



User Manual: Squareled NPQ818 RGBW 8x18W W-DMX version

Squareled

NPQ818 -18x8W-RGBW
W-DMX version



USER MANUAL



Catalogue

1. Summary	1
2. Safety Instruction.....	2
3. Outside Size Picture	3
4. Main Function.....	4
5. DMX Control Function	5
6. Display Operation instruction.....	7
6.1 DMX ADDRESS SETTING	9
6.2 STATIC SETTING.....	9
6.3 COLOR CAST CALIBRATION SETTING	9
6.4 CHANNEL MODE SETTING	10
6.5 DIMMING MODE SETTING	10
6.6 DISPLAY SETTING.....	10
6.7 AUTO LOCK KEY SETTING	10
6.8 DMX signal selection setting	11
6.9 Wireless set	11
6.10 CUSTOM COLOR SETTING	11
6.11 AUTO RUN, SELF-PROGRAM RUN	11
6.12 EDIT SELF-PROGRAM.....	11
6.13 CHECK THE LIGHTING INFORMATION	12
6.14 LIGHTING SETTING PARAMETER RESET	12
6.15 【PROG】 SELF-PROGRAMMING PARAMETER RESET	12
6.16 LIGHTING PARAMETER DOWNLOADING EACH OTHER VIA DMX CABLE	12
7. Compatible W- DMX wireless module Instruction..... Fehler! Textmarke nicht definiert.	
8. Operating Control Instruction.....	13
9. XLR cable connecting	14
10. Connecting picture.....	15
11. Trouble Shooting.....	15

Please read over this manual before operating the light

1. Summary

➤ **Summary**

- Thank you for purchasing our NPQ818. Please read these instructions carefully before begin and operate the fixtures according to these instructions to avoid any possible damages and accidents causes by misuse

➤ **Product introduction**

LED NPQ818 light uses casting aluminum housing, designed in a fashion of hydrodynamic form. Appearance shows. It adopts high power 4-in-1 LED, which refers to single LED is made of R,G,B,W, 4-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**

- NPQ818 1 PC
- DMX Signal Cable 1 Set
- Waterproof input 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;



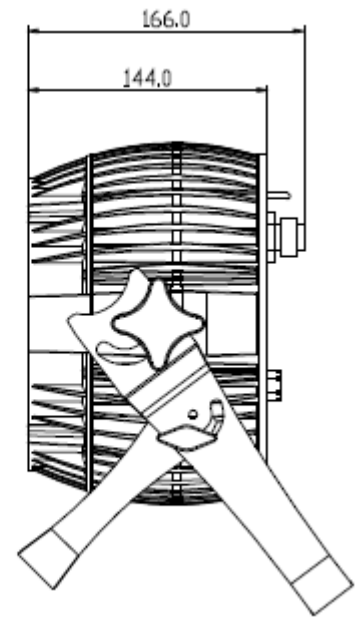
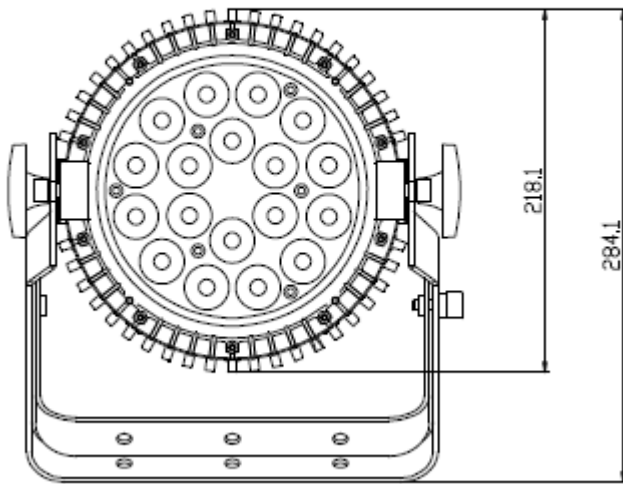
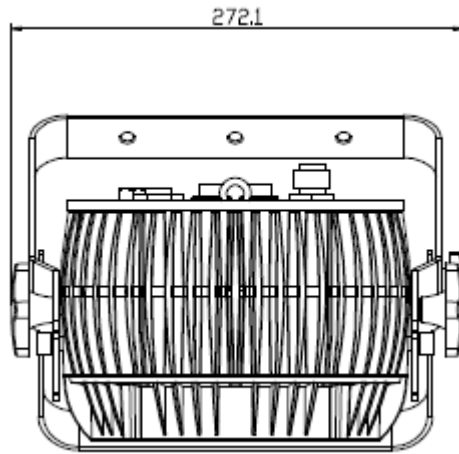
➤ **Safety**



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.

