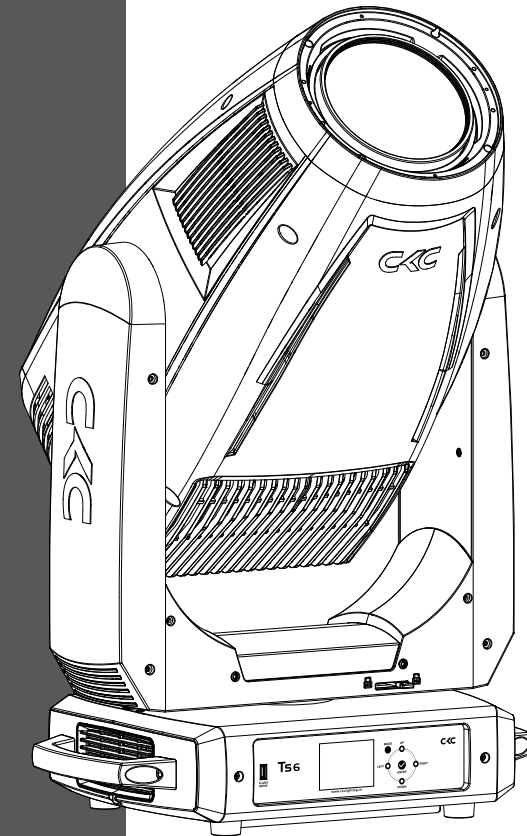


CKC

Ts6



www.ckclighting.com

CKC LIGHTING CO.,LTD

Addr.:335 Nansha Avenue, Tung Chung Town,
Nansha District, Guangzhou City, China.
TEL: (020)3920 4506 FAX: (020)3920 4631
WEB: www.ckclighting.com



Before carrying out any installation, maintenance, or cleaning of the lighting fixtures, please confirm that the power has been cut off! Before using this fixture, please read this manual. Our company reserves the right to change product design and specifications without prior notice.

CONTENTS

1. Security Warning Information	1
2. Product Introduction	3
2.1 Exterior dimensions	3
2.2 Fixture packaging accessories	3
3. Main technical parameters of the equipment	3
4. Packaging and transportation	8
4.1 Disassemble packaging	8
4.2 Equipment installation	8
5. Installation Requirements Explanation	9
5.1 Clamp installation	9
5.2 Fixture installtion	10
5.3 Hanging Installation Diagram	10
6. Power and signal connection	11
6.1 Power and signal socket	11
6.2 Power Connect	11
6.3 Signal Connect	12
7. Control panel	12
7.1 Panel Introduction	12
7.2 System menu	13
8. DMX control channel table	15
9. Control circuit diagram	19
10. Regular maintenance	19
10.1 Cleaning and maintenance	19
10.2 Fault analysis and handling	20

★ Statement ★

- This manual contains important information on safe use and installation. Please read it carefully and follow the requirements for operation and installation. Please keep this manual properly;
- The equipment has good performance and complete packaging when it leaves the factory. The operator should strictly follow the warning items and operating instructions stated in the manual. Any malfunction or damage caused by misuse or neglect of the manual is not within the scope of our company's responsibility and warranty;
- The relevant information in this manual is for reference only. All lighting products are subject to the actual product. Any changes will not be notified separately, and our company reserves the right of final interpretation.

1. Security Warning Information



Attention !

Please read the safety requirements information in this section carefully before installing, powering on, operating, or repairing the lighting fixtures.



- This product is for professional use and is not suitable for other purposes;
- After receiving the lighting fixtures, please check if the packaging is complete and unpack to check if the equipment has been damaged due to transportation. If there is any damage caused by transportation, please do not use this lamp and contact local technicians or manufacturers as soon as possible;
- When transporting again, please use the original packaging materials;
- If there is obvious damage to the machine casing, it should be replaced in a timely manner;
- When hanging lamps, it is necessary to verify that the hanging equipment can withstand more than 6 times the weight of the lamp. After installation, it is necessary to verify that the lamp cover and installation buckle are secure and undamaged. At the same time, a safety rope should be used as an auxiliary safety for the lamp and fixed on the truss;
- The light source inside this luminaire should be replaced by the manufacturer, its service agent, or a similarly qualified person;
- If you have any other questions about how to safely operate the equipment, please contact our technical personnel or call our service hotline;
- This product has a protection level of IP20 and is suitable for indoor use;
- Avoid direct external strong light shining on the lens, which may cause the lens to focus and burn out internal components.



- Lighting fixtures should be kept clean and avoid prolonged use in overheated or dusty environments to prevent contact with chemical liquids;
- When using the product, attention should be paid to avoiding serious or fatal injuries caused by fire, heat, electrical shock, and ultraviolet radiation. Before powering on or installing, read the instruction manual first. Follow the safety precautions for operation and pay attention to the warning signs on the instructions and equipment;
- Only professionals are allowed to install, operate, and maintain lighting fixtures, and strictly follow the procedures stated in the operating instructions.



- The eyes cannot directly look at the luminous object;
- Do not connect this device to any dimmer;
- If visible damage occurs to the protective casing, lens, and display screen on the lighting fixture, it is considered as damage to the point of loss;
- Please do not place any filters or other items at the light outlet, and do not replace non original parts;
- The minimum safe illumination distance of the lamp is 2m.



- Before installation, please confirm that the power supply voltage used matches the voltage indicated on the light fixture. Each lighting fixture should be properly grounded and electrically installed according to relevant standards;
- Please disconnect the power before repairing or cleaning the equipment;
- During the operation of the lighting fixtures, touching the wires is prohibited to prevent electric shock;
- If the external soft cable or wire of this lamp is damaged, the wire should be replaced by the manufacturer, its agent, or a similarly qualified person to avoid danger;
- Avoid flammable liquids, water, or metal conductors from entering the interior of the lamp to prevent electric shock or fire. If any foreign objects enter the lamp, immediately cut off the power supply;
- When multiple lamps are operated in series, the signal lines can be connected in multiple ways, but the power supply must be connected separately.



- The lighting fixtures work normally at -20 °C to 45 °C . When replacing any components or accessories in the equipment, ensure that the power is disconnected to prevent electric shock and injury;
- The maximum surface temperature of the lamp during operation can reach 72 °C , please do not touch it with bare hands.

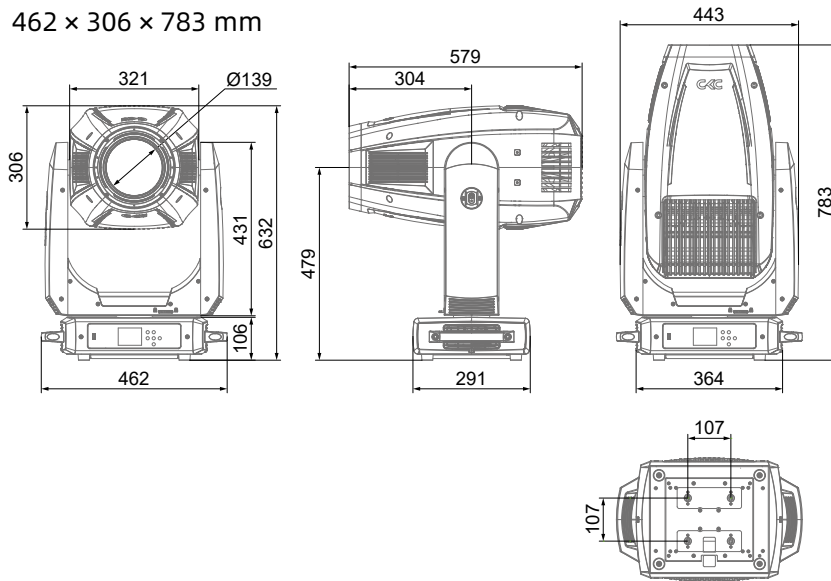


- The lighting fixtures must be installed in a sufficiently ventilated area, at least 0.5m away from adjacent surfaces, to ensure that no ventilation holes are blocked;
- Do not install the lighting fixtures directly on flammable objects;
- The minimum distance between all outer surfaces of the lamp and combustible materials is 0.5m.

