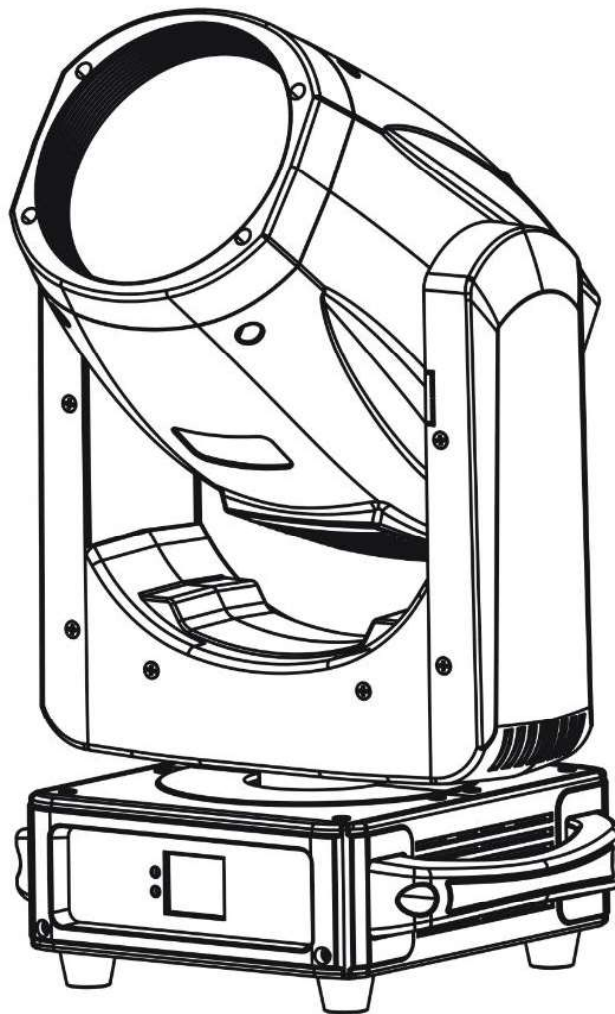


USER MANUAL

295W Moving Head Beam Light & LED Circle 22CH



CE

Please read over this manual before operation the light

1.Recautions with installation

1. Maintenance

- This light fixture should be kept dry and avoid working in wet conditions.
- Intermittent use will effectively extend the life of the luminaire.
- In order to obtain good ventilation and lighting effects, pay attention to cleaning the fan and fan net as well as the lens often.
- Do not rub the luminaires housing with organic solvents such as alcohol to avoid damage.

2. Declaration

This product was shipped out in good condition and complete package. All users shall strictly abide by the warnings and operating instructions stated above. Any damage caused by misuse is not covered by the warranty of the company. The Distributor shall not be responsible for the failure and problems caused by ignoring the operating manual.

This manual is subject to technical changes without prior notice.

3. Product Notes

- In order to ensure the service life of the product, the product should not be placed in a damp or leaking place, and should not work in an environment where the temperature exceeds 60 degrees
- Do not place this product in a place that is easy to loose or shake.
- In order to avoid the danger of electric shock, please consult a professional for maintenance of this product.
- When the lamp is used, the power supply voltage change should not exceed $\pm 10\%$, the voltage is too high, will shorten the life of the lamp, the voltage is too low, it will affect the light color of the lamp.
- After the power off, it takes 20 minutes to use the lamp to cool down fully before it can be used again.
- In order to ensure the normal use of this product, please read this instruction carefully.
-

4. Product Description

- Power supply: AC100-240V 50/60Hz, high efficiency and reliable switching power supply;
- Total power: 450W
- Bulb model: 295WLamp
- The luminous flux: 7950lm
- Color temperature :8500K
- Ballast: Electronic inductance ballast
- Control mode: DMX512/Auto/Sound/Slave
- Channel: 22CH(With Led Strip)

