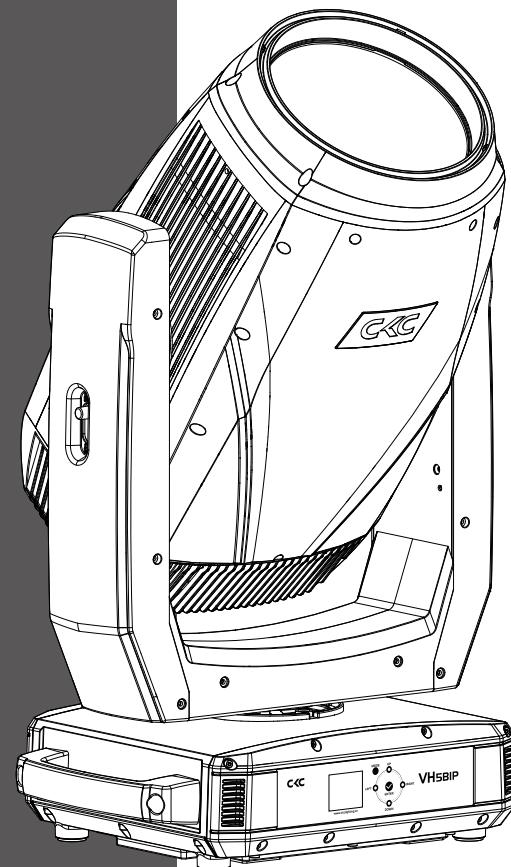


CKC

VH5BIP



[www.ckclighting.com](http://www.ckclighting.com)

**CKC LIGHTING CO.,LTD**

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

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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 18m.



- 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.



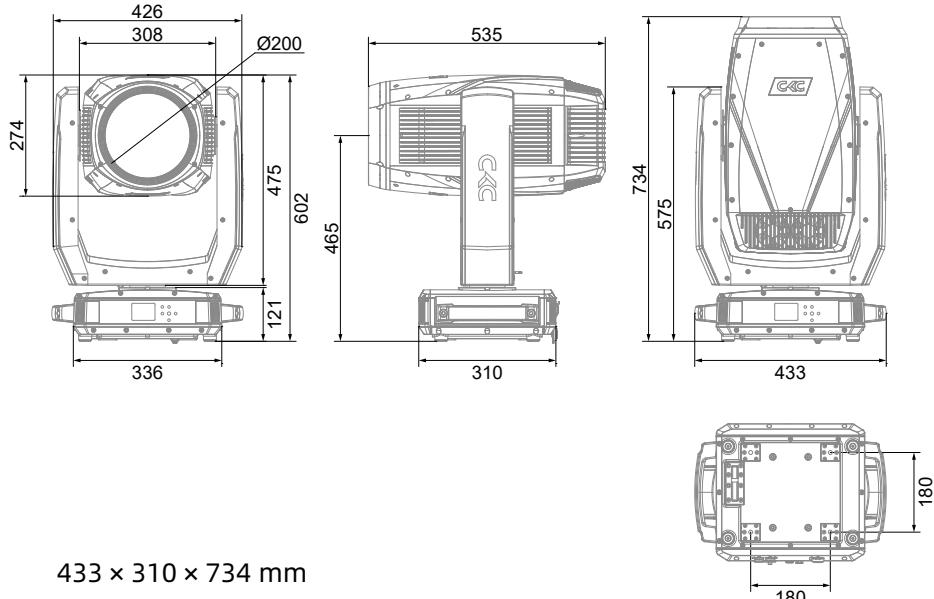
- The lighting fixtures work normally at -20 °C to 45 °C . When replacing any components or accessories in the equipment, ensure that the power is disconnected to prevent electric shock and injury;
- The maximum surface temperature of the lamp during operation can reach 88 °C , please do not touch it 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.

