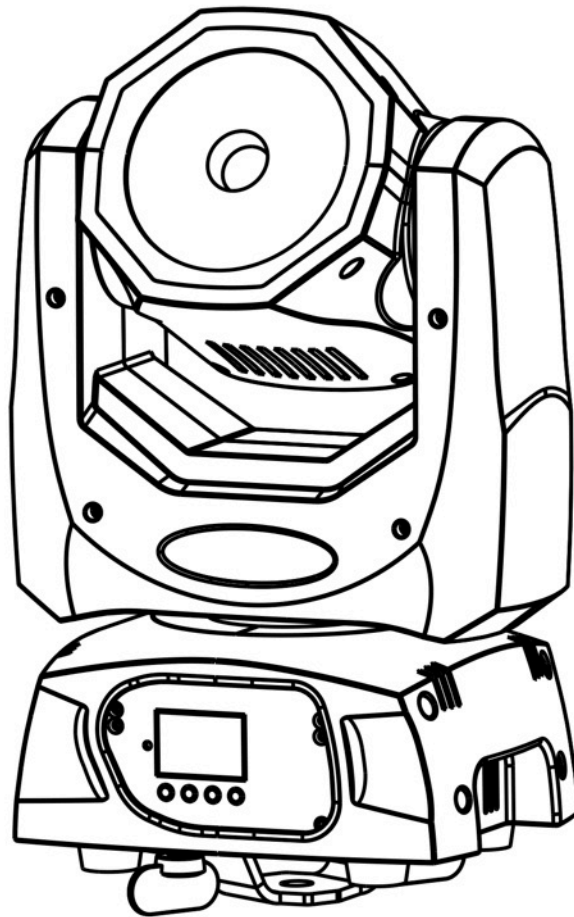


BSL ARES **USERS GUIDE**



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
- 3m DMX cable
- 1.5m power cable with powercon
- Omega bracket for hanging installation
- Safety chain

1.2 Specification

Source

- Light source: 1pcs OSRAM 60W 4in1 leds
- Led life: 60.000 hours
- Luminous Flux: 2300lumen, 15850lux@2.5m
- Control: Remote on/off via DMX
- Ballast: switching mode power supply

Optical System

- Beam angle: 6°

X/Y

- Pan: 360° (2.0 sec) or 540°(1.5 sec), Tilt: 265° (1.1 sec)
- 16-bit resolution
- Auto repositioning
- 3 phase motor for crazily fast and quiet movement

Features

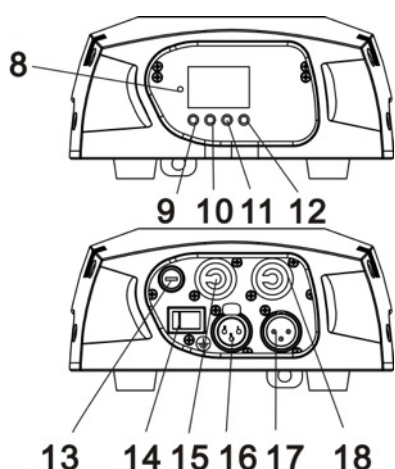
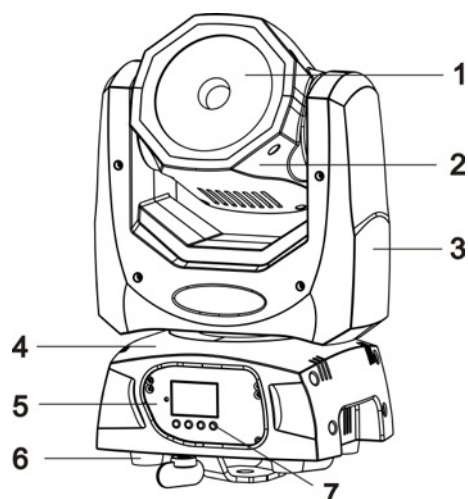
- DMX channels: 16/14
- Super fast, smooth and silent movement
- RGBW four colors mixing to create vivid, saturated and uniform color effect
- Two virtual color wheel for color bounce effect
- Color temperature preset at 2700K, 3200K, 4200K, 5600K and 8000K
- Full range 0-100% dimmer
- Various strobe
- RDM function to change DMX address, display flip, X/Y Reverse and so on
- Software upgrade via DMX
- Hibernation when lost DMX for preset time
- Indicate temperature info of base, arm and lamp
- Fan speed auto change according to temperature
- Heat pipe for cooling

