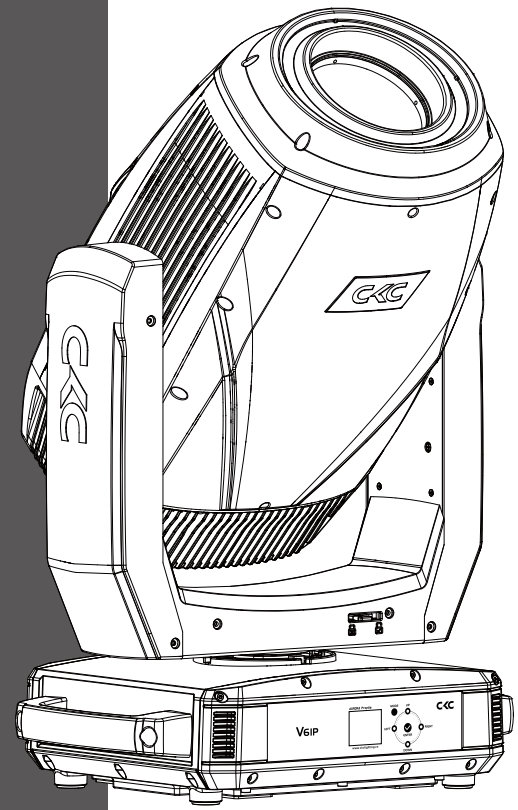
V6IP



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.

CKC LIGHTING CO.,LTD

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WEB：www.ckclighting.com

CONTENTS

★ 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 IP65 and can be used both indoors and outdoors;
- 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.

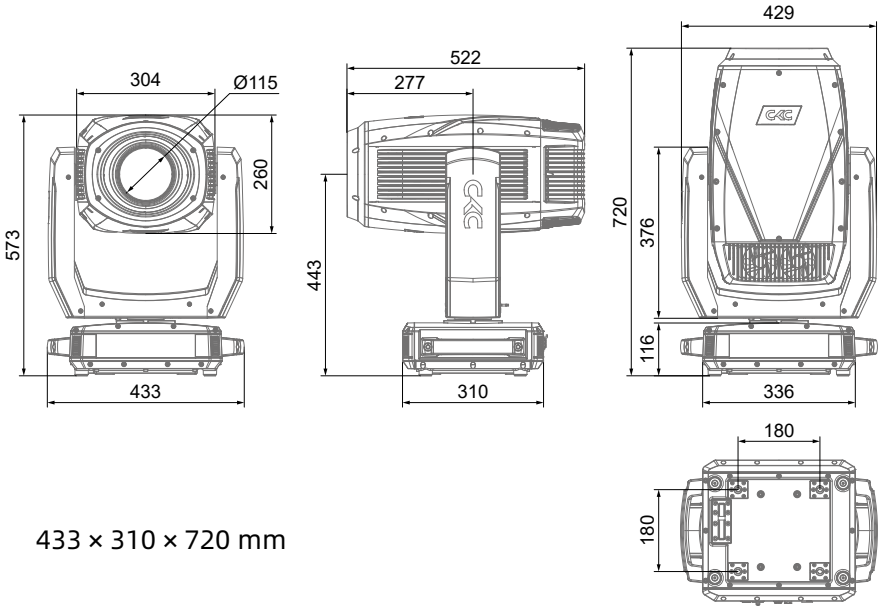
- Before installation, please confirm that the power supply voltage used matches the voltage indicated on the light fixture. Each lighting fixture should be properly grounded and electrically installed according to relevant standards;
- Please disconnect the power before repairing or cleaning the equipment;
- 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 ℃ to 45 ℃ . 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 64 ℃ , 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

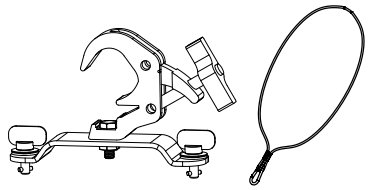
2.1 Exterior dimensions of lighting fixtures



433 × 310 × 720 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：GB7000.1-2023，GB7000.217-2023，Q/YF-2017

● Electrical parameter

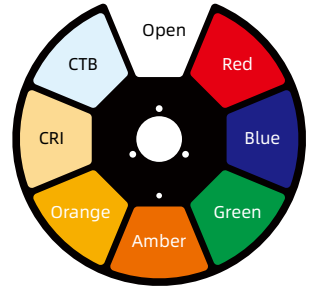
Rated input voltage：AC 100V-240V~ 50Hz/60Hz
Rated power of the entire fixture：990W
Power factor：0.997F
Input Current：3.89A 220V