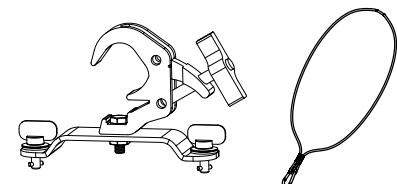
## 2. Product Introduction

### 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: 620W

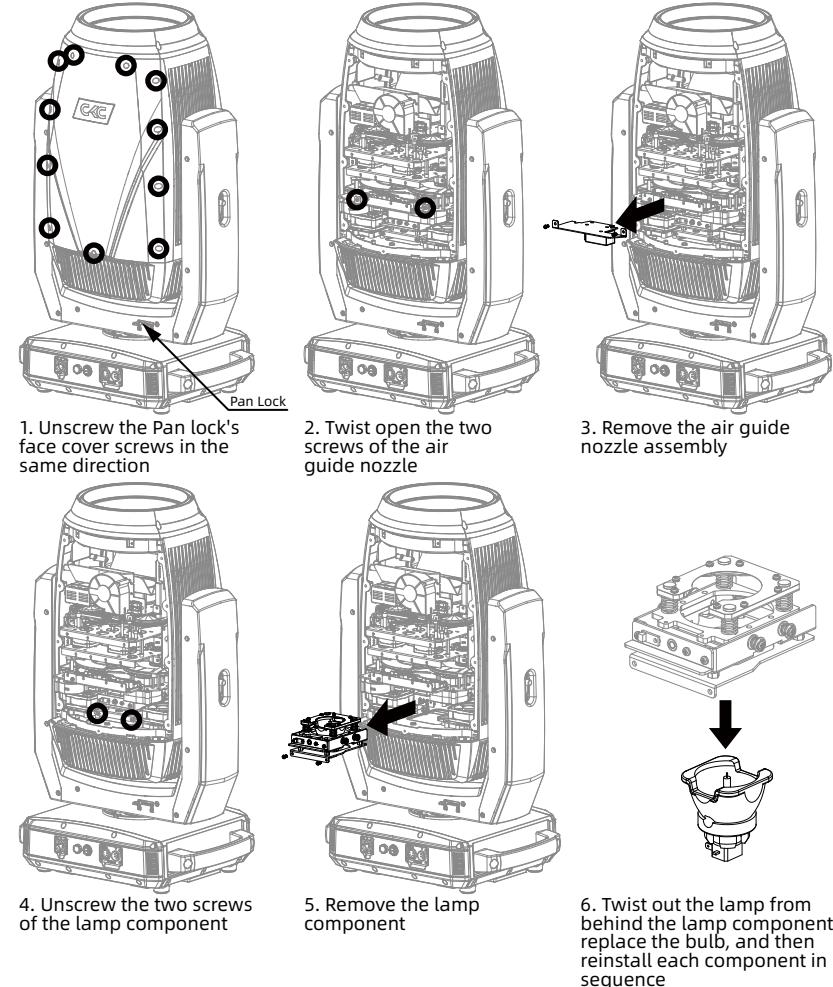
Power factor: 0.99F

Input Current: 2.7A 220V

### ● Source lifespan

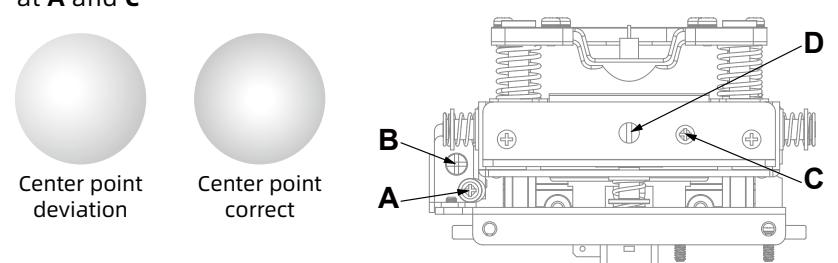
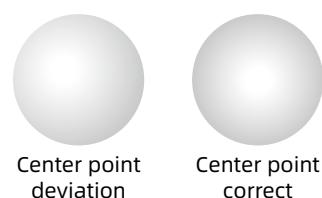
>4000 hours

