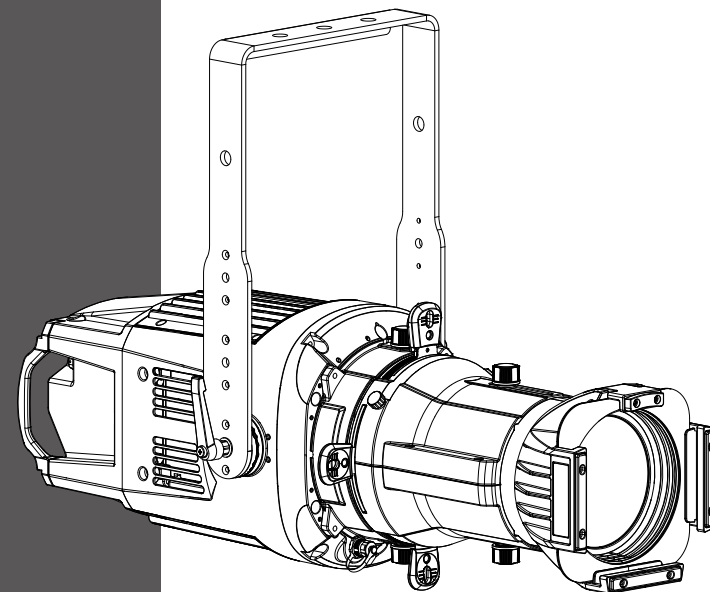




Profile

500FC IP



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Before carrying out any installation, maintenance, or cleaning of the lighting fixtures, please confirm that the power has been cut off! Before using this fixture, please read this manual. Our company reserves the right to change product design and specifications without prior notice.

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★ Statement ★

- This manual contains important information on safe use and installation. Please read it carefully and follow the requirements for operation and installation. Please keep this manual properly;
- The equipment has good performance and complete packaging when it leaves the factory. The operator should strictly follow the warning items and operating instructions stated in the manual. Any malfunction or damage caused by misuse or neglect of the manual is not within the scope of our company's responsibility and warranty;
- The relevant information in this manual is for reference only. All lighting products are subject to the actual product. Any changes will not be notified separately, and our company reserves the right of final interpretation.

1. Security Warning Information



Attention !

Please read the safety requirements information in this section carefully before installing, powering on, operating, or repairing the lighting fixtures.



- This product is for professional use and is not suitable for other purposes;
- After receiving the lighting fixtures, please check if the packaging is complete and unpack to check if the equipment has been damaged due to transportation. If there is any damage caused by transportation, please do not use this lamp and contact local technicians or manufacturers as soon as possible;
- When transporting again, please use the original packaging materials;
- If there is obvious damage to the machine casing, it should be replaced in a timely manner;
- When hanging lamps, it is necessary to verify that the hanging equipment can withstand more than 6 times the weight of the lamp. After installation, it is necessary to verify that the lamp cover and installation buckle are secure and undamaged. At the same time, a safety rope should be used as an auxiliary safety for the lamp and fixed on the truss;
- The light source inside this luminaire should be replaced by the manufacturer, its service agent, or a similarly qualified person;
- If you have any other questions about how to safely operate the equipment, please contact our technical personnel or call our service hotline;
- This product has a protection level of IP65 and can be used both indoors and outdoors;
- Avoid direct external strong light shining on the lens, which may cause the lens to focus and burn out internal components.



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



- The eyes cannot directly look at the luminous object;
- Do not connect this device to any dimmer;
- If visible damage occurs to the protective casing, lens, and display screen on the lighting fixture, it is considered as damage to the point of loss;
- Please do not place any filters or other items at the light outlet, and do not replace non original parts;
- The minimum safe illumination distance of the lamp is 1m.



- Before installation, please confirm that the power supply voltage used matches the voltage indicated on the light fixture. Each lighting fixture should be properly grounded and electrically installed according to relevant standards;
- Please disconnect the power before repairing or cleaning the equipment;
- During the operation of the lighting fixtures, touching the wires is prohibited to prevent electric shock;
- If the external soft cable or wire of this lamp is damaged, the wire should be replaced by the manufacturer, its agent, or a similarly qualified person to avoid danger;
- Avoid flammable liquids, water, or metal conductors from entering the interior of the lamp to prevent electric shock or fire. If any foreign objects enter the lamp, immediately cut off the power supply;
- When multiple lamps are operated in series, the signal lines can be connected in multiple ways, but the power supply must be connected separately.



