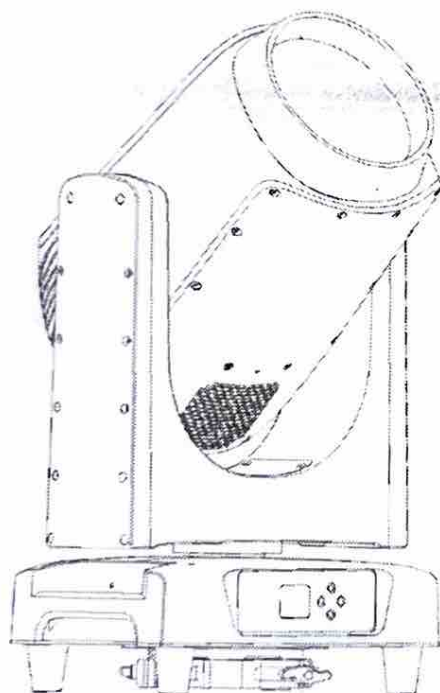




# Laser Beam



USE MANUAL

# Catalogue

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Thank you very much for purchasing this product. Before you use our product, please carefully read carefully and fully understand all the safety instructions recorded in this book to avoid the potential dangers that may cause bodily injury, property damage or damage to the product. The Company shall not be liable for any direct losses and associated losses caused by the failure to operate as instructed in the instructions.

# SAFETY GUIDE



## WARNING

**Please read the instruction manual carefully, which contains important information about installation, operation, maintenance, etc**

This product is intended for professional use only and is prohibited for family use

Please keep this manual for future reference, if you sell the machine to another user, please ensure that the user also gets this manual.

- ◆ Open the package before use and carefully check if the machine is damaged during transportation.
- ◆ Non-professional operators are not allowed to install and operate the machine.
- ◆ Disconnect the external power supply when opening the housing or replacing the parts, or when the lamp is not in use.
- ◆ Ensure that the equipment is reliable and use the AC power supply matching the lamp voltage frequency with overload and grounding protection.
- ◆ Before use, ensure that the cable is in normal condition and suitable for the flow of the connected equipment.
- ◆ Avoid having the power cord going around with the surrounding cables.
- ◆ Ensure that the equipment is reliably grounded.
- ◆ If the power cable or plug is damaged, the lamp is wet or the power supply is obviously overheated, please disconnect the power supply immediately.
- ◆ Avoid any flammable liquid, water, or metal material from entering the machine. Once it happens, please cut off the power supply immediately.
- ◆ Do not look directly into the light port and the illuminated light source.
- ◆ Do not use damaged housing, light shield, lens, protective screen, or heat lamps.
- ◆ If the protective screen, lens or ultraviolet screen on the lamp produces visible damage, that is, the damage to the degree of failure, such as cracks or deep marks, should be replaced in time.
- ◆ Do not use when the ambient temperature exceeds 40°C.
- ◆ When the external temperature of the lamps during the use is 65°C, to avoid contact with the human body or other objects. Please cool the lamps fully before handling.
- ◆ Ensure that combustible materials (such as fabric, wood, paper, etc.) away from the lamps at least 0.5 meters, flammable items as far as possible away from the equipment, ensure that the inlet and outlet at least 0.5 meters of space
- ◆ Do not directly illuminate surfaces within 10 meters.
- ◆ During the day, cover the lens or turn the lens direction to prevent direct sunlight from reaching the lens, as it can focus on the sun and create a potential fire hazard.
- ◆ In any case, do not modify the lamp, do not install non-original parts, do not paste any filter paper on the lens or other optical accessories.
- ◆ Disconnect the power supply before maintaining the clean lamps.
- ◆ Do not attempt to short circuit the fuse or the temperature control switch.
- ◆ Do not carry the lamps and lanterns alone when working at a height.
- ◆ Use two evenly distributed lamp hooks on the hanger, and do not use a single lamp hook.
- ◆ Ensure that the support and hanging system can support more than 10 times the weight of the lamp.
- ◆ When used, a safety rope must be installed, which must be able to withstand 10 times the weight of the lamp.
- ◆ Ensure that the external fittings and hangings are fully fastened.
- ◆ For installation, maintenance and moving lamps, stable platform shall be provided with safety fence.
- ◆ For related operations not described in this article, please consult the Authorized after-sales department.



## Specification parameters

Voltage: AC100-240V 50 / 60Hz

Maximum power: 400W

Light source: a 300W white laser light source

Light source life: 12,000 hours

Control: 14 / 16 channel, DMX512, RDM.

Color: one color plate, 14 colors + white light, half-color and two-way color rainbow effect

Pattern: a fixed pattern plate, 19 kinds of patterns + white light, running water, jitter effect

Prism: 8 prism + 24 prism: can be two-way rotation, can switch independently, can stack

Optics: high-precision glass optical lens, optical diameter of 165mm, electric focus

Effect: nebulization effect

Movement: horizontal 540 degrees, 8 / 16 Bit resolution, 360 degrees infinite rotation  
252 degrees vertical, 8 / 16 Bit resolution

Vertical magnetic encoder; three-phase stepper motor

Display: 1.7-inch display screen, touch button, Chinese and English interface.

