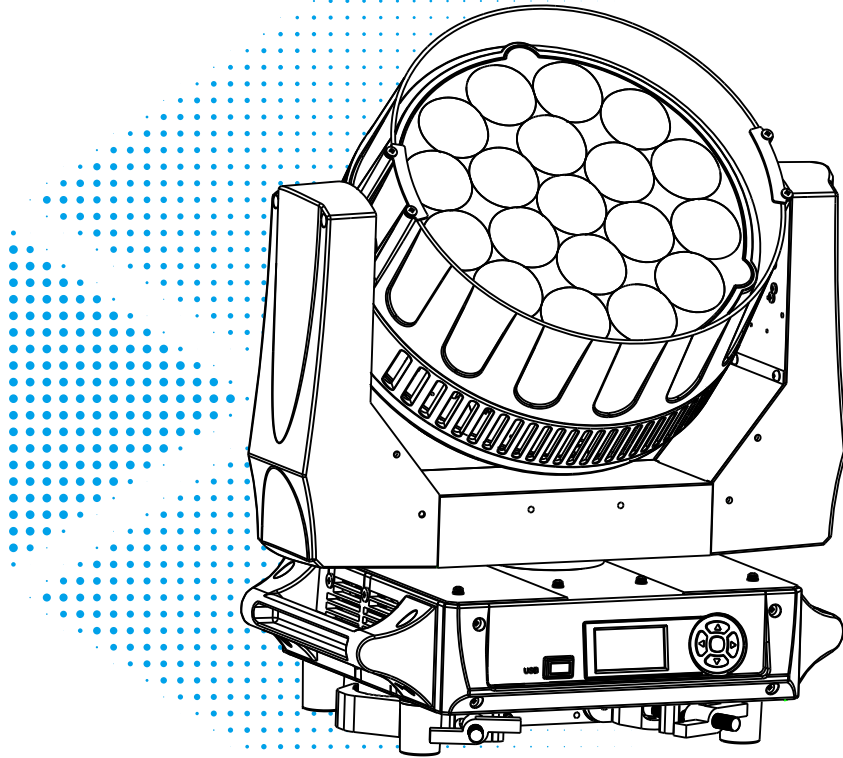


LIGHT SKY

www.lightsky.com.cn



TX1940ZOOM User Manual

Please read the instruction carefully before use

Fly Dragon Lighting Equipment Co., Ltd.

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Social Media



LIGHT SKY Wechat

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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.

$t_a 40^{\circ}\text{C}$



■ Maximum ambient temperature

The fixture is intended for indoor application.

Do not operate the fixture if the ambient temperature (T_a) exceeds 40°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 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.



tc 60 °C



■ 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 60°C.

Avoid contact by persons and materials.

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



■ Maintenance

Before starting any maintenance work or cleaning the projector, cut off power from the mains



■ The light source

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 light.



■ Protection against explosion

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.



■ 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.



The product implementation standard.: IEC 60598-1, IEC 60598-2-17

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:

100V~240V~ 50/60Hz 6.5A

● Power :

632W, PF0.985

● LED chip:

OSRAM 40W, RGBW 4 in 1 LED chip

● LED QTY: 19PCS

● Average life:50000h

● Beam angle: Zoom function min.5°,max.55°.

● Color: RGBW macro color system.

● Strobe: 1-30 times/ second electronic strobe

● Dimmer: 65536 class dimmer

● Pan、Tilt :

X/Y Travel: 540°/220°

X/Y Resolution: 2.11°/0.98°

X/Y Speed: 2.5S/1.0S

● Control Mode :

DMX512, RDM, Stand-alone mode , ArtNet (optional),
Wireless DMX512 (optional)

● Channel :

Standard (13CH)

Extended (23CH)

Simple Mode (9CH)

HSIC Mode (12CH)

● Focus and Lens

High precision combination lens, linear adjustment

● Display Menu :

- The display panel adopts a 2.0-inch LCD12864 LCD screen, which is used in both Chinese and English languages to facilitate quick operation and browse menus.
- Display board can record device's using time , show device's temperature, channel data and software version .
- Edit the procedure

● IP set

Automatic charge battery, IP could be set without electricity.