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

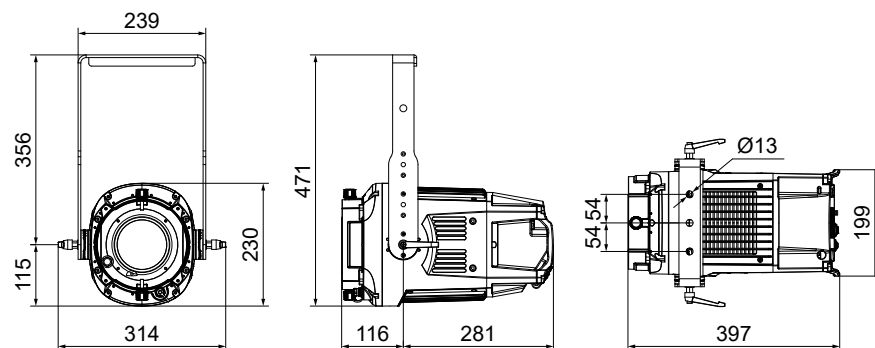


- The lighting fixtures must be installed in a sufficiently ventilated area, at least 0.5m away from adjacent surfaces, to ensure that no ventilation holes are blocked;
- Do not install the lighting fixtures directly on flammable objects;
- The minimum distance between all outer surfaces of the lamp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

2. Product Introduction

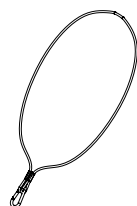
2.1 Exterior dimensions of lighting fixtures

314 × 397 × 471 mm



2.2 Packaging accessories

Name	QTY
Safety cable	1 PCS



3. Main technical parameters of the equipment

Product execution standards: GB7000.1-2023, GB7000.217-2023, Q/YF-2017, CE

● Electrical parameter

Rated input voltage: AC 100V-240V~ 50Hz/60Hz

Rated power of the entire fixture: 485W

Power factor: 0.99F

Input Current: 0.895A 220V

● LED lifespan

> 20000 hours

● Optical system

Source: 500W RGBMA LED

Optional accessories:

Threaded lens (beam angle: 10~17°, spot angle: 17~47°)

Waterproof lens (light output angle: 14°/19°/26°/36°/50°/70°)

Output luminous flux: 18900 Lm

CRI: 93

CCT: 2400~8500K

● Control and programming

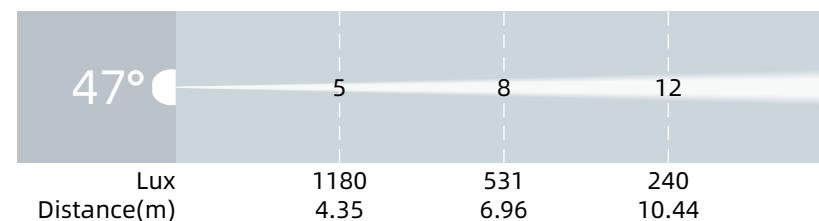
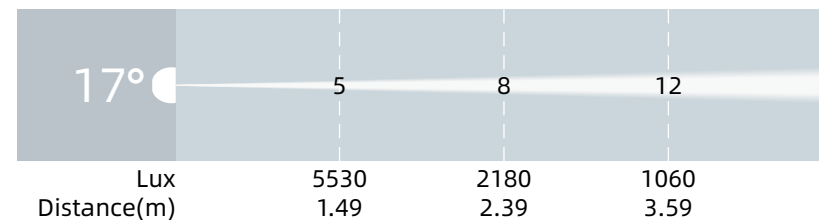
Control channel: 1 / 4 / 6 / 9 / 10 / 11 / 13 / 15 / 19 CH

