

# LASER LIGHT MOVING LASER

## MSL-3W RGB

### User Manual



LEDLIGHT



**Please keep the manual carefully for future reference**

Thank you for your patronage. We are confident that our excellent products and service can satisfy you. For your own safety, please read this user manual carefully before installing the device.

In order to install, operate, and maintain the lighting safely and correctly. We suggest that the installation and operation should be done by the verified technician and follow the instruction strictly.

Every person involved with the installation, operation and maintenance of this device has to:

- be qualified
- follow carefully the instructions of this manual

### **Introduction**






Thank you for having chosen this professional moving head. You will see you have acquired a powerful and versatile device.

Unpack the device. Inside the box you should find:

1. 1\*DMX512 cable
2. 1\*quick lock handle
3. 1\* use manual
4. 1\* power cable

Please check carefully that there is no damage caused by transportation. Should there be any, consult your local dealer

### **Symbol Instruction On The Device**

-  ..... **CE Certificate**
-  ..... **Suitable directly installed on the common combustible materials devices**
-  ..... **Only indoor use**
-  ..... **Environmental protection**
-  ..... **The minimum distance from lighted objects(meter)**

#### **CAUTION!**



**Keep this device away from rain and moisture!**

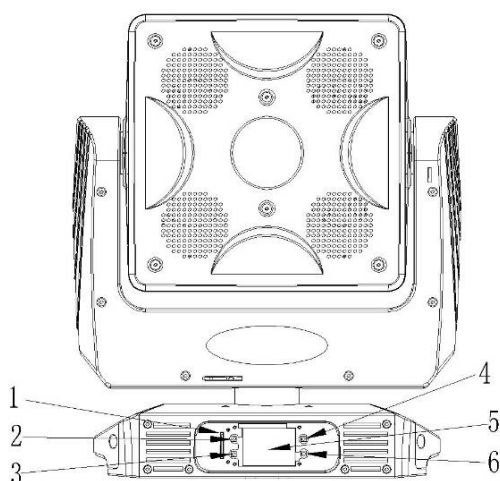


**Unplug mains lead before opening the housing!**

## 1. Description of the Device

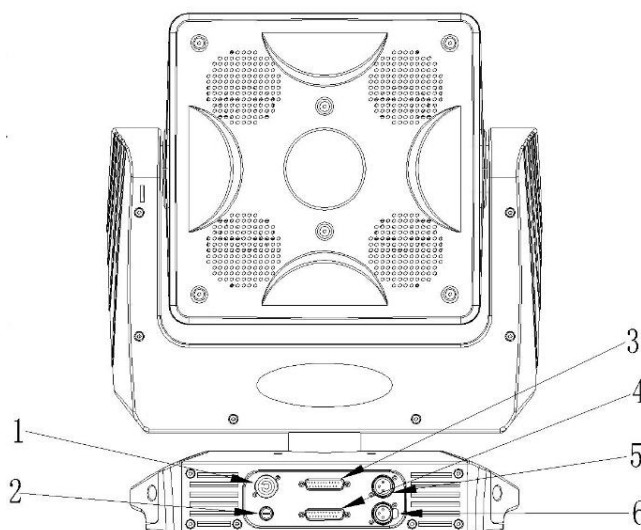
● Total 3W RGB(500mW/638nm+500mW/520nm+2W/445nm) laser light, good beam light, and can output small stand straight beam light.

- 40K Scanner.
- Low energy consumption, compact light weight, high brightness and farther of visible light beam.
- Quickly scan speed, Pan scanning 630 degree , and Tilt scanning 254 degree.
- Can play by Auto,ILDA,SD card or DMX controller.
- Perfect blue LCD display.
- Product widely using, simple installation. Applicable for Disco, Clubs, KTV, Pub,Bar,Family party etc..



1. SD Card
2. <Up>
3. <Down>
4. <Menu>
5. Display
6. <Enter>

1. Power In
2. Fuse
3. ILDA In
4. ILDA Out
5. DMX In
6. DMX Out



## 2. Safety Instructions



### CAUTION!

**Be careful with your operations. With a dangerous voltage you can suffer a dangerous electric shock when touching wires!**

This device has left the factory in perfect condition. In order to maintain this condition and to ensure a safe operation, it is absolutely necessary for the user to follow the safety instructions and warning notes written in this user manual.



