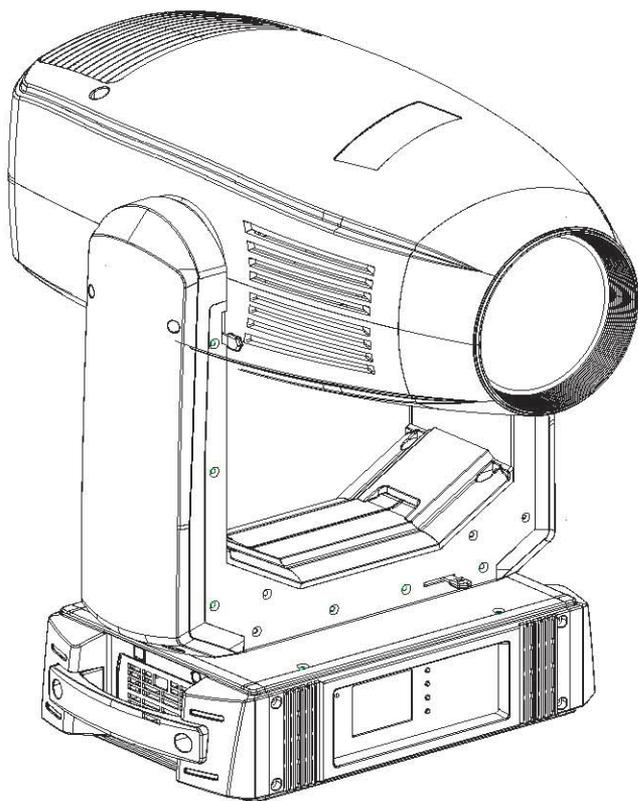


# ***USER MANUAL***



**CE**

**NOVALIGHT**



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Congratulations on choosing our products! Please carefully read this instruction manual in its entirety and keep it well for using reference. This manual contained about the installation and the relative using information of this products. Plese refere this manual's relative instruction when using this equipment.

## 1.Open–Package guidelines

Congratulations on choosing our products! Please carefully read this instruction manual in its entirety and keep it well for using reference. This manual contained about the installation and the relative using information of this products. Please refer to this manual's relative instruction when using this equipment.

This equipment is made of new style, high intensity plastic. It fully shows the modern times light characteristic with beauty structure. And it is made according to CE standard. Fully agree with the international standard of DMX 512 agreement.

When receive the product, please be careful to take and put, check if the product has damage or not because of transportation, and check the following parts:

- |                    |                     |
|--------------------|---------------------|
| 1.Signal cable-1PC | 2.Safety cable-1PC  |
| 3.User Manual-1PC  | 4.Omega holder-2PCS |
| 5.Power cable-1PC  | 5.Service card-1PC  |

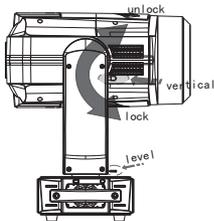
### 1.1 Package

Unpacking the fixture

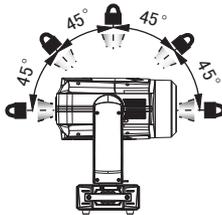
- 1.Open the flight case cover
- 2.With one person on each side, lift the fixture out of the flight case.
- 3.Unlock tilt before operating fixture.

Packing the fixture

- 1.Disconnect the fixture from power and allow it to cool.
- 2.Lock head as figure. (Tilt Mechanism Lock and Release (every 45°)- Fig.1-1)
- 3.Place the fixture in the bottom of the flight case, and cover the case without forcing.



Transportation lock Fig.1



Tilt Mechanism Lock Fig.1-1

## 2.Safety instructions

Every person involved with installation and maintenance of this device to:

- Be qualified
- Follow the instructions of this manual.



**CAUTION!**  
*Be careful with your operations.  
With a high voltage you can suffer  
a dangerous electric shock when touching the wires!*



This device has been shipped with our premises in absolutely perfect condition. In order to maintain this condition and to ensure a safe operation, it is absolutely necessary for the user to follow the safety instructions and warning notes written in this manual.

### Important:

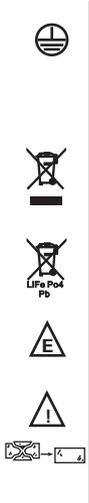
- The manufacturer will not accept liability for any resulting damages caused by the nonobservance of this manual or any unauthorized modification to the device.
- Please consider that damages caused by manual modifications to the device are not subject to warranty.
- Never let the power-cord come into contact with other cables! Handle the power cord and all connections with particular caution!

- Make sure that the available voltage is not higher than stated on the rearpanel.
- Always plug in the power plug least. Make sure that the power-switch is set to off-position before you connect with the mains with particular caution!
- Make sure that the power-cord is never crimped or damaged by sharp edges. Check the device and the power-cord from time to time.
- Always disconnect from the mains, when the device is not in use or before cleaning it.
- Only handle the power-cord by the plug. Never pull out the plug by tugging the powercord.
- This device falls under protection class I. Therefore it is essential to connect the yellow/green conductor to earth.
- The electric connection, repairs and servicing must be carried out by a qualified employee.
- Do not connect this device to a dimmer pack.
- Do not switch the fixture on and off in short intervals as this would reduce the lamp's life.
- Do not touch the device's housing bare hands during its operation (housing becomes hot)!
- For replacement use lamps and fuses of same type and rating only.

### Eye damage!

#### Avoid looking directly into the light source (meant especially for epileptics)!

- |  |   |
|--|---|
|    | <ul style="list-style-type: none"> <li>➤ <b>Minimum distance of illuminated objects</b><br/>The projector needs to be positioned so that the objects hit by the beam of light are at least 2.5 metres from the lens of the projector.</li> </ul>  |
| $t_a$ 40 °C  | <ul style="list-style-type: none"> <li>➤ <b>Maximum ambient temperature</b><br/>Do not operate the fixture if the ambient temperature (<math>T_a</math>) exceeds 40 °C (104 °F).</li> </ul>   |
| $t_s$ 90 °C  | <ul style="list-style-type: none"> <li>➤ <b>Temperature of the external surface</b><br/>The maximum temperature that can be reached on the external surface of the fitting, in a thermally steady state, is 90 °C (194 °F).</li> </ul>  |
| IP20   | <ul style="list-style-type: none"> <li>➤ <b>IP20 protection rating</b><br/>The fitting is protected against penetration by solid of over 12mm (0.47") in diameter (first digit 2), but not against dripping water, rain, splashes or jets of water (second digit 0).</li> </ul>   |
|   | <ul style="list-style-type: none"> <li>➤ <b>Mounting surfaces</b><br/>Must be mounted on a solid surface, allowing installation on a generally combustible surface.</li> </ul>  |
|   | <ul style="list-style-type: none"> <li>➤ <b>Indoor use only</b></li> </ul>  |
|    | <ul style="list-style-type: none"> <li>➤ <b>Not suitable for household illumination</b></li> </ul>  |
| <br><small>Risk Group 1<br/>According to<br/>EN 62471</small> | <ul style="list-style-type: none"> <li>➤ <b>Photobiological Safety</b><br/>CAUTION. Do not look directly at the light source. Do not look at the light beam with optical devices or any other tool that could cause light convergence.<br/>The fixture must be positioned so that the minimum distance between the front lens and human eye is at least 3 metres to prevent personal photobiological risks.</li> </ul>  |
|   | <ul style="list-style-type: none"> <li>➤ <b>Install</b><br/>The equipment must be installed away from flammable and explosive materials. The minimum distance between all surfaces of the luminaire and combustible materials is 0.5 m.</li> </ul>  |
|   | <ul style="list-style-type: none"> <li>➤ The products to which this manual refers comply with the European Directives pursuant to:           <ul style="list-style-type: none"> <li>• Safety of electrical equipment supplied at low voltage (LVD)<br/>EN 60598-1:2015<br/>EN 60598-2-17:1989+A2:1991</li> <li>• Electromagnetic Compatibility (EMC)<br/>EN 55015:2013/A1:2015<br/>EN 61000-3-2:2014<br/>EN 61000-3-3:2013<br/>EN 61547:2019</li> <li>• Restriction of the use of certain hazardous substances (RoHS)<br/>2011/65/EU</li> </ul> </li> </ul> |



➤ Protection against electrical shock

Connection must be made to a power supply system fitted with efficient earthing (Class I appliance according to standard EN 60598-1). It is, moreover, recommended to protect the supply lines of the projectors from indirect contact and/or shorting to earth by using appropriately sized residual current devices.

