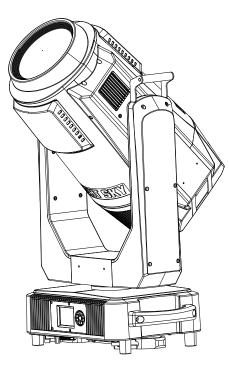
LIGHT SKY[®]

FLY DRAGON LIGHTING EQUIPMENT CO., LTD





F1700WB-E USER MANUAL

Please read these user manual carefully before use!

LIGHT SKY[®]

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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.

SAFETY INFORMATION



This lighting fixture is for professional use only - it is not for household use.

Installation

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.

Mounting surface and fire protection Please do not install the fixture onto combustible surface.



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

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

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.



Maximum ambient temperature

The fixture is intended for indoor application. Do not operate the fixture if the ambient temperature (Ta) exceeds 40 $^\circ\!C$.



Protection against electrical shock

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

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.



Connection to mains supply

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.

tc120℃

Temperature of the external surface

The maximum temperature that can be reached on the external surface of the fitting, in a thermally steady state is 120 $^\circ\!\!C$.

Maintenance



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.



Lamp

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.



Minimum distance of illum inated objects

When the luminaire projects an object, the minimum distance of the luminaire to the flammable object is 12 meters.



Protection against explosion

The protection screen, lens or uv 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.



Protection optical radiation

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

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



Battery

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.

CE

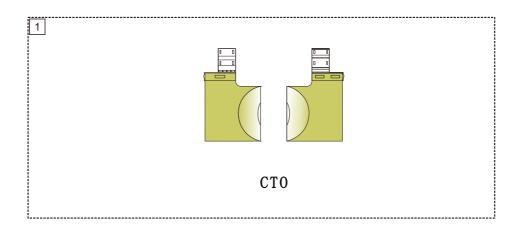
The products referred to in this manual conform to the European Community Directives to which they are subject:

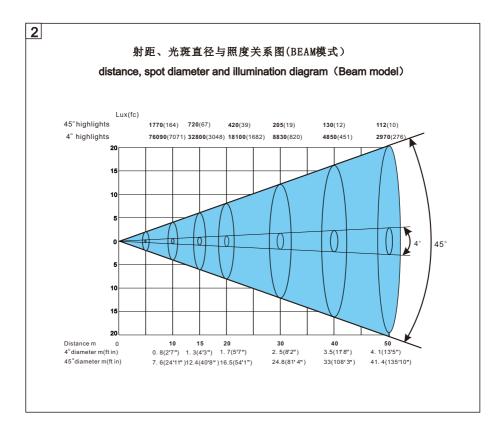
Low Voltage 2014/35/EU

Electromagnetic Compatibility 2014/30/EU

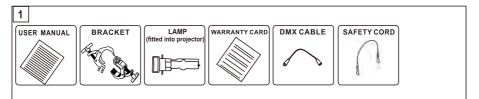
TECHNICAL INFORMATION

Power supplies available :	IP set :
-198-264V~50/60Hz 11A	-built-in long-life battery, can set address without
Power :	power connection.
-2000W PF≥0.98	• Software upgrade :
• Lamp :	-Upgrade via USB interface.
-Light source : OSRAM lok-itHTI 1700PS	• Display Menu:
-Lamp power : 1700W	-The display panel adopts a 2.8-inch color LCD
- Averagelife : 750H	screen, which is used in both Chinese and English
-Color Temperature :	languages to facilitate quick operation and browse
2700K-6500K,Linear CTO adjustment.	menus.
Luminous flux output : 37000LM	-Display board can record device's using time , show
● Zoom Range: 4°- 45°	device's temperature, channel data and software version .
● CRI : Ra ≥ 90	Working Mode :
Ballast : Electrical ballast 。	-Silent , Standard, High brightness three modes.
Reflector :	• Features :
-Double Reflector Cup design,German optical	-Remote Control Lamp switch On/Off, automatically
coating process.	reduce the lamp power when the Shutter is Off.
• Frost :	Temperature control :
−1° and 20° can be combined.	-Intelligent temperature control, can automatically adjus
• Dimming :	the speed of the cooling fan and overheat protection.
-16Bit,0-100% linear dimming.	• Error alarm :
• Lens :	-Automatic alarming for fixture error.
-Diameter \$\$\phi\$ 200mm large aperture optical lens set.	• Structure :
• Strobe :	-plastic cover parts are made of engineering plastic PA66
-1-9Hz synchronization,pulse,random stroboscopic.	+ GF,with fire-proof, noise reduction, impact resistance,
• ControlMode :	high temperature resistance, anti-aging characteristics.
DMX512, RDM, Art-Net, WirelessDMX512 (optional)	
• X/Y Travel: 540°/270°	device, convenient transportation and maintenance.
• X/Y Resolution: 2.11°/1.05°	• IP RATE: IP22
• X/Y Speed: 2.5S/1.5S	• Lighting Size : 503X324X878MM
• Channel : Standard17CH	• Box Size : 960X570X395MM
	N.W.: 41kg , G.W.: 46kg
	• Flycase Size (1PCS):
	765X610X970MM

