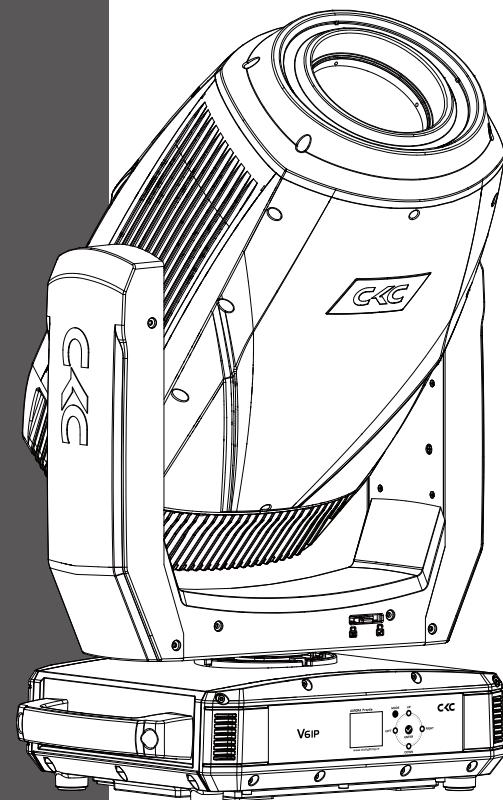


CKC

V6IP



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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.

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★ 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.



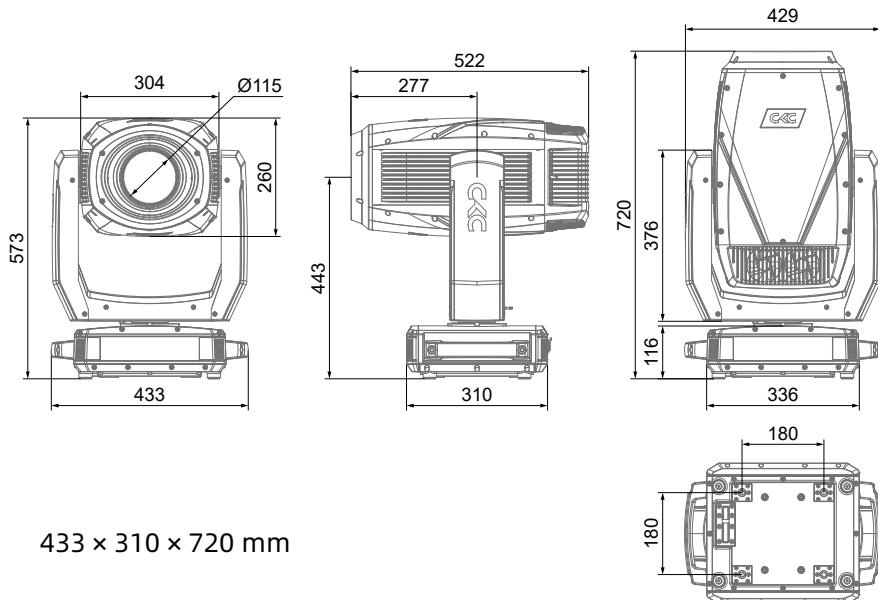
- The lighting fixtures work normally at -20 °C to 45 °C . When replacing any components or accessories in the equipment, ensure that the power is disconnected to prevent electric shock and injury;
- The maximum surface temperature of the lamp during operation can reach 64 °C , please do not touch it 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.

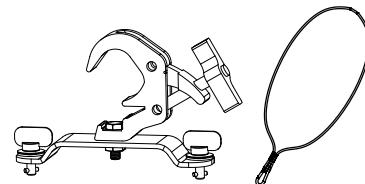
2. Product Introduction

2.1 Exterior dimensions of lighting fixtures



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

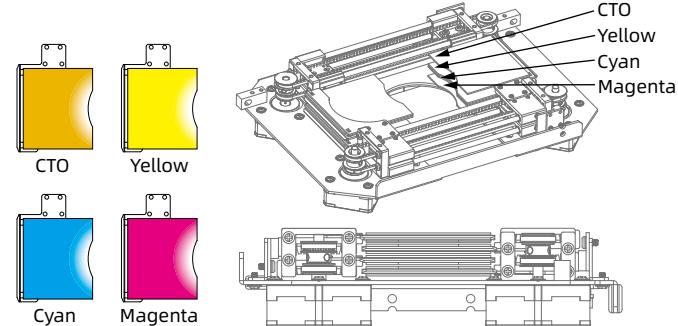
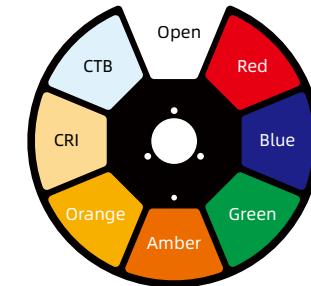
Rated input voltage: AC 100V-240V~ 50Hz/60Hz
 Rated power of the entire fixture: 990W
 Power factor: 0.997F
 Input Current: 3.89A 220V

