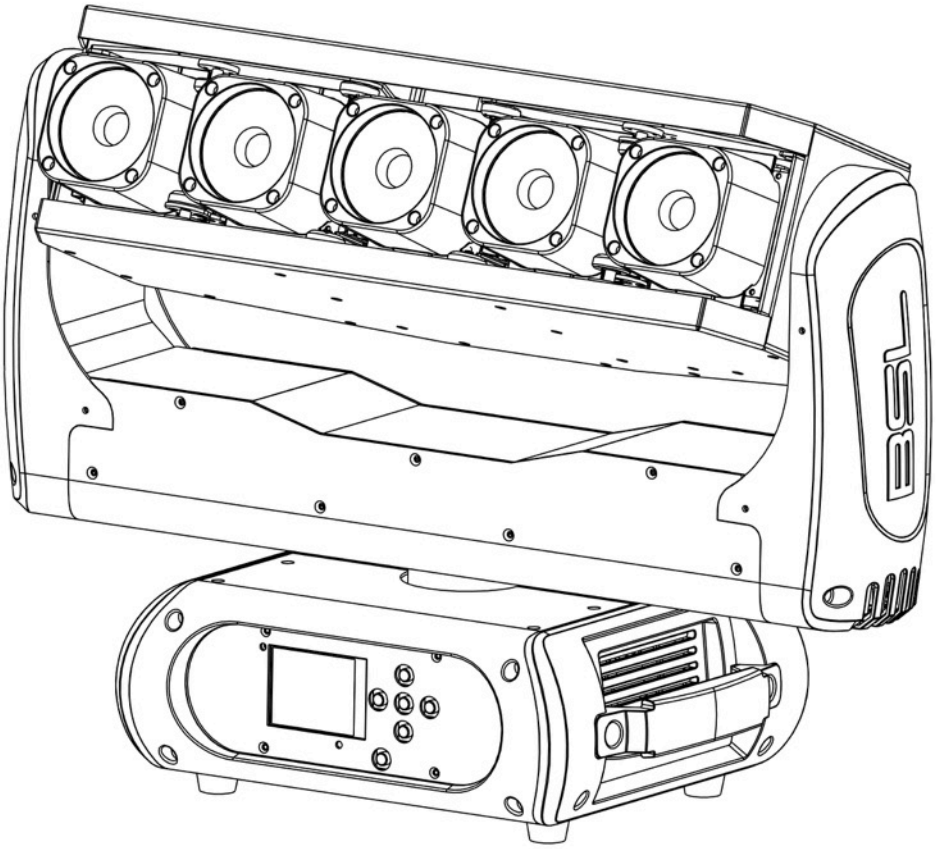
BSL PEGASUS
USERS GUIDE



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: 5*30w RGBW 4in1 leds
- Lamp life: 60.000 hours
- Control: Remote on/off via DMX
- Pixel control
- Ballast: switching mode power supply

Optical System

- Beam angle: 7°

X/Y

- Pan and Tilt infinity rotation
- Creative design for two tilt rotation heads
- 16-bit resolution
- Auto repositioning

Colors

- Beautiful color changing and chase effect
- Nice color mixing

Features

- DMX channels: 16/38/15/17
- Full range 0-100% dimmer
- Beautiful color chase effect for RGBW leds
- Pixel control on every single color
- Separate control of two heads
- 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

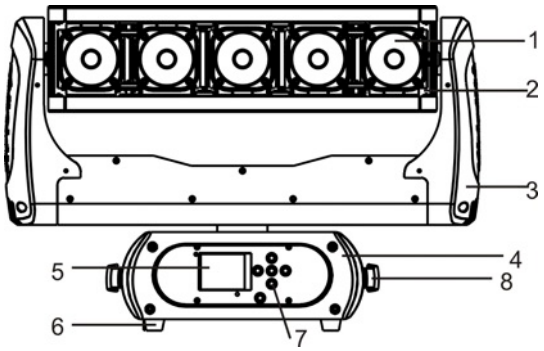
- Indicate temperature info of base, arm and lamp
- Fan speed auto change according to temperature

