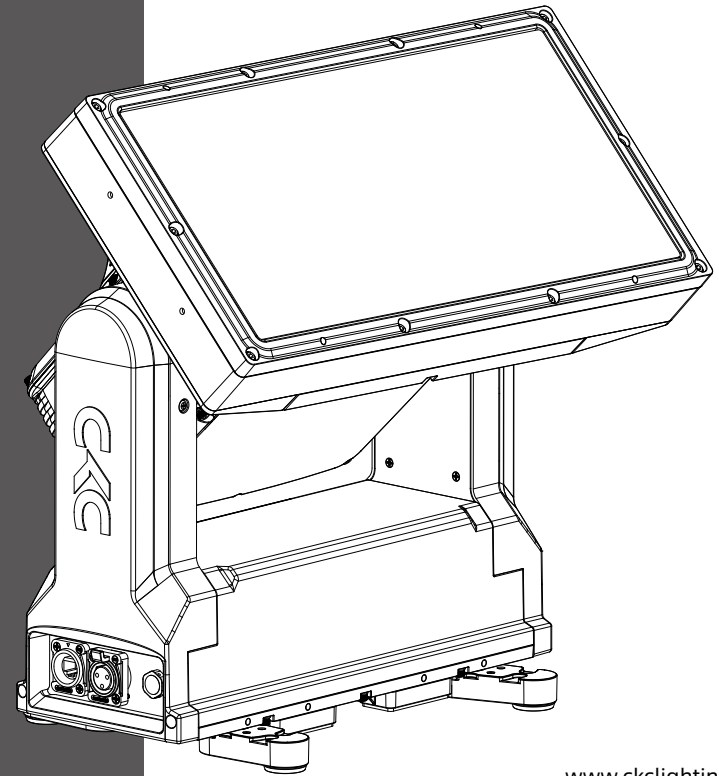


**CKC**

# AK M Blast



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

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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.



- 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 65 °C , please do not touch it with bare hands.

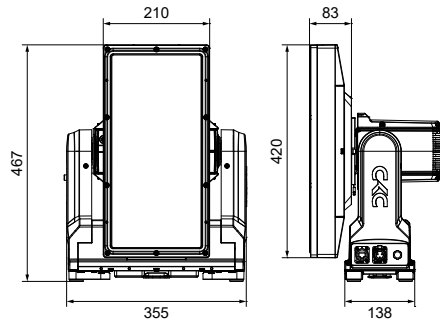
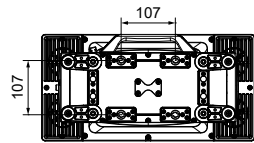
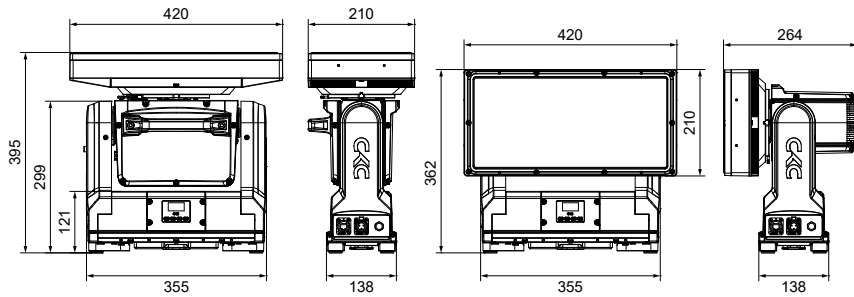


- The lighting fixtures must be installed in a sufficiently ventilated area, at least 0.5m away from adjacent surfaces, to ensure that no ventilation holes are blocked;
- Do not install the lighting fixtures directly on flammable objects;
- The minimum distance between all outer surfaces of the lamp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

