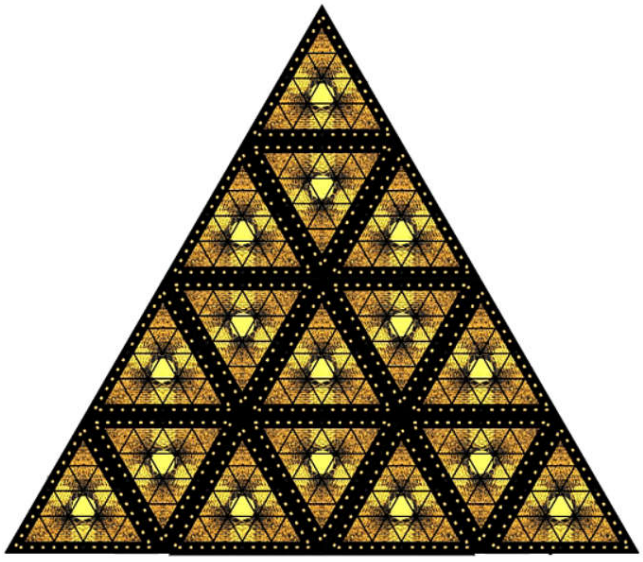
User Manual

Freedom Pixel 2000S



Thank you very much for purchasing this product. Before you use our product, please read carefully and fully understand all the safety instructions listed in this book to avoid potential danger of causing bodily injury, property loss or product damage. The Company shall not bear any direct or related losses arising from the failure to operate in accordance with the instructions

Safety Advice

This product is only for professional use and forbidden for family use.

Read the safety information section of this chapter before installing, energizing and maintaining this product.

Shock Protection

- Turn off the external power supply when opening the housing or replacing parts, or when the lamp is not in use.
- Ensure equipment reliability and use AC power supply with overload and grounding protection matching lamp voltage and frequency
- Use three-core power cables with rated load of more than 5A
- Ensure that the cable is in normal condition and suitable for the current flow of the connected equipment before use,
- When it is found that the power cable or plug is damaged, the lamp is wetted or the power supply part is obviously overheated, please disconnect the power supply immediately.
- Disconnect the power supply before replacing the fuse or bulb, and use the same model.
- Do not expose this product to rain or moist air

Ensure reliable grounding of equipment

Light Source Safety

- Long exposure to ultraviolet radiation from non-covered light sources can cause burns to eyes and skin. Do not look directly at the light source and the light source.
- Do not use the light with damaged housing, light shield, lens, protective screen or thermal insulation.
- If visible damage occurs to the protective screen, lens or ultraviolet screen on lamps and lanterns, it will be damaged to the extent of failure. If cracks or deep marks occur, they should be replaced.
- Lamps should only be used with a protective cover in the complete area.

Prevent burns and fires

- During use, the exterior temperature of the lamps may be relatively high. Avoid touching the human body or other objects. Please let the lamps cool sufficiently before handling.
- Ensure that flammable materials (such as fabrics, wood, paper, etc.) are at least 0.2 meters away from lamps and lanterns, and that flammable materials are as far away from the equipment as possible.
- When the ambient temperature exceeds 40 C (104 F), do not turn on the machine.In any case, do not modify the lamp, do not install non-original parts, do not paste any filter paper on the lens or other optical fittings.

Do not attempt to short-circuit fuses or temperature-controlled switches

Avoid falling injury

- Don't carry lamps and lanterns alone while working at high altitude
- Two evenly distributed lamp hooks shall be used on the hanger, and no single lamp hook shall be used.
- Ensure that the bracket and suspension system can support more than 10 times the weight of lamps and lanterns
- Lifting the fixtures and hanging safety ropes should not be placed on the handle of fixtures
- Safety rope shall be installed, and the safety rope shall be able to bear 10 times the weight of lamps and lanterns.
- Ensure complete tightening of external fittings and hangers
- When installing, repairing and moving lamps and lanterns, there should be a stable platform and a safety fence under it.
- Consult authorized after-sales department for related operations not described in this article.

Specification Parameters

Power Consumption: 250W

Light source：20W 2in1 LED(30pcs chips 1600K+20pcs chips 5600K) x 16pcs

0.2W 4000K LED x 150pcs

Lifetime: 60,000hours

Input Voltage: 90-240V/50-60Hz

Output Voltage: 24V 16A,PFC

Dimmer: 0-100% linear dimming

Display: LCD display

DMX Channel: 27/32/42/182

Power Connector: PowerCON input/output

DMX Connector: 3pin or 5pin input/output DMX XLR

Control Mode: DMX512 Control; Stand-Alone Mode; Master/Slave; Sound Control; Art-net;

