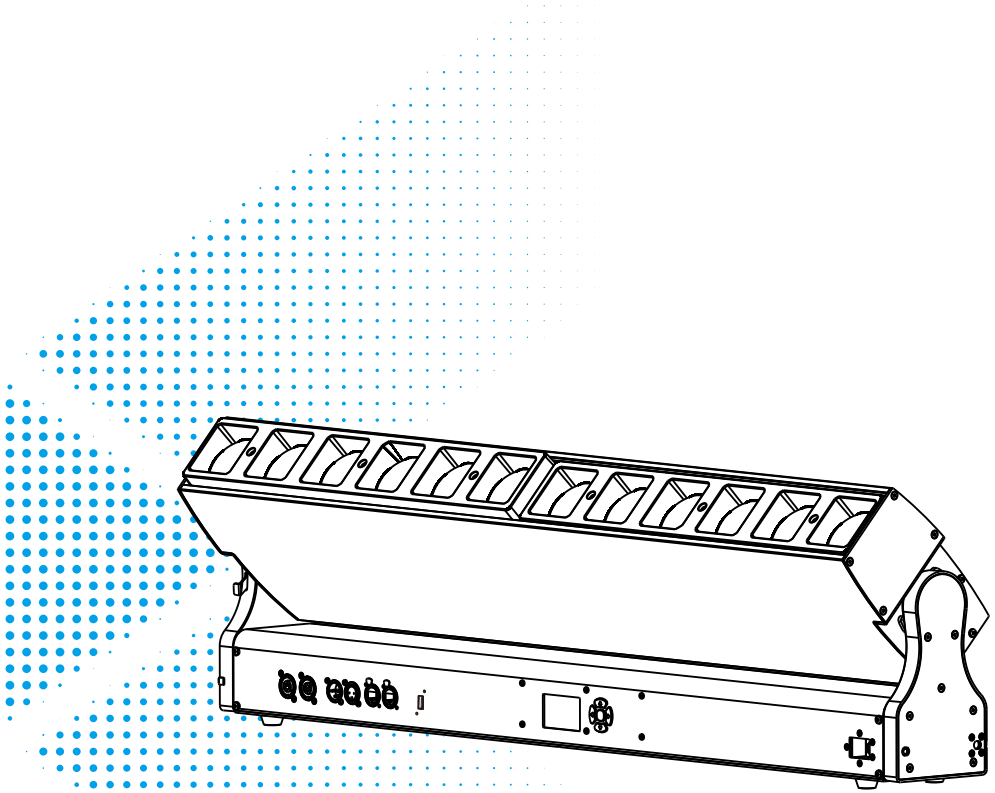
LiGHT SKY

www.lightsky.com.cn



# MAMBA

## User Manual

Please read the instruction carefully before use


Fly Dragon Lighting Equipment Co., Ltd.

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# CONTENTS


1、Safety Instructions.....2

2、Technical Specifications.....5

2.1、Attachment And Size .....7

3、Control Panel.....8

4、How To Set The Unit.....9

4.1、Main Function .....9

5、Connection and control.....20

5.1、Power supply connection.....20

5.2、DMX 512 Connection .....21

5.3、Channel Setting.....22

5.4、Address Setting.....22

5.5、DMX 512 Configuration.....23

6、 Electrical Connection Diagram .....26

7、 Troubleshooting.....27

8、Fixture Cleaning .....28

9、 Duty exonerative and copyright protectio .....28


**Congratulations on choosing our company product! We thank you for your custom.**

- Please keep in mind that this product, like other products of the company, adheres to the concept of people-oriented design and manufacture, and takes product quality as the foundation.
- We put the interests of customers first, and do our best to meet customer requirements.
- Please read this instruction manual carefully and keep it for future reference. In the case of fully understanding the product information, strictly abide by theUse the instruction manual to ensure that the product is installed, used and serviced correctly and safely.
- Our company is not responsible for any damage to lamps or other performance due to personal failure to follow the instructions during installation, use and maintenance.responsibility.
- Our company reserves the right to modify the manual at any time and without prior notice.

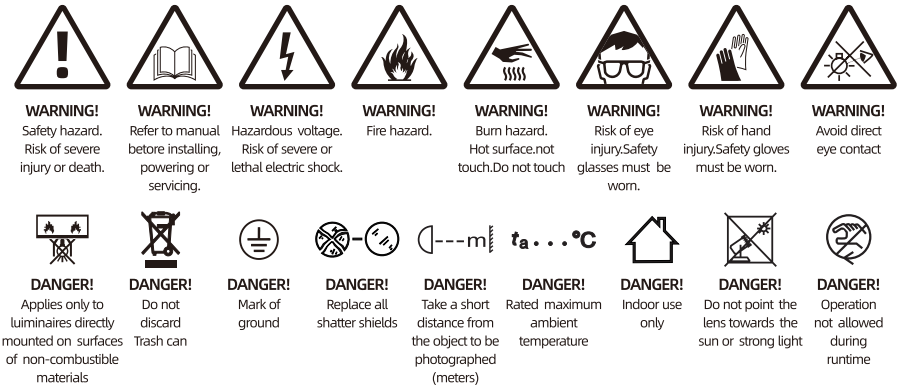
## 1.Safety Instructions

Please read the instruction carefully which includes important information about the installation, usage and maintenance.

**WARNING**

**Please keep this User Manual for future consultation. If you sell the unit to another user, be sure that they also receive this manual.**

The following symbols are used to identify important safety information on the product and in this manual:




**Important:**

**Damages caused by the disregard of this user manual are not subject to warranty. The dealer will not accept liability for any resulting defects or problems.**

— Unpack and check carefully to ensure that there is no transportation damage before using the unit.

— This product is for indoor use only. Use only in a dry location.

— Do install and operate by qualified operator.

— The light source in this luminaire should be replaced by the manufacturer or its service agent or a similarly qualified person, always cut off the power supply before replacing he light source.

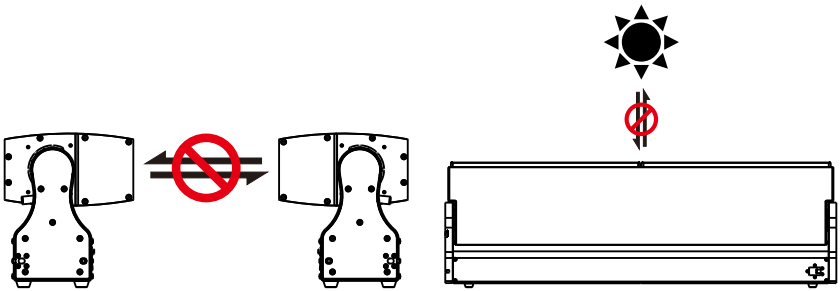
— Do not allow children to operate the fixture.

— Use safety chain when fixing the unit. Handle the unit by carrying its base instead of head only.

— The unit must be installed in a location with adequate ventilation, at least 20cm from adjacent surfaces.

— Be sure that no ventilation slots is blocked, otherwise the unit will be overheated.

— Before operation, ensure that you are connecting this product to the proper voltage in accordance with the specifications in this manual or on the product's specification label.
— It's important to ground the yellow/green conductor to earth in order to avoid electric shock.
— Minimum ambient temperature Ta: -10°C. Maximum ambient temperature Ta: 45°C.
— Do not operate this product at a lower or higher temperature.
— Do not connect the device to any dimmer pack.
— When the lamp is running, do not place combustible objects next to it. The shortest distance between the device and inflammable and explosive objects or materials is 0.5 m.
— Make sure the power cord is not crimped or damaged; replace it immediately if damaged.
— Unit's surface temperature may reach up to 80°C. Do not touch the housing bare-handedduring its operation.
— Avoid any flammable liquids, water or metal from entering the unit. Once it happens, cut off the mains power immediately.
— Do not operate in a dirty or dusty environment. Do clean the fixture regularly.
— Do not touch any wire during operation as there might be a hazard of electric shock.
— Avoid entanglement of the power cord with other wires.
— The distance between the luminaire and the irradiated surface shall be greater than 3 meters.
— Do not shine light directly into another fixture's lens. Intense beam can damage internal components.
— Direct sunlight or any other strong light beam penetrating the front lens of the luminaire can cause severe internal damage. During unpacking, installation, operation, and xtended idle periods outdoors, it is prohibited to expose the front lens of the luminaire to beams of direct sunlight or any other strong light source from any angle.



