

# LIGHT SKY<sup>®</sup>

FLY DRAGON LIGHTING EQUIPMENT CO.,LTD



## LIGHT SKY<sup>®</sup>

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**LIGHT SKY<sup>®</sup>**



## PL6103

### USER MANUAL

Please read these user manual carefully before use

## INDEX

1.Safety information.....	2
2.Skill specifications and Performance trait .....	3
3.Control panel.....	4
4.Attachment and Body size.....	5
5.Distance,spot diameter and illumination diagram.....	6
6.Mounting and installation.....	7
7.Power supply and signal connection.....	8
8.Menu setting.....	10
9.Channel function.....	13
10.Circuit connecting diagram.....	17
11.Troubeshooting.....	18
12.Cleaning and maintenances.....	19
13. Duty exonerative and copyright protection.....	19

Congratulations on choosing our company product! We thank you for your custom.

- ◆ Please note that this product, as all the others in the rich my company range, has been designed and made with total quality to ensure excellent performance and best meet your expectations and requirements.
- ◆ Carefully read this user manual in its entirety and keep it safe for future reference. It is essential to know the information and comply with the instructions given in this manual to ensure the fitting is installed, used and serviced correctly and safely.
- ◆ My company disclaims all liability for damage to the fitting or to other property or persons deriving from installation, use and maintenance that have not been carried out in conformity with this user manual, which must always accompany the fitting.
- ◆ My company reserves the right to modify the characteristics stated in this user manual at any time and without prior notice.

## SAFETY INSTRUCTIONS

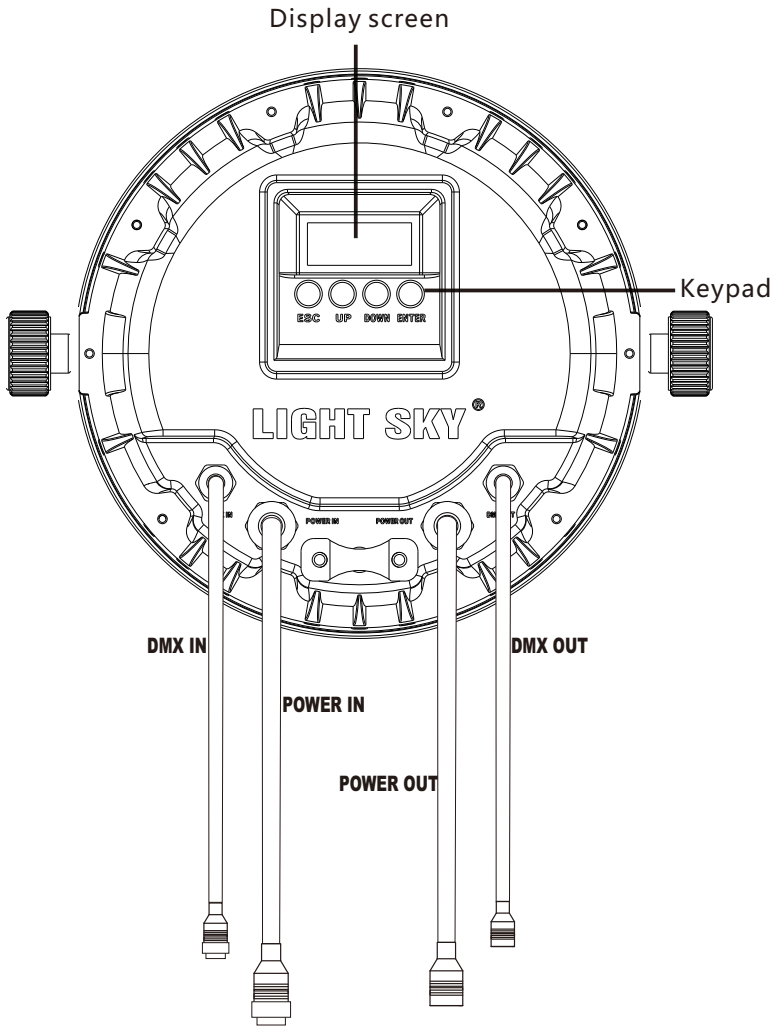
**Notice:** To guarantee proper and consistent operation, it is important to follow the guidelines in this manual. Our company will not accept responsibility for damages resulting from the misuse of this fixture due to the disregard of the information printed in this manual.

