



User Manual: SquareLED ENERGY 7x12W RGBAW + UV (6-in-1)

Akkubetrieben + Wireless DMX

Manual | ENERGY 7x12W RGBAW + UV (6-in-1)

1. Summarization

Summarize: Thank you for purchasing our ENERGY 7x12W RGBAW + UV (6-in-1) lighting. Please read these instructions carefully before begin and operate the fixtures according to these instructions to avoid any possible damages and accidents causes by misuseage.

Products introduction: Energy 7x12W RGBW + UV (6in1) light uses casting aluminum housing, designed in a fashion of hydrodynamic form. Appearance shows. It adopts high power 6-in-1 LED, which refers to single LED is made of R,G,B,A,W,UV 6-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: 1x SquareLED ENERGY 7x12W RGBAW + UV (6-in-1) , 1x DMX signal cable, 1x Power cable, the 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

Safety 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.

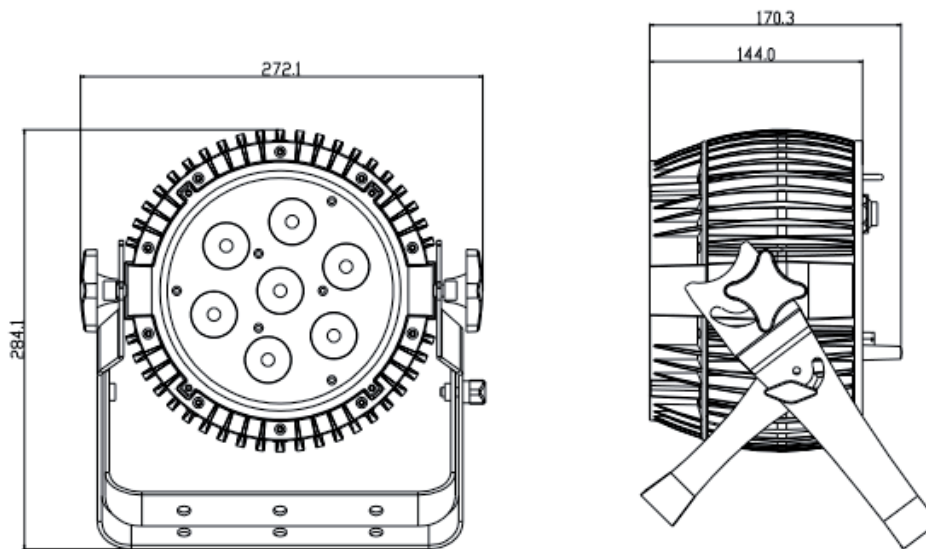
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3. Main Function

- » Input voltage: AC 100V-264V/47-63HZ
- » Consume: 90W
- » Lamp Type: 12W LED 6-in-1 R, G, B, A, W, UV (7PCS)
- » Life span: 50000~100000hours
- » PWM Dimmer: 1500HZ(16666 grades)
- » Control Signal: DMX512
- » Control mode: stand alone/ sound activated
- » Channel: 12CH, 9CH, 7CH, 6CH, 5CH, 4CH
- » Function Effect: dimmer, strobe, gradual change
- » Touch buttons, automatic lock key
- » Built-in temperature control measurement function, when LED work overheated, intelligent reduce LED output power, current power output can be viewed
- » Cooling mode: Natural Convection
- » built-in lithium battery, compatible with Swedish wireless DMX module
- » Battery Capacity: 25.9V / 6.6Ah
- » Charging time: 4 hours
- » full light Duration: 3 hours
- » Anti-electricity intension: 1.5KV
- » Insulation Resistance: >2MΩ
- » Size:287.3 x 270.1 x 166.0mm
- » Net Weight: 5.2 kg
- » Beam Angle: 15°, 25°, 45° Optional