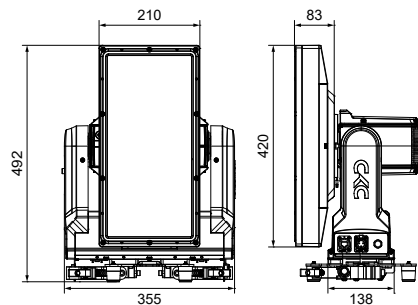
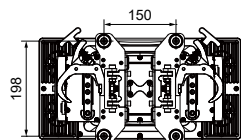
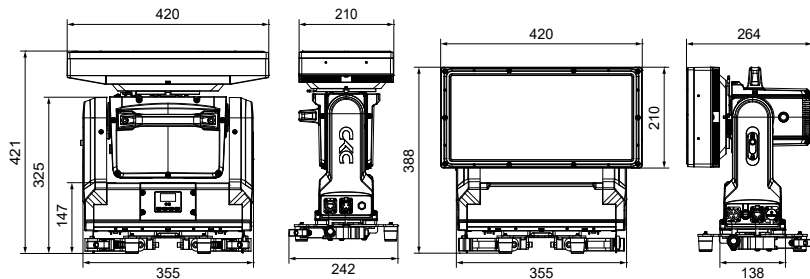
## 2. Product Introduction

### 2.1 Exterior dimensions of lighting fixtures

Normal version:  
420 × 210 × 395 mm

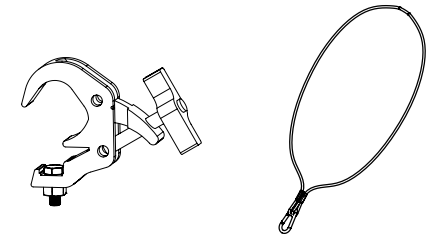


Integrated clamp version:  
420 × 242 × 421 mm



### 2.2 Packaging accessories

Name	QTY
Clamp	2 PCS
Safety cable	1 PCS



### 3. Main technical parameters of the equipment

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

#### ● Electrical parameter

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

	Power	Power factor	Input Current
Rated power	440W	0.99F	1.976A 220V
Strobe power	1600W	0.99F	6.82A 220V

#### ● Source lifespan

> 20000 hours

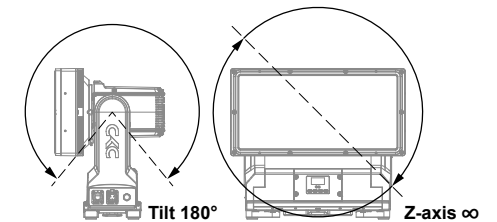
#### ● Optical system

Source: 1224×1.5W RGB LED + 432×5W CW LED  
Output luminous flux: 80000 Lm  
Beam angle: 112° (CW LED) / 115° (RGB LED)  
CCT: 2400 ~ 8500 K

#### ● Pan/Tilt

**Pan scan:**  
Infinite 8-bit/16 bit precision scanning

**Tilt scan:**  
180° 8-bit/16bit precision scanning



#### ● Control and programming

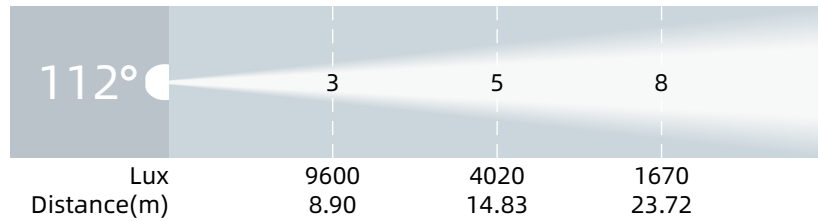
Control channel: 24CH/55CH/91CH/133CH/140CH/180CH/21CH+156CH/21CH+78CH

Protocol: DMX512, RDM, ArtNet/sACN

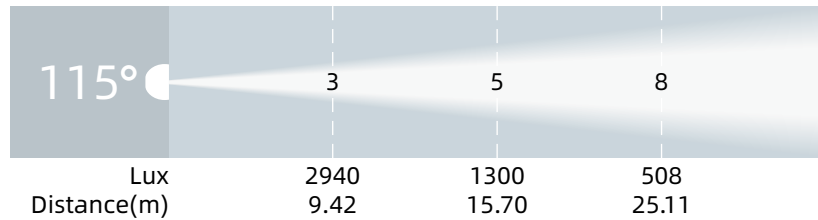
Data connect: 3 pin signal in/out, RJ45 in/out

● **Illumination draw**

CW LED



RGB LED



● **Other effect function**


Fast electronic strobe: 1~25Hz     Dimming curves: 4 types  
 Built in effects: white light, RGB, etc., with about 40 types available

● **Other features and functions**

Weight: 17.5 KG (Normal version)  
 19 KG (Integrated light hook version)

**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.

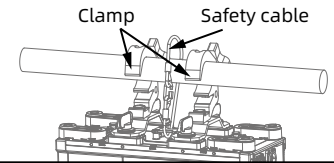
**5. Installation Requirements Explanation**

