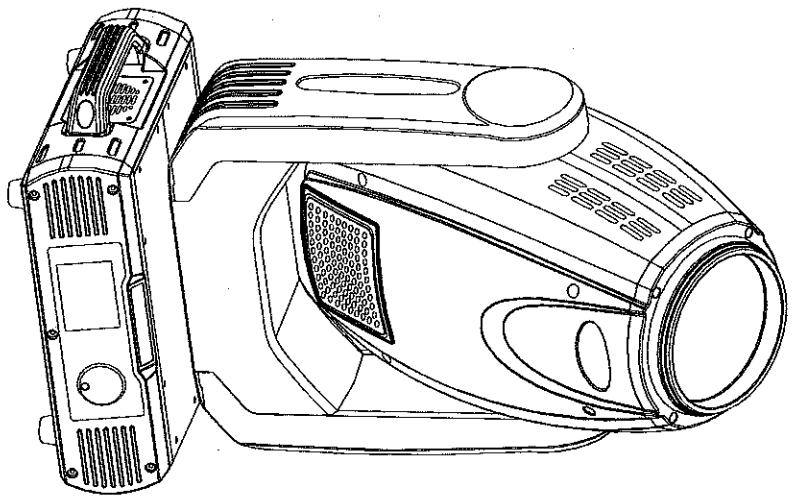


eco°
Stage

ECO Stage BS440



WEIGHT: 25KG

POWER: 600W

BEAM+SPOT+WASH

ITEM

Item.....	02
1.Product introduce	03
2.Fixture size.....	03
3.Parts introduce.....	04
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5.Packing and shipping	07
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1. PRODUCTION INTRODUCE

Thank you for choosing this BS440C 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.

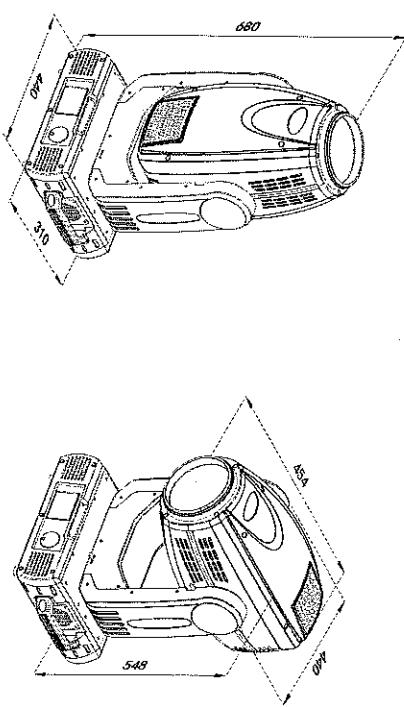
BS440C use efficient lamp and short distance condenser system, coupled with the high-quality optical lens components, Gorgeous color and clear gobos, sharp and uniform output light. Chinese/English language selected.

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 17 gobos, the rotation gobo is combined with white and 9 gobos.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.

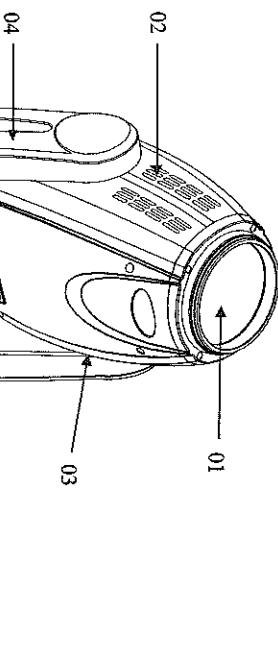
2 FIXTURE SIZE

STATEMENT

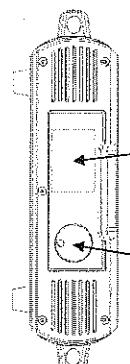
The product is good packing when ship out the factory. All users should strictly abide by the warnings and instructions stated in this manual, any damage and results due to misuse and the neglect of this operating manual will be excluded from the deal responsibility this manual will not informed in additionally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



3. PARTS INTRODUCE



BS440C each part of product structure and main composition product name description for better know the light unit.