2. Product Introduction

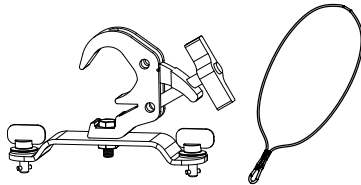
2.1 Exterior dimensions of lighting fixtures

462 × 306 × 783 mm



2.2 Packaging accessories

Name	QTY
Omega bracket	2 PCS
Clamp	2 PCS
Safety cable	1 PCS



3. Main technical parameters of the equipment

Product execution standards: GB43472-2:2023、GB/T 7000.1-2023、GB/T 7000.217-2023

● Electrical parameter

Rated input voltage: AC 100V-240V~ 50Hz/60Hz
 Rated input power: 730 W
 Power factor: 0.999F
 Input Current: 3.25A 220V

● Source lifespan

>20000 hours

● Optical system

Beam angel: 7 ~ 50°
 Source: 500W RGBAL LED
 Output luminous flux: 16400 Lm

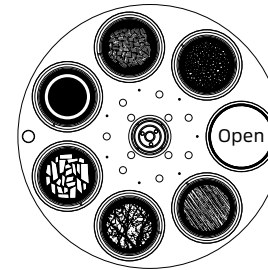
● Color system

CCT: 2400~8500K
 Ra: >95
 R9: >95
 TLCI: >92

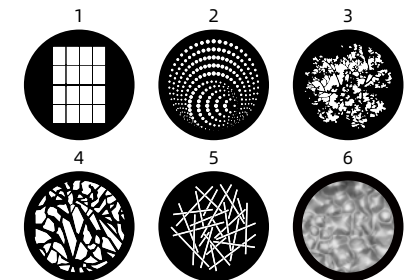
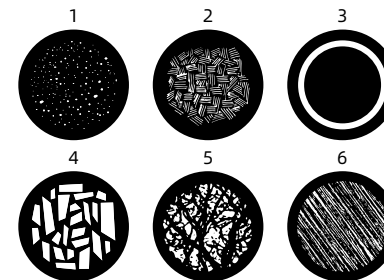
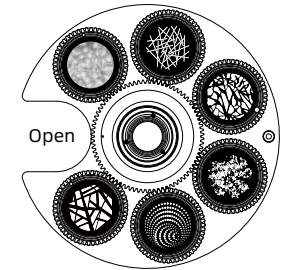
● Gobo system

Gobo outer diameter: 30 ±0.2 mm
 Internal diameter: 25mm
 Thickness: 1.1mm

Rotation gobo wheel 1



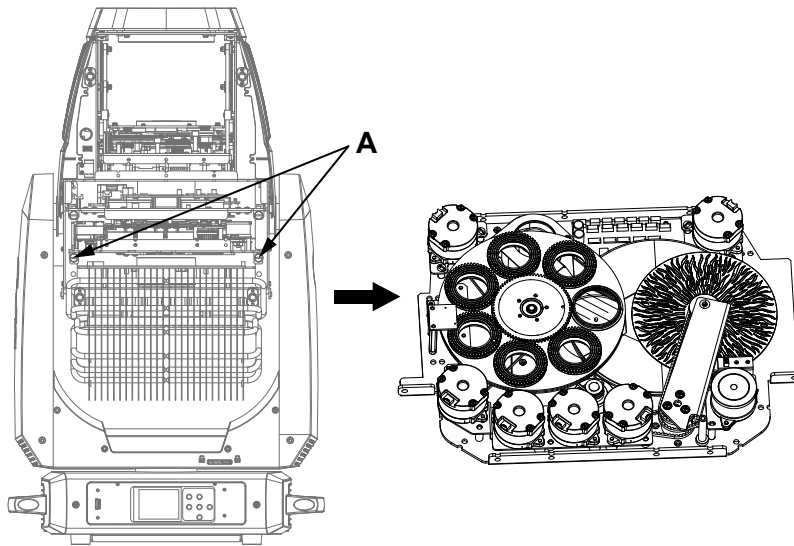
Rotation gobo wheel 2



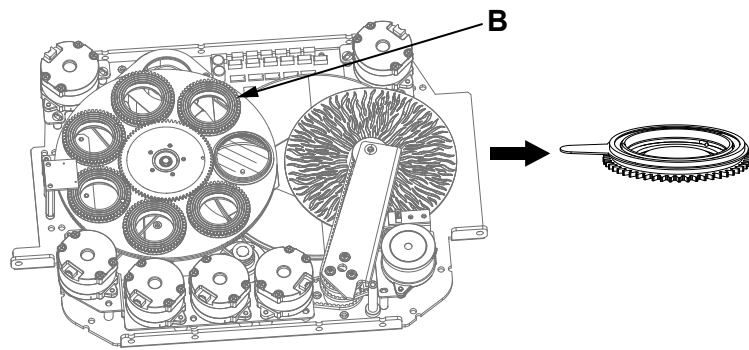
Gobo replace

1) Gobo wheel 1

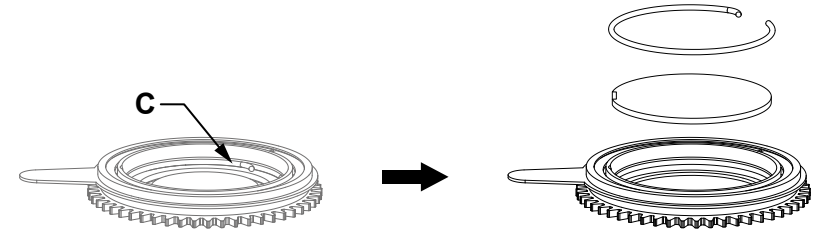
a). Remove the two screws at location **A**, unplug the power and signal adaptercables, and extract the Gobo component;



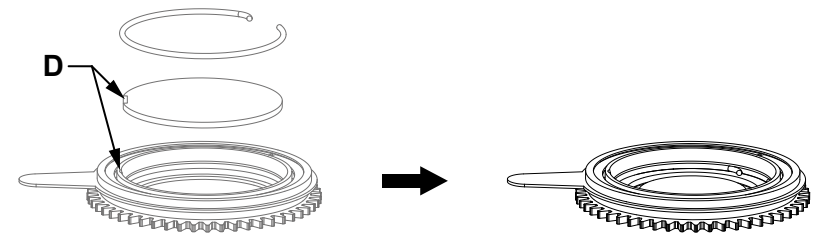
b). As shown in **B**, gently lift the driven wheel from the edge upwards from the front of the pattern plate and slowly pull it out to remove a single pattern seat;