5.1 Clamp install

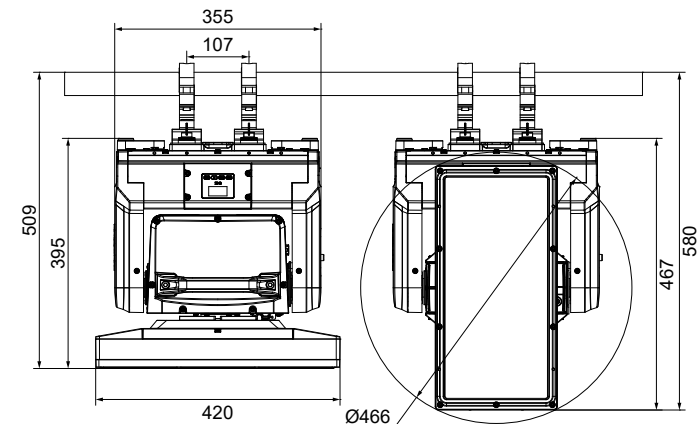
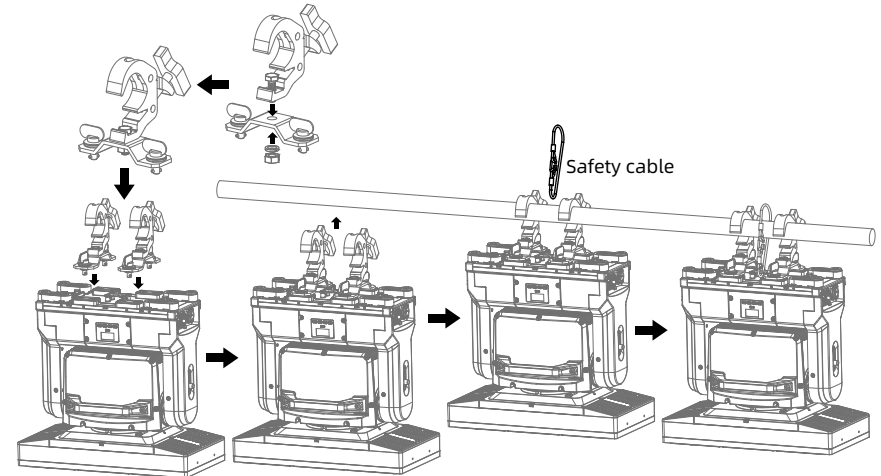


**Warning !**

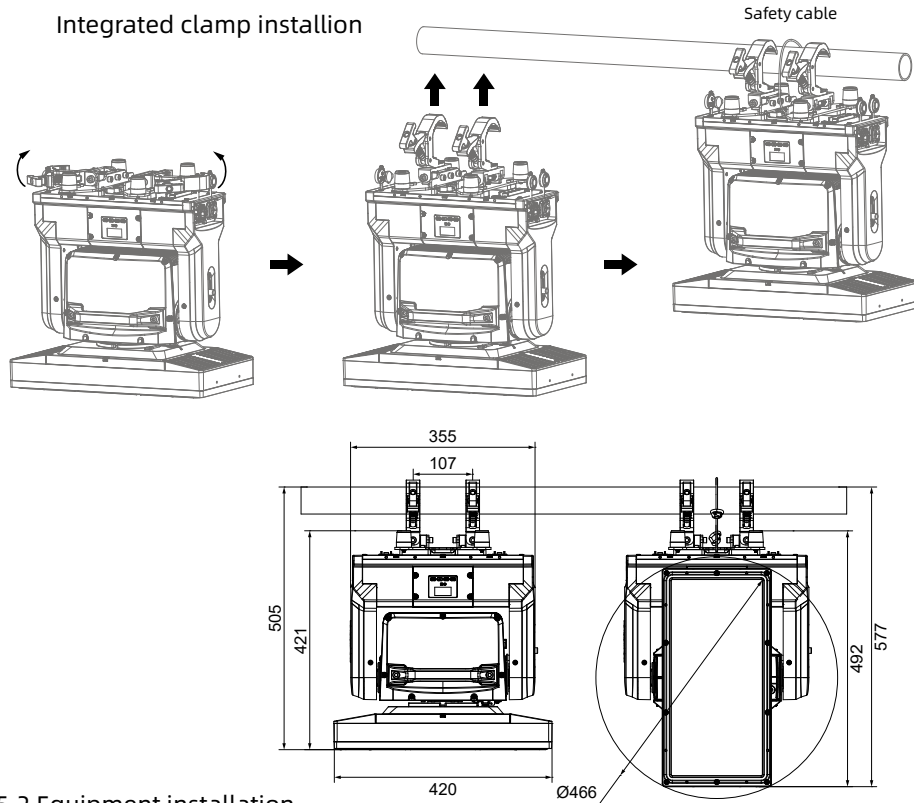
The clamp is installed on the handle. Insert the clamp into the handle mounting hole horizontally and tighten it with bolts (the shape of clamp shall be subject to the actual object).



