# LIGHT SKY®

广州市升龙灯光设备有限公司
FLY DRAGON LIGHTING EQUIPMENT CO.,LTD
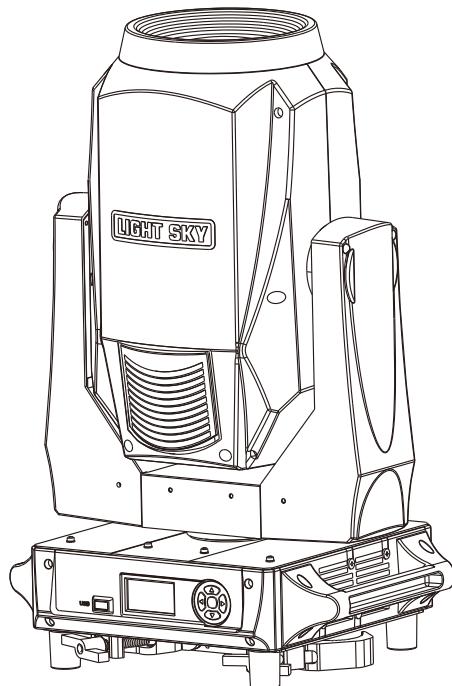
F400BSW
使用说明书
USER MANUAL
Please read these user manual carefully before use

Contents

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,这款产品和公司的其他产品一样,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

■**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,
so that, if the primary support system fails,the fitting falls as little as possible.
If the safety chain gets used, it needs to be replaced with a genuine spare.

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的。
安全绳索一定要恰当固定在安全的结构上。
当要更换安全绳索时, 必须要用原装备用绳索替换。

■**Mounting surfaces** 安装面
It is permissible to mount the fitting on normally flammable surfaces.
必须安装在牢固物体的表面。

■**Minimum distance of illuminated objects** 与照射物体的最小距离
When the luminaire projects an object, the minimum distance of the luminaire to
the flammable object is 12 meters.
当灯具投射物体时，灯具出光口到被照射易燃物体的最小距离为12米。

■Please do not install the fixture onto combustible surface.
请不要将灯具直接安装在可燃物质的表面上。

■Distance between this fixture and combustible goods needs more than 1 meter.
灯体表面与可燃材料的距离至少为1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。

■**Maximum ambient temperature** 最高环境温度
The fixture is intended for indoor application.
Do not operate the fixture if the ambient temperature (Ta) exceeds 38℃.
本灯具适用于室内，户外使用时增加防护装置, 如果环境温度（Ta）超过38℃请勿操作此灯具。

■**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。

12 ....m

t₀ 38℃

t꜀ 100℃

■**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 100℃.

在热稳定的状态下,外表面的温度最高点可达100℃。

■**Maintenance** 维护

Before starting any maintenance work or cleaning the projector, cut off power from the mains supply. After switching off, do not remove any parts of the fitting, to avoid getting burnt for at least 30 minutes. After this time the likelihood of the lamp exploding is virtually nill.

The fitting is designed to hold in any splinters produced by a lamp exploding. The lenses must be mounted and, if visibly Damaged, they have to be replaced with genuine spares.

在开始任何维修工作或清洁灯具之前,必须切断供电电源。电源切断后,为了避免烧伤,10分钟内不可拆卸灯具中的任何一个零部件。冷却过后灯泡爆炸的可能性几乎为零。如果需要更换灯泡,则需再等待20分钟,以免烧伤。

■**Lamp** 灯泡

The fitting mounts a high-pressure lamp that needs an external .
Immediately replace the lamp if damaged or deformed by heat.
The light source in this fixture shall be replaced by the manufacturer or its service agent or similar qualification.
Always disconnect from mains before replacing the lamp.

灯具上装有一个需高压触发的灯泡。
如灯泡有损坏或热变形，请立即更换灯泡。
此灯具内的光源应由制造商或其服务代理商或有类似资格的人来更换
更换灯泡前，请始终切断电源

■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 stare directly into the light output.Never look at an exposed lamp while it is lit.
禁止直视点着的暴露灯泡以免紫外线伤害眼睛。

■**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。

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

●**Power supplies available** 电压选配范围
100V~240V~ 50/60Hz 5A
●**Power** 功率/功率因数
495W(220V/50Hz) PF0.98
Lamp 灯泡
- Brand品牌：USHIO NSL360(31mmWD)
- Lamp power功率：360W
- Colour temperature色温：6900K
- Average life平均寿命:1500h
●**Motors** 电机：
- 12 ultra-quiet motors，15个超静音电机
●**Inputs** 控制信号：
- DMX512
●**Color** 颜色
- 14 colors + white，14种颜色+白光
●**Static gobo wheel** 固定图案盘
- 11Gobo + 1 white + animation range
- 11个图案+白光+animation(可双向抖动、动画、流水效果）
●**Rotation Gobo Wheel** 旋转图案盘
-7 rotating Gobos+open,Bi-direction
 flow water animation effect
-7+1活动图案盘，可双向抖动流水效果
●**Pri sm**/棱镜
- 12 facet round Prism（zoom from to 20 degree)
- 12棱圆形棱镜 （棱镜角度10到20° 自由缩放）
●**Beam angle** 光束角度
-Beam Projection 0-1.5°，Spot Projection 1.5-20°
-Beem模式0-1.5°，Spot模式1.5-20°
●**Wash angle** 柔光角度
-8-60° independent Wash effect
-8-60° 独立柔光效果
●**Focus and Lens** 调焦与镜头
- High precision optical lens,linear adjustment
- 高精密多组胶合光学镜头，线性电动调焦
●**Strobe** 频闪
- Double lens strobe(0.5-9 times/second)
- 双频闪结构, 0.5-9次/秒可调.
●**Dimmer** 调光
- 0-100% linear adjustment线性调节.
●**X/Y Travel(X/Y行程):**540°/250°
●**X/Y Resolution(X/Y微调):**2.11°/0.98°
●**X/Y Speed(X/Y速度):**2.7S/1.6S
●**Box Size** 纸箱尺寸：380X330X616MM
  N.W.净重: 22.5kg，G.W.毛重:25kg
●**Flycase Size**航空箱尺寸(2台装)：
  820X535X810MM
  N.W.净重: 45kg，G.W.毛重：80.3kg

