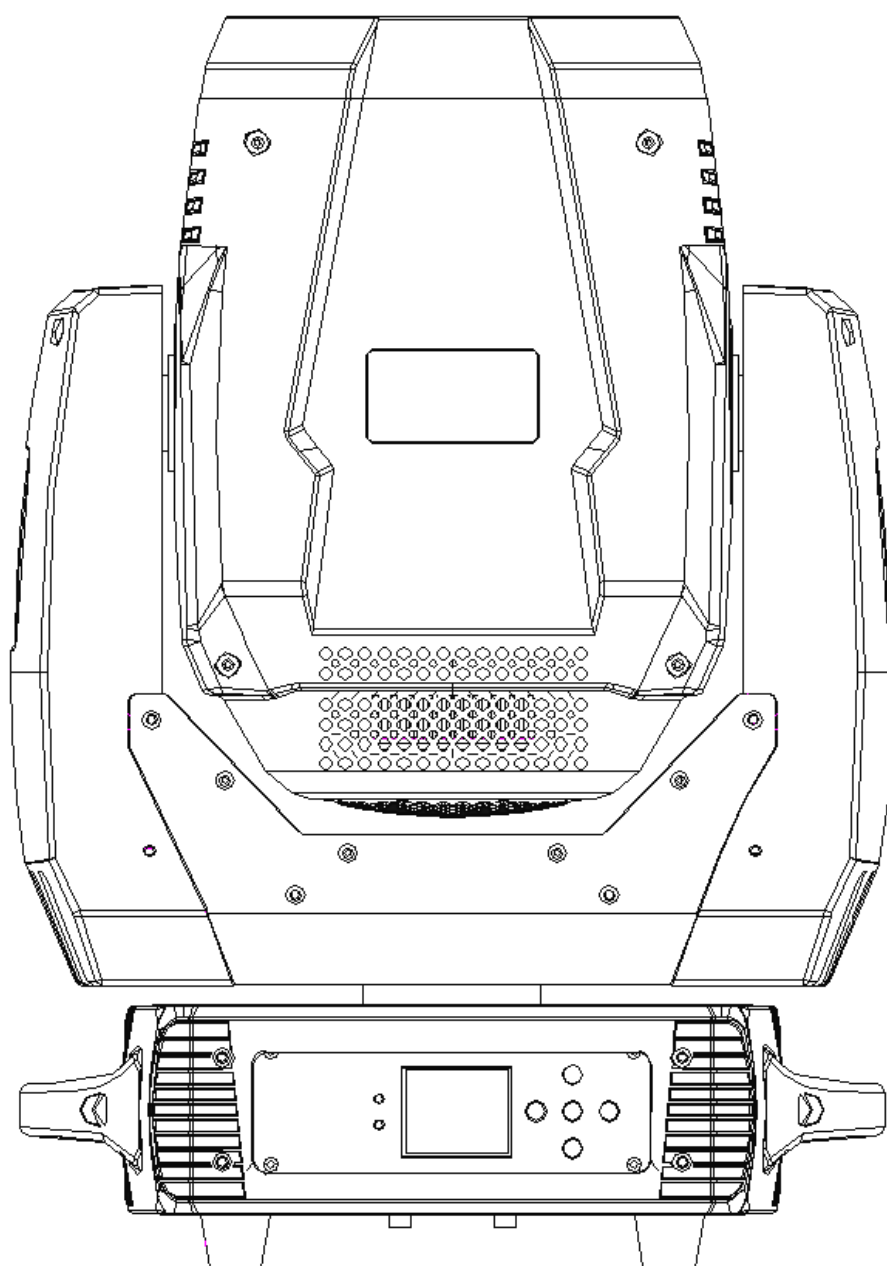




# LED moving head



**User Manual**

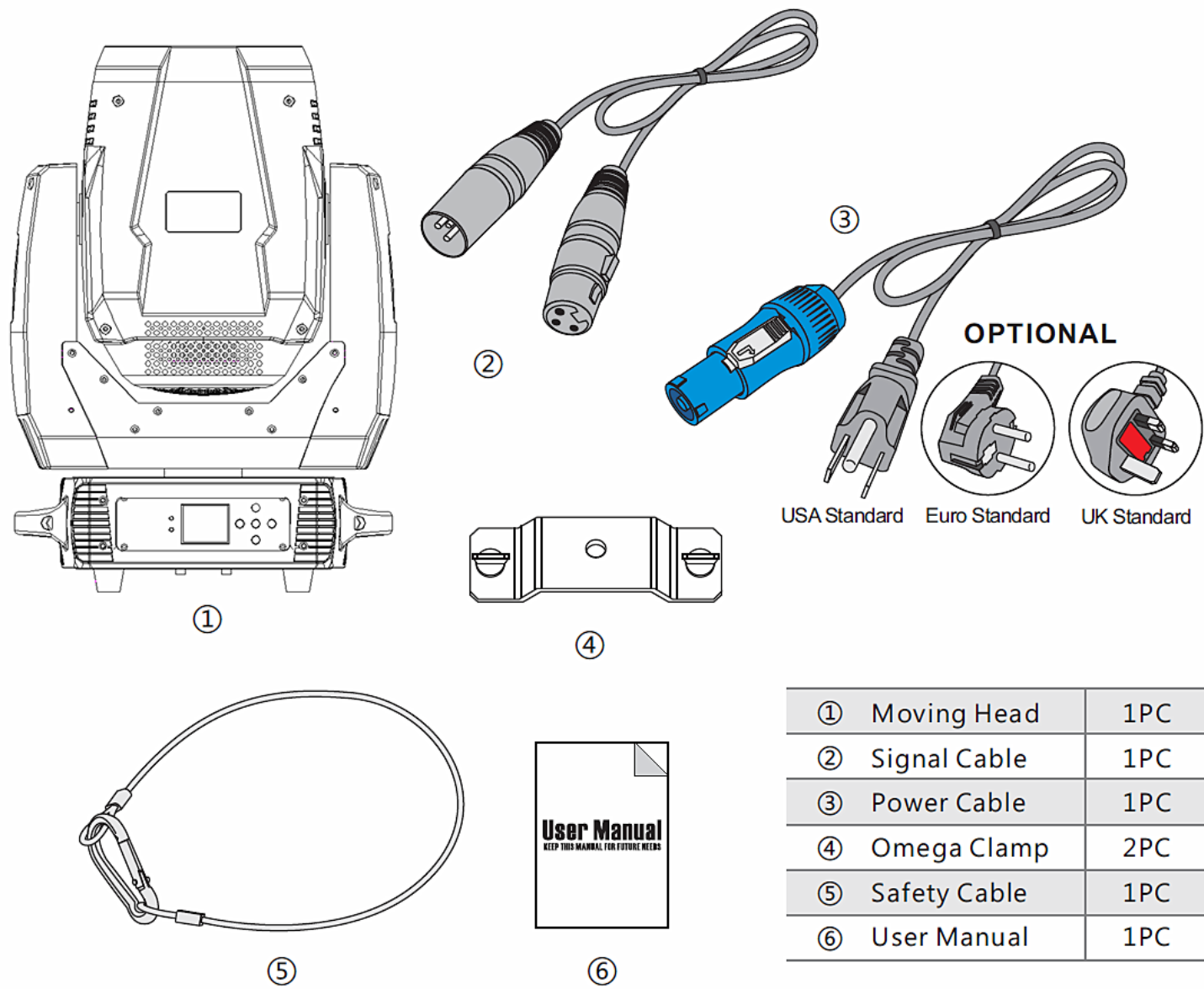
**PLEASE KEEP THIS MANUAL FOR FUTURE NEEDS**

# 1. Unpacking

Thank you for choosing our products. For your own safety, please read this manual before installing the device. This manual covers the important information on installation and applications. Please install and operate the fixture with following instructions, make sure the power is off before opening the light or repairing. Meanwhile, please keep this manual well for future needs.

It is made of a new type of high temperature strength of engineering plastics and cast aluminum casing with nice outlook. The fixture is designed and manufactured strictly following CE standards, complying with international standard DMX512 protocol. It's available independently controlled and linkable with each other for operation. And it is applicable for large-scale live performances, theater, studio, nightclubs and discos.