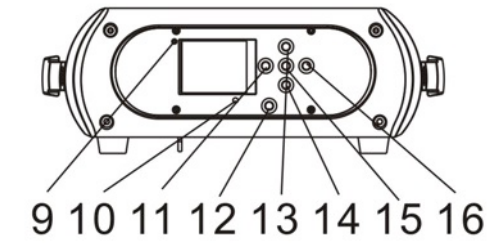
Display

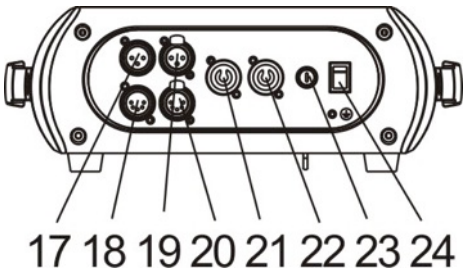
- 2.4inch super nice LCD display with friendly English/ Chinese/French/Spanish menu
- Auto lock
- Flip
- Back-up communicating IC

1.3 Description of the Device

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







9. Wireless indicator
10. Mic
11. Left button
12. Battery indicator
13. Up button
14. Down button
15. Enter button
16. Right button
17. 3-pin DMX in
18. 3-pin DMX out
19. Powercon in
20. Powercon out
21. Fuse
22. Power switch

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.

CE	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℃	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	Check the temperature from menu Check the fan speed info from menu

	Faulty LED Dimmer and strobe set at 0 Faulty power supply	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.

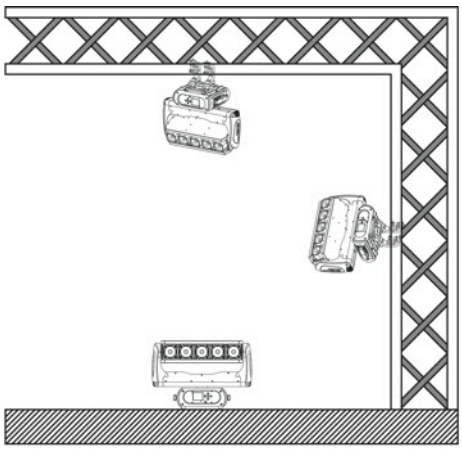
Step One: Unplug power cable from main power.

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.

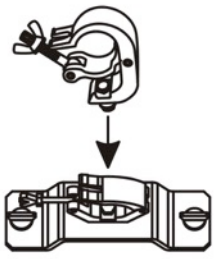
3. Installation

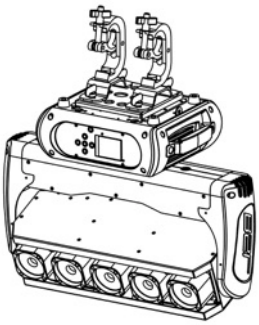


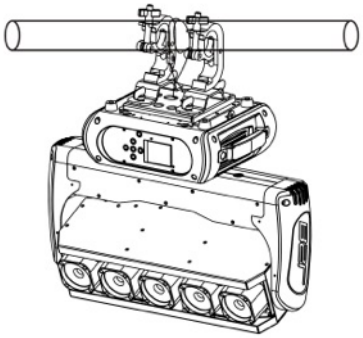
3.1 The device could be either put on a solid and even surface, or mounted upside down or sideways like left picture.

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

4.1 Meaning of the icon in menu

CONNECT	LIGHT	INFOMATION	SET	PROGRAM

4.2 Menu tree

Default setting shadowed. mark with ①can be basic reloaded, ② be program reloaded, ③can be private reloaded.