●**IP set** 地址码设置
- Automatic chang 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
●**Mobile APP** 手机APP功能
- Can be connected through the mobile phone WIFI stage lighting,to understang the equipment information ,chang the device parameters and set the device address coding.
  可通过手机WIFI连接灯具，了解灯具信息、更改
  灯具地址码和设置灯具参数。
●**Software upgrade** 软件升级
- Insert USB upgrade software.可插入USB升级软件
●**Features** 其他功能
- Remote control lamp's swith function display light and lamp's using time.automaticalay adjust cooling fan's speed,Drop power when strobe lens.
  远程控制灯泡开关，风机自动调速，灯具闭光时自
  动降低灯泡功率。
●**IP20 protection/IP20** 防护等级
- Protected against the entry of solid bodies larger than 12mm. 防止大于12㎜固体进入灯具。
- No protection against the entry of liquids.
  禁止任何液体进入灯具。
●**Safety Devices** 灯具安全
- BIPOlar circuit breaker with thermal protection.
  过流和过热保护
- Automatic break in power supply in case of overheating or failed operation of cooling system.
  当灯具过热或散热系统失效时自动中断灯泡电源。
●**Cooling** 冷却
- Forced ventilation with axial fans.
  用轴流式风机强制通风。
●**Structure** 外观
- Heat-proof plastic+module pressing alloy materials.
- 耐高温塑胶外壳，高强度合金冷压成型内核材料。
●The vertical direction of the use of hidden locking device, convenient transportation and maintenance.
  垂直方向采用隐藏式锁紧装置，运输保养方便。
●CE Marking 标志
- In conformity with the European Union Low Voltage Directive 2014/35/EU and Electomagnetic compatibility Directive 2014/30/EU.
  符合欧盟低电压指令2014/35/EU和电磁兼容性指令
  2014/30/EU

Static gobo wheel
(please refer to the actual material)

Rotating gobo wheel
(please refer to the actual material)

Heat insulation

White

Dark red

Dark blue 隔热片 白光 深红色 Nacarat

深蓝色 桔红色

CTB 14 1

CTB 13 2 浅蓝色 Light blue

12 3

CTO2 11 4 深绿色 Dark green

CTO2

10 5

Cyan 青色 9 6 绿色 Green

8 7

洋红色 正紫色

Magenta 黄色 粉红色 Purple

Yellow Pink

Color Wheel
(please refer to the actual material)
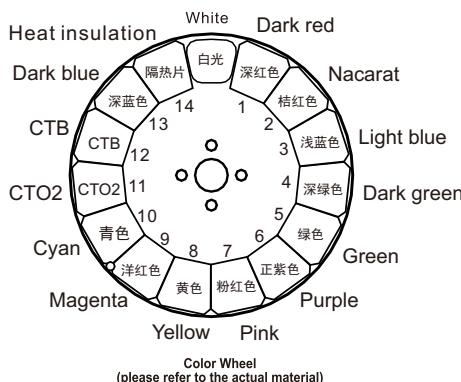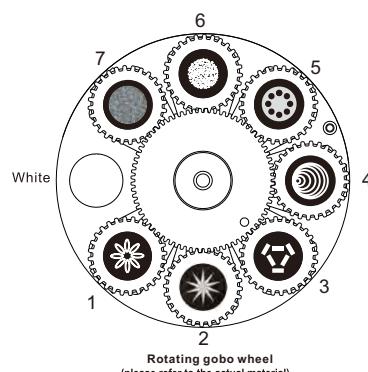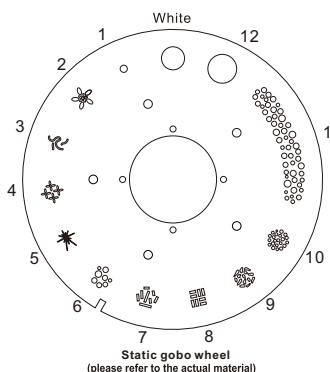
Photometric Data:

Lux(fc)

20° highlights	12900(1191)	5650(525)	3220(299)	1310(122)	845(79)	452(42)
1.5° highlights	244000(22677)	113000(10502)	58000(5390)	29000(2695)	16200(1506)	10200(948)

1.5° 20°

Distance m(ft in)	0	10(32'10")	15(49'2")	20(65'7")	30(98'5")	40(131'3")	50(164')
1.5° diameter m(ft in)	0	0.52(1'8")	0.76(2'6")	0.99(3'4")	1.53(5'2")	2.05(6'8")	2.46(8')
20° diameter m(ft in)	0	3.4(11'2")	5.1(16'8")	6.8(22'3")	10.2(33'5")	13.6(44'7")	17.0(55'9")
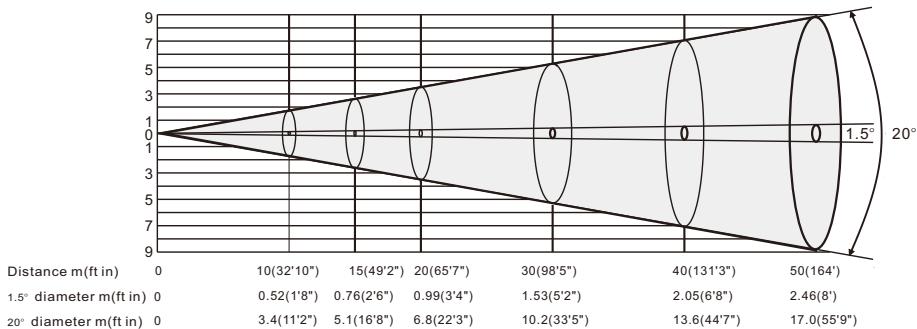
ATTACHMENT AND BODY SIZE

