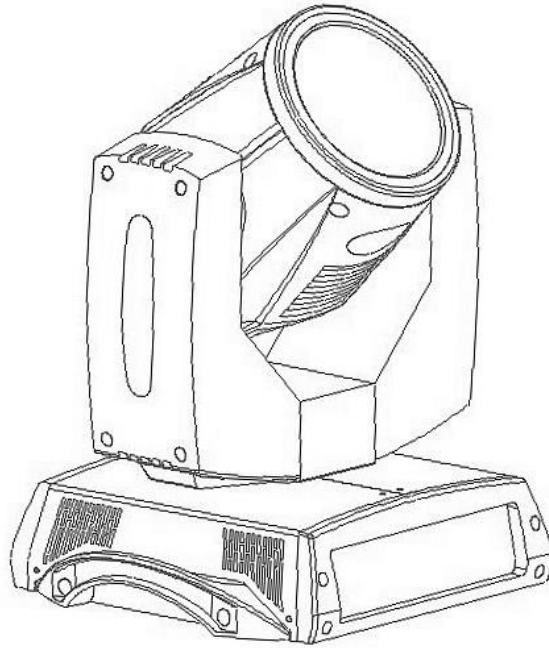


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# **280W Moving Head Beam Light**



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Please read the instruction manual carefully before use

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Thank you for using our product. For your safe and effective use of this product, please read this manual carefully and thoroughly before using it. This manual contains: The product performance and how to install safely, as well as the use of important information, please keep it for use reference. Please follow the instructions when installing and using.

### **Technical Parameters:**

1. Power: AC 110 v-240 V
2. FREQUENCY: 50 HZ-60 HZ
3. Total power: 450 W
4. Fuse: 6a
5. Ballast: Brand Electrical Ballast
6. Bulb Power: 280W
7. Color temperature: 8500 K
8. Average life: 2000H (bulb and Reflective Cup whole package, light effect higher service life longer)
9. Control Signal: International Standard DMX512
10. APPEARANCE: High Temperature Resistant Plastic
11. Body Color: Black
12. Protection Class: IP20
13. Net weight :16 kg

### **FEATURES:**

1. International Standard Control Signal: DMX 512
2. Channel number: 16 CH Channel
3. LCD 650000 color touch TFT interface, easy to operate, beautiful interface, interface can be 180 degrees reverse display.
4. X Axis Horizontal rotation 540 ° C, Y axis vertical rotation 270 ° C, with automatic correction positioning.
5. X, Y axis operation adjustable and fine-tuning, software with correction positioning

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function, high accuracy!

6. DIMMING: 0-100% LINEAR adjustment.
7. STROBOSCOPIC: Monolithic STROBOSCOPIC (0.5-9 times per second) , fully linear dimming and variable stroboscopic speed.
8. Color Wheel: 14 colors + white space (creates a sharp aerial light effect)
9. Pattern wheel: with 6 glass patterns + 12 fixed pattern pieces + blank (let you quickly change the shape of the beam)
10. PRISMS: double prisms plate, honeycomb prisms, double prisms effect, two-way rotation, adjustable speed, more rich pattern projection effect
11. Frost: soft light effect, easy to achieve a soft pattern effect.
12. FOCUSING: 4 groups of Optical Lens combination, far better than the usual beam lamp, can project a high-resolution pattern
13. Beam Angle: Parallel Beam Angle: 0-3.8
14. Intelligent overheat protection
15. Intelligent bulb switch control (extend bulb life)

### **Safety Tip!**

To ensure safe and proper use of Light, please read the following safety tips carefully before use.

- 1, non-professionals, do not remove the lights and lighting accessories.
- 2, AC POWER SUPPLY: check the location of the power supply is in line with the product voltage rating requirements.
- 3, This light is designed according to the type of electric shock protection. The light shall be connected to a fully grounded power supply system and the ground wire of the light shall be connected to the ground wire of the power supply system. Do not use insulated damaged power cord, and do not lap the power cord to other wires.
- 4, when the light is installed and positioned, the minimum distance between any point on the surface of the light and any inflammable and explosive substance is 10 meters, and the distance between the light and the light is 2.5 meters. Please do not install the light directly on the surface of the burnable substance.
- 5, lighting environment temperature: (- 10 degrees + 40 degrees) , the maximum surface temperature of the lamp 80 degrees, the lamp to stay away from liquid substances and humid environment.

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6, Make sure the lamp is well grounded before use. Do not install or remove any parts of the lamp.