● Software upgrade

Insert USB upgrade software.

● IP20 protection

- Protected against the entry of solid bodies larger than 12mm.
- No protection against the entry of liquids.

● Safety Devices

- BIPOlar circuit breaker with thermal protection.
- Automatic break in power supply in case of overheating or failed operation of cooling system.

● Cooling

Forced ventilation with axial fans.

● Outlooking

adopt ABS anti-fire plastic.

● Light size : 425×300×506

● Box Size : 500X580X375MM

N.W.: 21kg , G.W.:25.8kg

● Flycase Size (2 sets):

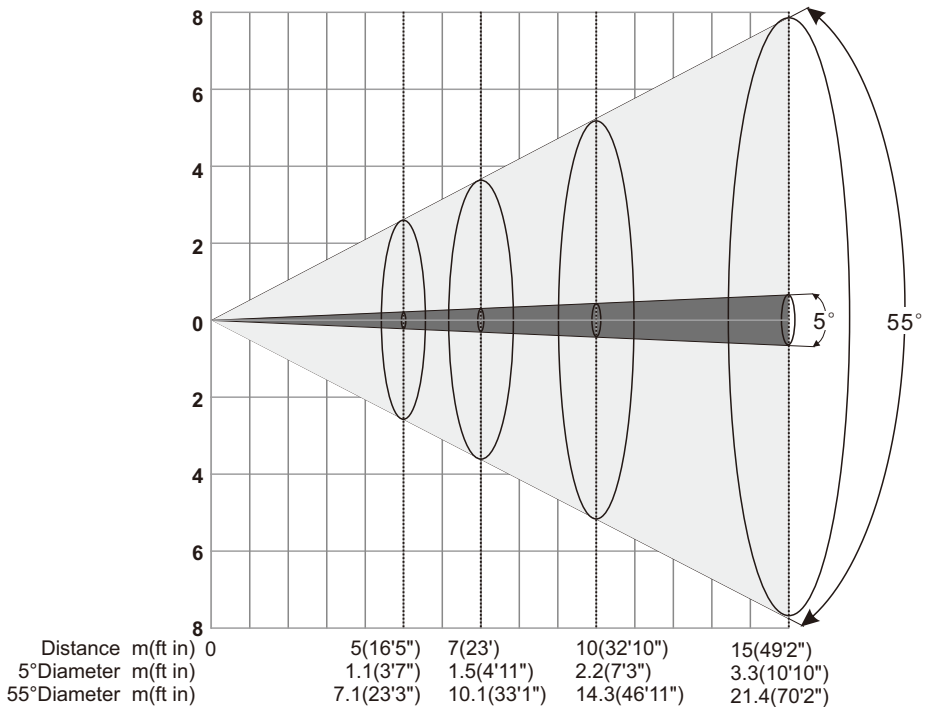
880X500X640MM

N.W.: 42kg , G.W.: 75kg

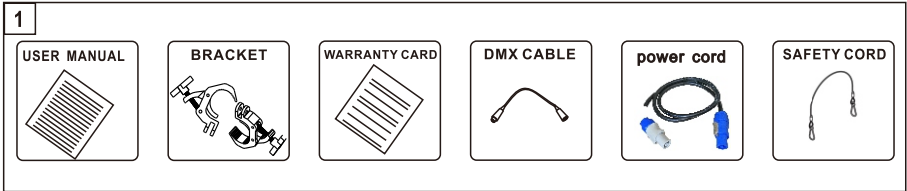
Distance, spot diameter and illumination diagram

55° Lux(fc)	R	232(22)	128(12)	73(7)	38(4)
	G	380(36)	211(20)	120(11)	72(7)
	B	95(9)	61(6)	36(3)	22(2)
	RBGW	1195(111)	636(60)	364(34)	208(19)

