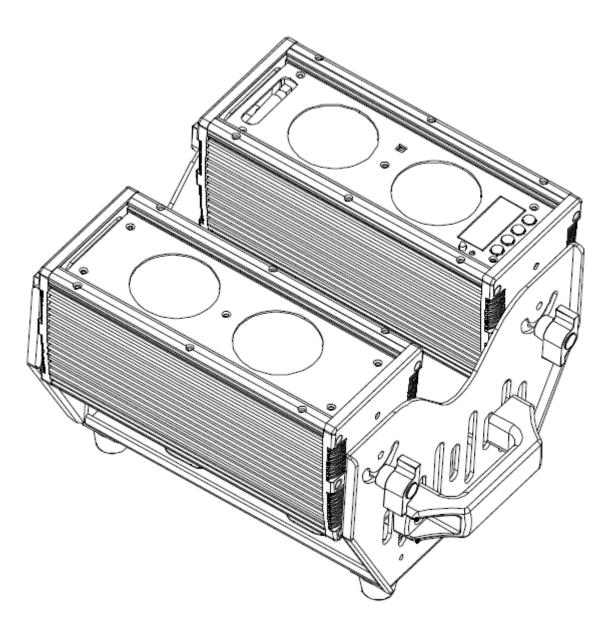


# User Manual: Squareled Edgy Akku & Wireless 4x25W RGBAW

# SquareLED

Edgy Akku + Wireless 4x25W RGBAW 5in1



**USER MANUAL** 

# Catalogue

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Please read over this manual before operating the light

# 1. Summary

### > Summary

Thank you for purchasing our SquareLED EDGY. Please read these instructions carefully before begin and operate the fixtures according to these instructions to avoid any possible damages and accidents causes by misusage

### > Product introduction

The SquareLED EDGY light uses casting aluminum housing, designed in a fashion of hydrodynamic form. Appearance shows. It adopts high power 5-in-1 LED, which refers to single LED is made of R,G,B,A,W 5-IN-1 LED, And long life span, low consumption, good color mixing effect and high brightness are the most prominent features. Each kind of LED can be independently dimmed. The built-in program includes dimming, strobe, eotic, gradual change, fading and so on. It uses power switch, performs low weight and consumption, stable capability and long life. International standard DMX 512 signal is requested.

## Packing List

- ➤ LF2504 1 PC
- ➤ DMX Signal Cable 1 Set
- ➤ Power cable 1 PC
- ➤ User Manual
- ➤ Warranty Card

# 2. Safety Instruction

### Safety Notes

- ! Enquire the skilled people before any repair;
- ! Always make sure disconnect from the power source before setting up, serving and moving;.
- ! Avoid direct eye exposure to the fixture when it is on;

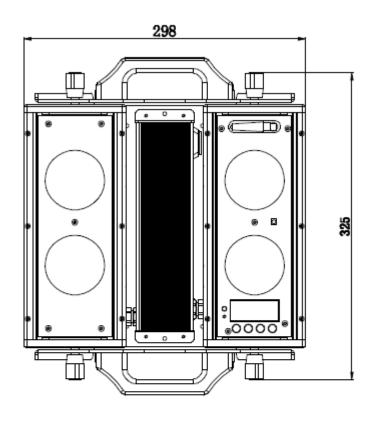


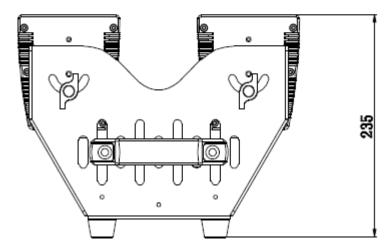


### instruction

- Make sure the power supply voltage are consistent with this lights. Ensure the use of voltage is in the range of the request technical parameter.
- •Before the installation, please check the light's fasteners and mechanical structure have been received in good condition and appear no damage.
- •This light is designed for indoor use; working temperature is lower than 40 degree.
- •The fixtures maybe mounted in any position provided there is adequate room for ventilation. Make sure there are no inflammable and explosive items (ornaments) in 0.5 meters away.
- •Yellow / green cabling earthling safety; no flicker when the fixture is working on.

