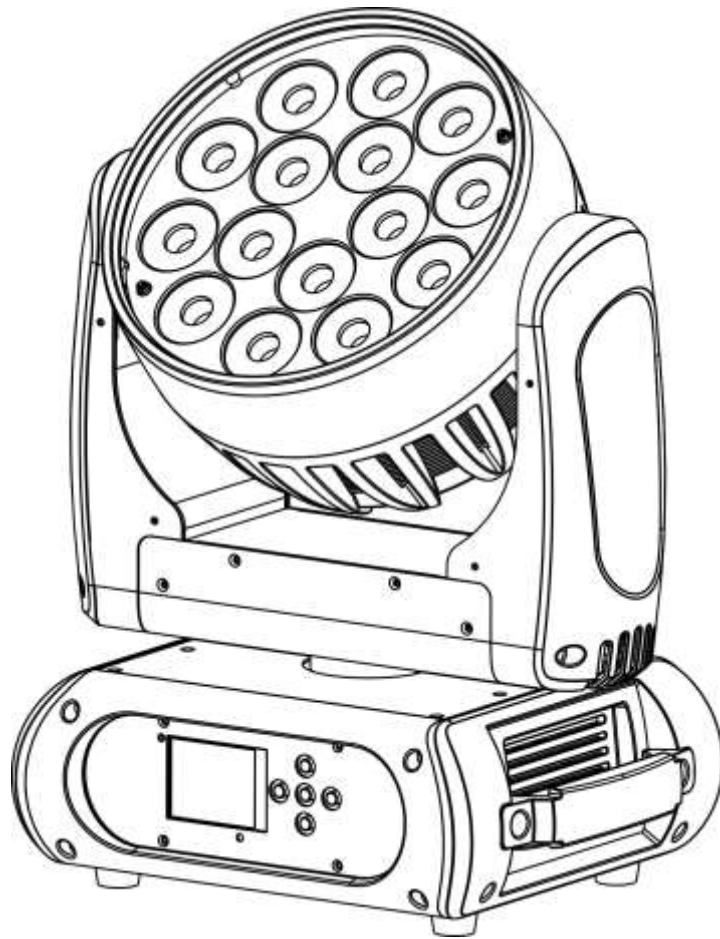


LED ZOOM HEAD

USERS GUIDE



CE

1. Product Introduction:

1.1 Before unpack the fixture, pls make sure that the packing is in good condition, following items will be found in the box:

- The fixture
- This users guide
- 3m DMX cable
- 1.5m power cable with powercon
- Omega bracket for hanging installation
- Safety chain

1.2 Specification

Source

- Light source: 15pcs OSRAM 15W 4in1 leds, 5 sections control
- Led life: 60.000 hours
- Luminous Flux: 5500lumen, [27400lux@2m](#) at 10°, 1500lux@2m at 60°
- Control: Remote on/off via DMX
- Ballast: switching mode power supply

Optical System

- Beam angle: 10° to 60°

X/Y

- Pan: 630° (2.5.0 sec) or 540°(2 sec), Tilt: 265° (1.8 sec)
- 16-bit resolution
- Auto repositioning

Features

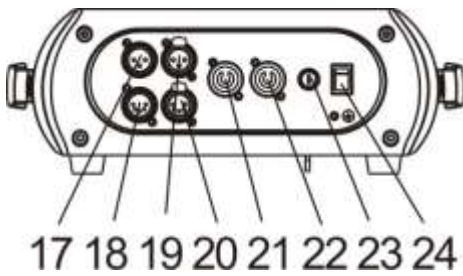
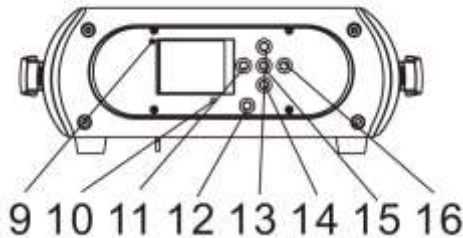
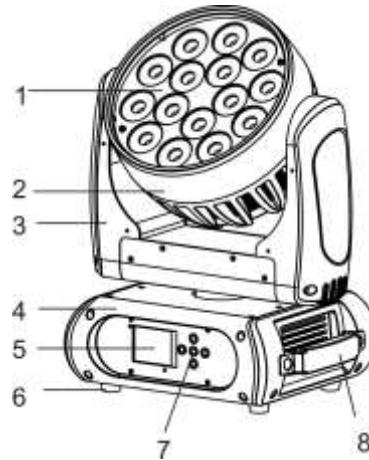
- DMX channels: 15/38/14/16
- Super fast, smooth and silent movement
- RGBW four colors mixing to create vivid, saturated and uniform color effect
- Pre-set color temperature at 2700K, 3200K, 4200K, 5600K and 8000K
- zoom from 10° to 60°
- Full range 0-100% dimmer
- Various strobe
- RDM function to change DMX address, display flip, X/Y Reverse and so on
- Software upgrade via DMX
- Hibernation when lost DMX for preset time
- Indicate temperature info of base, arm and lamp
- Fan speed auto change according to temperature
- Heat pipe for cooling