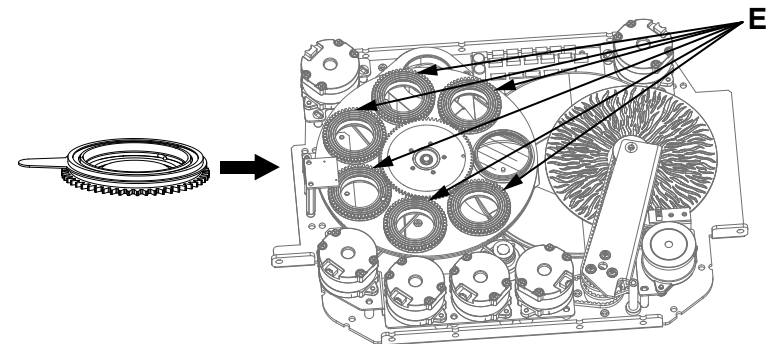
c). Use tweezers or other small grippers to remove the snap spring at point **C** (If the pattern piece is coated with glass glue for fixation, please use a professional cleaning agent to remove the glass glue before removing the snap spring to avoid damaging the gobo);



d). When assembling the gobo, avoid touching it directly with your hands. As shown in **D**, align the notch of the gobo with the recess of the driven wheel component (the coating surface of the gobo should face the light source);

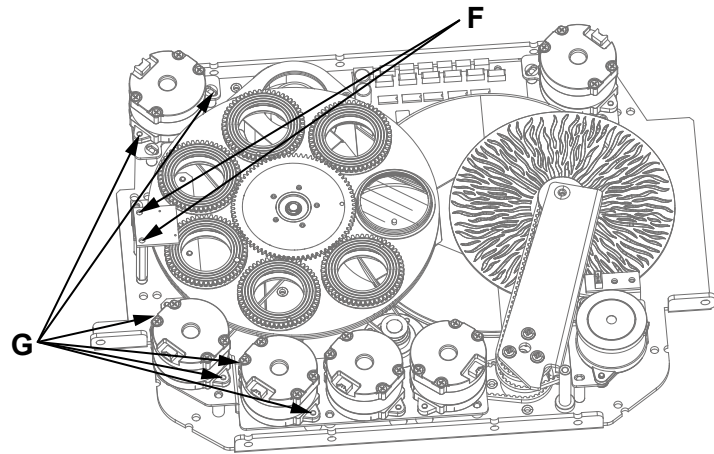


e). Insert the gobo holder into the drive wheel assembly, as shown in **E**, and reinstall the gobo holder in the order it was removed; The positioning point of the gobo holder should be aligned with the positioning point of the driving wheel; After installation, simply reinstall the gobo wheel component onto the light fixture.

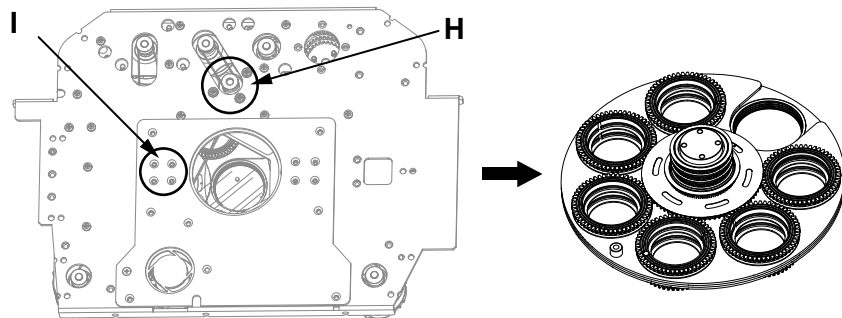


2) Gobo wheel 2

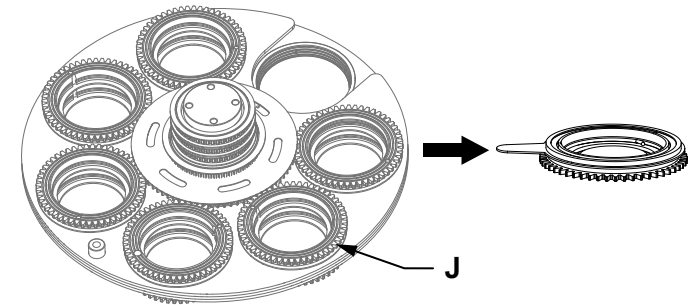
a). Unscrew the two screws on the front **F** of the gobo wheel component and remove the magnetic sensing plate; Loosen the 6 screws at point **G** and loosen the Gobo self rotating belt (to facilitate the next step of removing the Gobo wheel component);



b). Reverse the components and loosen the 3 screws at **H** to loosen the belt; Unscrew the 4 screws at position **I** again to remove the gobo wheel component of the pattern disk;

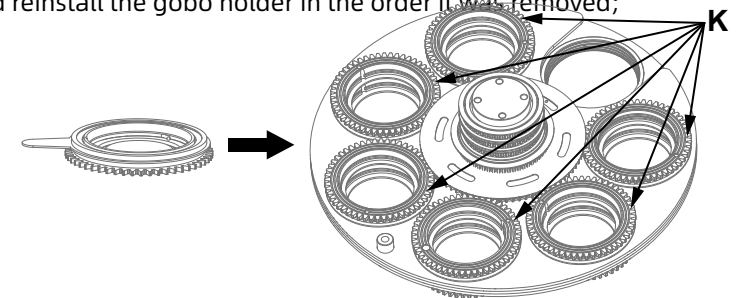


c). As shown in **J**, gently lift the gobo holder from the edge of the gobo wheel 2 and slowly pull it out to remove a single gobo holder;



d). Please refer to page 6 for the replacement method of Gobo;

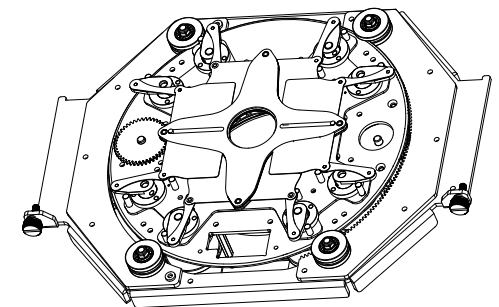
e). Insert the gobo wheel into the drive wheel assembly, as shown in **K**, and reinstall the gobo holder in the order it was removed;



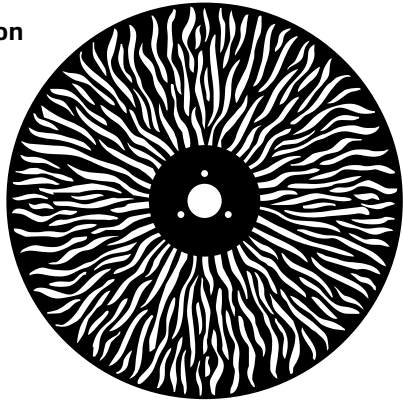
g). After installation, simply reinstall the gobo wheel component onto the light fixture.