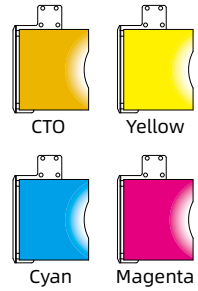
● Source lifespan

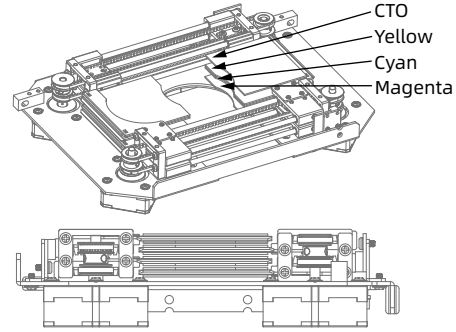
>20000 hours

● Color system

CCT: 6800K
CRI： 72
Color wheel: 7+1
CMY+CTO



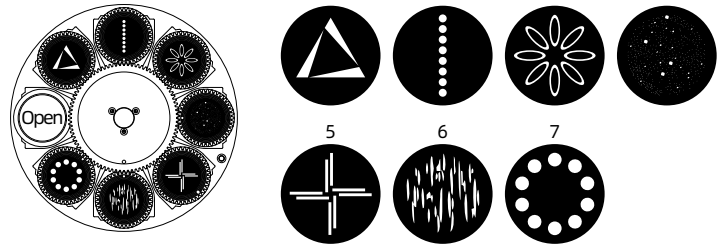




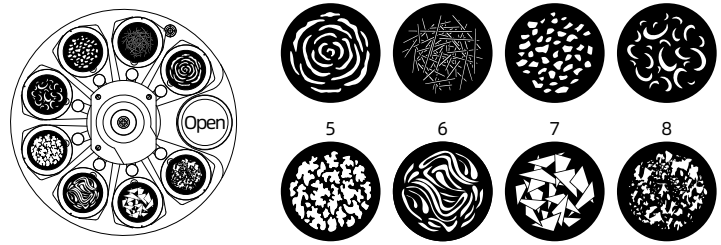
● Gobo system

Gobo outer diameter: $23^{+0}_{-0.2}$mm Internal diameter: 19mm Thickness: 1.1mm

Rotation Gobo



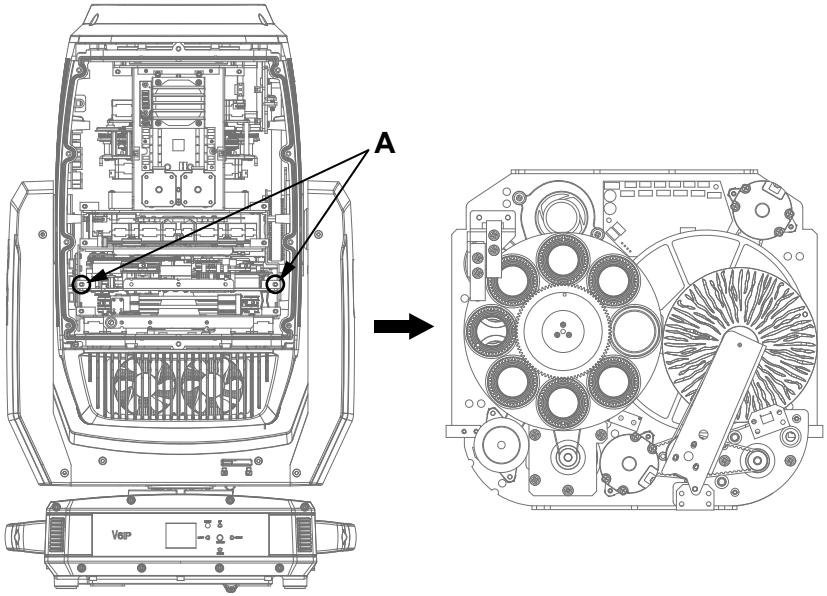
Fixed gobo



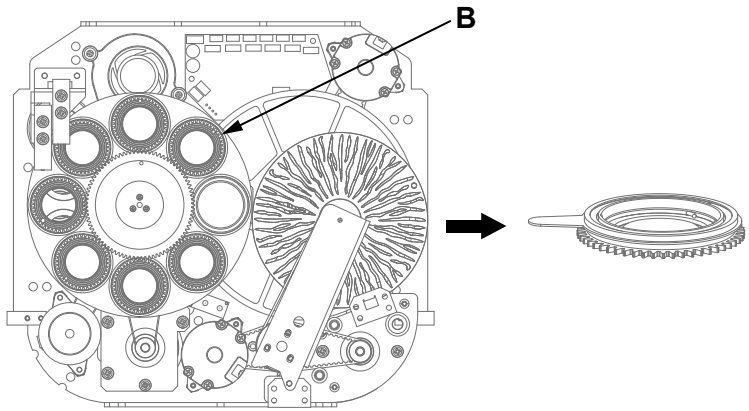
Gobo replace

1) Rotation gobo wheel

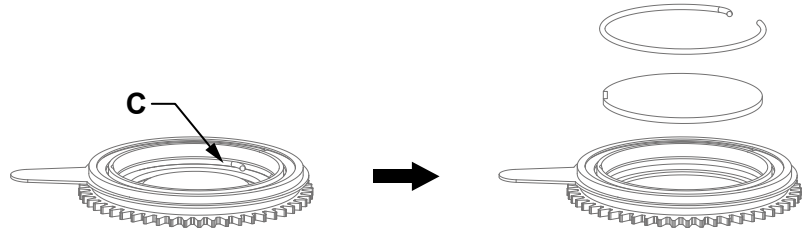
a). Remove the two screws at location **A**, unplug the power and signal adaptercables, and extract the Gobo component;



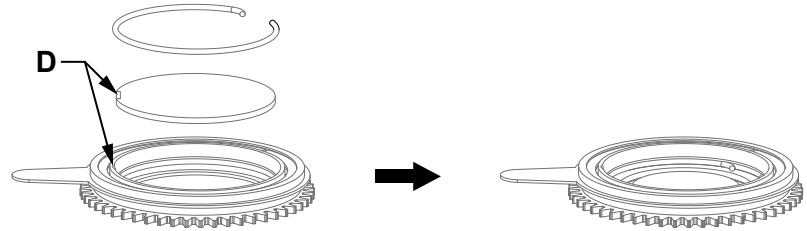
b). As shown in **B**, gently lift the driven wheel from the edge upwards from the front of the pattern plate and slowly pull it out to remove a single pattern seat;



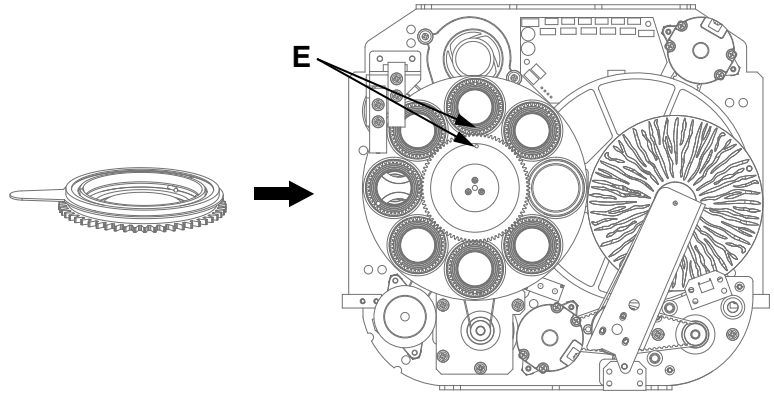
c). Use tweezers or other small grippers to remove the snap spring at point **C** (If the pattern piece is coated with glass glue for fixation, please use a professional cleaning agent to remove the glass glue before removing the snap spring to avoid damaging the gobo);



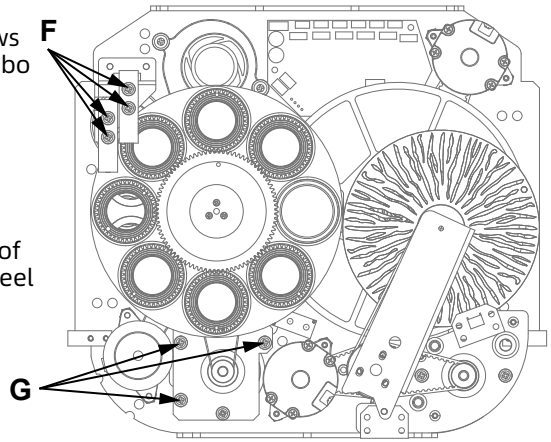
d). When assembling the gobo, avoid touching it directly with your hands. As shown in **D**, align the notch of the gobo with the recess of the driven wheel component (the coating surface of the gobo should face the light source);



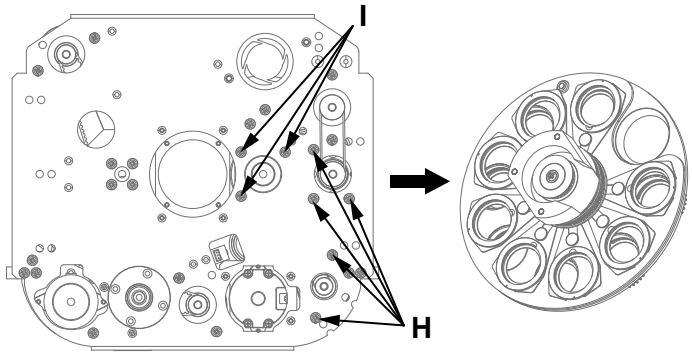
e). Insert the gobo holder into the drive wheel assembly, as shown in **E**, and reinstall the gobo holder in the order it was removed; The positioning point of the gobo holder should be aligned with the positioning point of the driving wheel; After installation, simply reinstall the gobo wheel component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



