eco°Stage

LED Moving Head Light

Net Weight：19.1KG

Color Temperature：5800 K

ITEM

STATEMENT

The product is good packing when ship out the factory. All users should strictly abide by the warnings and instructions stated in this manual, any damage and results due to misuse and the neglect of this operating manual will be excluded from the deal responsibility this manual will not informed in additionally if have technical changes.

1、PRODUCT INTRODUCTION

Thank you for choose this HOT BEAM280 products, this model is the moving head light which is

the latest development of the smart, efficient products, beautiful shape, smooth R & D, combined with the advanced technology of today's stage lighting products with international advanced electronic control technology and excellent user-friendly industrial design , fully comply with CE standard, accepted international standard DMX512 signal mode.

Production enforce standard IEC 60598-1:2014，IEC60598-2-17:2017

Channels mode: 16/24 CH；

light source:LED170；

power: 110-240V,50/60Hz；

Total power: 300W；

Display: 2.8inch   screen display,can reverse:180°；

Color wheel: 9 colors+white；；

Rotation GOBO: 9 GOBO+white+effect；

Rotation GOBO: 9 GOBO+ white,changeable；Gobo size diameter: 15.9mm, image diameter:13mm；

Prism: 8facet prism+3facet prism;fixed frost function；

Beam angel:3.5～37°；

Dimmer: 0—100% linear adjustment,supports electronic strobe and adjustable strobe effect, supports strobe macro function, lens group optical system, electric focusing, linear zoom.

The photoelectric reset system is used. After the error occurs, the reset can be automatically retrieved.

Positioning technology: The magnetoelectric positioning system uses magnetic devices instead of the traditional Hall positioning system, with higher accuracy and reliability.

USB:USB connector can set dmx address without power switch on and upgrade the software.

Pan: 540°,8/16Bit；   Tilt: 270°,8/16Bit；

IP Rate: IP20；

2、**FIXTURE SIZE** ：368mm（L）×266mm（W）×619mm（H）
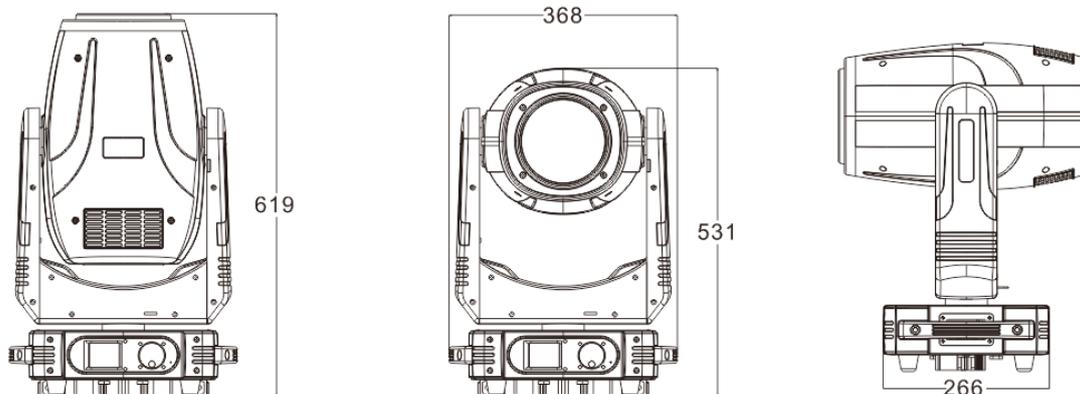
3. 3. PARTS INTRODUCE

01 — Lens
02 — Body
03 — Tilt Lock
04 — Arm
05 — Pan Lock
06 — Handle
07 —Light base