### Warning!

*Damages caused by the disregard of this user manual are not subject to warranty. The dealer will not accept liability for any resulting defects or problems.*

- ▶ If the device has been exposed to temperature changes due to environmental changes, do not switch it on immediately. The arising condensation could damage the device. Leave the device switched off until it has reached room temperature.
- ▶ Please make sure that the device be earthed.
- ▶ Please replace housing if it is broken. This fixture can be using after finished installed.
- ▶ The electric connection must carry out by qualified person.
- ▶ Make sure that the available voltage is not higher than stated at the end of this manual.
- ▶ Make sure the power cord is never crimped or damaged by sharp edges. If this would be the case, replacement of the cable must be done by an authorized dealer.
- ▶ If the external flexible cable or cord of this luminaire is damaged, it shall be exclusively replaced by the manufacturer or his service agent or a similar qualified person in order to avoid a hazard.
- ▶ Please cut off the power if don't use the fixture or want to clean, maintenance.



### CAUTION!

**Never touch the device during operation!  
The housing may heat up**



### CAUTION!

**Never look directly into the light source,  
as sensitive persons may suffer an epileptic shock.**

Please be aware that damages caused by manual modifications to the device are not subject to warranty. Keep away from non-professionals.

## **General Guidelines**

▶ This device is a lighting effect for professional use on stages, in discotheques, theaters, etc., the device was designed for indoor use only.

▶ This fixture is only allowed to be operated with the max alternating current which stated in the technical specifications in the last page of this manual.

▶ The device can do continuous work for eight hours. Lighting effects are not designed for permanent operation. Consistent operation breaks may ensure that the device will serve you for a long time without defects.

▶ Handle with care, do not make the device by strong shocks.

While choosing the installation-spot, please make sure that the device is not exposed to extreme heat, moisture or dust. Please don't project the beam onto combustible substances. The minimum distance between light-output from the projector and the illuminated surface must be more than 1 meter.

▶ Please do not in damp, overheat or dusty environment install and use the device. Do not use light on fuel. The distance between the device and the projectile to keep at least 1 meter.

▶ If you use the quick lock cam in hanging up the fixture, please make sure the quick lock fasteners turned in the quick lock holes correctly.

▶ Operate the device only after having familiarized with its functions. Do not permit operation by persons not qualified for operating the device. Most damages are the result of unprofessional operation.

▶ Please use the original packaging if the device is to be transported.

▶ For safety reasons, please be aware that all modifications on the device are forbidden.

▶ If this device will be operated in any way different to the one described in this manual, the product may suffer damages and the guarantee becomes void. Furthermore, any other operation may lead to short-circuit, burns, electric shock, lamp explosion, crash, etc.

## **3. Installation Instruction**



### **CAUTION!**

**Please consider the GB7000.15/EN60598-2-17 and the other respective national norms during The installation. The installation must only be carried out by a qualified person.**

▶ The applicable temperature for the lighting is between -25°C to 45°C. Do not use the lighting under or above the temperature.

▶ The installation of the effect has to be built and constructed in a way that it can hold 10 times the weight for 1 hour without any harming deformation.

