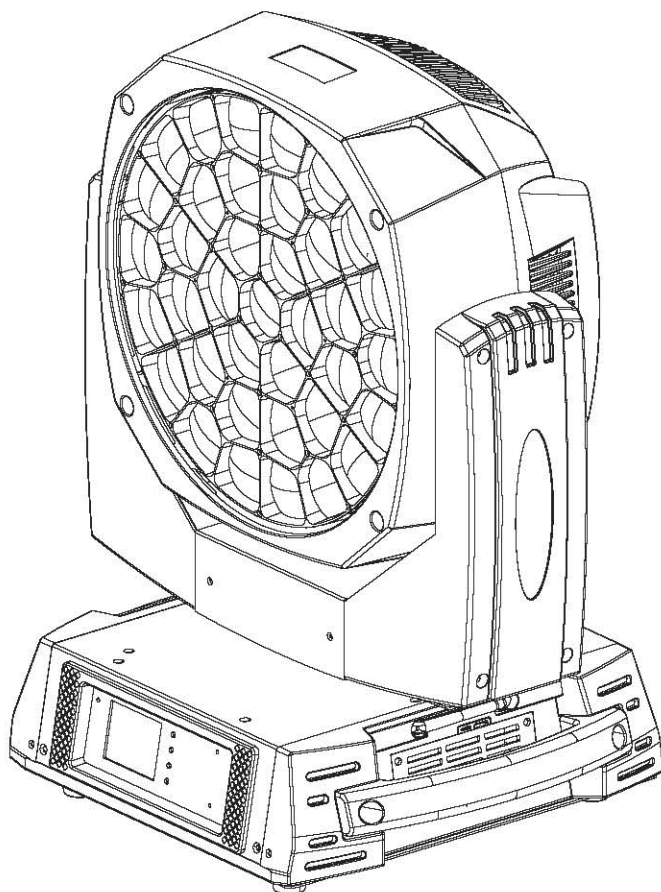


# ***USER MANUAL***

## ***USER MANUAL***



Version:1.1

**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. Please refer to this manual's relative instruction when using this equipment.



## 1.Open-Package guidelines

This equipment is made of new style,high intensity plastic.It fully shows the modem times light charac teristic with teristic with beauty struture. And it is made accord to CE standard. Fully agree with the internation standard of DMX512 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.Safaty cable-1PC  |
| 3.User Manval-1PC  | 4.Omega holder-2PCS |
| 5.Power cable-1PC  | 5.Service card-1PC  |

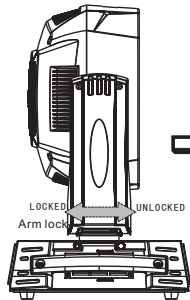
### 1. 1 Package

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 pan and tilt before operating fixture

Packing the fixture

- 1.Disconnect the fixture from power and allow it to cool.
- 2.lock arms as figure.- Fig.1(PAN Mechanism Lock and Release (every 90°) - Fig.2)
- 3.Place the fix ture in the bottom of the flight case, and cover the case without forcing.



Level transportation lock  
Fig.1

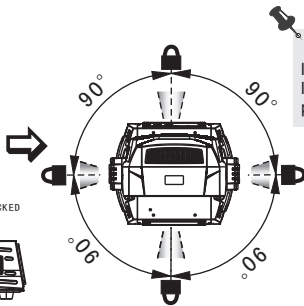
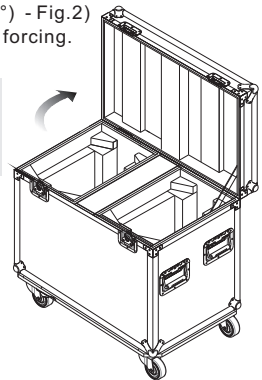


Fig.2

Note: to prevent the lamp damaged, focusing lens must return, can be placed in the box.



Aviation box

## 2.Safety instructions

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

- Be qualified
- Follow the instructions of this manual.



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 themains 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>➤ Minimum distance of illuminated objects<br/>The projector needs to be positioned so that the objects hit by the beam of light are at least 0.20 metres from the lens of the projector.</li> </ul>  |
| <p>t<sub>a</sub> 45°C</p>   | <ul style="list-style-type: none"> <li>➤ Maximum ambient temperature<br/>Do not operate the fixture if the ambient temperature (T<sub>a</sub>) exceeds 45°C (113°F).</li> </ul>   |
| <p>t<sub>c</sub> 80°C</p>   | <ul style="list-style-type: none"> <li>➤ Temperature of the external surface<br/>The maximum temperature 80°C (176°F).</li> </ul>   |
| <p>IP20</p>   | <p>IP20 protection rating</p> <ul style="list-style-type: none"> <li>➤ 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>➤ Indoor use only</li> </ul>   |
|   | <ul style="list-style-type: none"> <li>➤ Not suitable for household illumination</li> </ul>   |
|  | <p>Photobiological Safety</p> <ul style="list-style-type: none"> <li>➤ CAUTION. Possibly hazardous optical radiation emitted from this product. Do not stare at operating lamp. May be harmful to the eyes.</li> </ul>  |
|  | <p>Light collimation system</p> <ul style="list-style-type: none"> <li>➤ This product contains internal light collimation system. Avoid intense light from any angle.</li> </ul>  |
| <p>CE</p>   | <p>The products to which this manual refers comply with the European Directives pursuant to:</p> <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> |



➤ 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 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

The fitting mounts a high-pressure lamp that needs an external igniter. This igniter is fitted onto the apparatus. -Carefully read the "operating instructions" provided by the lamp manufacturer. -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 20 minutes. After this time the likelihood of the lamp exploding is virtually small. If it is necessary to replace the lamp, wait for another 20 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 projector head, 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 radiat, 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.

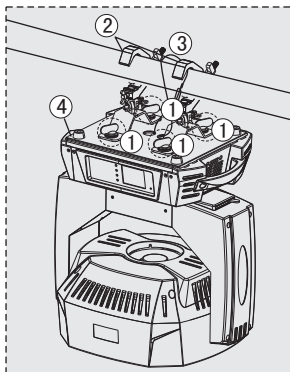
If the projector shall be lowered from the ceiling or high joists, professional trussing systems have to be used. The projector must never be fixed swinging freely in the room.

**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.

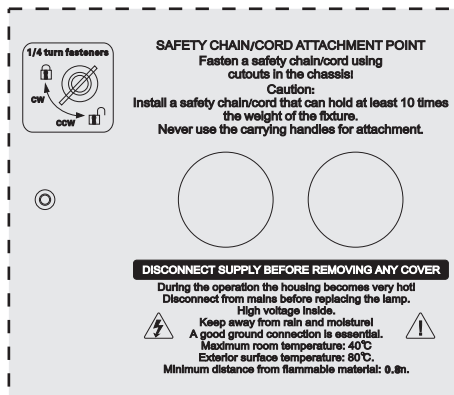
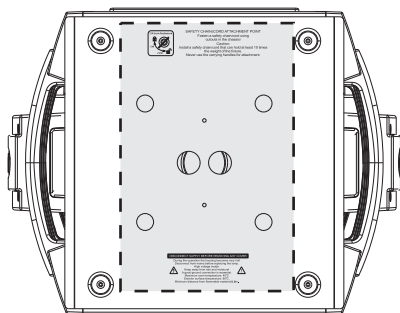
The projector can be placed directly on the stage floor or rigged in any orientation on a truss without altering its operation characteristics.

