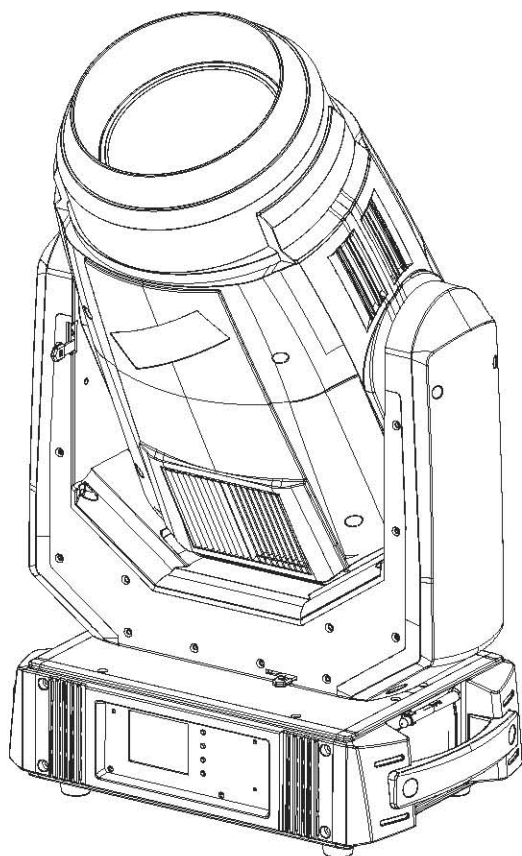


USER MANUAL



Version:1.2

NOVALIGHT

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Congratulations on choosing our products! Please carefully read this instruction manual in its entirety and keep it well for using reference. This manual contained about the installation and the relative using information of this products. Please refer to this manual's relative instruction when using this equipment.

1.Open-Package guidelines

This equipment is made of new style,high intensity plastic.It fully shows the modem times light charac teris-
tic with beauty struture. And it is made accord to CE standard. Fully agree with the internation
standard of DMX512 agreement.

When receive the product,please be careful to take and put,check if the product has damage or not be-
cause of transportation, and check the following parts:

- | | |
|--------------------|---------------------|
| 1.Signal cable-1PC | 2.Safty cable-1PC |
| 3.User Manval-1PC | 4.Omega holder-2PCS |
| 5.Power cable-1PC | 5.Service card-1PC |

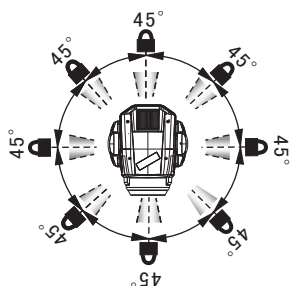
1.1 Package

Unpacking the fixture

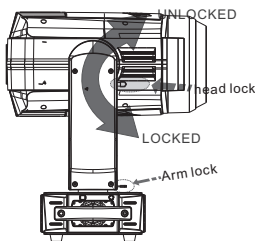
- 1.Open the flight case cove.
- 2.With one person on each side, lift the fixture out of the flight case.
- 3.Unlock pan and tilt before operating fixture.

Packing the fixture

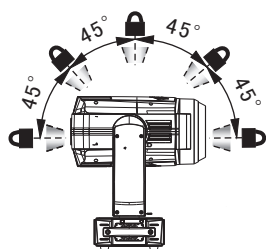
- 1.Disconnect the fixture from power and allow it to cool.
- 2.lock arms and head as figure.- Fig.1(PAN Mechanism Lock and Release (every 45°)
- Fig.1-1)(Tilt Mechanism Lock and Release (every 45°) - Fig.1-2)
- 3.Place the fix ture in the bottom of the flight case, and cover the case without forcing.



PAN Mechanism Lock Fig.1-1



Level vertical transportation lock Fig.1

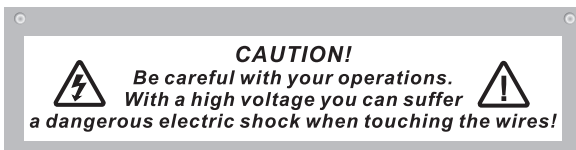


Tilt Mechanism Lock Fig.1-2

2.Safety instructions

Every person involvd with installation and maintenance of this device to:

- Be qualified
- Follow the instructions of this manual.



This device has been shipped with our premises in absolutely perfect condition.In order to maintain this co-
ndition and toensure a safe operation,it is absolutely necessary for the user to follow the safety instructions
and warning notes written in this manual.








Important:

- The manufacturer will not accept liability for any resulting damages caused by the nonobservance of this manual or any unauthorized modification to the device.
- Please consider that damages caused by manual modifications to the device are not subject to warranty.

- Never let the power-cord come into contact with other cables! Handle the power cord and all connections with particular caution!
- Make sure that the available voltage is not higher than stated on the rearpanel.
- Always plug in the power plug least. Make sure that the power-switch is set to off-position before you connect with themains with particular caution!
- Make sure that the power-cord is never crimped or damaged by sharp edges. Check the device and the power-cord from time to time.
- Always disconnect from the mains, when the device is not in use or before cleaning it.
- Only handle the power-cord by the plug, Never pull out the plug by tugging the powercord.
- This device falls under protection class I. Therefore it is essential to connect the yellow/green conductor to earth.
- The electric connection, repairs and servicing must be carried out by a qualified employee.
- Do not connect this device to a dimmer pack.
- Do not switch the fixture on and off in short intervals as this would reduce the lamp's life.
- Do not touch the device's housing bare hands during its operation (housing becomes hot)!
- For replacement use lamps and fuses of same type and rating only.

Eye damage!

Avoid looking directly into the light source (meant especially for epileptics)!

-  --18m ➤ **Minimum distance of illuminated objects**
The projector needs to be positioned so that the objects hit by the beam of light are at least 12 metres from the lens of the projector.
- t_a 40°C ➤ **Maximum ambient temperature**
Do not operate the fixture if the ambient temperature (T_a) exceeds 40°C (104°F).
- t_c 80°C ➤ **Temperature of the external surface**
The maximum temperature that can be reached on the external surface of the fitting, in a thermally steady state, is 80°C (176°F).
- IP20 ➤ **IP20 protection rating**
The fitting is protected against penetration by solid of over 12mm (0.47") in diameter (first digit 2), but not against dripping water, rain, splashes or jets of water (second digit 0).
-  ➤ **Indoor use only**
-  ➤ **Not suitable for household illumination**
-  ➤ **Photobiological Safety**
CAUTION. Do not look directly at the light source. Do not look at the light beam with optical devices or any other tool that could cause light convergence.
The fixture must be positioned so that the minimum distance between the front lens and human eye is at least 3 metres to prevent personal photobiological risks.
-  ➤ **Mounting surfaces**
It is permissible to mount the fitting on normally flammable surfaces.
-  ➤ **The products to which this manual refers comply with the European Directives pursuant to:**
 - 2006/95/EC - Safety of electrical equipment supplied at low voltage (LVD)
 - 2004/108/EC - Electromagnetic Compatibility (EMC)
 - 2011/65/EU - Restriction of the use of certain hazardous substances (RoHS)
 - 2009/125/EC - EcoDesign requirements for Energy-related Products (ErP)
-  ➤ **Protection against electrical shock**
Connection must be made to a power supply system fitted with efficient earthing (Class I appliance according to standard EN 60598-1). It is, moreover, recommended to protect the supply



lines of the projectors from indirect contact and/or shorting to earth by using appropriately sized residual current devices.

➤ Disposing

This product is supplied in compliance with European Directive 2012/19/EU-Waste Electrical and Electronic Equipment (WEEE) . To preserve the environment please dispose/recycle this product at the end of its life according to the local regulation.



➤ Battery

This product contains a rechargeable lead-acid or lithium iron tetraphosphate battery. To preserve the environment, please dispose the battery at the end of its life according to the regulation in force.



➤ Lamp

The fitting mounts a high-pressure lamp that needs an external igniter. This igniter is fitted onto the apparatus. -Carefully read the "operating instructions" provided by the lamp manufacturer.
-Immediately replace the lamp if damaged or deformed by heat.



➤ 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 for at least 10 minutes. After this time the likelihood of the lamp exploding is virtually small. If it is necessary to replace the lamp, wait for another 15 minutes to avoid getting burnt. The fitting is designed to hold in any splinters produced by a lamp exploding.