➤ Disposing

This product is supplied in compliance with European Directive 2012/19/EU-Waste Electrical and Electronic Equipment (WEEE). To preserve the environment please dispose/recycle this product at the end of its life according to the local regulation.

➤ Battery

This product contains a rechargeable lead-acid or lithium iron tetraphosphate battery. To preserve the environment, please dispose the battery at the end of its life according to the regulation in force.

➤ Lamp

-Immediately replace the lamp if damaged or deformed by heat.

➤ Maintenance

Before starting any maintenance work or cleaning the projector, cut off power from the mains supply. After switching off, do not remove any parts of the fitting for at least 10 minutes. After this time the likelihood of the lamp exploding is virtually small. If it is necessary to replace the lamp, wait for another 15 minutes to avoid getting burnt. The fitting is designed to hold in any splinters produced by a lamp exploding.

### 3. Operating determinations

- This device is a moving-head for creating decorative effects and was designed for indoor use only.
- If the device has been exposed to drastic temperature fluctuation (e.g. after transportation), do not switch it on immediately. The arising condensation water might damage your device. Leave the device switched off until it has reached room temperature.
- Never run the device without lamp!
- Do not shake the device. Avoid brute force when installing or operating the device.
- Never lift the fixture by holding it at the projectorhead, as the mechanics may be damaged. Always hold the fixture at the transport handles.
- When choosing the installation-spot, please make sure that the device is not exposed to heat, moisture or dust. There should not be any cables lying around. You endanger your own and the safety of others!
- The minimum distance between light output and the illuminated surface must be more than 0.2 meters.
- Make sure that the area below the installation place is blocked when rigging, derigging or servicing the fixture.
- Always fix the fixture with an appropriate safety rope. Fix the safety rope at the correct holes only.
- Operate the fixture after having checked that the housing is firmly closed and all screws are tightly fastened.
- The lamp must never be ignited if the objective-lens or any housing-cover is open, as discharge lamps may explode and emit a high ultraviolet radiation, which may cause burns.
- The maximum ambient temperature 40° C must never be exceeded.
- Operate the device only after having familiarized with its functions. Do not permit operation by persons not qualified for operating the device. Most damages are the result of unprofessional operation!
- Please use the original packaging if the device is to be transported.
- Please consider that unauthorized modifications on the device are forbidden due to safety reasons!
- If this device will be operated in any way different to the one described in this manual, the product may suffer damages and the guarantee becomes void. Furthermore, any other operation may lead to dangers like short-circuit, burns, electric shock, burns due to ultraviolet radiation, lamp explosion, crash etc.

---

## 4. Rigging the fixture

### 4.1 Mounting



**Pay attention to the regulations of CE.  
Installation by qualified staff to complete.**

For the various mounting positions of the FIXTURE (standing on the floor, sideways or hanging) different accessories kits are available.

Through this a safe and firm installation is assured.

You'll find special connectors on the bottom side of the system which are put to use here.

### 4.2 Installing the Clamps

Please consider the respective national norms during the installation! The installation must only be carried out by an authorized dealer!

The installation of the projector has to be built and constructed in a way that it can hold 10 times the weight for 1 hour without any harming deformation.

The installation must always be secured with a secondary safety attachment, e.g. an appropriate catch net. This secondary safety attachment must be constructed in a way that no part of the installation can fall if the main attachment fails.

When servicing the fixture staying in the area below the installation place, on bridges, under high working places and other endangered areas is forbidden.

The operator has to make sure that safety-relating and machine-technical installations are approved by an expert before taking into operation for the first time and after changes before taking into operation another time.

The operator has to make sure that safety-relating and machine-technical installations are approved by an expert after every four years in the course of an acceptance test.

The operator has to make sure that safety-relating and machine-technical installations are approved by a skilled person once a year.

The projector should be installed outside areas where persons may walk by or be seated.

**Important!** Overhead rigging requires extensive experience CE, including (but not limited to) calculating working load limits, installation material being used, and periodic safety inspection of all installation material and the projector. If you lack these qualifications, do not attempt the installation yourself, but instead use a professional structural rigger. Improper installation can result in bodily injury and or damage to property.

The projector has to be installed out of the reach of people.

If the projector shall be lowered from the ceiling or high joists, professional trussing systems have to be used. The projector must never be fixed swinging freely in the room.

Caution Projectors may cause severe injuries when crashing down! If you have doubts concerning the safety of a possible installation, do not install the projector!

Before rigging make sure that the installation area can hold a minimum point load of 10 times the projector's weight.

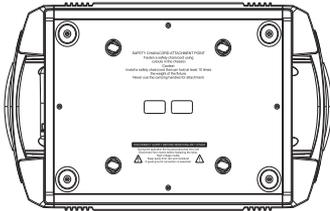
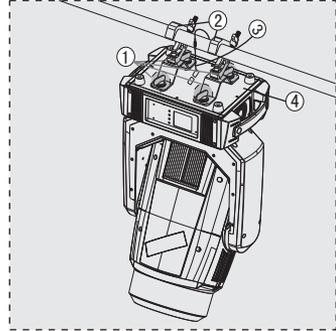
The projector can be placed directly on the stage floor or rigged in any orientation on a truss without altering its operation characteristics.

For overhead use, always install a safety-rope that can hold at least 10 times the weight of the fixture. You must only use safety-ropes with screw on carabines. Pull the safety-rope through the two apertures on the bottom of the base and over the trussing system etc.



**Warning:** it is necessary to make sure that the installation location is perfectly appropriate, and the installation location is safe and reliable.

- ① rotary Knob
- ② omega holder
- ③ secure chain
- ④ base



**SAFETY CHAIN/CORD ATTACHMENT POINT**  
 Fasten a safety chain/cord using cutouts in the chassis!  
**Caution:**  
 Install a safety chain/cord that can hold at least 10 times the weight of the fixture.  
 Never use the carrying handles for attachment.

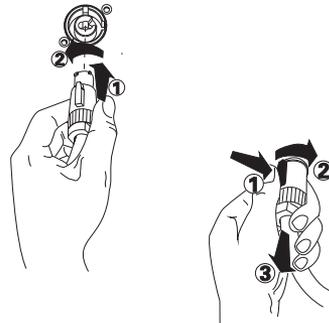
**DISCONNECT SUPPLY BEFORE REMOVING ANY COVER**  
 During the operation the housing becomes very hot!  
 Disconnect from mains before replacing the lamp.  
 High voltage inside.  
 Keep away from rain and moisture!  
 A good ground connection is essential.

### 4.3 Power supply connection and cut off

Connect the light source to the main power source with the plug of the power cord, or cut off the power supply:

Connection: according to procedures, the power plug and socket is inserted into the groove one one alignment, rotation.

Cut off: according to procedures, press the button on the rotating plug, pull out.



