

G·LITES™

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ARCH 180  
180X3W (RGB)

## 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.

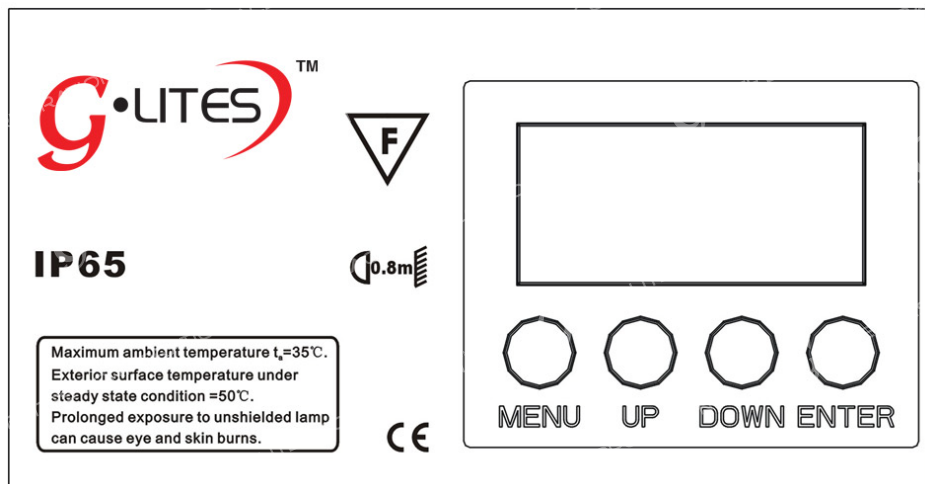
1. In order to ensure the light could operate normally, the ambient temperature couldn't be higher than 35°C. and no lower than - 2°C.
2. Under normal condition, the highest sectional surface temperature may be up to 50°C.
3. These projectors are designed depends on the electric shock protection, the 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. Connecting the main power supply should be done by the professional person.
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.

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

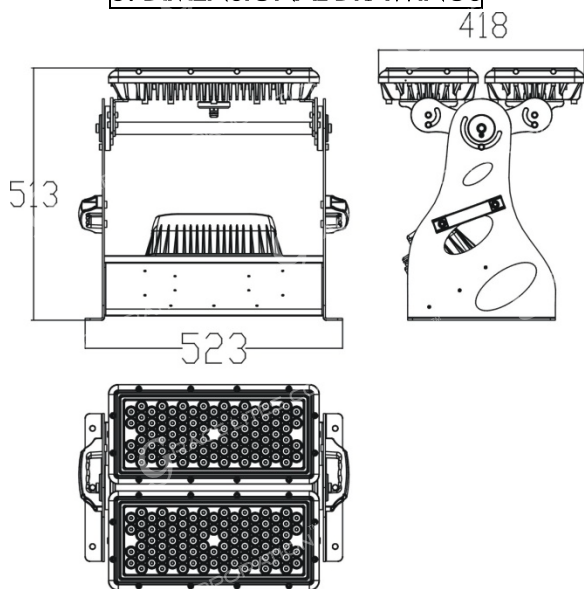
- Lighting equipment use the LED illuminant with high performance and super luminance.
- High performance and energy saving permanent current LED driving circuit and software control system, with perfect dimmer color system and splendid performing function.
- The fixture's out shape adopt pressed construction design and strong wind refrigeration system which be know as a good cooling system.
- High precision temperature monitor function: monitoring the phosphor board and PCB board simultaneously.
- Wind speed automatic adjustment: The fixture can control the wind speed according to the temperature and inner intelligent setting function.
- Default scene after power: the fixture can automatically adjust the default scene after power according to the inner setting.
- Automatic run function: Support 4 automatic run procedures, support the Menu and controller scene edit function. The most can be 100 scenes.
- Automatic distinguish function: It support DMX control signal priority. Regardless of any state, the fixture will automatically switch to the DMX controlled state once receiving DMX signal, if no DMX signal, the fixture can automatically switch to the DMX signal control, black scene, the default scene and automatic run procedures state according to its inner setting.
- Address code function: Each fixture can set IP address separately, the most can be setting 64 IP (0 is a common IP and is available for all the IP.). That means the biggest IP range is 512\*64.
- Application places: suitable for the building wall, square, Bridges, large specific landscape lighting forest scenic spots.
- Projection distance 10-40 meters best effect.
- Voltage: AC100-240V/50-60Hz
- LED QTY: 24R + 24G + 36B + 36W + 60A
- LED power: 3W

