

# **LIGHT SKY<sup>®</sup>**

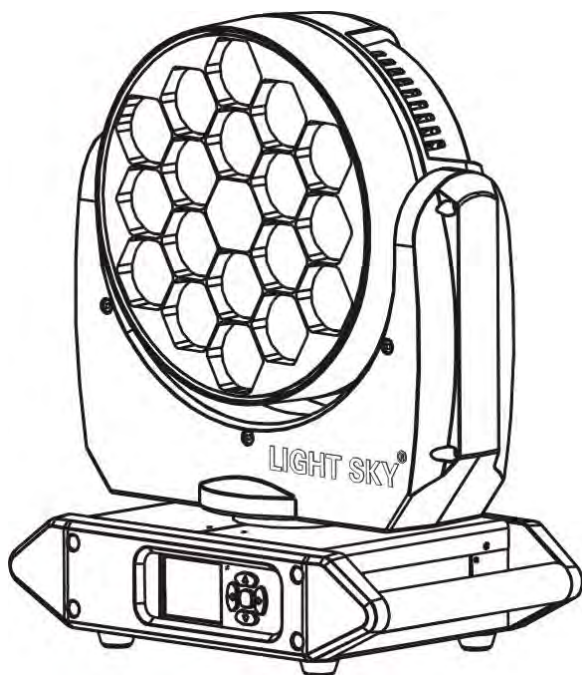
## **USER MANUAL**

### **PROFESSIONAL SHOW LIGHTING**

### **LED**

### **TX1810 ZOOM**

**100V~240V~ 50/60Hz**



[www.lightsky.com.cn/www.lightsky-china.com](http://www.lightsky.com.cn/www.lightsky-china.com)

**FLY DRAGON LIGHTING EQUIPMENT CO., LTD**



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# 1. GENERAL INFORMATION

**INTRODUCTION:** Congratulations, you have just purchased one of the most innovative and reliable LED fixtures on the market today. Our company has been designed to perform reliably for years when the guidelines in this booklet are followed. Please read and understand the instructions in this manual carefully and thoroughly before attempting to operate this unit. These instructions contain important information regarding safety during use and maintenance.

**Notice:** As part of our ongoing commitment to continuous products update, company will keep the right to improve this products, the information in this menu may be changed in the future, the company reserve the right to change the data without any advises.

**UNPACKING:** Thank you for purchasing our company products. Every product has been thoroughly tested and has been shipped in perfect operating condition. Carefully check the shipping carton for damage that may have occurred during shipping. If the carton appears to be damaged, carefully inspect your fixture for damage and be sure all accessories necessary to operate the fixture have arrived intact. In the event damage has been found or parts are missing, please contact our customer support team for further instructions. Inside the box you should find: the fixture, a DMX XLR cable, a power cable, and this user manual.

Please do not discard the shipping carton in the trash. Please recycle whenever possible.

## 2. 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.



### ■ Mounting surfaces

It is permissible to mount the fitting on normally flammable surfaces.



Please do not install the fixture onto combustible surface.

Ensure a minimum clearance of 0.2m around the cooling fans and ventilation.

$t_a$  38°C

### ■ Maximum ambient temperature

The fixture is intended for indoor application.



Do not operate the fixture if the ambient temperature ( $T_a$ ) exceeds 38°C.

### ■ Temperature of the external surface

The maximum temperature that can be reached on the external surface of the fitting, in a thermally steady state, is 60°C.



### ■Protection against electrical shock

Connection must be made to a power supply system fitted with efficient earthing(Class I appliance according to standard EN60598-1).

It is,moreover,recommended to protect the supply lines of the projectors from indirect contact and/or shorting to earth by using appropriately sized residual current devices.



### ■Connection to mains supply

The double insulation between the LV power supply and the control conductor on the fixture.

Connection to the electricity mains must be carried out by a qualified electrical installer.

Check that the mains frequency and voltage correspond to those for which the projector is designed as given on the electrical data label.

This label also gives the input power to which you need to refer to evaluate the maximum number of fittings to connect to the electricity line,in order to avoid overloading.

