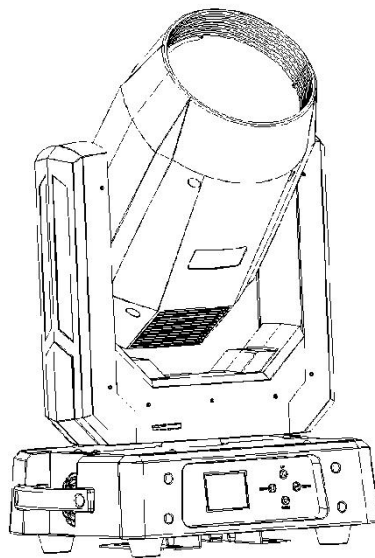


390W Beam Moving Head

BEAM390



User Manual

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Thanks for choosing our products. Please read carefully this user manual before you start to operate on the products, to avoid any damage and lose and any potential danger.

Parameter

Product: 390W Beam Moving Head

Model: BEAM390

Voltage: AC100-240V 50/60Hz

Power Consumption: 600W

Lamp Source: USHIO 390W

Color Temperature: 7500K

LifeSpan: 1500H

Ballast: Electronic Ballast

Control: DMX 512 signal RDM, 16/18CH

Color: One color plate, 14 colors+ope, semi-color effect

One six-color plate, creating rainbow effect with combination of prism

Gobo: One gobo plate, 17 gobo+open

Prisms: Two prisms, bi-rotatioal.

Standard 8 prisms+ 16 prisms, could be customized.

Optics: High-precision glass optical lens

Angel: 1.8 ° , Electric focusing

Frost: Gradient atomization

Strobe: Double-gate stroboscopic, 0.5-12 times/sec, multiple stroboscopic effects

Movement: Pan 540 degrees, 8/16Bit resolution

Tilt252 degrees, 8/16Bit resolution

Pan&Tilt photoelectric reset, when the misoperation occurs, it can automatically retrieve and reset; the three-phase phase motor makes the movement faster and smoother


Built-in overheating protection and intelligent cooling system, remote control bulb switch and power

LCD screen, Chinese and English operation interface

Ip Grade: IP20

Net Weight: 18.5kgs

Safety Information

	Warning:
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Fixture for professional use only, forbid any home use. Please read this chapter before installation or powering on or maintenance

This fixture has the risk of electric shock, burning, bulb explosion, and falling that can cause serious injury or death

Please read the following safety measures in this manual before installing, powering on, and overhauling this product, and follow the safety information on the lamp body



Electric shock protection

- ◆ Please disconnect the external power supply when opening the cover or replacing parts, or when the fixture is not in use
- ◆ Ensure that the equipment is reliable and use an AC power supply with overload and grounding protection that matches the voltage and frequency of the lamp
- ◆ Use a three-core power cable with a rated load of 5A or more
- ◆ Before use, make sure that the cable is in normal condition and suitable for the current of the connected device
- ◆ When you find that the power cable or plug is damaged, the fixture is wet or the power supply part is obviously overheated, please disconnect the power immediately
- ◆ Do not expose this product to rain or humid air
- ◆ Ensure that the equipment is reliably grounded



Lamp safety

- ◆ Long-term exposure to the ultraviolet rays generated by the unshielded discharge bulb will cause burns to the eyes and skin. Please do not look directly at the light outlet and the light bulb.
- ◆ Do not use lamps with damaged shells, light barriers, lenses, protective screens or heat shields
- ◆ If the protective screen, lens or ultraviolet screen on the lamp is damaged visible, it is damaged to the extent of failure, such as cracks or deep marks, should be replaced
- ◆ The luminaire should only be used with a complete protective cover
- ◆ The hot discharge bubble has a strong air pressure and may explode without warning.
- ◆ Therefore, when servicing the interior of the lamp body or operating the bulb, wear goggles and gloves and ensure that the lamp is sufficiently cooled
- ◆ Do not use a bulb that is broken, damaged or has any other defects. The bulb is damaged or deformed and should be replaced
- ◆ Monitor the use time and light decay of the bulb, and replace the bulb before this specification or the bulb manufacturer's rated bulb service life
- ◆ The installed bulbs must comply with relevant safety regulations
- ◆ If the quartz sphere of the bulb breaks, a small amount of mercury and poisonous gas will be released. If you are located in a small space, please evacuate as soon as possible and thoroughly ventilate the space. Wear protective gloves when collecting broken bulbs. Do not

throw away the bulbs when they are scrapped. Send these toxic and hazardous materials to a special disposal agency.