- Color Wheel:14 color chips+whiteAdjustable rotation speed, bidirectionalflowing water effect and rainbow effect
- Pattern Wheel: 14 pattern effects+white
- Prism:Prism 8+Prism 8+16+24
- Double prisms can be stacked and rotated independently in both directions
- Focusing: Linear focusing with atomization function and adjustable atomization speed0-100% mechanical dimming, supporting mechanical strobe and adjustable strobe effects Supports strobe macro function, with mechanical strobe ranging from 1 to 12 F.P.S.Lens group optical system, electric focusing.
- Horizontal 540°, resolution 8Bit/16Bit;
- Vertical 270°, resolution 8Bit/16Bit;
- Beam angle:Lens group optical system 3.8°-45° linear adjustable,
- Zoom range: 0-4Degree
- Strobe:0-25times/Second
- IP protection level: IP20
- Overheat protection;
- Light Size:290*240*510mmNW:125KGCarton Size:510*370*405mm
- G.W:14KG(Carton Package)/46kg(Flycase 2IN1 Package)
-

5. Signal wire connection (DMX)

Use an RS-485 cable that meets specifications: shielded, 120ohm characteristic impedance, 22-24 AWG, low capacitance react-resistance. Do not use microphone cables or cables with different specified characteristics. Connections to terminals must be made using a 3 or 5 pin XLR type male/maternal connector. A 120ohm impedance matching resistor (minimum 1/4 W) must be inserted between terminals 2 and 3 of the terminal plug.

Important: The wires must not touch each other or the metal housing.

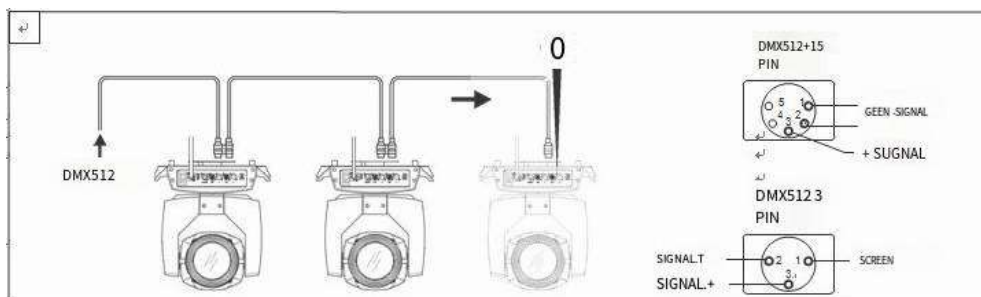


Figure 1 Schematic diagram of DMX signal wire connection

6. Luminaire installation

Luminaires can be placed horizontally, hung diagonally, and hung upside down. Be sure to pay attention to the installation method when slant hanging and upside down.

As shown in Figure 2, before positioning the lamp, to ensure the stability of the installation site, in the reverse hanging installation, must ensure that the lamp does not fall down on the support frame, need to use the safety rope through the support frame and the lamp handle for auxiliary hanging to ensure safety. Prevent the luminaire from falling and sliding.

During the installation and debugging of the lamps, pedestrians are forbidden to pass under the lamps. Regularly check whether the safety rope is worn and whether the hook screws are loose.