## Replace the bulb



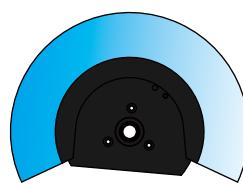
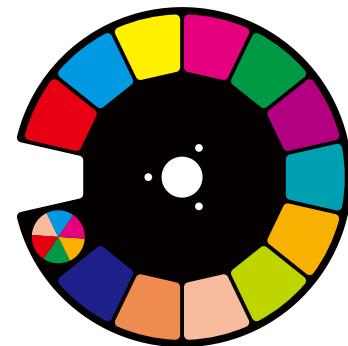
## Adjustment of the center point of Lamp

Loosen the screws at **A** or **C**, turn the screw at **B** to adjust left and right, and turn the screw at **D** to adjust up and down, so that the brightest spot moves to the center of the light spot, and then tighten the screws at **A** and **C**

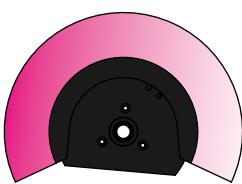


### ● Color system

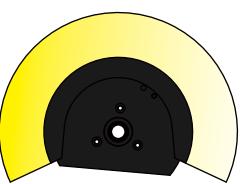
CCT: 6900K  
CRI: 80  
Color wheel: 13+1  
CMY



CYAN



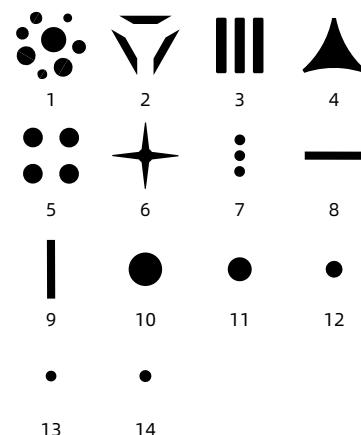
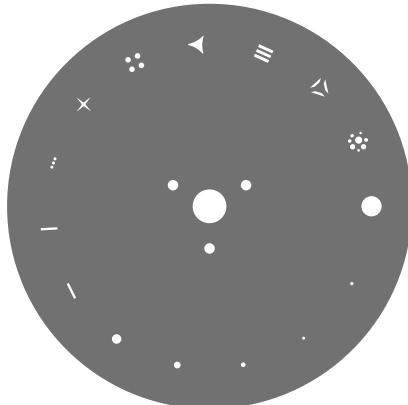
MAGENTA



YELLOW

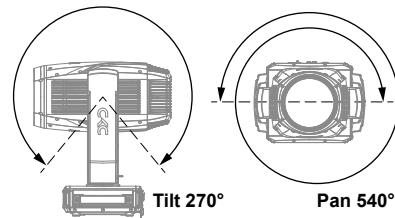
### ● Gobo system

Fixed gobo wheel: 14+1



### ● Pan/Tilt

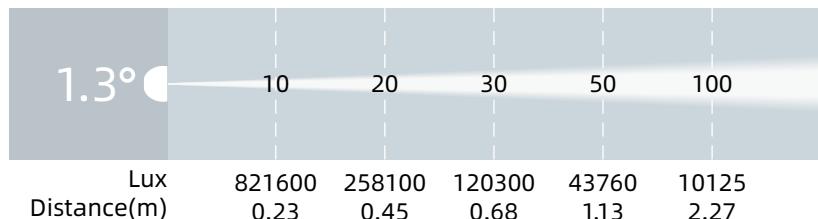
**Pan scan:**  
540° or 630° 8-bit/16bit precision scanning  
**Tilt scan:**  
270° 8-bit/16bit precision scanning



### ● Optical system

Beam angel: 1.3°  
Source: OSRAM 420W Lamp  
Output luminous flux: 14000 Lm

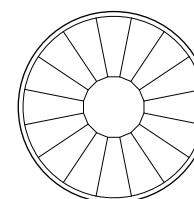
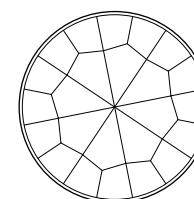
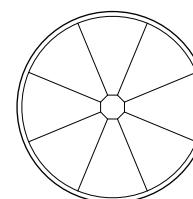
### ● Illumination draw



### ● Other effect function

Fast electronic strobe: 1~25Hz  
Prism: 8 prism + 16 prism + 24 prism

Frost: 1



### ● Other features and functions

Control channel: 21CH/26CH

Weight: 37 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.