Display

- 1.2inch super nice OLED display with friendly English/ Chinese/French/Spanish menu
- Auto lock
- Flip
- Back-up communicating IC

1.3 Description of the Device

1. Project lens
2. Head
3. Arm
4. Base
5. Display
6. Foot stand
7. Operation button











8. Mic
9. Mode/ESC button
10. Down button
11. Up button
12. Enter button
13. Fuse holder
14. Power switch
15. Powercon in
16. 3-pin DMX in
17. 3-pin DMX out
18. Powercon out

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 from menu Check the fan speed info from menu 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.

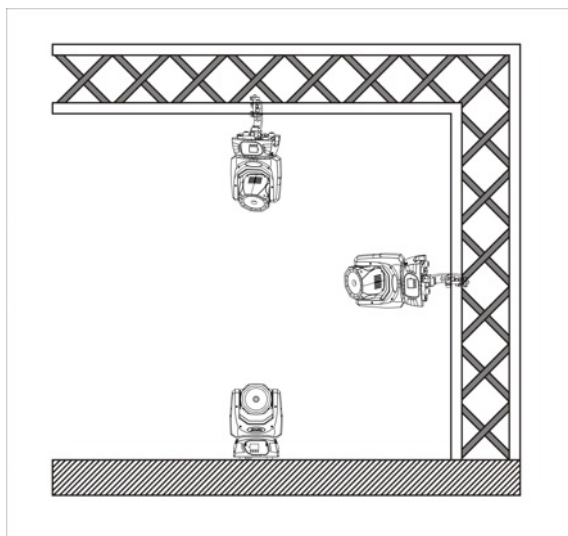
Step One: Unplug power cable from main power.

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.