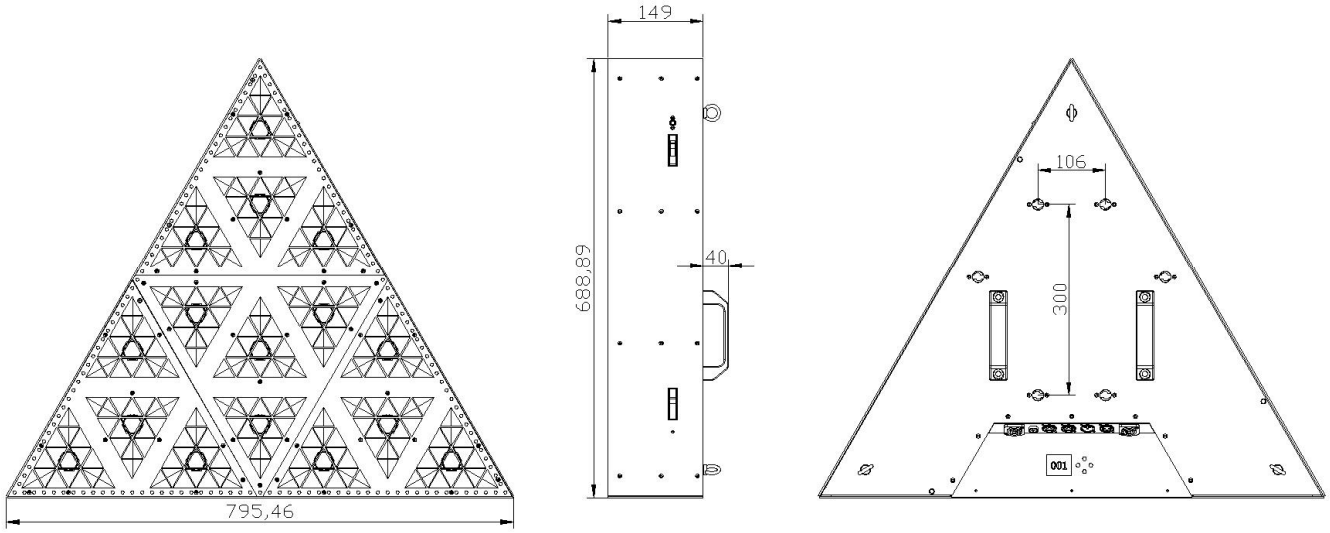
Kling-Net; RDM

IP Rating: IP20

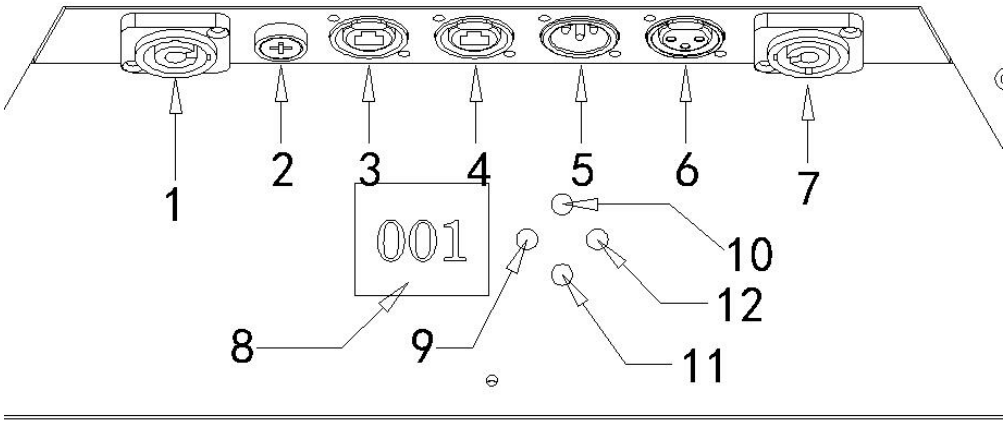
Dimension: 800X800X150mm

Net Weight: 8kgs

Product Dimension:(mm)

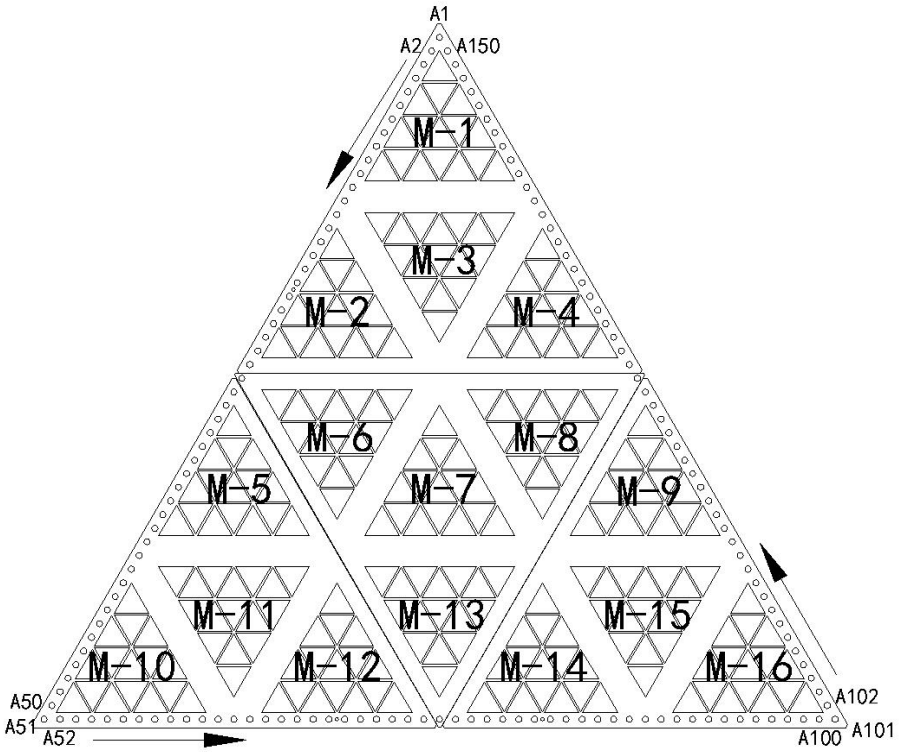


Product Diagram Connectors



1--Power input 2--Fuse 3--RJ45 input/output 4--RJ45 input/output
5--DMX input 6--DMX output 7--power output 8--Display menu
9--Menu list 10--Up button 11--down button 12--Yes button

