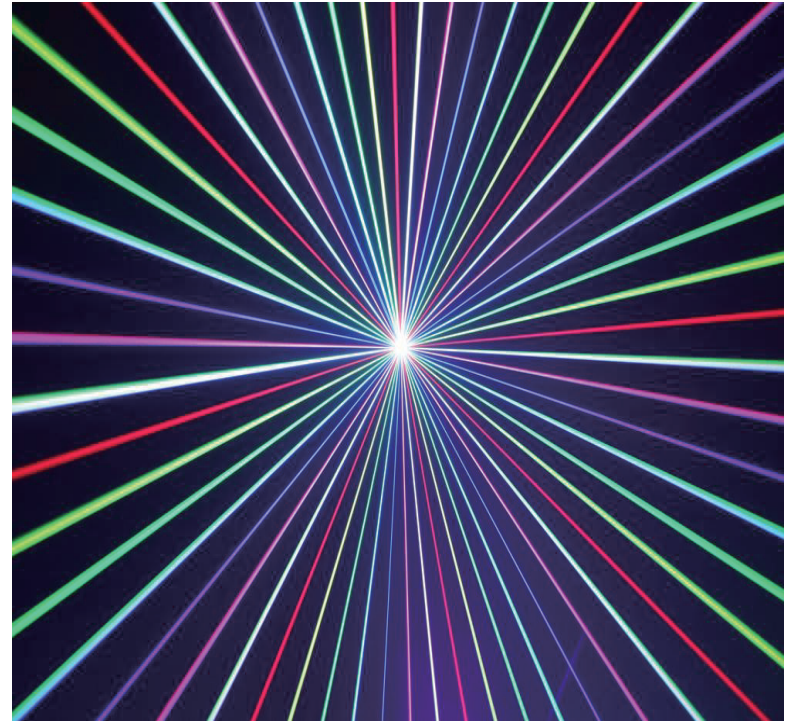


Full color animated laser lamp

● Operation manual



● Please read the user manual carefully  
before use

## I、 Safety guidance:

Thank you for using our product. In order to use this product safely and effectively, please carefully read the complete contents of this manual before you use this product. This manual includes: the introduction of this product and important information about how to install and use it safely. Please keep it properly for reference. The relevant instructions for installation and use must be strictly observed.

**Note:** The equipment is completely packaged when leaving the factory. Please operate according to the user manual. The warranty is not applicable to failures and problems caused by ignoring the manual or machine failures caused by human factors.

- Before using the product, please open it and check it carefully to ensure that there is no damage caused by transportation.
- The lamp is suitable for use in a dry environment.
- The installation and operation of lamps shall be carried out by professionals.
- Use safe ropes when fixing equipment, and lift the bottom when moving lamps.
- The equipment must be installed with good ventilation
- Ensure that the ventilation hole is unobstructed to avoid overheating when the lamp is running.
- Ensure that the power supply voltage is consistent with the required power supply voltage of the equipment before operation.
- Please ground the conductor to prevent electric shock.
- Do not operate the lamp in an environment above 40 °C.
- A small amount of smoke or peculiar smell may appear when the new lamp is working, which will disappear after 15 minutes of operation.
- Please do not place combustibles beside the lamp when it is running to prevent fire.
- Please carefully check whether the power cord is damaged before turning on the lamp, and replace it immediately if it is damaged.
- When the lamp is running, the surface temperature can reach 75 °C. Please do not touch it with bare hands.
- Avoid flammable liquid, water, metal and other conductive bodies

from entering the interior of the lamp to avoid electric shock or fire. If any foreign matter enters the lamp, please cut off the power immediately.

- Avoid operating in a dirty and messy environment, and clean and maintain the lamps regularly.
- It is forbidden to touch the wire when the lamp is running to prevent electric shock.
- Avoid entanglement of power cord with other wires.
- In case of serious operation failure, please stop using immediately.
- Do not operate the machine by yourself. Non professional operation may cause damage to the equipment or functional failure. If maintenance is required, please contact the nearest authorized service center.
- Please cut off the power supply when the lamp is not used or maintained for a long time.
- To avoid fire or electric shock, do not expose the lamps to rain or wet areas.

