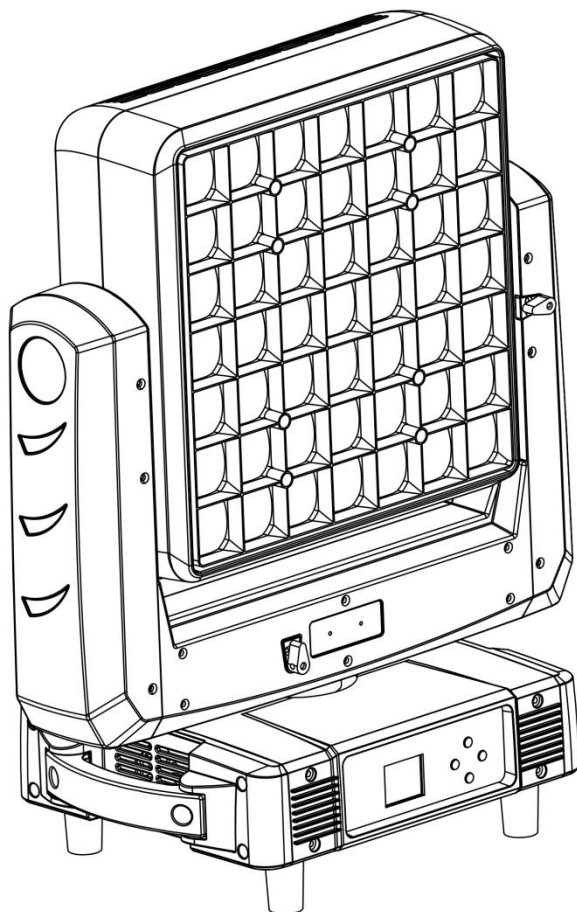


# 4920Z

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## 49\*20w Matrix Zoom Moving Head



User manual

Please read the instructions carefully before use

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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't 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 50 cm 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.

## 2. Technical Specifications

Light Sources: 49\*20W 4IN1 RGBW LED

Beam Angle: 4°- 46°

Power Consumption: 760W ± 5%, power factor PF ≥ 0.95; standby power: 26W

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

Dimension: 477mm × 272mm × 579.5mm

Net Weight: 22.5 kg

Carton Package 1in1 size: 60\*60\*46cm

Gross Weight: 27.2 kg

Flight Case Package 2in1 size: 79\*56\*79cm

Gross Weight: 87.8 kg

### Control

DMX Channel: 22/25/33/229/206 Channels

Control Modes: DMX512/Master-Slave/Auto Run/Music/Artnet

### Pan/Tilt

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

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

Pan/Tilt Resolution: 8/16 bit

Tilt infinite rotation; Using photoelectric reset system

### Construction

Display: 180° reversible 1.8 inch TFT colorful Display

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

Power Socket: Power Con in/out

Protection Rating: IP20

### Features

Full light domain dimming, 65536 levels of dimming accuracy;

Fast strobe 1~25Hz; preset various kinds of color macro function; preset

various kinds of effect macro function;

LED temperature protection & Speed of fan automatic adjustment based on the temperature of the head;

Single LED control, zoom effect, Tilt infinite rotation.

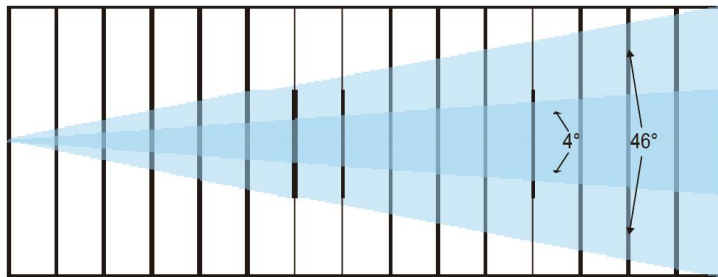
### 3 LUX Date

#### Beam Angle = 4°

R lux	13000	9010	6360	2680
G lux	32400	19100	14000	5870
B lux	4690	3910	2750	1160
W lux	32900	24800	18200	7550
4in1 lux	81600	54400	38800	16400

