## 10.Maintenance and cleaning

It is absolutely essential that the fixture is kept clean and that dust, dirt and smoke-fluid residues must not build up on or within the fixture. Otherwise, the fixture‘s light-output will be significantly reduced. Regular cleaning will not only ensure the maximum light-output, but will also allow the fixture to function reliably throughout its life.A soft lint-free cloth moistened with any good glass cleaning fluid is recommended, under no circumstances should alcohol or solvents be used!

**DANGER !**
**Disconnect from the mains before starting any maintenance work**

The front objective lens will require weekly cleaning as smoke-fluid tends to building up residues, reducing the light-output very quickly. The cooling-fans should be cleaned monthly.

The interior of the fixture should be cleaned at least annually using a vacuum-cleaner or an air-jet. Dichroic colour filters, CMY lamellas, gobo and graphic wheels and the internal lenses should be cleaned monthly. Remove dust and dirt from the fans and cooling vents using a soft brush and vacuum-cleaner.

Important! Check the air filters periodically and clean before they become clogged!

Clean two air filters placed in the fixture’s covers and two in the fixture base. Use a vacuum cleaner, compressed air or you can wash them and put back dry.

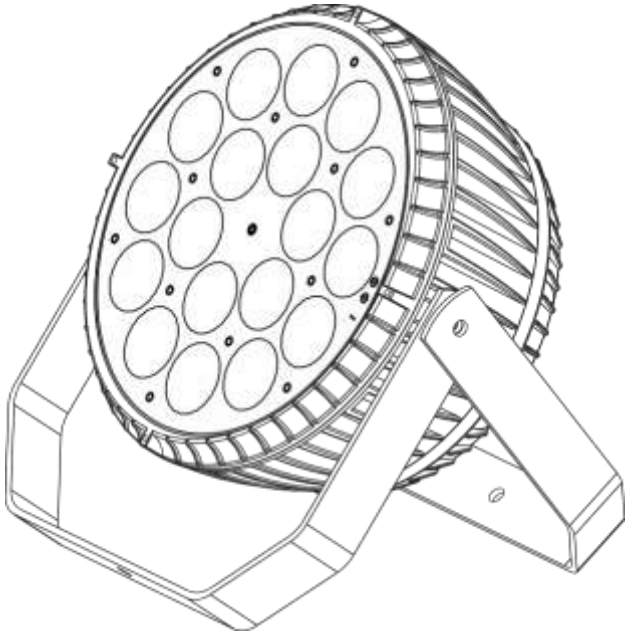
After replacing the air filters, reset the elapsed time counter in the menu "Information" (Information--->Air Filters--->Elapsed Time).

Replacing the fuse. Before replacing the fuse, unplug mains lead.

1) Remove the fuse holder on the rear panel of the base with a fitting screwdriver from the housing (anti-clockwise).
2) Remove the old fuse from the fuse holder.
3) Install the new fuse in the fuse holder (only the same type and rating).
4) Replace the fuseholder in the housing and fix it.

INVOLIGHT

# Liberty Par 1810IP



*Version 1.0*

# USER MANUAL

- Be sure to read the USER MANUAL carefully before using this product.
- Be sure to keep the USER MANUAL properly for future needs.
- Use this product correctly when you can fully understand the User Manual

## 1.Safety instructions

Thank you for choosing our Liberty Par 1810IP . FOR YOUR OWN SAFETY, PLEASE READ THIS USER MANUAL CAREFULLY
**BEFORE YOU INITIAL START - UP!**

**CAUTION!**
**Be careful with your operations.**
**With a high voltage you can suffera dangerous electric shock when touching the wires!**

This device has left our premises in absolutely 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 manual.

**CAUTION!**
**Keep this device away from rain and moisture!**
**Unplug mains lead before opening the housing!**

**Important:**
The manufacturer will not accept liability for any resulting damages caused by the non-observance of this manual or any unauthorized modification to the device.

Please consider that damages caused by manual modifications to the device are not subject to warranty.

During the operation the housing becomes hot). Allow the fixture to cool approximately 20 minutes prior to manipulate with it.