— In the event of serious operating problem, stop using the unit immediately.
— Never turn on and off the unit time after time.
— The housing, the lenses, or the ultraviolet filter must be replaced if they are visibly damaged.

— Do not open the housing as there are no user serviceable parts inside.
— Do not attempt to operate this unit if it becomes damaged. Do not attempt any repairs yourself. Repairs carried out by unskilled people can lead to damage or malfunction. Please contact the nearest authorized technical assistance center if needed.
— Disconnect this product from its power source before servicing.
— Do use the original packaging if the device is to be transported.
— Avoid direct eye exposure to the light source while the product is on.
— Do not operate this product if you see damage on the housing, shields, or cables. Have the damaged parts replaced by an authorized technician at once.

**Installation:**

The luminaire must be securely fastened to the quick-lock hook with screws to prevent vibration or slipping during operation. The supporting structure must be able to withstand 6 times the weight of the luminaire. Additionally, a safety cable must be installed that can endure 30 free-fall drops from 300mm without failure. Installation should only be performed by qualified professionals, and the luminaire must be mounted in an area inaccessible to unauthorized personnel or away from pedestrian traffic.

## 2.Technical Specifications

OPTICS
- Light source: 12*40W LED chip RGBW 4 in 1
- Beam angle: 3.6°-38°
- Zoom angle: 4.2°-53°
- Color Temperature: 2200K-8000K
- Light Luminous Flux: 18460 lux@5 meters

EFFECT
- Color Mixing System: uniform RGBW color mixing and rainbow effect
- Zoom system: Linear electronic zoom
- Individual Controlled: support individual controlled, varied in color and effect
- effect macro: static and dynamic
- Dimmer: Linear electronic dimmer, provides four dimming options
- Strobe: 1-30Hz electronic strobe and random strobe

CONTROL AND PROGRAMMING
- Controlled Channel:19CH(Standard),64CH(Extended),see channel table for details
- Control Mode: DMX512, RDM, ART-NET
- Data connection: RJ45 input and output, 3-pin and 5-pin input and output
- Display: LCD Lattice screen

SOFTWARE
- Upgrade:Upgrade software through DMX signal interface and USB interface
- Intelligent temperature control to ensure long lifespan of LED

PAN/TILT MOVEMENT
- Tilt movement:185°16 bit precision

POWER AND VOLTAGE
- Input voltage: AC 100-240V 50/60Hz
- Power: 425W PF: > 0.98

SIZE AND WEIGHT
- Light Size: 1003mm×126mm×308mm
- N.W: 20.7 kg
- Carton size: 1110mm×410mm×220mm
- G.W: 24.4 kg
- Flycase (option-3 sets) :1075mm×680mm×495mm
- N.W: 62.1 Kg G.W: 101.6 Kg

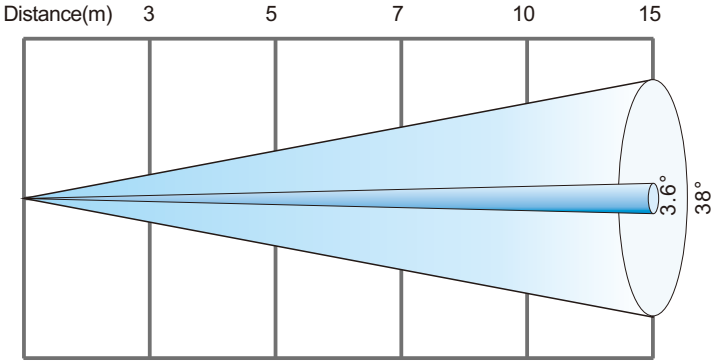
OTHERS

- IP rate: IP20
- Working environment: -10℃~45℃
- Maximum temperature of fixture body surface: 80℃
- Maximum on-line quantity: 2pcs/110V 4pcs/220V
- Maximum current: 1.9A/220V； 4.3A/110V
- Optional material: light hook （Suitable for pipes with a diameter of 38-52 mm）

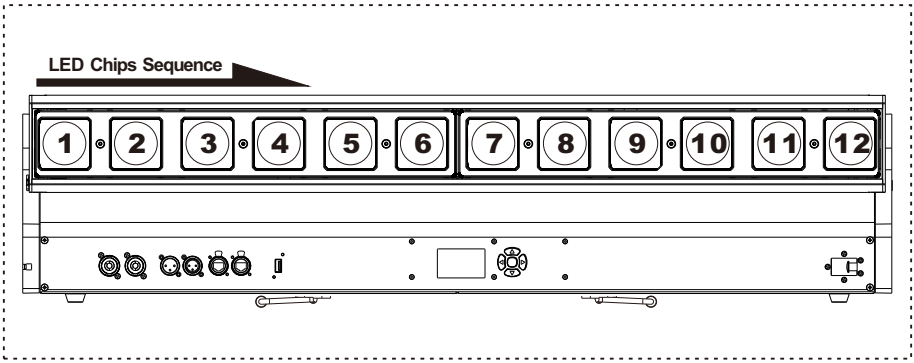
APPROVALS

- The product implementation standard: IEC 60598-1、IEC 60598-2-17
- Approved certifications: CE、RoHs
- The product complies with the following EU directives:
- Low Voltage Directive 2014/35/EU . EMC Directive 2014/30/EU

## illumination diagram

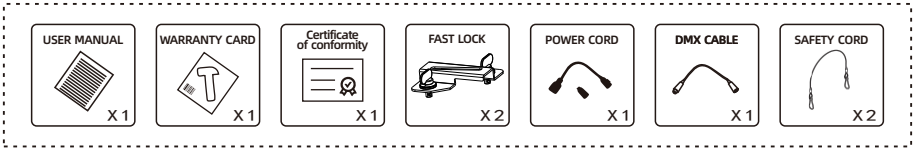



| | | | | | |
|---|---|---|---|---|---|
| 3.6° Lux R | 7020 | 2530 | 1290 | 630 | 280 |
| G | 19500 | 7020 | 3580 | 1750 | 780 |
| B | 6100 | 2200 | 1120 | 550 | 240 |
| RGBW | 51278 | 18460 | 9418 | 4615 | 2050 |
| Diameter (m) | 0.19 | 0.32 | 0.44 | 0.63 | 0.95 |
| 38° Lux R | 300 | 108 | 55 | 27 | 12 |
| G | 769 | 277 | 140 | 70 | 31 |
| B | 244 | 88 | 45 | 22 | 10 |
| RGBW | 2000 | 720 | 360 | 180 | 80 |
| Diameter (m) | 2.06 | 3.43 | 4.81 | 6.87 | 10.30 |