1						
USER MANUAL	BRACKET	LAMP (fitted into projector)	WARRANTY CARD	DMX CABLE	power cord	SAFETY CORD
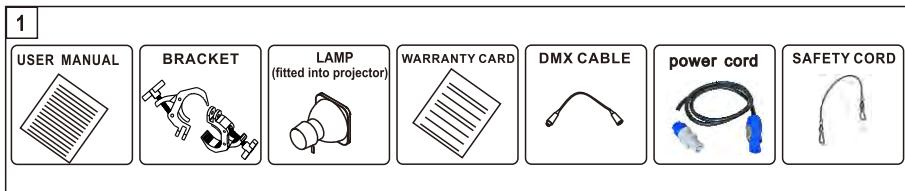
Attachment contents- Fig. 1

| 2 |

380
276

300

364
265

420

244

616
438
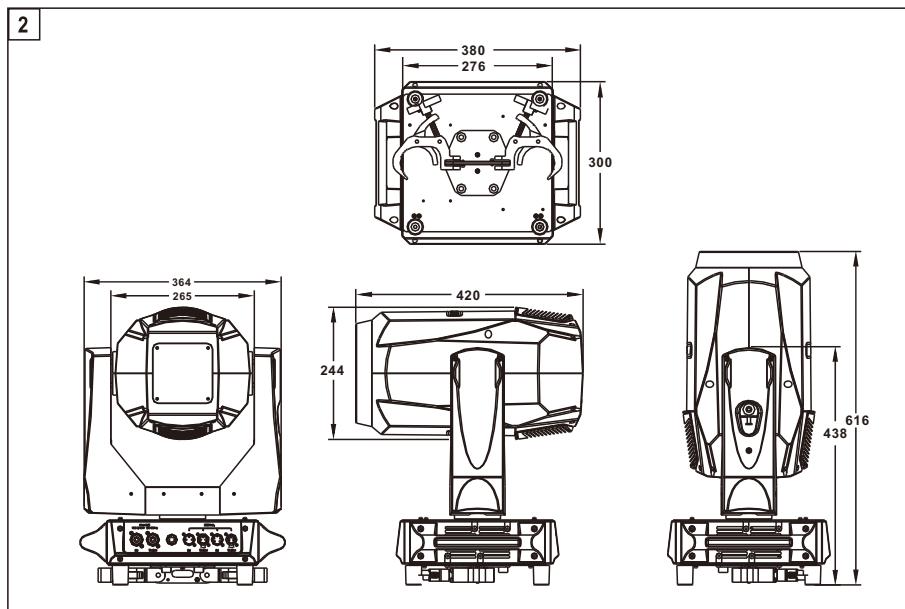
Body Size---Fig 2

INSTALLATION AND CONNECTING
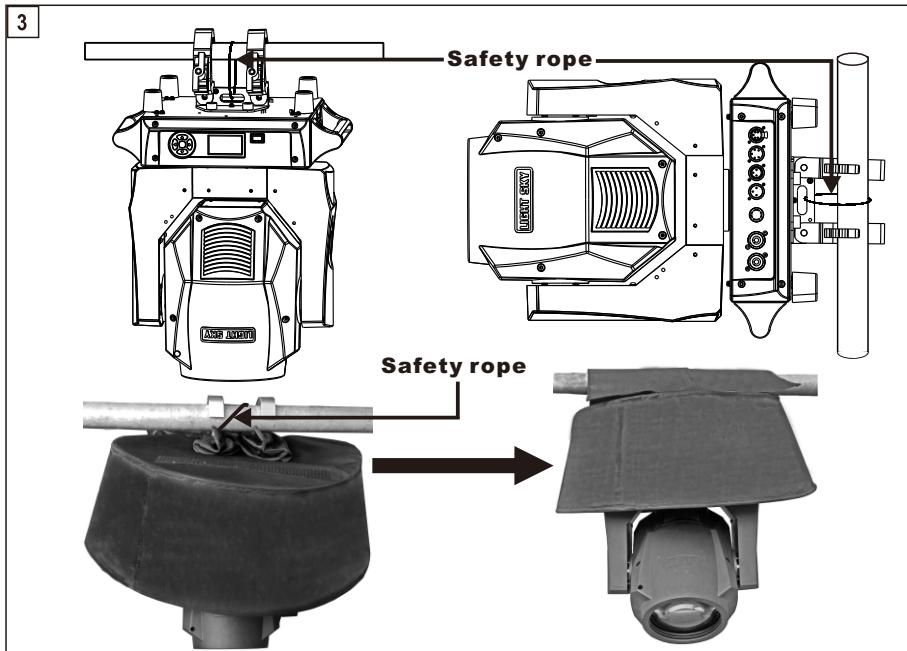
Installing the projector- Fig. 3

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。

power in   out   in   out   in   power end
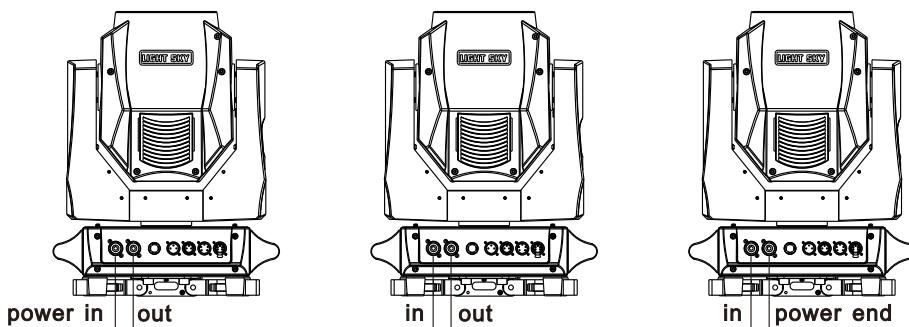
The N terminal is connected with the blue line.
N端连接蓝色线

N   Ground
         地线

L
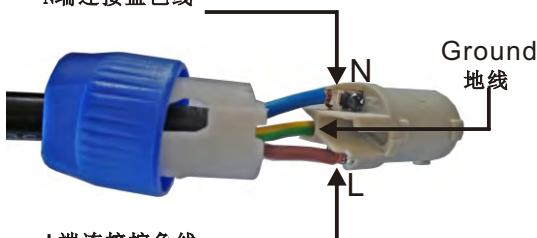
L端连接棕色线
The L terminal is connected with the brown line.