Make sure that the available voltage is not higher than stated on the rear panel.

WARNING! This unit does not contain an ON/OFF switch. Always disconnect power input cable to completely remove power from unit when not in use or before cleaning or servicing the fixture.

Make sure that the power-cord is never crimped or damaged by sharp edges. Check the device and the power-cord from time to time.

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.

This device falls under protection class I. Therefore it is essential to connect the yellow/green conductor to earth.

The electric connection, repairs and servicing must be carried out by a qualified employee.

Do not connect this device to a dimmer pack.

Do not switch the fixture on and off in short intervals as this would reduce the lamp's life.

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

Do not touch the device's housing bare hands during its operation (housing becomes hot)!

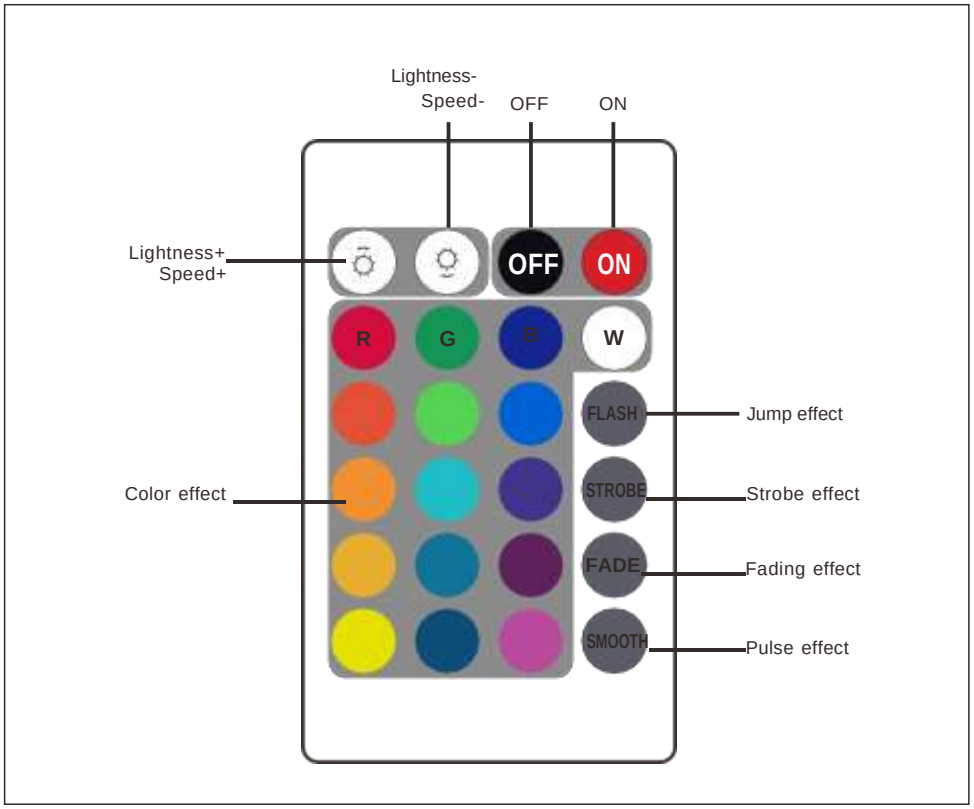
For replacement use lamps and fuses of same type and rating only.

**CAUTION ! EYE DAMAGES !**
**Avoid looking directly into the light source**
**(meant especially for epileptics) !**





## 10.IR Remote Controller Instruction




Tips:
1. The light can be controlled by IR controller while don't receive DMX signal. Please remove the battery separator of controller, before using the remote controller