01-Display
02- Control wheel

01 — DMX IN
02 — DMX OUT
03 — Power switch
04 — Power in
05 — Fuse

4、SAFETY INFORMATION

5、**4.1.1** SAFETY WARNING MESSAGE

1、This product is only suitable for professional use, and does not apply to security for other purposes.After you got the lights, please check the package whether have any damage caused by transportation. If there is any damage, do not use this fixture, and please contact the dealer or manufacturer as soon as possible.
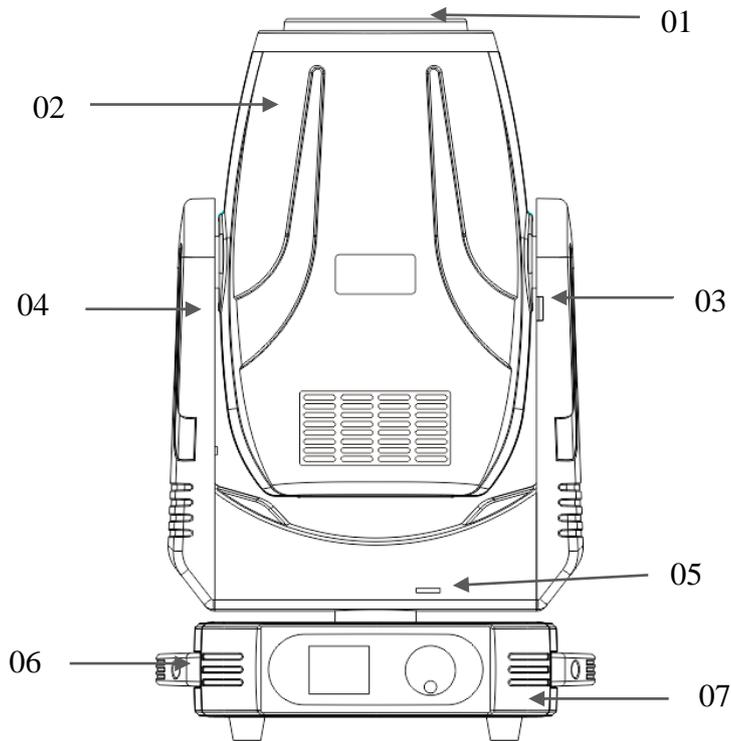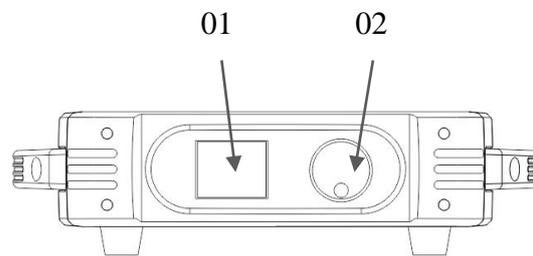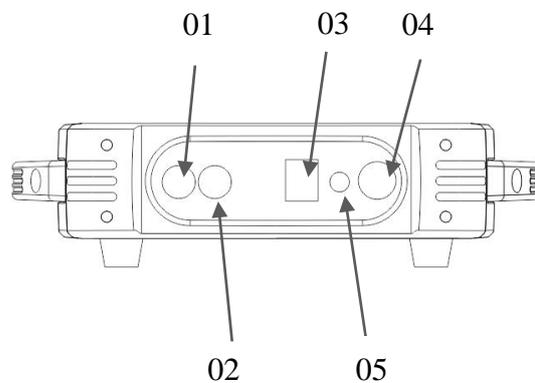
2、This product is only suitable for indoor, IP20 protection class. Lamps should be kept dry to avoid Moisture, overheating or dusty environment. Prevent lamps come into contact with water or any other liquid.The use of this product should pay attention to: fire, heat, electric shock, ultraviolet radiation, the lamp to explode or Shedding caused serious or fatal injury.

4.1.2 NEED TO READ THE INSTRUCTIONS BEFORE USE ENERGIZED OR

INSTALLING

1、Follow through the operation of security methods and pay attention to the warning signs on the specification and equipment.

2、 If you have any problem for how to safely operate the equipment. Please contact your dealer.

4.1.3 OPERATION IS PROHIBITED

In automatic mode, do not manually force equipment or equipment.

4.1.4 POINTING IS PROHIBITED

Never point the lights directly to the sun or other strong light source.

4.2 TO PREVENT FALLING WOUNDING

1、Please don't move the package by one person only.

2、When Hang the fixture, please must verify that the facilities to be able to withstand the weight of the lamps at least 10 times more.

