USER'S MANUAL

230W Beam Moving Head Lighting

⚠ **CAUTION!** Keep this device away from rain and moisture!

FOR YOUR OWN SAFETY, PLEASE READ THIS USER MANUAL CAREFULLY

BEFORE YOU INITIAL START - UP!

1-Maintenance

The manufacturer will not accept liability for any resulting damages caused by the non-observance of this manual or any unauthorized modification to the device.

Please consider that damages caused by manual modifications to the device are not subject to warranty.

During the operation the housing becomes hot). Allow the fixture to cool approximately 20 minutes prior to manipulate with it.

Make sure that the available voltage is not higher than stated on the rear panel.

to completely remove power from unit when not in use or before cleaning or servicing the fixture.

Make sure that the power-cord is never crimped or damaged by sharp edges. Check the device and the power-cord from time to time.

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.

This device falls under protection class I. Therefore it is essential to connect the yellow/green conductor to earth.

The electric connection, repairs and servicing must be carried out by a qualified employee.

Do not connect this device to a dimmer pack.

Do not switch the fixture on and off in short intervals as this would reduce the fixture's life.

During the initial start-up some smoke or smell may arise. This is a normal process and does not necessarily mean that the device is defective.

Do not touch the device's housing bare hands during its operation (housing becomes hot)!

For replacement use fixtures and fuses of same type and rating only.

⚠️ **CAUTION!**

Be careful with your operations.

With a high voltage you can suffer a dangerous electric shock when touching the wires!

Attention: The powerCON is a connector without breaking capacity, i.e. the powerCON should not be connected or disconnected under load or live!

This device is a moving head for creating decorative effects and was designed for indoor use only.

This device is for professional use only. It is not for household use.

If the device has been exposed to drastic temperature fluctuation (e.g. after transportation), do not switch it on immediately. The arising condensation water might damage your device. Leave the device switched off until it has reached room temperature.

Before switching the fixture OFF, turn the fixture OFF and allow the fixture to cool for a while. Never run the device without fixture!

Do not shake the device. Avoid brute force when installing or operating the device.

Never lift the fixture by holding it at the projector-head, as the mechanics may be damaged. Always hold the fixture at the transport handles.

When choosing the installation-spot, please make sure that the device is not exposed to extreme heat, moisture or dust. There should not be any cables lying around. You endanger your own and the safety of others!

The minimum distance between light output and the illuminated surface must be more than 8 meters.

Make sure that the area below the installation place is blocked when rigging, derigging or servicing the fixture.

Always fix the fixture with an appropriate safety rope. Fix the safety rope at the correct holes only.

Only operate the fixture after having checked that the housing is firmly closed and all screws are tightly fastened.

The fixture must never be ignited if the objective-lens or any housing-cover is open, as discharge fixtures may

explode and emit a high ultraviolet radiation, which may cause burns.

The maximum ambient temperature 45°C must never be exceeded.

3-Attention Item

1.For guarantee the life of product,please do not put it on the wet place and not use it the place over 40 degree.

2.Please don't lay the product on the un-fixable or shakable place.

3.Ask for the professional to maintain the product in order to avoid the danger of get an electric shock.

4.Power supply should not be changed over +&-10% while the light is using,it will be decreased the life of fixture if the power is too high,but it will be influenced the luminosity if the power is too low.

5.After power off,if it is need used again,please cool down over 20 minuter.

6.Please look round the manual for ensure the product can be used normally.

4-Rigging the fixture

A structure intended for installation of the fixture(s) must safely hold weight of the fixture(s)

placed on it.The structure has to be certificated to the purpose.

The fixture (fixtures) must be installed in accordance with national and local electrical and

construction codes and regulation.

> For overhead installation, the fixture must be always secured with a safety
> wire that can bear at least 10 times the weight of the fixture

When rigging, derigging or servicing the fixture staying in the area below the installation place, on bridges,under high working places and other endangered areas is forbidden.

The operator has to make sure that safety-relating and machine-technical installations are approved by an expert before taking into operation for the first time and after changes before taking into operation another time.

The operator has to make sure that safety-relating and machine-technical installations are approved by a skilled person once a year.

Allow the fixture to cool for ten minutes before handling.