Display

- 2.4inch super nice LCD display with friendly English/ Chinese/French/Spanish menu
- Auto lock
- Flip
- Back-up communicating IC

1.3 Description of the Device

1. Project lens
2. Head
3. Arm
4. Base
5. Display
6. Foot stand
7. Operation button
8. Handel














9. Wireless indicator
10. Mic
11. Left button
12. Battery indicator
13. Up button
14. Down button
15. Enter button
16. Right button
17. 3-pin DMX in
18. 5-pin DMX in
19. 3-pin DMX out
20. 5-pin DMX out
21. Powercon in
22. Powercon out
23. Fuse
24. Power switch

2. Safety and maintenance Information

2.1 Safety Info

| | |
|--|--|
| | <p>Before operate this unit, please carefully read this users guide and keep if needed in future. It's necessary to respect following rules.</p> |
| | <p>The disposal of the device after lifecycle could damage the environment, need to take it to special company for recycling or return to authorized dealer.</p> |
| | <p>The products referred to in this manual conform to the European Community Directives and are therefore marked with CE logo.</p> |

| | |
|---|--|
|  | Keep this device away from children and unauthorized users, the manufacturer will not take responsibility for the damage due to any disregard of the information provided in this manual and wrong operation. |
|  | Before operate the device, pls make sure the fixture is in good housing, ensure pan and tilt can rotate in its complete range. |
|  | Pls make sure minimal 0.5m distance need to kept between the fixture to any flammable material. |
|  | The device can only run with 100-240v voltage, 50/60Hz power, don't connect to any other wrong power. Disconnect the device from main power before open the shield or maintenance. |
|  | The device is designed only for indoor usage, pls keep it away from moisture. Do not expose the device under the sun or directly to any other lighting source. |
|  | Never look directly into the projecting lens when the fixture is power on, the light may trigger epileptic seizures in photosensitive persons or persons with epilepsy. Especially at beam effect, extreme caution and observance of these safety instructions is mandatory. |
|  | Don't put or install the device on a surface that subject to vibration or bumps. |
| Ta=45°C | The device is supposed to work in the temperate range -15° C and +45° C, do not use the device when the temperate exceed this range. |
|  | The lens, shield need to be replaced when obviously broken, never use the device when the shield is not completed closed. |
|  | Safety I class device, need to be earth connected. |
|  | When the fixture is hanged overhead, the safety rope must be fixed to the bottom of the device to the appropriate fixing point. |
|  | Always carry the device by the handles, do not take the head or arm directly for transportation. |

2.2 Maintenance

2.2.1 Operation only allowed to qualified person, damages due to unprofessional operation or remove of any parts inside will not be considered in warranty service. There are no serviceable parts inside the device or package, service only leaves to authorized dealers.

2.2.3 Never allow the optical components contact with oil, fat or any other liquid.

2.2.4 A regular clearance of the device is needed for long-term usage, this is very helpful to maintain the lifetime and brightness need to use a soft and lint-free cloth to clean the optical system, fan and air flowing tunnel.