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4. Outside Size Picture



5. DMX Control Function

DMX Channels

4CH	5CH	6CH	7CH	9CH	12CH	VALUE	FUNCTION
-	CH1	-	CH1	CH1	CH1	0-255	Dimming all
CH1	-	CH1	CH2	CH2	CH2	0-255	Red
CH2	-	CH2	CH3	CH3	CH3	0-255	Green
CH3		CH3	CH4	CH4	CH4	0-255	Blue
-	CH2	CH4	CH5	CH5	CH5	0-255	Amber
CH4	CH3	CH5	CH6	CH6	CH6	0-255	White
-	CH4	CH6	CH7	CH7	CH7	0-255	UV
-	-	-	-	CH8	CH8	0-5	No strobe
-	-	-	-	CH8	CH8	6-20	Random burst strobe(slow to fast)
-	-	-	-	CH8	CH8	21-60	Normal strobe(slow to fast)
-	-	-	-	CH8	CH8	61-100	Electronic Sinewave(slow to fast)
-	-	-	-	CH8	CH8	101-140	Random Strobe(slow to fast)
-	-	-	-	CH8	CH8	141-180	Opening pulse(slow to fast)
-	-	-	-	CH8	CH8	181-220	Closing pulse(slow to fast)
-	-	-	-	CH8	CH8	221-255	Electronic Squarewave(slow to fast)

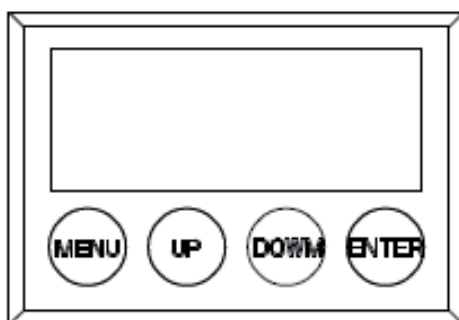
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4CH	5CH	6CH	7CH	9CH	12CH	VALUE	FUNCTION
-	-	-	-	-	CH9 (CH9 prior to	0-10	No effect
						11-15	CT01
						16-20	CT02
						21-25	CT03
						26-30	CT04
						31-35	CT05
						36-40	CT06
						41-45	CT07
						46-50	CT08
						51-55	CT09
						56-60	CT10
						61-65	AUTO 1 (R - G - B - A - W - UV - RG - RB - GB - AW - WUV - AUV)
						66-70	AUTO 2 (R^ - R. - G^ - G. - B^ - B. - A^ - A. - W^ - W. - UV^ - UV.)
						71-75	AUTO 3 (R^ G^ - R. G. - R^ B^ - R. B. - B^ G^ - B. G.)
						76-80	AUTO 4 (R^ - G^ - B^ - W^ - R. - G. - B. - W.)
						81-85	AUTO 5 (Rainbow effect: B, BG^ - BG,B. - G,G,GR^ - GR,G. - R,R,RB^ - RB,R^ - B)
						86-90	CHASE 1
						91-95	CHASE 2
						96-100	CHASE 3
						101-110	Reserved
111-200	R:111-115, G:116-120, B:121-125, A:126-130, W:131-135, UV:136-140, YELLOW:141-145, PINK:146-150, CYAN:151-155, ORANGE:156-160, VIOLET:161-165, GOLDEN:166-170, 2700K:171-175, 3200K:176-180, 4000K:181-185, 5500K:186-190, 6500K:191-195, RGBW:196-200						
201-255	Reserved						
					CH10	0-255	0-255(S),(speed of AUTO,fast to slow when AUTO1-AUTO5 effective)

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4CH	5CH	6CH	7CH	9CH	12CH	VALUE	FUNCTION
-	CH5	-	-	-	CH11 (RGB color mi- xing)	0-10	No effect
						11	Blue (Blue=full, Red+Green=0)(step)
						12-50	Red=0, Green->up,Blue =full(proportional)
						51	Light Blue (Red=0, Green=full, Blue =full)(step)
						52-90	Red=0, Green=full, Blue->down(proportional)
						91	Green (Red=0, Green=full, Blue =0)(step)
						92-130	Red->up, Green=full, Blue=0(proportional)
						131	Yellow (Red=full, Green=full, Blue=0)(step)
						132-170	Red=full, Green->down, Blue=0(proportional)
						171	Red(Red=full, Green=0, Blue=0)(step)
						172-210	Red=full, Green=0, Blue->up(proportional)
						211	Magenta (Red=full, Green=0, Blue=full)(step)
						212-250	Red-> down, Green=0, Blue=full(proportional)
						251-255	Blue (Red=0, Green=0, Blue=full)(step)
-	-	-	-	CH9	CH12	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
						41-50	S-curve
						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