2. If you want to quit the strobe function after the strobe effect is turned on, please press "ON" again.

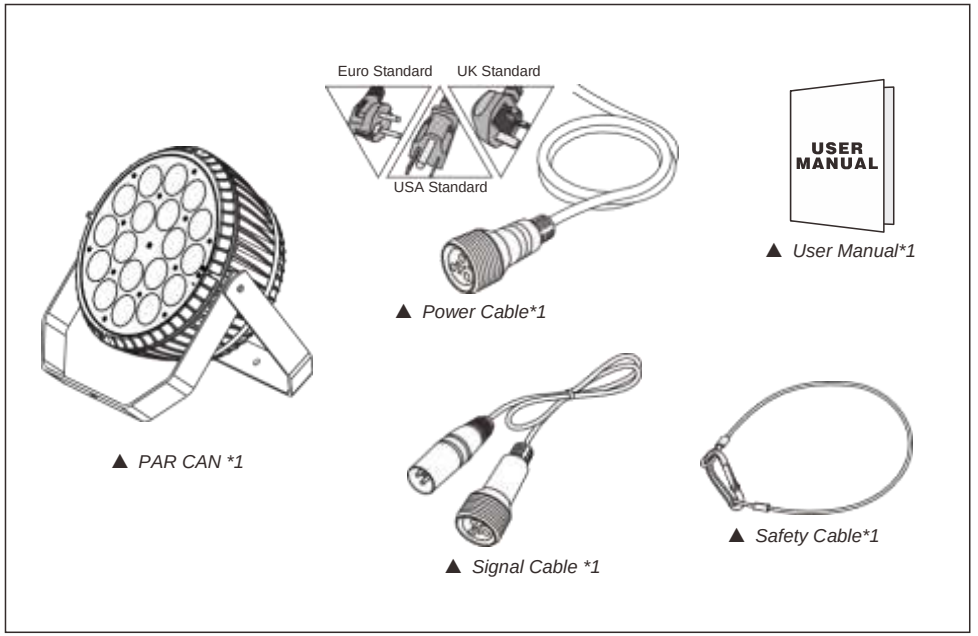
| | | | |
|---|---|---|---|
| 15 | 7 | G | **Macro** |
| | | 0..15 | No Function |
| | | 16..31 | Red |
| | | 32..47 | Green |
| | | 48..63 | Blue |
| | | 64..79 | White |
| | | 80..95 | Red+Green |
| | | 96..111 | Red+Blue |
| | | 112..127 | Red+White |
| | | 128..143 | Green+Blue |
| | | 144..159 | G reen+White |
| | | 160..175 | Blue+Wtihe |
| | | 176..191 | R +G+B |
| | | 192..207 | R+G+B+W |
| | | 208..223 | Jump effect |
| | | 224..239 | Fading effect |
| | | 240..255 | Pulse-effect |
| 16 | 8 | | **Macro Speed** |
| | | 0..255 | Macro Speed from Slow To Fast |
| 17 | 9 | | **Special function** |
| | | 0..19 | No function |
| | | 20..29 | No function |
| | | 30..39 | No function |
| | | 40..79 | No function |
| | | 80..84 | No function |
| | | 85..94 | No function |
| | | 95..99 | No function |
| | | 100..119 | Internal program 1 |
| | | 120..139 | Internal program 2 |
| | | 140..159 | Internal program 3 |
| | | 160..179 | Internal program 4 |
| | | 180..199 | Internal program 5 |
| | | 200..219 | Internal program 6 |
| | | 220..239 | Internal program 7 |
| | | 240..255 | Internal Sound program 1 |





## 2.UNPACKING

Liberty Par 1810IP adopts a 10W white LED lamp 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:




▲ *PAR CAN *1*

▲ *Power Cable*1*

▲ *User Manual*1*

▲ *Signal Cable *1*

▲ *Safety Cable*1*

Liberty Par 1810IP 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 per formances, theater, studio, nightclubs and discos.

This manual covers the important information on installation and applications. Meanwhile, please keep this manual well for future needs.