## 4.4 Power Connection

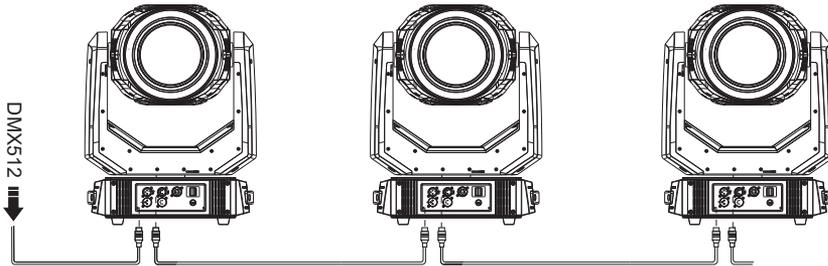
If you wish to change the power supply settings, see the chapter appendix Connect the fixture to the mains with the enclosed power cable and plug.

**Warning:** please verify the power of the power supply equipment prior to the connection! Earth wire must be grounded!

| CABLE(EU)    | CABLE(US) | Pin     | INTERNATIONAL   |
|--------------|-----------|---------|---|
| Brown        | Black     | Live    | <b>L</b>  |
| Light blue   | White     | Neutral | <b>N</b>  |
| Yellow/Green | Green     | Earth   |  |

## 4.5 DMX-512 connection/connection between fixtures

Only use stereo shielded cable and 3-pin XLR-plugs and connectors in order to connect.



### Caution

At the last fixture, the DMX-cable has to be terminated with a terminator. solder a 120 resistor between signal(-) and Signal (+) into a 3-pin XLR-plug and plug it in the DMX-output of the last fixture.

DMX output  
3-pin XLR socket



DMX input  
3-pin XLR socket



1: Ground  
2: Signal (-)  
3: Signal (+)

DMX output  
5-pin XLR socket



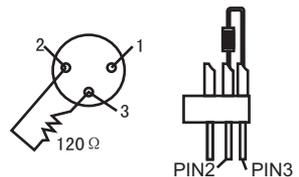
DMX input  
5-pin XLR socket



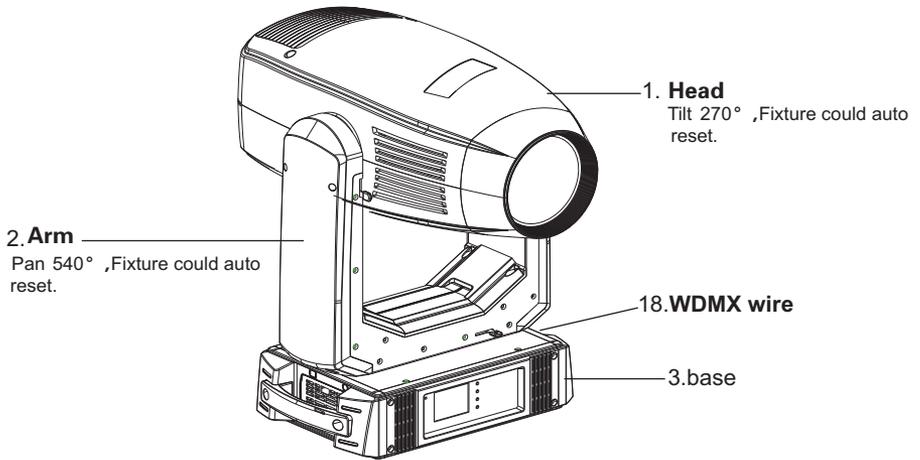
1: Ground  
2: Signal (-)  
3: Signal (+)  
4: N. A.  
5: N. A.

### DMX Terminator Diagram

-For installations where the DMX cable has to run a long distance or is in an electrically noisy environment it is recommended to use a DMX terminator. This helps in preventing corruption of the signal by electrical noise. The DMX terminator is simply an XLR plug with a 120Ω resistor connected between pins 2 and pins 3, which is then plugged into the output XLR socket of the last fixture in the chain.

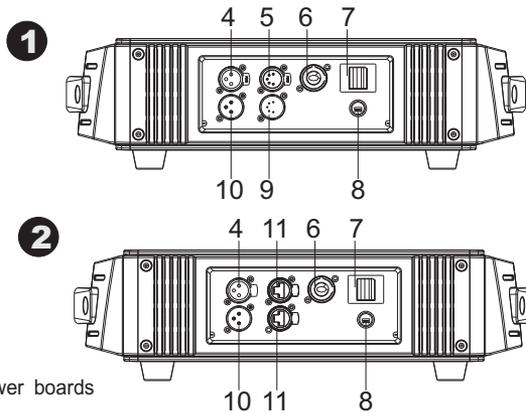


## 5.Description of the device



### Display panel

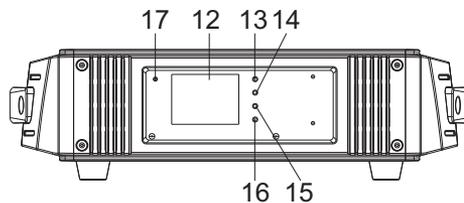
- 4. 3-pin XLR female
- 5. 5-pin XLR female
- 6. Power In
- 7. Power Switch
- 8. Main Fuse
- 9. 5-pin XLR male
- 10. 3-pin XLR male
- 11. Network interface



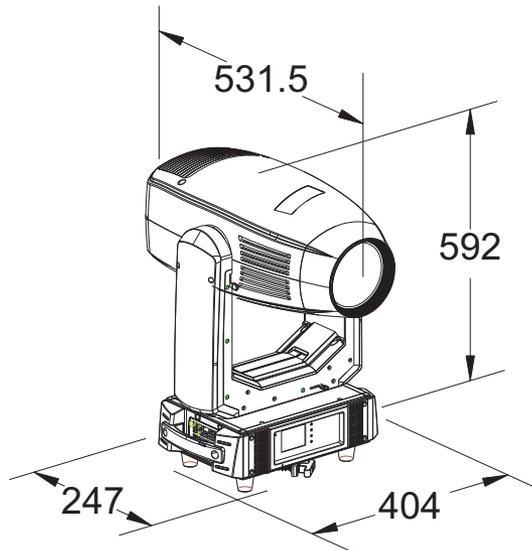
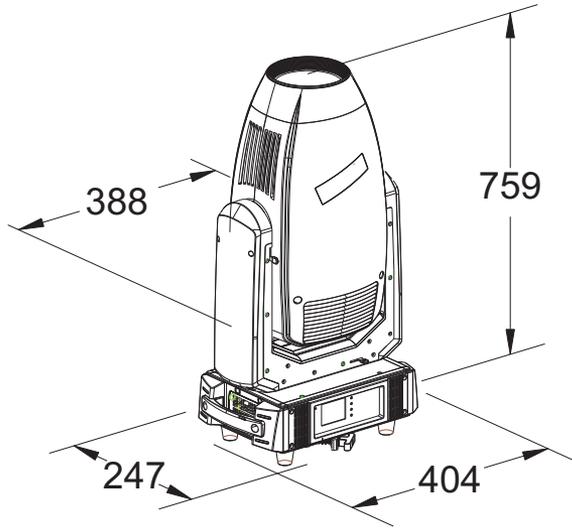
Note: One of the above two power boards can be chosen at will!

### Control panel

- 12. Touch screen
- 13. MODE button
- 14. Up button
- 15. DOWN button
- 16. ENTER burron
- 17. Power indicator light



## 6.Dimension



Unit:(mm)

## 7.Display control

### 7.1 Navigation in the Menu

Using the buttons or touch screen, and this can be simply and easily set the address code and functions code.

If you view or modify the lighting feature set, then press ENTER button, the display will enter the menu interface. Both there is sub menu corresponding to the functional operation of the main menu. Each of the menus is representative of the specific features of the lamp. The specific contents shows as the table menu below.

Set or browse lighting function, press UP or DOWN button.

Press ENTER to save your changes or enter the submenu.Press the UP or DOWN can change the numerical (increase or decrease in value).

Press the MODE button to return to menu. Set a time 1 to 10 minutes automatically exit menu interface and close the screen.

