

# MOVING HEAD LIGHT

**100W LED**

## USER MANUAL



**Congratulations on purchasing this 100W LED moving head**  
**Thank you for extending your trust in our technology!**

For reasons of safety and approval(CE) the personal reconstruction and/or modification of this product is prohibited. Please observe that damage caused by modifications performed manually to this device is not covered by the warranty.

This product leaves our works in a perfect condition. Please observe all notes in these operating instructions to warrant this condition and the safe operation of the product!

Any damage caused as a result of the non-compliance with these operating instructions leads to the expiration of any warranty claim. The manufacturer does not accept liability for any damage to property or for personal injury resulting from the improper handling of the product, or non-observance of the operating instructions.

Store these operating instructions in a safe place for later reference and pass them to any new holder when selling or lending or leaving this device in the hands of any other party.

### **Application According to Purpose**

This product is a lighting effect which creates special light effects with one lamp. To generate these effects, the product must be connected to mains and a DMX-512 compatible controller.

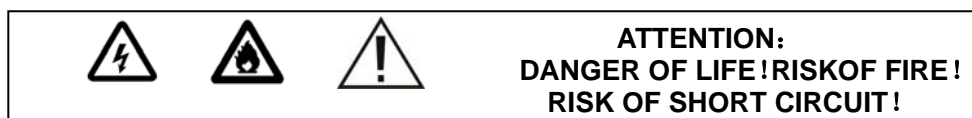
This product is designed for AC100~230V/50~60Hz operation and exclusively for indoor use.

If used for any purpose other than described in these operating instructions, the device may suffer damage and the warranty expires. Also, any other use is linked with risks such as short circuits, fire, electrical shock, etc.

The manufacturer's serial number must never be removed as otherwise the warranty expires.

### **Notes on safety**

#### **1. Before Operation**



Prior to the initial operation of this product, please do the followings

- Read these operating instructions with great care;
- Study and observe all instructions carefully;
- Ensure that everybody and anybody involved in the installation, operation, transport and storage of this product is suitably qualified;
- Verify whether any visible damage was caused during transport. If the power cord, housing or the light are damaged, do not operate the device; contact your specialized dealer immediately.

#### **2. Supply Voltage, Mains Cord and Connection to Mains**



The handling of supply voltage, mains cords and connections to mains calls for particular care considering the risk from a life-threatening electric shock, the risk of fire and the risk of short circuits please observe the following notes in particular:

Products operating on supply voltage should be kept out of the reach of children. Therefore ensure the permanent supervision if children are in the immediate vicinity of the product!

For commercial facilities the regulations on the prevention of accidents of the respective trade association must be observed. The operation of this equipment at schools, training facilities, and hobby yourself-help workshops must be supervised responsibly by trained personnel.

Check the product regularly for any damage to the mains cord! Should you discover any damage to the mains cord, do not operate or disconnect this product! Secure the product against accidental operation and contact your specialized dealer.

Always separate the product from mains by holding the mains plug by the handling surface. Never disconnect by holding the line cord! Be sure to connect the product exclusively to AC100~230V/50~60Hz!

Always be sure during installation, operation, transport and when storing the product that the mains cord is not exposed to possible mechanical damage, or damage caused by humidity, fluid, heat or cold!

The product's cable entry must not be exposed to stress from pull! Create the mains connection once the product has been installed only. Always connect the mains plug last!

The product must only be connected to a proper outlet of the public supply grid. Connect the mains cord to suitable outlets only! Use extension cords in compliance with specifications only! Do not allow the mains cord to come into contact with other cords!

Ensure during installation, operation, transport and storage that none of the cables are freely exposed! Never touch the mains cord, mains plug and outlet with wet or damp hands!

When not using the product, and prior to cleaning always disconnect the product from mains! To do so, hold the

mains plug by the handling surface and never pull the mains cord!

Never connect the device to dimmer packer!

### 3. Housing



Always ensure during installation, operation, transport and when storing the product that no shocks or other forces impact the housing!

The housing must not touch onto any other devices or objects during operation!

Easily flammable materials ,e.g. decoration material and other surfaces and objects, must maintain a minimum distance of 3m to the housing !Walls must maintain a minimum distance of 50cm to the housing! The device must be installed on a fireproof surface only (no carpet)! Always ensure a proper circulation of air.

Do not touch the housing during operation it will heat up .The housing is safe to touch approx .5 minutes following the end of operation!

The device must never be carried via the projector anns. Use the carrying handles only !