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.



### ■Protection against explosion

The protection screen, lens or ultraviolet screen on the lamp can be damaged to the degree of failure if visible damage, such as a crack or deep mark, should be replaced.



### ■Protection optical radiation

Never look directly into the light source. You risk injury to your retina, which may induce blindness.

### ■Maintenance

Never open this fixture while in use.



Please disconnect the power supply when begin to maintenance take down the light.

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.

The light source in this fixture shall be replaced by the manufacturer or its service agent or similar qualification..

Do not revise the fixture or install any parts not from our company.Please be aware that damages caused by modifications to the device are not subject to warranty.

■The products referred to in this manual conform to the European Community Directives to which they are subject::



Low Voltage 2014/35/EU

Electromagnetic Compatibility 2014/30/EU

Before the power OFF ,please BLACK the fixture firstly , then the ZOOM module would ZOOM back automatically,or the ZOOM module would effect the package.or Before the power OFF, via controller to ZERO the ZOOM DMX data .

### **3. PERFORMANCE TRAIT AND SKILL SPECIFICATIONS**

- ◎ Voltage : 100V~240V~ 50/60Hz 2.5A
- ◎ Power : 246W PF0.97
- ◎ LED chip : 10W , RGBW 4 in 1 LED chip.
- ◎ LED QTY : 18PCS.
- ◎ LED life : 50000H.
- ◎ Beam angle : Zoom function min.7°,max.55°.
- ◎ Color: RGBW macro color system.
- ◎ Strobe : 1-30 times/ second electronic strobe and random strobe.
- ◎ Dimmer : 65536 class dimmer.
- ◎ Pan/Tilt : Pan : 540° times /2.0 seconds Tilt: 180°/1.2 seconds.
- ◎ Control Mode: DMX512, RDM, Stand-alone mode ,Voice Control mode , Mater-Slave mode , Wireless DMX512.



◎ Channel: Simple(10CH),Standard(16CH), Extended1(20CH),  
Extended2(24CH)

◎ Display Menu:

1. 2.4 inches TFT touch screen, Chinese and English two version language.

2, Display board can record device's using time , show device's temperature, channel data and software version .

3, Edit the procedure

◎ Other feature :

1.Extend IP address function , each IP address maximum can set 64 ID

2.Support DMX signal priority identification, when lose the signal it would be turn into Black , default scene , Automatic function etc according to your set.

3.Remote control function: control the procedure, speed etc function by the remote controller when the product under the condition without signal.

4.Software upgrade : upgrade software by XRL cable.

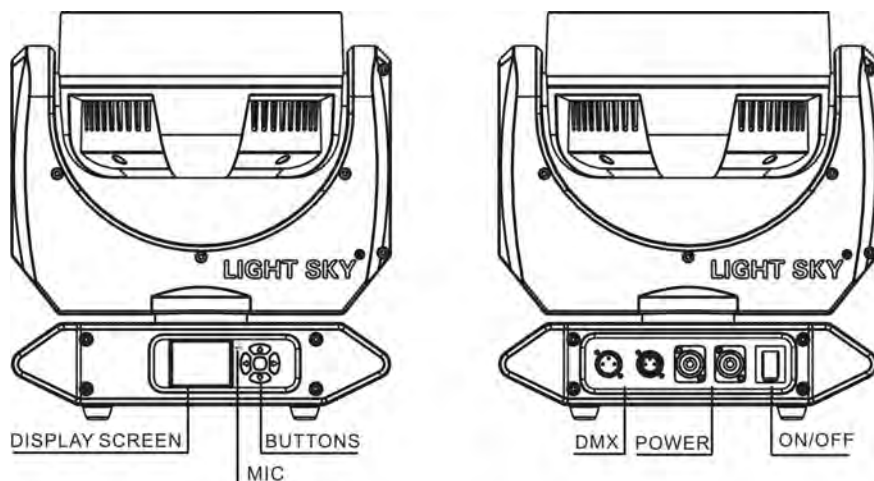
◎ Outlooking: adopt ABS anti-fire plastic.

