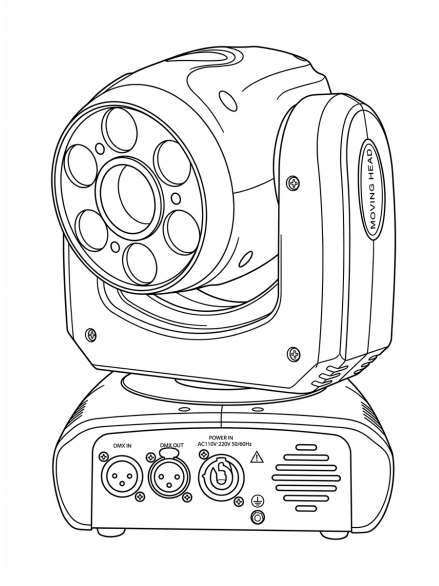
Laser Head X2

laser beam wash plus



FXLIGHTING

FX-LIGHTING.COM

User Manual

Please read carefully before use

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1. Safety Guidance

Thank you for choosing our products. For your safety, please read this manual carefully before operation. This manual includes installation and use information.

The equipment is packed in a good condition when leaving the factory. Please operate according to the user manual. The machine failure caused by artificial damage are not covered by the warranty.

1. Before using the product, please open it and check it carefully to ensure that there is no damage caused by transportation.
2. Don't let children operate the machine.
3. Use safe rope when fixing the equipment and lift the bottom of the lamp when moving it.
4. The device must be installed in a well-ventilated place, at least 50cm from the proximal surface.
5. Ensure that the ventilation hole is unobstructed to avoid overheating when the lamp is running.
6. Before running, ensure that the power supply voltage is consistent with the required power supply voltage.
7. Please ground the conductor to prevent electric shock.
8. Do not place combustible articles near the lamp when it is running to prevent fire risk.
9. Before opening the lamp, please carefully check whether the power cable is damaged. If it is damaged, please replace it immediately.
10. Avoid flammable liquid, water, metal and other electrical conductors entering the lamp to avoid electric shock or fire. If foreign matter enters the lamp, cut off the power supply immediately.

11. Avoid operating lamps in dirty and dusty environment, and clean and maintain lamps regularly.
12. Do not touch the wire when the lamp is running to prevent electric shock.
13. Avoid entangling power cables with other wires.
14. Do not open the shell of the lamp without permission.
15. Please cut off the power supply when the lamp is not used or maintained for a long time.
16. Do not look directly at the lamp when it is running.

2. Packing List

This series of products are packed in standard carton, air carton is optional, please read this manual carefully before using. Follow operating rules to avoid damage to light or bodily injury. Please handle the products carefully after receiving them, and check whether the products are damaged during transportation. Open the cover of the box, take out the relevant accessories in the box, take out the light, and place the lamp on a horizontal table to facilitate related operations. Note: Do not squeeze plastic parts to avoid breakage or distortion. Check the parts as follows:

Stage light 1pc cable 1pc manual 1pc

3. Installation Notes

1. When install this equipment please make sure there's no flammable surfaces (decorated things, etc) within at least 2.5M and maintain minimum distance of 0.5M from the equipment to the walls.

2. Before installation, please confirm whether the power supply voltage you are using matches the voltage marked by the light.

3. Make sure that the ventilation fan and exhaust passage are not blocked by other equipment or decorative materials, such as newspaper, tablecloths, curtains, etc.

4. The equipment should be fixedly installed. To ensure the stability of its installation point, at least a load-bearing structure that can withstand more than ten times the weight of the product.

