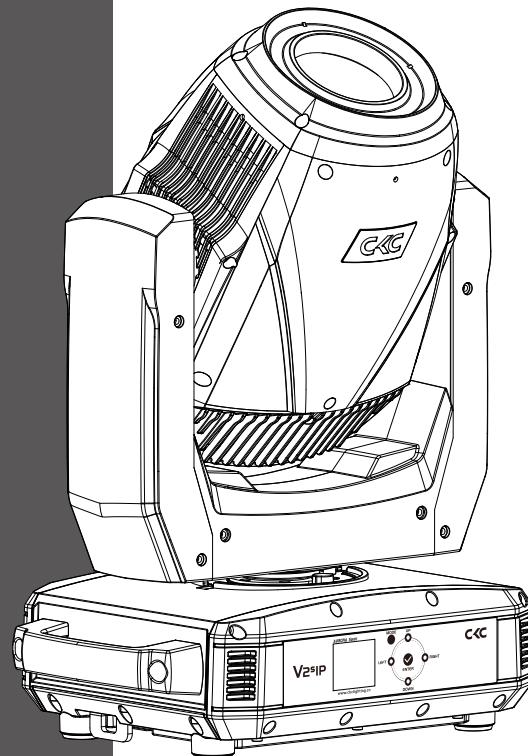


CKC

V2^{SP}



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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 1m.



- 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.



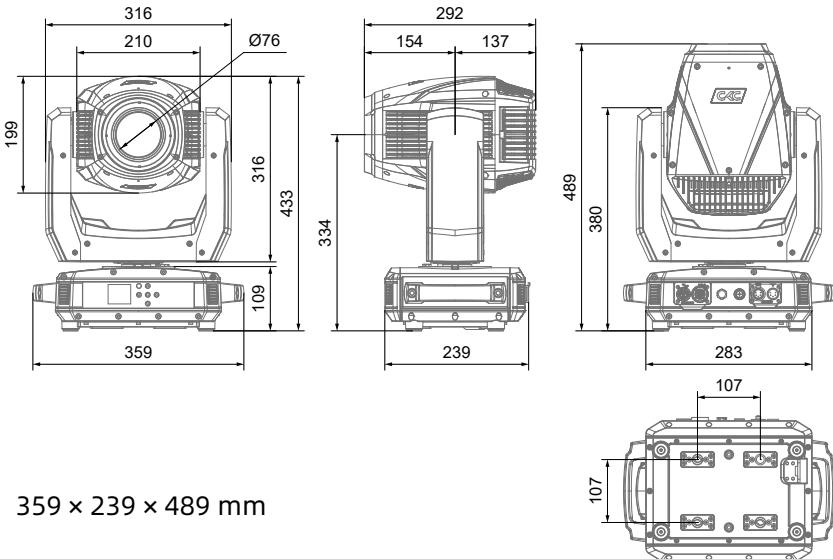
- The lighting fixtures work normally at -20 °C to 45 °C . When replacing any components or accessories in the equipment, ensure that the power is disconnected to prevent electric shock and injury;
- The maximum surface temperature of the lamp during operation can reach 55°C , please do not touch it 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.

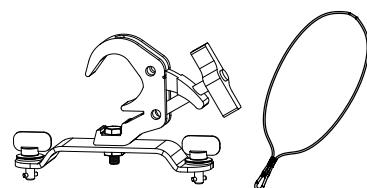
2. Product Introduction

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

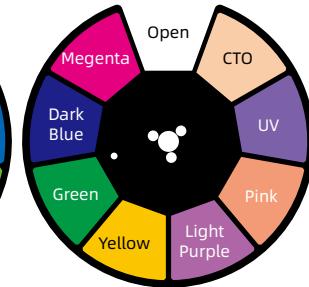
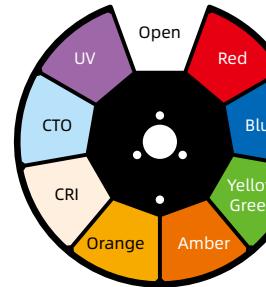
Rated input voltage: AC 100V-240V~ 50Hz/60Hz
 Rated power of the entire fixture: 319W
 Power factor: 0.994F
 Input Current: 1.55A 220V