Quick lock and clamp install



Integrated clamp installion

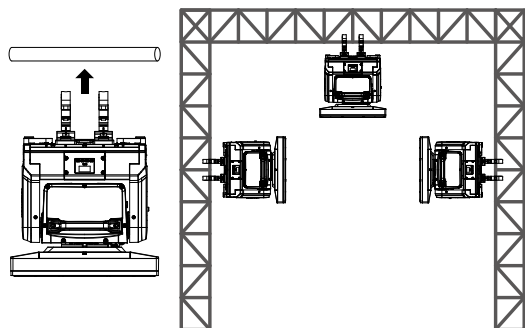


Safety cable

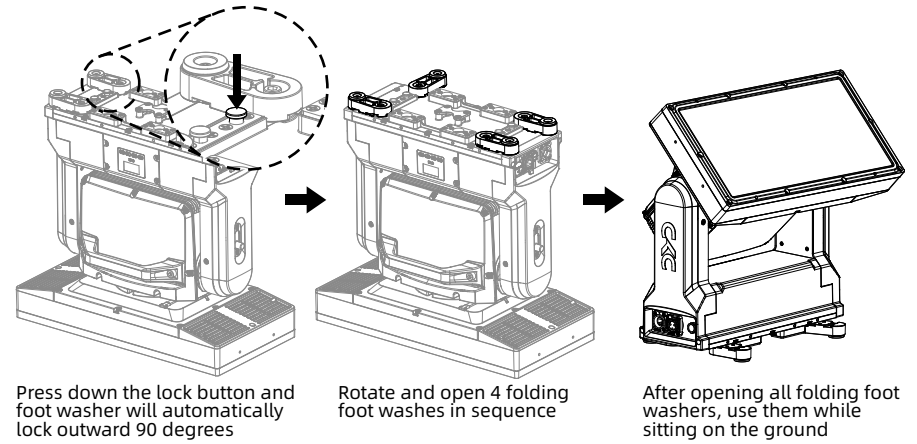
5.2 Equipment installation

- 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). 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 Foot washer installation



Press down the lock button and foot washer will automatically lock outward 90 degrees

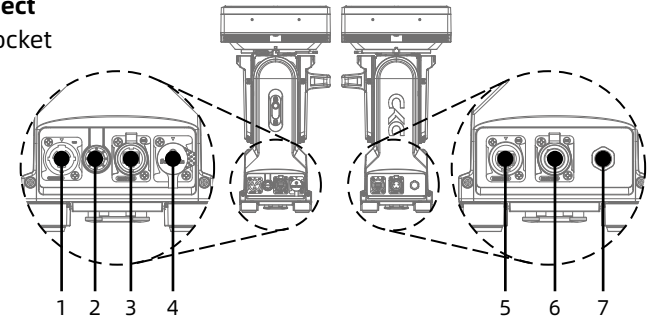
Rotate and open 4 folding foot washers in sequence

After opening all folding foot washers, use them while sitting on the ground

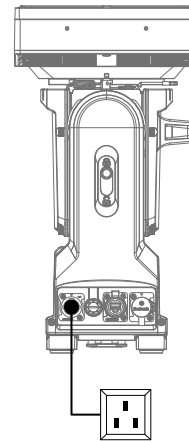
6. Power、Signal connect

6.1 Power and signal socket

1. Power input
2. Fuse holder
3. Network input
4. 3Pin XLR male
5. Network output
6. 3Pin XLR female
7. Breathable valve



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

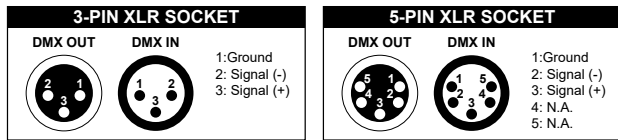
Due to power limitations, a 1.5 square meter power cord can carry up to 2 products at 230V