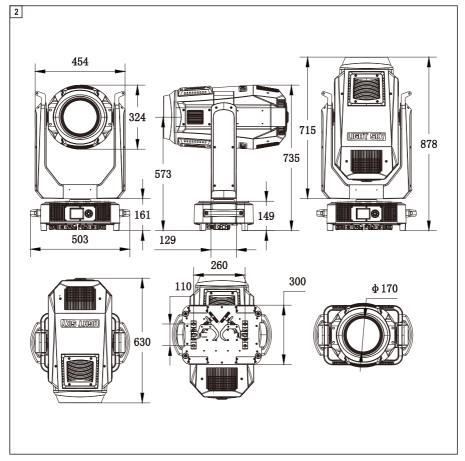


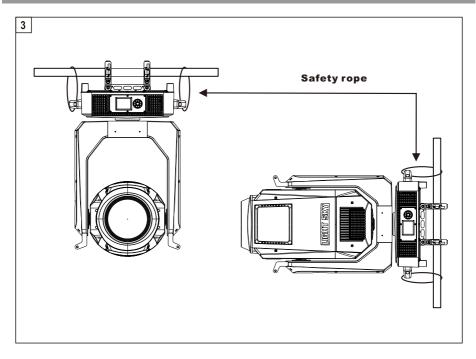


ATTACHMENT AND BODY SIZE



Attachment contents- Fig. 1





INSTALLATION AND CONNECTING

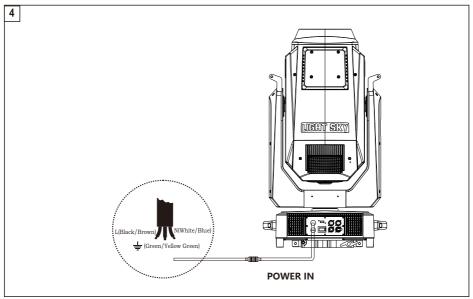
Installing the projector- Fig. 3

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 base handle.

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.



Connecting to the mains suppply ---Fig 4

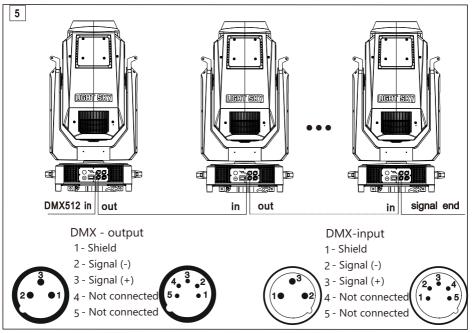
Wire color-coding and power connections:

Conductor	Symbol	Wire Color (EU models)	Wire Color (US models)	
live	L	brown	black	
neutral	N	blue	white	
ground(earth)	or 🚽	yellow-green	green	

• connection to the electricity mains must be carried out by a qualified electrical installer.

• 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.

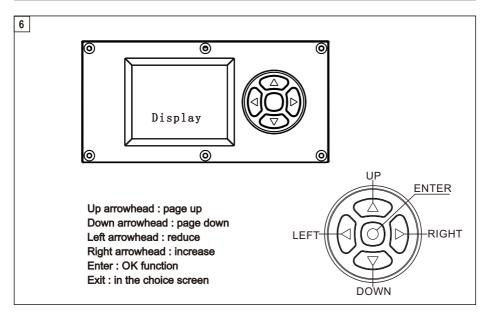
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Connecting to the control signal line (DMX) - Fig. 5

- 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.
- 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).
- •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 $120\Omega 1/2W$ resistor connected across pin 2 and 3.Which is then plugged into the output socket on the last projec -tor in the hain.Refer to the connection.

