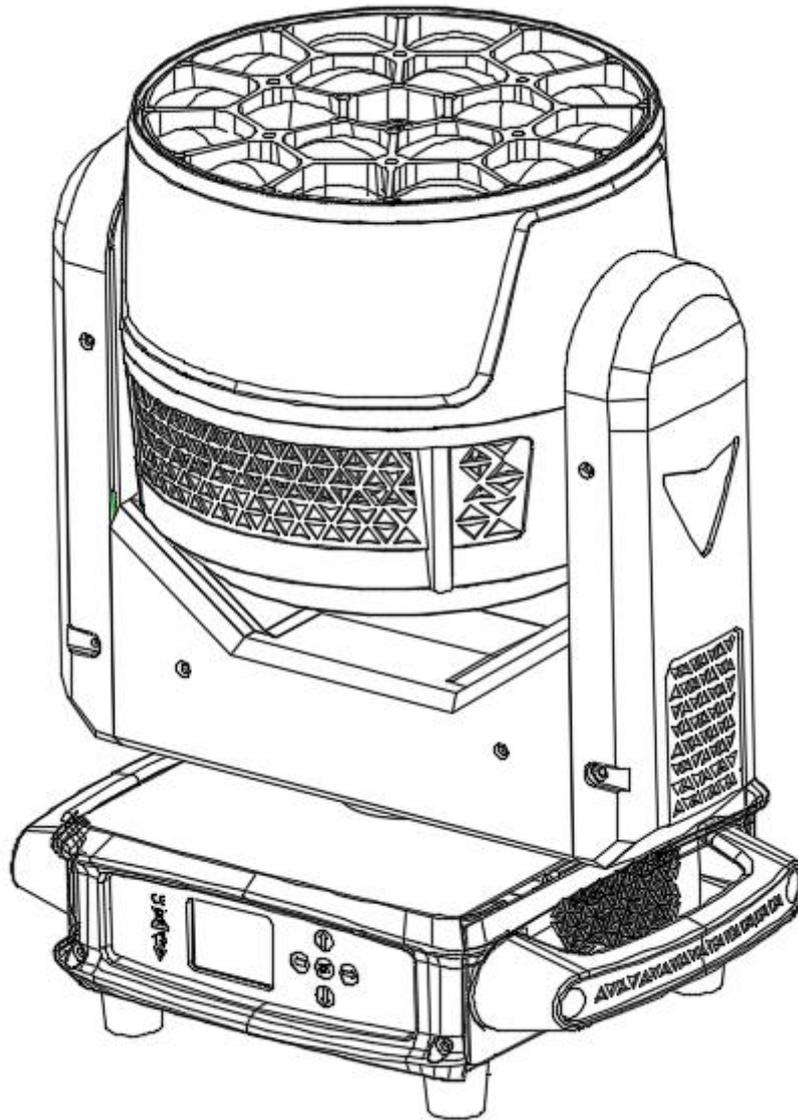


R1940L



User manual

1. Safety Instructions

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

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

Important:

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

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

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

DO install and operate by qualified operator.

DO NOT allow children to operate the fixture.

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

The unit must be installed in a location with adequate ventilation, at least 50cm from adjacent surfaces.

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

Before operation, ensure that you are connecting this product to the proper voltage in accordance with the specifications in this manual or on the product's specification label.

It's important to ground the yellow/green conductor to earth in order to avoid electric shock.

Minimum ambient temperature TA: 0°C. Maximum ambient temperature TA: 40°C. Do not operate this product at a lower or higher temperature.

DO NOT connect the device to any dimmer pack.

Avoid any flammable liquids, water or metal from entering the unit. Once it happens, cut off the mains power immediately.

DO NOT operate in a dirty or dusty environment. DO clean the fixture regularly.

DO NOT touch any wire during operation as there might be a hazard of electric shock.

Avoid entanglement of the power cord with other wires.

The minimum distance to objects/surface must be more than 1 meters.

Disconnect mains power before fuse/lamp replacement or servicing.

Replace fuse/lamp only with the same type.

In the event of serious operating problem, stop using the unit immediately. Never turn on and off the unit time after time.

The housing, the lenses, or the ultraviolet filter must be replaced if they are visibly damaged.

DO NOT attempt to operate this unit if it becomes damaged. DO NOT attempt any repairs

yourself. Repairs carried out by unskilled people can lead to damage or malfunction. Please contact the nearest authorized technical assistance center if needed.

Disconnect this product from its power source before servicing.

DO use the original packaging if the device is to be transported.

Avoid direct eye exposure to the light source while the product is on.

Never touch bulb with bare fingers, as it is very hot after using.

DO NOT operate this product if you see damage on the housing, shields, or cables. Have the damaged parts replaced by an authorized technician at once

Installation:

The fixture should be fixed on the clamp. Always ensure that the unit is firmly fixed to avoid vibration and slipping off during operation. Ensure that the trussing or area of installation must be able to hold 10 times the weight without any deformation. Always install a safety cable that can hold at least 12 times the weight of the fixture when installing. DO install and operate by qualified operator. It must be installed in a place where there is out of the reach of people.