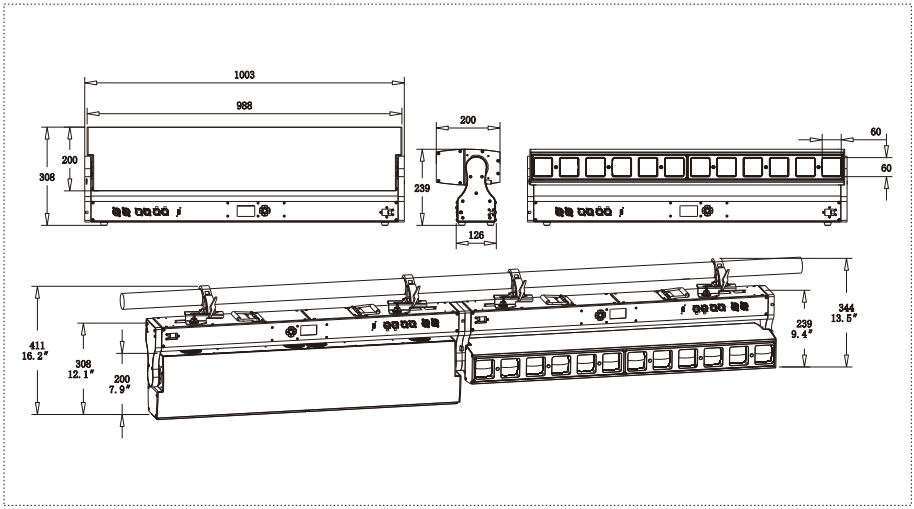



## 2.1.Attachment And Size

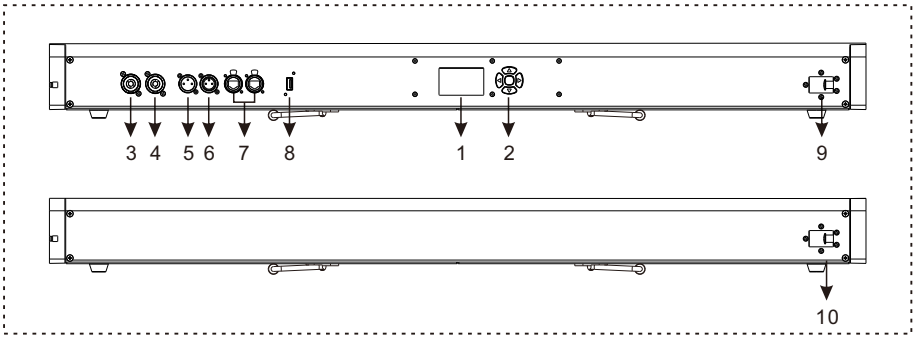
Attachment contents-Fig.1




Size-Fig.2



## 3.Control Panel




1.Display: To show the various menus and the selected function.

2.Button:

| | |
|---|---|
| ● | OK confirmation key |
| ▲ | UP |
| ▼ | DOWN |
| ◀ | To the left |
| ▶ | To the right |

3. Power input: connect to the power supply.
4. Power output: connect to the lamp power output adapter.
5. DMX input: for DMX512 connection, use 3 or 5-core XLR signal cable to connect console and lamps,and input DMX signal.
6. DMX output: used for DMX512 connection, use 3 or 5-core XLR signal cable to connect console and lamps,And output DMX signal.
7. ART-NET input/output: The information of the luminaire can be transmitted to the main controller through the network cable, and the luminaire can be controlled through Rj45.
8. USB socket: for updating software version.
9. Lamp connection lock position (front)
10. Lamp connection lock position (back)

# 4.How To Set The Unit

## 4.1.Main Function

After starting up, press any key to enter the **preset menu** interface, use the up/down/left/right keys to select: DMX settings, basic information, personality settings, manual control, service options, test lamps, language, screen rotation, press OK Confirm and enter the lower menu.

①  – **DMX settings**

Enter the **Preset menu** interface, select  Function, press the OK key to enter the lower menu, use the Up/Down key to select the ② level menu: DMX address, signal priority, AreNet setting, exit.

② **DMX address:**

Select the **DMX address** function, press the OK key to enter the lower-level menu, press the up/down key, you can choose to set the address code (001~512) of the lamp according to the current channel mode, and press the left/right key to fine-tune the address code. Press OK to confirm the settings and return to the previous menu.

② **DMX/Artnet:**

Select the **DMX/Artnet** function, press the OK button to enter the lower menu, press the up/down button, you can choose: DMX priority (default), ARTNET priority, press the OK button to confirm the setting and return to the upper menu, or press the left/right button to Returns to the previous menu without changing the current selection.

②**ArtNet Set:**

Select the **ArtNet Set** function, press the OK key to enter the lower-level menu, press the Up/Down key to select: IP address, Mask address, Net address, Sub Net address, Universe address, and exit. Press the OK key to enter the lower level menu, or press the left/right key to return to the upper level menu.

③ **IP address:**

Select the **IP address** function, press the OK key to enter the sub-menu, press the left/right key to select the address code number segment to be set, and press the up/down key to adjust the number of the number segment. Press OK to confirm the settings and return to the previous menu.

③ **Mask address:**

Select the **Mask address** function, press the OK key to enter the lower-level menu, press the left/right key to select the address code number segment to be set, and press the up/down key to adjust the number of the number segment. Press OK to confirm the settings and return to the previous menu.

③ **Net address:**

Select the **Net address** function, press the OK key to enter the submenu, and press the Up/Down key to adjust the Net address code (001~128). Press OK to confirm the settings and return to the previous menu.

③**Sub Net address:**

Select the **Sub Net address** function, press the OK key to enter the sub-menu, and press the Up/Down key to adjust the Sub Net address code (001~015). Press OK to confirm the settings and return to the previous menu.

③**Universe address:**

Select the **Universe address** function, press the OK key to enter the submenu, and press the Up/Down key to adjust the universe address code (001~015). Press OK to confirm the settings and return to the previous menu.

①  – **Information**

Enter the **preset menu** interface, select  function, press the OK key to enter the lower menu, use the up/down keys to select the ② level menu: total running time, equipment time, equipment temperature, RDM address, fan voltage, equipment channel, version information, quit.

② **Total Time**

Select the **Total Time** function of total running time, press the OK key to enter the sub-menu, and you can view the equipment: always powered on (H), always on (H). Press OK or Left/Right to return to the previous menu.

② **Led hours**

Select the **Led hours** function, press the OK key to enter the sub-menu, you can view the device: power-on time (H), lighting time (H). Press OK or Left/Right to return to the previous menu.

② **Temperature**

Select the **Temperature** function, press the OK key to enter the lower-level menu, and you can view the temperature of the device: driver board 1, light source 1, driver board 2, and light source 2 (unit: °C). Press OK or Left/Right to return to the previous menu.

② **RDM UID**

Select the **RDM UID** function, press the OK key to enter the submenu, and you can view the device: RDM address information. Press OK or Left/Right to return to the previous menu.

② **Fan voltage**

Select the **Fan voltage** function, press the OK key to enter the sub-menu, you can view the equipment: cooling fan 1, cooling fan 2 voltage. Press OK or Left/Right to return to the previous menu.

② **DMX live**

Select the **DMX live** function, press the OK key to enter the submenu, and you can view the device: channel information in the current channel mode. Press OK or Left/Right to return to the previous menu.

② **System version**

Select the **System version** function, press the OK key to enter the lower-level menu, and you can view the version information of the device: display board, Y-axis board, zoom 1, zoom 2, light board 1, and light board 2. Press OK or Left/Right to return to the previous menu.

①  **- Personal**

Enter the **preset menu** interface, select  function, press the OK button to enter the lower menu, use the up/down button to select the ② level menu: channel mode, interface display password, dimming curve, LED sequence reverse,display setting, Led frequency setting,Fan mode, exit, press OK key to enter the lower menu, or press the left/right key to return to the upper menu.

