

# KAM

I N S T R U C T I O N M A N U A L

## Kam GoboTracer

Multicolour moving head gobo effects

M A N U A L V E R S I O N 1 . 0  
0 1 - 0 6 - 1 6

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

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

Kam products are manufactured by: **Lamba plc**, Unit 1, Southfields Road, Dunstable, Bedfordshire, United Kingdom LU6 3EJ  
Telephone: (+44) (0)1582 690600 • Fax: (+44) (0)1582 690400 • Email: [mail@lambapl.com](mailto:mail@lambapl.com) • Web: [www.lambapl.com](http://www.lambapl.com)

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.

© Copyright Lamba plc. E&OE.

**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.**

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.


#### 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

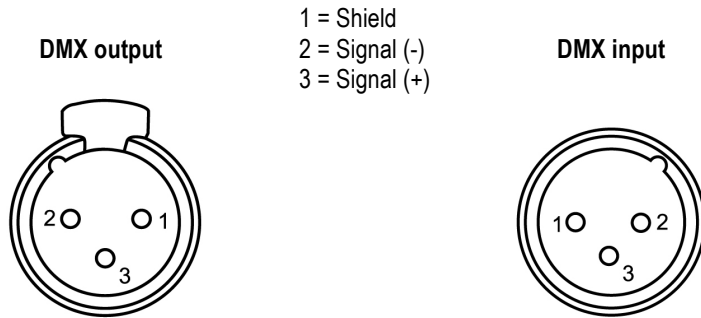
Before first time use, the unit should be inspected for safety. Inspection the unit regularly every year.

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	

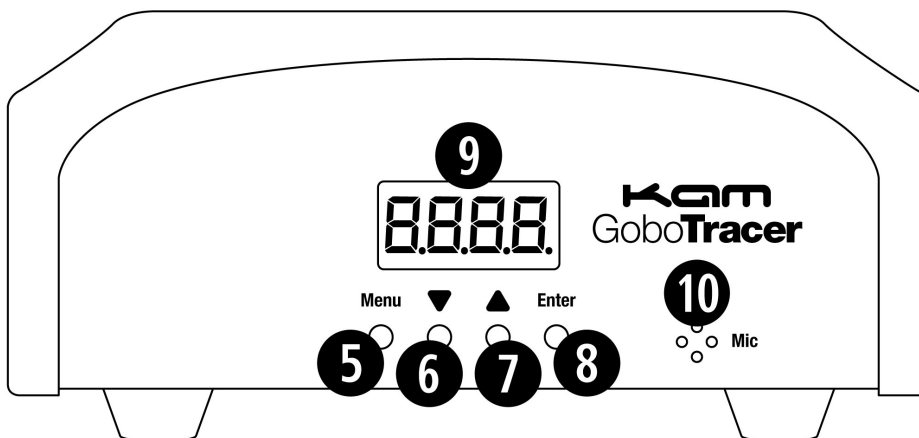
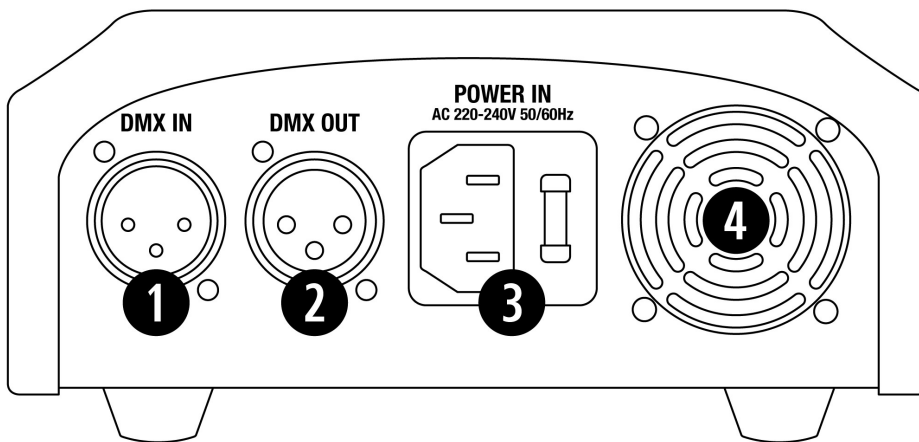
### DMX-512 connection

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.



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 output of one unit with the input of the next unit until all units are connected.

### Unit features



Number	Feature	Function
1	DMX input	3 pin XLR connector for DMX512 input communication.
2	DMX output	3 pin XLR connector for DMX512 output communication.
3	Power supply input	Attach the mains cable here. Built-in fuse
4	Fan grille	Cooling fan grille – do not cover
5	MENU button	MENU function button (see below for operation)
6	UP button	UP function button (see below for operation)
7	DOWN button	DOWN function button (see below for operation)
8	ENTER button	ENTER function button (see below for operation)
9	LED display	LED function display and menu buttons to control the operating mode of the unit
10	Mic	Built-in microphone for Sound-to-Light operation

### Function setting

Using the four function buttons on the base of the unit you can set the operating mode of the unit. Press the **Menu** button to display the different functions (see table below for a description of the functions). Use the **Up** or **Down** arrow buttons to make your selection. When you have chosen your desired function, press the **Enter** button to confirm the change.

