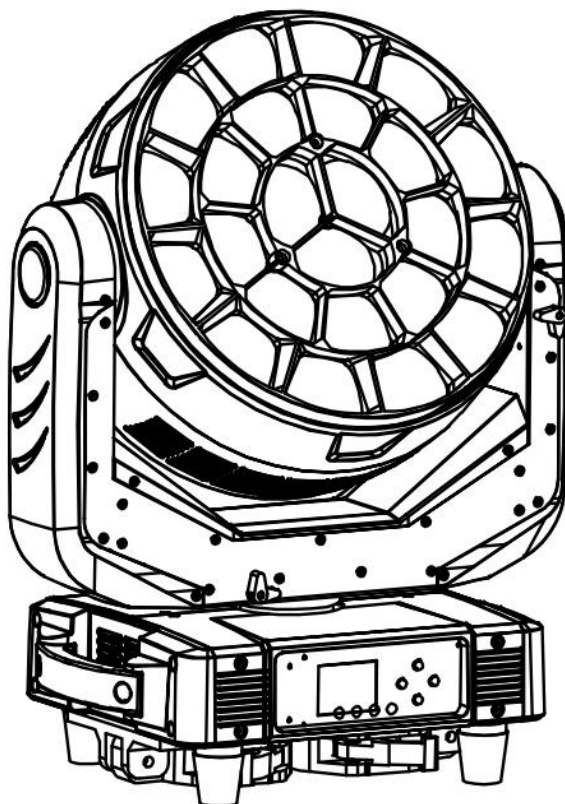

Wash Zoom 24*60w Led moving head



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.

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°C. DO NOT operate it where the temperature is higher than this Unit surface temperature may reach up to 85°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.

2. Technical Specifications

Light Source: 24*60W 4IN1 RGBW LED

Led 3 ring control effect

Average lifespan> 50000 hours

Beam Angle:3.5°- 45°

Glass light guide + PMMA high quality optical lens

Power Consumption: 1500W

Power factor PF \geq 0.95

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

Net Weight: 23.5 kg

Dimension: 444mm \times 376mm \times 573mm

Working temperature: -10 $^{\circ}$ C \sim 45 $^{\circ}$ C

Control

DMX Channel:20/24/32/44 Channels

Control Protocol: DMX512/RDM

Pan/Tilt

Pan : 540 $^{\circ}$,accuracy 2.11 $^{\circ}$ /step, fine-tuning accuracy: 0.008 $^{\circ}$;

Tilt : 270 $^{\circ}$,accuracy 0.86 $^{\circ}$ /step, fine-tuning accuracy: 0.0034 $^{\circ}$;

Using magnetic coded reset system

Construction

Display:2.4-inch TFT color display;Chinese and English languages can be switched,180 $^{\circ}$ reversible TFT Display

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

Powercon in

Protection Rating: IP20

Electronic control technology:

Menu or console control lamp reset;

0-100% dimming;

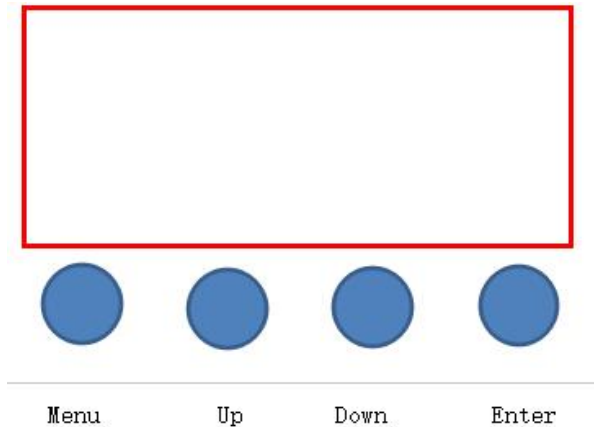
Constant current drive mode;

Temperature sensor detection, intelligent adjustment of Led power;

Light work information can be read on menu;

Intelligent fan speed control

3. How To Control The Unit



Display:

- 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
- 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

	1.Pan Degree	1) 540°, 2)360°	Pan move angle selection
	2.Mic Sense	001 - 100	Sound sensitivity adjustment
	3.Pan Invert	1.NO 2.YES	X axis forward and reverse settings