Software upgrade: Software can be updated through a DMX connection

Waterproof power supply connector input / output

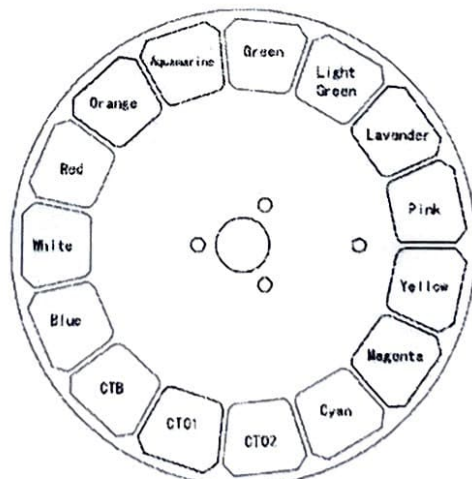
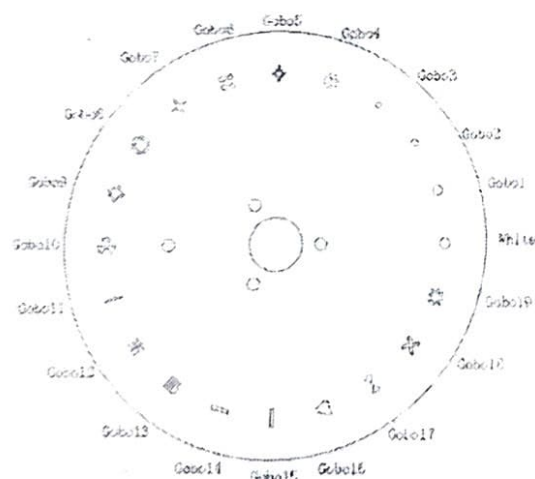
Three-core / five-core waterproof Canon head socket

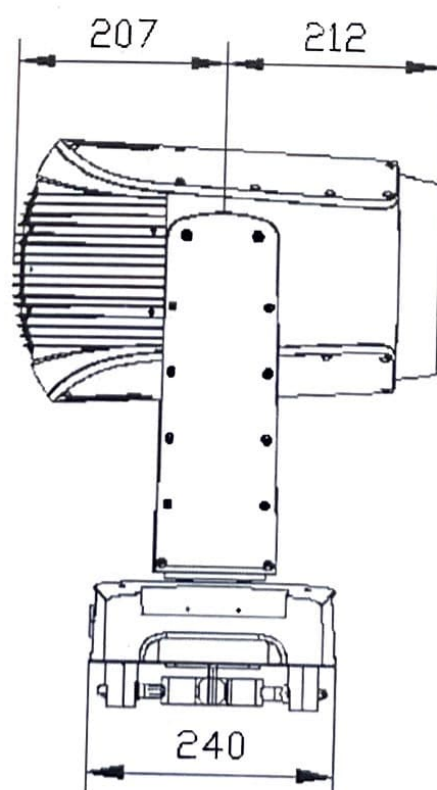
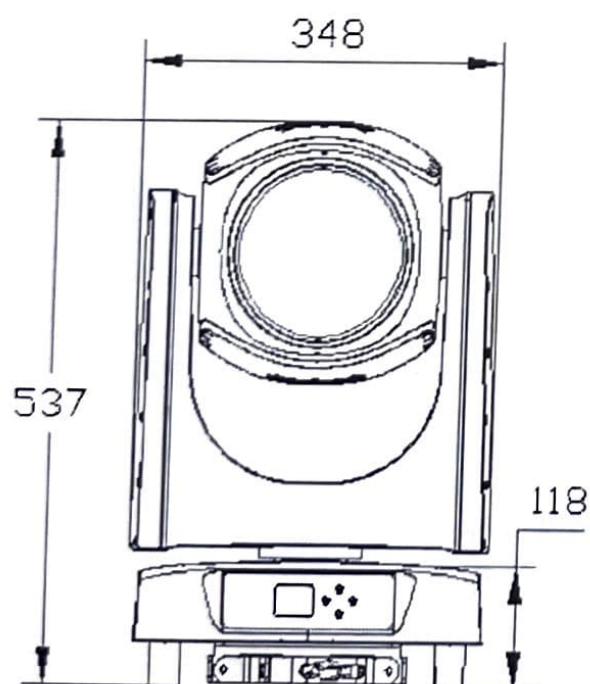
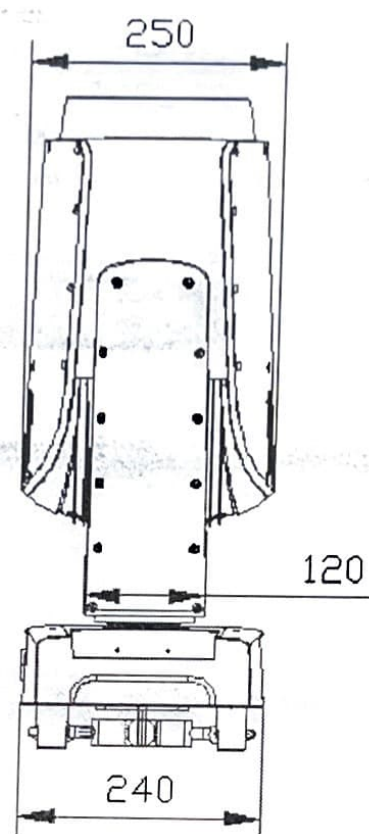
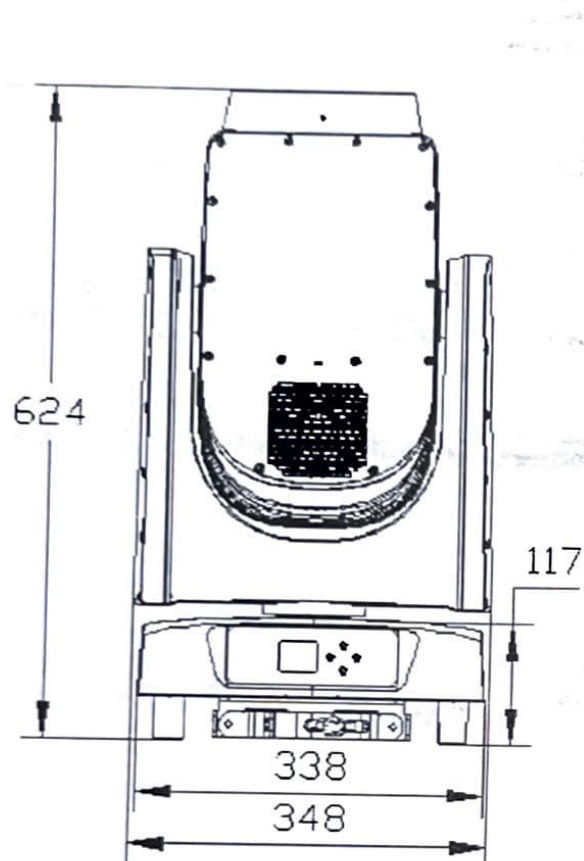
Fold hook is free