2.INSTALLATIONS

installations Note: In order to increase protection, please install the lamp on the sidewalk, outside the seating area, or an area where unauthorized persons may touch the lamp

Before installing the fixture on any surface, make sure that the installation area can bear the minimum point load above 10 points of the weight of the equipment. The installation of the fixing device must always be fixed with auxiliary safety accessories (such as a suitable safety rope)

Do not stand directly under the equipment when installing, removing, or servicing fixtures

From the ceiling or set on a flat surface (see the picture below). Ensure that this fixture is kept at least 0.5m (1.5 feet) away from any flammable materials (decorations, etc.)

Be sure to use and install the supplied safety rope to ensure safety and prevent accidental damage and/or injury in case the fixture is damaged

Installation point: Overhead installation requires a wealth of experience, including calculation of working load limits, in-depth understanding of the installation materials used, and regular safety inspections of all installation materials and fixtures. If you do not have these qualifications, please do not try to install it yourself. Improper installation can cause personal injury

Before connecting the main power cord to an appropriate wall outlet, make sure to complete all assembly and installation procedures

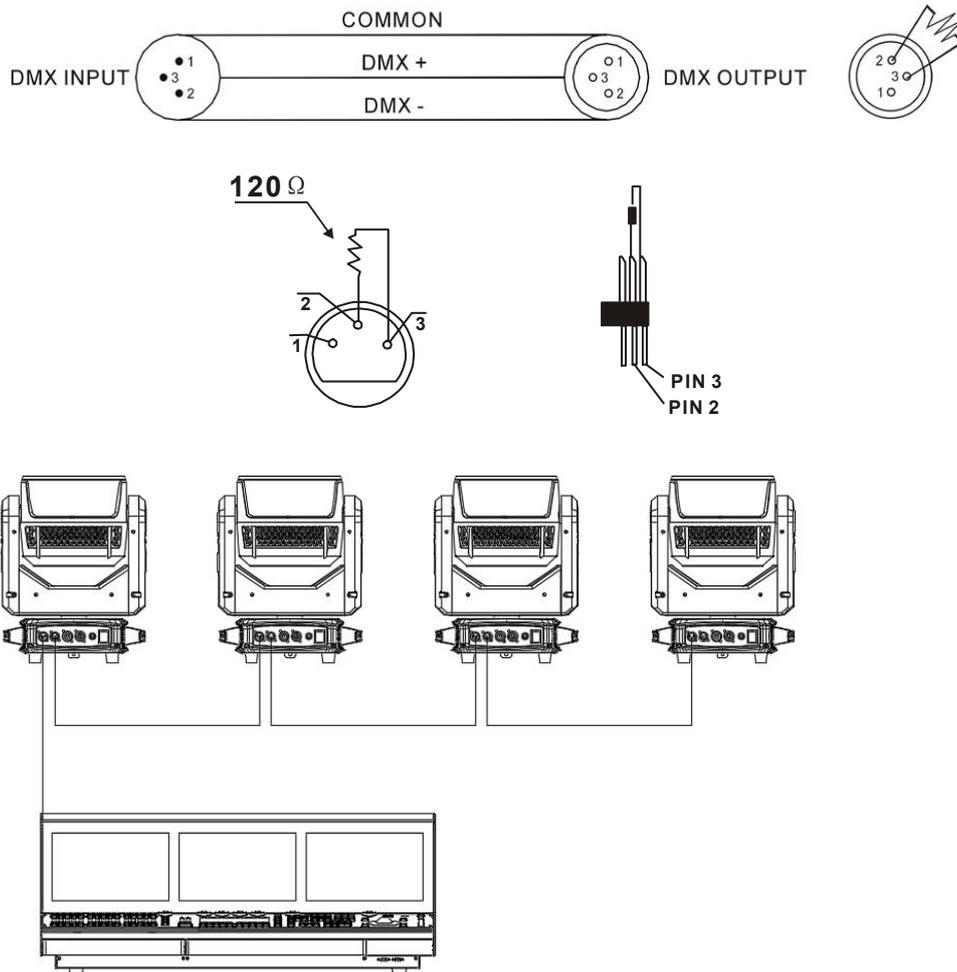
LED installation: LED shaking head provides a unique mounting bracket assembly, which integrates the bottom of the base and the fixing point of the safety cable into one unit . When installing the fixture to the truss, make sure to use the appropriate tools to fix it on the attached bracket, and use the M10 screw that passes through the center hole of the "bracket" to fix it. As an additional safety measure, make sure to use at least one safety cable integrated in the base assembly to connect at least one appropriately rated safety cable to the fixture.

3. DMX-512 control connections

Connect the provided XLR cable to the female 3-pin XLR output of your controller and the other side to the male 3-pin XLR input of the moving head. You can chain multiple

Moving heads be connected together through serial linking. The cable needed should be two core, screened cable with XLR input and output connectors.