Protocol: DMX512, RDM

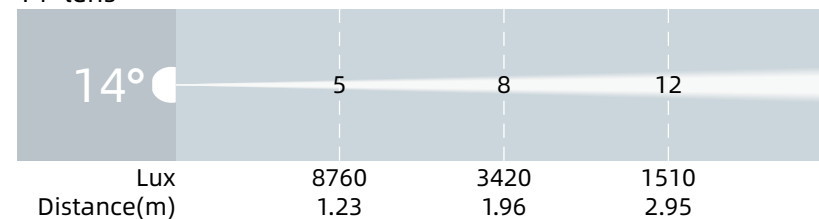
Data connect: 3 PIN XLR

● Illumination draw

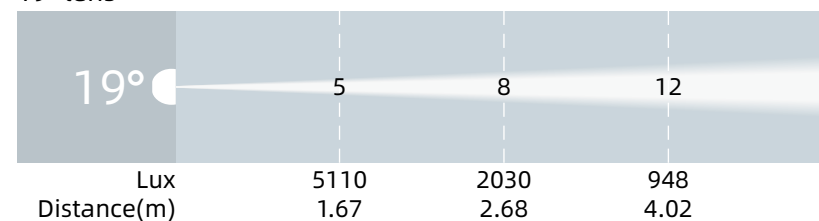
Threaded lens



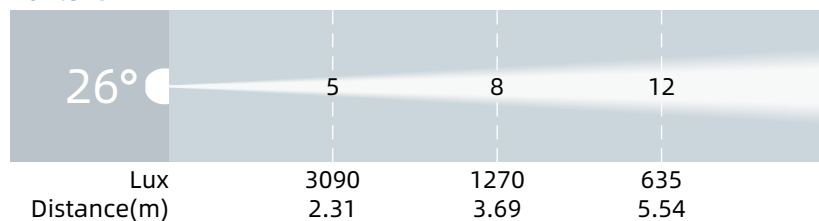
14° lens



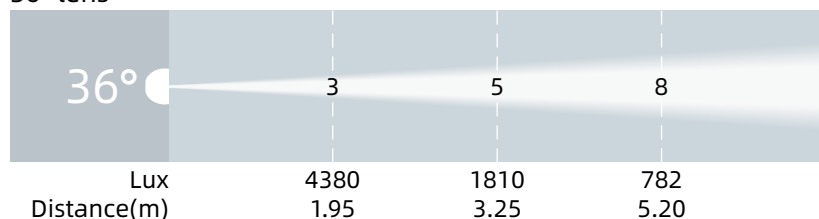
19° lens



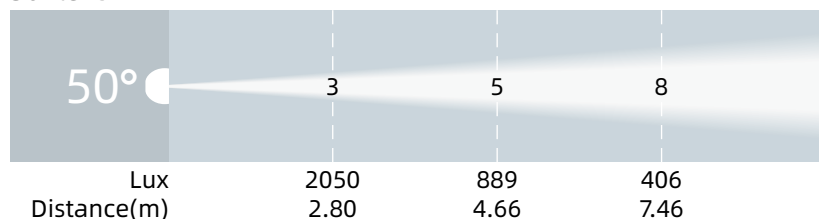
26° lens



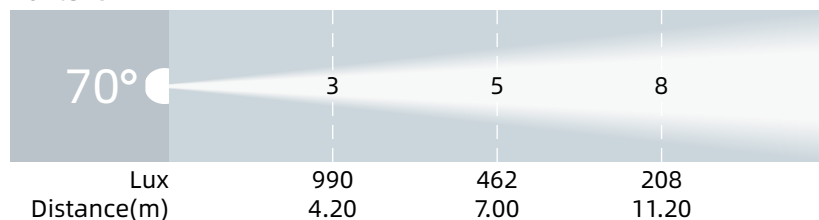
36° lens



50° lens



70° lens



● **Other effect function**

Fast electronic strobe: 1~25Hz

● **Other features and functions**

Weight: 10 KG

Flight case size: 58.5 × 37.5 × 37.5 cm

N.W: 18.3 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.