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

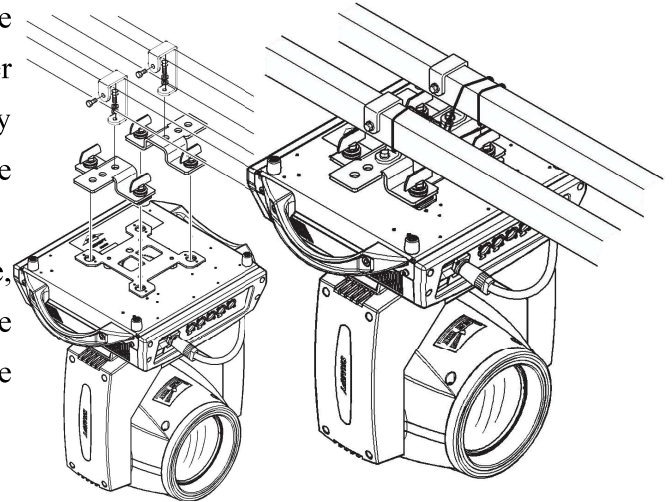


Figure 2 Schematic diagram of the lamp hanging upside down

7. Control panel

2.1 Key Instructions

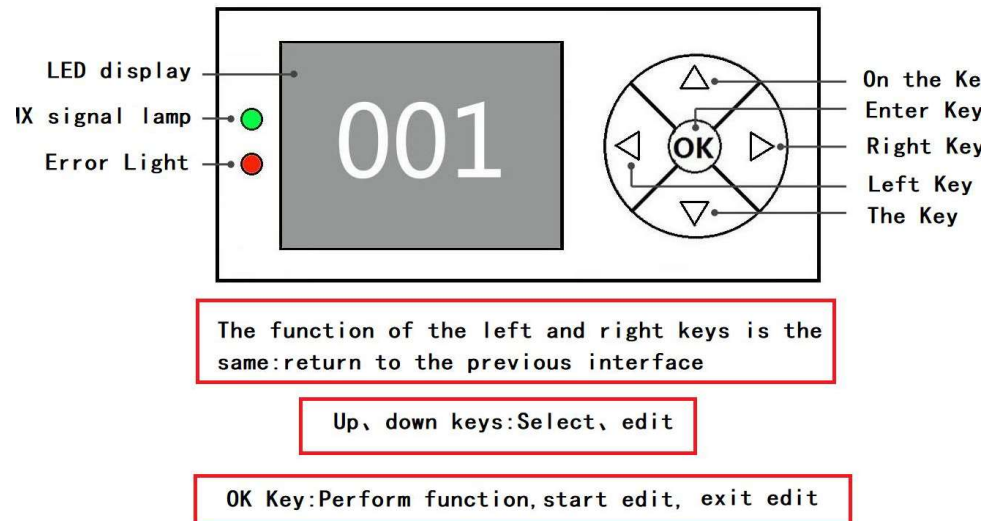


Figure 3 Schematic diagram of key description on the panel

- The following takes "Modify DMX address code" as an example to describe the use of keys:
- The following takes "Modify DMX address code" as an example to describe the use of keys:
1. if the current is not the main interface, press the "left" key (one or more times) to return to the main interface.
 2. in the home screen, press the "up" key or "down" key to select the "Settings" button
 3. Press the "OK" key to enter the "Settings" interface.

4. in the "Settings" interface, press the "up" key or "down" key to select "DMX address".
5. press the "OK" key to enter the editing state.
6. press the "up" key or "down" key to modify the DMX address code.
7. press the "OK" key to exit the editing state

2.2 Menu Description

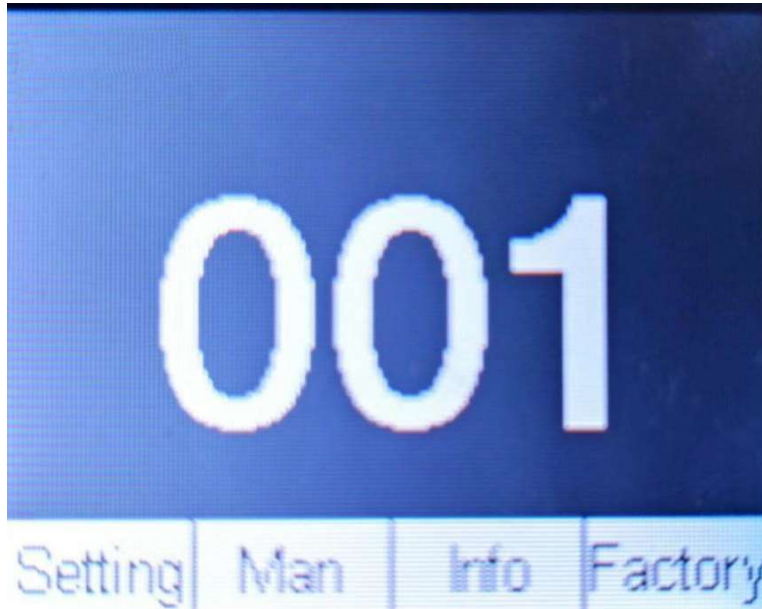


Figure 4 Schematic diagram of main menu

2.2.1 Settings

Options	Instructions	
Run	DMX	Slave state: Receives DMX signals from the console or host
	Bootstrap	Host status: Self-drive and send DMX signal to slave
	Voice Control	
DMX address	1-512	Press "OK" to enter the editing state. At this time, the hundreds digit is selected, and press the "up" and "down" keys to change the address code. Press the "OK" key again to select the tens edit. Press "OK" again to select the ones edit. Press again to exit the editing state
Bulb	Off	Off Bubble
	On	Bright bubble
Motor reset	Off	
	On	Light fixture reset
Channel	Standard 18CH	Standard 18 channel mode
	Standard 22CH	Standard 22 channel mode
Language	English	Set to English interface

