

LED SPOT HEAD

USERS GUIDE



CE

1. Product Introduction:

1.1 Before unpack the fixture, pls make sure that the packing is in good condition, following items will be found in the box:

- The fixture
- This users guide
- 1.5m power cable with IEC power in socket
- Two brackets for hanging installation
- Safety chain

1.2 Specification

Source

- Light source: Advanced 75w white led
- Led life: 60.000 hours
- Luminous Flux: 6000lumen, 6640lux@2.5m
- Control: Remote on/off via DMX
- Ballast: switching mode power supply

Optical System

- Beam angle: 13°

X/Y

- Pan: 540°, Tilt: 265° (2.8 sec)
- 16-bit resolution
- Auto repositioning

Colors

- 8+open, indexable and bidirectional rainbow effect
- Color bounce

Gobos

- Outside \varnothing 23mm, inside \varnothing 18mm
- 7+ open custom interchangeable position for rotating gobo wheel
- Real indexable and gobo shaking
- Distinctive gobo animation effect

Features

- DMX channels: 11/13
- Color wheel: 9+1 colors
- Rotating gobo wheel: 7+1 gobos
- Manual zoom from 13°
- Motorized focus
- Full range 0-100% dimmer
- Various strobe
- Rotating 3 facets prism
- Software upgrade via DMX
- Hibernation when lost DMX for preset time

Display

- LED display
- Flip
- Back-up communicating IC

1.3 Description of the Device



1.4 Colors and Gobos

	1	Open	
	2		Magenta
	3		Orange
	4		Sky blue
	5		Pink






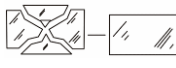



	6		Yellow
	7		Green
	8		Blue
	9		Red



2. Safety and maintenance Information

2.1 Safety Info

	Before operate this unit, please carefully read this users guide and keep if needed in future. It's necessary to respect following rules.
	The disposal of the device after lifecycle could damage the environment, need to take it to special company for recycling or return to authorized dealer.
	The products referred to in this manual conform to the European Community Directives and are therefore marked with CE logo.
	Keep this device away from children and unauthorized users, the manufacturer will not take responsibility for the damage due to any disregard of the information provided in this manual and wrong operation.
	Before operate the device, pls make sure the fixture is in good housing, ensure pan and tilt can rotate in its complete range.

	Pls make sure minimal 0.5m distance need to kept between the fixture to any flammable material.
	The device can only run with 100-240v voltage, 50/60Hz power, don't connect to any other wrong power. Disconnect the device from main power before open the shield or maintenance.
	The device is designed only for indoor usage, pls keep it away from moisture. Do not expose the device under the sun or directly to any other lighting source.
	Never look directly into the projecting lens when the fixture is power on, the light may trigger epileptic seizures in photosensitive persons or persons with epilepsy. Especially at beam effect, extreme caution and observance of these safety instructions is mandatory.
	Don't put or install the device on a surface that subject to vibration or bumps.
Ta=45 °C	The device is supposed to work in the temperate range -15° C and +45° C, do not use the device when the temperate exceed this range.
	The lens, shield need to be replaced when obviously broken, never use the device when the shield is not completed closed.
	Safety I class device, need to be earth connected.
	When the fixture is hanged overhead, the safety rope must be fixed to the bottom of the device to the appropriate fixing point.
	Always carry the device by the handles, do not take the head or arm directly for transportation.

2.2 Maintenance

2.2.1 Operation only allowed to qualified person, damages due to unprofessional operation or remove of any parts inside will not be considered in warranty service. There are no serviceable parts inside the device or package, service only leaves to authorized dealers.

2.2.3 Never allow the optical components contact with oil, fat or any other liquid.

2.2.4 A regular clearance of the device is needed for long-term usage, this is very helpful to maintain the lifetime and brightness need to use a soft and lint-free cloth to clean the optical system, fan and air flowing tunnel.

2.2.5. Trouble Shooting

Problems	Possible reasons	Checking or solutions
Device not power up	Powercon or power cable damaged Faulty power supply	Change a good power cable to try Replace new power supply
Pan/Tilt error or vibrate	Faulty Pan/Tilt PCB Faulty opto sensor Cable loosen	Replace PT001 PCB Replace opto sensor OP001 Check the cable connect to OP001
LED off	Temperature protection Fan not working Faulty LED Dimmer and strobe set at 0 Faulty power supply	Check the temperature Check the fan s Replace new LED Set dimmer and strobe channel at 255 Replace new power supply
Device not response to DMX	Faulty communication IC Faulty display PCB Wrong DMX addressing Faulty DMX cable	Replace the IC with back-up one in the display PCB Replace new display PCB Check the address and setting Change to a good DMX cable

2.2.6 Replacement of the fuse

Need to replace with same type and rating, which originally installed in the device.

