CKC

P500 FC IP

⚠

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

★ 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;

● 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 ℃ to 45 ℃ . 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 65 ℃ , 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.
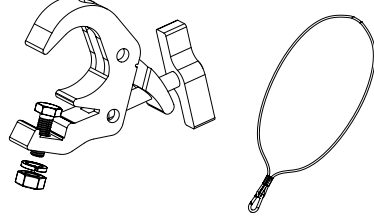
2. Product Introduction

2.1 Exterior dimensions of lighting fixtures

304 × 357 × 453 mm
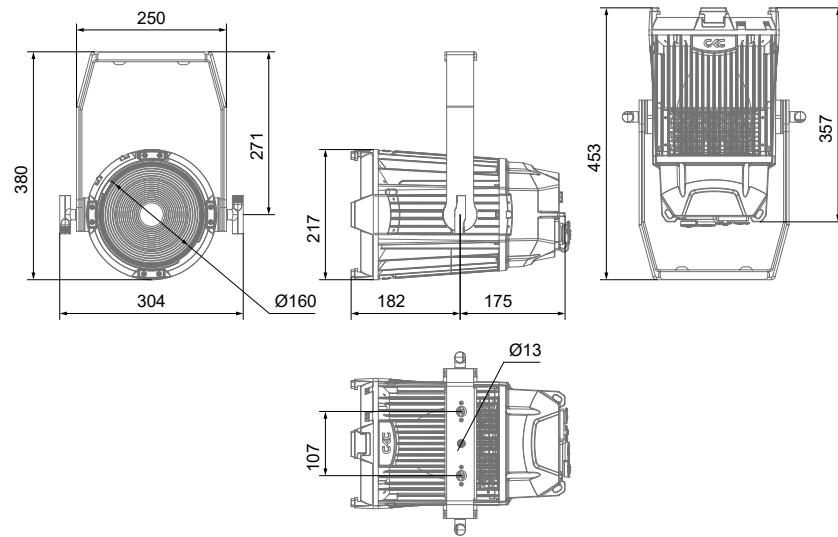
2.2 Packaging accessories

Name	QTY
Omega bracket	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：356 W
Power factor：0.957F
Input Current：1.6A 220V

● **Source lifespan**

＞ 20000 hours

● **Optical system**

Source：500W RGBAL LED
Output luminous flux：11300 Lm
Beam angel：11° /22° /30° /52°
Field angle：18° /32° /39° /75°
CCT：2400 ~ 8000 K

● **Control and programming**

Control channel：1CH/6CH/11CH/18CH/19CH/9CH/14CH/15CH
Protocol：DMX512, RDM
Data connect：3 pin or 5pin signal in/out

● **Illumination draw**

18°	3	5	8
Lux	29700	11400	4390
Distance(m)	0.95	1.58	2.53

32°	3	5	8
Lux	7150	2630	1110
Distance(m)	1.72	2.87	4.59
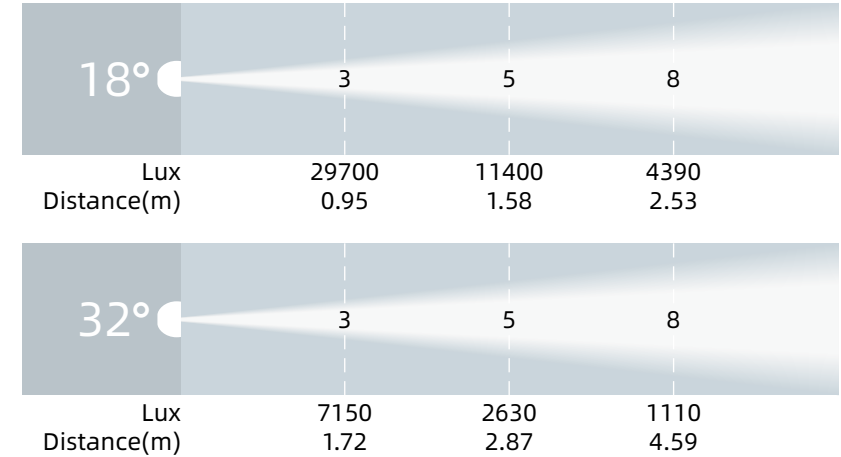
● **Other effect function**

Fast electronic strobe：1~25Hz

● **Other features and functions**

Weight：7.3 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.

Clamp   Safety cable
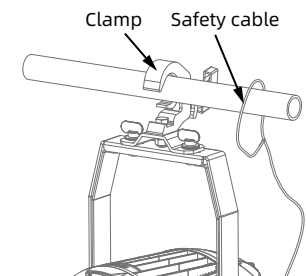
Waining !