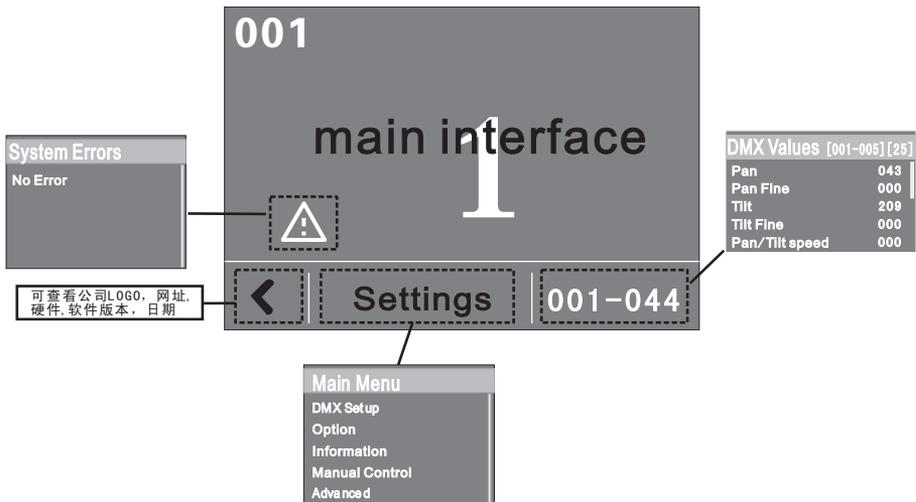
### 7.2 Display Operation

Put through power supply, open the power switch of lamps and lanterns, display show the company LOGO website. According to the main interface, as shown in figure:

In the main interface, press "MODE" button to view the software version, press the "UP" "DOWN" can modify the DMX address.

If the screen "⊕" icon is green,said DMX signal connection is normal, this state can be used to check the lamps and lanterns and connection between the control table is normal.

This lamp can be set to turn off the automatic flip screen function, touch this "⌂" icon can be manually flip screen.



### 7.3 Menu

|                     |                         |                                     |       |                       |
|---------------------|-------------------------|-------------------------------------|-------|-----------------------|
| DMX Setup           | DMX Address             | 001*~XXX                            |       |                       |
|                     | Channel Mode            | Mode1*                              | 1-44  |                       |
|                     |                         | Mode2                               | 1-35  |                       |
|                     | Fixture Id              | 000*~512                            |       |                       |
|                     | Dmx Input               | Wire Input*                         |       | Under the module with |
| Wireless Input      |                         |                                     |       |                       |
| Wireless IN/XLR Out |                         |                                     |       |                       |
| Ethernet input      |                         |                                     |       |                       |
|                     | Ethernet IN/XLR Out     |                                     |       |                       |
|                     | RDM                     | ON*/OFF                             |       |                       |
| Option              | Pan Invert              | ON/OFF*                             |       |                       |
|                     | Tilt Invert             | ON/OFF*                             |       |                       |
|                     | Feedback                | ON*/OFF                             |       |                       |
|                     | Pan/Tilt Mode           | Speed*/Time                         |       |                       |
|                     | Frequency Setup         | 1200HZ/2400HZ*/12000HZ/24000HZ      |       |                       |
|                     | Fan Mode                | Auto*/High                          |       |                       |
|                     | Blackout Settings       | Blackout Enable                     |       | ON/OFF*               |
|                     |                         | While P/T Moving                    |       | ON/OFF*               |
|                     |                         | While Gobo Moving                   |       | ON/OFF*               |
|                     |                         | While Colour Moving                 |       | ON/OFF*               |
|                     | Dimmer Curve            | Liner*/Square/Theatrical/Inv Square |       |                       |
|                     | Display                 | ON/OFF*                             |       |                       |
|                     | Auto Screen             | ON*/OFF                             |       |                       |
|                     | Touch Screen            | ON*/OFF                             |       |                       |
| Ethernet            | ON/OFF* (password:0921) |                                     |       |                       |
| Wireless            | ON/OFF* (password:0921) |                                     |       |                       |
| Language            | English/中文              |                                     |       |                       |
| System Errors       | ...                     |                                     |       |                       |
| Information         | Fixture Hours           | Resettable Time                     |       |                       |
|                     |                         | Total Time                          |       |                       |
|                     | LED Hours               | Resettable Time                     |       |                       |
|                     |                         | Total Time                          |       |                       |
|                     | DMX Values              | .....                               |       |                       |
|                     | Fixture Temperatures    | LED Temperature                     | °C/°F |                       |
|                     |                         | Base Temperature                    | °C/°F |                       |
|                     | Firmware Version        | xx.xx                               |       |                       |
| Hardware Version    | Hx                      |                                     |       |                       |
| RDM UID             | xxxxxx                  |                                     |       |                       |
| Manual Control      | Reset Functions         | Total Reset                         |       |                       |
|                     |                         | Pan/Tilt Reset                      |       |                       |
|                     |                         | Colour System Reset                 |       |                       |
|                     |                         | Gobo/Effect Reset                   |       |                       |
|                     |                         | Optics/Prism/Frost Reset            |       |                       |
|                     |                         | Iris/Framing Reset                  |       |                       |
| Channels            | .....                   |                                     |       |                       |
| Advanced            | Calibration             | Input Password: xxxx                |       |                       |
|                     | Menu Locking            | Off/On/Enter Password               |       |                       |
|                     | Factory Default         | ON/OFF                              |       |                       |
|                     | Touch Calibration       |                                     |       |                       |

## 8.DMX protocol

| Mode1  | Mode2   | Fade Type                    | Function  | Dmx Value |
|--|---------|------------------------------|---|-----------|
| 1  | 1       | Pan                          | Pan   | 0-255     |
| 2  | *       | Pan Fine                     | Pan Fine  | 0-255     |
| 3  | 2       | Tilt                         | Tilt  | 0-255     |
| 4  | *       | Tilt Fine                    | Tilt Fine   | 0-255     |
| 5  | *       | Pan/Tilt speed               | Standard mode (0=default)   | 0         |
|  |         |                              | Speed from max. to min  | 1-255     |
|  |         |                              | Unused Range  | 0-19      |
| 6  | 3       | Function                     | <b>To activate following functions, stop in DMX value for at least 3 s and shutter must be closed at least 3 sec.</b> |           |
|  |         |                              | Graphic display: ON   | 20-24     |
|  |         |                              | Graphic display: OFF  | 25-29     |
|  |         |                              | Reserved  | 30-49     |
|  |         |                              | Blackout while pan/tilt moving  | 50-54     |
|  |         |                              | Disabled blackout while pan/tilt moving   | 55-59     |
|  |         |                              | Blackout while Gobo moving  | 60-64     |
|  |         |                              | Disabled blackout while Gobo moving   | 65-69     |
|  |         |                              | Blackout while Color moving   | 70-74     |
|  |         |                              | Disabled blackout while Color moving  | 75-79     |
|  |         |                              | Fans mode: Auto   | 80-84     |
|  |         |                              | Fans mode: High   | 85-89     |
|  |         |                              | Unused Range  | 90-109    |
|  |         |                              | Dimmer curve: Square law  | 110-114   |
|  |         |                              | Dimmer curve: Linear  | 115-119   |
|  |         |                              | Dimmer curve: Inv Square  | 120-124   |
|  |         |                              | Unused Range  | 125-129   |
|  |         |                              | <b>To activate following functions, stop in DMX value for at least 3 seconds.</b>                                     |           |
|  |         |                              | Fixture reset (except pan/tilt)   | 130-139   |
|  |         |                              | Reset Pan/Tilt  | 140-149   |
|  |         |                              | Reset CMY, CTO, color   | 150-159   |
|  |         |                              | Reset Rotation Gobo, Rotation Gobo RT, Static gobos, Animation  | 160-169   |
|  |         |                              | Unused Range  | 170-179   |
|  |         |                              | Reset Focus, Zoom, Prism, Prism RT, Frost   | 180-189   |
|  |         |                              | Reset Iris, Blade, Framing Rotation   | 190-199   |
|  |         |                              | Reset ALL   | 200-209   |
|  |         |                              | Gobo Speed Fast(Rotation Gogo,Animation)  | 210-214   |
|  |         |                              | Gobo Speed Smooth(default)  | 215-219   |
|  |         |                              | Blade Speed Fast(Iris, Blade, Framing Rotation)   | 220-224   |
|  |         |                              | Blade Speed Smooth(default)   | 225-229   |
|  |         |                              | Colour Speed Fast(Colour,CMY CTO)   | 230-234   |
|  |         |                              | Colour Speed Smooth(default)  | 235-240   |
|  |         |                              | Unused Range  | 241-247   |
| Quiet mode – fan noise control from min. to max. | 248-255 |                              |   |           |
| 7  | *       | LED frequency selection      | PWM frequency from Display menu (fixture utilizes PWM frequency set in the display menu item Frequency Setup)         | 0-4       |
|  |         |                              | 1200 Hz   | 5-9       |
|  |         |                              | 2400 Hz   | 10-14     |
|  |         |                              | 12000 Hz  | 15-19     |
|  |         |                              | 24000 Hz  | 20-24     |
|  |         |                              | Reserved (fixture utilizes PWM frequency set in the display menu item Frequency Setup)                                | 25-255    |
| 8  | *       | LED frequency fine adjusting | Selected LED Frequency  | 0-1       |
|  |         |                              | LED Frequency (step -126)   | 2         |
|  |         |                              | LED Frequency (step -125)   | 3         |
|  |         |                              | LED Frequency (step -124)   | 4         |
|  |         |                              | :   | :         |
|  |         |                              | LED Frequency (step -3)   | 125       |
|  |         |                              | LED Frequency (step -2)   | 126       |
|  |         |                              | LED Frequency (step -1)   | 127       |
|  |         |                              | Selected LED Frequency (128=default)  | 128       |
|  |         |                              | LED Frequency (step +1)   | 129       |
|  |         |                              | LED Frequency (step +2)   | 130       |
|  |         |                              | LED Frequency (step +3)   | 131       |
|  |         |                              | :   | :         |
|  |         |                              | LED Frequency (step +124)   | 252       |
|  |         |                              | LED Frequency (step +125)   | 253       |
|  |         |                              | LED Frequency (step +126)   | 254       |
|  |         |                              | Selected LED Frequency  | 255       |

