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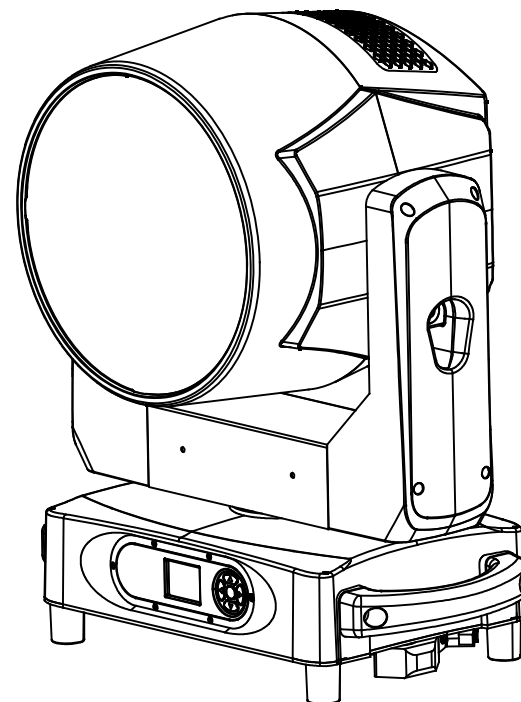
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LIGHT SKY®

广州市升龙灯光设备有限公司
FLY DRAGON LIGHTING EQUIPMENT CO.,LTD



AQUAPEARL

USER MANUAL



Please read these user manual carefully before use!
使用前请仔细阅读本产品使用说明书!

Contents/目录

1. Safety information/安全信息.....	2
2. Technical information/技术信息.....	4
3. Attachment and body size/附件与包装尺寸.....	6
4. Installation and connecting/安装与连接.....	7
5. Control panel/控制面板.....	10
6. Menu setting/菜单设置.....	11
7. Channel function/通道功能.....	15
8. Circuit connecting diagram/电器连接图.....	25
9. Cleaning and maintenances/清洁与保养.....	26
10. Troubleshooting/疑难处理.....	27
11. Duty exonerative and copyright protection.....	28

Congratulations on choosing our company product! We thank you for your custom.

- ◆ Please note that this product, as all the others in the rich my company range, has been designed and made with total quality to ensure excellent performance and best meet your expectations and requirements.
- ◆ Carefully read this user manual in its entirety and keep it safe for future reference. It is essential to know the information and comply with the instructions given in this manual to ensure the fitting is installed, used and serviced correctly and safely.
- ◆ My company disclaims all liability for damage to the fitting or to other property or persons deriving from installation, use and maintenance that have not been carried out in conformity with this user manual, which must always accompany the fitting.
- ◆ My company reserves the right to modify the characteristics stated in this user manual at any time and without prior notice.

感谢您选用我们公司的产品。

请记住, 这款产品和其他产品一样, 坚持以人为本的设计制造理念, 以产品质量为根本。

我们把客户的利益放在第一位, 尽最大的努力满足客户的要求。

请仔细阅读完这本使用说明书并妥善保管, 以便日后参考。在充分了解产品信息的情况下, 严格遵守使用说明书进行操作, 这样才能确保产品正确安全地安装、使用与服务。

我们公司不承担所有由于个人在安装、使用、维修时没有按照说明书操作而损坏灯具或其他性能的责任。

我们公司保留在任何时间和没有提前通知的情况下修改说明书权利。

SAFETY INFORMATION / 安全信息



- This lighting fixture is for professional use only - it is not for household use.
此灯具仅供专业人士使用-不适合家居使用

■ Installation 安装

Make sure all parts for fixing the projector are in a good state of repair.
Make sure the point of anchorage is stable before positioning the projector.
The safety chain must be properly hooked onto the fitting and secured to the framework.
When suspending the fixture, ensure that the supporting structure and all hardware used can hold at least 10 times the weight of all the devices they support.

确保固定灯具的所有零部件都完好无损。

在固定灯具之前请确保固定物是牢固稳定的。

安全绳索一定要恰当的固定在安全的结构上。

在吊装灯具时，确保支撑结构和所使用的所有配件至少可以保持10倍于他们支持的所有设备的重量。



Ta 40°C

■ Mounting surface and fire protection 安装面与防火

Please do not install the fixture onto combustible surface.

请不要将灯具直接安装在可燃物物质的表面上。

Keep all combustible materials at least 20 cm away from the fixture.

保持所有易燃材料远离灯具至少20厘米

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

灯具上的风扇或通风处至少在0.2m范围内不能有障碍物。

Do not expose the front glass to sunlight or other strong light source from any angle.

Lenses can focus the sun's rays inside the fixture, creating a potential fire hazard.

不要从任何角度将前玻璃暴露在阳光下或其他强光源上。

镜头可以将太阳光线聚焦在灯具里，从而产生潜在的火灾隐患。

■ Maximum ambient temperature 最高环境温度

This fixture is suitable for indoor use and wet locations. Do not immerse in water.

The ambient temperature Ta: -20°C~40°C.

本灯具适用于室内与户外潮湿环境，不可浸泡于水中，使用环境温度（Ta）为：-20°C~40°C。

■ Protection against electrical shock 电击防护

Connection must be made to a power supply system fitted with efficient earthing (Class I appliance according to standard EN 60598-1).

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.

电源供应系统的地线必须有效接地（标准EN 60598-1）。

另外，建议您使用适当大小的漏电电路断路器，保护灯具电源线以免其间接接地或对地短路。

■ Connection to mains supply 电源供应

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.

灯具上的LV电源和控制导体之间采用的双重绝缘

连接电源的总线必须由有资格的专业技术人员安装。

检测总线频率及电压是否与灯具上的标签上所标注的数值一致，即和灯具设计数值一致。

该标签还给出了输入功率，您需要参考计算电线所能够连接的最大灯具数量，以避免出现过载。

请勿使用绝缘层有损伤的电源线，发现灯具电源线有损伤时，必须由制造商或经销商或一个有专业资格的人员更换，以免发生危险。



t_c 80 °C



■ **Temperature of the external surface** 外表面最高温度

The maximum temperature that can be reached on the external surface of the fitting, in a thermally steady state, is 80 °C.

Avoid contact by persons and materials.

Allow the fixture to cool for at least 5 minutes before handling.

在热稳定的状态下，灯具外表面的温度最高点可达80°C。

避免直接接触灯体热表面。

让灯具冷却至少5分钟后再处理灯具（问题）



■ **Maintenance** 维护

In the event of a serious operating problem, stop using the fixture.

There are no user serviceable parts inside the unit. Do not open the housing or attempt any repairs yourself. In the unlikely event your unit may require service, please contact your nearest dealer.

出现严重运行故障时，立即停止使用该设备。

灯具内部没有用户可以使用的零部件。不要随便打开外壳，也不要自己修理。万一需要维修灯具，请与就近的经销商联系。

Before starting any maintenance work or cleaning the fixture, cut off power from the mains supply.

在开始任何维修工作或清洁灯具之前，必须切断灯具供电电源。



■ **Protection against explosion** 预防炸裂

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.

灯具上的保护屏、透镜或紫外线屏如果产生可见的损坏，即损坏到失效程度，如产生裂缝或深痕时，应更换。



■ **Protection optical radiation** 光辐射保护

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

请不要眼睛对看光源，它对眼睛网膜的损害可能会导致视盲。

Do not look at LEDs with magnifiers, telescopes, binoculars or similar optical instruments that may concentrate the light output.

