Q-4Plus
USER MANUAL

CE

Version:1.0

JOLLY®

Table of content

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

This equipment is made of new style,high intensity plastic.It fully shows the modem times light charac teris-tic 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 be-cause of transportation, and check the following parts:

1.Signal cable-1PC   2.Safty cable-1PC
3.User Manval-1PC   4.Omega holder-2PCS
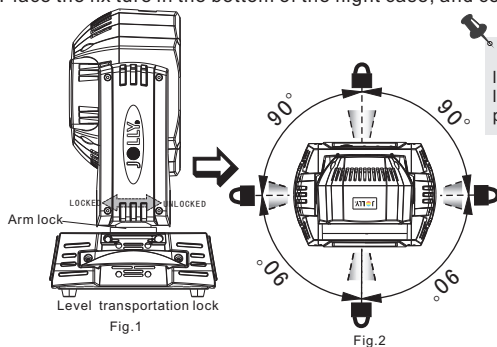5.Power cable-1PC   5.Service card-1PC

1 . 1 Package

Unpacking the fixture
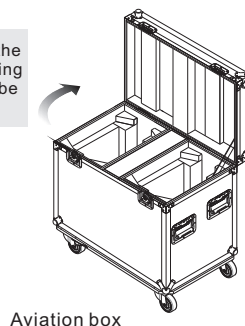1.Open the flight case cover
2.With one person on each side, lift the fixture out of the flight case.
3.Unlock pan and tilt before operating fixture
Packing the fixture
1.Disconnect the fixture from power and allow it to cool.
2.lock arms as figure.- Fig.1(PAN Mechanism Lock and Release (every 90°) - Fig.2)
3.Place the fix ture in the bottom of the flight case, and cover the case without forcing.

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

Arm lock

LOCKED   UNLOCKED

Level transportation lock

90°   90°   90°   90°

Fig.1

Fig.2

Aviation box

2.Safety instructions

Every person involvd with installation and maintenance of this device to:
-Be qualilfied
-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 toensure a safe operation ,it is absolutely necessary for the user to follow the safety instructi-ons 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 suer that the power-switch is set to off-position before you con ections with themains with particular caution!

➢Make sure that the power-cord is never crimped or damaged by sharp edges.Check the decice and the p-ower-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)!

0.2m

➢Minimum distance of illuminated objects
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.

t_a 40℃

➢Maximum ambient temperature
Do not operate the fixture if the ambient temperatuer(Ta) exceeds 40℃ (104℉).

t_c 90℃

➢Temperature of the external surface
The maximum temperature that can be reached on the external surface of the fitting,in a ther-mally steadystate, is 90℃ (194℉).

➢IP20 protection rating
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).

IP20

➢Indoor use only

➢Not suitable for household illumination

Risk Group 2
According to
En62471

➢Photobiological Safety
CAUTION.Possibly hazardous optical radiation emitted from this product. Do not stare at operating lamp. May be harmful to the eyes.

➢Light collimation system
This product contains internal light collimation system. Avoid intense light from any angle.

➢The products to which this manual refers comply with the European Directives purs-uant to：
•2006/95/EC - Safety of electrical equipment supplied at low voltage（LVD）
•2004/108/EC - Electromagnetic Compatibility (EMC)
•2011/65/EU - Restriction of the use of certain hazardous substances (RoHS)
•2009/125/EC - EcoDesign requirements for Energy-related Products (ErP)

CE

➢Protection against electrical shock
Connection must be made to a power supply system fitted with efficient earthing (Class I app-liance according to standard EN 60598-1).It is, moreover, recommended to protect the supply lines of the projectors from indirect contact and/orshorting 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/recycde 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 pre-serve the environment,please dispose the battery at the end of its life according to the regul-ation in force.

3.Operating determinations

➢This device is a moving-head for creating decorative effects and was designed for indoor use only.

➢If the device ha been exposed to drastic temperature fluctuation(e.g.after transportation).do not weitch 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 life 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 fi-xture.

➢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 faste-nd.

➢The lamp must never be ignited if the objective-lens or any housing-cover is open, as discharge lamps may explose and emit a hign 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 reasonsl.

➢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 shict,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 norm s 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 year 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 m ay walk by or be seated.

Important!Overhead rigging requires extensive expering 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 bodilyinjury 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 system s 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 minim um 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 atruss 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.
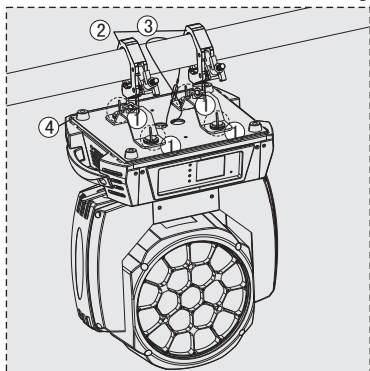
Warning: it is necessary to make sure that the installation location is perfectly appropriate, and the installation location is safe and reliable.

①	Lock catch
②	omega holder
③	secure chain
④	mounting plate

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.

1/4 turn fasteners
CW
CCW

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.
Maximum room temperature: 40℃.
Exterior surface temperature: 80℃.
Minimum distance from flammable material: 0.8n.