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 | Lock catch     |
| ② | Omega holder   |
| ③ | Secure chain   |
| ④ | Mounting plate |

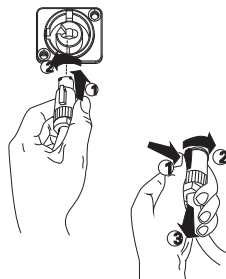


### 4.3 Power supply connection and cut off

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.

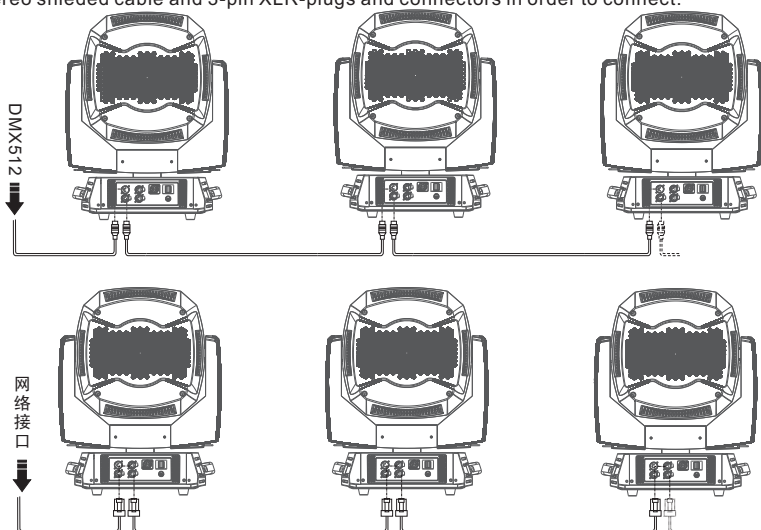


**Warning:** please verify the power of the power supply equipment prior to the connection! Earth wire must be grounded!

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

## 4.5 DMX-512 connection/connection between fixtures

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



Max loop 3 fixture at 110V, Max loop 6 fixture at 240V.

### 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



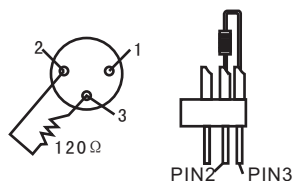
DMX input  
5-pin XLR socket



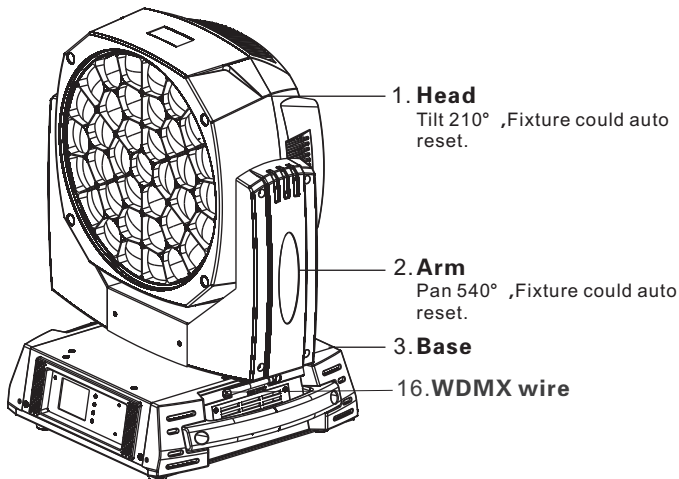
1: Ground  
2: Signal (-)  
3: Signal (+)  
4: N. A.  
5: N. A.

### 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  $120\Omega$  resistor connected between pins 2 and pins 3, which is then plugged into the output XLR socket of the last fixture in the chain.

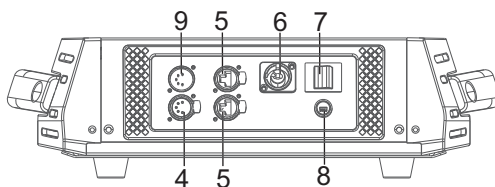


## 5. Description of the device



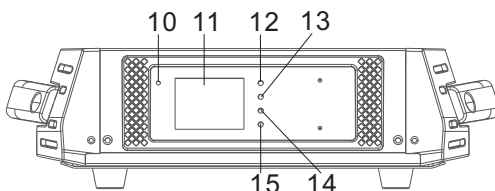
### BACK PANEL

- 4. 5-pin XLR female
- 5. Network interface
- 6. Power-in
- 7. Power switch
- 8. Main Fuse
- 9. 5-pin XLR male

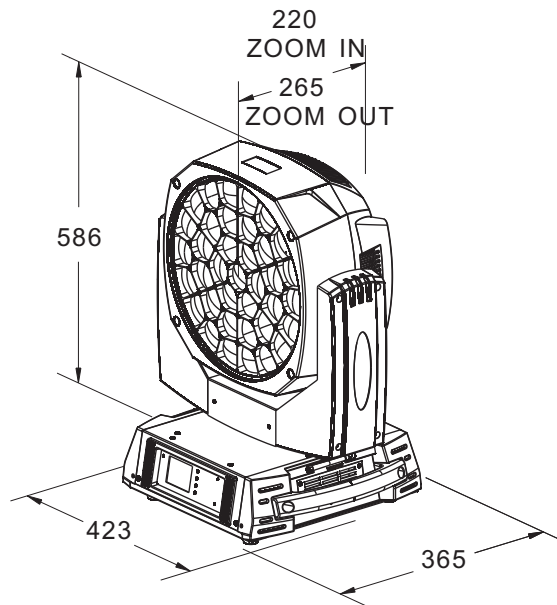
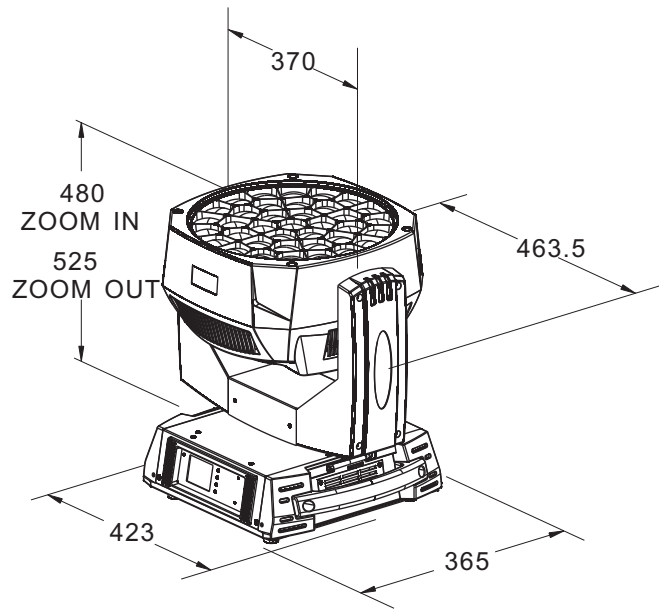


### CONTROL PANEL

- 10. Status indicator lamp
- 11. Touch screen (LCD display)
- 12. MODE button
- 13. UP button
- 14. DOWN button
- 15. ENTER button
- 16. WDMX Wire



## 6.Dimension





## 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 0 to 10 minutes automatically exit menu interface and close the screen.

