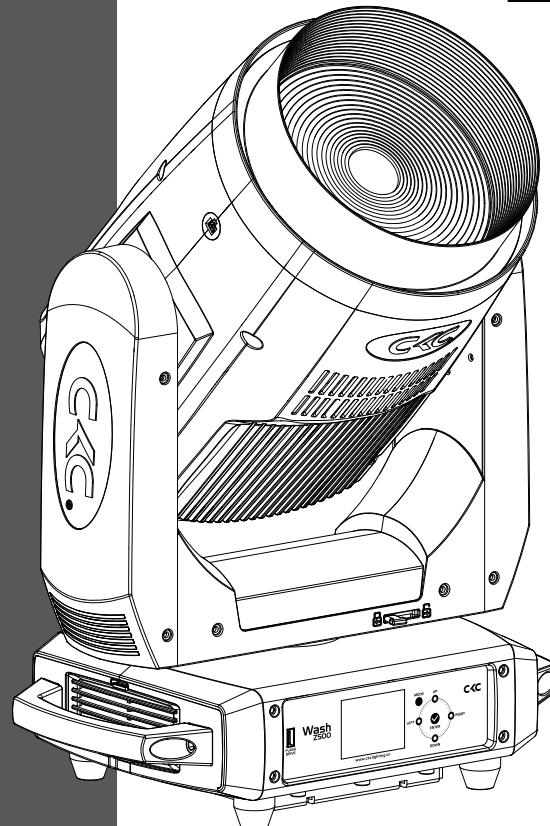


CKC

Wash Z500



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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 IP20 and is suitable for indoor use;
- Avoid direct external strong light shining on the lens, which may cause the lens to focus and burn out internal components.



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



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



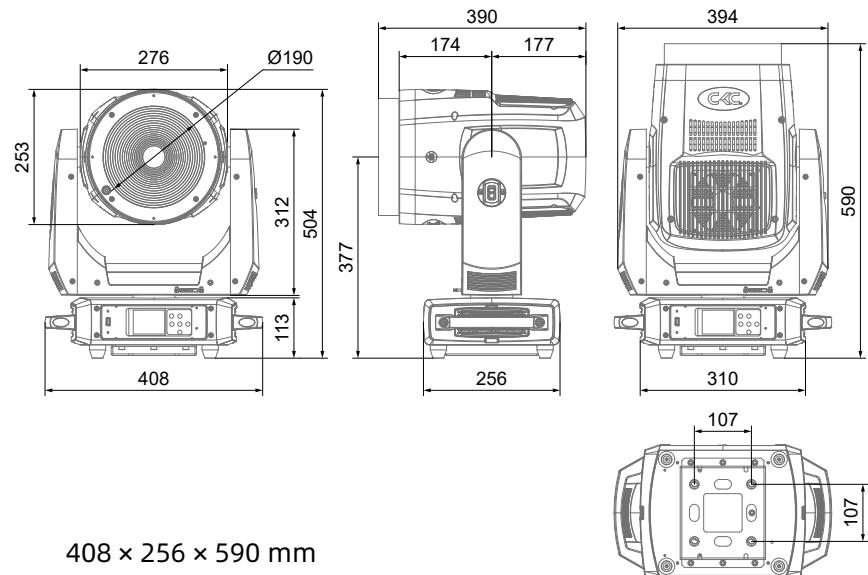
- The lighting fixtures work normally at -20 °C to 45 °C . When replacing any components or accessories in the equipment, ensure that the power is disconnected to prevent electric shock and injury;
- The maximum surface temperature of the lamp during operation can reach 56 °C , please do not touch it 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.