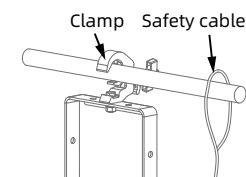
4.2 Equipment packaging

- 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

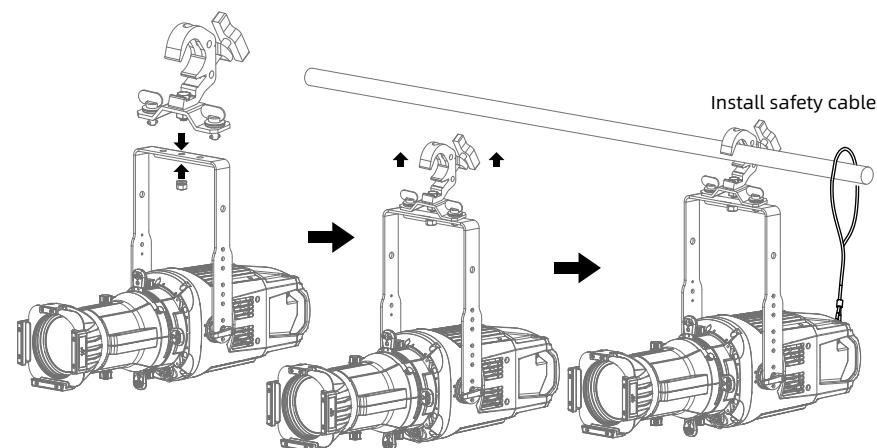
The lighting fixtures can be installed on the stage or on any direction of the truss, and the clamp can be quickly and easily locked onto the truss.

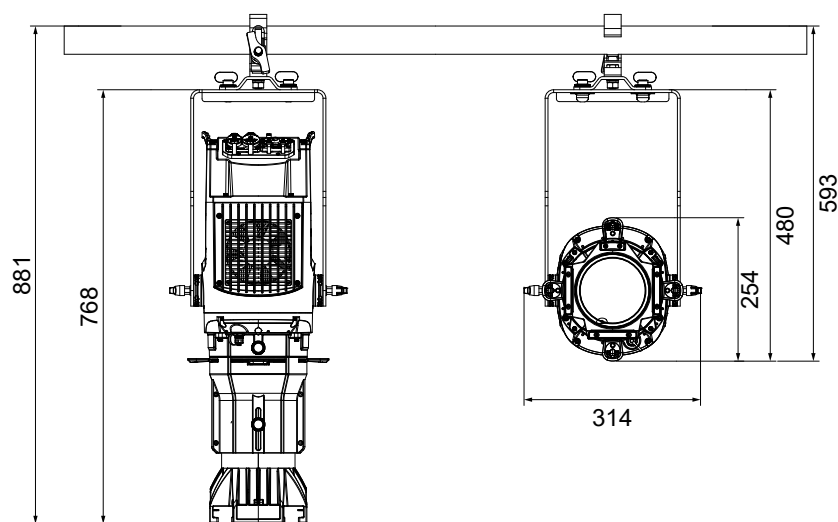


Warning !

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.

Installation of clamps and safety cable

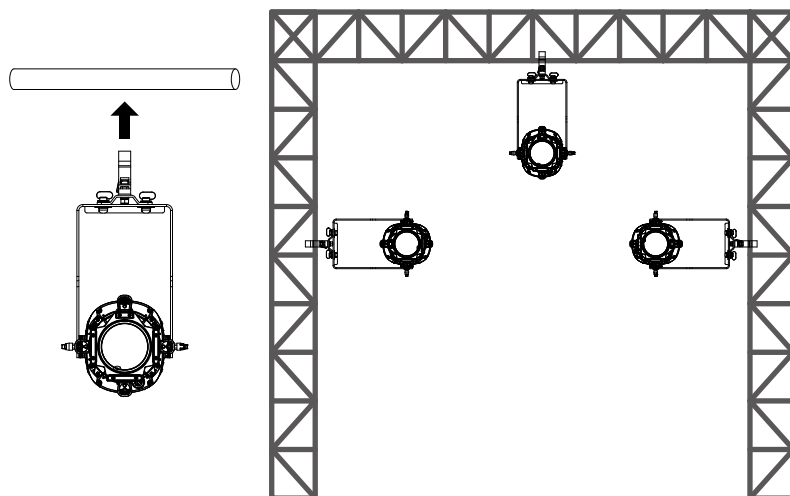




5.2 Equipment installation

- 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). The clamp is installed on the handle. Insert the clamp into the handle mounting hole horizontally and tighten it with bolts (the shape of clamp shall be subject to the actual object)..