- 1. In order to ensure the light could operate normally, the ambient temperature couldn't be higher than 40°C and no lower than -10°C.
- 2. Under normal condition, the highest sectional surface temperature may be up to 60 °C.
- 3. These projectors are designed depends on the electric shock protection, the projector should be connected with the power supply system which connected ground enough. The projector's ground cable should be connected with the ground cable of the power supply system as well. The ground mark of the light metal cover should be connecting with the installation bricked steadily.
- 4. Don't use the power cable when the insulation is damaged.  
It must be the manufacturer or distributor or the professional person to change the damaged power cable in order to avoid any dangerous.
- 5. Please check the voltage, frequency data of power supply system is suitable for the mentioned on the projector. Please do avoid the different voltage between them and burn the projector.
- 6. Do not attempt to operate this fixture if the power cord has become damaged or frayed.
- 7. Never open this fixture while in use.
- 8. Never look directly into the light source. You risk injury to your retina, which may induce blindness.
- 9. Please be aware that damages caused by modifications to the device are not subject to warranty.

## Skill specifications and Performance trait

- ⊙ Voltage : AC100~240V 50/60Hz.
- ⊙ Maximum power consumption :190W
- ⊙ LED chip : CREEN 3W, R、G、B、W.
- ⊙ LED QTY : 61PCS; (R : 17PCS; G : 17PCS; B : 17PCS; W : 10PCS)
- ⊙ Chip drive current : 950mA
- ⊙ LED life : ≥50000H
- ⊙ Beam angle:Zoom function min.10°, max.50°
- ⊙ Color : RGB Color system,soft and no flicker,Single ring can be controlled separately, fast marco color system
- ⊙ Strobe:1-30 times/second electronic strobe and random strobe.
- ⊙ Dimmer :65536 class dimmer
- ⊙ Control Mode: DMX512、 Stand-alone mode、 Mater-Slave mode
- ⊙ Channel: Standard(12CH),16Bit mode(12CH),RGB mode(5CH),HSI mode(5CH)
- ⊙ Control panel:LED display screen+keypad
- ⊙ Structure : Aluminum material,honeycomb design,high quality cooling system
- ⊙ IP Rate:IP65
- ⊙ Using environment  
temperature:-10-40°C, humidity : 5%-95%
- ⊙ CE Marking  
In conformity with the European Union Low Voltage.  
Directive 2014/35/EU and Electromagnetic compatibility Directive 2014/30/EU.
- ⊙ Single carton size : 258×335×291MM
- ⊙ N.W. : 8.7KG
- ⊙ Carton size : 340×340×356MM  
N.W : 8.7KG G.W : 10KG
- ⊙ Light size(6pce ) :910×790×500MM  
N.W : 53KG G.W : 86KG