7, When installing the light, the fixing screw must be fixed, equipped with safety cable and checked regularly.

8, It is recommended that the continuous working time should not exceed 10 hours and the interval between starting lamps should not be less than 10 minutes. Otherwise the bulb will overheat and fail to trigger properly.

9, In the use process, if the lamp appears abnormal should stop using the lamp.

10, When the bulb reaches the rated service life, it should be replaced in time, otherwise it will explode.

11, The rotating parts and pasted parts of the light must be checked regularly, loosen, shake and reinforce in time to prevent accidents.

12, Lamps and lanterns are cooled by strong wind, easy to accumulate dust, must be cleaned once a month, especially the cooling vent, otherwise it will be blocked by accumulated dust, resulting in poor heat dissipation, making lamps and lanterns abnormal.

## **Matters needing attention and installation**

### **1. Maintenance**

- This light should be kept dry to avoid working in damp environment.
- Intermittent use will effectively extend the life of the lamp.
- In order to achieve good ventilation and lighting effects, care should be taken to always clean the fan and Fan Net and Lens.
- Please do not use alcohol and other organic solvents to wipe the light Shell, so as to avoid damage.

### **2. Proclamations**

This product comes in the factory, the performance is intact, the packing is complete. All users shall strictly abide by the warning and operating instructions stated above. Any damage caused by misuse is not guaranteed by the company, failure and problems arising from the neglect of the operation manual are also beyond the scope of the distributor's responsibility.

This manual is subject to change without prior notice.

### **3. Product points to note**

- In order to ensure the service life of the product, the product should not be placed in a humid or leaking place, not to mention in the temperature above 60 degrees environment work.
- Do not place this product in a place where it is easily loosened or vibrated.

- To avoid the risk of electric shock, this product maintenance request for professional maintenance.
- After the power failure, it takes 20 minutes to use the lamp to fully cool before it can be used again.
- To ensure the normal use of this product, please read the instructions carefully.

#### 4. Signal wire connection (DMX)

This light uses DMX512 signal control mode. The control signals of each light are in parallel connection. When connecting the signals of many light, it is best to use a double-core shielded cable. When connecting, the lamps and lanterns are connected through the DMX signal Jack (kanong seat) INPUT (INPUT) and OUTPUT (OUTPUT) . The 3-core XLRXL plug terminals connecting the signal wires of the lamps and lanterns must correspond to each other, DMX Signal Terminal is recommended. To avoid damaging the control signal due to electrical noise, the DMX signal terminal is a 120 ohm 1w resistor connected between the 2 and 3 pins of an XLR plug and connected to the OUTPUT Jack of the last light

Important Note: The lines can not touch each other or the metal shell contact.

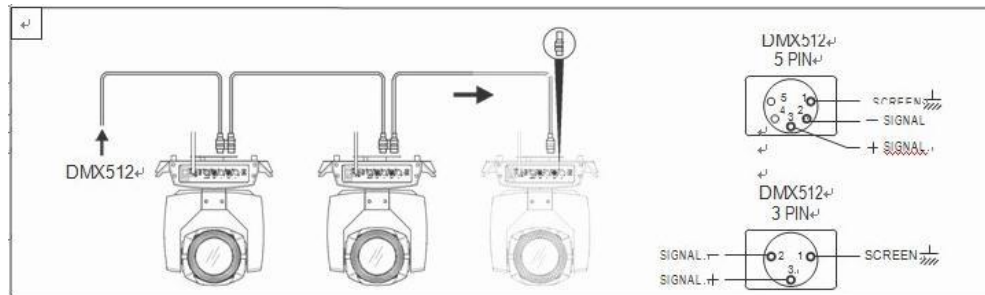


Fig. 1 DMX Signal Line Connection Diagram

#### 5. Light installation

The light can be placed horizontally, hung obliquely and hung upside down. Attention must be paid to the installation method when hanging obliquely or upside down,

As shown in figure 2, before positioning the light, to ensure the stability of the installation site, in the reverse hanging installation, you must ensure that the light does not fall off the support frame, to ensure safety, safety ropes are required to be used for auxiliary hanging through the support frame and the light handle. Prevent the lamp from falling and sliding.

If the hanging installation is not stable, resulting in the fall of the lamp and all the consequences, we do not assume any responsibility.

