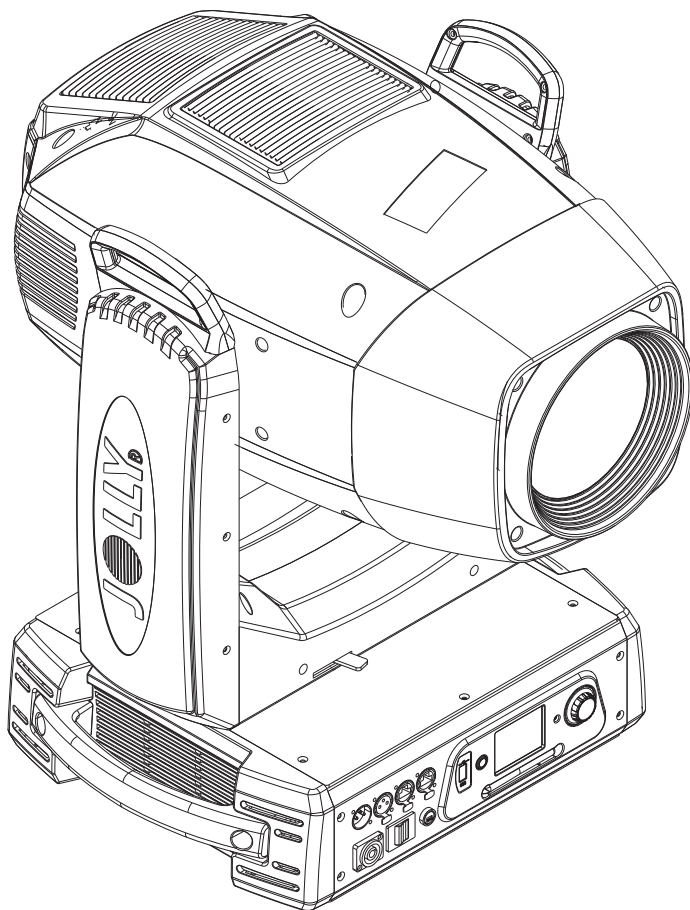


X-1400 Spot PF

USER MANUAL



CE

JOLLY®

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Congratulations on choosing our products! Please carefully read this instruction manual in its entirety and keep it well for using reference. This manual contained about the installation and the relative using information of this products. Please refer to this manual's relative instruction when using this equipment.

1.Open-Package guidelines

This equipment is made of new style,high intensity plastic.It fully shows the modem times light charac teristic with beauty struture. And it is made accord to CE standard. Fully agree with the internation standard of DMX512 agreement.

When receive the product,please be careful to take and put,check if the product has damage or not because of transportation, and check the following parts:

- | | |
|--------------------|---------------------|
| 1.Signal cable-1PC | 2.Safaty cable-1PC |
| 3.User Manval-1PC | 4.Omega holder-2PCS |
| 5.Power cable-1PC | 5.Service card-1PC |

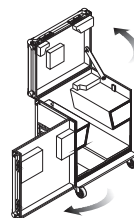
1.1 Package

Unpacking the fixture

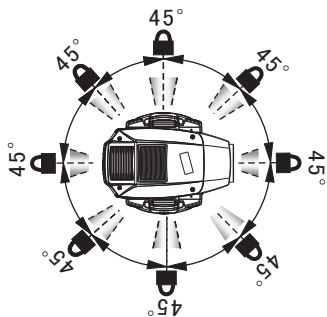
- 1.Open the flight case cover- Fig. 1
- 2.With one person on each side, lift the fixture out of the flight case.
- 3.Unlock pan and tilt before operating fixture.

Packing the fixture

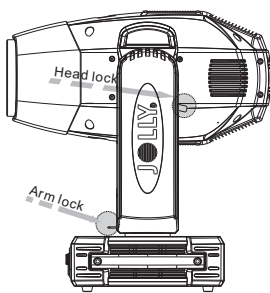
- 1.Disconnect the fixture from power and allow it to cool.
- 2.lock arms and head as figure.- Fig.2(PAN Mechanism Lock and Release (every 45°) - Fig.2-1)(Tilt Mechanism Lock and Release (every 45°) - Fig.2-2)
- 3.Place the fix ture in the bottom of the flight case, and cover the case without forcing.



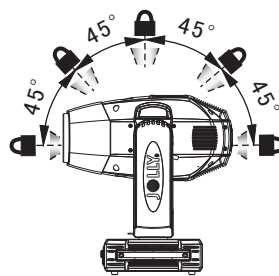
Aviation box Fig.1



PAN Mechanism Lock Fig.2-1



Level vertical transportation lock Fig.2



Tilt Mechanism Lock Fig.2-2

2.Safety instructions

Every person involvd with installation and maintenance of this device to:

- Be qualified
- Follow the instructions of this manual.

CAUTION!

*Be careful with your operations.
With a high voltage you can suffer
a dangerous electric shock when touching the wires!*

This device has been shipped with our premises in absolutely perfect condition.In order to maintain this condition and toensure a safe operation,it is absolutely necessary for the user to follow the safety instructions and warning notes written in this manual.








Important:

- The manufacturer will not accept liability for any resulting damages caused by the nonobservance of this manual or any unauthorized modification to the device.
- Please consider that damages caused by manual modifications to the device are not subject to warranty.

- Never let the power-cord come into contact with other cables! Handle the power cord and all connections with particular caution!
- Make sure that the available voltage is not higher than stated on the rearpanel.
- Always plug in the power plug least. Make sure that the power-switch is set to off-position before you connect with themains with particular caution!
- Make sure that the power-cord is never crimped or damaged by sharp edges. Check the device and the power-cord from time to time.
- Always disconnect from the mains, when the device is not in use or before cleaning it.
- Only handle the power-cord by the plug, Never pull out the plug by tugging the powercord.
- This device falls under protection class I. Therefore it is essential to connect the yellow/green conductor to earth.
- The electric connection, repairs and servicing must be carried out by a qualified employee.
- Do not connect this device to a dimmer pack.
- Do not switch the fixture on and off in short intervals as this would reduce the lamp's life.
- Do not touch the device's housing bare hands during its operation (housing becomes hot)!
- For replacement use lamps and fuses of same type and rating only.