Fixture can be used to fix the equipment, and a safety rope must be connected to the safety hook. Note that it cannot be connected to the handle.

Quick lock and clamp install

Install safety cablea

493
380
217
306

567
453
357
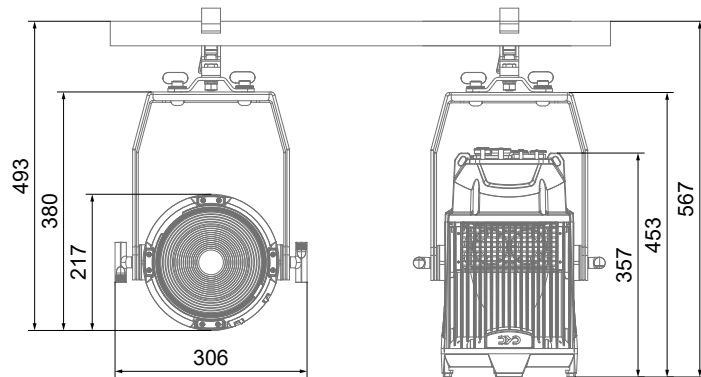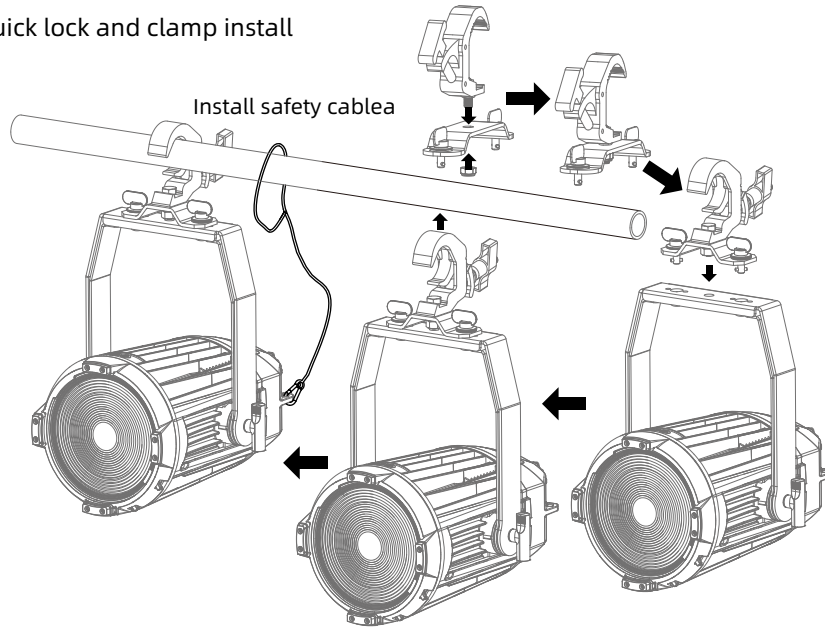
5.2 Equipment installation

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 lamp hook on the handle and insert it horizontally into the handle mounting hole to lock it in place.