不要用放大镜、望远镜、双筒望远镜或类似的光学仪器来观察LED光源，这些仪器可以集中输出光。



■ **Battery** 电池

This product contains a rechargeable lead-acid battery. To preserve the environment, please dispose the battery at the end of its life according to the regulation in force.

本产品包含一个可充电锂电池。为了保护环境，请根据规定处理寿命结束的电池。

■ **执行标准：产品执行GB7000.1-2015，GB7000.217-2008标准。**



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

该产品符合欧洲共同体要求，遵守：

低压2014/35/EU

电磁兼容性2014/30/EU

TECHNICAL INFORMATION / 技术信息

● Power supplies available / 电压选配范围:

100V~240V~ 50/60Hz

● Power / 功率/功率因数:

797W, PF0.985

● Light Source / 光源:

OSRAM 40W, RGBW 4 in 1 LED chip

OSRAM 40W, RGBW四合一LED灯珠

● LED QTY/灯珠数量: 19PCS/19颗.

● Average life/平均寿命: 30000h

● Lens & Zoom/透镜与变焦:

High precision combination lens, linear adjustment.

高精度组合透镜, 线性调节。

● Zoom angle/变焦范围: 4.5°~60°.

● Color/混色系统: RGBW macro color system.

RGBW 混色系统, 混色均匀无闪烁, 快速颜色彩虹效果。

● CCT/色温:

Color temperature adjustable range: 2500~10000K

色温可调节范围2500~10000K

● Beam/光束:

Small degrees beam effect/小角度光束效果突出

● Wash/染色:

Middle and big degree wash中大角度铺光均匀

● Ring Control/单圈控制: Yes

Independent control of outer and inner ring.

光源支持内外单圈独立控制颜色变换。

● Individual LED control/单点控制: Yes

Independent Individual LED control.

光源支持单颗独立控制、变换效果突出。

● Effect macro/效果宏:

Static effect macro functions and Dynamic effects macro function. /静态效果宏和动态效果宏功能。

● Strobe/频闪: 1-30 times/second electronic strobe

and random strobe./ 1-30 次/秒电子频闪和随机频闪。

● Dimmer/Shutter 调光/频闪:

Electronic dimmer, provides four dimming options; various strobe effect.

电子调光, 提供四种调光选择. 多种频闪效果。

● Pan, Tilt / 扫描系统:

X/Y Travel(X/Y行程): 540°/218°

X/Y Resolution(X/Y微调): 2.11°/0.85°

X/Y Speed(X/Y速度): 2.5S/1.0S

● Control Mode 控制方式:

DMX512, RDM, Stand-alone mode, ArtNet,

Wireless DMX512 (optional).

DMX512、RDM、单机模式、ArtNet、

无线DMX512 (选配)。

● Channel / 通道模式:

Standard-1 (22CH)/标准模式-1 (22CH)、

Mode-2(41CH)/模式-2 (41CH)、

Mode-3(94CH)/模式-3 (94CH)、

Mode-4(75CH)/模式-4 (75CH)、

Mode-5(18CH)/模式-5 (18CH)、

Mode-6(12CH)/模式-6 (12CH)。

● Display Menu / 显示菜单:

- The display panel adopts a 1.91-inch OLED screen, which is used in both Chinese and English languages to facilitate quick operation and browse menus.

显示面板采用1.91英寸OLED屏, 采用中英文两种语言文字, 方便快捷操作和浏览菜单;

- Display board can record device's using time, show device's temperature, channel data and software version. 菜单可记录设备使用时间和发光时间, 显示设备温度、通道数据及软件版本信息;

- Menu can be edited or called built-in the program. 可个性化设置显示菜单设置, 通过菜单可编辑或调用内置程序。

● IP set / 地址码设置:

Automatic change battery, IP could be set without electricity.

内置长寿命电池, 设置地址码时灯具不需上电。

● Software upgrade / 软件升级:

Update via DMX link Channel.

通过DMX链接上传升级文件。

● IP66 protection/IP66 防护等级: IP66

● Safety Devices / 灯具安全:

- BiPolar circuit breaker with thermal protection.

- 过流和过热保护。

● Cooling / 冷却:

Forced ventilation with axial fans.

用轴流式风机强制通风。

● Working mode / 工作模式:

Auto mode, Stage mode, Studio mode. 标准、舞台、演播室3种工作模式。

● Outlook / 外观:

Metal base and anti-fire plastic.

金属底座与防火工程塑料。

● Light size / 灯体尺寸: 470×333×563

● Box Size / 纸箱尺寸: 530X395X635MM

● N.W./净重: 29.0kg, G.W./毛重: 32.8kg

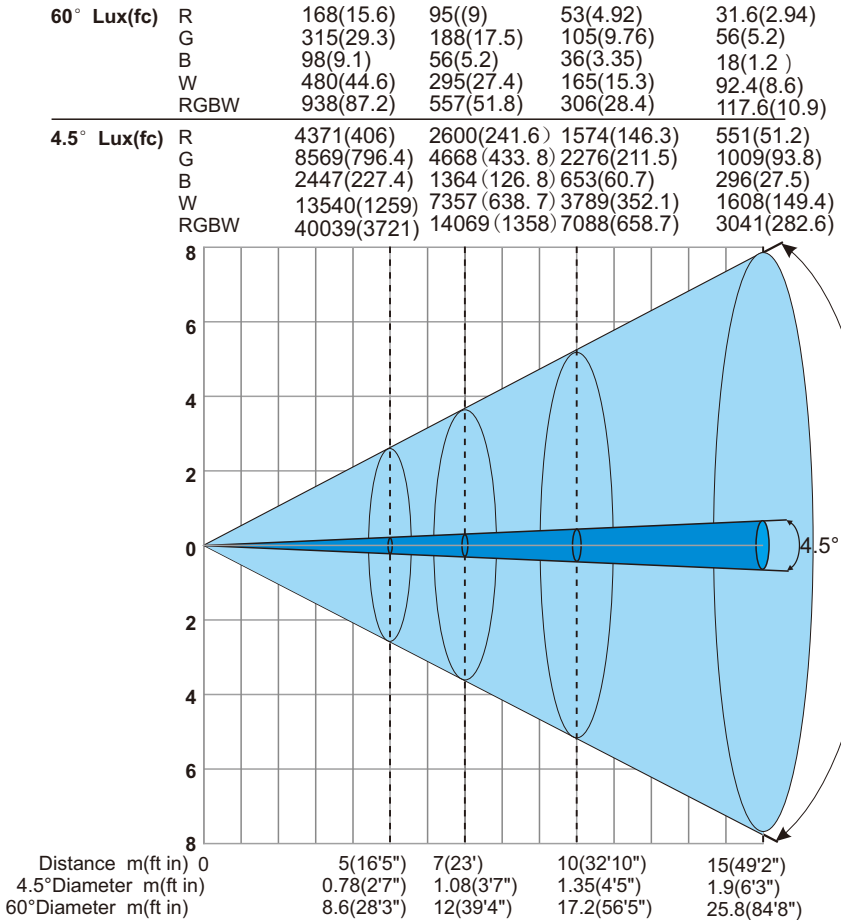
● Flycase Size / 航空箱尺寸(2台装):