● Source lifespan

>20000 hours

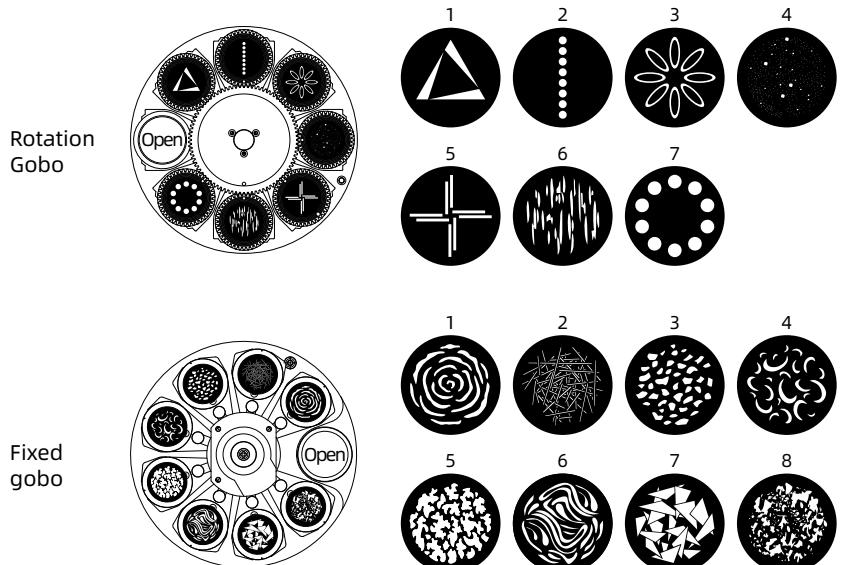
● Color system

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



● Gobo system

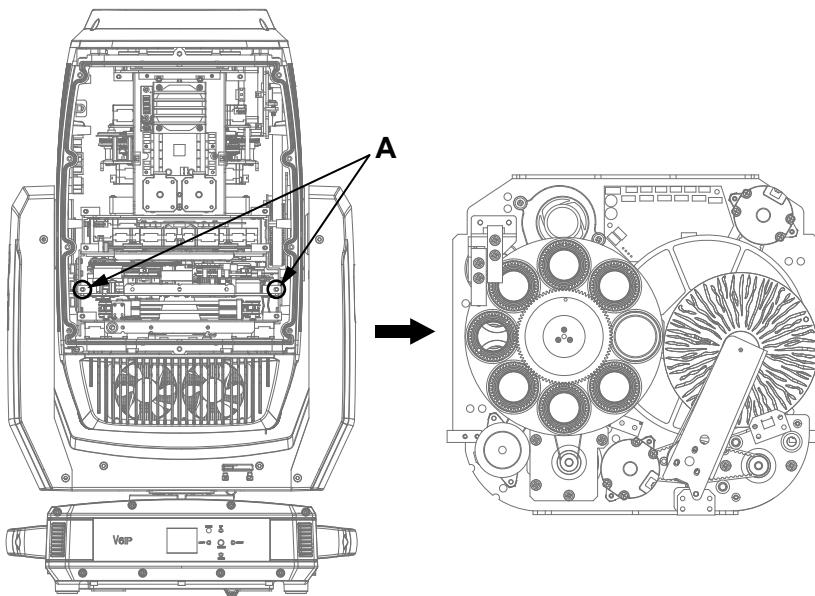
Gobo outer diameter: $23^{+0.2}$ mm Internal diameter: 19mm Thickness: 1.1mm



