

Beam 230W Hybrid

USER MANUAL



FOS TECHNOLOGIES



Congratulations on purchasing this 230W moving Beam Light
Thank you for extending your trust in our technology!

Voltage :110V/240V AC, 50/60Hz
Power Consumption:260W
Lamp:7R 230W Osram (DMX on/off)
Lumen output:120000LM/10meter
Color Temperature:8000K
Lens:3-layer optic glass lens

Prism:8 Prism rotation

Gobo:Gobo wheel with 15 + 1gobos

Colors:Color wheel with 13 +1colors,single rotation rainbow effect

DMX Channel:20CH

Frost function

Control:Master-slave mode

DMX Mode:Auto mode

Head movement:Pan 540° (16bit) Electric correction

Tilt 270° (16bit) Electric correction
with auto-correction function

Focus :Double automatic focusing

Dimmer:Independent dimmer channel, 0-100% linear dimmer

Strobe:Independent strobe channel, 1-13times/s, speed adjustable

LAMP DMX ON/OFF: LAMP DMX ON/OFF, ignited by inverter, protect and lengthen the lifetime of the bulb

Other functions

Fixture and lamp usage time display

Highly Positioning precision

Adjustable fan speed

Built-in analyzer for easy fault finding, error messages

Input signal isolating protection

Body Size: 47*33*27cm

Net Weight: 11Kg

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 hte 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 specila light effects with one lamp.Togenerate these effects,the product must be connected to mains and a DMX-512 compatible controller.

This product is designed for AC110~240V/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 hobbyorself-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 de-alert.

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 AC110~127V/59~60Hz!

Always insure 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,fluids,heat or cold!

The products 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 !

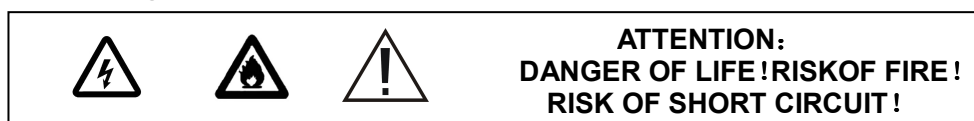
The product must only be connected to a proper outlet of the public supply grid .Connect the mains cord to suitable outlets only ! Use extensions cords in compliance with specifications only! Do not allow the mains cord to come into contact with other cords!

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 proform 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 insure 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)1 Always ensure a proper circulation of air.

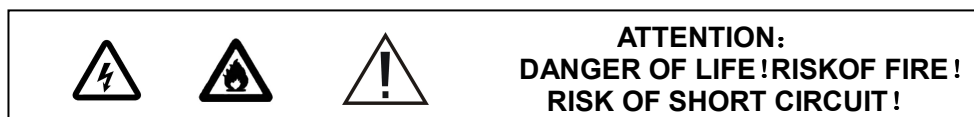
Do not touch the housing during operation it will heat up .The housing is safe to touch approx .5 minutes following the end of operation!

The device must never be carried via the projector anns.Use the caring 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 electro shocks !If fluids have entered, disconnect the mains plug immediately and secure the product against unintentional operation and contact yours specialized dealer! Damage caused as a re-suit 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 warrantably.

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°.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° and 45° only.Protect the product against direct exposure to sunlight 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!

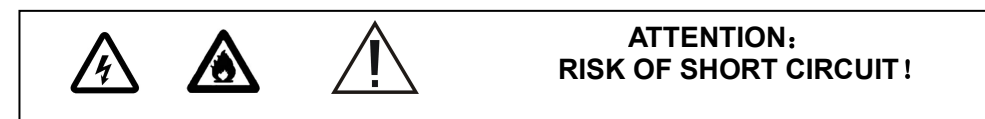
Protect the product against dust!Dust may reduce the protective insulation,which may cause fatal electric shocks!

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 1.5m 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.

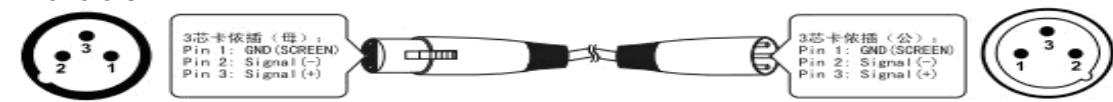
It is prohibited for any individual to unnecessarily stay or pass beneath the installation during any type of assembly work

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



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 dis/connecting the product repeatedly and quickly from/with mains!Always wait 15 minutes prior to the next dis/connection!

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



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. 15 minutes 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



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



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 benzene for cleaning.

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



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:

Main menu

01. Version:

brand, model, version, number, lamp use time

02. Address: [001~512]

***Set DMX channel address.**

03. Pan reverse: [On/Off]

***On (reversed) Off (normal).**

04. Tilt reverse: [On/Off]

***On (reversed) Off (normal).**

05. Pan/Tilt speed: [01-16]

***From 01-16, to set the speed for Pan/Tilt movement.**

06. Pan/Tilt mode: [8bit/16bit]

***8bit, 16bit, when set as 8bit, the channels Pan fine and Tilt fine will be disabled, the fixture has 14 channels now.**

07. Lamp mode: [On/Off]

***On (lamp on); Off (lamp off).**

08. Reset:

01. Lighting reset:

02. Lamp time restore: [password]

***Can be set password afterwards to prevent unwanted modifying).**

03. Motor Zero: [password]

***Restore (can be set password afterwards to prevent unwanted modifying).**

04. Exit.

09. Channel data:

01: Shutter [000~255]