The projector should be installed outside areas where persons may walk by or be seated.

IMPORTANT! OVERHEAD RIGGING REQUIRES EXTENSIVE EXPERIENCE

including calculating working load limits, installation material being used, and periodic safety inspection of all installation material and the projector. If you lack these qualifications, do not attempt the installation yourself, but use a help of professional companies.

CAUTION: Fixtures may cause severe injuries when crashing down! If you have doubts concerning the safety of a possible installation, do not install the fixture!

The fixture has to be installed out of the reach of public.

The fixture must never be fixed swinging freely in the room.

Danger of fire !

When installing the device, make sure there is no highly inflammable

material (decoration articles, etc.) in a distance of min. 1 m.

The minimum distance of 8 meters between light output from the moving head

and the lit objects must be kept!

CAUTION!

Use 2 appropriate cfixtures to rig the fixture on the truss.

Follow the instructions mentioned at the bottom of the base.

Make sure that the device is fixed properly! Ensure that the

structure (truss) to which you are attaching the fixtures is secure.

The fixture can be placed directly on the stage floor or rigged in any orientation on a truss without altering its operation characteristics.

For securing a fixture to the truss, install two safety wires which can hold at least 10 times the weight of the fixture. Use only the safety wires with screw-on carabines.

5-DMX-512 connection

The fixture is equipped with both 3-pin sockets for DMX input and output. The sockets are wired in parallel.

Only use a shielded twisted-pair cable designed for 3-pin XLR-plugs and connectors in order to connect the controller with the fixture or one fixture with another.

DMX - output
XLR mounting-sockets (rear view):
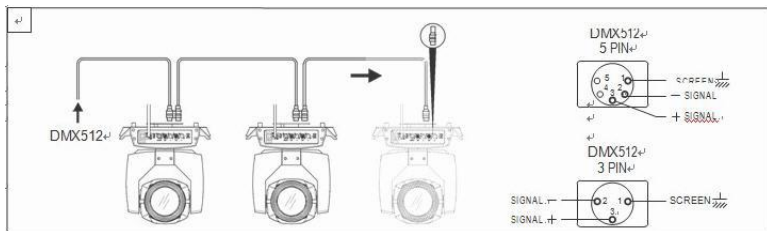
1 - Shield
2 - Signal (-)
3 - Signal (+)

DMX-input
XLR mounting-plugs (rear view):

1 - Shield
2 - Signal (-)
3 - Signal (+)

Building a serial DMX-chain:

Connect the DMX-output of the first fixture in the DMX-chain with the DMX-input of the next fixture. Always connect one output with the input of the next fixture until all fixtures are connected. Up to 32 fixtures can be connected.

Caution: At the last fixture, the DMX-cable has to be terminated with a terminator.

Solder a 120 Ω resistor between Signal (–) and Signal (+) into a 3-pin (5-pin) XLR-plug and plug it in the DMX-output of the last fixture.

6-Technical Specifications

Voltage:	AC90V ~ 240V / 50 ~ 60Hz	**Rainbow Wheel**:	Color rainbow effect
Power consumption:	230W	**Prism1:**	24-facet circular prism rotating
Lights Source:	Philips Bulb	**Dimmer:**	0-100% 16Bit mechanic dimmer
Drive Current:	1500mA	**Control Modes:**	DMX512,Auto,Sound , Master/Slave
Color Temperature:	8000k	**Strobe:**	Flash rate 0--25HZ
Beam Angle:	2-5 Degrees	**Channel:**	16/20 CH
Color Wheel:	14 kind of colors +white(half-color-effect)	**Ambient temperature:**	-20°C ~ 40°C
		Cooling System:	Box Heat Conduction
Tilt:	270° (16bit)	**Shell Material:**	High temperture resistant plastic
Pan:	540°(16bit)	**Product Color:**	Black
Dimmer:	0-100% mechanic dimmer	**Product Size:**	52.3 x 33.7 x 51.1 cm
Long Lifespan LEDs	More than 2,000 hours	**Product Weight:**	19.5 kg
Waterproof level:	IP20 Indoor	**Package Weight:**	23 kg
Package Size:	52.3 x 33.7 x 51.1 cm		

7-Maintenance and cleaning

It is absolutely essential that the fixture is kept clean and that dust, dirt and smoke-fluid residues must not build up on   or within the fixture. Otherwise, the fixture's light-output will be significantly reduced. Regular cleaning will not only ensure the maximum light-output, but will also allow the fixture to function reliably throughout its life.