BS440C 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°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: $\Phi 158 \times 43$ 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 UV 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 ELECTRIC 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



- The fixture can be mounted directly on the surface of ordinary combustible material. 
- Do not short-circuit temperature protection switch or fuse, use the specified type of fuse.
- The equipment must be installed away from inflammable and explosive materials.
- The equipment should be projected range of 15 meters away objects and projectiles temperature less than 60 °C 
- Fan or ventilation, at least in the range of 0.5 meters can not be an obstacle.
- Do not place any object on the lens.
- Handling at least allow the device to cool for 20 minutes. 
- 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

- Before packed, make sure power is off, and wait for at least 20mins for cooling down.
- Before clean the fixture, make sure X, Y axis protect lock closed.
- 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.
- After packed the product, put the accessory into the accessory case, then closed and lock the fly-case.
- Fly-case only up stacked two layers. Prohibited upside down
- When packed with carton box, equipment should be put into the foam first, then set into a carton, pay attention to the vertical position. 

BS440C 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.

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.

- Open the fly-case, and discover the inside plastic bag.
- High-lift the product by two handles beside the bottom base and move it out.
- 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. 24A WG 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

BS440C packed with fly-case of two in one ,or carton box. Attach follow accessory.

ACCESSORY	
CONTENT	QUANTITY
USER MANUAL	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

7. LAMP MODEL AND REPLACE

BS440C LAMP			
LAMP MODEL	POWER	LIFE/HOUR	LUMEN
OSRAM SIRIUS HRI 440W	440w	1500 HOURS	114900Lux

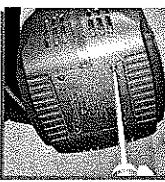
WARNING! There is a safety hazard or damage if install similar bulb To reduce the risk of damage to light ,do change the lamp before using time over 125% of lamp life .

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.

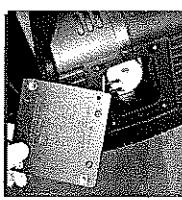


1. Use cross screwdriver to open the light body cover(picture 1)



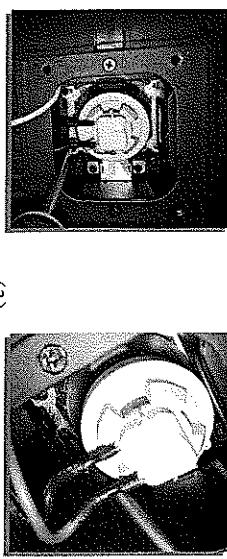
(1)

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)

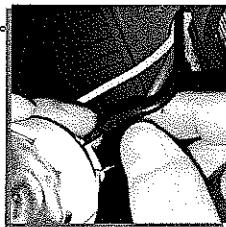


(3)



(4)

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

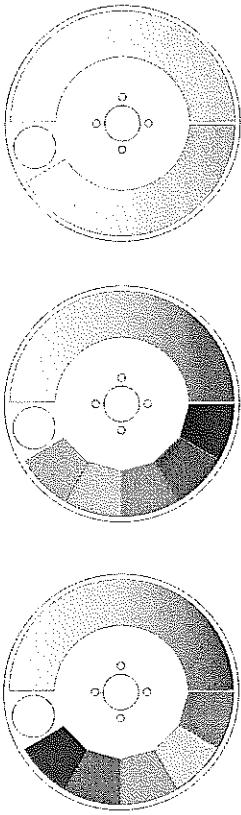


(5)

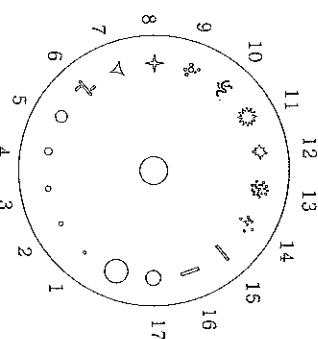
- 5.install the lamp after replaced.