# 3. Outside Size Picture





# 4. Main Function

- ➤ Input voltage: AC 100V-264V/47-63HZ
- ➤ Power consumption: 120W
- Lamp Type: 25W LED 5-in-1 R, G, B, A, W (4PCS)
- ➤ Life span: 50000~100000hours
- ➤ PWM Dimmer: 1500HZ(16666 grades)
- ➤ Control Signal: DMX512
- ➤ Control mode: stand alone/ Master/Slaver
- ➤ Ifrared keyboard control
- ➤ 2.4G wireless DMX512
- ➤ Channel: 16CH/11CH/10CH/11CH./6CH/5CH
- Function Effect: dimmer, strobe, gradual change
- ➤ Battery charge time:5.5 hours
- Full power battery duration:5.5 hours
- Cooling mode: Natural Convection
- Anti-electricity intension: 1.5KV
- $\triangleright$  Insulation Resistance:>2M $\Omega$
- ► Beam Angle: 15°,25°,45°,60° Optional
- Net weight: 9.52Kg

# **5. DMX Control Function**

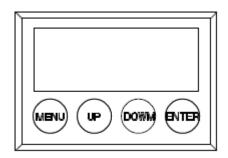
# > DMX Channels

5CH	6СН	11CH.	10CH	11CH	16CH	Value	Function	
-	CH1	CH1	-	CH1	CH1	0-255	Dim all	
CH1	CH2	CH2	-	-	-	0-255	R	
CH2	СНЗ	СНЗ	-	-	-	0-255	G	
СНЗ	CH4	CH4	-	-	-	0-255	В	
CH4	CH5	CH5	-	-	-	0-255	A	
CH5	CH6	СН6	-	-	-	0-255	W	
-	1	-	CH1	CH2	CH2	0-255	R1	
-	1	-	CH2	СНЗ	СН3	0-255	G1	
-	1	-	СН3	CH4	CH4	0-255	B1	
-	ı	-	CH4	CH5	CH5	0-255	A1	
-	1	-	CH5	СН6	CH6	0-255	W1	
-	-	-	СН6	CH7	CH7	0-255	R2	
-	1	-	CH7	CH8	CH8	0-255	G2	
-	1	-	CH8	CH9	CH9	0-255	B2	
-	ı	-	CH9	CH10	CH10	0-255	A2	
-	-	-	CH10	CH11	CH11	0-255	W2	
	-	- СН7	-			0-5	No strobe	
						6-20	Not synchronous strobe(slow to fast)	
						21-60	Synchronous strobe(slow to fast)	
					CHIA	61-100	Electronic Sinewave(slow to fast)	
-				-	CH12	101-140	Random Strobe(slow to fast)	
						141-180	Opening pulse(slow to fast)	
						181-220	Closing pulse(slow to fast)	
						221-255	Electronic Squarewave(slow to fast)	
						0-5	No effect	
							6-10	CT01(Call custom color in menu settint)
					-	11-15	CT02	
						16-20	CT03	
		CHOC			CHI2	21-25	CT04	
		CH8(C H8			CH13 (CH13	26-30	CT05	
-	-	Prior to	-	-	Prior to	31-35	CT06	
		CH10)			CH15)	36-40	CT07	
						41-45	CT08	
						46-50	CT09	
						51-55	CT10	
					56-60	AUTO 1		
						61-65	AUTO 2	

