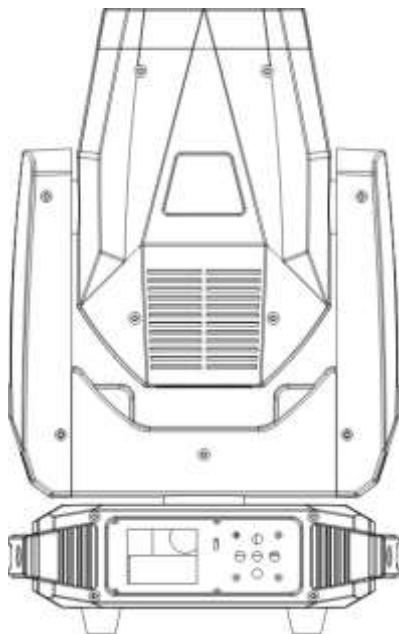




80W LED Beam Moving Head



ML-B080

User Manual

Please read this user manual before using this product.



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STATEMENT

The product has well capability and intact packing when leave factory. All of the user should comply with warning item and manual, any misuse cause of the damages are not included in our guarantee, and also cannot be responsible for any malfunction & problem owing to ignore the manual.

ACCESSORIES

These items are packed together with the product:

Name	Quantity	Unit	Remark
USER MANUAL	1	PCS	
DMX CABLE	1	PCS	
OMEGA	2	PCS	
CLAMP	2	PCS	
SATETY CABLE	1	PCS	

SAFETY INSTRUCTION

Please keep this User Guide for future consultation. If you sell the unit to another user, be sure that they also receive this instruction booklet.



This fixture is an extremely sophisticated piece of electronic equipment. To guarantee a smooth operation, it is important to follow the guidelines in this manual. The manufacturer of this device will not accept responsibility for damages resulting from the misuse of this fixture due to the disregard of the information printed in this manual.



This device falls under **PROTECTION CLASS 1**. It's essential this device be grounded properly. Only qualified personnel should perform all electrical connections.



I N D O O R S U S E O N L Y !
DO NOT EXPOSE FIXTURE RAIN AND MOISTURE!



UNPLUG POWER BEFORE SERVICING FIXTURE!
DO NOT PLUG FIXTURE INTO A DIMMER PACK!
NEVER TOUCH FIXTURE DURING OPERATION, AS IT MAY BE HOT!



NEVER LOOK DIRECTLY INTO THE LIGHT SOURCE!
SENSITIVE PERSONS MAY SUFFER AN EPILEPTIC SHOCK!

GENERAL GUIDELINES

◆ NEVER OPEN THIS FIXTURE WHILE IN USE!

- ◆ During the initial operation of this fixture, a light smoke or smell may emit from the interior of the fixture. This is a normal process and is caused by excess paint in the interior of the casing burning off from the heat associated with the lamp and will decrease gradually over time.
- ◆ This fixture is a professional lighting effect designed for **INDOOR / DRY LOCATIONS ONLY** on stage, in nightclubs, theatres, etc.
- ◆ Please make sure there are **NO FLAMMABLE MATERIALS** close to the

fixture while operating, to prevent any fire hazard.

- ◆ The fixture must be installed in a location with adequate ventilation, at least 1.5 feet (.5m) from adjacent surfaces. Be sure no air ventilation slots are blocked.
- ◆ **DO NOT** attempt installation and/or operation without knowledge how to do so.
- ◆ **DO NOT** permit operation by persons who are not qualified to operate this type of fixture. Most damages are the result of operations by nonprofessionals. Consistent operational breaks may ensure the fixture will function properly for many years to come.
- ◆ **DO NOT** shake fixture, avoid brute force when installing and/or operating fixture.
- ◆ Always install the fixture with an appropriate safety cable. When installing the fixture in a suspended environment, always use mounting hardware that is no less than M10 x 25 mm, also be sure the hardware is insert in the pre-arranged screw holes in the bracket of the fixture.
- ◆ Use the original packaging and materials to transport the fixture in for service.
- ◆ **DO NOT TOUCH** the housing bare-hand during its operation. Turn OFF the power and allow approximately 15 minutes for the fixture to cool down before replacing or serving.