## Control panel

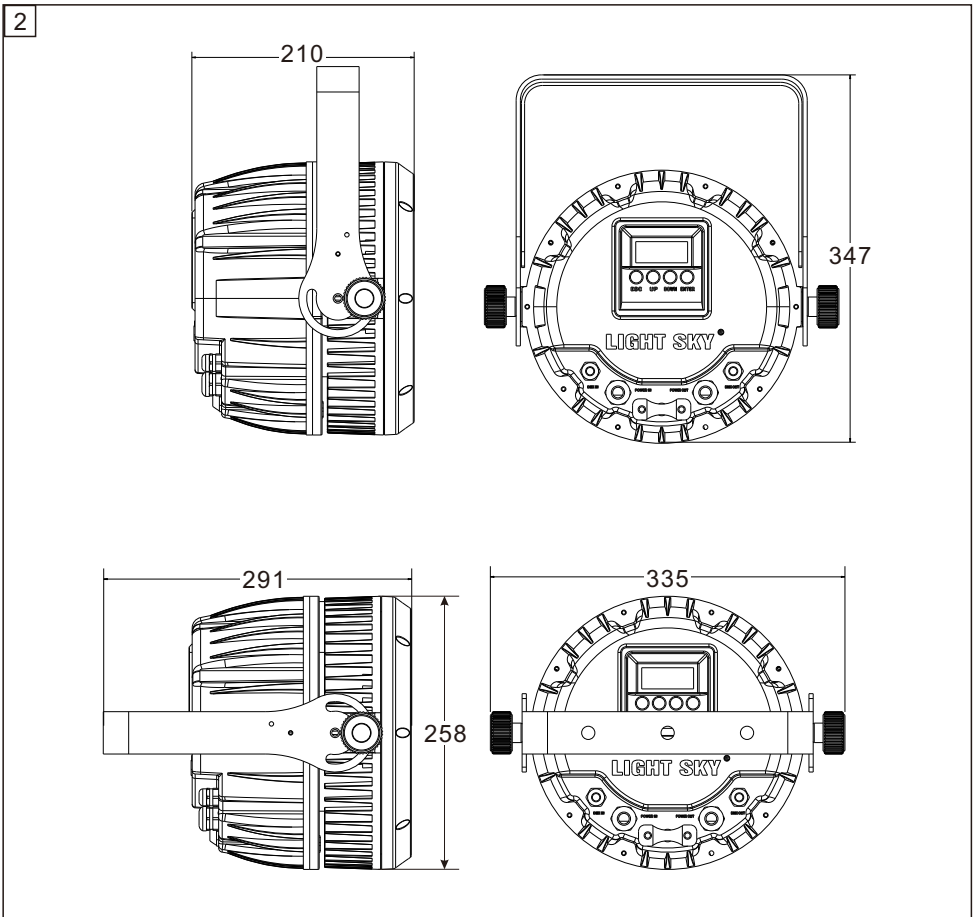


## Attachment and Body size



Attachment contents- Fig. 1

◆Each of the six stage lights delivers a power cord and a signal line.

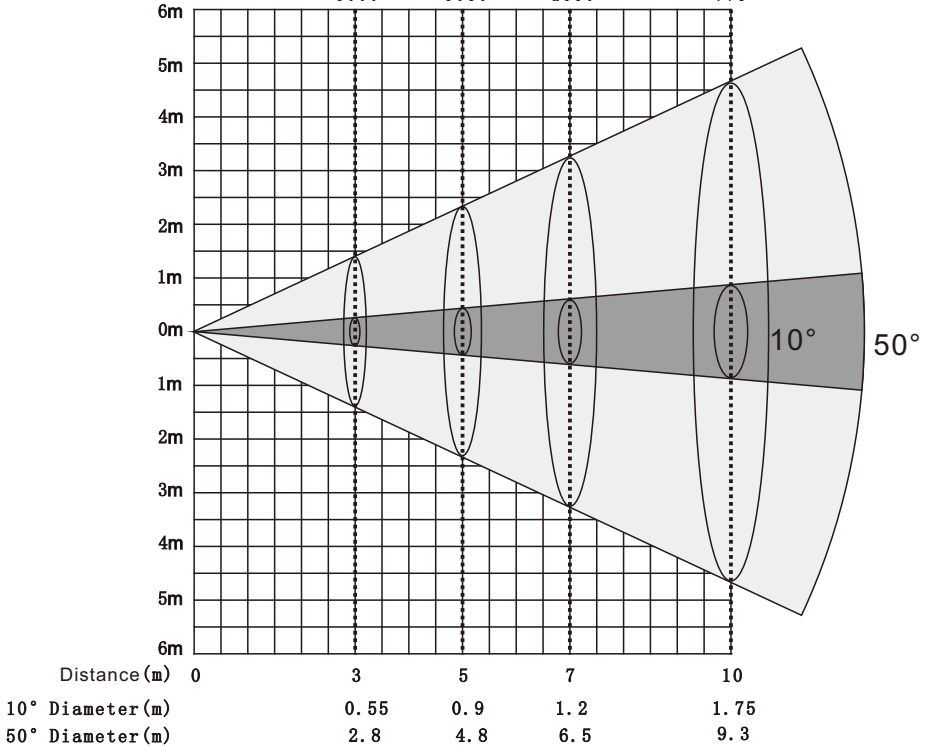


Body Size---Fig 2

## Distance, spot diameter and illumination diagram

### Distance, spot diameter and illumination diagram

50°(Lux)	R	270	100	59	31
	G	530	195	115	62
	B	68	25	14	8
	W	510	191	104	57
	RGBW	1180	430	250	136
10°(Lux)	R	1780	700	340	187
	G	3520	1440	720	354
	B	535	197	105	49
	W	3420	1280	635	320
	RGBW	8000	3080	1550	775



## Mounting and installation

### Cautions:

For added protection mount the fixtures in areas outside walking paths, seating areas, and away from areas where unauthorized personnel might reach the fixture.