- Power: 454W
- Body size: 523 x 418 x 513(mm)
- Carton size: 605 x 370 x 670 (mm)
- N.W.: 21.8kg
- G.W.: 24.8kg
- Lens angle: 45°
- DMX channel support three channels mode.
- Standard DMX-512.
- Color mixing: unlimited color mixing system
- Dimmer: continuous dimming 0~100%.
- Shutter: electronic shutter 0~18 fps.
- LED life: 100,000 hours rated life.
- Single carton size: 260 x 260 x 450 (mm)

#### 4. OPERATION PANEL

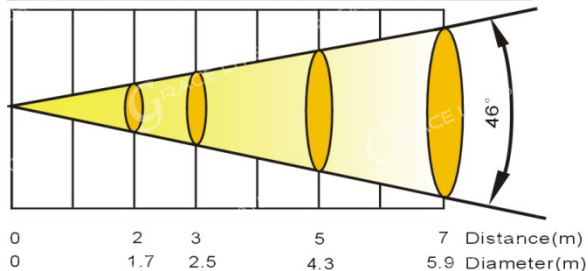


## 5. DIMENSIONAL DRAWINGS



## 6. PHOTOMETRIC DATA

R	938	560	285	80 LUX
G	1350	780	290	150 LUX
B	2810	1640	670	360 LUX
W	2450	1410	560	330 LUX
A	1610	910	360	170 LUX
RGB	5100	2900	1170	640 LUX
RGBW	4770	4240	1720	930 LUX
ALL	9150	5190	1980	1180 LUX



## **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.).

## **8. POWER SUPPLY AND SIGNAL CONNECTION**

### **1. Power supply**

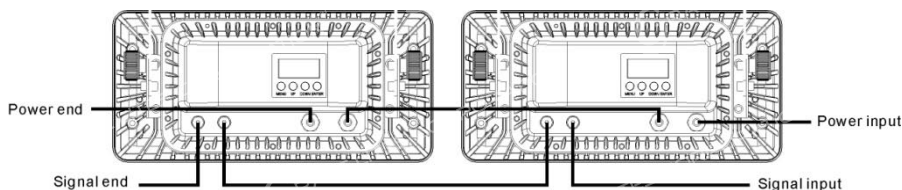
Use the professional plug to connect the projector and main power supply. Please pay attention to the voltage, frequency the same as the mentioned on the projector. Suggest each light has separately switched of the power supply so that



could turn on or turn off each projector desultorily.

## 2. Signal connection

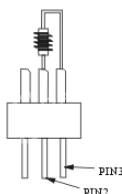
Please use the round 3-pin XLR plugs & sockets offered by menu facture to connect the first projector's output to the second projector' input and connect the second projector's output to the third device's input. And in the same way for the rest, eventually connect the last device's output, all the devices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



The devices' control signal output or input by using the 3-pin XLR plug and socket. If need to long then the communication cable, please make sure the both side of 3-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-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 120Ω 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:

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

Power, press the **ENTER** button to enter the menu settings:

**ESC:** Exit Button:

**UP:** Page up or increase:

**DOWN:** Page down or reduce: **ENTER:** OK button

Main Menu		□ Menu		□ Menu	□ Menu	□ Menu	Function				
DMX.S	→	ADDR	→	A.001 ↓ A.512	Adjusting DMX addressing data						
		DMX.F	→	HOLD	DMX signal is off after the last state to maintain controller						
				BLK	DMX signal is off ,LED turn off all light						
				D.SCN	DMX signal is off, transferred to the default scene						
				SCN.1	DMX signal is off, transferred to user-defined scene 1						
				SCN.2	DMX signal is off, transferred to user-defined scene 2						
				SCN.3	DMX signal is off, transferred to user-defined scene 3						
				SCN.4	DMX signal is off, transferred to user-defined scene 4						
		MODE	→	14CH	14-channel mode						
				10CH	10-channel mode						
09CH	9-channel mode										
Main Menu		I Menu		II Menu		III Menu		V Menu		Function	

