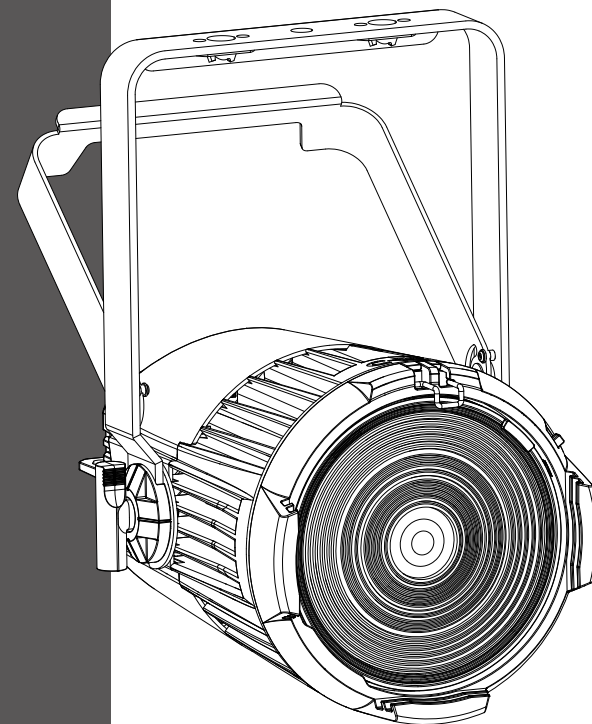




P500 FC



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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.

CONTENTS

1. Security Warning Information	1
2. Product Introduction	3
2.1 Exterior dimensions	3
2.2 Fixture packaging accessories	3
3、 Main technical parameters of the equipment	3
4、 Packaging and transportation	4
4.1、 Disassemble packaging	4
4.2、 Equipment installation	4
5、 Installation Requirements Explanation	5
5.1、 Clamp installation	5
5.2、 Fixture installtion	6
5.3、 Hanging Installation Diagram	6
6、 Power and signal connection	6
6.1、 Power and signal socket	6
6.2、 Power Connect	7
6.3、 Signal Connect	7
7、 Control panel	8
7.1、 Panel Introduction	8
7.2、 System menu	8
7.3、 Knob operation	11
8、 DMX control channel table	11
9、 Control circuit diagram	17
10、 Regular maintenance	18
10.1、 Cleaning and maintenance	18
10.2、 Fault analysis and handling	18

★ 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 72 °C , please do not touch it with bare hands.

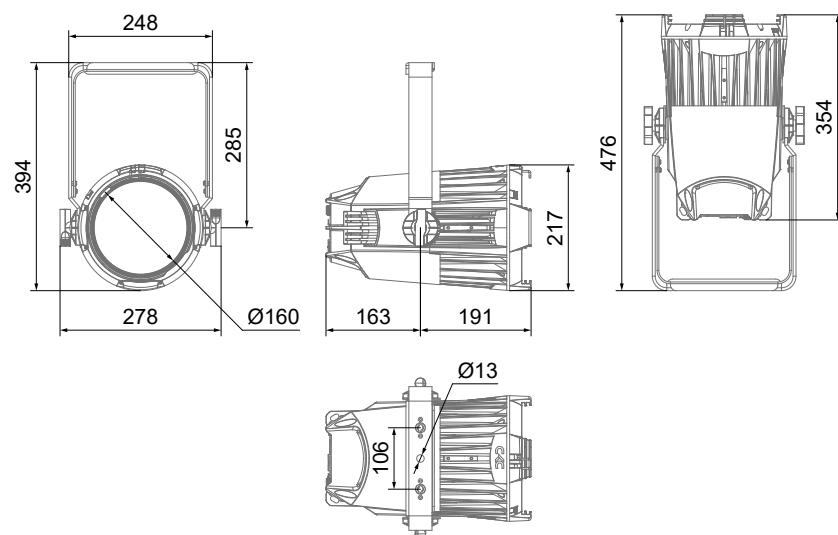


- The lighting fixtures must be installed in a sufficiently ventilated area, at least 0.5m away from adjacent surfaces, to ensure that no ventilation holes are blocked;
- Do not install the lighting fixtures directly on flammable objects;
- The minimum distance between all outer surfaces of the lamp and combustible materials is 0.5m.