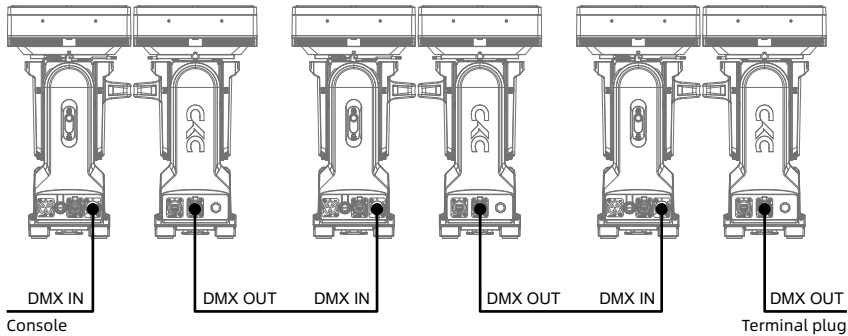
**Warning !**

- 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.

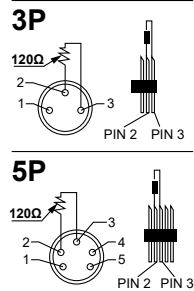
6.3 Signal connect



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.

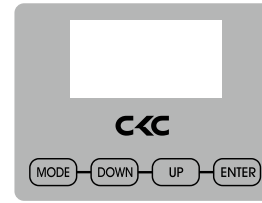


Connect a shielded twisted pair signal cable from the DMX output port of the controller to the DMX input port of the first device, and from the DMX output port of the first device to the DMX input port of the second device, and so on, until all the lamps are connected. Then install a terminal plug on 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 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			
AK M Blast			
Ethernet Init ...			
Motor Reset			
Please Wait ...			
Menu Option	Level 1	Level 2	
<b>DMX Settings</b>	DMX Address	001 - XXX	
		24CH	
		55CH	
		91CH	
		133CH	
		140CH	
		180CH	
		21CH+156CH	
		21CH+78CH	
	No DMX Status	Hold Last	
		Fade to black	
	Protocol	Net Protocol	Art-Net/sACN / Dmx
		Universe	0- 32767
		IP	2.x.x.x
		Subnet Mask	255.0.0.0
Dual Universe	Net Switch	Off	
	KlingNet	ON	
	Active	Yes / No	
Dual Universe	Select Signal	Art-Net/sACN	
	Universe	0- 32767 (Default=2)	
	LED Address	001 - 512	
	Pan	0- 255	

<b>Control</b>	Manual Control	Tilt	0- 255
		RGB Dimmer	0%-100%
		Red	0- 255
		Green	0- 255
		Blue	0- 255
		CW Strobe Dimmer	0%-100%
		CCT	2400K - 8500K
		Virtual Color	
	Primary	On	
		Off	
	Secondary	On	
		Off	
	Reset	All	
		Pan	
		Tilt	
	Self Test	All	
		Dimmer	
Movement			
Strobe LED			
Color LED			
Fan Mode	Auto		
	High		
	Silent		
Movement	Pan Invert	Off	
		On	
	Tilt Invert	Off	
		On	
	Pan Tilt Speed	1 - 4	
	Pan Degree	360	
		540	
	Pan Path	Continue	
Short			
Pan Tilt Feedback	Off		
	On		
Hibernation	Off		
	1-99M		
Dim Modes	Standard		
	Stage		
	TV		
	Architectural		
	Theatre		
	Stage 2		
	1-99M	0s - 10s	

<b>Settings</b>	Dim Curves	Linear
		Square
		Square Inverse
		S-Curve
	Zone Flip	Default
		Horizontally
		Vertically
		Intersection
	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 - 5min (Default 1 min)	
	Screen Lock OFF - 10s - 5 min	
	Rotate Display YES / NO / Auto	
Reset Defaults	Yes/No	
<b>INFO</b>	Time	Current Run Time
		Total Run Time
		Last Run Time
	Temperature	Head
		Base
		Max
	Fan Speed	Head
		Base
	DMX Values	Pan
		Tilt
		...
	Product ID's	RDM UID
	Error Logs	Fixture Errors
	Software Version	1U:V1.0.X
		2U:V1.0.X
3U:V1.0.X		
4U:V1.0.X		
5U:V1.0.X		
	Pan 000 - 255	
	Tilt 000 - 255	
	All Red 000 - 255	
	All Green 000 - 255	
	All Blue 000 - 255	