i i			<u> </u>	<u> </u>			
						66-70	AUTO 3
						71-75	AUTO 4
						76-80	AUTO 5
						81-85	AUTO 6
						86-90	AUTO 7
						91-95	AUTO 8
						96-100	AUTO 9
						101-105	AUTO 10
						106-110	AUTO 11
						111-115	AUTO 12
						116-120	AUTO 13
						121-125	AUTO 14
						126-130	AUTO 15
						131-135	AUTO 16
						136-140	AUTO 17
						141-145	AUTO 18
						146-150	AUTO 19
						151-155	AUTO 20
						156-160	AUTO 21
						161-165	AUTO 22
						166-170	AUTO 23
						171-175	AUTO 24
						176-180	AUTO 25
						181-185	AUTO 26
						186-190	AUTO 27
						191-195	AUTO 28
						196-200	AUTO 29
						201-205	AUTO 30
						206-210	AUTO 31
						211-215	AUTO 32
						216-220	AUTO 33
						221-225	CHASE1
						226-230	CHASE2
						231-235	CHASE3
						236-255	Reserved
							Auto
_	_	СН9	_	_	CH14	0-255	speed,fast->slow,(AT01-AT05:0-255S,AT06-
		011)				0 200	AT33:0-25.5S)
					CH15(R		Virtual colour wheel
					GB	0-10	No effect
_	_	CH10	_	-	color	11	Blue (Blue=full, Red+Green+White=0)(step)
		0			mixing		Red=0, Green->up,Blue =full,
					instead	12-50	White=0(proportional)
					moteau		"me-o(proportionar)

•							
					of RGB	51	Light Blue (Red=0, Green=full, Blue =full,
					channel	31	White=0)(step)
					)	52.00	Red=0, Green=full, Blue->down,
			52-90	White=0(proportional)			
						01	Green (Red=0, Green=full, Blue =0,
						91	White=0)(step)
						02.120	Red->up, Green=full, Blue=0,
						92-130	White=0(proportional)
						131	Yellow (Red=full, Green=full, Blue=0,
						131	White=0)(step)
						132-170	Red=full, Green->down, Blue=0,
						132-170	White=0(proportional)
						171	Red(Red=full, Green=0, Blue=0,
						1/1	White=0)(step)
					172-210	Red=full, Green=0, Blue->up,	
						172-210	White=0(proportional)
					211	Magenta (Red=full, Green=0, Blue=full,	
						211	White=0)(step)
			212-250	Red -> down, Green=0, Blue=full,			
						212-230	White=0(proportional)
			251-255	Blue (Red=0, Green=0, Blue=full,			
						231-233	White=0)(step)
						0-10	Use the dimmer mode which menu had set up
						11-20	Linear curve
						21-30	Square law curve
						31-40	Inverse square law curve
		CU11			CH16	41-50	S-curve
_	-	CH11	1 -	-	CIIIO	51-60	Linear curve and smooth
						61-70	Square law curve and smooth
						71-80	Inverse square law curve and smooth
						81-90	S-curve and smooth
						91-255	Use the dimmer mode which menu had set up

# **6. Display Operation instruction**



> MENU: access the menu or return to a previous menu option

> ENTER: select the current menu option

➤ UP: menu selection or parameter increments

> DOWN: menu selection or parameters decrease

# **Menu Tree**

TAB	LEVEL 1	LEVEL 2	LEVLE 3	LEVEL 4
ADDR(Address)	001-512			
STAT(Static control)	R1	<u>0</u> -255 *		
	G1	<u>0</u> -255 *		
	B1	<u>0</u> -255 *		
	A1	<u>0</u> -255 *		
	W1	<u>0</u> -255 *		
	R2	<u>0</u> -255 *		
	G2	<u>0</u> -255 *		
	B2	<u>0</u> -255 *		
	A2	<u>0</u> -255 *		
	W2	<u>0</u> -255 *		
	SHUT	<u>0</u> -255 *		
SET(Set)	SIGN(DMX signal selection)	2.4G(wirelsee)/CABL(Cable)		
	WIRE(Wireless set)	REST(reset)	YES/NO	
		KEY		

