

# Hybrid LED 250w

LED 250W, beam spot wash 3-in-1



CE  $\nabla$   $\oplus$  IP20  $\text{EFF} \left( \text{---} 0.2 \text{---} \right)$  T:40°C I:150°C

## User Manual

## **1** 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.



### **IMPORTANT**

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.

This device falls under protection-class I. Therefore it is essential that the device be earthed.

The electric connection must carry out by qualified person.

The device shall only be used with rate voltage and frequency.

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.

Always disconnect from the mains, when the device is not in use or before cleaning it.

Only handle the power cord by the plug. Never pull out the plug by tugging the power cord.

During initial start-up some smoke or smell or smell may arise. This is a normal process and does not necessary mean that the device is defective, it should decrease gradually.

Please don't project the beam onto combustible substances.

Fixtures cannot be installed on combustible substances, keep more than 50cm distance with wall for smooth air flow, so there should be no shelter for fans and ventilation for heat radiation.

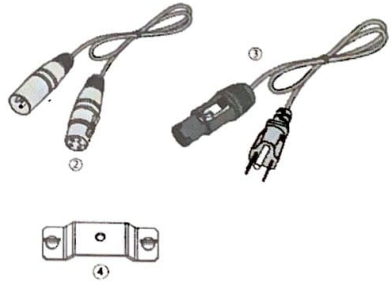
If the external flexible cable or cord of this luminaire is damaged, it shall be exclusively replaced by the manufacturer of his service agent or a similar qualified person in order to avoid a hazard.

## 2 UNPACKING

Thank you for choosing our Hybrid LED 250w. For your own safety, please read this manual before installing the device. This manual covers the important information on installation and applications. Please install and operate the fixture with following instructions. Meanwhile, please keep this manual well for future needs.

The Hybrid LED 250W is made of a new type of high temperature strength of engineering plastic and cast aluminum casing with nice outlook. The fixture is designed and manufactured strictly following CE standards, complying with international standard DMX512 protocol. It's available independently controlled and linkable with each other for operation. And it is applicable for large-scale live performances, theater, studio, nightclubs and discos.

The 250W Moving head light which features high brightness and stability. Please carefully unpack it when you receive the fixture and check whether it is damaged during the transportation. And please check whether the following items are included inside the box:





⑤

① Moving Head	1PC
② Signal Cable	1PC
③ Power Cable	1PC
④ Omega Clamp	1PC
⑤ User Manual	1PC

### 3 FEATURES & SPECIFICATIONS

#### Features

- 250W High Output White LED
- 50,000 hours lifespan and low power consumption
- Zoom angle 5.5° ~30° , focus function
- High light output, 13300LUX@5M at White light zoom in, 950LUX@5M at White light zoom out
- Temperature protect function, when the internal Temperature is up to 40° then the fans begin to work, when the internal temperature is up to 70° and the brightness reduce half.
- Color Wheel: 7 colors +white, color fine tuning, rotation with variable direction and speed
- 1 Rotation Gobo Wheel: 7 gobos + white, wheel rotation and shake
- 1 Static Gobo Wheel: 8 gobos + white, wheel rotation and shake
- Prism: 8-facet Prism, bi-directional rotatable at variable speeds
- Frost effect
- High speed strobe effect with 1-25 flashers per second
- Internal program available
- 16/18 DMX Channels USITT DMX-512
- DMX 512, master-slave and sound activated controllable or auto operation
- Colorful LCD display
- Efficient low noise fan cooling system
- PowerCon IN/OUT
- 3-pin & 5-pin XLR connectors IN/OUT