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)

		11111 (F)
DMX: DMX Address Information	💊 Personal 💷	Manual control
්රී Service ්ර් Lamp	EN Language (R)	Reversal

MENU SETTING

Mainmenu	l	I menu		II menu		Ⅲ menu	IV men
		Address	→	1-512			
DMX		Channel mode	+	Standard (17)			
SETTING		Inputmode	→	DMX 512			
		DMX State		Blackout			
			-	Hold			
				Power on time		0 – 99999Н	
		Fixture times	→	Lamp on time		0 — 99999Н	
				All time		0 - 99999H	
		Temperatures	+	Lamp TEMP			
				Head fan 1			
				Head fan 2			
				Lamp fan 1			
		Fan speed	-+	Lamp fan 2			
				Lamp fan 3			
				Lamp fan 4			
				Power fan			
		Fan voltage / 风 扇电压		Head fan 1			
				Head fan 2			
				Lamp fan 1			
				Lamp fan 2			
				Lamp fan 3			
				Lamp fan 4			
				Power fan			
		RDM info/RDM信息		UID:0x3888XXXXXXXX			
			→	Manufactory Label: LIGHT SKY			
				Device Label: F1700WB-E			
				1. Pan		0 - 255	
				2.Pan fine		0 - 255	
				3.Tilt		0 - 255	
				4.Tilt Fine		0 - 255	
Info	→			5.P/T speed		0 - 255	
				6.Functions		0 - 255	
				7. Strobe		0 - 255	
				8.Dimmer		0 - 255	
		DMX live	→	9.Dimmer fine	→	0 - 255	
				10. CT0		0 - 255	
				11. Zoom		0 - 255	
				12. Focus		0 - 255	
				13.Focus fine		0 - 255	
				14.Auto Fin.		0 - 255	
	1			15.Auto Dis		0 - 255	
	1			16.Frost1		0 - 255	
				17. Frost2		0 - 255	
	1	Version info	-	Display	→	VX. XXX	1

Mainmenu		I menu		II menu		III menu	IV menu
				Pan/Tilt		VX. XXX	
		Version info	-	Color module	-	VX. XXX	
				Zoom module		VX. XXX	
				FanDrv		VX. XXX	
				Input voltage		XXXV	
				Output voltage		XXXV	
Info	→			Input current		XXXA	
				Output Power		XXXW	
		Ballast info	-	→ Internal.T		XXX°C	
				External.T		XXX°C	
						Error	
				Running state	-	OK	
						Fault	
				DT		0FF	
				PT swap		ON	
		p /m.1.		Pan invert		0FF	
		Pan/Tilt	-		-	ON	
						0FF	
Person				Tilt invert		ON	
		Power mode	+	1200W mode			
	→			1400W mode			
				1700W mode			
						English	
				Language		Chinese	
		Display				Always	
				Backlight time / 背光时间		Auto (30S)	
			-	Intensity / 背光调节		0 - 100	
				Rotation / 屏幕旋转		Normal	
						Rotate 180	
						Auto	
				1.Pan / 1.水平		0 - 255	
				2.Pan fine / 2.水平微调		0 - 255	
				3.Tilt / 3.垂直		0 - 255	
				4.Tilt Fine / 4.垂直微调		0 - 255	
				5.P/T speed / 5.速度		0 - 255	
				6.Functions / 6.功能		0 - 255	
				7.Strobe / 7.频闪		0 - 255	
				8.Dimmer / 8.亮度		0 - 255	
		Manual Control /	→	9.Dimmer fine / 9.亮度微调	1	0 - 255	
		手动控制		10. CTO / 10. 降色温		0 - 255	
			1	11. Zoom / 11. 缩放	1	0 - 255	
lanua1				12. Focus / 12. 调焦		0 - 255	
/ 手动	→			13. Focus fine / 13. 调焦微调		0 - 255	
			1	14. Auto Fin. / 14. 自动微调	1	0 - 255	
			1	15. Auto Dis. / 15. 自动距离		0 - 255	