◎ Carton size : 412×287×525MM.

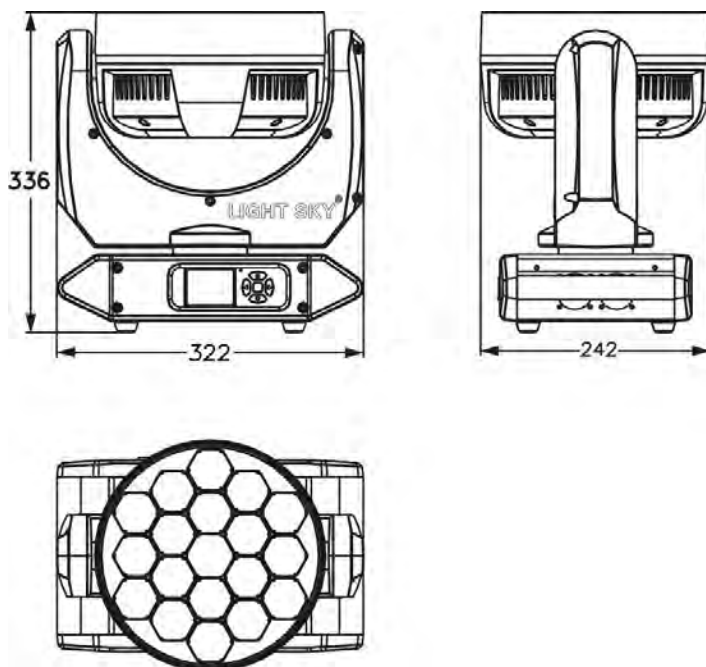
◎ N.W.: 8.5KG      G.W.: 11.1KG

◎ Light size:322×242×336MM

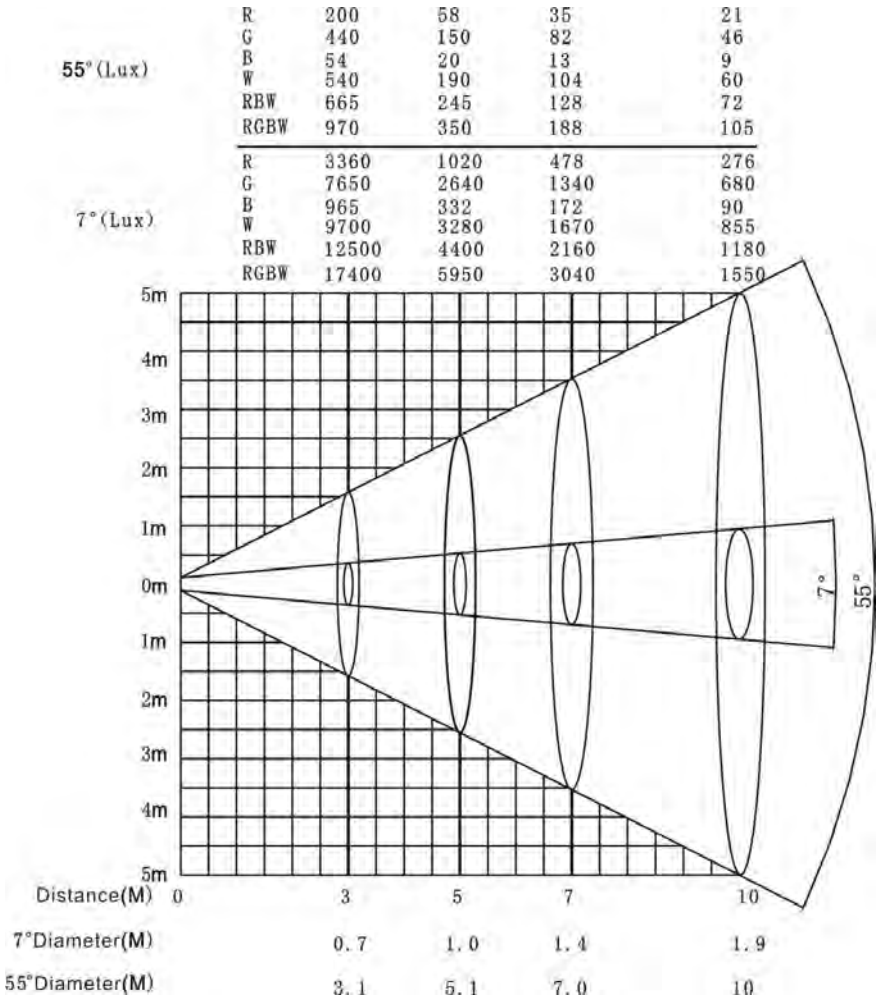
## 4. OPERATION PANEL



## 5. DIMENSIONAL DRAWINGS



6. PHOTOMETRIC DATA



## **7. 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.



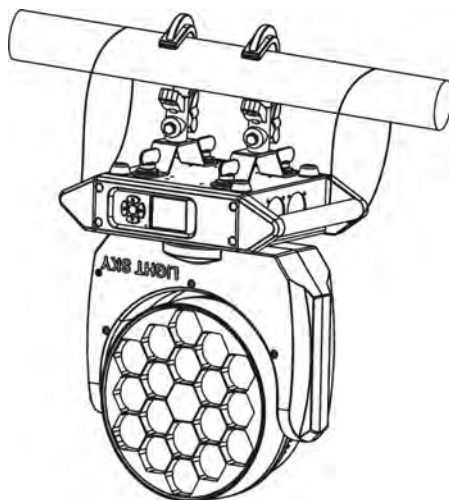
#### **CAUTION!**

**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.



## 8. 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.

### 2. Signal connection

Please use the round 3/5-pin XLR plugs & sockets offered by menu facture to connect the first projector's output to the second projector' 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 pug 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.

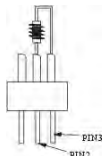


The communicate cable is 2-pin shielded cable 75Ω

Resistance with each core is at least a 0.5mm diameter. (Caution: All the inside leading wire of 3/5-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  $120\Omega$   $1/2w$  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 as above: (Picture ). We suggest using the DMX signal distributor when the distance of the lights over 15meter, In case of effect the light communication because of the signal feeble.



### 3. Light power connection:



The L terminal is connected with the brown line