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.
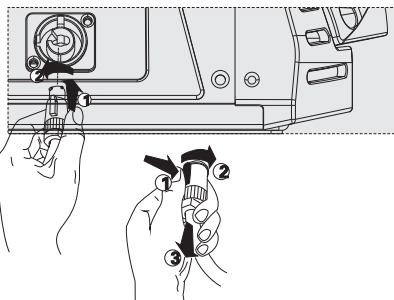
4.4 Power Connection

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	**L**
Light blue	White	Neutral	**N**
Yellow/Green	Green	Earth	⏚

4.5 DMX–512 connection/connection between fixtures

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

Standard edition

DMX512

Online edition

DMX512
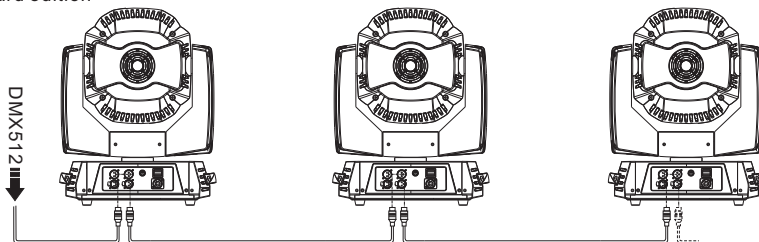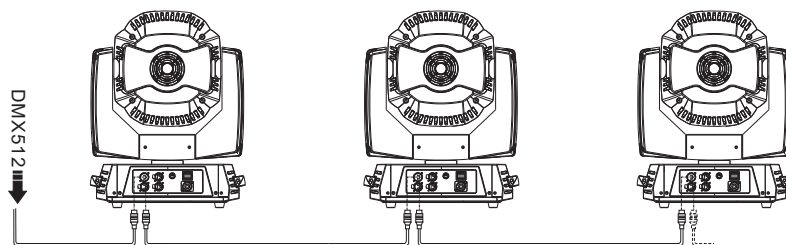
Caution

At the last fixture,the DMX-cable has to be terminated with a terminatou. 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 iutput
3-pin XLR socket

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

DMX output
5-pin XLR socket

DMX iutput
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 help in preventing corruption of the signal by electrical noise. The DMX terminato r is simply an XLR plug witha 120Ω resistor connected between pins 2 and pins3, which is then plugged into a the output XLR socket of the last ifxture in the chain.

2
1
3
120Ω

PIN2   PIN3
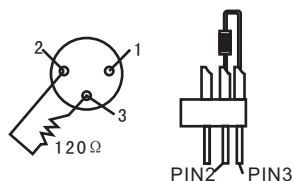
5.Description of the device
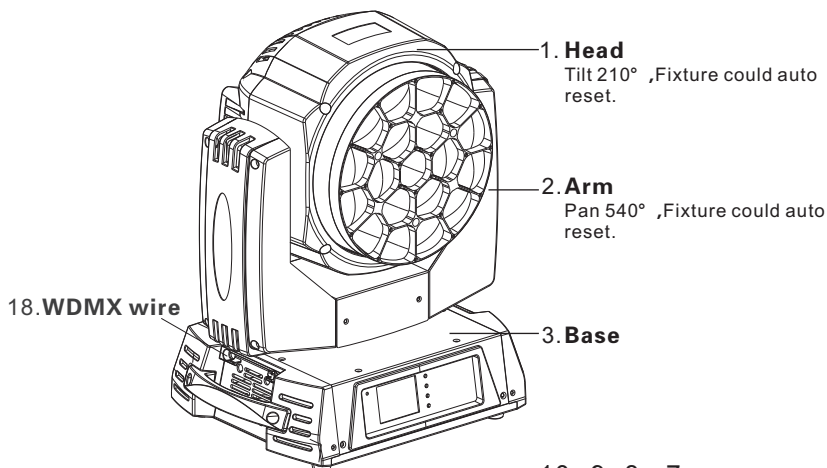
1.**Head**
Tilt 210° ,Fixture could auto reset.

2.**Arm**
Pan 540° ,Fixture could auto reset.

18.**WDMX wire**

3.**Base**

10 9 8 7

BACK PANEL

Standard edition

4. 5-pin XLR female
5. 3-pin XLR female
6. Power-in
7. Power switch
8. Main Fuse
9. 3-pin XLR male
10.5-pin XLR male
11.Network interface

4   5   6

Online edition

10 11 8 7

4   11   6
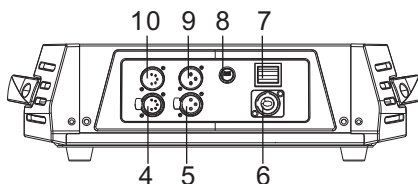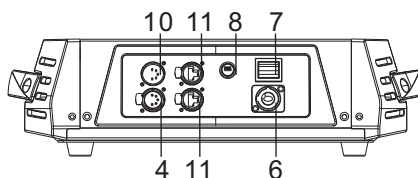
CINTROL PANEL