2.2.5. Trouble Shooting

| Problems | Possible reasons | Checking or solutions |
|---------------------------|---|--|
| Device not power up | Powercon or power cable damaged Faulty power supply | Change a good power cable to try Replace new power supply |
| Pan/Tilt error or vibrate | Faulty Pan/Tilt PCB Faulty opto sensor Cable loosen | Replace PT001 PCB Replace opto sensor OP001 Check the cable connect to OP001 |
| LED off | Temperature protection Fan not working | Check the temperature from menu Check the fan speed info from menu |

| | | |
|----------------------------|---|--|
| | Faulty LED Dimmer and strobe set at 0 Faulty power supply | Replace new LED Set dimmer and strobe channel at 255 Replace new power supply |
| Device not response to DMX | Faulty communication IC Faulty display PCB Wrong DMX addressing Faulty DMX cable | Replace the IC with back-up one in the display PCB Replace new display PCB Check the address and setting Change to a good DMX cable |

2.2.6 Replacement of the fuse

Need to replace with same type and rating, which originally installed in the device.

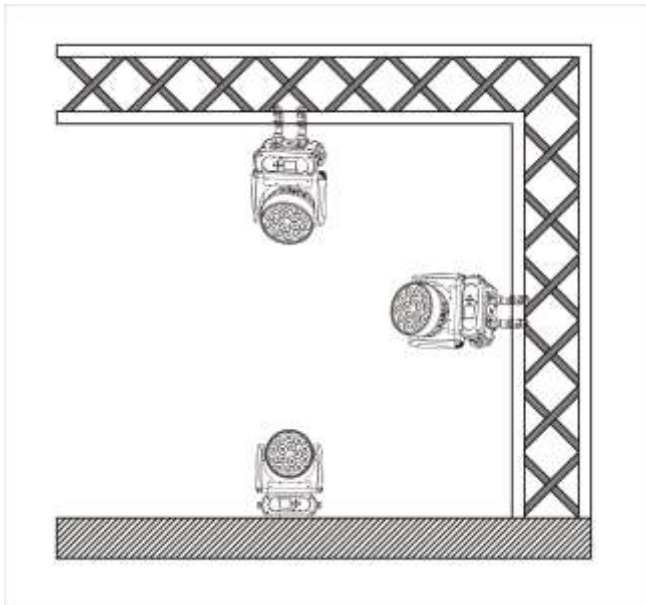
Step One: Unplug power cable from main power.

Step Two: Unscrew the fuse holder out of the housing with a screwdriver.

Step Three: Remove the broken fuse and replace with an exact same type of new fuse.

Step Four: Insert the fuse holder back to the housing and screw tight and reconnect power.

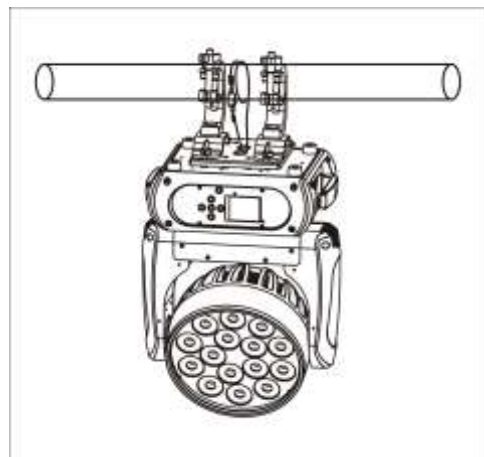
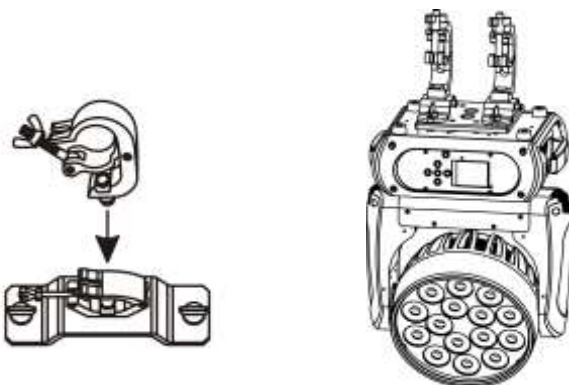
3. Installation



3.1 The device could be either put on a solid and even surface, or mounted upside down or sideways like left picture.

3.2 The mounting place must be sufficient stable and be able to support a weight of 10 times of the unit's weight. When the fixture is hanged, always additionally secure the device with the safety chain, fasten the safety rope at a suitable position so that the maximum fall of the projector will be 20 cm

3.3 How to do mounting installation.



Step one: Installation the clamp onto the omega bracket;

Step two: Install the clamp and bracket on the bottom of panel, fasten the quick-locks;

Step three: Install the whole device onto appropriate truss and fasten the clamps, tight the safety rope with the truss or other fixing point at a suitable position that drop down distance not exceed 20 cm.