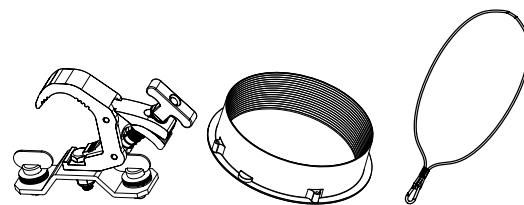
2. Product Introduction

2.1 Exterior dimensions of lighting fixtures



2.2 Packaging accessories

Name	QTY
Omega bracket	2 PCS
Clamp	2 PCS
Snoot	1 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: 2.74A 220V

● Source lifespan

>20000 hours

● Optical system

LED source: 500W RGBAL LED

Beam angel: 9 ~ 48°

Field angle: 17 ~ 67°

Output luminous flux: 19000 Lm

● Color system

CCT: 1800 ~ 10000 K

CRI: Ra/95 R9/95

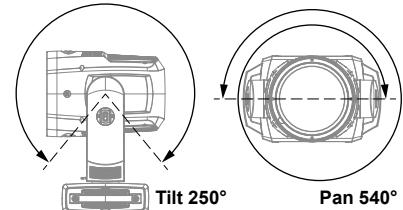
● Pan/Tilt

Pan scan:

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

Tilt scan:

270° 8-bit/16bit precision scanning



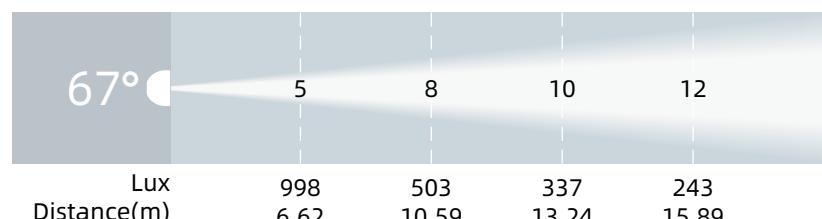
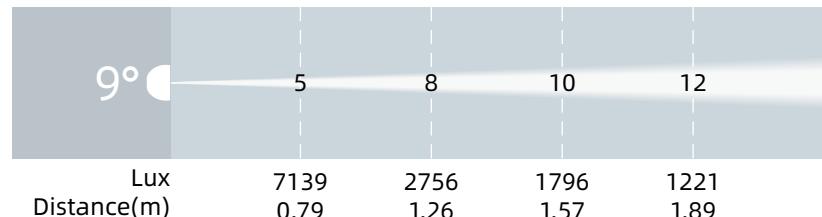
● Control and programming

Control channel: 18CH/25CH

Protocol: DMX512, RDM

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

● Illumination draw



● Other effect function

Fast electronic strobe: 1~25Hz LED refresh frequency: 1200Hz-25KHz

● Other features and functions

Weight: 20.1 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.

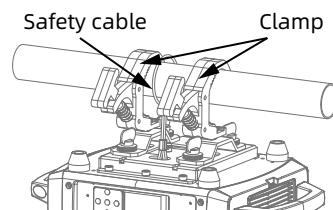
4.2 Equipment packaging

- 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.

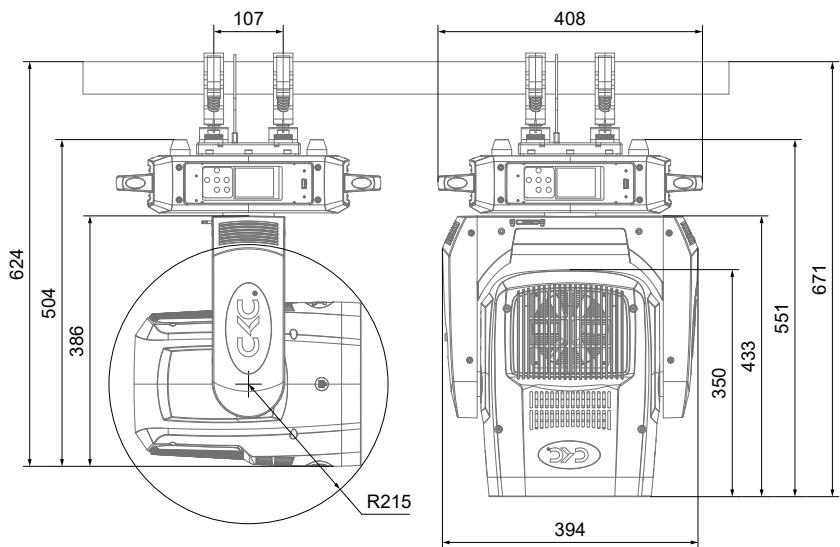
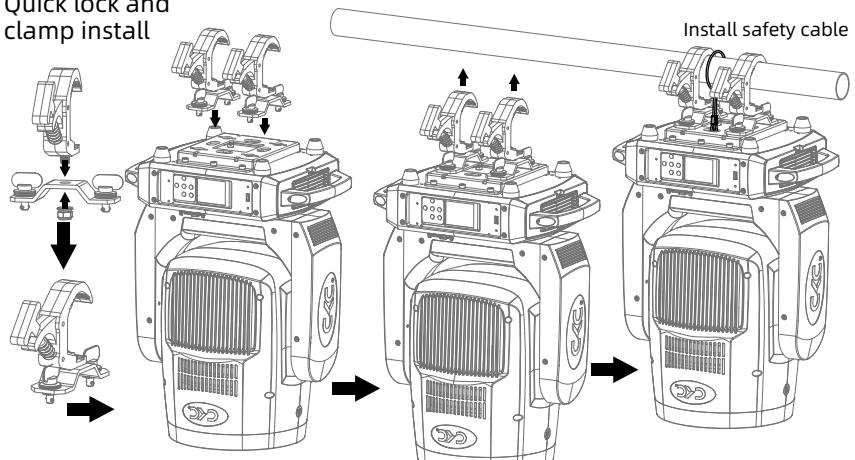