Connecting to the mains suppply ---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 eiectricty 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。
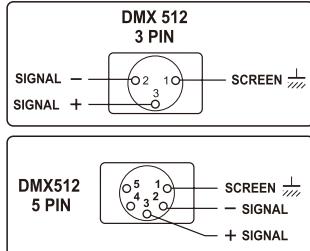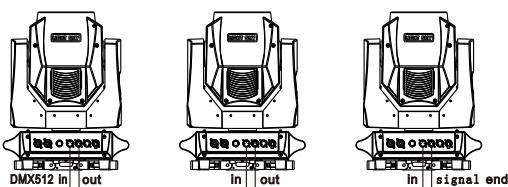
Connecting to the control signal line (DMX) - Fig. 5

◎ Please use the round 3 or 5-pin XLR plugs &sockets offered by menu facture to connect the first projector's output to the second projector' 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的输入端之间的连接,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 pug 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**75**Ω。**(**注意：每根通讯电缆线的线芯直径至少为**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 dama -ge 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 projec -tor 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
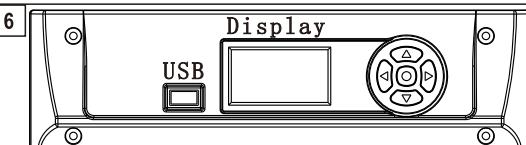
Press the switch. The projector starts resetting the effects. At the same time, the following information scrolls on the display(please refer to the actual material):

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(V1.0)

Main menu /菜单		Ⅰ menu /一级菜单		Ⅱ menu /二级菜单		Ⅲ menu /三级菜单
DMX Address /DMX地址	→	Address /地址码: 001-512				
Information /基本信息	→	Lamp hours /设备时间	→	Total/上电时间: ****(h)		
				Lamp open/亮灯时间: ****(h)		
		Temperature /设备温度	→	PVG_TEM/镇流器: ***.*		
				Board/测温板: ***.*		
		RDM UID/RDM地址	→	Undistributed/未分配地址		
		MOTOR UID	→			
		Fan speed/Voltag /风机速度/电压	→	Fan/鼓风机:: **.*V		
				Fan1/风机1: **.*V		
				Fan2/风机2: **.*V		
				Fan/鼓风机: **** RPM		
				Fan1/风机1: **** RPM		
				Fan2/风机2: ****RPM		
		DMX live/设备通道	→	1.Dimmer/调光(***)		
				2.Shutter/频闪(***)		
				3.Colour/颜色盘(***)		
				4.Gobo/固定图案(***)		
				5.Rota.Gobo/活动图案(***)		
				6.Gobo.Rota./活动自转(***)		
				7.Frost/雾化(***)		
				8.Focus/调焦(***)		
				9.Zoom/缩放(***)		
				10.Prism/棱镜切入(***)		
				11.PrismRota./棱镜自转(***)		
				12.PrismZoom/棱镜缩放(***)		
				13.Autofocus/自动调焦(***)		
				14.Pan/水平(***)		
				15.Pan Fine/水平微调(***)		
				16.Tilt/垂直(***)		
				17.Tilt Fine/垂直微调(***)		
				18.Function/功能(***)		
		System version /版本信息	→	XY:V*.**		
				12M:V*.**		
				DIS Board/显示板: V*.**		
		Return(ESC)/退出				

Main menu /菜单	I menu /一级菜单	II menu /二级菜单		III menu /三级菜单
Personal /个性设置	Channel mode /通道模式 →	Standard(18CH)/标准模式（18CH）		
		Simple(20CH)/简易模式（20CH）		
	Auto lamp on /自动打开灯泡 →	OFF/关		
		ON/开		
	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
	Display/显示设置 →	Language/语言		English（英文）
				Chinese（中文）
		Back Light/背光 →		Open/常亮
				Auto close(15s)/自动关（15S）
		Reversal/屏幕旋转 →		Normal/正常
				Rota.180/旋转180度
		Backlight blink/背光闪烁 →		ON/打开
				OFF/关闭
		Return(ESC)/退出		
	Return(ESC)/退出			
Manual control /手动控制 →	Channel control /通道控制 →	1.Dimmer/调光（***）		
		2.Shutter/频闪（***）		
		3.Colour/颜色盘（***）		
		4.Gobo/固定图案（***）		
		5.Rota.Gobo/活动图案（***）		
		6.GoboRota./活动自转（***）		
		7.Frost/雾化（***）		
		8.Focus/调焦（***）		
		9.Zoom/缩放（***）		
		10.Prism/棱镜切入（***）		
		11.PrismRota./棱镜自转（***）		
		12.PrismZoom/棱镜缩放（***）		
		13.Autofocus/自动调焦（***）		
		14.Pan/水平（***）		
		15.Pan Fine/水平微调（***）		
		16.Tilt/垂直（***）		
		17.Tilt Fine/垂直微调（***）		
		18.Function/功能（***）		
		Return(ESC)/退出		

Main menu /菜单		I menu /一级菜单		II menu /二级菜单		III menu /三级菜单
	→	Reset/复位	→	System reset/系统复位		
				Pan/Tilt reset/水平垂直复位		
				Head motor reset/头部电机复位		
				Return(ESC)/退出		
	→	Test/测试灯具	→	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		
		Return(ESC)/退出				
Service /服务选项	→	Error list/历史故障信息				
		Clean error/清除故障信息	→	Keep/保留		
				Clean/清除		
		Calibration/校准	→	Pan/水平　　　　000-255		
				Tilt/垂直　　　　000-255		
				Dimmer1/调光1　000-255		
				Dimmer2/调光2　000-255		
				Focus/调焦　　　000-255		
				Zoom/缩放　　　000-255		
				Colour/颜色盘　　000-255		
				Gobo/固定图案　　000-255		
				Rota.Gobo/活动图案000-255		
				Return(ESC)/退出		

Main menu /菜单		I menu /一级菜单		II menu /二级菜单		III menu /三级菜单		IV menu /三级菜单
Service /服务选项	→	AutoFocus Cal. /自动对焦数据校准	→	AutoFocus S.Gobo /固定盘对焦校准	→	S.Gobo-10M /固定盘10M对焦	→	Auto Zoom /自动对焦缩放 000-255
								Zoom Cal. /缩放调节 000-255
								Focus Cal. /调焦调节 000-255
					→	S.Gobo-15M /固定盘15M对焦	→	Auto Zoom /自动对焦缩放 000-255
								Zoom Cal. /缩放调节 000-255
								Focus Cal. /调焦调节 000-255
					→	S.Gobo-20M /固定盘20M对焦	→	Auto Zoom /自动对焦缩放 000-255
								Zoom Cal. /缩放调节 000-255
								Focus Cal. /调焦调节 000-255
					→	S.Gobo-30M /固定盘30M对焦	→	Auto Zoom /自动对焦缩放 000-255
								Zoom Cal. /缩放调节 000-255
								Focus Cal. /调焦调节 000-255
					→	S.Gobo-40M /固定盘40M对焦	→	Auto Zoom /自动对焦缩放 000-255
								Zoom Cal. /缩放调节 000-255
								Focus Cal. /调焦调节 000-255
					→	S.Gobo-50M /固定盘50M对焦	→	Auto Zoom /自动对焦缩放 000-255
								Zoom Cal. /缩放调节 000-255
								Focus Cal. /调焦调节 000-255
					Return(ESC)/退出			