Mainmenu		I menu		II menu		Ⅲ menu		IV menu
		Manual Control		16.Frost1		0 - 255		
			-	17. Frost2		0 - 255		
		Lamp Switch	→	OFF				
Manua1	-+			ON				
				Pan/Tilt reset				
				Dimmer reset				
		Reset	→	Color reset				
				Focus reset				
		Test all		Total reset				
Test		Test pan/tilt	-	Test in process				
	-		-	Test in process				
		Test effects		Test in process				
				Memory IC		OK/ Reset/ Error		
				Angle Sensor		OK/ Reset/ Error		
				Pan Encodeer		OK/ Reset/ Error		
				Pan Drive IC		OK/ Reset/ Error		
				Tilt Encoder		OK/ Reset/ Error		
		Fixture state	→	Tilt Drive IC	→	OK/ Reset/ Error		
				Pan		OK/ Reset/ Error		
				Tilt		OK/ Reset/ Error		
				СТО		OK/ Reset/ Error		
				Zoom		OK/ Reset/ Error		
				Focus		OK/ Reset/ Error		
			-	Pan		0 - 255		
			-	ran Tilt		0 - 255		
			-	Strobe 1		0 - 255		
			-	Strobe 2		0 - 255		
		Adjust	-	СТО	→	0 - 255		
		5	-	Zoom		0 - 255		
			-	Focus		0 - 255		
				Frost 1		0 - 255		
Service				Frost 2		0 - 255		
	→			Factory Reset	Pass word	YES / NO		
						Reset power on timers		YES/ NO
				Reset timers	Pass word	Reset lamp timers	→	YES/ NO
		Factory	→		-	Reset all timers		YES/ NO
					Pass	Correlate lamp		
				Developer	word	Manual Fan Vol		l

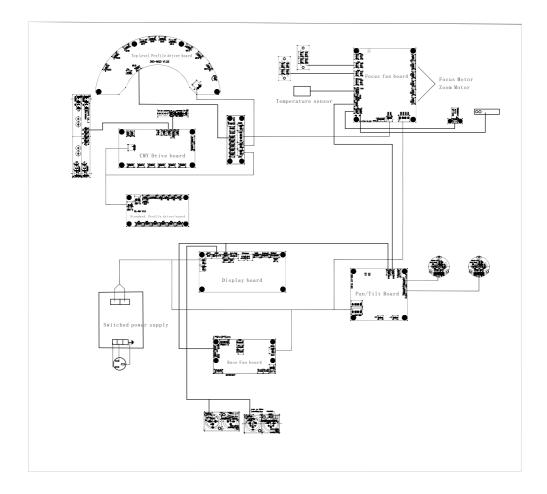
Mainmenu		I menu		II menu		III menu		IV menu
				Developer	Pass word	Manual Power Manual OR DMX		
Service	9	Factory	→			Simple update	+	Display Pan/Tilt / XY Color module Zoom module FANDRV
	→			Update	Pass word →	Whole update		ALL Display Pan/Tilt / XY Color module Zoom module FANDRV
								ALL

CHANNEL FUNCTION

Channe	I DMX	Percentage	Function	Note
1	0-255	0-100	Pan	
2	0-255	0-100	Pan Fine	
3	0-255	0-100	Tilt	
4	0-255	0-100	Tilt fine	
5	0-255	0-100	Pan/Tilt speed	
	0-9		Reserved (O=default)	
	10-14		RESET ALL	
	15-19		RESET DIMMER SHUTTER	
	20-24		RESET COLOR	
	25-29		Reserved	
	30-34		RESET PT	
	35-39		RESET ZOOM	
6	40-44		LAMP ON	
	45-49		LAMP OFF	
	50-54		Always	
	55-59		Auto (30S)	
	60-64		POWER MODE 1200	
	65-69		POWER MODE 1400	
	70-74		POWER MODE 1700	
	75-255		Reserved	
			Shutter strobe	
	0 - 31		Shutter closed	
	32 - 63		Shutter open (32=default)	
	64 - 95		Strobe-effect from slow to fast	
-	96 - 127		Shutter open	
7	128 - 143		Opening pulse in sequences from slow to fast	
	144 - 159		Closing pulse in sequences from fast to slow	
	160 - 191		Shutter open	
	192 - 223		Random strobe-effect from slow to fast	
	224 - 255		Shutter open	
8	0 - 255	0-100	Dimmer	
9	0 - 255	0-100	Dimmer fine	
10	0 - 255	0-100	СТО	
11	0 - 255	0-100	Zoom	
12	0 - 255	0-100	Focus	
13	0 - 255	0-100	Focus Fine	
14	0-255	0-100	Auto Fin	
			Auto Dis	
	0 - 9		NO function	
	10 19		10M	
	20 29		15M	
15	30 39		20M	
	40 49		30M	

