100BW
IP65 100W Laser Lamp Pure Beam

CONTENTS

Thank you for choosing our LED lights. Each facility has been rigorously tested. Please check whether the facility has been damaged during transportation. If you find any parts are missing or broken, please contact the manufacturer immediately. Please do not return the product without any notice!

1.Safety Instructions

⚠ Please read this manual carefully, which includes important information on installation,use and maintenance.

Attention

● Please keep this USER MANUAL for future consultation. If you sell the facility to another user, be sure that they also receive this USER MANUAL.

● Please open and check in details and make sure there is no transportation damage.

● Before operating, ensure that the voltage and frequency of power supply match the power requirements of the facility.

● It's important to ground the yellow/green conductor to earth in order to avoid electric shock.

● The facility must be installed in a location with adequate ventilation, at least 50 cm from adjacent surfaces. Be sure that no ventilation slots are blocked.

● Make sure the power is disconnected before removing the facility.

● Make sure there are no flammable materials close to the unit while operating as it is fire hazard.

● Use safety cable when fixes this facility. Do not handle the facility by taking its head only, but always by taking its base.

● Maximum ambient temperature is 40 ℃. Do not operate it where the temperature is higher than this.

● Please stop using the facility for serious operating problems. Stop using the facility immediately. Never try to repair the facility by yourself, but be a professional technician. Please contact the supplier's service department

for technical support.

- Do not touch any wire during operation as high voltage might be causing electric shock.
- When the housing or lens is damaged, it must be replaced.
- Direct sunlight or any other strong light source penetrating the lens of the light will cause serious internal damage to the facility. During unpacking, installation, use and long-term outdoor idleness, it is forbidden to expose the lens of the facility to direct sunlight or any other strong light source at any angle. It is forbidden to aim the beam of one light directly at another light.
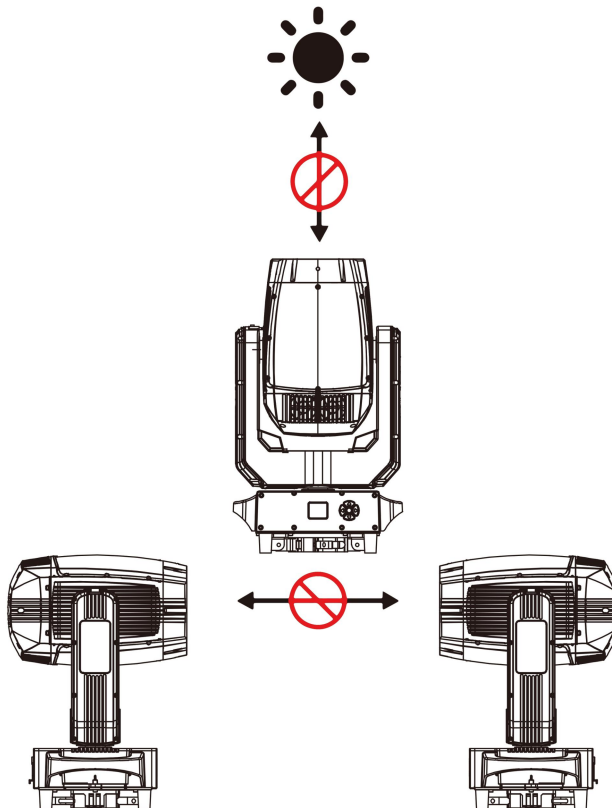
Caution

There are no accessories available, do not open the housing and try to repair the facilities yourself. Please contact our company for after service.

Installation

The unit should be mounted via its screw holes on the bracket. Always ensure that the unit is firmly fixed to avoid vibration and slipping while operating. And make sure that the structure to which you are attaching the unit is secure and is able to support a weight of 10 times of the unit's weight. Also always use a safety cable that can hold 12 times of the weight of the unit when installing the fixture.

The facility must be installed by professionals, and keep it far away from fire, walking road, and easy touched place.

