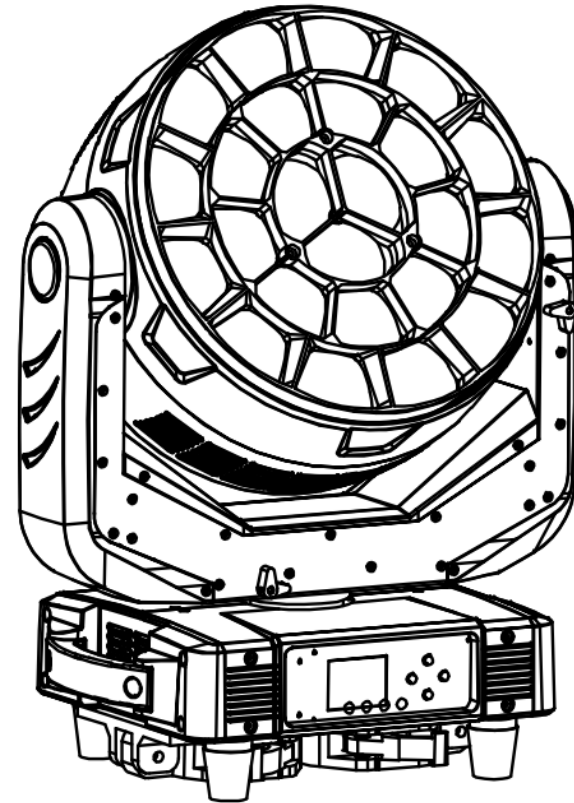


# Solar Eye K24

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24x60w RGBW LEDs, Beam Wash Kaleido 3-in-1



User manual

Please read the instructions carefully before us

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### statement

The product has well capability and intact packing when leave factory. All of the user should comply with warning item and manual, any misuse cause of the damages are not included in our guarantee, and also can not be responsible for any malfunction & problem owing to ignore the manual.

## 8. Fixture Cleaning

The cleaning of internal and external optical lenses and/or mirrors must be carried out periodically to optimize light output. Cleaning frequency depends on the environment in which the fixture operates: damp, smoky or particularly dirty surrounding can cause greater accumulation of dirt on the unit's optics.

Clean with soft cloth using normal glass cleaning fluid.

Always dry the parts carefully.

Clean the external optics at least every 20 days. Clean the internal optics at least every 30/60 days.

## 7. Trouble shooting

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

### A. The unit does not work, no light and the fan does not work

1. Check the connection of power and main fuse.
2. Measure the mains voltage on the main connector.
3. Check the power on LED.

### B. Not responding to DMX controller

1. DMX LED should be on. If not, check DMX connectors, cables to see if link properly.
2. If the DMX LED is on and no response to the channel, check the address settings and DMX polarity.
3. If you have intermittent DMX signal problems, check the pins on connectors or on PCB of the unit or the previous one.
4. Try to use another DMX controller.
5. Check if the DMX cables run near or run alongside to high voltage cables that may cause damage or interference to DMX interface circuit.

### C. One of the channels is not working well

1. The stepper motor might be damaged or the cable connected to the PCB is broken.
2. The motor's drive IC on the PCB might be out of condition.

## 1. Safety Instructions

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

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

Before operating, ensure that the voltage and frequency of power supply match the power requirements of the unit.

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

The unit is for indoor use only. Use only in a dry location.

The unit must be installed in a location with adequate ventilation, at least 50cm from adjacent surfaces. Be sure that no ventilation slots are blocked.

Disconnect main power before replacement or servicing.

Make sure there are no flammable materials close to the unit while operating as it is fire hazard.

Use safety cable when fixes this unit. DO NOT handle the unit by taking its head only, but always by taking its base.

Maximum ambient temperature is  $T_a: 40^{\circ}\text{C}$ . DO NOT operate it where the temperature is higher than this Unit surface temperature may reach up to  $85^{\circ}\text{C}$ . DO NOT touch the housing bare-hand during its operation. Turn off the power and allow about 15 minutes for the unit to cool down before replacing or serving.

the event of serious operating problem, stop using the unit immediately. Never try to repair the unit by yourself. Repairs carried out by unskilled people can lead to damage or malfunction. Please contact the nearest authorized technical assistance center. Always use the same type spare parts.