- **Framing system**

4 gratings achieve fast and smooth cutting, and the cutting direction and angle of each grating can be controlled separately. The single grating can achieve complete light closure, and the entire frame module can rotate $\pm 60^\circ$

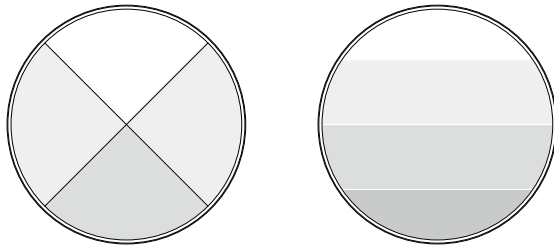


● Animation



● Prism system

4 prism+ 4 linear



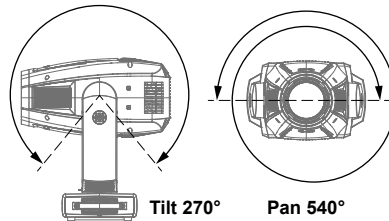
● Pan/Tilt

Pan scan:

540° or 630° 8-bit/16bit resolution scanning

Tilt scan:

270° 8-bit/16bit precision scanning



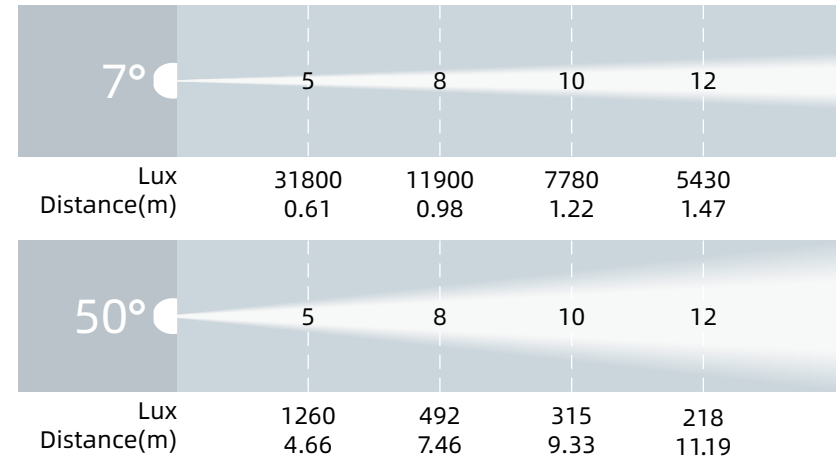
● Control and programming

Control channel: 41CH/57CH/RGB 39CH/RGB 53CH/CMY 39CH/CMY 53CH

Protocol: DMX512, RDM, ArtNet/sACN

Data connect: 3 or 5 pin signal in/out, RJ45 in/out

● Illumination draw



● Other effect function

Fast electronic strobe: 1~25Hz

LED refresh frequency: 1200Hz-25KHz

Frost: Light frost+heavy frost

Iris

● Other features and functions

Weight: 36.6 KG

4. Packaging and transportation

4.1 Disassemble packaging



Notice: After receiving the fixture, please unpack and check for any damage caused by transportation. If there is any damage caused by transportation, please do not use this fixture and contact the local technical personnel or manufacturer as soon as possible.

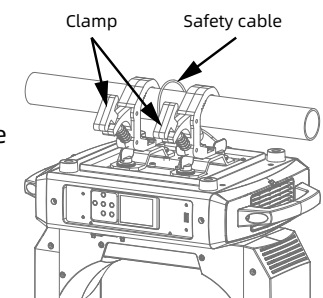
4.2 Equipment packaging

- 1). Disconnect the power supply before packaging the lighting fixtures to allow them to cool completely;
- 2). Flight cases can only be stacked in two layers and are not allowed to be reversed.

5. Installation Requirements Explanation

5.1 Clamp install

The lighting fixtures can be installed on the stage or on any direction of the truss, and the clamp can be quickly and easily locked onto the truss.

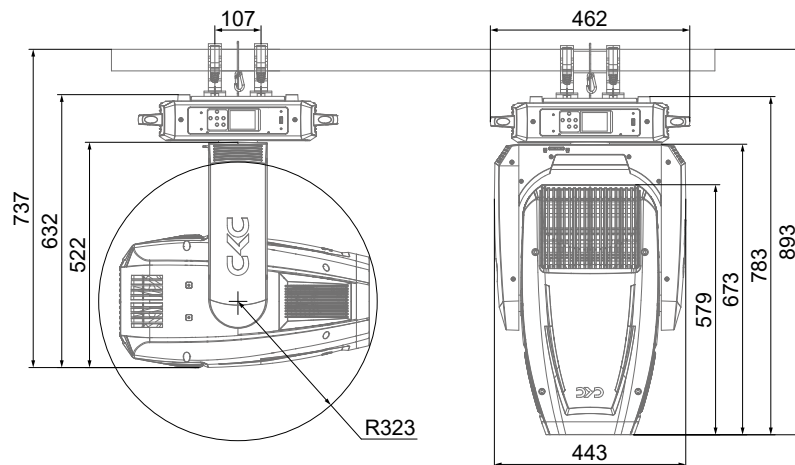
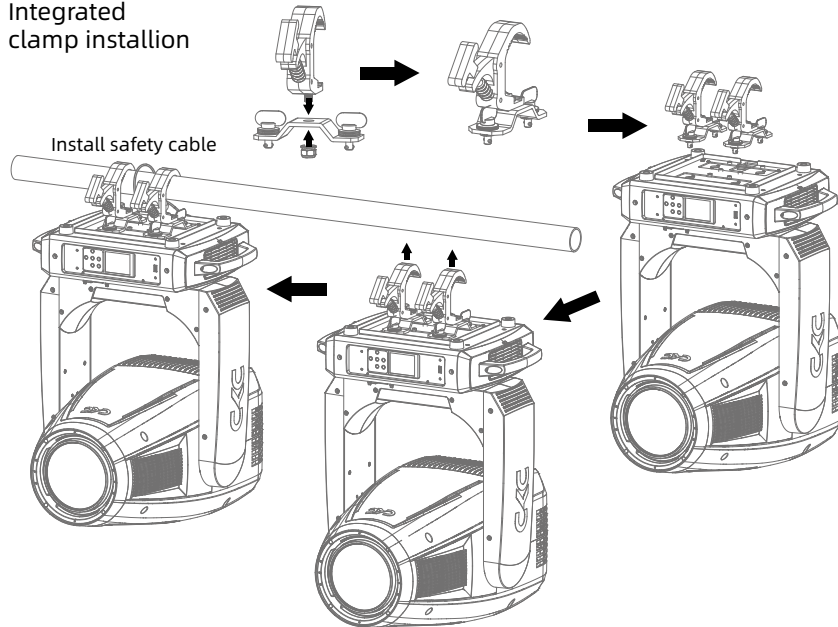


Warning !

The lighting fixtures are divided into two versions: integrated light hook and normal. When using the integrated light hook version, the clamp is broken up and locked onto the truss. The normal version must use 2 clamps to secure the device and fasten it with a 1/4 rotation. Regardless of the version, one safety rope must be added and connected to the base hole, but be careful not to connect it to the handling handle.