A soft lint-free cloth moistened with any good glass cleaning fluid is recommended, under no circumstances should alcohol or solvents be used!

The front objective lens will require weekly cleaning as smoke-fluid tends to building up residues, reducing the light-output very quickly. The cooling-fans should be cleaned monthly. The interior of the fixture should be cleaned at least annually using a vacuum-cleaner or an air-jet.

Remove dust and dirt from the fans and cooling vents using a soft brush and vacuum-cleaner.

Important! Check the air filters periodically and clean before they become clogged!

Clean two air filters placed in the fixture´s covers and two in the fixture base. Use a vacuum cleaner, compressed air or you can wash them and put back dry.

8-Replacing the fuse.

Before replacing the fuse, unplug mains lead.

1. Remove the fuse holder on the rear panel of the base with a fitting screwdriver from the housing(anti-clockwise).

2. Remove the old fuse from the fuse holder.

3. Install the new fuse in the fuse holder (only the same type and rating).

4. Replace the fuse holder in the housing and fix it.

Checking plastic parts of the fixture.

The plastic parts of the fixture should be checked for damages and beginning cracks at least every two months.
In addition, the plastic part of the front lens has to be checked mechanically (by means of movement by the plastic part) if it is firmly fastened to the fixture. If hint of a crack is found on some plastic part, do not use the fixture until the damaged part will be replaced.
Cracks or another damages of the plastic parts can be caused by the fixture transportation or manipulation and also ageing process may influence plastic materials.
This checking is necessary for both fixed installations and preparing fixtures for renting. Any free moving parts inside of the fixture head, cracked plastic or any plastic part of front lens not sitting properly in place need to be immediately replaced.

9-Panel operation
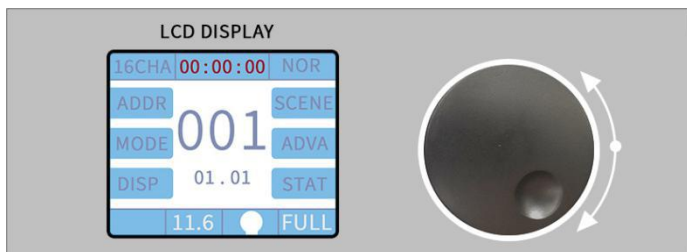
The schematic diagram of the light board is shown in Figure 3. The left side is the TFT Displayer, and the right side is the encoder button.

The left area is the TFT Displayer, light setting (parameter) operation or viewing light status. The right area is a rotary encoder with buttons. As an auxiliary input interface, you can select encoder settings or view items, then press the encoder button to confirm the selection, and the rotary encoder will set the parameter value again. Finally, press the encoder button again. Save the value or setting.

10-Control menu map

Menu 1	Menu 2	Function
ADDR	001-512	DMX address setting page
MODE	DMX Ctrl	On / Off
	Auto Run	On / Off
	Sound Ctrl	On / Off
	Scene Mode	Auto and 01-10
	M/S Choose	Auto / Master / Salve
	Light Switch	On / Off
DISP (Address)	Language (语言)	English / 中文（CN）
	Screen saver	On / Off
	Screen Rot	Auto / Forward
	DMX Indicate	Moded 1-3
	Screen Light	01-10
SCENE	Scene Select	1-10
	Scene Time	0 - 255 S
	01. Colour	000-255
	02. Strobe	000-255
	03. Dimmer	000-255
	04. Gobo	000-255
	05. Prism 1	000-255
	06. Prosm1.R	000-255
	07. Empty	000-255
	08. Frost	000-255

	09. Focus	000-255
	Pan	000-255
	Pan Fine	000-255
	Tilt	000-255
	Tilt Fine	000-255
	Macro	000-255
	Reset	000-255
	Lamp	000-255
ADVA (Advance)	Pan Invert	On / Off
	Tilt Invert	On / Off
	P/T Rectify	On / Off
	Pan Offset	004-150
	Tilt Offset	004-150
	Date Hold	On / Off
	Lamp When	Manual / RstDone / Power On
	Reset	
	Factory Setting.	
STAT (Status)	Stepper	
	Error Logging	
	Fixture Status	
	Version	V1.1.0
	Light Time	10:00
	Total time	20:00