5.3 Hanging Installation Diagram
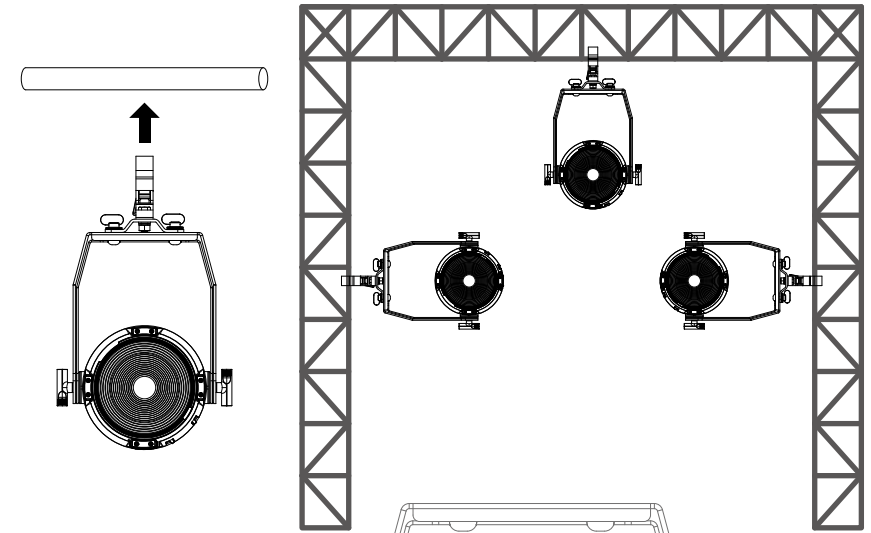
6. Power、Signal connect

6.1 Power and signal socket

1. Breathable valve
2. Power input
3. Power output
4. Dmx output
5. Dmx input

1 2 3 4 5
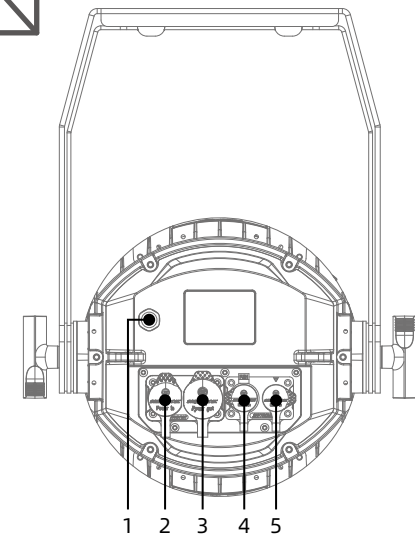
6.2 Power connect

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
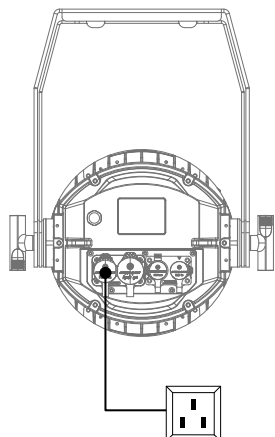
This product uses Powercon In/Out to connect power cords. Due to power limitations, a 2 square meter power cord can carry up to 8 products at 220V and 2 product at 110V.

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

3-PIN XLR SOCKET

DMX OUT   DMX IN

1:Ground
2: Signal (-)
3: Signal (+)

5-PIN XLR SOCKET

DMX OUT   DMX IN

1:Ground
2: Signal (-)
3: Signal (+)
4: N.A.
5: N.A.
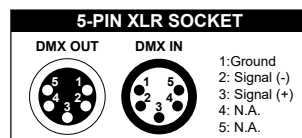
The lighting fixtures are equipped with standard DMX XLR input and output sockets. Please use DMX512 shielded twisted pair signal cables or Category 3/5 or above network twisted pair cables for connection. The typical connection distance for DMX signal lines is 150 meters. When transmitting signals over long distances, a DMX512 signal amplifier must be added.

DMX OUT   DMX IN   DMX OUT   DMX IN   DMX OUT   DMX IN

Terminal plug   Controler
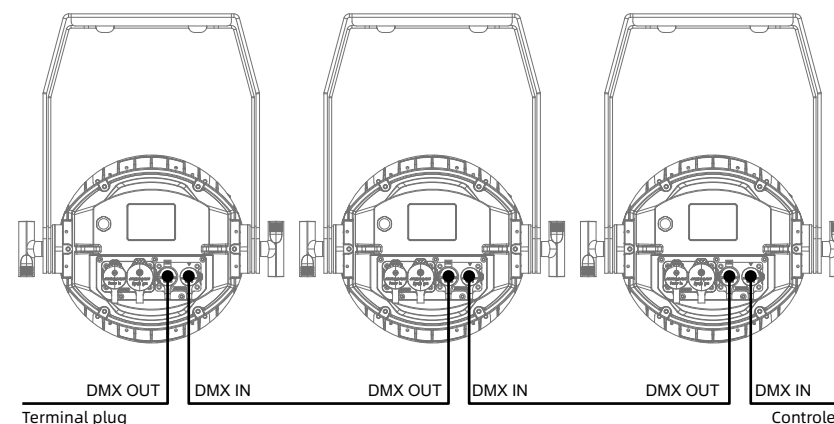
Connect a shielded twisted pair signal cable from the DMX output port of the controller to the DMX input port of the first device, and from the DMX output port of the first device to the DMX input port of the second device, and so on, until all the lamps are connected. Then install a terminal plug on 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).