● Source lifespan

>20000 hours

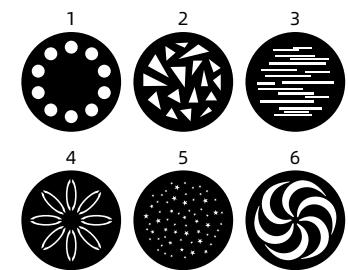
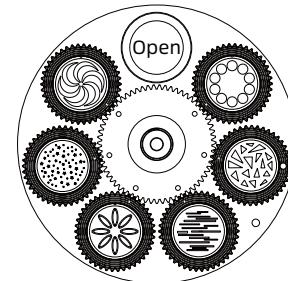
● Color system

CCT: 20000K
 CRI: 77
 Color wheel 1: 8+1
 Color wheel 2: 8+1



● Gobo system

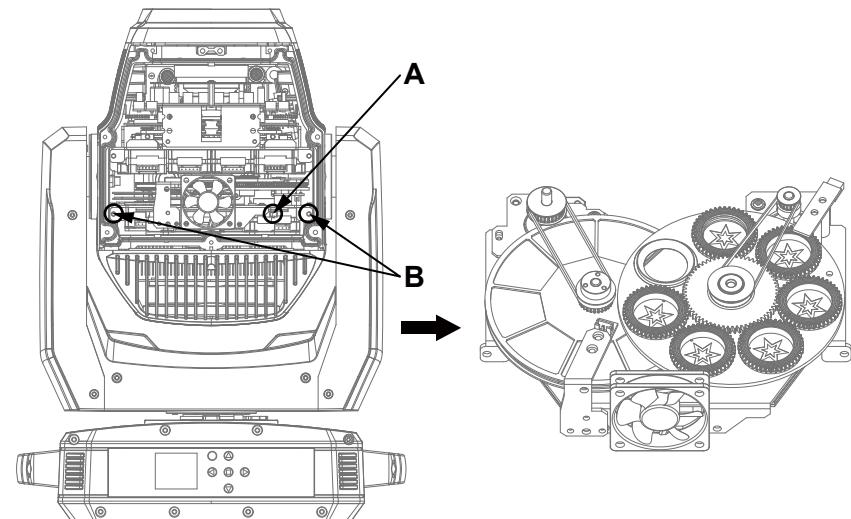
Gobo outer diameter: $23^{+0.2}_{-0.2}$ mm
 Internal diameter: 19mm
 Thickness: 0.5mm



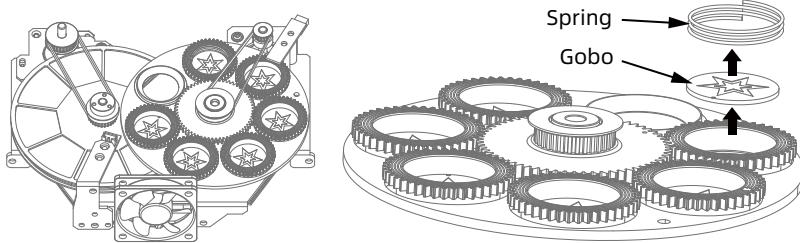
Gobo replace

1) Rotation gobo wheel

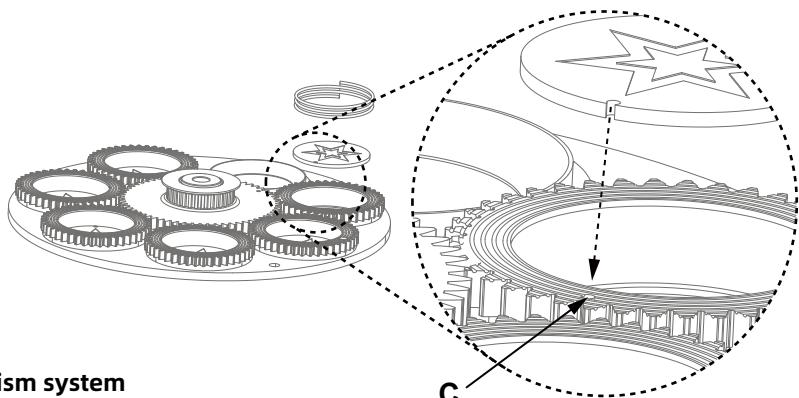
a). Pull out the power and signal adapter at point A, remove the two screws at point B, and extract the Gobo component;



b).Use tweezers or other small grippers to remove the clamp of the Gobo holder spring and pick up the Gobo;