90W beam which features high brightness and stability. Please carefully unpack it when you receive the fixture and check whether it is damaged during the transportation. And please check whether the following items are included inside the box:



①	Moving Head	1PC
②	Signal Cable	1PC
③	Power Cable	1PC
④	Omega Clamp	2PC
⑤	Safety Cable	1PC
⑥	User Manual	1PC

## 2. Safety Instructions



### CAUTION!

Be careful with your operations. With a dangerous voltage you can suffer a dangerous electric shock when touching wires!

This device has left the factory in perfect condition. In order to maintain this condition and to ensure a safe operation, it is absolutely necessary for the user to follow the safety instructions and warning notes written in this user manual.



#### Important:

*Damages caused by the disregard of this user manual are not subject to warranty. The dealer will not accept liability for any resulting defects or problems.*

If the device has been exposed to temperature changes due to environmental changes, do not switch it on immediately. The arising condensation could damage the device. Leave the device switched off until it has reached room temperature. This device falls under protection-class I. Therefore it is essential that the device be earthed.

The electric connection must carry out by qualified person.

The device shall only be used with rate voltage and frequency.

Make sure that the available voltage is not higher than stated at the end of this manual.

Make sure the power cord is never crimped or damaged by sharp edges. If this would be the case, replacement of the cable must be done by an authorized dealer. Always disconnect from the mains, when the device is not in use or before cleaning it. Only handle the power cord by the plug. Never pull out the plug by tugging the power cord.

During initial start-up some smoke or smell may arise. This is a normal process and does not necessarily mean that the device is defective, it should decrease gradually.

Please don't project the beam onto combustible substances.

Fixtures cannot be installed on combustible substances, keep more than 50cm distance with wall for smooth air flow, so there should be no shelter for fans and ventilation for heat radiation.

If the external flexible cable or cord of this luminaire is damaged, it shall be exclusively replaced by the manufacturer or his service agent or a similar qualified person in order to avoid a hazard.

### **3.Key Features**

Voltage: AC100V-240V 50/60HZ

Main Light source: 90W high brightness LED

Ring LED: 48pcs 0.2 RGB 3-in-1 soft LED strip with multiple-built-in effects

Rated power: 120W

Beam angle: 1.6 degree

Channel: 17CHs

Color: 10 colors + open

Gobo: 18 gobos + open

Strobe: 0-25 times/second

Pan: 540 degree+16 bit fine

Tilt: 270 degree+16 bit fine

Display: LCD display

Prism: 24 facet prism

Frost: Linear frost

Colorful wheel: 6 colors honeycomb wheel mix with prism to create colorful-effect

Focus: Electric focus

N.W: 13.5 KG

G.W: 15 KG

## ***4. Operation Instructions***

- The moving head is for beam purpose.
- Don't turn on the fixture if it's been through severe temperature difference like after transportation because it might damage the light due to the environment changes. So make sure to operate the fixture until it is in normal temperature.
- This light should be keep away from strong shaking during any transportation or movement.
- Don't pull up the light by only the head, or it might cause damages to the mechanical parts.
- Don't expose the fixture in overheat, moisture or environment with too much dust when installing it. And don't lay any power cables on the floor. Or it might cause electronic shock to the people.
- Make sure the installation place is in good safety condition before installing the fixture.
- Make sure to put the safety chain and check whether the screws are screwed properly when installing the fixture.
- Make sure the lens are in good condition. It's recommended to replace the units if there are any damages or severe scratch.
- Make sure the fixture is operated by qualified personnel who knows the fixture before using.
- Keep the original packages if any second shipment is needed.
- Don't try to change the fixtures without any instruction by the manufacturer or the appointed repairing agencies.
- It is not in warranty range if there are any malfunctions from not following the user manual to operate or any illegal operation, like shock short circuit, electronic shock, lamp broke, etc.

## ***5. Mounting and Installation***

**Cautions:** For added protection mount the fixtures in areas outside walking paths, seating areas, or in areas were the fixture might be reached by unauthorized personnel.

Before mounting the fixture to any surface, make sure that the installation area can hold a minimum point load of 10 times the device's weight.