DMX.S	→	LIST	→	R.000	The red channel values		Press ENTER button to editing status
				G.000	The green channel values		
				B.000	The blue channel values		
				W.000	The white channel values		
				A.000	The amber channel values		
				F.000	Soft speed channel values		
				C.000	Channel value of the macro function		
				D.000	Dimmer channel values		
				S.000	shutter channel values		
				-.000	The second shutter : slake hold time channel values		
				/ .000	The second shutter: off to light by the time channel values		
				- .000	The second shutter: Brightness hold time channel values		
				\.000	The second shutter: light to off by the time channel values		
		I.000	Select channel sub-code				
INFO	→	EDT.S	→	ST.00 ↓ ST.99	Save the current channel data to the scene		
				P.TIM	→	T.HRS	→
		R.HRS	→			0000	Reset after power on time(unit: hours)
		P.TMS	→	T.TMS	→	0000	The total number of device power on
				R.TMS	→	0000	Reset after power on

						number
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Main Menu		I Menu		II Menu		III Menu	V Menu	Function
INFO	→	L.TIM	→	T.HRS	→	0000		LED light radiation board the total time
				R.HRS	→	0000		Reset after LED light time(unit: hours)
		TEM1	→	CUR.T	→	000C		The temperature of the current driver board
				MAX.T	→	000C		Driver board temperature record
				MAX.R	→	000C		Reset the maximum temperature
		TEM2	→	CUR.T	→	000C		The temperature of the current radiation board
				MAX.T	→	000C		Radiation board temperature record
				MAX.R	→	000C		Reset the maximum temperature
		VERS	→	MCU.V	→	V*. **		MCU software version number
DISP	→	OPEN		Display board Often bright				
		OPN.D		Full-screen flicker when DMX is off , often bright when has DMX				
		CLOS		Display board often off				
		SHU.D		Full-screen flicker when DMX is off , often off when has DMX				
		CLS.D		often bright(.) when DMX is off ,flicker(.) when has DMX				

Main Menu		I Menu	→	II Menu		III Menu		V Menu	Function
AUTO	→	L.DEF	→	0000	Password "1111"				Scene data reset
		EDIT	→	D.SCN	→	ST.00	Select the default the scene after the DMX signal is off		
			→	SCN.1	→	STA.S	→	ST.00	Start program step
						END.S	→	ST.00	End of the program step
						SPED	→	000P	Program speed (time = parameter value *0.1S)
						STA.S	→	ST.00	Start program step
						END.S	→	ST.00	End of the program step
						SPED	→	000P	Program speed (time = parameter
			→	SCN.2	→	STA.S	→	ST.00	Start program step
						END.S	→	ST.00	End of the program step
						SPED	→	000P	Program speed (time = parameter

									value *0.1S)
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Main Menu		I Menu		II Menu		III Menu		V Menu	Function
AUTO	→	EDIT	→	SCN.3	→	STA.S	→	ST.00	Start program step
						END.S	→	ST.00	End of the program step
						SPED	→	000P	Program speed (time = parameter value *0.1S)
			→	SCN.4	→	STA.S	→	ST.00	Start program step
						END.S	→	ST.00	End of the program step
						SPED	→	000P	Program speed (time = parameter

								value *0.1S)
		SL.ID	→	ID.00 ↓ ID.64	Slave code set ID			

Main Menu		I Menu		II Menu		III Menu		V Menu	Function	
PERS	→	FADE	→	F.100	Soft parameters from fast to slow set (default is 100)					
		FANS	→	AUTO	Automatic fan speed control operation					
				MAX	Maximum wind speed fan operation					
		OSC.C	→	SEND	→	S000	Send crystal calibration signal			
				CALI	→	C000	reception crystal calibration signal			
REST	→	ENT	Driver reset (equivalent to re-power)							
LOAD	→	0000	Password "1111"					Restore the factory parameters, while device reset		

