

# KAM

## INSTRUCTION MANUAL

# Kam StratoSphere

## High power multi-beam colour lighting ball

M A N U A L V E R S I O N 2 . 1  
3 0 . 0 4 . 1 5

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](http://www.kam.co.uk)

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

[www.kam.co.uk](http://www.kam.co.uk)

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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 its performance, 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.



### 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](mailto:certification@lambapl.com)

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

### What is included in the package

1 x Kam StratoSphere lighting ball / 1 x IEC mains power cable / 1 x quick lock handle / 1 x safety cable / 1 x instruction manual

### Overhead rigging

**Important** - the installation must be carried out by qualified service personal only. Improper installation can result in serious injuries and /or damage to property. Overhead rigging required extensive experience. Working load limits should be respected, certified installation materials should be used, the installed unit should be inspected regularly for safety.

- Make sure the area below the installation place is free from unwanted persons during rigging, de-rigging and servicing.
- Locate the fixture in a well ventilated spot, far away from any flammable materials and/or liquids. The fixture must be fixed at **least 50cm** from surrounding walls
- The device should be installed out of reach of people and outside of areas where persons may walk by or be seated.
- Before rigging make sure that the installation area can hold minimum point load of 10 times the device's weight.
- The device should be well fixed; a free swinging mounting is dangerous.
- Do not cover any ventilation opening as this may result in overheating
- Before first time use, the unit should be inspected for safety. Inspection the unit regularly every year.

### DMX-512 connection

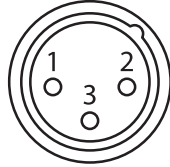
If you are using a standard DMX controller, you can connect the DMX output of the controller directly to the DMX input of the first unit in a DMX chain. If you wish to connect a DMX controller with other XLR outputs you will need to use adapter cables.

### DMX OUT



XLR female

### DMX IN

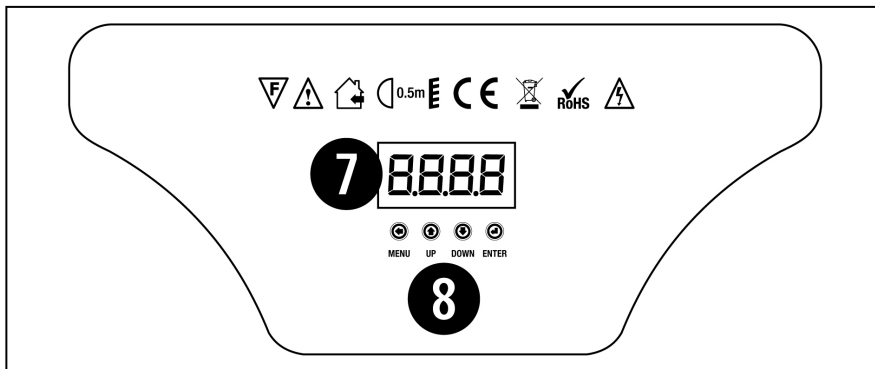
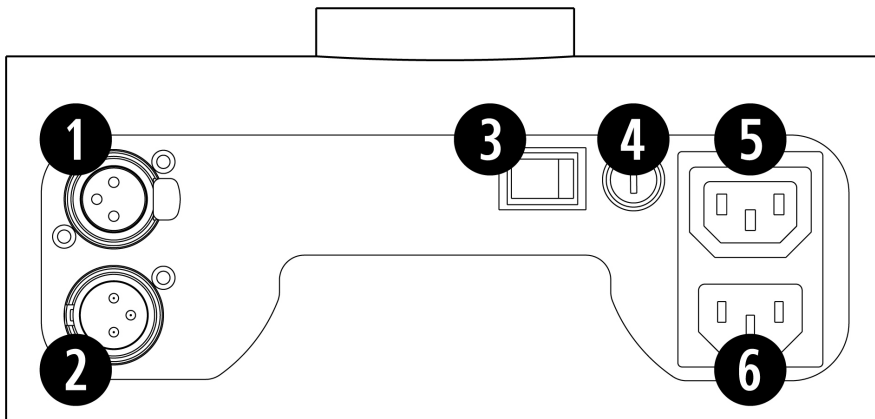


XLR male

1 = ground 2 = minus signal (-) 3 = plus signal (+)

Connect the DMX output of the first unit in a DMX chain with the DMX input of the next unit in the chain. Always connect the the output of one unit with the input of the next unit until all units are connected. If you use a controller with 5 pin DMX connection you will need to use a 5 pin to 3 pin adapter.