Main menu /菜单	I menu /一级菜单		II menu /二级菜单		III menu /三级菜单		IV menu /三级菜单
Service /服务选项	→ AutoFocus Cal. /自动对焦数据校准	→	AutoFocus R.Gobo /活动盘对焦校准	→	R.Gobo-10M /活动盘10M对焦	→	Auto Zoom /自动对焦缩放 000-255
							Zoom Cal. /缩放调节 000-255
							Focus Cal. /调焦调节 000-255
					R.Gobo-15M /活动盘15M对焦	→	Auto Zoom /自动对焦缩放 000-255
							Zoom Cal. /缩放调节 000-255
							Focus Cal. /调焦调节 000-255
					R.Gobo-20M /活动盘20M对焦	→	Auto Zoom /自动对焦缩放 000-255
							Zoom Cal. /缩放调节 000-255
							Focus Cal. /调焦调节 000-255
					R.Gobo-30M /活动盘30M对焦	→	Auto Zoom /自动对焦缩放 000-255
							Zoom Cal. /缩放调节 000-255
							Focus Cal. /调焦调节 000-255
					R.Gobo-40M /活动盘40M对焦	→	Auto Zoom /自动对焦缩放 000-255
							Zoom Cal. /缩放调节 000-255
							Focus Cal. /调焦调节 000-255
					R.Gobo-50M /活动盘50M对焦	→	Auto Zoom /自动对焦缩放 000-255
							Zoom Cal. /缩放调节 000-255
							Focus Cal. /调焦调节 000-255
					Return(ESC)/退出		
			Return(ESC)/退出				

Main menu /菜单		I menu /一级菜单		II menu /二级菜单		III menu /三级菜单
Service /服务选项 →		Factory/工厂设置 →		Defualt/工厂默认		
				Time clean/时间清除 →	上电时间	
				Developer/开发人员		
				Firmware update/软件升级		
		Fan mode/风机模式 →		Standard mode/标准模式		
				3000-4000M/海拔3000-4000M		
				4000-5500M/海拔4000-5500M		
		Return(ESC)/退出				
Lamp/灯泡 →		Off/关闭				
		On/打开				
Language /语言 →		English/英文				
		Chinese/中文				
Reversal /屏幕旋转 →		Normal/正常				
		Rota.180/旋转180度				

CHANNEL FUNCTION(V1.0)

18 CH	20 CH	DMX	Percentage /百分比	Function/功能
1	**1**	0–255	0–100	Dimmer/调光
2	**2**			Shutter/ strobe/频闪
		0-31	0-12.35	Shutter closed/频闪关闭
		32-63	12.35-24.9	Shutter open, Full lamp power/频闪打开, 总灯泡功率
		64-95	24.9-37.45	Strobe-effect from slow to fast/频闪效果, 从慢到快
		96-127	37.45-50	Shutter open/频闪打开
		128-143	50-56.27	Opening pulse in sequences from slow to fast /依次打开脉冲，从慢到快
		144-159	56.27-62.55	Closing pulse in sequences from fast to slow /依次关闭脉冲，从快到慢
		160-191	62.55-75.1	Shutter open/频闪打开
		192-223	75.1-87.65	Random strobe-effect from slow to fast /随机频闪效果，从慢到快
		224-255	87.65-100	Shutter open, Full lamp power/频闪打开, 总灯泡功率
3	**3**			**Colour/颜色**
				Continual positioning/连续定位
		0-4	0-1.76	Open/white/白光
		5-11	1.76-4.51	White+Dark Red/白光+深红色
		12-18	4.51-7.25	Dark Red/深红色
		19-25	7.25-10	Dark Red+Nacarat/深红色+桔红色
		26-32	10-12.75	Nacarat/桔红色
		33-39	12.75-15.49	Nacarat+Light blue/桔红色+浅蓝色
		40-46	15.49-18.24	Light blue/浅蓝色
		47-53	18.24-20.98	Light blue+Dark green/浅蓝色+深绿色
		54-60	20.98-23.73	Dark green/深绿色
		61-67	23.73-26.47	Dark green+Green/深绿色+绿色
		68-74	26.47-29.22	Green/绿色
		75-81	29.22-31.96	Green+Purple/绿色+正紫色
		82-88	31.96-34.71	Purple/正紫色
		89-95	34.71-37.45	Purple+Pink/正紫色+粉红色
		96-102	37.45-40.2	Pink/粉红色
		103-109	40.2-42.94	Pink+Yellow/粉红色+黄色
		110-116	42.94-45.69	Yellow/黄色
		117-123	45.69-48.43	Yellow+Magenta/黄色+洋红色
		124-130	48.43-51.18	Magenta/洋红色
		131-137	51.18-53.92	Magenta+Cyan/洋红色+青色
		138-144	53.92-56.67	Cyan/青色