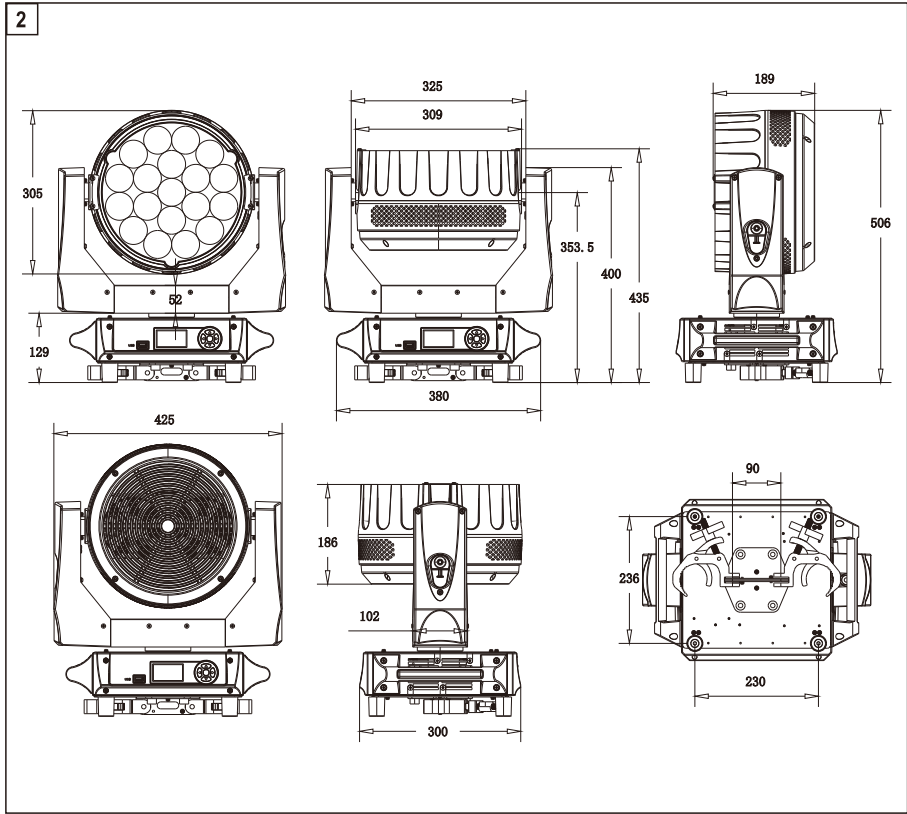
5° Lux(fc)	R	4205(391)	2240(208)	1122(105)	525(49)
	G	6960(647)	3640(338)	1848(172)	881(82)
	B	1720(160)	1017(95)	502(47)	245(23)
	RBGW	22320(2074)	11766(1094)	5968(555)	2838(264)



ATTACHMENT AND BODY SIZE

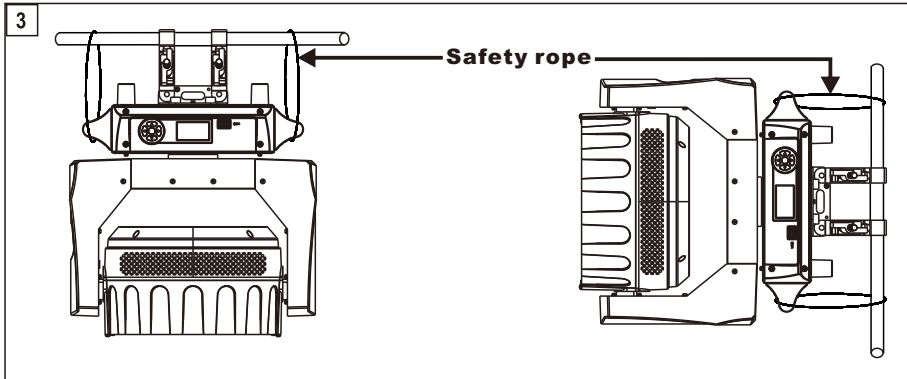


Attachment contents- Fig. 1



Body Size---Fig 2

INSTALLATION AND CONNECTING



Installing the projector- Fig. 3

Compact, standard clamp system equipped & easy installation

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.