	BAT(battery output)	HIGH/MIDDLE/LOW		
	CAL(Calibration)	R	0- <u>255</u>	
		G	0- <u>255</u>	
		В	0- <u>255</u>	
		A	0- <u>255</u>	
		W	0- <u>255</u>	
		USE	YES/NO	
	CHMD(Channel mode)	16CH/11CH/10CH/11CH./6CH/5CH		
	DIM/D:	LIN(linear)/SQR(square law)/ISQR(inverse square		
	DIM(Dimming	law)/SCUR(S-curve)/LIN.(linear		
	mode)	smooth)/ <u>SQR.</u> (square law		
		smooth)/ISQR.(inverse square law smooth)/SCUR.(S-curve smooth)		
	DISY(Display set)	ON(Permanent on)		
	DIST (Display Set)	2 OFF (2 minutes off)		
	SHOW	ADDR/ <u>BAT</u>		
	LOCK	YES/NO		
CTST(Custom	LOCK	TES/NO		
color set)	CT01	R	0-255	
		G	0-255	
		В	0-255	
		A	0-255	
		W	0-255	
	CT10			
AUTO(Auto)	AT01	RUN *		
		RUN *		
		RUN *		
		RUN *		
	AT33	RUN *		
	ATSP(Auto speed)	<u>0</u> -255(S)		
	CHS1 (Chase 1)	RUN *		
	CHS2 (Chase 2)	RUN *		
	CHS3 (Chase 3)	RUN *		
PROG (Program)	CHS1 (Chase 1)	SC01 (Scene 1)	R1	0-255
			G1	0-255
			B1	0-255
			A1	0-255
			W1	0-255
			R2	0-255
			G2	0-255
			B2	0-255

			A2	0-255
			W2	0-255
			SHUT	0-255
			AUTO	NONE,AT01-AT33
			ATSP	0-255(S)
			TIME	0-255(S)
			WAIT	0-25.5(S)
			USE	YES/NO
		SC25 (Scene 25)		
	CHS3 (Chase 3)			
INFO	SOFT(Software	Vx.x		
(Information)	version)	VX.X		
	BATTERY	0%-100%		
	POW(Power	xxx%		
	reduction)	XXX%		
	TEM1	xxxC		
	TEM2	xxxC		
LOAD(Load)	ST L (Setting load)	YES/NO		
	PR L(Program load)	YES/NO		
SEND(Send)	YES/NO			

### **Instructions:**

When enter to the "\*" position displayed on the LED, the light will automatically set as master and send data to external. Other fixtures can receive this data and will synchronously running without manually set as slave. When power cycle it will jump to the "\*" position and running again. And in these position it will not return back to the default display after two minutes.

### 6.1 DMX ADDRESS SETTING

- 1) Press the **[ENTER]** button in **[ADDR]** menu, then enter to the DMX address setting.
- 2) Press the 【UP/DOWN】 button to select 【1-512】 numerical value.
- 3) Press the **[ENTER]** button to escape and save.

### **6.2 STATIC SETTING**

- 1) Press the **[ENTER]** button in **[STAT]** menu, then enter to the static setting.
- 2) Press the 【UP/DOWN】 button to select 【RED1】【GREEN1】【BLUE1】...【WHITE2】 and 【SHUT】.
- 3) Press the 【UP/DOWN】 button to set up the 【0-255】 numerical value.
- 4) Press the **[ENTER]** button to escape and save.

### 6.3 DMX signal selection setting

- 1) Press the **[ENTER]** button in **[SIGN]** menu, then enter to the DMX signal selection setting.
- 2) Press the 【UP/DOWN】 button to select 【2.4G】, 【CABLE】
- 3) Press the **[ENTER]** button to escape and save.

### 6.4 Wireless set

- 1) Press the **[ENTER]** button in **[WIRE]** menu, then enter to the wireless set.
- 2) **[RESET]** Analog the wireless module, it is the process of off and pressing the button then power
- 3) 【KEY】 similar as the external key.

### 6.5 Battery output setting

- 1) Press the 【ENTER】 button in 【BAT】 menu, then enter to the Battery output setting.
- 2) Press the 【UP/DOWN】 button to select 【HIGH】, 【MIDDLE】, 【LOW】
- 3) Press the **[ENTER]** button to escape and save.