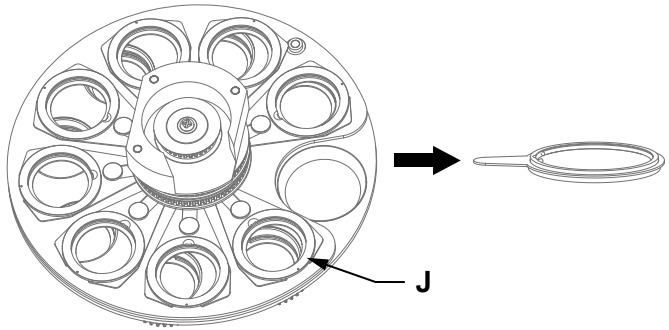
2) Fixed gobo wheel
a). Unscrew the 4 screws on the front **F** of the gobo wheel component and remove the magnetic sensing plate; Loosen the 3 screws at point **G** and loosen the Gobo self rotating belt (to facilitate the next step of removing the Gobo wheel component);



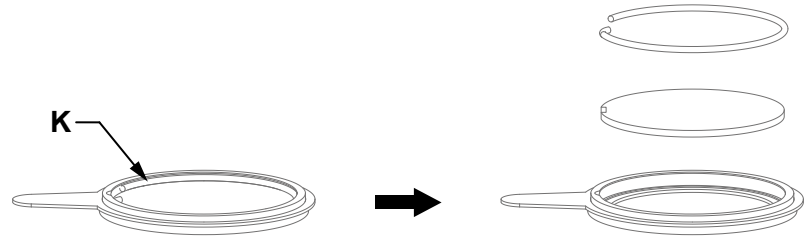
b). Reverse the components and loosen the 5 screws at **H** to loosen the belt; Unscrew the 3 screws at position **I** again to remove the gobo wheel component of the pattern disk;



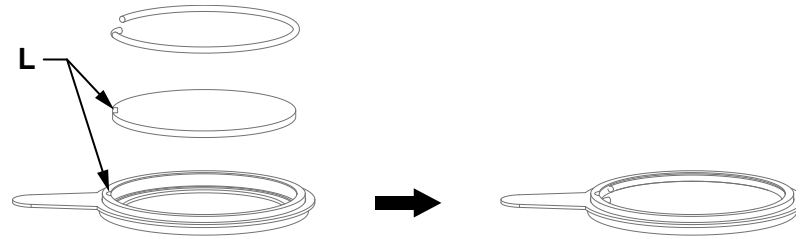
c). As shown in **J**, gently lift the gobo holder from the edge of the fixed gobo wheel and slowly pull it out to remove a single gobo holder;



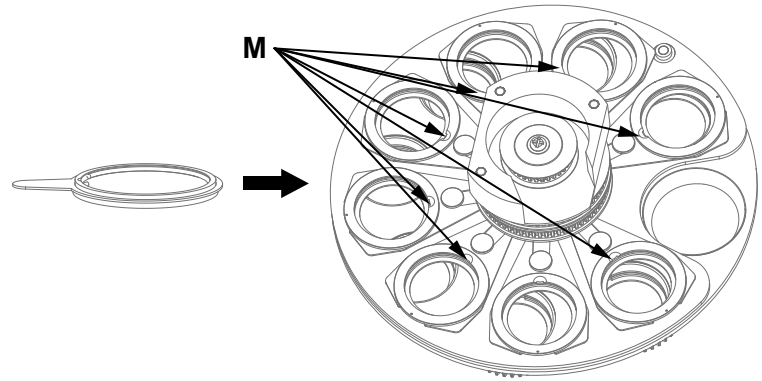
d). Use tweezers or other small grippers to remove the snap spring at point **K** (If the pattern piece is coated with glass glue for fixation, please use a professional cleaning agent to remove the glass glue before removing the snap spring to avoid damaging the gobo);



e). When assembling the gobo, avoid touching it directly with your hands. As shown in **L**, 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);



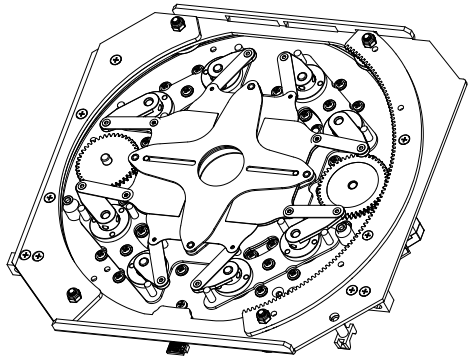
f). Insert the gobo wheel into the drive wheel assembly, as shown in **M**, and reinstall the gobo holder in the order it was removed;



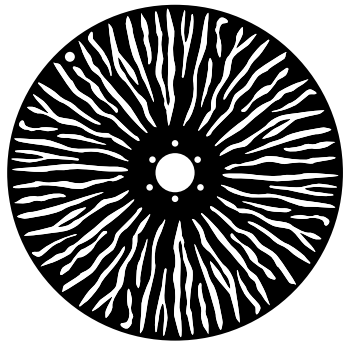
g). After installation, simply reinstall the gobo wheel component onto the light fixture.

● **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 ±60°

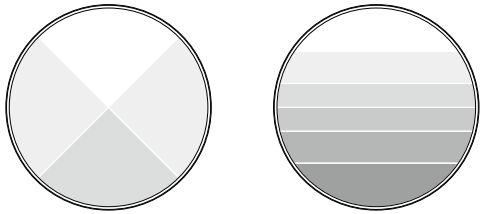


● **Animation**



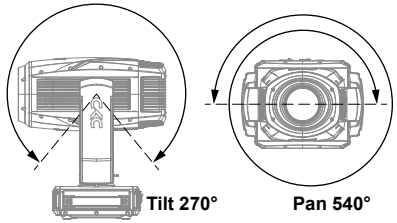
● **Prism system**

4 prism+ 6 linear



● **Pan/Tilt**

Pan scan:
540° or 630° 8-bit/16bit recision scanning
Tilt scan:
270° 8-bit/16bit precision scanning



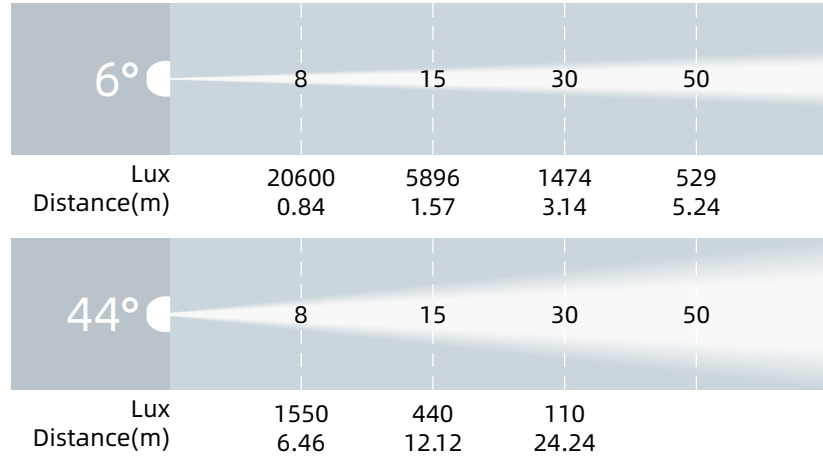
● **Optical system**

Source：600W CW LED
Beam angel: 6 ~ 44°
Output luminous flux：26300 Lm

● **Control and programming**

Control channel：36CH/50CH/57CH
Protocol：DMX512, RDM
Data connect：3 pin signal 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：38.4 KG
Carton size: 88 × 57.5 × 48.5 cm
Flight case size: 70.8 × 61.5 × 87.5 cm
N.W: 46.2 KG
N.W: 103.8 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.