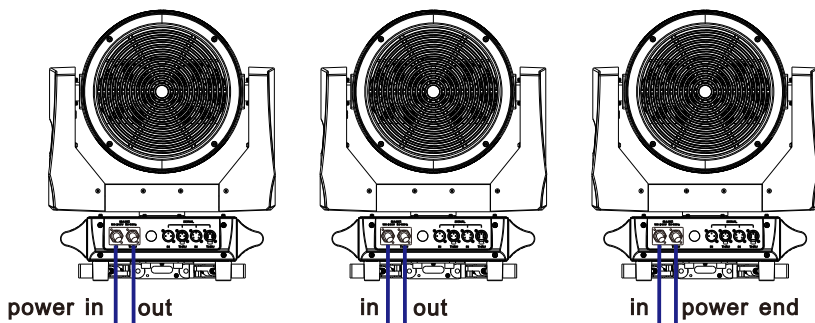
Make sure all parts for fixing the projector are in a good state of repair.

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

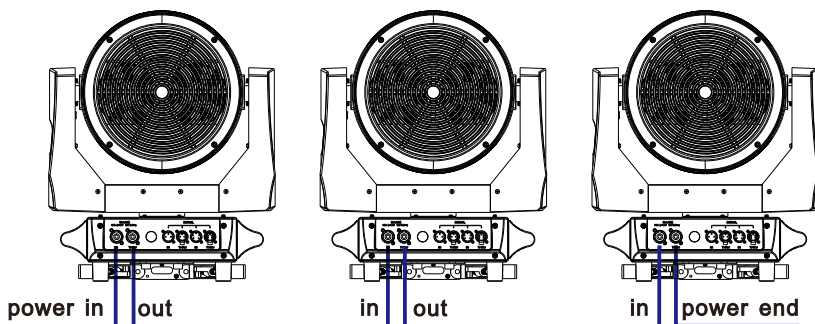
When suspending the fixture, ensure that the supporting structure and all hardware used can hold at least 10 times the weight of all the devices they support.

4

PG version



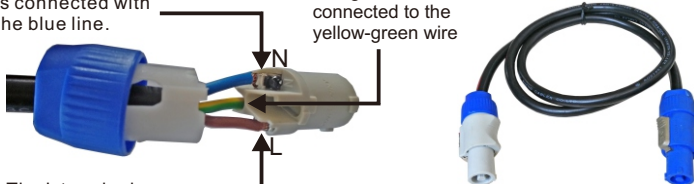
Socket version



The N terminal is connected with the blue line.

The ground wire is connected to the yellow-green wire

The L terminal is connected with the brown line.

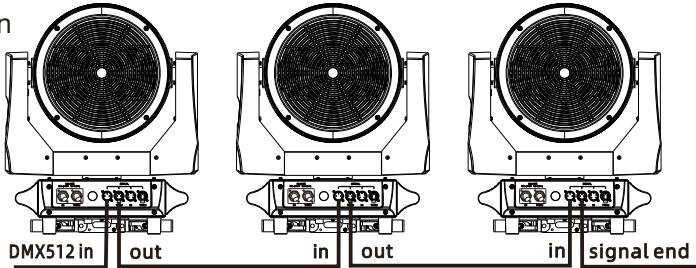


Connecting to the mains supply ---Fig 4

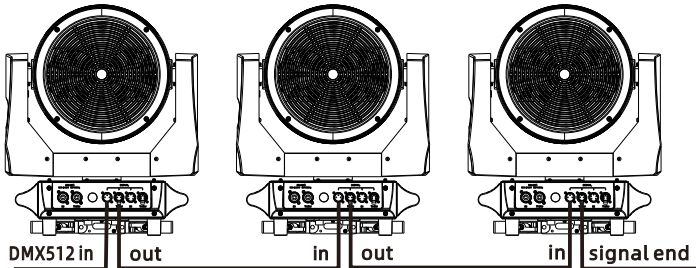
- The stage lighting power supply can not be more than 2pcs pre line
- connection to the electricity mains must be carried out by a qualified electrical installer.
- After doing the above operation and making sure all the devices had been installed with natural operate, press the power switch to check whether every-thing is working normally.

