# MJ-OS-013beam light




# Beam Light User Manual

## Contents

1. Main Functions .....

2. DMX Channel Table.....

3. Display Panel Operation .....

4. Troubleshooting.....

## 1.Main Functions

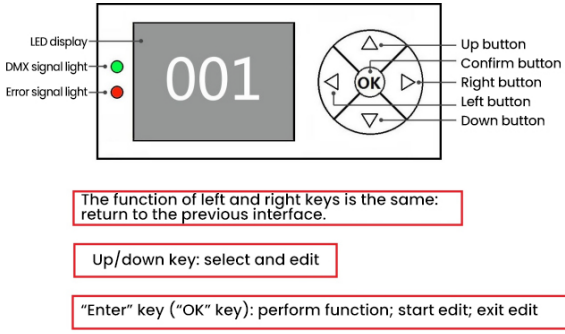
**Working Voltage:** AC 100-240V, 50/60Hz
**Color Temperature:** 7800K
**Light Output Aperture:** 15.2cm
**Light Illuminance:** 300,000 LUX
**Average Lifespan:** 3,000 hours
**Ballast:** Electronic inductor ballast
**Control Mode:** DMX512 / WDMX / Auto-run / Sound-Activated / Master-Slave
**Number of Channels:** 18 channels
**Function Display:** 1.77-inch high-definition display screen with 4 tactile switches, supporting 180° inverted display
**Color Wheel 1:** 1 color wheel composed of 14 color filters + white, with adjustable rotation speed and bidirectional water flow effect
**Color Wheel 2:** 1 color wheel composed of 6 color filters, capable of achieving rainbow effect
**Frost Wheel:** 1 frost wheel with adjustable frosting speed
**Gobo Wheel:** 1 fixed gobo wheel with 13 gobo effects + white light, featuring adjustable rotation speed and bidirectional water flow effect
**Prism:** 8-facet + 16-facet + 24-facet honeycomb prism + 8-facet prism; the two prisms can be superimposed, support bidirectional independent rotation (bidirectional rotation), and have adjustable rotation speed
**Focusing:** Lens group optical system with electric focusing; linear beam angle adjustment from 0° to 4°; 0-100% mechanical dimming from near to far
**Strobe:** Supports mechanical strobe and adjustable-speed strobe effects, as well as strobe macro function; mechanical strobe speed: 1-12 F.P.S (Frames Per Second)
**Horizontal Angle:** 540°, with 8Bit/16Bit fine adjustment
**Vertical Angle:** 270°, with 8Bit/16Bit fine adjustment
Additional Protection & Correction: Equipped with horizontal and vertical fine automatic error correction function, and overheat protection
**Reset System:** Adopts photoelectric reset system, which can automatically search and reset in case of accidental misoperation
**Chassis Material:** Alloy frame + high-temperature resistant plastic
**Dimensions:** 25cm (Length) × 31cm (Width) × 53.5cm (Height)
**Net Weight:** 12.75kg

## 2.DMX Channel table

| 18 channel | | | |
|---|---|---|---|
| channel | function | value | description |
| 1 | Color wheel | 0 - 4 | White Lighting |
| | | 5 - 9 | White Lighting + 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 | Color 8 |
| | | 85 - 89 | Color 8 + Color 9 |
| | | 90 - 94 | Color 9 |
| | | 95 - 99 | 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 + Color 14 |
| | | 140 - 144 | Color 14 |
| | | 145 - 149 | Color 14 + White Lighting |
| | | 150 - 200 | Counterclockwise Rotation (Fast to Slow) |
| | | 201 - 255 | Clockwise Rotation (Slow to Fast) |
| 2 | Stobe | 0 - 3 | Dimming |
| | | 4 - 103 | Normal Strobe |
| | | 104 - 107 | Dimming |
| | | 108 - 207 | Pulsed Strobe |
| | | 208 - 212 | Dimming |
| | | 213 - 251 | Random Strobe |
| | | 252 - 255 | Dimming |
| 3 | Dimming | 0 - 255 | 0%-100% Linear Dimming |
| 4 | Gobo Disk | 0 - 4 | Round Hole |
| | | 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 |