11-DMX address code

Click and select "ADDR", you can enter the DMX address setting page, the range is 1~512, the address code cannot be greater than (512-number of channels), otherwise the light cannot be controlled. Here's the action:

Enter the DMX address page, click the blank area on the right side of the display, modify the value, click "ENTER" to confirm and save the DMX address code.
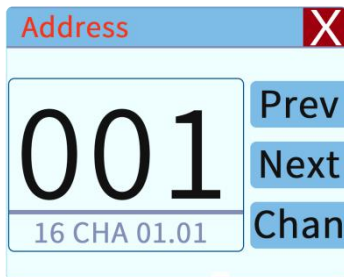
12-Set Light work mode

Go to the "MODE" page and modify the settings. The light work mode, control light and DMX channel mode can be set.

The light includes 3 working modes: DMX mode, auto mode and sound mode, the parameters are defined as follows:

- **DMX Mode**: Under this mode, the light receive data from the DMX controller and move.

- **AUTO RUN**: Under this mode, light will run with inside code(data), ignore data from DMX controller.

- **SOUND Ctrl**: Under this mode, light ignore data from DMX controller., When there is a strong sound in stage, the light will run a scene, otherwise it will keep the last scene.

- **M/S Choose**: 'M/S Choose' is available when light just in 'AUTO RUN' or 'SOUND Ctrl' mode. If this item is set as 'OFF', the light don't send data to other light via DMX Cable. When 'ON', the data will send to other slave light immediately.

- **Lamp control**: Turn on lamp when this item is set 'ON', otherwise, turn off lamp. The gap between operation is limited to 30 second.
- Channel mode: Light support 2 DMX Channel mode: sample or extend.

13-Set display

The light supports 2 languages, rotates the display, and enters the setting parameters as follows:
- **Language:** Choose to display in Simplified Chinese or English.
- **Screen saver:** When the panel is idle (no operation within 10 seconds), the monitor enters the screen saver state. When set to 'Mode 1', the save state is off display, and the 'Mode 2' save state will display DMX address code (DMX MODE) or display LOGO (AUTO RUN or SOUND CTRL). When set to 'OFF', the display remains lit and the main menu is displayed.

- **Screen Rotation:** rotate displayer.

14-SCENE

Enter the SCENE page, Light will enter the test mode, in this mode, Light will not receive data from the DMX controller:

- PAN: range for 0 to 255;
- TILT: range for 0 to 255;
- FOCUS: range for 0 to 255;
- COLOR: range for 0 to 255;
- GOBO: range for 0 to 255;
- PRISM: range for 0 to 255;
- FROST: range for 0 to 255;（Optional, the default is 7 color wheels）；
- STROBE: range for 0 to 255;

Scene	X
Scene Select	2
Scene Time	0.0S
01. Colour	000
02. Strobe	000
03. Dimmer	000
04. Gobo	000

15-Set display

The light supports 2 languages, rotates the display, and enters the setting parameters as follows:

- Pan Invert: Reverse PAN move.
- Tilt Invert: Reverse TILT mover.
- Rectify enable: set as 'OFF', PAN or TILT will disable position rectify function. As 'ON', when PAN or TILT lose steps, light will rectify auto.
- Pan Offset: Set PAN original position.
- Tilt Offset: Set TILT original position.
- Lamp up when: Select lamp on mode, includes 3 mode: power on, after reset done and manual;
- Factory setting: restore all parameters to factory setting.

Advanced	X
Pan Invert	OFF
Tilt Invert	OFF
P/T Rectify	ON
Pan Offset	010
Tilt Offset	010
Date hold	OFF

16-View status

Working mode: display the current working mode of the lamp;

Address Code: Display the current DMX address of the fixture.

Version: Displays the current software version of the light.

On Time: Displays the operating time of the lamp and the current on time.

Running Time: Displays the total running time of the fixture.