3. Operating determinations

- This device is a moving-head for creating decorative effects and was designed for indoor use only.
- If the device has been exposed to drastic temperature fluctuation (e.g. after transportation), do not switch it on immediately. The arising condensation water might damage your device. Leave the device switched off until it has reached room temperature.
- Never run the device without lamp!
- Do not shake the device. Avoid brute force when installing or operating the device.
- Never lift the fixture by holding it at the projector head, as the mechanics may be damaged. Always hold the fixture at the transport handles.
- When choosing the installation-spot, please make sure that the device is not exposed to heat, moisture or dust. There should not be any cables lying around. You endanger your own and the safety of others!
- The minimum distance between light output and the illuminated surface must be more than 0.2 meters.
- Make sure that the area below the installation place is blocked when rigging, derigging or servicing the fixture.
- Always fix the fixture with an appropriate safety rope. Fix the safety rope at the correct holes only.
- Operate the fixture after having checked that the housing is firmly closed and all screws are tightly fastened.
- The lamp must never be ignited if the objective-lens or any housing-cover is open, as discharge lamps may explode and emit a high ultraviolet radiation, which may cause burns.
- The maximum ambient temperature 40° C must never be exceeded.
- Operate the device only after having familiarized with its functions. Do not permit operation by persons not qualified for operating the device. Most damages are the result of unprofessional operation!
- Please use the original packaging if the device is to be transported.
- Please consider that unauthorized modifications on the device are forbidden due to safety reasons!
- If this device will be operated in any way different to the one described in this manual, the product may suffer damages and the guarantee becomes void. Furthermore, any other operation may lead to dangers like short-circuit, burns, electric shock, burns due to ultraviolet radiation, lamp explosion, crash etc.

4. Rigging the fixture

4.1 Mounting



Pay attention to the regulations of CE.

Installation by qualified staff to complete.

- ☞ For the various mounting positions of the FIXTURE (standing on the floor, sideways or hanging different accessories kits are available).
- ☞ Through this a safe and firm installation is assured.
- ☞ You'll find special connectors on the bottom side of the system which are put to use here.

4.2 Installing the Clamps

Please consider the respective national norms during the Installation! The installation must only be carried out by an authorized dealer!

The installation of the projector has to be built and constructed in a way that it can hold 10 times the weight for 1 hour without any harming deformation.

The installation must always be secured with a secondary safety attachment, e.g. an appropriate catch net. This secondary safety attachment must be constructed in a way that no part of the installation can fall if the main attachment fails.

When servicing the fixture staying in the area below the installation place, on bridges, under high working places and other endangered areas is forbidden.

The operator has to make sure that safety-relating and machine-technical installations are approved by an expert before taking into operation for the first time and after changes before taking into operation another time.

The operator has to make sure that safety-relating and machine-technical installations are approved by an expert after every four years in the course of an acceptance test.

The operator has to make sure that safety-relating and machine-technical installations are approved by a skilled person once a year.

The projector should be installed outside areas where persons may walk by or be seated.

Important! Overhead rigging requires extensive experience CE, including (but not limited to) calculating working load limits, installation material being used, and periodic safety inspection of all installation material and the projector. If you lack these qualifications, do not attempt the installation yourself, but instead use a professional structural rigger. Improper installation can result in bodily injury and or damage to property.

The projector has to be installed out of the reach of people.

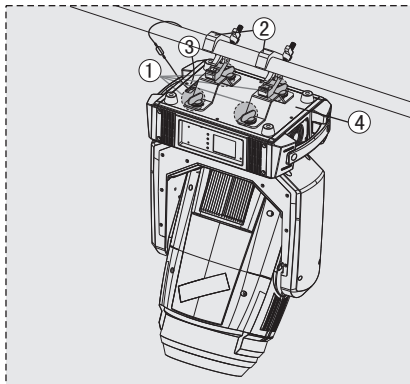
If the projector shall be lowered from the ceiling or high joists, professional trussing systems have to be used. The projector must never be fixed swinging freely in the room.

Caution Projectors may cause severe injuries when crashing down! If you have doubts concerning the safety of a possible installation, do not install the projector!

Before rigging make sure that the installation area can hold a minimum point load of 10 times the projector's weight.

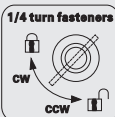
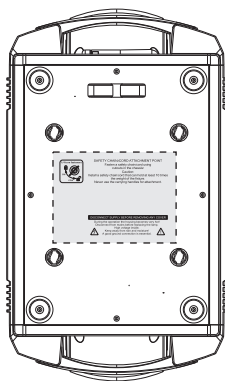
The projector can be placed directly on the stage floor or rigged in any orientation on a truss without altering its operation characteristics.

For overhead use, always install a safety-rope that can hold at least 10 times the weight of the fixture. You must only use safety-ropes with screw on carabines. Pull the safety-rope through the two apertures on the bottom of the base and over the trussing system etc.



Warning: it is necessary to make sure that the installation location is perfectly appropriate, and the installation location is safe and reliable.

- | | |
|---|----------------|
| ① | Lock catch |
| ② | omega holder |
| ③ | secure chain |
| ④ | mounting plate |



SAFETY CHAIN/CORD ATTACHMENT POINT

Fasten a safety chain/cord using cutouts in the chassis

Caution:

Install a safety chain/cord that can hold at least 10 times the weight of the fixture.
Never use the carrying handles for attachment.

DISCONNECT SUPPLY BEFORE REMOVING ANY COVER

During the operation the housing becomes very hot!
Disconnect from mains before replacing the lamp.
High voltage inside.

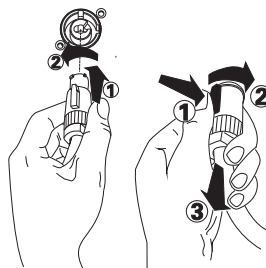
Keep away from rain and moisture!
A good ground connection is essential.

4.3 Power supply connection and cut off

Connect the light source to the main power source with the plug of the power cord, or cut off the power supply:

Connection: according to procedures, the power plug and socket is inserted into the groove one one alignment, rotation.


Cut off: according to procedures, press the button on the rotating plug, pull out.



4.4 Power Connection

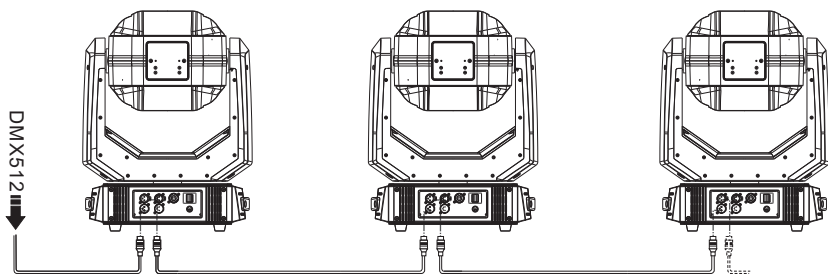
If you wish to change the power supply settings, see the chapter appendix Connect the fixture to the mains with the enclosed power cable and plug.

Warning: please verify the power of the power supply equipment prior to the connection! Earth wire must be grounded!

CABLE(EU)	CABLE(US)	Pin	INTERNATIONAL
Brown	Black	Live	L
Light blue	White	Neutral	N
Yellow/Green	Green	Earth	

4.5 DMX-512 connection/connection between fixtures

Only use stereo shielded cable and 3-pin XLR-plugs and connectors in order to connect.



Caution

At the last fixture, the DMX-cable has to be terminated with a terminator. solder a 120 resistor between signal(-) and Signal (+) into a 3-pin XLR-plug and plug it in the DMX-output of the last fixture.