### 6.6 COLOR CAST CALIBRATION SETTING

- 1) Press the **[ENTER]** button in **[CAL]** menu, then enter to the color cast calibration setting.
- 2) Press the 【UP/DOWN】 button to select 【RED】, 【GREEN】...【WHITE】
- 3) Press the 【UP/DOWN】 button to set up the 【0-255】 numerical value.
- 4) On the 【USE】 interface, pressing 【YES】 button means valid, 【NO】 means invalid.
- 5) Press the **[ENTER]** button to escape and save.

Illustrations: When pressing the 【YES】 button which means valid on the 【USE】 interface, the actual output value of RED...WHITE is output in accordance with the percentage which the color cast calibration value divides 255.

### 6.7 CHANNEL MODE SETTING

- 1) Press the **[ENTER]** button in **[CHMD]** menu, then enter to the channel mode setting.
- 2) Press the 【UP/DOWN】 button to select【16CH】, 【11CH】【10CH】【11CH.】【6CH】【5CH】
- 3) Press the **[ENTER]** button to escape and save.

### 6.8 DIMMING MODE SETTING

- 1) Press the **[ENTER]** button in **[DIM]** menu, then enter to the dimming mode setting.
- 2) Press the [UP/DOWN] button to select [LIN], [SQR], [ISQR], [SCUR], [LIN.], [SQR.
- ], [ISQR.] and [SCUR.].

3) Press the 【ENTER】 button to escape and save.

Illustrations: When setting [LIN.], [SQR.], [ISQR.] and [SCUR.] in [DIM] menu, there will be added a little delay dimming effect for smooth..

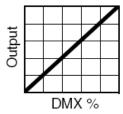
Dimming curve:

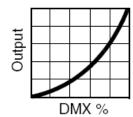
Linear curve:

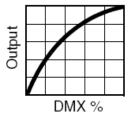
square law curve:

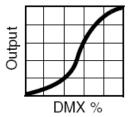
Inverse Square law curve:

S-curve:









### 6.9 DISPLAY SETTING

- 1) Press the **[ENTER]** button in **[DISY]** menu, then enter to the display setting.
- 2) Press the 【UP/DOWN】 button to select【ON】, 【2 MINITES OFF】
- 3) Press the **【**ENTER **】** button to escape and save.

### 6.10 TWO MINUTES TIME OUT DISPLAY SETTING

- 1) Press the **[ENTER]** button in **[SHOW]** menu, then enter to the two minutes time out display setting.
- 2) Press the 【UP/DOWN】 button to select【ADDR】, 【BAT】
- 3) Press the **[ENTER]** button to escape and save.

### 6.11 AUTO LOCK KEY SETTING

1)pressing the MENU-UP-DOWN-ENTER-MENU-UP-DOWN-ENTER. That means, the unlock method is to press the MENU-UP-DOWN-ENTER three times cyclically, and the time between press two keys can not over 3S, or start anew.

2) The methods are using need to meet certain key sequences and time limit, so that the rate of accidental unlocking almost zero.

### 6.12 CUSTOM COLOR SETTING

- 1) Press the 【ENTER】 button in 【CTST】 menu, then enter to the custom color setting.
- 2) Press the 【UP/DOWN】 select 【CT01】...【CT10】
- 2) Press the 【UP/DOWN】 button to select 【1-255】 numerical value.
- 3) Press the **[ENTER]** button to escape and save.

### 6.13 AUTO RUN, SELF-PROGRAM RUN

- 1)Press the 【ENTER】 button in 【AUTO】 menu, then enter to the auto run,self-program run.
- 2)Press the [UP/DOWN] button to select [AT01]...[AT05], [AUTO SPEED], [CHASE01]...[CHASE03

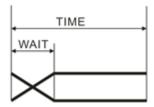
1

3)Press the **[ENTER]** button to start running.