LED Pixel Map



M-1----M-16：Main LED　　A1----A150：Background LED

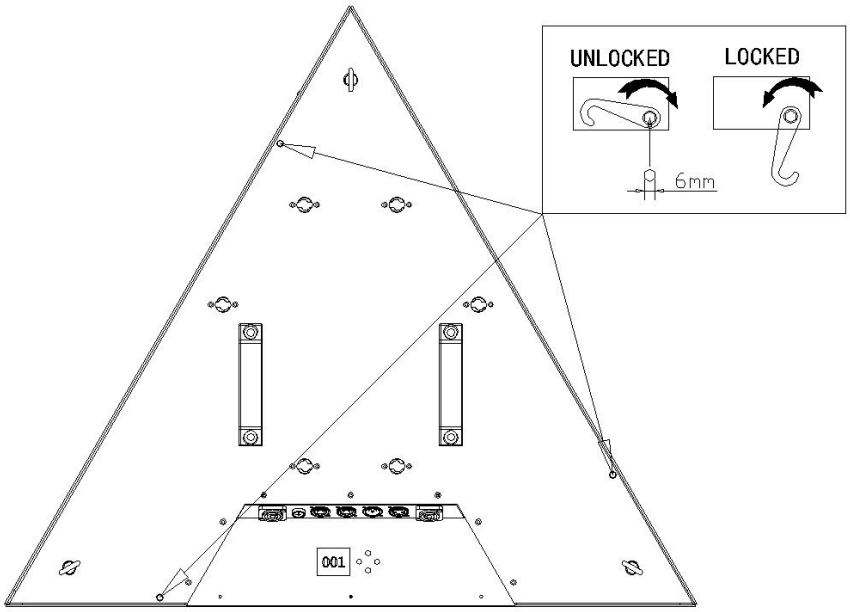
Installation Guidelines

Splice lock apply

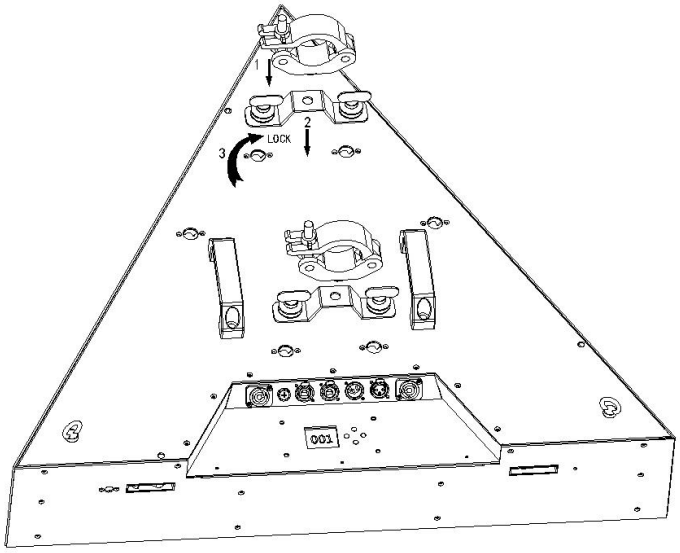
6mm Hexagonal screw driver rotation

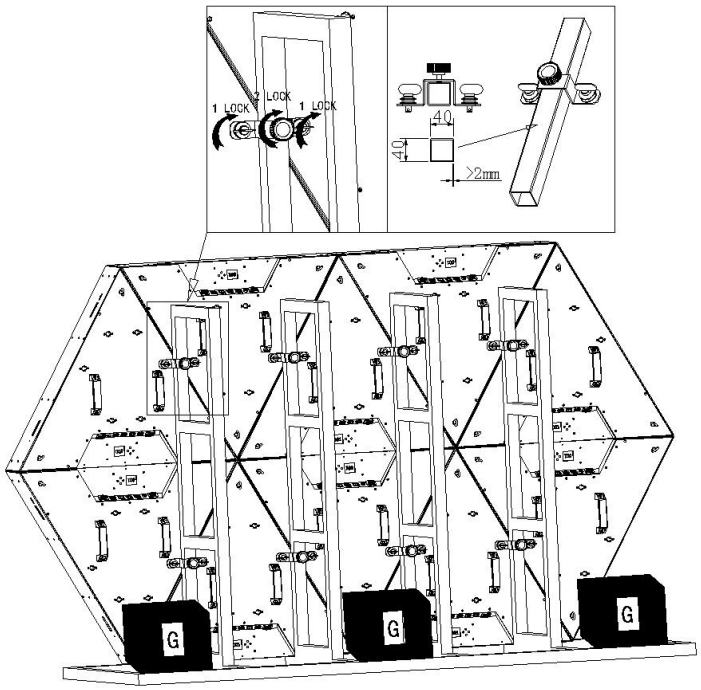
Counter clockwise rotation：LOCK

Clockwise rotation：UN-LOCK



1. Install fixture hook on OMEGA bracket and fasten screw
2. Install OMEGA bracket on lamp base and tighten fast lock clockwise
3. One person on each side of the lamp holds the lamp up, clips the lamp hook into the lamp pole and locks it tightly.
4. Pass the safety rope through the ring hole and tie it to the lamp pole





Back mounting fixture holder can be manufactured by itself or customized by contact with manufacturer or distributor.

Installation Notes：

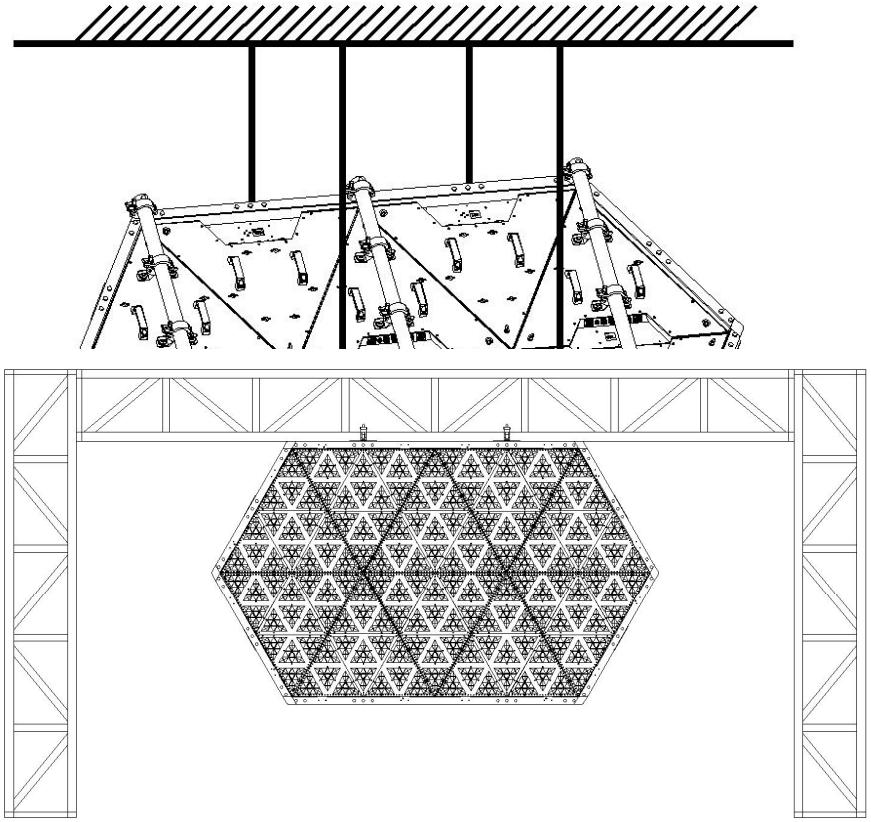
1. Verify that the hook and accessories are not damaged and can withstand 10 times the total weight of lamps, cables and accessories.
2. The lock must be rotated to the lock position.
3. The safety rope passes through the sling hole and is tied to the lamp pole.
4. When installing, repairing and moving lamps and lanterns, there should be a stable platform with a safety fence directly below it.
5. When installing, repairing and moving lamps and lanterns, there should be a stable platform with a safety fence directly below it.
6. Check that there is no combustible material in the range of 0.2 meters for lamps and lanterns
7. Check that the other lights are not directly illuminated on the lamp. Intense light can damage the protective case of the lamp.