DMX output 3-pin XLR socket DMX input 3-pin XLR socket

DMX output 5-pin XLR socket DMX input 5-pin XLR socket



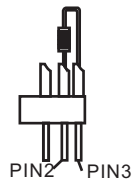
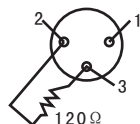
1: Ground
2: Signal (-)
3: Signal (+)



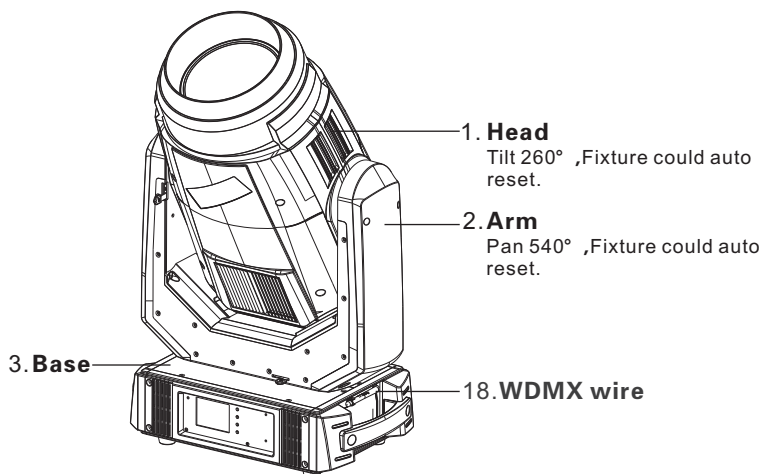
1: Ground
2: Signal (-)
3: Signal (+)
4: N. A.
5: N. A.

DMX Terminator Diagram

-For installations where the DMX cable has to run a long distance or is in an electrically noisy environment it is recommended to use a DMX terminator. This helps in preventing corruption of the signal by electrical noise. The DMX terminator is simply an XLR plug with a 120Ω resistor connected between pins 2 and pins 3, which is then plugged into the output XLR socket of the last fixture in the chain.



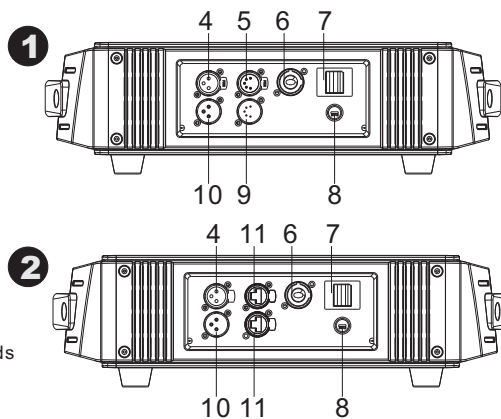
5.Description of the device



BACK PANEL

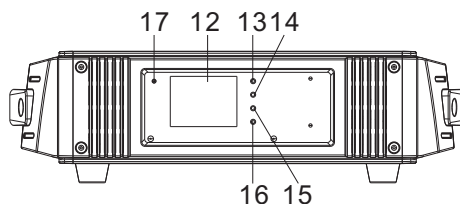
- 4. 3-pin XLR female
- 5. 5-pin XLR female
- 6. Power-in
- 7. Power switch
- 8. Main Fuse
- 9. 5-pin XLR male
- 10. 3-pin XLR male
- 11. Network interface

Note: One of the above two power boards can be chosen at will!

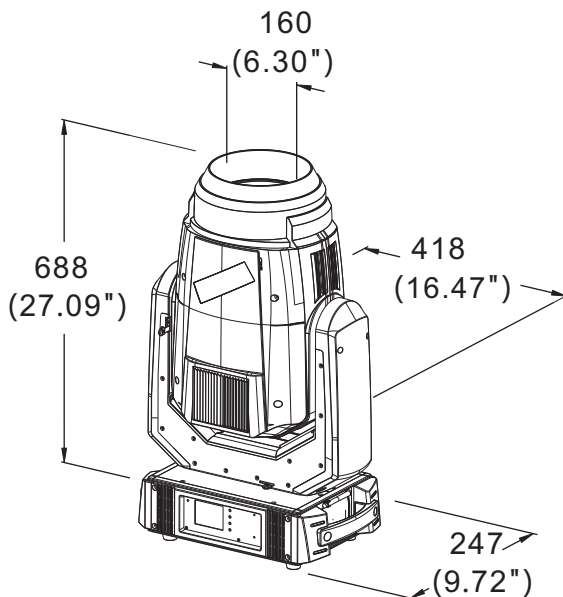
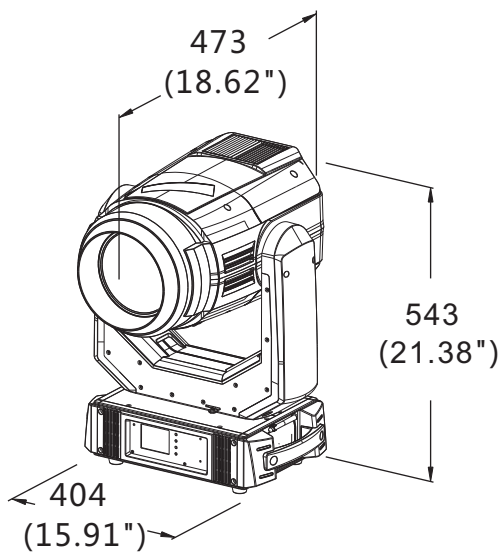


CINTROL PANEL

- 12. Touch screen(LCD display)
- 13. MODE button
- 14. UP button
- 15. DOWN button
- 16. ENTER button
- 17. Status indicator lamp
- 18. WDMX Wire



6.Dimension



7.Display control

7.1 Navigation in the Menu

Using the buttons or touch screen, and this can be simply and easily set the address code and functions code.

If you view or modify the lighting feature set, then press ENTER button, the display will enter the menu interface. Both there is sub menu corresponding to the functional operation of the main menu. Each of the menus is representative of the specific features of the lamp. The specific contents shows as the table menu below.

Set or browse lighting function, press UP or DOWN button.

Press ENTER to save your changes or enter the submenu. Press the UP or DOWN can change the numerical (increase or decrease in value).

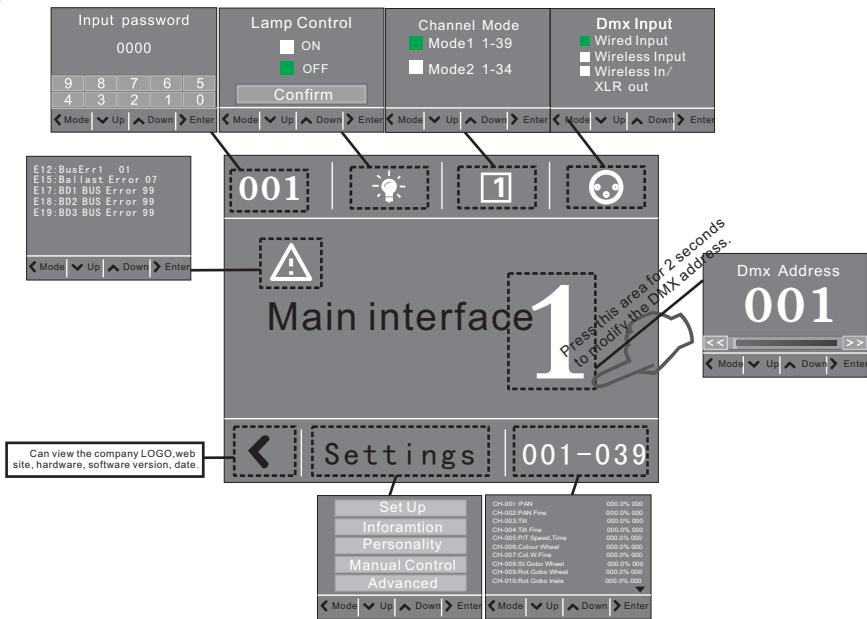
Press the MODE button to return to menu. Set a time 0 to 10 minutes automatically exit menu interface and close the screen.

7.2 Display Operation

Put through power supply, open the power switch of lamps and lanterns, display show the company LOGO website. According to the main interface, as shown in figure:

In the main interface, press "MODE" button to view the software version, press the "UP" "DOWN" can modify the DMX address.

If the screen "⊗" icon is green, said DMX signal connection is normal, this state can be used to check the lamps and lanterns and connection between the control table is normal.



This lamp can be set to turn off the automatic flip screen function, touch this "⊗" icon can be manually flip screen.

Click on the main interface of the icon, numerical to view view Settings related information of lamps and lanterns. Symbols such as the main interface appear "Δ", the following error message indicates that there might be a lamps and lanterns, can click to view and control information content to modify the lamps and lanterns.