4. Control menu

4.1 Meaning of the icon in menu

| CONNECT | LIGHT | INFOMATION | SET | PROGRAM |
|---|---|---|---|---|
|  |  |  |  |  |

4.2 Menu tree

Default setting shadowed. mark with ① can be basic reloaded, ② be program reloaded, ③ can be private reloaded.

| | | | | |
|--------------|-----------------------------------|---|---|--|
| Con nect | DMX Address① | XXX | | DMX address setting |
| | Light | Max Temperature① | 80~139°C, 90°C / 176~282°F, 194°F | |
| Lamp Adjust① | | PAN..... | | Adjust value of each channels |
| Information | Time Info. | Current | XXXX(Hours) | Fixture boot time |
| | | Fixture Life | XXXX(Hours) | Fixture total run time |
| | Temperature | Near Lamp Temp (depends on fixture) | | Temperature Sensors |
| | Fans Speed | Near Lamp Fan (depends on fixture) | | Fan speed Sensors |
| | Channel Value | PAN..... | | Display value of channel |
| | Error Message | Pan,Tilt..... | | Error channels |
| | Fixture Model | xxxxxxxxxxxx | | Display model brand and model |
| Software Ver | 1U01 V1.0.00 2U01 V1.0.00 : | | | Version of each IC |
| Set | Reset | All Pan&Tilt Others | Reset all Reset Pan&Tilt Reset Others | |
| | Movment | Pan Reverse① Tilt Reverse① Pan Degree① Encoders① Pan/Tilt Mode① | ON/OFF ON/OFF 630/540 ON/OFF Stand/Smooth | Pan Reverse Tilt Reverse Choose Pan Degree Encoder wheel on/off Choose pan/tilt mode |

| | | | | |
|---------|----------------|---|--|---|
| | UI Set | Mic Sens. ③ No Signal① Temperature. C/F① Fans Mode① Hibernation① Backlight① Flip Display① Display Bright③ Brand Show① Key Lock① Language① | 0~99%,60% Close/Hold/Auto/Music Fahrenheit /Celsius Auto Speed /High Speed OFF, 01M~99M, 15M 02~60m 02m ON/OFF 00~31 10 ON/OFF ON/OFF En/简/繁/Fr/Sp | Sensitivity of Mic Mode when no signal Temperature at °C/°F Fans mode Sleeping mode Show backlight time Display 180° reverse Display Brightness Show brand or not Key lock on/off Language Select |
| | Users | User Mode① | Standard Extended Basic-8bit Basic-16bit User | Standard mode Extended mode Basic-8bit mode Basic-16bit mode User program mode |
| | | Edit User③ | Max Channel = XX PAN = CH01 : | Edit users mode |
| | Calibration③ | -Password- Pan... | =XXX =XXX | Password: 050 Calibrate channel value |
| | Fixture ID③ | Name -Password- PID Code | | Name Password: 050 Set PID of RDM |
| | Reload Default | Basic Reload(①) Program Reload(②) ---Password--- Private Reload(③) All Reload | ON/OFF ON/OFF XXX ON/OFF ON/OFF | Basic Reload Program Reload Password: 050 Private Reload All Reload |
| Program | Play① | DMX Receive Slave Receive Sequence Music | Slave Receive 1,2,3 Master / Alone Master / Alone | DMX Receive Choose slave position Run Sequence Music mode |
| | Select Chase② | Chase Part 1 Chase Part 2 Chase Part 3 | Chase 1 ~ 8 Chase 1 Chase 1 ~ 8 Chase 2 Chase 1 ~ 8 Chase 3 | Select and run auto program |
| | Edit Chase② | Chase 1 : Chase 8 | Chase Test Step 01 =SCxxx Step 64 =SCxxx | Test Beginning scene Ending scene |
| | Edit Scenes② | Edit Scene 001 ~ Edit Scene 250 | Pan,Tilt,..... =xxx --Fade Time-- =xxx --Secne Time-- =xxx DMX Input | Input manual scene Modify manually fading time Modify manually scene time Input scene from exterior controller |
| | Scenes Record | ScXX=>ScXX | | Auto Input scenes |