Eye damage!

Avoid looking directly into the light source (meant especially for epileptics)!

- 
 ➤ **Minimum distance of illuminated objects**
 The projector needs to be positioned so that the objects hit by the beam of light are at least 5 metres from the lens of the projector.
- t_a 40°C
 ➤ **Maximum ambient temperature**
 Do not operate the fixture if the ambient temperature (T_a) exceeds 40°C (104°F).
- t_c 80°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 80°C (176°F).
- IP20
 ➤ **IP20 protection rating**
 The fitting is protected against penetration by solid of over 12mm (0.47") in diameter (first digit 2), but not against dripping water, rain, splashes or jets of water (second digit 0).
- 
 ➤ **Indoor use only**
- 
 ➤ **Not suitable for household illumination**
- 
 ➤ **Photobiological Safety**
 CAUTION. Do not look directly at the light source. Do not look at the light beam with optical devices or any other tool that could cause light convergence.
 The fixture must be positioned so that the minimum distance between the front lens and human eye is at least 3 metres to prevent personal photobiological risks.
- 
 ➤ **Mounting surfaces**
 It is permissible to mount the fitting on normally flammable surfaces.
- 
 ➤ **The products to which this manual refers comply with the European Directives pursuant to:**
 - 2006/95/EC - Safety of electrical equipment supplied at low voltage (LVD)
 - 2004/108/EC - Electromagnetic Compatibility (EMC)
 - 2011/65/EU - Restriction of the use of certain hazardous substances (RoHS)
 - 2009/125/EC - EcoDesign requirements for Energy-related Products (ErP)
- 
 ➤ **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.



➤ **Disposing**

This product is supplied in compliance with European Directive 2012/19/EU-Waste Electrical and Electronic Equipment (WEEE) . To preserve the environment please dispose/recycle this product at the end of its life according to the local regulation.



➤ **Battery**

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



➤ **Lamp**

The fitting mounts a high-pressure lamp that needs an external igniter. This igniter is fitted onto the apparatus. -Carefully read the "operating instructions" provided by the lamp manufacturer.
-Immediately replace the lamp if damaged or deformed by heat.



➤ **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 for at least 10 minutes. After this time the likelihood of the lamp exploding is virtually small. If it is necessary to replace the lamp, wait for another 15 minutes to avoid getting burnt. The fitting is designed to hold in any splinters produced by a lamp exploding.



3. Operating determinations

- This device is a moving-head for creating decorative effects and was designed for indoor use only.
- If the device has been exposed to drastic temperature fluctuation (e.g. after transportation), do not switch it on immediately. The arising condensation water might damage your device. Leave the device switched off until it has reached room temperature.
- Never run the device without lamp!
- Do not shake the device. Avoid brute force when installing or operating the device.
- Never lift the fixture by holding it at the projector head, as the mechanics may be damaged. Always hold the fixture at the transport handles.
- When choosing the installation-spot, please make sure that the device is not exposed to heat, moisture or dust. There should not be any cables lying around. You endanger your own and the safety of others!
- The minimum distance between light output and the illuminated surface must be more than 0.2 meters.
- Make sure that the area below the installation place is blocked when rigging, derigging or servicing the fixture.
- Always fix the fixture with an appropriate safety rope. Fix the safety rope at the correct holes only.
- Operate the fixture after having checked that the housing is firmly closed and all screws are tightly fastened.
- The lamp must never be ignited if the objective-lens or any housing-cover is open, as discharge lamps may explode and emit a high ultraviolet radiation, which may cause burns.
- The maximum ambient temperature 40° C must never be exceeded.
- Operate the device only after having familiarized with its functions. Do not permit operation by persons not qualified for operating the device. Most damages are the result of unprofessional operation!
- Please use the original packaging if the device is to be transported.
- Please consider that unauthorized modifications on the device are forbidden due to safety reasons!
- If this device will be operated in any way different to the one described in this manual, the product may suffer damages and the guarantee becomes void. Furthermore, any other operation may lead to dangers like short-circuit, burns, electric shock, burns due to ultraviolet radiation, lamp explosion, crash etc.

4. Rigging the fixture

4.1 Mounting



Pay attention to the regulations of CE.

Installation by qualified staff to complete.

- ☞ For the various mounting positions of the FIXTURE (standing on the floor, sideways or hanging different accessories kits are available.
- ☞ Through this a safe and firm installation is assured.
- ☞ You'll find special connectors on the bottom side of the system which are put to use here.

4.2 Installing the Clamps

Please consider the respective national norms during the Installation! The installation must only be carried out by an authorized dealer!

The installation of the projector has to be built and constructed in a way that it can hold 10 times the weight for 1 hour without any harming deformation.

The installation must always be secured with a secondary safety attachment, e.g. an appropriate catch net. This secondary safety attachment must be constructed in a way that no part of the installation can fall if the main attachment fails.

When servicing the fixture staying in the area below the installation place, on bridges, under high working places and other endangered areas is forbidden.

The operator has to make sure that safety-relating and machine-technical installations are approved by an expert before taking into operation for the first time and after changes before taking into operation another time.

The operator has to make sure that safety-relating and machine-technical installations are approved by an expert after every four years in the course of an acceptance test.

The operator has to make sure that safety-relating and machine-technical installations are approved by a skilled person once a year.

The projector should be installed outside areas where persons may walk by or be seated.

Important! Overhead rigging requires extensive experience CE, including (but not limited to) calculating working load limits, installation material being used, and periodic safety inspection of all installation material and the projector. If you lack these qualifications, do not attempt the installation yourself, but instead use a professional structural rigger. Improper installation can result in bodily injury and or damage to property.