Menu	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.Default	Yes	Reset	
		No		
	8.Adjust	Pass Word: ****		
		Pan:0 - 255	<p>Change the value of Pan/Tilt/Focus/Rotation to correct the angle;</p> <p>Change the value of R/G/B/W to adjust the white balance</p>	
		Tilt:0 - 255		
		Focus:0 - 255		
		Rotation:0 - 255		
Red:0 - 255				
Green:0 - 255				
Blue:0 - 255				
White:0 - 255				
Address	Setting DMX value from 001 - 512			
Model	DMX512		Set control mode	
	Auto			
	Sound			
	Manual	1.pan:0-255		Manual
		2.Tilt (Y) :0--255		
		3.Focus:0--255		
		4.Red: 0--255		
		5.Greed: 0--255		
6.Blue: 0--255				
7.White: 0--255				

		8.Strobe: 0-255	Manual
	Master/ Alone	1.Master	Master/Alone
		2.Alone	
Channel	1.20 CH	1.21 CH	Select channel mode
	2.24 CH	2.25 CH	
	3.32 CH	3.33 CH	
	4. 44 CH	4.129 CH	
Display	Display	1.YES 2.NO	Display font forward or 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 V.XXX		

4.DMX Channel List

Model 1 - CH20

Channel	Display	Function	Value
CH-1	Red	Red dimming	0 --- 255
CH-2	Red fine adjust	Red adjustment	0 --- 255
CH-3	Green	Green dimming	0 --- 255
CH-4	Green fine adjust	Green adjustment	0 --- 255
CH-5	Blue	Blue dimming	0 --- 255
CH-6	Blue fine adjust	Blue dimming	0 --- 255

CH-7	White	White dimming	0 --- 255
CH-8	White fine adjust	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
		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
CH-9	Color temperature	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 function	0--9
		Macro color 1	10--19
		Macro color 2	20--29
		Per 10 value one color.....	.....
		Macro color 24	240--249
		Macro color 25	250--255
CH-11	Dimmer	dark to bright linear dimming	0 --- 255
CH-12	Dimmer fine adjust	Dimmer fine adjustment	0 --- 255
CH-13	Strobe	Led on	0---3
		synchronously strobe speed slow to fast (1HZ-25HZ)	4---203
		Random strobe	204--255
CH-14	Pan	Pan control	0 --- 255
CH-15	Pan fine adjust	Pan adjustment control	0 --- 255
CH-16	Tilt	Tilt control	0 --- 255
CH-17	Tilt fine adjust	Tilt adjustment control	0 --- 255
CH-18	Zoom	Zoom adjustment	0-255

CH-19	Dimming Mode	Mode -1	0 --- 49
		Mode -2	50 --- 99
		Mode -3	100---149
		Mode -4	150---255
CH-20	Reset	NO function	0-250
		Reset within 5s	251---255

Model 2 - CH24

Channel	Display	Function	Value
CH-1	Pan	Pan control	0 --- 255
CH-2	Pan fine adjust	Pan Fine adjust	0 --- 255
CH-3	Tilt	Tilt control	0 --- 255
CH-4	Tilt fine adjust	Tilt Fine adjust	0 --- 255
CH-5	Pan/tilt speed	Speed from fast to slow	0 --- 255
CH-6	Zoom	Angle from small to large	0 --- 255
CH-7	Dimmer	dark to bright linear dimming	0 --- 255
CH-8	Strobe	Led on	0--3
		Synchronously strobe From slow to fast (1HZ-25HZ)	4---203

		Random strobe	204--255
CH-9	R dimming	dark to bright linear dimming	0-255
CH-10	G dimming	dark to bright linear dimming	0-255
CH-11	B dimming	dark to bright linear dimming	0-255
CH-12	W dimming	dark to bright linear dimming	0-255
CH-13	Color temperature	No function	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
		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-14	Macro color	No function	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
CH-15	Static pattern	No function	0--36
		pattern 1	37--73
		pattern 2	74--110
		.....(37 value per 1 pattern)	.....
		pattern 6	222--255
		NO function	0--9
		Single color dynamic pattern 1	10--19
		Single color dynamic pattern 2	20--29
		.....(10 DMX value per pattern)	.....