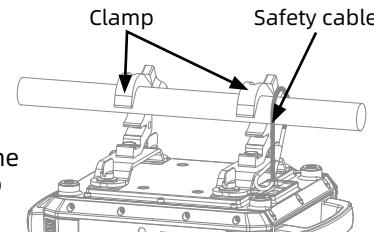
### 4.2 Equipment packaging

- 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.

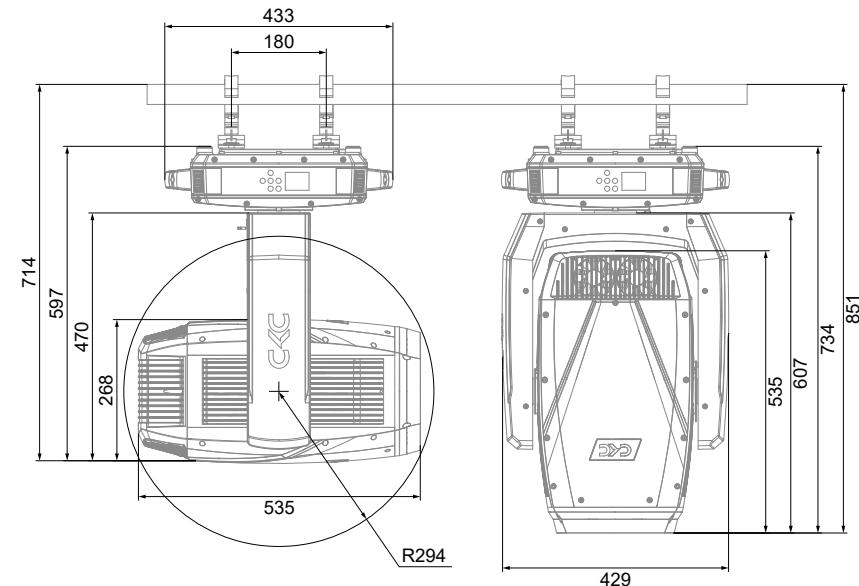
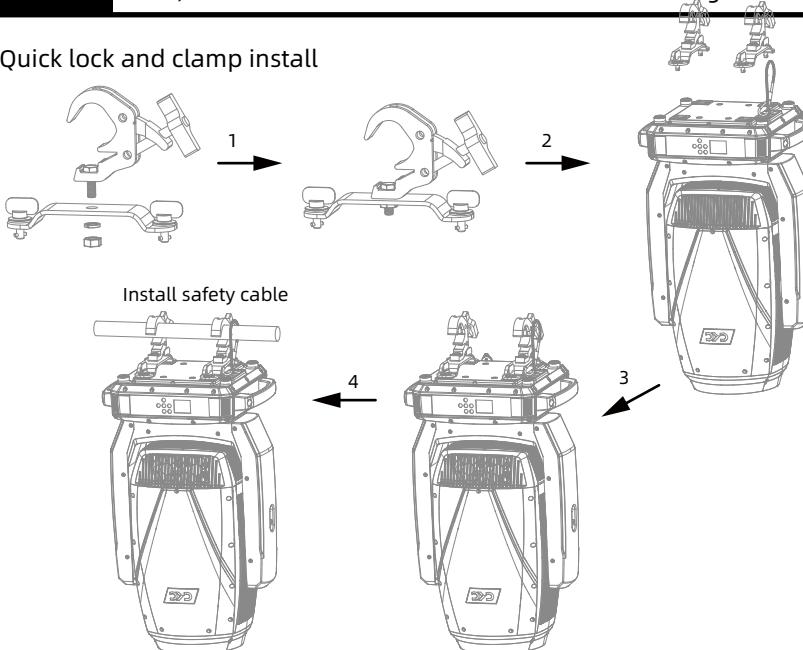


### Warning !

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.