## II、 Product description:

● Full color animated laser lamp is a compact animated laser lamp with excellent performance. It has the following features: small size, convenient transportation, small power, high light efficiency, long service life and environmental protection; Faster speed, hundreds of animation programs, strong and sharp beam in smoke state, intelligent temperature controlled fan, more silent; It is very suitable for: bars, nightclubs, music restaurants, KTV halls, indoor multi-function halls and other places.

- Technical parameters
- Voltage: AC100-240V 50/60HZ
- Power configuration: 1W/2W/3W
- Laser power: 1W (red light: 350mw/green light: 150mw/blue light: 500mw)
- Laser power: 2W (red light: 500mw/green light: 500mw/blue light: 1000mw)
- Laser power: 3W (red light: 800mw/green light: 800mw/blue light: 1400mw)
- Operation mode: DMX512, master slave, self-propelled, voice control
- Control channel: 17/34 channels
- Playback system: linear distortion of input signal at 20 K scanning angle of high-speed galvanometer;
- Effects: various beams, complex graphics, hundreds of animation program effects in memory
- Program effect: hundreds of animated line program effects in memory for various beams, complex graphics and broken pen effects

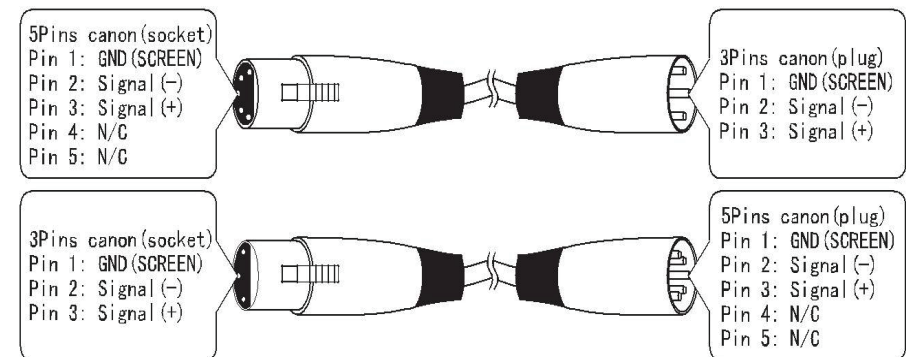
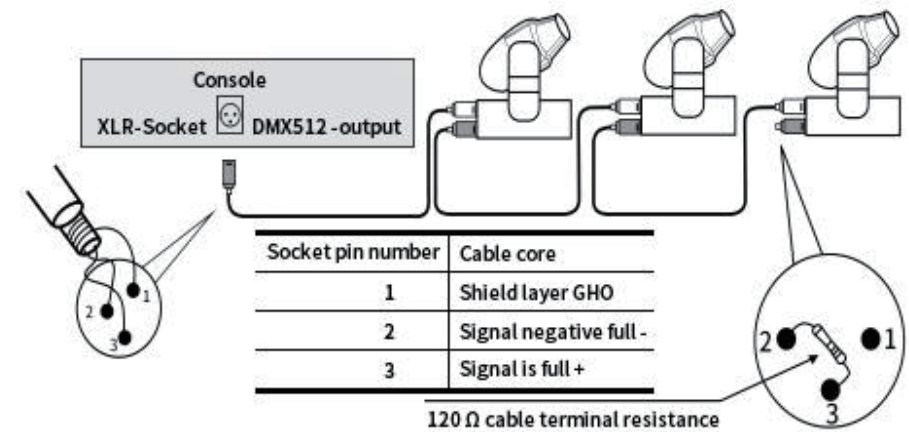
The relevant parameters in this user manual are for reference only, and all lamp products are subject to the real object, if there is any change. The Company reserves the right of final interpretation without notice

### III、 Wiring mode :

1. In order to reduce signal errors and avoid signal weakening and interference during transmission, a 120 OHM 1/4W resistor can be added between the 2-core and 3-core DMX outputs of the last machine.
2. Connect the lamp with XLR signal line, with one end connected to the output port of the lamp and the other end connected to the input port of the next lamp. XLR signal lines can only be used in series, not in parallel. DMX512 signal transmission speed is very fast. If the signal line is damaged, the welding position is not secure, and the contact is not good, the signal transmission will be affected, resulting in signal loss or interference.