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



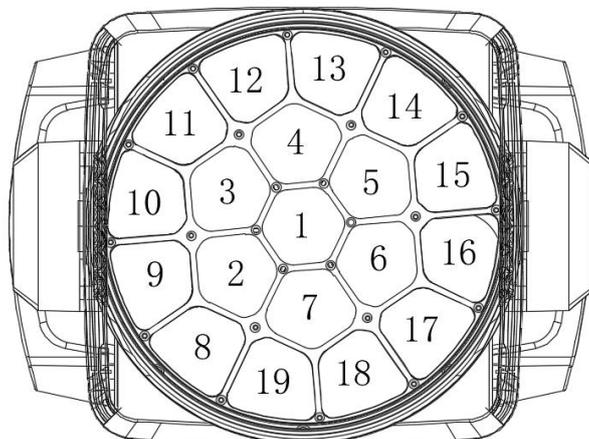
4.Address code setting

If you use a universal DMX controller to control the units, you have to set DMX address from 1 to 512 so that the units can receive DMX signal.

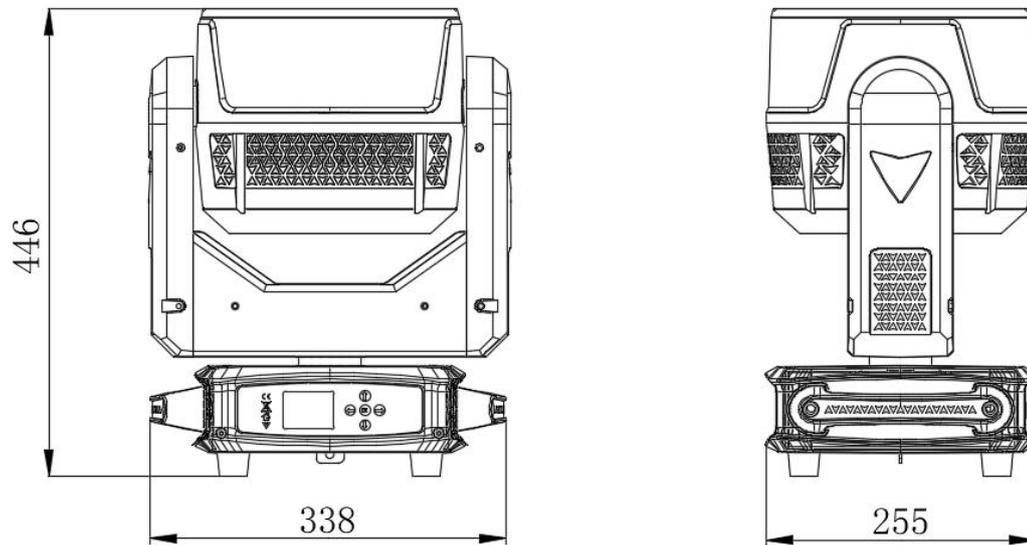
Press the MENU button to enter menu mode, select DMX Settings, press the ENTER button to confirm, use the UP/DOWN button to select DMX Address, press the ENTER button to confirm, the present address will blink in the display, use the UP/DOWN button to adjust the address from 001 to 512, press the ENTER button to store. Press the MENU button back to the last menu or let the unit idle 30 seconds to exit menu mode. Please refer to the following diagram to address your DMX512 channel for the first 4 units.

Channel MODE	UNIT1 ADDERSS	UNIT2 ADDERSS	UNIT3 ADDERSS	UNIT4 ADDERSS
21CH	1	22	43	64
23CH	1	24	47	70
35CH	1	36	71	106
78CH	1	79	157	135
92CH	1	93	185	177
97CH	1	98	195	292
99CH	1	100	199	298

