250W BEAM MOVING HEAD LIGHT

Instruction manual

Preface

First! Thank you very much for choosing our head beam lamp series products! This product is a high-performance light source computer head beam lamp with high-end and atmospheric appearance. It has advanced electronic control

technology and excellent human-oriented industrial design. The lamp cup and lightbulb of this light source are integrated, the arc length is very short, the

output brightness is strong and the light angle is small, the average service life of the light source is 1500 hours, equipped with rich colors and patterns, 2

rotating prisms, 1 Light weight, fast vertical and horizontal scanning speed, low running noise, less than 500W power, energy saving and environmental

protection.

It has a wide range of applications and simple installation; it can be used for lighting of large fixed stage, background dyeing, large-scale art performance, stadium lighting, temporary stage performance, urban lighting system, television station, conference center, professional theater, park, singing and dancing hall, bar, small-scale art performance and public environment lighting.

security information

This manual contains important information about the installation and use of this lamp product. Please strictly follow these instructions when installing and using.

★ please read all contents of this manual carefully. (please keep the manual together with the lamp for reference)

★ in order to ensure the correct and safe installation, use and maintenance of the product, it is necessary to understand

And operate in accordance with the contents of this manual.

★ the manufacturer shall not be liable for any damage to lamps, property or personal injury caused by failure to install, use and maintain in accordance with the requirements of this manual.

★ if you have any other questions about how to operate the equipment safely, please contact the dealer or call the service hotline

!! Warning: if the protective screen, lens or lens on the lamp produce visible damage (i.e. damage to the extent of failure), such as cracks or deep marks, they should be replaced before use。

&=45   When hanging and installing lamps, it must be verified that the hanging facilities and lamp hooks can bear more than 10 times of the weight of lamps and the installation facilities are free of other damages. After installation, the safety rope must be used as an auxiliary safety way to fix the lamp on other facilities that can bear the weight of the lamp. The personnel for electrical connection of lamps must have corresponding operation qualification before operation. When power on, please make sure that the power supply voltage you use is consistent with the voltage indicated by the lamp, and there is overload or leakage protection. When the luminaire is installed and positioned, the minimum distance between any point on the luminaire surface and any inflammable material is 1 m. Please do not install the lamp directly on the surface of ordinary combustible materials. The luminaires shall be dry and shall not be used in humid, overheated or dusty environments. Ensure that the maximum ambient temperature for normal and stable operation of the lamp is no more than 45 cycles, and the minimum temperature is no more than - 20 ° C. under stable heat dissipation working conditions, the maximum temperature of the lamp shell surface can reach 75 ° C, please do not touch it by hand. Before the lamp is not used, cleaned or repaired, please make sure that the power supply is disconnected, and do not pull or pull the power cord directly

★ special precautions for product use

In order to ensure the service life of the product, the product shall not be placed in a wet or leaky place, and shall not work in an environment with a temperature of more than 60 degrees

Do not place the product in a place easy to loosen or vibrate.In order to avoid the risk of electric shock, please call for professional maintenance for the maintenance of this product.

When the bulb is used, the change of power supply voltage shall not exceed ± 10%. If the voltage is too high, the service life of the bulb will be shortened. If the voltage is too low, the light color of the bulb will be affected.

To ensure the normal use of this product, please read this instruction carefully

Basic product parameters
Voltage:100-240V 50/60HZ
Power:350W
Bulb: Philips 250W / China 250W Bulb
Lifetime: 2200 hours
Color Temperature: 8000K
Beam Angle: 0-2°
Pan: 540°（16bit）with auto correction
Tilt: 270°（16bit）with auto correction
Color Wheel: 12+ blank
Static Gobo Wheel: 11 gobos
Prism: Double prisms with rotation, 16 prism + 24 prism
Frost + Colorful Effect Plate
Dimmer: 0-100% liner dimmer with strobe, adjustable strobe and strobe macro
Control: DMX512, sound run, auto run, master-slave
Channel: 16 Channels
IP protection grade: IP20
Overheating protection
Carton size: 515x440x725
Net weight: 14.5kg

DMX Signal line connection

DMX signal connection method of lamps: from the controller output to the input of the first lamp closer to the controller, and then from the output of the lamp to the input of the next lamp And so on until the lamps are connected.