⚠ DO NOT touch any wire during operation as high voltage might be causing electric shock.

### Warning:

⚠ To prevent or reduce the risk of electrical shock or fire, do not expose the unit to rain or moisture.

⚠ DO NOT open the unit within five minutes after switching off.

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

### Caution:

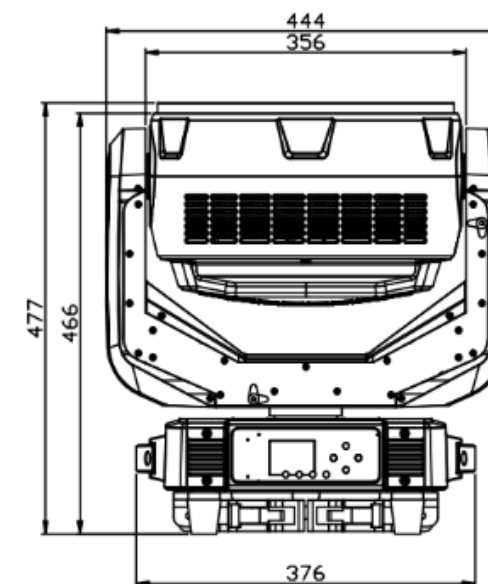
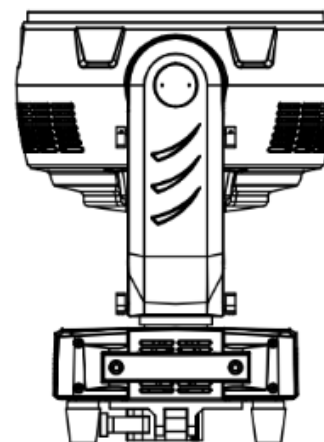
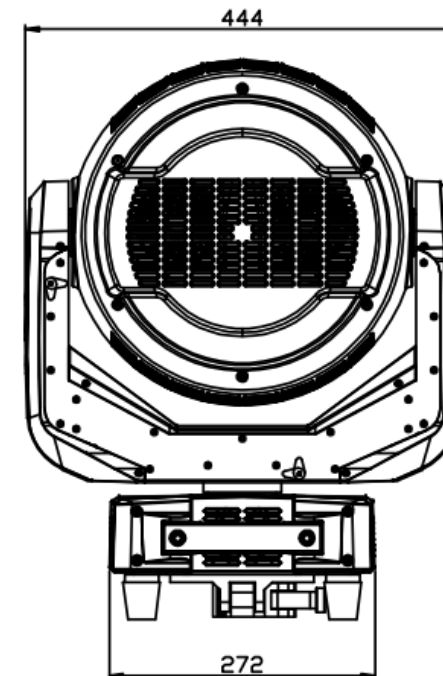
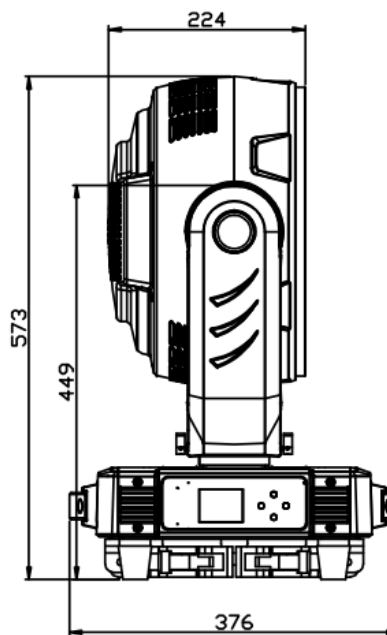
There are no user serviceable parts inside the unit. DO NOT open the housing or attempt any repairs yourself. In the unlikely event your unit may require service, please contact your nearest dealer.