8.COLOR WHEEL,GOBO WHEEL

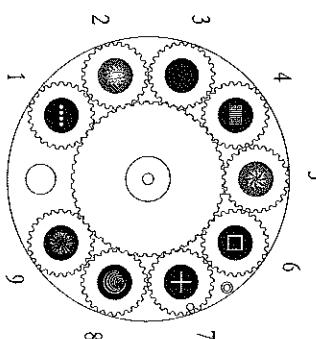
BS440C color wheel with colors+CMY,pure colors,perfect effect;



BS440C Static gobo wheel with 17 gobos +white,Rich gobos;



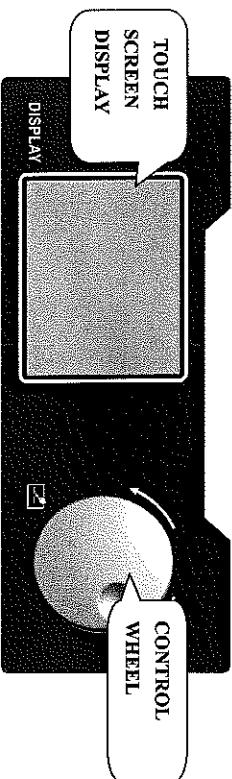
BS440C Rotate gobo wheel with 9gobos+white,smooth gobo rotation,replace easily;



9

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;

To left: Data increasing scroll menu:

Third sight: Data diminishing scroll menu

100

9.2. CONTROL PANEL MENU OPERATE

Main Menu	Submenu 1	Submenu2	Function SET	Function description
	<<			to address 1
	>			address up
DMX	<<			address down
ADDRESS			SAVE	to address 512 save and back
			ESC	back
			DMX	DMX
			Wire	no function
			Auto	no function
			20CH	20CH mode
			24CH	24CH mode
			30CH	30CH mode
			OFF	Pan Scan Normal
			On	Pan Scan Reverse
			Off	Tilt Scan Normal
			On	Tilt Scan Reverse
			Off	Pan/Tilt optical sensor testing off
			On	Pan/Tilt optical sensor testing on

		Noml	Pan/Tilt normal	Scan	Speed setting
PT Speed:	Slow	slow	Pan/Tilt	Scan	Speed setting
	Fast	fast	Pan/Tilt	Scan	Speed setting
Pan Angle:	360	Pan Scan	Angle setting 360		
	540	Pan Scan	Angle setting 540		
Singl Clear:	630	Pan Scan	Angle setting 630		
	Off	keep signal data			
Full Colour:	On	clear signal data			
	Off	half color function			
ShortCut:	On	Shortcut open for colors and gobos			
	Off	Shortcut off for colors and gobos			
ADVANCED FUNCTION	ADV.	ADVANCED FUNCTION			
	RST.	Re-setting and back			
SAVE	Save and back				
	ESC	Back			
ZEROSETTING					
ADVANCED FUNCTION	Part:				
	Tilt:				
	Static Gobo:				
	Rot Gobo:				
	Colour:				
	Colour2:				
	Colour3:				
	Focus:	0-255	Adjust the begging state		
	Zoom:				
	Dimmer:				
Beam:	Prism:				
	Beam Rot:				
Frost:	SAVE	Save and back			
	>				
ChanDef	<				
	ESC	back			
No function					

5. install the lamp after h.s

FactSet			Only factory only
	Limit	LimitTime	No function
		LimitCont	No function
	YES	Return to default	
	NO	back	
UseManage	SAVE	Save and back	
	EPRT	for factory only	
	ESC	back	
	ESC	back	
UNLOCK	Verify1:	0-255	need password
	Verify2:		
	KEY	need password	
	ESC	back	

LAMP REST	ALL MOTER	All step motor(do not adjust it)
	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
AUTO		Auto
TEST RUN	SOUND	Sound
	ESC	Back

MANUAL	SYSTEM INFO	DMX VALUE	CH00-CH32	0-255	DMX value number					
		Colour:	Rot Gobo:	Static Gobo:	Pan:	Tilt:	Gobo Rot:	Prism:	Right/Error	For factory only
SMULATE		Run Time:	0-9999	Machine running hours						
DMX		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						
	OTHER INFO	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/Tilt software						
		M1 Version:	Vxxx	Software Version M1						
		M2 Version:	Vxxx	Software Version M2						
		ESC	ESC	Back						
		Frost:								

