

# KAM

INSTRUCTION MANUAL

## InfinityBeam

Multi-colour wide angle beam effects

M A N U A L V E R S I O N 1 . 0  
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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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If this product is ever no longer functional please take it to a recycling plant for environmentally friendly disposal.

Due to continuous product development, specifications and appearance are subject to change.

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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 instructions carefully to familiarise yourself with the basic operations of the 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 the mains, 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 requirements of 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. Please read and pay attention to all laser safety warning sticker labels on the unit.**

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.

#### AC power

The unit is supplied with a power plug appropriate to its voltage. Should any other connections be required they must be carried out with the following configuration:

| Cable (EU)   | Cable (US) | Pin     | International |
|--------------|------------|---------|---------------|
| Brown        | Black      | Live    | L             |
| Light blue   | White      | Neutral | N             |
| Yellow/green | Green      | Earth   |               |

### DMX-512 connection

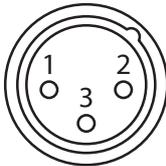
If you are using a standard DMX controller, you can connect the DMX output of the controller directly to the DMX input of the first unit in a DMX chain. If you wish to connect a DMX controller with other XLR outputs you will need to use adapter cables.

#### DMX OUT



XLR female

#### DMX IN



XLR male

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

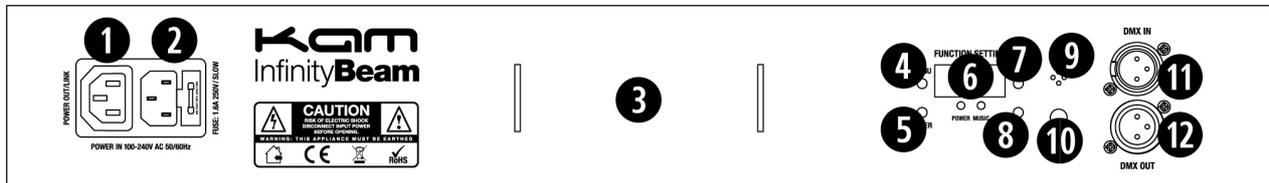
Connect the DMX output of the first unit in a DMX chain with the DMX input of the next unit in the chain. Always connect the the output of one unit with the input of the next unit until all units are connected. If you use a controller with 5 pin DMX connection you will need to use a 5 pin to 3 pin adapter.

### 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 unit 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. Inspect the unit regularly every year.



### Key to rear panel diagram

1. Mains power output/link socket. Insert an IEC cable between this socket and a connected unit's power input socket.
2. Mains power input IEC socket. Connect the supplied IEC cable to the input and the mains power.
3. Position of adjustable bracket
4. Menu button – see below table for function setting
5. Enter button – see below table for function setting
6. Function setting LED display panel and LED indicators for power and sound input
7. Down button – see below table for function setting
8. Up button – see below table for function setting
9. Microphone - used to monitor the music input during Sound-to-Light mode
10. Sensitivity - used to adjust the mic's input sensitivity during Sound-to-Light mode.
11. DMX input - 3 pin male XLR socket for DMX communication
12. DMX output - 3 pin female XLR socket for DMX communication

### Rear panel Function Setting LED display

Use a combination of the four function buttons to set the unit to your desired working mode.

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.

The menu structure is shown on the following page.

## Menu function and operation

|     |  |  |   |   |
|-----|--|--|---|---|
| AUT | AOTP   | AP**<br>Auto programs                    | AP01~AP** - selects the auto shows  | Press the Enter button to confirm your choice                         |
|     |  |  | S.01~S.99 - selects the show speed<br>01 is the slowest / 99 is the fastest | Press the Enter button to confirm your choice and return to AP** menu |
|     | AUTF   | AF**<br>Auto flashing programs           | AF01~AF** - selects the auto flashing shows                                 | Press the Enter button to confirm your choice                         |
|     |  |  | S.01~S.99 - selects the show speed<br>01 is the slowest / 99 is the fastest | Press the Enter button to confirm your choice and return to AF** menu |
|     | AUTM   | AM**<br>Auto mixed programs              | AM01-AM02 - selects the auto mixed shows                                    | Press the Enter button to confirm your choice                         |
|     |  |  | S.01~S.99 - selects the show speed<br>01 is the slowest / 99 is the fastest | Press the Enter button to confirm your choice and return to AM** menu |
| SOU | SOUP   | SP**<br>Sound-to-Light programs          | SP01~SP** - selects auto sound shows  | Press the Enter button to confirm your choice and return to SP** menu |
|     | SOUF   | SF**<br>Sound-to-Light flashing programs | SF01~SF** - selects flashing sound shows                                    | Press the Enter button to confirm your choice and return to SF** menu |
|     | SOUM   | SM**<br>Sound-to-Light mixed programs    | SM01-SM02 - select the sound mixed show                                     | Press the Enter button to confirm your choice and return to SM** menu |
| DMX | 03CH (d001-d510)<br>09CH (d001-d504)<br>14CH (d001-d499) |  | Select the DMX channel mode then press Enter button for the next menu       |   |
|     | dXXX   | d 001-dxxx                               | Select DMX value then press the Enter button to confirm your choice         |   |
| SLA | SLAV   | Sets the unit to slave mode              |   | Press the Enter button to confirm your choice                         |
| SYS | LEDS   | Turns the LED display on or off          |   | Press the Enter button to confirm your choice                         |
|     | TEST   | Self tests the unit                      |   |   |
|     | REST   | Resets the unit to factory defaults      |   | Press the Enter button to confirm and restart the unit                |