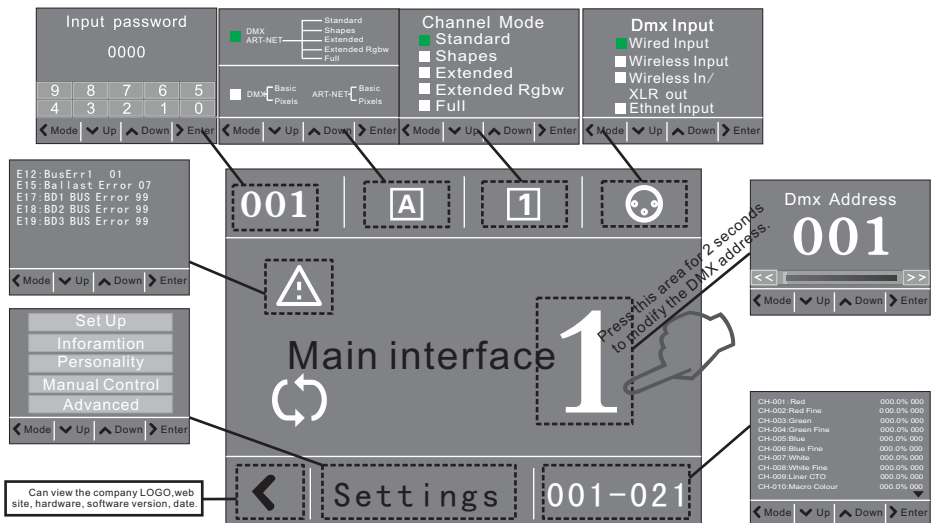
### 7.2 Display Operation

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.

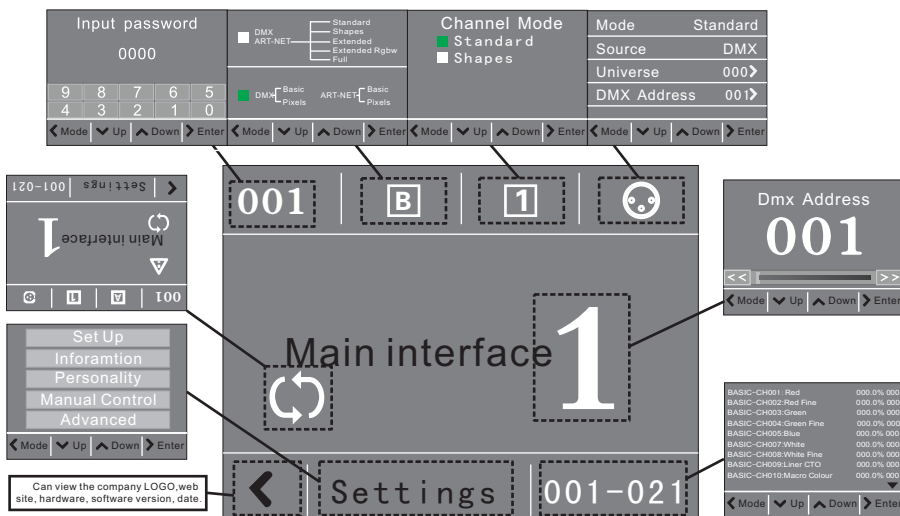
If the screen "⊙" icon is green, said DMX signal connection is normal, this state can be used to check th-lamps and lanterns and connection between the control table is normal.

This lamp contains "A""B" two control modes are optional, see below; (A mode, also known as unit mode, its function as a network and only a single control console. B mode known as multivariate models, its function as a network and control console merge or separate two options.)



A mode menu interface

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



B mode menu interface

Click on the main interface of the icon, numerical to view view Settings related information of lamps and lanterns. Symbols such as the main interface appear "Δ", the following error message indicates that there might be a lamps and lanterns, can click to view and control information content to modify the lamps and lanterns.

CODE #	ERRO INFO	CHECK MEASURMENT	NOTE
E02	Program Err 1	Check the welding of Chip	RESET ERROR
E04	MBDInit Error	Check the communication signal 485& 485 chip & memory IC	
E05	BD1Init Error	Check main cable ABAB ( 485 ) chip	
E06	BD2Init Error		
E12	BusErr1	Check main cable ABAB ( 485 ) chip	
E16	MFpga Error		
E17	BD1 BUS Error	Check the communication signal& welding of communication chip	
E18	BD2 BUS Error		
E21	Pan FB. Err	Check the light coupling line, optical coupling switch and a plate of the relative position measurement	
E22	Pan Zero Err	Check cable of sensor, distance and location of ,magnets and sensor	
E23	Tilt FB. Err	Check the light coupling line, optical coupling switch and a plate of the relative position measurement	
E24	Tilt Zero Err	Check cable of sensor, distance and location of ,magnets and sensor	
E36	Zoom RT. Error	Check cable of sensor, distance and location of ,magnets and sensor	
E057	EthMDL Error	Check the fan of ArtNet、communication signal	