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

13 15 16 17

14 12

6.Dimension

250

381

428.5
ZOOM IN

473
ZOOM OUT

390

286.5

190.5
ZOOM IN

235
ZOOM OUT

493.5

390

286.5
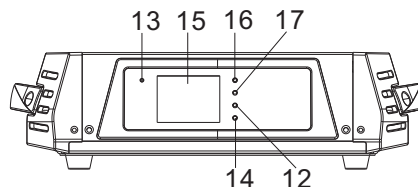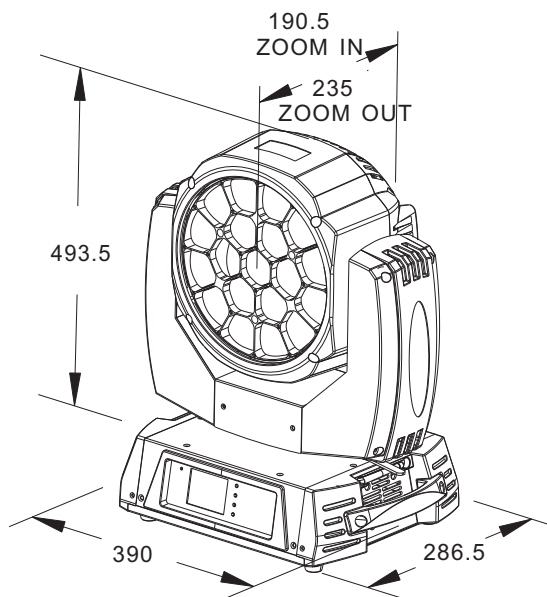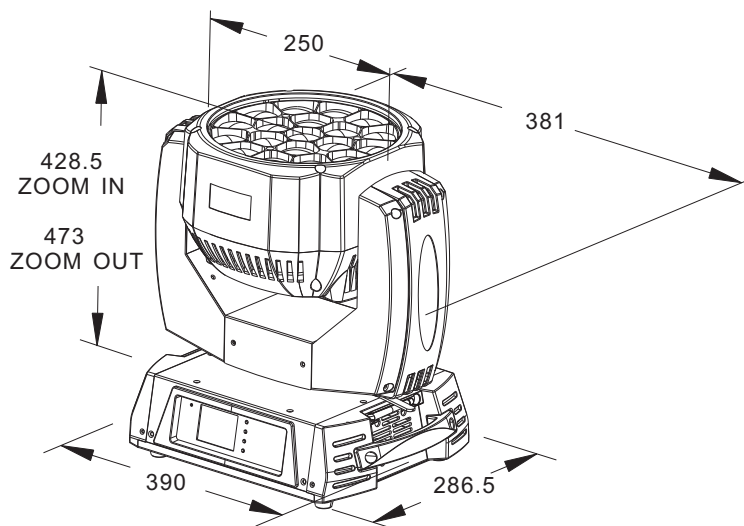
7.Display control

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 the 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.)
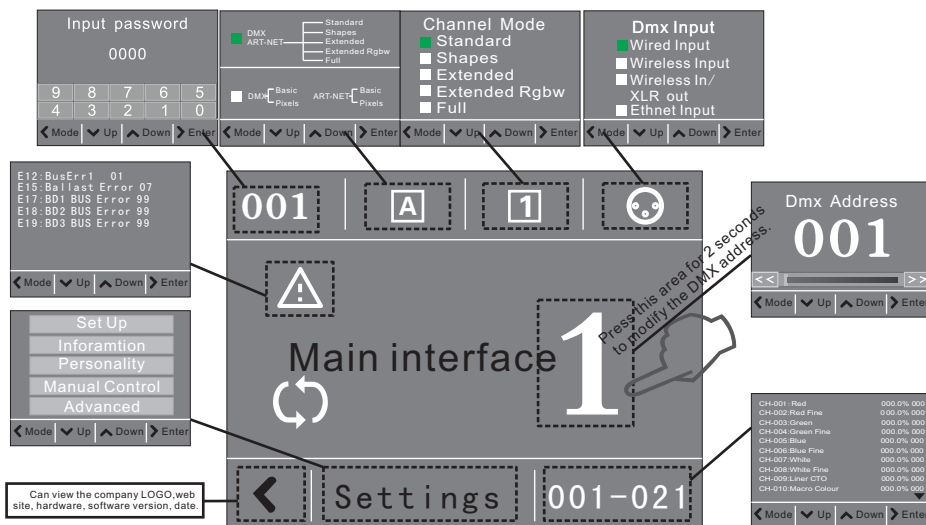
A mode menu interface

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

Input password	DMX	Standard	Channel Mode	Dmx Input

Input password
0000

| 9 | 8 | 7 | 6 | 5 |
| 4 | 3 | 2 | 1 | 0 |

‹ Mode ∨ Up ∧ Down › Enter

DMX ART-NET — Standard / Shapes / Extended / Extended Rgbw / Full

DMX ⌐ Basic / Pixels   ART-NET ⌐ Basic / Pixels

‹ Mode ∨ Up ∧ Down › Enter

Channel Mode
■ Standard
■ Shapes

‹ Mode ∨ Up ∧ Down › Enter

Dmx Input
■ Wired Input
■ Wireless Input
■ Wireless In/ XLR out

‹ Mode ∨ Up ∧ Down › Enter

Settings 001-021

Main interface 1

⊕ | Ⅱ | Ⅴ | 001

Set Up
Inforamtion
Personality
Manual Control
Advanced

‹ Mode ∨ Up ∧ Down › Enter

Can view the company LOGO,web site, hardware, software version, date.

001   B   1   ⊙

Main interface **1**

↻

‹ Settings 001-021

Dmx Address
001

<< |_____| >>

‹ Mode ∨ Up ∧ Down › Enter

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 " ⚠ ",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	MBDlnit Error	Check the communication signal 485& 485 chip & memory	
E05	BD1lnit Error	Check main cable ABAB（485） chip	
E06	BD2lnit Error		
E12	Bus1 Error	Check main cable ABAB（485） chip	
E16	MFpga Error	Check the communication signal& welding of communication chip	
E17	BD1 BUS		
E18	BD2 BUS		
E21	Pan FB. Error	Check the light coupling line, optical coupling switch and a plate of the relative position measurement	
E23	Tilt FB. Error		
E22	Pan Zero	Check cable of sensor, distance and location of ,magnets and sensor	
E24	Tilt Zero Error		
E36	Zoom RT.		
E46	H.Fan Error	Check the fan of head	
E057	EthMDL Error	Check the fan of ArtNet、 communication signal	

Note：under standard version only mode A is working ,and without DMX input.