3. When a machine is powered off, the DMX output and input connections are bypassed to maintain DMX line connectivity.
4. 3-core XLR connector is more common than 5-core XLR connector:  
3-core XLR: PIN 1: GND, PIN 2: negative signal, PIN 3: positive signal.  
5-core XLR: PIN 1: GND, PIN 2: negative signal, PIN 3: positive signal, PIN4/PIN5: not used.

The wiring mode is shown in the figure below :



#### IV、 Installation notes :

During the installation of lamps, in order to ensure the stability of the installation site, it is necessary to ensure the fastness of the connection between the lamp pole and the lamp hook, and use the safety rope to assist in the suspension; To ensure safety. In order to prevent the lamps from falling and slipping, pedestrians are prohibited from passing during the installation and commissioning of the lamps, and the safety ropes are regularly checked for wear and looseness of hook screws to prevent accidents caused by unstable hanging and installation.

#### V、 Menu Description :

##### 1. Description of display/keys



●The function of the "MUNU" key is to switch the self-propelled/DMX mode of the lamp

●The function of the "UP" key is to select the previous item or value plus

●The function of the "DOWN" key is to select the next item or decrease the value

●The function of the "ENTER" key is to select or cancel the voice control function

#### 2、 Mode Description

##### 2.1 Console mode address code:



Professional model



Simple mode

Receive DMX signal or RDM signal from console or host

Short press the "MENU" key to enter the DMX Easy/Professional mode.

Press the "UP" and "DOWN" keys to change the address code. (Long press to quickly adjust)

##### 2.2 Self-propelled mode:



Automatic operation and sending DMX signal to slave  
Press the "UP" and "DOWN" keys to select a group of animation/line effects to play repeatedly

##### 2.3 声控模式:



Voice control operation and sending DMX signal to slave  
Press this key briefly to set or cancel voice control

**VI : Simple mode channel table :** Simple DMX mode is a built-in scene that calls lamps directly. It is simple and easy to use. It is recommended to use simple DMX mode when there are no special requirements. There are 6 channels in this mode, as shown below:

6 Exit	number	explain
CH1	0 1-255	<b>General dimming</b> <b>Close light</b> <b>Luminescence</b>
CH2	0-127 128-255	<b>Action voice control self-propelled control</b> Locomotion Action voice control
CH3	0-15 16-31 32-47 48-63 64-79 80-95 96-111 112-127 128-143 144-159 160-175 176-191 192-207 208-223 224-239 240-255	<b>Gallery Selection</b> Warehouse 1 Warehouse 2 Warehouse 3 Warehouse 4 Warehouse 5 Warehouse 6 Warehouse 7 Warehouse 8 Warehouse 9 Warehouse 10 Warehouse 11 Warehouse 12 Warehouse 13 Warehouse 14 Warehouse 15 Library 0 <b>Note: When the drawing library number exceeds the number of this lamp's drawing library, the system uses the maximum drawing library number instead</b>
CH4	0-255	<b>Scene selection</b> Each value corresponds to a pattern. If the value exceeds the number of patterns, the system will replace it with the maximum drawing number
CH5	0-31	<b>Color Selection</b> colour

	32-63 64-95 96-127 128-159 160-191 192-223 224-255	red yellow green Indigo blue purple white
CH6	0 1-255	<b>Speed regulation</b> Primary speed Speed regulation (slow fast)

**六 : Professional Mode Channel Table :** Professional DMX mode is provided for experienced lighters. Unless you have rich experience in DMX control and a certain understanding of laser pattern scanning principle, simple DMX mode is recommended

There are 37 channel modes in this mode, as shown below:

34 Exit	number	explain
CH1	0 1-99 100-199 200-254 255	<b>Light on</b> Completely closed light Locomotion Action voice control retain Pattern A turns off light, pattern B allows light
CH2	0-49 50-99 100-149 150-199 200-255	<b>Out of bounds and pattern size</b> Crossing out of boundary Outbound turn back Out of bounds blanking Enlarged pattern, out of bounds blanking retain
CH3	0-15 16-31 32-47 48-63 64-79	<b>Gallery selection</b> Warehouse 1 Warehouse 2 Warehouse 3 Warehouse 4 Warehouse 5