3. Outside Size Picture



4. Main Function

- Input voltage: AC 100V-264V/47-63HZ
- Consume: 150W
- Lamp Type: 8W LED 4-in-1 R、G、B、W(18PCS)
- Life span: 50000~100000hours
- PWM Dimmer: 1500HZ(16666 grades)
- Control Signal: DMX512
- Control mode: standalone / sound activated
- Channel: 10CH、7CH、5CH、4CH、3CH
- 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
- Anti-electricity intension: 1.5KV
- Insulation Resistance: > 2 MΩ
- Size: 287.3*270.1*166.0mm
- Net Weight: 5.2 Kg
- Beam Angle: 15°, 25°, 45° Optional

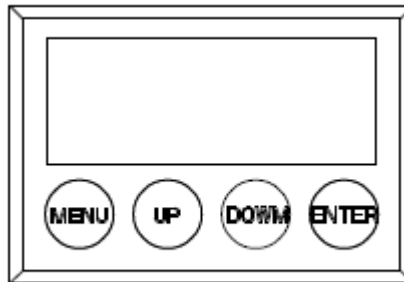
5. DMX Control Function

➤ DMX Channels

3CH	4CH	5CH	7CH	10CH	VALUE	FUNCTION
CH1	-	CH1	CH1	CH1	0-255	Dimming all
-	CH1	CH2	CH2	CH2	0-255	Red
-	CH2	CH3	CH3	CH3	0-255	Green
-	CH3	CH4	CH4	CH4	0-255	Blue
CH2	CH4	CH5	CH5	CH5	0-255	White
-	-	-	CH6	CH6	0-5	No strobe
					6-20	Random burst strobe(slow to fast)
					21-60	Normal strobe(slow to fast)
					61-100	Electronic Sinewave(slow to fast)
					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)					
-	-	-	-	CH7(CH 7 prior to CH9)	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,W, RG, RB, GB, RGBW)
					66-70	AUTO 2 (R↑,R↓,G↑,G↓,B↑,B↓,W↑,W↓)
					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					
101-105	SOUND 1:Sound change color					

					106-110	SOUND 2:Sound Strobe(white color only)
					111-200	R:111-115,G:116-120,B:121-125,W:126-130,RGW:131-135,RGB: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
-	-	-	-	CH8	0-255	0-255(S),(speed of AUTO,fast to slow, when AUTO1-AUTO5 effective)
CH3	-	-	-	CH9 (RGB color mixing instead of RGB channel)	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)					
-	-	-	CH7	CH10	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

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	Level 3	Level 4
ADDR(Address)	001-512			
STAT(Static control)	R	<u>0-255*</u>		
	G	<u>0-255*</u>		
	B	<u>0-255*</u>		
	W	<u>0-255*</u>		
	SHUT	<u>0-255*</u>		
	PRSC(Preset color)	NONE,R,G,B,W,RGBW,RGB, YELLOW,PINK,CYAN,ORANGE,VIOLET,GOLDEN,2700K,3200K,4000K,5500K,6500K,RGBW *		
SET(Set)	CAL(Calibration)	R	<u>0-255</u>	
		G	<u>0-255</u>	
		B	<u>0-255</u>	
		W	<u>0-255</u>	
		USE	YES/NO	
	CHMD(Channel mode)	<u>10CH</u>		