7.3 Menu list

			Remark
Set up	DMX Address	**Un iverse**	
		DMX Address 001–XXX	
	Channel Mode	**STANDARD 1–21**	default Mode1
		SHAPES 1–35	
		EXTENDED 1–78	
		EXTENDED RGBW 1–97	
		FULL 1–92	
	Fixture Id	**0001–XXXX**	**Lamps address**
	Multi Mode（use it under the module with art–net）	**DMX Or ART–NET**	**Multi Mode（use it under the module with art–net）**
		DMX+ART–NET	
	Ethernet（use it under the module with art–net）	**IPAddress**	**IP address setting（use it under the module with art–net）**
		Netmask	
Information	Fixture Times	**XXXXX h XX m**	**Total working hours**
	LED Timeshare	**LED On Times XXXXh XXm**	**Lamp Strike**
		Reset LED Time	**Reset Lamp Time**
	Error List		**Error details**
	Diagnosis	**BOARD 1: XX.XX%**	**Diagnosis**
		BOARD 2: XX.XX%	
	DMX Values		**DMX Values**
	Fans Monitor		**Fans Values**
Personality	Pan/Tilt	**Pan Reverse ON/OFF**	**Pan Reverse（defaul OFF）**
		Tilt Reverse ON/OFF	**Tilt Reverse（defaul OFF）**
		Feedback ON/OFF	**Pan/Tilt Auto Switch（defaul ON）**
	Dmx Input	**Wired Input**	**Wired Input（defaul）**
		Wireless Input	**Wireless Input**
		Wireless In/XLR out	**Wireless In/XLR out**
		Ethnet Input(use it under the module with art–net)	**Ethnet Input(use it under the module with art–net)**
	Screen	**Brightness**	**Brightness**
		Screen Time out 0–10m	**Screen Time out**
		Touch Screen ON/OFF	**Touch Screen（defaul ON）**
		Auto Screen ON/OFF	**Auto Screen（defaul ON）**
	Fan Mode	**Auto**	
		High	
		Silence mode	**Slower fan speed, light output limited to 80%**
	Language	**English**	**English**
		简体中文	**中文**
Manusl Control	Reset	**Reset ALL**	
		Reset Pan/Tilt	
		Reset Other	
	Channel		**Chanel Testing**
Advanced	Calibration		**Chanel Adgusting**
	Factory Default		**Reset to orignal parameters**
	Touch Calibration		**Touch screen adjusting**

Note: under standard version, the content mark "*" are unable to use.

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	Black→Red 0~100%	0~255
2	2	2	2	2	Red fine	Red fine	0~255
3	3	3	3	3	Green	Black→Green 0~100%	0~255
4	4	4	4	4	Green fine	Green fine	0~255
5	5	5	5	5	Blue	Black→Blue 0~100%	0~255
6	6	6	6	6	Blue fine	Blue fine	0~255
7	7	7	7	7	White	Black→White 0~100%	0~255
8	8	8	8	8	White fine	White fine	0~255
9	9	9	9	9	Linear CTO	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

Mode1	Mode2	Mode3	Mode4	Mode5	Fade Type	Function	Dmx Value
10	10	10	10	10	Macro colour	Dark Pink	121–122
						Magenta	123–124
						Peacock Blue	125
						Med Blu Green	126
						Steel Blue	127
						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	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

Mode1	Mode2	Mode3	Mode4	Mode5	Fade Type	Function	Dmx Value
18	18	18	18	18	Function	Halogen Lamp Simulation OFF (Default)	73–77
						Halogen Lamp Simulation, type 1 (750 W) Linear CTO @ 0 bit	78–82
						Halogen Lamp Simulation, type 2 (1000 W) Linear CTO @ 0 bit	83–87
						Halogen Lamp Simulation, type 3 (1200 W) Linear CTO @ 0 bit	88–92
						Halogen Lamp Simulation, type 4 (2000 W) Linear CTO @ 0 bit	93–97
						Halogen Lamp Simulation, type 5 (2500 W) Linear CTO @ 0 bit	98–102
						Reserved	103–255
19	19	19	19	19	Reset	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 Rotaiton 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
						Shape 1	8
						Shape 2	9
						Shape 3	10
						UNUSED RANGE	11
						Shape 4	12
						Shape 5	13
						UNUSED RANGE	14
						Shape 6	15
						Shape 7	16
						Shape 8	17
						Shape 9	18
						Shape 10	19
						Shape 11	20
						Shape 12	21
						Shape 13	22
						Shape 14	23
						Shape 15	24
						Shape 16	25
						Shape 17	26
						Shape 18	27
						Shape 19	28
						Shape 20	29
						Shape 21	30
						Shape 22	31
						Shape 23	32
						UNUSED RANGE	33
						UNUSED RANGE	34
						Shape 24	35
						Shape 25	36
						Shape 26	37
						Shape 27	38
						Shape 28	39
						Shape 29	40
						UNUSED RANGE	41
						Shape 30	42
						UNUSED RANGE	43
						Shape 31	44
						Shape 32	45