5

PG version



Socket version



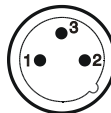
DMX - output

- 1 - Shield
- 2 - Signal (-)
- 3 - Signal (+)
- 4 - Not connected
- 5 - Not connected



DMX-input

- 1 - Shield
- 2 - Signal (-)
- 3 - Signal (+)
- 4 - Not connected
- 5 - Not connected



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

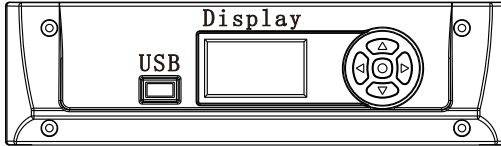
© Please use the round 3 or 5-pin XLR plugs & sockets offered by menu factory to connect the first projector's output to the second projector's input and connect the second projector's output to the third projector's input. And in the same way for the rest, eventually connect the last projector's output,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

© 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 communication cable is 2-core 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).

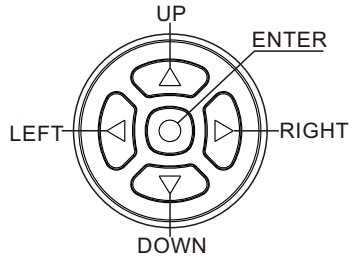
© Recommend to use the DMX signal terminator for the installation to avoid the electronic noise damage the digital control signal. Simply speaking, DMX terminator is an XLR connector with a 120Ω 1/2W resistor connected across pin 2 and 3. Which is then plugged into the output socket on the last projector in the chain. Refer to the connection.

CONTROL PANEL

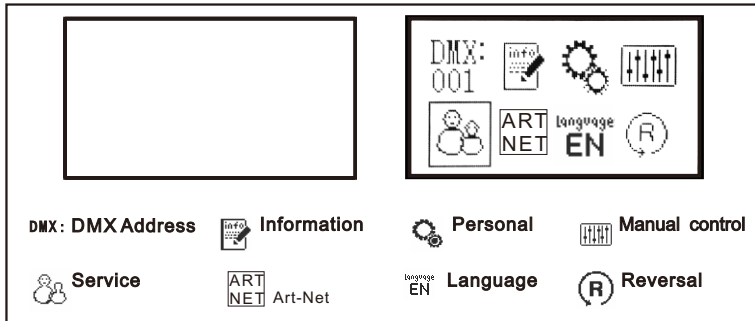
6



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):



● Color Calibration System

Because LED chip's brightness and wave length can not be produced exactly same by LED factory, which would cause the color difference in the LED color fixture. To solve the issue, LIGHT SKY adopts a calibration system by calibrating each color's brightness curve and defining a standard color area. then apply this standard into all the LED fixture to lower the color difference.

So, in MENU Optional of Open Calibration OFF/ON in PERSONAL is available. Standard production, the Calibration system in ON.

But user can choose OFF as well

MENU SETTING

Main menu	I menu	II menu	III menu
DMX Address	Address :001-512		
Information	Totel time	Power :**** (h)	
		Lamp on :**** (h)	
	Lamp hours	Total :**** (h)	
		Lamp open :**** (h)	
	Temperature	Board :000.0	
	RDM UID	Undistributed	
	Fan speed/Voltag	Fan1 1:0000 RPM	
		Fan2 2:0000 RPM	
	DMX live	1. Pan (***)	
		2. Pan Fine (***)	
		3. TILT (***)	
		4. TILT Fine (***)	
		5. Fuction (***)	
		6. Dimmer (***)	
		7. Shutter (***)	
		8. Red (***)	
		9. Green (***)	
		10. Blue (***)	
		11. White (***)	
		12. Macro (***)	
		13. ZOOM (***)	
	System version	XY:V*. **	
		LED-KZ:V*. **	
		DIS Board :V*. **	
	Return (ESC)		
Personal	Channel mode	Standard (13CH	
		Extended (23CH	
		SimpleMode (9CH)	
		HSIC Mode (12CH)	
	Fan mode	Normal mode	
		Silent mode	