18 CH	20 CH	DMX	Percentage /百分比	function/功能
		145-151	56.67-59.41	Cyan+CTO2/青色+CTO2
		152-158	59.41-62.16	CTO2
		159-165	62.16-64.9	CTO2+CTB
		166-172	64.9-67.65	CTB
		173-179	67.65-70.39	CTB+Dark Blue/CTB+深蓝色
		180-186	70.39-73.14	Dark Blue/深蓝色
		187-219	73.14-86.08	Forwards rainbow effect from fast to slow /彩虹效果，顺时针旋转，由快到慢
		220-222	86.08-87.25	No rotation
		223-255	87.25-100	Backwards rainbow effect from slow to fast /彩虹效果，逆时针旋转，由慢到快
				Static gobo wheel/固定图案盘
		0-3	0-1.37	Open/hole/白光
				Positioning/定位
		4-9	1.37-3.73	Gobo1/图案1
		10-15	3.73-6.08	Gobo2/图案2
		16-21	6.08-8.43	Gobo3/图案3
		22-27	8.43-10.78	Gobo4/图案4
		28-33	10.78-13.14	Gobo5/图案5
		34-39	13.14-15.49	Gobo6/图案6
		40-45	15.49-17.84	Gobo7/图案7
		46-51	17.84-20.2	Gobo8/图案8
		52-57	20.2-22.55	Gobo9/图案9
		58-63	22.55-24.9	Gobo10/图案10
		64-69	24.9-27.25	Gobo11/图案11
		70-75	27.25-29.61	Gobo12/图案12
		76-81	29.61-31.96	Open/hole/白光
		82-87	31.96-34.31	Open/hole/白光
4	**4**			Shaking gobos from slow to fast/抖动图案，从慢到快
		88-95	34.31-37.45	Gobo1/图案1
		96-103	37.45-40.59	Gobo2/图案2
		104-111	40.59-43.73	Gobo3/图案3
		112-119	43.73-46.86	Gobo4/图案4
		120-127	46.86-50	Gobo5/图案5
		128-135	50-53.14	Gobo6/图案6
		136-143	53.14-56.27	Gobo7/图案7
		144-151	56.27-59.41	Gobo8/图案8
		152-159	59.41-62.55	Gobo9/图案9
		160-167	62.55-65.69	Gobo10/图案10
		168-175	65.69-68.82	Gobo11/图案11

18 CH	20 CH	DMX	Percentage /百分比	function/功能
		176-183	68.82-71.96	Gobo12/图案12
		184-191	71.96-75.1	Open/hole/白光
		192-199	75.1-78.24	Open/hole/白光
		200-201	78.24-79.02	Open/hole/白光
		202-221	79.02-86.86	Forwards gobo wheel rotation from fast to slow /图案盘顺时针旋转，从快到慢
		222-223	86.86-87.65	No rotation/无旋转
		224-243	87.65-95.49	Backwards gobo wheel rotation from slow to fast /图案盘逆时针旋转，从慢到快
		244-249	95.49-97.84	Unused range/无作用
		250-255	97.84-100	Auto random gobo selection from fast to slow /随机图案自动由快到慢选择
5	5			Rotating gobo wheel/旋转图案盘
				In the range of 0-59 DMX the gobo selection speed is controlled by the Effect Speed channel /在0-59DMX范围内图案选择速度由效果速度通道控制 Index - set indexing on channel /索引-索引设置在通道上
		0-6	0-2.55	Open/hole（default）/白光（默认）
		7-30	2.55-11.96	Gobo1/图案1
		31-54	11.96-21.37	Gobo2/图案2
		55-78	21.37-30.78	Gobo3/图案3
		79-102	30.78-40.2	Gobo4/图案4
		103-126	40.2-49.61	Gobo5/图案5
		127-150	49.61-59.02	Gobo6/图案6
		151-174	59.02-68.43	Gobo7/图案7
				Shaking gobos from slow to fast/由慢到快抖动图案 Index - set indexing on channel 6/索引-在6通道设置
		175-184	68.43-72.35	Gobo1/图案1
		185-194	72.35-76.27	Gobo2/图案2
		195-204	76.27-80.2	Gobo3/图案3
		205-214	80.2-84.12	Gobo4/图案4
		215-224	84.12-88.04	Gobo5/图案5
		225-234	88.04-91.96	Gobo6/图案6
		235-244	91.96-95.88	Gobo7/图案7
		245-249	95.88-97.84	Open/hole/白光
		250-255	97.84-100	Auto random gobo selection from fast to slow /随机图案自动由快到慢选择

18 CH	20 CH	DMX	Percentage /百分比	Function/功能
6	**6**			Rot. gobo indexing and rotation/活动图案自转
		0-127	0-50	Gobo indexing/索引图案
		128-187	50-73.53	Forwards gobo rotation from fast to slow /从快到慢顺时针旋转图案
		188-195	73.53-76.67	No rotation/无旋转
		196-255	76.67-100	Backwards gobo rotation from slow to fast /从慢到快逆时针旋转图案
7	**7**			Frost/雾化
		0-127	0-50	Close/关闭
		128-255	50-100	Open/打开
8	**8**			Focus/调焦
		0-255	0-100	Continuous adjustment from far to near /从远到近连接调整
-	**9**			Focus - fine/调焦-微调
		0-255	0-100	Fine focusing/微调调焦
9	**10**			Zoom/缩放
		0-255	0-100	Zoom from max. to min.beam angle /从大到小光斑角度缩放
-	**11**			Zoom - fine/缩放-微调
		0-255	0-100	Fine zooming/微调缩放
10	**12**			Prism/棱镜
		0-127	0-50	Open position (hole)/打开
		128-255	50-100	Prism/棱镜
11	**13**			Prism rotation and indexing/自动调焦
		0-4	0-1.76	No rotation/无旋转
		5-128	5-50.39	Forwards prism rotation from fast to slow /从快到慢顺时针棱镜旋转
		129-131	50.39-51.57	No rotation/无旋转
		132-255	51.57-100	Backwards prism rotation from slow to fast /从慢到快逆时针棱镜旋转
12	**14**			Prism zoom - set position on channel 12/14 /棱镜缩放-在12/14通道设置
		0-127	0-50	Zoom from min. to max.beam angle /从小到大光斑角度缩放
		128-255	50-100	Prism/棱镜
13	**15**			Autofocus (priority & distance selection)/自动调焦 Select desired distance and effect on which you need to focus and use "Focus" channel (18/20) to focus the image.
		0	0	Autofocus Off/自动调焦关闭 Rotating gobos & Hole (flat field)/旋转图案

