

# **USER MANUAL**

**90W LED MOVING HEAD SPOT**

**Model: MHLED 90DB**

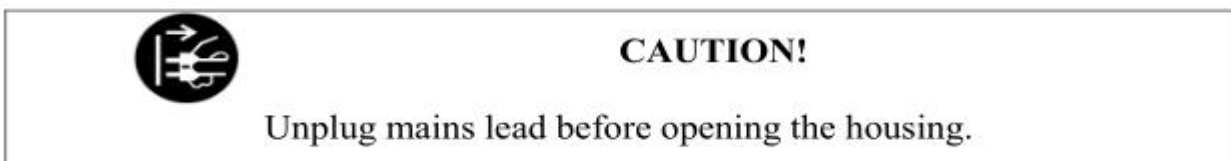
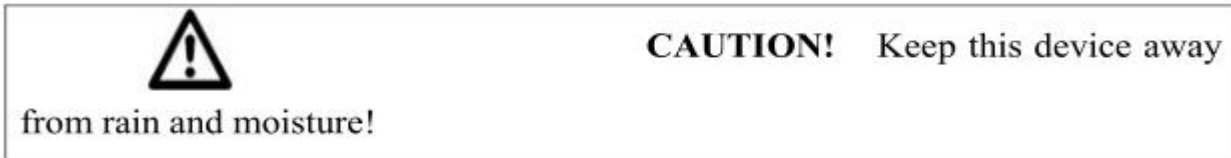


**CE**

**Please read over this manual before operation the light**

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 safety 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

## 1. 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 carton box you should find:

1. One XLR power cable
2. One user manual
3. One pcs omega

Please check carefully that there is no damage caused by transportation.

Should there be any, please consult your dealer and don't install this device.

## 2 Mounting and installation:

**2.1 Cautions:** for added protection mount the fixtures in areas outside walking paths, seating areas, or in areas where the fixture might be reached by unauthorized personnel.

Before mounting the fixture to any surface, make sure that the installation area can hold a minimum point load of 10 times the device's weight.

Fixture installation must always be secured with a secondary safety attachment, such as an appropriate safety cable.

Never stand directly below the device when mounting, removing, or servicing the fixture, from a

ceiling, or set on a flat level surface (see illustration below). Be sure this fixture is kept at least 0.5m (1.5ft) away from any flammable (decoration etc.)

Always use and install the supplied safety cable as a safe cable as safety measure to prevent accidental damage and /or injury in the event the clamp fails.

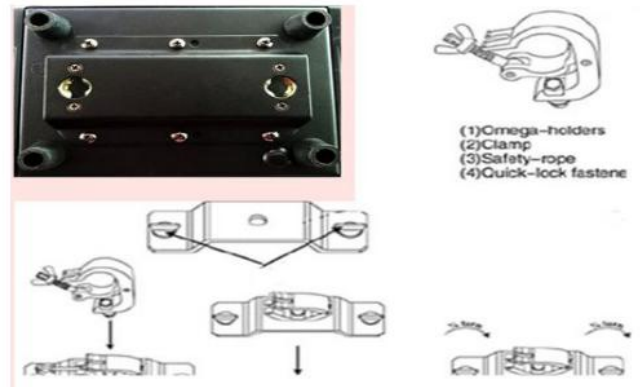
## 2.2 Mounting points:

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

Be sure to complete all rigging and installation procedures before connecting the main power cord to the appropriate wall outlet.

## 2.3 Clamp mounting :

The LED moving head provides a unique mounting bracket assembly that integrates the bottom of the base, the included 'omega bracket' and the safety cable rigging point in one unit (see the illustration below). When mounting this fixture to truss be sure to secure an appropriately rated clamp to the included omega bracket using a M10 screw fitted through the center hole of the 'omega bracket'. As an added safety measure be sure to attached at least one properly rated safety cable to the fixture using one of the safety cable rigging points integrated in the base assembly.