3、Please make sure the Mounting hardware is strong enough no any damage, and insurance for the safety rope as auxiliary security fixed in other facilities will need to verify before installation. Installing or removing the equipment, to make the pulley below the work location.

4.3 UA PROTECTION AND THE BULB EXPLOSION

1、Prohibit straight viewpoint with exposed bulbs to avoid UV damage to the eyes;

2、Do not use the equipment without the lens screen and the lid;

The lens and the light head covers should be timely replaced if any damage to rupture.

3、The Fixture should be used with the protection screen together.

4.4.1   ANTI-HIGH TEMPERATURE (Rated maximum ambient temperature)

t_a =40°C

Please don't use the equipment if the temperature above 40℃.

4.4.2 ANTI-HIGH TEMPERATURE (Rated maximum ambient temperature)

t_c =90°C

The maximum temperature that can be reached on the external surface of the fitting, in a thermally steady state ,is 90℃.

4.5 IP   PROTECTION

The product are certified at IP 20 levels only. Adequate additional protection should be taken for outdoor use. All lamps, lights and their fittings should be kept dry. Overheating dust and excessive humidity must be avoided.

4.6 BURST PREVENTION
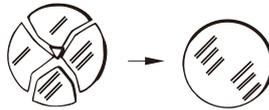
The product are certified at IP 20 levels only. Adequate additional protection should be taken for outdoor use. All lamps, lights and their fittings should be kept dry. Overheating dust and excessive humidity must be avoided.

4.6 PREVENTION OF ELECTIC SHOCK

1、The electrical connection must only be carried out with corresponding qualifications;

2、Before installing, make sure you use the power voltage lamps must comply with the identified power, voltage and have an overload or leakage protection;

3、Each lamp must be properly grounded, installed in accordance with the relevant standards;

4、Cut off the power when stall or replace the lamp and the fuse;

5、Prohibit the use of a lightning storm or wet environment.

4.7 MAINTENANCE

Before starting any maintenance work or cleaning the projector,cut off power from the mains supply.After switching off,do not remove any parts of the fitting,to avoid getting burnt for at least 30 minutes.After this time the likelihood of the lamp exploding is virtually nill.

The fitting is designed to hold in any splinters produced by a lamp exploding.The lenses must be mounted and,if visibly Damaged,they have to be replaced with genuine spares.

4.8 TO PREVENT BURNING OR FIRE

1. The fixture can be mounted directly on the surface of ordinary combustible material.
2. Do not short-circuit temperature protection switch or fuse, use the specified type of fuse.
3. The equipment must be installed away from inflammable and explosive materials.
4. The equipment should be projected range of 10 meters away objects and projectiles temperature less than 60 ° C 12 m
5. Fan or ventilation, at least in the range of 0.5 meters can not be an obstacle.
6. Do not place any object on the lens.
7. Handling at least allow the device to cool for 20 minutes.
8. Do not replace the non-original parts.
   Packed with fly-case of 2in 1 OR 1 in 1 and carton box.

5、PACKAGE

5.1 ATTACH FOLLOW ACCESSORY

ACCESSORY

CONTENT	QUANTITY
USER MANUL	1
Safety Steels(Selection)	1
Clamps(Selection)	2
SIGNAL CABLE	1
drawbridge	2

5.2 TRANSPORT PROTECT LOCK

In order to protect the light, there is a protect lock; During the transport , the lock catch position need lock in the center, and the fixture keep in vertical state.

5.3 ABOUT PACKING

1. Before packed, make sure power is off, and wait for at least 20mins for cooling down.
2. Before clean the fixture, make sure X, Y axis protect lock closed.
3. After packed by plastic bag, high-lift the fixture with two handles besides the product. put the product into the fly-case up-side-down.
4. After packed the product, put the accessory into the accessory case, then closed and lock the

fly-case.

5. Fly-case only up stacked two layers. Prohibited upside down

6. When packed with carton box, equipment should be put into the foam first, then set into a carton, pay attention to the vertical position.