Before mounting the fixture to any surface, make sure that the installation area can hold a minimum point load of 10 times the device's weight. Fixture installation must always be secured with a secondary safety attachment, such as an appropriate safety cable. To avoid injury, never stand directly below the device when mounting, removing, or servicing the fixture.

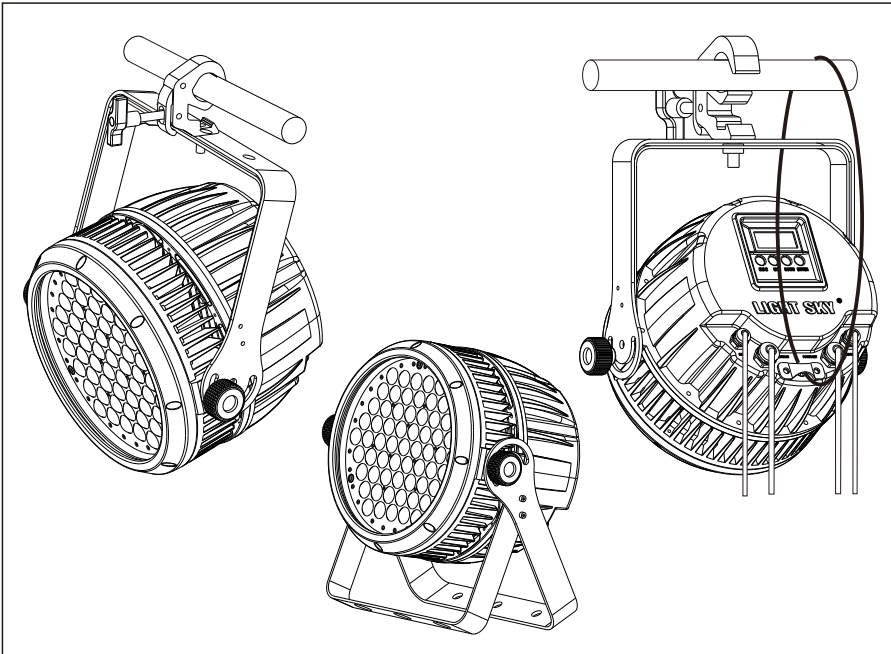
**Mounting points:** Overhead mounting requires extensive experience, including amongst others calculating working load limits, a fine knowledge of the installation material being used, and periodic safety inspection of all installation material and the fixture. If you lack these qualifications, do not attempt the installation yourself. Improper installation can result in bodily injury. Be sure to complete all rigging and installation procedures before connecting the main power cord to the appropriate wall outlet.

**caution! Be sure a qualified electrician performs all electrical connections.**

### Mounting:

Our company is fully operational in any mounting position, hanging upside-down, side mounted, or set on a flat level surface, etc. Be sure this fixture is kept at least 0.5m (about 1.6feet) away from any flammable materials (decoration etc.).

When clamp mounting; always use and install the supplied safety cable as an added safety measure to prevent accidental damage in the event of a clamp failure. See the image below.

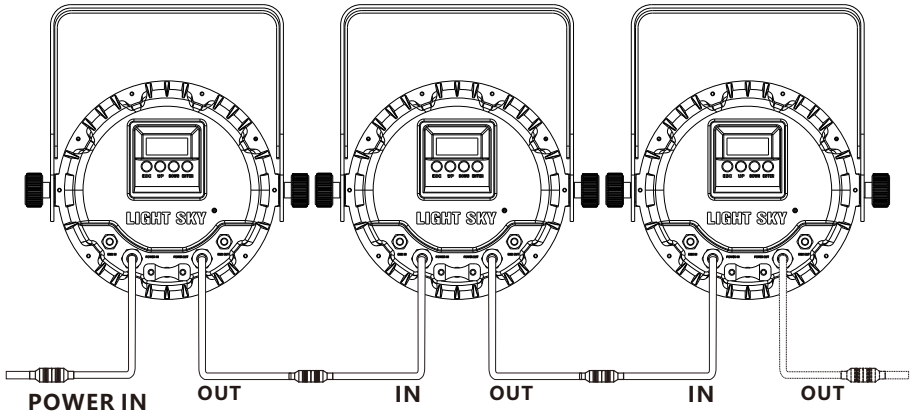






## Power supply and signal connection

### 1. Power supply

Use the professional plug to connect the projector and main power supply. Please pay attention to the voltage, frequency the same as the mentioned on the projector. Suggest each light has separately switched of the power supply so that could turn on or turn off each projector desultorily.