	80-95	Warehouse 6
	96-111	Warehouse 7
	112-127	Warehouse 8
	128-143	Warehouse 9
	144-159	Warehouse 10
	160-175	Warehouse 11
	176-191	Warehouse 12
	192-207	Warehouse 13
	208-223	Warehouse 14
	224-239	Warehouse 15
	240-255	Library 0
	<b>Note: When the drawing library number exceeds the number of this lamp's drawing library, the system uses the maximum drawing library number instead</b>	
CH4	0-255	<b>Pattern selection</b> Each value corresponds to a pattern. If the value exceeds the number of patterns, the system will replace it with the maximum drawing number
CH5	0	<b>Pattern Zoom</b> No zoom
	1-31	Zoom Effect 1
	32-63	Zoom Effect 2
	64-95	Zoom Effect 3
	96-127	Zoom Effect 4
	128-159	Zoom Effect 5
	160-191	Zoom Effect 6
	192-223	Zoom Effect 7
	224-255	Zoom Effect 8
CH6	0-63	<b>Pattern rotation</b> Manual rotation
	64-95	Rotation effect 1
	96-127	Rotation Effect 2
	128-159	Rotation Effect 3
	160-191	Rotation effect 4
	192-223	Rotation effect 5

	224-255	Rotation Effect 6
CH7	0-63	<b>Horizontal movement</b> Manual Pan
	64-95	Translation effect 1
	96-127	Translation effect 2
	128-159	Translation effect 3
	160-191	Translation effect 4
	192-223	Translation effect 5
	224-255	Translation effect 6
CH8	0-63	<b>Vertical movement</b> Manual vertical shift
	64-95	Vertical shift effect 1
	96-127	Vertical shift effect 2
	128-159	Vertical shift effect 3
	160-191	Vertical shift effect 4
	192-223	Vertical shift effect 5
	224-255	Vertical shift effect 6
CH9	0-63	<b>Scale horizontally</b> Manual X-axis scaling
	64-95	X-axis scaling effect 1
	96-127	X-axis scaling effect 2
	128-159	X-axis scaling effect 3
	160-191	X-axis scaling effect 4
	192-223	X-axis scaling effect 5
	224-255	X-axis scaling effect 6
CH10	0-63	<b>Vertical Zoom</b> Manual Y-axis scaling
	64-95	Y-axis scaling effect 1
	96-127	Y-axis scaling effect 2
	128-159	Y-axis scaling effect 3
	160-191	Y-axis scaling effect 4
	192-223	Y-axis scaling effect 5
	224-255	Y-axis scaling effect 6
CH11	0	<b>Force Segment Color</b> Pattern primary color

	1-255	Length of segment color
CH12		<b>Pattern discoloration</b>
	0-7	Primary color
	8-15	red
	16-23	yellow
	24-31	green
	32-39	Indigo
	40-47	blue
	48-55	purple
	56-63	white
	64-95	Red, green and blue discoloration in the whole picture
	96-127	Full picture indigo purple discoloration
	128-159	Full set of seven color discoloration
	160-191	Colorful Discoloration
192-223	Moving forward	
224-255	Reverse Jogger	
CH13		<b>Node and pen break control</b>
	0-63	Normal broken pen
	64-127	No broken pen in pattern, broken pen in rewind line
	128-159	No broken pen in pattern and no broken pen in back sweep line
	160-255	retain
		<b>Note: The greater the value in the segment, the higher the brightness of the node</b>
CH14		<b>Auxiliary function of gradual drawing control (to be used with CH15)</b>
	CH15 为	
	0-63	Manual Fade Amount
	64-127	Holding time of dynamic gradual drawing of patterns when
	160-191	fully unfolded
192-255	Number of nodes gradually drawn	
CH15		<b>Gradual drawing control</b>
	0-31	Forward manual gradual drawing
	32-63	Reverse Manual Gradation
	64-95	Extended Gradation
	96-127	Shrink Gradual