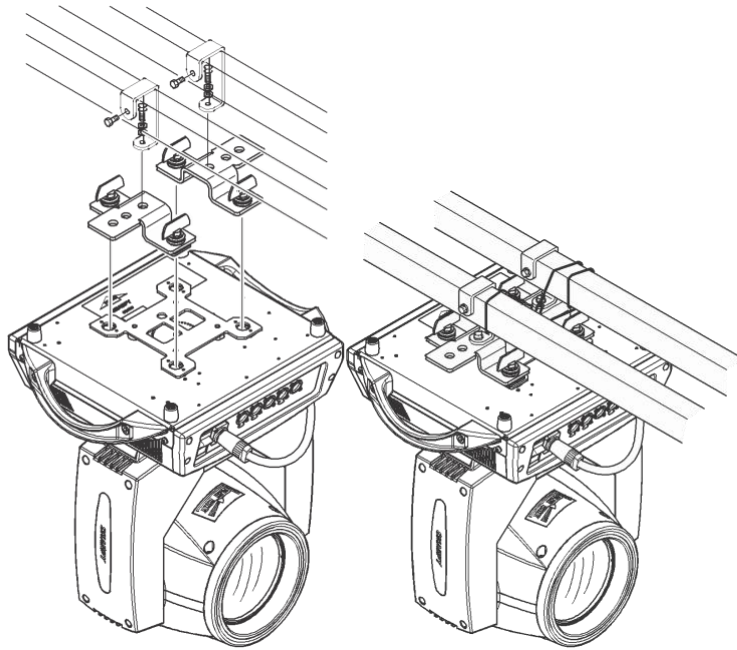


Fig. 2 schematic diagram of upside-down light

## 6. Bulb installation

- 1, Remove the plastic housing of the lamp cap before installing and replacing the bulb.
- 2, It is recommended to use light bulbs of good quality.
- 3, Do not install with electricity, remove the bulb.
- 4, Hands should not touch the bulb ball.
- 5, Be sure to tighten the screws after changing the bulb.

6, Because of the extremely high temperature of the bulb and the physical nature of the gas discharge bulb, it must be completely cooled for 10 minutes after each power cut operation, or it will lead to high-voltage discharge, short-circuit Fried Computer Control Board components.

## 7. How to calculate the starting address code of a light

The starting address code of the current light is equal to (the starting address code of the previous light) + (the number of passages in the light) description:

- 1: The starting address value of the first light is a 001.
- 2: The basic number of channels for the controller shall be greater than or equal to the total number of channels for lamp use.
- 3: Note: When using any controller, each light must have its own starting address code. If the starting address code of the first light is set to A001, the light path number is 16ch; Then the starting address code of the second lamp is set to A017; the starting address code of the third lamp is set to A033; and so on

## 1: Button description:



The left and right buttons do the same thing: return to the previous screen

Up” and “Down” keys: select, edit

OK Key: perform functions, start editing, and exit editing

## 2: Interface description:

The following is an example of the use of keystrokes:

- 1: If the current is not the main interface, press the “Exit” button (one or more times) can be back to the main interface
- 2: In the main interface, press the “Confirm” button to enter the menu settings.
- 3: On the first level menu page, press “Up” or “Down” to select “System settings”
- 4: Press “OK” to enter “System settings”
- 5: Press “Up” or “Down” to select “DMX address”
- 6: Press “OK” to enter “DMX address”
- 7: Press “Up” or “Down” to modify address Code
- 8: Press “OK” to confirm address code
- 9: Press “Exit” to return to the home page

If you’ re using a touch screen, the process is easier:

1. Touch the “Settings” button under the main screen to enter the “Settings” screen
2. As in steps 4-7 above (physical keys or touch keys) , do not repeat.

### 3: Screen setup:

#### 3.1Set up the interface

options	explain	
Operation Mode	DMX	Slave status: receive DMX signals from the console or host
	Automatic	Host status: Run automatically and send DMXD signal to slave
	Sound	To receive external sound or vibration, run the built-in program effects
Channel	16	Channel 17-20 is not working
DMX address	1-512	Press OK to enter the edit state. At this point is selected hundred, press the” up” and” down” key to change the address code. Press OK again to select ten edits. Press OK again to select a-bit edit. Press once more to exit the edit state.
X Inverts	off/on	
Y Inverts	off/on	
XY Encoders	off	Position Correction Without encoder (optocoupler)
	on	An encoder (optocoupler) is used to determine the out-of-step and automatically correct the position
No DMX Signal	Keep	Continue as you were
	Zero out	Motor return to position, stop operation
	on	Turn off the backlight after 30 seconds