3P

120Ω

PIN 2   PIN 3

5P

120Ω

PIN 2   PIN 3
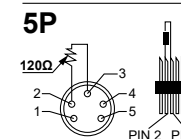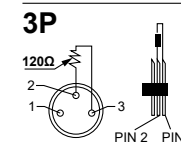
7. Control panel

7.1 Panel Introduction

● Adopting a OLED display screen;

● 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);

MODE   UP

ENTER   DOWN

● 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;

● When you enter the Touch Bar Mode mode, the bottom plus and minus keys and the slider adjust the values.
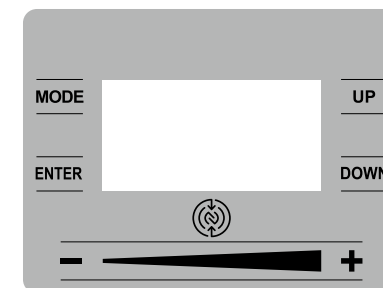
7.2、System menu

Note: The gray color block is the default setting value

Update Wait.. CKC SOFTWARE V1.01			
Receive	XXCH XXXX ADDR:001		
Touch Bar Mode	Disabled	For use when running fixture in DMX mode	
	Dimmer	For use when running fixture in dimmer mode	
	Int CCT Grn	For use when runnin fixture in CCT mode with touch bar control	
	Int Color Sat	For use when running fixture in color mode with touch bar control	
	Manual Control	For use when running fixture in manual control mode with touch bar control	
DMX	DMX Address	001 – 512	
	DMX Mode	1CH Dimmer	
		6CH Dimmer Color	
		11CH Standard	
		18CH Legacy Extended	
		19CH Extended	
		9CH CMY	
		14CH Legacy CMY Extended	
		15CH CMY Extended	
	No DMX Status	Hold Last	
		Fade to Black	
		Standalone	
Control	Dimmer	000% – 100%	
	Manual Color	Red	0– 255
		Green	0– 255
		Blue	0– 255
		Mint	0– 255
		Amber	0– 255
		CCT	2400K – 8500K (Default = 6000K)
		Green Shift	-100% ~ +100% (Default = 0)
		Virtual Color	See Color Macros
	Master	On / Off	
	Slave	On / Off	
	Self Test	All	
		Dimmer	
		Color	
	Dim Modes	Standard	
		Stage	
		TV	
		Architectural	

		Theatre	
		Stage 2	
		Dim Speed	0s – 10s (Default = 0.1s)
	Dim to Warm	On / Off	
	Dim Curves	Linear	
		Square	
		Square Inverse	
		S-Curve	
	CCT Mode	Constant Mode	
		Max Mode	
	LED Refresh Rate	900Hz – 1500Hz, 2500Hz, 4000Hz, 5000Hz, 6000Hz, 10KHz,15KHz, 20KHz, 25KHz (Default = 1200 Hz)	
	LED Power Limit	50%	
		60%	
		70%	
		80%	
		90%	
		100%	
	Fan Mode	Auto	
		High	
		Silent	
	Display	Screen Delay	10s – 5min (Default = 1 min)
		Screen Lock	OFF/ON/ON1
		Rotate Display	Yes / No / Auto
	Reset Defualts	Yes / No	
Info	Time	Current Run Time	
		Total Run Time	
		Last Run Time	
	Temperature	Current	
		Max Resettable	
	DMX Values	Red	
		Green	
		...	
	Product IDs	RDM UID	xxxxxx...
	Error Logs	Fixture Errors	None
	Software Version	V1.01	
Service	Calibration (Passcode:050)	Red 000 – 255	
		Green 000 – 255	
		Blue 000 – 255	
		Mint 000 – 255	
		Amber 000 – 255	
	Reset Last Run	Yes / No	
	Reset Error Logs	Yes / No	

7.3、Touch Bar Mode operation

Disabled mode				
Touch	Function	Display	Each level	Default
Disabled	Exit Touch	DMX page	/	/

Dimmer mode				
Touch	Function	Display	Each level	Default
Dimmer	Intensity 总调	Intensity：0-100%	1%	0%

Int CCT Grn mode				
Touch	Function	Display	Each level	Default
Int CCT Grn	Intensity	Intensity：0-100%	1%	0%
	CCT	CCT：2400-8500K	100K	6000K
	GM Point	GRN-100%to +100%	1%	0%

Int Color Sat mode				
Touch	Function	Display	Each level	Default
Int Color Sat	Intensity	Intensity：0-100%	1%	0%
	Color	Color1-53	Single Color	/
	Saturation	Sat 0-100%	1%	100%

Manual Control mode				
Touch	Function	Display	Each level	Default
Manual Control	Intensity	Intensity：0-100%	1%	0%
	Strobe	Strobe：0-255	1	0
	Red	Red：0-255	1	0
	Green	Green：0-255	1	0
	Blue	Blue：0-255	1	0
	Mint	Mint：0-255	1	0
	Amber	Amber：0-255	1	0