### 7.3 Unit Menu(A mode)

Set up	DMX Address	Un iverse DMX Address 001-XXX	修改网络域码地址 修改DMX地址
	Channel Mode	STANDARD 1~21	通道模式（默认Mode1）
		SHAPES 1~36	
		EXTENDED 1~132	
		EXTENDED RGBW 1~169	
		FULL 1~147	
	Fixture Id	0001-XXXX	灯具ID
Multi Mode（use it under the module with art-net）	DMX Or ART-NET DMX+ART-NET	多元模式选择（带ART-NET模块下使用）	
Ethernet（use it under the module with art-net）	IPAddress	网络IP地址设置（带ART-NET模块下使用）	
	Netmask		
Information	Fixture Times	XXXXX h XX m	灯具累计运行时间
	LED Timeshare	LED On Times XXXXh XXm	LED开光累计运行时间
	Error List	Reset LED Time	LED时间清零
			错误列表(1-99次)
	Diagnosis	BOARD 1: XX.XX% BOARD 2: XX.XX%	通信质量
DMX Values		查看DMX数值	
Personality	Pan/Tilt	Pan Reverse ON/OFF	水平反相（默认OFF）
		Tilt Reverse ON/OFF	垂直反相（默认OFF）
		Feedback ON/OFF	扫描测位齿是否起作用（默认ON）
	Dmx Input	Wired Input	有线输入（默认）
		Wireless Input	无线输入
		Wireless In/XLR out	无线输入/有线输出
		Ethnet Input（use it under the module with art-net）	ethnet 输入 （带ART-NET模块下使用）
	Screen	Brightness	显示屏亮度调节
		Screen Time out 0-10m	显示屏背光关闭时间
Touch Screen ON/OFF		触摸屏触摸开关（默认OFF）	
Manusl Control	Reset	Auto Screen ON/OFF	屏幕翻转（默认ON）
		Reset ALL	灯具全部复位
		Reset Pan/Tilt	水平/垂直复位
		Reset Other	其他复位
	Channel		通道测试
Advanced	Calibration		通道校准
	Factory Default		恢复出厂设置
	Touch Calibration		触摸屏校准

## 7.4 Multivariable Menu(B mode)

Set up	Basi Engine	Mode	Standard	模式选择
			Shape	
		Source	DMX	DMX选择
		Universe	ART-NET	
	Pixels Engine	DMX Address	001-XXX	修改网络域码地址
			001-XXX	修改DMX地址
		Mode	Disadied	模式选择
			RGB	
			RGBW	
		Source	DMX	资源控制选择
			ART-NET	
		Universe	001-XXX	修改网络域码地址
		DMX Address	001-XXX	修改DMX地址
	Fixture Id	0001-XXXX		灯具ID
	Multi Mode ( use it under the module with art-net )	DMX ART-NET		多元模式选择 ( 带ART-NET模块下使用 )
		DMX+ART-NET		
	Ethernet ( use it under the module with art-net )	IPAddress	XXX.XXX.XXX.XXX	网络IP地址设置 ( 带ART-NET模块下使用 )
			Confirm	
		Netmask	XXX.XXX.XXX.XXX	
			Confirm	
Information	Fixture Times	XXXXX h XX m		灯具累计运行时间
	LED Timeshare	LED On Times XXXXh XXm		LED开光累计运行时间
		Reset LED Time		LED时间清零
	Error List			<a href="#">错误列表(1-99次)</a>
	Diagnosis	BOARD 1: XX.XX%		通信质量
		BOARD 2: XX.XX%		
Personality	Pan/Tilt	DMX Values		查看通信质量及DMX数值
		Pan Reverse ON/OFF		水平反相 ( 默认OFF )
		Tilt Reverse ON/OFF		垂直反相 ( 默认OFF )
	Dmx Input	Feedback ON/OFF		扫描测位齿是否起作用 ( 默认ON )
		Wired Input		有线输入 ( 默认 )
		Wireless Input		无线输入
		Wireless In/XLR out		无线输入/有线输出
		Ethnet Input(use it under the module with art-net)		ethnet 输入 ( 带ART-NET模块下使用 )
	Screen	Brightness		显示屏亮度调节
		Screen Time out 0-10m		显示屏背光关闭时间
		Touch Screen ON/OFF		触摸屏触摸开关 ( 默认OFF )
		Auto Screen ON/OFF		屏幕翻转 ( 默认ON )
Manusl Control	Reset	Reset ALL		灯具全部复位
		Reset Pan/Tilt		水平/垂直复位
		Reset Other		其他复位
Advanced	Channel			通道测试
	Calibration			通道校准
	Factory Default			恢复出厂设置
	Touch Calibration			触摸屏校准

## 8.DMX protocol

### 8.1 Unit model(A mode)

Mode1	Mode2	Mode3	Mode4	Mode5	Fade Type	Function	Dmx Value
1	1	1	1	1	Red	Red 0-100%	0-255
2	2	2	2	2	Red fine	Red fine	0-255
3	3	3	3	3	Green	Green 0-100%	0-255
4	4	4	4	4	Green fine	Green fine	0-255
5	5	5	5	5	Blue	Blue 0-100%	0-255
6	6	6	6	6	Blue fine	Blue fine	0-255
7	7	7	7	7	White	White 0-100%	0-255
8	8	8	8	8	White fine	White fine	0-255
9	9	9	9	9	Linear CTO	Note: If CTO channel is active, the WHITE channel is disabled.	
						UNUSED RANGE	0-9
						8000K	10
						8000K→7000K	10-54
						7000K→6000K	54-99
						6000K→5600K	99-117
						5600K→5000K	117-144
						5000K→4000K	144-188
						4000K→3200K	188-224
						3200K→2500K	224-255
10	10	10	10	10	Macro colour	Macro color OFF	0-9
						Red	10
						Green	11
						Blue	12
						Cyan	13
						Yellow	14
						Magenta	15
						White 7000 K	16
						White 3700 K	17
						White 5000 K	18
						Black	19
						Medium Yellow	20-22
						Straw Tint	23-26
						Surprise Peach	27-28
						Fire	29
						Medium Amber	30
						Gold Amber	31
						Dark Amber	32-34
						Sunrise Red	35-44
						Light Pink	45
						Medium Pink	46-48
						Pink Carnation	49-61
						Light Lavender	62-67
						Lavender	68-77
						Sky Blue	78-88
						Just Blue	89-99
						Dark yellow green	100-109
						Spring Yellow	110-111
						Light Amber	112
						Straw	113
						Deep Amber	114
						Orange	115-116
						Light Rose	117
						English Rose	118
						Light Salmon	119
						Middle Rose	120
						Dark Pink	121-122
						Magenta	123-124
						Peacock Blue	125
						Med Blu Green	126
						Steel Blue	127