**Status menu:**

NO.	Status Information	Explain
1	A001-A512	DMX addressing data
2	SLAV	Sub-light status
3	ST.00-ST.99	State of the main light self-propelled

**Information menu:**

NO.	Information	Explain
1	NO.ER	No error
2	ERR.T	Temperature error
3	ERR.D	DMX signal line error
4	ERR.M	Memory data error

**10. DMX TRAITS**

function	DMX values and effect	Remarks
RED	0-255	From dark to light dimming, color macro function in adjustment phase
GREEN	0-255	From dark to light dimming, color macro function in adjustment phase
BLUE	0-255	From dark to light dimming, color macro function in adjustment phase
WHITE	0-255	From dark to light dimming, color macro function in adjustment phase
AMBER	0-255	From dark to light dimming, color macro function in adjustment phase
FADE	0-255	Adjust the speed from fast to slow soft
COLOR	0-3	No macro function
	4-67	Fixed the macro function, alternating from



		slow to fast RGB, white and amber can be individually controlled
	68-131	Fixed the macro function, alternating from slow to fast RGBWA
	132-255	Phase macro functions, from slow to fast, and with the use of 1,2,3, 4 and 5-channel

function	DMX values and effect	Remarks
DIMMER	0-255	From dark to light dimming
SHUTTER	0-1	Open light
	2-64	Slow to off quick open (from slow to fast)
	65-127	Slow to open quick off (from slow to fast)
	128-190	Random shutter(from slow to fast)
	191-253	from slow to fast
	254-255	Open light
CLOSE	0-255	The second shutter : slake hold time 0-3s
C_TO_O	0-255	The second shutter: off to light time 0-3s
OPEN	0-255	The second shutter: Brightness hold time 0-3s
O_TO_C	0-255	The second shutter: light to off 0-3s
SLAVE	0-2	All IDs are efficient lighting its own ID to 0, the channel set to any value is valid
	3-5	ID:1 effective
	6-8	ID:2 effective
	...	...
	192-194	ID:64 effective
	195-197	ID is $(2*n)+1$ effective, $(n=0-31)$
	198-200	ID is $(2*n)+2$ effective, $(n=0-31)$

	201-203	ID is $(3*n)+1$ effective, $(n=0-21)$
	204-206	ID is $(3*n)+2$ effective, $(n=0-20)$
	207-209	ID is $(3*n)+3$ effective, $(n=0-20)$
	210-212	ID is $(4*n)+1$ effective, $(n=0-15)$
	213-215	ID is $(4*n)+2$ effective, $(n=0-15)$
	216-218	ID is $(4*n)+3$ effective, $(n=0-15)$
	219-221	ID is $(4*n)+4$ effective, $(n=0-15)$
	222-224	ID is $(5*n)+1$ effective, $(n=0-12)$

function	DMX values and effect	Remarks
SLAVE	225-227	ID is $(5*n)+2$ effective, $(n=0-12)$
	228-230	ID is $(5*n)+3$ effective, $(n=0-12)$
	231-233	ID is $(5*n)+4$ effective, $(n=0-12)$
	234-236	ID is $(5*n)+5$ effective, $(n=0-11)$
	237-239	ID is $(6*n)+1$ effective, $(n=0-10)$
	240-242	ID is $(6*n)+2$ effective, $(n=0-10)$
	243-245	ID is $(6*n)+3$ effective, $(n=0-10)$
	246-248	ID is $(6*n)+4$ effective, $(n=0-10)$
	249-251	ID is $(6*n)+5$ effective, $(n=0-9)$
	252-254	ID is $(6*n)+6$ effective, $(n=0-9)$
	255	All IDs are valid

