
200WLED Beam Plus Light Strip With Moving Head Light

Users' Manual



Contents

| | |
|--|------|
| 1. Precautions and Installation Precautions and Installation | I |
| 1.1 Statement | I |
| 1.2 Maintenance | I |
| 1.3 Product Precautions | I |
| 1.4 Product Introduction | I |
| 1.5 Signal line connection | II |
| 1.6 Lighting installation | II |
| 2. Control Panel | IV |
| 2.1 Key Description | IV |
| 2.2 Menu Description | V |
| 2.2.1 Setting | V |
| 2.2.2 Manual Control | VI |
| 2.2.3 Information | VI |
| 2.2.4 Factory | VIII |
| 3. Channel Function | VIII |
| 3.1 Channel Table | VIII |
| Channel parameters (full version) | X |
| Common malfunctions | XIII |

1. Precautions and Installation Precautions and Installation

1.1 Statement

Thank you for choosing our company's products! When this product leaves the factory, its performance is intact and its packaging is complete. For your safe and effective use of this product, please read this instruction manual carefully and completely before using this product. This manual contains important information for installation and use. Please install and operate according to the requirements of the manual. At the same time, please keep this manual properly for use at any time. Our company is not responsible for any damage to lamps or other performances due to personal failure to operate in accordance with the instructions during installation, use, and maintenance.

This manual is subject to technical changes without prior notice.

1.2 Maintenance

- Please disconnect the power before maintenance.
- The lamp should be kept dry and avoid working in a humid environment.
- Intermittent use will effectively prolong 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 shell of the lamp with alcohol or other organic solvents to avoid damage.

1.3 Product Precautions

- This lamp is for professional use only.
- Before operation, make sure that the power supply voltage matches the power supply voltage required by the equipment.
- Do not place this product in a place where it is easy to loose or vibrate.
- During use, if the lamp is abnormal, stop using the lamp in time.
- In order to ensure the service life of the product, this product should not be placed in a place with humidity or water leakage, let alone work in an environment where the temperature exceeds 60 degrees.
- When the bulb is in use, the power supply voltage should not vary by more than $\pm 10\%$. 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.
- 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.
- The rotating parts of the lamps and the pasting accessories must be checked regularly, and any looseness and shaking should be reinforced in time to prevent accidents.
- In order to ensure the normal use of this product, please read this instruction carefully.

1.4 Product Introduction

- Light source power: 200W;
- Voltage: AC 200V~240V/50~60Hz;
- Color wheel: each color wheel consists of 13 color chips + white light;
- Pattern wheel: 17 pattern effects + white light composition;

- 540° pan, 270° tilt.
- Overheating protection;
- Control mode: DMX512/master-slave/automatic;
- IP20 protection grade

1.5 Signal line connection

The lamps are equipped with standard DMX input and output 3-pin or 5-pin XLR sockets. Please use the shielded twisted-pair signal cable specially designed for DMX 512; the signal cable is generally connected at a distance of 150 meters, and a DMX512 signal amplifier must be added for long-distance signal transmission.

Use a shielded twisted pair signal cable to connect the DMX output port of the controller to the DMX input port of the first device, and connect the DMX output port of the first device to the DMX input port of the second device, and so on. Until all the lamps are connected, then install a terminal plug on the last connected lamp output 3-core jack of each link. (Weld a 4/1W, 120 Ω resistor between pins 2 and 3 of the 3-pin XLR plug).

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

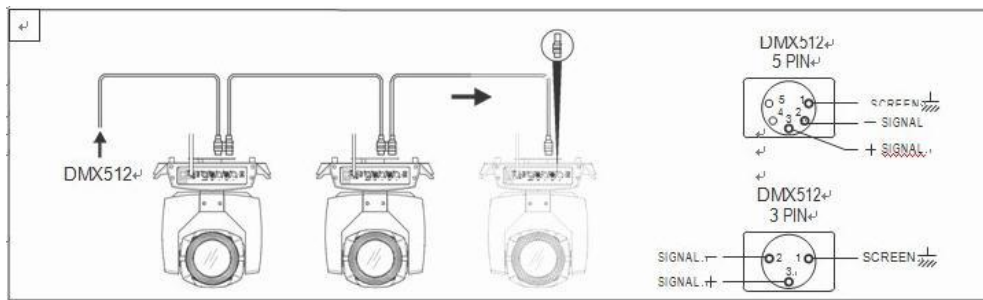


Figure 1 DMX signal line connection diagram

➤ Calculation method of lamp starting address code:

The starting address code of the current lamp is equal to (the starting address code of the previous lamp) + (the number of channels of the lamp) Explanation:

1: The initial address code value of the first lamp is A001.