INSTALLATION



FLAMMABLE MATERIAL WARNING

Keep fixture at least 5.0 ft (1.5m) away from any flammable materials, decorations, pyrotechnics, etc.



ELECTRICAL CONNECTIONS

A qualified electrician should be used for all electrical connections and/or installations.

CAUTIONS

- ◆ For added protection, mount the fixture in areas outside walking paths, seating areas, or in areas where unauthorized personnel might reach the fixture.
- ◆ Ambient operating temperature range for this fixture is **5° to 113°F. (-15° to 45°C)** Do not use the fixture under or above this temperature.
- ◆ Before mounting the fixture to any surface, make sure the installation area can hold a minimum point load of 10 times the weight of the fixture.
- ◆ 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.

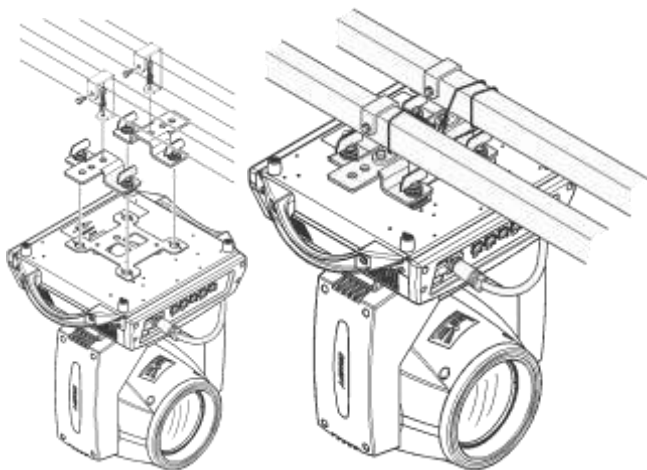
The unit should be mounted via its screw holes on the bracket. Always ensure that the unit is firmly fixed to avoid vibration and slipping while operating. And make sure that the structure to which you are attaching the unit is secure and is able to support a weight of 10 times of the unit's weight. Also always use a

safety cable that can hold 12 times of the weight of the unit when installing the fixture.

The equipment must be fixed by professionals. And it must be fixed at a place where is out of the touch of people.

Clamp mounting

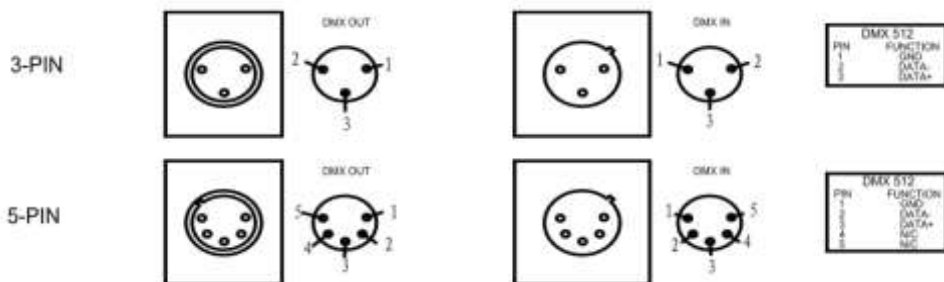
The moving head provides a unique mounting bracket assembly that integrates the bottom of the base, the included '**Omega Bracket**' and the **Safety Cable** rigging point in one unit (see the illustration below). When mounting this fixture to truss be sure to be sure to secure an appropriately rated 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 point integrated in the base assembly.



DMX-512 control connection:

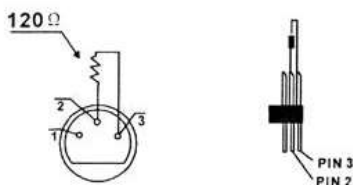
Connect the provided XLR cable to the female 3-pin XLR output of your controller and the other side to the male 3-pin XLR input of the moving head. You can chain multiple Moving head together through serial linking. The cable needed should be two core, screened cable

with XLR input and output connectors. Please refer to the diagram below.



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.