② **Channel mode**

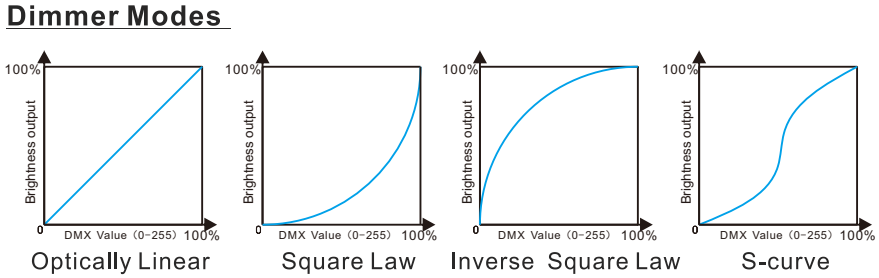
Select the **Channel mode** function, press the OK key to enter the lower menu, you can use the up / down keys to select: standard mode (19CH) (default), extended mode (64CH), press the OK key to confirm the selection and return to the upper menu.

② **Display lock**

Select the **Display lock** function, press the OK key to enter the submenu, press the up/down key to select: on, off (default), press the OK key to confirm Select and return to the previous menu. (Note: The interface password function only works for the DMX setting function, password: 2222)

② **Dimmer Curve**

Select the **Dimmer Curve** function, press the OK key to enter the lower menu, you can use the Up/Down keys to select: linear (default), square curve, inverse square curve, S curve, press the OK key to confirm the selection and return to the upper menu.




② **LED sequence reverse**

Select the **LED sequence reverse** function of setting the sequence of light beads in reverse, press the OK key to enter the lower menu. You can use the up/down keys to select: close/open, press the OK key to confirm the selection and return to the upper menu.

② **Display**

Select the **Display** setting function, press the OK key to enter the submenu, you can use the up/down key to select the ③ level menu: language (Language), backlight, screen rotation, backlight flashing, exit, press the OK key to enter the submenu, or press the left button Return to previous menu.

③ **Language**

Select the **Language** function, press OK key to enter the lower menu, you can use the up / down keys to select: English , Chinese (default), press OK key to confirm the selection and return to the upper menu.

③ **Backlight**

Select the **Backlight** function, press the OK key to enter the lower menu, you can use the up/down keys to select: constant light, automatic off (30S) (default), press the OK key to confirm and return to the upper menu.

③ **Reversal**

Select the **Reversal** function, press the OK key to enter the lower menu, you can use the up / down keys to select: normal (default), rotate 180 degrees, press the OK key to confirm and return to the upper menu.

③ **Backlight blink**

Select the **Backlight blink** function, press the OK key to enter the submenu, you can use the up / down keys to select: open (default), close, press the OK key to confirm and return to the previous menu.

② **Led Preq Set**

Select the **Led Preq Set** function, press the OK button to enter the lower menu, you can use the up/down button to select the ③ level menu: 1000 Hz, 3600 Hz, 7200 Hz, 25000 Hz (default), press the OK button to confirm the selection and return to the upper menu, Pressing Left/Right only returns to the previous menu without changing the current selection.

② **Fan mode**

Select the fan mode function, press the OK key to enter the lower-level menu, you can use the up/down keys to select the③ menu: high speed, silent, press the OK key to confirm the selection and return to the upper-level menu, press the left/right key to only return to the upper-level menu, not Change the current selection.

② **Dimming mode**

Select the dimming mode function, press the OK key to enter the lower menu, and use the up/down keys to select the ③ level menu: fast and smooth, press the OK key to confirm the selection and return to the upper menu, press the left/right keys to only return to the upper menu, without changing the current selection.

①  – **Manual control**

Enter the **preset menu** interface, select  function, press the OK key to enter the submenu, you can use the up/down key to select the ② level menu: channel control, reset, exit, press the OK key to enter the submenu, or press the left/right key to Return to previous menu.

② **Channel control**

Select the **Channel control** function, press the OK key to enter the sub-menu, press the up / down key to select each channel of the current channel mode, press the left / right key to manually adjust the DMX value of each channel from 0 to 255, press the OK key Return to the previous menu, and at the same time, the lamp is reset to the state just turned on.

② **Reset**

Select the **Reset** function, press the OK key to enter the lower menu, you can use the up / down keys to select: system reset (that is, the whole machine reset), vertical reset, zoom reset, exit, press the OK key to confirm and execute the selected reset command, and return Previous menu, or press Left/Right to return to previous menu only.

①  – **Service**

Enter the **preset menu** interface, select  function, press the OK key to enter the submenu, you can use the up/down key to select: current fault information, clear fault information, calibration, factory settings, exit, press the OK key to enter the submenu, or press the Left/Arrow only returns to previous menu.

② **Error list**

Select the **Error list** function, press the OK key to enter the lower-level menu, you can view the fault records of the whole machine, press the OK key or the left/right key to return to the upper-level menu.

② **Clean error**

Select the **Clean error** function, press the OK key to enter the lower menu, use the up/down keys to select: no clear (default), clear, you can clear or keep the fault records of the lamp, press the OK key to confirm clearing the fault information and return to the upper menu , or press Left/Right to return to the previous menu without changing the current selection.

② **Calibration**

Select the **Calibration** function, press the OK key to enter the lower menu, press the up/down key to select each channel of the current channel mode, press the left/right key to manually fine-tune the DMX value of each channel from 0 to 255 (default 128), press OK key to confirm and return to the previous menu.

② **Factory**

Select the **Factory** function, press the OK key to enter the submenu, you can use the up / down keys to select: factory default, time clear, developer, software upgrade, exit, press the OK key to enter the submenu. Note that the functions under this menu require a password to proceed to the next step.

① - **Test**

Enter the **preset menu** interface, select function, press the OK key to enter the submenu, you can use the up/down key to select: test vertical, test the head effect, overall test, exit, press the OK key to enter the submenu, and the lamp starts to execute Test instructions. Or press Left/Right to return to previous menu only.

① - **Language**

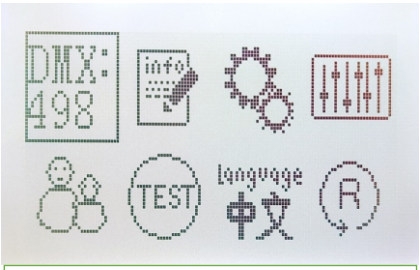
Enter the **Preset Menu** interface, select Function, and press OK to switch between Chinese (default) and English.

① - **Reversal**

Enter the **Preset Menu** interface, select Function, and press OK to switch the screen between: normal and rotated 180 degrees.