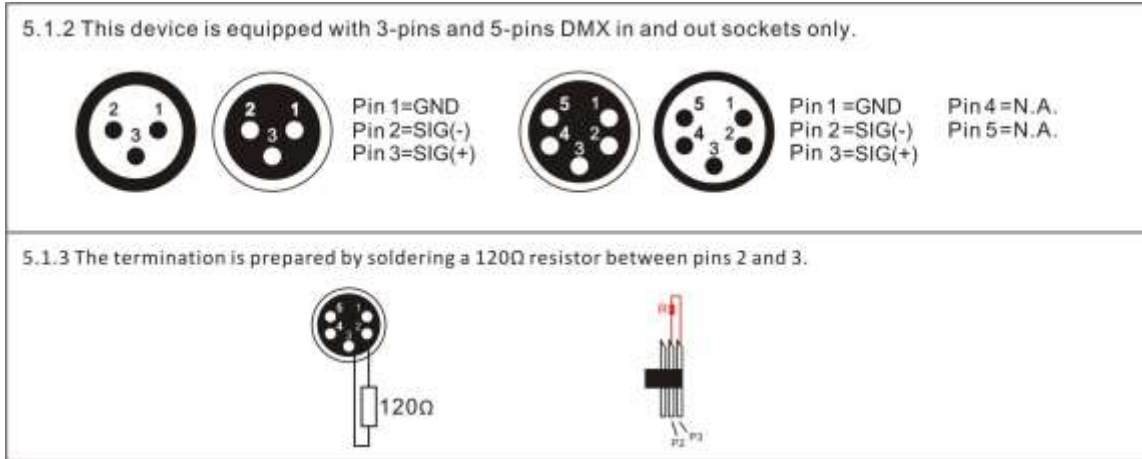
5. DMX connection and DMX protocol

5.1 DMX addressing:

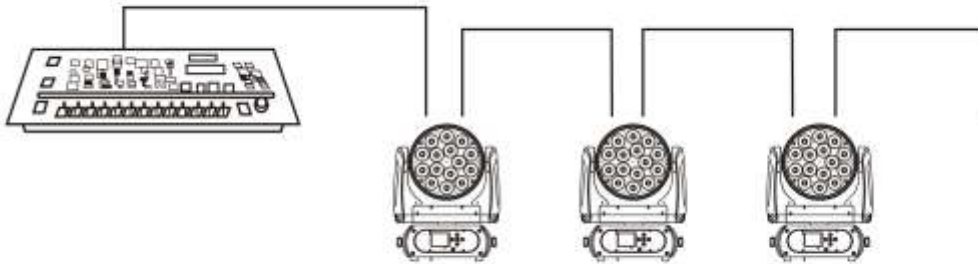
5.1.1 The device is controlled by universal DMX 512 protocol, DMX address is the start channel used to receive instructions from the external controller. For independent control, each fixture must be assigned its unique address control channels. For example, this device has four channel modes: 15/38/14/16, if we set the mode at standard 15 channels mode, and there are several models need to be independently controlled, we just simply address first fixture at 1, and second fixture at 16, third one at 31, etc.

If the devices have the same address, they will behave synchronically.

DMX addressing is limited, don't set the address so high that without enough control channels for the fixtures. Display is flashing when no DMX signal is received.



5.1.4 Connection: use DMX cable with 3+5 pin XLR-plugs to connect the controller with the fixture or one fixture with another.



5.2 DMX chart

| Channel | | | | name | function | Min DMX | Max DMX |
|---------|----|---------|----------|-----------|--------------------|---------|---------|
| St | Ex | Ba 8bit | Ba 16bit | | | | |
| 1 | 1 | 1 | 1 | Pan | Pan Coarse | 0 | 255 |
| | 2 | | 2 | Pan fine | Pan Fine | 0 | 255 |
| 2 | 3 | 2 | 3 | Tilt | Tilt Coarse | 0 | 255 |
| | 4 | | 4 | Tilt fine | Tilt Fine | 0 | 255 |
| 3 | 5 | 3 | 5 | Movement | fastest to Slowest | 0 | 255 |