Channel	DMX	Percentage	Function	Note
15	50 59		40M	
10	60 255		50M	
			Frost 1	
	0 - 127		Minimum atomization to maximum atomization	
16	128 - 159		Slow in and fast out from slow to fast	
	160 - 191		Fast in and slow out from slow to fast	
	192 - 255		Slow in Slow out from slow to fast	
			Frost2	
	0 - 127		Minimum atomization to maximum atomization	
17	128 - 159		Slow in and fast out from slow to fast	
	160 - 191		Fast in and slow out from slow to fast	
	192 - 255		Slow in Slow out from slow to fast	

CIRCUIT CONNECTING DIAGRAM



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.
- 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.
- •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.
- •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.
- •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.
- 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.

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.

■Lamp off

©Please check if install the suitable lamp.

- OPlease check the connection of the power supply or switch is ok.
- Please check whether the lamp will reach the end of their life can explode ,please replace a same description lamp.
- OPlease measure if the power supply is enough.
- 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.

- ◎ Please check whether the DMX512 controller pass the "turn on" oder.
- ◎ Please check the connection of the trigger circuit is loose contact.
- Please check whether the connected point of he trigger point is loose contact, faster the connect cable.
- ◎ 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.
- ◎ Please check if the switch of the temperature is damaged.
- © Enter the menu "information" select "temperature" to see whether the temperature display boad is too high or no temperature display.

The light beam dark, not inhomogeneou...

- when the lamp is to the usage life, the light is not enough, please change a new one for the same description.
- ◎ Please check the reflector parts is dirty.Keep them clear.
- ◎ Please measure if the power supply is enough.
- ◎ Small adjusting is suitable for change height or screw systen till get a ideal light beam.
- Enter the menu "service options" to choose "calibration" to enter the "Color" and "Gobo" adjustment, the center can be modulated.

The light shadow is fogging.

- O Please check the data on the DMX 512 controller is suitable for the electric focus.
- Please check the machenical parts is jamging.After cleaning,please add some temperature -durable juice.

The light works interruptly

- ◎ Please check if the fan works normally or mote clogging.
- O Please check whether the abstract heat have the mote clogging.
- O Please check if the lamp is to the usage life.
- Please check if the power supply is enough, the connection of the power supply or the circuit are good.
- O Please check if the switch of the sup-temperature is good.

Though the light is lighting, but it couldn't accept the control order:

OPlease check the start code address and the function option are correct.

©Please check whether the communicate control cable is ongood connection or the cable is too long or interrupt.

©Please check the control system is not valid, check the singal amplifier of chain connected is valid.

© Please check whether the communicate cable is too long or the other equipment is mutually conjugate.

© Please arrange the wire well, Shorter the signal cable, put the high voltage cable and low voltage cable separately .

OAdd the signal amplify isolator.

©Signal cable is used the excellent screening doublet (Resistance 75 Ω)

©The end of the light end and the end resistance.

©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.

■the light can't move

©Please check if the power supply is suitable for the light voltage data.

OPlease check the fuse of input voltage is defective.

©Please check the light if they are deformating, inside parts is broken, become wet...etc will lead the loose contact.

 $\ensuremath{\mathbb{O}}\xspace$ Please check if the inside lead wire and the connector is loose.

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.

Part of the projector couldn't be responsed to the controlling order:

OPlease check the order is correct to the moving.

OPlease check the mechanicalpart is deformation or loose.

©Please check the function to the motor socket is loose or drive chip is burn down.

OPlease check the wire of the motor is cut at zig point.

OPlease check these function to the motor is damaged.

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

OPlease check according to the above step by step.

 \bigcirc Please check the belt of the X.Y is broken.

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

©Re-projector reset.

DUTY EXONERATIVE AND COPYRIGHT PROTECTION

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

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

 \Diamond The commentary for all the instruction belongs to the supplier in final.

 \Diamond No authorize can't copy.

◇The information in this manual may be changed in the future, the company reserve the right to change the data without any advise.