2、Product Introduction

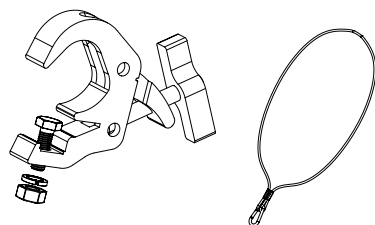
2.1、Exterior dimensions of lighting fixtures

278 × 217 × 476 mm



2.2、Packaging accessories

Name	QTY
Clamp	1 PCS
Safety cable	1 PCS



3、Main technical parameters of the equipment

Product execution standards: GB43472-2:2023 、GB/T 7000.1-2023、GB/T 7000.217-2023

● Electrical parameter

Rated input voltage: AC 100V-240V~ 50Hz/60Hz
 Rated input power of the entire fixture: 276W
 Power factor: 0.993F
 Input Current: 1.438A 220V

● Source lifespan

≥ 20000 hours

● Optical system

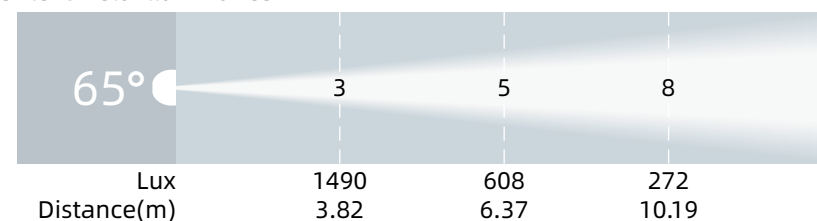
Source: 500W RGBAL LED
 Output luminous flux: 9000 Lm
 Beam angle: 13° /25° /45° /65° (Optional)
 Field angle: 20° /40° /65° /90°
 CCT: 2400 ~ 8500 K

● Control and programming

Control channel: 1CH/6CH/11CH/18CH/9CH/14CH
 Protocol: DMX512, RDM
 Data connect: 3pin、5 pin signal in/out

● Illumination draw

45° lens field illuminance



● Other effect function

Fast electronic strobe: 1~25Hz
 Dimming modes: 7
 Dimming curves: 4

● Other features and functions

Weight: 7 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.

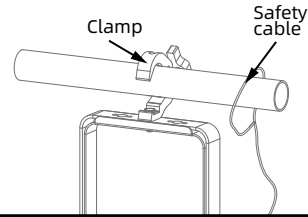
4.2 Equipment packaging

- 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

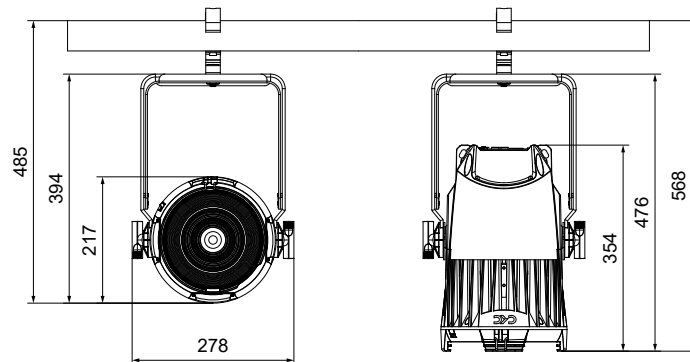
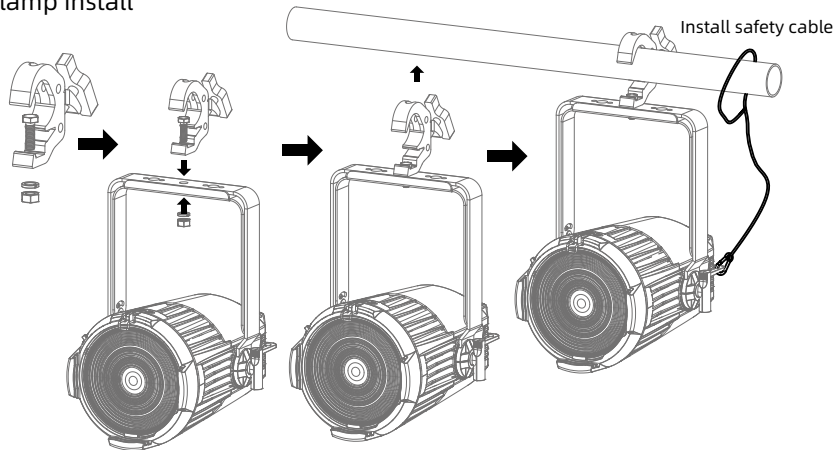
The lighting fixtures can be installed on the stage or on any direction of the truss, and the clamp can be quickly and easily locked onto the truss.



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.