Mode1	Mode2	Mode3	Mode4	Mode5	Fade Type	Function	Dmx Value
						Shape 33	46
						Shape 34	47
						Shape 35	48
						Shape 36	49
						Shape 37	50
						Shape 38	51
						Shape 39	52
						Shape 40	53
						Shape 41	54
						Shape 42	55
						Shape 43	56
						Shape 44	57
22				22	Shape Selection	Shape 45	58
						Shape 46	59
						Shape 47	60
						Shape 48	61
						Shape 49	62
						Shape 50	63
						UNUSED RANGE	64
						Shape 51	65
						Shape 52	66
						Shape 53	67
						Shape 54	68
						UNUSED RANGE	69
						Shape 55	70
						UNUSED RANGE	71–255
						Radius size,Static	0–63
	23			23	Shape Speed	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
	33			33	Foreground Strobe	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			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

Mode1	Mode2	Mode3	Mode4	Mode5	Fade Type	Function	Dmx Value
	34			34	Background Strobe	OPEN	252–255
	35			35	Background Select	UNUSED RANGE	0–7
						NO selection	8
						pixe l	9
						Ring 2	10
						Ring 3	11
						pixe l + Ring 3	12
						pixe l + Ring 2	13
						pixe l + Ring 2 + Ring 3	14
						Ring 2 + Ring 3	15
						UNUSED RANGE	16–255
		22	22	36	Red LED 1	Red 0–100%	0–255
		23	23	37	Green LED 1	Green 0–100%	0–255
		24	24	38	Blue LED 1	Blue 0–100%	0–255
			25		White LED 1	White 0–100%	0–255
		25	26	39	Red LED 2	Red 0–100%	0–255
		26	27	40	Green LED 2	Green 0–100%	0–255
		27	28	41	Blue LED 2	Blue 0–100%	0–255
			29		White LED 2	White 0–100%	0–255
		28	30	42	Red LED 3	Red 0–100%	0–255
		29	31	43	Green LED 3	Green 0–100%	0–255
		30	32	44	Blue LED 3	Blue 0–100%	0–255
			33		White LED 3	White 0–100%	0–255
		31	34	45	Red LED 4	Red 0–100%	0–255
		32	35	46	Green LED 4	Green 0–100%	0–255
		33	36	47	Blue LED 4	Blue 0–100%	0–255
			37		White LED 4	White 0–100%	0–255
		34	38	48	Red LED 5	Red 0–100%	0–255
		35	39	49	Green LED 5	Green 0–100%	0–255
		36	40	50	Blue LED 5	Blue 0–100%	0–255
			41		White LED 5	White 0–100%	0–255
		37	42	51	Red LED 6	Red 0–100%	0–255
		38	43	52	Green LED 6	Green 0–100%	0–255
		39	44	53	Blue LED 6	Blue 0–100%	0–255
			45		White LED 6	White 0–100%	0–255
		40	46	54	Red LED 7	Red 0–100%	0–255
		41	47	55	Green LED 7	Green 0–100%	0–255
		42	48	56	Blue LED 7	Blue 0–100%	0–255
			49		White LED 7	White 0–100%	0–255
		43	50	57	Red LED 8	Red 0–100%	0–255
		44	51	58	Green LED 8	Green 0–100%	0–255
		45	52	59	Blue LED 8	Blue 0–100%	0–255
			53		White LED 8	White 0–100%	0–255
		46	54	60	Red LED 9	Red 0–100%	0–255
		47	55	61	Green LED 9	Green 0–100%	0–255
		48	56	62	Blue LED 9	Blue 0–100%	0–255
			57		White LED 9	White 0–100%	0–255
		49	58	63	Red LED 10	Red 0–100%	0–255
		50	59	64	Green LED 10	Green 0–100%	0–255
		51	60	65	Blue LED 10	Blue 0–100%	0–255
			61		White LED 10	White 0–100%	0–255
		52	62	66	Red LED 11	Red 0–100%	0–255
		53	63	67	Green LED 11	Green 0–100%	0–255
		54	64	68	Blue LED 11	Blue 0–100%	0–255
			65		White LED 11	White 0–100%	0–255
		55	66	69	Red LED 12	Red 0–100%	0–255

Mode1	Mode2	Mode3	Mode4	Mode5	Fade Type	Function	Dmx Value
		56	67	70	Green LED 12	Green 0–100%	0–255
		57	68	71	Blue LED 12	Blue 0–100%	0–255
			69		White LED 12	White 0–100%	0–255
		58	70	72	Red LED 13	Red 0–100%	0–255
		59	71	73	Green LED 13	Green 0–100%	0–255
		60	72	74	Blue LED 13	Blue 0–100%	0–255
			73		White LED 13	White 0–100%	0–255
		61	74	75	Red LED 14	Red 0–100%	0–255
		62	75	76	Green LED 14	Green 0–100%	0–255
		63	76	77	Blue LED 14	Blue 0–100%	0–255
			77		White LED 14	White 0–100%	0–255
		64	78	78	Red LED 15	Red 0–100%	0–255
		65	79	79	Green LED 15	Green 0–100%	0–255
		66	80	80	Blue LED 15	Blue 0–100%	0–255
			81		White LED 15	White 0–100%	0–255
		67	82	81	Red LED 16	Red 0–100%	0–255
		68	83	82	Green LED 16	Green 0–100%	0–255
		69	84	83	Blue LED 16	Blue 0–100%	0–255
			85		White LED 16	White 0–100%	0–255
		70	86	84	Red LED 17	Red 0–100%	0–255
		71	87	85	Green LED 17	Green 0–100%	0–255
		72	88	86	Blue LED 17	Blue 0–100%	0–255
			89		White LED 17	White 0–100%	0–255
		73	90	87	Red LED 18	Red 0–100%	0–255
		74	91	88	Green LED 18	Green 0–100%	0–255
		75	92	89	Blue LED 18	Blue 0–100%	0–255
			93		White LED 18	White 0–100%	0–255
		76	94	90	Red LED 19	Red 0–100%	0–255
		77	95	91	Green LED 19	Green 0–100%	0–255
		78	96	92	Blue LED 19	Blue 0–100%	0–255
			97		White LED 19	White 0–100%	0–255