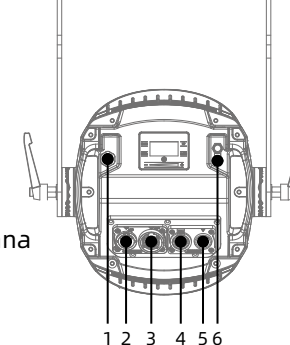
5.3 Hanging Installation Diagram



6. Power、Signal connect

6.1 Power and signal socket

- | | |
|---------------------|-----------------------|
| 1. Breathable valve | 2. Power input |
| 3. Power output | 4. 3Pin XLR female |
| 5. 3Pin XLR male | 6. Waterproof antenna |



6.2 Power connect

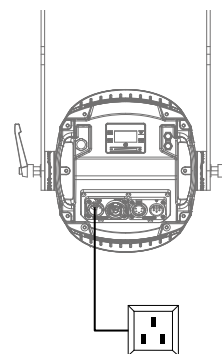
Connection method:

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

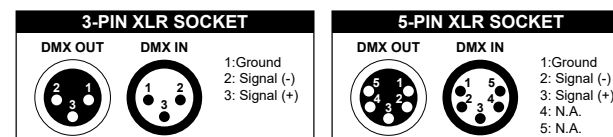
This product uses Powercon In/Out to connect power cords. Due to power limitations, a 2 square meter power cord can carry up to 6 products at 220V and 2 product at 110V.

Warning !



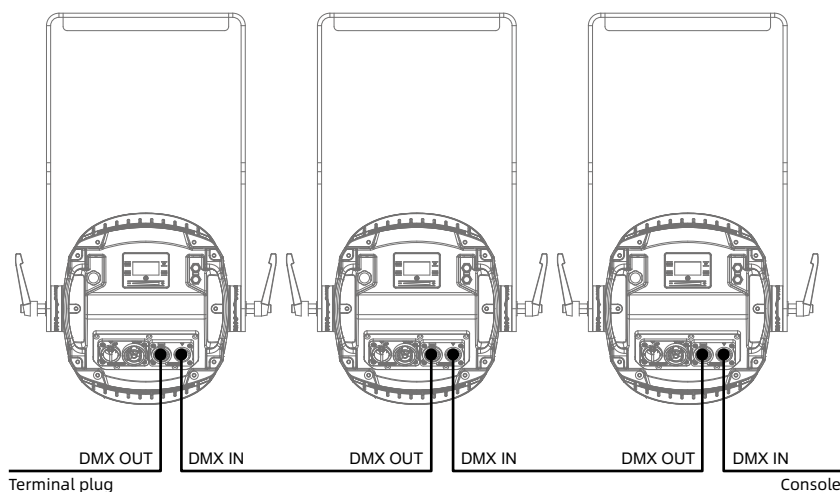
- Do not connect too many fixtures or overload a single power cord;
- Do not use power cords with damaged insulation layers, and do not place power cords on other wires;
- When the fixture is not in use or cleaned, please unplug the power cord; Do not forcefully unplug or drag the power cord directly.

6.3 Signal connect

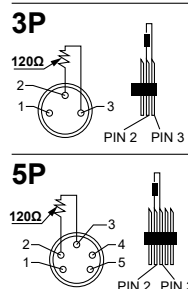


The lighting fixtures are equipped with standard DMX XLR and RJ-45

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.