The N terminal is connected with the blue line

the items can't be more than 6pcs under series connection.

After doing the above operation and making sure all the devices had been installed with natural operate, press the power switch to check whether everything is working normally.

## 9. DISPLAY MENU

I Menu	II Menu	III Menu	Remark
SETTING	DMX Address	001-512	
	Fixture ID	000-064	
	Channel mode	Simple(10CH)	
		Standard(16CH)	Default
		Extended1(20CH)	
		Extended2 (24CH)	
	DMX input mode	Wired input	Default
		Wireless input	
		Reset wireless	
	DMX function	Hold	
		Black	
		D.scene	
		Program 1	
		Program 2	
		Program 3	
		Program 4	
		Program 5	
		Program 6	
		Program 7	
		Program 8	
	Slave-Master	Slave mode	
		Master mode	
	Sound control	Close	
		Open	
	Exit		



I Menu	II Menu	III Menu	Remark
INFO	Fixture times	Power on time ****H	
		Lamp on time ****H	
	Fixture temperatures	LAMP_TEM ***°C	
	RDM UID	3888:*****	
	DMX live	1. Dimmer 0-255	
		2. Dimmer fine 0-255	
		3. Shutter 0-255	
		4. Red-1 0-255	
		5. Green-1 0-255	
		6. Blue-1 0-255	
		7. White-1 0-255	
		8. Red-2 0-255	
		9. Green-2 0-255	
		10.Blue-2 0-255	
		11.White-2 0-255	
		12.Red-3 0-255	
		13.Green-3 0-255	
		14.Blue-3 0-255	
		15.White-3 0-255	
		16.Macro colour 0-255	
		17.Pan 0-255	
		18.Pan fine 0-255	
		19.Tilt 0-255	
		20.Tilt fine 0-255	
		21.Zoom 0-255	