8.2 Multivariable model(B mode)

Mode1	Mode2	Fade Type	Function	Dmx Value
1	1	Red	Black→Red 0–100%	0–255
2	2	Red fine	Red fine	0–255
3	3	Green	Black→Green 0–100%	0–255
4	4	Green fine	Green fine	0–255
5	5	Blue	Black→Blue 0–100%	0–255
6	6	Blue fine	Blue fine	0–255
7	7	White	Black→White 0–100%	0–255
8	8	White fine	White fine	0–255
9	9	Linear CTO	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	Macro colour	Macro color OFF	0–9
			Red	10
			Green	11
			Blue	12
			Cyan	13

Mode1	Mode2	Fade Type	Function	Dmx Value
10	10	Macro colour	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
			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

Mode1	Mode2	Fade Type	Function	Dmx Value
10	10	Macro colour	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	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
			Halogen Lamp Simulation OFF (Default)	73–77
			Halogen Lamp Simulation, type 1 (750 W) Linear CTO @ 0 bit	78–82
			Halogen Lamp Simulation, type 2 (1000 W) Linear CTO @ 0 bit	83–87
			Halogen Lamp Simulation, type 3 (1200 W) Linear CTO @ 0 bit	88–92
			Halogen Lamp Simulation, type 4 (2000 W) Linear CTO @ 0 bit	93–97
			Halogen Lamp Simulation, type 5 (2500 W) Linear CTO @ 0 bit	98–102
			Reserved	103–255
19	19	Reset	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 Rotaiton 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	Shape Selection	UNUSED RANGE	0–7
			Shape 1	8
			Shape 2	9
			Shape 3	10
			UNUSED RANGE	11
			Shape 4	12
			Shape 5	13
			UNUSED RANGE	14
			Shape 6	15
			Shape 7	16
			Shape 8	17
			Shape 9	18
			Shape 10	19
			Shape 11	20
			Shape 12	21

Mode1	Mode2	Fade Type	Function	Dmx Value
	22	Shape Selection	Shape 13	22
			Shape 14	23
			Shape 15	24
			Shape 16	25
			Shape 17	26
			Shape 18	27
			Shape 19	28
			Shape 20	29
			Shape 21	30
			Shape 22	31
			Shape 23	32
			UNUSED RANGE	33
			UNUSED RANGE	34
			Shape 24	35
			Shape 25	36
			Shape 26	37
			Shape 27	38
			Shape 28	39
			Shape 29	40
			UNUSED RANGE	41
			Shape 30	42
			UNUSED RANGE	43
			Shape 31	44
			Shape 32	45
			Shape 33	46
			Shape 34	47
			Shape 35	48
			Shape 36	49
			Shape 37	50
			Shape 38	51
			Shape 39	52
			Shape 40	53
			Shape 41	54
			Shape 42	55
			Shape 43	56
			Shape 44	57
			Shape 45	58
			Shape 46	59
			Shape 47	60
			Shape 48	61
			Shape 49	62
			Shape 50	63
			UNUSED RANGE	64
			Shape 51	65
			Shape 52	66
			Shape 53	67
			Shape 54	68
			UNUSED RANGE	69
			Shape 55	70
			UNUSED RANGE	71–255
	23	Shape Speed	Radius size,Static	0–63
			max to min speed	64–158
			Stop	159–160
			min to max speed	161–255
	24	Shape Fade	Shape Fade 0–100%	0–255
	25	Shape R	Shape R	0–255
	26	Shape G	Shape G	0–255
	27	Shape B	Shape B	0–255
	28	Shape W	Shape W	0–255

| Mode1	Mode2	Fade Type	Function	Dmx Value
	29	Shape Dimmer	Shape Dimmer 0–100%	0–255
	30	Background Dimmer	Background Dimmer 0–100%	0–255
	31	Shape Transition	Shape Transition	0–255
	32	Shape Offset	Shape Offset	0–255
	33	Foreground 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
	34	Background 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
	35	Background Select	UNUSED RANGE	0–7
			NO selection	8
			pixe l	9
			Ring 2	10
			Ring 3	11
			pixe l + Ring 3	12
			pixe l + Ring 2	13
			pixe l + Ring 2 + Ring 3	14
			Ring 2 + Ring 3	15
			UNUSED RANGE	16–255