5. For safety reasons, this machine should be connected to a main socket with a ground wire.

4. Technical Parameter

1.Power supply：AC 110~220V 50/60Hz,80W@220V

2.Light： ☑RGB；RGBW four in one 3535LED×6PCS

3.Working mode：Sound/Auto/DMX512/master-slave

4.DMX Control Channel：17CH

5.Cool system：Intelligent air-cooled cooling system

6.Working environment：indoor

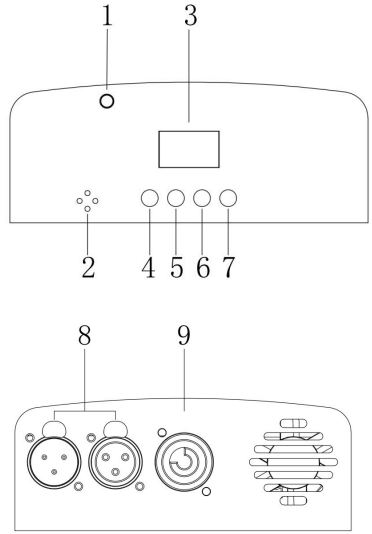
7.Working temperature: 0℃ - 35℃

8.Tow packs net/gross weight：6.9KG/8KG

9.Tow pack packaging size：34.5*29*57.5CM

10.Four pack packaging size：57.5*34.5*57.5CM

5. Light Control Panel



No.	Interface	
1	Yellow indicator	No light： No DMX512 signal detected
		normal light： DMX512 signal detected
		Flash:Detected dmx512 signal and received signal simultaneously
	Red indicator	NO light/ normal light::The device system is in the dead state
		Flash : The equipment system is running normally
		Flash fast: The safety electronic lock of the device is not enabled
2	MIC microphone	
3	Menu	

4	O MENU
5	▲ UP
6	▼ DOWN
7	● ENTER
8	XLR 3 pin DMX-512 Interface (IN/OUT)
9	220V power input

6. Light Setting

Open the device, press the MENU button to ENTER the menu mode, press the ENTER button to enter the selected function, then use the UP/DOWN button to select the required function, and press the Enter button to confirm. To return to the main MENU press the Menu button. The main functions are as follows:

6.1 OLED display control panel function menu setting ,as following：

First level menu	Secondary Menu	
Operation Mode	DMX-512	
	Auto Mode	
	Test Mode	
	User Mode	
DMX Mode	DMX Address 001~512	address setting
	CH Mode 17CH	Channel mode selection
	RDM ☒/☑	Default enabled RDM ☑Open，☒Close

View DMX Channel value view	CH1~CH17	View Channel Mode Corresponding value for selecting channel mode
Auto Mode	001~003 Auto effect selection	
	Master/Slave ☑/☒	Master slave selection ☑Master，☒Slave
	Sound ☒/☑	Audio Mod
Test Mode	Pan 0~255	X-axis horizontal motor
	Tilt 0~255	Y-axis vertical motor
	Enable Laser ☒/☑	Turn on light source output
	Light Color RGB/R/G/B	Light source color selection
	LED Color E/R/G/B/W	LED color selection
User Mode	Value setting (CH1-CH17can customize the value of each channel of the light)	the program like a built-in console, the data will be saved even after default reset , press the reset at user mode to clear the data.
System settings	Motor 》 Motor settings	Pan Invert ☒/☑X motor axis reverse
		Tilt Invert ☒/☑ Y motor axis reverse
		Pan Angle 360/540 X motor axis angle
	Sound sense 000-100	Voice sensitivity

	Factory 》	Used for internal factory debugging
	Motor Reset ☒/☑	Motor reset
	System Reset ☒/☑	Restore factory settings
Device Status	Hardware 》	Hardware version
	Software 》	Software version
Device Info	Mode XX	Display current operating mode
	Channel XX	Display current channel mode
	DMX-512 address XX	Display current address
	Temp XX	Current internal temperature of the device

DMX512

Select DMX512 mode press ●ENTER key to confirm, the current mode will be displayed on the display, press the "●ENTER" button, use ▲UP, ▼DOWN button to select the number of channels according to the required effect of DMX control, channel mode has three kinds: 17CH channel mode. After setting, if you need to view the value of each channel, press ▲UP, ▼DOWN button to select the channel value and view the access channel. Console mode is slave mode at the same time. If DMX512 console signal is connected, it is console mode. Press the ●ENTER key to save, and press the MENU button to return to the upper-level menu.