Standby interface




Preset menu interface

| Main menu | | I menu | | II menu | | III menu | | Ⅳ menu |
|---|---|---|---|---|---|---|---|---|
| DMX Address | → | Address:001-512 | | | | | | |
| | | DMX/ARTNET | → | DMX Priority | | | | |
| | | | | ARTNET Priority | | | | |
| | | ArtNet Set | → | IP Address | → | xxx.xxx.xxx.xxx | | |
| | | | | Mask Address | → | xxx.xxx.xxx.xxx | | |
| | | | | Net Address | → | 1-128 | | |
| | | | | Sub Net Address | → | 0-15 | | |
| | | | | Universe Address | → | 0-15 | | |
| | | Return(ESC) | | | | | | |
| Information | → | Total Time | → | Power:****(h) | | | | |
| | | | | Led ON:****(h) | | | | |
| | | Led hours | → | Total:****(h) | | | | |
| | | | | Led open:****(h) | | | | |
| | | Temperature | → | Borad 1：00.0 | | | | |
| | | | | LED 1：00.0 | | | | |
| | | | | Borad 2:00.0 | | | | |
| | | | | LED 2:00.0 | | | | |
| | | RDM UID | → | RDM UID 3888:00000000 | | | | |
| | | FanVoltag | → | LEDFan1 00.0V | | | | |
| | | | | LEDFan2 00.0V | | | | |
| | | DMX live | → | 1.Dimmer 000-255 | | | | |
| | | | | 2.DimmerFine 000-255 | | | | |
| | | | | 3.strobe 000-255 | | | | |
| | | | | 4.Red 000-255 | | | | |
| | | | | 5.Green 000-255 | | | | |
| | | | | 6.Blue 000-255 | | | | |
| | | | | 7.White 000-255 | | | | |
| | | | | 8.CCT 000-255 | | | | |
| | | | | 9.Inter Program 000-255 | | | | |
| | | | | 10.Program Speed 000-255 | | | | |
| | | | | 11.Dimmer of Back Color(for Program) 000-255 | | | | |
| | | | | 12. Red of Back Color(for Program) 000-255 | | | | |
| | | | | 13. Green of Back Color(for Program) 000-255 | | | | |
| | | | | 14.Blue of Back Color(for Program) 000-255 | | | | |
| | | | | 15.White of Back Color(for Program) 000-255 | | | | |
| | | | | 16.ZOOM left segment 000-255 | | | | |
| | | | | 17.TILT 000-255 | | | | |
| | | | | 18.TILT FINE 000-255 | | | | |
| | | | | 19.RESET 000-255 | | | | |
| | | System version | → | Display | | | | |
| | | | | Y Board | | | | |
| | | | | Zoom1 | | | | |
| | | | | Zoom2 | | | | |
| | | | | LED1 | | | | |
| | | | | LED2 | | | | |
| | | Return(ESC) | | | | | | |
| | | Channel mode | → | Standard(19CH) | | | | |
| | | | | Extended(64CH) | | | | |
| | | Display lock | → | OFF | | | | |
| | | | | ON | | | | |

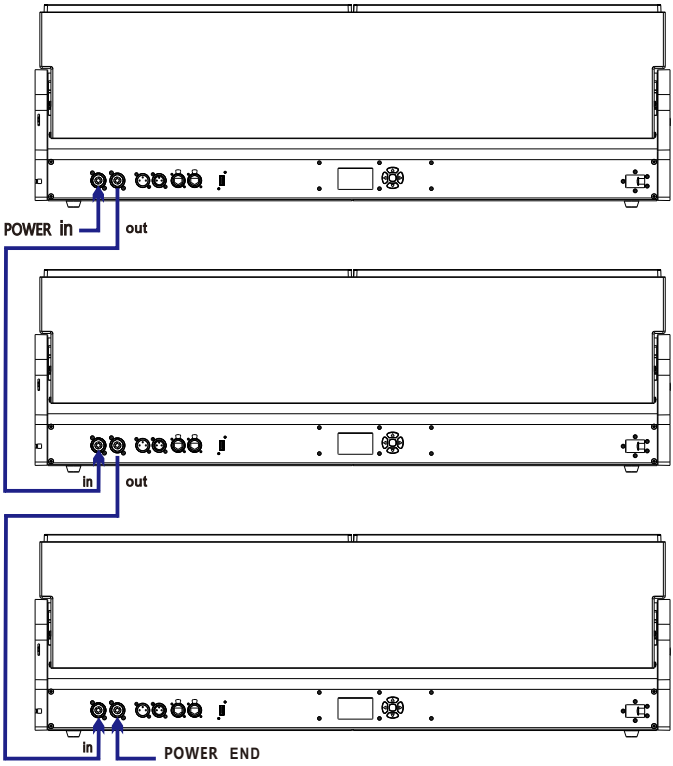
| Main menu | | I menu | | II menu | | III menu | | Ⅳ menu |
|---|---|---|---|---|---|---|---|---|
| Personal | | Dimmer Curve | → | Linear(Default) | | | | |
| | | | | Square | | | | |
| | | | | I-Square | | | | |
| | | | | SCurve | | | | |
| | | LED invert | → | OFF | | | | |
| | | | | ON | | | | |
| | | Display | → | Language | → | English | | |
| | | | | | | Chinese | | |
| | | | | BackLight | → | Open | | |
| | | | | | | Auto close(30s) | | |
| | | | | Reversal | → | Normal | | |
| | | | | | | Rota.180 | | |
| | | | | Backlight blink | → | ON | | |
| | | | | | | OFF | | |
| | | | | Return(ESC) | | | | |
| | | Led Preq Set | → | 1000 Hz | | | | |
| | | | | 3600 Hz | | | | |
| | | | | 7200 Hz | | | | |
| | | | | 25000 Hz | | | | |
| | | Fan mode | | fast | | | | |
| | | | | silence | | | | |
| | | Dim mode | | fast | | | | |
| | | | | smooth | | | | |
| | | Return(ESC) | | | | | | |
| Manual control | → | Channel control | → | 1.Dimmer 000-255 | | | | |
| | | | | 2.DimmerFine 000-255 | | | | |
| | | | | 3.strobe 000-255 | | | | |
| | | | | 4.Red 000-255 | | | | |
| | | | | 5.Green 000-255 | | | | |
| | | | | 6.Blue 000-255 | | | | |
| | | | | 7.White 000-255 | | | | |
| | | | | 8.CCT 000-255 | | | | |
| | | | | 9.Inter Program 000-255 | | | | |
| | | | | 10.Program Speed 000-255 | | | | |
| | | | | 11.Dimmer of Back Color(for Program) 000-255 | | | | |
| | | | | 12. Red of Back Color(for Program) 000-255 | | | | |
| | | | | 13. Green of Back Color(for Program) 000-255 | | | | |
| | | | | 14.Blue of Back Color(for Program) 000-255 | | | | |
| | | | | 15.White of Back Color(for Program) 000-255 | | | | |
| | | | | 16.ZOOM left segment 000-255 | | | | |
| | | | | 17.TILT 000-255 | | | | |
| | | | | 18.TILT FINE 000-255 | | | | |
| | | | | 19.RESET 000-255 | | | | |
| | | | | Return(ESC) | | | | |
| | | Reset | → | system reset | | | | |
| | | | | Tilt reset | | | | |
| | | | | Zoom reset | | | | |
| | | | | Return(ESC) | | | | |
| | | Return(ESC) | | | | | | |
| | | Error list | → | ZOOM1 | | | | |
| | | | | ZOOM2 | | | | |
| | | | | TILT | | | | |

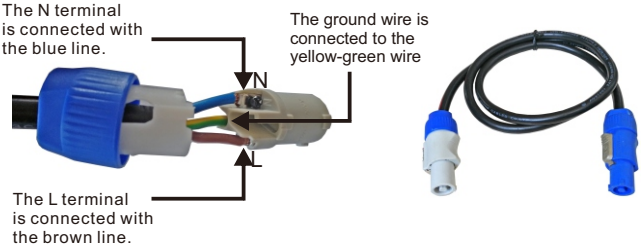
| Main menu | | I menu | | II menu | | III menu | | IV menu |
|---|---|---|---|---|---|---|---|---|
| Service | → | Clean error | → | Yes | | | | (code：2222) |
| | | | | No | | | | |
| | | Calibration | → | Tilt 000-255 | | | | |
| | | | | Zoom1 000-255 | | | | |
| | | | | Zoom2 000-255 | | | | |
| | | | | Red1 000-255 | | | | |
| | | | | Green1 000-255 | | | | |
| | | | | Blue1 000-255 | | | | |
| | | | | White1 000-255 | | | | |
| | | | | Red2 000-255 | | | | |
| | | | | Green2 000-255 | | | | |
| | | | | Blue2 000-255 | | | | |
| | | | | White2 000-255 | | | | |
| | | | | Red3 000-255 | | | | |
| | | | | Green3 000-255 | | | | |
| | | | | Blue3 000-255 | | | | |
| | | | | White3 000-255 | | | | |
| | | | | Red4 000-255 | | | | |
| | | | | Green4 000-255 | | | | |
| | | | | Blue4 000-255 | | | | |
| | | | | White4 000-255 | | | | |
| | | | | Red5 000-255 | | | | |
| | | | | Green5 000-255 | | | | |
| | | | | Blue5 000-255 | | | | |
| | | | | White5 000-255 | | | | |
| | | | | Red6 000-255 | | | | |
| | | | | Green6 000-255 | | | | |
| | | | | Blue6 000-255 | | | | |
| | | | | White6 000-255 | | | | |
| | | | | Red7 000-255 | | | | |
| | | | | Green7 000-255 | | | | |
| | | | | Blue7 000-255 | | | | |
| | | | | White7 000-255 | | | | |
| | | | | Red8 000-255 | | | | |
| | | | | Green8 000-255 | | | | |
| | | | | Blue8 000-255 | | | | |
| | | | | White8 000-255 | | | | |
| | | | | Red9 000-255 | | | | |
| | | | | Green9 000-255 | | | | |
| | | | | Blue9 000-255 | | | | |
| | | | | White9 000-255 | | | | |
| | | | | Red10 000-255 | | | | |
| | | | | Green10 000-255 | | | | |
| | | | | Blue10 000-255 | | | | |
| | | | | White10 000-255 | | | | |
| | | | | Red11 000-255 | | | | |
| | | | | Green11 000-255 | | | | |
| | | | | Blue11 000-255 | | | | |
| | | | | White11 000-255 | | | | |
| | | | | Red12 000-255 | | | | |
| | | | | Green12 000-255 | | | | |
| | | | | Blue12 000-255 | | | | |
| | | | | White12 000-255 | | | | |