Protection level: IP66

Dimensions: 348 \* 250 \* 624mm

Net weight: 21.6Kg





## INSTALL



### WARNING:

When hanging lamps, additional safety rope must be installed to prevent the failure of lamp hook,

The safety rope must be attached to the mounting position of the safety rope, and must not be installed on the handling handle

When the lamp is not placed steadily, the movement of the lamp head may drive the movement of the base,

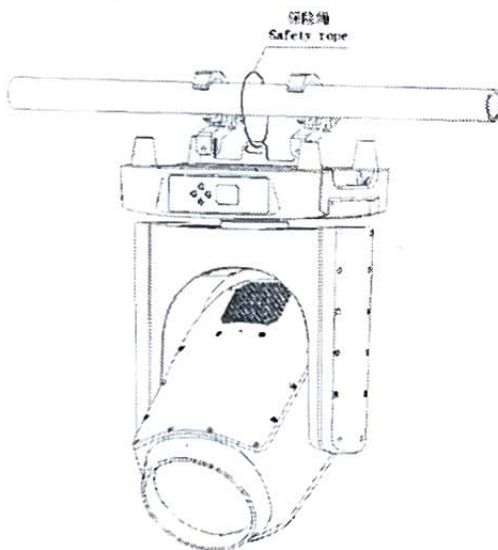
Therefore, do not start the lamp without confirming the stable placement or hanging of the lamp.



Do not hang the side installation and use of lamps!

Cover the lens or turn the direction to avoid direct sunlight into the lens,

Because the camera can focus on sunlight as a potential fire danger.



### Installation considerations:

1. Confirm that the hanging lamp hook and accessories are not damaged and can withstand 10 times the total weight of the lamps, cables and accessories,
2. For installation, maintenance and moving lamps, stable platform shall be provided with safety fence
3. Tie the safety rope through the hole in the lamp base to the lamp holder, not to the handle
4. Check that there is no combustible material within 0.5 meters of the lamp shell, do not be blocked within 10 meters of the lamp column directly, and no flammable substances nearby
5. Check that the lights are not possible to collide with each other during movement
6. Check that the other lamp has not directly illuminate on the lamp, the strong light will damage the protective shell of the lamp
7. Make sure that the installation surface is horizontal, so as to avoid sliding when the lamp is running





warn:

To prevent electric shock, the lamp must be grounded, and the main power supply must be safe and disconnected

Switch and ground protection



Please connect the lamp directly to AC power supply, not the silicon box to avoid damage