18 CH	20 CH	DMX	Percentage /百分比	Function/功能
13	**15**	1	0.59	10 metres/10米
		8	3.33	15 metres/15米
		16	6.47	20 metres/20米
		24	9.61	30 metres/30米
		32	12.75	40 metres/40米
		40	15.88	50 metres/50米
		48	19.02	More than 50 meters/50米以上
		56	22.16	
				Static gobos & Hole (default)/打开
		64	25.29	10 metres/10米
		72	28.43	15 metres/15米
		80	31.57	20 metres/20米
		88	34.71	30 metres/30米
		96	37.84	40 metres/40米
		104	40.98	50 metres/50米
		112	44.12	More than 50 meters/50米以上
		120	47.25	
		127	50	Infinity/无限
		128-255	50.39-100	Reserved/备用
14	**16**	0-255	0-100	Pan/水平 Pan movement by 540
15	**17**	0-255	0-100	Pan Fine/水平微调 Fine control of pan movement
16	**18**	0-255	0-100	TILT/垂直 Tilt movement by 230
17	**19**	0-255	0-100	TILT Fine/垂直微调 Fine control of tilt movement
18	**20**			Function/功能
		0-89	0-35.1	Reserved/备用
		90-99	35.1-39.02	Reserved/备用
		100-109	39.02-42.94	Reserved/备用
		110-119	42.94-46.86	Reserved/备用
		120-129	46.86-50.76	Reserved/备用
		130-139	50.76-54.71	Lamp ON/打开灯泡
		140-149	54.71-58.63	PAN/TITL Reset/头部电机复位
		150-159	58.63-62.55	Fuction reset/功能复位
		160-169	62.55-66.47	Total reset/总复位
		170-229	66.47-90	Reserved/备用
		230-239	90-93.92	Lamp Off/关闭灯泡
		240-255	93.92-100	Reserved/备用

Circuit connecting diagram

XY drive board

28
GND

12 drive board

28V
GND

Output

+28V
GND

Lamp

Switched power supply

Electronic ballast

+380V
GND

Input

L
N
PE
100V~240V~ 50/60Hz

28
GND

YJ-XS V1. 12 20170316

Display board

1
36
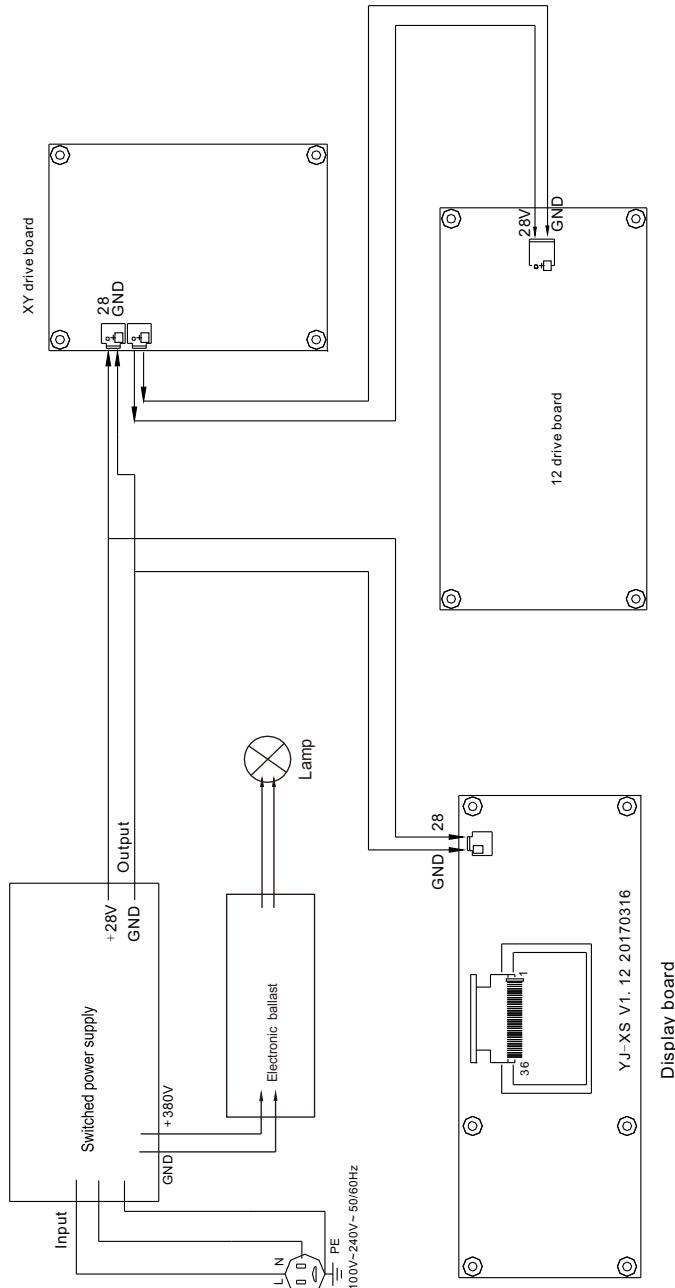
CLEANING AND MAINTENANCES

●In order to ensure the projector could work normally.It should be kept clean always .It is recommended that the
  fans and ventilation in let should be cleaned every 15 days.The lens and dichroic colour filters should also be reg
  -ularly cleaned to maintain an optimum light output.Do not use any type of solvent on dichroic colour filters.It will
  damage the projector.
  为确保灯具能够正常稳定的运行,应该保持灯具的清洁,建议每隔**15**天清理一次机体及风扇与进风槽。对于镜头及分
  色滤光器也应定期进行清理,以保证最佳的光线效果。在清理分色滤光器时,注意不要使用任何溶解性清洁剂,以免对
  灯具造成损害。
●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 problems.
  灯具在连续使用时,建议每次不要超过**4**小时,否则会大大缩短灯具的使用寿命,可采用轮换休息法解决上述问题。
●Please disconnect the power supply when begin to maintenaceor takedown the light.Please let the parts cool
  down 10 minute at least then begin to install.If need to replace the lamp,please wait 10 minute again at least to
  let the lamp cool down completely or which maybe burned down.
  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。断开电源之后,灯具的零件都要冷却**10**分钟左右才
  能拆装。如果需要更换灯泡,需再等**20**分钟以上,让灯泡完全冷却,以免烫伤。
●Please inspect the lens or other moving parts timing and keep them clear and static.If find anything damaged or
  losseness,must change a lamp or fix the lamp in order to avoid the accident.
  灯具的镜片或镜头和其它转动件必须定期检查,使其保持清洁和稳定性,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,以防发生意外事故。
●The light use the strong cool system. It is easy for the dirty to be collected .Please do clear the hot-sak one time
  two week at least.
  灯具产品采用强风制冷,容易积尘, 每二周至少清洁一次,尤其是散热进出风口处。
●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,应清除干净,否则易损坏风机和引发火警。