Wire color-coding and power connections:

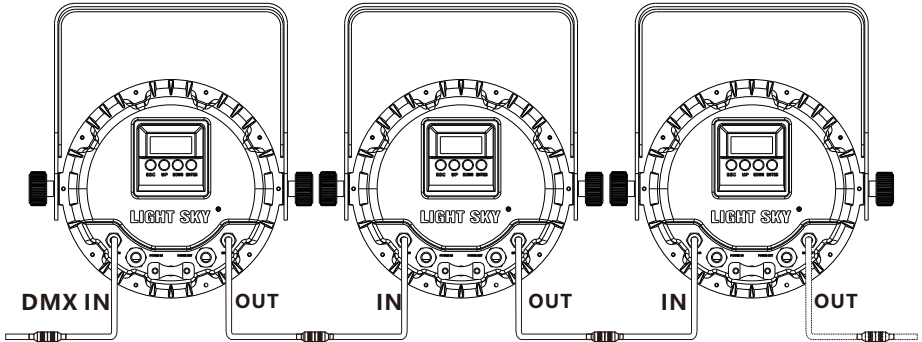
Conductor	Symbol	Wire Color (EU models)	Wire Color (US models)
live	<b>L</b>	brown	black
neutral	<b>N</b>	blue	white
ground(earth)	 or 	yellow-green	green

## 2.Signal connection

Please use the round 3/5-pin XLR plugs & sockets offered by menu manufacture to connect the first projector's output to the second projector's input and connect the second projector's output to the third device's input. And in the same way for the rest, eventually connect the last device's output, all the devices are together as the following figure.

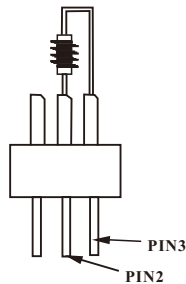
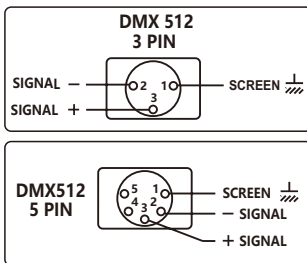
The devices' control signal output or input by using the 3/5-pin XLR plug and socket.

If need to long then the communication cable, please make sure the both side of 3/5-pin plug is one to one. (one to one, two to two, three to three). Otherwise, the communication cable will be interrupted.



Connecting to the control signal line (DMX) - Fig. 5

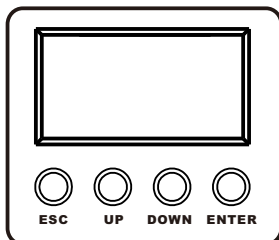
- © Please use the round 3 or 5-pin XLR plugs & sockets offered by menu manufacture to connect the first projector's output to the second projector's input and connect the second projector's output to the third projector's input. And in the same way for the rest, eventually connect the last projector's output, all the projectors are together.
- © The projectors' control signal output or input by using the 3 or 5-pin XLR plug and socket. If need to lengthen the communication cable, please make sure the both side of 3 or 5-pin plug is one to one. (one to one, two to two, three to three). Otherwise, the communication cable will be interrupted. The communication cable is 2-core screened cable 75 Ω resistance with each core is at least a 0.5mm diameter. (**Caution:** All the inside leading wire of 3 or 5-pin XLR plug couldn't touch each other or plinth).
- © Recommend to use the DMX signal terminator for the installation to avoid the electronic noise damage the digital control signal. Simply speaking, DMX terminator is an XLR connector with a 120 Ω 1/2W resistor connected across pin 2 and 3. Which is then plugged into the output socket on the last projector in the chain. Refer to the connection.