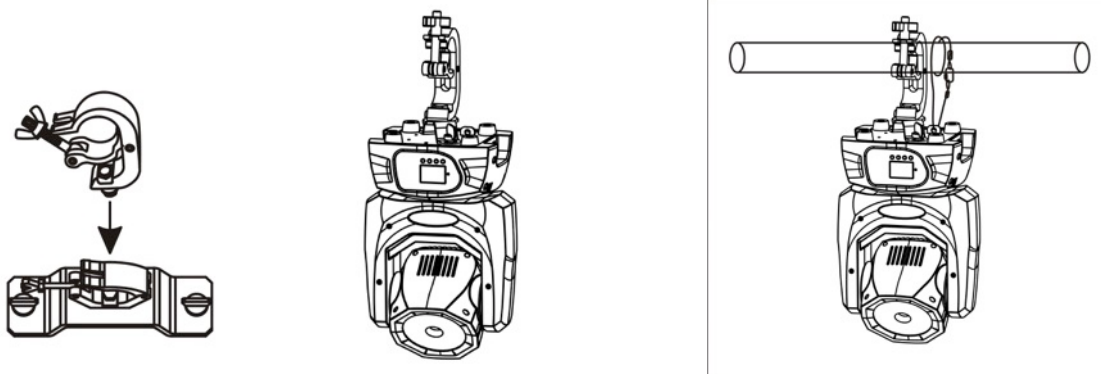
3. Installation



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

Connect	DMX Addr	XXX		DMX address setting
	Slave Rece			Choose Slave mode
	Sequence	Alone/Master		Choose Sequence mode
	Music	Alon/Master		Choose Sound mode
Light	Max Temp	80~130°C, 85°C		Lamp off if temperature continuously over for 5 minutes
	Lamp Adjust	Pan=XXX.....		Adjust value of each channels
Information	Lamp Temp	XXXC		Temperature of driver
Set	Reset			Reset
	Movement	Pan Reve	ON/OFF	Pan Reverse
		Tilt Reve	ON/OFF	Tilt Reverse
		Pan Degree	630/540	Choose Pan Degree
		Encoders	ON/OFF	Encoder wheel on/off
		Move Mode	Standard/Smooth	Choose pan/tilt mode
	UI Set	Mic Sens.	0~99%, 60%	Sensitivity of Mic
		No Signal	Close/Hold/Auto/Music	Mode when no signal
	Temper C/F	Fahrenheit /Celsius	Temperature at °C/°F	
	Fans Mode	Auto/High	Fans mode	
	Hibernation	OFF, 01M~99M, 15M	Sleeping mode	
	BackLight	02~60m 02m	Show backlight time	
	Flip Display	ON/OFF	Display 180° reverse	
	Users	Standard/Basic	Users mode	
	Calibration	Password	XXX	Password: 050
		Pan	XXX	Calibrate channel value
		:	:	
	Fixture ID	Name		Name
		-Password-		Password: 050
		PID Code		Set PID of RDM
	Software V			IC Version
	Reload Def	Basic Reload Password All Reload		Reload Default

5. DMX connection and DMX protocol

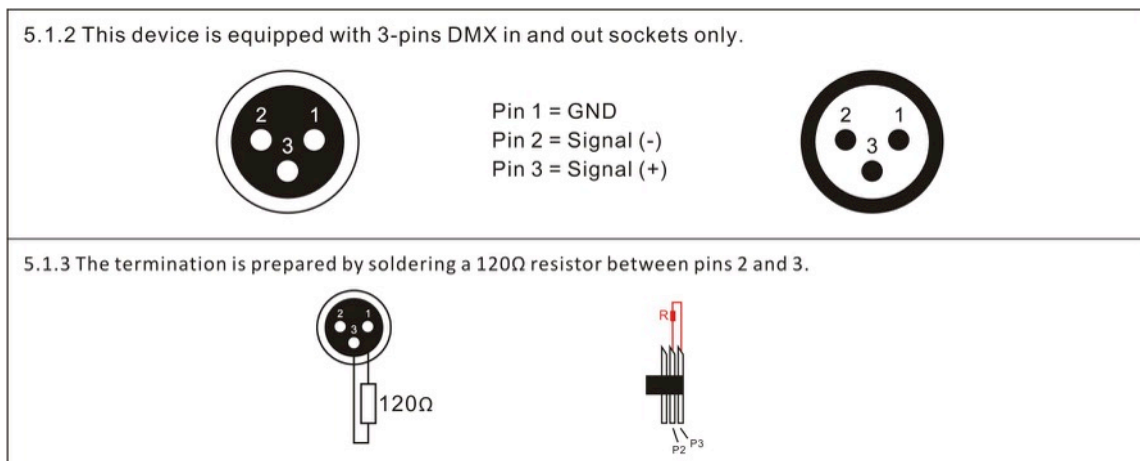
5.1 DMX addressing:

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: 16/14, if we set the mode at standard 16 channels mode, and there are several models need to be independently controlled, we just simply address first fixture at 1, and second fixture at 16, third one at 32, etc.

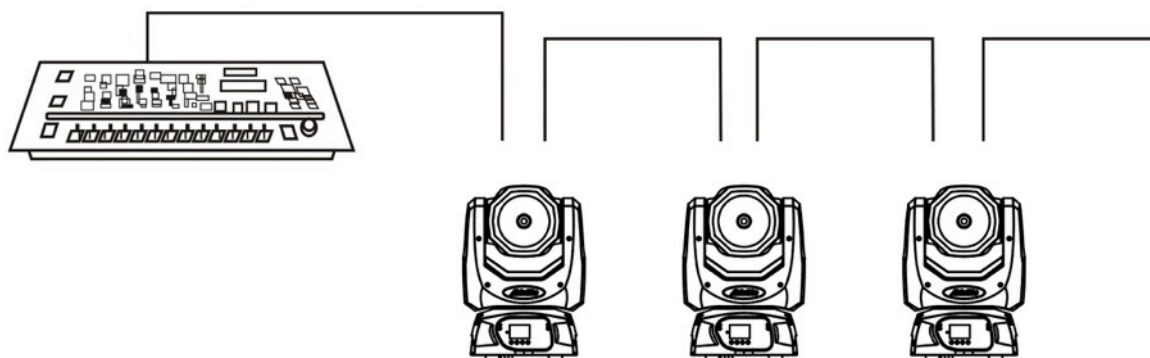
If the devices have the same address, they will behave synchronically.