				150—159	No function
	Light Set:	1-TLev	Back Ground light level	160—169	All the small step motor Reset
		On	Keep back ground light on	170—199	No function
		1Min	Back light turn off after 1 min	200—209	whole light Reset
	Light Off:	2Min	Back light turn off after 2 mins	210—229	No function
		3Min	Back light turn off after 3 mins	230—239	Lamp off
		Off	Turn off the menu and back	240—255	No function
	DISPLAY SETTING	1Min	Menu back after 1 min	7	Color 1
	Menu Back:	2Min	Menu back after 2 mins	5	White
		3Min	Menu back after 3 mins	0	White+Pink
	Light Flash:	Off	Back ground light flash function off	28	Pink
		On	Back ground light flash function on	50	Pink+Light Orange
	Touch Cali:	Off	Touch screen calibration on	100	Light Orange
		On	Touch screen calibration off	129	Light Orange+Light Purple
		SAVE	Save and back	150	Light Purple
		ESC	Back	181	Light Purple+Blue
				204	Blue
	Lamp Default:	Off	Lamp off	235	Blue+Deep Blue
		On	Lamp on	255	Deep Blue
	Manual Lamp:	Off	Lamp off by manual	8	Color 2
		On	lamp on by manual	6	White
	LAMP SETTING	0000-9999	Lamp time	0	White+Deep Red
	Lamp Time	Off	Lamp off	28	Deep Red+Deep Green
	Lamp State	On	Lamp on	50	Deep Red
		After 10 mins no signal come in,		80	Deep Red+Deep Green
	Lamp OFF:	10M	Lamp off	100	Deep Green
		No signal come in , lamp keep		129	Deep Green+Light Green
		Lith	lighting	150	Light Green
				181	Light Green+UV Blue
				204	UV Blue
				235	UV Blue+Deep Orange
				255	Deep Orange
		9	7	0-255	Color 3
				CTO	
	24CH Mode	20CH Mode	DMX Value	Function	
	1	1	0—255	Pan	Cyanine
	2	*	0—255	Pan Fine	Magenta
	3	2	0—255	Tilt	Yellow
	4	*	0—255	Tilt Fine	Static gobo
	5	3	0—255	Pan Tilt speed adjust	0—3
	6	4	0—129	Marco	No function
			130—139	Lamp on	4—7
			140—149	Pan Tilt Reset	8—12
					Gobo2
					13—16
					Gobo3
					17—20
					Gobo4
					21—24
					Gobo5

10.DMX Channels

	10	8	0-255	Cyanine
	11	9	0-255	Magenta
	12	10	0-255	Yellow
	13	11		Static gobo
			0—3	No function
			4—7	Gobo1
			8—12	Gobo2
			13—16	Gobo3
			17—20	Gobo4
			21—24	Gobo5

	25—29	Gobo6	29—31	Gobo9	Rotation Gobo(Gobo rotation Mode)
	30—33	Gobo7			
	34—37	Gobo8			
	38—41	Gobo9			
	42—46	Gobo10			
	47—50	Gobo11			
	51—54	Slim Beam1			
	55—58	Slim Beam2			
	59—63	Slim Beam3			
	64—67	Slim Beam4			
	68—71	Slim Beam5			
	72—113	Run from fast to slow			
	114—117	Pause			
	118—159	Run from slow to fast			
		Gobo shake from slow to fast			
	160—165	Gobo1Shake			
	166—170	Gobo2Shake			
	171—176	Gobo3Shake			
	177—181	Gobo4Shake			
	182—187	Gobo5Shake			
	188—193	Gobo6Shake			
	194—198	Gobo7Shake			
	199—204	Gobo8Shake			
	205—209	Gobo9Shake			
	210—215	Gobo10Shake			
	216—220	Gobo11Shake			
	221—226	Slim Beam1Shake			
	227—232	Slim Beam2Shake			
	233—237	Slim Beam3Shake			
	238—243	Slim Beam4Shake			
	244—248	Slim Beam5Shake			
	249—255	Big Beam Shake			
14	12	Rotation Gobo(position Mode)			
	0	No function			
	1—4	Bigest White (Uniform effect)			
	5—7	Gobo1			
	8—10	Gobo2			
	11—13	Gobo3			
	14—16	Gobo4			
	17—19	Gobo5			
	20—22	Gobo6			
	23—25	Gobo7			
	26—28	Gobo8			

			0—255	Index
		If Rotation Gobo in Gobo rotation mode		
		0	Pause	
		1—127	Rotation Anti-clockwise from fast to slow	
		128—129	Pause	
		130—255	Rotation clockwise from slow to fast	