The projector has to be installed out of the reach of people.

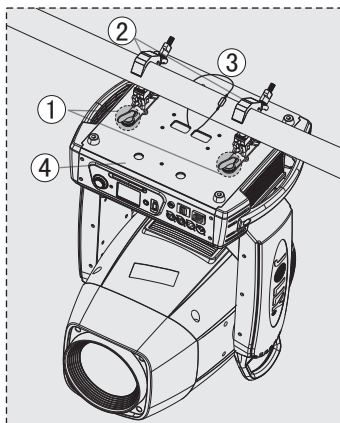
If the projector shall be lowered from the ceiling or high joists, professional trussing systems have to be used. The projector must never be fixed swinging freely in the room.

Caution Projectors may cause severe injuries when crashing down! If you have doubts concerning the safety of a possible installation, do not install the projector!

Before rigging make sure that the installation area can hold a minimum point load of 10 times the projector's weight.

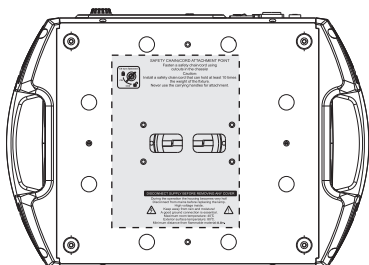
The projector can be placed directly on the stage floor or rigged in any orientation on a truss without altering its operation characteristics.

For overhead use, always install a safety-rope that can hold at least 10 times the weight of the fixture. You must only use safety-ropes with screw on carabines. Pull the safety-rope through the two apertures on the bottom of the base and over the trussing system etc.



Warning: it is necessary to make sure that the installation location is perfectly appropriate, and the installation location is safe and reliable.

①	Lock catch
②	omega holder
③	secure chain
④	mounting plate



SAFETY CHAIN/CORD ATTACHMENT POINT

Fasten a safety chain/cord using cutouts in the chassis!

Caution:

Install a safety chain/cord that can hold at least 10 times the weight of the fixture.

Never use the carrying handles for attachment.

DISCONNECT SUPPLY BEFORE REMOVING ANY COVER

During the operation the housing becomes very hot!
Disconnect from mains before replacing the lamp.

High voltage inside.

Keep away from rain and moisture!

A good ground connection is essential.

Medium room temperature: 40°C.

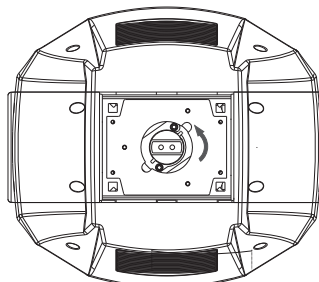
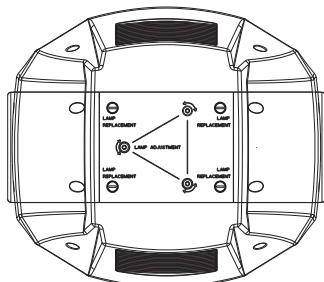
Exterior surface temperature: 80°C.

Minimum distance from flammable material: 0.8m.

6) Loosen the four screws marked on the back cover to open it, and turn the bulb in the direction shown to the corresponding slot for replacement.

Make sure the bulb is at central location when installing to get the best effects.

Rotate the three screws on the back cover to adjust the bulb position as indicated following:

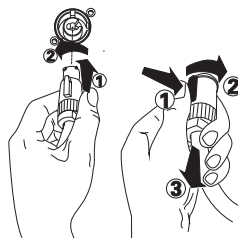


4.3 Power supply connection and cut off

Connect the light source to the main power source with the plug of the power cord, or cut off the power supply:

Connection: according to procedures, the power plug and socket is inserted into the groove one one alignment, rotation.

Cut off: according to procedures, press the button on the rotating plug, pull out.



4.4 Power Connection

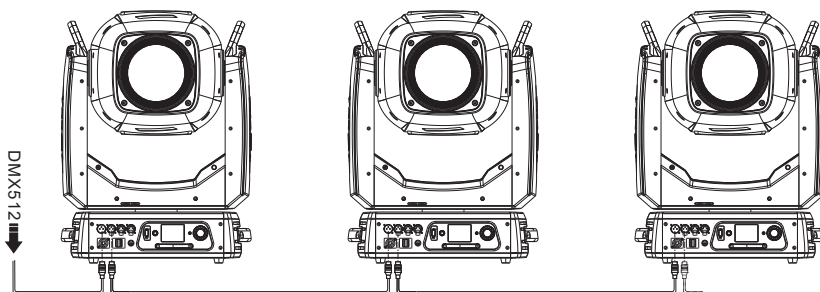
If you wish to change the power supply settings, see the chapter appendix Connect the fixture to the mains with the enclosed power cable and plug.

Warning: please verify the power of the power supply equipment prior to the connection! Earth wire must be grounded!

CABLE(EU)	CABLE(US)	Pin	INTERNATIONAL
Brown	Black	Live	L
Light blue	White	Neutral	N
Yellow/Green	Green	Earth	⏏

4.5 DMX-512 connection/connection between fixtures

Only use stereo shielded cable and 3-pin XLR-plugs and connectors in order to connect.



Caution

At the last fixture, the DMX-cable has to be terminated with a terminator. solder a 120 resistor between signal(-) and Signal (+) into a 3-pin XLR-plug and plug it in the DMX-output of the last fixture.