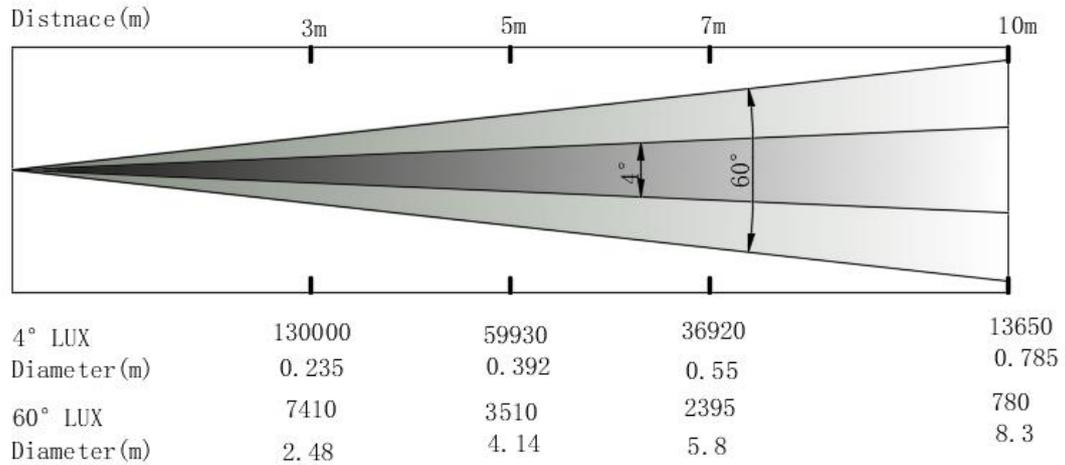
5.LED arrangement order



6. Fixture size



7. Illuminance chart:



8. LED technical parameters

Input Voltage: 100-240V, 50/60Hz

Output Voltage: V1:36V(LED driver+ main board),

Power consumption: 760W

Power supply: 1000W

Single LED power: 40W

Light source: 19x40W RGBW 4IN LED

Beam angle: 4-60°

Adjustable color temperature

DMX Channel: 21/23/35/78/92/97/99 CH

Operate mode: DMX512, AUTO master/slave, Voice control, RDM

Electronic dimmer:0~100%16bit linear

Linear CTO color temperature adjustment: 2500-8000K

Four dimming curve functions

Rich color gradient effects

Rich and diverse dynamic effects

Infinite color mixing

Automatically calculate the address code of the next fixture

Infinite honeycomb rotation, adjustable forward and backward speeds

Encoding positioning is used for the XY axis

Three phase silent motor fast and stable

Fast operation speed and noiseless operation

No flickering under high-definition camera

Dust and oil resistant design

Fixture size: 338*255*446mm

Feature:

LED shaking head dyeing light, with fast operation speed, no noise during operation, and no flicker under high-definition camera. It consists of 19x40W RGBW four color LEDs as a light source, creating a uniform color mixing system and rainbow effect, easily creating a fast and powerful beam, adding dynamism to the stage. Multiple channel modes are available, with point by point control of the light beads. The lighting engineer can flexibly switch colors, angles, and lighting effects. A linear focusing system with a beam angle of 4°-60° , multiple speed stroboscopic effects, and a smooth dimming function of 0~100% 16BIT. The shell is made of nylon material, which is wear-resistant and resistant to falling, and is a sturdy LCD display screen.

9.Menu Actions

9.1:Home interface menu display

First interface	Description	explain
address	001 - 512	Button up and down: Change the address code of this light, for example, if the channel value is 23CH, then the address code of this light is 1, and the address code of the next light is 24; Left and right buttons: Each time the address code of this light increases by 1 or the address code decreases by 1
signal	OK/NG	DMX signal
Channel	21/23/35/78/92/97/99 CH	
Mode	DMX512/Auto1/auto2/sound	Current operating mode of the LED
TEMP	20°C	Current temperature of the LED
	**°C	Abnormal temperature display
Reset information	Display reset status	1) Normal 2) Exception: Reset the specific content of the exception. View the information options on the setting interface

9.2:Shortcut interface menu

shortcut menu	Description	explain
address	address: 001 - 512	Same interface menu structure operation
Adjust	Enter password	LED calibration
中/EN	中/EN	Change Language
Normal	Normal	Screen does not display in reverse
	Invert	Screen inversion display
	Auto	The system can automatically rotate the screen according to the direction of gravity
Setup	Setup	Enter the settings interface

9.3:Settings interface menu

Main Menu	Secondary menu	tertiary menu/parameters
Address	001 - 512	
System settings	Run mode	DMX/sound/auto1/auto2
	Channel	23CH/35CH/51CH
	Pan def Pos	000
	Tilt def Pos	127
	Invert pan	on/off
	Invert Tilt	on/off
	Swap pan/tilt	on/off
	Fast dimming	on/off
	KEEP Signal	on/off/auto
	Encoder Correct	on/off
	Hall correct	中/EN
	Back lighting time	15s/30s/LOGO/OFF
	Curve	Curve1/Curve2/ Curve3/Curve4
	Load default	OK/Cancel
Adjust	Enter password	xxxx
TEST	Current channel mode Channel	0-255
reset	Motor ON/OFF	
	Reset Head	
	Reset XY	
	Reset ALL	
Info	Error message	Display specific information content
	DMX data	Display specific testing content for DMX
	Sensor info	Display specific information of optocoupler and Hall
	Version	Display version number and RDM code
	Usage time	xxxxH

10.DMX512

21CH

CH	Function	Value	Details
1	Red	0-255	Red dimmer
2	Red Fine	0-255	Red fine control
3	Green	0-255	Green dimmer
4	Green Fine	0-255	Green fine control
5	Blue	0-255	Blue dimmer
6	Blue Fine	0-255	Blue fine control
7	White	0-255	White dimmer
8	White Fine	0-255	White fine control
9	CTO	0-255	Color temperature linear control
10	Macro color	0-255	Built in color gradient
11	Strobe	0-3	NO function
		4-103	Synchronous strobe speed from slow to fast (1HZ-25HZ)
		104-107	OPEN
		108-207	Split the strobe speed from slow to fast