5. Display Operation



- » **MENU:** access the menu or return to a previous menu option
- » **UP:** menu selection or parameter increments
- » **DOWN:** menu selection or parameters decrease
- » **ENTER:** select the current menu option

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Menu Tree

Tab	Level 1	Level 2	Level 3	Level 4
ADDR(Address)	001-512	0-255*		
STAT(Static control)	R	0-255*		
	G	0-255*		
	B	0-255*		
	A	0-255*		
	W	0-255*		
	UV	0-255*		
	SHUT	0-255*		
	PRSC(Preset color)	NONE,R,G,B,A,W,UV,YELLOW,PINK,CYAN,ORANGE,VIOLET,GOLDEN,2700K,3200K,4000K,5500K,6500K,RGBW *		
SET(Set)	CAL(Calibration)	R(Red)	0-255	
		G(Green)	0-255	
		B(Blue)	0-255	
		A	0-255	
		W	0-255	
		UV	0-255	
		USE	YES/NO	
	CHMD(Channel mode)	12CH		
		9CH		
		7CH		
		6CH		
		5CH		
		4CH		
	DIM(Dimming mode)	LIN(linear)/SQR(square law)/ISQR(inverse square law)/SCUR(S-curve)/LIN.(linear smooth)/SQR.(square law smooth)/ISQR.(inverse square law smooth)/SCUR.(S-curve smooth)		
	DISY(Display set)	ON(Permanent on)		
		2MIN (2 minutes off)		
	LOCK(Key 2 minutes lock)	YES/NO		
	BAT(battery output)	HIGH(high)		
		MID		
		LOW		
	SIGN(DMX signal selection)	2.4G(wireless)/CABL(Cable)		

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Tab	Level 1	Level 2	Level 3	Level 4
	WIRE(Wireless set)	REST(reset)	YES/NO	
		KEY		
CTST(Custom color set)	CT01	R	0-255	
		G	0-255	
		B	0-255	
		A	0-255	
		W	0-255	
		UV	0-255	
	CT10			
AUTO(Auto)	AT01	0-255*		
	AT02	0-255*		
	AT03	0-255*		
	AT04	0-255*		
	AT05	0-255*		
	CHS1	RUN..*		
	CHS2	RUN..*		
	CHS3	RUN..*		
PROG (Program)	CHS1 (Chase 1)	SC01 (Scene 1)	R	0-255
	.	.	G	0-255
	.	.	B	0-255
	.	.	A	0-255
	.	.	W	0-255
	.	.	UV	0-255
	.	.	SHUT	0-255
	.	.	AUTO	NONE,AT01-AT05
	.	.	ATSP	0-255(S)
	.	.	TIME	0-255(S)
	.	.	WAIT	0-25.5(S)
	.	.	USE	YES/NO
	.	SC20 (Scene 20)		
	CHS3 (Chase 3)			
INFO (Information)	SOFT(Software version)	Vx.x		
	POW(Power reduction)	100%/80%/50%		
	BAT	0-10		
	ST L (Setting load)	YES/NO		
	PR L (Program load)	YES/NO		
SEND(Send)	VES/NO			

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7. Instruction

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.

7.1 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.

7.2 STATIC SETTING

- » 1) Press the (ENTER) button in (STAT) menu, then enter to the static setting.
- » 2) Press the (UP/DOWN) button to select
(RED) , (GREEN) , (BLUE) , (WHITE) ... (PRSC).
- » 3) Press the (UP/DOWN) button to set up the (0-255) numerical value.
- » 4) Press the (ENTER) button to escape and save.

7.3 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) , (BLUE) , (UV)
- » 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 (GREEN) BLUE...UV is output in accordance with the percentage which the color cast calibration value divides 255.