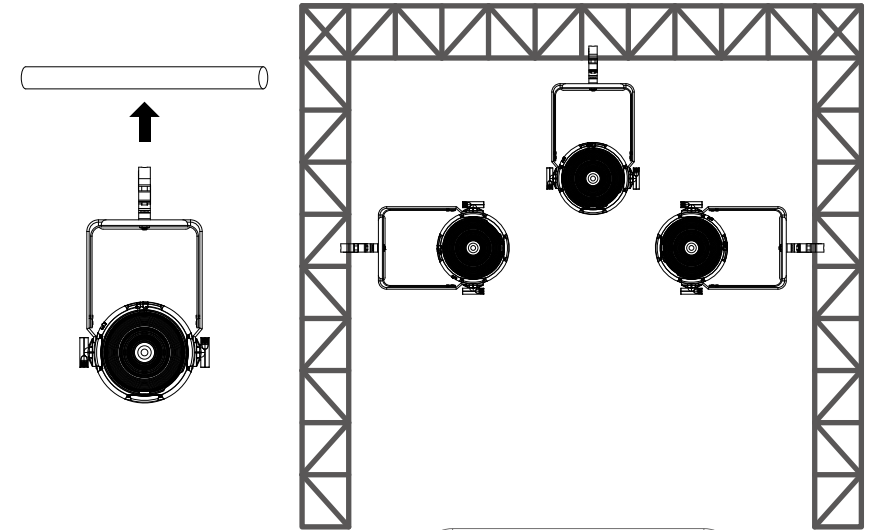
Quick lock and clamp install



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).

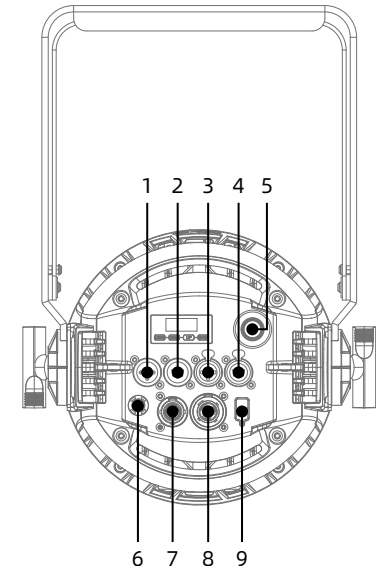
5.3 Hanging Installation Diagram



6. Power、Signal connect

6.1 Power and signal socket

- 1、3Pin XLR male
- 2、5Pin XLR male
- 3、3Pin XLR female
- 4、5Pin XLR female
- 5、potentiometer knob
- 6、Fuse holder
- 7、Power input
- 8、Power output
- 9、USB



6.2 Power connect

Connection method:

L(live wire) - brown wire

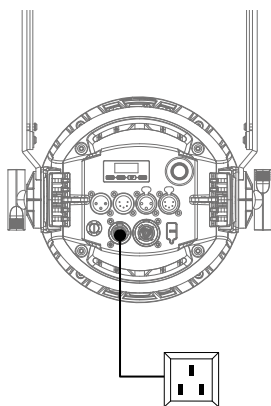
E(Ground wire) - yellow/green dual color line

N(Zero Line) - Blue Line

When connecting the power supply, please note that the voltage and frequency of the power supply must match the voltage and frequency marked on the light fixture. When multiple fixtures are used simultaneously, it is recommended to connect the power supply of each fixture separately, so that each fixture can be individually controlled for power on/off.



Attention: When connecting the power supply, the ground wire (yellow/green dual color wire) must be safely grounded and comply with all relevant electrical installation standards.



Power In

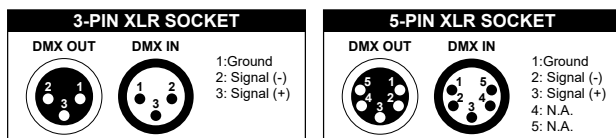
This product uses power&signal integrated input/output cable, Due to power limitations, a 2mm power cable can drive up to 1 fixtures at 220V.



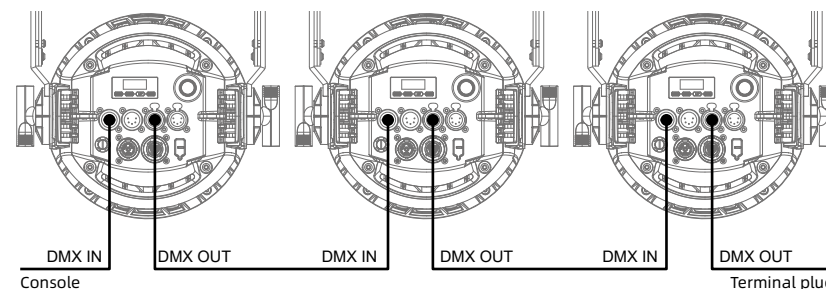
Warning !