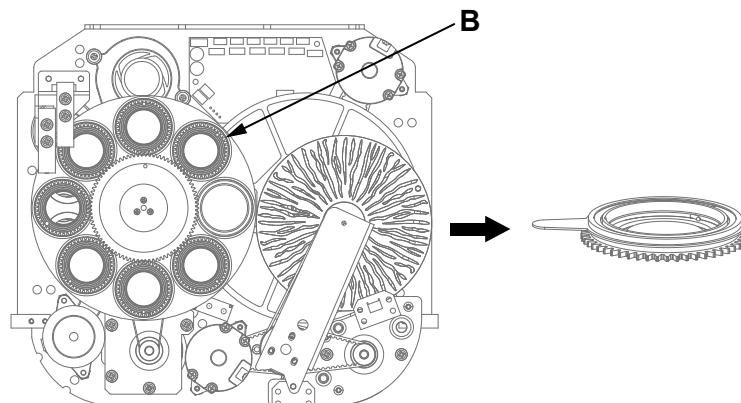
Gobo replace

1) Rotation gobo wheel

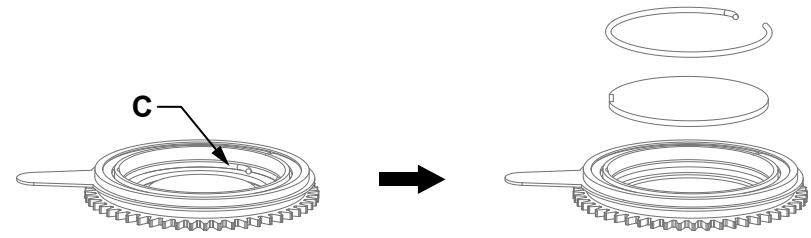
a). Remove the two screws at location **A**, unplug the power and signal adaptercables, and extract the Gobo component;



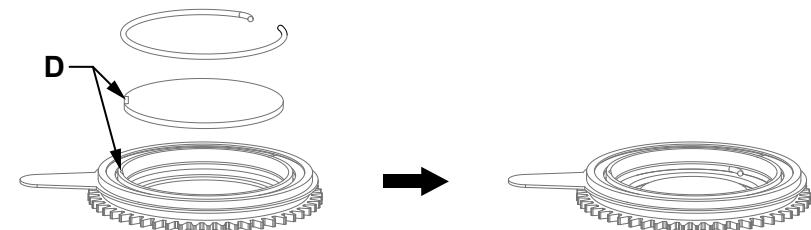
b). As shown in **B**, gently lift the driven wheel from the edge upwards from the front of the pattern plate and slowly pull it out to remove a single pattern seat;



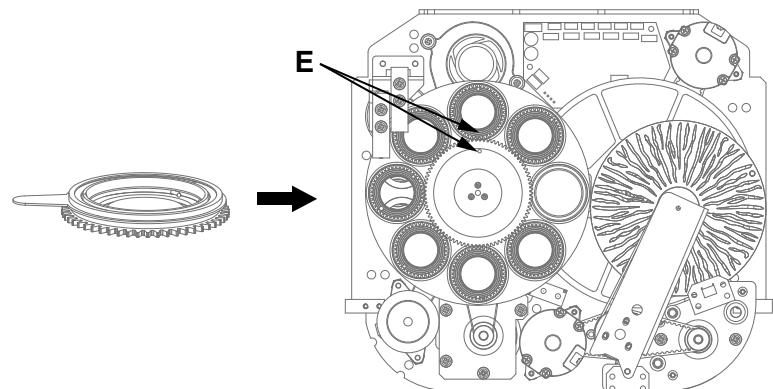
c). Use tweezers or other small grippers to remove the snap spring at point **C** (If the pattern piece is coated with glass glue for fixation, please use a professional cleaning agent to remove the glass glue before removing the snap spring to avoid damaging the gobo);



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);

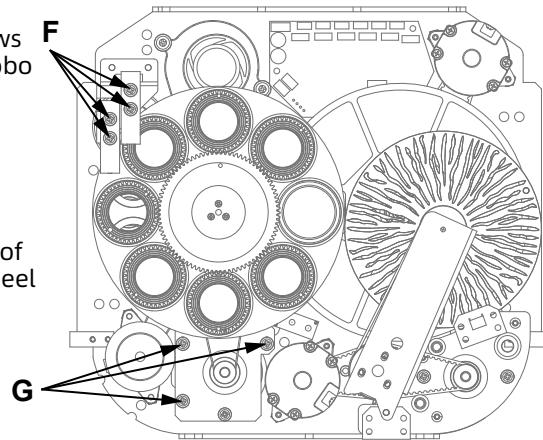


e). Insert the gobo holder into the drive wheel assembly, as shown in **E**, and reinstall the gobo holder in the order it was removed; The positioning point of the gobo holder should be aligned with the positioning point of the driving wheel; After installation, simply reinstall the gobo wheel component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

