

MINI 230W beam head shaking lamp

User Manual



Precautions and Installation

1. Maintenance

The lamp should be kept dry and avoid working in a humid environment.

Intermittent use will effectively extend the life of the lamp.

In order to obtain good ventilation and lighting effects, it is necessary to clean the fan, fan net and lens frequently.

Do not wipe the housing of the lamp with organic solvents such as alcohol to avoid damage.

2. Statement

When this product is shipped from the factory, the performance is intact and the packaging is complete. All users should strictly abide by the warnings and operating instructions stated above. Any damage caused by misuse is not covered by our company's guarantee, and the dealer is not responsible for failures and problems caused by ignoring the operating manual. .

This manual is subject to technical changes without notice.

3. Product precautions

In order to ensure the service life of the product, this product should not be placed in a humid or leaking place, and it should not be used in an environment where the temperature exceeds 60 degrees.

Do not place this product in a place that is easy to loosen or shake.

In order to avoid the risk of electric shock, the maintenance of this product requires professional maintenance.

When the bulb is in use, the power supply voltage should not change more than $\pm 10\%$. Too high voltage will shorten the life of the bulb, and too low voltage will affect the light color of the bulb.

After the power is cut off, it takes 20 minutes to use the lamp to fully cool down before it can be powered on again.

In order to ensure the normal use of this product, please read this manual carefully. Signal line connection (DMX)

Use RS-485 cables that meet the specifications: shielded, 120ohm characteristic impedance, 22-24 AWG, low capacitive reactance. Do not use microphone cables or cables with different specified characteristics. The connection of the terminal must use 3 or 5 pin XLR type male/female connector. (Minimum 1/4 W).

Important note: The wires cannot touch each other or the metal shell.

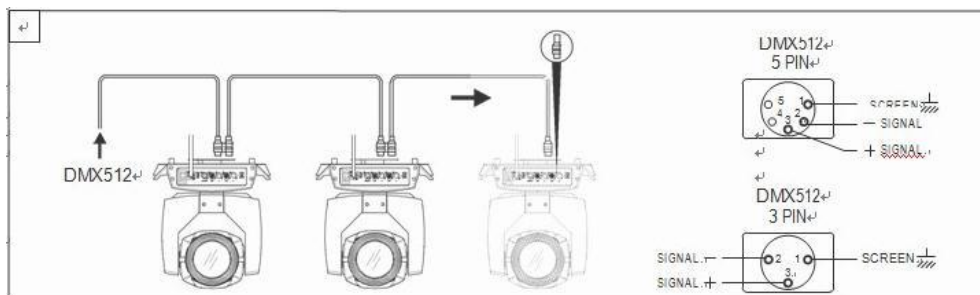


Figure 1 Schematic diagram of DMX signal line connection

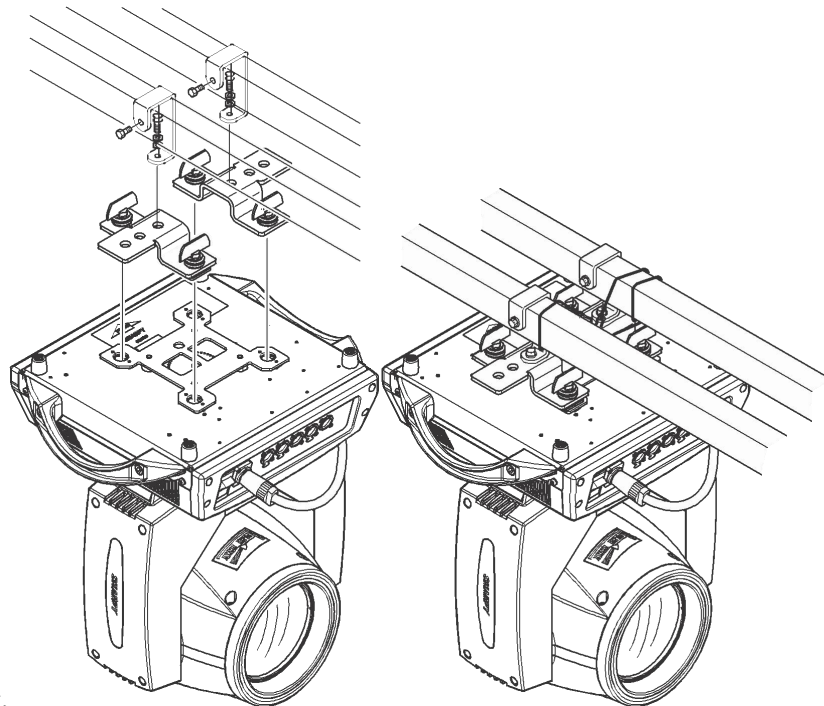
1. Light installation

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

As shown in Figure 2, before locating the luminaire, ensure the stability of the installation site. During the reverse hanging installation, you must ensure that the luminaire does not fall down on the support frame. A safety rope needs to pass through the support frame and the luminaire lift. Hand assist hanging to ensure safety and prevent the lamp from falling and sliding.

When the lamps are installed and debugged, pedestrians are prohibited from passing underneath. Regularly check whether the safety ropes are worn and the hook screws are loose.

Our company will not bear any responsibility for all the consequences caused by the falling of the lamp due to the unstable installation of the



hanging.