| Mode1                    | Mode2   | Fade Type            | Function  | Dmx Value |
|--------------------------|---------|----------------------|---|-----------|
| 9                        | 4       | Color 1              | Open  | 0         |
|                          |         |                      | Whatever Position Open → Slot6                                  | 1-128     |
|                          |         |                      | <b>Stepped Scroll(snap to full color positions)</b>             |           |
|                          |         |                      | Slot1   | 129-136   |
|                          |         |                      | Slot2   | 137-144   |
|                          |         |                      | Slot3   | 145-152   |
|                          |         |                      | Slot4   | 153-160   |
|                          |         |                      | Slot5   | 161-168   |
|                          |         |                      | Slot6   | 169-176   |
|                          |         |                      | Open  | 177-188   |
|                          |         |                      | <b>Continuous Rotation</b>                                      |           |
|                          |         |                      | CW, Fast → Slow CW  | 189-213   |
|                          |         |                      | Stop(This will stop the color wheel wherever it is at the time) | 214-219   |
|                          |         |                      | CCW Slow → Fast CCW   | 220-243   |
| Random color Fast → Slow | 244-255 |                      |   |           |
| 10                       | 5       | Cyan                 | Cyan 0 → 100%   | 0-255     |
| 11                       | 6       | Magenta              | Magenta 0 → 100%  | 0-255     |
| 12                       | 7       | Yellow               | Yellow 0 → 100%   | 0-255     |
| 13                       | 8       | CTO                  | CTO 0 → 100%  | 0-255     |
| 14                       | 9       | Virtual colour wheel | No function   | 0         |
|                          |         |                      | LEE Filter 4  | 1-2       |
|                          |         |                      | LEE Filter 10   | 3-4       |
|                          |         |                      | LEE Filter 19   | 5-6       |
|                          |         |                      | LEE Filter 26   | 7-8       |
|                          |         |                      | LEE Filter 58   | 9-10      |
|                          |         |                      | LEE Filter 68   | 11-12     |
|                          |         |                      | LEE Filter 71   | 13-14     |
|                          |         |                      | LEE Filter 79   | 15-16     |
|                          |         |                      | LEE Filter 88   | 17-18     |
|                          |         |                      | LEE Filter 90   | 19-20     |
|                          |         |                      | LEE Filter 100  | 21-22     |
|                          |         |                      | LEE Filter 101  | 23-24     |
|                          |         |                      | LEE Filter 102  | 25-26     |
|                          |         |                      | LEE Filter 103  | 27-28     |
|                          |         |                      | LEE Filter 104  | 29-30     |
|                          |         |                      | LEE Filter 105  | 31-32     |
|                          |         |                      | LEE Filter 106  | 33-34     |
|                          |         |                      | LEE Filter 111  | 35-36     |
|                          |         |                      | LEE Filter 115  | 37-38     |
|                          |         |                      | LEE Filter 116  | 39-40     |
|                          |         |                      | LEE Filter 117  | 41-42     |
|                          |         |                      | LEE Filter 118  | 43-44     |
|                          |         |                      | LEE Filter 119  | 45-46     |
|                          |         |                      | LEE Filter 120  | 47-48     |
|                          |         |                      | LEE Filter 121  | 49-50     |
|                          |         |                      | LEE Filter 128  | 51-52     |
|                          |         |                      | LEE Filter 131  | 53-54     |
|                          |         |                      | LEE Filter 132  | 55-56     |
|                          |         |                      | LEE Filter 134  | 57-58     |
|                          |         |                      | LEE Filter 135  | 59-60     |
|                          |         |                      | LEE Filter 136  | 61-62     |
|                          |         |                      | LEE Filter 137  | 63-64     |
|                          |         |                      | LEE Filter 138  | 65-66     |
|                          |         |                      | LEE Filter 139  | 67-68     |
|                          |         |                      | LEE Filter 141  | 69-70     |
|                          |         |                      | LEE Filter 147  | 71-72     |
|                          |         |                      | LEE Filter 148  | 73-74     |
|                          |         |                      | LEE Filter 152  | 75-76     |
|                          |         |                      | LEE Filter 154  | 77-78     |
|                          |         |                      | LEE Filter 157  | 79-80     |
|                          |         |                      | LEE Filter 158  | 81-82     |
|                          |         |                      | LEE Filter 162  | 83-84     |
|                          |         |                      | LEE Filter 164  | 85-86     |
|                          |         |                      | LEE Filter 165  | 87-88     |
|                          |         |                      | LEE Filter 169  | 89-90     |
|                          |         |                      | LEE Filter 170  | 91-92     |
|                          |         |                      | LEE Filter 172  | 93-94     |
| LEE Filter 179           | 95-96   |                      |   |           |
| LEE Filter 180           | 97-98   |                      |   |           |
| LEE Filter 181           | 99-100  |                      |   |           |