Advanced	X
Pan Invert	OFF
Tilt Invert	OFF
P/T Rectify	ON
Pan Offset	010
Tilt Offset	010
Date hold	OFF

DMX clear:

When <Advanced Settings-Data Retention> is set to <On>, DMX is cleared to zero and the lights can be centered.

Fixture reset:

Reset all motors of the lights

17-Channel List Notes:

- If the light has been reset, please check whether the value of the "reset" channel is within the valid data segment;
- If the X/Y axis of the lamp rotates slowly, please check the data of the "X/Y speed" channel;
- Only when the channel mode of the light parameter is set to "Extended (20CH)" (refer to "Operation Mode" > "Channel Mode" settings), the extended channel (see Channel Table) can be used.

18-DMX Channel

16ch (Sample) and 20ch (extend)e				
MODE	Channel	Function	Value	Function
16CH MODE	CH1	COLOR	0-4	White
			5-9	White+Color 1
			10-14	color 1
			15-19	color 1 color 2
			20-24	color 2
			25-29	color 2+color 3
			30-34	color 3
			35-39	color 3 color 4
			40-44	color 4
			45-49	color 4+color 5
			50-54	color 5
			55-59	color 5+color 6
			60-64	color 6
			65-69	color 6+color 7
			70-74	color 7
			75-79	color 7+color 8
			80-84	color 8
			85-89	color 8+color 9
			90-94	color 9
			95-99	color 9+color 10
			100-104	color 10
			105-109	Color 10 + Color 11
			110-114	color 11
			115-119	color 11 color 12
			120-124	color 12
			125-129	Color 12 + Color 13
			130-134	color 13
			135-139	color 13 color 14
			140-144	color 14
			145-149	Color 14+ white light
			150-255	Forward from slow to fast

	CH2	Shutter	0	Turn off
	CH3	DIMMER	0-255	Dimming(0-100%)
	CH4	GOBO	0-5	White
			6-9	GOBO 1
			10-15	GOBO 2
			16-19	GOBO 3
			20-25	GOBO 4
			26-29	GOBO 5
			30-35	GOBO 6
			36-39	GOBO 7
			40-45	GOBO 8
			46-49	GOBO 9
			50-55	GOBO 10
			56-59	GOBO 11
			60-65	GOBO 12
			66-69	GOBO 13
			70-75	GOBO 14
			76-79	GOBO 15
			80-85	GOBO 16
			86-89	GOBO 17
			90-129	Forward rotation from fast to slow
			130-134	Stop
			135-170	Reverse rotation from slow to fast
			171-175	GOBO 1 shake
			176-180	GOBO 2 shake
			181-185	GOBO 3 shake
			186-190	GOBO 4 shake
			191-195	GOBO 5 shake
			196-200	GOBO 6 shake
			201-205	GOBO 7 shake
			206-210	GOBO 8 shake
			211-215	GOBO 9 shake
			216-220	GOBO 10 shake
			221-225	GOBO 11 shake
			226-230	GOBO 12 shake
			231-235	GOBO 13 shake
			236-240	GOBO 14 shake
			241-245	GOBO 15 shake
			246-250	GOBO 16 shake
			251-255	GOBO 17 shake
	CH5	PRISM	128-255	Prism effect
	CH6	PRISM ROTATION	0-127	0-400 degrees
			128-190	Forward flow from fast to slow
			191-192	Stop
			193-255	Reverse flow from slow to fast
	CH7	NO FUNCTION	0	No function
	CH8	RAINBOW	128-255	Rainbow effect on
	CH9	FOCUS	0-255	Focus
	CH10	PAN	0-255	Pan X axis Fine tuning
	CH11	PAN FINE-TUNING	0-255	1.8°
	CH12	TILT	0-255	Tilt Y axis Fine tuning
	CH13	TILT FINE-TUNING	0-255	1.8°
	CH14	EFFECT	0-255	Build in Effect
	CH15	RESET	150-255	Reset system
			200-205	Turn on
			252-255	Reset
	CH16	LAMP	0-25	No function
			26-100	Turn off lamp
			101-254	Turn on lamp
20CH Mode	CH17	P/T SPEED	0-255	Adjust XY scanning speed
	CH18	COLOR SPEED	0-255	Adjust the color wheel speed
	CH19	FOCUSING SPEED	0-255	Adjust the focusing speed
	CH20	GOBO SPEED	0-255	Adjust the speed of the chart