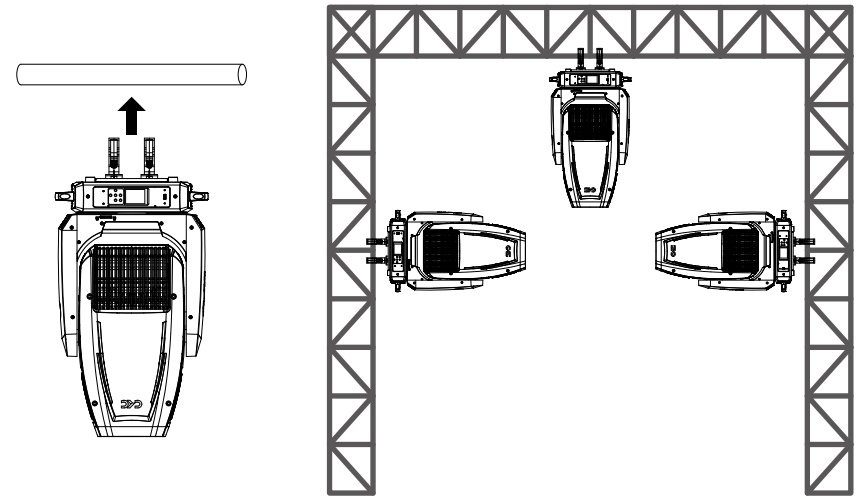
Integrated clamp installation



5.2 Equipment installation

- 1). Before installation, it is necessary to verify that the lamp hook and safety rope are not damaged, and that the installation object can withstand 6 times the total weight of the lamp and cable accessories;
- 2). Install the quick lock clamp on the base of the lamp body. Insert the clamp horizontally into the mounting hole of the base, rotate it clockwise 1/4 turn to lock it, and install the second clamp using the same method (the shape of the clamp should be based on the actual product).

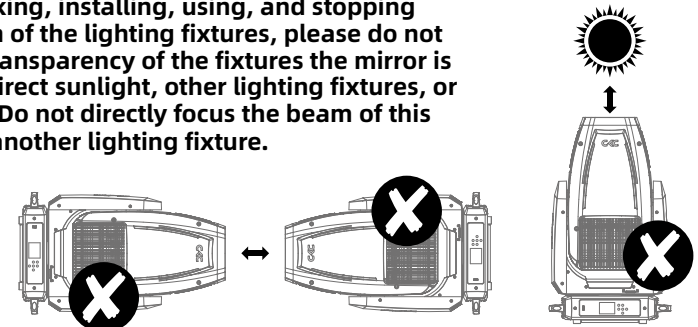
5.3 Hanging Installation Diagram



Reminder: External beam source may damage internal lighting fixtures

External beams from direct sunlight, lighting fixtures, and lasers that are directly focused onto the casing or penetrate the lens to illuminate the interior of the fixture may cause damage to the components. This is a common issue with all lighting fixtures and does not occur alone with CKC products. Although there is no way to completely prevent this problem from occurring, following the following guidelines can prevent potential damage.

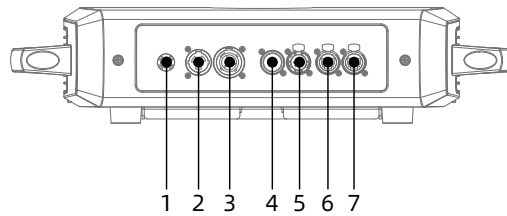
When unpacking, installing, using, and stopping the operation of the lighting fixtures, please do not expose the transparency of the fixtures the mirror is exposed to direct sunlight, other lighting fixtures, or laser beams, Do not directly focus the beam of this device onto another lighting fixture.



6. Power、Signal connect

6.1 Power and signal socket

1. Fuse holder
2. Power input
3. Power output
4. DMX input
5. DMX output
6. RJ45 input
7. RJ45 output



6.2 Power connect

Connection method:

L(live wire) - brown wire

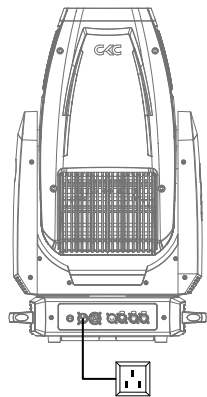
E(Ground wire) - yellow/green dual color line

N(Zero Line) - Blue Line

When connecting the power supply, please note that the voltage and frequency of the power supply must match the voltage and frequency marked on the light fixture. When multiple fixtures are used simultaneously, it is recommended to connect the power supply of each fixture separately, so that each fixture can be individually controlled for power on/off.



Attention: When connecting the power supply, the ground wire (yellow/green dual color wire) must be safely grounded and comply with all relevant electrical installation standards.



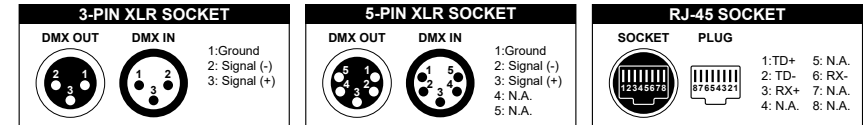
This product uses Powercon In/Out to connect power cords. Due to power limitations, a 2 square meter power cord can carry up to 3 products at 220V and 1 product at 110V.

Warning !

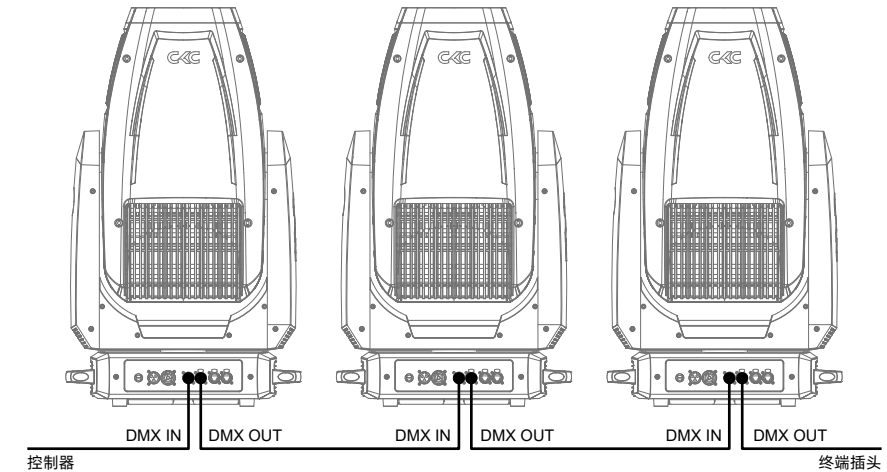
- Do not connect too many fixtures or overload a single power cord;
- Do not use power cords with damaged insulation layers, and do not place power cords on other wires;
- When the fixture is not in use or cleaned, please unplug the power cord; Do not forcefully unplug or drag the power cord directly.



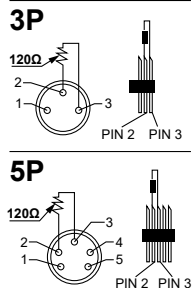
6.3 Signal connect



The lighting fixtures are equipped with standard DMX XLR and RJ-45 input and output sockets. Please use DMX512 shielded twisted pair signal cables or Category 5 or above network twisted pair cables for connection. The typical connection distance for DMX signal lines is 150 meters. When transmitting signals over long distances, a DMX512 signal amplifier must be added.