### Installation:

The unit should be mounted via its screw holes on the bracket. Always ensure that the unit is firmly fixed to avoid vibration and slipping while operating.

And make sure that the structure to which you are attaching the unit is secure and is able to support a weight of 10 times of the unit's weight. Also always use a safety cable that can hold 12 times of the weight of the unit when installing the fixture.

The equipment must be fixed by professionals. And it must be fixed at a place where is out of the touch of people.



CH-33	Reset	Reset within 5s	251-255
CH-34	R1 LED dimming	Red1 LED dimming	0-250
CH-35	G1 LED dimming	Green1 LED dimming	0-250
CH-36	B1 LED dimming	Blue1 LED dimming	0-250
CH-37	W1 LED dimming	White1 LED dimming	0-250
CH-38	.....	.....	.....
CH-126	R24 LED dimming	Red24 LED dimming	0-250
CH-127	G24 LED dimming	Green24 LED dimming	0-250
CH-128	B24 LED dimming	Blue24 LED dimming	0-250
CH-129	W24 LED dimming	White24 LED dimming	0-250

## 6. Shape

## 2. Technical Specifications

### Light Sources: 24\*60W 4IN1 RGBW LED

Average life span> 50000 hours

Beam Angle:3.5°- 45°

Glass light guide + PMMA high quality optical lens

Power Consumption: 1500W

Power factor PF≥0.98

Power Voltage: AC 100-240V, 50/60Hz

Net Weight: 25 kgs

Dimension: 354mm×444mm×477mm

Working temperature: -10℃~45℃

### Control

DMX Channel:21/25/33/129 Channels

Control Modes: DMX512/master-Slave/Auto Run/Music

### Pan/Tilt

Pan : 540° ,accuracy 2.11°/step, fine-tuning accuracy: 0.008°;

Tilt : 270° ,accuracy 0.86° /step, fine-tuning accuracy: 0.0034° ;

Using magnetic coded reset system

### Construction

Display:2.4-inch TFT color display;Chinese and English languages can be switched,180° reversible TFT Display

Data In/Out socket: 3-pin & 5-pin XLR sockets

Power Socket: Power Con in/out

Protection Rating: IP20

**Electronic control technology:**

- Menu or console control lamp reset;
- 0-100% dimming;
- Constant current drive mode;
- Temperature sensor detection, intelligent adjustment of light source power;
- Lamp information query;
- Intelligent fan speed control

**Features**

- Full optical domain dimming, 65536-level dimming accuracy; fast strobe 1~25Hz;
- Single point control of lamp beads;
- Combine the three-in-one effect of dyeing, beam and bee eye;
- Preset 44 kinds of color macro function; preset 121 kinds of effect macro function

**3. How To Control The Unit**



Menu      Up      Down      Enter

**Display:**

CH-23	Dynamic pattern	Mixed color dynamic pattern 2	184--186
		.....(3numbers 1 pattern)	.....
		Mixed color dynamic pattern 18	232--234
		Mixed color dynamic pattern 19	235--255
CH-24	Pattern translation (with 23 channels)	Select dynamic pattern scene	0--255
CH-25	Dynamic pattern speed (with 17 channels)	No	0--9
		Forward, from fast to slow	10--132
		Go backward, from slow to fast	133--255
CH-26	Pattern effect fade	Pattern effect fade	0--255
CH-27	Background total dimming	Background total dimming from 0 - 100%	0--255
CH-28	Background strobe	Background strobe	0--255
CH-29	Back color Red	dark to bright linear dimming	0-255
CH-30	Back color Green	dark to bright linear dimming	0-255
CH-31	Back color Blue	dark to bright linear dimming	0-255
CH-32	Back color White	dark to bright linear dimming	0-255
		NO	0-250