Main menu	I menu	II menu	III menu
Personal	Dimmer Speed	Dimmer Speed-1 (fast)	
		Dimmer Speed-2	
		Dimmer Speed-3	
		Dimmer Speed-1 (slow)	
	Dimmer Curve	Dimmer Curve 1	
		Dimmer Curve 2	
		Dimmer Curve 3	
		Dimmer Curve 4	
	Open calibration	OFF	
		ON	
	DMX Function	Keep	
		Black	
		Sta Scence	
	P/T invert	Pan invert	OFF
			ON
		Tilt invert	OFF
			ON
		Return (ESC)	
	Display	Language	English
			Chinese
		Back Light	Open
			Auto close (15s)
		Reversal	Normal
			Rota. 180
		Backlight blink	ON
			OFF
		Return (ESC)	
	Return (ESC)		
Manual control	Channel control	1. Pan (***)	
		2. Pan Fine (***)	
		3. TILT (***)	
		4. TILT Fine (***)	

Main menu	I menu	II menu	III menu
Manual control	Channel control	5. Fuction (***)	
		6. Dimmer (***)	
		7. Shutter (***)	
		8. Red (***)	
		9. Green (***)	
		10. Blue (***)	
		11. White (***)	
		12. Macro (***)	
		13. ZOOM (***)	
		Return (ESC)	
	Reset	system reset	
		Pan/Tilt reset	
		Head motor reset	
	Test	Test P/T	STEP ***
		Test effect	STEP ***
		Test all	STEP ***
		Test all	
		Return (ESC)	
	Return (ESC)		
Service	Calibration	Pan 000-255	
		Tilt 000-255	
		Return (ESC)	
	Factory	Default	
			Power on time
		Time clean	Lights on time
			The total time
		Developer	
		Firmware update	
		Return (ESC)	
	return (ESC)		
ARTNET	DMX/ARTNET	First/DMX	
		ARTNET First/ARTNET	
	IP Address		

Main menu	I menu	II menu	III menu
ARTNET	Mask Address		
	Net Address		
	Sub Net Address		
	Universe Address		
	return (ESC)		
Language	English		
	Chinese		
Reversal	Normal		
	Rota. 180		

CHANNEL FUNCTION

Channel	DMX	Percentage	function
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	Fuction		
	0-25	0-9.8	No Fuction
	26-35	10.2-13.7	Zoom Reset
	36-45	14.1-17.6	P/T Reset
	46-55	18-21.6	All Reset
	56-65	22-25.5	DimmerSpeed1
	66-75	25.9-29.4	DimmerSpeed2
	76-85	29.8-33.3	DimmerSpeed3
	86-95	33.7-37.3	DimmerSpeed4
	96-255	37.6-100	No Fuction
6	0-255	0-100	Dimmer
7	Shutter		
	0-9	0-3.5	NO Function
	10-49	3.9-19.2	Slow closing, Fast opening, slow → fast
	50-89	19.6-34.9	Fast closing, Slow opening, Slow → Fast
	90-119	35.3-46.7	Slow closing, Slow open, Slow → Fast
	120-179	47.1-70.2	Randomstrobe, Slow → Fast
	180-249	70.6-97.6	Synchronoussstrobe, slow → fast
	250-255	98-100	NO Function
8	0-255	0-100	Red
9	0-255	0-100	Green
10	0-255	0-100	Blue
11	0-255	0-100	White
12	0-255	0-100	Macro
13	0-255	0-100	ZOOM

Extended (23CH)