5.4 UNPACKING

Note: Before unpacking check the damage is whether due to the transportation or not, if you find any such damage, please do not use this item, and contact with the dealer or manufacturer as soon as possible.

1. Open the fly-case, and discover the inside plastic bag.

2. High-lift the product by two handles beside the bottom base and move it out.

3. Before power on, make sure you have opened the X, Y axis lock!

6、INSTALLATION STANDARD

6.1 INSTALLATION OF THE RIGGING

The product can be placed on the stage or mounted on any supporting frame. The quick locking system can quickly and easily press 2 directions to lock on the bracket.

6.2 EQUIPMENT FIXATION

1. Before installation, it is necessary to verify that the gear clamp is not damaged and can bear at least 10 times the weight of the equipment. The verification building can bear the weight of at least 10 times the total weight of the equipment and fixture cable attached equipment.

2. The fixture is mounted on the base of the lamp body, inserts the fastener into the mounting hole of the base, and holds the handle of the fastener to lock the 1/4 ring clockwise, and the other fasteners are installed in the same way.

3. Install a safety rope that can withstand 10 times the weight of the equipment.

4、Check whether the vertical lock has been opened. There is no combustible or attached in the verification equipment within 3 meters.Near other flammable objects.

ATTENTION ! ⚠

Must use two clamps fix the fixture,and tighten the clamps with1/4 lock, only fully clockwise rotate 90 °then can lock the fasteners. Add one safety insurance rope on the hole of light base. pls attention not connect to the transport handle.

6.3 DEVICE CONNECTION

Attention！ ⚠

1、 One product only can accept one input one output.

2、 The input is a DMX. The output is by means of a 3 core socket as follows.

Pin 1: +ve polarity signal

Pin2; -ve polarity signal

Pin3: Grounded.

3、DMX512 cable must use the professional shielded twisted pair cable; standard loudspeaker cable is not reliable to control the long-range data.24AWG cable is suitable for more than 300 meters long-distance signal transmission and must add DMX 512 signal amplifier.

4、Do not use two outputs to separate the connection, if separate a continuous connection to branch, DMX512 splitter is necessary.If use the DMX512 splitter. At first connect DMX512 Splitter input terminal to controller .And then connected from the splitter output terminal to next device.Do as above guide to connect other device, and finally coupled with terminal insertion.

7. AC POWER

7.1 VOLTAGE, POWER, FUSE SPECIFICATION

Input Voltage	Frequency	Total Power
110~240V	50/60Hz	300W

Fuse voltage	Electronic current	Specification
250V	8A	5×20

7.2 POWER PROTECT

The equipment must be operated by professionals; Make sure that the voltage of power supply must be comply with the voltage identified on the lamp, and must have an overload or leakage electrical protection.

ATTENTION ！

Factory has equipped the standard 3 pin plug socket. Connect the power supply as below table. If lamp cable is damaged, replacement should be operate by factory or qualified staff. Any question, please contact professionals or talk to a qualified electrician.

Live wire (L)	Null (N)	Ground wire	
BROWN	BLUE	Yellow +Green	

8、LED LAMP MODEL AND REPLACE

8.1　LED LAMP DESCRIPTION

LED LAMP MODEL	POWER OF LAMP	LIFE/HOUR	COLOR TEMPERATURE
LED 170	**170 W**	**20000** HOURS	**5800K**

8.2 LED LAMP REPLACE

WARNING!

The light source of this luminaire is a non user replacement light source. If it is broken, please replace it by the manufacturer or its agent service provider or a qualified person.

9、CONTROL PANEL

DISPLAY

CONTROL WHEEL

DISPLAY

Display: to display all information of fixture.

Control wheel: can turn right,left and enter.