CH-21	Macro color	....(10 numbers 1 macro color)	....
		Macro color 24	240--249
		Macro color 25	250--255
CH-22	Static pattern	No	0--6
		Monochrome pattern 1	7--13
		Monochrome pattern 2	14--20
		.....(7 numbers 1 pattern)	....
		Monochrome pattern 26	182--188
		Mixed color pattern 1	189-195
		Mixed color pattern 2	196--202
		....(7 numbers 1 pattern)	....
		Mixed color pattern 8	245--251
		Mixed color pattern 9	252--255
CH-23	Dynamic pattern	NO	0--9
		Monochrome dynamic pattern 1	10--12
		Monochrome dynamic pattern 2	13--15
		.....(3 numbers 1 pattern)	....
		Monochrome pattern 57	178--180
		Mixed color dynamic pattern 1	181--183

MENU To select the programming functions  
DOWN To go backward in the selected functions  
uP To go forward in the selected functions  
ENTER To confirm the selected functions

### Set DMX Address Code

- 1 Press "**Menu**" to "Set DMX Address",and press"**ENTER**" keys to enter into
- 2 Show "Set DMX Address DMX Address:**001**",Press the "**UP and DOWN**" keys to amended
- 3 Press "**ENTER**"keys to save and Exit,Press the"**MENU**"Keys does not save and Exit

Menu	1.Pan Degree	1) 540 ° , 2)360°	X-axis running angle selection
	2.Mic Sense	001 - 100	Sound sensitivity adjustment
	3.Pan Invert	1.NO 2.YES	X axis forward and reverse settings
	4.Tilt Invert	1.NO 2.YES	Y axis forward and reverse settings
	5.No Signal	1.Black Out 2.Hold	Set the state when the machine has no signal input
	6.Fan Set	1.Auto 2.Low 3.High	Set fan speed
	7. ArtNet Set	ArtNet Enable:1.ON 2.OFF 2.Universe:0--255 3.IP model:A.2.X.X.X B.10.X.X.X	

Menu	7.ArtNet Set	C.Customer	
		4.Customer IP:192.168.000.001	
		5.SubNetMask:255.00 0.000.000	
	8.Default	Yes	Reset
		No	
	9.Adjust	Pass Word: up+down+up+down	
		Pan:0 - 255	Change the value of Pan/Tilt/Focus/Rotation to correct the angle;
		Tilt:0 - 255 Focus:0 - 255	
		Rotation:0 - 255	
		Red:0 - 255	Change the value of R/G/B/W to adjust the white balance
Green:0 - 255			
Blue:0 - 255			
White:0 - 255			
Address	Setting from 001 - 512		
Model	DMX512	Set control mode	
	Auto		
	Sound		
	Manual	1.Pan(X):0--255	Manual
		2.Tilt (Y) :0--255	
		3.Focus:0--255	
4.Rotation:0--255			
5.Red: 0--255			

CH-20	Color temperature	R100%,G0%,B DOWM	116---135
		R100%,G UP,B UP	136---155
		R DOWM,G DOWM, B 100%	156---175
		R100%,G100%,B100%,W100%	176---195
		2800K	196---200
		3200K	201---205
		4000K	206---210
		4500K	211---215
		5000K	216---220
		5500K	221---225
		5600K	226--230
		6500K	231--235
7000K	236--240		
8000K	241--245		
CH-21	Macro color	No	0--9
		Macro color 1	10--19
		Macro color 2	20--29



CH-11	Red dimming	Red dimming	0-255
CH-12	Red trim	Red trim	0-255
CH-13	Green dimming	Green dimming	0-255
CH-14	Green trim	Green trim	0-255
CH-15	Blue dimming	Blue dimming	0-255
CH-16	Blue trim	Blue trim	0-255
CH-17	White dimming	White dimming	0-255
CH-18	White trim	White trim	0-255
CH-19	Dimming Mode	Mode -1	0 --- 49
		Mode -2	50 --- 99
		Mode -3	100---149
		Mode -4	150---255
CH-20	Color temperature	No	0 ---15
		R100%,G UP,B0%	16---35
		R DOWM,G100%,B0%	36---55
		R0%,G100%,B UP	56---75
		R0%,G DOWM,B100%	76---95
		R UP,G0%,B100%	96---115

