

STAIRVILLE

DJ LASE 150-RGY DMX

User Manual

Thank you for using the Stairville DJLase series laser projector. For the sake of safety and better operation of this projector, please read this manual carefully before use and operate the projector, lest incur any personal injury or damage to the projector.

Please check the local Laser assignments in your country before starting the Laser Show!!!

● Package list:

When you unpack the case , please take time to examine the items as follow:

1 pcs.	Stairville DJLase 150 RGY DMX
1 pcs.	Power cord 1
1 pcs.	Owners manual

● Product Introduction:

Stairville DJLase 150 RGY DMX laser performer uses the latest multi-patterns laser control system researched and developed by ourselves. It can control four different patterns with various effects simultaneously. It adopts the latest appearance design to make it compact and light. The housing uses the imported paint.

Stairville DJLase 150 RGY DMX laser performer adopts the semiconductor laser source. Laser generator is double-temperature -controlled power supply. The laser light source has a long life span and high stability, complying with the international standard.

It uses the latest low speed vibratory scanner system researched and developed by ourselves, international DMX-512 signal control. There are 85 latest geometric laser patterns in it, as well as 26 pre-programmed 4patterns laser shows. It can make tunnel effect and animation, geometric, character and three-dimensional effects, Laser sky effects, Rolling effects, Scanning effects, and Laser tunnel effects in all directions with 5kpps vibratory mirror scanner system.

Control mode: DMX-512 signal control (with 16CH), music active, automatic run, master & slave control mode. It can be applied for the place of public entertainment such as disco, night club, TV station and theater etc.

● Instructions:

After unpacking, check whether the laser lighting has been damaged by transport such as any screw loosening, lighting tube broken, etc. If everything is OK, select a proper location, hang the light and adjust its angle properly, then connect the power cord and the ground wire before switch on at the means.

This product belongs to grade-1 protective equipment. Notice that while using this laser lighting the green and yellow wire has to connect the ground properly by professionals. Please examine the electrics and voltage before power on it. Because of the radiate laser generator `s own characteristic and to secure the laser `s long life span. Please terminate it for 10 minutes after using it for 30 minutes. Avoid being interfered by other signals while controlled by Fire Phoenix software or using the DMX-512 signal controller, such as wireless interphone & high radiated source.

● **Technical Parameters:**

Rated voltage: AC110V /AC230V ±10%
 Rated frequency: 50HZ~60HZ
 Power consumption: 25 Watt
 Laser power: 140mw
 Laser source: solid semiconductor laser generator
 Color: green/532nm, red/650nm
 Laser patterns: 85 patterns
 Scanning: 3~5kpps vibratory mirror scanner system
 Scanning angle: ±20 degrees
 Control Channel : 16 DMX-512 signal control channels
 Control signal: DMX-512 international standard signal
 Control mode: DMX-512, music active, automatic run, master & slave
 Cool system: fan
 Operating environment: indoor

● **Channel`s function**

Stairville DJLase 150 RGY DMX use international standard DMX-512 signal control, with 16 channels, as the below detailed descriptions :

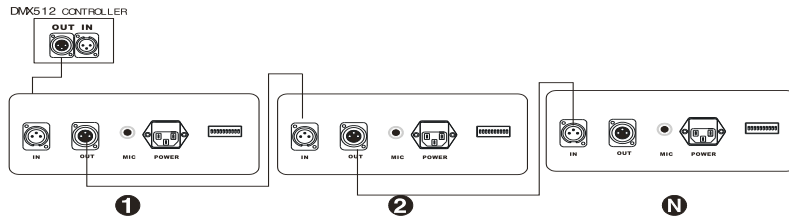
Channel		DMX-512 Value 0~255	Descriptions
CH1	Function choose	0~50	Laser is off
		51~101	DMX pattern mode
		102~152	DMX SHOW edit mode
		153~203	DMX SHOW automatic run mode
		204~255	DMX SHOW music active mode
CH2	Multi-functions Channel	1~255	Pattern mode : Pattern A
		0~255	SHOW mode : Laser SHOW
CH3	Multi-functions Channel	1~255	Pattern mode : Pattern B
		0~255	SHOW mode : Laser SHOW segment
CH4	Pattern C	1~255	Pattern mode : Pattern C
CH5	Pattern D	1~255	Pattern mode : Pattern D
CH6	Multi-functions Channel	0~51	At the same time with Pattern A、 B、 C、 D effects
		52~103	Pattern A control effect
		104~155	Pattern B control effect
		156~207	Pattern C control effect
		208~255	Pattern D control effect
		0~255	1. 0 is the function with turning off laser SHOW segment edit 1. 1~255 is the function with turning on laser SHOW segment edit