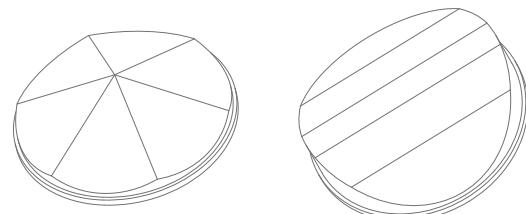


c).When assembling the Gobo, the black spray on the Gobo should face upwards and the notch position should be aligned with the positioning point (depression) of the driven wheel component **C**; After installation, simply reinstall the Gobo wheel component onto the fixture.



● Prism system

6 prism+ 5 linear



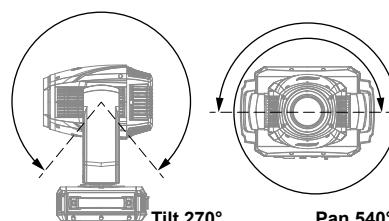
● Pan/Tilt

Pan scan:

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

Tilt scan:

270° 8-bit/16bit precision scanning



● Optical system

Beam angel: 12 ~ 23°

Source: 200W CW LED

Output luminous flux: 8000 Lm

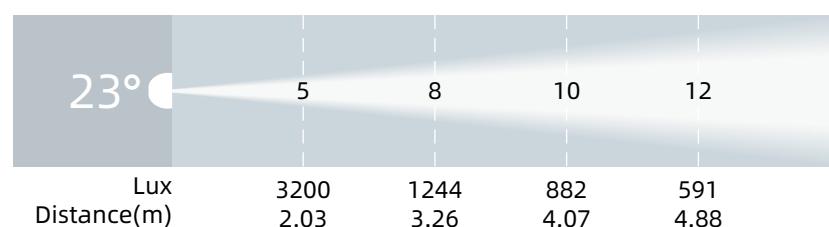
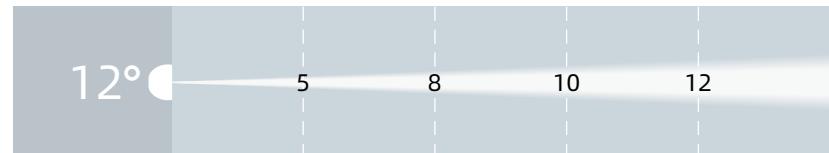
● Control and programming

Control channel: 17CH/20CH/22CH

Protocol: DMX512, RDM

Data connect: 3 or 5 pin signal in/out

● Illumination draw



● Other effect function

Fast electronic strobe: 1~25Hz

LED refresh frequency: 1200Hz-25KHz

Frost: Light frost+heavy frost

● Other features and functions

Weight: 17.2 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.

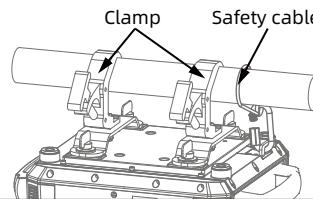
4.2 Equipment packaging

- 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.