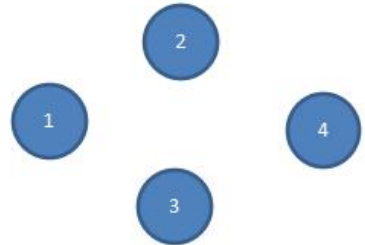
#### Beam Angle = 46°

R lux	7220	873	350	143
G lux	16100	2060	802	320
B lux	3270	419	162	64.1
W lux	20300	2570	1010	406
4in1 lux	44100	5560	2210	888



Distance (m)		1	3	5	8
Spot diameter (m) 4°		0.48	0.69	0.90	1.35
Spot diameter (m) 46°		0.85	2.52	3.66	None

## 4. 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 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

	1.Pan Degree	1)540 ° , 2)360°	Pan running angle selection
	2.Mic Sense	001 - 100	Sound sensitivity adjustment
	3.Language	English	Chinese

Menu	4.No Signal	1.Black Out 2.Hold	
	5.Fan Set	1.Auto 2. Low 3.High	
	6.ArtNet Set	ArtNet Enable:	1.ON 2.OFF
		2.Universe:0---255	
		3.IP Mode:	A.2.X.X.X Auto B.10.X.X.X Auto C.Custom
		4.Custom IP	192.168.000.001
		5.SubNetMask	255.000.000.000
	7.Reset	Yes	Reset
		No	
	8.Default	Yes	Default
		No	
	9.Adjust	Pass Word: up+down+up+down	
		1.Pan	0 - 255
		2.Tilt	0 - 255
		3.Focus	0 - 255
		4.Red	0 - 255
5.Green		0 - 255	
6.Blue		0 - 255	
7.White		0 - 255	
Address	Setting from 001 - 512		
		1.Yes	



Reverse	Forward or reversed setting		Pan	2.No
			Tilt	1.Yes
				2.No
			Display	1.Yes
2.No				
Information		1.CH Value		Each channel show CH value
		2.Temp _____°C		Show the temperature of led board
		3.Soft V.XXX		Show the version number
		4.IP	002.016.035.052	Default IP
		5.Mask	255.000.000.000	Default submask
Channel		1.22Channels		Select channel mode
		2.25Channels		
		3.33Channels		
		4.229Channels		
		5.206Channels		
Mode		DMX 512		
		AUTO		
		SOUND		
		1.Pan:0--255		
		2.Pan Rotation: 0--255		
		3.Tilt:0--255		

Mode	Manual control	4.Tilt Rotation: 0--255	Manual control
		5.Focus:0--255	
		6.Red1: 0--255	
		7.Greed1: 0--255	
		8.Blue1: 0--255	
		9.White1: 0--255	
		10.Strobe1: 0-255	
		11.Red2: 0--255	
		12.Greed2: 0--255	
		13.Blue2: 0--255	
		14.White2: 0--255	
		15.Strobe2: 0-255	
	Alone/Master	1.Master	Alone/Master
		2.Alone	

# 5.DMX Channel List

## Model 1 - 22Channels

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	linear color temperature	No effect	0---4
		Color temperature from warm to cold	5---255
CH-10	Macro color	No effect	0--9
		Macro color 1	10--19
		Macro color 2	20--29
		.... (10 numbers 1 macro color)	....

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	Pan/Tilt Speed	Speed fast to slow	0 --- 255
CH-19	Tilt infinite rotation control	No Funtion	0---55
		Infinite rotation from slow to fast	56---155
		Infinite rotation reversal from slow to fast	156---255
CH-20	Zoom	Zoom	0---255
		Mode -1	0 --- 49

CH-21	Dimming Mode	Mode -2	50 --- 99
		Mode -3	100---149
		Mode -4	150---255
CH-22	Reset	NO	0-250
		Reset within 5s	251---255