925X580X785MM

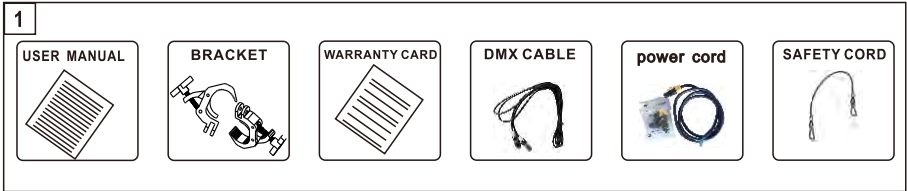
N.W./净重: 58kg, G.W./毛重: 101.8kg

射距、光板直径与照度关系图

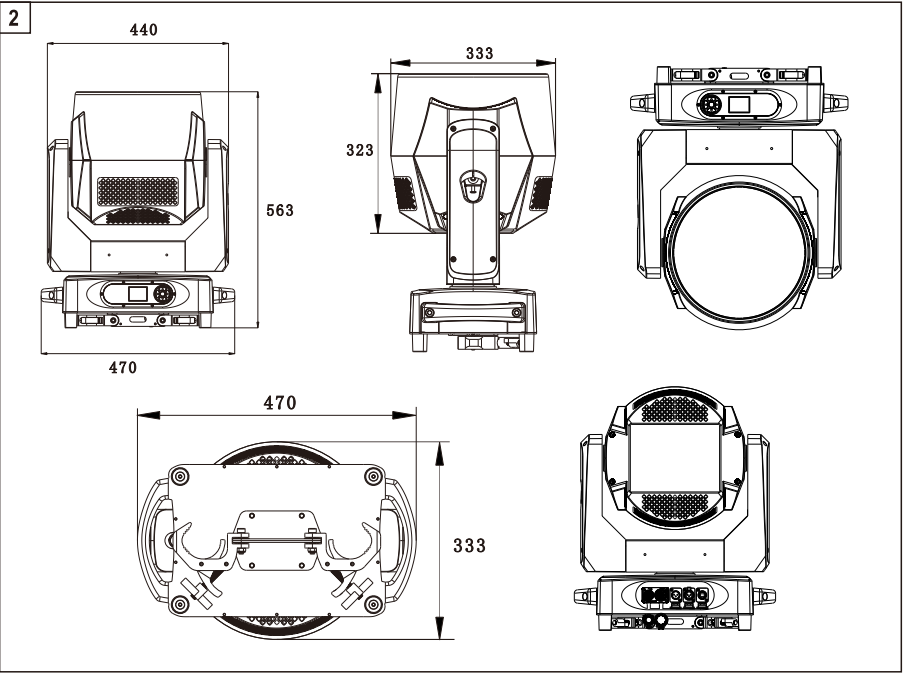
Distance, spot diameter and illumination diagram



ATTACHMENT AND BODY SIZE/附件与包装尺寸

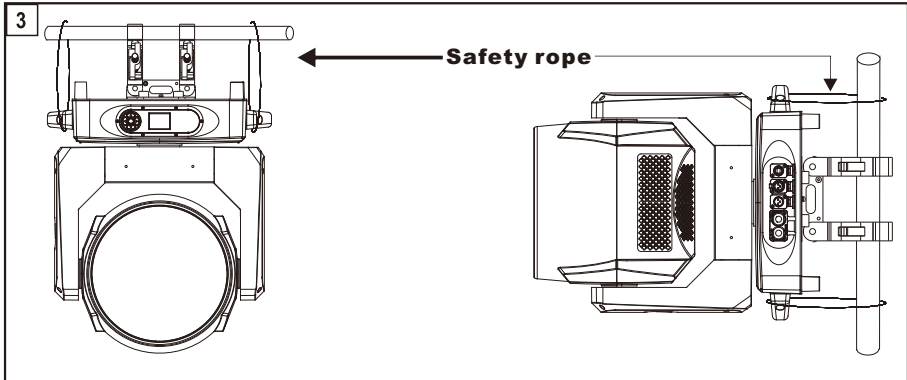


Attachment contents- Fig. 1



Body Size---Fig 2

INSTALLATION AND CONNECTING/安装与连接



Installing the projector- Fig. 3

Compact, standard clamp system equipped & easy installation

灯具底座配置有一体化可折叠灯钩，安装更方便，使用更安全

The projector can be installed on the floor resting on special rubber feet, on a truss or on the ceiling or wall.

WARNING: with the exception of when the projector is positioned on the floor, the safety rope must be fitted.

This must be securely fixed to the support structure of the projector and then connected to the fixing point at the centre of the base.

灯具可通过橡胶机脚放置在地板上、或安装在桁架、天花板或墙壁上。

警告：除非灯具放置在地板上，否则必须安装安全绳。

要求安全绳必须牢固地固定在灯具支架上，然后连接到底座中心固定点上。

Make sure all parts for fixing the projector are in a good state of repair.

Make sure the point of anchorage is stable before positioning the projector.

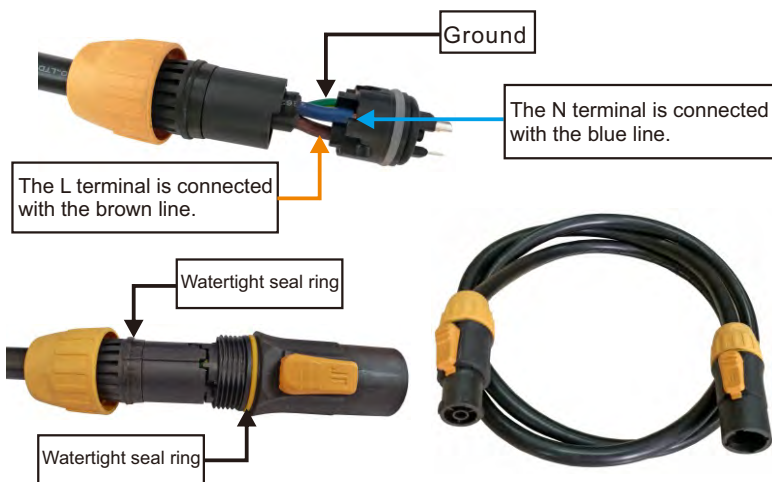
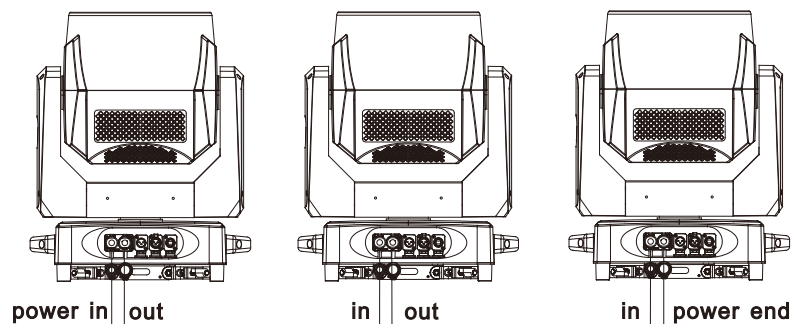
When suspending the fixture, ensure that the supporting structure and all hardware used can hold at least 10 times the weight of all the devices they support.