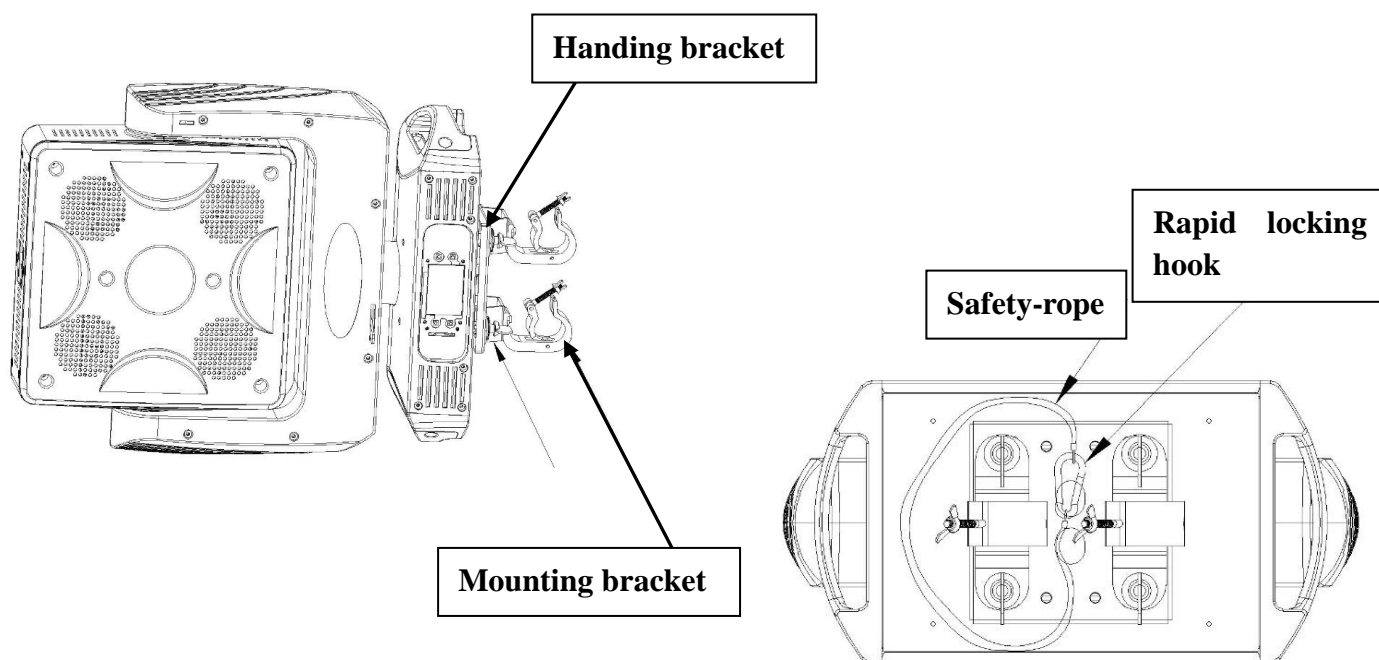
► The installation must always be secured with a secondary safety attachment, e.g. an appropriate safety rope. Never stand directly below the device when mounting, removing or servicing the fixture.

► The operator has to make sure the safety relating and machine technical installations are approved by an expert before taking the device into operation for the first time.

► These installations have to be approved by a skilled person once a year.

► Overhead mounting requires extensive experience, including amongst others calculating working load limits, installation material being used, and periodic safety inspection of all installation material and the device. If you lack these qualifications, do not attempt the installation yourself. Improper installation can result in bodily injury.

## Ringling



Insert the quick-lock fasteners of the first holder into the respective holes on the bottom of the device. Tighten the quick-lock fasteners fully clockwise.

Make the finished installed mounting bracket tighten on the fixed bracket.

Pull the safety rope through the holes on the bottom of the base and over the trussing system or other safe fixation spot.

Note: This step is quite important to ensure that fixture will not drop out by the damage of clamp.

## 4. DMX-512 control connection

Connect the provided XLR cable to the male 3-pin XLR output of your controller and the other side to the female 3-pin XLR input of the light. You can chain multiple lights together through serial linking

The cable needed should be two core, screened cable with XLR input and output connectors. Please refer to the diagram below.

**DMX output**  
**XLR Mounting socket**

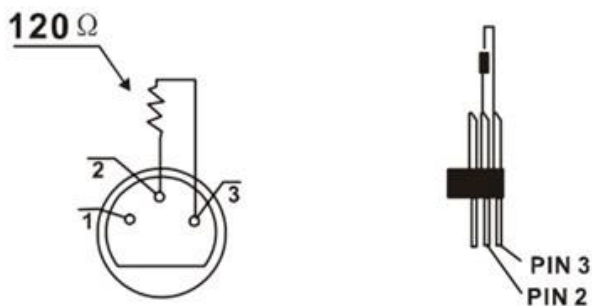


**DMX Input**  
**XLR Mounting plug**



### DMX-512 connection with DMX terminator

For installations where has it has too much lines or lights environment it is recommended to use a DMX terminator. This helps in preventing corruption of the digital control signal by electrical noise. The DMX terminator is simply an XLR plug with a 120 Ω resistor connected between pins 2 and 3, which is then plugged into the output XLR socket of the last fixture in the chain.