<b>Service (Passcode = 050)</b>	Calibration	All CW Strobe 000 - 255
		Red 1 0-255
		Green 1 0-255
		Blue 1 0-255
		....
		Red 36 0-255
		Green 36 0-255
		Blue 36 0-255
		CW Strobe 1 0-255
		.....
		CW Strobe 48 0-255
		Reset Last Run
	Reset Error Log	Yes / No
	Update Fireware	On / Off

**8.DMX control channel table :**  
channel table 1 :

24	55	91	133	140	180	Value	Function
1	1	1	1	1	1	000-255	Pan
2	2	2	2	2	2	000-255	Pan fine
3	3	3	3	3	3	000-255	Tilt
4	4	4	4	4	4	000-255	Tilt fine
5	5	5	5	5	5	0-2	PAN Continuous rotation
						3-126	Disabled
						127-129	Rotate Clockwise Fast → Slow
						130-253	No Rotation
5	5	5	5	5	5	254-255	Rotate Counter-Clockwise Fast → Slow No Rotation
6	6				6	0-255	Master Dimmer Intensity 0 → 100%
7	7	6	6	6	7	0-255	CW Dimmer Intensity 0 → 100%
8	8	7	7	7	8		CW Strobe Mode
						0-31	Close
						32-63	Open
						64-95	All Strobe: slow->fast
						96-127	Open
						128-159	All Pulse Strobe: slow->fast
						160-191	Open
						192-207	Single Random
						208-223	Random
224-255	Open						
9	9	8	8	8	9	0-255	RGB Dimmer Intensity 0 → 100%
							RGB Strobe Mode

10	10	9	9	9	10	0-31	Close	
						32-63	Open	
						64-95	All Strobe: slow->fast	
						96-127	Open	
						128-159	All Pulse Strobe: slow->fast	
						160-191	Open	
						192-207	Single Random	
						208-223	Random	
						224-255	Open	
								10
11	11	11	11	11	11		RGB Center Strobe Mode	
						0-31	Close	
						32-63	Open	
						64-95	All Strobe: slow->fast	
						96-127	Open	
						128-159	All Pulse Strobe: slow->fast	
						160-191	Open	
						192-207	Single Random	
						208-223	Random	
						224-255	Open	
11	11				11	0-255	All Red Red Saturation 0 → 100%	
12	12				12	0-255	All Green Green Saturation 0 → 100%	
13	13				13	0-255	All Blue Blue Saturation 0 → 100%	
14	14				10	14		RGB CCT
							0-23	Open
							24-85	2400K → 8500K (See Sheet)
						96-255	8500K	
15	15				11	15		RGB Color Wheel
							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							
							CW Strobe Effect Selection	
						0-15	No Function	
						16-21	FX Selection 1	



20	20	16	20	88-93	FX Selection 13
				94-99	FX Selection 14
				100-105	FX Selection 15
				106-111	FX Selection 16
				112-117	FX Selection 17
				118-123	FX Selection 18
				124-129	FX Selection 19
				130-135	FX Selection 20
				136-141	FX Selection 21
				142-147	FX Selection 22
				148-153	FX Selection 23
				154-159	FX Selection 24
				160-165	FX Selection 25
				166-171	FX Selection 26
				172-177	FX Selection 27
				178-183	FX Selection 28
				184-189	FX Selection 29
				190-195	FX Selection 30
				196-201	FX Selection 31
				202-207	FX Selection 32
208-213	FX Selection 33				
				214-219	FX Selection 34
				220-225	FX Selection 35
				226-231	FX Selection 36
				232-237	FX Selection 37
				238-243	FX Selection 38
				244-249	FX Selection 39
				250-255	FX Selection 40
21	21	17	21	RGB Effect Speed	
				0-126	Slow → Fast
				127-128	Stop
				129-255	Rev Fast → Slow
				RGB Effect Offset	
				0	Idle
				1	Fixture Offset 10 Degrees
				2	Fixture Offset 20 Degrees
				3-34	Fixture Offset...
				35	Fixture Offset 350 Degrees
				36	Synchronized
				37-49	Random Fixture Offset
				50-59	Random Pixel Order
				60-69	Random Steps
				70-79	Idle
22	22	18	22	Effect Fade ( Must switch to Steps mode to disable trailing effect )	

