

KAM

INSTRUCTION MANUAL

Kam Spin2

Multi-scanning mirror 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

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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

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

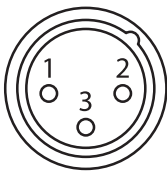
If you are using a standard DMX controller, you can connect the DMX output of the controller directly to the DMX input of the first unit in a DMX chain. If you wish to connect a DMX controller with other XLR outputs you will need to use adapter cables.

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

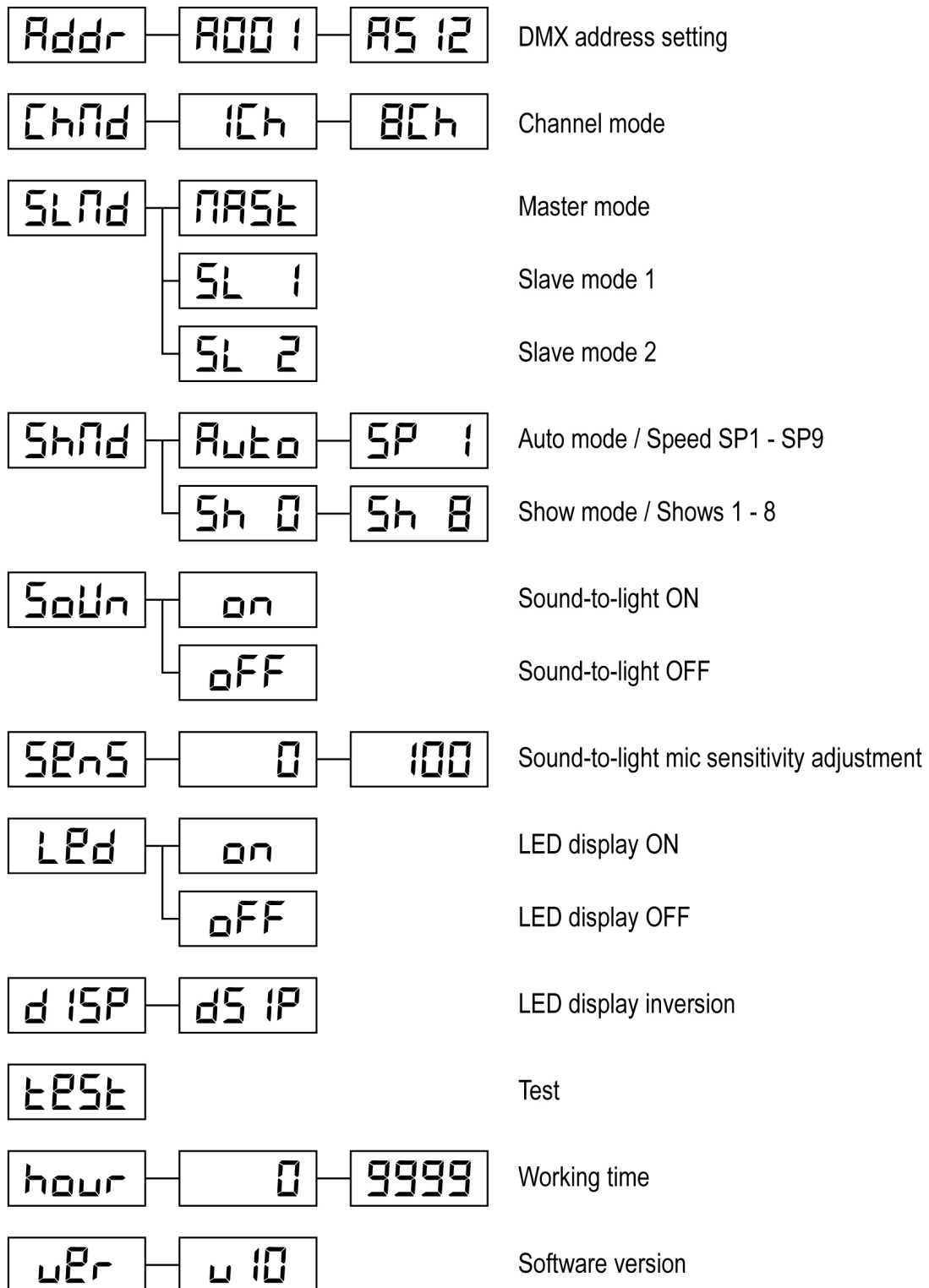
Before first time use, the unit should be inspected for safety. Inspection the unit regularly every year.