- 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.

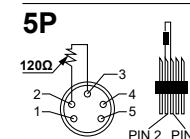
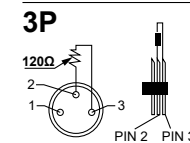
6.3 Signal connect



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.



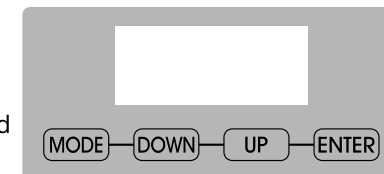
Connect a shielded twisted pair signal cable from the DMX output port of the controller to the DMX input port of the first device, and from the DMX output port of the first device to the DMX input port of the second device, and so on, until all the lamps are connected. Then install a terminal plug on the last 3 pin socket of each connected lamp output. (Weld a 4/1W, 120 Ω resistor between the 2 and 3 pins).



7. Control panel

7.1 Panel Introduction

- Adopting OLED display screen;
- Press the MODE key to view or modify fixture function settings, and press UP and DOWN;
- 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.



7.2. System menu

Note: The gray color block is the default setting value

Update Wait.. CKC SOFTWARE V1.03		
Menu Option	Level 1	Level 2

Encoder Mode	Disabled	After confirming this option, return to the homepage and run the DMX mode.
	Dimmer	After confirming this option, return to the homepage and run Dimmer mode, using the knob to control the lighting fixtures
	Int CCT Grn	After confirming this option, return to the homepage and run CCT mode to control the lighting fixtures with the knob.
	Int Color Sat	After confirming this option, return to the homepage and run COLOR mode to control the lighting fixtures with the knob.
	Manual Control	After confirming this option, return to the homepage and run Manual Control mode to control the lighting fixtures with the knob
DMX Settings	DMX Address	001 - 512
	DMX Channel Mode	Dimmer 1CH
		Dimmer Color 6CH
		Standard 11CH
		Extended 18CH
		CMY 9CH
		CMY Extended 14CH
	No DMX Status	Hold Last Fade to black Standalone
Standalone	Dimmer	000%-100%
	Color Temperature	2400K-8500K Default 2700K
	Green Shift	GM Point: 000%
	Virtual Color	Color01-Color53
	Primary	ON / OFF
	Secondary	ON / OFF
	Dim Modes	Standard
		Stage
		TV
		Architectural
		Theatre
		Stage 2
		Dim Speed 0.0S-10S (0.1)

Personality	Dim Curves	Linear
		Square
		Square Inverse
		S-Curve
	Fan Control	Silent/High/Auto Low speed/high speed/automatic
	LED Refresh Rate	900~1500, 2500, 4000, 5000, 6000, 10KHz, 15KHz, 20KHz, 25KHz (1200Hz)
	LED Power Limit	50,60,70,80,90,100%
	Display	Screen Saver Delay 10S-5M (1M)
		Screen Lock OFF - 10 minutes
		Rotate Display YES / NO / Auto
	Service Password: 050	Calibration
		Red 000-255
		Green 000-255
		Blue 000-255
		Mint 000-255
		Amber 000-255
		Factory Restore YES / NO
		USB Update on/off
		Edit RDM UID xxxxxx
	Life Time	Life Time xxxxxx Hours
	Last Run Time	Last Run Time xxxxxx Hours
	Time Reset	Passcode=038
	Temperature	Current xxx F / xxx C
		Max Resettable xxx F / xxx C
		Reset

Info	DMX Values	Dimmer xxx
		Strobe xxx
		...
	Product ID	RDM UID
	Error Logs	Fixture Errors
		Reset Error Log YES / NO
	Software Version	V1.03

7.3、Knob operation

Dimmer Mode				
Knob	Function	Display	Each level	Default
Dimmer	Intensity	Intensity 0-100%	1%	0%

Int CCT Grn Mode				
Knob	Function	Display	Each level	Default
CTRL	Intensity	Intensity 0-100%	1%	0%
	Color Temperature	CCT 2400 - 8500K	100K	6000K
	Green Shift	GRN -100% to +100%	1%	Neutral