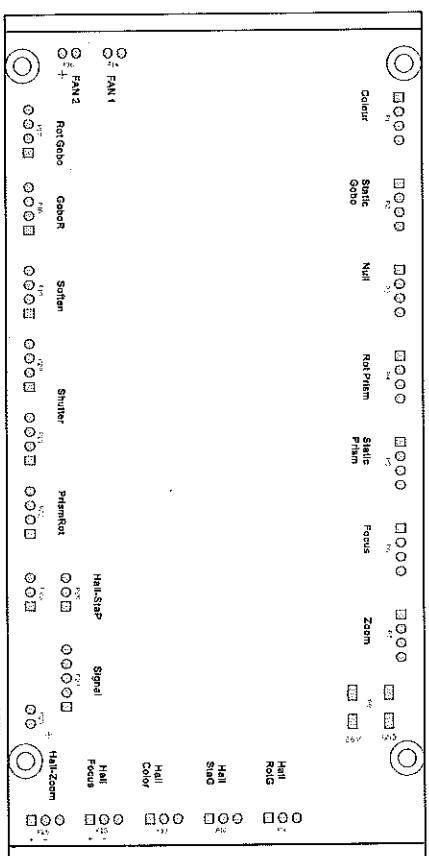
16	14	0—5	Prism (Prism rotation is in position mode)
		6—25	No function
		26—50	Prism1
		51—75	Prism2
		76—100	Prism3
		101—125	Prism4
		126—150	Prism5
		151—175	Prism1
		176—200	Prism2
		201—225	Prism3
		226—255	Prism4
	15	0—255	Prism5
			Prism Rotation (position mode)
			Index
		0—1	Prism rotation (rotation mode)
		No function	No function
		2—127	Rotate Clockwise from fast to slow
		128—129	Pause
		130—255	Rotate Anti-clockwise from slow to fast
18	16	Frost	
		0—64	No function
		65—255	Frost changeable
19	17	Zoom	
		0—255	Linear Zoom
20	*	0—255	Zoom Fine
21	18	0—255	Focus
22	*	0—255	Focus Fine
23	19	0—31	Strobe
		32—63	Strobe Close
		64—95	Strobe Open
		96—127	Strobe from slow to fast
		128—143	From fast to slow,slow close fast open
		144—159	From slow to fast,fast open slow close
		160—191	Strobe Open
		192—223	Random Strobe from slow to fast
24	20	224—255	Strobe Open
		0—255	Dimmer
		192—223	Linear Dimmer
		224—255	From slow to fast,fast open slow close
		160—191	Strobe Open
		192—223	Random Strobe from slow to fast
		224—255	Strobe Open
	9	0—10	Dimmer Fine
		10	Static Gobo

30CH Mode	DMX Value	Function
1	0—255	Cyanine
2	0—255	Magenta
3	0—255	Yellow
4	0	Color1
	28	White
	50	White+LPink
	80	Pink
	100	Pink+Light Orange
	129	Light Orange+Light Purple
	150	Light Purple
	181	Light Purple+Blue
	204	Blue
	235	Blue+Deep Blue
	255	Deep Blue
5	0	White
	50	Deep Red
	80	Deep Red+Deep Green
	100	Deep Green
	129	Deep Green+Light Green
	150	Light Green
	181	Light Green+UV Blue
	204	UV Blue
	235	UV Blue+Deep Orange
	255	Deep Orange
	6	Color 3
	0—255	CTO
	7	Strobe
	8	Dimmer
	0—31	Strobe Close
	32—63	Strobe Open
	64—95	Strobe from slow to fast
	96—127	Strobe Open
	128—143	From fast to slow,slow close fast open
	144—159	From slow to fast,fast open slow close
	160—191	Strobe Open
	192—223	Random Strobe from slow to fast
	224—255	Strobe Open
	0—10	Static Gobo