DMX output 3-pin XLR socket DMX output 3-pin XLR socket

DMX output 5-pin XLR socket DMX output 5-pin XLR socket



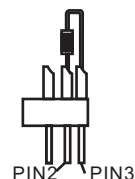
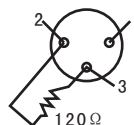
1: Ground
2: Signal (-)
3: Signal (+)



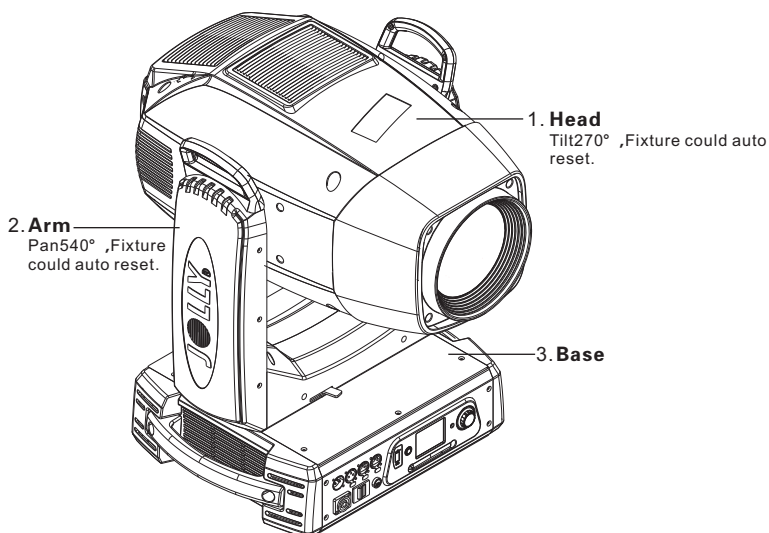
1: Ground
2: Signal (-)
3: Signal (+)
4: N. A.
5: N. A.

DMX Terminator Diagram

-For installations where the DMX cable has to run a long distance or is in an electrically noisy environment it is recommended to use a DMX terminator. This helps in preventing corruption of the signal by electrical noise. The DMX terminator is simply an XLR plug with a 120Ω resistor connected between pins 2 and pins 3, which is then plugged into the output XLR socket of the last fixture in the chain.

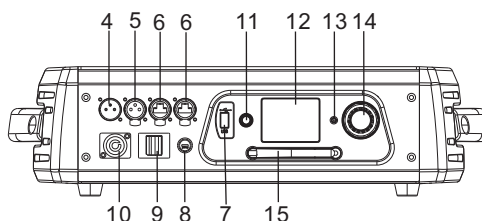


5. Description of the device

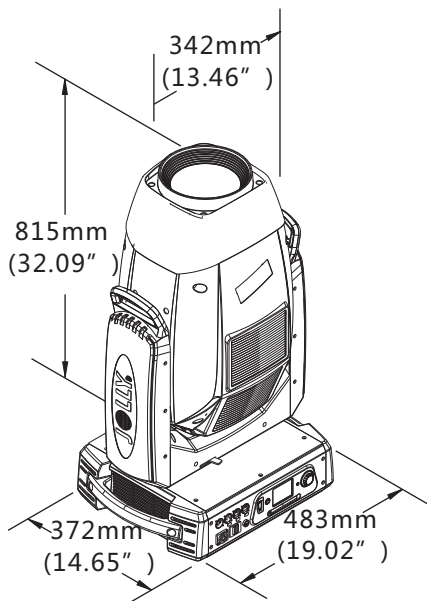
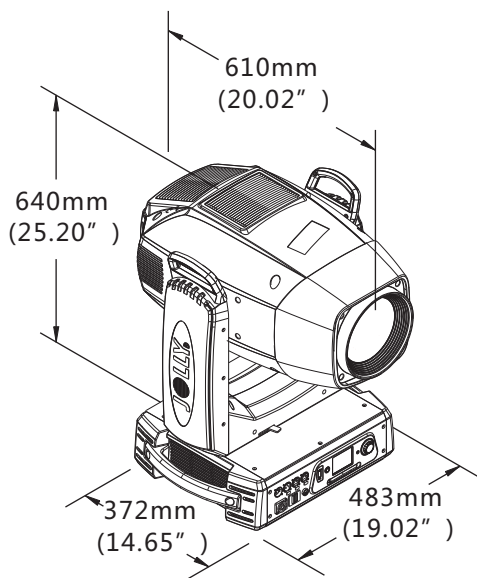


Display panel

- 4. 3-pin XLR male
- 5. 3-pin XLR female
- 6. Network interface
- 7. USB interface Power-in
- 8. Main Fuse
- 9. Network interface
- 10. Power switch
- 11. Small button
- 12. Display
- 13. Status indicator lamp
- 14. Knob
- 15. WDMX wire



6.Dimension



7.Display control

7.1 Navigation in the Menu

Using the buttons or touch screen, and this can be simply and easily set the address code and functions code.

If you view or modify the lighting feature set, then press ENTER button, the display will enter the menu interface. Both there is sub menu corresponding to the functional operation of the main menu. Each of the menus is representative of the specific features of the lamp. The specific contents shows as the table menu below.

Set or browse lighting function, press UP or DOWN button.

Press ENTER to save your changes or enter the submenu. Press the UP or DOWN can change the numerical (increase or decrease in value).

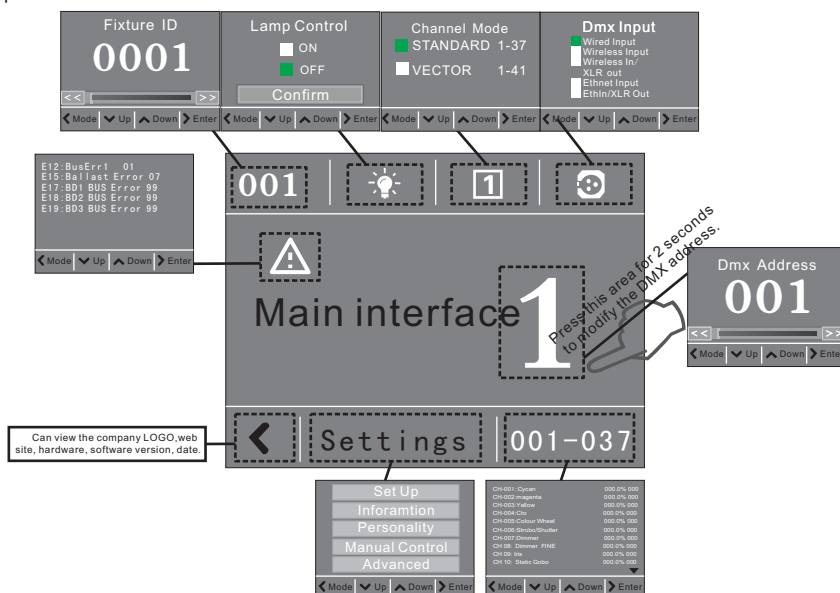
Press the MODE button to return to menu. Set a time 0 to 10 minutes automatically exit menu interface and close the screen.