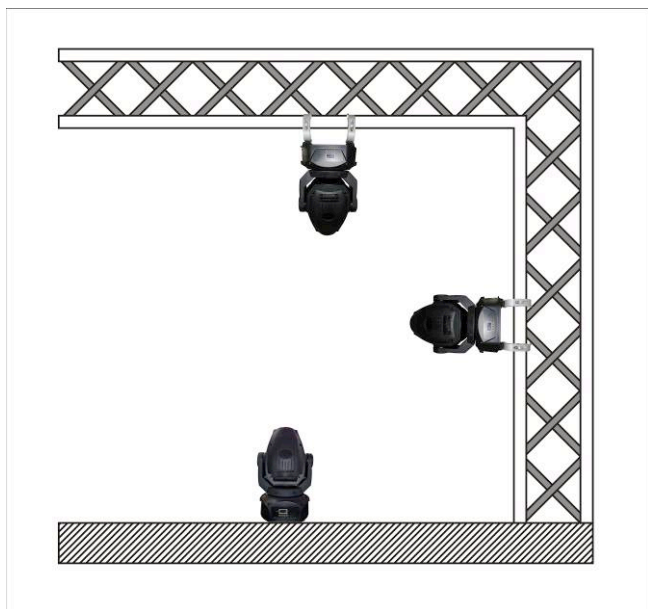
Step One: Unplug power cable from main power.

Step Two: Unscrew the fuse holder out of the housing with a screwdriver.

Step Three: Remove the broken fuse and replace with an exact same type of new fuse.

Step Four: Insert the fuse holder back to the housing and screw tight and reconnect power.

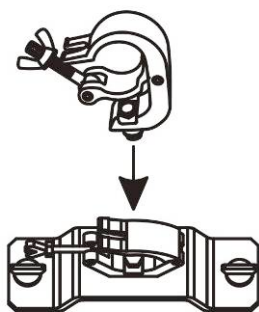
3. Installation



3.1 The device could be either put on a solid and even surface, or mounted upside down or sideways like left picture.

3.2 The mounting place must be sufficient stable and be able to support a weight of 10 times of the unit's weight. When the fixture is hanged, always additionally secure the device with the safety chain, fasten the safety rope at a suitable position so that the maximum fall of the projector will be 20 cm

3.3 How to do mounting installation.



Step one: Installation the clamp onto the omega bracket;

Step two: Install the clamp and bracket on the bottom of panel, fasten the quick-locks;

Step three: Install the whole device onto appropriate truss and fasten the clamps, tight the safety rope with the truss or other fixing point at a suitable position that drop down distance not exceed 20 cm.

4. Control menu

Default setting shadowed.

Mode	Addr	XXX		DMX address setting
	Slav			Choose Slave mode
	Sequ	Alon/Mast		Choose Sequence mode
	Sund	Alon/Mast		Choose Sound mode
Lamp	Temp	80~139℃, 85℃		Lamp off if temperature continuously over for 5 minutes
	Adju	CHxx=XXX.....		Adjust value of each channels
Info	DriT	XXXC		Temperature of driver
Set	Rest			Reset
	Move	RPan	ON/OFF	Pan Reverse
		RTilt	ON/OFF	Tilt Reverse
		Enco	ON/OFF	Encoder wheel on/off
		Mode	Mod1/Mod2	Choose pan/tilt mode
	UI	Mic	0~99%, 60%	Sensitivity of Mic
		Sign	Close/Hold/Auto/Music	Mode when no signal
		Fan	Auto Speed /High Speed	Fans mode
		Hibe	OFF, 01M~99M, 15M	Sleeping mode
		Back	02~60m 02m	Show backlight time
		Flip	ON/OFF	Display 180° reverse
		User	Use1/Use2	Users mode
	Cali	Code	XXX	Password: 050
		CHxx	XXX	Calibrate channel value
	Ver	X1.0.0		IC Version
	load	ON/OFF		Reload Default

5. DMX connection and DMX protocol

5.1 DMX addressing:

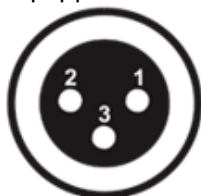
5.1.1 The device is controlled by universal DMX 512 protocol, DMX address is the start channel used to receive instructions from the external controller. For independent control, each fixture must be assigned its unique address control channels. For example, this device has four channel modes: 13/11, if we set the mode at standard 13 channels mode, and there are several models need to be independently controlled, we just simply address first fixture at 1, and second fixture at 14, third one at 27, etc.

If the devices have the same address, they will behave synchronically.

DMX addressing is limited, don't set the address so high that without enough control channels for the fixtures.

Display is flashing when no DMX signal is received.

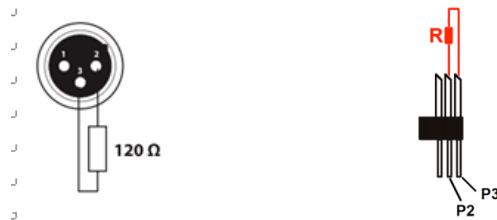
5.1.2 This device is equipped with 3-pins DMX in and out sockets only.