## Menu setting

### 1. Button operation

- ESC: Exit Button ;
- UP: Page up or increase ;
- DOWN: Page down or reduce ;
- ENTER: OK button



### 2. Menu operation

Level 1 menu	Level 2 menu	Level 3 menu	Level 4 menu	note
SET	ADD	A. ***		Address code Settings
	CH.	STA.		Standard channel mode
		16B.		16Bit channel mode
		HSI.		HSI channel mode
		RGB.		RGB channel mode
	DIM.	OFF		Dimmer speed off
		DIM. 1		Dimmer speed 1
		DIM. 2		Dimmer speed 2
		DIM. 3		Dimmer speed 3
	CURV	DIM. 4		Dimmer speed 4
		OFF		Dimmer curv off
		CUR. 1		Dimmer curv 1
		CUR. 2		Dimmer curv 2
	DMX. F	CUR. 3		Dimmer curv 3
		CUR. 4		Dimmer curv 4
		HOLD		No signal, keep the final state
		BLAC		No signal, the black field
		R.		No signal, bright red
		G.		No signal, bright green
		B.		No signal, bright blue
		W.		No signal, bright white
	R-G.		No signal, bright red-green	
	R-B.		No signal, bright red-blue	

Level 1 menu	Level 2 menu	Level 3 menu	Level 4 menu	Note
<b>SET</b>	DMX. F	R-W.		No signal, bright red-white
		G-B.		No signal, bright green-blue
		G-W.		No signal, bright green-white
		B-W.		No signal, bright blue-white
		PRO.1		No signal, Built-in program 1
		PRO.2		No signal, Built-in program 2
		PRO.3		No signal, Built-in program 3
		PRO.4		No signal, Built-in program 4
		F.SCE		No signal, Custom scenes
	M-S	SLAV		Slave machine
		MAST		Master machine
	D-SP	SP.00		Speed of built-in program without DMX signal
	ZOOM	Z.000		Focus position without DMX signal
	F.SCE	D.000		Fixed editing of scenes
		S.000		Fixed editing of scenes
		R.000		Fixed editing of scenes
		G.000		Fixed editing of scenes
		W.000		Fixed editing of scenes
		M.000		Fixed editing of scenes
		Z.000		Fixed editing of scenes
<b>INFO</b>	TEM1			LED temperature
	LIST	D.000		The DMX512 value of the console
		S.000		The DMX512 value of the console
		R.000		The DMX512 value of the console
		G.000		The DMX512 value of the console
		W.000		The DMX512 value of the console
		M.000		The DMX512 value of the console
		Z.000		The DMX512 value of the console
	VERS	V*.00		Displays CPU version number

Level 1 menu	Level 2 menu	Level 3 menu	Level 4 menu	Note
<b>MANU</b>	D.000			Dimmer
	S.000			Strobe
	R.000			Red
	G.000			Green
	B.000			Blue
	W.000			White
	M.000			Macro
Z.000			Zoom	
<b>SERV</b>	Factory settings	Factory default	Keep	password : 1111(Enter)
			default	

## CHANNEL FUNCTION

### Standard channel (12CH)

CHANNEL	DMX VALUE	%	FUNCTION
1	0-255	0-100	<b>Dimmer</b>
2	<b>Strobe</b>		
	0-9	0-3	No Function
	10-49	4-19	Slow closing, Fast opening, Sloe→Fast
	50-89	20-34	Fast closing, Slow opening, Sloe→Fast
	90-119	35-46	Slow closing, Slow opening, Sloe→Fast
	120-179	47-70	Random strbe, Sloe→Fast
	180-249	71-98	Synchronous strbe, Sloe→Fast
	250-255	99-100	NO Function
3	0-255	0-100	<b>Red</b>
4	0-255	0-100	<b>Green</b>
5	0-255	0-100	<b>Blue</b>
6	0-255	0-100	<b>White</b>
7	0-255	0-100	<b>Colour macro</b>
8	<b>AUTO</b>		
	0-5	0-2	NO Function
	6-30	2. 4-11. 8	Auto1
	31-55	12. 2-21. 6	Auto2
	56-80	22-31. 4	AUTO3
	81-105	31. 8-41. 2	AUTO4
	106-130	41. 6-51	AUTO5