Quick Start Guide

After connecting your unit to the mains, use the LED Function menu on the side of the unit to set the operating mode.

Use the MENU button to make a function selection, then press ENTER to confirm it. Next use the UP and DOWN arrow buttons to refine your selection, then use the ENTER button to confirm your setting.

LED Function menu structure



LED Function menu setting

1. DMX512 address setting (Addr)

Select **Addr** in the Function Menu and press the **Enter** button to confirm. Using the **Up/Down** buttons, select your initial address and press the **Enter** button to confirm. Press the **Menu** button to return to the main menu or wait 10 seconds and this will happen automatically.

2. Channel mode (Chnd)

Select **Chnd** in the Function Menu and press the **Enter** button to confirm. Using the **Up/Down** buttons, select a channel (e.g. **6Ch** which is 6 channel mode) and press the **Enter** button to confirm your choice (1 or 8 channel). Press the **Menu** button to return to the main menu or wait 10 seconds and this will happen automatically.

3. Master/Slave mode (SLnd)

Select **SLnd** in the Function Menu and press the **Enter** button to choose between **NASt** (Master mode) or **SL1** (Slave 1 mode) or **SL2** (Slave 2 mode). Press the **Enter** button to confirm your choice. Press the **Menu** button to return to the main menu or wait 10 seconds and this will happen automatically.

4. Show mode (Shnd)

Select **Shnd** in the Function Menu and press the **Enter** button to confirm. **Auto** will appear in the menu, press the **Enter** button then select the Auto show speed using the **Up/Down** buttons (1 slow to 9 fast).

Select **Shnd** again and press the **Enter** button to confirm. You can now choose which Auto show you wish to use with the **Up/Down** buttons (**Sh0** selects a random show, or choose shows **Sh1** to **Sh8**). Press the **Menu** button to return to the main menu or wait 10 seconds and this will happen automatically.

5. Sound-to-Light mode (SoUn)

Select **SoUn** in the Function Menu and press the **Enter** button to confirm. Using the **Up/Down** buttons, select either **ON** or **OFF** and press the **Enter** button to confirm your choice. Press the **Menu** button to return to the main menu or wait 10 seconds and this will happen automatically.

6. Sound-to-Light microphone sensitivity (SenS)

Select **SenS** in the Function Menu and press the **Enter** button to confirm. Using the **Up/Down** buttons, select a microphone sensitivity setting (from 0-100) and press the **Enter** button to confirm your choice. Press the **Menu** button to return to the main menu or wait 10 seconds and this will happen automatically.

7. LED display setting (Led)

Select **Led** in the Function Menu and press the **Enter** button to confirm. Using the **Up/Down** buttons, select either **ON** or **OFF** and press the **Enter** button to confirm your choice. Press the **Menu** button to return to the main menu or wait 10 seconds and this will happen automatically.

8. LED display inversion (dISP)

Select **dISP** in the Function Menu and press the **Enter** button to confirm. Choose either **dISP** which is the normal display setting or **dSIP** which rotates the display 180 degrees (inverts). Press the **Menu** button to return to the main menu or wait 10 seconds and this will happen automatically.

9. Test mode (teSt)

Select **teSt** in the Function Menu and press the **Enter** button to confirm. The LED display will flash and the unit will run a built-in self-test program. Press the **Menu** button to return to the main menu or wait 10 seconds and this will happen automatically.

10. Working time (hour)

Select **hour** in the Function Menu and press the **Enter** button to confirm. The LED display will show the working time of the unit. Press the **Menu** button to return to the main menu or wait 10 seconds and this will happen automatically.

11. Software version (uer)

Select **uer** in the Function Menu and press the **Enter** button to confirm. The LED display will show the software version. Press the **Menu** button to return to the main menu or wait 10 seconds and this will happen automatically.