23	23	12	12	19	23	80-89	Sinewave- Cross		
						90-99	Sinewave- Full		
						100-109	Sawtooth- Cross		
						110-119	Sawtooth- Full		
						120-129	Ramp Up		
						130-139	Ramp Down		
						140-149	Steps		
						150-255	Idle		
								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								
140	9.0s								
141	10s								
142-255	Idle								
		Control							
0-3	Idle								
4-7	Fan Mode: Auto								
8-11	Fan Mode: Silent								
12-15	Fan Mode: High								
16-19	Pan/Tilt Reset								
20-23	Pan Reset								
24-27	Tilt Reset								

						28-31	Pan Tilt Speed 1
						32-35	Pan Tilt Speed 2
						36-39	Pan Tilt Speed 3
						40-43	Pan Tilt Speed 4
						44-47	Pan Tilt Shortest Path
						48-51	Pan Tilt Continue Path
						52-55	Pan Range 540
						56-59	Pan Range 360
						60-63	Tilt Invert ON
						64-67	Tilt Invert OFF
						68-99	Idle
							Refresh Rate (Hz)
						100-104	900
						105-109	1000
						110-114	1100
						115-119	1200
						120-124	1300
						125-129	1400
						130-134	1500
						135-139	2500
						140-144	4000
						145-149	5000
						150-154	6000
						155-159	10000
						160-164	15000
						165-169	20000
						170-173	25000
							Zone Flip
						175-176	Default Zone Arrangement
						177-178	Flip Zones Horizontally
						179-180	Flip Zones Vertically
						181-182	Flip Zones Horizontally and Vertically
						183-200	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
	25	14	14	21	25	0-255	Red1
	26	15	15	22	26	0-255	Green1
	27	16	16	23	27	0-255	Blue1
	..	..	..	..	..	...	...
		47	47	54	58	0-255	Red12
		48	48	55	59	0-255	Green12
		49	49	56	60	0-255	Blue12

					..		...
					94	0-255	Red 24
	49				95	0-255	Green 24
	50				96	0-255	Blue 24
		50				0-255	StrobeLine Red 1
		51				0-255	StrobeLine Green 1
		52				0-255	StrobeLine Blue 1
		..					...
		65				0-255	StrobeLine Red 6
		66				0-255	StrobeLine Green 6
		67				0-255	StrobeLine Blue 6
	51	68	50	57	97	0-255	CW Strobe 1
	52	69	51	58	98	0-255	CW Strobe 2
	53	70	52	59	99	0-255	CW Strobe 3
	54	..	..	60	100	0-255	CW Strobe 4
		..	..	..	..	...	...
		..	..	..	..	...	...
		79	61	68	108	0-255	CW Strobe 12
		80	62	69	109	0-255	CW Strobe 13
		..	..	..	..	...	...
		..	..	..	..	...	...
		90	72	79	119	0-255	CW Strobe 23
		91	73	80	120	0-255	CW Strobe 24
			..	..	..	...	...
			..	..	..	...	...
			96	103	143	0-255	CW Strobe 47
			97	104	144	0-255	CW Strobe 48
			98	105	145		StrobeLine Red 1
			99	106	146		StrobeLine Green 1
			100	107	147		StrobeLine Blue 1
			..	..	..		...
			..	..	..		...
			..	..	..		...
			131	138	178		StrobeLine Red 12
			132	139	179		StrobeLine Green 12
			133	140	180		StrobeLine Blue 12

## 21CH+.....:

21CH	Value	Function
1	0-255	Pan
2	0-255	Pan fine
3	0-255	Tilt
4	0-255	Tilt fine
5		PAN Continuous rotation
	0-2	Disabled
	3-126	Rotate Clockwise Fast → Slow
	127-129	No Rotation
	130-253	Rotate Counter-Clockwise Fast → Slow
	254-255	No Rotation
6	0-255	Master Dimmer Intensity 0 → 100%
7	0-255	All Red Red Saturation 0 → 100%
8	0-255	All Green Green Saturation 0 → 100%
9	0-255	All Blue Blue Saturation 0 → 100%
10	0-255	All Dimmer
11		RGB Strobe Mode
	0-31	Close
	32-63	Open
	64-95	All Strobe: slow->fast
	96-127	Open
	128-159	All Pulse Strobe: slow->fast
	160-191	Open
	192-207	Single Random
	208-223	Random
	224-255	Open
12	0-255	Center Red Red Saturation 0 → 100%
13	0-255	Center Green Green Saturation 0 → 100%
14	0-255	Center Blue Blue Saturation 0 → 100%
15	0-255	Center Dimmer
16		RGB Center Strobe Mode
	0-31	Close
	32-63	Open
	64-95	All Strobe: slow->fast
	96-127	Open
	128-159	All Pulse Strobe: slow->fast
	160-191	Open
192-207	Single Random	