7.2 Display Operation

Put through power supply, open the power switch of lamps and lanterns, display show the company LOGO website. According to the main interface, as shown in figure:

In the main interface, press "MODE" button to view the software version, press the "UP" "DOWN" can modify the DMX address.

If the screen "😊" icon is green, said DMX signal connection is normal, this state can be used to check the lamps and lanterns and connection between the control table is normal.



menu interface

This lamp can be set to turn off the automatic flip screen function, touch this "😊" icon can be manually flip screen.

Click on the main interface of the icon, numerical to view view Settings related information of lamps and lanterns. Symbols such as the main interface appear "Δ", the following error message indicates that there might be a lamps and lanterns, can click to view and control information content to modify the lamps and lanterns.

CODE #	ERRO INFO	CHECK MEASURMENT	NOTE
E001	SpiFlashError	Check the welding of memory IC	RESET ERROR
E002	Program Err 1	Check the welding of Chip	
E003	Program Err 2	Check the welding of master IC EP3C	
E004	MBDInit Error	Check the communication signal 485& 485 chip & memory IC	
E005	BD1Init Error	Check main cable ABAB (485) chip	
E006	BD2Init Error		
E007	BD3Init Error		
E008	BD4Init Error		
E009	BD5Init Error		
E010	BD6Init Error		
E011	BD7Init Error		
E012	BusErr1	Check the communication signal& welding of communication chip	
E013	SPDError		
E014	MFpga Error		
E015	BD1 BUS Error		
E016	BD2 BUS Error		
E017	BD3 BUS Error		
E018	BD4 BUS Error		
E019	BD5 BUS Error		
E020	Pan FB. Err	Check the light coupling line, optical coupling switch and a plate of the relative position measurement	
E022	Tilt FB. Err		
E021	Pan Zero Err	Check cable of sensor, distance and location of ,magnets and sensor	
E023	Tilt Zero Err		
E024	Prism Err1		
E025	Prism Err2		
E026	R.Gobo1 Err1		
E027	R.Gobo1 Err2		
E028	R.Gobo2 Err1		
E029	R.Gobo2 Err2		
E030	Zomm Err		
E031	Focus Err		
E032	St.Gobo Err		
E033	ColourW. Err		
E034	Iris Error		
E035	Cyan Err		
E036	Magenta Err		
E037	Yellow Err		
E038	Cto Err		
E039	Frost2 Err		
E040	Animotion Err		
E041	Frame R. Err		
E042	B.Fan1 Error	Check the fan of head	
E043	B.Fan2 Error		
E044	B.Fan3 Error		
E045	CMY Fan1 Error	Check if the blowing machine of CMY holder is working	
E046	CMY Fan2 Error		
E047	CMY Fan3 Error		
E048	CMY Fan4 Error		
E049	Gobo Fan Error	Check the fan of head BD Fan	
E050	LFan1 Error	Check the fan of head Lamp Fan	
E051	LFan2 Error		
E052	EthMDL Error	Check the fan of ArtNet、communication signal	

7.3 Menu Maps

			Remark
Set up	Dmx Address	001~XXX	Dmx Address
	Channel Mode	Mode1 1~37	default Mode1
		Mode2 1~41	
	Fixture Id	0001~9999	Lamps address(Password:1702)
Information	Fixture Times	XXXXX h XX m	Total working hours
	Lamp Times	Lamp On Times XXXXh XXm	Lamp On working hours
		Lamp Strike XXXX	Lamp Strike
		Reset Lamp Time/Strike	Reset Lamp Time/Strike
	Error List		Error details
	Diagnosis	BOARD 1: XX.XX%	Diagnosis
		BOARD 2: XX.XX%	
		BOARD 3: XX.XX%	
		BOARD 4: XX.XX%	
		BOARD5: XX.XX%	
	Fans Monitor		Fans Monitor
	DMX Values		DMX Values
Personality	Lamp	Power ON Light:ON/OFF	Power ON Light (default OFF)
		Lamp On By DMX:ON/OFF	Lamp On By DMX (default ON)
		Lamp ON Delay:0~60m	Lamp ON Delay (default 0m)
	Pan/Tilt	Pan Reverse:ON/OFF	Pan Reverse (default OFF)
		Tilt Reverse:ON/OFF	Tilt Reverse (default OFF)
		Feedback:ON/OFF	Pan/Tilt Auto Switch(default ON)
	Dmx Input	Wired Input	Wired Input (default)
		Wireless Input	Wireless Input
		Wireless In/XLR out	Wireless In/XLR out
	Screen	Brightness	Brightness
		Screen Time out 0~10m	Screen Time out
		Touch Screen:ON/OFF	Touch Screen (default OFF)
		Auto Screen:ON/OFF	Auto Screen (default ON)
	Language	English	language choice
		简体中文	
Manual Control	Lamp	Lamp Control:ON/OFF	Lamp Control (default OFF)
		Confirm	Confirm
	Reset	Reset ALL	
		Reset Pan/Tilt	
		Reset Colour	
		Reset Zoom	
		Reset Dimmer	
	Channel		Chanel Testing
Advanced	Calibration	Input Password:0088	Chanel Adgusting
	Factory Default	ON/OFF	Reset to original parameters
	Touch Calibration		Touch screen adjusting