When splicing and installing, the lamp holder should be fixed firmly or the counterweight should be increased. The counterweight should be more than five times of the total amount of the fixture.

The following installation methods need to use reinforcement accessories, otherwise there will be potential safety hazards.

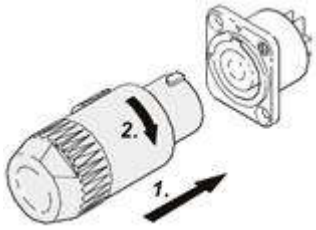
Reinforcement accessories need to be purchased separately. Please contact the manufacturer or distributor.

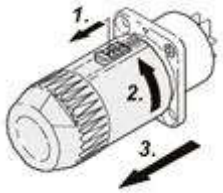
A large number of lamps and lanterns are spliced and used in suspension, and the back of the lamps and lanterns can not be installed on the lamp holder.



Power Voltage

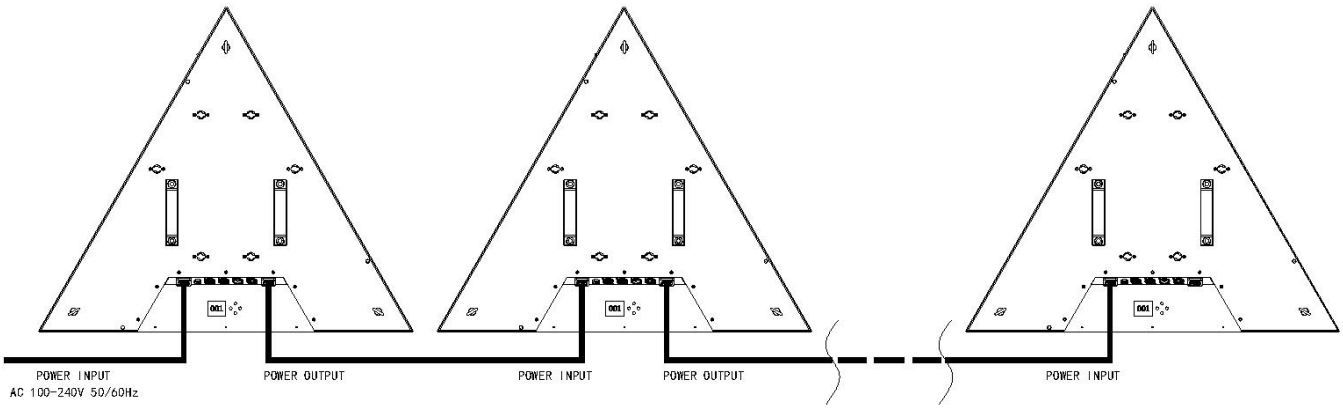
There is a switching power supply with PFC inside the fixture.
AC100V-240V 50/60Hz
Fuse 5×20，3A 250V





One end of the power cord has been installed with a plug matching the lamp power interface; the other end should be installed with a suitable power plug, three-pin plug with grounding. Installation must follow manufacturer's instructions。The table below gives some suggestions for pin-and-pin connection of plugs.。If you are unsure or in doubt, consult a qualified electrician

Connect power cord Dis-Connect power cord



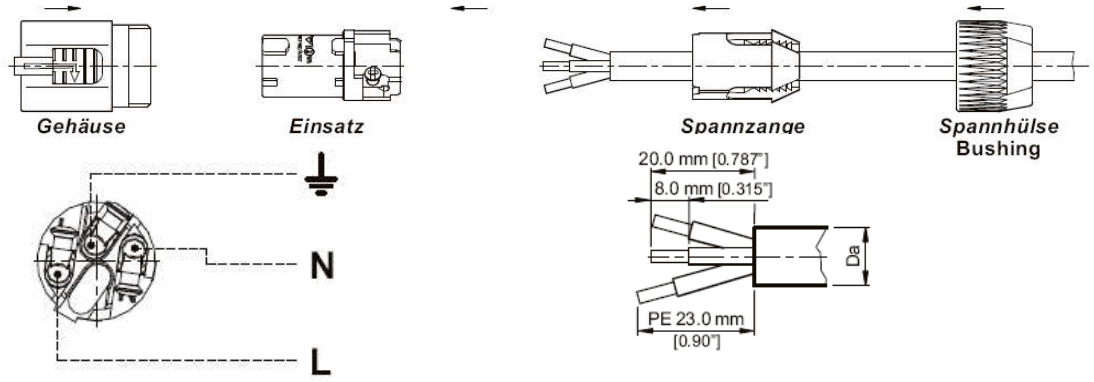
1. In order to prevent electric shocks, lamps must be grounded, and the main power supply must have safety and circuit breaker and grounding protection.

2. Please connect the lamp directly to AC power supply. No silicon box should be connected to avoid damaging the fixture.

3.When the lamp power supply is connected in series, the maximum current of the cable should not be greater than 16A.

When the power cord is scratched, the outer protective skin is broken or the length of service is too short, it should be replaced.