Figure 2 Schematic diagram of upside down lamps

Channel Description

The order of this lamp channel can be checked in the scene mode. The channel mode is set in the "Address Setting" page. The specific details are shown in the table below:

channel 1	channel 2	name	Numerical value	description
CH1	CH1	color	0-4	white light
			5-9	white light + 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	color8
			85-89	color8 + color9
			90-94	color9
			95-99	color9 + color10
			100-104	color10
			105-109	color10 + color11
			110-114	color11
115-119	color11 + color12			
120-124	color12			
125-129	color12 + color13			
130-134	color13			
135-139	color13 + white light			
140-200	Forward flow from fast to slow			
201-255	Forward flow from slow to fast			
CH2	CH2	strobe	0-3	off light
			4-103	Slow to fast pulse strobe
			104-107	on light
			108-207	Gradual strobe from slow to fast
			208-212	on light
			213-251	Gradual strobe from slow to fast

			252-255	on light
CH3	CH3	Dimming	0-255	0-100% dimming
CH4	CH4	Pattern	0-4	white light
			5-9	pattern 1
			10-14	pattern 2
			15-19	pattern 3
			20-24	pattern 4
			25-29	pattern 5
			30-34	pattern 6
			35-39	pattern 7
			40-44	pattern 8
			45-49	pattern 9
			50-54	pattern 10
			55-59	pattern 11
			60-64	pattern 12
			65-69	pattern 13
			70-74	pattern 14
			75-113	Forward flow from fast to slow
			114-117	Stop (no pattern)
			118-159	Reverse flow from slow to fast
			160-190	Slow to fast dither pattern 1
			191-195	Slow to fast dither pattern 2
			196-200	Slow to fast dither pattern 3
			201-205	Slow to fast dither pattern 4
			206-210	Slow to fast dither pattern 5
			211-215	Slow to fast dither pattern 6
			216-220	Slow to fast dither pattern 7
			221-225	Slow to fast dither pattern 8
226-230	Slow to fast dither pattern 9			
231-235	Slow to fast dither pattern 10			
236-240	Slow to fast dither pattern 11			
241-245	Slow to fast dither pattern 12			

			246-250	Slow to fast dither pattern 13
			251-255	Slow to fast dither pattern 14
CH5	CH5	Prism	0-127	Remove the prism
			128-255	Insert the prism
CH6	CH6	Prism rotation	0-127	0-400°
			128-190	Forward flow from fast to slow
			191-192	Stop
			193-255	Reverse flow from slow to fast
CH7	CH7	Colorful	0-127	No
			128-255	colorful
CH8	CH8	Atomization	0-127	No
			128-255	atomization
CH9	CH9	Zoom	0-255	from far to near
CH10	CH10	X axis	0-255	0-540°
CH11	CH11	X-axis fine-tuning	0-255	
CH12	CH12	Y axis	0-255	0-270°
CH13	CH13	Y-axis fine-tuning	0-255	
CH14	CH14	XY velocity	0-255	from fast to slow
CH15	CH15	reset	128-255	Reset the whole machine for more than 6 seconds
CH16	CH16	light cannon	26-100	Turn off the light cannon for more than 6 seconds
			101-255	Turn on the light cannon for more than 6 seconds
	CH17	keep	0-255	
	CH18	color wheel speed	0-255	from fast to slow
	CH19	Focus speed	0-255	from fast to slow
	CH20	Pattern plate speed	0-255	from fast to slow

Common Faults and Use Attention

- The lamp 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.
- 1. The bulb does not light up (except for LED light sources)
- 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.
- 2. The light beam appears dim
- Possible cause: The lamp 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.
- 3. Blurred pattern projection
- Check whether the electronic focus channel value is suitable for the current projection distance.
- 4. The lamps work intermittently
- Possible cause: The internal circuit enters the protection state, and the processing 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.
- 5. After the lamp is reset normally, it does not accept the control of the console
- Possible cause: The signal line is faulty or the lamp parameter setting is not normal, the treatment is as follows:
 - Check the start address code and check the connection of the DMX signal line (whether the signal line cable is intact, and whether the connection of the Deng Nong head is loose);
 - Add signal amplifier and 120 ohm terminal resistance;
- 6. The lamps cannot be started
- Possible reason: bad power line, the treatment is as follows:
 - Check whether the fuse on the power input socket is fused, and replace the fuse;
 - Lamps have poor line contact due to vibration during long-distance transportation
 - Check the input power, computer board and other plug-in devices.
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- 1. 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 wind 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 lamps, 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 on-off 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;
- In order to ensure that multiple lamps can better comply with the scene effect, the 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.
- 2. Precautions for the use of RDM
- RDM is an extended version of the DMX512-A protocol. It is a remote device management (Remote Device Management) protocol. The traditional DMX512 protocol communication is one-way communication. The protocol is based on the RS-485 bus. RS-485 is a time-sharing multipoint, half-duplex protocol. , Only one port is allowed to output from the host at the same time, so, pay attention to the following points when using RDM:
 - Use a console or host device that supports the RDM protocol host;
 - To use a two-way signal amplifier, the traditional one-way signal amplifier is not suitable for the RDM protocol, because the RMD protocol requires feedback data, and the use of a one-way amplifier will block the returned data, resulting in not being able to search for the lamps;
 - All lamps must be set to DMX mode to ensure that there is only one host on the signal line;
 - A 120ohm impedance matching resistor must be inserted between the terminals 2 and 3 of the terminal plug. When the signal line is relatively long, reducing signal reflection will use the differential signal to be more stable, which is conducive to the quality of communication;
 - When it appears that the lamp accepts DMX control, but cannot search for the lamp by RDM, first check the signal amplifier, and then check whether there is a bad connection between the 2 and 3 lines of the signal line.