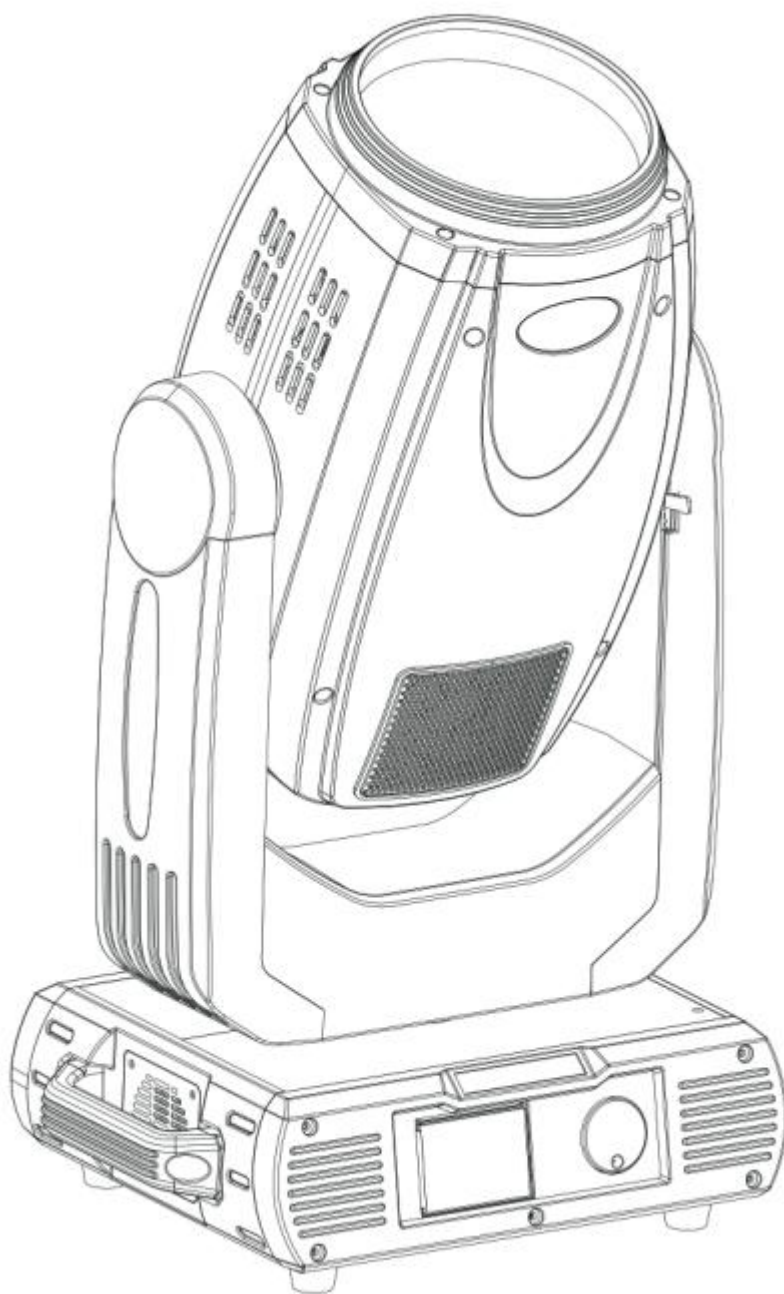


# BEAM440



WEIGHT: 25KG

POWER: 600W

BEAM+WASH

# ITEM

<b>Item.....</b>	<b>02</b>
<b>1.Product introduce .....</b>	<b>03</b>
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## 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. PRODUCTION INTRODUCE