I Menu	II Menu	III Menu	Remark
INFO	DMX live	22.Fixture control 0-255	
		23.Calibration 0-255	
		24.Slave ID 0-255	
	Version info	LED_XY_SOFT:V*.**	
		LED_DPY_SOFT:V*.**	
	Exit		

I Menu	II Menu	III Menu	IV Menu	Remark
PERSON	Pan/Tilt	P/T swap	Close	Default
			Open	
		Pan invert	Close	Default
			Open	
		Tilt invert	Close	Default
			Open	
		Exit		
	Reset	System reset		
		Exit		
	Quick closedown	Open		
		Close		
	P/T angle limit	Close		
		Open		
	Program on/off	Close		
		Open		
	Set P/T angle	Pan start		
		Pan end		
		Tilt start		
		Tilt end		
		Exit		

I Menu	II Menu	III Menu	IV Menu	Remark
PERSON	Display	Display language	English(英文)	Default
			Chinese (中文)	
		Display sleep	Light always	
			2 minutes	Default
			4 minutes	
			6 minutes	
		Display intensity	10-100	
		Display rotation	Normal	Default
			Rotate 180	
		TFT calibration		
		Exit		
	Exit			

I Menu	II Menu	III Menu	Remark
MANUAL	1. Dimmer 0-255		
	2. Dimmer fine 0-255		
	3. Shutter 0-255		
	4. Red-1 0-255		
	5. Green-1 0-255		
	6. Blue-1 0-255		
	7. White-1 0-255		
	8. Red-2 0-255		
	9. Green-2 0-255		
	10.Blue-2 0-255		
	11.White-2 0-255		
	12.Red-3 0-255		
	13.Green-3 0-255		
	14.Blue-3 0-255		
	15.White-3 0-255		
	16.Macro 0-255		
	17.Pan 0-255		
	18.Pan fine 0-255		
	19.Tilt 0-255		
	20.Tilt fine 0-255		
	21.Zoom 0-255		
	22.Fixture 0-255		
	23.CAL 0-255		
	24.Slave ID 0-255		
	Exit		

I Menu	II Menu	III Menu	IV Menu
PROGRAM	Edit program	Edit program 1	Scene 0-100
			1. Dimmer 0-255
			2. Dimmer fine 0-255
			3. Shutter 0-255
			4. Red-1 0-255
			5. Green-1 0-255
			6. Blue-1 0-255
			7. White-1 0-255
			8. Red-2 0-255
			9. Green-2 0-255
			10.Blue-2 0-255
			11.White-2 0-255
			12.Red-3 0-255
			13.Green-3 0-255
			14.Blue-3 0-255
			15.White-3 0-255
			16.Macro 0-255
			17.Pan 0-255
			18.Pan fine 0-255
			19.Tilt 0-255
			20.Tilt fine 0-255
			21.Zoom 0-255
			22.Fixture 0-255
			23.CAL 0-255
			24.Slave ID 0-255
			Save scene
			Exit

I Menu	II Menu	III Menu	IV Menu
PROGRAM	Edit program	Edit program 2	Same as Edit program 1
		Edit program 3	Same as Edit program 1
		Edit program 4	Same as Edit program 1
		Edit program 5	Same as Edit program 1
		Edit program 6	Same as Edit program 1
		Edit program 7	Same as Edit program 1
		Edit program 8	Same as Edit program 1
		Exit	
	Set program	Set program 1	Start step 0-100
			End step 0-100
			Step time 0-255
			Save
			Exit
		Set program 2	Same as Set program 1
		Set program 3	Same as Set program 1
		Set program 4	Same as Set program 1
		Set program 5	Same as Set program 1
		Set program 6	Same as Set program 1
		Set program 7	Same as Set program 1
		Set program 8	Same as Set program 1
		Exit	
	Run	Running program...	
	Fixed scene	Scene 0-100	
		Save scene	
		Exit	
	Exit		

I Menu	II Menu	III Menu	IV Menu
SERVICE	Error list		
	Calibration	Pan	±5.00%
		Tilt	±5.00%
		Lens	±5.00%
		Exit	
	Factory	Factory default	****
		Calibration default	****
		Time clean	****
		Developer	****
		Machine sel	****
		Exit	
	Updata	****	
	Exit		