When the signal is transmitted for a long distance (more than 150m) or the number of single way lamps exceeds 30, DMX512 signal amplifier shall be added in the middle of the line to ensure the signal connection is stable and normal, and then the terminal plug-in shall be added to the last lamp to improve the data transmission quality.

★ in order to ensure stable signal transmission,

DMX512 Signal wiring standard	
1	Shield wire / ground wire
2	Data pole
3	Da a line + pole

Please use shielded twisted pair cable which is in line with DMX512 signal to connect 0.25W and 120Q resistors between the 2 pins and 3 pins of the cannon head, and plug in the DMX of the last lamp.

Display panel operation and function settings

The schematic diagram of the lamp panel is shown below. The left side is TFT display, which supports touch operation. The right side is encoder knob, which can directly operate the lamp or set system parameters.

Display and operation are similar to "Android operating system". Click the corresponding item with fingertips or blunt objects to operate.

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

Schematic diagram of display panel

Use intuitive touch or key to operate the lamp

The left area is TFT display area and touch area. Click panel content with fingers or blunt hardware to complete parameter setting or view status and other operations.

The area on the right is the key for auxiliary input. If you do not use the touch function provided by TFT, you can use the key to select the item you want to set or view.

Main menu display interface

Display panel preset USB micro interface

When the external power supply (5V) is connected through USB micro interface, the parameters of the lamp can be set when the power is off. Long press the OK key to skip the reset process, and then set parameters: such as DMX address, etc., which will be saved automatically after setting, and then unplug the power supply.

Connect USB micro interface with data cable through computer to upgrade the fixture firmware.

Operation and function description of display home page

DMX address: display the current DMX address
Menu setting: Click to enter the main menu
Language switch: Click to set the interface language
Switch bulb: click switch bulb
Channel mode: Click to set the current channel mode. The number displayed indicates the current channel number
Reverse display: click the reverse display screen
Signal status: display the current signal status, click to switch the master-slave mode.
Green down arrow: indicates that the external DMX signal is currently being received
Yellow cross: no external DMX signal
Blue up arrow: indicates that it is currently in host mode and sending signals to the outside
Operation mode: Click to set the current operation mode. If the icon is highlighted, it indicates that the mode is currently running. No signal status: displays the action of the machine when the external DMX signal is lost. If the icon is highlighted, it indicates that the mode is currently running. This mode is only valid when the machine is turned on. For details, please refer to the description of menu [operation setting] - [when there is no DMX].
Error message: if a green tick is displayed, it indicates that the current self-test status is good. If a yellow exclamation mark is displayed, the self-test finds that there is an error. Click this icon to enter the error information menu to view the specific error information.

Blue LED: when flashing, it indicates that there is a DMX signal; when it is on for a long time, it indicates the host mode; when it is off, it indicates that there is no DMX signal. It can be set to "automatic" in the menu [display setting] - [indicator light] to make the indicator light go out with the LED backlight.

Red LED: when flashing, it means that it is currently in voice control mode, and when it is on for a long time, it means that an error is detected. It can be set to "automatic" in the menu [display setting] to [indicator light] to let the indicator light follow the LED

> Menu structure

---Setting ———— Operation mode

—-DMX Addr

----CH MODE

-**—X** inversion

—-Y inversion

--**XY** switching

----**XY** encoder **—-DMX** Signal

— power on and light up

----Linear change of color wheel

— restore default settings

-Software version

--Reset calibration

--Sensor monitoring

--SYSTEM   --system error

--Permission settings

-**DMX** monitoring

--Switch between Chinese and English
-Screen rotation

Main interface   . −Manual

16CH

CH	Function
1	PAN
2	TILT
3	PAN FINE
4	TILT FINE
5	PAN-TILT TIME
6	FROST
7	STOP/STROBE
8	DIMMER
9	COLOUR
10	GOBO
11	PRISM
12	PRISM1
13	PRISM RT
14	IRIS
15	FOCUS
16	RESET& LAMP CONTROL