8.DMX protocol

Mode1	Mode2	Name	Function	DMX Value
1	1	Cyan	Linear Cyan movement 0-100%	0-255
2	2	Magenta	Linear Magenta movement 0-100%	0-255
3	3	Yellow	Linear Yellow movement 0-100%	0-255
4	4	CTO	Linear CTO movement 0-100%	0-255
5	5	Colour Wheel	Empty position	0
			Empty + Dark Red	8
			Dark Red	16
			Dark Red + Blue Brilliant 485	24
			Blue Brilliant 485	32
			Blue Brilliant 485 + Green 5054	40
			Green 5054	48
			Green 5054 + HMG4	56
			Half Minus Green HMG4	64
			HMG4 + Gold Amber 555	71
			Gold Amber 555	80
			Gold Amber + Red 600	87
			Red 600	96
			Red 600 + Navy Blue 440	103
			Navy Blue 440	112
			Navy Blue 440 + Empty position	120
			Continuous clockwise Colour Wheel rotation at linearly variable speed from slow (4.4 rph) to fast (160 rpm)	128-255
6	6	Stopper/Strobe	Light OFF	0-3
			Strobe at linearly variable frequency from low (1 flash/sec) to high (12 flashes/sec)	4-103
			Light ON	104-107
			Pulsation at linearly variable speed from slow to fast	108-207
			Light ON	208-212
			Random Strobe at low frequency	213-225
			Random Strobe at medium frequency	226-238
			Random Strobe at high frequency	239-251
			Light ON	252-255
7	7	Dimmer	Light output linearly increase from no-light to maximum brightness	0-255
8	8	Dimmer Fine	Fine Dimmer positioning	0-255
9	9	Iris	Iris linearly open from minimum to maximum aperture	0-131
			Iris pulsation from slow to fast speed	132-171
			Iris pulsation from slow to fast speed with fast opening	172-211
			Iris pulsation from slow to fast speed with fast closing	212-251
			Maximum aperture	252-255
10	10	Static Gobo	Empty position	0-7
			Gobo 1	8-15
			Gobo 2	16-23
			Gobo 3	24-31
			Gobo 4	32-39
			Gobo 5	40-47
			Gobo 6	48-55
			Gobo 7	56-63
			Gobo 8	64-71
			Continuous rotation clockwise at linearly variable speed	72-113
			Stop	114-117
			Continuous rotation counter-clockwise at linearly variable speed	118-159
			Gobo 1 shakes at variable speed from slow to fast	160-171
			Gobo 2 shakes at variable speed from slow to fast	172-183

Mode1	Mode2	Name	Function	DMX Value
10	10	Static Gobo	Gobo 3 shakes at variable speed from slow to fast	184–195
			Gobo 4 shakes at variable speed from slow to fast	196–207
			Gobo 5 shakes at variable speed from slow to fast	208–219
			Gobo 6 shakes at variable speed from slow to fast	220–231
			Gobo 7 shakes at variable speed from slow to fast	232–243
11	11	Rotating Gobo	Gobo 8 shakes at variable speed from slow to fast	244–255
			Empty position	0–18
			Gobo 1	19–37
			Gobo 2	38–56
			Gobo 3	57–74
			Gobo 4	75–92
			Gobo 5	93–111
			Gobo 6	112–129
			Gobo 1 shakes at variable speed from slow to fast	130–150
			Gobo 2 shakes at variable speed from slow to fast	151–171
			Gobo 3 shakes at variable speed from slow to fast	172–192
			Gobo 4 shakes at variable speed from slow to fast	193–213
			Gobo 5 shakes at variable speed from slow to fast	214–234
			Gobo 6 shakes at variable speed from slow to fast	235–255
12	12	Gobo Rotation	Gobo indexing: 0° to 90° range	0–21
			Gobo indexing: 90° to 180° range	21–42
			Gobo indexing: 180° to 270° range	42–63
			Gobo indexing: 270° to 360° range	63–84
			Gobo indexing: 360° to 450° range	84–105
			Gobo indexing: 450° to 540° range	105–127
			Continuous clockwise gobo rotation at linearly variable speed from fast (180 rpm) to slow (2.2 rph)	128–190
			Stop rotation	191–192
			Continuous counter-clockwise gobo rotation at linearly variable speed from slow (2.2 rph) to fast (180 rpm)	193–255
13	13	Gobo Rotation Fine	Fine counter-clockwise Gobo Indexing	0–255
14	14	Prism	Prism out	0–127
			4 facet Prism into the light beam	128–255
15	15	Prism Rotation	Prism indexing: 0° to 90° range	0–21
			Prism indexing: 90° to 180° range	21–42
			Prism indexing: 180° to 270° range	42–63
			Prism indexing: 270° to 360° range	63–84
			Prism indexing: 360° to 450° range	84–105
			Prism indexing: 450° to 540° range	105–127
			Continuous counter-clockwise prism rotation at linearly variable speed from fast (80 rpm) to slow (3 rph)	128–190
			Stop rotation	191–192
			Continuous clockwise prism rotation at linearly variable speed from slow (3 rph) to fast (80 rpm)	193–255
16	16	Frost	Frost 0–100%	0–255
17	17	Blade UP 1	Blade moves linearly into the light beam	0–255
18	18	Blade UP 2	Blade moves linearly into the light beam	0–255
19	19	Blade DOWN 1	Blade moves linearly into the light beam	0–255
20	20	Blade DOWN 2	Blade moves linearly into the light beam	0–255
21	21	Blade RIGHT 1	Blade moves linearly into the light beam	0–255
22	22	Blade RIGHT 2	Blade moves linearly into the light beam	0–255
23	23	Blade LEFT 1	Blade moves linearly into the light beam	0–255
24	24	Blade LEFT 2	Blade moves linearly into the light beam	0–255
25	25	Frame Rotation	Frame counter-clockwise linearly rotate	0–255
26	26	Focus	Focus moves linearly from far to near position	0–255
27	27	Focus Fine	Fine Focus positioning	0–255