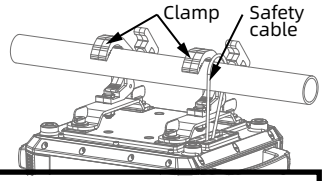
4.2 Equipment packaging

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

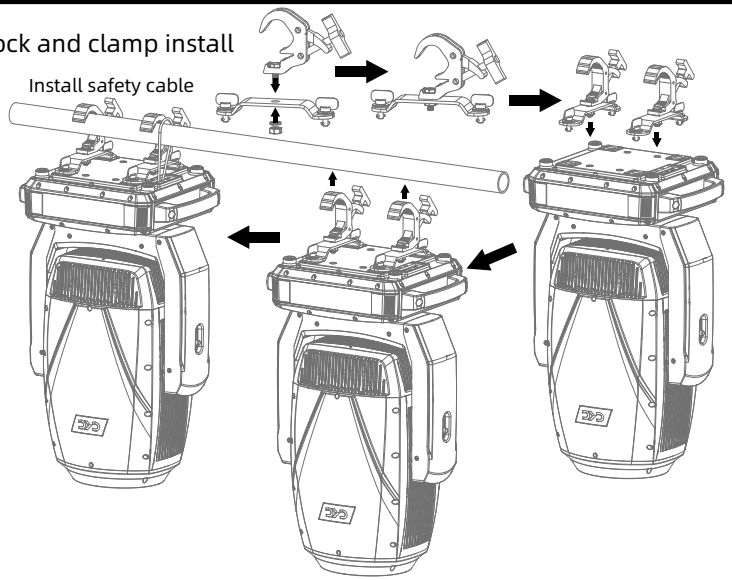
The lighting fixtures can be installed on the stage or on any direction of the truss, and the clamp can be quickly and easily locked onto the truss.

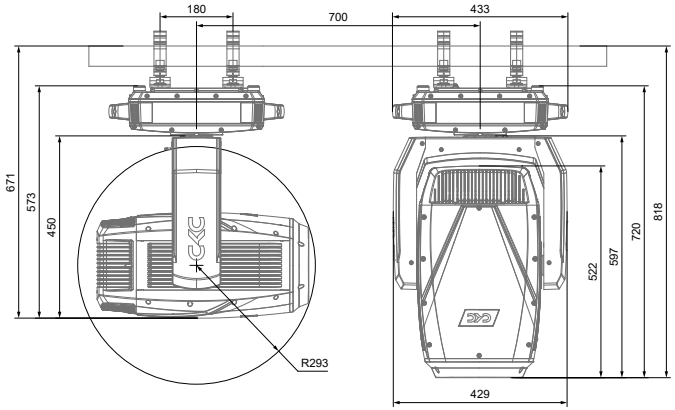


Waining !

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.

Quick lock and clamp install

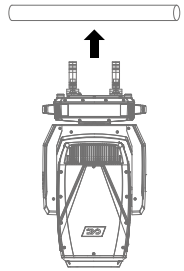


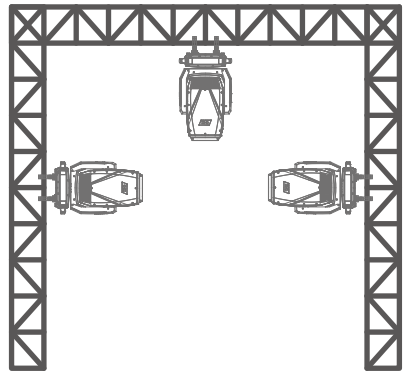


5.2 Equipment installation

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

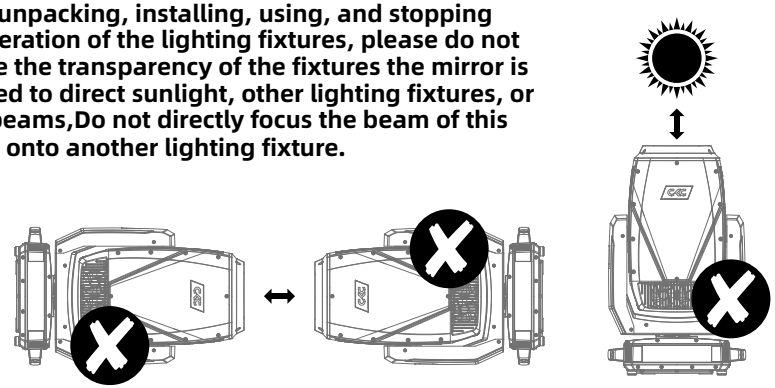




Reminder: External beam source may damage internal lighting fixtures

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.

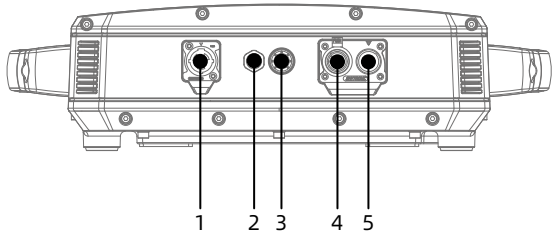
When unpacking, installing, using, and stopping the operation of the lighting fixtures, please do not expose the transparency of the fixtures the mirror is exposed to direct sunlight, other lighting fixtures, or laser beams,Do not directly focus the beam of this device onto another lighting fixture.



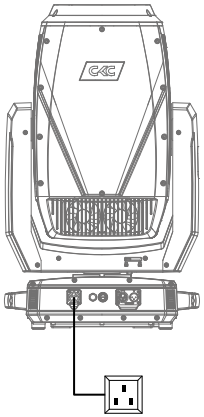
6. Power、Signal connect

6.1 Power and signal socket

1.Power input
2.Breathable valve
3.Fuse holder
4.XLR female
5.XLR male



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.

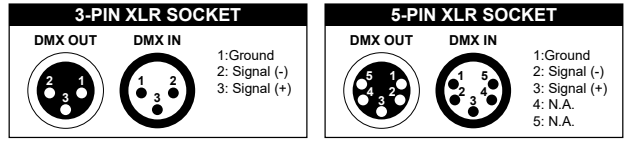

Power In

This product uses Powercon In/Out to connect power cable. Due to power limitations, a 2mm power cable can drive up to 1 fixtures at 220V.