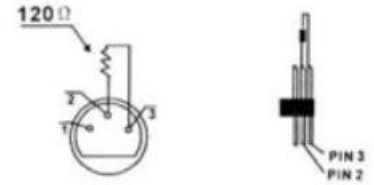
## 2.4 DMX-512 control connection:

Connect the provided XLR cable to the female 3-pin XLR output of your controller and the other side to the male 3-pin XLR input of the moving head. You can chain multiple Moving head 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.



## 2.5 DMX-512 connection with DMX terminator

For installations where the DMX cable has to run a long distance or is in an electrically noisy environment, such as in a discotheque, 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 resistor connected between pins 2 and 3, which is then plugged into the output XLR socket of the last fixture in the chain. Please see illustrations below.



## 3 TECHNICAL PARAMETERS:

### POWER SUPPLIE

Input power:AC100-240V 50/60 Hz

Power consumption :120W

LED: 90W high power LED

DMX channel:6/16 channels

Control mode:DMX512/Master-Slave/Auto run

Display:LCD display

Movement :pan 540 degree , tilt 270 degree

Color wheel:7 color + Open

Rotating gobo wheel : 6 gobos + open ( interchangeable )

Static gobo wheel : 8 gobos + open

Prism: 3 face

Focus: Electronic linear focus

WEIGHT&SIZE: N.W: 7KG / G.W: 8 KG

Packing size: 43\*32\*24cm

## 4 :MENU FUNCTION :

DMX Address	001-512			
Operating Mode	DMX 6 Ch			
	DMX 16 Ch			
	Auto		Perform Mode 1	
			Perform Mode 2	
			Perform Mode 3	
			Perform Mode 4	
			Perform Mode 5	
			Perform Mode 6	
			Perform Mode 7	
			Perform Mode 8	
	Sound			
	Master Auto		Perform Mode 1	
		Perform Mode 2		

		Perform Mode 3	
		Perform Mode 4	
		Perform Mode 5	
		Perform Mode 6	
		Perform Mode 7	
		Perform Mode 8	
	Master Sound		
	Slave		
Language Setting	简体中文		
	English		
Advanced Setting	Pan Reverse		
	Tilt Reverse		
	Display Reverse		
	Mic Sensitive	=000	
	Reset Motor		
	Factory Reset		
	Home Position	Password	Code =018
		PAN	PAN =000
		TILT	TILT =000
		Color	
		fixed Gobo	
	Wheel Gobo		
	Focus		
	Prism		
System Info	Current Time		
	Total Time		
	Current Mode		
	Temperature		
	Software Version		
Manual Control	PAN	PAN =000	
	PAN-FINE	PAN-Fine =000	
	TILT	TILT =000	
	TILT-FINE	TILT-FINE =000	
	Pan/Tilt Speed	Move Speed =000	
	Dimmer	Dimmer =000	
	Strobe	Strobe =000	
	Color		
	Fixed Gobo		
	Wheel Gobo		
	Wheel Gobo Rotation		
	Focus		
	Prism		

## **5:Function Mode:**

### **5.1 DMX address setting:**

With this function, you can adjust the desired DMX-address via the Control Board.

Select via the encoder.

Press the encoder, adjust the DMX address by turning the encoder.

Press the encoder to confirm.

Press the Mode/Esc-button in order return to the main menu.

Set DMX address

Display the DMX 512 value of each channel

With this function you can display the DMX 512 value of each channel.

The display automatically

Shows the channel with a value changing.

### **5.2 Run Mode:**

The LED moving head have 6CH and 16CH, can receive the International DMX signal.

In the **【Run】** mode, you can chose **【Master】** mode [ Sound Control ] [MasterAuto Run ] [Master Sound Control ] and **【Slave】** mode.

### **5.3 Language Setting:**

With this function, you can choose the Language between English and Chinese.

### **5.4 Advanced Set up:**

Pan Reverse

With this function you can reverse the Pan-movement.

Tilt Reverse

With this function you can reverse the Tilt 1-movement.

Display Reverse

With this function you can reverse the Tilt 2-movement.