Warning !

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.



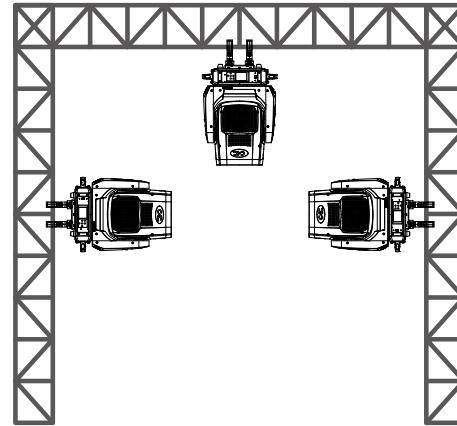
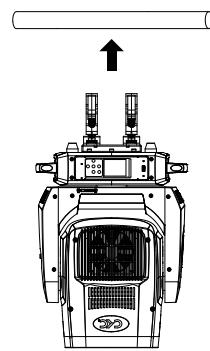
Quick lock and clamp install



5.2 Equipment installation

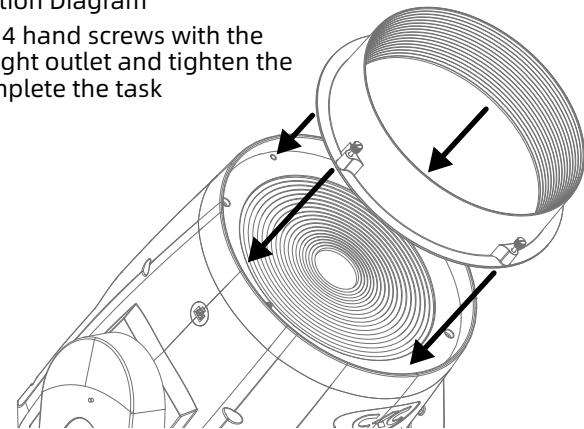
- 1). Before installation, it is necessary to verify that the lamp hook and safety rope are not damaged, and that the installation object can withstand 6 times the total weight of the lamp and cable accessories;
- 2). Install the quick lock clamp on the base of the lamp body. Insert the clamp horizontally 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

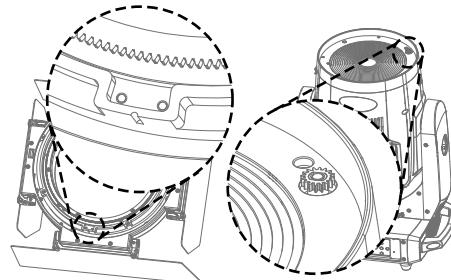
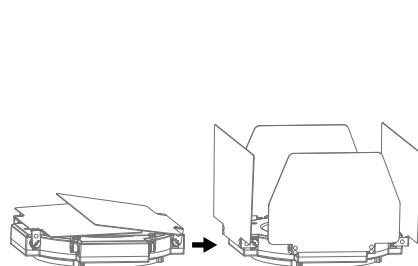