| Mode1  | Mode2       | Fade Type            | Function   | Dmx Value |
|--|-------------|----------------------|--|-----------|
| 14   | 9           | Virtual colour wheel | LEE Filter 197   | 101-102   |
|  |             |                      | LEE Filter 201   | 103-104   |
|  |             |                      | LEE Filter 202   | 105-106   |
|  |             |                      | LEE Filter 203   | 107-108   |
|  |             |                      | LEE Filter 204   | 109-110   |
|  |             |                      | LEE Filter 205   | 111-112   |
|  |             |                      | LEE Filter 206   | 113-114   |
|  |             |                      | LEE Filter 247   | 115-116   |
|  |             |                      | LEE Filter 248   | 117-118   |
|  |             |                      | LEE Filter 281   | 119-120   |
|  |             |                      | LEE Filter 285   | 121-122   |
|  |             |                      | LEE Filter 352   | 123-124   |
|  |             |                      | LEE Filter 353   | 125-126   |
|  |             |                      | LEE Filter 715   | 127-128   |
|  |             |                      | LEE Filter 778   | 129-130   |
|  |             |                      | LEE Filter 793   | 131-132   |
|  | No function | 133-255              |  |           |
| 15   | 10          | Rotating gobo wheel  | <b>Rotation gobo Select Mode1:16/17, Mode2:11</b>                              |           |
|  |             |                      | Empty position   | 0-5       |
|  |             |                      | Gobo 1   | 6-8       |
|  |             |                      | Gobo 2   | 9-11      |
|  |             |                      | Gobo 3   | 12-14     |
|  |             |                      | Gobo 4   | 15-17     |
|  |             |                      | Gobo 5   | 18-20     |
|  |             |                      | Gobo 6   | 21-23     |
|  |             |                      | Gobo 7   | 24-26     |
|  |             |                      | <b>Rotation – set rotation on channel. Mode1:16/17, Mode2:11</b>               |           |
|  |             |                      | Gobo 1   | 27-29     |
|  |             |                      | Gobo 2   | 30-32     |
|  |             |                      | Gobo 3   | 33-35     |
|  |             |                      | Gobo 4   | 36-39     |
|  |             |                      | Gobo 5   | 40-42     |
|  |             |                      | Gobo 6   | 43-45     |
|  |             |                      | Gobo 7   | 46-48     |
|  |             |                      | <b>Gobo Shaking at variable speed from slow to fast. Mode1:16/17, Mode2:11</b> |           |
|  |             |                      | Gobo 1   | 49-73     |
|  |             |                      | Gobo 2   | 74-98     |
|  |             |                      | Gobo 3   | 99-123    |
|  |             |                      | Gobo 4   | 124-148   |
|  |             |                      | Gobo 5   | 149-173   |
|  |             |                      | Gobo 6   | 174-198   |
|  |             |                      | Gobo 7   | 199-222   |
|  |             |                      | Forwards gobo wheel rotation from fast to slow                                 | 223-237   |
|  |             |                      | No rotation  | 238-240   |
|  |             |                      | Backwards gobo wheel rotation from slow to fast                                | 241-255   |
| <b>Gobo indexing – set position on channel. Mode1:15, Mode2:10</b> |             |                      |  |           |
| Gobo indexing  | 0-255       |                      |  |           |
| <b>Gobo rotation – set position on channel. Mode1:15, Mode2:10</b> |             |                      |  |           |
| No rotation  | 0-2         |                      |  |           |
| Forwards gobo rotation from fast to slow                           | 3-126       |                      |  |           |
| No rotation  | 127-129     |                      |  |           |
| Backwards gobo rotation from slow to fast                          | 130-253     |                      |  |           |
| No rotation  | 154-255     |                      |  |           |
| 17   | *           | Fine Gobo            | Fine Gobo Rotation   | 0-255     |
| 18   | 12          | Static gobos         | <b>Static gobos</b>  |           |
|  |             |                      | Empty position   | 0         |
|  |             |                      | Gobo1  | 1-5       |
|  |             |                      | Gobo2  | 6-10      |
|  |             |                      | Gobo3  | 11-15     |
|  |             |                      | Gobo4  | 16-20     |
|  |             |                      | Gobo5  | 21-25     |
|  |             |                      | Gobo6  | 26-30     |
|  |             |                      | Gobo7  | 31-35     |
|  |             |                      | Gobo8  | 36-40     |
|  |             |                      | Gobo9  | 41-45     |
|  |             |                      | <b>Gobo Shakes at variable speed from slow to fast.</b>                        |           |
|  |             |                      | Gobo1  | 46-60     |
| Gobo2  | 61-75       |                      |  |           |
| Gobo3  | 76-90       |                      |  |           |

| Mode1         | Mode2   | Fade Type               | Function  | Dmx Value |         |                      |
|---------------|---------|-------------------------|---|-----------|---------|----------------------|
| 18            | 12      | Static gobos            | Gobo4   | 91-105    |         |                      |
|               |         |                         | Gobo5   | 106-120   |         |                      |
|               |         |                         | Gobo6   | 121-135   |         |                      |
|               |         |                         | Gobo7   | 136-150   |         |                      |
|               |         |                         | Gobo8   | 151-165   |         |                      |
|               |         |                         | Gobo9   | 166-180   |         |                      |
|               |         |                         | Forwards gobo wheel rotation from fast to slow  | 181-216   |         |                      |
|               |         |                         | No rotation   | 217-219   |         |                      |
|               |         |                         | Backwards gobo wheel rotation from slow to fast   | 220-255   |         |                      |
| 19            | 13      | Animation               | Animation Disk out  | 0         |         |                      |
|               |         |                         | Animation Disk Linear Insertion   | 1-255     |         |                      |
| 20            | 14      | Animation Rotation      | No function   | 0         |         |                      |
|               |         |                         | Forwards rotation from fast to slow   | 1-127     |         |                      |
|               |         |                         | No rotation   | 128       |         |                      |
|               |         |                         | Backwards rotation from slow to fast  | 129-255   |         |                      |
| 21            | 15      | Effect wheel animations | No animation  | 0-7       |         |                      |
|               |         |                         | <b>Note: The following channels are blocked: Effect wheel positioning, Effect wheel rotation, Rotating gobo, Rot. Gobo indexing and rotation, Rot. Gobo wheel fine rotation</b> |           |         |                      |
|               |         |                         | Macro 1   | 8-9       |         |                      |
|               |         |                         | Macro 2   | 10-11     |         |                      |
|               |         |                         | Macro 3   | 12-13     |         |                      |
|               |         |                         | Macro 4   | 14-15     |         |                      |
|               |         |                         | Macro 5   | 16-17     |         |                      |
|               |         |                         | Macro 6   | 18-19     |         |                      |
|               |         |                         | Macro 7   | 20-21     |         |                      |
|               |         |                         | Macro 8   | 22-23     |         |                      |
|               |         |                         | Macro 9   | 24-25     |         |                      |
|               |         |                         | Macro 10  | 26-27     |         |                      |
|               |         |                         | Reserved  | 28-255    |         |                      |
|               |         |                         | 22  | 16        | Blade 1 | Blade Out → Blade In |
| 23            | 17      | Blade 2                 | Blade Out → Blade In  | 0-255     |         |                      |
| 24            | 18      | Blade 3                 | Blade Out → Blade In  | 0-255     |         |                      |
| 25            | 19      | Blade 4                 | Blade Out → Blade In  | 0-255     |         |                      |
| 26            | 20      | Blade 5                 | Blade Out → Blade In  | 0-255     |         |                      |
| 27            | 21      | Blade 6                 | Blade Out → Blade In  | 0-255     |         |                      |
| 28            | 22      | Blade 7                 | Blade Out → Blade In  | 0-255     |         |                      |
| 29            | 23      | Blade 8                 | Blade Out → Blade In  | 0-255     |         |                      |
| 30            | 24      | Framing Rotation        | Framing Rotation  | 0-255     |         |                      |
| 31            | 25      | Prism                   | Open position   | 0-19      |         |                      |
|               |         |                         | Prism 1 indexing – set position on channel 33/16  | 20-73     |         |                      |
|               |         |                         | Prism 1 rotation – set position on channel 33/16  | 74-127    |         |                      |
|               |         |                         | <b>以下通道被临时覆盖: 棱镜, 棱镜1转, 旋转图案盘, 旋转图案自转, 旋转图案自转微调, 静态图案盘。</b>   |           |         |                      |
|               |         |                         | Macro 1   | 128-135   |         |                      |
|               |         |                         | Macro 2   | 136-143   |         |                      |
|               |         |                         | Macro 3   | 144-151   |         |                      |
|               |         |                         | Macro 4   | 152-159   |         |                      |
|               |         |                         | Macro 5   | 160-167   |         |                      |
|               |         |                         | Macro 6   | 168-175   |         |                      |
|               |         |                         | Macro 7   | 176-183   |         |                      |
| Macro 8       | 184-191 |                         |   |           |         |                      |
| Macro 9       | 192-199 |                         |   |           |         |                      |
| Macro 10      | 200-207 |                         |   |           |         |                      |
| Open position |         |                         |   | 208-255   |         |                      |
| 32            | 26      | Prism Rotation          | Prism indexing – set position on channel. Mode1:31, Mode2:25  |           |         |                      |
|               |         |                         | Prism indexing  | 0-255     |         |                      |
|               |         |                         | <b>Prism indexing – set position on channel. Mode1:31, Mode2:25</b>   |           |         |                      |
|               |         |                         | No rotation   | 0         |         |                      |
|               |         |                         | Forwards prism rotation from fast to slow   | 1-127     |         |                      |
| 33            | 27      | CRI                     | No rotation   | 128-129   |         |                      |
|               |         |                         | Backwards prism rotation from slow to fast  | 130-255   |         |                      |
|               |         |                         | CRI 0%-100%   | 0-255     |         |                      |
| 34            | 28      | Frost                   | Frost 0% to 100%  | 0-255     |         |                      |
| 35            | 29      | Iris                    | Open  | 0         |         |                      |
|               |         |                         | From max. diameter to min. diameter   | 1-179     |         |                      |
|               |         |                         | Closed  | 180-191   |         |                      |
|               |         |                         | Pulse opening from slow to fast   | 192-219   |         |                      |
|               |         |                         | Pulse closing from fast to slow   | 220-247   |         |                      |