CH7	Rotation effect	1~127	Rotation angle adjustment, the 15CH adjustment speed
		128~191	Counter-clockwise rotation
		192~255	Clockwise rotation
CH8	Vertical turning	1~127	Vertical rotation linearity adjustment, 15CH adjustment speed
		128~255	Vertical rotation speed adjustment
CH9	Horizontal turning	1~127	Horizontal rotation linearity adjustment, 15CH adjustment speed
		128~255	Horizontal rotation speed
CH10	Moving effect	1~127	Horizontal moving speed
		128~255	Vertical moving speed
CH11	Gradual drawing effect	0~41	gradual increasing drawing
		42~83	gradual decreasing drawing
		84~127	gradual increasing and decreasing
	Point effect	128~255	Adjustment of point brightness
CH12	Vertical	1~255	Adjustment of vertical angle, 15CH adjustment speed
CH13	Horizontal	1~255	Adjustment of horizontal angle, 15CH adjustment speed
CH14	Zoom in/out effect	1~127	Adjustment of pattern size, 15CH adjustment speed
		128~169	Pattern from small to big , 15CH adjustment speed
		170~211	Pattern from big to small , 15CH adjustment speed
		212~255	Zoom patterns , 15CH adjustment speed
CH15	Control color	0~255	Choose different color effect, 15CH adjustment speed
CH16	Speed adjustment	0~255	CH11、CH12、CH13、CH14 effective speed adjustment

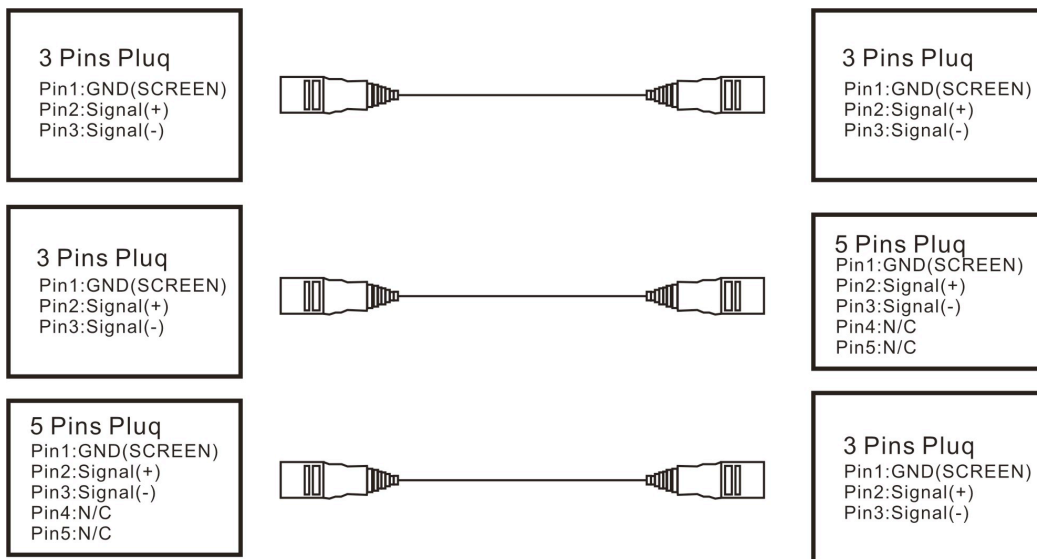
● Signal Connection and Address Code Dialing

When the controller outputs the standard DMX512 signal, the connection of which is accomplished through the “input” and “output” 3-pin XLR socket. When a console signal outputs to the unit, it must correspond to the Pin 1 Ground, Pin 2 Negative and Pin 3 Positive of the XLR socket on the unit. If it does not work just try exchanging the Pin 2 and Pin 3 (these 2 pins are generally do not need exchanged for consoles). The signal wire length should not exceed 100m in order to avoid the interference of the other signals by any other electric appliances.

This unit adopts the 3 pins XLR socket, detail connection of many units as bellow:



If your DMX-512signal controller adopt 5 pins XLR plug, you need one transfer line, the transfer method as following:



When control signals from the console inputs into Stairville DJLase 150 RGY DMX projector. The projector must be assigned a data start address code, so that a unit may act on the corresponding control signal. Thus, when any controller is used, every unit must have its own data start address. Accordingly, the address of the first unit is set as 1, the second unit has also 16 channels, so its address code is 17, the third unit is set at 33, so on and so forth (the setting method will also depend on the specific console, the above is just for general cases).

Every binary system address code corresponding the decimal system number :

1	2	3	4	5	6	7	8	9	Number
1	2	4	8	16	32	64	128	256	numerical value

Calculation formula : light address code = (the N light – 1) * the channel of light + 1

For example : the eighth light's address code = (8 – 1) * 16+1=113,the

corresponding binary system code : the second, fourth, sixth, seventh is ON, and the other is OFF.