- Two 1/4 turn fastening Omega Clamps
- IP 20 protection rating

### Specifications

Input Voltage: AC90-260V 50/60Hz

Light Source: 250W High Output White LED

Control Signal: DMX 512, master-slave and sound activated or auto operation

Control Channel: 16/18 DMX Channels USITT DMX-512

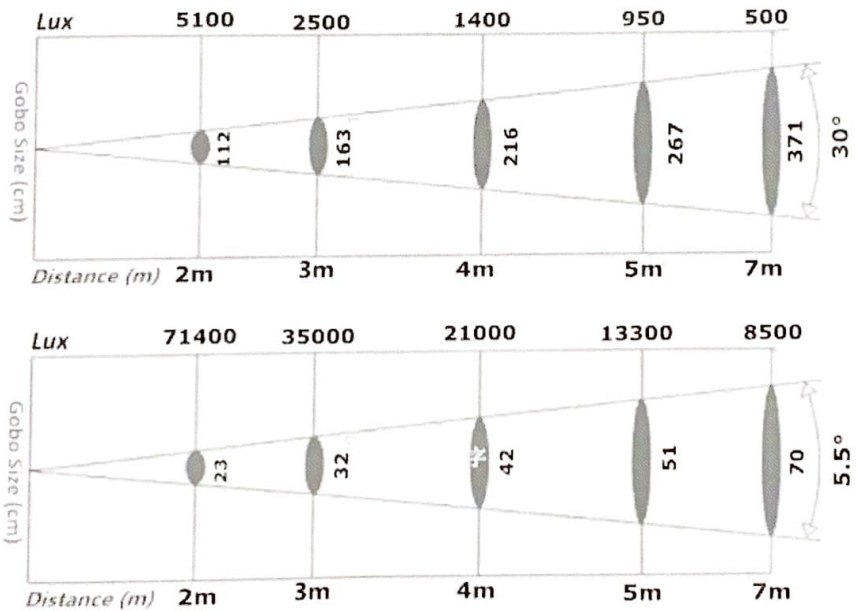
Power Consumption: 350W

Dimensions: 320(L)\*220(W)\*480(H)mm

Packing size: 365(L)\*280(W)\*600(H)mm

Net Weight: 13.50kg, Gross Weight: 16.50kg

## 4 PHOTOMETRIC DATA



## **5** OPERATION INSTRUCTIONS

- The moving head is for spot effect for on-site decoration purpose.
- Don't turn on the fixture if it's been through severe temperature difference like after transportation because it might damage the light due to the environment changes. So make sure to operate the fixture until it is in normal temperature.
- This light should be keep away from strong shaking during any transportation or movement.
- Don't pull up the light by only the head, or it might cause damages to the mechanical parts.
- Don't expose the fixture in overheat, moisture or environment with too much dust when installing it. And don't lay any power cables on the floor. Or it might cause electronics shock to the people.
- Make sure the installation place is in good safety condition before installing the fixture.
- Make sure to put the safety chain and check whether the screws are screwed properly when installing the fixture.
- Make sure the lens are in good condition. It's recommended to replace the units if there are any damages or severe scratch.
- Make sure the fixture is operated by qualified personnel who know the fixture before using.
- Keep the original packages if any second shipments is needed.
- Don't try to change the fixtures without any instruction by the manufacturer or the appointed repairing agencies.
- It is not in warranty range if there are any malfunctions from not following the user manual to operate or any illegal operation, like shock short circuit, electronic shock, lamp broke, etc.

## 6 INSTALLATIONS

**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 materials (decoration etc.).

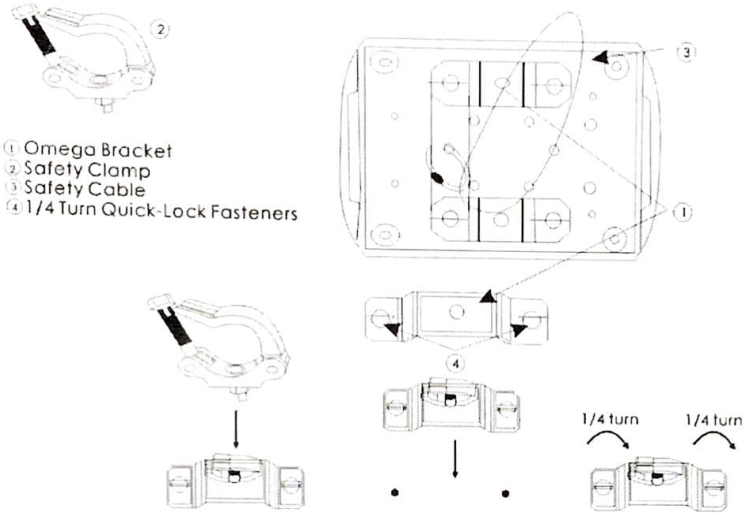
Always use and install the supplied safety cable as a safety measure to prevent accidental damage and/or injury in the event the clamp fails.