## Model 2 - 25Channels

Channel	Display	Function	Value
CH-1	Pan	Pan control	0 --- 255
CH-2	Pan adjustment	Pan adjustment control	0 --- 255
CH-3	Tilt	Pan control	0 --- 255
CH-4	Tilt adjustment	Tilt adjustment control	0 --- 255
CH-5	Pan/Tilt speed	Speed from fast to slow	0 --- 255
CH-6	Tilt infinite control	No effect	0---55
		Go from slow to fast	56---155
		Reverse from slow to fast	156---255
CH-7	Zoom	Zoom	0 --- 255
CH-8	Dimmer	dark to bright linear dimming	0 --- 255

CH-9	Strobe	Turn on the light	0---3
		Synchro strobe speed From slow to fast (1HZ-25HZ)	4---203
		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	linear color temperature	No effect	0---4
		Color temperature from warm to cold	5---255
CH-15	Macro color	No effect	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
		No	0--2
		pattern 1	3--5
		pattern 2	6--9

CH-16	Static pattern	.....(3 numbers 1 pattern)	.....
		pattern 59	174--176
		pattern 60	177--255
CH-17	Dynamic pattern	NO	0--9
		dynamic pattern 1	10--11
		dynamic pattern 2	12--13
		.....(2 numbers 1 pattern)	.....
		dynamic pattern 93	194--195
		dynamic pattern 94	196--255
CH-18	Pattern translation (With 17 channels)	Select a dynamic pattern scene	0-255
CH-19	Dynamic pattern speed (with 17 channels)	No effect	0---9
		Forward, from fast to slow (with 17CH)	10---132
		Reverse, from slow to fast(with 17CH)	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-24	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 - 33Channel

Channel	Display	Function	Value
CH-1	Pan	Pan control	0 --- 255
CH-2	Pan adjustment	Pan adjustment control	0 --- 255
CH-3	Tilt	Pan control	0 --- 255
CH-4	Tilt adjustment	Tilt adjustment control	0 --- 255
CH-5	Pan/Tilt speed	Speed from fast to slow	0 --- 255
CH-6	Tilt infinite control	No effect	0----55
		Go from slow to fast	56----155
		Reverse from slow to	156----255



		fast	
CH-7	Zoom	Zoom	0-255
CH-8	Dimmer	dark to bright linear dimming	0 --- 255
CH-9	Dimmer adjust	Dimmer adjusting control	0 --- 255
CH-10	Strobe	No effect	0---3
		Synchro strobe speed From slow to fast (1HZ-25HZ)	4---203
		Random strobe	204--255
CH-11	Red	Red dimming	0-255
CH-12	Red adjustment	Red adjustment	0-255
CH-13	Green	Green dimming	0-255
CH-14	Green adjustment	Green adjustment	0-255
CH-15	Blue	Blue dimming	0-255
CH-16	Blue adjustment	Blue dimming	0-255
CH-17	White	White dimming	0-255
CH-18	White adjustment	White adjustment	0-255
CH-19		Mode -1	0 --- 49
		Mode -2	50 --- 99

	Dimming Mode	Mode -3	100---149
		Mode -4	150---255
CH-20	linear color temperature	No effect	0---4
		Color temperature from warm to cold	5---255
CH-21	Macro color	No effect	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-22	Static pattern	No effect	0--2
		pattern 1	3--5
		pattern 2	6--9
		.....	..... (3 numbers and one type)
		pattern 59	174--176
		Pattern 60	177--255

CH-23	Dynamic pattern	No effect	0--9
		dynamic pattern 1	10--11
		dynamic pattern 2	12--13
		.....	..... (2 numbers and one type)
		dynamic pattern 93	194--195
		dynamic pattern 94	196--255
CH-24	Pattern translation (with 23 channels)	Select a dynamic pattern scene	0--255
CH-25	Dynamic pattern effect speed	NO	0--9
		Forward, from fast to slow(with 23CH)	10--132
		Reverse, from slow to fast(with 23CH)	133--255
CH-26	Pattern effect fade	Pattern effect fade	0-255
CH-27	Background dimming	Background 0-100% dimming	0-255
CH-28	Background strobe	Background strobe	0-255
CH-29	Pattern Back R	Pattern effect R	0-255
CH-30	Pattern Back G	Pattern effect G	0-255