确保固定灯具的所有零部件都完好无损。

在固定灯具之前请确保固定物是牢固稳定的。

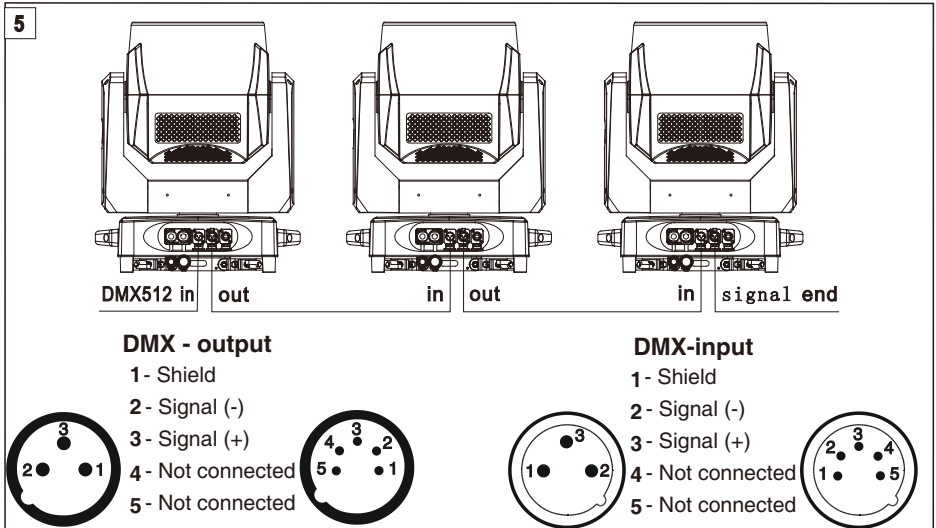
在吊装灯具时，确保支撑结构和所使用的所有配件至少可以保持10倍于他们支持的所有设备的重量。

4



Connecting to the mains supply ---Fig 4

- The stage lighting power supply can not be more than 2pcs pre line
- 舞台灯具电源串联不能超过2台
- connection to the electricity mains must be carried out by a qualified electrical installer.
- 连接电源的总线必须由有资格的专业技术人员安装。
- After doing the above operation and making sure all the devices had been installed with natural operate, press the power switch to check whether every -thing is working normally.
- 在完成上述全部操作并确保已安装好之后，才可以上电对灯具进行操作。



Connecting to the control signal line (DMX) - Fig. 5

© Please use the round 3 or 5-pin XLR plugs & sockets offered by menu factory to connect the first projector's output to the second projector's input and connect the second projector's output to the third projector's input. And in the same way for the rest, eventually connect the last projector's output, all the projectors are together.

主灯的输出端与子灯中输入端之间的连接,可以采用由厂商提供的圆柱形3或5芯XLR电缆。将主灯的OUT插座与子灯底座上的IN插座相连,然后再将OUT插座与下一个子灯的IN插座相连,如此类推直到所有子灯都被连接在一起。

© The projectors's control signal output or input by using the 3 or 5-pin XLR plug and socket. If need to lengthen the communication cable, please make sure the both side of 3 or 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-cord screened cable 75Ω resistance with each core is at least a 0.5mm diameter. (Caution: All the inside leading wire of 3 or 5-pin XLR plug couldn't touch each other or plinth).

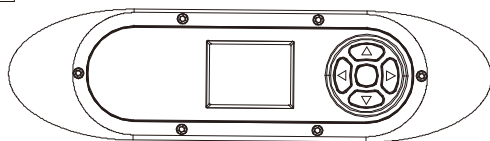
信号线进行接入或接出时,应使用与灯具一并提供的圆柱形3或5芯XLR插头。如果需要延长通讯电缆,在接线时,公母3或5芯XLR插头两端必须一一对应(即1对应1,2对应2,3对应3),否则易导致通讯中断。通讯线为两芯屏蔽线,阻抗特性为 75Ω 。(注意:每根通讯电缆线的线芯直径至少应为0.5mm,所有的3或5芯XLR的内部导线不应互相接触或接触到插头体。)

© 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.

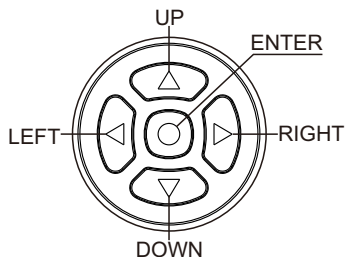
在安装灯具时建议使用DMX信号终端器;它可以避免由电噪声而导致干扰数字控制信号。简单来说,DMX终端器是一个XLR连接器,在其2脚与3脚之间连有一个120欧姆1/2W的电阻,将它连到最后一台灯具的OUT插座上。

CONTROL PANEL/控制面板

6

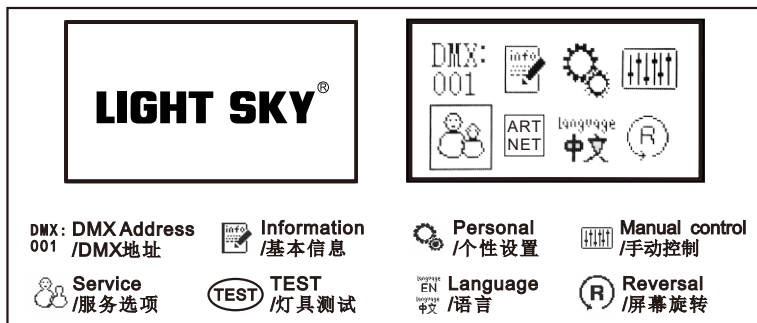


Up arrowhead : page up
 Down arrowhead : page down
 Left arrowhead : reduce
 Right arrowhead : increase
 Enter : OK function
 Exit : in the choice screen



- Press the switch. The projector starts resetting the effects. At the same time, the following information scrolls on the display (please refer to the actual material):

打开电源开关,液晶屏会出现如下信息(请以实物显示为准):



MENU SETTING/菜单设置

Main menu / 主菜单	I menu/ 一级菜单	II menu/ 二级菜单	III menu/ 三级菜单	IV menu/ 四级菜单
DMX Seetting s/设置 DMX地址	Address/DMX地址:001-512			
	DMX Signal mode/信号优先 →	Wire priority/有线优先 ARTNET priority/ARTNET优先		
	ART-NET/ART-NET设置 →	IP address/IP地址	No Artnet board/无ARTNET板	
		Mask Address/Mask地址		
		Net Address/Net地址		
		Sub net Address/Sub net地址		
		Universe Address/Universe地址		
	Return (ESC) /退出	Return (ESC) /退出		
Information/基本信息查看	Total Time/总运行时间 →	Power On/总上电: ****(h) LED On/亮LED: ****(h)		
	Temperature/设备温度 →	LED TEMP/散热器温度:00.0		
	Logged temperature/温度记录 →	LED temperature/散热器温度	Cur TEMP/当前问题: **. *	
			Max TEMP/最大温度: **. *	
			Min TEMP/最小温度: **. *	
		Return (ESC) /退出		
	Fan information/风机信息 →	led fan/散热风机	1. Power/电压: **. *V	
			2. Sp-Fan1/散热风机1: ****%	
			3. Sp-Fan2/散热风机2: ****%	
			4. Sp-Fan3/散热风机3: ****%	
			5. Sp-Fan4/散热风机4: ****%	
			6. Sp-Fan1/散热风机1: ****R	
			7. Sp-Fan2/散热风机2: ****R	
		Return (ESC) /退出		
	RDM UID/RDM地址 →	3888: ****		
	DMX live/设备通道 →	1. Pan/水平 ***		
		2. Pan Fine/水平微调 ***		
		3. Tilt/垂直 ***		
		4. Tilt Fine/垂直微调 ***		
		5. Function/功能 ***		
		6. zoom/缩放 ***		
		7. Zoom fine/缩放微调 ***		
		8. Dimmer/调光 ***		
		9. Dimmer Fine/调光微调 ***		
		10. Shutter/频闪 ***		
		11. Macro/颜色宏 ***		
		12. CCT/色温 ***		
		13. Sta Effect/静态效果 ***		
		14. MoveEffect/动态效果 ***		
		15. EffectSP/效果速度 ***		
		16. LED Fade/效果延时 ***		