Prevent burns and fires

- ◆ The surface temperature of the fixture may be relatively high during use. Avoid contact with human body or other objects. Please allow the fixture to cool sufficiently before transporting.
- ◆ Keep combustible materials (such as fabric, wood, paper, etc.) away from the fixture at least 0.2 meters, and flammable materials as far away as possible from the equipment, and ensure that there is at least 0.1 meters of space at the air inlet and outlet
- ◆ Do not directly illuminate the surface within 10 meters
- ◆ Cover the lens or turn the lens direction during the day to prevent direct sunlight from hitting the lens, because the lens can focus the sun and cause a potential fire hazard
- ◆ When the ambient temperature exceeds 40 ° C (104 ° F). Do not use it when it is turned on
- ◆ In any case, do not modify the fixture, do not install non-original parts, do not paste any filter paper on the lens or other optical accessories, pictures



- ◆ Do not attempt to short-circuit the fuse or temperature control switch **Avoid falling injuries**
- ◆ Do not carry the fixture alone when working at height
- ◆ Use two evenly distributed light hooks on the hanger, not a single light hook
- ◆ Ensure that the bracket and hanging system can support more than 10 times the weight of the fixture
- ◆ The point of effort for lifting the fixture and hanging the safety rope shall not be on the handle of the fixture
- ◆ A safety rope must be installed, and the safety rope must be able to withstand 10 times the weight of the fixture
- ◆ Ensure that the external accessories and spreaders are completely tightened
- ◆ There should be a stable platform when installing, repairing and moving the fixture, and there should be a safety fence directly below it
- ◆ For related operations not described in this article, please consult the authorized after-sales department

Installation



Warning:

When hanging the fixture, an additional safety rope must be installed to prevent the hazard caused by the failure of the lamp hook.

The safety rope must be tied to the safety rope installation position of the fixture, and must not be installed on the carrying handle

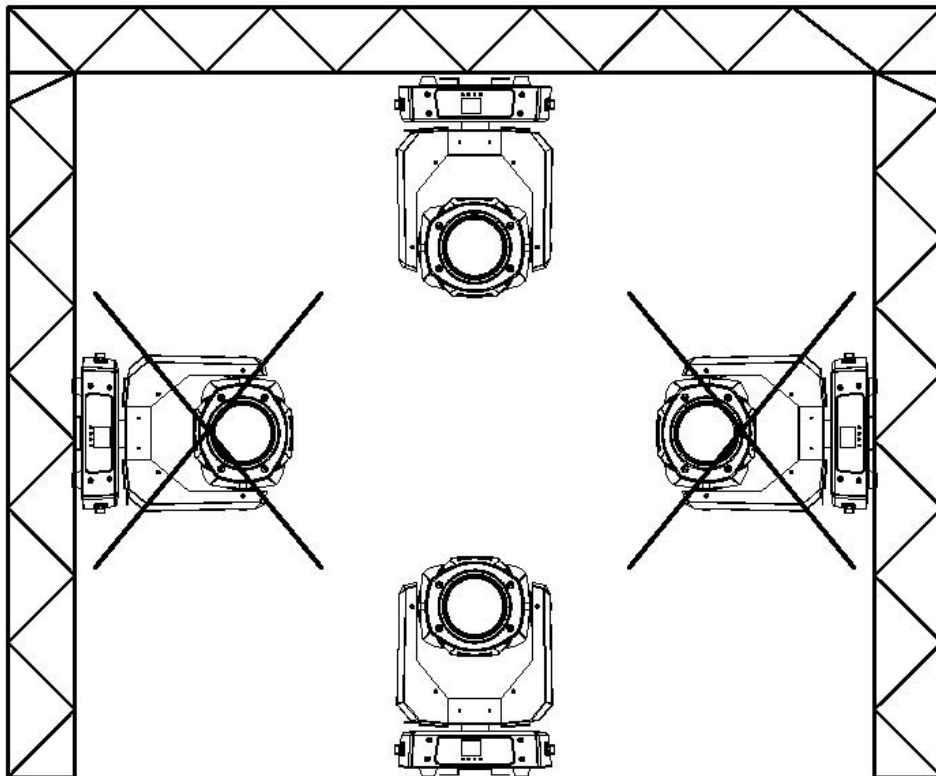
When the fixture is not firmly placed, the movement of the moving head may drive the movement of the base. Therefore, do not turn on the fixture without confirming that the fixture is placed or hung firmly.