**Note: (1) 14 channel modes channel order**

1CH	RED	6CH	FADE	11CH	C_TO_ O
2CH	GREEN	7CH	COLOR	12CH	OPEN
3CH	BLUE	8CH	DIMMER	13CH	O_TO_ C
4CH	WHITE	9CH	SHUTTER	14CH	SLAVE
5CH	AMBER	10C	CLOSE		

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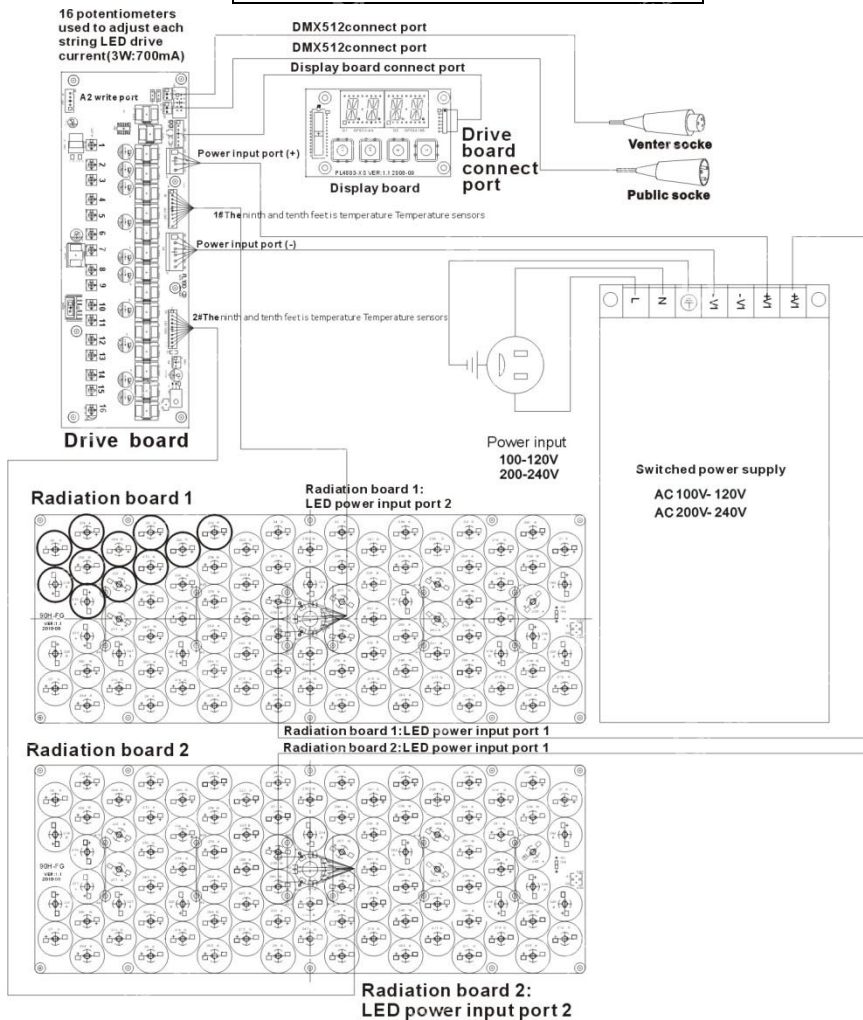
**(2) 10 channel modes channel order**