7.4 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 (12CH) , (9CH) , (7CH) , (6CH) , (5CH) , (4CH)
- » 3) Press the (ENTER) button to escape and save.

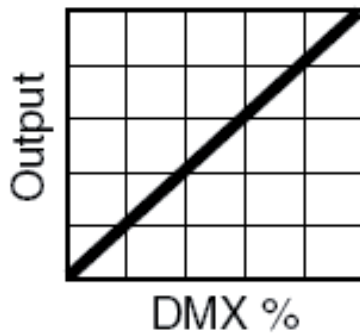
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7.5 DIMMING MODE SETTING

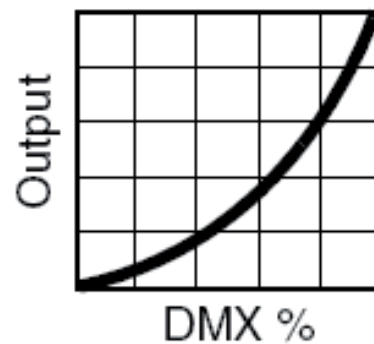
- » 1) Press the (ENTER) button in (DIM) menu, then enter to the dimming mode setting.
- » 2) Press the (UP/DOWN) button to select (LIN) (SQR) (ISQR) (SCUR) (LIN.) (SQR.) (ISQR.) and (SCUR.).
- » 3) Press the (ENTER) button to escape and save.
- » Illustrations (When setting (LIN.) (SQR.) (ISQR.) and (SCUR.) in (DIM) menu, there will be added a little delay dimming effect for smooth..

» Dimming curve:

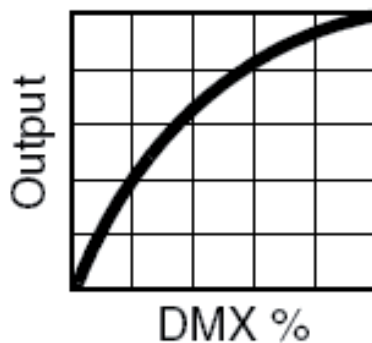
Linear curve:



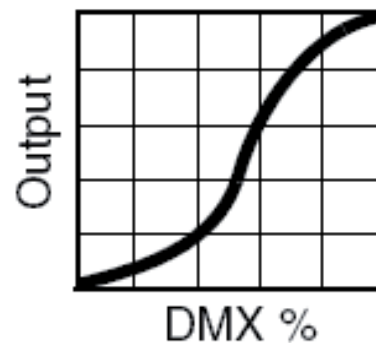
Square law curve:



» Inverse Square law curve:



S-curve:



7.6 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 MINUTES OFF)
- » 3) Press the (ENTER) button to escape and save.

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7.7 AUTO LOCK KEY SETTING

- » 1) Press the (ENTER) button in (LOCK) menu, then enter auto lock key setting.
- » 2) Press the (UP/DOWN) button to select (YES), (NO)
- » 3) Press the (ENTER) button to escape and save.
- » Instructions: When set to [YES], it will lock automatically after two minutes to prevent accidental triggering flood flushing, and then press any key keep 10 seconds to unlock.

7.8 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.

7. 6.9 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.

7. 6.10 Wireless set

- » 1) Press the (ENTER) button in (WIRE) menu, then enter to the wireless set.
- » 2) (RESET) the Analog process of press the button on again after wireless module off
- » 3) (KEY) similar as the build-out kep

7. 6.11 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.

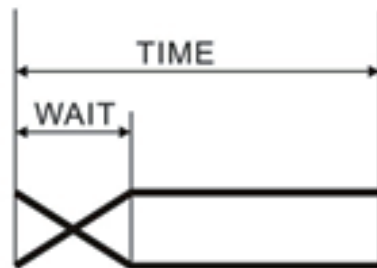
7. 6.12 AUTO RUN, SELF-PROGRAM RUN

- » 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)
- » 3) Press the (ENTER) button to start running.