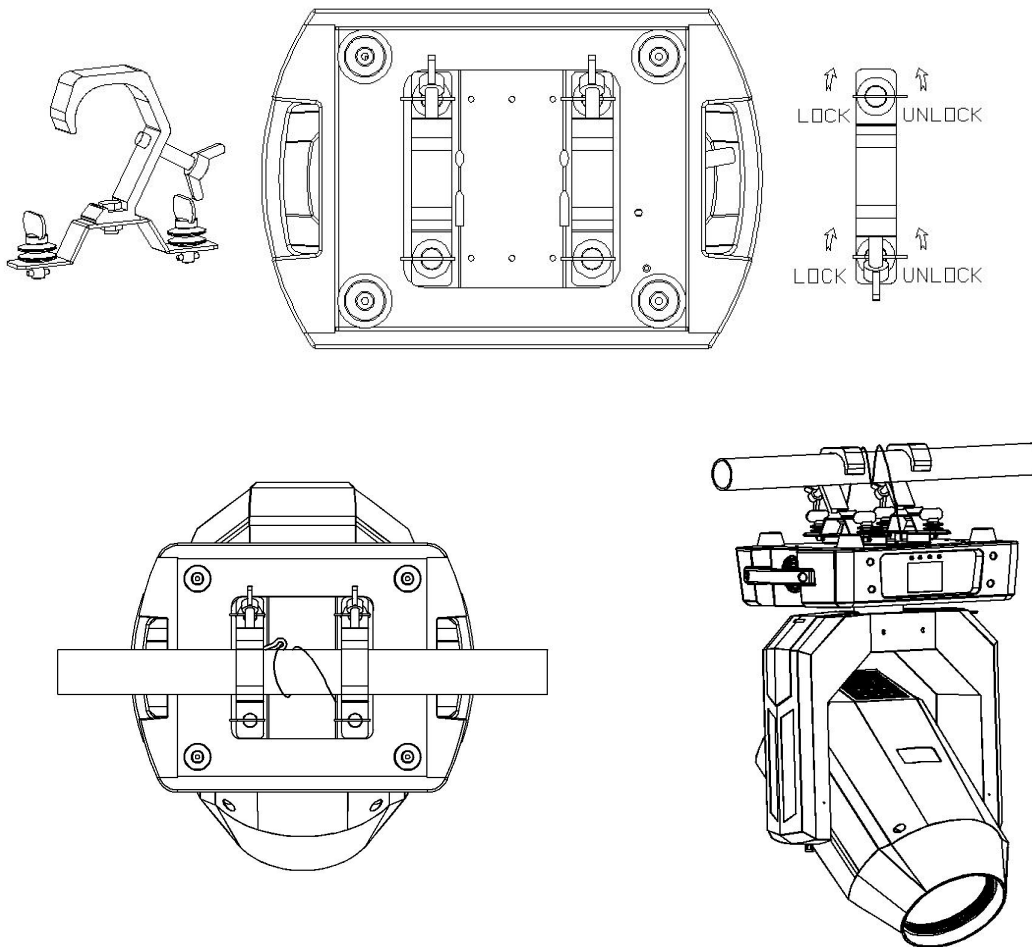


It is strictly forbidden to install and use fixture on the side!

Cover the lens or turn the lens direction during the day to prevent direct sunlight from hitting the lens,

Because the lens can focus the sun and poses a potential fire hazard.





1. Install the fixture hook on the OMEGA bracket and tighten the screws
2. Install the OMEGA bracket to the base of the fixture, and tighten the quick lock clockwise
3. 1 person on each side of the fixture, lift the fixture, clip the fixture hook into the pole and lock it tightly
4. Pass the safety rope through the base hole and tie it to the light pole

Installation Precautions:

1. Confirm that the hanging fixture hook and accessories are not damaged and can withstand 10 times the total weight of the fixture, cables and accessories, etc.
2. Pay attention to the front direction of the fixture marked on the bottom of the base of the body
3. There should be a stable platform when installing, repairing and moving the fixture, and there should be a safety fence directly under it
4. Pass the safety rope through the safety rope hole in the base of the fixture body, and tie it to the holder, not to the handle
5. Check that there should be no combustible materials within 0.2 meters of the fixture housing, no flammable materials should be blocked within 12 meters of the direct beam of the lamp,

and no flammable materials nearby

6. Check whether the lights are likely to collide with each other during movement
7. Check that the other fixtures are not directly irradiated on this fixture, the strong light will damage the protective shell of the fixture
8. Make sure that the mounting surface is level when installing it upright to avoid sliding when the lamp is running

Power supply

Warning



Must be grounded to avoid electric shock, Main supply must be insured and disconnected



Switch and ground protection

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



When the fixture power supply is connected in series, the maximum cable current cannot be higher than 20A

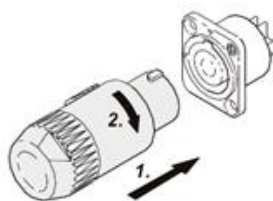
Voltage There is a switching power supply with PFC inside the fixture, and the power supply voltage is AC100V-240V 50/60Hz**Safety** 6A 5×20

Power

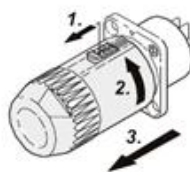
Power connection

One end of the power cord has been installed with a plug that matches the power interface of the fixture, and the other end should be installed with a suitable power plug with a grounded

three-pin plug. It must be installed in accordance with the manufacturer's instructions. The following table gives some plug pin connection suggestions. If you are not sure or have questions, please consult a qualified electrician



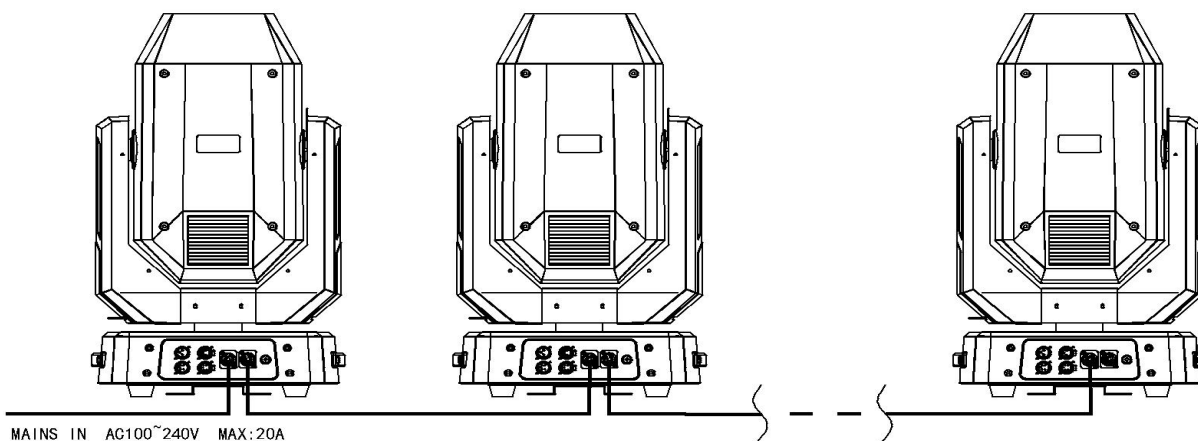
连接电源线



拆卸电源线



When the power cord is scratched, the outer protective sheath is broken or the length is too short, it should be replaced



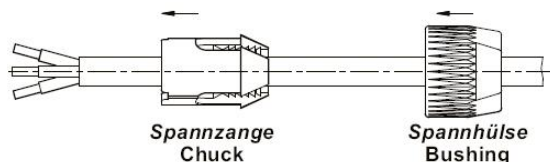
Power cable replacing



Gehäuse
Housing

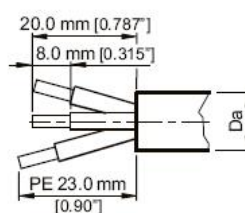
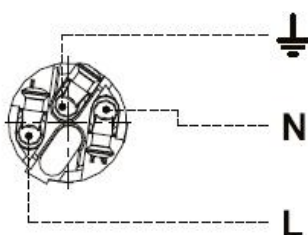