2: The number of basic channels of the controller should be greater than or equal to the total number of channels used by the lamps.

3: Note: When using any controller, each lamp must have its own initial address code, if the initial address code of the first lamp is set to A001, and the channel number of lamps is 16CH; then The start address code of the second lamp is set to A017; the start address code of the third lamp is set to A033; and so on, (this setting method also needs to be determined according to different consoles)

1.6 Lighting installation

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

As shown in Figure 2, before positioning the luminance, ensure the stability of the installation site. When inverting the hanging installation, you must ensure that the luminance does not fall off

the support frame. It is necessary to use a safety rope to pass through the support frame and the luminance. Auxiliary hanging by hand to ensure safety and prevent falling and sliding of lamps. When the lamp is installed and debugged, pedestrians are prohibited from passing below, and the safety rope is regularly checked for wear and hook screws for looseness.

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

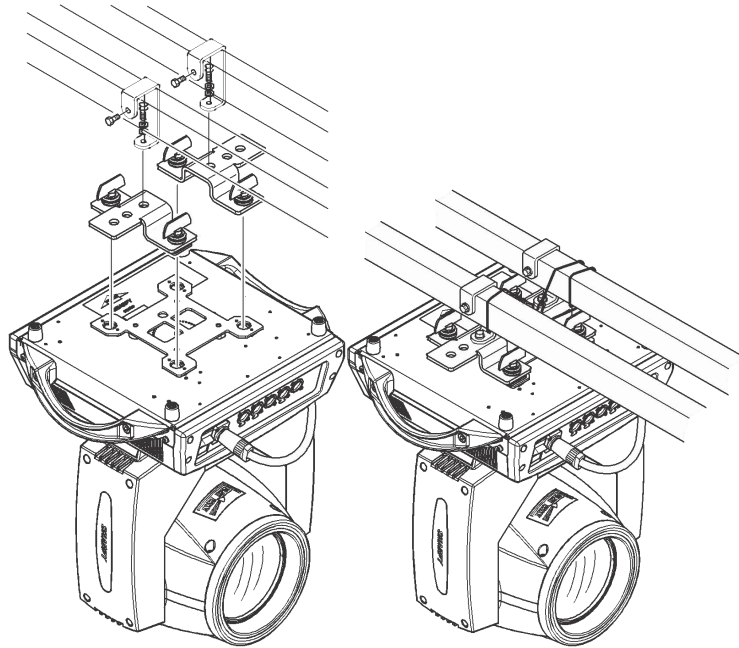
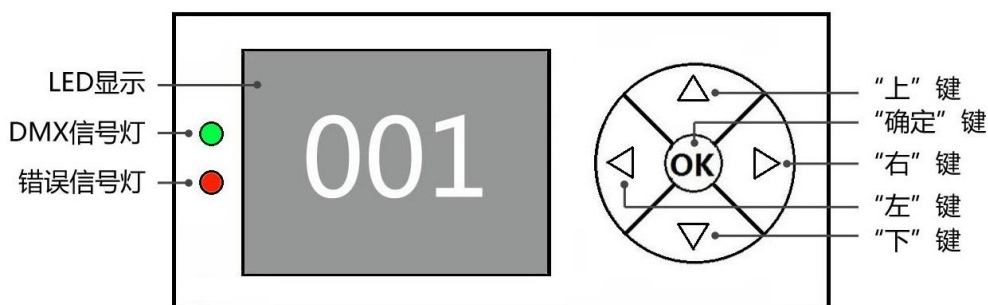


Figure 2 Schematic diagram of upside-down lamps

2. Control Panel

2.1 Key Description



“左” “右” 键的功能是一样的：返回上一界面

“上”、“下” 键：选择、编辑

“确定” 键（即 “OK” 键）：执行功能、开始编辑、退出编辑

Figure 3 Schematic diagram of panel button description

The following takes “modify DMX address code” as an example to describe the use of buttons:

1. If the current interface is not the main interface, press the “Left” button (one or more times) to return to the main interface
2. In the main interface, press the “Up” key or “Down” key to select the “Settings” button
3. Press the “OK” button to enter the “Settings” interface
4. In the “Settings” interface, press the “Up” or “Down” key to select “DMX Address”
5. Press the “OK” key to enter the editing state
6. Press the “up” 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 the main menu