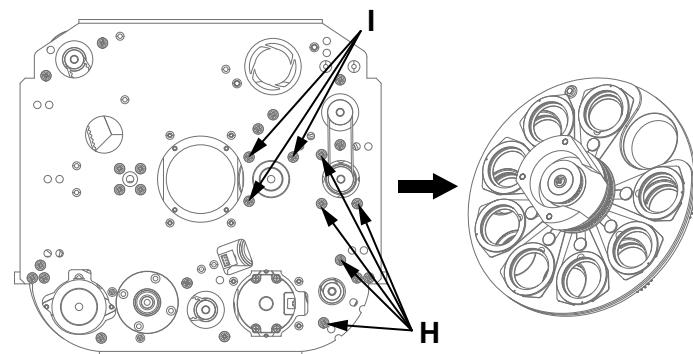


2) Fixed gobo wheel

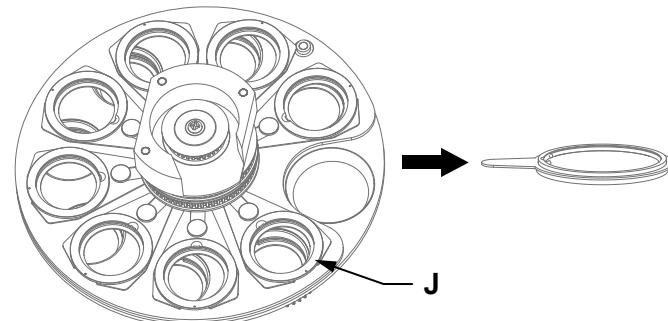
a). Unscrew the 4 screws on the front **F** of the gobo wheel component and remove the magnetic sensing plate; Loosen the 3 screws at point **G** and loosen the Gobo self rotating belt (to facilitate the next step of removing the Gobo wheel component);



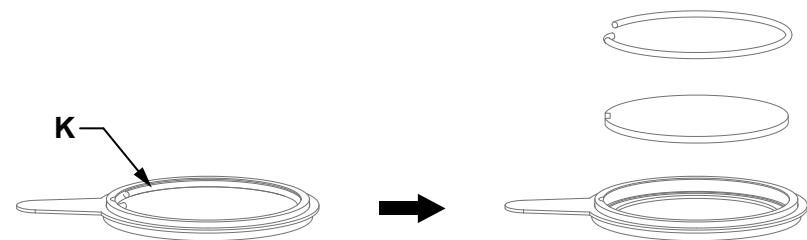
b). Reverse the components and loosen the 5 screws at **H** to loosen the belt; Unscrew the 3 screws at position **I** again to remove the gobo wheel component of the pattern disk;



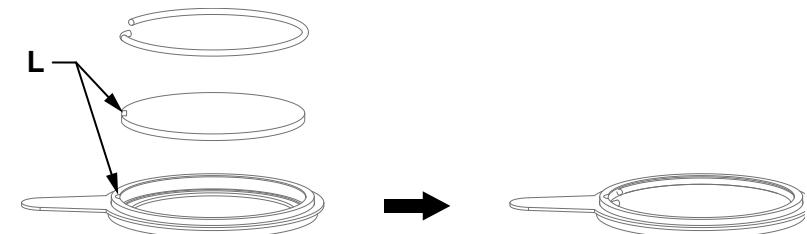
c). As shown in **J**, gently lift the gobo holder from the edge of the fixed gobo wheel and slowly pull it out to remove a single gobo holder;



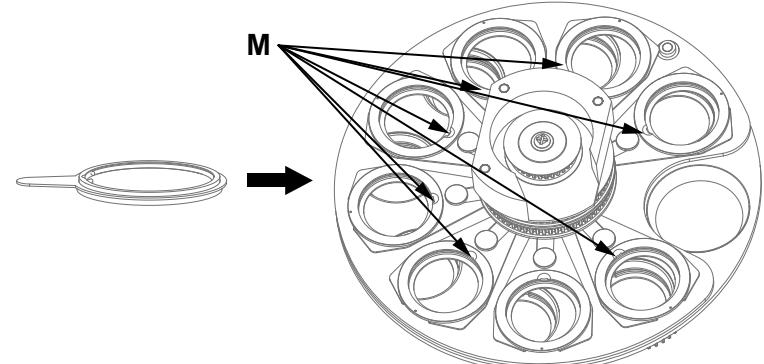
d). Use tweezers or other small grippers to remove the snap spring at point **K** (If the pattern piece is coated with glass glue for fixation, please use a professional cleaning agent to remove the glass glue before removing the snap spring to avoid damaging the gobo);



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);



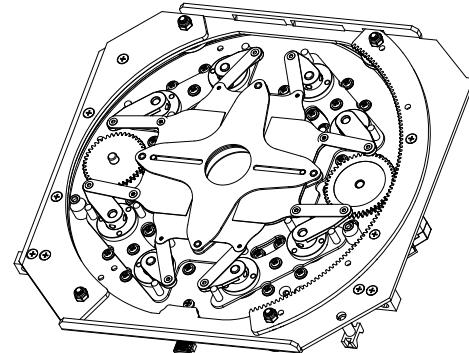
f). Insert the gobo wheel into the drive wheel assembly, as shown in **M**, and reinstall the gobo holder in the order it was removed;