19-Channel List Notes:

- If the light has been reset, please check whether the value of the "reset" channel is within the valid data segment;

- If the X/Y axis of the lamp rotates slowly, please check the data of the "X/Y speed" channel;

- The extended channel can only be used when the channel mode of the light parameter is set to "Extended (20CH)"

20-Fault handling

Common Faults and Use Attention

Common troubleshooting:
- The lights contains professional components such as microcomputer circuit board and high-voltage power supply. For your safety and product life, non-professionals should not disassemble the lamp and related accessories without authorization.

The bulb does not light up
- Possible cause: The bulb is not completely cooled, or the bulb has reached the end of its life, the treatment is as follows:
- Due to abnormal operation, the bulb has not been completely cooled, so let the lamp body cool for more than 10 minutes to make the interior completely return to normal state, and then turn on the power again;
- Check whether the bulb has reached the end of its service life, and replace it with a new one;
- Check whether the bulb and the lighter circuit are leaking, falling off or having poor contact;
- Replace with a new lighter.

The light beam appears dim
- Possible cause: The lights has been used for a long time or the light path is not clean. The treatment is as follows:
- Check whether the bulb has reached the end of its service life, and replace it with a new one;
- Check whether the optical components or bulbs are clean, and whether there is dust on the bulbs and other optical components. Regular cleaning and maintenance of the bulbs and components in the lamps are required.

Blurred pattern projection
- distance.

Lamps work intermittently
- Possible cause: The internal circuit enters the protection state, and the treatment is as follows:
- Check whether the fan is operating normally or whether it is dirty, causing the internal temperature of the lamp to rise;

- Check whether the internal temperature control switch is in the closed state;
- Check whether the bulb has reached the end of its service life and replace it with a new one.

The lamp does not accept the control of the console after the normal reset

- Possible cause: The signal line is faulty or the lights parameter setting is not normal, the treatment is as follows:
- Check the address code and the connection of the DMX signal line (whether the signal line cable is intact, and if the connection of the Deng Nong head is loose);
- Add signal amplifier and 120 ohm terminal resistance;
- Check the lights parameter settings, make sure the lights is in "DMX mode", and make sure that the "CH20 operation mode" of the DMX channel is in the data segment "0~49" of the "DMX mode".

- 4.1.6 The lights cannot be started
- Possible cause: The power line is bad, and the treatment is as follows:
- Check whether the fuse on the power input socket is fused, and replace the fuse;
- lights have poor line contact due to vibration during long-distance transportation
- Check the input power, computer board and other plug-in devices

Precautions for use

- Check whether the local power supply meets the rated voltage requirements of the product, and the leakage protector and overcurrent protector meet the requirements of the load;
- Do not use power cords with damaged insulation, and do not overlap power cords with other wires;The lamp adopts strong air cooling, which is easy to accumulate dust. It must be cleaned once a month, especially the heat dissipation vent, otherwise it will be blocked by the accumulation of dust, resulting in poor heat dissipation and abnormalities in the lamp.
- When installing the lamp, the fixing screws must be fastened, with safety cables, and regular inspections;
- When installing and positioning the luminaire, keep a minimum distance of 10 meters between any point on the surface of the luminaire and any flammable and explosive object, and the distance from the irradiated object is 2.5 meters. Please do not install the luminaire directly on the surface of combustible materials;
- It is recommended that the continuous working time of the lamp should not exceed 10 hours, and the interval between continuous starting of the lamp should not be less than 10 minutes, otherwise it will not be triggered normally due to the overheating protection of the lamp;
- The closing time using the switch valve should not exceed 5 minutes. If you need to close the light for a long time, you should use the console (lighting control channel) to turn off the light;
- lamps should not be in the unfinished current scene all the time, that is, start the next scene action. It is best not to exceed 3 minutes in this state to ensure that multiple lamps can run simultaneously.
- During use, if there is an abnormality in the lamp, stop using the lamp in time to prevent other malfunctions;

21-Accessories list

Quick lock x 2

Power cable x 1

Dmx512 cable x 1

Manual x 1