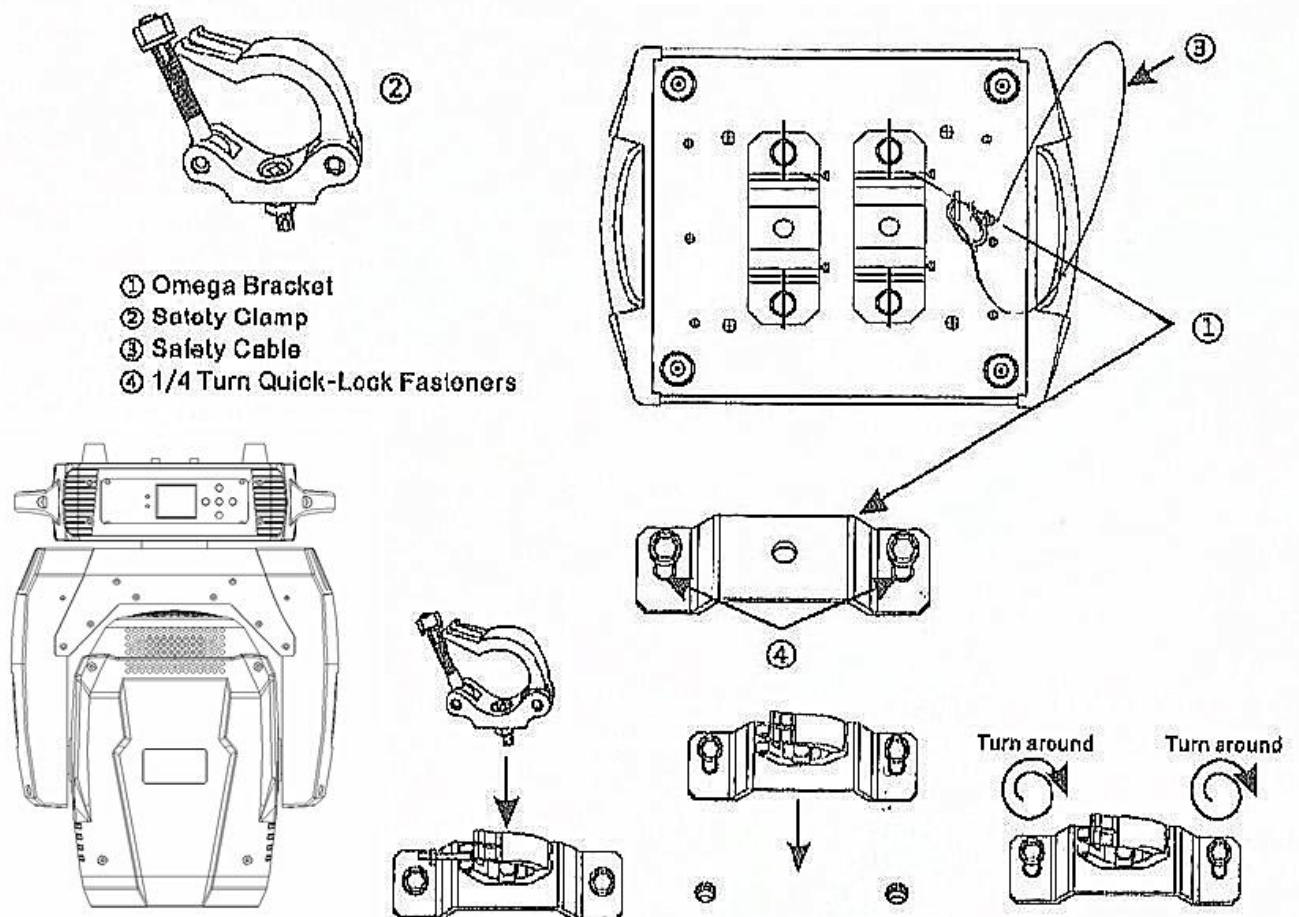
Fixture installation must always be secured with a secondary safety attachment, such as an appropriate safety cable.

Never stand directly below the device when mounting, removing, or servicing the fixture from a

periodic safety inspection of all installation material and the fixture. If you lack these qualifications, do not attempt the installation yourself. Improper installation can result in bodily injury.