Channel	DMX	Percentage	Function
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	Fuction		
	0-25	0-9.8	No Fuction
	26-35	10.2-13.7	Zoom Reset
	36-45	14.1-17.6	P/T Reset
	46-55	18-21.6	All Reset
	56-65	22-25.5	DimmerSpeed1
	66-75	25.9-29.4	DimmerSpeed2
	76-85	29.8-33.3	DimmerSpeed3
	86-95	33.7-37.3	DimmerSpeed4
	96-255	37.6-100	No Fuction
6	0-255	0-100	Dimmer
7	Shutter		
	0-9	0-3.5	NO Function
	10-49	3.9-19.2	Slow closing, Fast opening, slow → fast
	50-89	19.6-34.9	Fast closing, Slow opening, Slow → Fast
	90-119	35.3-46.7	Slow closing, Slow open, Slow → Fast
	120-179	47.1-70.2	Randomstrobe, Slow→ Fast
	180-249	70.6-97.6	Synchronoustrobe, slow→ fast
	250-255	98-100	NO Function
8	0-255	0-100	Red 1
9	0-255	0-100	Green 1
10	0-255	0-100	Blue 1
11	0-255	0-100	White 1
12	0-255	0-100	Red 2
13	0-255	0-100	Green 2
14	0-255	0-100	Blue 2
15	0-255	0-100	White 2

Channel	DMX	Percentage	Function
16	0-255	0-100	Red 3
17	0-255	0-100	Green 3
18	0-255	0-100	Blue 3
19	0-255	0-100	White 3
20	0-255	0-100	Macro
21	0-255	0-100	Effect macro
22	CCT		
	0-3	0-1.18	NO Function
	4-255	1.57-100	2000K-10000K
23	0-255	0-100	ZOOM

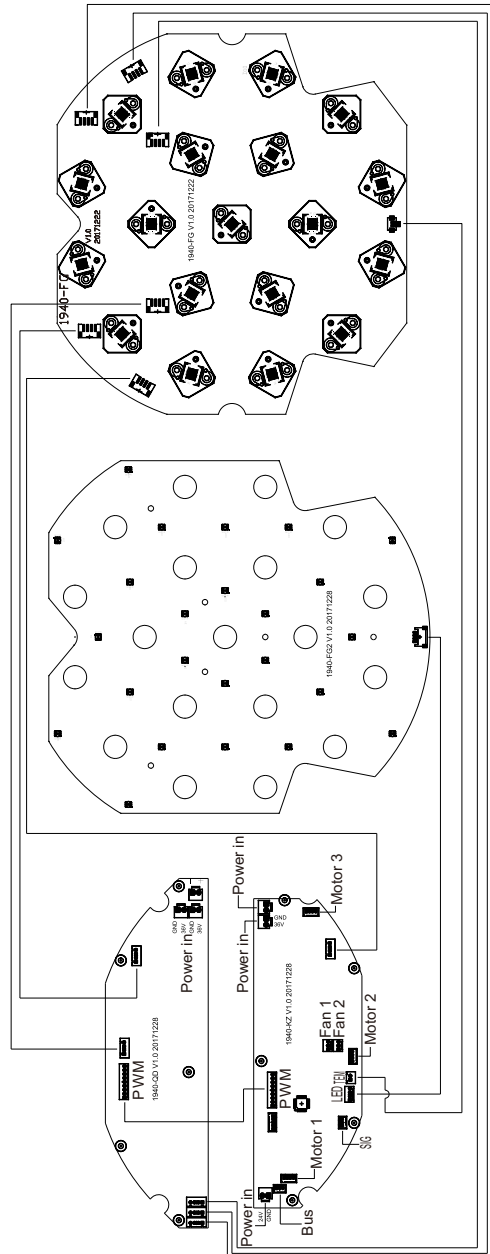
SimpleMode (9CH)