### 6.14 EDIT SELF-PROGRAM

- 1) Press the **[ENTER]** button in **[PROG]** menu, then enter to the edit self-program.
- 2) Press the 【UP/DOWN】 button to select 【CHASE01】 ... 【CHASE03】
- 3) Press the **[ENTER]** button for confirmation and enter to the next menu.
- 4) Press the 【UP/DOWN】 button to select 【SCENE01】 ... 【SCENE20】
- 5) Press the **[ENTER]** button for confirmation and enter to the next menu.
- 6) Then press the 【UP/DOWN】 button to select 【RED】 ... 【SHUT】 , 【TIME】 , 【WAIT】 , 【USE】
- 7) Press the 【UP/DOWN】 button to set up the parameter which are needed.
- 8) Press the **[ENTER]** button to escape and save.

Illustrations: When [USE] is set to be [NO], or the parameter of [TIME] is 0, it will not run this scene. When [WAIT] is set to be FADE time, the running process is as the following chart showing.



### 6.15 CHECK THE LIGHTING INFORMATION

- 1) Press the 【ENTER】 button in 【INFO】 menu, then enter to the checking the lighting information.
- 2) 【SOFT】 button is for software version information.
- 3) **【BAT】** is battery level from 0% to 100%.
- 4) 【POW】 button is for the current information of power reduction...
- 5) 【TEMP】 Current temperature of lamp board.

### 6.16 LIGHTING SETTING PARAMETER RESET

- 1) Press the **[ENTER]** button in **[STL]** menu, then enter to the lighting setting parameter reset.
- 2) Press the 【UP/DOWN】 button to select 【YES】.

3) Press the **[ENTER]** button to escape and save.

Illustrations: "ADDR" "CTST" and "PROG" are not reset, the others reset to the underlined value of the word.

### 6.17 **PROG SELF-PROGRAMMING PARAMETER RESET**

- 1) Press the **[ENTER]** button in **[PRL]** menu, then enter to the **[PROG]** self-programming parameter reset.
- 2) Press the 【UP/DOWN】 button to select 【YES】.
- 3) Press the 【ENTER】 button to escape and save.

# 6.18 LIGHTING PARAMETER DOWNLOADING EACH OTHER VIA DMX CABLE

- 1) Press the **[ENTER]** button in **[SEND]** menu, then enter to sending parameter to other lightings.
- 2) Press the 【UP/DOWN】 button to select 【YES】.
- 3) Press the **【ENTER】** button to confirm sending.

Illustrations:

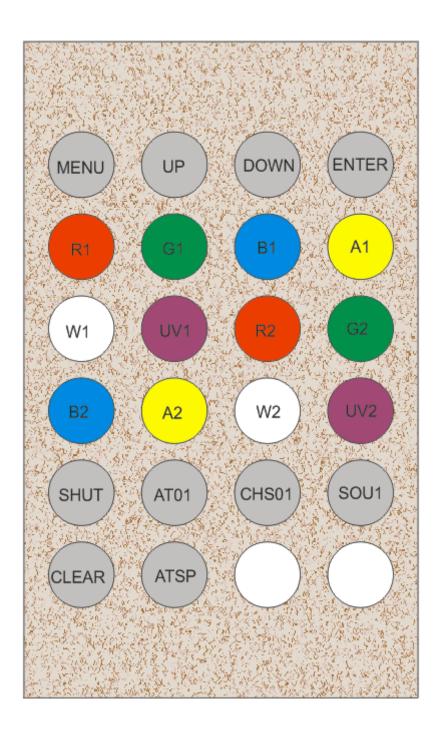
- 1)Please disconnect the connection of projector and DMX console before sending the parameter.
- 2) The information of 【ADDR】、【CAL】 can't be sent, can't be downloaded each other.
- 3) There will be an automatic reset of the other projectors after receiving parameter correctly.