Model	Manual	6.Greed: 0--255	Manual		
		7.Blue: 0--255			
		8.White: 0--255			
		9.Strobe: 0-255			
Channel	Master/Alone	1.Master	Master/Alone		
		2.Alone			
	1.21 CH	1.21 CH	Select channel mode		
				2.25 CH	2.25 CH
				3.33 CH	3.33 CH
				4. 129 CH	4.129 CH
5.106 CH	5. 106 CH				
Display	Display	1.YES 2.NO		Display font forward and reverse settings	
Language	English or Chinese		Choose a language		
Reset	YES or NO		Reset		
Information	1. CH Value		Show all channel information		
	2.Temp ____°C		Display LED board temperature		
	3.Soft V1.0				
	4.IP		002.050.164.014		
	5.Mask		255.000.000.000		

## 4.DMX Channel List

### Model 1 - CH21

Channel	Display	Function	Value
CH-1	Red	Red dimming	0 --- 255
CH-2	Red adjustment	Red adjustment	0 --- 255
CH-3	Green	Green dimming	0 --- 255
CH-4	Green adjustment	Green adjustment	0 --- 255
CH-5	Blue	Blue dimming	0 --- 255
CH-6	Blue adjustment	Blue dimming	0 --- 255
CH-7	White	White dimming	0 --- 255
CH-8	White adjustment	White adjustment	0 --- 255
CH-9	Color temperature	No	0--15
		R100%,G UP,B0%	16--35
		R DOWM,G100%,B0%	36--55
		R0%,G100%,B UP	56--75
		R0%,G DOWM,B100%	76--95
		R UP,G0%,B100%	96--115

### Model 4 - CH 129

Channel	Display	Function	Value
CH-1	Pan	Pan control	0 --- 255
CH-2	Pan adjustment	Pan Fine tuning control	0 --- 255
CH-3	Tilt	Tilt control	0 --- 255
CH-4	Tilt adjustment	Tilt Fine tuning control	0 --- 255
CH-5	XY speed	Speed from fast to slow	0 --- 255
CH-6	Zoom	Angle from small to large	0 --- 255
CH-7	Lens rotation	0~60°	0-155
		Clockwise infinite rotation from fast to slow	156-205
		Counterclockwise rotation from slow to fast	206-255
CH-8	Dimmer	dark to bright linear dimming	0 --- 255
CH-9	Dimming fine-tuning	Dimming fine-tuning control	0--255
CH-10	Strobe	Turn on the light	0---3
		Synchro strobe speed	4---203
		From slow to fast (1HZ-25HZ)	
		Random strobe	204--255

		Mixed color dynamic pattern 19	235--255
CH-24	Pattern translation (with 23 channels)	Select dynamic pattern scene	0--255
CH-25	Dynamic pattern speed (with 17 channels)	No	0--9
		Forward, from fast to slow	10--132
		Go backward, from slow to fast	133--255
CH-26	Pattern effect fade	Pattern effect fade	0--255
CH-27	Background total dimming	Background total dimming from 0 - 100%	0--255
CH-28	Background strobe	Background strobe	0--255
CH-29	Back color Red	dark to bright linear dimming	0-255
CH-30	Back color Green	dark to bright linear dimming	0-255
CH-31	Back color Blue	dark to bright linear dimming	0-255
CH-32	Back color White	dark to bright linear dimming	0-255
CH-33	Reset	NO	0-250
		Reset within 5s	251-255

CH-9	Color temperature	R100%,G0%,B DOWM	116--135
		R100%,G UP,B UP	136--155
		R DOWM,G DOWM, B 100%	156--175
		R100%G100%B100%W100%	176--195
		2800K	196--200
		3200K	201--205
		4000K	206--210
		4500K	211--215
		5000K	216--220
		5600K	221--225
		6500K	226--230
		7000K	231--235
		7500K	236--240
		8000K	241--255
CH-10	Macro color	No	0--9
		Macro color 1	10--19
		Macro color 2	20--29
		.....	.....