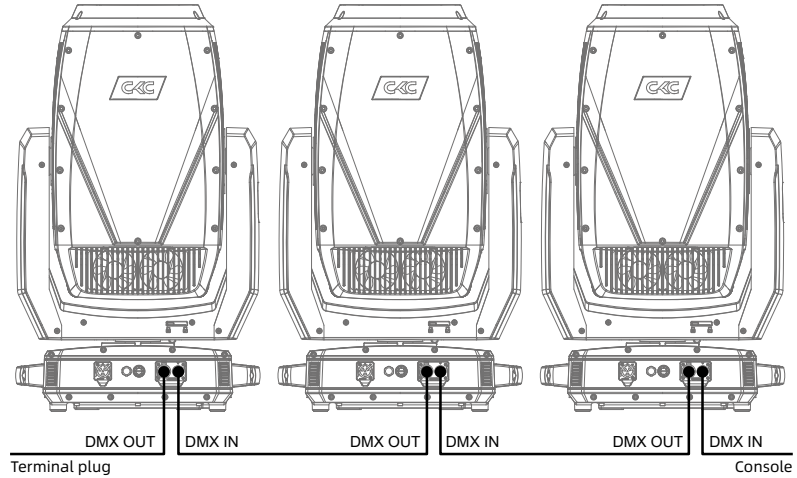
Waining !

- 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.

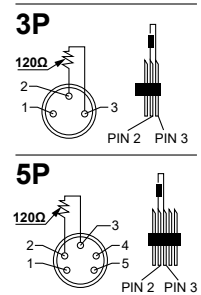
6.3 Signal connect



The lighting fixtures are equipped with standard DMX XLR 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.

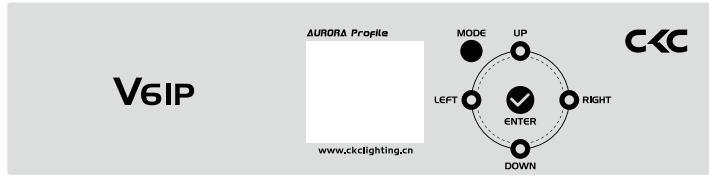


Connect a shielded twisted pair signal cable from the DMX output port of the controller to the DMX input port of the first device, and from the DMX output port of the first device to the DMX input port of the second device, and so on, until all the lamps are connected. Then install a terminal plug on the last 3 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 1.8 "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 V6 IP Motor Reset Please Wait...			
SET	Set Address	A001~AXXX	
	DMX Channel Mode	Basic 36 Standard50 Extend 57	
	No DMX Status	Hold Last Blackout Manual Internal Programs	
	Prim/Sec Mode	Primary Secondary	
	Status Settings	Pan Degree Pan Invert Tilt Invert P./T. Feedback P./T. Speed Hibernation Pump	630/540 ON/OFF ON/OFF ON/OFF Speed 1~ 2 OFF,01M~99M,15M OFF/ON
	Fan Settings	Head	Auto High Low
		Base Fan	Auto High Low
	Zoom Speed	Standard Fast	

Personality	Dim Modes	Standard Stage TV Architectural Theatre Stage2 Dim Speed(0.1s-10s)	
	LED Refresh Rate	900Hz-1500Hz,2500Hz,4000Hz,5000Hz,6000Hz,10KHz, 15KHz,20KHz,25KHz,1200Hz	
	Dim Curve	Square Linear Inverse Square S-Curve	
	Reset Motors	Reset All Motors Pan/Tilt Reset Color Reset Gobo Reset Focus/Zoom Reset Shutter Reset Other motors Reset	YES / NO YES / NO YES / NO YES / NO YES / NO YES / NO YES / NO
	Display	Intensity Display Invert Screen Saver Delay Key Lock	1-10 YES/NO OFF-10M 05M OFF/ON/ON1
	Service	Passcode	Effect Adjust (Calibration) 050 PAN 000-255 Tilt 000-255 Cyan 000-255 Magenta 000-255 ...
		Update Software	YES / NO
		Factory Restore (Passcode11)	YES / NO
Manual Control	Pan	000-255	
	Pan Fine	000-255	
	Tilt	000-255	
	Tilt Fine	000-255	
	....	000-255	
Internal Programs	Program 1	Speed	000-255
		Fade	000-255
	Program 2	Speed	000-255
		Fade	000-255
	Program 3	Speed	000-255
		Fade	000-255
	Program 4	Speed	000-255
		Fade	000-255

	Program 5	Speed		000-255
		Fade		000-255
	Program 6	Speed		000-255
		Fade		000-255
	Program 7	Speed		000-255
		Fade		000-255
Info	Fixture Life Time	Power On Time		xxxxxx Hours
		P-On Time-R		xxxxxx Hours
		P-On Time-Reset		Passcode 50
	Total LED Time	LED On Time		xxxxxx Hours
		LEDOn Time-R		xxxxxx Hours
		LED Hours Reset		Passcode 50
	Fixture Temps	LED's	Current	xxx F / xxx C
			Max Resettable	
		Base Temp	Current	
			Max Resettable	
		Reset LED Temp	YES/No Passcode 050	
		Reset Base Temp	YES/No Passcode 050	
	Fixture Humidity	Head Base		xxx% xxx%
	Fan Info.(RPM)	LED Fan Base Fan		xxxxRPM xxxxRPM
	DMX Values	Pan		
		Pan Fine		
		...		
		Frost		
	Error Logs	XXXXX XXXXX		List Errors one by one
		Reset Error Log		YES / NO Passcode (50)
	Software Version	1U: X.X.X 2U: X.X.X 3U: X.X.X ...		

8. DMX channel table:

36	50	57	Function	Values	
1	1	1	Pan	0~255	Pan Movement (540/630)
	2	2	Pan fine	0~255	Pan Fine
2	3	3	Tilt	0~255	Tilt Movement (270)
	4	4	Tilt fine	0~255	Tilt Fine
3	5	5	Cyan	0~255	0% to 100%
		6	Cyan Fine	0~255	0% to 100%
4	6	7	Magenta	0~255	0% to 100%
		8	Magenta Fine	0~255	0% to 100%
5	7	9	Yellow	0~255	0% to 100%
		10	Yellow Fine	0~255	0% to 100%
6	8	11	CTO	0~255	0% to 100%
		12	CTO Fine	0~255	0% to 100%
7	9	13	White Color Temp Presets	0~23	Open
				24~76	See WCT Preset Chart
				77~255	7500K
8	10	14	Color Wheel (Snap)	0~4	Open
				5~17	Open / Red
				18~30	Red
				31~43	Red / Medium Blue
				44~56	Medium Blue
				57~69	Medium Blue / Green
				70~82	Green
				83~95	Green / Amber
				96~108	Amber
				109~121	Amber / Orange
				122~134	Orange
				135~147	Orange / High CRI Filter
				148~160	High CRI Filter
				161~173	High CRI Filter / CTB
				174~186	CTB
				187~199	CTB / Open
				200~226	Clockwise Color Wheel Rotation, Fast -> Slow
				227~228	No Rotation
				229~255	Counter Clockwise Color Wheel Rotation, Slow -> Fast
	11	15	Color Macros - CMY and Color Wheel	0~31	OFF
				32~39	Macro1
				40~47	Macro2
				48~55	Macro3
				56~63	Macro4
				64~71	Macro5
				72~79	Macro6
				80~87	Macro7
				88~95	Macro8
				96~103	Macro9
				104~111	Macro10
				112~119	Macro11
				120~127	Macro12
				128~135	Macro13
				136~143	Macro14
				144~151	Macro15