CH-31	Pattern Back B	Pattern effect B	0-255
CH-32	Pattern Back W	Pattern effect W	0-255
CH-33	Reset	No effect	0-250
		Reset within 5S	251-255

## Model 4 - 229Channels

Channel	Display	Function	Value
CH-1	Pan	Pan control	0 --- 255
CH-2	Pan adjustment	Pan adjustment control	0 --- 255
CH-3	Tilt	Pan control	0 --- 255
CH-4	Tilt adjustment	Tilt adjustment control	0 --- 255
CH-5	Pan/Tilt speed	Speed from fast to slow	0 --- 255
CH-6	Tilt infinite control	No effect	0----55
		Go from slow to fast	56----155
		Reverse from slow to fast	156----255
CH-7	Zoom	Zoom	0-255

CH-8	Dimmer	dark to bright linear dimming	0 --- 255
CH-9	Dimmer adjust	Dimmer adjusting control	0 --- 255
CH-10	Strobe	No effect	0---3
		Synchro strobe speed From slow to fast (1HZ-25HZ)	4---203
		Random strobe	204--255
CH-11	Red	Red dimming	0-255
CH-12	Red adjustment	Red adjustment	0-255
CH-13	Green	Green dimming	0-255
CH-14	Green adjustment	Green adjustment	0-255
CH-15	Blue	Blue dimming	0-255
CH-16	Blue adjustment	Blue dimming	0-255
CH-17	White	White dimming	0-255
CH-18	White adjustment	White 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	linear color temperature	No effect	0---4
		Color temperature from warm to cold	5---255
CH-21	Macro color	No effect	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-22	Static pattern	No effect	0--2
		pattern 1	3--5
		pattern 2	6--9
		.....	..... (3 numbers and one type)
		pattern 59	174--176
		Pattern 60	177--255

CH-23	Dynamic pattern	No effect	0--9
		dynamic pattern 1	10--11
		dynamic pattern 2	12--13
		.....	..... (2 numbers and one type)
		dynamic pattern 93	194--195
		dynamic pattern 94	196--255
CH-24	Pattern translation (with 23 channels)	Select a dynamic pattern scene	0--255
CH-25	Dynamic pattern effect speed	NO	0--9
		Forward, from fast to slow(with 23CH)	10--132
		Reverse, from slow to fast(with 23CH)	133--255
CH-26	Pattern effect fade	Pattern effect fade	0-255
CH-27	Background dimming	Background 0-100% dimming	0-255
CH-28	Background strobe	Background strobe	0-255
CH-29	Pattern Back R	Pattern effect R	0-255
CH-30	Pattern Back G	Pattern effect G	0-255
CH-31	Pattern Back B	Pattern effect B	0-255
CH-32	Pattern Back W	Pattern effect W	0-255

CH-33	Reset	No effect	0-250
		Reset within 5S	251-255
CH-34	R1 LED dimming	0--255	R1 LED dimming
CH-35	G1 LED dimming	0--255	G1 LED dimming
CH-36	B1 LED dimming	0--255	B1 LED dimming
CH-37	W1 LED dimming	0--255	W1 LED dimming
.....	.....	.....	.....
CH-226	R49 LED dimming	0--255	R49 LED dimming
CH-227	G49 LED dimming	0--255	G49 LED dimming
CH-228	B49 LED dimming	0--255	B49 LED dimming
CH-229	W49 LED dimming	0--255	W49 LED dimming