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.



5.1.4 Connection: us 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				Pan fine	Pan Fine	0	255
3		2		Tilt	Tilt Coarse	0	255
4				Tilt fine	Tilt Fine	0	255
5		3		Movement Speed	fastest to Slowest	0	255
6		4		Movement Function	Normal	0	15
					Movement With Backout	16	31
					Pan Forward Spin	32	47
					Pan Reverse Spin	48	63
				Tilt Forward Spin	64	79	

				Tilt Reverse Spin	80	95
				Pan&Tilt Forward Spin	96	111
				Pan&Tilt Reverse Spin	112	127
				Pan Forward Spin & Tilt Reverse Spin	128	143
				Pan Reverse Spin & Tilt Forward Spin	144	159
				TBD	160	255
7		5	Shutter	Shutter closed	0	31
				No function (shutter open)	32	63
				Strobe effect slow to fast	64	95
				No function (shutter open)	96	127
				Pulse-effect in sequences	128	159
				No function (shutter open)	160	191
				Random strobe effect slow to fast	192	223
				No function (shutter open)	224	255
8		6	Dimmer	Dimmer(0->100%)	0	255
9		7	Virtual Color Function	On Function	0	15
				CTC Function	16	31
				Forward Spin	32	47
				Reverse Spin	48	63
				Continuous	64	79
				Color Bounce	80	111
				TBD	112	255
10		8	Virtual Color1	CTC Function		
				Colour Temperature Correction 2000K->2700K	0	223
				White 3200K	224	231
				White 4200K	232	239
				White 5600K	240	247
				White 8000K	248	255
				Forward Spin		
				Rainbow Effect (Slow->Fast)	0	255
				Reverse Spin		
				Rainbow Effect (Slow->Fast)	0	255
				Continuous&Color Bounce		
				Black	0	0
				Red	1	1
				Green	2	2
				Blue	3	3
				White	4	4
				Red=0, Green->up,Blue=full,White=0	5	46
Red=0, Green=full,Blue->down,White=0	47	88				
Red->up, Green=full,Blue=0,White=0	89	130				
Red=full, Green->down,Blue=0,White=0	131	172				
Red=full, Green=0,Blue->up,White=0	173	214				
Red->down, Green=0,Blue=full,White=0	215	255				
11		9	Virtual Color2(Color Bounce		
				Black	0	0

			Only On Color Bounce)	Red	1	1
				Green	2	2
				Blue	3	3
				White	4	4
				Red=0, Green->up,Blue=full,White=0	5	46
				Red=0, Green=full,Blue->down,White=0	47	88
				Red->up, Green=full,Blue=0,White=0	89	130
				Red=full, Green->down,Blue=0,White=0	131	172
				Red=full, Green=0,Blue->up,White=0	173	214
				Red->down, Green=0,Blue=full,White=0	215	255
12		10	Red	Red 0->100%	0	255
13		11	Green	Green 0->100%	0	255
14		12	Blue	Blue 0->100%	0	255
15		13	White	White 0->100%	0	255
16		14	Control	Normal	0	7
				Reset All	8	15
				Pan&Tilt Reset	16	23
				TBD	24	55
				Display Off	56	63
				Display On	64	71
				TBD	72	79
				TBD	80	87
				Hibernation	88	95
			TBD	96	255	

6. Unique Features

6.1 RDM, stand for "Remote Device Management", with this function, users can realize remote control of the device, such as remotely changing DMX address, reverse pan/tilt setting, check a lot of useful information such as temperature, power consumption, fan speed. Etc. Every single device has a unique RDM code before left factory to distinguish from each other, usually not suggest users change this code freely.