Mode1	Mode2	Mode3	Mode4	Mode5	Fade Type	Function	Dmx Value
10	10	10	10	10	Macro colour	Light Blue	128
						Dark Blue	129-130
						Leaf Green	131-133
						Dark Green	134-135
						Mauve	136-137
						Bright Pink	138-141
						Medium Blue	142-144
						Deep Golden Amber	145
						Pale Lavender	146
						Special lavender	147-148
						Primary Green	149-150
						Bright Blue	151-156
						Apricot	157-161
						Pale Gold	162-167
						Deep Orange	168-171
						Bastard Amber	172-173
						Flame Red	174
						Daylight Blue	175-178
						Lilac Tint	179
						Deep lavender	180-183
						Dark Steel Blue	184-190
						Congo Blue	191-206
						Alice Blue	207
						Dirty White	208
						White	209-255
11	11	11	11	11	Strobe	CLOSED	0-3
						STROBE SLOW → FAST ( 1 → 25 flash/sec )	4-103
						OPEN	104-107
						PULSATION SLOW → FAST ( 0.5-25 flash/sec )	108-207
						OPEN	208-212
						RANDOM SLOW STROBE	213-225
						RANDOM MEDIUM STROBE	226-238
						RANDOM FAST STROBE	239-251
						OPEN	252-255
12	12	12	12	12	Dimmer	Dimmer 0-100%	0-255
13	13	13	13	13	Dimmer Fine	Dimmer Fine	0-255
14	14	14	14	14	Pan	Pan	0-255
15	15	15	15	15	Pan Fine	Pan Fine	0-255
16	16	16	16	16	Tilt	Tilt	0-255
17	17	17	17	17	Tilt Fine	Tilt Fine	0-255
18	18	18	18	18	Function	The functions are activated passing through the "unused range" and staying 5 seconds.	
						Function off - rearmed	0-11
						Pan Tilt Fast (Default)	12-24
						Pan Tilt Normal	25-37
						Dimmer Curve 1	38-42
						Dimmer Curve 2	43-47
						Dimmer Curve 3	48-52
						Dimmer Curve 4	53-57
						RGBW Gamma curve 1 - gamma = 1.0	58-62
						RGBW Gamma curve 2 - gamma = 1.5	63-67
						RGBW Gamma curve 3 - gamma = 2.0	68-72
						Reserved	73-163
						Base frequency=1000Hz	164
						Base frequency=1500Hz (Default)	165
						Base frequency=2400Hz	166
						Base frequency=3700Hz	167
						Base frequency=5600Hz	168
						Base frequency=9400Hz	169
						Base frequency=15100Hz	170
						Base frequency=21400Hz	171
						Base frequency=31000Hz	172
						Base frequency=43700Hz	173
						Reserved	174-255

Mode1	Mode2	Mode3	Mode4	Mode5	Fade Type	Function	Dmx Value
19	19	19	19	19	Reset	Activated passing through the unused range and staying 5 seconds.	
						UNUSED RANGE	0-25
						ZOOM RESET	26-76
						PAN / TILT RESET	77-127
						COMPLETE RESET	128-255
20	20	20	20	20	Zoom	ZOOM NARROW BEAM → WIDE BEAM Rotation Enable	0-52
						ZOOM NARROW BEAM → WIDE BEAM Rotation Disable	53-255
21	21	21	21	21	Zoom Rotation	Linear Rotation lens angle from 0 to 60	0-127
						CW Rotation speed from fast to slow	128-190
						Stop Rotation	191-192
						CW Rotation speed from slow to fast	193-255
*	22	*	*	22	Shape Selection	UNUSED RANGE	0-7
						Shape1	8
						Shape2	9
						Shape3	10
						Shape4	11
						Shape5	12
						Shape6	13
						Shape7	14
						Shape8	15
						Shape9	16
						Shape10	17
						Shape63	70
						UNUSED RANGE	71-255
*	23	*	*	23	Shape Speed	Radius size, Static	0-63
						max to min speed	64-158
						Stop	159-160
						min to max speed	161-255
*	24	*	*	24	Shape Fade	Shape Fade 0-100%	0-255
*	25	*	*	25	Shape R	Shape R	0-255
*	26	*	*	26	Shape G	Shape G	0-255
*	27	*	*	27	Shape B	Shape B	0-255
*	28	*	*	28	Shape W	Shape W	0-255
*	29	*	*	29	Shape Dimmer	Shape Dimmer 0-100%	0-255
*	30	*	*	30	Background Dimmer	Background Dimmer 0-100%	0-255
*	31	*	*	31	Shape Transition	Shape Transition	0-255
*	32	*	*	32	Shape Offset	Shape Offset	0-255
						CLOSED	0-3
						STROBE SLOW → FAST ( 1 → 25 flash/sec )	4-103
						OPEN	104-107
						PULSATION SLOW → FAST ( 0.5-25 flash/sec )	108-207
						OPEN	208-212
						RANDOM SLOW STROBE	213-225
						RANDOM MEDIUM STROBE	226-238
						RANDOM FAST STROBE	239-251
						OPEN	252-255
						CLOSED	0-3
						STROBE SLOW → FAST ( 1 → 25 flash/sec )	4-103
						OPEN	104-107
						PULSATION SLOW → FAST ( 0.5-25 flash/sec )	108-207
						OPEN	208-212
						RANDOM SLOW STROBE	213-225
						RANDOM MEDIUM STROBE	226-238
						RANDOM FAST STROBE	239-251
						OPEN	252-255
*	35	*	*	35	Background Select	UNUSED RANGE	0-7
						NO selection	8
						pixe l	9
						Ring 2	10

Mode1	Mode2	Mode3	Mode4	Mode5	Fade Type	Function	Dmx Value
*	35	*	*	35	Background Select	Ring 3	11
						Ring 4	12
						pixe l + Ring 2	13
						pixe l + Ring 2 + Ring 3	14
						pixe l + Ring 2 + Ring 3 + Ring 4	15
						Ring 2 + Ring 3 + Ring 4	16
						Ring 3 + Ring 4	17
						pixe l + Ring 4	18
						Ring 2 + Ring 3	19
						pixe l + Ring 3	20
						Ring 2 + Ring 4	21
						pixe l + Ring 3 + Ring 4	22
						pixe l + Ring 2 + Ring 4	23
						UNUSED RANGE	24-255
*	36	*	*	36	FREQUENCY	Fine adjusting of frequency Base selected from the Function channel. If shape + frequency mode is selected.	
						746 Hz – 1254 Hz (Base frequency=1000Hz)	0-255
						1246 Hz – 1754 Hz (Base frequency=1500Hz)	0-255
						1765 Hz – 3035 Hz (Base frequency=2400Hz)	0-255
						3065 Hz – 4335 Hz (Base frequency=3700Hz)	0-255
						4330 Hz – 6870 Hz (Base frequency=5600Hz)	0-255
						6860 Hz – 11940 Hz (Base frequency=9400Hz)	0-255
						11925 Hz – 18275 Hz (Base frequency=15100Hz)	0-255
						18225 Hz – 24575 Hz (Base frequency=21400Hz)	0-255
						24650 Hz – 37350 Hz (Base frequency=31000Hz)	0-255
						37350 Hz – 50050 Hz (Base frequency=43700Hz)	0-255
*	*	22	22	37	Red LED 1	Red 0-100%	0-255
*	*	23	23	38	Green LED 1	Green 0-100%	0-255
*	*	24	24	39	Blue LED 1	Blue 0-100%	0-255
*	*	*	25	*	White LED 1	White 0-100%	0-255
*	*	25	26	40	Red LED 2	Red 0-100%	0-255
*	*	26	27	41	Green LED 2	Green 0-100%	0-255
*	*	27	28	42	Blue LED 2	Blue 0-100%	0-255
*	*	*	29	*	White LED 2	White 0-100%	0-255
*	*	28	30	43	Red LED 3	Red 0-100%	0-255
*	*	29	31	44	Green LED 3	Green 0-100%	0-255
*	*	30	32	45	Blue LED 3	Blue 0-100%	0-255
*	*	*	33	*	White LED 3	White 0-100%	0-255
*	*	130	166	145	Red LED 37	Red 0-100%	0-255
*	*	131	167	146	Green LED 37	Green 0-100%	0-255
*	*	132	168	147	Blue LED 37	Blue 0-100%	0-255
*	*	*	169	*	White LED 37	White 0-100%	0-255