2.2.1 Setting

| Options | Illustrate | |
|----------------|----------------|---|
| Operating Mode | DMX | Slave state: receive DMX signal from console or host |
| | Self-Propelled | Master status: self-propelled and send DMX signal to slave |
| | Voice Control | |
| DMX Address | 1~512 | Press the "OK" key to enter the editing state. At this time, the hundreds digit is selected, press the "Up" and "Down" keys to change the address code. Press the "OK" button again to select the tenth editor. Press the "OK" button again to select the ones digit for editing. Press again to exit editing state |
| Motor Reset | Close | |
| | Open | Fixture Reset |
| Channel Mode | Standard 14CH | Standard 14 channel mode |
| | Extended 20CH | Extended 20 channel mode |
| Language | Chinese | Set to Chinese interface |
| | English | Set to English interface |
| Screen Flip | Close | Front display |
| | Open | Screen reversed |
| X Reverse | Close | |
| | Open | |
| Y Reverse | Close | |
| | Open | |

| | | |
|------------------------------|-------|---|
| Xy Swap | Close | |
| | Open | Swap channels of XY axes (including trimming) |
| Xy Encoder | Open | Use the encoder (optocoupler) to judge out-of-step and automatically correct the position |
| | Close | Position correction without encoder (optocoupler) |
| Dmx Signal | Keep | continue to run |
| | Clear | The motor returns to its position and stops running |
| Boot Light Bubble | Close | Reset directly after power on, without turning on the bulb (need to use the menu or console to manually turn on the bulb) |
| | Open | The bulb will automatically light up after power on, and it will not be reset until the bulb is successfully turned on |
| Color Wheel Changes Linearly | Open | Color wheel changes linearly |
| | Close | Color wheel non-linear change, half-color change |
| | | Press the "OK" button to see the confirmation dialog box, press the "OK" button again to restore the default settings |

2.2.2 Manual Control

This interface is used to control the current fixture (does not receive DMX signal), corresponding to the channel. For details, refer to the channel table

| Options | Illustrate | |
|---------|------------|--|
| 1CH. | 0~255 | Press the "OK" key to enter the editing state. At this time, the hundreds place is selected, press the "Up" and "Down" keys to change the channel value. Press the "OK" button again to select the tenth editor. Press the "OK" button again to select the ones digit for editing. Press again to exit editing state |
| | 0~255 | |
| 15CH. | 0~255 | |
| | 0~255 | |

2.2.3 Information

| Options | Illustrate | |
|---------|------------------|--------------------------------------|
| DIS | | Display board software version |
| MT | | Motor board software version |
| Manual | manual interface | Corresponding channel manual control |

| | | |
|--------------------------------|---------------------------------------|--|
| Time Information | 1.Total Bright Foam 2. Total usage | Record the cumulative bright bubble time Record lamp usage time |
| System Error | | If the red ERR indicator is on, it means that the lamp is running incorrectly, and you can enter the sub-interface to view the details. After viewing, you can press the "clear" button to clear the error record |
| Blower Speed | | Displays the current blower speed |
| Hall State | 0000000 | 0 when magnetism is detected, 1 otherwise |
| X-Axis Encoder Disc Step Value | 0000 | When walking in the positive direction, the step value should increase, and when walking in the reverse direction, the step value should decrease. It is normal that the value is the same every time you go to the same point |
| Y-Axis Encoder Disc Step Value | 0000 | When walking in the positive direction, the step value should increase, and when walking in the reverse direction, the step value should decrease. It is normal that the value is the same every time you go to the same point |
| Permission Duration | | 9999 without encryption; other values can be used with encryption |

A. Error message description

| Common Error Messages | Illustrate |
|----------------------------|--|
| MT board connection failed | The motor board is not responding. There is a problem with the serial communication line connecting the display board and the motor board, or there is a problem with the motor board. |
| Y axis reset failed | There is a problem with the Y-axis photoelectric switch, or the Y-axis motor or motor board |
| X-axis Hall error | X-axis Hall, or there is a problem with the motor board |
| Y-axis Hall error | Y-axis Hall, or there is a problem with the motor board |
| Color wheel reset failed | There is a problem with the color wheel Hall, or the color wheel motor |
| Gobo reset failed | Gobo Hall, or there is a problem with the gobo motor |
| Focus reset | There is a problem with the focus Hall, or the focus motor |

| | |
|---------------------|---|
| failed | |
| Bulb control failed | Bubble brightening or defoaming failed, there is a problem with the igniter or bulb |