Int Color Sat Mode				
Knob	Function	Display	Each level	Default
CTRL	Intensity	Intensity 0-100%	1%	0%
	Color	Virtual Color 1, 2, 3, 4...	Single Color	
	Saturation	Sat 0 - 100%	1%	100%

Manual Control Mode				
Knob	Function	Display	Each level	Default
CTRL	Intensity	Intensity 0-100%	1%	0%
	Options	[Setting Name] 0 - 100	Strobe / Red / Green / Blue / Amber / Mint	Strobe
	Regulator	[Value] 0 - 100%	1%	0%

8. DMX channel table:

1CH	6CH	11CH	18CH	9CH	14CH	Value	Function
1	1	1	1	1	1		Dimmer:
						0-255	Intensity 0 to 100%
	2	2	2	2	2		Dimmer Fine:
						0-255	Dimmer fine
							Shutter, strobe:

3	3	3	3	3	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)
				4	4	Cyan: Cyan (0-100% Cyan)
					5	Cyan Fine: Cyan Fine
				5	6	Magenta: Magenta (0-100% Magenta)
					7	Magenta Fine: Magenta Fine
				6	8	Yellow: Yellow (0-100% Yellow)
					9	Yellow Fine: Yellow Fine
		4	4			Red: Red (0-100% Red)
					0-255	Red (0-100% Red)
			5			Red Fine: Red Fine
					0-255	Red Fine
		5	6			Green: Green (0-100% Green)
					0-255	Green (0-100% Green)
			7			Green Fine: Green Fine
					0-255	Green Fine
		6	8			Blue: Blue (0-100% Blue)
					0-255	Blue (0-100% Blue)
			9			Blue Fine: Blue Fine
					0-255	Blue Fine
		7	10			Mint Mint (0-100% Mint)
					0-255	Mint (0-100% Mint)
			11			Mint Fine: Mint Fine
					0-255	Mint Fine
		8	12			Amber Amber (0-100% Amber)
					0-255	Amber (0-100% Amber)
			13			Amber Fine: Amber Fine
					0-255	Amber Fine
4	9	14	7	10		CTO: Open
					0-23	Open
					18-85	CTO 2400K - 8500K (see separate sheet)
					86-255	8500K
						Color Wheel:

5	10	15	8	11	0	Open
					1-179	Virtual Swatch Book (see separate sheet)
						Color Scroll
					180-201	Clockwise,fast → slow
					202-207	Stop
					208-229	Counter-clockwise,slow → fast
					230-234	Open
						Random Slots
					235-239	Fast
					240-244	Medium
					245-249	Slow
					250-255	Open
						Green shite:
					0	No function
					1-127	Slightly red → normal
					128	normal
					129-255	Normal → slightly green
						Dim Modes
				12	0-20	Standard
					21-40	Stage
					41-60	TV
					61-80	Architectural
					81-100	Theatre
					101-120	Stage 2
						Dimmer Delay Time
					121	0s
					122	0.1s
					123	0.2s
					124	0.3s
					125	0.4s
					126	0.5s
					127	0.6s
					128	0.7s
					129	0.8s
					130	0.9s
					131	1.0s
					132	1.5s
					133	2.0s
					134	3.0s
					135	4.0s
					136	5.0s
					137	6.0s
					138	7.0s
					139	8.0s

6	11	18	9	14	140	9.0s
					141	10s
					142-255	Idle
						Control:
					0-29	Idle
					30-39	Fan Mode Auto
					40-49	Fan Mode Silent
					50-59	Fan Mode High
					60-69	Idle
					70-74	DTW Function off
					75-79	DTW Function on
					80-99	Idle
					100-168	Refresh Rate (Hz)
					100	900
					101	910
					102	920
					103	930
					104	940
					105	950
					106	960
					107	970
					108	980
					109	990
					110	1000
					111	1010
					112	1020
					113	1030
					114	1040
					115	1050
					116	1060
					117	1070
					118	1080
					119	1090
					120	1100
					121	1110
					122	1120
					123	1130
					124	1140
					125	1150
					126	1160
					127	1170
					128	1180
					129	1190
					130	1200
					131	1210

132	1220
133	1230
134	1240
135	1250
136	1260
137	1270
138	1280
139	1290
140	1300
141	1310
142	1320
143	1330
144	1340
145	1350
146	1360
147	1370
148	1380
149	1390
150	1400
151	1410
152	1420
153	1430
154	1440
155	1450
156	1460
157	1470
158	1480
159	1490
160	1500
161	2500
162	4000
163	5000
164	6000
165	10000
166	15000
167	20000
168	25000
169-200	Idle
201-210	Dimmer Curve Linear (default)
211-220	Dimmer Curve Square
221-230	Dimmer Curve Inverse Square
231-240	Dimmer Curve S-Curve
241-255	Idle