Be sure to complete all rigging and installation procedures before connecting the main power cord to the appropriate wall outlet.

**Clamp Mounting:** The beam light provides a unique mounting bracket assembly that integrates the bottom of the base, the included “Omega Bracket,” and the safety cable rigging point in one unit (see the illustration below). When mounting this fixture to truss be sure to secure an appropriately rated clamp to the included omega bracket using a M10 screw fitted through the center hole of the “omega bracket”. As an added safety measure be sure to attached at least one properly rated safety cable to the fixture using on of the safety cable rigging point integrated in the base assembly

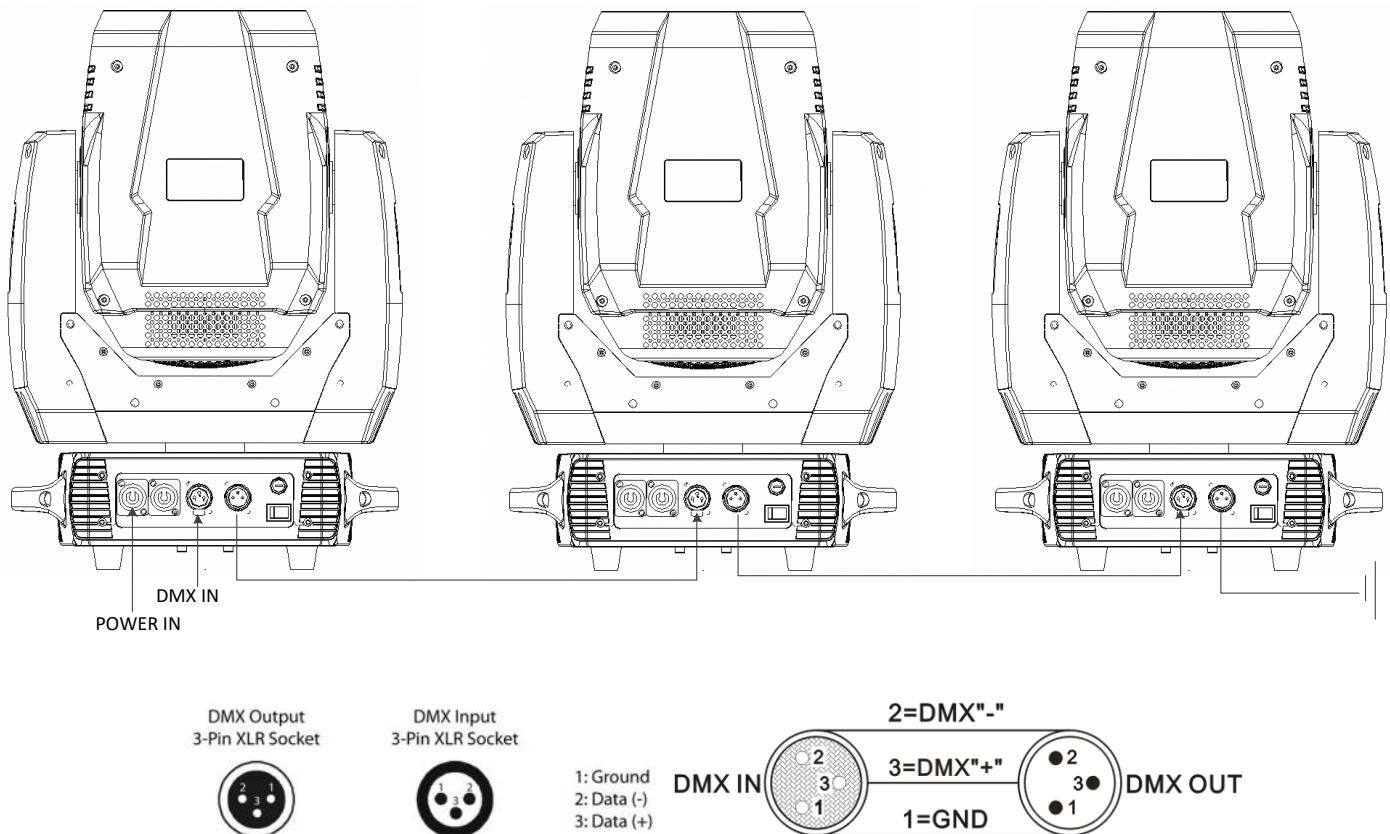


Regardless of the rigging option you choose for your fixture, always be sure to secure your fixture with a safety cable. The fixture provides a built-in rigging point for a safety cable on the hanging bracket as illustrated above. Be sure to only use the designated rigging point for the safety cable and never secure a safety cable to a carrying handle.