LED reference number for pixel mapping
TILT: channel 16 @ 200 bit

Standard edition
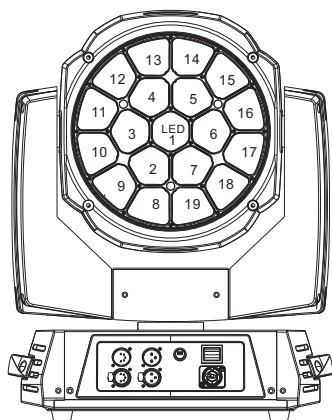
Online edition
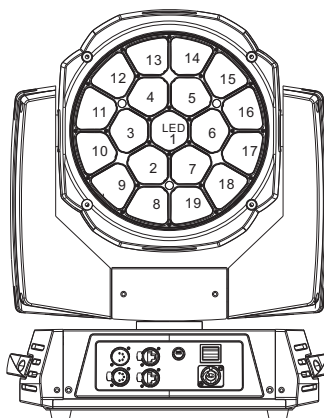
9.Maintance and cleaning

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 circum stances 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 usinga 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 paramters

SOURCE:RGBW LED-40W

POWER:850W

VOLTAGE:AC100-240V 50/60HZ

Color Temperature:6500K

10.2 Weight and dimensions

Dimensions : 390X286.5X493.5mm

NET WEIGHT:16Kg

Dimensions（Carton Package）: 526X496X596mm

WEIGHT（Carton Package）: 22.5Kg

Dimensions（Flight Case -4 lights):1016X650X699mm

NET WEIGHT/WEIGHT（Flight Case -4 lights）: 45.6Kg/119.6Kg

10.3 Channel Characteristics

1. 21、35、78、97、92 five standard DMX channel model or 21、35 two standard DMX channel model and network control mode optional.

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

3. Demmer: limear dimmer.

5. Zoom:linear amplifier.。

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

7. 19 RGBW lamp can be controlled separately.

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

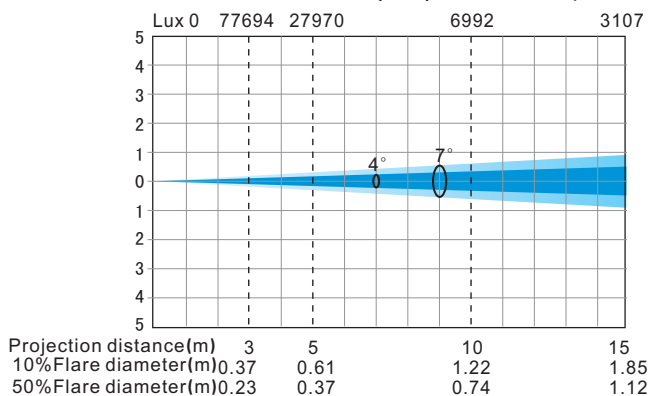9. Shutter: electronic shutter, random strobe.
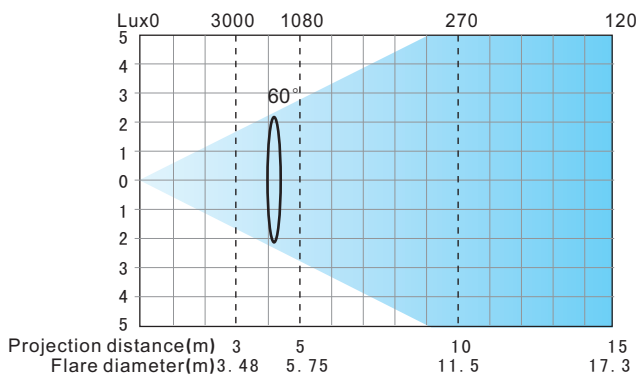
10. Focus: linear focus.

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(10%–50%)

Projection distance(m)	3	5	10	15
10%Flare diameter(m)	0.37	0.61	1.22	1.85
50%Flare diameter(m)	0.23	0.37	0.74	1.12