Main menu / 主菜单	I menu/ 一级菜单	II menu/ 二级菜单	III menu/ 三级菜单	IV menu/ 四级菜单
Information/基本 信息查看	DMX live/设备通道	17. Back Color/背景颜色 ***		
		18. Back Dimmer/背景调光 ***		
		19. Red/红色 ***		
		20. Green/绿色 ***		
		21. Blue/蓝色 ***		
		22. White/白色 ***		
	System version/版 本信息	XY /XY板: V*. **		
		LED /LED控制板: V*. **		
		Zoom /缩放板: V*. **		
		DIS /显示板: V*. **		
	Return (ESC) /退出			
Personal /个性设 置	Display lock/界面 密码	OFF/关		
		ON/开		
	Channel mode/通道 模式	Mode-1/模式1 (22CH)		
		Mode-2/模式2 (41CH)		
		Mode-3/模式3 (94CH)		
		Mode-4/模式4 (75CH)		
		Mode-5/模式5 (18CH)		
		Mode-6/模式6 (12CH)		
	Fan mode/风机模式	Auto/标准模式		
		Stage/舞台模式		
		Studio/演播室模式		
	Dimmer speed/调光 速度	Dimmer sp-1 (Fast)/调光速度1 (快)		
		Dimmer sp-2/调光速度2		
		Dimmer sp-3/调光速度3		
		Dimmer sp-4 (Slow)/调光速度		
	Dimmer curve/调光 曲线	Linear/线性		
		Square/平方		
		I-Square/反平方		
		SCurve/S曲线		
	P/T invert/水平垂 直反向	Pan invert/水平反向	OFF/关	
			ON/开	
		Tilt invert/垂直反向	OFF/关	
			ON/开	
		Return (ESC) /退出		
	Display/显示设置	Backlight/背光	Always on	
			Auto off (15s)	
		Rotate/屏幕旋转	Normal	
			Rotate 180	
		Backlight blink/背光闪烁	ON	
			OFF	
		Return (ESC)		
	XY Sensor Power /XY纠错力度开关	OFF/关		
		ON/开		
	Return (ESC) /退出			

Main menu / 主菜单	I menu/ 一级菜单	II menu/ 二级菜单	III menu/ 三级菜单	IV menu/ 四级菜单
Manual control/ 手动控制	Channel control /通道设置	1. Pan/水平 ***		
		2. Pan Fine/水平微调 ***		
		3. Tilt/垂直 ***		
		4. Tilt Fine/垂直微调 ***		
		5. Function/功能 ***		
		6. zoom/缩放 ***		
		7. Zoom fine/缩放微调 ***		
		8. Dimmer/调光 ***		
		9. Dimmer Fine/调光微调 ***		
		10. Shutter/频闪 ***		
		11. Macro/颜色宏 ***		
		12. CCT/色温 ***		
		13. Sta Effect/静态效果 ***		
		14. MoveEffect/动态效果 ***		
		15. EffectSP/效果速度 ***		
		16. LED Fade/效果延时 ***		
		17. Back Color/背景颜色 ***		
		18. Back Dimmer/背景调光 ***		
		19. Red/红色 ***		
		20. Green/绿色 ***		
		21. Blue/蓝色 ***		
		22. White/白色 ***		
		Return (ESC)/退出		
	Reset/复位	Reset all/整机系统复位		
		Pan/Tilt reset/水平垂直复位		
		Zoom reset/缩放系统复位		
		Return (ESC)/退出		
	Return (ESC)/退出			
Service/ 工厂服务	Error information/故障 信息	Error list/历史故障信息		
		Empty list/清除故障信息	NO/保留 YES/清除	
		Return (ESC)/退出		
	Calibration/校准	Pan/水平 000-255		
		Tilt/垂直 000-255		
		ZOOM/缩放 000-255		
		Red-1/红色-1 000-255		
		Green-1/绿色-1 000-255		
		Blue-1/蓝色-1 000-255		
		White-1/白色-1 000-255		
		Red-2/红色-2 000-255		
		Green-2/绿色-2 000-255		
		Blue-2/蓝色-2 000-255		
		White-2/白色-2 000-255		
		Red-3/红色-3 000-255		
		Green-3/绿色-3 000-255		

Main menu / 主菜单	I menu/ 一级菜单	II menu/ 二级菜单	III menu/ 三级菜单	IV menu/ 四级菜单
Service/ 工厂服务	Calibration/校准	Blue-3/蓝色-3 000-255		
		White-3/白色-3 000-255		
		Red-4/红色-4 000-255		
		Green-4/绿色-4 000-255		
		Blue-4/蓝色-4 000-255		
		White-4/白色-4 000-255		
		Return(ESC)/退出		
	Factory/工厂设置	Load default/工厂默认		
		Reset timers/时间清除		
		Clear logged temperature/清除 记录温度		
		Developer/开发人员		
		Firmware update/软件升级		
		Return(ESC)/退出		
Test/灯 具测试	Test P/T/测试水平 垂直	STEP/场景 ***		
	Test effect/测试 头部效果	STEP/场景 ***		
	Test all/整体测试	STEP/场景 ***		
	Return(ESC)/退出			
Language /语言设 置	English/英文			
	Chinese/中文			
Rotate display /显示屏 旋转	Normal			
	Rotate 180/旋转 180°			

CHANNEL FUNCTION/通道功能

Standard-1 (22CH)/标准模式-1 (22CH)

Channel / 通道	DMX值	Percentage / 百分比	Function/功能
1	0-255		Pan/水平
2	0-255		Pan Fine/水平微调
3	0-255		Tilt/垂直
4	0-10		Tilt Fine/垂直微调
5	0-25		No Function/无功能
	26-30		Zoom Reset/缩放复位
	31-40		P/T Reset/水平垂直复位
	41-50		System Reset/整机复位
	51-255		No Function/无功能
6	0-255		Zoom/缩放
7	0-255		Zoom Fine/缩放微调
8	0-255		Dimmer/调光
9	0-255		Dimmer Fine/调光微调
10			Shutter/频闪
	0-9	0-3.5	NO Function/无功能
	10-49	3.9-19.2	Slow closing, Fast opening, slow → fast/慢速关闭快速打开, 由慢到快;
	50-89	19.6-34.9	Fast closing, Slow opening, Slow → Fast/快速关闭慢速打开, 由慢到快;
	90-119	35.3-46.7	Slow closing, Slow open, Slow → Fast/慢速关闭慢速打开, 由慢到快;
	120-179	47.1-70.2	Random strobe, Slow → Fast/随机频闪, 由慢到快
	180-249	70.6-97.6	Synchronous strobe, slow → fast/同步频闪, 由慢到快
	250-255	98-100	NO Function/无功能
11	0-255		Macro/颜色宏
12	0-255		CCT/色温
13	0-255		Static Effect/静态效果
14	0-255		Move Effect/动态效果
15	0-255		Move Effect Speed/动态效果速度
16	0-255		LED Effect Delay /LED效果延时
17	0-255		Background Color/背景颜色
18	0-255		Background Dimmer/背景调光
19	0-255		Red/红
20	0-255		Green/绿
21	0-255		Blue/蓝
22	0-255		White/白

Mode-2 (41CH) / 模式-2 (41CH)

