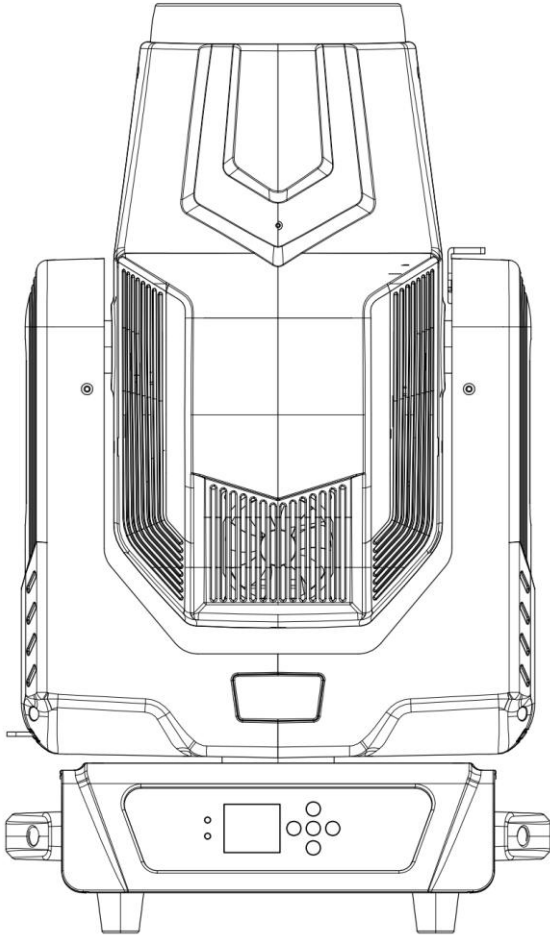


# LED 500W three-in-one all-cut headlight



User Manual

## 1.1 statement

Thank you for choosing our products! Our products are delivered in perfect condition with complete packaging. To ensure safe and effective use, please read this user manual thoroughly before operation. This manual contains essential installation and usage instructions. Follow all guidelines during setup and maintenance, and keep this manual handy for reference. We assume no responsibility for damages to fixtures or performance issues caused by improper installation, use, or maintenance.

This manual may be modified without prior notice.

## 1.2 tending

- Disconnect the power supply before maintenance.
- Keep the lamp dry and avoid working in wet environment.
- Intermittent use will effectively extend the life of this lamp.
- In order to achieve good ventilation and lighting, it is important to clean the fan, fan screen and lens regularly.
- Do not use alcohol and other organic solvents to wipe the lamp shell, so as not to cause damage.

## 1.3 Product precautions

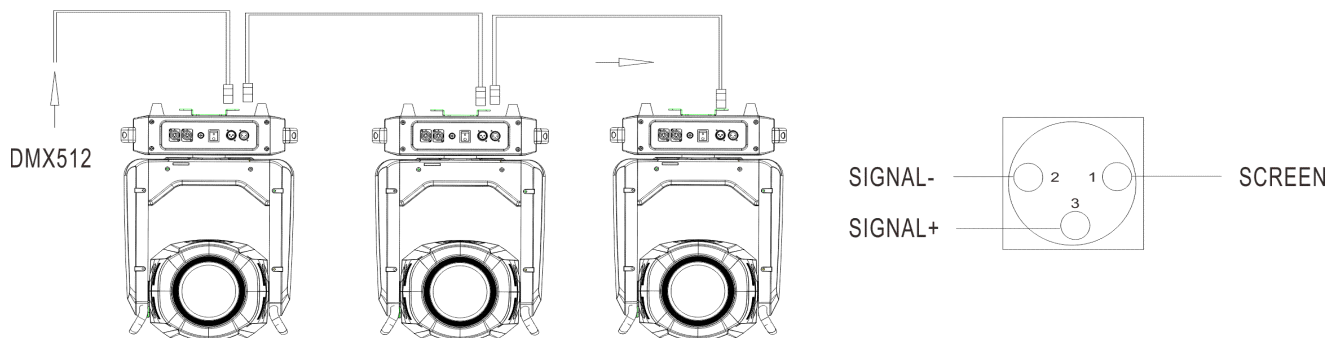
- This lamp is for professional use only.
- Ensure that the power supply voltage matches the required power supply voltage before operation.
- Do not place this product in a place that is easy to loosen or shake.
- During use, if the lamp is abnormal, stop using the lamp in time.
- To ensure the service life of the product, do not place the product in a humid or water-leaking place, and do not work in an environment with temperature above 60 degrees.
- When the bulb is used, 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 for the lamp to be fully cooled before being used again.
- The rotating parts and adhesive accessories of the lamp must be checked regularly. If loosening or shaking occurs, reinforce it in time to prevent accidents.
- To ensure the normal use of this product, please read this instruction carefully.