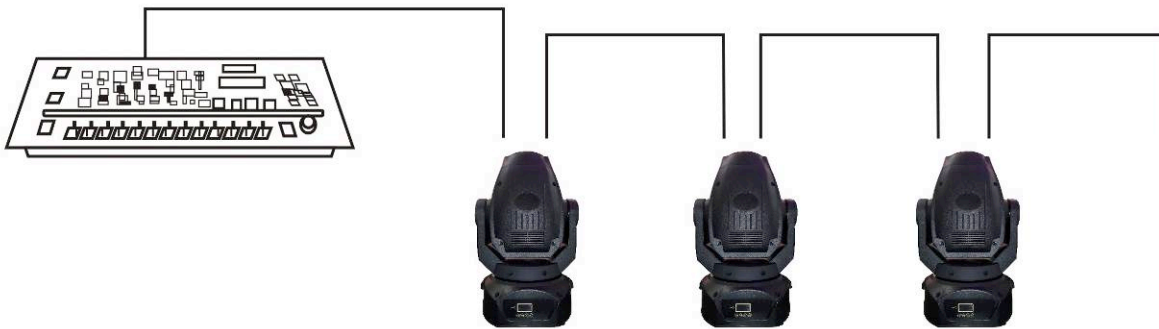
Pin 1 = GND
Pin 2 = Signal (-)
Pin 3 = Signal (+)



5.1.3 The termination is prepared by soldering a 120Ω resistor between pins 2 and 3.



5.1.4 Connection: use DMX cable with 3-pin XLR-plugs to connect the controller with the fixture or one fixture with another.



5.2 DMX chart

Channel		name	function	Min DMX	Max DMX
St	Ba				
1	1	Pan	Pan Coarse	0	255
2	2	Tilt	Tilt Coarse	0	255
3	3	Movment Speed	Fastest to Slowest	0	223
			Movement With Blackout	224	231
			TBD	232	255
4	4	Color	Indexed		
			Position 1 (Open)	0	12
			Position 2	13	25
			Position 3	26	38
			Position 4	39	51
			Position 5	52	64
			Position 6	65	77
			Position 7	78	90
			Position 8	91	103
			Position 9	104	116
			Position 10	117	127
			Forward Wheel Spin		
			Forwards color-wheel rotation with decreasing speed	128	191

			Reverse Wheel Spin		
			Backwards color-wheel rotation with increasing speed	192	255
5	5	Rot Gobo	Indexed		
			Position 1 (Open)	0	8
			Position 2	9	17
			Position 3	18	26
			Position 4	27	35
			Position 5	36	44
			Position 6	45	53
			Position 7	54	62
			Position 8	63	69
			Indexed With Shake		
			Position 2	70	91
			Position 3	92	113
			Position 4	114	135
			Position 5	136	157
			Position 6	158	179
			Position 7	180	201
			Position 8	202	223
			Forward Wheel Spin		
			Forwards gobo-wheel rotation with decreasing speed	224	239
			Reverse Wheel Spin		
			Backwards gobo-wheel rotation with increasing speed	240	255
6	6	Gobo Rot	Indexed		
			No rotation	0	3
			Forward Spin		
			Forwards gobo rotation with decreasing speed	4	127
			No rotation		
			No rotation	128	131
			Reverse Spin		
			Backwards gobo rotation with increasing speed	132	225
7	7	Focus	Continuous		
			Focus far to near	0	255
8	8	Prism & Prism Rot	Prism		
			Position 1 (Open)	0	15
			Position	16	50
			Prism Rot Forward Spin		
			Forwards Prism rotation with decreasing speed	51	150
			No rotation		
			No rotation	151	155
			Prism Rot Reverse Spin		
			Backwards Prism rotation with increasing speed	156	225
9	9	Shutter	Shutter closed	0	15
			Strobe effect slow to fast	16	200
			Random strobe effect slow to fast	201	250
			No function (shutter open)	251	255

10	10	Dimmer	Dimmer(Close to Open)	0	255
11	11	Control	Normal	0	7
			Reset All	8	15
			Pan&Tilt Reset	16	23
			Color Reset	24	31
			Gobo Reset	32	39
			TBD	40	47
			Other Reset	48	55
			Display Off	56	63
			Display On	64	71
			TBD	72	87
			Hibernation	88	95
			TBD	96	255
12		Pan fine	Pan Fine	0	255
13		Tilt fine	Tilt Fine	0	255

8. Dimensions Drawing



9. Technical specification

Power supply	100-240 V AC, 50/60 Hz ~
Power consumption	160W
LED	72 W LED
DMX channels	13/11 modes
Beam angle	13°
Fuse	T2 A, 250 V
Device dimensions	260x225x410mm
Net Weight	7.5KG