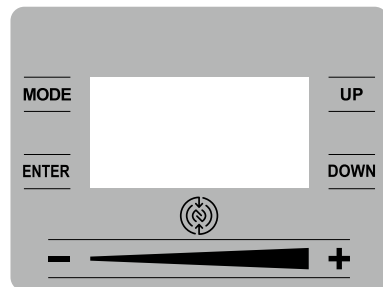
Connect a shielded twisted pair signal cable from the DMX output port of the controller to the DMX input port of the first device, and from the DMX output port of the first device to the DMX input port of the second device, and so on, until all the lamps are connected. Then install a terminal plug on the last 3 or 5 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 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);
- 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.. SOFTWARE V1.01 CKC		
Receive	XXCH XXXX ADDR:001	
Touch Bar Mode	Disabled	For use when running fixture in DMX mode
	Dimmer/Gobo	For use when running fixture in dimmer mode
	Int CCT Grn	For use when running fixture in CCT mode with touch bar control
	Int Color Sat	For use when running fixture in color mode with touch bar control
	Int x,y	For use when running fixture in x,y mode with encoder 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
		4CH Dimmer/ CCT
		6CH Dim/CCT/Clr
		10CH RGBMA
		11CH Standard
		19CH Extended
		9CH CMY
		15CH CMY Extended
		13CH x, y Extended
	Gobo Rotator	On (+2 DMX) / Off
Control	No DMX Status	Hold Last 保持
	Fade to Black	黑场
		运行自动模式
	Dimmer	000% - 100%
	Manual Control	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
	Gobo	0- 255

Settings	Master	On / Off
	Slave	On / Off
	Self Test	All
		Dimmer
		Color
		Gobo
	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%
	Fan Mode	100%
		Auto
		High
		Silent
	Display	Screen Delay 10s - 5min (Default = 1 min)
		Screen Lock ON , OFF, ON
		Rotate Display Yes / No / Auto
	Reset Defaults	Yes / No
Info	Time	Current Run Time
		Total Run Time
		Last Run Time
	Temperature	Current
		Max Resettable
	Humidity	xx% RH
	DMX Values	Red
		Green
		...
	Product IDs	RDM UID xxxxxx...

Service	Error Logs	Fixture Errors	None
	Software Version	V1.01	
	Calibration	Red 000 - 255	
		Green 000 - 255	
		Blue 000 - 255	
		Mint 000 - 255	
		Amber 000 - 255	
		Gobo Rotator 000 - 255	
	Reset Last Run	Yes / No	
	Reset Error Logs	Yes / No	
	CCT Calibration	Red 000 - 255	
		Green 000 - 255	
		Blue 000 - 255	
		Mint 000 - 255	
		Amber 000 - 255	

8. DMX channel table:

CH Mode									Value	Function
1	4	6	10	11	19	9	15	13		
1	1	1		1	1	1	1	1	000-255	Dimmer Intensity 0 → 100%
										Shutter/Strobe
									0-31	Shutter closed
									32-63	No function (shutter open)
									64-95	Strobe effect slow to fast
		3		3	3	3	3	3	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)
			1	4	4				0-255	Red 0 → 100%
			2		5				0-255	Red Fine Fine Adjustment
			3	5	6				0-255	Green 0 → 100%
			4		7				0-255	Green Fine Fine Adjustment
			5	6	8				0-255	Blue 0 → 100%
			6		9				0-255	Blue Fine Fine Adjustment
			7	7	10				0-255	Mint 0 → 100%

		8	11			0-255	Mint Fine Fine Adjustment
		9	8	12		0-255	Amber 0 → 100%
		10	13			0-255	Amber Fine Fine Adjustment
				4	4	0-255	Cyan 0 → 100%
					5	0-255	Cyan Fine Fine Adjustment
				5	6	0-255	Magenta 0 → 100%
					7	0-255	Magenta Fine Fine Adjustment
				6	8	0-255	Yellow 0 → 100%
					9	0-255	Yellow Fine Fine Adjustment
					4	0-255	X Coordinate 0 → 100%
					5	0-255	X Coordinate Fine Fine Adjustment
					6	0-255	Y Coordinate 0 → 100%
					7	0-255	Y Coordinate Fine Fine Adjustment
		4	9	7			CCT Presets
						0-23	Open
						24-85	2400K → 8500K (See Sheet)
						86-255	8500K
							Variable CCT
	3			14	10	8	0-23 Open
							24-255 2400K → 8500K
	4			15	11	9	0-255 Variable CCT Fine Fine Adjustment
							Green Shift
						0	Idle
			16		12	10	1-127 Full Minus Green to Neutral
							128 Neutral White
							129-255 Neutral to Full Plus Green
							Color
						0	Open
							1-179 Virtual Swatch Book (See Table)
							Color Scroll
							180-201 Clockwise Fast → Slow