**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.

**Clamp Mounting:** The LED moving head provides a unique mounting bracket assembly that integrates the bottom of the base, 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 on of the safety cable rigging point integrated in the base assembly.



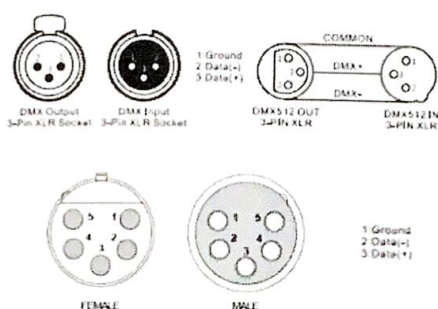
Regardless of the rigging option you choose for your LED moving head, always be sure to secure your fixture with a safety cable. The fixture provides a built-in rigging point for a safety cable on the hanging bracket as illustrated above. Be sure to only use the designated rigging point for the safety cable and never secure a safety cable to a carrying handle.



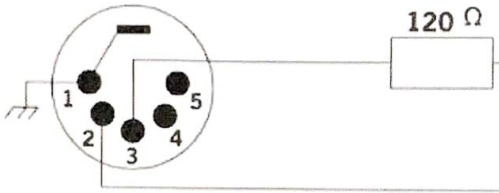
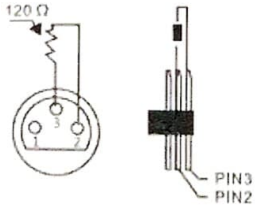
## 7

## DMX-512 CONTROL CONNECTIONS

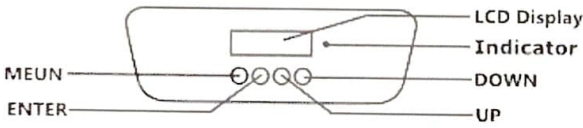
Connect the provided XLR cable to the female 3-pin XLR & 5-pin XLR output of your controller and the other side to the male 3-pin XLR & 5-pin XLR input of the moving head. You can chain multiple moving head together through serial linking. The cable needed should be two core, screened cable with XLR input and output connectors. Please refer to the diagram below.



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  $\Omega$  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.

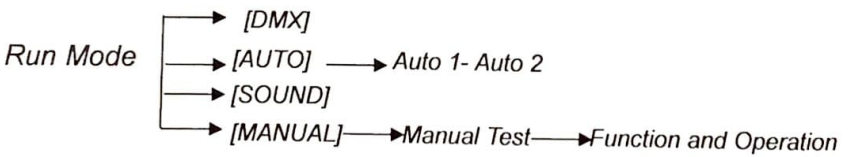


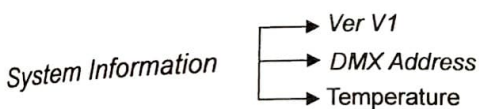
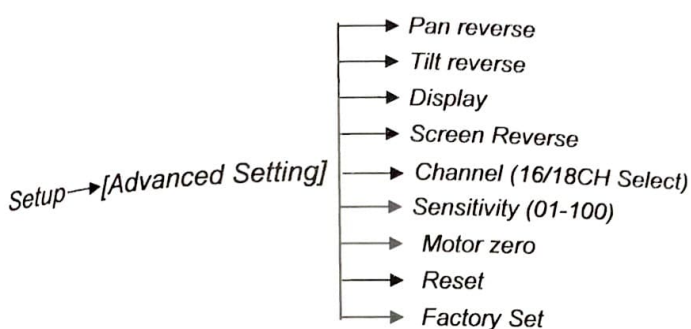
## 8 MENU OPERATIONS