| Main menu | | I menu | | II menu | | III menu | | Ⅳ menu |
|---|---|---|---|---|---|---|---|---|
| | | | | Return(ESC) | | | | |
| | | Factory | → | Defualt | | | | |
| | | | | Time clean | → | Total Time | | |
| | | | | | | Device Time | | |
| | | | | | | Led Time | | |
| | | | | Developer | → | Manual OR DMX | | DMX Control |
| | | | | | | | | Manual Control |
| | | | | | → | Load font | | |
| | | | | | → | LOGO select | | LIGHT SKY |
| | | | | | | | | Custom LOGO |
| | | | | | | | | No LOGO |
| | | | | | → | LOGO upgrade | | |
| | | | | | → | Return(ESC) | | |
| | | | | Firmware update | | | | |
| | | | | Return(ESC) | | | | |
| | | Return(ESC) | | | | | | |
| test | → | Test T | → | STEP *** | | | | |
| | | Test effect | → | STEP *** | | | | |
| | | Test all | → | STEP *** | | | | |
| | | Return(ESC) | | | | | | |
| Language | → | English | | | | | | |
| | | Chinese | | | | | | |
| Reversal | → | Normal | | | | | | |
| | | Rota.180 | | | | | | |

# 5.Connection and control

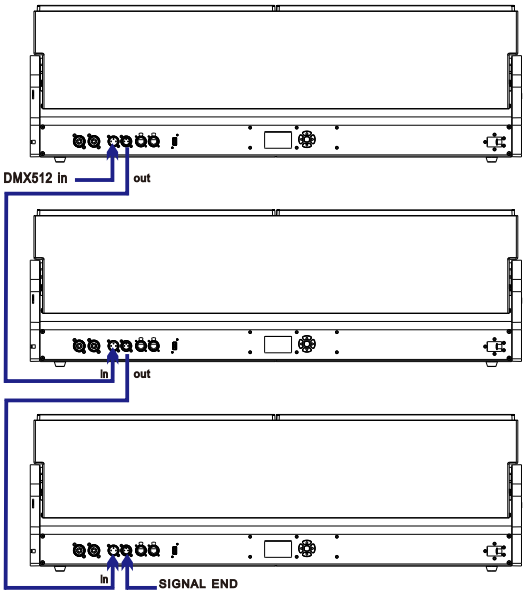
## 5.1.Power supply connection

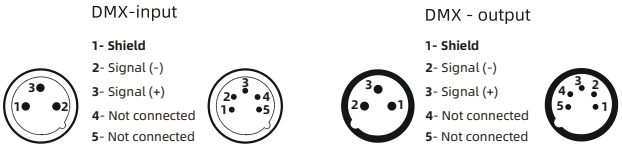



- The bus connecting the power supply must be installed by a qualified professional technician.
- After completing all the above operations and ensuring that it is installed, you can power on the lamp to operate.

## 5.2.DMX 512 Connection




1. At last unit, the DMX cable has to be terminated with a terminator. Solder a 120 Ω 1/4W resistor between pin 2(DMX-) and pin 3(DMX+) into a 3-pin XLR-plug and plug it in the DMX-output of the last unit.
2. Connect the unit together in a "daisy chain" by XLR plug cable from the output of the unit to the input of the next unit. The cable cannot be branched or split to a "Y" cable. DMX 512 is a very high-speed signal. Inadequate or damaged cables, soldered joints or corroded connectors can easily distort the signal and shut down the system.
3. The DMX output and input connectors are pass-through to maintain the DMX circuit, when one of the units' power is disconnected.
4. Each lighting unit needs to have a DMX address to receive the data by the controller. The address number is between 1-512.
5. The end of the DMX 512 system should be terminated to reduce signal errors.
6. 3 pin XLR connectors are more popular than 5 pins XLR.
   3 pin XLR: Pin 1: GND, Pin 2: Negative signal (-), Pin 3: Positive signal (+)
   5 pin XLR: Pin 1: GND, Pin 2: Negative signal (-), Pin 3: Positive signal (+), Pin4, Pin5 not used.

## 5.3.Channel Setting

Enter the MENU menu, select the Personal Settings function, select the channel mode, press the OK button to confirm, you can use the up and down keys to select: 19channels (default), 64 channels,Press the OK key to enter the selection confirmation and return to the previous menu.

## 5.4.Address Setting

Enter MENU, select the DMX setting function, select the address code setting, press the OK button to confirm, the current DMX address will be displayed on the display. Use the up/down buttons to select addresses 001~512, and press the OK button to save. Press the OK button to return to the previous menu.

Please refer to the following diagram to address your DMX512 channel for the first 4 units.

| Channel mode | Unit 1 Address | Unit 2 Address | Unit 3 Address | Unit 4 Address |
|---|---|---|---|---|
| 19 CH | 1 | 20 | 39 | 58 |
| 64 CH | 1 | 65 | 129 | 193 |