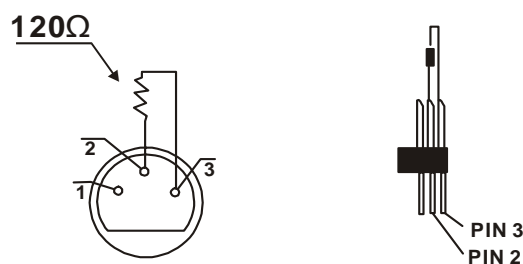
## 6. DMX-512 control connections

Connect the provided XLR cable to the female 3-pin XLR output of your controller and the other side to the male 3-pin XLR input of the moving head. You can chain multiple Moving heads be connected together through serial linking. The cable needed should be two core, screened cable with XLR input and output connectors. Please refer to the diagram below.

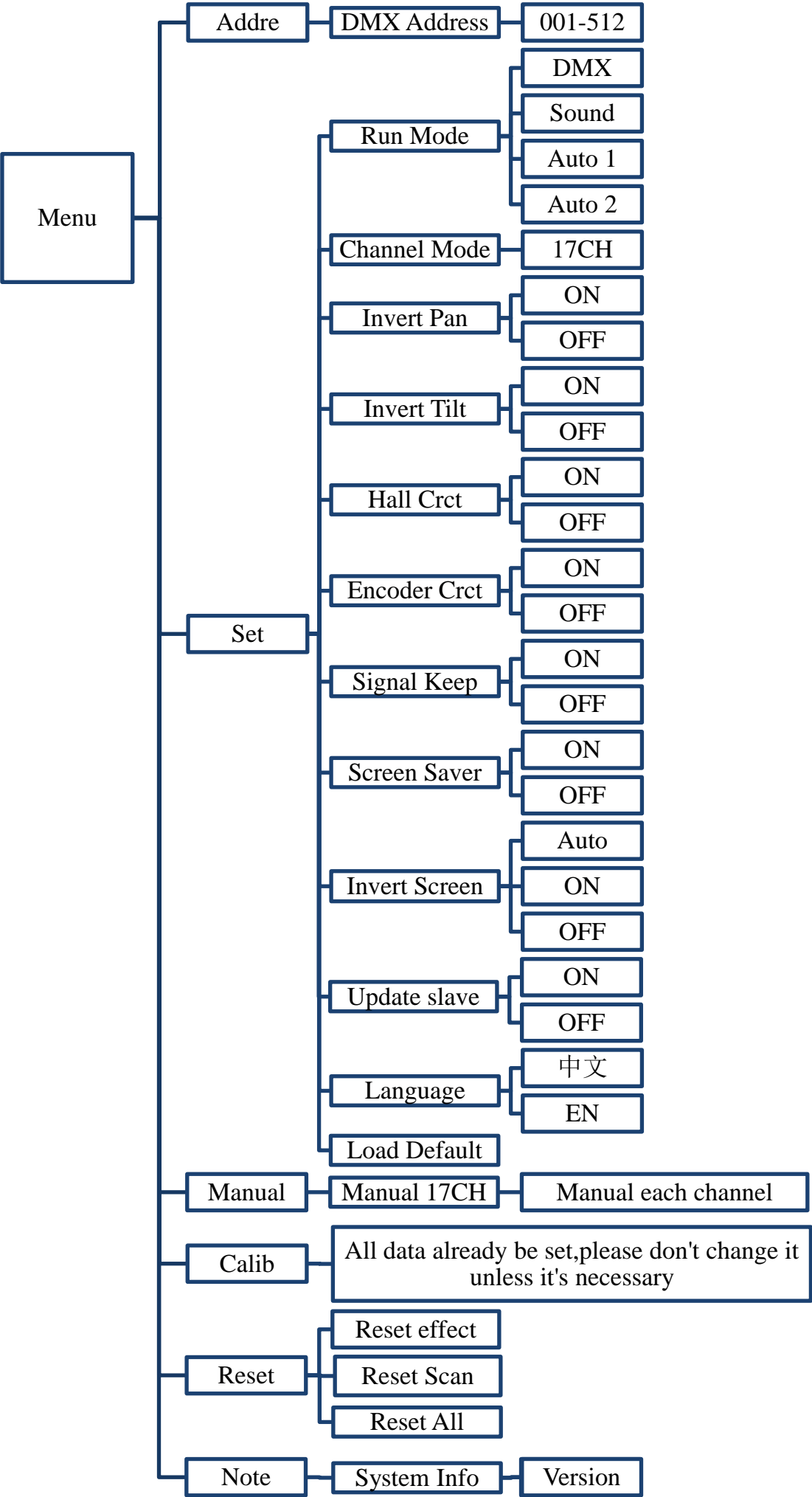
DMX-512 connection with DMX terminator



For installations where the DMX cable has to run a long distance or is in an electrically noisy environment, such as in a discotheque, it is recommended to use a DMX terminator. This helps in preventing corruption of the digital control signal by electrical noise. The DMX terminator is simply an XLR plug with a  $120\ \Omega$  resistor connected between pins 2 and 3, which is then plugged into the output XLR socket of the last fixture in the chain. Please see illustrations below.



7. Display menu control