CH-16	Dynamic pattern	Single color dynamic pattern 8	80--89
		mixed color dynamic pattern 1	90--99
		Mixed color dynamic pattern 2	100--109
		.....(10 DMX value per pattern)	.....
		Mixed color dynamic pattern 14	220--229
		Mixed color dynamic pattern 15	225--255
CH--17	Pattern translation(work with CH 16)	Select dynamic pattern scene	0-255
CH-18	Dynamic pattern speed (work with CH 16)	No function	0--9
		Forward, from fast to slow	10--132
		Go backward, from slow to fast	133--255
CH-19	Back color R	dark to bright linear dimming	0-255
CH-20	Back color G	dark to bright linear dimming	0-255
CH-21	Back color B	dark to bright linear dimming	0-255
CH-22	Back color W	dark to bright linear dimming	0-255
CH-23	Dimming Mode	Mode -1	0 --- 49
		Mode -2	50 --- 99
		Mode -3	100---149
		Mode -4	150---255
		NO function	0-250

CH-24	Reset	Reset within 5s	251-255
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Model 3 - CH32

Channel	Display	Function	Value
CH-1	Pan	Pan control	0 --- 255
CH-2	Pan fine adjust	Pan Fine adjust	0 --- 255
CH-3	Tilt	Tilt control	0 --- 255
CH-4	Tilt fine adjust	Tilt Fine adjust	0 --- 255
CH-5	Pan/Tilt speed	Speed from fast to slow	0 --- 255
CH-6	Zoom	Angle from small to large	0 --- 255
CH-7	Dimmer	dark to bright linear dimming	0 --- 255
CH-8	Dimming fine	Dimming fine	0--255
CH--9	Strobe	Led on	0-3
		Synchronously strobe From slow to fast (1HZ-25HZ)	4---203
		Random strobe	204--255
CH-10	Red dimming	Red dimming	0-255
CH-11	Red fine	Red fine	0-255

CH-12	Green dimming	Green dimming	0-255
CH-13	Green fine	Green fine	0-255
CH-14	Blue dimming	Blue dimming	0-255
CH-15	Blue fine	Blue fine	0-255
CH-16	White dimming	White dimming	0-255
CH-17	White fine	White fine	0-255
CH-18	Dimming Mode	Mode -1	0 --- 49
		Mode -2	50 --- 99
		Mode -3	100---149
		Mode -4	150---255
CH-19	Color temperature	No function	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
		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-20	Macro color	No function	0--9
		Macro color 1	10--19
		Macro color 2	20--29
		..(10 DMX value 1 macro color)	....
		Macro color 24	240--249
		Macro color 25	250--255
CH-21	Static pattern	No function	0--36
		pattern 1	37--73
		pattern 2	74--110
		.....(37 DMX value per pattern)	....

		pattern 6	222--255
CH-22	Dynamic pattern	NO function	0--9
		Single color dynamic pattern 1	10--19
		Single color dynamic pattern 2	20--29
		.....(10 DMX value 1 pattern)	.....
		Single color dynamic pattern 8	80--89
		Mixed color dynamic pattern 1	90--99
		Mixed color dynamic pattern 2	100--109
		.....(10 DMX value 1 pattern)	.....
		Mixed color dynamic pattern 14	220--229
		Mixed color dynamic pattern 15	230--255
CH-23	Pattern translation (with 22 channels)	Select dynamic pattern scene	0--255
CH-24	Dynamic pattern speed (work with 22 channels)	No function	0--9
		Forward, from fast to slow	10--132
		Go backward, from slow to fast	133--255
CH-25	Pattern effect fade	Pattern effect fade	0--255
CH-26	Background total dimming	Background total dimming from 0 - 100%	0--255
CH-27	Background	Background strobe	0--255

	strobe		
CH-28	Back color Red	dark to bright linear dimming	0-255
CH-29	Back color Green	dark to bright linear dimming	0-255
CH-30	Back color Blue	dark to bright linear dimming	0-255
CH-31	Back color White	dark to bright linear dimming	0-255
CH-32	Reset	NO function	0-250
		Reset within 5s	251-255

Model 4 - CH 44

Channel	Display	Function	Value
CH-1	Pan	Pan control	0 --- 255
CH-2	Pan fine adjust	Pan fine adjust	0 --- 255
CH-3	Tilt	Tilt control	0 --- 255
CH-4	Tilt fine adjust	Tilt fine adjust	0 --- 255
CH-5	Pan/Tilt speed	Speed from fast to slow	0 --- 255
CH-6	Zoom	Angle from small to large	0 --- 255
CH-7	Dimmer	dark to bright linear dimming	0 --- 255
CH-8	Dimming fine	Dimming fine-tuning control	0--255