☢ LAMP CONTROL& RESET

BIT	EFFECT	Remarks
250-255	COMPLETE RESET	Lamp switch passing through the unused range and staying 5 seconds.
206-249	UNUSED RANGE	
200-205	LAMP OFF	
106-199	UNUSED RANGE	
100-105	LAMP ON	
0-99	UNUSED RANGE	

⊛ COLOUR

BIT	EFFECT	Remarks
255	FAST ROTATION	Flowing water
……	……	
191	SLOW ROTATION	
190	FAST ROTATION	
……	……	
140	SLOW ROTATION	
135-139	COLOUR13 + WHITE	For the convenience of memory, the color value is always a multiple of 5.
130	COLOUR13	
125	COLOUR12 + COLOUR13	
120	COLOUR12	
115	COLOUR11+ COLOUR12	
110	COLOUR11	
105	COLOUR10+ COLOUR11	
100	COLOUR10	
95	COLOUR9+ COLOUR10	
90	COLOUR9	
85	COLOUR8+ COLOUR9	
80	COLOUR8	
75	COLOUR7 + COLOUR8	
70	COLOUR7	
65	COLOUR6+ COLOUR7	
60	COLOUR6	
55	COLOUR5+ COLOUR6	
50	COLOUR5	
45	COLOUR4 + COLOUR5	
40	COLOUR4	
35	COLOUR3+ COLOUR4	
30	COLOUR3	
25	COLOUR2 + COLOUR3	
20	COLOUR2	
15	COLOUR1 + COLOUR2	
10	COLOUR1	
5	WHITE +COLOUR1	
0	WHITE	

☺ STOP/STOBE

BIT	EFFECT	Remarks
252-255	OPEN	Controlled by dimming channel
239-251	RANDOM FAST STROBE	
226-238	RANDOM MEDIUM STROBE	
213-225	RANDOM SLOW STROBE	
208-212	OPEN	Controlled by dimming channel
207	FAST PULSATION	
……	……	
108	SLOW PULSATION	
104-107	OPEN	Controlled by dimming channel
103	FAST STROBE	
……	……	
4	SLOW STROBE	
0-3	CLOSED	

☺ DIMMER

BIT	EFFECT	Remarks
255	100%	
……	……	
0	0%	

GOBO

BIT	EFFECT	Remarks
255	GOBO 13 SHAKE, FAST SPEED	Value is always a multiple of 5
……	……	
251	GOBO 13SHAKE, SLOW SPEED	
……	……	
195	GOBO 1 SHAKE, FAST SPEED	
……	……	
191	GOBO 1 SHAKE, SLOW SPEED	
190	FAST ROTATION	
……	……	
135	SLOW ROTATION	
130-134	STOP	
129	SLOW ROTATION	
……	……	
70	FAST ROTATION	
65-69	GOBO 13	
60	GOBO 12	
55	GOBO 11	
50	GOBO 10	
45	GOBO 9	
40	GOBO 8	
35	GOBO 7	
30	GOBO 6	
25	GOBO 5	
20	GOBO 4	
15	GOBO 3	
10	GOBO 2	
5	GOBO 1	
0	WHITE	

☼ PRISM

BIT	EFFECT	Remarks
128-255	PRISM INSERTED	
0-127	PRISM EXCLUDED	

☼ PRISM1

BIT	EFFECT	Remarks
128-255	PRISM1 INSERTED	
0-127	PRISM1 EXCLUDED	

☼ PRISM ROTATION

BIT	EFFECT	Remarks
255	FAST ROTATION	
……	……	
193	SLOW ROTATION	
191-192	STOP	
190	SLOW ROTATION	
……	……	
127	FAST ROTATION	
0-127	POSITION	

☼ PRISM1 ROTATION

BIT	EFFECT	Remarks
255	FAST ROTATION	
……	……	
193	SLOW ROTATION	
191-192	STOP	
190	SLOW ROTATION	
……	……	
127	FAST ROTATION	
0-127	POSITION	

☼ FROST

BIT	EFFECT	Remarks
128-255	FROST INSERTED	

0-127	FROST EXCLUDED	

☺ IRIS

BIT	EFFECT	Remarks
128-255	IRIS INSERTED	
0-127	IRIS EXCLUDED	

☺ FOCUS

BIT	EFFECT	Remarks
255	100%	
……	……	
0	0%	

- ☺ **PAN**（....）
- ☺ **PAN FINE**（....）
- ☺ **TILT**（....）
- ☺ **TILT FINE**（....）
- ☺ **PAN-TILT TIME**
- ☺

	Timing Channel	CH Function	Remarks	
0-255	Pan-Tilt time	Pan-Tilt-(Pan fine-Tilt fine)	255 ------ 0	SLOW SPEED ------ FAST SPEED