				152~159	Macro16
				160~167	Macro17
				168~175	Macro18
				176~183	Macro19
				184~191	Macro20
				192~199	Macro21
				200~207	Macro22
				208~215	Macro23
				216~223	Macro24
				224~231	Macro25
				232~239	Macro26
				240~247	Macro27
				248~255	Random CMY
9	12	16	Gobo Wheel 1	0~9	Open
				10~19	Gobo 1
				20~29	Gobo 2
				30~39	Gobo 3
				40~49	Gobo 4
				50~59	Gobo 5
				60~69	Gobo 6
				70~79	Gobo 7
				80~94	Gobo 1 shake (slow-fast)
				95~109	Gobo 2 shake (slow-fast)
				110~124	Gobo 3 shake (slow-fast)
				125~139	Gobo 4 shake (slow-fast)
				140~154	Gobo 5 shake (slow-fast)
				155~169	Gobo 6 shake (slow-fast)
				170~189	Gobo 7 shake (slow-fast)
				190~221	Clockwise Gobo Wheel Rotation, Fast -> Slow
				222~223	No Rotation
				224~255	Counter Clockwise Gobo Wheel Rotation, Slow -> Fast
10	13	17	Gobo 1 Rotation	0~5	Gobo1 Rot. Off
				6~128	Gobo Index 0° ... 540°
				129~191	Clockwise Gobo Rotation, Fast -> Slow
				192~192	No Rotation
				193~255	Counter Clockwise Gobo Rotation, Slow -> Fast
		18	Gobo 1 Rotation fine	0~255	Gobo indexing fine
				0~5	Open
				6~14	Gobo 1
				15~23	Gobo 2
				24~32	Gobo 3
				33~41	Gobo 4
				42~50	Gobo 5

11	14	19	Gobo Wheel 2	51~59	Gobo 6
				60~68	Gobo 7
				69~77	Gobo 8
				78~91	Gobo 1 shake (slow-fast)
				92~105	Gobo 2 shake (slow-fast)
				106~119	Gobo 3 shake (slow-fast)
				120~133	Gobo 4 shake (slow-fast)
				134~147	Gobo 5 shake (slow-fast)
				148~161	Gobo 6 shake (slow-fast)
				162~175	Gobo 7 shake (slow-fast)
				176~189	Gobo 8 shake (slow-fast)
				190~221	Clockwise Gobo Wheel Rotation, Fast -> Slow
				222~223	No Rotation
				224~255	Counter Clockwise Gobo Wheel Rotation, Slow -> Fast
12	15	20	Shutter	0~31	Shutter closed
				32~63	Shutter open
				64~95	Strobe Slow to fast
				96~127	Shutter open
				128~159	Pulse effect Slow to fast
				160~191	Shutter open
				192~223	Random strobe Slow to fast
				224~255	Shutter open
13	16	21	Dimmer	0~255	Intensity 0 to 100%
	17	22	Dimmer fine	0~255	Dimmer Intensity Fine
14	18	23	Prisms and Prism/Gobo Macros	0~5	No Prism - Open
				6~66	Prism 1 (6 Linear Prism)
				67~127	Prism 2 (4 Facet Prism)
				128~135	Macro1
				136~143	Macro2
				144~151	Macro3
				152~159	Macro4
				160~167	Macro5
				168~175	Macro6
				176~183	Macro7
				184~191	Macro8
				192~199	Macro9
				200~207	Macro10
				208~215	Macro11
				216~223	Macro12
				224~231	Macro13
				232~239	Macro14
				240~247	Macro15
				248~255	Macro16
				0~5	Prism Rot. Off

15	19	24	Prism Rotation	6~128	Prism Indexing 0 ... 540°
				129~191	Clockwise Prism Rotation, Fast -> Slow
				192~192	No Rotation
				193~255	Counter Clockwise Prism Rotation, Slow-> Fast
16	20	25	Focus	0~255	0% to 100%
		26	Focus fine	0~255	0% to 100%
17	21	27	Zoom	0~255	Narrow to wide
		28	Zoom fine	0~255	Narrow to wide 16-bit
18	22	29	Iris	0~225	Open - Close
				226~235	Pulse up, slow -> fast
				236~245	Pulse dowm, slow -> fast
				246~255	Random effect, slow -> fast
19	23	30	Medium Frost	0~255	0% to 100%
20	24	31	Heavy Frost	0~255	0% to 100%
21	25	32	Animation	0~5	Animation Rot. OFF
				6~128	Animation Index 0 ... 540°
				129~191	Clockwise Animation Rotation, Fast -> Slow
				192~192	No Rotation
				193~255	Counter Clockwise Animation Rotation, Slow-> Fast
22	26	33	Blade 1A	0~255	0% - 100%
	27	34	Blade 1A fine	0~255	0% - 100%
23	28	35	Blade 1B	0~255	0% - 100%
	29	36	Blade 1B fine	0~255	0% - 100%
24	30	37	Blade 2A	0~255	0% - 100%
	31	38	Blade 2A fine	0~255	0% - 100%
25	32	39	Blade 2B	0~255	0% - 100%
	33	40	Blade 2B fine	0~255	0% - 100%
26	34	41	Blade 3A	0~255	0% - 100%
	35	42	Blade 3A fine	0~255	0% - 100%
27	36	43	Blade 3B	0~255	0% - 100%
	37	44	Blade 3B fine	0~255	0% - 100%
28	38	45	Blade 4A	0~255	0% - 100%
	39	46	Blade 4A fine	0~255	0% - 100%
29	40	47	Blade 4B	0~255	0% - 100%
	41	48	Blade 4B fine	0~255	0% - 100%
30	42	49	Frame Rotation	0~255	Rotation from 0 to 120°
	43	50	Frame Rotation Fine	0~255	0% - 100%
31	44	51	Frame Speed	0~255	Max -> Min
				0~7	Off
				8~15	Macro 1
				16~23	Macro 2
32	45	52	Frame Macros	24~31	Macro 3
				32~39	Macro 4
				40~47	Macro 5
				48~55	Macro 6
				56~63	Macro 7
				64~71	Macro 8
				72~79	Macro 9
				80~87	Macro 10
				88~95	Macro 11
				96~103	Macro 12
				104~111	Macro 13
				112~119	Macro 14
				120~127	Macro 15
				128~135	Macro 16
				136~143	Macro 17
				144~151	Macro 18
				152~159	Macro 19
				160~167	Macro 20
				168~175	Macro 21
				176~183	Macro 22
				184~191	Macro 23
				192~199	Macro 24
				200~207	Macro 25
				208~215	Macro 26
				216~223	Macro 27
				224~231	Macro 28
				232~239	Macro 29
				240~247	Macro 30
				248~255	Macro 31
33	46	53	Dimmer Mode	0~20	Default to Unit Setting
				21~40	Standard
				41~60	Stage
				61~80	TV
				81~100	Architectural
				101~120	Theater
				121~140	Stage 2
				141	0.1 Sec.
				142	0.2 Sec.
				143	0.3 Sec.
				144	0.4 Sec.
				145	0.5 Sec.
				146	0.6 Sec.
				147	0.7 Sec.
				148	0.8 Sec.
				149	0.9 Sec.