Auto mode

Select the Auto mode, press the ●ENTER key to confirm, the current mode will be displayed on the display screen, press the "●ENTER" button, use ▲UP, ▼DOWN button to select 3 kinds of built-in effect auto mode. If you need to use ▲UP, ▼DOWN button to select the primary and secondary Settings ON

/OFF off. You can also choose a voice-activated trigger to play the selection effect. Press the ●ENTER button to save, and press the MENU button to return to the upper-level menu.

Test Mode

Select the testing mode, press the Enter button to confirm, and the current mode will be displayed on the display screen. The testing mode is a special mode that can only be called after entering the testing mode interface. Use the ▲UP and ▼Down buttons to select the XY motor/beam color/LED light circle color. Press the●ENTER button to confirm the XY motor position setting, turn on the light source, light source color, and select the testing diagram to check if there are any problems with the lighting fixtures, After exiting the interface, restore the previous running mode and press the MENU button to return to the previous menu level.

User Mode

Select user mode, press the●ENTER button to confirm, and the current mode will be displayed on the display screen. Channels CH1~CH17, press the ●ENTER button to confirm and use the ▲UP and ▼DOWN buttons to select values from 0 to 255. Set the next channel by pressing the ▼DOWN touch button. Set the lighting fixtures according to the desired numerical effect through operation (user mode setting data: restore factory settings without changing, press the Reset option if clearing data). Press the ●ENTER button to save and press the MENU button to return to the previous menu level.

System setting

Select system settings, press the ●ENTER button to confirm, and the current mode will be displayed on the display screen. Use the▲UP and ▼DOWN buttons to select, motor settings/voice sensitivity settings/factory settings/motor reset/factory settings. Press the●ENTER button to save, and press the MENU button to return to the

previous menu level.

Device status: Select the device status, press the ●ENTER button to confirm, and the current mode will be displayed on the display screen. Use the ▲UP and ▼DOWN buttons to check if there are any communication errors: device hardware information - batch of the lighting program board, device software information - version of the lighting program, control board - control board program version number (to determine whether the control board information has been read). After viewing, press the MENU button to return to the previous menu level.

Device information: Select device information and press the ●ENTER button to confirm. The current mode will be displayed on the display screen. Use the ▲UP and ▼DOWN buttons to view relevant information about the system

Operation mode: current working mode of the lighting fixture, channel mode: current device channel mode, address code: current working address of the lighting fixture, device temperature: internal temperature of the device. After viewing, press the MENU button to return to the previous menu.

7. Light Control mode

①DMX512 control mode:

1. Set the DMX512 address code, the lamp will receive the standard DMX512 signal

2. Set the corresponding channel control mode

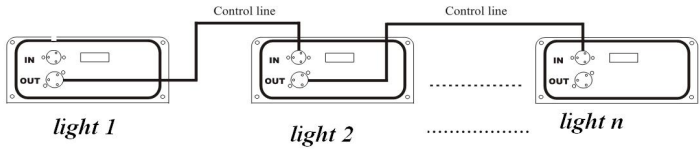
②Auto mode:

When the lamp does not receive the external signal, the device can choose the built-in program effect to run automatically. At the same time, you can also select the voice control mode to trigger the playback.