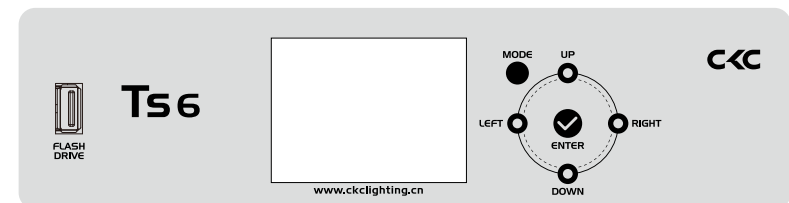


Connect a shielded twisted pair signal cable from the DMX output port of the controller to the DMX input port of the first device, and from the DMX output port of the first device to the DMX input port of the second device, and so on, until all the lamps are connected. Then install a terminal plug on the last 3 or 5 pin socket of each connected lamp output. (Weld a 4/1W, 120 Ω resistor between the 2 and 3 pins of a 3 or 5 core pin XLR plug).



7. Control panel

7.1 Panel Introduction



● Adopting a 2.8 "LCD display screen, the operation panel is equipped with a rechargeable battery, which can enter the menu to set address codes and make other settings without powering on;

● Press the MODE key to view or modify the lighting function settings, and press the UP, DOWN, LEFT, and RIGHT keys to select the function menu;

● Press the ENTER key to confirm your selected function menu, which will take you to the corresponding sub menu in the menu. Each menu item represents a specific function of the lighting fixture (as shown in the table below);

● Press the ENTER key to save your modifications or enter a submenu, and press the UP or DOWN key to modify values (increase or decrease values); Press the MODE key to return to the previous menu or exit.

● Press the MODE key to return to the previous menu or exit.

7.2、System menu

Note: The gray color block is the default setting value

Software Update Please Wait.. CKC TS6 Ethernet Reset Temperature Check LED Temp:xxxC Base Temp: xxxC Motor Reset... Please Wait...			
SET	Dmx Presets	A001~AXXX	
	User Mode	41Ch Standard 57CH Extended 39CH RGB 53CH RGB EX 39CH CMY 53CH CMY Ex	
	Network	Net Protocol	ArtNET/sACN
	Status	No DMX Mode P.Reverse T.Reverse Pan Degree Feedback Move.Speed Hibernation Follow Spot Performance Reset Mode	Black/Hold/Auto ON/OFF ON/OFF 630/540 ON/OFF Speed 1~ 2 OFF, 01M~99M ON/OFF Ultra Quiet/Best Speed Fast Reset/Traditional
	Fixture ID	Service PIN Universe IP Address Mask Address	Password=050 000~255 2.XXX.XXX.XXX 255.XXX.XXX.XXX

Function	Net Switch	ON/OFF		
	KlingNet SW	ON/OFF		
	Dim Mode	Standard Stage TV Architectural Theatre		
	Dim to Warm	ON/OFF		
	Temp. C/F	Celsius Fahrenheit		
	Dim Curve	Linear Square Inv-Square S-Curve		
	Frequency	1200Hz/3600Hz/5000Hz/10KHz/15KHz/20KHz/25KHz		
	LED Output	Full/5600K		
	LCD.Set	Backlight	01~60m	
		Flip Display	OFF/ON	
		Key Lock	OFF/ON	
		DispFlash	OFF/ON	
	Disp.Set	Channel Value	PAN.....	
		Slave Set Auto.Prog	Slave1,Slave2,Slave3 Master / Alone	
DFSE	OFF/ON			
USB Update	OFF/ON			
Scan Record	-Service PIN-(password:050) Record Status No Record/Pan Record/Tilt Record/ All Record			
Test	Reset.M	All Pan&Tilt Other		
	Test.Chan	PAN		
	Panel.Ctrl.	PAN =XXX :		
	Calibrate	-Password- PAN :		
Time.Info	Current(Hours) Total Time(Hours) Last Time(Hours) Timer PIN(Password=50) Clear Last(ON/OFF)			

Info	Temp. Info	Base Temp. Head Temp.
	Error. Info	Pan,Tilt.....
	Model. Info	TS6
	Software.V	1U V 1.X.X 2U V 1.X.X 3U V 1.X.X 4U V 1.X.X 5U V 1.X.X 6U V 1.X.X 7U V 1.X.X

8. DMX channel table:

41CH	57CH	39CH RGB	53CH RGB EX	39CH CMY	53CH CMY EX	Value Range	Function
1	1	1	1	1	1	0-255	Pan Left → Right
2	2	2	2	2	2	0-255	Pan Fine Fine Position
3	3	3	3	3	3	0-255	Tilt Forward → Backward
4	4	4	4	4	4	0-255	Tilt Fine Fine Position
5	5	5	5			0-255	Red 0 → 100%
	6		6			0-255	Red Fine Fine Adjustment
6	7	6	7			0-255	Green 0 → 100%
	8		8			0-255	Green Fine Fine Adjustment
7	9	7	9			0-255	Blue 0 → 100%
	10		10			0-255	Blue Fine Fine Adjustment
8	11					0-255	Lime 0 → 100%
	12					0-255	Lime Fine Fine Adjustment
9	13					0-255	Amber 0 → 100%
	14					0-255	Amber Fine Fine Adjustment
				5	5	0-255	Cyan 0 → 100%

					6	0-255	Cyan Fine Fine Adjustment
				6	7	0-255	Magenta 0 → 100%
					8	0-255	Magenta Fine Fine Adjustment
				7	9	0-255	Yellow 0 → 100%
					10	0-255	Yellow Fine Fine Adjustment
10	15	8	11	8	11		Variable CCT 0-26 Open 27-85 2400K → 8500K (See Sheet) 86-255 8500K
							Color 0 Open 1-60 Virtual Swatch Book (See Sheet) 61-179 Open
11	16	9	12	9	12		Scroll 180-201 Clockwise Fast → Slow 202-207 Stop 208-229 Counter-clockwise Slow → Fast 230-234 Open
							Random Slots 235-239 Fast 240-244 Medium 245-249 Slow 250-255 Open
12	17	10	13	10	13		Green Shift 0 Idle 1-127 Full Minus Green to Neutral 128 Neutral White 129-255 Neutral to Full Plus Green
13	18	11	14	11	14		CCT Crossfade 0 CCT 1-254 Blend CCT → Color Mix 255 Color Mix
14	19	12	15	12	15		Rotating Gobo Wheel 1 0-9 Open 10-19 Rotating Gobo 1 20-29 Rotating Gobo 2 30-39 Rotating Gobo 3 40-49 Rotating Gobo 4 50-59 Rotating Gobo 5 60-69 Rotating Gobo 6 70-89 Gobo 1 Shake Slow → Fast