CODE #	ERRO INFO	CHECK MEASUREMENT	NOTE
E01	SpiFlashError	Check the welding of memory IC	RESET ERROR
E02	Program Err 1	Check the welding of Chip	
E03	Program Err 2	Check the welding of master IC EP4C	
E04	MBDInit Error	Check the communication signal 485& 485 chip & memory IC	
E05	BD1Init Error		
E06	BD2Init Error	Check main cable ABAB (485) chip	
E07	BD3Init Error		
E08	BD4Init Error		
E12	BusErr1		
E13	BusErr2		
E14	SPDError	Check the welding of master IC	
E16	MFpga Error	Check the communication signal& welding of communication chip	
E17	BD1 BUS Error		
E18	BD2 BUS Error		
E19	BD3 BUS Error		
E20	BD4 BUS Error		
E21	Pan FB. Err	Check the light coupling line, optical coupling switch and a plate of the relative position measurement	
E23	Tilt FB. Err		
E22	Pan Zero Err	Check cable of sensor, distance and location of ,magnets and sensor	
E24	Tilt Zero Err		
E25	Prism Err1		
E26	Prism Err2		
E27	Colour Err		
E28	Effect Err		
E29	R.Gobo Err1		
E30	R.Gobo Err2		
E31	Zomm Err		
E32	Focus Err		
E33	St.Gobo Err		
E34	Cyan Err		
E35	Magenta Err		
E36	Yellow Err		
E37	B.Fan1 Error	Check the fan of head	
E38	B.Fan2 Error		
E39	B.Fan3 Error		
E40	L.Fan1 Error	Check if the fan(80) of the lamp holder is working	
E41	L.Fan2 Error		
E42	L.Fan3 Error	Check if the blowing machine of lamp holder is working	
E43	L.Fan4 Error		
E44	GOBO Fan Error	Check the fan of head GOBO	
E45	EthMDL Error	Check the fan of ArtNet、communication signal	

7.3 Menu Maps

			Remark
Set up	Dmx Address	001-XXX	
	Channel Mode	Mode1 1-39	default Mode1
		Mode2 1-34	
	Fixture Id	0001-9999	
	Ether net (Optional)	Default IP Address	2.X.X.X 10.X.X.X
		Custom IP Address	Enable X.X.X.X
		Net Mask	255.255.255.X
		Art-Net Universe	0-255
		Network params	
Information	Fixture Times	XXXXX h XX m	
	Lamp Times	Lamp On Times XXXXh XXm	
		Lamp Strike XXXX	
		Reset Lamp Time	
	Error List		
	Diagnosis	BOARD 1: XX.XX%	
		BOARD 2: XX.XX%	
		BOARD 3: XX.XX%	
		BOARD 4: XX.XX%	
	Fans Monitor		
	DMX Values		
	DMX Diagnosis		
Personality	Lamp	Power ON Light ON/OFF	Ddefault OFF
		Lamp On By DMX ON/OFF	Default ON
		Lamp ON Delay 0-60M	Default 0M
	Pan/Tilt	Pan Reverse ON/OFF	Default OFF
		Tilt Reverse ON/OFF	Default OFF
		Feedback ON/OFF	Default ON
	Dmx Input	Wired Input	Default
		Wireless Input	Optional
		Ethernet Input	
		Wireless In/XLR out	
		Ethernet In/XLR out	
	Language	English	language choice
		简体中文	
	Screen	Brightness	Brightness
		Screen Time out 0-10m	Screen Time out
		Touch Screen ON/OFF	Default OFF
		Auto Screen ON/OFF	Default ON
Manual Control	Lamp	Lamp Control ON/OFF	Default OFF
		Confirm	Confirm
	Reset	Reset ALL	
		Reset Pan/Tilt	
		Reset Colour	
		Reset Zoom	
		Reset Dimmer	
	Channel		
Advanced	Calibration	Input Password XXXX	
	Factory Default	ON/OFF	
	Touch Calibration		

8.DMX protocol

Mode 1	Mode 2	Fade Type	Function	Dmx Value
1	1	Pan	Pan	0-255
2	2	Pan Fime (16BIT)	Pan Fime	0-255
3	3	Tilt	Tilt	0-255
4	4	Tilt Fime (16BIT)	Tilt Fime	0-255
5	5	Pan/Tilt speed , Pan/Tilt time	Standard mode	0
			Max. Speed Mode	1
			Time from 0.2 s to 25.5 sec	2 - 255
			Reserved	0 - 19
			function is active only10 seconds after switching the fixture on	
			Graphic display On	20-24
			Graphic display Off	25-29
			To activate CRI setting, stop in DMX value for at least 3 seconds.	
			High CRI (CRI=90+)	30-34
			Standard CRI (CRI=80)	35-39
			Eco mode (Lamp power 380W)	40-44
			Standard mode (Lamp power 470W)	45-49
			Close proximity mode On	50-54
			Close proximity mode Off	55-59
			Fans mode: Auto	60-64
			Fans mode: High	65-69
			Dimmer curve: Square law	70-74
			Dimmer curve: Linear	75-79
			Autofocus On	80-84
			Autofocus Off	85-89
			Pan/Tilt speed mode	90-94
			Pan/Tilt time mode	95-99
			Blackout while pan/tilt moving	100-101
			Disabled blackout while pan/tilt moving	102-103
			Blackout while prism wheel 1 (wheel 2) moving	104-105
			Disabled blackout while prism wheel 1 (wheel 2) moving	106-107
			Reserved	108-119
			Parking position On	120-124
			Parking position Off	125-129
			To activate following functions, stop in DMX value for at least 3 seconds.	
			Lamp On	130-139
			Pan/Tilt reset	140-149
			Colour system Reset	150-159
			Gobo wheels Reset	160-169
			Dimmer/Shutter/Hot Spot Reset	170-179
			Zoom/focus/frost/prism wheels Reset	180-189
			Effect wheel Reset	190-199
			Total Reset	200-209
			Reserved	210-229
			Lamp Off step	230-239
			The following RoboSpot related commands are only applicable when the RoboSpot is connected:	
			RoboSpot enabled	240-244
			RoboSpot disabled - except handle faders and pan/tilt	245-249
			RoboSpot fully disabled except pan/tilt	250-255
7	7	Cyan	Linear Cyan movement	0-255
8	8	Magenta	Linear Magenta movement	0-255

Mode 1	Mode 2	Fade Type	Function	Dmx Value
9	9	Yellow	Linear Yellow movement	0-255
10	10	Colour wheel	Continual positioning	
			Open/white	0
			Deep Red	9
			Deep Blue	18
			Yellow	27
			Light green	37
			Magenta	46
			Lavender	55
			Pink	64
			Dark green	73
			CTO 2700K	82
			Blue	91
			Orange	101
			CTO 3200K	110
			UV	119
			White step	128-129
			Positioning	
			Deep Red	130-134
			Deep Blue	135-138
			Yellow	139-143
			Light green	144-147
			Magenta	148-152
			Lavender	153-157
			Pink	158-161
			Dark green	162-166
			CTO 2700K	167-171
			Blue	172-176
			Orange	177-180
			CTO 3200K	181-185
			UV	186-189
			Forwards rainbow effect from fast to slow proportional	190-215
			No rotation	216-217
			Backwards rainbow effect from slow to fast proportional	218-243
			Reserved	244-249
			Auto random colour selection from fast to slow	250-255
11		Colour wheel-fine	Fine positioning	0-255
12	11	Virtual colour wheel	Open/white	0
			Filter 4 (Medium Bastard Amber)	1-2
			Filter 10 (Medium Yellow)	3-4
			Filter 19 (Fire)	5-6
			Filter 26 (Bright Red)	7-8
			Filter 58 (Lavender)	9-10
			Filter 68 (Sky Blue)	11-12
			Filter 71 (Tokyo Blue)	13-14
			Filter 79 (Just Blue)	15-16
			Filter 88 (Lime Green)	17-18
			Filter 90 (Dark Yellow Green)	19-20
			Filter 100 (Spring Yellow)	21-22
			Filter 101 (Yellow)	23-24
			Filter 102 (Light Amber)	25-26
			Filter 103 (Straw)	27-28
			Filter 104 (Deep Amber)	29-30
			Filter 105 (Orange)	31-32
			Filter 106 (Primary Red)	33-34