| | | | | | | | |
|------|-----|-----|---|------------------------|-----------------------------------|-----|-----|
| | | | | Speed | | | |
| | 6 | | | Movment Function | Normal | 0 | 15 |
| | | | | | Movement With Backout | 16 | 31 |
| | | | | | TBD | 32 | 255 |
| 4 | 7 | | | Shutter Function | Normal Shutter Functions | 0 | 15 |
| | | | | | Pulse-effect Forward | 16 | 31 |
| | | | | | Pulse-effect Reverse | 32 | 47 |
| | | | | | Random Strobe | 48 | 63 |
| | | | | | TBD | 64 | 255 |
| 5 | 8 | | | Shutter | Normal Shutter Functions | | |
| | | | | | Close | 0 | 31 |
| | | | | | Strobe Rate (slow to fast) | 32 | 223 |
| | | | | | Open | 224 | 255 |
| | | | | | Pulse-effect Forward | | |
| | | | | | Close | 0 | 31 |
| | | | | | Strobe Rate (slow to fast) | 32 | 223 |
| | | | | | Open | 224 | 255 |
| | | | | | Pulse-effect Reverse | | |
| | | | | | Close | 0 | 31 |
| | | | | | Strobe Rate (slow to fast) | 32 | 223 |
| | | | | | Open | 224 | 255 |
| | | | | | Random Strobe | | |
| | | | | | Close | 0 | 31 |
| | | | | | Strobe Rate (slow to fast) | 32 | 223 |
| Open | 224 | 255 | | | | | |
| | | 4 | 6 | Shutter | Shutter closed | 0 | 31 |
| | | | | | No function (shutter open) | 32 | 63 |
| | | | | | Strobe effect slow to fast | 64 | 95 |
| | | | | | No function (shutter open) | 96 | 127 |
| | | | | | Pulse-effect in sequences | 128 | 159 |
| | | | | | No function (shutter open) | 160 | 191 |
| | | | | | Random strobe effect slow to fast | 192 | 223 |
| | | | | | No function (shutter open) | 224 | 255 |
| 6 | 9 | 5 | 7 | Dimmer | For Dimmer | | |
| | | | | | Dimmer(0->100%) | 0 | 255 |
| | | | | | LED Segments | | |
| | | | | | Increasing speed | 0 | 255 |
| 7 | 10 | 6 | 8 | Virtual Color Function | On Function | 0 | 15 |
| | | | | | CTC Function | 16 | 31 |
| | | | | | Forward Spin | 32 | 47 |
| | | | | | Reverse Spin | 48 | 63 |
| | | | | | Continuous | 64 | 79 |
| | | | | | Color Bounce | 80 | 111 |
| | | | | | LED Segments | 112 | 127 |
| | | | | | TBD | 128 | 255 |