		7CH		
		5CH		
		4CH		
		3CH		
	DIM(Dimming mode)	LIN/SQR/ISQR/SCUR/LIN./SQR./ISQR/SCUR.		
	DISY(Display set)	ON(Permanent on)		
		<u>2MIN</u> (2 minutes off)		
	LOCK(Key 2 minutes lock)	YES/ <u>NO</u>		
	SIGN(DMX signal selection)	2.4G(wireless)/ <u>CABL</u> (Cable)		
	WIRE(Wireless set)	REST(reset)		
		KEY		
CTST(Custom color set)	CT01	R	0-255	
	.	G	0-255	
	.	B	0-255	
	.	W	0-255	
	.			
	.			
	CT10			
AUTO(Auto)	AT01	RUN..*		
	AT02	RUN..*		
	AT03	RUN..*		
	AT04	RUN..*		
	AT05	RUN..*		
	ATSP	<u>0-255</u> (S)		
	CHS1	RUN..*		
	CHS2	RUN..*		
	CHS3	RUN..*		
	SOU1	RUN*(Sound change color)		
	SOU2	RUN* (Sound Strobe,white color only)		
PROG (Program)	CHS1 (Chase 1)	SC01 (Scene 1)	R	0-255
	.	.	G	0-255
	.	.	B	0-255
	.	.	W	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%		
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.

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 **【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.

6.3 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】** , **【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, GREEN, BLUE, WHITE is output in accordance with the percentage which the color cast calibration value divides 255.

6.4 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 **【10CH】** , **【7CH】** , **【5CH】** , **【4CH】** , **【3CH】**

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

6.5 DIMMING MODE SETTING

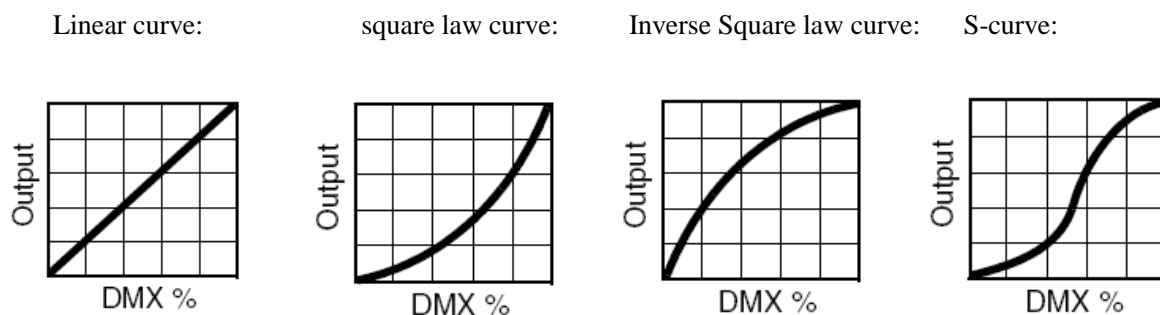
1) Press the **【ENTER】** button in **【DIM】** menu, then enter to the dimming mode setting.

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:



6.6 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.

6.7 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.

6.8 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.

6.9 Wireless set

1) Press the **【ENTER】** button in **【WIRE】** menu, then enter to the wireless set.

2) Press the **【UP/DOWN】** button to select **【2.4G】** , **【CABLE】**

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

6.10 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.

6.11 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】** **【CHASE1】** **【CHASE3】**

3) Press the **【ENTER】** button to start running.

6.12 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】**

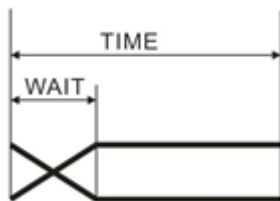
3) Press the **【ENTER】** button for confirmation and enter to the next menu.

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.



6.13 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.

6.14 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.

6.15 **【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.

6.16 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. Compatible Swedish DMX wireless module Instruction

1)This mode have four models, Compatible Swedish receiver mode (Green indicator), Compatible Swedish transmitter mode (blue indicator), Normal mode (yellow indicator), customer mode (red indicator)

2)After **【RESET】** , can be switching in the above modes by **【KEY】** , select the mode you need and press 1s **【KEY】** to confirm and save.

3)When in compatible Swedish receiver mode, press 3s **【KEY】** can select the pairing between this fixture and transmitter mode.

4)When in compatible Swedish transmitter mode, press **【KEY】** can be paired with other receiver modes, press 3s can select the paired modes.

5)Work on normal mode, indicator have seven colors for option, can receive or transmit the data when in the same color

6)Customs model, the user can not use.

7)Note: The compatible Swedish DMX wireless mode of this fixture have full data receive/transmit function, but the transmit function can not be used in this fixture.