						90-109	Gobo 2 Shake Slow → Fast
						110-129	Gobo 3 Shake Slow → Fast
						130-149	Gobo 4 Shake Slow → Fast
						150-169	Gobo 5 Shake Slow → Fast
						170-189	Gobo 6 Shake Slow → Fast
							Scroll
						190-221	Clockwise Fast → Slow
						222-223	Stop
						224-255	Counter-clockwise Slow → Fast
							Rotating Gobo Index/Rotation
						0-127	Index Position
							Rotate
						128-189	Clockwise Fast → Slow
						190-193	Stop
						194-255	Counter-clockwise Slow → Fast
15	20	13	16	13	16		
							Rotating Gobo Index/Rotation Fine
						0-255	Fine Adjustment
							Rotating Gobo Wheel 2
						0-9	Open
						10-19	Rotating Gobo 1
						20-29	Rotating Gobo 2
						30-39	Rotating Gobo 3
						40-49	Rotating Gobo 4
						50-59	Rotating Gobo 5
						60-69	Rotating Gobo 6
						70-89	Gobo 1 Shake Slow → Fast
						90-109	Gobo 2 Shake Slow → Fast
						110-129	Gobo 3 Shake Slow → Fast
						130-149	Gobo 4 Shake Slow → Fast
						150-169	Gobo 5 Shake Slow → Fast
						170-189	Gobo 6 Shake Slow → Fast
							Scroll
						190-221	Clockwise Fast → Slow
						222-223	Stop
						224-255	Counter-clockwise Slow → Fast
							Rotating Gobo Wheel 2 Index / Rotation
						0-127	Index Position
							Rotate
						128-189	Clockwise Fast → Slow
						190-193	Stop
						194-255	Counter-clockwise Slow → Fast
							Rotating Gobo Wheel 2 Index/ Rotation Fine
						0-255	Fine Adjustment
16	21	14	17	14	17		
17	22	15	18	15	18		
18	23	16	19	16	19		
19	24	17	20	17	20		

20	25	18	21	18	21		Prism
						0-5	Open
						6-130	Prism 1
						131-255	Prism 2
							Prism Index/Rotation
						0-127	Index Position
							Rotate
						128-189	Clockwise Fast → Slow
						190-193	Stop
						194-255	Counter-clockwise Slow → Fast
							Focus
						0-255	Infinity → Near
							Focus Fine
						0-255	Fine Adjustment
							Zoom
						0-255	Narrow → Wide
							Zoom Fine
						0-255	Fine Adjustment
							Strobe
						0-31	Closed
						32-63	Open
						64-95	Strobe effect slow to fast
						96-127	Open
						128-159	Pulse Effect
						160-191	Open
						192-223	Random Slow → Fast
						224-255	Open
							Dimmer
						0-255	0 → 100%
							Dimmer Fine
						0-255	Fine Adjustment
							Dim Modes
						0-20	Standard
						21-40	Stage
						41-60	TV
						61-80	Architectural
						81-100	Theatre
						101-255	Default to Unit Setting
							Iris
						0-191	Open - Close
						192-207	Pulse up, slow -> fast
						208-223	Pulse down, slow -> fast
						224-239	Random effect, slow -> fast
						240-255	Fast Up-Fast Down slow -> fast
21	26	19	22	19	22		
22	27	20	23	20	23		
23	28	21	24	21	24		
24	29	22	25	22	25		
25	30	23	26	23	26		
26	31	24	27	24	27		
27	32	25	28	25	28		
28	33	26	29	26	29		
29	34	27	30	27	30		
30	35	28	31	28	31		

29	36	27	32	27	32	0 - 255	Frost (Light) Open → Closed
30	37	28	33	28	33	0 - 255	Frost (Wash) Open → Closed
31	38	29	34	29	34		Animation Wheel
						0-5	Wheel Rot. Off
						6-128	Wheel Position 0 ... 540°
						129-191	Wheel rot. Fast -> Slow, CW
						192-192	Wheel rot. Stop
193-255	Wheel rot. Slow -> Fast, CCW						
32	39	30	35	30	35	0-255	Blade 1 A Open → Closed
						40	Blade 1 A Fine Fine Adjustment
33	41	31	37	31	37	0-255	Blade 1 B Open → Closed
						42	Blade 1 B Fine Fine Adjustment
34	43	32	39	32	39	0-255	Blade 2 A Open → Closed
						44	Blade 2 A Fine Fine Adjustment
35	45	33	41	33	41	0-255	Blade 2 B Open → Closed
						46	Blade 2 B Fine Fine Adjustment
36	47	34	43	34	43	0-255	Blade 3 A Open → Closed
						48	Blade 3 A Fine Fine Adjustment
37	49	35	45	35	45	0-255	Blade 3 B Open → Closed
						50	Blade 3 B Fine Fine Adjustment
38	51	36	47	36	47	0-255	Blade 4 A Open → Closed
						52	Blade 4 A Fine Fine Adjustment
39	53	37	49	37	49	0-255	Blade 4 B Open → Closed
						54	Blade 4 B Fine Fine Adjustment
40	55	38	51	38	51		Framing Rotation
						0-126	Min (-60°)
						127-128	Parallel (0°)
						129-255	Max (+60°)

	56		52		52		Pan / Tilt Speed
						0-225	Max to min speed
						226-235	Blackout by movement
						236-245	Blackout by wheel changes
						246-255	No function
41	57	39	53	39	53		Control
						0-19	Wheel Snap
						20-39	Wheel Fade
							Performance Mode
						40-44	Ultra Quiet
						45-49	Best Speed
						50-79	Idle
							Reset
						80-84	All
						85-87	Pan / Tilt
						88-90	Gobo
						91-93	Focus and Zoom
						94-96	Others
						97-99	Idle
							Refresh Rate (Hz)
100-104	1200Hz						
105-109	3600Hz						
110-114	5000Hz						
115-119	10000Hz						
120-124	15000Hz						
125-129	20000Hz						
130-134	25000Hz						
135-139	DTW ON						
140-144	DTW OFF						
145-149	LED Output Full						
150-154	LED Output 5600K						
155-200	Idle						
	Dimmer Curves						
201-210	Linear						
211-220	Square						
221-230	Inverse Square						
231-240	S-Curve (Default)						
241-255	Idle						