| Mode1 | Mode2 | Fade Type            | Function  | Dmx Value |
|-------|-------|----------------------|---|-----------|
| 35    | 29    | Iris                 | Random pulse opening (fast)                         | 248-249   |
|       |       |                      | Random pulse opening (slow)                         | 250-251   |
|       |       |                      | Random pulse closing (fast)                         | 252-253   |
|       |       |                      | Random pulse closing (slow)                         | 254-255   |
|       |       |                      |   |           |
| 36    | 30    | Zoom                 | Zoom from max. to min. beam angle                   | 0-255     |
| 37    | *     | Zoom Fine            | Fine Zoom positioning                               | 0-255     |
| 38    | 31    | Focus                | Focus moves linearly from far to near position      | 0-255     |
| 39    | *     | Focus Fine           | Fine focus positioning                              | 0-255     |
| 40    | 32    | Autofocus Distance   | Unused range  | 0-5       |
|       |       |                      | Disable zoom/focuslinking                           | 6-55      |
|       |       |                      | Enable zoom/focus linking, near distance(5 meters)  | 56-105    |
|       |       |                      | Enable zoom/focus linking, near distance(8 meters)  | 106-155   |
|       |       |                      | Enable zoom/focus linking, near distance(10 meters) | 156-205   |
|       |       |                      | Enable zoom/focus linking, near distance(12 meters) | 206-255   |
| 41    | 33    | Autofocus Adjustment | Unused range  | 0-9       |
|       |       |                      | autofocus priority BLADE                            | 10-19     |
|       |       |                      | autofocus priority rotation gobo                    | 20-29     |
|       |       |                      | autofocus priority Animation                        | 30-39     |
|       |       |                      | autofocus priority Iris                             | 40-49     |
|       |       |                      | autofocus priority Static gobo                      | 50-59     |
|       |       |                      | Unused range  | 60-255    |
|       |       |                      |   |           |
| 42    | 34    | Stopper/Strobe       | Close   | 0-31      |
|       |       |                      | Shutter Open  | 32-63     |
|       |       |                      | Strobe-effect from slow to fast                     | 64-95     |
|       |       |                      | Shutter Open  | 96-127    |
|       |       |                      | Opening pulse in sequences from slow to fast        | 128-143   |
|       |       |                      | Closing pulse in sequences from fast to slow        | 144-159   |
|       |       |                      | Shutter Open  | 160-191   |
|       |       |                      | Random strobe-effect from slow to fast              | 192-223   |
|       |       |                      | Shutter Open  | 224-255   |
|       |       |                      |   |           |
| 43    | 35    | Dimmer               | Dimmer 0 → 100%                                     | 0-255     |
| 44    | *     | Dimmer Fine          | Dimmer Fine   | 0-255     |

## 9.Maintance and cleaning

**DANGER:Disconnect from the mains before starting any maintenance work.**

### Ballast

Please change timely when each pin is getting yellow.

Be sure to maintain the device every 2 months, and make sure that all parts of the ballast, such as, screws, terminals, are locked well to ensure performance. Neglecting of maintenance may lead to failure of devices.

### Lamp

Turn off the lamp first to better protect the device when the fixture is turned off. Turn off the power after running for at least 5 minutes

Don't touch the bulb with your hands. Once contacting with your hands, scrub with alcohol and then dry with linen.

When the light is on, the bulb runs at high pressure,so there is a risk of broken.It is related to the duration of using, temperature and unreasonable operation. Therefore, please do not use lamp over the life span.

The using of lamp should not exceed 20000 hours, otherwise it can damage device. Check the running time of the fixure regularly. When the lamp is used around 20000 hours, We strongly recommend that you change the lamp. After replacing it, the used time of lamp can be removed and reset.

Avoid operating in dirty and dusty environment, clean and maintain lamps regularly. Wipe the outside of the lens at least every 20 days. Wipe the internal fan at least every 30 days

It is absolutely essential that the fixture is kept clean and that dust,dirt and smoke fluid residues must not buildup on or within the fixture. Otherwise, the fixtures light-output will be significantly reduced. Regular cleaning will not only ensure the maximum light-output, but will also allow the fixture to function reliably through out its life. A soft lint-free cloth moistened with any good glass cleaning fluid is recommended, under no circum stances should alcohol or solvents be used!

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The front objective lens will require weekly cleaning as smoke-fluid tends to building up residues, reducing the light-output very quickly. The cooling-fans should be cleaned monthly.

The gobos may be cleaned with a soft brush, The interior of the fixture should be cleaned at least annually using a vacuum-cleaner or an air-jet.

There are no serviceable parts inside the device except for the lamp and the fuse.

Please disconnect the power supply before replacing the fuse and bulb. When replacing them, adopt the same mode.

## **10. Electric equipment specification**

### **10.1 Electrical paramters**

SOURCE: 800W LED

Max POWER: 900W

VOLTAGE: AC110-240V 50/60HZ

Color temperature: 6500K

### **10.2 Weight and dimensions**

Dimensions : 404X247X759 mm

NET WEIGHT: 29.5Kg

Dimensions ( boxes- 1 lights ) : 870X514X365mm

NET WEIGHT/WEIGHT ( boxes-1 lights ): 29.5Kg/33Kg

### **10.3 Channel Characteristics**

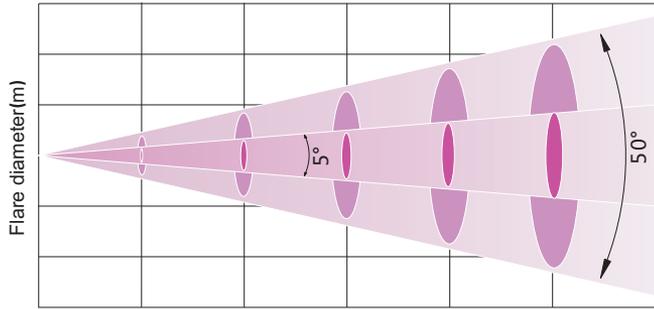
1. Channel: 44, 35DMX-512.
2. Scan: Pan540° , Tilt270° , Scan speed adjustable. Fixture could auto reset.
3. Colour wheel: one white+6 colors. half-color effects, CMY+CTO function.
4. Gobo wheel: one white+7 gobos, Fix gobo wheel : one white+9 gobos+1 position dynamic effects.
5. Prism system: 1 rotating of faces.
6. Zoom: linear amplifier.
7. Focus: linear focus with auto function.
8. Dimmer: electronic dimming, linear dimmer.
9. Strobe: electronic strobe, with strobe mode of synchronical, pulse and random.
10. Multi cutting independent control, cutting components with rotation function.