	128-159	Scale gradient at both ends
	160-191	Scale and gradually draw head and tail respectively
	192-223	Draw gradually
	224-255	Turn the section and walk the horse to draw gradually
CH16	0-255	<b>Auxiliary control of twist deformation effect channel</b> The higher the value, the smaller the twist deformation <b>Note: When scaling, rotating, moving and tumbling the twisting effect, CH16 can control the twisting degree of the aforementioned twisting effect</b>
		<b>Grating sheet selection and projection amplitude control</b>
CH17	0-19	No. 1 grating sheet
	20-39	No. 2 grating sheet
	40-59	No. 3 grating sheet
	60-79	No. 3 grating sheet
	80-99	No. 4 grating sheet
	100-119	No. 5 grating sheet
	120-139	No. 6 grating sheet
	140-159	No. 7 grating sheet
	160-179	No. 8 grating sheet
	180-199	No. 9 grating sheet
	200-219	No. 10 grating sheet
	220-239	No. 11 grating sheet
	240-255	No. 12 grating plate No. 13 grating plate
		<b>Note: In each segment, the larger the value, the smaller the projection amplitude</b>
<b>CH18-Ch34, channel function of pattern B. Unless otherwise specified, these 17 channels only control pattern B, and pattern A is not controlled by these 17 channels:</b>		
CH18	0	<b>Light on</b> Completely closed light
	1-99	Locomotion
	100-199	Action voice control
	200-254	retain
	255	Pattern A turns off light, pattern B allows light

CH19	0-49	<b>Out of bounds and pattern size</b> Crossing out of boundary
	50-99	Outbound turn back
	100-149	Out of bounds blanking
	150-199	Enlarged pattern, out of bounds blanking
	200-255	retain
CH20	0-99	<b>Distribution angle of each unit of the array: (bold font indicates that the channel functions corresponding to pattern A are different)</b> <b>The value in the section is about small, and the greater the angular distribution gap of each unit is, the difference is positive</b>
	100-199	<b>The value in the section is about small, and the greater the angle distribution gap of each unit is, the gap is negative</b>
	200-255	<b>retain</b>
CH21	0-255	<b>Pattern selection</b> Each value corresponds to a pattern. If the value exceeds the number of patterns, the system will replace it with the maximum drawing number
CH22	0	<b>Pattern Zoom</b> No zoom
	1-31	Zoom Effect 1
	32-63	Zoom Effect 2
	64-95	Zoom Effect 3
	96-127	Zoom Effect 4
	128-159	Zoom Effect 5
	160-191	Zoom Effect 6
	192-223	Zoom Effect 7
	224-255	Zoom Effect 8
CH23	0-63	<b>Pattern rotation</b> Manual rotation
	64-95	Rotation effect 1
	96-127	Rotation Effect 2
	128-159	Rotation Effect 3

	160-191	Rotation effect 4
	192-223	Rotation effect 5
	224-255	Rotation Effect 6
CH24	0-63	<b>Horizontal movement</b> Manual Pan
	64-95	Translation effect 1
	96-127	Translation effect 2
	128-159	Translation effect 3
	160-191	Translation effect 4
	192-223	Translation effect 5
CH25	224-255	Translation effect 6
	0-63	<b>Vertical movement</b> Manual vertical shift
	64-95	Vertical shift effect 1
	96-127	Vertical shift effect 2
	128-159	Vertical shift effect 3
	160-191	Vertical shift effect 4
CH26	192-223	Vertical shift effect 5
	224-255	Vertical shift effect 6
	0-63	<b>Scale horizontally</b> Manual X-axis scaling
	64-95	X-axis scaling effect 1
	96-127	X-axis scaling effect 2
	128-159	X-axis scaling effect 3
CH27	160-191	X-axis scaling effect 4
	192-223	X-axis scaling effect 5
	224-255	X-axis scaling effect 6
	0-63	<b>Vertical Zoom</b> Manual Y-axis scaling
	64-95	Y-axis scaling effect 1
	96-127	Y-axis scaling effect 2
	128-159	Y-axis scaling effect 3
	160-191	Y-axis scaling effect 4
	192-223	Y-axis scaling effect 5
	224-255	Y-axis scaling effect 6