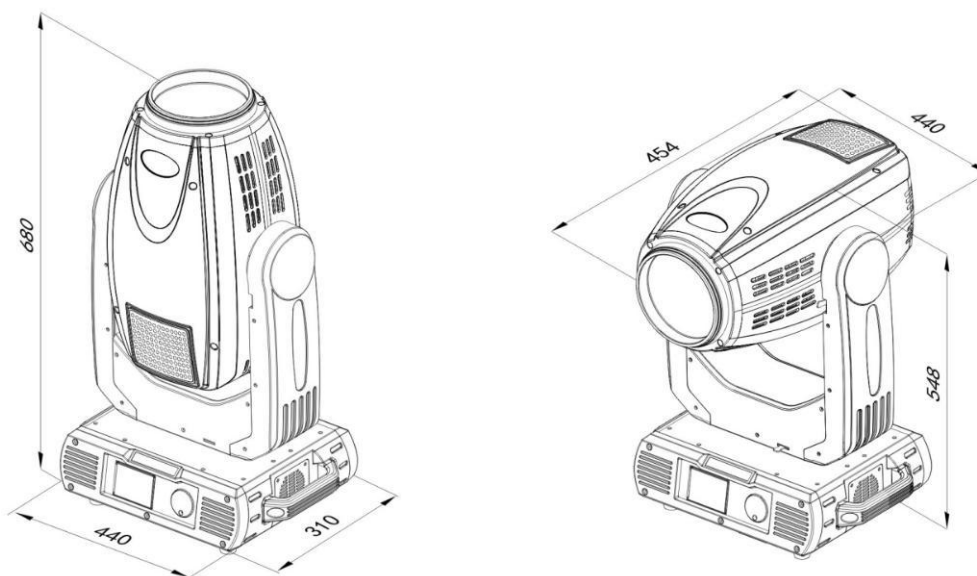
Thank you for choosing this BEAM440 products, this model is the moving head light which is the latest development of the smart, efficient products, beautiful shape, smooth R & D, combined with the advanced technology of today's stage lighting products with international advanced electronic control technology and excellent user-friendly industrial design , fully comply with CE standard, accepted international standard DMX512 signal mode.

BEAM440 use efficient lamp and short distance condenser system, coupled with the high-quality optical lens components, Gorgeous color and clear gobos, sharp and uniform output light. Chinese/English language selected.

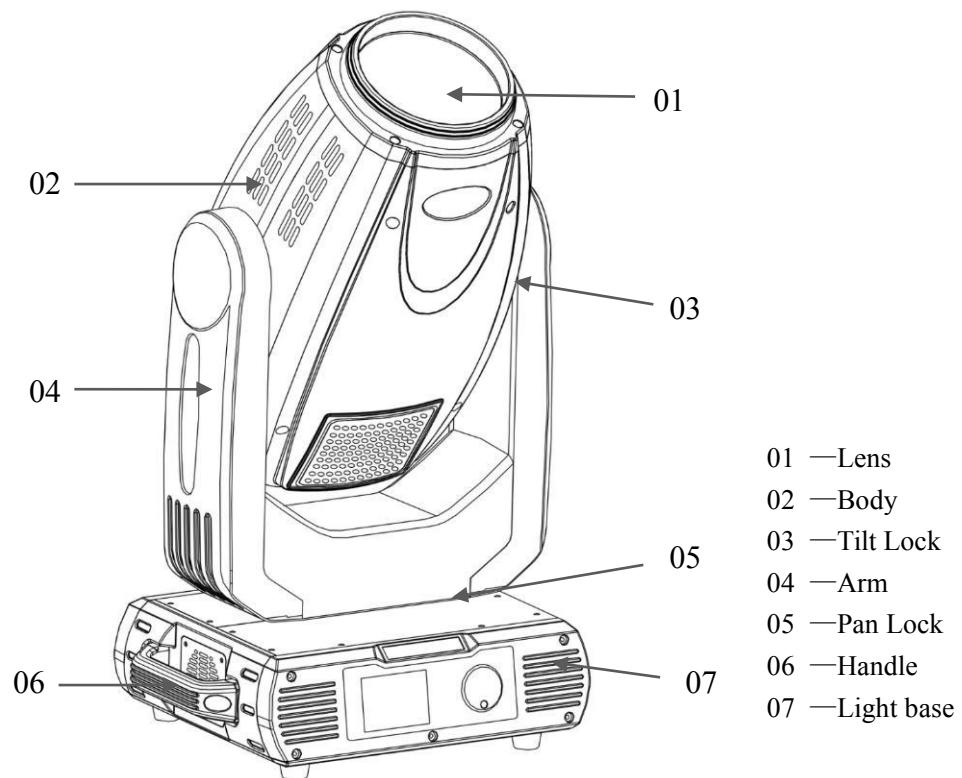
Operate menu intuitive and fast;The display can be inverted 180 °. DMX512 channels optional . Horizontal scan: 540 ° vertical scanning 270 °. The color wheel is combined with white and 11 colors. The static gobos is combined with white and 17gobos, Two rotation prism, one is 8 facet prism, one is 4 linear prism, and one is 16 facet prism. Each 2 prism can mixed together. Frost function.