Mode 1	Mode 2	Fade Type	Function	Dmx Value
12	11	Virtual colour wheel	Filter 111 (Dark Pink)	35-36
			Filter 115 (Peacock Blue)	37-38
			Filter 116 (Medium Blue-Green)	39-40
			Filter 117 (Steel Blue)	41-42
			Filter 118 (Light Blue)	43-44
			Filter 119 (Dark Blue)	45-46
			Filter 120 (Deep Blue)	47-48
			Filter 121 (Filter Green)	49-50
			Filter 128 (Bright Pink)	51-52
			Filter 131 (Marine Blue)	53-54
			Filter 132 (Medium Blue)	55-56
			Filter 134 (Golden Amber)	57-58
			Filter 135 (Deep Golden Amber)	59-60
			Filter 136 (Pale Lavender)	61-62
			Filter 137 (Special Lavender)	63-64
			Filter 138 (Pale Green)	65-66
			Filter 139 (Primary Green)	67-68
			Filter 141 (Bright Blue)	69-70
			Filter 147 (Apricot)	71-72
			Filter 148 (Bright Rose)	73-74
			Filter 152 (Pale Gold)	75-76
			Filter 154 (Pale Rose)	77-78
			Filter 157 (Pink)	79-80
			Filter 158 (Deep Orange)	81-82
			Filter 162 (Bastard Amber)	83-84
			Filter 164 (Flame Red)	85-86
			Filter 165 (Daylight Blue)	87-88
			Filter 169 (Lilac Tint)	89-90
			Filter 170 (Deep Lavender)	91-92
			Filter 172 (Lagoon Blue)	93-94
			Filter 179 (Chrome Orange)	95-96
			Filter 180 (Dark Lavender)	97-98
			Filter 181 (Congo Blue)	99-100
			Filter 197 (Alice Blue)	101-102
			Filter 201 (Full C.T. Blue)	103-104
			Filter 202 (Half C.T. Blue)	105-106
			Filter 203 (Quarter C.T. Blue)	107-108
			Filter 204 (Full C.T. Orange)	109-110
			Filter 205 (Half C.T. Orange)	111-112
			Filter 206 (Quarter C.T. Orange)	113-114
			Filter 247 (Filter Minus Green)	115-116
			Filter 248 (Half Minus Green)	117-118
			Filter 281 (Three Quarter C.T. Blue)	119-120
			Filter 285 (Three Quarter C.T. Orange)	121-122
			Filter 352 (Glacier Blue)	123-124
			Filter 353 (Lighter Blue)	125-126
			Filter 715 (Cabana Blue)	127-128
			Filter 778 (Millennium Gold)	129-130
			Filter 793 (Vanity Fair)	131-132
			Raw DMX	133-255
13	12	Effect Speed	Speed of CMY movement from max to min	0-255
14	13	CMY & Colour wheel time	Function is off	0
			Time of CMY and col. wheel movement (0.1sec-->25.5sec.)	1-255
15	14	Zoom & Focus & Frost & Prism time	Function is off	0
			Time of prism movement (0.1 sec-->5 sec.)	1-50

Mode 1	Mode 2	Fade Type	Function	Dmx Value
15	14	Zoom & Focus & Frost & Prism time	Time of frost movement (0.1 sec -->10 sec)	51-100
			Time of zoom/ focus movement (0.1 sec-->25.5 sec.)	101-255
16	15	Effect wheel positioning	No function	0-19
			Proportional indexing	20-127
			Ramping from open to full position (max.-->min. speed)	128-170
			Ramping from open to half position (max.-->min. speed)	171-213
			Ramp. from half position to full position (max.-->min. speed)	214-255
17	16	Effect wheel rotation	No rotation	0
			Forwards rotation from fast to slow	1-127
			No rotation	128
			Backwards rotation from slow to fast	129-255
18	17	Effect wheel animations	No animation	0-3
			Note : All animations were created at distance of 5 m from screen with zoom=16 DMX. Focus value for each animation is stated in brackets	
			Animation Macro 1 (Focus=159 DMX at 5 m)	4-5
			Animation Macro 2 (Focus=154 DMX at 5 m)	6-7
			Animation Macro 3 (Focus=154 DMX at 5 m)	8-9
			Animation Macro 4 (Focus=157 DMX at 5 m)	10-11
			Animation Macro 5 (Focus=157 DMX at 5 m)	12-13
			Animation Macro 6 (Focus=166 DMX at 5 m)	14-15
			Animation Macro 7 (Focus=145 DMX at 5 m)	16-17
			Animation Macro 8 (Focus=162 DMX at 5 m)	18-19
			Animation Macro 9 (Focus=162 DMX at 5 m)	20-21
			Animation Macro 10 (Focus=162 DMX at 5m)	22-23
			Black and white animations. The channels are blocked: Effect wheel positioning, Effect wheel rot., Rotat. Gobos and Rot. Gobo rotation	
			Animation Macro 1 (Focus=159 DMX at 5 m)	24-25
			Animation Macro 2 (Focus=154 DMX at 5 m)	26-27
			Animation Macro 3 (Focus=154 DMX at 5 m)	28-29
			Animation Macro 4 (Focus=157 DMX at 5 m)	30-31
			Animation Macro 5 (Focus=157 DMX at 5 m)	32-33
			Animation Macro 6 (Focus=166 DMX at 5 m)	34-35
			Animation Macro 7 (Focus=145 DMX at 5 m)	36-37
			Animation Macro 8 (Focus=162 DMX at 5 m)	38-39
			Animation Macro 9 (Focus=162 DMX at 5 m)	40-41
			Animation Macro 10 (Focus=162 DMX at 5m)	42-43
			Raw DMX	44-255
19	18	Static gobo wheel	Open/Hole	0-3
			Positioning	
			Gobo 1	4-9
			Gobo 2	10-15
			Gobo 3	16-21
			Gobo 4	22-27
			Gobo 5	28-33
			Gobo 6	34-39
			Gobo 7	40-45
			Gobo 8	46-51
			Gobo 9	52-57
			Gobo 10	58-63
			Beam reducer 1	64-69
			Beam reducer 2	70-75
			Beam reducer 3	76-81
			Beam reducer 4	82-87
			Shaking gobos from slow to fast	

Mode 1	Mode 2	Fade Type	Function	Dmx Value
19	18	Static gobo wheel	Gobo 1	88-95
			Gobo 2	96-103
			Gobo 3	104-111
			Gobo 4	112-119
			Gobo 5	120-127
			Gobo 6	128-135
			Gobo 7	136-143
			Gobo 8	144-151
			Gobo 9	152-159
			Gobo 10	160-167
			Beam reducer 1	168-175
			Beam reducer 2	176-183
			Beam reducer 3	184-191
			Beam reducer 4	192-199
			Open/hole	200-201
			Forwards gobo wheel rotation from fast to slow	202-222
			Backwards gobo wheel rotation from slow to fast	223-243
			Reserved	244-249
			Auto random gobo selection from fast to slow	250-255
20	19	Rotating gobo wheel	Index – set indexing on channel 21/20	
			Open/Hole	0
			Hole (flat field)	1-4
			Gobo 1	5-7
			Gobo 2	8-10
			Gobo 3	11-13
			Gobo 4	14-16
			Gobo 5	17-19
			Gobo 6	20-22
			Gobo 7	23-25
			Gobo 8	26-28
			Gobo 9	29-31
			Rotation – set rotation on channel 21/20	
			Gobo 1	32-34
			Gobo 2	35-37
			Gobo 3	38-40
			Gobo 4	41-43
			Gobo 5	44-46
			Gobo 6	47-49
			Gobo 7	50-52
			Gobo 8	53-55
			Gobo 9	56-59
			Shaking gobo from slow to fast	
			Gobo 1	60-67
			Gobo 2	68-75
			Gobo 3	76-83
			Gobo 4	84-91
			Gobo 5	92-99
			Gobo 6	100-107
			Gobo 7	108-115
			Gobo 8	116-123
			Gobo 9	124-129
			Shaking gobo from slow to fast	
			Gobo 1	130-137
			Gobo 2	138-145
			Gobo 3	146-153
			Gobo 4	154-161