The details of DMX-512 signal control mode address switch as follow:

Lamp no.	Start address	Control switch (ON)
1	1	1
2	17	1、 5
3	33	1、 6
4	49	1、 5、 6
5	65	1、 7
6	81	1、 5、 7
7	97	1、 6、 7
8	113	1、 5、 6、 7
9	129	1、 8
10	145	1、 5、 8
⋮	⋮	⋮

Stairville DJLase 150 RGY DMX Laser Performer has controlled by on/off switch address code. 1 to 9 are the numerical value DMX 512 signal, 10 is the exchange switch of sound active control, automatic run, master & slave and DMX512 signal control.

The detailed control mode as follow:

MODE		Control switch (ON)
1	DMX-512 signal control mode	10 : ON, 1-9 : address code
2	music active mode、 master mode	1 : ON, others : OFF
3	automatic run mode、 master mode	1-10 : OFF
4	Slave mode	10:ON, 1-9:OFF

The skill of editing various patterns with DMX-512:

1. Pattern A、 B、 C、 D's channel is controlled dividually, you can turn on or off, exchange pattern arbitrarily, it's very convenient to use.
2. When the CH2、 CH3、 CH4、 CH5's channel address is 0, it will turn on the pattern A、 B、 C、 D。
3. The four pattern's effects controlling channel is used doublely, it is exchanged by CH6:
When the CH6 is 0~51, the pattern is A、 B、 C、 D simultaneously, When the CH6 is 52~103, the pattern is A, When the CH6 is 104~155, the pattern is B, When the CH6 is 156~207, the pattern is C, When the CH6 is 208~255, the pattern is D.

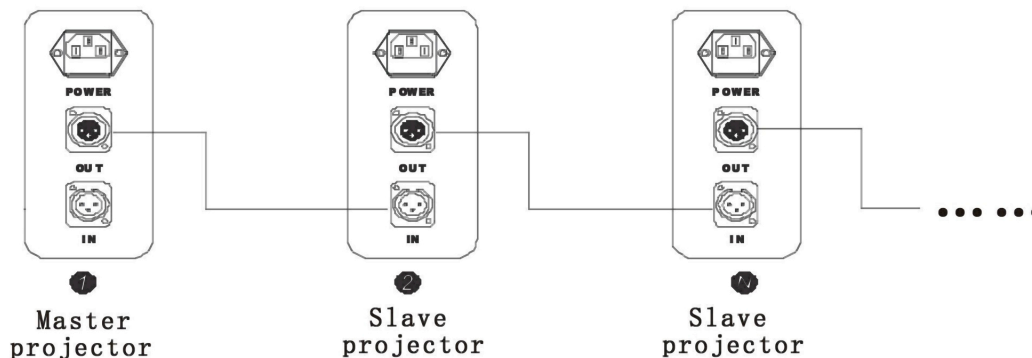
Edit the DMX-512 inside laser show segment:

- 1、 CH2 choose laser SHOW, CH3 choose the SHOW segment needed to edit, when CH6 is 0, it will turn off SHOW segment edit , when CH6 is 1~255, it will turn on SHOW segment edit.
- 2、 When CH6 is 1~51, the pattern is A、 B、 C、 D control simultaneously , When CH6 is 52~103, the pattern is A, When CH6 is 104~155, the pattern is B, When CH6 is 156~207, the pattern is C, When CH6 is 208~255, the pattern is D.

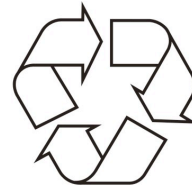
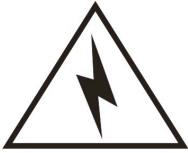
Pay attention to bellow descriptions for the master & slave control mode :

1. You can not connect to the DMX-512 controller when the master and slave projector are operating synchronously, otherwise the master and slave synchronous functions can't be realized;
2. When operating the master and slave controlling, it must be only one master projector, otherwise it can not be operated synchronously.

Master and Slave connection as bellow:



● **Safety marks:**



- ! Please make sure to switch off the power before installation or maintenance.
- ! Please keep the fan expedite and environment ventilated.
- ! This laser projector is designed for the indoor, so while using, please avoid any dripping. If you want to use for outdoor, please do enough waterproof measure.
- ! Before maintenances, please refer to eligible personnel
- ! Do not use any power voltage and light type of different specifications
- ! Please do not see the laser light directly, in case it might damage the eyes.
- ! Avoid electric shock! Bulb overheating.
- ! Do not use it frequently under the humid atmosphere.

● **Maintenance:**

It is very important to keep the Stairville DJLase 150 RGY DMX laser light clean, therefore please clean reflector lens monthly to keep the lights away from dust, dirt or fog juice. We suggest that clean the light with professional glass cleaning lotion and downy cloth. Keep the light clean regularly will not only maintain the maximum laser output brightness but also will extend the life span of the laser.

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