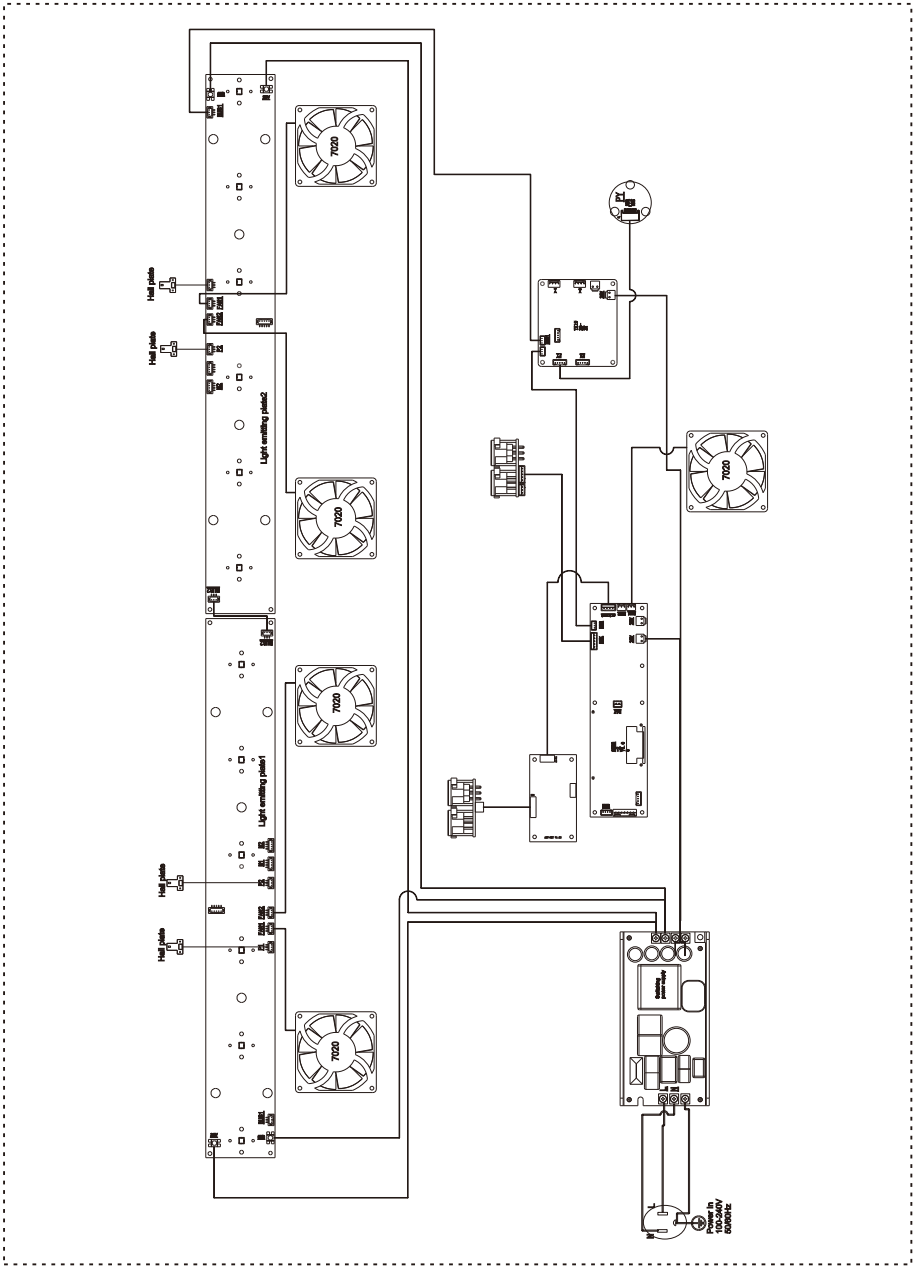
## 5.5.DMX 512 Configuration

| 64 Channel | 19 Channel | DMX | Function | Note |
|---|---|---|---|---|
| 1 | 1 | 0-255 | **Dimmer**<br>Light output linearly increase from off to maximum brightness | |
| 2 | 2 | 0-255 | **Dimmer Fine**<br>Fine Dimmer positioning | |
| 3 | 3 | 0 - 9<br>10 - 194<br>195 - 199<br>200 - 249<br>250 - 255 | **Strobe**<br>Close<br>Strobe from slow to fast<br>Open<br>Random strobe from slow to fast<br>Open | |
| 4 | 4 | 0-255 | **RED 1**<br>Red1 colour linearly increase from no-light to maximum intensity | |
| 5 | 5 | 0-255 | **GREEN 1**<br>GREEN1 colour linearly increase from no-light to maximum intensity | |
| 6 | 6 | 0-255 | **BLUE 1**<br>BLUE1 colour linearly increase from no-light to maximum intensity | |
| 7 | 7 | 0-255 | **White 1**<br>White1 colour linearly increase from no-light to maximum intensity | |
| 8 | / | 0-255 | **RED 2**<br>Red2 colour linearly increase from no-light to maximum intensity | |
| 9 | / | 0-255 | **GREEN 2**<br>GREEN2 colour linearly increase from no-light to maximum intensity | |
| 10 | / | 0-255 | **BLUE 2**<br>BLUE2 colour linearly increase from no-light to maximum intensity | |
| 11 | / | 0-255 | **White 2**<br>White2 colour linearly increase from no-light to maximum intensity | |
| 12 | / | 0-255 | **RED 3**<br>Red3 colour linearly increase from no-light to maximum intensity | |
| 13 | / | 0-255 | **GREEN 3**<br>GREEN3 colour linearly increase from no-light to maximum intensity | |
| 14 | / | 0-255 | **BLUE 3**<br>BLUE3 colour linearly increase from no-light to maximum intensity | |
| 15 | / | 0-255 | **White 3**<br>White3 colour linearly increase from no-light to maximum intensity | |
| 16 | / | 0-255 | **RED 4**<br>Red4 colour linearly increase from no-light to maximum intensity | |
| 17 | / | 0-255 | **GREEN 4**<br>GREEN4 colour linearly increase from no-light to maximum intensity | |
| 18 | / | 0-255 | **BLUE 4**<br>BLUE4 colour linearly increase from no-light to maximum intensity | |
| 19 | / | 0-255 | **White 4**<br>White4 colour linearly increase from no-light to maximum intensity | |
| 20 | / | 0-255 | **RED 5**<br>Red5 colour linearly increase from no-light to maximum intensity | |
| 21 | / | 0-255 | **GREEN 5**<br>GREEN5 colour linearly increase from no-light to maximum intensity | |
| 22 | / | 0-255 | **BLUE 5**<br>BLUE5 colour linearly increase from no-light to maximum intensity | |
| 23 | / | 0-255 | **White 5**<br>White5 colour linearly increase from no-light to maximum intensity | |
| 24 | / | 0-255 | **RED 6**<br>Red6 colour linearly increase from no-light to maximum intensity | |
| 25 | / | 0-255 | **GREEN 6**<br>GREEN6 colour linearly increase from no-light to maximum intensity | |
| 26 | / | 0-255 | **BLUE 6**<br>BLUE6 colour linearly increase from no-light to maximum intensity | |
| 27 | / | 0-255 | **White 6**<br>White6 colour linearly increase from no-light to maximum intensity | |
| 28 | / | 0-255 | **RED 7**<br>Red7 colour linearly increase from no-light to maximum intensity | |
| 29 | / | 0-255 | **GREEN 7**<br>GREEN7 colour linearly increase from no-light to maximum intensity | |