③Master slave mode

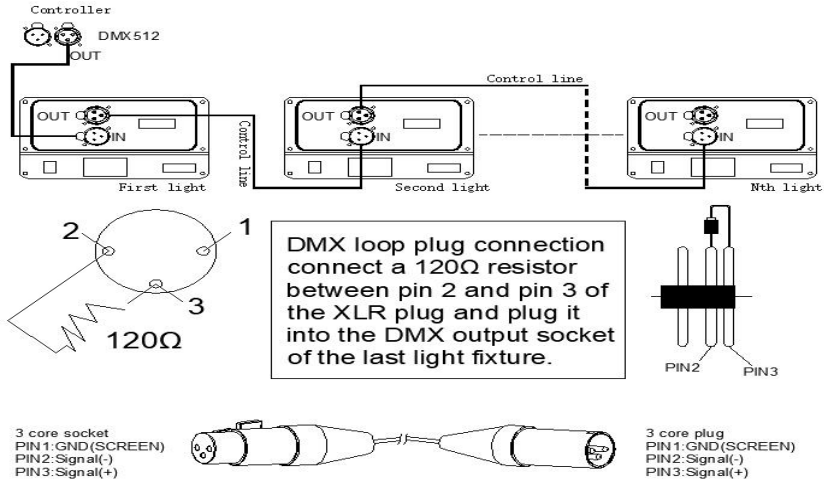
Main engine, press the ●ENTER button in the main menu to enter the "Operation Mode" mode, select the "Auto Mode" menu, set the host to check (default to cross), and the lighting fixtures will be the host. Press the ●ENTER button to save.

Slave machine, press the ●ENTER button to enter the "Operation Mode"mode,select the "Auto Mode" menu, and set the slave to cross (default to cross). At this time, the lamp is the slave. Press the ●ENTER button to save.



8. DMX512 Control

8.1 DMX512 连接



1. In order to reduce signal errors and avoid signal weakening or interference during transmission, a 120Ω resistance loop can be inserted between the 2 cores and the 3 cores of the DMX output terminal of the last machine.

2. Connect the light with XLR signal, one end is connected to the output port of the light, and the other end is connected to the input port of the next light. XLR signal lines can only be used in series, not in parallel. DMX512 signal transmission speed is very fast. Damage to the signal line, weak welding, poor contact, etc., will affect the signal transmission and cause the system to shut down.

3. When a unit of machine power disconnect, DMX output or input connection is bypass, in order to maintain the DMX line and connectivity.

4. Each light must have an address code, which can receive the information sent by the console, ranging from 1 to 512.

5. The terminal of the DMX512 system needs to be equipped with a terminator to reduce signal transmission errors.

6. The 3-pin XLR connector is more common than the 5-pin XLR:

3 pin XLR：PIN1：GND，PIN2：- Signal ，PNI3：+ Signal

5 pin XLR：PIN1：GND，PIN2：- Signal，PIN3：+ Signal，PIN4/PIN5:No USE

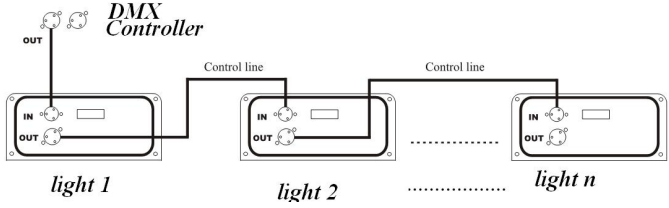
8.2 DMX512 Chanel setting:

Chanel settings：

Press the knob to enter the menu mode, select the operation mode/DMX-512 DMA mode (17CH), select the channel mode you need, and press the knob key to confirm.

Address code settings：

Connect the XLR control line from the DMX outlet of the controller to the DMX input port of each lamp, and so on until all lamps are connected, and then connect the loop plug to the signal outlet of the last lamp to complete the connection, as shown in the figure below:



When using any controller, each device must have its own address code. So, when the address of the first lamp is set to 1, the address code of the second lamp is set to 18, the address code of the first lamp is set to 1 plus 17 channels, and the third lamp is set to 35CH. And so on (this setting method still needs to be determined according to different consoles, and now it is only in general terms).