				150	1.0 Sec.
				151	1.5 Sec.
				152	2.0 Sec.
				153	3.0 Sec.
				154	4.0 Sec.
				155	5.0 Sec.
				156	6.0 Sec.
				157	7.0 Sec.
				158	8.0 Sec.
				159	9.0 Sec.
				160	10 Sec.
				161~255	Default to Unit Setting
	47	54	Dim Curves	0~20	Square
				21~40	Linear
				41~60	Inv. Squa
				61~80	S. Curve
				81~255	No function
34	48	55	CMY & Color Macro Speed	0~255	CMY / Color Macro Speed Max -> Min
35	49	56	Pan/Tilt Speed	0~225	Pan/Tilt Fast -> Slow
				226~235	Blackout by movement
				236~245	Blackout by all wheel changing
				246~255	No function
36	50	57	Special Function	0~39	No function(1200 Hz LED Refresh Rate (Default)
				40~49	Fan Control - Low (Hold 3s)
				50~59	Fan Control - High (Hold 3s)
				60~69	Fan Control - Auto (Default) (Hold 3s)
				70~74	All motor Reset (Hold 3s)
				75~79	Pan / Tilt Reset (Hold 3s)
				80~84	Color Reset (Hold 3s)
				85~89	Gobo Reset (Hold 3s)
				90~94	Focus and Zoom Reset (Hold 3s)
				95~99	Shutter Reset (Hold 3s)
				100~104	Framing Reset (Hold 3s)
				105~109	Other motors Reset (Hold 3s)
				110~114	Enable Zoom Speed Fast(Hold 3s)
				115~119	Disable Zoom Speed Fast(Hold 3s)
				120~124	Pump ON
				125~129	Pump OFF
				130~134	Enable Color Wheel Index to any position (Hold 3s)
				135~139	Disable Color Wheel Index to any position (Hold 5s)
				140~152	No function
				153~154	Hibernation Enable (Hold 3s)
				155~156	Hibernation OFF (Hold 5s)
				157~158	Display Backlight ON (Hold 3s)
				159~160	Display Backlight OFF (Hold 5s)
				161~162	Pan/Tilt Speed 1 (Default) (Hold 5s)
				163~164	Pan/Tilt Speed 2 (Hold 5s)
				165~166	Invert Pan ON (Hold 3s)
				167~168	Invert Pan OFF (Hold 5s)
				169~170	Invert Tilt ON (Hold 3s)
				171~172	Invert Tilt OFF (Hold 5s)
				173~173	900 Hz LED Refresh Rate (Hold 1s)
				174~174	910 Hz LED Refresh Rate (Hold 1s)
				175~175	920 Hz LED Refresh Rate (Hold 1s)
				176~176	930 Hz LED Refresh Rate (Hold 1s)
				177~177	940 Hz LED Refresh Rate (Hold 1s)
				178~178	950 Hz LED Refresh Rate (Hold 1s)
				179~179	960 Hz LED Refresh Rate (Hold 1s)
				180~180	970 Hz LED Refresh Rate (Hold 1s)
				181~181	980 Hz LED Refresh Rate (Hold 1s)
				182~182	990 Hz LED Refresh Rate (Hold 1s)
				183~183	1000 Hz LED Refresh Rate (Hold 1s)
				184~184	1010 Hz LED Refresh Rate (Hold 1s)
				185~185	1020 Hz LED Refresh Rate (Hold 1s)
				186~186	1030 Hz LED Refresh Rate (Hold 1s)
				187~187	1040 Hz LED Refresh Rate (Hold 1s)
				188~188	1050 Hz LED Refresh Rate (Hold 1s)
				189~189	1060 Hz LED Refresh Rate (Hold 1s)
				190~190	1070 Hz LED Refresh Rate (Hold 1s)
				191~191	1080 Hz LED Refresh Rate (Hold 1s)
				192~192	1090 Hz LED Refresh Rate (Hold 1s)
				193~193	1100 Hz LED Refresh Rate (Hold 1s)
				194~194	1110 Hz LED Refresh Rate (Hold 1s)
				195~195	1120 Hz LED Refresh Rate (Hold 1s)
				196~196	1130 Hz LED Refresh Rate (Hold 1s)
				197~197	1140 Hz LED Refresh Rate (Hold 1s)
				198~198	1150 Hz LED Refresh Rate (Hold 1s)
				199~199	1160 Hz LED Refresh Rate (Hold 1s)
				200~200	1170 Hz LED Refresh Rate (Hold 1s)
				201~201	1180 Hz LED Refresh Rate (Hold 1s)
				202~202	1190 Hz LED Refresh Rate (Hold 1s)
				203~203	1210 Hz LED Refresh Rate (Hold 1s)
				204~204	1220 Hz LED Refresh Rate (Hold 1s)
				205~205	1230 Hz LED Refresh Rate (Hold 1s)
				206~206	1240 Hz LED Refresh Rate (Hold 1s)
				207~207	1250 Hz LED Refresh Rate (Hold 1s)
				208~208	1260 Hz LED Refresh Rate (Hold 1s)
				209~209	1270 Hz LED Refresh Rate (Hold 1s)
				210~210	1280 Hz LED Refresh Rate (Hold 1s)