			(1HZ-25Hz)
		208-212	OPEN
		213-225	Low speed random flashing
		226-238	Medium speed random strobe
		239-251	High speed random flashing
		252-255	OPEN
12	Dimmer	0-255	Linear dimming from dark to bright
13	Dimmer Fine	0-255	Dimming and fine-tuning control
14	Pan	0-255	0-540°
15	Pan Fine	0-255	16bit
16	Tilt	0-255	0-270°
17	Tilt Fine	0-255	16bit
18	Function	0-255	reserve
19	Reset	0-79	NO Function
		80-99	curve1(5s)
		100-119	curve2(5s)
		120-139	curve3(5s)
		140-159	curve4(5s)
		160-179	Slow dimming mode (5s)
		180-199	Fast dimming mode (5s)

		200-209	Effect motor reset (5s)
		210-219	XY motor reset (5s)
		220-229	Reset all motors (5s)
20	Zoom	0-255	Linear adjustment of angle from small to large
21	Zoom Rotation	0-127	0~60°
		128-191	Turning counterclockwise from fast to slow endlessly
		200-255	Clockwise rotation from slow to fast

23CH

CH	Function	DMX	Details
1	Pan	0-255	0-540°
2	Pan Fine	0-255	16bit
3	Tilt	0-255	0-270°
4	Tilt Fine	0-255	16bit
5	P/T speed	0-255	Speed from fast to slow
6	Zoom	0-255	Linear adjustment
7	Zoom Rotation	0-127	0~60°
		128-191	Turning counterclockwise from fast
		200-255	Clockwise rotation from slow to fast
8	Dimmer	0-255	Linear dimming from dark to bright

9	Strobe	0-3	NO function
		4-103	Synchronous strobe speed from slow
		104-10	OPEN
		108-20	Split the strobe speed from slow to
		208-21	OPEN
		213-22	Low speed random flashing
		226-23	Medium speed random strobe
		239-25	High speed random flashing
		252-25	OPEN
10	R	0-255	Red dimmer
11	G	0-255	Green dimmer
12	B	0-255	Blue dimmer
13	W	0-255	White dimmer
14	CTO	0-255	Color temperature linear control
15	Macro color	0-255	Built in color gradient
16	Static effect	0-255	Each 5 DMX value is a kind of static
17	Dynamic effect	0-255	Each 5 DMX value is a kind of dynamic effect
18	Dynamic effect speed	0-255	Speed from slow to fast,pls operate against 15 CH
19	Background R	0-255	1-100% Background Red linear dimmer from dark to bright

20	Background G	0-255	1-100% Background Blue linear dimmer from dark to bright
21	Background B	0-255	1-100% Background Green linear dimmer from dark to bright
22	Background W	0-255	1-100% Background Blue linear dimmer from dark to bright
23	Reset	0-79	NO Function
		80-99	curve1(5s)
		100-11	curve2(5s)
		120-13	curve3(5s)
		140-15	curve4(5s)
		160-17	Slow dimming mode (5s)
		180-19	Fast dimming mode (5s)
		200-20	Effect motor reset (5s)
		210-21	XY motor reset (5s)
		220-22	Reset all motors (5s)

35CH

CH	Function	Value	Details
1	Red	0-255	Red dimmer
2	Red Fine	0-255	Red fine control
3	Green	0-255	Green dimmer
4	Green Fine	0-255	Green fine control
5	Blue	0-255	Blue dimmer
6	Blue Fine	0-255	Blue fine control
7	White	0-255	White dimmer
8	White Fine	0-255	White fine control
9	CTO	0-255	Color temperature linear control
10	Macro color	0-255	Built in color gradient
11	Strobe	0-3	NO function
		4-103	Synchronous strobe speed from slow to fast (1HZ-25HZ)
		104-107	OPEN
		108-207	Split the strobe speed from slow to fast (1HZ-25Hz)

		208-212	OPEN
		213-225	Low speed random flashing
		226-238	Medium speed random strobe
		239-251	High speed random flashing
		252-255	OPEN
12	Dimmer	0-255	Linear dimming from dark to bright
13	Dimmer Fine	0-255	Dimming and fine-tuning control
14	Pan	0-255	0-540°
15	Pan Fine	0-255	16bit
16	Tilt	0-255	0-270°
17	Tilt Fine	0-255	16bit
18	Function	0-255	reserve
19	Reset	0-79	NO Function
		80-99	curve1(5s)
		100-119	curve2(5s)
		120-139	curve3(5s)
		140-159	curve4(5s)
		160-179	Slow dimming mode (5s)
		180-199	Fast dimming mode (5s)
		200-209	Effect motor reset (5s)