Mode1	Mode2	Name	Function	DMX Value
18	18	Blade UP 2	Blade moves linearly into the light beam	0-255
19	19	Blade DOWN 1	Blade moves linearly into the light beam	0-255
20	20	Blade DOWN 2	Blade moves linearly into the light beam	0-255
21	21	Blade RIGHT 1	Blade moves linearly into the light beam	0-255
22	22	Blade RIGHT 2	Blade moves linearly into the light beam	0-255
23	23	Blade LEFT 1	Blade moves linearly into the light beam	0-255
24	24	Blade LEFT 2	Blade moves linearly into the light beam	0-255
25	25	Frame Rotation	Frame counter-clockwise linearly rotate	0-255
26	26	Focus	Focus moves linearly from far to near position	0-255
27	27	Focus Fine	Fine Focus positioning	0-255
28	28	Zoom	Zoom linearly moves from narrow to wide beam	0-255
29	29	Autofocus Distance	Autofocus disabled	0-6
			Autofocus from 4mt. (bit 7) to 100mt. (bit 255)	7-255
30	30	Autofocus Adjustment	Focus Fine	0-127
			Stop	128
			Focus Fine	129-255
31	31	Pan	Pan movement/positioning from 0° to 540°	0-255
32	32	Pan Fine	Fine Pan positioning	0-255
33	33	Tilt	Tilt movement/positioning from 0° to 268°	0-255
34	34	Tilt Fine	Fine Tilt positioning	0-255
35	35	Function	Unused range	0-11
			Fast Pan / Tilt speed (default)	12-24
			Normal Pan / Tilt speed	25-37
			Conventional Dimmer curve	38-50
			Standard Dimmer curve (default)	51-62
			Free	63-113
			Slow Blade speed	114-126
			Fast Blade speed	127-139
			Fast Gobo change	140-152
			Normal Gobo change (default)	153-164
			Free	165-203
			Linear Dimmer curve	204-213
			Free	214-216
			Uniform Field Frost Auto	217-227
			Uniform Field Frost Always ON	228-240
			Uniform Field Frost Always OFF	241-255
36	36	Reset	Unused range	0-25
			Zoom Reset	26-76
			Pan / Tilt Reset	77-127
			Complete Reset	128-255
37	37	Lamp Control	Unused range	0-25
			Lamp OFF Lamp switch-off passing through the unused levels range and staying in this range for 5 seconds.	26-100
			Lamp ON @1200W -Fans Noise reduced Lamp switch-on passing through the unused levels range and staying in this range for 5 seconds.	101-179
			Lamp ON @1400W Lamp switch-on passing through the unused levels range and staying in this range for 5 seconds.	178-255
	38	Pan-Tilt Time	Fine Tilt positioning	0-255
	39	Colour Time	Cyan -Magenta -Yellow -CTO	0-255
	40	Beam Time	Dimmer -Frost -Prism -Focus -Zoom	0-255
	41	Rotating Gobo Time	Rotating Gobo	0-255

Time table

BIT	Seconds	BIT	Seconds	BIT	Seconds	BIT	Seconds	BIT	Seconds	BIT	Seconds
0	Full	43	8.6	86	24	129		172		215	160
1	0.2	44	8.8	87		130	41	173	58	216	170
2	0.4	45	9	88		131		174		217	
3	0.6	46	9.2	89	25	132	42	175		218	
4	0.8	47	9.4	90		133		176	59	219	180
5	1	48	9.6	91		134		177		220	
6	1.2	49	9.8	92	26	135	43	178	60	221	190
7	1.4	50	10	93		136		179		222	
8	1.6	51	10.2	94	27	137	44	180		223	
9	1.8	52	10.4	95		138		181	65	224	200
10	2	53	10.6	96	28	139	45	182		225	
11	2.2	54		97		140		183	70	226	
12	2.4	55	11	98		141		184		227	210
13	2.6	56		99	29	142	46	185		228	
14	2.8	57	12	100		143		186	75	229	220
15	3	58	13	101		144		187		230	
16	3.2	59		102	30	145	47	188	80	231	230
17	3.4	60		103		146		189		232	
18	3.6	61	14	104	31	147	48	190		233	
19	3.8	62		105		148		191	85	234	240
20	4	63	15	106		149		192		235	
21	4.2	64		107	32	150	49	193		236	
22	4.4	65		108		151		194	90	237	250
23	4.6	66	16	109		152		195		238	
24	4.8	67		110	33	153	50	196	95	239	260
25	5	68	17	111		154		197		240	
26	5.2	69		112	34	155	51	198	100	241	
27	5.4	70		113		156		199		242	270
28	5.6	71	18	114	35	157		200		243	
29	5.8	72		115		158	52	201	110	244	280
30	6	73	19	116		159		202		245	
31	6.2	74		117	36	160	53	203		246	
32	6.4	75		118		161		204	120	247	290
33	6.6	76	20	119	37	162		205		248	
34	6.8	77		120		163	54	206	130	249	300
35	7	78		121		164		207		250	
36	7.2	79	21	122	38	165	55	208		251	
37	7.4	80		123		166		209	140	252	310
38	7.6	81	22	124		167		210		253	
39	7.8	82		125	39	168	56	211	150	254	Full
40	8	83		126		169		212		255	
41	8.2	84	23	127	40	170	57	213	160		
42	8.4	85		128		171		214			

9.Maintenance and cleaning

DANGER: Disconnect from the mains before starting any maintenance work.

Ballast

Please change timely when each pin is getting yellow.

Be sure to maintain the device every 2 months, and make sure that all parts of the ballast, such as, screws, terminals, are locked well to ensure performance. Neglecting of maintenance may lead to failure of devices.