### 3 channel DMX mode

| Channel | Value   | Description  |
|---------|---------|--|
| 1       | 000-009 | Black out  |
|         | 010-050 | Auto   |
|         | 051-090 | Auto flash   |
|         | 091-130 | Auto mix   |
|         | 131-170 | Sound  |
|         | 171-210 | Sound flash  |
|         | 211-255 | Sound mix  |
| 2       | 000-255 | Auto - AP** (based on channel 1, value 010-050) see below table        |
|         | 000-255 | Auto flash - AF** (based on channel 1, value 051-090) see below table  |
|         | 000-255 | Auto mix - AM** (based on channel 1, value 091-130) see below table    |
|         | 000-255 | Sound - SP** (based on channel 1, value 131-170) see below table       |
|         | 000-255 | Sound flash - SF** (based on channel 1, value 171-210) see below table |
|         | 000-255 | Sound mix - SM** (based on channel 1, value 211-255) see below table   |
| 3       | 0-255   | Program speed  |

### 3 channel DMX mode / channel 2 details

| Value   | Auto program |  | Value   | Sound program |
|---------|--------------|--|---------|---------------|
| 000-010 | AP01         |  | 000-010 | SP01          |
| 011-021 | AP02         |  | 011-021 | SP02          |
| 022-032 | AP03         |  | 022-032 | SP03          |
| 033-043 | AP04         |  | 033-043 | SP04          |
| 044-054 | AP05         |  | 044-054 | SP05          |
| 055-065 | AP06         |  | 055-065 | SP06          |
| 066-076 | AP07         |  | 066-076 | SP07          |
| 077-087 | AP08         |  | 077-087 | SP08          |
| 088-098 | AP09         |  | 088-098 | SP09          |
| 099-109 | AP10         |  | 099-109 | SP10          |
| 110-120 | AP11         |  | 110-120 | SP11          |
| 121-131 | AP12         |  | 121-131 | SP12          |
| 132-142 | AP13         |  | 132-142 | SP13          |
| 143-153 | AP14         |  | 143-153 | SP14          |
| 154-164 | AP15         |  | 154-164 | SP15          |
| 165-175 | AP16         |  | 165-175 | SP16          |
| 176-186 | AP17         |  | 176-186 | SP17          |
| 187-197 | AP18         |  | 187-197 | SP18          |
| 198-208 | AP19         |  | 198-208 | SP19          |
| 209-219 | AP20         |  | 209-219 | SP20          |
| 220-230 | AP21         |  | 220-230 | SP21          |
| 231-241 | AP22         |  | 231-241 | SP22          |
| 242-255 | AP23         |  | 242-255 | SP23          |
|         |              |  |         |               |
| 000-024 | AF01         |  | 000-024 | SF01          |
| 025-049 | AF02         |  | 025-049 | SF02          |
| 050-074 | AF03         |  | 050-074 | SF03          |
| 075-099 | AF04         |  | 075-099 | SF04          |
| 100-124 | AF05         |  | 100-124 | SF05          |
| 125-149 | AF06         |  | 125-149 | SF06          |
| 150-174 | AF07         |  | 150-174 | SF07          |
| 175-199 | AF08         |  | 175-199 | SF08          |
| 200-224 | AF09         |  | 200-224 | SF09          |
| 225-255 | AF10         |  | 225-255 | SF10          |
|         |              |  |         |               |
| 000-085 | AM01         |  | 000-085 | SM01          |
| 086-171 | AM02         |  | 086-171 | SM02          |
| 172-255 | AM03         |  | 172-255 | SM03          |