		5		10	17	8	13	11	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
										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
					18		14	12	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
									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
60-69	Idle
	Reset
70-79	Gobo Rotator
80-99	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
131	1210
132	1220
133	1230
134	1240
135	1250
136	1260
137	1270
138	1280

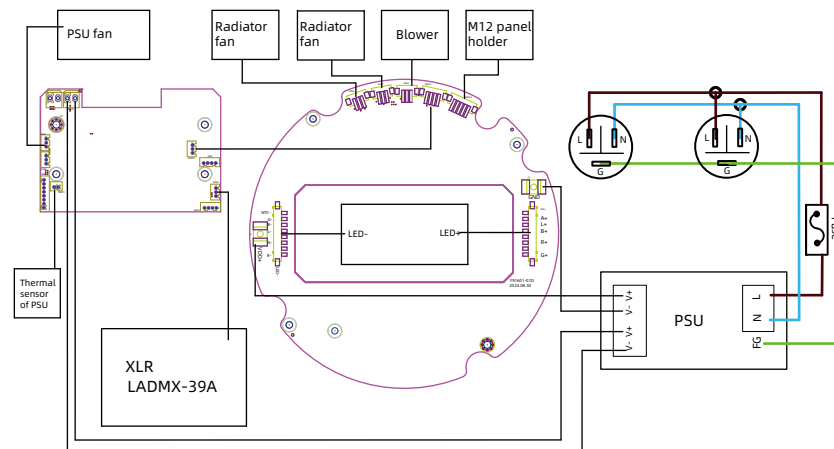
		6	11	19	9	15	13	139	1290	
								140	1300	
								141	1310	
								142	1320	
								143	1330	
								144	1340	
								145	1350	
								146	1360	
								147	1370	
								148	1380	
								149	1390	
								150	1400	
								151	1410	
								152	1420	
								153	1430	
								154	1440	
								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									
2	5	7	11	12	20	10	16	14	Gobo Indexing & Rotation	
									0- 127	Gobo Indexing
									128-189	Clockwise Gobo Rotation, Fast → Slow
									190-193	Stop
									194-255	Counter-clockwise Gobo Rotation, Slow → Fast
3	6	8	12	13	21	11	17	15	0-255	Gobo Fine Indexing Fine Adjustment

Marcros sheet

Value	Filter Number	Name
1	7	pale yellow
2	103	straw
3	151	gold tint
4	100	spring yellow
5	10	medium yellow
6	101	yellow
7	104	deep amber
8	15	deep straw
9	179	loving amber
10	21	gold amber
11	105	orange
12	158	deep orange
13	22	dark amber
14	778	millenium gold
15	135	deep golden amber
16	24	scarlet
17	106	primary red
18	26	bright red
19	27	medium red
20	19	fire
21	157	pink
22	36	medium pink
23	111	dark pink
24	128	bright pink
25	148	bright rose
26	332	special rose pink
27	793	vanity fair
28	113	magenta
29	46	dark magenta
30	48	rose purple
31	126	mauve

Value	Filter Number	Name
32	49	medium purple
33	58	lavender
34	199	palace blue
35	119	dark blue
36	132	medium blue
37	120	deep blue
38	165	daylight blue
39	161	slate blue
40	118	light blue
41	68	sky blue
42	143	pale navy blue
43	131	marine blue
44	115	peacock blue
45	172	lagoon blue
46	116	medium blue green
47	90	dark yellow green
48	139	primary green
49	122	fern green
50	89	moss green
51	124	dark green
52	88	lime green
53	138	pale green
54	203	Quarter CT Blue
55	202	Half CT Blue
56	201	FULL CT Blue
57	200	double CT Blue
58	206	Quarter CT Orange
59	205	Half CT Orange
60	204	FULL CT Orange
61-179		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.