### MENU

Address Set → [Set Address Numbers]





## 9 DMX CHANNELS

### 18/16 channel mode sheet

18CH	16CH	Function	Channel Value	Description
CH1	CH1	Pan	0-255	0-540°
CH2		Pan fine	0-255	Pan Fine
CH3	CH2	Tilt	0-255	0-270°
CH4		Tilt Fine	0-255	Tilt Fine
CH5	CH3	X, Y speed	0-255	From fast to slow
CH6	CH4	LED Dimmer	0-255	From dark to bright
CH7	CH5	LED Strobe	0-7	Turn on
			8-250	Strobe from slow to fast

			251-255	Turn on
CH8	CH6	7 color + White	0-15	White Lighting
			16-31	Color 1
			32-47	Color 2
			48-63	Color 3
			64-79	Color 4
			80-95	Color 5
			96-111	Color 6
			112-127	Color 7
			128-191	CW from slow to fast
			192-255	CCW from slow to fast
CH9	CH7	Color effect	0-10	No function
			11-209	Color fine tuning
			210-255	Color shake from fast to slow
CH10	CH8	Static gobo wheel	0-6	open
			7-13	Gobo1
			14-20	Gobo2
			21-27	Gobo3
			28-34	Gobo4
			35-41	Gobo5
			42-48	Gobo6
			49-55	Gobo7
			56-63	Gobo 8
			64-70	Gobo 8 shake
			71-77	Gobo 7 shake
			78-84	Gobo 6 shake
			85-91	Gobo 5 shake
92-98	Gobo 4 shake			

			99-105	Gobo 3 shake
			106-112	Gobo 2 shake
			113-119	Gobo 1 shake
			120-127	open
			128-191	Gobo rotate CW from slow to fast
			192-255	Gobo rotate CCW from slow to fast
CH11	CH9	7 rotation gobos +White	0-15	open
			16-31	Gobo1
			32-47	Gobo2
			48-63	Gobo3
			64-79	Gobo4
			80-95	Gobo5
			96-111	Gobo6
			112-127	Gobo7
			128-191	Gobo Rotate CW from slow to fast
			192-255	Gobo Rotate CCW from slow to fast
CH12	CH10	Gobo Rotation	0-15	open
			16-95	Gobo Fine 0-250
			96-135	Gobo Rotating 0-90
			136-155	Gobo Rotating 0-250
			156-175	Gobo Rotating 0-360
			176-215	Gobo self-rotating CW from slow to fast
			216-255	Gobo self-rotating CCW rotating from slow to fast
CH13	CH11	Focus	0-255	Gobo hazy to clear
CH14	CH12	ZOOM	0-255	Angle from narrow to wider
CH15		Prism	0-63	Open

	CH13		64-255	Prism In
CH16	CH14	Prism Rotation	0-15	open
			16-95	Prism Fine 0-250
			96-135	Prism Rotating 0-90
			136-155	Prism Rotating 0-250
			156-175	Prism Rotating 0-360
			176-215	Prism self-rotating CW from slow to fast
			216-255	Prism self-rotating CCW rotating from slow to fast
CH17	CH15	Frost	0-63	open
			64-255	Frost effect
CH18	CH16	self-setting Program	0-7	No action
			8-131	Auto mode
			132-249	Soud mode
			250-253	Reset
			254-255	No action

## **10** MAINTENANCE AND CLEANING

The following points have to be considered during the inspection:

- 1) All screws 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 the housing, color lenses, fixations and installation  
spots (ceiling, suspension, trussing).
- 3) Mechanically moved parts must not show any traces of wearing and must not rotate