Mode 1	Mode 2	Fade Type	Function	Dmx Value
20	19	Rotating gobo wheel	Gobo 5	162–169
			Gobo 6	170–177
			Gobo 7	178–185
			Gobo 8	186–193
			Gobo 9	194–199
			Open/hole	200–201
			Forwards gobo wheel rotation from fast to slow	202 – 222
			Backwards gobo wheel rotation from slow to fast	223 – 243
			Reserved	244 – 249
			Auto random gobo selection from fast to slow	250–255
21	20	Rot. gobo indexing and rotation	Gobo indexing – set position on channel 20/19	
			Gobo indexing	0–255
			Gobo rotation – set position on channel 20/19	
			No rotation	0
			Forwards gobo rotation from fast to slow	1–127
			No rotation	128
22		Rotation Fine	Backwards gobo rotation from slow to fast	129–255
			Fine indexing/rotation (0=default)	0–255
23	21	Prism wheel 1	This wheel is blocked If Rotating gobo wheel >0 DMX	
			Open position/hole	0–3
			Index – set indexing on channel 24/22	
			Prism 1 – 6-facet linear	4–7
			Prism 2 – cylindrical	8–11
			Prism 3 – 8-facet 12° circular	12–15
			Rotation – set rotation on channel 24/22	
			Prism 1 – 6-facet linear	16–19
			Prism 2 – cylindrical	20–23
			Prism 3 – 8-facet 12° circular	24–27
24	22	Prism wheel 1 Rotation	Raw DMX	28–255
			Prism indexing – set position on channel 23/21	
			Prism 1 indexing	0–255
			Prism rotation – set position on channel 23/21	
			No Rotation	0
			Forwards prism rotation from fast to slow	1–127
25	23	Prism wheel 2	No rotation	128
			Backwards prism rotation from slow to fast	129–255
			This wheel is blocked If Rotating gobo wheel >0 DMX	
			Open position/hole	0–3
			Index – set indexing on channel 26/24	
			Prism 1 – 6-facet linear	4–7
			Prism 2 – cylindrical	8–11
			Prism 3 – 8-facet 12° circular	12–15
			Rotation – set rotation on channel 26/24	
			Prism 1 – 6-facet linear	16–19
26	24	Prism wheel 2 Rotation	Prism 2 – cylindrical	20–23
			Prism 3 – 8-facet 12° circular	24–27
			Raw DMX	28–255
			Prism indexing – set position on channel 25/23	
			Prism 2 indexing	0–255
			Prism rotation – set position on channel 25/23	
27	25	Pattern selection	No Rotation	0
			Forwards prism rotation from fast to slow	1–127
			No rotation	128
			Backwards prism rotation from slow to fast	129–255
27	25	Pattern selection	The channels are blocked: Prism Wheel 1/2, Prism Wheel 1/2 rot.	

Mode 1	Mode 2	Fade Type	Function	Dmx Value
27	25	Pattern selection	Open position/hole	0-3
			Pattern 1	4-5
			Pattern 2	6-7
			Pattern 3	8-9
			Pattern 4	10-11
			Pattern 5	12-13
			Pattern 6	14-15
			Pattern 7	16-17
			Pattern 8	18-19
			Pattern 9	20-21
			Pattern 10	22-23
			Pattern 11	24-25
			Pattern 12	26-27
			Rotation – set rotation on channel 28/26	
			Pattern 1	28-29
			Pattern 2	30-31
			Pattern 3	32-33
			Pattern 4	34-35
			Pattern 5	36-37
			Pattern 6	38-39
			Pattern 7	40-41
			Pattern 8	42-43
			Pattern 9	44-45
			Pattern 10	46-47
			Pattern 11	48-49
			Pattern 12	50-51
			Dynamic patterns–set rotation on channel 28/26	
			Pattern 13	52-53
			Pattern 14	54-55
			Pattern 15	56-57
			Pattern 16	58-59
			Pattern 17	60-61
			Pattern 18	62-63
			Pattern 19	64-65
			Pattern 20	66-67
			Raw DMX	68-255
28	26	Pattern rotation and indexing	The channels are blocked: Prism Wheel 1/2, Prism Wheel 1/2 rot.	
			Pattern indexing – set position on channel 27/25	
			Pattern indexing	0-255
			Pattern rotation – set position on channel 27/25	
			No rotation	0
			Forwards pattern rotation from fast to slow	1-127
29	27	Beam shaper selection	No rotation	128
			Backwards pattern rotation from slow to fast	129-255
			The channels are blocked: Pris.Wheel 1 and 2, Static gobo, Rotating gobo, Frost (Light frost only)	
			Open position/hole	0 – 3
			Index – set indexing on channel 30/28	
			Beam shaper 1	4-7
			Beam shaper 2	8-11
			Beam shaper 3	12-15
			Beam shaper 4	16-19
			Rotation – set rotation on channel 30/28	
			Beam shaper 1	20-23
			Beam shaper 2	24-27

Mode 1	Mode 2	Fade Type	Function	Dmx Value
29	27	Beam shaper selection	Beam shaper 3	28-31
			Beam shaper 4	32-35
			Reserved	36-255
30	28	Beam shaper rotation and indexing	Beam shaper indexing – set position on channel 29/27	
			Shaper indexing	0 – 255
			Beam shaper rotation – set position on channel 29/27	
			No rotation	0
			Forwards shaper rotation from fast to slow	1-127
			No rotation	128
			Backwards shaper rotation from slow to fast	129-255
31	29	Frost	Open	0
			Light Frost	
			Light Frost from 0% to 100%	1-50
			100% Light Frost	51-53
			Pulse closing from slow to fast	54-63
			Pulse opening from fast to slow	64-73
			Ramping from fast to slow	74-83
			Open	84-86
			Medium Frost	
			Medium Frost from 0% to 100%	87-136
			Pulse closing from slow to fast	137-139
			Pulse opening from fast to slow	150-159
			Ramping from fast to slow	160-169
			Open	170-172
			Medium Frost	
			Note: Combined Frost and Prism wheel 1 cannot be inserted into light beam at the same time . The Prism wheel 1 has priority to Combined Frost .	
			Max. time of Medium frost movement 0 -->100% (100% -->0) is 10 sec.	
			Medium Frost from 0% to 100% (Light Frost inserted)	173-222
			100% Medium Frost (Light Frost inserted)	223-225
			Pulse closing from slow to fast	226-235
			Pulse opening from fast to slow	236-245
			Ramping from fast to slow	246-255
32	30	Zoom	Zoom from max. to min.beam angle	0-255
33		Zoom – fine	Fine zooming	0-255
34	31	Focus	Continuous adjustment from far to near	0-255
35		Focus Fine	Fine focusing	0-255
36	32	Reserved		0-255
37	33	Shutter/ strobe	Shutter closed	0-31
			Shutter open	32-63
			Strobe–effect from slow to fast	64-95
			Shutter open	96-127
			Opening pulse in sequences from slow to fast	128-143
			Closing pulse in sequences from fast to slow	144-159
			Shutter open	160-191
			Random strobe–effect from slow to fast	192-223
			Shutter open, Full lamp power	224-255
38	34	Dimmer	Dimmer intensity From 0% to 100%	0-255
39		Dimme Fine	Fine Dimming	0-255

9.Maintance and cleaning

DANGER:Disconnect from the mains before starting any maintenance work.

Ballast

Please change timely when each pin is getting yellow.

Be sure to maintain the device every 2 months, and make sure that all parts of the ballast, such as, screws, terminals, are locked well to ensure performance. Neglecting of maintenance may lead to failure of devices.

Lamp

Turn off the lamp first to better protect the device when the fixture is turned off. Turn off the power after running for at least 5 minutes

Don't touch the bulb with your hands. Once contacting with your hands, scrub with alcohol and then dry with linen.

When the light is on, the bulb runs at high pressure,so there is a risk of broken.It is related to the duration of using, temperature and unreasonable operation. Therefore, please do not use lamp over the life span.

The using of lamp should not exceed 1500 hours, otherwise it can damage device. Check the running time of the fixure regularly. When the lamp is used around 1500 hours, We strongly recommend that you change the lamp. After replacing it, the used time of lamp can be removed and reset.

Avoid operating in dirty and dusty environment, clean and maintain lamps regularly. Wipe the outside of the lens at least every 20 days. Wipe the internal fan at least every 30 days

It is absolutely essential that the fixture is kept clean and that dust,dirt and smoke fluid residues must not buildup on or within the fixture. Otherwise, the fixtures light-output will be significantly reduced.Regular cleaning will not only ensure the maximum light-output, but will also allow the fixture to function reliably through out its life. A soft lint-free cloth moistened with any good glass cleaning fluid is recommended, under no circum stances should alcohol or solvents be used!

The front objective lens will require weekly cleaning as smoke-fluid tends to building up residues, reducing the light-output very quickly.The cooling-fans should be cleaned monthly.

The gobos may be cleaned with a soft brush, The interior of the fixture should be cleaned at least annually usinga vacuum-cleaner or an air-jet.