Screen saver	off	Back light is always bright
Turn on	on	When the lamp is started, the bulb will light automatically
	off	When the lamp is started, the bulb does not come on
Return		

### 3.2 Manual control interface

This interface is used to control the current fixture, and is neither slave state (do not receive DMX signals) nor host state (do not send DMX signals)

Option	Explain	
Reset	Press the “OK” button to see the confirmation dialog box, and then press the “OK” button to enter the reset carry interface, all motor reset	
Bulb Control	on/off	
Color wheel	0-255	Press OK to enter the edit state. This is selected, press the “Up” and “Down” keys to change the channel value, and then press the “OK” button again to exit the editing state.
CUT/STROBE	0-255	.....
Dimming	0-255	.....
Pattern wheel	0-255	.....
Prism	0-255	.....
Prism rotate	0-255	.....
Prism color	0-255	.....
Atomize	0-255	.....
Focus	0-255	.....
X	0-255	.....
X Fine-tuning	0-255	.....
Y	0-255	.....
Y Fine-tuning	0-255	.....
Function	0-255	.....
XY Speed macro function	0-255	.....
Prism 2	0-255	.....

Prism rotate	2	0-255	.....
Pattern disk speed		0-255	.....
Return			Yes/No

### 3.3 Factory interface

Enter the factory interface, display please enter Password: XXXXXX; specific operation: Press the up and down key to select a number once (appear a \*) . Password input complete, and finally press the “OK” key for password verification.

Option	Explain	
Reset calibration (fine tuning)	0-255	X Calibration
	0-255	Y Calibration
	0-255	Dimming calibration
	0-255	Color wheel alignment
	0-255	Pattern Plate calibration
	0-255	Focusing calibration
	0-255	Prism calibration
	0-255	Fog Lens calibration
Screen saver mode	Pattern 1	Display Address Code
	Pattern 2	Display Factory LOGO
	Pattern 3	No display (reserved)
Return	No/Yes	

### 4. Channel control instructions:

Channel	Function	Numerical value	
1	Color Wheel	0-255	Color effect
2	Flash	0-255	Strobe effect
3	Dimmer	0-255	Dimming effect
4	Gobo	0-255	Pattern effect
5	Prism1	0-255	Prism effect
6	Prism	0-255	Prism rotate

	rotation		
7	Prism2	0-255	Prism effect
8	Frost	0-255	Linear variation
9	Focus	0-255	The pattern is clear from far to near
10	Pan	0-255	Horizontal 540-degree scan
11	Pan fine	0-255	Level 1.2 degrees
12	Tilt	0-255	270-degree vertical scan
13	Tilt fine	0-255	Vertical 1.2 degree adjustment
14	Function	0-255	Speed macro function
15	RESET	0-239 240-255	No effect Light reset
16	Lamp	100-105 200-205	Off bulb On bulb

### 5. 16Channel description (full version):

1	Color Wheel	0-4 5-9 10-14 15-19 20-24 25-29 30-34 35-39 40-44 45-49	WHITE WHITE + RED RED RED + ORANGE ORANGE ORANGE + AQUAMARINE AQUAMARINE AQUAMARINE + GREEN GREEN GREEN+LIGHT GREEN
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		50-54 55-59 60-64 65-69 70-74 75-79 80-84 85-89 90-94 95-99 100-104 105-109 110-114 115-119 120-124 125-129 130-134 135-139 140-144 145-149 150-199 200-255 128	LIGHT GREEN LIGHT GREEN +YELLOW YELLOW YELLOW+PINK PINK PINK+BLUE BLUE BLUE+WARM WHITE WARM WHITE WARM WHITE+CYAN CYAN CYAN+CTO 260 CTO 260 CTO260+CTO 190 CTO 190 CTO 190+CTB 8000 CTB8000 CTB8000+BLUE BLUE BLUE+WHITE SLOW ROTATION(0.2rpm)
2	Flash	0-5 6-11 12 -107 108-149 150-191 192-251 252-255	Full off Full on Strobe from slow to fast Pulse effect opening,increasing Pulse effect closing,increasing Random strobe with decreasing speed Full on
3	Dimmer	0-255	Dark → bright
4	Gobo	0-2 3-5 6-8 9-11 12-14 15-17 18-20 21-23 24-26 27-29 30-32 33-35 36-38 39-41	WHITE Gobo1 Gobo2 Gobo3 Gobo4 Gobo5 Gobo6 Gobo7 Gobo8 Gobo9 Gobo10 Gobo11 Gobo12 Gobo13