**9 channel DMX mode**

| <b>Channel</b> | <b>Value</b> | <b>Description</b>         |
|----------------|--------------|----------------------------|
| 1              | 000-085      | Red 0 - 100% (head 1)      |
|                | 086-170      | Green 0 - 100% (head 1)    |
|                | 171-255      | Blue 0 - 100% (head 1)     |
| 2              | 000-085      | Red 0 - 100% (head 2)      |
|                | 086-170      | Green 0 - 100% (head 2)    |
|                | 171-255      | Blue 0 - 100% (head 2)     |
| 3              | 000-085      | Red 0 - 100% (head 3)      |
|                | 086-170      | Green 0 - 100% (head 3)    |
|                | 171-255      | Blue 0 - 100% (head 3)     |
| 4              | 000-085      | Red 0 - 100% (head 4)      |
|                | 086-170      | Green 0 - 100% (head 4)    |
|                | 171-255      | Blue 0 - 100% (head 4)     |
| 5              | 000-085      | Red 0 - 100% (head 5)      |
|                | 086-170      | Green 0 - 100% (head 5)    |
|                | 171-255      | Blue 0 - 100% (head 5)     |
| 6              | 000-085      | Red 0 - 100% (head 6)      |
|                | 086-170      | Green 0 - 100% (head 6)    |
|                | 171-255      | Blue 0 - 100% (head 6)     |
| 7              | 000-085      | Red 0 - 100% (head 7)      |
|                | 086-170      | Green 0 - 100% (head 7)    |
|                | 171-255      | Blue 0 - 100% (head 7)     |
| 8              | 000-085      | Red 0 - 100% (head 8)      |
|                | 086-170      | Green 0 - 100% (head 8)    |
|                | 171-255      | Blue 0 - 100% (head 8)     |
| 9              | 000-255      | strobe speed (strobe LEDs) |

**14 channel DMX mode**

| Channel | Value   | Description                                  |
|---------|---------|--|
| 1       | 000-085 | Red 0 - 100% (head 1)                        |
|         | 086-170 | Green 0 - 100% (head 1)                      |
|         | 171-255 | Blue 0 - 100% (head 1)                       |
| 2       | 000-085 | Red 0 - 100% (head 2)                        |
|         | 086-170 | Green 0 - 100% (head 2)                      |
|         | 171-255 | Blue 0 - 100% (head 2)                       |
| 3       | 000-085 | Red 0 - 100% (head 3)                        |
|         | 086-170 | Green 0 - 100% (head 3)                      |
|         | 171-255 | Blue 0 - 100% (head 3)                       |
| 4       | 000-085 | Red 0 - 100% (head 4)                        |
|         | 086-170 | Green 0 - 100% (head 4)                      |
|         | 171-255 | Blue 0 - 100% (head 4)                       |
| 5       | 000-085 | Red 0 - 100% (head 5)                        |
|         | 086-170 | Green 0 - 100% (head 5)                      |
|         | 171-255 | Blue 0 - 100% (head 5)                       |
| 6       | 000-085 | Red 0 - 100% (head 6)                        |
|         | 086-170 | Green 0 - 100% (head 6)                      |
|         | 171-255 | Blue 0 - 100% (head 6)                       |
| 7       | 000-085 | Red 0 - 100% (head 7)                        |
|         | 086-170 | Green 0 - 100% (head 7)                      |
|         | 171-255 | Blue 0 - 100% (head 7)                       |
| 8       | 000-085 | Red 0 - 100% (head 8)                        |
|         | 086-170 | Green 0 - 100% (head 8)                      |
|         | 171-255 | Blue 0 - 100% (head 8)                       |
| 9       | 000-255 | General brightness                           |
| 10      | 000-080 | Dimmer 0 - 100% for the 8 heads)             |
|         | 081-160 | Dimmer 100% - 0 (for the 8 heads)            |
|         | 161-240 | Strobe speed, slow to fast (for the 8 heads) |
|         | 241-255 | Sound to strobe                              |
| 11      | 000-255 | White strobe speed (strobe 1)                |
| 12      | 000-255 | White strobe speed (strobe 2)                |
| 13      | 000-255 | White strobe speed (strobe 3)                |
| 14      | 000-255 | White strobe speed (strobe 4)                |

## **Kam InfinityBeam features & specification**

Multi-colour wide angle beam effects

Classic disco lighting effects updated with LED

Room-filling beams from 8 multi-colour heads

Each head has a powerful 9 watt RGB multi-colour tri-LED

Position each head exactly where you want it

Strobing white effects from 4 static LEDs

Fill the dance floor with multi-colour beams of light

Stunning built-in programs

Easy-to-use 4 button control panel

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

Adjustable bracket for stands, rigs and ceilings

Controller has a robust metal chassis

Linkable IEC mains input and output

Mains input voltage: AC100~240v 50/60Hz

Dimensions: 600 x 220 x 260mm

Weight: 3.5kg