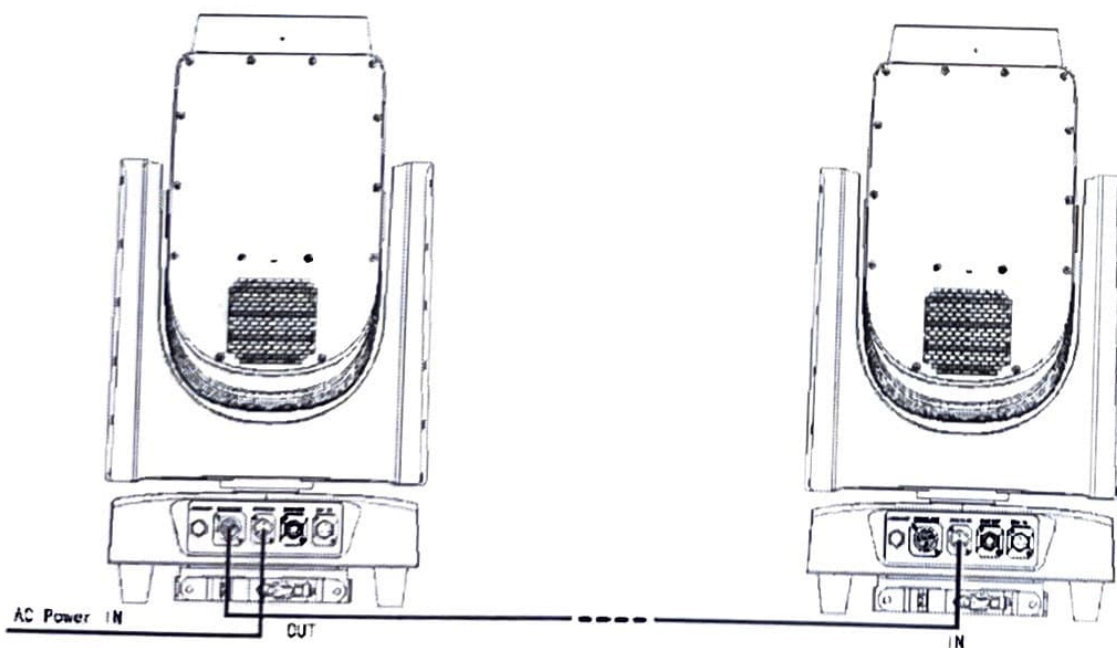
lamps and lanterns



When the power supply of the lamps is connected in series, the maximum current of the power supply seat shall not be greater than 16 A

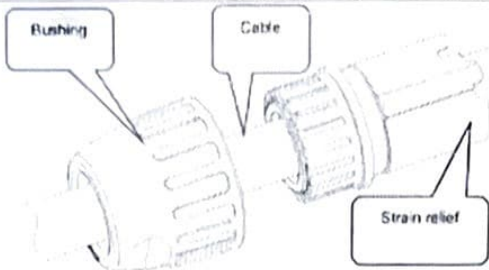


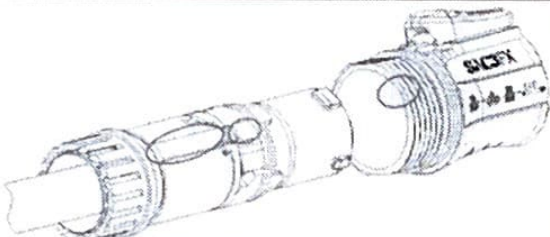
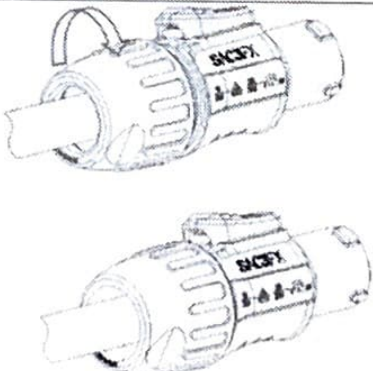
## Power connection

A plug matching with the lamp power interface has been installed on one end of the power cord, and a suitable power plug with grounding shall be installed on the other end. Installation must follow the manufacturers instructions. The table below gives some tips for plug and pin connections. If not sure or questionable, consult a qualified electrician.