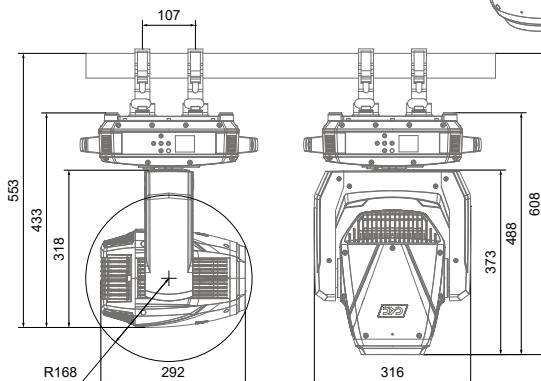
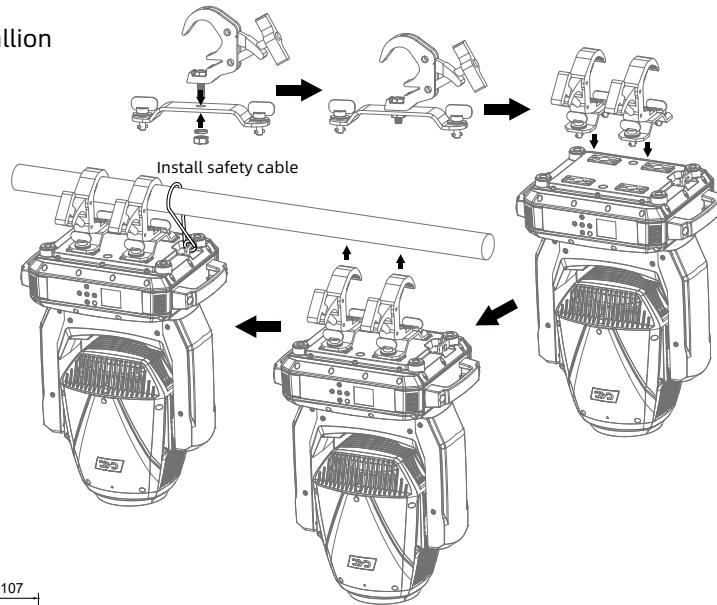


Warning !

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.



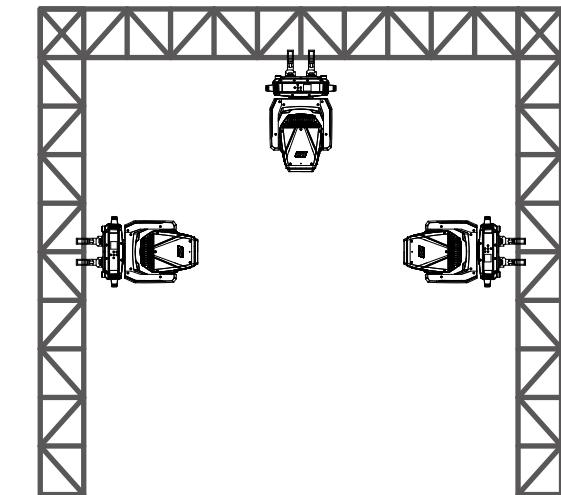
Integrated clamp installation



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).

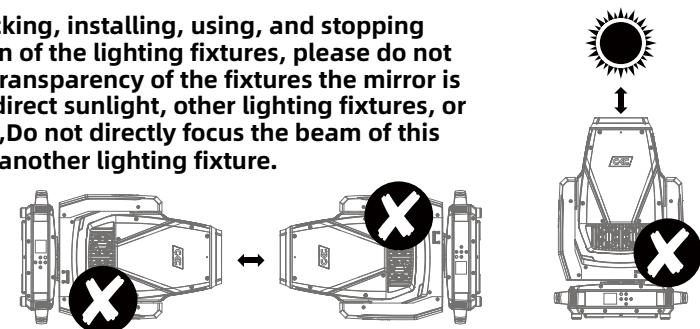
5.3 Hanging Installation Diagram



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.

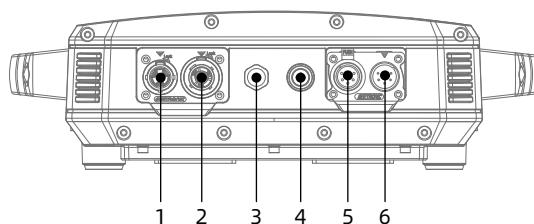
When unpacking, installing, using, and stopping the operation of the lighting fixtures, please do not expose the transparency of the fixtures the mirror is exposed to direct sunlight, other lighting fixtures, or laser beams, Do not directly focus the beam of this device onto another lighting fixture.