02: Dimmer [000~255]

03: Lamp/reset [000~255]

04: Pan/tilt speed [000~255]

05: Pan [000~255]

06: Tilt [000~255]

07: Pan fine [000~255]

08: Tilt fine [000~255]

09: Color wheel [000~255]

10: Gobo wheel [000~255]

11: Gobo effect [000~255]

12: Prism/macros [000~255]

13: Prism rotation [000~255]

14: Focus [000~255]

15: Focus fine [000~255]

16: Frost [000~255]

17 Exit

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

09. Display:

1. Language:

***English Chinese or some other language according to your requirement.**

2. Backlight time:

***Open(always on), 30 seconds.**

3. Back-brightness:

***1-4, from dark to bright.**

4. Exit:

10. Motor adjust:

01: Strobe [-31 ~ +31]

02: Pan [-31 ~ +31]

03: Tilt [-31 ~ +31]

04: Color [-31 ~ +31]

05: Gobo [-31 ~ +31]

06: Prism [-31 ~ +31]

07: Prism rotation [-31 ~ +31]

08: Focus [-31 ~ +31]

09: Frost [-31 ~ +31]

10: Motor zero: [password]

***Can be set password afterwards to prevent unwanted modifying**

11: Save [password]

***Can be set password afterwards to prevent unwanted modifying**

12: Exit.

11. Control:

01.Control select: [DMX, Auto, Music, Slave]

***These function have not been finished now, they would be finished**

afterward according to your suggestion

02. Auto run program: [1~9]

***Select the program you want to run in certain mode**

03. Auto run speed [1~16]

***Set running speed for program**

04: Exit.

13. Help info:

***Include copyright, company information, etc.**

14. Exit

11. DMX PROTOCOL:

DMX Chart

No.	Channel	DMX value	Description
1	Color Wheel	0	WHITE
		5	WHITE + RED
		9	RED
		13	RED + ORANGE
		18	ORANGE
		22	ORANGE + AQUAMARINE
		26	AQUAMARINE
		30	AQUAMARINE + GREEN
		35	GREEN
		39	GREEN+LIGHT GREEN
		43	LIGHT GREEN
		47	LIGHT GREEN +LAVENDER
		52	LAVENDER
		56	LAVENDER+PINK
		60	PINK
		64	PINK+YELLOW
		69	YELLOW
		73	YELLOW+MAGENTA
		77	MAGENTA
		82	MAGENTA+CYAN
		86	CYAN
		90	CYAN+CTO 260
		94	CTO 260
		99	CTO260+CTO 190
		103	CTO 190
		107	CTO 190+CTB 8000
		111	CTB8000
		116	CTB8000+BLUE
		120	BLUE
		124	BLUE+WHITE
		128	SLOW ROTATION(0.2rpm)
2	Flash	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
3	Dimmer	0-255	Dark → bright
4	Gobo	0-3	WHITE
		4-7	Gobo1
		8-11	Gobo2
		12-15	Gobo3
		16-19	Gobo4
		20-23	Gobo5
		24-27	Gobo6
		28-31	Gobo7
		32-35	Gobo8
		36-39	Gobo9
		40-43	Gobo10
		44-47	Gobo11
		48-51	Gobo12
		52-55	Gobo13
		56-59	Gobo14

		60-63 64-67 68-71 72-113 114-117 118-159 160-166 167-172 173-179 180-185 186-191 192-198 199-204 205-211 212-217 218-223 224-230 231-236 237-243 244-249 250-255	Gobo15 Gobo16 Gobo17 Gobo rotation, forward Stop Gobo rotation, backward Gobo2 Shake (slow to quick) Gobo3 Shake(slow to quick) Gobo4 Shake(slow to quick) Gobo5 Shake(slow to quick) Gobo6 Shake(slow to quick) Gobo7 Shake(slow to quick) Gobo8 Shake(slow to quick) Gobo9 Shake(slow to quick) Gobo10Shake(slow to quick) Gobo11 Shake(slow to quick) Gobo12 Shake(slow to quick) Gobo13 Shake(slow to quick) Gobo14 Shake(slow to quick) Gobo15 Shake(slow to quick) Gobo16 Shake(slow to quick)
5	Prism	0-127 128-255	No prism Prism
6	Prism rotation	0 21 42 63 84 105 127 128-190 191-192 193-255	0° 90° 180° 270° 360° 450° 540° Prism rotation, forward Stop Prism rotation, backward
7	Effect	0-255	Blank
8	Frost		
9	Focus	0-255	
10	Pan	0-255	
11	Pan fine	0-255	
12	Tilt	0-255	
13	Tilt fine	0-255	
14	Function	0-11 12-24 25-37 38-50 51-62 63-255	UNUSED RANGE PAN/TILT FUNCTION.(FAST) NORMAL CONVENTIONAL LINEAR UNUSED RANGE
15	RESET	0-25 26-76 77-127 128-255	NO EFFECTS RESET PAN TILT RESET CICOMPLETE RESET
16	Lamp	0-25 26-100 101-255	No function Lamp Off Lamp On
17 18 19 20.	Pan/Tilt speed Colour time Beam time Gobo time	0-255	Pan - Tilt - (Pan fine - Tilt fine) Colour wheel Dimmer - Frost – Prism Static Gobo