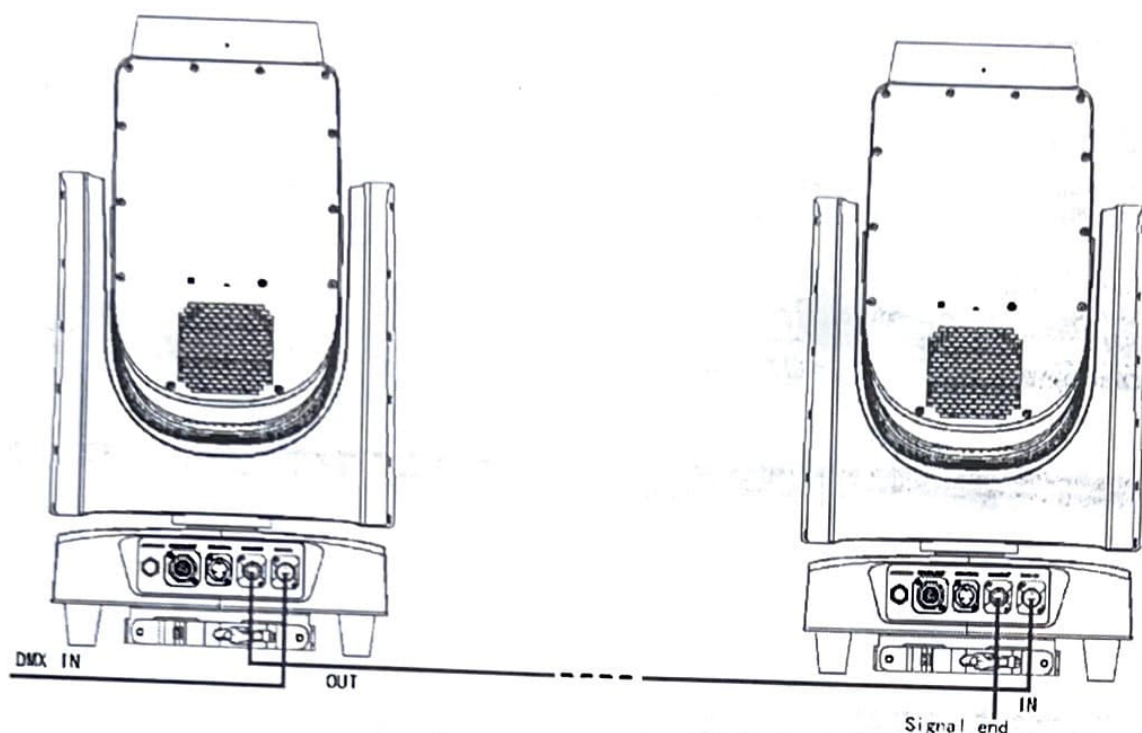


AC100V The power cord can connect up to 4 lamps in series

AC220V The power cord can connect up to 8 lamps in series

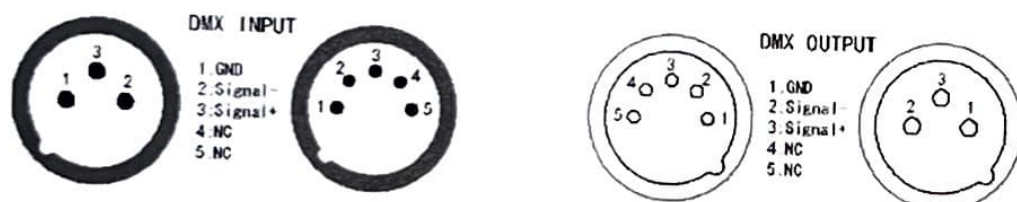
(1) Put the cable through the bushing and strain relief													
(2) Strip the cable in the size as shown													
(3) Insert the conductor of the cable into the terminal of the inner core (refer to the wiring method on the right) and then lock with a torque of 0.7 Nm.	<table border="1" data-bbox="791 680 1352 826"><thead><tr><th>Wiring</th><th>VDE</th><th>UL</th></tr></thead><tbody><tr><td>L</td><td>Brown</td><td>Black</td></tr><tr><td>N</td><td>Blue</td><td>White</td></tr><tr><td>Ground</td><td>Green/Yellow</td><td>Green</td></tr></tbody></table> 	Wiring	VDE	UL	L	Brown	Black	N	Blue	White	Ground	Green/Yellow	Green
Wiring	VDE	UL											
L	Brown	Black											
N	Blue	White											
Ground	Green/Yellow	Green											
(4) Push the inner core component into the housing with the strain relief. The protruding rib of strain relief should correspond to the protruding rib of inner core component. And the two protruding ribs should correspond to the two grooves inside the housing.													
(5) After the assembly of the strain relief, inner core component and housing, tighten the bushing in a clockwise direction with a torque of 2.0 Nm.													





## Signal connection

DMX signal via XLR Cannon insert, defined as follows:

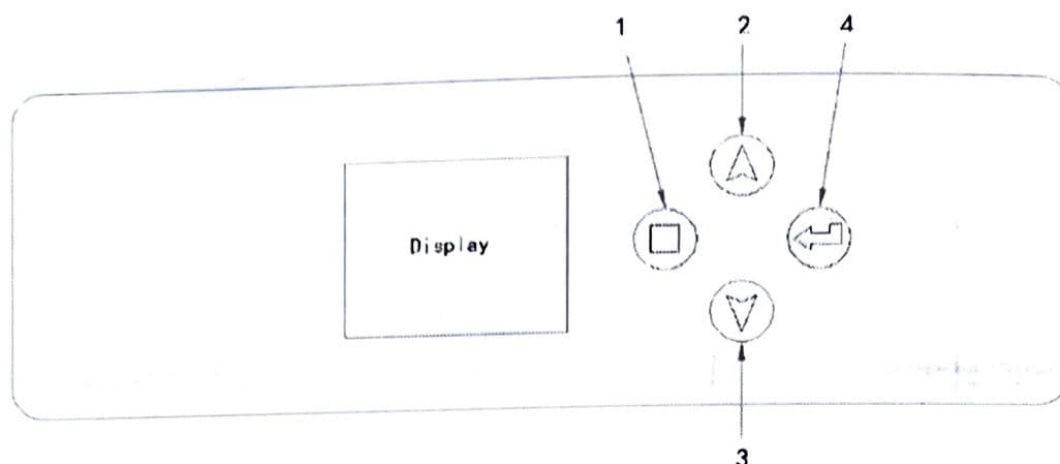


1. Connect a DMX signal line from the controller to the lamp signal input port
2. Connect one DMX signal line to the next lamp from the lamp signal output port
3. The DMX signal line can only be connected in series. In parallel, please use the signal distributor
3. Interspan a terminal resistance between the 2 and 3 feet of the last lamp signal output