2. Technical Specification

Light Source	100W laser;color temperature:10000±500K;CRI:70Ra
LED Lifetime	≥20000H
Power Voltage	90-240VAC 50/60Hz
Power Consumption	150W±5%;PF≥0.95;Standby power:21.5W
Optical system	0.8° (φ3mm white round aperture), 0.7° (φ2.5mm white round aperture), 0.57° (φ2mm white round aperture); high-quality glass optical lens, optical lens: φ180mm
Color system	14+1,3200K single color wheel
DMX Channel	16/19Channel
Control Modes	DMX512、ArtNet、RDM
Display	1.8°TFT Color Display,Can be rotated 180°,Chinese and English can be switched

Data In/Out Socket	3-pin XLR sockets
Electronic control technology	The menu or console controls the reset of the lights;0-100% dimming constant current drive mode temperature sensing detection,;Intelligent adjustment of light source power; Lamp information query Intelligent fan speed regulation;Using magnetic coded reset system
Security protection	Overcurrent, overvoltage, overheat protection, X/Y axis fixed lock, safety rope
Working position	Install in a safe position by laying flat or hanging
Pan	540°,accuracy 2.11°/step.fine-tuning accuracy:0.008°
Tilt	270°,accuracy 0.86°/step.fine-tuning accuracy:0.0034°
Protection Rating	IP65
Dimension	360*260*625.6mm
Net Weight	25kg
Carton Package	750*375*470mm 1in1 GW:27.5kg
Flight Case	790*480*840mm 2in1 GW:83.6kg
Features	Fast strobe 1-25Hz;Prism1:24+48+6 rows,Prism 2: 24+6 rows; Color wheel: 14+1, half color can be selected; Static Gobo wheel: 22 kinds of effect,macro effect mode
Configuration	Signal cable 1pc
	Power cable 1pc
	Manual 1pc

3. DMX Set Up

Pin1: Ground   pin2: Negative   pin3: Positive
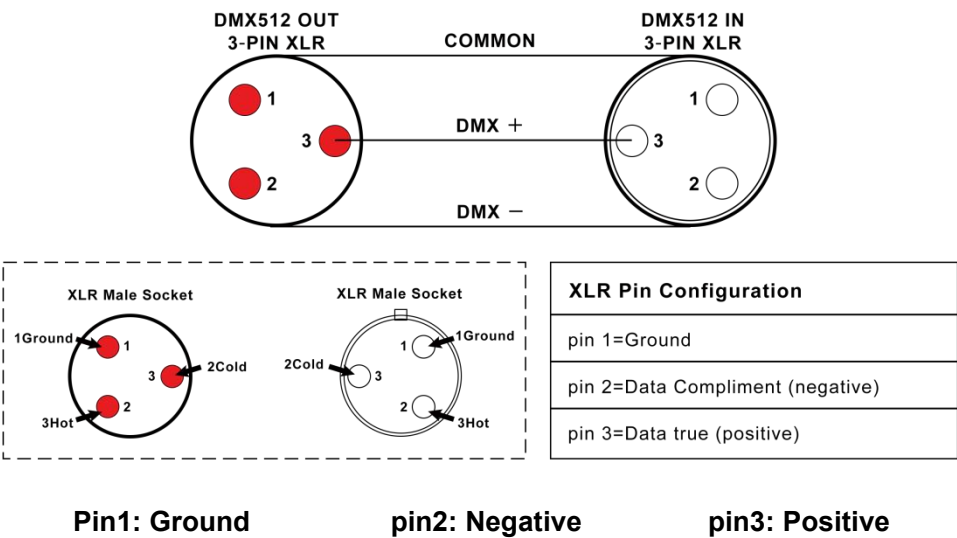
DMX Connection

To ensure optimal transmission of DMX data, please connect facilities in the shortest way. The connection order won't affect the DMX address code. For example, if the address code is set to 1, no matter where the facility is connected, its address code will not change. This is determined by the principle of the DMX controller.

