



# **LASER DISPLAY SYSTEM**

## **MANUAL**

# **SEVEN STARS®**

# Laser Display System Manual

## Model SD3000+RGB

### Notices


1. This is Class IV laser product.
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. 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.
5. Do not touch the product or pull the power wire by wet hand.
6. 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.
7. Fixed installation to prevent the product from strong vibration or shock.
8. Prevent foreign objects from entering the product to avoid malfunction.
9. Keep the distance between the product and the objects in the lighting 1M at least.
10. Do not connect the power cable or turn on the light before installation.
11. Make sure the plug has been wired up properly before being powered on.
12. On the basis of the characteristics of laser, the laser can achieve a stable output after preheating 15 minutes, then the product would start a normal demonstration. After working constantly for three hours, turn off the product for 25 minutes at least for cooling to reuse.
13. Turn on the product before opening the laser show control software. Otherwise, the laser show control software need to be reopened.
14. Use the original shake-proof packing for re-transportation.

# 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 <input type="checkbox"/>	warranty: <input type="checkbox"/>	non-warranty: <input type="checkbox"/>
Mode:	Serial No.:	
Distributor:	Address:	
Tel:		
<b>About Product Warranty</b>		
<b>1.</b> 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.		
<b>2.</b> The warranty is no longer valid in the following situations:		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 component.		
*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).		
<b>3.</b> The Company reserves the right to interpret the provisions above.		
The content of these articles is subject to change without notice!		

15.  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.

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## Installation instruction

1. 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 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.
5. It is essential to be connected to main socket with ground wire for the safety

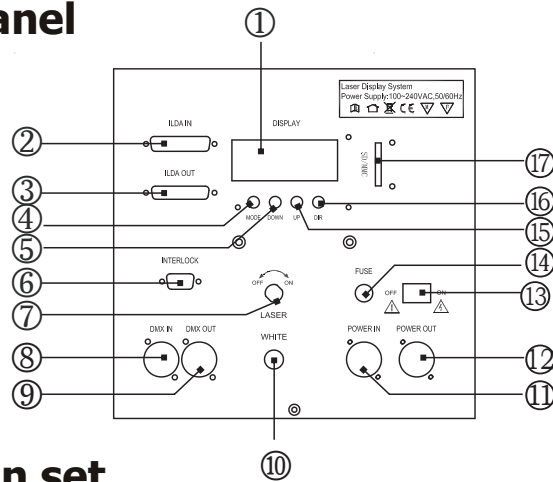
## Maintenance

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.

# Instruction of using interlock wire

The machine will work only if plugging in the Interlock wire with short circuit. It will delay 5-15 seconds to light out.

## Back Panel



## Function set

- ① Digital display screen
- ② ILDA IN: ILDA input interface
- ③ ILDA OUT: ILDA output interface
- ④ Menu mode
- ⑤ Down
- ⑥ INTERLOCK
- ⑦ Laser on/off control switch
- ⑧ DMX signal input
- ⑨ DMX signal output
- ⑩ Full white light control switch
- ⑪ AC input
- ⑫ AC output
- ⑬ Fuse
- ⑭ UP
- ⑮ Enter(Dir)
- ⑯ SD card

2. SD card needs to be dedicated special cards, not store mixed with other files, can support up to 100 folders, each folder can store up to 255 files.
3. Program list: users can use a text editor (Notepad) to edit the program list, and its extension name is PRG. Program list is consist of the player file name, the playback speed, playback frequency , ishow ID (i), in the middle with "," to separated. Each line item edits a program. For example, a program as the file1.ild, file2.ild,file3.ild is consist of three files, file1.ild: playback speed of 12K, repeat three times, file2.ild: playback speed of 20K, 1 player, furthermore file 2 is made by a software named ishow, file3.ild:playback speed of 18K, play 4 times, so prg1.prg content as follows:  
 File1.ild,12,3  
 File2.ild,20,1  
 File3.ild,18,4  
 When build a folder, need to create a PRG file under the folder , also with the same name as the folder , and put all files that needed to play into the PRG file, then the edited playback speed is the one under "ILDA Mode" . For example, build a file named aurora.prg . in the aurora folder. You need to add the file to the PRG list after adding a new ILDA file , so that we can accurately locate the file when ILDA Mode, with the playback speed you want it plays.
4. The system support the standard ILDA file, expanded name is ILD file.