Channel / 通道	DMX值	Percentage / 百分比	Function/功能
1	0-255		Pan/水平
2	0-255		Pan Fine/水平微调
3	0-255		Tilt/垂直
4	0-255		Tilt Fine/垂直微调
5	0-25		No Function/无功能
	26-30		Zoom Reset/缩放复位
	31-40		P/T Reset/水平垂直复位
	41-50		System Reset/整机复位
	51-255		No Function/无功能
6	0-255		Zoom/缩放
7	0-255		Zoom Fine/缩放微调
8	0-255		Dimmer/调光
9	0-255		Dimmer Fine/调光微调
10			Shutter /频闪
	0-9	0-3.5	NO Function/无功能
	10-49	3.9-19.2	Slow closing, Fast opening, slow → fast/慢速关闭快速打开, 由慢到快;
	50-89	19.6-34.9	Fast closing, Slow opening, Slow → Fast/快速关闭慢速打开, 由慢到快;
	90-119	35.3-46.7	Slow closing, Slow open, Slow → Fast/慢速关闭慢速打开, 由慢到快;
	120-179	47.1-70.2	Random strobe, Slow → Fast/随机频闪, 由慢到快
	180-249	70.6-97.6	Synchronous strobe, slow → fast/同步频闪, 由慢到快
	250-255	98-100	NO Function/无功能
11	0-255		Macro/颜色宏
12	0-255		CCT/色温
13	0-255		Static Effect/静态效果
14	0-255		Move Effect/动态效果
15	0-255		Move Effect Speed/动态效果速度
16	0-255		LED Effect Delay/LED效果延时
17	0-255		Background Color/背景颜色
18	0-255		Background Dimmer/背景调光
19	0-255		Red/红
20	0-255		Green/绿
21	0-255		Blue/蓝
22	0-255		White/白
23	0-255		Color1/颜色1
24	0-255		Color2/颜色2
25	0-255		Color3/颜色3
26	0-255		Color4/颜色4
27	0-255		Color5/颜色5
28	0-255		Color6/颜色6
29	0-255		Color7/颜色7
30	0-255		Color8/颜色8
31	0-255		Color9/颜色9
32	0-255		Color10/颜色10
33	0-255		Color11/颜色11

Channel /通道	DMX值	Percentage /百分比	Function/功能
34	0-255		Color12/颜色12
35	0-255		Color13/颜色13
36	0-255		Color14/颜色14
37	0-255		Color15/颜色15
38	0-255		Color16/颜色16
39	0-255		Color17/颜色17
40	0-255		Color18/颜色18
41	0-255		Color19/颜色19

Mode-3 (94CH) / 模式-3 (94CH)

Channel /通道	DMX值	Percentage /百分比	Function/功能
1	0-255		Pan/水平
2	0-255		Pan Fine/水平微调
3	0-255		Tilt/垂直
4	0-255		Tilt Fine/垂直微调
5	0-25		No Function/无功能
	26-30		Zoom Reset/缩放复位
	31-40		P/T Reset/水平垂直复位
	41-50		System Reset/整机复位
	51-255		No Function/无功能
6	0-255		Zoom/缩放
7	0-255		Zoom Fine /缩放微调
8	0-255		Dimmer/调光
9	0-255		Dimmer Fine/调光微调
10			Shutter/频闪
	0-9	0-3.5	NO Function/无功能
	10-49	3.9-19.2	Slow closing, Fast opening, slow → fast/慢速关闭快速打开, 由慢到快;
	50-89	19.6-34.9	Fast closing, Slow opening, Slow → Fast/快速关闭慢速打开, 由慢到快;
	90-119	35.3-46.7	Slow closing, Slow open, Slow → Fast/慢速关闭慢速打开, 由慢到快;
	120-179	47.1-70.2	Random strobe, Slow → Fast/随机频闪, 由慢到快
	180-249	70.6-97.6	Synchronous strobe, slow → fast/同步频闪, 由慢到快
	250-255	98-100	NO Function/无功能
11	0-255		Macro/颜色宏
12	0-255		CCT/色温
13	0-255		Static Effect/静态效果
14	0-255		Move Effect/动态效果
15	0-255		Move Effect Speed/动态效果速度
16	0-255		LED Effect Delay/LED效果延时
17	0-255		Background Color/背景颜色
18	0-255		Background Dimmer/背景调光
19	0-255		Red/红-1
20	0-255		Green/绿-1
21	0-255		Blue/蓝-1
22	0-255		White/白-1
23	0-255		Red/红-2
24	0-255		Green/绿-2
25	0-255		Blue/蓝-2
26	0-255		White/白-2
27	0-255		Red/红-3
28	0-255		Green/绿-3
29	0-255		Blue/蓝-3
30	0-255		White/白-3
31	0-255		Red/红-4
32	0-255		Green/绿-4
33	0-255		Blue/蓝-4

Channel /通道	DMX值	Percentage /百分比	Function/功能
34	0-255		White/白-4
35	0-255		Red/红-5
36	0-255		Green/绿-5
37	0-255		Blue/蓝-5
38	0-255		White/白-5
39	0-255		Red/红-6
40	0-255		Green/绿-6
41	0-255		Blue/蓝-6
42	0-255		White/白-6
43	0-255		Red/红-7
44	0-255		Green/绿-7
45	0-255		Blue/蓝-7
46	0-255		White/白-7
47	0-255		Red/红-8
48	0-255		Green/绿-8
49	0-255		Blue/蓝-8
50	0-255		White/白-8
51	0-255		Red/红-9
52	0-255		Green/绿-9
53	0-255		Blue/蓝-9
54	0-255		White/白-9
55	0-255		Red/红-10
56	0-255		Green/绿-10
57	0-255		Blue/蓝-10
58	0-255		White/白-10
59	0-255		Red/红-11
60	0-255		Green/绿-11
61	0-255		Blue/蓝-11
62	0-255		White/白-11
63	0-255		Red/红-12
64	0-255		Green/绿-12
65	0-255		Blue/蓝-12
66	0-255		White/白-12
67	0-255		Red/红-13
68	0-255		Green/绿-13
69	0-255		Blue/蓝-13
70	0-255		White/白-13
71	0-255		Red/红-14
72	0-255		Green/绿-14
73	0-255		Blue/蓝-14
74	0-255		White/白-14
75	0-255		Red/红-15
76	0-255		Green/绿-15
77	0-255		Blue/蓝-15
78	0-255		White/白-15

Channel /通道	DMX值	Percentage /百分比	Function/功能
79	0-255		Red/红-16
80	0-255		Green/绿-16
81	0-255		Blue/蓝-16
82	0-255		White/白-16
83	0-255		Red/红-17
84	0-255		Green/绿-17
85	0-255		Blue/蓝-17
86	0-255		White/白-17
87	0-255		Red/红-18
88	0-255		Green/绿-18
89	0-255		Blue/蓝-18
90	0-255		White/白-18
91	0-255		Red/红-19
92	0-255		Green/绿-19
93	0-255		Blue/蓝-19
94	0-255		White/白-19

Mode-4 (75CH) / 模式-4 (75CH)