Operation method

You can operate in the following three modes:

● Auto mode - the light can automatically complete all color changes
● DMX control mode - each light can be individually controlled by a standard DMX512 console

● Master mode - any light can work as a host in any of the above modes, and the other lights will work synchronously as slaves

4. Display

There are five buttons on the LED panel:
1 previous-MENU   2 UP   3 DOWN   4 Lower-MENU   5 ENTER
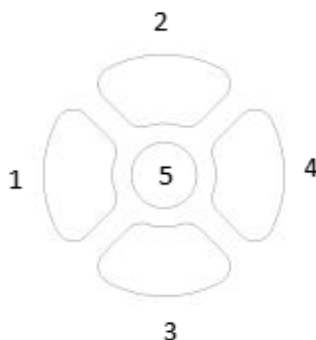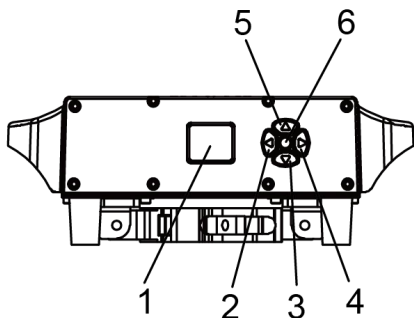
FRONT VIEW   **REST VIEW**
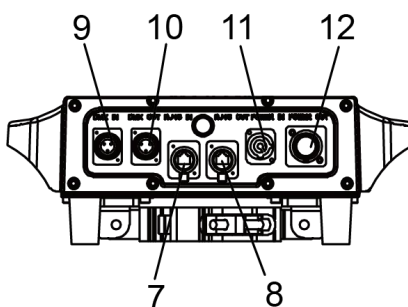
After powering on, the facility will automatically return to the last operation when it was powered off, then get into standby status. For more details, please refer to the information below↓

5. Menu

1 previous-MENU 2 UP 3 DOWN 4 Lower-MENU 5 ENTER			
Menu	1. Pan Degree	1.540 2.360	Pan running angle selection
	2.Mic Sense	001--100	Sound control adjust sensitiveness
	3.Language	1.English	Select Display Language
		2.Chinese	
	4. No Signal	1.BlackOut 2.Hold	
	5. Fan Set	1.Auto) 2.Low 3.High	
	6.ArtNet Set	1.ArtNet Enable：1.ON 2.OFF	
		2.Universe:0---255	
		3.IP Mode：A.2.X.X.X Auto B.10.X.X.X Auto C.Custom	
		4.Custom IP:192.168.000.001	
		5.SubNetMask：255.000.000.000	
	7.Reset	1.Yes	Reset
		2.No	
	8.Default	1.Yes	Restore factory settings
		2.No	
	9.Adjust	Password：****	Changing the values of Pan/Tilt/Focus can correct the angle;
		1.Pan:0--255	

		2.Tilt:0--255	
		3.Focus:0--255	
		4.Frost：0--255	
		5.Dimmer：0--255	
		6.Color：0--255	
		7.Gobo：0--255	
		8.Prism1：0--255	
		9.R-Prism1：0--255	
		10.R-Prism1：0--255	
		11.R-Prism2：0--255	
Address	001--512		Set address code 001--512
Rever	1.Pan	1.YES	
		2.NO	
	2.Tilt	1.YES	
		2.NO	
	3.Display	1.YES	
		2.NO	
Inform	1. CH Value		Display all channel values
	2.Temp/℃		Display led board temperature
	3.Version		Program version number
	4.IP	002.018.016.001	Default IP
	5.Mask	255.000.000.000	Default submask