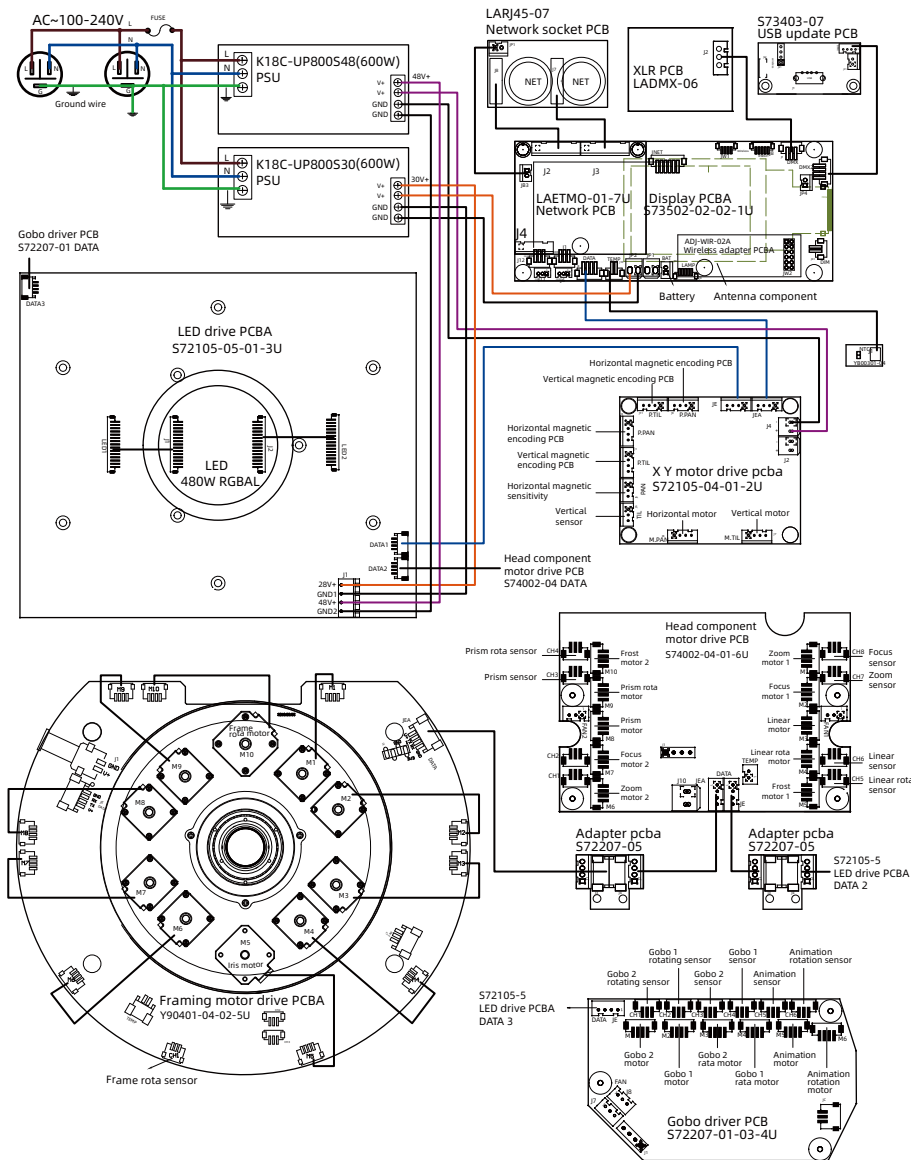
Virtual Swatch Book

Value	Filter Number	Name	Value	Filter Number	Name
1	7	pale yellow	31	126	mauve
2	103	straw	32	49	medium purple
3	151	gold tint	33	58	lavender
4	100	spring yellow	34	199	palace blue
5	10	medium yellow	35	119	dark blue
6	101	yellow	36	132	medium blue
7	104	deep amber	37	120	deep blue
8	15	deep straw	38	165	daylight blue
9	179	loving amber	39	161	slate blue
10	21	gold amber	40	118	light blue
11	105	orange	41	68	sky blue
12	158	deep orange	42	143	pale navy blue
13	22	dark amber	43	131	marine blue
14	778	millenium gold	44	115	peacock blue
15	135	deep golden amber	45	172	lagoon blue
16	24	scarlet	46	116	medium blue green
17	106	primary red	47	90	dark yellow green
18	26	bright red	48	139	primary green
19	27	medium red	49	122	fern green
20	19	fire	50	89	moss green
21	157	pink	51	124	dark green
22	36	medium pink	52	88	lime green
23	111	dark pink	53	138	pale green
24	128	bright pink	54	203	Quarter CT Blue
25	148	bright rose	55	202	Half CT Blue
26	332	special rose pink	56	201	FULL CT Blue
27	793	vanity fair	57	200	double CT Blue
28	113	magenta	58	206	Quarter CT Orange
29	46	dark magenta	59	205	Half CT Orange
30	48	rose purple	60	204	FULL CT Orange

Variable CCT

Value	Color Temperature	Value	Color Temperature	Value	Color Temperature
24	2400	45	4500	66	6600
25	2500	46	4600	67	6700
26	2600	47	4700	68	6800
27	2700	48	4800	69	6900
28	2800	49	4900	70	7000
29	2900	50	5000	71	7100
30	3000	51	5100	72	7200
31	3100	52	5200	73	7300
32	3200	53	5300	74	7400
33	3300	54	5400	75	7500
34	3400	55	5500	76	7600
35	3500	56	5600	77	7700
36	3600	57	5700	78	7800
37	3700	58	5800	79	7900
38	3800	59	5900	80	8000
39	3900	60	6000	81	8100
40	4000	61	6100	82	8200
41	4100	62	6200	83	8300
42	4200	63	6300	84	8400
43	4300	64	6400	85	8500
44	4400	65	6500		

9. Control circuit diagram




10. Regular maintenance

10.1 Cleaning and maintenance

Lighting fixtures require daily cleaning and maintenance, and their service life largely depends on the operating environment and standards. If you have any questions, please consult our technical engineers for advice. Maintenance and repair work not included in this book should be entrusted to our qualified technical engineers.

⚠ Attention! Damage caused by dust, e-liquid, or other reasons, as well as abnormal use, is not covered by the warranty.




Warning ! Before opening any lid, disconnect the power supply. Cleaning optical components requires gentle wiping as the coating surface is prone to scratching. Do not use damaging liquids or hard objects, as they may damage the plastic or coating surface.

- When the lens is cracked or otherwise damaged, it should be replaced in a timely manner;
- When the brightness significantly decreases, the LED may have reached its expiration date and should be replaced in a timely manner;
- When the fixture cannot start, please check if the fixture power fuse is blown. If it is blown, a fuse of the same specification must be used for installation;
- The fixture is equipped with a temperature protection device. When the temperature is too high, the protection device will automatically reduce power.
- When this situation occurs, please check whether the fan is running normally, whether the fan and fan mesh are clogged with dust, identify the fault and repair it before starting the fixture. Please note that only qualified technicians are allowed to carry out maintenance work;
- To maintain smooth movement of the focusing lens, it is recommended to lubricate the guide rail of the focusing lens every three months. Excellent and high-temperature resistant lubricating grease should be used, and excessive grease should not be used as it can easily dirty adjacent components.

10.2 Fault analysis and handling

Fault description	Analysis	Processing method
No action after power on	Check if the power switch is turned on	Turn on
	Check if the fuse is blown	Replace
	Check if the output of PSU is normal	Detecting voltage
	Check if poor contact in the internal circuit	Reconnect

Uncontrolled lighting fixtures	Check if the DMX signal cable is connected correctly (If there is no signal, the display screen will flash)	Reconnect or replace
	Check if the address code is correct and if the DMX mode of the lighting fixture matches the settings	Reconfirm
	The main control PCB is damaged	Replace
Not bright	LED aging or damage	Replace
	Power PCB malfunction	Check/ Replace
	Loose or poor contact of the circuit	Reconnect
	PSU malfunction	Replace
Automatically turn off or dim the lights	LED aging	Replace
	Damaged cooling fan or abnormal wind speed	Replace
	Check the power output of the fan	Check/ Replace
	The temperature control switch is damaged	Replace
Gobo wheel misalignment or abnormal control	Poor contact of motor wire	Reconnect
	Corresponding motor drive board malfunction	Refixed
	Misalignment or magnetic damage between the magnetic tube and the positioning magnet	Adjust/Replace
	Motor malfunction	Replace
Weak light efficiency and uneven light spot	LED aging	Replace
	LED not centered with the lens	Adjust LED
	The optical mirror has accumulated dust or stains	Clean
	The optical mirror is damaged	Replace
Impure color	Weakening of light efficiency	Replace led PCB
	The color filter has accumulated dust or stains	Clean
	The color filter has been demolded or damaged	Replace

Gobo is unclear	The optical mirror has accumulated dust or stains	Clean
	The optical mirror is damaged	Replace
Head or base fan stops rotating	Check if the fan leads are installed properly or disconnected	Re connect
	Check if the fan is damaged	Replace
	Check if there are any other interfering objects within the operating range of the fan	Adjust
 Attention! The above analysis is for abnormal reference only. Non professionals are not allowed to disassemble and repair the machine		