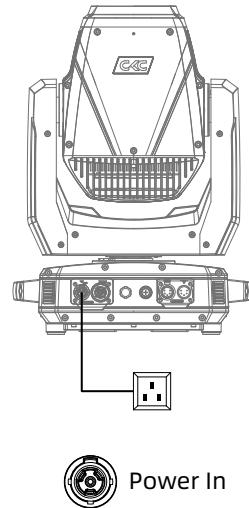
6. Power、Signal connect

6.1 Power and signal socket

- 1.Power input
- 2.Power output
- 3.Breathable valve
- 4.Fuse holder
- 5.DMX output
- 6.DMX input



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 7 products at 220V and 3 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.

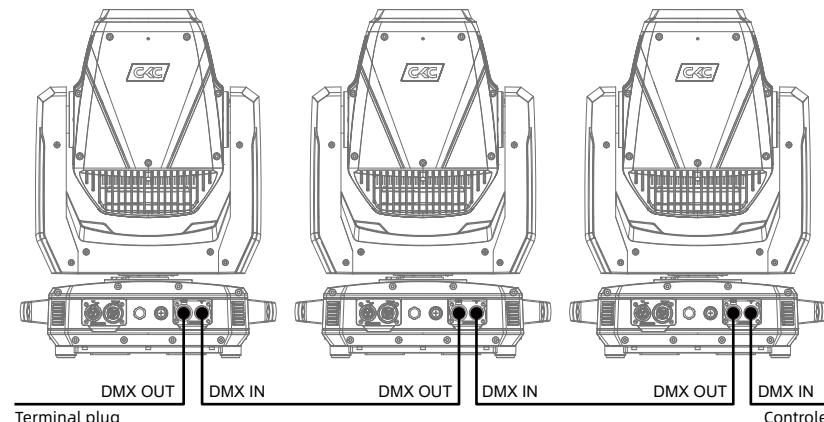


6.3 Signal connect

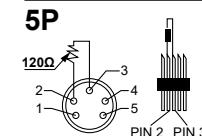
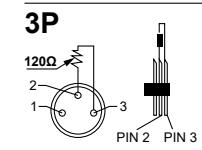


1:Ground
2: Signal (-)
3: Signal (+)
4: N.A.
5: N.A.

The lighting fixtures are equipped with standard DMX XLR input and output sockets. Please use DMX512 shielded twisted pair signal cables or Category 3/5 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.

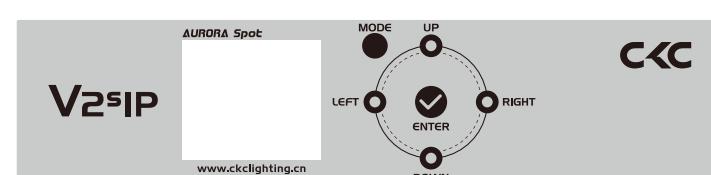


Connect a shielded twisted pair signal cable from the DMX output port of the controller to the DMX input port of the first device, and from the DMX output port of the first device to the DMX input port of the second device, and so on, until all the lamps are connected. Then install a terminal plug on 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 V2s IP Motor Reset Please Wait...		
DMX Settings	Set Address	A001~AXXX
	DMX Channel Mode	Basic 17 Standard 20 Extend 22
	No DMX Status	Hold Last Blackout Manual Internal Programs
	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
Fan Settings	Hibernation	OFF,01M~99M,15M
	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	900~1500Hz,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 Color1 000-255 Color2 000-255 ...
	Update Software	YES / NO
	Factory Restore (Passcode11)	YES / NO
	Manual Control	Pan Pan Fine Tilt Tilt Fine
	Internal Programs	Program 1 Speed Fade Program 2 Speed Fade Program 3 Speed Fade Program 4 Speed Fade