Mode	1.DMX512			Set control mode
	2.Auto	1.Master 2.Alone		
	3.Sound	1.Master 2.Alone		
	4.Manual	1.Master 2.Alone	1.Pan:0--255	Manual control
			2.Tilt:0--255	
			3.Focus:0--255	
			4.Frost:0--255	
			5.Dimmer:0--255	
			6.Color:0--255	
			7.Gobo:0--255	
			8.Prism1:0--255	
			9.R-Prism1:0--255	
			10.Prism2:0-255	
			11.R-Prism2:0--255	
			12.Strobe:0--255	
Channel	1.16CH	1.16Channels		Select channel mode
	2.19CH	2.19Channels		

6. LUX Data

Beam Angle = 1.5°

W lux		1638000	409500	182000	102375	45500

Distance(m)		5		10	15	20	30
Spot diameter (m) 1.5°		1.5		3.0	4.5	6.5	9.0
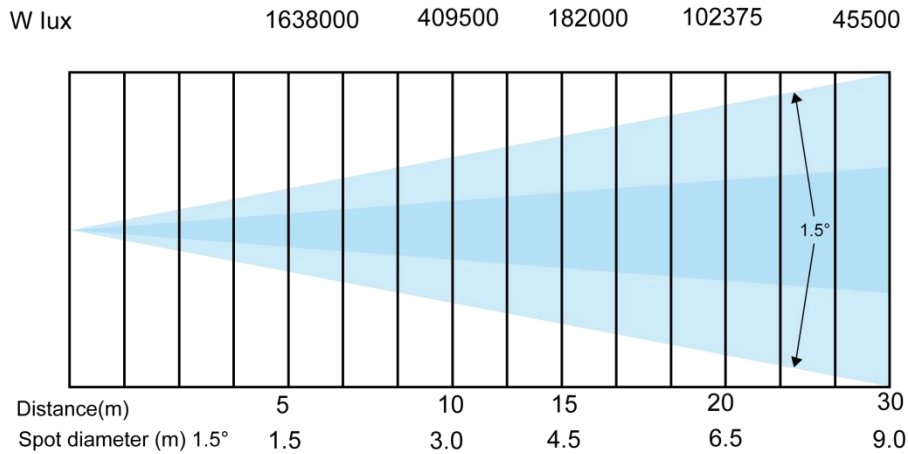
7. DMX Channel List

▶**16CH Mode**

CH	Function	DMX Value	Description
1	Pan	0----255	Pan control
2	Pan adjustment	0----255	Pan adjustment
3	Tilt	0----255	Tilt control
4	Tilt adjustment	0----255	Tilt adjustment
5	Pan/Tilt speed	0----255	From fast to slow
6	Dimmer	0----255	From dark to bright
7	Strobe	0--3	Strobe dimming
		4--203	From slow to fast（1Hz-25Hz）
		204--255	Random strobe
8	Color	0--3	White
		4--7	White & Red

CH	Function	DMX Value	Description
		8--11	Red
		12--15	Red & Orange
		16--19	Orange
		20--23	Orange & Cyan
		24--27	Cyan
		28--31	Cyan & Green
		32--35	Green
		36--39	Green & Dark Blue
		40--43	Dark Blue
		44--47	Dark Blue & Light Purple
		48--51	Light Purple
		52--55	Light Purple & Pink
		56--59	Pink
		60--63	Pink & White Light 3200K
		64--67	White Light 3200K
		68--71	White Light 3200K & Rose Red
		72--75	Rose Red
		76--79	Rose Red & Blue
		80--83	Blue
		84--87	Blue & Yellow
		88--91	Yellow
		92--95	Yellow & Light Green
		96--99	Light Green
		100--103	Light Green & Orange Red
		104--107	Orange Red
		108--111	Orange Red & Light Yellow
		112--115	Light Yellow
		116--119	Light Yellow & White
		120--184	Color Flow (Forward from Fast to Slow)