## 3.TECHNICAL INFORMATION

SPECIFICATIONS:

LED Quantities: 18pcs*5W 4-IN-1 LEDs(RGBW)
Input Voltage: AC90-260V 50-60Hz
Battery type: Lithium ion
Battery charge time: 5.5 hours(0-100%)
Max-endurance: 8 hours(Full power) 8~12 hours(built-in program)
Battery protection: Short circuit protection, over current protection,overow charging
Control Signal:DMX512, master-slave and sound activated or auto operation
Control Channel: 17/9 DMX Channels USITT DMX-512
Dimensions: 344(D)*156(W)*337(H)mm
Packing Dimensions: 390(D)*215(W)*410(H)mm
Net Weight: 8kgs
Gross Weight: 10.5kgs

FEATURES:

50,000 hours life span and low power consumption
Aluminum die-casting structure design with optimum
Cooling system
Infinite RGBW color mixing system and rainbow effect
16.7million additive RGBW colors whit full saturationcontrol
Built-in programs that could be called up via a DMXcontroller
25t/s strobe effect and pulse strobe effect
0-100% electronic dimming and blackout for all LEDs
4-button LED display on rear panel
Dual bracket system available for setting the fixture on the ground or hanging
Linkable via 3-Pin XLR cables
Overheat protection
-0°C ~ 45°C max ambient temperature
TO.8A fuse

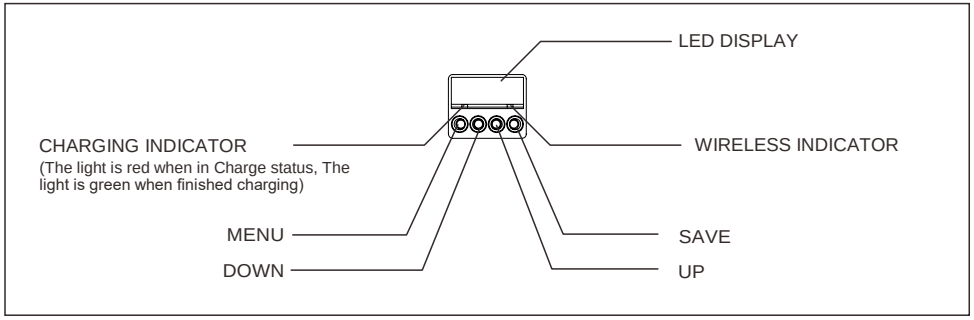




## 9.DMX PROTOCOL

| Mode/Channel | | Value | Function |
|---|---|---|---|
| **CH17** | **CH09** | | |
| 1 | 1 | | **Dimmer** |
| | | 0..255 | Dimmer 0%...100% |
| 2 | 2 | | **Shutter** |
| | | 0..31 | Shutter closed |
| | | 32..63 | shutter open |
| | | 64..95 | Strobe effect slow to fast |
| | | 96..127 | shutter open |
| | | 128..159 | Pulse-effect in sequences slow to fast |
| | | 160..191 | shutter open |
| | | 192..223 | Random strobe effect slow to fast |
| | | 224..255 | shutter open |
| 3 | 3 | | **Red** |
| | | 0..255 | 0-100% Red dimmer from dark to bright |
| 4 | 4 | | **Green** |
| | | 0..255 | 0-100% Green dimmer from dark to bright |
| 5 | 5 | | **Blue** |
| | | 0..255 | 0-100% Blue dimmer from dark to bright |
| 6 | 6 | | **White** |
| | | 0..255 | 0-100% White dimmer from dark to bright |
| 7 | | | **Red1** |
| | | 0..255 | 0-100% Red1 dimmer from dark to bright |
| 8 | | | **Green1** |
| | | 0..255 | 0-100% Green1 dimmer from dark to bright |
| 9 | | | **Blue1** |
| | | 0..255 | 0-100% Blue1 dimmer from dark to bright |
| 10 | | | **White1** |
| | | 0..255 | 0-100% White1 dimmer from dark to bright |
| 11 | | | **Red2** |
| | | 0..255 | 0-100% Red2 dimmer from dark to bright |
| 12 | | | **Green2** |
| | | 0..255 | 0-100% Green2 dimmer from dark to bright |
| 13 | | | **Blue2** |
| | | 0..255 | 0-100% Blue2 dimmer from dark to bright |
| 14 | | | **White2** |
| | | 0..255 | 0-100% White2 dimmer from dark to bright |