| | | | | | | | |
|--------------------------------------|-----|-----|----|--------------------------------------|--|-----|-----|
| 8 | 11 | 7 | 9 | Virtual Color1 | CTC Function | | |
| | | | | | Colour Temperature Correction 2000K->2700K | 0 | 223 |
| | | | | | White 3200K | 224 | 231 |
| | | | | | White 4200K | 232 | 239 |
| | | | | | White 5600K | 240 | 247 |
| | | | | | White 8000K | 248 | 255 |
| | | | | | Forward Spin | | |
| | | | | | Rainbow Effect (Slow->Fast) | 0 | 255 |
| | | | | | Reverse Spin | | |
| | | | | | Rainbow Effect (Slow->Fast) | 0 | 255 |
| | | | | | Continuous & Color Bounce | | |
| | | | | | Black | 0 | 0 |
| | | | | | Red | 1 | 1 |
| | | | | | Green | 2 | 2 |
| | | | | | Blue | 3 | 3 |
| | | | | | White | 4 | 4 |
| | | | | | Red=0, Green->up,Blue=full,White=0 | 5 | 46 |
| | | | | | Red=0, Green=full,Blue->down,White=0 | 47 | 88 |
| | | | | | Red->up, Green=full,Blue=0,White=0 | 89 | 130 |
| | | | | | Red=full, Green->down,Blue=0,White=0 | 131 | 172 |
| | | | | | Red=full, Green=0,Blue->up,White=0 | 173 | 214 |
| Red->down, Green=0,Blue=full,White=0 | 215 | 255 | | | | | |
| LED Segments | | | | | | | |
| Chaser 1~Chaser 32 | 0 | 255 | | | | | |
| 9 | 12 | 8 | 10 | Virtual Color2(Only On Color Bounce) | Color Bounce | | |
| | | | | | Black | 0 | 0 |
| | | | | | Red | 1 | 1 |
| | | | | | Green | 2 | 2 |
| | | | | | Blue | 3 | 3 |
| | | | | | White | 4 | 4 |
| | | | | | Red=0, Green->up,Blue=full,White=0 | 5 | 46 |
| | | | | | Red=0, Green=full,Blue->down,White=0 | 47 | 88 |
| | | | | | Red->up, Green=full,Blue=0,White=0 | 89 | 130 |
| | | | | | Red=full, Green->down,Blue=0,White=0 | 131 | 172 |
| | | | | | Red=full, Green=0,Blue->up,White=0 | 173 | 214 |
| | | | | | Red->down, Green=0,Blue=full,White=0 | 215 | 255 |
| | | | | | LED Segments | | |
| | | | | | LED_A Virtual Color | 0 | 255 |
| 10 | 13 | 9 | 11 | Red-All | For Dimmer | | |
| | | | | | Red 0->100% | 0 | 255 |
| | | | | | LED Segments | | |
| | | | | | LED_B Virtual Color | 0 | 255 |
| 11 | 14 | 10 | 12 | Green-All | For Dimmer | | |
| | | | | | Green 0->100% | 0 | 255 |
| | | | | | LED Segments | | |
| | | | | | LED_C Virtual Color | 0 | 255 |

| | | | | | | | |
|----|----|----|----|-------------|--------------------------|----|-----|
| 12 | 15 | 11 | 13 | Blue-All | For Dimmer | | |
| | | | | | Blue 0->100% | 0 | 255 |
| | | | | | LED Segments | | |
| | | | | | LED_D Virtual Color | 0 | 255 |
| 13 | 16 | 12 | 14 | White-All | For Dimmer | | |
| | | | | | White 0->100% | 0 | 255 |
| | | | | | LED Segments | | |
| | | | | | LED_E Virtual Color | 0 | 255 |
| | | | | LED-A Color | LED_A Virtual Color | 0 | 255 |
| | | | | LED-B Color | LED_B Virtual Color | 0 | 255 |
| | | | | LED-C Color | LED_C Virtual Color | 0 | 255 |
| | | | | LED-D Color | LED_D Virtual Color | 0 | 255 |
| | | | | LED-E Color | LED_E Virtual Color | 0 | 255 |
| | 17 | | | Red-A | Red 0->100% | 0 | 255 |
| | 18 | | | Green-A | Green 0->100% | 0 | 255 |
| | 19 | | | Blue-A | Blue 0->100% | 0 | 255 |
| | 20 | | | White-A | White 0->100% | 0 | 255 |
| | 21 | | | Red-B | Red 0->100% | 0 | 255 |
| | 22 | | | Green-B | Green 0->100% | 0 | 255 |
| | 23 | | | Blue-B | Blue 0->100% | 0 | 255 |
| | 24 | | | White-B | White 0->100% | 0 | 255 |
| | 25 | | | Red-C | Red 0->100% | 0 | 255 |
| | 26 | | | Green-C | Green 0->100% | 0 | 255 |
| | 27 | | | Blue-C | Blue 0->100% | 0 | 255 |
| | 28 | | | White-C | White 0->100% | 0 | 255 |
| | 29 | | | Red-D | Red 0->100% | 0 | 255 |
| | 30 | | | Green-D | Green 0->100% | 0 | 255 |
| | 31 | | | Blue-D | Blue 0->100% | 0 | 255 |
| | 32 | | | White-D | White 0->100% | 0 | 255 |
| | 33 | | | Red-E | Red 0->100% | 0 | 255 |
| | 34 | | | Green-E | Green 0->100% | 0 | 255 |
| | 35 | | | Blue-E | Blue 0->100% | 0 | 255 |
| | 36 | | | White-E | White 0->100% | 0 | 255 |
| 14 | 37 | 13 | 15 | Zoom | small angle -> Big angle | 0 | 255 |
| 15 | 38 | 14 | 16 | Control | Normal | 0 | 7 |
| | | | | | Reset All | 8 | 15 |
| | | | | | Pan&Tilt Reset | 16 | 23 |
| | | | | | TBD | 24 | 47 |
| | | | | | Other Reset | 48 | 55 |
| | | | | | Display Off | 56 | 63 |
| | | | | | Display On | 64 | 71 |
| | | | | | TBD | 72 | 79 |
| | | | | | TBD | 80 | 87 |
| | | | | | Hibernation | 88 | 95 |
| | | | | | TBD | 96 | 255 |

