Kam

INSTRUCTION MANUAL

Kam LED Bronco
Six lens RGBW gobo lighting effect with DMX

MANUAL VERSION 2.0
12-06-13

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 instruction manual updates and information on the entire Kam range visit:

www.kam.co.uk

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 periodicaly, 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 41ºF / 5ºC or exceeding 95ºF / 35ºC).

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.

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@lambaplc.com
Before putting the devices into operation, please observe the respective country-specific regulations.
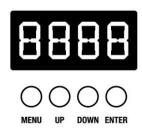
Installation
Unless it has already been assembled prior to shipping, attach the hanging bracket to the unit via the screw holes. Ensure that the unit is firmly fixed together to avoid vibration during operation. Make sure that the structure that you attach the light to is secure and able to support a weight of 10 times of the unit's own weight. Always use a safety cable that can hold 12 times of the weight of the unit when installing the fixture. The equipment must be fixed by professionals and must be attached in a position that is out of the reach of unqualified personal.

Cleaning
The cleaning of internal and external optical lenses and/or mirrors must be carried out periodically to optimise light output. Cleaning frequency depends on the environment in which the fixture operates: damp, smoky or particularly dirty surrounding can cause greater accumulation of dirt on the unit's optics. Clean with soft cloth using normal glass cleaning fluid. Always dry the parts carefully.

Operation
There are three ways to operate this unit:
Auto mode
Sound activated (Sound-to-Light) mode
Via a universal DMX controller
Master/Slave mode / Standalone operation

FUNCTION SETTING

MENU   UP   DOWN   ENTER

Auto mode and Sound activated (Sound-to-Light) mode
To operate the unit in either of the above modes, use the Function Setting buttons on the rear of the unit. Start by pressing the Menu button to select your desired effect from the table below e.g. A1 mode (Auto 1 red), then use the Up and Down buttons to select the speed of the effect 1-9 (slow to fast). Then press the Enter button to save your changes.

Manual setting mode:

A1 Mode	Red setting	Speed 1~9
A2 Mode	Green setting	Speed 1~9
A3 Mode	Blue setting	Speed 1~9
A4 Mode	White setting	Speed 1~9
A5 Mode	Auto setting	Speed 1~9
A6 Mode	Auto setting (not flash)	Speed 1~9
A7 Mode	Auto setting (flash)	Speed 1~9
S1 Mode	Red setting	Speed 1~9
S2 Mode	Green setting	Speed 1~9
S3 Mode	Blue setting	Speed 1~9
S4 Mode	White setting	Speed 1~9
S5 Mode	Sound active setting	Speed 1~9
S6 Mode	Sound active setting (not flash)	Speed 1~9
S7 Mode	Sound active setting (flash)	Speed 1~9
d Mode	DMX setting (5 channels)	
H Mode	DMX setting (6 channels)	

Universal DMX controller operation
When using a universal DMX controller to control a chain of units, you have to set the address using the DMX table below.

Master/Slave operation
Multiple units can be linked together in a daisy chain and operated in Master/Slave mode. Please use a 3 pin XLR cable/plug when connecting multiple units together in Master/Slave mode.

Master unit: select Auto or Sound mode on the Master unit.
Slave units: select DMX mode and set the start address to **d001**.

In Master/Slave mode please refer to the DMX settings using the table below.

LED digital setting: d001~d512 (5 channels)

CH1	0~255	LED Gobo
CH2	0~100	Single Gobo Select
	101~255	LED Gobo Speed
CH3	0~255	Flash
CH4	11~200	Auto DMX
	201~255	Sound DMX
CH5	0~255	Auto DMX/ Sound DMX Speed (Slow--Fast)

DMX code setting: H001~H512 (6 channels)

	0~15	Off
	16~31	Red
	32~47	Green
	48~63	Blue
	64~79	White
	80~95	Red + Green
	96~111	Red + Blue
	112~127	Red + White
CH1(Lenses 1)	128~143	Green + Blue
	144~159	Green + White
	160~175	Blue + White
	176~191	Red + Green +Blue
	192~207	Red + Green + White
	208~223	Red+ Blue + White
	224~239	Green + Blue + White
	240~255	Red + Green + Blue + White
	0~15	Off
	16~31	Red
CH2(Lenses 2)	32~47	Green
	48~63	Blue
	64~79	White

	80~95	Red + Green
	96~111	Red + Blue
	112~127	Red + White
	128~143	Green + Blue
	144~159	Green + White
	160~175	Blue + White
	176~191	Red + Green +Blue
	192~207	Red + Green + White
	208~223	Red+ Blue + White
	224~239	Green + Blue + White
	240~255	Red + Green + Blue + White
CH3(Lenses 3)	0~15	Off
	16~31	Red
	32~47	Green
	48~63	Blue
	64~79	White
	80~95	Red + Green
	96~111	Red + Blue
	112~127	Red + White
	128~143	Green + Blue
	144~159	Green + White
	160~175	Blue + White
	176~191	Red + Green +Blue
	192~207	Red + Green + White
	208~223	Red+ Blue + White
	224~239	Green + Blue + White
	240~255	Red + Green + Blue + White
CH4(Lenses 4)	0~15	Off
	16~31	Red
	32~47	Green
	48~63	Blue
	64~79	White

	80~95	Red + Green
	96~111	Red + Blue
	112~127	Red + White
	128~143	Green + Blue
	144~159	Green + White
	160~175	Blue + White
	176~191	Red + Green +Blue
	192~207	Red + Green + White
	208~223	Red+ Blue + White
	224~239	Green + Blue + White
	240~255	Red + Green + Blue + White
CH5(Lenses 5)	0~15	Off
	16~31	Red
	32~47	Green
	48~63	Blue
	64~79	White
	80~95	Red + Green
	96~111	Red + Blue
	112~127	Red + White
	128~143	Green + Blue
	144~159	Green + White
	160~175	Blue + White
	176~191	Red + Green +Blue
	192~207	Red + Green + White
	208~223	Red+ Blue + White
	224~239	Green + Blue + White
	240~255	Red + Green + Blue + White
CH6(Lenses 6)	0~15	Off
	16~31	Red
	32~47	Green
	48~63	Blue
	64~79	White

	80~95	Red + Green
	96~111	Red + Blue
	112~127	Red + White
	128~143	Green + Blue
	144~159	Green + White
	160~175	Blue + White
	176~191	Red + Green +Blue
	192~207	Red + Green + White
	208~223	Red+ Blue + White
	224~239	Green + Blue + White
	240~255	Red + Green + Blue + White

Technical specification & features

Kam LED Bronco
Six lens gobo lighting effect with DMX
Multi-colour RGBW LED effects
Classic disco gobo shape lighting effects
Sound-to-Light mode via built-in microphone
Adjustable microphone sensitivity
Auto/standalone mode / DMX mode / Master/Slave mode
The unit can be operated by DMX512 control or can be used as an individual unit without controller
Four button function setting with LED display
Tough metal chassis / Adjustable metal hanging bracket / Safety chain loop
IEC mains input
Fan cooled operation
Voltage: AC110～240V / 60/50HZ
Power: 80w / Fuse: 3A
LED: 6 x 10w 4-in-1 LED (red, green, blue and white)
Control signal: DMX signal / Channels: 5/24 channels
Dimensions (WxHxD): 430 x 50 x 280mm (not including bracket)
Weight: 3.1Kg