## 10、DMX TRAITS

Channel	DMX values	%	Effect
1. Dimmer	0-255	0-100	
2. Dimmer fine	0-255	0-100	
3. Shutter	0-9	0-3.73	No function
	10-49	3.73-19.41	Slow closing, Fast opening, slow → fast
	50-89	19.41-35.10	Fast closing, Slow opening, Slow → Fast
	90-119	35.10-46.86	Slow closing, Slow open, Slow → Fast
	120-179	46.86-70.39	Random strobe, Slow → Fast
	180-249	70.39-97.84	Synchronous strobe, slow → fast
	250-255	97.84-100	No function
4. Red-1	0-255	0-100	
5. Green-1	0-255	0-100	
6. Blue-1	0-255	0-100	
7. White-1	0-255	0-100	
8. Red-2	0-255	0-100	
9. Green-2	0-255	0-100	
10. Blue-2	0-255	0-100	
11. White-2	0-255	0-100	
12. Red-3	0-255	0-100	
13. Green-3	0-255	0-100	
14. Blue-3	0-255	0-100	
15. White-3	0-255	0-100	



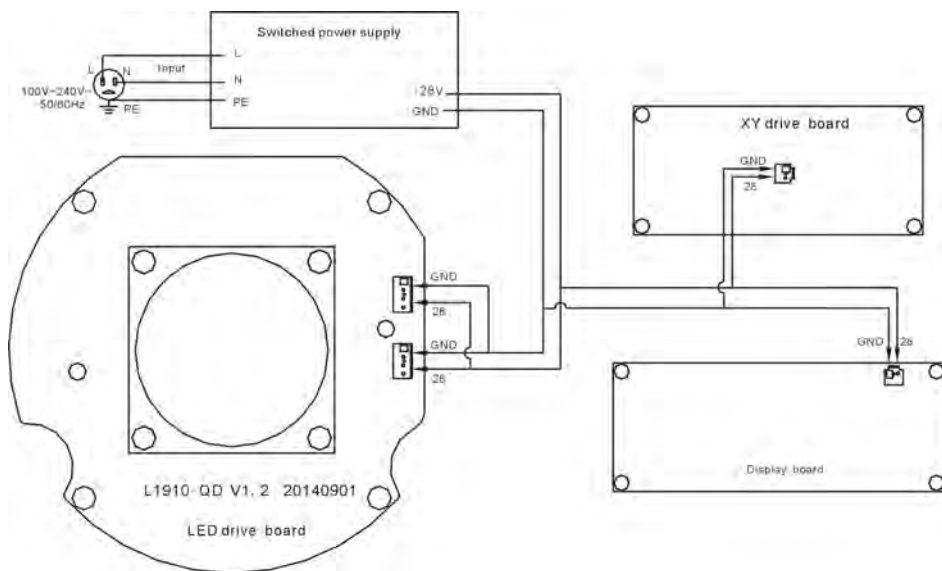
Channel	DMX values	%	Effect
16. Macro colour	0-1	0-0.59	No function
	2-225	0.59-88.43	Colour gradient change
	226-230	88.43-90.39	2700K
	231-235	90.39-92.35	3200K
	236-240	92.35-94.31	4200K
	241-245	94.31-96.27	5600K
	246-250	96.27-98.24	6500K
	251-255	98.24-100	8000K
17. Pan	0-255	0-100	
18. Pan fine	0-255	0-100	
19. Tilt	0-255	0-100	
20. Tilt fine	0-255	0-100	
21. Zoom	0-255	0-100	
22. Fixture control	0-9	0-3.73	No function
	10-14	3.73-5.69	System Reset
	15-19	5.69-7.65	Open
	20-24	7.65-9.61	Close
	25-29	9.61-11.57	Quick open
	30-34	11.57-13.53	Quick close
	35-239	13.53-93.92	No function
	240-244	93.92-95.88	Pan Calibration
	245-249	95.88-97.84	Tilt Calibration
	250-255	97.84-100	No function