Reset

With this function, you can reset the device via the Control Board.You can select the different reset function by turning the encoder.

Factory Reset

With this function, you can select restore factory set for ON or OFF, the default is OFF.

### **5.5 System State:**

With this function, you can know the On Time ,Accumulative Time,Current Run Mode ,Temperature and Software Version.

## 5.6 Manual Control:

With this function ,you can adjust the pan and tilt and the move speed,also adjust the dimmer ,strobe and color.

## 6: DMX CHANNELS:

### 6.1 16 CHannel Definition Table

Channel	DMX Vable	Function
1	000-255	X
2	000-255	Y
3	000-255	Dimmer(0-100%)
4	000-004	Shutter Closed
	005-250	Stobe effect slow to fast
	251-255	Shutter Open
5	000-007	Empty
	008-047	Auto Play 1
	048-087	Auto Play 2
	088-127	Auto Play 3
	128-167	Auto Play 4
	168-207	Auto Play 5
	208-247	Auto Play 6
	248-255	Color Gobo Sound Control
6	000-007	Empty
	008-032	X/Y auto run 1
	033-058	X/Y auto run 2
	059-084	X/Y auto run 3
	085-110	X/Y auto run 4
	111-136	X/Y auto run 5
	137-162	X/Y auto run 6

	163-188	X/Y auto run 7
	189-214	X/Y auto run 8
	215-240	X/Y auto run 9
	241-255	X/Y Sound control

## 6.2 16 Channel Definition Table

Channel	DMX Vable	Function
1	000-255	X
2	000-255	X-Fine
3	000-255	Y
4	000-255	Y-Fine
5	000-255	XY Speed
6	000-255	Dimmer(0-100%)
7	000-004	Shutter Closed
	005-250	Stobe effect slow to fast
	251-255	Shutter Open
8	000-004	Open(White)
	005-013	White/Color1
	014-022	Color1
	023-031	Color1/Color2
	032-040	Color2
	041-049	Color2/Color3
	050-058	Color3
	059-067	Color3/Color4
	068-076	Color4
	077-085	Color4/Color5
	086-094	Color5
	095-103	Color5/Color6
	104-112	Color6
	113-121	Color6/Color7
	122-130	Color7
	131-139	Open(White)
	140-195	Forward rainbow effect from fast to slow
196-199	Rotation stop	
200-255	Backward rainbow effect from slow to fast	
9	000-005	Open(White)
	006-021	Gobo1
	022-037	Gobo2
	038-053	Gobo3
	054-069	Gobo4
	070-085	Gobo5

	086-101	Gobo6
	102-117	Gobo7
	118-133	Gobo8
	134-194	Forward rainbow effect from fast to slow
	195-255	Backward rainbow effect from slow to fast
10	000-007	Open(White)
	008-028	Gobo1
	029-049	Gobo2
	050-070	Gobo3
	071-091	Gobo4
	092-112	Gobo5
	113-133	Gobo6
	134-194	Forward rainbow effect from fast to slow
	195-255	Backward rainbow effect from slow to fast
11	000-009	Stop
	010-129	Forward Gobo2 Rotation from fast to slow
	130-134	Stop
	135-255	Barward Gobo2 Rotation from slow to fast
12	000-255	Focus
13	000-007	Open(White)
	008-134	Prism
	135-255	Forward Prism Rotation from slow to fast
14	000-007	Empty
	008-047	Auto Play 1
	048-087	Auto Play 2
	088-127	Auto Play 3
	128-167	Auto Play 4
	168-207	Auto Play 5
	208-247	Auto Play 6
	248-255	Color Gobo Sound Control
15	000-007	Empty
	008-032	X/Y auto run 1
	033-058	X/Y auto run 2
	059-084	X/Y auto run 3
	085-110	X/Y auto run 4
	111-136	X/Y auto run 5
	137-162	X/Y auto run 6
	163-188	X/Y auto run 7
	189-214	X/Y auto run 8
	215-240	X/Y auto run 9
	241-255	X/Y Sound control
16	250-255	RESET(10S)