		210-219	XY motor reset (5s)
		220-229	Reset all motors (5s)
20	Zoom	0-255	Linear adjustment of angle from small to large
21	Zoom Rotation	0-127	0~60°
		128-191	Turning counterclockwise from fast to slow endlessly
		200-255	Clockwise rotation from slow to fast
22	Pattern selection	0-7	NO
		8	static effect1
		9	static effect2
		10	static effect3
		11	NO
		12	static effect4
		13	static effect5
		14	NO
		15	Trends Effeect1
		16	Trends Effeect2
		17	Trends Effeect3
		18	Trends Effeect4
		19	Monochromatic random

20	Full color random
21	Rainbow Effect1
22	Rainbow Effect2
23	Trends Effeect5
24	Trends Effeect6
25	Trends Effeect7
26	Trends Effeect8
27	Trends Effeect9
28	Trends Effeect10
29	Trends Effeect11
30	Trends Effeect12
31	Trends Effeect13
32	Trends Effeect14
33	NO
34	NO
35	Trends Effeect15
36	Trends Effeect16
37	Trends Effeect17
38	Trends Effeect18
39	Trends Effeect19
40	Trends Effeect20

41	NO
42	Trends Effeect21
43	NO
44	Trends Effeect22
45	Trends Effeect23
46	Trends Effeect24
47	Trends Effeect25
48	Trends Effeect26
49	Trends Effeect27
50	Trends Effeect28
51	Trends Effeect29
52	Trends Effeect30
53	Trends Effeect31
54	Trends Effeect32
55	Trends Effeect33
56	Trends Effeect34
57	Trends Effeect35
58	Trends Effeect36
59	Trends Effeect37
60	Trends Effeect38
61	Random location1

		62	Random location2
		63	Random location3
		64	NO
		65	Random location4
		66	Random location5
		67	Trends Effeect39
		68	Trends Effeect40
		69	NO
		70	Trends Effeect41
		71-255	NO
23	Pattern effect speed	0-255	Pattern effect speed control
24	Pattern effect fading	0-255	Pattern effect fading
25	Pattern effect R	0-255	Pattern effect R
26	Pattern effect G	0-255	Pattern effect G
27	Pattern	0-255	Pattern effect B

	effect B		
28	Pattern effect W	0-255	Pattern effect W
29	Pattern dimming	0-255	Pattern dimming0-100%
30	Background dimming	0-255	Background dimming0-100%
31	Pattern effect transition	0-255	Pattern change control
32	Pattern effect supplement	0-255	Pattern translation
33	Foreground Strobe	0-255	Foreground strobe (same as channel 11)
34	Background Strobe	0-255	Background strobe (same as channel 11)
35	Background selection	0-255	Background selection

78CH

CH	Function	Value	Details
1	Red	0-255	Red dimmer
2	Red Fine	0-255	Red fine control
3	Green	0-255	Green dimmer
4	Green Fine	0-255	Green fine control
5	Blue	0-255	Blue dimmer
6	Blue Fine	0-255	Blue fine control
7	White	0-255	White dimmer
8	White Fine	0-255	White fine control
9	CTO	0-255	Color temperature linear control
10	Macro color	0-255	Built in color gradient
11	Strobe	0-3	NO function
		4-103	Synchronous strobe speed from slow to fast (1HZ-25HZ)
		104-107	OPEN
		108-207	Split the strobe speed from slow to fast (1HZ-25Hz)
		208-212	OPEN
		213-225	Low speed random flashing
		226-238	Medium speed random strobe

		239-251	High speed random flashing
		252-255	OPEN
12	Dimmer	0-255	Linear dimming from dark to bright
13	Dimmer Fine	0-255	Dimming and fine-tuning control
14	Pan	0-255	0-540°
15	Pan Fine	0-255	16bit
16	Tilt	0-255	0-270°
17	Tilt Fine	0-255	16bit
18	Function	0-255	reserve
19	Reset	0-79	NO Function
		80-99	curve1(5s)
		100-119	curve2(5s)
		120-139	curve3(5s)
		140-159	curve4(5s)
		160-179	Slow dimming mode (5s)
		180-199	Fast dimming mode (5s)
		200-209	Effect motor reset (5s)
		210-219	XY motor reset (5s)
		220-229	Reset all motors (5s)
20	Zoom	0-255	Linear adjustment

			of angle from small to large
21	Zoom Rotation	0-127	0~60°
		128-191	Turning counterclockwise from fast to slow endlessly
		200-255	Clockwise rotation from slow to fast
22	R1 LED Dim	0-255	R1 LED Dim
23	G1 LED Dim	0-255	G1 LED Dim
24	B1 LED Dim	0-255	B1 LED Dim
	W1 LED Dim	0-255	W1 LED Dim
...
76	R19 LED Dim	0-255	R19 LED Dim
77	G19 LED Dim	0-255	G19 LED Dim
78	B19 LED Dim	0-255	B19 LED Dim
	W19LED Dim	0-255	W19LED Dim