There are no serviceable parts inside the device except for the lamp and the fuse.

Please disconnect the power supply before replacing the fuse and bulb. When replacing them, adopt the same mode.

10.Electric equipment specification

10.1 Electrical paramters

SOURCE:Osram sirius hri 470W

POWER:700W

VOLTAGE:AC100-240V 50/60HZ

Color temperature: 8000K

10.2 Weight and dimensions

Dimensions : 473X418X543mm

NET WEIGHT:25.5Kg

Dimensions (Carton package) : 783X530X363mm

WEIGHT (Carton package) : 31.5Kg

10.3 Channel Characteristics

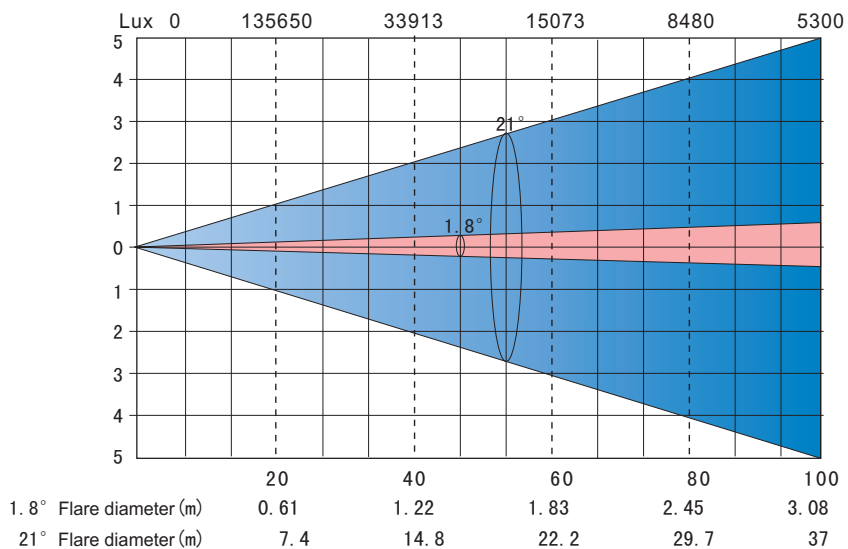
1. Channel:39、34DMX-512.
2. Scan: Pan540° ,Tilt260° ,Scan speed adjustable.Fixture could auto reset.
3. Colour wheel:One open+13colors.
- 4.RGobo wheel:one open+9 gobos. GoboR wheel: one open+ 14 gobos.Effect wheel rotation.
- 5.Prism Wheel 2: 2 8-facet prism, 2 6-facet prism, 1 32-facet prism, 1 Cylindrical Prism .
- 6.Demmer: limear dimmer.
- 7.Focus: linear focus.
- 8.Zoom:linear amplifier.
- 9.Shutter:Double motor stroboscopic, electronic shutter, random strobe.

10.4 Menu Function

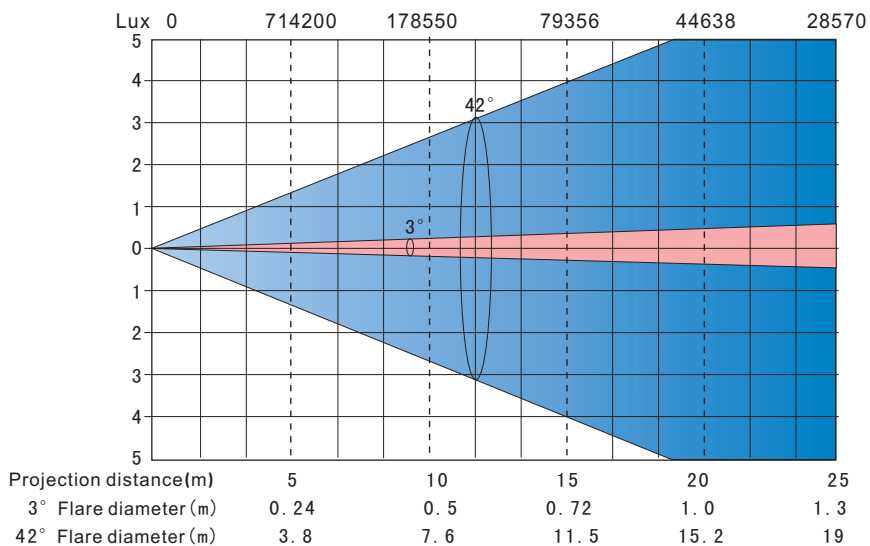
- 1.Touch screen, English menu.
- 2.Each DMX Value displayable.
- 3.Monitor could ON/OFF automatically.
- 4.Show fixture, lamp use time.
- 5.Lamp on/ff when power on.
- 6.When dimmer is closed, It supports energy saving mode,power consumption of the bulb will be 80% less, which will prolong lifetime of the bulb and make. It more stable
- 7.You can switch on and off the lamp via the control panel or via your DMX controller. It must be noted that it has to be cold before re-stricking.
- 8.DMX signal after disconnecting display brightness alternately.
- 9.Remote ON by DMX.
- 10.Software upgrade function.

10.5 light table

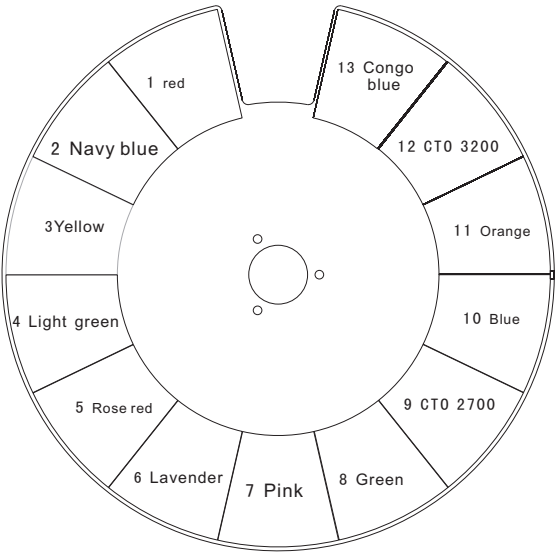
Beam pattern light spot



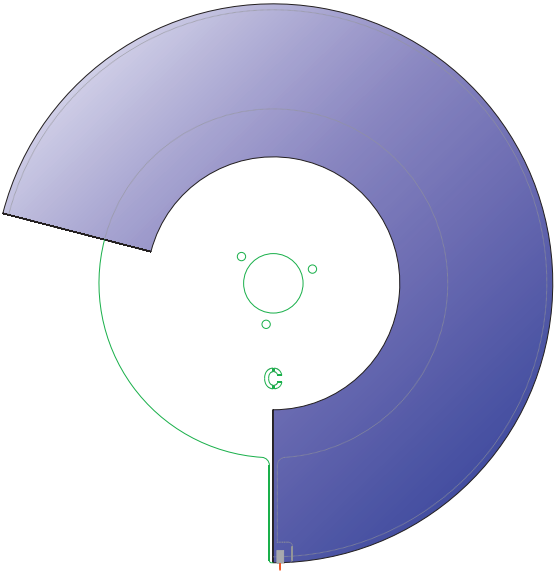
Spot mode maximum spot

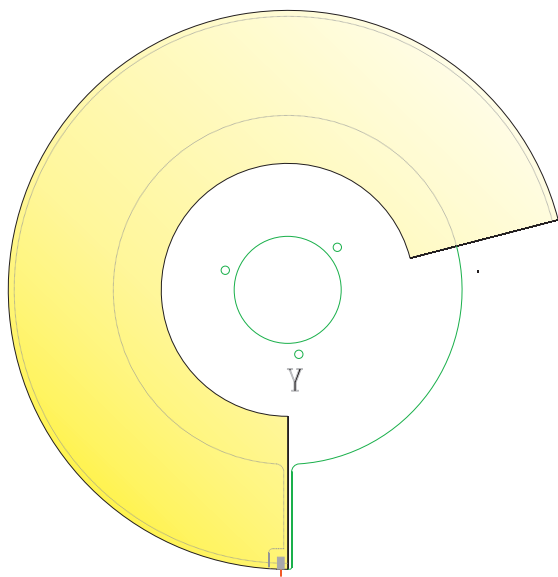
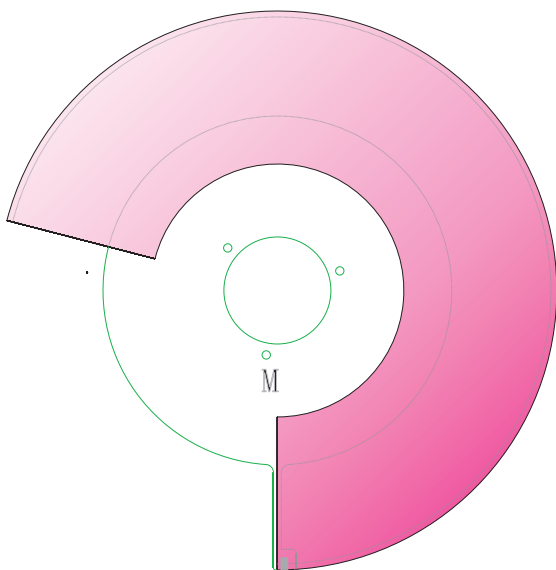