Connect	DMX Address①	XXX		DMX address setting
Light	Max Temperature ①	80~139℃ /176~282℉ 90℃		Lamp off if temperature continuously over for 5 minutes
	Lamp Adjust①	PAN……		Adjust value of channel
Information	Time Info.	Current XXXX(Hours) Fixture Life XXXX(Hours)		Fixture boot time Fixture total run time
	Temperature	Near Lamp Temp (depends on fixture)		Temperature Sensors
	Fans Speed	Near Lamp Fan (depends on fixture)		Fan speed Sensors
	Channel Value	PAN……		Display value of channel
	Error Message	Pan,Tilt……		Error channels
	Fixture Model	xxxxxxxxxxxx		Display model brand and model
	Software Ver	1U01 V1.0.00……		Version of each IC
Set	Reset	All Pan&Tilt		Reset all Reset Pan&Tilt
	Movement	Pan Reverse① Tilt Reverse① Pan Degree① Encoders① Pan/Tilt Mode①	ON/OFF ON/OFF 630/540 ON/OFF Stand/Smooth	Pan Reverse Tilt Reverse Choose Pan Degree Encoder wheel on/off Choose pan/tilt mode
	UI Set	Mic Sens. ③ No Signal① Temperature. C/F① Fans Mode① Hibernation① Backlight① Flip Display① Display Bright③ Brand Show① Key Lock① Language③	0~99%,60% Close/Hold/Auto/Music Fahrenheit /Celsius Auto Speed /High Speed OFF, 01M~99M，15M 02~60m 02m ON/OFF 00~31 10 ON/OFF ON/OFF En/简/繁/Fr/Sp	Sensitivity of Mic Mode when no signal Temperature at ℃/℉ Fans mode Sleeping mode Show backlight time Display 180° reverse Display Brightness Show brand or not Key lock on/off Language Select
	Users	User Mode①	Standard Extended Basic-8bit Basic-16bit User	Standard mode Extended mode Basic-8bit mode Basic-16bit mode User program mode

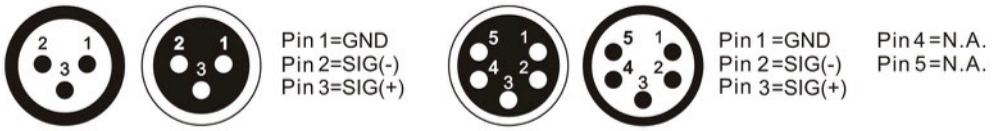
		Edit User③		Max Channel = XX PAN = CH01 :	Edit users mode
	Calibration③	-Password- Color :		=XXX =XXX :	Password: 050 Calibrate channel value
	Fixture ID③	Name -Password- PID Code			Name Password: 050 Set PID of RDM
	Reload Default	Basic Reload(①) Program Reload(②) ---Password--- Private Reload(③) All Reload		ON/OFF ON/OFF XXX ON/OFF ON/OFF	Basic Reload Program Reload Password: 050 Private Reload All Reload
Program	Play①	DMX Receive Slave Receive Sequence Music	Slave Receive 1,2,3 Master / Alone Master / Alone		DMX Receive Choose slave position Run Sequence Music mode
	Select Chase②	Chase Part 1 Chase Part 2 Chase Part 3	Chase 1 ~ 8 Chase 1 Chase 1 ~ 8 Chase 2 Chase 1 ~ 8 Chase 3		Select and run auto program
	Edit Chase②	Chase 1 : Chase 8	Chase Test Step 01 Step 64	 =SCxxx =SCxxx	Test Beginning scene Ending scene
	Edit Scenes②	Edit Scene 001 ~ Edit Scene 250	Pan,Tilt,…… --Fade Time-- --Secne Time-- DMX Input	=xxx =xxx =xxx	Input manual scene Modify manually fading time Modify manually scene time Input scene from exterior controller
	Scenes Record	ScXX=>ScXX			Auto Input scenes

5. DMX connection and DMX protocol

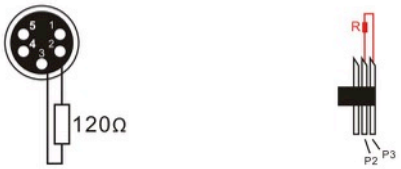
5.1 DMX addressing:

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: 16/38/15/17, 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 17, third one at 33, 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.