1CH	RED	5CH	AMBER	9CH	SHUTTER
2CH	GREEN	6CH	FADE	10CH	SLAVE
3CH	BLUE	7CH	COLOR		
4CH	WHITE	8CH	DIMMER		

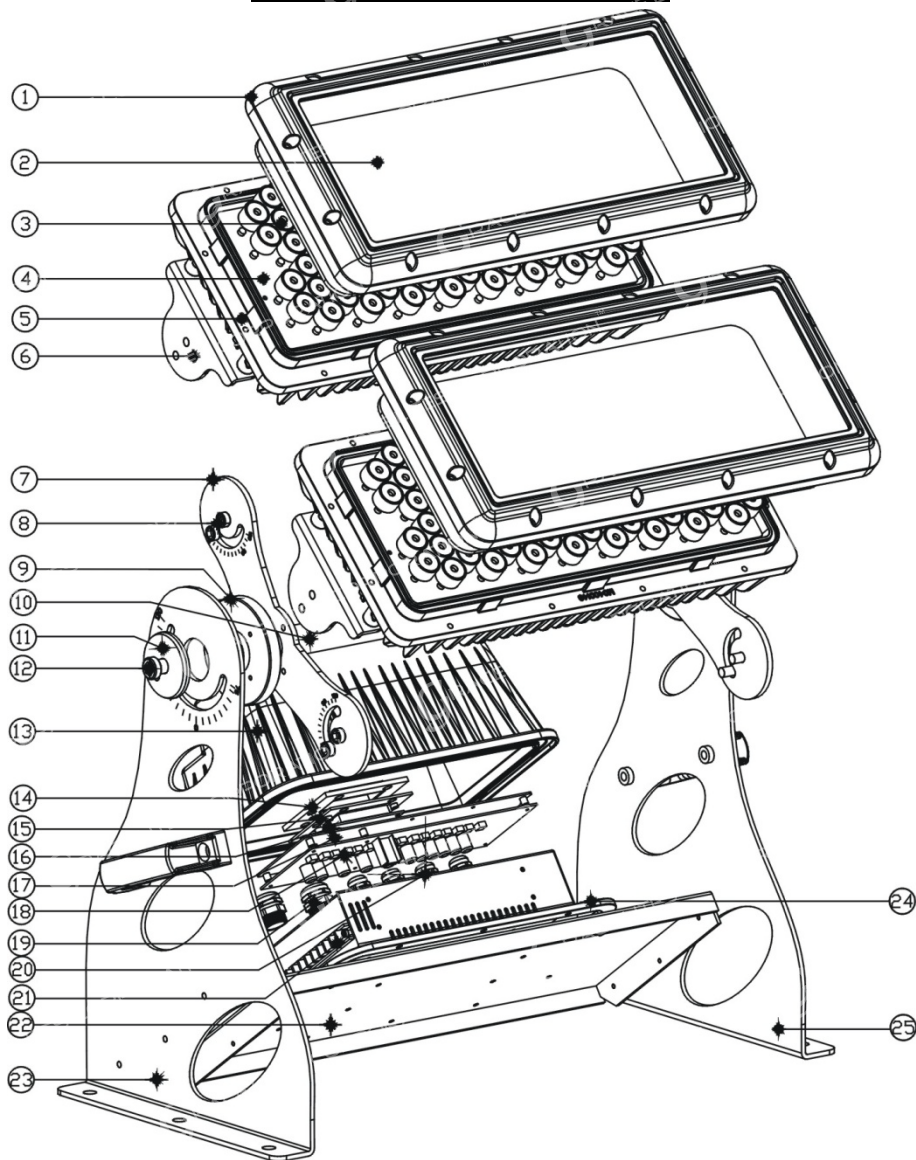
**(3) 9 channel modes channel order**

1CH	RED	4CH	WHITE	7CH	DIMMER
2CH	GREEN	5CH	AMBER	8CH	SHUTTER
3CH	BLUE	6CH	COLOR	9CH	SLAVE

## 11. CIRCUIT CONNECTING DIAGRAM



## 12. EXPLODE DIAGRAM AND LIST



No.	Inquire number	No.	Inquire number
1	M0400150	15	M0101965
2	M0600825	16	Z0600300002
3	M0600930	17	M01019123
4	Z0600742	18	Z0600100011
5	M0400149	19	M1300768
6	M01019122	20	M1300767
7	M01019121	21	M1000933
8	M21008005	22	M01019118
9	M0201928	23	M01019119
10	M0201929	24	M0300789
11	M0201930	25	M01019120
12	M21008011		
13	M0400151		
14	M0300768		

### 13. TROUBLE DISPOSE

It is recommended some solution for some normal trouble shooting. Any electrical 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.

#### **14. 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.

## 15. 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.