	208-223	Random	
	224-255	Open	
17	0-255	CW (Must be turned on together with CW Dimmer to produce white light, controlling 156CH CW)	
18	0-255	CW Dimmer	
19		CW Strobe Mode	
	0-31	Close	
	32-63	Open	
	64-95	All Strobe: slow->fast	
	96-127	Open	
	128-159	All Pulse Strobe: slow->fast	
	160-191	Open	
	192-207	Single Random	
	208-223	Random	
	224-255	Open	
			Dim Modes
		0-20	Standard
		21-40	Stage
		41-60	TV
	61-80	Architectural	
	81-100	Theatre	
	101-120	Stage 2	
20		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	
	140	9.0s	
141	10s		
	142-255	Idle	

		Control
	0-3	Idle
	4-7	Fan Mode: Auto
	8-11	Fan Mode: Silent
	12-15	Fan Mode: High
	16-19	Pan/Tilt Reset
	20-23	Pan Reset
	24-27	Tilt Reset
	28-31	Pan Tilt Speed 1
	32-35	Pan Tilt Speed 2
	36-39	Pan Tilt Speed 3
	40-43	Pan Tilt Speed 4
	44-47	Pan Tilt Shortest Path
	48-51	Pan Tilt Continue Pat
	52-55	Pan Range 540
	56-59	Pan Range 360
	60-63	Tilt Invert ON
	64-67	Tilt Invert OFF
	68-99	Idle
		Refresh Rate (Hz)
21	100-104	900
	105-109	1000
	110-114	1100
	115-119	1200
	120-124	1300
	125-129	1400
	130-134	1500
	135-139	2500
	140-144	4000
	145-149	5000
	150-154	6000
	155-159	10000
	160-164	15000
	165-169	20000
	170-173	25000
		Zone Flip
	175-176	Default Zone Arrangement
	177-178	Flip Zones Horizontally
	179-180	Flip Zones Vertically
	181-182	Flip Zones Horizontally and Vertically
	183-200	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

## +156CH

156CH	Value	Function
1	0-255	Red1
2	0-255	Green1
3	0-255	Blue1
	0-255	RGB...
34	0-255	Red12
35	0-255	Green12
36	0-255	Blue12
	0-255	RGB...
70	0-255	Red24
71	0-255	Green24
72	0-255	Blue24
73	0-255	StrobeLine Red 1
74	0-255	StrobeLine Green 1
75	0-255	StrobeLine Blue 1
76	0-255	StrobeLine Red 2
77	0-255	StrobeLine Green 2
78	0-255	StrobeLine Blue 2
	0-255	StrobeLine Red...
	0-255	StrobeLine Green...
	0-255	StrobeLine Blue...
79	0-255	StrobeLine Red 6
80	0-255	StrobeLine Green 6
81	0-255	StrobeLine Blue 6
	0-255	StrobeLine Red...
	0-255	StrobeLine Green...
	0-255	StrobeLine Blue...
106	0-255	StrobeLine Red 12
107	0-255	StrobeLine Green 12
108	0-255	StrobeLine Blue 12
109	0-255	CW Strobe 1
110	0-255	CW Strobe 2
111	0-255	CW Strobe 3
112	0-255	CW Strobe 4
	0-255	CW Strobe...
	0-255	CW Strobe 12
	0-255	CW Strobe...
156	0-255	CW Strobe 48





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 the 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 damaged	Replace
	Power pcb malfunction	Check/ replace
	Loose or poor contact of the circuit	Reconnect
	Switching power supply 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 on the power circuit pcb	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 the light guide column
	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 interferences within the operating range of the fan	Adjust the interference object
 <b>Attention!</b> The above analysis is for abnormal reference only. Non professionals are not allowed to disassemble and repair the machine		