CH-10	Macro color	Macro color 24	240--249
		Macro color 25	250--255
CH-11	Dimmer	dark to bright linear dimming	0 --- 255
CH-12	Dimmer adjust	Dimmer adjustment control	0 --- 255
CH-13	Strobe	Turn on the light	0---3
		Synchro strobe speed slow to fast (1HZ-25HZ)	4---203
		Random strobe	204--255
CH-14	Pan	Pan control	0 --- 255
CH-15	Pan adjustment	Pan adjustment control	0 --- 255
CH-16	Tilt	Tilt control	0 --- 255
CH-17	Tilt adjustment	Tilt adjustment control	0 --- 255
CH-18	Zoom	Zoom	0-255
CH-19	Lens rotation	0~60°	0-155
		Clockwise infinite rotation	156-205
		Counterclockwise rotation	206-255
CH-20	Dimming Mode	Mode -1	0 --- 49
		Mode -2	50 --- 99
		Mode -3	100---149

CH-22	Static pattern	No	0--6
		Monochrome pattern 1	7--13
		Monochrome pattern 2	14--20
		.....(7 numbers 1 pattern)	.....
		Monochrome pattern 26	182--188
		Mixed color pattern 1	189-195
		Mixed color pattern 2	196--202
		....(7 numbers 1 pattern)	....
		Mixed color pattern 8	245--251
		Mixed color pattern 9	252--255
CH-23	Dynamic pattern	NO	0--9
		Monochrome dynamic pattern 1	10--12
		Monochrome dynamic pattern 2	13--15
		.....(3 numbers 1 pattern)	.....
		Monochrome pattern 57	178--180
		Mixed color dynamic pattern 1	181--183
		Mixed color dynamic pattern 2	184--186
		.....(3numbers 1 pattern)	.....
Mixed color dynamic pattern 18	232--234		

CH-20	Color temperature	R DOWM,G DOWM, B 100%	156---175
		R100%,G100%,B100%,W100%	176---195
		2800K	196---200
		3200K	201---205
		4000K	206---210
		4500K	211---215
		5000K	216---220
		5500K	221---225
		5600K	226--230
		6500K	231--235
		7000K	236--240
		8000K	241--245
CH-21	Macro color	No	0--9
		Macro color 1	10--19
		Macro color 2	20--29
		....(10 numbers 1 macro color)	....
		Macro color 24	240--249
		Macro color 25	250--255

		Mode -4	150---255
CH-21	Reset	NO	0-250
		Reset within 5s	251---255

### Model 2 - CH25

Channel	Display	Function	Value
CH-1	Pan	Pan control	0 --- 255
CH-2	Pan adjustment	Pan Fine tuning control	0 --- 255
CH-3	Tilt	Tilt control	0 --- 255
CH-4	Tilt adjustment	Tilt Fine tuning control	0 --- 255
CH-5	XY speed	Speed from fast to slow	0 --- 255
CH-6	Zoom	Angle from small to large	0 --- 255
CH-7	Lens rotation	0~60°	0-155
		Clockwise infinite rotation from fast to slow	156-205
		Counterclockwise rotation from slow to fast	206-255
CH-8	Dimmer	dark to bright linear dimming	0 --- 255
CH-9	Strobe	Turn on the light	0---3

CH-9	Strobe	Synchro strobe speed	4---203
		From slow to fast (1HZ-25HZ)	
		Random strobe	204--255
CH-10	R dimming	dark to bright linear dimming	0-255
CH-11	G dimming	dark to bright linear dimming	0-255
CH-12	B dimming	dark to bright linear dimming	0-255
CH-13	W dimming	dark to bright linear dimming	0-255
CH-14	Color temperature	No	0 ---15
		R100%,G UP,B0%	16---35
		R DOWM,G100%,B0%	36---55
		R0%,G100%,B UP	56---75
		R0%,G DOWM,B100%	76---95
		R UP,G0%,B100%	96---115
		R100%,G0%,B DOWM	116---135
		R100%,G UP,B UP	136---155
		R DOWM,G DOWM, B 100%	156---175