## 8. DMX Channels

### 18Channel Mode

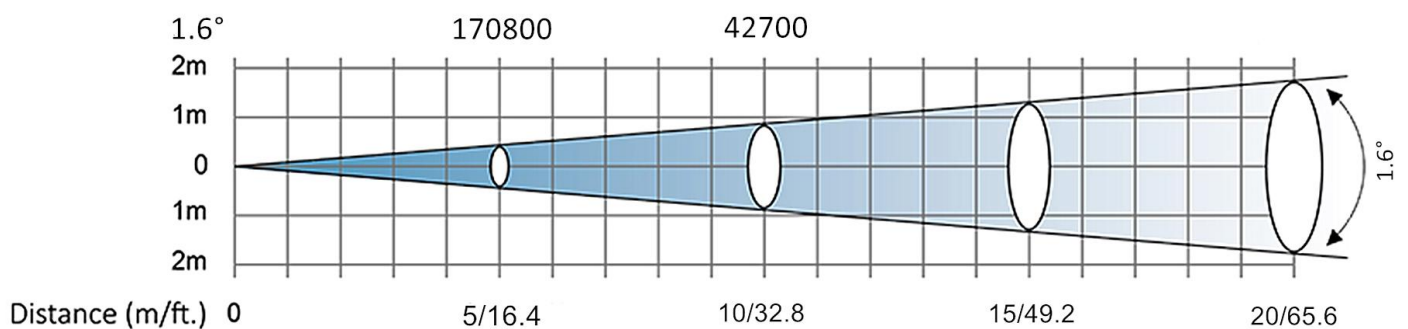
CH	Function	DMX value	Description
1	Pan	0-255	Pan movement
2	Pan fine	0-255	Pan fine
3	Tilt	0-255	Tilt movement
4	Tilt fine	0-255	Tilt fine
5	P/T speed	0-255	Pan/Tilt speed from fast to slow
6	Dimmer	0-255	0%-100% dimmer
7	Strobe	0-3	No function
		4-99	Strobe from slow to fast
		100-149	Pulse strobe from slow to fast
		150-199	Thunder strobe from slow to fast
		200-249	Random strobe from slow to fast
		250-255	Light on
8	Color wheel	0-1	Open
		2-7	Color 1
		8-13	Color 2
		14-19	Color 3
		20-25	Color 4
		26-31	Color 5
		32-37	Color 6
		38-43	Color 7
		44-49	Color 8
		50-55	Color 9
		56-61	Color 10
		62-67	Open+Color 1
		68-73	Color1+Color2
		74-79	Color2+Color 3
		80-85	Color3+Color 4
		86-91	Color 4+Color 5
		92-97	Color 5+Color 6
		98-103	Color 6+Color 7
		104-109	Color 7+Color 8
		110-115	Color 8+Color 9
		116-121	Color 9+Color 10
		122-127	Color 10+Open
		128-189	Clockwise rotation from fast to slow
		190-193	Stop
		194-255	Anti-clockwise rotation from slow to fast