## 1.4 Signal lines are connected

The lamp is equipped with standard DMX input and output 3-core or 5-core XLR socket. Please use the DMX 512 shielded double twisted signal line; the signal line is generally connected at a distance of 150 meters, long distance signal transmission, must add DMX512 signal amplifier.

Connect the first device's DMX input port to the controller's DMX output port using a shielded twisted pair signal cable. Repeat this process from the first device's DMX output port to the second device's DMX input port, continuing this sequence until all fixtures are connected. Install a terminal plug at the last fixture output 3-pin connector of each circuit loop. (Weld a 4/1W, 120  $\Omega$  resistor between pins 2 and 3 of the 3-pin RCA connector).

Important: Do not touch the wires to each other or to the metal case.



## **Lighting parameters:**

Voltage: AC 90V-240V

Frequency: 50Hz/60Hz

Power: 550W

Light source: 500W

Color adjustment: 0-100% linear adjustment

Flicker: 0.5-9 times per second

Focus: Linear focus

Zoom: Linear zoom

Color 1: 13 colors + white light, rainbow effect speed adjustable, half-step color effect

Color 2: 3 colors + white light + CTO, rainbow effect speed can be adjusted, half-step color effect

Pattern plate: 7 replaceable pattern plates + white light, the flow of patterns from slow to fast

Cutting board: can cut graphics at will

Level: 540° Electronic error correction

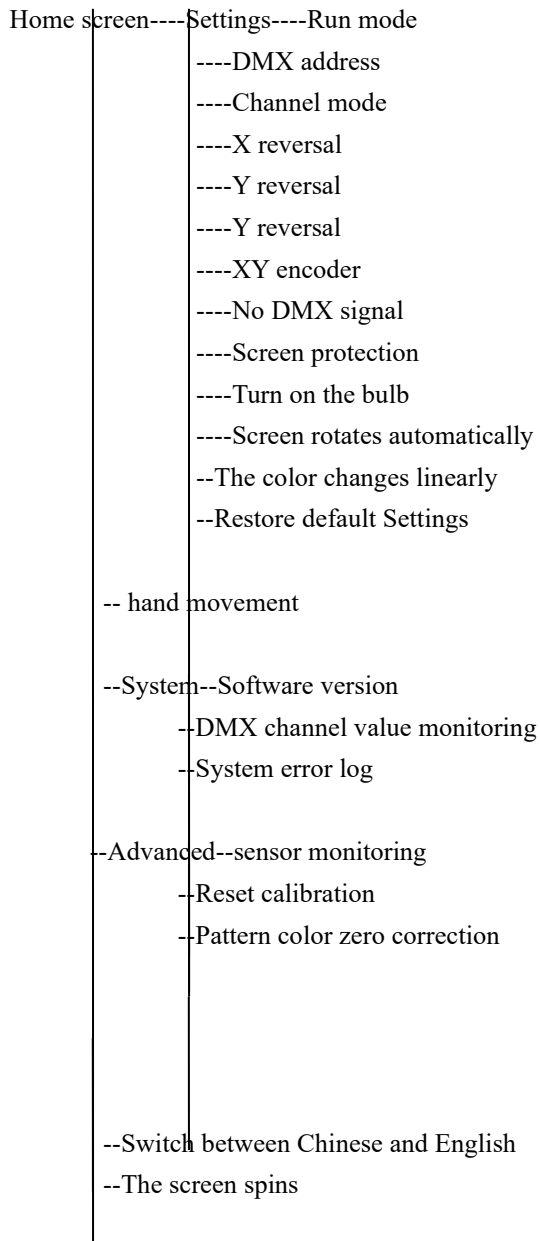
Vertical: 270° Electronic error correction

channel : 24CH

show : LCD

# control panel

## ➤ Menu structure



## ➤ Screen rotation function

The system can automatically rotate the screen according to the direction of gravity, without manual rotation. The automatic rotation function can also be turned off.

## ➤ Power off address code function

After connecting the battery, when the lamp is not powered on, press the confirm button for 5 seconds. The display will be powered by the battery, so as to achieve the purpose of cutting off the power and dialing the address code.