Power Wire Replacement

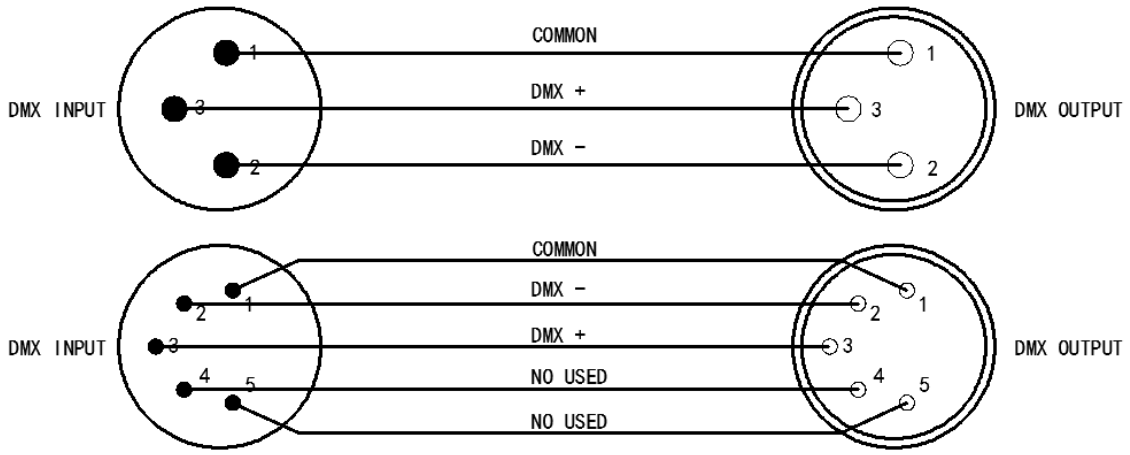


Wire colour	Plug	Mark
Brown	live wire	L
Blue	neutral line	N
Yellow/Green	Earth wire	⏚

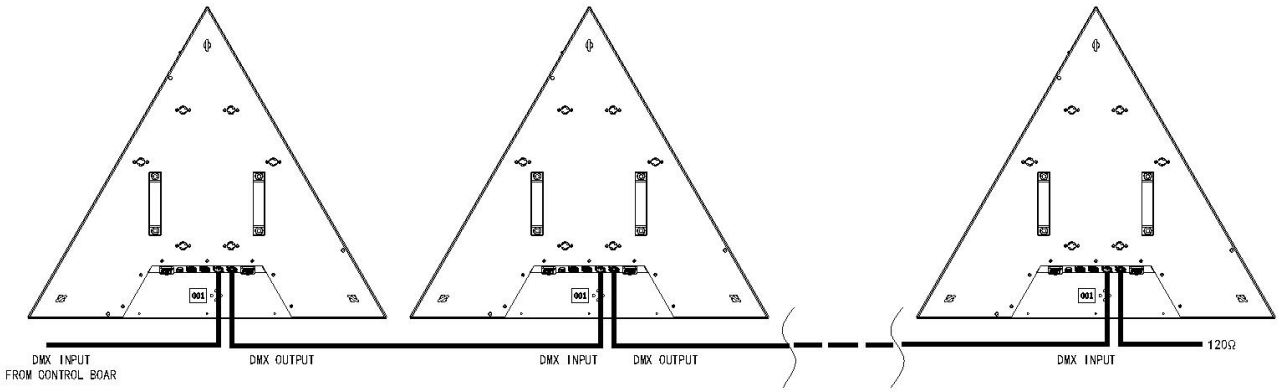
1. Remove the original power cord plug
2. Cut a cable about 1.5 meters long and 3*2 square in size.
3. Peel the cable according to the size shown above, and pass through the plug end cap and fastener.
4. Put the core in the right position on the pressing plug L-brown N-blue-yellow/green
5. Assemble the plug and tighten the end cap
6. The other end of the power cord is connected with a suitable three-pin plug with grounding.

Signal Connection

The lamp is input and output of DMX signal through XLR Cannon Plug, which is defined as follows:

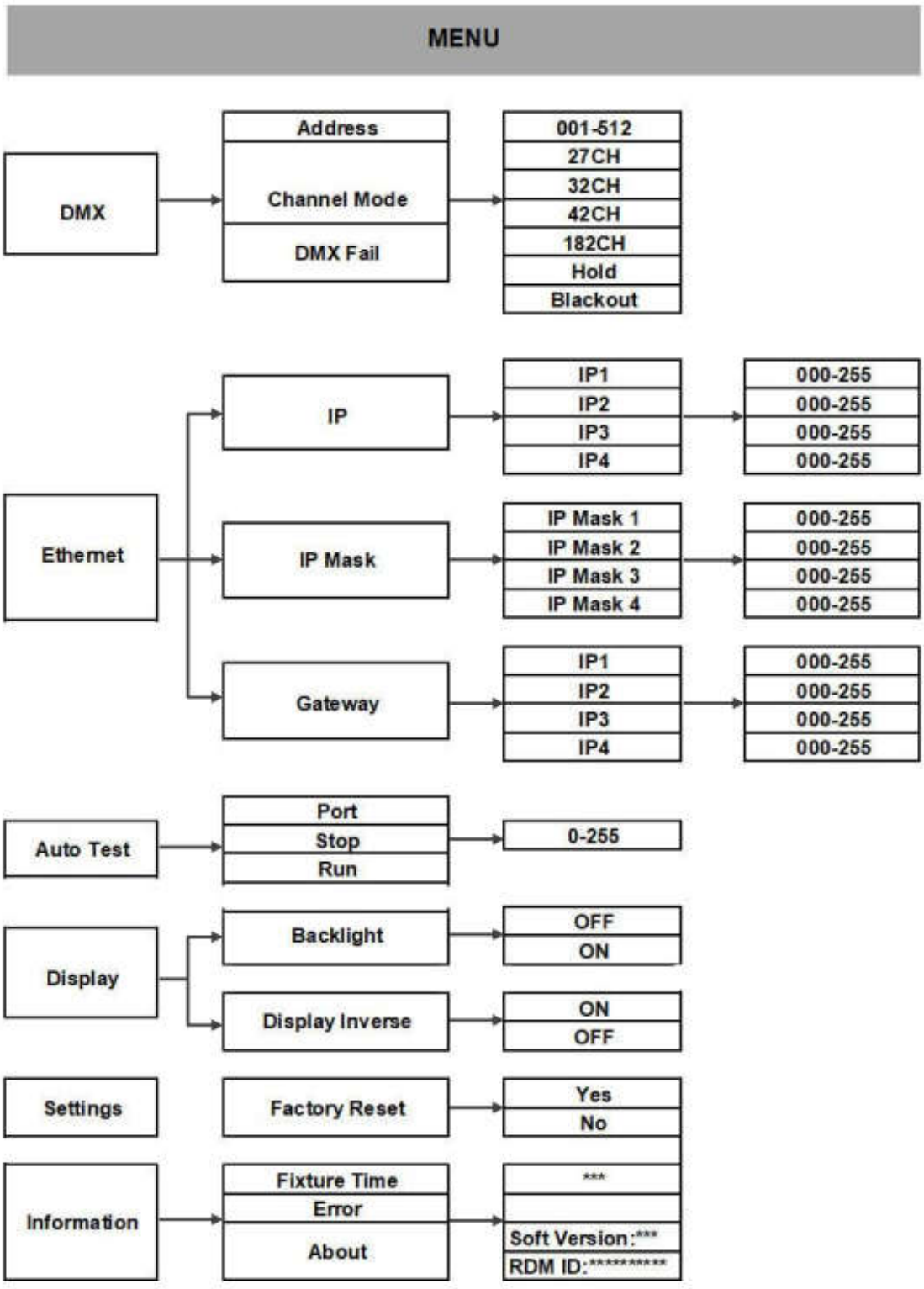


When the plug and socket of the core and the 5-core are connected, the 5-core Kanon pin 4/pin 5 is not used.



1. Connect a DMX signal line from the controller to the lamp signal input port
2. Connect a DMX signal line from the output port of the lamp signal to the next lamp.
3. Lamps DMX signal lines can only be connected in series. If you need parallel connection, please use signal distributor.
4. Wire with thicker diameter and signal amplifier are needed for long-distance transmission.
5. A 120 Ohm 1/4 W resistance is connected between the two and three legs of the last lamp signal output terminal.

Menu Operation



DMX Profile

27 Channels			
Channel	**Description**	**Value**	**Function**
1	Dimmer	0-255	Dimmer 0-100%
2	Strobe	0-3	Open
		4-103	Strobe Slow-Fast
		104-107	Open
		108-207	Pulsation Slow-Fast
		208-212	Open
		213-251	Random Strobe
		252-255	Open
3	LED 1	0-255	LED Color Intensity
4	LED 2	0-255	LED Color Intensity
5	LED 3	0-255	LED Color Intensity
6	LED 4	0-255	LED Color Intensity
7	LED 5	0-255	LED Color Intensity
8	LED 6	0-255	LED Color Intensity
9	LED 7	0-255	LED Color Intensity
10	LED 8	0-255	LED Color Intensity
11	LED 9	0-255	LED Color Intensity
12	LED 10	0-255	LED Color Intensity
13	LED 11	0-255	LED Color Intensity
14	LED 12	0-255	LED Color Intensity
15	LED 13	0-255	LED Color Intensity
16	LED 14	0-255	LED Color Intensity
17	LED 15	0-255	LED Color Intensity
18	LED 16	0-255	LED Color Intensity
19	CTO	0-10	No Function
		11-255	1600K-5600K
20	Macro	0-9	No Macro
		10-19	Program 1
		20-29	Program 2
		30-39	Program 3
		40-49	Program 4

		50-59	Program 5
		60-69	Program 6
		70-79	Program 7
		80-89	Program 8
		90-99	Program 9
		100-109	Program 10
		110-119	Program 11
		120-129	Program 12
		130-139	Program 13
		140-149	Program 14
		150-159	Program 15
		160-169	Program 16
		170-179	Program 17
		180-189	Program 18
		190-199	Program 19
		200-209	Program 20
		210-219	Program 21
		220-229	Program 22
		230-239	Program 23
		240-255	Program 24
21	Macro Starting Point	0-99	Starting Point 1
		100-199	Starting Point 2
		200-255	Starting Point 3
22	Macro Direction	0-127	Forward
		128-255	Backward
	Macro Speed	0-127	Color Snap Slow-Fast
23		128-255	Color Fade Slow-Fast
24	Background LEDs Macro	0-9	No Macro
		10-19	Program 1
		20-29	Program 2
		30-39	Program 3
		40-49	Program 4
		50-59	Program 5
		60-69	Program 6
		70-79	Program 7

		80-89	Program 8
		90-99	Program 9
		100-109	Program 10
		110-119	Program 11
		120-129	Program 12
		130-139	Program 13
		140-149	Program 14
		150-159	Program 15
		160-169	Program 16
		170-179	Program 17
		180-255	Program 18
25	Background LEDs Macro Starting Point	0-99	Starting Point 1
		100-199	Starting Point 2
		200-255	Starting Point 3
26	Background LEDs Macro Direction	0-127	Forward
		128-255	Backward
27	Background LEDs Macro Speed	0-255	Slow-Fast

32 Channels			
Channel	**Description**	**Value**	**Function**
1	LED 1 1600K	0-255	LED Color Intensity
2	LED 1 5600K	0-255	LED Color Intensity
3	LED 2 1600K	0-255	LED Color Intensity
4	LED 2 5600K	0-255	LED Color Intensity
5	LED 3 1600K	0-255	LED Color Intensity
6	LED 3 5600K	0-255	LED Color Intensity
7	LED 4 1600K	0-255	LED Color Intensity
8	LED 4 5600K	0-255	LED Color Intensity
9	LED 5 1600K	0-255	LED Color Intensity