## 8.MENU OPERATIONS



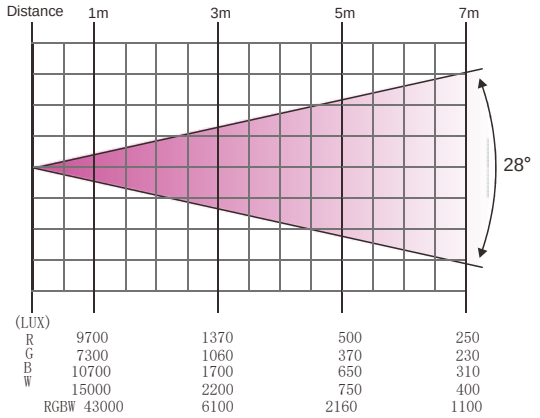

| MENU | | | | Description |
|---|---|---|---|---|
| MODE | ADDR | VALU | A001~AXXX(AXXX) | ***DMX address setting*** |
| | | SLAV | ON/OFF(SLAV) | ***Standard mode*** |
| | AUTO | IP1~8 | ALON(AU-A) | ***Internal program(Alone)*** |
| | | | MAST(AU-M) | ***Auto run(Master)*** |
| | SOUN | IP1~8 | ALON(SO-A) | ***Sound control(Alone)*** |
| | | | MAST(SO-M) | ***Sound setting(Master)*** |
| SET | MIC | M-XX | | ***Mic sensitivity setting*** |
| | LODA | ON/OFF | | ***Reload data*** |
| | VER | V-1.0~V-9.9 | | ***Software version*** |
| | CALL | Code(password:088) | | ***Input password*** |
| | | CH01--CH12 | | ***Calibration*** |
| | SIGS | WD | | ***Wire DMX input*** |
| | | WLD | | ***Wireless DMX input*** |
| | | WLDO | | ***Wireless signal to signal output*** |
| DMX | CH17 | | | ***17CH*** |
| | CH09 | | | ***09CH*** |
| REST | ON/OFF | | | ***Total reset*** |
| TEMP | TXXX | | | ***Current temperature*** |
| BAT | AXXX | | | ***Remain electricity capacity of internal battery*** |
| | BXXX | | | ***Remain electricity capacity of external battery*** |

"Enter" botton in Address page same time for 3 second, to clean WIFI data. Reconnect WIFI
flash code matching.
tery electricity capacity showed when display darkened.





## 4.PHOTOMETRICS DIAGRAM




## 5.OPERATION INSTRUCTIONS

- Liberty Par 1810IP is for wash effect for on-site decoration 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.

# 6.INSTALLATIONS

**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 ceiling, or set on a flat level surface (see illustration below). Be sure this fixture is kept at least 0.5m (1.5 f t) away from any flammable materials (decoration etc.).

Always use and install the supplied safety cable as a safety measure to prevent accidental damage and/or injury in the event the clamp fails.