10、 CONTROL PANEL MENU OPERATE

Main Menu	Submenu 1	Submenu2	Function SET	Function description
DMX ADDRESS	<<		1-512	To address 1
	<			Address +1
	>			Address-1
	<<			001-512
			SAVE	save and back
			ESC	ESC
FEATURES SETTING	Run Mode:		DMX	DMX
			Wire	not active
			Aoto	not active

			24CH	24CH model
	Channel Mode:		**16CH**	16CH model
	Pan Reverse:		**Off**	Pan Scan Normal
			On	Pan Scan Reverse
	Tilt Reverse:		**Off**	Tilt Scan Normal
			On	Tilt Scan Reverse
	Opto Check:		**Off**	Pan/Tilt optical sensor testing off
			On	Pan/Tilt optical sensor testing on
	PT Speed:		**Noml**	Pan/Tilt Scan Speed setting nomal
			Slow	Pan/Tilt Scan Speed setting slow
			Fast	Pan/Tilt Scan Speed setting fast
	Singl Clear:		**Off**	keep signal data
			On	clear signal data
	Full Colour:		**Off**	half color function
			On	full color function
	ShortCut:		**Off**	Shortcust off for colors and GOBOS
			On	Shortcust open for colors and GOBOS
			ADV.	(ADVANCED FUNCTION)
			RST.	Re-setting and back
			SAVE	Save and back
			ESC	Save and back
ADVANCED FUNCTION	Redress		ZEROSETTING	
		Pan rotation	0-255	Adjust the begging state
		Tilt rotation		
		focus		
		zoom		
		Cyan+blue		
		Magenta		
		Yellow		
		Color temperature		
		Color wheel		
		Dimming		
		aperture		
		Fixed GOBO		
		Prism Rota		
		GOBO Rota		
		Prism		

			Prism Rota		
			FROST		
			ESC		back
	ChanlDef				No function
	FactSett				For factory only
	UseManage	Limit		**LimitTime**	No function
				limitCont	No function
		DefConfig		**YES**	Return to default
				NO	back
		FacConfig		**SAVE**	Save and back
				EPRT	for factory only
				ESC	back
				ESC	back
UNLOCK	Verify1:			**0-255**	need password
	Verify2:				
				KEY	need password
				ESC	back
MANUAL	LAMP REST			**ALL MOTER**	
				XY MOTER	Pan/Tilt step motor adjust(do not adjust it)
				PART MOTER	Other step motor(except Pan/Tilt)
				YES	The chosen step motor reset
				ESC	Back
	TEST RUN	AUTO			Auto
		SOUND			Sound
				ESC	Back
	SMULATE DMX	Pan:		**0-255**	Control Channel on display
		Pan Fine:			
		Tilt:			
		Tilt Fine:			
		PT Speed:			
		Special Fun:			
		Colour:			
		Colour2:			
		Colour3:			
		Cyan Colour:			
		Magenta Colour:			
		Yellow Colour:			
		Static Gobo:			
		Rot Gobo:			

Note: In the LAMP REST row, the "ALL MOTER" description cell reads "All step motor(do not adjust it)".

			Gobo Rot:		
			Prism:		
			Prism Rot:		
			Frost:		
			Zoom:		
			Zoom Fine		
			Focus:		
			Focus Fine:		
			Strobe:		
			Dimmer:		
				>	Value+1
				<	Value-1
				ESC	Back
	ESC				Back
SYSTEM INFO	DMX VALUE	CH00-CH37	**0-255**		DMX value number
		CH00-CH41	**0-255**		DMX value number
	LAMP REST	**ALL MOTER**	**Right/Erro**		Motor reset state
		XY MOTER			
		PART MOTER			
			ESC		Back
	OTHER INFO	Run Time:	**0-9999**		Machine runing hours
		Run Count:	**0-9999**		Open times memo
		Residue T:	**Most**		No limit time
		Residue C:	**Most**		No limit times
		Type:	**xxxx**		LED Lamp model
		Temp:	**xxx**		Temperature
		Fan 1:	**0-9999**		Fan rotation speed 1
		Fan 2:	**0-9999**		Fan rotation speed 2
		DisVersion:	**Vxxx**		Version of display software
		XY Version:	**Vxxx**		Version of Pan/Tilt software
		M1 Version:	**Vxxx**		Software Version M1
		M2 Version:	**Vxxx**		Software Version M2
			ESC		Back
	ESC				Back
DISPLAY SETTING	Light Set:			1−7Lev	Back Ground light level
	Light Off:			0n	Keep back ground light on
				1Min	Back light turn off after 1 min
				2Min	Back light turn off after 2 mins
				3Min	Back light turn off after 3 mins
	Menu Back:			**Off**	Turn off the menu and back
				1Min	Menu back after 1 min
				2Min	Menu back after 2 mins
				3Min	Menu back after 3 mins