CH-14	Green trim	Green trim	0-255
CH-15	Blue dimming	Blue dimming	0-255
CH-16	Blue trim	Blue trim	0-255
CH-17	White dimming	White dimming	0-255
CH-18	White trim	White trim	0-255
CH-19	Dimming Mode	Mode -1	0 --- 49
		Mode -2	50 --- 99
		Mode -3	100---149
		Mode -4	150---255
CH-20	Color temperature	No	0 ---15
		R100%,G UP,B0%	16---35
		R DOWM,G100%,B0%	36---55
		R0%,G100%,B UP	56---75
		R0%,G DOWM,B100%	76---95
		R UP,G0%,B100%	96---115
		R100%,G0%,B DOWM	116---135
		R100%,G UP,B UP	136---155

CH-3	Tilt	Tilt control	0 --- 255
CH-4	Tilt adjustment	Tilt Fine tuning control	0 --- 255
CH-5	XY speed	Speed from fast to slow	0 --- 255
CH-6	Zoom	Angle from small to large	0 --- 255
CH-7	Lens rotation	0~60°	0-155
		Clockwise infinite rotation from fast to slow	156-205
		Counterclockwise rotation from slow to fast	206-255
CH-8	Dimmer	dark to bright linear dimming	0 --- 255
CH-9	Dimming fine-tuning	Dimming fine-tuning control	0--255
CH-10	Strobe	Turn on the light	0---3
		Synchro strobe speed	4---203
		From slow to fast (1HZ-25HZ)	
		Random strobe	204--255
CH-11	Red dimming	Red dimming	0-255
CH-12	Red trim	Red trim	0-255
CH-13	Green dimming	Green dimming	0-255

CH-14	Color temperature	R100%,G100%,B100%,W100%	176---195
		2800K	196---200
		3200K	201---205
		4000K	206---210
		4500K	211---215
		5000K	216---220
		5500K	221---225
		5600K	226--230
		6500K	231--235
CH-15	Macro color	7000K	236--240
		8000K	241--245
		No	0--9
		Macro color 1	10--19
		Macro color 2	20--29
		....(10 numbers 1 macro color)	....
CH-16	Static pattern	Macro color 24	240--249
		Macro color 25	250--255
		No	0--9
		Monochrome pattern 1	10--12

CH-16	Static pattern	Monochrome pattern 2	13--15
		.....(3 numbers 1 pattern)	.....
		Monochrome pattern 67	208--210
		Mixed color pattern 1	211--213
		Mixed color pattern 2	214--216
		....(3 numbers 1 pattern)	....
		Mixed color pattern 14	250--252
		Mixed color pattern 15	253--255
CH-17	Dynamic pattern	NO	0--9
		Monochrome dynamic pattern 1	10--14
		Monochrome dynamic pattern 2	15--19
		.....(5 numbers 1 pattern)	.....
		Monochrome pattern 30	155--159
		Mixed color dynamic pattern 1	160--164
		Mixed color dynamic pattern 2	165--169
		.....(5 numbers 1 pattern)	.....
		Mixed color dynamic pattern 13	220--224
		Mixed color dynamic pattern 14	225--255
	Dynamic pattern speed	Forward, from fast to slow (with 17CH)	0--127

16

CH-18		Reverse, from slow to fast(with 17CH)	128--255
CH-19	Dynamic pattern speed (with 17 channels)	No	0--9
		Forward, from fast to slow	10--132
		Go backward, from slow to fast	133--255
CH-20	Back color R	dark to bright linear dimming	0-255
CH-21	Back color G	dark to bright linear dimming	0-255
CH-22	Back color B	dark to bright linear dimming	0-255
CH-23	Back color W	dark to bright linear dimming	0-255
CH-20	Dimming Mode	Mode -1	0 --- 49
		Mode -2	50 --- 99
		Mode -3	100---149
		Mode -4	150---255
CH-25	Reset	NO	0-250
		Reset within 5s	251-255

### Model 3 - CH33

Channel	Display	Function	Value
CH-1	Pan	Pan control	0 --- 255
CH-2	Pan adjustment	Pan Fine tuning control	0 --- 255

17