## Reliability tips

- Using a shielded twisted pair designed for RS-485, the connection distance of the signal is generally 150 meters, and a signal amplifier is used for long-distance transmission
- Branch driver (signal in parallel) requires a signal distributor
- A 120 ohm 1 / 4 watt resistance is crossed between the 2 and 3 feet of the last lamp signal output to avoid signal reflection interference, so that the resistance should be connected to the respective terminals

## Lighting setting



- 1- -MENU (menu key) 2- -UP (upper key) 3- -DOWN (lower key) 4- -ENTER (confirmation key)
- Key lock: touch the menu button and confirmation button in 3 seconds

## Menu structure

DMX地址 DMX Addr	红色背景时地址码加减1, 黑色背景时地址码按通道模式加减			
通道模式 Channel Mode	16			
	14			
运行模式 Run Mode	DMX			
	用户 User			
	自走 Auto			
手控 Manual	锁定手控 Lock Manual Ctrl	否 No		
		是 Yes		
	X轴 Pan			
	Y轴 Tilt			
	X轴旋转 Pan Rot			
	颜色 Color			
	频闪 Strobe			

	调光 Dimmer			
	固图 Gobo			
	棱镜 Prism			
	棱镜自转 Prism Rot			
	雾化 Frost			
	调焦 Focus			
复位 Reset	整机复位 Reset All			
	XY轴 Pan Tilt			
	头部复位 Head Reset			
运行设置 Run Settings	主从模式 M/S Mode	从机 Slave		
		主机 Master		
	XY轴设置 Pan/Tilt Settings	X轴反向 Pan Reverse	否 No	
			是 Yes	
		Y轴反向 Tilt Reverse	否 No	
			是 Yes	
	调光曲线 Dim Curve	线性 Linear		
		对数 Log		
		S曲线 S-Curve		
		开方 Square Root		
		平方 Square		
	LED模式 LED Mode	标准 Standard		
		高亮 High Light		



		静音 Silent		
	自编程 User Program	手工编辑 Manual	步数01 Step01 . . . . . 步数12 Step12	时间 Time
				通道01 Chn01
				通道02 Chn02
				通道03 Chn03
				通道04 Chn04
				通道05 Chn05
				通道06 Chn06
				通道07 Chn07
				通道08 Chn08
				通道09 Chn09
				通道10 Chn10
				通道11 Chn11
				通道12 Chn12
				通道13 Chn13
				通道14 Chn14
		录制DMX Record	选择步数 Select Step	01—012
			时间 Time	
			录制 Record	
		全部清零 Clear	密码 Input PSW	
	无信号时 If No DMX	开机时 Power On	居中 Middle	
			无效果	

			No Effect	
			用户 User	
			自走 Auto	
		运行时 Run Time	保持 Keep	
			闭关 Shutter Off	
高级设置 Advanced Settings	偏移量 Adj Offset	密码 Input PSW	000	
	显示屏 LCD Display	休眠 Sleep	30秒 30Sec	
			2分钟 2min	
			10分钟 10min	
			无 No	
		翻转 Flip	否 No	
			是 Yes	
		自动锁屏 Auto Lock	是 Yes	
			否 No	
		忽略错误 Ignore Err	否 No	
			是 Yes	
	工厂设置 Factory Setting	密码 Input PSW		
	微调恢复 Adj Recover	密码 Input PSW		
	恢复出厂设置 Restore Defaults	密码 Input PSW	221	
设备信息 Device Info	光源使用时间 Lamp Hours			
	设备使用时间 Fixture Hours			
	光源时间清零 Clear Lamp Hours	密码 Input PSW		

	头部风机01 Head Fan1			
	头部风机02 Head Fan2			
	头部风机03 Head Fan3			
	激光温度 Laser Temp			
	色轮温度 Color Wheel Temp			
	DMX值 DMX Value			
	错误 Error			
	测试模式 Test Mode	加热棒 Heating Rod	关 Off	
			开 On	
		风机测试 Fan Test	风机01 Fan01	0-101%
			风机02 Fan02	0-101%
			风机03 Fan03	0-101%
			风机04 Fan04	0-101%
			风机05 Fan05	0-101%
			风机06 Fan06	0-101%
语言 (Lang)	中文			
	English			