CHANNEL	DMX VALUE	%	FUNCTION
8	131-155	51.4-60.8	Auto6
	156-180	61.2-70.6	Auto7
	181-205	71-80.4	Auto8
	206-230	80.8-90.2	Auto9
	231-255	90.6-100	Auto10
9	0-255	0-100	Auto speed
10	<b>Dimmer Speed</b>		
	0-9	0-3.5	NO Function
	10-29	3.6-11.3	Linear Dimmer
	30-69	11.4-27	Dimmer Speed 1 (Fastest) )
	70-129	27.1-50.5	Dimmer Speed 2
	130-189	50.6-74.1	Dimmer Speed 3
	190-255	74.2-100	Dimmer Speed 4 (Slowest)
11	0-255	0-100	<b>Zoom</b>
12	<b>Function</b>		
	0-128	0-50	NO Function
	129-255	51-100	Reset

### 16Bit channel mode (12CH)

CHANNEL	DMX VALUE	%	FUNCTION
1	0-255	0-100	<b>Dimmer</b>
2	0-255	0-100	<b>Dimmer Fine</b>
3	0-255	0-100	<b>Red</b>
4	0-255	0-100	<b>Red Fine</b>
5	0-255	0-100	<b>Green</b>
6	0-255	0-100	<b>Green Fine</b>
7	0-255	0-100	<b>Blue</b>
8	0-255	0-100	<b>Blue Fine</b>
9	0-255	0-100	<b>White</b>
10	0-255	0-100	<b>White Fine</b>
11	<b>Strobe</b>		
	0-9	0-3	No Function
	10-49	4-19	Slow closing, Fast opening, Sloe→Fast
	50-89	20-34	Fast closing, Slow opening, Sloe→Fast
	90-119	35-46	Slow closing, Slow opening, Sloe→Fast
	120-179	47-70	Random strbe, Sloe→Fast
	180-249	71-98	Synchronous strbe, Sloe→Fast
	250-255	99-100	NO Function
12	0-255	0-100	<b>Zoom</b>



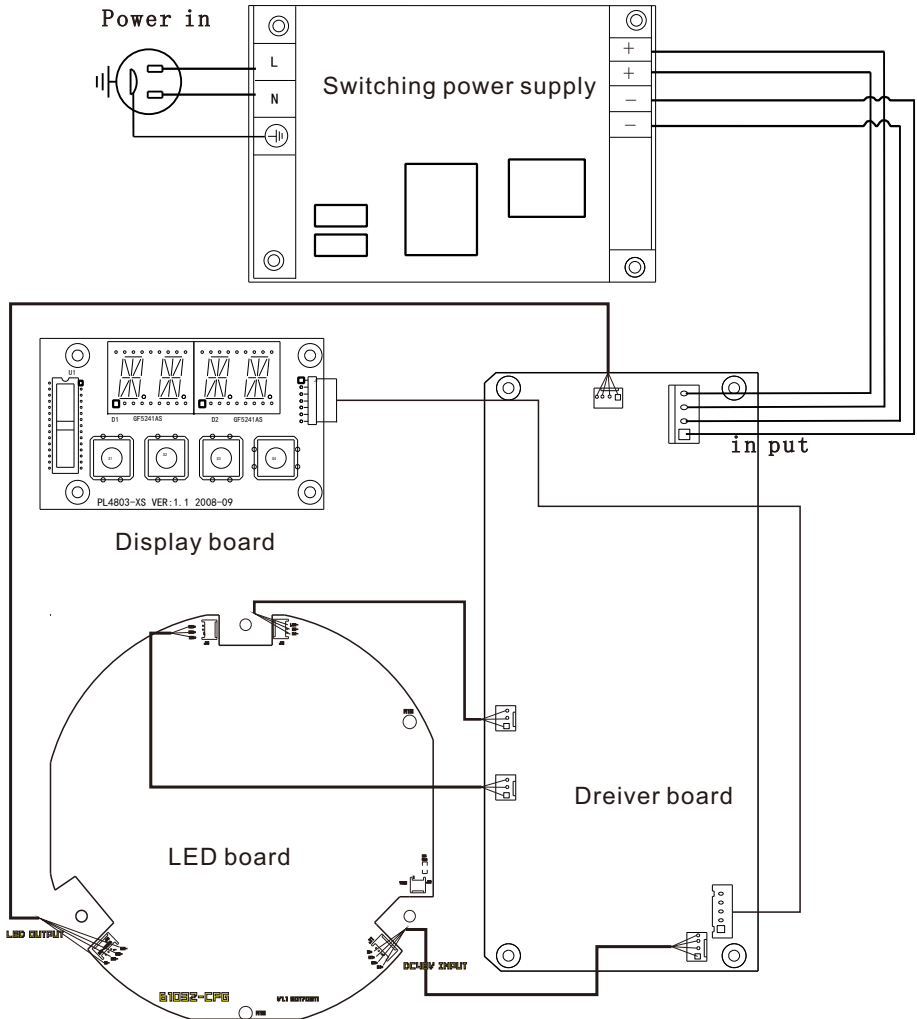
### RGB channel mode(5CH)