10.6 Color Wheel

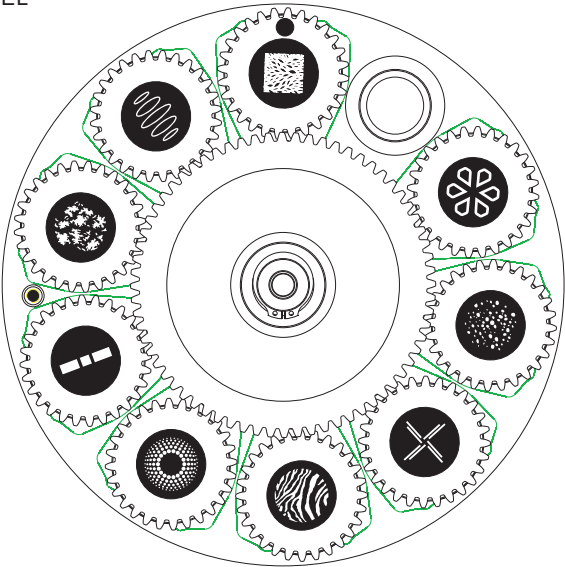


CMY

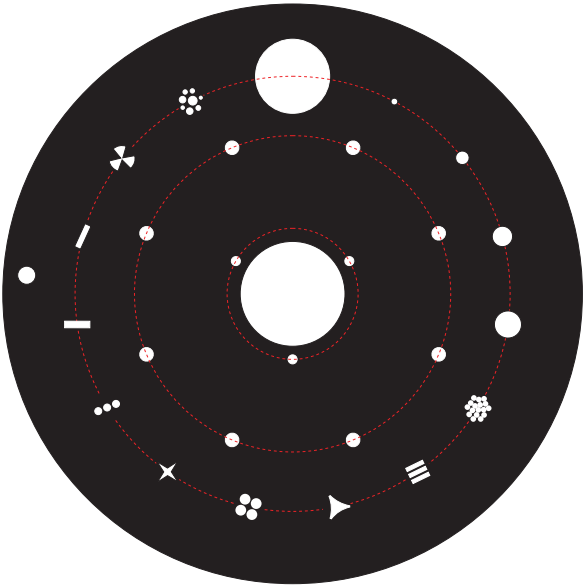




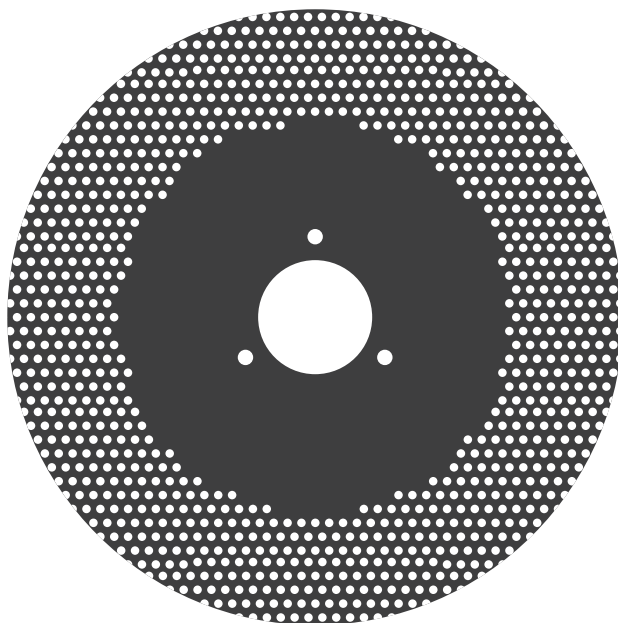
10.7 Gobo wheel
RGOBO WHEEL



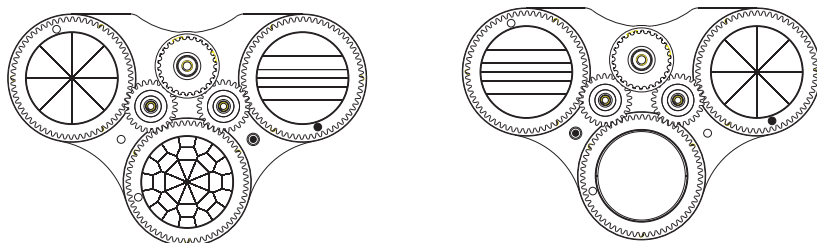
GOBOR WHEEL



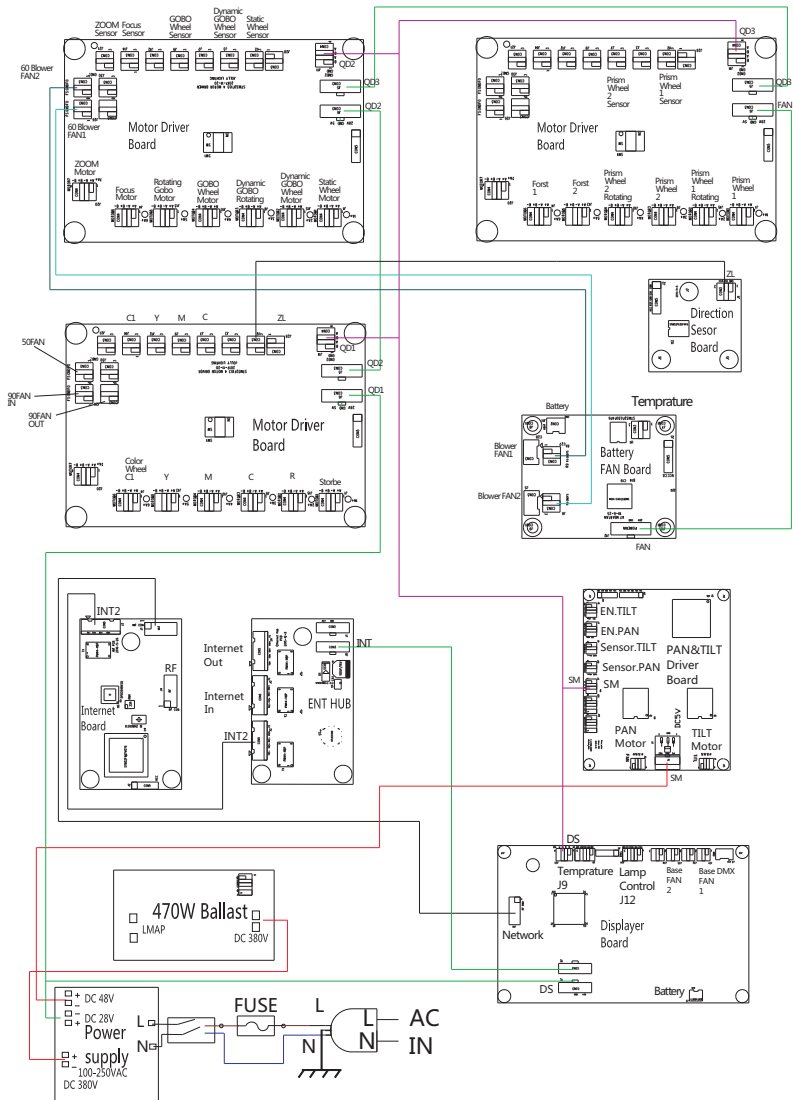
Effect Wheel



Prism Wheel



11. Electronic drawing



Note: The above contents for reference only and is subject to change without prior notice, please take specification you have on hand and our company reserves the final right of interpretation.