CH28	0 1-255	<b>Force Segment Color</b> Pattern primary color Length of segment color
CH29	0-7 8-15 16-23 24-31 32-39 40-47 48-55 56-63 64-95 96-127 128-159 160-191 192-223 224-255	<b>Pattern discoloration</b> Primary color red yellow green Indigo blue purple white Red, green and blue discoloration in the whole picture Full picture indigo purple discoloration Full set of seven color discoloration Colorful Discoloration Moving forward Reverse Jogger
CH30	0-63 64-127 128-159 160-191 192-255	<b>Node and pen break control, array control: (bold font indicates that the channel function corresponding to pattern A is different)</b> Normal broken pen No broken pen in pattern, broken pen in rewind line No broken pen in pattern and no broken pen in back sweep line <b>Pattern A array with pattern B not base point, and the pattern color maintains the setting of pattern A</b> <b>Pattern A array at the base point of pattern B, and the pattern color is the node color of pattern B</b> <b>Note: The greater the value in the segment, the higher the brightness of the node</b>
CH31	CH32 为 0-63	<b>Auxiliary function of gradual drawing control (to be used with CH32)</b> Manual Fade Amount Holding time of dynamic gradual drawing of patterns when

	64-127 160-191 192-255	fully unfolded Number of nodes gradually drawn Note 1: CH32 shall be used together with CH31 Note 2: When pattern A is voice controlled, the action of CH32 will also become voice controlled
CH32	0-31 32-63 64-95 96-127 128-159 160-191 192-223 224-255	<b>Gradual drawing control</b> Forward manual gradual drawing Reverse Manual Gradation Extended Gradation Shrink Gradual Scale gradient at both ends Scale and gradually draw head and tail respectively Draw gradually Turn the section and walk the horse to draw gradually
CH33	0-255	<b>Auxiliary control of twist deformation effect channel</b> The higher the value, the smaller the twist deformation <b>Note: When scaling, rotating, moving and tumbling the twisting effect, CH16 can control the twisting degree of the aforementioned twisting effect</b>
CH34	0-19 20-39 40-59 60-79 80-99 100-119 120-139 140-159 160-179 180-199 200-219 220-239 240-255	<b>Projection amplitude control: (bold font indicates different channel functions corresponding to pattern A)</b>  In each segment, the larger the value, the smaller the projection amplitude

## VII : Troubleshooting

The following are some problems that often occur in operation, with some suggestions for troubleshooting:

A. The lamp does not work, there is no light, and the fan does not turn.

1. Check the power supply contact and whether the fuse is in good condition.

2. Check the voltage.

3. Check the indicator of the power switch.

B. Control of uncontrolled platform

1. After receiving DMX signal, the indicator must be on. If not, check the DMX signal connector and signal line to see if they are connected correctly.

2. If the DMX indicator is on but does not respond to channel control, check whether the address code is set correctly.

3. If the DMX signal transmission is intermittent, check whether the XLR seat is well connected with the signal line.

4. Try other controllers.

5. Check whether the DMX signal line is too close to the high-voltage line, which may damage or interfere with the signal circuit.

C. A channel fails

1. Stepper motor or motor lead may be damaged.

2. The drive circuit of the motor may be damaged.

## VIII : Routine maintenance

The equipment needs regular cleaning and maintenance by professionals. The service life of the equipment depends largely on the operating environment and daily cleaning and maintenance

Cleaning optics: the optical components shall be wiped gently, and the dust and floating fog shall be wiped off with soft odorless cotton cloth, clean water or special glass detergent, and the components shall be carefully wiped dry.

Clean the air duct: use a soft brush, cotton paper, air cleaner or air blowing to clean the dust at the fan and air inlet to keep the air duct smooth

# Product warranty card

Product name	Product model

<b>end user</b>
<b>Company name :</b>
<b>address :</b>
<b>contacts :</b>
<b>Tel :</b>

date of manufacture	User purchase date

<b>Selling goods</b>
<b>contacts :</b>
<b>Tel :</b>
<b>Seal</b>

**Note: The blanks above must be filled in and sealed by the end user and the seller truthfully, otherwise, no warranty will be provided.**