➤ **set up**

| option                           | explain       |   |
|----------------------------------|---------------|---|
| running mode                     | DMX           | From the machine state: receive DMX signal from console or host   |
|                                  | Random walk   |   |
|                                  | sound control |   |
| DMX address                      | 1~512         | Press the "OK" button to enter editing mode. At this point, the hundred's place is selected. Press the "Up" and "Down" keys to change the address code. Press "OK" again to select the tens' place for editing. Press "OK" once more to select the units' place for editing. Finally, press "OK" once more to exit the editing mode |
| channel pattern                  | Standard 24CH | Standard 24-channel mode  |
| X reversal                       | close         |   |
|                                  | open          |   |
| Y reversal                       | close         |   |
|                                  | open          |   |
| XY exchange                      | close         |   |
|                                  | open          | Switch the XY axis channel (including fine-tuning)  |
| XY encoder                       | open          | Use the encoder (optocoupler) to determine the loss of step and automatically correct the position  |
|                                  | close         | Position is not corrected using an encoder (optocoupler)  |
| No DMX signal                    | keep          | Continue to operate in its original state   |
|                                  | zero clearing | The motor returns to its original position and stops running  |
| Screen protection                | open          | Turn off the backlight after 30 seconds of idleness   |
|                                  | close         | Keep the backlight on   |
| Turn on the light bulb           | close         | After power on, the bulb is directly reset and does not light up (the bulb needs to be manually lit by menu or console)   |
|                                  | open          | After the power is on, the bulb will automatically light up, and you must wait for the bulb to be successfully lit before resetting   |
| The screen rotates automatically | close         | Turn off the automatic screen rotation function   |
|                                  | open          | Turn on the screen rotation function  |
| Restore to default settings      |               | After pressing the "OK" button, you will see the confirmation dialog box. Press "OK" again to restore the default Settings  |

➤ **manual control**

This interface controls the current lamp.

Press the "OK" button to enter editing mode. At this point, the hundredth digit is selected. Press the "Up" and "Down" keys to adjust channel values. Press "OK" again to select the tenth digit for editing. Press "OK" once more to select the unit digit for editing. Finally, press "OK" once more to exit the editing mode.

➤ **system info**

| option              |  | explain  |
|---------------------|--|--|
| software release    |  | Current software version   |
| DMX channel value   |  | This leads to the sub-interface, where channel values are displayed in numerical and percentage terms for viewing  |
| System error record |  | If the red ERR indicator light is on, it indicates that the lamp is running out of order. You can enter the sub-interface to view the details. After viewing, you can press the "Clear" key to clear the error record<br>Note: Sometimes it is not really a problem of the installation of Hall or optocoupler, but the motor wire is reversed |

| error message                         |  | explain   |
|---------------------------------------|--|---|
| Motor reset failed, serial port error |  | The driver board did not respond. There is a problem with the serial communication line connecting the display board and the driver board, or there is a problem with the driver board. |
| X-axis repositioning failed           |  | There is a problem with the X-axis photoelectric switch or the X-axis motor   |
| Y-axis repositioning failed           |  | There is a problem with the Y-axis photoelectric switch or the Y-axis motor   |
| X-axis Hall error"                    |  | There's something wrong with the X-axis Hall  |
| Y-axis Hall error                     |  | There's something wrong with the Y-axis Hall  |
| Color disk repositioning failed       |  | The color pan is either colored or there is a problem with the color pan motor  |
| The pattern disk failed to reset      |  | The pattern disk is holl, or there is something wrong with the pattern disk motor   |
| Calibration reset failed              |  | The focus is off, or there's something wrong with the focus motor   |
| The bulb control failed               |  | The bulb or the bulb failed to light or extinguish. There was a problem with the lighter or the bulb  |

➤ **senior**

A password layer is set here to prevent non-professionals from misoperation. The default password is "up up down down". Press the "OK" key for password verification.

| option             |  | explain   |
|--------------------|--|---|
| Reboot calibration |  | After entering the sub-interface, you can adjust the reset position of the motor such as X-axis and Y-axis to compensate for the error in hardware installation. The adjustment range is -128~+127, and +0 means no adjustment. |
| Sensor monitoring  |  | Monitor the status of various photoelectric switches, Hall and other sensors on the lamp in real time   |