92CH

CH	Function	Value	Details
1	Red	0-255	Red dimmer
2	Red Fine	0-255	Red fine control
3	Green	0-255	Green dimmer
4	Green Fine	0-255	Green fine control
5	Blue	0-255	Blue dimmer
6	Blue Fine	0-255	Blue fine control
7	White	0-255	White dimmer
8	White Fine	0-255	White fine control
9	CTO	0-255	Color temperature linear control
10	Macro color	0-255	Built in color gradient
11	Strobe	0-3	NO function
		4-103	Synchronous strobe speed from slow to fast (1HZ-25HZ)
		104-107	OPEN
		108-207	Split the strobe speed from slow to fast (1HZ-25Hz)
		208-212	OPEN
		213-225	Low speed random flashing
		226-238	Medium speed random strobe

		239-251	High speed random flashing
		252-255	OPEN
12	Dimmer	0-255	Linear dimming from dark to bright
13	Dimmer Fine	0-255	Dimming and fine-tuning control
14	Pan	0-255	0-540°
15	Pan Fine	0-255	16bit
16	Tilt	0-255	0-270°
17	Tilt Fine	0-255	16bit
18	Function	0-255	reserve
19	Reset	0-79	NO Function
		80-99	curve1(5s)
		100-119	curve2(5s)
		120-139	curve3(5s)
		140-159	curve4(5s)
		160-179	Slow dimming mode (5s)
		180-199	Fast dimming mode (5s)
		200-209	Effect motor reset (5s)
		210-219	XY motor reset (5s)
		220-229	Reset all motors (5s)
20	Zoom	0-255	Linear adjustment

			of angle from small to large
21	Zoom Rotation	0-127	0~60°
		128-191	Turning counterclockwise from fast to slow endlessly
		200-255	Clockwise rotation from slow to fast
22	Pattern selection	0-7	NO
		8	static effect1
		9	static effect2
		10	static effect3
		11	NO
		12	static effect4
		13	static effect5
		14	NO
		15	Trends Effect1
		16	Trends Effect2
		17	Trends Effect3
		18	Trends Effect4
		19	Monochromatic random
		20	Full color random
		21	Rainbow Effect1
22	Rainbow Effect2		

23	Trends Effeect5
24	Trends Effeect6
25	Trends Effeect7
26	Trends Effeect8
27	Trends Effeect9
28	Trends Effeect10
29	Trends Effeect11
30	Trends Effeect12
31	Trends Effeect13
32	Trends Effeect14
33	NO
34	NO
35	Trends Effeect15
36	Trends Effeect16
37	Trends Effeect17
38	Trends Effeect18
39	Trends Effeect19
40	Trends Effeect20
41	NO
42	Trends Effeect21
43	NO

44	Trends Effeect22
45	Trends Effeect23
46	Trends Effeect24
47	Trends Effeect25
48	Trends Effeect26
49	Trends Effeect27
50	Trends Effeect28
51	Trends Effeect29
52	Trends Effeect30
53	Trends Effeect31
54	Trends Effeect32
55	Trends Effeect33
56	Trends Effeect34
57	Trends Effeect35
58	Trends Effeect36
59	Trends Effeect37
60	Trends Effeect38
61	Random location1
62	Random location2
63	Random location3
64	NO

		65	Random location4
		66	Random location5
		67	Trends Effeect39
		68	Trends Effeect40
		69	NO
		70	Trends Effeect41
		71-255	NO
23	Pattern speed	0-255	Pattern effect speed control
24	Pattern effect fading	0-255	Pattern effect fading
25	Pattern effect R	0-255	Pattern effect R
26	Pattern effect G	0-255	Pattern effect G
27	Pattern effect B	0-255	Pattern effect B
28	Pattern effect W	0-255	Pattern effect W
29	Pattern	0-255	Pattern dimming0-100%

	dimming		
30	Background dimming	0-255	Background dimming 0-100%
31	Pattern effect transition	0-255	Pattern change control
32	Pattern effect supplement	0-255	Pattern translation
33	Foreground Strobe	0-255	Foreground strobe (same as channel 11)
34	Background Strobe	0-255	Background strobe (same as channel 11)
35	Background selection	0-255	Background selection
36	R1 LED Dim	0-255	R1 LED Dim
37	G1 LED Dim	0-255	G1 LED Dim
38	B1 LED Dim	0-255	B1 LED Dim
...
90	R19 LED Dim	0-255	R19 LED Dim
91	G19 LED Dim	0-255	G1 LED Dim
92	B19 LED Dim	0-255	B1 LED Dim

97CH

CH	Function	Value	Details
1	Red	0-255	Red dimmer
2	Red Fine	0-255	Red fine control
3	Green	0-255	Green dimmer
4	Green Fine	0-255	Green fine control
5	Blue	0-255	Blue dimmer
6	Blue Fine	0-255	Blue fine control
7	White	0-255	White dimmer
8	White Fine	0-255	White fine control
9	CTO	0-255	Color temperature linear control
10	Macro color	0-255	Built in color gradient
11	Strobe	0-3	NO function
		4-103	Synchronous strobe speed from slow to fast (1HZ-25HZ)
		104-107	OPEN
		108-207	Split the strobe speed from slow to fast (1HZ-25Hz)
		208-212	OPEN