## 8.2 Multivariate model(B mode)

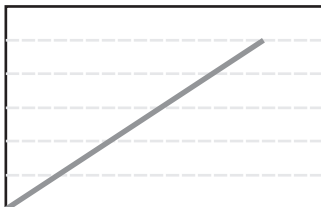
Mode1	Mode2	Fade Type	Function	Dmx Value
1	1	Red	Red 0-100%	0-255
2	2	Red fine	Red fine	0-255
3	3	Green	Green 0-100%	0-255
4	4	Green fine	Green fine	0-255
5	5	Blue	Blue 0-100%	0-255
6	6	Blue fine	Blue fine	0-255
7	7	White	White 0-100%	0-255
8	8	White fine	White fine	0-255
9	9	Linear CTO	Note: If CTO channel is active, the WHITE channel is disabled.	
			UNUSED RANGE	0-9
			8000K	10
			8000K→7000K	10-54
			7000K→6000K	54-99
			6000K→5600K	99-117
			5600K→5000K	117-144
			5000K→4000K	144-188
			4000K→3200K	188-224
10	10	Macro colour	3200K→2500K	224-255
			Macro color OFF	0-9
			Red	10
			Green	11
			Blue	12
			Cyan	13
			Yellow	14
			Magenta	15
			White 7000 K	16
			White 3700 K	17
			White 5000 K	18
			Black	19
			Medium Yellow	20-22
			Straw Tint	23-26
			Surprise Peach	27-28
			Fire	29
			Medium Amber	30
			Gold Amber	31
			Dark Amber	32-34
			Sunrise Red	35-44
			Light Pink	45
			Medium Pink	46-48
			Pink Carnation	49-61
			Light Lavender	62-67
			Lavender	68-77
			Sky Blue	78-88
			Just Blue	89-99
			Dark yellow green	100-109
			Spring Yellow	110-111
			Light Amber	112
			Straw	113
			Deep Amber	114
			Orange	115-116
			Light Rose	117
			English Rose	118
			Light Salmon	119
			Middle Rose	120
			Dark Pink	121-122
			Magenta	123-124
			Peacock Blue	125
			Med Blu Green	126
			Steel Blue	127
			Light Blue	128

Mode1	Mode2	Fade Type	Function	Dmx Value
10	10	Macro colour	Dark Blue	129-130
			Leaf Green	131-133
			Dark Green	134-135
			Mauve	136-137
			Bright Pink	138-141
			Medium Blue	142-144
			Deep Golden Amber	145
			Pale Lavender	146
			Special lavender	147-148
			Primary Green	149-150
			Bright Blue	151-156
			Apricot	157-161
			Pale Gold	162-167
			Deep Orange	168-171
			Bastard Amber	172-173
			Flame Red	174
			Daylight Blue	175-178
			Lilac Tint	179
			Deep lavender	180-183
			Dark Steel Blue	184-190
			Congo Blue	191-206
			Alice Blue	207
			Dirty White	208
			White	209-255
11	11	Strobe	CLOSED	0-3
			STROBE SLOW → FAST ( 1→25 flash/sec )	4-103
			OPEN	104-107
			PULSATION SLOW → FAST ( 0.5-25 flash/sec )	108-207
			OPEN	208-212
			RANDOM SLOW STROBE	213-225
			RANDOM MEDIUM STROBE	226-238
			RANDOM FAST STROBE	239-251
			OPEN	252-255
12	12	Dimmer	Dimmer 0-100%	0-255
13	13	Dimmer Fine	Dimmer Fine	0-255
14	14	Pan	Pan	0-255
15	15	Pan Fine	Pan Fine	0-255
16	16	Tilt	Tilt	0-255
17	17	Tilt Fine	Tilt Fine	0-255
18	18	Function	The functions are activated passing through the "unused range" and staying 5 seconds	
			Function off - rearmed	0-11
			Pan Tilt Fast (Default)	12-24
			Pan Tilt Normal	25-37
			Dimmer Curve 1	38-42
			Dimmer Curve 2	43-47
			Dimmer Curve 3	48-52
			Dimmer Curve 4	53-57
			RGBW Gamma curve 1 - gamma = 1.0	58-62
			RGBW Gamma curve 2 - gamma = 1.5	63-67
			RGBW Gamma curve 3 - gamma = 2.0	68-72
			Reserved	73-163
			Base frequency=1000Hz	164
			Base frequency=1500Hz (Default)	165
			Base frequency=2400Hz	166
			Base frequency=3700Hz	167
			Base frequency=5600Hz	168

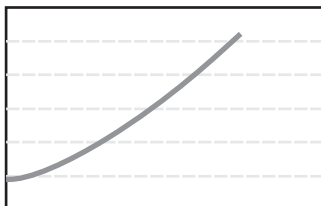
Mode1	Mode2	Fade Type	Function	Dmx Value
18	18	Function	Base frequency=9400Hz	169
			Base frequency=15100Hz	170
			Base frequency=21400Hz	171
			Base frequency=31000Hz	172
			Base frequency=43700Hz	173
			Reserved	174-255
19	19	Reset	Activated passing through the unused range and staying 5 seconds	
			UNUSED RANGE	0-25
			ZOOM RESET	26-76
			PAN / TILT RESET	77-127
			COMPLETE RESET	128-255
20	20	Zoom	ZOOM NARROW BEAM→WIDE BEAM Rotation Enable	0-52
			ZOOM NARROW BEAM→WIDE BEAM Rotation Disable	53-255
21	21	Zoom Rotation	Linear Rotation lens angle from 0 to 60	0-127
			CW Rotation speed from fast to slow	128-190
			Stop Rotation	191-192
			CW Rotation speed from slow to fast	193-255
			UNUSED RANGE	0-7
*	22	Shape Selection	Shape1	8
			Shape2	9
			Shape3	10
			Shape4	11
			Shape5	12
			Shape6	13
			Shape7	14
			Shape8	15
			Shape9	16
			Shape10	17
			Shape63	70
			UNUSED RANGE	71-255
			Radius size, Static	0-63
			max to min speed	64-158
*	23	Shape Speed	Stop	159-160
			min to max speed	161-255
			Shape Fade 0-100%	0-255
			Shape R	0-255
			Shape G	0-255
	24	Shape Fade	Shape B	0-255
			Shape W	0-255
	25	Shape Dimmer	Shape Dimmer 0-100%	0-255
			Background Dimmer 0-100%	0-255
	26	Background Dimmer	Shape Transition	0-255
			Shape Offset	0-255
	27	Shape Transition	CLOSED	0-3
			STROBE SLOW→FAST ( 1→25 flash/sec )	4-103
*	33	Foreground Strobe	OPEN	104-107
			PULSATION SLOW→FAST ( 0.5-25 flash/sec )	108-207
			OPEN	208-212
			RANDOM SLOW STROBE	213-225
			RANDOM MEDIUM STROBE	226-238
			RANDOM FAST STROBE	239-251
			OPEN	252-255
			CLOSED	0-3
			STROBE SLOW→FAST ( 1→25 flash/sec )	4-103
			OPEN	104-107
*	34	Background Strobe	PULSATION SLOW→FAST ( 0.5-25 flash/sec )	108-207
			OPEN	208-212
			RANDOM SLOW STROBE	213-225
			RANDOM MEDIUM STROBE	226-238
			RANDOM FAST STROBE	239-251
			OPEN	252-255
			CLOSED	0-3
			STROBE SLOW→FAST ( 1→25 flash/sec )	4-103
			OPEN	104-107
			PULSATION SLOW→FAST ( 0.5-25 flash/sec )	108-207