1. Master/Slave operation

You can link multiple units together in Master/Slave mode. To achieve this you will need to set the first unit in the chain as the **Master** unit and then set all other linked units as **Slave** units.

Important note: if you are linking the **Kam Spin2** to the **Kam Spin4** in Master/Slave mode, **the Spin4 must be Master unit.**

Using DMX cables, link the units from the DMX output of the first (**Master**) unit to the DMX input of the second (**Slave**) unit, then link the DMX output of the second unit to the DMX input of the third unit and so on.

Next set the first unit to be the **Master**:

1. Press the **Menu** button and choose **SLnd**
2. Press the **Enter** button
3. Set the unit to **NASt**
4. Press the **Enter** button to confirm your choice
5. Next set the unit to Show mode **Shnd** (and choose a show (0-8))

Next set the other units to be **Slave mode**:

6. Press the **Menu** button and choose **SLnd**
7. Press the **Enter** button
8. Set the units to **SL1** (normal Slave mode) or **SL2** (dual light show mode)
9. Press the **Enter** button to confirm your choice

All units should now operate in Master/Slave mode where all units operate the same show as the first unit in the chain. If you are only joining two units in Master/Slave mode, it is recommended to use **SL2** Slave mode.

2. DMX controller operation

If you intend to operate the unit using a DMX controller, then you need to begin by setting the address. Choose **A001** as the default address. Below are the DMX channel function tables for each DMX mode.

1 channel DMX mode

Channel	Value	Function
1 008-258 are all controlled using Sound-to-Light	000-007	No function
	008-037	Show 1
	038-067	Show 2
	068-097	Show 3
	098-127	Show 4
	128-157	Show 5
	158-187	Show 6
	188-217	Show 7
	218-247	Show 8
	248-255	Random show 1-8
	143-157	Show 10
	158-172	Show 11
	173-187	Show 12
	188-202	Show 13
	203-217	Show 14
	218-232	Show 15
	233-247	Show 16
248-255	Sound-to-Light mode	

8 channel DMX mode

Channel	Value	Function
1	000-255	Full dimmer 0 - 100%
2	000-255	Strobe, slow to fast
3	000-255	Motor 1, X axis reverse direction rotating 180 degrees
4	000-120	Motor 1, Y axis positive direction rotation, fast to slow
	121-134	Stop / run
	135-255	Motor 1, Y axis reverse direction rotation, fast to slow
5	000-008	No function
	009-024	Red
	025-041	Blue
	042-057	Green
	058-074	White
	075-090	Red & green
	091-107	Red & blue
	108-123	Red & white
	124-140	Green & blue
	141-156	Green & white
	157-173	Blue & white
	174-189	Red, green & blue
	190-206	Red, green & white
	207-222	Red, blue & white
	223-239	Green, blue & white
240-255	Red, green, blue & white	
6	000-255	Motor 2, X axis reverse direction rotating 180 degrees
7	000-120	Motor 2, Y axis positive direction rotation, fast to slow
	121-134	Stop / run
	135-255	Motor 2, Y axis reverse direction rotation, fast to slow
8	000-008	No function
	009-024	Red
	025-041	Blue
	042-057	Green
	058-074	White
	075-090	Red & green
	091-107	Red & blue
	108-123	Red & white
	124-140	Green & blue
	141-156	Green & white
	157-173	Blue & white
	174-189	Red, green & blue
	190-206	Red, green & white
	207-222	Red, blue & white
	223-239	Green, blue & white
240-255	Red, green, blue & white	

Technical specifications

Kam Spin2	
Mains power	AC 110-240V 50/60Hz
Mains connection	IEC mains input and output
Control modes	DMX512 / Auto Show / Sound-to-Light / Master/Slave
Light source	2 x 10w RGBW 4-in-1 CREE LEDs
Colours	Red, green, blue and white
Control setting	4 buttons plus function setting LED display
Operating temperature	-20~40°C
DMX512 connections	3 pins XLR input (male) and output (female)
DMX512 channels	1 / 8
Dimensions (WxDxH)	300 x 145 x 270mm
Nett weight	3.7Kg