Channel	DMX	Percentage	Function
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	Fuction		
	0-25	0-9.8	No Fuction
	26-35	10.2-13.7	Zoom Reset
	36-45	14.1-17.6	P/T Reset
	46-55	18-21.6	All Reset
	56-65	22-25.5	DimmerSpeed1
	66-75	25.9-29.4	DimmerSpeed2
	76-85	29.8-33.3	DimmerSpeed3
	86-95	33.7-37.3	DimmerSpeed4
	96-255	37.6-100	No Fuction
6	0-255	0-100	Dimmer
7	Shutter		
	0-9	0-3.5	NO Function
	10-49	3.9-19.2	Slow closing, Fast opening, slow → fast
	50-89	19.6-34.9	Fast closing, Slow opening, Slow → Fast
	90-119	35.3-46.7	Slow closing, Slow open, Slow → Fast
	120-179	47.1-70.2	Randomstrobe, Slow → Fast
	180-249	70.6-97.6	Synchronoussstrobe, slow → fast
	250-255	98-100	NO Function
8	CCT		
	0-3	0-1.18	NO Function
	4-255	1.57-100	2000K-10000K
9	0-255	0-100	ZOOM

HSIC Mode(12CH)

Channel	DMX	Percentage	Function
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	Fuction		
	0-25	0-9.8	No Fuction
	26-35	10.2-13.7	Zoom Reset
	36-45	14.1-17.6	P/T Reset
	46-55	18-21.6	All Reset
	56-65	22-25.5	DimmerSpeed1
	66-75	25.9-29.4	DimmerSpeed2
	76-85	29.8-33.3	DimmerSpeed3
	86-95	33.7-37.3	DimmerSpeed4
	96-255	37.6-100	No Fuction
6	0-255	0-100	Hue
7	0-255	0-100	Hue fine
8	0-255	0-100	Saturation
9	0-255	0-100	Dimmer
10	Shutter		
	0-9	0-3.5	NO Function
	10-49	3.9-19.2	Slow closing, Fast opening, slow → fast
	50-89	19.6-34.9	Fast closing, Slow opening, Slow → Fast
	90-119	35.3-46.7	Slow closing, Slow open, Slow → Fast
	120-179	47.1-70.2	Randomstrobe, Slow→ Fast
	180-249	70.6-97.6	Synchronousstrobe, slow→ fast
	250-255	98-100	NO Function
11	CCT		
	0-3	0-1.18	NO Function
	4-255	1.57-100	2000K-10000K
12	0-255	0-100	ZOOM

CIRCUIT CONNECTING DIAGRAM



CLEANING AND MAINTENANCES

- 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.
- 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.
- 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.
- 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. Please check the machanical parts is jamging. After cleaning, please add some temperature -durable juice.
- 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.
- 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.

CAUTION!

Disconnect from mains before starting maintenance operation.

TROUBESHOOTING

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 :

- 1.Please check if install the suitable voltage
- 2.Please check whether the led will reach the end of their life can explode; please replace a same description led.
- 3.Please check if the power supply is enough.
- 4.Please check whether the DMX 512 controller pass the "turn on" order.

■The light couldn't accept the control order:

- 1.Please check the start code address and the function option are correct.
- 2.Please check whether the communicate control cable is on good connection or the cable is too long or interrupt.
- 3.Please check the control system is not valid, check the signal amplifier of chain connected is valid.
- 4.Please check whether the communicate cable is too long or the other equipment is mutually conjugate.
- 5.Please arrange the wire well, shorter the signal cable, put the high voltage cable and low voltage cable separately.
- 6.Add the signal amplify isolator.
- 7.Signal cable is used the excellent screening doublet (Resistance 75 OHM)
- 8.The end of the light end and the end resistance.

■The light can't move

- 1.Please check if the power supply is suitable for the light voltage data.
- 2.Please check the light if they are deformation, inside parts is broken, become wet etc will lead the loose contact.
- 3.Please check the if the inside lead wire and the connector is loose.
- 4.Please check the electric parts(such as the transformer,PCB board,contrller) is short-circuit or burn down.

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

- ☆ Please check according to the above step by step.
- ☆ 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 light source is a consumable product and is not covered by the warranty.
- The manufacturer is not responsible for any damage to the lamp caused by failure to operate in accordance with this manual.
- The final interpretation right of all the information in this manual belongs to the manufacturer.
- All information in this manual may not be copied without permission.
- The data contained in this manual may change in the future without prior notice.