### Rear and Front panel diagrams



#### Key to rear panel diagram

1. DMX Input - 3 pin male XLR interface for DMX connections.
2. DMX Output - 3 pin female XLR interface for DMX connections.
3. Unit ON / OFF switch
4. Fuse holder
5. Mains Power input IEC socket
6. IEC connector socket

#### Key to front panel diagram

7. LED function setting display - shows the various menus and the selected functions
8. Menu buttons - used to select the different menu items.

## Main Menu

**Important: to begin using the menu, press and hold the MENU button for 2-3 seconds to activate the menu.**

The default LED readout is **RD01**. To select any of the menu options, press the MENU button to select the mode required.

Once you have made a selection then press ENTER to confirm.

Use the UP and DOWN buttons to choose the desired menu option. Once you have made a selection, press ENTER to confirm.

1. If the display flickers slowly - this is the current MENU option. If the display flickers quickly, this allows you to enter data.
2. If no operation is selected within 10 seconds, the MENU will return to the default **RD01** (the DMX address).

## Mode Selection

Press the MODE button, the following functions can be selected and then confirmed using the ENTER and UP and DOWN buttons:

LED DISPLAY	FUNCTION DESCRIPTION
<b>RD01</b>	<b>RD01-RS12</b> DMX address (See DMX chart below for more detailed description)
<b>Auto</b>	<b>Sound</b> – Sound-to-Light mode
	<b>AutoF</b> – turns Auto mode OFF
	<b>AutoO</b> – turns Auto mode ON
<b>SOUS</b>	<b>SOUS-SGT0</b> – Sound-to-Light microphone sensitivity adjustment
<b>RS1E</b>	<b>RS1E</b> – unit runs in Master mode
	<b>RL0n</b> – unit runs in Slave mode
<b>rdof</b>	<b>rdof</b> – LED display reverse OFF
	<b>rdon</b> – LED display reverse ON
<b>LoSt</b>	<b>LoSt mode controls what happens in DMX mode if the DMX signal is temporarily lost</b>
	<b>Sound</b> – if DMX signal is lost, the unit will run Auto Sound-to-Light programs
	<b>BLAC</b> – if DMX signal is lost, the unit will turn off all LEDs and blackout
	<b>Hold</b> – if DMX signal is lost, the unit will hold the last status before the signal was lost
<b>MANU</b>	<b>Manual mode allows you to set the specific colour and speed of rotation – total control</b>
	<b>Rate</b> – manually adjust the speed of rotation (0-255)
	<b>PURP</b> – manually adjust the amount of UV colour projected (0-255)
	<b>YELL</b> – manually adjust the amount of the yellow colour projected (0-255)
	<b>WHTE</b> – manually adjust the amount of the white colour projected (0-255)
	<b>BLUE</b> – manually adjust the amount of the blue colour projected (0-255)
	<b>GREEN</b> – manually adjust the amount of the green colour projected (0-255)
	<b>RED</b> – manually adjust the amount of the red colour projected (0-255)
<b>dfof</b>	<b>dfof</b> – default Mode OFF
	<b>dfon</b> – default mode ON
<b>RESt</b>	Resets the unit

### DMX address setting

Each unit must be set with a specific starting address. When receiving a DMX signal, the unit will receive the channel control signals of this specific address from the DMX controller. For ease of use, the user can set the same address for several units or you can set a unique address for every unit. If you set the same address for all units, they will receive the same DMX channel signals and will all perform in the same manner. If you set a different address for each unit, each unit will receive a unique signal and can be controlled by DMX controller separately. This unit has **12** channels. You should set the starting address of the first unit to **1**, the second unit to **13** ( $1 \times 12 + 1$ ), the third unit to **25** ( $2 \times 12 + 1$ ), and so on.

### DMX mode operation

To operate the unit in DMX mode, connect a cable from the DMX controller to the unit, then turn the unit ON. Next select the **Auto** menu > **AuoF**. This turns the Auto mode OFF and turns the DMX mode ON.