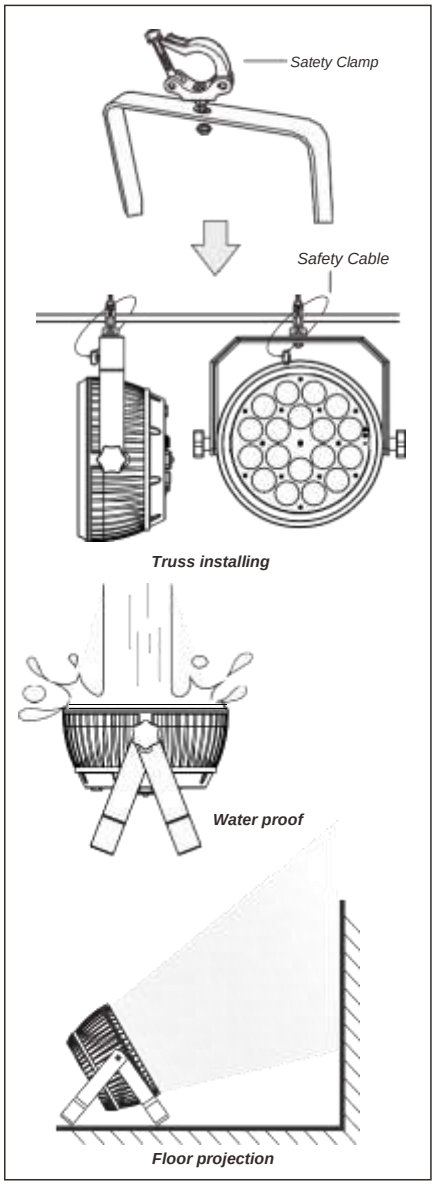
**Mounting points:**

Overhead mounting requires extensive experience, including amongst others calculating working load limits, a fine knowledge of the installation material being used, and 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:**

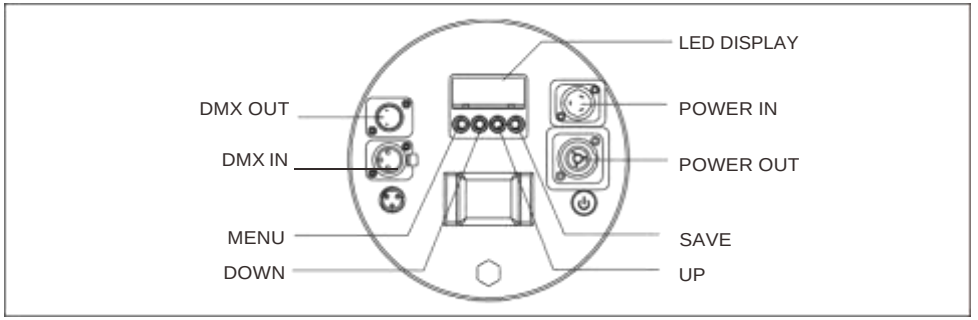
The Liberty Par 1810IP provides a unique mounting bracket assembly that integrates the bottom of the base, and the safety cable rigging point in one unit (see the illustration below). When mounting this fixture to truss be sure to secure an appropriately rated clamp to the included omega bracket using a M10 screw fitted through the center hole of the handle. 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 .

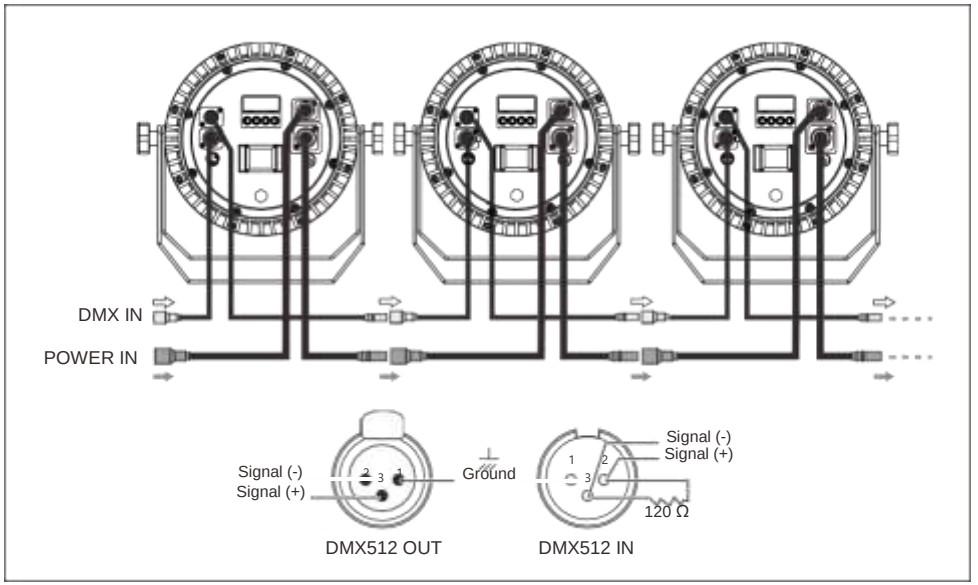







# 7.CONTROL CONNECTION




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 head 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 a3 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.