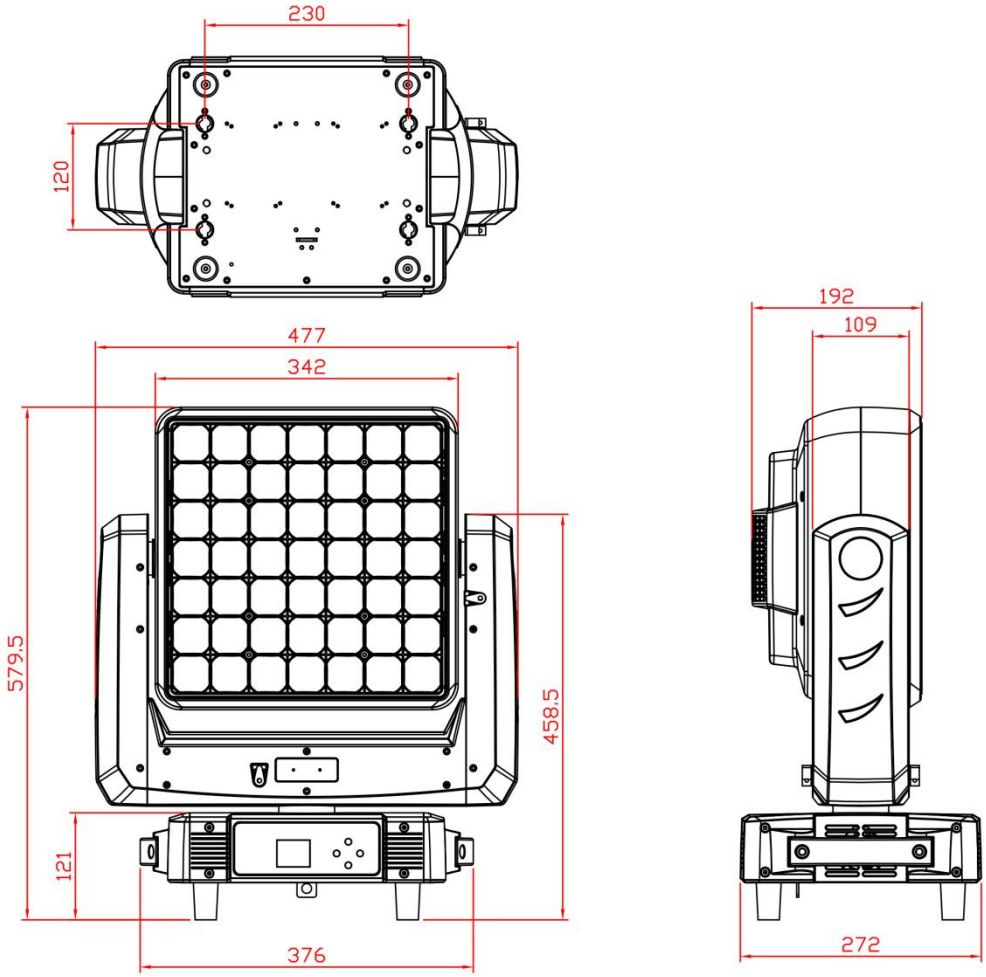
## Model 5-206Channels

(combined with ArtNet, 1~10 channels are controlled by ordinary DMX512 , 11~206channels are controlled by ArtNet )

Channel	Display	Function	Value
CH-1	Pan	Pan control	0 --- 255
CH-2	Pan adjustment	Pan adjustment control	0 --- 255
CH-3	Tilt	Pan control	0 --- 255
CH-4	Tilt adjustment	Tilt adjustment control	0 --- 255
CH-5	Pan/Tilt speed	Speed from fast to slow	0 --- 255
CH-6	Tilt infinite control	No effect	0----55
		Go from slow to fast	56----155
		Reverse from slow to fast	156----255
CH-7	Zoom	Zoom	0-255
CH-8	Reset	No effect	0-250
		Reset within 5S	251-255
CH-9	Dimmer	dark to bright linear	0 --- 255

		dimming	
CH-10	Strobe	No effect	0---3
		Synchro strobe speed From slow to fast (1HZ-25HZ)	4---203
		Random strobe	204--255
		dynamic pattern 93	194--195
		dynamic pattern 94	196--255
CH-11	R1 LED dimming	0--255	R1 LED dimming
CH-12	G1 LED dimming	0--255	G1 LED dimming
CH-13	B1 LED dimming	0--255	B1 LED dimming
CH-14	W1 LED dimming	0--255	W1 LED dimming
.....	.....	.....	.....
CH-203	R49 LED dimming	0--255	R49 LED dimming
CH-204	G49 LED dimming	0--255	G49 LED dimming
CH-205	B49 LED dimming	0--255	B49 LED dimming
CH-206	W49 LED dimming	0--255	W49 LED dimming

# 6. Shape



## 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.**