# CE

## LED BEAM Moving Head

4in1

## MH-B7012



**User Manual** KEEP THIS MANUAL FOR FUTURE NEEDS

#### 1. Unpacking

Thank you for choosing LEDBEAM 120F. 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.

LEDBEAM 120F is made of a new type of high temperature strength of engineering plastics 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.

4-IN-1 LEDs(RGBW) 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:

Moving HeadOne	Signal CableOne
Hanging BracketOne	Power CableOne
Safety ChainOne	User ManualOne

#### **10. Specifications**

Input Voltage: AC90-260V 50/60Hz LED Quantities: 7PCS OSRAM 12W 4-IN-1 LEDs (R, G, B, W) Control Signal: DMX512, master-slave and sound activated or auto operation Control Channel: 15 DMX channels Power Consumption: 120W Dimensions: 152(D)\*265(W)\*310(H)mm Packing Dimensions:260(D)\*320(W)\*335(H)mm Net Weight: 4.9kg Gross Weight: 7kg **11. 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 with unbalances. 4. The electric power supply cables must not show any damage, material fatigue 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.



#### CAUTION!

Disconnect from mains before starting maintenance operation.

In order to make the lights in good condition and extend the life time, we suggest a regular cleaning to the lights. 1) Clean the inside and outside lens each week to avoid the weakness of the lights due to accumulation of dust. 2) Clean the fan each week. 3) A detailed electric check by approved electrical engineer each three month, make sure that the circuit contacts are in good condition, prevent the poor contact of circuit from overheating.

We recommend a frequent cleaning of the device. Please use a moist, lint- free cloth. Never use alcohol or solvents. There are no serviceable parts inside the device. Please refer to the instructions under "Installation instructions". Should you need any spare parts, please order genuine parts from your local dealer.

#### 9. Key Features

7PCS OSRSM 12W 4-IN-1 LEDs (R,G,B,W)

60,000 hours life span for LEDs and low power consumption

Intelligent temperature sensor for LEDs(over heat protection)

High efficiency 8 degree optic lens

Color range with 16.7 millions additive RGBW colors

High light output as 840LUX@ 7M at full

0-100% smooth linear dimmer with flicker free

20t/s strobe effect with variable speed

Pre-programmed random strobe and pulse effects

15CH DMX channels

Built-in programs with macro effects

DMX512, master-slave and sound activated controllable or auto operation

High definition blue TFT LCD display

Quiet, smooth and fast PAN/TILT movement

Low noise and efficient FAN cooling system

540° PAN and 250° TILT movement

Scan position memory, auto reposition after unexpected movement

Compact size with only 4.9KG body and 310mm in height

IEC power connector

45 max ambient temperature

IP20 protection rating

3-Pin XLR DMX input/output

#### 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.

### Important:

Damages caused by the disregard of this user manual are not subject to warranty. The deale 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 may arise. This is a normal process and does not

necessarily 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 or his service agent or a similar gualified person in order to avoid a hazard.

#### 3. Operation Instructions

-The moving head is for wash 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 electronic 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 knows the fixture before using. -Keep the original packages if any second shipment 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.

#### 4. Mounting and Installation

Cautions: For added protection mount the fixtures in areas outside walking paths, seating areas, or in areas were 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.

#### 8. Photometric Data

Photometric Beam Angle Data 8"Beam Angle LUX × 0.0929=FC R 348 / 3750 45/480 17/180 9/90 G 466 / 5020 61/660 23/285 13/140 8 125 / 1350 44/470 22/240 1098/11820 w 1004/10810 122 / 1310 43 / 460 21/283 2731/29400 333 / 3580 60/684 (FC/LUX) RGBW 116/1250 8° Om (Oft) 1m (3.3ft) 7m (23.0ft) 3m (9.8ft) 5m (16.4ft)

#### 7. DMX Channels

Chanel	Function	Values	Description
1	Pan	0-255	PAN Movement
2	Pan Fine	0-255	Fine control of Pan movement
3	Tilt	0-255	Tilt Movement
4	Tilt Fine	0-255	Fine control of Tilt movement
5	Dimmer	0-255	0-100% Linear dimmer from dark to bright
6	Strobe	0-255	Strobe effect from slow to fast
7	Red	0-255	0-100% red dimmer from dark to bright
8	Green	0-255	0-100% green dimmer from dark to bright
9	Blue	0-255	0-100% blue dimmer from dark to bright
10	White	0-255	0-100% white dimmer from dark to bright
11	Colors	0-255	Colors changing effect
12	Macros	0-010	CH1-CH11 activated
		011-120	Colors jumping
		121-180	Colors fading
		181-244	Colors mixing
		245-255	Sound control
13	Speed	0-255	Speed of macros
14	Speed	0-255	Speed control of PAN/TILT (fast to slow)
15	Reset	0-244	CH1-CH14 activated
		245-255	Reset after 3 seconds

Never stand directly below the device when mounting, removing, or servicing the fixture from a 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 LEDBEAM 120F 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 on of the safety cable rigging point integrated in the base assembly



Regardless of the rigging option you choose for your LEDBEAM 120F, 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.

#### 5. DMX-512 control connections

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  $\Omega$  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.



6. Menu Operations