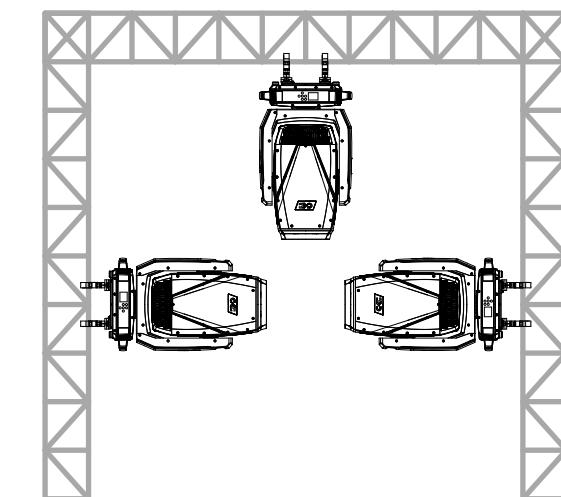
### Quick lock and clamp install



### 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

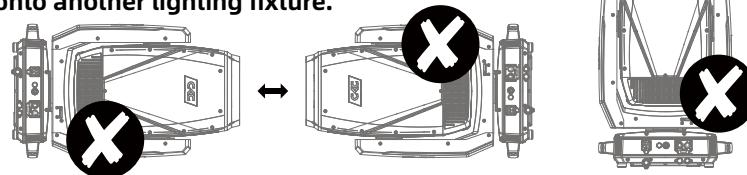




### Reminder: External beam source may damage internal lighting fixtures

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.

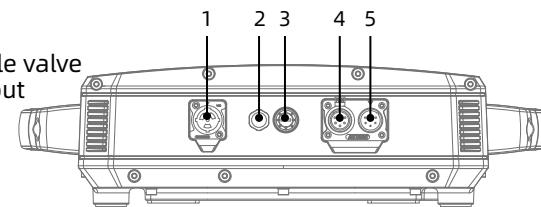
**When unpacking, installing, using, and stopping the operation of the lighting fixtures, please do not expose the transparency of the fixtures the mirror is exposed to direct sunlight, other lighting fixtures, or laser beams, Do not directly focus the beam of this device onto another lighting fixture.**



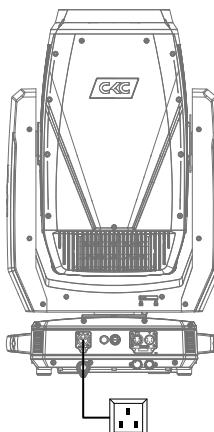
## 6. Power, Signal connect

### 6.1 Power and signal socket

1. Power input
2. Breathable valve
3. Fuse holder
4. DMX output
5. 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 220V power cord can carry up to 3 products.



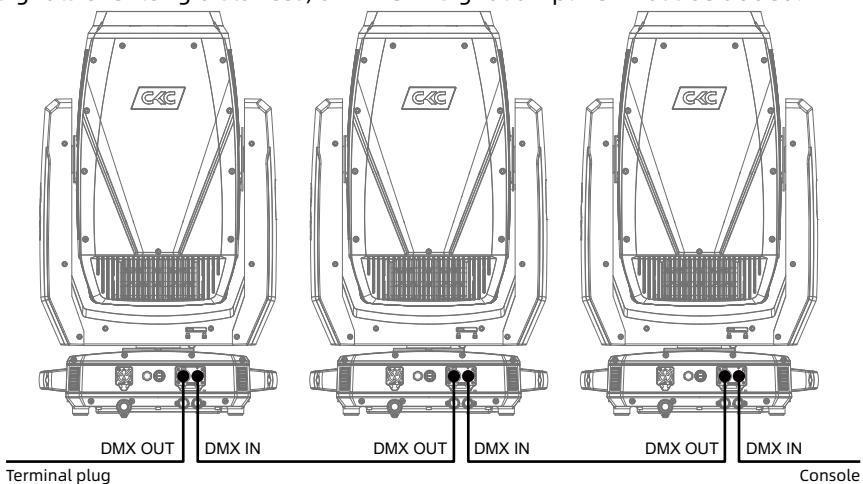
### Warning !