Fluids must not enter the housing as this could reduce the protective insulation and may trigger short circuits which may lead to fatal electric shocks !If fluid have entered, disconnect the mains plug immediately and secure the product against unintentional operation and contact yours specialized dealer! Damage caused as a result of fluids entering the housing is exempt from warranty .

No metal parts or other items must enter the housing as this may reduce the protective insulation or trigger short circuits which may lead to fatal electric shocks !If metal parts or other items have entered ,disconnect the mains plug immediately, secure the product against unintentional operation and contact your specialized dealer! Damage caused by metal parts or other items in the housing is exempt from warranty.

### 4. Operating Environment



The product must be operated and stored in a dry environment only !Splash water ,rain, humidity, fog may reduce the protective insulation which may lead to fatal electric shocks! The limit value for relative humidity is 50% at 45°C.A minimum distance of 1.5m to a fog machine must be observed ;fog saturation in the room must not reduce the visibility to below 10m .

The product must be operated at a temperature range of between -5°C and 45°C only. Protect the product against direct exposure to super light or other heat, such as from radiators! If the product is taken from a cold environment into a warm environment it must only be taken into operation once it has reached ambient temperature, since the condensation created by the difference in temperature may destroy the device!

Protect the product against dust! Dust may reduce the protective insulation, which may cause fatal electric shocks!

The product must be operated at altitudes ranging between 20m below and 3000m above sea level only!

The product must not be operated during thunder storms; risk of destruction from surge voltages!

The product must be operated at a minimum distance of 0.5m to lit objects only!

### 5. Installation



This product can be operated suspended or as stand-alone system.

Should your lighting effect show any signs of damage, do not install the device! In this case, have your lighting effect repaired by your specialized dealer. The manufacturer does not accept responsibility or liability for damage to property or personal injury resulting from an improperly installation!

As a stand-alone system the device must be installed vertically on an absolute planar, firm, fireproof, shock- and vibration-free surface. The installation of this lighting effect must be carried out by trained and professional staff! The installation of this lighting must only be carried out with the appropriate materials!

The suspended installation of this lighting effect necessitates a suitable suspension system! The lighting effect must never be fixed swinging freely in the room. No individuals should linger underneath the lighting effect during suspended installation!

It is a must to install this device with a second independent fixture. Such second fixture must guarantee in the event of failure of the main fixture that no assembly parts will fall down. Use the fixture on the undersurface only.

The light effect unit must be attached via two certified hooks and omega bracket to a tie-bar system. Use the screw threads on the undersurface only.

It must be ensured that an expert inspects the mechanical and safety-relevant installation prior to the initial operation and following major modifications, prior to the renewed operation. It must be ensured that an expert inspects the mechanical and safety-relevant installation at least once a year. It must be ensured that an expert inspects the mechanical installation and the installation of relevance to safety within the framework of an acceptance test at least every four years.

The installation fixture must be as such that it can withstand for a period of 60minutes 10 times the load capacity without harmful deformation.

It is prohibited for any individual to unnecessarily stay or pass beneath the installation during any type of assembly work.

The light effect unit must be secured by a safety arrester cable if fly-mounted. The cable must withstand 12 times the weigh of the light effect unit Use arrester cables equipped with quick closing links. The dropping distance must not exceed 20 cm. Defect arrester cables or arrester cables that have already been exposed to stress must not be used.

## 6. Operation



**ATTENTION:  
RISK OF SHORT CIRCUIT!**

### Controls

Link all DMX devices with a DMX-512 controller by using a standard,3-pin DMX cable. Connect the output of the first device with the input of the second device and the output of the second device with the input of the third device and so on.

Connect the mains plug to an outlet.

Operating the product for the first time may generate smoke and odour, this is not a defect. Avoid disconnecting the product repeatedly and quickly from/with mains! Always wait 15 minutes prior to the next disconnection!

The device starts not until a self-testing and starting time. If the moving head is ready to start, push and roll the function wheel. The LCD display shows the options, as below:

## 7. Lamps



**ATTENTION:  
DANGER OF LIFE! RISK OF FIRE!  
RISK OF SHORT CIRCUIT!**

During operation, the lamps will reach temperatures of up to 600°C. Touching the lamps may cause serious burns! Objects coming into contact with the lamps during and shortly after operation may catch fire!

Disconnect the product from mains prior to installing or before changing a lamp! Allow a lamp to cool for approx. 15minutes before exchanging it!

Never touch a lamp with bare hands! If damaged or deformed, a lamp must be exchanged!