			Off	Back ground light flash function off
Light Flash:			On	Back ground light flash function on
Touch Cali:			Off	Touch screen calibration off
			On	Touch screen calibration on
			SAVE	Save and back
			ESC	Back
LAMP SETTING	Lamp Default:		Off	Lamp off
			On	Lamp on
	Manual Lamp:		Off	Lamp off by manual
			On	lamp on by manual
	LampTime		0000-9999	Lamp time
	LampState		Off	Lamp off
			On	Lamp on
	Lamp Off:		10M	After 10 mins no signal come in, Lamp off
			Lifh	No signal come in , lamp keep lighting

11、DMX Channels

24 CH Mode	16 CH Mode	Function description	DMX Value	Function description
1	1	Pan	0-255	0~540°
2	*	Pan Fine	0-255	Pan Fine
3	2	Tilt	0-255	0~270°
4	*	Tilt Fine	0-255	Tilt Fine
5	3	Pan/Tilt speed	0－255	Pan/Tilt speed
6	4	**Function setting**	0-139	Empty
			140-149	PAN/TILT reset
			150-159	Empty
			160-169	Small motors reset
			170-199	Empty
			200-209	Whole unit reset
			210-255	Empty
7	5	**Color Wheel**	0	Empty
			1-127	Color Fade
			128-129	White
			130-136	GOBO 1
			137-143	GOBO 2
			144-150	GOBO 3

			151-157	GOBO 4
			158-164	GOBO 5
			165-171	GOBO 6
			172-178	GOBO 7
			179-185	GOBO 8
			186-189	GOBO 9
			190-215	Run from fast to slow in clockwise
			216-217	stop
			218-243	Run from slow to fast in anti clockwise
			244-249	Color change when sound control
			250-255	Color change when random control
8	*****	**Color Wheel Fine**	0-255	empty
9	**6**	Rotate GOBO speed	0-255	empty
10	**7**	Fixed GOBO	0-3	blank
			4-9	GOBO 1
			10-15	GOBO 2
			16-21	GOBO 3
			22-27	GOBO 4
			28-33	GOBO 5
			34-39	GOBO 6
			40-45	GOBO 7
			46-51	GOBO 8
			52-57	GOBO 9
			58-87	The effect GOBO from slow to fast shake
			88-95	GOBO 1 Shake
			96-103	GOBO 2 Shake
			104-111	GOBO 3 Shake
			112-119	GOBO 4 Shake
			120-127	GOBO 5 Shake
			128-135	GOBO 6 Shake
			136-143	GOBO 7 Shake
			144-151	GOBO 8 Shake
			152-159	GOBO 9 Shake
			160-199	The effect GOBO shake
			200-201	blank
			202-221	Run from fast to slow in clockwise

15

			222-223	Stop
			224-243	Run from slow to fast in anti clockwise
			244-249	GOBO change when sound control
			250-255	Random GOBO
11	**8**	Rotate GOBO	0	Empty
			1－4	Maximum Aperture
			GOBO Location（GOBO rotation indexing mode）	
			5－7	GOBO 1
			8－10	GOBO 2
			11－13	GOBO 3
			14－16	GOBO 4
			17－19	GOBO 5
			20－22	GOBO 6
			23－25	GOBO 7
			26－28	GOBO 8
			29－31	GOBO9
			GOBO Location（GOBO rotation indexing mode）	
			32－34	GOBO 1
			35－37	GOBO 2
			38－40	GOBO 3
			41－43	GOBO 4
			44－46	GOBO 5
			47－49	GOBO 6
			50－52	GOBO 7
			53－55	GOBO 8
			56－59	GOBO 9
			GOBO shake from slow to fast（GOBO rotation indexing mode）	
			60－67	GOBO 1 Shake
			68－75	GOBO 2 Shake
			76－83	GOBO 3 Shake
			84－91	GOBO 4 Shake
			92－99	GOBO 5 Shake
			100－107	GOBO 6 Shake
			108－115	GOBO 7 Shake
			116－123	GOBO 8 Shake
			124－129	GOBO 9 Shake