- 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.

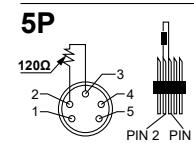
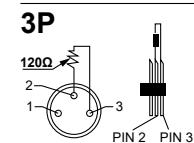
### 6.3 Signal connect



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

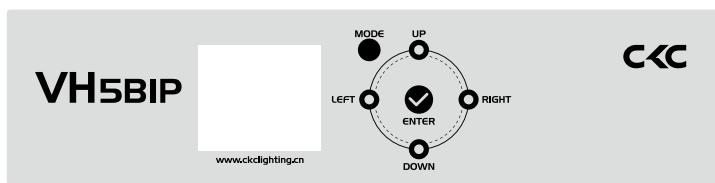


Connect a shielded twisted pair signal cable from the DMX output port of the controller to the DMX input port of the first device, and from the DMX output port of the first device to the DMX input port of the second device, and so on, until all the lamps are connected. Then install a terminal plug on 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...		
VH5B IP		
Motor Reset Please Wait...		
<b>Receive</b>	Set Address	A001~AXXX
<b>User Mode</b>	User Mode	Standard Extend
<b>Function</b>	Status	No DMX Mode P. Reverse T. Reverse Pan Degree Feedback Move.Spd Hibernation
	Lamp	ON/OFF
	Temp. C/F	Celsius Fahrenheit
	Dim Curv	Square Inv- Square S-Curve Linear

LCD.Set	Backlight FlipDisplay Key Lock DispFlash	01~60m <01m> ON/OFF ON/OFF ON/OFF
Disp.Set	Chan.Value Slave Set Auto.Prog	PAN..... Slave Master / Alone
DFSE	ON/OFF	
Time. Info		Current Time(Hours) Total Time(Hours) Last Time(Hours) Timer PIN(ON/OFF) Clear Last>Password=050 Clear Total>Password=060
Temp. Info		Head:XXXC Base: XXXC Bal : XXXC
Humi.Info		HeadHumi:XXX% HeadTemp:XXXC BaseHumi: XXX% BaseTemp: XXXC
<b>Info</b>		Base-1: xxxx RPM Base-2: xxxx RPM Lamp-1: xxxx RPM Lamp-2: xxxx RPM Gobo: xxxx RPM CMY: xxxx RPM Cool-1: xxxx RPM Cool-2: xxxx RPM Cool-3: xxxx RPM Cool-4: xxxx RPM Cool-5: xxxx RPM Head-1: xxxx RPM Head-2: xxxx RPM Head-3: xxxx RPM
	Fan Speed	
	Error. Info	NONE/Pan,Tilt.....
Soft- ware.V	Model. Info	VH5B IP
		1U01 V1.X.X
		2U01 V1.X.X
		3U01 V1.X.X
		4U01 V1.X.X

<b>Test</b>	Reset.Motor	All Pan & Tilt Head
	Test.Channel	PAN .....
	Panel.Ctrl.	PAN =XXX :
	Calibrate	-Password 050- PAN :