Einsatz
Insert



Spannzange
Chuck

Spannhülse
Bushing

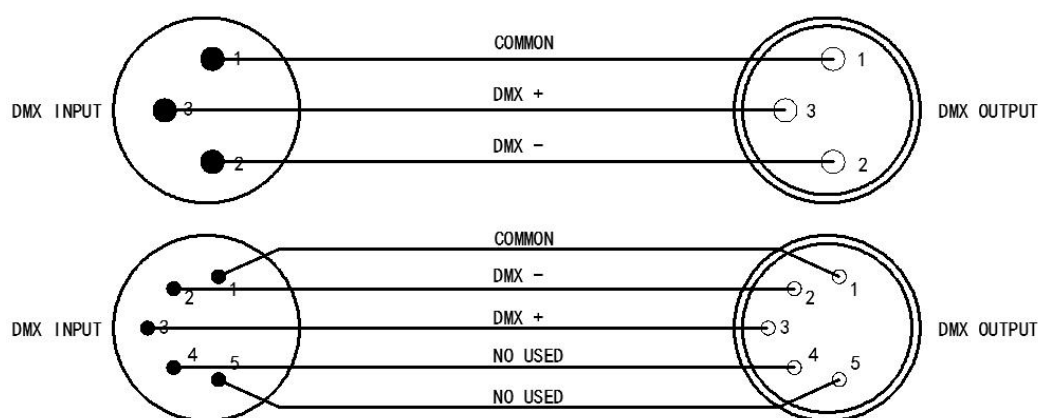


Color	Plug	Mark
Brown	Fire	L
Blue	Zero	N
Yello/Green	Ground	

1. Remove the original power cord plug
2. Cut a 1.5-meter-long cable with a specification of 3*1.5 square
3. Strip the cable according to the size in the figure above, and pass it through the plug end cap and the fastener
4. Press the core into the correct position on the compression plug L—brown N—blue
--yellow/green
5. Assemble the plug and tighten the end cap
6. Connect the other end of the power cord to a suitable, grounded three-pin plug

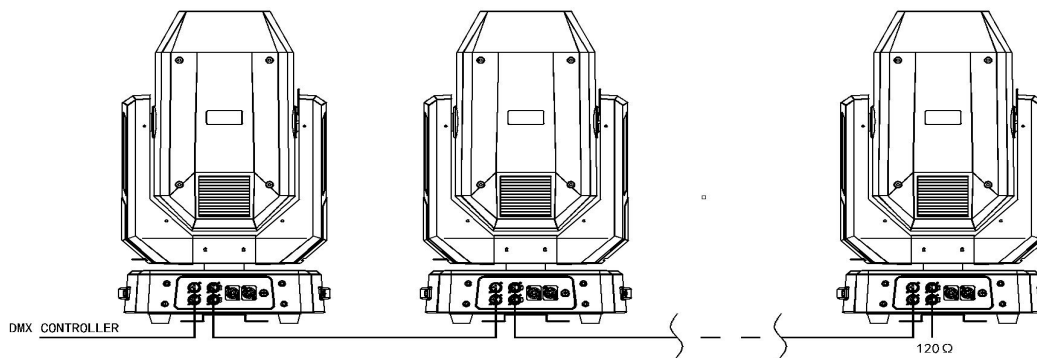
Signal connection

Fixture can input and output DMX signal through XLR plug, as follows:



When switching between 3-pin and 5-pin plug sockets, 5-pin XLR pin 4/pin 5 are not used