5.4 Snoot Installation Diagram

Align Snoot's 4 hand screws with the holes of the light outlet and tighten the screws to complete the task



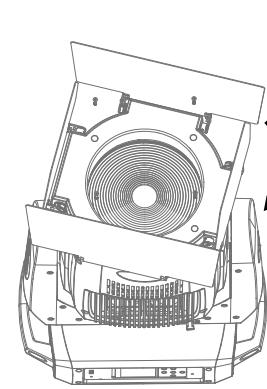
5.5 Installation diagram of auto barndoors (optional accessory)



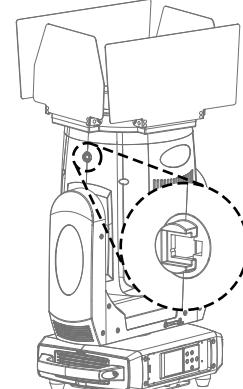
Open the blades of the barndoors approximately 90° by hand.

(Note: Sometimes there may be a jamming phenomenon when opening the blade. Simply turn it in the opposite direction and then continue to turn it in the direction of opening. Do not use too much force.)

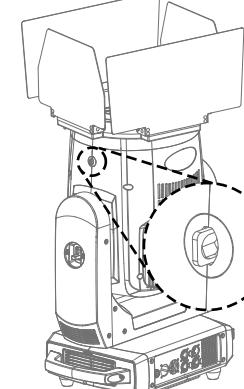
Align the arc-shaped notch on the back of the barndoors with the small gear above the fixture head and place it flat.



After turning the barndoors clockwise to the end, four screw holes can be seen through the plastic shell, which are locked with M4 * 20 countersunk screws.



Insert the signal power cord of the barndoors into the side socket of the fixture.



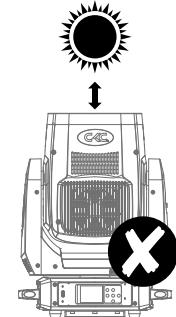
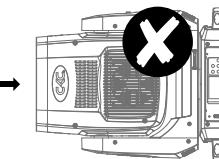
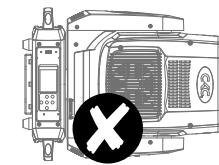
Finally, install the safety rope onto the safety clamp on the other side of the fixture head.



Reminder: External beam source may damage internal lighting fixtures

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

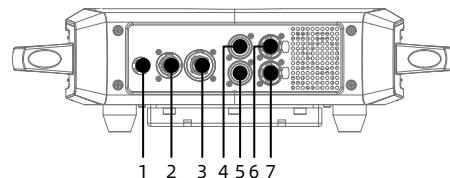
When unpacking, installing, using, and stopping the operation of the lighting fixtures, please do not expose the transparency of the fixtures the mirror is exposed to direct sunlight, other lighting fixtures, or laser beams. Do not directly focus the beam of this device onto another lighting fixture.



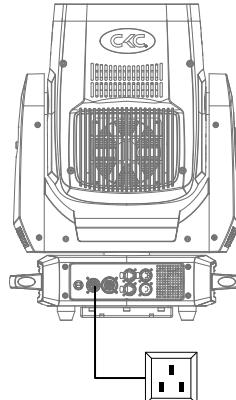
6. Power、Signal connect

6.1 Power and signal socket

- 1.Fuse holder
- 2.Power input
- 3.Power output
- 4.3 Pin DMX input
- 5.5 Pin DMX input
- 6.3 Pin DMX output
- 7.5 Pin DMX output



6.2 Power connect



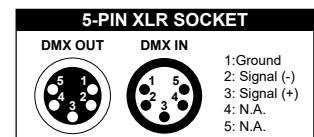
This product uses Powercon In/Out to connect power cords. Due to power limitations, a 2 square meter power cord can carry up to 3 products at 220V and 1 product at 110V.

Waining !