CH-9	Strobe	Turn on the light	0---3
		synchronously strobe speed From slow to fast (1HZ-25HZ)	4---203
		Random strobe	204--255
CH-10	Red dimming	Red dimming	0-255
CH-11	Red fine	Red fine	0-255
CH-12	Green dimming	Green dimming	0-255
CH-13	Green fine	Green fine	0-255
CH-14	Blue dimming	Blue dimming	0-255
CH-15	Blue fine	Blue fine	0-255
CH-16	White dimming	White dimming	0-255
CH-17	White fine	White trim	0-255
CH-18	Dimming Mode	Mode -1	0 --- 49
		Mode -2	50 --- 99
		Mode -3	100---149
		Mode -4	150---255
		No function	0 ---15
		R100%,G UP,B0%	16---35
		R DOWM,G100%,B0%	36---55
		R0%,G100%,B UP	56---75

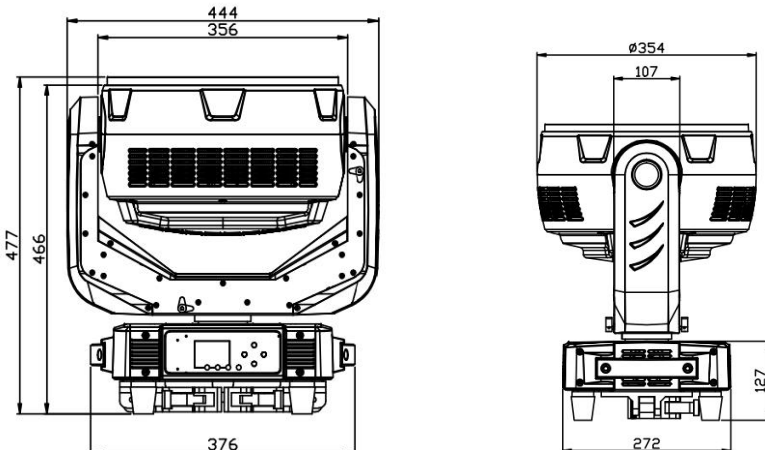
CH-19	Color temperature	R0%,G DOWM,B100%	76---95
		R UP,G0%,B100%	96---115
		R100%,G0%,B DOWM	116---135
		R100%,G UP,B UP	136---155
		R DOWM,G DOWM, B 100%	156---175
		R100%,G100%,B100%,W100%	176---195
		2800K	196---200
		3200K	201---205
		4000K	206---210
		4500K	211---215
		5000K	216---220
		5500K	221---225
		5600K	226--230
		6500K	231--235
7000K	236--240		
8000K	241--245		
CH-20	Macro color	No function	0--9
		Macro color 1	10--19
		Macro color 2	20--29
		....(10 DMX value 1 macro color)	....

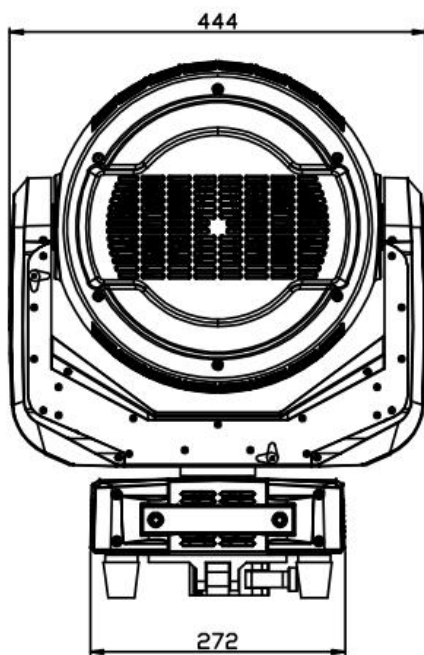
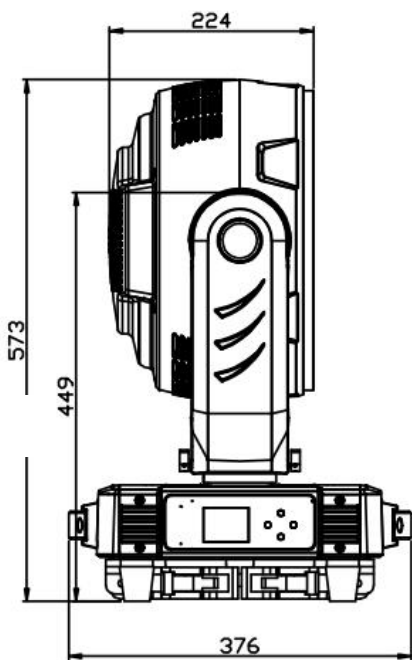
		Macro color 24	240--249
		Macro color 25	250--255
CH-21	Static pattern	No function	0--36
		pattern 1	37--73
		pattern 2	74--110
		.....(37 DMX value 1 pattern)	.....
		pattern 6	222--255
CH-22	Dynamic pattern	NO function	0--9
		Single color dynamic pattern 1	10--19
		Single color dynamic pattern 2	20--29
		.....(10 DMX value 1 pattern)	.....
		Single color dynamic pattern 8	80--89
		Mixed color dynamic pattern 1	90--99
		Mixed color dynamic pattern 2	100--109
		.....(10 DMX value 1 pattern)	.....
		Mixed color dynamic pattern 14	220--229
		Mixed color dynamic pattern 15	230--255
CH-23	Pattern translation (work with 22 channels)	Select dynamic pattern scene	0--255
CH-24	Dynamic pattern	No function	0--9