# Channel data

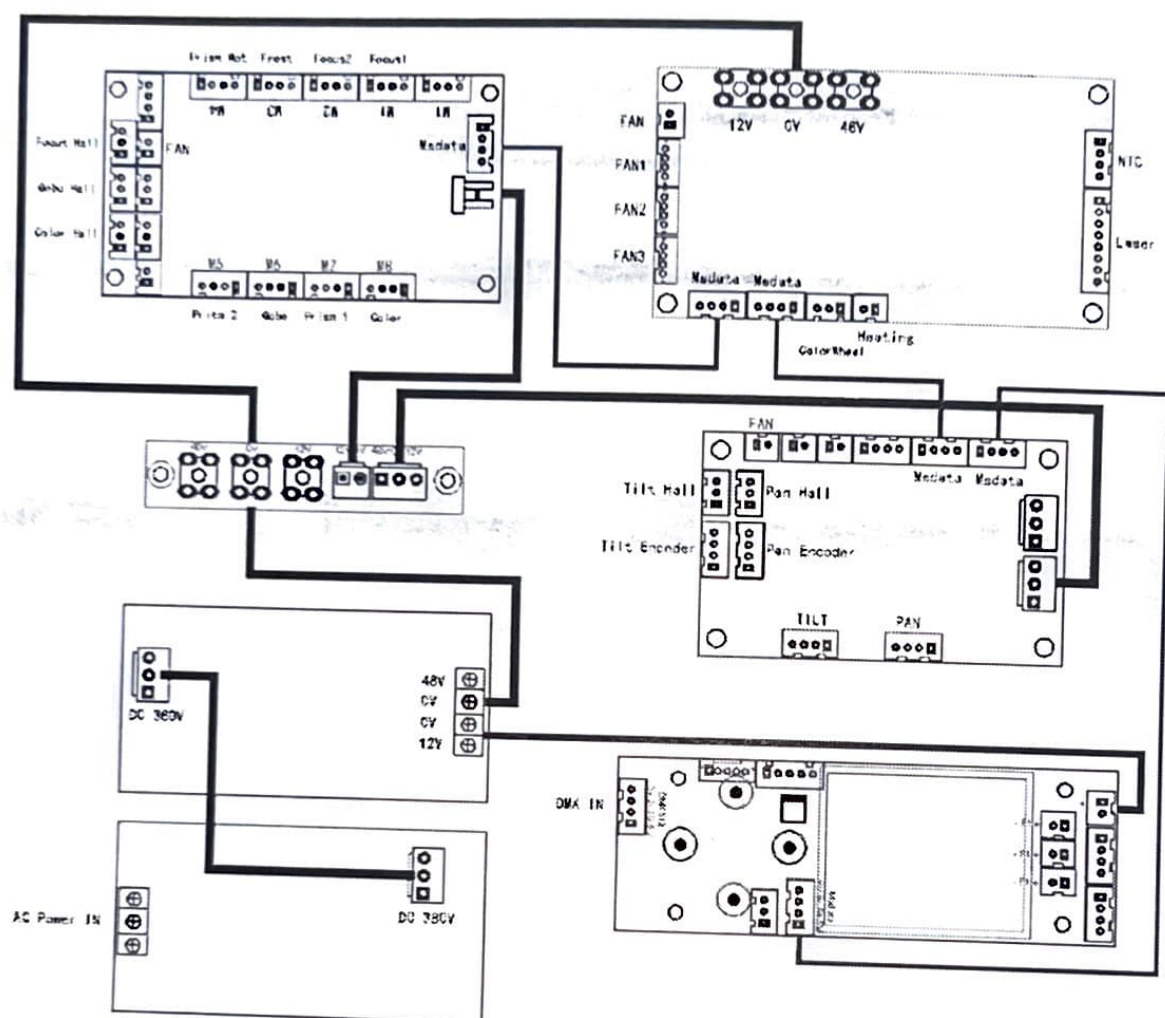
14CH	16CH	FUNCTION	VALUE	
1	1	颜色 Color	0—4	WHITE
			5—8	WHITE+RED
			9—12	RED
			13—17	RED+ORANGE
			18—21	ORANGE
			22—25	ORANGE+AQUAMARINE
			26—29	AQUAMARINE
			30—34	AQUAMARINE+GREEN
			35—38	GREEN
			39—42	GREEN+LIGHT GREEN
			43—46	LIGHT GREEN
			47—51	LIGHT GREEN+LAVENDER
			52—55	LAVENDER
			56—59	LAVENDER+PINK
			60—63	PINK
			64—68	PINK+YELLOW
			69—72	YELLOW
			73—76	YELLOW+MAGENTA
			77—81	MAGENTA
			82—85	MAGENTA+CYAN
			86—89	CYAN
			90—93	CYAN+CTO 260
			94—98	CTO 260
			99—102	CTO 260+CTO 190
			103—106	CTO 190
			107—110	CTO 190+CTB 8000
			111—115	CTB 8000
			116—119	CTB 8000+BLUE
			120—123	BLUE
			124—127	BLUE+WHITE
			128—255	ROTATION SLOW—FAST
2	2	频闪 Strobe	0—3	CLOSED
			4—103	STROBE SLOW—FAST
			104—107	OPEN
			108—207	PULSATION SLOW—FAST
			208—212	OPEN
			213—251	RANDOM STROBE
			252—255	OPEN
3	3	调光 Dimmer	0—255	DIMMER 0—100%
4	4	图案	0—3	OPEN