### 8. DMX channel table:

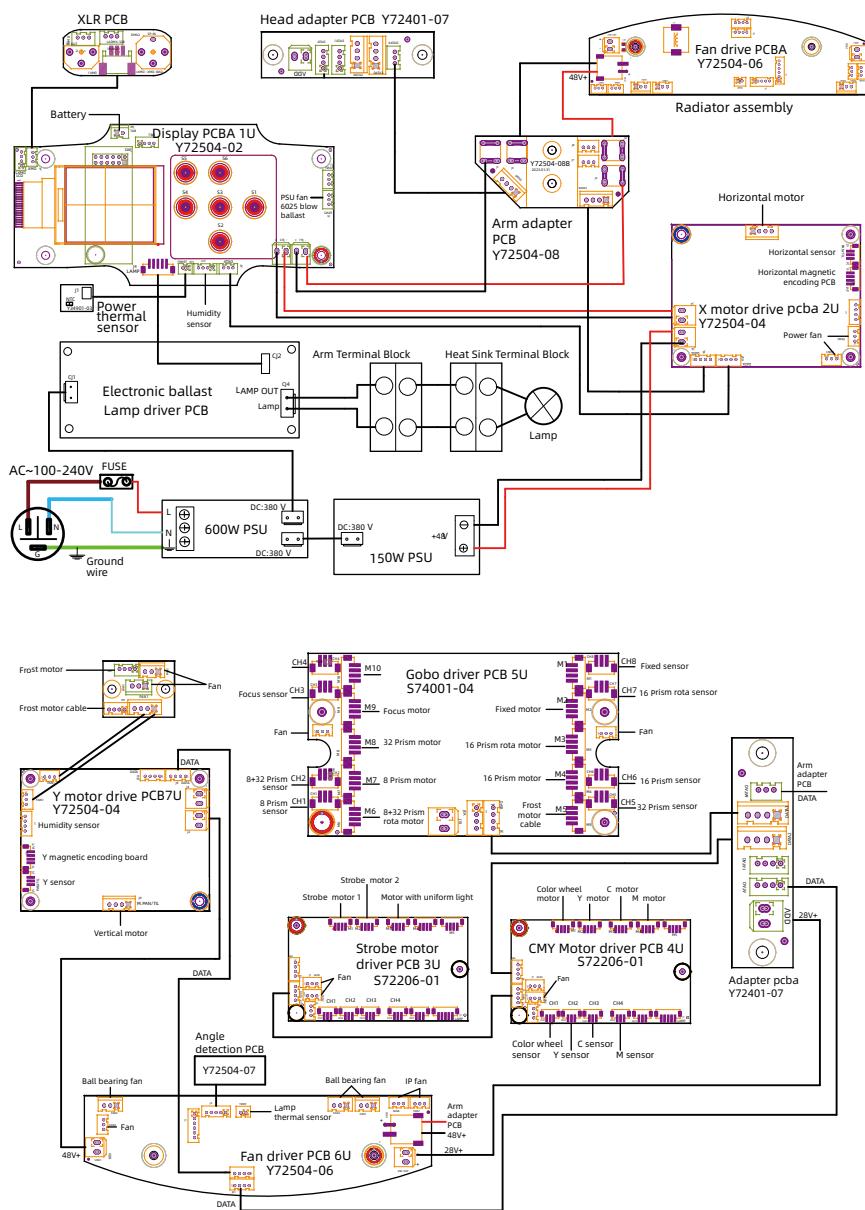
Mode/Channel		Value	Function
St.	Ex.		
1	1	0-255	<b>PAN Movement 8bit</b> Pan Movement By 630/540
2	2	0-255	<b>PAN Fine 16bit</b> Fine control of Pan movement
3	3	0-255	<b>TILT Movement 8bit</b> Tilt Movement
4	4	0-255	<b>TILT Fine 16bit</b> Fine control of Tilt movement
5	5	0-255	<b>Dimmer (Intensity)</b> Intensity 0 to 100%
6	6	0-255	<b>Dimmer Fine</b> Intensity 0 to 100%
7	7		<b>Shutter, Strobe:</b>
		000-031	Shutter closed
		032-063	Shutter open
		064-095	Strobe slow to fast
		096-127	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	8	000-255	<b>Cyan:</b> 0 to 100%
	9	000-255	<b>Cyan Fine:</b> 0 to 100%
9	10	000-255	<b>Magenta:</b> 0 to 100%