### **10.4 Menu Function**

1. Touch screen, English/Chinese menu
2. Each DMX Value displayable.
3. Time of automatic turning off is able to set on the display,
4. Display the time using of lighting feature and lamp as well as the times of turning on for lamp.
5. You can switch on and off the lamp via the control panel or via your DMX controller. It must be noted that it has to be cold before re-stricking.
6. After the DMX signal is disconnected, the display will be bright and dark.
7. Software upgrade function.
8. Wired input/output, wireless input/output, network input mode (optional).

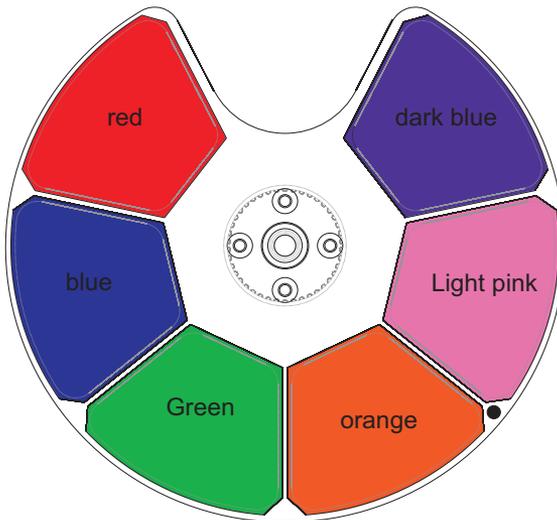
### 10.5 light table

|                             |       |       |      |      |      |
|-----------------------------|-------|-------|------|------|------|
| 50° Illuminance (Lux) (Lux) | 2000  | 500   | 223  | 125  | 80   |
| 5° Illuminance (Lux) (Lux)  | 75300 | 18825 | 8366 | 4705 | 3012 |



|  |       |      |       |       |       |
|--|-------|------|-------|-------|-------|
| Projection distance(m)                 | 5     | 10   | 15    | 20    | 25    |
| The minimum Angle 5° Flare diameter(m) | Φ0.45 | Φ0.9 | Φ1.35 | Φ1.8  | Φ2.25 |
| Maximum Angle 50° Flare diameter(m)    | Φ4.7  | Φ9.4 | Φ14.1 | Φ18.8 | Φ23.5 |

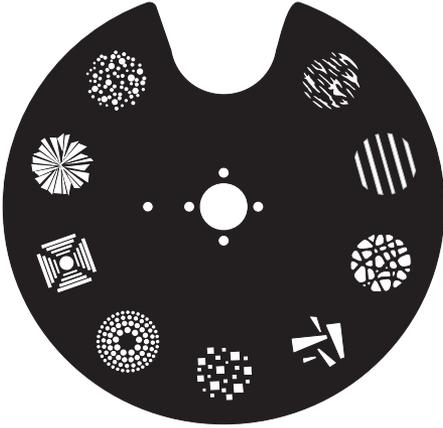
### 10.6 Color wheel



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## 10.7 Gobo wheel

Fix gobo wheel

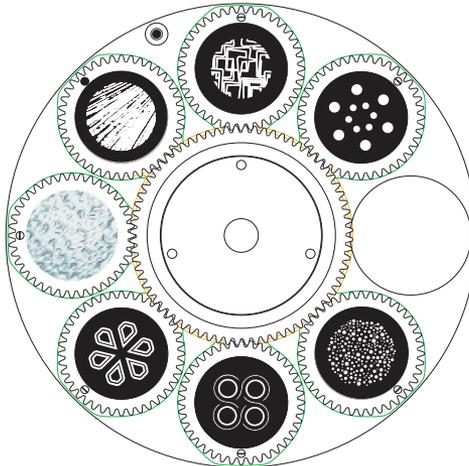


Effect wheel

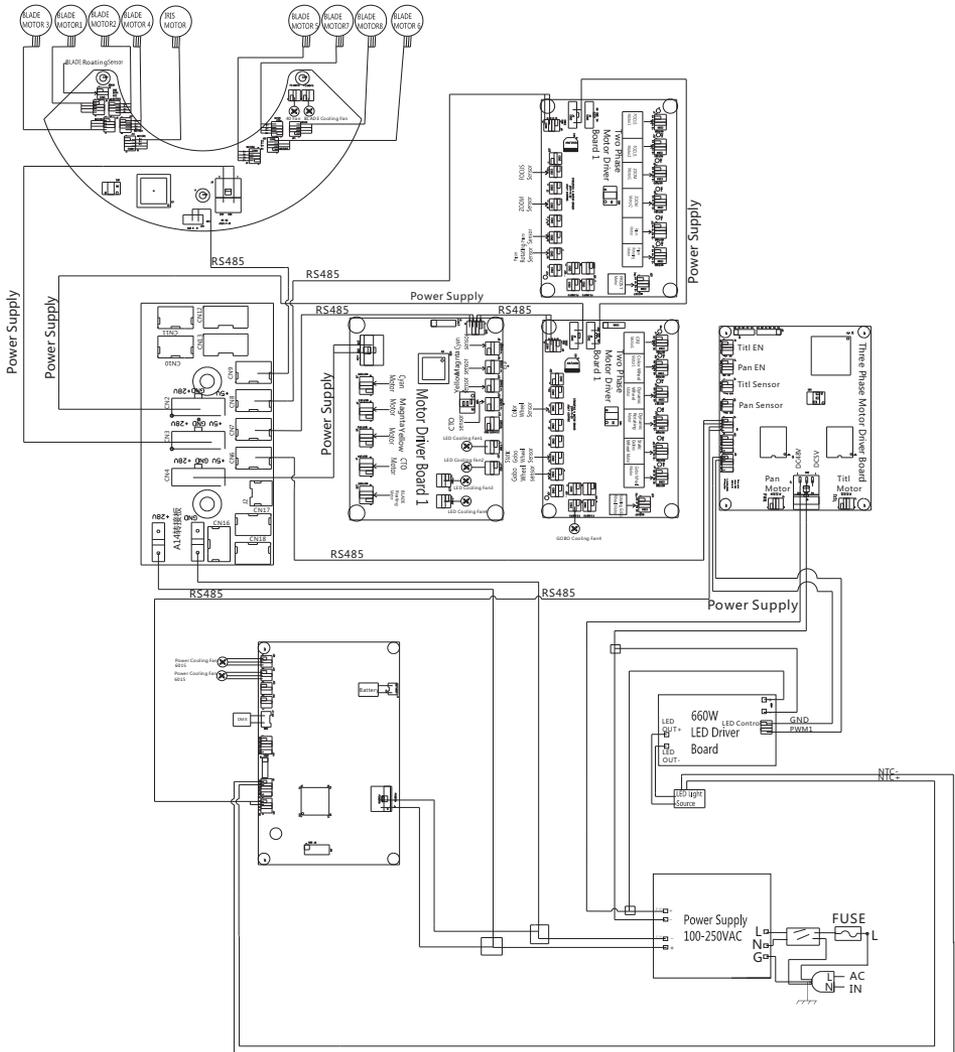


Rgobo wheel

Glass design. Inside diameter 24.5mm, effective diameter 18mm.



# 11. Electronic drawing



**Note: The above contents for reference only and is subject to change without prior notice, please take specification you have on hand and our company reserves the final right of interpretation.**