				211~211	1290 Hz LED Refresh Rate (Hold 1s)
				212~212	1300 Hz LED Refresh Rate (Hold 1s)
				213~213	1310 Hz LED Refresh Rate (Hold 1s)
				214~214	1320 Hz LED Refresh Rate (Hold 1s)
				215~215	1330 Hz LED Refresh Rate (Hold 1s)
				216~216	1340 Hz LED Refresh Rate (Hold 1s)
				217~217	1350 Hz LED Refresh Rate (Hold 1s)
				218~218	1360 Hz LED Refresh Rate (Hold 1s)
				219~219	1370 Hz LED Refresh Rate (Hold 1s)
				220~220	1380 Hz LED Refresh Rate (Hold 1s)
				221~221	1390 Hz LED Refresh Rate (Hold 1s)
				222~222	1400 Hz LED Refresh Rate (Hold 1s)
				223~223	1410 Hz LED Refresh Rate (Hold 1s)
				224~224	1420 Hz LED Refresh Rate (Hold 1s)
				225~225	1430 Hz LED Refresh Rate (Hold 1s)
				226~226	1440 Hz LED Refresh Rate (Hold 1s)
				227~227	1450 Hz LED Refresh Rate (Hold 1s)
				228~228	1460 Hz LED Refresh Rate (Hold 1s)
				229~229	1470 Hz LED Refresh Rate (Hold 1s)
				230~230	1480 Hz LED Refresh Rate (Hold 1s)
				231~231	1490 Hz LED Refresh Rate (Hold 1s)
				232~232	1500 Hz LED Refresh Rate (Hold 1s)
				233~233	2500 Hz LED Refresh Rate (Hold 1s)
				234~234	4000 Hz LED Refresh Rate (Hold 1s)
				235~235	5000 Hz LED Refresh Rate (Hold 1s)
				236~236	6000 Hz LED Refresh Rate (Hold 1s)
				237~237	10,000 Hz LED Refresh Rate (Hold 1s)
				238~238	15,000 Hz LED Refresh Rate (Hold 1s)
				239~239	20,000 Hz LED Refresh Rate (Hold 1s)
				240~240	25,000 Hz LED Refresh Rate (Hold 1s)
				241~241	Internal program 1 (scenes 1~8) (Hold 3s)
				242~242	Internal program 2 (scenes 9~16) (Hold 3s)
				243~243	Internal program 3 (scenes 17~24) (Hold 3s)
				244~244	Internal program 4 (scenes 25~32) (Hold 3s)
				245~245	Internal program 5 (scenes 33~40) (Hold 3s)
				246~246	Internal program 6 (scenes 41~48) (Hold 3s)
				247~247	Internal program 7 (scenes 49~56) (Hold 3s)
				248~255	No function

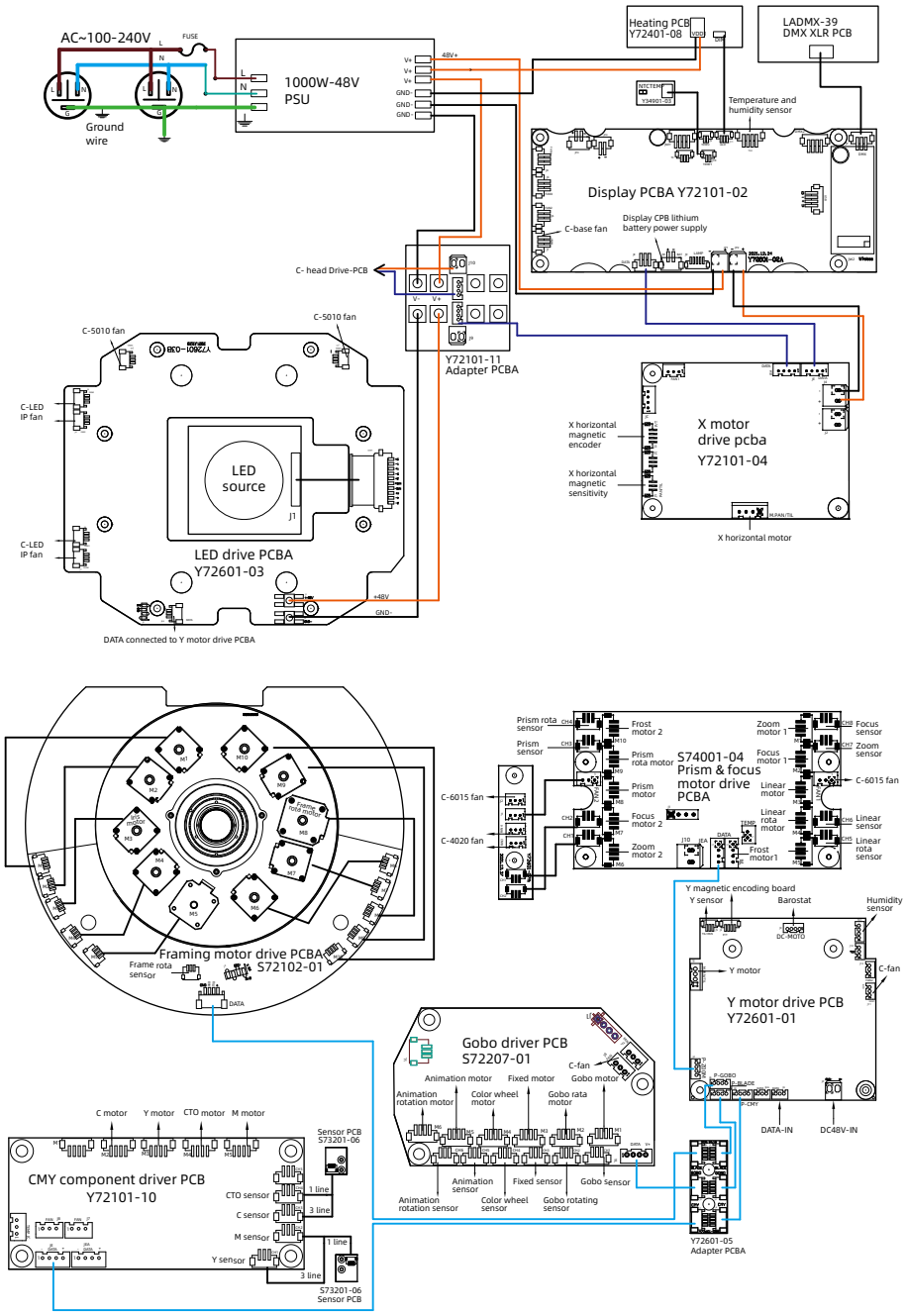
WCT Preset Chart:

Value	Color Temperature
24	2700
25	2800
26	2900
27	3000
28	3100
29	3200
30	3300
31	3400
32	3500
33	3600
34	3700
35	3800
36	3900
37	4000
38	4100
39	4200
40	4300
41	4400
42	4500
43	4600
44	4700
45	4800
46	4900
47	5000
48	5100
49	5200
50	5300
51	5400
52	5500
53	5600
54	5700
55	5800
56	5900
57	6000
58	6100
59	6200
60	6300
61	6400
62	6500
63	6600
64	6700
65	6800
66	6900
67	7000
68	7100
69	7200
70	7300
71	7400

Color Macros:

Color Macros	Color Wheel	Cyan	Magenta	Yellow
Macro1		128	128	0
Macro2		255	128	0
Macro3		128	255	0
Macro4		0	128	255
Macro5		0	255	128
Macro6		128	0	255
Macro7		255	0	128
Macro8		0	128	128
Macro9		128	0	128
Macro10			255	170
Macro11		255	128	128
Macro12		128	255	128
Macro13		128	128	255
Macro14		46	13	206
Macro15		0	255	255
Macro16		255	0	255
Macro17		255	255	0
Macro18		133	207	124
Macro19		228	170	124
Macro20		23	28	157
Macro21		94	157	169
Macro22		176	203	112
Macro23		125	85	60
Macro24		205	117	96
Macro25		221	119	227
Macro26		0	0	255
Macro27	22	0	153	0

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.

Waining !

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