Beam 250

moving head light

User manual

(RDM, color display, touch operation)

Please read the instructions carefully before use

Catalogue

Chapter 1 Precautions and Installation

1. Maintenance

a) The fixture shall be kept dry to avoid working in a humid environment.

b) Intermittent use will effectively prolong the service life of the fixture.

c) In order to obtain good ventilation effect and lighting effect, pay attention to cleaning the fan, fan mesh and lens frequently.

d) Do not wipe the lamp shell with alcohol or other organic solvents to avoid damage.

2. Declaration

When the product is delivered from the factory, its performance is intact and its packaging is complete. All users shall strictly abide by the warnings and operating instructions stated above. Any damage caused by misuse is not covered by the Company's warranty, and the failure and problem caused by ignoring the operating manual is not within the scope of the dealer.

This manual is subject to technical changes without notice

3. Product Precautions

a) In order to ensure the service life of the product, this product should not be placed in a damp or leaking place, nor should it work in an environment where the temperature exceeds 60 degrees.

b) Do not place the product in a place that is easy to loosen or vibrate.

c) In order to avoid the danger of electric shock, this product should be repaired by professionals.

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

e) After the power is cut off, it takes 20 minutes for the lamps to be fully cooled before being powered on again

f) To ensure the normal use of this product, please read this instruction carefully. Signal line connection (DMX)

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

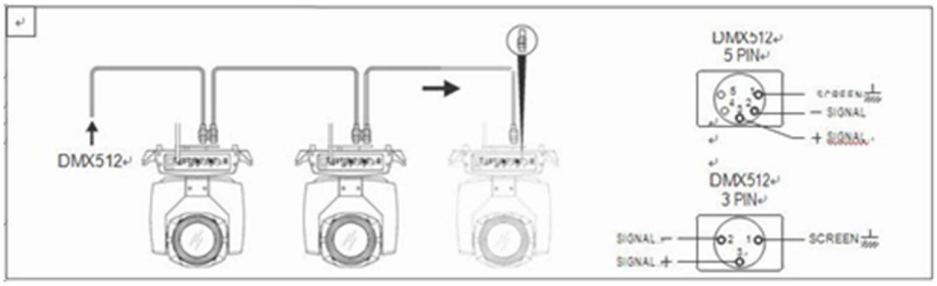

Figure 1 DMX signal line connection diagram

4. Installation of fixture

Fixture can be placed horizontally, inclined or upside down. Pay attention to the installation method when hanging diagonally or upside down.

As shown in Figure 2, before positioning the Fixture, the stability of the installation site shall be ensured. During the reverse hanging installation, it is necessary to ensure that the lamp does not fall off the support frame. It is

necessary to use a safety rope to pass through the support frame and the lamp handle for auxiliary hanging to ensure safety and prevent the lamp from falling and sliding.

During the installation and commissioning of fixtures, pedestrians are not allowed to pass under them. Regularly check whether the safety ropes are worn and whether the hook screws are loose.

Our company will not bear any responsibility for all consequences arising from falling fixtures due to unstable hanging installation.

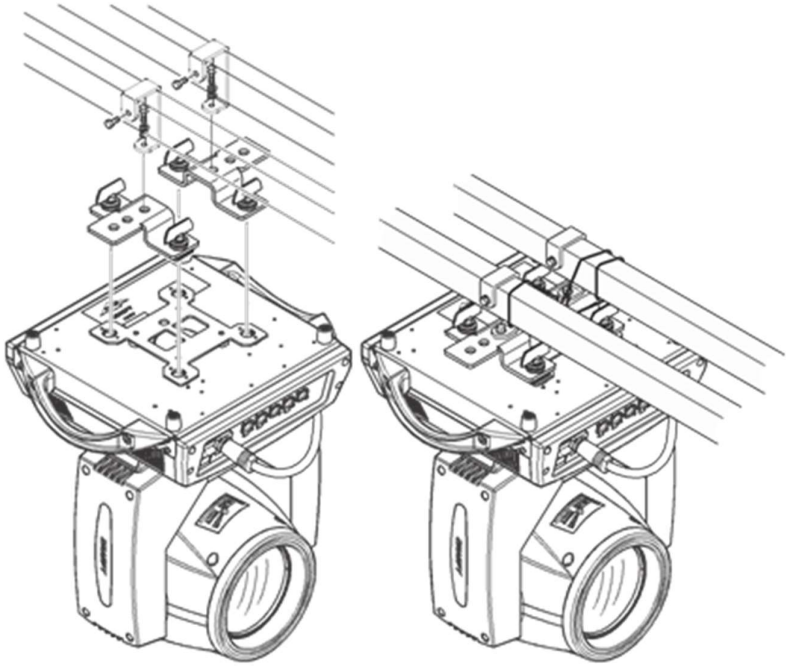

Figure 2 Schematic Diagram of Inverted Fixture

Chapter 2 Panel Operation

1. Overview

The schematic diagram of the fixture panel is shown in Figure 3. The title above shows the lamp name, and the status bar below shows the signal, bulb status, and fault of the current lamp ("ERR" is displayed when the fault information is not viewed, otherwise "NOR" is displayed).

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

The display and operation are similar to "Android operating system". Click the corresponding item with your fingertip or blunt object to operate

2. Menu operation

1. Select the menu item

The left area is the TFT display area and the touch area. Click the panel content with your finger or blunt hardware to complete parameter settings or check the status.