10	LED 5 5600K	0-255	LED Color Intensity
11	LED 6 1600K	0-255	LED Color Intensity
12	LED 6 5600K	0-255	LED Color Intensity
13	LED 7 1600K	0-255	LED Color Intensity
14	LED 7 5600K	0-255	LED Color Intensity
15	LED 8 1600K	0-255	LED Color Intensity
16	LED 8 1600K	0-255	LED Color Intensity
17	LED 9 1600K	0-255	LED Color Intensity
18	LED 9 1600K	0-255	LED Color Intensity
19	LED 10 1600K	0-255	LED Color Intensity
20	LED 10 5600K	0-255	LED Color Intensity
21	LED 11 1600K	0-255	LED Color Intensity
22	LED 11 5600K	0-255	LED Color Intensity
23	LED 12 1600K	0-255	LED Color Intensity
24	LED 12 5600K	0-255	LED Color Intensity
25	LED 13 1600K	0-255	LED Color Intensity
26	LED 13 5600K	0-255	LED Color Intensity
27	LED 14 1600K	0-255	LED Color Intensity
28	LED 14 5600K	0-255	LED Color Intensity
29	LED 15 1600K	0-255	LED Color Intensity
30	LED 15 5600K	0-255	LED Color Intensity
31	LED 16 1600K	0-255	LED Color Intensity
32	LED 16 5600K	0-255	LED Color Intensity

42 Channel			
Channel	**Description**	**Value**	**Function**
1	Dimmer	0-255	Dimmer 0-100%
2	Strobe	0-3	Open
		4-103	Strobe Slow-Fast
		104-107	Open
		108-207	Pulsation Slow-Fast
		208-212	Open
		213-251	Random Strobe
		252-255	Open
3	LED 1 1600K	0-255	LED Color Intensity
4	LED 1 5600K	0-255	LED Color Intensity
5	LED 2 1600K	0-255	LED Color Intensity
6	LED 2 5600K	0-255	LED Color Intensity
7	LED 3 1600K	0-255	LED Color Intensity
8	LED 3 5600K	0-255	LED Color Intensity
9	LED 4 1600K	0-255	LED Color Intensity
10	LED 4 5600K	0-255	LED Color Intensity
11	LED 5 1600K	0-255	LED Color Intensity
12	LED 5 5600K	0-255	LED Color Intensity
13	LED 6 1600K	0-255	LED Color Intensity
14	LED 6 5600K	0-255	LED Color Intensity
15	LED 7 1600K	0-255	LED Color Intensity
16	LED 7 5600K	0-255	LED Color Intensity
17	LED 8 1600K	0-255	LED Color Intensity
18	LED 8 1600K	0-255	LED Color Intensity
19	LED 9 1600K	0-255	LED Color Intensity
20	LED 9 1600K	0-255	LED Color Intensity
21	LED 10 1600K	0-255	LED Color Intensity
22	LED 10 5600K	0-255	LED Color Intensity
23	LED 11 1600K	0-255	LED Color Intensity
24	LED 11 5600K	0-255	LED Color Intensity
25	LED 12 1600K	0-255	LED Color Intensity
26	LED 12 5600K	0-255	LED Color Intensity

27	LED 13 1600K	0-255	LED Color Intensity
28	LED 13 5600K	0-255	LED Color Intensity
29	LED 14 1600K	0-255	LED Color Intensity
30	LED 14 5600K	0-255	LED Color Intensity
31	LED 15 1600K	0-255	LED Color Intensity
32	LED 15 5600K	0-255	LED Color Intensity
33	LED 16 1600K	0-255	LED Color Intensity
34	LED 16 5600K	0-255	LED Color Intensity
35	Macro	0-9	No Macro
		10-19	Program 1
		20-29	Program 2
		30-39	Program 3
		40-49	Program 4
		50-59	Program 5
		60-69	Program 6
		70-79	Program 7
		80-89	Program 8
		90-99	Program 9
		100-109	Program 10
		110-119	Program 11
		120-129	Program 12
		130-139	Program 13
		140-149	Program 14
		150-159	Program 15
		160-169	Program 16
		170-179	Program 17
		180-189	Program 18
		190-199	Program 19
		200-209	Program 20
		210-219	Program 21
		220-229	Program 22
		230-239	Program 23
		240-255	Program 24
36	Macro Starting Point	0-99	Starting Point 1
		100-199	Starting Point 2

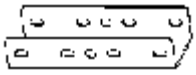
		200-255	Starting Point 3
37	Macro Direction	0-127	Forward
		128-255	Backward
39	Macro Speed	0-127	Color Snap Slow-Fast
		128-255	Color Fade Slow-Fast
39	Background LEDs Macro	0-9	No Macro
		10-19	Program 1
		20-29	Program 2
		30-39	Program 3
		40-49	Program 4
		50-59	Program 5
		60-69	Program 6
		70-79	Program 7
		80-89	Program 8
		90-99	Program 9
		100-109	Program 10
		110-119	Program 11
		120-129	Program 12
		130-139	Program 13
		140-149	Program 14
		150-159	Program 15
		160-169	Program 16
		170-179	Program 17
		180-255	Program 18
40	Background LEDs Macro Starting Point	0-99	Starting Point 1
		100-199	Starting Point 2
		200-255	Starting Point 3
41	Background LEDs Macro Direction	0-127	Macro Run Forward
		128-255	Macro Run Reverse
42	Background LEDs Macro Speed	0-255	Slow-Fast