### DMX channel control table

Channel	Value	Function
1	0-255	<b>Red</b> 0-100% (ensure channel 8 dimmer is set to 100%)
2	0-255	<b>Green</b> 0-100% (ensure channel 8 dimmer is set to 100%)
3	0-255	<b>Blue</b> 0-100% (ensure channel 8 dimmer is set to 100%)
4	0-255	<b>White</b> 0-100% (ensure channel 8 dimmer is set to 100%)
5	0-255	<b>Yellow</b> 0-100% (ensure channel 8 dimmer is set to 100%)
6	0-255	<b>Purple</b> 0-100% (ensure channel 8 dimmer is set to 100%)
7	0-255	<b>Strobe</b> (ensure channel 8 dimmer is set to 100%) 000~007 Off 008~015 Open 016~131 Strobe / slow to fast 132~139 Open 140~181 Open / fast close 182~189 Open 190~231 Fast open / slow Close 232~239 Open 240~247 Random strobe 248~255 Open
8	0-255	<b>Dimmer</b> 0-100%
9	0-255	<b>Pan rotation</b> 000~030 No function 031~140 Clockwise rotation / fast to slow 141~145 Stop 146~255 Counter clockwise / rotation slow to fast
10	0-255	<b>Colour mixing &amp; effects</b> (ensure CH8 dimmer is set to 100% and CH7 is fully OPEN) 000~025 No function 026~205 Color mixes / different colour mixes every 20 values 206~255 Color changes (fast to slow)
11	0-255	<b>Pan/colour mixing</b> 000~055 No Function 056~075 Sound mode 076~105 Red / clockwise rotation 106~135 Green / counter-clockwise rotation 136~165 Blue / clockwise rotation 166~195 White / counter-clockwise rotation 196~255 Yellow / clockwise rotation
12	0-255	<b>Function</b> 000~069 Null 070~085 Reset 086~255 Null

## Troubleshooting

Problem	Check list	Troubleshooting
No output - the unit does not appear to work	<ol style="list-style-type: none"> <li>1. Check if the power cord is connected to the input mains socket of the unit.</li> <li>2. Check if the ambient temperature is in a safe range.</li> </ol>	<ol style="list-style-type: none"> <li>1. Make sure there is mains present to the cable, check the fuse or replace the cable.</li> <li>2. Ensure the ambient temperature is suitable.</li> </ol>
LEDs are dimmed	<ol style="list-style-type: none"> <li>1. Check if the power cord is connected to the input mains socket of the unit.</li> </ol>	<ol style="list-style-type: none"> <li>1. Make sure the mains input voltage is the correct voltage.</li> </ol>
No DMX input	<ol style="list-style-type: none"> <li>1. Check that the cable is not damaged.</li> <li>2. Check the polarity of the pin connections is correct.</li> <li>3. Check if the unit is in DMX mode.</li> <li>4. Check if 2 units are set as Master units in a chain.</li> </ol>	<ol style="list-style-type: none"> <li>1. Change the DMX cable.</li> <li>2. Correct the DMX polarity or change the cable.</li> <li>3. Set up the function mode as DMX.</li> <li>4. Set all other units as Slave units in the chain.</li> </ol>
Display shows PAN-ERR or TILT-ERR	There will be an error with either the PAN function or the TILT function	Please contact your local Kam dealer for advice

## Features and specifications

### Kam StratoSphere

Classic mirror ball FX for the 21st Century!

Available in black or white finish to suit the event

5 x 15 watt RGBWAUV 6-in-1 LEDs

Multi-colour red, green, blue, white, amber and ultra violet

Room-filling light beams projected from 98 lenses

Black or white finish (Ghost) to suit your environment or event

Fill the dance floor with rotating multicolour beams of light

Stunning built-in programs / Easy-to-use 4 button control panel

Manual mode allows you total control of colour and rotation speed

Colour, speed, direction, dimming & strobing adjustments

Auto, Sound-to-Light, Master/Slave and DMX modes

12 channel DMX

Linkable 3 pin DMX XLR input and output

Smooth quiet motor operation / Stand, floor or ceiling mount

LEDs with huge 50,000 hour lifespan (average)

Safety chain eyelet for stands, rigs and ceilings

Rubber feet for safe placement / Metal ball chassis

Linkable IEC mains input and output

Input voltage: AC100~240V 50/60HZ

Dimensions (WxDxH): 310 x 310 x 410mm

Weight: 3.65Kg