	Chinese	Set to the Chinese interface
Screen flip	Off	Front display
	On	Screen inverted display
X Inversion	Off	
	On	X Motor rotated 180 degrees in the direction
Y reversal	Off	
	On	Y Turn the motor 180 degrees in the direction
XY switching	Off	
	On	Channel to swap XY axes (incl. trims)
XY encoder	On	Use an encoder (optocoupler) to judge out of step and automatically correct the position
	Off	Correct position without using an encoder (optocoupler)
DMX signal	Hold	Continue running in its original state
	Reset	Turn the motor back and stop running
Turn on bright bubble	Off	
	On	Bright bubble after turning on
Linear color	On	The color wheel changes linearly
	Off	Color wheel nonlinear change, half-color change
Restore default	On	
	Off	Press "OK" to see the confirmation dialog box, press "OK" again to restore the default Settings

2.2.2 Manual control

This interface is used to control the current luminaire (does not receive DMX signals), corresponding to the channel. Refer to the channel table for details

Options		Instructions
1CH.	0 ~ 255	Press "OK" to enter the editing state. At this time, the hundreds digit is selected, and press the "up" and "down" keys to change the channel value. Press the "OK" key again to select the tens edit. Press "OK" again to select the ones edit. Press again to exit the editing state.
...	0 ~ 255	
15CH.	0 ~ 255	
...	0 ~ 255	

2.2.3 Information

Options	Instructions	
Ver		Software version
DIS		Display board software version
MT		Motor board software version

Time information	Time information Steps: 1 Total brightening bubbles 2. Total use	Record the cumulative brightening time Record the lighting time
System error		If the red ERR indicator light shines, it indicates that the lamp is running incorrectly, and the details can be viewed from this sub-interface. After viewing, you can press the "Clear" button to clear the error record
Blower speed		Displays the current blower speed
Hall Status	11100010	0 when magnetic is detected, 1 otherwise
X encodes the step value	0000	The number of steps should increase for forward travel and decrease for reverse travel. The number should be normal every time you reach the same point
Y encodes the step value	0000	The number of steps should increase for forward travel and decrease for reverse travel. The number should be normal every time you reach the same point
Permission Duration		9999 No encryption; Other values can be used with encryption

A. Error message description

Common Error Messages	Instructions
MT board connection failed	Motor board not responding. There is a problem with the serial communication line connecting the display board to the motor board, or there is a problem with the motor board.
X-axis reset failed	There is a problem with the X-axis photoelectric switch, or the X-axis motor or motor board
Y-axis reset failed	Y-axis photoelectric switch, or Y-axis motor or motor board problem
X-axis Hall error	X-axis Hall, or a problem with the motor board
Y-axis Hall error	Y-axis Hall, or a problem with the motor board
Color disk reset failed	Color disk Hall, or there is a problem with the color disk motor
Description The pattern disk failed to reset	Pattern plate Hall, or pattern plate motor has a problem
The focus reset failed	Focusing Hall, or a problem with the focusing motor
Bulb control failure	Failure to light or extinguish bubbles, lamplighter or bulb problem

2.2.4 Factory

Calibrate	Data download	After changing the display board, download the calibration data of the original display board from the motor board
	X-axis	After entering the sub-interface, the reset position of the motor such as X axis and Y axis can be adjusted to make up for the error on the hardware installation. The adjustment range is -128~+127, and +0 indicates no adjustment.
	Y-axis	
	Colors	
	Gobo	
	Focus	
	Dimming	
	Prism 1 Zero	
	Prism 1 Stroke	
	Prism 2 Zero	
	Prism 2 Stroke	
	Frost zero	
	Frost stroke	
	Colorful mirror stroke	
	Zeroing	close
		On, the data is restored to default values
	X Hall	Off, X Hall report wrong off
		On, X Hall reports the wrong off
	Y Hall	Off, Y Hall reports wrong off
		Open, Y Hall is wrong
Half power	Off, no half power function	
	On, with half power function	