	11	000-255	<b>Magenta Fine:</b> 0 to 100%
10	12	000-255	<b>Yellow:</b> 0 to 100%
	13	000-255	<b>Yellow Fine:</b> 0 to 100%
			<b>Color Wheel</b>
		000-004	Color 0 (Open)
		005-009	Color 1
		010-014	Color 2
		015-019	Color 3
		020-024	Color 4
		025-029	Color 5
		030-034	Color 6
		035-039	Color 7
	11	040-044	Color 8
		045-049	Color 9
		050-054	Color 10
		055-059	Color 11
		060-064	Color 12
		065-069	Color 13
		070-182	Open → Color1..Color17 → Open
		183-214	Clockwise from fast to slow
		215-223	Stop
		224-255	Counter-clockwise from slow to fast
	12	15	<b>Color Wheel fine</b> Color wheel fine:0 - 100%
			<b>Fixed Gobos Wheel</b>
		0-2	Open
		3-11	FixedGobo 1
		12-20	FixedGobo 2
		21-29	FixedGobo 3
		30-38	FixedGobo 4
		39-47	FixedGobo 5
		48-56	FixedGobo 6
		57-65	FixedGobo 7
		66-74	FixedGobo 8

13	16	75-83	FixedGobo 9
		84-92	FixedGobo 10
		93-101	FixedGobo 11
		102-110	FixedGobo 12
		111-119	FixedGobo 13
		120-128	FixedGobo 14
		129-131	Open
		132-135	FixedGobo 1 shake, from slow to fast
		136-139	FixedGobo 2 shake, from slow to fast
		140-143	FixedGobo 3 shake, from slow to fast
		144-147	FixedGobo 4 shake, from slow to fast
		148-151	FixedGobo 5 shake, from slow to fast
		152-155	FixedGobo 6 shake, from slow to fast
		156-159	FixedGobo 7 shake, from slow to fast
		160-163	FixedGobo 8 shake, from slow to fast
		164-167	FixedGobo 9 shake, from slow to fast
		168-171	FixedGobo 10 shake, from slow to fast
		172-175	FixedGobo 11 shake, from slow to fast
		176-179	FixedGobo 12 shake, from slow to fast
		180-183	FixedGobo 13 shake, from slow to fast
		184-187	FixedGobo 14 shake, from slow to fast
		188-191	Fixgobo open
		192-223	Clockwise from fast to slow
		224-224	Stop
		225-255	Counter-clockwise from slow to fast
14	17		<b>Prism 1 &amp; 2:</b>
		0-5	Open
		6-127	Prism 1
		128-255	Prism 2
15	18		<b>Rotating prism 1 &amp; 2 index:</b>
		0-5	Open
		6-128	Prism 1 & 2 indexing
		129-191	Forwards prism 1 & 2 rotation from fast to slow
		192-192	No rotation
		193-255	Backwards prism 1 & 2 rotation from slow to fast

16	19		<b>Prism3:</b>
		0-5	Open
		6-255	16 Facet prism
17	20		<b>Rotating prism 3 index:</b>
		0-5	Open
		6-128	Prism 3 indexing
		129-191	Forwards prism 3 rotation from fast to slow
		192-192	No rotation
18	21		<b>Split Color</b>
		0-5	Close
		6-255	Open
19	22	0-255	<b>Focus</b> Continuous adjustment from far to near
		0-255	<b>Focus Fine</b> Continuous adjustment from far to near
20	24	0-255	<b>Frost:</b> Frost:0 - 100% (Linear)
		0-255	<b>Speed pan/tilt movement</b> Max to min speed
21	26		<b>Function Device Set:</b>
		000-001	No function
		002-003	Off Display Backlight
		004-005	ON Display Backlight
		006-035	No function
		036-050	Lamp On (Hold 3s)
		051-065	Lamp OFF (Hold 3s)
		66-200	No function
		201-215	P/T Reset
		216-230	Head Reset
		231-255	All Reset

## 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
	<b>Attention!</b> The above analysis is for abnormal reference only. Non professionals are not allowed to disassemble and repair the machine	