Lamp

Turn off the lamp first to better protect the device when the fixture is turned off. Turn off the power after running for at least 5 minutes

Don't touch the bulb with your hands. Once contacting with your hands, scrub with alcohol and then dry with linen.

When the light is on, the bulb runs at high pressure, so there is a risk of broken. It is related to the duration of using, temperature and unreasonable operation. Therefore, please do not use lamp over the life span.

The using of lamp should not exceed 1500 hours, otherwise it can damage device. Check the running time of the fixture regularly. When the lamp is used around 1500 hours, We strongly recommend that you change the lamp. After replacing it, the used time of lamp can be removed and reset.

Avoid operating in dirty and dusty environment, clean and maintain lamps regularly. Wipe the outside of the lens at least every 20 days. Wipe the internal fan at least every 30 days

It is absolutely essential that the fixture is kept clean and that dust, dirt and smoke fluid residues must not build up on or within the fixture. Otherwise, the fixtures light-output will be significantly reduced. Regular cleaning will not only ensure the maximum light-output, but will also allow the fixture to function reliably through out its life. A soft lint-free cloth moistened with any good glass cleaning fluid is recommended, under no circumstances should alcohol or solvents be used!

The front objective lens will require weekly cleaning as smoke-fluid tends to building up residues, reducing the light-output very quickly. The cooling-fans should be cleaned monthly.

The gobos may be cleaned with a soft brush, The interior of the fixture should be cleaned at least annually using a vacuum-cleaner or an air-jet.

There are no serviceable parts inside the device except for the lamp and the fuse.

Please disconnect the power supply before replacing the fuse and bulb. When replacing them, adopt the same mode.

10. Electric equipment specification

10.1 Electrical paramters

SOURCE: OSRAM Lok-it! HTI 1400

POWER: 2000W

VOLTAGE: AC198-240V 50/60HZ

Color temperature: 6000K

10.2 Weight and dimensions

Dimensions : 610X483X640mm

NET WEIGHT: 48Kg

Dimensions (Carton package) : 740X590X775mm

WEIGHT (Carton package) : 55Kg

Dimensions (Air boxes -1 lights): 705X546X889mm

NET WEIGHT/WEIGHT (Air boxes -1 lights) : 39Kg/89Kg

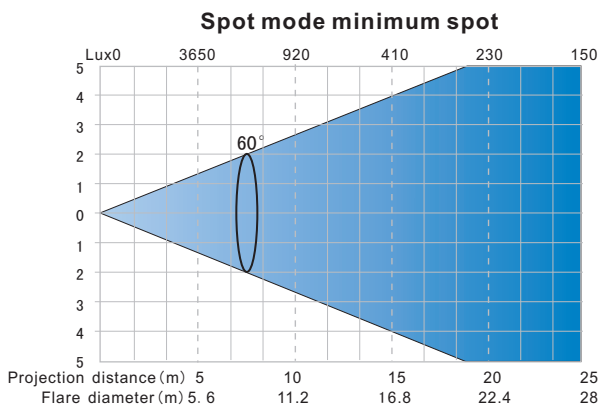
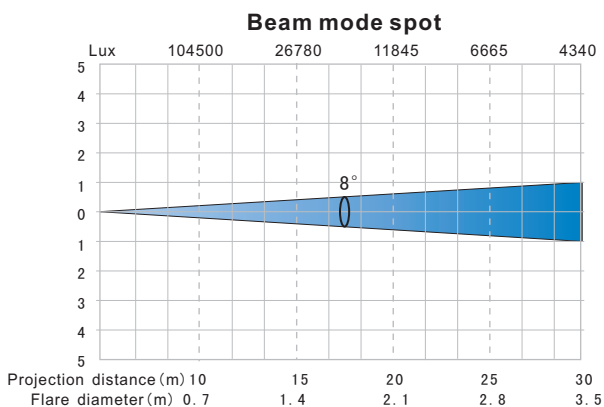
10.3 Channel Characteristics

1. Channel: 37, 41 DMX-512.
2. Scan: Pan 540°, Tilt 270°, Fixture could auto reset.
3. Colour wheel: One open + 7 colors.
4. R Gobo wheel : one open + 6 gobos.
5. Gobo R wheel: one open + 8 gobos
6. Zoom: linear amplifier.
7. Focus: linear focus.
8. Shutter: electronic shutter, random strobe.
9. Dimmer: linear dimmer.
10. Prism system: prism effect, with rotating.
11. Multi cutting independent control, cutting components with rotation function.

10.4 Menu Function

- 1.Touch screen, English/Chinese menu.
- 2.Each DMX Value displayable.
- 3.Time of automatic turning off is able to set on the display, when operating pan/tilt, Color and gobos, strobe are turn off and able to set freely.
- 4.Display the time using of lighting feature and lamp as well as the times of turning on for lamp.
- 5.With function of turn on lamp when powered.
- 6Automatic 50 % energy saving of power when turn off the strobe.
- 7.Remote ON by DMX.
- 8.You can switch on and off the lamp via the control panel or via your DMX controller. It must be noted that it has to be cold before restricting.
- 9.After the DMX signal is disconnected, the display will be bright and dark.
- 10.Software upgrade function.

10.5 light table



10.6 Color wheel

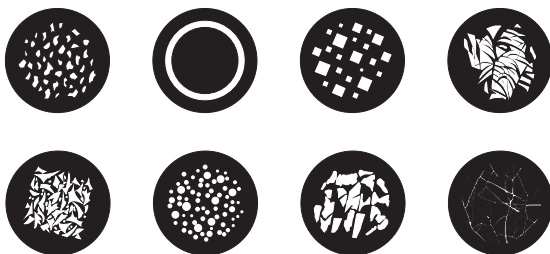


10.7 Gobo wheel

Rotating disc of design



A fixed set of design





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