CH	Function	DMX value	Description
9	Static gobo	0-4	Open
		5-12	Gobo 1
		13-15	Gobo 2
		16-18	Gobo 3
		19-21	Gobo 4
		22-24	Gobo 5
		25-27	Gobo 6
		28-30	Gobo 7
		31-33	Gobo 8
		34-36	Gobo 9
		37-39	Gobo 10
		40-42	Gobo 11
		43-45	Gobo 12
		46-48	Gobo 13
		49-51	Gobo 14
		52-54	Gobo 15
		55-57	Gobo 16
		58-60	Gobo 17
		61-63	Gobo 18
		64-70	Gobo 1 shake from slow to fast
		71-77	Gobo 2 shake from slow to fast
		78-84	Gobo 3 shake from slow to fast
		85-91	Gobo 4 shake from slow to fast
		92-98	Gobo 5 shake from slow to fast
		99-105	Gobo 6 shake from slow to fast
		106-112	Gobo 7 shake from slow to fast
		113-119	Gobo 8 shake from slow to fast
		120-126	Gobo 9 shake from slow to fast
		127-133	Gobo 10 shake from slow to fast
		134-140	Gobo 11 shake from slow to fast
		141-147	Gobo 12 shake from slow to fast
		148-154	Gobo 13 shake from slow to fast
		155-161	Gobo 14 shake from slow to fast
		162-168	Gobo 15 shake from slow to fast
		169-175	Gobo 16 shake from slow to fast
		176-182	Gobo 17 shake from slow to fast
		183-189	Gobo 18 shake from slow to fast
		190-221	Clockwise rotation from fast to slow
		222-223	Stop
		224-255	Anti-clockwise rotation from slow to fast

CH	Function	DMX value	Description
10	Frost &Colorful honeycomb wheel	0-200	Linear frost
		201-255	Colorful honeycomb wheel
11	Prism	0-127	No function
		128-255	Prism insert
12	Prism rotation	0-127	Prism change position
		128-190	Clockwise rotation from fast to slow
		191-193	Stop
		194-255	Anti-clockwise rotation from slow to fast
13	Focus	0-255	Focus
14	LED ring strobe	0-3	No function
		4-255	Strobe from slow to fast
15	LED ring macro effect	0-11	No function
		12-51	Every 2 DMX value is one kind of static color(20
		52-55	Dynamic effect 1
		56-59	Dynamic effect 2
		...	Every 4 DMX value is one kind of dynamic effect
		252-255	Dynamic effect 51
16	Effect speed	0-255	Effect speed from slow to fast
17	Reset	0-199	No function
		200-205	Reset all
		206-255	No function

## 9. Photometric

**Illuminance(LUX)**



## 10. Maintenance and Cleaning

The following points have to be considered during the inspection:

1. All screws for installing the devices or parts of the device have to be tightly connected and must not be corroded.
2. There must not be any deformations on the housing, color lenses, fixations and installation spots (ceiling, suspension, trussing).
3. Mechanically moved parts must not show any traces of wearing and must not rotate with unbalances.
4. The electric power supply cables must not show any damage, material fatigue or sediments.

Further instructions depending on the installation spot and usage have to be adhered by a skilled installer and any safety problems have to be removed.



### CAUTION!

Disconnect from mains before starting maintenance operation.

In order to make the lights in good condition and extend the life time, we suggest a regular cleaning to the lights.

- 1) Clean the inside and outside lens each week to avoid the weakness of the lights due to accumulation of dust.
- 2) Clean the fan each week.
- 3) A detailed electric check by approved electrical engineer each three month, make sure that the circuit contacts are in good condition, prevent the poor contact of circuit from overheating.

We recommend a frequent cleaning of the device. Please use a moist, lint- free cloth. Never use alcohol or solvents. There are no serviceable parts inside the device. Please refer to the instructions under “Installation instructions”. Should you need any spare parts, please order genuine parts from your local dealer