Virtual Colors

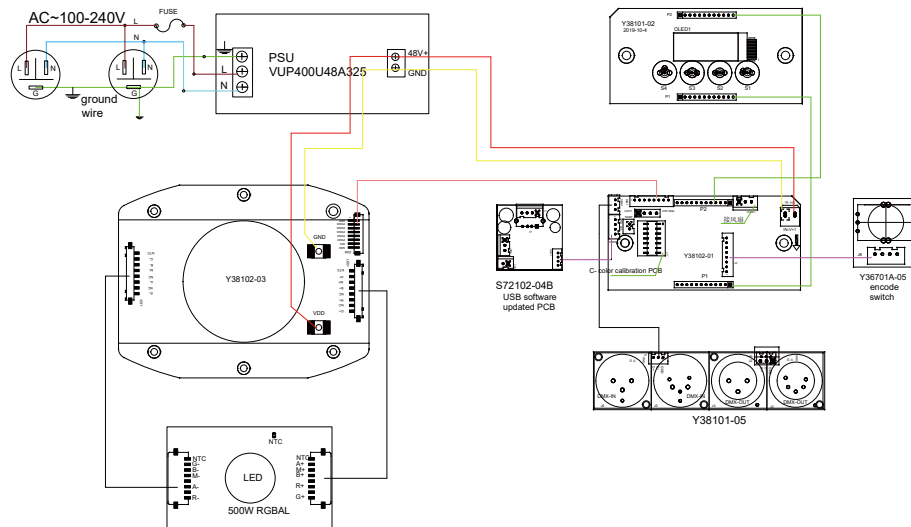
Value	Filter Number	Name	Value	Filter Number	Name
1	7	pale yellow	28	113	magenta
2	103	straw	29	46	dark magenta
3	151	gold tint	30	48	rose purple
4	100	spring yellow	31	126	mauve
5	10	medium yellow	32	49	medium purple
6	101	yellow	33	58	lavender
7	104	deep amber	34	199	palace blue
8	15	deep straw	35	119	dark blue
9	179	loving amber	36	132	medium blue
10	21	gold amber	37	120	deep blue
11	105	orange	38	165	daylight blue
12	158	deep orange	39	161	slate blue
13	22	dark amber	40	118	light blue
14	778	millenium gold	41	68	sky blue
15	135	deep golden amber	42	143	pale navy blue
16	24	scarlet	43	131	marine blue
17	106	primary red	44	115	peacock blue
18	26	bright red	45	172	lagoon blue
19	27	medium red	46	116	medium blue green
20	19	fire	47	90	dark yellow green
21	157	pink	48	139	primary green
22	36	medium pink	49	122	fern green
23	111	dark pink	50	89	moss green
24	128	bright pink	51	124	dark green
25	148	bright rose	52	88	lime green
26	332	special rose pink	53	138	pale green
27	793	vanity fair	54-179		No function

WCT Preset Chart:

Value	Color Temperature	Value	Color Temperature
24	2400K	55	5500K
25	2500K	56	5600K
26	2600K	57	5700K
27	2700K	58	5800K
28	2800K	59	5900K
29	2900K	60	6000K
30	3000K	61	6100K
31	3100K	62	6200K
32	3200K	63	6300K
33	3300K	64	6400K
34	3400K	65	6500K

35	3500K	66	6600K
36	3600K	67	6700K
37	3700K	68	6800K
38	3800K	69	6900K
39	3900K	70	7000K
40	4000K	71	7100K
41	4100K	72	7200K
42	4200K	73	7300K
43	4300K	74	7400K
44	4400K	75	7500K
45	4500K	76	7600K
46	4600K	77	7700K
47	4700K	78	7800K
48	4800K	79	7900K
49	4900K	80	8000K
50	5000K	81	8100K
51	5100K	82	8200K
52	5200K	83	8300K
53	5300K	84	8400K
54	5400K	85	8500K

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

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
	The temperature control switch is damaged	Replace
Weak light efficiency and uneven light spot	LED aging	Replace
	The optical mirror has accumulated dust or stains	Clean
	The optical mirror is damaged	Replace
Impure color	Weakening of light efficiency	Replace led PCB
 Attention! The above analysis is for abnormal reference only. Non professionals are not allowed to disassemble and repair the machine		