2.2.4 Factory

| | | |
|-------------|-----------------|--|
| Calibration | Data Download | After replacing the display board, download the calibration data of the original display board from the motor board. |
| | X Axis | After entering the sub-interface, you can adjust the reset position of the X-axis, Y-axis and other motors to compensate for errors in hardware installation. The adjustment range is -128~+127, and +0 means no adjustment. |
| | Y Axis | |
| | Color | |
| | Pattern | |
| | Focusing | |
| | Atomize | |
| | Colorful Mirror | |
| | Clear | Switch |
| | X Hall | Switch |
| | Y Hall | Switch |
| | Half Power | Switch |

3. Channel Function

3.1 Channel Table

| Channel | 14 Channel Mode | 20 Channels |
|---------|------------------------|------------------------|
| 1 | Color Wheel | Color Wheel |
| 2 | Cut Light/Strobe | Cut Light/Strobe |
| 3 | Dimming | Dimming |
| 4 | Gobo Wheel | Gobo Wheel |
| 5 | Prism & Rotation | Prism & Rotation |
| 6 | Atomization & Colorful | Atomization & Colorful |
| 7 | Focusing | Focusing |
| 8 | x | x |
| 9 | X Fine-Tuning | X Fine-Tuning |
| 10 | Y | Y |
| 11 | Y Fine-Tuning | Y Fine-Tuning |
| 12 | XY Speed | XY Speed |
| 13 | Self-Propelled | Self-Propelled |
| 14 | Reset | Reset |
| 15 | | Light Ring Strobe |
| 16 | | Light Ring Red |
| 17 | | Light Circle Green |

| | | |
|----|--|--------------------------|
| 18 | | Light Circle Blue |
| 19 | | Light Circle Scene |
| 20 | | Light Circle Scene Speed |

Channel parameters (full version)

| Channel | Function | Channel Value | Effect |
|-----------|--|---------------|--|
| 1 | Color Wheel | 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+ white light | | |
| 140 - 200 | Reverse flow (from fast to slow) | | |
| 201 - 255 | Forward water flow (from slow to fast) | | |
| 2 | Strobe | 000-003 | shutter closed |
| | | 004-103 | Strobe from slow to fast |
| | | 104-107 | Shutter open → (controlled by dimming channel) |
| | | 108-207 | Pulse strobe from slow to fast |
| | | 208-212 | Shutter open → (controlled by dimming channel) |
| | | 213-251 | Random strobe from slow to fast |
| | | 252-255 | Shutter open → (controlled by dimming channel) |
| 3 | Dimming | 000-255 | from dark to light |

| | | | |
|-----------|---|-----------|---|
| 4 | Gobo Wheel | 000 - 004 | Solid image 1 (white light) |
| | | 005 - 009 | Solid Figure 2 |
| | | 010 - 014 | Solid Figure 3 |
| | | 015 - 019 | Solid Figure 4 |
| | | 020 - 024 | Solid Figure 5 |
| | | 025 - 029 | Solid Figure 6 |
| | | 030 - 034 | Solid Figure 7 |
| | | 035 - 039 | Solid Figure 8 |
| | | 040 - 044 | Solid Figure 9 |
| | | 045 - 049 | Solid Figure 10 |
| | | 050 - 054 | Solid Figure 11 |
| | | 055 - 059 | Solid Figure 12 |
| | | 060 - 064 | Solid Figure 13 |
| | | 065 - 069 | Solid Figure 14 |
| | | 070 - 074 | Solid Figure 15 |
| | | 075 - 079 | Solid Figure 16 |
| | | 080 - 084 | Solid Figure 17 |
| | | 085 - 089 | Solid Figure 18 |
| | | 090 - 094 | Fixed image 1 jitters (from slow to fast) |
| | | 095 - 099 | Fixed Figure 2 jitters (from slow to fast) |
| | | 100 - 104 | Fixed Figure 3 jitters (from slow to fast) |
| | | 105 - 109 | Fixed Figure 4 jitters (from slow to fast) |
| | | 110 - 114 | Fixed Figure 5 jitters (from slow to fast) |
| | | 115 - 119 | Fixed Figure 6 jitters (from slow to fast) |
| | | 120 - 124 | Fixed Figure 7 jitters (from slow to fast) |
| | | 125 - 129 | Fixed figure 8 jitters (from slow to fast) |
| | | 130 - 134 | Fixed figure 9 jitters (from slow to fast) |
| | | 135 - 139 | Fixed figure 10 jitters (from slow to fast) |
| 140 - 144 | Fixed figure 11 jitters (from slow to fast) | | |
| 145 - 149 | Fixed figure 12 jitters (from slow to fast) | | |
| 150 - 154 | Fixed figure 13 jitters (from slow to fast) | | |
| 155 - 159 | Fixed figure 14 jitters (from slow to fast) | | |
| 160 - 164 | Fixed figure 15 jitters (from slow to fast) | | |
| 165 - 169 | Fixed figure 16 jitters (from slow to fast) | | |
| 170 - 174 | Fixed figure 17 jitters (from slow to fast) | | |
| 175 - 179 | Fixed figure 18 jitters (from slow to fast) | | |
| 180 - 217 | Forward water flow (from fast to slow) | | |
| 218 - 255 | Reverse flow (from slow to fast) | | |
| 5 | Prism | 000-014 | no prism effect |
| | | 015-127 | prism |
| | | 128-255 | Prism rotation |
| 6 | Atomize | 000-127 | none |
| | | 128-191 | Atomized sheet cut in |
| | | 192-255 | colorful cut |