CH	Function	DMX Value	Description
		185--190	Stop
		191--255	Color Flow (Reverse From slow to fast)
9	Fixed pattern	0--2	No function
		3--5	Pattern 1
		6--8	Pattern 2
		9--11	Pattern 3
		12--14	Pattern 4
		15--17	Pattern 5
		18--20	Pattern 6
		21--23	Pattern 7
		24--26	Pattern 8
		27--29	Pattern 9
		30--32	Pattern 10
		33--35	Pattern 11
		36--38	Pattern 12
		39--41	Pattern 13
		42--44	Pattern 14
		45--47	Pattern 15
		48--50	Pattern 16
		51--53	Pattern 17
		54--56	Pattern 18
		57--59	Pattern 19
		60--62	Pattern 20
		63--65	Pattern 21
		66--71	Pattern 21 shakes (From slow to fast)
		72--77	Pattern 20 shakes (From slow to fast)
		78--83	Pattern 19 shakes (From slow to fast)
		84--89	Pattern 18 shakes (From slow

CH	Function	DMX Value	Description
			to fast)
		90--95	Pattern 17 shakes (From slow to fast)
		96--101	Pattern 16 shakes (From slow to fast)
		102--107	Pattern 15 shakes (From slow to fast)
		108--113	Pattern 14 shakes =Move (From slow to fast)
		114--119	Pattern 13 shakes (From slow to fast)
		120--125	Pattern 12 shakes (From slow to fast)
		126--131	Pattern 11 shakes (From slow to fast)
		132--137	Pattern 10 shakes (From slow to fast)
		138--143	Pattern 9 shakes (From slow to fast)
		144--149	Pattern 8 shakes (From slow to fast)
		150--155	Pattern 7 shakes (From slow to fast)
		156--161	Pattern 6 shakes (From slow to fast)
		162--167	Pattern 5 shakes (From slow to fast)
		168--173	Pattern 4 shakes (From slow to fast)
		174--179	Pattern 3 shakes (From slow to fast)
		180--185	Pattern 2 shakes (From slow to fast)
		186--191	Pattern 1 shakes (From slow to fast)
		192--221	Pattern flow (clockwise From slow to fast)
		222--225	Stop
		226--255	Pattern flow (counterclockwise

CH	Function	DMX Value	Description
			From slow to fast)
10	Prism plate 1	0--63	No prism
		64--127	Prism 1
		128--191	Prism 2
		192--255	Prism 3
11	Prism plate 1 rotation	0--127	Slide (0~360 degrees)
		128--189	Water flow (clockwise From slow to fast)
		190--193	Stop
		194--255	Water flow (counterclockwise From slow to fast)
12	Prism plate 2	0--9	No prism
		10--132	Prism 1
		133--255	Prism 2
13	Prism plate 2 rotation	0--127	Slide (0~360 degrees)
		128--189	Water flow (clockwise From slow to fast)
		190--193	Stop
		194--255	Water flow (counterclockwise From slow to fast)
14	Atomization	0--127	No atomization
		128--255	Atomization
15	Zoom	0-255	0-255
16	Function	0--149	No function
		150--159	Fast dimming (default fast dimming on power on) valid for 3s
		160--169	Slow dimming valid for 3s
		170--239	No function
		240--245	Pan/ tilt　motor reset valid for 3s
		246--250	Head motor reset valid for 3s
		251--255	Whole light reset valid for 3s

▶19CH Mode

CH	Function	DMX Value	Description
1	Pan	0----255	Pan control
2	Pan adjustment	0----255	Pan adjustment
3	Tilt	0----255	Tilt control
4	Tilt adjustment	0----255	Tilt adjustment
5	Pan/Tilt speed	0----255	from fast to slow
6	Dimmer	0----255	From dark to bright
7	Dimming adjustment	0----255	From dark to bright
8	Strobe	0--3	Strobe dimming
		4--203	Synchronous strobe speed From slow to fast (1Hz-25Hz)
		204--255	Random strobe
9	Dimming curve	0--49	Linear dimming
		50--99	Square rate dimming
		100--149	Inverse square rate dimming
		150--255	S-curve dimming
10	Color	0--3	White
		4--7	White & Red
		8--11	Red
		12--15	Red & Orange
		16--19	Orange
		20--23	Orange & Cyan
		24--27	Cyan
		28--31	Cyan & Green
		32--35	Green
		36--39	Green & Dark Blue
		40--43	Dark Blue
		44--47	Dark Blue & Light Purple
		48--51	Light Purple
		52--55	Light Purple & Pink
		56--59	Pink
		60--63	Pink & White Light 3200K
		64--67	White Light 3200K
		68--71	White Light 3200K & Rose Red