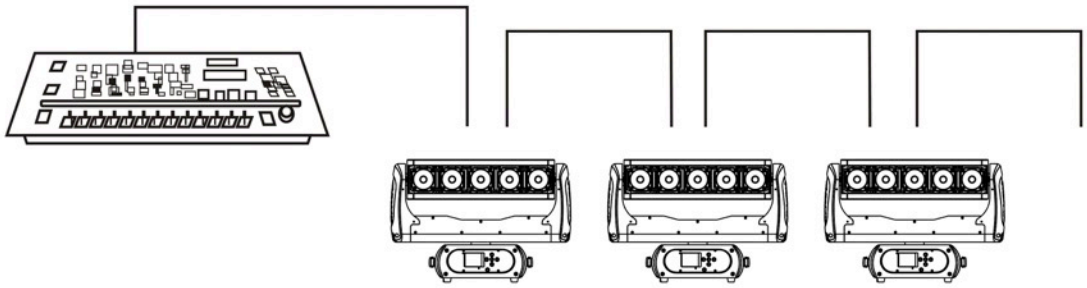
5.1.2 This device is equipped with 3-pins and 5-pins DMX in and out sockets only.



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



5.1.4 Connection: us DMX cable with 3+5 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	Ex	Ba1	Ba2				
1	1	1	1	Pan	Pan Coarse	0	255
	2		2	Pan fine	Pan Fine	0	255
2	3	2	3	Tilt	Tilt Coarse	0	255
	4		4	Tilt fine	Tilt Fine	0	255
3	5	3	5	Movment Speed	fastest to Slowest	0	255
4	6	4	6	Movment 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

5	7			Shutter Function	Normal Shutter Functions	0	15
					Pulse-effect Forward	16	31
					Pulse-effect Reverse	32	47
					Random Strobe	48	63
					Effect	64	95
					TBD	96	255
6	8			Shutter	Normal Shutter Functions		
					Close	0	31
					Strobe Rate (slow to fast)	32	223
					Open	224	255
					Pulse-effect Forward		
					Close	0	31
					Strobe Rate (slow to fast)	32	223
					Open	224	255
					Pulse-effect Reverse		
					Close	0	31
					Strobe Rate (slow to fast)	32	223
					Open	224	255
					Random Strobe		
					Close	0	31
					Strobe Rate (slow to fast)	32	223
					Open	224	255
					Effect		
					Close	0	31
					Effect Speed (slow to fast)	32	223
					Open	224	255
		5	7	Shutter	Shutter closed	0	31
					Effect 1 slow to fast	32	47
					Effect 2 slow to fast	48	63
					Strobe effect slow to fast	64	95
					Effect 3 slow to fast	96	111
					Effect 4 slow to fast	112	127
					Pulse-effect in sequences	128	159
					Effect 5 slow to fast	160	175
					Effect 6 slow to fast	176	191
					Random strobe effect slow to fast	192	223
					No function (shutter open)	224	255
7	9	6	8	Dimmer	Dimmer(Close to Open)	0	255
8	10	7	9	Virtual Color Function	No 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
9	11	8	10	Virtual	CTC Function		

				Color1	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	3
					Red=full, Green->up,Blue=0,White=0	4	33
					Red->down, Green=full,Blue=0,White=0	34	63
					Red=0 Green=255 Blue->up White=0	64	93
					Red=0 Green->down Blue=255 White=0	94	123
					Red=0 Green=0 Blue=255 White->up	124	153
					Red=0 Green=0 Blue->down White=255	154	183
					Red->up Green=0 Blue=0 White=255	184	213
					Red=255 Green=0 Blue=0 White->down	214	243
					Red	244	245
					Green	246	247
					Blue	248	249
					White	250	251
					All Color	252	255
10	12	9	11	Virtual Color2	Color Bounce		
					Black	0	3
					Red=full, Green->up,Blue=0,White=0	4	33
					Red->down, Green=full,Blue=0,White=0	34	63
					Red=0 Green=255 Blue->up White=0	64	93
					Red=0 Green->down Blue=255 White=0	94	123
					Red=0 Green=0 Blue=255 White->up	124	153
					Red=0 Green=0 Blue->down White=255	154	183
					Red->up Green=0 Blue=0 White=255	184	213
					Red=255 Green=0 Blue=0 White->down	214	243
					Red	244	245
					Green	246	247
					Blue	248	249
					White	250	251
					All Color	252	255
11	13	10	12	Red-All	Red 0->100%	0	255
12	14	11	13	Green-All	Green 0->100%	0	255
13	15	12	14	Blue-All	Blue 0->100%	0	255
14	16	13	15	White-All	White 0->100%	0	255
15	17	14	16	Pivot	Pivot Down -> Pivot Up	0	255
	18			Red 1	Red 0->100%	0	255
	19			Green 1	Green 0->100%	0	255

