

350W BEAM MOVING HEAD

ST-350A



User Manual

PLS
PROFESSIONAL

PLS-LITES

1. Chapter 1 Precautions and Installation

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 lamp housing with organic solvents such as alcohol to avoid damage.

2. Statement

This product has good performance and complete packaging when it leaves the factory. 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 dealers are not responsible for failures and problems caused by ignoring the operating manual. .

3. Product precautions

- In order to ensure the service life of the product, this product should not be placed in a damp or leaky 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.

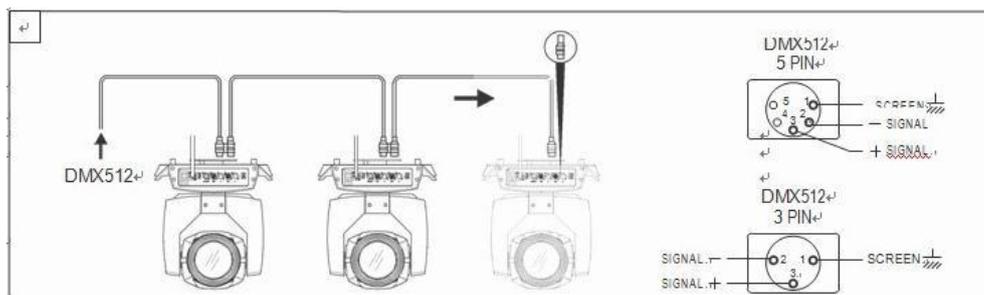


Diagram1 DMX Cable connection diagram

4. Installation

The lighting fixture 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 Fixture, ensure the stability of the installation site. When installing inverted and hanging, you must ensure that the fixture does not fall down on the support frame. A safety rope needs to pass through the support frame and the fixture lifting Hand assisted 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 fixture falling due to unstable hanging installation.

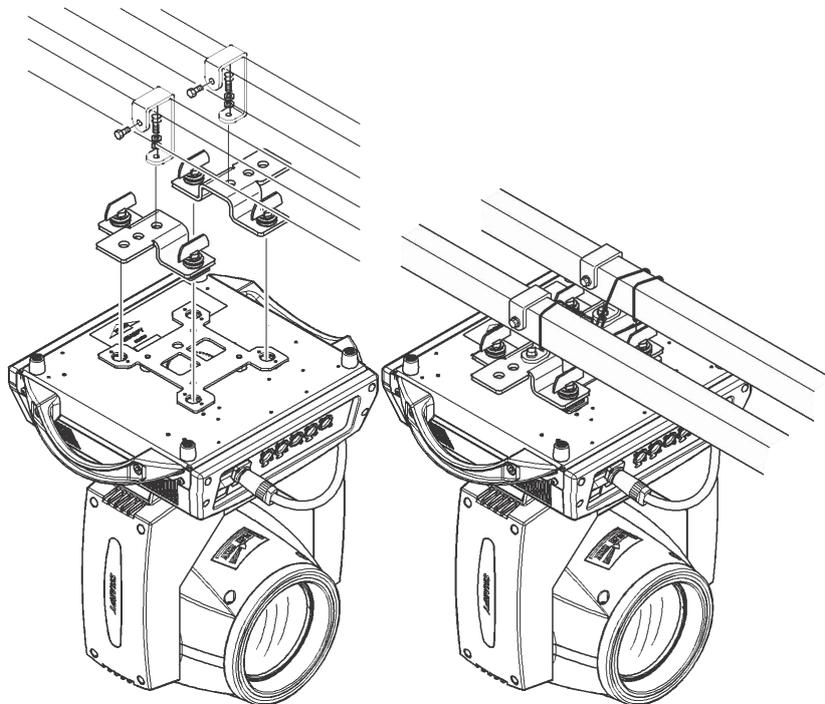


Diagram2 Schematic diagram of upside down fixture

Operation

The schematic diagram of the luminaire panel is shown in Figure 3. The upper title displays the name of the luminaire, and the lower is the status bar, which displays the current luminaire's signal, bulb status, and fault (when there is a fault message that has not been checked, it will display "ERR", otherwise it will display "NOR") Wait.

This fixture supports DMX/RDM protocol. When the lamp is searched by the RDM host, the three letters "RDM" will appear on the panel, indicating that the lamp is enumerated normally.