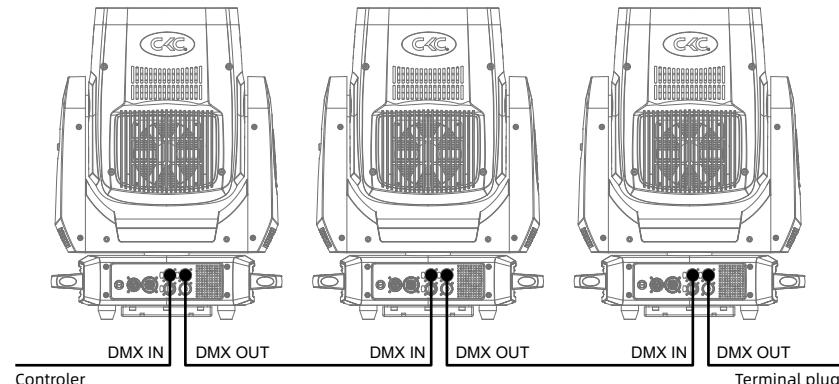
- Do not connect too many fixtures or overload a single power cord;
- Do not use power cords with damaged insulation layers, and do not place power cords on other wires;
- When the fixture is not in use or cleaned, please unplug the power cord; Do not forcefully unplug or drag the power cord directly.



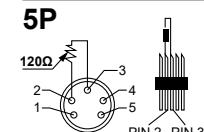
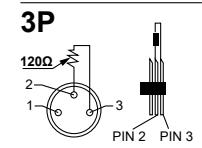
6.3 Signal connect



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

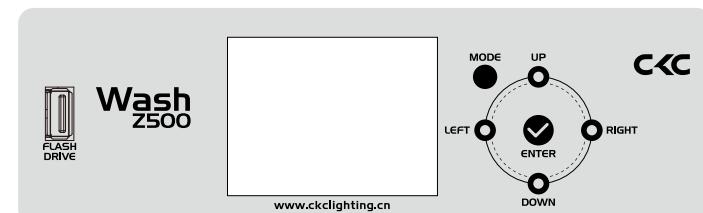


Connect a shielded twisted pair signal cable from the DMX output port of the controller to the DMX input port of the first device, and from the DMX output port of the first device to the DMX input port of the second device, and so on, until all the lamps are connected. Then install a terminal plug on 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 2.8 "LCD display screen, the operation panel is equipped with a rechargeable battery, which can enter the menu to set address codes and make other settings without powering on;
- Press the MODE key to view or modify the lighting function settings, and press the UP, DOWN, LEFT, and RIGHT keys to select the function menu;
- Press the ENTER key to confirm your selected function menu, which will take you to the corresponding sub menu in the menu. Each menu item represents a specific function of the lighting fixture (as shown in the table below);
- Press the ENTER key to save your modifications or enter a submenu, and press the UP or DOWN key to modify values (increase or decrease values); Press the MODE key to return to the previous menu or exit.
- Press the MODE key to return to the previous menu or exit.

7.2. System menu

Note: The gray color block is the default setting value

Software Update Please Wait... CKC Fixture Type Check Motor Reset Wash Z500 Motor Reset		
SET	Dmx Presets	A001~AXXX
	User Mode	Standard Extend
	Status	No DMX Mode P.Reverse T.Reverse Pan Degree Feedback Move.Speed Hibernation Black/Hold/Auto ON/OFF ON/OFF 630/540 ON/OFF Speed 1~ 2 OFF, 01M~99M, 15M
	Dim Mode	Standard Stage TV Architectural Theatre
	Temp. C/F	Celsius Fahrenheit
Function	Dim Curve	Linear Square Inv-Square S-Curve

Frequency	1200Hz/3600Hz/5000Hz/10KHz/15KHz/20KHz/25KHz	
DTW Switch	ON/OFF	
Fan Set	Head Fan	Auto High Low
	Base Fan	Auto High
LCD.Set	Backlight	01~60m
	Flip Display	OFF/ON
Disp.Set	Key Lock	OFF/ON
	DispFlash	OFF/ON
	Language	English
	Channel Value	PAN.....
	Slave Set	Slave1,Slave2,Slave3
	Auto.Prog	Master / Alone
DFSE	OFF/ON	
USB Update	OFF/ON	
Test	Reset.M	All Pan&Tilt Other
	Test.Chan	PAN
	Panel.Ctrl.	PAN =XXX :
	Calibrate	-Password- PAN :
	Time.Info	Current (Hours) Total Time (Hours) Last Time (Hours) Timer PIN (ON/OFF) Clear Last (Password=50)
Info	Temp. Info	Base Temp. Head Temp.
	Fan Speed	BaseFan1: xxxx RPM BaseFan2: xxxx RPM CoolFan1: xxxx RPM CoolFan2: xxxx RPM
	Error. Info	Pan,Tilt.....
	Model. Info	Wash Z500
	Software.V	1U V 1.0.1 2U V 1.0.1 3U V 1.0.1 4U V 1.0.1