Mode1	Mode2	Fade Type	Function	Dmx Value
*	35	Background Select	UNUSED RANGE	0-7
			NO selection	8
			pixe l	9
			Ring 2	10
			Ring 3	11
			Ring 4	12
			pixe l + Ring 2	13
			pixe l + Ring 2 + Ring 3	14
			pixe l + Ring 2 + Ring 3 + Ring 4	15
			Ring 2 + Ring 3 + Ring 4	16
			Ring 3 + Ring 4	17
			pixe l + Ring 4	18
			Ring 2 + Ring 3	19
			pixe l + Ring 3	20
			Ring 2 + Ring 4	21
			pixe l + Ring 3 + Ring 4	22
			pixe l + Ring 2 + Ring 4	23
			UNUSED RANGE	24-255
*	36	FREQUENCY	Fine adjusting of frequency Base selected from the Function channel. If shape + frequency mode is selected.	
			746 Hz – 1254 Hz (Base frequency=1000Hz)	0-255
			1246 Hz – 1754 Hz (Base frequency=1500Hz)	0-255
			1765 Hz – 3035 Hz (Base frequency=2400Hz)	0-255
			3065 Hz – 4335 Hz (Base frequency=3700Hz)	0-255
			4330 Hz – 6870 Hz (Base frequency=5600Hz)	0-255
			6860 Hz – 11940 Hz (Base frequency=9400Hz)	0-255
			11925 Hz – 18275 Hz (Base frequency=15100Hz)	0-255
			18225 Hz – 24575 Hz (Base frequency=21400Hz)	0-255
			24650 Hz – 37350 Hz (Base frequency=31000Hz)	0-255
			37350 Hz – 50050 Hz (Base frequency=43700Hz)	0-255

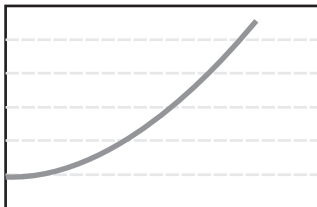
DIMMER CURVE 1 - GAMMA 1 LINEAR



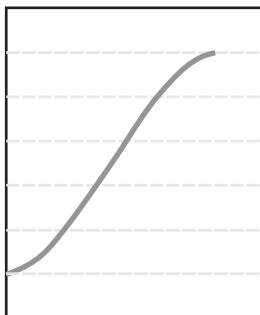
DIMMER CURVE 2 - GAMMA 1,5



DIMMER CURVE 3 - GAMMA 2,0



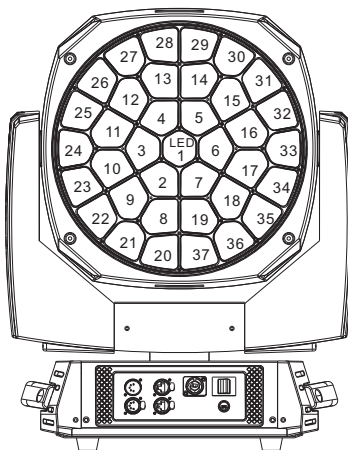
DIMMER CURVE 4 - S



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**LED reference number for pixel mapping**

TILT: channel 16 @ 200 bit



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## 9. Maintenance and cleaning

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

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 circumstances should alcohol or solvents be used!

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.

Replacing the fuse: If the lamp burns out, the fine-wire fuse of the device might fuse, too. Only replace the fuse by a fuse of same type and rating. Before replacing the fuse, unplug mains lead.

Maintenance and maintenance of the operation, please contact the manufacturer or distributor.

## 10. Electric equipment specification

### 10.1 Electrical parameters

SOURCE: RGBW LED-40W

POWER: 1500W

VOLTAGE: AC100-240V 50/60HZ

Color Temperature: 6500K

### 10.2 Weight and dimensions

Dimensions : 463.5X365X586mm

NET WEIGHT: 23Kg

Dimensions (Carton Package) : 600X495X665mm

WEIGHT (Carton Package) : 29Kg

### 10.3 Channel Characteristics

1. 21、36、132、169、147 five standard DMX channel model or 21、36 two standard DMX channel model and network control mode optional.

2. Scan: Pan540° , Tilt210° , Fixture could auto reset.

3. Dimmer: linear dimmer.

4. Zoom: linear amplifier.

5. Enlarged rotation: Can be 360° degrees clockwise, counterclockwise rotation.

6. 37 RGBW lamp can be controlled separately.

7. The network control mode and DMX control mode have independent control and combined control.

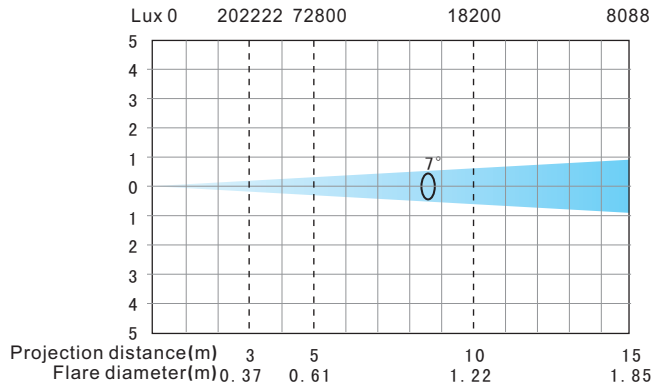
8. Shutter: electronic shutter, random strobe.

