

**Channel 9**     **Built-in programs, auto mode, sound-to-light mode**

| | |
|---|---|
| 000 – 010 | Off |
| 011 – 030 | Program 1 |
| 031 – 050 | Program 2 |
| 051 – 070 | Program 3 |
| 071 – 090 | Program 4 |
| 091 – 110 | Program 5 |
| 111 – 130 | Program 6 |
| 131 – 150 | Program 7 |
| 151 – 170 | Program 8 |
| 171 – 190 | Program 9 |

| | |
|---|---|
| 191 – 210 | Program 10 |
| 211 – 230 | Program 11 |
| 231 – 250 | Auto mode: built-in programs |
| 251 – 255 | Sound-to-light mode |

## 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: | **Each lens has: 3 x green / 3 x blue / 3 x red / 18 x white (total 189)** |
| Power supply: | **220-250V AC, 50-60Hz** |
| Power consumption: | **30W** |
| DMX channels: | **6** |
| 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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