Info	Program 5	Speed	000-255
		Fade	000-255
	Program 6	Speed	000-255
		Fade	000-255
	Program 7	Speed	000-255
		Fade	000-255
	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
			Max
			Resettable
		Base Temp	Current
			Max
			Resettable
		Reset LED	YES/NO
		Temp	Passcode 050
		Reset Base	YES/NO
		Temp	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	List Errors one by one
		XXXXXX	
	Software Version	Reset Error Log	YES / NO
			Passcode (50)
		1U: X.X.X	
		2U: X.X.X	
		3U: X.X.X	

8. DMX channel table:

16	19	22	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	0~9	Open
			10~16	Open / Red
			17~23	Red
			24~30	Red / Medium Blue
			31~37	Medium Blue
			38~44	Medium Blue / Green
			45~51	Green
			52~58	Green / Amber
			59~65	Amber
			66~72	Amber / Orange
			73~79	Orange
4	6	6	80~86	Orange / High CRI Filter
			87~93	High CRI Filter
			94~100	High CRI Filter / CTB
			101~107	CTB
			108~114	CTB / UV
			115~121	UV
			122~127	UV / Open
			128~189	Clockwise Color Wheel Rotation, Fast -> Slow
			190~193	No Rotation
			194~255	Counter Clockwise Color Wheel Rotation, Slow -> Fast
3	5	5	0~9	Open
			10~16	Open / Magenta
			17~23	Magenta
			24~30	Magenta / Blue
			31~37	Blue
			38~44	Blue / Green 485-525
			45~51	Green 485-525
			52~58	Green / Yellow
			59~65	Yellow Y525
			66~72	Yellow / CTB
3	5	5	73~79	CTB
			80~86	CTB / Pink
			87~93	Pink
			94~100	Pink / UV
			101~107	UV
			108~114	UV / CTO
			115~121	CTO
			122~127	CTO / Open
			128~189	Clockwise Color Wheel Rotation, Fast -> Slow

				190~193	No Rotation
				194~255	Counter Clockwise Color Wheel Rotation, Slow -> Fast
5	7	7	Gobo Wheel	0~4	Open
				5~19	Gobo 1
				20~34	Gobo 2
				35~49	Gobo 3
				50~64	Gobo 4
				65~79	Gobo 5
				80~94	Gobo 6
				95~109	Gobo 1 shake (slow-fast)
				110~124	Gobo 2 shake (slow-fast)
				125~139	Gobo 3 shake (slow-fast)
				140~154	Gobo 4 shake (slow-fast)
				155~169	Gobo 5 shake (slow-fast)
				170~189	Gobo 6 shake (slow-fast)
				190~221	Clockwise Gobo Wheel Rotation, Fast -> Slow
				222~223	No Rotation
				224~255	Counter Clockwise Gobo Wheel Rotation, Slow -> Fast
6	8	8	Gobo Rotation	0~127	Indexing
				128~189	Clockwise Gobo Rotation, Fast -> Slow
				190~193	No Rotation
				194~255	Counter Clockwise Gobo Rotation, Slow -> Fast
7	9	9	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
8	10	10	Dimmer	0~255	Intensity 0 to 100%
	11	Dimmer fine		0~255	Dimmer Intensity Fine
				0~5	No Prism - Open
				6~66	Prism 1 (5 Facet Linear Prism)
				67~127	Prism 2 (6 Facet Circular Prism)
				128~135	Macro1
				136~143	Macro2
				144~151	Macro3
				152~159	Macro4
				160~167	Macro5