Lux 0 77694 27970 6992 3107

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

Lux0 3000 1080 270 120

Projection distance(m)	3	5	10	15
Flare diameter(m)	3.48	5.75	11.5	17.3

11.Electronic drawing

Standard edition
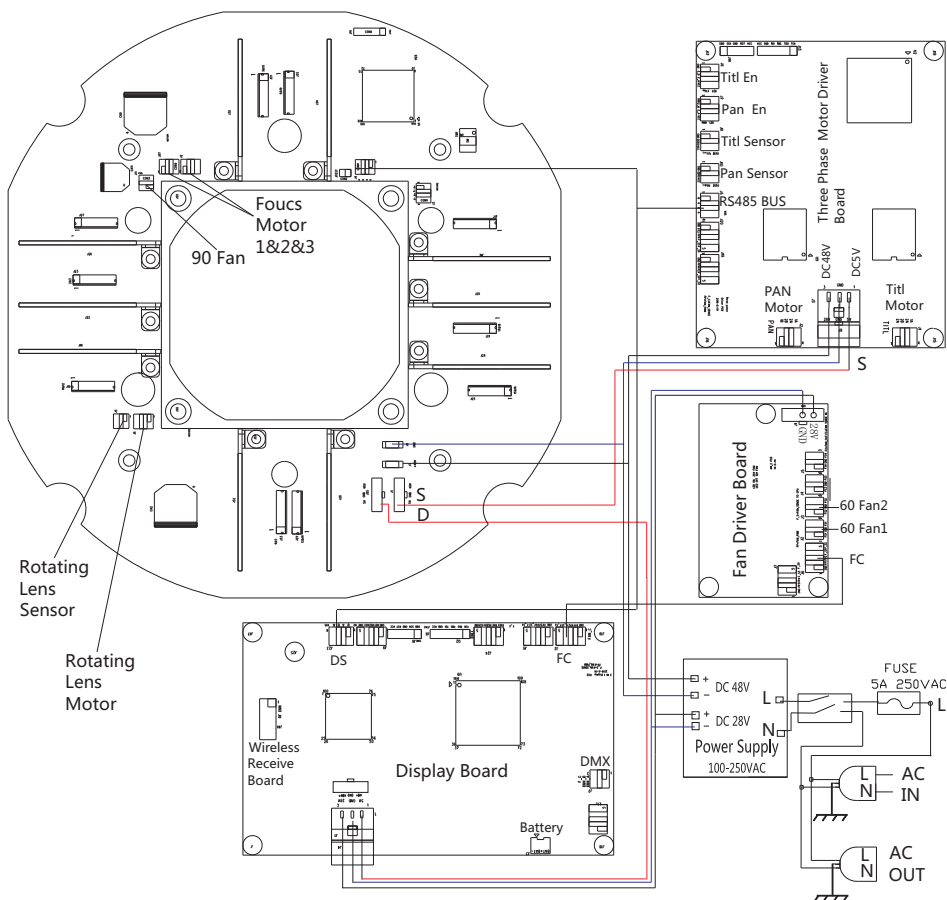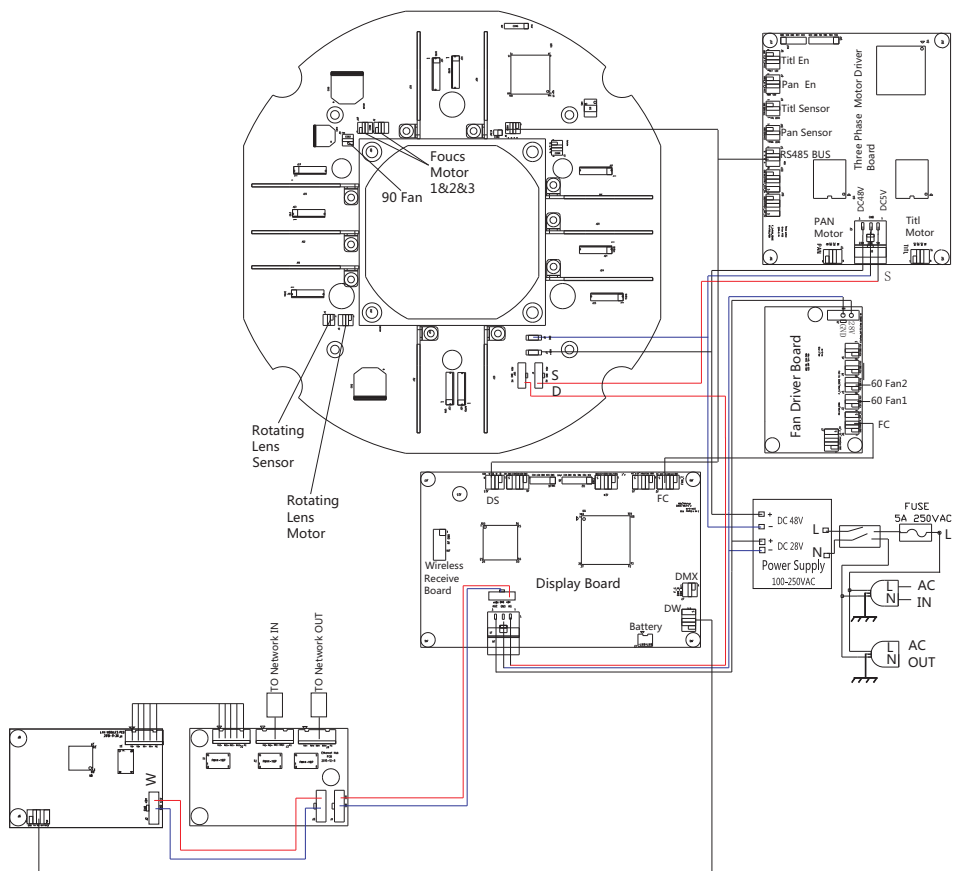
Foucs Motor 1&2&3

90 Fan

Rotating Lens Sensor

Rotating Lens Motor

Wireless Receive Board

Display Board

DS

FC

DMX

Battery

Titl En
Pan En
Titl Sensor
Pan Sensor
RS485 BUS

Three Phase Motor Driver Board

DC48V
DC5V

PAN Motor

Titl Motor

S

Fan Driver Board

60 Fan2
60 Fan1
FC

S
D

+ DC 48V
−
+ DC 28V
−

L
N

Power Supply
100-250VAC

FUSE
5A 250VAC

L

L

AC IN
N

L

AC OUT
N

Foucs Motor 1&2&3

90 Fan

Rotating Lens Sensor

Rotating Lens Motor

Titl En

Pan En

Titl Sensor

Pan Sensor

RS485 BUS

Three Phase Motor Driver Board

DC48V

DC5V

PAN Motor

Titl Motor

S

Fan Driver Board

60 Fan2

60 Fan1

FC

S

D

DS

FC

Wireless Receive Board

Display Board

DMX

DW

Battery

DC 48V

DC 28V

L

N

Power Supply
100~250VAC

FUSE
5A 250VAC

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AC
IN

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N

AC
OUT

TO Network IN

TO Network OUT

W

JOLLY®

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