0-100% mechanical dimming, mechanical strobe, speed adjustable strobe effect and gobo shaking effect, over-heat protection function.

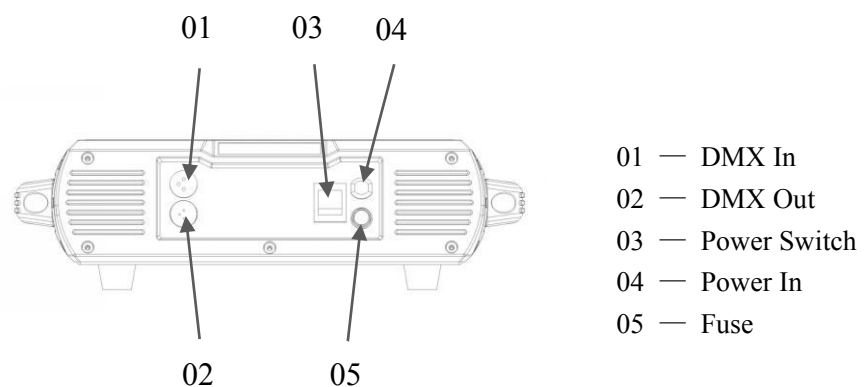
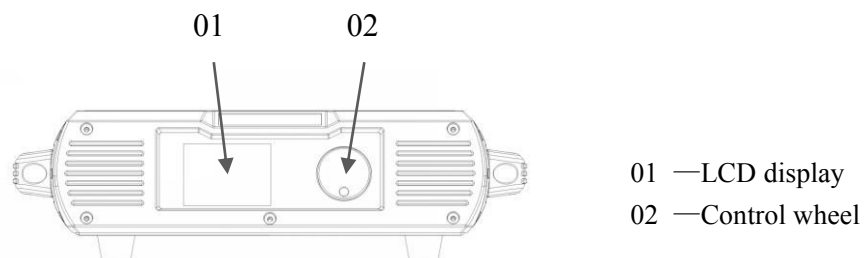
## 2 FIXTURE SIZE



### 3. PARTS INTRODUCE



BEAM440 each part of product structure and main composition product name description for better know the light unit.



**BEAM440 Control panel function introduction, mark for the part name on the panel, familiar with the function of every part.**

## 4. SAFETY INFORMATION

### Safety warning message

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. 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. Need to read the instructions before use energized or installing. Follow through the operation of security methods and pay attention to the warning signs on the specification and equipment. If you have any problem for how to safely operate the equipment. Please contact your dealer.

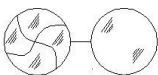
#### 4.1 ANTI-HIGH TEMPERATURE



$t_a = 40^{\circ}\text{C}$

Please don't use the equipment if the temperature above  $40^{\circ}\text{C}$

#### 4.2 BURST PREVENTION



The lens should be changed if had damaged or any problems. Don't change the non-original manufacturer lens.

Len size:  $\Phi 158 \times 43 \text{ mm}$

#### 4.3 TO PREVENT FALLING WOUNDING



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

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.

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.

#### 4.4 UA PROTECTION AND THE BULB EXPLOSION

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

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



The Fixture should be used with the protection screen together.

#### 4.5 PREVENTION OF ELECTIC SHOCK




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



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

Each lamp must be properly grounded, installed in accordance with the relevant standards;   
Cut off the power when stall or replace the lamp and the fuse;   
Prohibit the use of a lightning storm or wet environment.

#### 4.6 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 15 meters away objects and projectiles temperature less than 60 ° C  15m
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.

#### 4.7 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.

#### 4.8 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. 

#### 4.9 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!

**Attention!**



**Must use two clamps fix the fixture, and tighten the clamps with 1/4 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.**

Attention! One product only can accept one input one output. 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.

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

## 5. PACKAGE

BEAM440 packed with fly-case of two in one ,or carton box. Attach follow accessory.

### ACCESSORY

CONTENT	QUANTITY
USER MANUL	1
HANG FIXTURE	1
SIGNAL CABLE	2

## 6. AC POWER


### VOLTAGE, POWER, FUSE SPECIFICATION

Input Voltage	Total Power	Frequency
110-240V	600W	50/60HZ

Fuse voltage	Electronic current	Specification
250V	10A	5×20

### BEAM440 Power connection attention:

Attention! 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.