6. Unique Features

6.1 RDM, stand for “Remote Device Management”, with this function, users can realize remote control of the device, such as remotely changing DMX address, reverse pan/tilt setting, check a lot of useful information such as temperature, power consumption, fan speed. Etc. Every single device has a unique RDM code before left factory to distinguish from each other, usually not suggest users change this code freely.

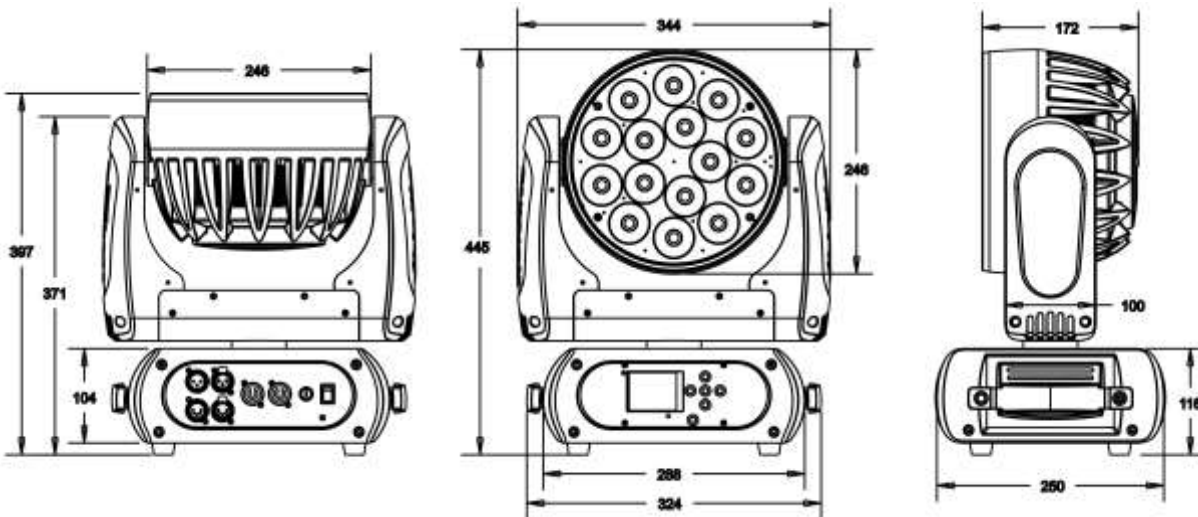
6.2 Software upgrade function via DMX cable, if there is any new firmware for this device come out, it can be upgraded simply via a software upgrade box, no need to change any mechanical parts. The upgrade box is not included in the package, if need any further assistance pls just contact authorized dealers.

6.3 Hibernation, the device will enter sleeping mode if activated after a period of disconnecting DMX signal to save the power consumption, and will return immediately as soon as the DMX signal is sent again.

6.4 Display back-up communication IC, there is a back-up communication IC installed in the display PCB, so users could replace at once if the working one is broken, no need to wait long time from service.

6.5 Display flip, by press up and down button for more than 3 seconds, the display will flip automatically, this function is useful to read menu conveniently when device is hanged.

8. Dimensions Drawing



9. Technical specification

| | |
|-------------------|--|
| Power supply | 100-240 V AC, 50/60 Hz ~ |
| Power consumption | 280W |
| LED | 15pcs OSRAM 15W 4in1 leds |
| DMX channels | 15/38/14/16 modes |
| Beam angle | 10° to 60° |
| Luminous flux | 5500lumen, 27400lux@2m at 10°, 1500lux@2m at 60° |
| Fuse | T 3.15 A, 250 V |
| Device dimensions | 344x250x445mm |
| Net Weight | 11KG |