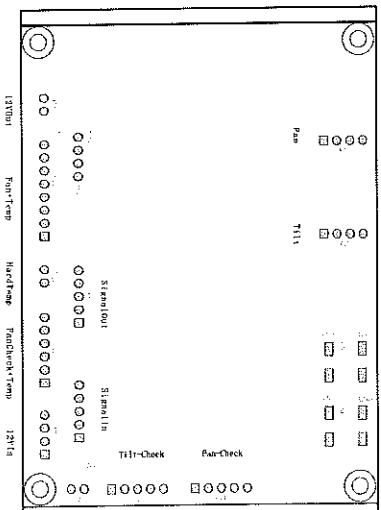
0—3	No function	8—10	Gobo2
4—7	Gobo1	11—13	Gobo3
8—12	Gobo2	14—16	Gobo4
13—16	Gobo3	17—19	Gobo5
17—20	Gobo4	20—22	Gobo6
21—24	Gobo5	23—25	Gobo7
25—29	Gobo6	26—28	Gobo8
30—33	Gobo7	29—31	Gobo9
34—37	Gobo8	32—34	Rotation Gobo(Gobo Rotation mode)
38—41	Gobo9	35—37	Gobo1
42—46	Gobo10	41—43	Gobo2
47—50	Gobo11	44—46	Gobo4
51—54	Slim Beam1	47—49	Gobo5
55—58	Slim Beam2	50—52	Gobo6
59—63	Slim Beam3	53—55	Gobo7
64—67	Slim Beam4	56—59	Gobo8
68—71	Slim Beam5	60—67	Gobo9
72—113	Run from fast to slow	68—75	Gobo Shake index from slow to fast
114—117	Pause	76—83	Gobo1Shake
118—159	Run from slow to fast	84—91	Gobo2Shake
160—165	Gobo3Shake	92—99	Gobo3Shake
166—170	Gobo2Shake	100—107	Gobo4Shake
171—176	Gobo3Shake	108—115	Gobo5Shake
177—181	Gobo4Shake	116—123	Gobo6Shake
182—187	Gobo5Shake	124—129	Gobo7Shake
188—193	Gobo6Shake	130—137	Gobo8Shake
194—198	Gobo7Shake	138—145	Gobo9Shake
199—204	Gobo8Shake	146—153	Gobo1Shake
205—219	Gobo9Shake	154—161	Gobo2Shake
210—215	Gobo10Shake	162—169	Gobo3Shake
216—220	Gobo11Shake	170—177	Gobo4Shake
221—226	Slim Beam1Shake	178—185	Gobo5Shake
227—232	Slim Beam2Shake	186—193	Gobo6Shake
233—237	Slim Beam3Shake	194—199	Gobo7Shake
238—243	Slim Beam4Shake	200—227	Rotation,Clockwise from fast to slow
244—248	Slim Beam5Shake	228—229	Pause
249—255	Big Beam Shake	230—255	Rotation Anti-clockwise from slow to fast
11	Effect Gobo(Empty)	256—259	Gobo Rotation
12	Effect Gobo Rotation(Empty)	260—263	If Rotation Gobo is in position mode
13	Rotation Gobo	264—267	
14	Biggest White (Uniform mode)	268—271	
5—7	Gobo1	272—275	

	0—255	Index
	If Rotation Gobo is in rotation mode	
0	Pause	
1—127	Rotation Anti-clockwise from fast to slow	
128—129	Pause	
130—255	Rotation clockwise from slow to fast	
15	Gobo Rotation Fine	
16	Prism	
0—5	No function	
6—25	Prism1	
26—50	Prism2	
51—75	Prism3	
76—100	Prism4	
101—125	Prism5	
	Prism rotation (Rotation mode)	
126—150	Prism1	
151—175	Prism2	
176—200	Prism3	
201—225	Prism4	
226—255	Prism5	
17	Prism rotation	
0—255	Index	
	Prism Rotation (Rotation mode)	
0—1	No function	
2—127	Rotation,Clockwise from fast to slow	
128—129	Pause	
130—255	Rotation,Anti-clockwise from slow to fast	
18	Frost	
0—64	No function	
65—255	Frost changeable	
19	Zoom	
0—255	Linear Zoom	
20	Focus	
0—255	Linear Focus	
21	Focus Fine	
0—255	Linear Focus Fine	
22	Beam effect(Empty)	
23	0—255	Pan
24	0—255	Pan Fine
25	0—255	Tilt
26	0—255	Tilt Fine
27	0—255	Function
	Pan Tilt speed adjust	

11.PCB Driving board



Driving Board 01



Driving Board 02