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

## 7. LAMP MODEL AND REPLACE

### BEAM440 LAMP

LAMP MODEL	POWER	LIFE/HOUR	LUMEN
OSRAM SIRIUS HRI 440W	440w	1500 HOURS	114900Lux



**WARNING! There is a safety hazard or damage if install similar bulb To reduce the risk of damage to light ,do change the lamp before using time over 125% of lamp life .**

## **LAMP REPLACE**

Attention! When replace the lamp is forbidden to touch lamp with bare hand, to avoid the greasy dirt stains filament. filament must be kept clean. Disconnect the power. Before replace lamp, fixture need 20 minutes for lamp cooling. Fasten the head with Y axis protect lock in 60 ° position.



1. Use cross screwdriver to open the light body cover(picture 1)



(1)

2. After open the cover,you can see the lamp inside,please wait the lamp be cool after used but not touch it in hot status.(picture 2)



(2)

3. One hand press the lamp holder,another hand hold the lamp,and pull out the wires(picture 3,4)

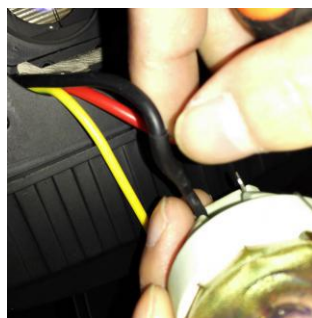


(3)



(4)

- 4.after take apart the lamp, please check the inside glasses, clear it will make the light better effect.(Picture 5)



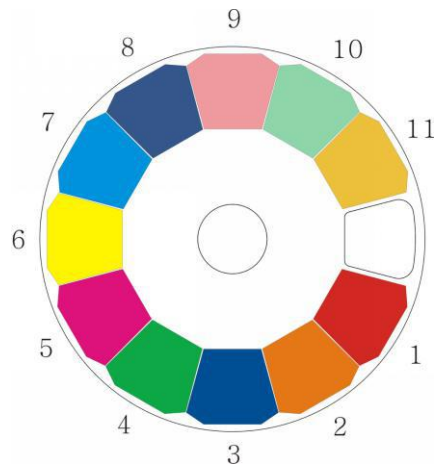
(5)

- 5.install the lamp after replaced.

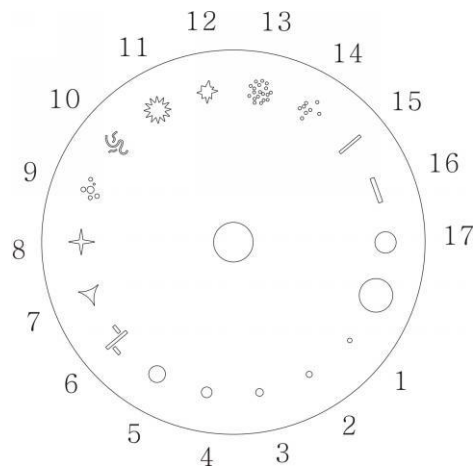


## 8.COLOR WHEEL,GOBO WHEEL

**BEAM440 color wheel with 11 colors+white,pure colors,perfect effect;**

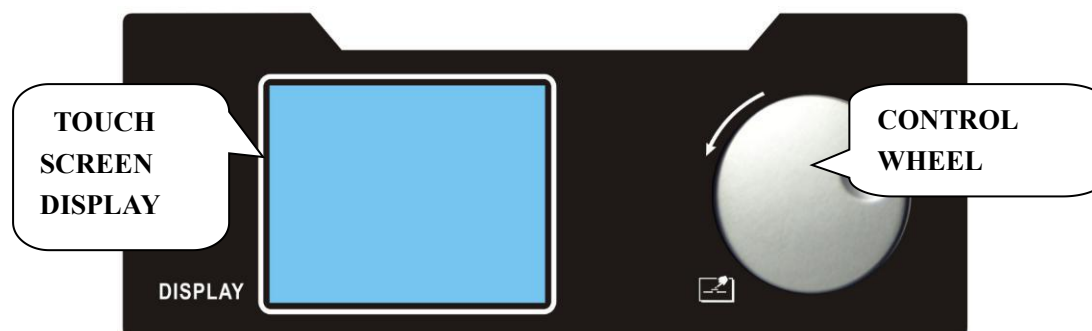


**BEAM440 Static gobo wheel with 17gobos +white gobos;**



Two rotation prism, one 8 facet prism, one linear 4 prism, one fixed 16 prism,each two prism can combined using together. Frost function.