Channel table

Channel	Channel mode	
	18	22
1	X	X
2	Y	Y
3	X Fine	X Fine
4	Y Fine	Y Fine
5	XY Speed	XY Speed

6	Frost	Frost
7	Shutter	Shutter
8	Dimming	Dimming
9	Color	Color
10	Gobo	Gobo
11	Prism 1	Prism 1
12	Prism 2	Prism 2
13	Prism Rotation	Prism Rotation
14	Colourful	Colourful
15	Focus	Focus
16	Lamp & Reset	Lamp & Reset
17	LED_Scene	LED_Scene
18	LED_Scene speed	LED_Scene speed
19		RFU
20		Color wheel Speed
21		Dimming - Prism - Frost Speed
22		Gobo Speed
Note: Ch17 and CH18 are only available for beam shake headlights with aperture, and beam shake headlights without aperture do not have these two ch		

CH list (full version) :

Ch	Features	values	Effects
1	X	000-255.	Horizontal 540 degree scan
2	Y	000-255.	Vertical 270 degree scan
3	X fINE	000-255.	Horizontal 1.2 degree fine tuning
4	Y Fine	000-255.	Vertical 1.2 degree fine trim
5	XY Speed	000-255.	Speed from fast to slow
6	Frost	000-127. 128-255.	None Frost cut in
7	Shutter	000-003. 004-103. 104-107. 108-207. 208-212. 213-251. 252-255.	Light brake off Stroboscopic from slow to fast Light gate on → (controlled by dimmer channel) Pulse stroboscopic from slow to fast Light gate open → (controlled by dimmer channel) Random strobe from slow to fast Light gate on → (controlled by dimmer channel)
8	Dimming	000-255.	Dark to light

9	Color	000-004.	White Light
		005-009	White light + Color 1
		010-014	Color 1
		015-019	Color 1+ Color 2
		020-024	Color 2
		025-029	Color 2+ Color 3
		030-034	Color 3
		035-039	Color 3+ Color 4
		040-044	Color 4
		045-049	Color 4+ Color 5
		050-054	Color 5
		055-059	Color 5+ Color 6
		060-064	Color 6
		065-069	Color 6+ Color 7
		070-074	Color 7
		075-079	Color 7+ Color 8
		080-084	Color 8
		085-089	Color 8+ Color 9
		090-094	Color 9
		095-099	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		
150-200	Positive flowing water (from fast to slow)		
201-255	Backward flow (slow to fast)		

10	Gobo	000-004 005-009 010-014 015-019 020-024 025-029 030-034 035-039 040-044 045-049 050-054 055-059 060-064 065-069 070-125 126-130 131-190 191-195 196-200 201-205 206-210 211-215 216-220 221-225 226-230 231-235 236-240 241-245 246-250 251-255	Gobo 1 Gobo 2 Gobo 3 Gobo 4 Gobo 5 Gobo 6 Gobo 7 Gobo 8 Gobo 9 Gobo 10 Gobo 11 Gobo 12 Gobo 13 Gobo 14 Reverse running water (from fast to slow) Stopping Forward flowing water (from slow to fast) Gobo 2 Shake(from slow to fast) Gobo 3 Shake(from slow to fast) Gobo 4 Shake(from slow to fast) Gobo 5 Shake(from slow to fast) Gobo 6 Shake(from slow to fast) Gobo 7 Shake(from slow to fast) Gobo 8 Shake(from slow to fast) Gobo 9 Shake(from slow to fast) Gobo 10 Shake(from slow to fast) Gobo 11 Shake(from slow to fast) Gobo 12 Shake(from slow to fast) Gobo 13 Shake(from slow to fast) Gobo 14 Shake(from slow to fast)
11	Prism 1	000-127. 128-255.	None Prism 1 Cut in
12	Prism 2	000-127. 128-255.	None Prism 2 Cut in
13	Prism Rotation	000-127. 128-187. 188-195. 196-255.	Prism Angle adjustment Forward rotation (from fast to slow) Stopping Reverse rotation (from slow to fast)
14	Colourful	000-127. 128-255.	None Colorful cut in
15	Focus	000-255.	Gobo clarity from far to near