**Welding a 120 ohm resistor between 2 and 3 pins male XLR , and insert it into the signal output of the last device**

### 5. DMX address setting

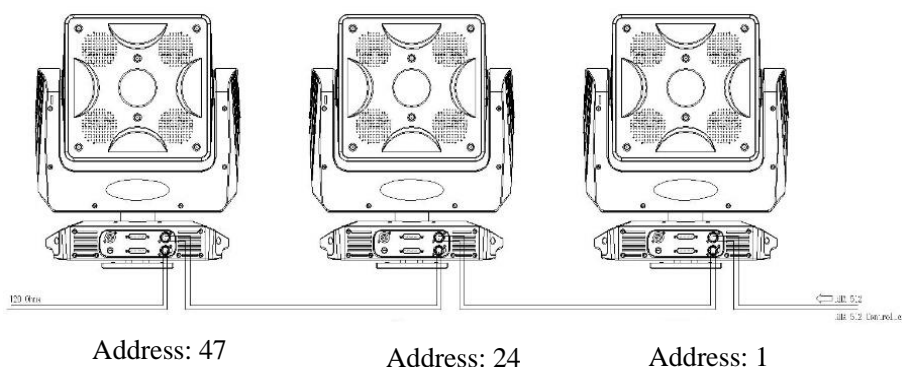
Each fixture must set a specific starting address. When receiving signal transmission, fixture will receive channel control signals which from the starting address.

According to different requirements or easy to use, the user can set many value fixtures to the same address, also can set up a separate address for every device.

If you set the same address, all the devices will receive from DMX channels signal. All connecting fixtures are jointly controlled, controller can't separate control a device.

If you set a different address, each device will be separate from its particular set the starting address and begin accepting DMX512 control signal, so that more convenient separate control one device. Using this method must be based on channel quantity of device to determine a starting address.

This led moving head light has 23 channels. you should set the starting address of the first unit to 1, the second unit to 24(23 + 1), the third unit to 47 (24+ 23), and so on.



## 6. Menu map and operation

Display	Function	
Dmx Address	Address setting	1-512
Show Mode	Mode select	Auto/Sound/ILD/PRG/Slave
Sound Sense	Sound sensitivity	0-99
SD File	SD Card files select	
SIZE	Gobos size setting	10-100
Phasic set	XY Reverse setting	
Speed set	Speed setting	15-40
DMX STATE	DMX Station	Show mode(With DMX signal/Black out(without DMX signal))
Fixture Hours	Fixture working hours	
Temperature	Fixture temperature	
Versions	Software version	

### Details operation instruction please following function menu.

There are total four operating buttons on the control panel, you can simply set the starting address, run the pre-programmed program or make a reset.

#### <Menu>

Used to scroll through the current operating mode, as well as back out of the current menu option.

#### <Up>

Used to select increasing advancement in the value.

#### <Down>

Used to select decreasing advancement in the value.

#### <Enter>

Used to select a value and store it to memory.

The control panel shows the current state of the unit. It is used to select the operating mode, as well as the sub-features. For a detailed lay out of the control panel functions, please see the following page.

## Channel Instruction

Channel	Function	Value	Description
CH1	Pan	0-255	Pan 0-630°
CH2	Pan_Adj	0-255	Pan fine
CH3	Pan_Speed	0-255	From slow to fast
CH4	Tilt	0-255	Tilt 0-254°
CH5	Tilt_Adj	0-255	Tilt fine