No.	Display	Function	
1	<b>Addr</b>	A001-A512	Address setting
2	<b>CHnd</b>	11CH	DMX channel mode selection (either 11 channel or 9 channel)
		9CH	
3	<b>SLnd</b>	MAST	MAST, SL1, SL2 selection
		SL1	
		SL2	
4	<b>SHnd</b>	SH0	Auto show selection
		SH1	
		SH2	
		SH3	
5	<b>Soud</b>	on	Turn the sound control on or off
		oFF	
6	<b>SEns</b>	0-99	Sound sensitivity control
7	<b>bLAnd</b>	bLAc	Signal running modes: <b>bLAc</b> = clear, <b>Auto</b> = auto mode, <b>Soun</b> = sound mode, <b>HoLd</b> = hold the last running mode
		Auto	
		Soun	
		HoLd	
8	<b>LEd</b>	OFF	Turn the LED display off or on
		ON	
9	<b>dISP</b>	no	Reverse the LED display no or yes
		YES	
10	<b>rPAN</b>	no	Level motor reverse
		YES	
11	<b>rTiL</b>	no	Vertical motor reverse
		YES	
12	<b>REST</b>	YES	Reset factory setting

**DMX address setting** - When controlling the unit (or units) with a DMX controller, each one must be set with a specific DMX address. You can choose to set all units with the same DMX address or you can set every unit with its own DMX address. If all units are set with the same DMX address all units will be synchronised and operate in the same way.

If you set each unit with a different DMX address, they will receive the DMX signal from their own DMX address. You will now be able to control each unit individually. The DMX address that you set for each unit must be determined by the number of channels. This unit has 9 or 11 DMX channels. If working in the 11 DMX channel mode, you should set the starting address of the first unit to 1, the second unit must then be set to 12 (1+11), the third to 23 (12+11), the fourth to 34 (23+11) and so on.

#### 9 channel DMX mode

Channel	Value	Function
1	0-255	Pan
2	0-255	Tilt
3	0-159	Colour selection
	160-255	Auto colour change from slow to fast
4	0-63	Fix gobo
	64-127	Gobo shutter
	128-255	Auto change gobo from slow to fast
5	0-255	Strobe
6	0-255	Dimmer
7	0-255	Horizontal vertical run
8	0-255	Auto mode / up = adjust forward rotation / down = adjust reverse rotation
9	250-255	Reset (after 5 seconds)

#### 11 channel DMX mode

Channel	Value	Function
1	0-255	Pan
2	0-255	Pan fine adjustment
3	0-255	Tilt
4	0-255	Tilt fine adjustment
5	0-159	Colour selection
	160-255	Auto colour change from slow to fast
6	0-63	Fix gobo
	64-127	Gobo shutter
	128-255	Auto change gobo from slow to fast
7	0-255	Strobe
8	0-255	Dimmer
9	0-255	Horizontal vertical run
10	0-59	Other channels on
	60-84	Auto mode 3
	85-109	Auto mode 2
	110-134	Auto mode 1
	135-159	Sound-to-light mode 0
	160-184	Sound-to-light mode 3
	185-209	Sound-to-light mode 2
	210-234	Sound-to-light mode 1
235-255	Sound-to-light mode 0	
11	250-255	Reset (after 5 seconds)

### Save mode

First unplug the DMX512 signal cable, then WAIT 30 seconds, then turn OFF the power. The system will automatically save the last DMX512 signal.

Set the unit to <b>Addr A001</b> , then press the ENTER key for 10 seconds, the system will bring up the following menus	
H000-255	X motor offset data
Y000-255	Y motor offset data
C000-255	Colour wheel motor offset data
G000-255	Gobo motor offset data
DEFR	Factory reset

### Save mode continued

Next press the ENTER key for 10 seconds, the system will automatically save your settings.

**Master/Slave operation** - Connect the units in a Master/Slave chain via 3 pin DMX cables:

1. Connect the DMX output of the Master unit to the DMX input of the first Slave unit.
2. Next connect another DMX cable from the first Slave unit DMX output to the second Slave unit DMX input.
3. Continue in this fashion until all units are connected.
4. Set the Master unit to: **SLnd / MAsT**. Set all Slave units address to **SLnd / SL1** or **SLnd / SL2**.
5. All Slave units will now follow the operation of the Master unit.

### Gobos



### Product specification

<b>Mains power / rated power</b>	AC 220~240V, 50/60Hz / 60w
<b>Control modes</b>	9 or 11 channel DMX512 / Auto / Sound-to-Light / Master/Slave
<b>Colour wheel</b>	7 colours plus white
<b>Gobo wheel</b>	7 fixed gobos plus spot/open
<b>Rotation</b>	540 degree pan / 230 degree tilt plus Pan&Tilt inversion mode
<b>Beam angle</b>	12°
<b>Light source</b>	35w LED
<b>Operating temperature</b>	-25°C to 40°C
<b>DMX512 connections</b>	3 pins XLR male/female
<b>Dimensions (WxDxH)</b>	210 x 147 x 285mm
<b>Nett weight</b>	3.2Kg

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