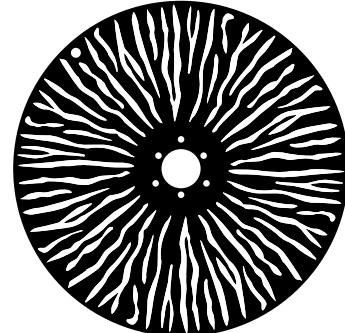
g). After installation, simply reinstall the gobo wheel component onto the light fixture.

● 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 $\pm 60^\circ$

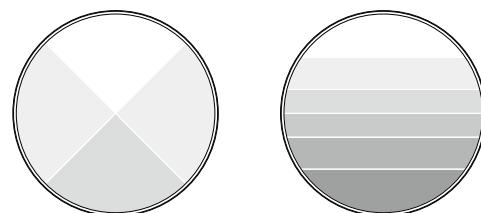


● Animation



● Prism system

4 prism+ 6 linear



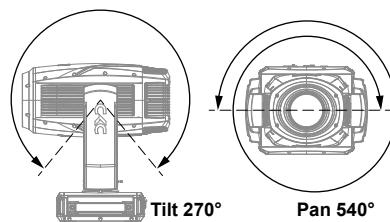
● Pan/Tilt

Pan scan:

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

Tilt scan:

270° 8-bit/16bit precision scanning



● Optical system

Source: 600W CW LED

Beam angel: 6 ~ 44°

Output luminous flux: 26300 Lm

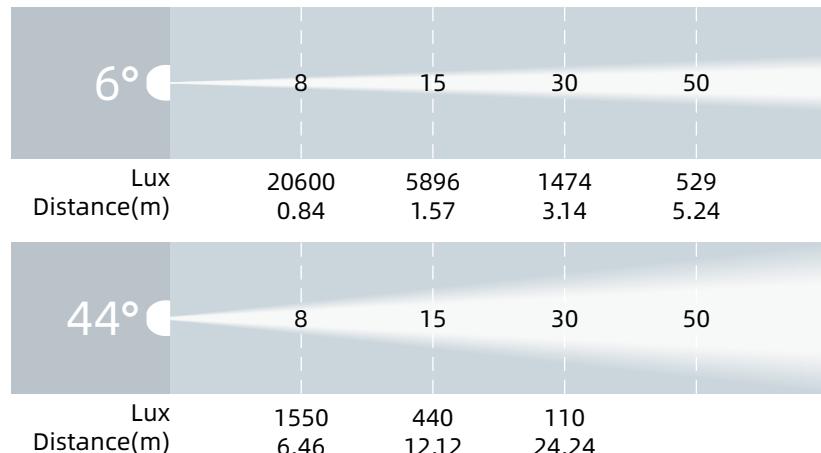
● Control and programming

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 x 57.5 x 48.5 cm

Flight case size: 70.8 x 61.5 x 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

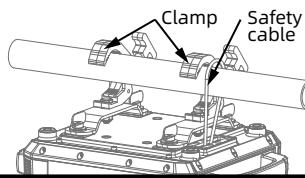
1). Disconnect the power supply before packaging the lighting fixtures to allow them to cool completely;