## 10.4 Menu Function

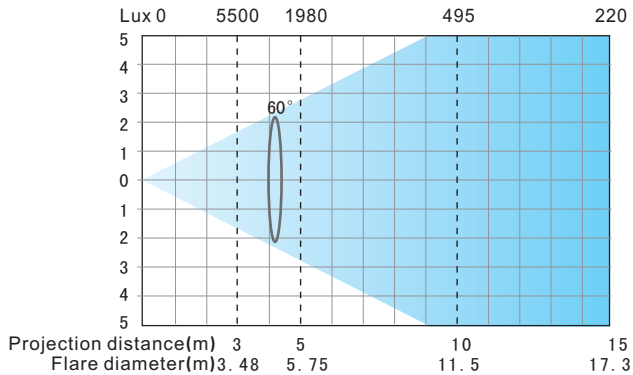
1. Touch screen, English menu.
2. DMX values and communication quality values can be displayed in each channel. .
3. Monitor could ON/OFF automatically.
4. Show fixture use time.
5. After the DMX signal is disconnected, the display will be bright and dark.
6. The screen can be set automatically to flip or hand over.
7. Auto error detection.
8. Wireless input,wired input,wirelss in/xlr out,ETHNET input.
9. With DMX software upgrade.
10. 5 seconds after the DMX signal is disconnected, the amplification is automatically retracted.

## 10.5 light table

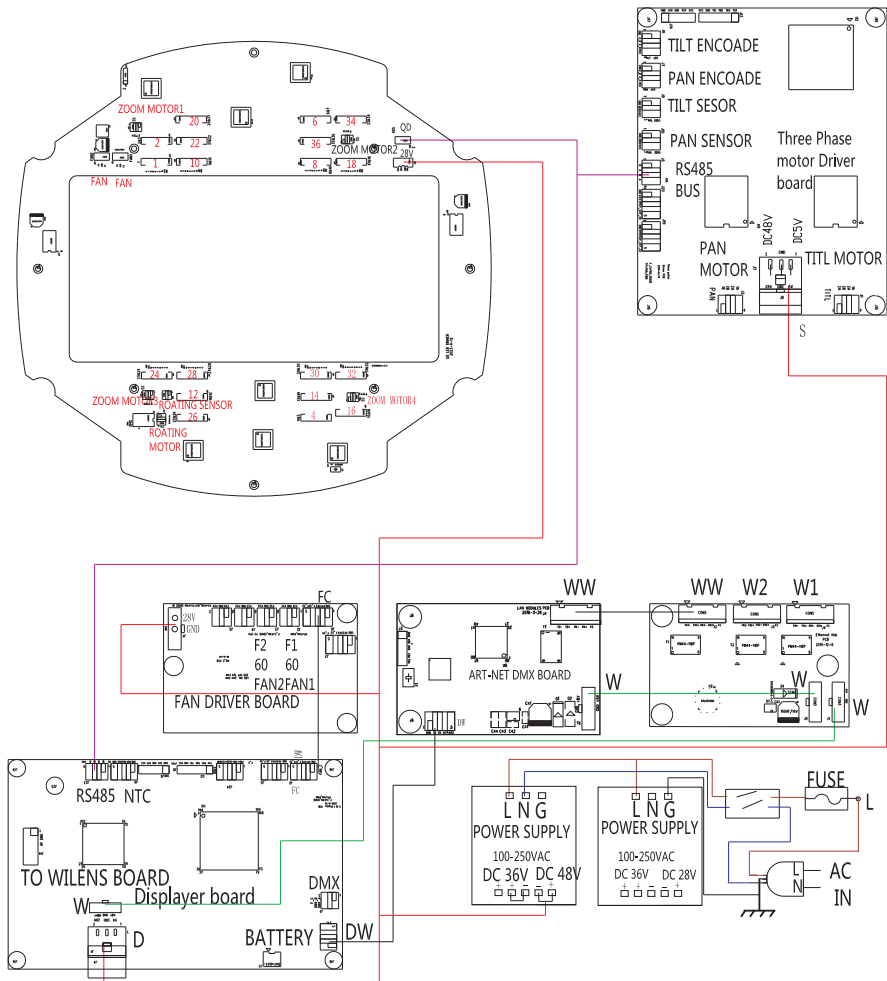
**Minimum Zoom with WHITE,RED,GREEN&BLUE(7° 10%)**



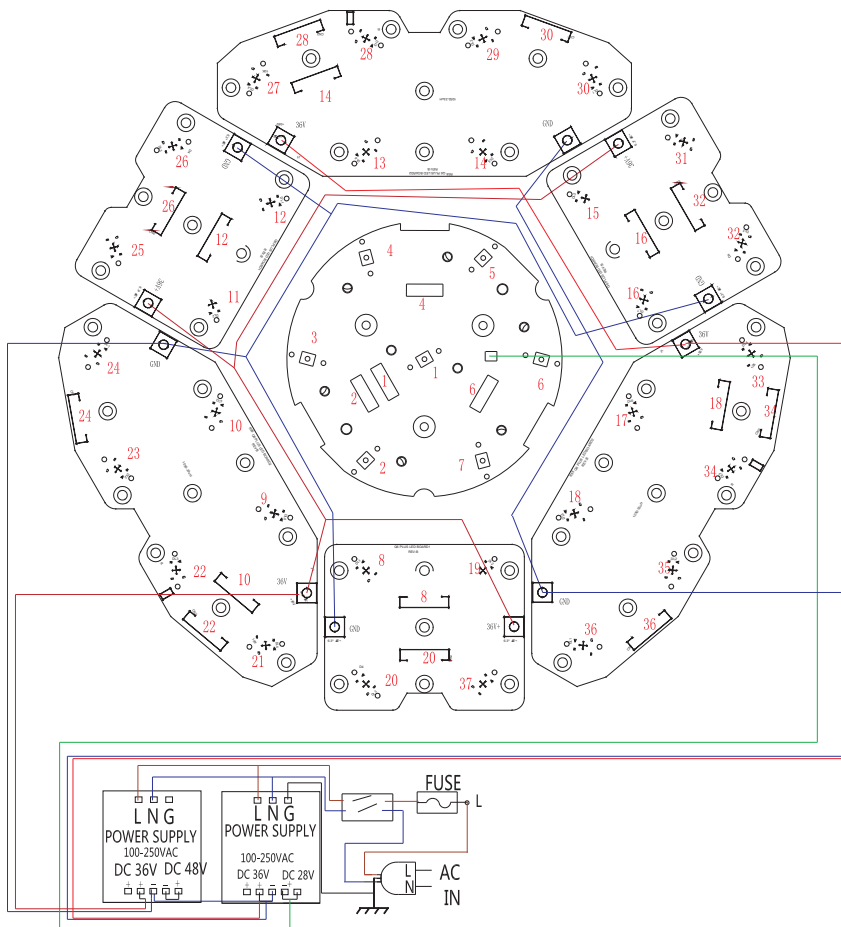
**Maximum Zoom with WHITE,RED,GREEN&BLUE(60° 10%)**



## 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.**