| 18 channel | | | |
|---|---|---|---|
| channel | function | value | description |
| | | 65 - 69 | Pattern 13 |
| | | 70 - 125 | Counterclockwise Rotation (Fast to Slow) |
| | | 126 - 130 | Round Hole |
| | | 131 - 190 | Clockwise Rotation (Slow to Fast) |
| | | 191 - 195 | Pattern 1 Jitter |
| | | 196 - 200 | Pattern 2 Jitter |
| | | 201 - 205 | Pattern 3 Jitter |
| | | 206 - 210 | Pattern 4 Jitter |
| | | 211 - 215 | Pattern 5 Jitter |
| | | 216 - 220 | Pattern 6 Jitter |
| | | 221 - 225 | Pattern 7 Jitter |
| | | 226 - 230 | Pattern 8 Jitter |
| | | 231 - 235 | Pattern 9 Jitter |
| | | 236 - 240 | Pattern 10 Jitter |
| | | 241 - 245 | Pattern 11 Jitter |
| | | 246 - 250 | Pattern 12 Jitter |
| | | 251 - 255 | Pattern 13 Jitter |
| 5 | Prism 1 | 0 - 127 | No Function |
| | | 128 - 255 | Prism 1 Engage |
| 6 | Prism 2 | 0 - 127 | No Function |
| | | 128 - 255 | Prism 2 Engage |
| 7 | Prism Rotation | 0 - 127 | Linear Rotation |
| | | 128 - 188 | Clockwise Rotation (Fast to Slow) |
| | | 189 - 194 | Stop |
| | | 195 - 255 | Counterclockwise Rotation (Slow to Fast) |
| 8 | Atomization | 0 - 127 | No Function |
| | | 128 - 255 | Atomization Engage |
| 9 | Focus | 0 - 255 | 0%-100% Linear Focus |
| 10 | X-axis | 0 - 255 | 0-540 Degrees |
| 11 | X-axis Fine-tuning | 0 - 255 | X-axis 16-bit |
| 12 | Y-axis | 0 - 255 | 0-270 Degrees |
| 13 | Y-axis Fine-tuning | 0 - 255 | Y-axis 16-bit |
| 14 | XY Speed | 0 - 255 | Fast to Slow |
| 15 | Seven-color | 0 - 127 | No Function |
| | | 128 - 255 | Seven-color Engage |
| 16 | Reset | 0 - 99 | No Function |
| | | 100 - 105 | Lamp Extinguish |
| | | 106 - 199 | No Function |
| | | 200 - 205 | Lamp Ignite |
| | | 206 - 240 | No Function |
| | | 241 - 255 | Reset (Valid for 5 Seconds) |
| **17** | LED strip light effects | 0 - 255 | LED Strip Light Effect Adjustment |
| **18** | LED Strip Light Effect Speed | 0 - 255 | Program Speed Adjustment |

## 3.Display Panel Operation




- MENU : Cycle through top-level menus or return to the previous menu level.
- ENTER: Access the next menu level or confirm and save selected parameters.
- UP: Navigate upward in the menu, switch selected parameters, or increase values.
- DOWN: Navigate downward in the menu, switch selected parameters, or decrease values.

## 菜单结构

| Setting | | Function |
|---|---|---|
| Address Code | 1 - 512 | Set the address code. |
| Channel | 18CH | Set the channel. |
| Operating Mode | DMX512 / Auto-run / Sound Control / Manual | Set the operating mode. |
| Address Code Auto | On / Off | Automatically calculate the address code. For example, if the current address code is 1 and the channel mode is 16CH, after enabling Address Code Auto, pressing the address code setting button will automatically add 16, making the address code 17. |
| Signal Hold | On / Off | When enabled, the original action will be maintained when there is no signal. |
| XY Swap | On / Off | Swap the X and Y channels. |
| X-axis Reverse | On / Off | Reverse the X-axis. |
| Y-axis Reverse | On / Off | Reverse the Y-axis. |
| Encoder Error Correction | On / Off | Perform encoder error correction. |
| Hall Error Correction | On / Off | Perform Hall error correction. |
| Restore Settings | Yes / No | Restore factory settings (but fine-tuning data will not be restored). |

| Manual | | value | Functions |
|---|---|---|---|
| **01** | Color Wheel | 0-255 | |
| **02** | Strobe | 0-255 | |
| **03** | Dimming | 0-255 | |
| **04** | Gobo Disk | 0-255 | |
| **05** | Prism 1 | 0-255 | |
| **06** | Prism 2 | 0-255 | |
| **07** | Prism Rotation | 0-255 | |
| **08** | Atomization | 0-255 | |
| **09** | Focus | 0-255 | |
| **10** | X-axis | 0-255 | |
| **11** | X-axis Fine-tuning | 0-255 | |

