Kam

INSTRUCTION MANUAL

DMX Laser80 FScan
Fast scanning green DMX laser

Fast scanning motor
11 channel DMX 512 operation
XLR DMX in and out
Pre-programmed graphic images
Sound-to-Light, Auto and DMX 512 modes
Linkable master / slave in Sound-to-Light mode
Built-in black out function in Sound-to-Light mode
Tough metal chassis with adjustable hanging bracket
Key operated power control
Endless show creation possibilities
Optional C80FS hand controller (recommended)

www.kam.co.uk

Kam DMX Laser80 FScan

Fast scanning green DMX laser

INTRODUCTION

Thank you for purchasing the Kam DMX Laser80 FScan. To optimise the performance of this product please read these operating instructions prior to use to familiarise yourself with the basic operations of this unit. Please keep this user manual in a safe place for future reference.

This unit has been tested at our factory before being shipped to you, there is no assembly required.

WARNING

To prevent or reduce the risk of electric shock or fire, do not expose this unit to high temperature, rain or moisture. This unit is for indoor use only.

Laser class 3B product. National regulations must be adhered to at all steps of installation. (In Germany apply DIN 56912 and BGVR laser. Note additional regulations may apply).

Unintended reflections of the laser beam on reflective or metallic surfaces can be dangerous. This appliance is to be used by qualified personnel only.

LASER RADIATION WARNING

This unit uses a green laser diode; this is a class 3B laser product. Avoid exposure to eyes. Never open the laser diode box, please refer unit to a qualified engineer for any servicing or repairs.

PACKAGING

Every Kam DMX Laser80 FScan has been thoroughly tested and should be in perfect condition when it reaches you. When you receive your new Kam product, please open the packaging to check that there is no damage to the outer packaging carton that may have occurred during shipping. If the carton is damaged please check the laser unit for any signs of damage, if any is found do not use the laser unit, simply contact the retailer you purchased the unit from and return it to them if required.

PACKAGE CONTENTS

User instructions
Power cable with plug
Laser unit

INSTALLATION

Be sure that the AC outlet conforms to the required supply for your unit. AC 220/240V. This laser must be earthed. The laser unit must be installed by a qualified engineer. Always install this unit with sufficient ventilation allow approx 6 inches (15cm) from a wall or any other surface. Do not allow any vents or cooling devices to be blocked. Ensure any rigging or mounting point is suitable for the installation of this product and is strong and secure enough to hold the unit safely
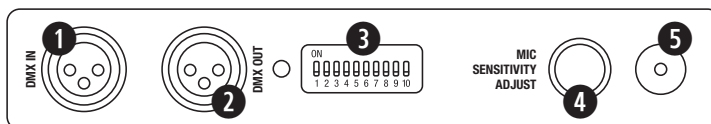
GENERAL WARNINGS

Please follow these operations to ensure a long and safe life for your laser. Keep the laser housing clean. Do not attempt to operate this unit if it becomes damaged in any way. Never operate this unit when its cover is removed.

Disconnect from the mains power before making any type of connection. To prevent or reduce the risk of electrical shock or fire, do not expose this unit to rain or moisture. Do not attempt to operate this unit if the power cord has been frayed or broken. Please route your power cord out of the way of foot traffic. Disconnect the appliance before cleaning and maintenance.
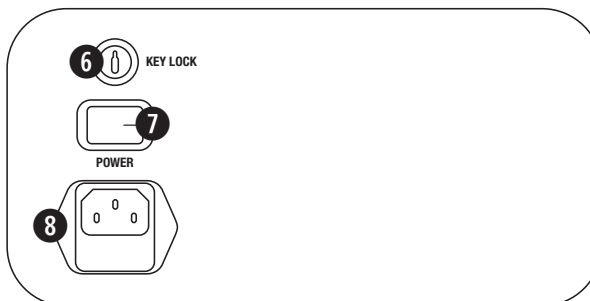
SIDE PANEL

1. DMX input
2. DMX output
3. DMX dip switches
4. Mic sensitivity adjustment
5. Built-in microphone

REAR PANEL

6. Laser isolation key
7. Mains power on/off switch
8. Mains input

DMX CHANNELS AND FUNCTIONS

Channel	DMX512 value	Description
Channel 1	10~63	Sound active mode
	64~127	Automatic mode
	128~191	Manual mode and with sound activation
	192~255	Automatic mode with automatic activation
Channel 2	0~63	Blackout
	64~127	Line
	128~191	Line-split pulse
	192~255	On blanking off
Channel 3	0~255	Select patterns (120 patterns)
Channel 4	0~127	Manual control gobo vertical movement
	128~191	Gobo auto down movement with speed control
	192~255	Gobo auto up movement with speed control
Channel 5	0~127	Manual control gobo horizontal movement
	128~255	Gobo auto right movement with speed control
	192~255	Gobo auto left movement with speed control
Channel 6	0~127	Manual control gobo vertical turn
	128~255	Gobo auto vertical turn, with speed control
Channel 7	0~127	Manual control gobo horizontal turn
	128~255	Gobo auto horizontal turn, with speed control
Channel 8	0~127	Manual control gobo rotation
	128~191	Gobo auto anticlockwise rotation with speed control
	192~255	Gobo auto clockwise rotation with speed control
Channel 9	0~85	Zoom gobo from small to large with speed control
	86~170	Zoom gobo from large to small with speed control
	171~255	Zoom gobo exchange large and small with speed control
Channel 10	0~255	Gobo size from small to big, 0 is fixed size, 1 is small 255 is big
Channel 11	0~255	Begin 1 dotting from dark to bright. 0 is no dotting

DIP SWITCH SETTINGS
To control the laser with a DMX controller, set dip switch No.1 and No.10 to the ON position.

If linking several DMX Laser80 FScans, the same control is required on all units (all creating the same patterns). Set the Master unit's dip switches No.1 and No.10 to ON and then set all slave unit's dip switches No.2 to ON.

If you wish to link several DMX Laser80 FScans and control them individually with a DMX controller, each head will need to be set up using DMX binary code, each unit occupies 11 DMX channels.

To use a Kam DMX Laser80 FScan with the optional mini-controller, set dip switches No.1 and No.10 to the ON position. When the mini-controller is used, standard DMX control is not available. When linking several units together using a mini-controller set master dip switch No.1 and No.10 to the ON position and then set all slave unit's dip switches to No.2.

When using the Kam DMX Laser80 FScan with no controller in stand alone mode, set dip switch No.1 to the ON position for Automatic mode and set dip switch No.10 to ON for sound activated mode.

Technical Specifications

Operation Voltage:	AC 85V~240V/50Hz
Working power:	15W
Laser wavelength:	532nm
Laser power:	532nm/80mW
Laser class:	Class 3b
Fuse:	3A F (always replace fuse with correct value)
Channels:	11
Control signal:	DMX512
Control mode:	Mini-controller / Sound-to-Light / Automatic / DMX / Linkable
Net weight:	2.40Kg
Dimensions:	195 x 205 x 120mm

The laser is designed for indoor use only, do not use outdoors. The operating temperature is 10°~60°C.

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

www.kam.co.uk