TECHNICAL SPECIFICATION

Power Supply

- Voltage: AC90-240V, 50/60Hz;
- Power: 200W;

Light Source

- Lamp source:80W high power white LED;
- Light source life: 80000h
- Color temperature: 6800K
- 5 meters illuminated lumens: 23450lux
- 10 meters illumination lumens: 6340lux
- Beam Angle:2°

Protocols

- Control Mode:DMX512/Maser/Auto/Sound;
- DMX Channel:16/20 DMX Channels;
- Built-in RDM, you can directly adjust the address code with the console

Display/Case/Base

- Display mode: LCD display, lamp temperature display, Chinese and English display, reverse display
- High temperature resistant engineering plastic case + aluminum base

Color Wheel

- Color plate: 13 colors + white light, rainbow effect, half color change effect

Gobo Wheel

- Fixed gobo plate: 13 gobos +open,gobo shaking, pattern water effect

Prisms

- Double prism disk: 8 prisms, 16 prisms Prism rotation effect (magnifying mirror can choose honeycomb mirror)

Focus

- Focusing effect

Movement

- X-axis: 540° (16-bit) motor correction
 - Y-axis: 270° (16-bit) motor correction
- Automatic XY error correction, rich built-in program

Dimmer/Strobe

- Dimming level: 0-100% perfect linear dimming system
- Strobe: Synchronous pulse strobe, random pulse strobe

Weigh

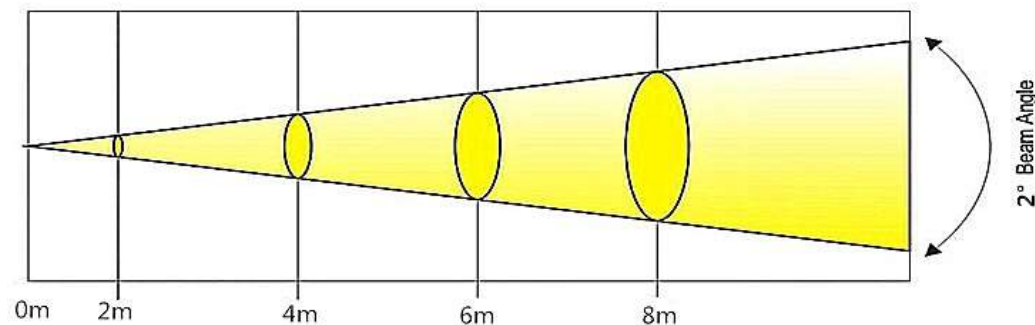
- Net weight: 12kg
- Gross weight: 14kg

IP Rated

- IP20, indoor only

Photometric Diagram:

195300 LUX @2m 48500 LUX @4m 23000 LUX@6m



Please Note: Specifications and improvements in the design of this unit and this manual are subject to change without any prior written notice.

80W White LED

Because of its high internal pressure, there might be a risk that the Discharge lamp would explode during operation. The lamp emits intense UV radiation which is harmful to the eyes and skin. The high luminance of the arc can cause severe damage to the retina if you take a close look at the lamp.

- To protect the lamp, always turn off the lamp first (via control panel or DMX controller) and let the unit run at least five minutes to cool down before switching off the mains supply. Never handle the lamp or luminary when it is hot.
- Do not touch the bulb with bare hands. If this happens, clean the lamp with denatured alcohol and wipe it with a lint free cloth before installation.
- The lamp generates UV radiation. Never operate the lamp without appropriate shielding.
- When lighting up, the lamp operates at high pressure and there is a slight risk of arc tube rupture. The risk increases with age, temperature and improper handling of the lamp. Do not use the lamp longer than its lifespan.
- Make sure the lamp is located in the center of the reflector for the best projection.

CONTROL SYSTEM

The DMX512 is widely used in intelligent lighting control, with a DMX 512 controller. Connect several lights together dmx in and dmx out, 3 pin XLR connectors: Pin 1: GND, Pin 2: Negative signal (-), Pin 3: Positive signal (+)