When exchanging the lamp be sure to use suitable lamps only. Lamps with greater performance generate excessive heat for the product; risk of fire! Damage resulting from the use of an unsuitable lamp is exempt from warranty!

Never connect the lighting effect to the mains prior with opened housing.

## 8. Fuse



**ATTENTION:  
DANGER OF LIFE! RISK OF FIRE!  
RISK OF SHORT CIRCUIT!**

Disconnect the product from the mains prior before changing a fuse.

Only replace the fuse by a fuse of same type and rating! An incorrect fuse could damage or destruct the lighting effect.

Replace a fuse by levering the fuse holder cover with an appropriate screwdriver. Remove the old fuse and place the fuse inside the holder. Replace the fuse holder and insert it.

Never connect the lighting effect to the mains prior with opened housing.

## 9. Cleaning



**ATTENTION:  
DANGER OF LIFE! RISK OF FIRE!  
RISK OF SHORT CIRCUIT!**

The product must be freed regularly from dust, other deposits and contamination as this may reduce the protective insulation, which may lead to a fatal electric shock!

Before cleaning, always disconnect the product from mains!

This product should be cleaned with a moist cloth only; never use aggressive cleaning agents, solvents or benzine for cleaning.

Ensure that the product is completely dry before operating it again after cleaning!



**ATTENTION:  
FRAGILE!**

To avoid damage caused during transport, wrap the product in its original packaging only and handle it with great care during transport!

## 10. Menu settings

1. Version: brand, model, version, number, lamp use time
2. Address: Set DMX address
3. Pan reverse: On (reversed) Off (normal)
4. Tilt reverse: On (reversed) Off (normal)
5. Pan/Tilt speed: from 01-16, to set the speed for Pan/Tilt movement
6. Pan/Tilt mode: 8bit, 16bit, when set as 8bit, the channels Pan fine and Tilt fine will be disabled, the fixture has 15 channels now.
7. Lamp mode: On (lamp on); Off (lamp off)
8. Reset: lighting reset; time restore (can be set password afterwards to prevent unwanted modifying); Motor restore (can be set password afterwards to prevent unwanted modifying); exit.
9. Channel data: 01:Shutter; 02:Dimmer; 03:Lamp/reset; 04:Pan/tilt speed; 05:Pan; 06:Tilt; 07:Pan fine; 08:Tilt fine; 09:Color wheel; 10: gobo 1; 11:gobo 1 rotation; 12: gobo 2; 13:gobo 2 rotation; 14:Prism/macros; 15:Prism rotation; 16: Zoom; 17:Focus; 18:Focus fine; 19:Exit.

When connected with a DMX controller, the channel value can not be changed, only show channel DMX value. While there is no DMX controller, you can control the fixture by this item, select some channel, roll the encoder wheel to adjust DMX value,

10. Display: language (English Chinese or some other language according to your requirement ); Backlight time: open(always on ), 30 seconds; Back-brightness: 1-4, from dark to bright; exit.
11. Motor adjust: 01:Pan; 02:Tilt; 03:Color; 04: gobo 1; 05:Gobo 1 rotation; 06: gobo 2; 07:Gobo 2 rotation; 08:Prism; 09:Prism rotation; 10: Zoom; 11:Focus; 12:Motor zero(can be set password afterwards to prevent unwanted modifying); 13:Save (can be set password afterwards to prevent unwanted modifying); 14: Exit.
12. Control: Control select (DMX, Auto, Music, Slave, these function have not been finished now, they would be finished afterward according to your suggestion); auto run program (select the program you want to run in certain mode); auto run speed (set running speed for program).
13. Help info: include copyright, company information, etc.
14. Exit

## 11. DMX PROTOCOL

Channel		Function	DMX value	Feature	Note
16 Bit	8 Bit				
1	1	Strobe	000-009	Full off	
			010-049	Full on	
			050-089	Strobe from slow to fast	
			090-129	Pulse effect opening, increasing	
			130-169	Pulse effect closing, increasing	
			170-209	Random strobe with decreasing speed	
			210-255	Full on	
2		Dimmer	000-255	Dimming from 0-100%	
3	3		000-009	No function	
			010-019	Shutter off when pan and tilt movement	
			020-029	Shutter off when changing color	
			030-039	Shutter off when changing gobo	
			040-049	No function	
			050-059	Shutter off when pan and tilt movement and color changing	
			060-069	Shutter off when pan and tilt movement and gobo changing	