2. Parameter value input

Setting value: You can directly pull the slider to quickly set the required value, or click the "Up" or "Down" button on the right to precisely set the required value or use auxiliary input to set.

Application value: When the data is set by pressing the "Up" or "Down" button, and then press the "Apply" button at the bottom left corner, the value will be sent to the lamp immediately, but the value is not saved.

Save the value: at any time, click the "OK" button at the bottom right corner to save the current value to the internal memory, and the saved value will be applied to the lamp when it is turned on next time.

3. Function Menu Description

1. Set DMX address code

The menu setting of lamps optimizes the address setting, and several operations for setting address codes are as follows:

Select "Previous" or "Next", the lamp will automatically calculate the address code of the next or previous set according to the current address code and channel data, which can be quickly set;

Click the address code value to enter the value editing window, where you can set any valid address code. The fixture automatically obtains the current channel number of the lamp, and automatically filters the address code (512 - current channel number) that cannot be used.

The fixture supports RDM protocol, and the lamp address code can be set remotely through RDM.

Two buttons are provided:

Channel mode: different channel modes can be selected circularly;

fixture reset: reset all motors.

2. Set fixture working mode

The fixture supports four operation modes (DMX mode, self-propelled mode, voice control mode and scene mode)

3. Panel display setting

Fixture support Chinese English bilingual, upside down display

Chapter 3 Channel Description

CHANNEL	Function
CH1	Pan
CH2	Tilt
CH3	Pan fine
CH4	Tilt fine
CH5	P/T speed
CH6	Frost
CH7	Strobe
CH8	Dimmer
CH9	Color
CH10	Gobo
CH11	Prism 1
CH12	Prism 2
CH13	Prism Rot
CH14	Rainbow
CH15	Focus
CH16	Lamp/Reset

Lamp/Reset(CH16): 100-105 (LAMP OFF)

200-205 (LAMP ON)

240-255 (RESET ALL)

Chapter 4 Common Faults and Precautions

1. Common fault handling

The fixture contains microcomputer circuit board, high-voltage power supply and other professional components. For your safety and product life, no professionals are not allowed to dismantle the fixture and related accessories without authorization.

1. The bulb does not light up (except for LED light source)

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, so the lamp body should be allowed to cool for more than 10 minutes to fully restore its interior to normal state, and then start the power supply again;

Check whether the bulb has reached its service life, and replace it with a new one;

Check whether the circuit between the bulb and the lamp lighter leaks, falls off or has poor contact;

Replace with a new lamp lighter.

2. The beam appears dim

Possible causes: 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 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. Clean and maintain the bulbs and components in the lamps regularly.

3. Blurred pattern projection

Check whether the electronic focusing channel value is suitable for the current projection distance.

4. The fixture works intermittently

Possible causes: the internal circuit enters the protection state, and the treatment is as follows:

Check whether the fan operates normally or becomes dirty, causing the temperature inside the lamp to rise;

Check whether the internal temperature control switch is closed;

Check whether the bulb has reached its service life and replace it with a new one.

5. The lamp does not accept the control of the console after normal reset

Possible causes: signal line fault or abnormal lamp parameter setting. The handling is as follows:

Check the starting address code and the connection of the DMX signal line (whether the signal line cable is in good condition and whether the connection of the CORNON head is loose);

Add signal amplifier and 120 ohm terminal resistor;

6. The fixture cannot be started

Possible causes: the power line is poor, and the treatment is as follows:

Check whether the fuse on the power input socket is fused, and replace the fuse;

Poor line contact caused by vibration of lamps during long-distance transportation

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

2. Precautions

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

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

The fixtures are cooled by strong wind, which is easy to accumulate dust, so they must be cleaned once a month, especially the cooling air outlet, otherwise the lamps will be blocked by dust, resulting in poor heat dissipation and abnormal fixtures.

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

During the installation and positioning of the lamp, the minimum distance between any point on the fixture surface and any combustible or explosive substance is 10 meters, and the distance from the illuminant is 2.5 meters. Please do not directly install the fixture on the surface of combustible substances;

It is recommended that the continuous working time of the fixture should not exceed

10 hours, and the interval between the continuous starting of the fixture should not be less than 10 minutes, otherwise it will not be triggered normally due to the overheat protection of the bulb;

The closing time of switching valve shall not exceed 5 minutes. If it is necessary to turn off the light for a long time, the control console (lamp control channel) shall be used to turn off the fixture;

3. Precautions for using RDM

RDM is an extended version of DMX512-A protocol. It is a 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 and half duplex protocol. Only one port is allowed to output for the host at a time. Therefore, the following points should be noted when using RDM:

The console or host equipment that supports RDM protocol hosts shall be used;

To use a two-way signal amplifier, the traditional one-way signal amplifier is not suitable for RDM protocol, because the RMD protocol requires feedback data, and the use of a one-way amplifier will block the returned data, resulting in no lamp search;

All fixtures 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 terminals 2 and 3 of the terminal plug. When the signal line is relatively long, reducing the signal reflection will make the differential signal more stable, which is conducive to the quality of communication;

When the fixture is controlled by DMX, but the RDM cannot search the fixture, check the signal amplifier first, and then check whether there is a poor contact between the 2 and 3 lines of the signal line.