Precautions for use

Check whether the local power supply meets the rated voltage requirements of the product, and whether the leakage protector, overcurrent protector, etc. meet the load requirements;

Do not use the power cord with damaged insulating layer, and do not lap the power cord on other wires;

The lamp is cooled by strong wind, which is easy to accumulate dust. It must be cleaned once a month, especially the air outlet for heat dissipation. Otherwise, it will be blocked due to dust

accumulation, resulting in poor heat dissipation and abnormal lamp.

When installing lamps, the fixing screws must be fastened, safety cables shall be added, and regular inspection shall be carried out;

When the lamp is installed and positioned, the minimum distance between any point on the surface of the lamp and any inflammable and explosive substance shall be 10 meters, and the distance from the irradiating substance shall be 4 meters. Please do not install the lamp directly on the surface of combustible substance;

• it is recommended that the continuous working time of lamps should not exceed 10 hours, and the interval between continuous start of lamps should not be less than 10 minutes, otherwise the lamps will not be triggered normally due to the overheating protection of lamps;

• the closing time of the on-off valve shall not exceed 5 minutes. If the light needs to be closed for a long time, the console shall be used

(light control channel) 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, that is, start the next scene action. It is better not to exceed 3 minutes in this state to ensure that multiple lamps can operate synchronously.

In the process of using, if the lamp is abnormal, stop using the lamp in time to prevent other faults;

Common faults and precautions

★ the lamp contains professional parts such as microcomputer circuit board and high-voltage power supply. For your safety and product life, non professionals are not allowed to dismantle the lamp and

relevant accessories without authorization.

★ **the bulb does not work**
Possible causes: the bulb is not completely cooled, or the bulb has reached its service life. The treatment is as follows:
Due to abnormal operation, the bulb is not completely cooled. Let the lamp body cool down for more than 10 minutes, so that the internal part can completely return to normal state, and then start the power supply again;
Check whether the bulb has reached the service life, and replace it with a new one;
Check whether there is leakage, falling off or poor contact between the lightbulb and the circuit of the lighter; Replace the lighter with a new one.

★ t**he light beam is dim**
Possible causes: the bulb has been used for a long time or the light path is not clean, and the treatment is as follows:
Check whether the bulb has reached the service life, and replace it with a new one;
Check whether the optical components or bulbs are clean and whether there is dust accumulated on the optical components such as bulbs. Regularly clean and maintain the bulbs and components in the lamps.

★ t**he light beam is dim**
Possible causes: the bulb has been used for a long time or the light path is not clean, and the treatment is as follows:
Check whether the bulb has reached the service life, and replace it with a new one;
Check whether the optical components or bulbs are clean and whether there is dust accumulated on the optical components such as bulbs. Regularly clean and maintain the bulbs and components in the lamps.

★ **blurred pattern projection**
Check whether the value of the electron focusing channel is suitable for the current projection distance.

★ **lamps work intermittently**
Possible cause: the internal line enters the protection state, and the treatment is as follows:
Check whether the fan operates normally or becomes dirty, which causes the internal temperature of the lamp to rise;
Check whether the internal temperature control switch is closed;
Check whether the bulb has reached the service life and replace it with a new one.

★ **the lamp will not be controlled by the control console after normal reset**
Possible causes: signal line failure or lamp parameter setting is abnormal, the treatment is as follows:
Check the starting address code and the connection of DMX signal line (whether the signal line cable is intact and whether the connection of the cable head is loose);
Add signal amplifier and 120 ohm terminal resistance;
Check the lamp parameter setting to ensure that the lamp is in "DMX mode",

★ **the lamp cannot be started**
Possible cause: the power line is poor, and the treatment is as follows:
Check whether the fuse on the power input socket is broken, and replace the fuse;   Poor contact of line caused by vibration during long-distance transportation of lamps