		Reset /Shutter off	070-079	Shutter off when pan and tilt movement changing	
			080-089	Shutter off when changing color or gobo	
			090-099	Shutter off when pan and tilt movement and color and gobo changing	
			100-109	Shutter off when pan and tilt movement and gobo changing	
			110-119	Shutter off when pan and tilt movement and color and gobo changing	
			120-239	No function	
			240-249	Reset after 3s	
			250-255	No function	
4	4	Pan/tilt speed	000-255	Pan/Tilt speed adjustment from fast to slow	
5	5	Pan	000-255	0-540° pan movement	
6	6	Tilt	000-255	0-280° tilt movement	
7		Pan fine	000-255	16 bit pan movement	
8		Tilt fine	000-255	16 bit tilt movement	
9	7	Color wheel	000-009	White	
			010-019	Color1	
			020-029	Color2	
			030-039	Color3	
			040-049	Color4	
			050-059	Color5	
			060-069	Color6	
			070-079	Color7	
			080-199	1*7color mixing	
			200-229	Color wheel CCW rotation from slow to fast, Rainbow effect	
			230-255	Color wheel CW rotation from slow to fast, Rainbow effect	
10	8	Gobo wheel 1	000-009	White	
			010-019	Gobo1	
			020-029	Gobo2	
			030-039	Gobo3	
			040-049	Gobo4	
			050-059	Gobo5	
			060-069	Gobo6	
			070-079	Gobo7	
			080-099	Gobo7 shaking from slow to fast	
			100-119	Gobo6 shaking from slow to fast	
			120-139	Gobo5 shaking from slow to fast	
			140-159	Gobo4 shaking from slow to fast	
			160-179	Gobo3 shaking from slow to fast	
			180-199	Gobo2 shaking from slow to fast	
			200-219	Gobo1 shaking from slow to fast	
			220-239	White shaking from slow to fast	
			240-255	Gobo wheel CCW flowing with Increasing speed	
11	9	Gobo wheel 2 rotation	000-169	Forwards gobo rotation with your pushing of fader	
			170-199	Gobo shaking, increasing in amplitude And speed	
			200-229	Backwards gobo rotation with decreasing speed	
			230-255	Forwards gobo rotation with decreasing speed	
			179-199	White shaking from slow to fast	
			200-229	Gobo wheel CCW flowing with Increasing speed	
			230-255	Gobo wheel CW flowing with Increasing speed	
12	10	Gobo wheel 2	000-009	White	
			010-019	Gobo1	
			020-029	Gobo2	
			030-039	Gobo3	
			040-049	Gobo4	
			050-059	Gobo5	
			060-069	Gobo6	
			070-089	Gobo6 shaking from slow to fast	
			090-109	Gobo5 shaking from slow to fast	
			110-129	Gobo4 shaking from slow to fast	
			130-149	Gobo3 shaking from slow to fast	
			150-169	Gobo2 shaking from slow to fast	
			170-189	Gobo1 shaking from slow to fast	
			190-209	White shaking from slow to fast	
			210-229	Gobo wheel CCW flowing with Increasing speed	
			230-255	Gobo wheel CW flowing with Increasing speed	
13	11	Gobo wheel 2	000-169	Forwards gobo rotation with your pushing of fader	
			170-199	Gobo shaking, increasing in amplitude And speed	

		rotation	200-229	Backwards gobo rotation with decreasing speed	
			230-255	Forwards gobo rotation with decreasing speed	
			179-199	White shaking from slow to fast	
			200-229	Gobo wheel CCW flowing with Increasing speed	
			230-255	Gobo wheel CW flowing with Increasing speed	
14	12	Prism and gobo Macros effect	000-009	No function	
			010-079	Prism	
			080-255	Prism and gobo macros effect	
15	13	Prism rotation And amplitude adjustment	000-169	Prism rotation with your pushing of fader	
			170-199	Prism shaking, increasing in amplitude And speed	
			200-229	Backwards prism rotation with decreasing speed	
			230-255	Forwards prism rotation with decreasing speed	
16	14	Zoom	000-049	No function	
			050-255	Zoom	
17	15	Focus	000-255	Focus adjustment from far to near	
18		Focus Fine	000-255	Focus fine adjustment from far to near	

## 12. Technical Information

Voltage:	AV100~240V/50~60Hz	Net Weight:	15Kg
Lamp:	13.1V/7.5A/100~120W LED(America)	Gross Weight:	17Kg
Total Power:	190W	Size(Max):	380 x 320 x 630mm
Fuse:	1.5A/250V	Packing Size:	490 x 450 x 700mm
DMX Channel:	18/15 DMX512 channel	Step Motor:	11 PCS

**Please note: All Information is subject to change without prior notice.**