The display and operation are similar to the "Android operating system", and you can click on the corresponding item with your fingertip or a blunt object to operate.

Note: Do not use pointed or sharp objects to click on the display to prevent damage.



Diagram3 Display panel diagram

1. Use intuitive touch or encoder to operate fixture

- The left area is the TFT display area and the touch area. Click the content of the panel with a finger or blunt-faced hardware to complete parameter setting or viewing status.
- The area on the right is the auxiliary input. If you don't use the touch function of TFT, you can use the auxiliary input to select the items that need to be set or viewed to complete the operation.

2.Parameter value input

When the selected parameter item needs to enter a value, the window shown in Figure 4 will open:

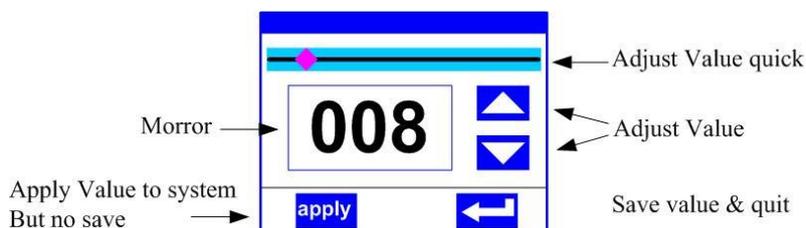


图 4 Value setting page

- **Set Value:** You can directly pull the slide bar to quickly set the required value, or click the "up" or "down" button on the right to set the required value accurately, or turn the "rotary encoder" on the right to set;

- **Applied value:**When the data is set by the "up" or "down" button, and then press the "apply" application button in the lower left corner, the value will be sent to the fixture immediately, but the value has not been saved;
- **Save Value:** At any time, click the "OK" button in the lower right corner to save the current value to the internal memory, and the saved value will be applied to the fixture next time you turn it on. .

3.Set boolean parameters

When the set parameter is a Boolean value (such as ON or OFF), you can directly click the corresponding item to switch the parameter value, and this type of parameter will be saved to the internal memory after modification. Press the parameter option on the right, and the corresponding option will be grayed out. When you let go, the corresponding parameters will be changed and saved. If pressing the parameter option is not the parameter you want to change, move your finger to another place on the screen at this time, and the corresponding parameter will not change.

The confirmation of important Boolean parameters will pass, and the confirmation window will be set, as shown in Figure 5 below

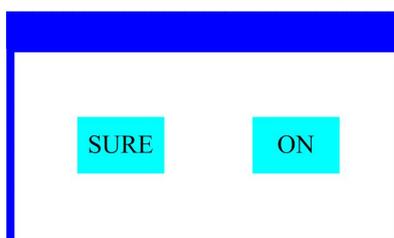


Diagram5 Confirm input window

1. Subpage (parameters)



Figure 6 Function page

5. Function operation and parameter setting

Enter the setting interface, as shown in Figure 6:

- In the main interface, you can enter the corresponding parameter setting interface by selecting six buttons.
- In the parameter setting interface, you can press the blue option on the left to quickly switch to other setting interfaces.

CHANNELS

1. Channel DMX

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

CH	CH	FUNCTION	VALUE	description
CH1	CH1	Colors	0-6	White
			7-13	White + Color 1
			14-20	Color1
			21-27	Color1 + Color2
			28-34	Color2
			35-41	Color2 + Color3
			42-48	Color3
			49-55	Color3 + Color4
			56-62	Color4
			63-69	Color4 + Color5
			70-76	Color5
			77-83	Color5 + Color6
			84-90	Color6
			91-97	Color6 + Color7
			98-104	Color7
			105-110	Color7 + Color8
			111-116	Color8
			117-122	Color8 + Color9
			123-128	Color9
			129-134	Color9 + Color10
			135-140	Color10
			141-146	Color10 + Color11
147-152	Color11			
153-158	Color11 + Color12			
159-164	Color12			
165-170	Color12 + Color13			
171-176	Color13			
177-182	Color13 + Color14			
183-188	Color14			
189-191	Color14 + WHITE			
192-223	Color 1-14From fast to slow			