		213-225	Low speed random flashing
		226-238	Medium speed random strobe
		239-251	High speed random flashing
		252-255	OPEN
12	Dimmer	0-255	Linear dimming from dark to bright
13	Dimmer Fine	0-255	Dimming and fine-tuning control
14	Pan	0-255	0-540°
15	Pan Fine	0-255	16bit
16	Tilt	0-255	0-270°
17	Tilt Fine	0-255	16bit
18	Function	0-255	reserve
19	Reset	0-79	NO Function
		80-99	curve1(5s)
		100-119	curve2(5s)
		120-139	curve3(5s)
		140-159	curve4(5s)
		160-179	Slow dimming mode (5s)

		180-199	Fast dimming mode (5s)
		200-209	Effect motor reset (5s)
		210-219	XY motor reset (5s)
		220-229	Reset all motors (5s)
20	Zoom	0-255	Linear adjustment of angle from small to large
21	Zoom Rotation	0-127	0~60°
		128-191	Turning counterclockwise from fast to slow endlessly
		200-255	Clockwise rotation from slow to fast
22	R1 LED Dim	0-255	R1 LED Dim
23	G1 LED Dim	0-255	G1 LED Dim
24	B1 LED Dim	0-255	B1 LED Dim
25	W1 LED Dim	0-255	W1 LED Dim
...
94	R19 LED Dim	0-255	R19 LED Dim
95	G19 LED Dim	0-255	G19 LED Dim
96	B19 LED Dim	0-255	B19 LED Dim
97	W19LEDDim	0-255	W19LEDDim

99CH

CH	Function	DMX	Details
1	Pan	0-255	0-540°
2	Pan Fine	0-255	16bit
3	Tilt	0-255	0-270°
4	Tilt Fine	0-255	16bit
5	P/T speed	0-255	Speed from fast to slow
6	Zoom	0-255	Linear adjustment
7	Zoom Rotation	0-127	0~60°
		128-19	Turning counterclockwise from fast
		200-25	Clockwise rotation from slow to fast
8	Dimmer	0-255	Linear dimming from dark to bright
9	Strobe	0-3	NO function
		4-103	Synchronous strobe speed from slow
		104-10	OPEN
		108-20	Split the strobe speed from slow to
		208-21	OPEN
		213-22	Low speed random flashing
		226-23	Medium speed random strobe
		239-25	High speed random flashing
		252-25	OPEN
10	R	0-255	Red dimmer
11	G	0-255	Green dimmer
12	B	0-255	Blue dimmer
13	W	0-255	White dimmer

14	CTO	0-255	Color temperature linear control
15	Macro color	0-255	Built in color gradient
16	Static effect	0-255	Each 5 DMX value is a kind of static
17	Dynamic effect	0-255	Each 5 DMX value is a kind of dynamic effect
18	Dynamic effect speed	0-255	Speed from slow to fast,pls operate against 15 CH
19	Background R	0-255	1-100% Background Red linear dimmer from dark to bright
20	Background G	0-255	1-100% Background Blue linear dimmer from dark to bright
21	Background B	0-255	1-100% Background Green linear dimmer from dark to bright
22	Background W	0-255	1-100% Background Blue linear dimmer from dark to bright
23	Reset	0-79	NO Function
		80-99	curve1(5s)
		100-11	curve2(5s)
		120-13	curve3(5s)
		140-15	curve4(5s)
		160-17	Slow dimming mode (5s)

		180-19	Fast dimming mode (5s)
		200-20	Effect motor reset (5s)
		210-21	XY motor reset (5s)
		220-22	Reset all motors (5s)
24	R1 LED Dim	0-255	R19 LED Dim
25	G1 LED Dim	0-255	G19 LED Dim
26	B1 LED Dim	0-255	B19 LED Dim
27	W1LEDDim	0-255	W19LEDDim
...
96	R19LED	0-255	R19 LED Dim
97	G19LED	0-255	G19 LED Dim
98	B19LED Dim	0-255	B19 LED Dim
99	W19LEDDim	0-255	W19LEDDim

11.Trouble shooting

Following are a few common problems that may occur during operation. Here are some suggestions for easy troubleshooting:

The unit does not work, no light and the fan does not work

Check the connection of power and main fuse.

Measure the mains voltage on the main connector.

Check the power on LED.

Not responding to DMX controller

DMX LED should be on. If not, check DMX connectors, cables to see if link properly.

If the DMX LED is on and no response to the channel, check the address settings and DMX polarity.

If you have intermittent DMX signal problems, check the pins on connectors or on PCB of the unit or the previous one.

Try to use another DMX controller.

Check if the DMX cables run near or run alongside to high voltage cables that may cause damage or interference to DMX interface circuit.

One of the channels is not working well

The stepper motor might be damaged or the cable connected to the PCB is broken.