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

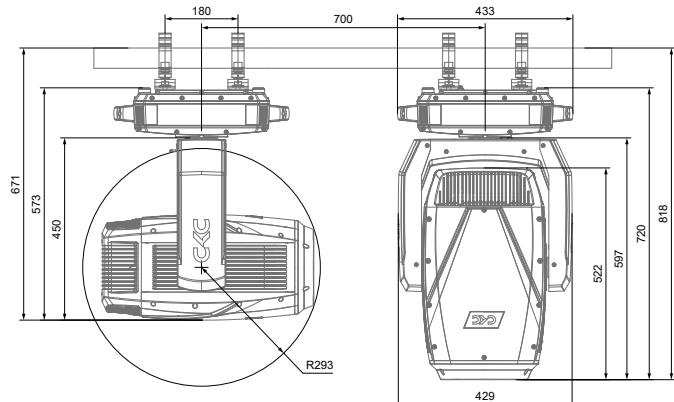
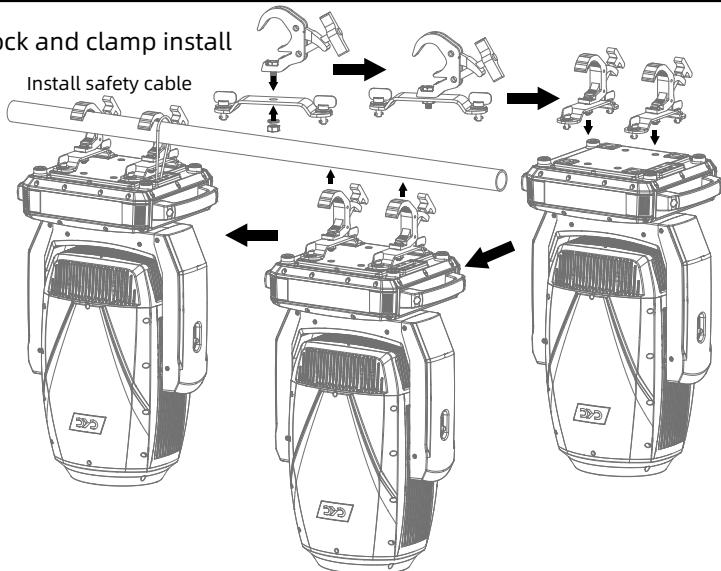
The lighting fixtures can be installed on the stage or on any direction of the truss, and the clamp can be quickly and easily locked onto the truss.



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.

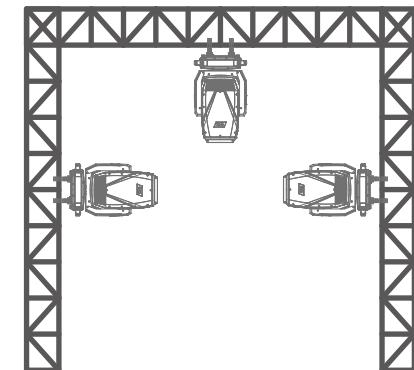
Quick lock and clamp install



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).

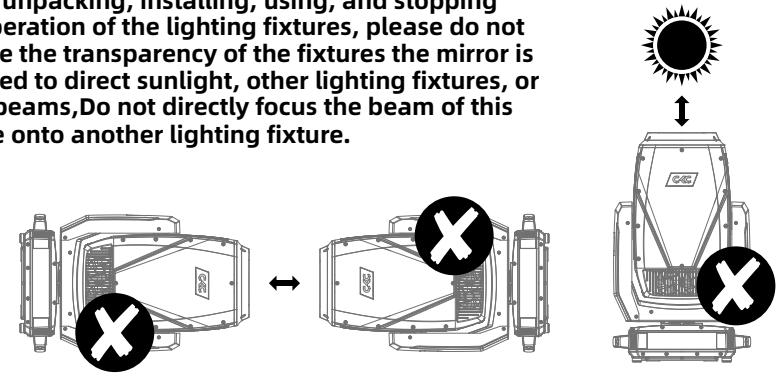
5.3 Hanging Installation Diagram



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.

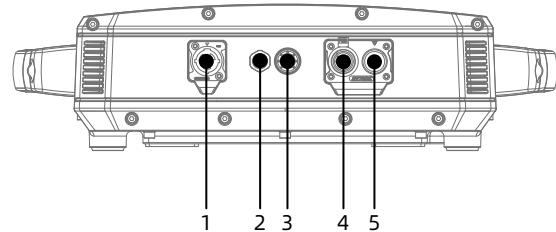
When unpacking, installing, using, and stopping the operation of the lighting fixtures, please do not expose the transparency of the fixtures the mirror is exposed to direct sunlight, other lighting fixtures, or laser beams,Do not directly focus the beam of this device onto another lighting fixture.



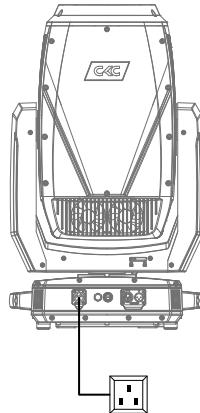
6. Power、Signal connect

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



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

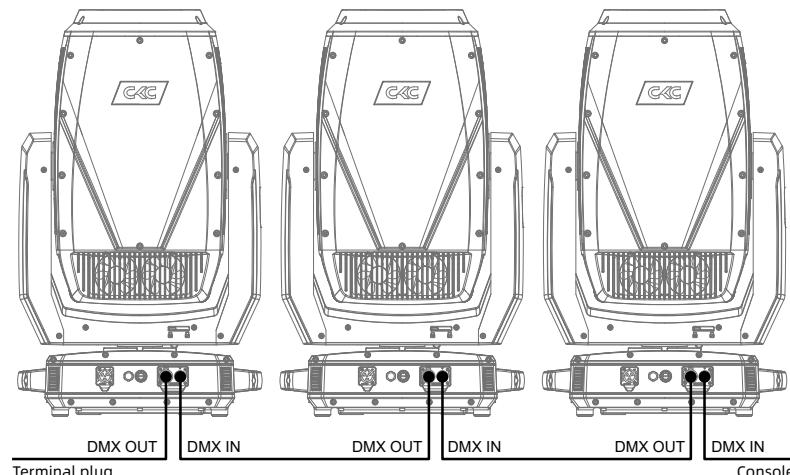
Warning !