# 7. Instruction for compatible Sweden DMX wireless module

- 1) There are 4 modes: compatible Sweden receive mode(green indicator), compatible Sweden transmit mode(blue indicator), normal mode(yellow indicator), custom mode(red indicator)
- 2) After 【RESET】, and then press 【KEY】 to switch above modes, select needed mode and press 【KEY】 one second to confirm and save it.
- 3) Under compatible Sweden DMX receive mode, press 【KEY】 3 seconds to delete matching between light and transmitter.
- 4) Under compatible Sweden DMX transmit mode, press 【KEY】 to match receive mode, press 3 seconds will delete matched mode.
- 5) Working in normal mode, indicator has 7 colors for option, when light and transmitter indicator are in the

- same color, can receive and transmit data.
- 6) User-defined function is not available.
- 7) Notice: compatible Sweden DMX mode in this lights has complete data for sending and receiving, but transmit function is not available here.

# 8. Infrared keyboard operation



- 1) 【MENU】, 【UP】, 【DOWN】, 【ENTER】 is same as the keys on the fixture.
- 2) 【R1】...【W2】, 【SHUT】 is shortcut for 【STAT】.
- 3) 【AT01】,【CHS01】,【ATSP】,【SOU1】is correspond to the positon of 【AT01】,【CHS01】,【SOU1】 in the MENU.
- 4) 【CLEAR】 is clear the value of 【R1】, 【G1】... 【SHUT】 then save and reset。

# 9. Operating Control Instruction

### **➤** Master/Slave

When the fixtures work in master mode it will send out the signal for the slave synchronous with it. To avoid the host signal and DMX512 signals interfere with each other, should cut off the DMX512 signals. The signal lines are longer than 60 meters (20 lamps), should increase a signal amplifier.

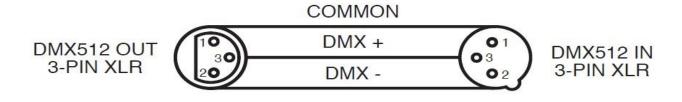
# 10. XLR cable connecting

### > XLR cable:

The standard connection way of the XLR is: one end connects to the male plug, and the other connects to the female. As below: pin 1: ground, pin 2: negative signal, pin 3: positive signal



XLR Pin Configuration				
Pin 1 = Ground				
Pin 2 = Data Compliment (negative)				
Pin 3 = Data True (positive)				



Note: In order to avoid failures and interference signal transmission, we connect a

Resistance  $120\Omega$  (1/4W) at the end of the DMX connecting as below:



Termination reduces signal errors and avoids signal transmission problems and interference. It is always advisable to connect a DMX terminal, (Resistance 120 Ohm 1/4 W) between PIN 2 (DMX-) and PIN 3 (DMX +) of the last fixture.

➤ The Conversion between 3 pin and 5 pin XLR

If the output cable of DMX512 controller is the 5PIN, please use 1pc 5PIN to 3PIN cable

3-Pin XLR to 5-Pin XLR Conversion						
Conductor	3-Pin XLR Female (Out)	5-Pin XLR Male (In)				
Ground/Shield	Pin 1	Pin 1				
Data Compliment (- signal)	Pin 2	Pin 2				
Data True (+ signal)	Pin 3	Pin 3				
Not Used		Do Not Use				
Not Used		Do Not Use				

# 11. Trouble Shooting

PROBLEM	REASON AND ACTION		
The lightin g can't be started normally	<ul> <li>Check the power connection is correct or not.</li> <li>Please detect the voltage.</li> <li>Power supply is damaged or incorrect connected. Call a qualified personnel to fix it.</li> <li>Connection of control board is not correct. Call a qualified personnel to fix it.</li> </ul>		
Out of console's control	<ul> <li>Please check the DMX connector and the power connection is connected correctly or not. It means having signal if it shows twinkling of the decimal point which in the lower right corner of the screen when exiting the screen saver.</li> <li>Please check the DMX address setting of lighting is correct or not.</li> <li>Check 【CHMD】 setting is correct or not.</li> </ul>		

	<b>A</b>	Please check whether the DMX line is near to the high voltage wire or not. In that case, it will damage or interfere the DMX electric circuit.
The beam appears	>	Check whether the 【CAL】 is started or not and the set value is
dim ,the brightness declines obviously	>	too small.  Check whether the 【POW】 is in over temperature protection
		situation or not, if yes, please take measures for ventilation.

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