8. DMX channel table:

ST.	EX.	Value	Function
1	1	0-255	PAN Movement 8bit:
			Pan Movement
2	2	0-255	Pan Fine 16bit:
			Fine control of Pan movement
3	3	0-255	TILT Movement 8bit:
			Tilt Movement
4	4	0-255	Tilt Fine 16bit:
			Fine control of Tilt movement
5	5	0-255	Dimmer:
			Intensity 0 to 100%
6	6	0-255	Dimmer Fine:
			Dimmer fine
7	7		Shutter, strobe:
		0-31	Shutter closed
		32-63	No function (shutter open)
		64-95	Strobe effect slow to fast
		96-127	No function (shutter open)
		128-159	Pulse-effect in sequences
		160-191	No function (shutter open)
		192-223	Random strobe effect slow to fast
		224-255	No function (shutter open)
			Red:
8	8	0-255	Red (0-100% Red)
			Red Fine:
	9	0-255	Red Fine
			Green:
9	10	0-255	Green (0-100% Green)
			Green Fine:
	11	0-255	Green Fine
			Blue:
10	12	0-255	Blue (0-100% Blue)
			Blue Fine:
	13	0-255	Blue Fine

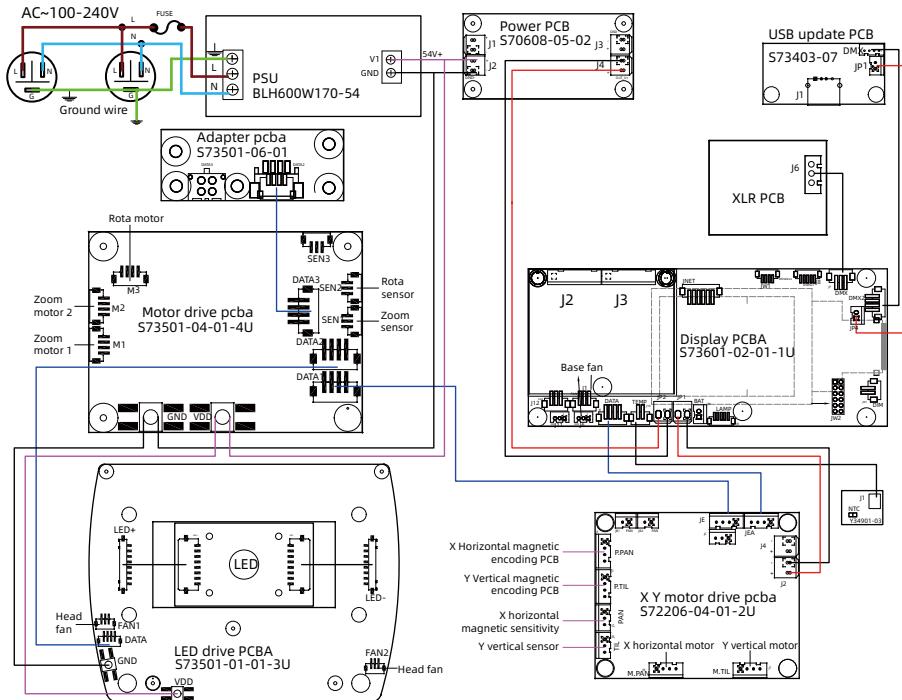
11	14	0-255	Amber:
			Amber (0-100% Mint)
12	16	0-255	Amber Fine:
			Amber Fine
13	17	0-255	Lime:
			Lime (0-100% Amber)
14	18	0-255	Lime Fine:
			Lime Fine
15	19	0-255	Color Wheel:
			0 Open
			1-70 Virtual Swatch Book (see separate sheet)
			71-179 Open
			Color Scroll
			180-201 Clockwise,fast → slow
			202-207 Stop
			208-229 Counter-clockwise,slow → fast
			230-234 Open
			Random Slots
16	20	0-255	235-239 Fast
			240-244 Medium
			245-249 Slow
			250-255 Open
			CTO:
17	21	0-255	0-17 Open
			18-100 CTO 1800K - 10000K
			101-255 10000K
			Tint:
18	22	0-255	0 no function
			1-127 Full Minus Green to Neutral
			128 Neutral White
			129-255 Neutral to Full Plus Green
19	23	0-255	Zoom:
			Zoom adjustment from small to big
			Beam Shaper:
20	24	0-255	0-180 0-360 Index
			181-217 Rotate CCW Fast to Slow