	speed (work with 22 channels)	Forward, from fast to slow	10--132
		Go backward, from slow to fast	133--255
CH-25	Pattern effect fade	Pattern effect fade	0--255
CH-26	Background total dimming	Background total dimming from 0 - 100%	0--255
CH-27	Background strobe	Background strobe	0--255
CH-28	Back color Red	dark to bright linear dimming	0-255
CH-29	Back color Green	dark to bright linear dimming	0-255
CH-30	Back color Blue	dark to bright linear dimming	0-255
CH-31	Back color White	dark to bright linear dimming	0-255
CH-32	Reset	NO function	0-250
		Reset within 5s	251-255
CH-33	R1 LED dimming	Red1 LED dimming	0-255
CH-34	G1 LED dimming	Green1 LED dimming	0-255
CH-35	B1 LED dimming	Blue1 LED dimming	0-255
CH-36	W1 LED dimming	White1 LED dimming	0-255
CH-37	R2 LED dimming	Red2 LED dimming	0-255
CH-38	G2 LED dimming	G2 LED dimming	0-250
CH-39	B2 LED dimming	Blue2 LED dimming	0-255

CH-40	W2 LED dimming	White2 LED dimming	0-255
CH-41	R3 LED dimming	Red3 LED dimming	0-255
CH-42	G3 LED dimming	Green3 LED dimming	0-255
CH-43	B3 LED dimming	Blue3 LED dimming	0-255
CH-44	W3 LED dimming	White3 LED dimming	0-255

5. Shape





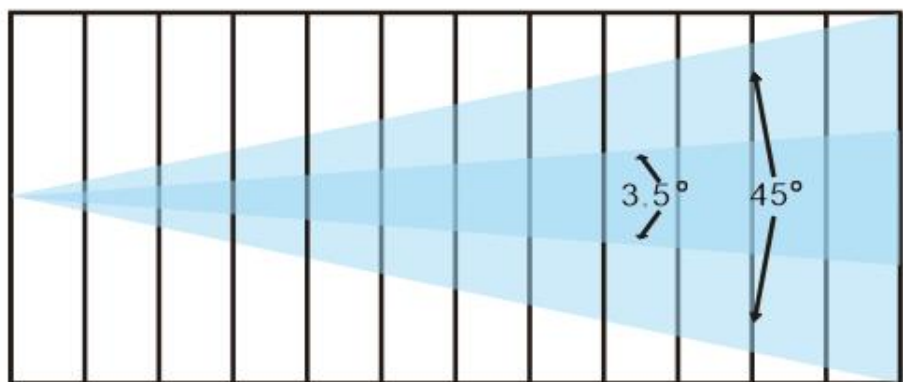
6.LUX Date

Beam Angle = 3.5°

R lux	9430	7080	3850
G lux	28900	21100	11900
B lux	5220	3570	2070
W lux	39100	29300	16900
4in1 lux	77300	56700	32500

Beam Angle = 45°

R lux	909	369	154
G lux	2870	1210	494
B lux	552	234	94
W lux	3750	1610	640
4in1 lux	7470	3120	1290



Distance (m)		3	5	8
Spot diameter (m) 3.5°		0.57	0.75	1.1
Spot diameter (m) 45°		2.8	4.3	

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.

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.