Channel/ 通道	DMX值	Percentage/ 百分比	Function/功能
1	0-255		Pan/水平
2	0-255		Pan Fine/水平微调
3	0-255		Tilt/垂直
4	0-255		Tilt Fine/垂直微调
5	0-25		No Function/无功能
	26-30		Zoom Reset/缩放复位
	31-40		P/T Reset/水平垂直复位
	41-50		System Reset/整机复位
	51-255		No Function/无功能
6	0-255		Zoom/缩放
7	0-255		Zoom Fine / 缩放微调
8	0-255		Dimmer/调光
9	0-255		Dimmer Fine/调光微调
10			Shutter/频闪
	0-9	0-3.5	No Function/无功能
	10-49	3.9-19.2	Slow closing, Fast opening, slow → fast/慢速关闭快速打开, 由慢到快;
	50-89	19.6-34.9	Fast closing, Slow opening, Slow → Fast/快速关闭慢速打开, 由慢到快;
	90-119	35.3-46.7	Slow closing, Slow open, Slow → Fast/慢速关闭慢速打开, 由慢到快;
	120-179	47.1-70.2	Random strobe, Slow → Fast/随机频闪, 由慢到快
	180-249	70.6-97.6	Synchronous strobe, slow → fast/同步频闪, 由慢到快
	250-255	98-100	No Function/无功能
11	0-255		Macro/颜色宏
12	0-255		CCT/色温
13	0-255		Static Effect/静态效果
14	0-255		Move Effect/动态效果
15	0-255		Move Effect Speed/动态效果速度
16	0-255		LED Effect Delay /LED效果延时
17	0-255		Background Color/背景颜色
18	0-255		Background Dimmer/背景调光
19	0-255		Red/红-1
20	0-255		Green/绿-1
21	0-255		Blue/蓝-1
22	0-255		Red/红-2
23	0-255		Green/绿-2
24	0-255		Blue/蓝-2
25	0-255		Red/红-3
26	0-255		Green/绿-3
27	0-255		Blue/蓝-3
28	0-255		Red/红-4
29	0-255		Green/绿-4
30	0-255		Blue/蓝-4
31	0-255		Red/红-5
32	0-255		Green/绿-5
33	0-255		Blue/蓝-5

Channel/ 通道	DMX值	Percentage/ 百分比	Function/功能
34	0-255		Red/红-6
35	0-255		Green/绿-6
36	0-255		Blue/蓝-6
37	0-255		Red/红-7
38	0-255		Green/绿-7
39	0-255		Blue/蓝-7
40	0-255		Red/红-8
41	0-255		Green/绿-8
42	0-255		Blue/蓝-8
43	0-255		Red/红-9
44	0-255		Green/绿-9
45	0-255		Blue/蓝-9
46	0-255		Red/红-10
47	0-255		Green/绿-10
48	0-255		Blue/蓝-10
49	0-255		Red/红-11
50	0-255		Green/绿-11
51	0-255		Blue/蓝-11
52	0-255		Red/红-12
53	0-255		Green/绿-12
54	0-255		Blue/蓝-12
55	0-255		Red/红-13
56	0-255		Green/绿-13
57	0-255		Blue/蓝-13
58	0-255		Red/红-14
59	0-255		Green/绿-14
60	0-255		Blue/蓝-14
61	0-255		Red/红-15
62	0-255		Green/绿-15
63	0-255		Blue/蓝-15
64	0-255		Red/红-16
65	0-255		Green/绿-16
66	0-255		Blue/蓝-16
67	0-255		Red/红-17
68	0-255		Green/绿-17
69	0-255		Blue/蓝-17
70	0-255		Red/红-18
71	0-255		Green/绿-18
72	0-255		Blue/蓝-18
73	0-255		Red/红-19
74	0-255		Green/绿-19
75	0-255		Blue/蓝-19

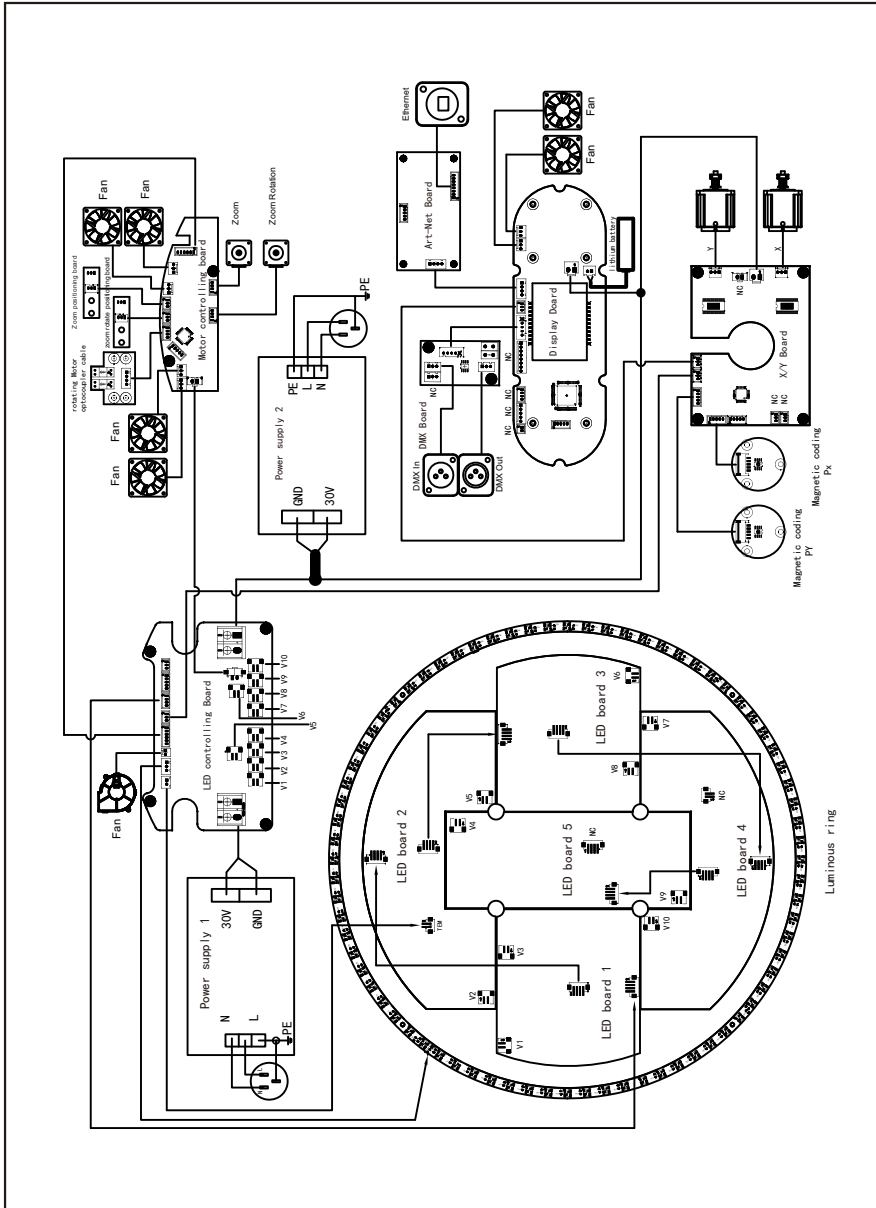
Mode-5 (18CH) / 模式-5 (18CH)