		218	Stop
		219-255	Rotate CW Slow to Fast
23	0-255	Pan / Tilt and Color Speed:	
		Max to min speed	
17	24	Dim Modes:	
		0-20	Standard
		21-40	Stage
		41-60	TV
		61-80	Architectural
		81-100	Theatre
		101-255	Default to Unit Setting
18	25	Device settings:	
		0-15	no function
		16-20	Invert Pan on (Hold 3s)
		21-25	Invert Pan off (Hold 5s)
		26-30	Invert Tilt on (Hold 3s)
		31-35	Invert Tilt off (Hold 5s)
		36-40	Fan Silent (Hold 3s)
		41-45	Fan Auto (Hold 5s)
		46-50	Fan High(Hold 3s)
		51-55	Linear Dimmer Curve (hold 3s)
		56-60	Square Dimmer Curve (hold 3s)
		61-65	Inv-Square Dimmer Curve (hold 3s)
		66-70	S - Dimmer Curve (hold 3s)
		71-75	Led Freq. 1200 Hz (hold 3s)
		76-80	Led Freq. 3600 Hz (hold 3s)
		81-85	Led Freq. 5000 Hz (hold 3s)
		86-90	Led Freq. 10.000 Hz (hold 3s)
		91-95	Led Freq. 15.000 Hz (hold 3s)
		96-100	Led Freq. 20.000 Hz (hold 3s)
		101-105	Led Freq. 25.000 Hz (hold 3s)
		106-110	Reset Pan/Tilt (Hold 3s)
		111-115	Reset only Head (Hold 3s)
		116-120	Reset All Functions (Hold 3s)
		121-125	DTW ON
		126-130	DTW OFF
		131-255	No function

Virtual Swatch Book

Value	Filter Number	Name	Value	Filter Number	Name
1	4	medium bastard amber	36	131	marine blue
2	10	medium yellow	37	132	medium blue
3	15	deep straw	38	134	golden amber
4	19	fire	39	135	deep golden amber
5	21	gold amber	40	136	pale lavender
6	22	dark amber	41	137	special lavender
7	24	scarlet	42	138	pale green
8	26	bright red	43	139	primary green
9	27	medium red	44	141	bright blue
10	36	medium pink	45	147	apricot
11	46	dark magenta	46	148	bright rose
12	48	rose purple	47	152	pale gold
13	49	medium purple	48	154	pale rose
14	68	sky blue	49	157	pink
15	71	tokyo blue	50	158	deep orange
16	79	just blue	51	162	bastard amber
17	88	lime green	52	164	flame red
18	90	dark yellow green	53	165	daylight blue
19	100	spring yellow	54	169	lilac tint
20	101	yellow	55	170	deep lavender
21	102	light amber	56	172	lagoon blue
22	103	straw	57	179	loving amber
23	104	deep amber	58	180	dark lavender
24	105	orange	59	181	congo blue
25	106	primary red	60	197	alice blue
26	111	dark pink	61	200	double C.T. Blue
27	113	magenta	62	201	FULL C.T. Blue
28	115	peacock blue	63	202	Half C.T. Blue
29	116	medium blue-green	64	203	Quarter C.T. Blue
30	117	steel blue	65	204	FULL C.T. Orange
31	118	light blue	66	205	Half C.T. Orange
32	119	dark blue	67	206	Quarter C.T. Orange
33	120	deep blue	68	248	Half miuns green
34	122	fern green	69	285	three quarter C.T.Orange
35	128	bright pink0	70	793	vanity fair

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
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
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