	20			Blue 1	Blue 0->100%	0	255
	21			White 1	White 0->100%	0	255
	22			Red 2	Red 0->100%	0	255
	23			Green 2	Green 0->100%	0	255
	24			Blue 2	Blue 0->100%	0	255
	25			White 2	White 0->100%	0	255
	26			Red 3	Red 0->100%	0	255
	27			Green 3	Green 0->100%	0	255
	28			Blue 3	Blue 0->100%	0	255
	29			White 3	White 0->100%	0	255
	30			Red 4	Red 0->100%	0	255
	31			Green 4	Green 0->100%	0	255
	32			Blue 4	Blue 0->100%	0	255
	33			White 4	White 0->100%	0	255
	34			Red 5	Red 0->100%	0	255
	35			Green 5	Green 0->100%	0	255
	36			Blue 5	Blue 0->100%	0	255
	37			White 5	White 0->100%	0	255
16	38	15	17	Control	Normal	0	7
					Reset All	8	15
					Pan&Tilt Reset	16	23
					TBD	24	31
					TBD	32	39
					TBD	40	47
					TBD	48	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.

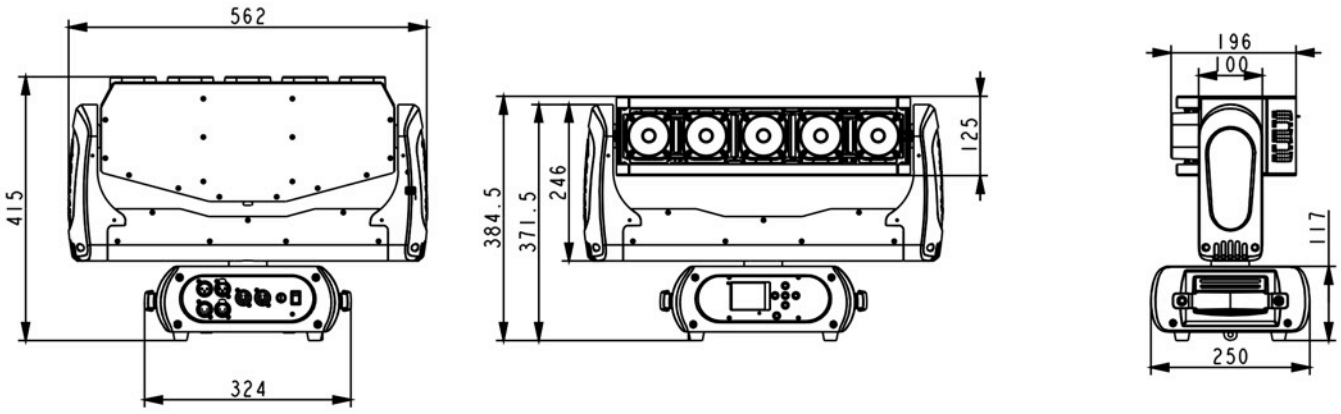
6.2 Software upgrade function via DMX cable, if there is any new firmware for this device come out, it can be upgraded simply via a software upgrade box, no need to change any mechanical parts. The upgrade box is not included in the package, if need any further assistance pls just contact authorized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

7. Dimensions Drawing



8. Technical specification

Power supply	100-240 V AC, 50/60 Hz ~
Power consumption	200W
LED	5*30w RGBW 4in1 leds
DMX channels	16/38/15/17 modes
Beam angle	7°
Fuse	T 3.15 A, 250 V
Device dimensions	562x250x415mm
Net Weight	12KG