The specific DMX-512 signal control mode address code settings are as follows:

Light NO.	Start Address	Display（ON）
1	1	1
2	18	018
3	35	035
⋮	⋮	⋮

8.3 DMX-512Channel introduce：

This lighting fixture pattern mode has one channel mode, 17CH (channel mode can be selected in operation mode → DMX-512 DMA mode), and the mode and description are as follows:

17CH channel mode:

Channel value	Control content		
CH1	X-axis motor	0～255	X-axis motor
CH2	X-axis motor fine adjustment	0～255	X-axis motor fine adjustment
CH3	Y-axis motor	0～255	Y-axis motor
CH4	Y-axis motor fine	0～255	Y-axis motor fine adjustment

	adjustment		
CH5	Motor speed	0～255	Selection of XY axis motor speed（slow to fast）
CH6	XY axis motor reset	0～255	XY axis motor reset
CH7	Laser total dimming	0～255	Total brightness adjustment
CH8	Laser red light	0～255	Red light brightness adjustment
CH9	Laser green light	0～255	Green light brightness adjustment
CH10	Laser blue light	0～255	Blue light brightness adjustment
CH11	Laser strobe	000-015	Open light
		016-131	Strobe，from slow to fast
		132-139	Open light
		140-181	Quick opening and slow closing,from slow to fast
		182-189	Open light
		190-231	Slow opening and fast closing,from slow to fast
		232-239	Voice controlled strobe
		240-247	Random strobe,from slow to fast
		248-255	Open light
CH12	LED total dimming	0～255	Total dimming
CH13	LED red light	0～255	Red
CH14	LED green light	0～255	Green
CH15	LED blue light	0～255	Blue
CH16	LED white light	0～255	White
CH17	LED strobe	000-015	Open light

		016-131	Strobe，from slow to fast
		132-139	Open light
		140-181	Quick opening and slow closing,from slow to fast
		182-189	Open light
		190-231	low opening and fast closing,from slow to fast
		232-239	Voice controlled strobe
		240-247	Random strobe,from slow to fast
		248-255	Open light

9. Maintenance

1. Maintenance should be performed every 15-day period, by using a sponge which is dipped with alcohol, rather than wet cloth or other chemical liquid, to clean the mirror.Always disconnect from the power when the device is not in use or before cleaning it.

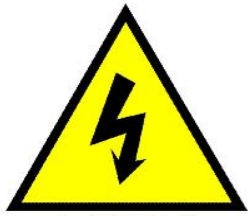
2. Cooling fan cleaning: Use compressed air to clean the fan of the device. The fan position plays a vital role in the normal operation of the device. Please ensure the normal operation of the fan.

3. When the equipment is used frequently, the fan should be cleaned every 1 month, or in a dusty and oily environment, the number of cleanings should be increased. The actual operation should be implemented according to the application environment of the equipment to ensure the normal operation of the fan.

4. Internal optical cleaning: cleaning internal optical components requires professional authorized technicians to operate. Incorrect cleaning techniques or improper cleaning choices can cause serious damage to the equipment. Since the optical part and the rest of the light source system are separated and sealed, this operation should not be performed more than once a year.

10. Warning and Declaration

Do not look directly at the light source with your eyes when turning on the light. Before any installation and maintenance work, please make sure that the power has been cut off.



Electrical safety



Optical security

Product common breakdown comparative chart	
breakdown cause	Major breakdown analysis and solution
The light no emitting or no work	1. Check the power cable whether to connect the light, whether the fuse does burn out 2. Check the input voltage whether to assign the voltage match with the light. Check work order is normal reset or not.

No sound control	1.Check whether the keys on the display screen are set to the voice control mode according to the instructions. 2. If the sound sensitivity value is small, select a larger value.
The light can emit light normally and is not controlled by the controller	1.Check whether the start address code of the display screen of the light is set correctly. 2.Check whether the XLR signal is damaged.
Master-slave synchronization mode, the master is normal, and the slave is abnormal	1.Confirm that there is only one host, and the host is not connected to the DMX console, and set to voice control or auto-propelled mode. 2.There is still a problem with the correct master and slave settings, please check the online line.
Key failure, no work	1.Check whether any of the keys has not been reset normally.
The light is dim and the brightness is obviously reduced	1.Check whether the light source has reached the expiration date. 2.Check whether the internal and external optical system is clean.
If the fault cannot be eliminated according to the above method, please contact with dealer.	