			224-255	Color 14-1From Slow to Fast
CH2	CH2	Strobe	0-3	Turn Off Light
			4-103	Pulse stroboscopic from slow to fast
			104-107	Turn on the light
			108-207	Gradual strobe from slow to fast
			208-212	Turn on the light
			213-251	Random strobe from slow to fast
			252-255	Turn on the light
CH3	CH3	Dimming	0-255	0-100% Dimming
CH4	CH4	GOBOS	0-4	White
			5-9	Gobo 1
			10-14	Gobo 2
			15-19	Gobo 3
			20-24	Gobo 4
			25-29	Gobo 5
			30-34	Gobo 6
			35-39	Gobo 7
			40-44	Gobo 8
			45-49	Gobo 9
			50-54	Gobo 10
			55-59	Gobo 11
			60-64	Gobo 12
			65-69	Gobo 13
			70-74	Gobo 14
			75-79	Gobo 14
			80-84	Gobo 14
			85-89	Gobo 14
			90-95	Jitter Gobos from slow to fast 1
			96-101	Jitter Gobos from slow to fast 2
102-107	Jitter Gobos from slow to fast 3			
108-113	Jitter Gobos from slow to fast 4			
114-119	Jitter Gobos from slow to fast 5			

			120-125	Jitter Gobos from slow to fast 6
			126-131	Jitter Gobos from slow to fast 7
			132-137	Jitter Gobos from slow to fast 8
			138-143	Jitter Gobos from slow to fast 9
			144-149	Jitter Gobos from slow to fast 10
			150-155	Jitter Gobos from slow to fast 11
			156-161	Jitter Gobos from slow to fast 12
			162-167	Jitter Gobos from slow to fast 13
			168-173	Jitter Gobos from slow to fast 14
			174-179	Jitter Gobos from slow to fast 14
			180-185	Jitter Gobos from slow to fast 14
			186-191	Jitter Gobos from slow to fast 14
			192-223	Positive flow from fast to slow
			224-255	Reverse flow from slow to fast
CH5	CH5	PRISM	0-127	Remove the prism
			128-255	Insert the prism
CH6	CH6	PRISM ROTATE	0-2	0-400DEGREE
			3-128	Forward rotation from fast to slow
			129-255	Reverse rotation from fast to slow
CH7	CH7	CUT LIGHT	0-85	No
			86-171	Turn off the light during XY operation
			172-255	Turn off the light when XY stops
CH8	CH8	FROST	0-127	No

			128-191	Frost
			192-255	Rainbow
CH9	CH9	Zoom	0-255	From Far To Close
CH10	CH10	Pan	0-255	0-540degree
CH11	CH11	Pan Fine	0-255	0-2degree
CH12	CH12	Tilt	0-255	0-270degree
CH13	CH13	Tilt Fine	0-255	0-1degree
CH14	CH14	Mode	0-5	No
			6-10	
			11-15	Mode 1
			16-20	Mode2
			21-25	Mode3
			26-31	Mode4
			32-63	Automode1
			64-95	Automode2
			96-127	Automode3
			128-159	Automode4
			160-191	Automode5
			191-223	Automode6
224-255	Automode7			
CH15	CH15	Reset	240-255	Reset more than 5 seconds
CH16	CH16	Lamp Control	130-200	Turn off the lights in more than 5 seconds
			240-255	Turn on the lights in more than 5 seconds
	CH17	Pan/Tilt Speed	0-255	From Fast To Slow
	CH18	Colors Speed	0-254	From Fast To Slow
			255	Fastest
	CH19	Gobos Speed	0-254	From Fast To Slow
			255	Fastest
	CH20	Zoom Speed	0-255	From Fast To Slow

Common faults and use attention

The Fixture 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

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 is not completely cooled down, so let the lamp body cool down for more than 10 minutes to make the inside 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 Ballast (we will provide).

2.The light beam appears dim

Possible cause: The bulb 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 various components in the lamps are required

3.Blurred Gobos projection

- Check whether the electronic focus channel value is suitable for the current projection distance

4.Lighting Fixture works 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 closed
- Check whether the bulb has reached the end of its service life and replace it with a new one

5. After the lighting fixture 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 if the connection of the head is loose);
- Add signal amplifier, add 120 ohm terminal resistance

6. The lighting fixture cannot be started

Possible reasons: bad power line, the treatment is as follows:

- Check whether the fuse on the power input socket is fused, and replace the fuse;
- Fixture have poor line contact due to vibration during long-distance transportation

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