**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.

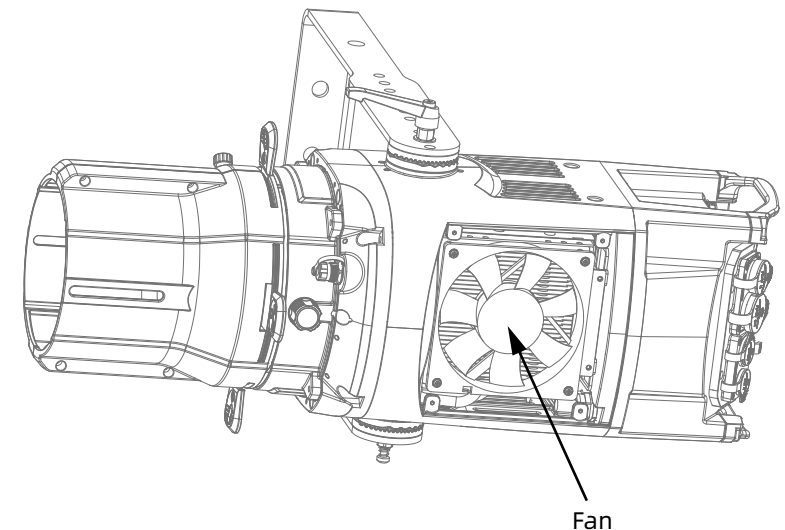
- When the lens is cracked or otherwise damaged, it should be replaced in a timely manner;
- When the brightness significantly decreases, the LED may have reached its expiration date and should be replaced in a timely manner;
- When the fixture cannot start, please check if the fixture power fuse is 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

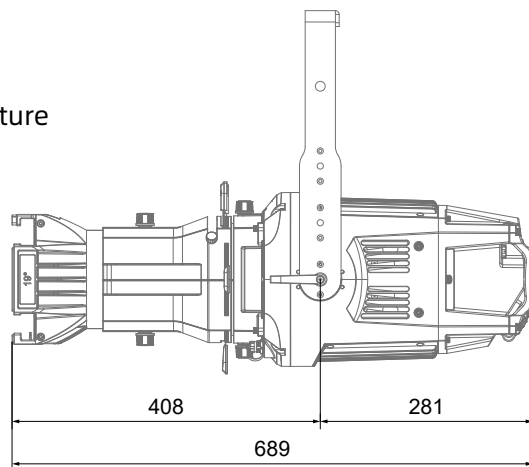
Weak light efficiency and uneven light spot	LED aging	Replace
	LED not centered with the lens	Adjust LED
	The optical mirror has accumulated dust or stains	Clean
	The optical mirror is damaged	Replace
Impure color	Weakening of light efficiency	Replace led PCB
⚠ Attention! The above analysis is for abnormal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



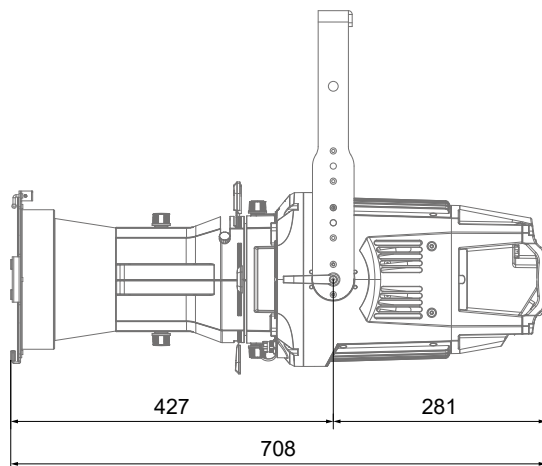
Appendix

Dimension of the whole fixture
after installing the lens

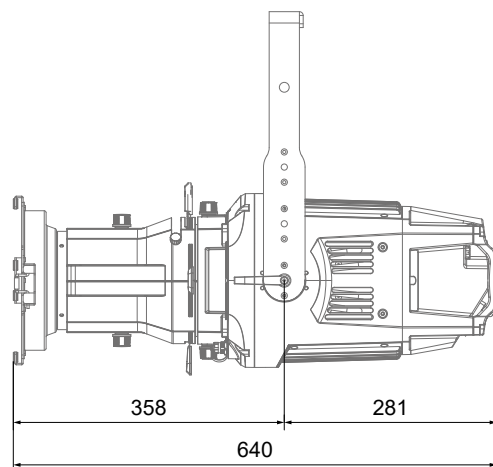
19°、26°、36°、50° lens



14° lens



70° lens



Focus thread lens