CH	Function	DMX Value	Description
		72--75	Rose Red
		76--79	Rose Red & Blue
		80--83	Blue
		84--87	Blue & Yellow
		88--91	Yellow
		92--95	Yellow & Light Green
		96--99	Light Green
		100--103	Light Green & Orange Red
		104--107	Orange Red
		108--111	Orange Red & Light Yellow
		112--115	Light Yellow
		116--119	Light Yellow & White
		120--184	Color Flow (Forward from Fast to Slow)
		185--190	Stop
		191--255	Color Flow (Reverse From slow to fast)
11	Fixed pattern	0--2	No function
		3--5	Pattern 1
		6--8	Pattern 2
		9--11	Pattern 3
		12--14	Pattern 4
		15--17	Pattern 5
		18--20	Pattern 6
		21--23	Pattern 7
		24--26	Pattern 8
		27--29	Pattern 9
		30--32	Pattern 10
		33--35	Pattern 11
		36--38	Pattern 12
		39--41	Pattern 13
		42--44	Pattern 14
		45--47	Pattern 15
		48--50	Pattern 16
		51--53	Pattern 17
		54--56	Pattern 18
		57--59	Pattern 19
		60--62	Pattern 20

| CH	Function	DMX Value	Description
		63--65	Pattern 21
		66--71	Pattern 21 shakes (From slow to fast)
		72--77	Pattern 20 shakes (From slow to fast)
		78--83	Pattern 19 shakes (From slow to fast)
		84--89	Pattern 18 shakes (From slow to fast)
		90--95	Pattern 17 shakes (From slow to fast)
		96--101	Pattern 16 shakes (From slow to fast)
		102--107	Pattern 15 shakes (From slow to fast)
		108--113	Pattern 14 shakes =Move (From slow to fast)
		114--119	Pattern 13 shakes (From slow to fast)
		120--125	Pattern 12 shakes (From slow to fast)
		126--131	Pattern 11 shakes (From slow to fast)
		132--137	Pattern 10 shakes (From slow to fast)
		138--143	Pattern 9 shakes (From slow to fast)
		144--149	Pattern 8 shakes (From slow to fast)
		150--155	Pattern 7 shakes (From slow to fast)
		156--161	Pattern 6 shakes (From slow to fast)
		162--167	Pattern 5 shakes (From slow to fast)
		168--173	Pattern 4 shakes (From slow to fast)
		174--179	Pattern 3 shakes (From slow to fast)
		180--185	Pattern 2 shakes (From slow to fast)
		186--191	Pattern 1 shakes (From slow

CH	Function	DMX Value	Description
			to fast)
		192--221	Pattern flow (clockwise From slow to fast)
		222--225	Stop
		226--255	Pattern flow (counterclockwise From slow to fast)
12	Prism plate 1	0--63	No prism
		64--127	Prism 1
		128--191	Prism 2
		192--255	Prism 3
13	Prism plate 1 rotation	0--127	Slide (0~360 degrees)
		128--189	Water flow (clockwise From slow to fast)
		190--193	Stop
		194--255	Water flow (counterclockwise From slow to fast)
14	Prism plate 2	0--9	No prism
		10--132	Prism 1
		133--255	Prism 2
15	Prism plate 2 rotation	0--127	Slide (0~360 degrees)
		128--189	Water flow (clockwise From slow to fast)
		190--193	Stop
		194--255	Water flow (counterclockwise From slow to fast)
16	Atomization	0--127	No atomization
		128--255	Atomization
17	zoom	0--255	
18	Zoom adjust	0--255	
19	Function	0--149	No function
		150--159	Fast dimming (default fast dimming on power on) valid for 3s
		160--169	Slow dimming valid for 3s
		170--239	No function
		240--245	Pan/ tilt motor reset valid for 3s
		246--250	Head motor reset valid for 3s