		Gobo	4—7	GOB01
			8—11	GOB02
			12—15	GOB03
			16—19	GOB04
			20—23	GOB05
			24—27	GOB06
			28—31	GOB07
			32—35	GOB08
			36—39	GOB09
			40—43	GOB010
			44—47	GOB011
			48—51	GOB012
			52—55	GOB013
			56—59	GOB014
			60—63	GOB015
			64—67	GOB016
			68—71	GOB017
			72—75	GOB018
			76—79	GOB019
			80—117	ROTATION FAST—SLOW
			118—121	STOP
			122—159	ROTATION SLOW—FAST
			160—165	GOB02 SHAKE
			166—171	GOB03 SHAKE
			172—177	GOB04 SHAKE
			178—183	GOB05 SHAKE
			184—189	GOB06 SHAKE
			190—195	GOB07 SHAKE
			196—201	GOB09 SHAKE
			202—207	GOB010 SHAKE
			208—213	GOB011 SHAKE
			214—219	GOB012 SHAKE
			220—225	GOB013 SHAKE
			226—231	GOB015 SHAKE
			232—237	GOB016 SHAKE
			238—243	GOB017 SHAKE
			244—249	GOB018 SHAKE
			250—255	GOB019 SHAKE
5	5	棱镜 Prism	0—63	OPEN
			64—127	PRISM1
			128—191	PRISM2
			192—255	PRISM1+PRISM2

6	6	棱镜旋转 Prism Rot	0—63	POSITION INDEX
			64—127	CCW FAST--SLOW
			128—191	CW SLOW--FAST
			192—207	ROTATE BACK AND FORTH 90 ° , SLOW--FAST
			208—223	ROTATE BACK AND FORTH 180 ° , SLOW--FAST
			224—239	ROTATE BACK AND FORTH 270 ° , SLOW--FAST
			240—255	ROTATE BACK AND FORTH 360 ° , SLOW--FAST
	7	棱镜宏 Prism Macro	0—15	UNUSED RANGE
			16—55	PRISM 1 FREE SWITCHING, SLOW--FAST
			56—95	PRISM 2 FREE SWITCHING, SLOW--FAST
			96—135	PRISM 1 AND 2 FREE SWITCHING, SLOW--FAST
			136—175	PRISM 1 SELECTION, PRISM 2 FREE SWITCHING, SLOW--FAST
			176—215	PRISM 2 SELECTION, PRISM 1 FREE SWITCHING, SLOW--FAST
			216—255	PRISM 1 AND PRISM 2 SWITCH TO EACH OTHER, SLOW--FAST
7	8	雾化 Frost	0—127	OPEN
			128—255	FROST INSERTED
8	9	调焦 Focus	0—255	FAR--NEAR
9	10	水平 Pan	0—255	PAN MOVEMENT
10	11	水平微调 Pan Fine	0—255	PAN MOVEMENT FINE
11	12	垂直 Tilt	0—255	TILT MOVEMENT
12	13	垂直微调 Tilt Fine	0—255	TILT MOVEMENT FINE
13	14	水平旋转 Pan Rot	0—127	UNUSED RANGE
			128—189	CCW FAST--SLOW
			190—193	STOP
			194—255	CW SLOW--FAST
14	15	复位 Reset	0—25	UNUSED RANGE
			26—76	EFFECT RESET
			77—127	P/T RESET
			128—255	RESET ALL
	16	运行模式 Run Mode	0—50	UNUSED RANGE
			51—100	Silent, Stop for 3 seconds and enable
			101—150	Standard, Stop for 3 seconds and enable
			151—200	High Light, Stop for 3 seconds and enable
			201—255	UNUSED RANGE



### Control line diagram



## MAINTIAN

Lamps require daily cleaning. The time depends on the following factors related to the use environment and the cleaning cycle:

- Use a smoke machine, a fog machine
- High wind speed (e. g. inlet and outlet)
- Dust (e. g. stage effects, the structure of the building, and occasions required to simulate the natural outdoor environment)
- If one or more factors exist, check whether the lamp is cleaned after 100 hours of operation and check it periodically

All repairs not mentioned here shall be consulted by the technician.



### **WARN:**

**Disconnect the AC power supply before opening the lamp housing and cool the lamp completely**

- Be careful when cleaning the optical components, and work in a clean and bright place. Optical coated surfaces are fragile and easy to wipe flowers. Do not use solvents that can damage the plastic or colored surfaces.
- To maintain proper cooling, the fans and vents must be removed periodically
- Clean optical parts
- 1. Cut off the power supply and cool the lamp completely. Open the lamp enclosure.
- 2. Spray the air compressor.
- 3. Touch cotton paper with glass cleaner or pure water on cotton paper to wipe away stubborn stains. But can not wipe the surface, should gently repeat wipe.
- 4. Remove lampblack debris with alcohol cotton cloth. Glass cleaners can also be used, but use pure water to clean up the residue. Slowly clean from inside to outside.
- 5. Blow it dry with a clean and soft cloth or an air compressor.
- Clean the fan and air vents
- Use soft brushes, cotton cloth, vacuum cleaner or air compressor to remove dust from fans and vents.