8. DMX channel table:

1CH	6CH	11CH	18CH	19CH	9CH	14CH	15CH	Value Range	Function
1	1	1	1	1	1	1	1	0-255	**Dimmer** Intensity 0 → 100%
	2	2	2	2	2	2	2	0-255	**Dimmer Fine** Fine Intensity Control
									Shutter/Strobe
								0-31	Shutter closed
								32-63	No function (shutter open)
3	3	3	3	3	3	3		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	4					0-255	**Red** 0 → 100%
		5	5					0-255	**Red Fine** Fine Adjustment
	5	6	6					0-255	**Green** 0 → 100%
		7	7					0-255	**Green Fine** Fine Adjustment
	6	8	8					0-255	**Blue** 0 → 100%
		9	9					0-255	**Blue Fine** Fine Adjustment
	7	10	10					0-255	**Mint** 0 → 100%
		11	11					0-255	**Mint Fine** Fine Adjustment
	8	12	12					0-255	**Amber** 0 → 100%
		13	13					0-255	**Amber Fine** Fine Adjustment
				4	4	4		0-255	**Cyan** 0 → 100%
					5	5		0-255	**Cyan Fine** Fine Adjustment
				5	6	6		0-255	**Magenta** 0 → 100%
					7	7		0-255	**Magenta Fine** Fine Adjustment
				6	8	8		0-255	**Yellow** 0 → 100%
					9	9		0-255	**Yellow Fine** Fine Adjustment
4	9	14		7	10				**CCT Presets**
								0-23	Open
								24-85	2400K → 8500K (See Sheet)
								86-255	8500K
			14			10			**Variable CCT**
								0-23	Open
								24-255	2400K → 8500K
			15			11		0-255	**Variable CCT Fine** Fine Adjustment

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							Value	Description
	16	16		12	12			**Green Shift**
							0	Idle
							1-127	Full Minus Green to Neutral
							128	Neutral White
							129-255	Neutral to Full Plus Green
5	10	15	17	8	11	13		**Color**
							0	Open
							1-179	Virtual Swatch Book (See Table)
								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
	17	18		13	14			**Dim Modes**
							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

Value	Description
140	9.0s
141	10s
142-149	Idle
	Dim to Warm
150-154	DTW On
155-159	DTW Off
160-255	Idle
	Control
0-29	Idle
30-39	Fan Mode Auto
40-49	Fan Mode Silent
50-59	Fan Mode High
60-99	Idle
	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

6	11	18	19	9	14	15		
							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
							Dimmer Curves	
							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

Color macro

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

9. Control circuit diagram
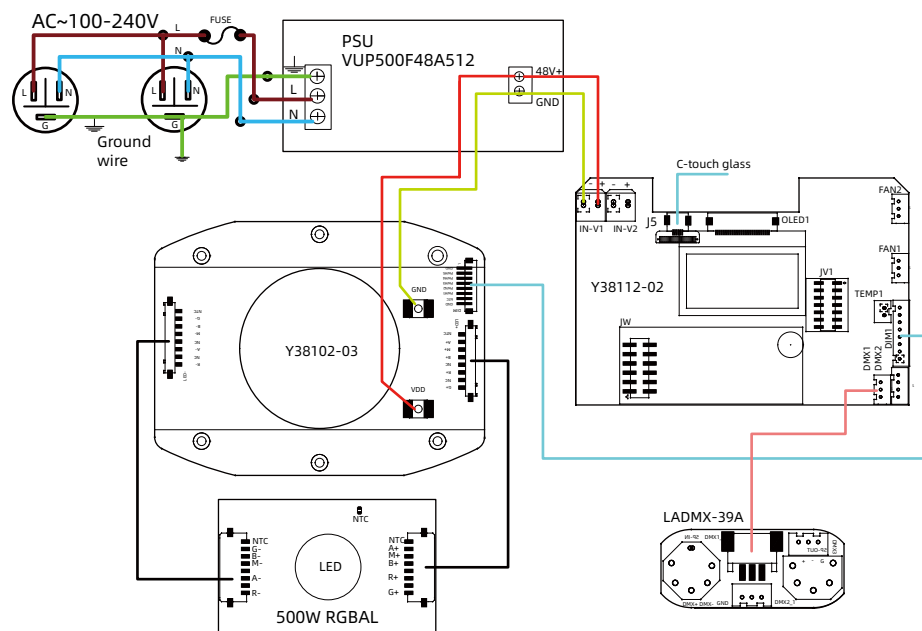
10. Regular maintenance

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
	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
	The color filter has accumulated dust or stains	Clean
	The color filter has been demolded or damaged	Replace
⚠️ **Attention!** The above analysis is for abnormal reference only. Non professionals are not allowed to disassemble and repair the machine		