



**LASER DISPLAY SYSTEM**  
**MANUAL**

**SEVEN STARS<sup>®</sup>**

Big Dipper Laser Science And Technology Co., Ltd  
REV: 1.00


Please read the manual carefully before using.

# Laser Display System Manual

## Model: K850RB

### Notices

1. This is 3B laser product. Do not exposure the human eye directly to the laser light.
2. Please follow the instructions. Do not disassemble this product. Please contact the professional person if there is a malfunction.
3. Installation should be done by a professional technician.
4. Please place the product far away from strobe lights.
5. The product should be placed in a dry place. Do not use the product in a wet or dusty environment. Water-proof fittings required if it is used outdoor.
6. Do not touch the product or pull the power wire by wet hand.
7. The work temperature of laser product is 10-40°C. The product will not work normally in a low-temperature environment.
8. Do not turn on or off the product frequently. Otherwise, the service time of lasers will be affected. Besides, keeping working for a long time should be avoided.
9. Fixed installation to prevent the product from strong vibration or shock.
10. Prevent foreign objects from entering the product to avoid malfunction.
11. Keep the distance between the product and the objects in the lighting 1M at least.

12. Do not connect the power cable or turn on the light before installation.
13. Make sure the plug has been wired up properly before being powered on.
14. After running constantly for three hours, turn off the product for 25 minutes at least for cooling to reuse.
15. Turn on the product before opening the laser show control software. Otherwise, the laser show control software need to be reopened.
16. Use the original shake-proof packing for re-transportation.
17.  This symbol indicates separate collection of electronics and electronic equipment

## Inspection

In order to use the product securely and properly, please read the manual before using and follow the instructions strictly to prevent personal safety trouble and product damage caused by misuse. Take care of the product, check the possibility of the product damage caused by transportation and check all the machine and listed accessories are present upon receipt of the product.

- |                          |                 |
|--------------------------|-----------------|
| 1 x LASER display system | 1 x User manual |
| 1 x Power cable          |                 |

## Installation

1. Be sure no flammables or explosives are placed in the range of the equipment at least 1.5M. Meanwhile be sure the internal distance between the wall and the light more than 0.5M before installation.

## Maintenance

Clean the lens regularly. Do not use a wet cloth or chemicals, but a cotton swab with alcohol to clean the lens. The maintenance frequency depends on the usage frequency and surrounding working conditions of the product. Clearance per 15 days is recommended. Besides, dust cover at the product side should be dismantled to clear regularly because the heat radiation effect will be affected by the dust for the long-time use.

## Warning

Power off before installation or maintenance.

## Declare

The product is with good performance and complete package when it is delivered. The end-user of this product should follow all the above instructions and warnings. Any damage caused by misuse, malfunction and problem caused by ignoring the instructions are not included in the repair guarantees of the manufacturer or dealers.

All products made from Big Dipper Laser Company have anti - fake identification. please verify the anti-counterfeit label at the bottom of the case to ensure the interests of consumers.

	252-255	Sound switch color gradually draw/Gradually erase effect .
	Remark: All related to The function of color can't Be exist without the modulability	
Function	Static and dynamic pattern can be shifted by DMX, operate simply and flexibly. Under the Sound Mode, if no sound once over 10 seconds, graphic is closed automatically.	

## Remark

DMX512 mode, intermittent signals will lead to shut-off of laser diode.

## ADDRESS: DMX address setup

1. When Dipswitch 10 is set to "ON", the functions for 1-9 is as follows:

The 1st code is off-----sound mode (host LASER)

The 1st code is on-----Auto mode (host LASER)

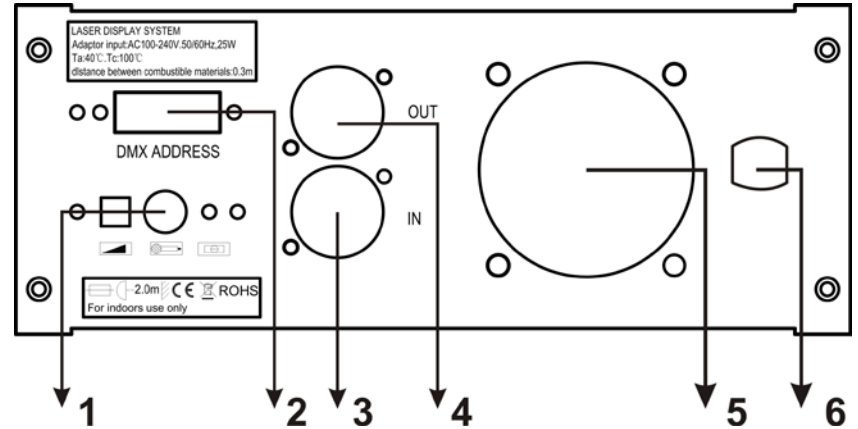
The 2st code is on --- Slave laser

2. When Dipswitch 10 is set to "OFF", the system can be controlled by DMX512.

3. When both of the address code 9 and 10 is on, it's center point debug mode.

2. Before installation, please check and make sure the power supply voltage is suitable to the product.
3. Please check ventilation fans or exhaust passages are cleaned
4. Fixed installation
5. A wire ground connected is needed for power supply.

## Back panel



## Key-press function instruction

1. Microphone: Sound signal IN
2. DMX ADDRESS: Binary format switch.
3. DMX 512 IN: DMX signal input
4. DMX 512 OUT: DMX signal output.
5. Fan
6. Input power line

## Technical Parameters

Model		K850RB
Parameters		
1	LASER diode	Red/ Blue
2	Power supply	100-240V AC, 50/60Hz
3	LASER power	R≥300Mw B≥400Mw
4	Scanner angle	+/- 15°
5	DMX Channels	10
6	Effect	More than 50 kinds of light beams and patterns, displaying laser patterns specified by the ILDA, such as diffusing laser network. Slowly rotating color fan, time and space tunnel and fairy flowers. (Can be Customized by customers)
7	Control mode	Sound control ,Auto control , DMX control
9	Dimensions	218*189*136mm
10	Net weight/ Gross weight	2.04/2.8KGS

## DMX channel setting

Channel	DMX value	Control Content
1-Play Mode	0-69	Shading
	70-139	Auto mode (Sound-activated)
	140-209	Auto mode (auto-activated)
	210-255	Manual mode
2-Pattern	0-16	Static pattern
	17-255	Dynamic geometry pattern
3-Strobe	0-255	NO
4-Pattern display	0-167	Display Normally
	168-188	Light spot display
5-Pan move	0-160	Manual adjustment
	161-190	Automatic loop (from left to right)
	191-220	Automatic loop (from right to left)
	221-255	Automatic loop (from right to left and right to left)
6-Tilt move	0-160	Manual adjustment
	161-190	Automatic loop (from down to up)
	191-220	Automatic loop (from up to down)
	221-255	Automatic loop (from up to down and down to up)
7-Zoom	0-10	No
	11-92	Manual zoom
	93-146	Automatic loop (from small to big)
	147-200	Automatic loop (from big to small)
	201-255	Automatic loop (from big to small and small to big)
8-Color	0-255	No
9-Reset	0-255	No
10-Color gradient	0	No
	1-100	Color fade/Color wipe effect; adjustable speed
	101-251	Sound shift Color fade and wipe effect