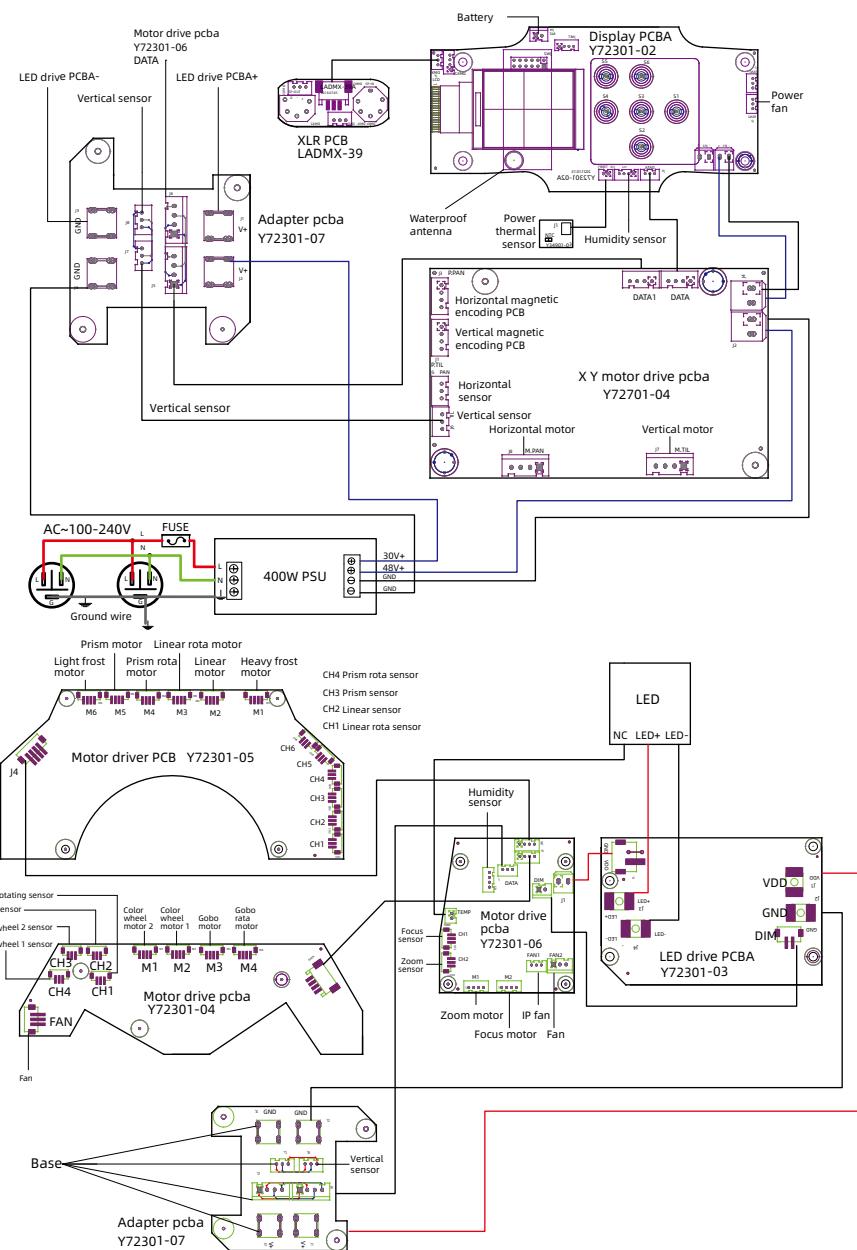
9	11	12	Prisms and Prism/Gobo Macros	168~175	Macro6
				176~183	Macro7
				184~191	Macro8
				192~199	Macro9
				200~207	Macro10
				208~215	Macro11
				216~223	Macro12
				224~231	Macro13
				232~239	Macro14
				240~247	Macro15
				248~255	Macro16
			Prism Rotation	0~5	Prism Rot. Off
				6~128	Prism Indexing 0 ... 540°
				129~191	Clockwise Prism Rotation, Fast -> Slow
				192~192	No Rotation
				193~255	Counter Clockwise Prism Rotation, Slow-> Fast
			11 13 14	Focus	0~255 0% to 100%
			12 14 15	Zoom	0~255 Narrow to wide
			16	Zoom fine	0~255 Narrow to wide 16-bit
			13 15 17	Heavy Frost	0~255 0% to 100%
			14 16 18	Medium Frost	0~255 0% to 100%
			Dimmer Modes	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
			0~20	Square
			21~40	Linear
			41~60	Inv. Squa
			61~80	S. Curve
			81~255	No function
			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	No function
			105~109	Other motors Reset (Hold 3s)
			110~114	Enable Zoom Speed Fast(Hold 3s)
			115~119	Disable Zoom Speed Fast(Hold 3s)
			120~152	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)

17	20	22	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

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