CH	Function	DMX Value	Description
		251--255	Whole light reset valid for 3s

8. Mounting

When installing the unit, the trussing or area of installation must be able to hold 10 times the weight without any deformation. When installing the unit must be secured with a secondary safety attachment, e.g. an appropriate safety cable. Never stand directly under the facility while mounting, uninstalling or repairing facilities.

High-altitude mounting requires for extensive experience, including working load limits calculating , installation material, and periodic safety check of installation materials and facilities. If you're lack of mentioned qualifications, do not attempt the installation yourself. These installation should be checked by a skilled person annually.
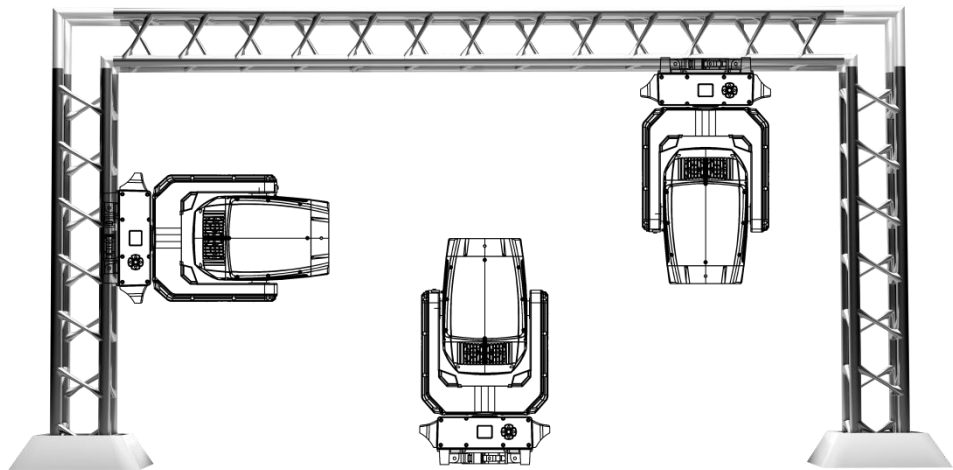
100B works properly in above different mounting, hanging upside-down from a ceiling, sideways on trussing, or set on smooth horizontal surface. Be sure this facility is at least 12m (40ft) away from flammable materials (decoration etc.). Always use and install the safety cable to prevent accidental damage or injury from the facility failure. Never use handles for secondary attachment.

NOTICE: The suitable environment temperature of the facility is from -25° C to 45° C. Do not place this facility in an environment where the temperatures are under or above the temperatures stated. This will help the fixture run at its best and extend the lifetime.