TROUBESHOOTING

It is recommended some solution for some normal trouble shooting.Any unsolutioned problems should always
be handle by the professional person.Disconnect the power supply before maintenance the light.
  以下是灯具的常见故障及对应的处理方法。不能自行维修的故障工作应由具有专业资质的人员进行处理。维修
保养时要断开灯具电源。
■**Lamp off** 灯泡不亮：
 ◎Please check if install the suitable lamp.
   检查是否安装了与灯具相匹配的灯泡；
 ◎Please check the connection of the power supply or switch is ok.
   检查灯具供电电源连接处或控制开关是否接触不良；
 ◎Please check whether the lamp will reach the end of their life can explode ,please replace a same description
   lamp.
   检查灯泡是否已达到使用寿命或已经损坏,更换同规格优质灯泡；
 ◎Please measure if the power supply is enough.
   测量电力供应是否不足；
 ◎Please check if the operation is correct.Please wait 30 minutes at least till the lamp cool down enough,then
   could the connect the power supply,which could be normal work.
   是否因非正常操作,灯泡未完全冷却。让灯具冷却**15**分钟以上,使灯泡冷却,恢复到正常可启动范围之内后,再次接通
   电源即可正常使用；

◎ Please check whether the DMX512 controller pass the "turn on"oder.

检查DMX512控制器是否发送了开灯泡指令；

◎ Please check the connection of the trigger circuit is loose contact.

检查灯泡与触发线路是否有脱落或解除不良；

◎ Please check whether the connected point of he trigger point is loose contact, faster the connect cable.

检查内部触发器上的接线端子是否接触不良,紧固好插头；

◎ Check menu "information"→fan speed/voltag→fan1, fan2, fan3", Whether the fan speed in 500RPM above, below 500RPM the lamp does not light, replace with the specifications of the fan.

检查菜单"基本信息"中"风机速度电压，查看FAN1FAN2FAN3的转速是否在500RPN以上，低于

500RPM灯泡不会

亮，更换同规格风机。

◎ Please check if the switch of the temperature is damaged.

检查灯具内部超温保护温度开关是否损坏。

◎ Enter the menu "information"select "temperature"to see whether the temperature display boad is too high or no temperature display.

进入菜单"基本信息"选择"设备温度"查看测温板是否显示温度过高或无温度显示。

■ **The light beam dark**, **not inhomogeneou**.光束显得暗淡不均匀。

◎ when the lamp is to the usage life , the light is not enough, please change a new one for the same description.

灯泡可能已经达到使用寿命,发光不足,更换同规格的灯泡.

◎ Please check the reflector parts is dirty.Keep them clear.

检查光学部分是否堆积有灰尘,清洗干净.

◎ Please measure if the power supply is enough.

测量电力是否供应不足；

◎ Small adjusting is suitable for change height or screw systen till get a ideal light beam.

细微调整用于变化灯泡高度的螺丝装置,直至调出理想的光.

◎ Enter the menu "service options"to choose "calibration"to enter the "Color"and "Gobo" adjustment, the center can be modulated.

进入菜单"服务选项"选择"校准"进入颜色和图案调节，可调至中心.

■ **The light shadow is fogging**投射出来的影像模糊。

◎ Please check the data on the DMX 512 controller is suitable for the electric focus.

检查电子对焦系统对应的DMX512控制器通道数值是否合适现在的投射距离。

◎ Please check the machenical 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。

■ **The light works interruptly**灯具灯泡间歇性地工作

◎ Please check if the fan works normally or mote clogging.

检查风机是否正常运转或有尘埃和纸屑堵塞。

◎ Please check whether the abstract heat have the mote clogging.

检查进出散热风口是否有尘埃堵塞。

◎ Please check if the lamp is to the usage life.

检查灯泡是否已达到使用寿命。

◎ Please check if the power supply is enough,the connection of the power supply or the circuit are good.

检查电力是否供应不足，电源开关及线路是否接触不良与老化。

◎ Please check if the switch of the sup-temperature is good.

检查灯具内部超温保护温度开关是否损坏。

■**Though the light is lighting,but it couldn't accept the control order:**
虽然发光,但是灯具不接受控制器的指令:

◎Please check the start code address and the function option are correct.
检查灯具数字起动地址数值和功能选项是否正确；

◎Please check whether the communicate control cable is ongood 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；

◎Please check the control system is not valid,check the singal amplifier 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；

◎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；

◎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；

◎Add the signal amplify isolator.
添加信号放大隔离器；

◎Signal cable is used the excellent screening doublet (Resistance 75Ω)
信号线采用优质屏蔽双绞线(阻抗特性为**75Ω**)；

◎The end of the light end and the end resistance.
在灯具末端连接信号终端电阻；

◎When the lamp don't cool down enough but do the incorrect operation will let the trigger up to super- high voltage leak.It will damage the electric circuit and communicate IC or CPU .Under this condition,please change the PCB board.
检查因为灯泡在未完全冷却时,执行了非正常操作,使触发器产生的瞬时超高电压泄漏,而导致电路板通讯**IC**或**CPU**烧坏,更换**PCB**板 。

■**the light can't move**灯具不能启动:

◎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；

◎Please check the fuse of input voltage is defective.
检查灯具电源输入处的保险丝是否熔断；

◎Please check the light if they are deformating,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；

◎Please check if the inside lead wire and the connector is loose.
检查灯具内部导线及接插器件是否脱焊、松动；

◎Please check the electric parts (such as the switch,transformer,ballast,electric capacity,piezoresistor, filter, PCB board,controller to motor) is short-circuit or burn down.
检查灯具电器元件(如电源开关、变压器、镇流器、电容、压敏电阻、滤波器、电源供电**PCB**板、电机控制**PCB**板等)是否有松动、短路、烧坏等现象。

■**Part of the projector couldn't be responsled to the controlling order:**
灯具部分功能不能接受控制器指令：

◎Please check the order is correct to the moving.
检查控制设备是否发送了对这些功能的正确动作指令；

◎Please check the mechanicalpart is deformation or loose.
检查这些功能对应的机械部份,是否松动变形；

◎Please check the function to the motor socket is loose or drive chip is burn down.
检查这些功能对应的电机插座是否有松动或相应驱动芯片已烧坏；

◎Please check the wire of the motor is cut at zig point.
检查这些功能对应的电机电线在转弯处是否折断；

◎Please check these function to the motor is damaged.
检查这些功能对应的电机是否损坏 。

■**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。

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◇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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