## 24CH channel list:

| channel | name                      | numeric value | description                            |
|---------|---------------------------|---------------|--|
| CH1     | X                         | 000-255       | 0--540°                                |
| CH2     | X fine-tuning             | 000-255       | 0--2.1°                                |
| CH3     | Y                         | 000-255       | 0--270°                                |
| CH4     | Y fine-tuning             | 000-255       | 0--1.0°                                |
| CH5     | XY speed governing        | 000-255       | From fast to slow                      |
| CH6     | Cut off the light/flicker | 000-003       | Guan Guang                             |
|         |                           | 004-127       | Frequency flash slow--fast             |
|         |                           | 128-131       | opening the light                      |
|         |                           | 132-251       | Random strobe, slow-fast               |
|         |                           | 252-255       | opening the light                      |
| CH7     | aiming                    | 000-255       | Out-On                                 |
| CH8     | Color 1                   | 000-006       | white light                            |
|         |                           | 007-013       | White light + color 1                  |
|         |                           | 014-020       | Color 1                                |
|         |                           | 021-027       | Color 1 + Color 2                      |
|         |                           | 028-034       | Color 2                                |
|         |                           | 035-041       | Color 2 + Color 3                      |
|         |                           | 042-048       | Color 3                                |
|         |                           | 049-055       | Color 3 + Color 4                      |
|         |                           | 056-062       | Color 4                                |
|         |                           | 063-069       | Color 4 + Color 5                      |
|         |                           | 070-076       | Color 5                                |
|         |                           | 077-083       | Color 5 + Color 6                      |
|         |                           | 084-090       | Color 6                                |
|         |                           | 091-097       | Color 6 + Color 7                      |
|         |                           | 098-104       | Color 7                                |
|         |                           | 105-111       | Color 7 + Color 8                      |
|         |                           | 112-118       | Color 8                                |
|         |                           | 119-127       | Color: 8 + white light                 |
|         |                           | 128-191       | The rainbow effect turns slow--fast    |
| 192-255 | Rainbow effect slow-fast  |               |  |
| CH9     | Color 2                   | 000-014       | white light                            |
|         |                           | 015-029       | Color 1                                |
|         |                           | 030-044       | Color 2                                |
|         |                           | 045-059       | Color 3                                |
|         |                           | 060-074       | White light + color 1                  |
|         |                           | 075-089       | Color 1 + Color 2                      |
|         |                           | 090-104       | Color 2 + Color 3                      |
|         |                           | 105-119       | Color 3+ white light                   |
|         |                           | 120-184       | The rainbow effect turns fast and slow |
|         |                           | 185-255       | Rainbow effect slow to reverse--fast   |
| CH10    | CTO                       | 000-255       |  |
| CH11    | motion graph              | 000-004       | white light                            |
|         |                           | 005-009       | Figure 1                               |

|      |                |         |   |
|------|----------------|---------|---|
|      |                | 010-014 | Figure 2  |
|      |                | 015-019 | Figure 3  |
|      |                | 020-024 | Figure 4  |
|      |                | 025-029 | Figure 5  |
|      |                | 030-034 | Figure 6  |
|      |                | 035-039 | Figure 7  |
|      |                | 040-054 | white light   |
|      |                | 055-069 | Pattern 1 vibration                                 |
|      |                | 070-084 | Pattern 2 vibration                                 |
|      |                | 085-099 | Pattern 3 vibration                                 |
|      |                | 100-114 | Pattern 4 vibration                                 |
|      |                | 115-129 | Figure 5. Vibration                                 |
|      |                | 130-144 | Figure 6. Vibration                                 |
|      |                | 145-159 | Pattern 7 vibration                                 |
|      |                | 160-207 | The rainbow effect turns slow--fast                 |
|      |                | 208-255 | Rainbow effect slow-fast                            |
| CH12 | Rotate the GIF | 000-127 | angle   |
|      |                | 128-191 | Turn fast and slow                                  |
|      |                | 191-192 | Slow-fast reversal                                  |
| CH13 | amplify        | 000-255 | Near-far  |
| CH14 | focus          | 000-255 | Near-far  |
| CH15 | Cut 1          | 000-255 | Cut--slice  |
| CH16 | Cut 2          | 000-255 | Cut--slice  |
| CH17 | Cut 3          | 000-255 | Cut--slice  |
| CH18 | Cut 4          | 000-255 | Cut--slice  |
| CH19 | Cut 5          | 000-255 | Cut--slice  |
| CH20 | Cut 6          | 000-255 | Cut--slice  |
| CH21 | Cut 7          | 000-255 | Cut--slice  |
| CH22 | Cut 8          | 000-255 | Cut--slice  |
| CH23 | Cutting effect | 000-007 | all-or-none   |
|      |                | 008-015 | Effect 1  |
|      |                | 016-023 | Effect 2  |
|      |                | 024-031 | Effect 3  |
|      |                | 032-039 | Effect 4  |
|      |                | 040-047 | Effect 5  |
|      |                | 048-055 | Effect 6  |
|      |                | 056-063 | Effect 7  |
|      |                | 064-071 | Effect 8  |
|      |                | 072-079 | Effect 9  |
|      |                | 080-087 | Effect 10   |
|      |                | 088-095 | Effect 11   |
|      |                | 096-103 | Effect 12   |
|      |                | 104-111 | Effect 13   |
|      |                | 112-119 | Effect 14   |
|      |                | 120-127 | Effect 15   |
|      |                | 128-255 | Effect automatically switches between slow and fast |
| CH24 | reset          | 000-249 | not have  |
|      |                | 250-255 | Reset in seconds                                    |