			GOBO shake from slow to fast（GOBO rotation indexing mode）	
			130－137	GOBO 1 Shake
			138－145	GOBO 2 Shake
			146－153	GOBO 3 Shake
			154－161	GOBO 4 Shake
			162－169	GOBO 5 Shake
			170－177	GOBO 6 Shake
			178－185	GOBO 7 Shake
			186－193	GOBO 8 Shake
			194－199	GOBO 9 Shake
			200－201	Maximum Aperture
			202－221	Run from fast to slow in clockwise
			222－223	Stop
			224－243	Run from slow to fast in anti clockwise
			244－249	GOBO change when sound control
			250－255	Random GOBO
12	9	GOBO Rota	GOBO rotation indexing mode	
			0-255	Index
			GOBO rotation indexing mode	
			0	Stop
			1－127	Run from fast to slow in clockwise
			128-129	Stop
			130－255	Run from fast to slow in clockwise
13	*	GOBO Rota fine	0－255	Empty
14	10	Prism	0－19	Empty
			20－49	GOBO 1Index Function
			50-75	GOBO 1 Rota Function
			76－105	GOBO 2 Index Function
			106-127	GOBO 2 Rota Function
			128-135	Macro 1
			136-143	Macro 2
			144-151	Macro 3
			152-159	Macro 4
			160-167	Macro 5
			168-175	Macro 6
			176-183	Macro 7
			184-191	Macro 8

			192-199	Macro 9
			200-207	Macro 10
			208-215	Macro11
			216-223	Macro 12
			224-231	Macro 13
			232-239	Macro 14
			240-247	Macro 15
			248-255	Macro16
15	**11**	Prism Rota		Rota Index
			0－255	Index
			Rotational　running water mode	
			0	Stop
			1－127	Run from fast to slow in clockwise
			128－129	Stop
			130－255	Run from slow to fast in anti clockwise
16	**12**	Frost	0－64	Empty
			65－255	Linear frost
17	**13**	**ZOOM**	0-255	Linear zoom
18	*	Zoom Fine	0－255	Zoom Fine
19	**14**	Focus	0－255	Focus
20	*	Focus Fine	0－255	Focus Fine
21	*	**Rota Focus**	0-255	Empty
22	**15**	Strobe	0－31	Strobe Close
			32－63	Strobe Open
			64－95	Strobe from slow to fast
			96－127	Strobe Open
			128－143	fast open slow close(step out)Fast to slow
			144－159	slow open fase close(step in) slow to fast
			160－191	Strobe Open
			192－223	Random Strobe from slow to fast
			224－255	Strobe Open
23	**16**	**Dimming**	0－255	Linear dimming
24	*	**Dimming fine**	0-255	Empty

Note: the above list has 2 channel modes.

12、ROUTINE MAINTENANCE

CLEANING AND MAINTENANCE

WARNING! ⚠️

1、Turn off the power before opening any cover.

2、After the power supply is broken, the bottom is cooled and the lid is opened.

3、Dust or floats can be blown gently with a vacuum cleaner or a pressure blow machine.

13、SIMPLE TROUBLESHOOTING

1.The whole device reacts... 1) first check whether the power fuse is normal, 2) check whether the output of switching power supply is normal, and the normal output of switching power supply is 27V.

2.If a one - way function is not normal... First, find the driving plug of the circuit board of this road, and change the two adjacent drive motor plugs to check out the problem of the board or the wiring or the motor.

3.If a one - way function is not normal... First, find the driving plug of the circuit board of this road, and change the two adjacent drive motor plugs to check out the problem of the board or the wiring or the motor.

4.If a few road function work is not normal... In general, a chip controls several drives at the same time, so it is possible that the chip is abnormal.