CHANNEL	DMX VALUE	%	FUNCTION
1	0-255	0-100	<b>Red</b>
2	0-255	0-100	<b>Green</b>
3	0-255	0-100	<b>Blue</b>
4	0-255	0-100	<b>White</b>
5	0-255	0-100	<b>Zoom</b>

### HSI channel mode(5CH)

CHANNEL	DMX VALUE	%	FUNCTION
1	0-255	0-100	<b>Hue</b>
2	0-255	0-100	<b>Saturation</b>
3	0-255	0-100	<b>Intensity</b>
<b>Strobe</b>			
4	0-9	0-3	No Function
	10-49	4-19	Slow closing, Fast opening, Sloe→Fast
	50-89	20-34	Fast closing, Slow opening, Sloe→Fast
	90-119	35-46	Slow closing, Slow opening, Sloe→Fast
	120-179	47-70	Random strbe, Sloe→Fast
	180-249	71-98	Synchronous strbe, Sloe→Fast
	250-255	99-100	NO Function
5	0-255	0-100	<b>Zoom</b>

## Circuit connecting diagram



## TROUBLE DISPOSE

It is recommended some solution for some normal trouble shooting. Any inextricability problems should always be handling by the professional person. Disconnect the power supply before maintenance the light.

### ●LED off :

- 1.Please check if install the suitable voltage
- 2.Please check whether the led will reach the end of their life can explode; please replace a same description led.
- 3.Please check if the power supply is enough.
- 4.Please check whether the DMX 512 controller pass the "turn on" order.

### ●Though the light is lighting, but it couldn't accept the control order:

- 1.Please check the start code address and the function option are correct.
- 2.Please check whether the communicate control cable is on good connection or the cable is too long or interrupt.
- 3.Please check the control system is not valid, check the signal amplifier of chain connected is valid.
- 4.Please check whether the communicate cable is too long or the other equipment is mutually conjugate.
- 5.Please arrange the wire well, shorter the signal cable, put the high voltage cable and low voltage cable separately.
- 6.Add the signal amplify isolator.
- 7.Signal cable is used the excellent screening doublet (Resistance 75 OHM )
- 8.The end of the light end and the end resistance.

### ●The light can't move:

- 1.Please check if the power supply is suitable for the light voltage data.
- 2.Please check the light if they are deformation, inside parts is broken, become wet etc will lead the loose contact.

## CLEANING AND MAINTENANCE

- 1. In order to ensure the projector could work normally. It should be kept clean always. The lens should also be regularly cleaned to maintain an optimum light output. Do not use any type of solvent on lens. It will damage the projector.
- 2. Suggestion: The continue usage of the light don't exceed 4 hours. Or it will shorter the usage of the lamp. Please use the alternative operation to solve this problem. The fixture power ON time is best not over 48 hours, or it would generate lamp protection procedure.
- 3. Please disconnect the power supply when begin to maintenance take down the light. Please let the parts cool down 10 minute at least then begin to install.
- 4. Please inspect the lens or other moving parts timing and keep them clear and static. If find anything damaged or looseness must change a lamp or fix the lamp in order to avoid the accident.

### **CAUTION!**

**Disconnect from mains before starting maintenance operation.**

## DUTY EXONERATIVE AND COPYRIGHT PROTECTION

- ⊙Any products broken that didn't according to the instruction is not guarantee to keep it in good repair.
- ⊙The commentary for all the instruction belongs to the supplier in final.
- ⊙No authorize can't copy.