Big Dipper keep all the rights for the explanation of this manual

1. Prg Mode: Playlist mode, play PRG file, the second line shows the current play list name, press "UP" and "DOWN" to change the playlist, press the DIR key to change the current working folder.
2. ILDA Model(ILDA file playing model): Play list model,playing PRG file,the second line displays the current playback file name, press "UP"and"DOWN"change playing list, press DIR change the current file, press the DIR key change the current working folder.
3. Audio Mode: shows the voice controled internal program , press "UP" and "DOWN" to change sound rhythm sensation.
4. Auto Mode: Play internal auto-program.
5. Dmx Mode: DMX mode, the first line displays the current mode and DMX address, the second line shows the accepting state of console.
6. Slave Mode: Master-slave , controlled by master unit .
7. Phasic Set: Phase settings, press "UP" and "DOWN" to change the phase
8. Speed Set: Speed set(scanner):press UP and DOWN to change the pattern and speed output.
9. Size Set: Press UP and Down to change the patterns' size.

## Warning

Power off before installation or maintenance.

## Note

1. This system supports short file name only , file name (including the folder name) is of up to 8-bit file name and 3 extension, file name and extension name is consist of letters, numbers and underscores and so on. File name could not be more than eightibit , can not have Chinese characters, or it can't be recognized by the file system.

## Technical parameters

Mode	SD30000+RGB
laser diode	R/G/B
Power	100-240V AC,50-60HZ 150W
Laser power	R:450mW B:2000mW G : 700mW Finished machine: 3150mW
Scan angle	± 15
Channel	18

Chanel specification				
	Chan	Val	Control specification	
CH1	mode	0-9	shut off	
		10-49	PRG mode	
		50-99	ILD mode	
		100-149	sound-activated	
		150-199	auto mode	
		200-255	manual model	
CH2	pattern/ folder selection	0-255	manual model	
			PRG/ILD	
CH3	Strobe/ file selection	0-10	no strobe	
			11-199	auto strobe
			200-255	sound strobe
CH4	X axis movement	0-125	hand adjust position	
		126-185	auto left-right	
		186-225	auto bounce left/right	
		226-245	auto jump irregular	
		246-255	ound jump irregular	
CH5	Y axis movement	0-125	hands adjust position	
		126-185	auto left-right	
		186-225	auto bounce left to right	
		226-245	auto jump irregular	
		246-255	sound jump irregular	
CH6	zooming	0-10	no zooming	
		11-100	manual adjust sizes	
		101-150	enlarge	
		151-200	narrow	
		201-255	regular zooming	
CH7	X axis rotation	0-10	no rotation	
		11-110	manual adjust	

CH7	X axis rotation	111-255	auto -rotate
CH8	Y axis rotation	0-10	no rotation
		11-110	manual adjust
		111-255	auto -rotate
CH9	Centre move	0	no rotate
		1-180	hand adjust
		181-217	auto clockwise rotating
		218-255	auto anti-clockwise rotating
CH10	gradually draw	0-10	no change
		10-74	Manually adjust graduallydraw
		75-104	Automatically gradually draw(increase)
		105-144	auto gradual draw(decrease)
		145-184	auto circular gradual draw
		185-224	end-to-end loop gradual draw(increase)
		225-255	end-to-end loop gradual draw(decrease)
CH11	X Horizontal wave	0-9	no waves
		10-69	small waves
		70-129	middle waves
		130-189	large waves
CH12	Y Horizontal wave	190-255	the max waves
		0-9	no waves
		10-69	small waves
		70-129	middle waves
CH13	display made	130-189	large waves
		190-255	the max waves
		0-63	normal display
		64-127	lightspot display
CH14	RGB	128-191	Subsection display
		192-255	dots display
		color	
		0-16	white
		17-33	red
		34-50	green
		51-67	blue
		68-84	yellow
		85-101	purple
		102-118	cyan
		119-135	W R G B four colors subsection
136-152	B Y P C four colors subsection		
153-169	W R G B Y C seven colors subsection		
170-186	W R G B four colors flow		
187-203	B Y P C four colors flow		

		204-220	B Y P C four colors flow
		221-237	display according to breakpoint subsection
		238-255	sound control the color to change
CH14	RGY	0-27	white
		28-55	red
		56-83	green
		84-111	yellow
		112-139	R G subsection
		140-167	W R G Y subsection
		168-195	R G subsection
		196-223	W R G Y subsection
		224-255	sound-played /color flow
CH15			
CH16	R dimming	0-5	all light
		6-255	adjust from bright to dimming
CH17	G dimming	0-5	all light
		6-255	adjust from bright to dimming
CH18	B dimming	0-5	all light
		6-255	adjust from bright to dimming

## key instruction



- **MODE:** Press a time to switch a model
- **UP, DOWN buttons:** under PRG and ILD mode switch DIR, sound-activated mode, changed the frequency.
- **Dir:** Change the working folder under PRG & ILD mode. After setting, the current working status will be auto saved after 5 seconds.

## Function set