- 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.

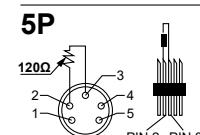
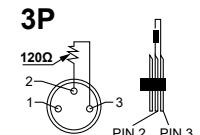
6.3 Signal connect



The lighting fixtures are equipped with standard DMX XLR 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 | |
| SET | Prim/Sec Mode | Primary Secondary | |
| | Status Settings | Pan Degree | 630/540 |
| | | Pan Invert | ON/OFF |
| | | Tilt Invert | ON/OFF |
| | | P.T. Feedback | ON/OFF |
| | | P.T. Speed | Speed 1~2 |
| | | Hibernation | OFF,01M~99M,15M |
| Pump | 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 |
| | Display | Intensity Display Invert Screen Saver Delay Key Lock |
| | Service | 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 Pan Fine Tilt Tilt Fine |
| | Internal Programs | Program 1 Program 2 Program 3 Program 4 |

| | | |
|------------------|-----------------|------------------------|
| 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 | Power On Time | xxxxxx Hours |
| | P-On Time-R | xxxxxx Hours |
| | P-On Time-Reset | Passcode 50 |
| | LED On Time | xxxxxx Hours |
| | LED On Time-R | xxxxxx Hours |
| | LED Hours Reset | Passcode 50 |
| | LED's | Current |
| | | Max Resettable |
| | Base Temp | Current |
| | | Max Resettable |
| Fixture Temps | Reset LED Temp | YES/No |
| | | Passcode 050 |
| | Reset Base Temp | YES/No |
| | | Passcode 050 |
| Fixture Humidity | Head | xxx% |
| | Base | xxx% |
| Fan Info.(RPM) | LED Fan | xxxxRPM |
| | Base Fan | xxxxRPM |
| DMX Values | Pan | |
| | Pan Fine | |
| | ... | |
| | Frost | |
| Error Logs | XXXXXX | |
| | XXXXXX | List Errors one by one |
| Software Version | Reset Error Log | YES / NO |
| | | Passcode (50) |

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 |
| | | | | 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 |
| 8 | 10 | 14 | Color Wheel (Snap) | 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 |
| | | | | 0~31 | OFF |
| | | | | 32~39 | Macro1 |
| | | | | 40~47 | Macro2 |
| | | | | 48~55 | Macro3 |
| | | | Color Macros - CMY and Color Wheel | 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 | 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) |
| 10 | 13 | 17 | 190~221 | Clockwise Gobo Wheel Rotation, Fast -> Slow |
| | | | 222~223 | No Rotation |
| | | | 224~255 | Counter Clockwise Gobo Wheel Rotation, Slow -> Fast |
| | | | 0~5 | Gobo1 Rot. Off |
| | | | 6~128 | Gobo Index 0° ... 540° |
| 11 | 14 | 18 | 129~191 | Clockwise Gobo Rotation, Fast -> Slow |
| | | | 192~192 | No Rotation |
| | | | 193~255 | Counter Clockwise Gobo Rotation, Slow -> Fast |
| | | | 0~255 | Gobo indexing fine |
| 12 | 15 | 19 | 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 down, slow -> fast | | | | |
| 246~255 | Random effect, slow -> fast | | | | |
| 19 | 23 | 30 | Medium Frost | 0~255 | 0% to 100% |
| 20 | 24 | 31 | | 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 | | 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 | 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 | |
| | | | 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) | |

| | | | |
|----------|------------------|---------|--------------------------------------|
| 36 50 57 | Special Function | 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:

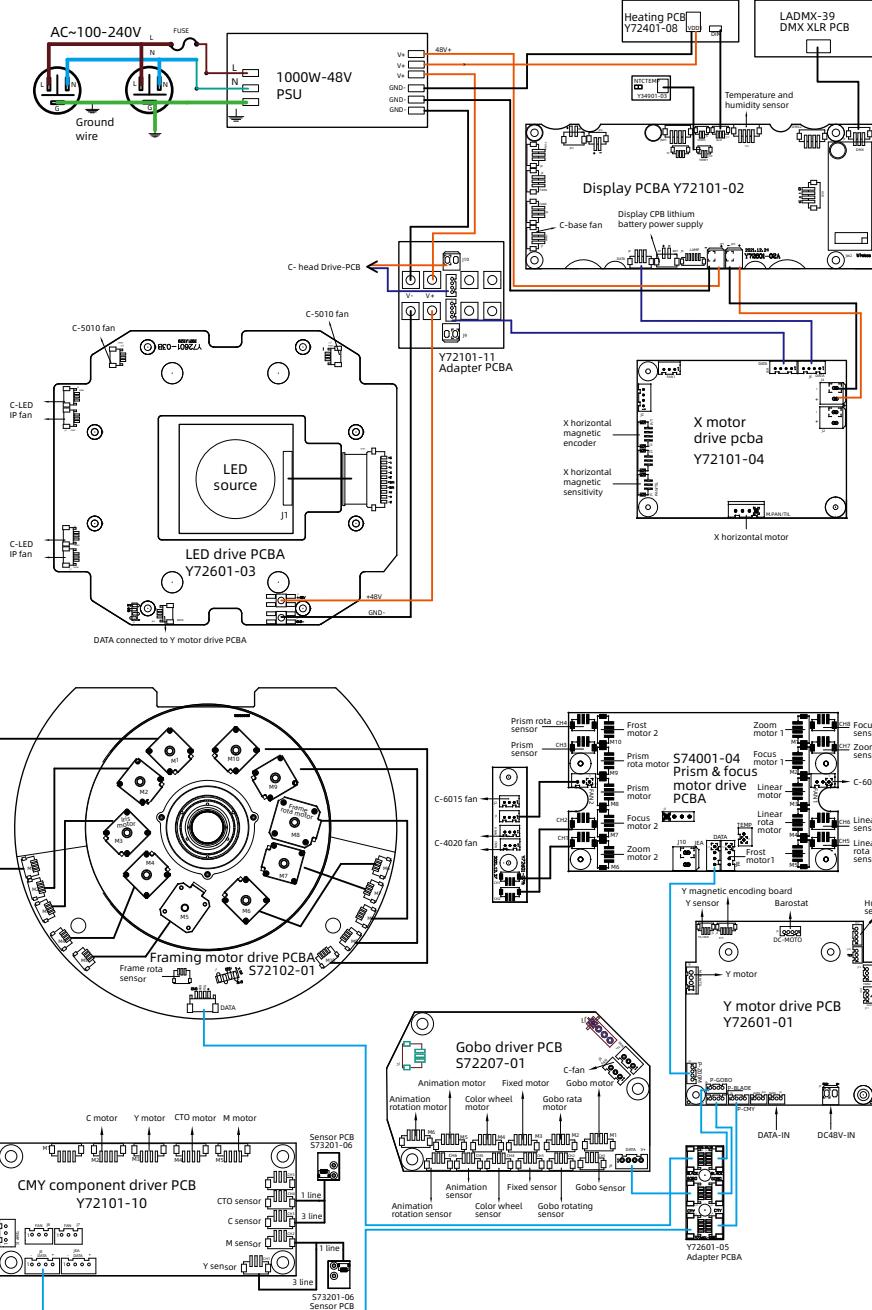
| Value | Color Temperature | Value | Color Temperature | Value | Color Temperature |
|-------|-------------------|-------|-------------------|-------|-------------------|
| 24 | 2700 | 40 | 4300 | 56 | 5900 |
| 25 | 2800 | 41 | 4400 | 57 | 6000 |
| 26 | 2900 | 42 | 4500 | 58 | 6100 |

| | | | | | |
|----|------|----|------|----|------|
| 27 | 3000 | 43 | 4600 | 59 | 6200 |
| 28 | 3100 | 44 | 4700 | 60 | 6300 |
| 29 | 3200 | 45 | 4800 | 61 | 6400 |
| 30 | 3300 | 46 | 4900 | 62 | 6500 |
| 31 | 3400 | 47 | 5000 | 63 | 6600 |
| 32 | 3500 | 48 | 5100 | 64 | 6700 |
| 33 | 3600 | 49 | 5200 | 65 | 6800 |
| 34 | 3700 | 50 | 5300 | 66 | 6900 |
| 35 | 3800 | 51 | 5400 | 67 | 7000 |
| 36 | 3900 | 52 | 5500 | 68 | 7100 |
| 37 | 4000 | 53 | 5600 | 69 | 7200 |
| 38 | 4100 | 54 | 5700 | 70 | 7300 |
| 39 | 4200 | 55 | 5800 | 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.

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