16	Lamp & Reset	000-099. 100-105. 200-205. 210-215. 220-235. 240-255.	None Lamp Off Lamp On Reset XY Reset Effect Reset All
17	LED_Scene	000-255.	
18	LED_scene speed	000-255.	
19	RFU	000-255	Speed from fast to slow
20	Color wheel Speed		
21	Dimming - Prism - Frost _peed		
22	Gobo Speed		
Note: Ch21 and CH22 are only available for beam shake headlights with aperture, and beam shake headlights without aperture do not have these two channels			

Common troubleshooting

The lamp contains microcomputer circuit board, high voltage power supply and other professional parts, for your safety and product life, non-professionals do not disassemble the lamp and related accessories without authorization.

1. The light bulb is not bright

Possible causes: The bulb is not completely cooled, or the bulb reaches the end of its life, treat as follows:

- Due to abnormal operation, the bulb is not completely cooled, the lamp body should be cooled for more than 10 minutes, so that its interior is completely restored to the normal state, and then start the power supply again;
- Check whether the lamp has reached the service life, should be replaced with a new bulb;
- Check whether the light bulb and the lamp line leak, fall off or poor contact;
- Replace the lamp with a new one.

2. The beam appears dull

Possible causes: The lamp has been used for a long time or the light path is not clean, treat as follows:

- Check whether the bulb has reached its service life and should be replaced with a new bulb;
- Check whether the optical parts or light bulbs are clean, whether there is dust accumulated on the optical devices such as light bulbs, it is necessary to regularly clean

and maintain the light bulbs and components in the lamp.

3. Pattern projection fuzzy

- Check that the electronic focus channel value is appropriate for the current projection distance.

4. The light fixture works intermittently

Can cause: The internal line enters the protection state, deal with as follows:

- Check whether the fan is running 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 that the bulb has reached the end of its useful life and replace it with a new bulb.

5. The light fixture does not accept control from the console after normal reset

Possible cause: The signal cable is faulty or the lamp parameter Settings are abnormal.

The solution is as follows:

- Check the start address code and check the connection of the DMX signal cable (whether the signal cable is in good condition and whether the nodule connection is loose);
- Add signal amplifier, add 120 ohm terminal resistor;

6. Luminaire can not start

Can cause: The power line is bad, the treatment is as follows:

- Check whether the insurance on the power input socket is blown and replace the insurance;
- Lamps in long distance transportation due to vibration caused by poor line contact
- Check the input power supply, computer board and other connector devices.

2. Precautions for use

- Check whether the local power supply meets the requirements of the rated voltage of the product, and the leakage protector and overcurrent protector meet the requirements of the load;
- Do not use the power line whose insulation layer has been damaged, and do not connect the power line to other wires;
- The lamp is used in strong wind refrigeration, easy to accumulate dust, must be cleaned once a month, especially the heat sink, otherwise it will be blocked by dust, resulting in poor heat dissipation, making the lamp abnormal.
- When installing the lamps, the fixing screws must be tightened, and with a safety cable, and regular inspection;
- When the lamp is installed and positioned, any point on the surface of the lamp and any easily burned explosive material, maintain a minimum distance of 10 meters, and the distance from the irradiation is 2.5 meters. Please do not install the lamp directly on the

surface of combustible material;

- The continuous working time of the lamp is recommended not to exceed 10 hours, and the continuous start of the lamp interval time should not be less than 10 minutes, otherwise it will not trigger normally because the lamp overheat protection;
- Use the on-off valve closing time should not exceed 5 minutes, if you need to close the light for a long time, you should use the console (lamp control channel) to close the lamp gun;
- In order to ensure that multiple lamps better comply with the scene effect, lamps should not always be in the current scene, 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 synchronically.
- In the process of use, if the lamps are abnormal, the use of lamps should be stopped in time to prevent other failures;