Channel	DMX values	%	Effect
23. Calibration	0-255	0-100	
24. Slave ID	0-2	0-0.98	All IDs are efficient lighting its own ID to 0, the channel set to any value is valid
	3-5	0.98-2.16	ID:1 effective
	6-8	2.16-3.33	ID:2 effective
	...	...	
	192-194	75.49-76.27	ID:64 effective
	195-197	76.27-77.45	ID is(2*n)+1 effective,(n=0-31) 1、3、5、7、9...63
	198-200	77.45-78.63	ID is(2*n)+2 effective,(n=0-31) 2、4、6、8、10...64
	201-203	78.63-79.8	ID is(3*n)+1 effective,(n=0-21) 1、4、7、10、13...64
	204-206	79.8-80.8	ID is(3*n)+2 effective,(n=0-20) 2、5、8、11、14...62
	207-209	80.8-82.16	ID is(3*n)+3 effective,(n=0-20) 3、6、9、12、15...63
	210-212	82.16-83.33	ID is(4*n)+1 effective,(n=0-15) 1、5、9、13、17...61
	213-215	83.33-84.51	ID is(4*n)+2 effective,(n=0-15) 2、6、10、14、18...62
	216-218	84.51-85.69	ID is(4*n)+3 effective,(n=0-15) 3、7、11、15、19...63
	219-221	85.69-86.86	ID is(4*n)+4 effective,(n=0-15) 4、8、12、16、20...64
	222-224	86.86-88.04	ID is(5*n)+1 effective,(n=0-12) 1、6、11、16、21...61

Channel	DMX values	%	Effect
24. Slave ID	225-227	88.04-89.22	ID is(5*n)+2 effective,(n=0-12) 2、7、12、17、22...62
	228-230	89.22-90.39	ID is(5*n)+3 effective,(n=0-12) 3、8、13、18、23...63
	231-233	90.39-91.57	ID is(5*n)+4 effective,(n=0-12) 4、9、14、19、24...64
	234-236	91.57-92.75	ID is(5*n)+5 effective,(n=0-11) 5、10、15、20、25...60
	237-239	92.75-93.92	ID is(6*n)+1 effective,(n=0-10) 1、7、13、19、25...61
	240-242	93.92-95.1	ID is(6*n)+2 effective,(n=0-10) 2、8、14、20、26...62
	243-245	95.1-96.27	ID is(6*n)+3 effective,(n=0-10) 3、9、15、21、27...63
	246-248	96.27-97.45	ID is(6*n)+4 effective,(n=0-10) 4、10、16、22、28...64
	249-251	97.45-98.63	ID is(6*n)+5 effective,(n=0-9) 5、11、17、23、29...59
	252-254	98.63-99.8	ID is(6*n)+6 effective,(n=0-9) 6、12、18、24、30...60
	255	100	All IDs are valid

Simple	Standard	Extended1	Extended2	Function
1	1	1	1	Dimmer
—	2	2	2	Dimmer fine
2	3	3	3	Shutter
3	4	4	4	Red /Red-1
4	5	5	5	Green /Green-1
5	6	6	6	Blue /Blue-1
6	7	7	7	White/White-1
—	—	8	8	Red-2
—	—	9	9	Green-2
—	—	10	10	Blue-2
—	—	11	11	White-2
—	—	—	12	Red-3
—	—	—	13	Green-3
—	—	—	14	Blue-3
—	—	—	15	White-3
—	8	12	16	Macro colour
7	9	13	17	Pan
—	10	14	18	Pan fine
8	11	15	19	Tilt
—	12	16	20	Tilt fine
9	13	17	21	Zoom
10	14	18	22	Fixture control
—	15	19	23	Calibration
—	16	20	24	Slave ID

## 11. CIRCUIT CONNECTING DIAGRAM



## **12. 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 fuse of input voltage is defective.
3. Please check the light if they are deformation, inside parts is broken, become wet etc will lead the loose contact.

## **13. 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.
- 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.

## **14.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.
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