CH6	Tilt_Speed	0-255	From slow to fast	
CH7	Model Select	<b><u>0-49</u></b>	Auto mode	
		50-99	Audio(Sound Active) mode	
		100-149	<b><u>PRG mode</u></b>	
		150-199	ILD mode	
		200-255	Manual mode	
CH8	Pattern/Folder Select	0-255	Manual mode	PRG/ILD mode
			Pattern select, every 3 value one pattern	File select
CH9	Flashing/File Select	0-10	No strobe	Play file select
		11-199	Auto strobe	
		200-255	Audio strobe	
<b><u>CH10</u></b>	RGB Models Color Select	<b><u>0-5</u></b>	<b><u>Laser off</u></b>	
		<b><u>0-16</u></b>	<b><u>White</u></b>	
		17-33	Red	
		34-50	Green	
		51-67	Blue	
		68-84	Yellow	
		85-101	Purple	
		102-118	Cyan	
		119-135	White, red, green, blue color section	
		136-152	Blue, yellow, purple, cyan color section	
		153-169	W, R, G, B, Y, P, C 7 color section	
		170-186	White, red, green, blue 4 color flow	
		187-203	Blue, yellow, purple, cyan 4 color flow	
		204-220	Blue, yellow, purple, cyan 4 color flow	
		221-237	color subsection by inflexion	
238-255	Sound active color change			
<b><u>CH11</u></b>	X move	0-125	Adjust position by manual	
		126-185	Move circle from left to right automatically	
		186-225	Jump circle from right to left automatically	
		226-245	Auto jumping	
		246-255	Audio jumping	
<b><u>CH12</u></b>	Y move	0-125	Adjust position by manual	
		126-185	Move circle from up to down automatically	
		186-225	Jump circle from down to up automatically	
		226-245	Auto jumping	
		246-255	Audio jumping	
<b><u>CH13</u></b>	Zoom(+/-)	0-10	No change	

		11-87	Adjust size by manual
		88-150	Zoom +
		151-200	Zoom -
		201-255	Zoom (+/-) circle
<b><u>CH14</u></b>	Rolling X	0	No change
		1-128	Manual rotation
		129-255	Auto rotation
<b><u>CH15</u></b>	Rolling Y	0	No change
		1-128	Manual rotation
		129-255	Auto rotation
<b><u>CH16</u></b>	Rolling Center	0	No change
		1-128	Manual rotation
		129-192	Auto clockwise rotation
		193-255	Auto counterclockwise rotation
<b><u>CH17</u></b>	Drawing	0-10	No change
		10-74	Manual drawing
		75-104	Auto drawing +
		105-144	Auto drawing -
		145-184	Auto drawing circle
		185-224	End to end drawing circle +
		225-255	End to end drawing circle -
<b><u>CH18</u></b>	X wave	0-9	No wave
		10-69	Small wave
		70-129	Medium wave
		130-189	Big wave
		190-255	Biggest wave
<b><u>CH19</u></b>	Y wave	0-9	No wave
		10-69	Small wave
		70-129	Medium wave
		130-189	Big wave
		190-255	Biggest wave
<b><u>CH20</u></b>	Display Mode	0-63	Normal display
		64-127	Light dot display
		128-191	Segment display
		192-255	Dot display
CH21	Red Dimmer	0-255	Dimmer laser output power from 100% to 0%
CH22	Green Dimmer	0-255	Dimmer laser output power from 100% to 0%
CH23	Blue Dimmer	0-255	Dimmer laser output power from 100% to 0%

## **Cleaning and maintenance**

The operator has to make sure that safety-relating and machine-technical installations are inspected by an expert after every four years in the course of an acceptance test.

The operator has to make sure that safety-relating and machine-technical installations are inspected by a skilled person once a year.

The following points have to be considered during the inspection:

- 1). All screws used for installing the devices or parts of the device have to be tightly connected and must not be corroded.
- 2). There must not be any deformations on housings, fixations and installation spots (ceiling, suspension, trussing).
- 3). Mechanically moved parts like axles, eyes and others must not show any traces of wearing (eg: material abrading or damages) and must not rotate with unbalances.
- 4). The electric power supply cables must not show any damages, material fatigue (eg: porous cables) or sediments. Further instructions depending on the installation spot and usage have to be adhered by a skilled installer and any safety problems have to be removed.

We recommend a frequent cleaning of the device. Please use a moist, lint-free cloth. Never use alcohol or solvents!

The cooling-fan should be cleaned monthly.

The interior of the fixture should be cleaned at least annually using a vacuum-cleaner or an air-jet.

There are no serviceable parts inside the device. Maintenance and service operations are only to be carried out by authorized dealers.