| Manual | | value | Functions |
|---|---|---|---|
| 12 | Y-axis | 0-255 | |
| 13 | Y-axis Fine-tuning | 0-255 | |
| 14 | XY Speed | 0-255 | |
| 15 | Seven-color | 0-255 | |
| 16 | Reset | 0-255 | |
| 17 | LED strip light effects | 0 - 255 | LED Strip Light Effect Adjustment |
| 18 | LED Strip Light Effect Speed | 0 - 255 | Program Speed Adjustment |

| Calibration | Function |
|---|---|
| Please enter a 4-digit password before using this function. | |

| Display | | Function |
|---|---|---|
| Screen Saver Time | 15s / 30s / 60s / Off | Return to the desktop when the set time is reached. |
| Backlight Time | 15s / 30s / 60s / Off | The screen turns off when the set time is reached. |
| Screen Inversion | On / Off | Control the screen to flip between normal and inverted display. |
| Language | Chinese / English | Select either Chinese or English as the interface language. |

| Reset | | Function |
|---|---|---|
| Full Reset | Yes/No | Full Motor Reset |
| XY Reset | Yes/No | XY Motor Reset |
| Head Reset | Yes/No | Head Small Motor Reset |

| Lamp Settings | | Function |
|---|---|---|
| Power-on Lamp On | Yes/No | Automatically turn on the lamp after power-on reset is completed. |
| Manual Lamp On | Yes/No | Manual lamp ignition |
| Half Power | Yes/No | Whether to enable half-power mode |

| DMX Data Monitoring | Function |
|---|---|
| Monitor DMX512 data values of each channel. | |

| Reset Information | Function |
|---|---|
| If the system reset is normal, it will display "System Normal". If there is a reset error, it will prompt the corresponding reset error information. | |

| Sensor Information | | Function |
|---|---|---|
| X Encoder | ***** | Current encoder count value |
| Y Encoder | ***** | Current encoder count value |
| X Encoder Status | 00/11 | Signal line status of encoder A and B |
| Y Encoder Status | 00/11 | Signal line status of encoder A and B |
| X Hall Effect | 0/1 | Hall effect status: 1 when the hall is at the magnet position, 0 otherwise |
| Y Hall Effect | 0/1 | Hall effect status: 1 when the hall is at the magnet position, 0 otherwise |
| Color Wheel Hall Effect | 0/1 | Hall effect status: 1 when the hall is at the magnet position, 0 otherwise |
| Gobo Disk Hall Effect | 0/1 | Hall effect status: 1 when the hall is at the magnet position, 0 otherwise |
| Focus Hall Effect | 0/1 | Hall effect status: 1 when the hall is at the magnet position, 0 otherwise |
| Usage Records | | Function |
| Usage count, usage duration, bulb-on duration, etc. | | |
| System Version | | Function |
| System Hardware Version, Software Version, | | |

Instructions：

1. When restoring factory settings, only parameters with underscores in the menu will be restored. Other parameters will not be automatically restored or cleared.
2. The [Send Local Parameters] menu allows you to send the parameter settings of underlined items from this device to another or multiple lighting fixtures via DMX data cable, avoiding repetitive setup work. When the receiving fixture receives the correct parameters, it will perform a reset.

## 4.Troubleshooting

| Fault | Solution |
|---|---|
| Fixture does not power on and shows no response | ➢ Check if the fuse is damaged.<br>➢ Verify that the AC voltage is normal.<br>➢ The switching power supply inside the fixture may be damaged.<br>➢ The internal control board of the fixture may be damaged. |
| Fixture is not controlled | ➢ Check if the DMX signal is normal. When normal, the DMX signal indicator on the display panel will flash.<br>➢ Verify that the address code is set correctly.<br>➢ Check if the channel mode is set correctly.<br>➢ Check if the DMX data cable is too long or if the number of daisy-chained fixtures is excessive. |
| XY-axis positioning is abnormal | ➢ The optocoupler sensor may be damaged or improperly installed, causing it to correct even when in the correct position. Set [XY Error Correction Enable] to [No] in the menu. Alternatively, adjust the optocoupler sensor circuit board to the appropriate position, or replace the circuit board. |