8. Operating Control Instruction

➤ **Master/Slave**

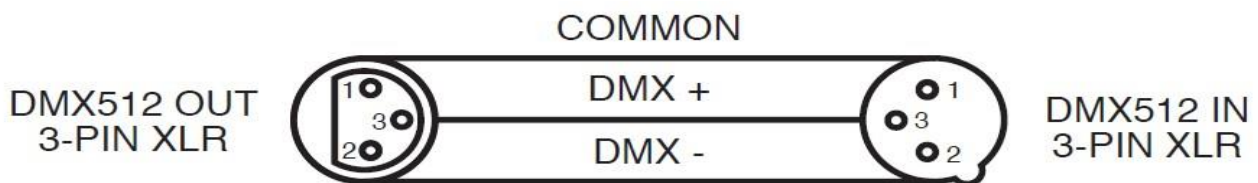
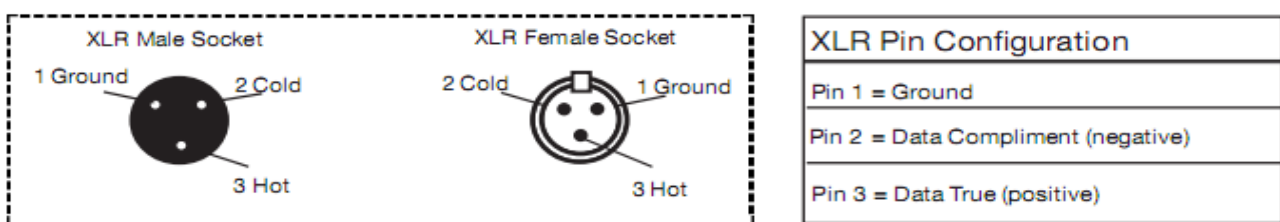
When the fixtures work in master mode it will send out the signal for the slave synchronous with it. To avoid the host signal and DMX512 signals interfere with each other, should cut off the

DMX512 signals. The signal lines are longer than 60 meters (20 lamps), should increase a signal amplifier.

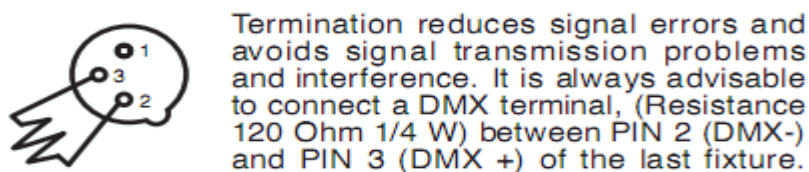
9. XLR cable connecting

➤ 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



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:



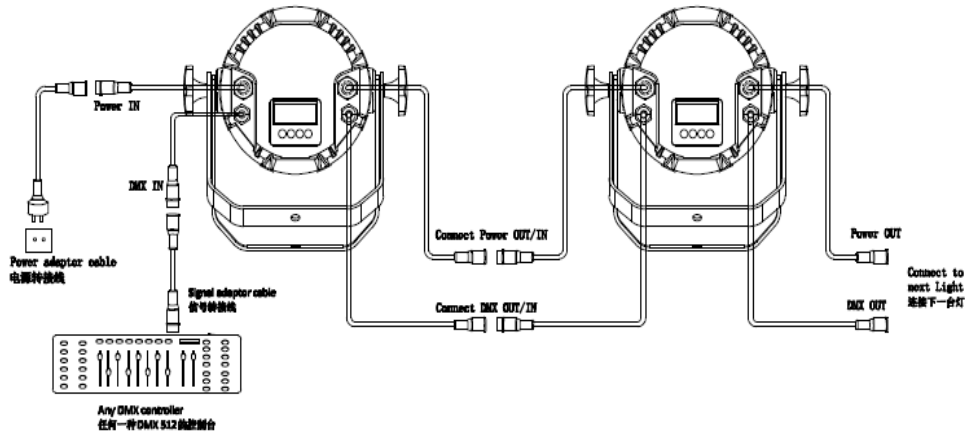
➤ The Conversion between 3 pin and 5 pin XLR

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

10. Connecting picture

- Light connecting picture:



11. Trouble Shooting

PROBLEM	REASON AND ACTION
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"> ➤ <input type="checkbox"/> 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.

	<ul style="list-style-type: none">➤ 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.



Das Lichttechnikhaus Vertriebs GmbH

Rudolf-Diesel-Str. 3, D-89312 Günzburg

Telefon +49 (0) 82 21 207 98-0

Fax +49 (0) 82 21 207 98-69

E-Mail info@lth-gmbh.de

Web www.lth-gmbh.de