

# **MANUAL**

# SEVEN STARS®

**Big Dipper Laser Science And Technology Co.**, Ltd REV: 1.01

### Laser light after service

#### Product warranty card

Please fill in the following content properly and keep it safe for future maintenance. Accordingly, for your each purchase of our systems we have archive Serial number and parameters for future reference.

Testing	warranty:	non-warranty:
Mode:	Serial No.:	
Distributor:	Address:	
Tel:		

#### **About Product Warranty**

- 1. Where in my company (and an authorized agent) to buy the proper use of laser devices in the case of products that enable card are entitled to light a period of mechanical, electronic one-year warranty; if not the warranty situation, the company can also according to actual situation provide paid maintenance services.
- **2.** The warranty is no longer valid in the following situations:
- \* Warranty cards and products have no serial numbers..
- \* Product is damaged or show significant signs of self-disassembly.
- \*Any unauthorized modification (removal or replacement) made to product or it's components.
- \*Improper or excessive use of inappropriate repairs which result in a repair failure or injury.
- \* Did not follow instructions or use in an environment not suitable for product..
- \*Product damage caused by strong impact
- \*The warranty cannot be extended if the product as been serviced
- \* Laser power normal degradation
- \*Warranty card must be filled out with receipt of purchasing in order for the warranty to be valid.
- \*Product is damaged due to abnormal voltage or caused by other accidents (ex. Natural disasters).
- **3.** The Company reserves the right to interpret the provisions above.

The content of these articles is subject to change without notice!

# Laser Display System User Manual Model: B20000+RGB

#### **Notices**

- 1. This is IV 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  $10-40^{\circ}$ 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.
- 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 listed items are present upon receipt of the product.

1x LASER display system1 x User manual1 x DMX cable1 x Power cable1 x Interlock wire1 x DB25 link wire1 x Key

#### Installation instruction

- Be sure that there is no flammable or explosive subjects in the range of at least 1.5 meters. At the same time, keep space more than half a meter between the wall and LASER display system.
- 2. Be sure the power socket output voltage matches that of the LASER display system.
- 3. Ensure the fan and the exhaust is not blocked.
- 4. The LASER display system should be statically fixed. It is essential to be earthed well for the sake of safety.

#### 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.

Display effect	Can show animation with blanking, patterns can be zoomed in or zoomed out synchronously (or asynchronously) in vertical or horizontal orientation, the same motion is effected on the offset, rotation, wave, dot-line, strobe and so on.	
Dimensions	554*335*145mm	
NW./ GW.	12/13.5Kg	

**Warning:** In any installation and maintenance work, please make sure the system is powered off.

**Remark**: DMX512 mode, the LASER display system will shut off, if the DMX512 signal intermit. Under the sound mode, the LASER display system will be closed when quiet.

ADDRESS: DMX address setup

Address 1-10 Dip switch:

1. When Dip Switch 10 is set to "On", the function of Dip code 1-9 as following:

Dip Switch 1 is OFF\_\_\_\_ Sound Mode(Master LASER)

Dip Switch 1 is ON\_\_\_\_ Auto Mode (Master LASER)

Dip Switch 3 is ON\_\_\_\_ Follow Mode

- 2. When Dip Switch 10 is set to "OFF", the system can be controlled by 12 channels DMX512.
- 3. Speed adjustment Under sound Mode:

Dip Switch 3, 4 are set to OFF, Fast speed

Dip Switch 3 is set to "ON", Dip Switch 4 to "OFF" Fast speed

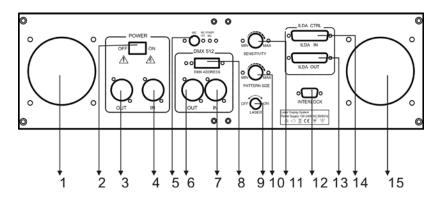
Dip Switch 3 is set to "OFF", Dip Switch 4 to "ON" Auto speed

Dip Switch 3,4 are set to "ON" Slow speed

### Instruction of using interlock wire

The machine will work only if turning on the Key and interlock at the same time. It will delay 5-15 seconds to light out.

#### **Back Panel**



#### **Function set**

- 1. Fan
- 2. Power ON/OFF
- 3. Power OUT
- 4. Power IN
- 5. Microphone
- 6. DMX signal output
- 7. DMX signal input
- 8. DMX ADDRESS: Binary format switch
- 9. Lock
- 10. Graph size adjustment
- 11. MIN-MAX: Sound Sensitivity adjustment
- 12. INTERLOCK: Remote control connection
- 13. ILDA Output
- 14. ILDA Input
- 15. Fan

Technical	parame	eters		
Model		B20000+RGB		
Laser diode		R/G /B		
Laser power	R:>	R:>1000mW 650nm B:>1000mW 445nm G:>500mW 532nm		
Power Requirement		100-240VAC, 50/60Hz		
Scanning angl	e	±15°		
DMX Channels	S	12 Channels		
DMX512 Control Channel Setting				
Channels	DMX512 numerical	Operating Mode		
	0-63	Off		
1-	64-127	Auto-Sound Mode		
Play Mode	128-191	Auto mode		
	192-255	Manual		
	0-82	Static patterns		
2- Pattern	83-92	welcome		
option	93-95	Dancing animation		
Option	96-98	Love heart animation		
	99-255	Dynamic pattern		
3- Strobe	0-255	8 levels adjustment (0-255) /30= (0-8)		
	0-167	Manual		
4-Horizontal	168-188	Auto Right/Left		
move	189-209	Auto Left/Right		
	210-255	Auto Bounce Right/Left		
5. Vertical move	0-167	Manual		
	168-188	Auto Down/Up		
	189-209	Auto Up/Down		
	210-255	Auto Bounce Up/Down		
6-Zoom mode	0-10	No zoom		
	11-109	Manual zooming		
	110-154	Auto zooming out		
	155-204	Auto zooming in		
	005 055	A 1		

7	0	No stretch	
7- Horizontal tension	1-150	Manual stretch	
	151-255	Auto stretch	
8-	0	No stretch	
Perpendicular	1-150	Manual stretch	
drawing	151-255	Auto stretch	
9- Rotating	0	No rotating	
	1-180	Manual rotation	
	181-217	Auto clockwise rotation	
	218-255	Auto anti-clockwise rotation	
	0-63	Normal display	
10-	64-127	Dot-line display	
Display mode	128-191	Subsection display	
	192-255	Dot display	
	0-10	No wave	
11- Wave	11-200	Frequency low /high	
	201-255	Amplitude low /high	
12- Color	0-251 (each five value one color,50 color optional)	White-red-green-blue-yellow-purple- Cyan-Stimulation modulation color →Subsection(RGB)→Subsection(PCY) →Subsection(RGPYBCW)→ Counterchange(RGB)→ Counterchange(PCY)→ Counterchange(WRGBPYC)→analogu e modulation color segmentation flow	
	252-255	Color flow/Sound Mode	
Control	Sound cont	rol、Auto control ,DMX, Compatible	
mode	with PC software		
Feature	<ol> <li>Red, green and blue can work in analogue modulation, can realize 50 kinds changing color.</li> <li>Fantastic animation, beam effect</li> <li>It can work synchronously under the control of computer (ILDA interface)and work in DMX, sound and auto mode without computer.</li> <li>Slow lighting from start (The speed of scanner is 20KPPS)</li> </ol>		

Auto zooming

205-255