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7.13 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



7.14 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) (POW) button is for the current information of power reduction. It is 100% output in normal conditions, but 80% or 50% output in over temperature protection situation.
- » 4) (BAT) Remaining battery power, from 0-10

7.15 LIGHTING SETTING PARAMETER RESET

- » 1) Press the (ENTER) button in (ST L) 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.

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7.16 (PROG) SELF-PROGRAMMING PARAMETER RESET

- » 1) Press the (ENTER) button in (PR L) 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.
- »

7.17 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.

8. 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.

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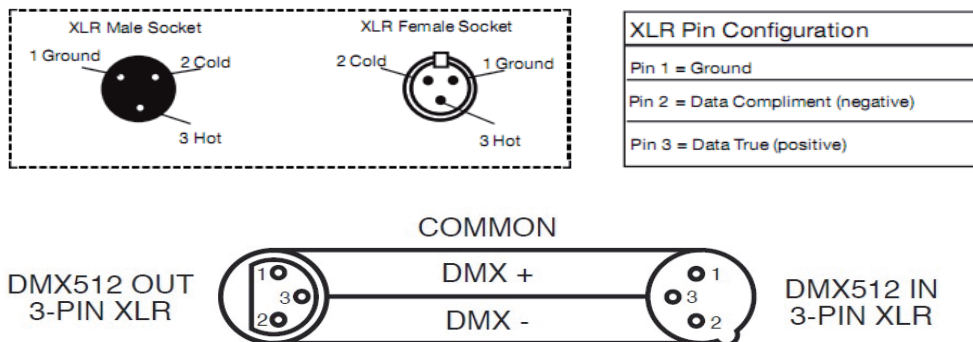
9. Operating Control Instruction

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



Noted: In order to avoid failures and interference signal transmission, we connect a resistance 120Ω (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

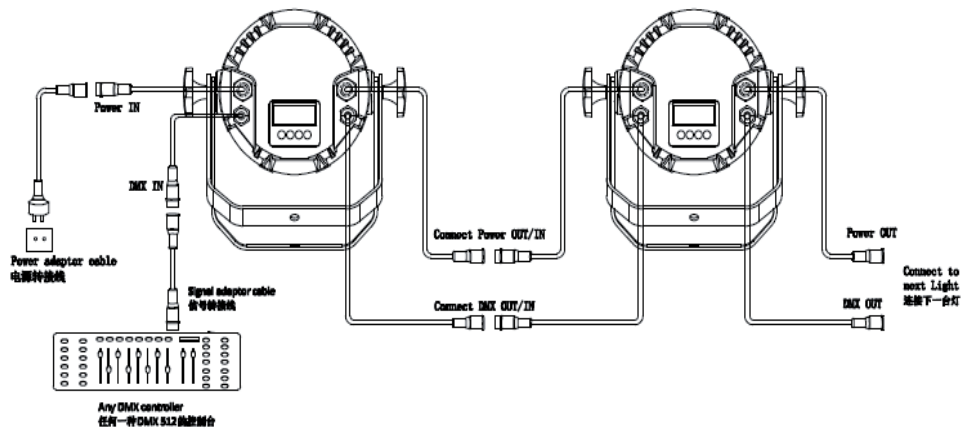
If the output cable of DMX512 controller is the 5PIN, please use 1pc 5PIN to 3PIN cable

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

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10. Connecting picture

Light connecting picture:



11. Trouble Shooting

Problem	Checking Way
The lighting can't be started normally	<ul style="list-style-type: none"> • Check the power connection is correct or not. • Please detect the voltage. • Power supply is damaged or incorrect connected. Call a qualified personnel to fix it. • Connection of control board is not correct. Call a qualified personnel to fix it.
Out of console's control	<ul style="list-style-type: none"> • 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. • Please check the DMX address setting of lighting is correct or not. • Check (CHMD) setting is correct or not. • Check (SIGN) setting is correct or not. • 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 dim ,the brightness declines obviously	<ul style="list-style-type: none"> • Check whether the (CAL) is started or not and the set value is too small. • Check whether the (POW) is in over temperature protection situation or not, if yes, please take measures for ventilation.
Noted: only professional persons can do as above!	



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