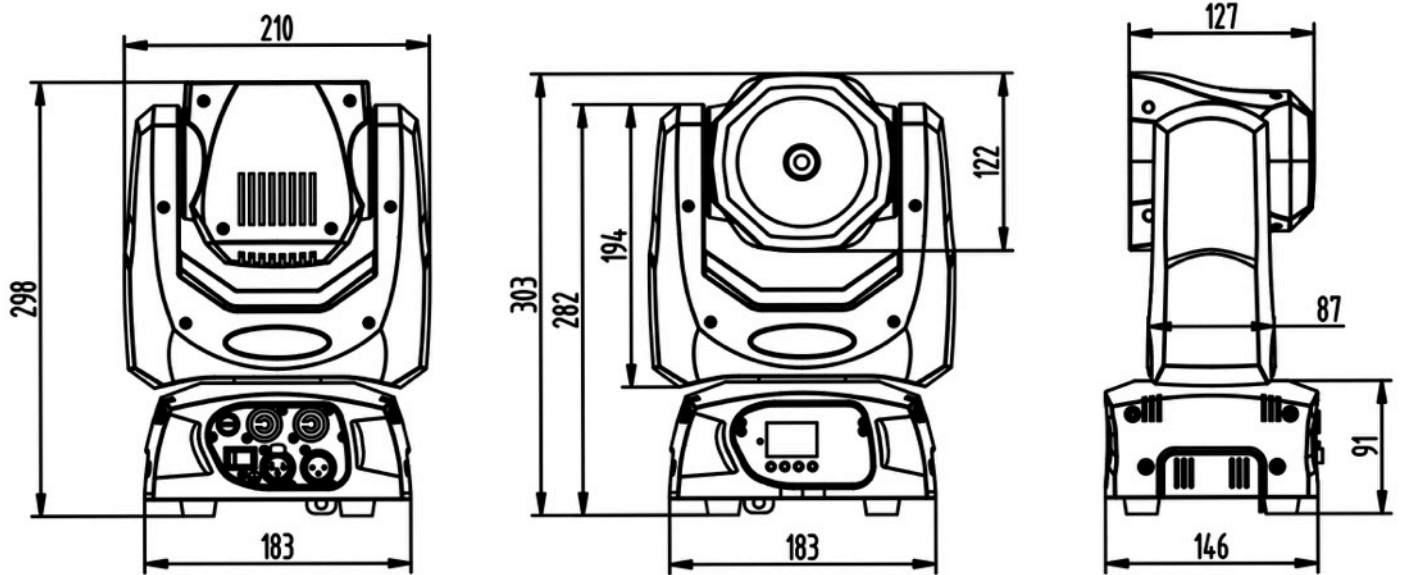
6.2 Software upgrade function via DMX cable, if there is any new firmware for this device come out, it can be upgraded simply via a software upgrade box, no need to change any mechanical parts. The upgrade box is not included in the package, if need any further assistance pls just contact authorized dealers.

6.3 Hibernation, the device will enter sleeping mode if activated after a period of disconnecting DMX signal to save the power consumption, and will return immediately as soon as the DMX signal is sent again.

6.4 Display back-up communication IC, there is a back-up communication IC installed in the display PCB, so users could replace at once if the working one is broken, no need to wait long time from service.

6.5 Display flip, by press up and down button for more than 3 seconds, the display will flip automatically, this function is useful to read menu conveniently when device is hanged.

8. Dimensions Drawing



9. Technical specification

Power supply	100-240 V AC, 50-60 Hz ~
Power consumption	100W
LED	1pcs OSRAM 60W 4in1 leds
DMX channels	16/14 modes
Beam angle	6°
Luminous flux	2300lumen, 15850lux@2.5m
Fuse	T 2 A, 250 V
Device dimensions	198x144x300mm
Net Weight	5KG