| | | | |
|----|--------------------------------|--|--|
| 7 | Focusing | 000-255 | Pattern clarity from far to near |
| 8 | X axis | 000-255 | Horizontal 540 degree scan |
| 9 | X-axis fine-tuning | 000-255 | Horizontal 1.2 degree fine-tuning |
| 10 | Y axis | 000-255 | Vertical 270 degree scan |
| 11 | Y-axis fine-tuning | 000-255 | Vertical 1.2 degree fine adjustment |
| 12 | XY speed | 000-255 | speed from fast to slow |
| 13 | Self-propelled | 000-063 064-127 128-191 192-255 | no effect Self-propelled random walk Voice-activated self-propelled |
| 14 | Reset | 000-025 026-050 061-085 251-255 | None, there is no action for areas without specified functions small motor reset XY motor reset All motors reset |
| 15 | Light Ring Strobe | 000-063 064-127 128-255 | light strip off LED lights Strobe from slow to fast |
| 16 | Light Ring Red | 000-255 | from dark to light |
| 17 | Light Circle Green | 000-255 | from dark to light |
| 18 | Light Circle Blue | 000-255 | from dark to light |
| 19 | Light Circle Scene | 000-015 016-023 024-031 032-063 064-095 096-111 112-127 128-151 152-175 176-199 200-223 224-247 248-251 252-255 | no effect color jump color gradient scene 1 scene 2 scene 3 scene 4 scene 5 scene 6 scene 7 scene 8 scene 9 scene 10 random |
| 20 | Light Circle Scene Speed | 000-255 | from slow to fast |

Common malfunctions

Aiming at some common faults, corresponding solutions are proposed. Any problems that cannot be resolved should be dealt with by professionals. Before servicing the lamp, please disconnect the power supply first.

1. The light bulb does not light up
 - Check whether the voltage matching the lamp is installed;
 - Check whether the power supply connection of the lamp or the control switch is in bad contact;
 - Check whether the power supply is insufficient;
 - Check whether the DMX512 controller has sent a command.

2. After the lamp is reset normally, it will not accept the control of the console
 - Check whether the digital starting address value and function options of the lamp are correct;
 - Check whether the connection of the communication control line is correct, the communication line is too long or has been interrupted;
 - Check whether the control equipment is invalid, and check whether the signal amplifier connected in series is invalid;
 - Check if the communication line is too long or if other devices interfere with each other;
 - Optimize the wiring, shorten the length of the control signal line, and separate the high-voltage and low-voltage lines;
 - Add signal amplifier;
 - The signal line adopts high-quality shielded twisted pair;
 - Connect the signal termination resistor (120 ohms) at the end of the lamp.

3. The lamp cannot be started
 - Check whether the power supply parameters are consistent with the lamps;
 - Check that the lamps are in poor contact due to extrusion deformation, vibration of internal parts, humidity and other reasons during long-distance transportation or fall off.
 - Please check whether the wires and connectors inside the lamp are disconnected or loose.
 - Check whether the electronic components of the lamp (such as electronic transformers, PCB boards, motor control boards, etc.) are loose, short-circuited and burned out.

4. When working, the X-axis or Y-axis of the lamp does not move normally
 - Check one by one according to the previous step;
 - Check whether the transmission belt corresponding to the X and Y axis directions in the lamp

is off or broken;

- Check whether the data feedback receiver (optocoupler) corresponding to the X and Y directions in the lamp is damaged;
- Reboot to reset once.