## 9. CONTROL PANEL



Touch screen display: Display the data information and control operation;

**Control wheel: can turn right,left and enter;**

Turn left: Data increasing, scroll menu;

Turn right: Data diminishing, scroll menu;

Enter: OK

### 9.2. CONTROL PANEL MENU OPERATE

Main Menu	Submenu 1	Submenu2	Function SET	Function description
DMX ADDRESS	<<		1-512	to address 1
	<			address up
	>			address down
	>>			to address 512
			SAVE	save and back
			ESC	back
FEATURES SETTING	Run Mode:		DMX	DMX
			Wire	no function
			Aoto	no function
	Channel Mode:		16CH	16CH mode
			24CH	24CH mode
	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
	Pan Angle:		360	Pan Scan Angle setting 360
			540	Pan Scan Angle setting 540
			630	Pan Scan Angle setting 630
	Singl Clear:		Off	keep signal data
			On	clear signal data
	Full Colour:		Off	half color function
			On	full color function
	ShortCut:		Off	Shortcut off for colors and gobos
			On	Shortcut open for colors and gobos
			ADV.	ADVANCED FUNCTION
			RST.	Re-setting and back
			SAVE	Save and back
ESC			Back	
ADVANCED FUNCTION	Redress	ZEROSSETTING		
		Pan:	0-255	Adjust the begging state
		Tilt:		
		Static Gobo:		
		Rot Gobo:		
		Colour:		
		Focus:		
		Zoom:		
		Dimmer:		
		Prism:		
		Beam:		
		Beam Rot:		
		Frost:		
			SAVE	Save and back
			>	

			<	
			ESC	back
	ChanlDef			No function
	FactSett			Only 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	All step motro(do not adjust it )
			XY MOTER	Pan/Til step motor adjust(do not adjust it )
			PART MOTER	Other step motor( except Pan/Til)
			YES	The chose step motor re-set
			ESC	Back
	TEST RUN	AUTO		Auto
		SOUND		Sound
			ESC	Back
	SMULATE DMX	Color:	0-255	Control Channel on display
		Strobe:		
		Dimmer:		
		Static gobo:		
		Rotate Gobo:		
		Gobo roatation:		
		Prism:		
		Prism rotation:		
		Frost:		
		Focus:		
		Pan		
		Pan Fine		
		Tilt		
Tilt Fine				

		Pan/Tilt speed		
			>	
			<	
			ESC	Back
	ESC			Back
SYSTEM INFO	DMX VALUE	CH00-CH32	0-255	DMX value number
	REST INFO	Colour:	Right/Erro	For factory only
		Rot Gobo:		
		Static Gobo:		
		Pan:		
		Tilt:		
		Gobo Rot:		
		Prism:		
		Beam:		
		Prism Rot:		
		Beam Rot:		
		Zoom:		
		Focus:		
		Pan Opto:		
		Tilt Opto:		
			ESC	Back
	OTHER INFO	Run Time:	0-9999	Machine runing hours
		Run Count:	0-9999	How many time of the Machine power on and off
		Residue T:	Most	Running time adjust(do not adjust)
		Residue C:	Most	(do not adjust)
		Type:	280W	Mode No
		Temp:	0	No function
		Fan 1:	0-9999	Fan 1 speed
		Fan 2:	0-9999	Fan 2 speed
		DisVersion:	Vxxx	Version of display software
		XY Version:	Vxxx	Version of Pan/Til software
		M1 Version:	Vxxx	Software Version M1
		M2 Version:	Vxxx	Software Version M2
			ESC	Back
	ESC			Back
DISPLAY	Light Set:		1-7Lev	Back Ground light level

SETTING	Light Off:		On	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
	Light Flash:		Off	Back ground light flash function off
			On	Back ground light flash function on
	Touch Cali:		Off	Touch screen calibration on
			On	Touch screen calibration off
			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	