182 Channel

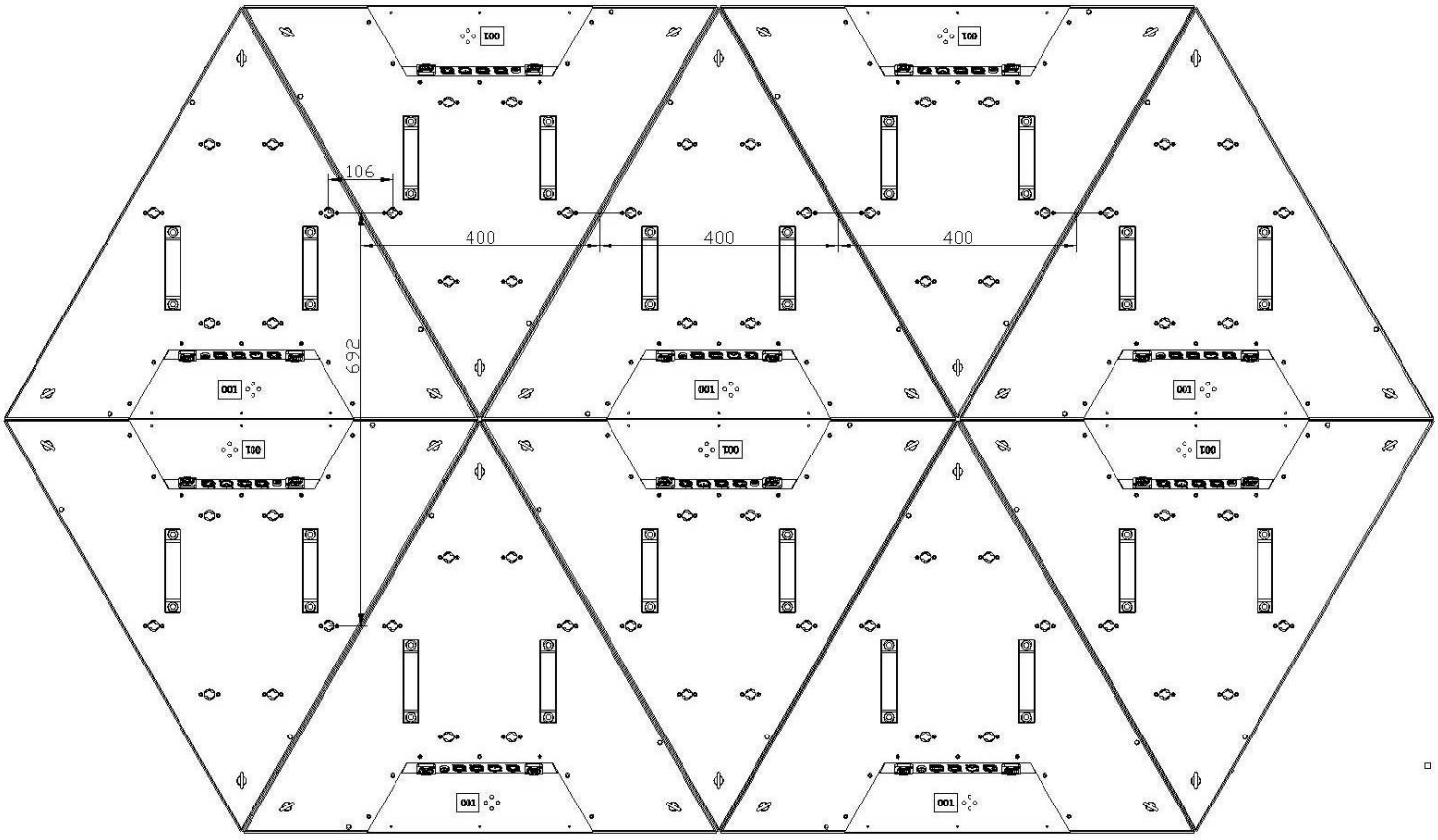
Channel	Description	Value	Function
1	LED 1 1600K	0-255	LED Color Intensity
2	LED 1 5600K	0-255	LED Color Intensity
3	LED 2 1600K	0-255	LED Color Intensity
4	LED 2 5600K	0-255	LED Color Intensity
5	LED 3 1600K	0-255	LED Color Intensity
6	LED 3 5600K	0-255	LED Color Intensity
7	LED 4 1600K	0-255	LED Color Intensity
8	LED 4 5600K	0-255	LED Color Intensity
9	LED 5 1600K	0-255	LED Color Intensity
10	LED 5 5600K	0-255	LED Color Intensity
11	LED 6 1600K	0-255	LED Color Intensity
12	LED 6 5600K	0-255	LED Color Intensity
13	LED 7 1600K	0-255	LED Color Intensity
14	LED 7 5600K	0-255	LED Color Intensity
15	LED 8 1600K	0-255	LED Color Intensity
16	LED 8 1600K	0-255	LED Color Intensity
17	LED 9 1600K	0-255	LED Color Intensity
18	LED 9 1600K	0-255	LED Color Intensity
19	LED 10 1600K	0-255	LED Color Intensity
20	LED 10 5600K	0-255	LED Color Intensity
21	LED 11 1600K	0-255	LED Color Intensity
22	LED 11 5600K	0-255	LED Color Intensity
23	LED 12 1600K	0-255	LED Color Intensity

24	LED 12 5600K	0-255	LED Color Intensity
25	LED 13 1600K	0-255	LED Color Intensity
26	LED 13 5600K	0-255	LED Color Intensity
27	LED 14 1600K	0-255	LED Color Intensity
28	LED 14 5600K	0-255	LED Color Intensity
29	LED 15 1600K	0-255	LED Color Intensity
30	LED 15 5600K	0-255	LED Color Intensity
31	LED 16 1600K	0-255	LED Color Intensity
32	LED 16 5600K	0-255	LED Color Intensity
33	Background LED 1	0-255	LED Color Intensity
34	Background LED 2	0-255	LED Color Intensity
35	Background LED 3	0-255	LED Color Intensity
36	Background LED 4	0-255	LED Color Intensity
37	Background LED 5	0-255	LED Color Intensity
.....	.....	.....	....
180	Background LED 148	0-255	LED Color Intensity
181	Background LED 149	0-255	LED Color Intensity
182	Background LED 150	0-255	LED Color Intensity

No.	**Accessories**
A01	
A02	

A03	
A04	
A05	

Splicing Lock Size Map



Clean

Clearing time depends on the environment and cleaning cycle. The following factors are relevant

- Use smoke machine, fog machine
- Where the wind speed is high (e.g. inlet and outlet)
- Dust (such as stage effects, building structures and occasions where natural outdoor environments need to be simulated)
- If there are more than one or more factors, check the lamp after running 100 hours to see if it needs cleaning, and periodically check again.
- All repairs not mentioned here should be consulted by technicians.

- Be careful when cleaning optical components and work in a clean and bright place.Fragile and rubbable optical coatings。Do not use solvents that can damage plastics or colouring surfaces.

1．Cut off the power supply and let the lamp cool completely.

2．Spray dust with air compressor.

3．Use cotton paper with glass cleaner or pure water to wipe away stubborn stains. But it can't scratch the surface. It should be gently repeated.

4．Remove soot impurities with alcohol cotton cloth. Glass detergent may also be used, but the residue should be cleaned up with pure water.。Slowly circle clean from inside to outside。

5. Dry with clean and soft cloth or air compressor。

6.Use soft brushes, cotton cloth, vacuum cleaners or air compressors to remove dust from fans and vents.