9. Product Size
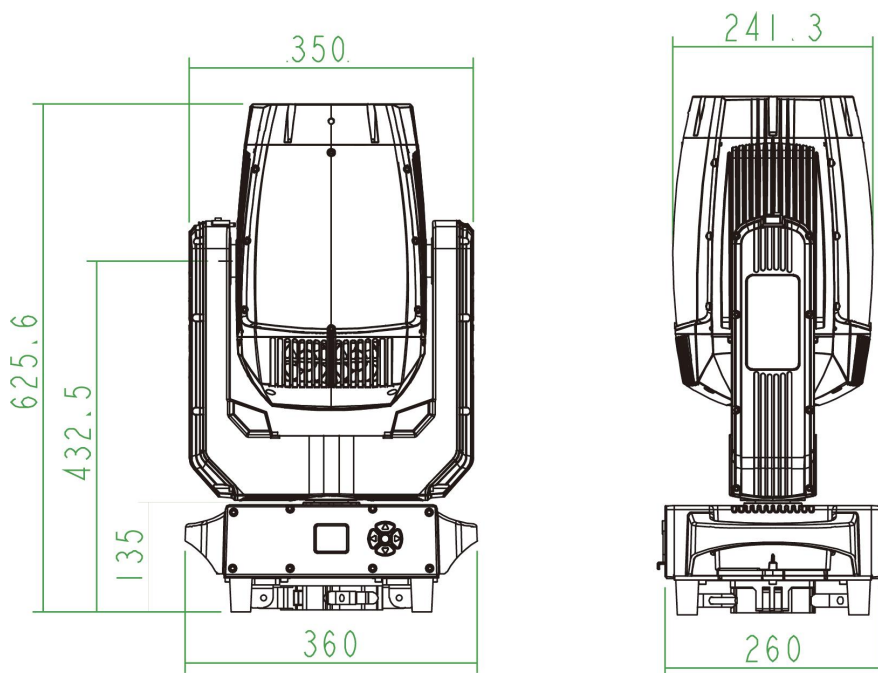
10. Attention

1. When the facility is powered on, please avoid looking directly at the facility.

2. When assembling/ replacing LEDs, be sure to cut off the main power of facilities before opening the cover upon the LED board.

11. Trouble Shooting

Following are a few common problems that may occur during operation. Here are some suggestions for easy troubleshooting:

A. The unit does not work, no light and the fan does not work

1. Check the status of power connection and fuse.
2. Check the voltage.
3. Check the power indicator.

B. No response to DMX controller

1. If the display screen flashes, check the DMX signal connector and signal line whether the connection is correct.
1. If the display screen does not flash, but no response to channel control, check whether the address code or channel setting is correct.
1. If the DMX signal transmission is intermittent, check if the XLR and DMX cables are in good condition.
2. Try using another controller.
3. Check if the DMX cables is too close to the high-voltage wire, which may damage or interfere with the signal circuit.
6. The facility has not completed the self-check.

C. One of the channels is not working well

1. The stepper motor might be damaged or the cable connected to the PCB is broken.
2. The motor's drive IC on the PCB might be out of condition.

12. Fixture Cleaning

The lens and diffuser should be clean frequently to get better light effect. Wipe frequency according to the environment. Humidity, excessive smoke, and dirty environment will make lens dusty.

● Use soft cloth and special glass cleaner.

● Wipe lens surface at least every 30 days.

● Use vacuum cleaners or air guns to clean the interior structure of the facility, at least twice a year.

⚠Warning:

To avoid the danger of lighting strikes and fire, please do not place the facility in a humid environment. Do not disassemble it without permission, otherwise, the manufacturer will not provide warranty. If the facility fails, please contact the manufacturer first.

Product Warranty Card

Product: IP65 100W Laser Lamp Pure Beam

Model NO.: 100BW   Manufacture Date:

User: Purchase Date:

Manufacturer: Sales Store:

Address: ATTN.:

ATTN.:   Phone:

Phone:

Note: The above blank must be filled in and sealed by the end user or sales point, otherwise no warranty will be provided. (Below please check the warranty period and terms)

Warranty Period: This facility is warranted for 2 years from the date of purchase.

Warranty Terms:

1. Except for man-made damage and natural disasters

2. If the facility fails to function properly during the warranty period, please contact our after service department or our local distributor directly.

1) Fail to present a valid warranty card.

2) Omissions, alterations, and trade sales names on the warranty card.

3) Failures and damage caused by force majeure.

4) Failures and damage caused during transportation and handling.

5) Failures and damage caused by failure to follow the instructions for use.

6) Failures and damage caused by disassembly, repair, and modification of the product without the manufacturer's authorization or by non-professionals.

7) Failures caused by the use of accessories not approved by the factory or not matched by the factory.

▲ **Thank you for reading this manual. Please keep it for future reference.**