Data connection



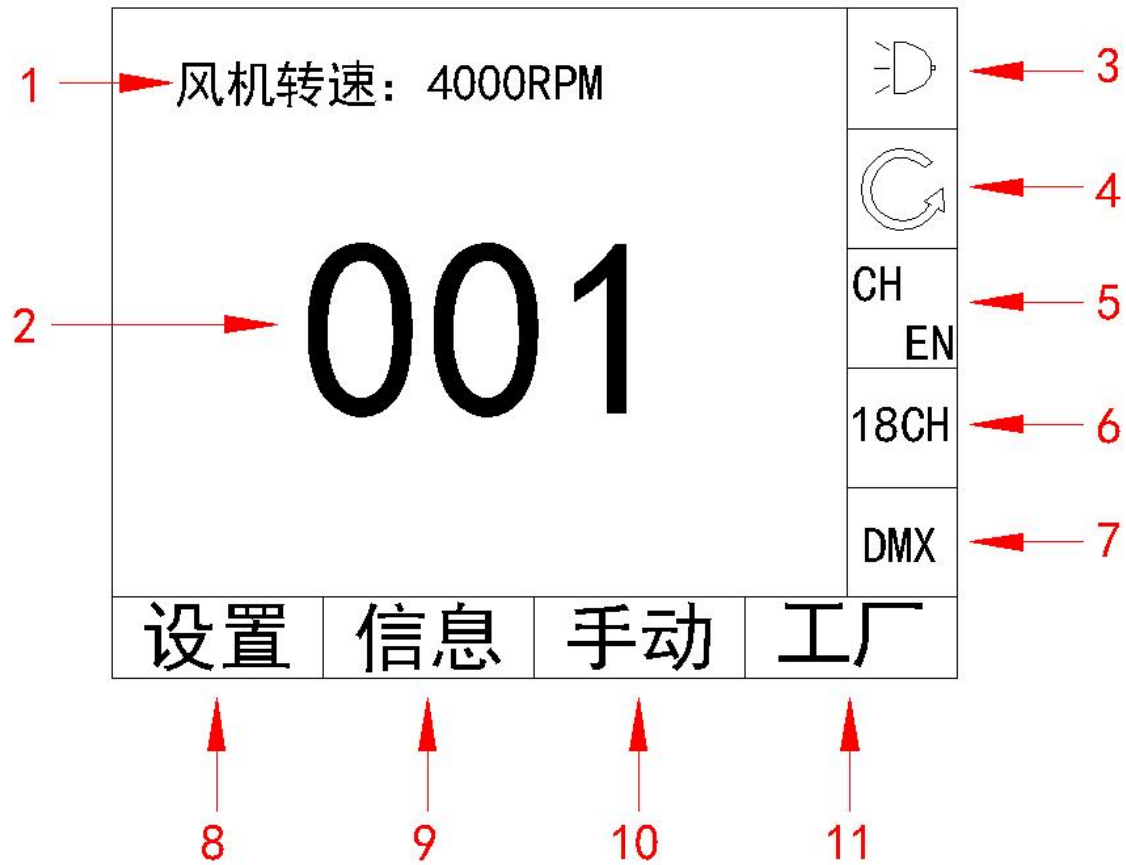
1. Connect a DMX signal line from the controller to the signal input port of the fixture
2. Connect a DMX signal line from the fixture signal output port to the next fixture
3. DMX signal lines of fixtures can only be connected in series, if you need to connect in parallel, please use a signal splitter
3. Connect a terminating resistor between the 2 pins and 3 pins of the signal output terminal of the last fixture

Reliability tips

- Use shielded twisted-pair cables designed for RS-485: standard microphone cables are not suitable for long-distance data transmission. The transmission distance of 24AGW cables can exceed 300 meters (1000 feet). For long-distance transmission, a thicker cable is required. , And preferably have a signal amplifier
- Branch drive (signal parallel) requires a signal splitter
- Connect a 120 ohm 1/4 watt resistor between pins 2 and 3 of the signal output terminal of the last lamp, so as to avoid signal reflection interference. For the same reason, if you use a splitter, you also need to connect it to the respective terminal. This resistance

Display set up

Display



- 1: Lamp fan speed detection
- 2: Lamp address code
- 3: Lamp, press the confirmation button to turn on or off the lamp, the lamp light icon turns green
- 4: Display direction reverse
- 5: Display language setting
- 6: Lamp channel setting
- 7: Lamp operation mode, DMX mode or master control mode
- 8: Lamp setting (follow-up description)
- 9: Lamp information; time information, sensor error information, software version
- 10: Manual control of lamps
- 11: Factory settings (offset settings for each function)

Display Menu

Address		
Fixture set up	Channel	18CH✓
		16CH
	Control Mode	DMX✓
		主控
	Flip	关闭✓
		打开
	Vertical Flip	关闭✓
		打开
	Optocoupler calibration	打开✓
		关闭
Display set up	No DMX status	清零✓
		保持
	Lamp on Startup	关闭✓
		打开
	Language	中文✓
		英文
Reset set up	Display flip	正常✓
		反转
	Display mode	60 秒✓
		常亮
	Pan/tilt reset	取消
		执行
	Effect reset	取消
		执行
	Overall reset	取消
		执行
	Default	取消
		执行