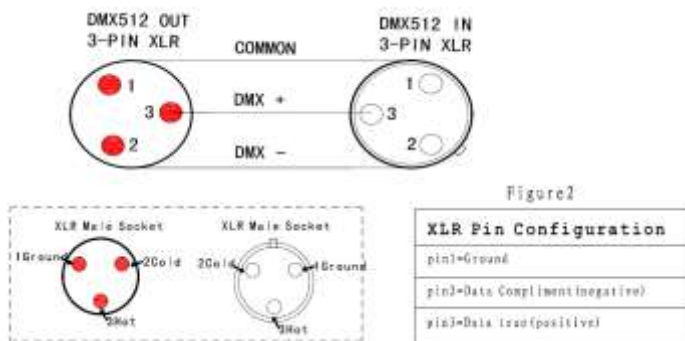


Figure2

HOW TO SET THE UNIT

Main Function

Turn on the unit, press the MENU button into menu mode, and press the UP/DOWN button until the required function is shown on the monitor. Select the function by the ENTER button. Use the UP/DOWN button to choose the submenu, press the ENTER button to store and automatically return to the last menu. Press the MENU button or let the unit idle one minute to exit menu mode.

In the event of disconnecting with mains power, press the UP button for one minute to enter into menu mode. Press MENU button or let the unit idle one minute to exit.

No.	Display	Function
1	DMX address	001-512

2	System set	<p>Work mode(DMX, sound,AUTO 1,AUTO 2,AUTO3)</p> <p>No.of machine:000-255</p> <p>Channel mode(18CH)</p> <p>Horizontal inversion (on, off),</p> <p>vertical inversion (on, off),</p> <p>Horizontal vertical exchange (on, off),</p> <p>Motor position error correction (on, off), screen saver (on, off)</p> <p>When there is no signal (hold, clear) Language (English, Chinese)</p> <p>reset</p>
3	Manual mode	slightly
4	Calibration	slightly
5	System test	slightly
6	System message	slightly

CHANNEL DESCRIPTION:

20 CH	16 CH	DMX Value	Function
1	1	0—255	Pan
2	2	0—255	Pan Low
3	3	0—255	Tilt

4	4	0—255	Tilt Low
5	*	0—255	P/T Speed
6	5		Shutter
		0-3	Closed
		4-103	SLOW - FAST
		104-107	Open
		108-207	Pulse FAST-SLOW
		208-212	Open
		213-225	SLOW
		226-238	Medium
		239-251	FAST
		252-255	Open
7	6	0-255	Dimmer
8	*	0-255	Dimmer Fine
9	7		Colour
		0-4	white
		5-9	Colour white+1
		10-14	Colour 1
		15-19	Colour 1+2
		20-24	Colour 2
		25-29	Colour 2+3
		30-34	Colour 3
		35-39	Colour 3+4
		40-44	Colour 4
		45-49	Colour 4+5
		50-54	Colour 5
		55-59	Colour 5+6

		60-64	Colour 6
		65-69	Colour 6+7
		70-74	Colour 7
		75-79	Colour 7+8
		80-84	Colour 8
		85-89	Colour 8+9
		90-94	Colour 9
		95-99	Colour 9+10
		100-104	Colour 10
		105-109	Colour 10+11
		110-114	Colour 11
		115-119	Colour 11+12
		120-124	Colour 12
		125-129	Colour 12+13
		130-134	Colour 13
		140-149	white
		115 — 199	FAST-SLOW
		200-205	STOP
		206-255	SLOW - FAST
10	*	0-255	Colour Fine
11	8		Gobo
		0-9	white
		10-19	Gobo 1
		20-29	Gobo 2
		30-39	Gobo 3
		40-49	Gobo 4
		50-59	Gobo 5

		60-69	Gobo 6
		70-79	Gobo 7
		80-89	Gobo 8
		90-99	Gobo 9
		100-109	Gobo 10
		110-119	Gobo 11
		120-127	Gobo 1 Jitter
		128-135	Gobo 2 Jitter
		136-143	Gobo 3 Jitter
		144-151	Gobo 4 Jitter
		152-159	Gobo 5 Jitter
		160-167	Gobo 6 Jitter
		168-175	Gobo 7 Jitter
		176-183	Gobo 8 Jitter
		184-191	Gobo 9 Jitter
		192-199	Gobo 10 Jitter
		200-207	Gobo 11 Jitter
		208-230	FAST-SLOW
		231-232	STOP
		233-255	SLOW - FAST
12	9	0—255	Foucs
13	*	0—255	Foucs Fine
14	10		Colour 7
		0-127	Emptv
		128-255	Colour 7
15	11		Frost
		0-255	Frost