## 10.DMX Channels

16CH Mode	DMX Value	Description
<b>1</b>		<b>Color</b>
	0	White
	1—128	Color gradual change
	129—134	White
	135—139	Deep Red
	140—144	Blue
	145—149	Yellow
	150—154	Light green
	155—159	Pink
	160—164	Light blue
	165—169	Magenta
	170—174	Deep green
	175—179	Orange
	180—184	CTB
	185—189	Purple+Blue
	190—220	Run from fast to slow
	221—225	Stop
	226—255	Run from slow to fast
<b>2</b>		<b>Strobe</b>
	0—31	Strobe OFF
	32—63	Strobe ON
	64—95	Strobe from slow to fast
	96—127	Strobe ON
	128—143	Fast to slow,slow close fast open
	144—159	Slow to fast,fast open slow close
	160—191	Strobe ON
	192—223	Random strobe from slow to fast
	224—255	Strobe ON
<b>3</b>		<b>Dimmer</b>
	0—255	Linear dimmer
<b>4</b>		<b>Static gobo</b>
	0—3	Empty
	4—7	Gobo1
	8—12	Gobo2
	13—16	Gobo3
	17—20	Gobo4
	21—24	Gobo5
	25—29	Gobo6
	30—33	Gobo7
	34—37	Gobo8
	38—41	Gobo9
	42—46	Gobo10



	47—50	Gobo11
	51—54	Small beam1
	55—58	Small beam2
	59-63	Small beam3
	64—67	Small beam4
	68—71	Small beam5
	72-113	Run from fast to slow
	114-117	Stop
	118-159	Run from slow to fast
		Gobo shaking from slow to fast
	160-165	Gobo1shaking
	166—170	Gobo2shaking
	171—176	Gobo3shaking
	177—181	Gobo4shaking
	182—187	Gobo5shaking
	188—193	Gobo6shaking
	194—198	Gobo7shaking
	199—204	Gobo8shaking
	205—209	Gobo9shaking
	210—215	Gobo10shaking
	216—220	Gobo11shaking
	221—226	Large beam shaking
	227—232	Small beam1shaking
	233—237	Small beam2shaking
	238—243	Small beam3shaking
	244-248	Small beam4shaking
	249—255	Small beam5shaking
<b>5</b>		<b>Rotate Gobo</b>
	0	Empty
	1—4	Largest white colour
	5—7	Gobo1
	8—10	Gobo2
	11—13	Gobo3
	14—16	Gobo4
	17—19	Gobo5
	20—22	Gobo6
	23—25	Gobo7
	26—28	Gobo8
	29—31	Gobo9
		Rotate Gobo(Gobo autorotation is in autorotation mode)
	32—34	Gobo1
	35—37	Gobo2

	38—40	Gobo3
	41—43	Gobo4
	44—46	Gobo5
	47—49	Gobo6
	50—52	Gobo7
	53—55	Gobo8
	56—59	Gobo9
		Gobo shaking index from slow to fast
	60—67	Gobo1shaking
	68—75	Gobo2shaking
	76—83	Gobo3shaking
	84—91	Gobo4shaking
	92—99	Gobo5shaking
	100—107	Gobo6shaking
	108—115	Gobo7shaking
	116—123	Gobo8shaking
	124—129	Gobo9shaking
		Gobo shaking rotation from slow to fast
	130—137	Gobo1shaking
	138—145	Gobo2shaking
	146—153	Gobo3shaking
	154—161	Gobo4shaking
	162—169	Gobo5shaking
	170—177	Gobo6shaking
	178—185	Gobo7shaking
	186—193	Gobo8shaking
	194—199	Gobo9shaking
	200—227	Rotating from fast to slow in clockwise
	228—229	Stop
	230—255	Rotating from slow to fast in anticlockwise
<b>6</b>		<b>Gobo roatation</b>
	If Rotate gobo is in positioning mode	
	0—255	Index
	If Rotate gobo is in autoroatation mode	
	0	Stop
	1—127	Rotating from fast to slow in anticlockwise
	128-129	Stop
	130-255	Rotating from fast to slow in clockwise
<b>7</b>		<b>Prism</b>
	0—8	Empty
	9—32	Prism1
	33-56	Prism2
	57—80	Prism3

	81—112	Prism4
	113—255	Prism5
8	<b>Prism rotation</b>	

	0 17	Empty	Hall-RotP	12VIN
	20—24	Energy-saving mode (360W)		
	25 - 29	Normal mode(440W)		
	30—129	Empty		
	130—139	Lamp on by dmx		
	140—149	PAN/TILT reset		
	150—159	Empty		
	160—169	Small motors reset		
	170—199	Empty		
	200—209	Whole unit reset		
	210—229	Empty		
	230—239	Lamp off by dmx		
	240—255	Empty		

## 11.PCB Driving board

## Driving Board 01