Channel / 通道	DMX值	Percentage / 百分比	Function/功能
1	0-255		Pan/水平
2	0-255		Pan Fine/水平微调
3	0-255		Tilt/垂直
4	0-255		Tilt Fine/垂直微调
5	0-25		No Function/无功能
	26-30		Zoom Reset/缩放复位
	31-40		P/T Reset/水平垂直复位
	41-50		System Reset/整机复位
	51-255		No Function/无功能
6	0-255		Zoom/缩放
7	0-255		Zoom Fine /缩放微调
8	0-255		Dimmer/调光
9	0-255		Dimmer Fine/调光微调
10			Shutter/频闪
	0-9	0-3.5	NO Function/无功能
	10-49	3.9-19.2	Slow closing, Fast opening, slow → fast/慢速关闭快速打开, 由慢到快;
	50-89	19.6-34.9	Fast closing, Slow opening, Slow → Fast/快速关闭慢速打开, 由慢到快;
	90-119	35.3-46.7	Slow closing, Slow open, Slow → Fast/慢速关闭慢速打开, 由慢到快;
	120-179	47.1-70.2	Random strobe, Slow → Fast/随机频闪, 由慢到快
	180-249	70.6-97.6	Synchronous strobe, slow → fast/同步频闪, 由慢到快
	250-255	98-100	NO Function/无功能
11	0-255		Macro/颜色宏
12	0-255		CCT/色温
13	0-255		Static Effect/静态效果
14	0-255		Move Effect/动态效果
15	0-255		Move Effect Speed/动态效果速度
16	0-255		LED Effect Delay /LED效果延时
17	0-255		Background Color/背景颜色
18	0-255		Background Dimmer/背景调光

Mode-6(12CH)/模式-6(12CH)

Channel /通道	DMX值	Percentage /百分比	Function/功能
1	0-255		Pan/水平
2	0-255		Pan Fine/水平微调
3	0-255		Tilt/垂直
4	0-255		Tilt Fine/垂直微调
5	0-25		No Function/无功能
	26-30		Zoom Reset/缩放复位
	31-40		P/T Reset/水平垂直复位
	41-50		System Reset/整机复位
	51-255		No Function/无功能
6	0-255		Zoom/缩放
7	0-255		Zoom Fine /缩放微调
8	0-255		Dimmer/调光
9	0-255		Dimmer Fine/调光微调
10			Shutter/频闪
	0-9	0-3.5	NO Function/无功能
	10-49	3.9-19.2	Slow closing, Fast opening, slow → fast/慢速关闭快速打开，由慢到快；
	50-89	19.6-34.9	Fast closing, Slow opening, Slow → Fast/快速关闭慢速打开，由慢到快；
	90-119	35.3-46.7	Slow closing, Slow open, Slow → Fast/慢速关闭慢速打开，由慢到快；
	120-179	47.1-70.2	Random strobe, Slow → Fast/随机频闪，由慢到快
	180-249	70.6-97.6	Synchronous strobe, slow → fast/同步频闪，由慢到快
	250-255	98-100	NO Function/无功能
11	0-255		Macro/颜色宏
12	0-255		CCT/色温

CIRCUIT CONNECTING DIAGRAM/电器连接图



CLEANING AND MAINTENANCES/清洁与保养

- 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.
确保灯具能够正常稳定的运行，应该保持灯具的清洁，对于镜头也应定期清理，以保证最佳的光线效果。在清洁时注意不要使用任何溶解清洁剂，以免对灯具造成损害。
- 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.
The fixture power ON time is best not over 48 hours, or it would generate lamp protection procedure.
建议：灯具持续使用时建议每次不要超过4小时，否则会大缩短灯具的使用寿命，可采用轮休息法解决上述问。建议灯具连续通电时间不要超过48小时。
- 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.
灯具在进行维护拆卸之前，一定要断开电源的连接，不能带电操作。
- 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.
灯具的调焦镜头或转动件必须定期检查，使其保持清洁和它的稳定性，如果出现明显的损坏或松动，必须及时对其进行更换或加固，以防发生竟然事故。
Please check the machanical parts is jamging. After cleaning, please add some temperature -durable juice.
检查调焦系统的机械部分是否卡住，去尘埃后添加防冻和耐温润滑油。
- 5. The light use the strong cool system. It is easy for the dirty to be colletced. Please do clear the hot-sak one time two week at least.
灯具产品采用风机制冷，容易积尘，请每两周至少清洁一次，尤其是散热进出风口。
- 6. After you use the light, please check the intake place whether there are some wastepaper, please clean it up, or the windmill will break down and causing fire.
灯具在有彩纸表演后，要检查进出风口处是否卡有或吸入纸屑，并清除赶紧，否则易损坏风机或引发火警隐患

CAUTION!注意！

Disconnect from mains before starting maintenance operation.
在进行保养维护之前请断开电源！

TROUBLESHOOTING/疑难处理

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 / LED不亮：

- 1.Please check if install the suitable voltage
检查是否安装了与灯具相匹配的电压；
- 2.Please check whether the led will reach the end of their life can explode; please replace a same description led.
检查灯具供电电源连接处或控制开关是否接触不良；
- 3.Please check if the power supply is enough.
检查电力供应是否不足；
- 4.Please check whether the DMX 512 controller pass the "turn on" order.
检查DMX512控制器是否发送了指令。

■The light couldn't accept the control order:

灯具不接受控制器的指令：

- 1.Please check the start code address and the function option are correct.
检查灯具数字启动地址数值和功能选项是否正确；
- 2.Please check whether the communicate control cable is on good connection or the cable is too long or interrupt.
检查通讯控制线路的连接情况是否正确、通讯线路过长或已经中断；
- 3.Please check the control system is not valid, check the signal amplifer of chain connected is valid. 检查控制设备是否失效，检查串连接入的信号放大器是否失效；
- 4.Please check whether the communicate cable is too long or the other equipment is mutually conjugate.检查通讯线路是否过长或有其它设备相互干扰；
- 5.Please arrange the wire well, shorter the signal cable, put the high voltage cable and low voltage cable separately.
优化布线，缩短控制信号线的长度，高压与低压线路分开布线；
- 6.Add the signal amplify isolator.添加信号放大隔离器；
- 7.Signal cable is used the excellent screening doublet (Resistance 75 OHM)
信号线采用优质屏蔽双绞线(阻抗特性为75欧姆)；
- 8.The end of the light end and the end resistance.
在灯具末端连接信号终端电阻。

■The light can't move/灯具不能启动:

- 1.Please check if the power supply is suitable for the light voltage data.
检查供电电源参数是否与灯具相符；
- 2.Please check the light if they are deformation, inside parts is broken, become wet etc will lead the loose contact.
检查灯具在长途运输过程中因挤压变形、内部零件震动、潮湿等原因，而导致接触不良或脱落。
- 3.Please check the if the inside lead wire and the connector is loose.
请检查灯具内部导线积接插件是否脱落、松动。
- 4.Please check the electric parts(such as the transformer,PCB board,contrller) is short-circuit or burn down.
检查灯具电子元器件（如电子变压器、PCB板、电机控制板等）是否有松动、短路和烧坏现象。

■ **On working,the pan & tilt couldn't work normally:**

工作时,灯具的X或Y方向的动作不正常:

◎Please check according to the above step by step.

按上一步聚逐个检查;

◎Please check the belt of the X.Y is broken.

检查灯具内X、Y方向对应的传动皮带是否脱落和断裂;

◎Please check the X/Y direction data to the receiver is damage.

检查灯具内X、Y方向对应的数据反馈接收器(光电传感器)是否损坏;

◎Re-projector reset.

重新开机复位一次。

DUTY EXONERATIVE AND COPYRIGHT PROTECTION

◇The lamp belongs to consumption products that is not guarantee to keep it in good repair.

灯泡属于消耗产品,不在保修范围内;

◇Any products broken that didn't according to the instruction is not guarantee to keep it in good repair.

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