Channel

16CH	18CH		VALUE	
1	1	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--288	ROTATION SLOW--FAST
2	2	SHUTTR	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	DIMMER	0--255	DIMMER 0--100%
4	4	GOBO	0--3	OPEN
			4--7	GOBO1
			8--11	GOBO2
			12--15	GOBO3
			16--19	GOBO4
			20--23	GOBO5
			24--27	GOBO6
			28--31	GOBO7
			32--35	GOBO8
			36--39	GOBO9
			40--43	GOBO10
			44--47	GOBO11
			48--51	GOBO12
			52--55	GOBO13
			56--59	GOBO14
			60--63	GOBO15
			64--67	GOBO16
			68--71	GOBO17
			72--113	ROTATION FAST--SLOW
			114--117	STOP
			118--159	ROTATION SLOW--FAST
			160--166	GOBO2 SHAKE
			167--172	GOBO3 SHAKE
			173--179	GOBO4 SHAKE
			180--185	GOBO5 SHAKE
			186--191	GOBO6 SHAKE
			192--198	GOBO7 SHAKE
			199--204	GOBO8 SHAKE
			205--211	GOBO9 SHAKE
			212--217	GOBO10 SHAKE
			218--223	GOBO11 SHAKE
			224--230	GOBO12 SHAKE
			231--236	GOBO13 SHAKE
			237--243	GOBO14 SHAKE
			244--249	GOBO16 SHAKE
			250--255	GOBO17 SHAKE
	5	PRISM 1	0--127	OPEN
			128--255	PRISM1 INSERTED

	6	PRISM 1 ROTATION	0--127	POSITION INDEX
			128--191	ROTATION FAST--SLOW
			192--255	ROTATION SLOW--FAST
	7	PRISM 2	0--127	OPEN
			128--255	PRISM1 INSERTED
	8	PRISM 2 ROTATION	0--127	POSITION INDEX
128--191			ROTATION FAST--SLOW	
192--255			ROTATION SLOW--FAST	
5		PRISM	0--63	OPEN
			64--127	PRISM 1
			128--191	PRISM 2
			192--255	PRISM 1+2
6		PRISM ROTATION	0--127	POSITION INDEX
			128--191	ROTATION FAST--SLOW
			192--255	ROTATION SLOW--FAST
7	9	7 COLOR	0--127	OPEN
			128--255	7 COLOR
8	10	FROST	0--288	FROST 0--100%
9	11	FOCUS	0--255	FAR--NRAR
10	12	PAN	0--255	PAN MOVEMENT
11	13	PAN FINE	0--255	PAN MOVEMENT FINE
12	14	TILT	0--255	TILT MOVEMENT
13	15	TILT FINE	0--255	TILT MOVEMENT FINE
14	16	P/T SPEED	0--255	P/T MOVING FAST--SLOW
15	17	RESET	0--25	SAFE
			26--76	EFFECT RESET
			77--127	P/T RESET
			128--255	RESET ALL
16	18	LAMP	0--25	SAFE
			26--100	LAMP OFF
			101--255	LAMP ON

Maintain and clean

Fixture needs daily maintenance and clean. Duration depends on the environment as below:

- Use of smoke machine, fog machine
- Places with high wind speeds (eg: inlet&outlet)
- Dust (eg: Such as stage effects, building structure and occasions that need to simulate the natural outdoor environment)
- If there are one or more factors, check whether the fixture needs to be cleaned every 100 hours of operation, and check again periodically

All repairs not mentioned here should be consulted with a technician.



Warning:

Please disconnect the AC power before opening the fixture housing and let the lamp cool down completely

Be careful when cleaning optical components and work in a clean and bright place. The optical coating surface is fragile and easy to scratch. Do not use solvents that can damage plastic or colored surfaces.

To maintain proper cooling, the fans and vents must be dusted off periodically

Clean the optics

1. Cut off the power and let the lamp cool down completely. Open the lamp housing
2. Use an air compressor to spray dust.
3. Dip tissue paper with glass cleaner or pure water to wipe off stubborn stains. However, the surface should not be rubbed, and the rubbing should be repeated gently.
4. Use alcohol cotton cloth to remove oily fume and debris. Glass cleaner can also be used, but pure water should be used to clean up the residue. Clean slowly in circular motions from the inside to the outside.
5. Dry with a clean and soft cloth or air compressor.

➤ Clean the fans and vents

Use a soft brush, cotton cloth, vacuum cleaner or air compressor to remove dust from fans and vents.