| 64 Channel | 19 Channel | DMX | Function | Note |
|---|---|---|---|---|
| 30 | / | 0-255 | **BLUE 7**<br>BLUE7 colour linearly increase from no-light to maximum intensity | |
| 31 | / | 0-255 | **White 7**<br>White7 colour linearly increase from no-light to maximum intensity | |
| 32 | / | 0-255 | **RED 8**<br>Red8 colour linearly increase from no-light to maximum intensity | |
| 33 | / | 0-255 | **GREEN 8**<br>GREEN8 colour linearly increase from no-light to maximum intensity | |
| 34 | / | 0-255 | **BLUE 8**<br>BLUE8 colour linearly increase from no-light to maximum intensity | |
| 35 | / | 0-255 | **White 8**<br>White8 colour linearly increase from no-light to maximum intensity | |
| 36 | / | 0-255 | **RED 9**<br>Red9 colour linearly increase from no-light to maximum intensity | |
| 37 | / | 0-255 | **GREEN 9**<br>GREEN9 colour linearly increase from no-light to maximum intensity | |
| 38 | / | 0-255 | **BLUE 9**<br>BLUE9 colour linearly increase from no-light to maximum intensity | |
| 39 | / | 0-255 | **White 9**<br>White9 colour linearly increase from no-light to maximum intensity | |
| 40 | / | 0-255 | **RED 10**<br>Red10 colour linearly increase from no-light to maximum intensity | |
| 41 | / | 0-255 | **GREEN 10**<br>GREEN10 colour linearly increase from no-light to maximum intensity | |
| 42 | / | 0-255 | **BLUE 10**<br>BLUE10 colour linearly increase from no-light to maximum intensity | |
| 43 | / | 0-255 | **White 10**<br>White10 colour linearly increase from no-light to maximum intensity | |
| 44 | / | 0-255 | **RED 11**<br>Red11 colour linearly increase from no-light to maximum intensity | |
| 45 | / | 0-255 | **GREEN 11**<br>GREEN11 colour linearly increase from no-light to maximum intensity | |
| 46 | / | 0-255 | **BLUE 11**<br>BLUE11 colour linearly increase from no-light to maximum intensity | |
| 47 | / | 0-255 | **White 11**<br>White11 colour linearly increase from no-light to maximum intensity | |
| 48 | / | 0-255 | **RED 12**<br>Red12 colour linearly increase from no-light to maximum intensity | |
| 49 | / | 0-255 | **GREEN 12**<br>GREEN12 colour linearly increase from no-light to maximum intensity | |
| 50 | / | 0-255 | **BLUE 12**<br>BLUE12 colour linearly increase from no-light to maximum intensity | |
| 51 | / | 0-255 | **White 12**<br>White12 colour linearly increase from no-light to maximum intensity | |
| 52 | 8 | 0-19<br>20-255 | CCT<br>Invalid<br>2200K - 8000K | |
| 53 | 9 | 0 - 7<br>8 - 15<br>16 - 23<br>24 - 31<br>32 - 39<br>40 - 47<br>48 - 55<br>56 - 63<br>64 - 71<br>72 - 79<br>80 - 87<br>88 - 95<br>96 - 103<br>104 - 111 | Inter Program<br>Invalid<br>Scenes 1<br>Scenes 2<br>Scenes 3<br>Scenes 4<br>Scenes 5<br>Scenes 6<br>Scenes 7<br>Scenes 8<br>Scenes 9<br>Scenes 10<br>Scenes 11<br>Scenes 12<br>Scenes 13 | |

| 64 Channel | 19 Channel | DMX | Function | Note |
|---|---|---|---|---|
| | | 112 - 119 | Scenes 14 | |
| | | 120 - 127 | Scenes 15 | |
| | | 128 - 135 | Scenes 16 | |
| | | 136 - 143 | Scenes 17 | |
| | | 144 - 151 | Scenes 18 | |
| | | 152 - 159 | Scenes 19 | |
| | | 160 - 167 | Scenes 20 | |
| | | 168 - 175 | Scenes 21 | |
| | | 176 - 183 | Scenes 22 | |
| | | 184 - 191 | Scenes 23 | |
| | | 192 - 199 | Scenes 24 | |
| | | 200 - 207 | Rainbow1 | |
| | | 208 - 215 | Rainbow2 | |
| | | 216 - 223 | Rainbow3 | |
| | | 224 - 231 | Rainbow4 | |
| | | 232 - 239 | Invalid | |
| | | 240 - 247 | Invalid | |
| | | 248 - 255 | Invalid | |
| 54 | 10 | | **Program Speed** | |
| | | 0-127 | slow to fast (without fade) | |
| | | 128-255 | slow to fast (with fade) | |
| 55 | 11 | 0-255 | **Dimmer of Back Color(for Program)** | |
| 56 | 12 | 0-255 | **Red of Back Color(for Program)** | |
| 57 | 13 | 0-255 | **Green of Back Color(for Program)** | |
| 58 | 14 | 0-255 | **Blue of Back Color(for Program)** | |
| 59 | 15 | 0-255 | **White of Back Color(for Program)** | |
| 60 | 16 | | **ZOOM left segment** | |
| | | 0-255 | Zoom linearly moves from narrow to wide beam | |
| 61 | / | | **ZOOM right segment** | |
| | | 0-255 | Zoom linearly moves from narrow to wide beam | |
| 62 | 17 | | **TILT** | |
| | | 0-255 | Moving batten linearly tilts from 0° to 190° | |
| 63 | 18 | | **TILT FINE** | |
| | | 0-255 | Tilt Fine positioning | |
| 64 | 19 | | **RESET** | |
| | | 0 - 9 | Free | |
| | | 10-19 | System Reset | |
| | | 20-29 | Tilt Reset | |
| | | 30- 39 | Zoom Reset | |
| | | 40-49 | Linear(Default) | |
| | | 50-59 | Square | |
| | | 60-69 | I-Square | |
| | | 70-79 | SCurve | |
| | | 80-89 | 1000 Hz | |
| | | 90-99 | 3600 Hz | |
| | | 100-109 | 7200 Hz | |
| | | 110-119 | 25000 Hz | |
| | | 120-129 | LED Flip on | |
| | | 130-139 | LED Flip off | |
| | | 140-149 | Fast dimmer | |
| | | 150-159 | Smooth dimmer | |
| | | 160-209 | Free | |
| | | 210-219 | Enable DMX Controller Fix the White Balance. In the extended mode, TiltCH==127 and Tilt FineCH ==127 and ProgramCH ==0 and Program speedCH == 127, keep it still for 3 seconds, then turn on the console to correct the white balance and continue to keep the conditions unchanged (vertical==127 and vertical trim==127 and built-in program==0 and built-in built-in program speed==127) | |
| | | 220-229 | Save the WhiteBalance Value & disable DMX Controller Fix the WhiteBalance. | |
| | | 240-249 | Fan&Zoom fast mode | |
| | | 250 - 255 | Fan&Zoom silence mode | |

## 6.Electrical Connection Diagram



## 7.Troubleshooting

**The following are common faults of lighting fixtures and corresponding solutions. Malfunctions that cannot be repaired by oneself should be handled by personnel with professional qualifications. Before maintaining the lamp, please disconnect the power supply first.**

■ LED off:

- Please check if install the suitable voltage
- Please check whether the led will reach the end of their life can explode; please replace a same description led.
- Please check if the power supply is enough.
- Please check whether the DMX 512 controller pass the "turn on" order.

■ The light couldn't accept the control order:

- Please check the start code address and the function option are correct.
- Please check whether the communicate control cable is on good connection or the cable is too long or interrupt.
- Please check the control system is not valid, check the signal amplifier of chain connected is valid.
- Please check whether the communicate cable is too long or the other equipment is mutually conjugate.
- Please arrange the wire well, shorter the signal cable, put the high voltage cable and low voltage cable separately.
- Add the signal amplify isolator.
- Signal cable is used the excellent screening doublet (Resistance 75Ω)
- The end of the light end and the end resistance.

■ The light can't move:

- Please check if the power supply is suitable for the light voltage data.
- Please check the light if they are deformation, inside parts is broken, become wet etc will lead the loose contact.
- Please check the if the iniside lead wire and the connector is loose.
- Please check the electric parts(such as the transformer,PCB board,contrller) is short-circuit or burn down.

## 8.Fixture Cleaning

It is absolutely essential that the fixture is kept clean to ensure the maximum light-output and allow the fixture to function reliably throughout its life. The fixture must be cleaned regularly to avoid dust, dirt and smoke-fluid residues building up on or within the fixture. The cleaning frequency depends on the application environment. Clean the fixture immediately if the dust enters it to avoid damage to the optical lens due to excessive dust.

- A soft lint-free cloth moistened with any good glass cleaning fluid is recommended, under no circumstances should solvents be used.
- Always dry the parts carefully.
- Clean the external optical lens at least every 20 days .



**CAUTION ! ! !**

**Disconnect from mains before starting maintenance operation.**

## 9.Duty exonerative and copyright protectio

- Light source belongs to consumption products, not within the scope of warranty.
- The manufacturer shall not bear any responsibility for any damage caused by failure to operate in accordance with this instruction.
- The manufacturer reserves the right of final interpretation for all information in this manual. For any questions, please refer to the official website.
- All the information in this manual shall not be copied without permission.
- The data contained in this statement are subject to change in the future without prior notice.