16	12		Prism 1
		0—127	Emptv
		128-255	Prism 1
17	13		Prism 1-Rot
		0—63	Linear
		64—126	FAST ROTATION - SLOW ROTATION
		127—128	STOP
		129—191	SLOW ROTATION - FAST ROTATION
		192—255	SLOW - FAST
18	14		Prism 2
		0—127	Emptv
		128-255	Prism 2-Rot
19	15		Prism 2-Rot
		0—63	Linear
		64—126	FAST ROTATION - SLOW ROTATION
		127—128	STOP
		129—191	SLOW ROTATION - FAST ROTATION
		192—255	SLOW - FAST
20	16		Reset
		200—250	Reset
		251- 255	Empty

TROUBLESHOOTING

Following are a few common problems that may occur during operation. Here

are some suggestions for easy troubleshooting:

A. The unit does not work, no light and the fan does not work

1. Check the connect power and main fuse.
2. Measure the mains voltage on the main connector.
3. Check the power on LED to see if it can be light up or not.

B. Not responding to DMX controller

1. DMX LED should be on. If not, check DMX connectors, cables to see if they are linked properly.
2. If the DMX LED is on and no response to the channel, check the address settings and DMX polarity.
3. If you have intermittent DMX signal problems, check the pins on connectors or on PCB of the unit or the previous one.
4. Try to use another DMX controller.
5. Check to see if the DMX cables run near or run alongside to high voltage cables that may cause damage or interference to DMX interface circuit.

C. One of the channels is not working well

1. The stepper motor might be damaged or the cable connected to the PCB is broken.
2. The motor's drive IC on the PCB might be out of condition.

D. The lamp is cutting out intermittently

1. The lamp is not working well. Check the mains voltage either too high or too low.
2. Internal temperature may be too high. Check if replacement of fan is needed on the head.

E. If The pan belt is broken

1. Turn off the mains power.
2. Loosen the screws (A), open the cover.
3. Loosen the screws (B).
4. Unplug all the connect wires over the belt.
5. Change a new belt (C), put the belt around the axis gear and motor gear.

6. Plug all the connect wires back upon the belt.

7. Tighten all the screws.

F. If The tilt belt is broken

1. Turn off the mains power.

2. Loosen all the screws (A) and open the right arm cover (B).

3. Loosen the screws (C) that fix the bridge.

4. Change a new belt (D). Please adjust the tension of the belt properly.

Note: do not fix the belt too

tight as it is can easily rupture.

5. Reverse the procedures from step 3 to 2.

CLEANING AND MAINTENANCE



C A U T I O N

Disconnect power before cleaning or maintenance.

Following are a few common problems that may occur during operation. Here are some suggestions for easy troubleshooting:

CLEANING

Frequent cleaning is recommended to insure proper function, optimized light output, and an extended life. The frequency of cleaning depends on the environment in which the fixture operates: damp, smoky or particularly dirty environments can cause greater accumulation of dirt on the fixture's optics.

- Clean the external lens surface at least every 20 days with a soft cloth to avoid dirt/debris accumulation.
- Never use alcohol, solvents, or ammonia based cleaners.

MAINTENANCE

Regular inspections are recommended to insure proper function and extended life. There are no user serviceable parts inside this fixture, please refer all other service issues to an authorized service technician. Should you need any spare parts, please order genuine parts from your local dealer.

Please refer to the following points during routine inspections:

- A detailed electric check by an approved electrical engineer every three months, to make sure the circuit contacts are in good condition and prevent overheating.
- Be sure all screws and fasteners are securely tightened at all times. Loose screws may fall out during normal operation resulting in damage or injury as larger parts could fall.
- Check for any deformations on the housing, color lenses, rigging hardware and rigging points (ceiling, suspension, trussing). Deformations in the housing could allow for dust to enter into the fixture. Damaged rigging points or unsecured rigging could cause the fixture to fall and seriously injure a person(s).
- Electric power supply cables must not show any damage, material fatigue or sediments. Never remove the ground prong from the power cable.