		42-44 45-47 48-50 51-53 54-69 70-85 86-95 96-105 106-115 116-125 126-135 136-145 146-155 156-165 166-175 176-185 186-195 196-205 206-215 216-225 226-235 236-245	Gobo14 Gobo15 Gobo16 Gobo17 Gobo rotation, forward 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) Gobo17 Shake(slow to quick)
5	Prism1	0-127 128-255	No prism Prism
6	Prism rotation	0-10 11-120 121-255	Stop Prismrotation, forward Prismrotation, backward
7	Prism2	0-127 128-255	No prism Prism
8	Frost	0-255	Linear variation
9	Focus	0-255	Linear adjustment
10	Pan	0-255	0-540°
11	Pan fine	0-255	1.2° fine
12	Tilt	0-255	0-270°
13	Tilt fine	0-255	1.2° fine
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	0-239 240-255	No function RESET
16	Lamp	0-99 100-105 106-199	No function Lamp Off No function

		200-205 206-255	Lamp On No function
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## Troubleshooting:

The following list of lamp failure and treatment, other maintenance work by professional qualified maintenance personnel to handle.

### 1,Bulb doesn' t work

- 1.1.If the bulb is not completely cooled due to abnormal operation, the lamp should be cooled for more than 10 minutes so that the internal bulb can be fully restored to its normal state and the power supply can be restarted.
- 1.2.To check that the bulb has reached its useful life, replace it with a new one.
- 1.3.Check the line of Bulb and light bulb for leakage, shedding or poor contact.
- 1.4.Replace the new ballast.

### 2,The beam appeared dim

- 2.1.Check that the bulb has reached its useful life and replace it with a new one.
- 2.2.Check whether the optical components or light bulbs are clean, there is dust on the optical components, such as light bulbs, etc. .

### 3,The projected image is blurred

- 3.1. Check whether the electron focus channel value is suitable for the present projection distance.

### 4,The computer lamp works intermittently

- 4.1.Check whether the fan is working properly and whether it is dirty.
- 4.2. Check whether the internal temperature control switch is closed.
- 4.3. Check that the bulb has reached its useful life and replace it with a new one.

### 5,Although it glows, the computer light is no longer controlled by the controller

- 5.1.Check the starting address code and check the connection of the communication line (1 ground 2 minus 3 plus)

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5.2. Add amplifier

5.3. When the bulb was not completely cooled, there was an abnormal start-up operation, and the instantaneous ultra-high voltage produced by the bubble starter leaked, which caused the CPU of the Circuit Board Channel Chip to burn out.

## **6,The lights won' t start**

6.1. Check whether the fuse on the power input socket is fused

6.2. The vibration of light in long-distance transportation leads to bad contact of circuit

6.3. Check the input power supply, computer board and other plug-in devices

## **7,Some functions are not controlled by the controller after self-checking**

7.1. Check if the function is powered on or if the chip is fried by other high-voltage impact.

## **8,When the power is on, the X and Y axes are restored to 0 bits in other data, and abnormal noise appears**

8.1. In abnormal start-up, high bubble voltage leakage led to the burning of the X, y Axis photoelectric induction circuit board (Optical Lotus)

8.2. Restart the computer light according to normal procedure

8.3. Push all channel values of the controller to 0 and reset the light remotely.

## **Maintenance and service :**

Power-off operation: Each power-off before the first 10 minutes to turn off the light bulb. Let the radiator fan to the lamp inside the use of the heat, rapid discharge, so as to extend the lamp accessories, especially the Lamp Bulb Life! In order to ensure that the lamp can operate stably, it is important to keep it clean. Make sure the power supply is disconnected before removing the lamp for repair or starting maintenance. It is very important to keep the lamp clean and clean. Please clean it regularly, it can not only keep the maximum brightness output, but also prolong the lamp' s service life. It is recommended to use high quality glass cleaner and clean with clean soft cloth.

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## ATTENTION TO AFTER-SALES SERVICE!

Lamp Factory, are strict quality inspection, packaging are intact, please operate according to the manual.

1, Machine failure due to human error is not covered by the warranty.

2. The company provides the technical consultation for the customer throughout the life.

3. If the product is out of order, please show the qualified certificate and fill in the relevant information truthfully. At the same time, we also hope that customers in time to product problems feedback to us, to facilitate our first time to improve the product.