

## 11. 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, 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!

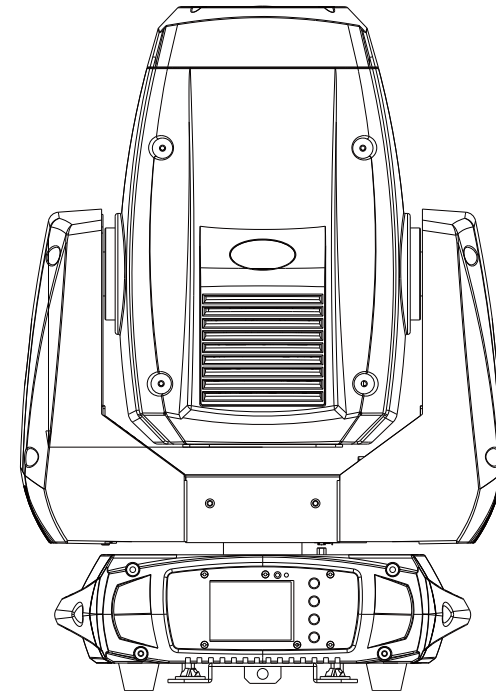
Clean two air filters placed in the fixture's covers and two in the fixture base. Use a vacuum cleaner, compressed air or you can wash them and put back dry.

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.

# ATTCO SPOT 250Z



## JMAZ LIGHTING

Address: 313 NEWQUIST PLACE STE B, CITY OF INDUSTRY, CA 91745 USA

Phone: 1-626-380-0883    www.jmazlighting.com    support@jmazlighting.com

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

## 10.RF Remote Controller Instruction



1. Press 3 times "Spot" to activate Spot series RF function
2. Press 3 times "Beam" to activate Beam series RF function
3. Press 3 times "Wash" to activate Wash series RF function
4. "Dimmer" brightness adjustment (press "Dimmer" button then press "+", "-") to adjust brightness.
5. "Strobe" turn on strobe effect (press "Strobe" button, can adjust speed by "+", "-").
6. "◀▶" adjust the speed of sound program or adjust the sensitivity of sound control.
7. "▶▶" adjust the speed of self-propelled program or adjust the sensitivity of voice control.
8. "1-9" Auto programs or sound activated state, press the corresponding button into the corresponding program; In the "Dimmer" or "Strobe" state, press this button can be optional color matching
9. "■" All reset
10. "DMX" selects wire DMX signal as signal source.

### Tips:

1. When activated RF function, the lamp will not control by DMX signal, and the lamp is in the RF control state. And each remote controller can only control a series of lamps at the same time.
2. When Wash series opens "Dimmer" and "Strobe", it needs to press the number button to brighten the corresponding color. In this mode, the number button can only switch the color wheel, but not the corresponding key color for Spot and Beam series.
3. To turn off RF function, there are the following methods:
  - (1). Select the signal input mode needed, "DMX" can exit RF function;
  - (2). Switch to other series of lamps, "Spot", "Beam", "Wash" switch to other units, will be restored to the original set signal source input;
  - (3). Press the menu button of the display panel.

## 1.Safety instructions

Thank you for choosing our ATTCO SPOT 250Z. 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 suffer a 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.

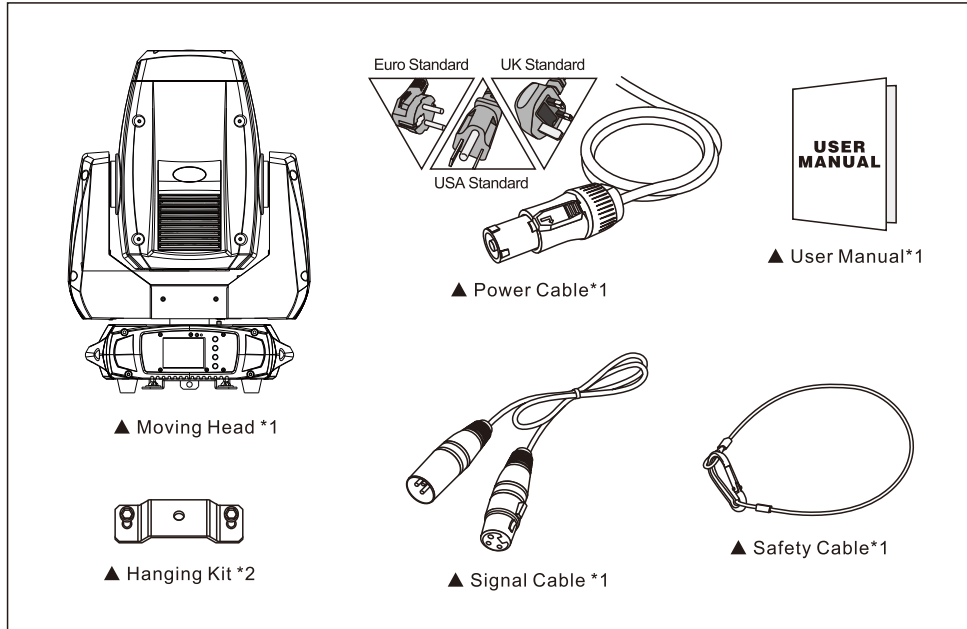
Do not touch the device's housing bare hands during its operation (housing becomes hot)!

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) !

## 2.UNPACKING

The LED SPOT ZOOM 250 adopts a 150W 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:



The ATTCO SPOT 250Z 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 DMX5 12 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.

16	14	16	94..96	TBD
			97..99	Reset other motor
			100..109	Internal program 1
			110..119	Internal program 2
			120..129	Internal program 3
			130..139	Internal program 4
			140..149	Internal program 5
			150..159	Internal program 6
			160..169	Internal program 7
			170..179	Internal program 8
			180..189	Internal Sound program 1
			190..199	Internal Sound program 2
			200..209	Internal Sound program 3
			210..219	Internal Sound program 4
			220..229	Internal Sound program 5
			230..239	Internal Sound program 6
240..249	Internal Sound program 7			
250..255	Internal Sound program 8			
		17		<b>Colour Time</b>
			0.255	Colour speed,fast to slow
		18		<b>Gobo Time</b>
			0.255	Gobo speed ,fast to slow

8	6	8	200.209	Gobo9 shake slow to fast
			210.219	Gobo10 shake slow to fast
			220.229	Gobo11 shake slow to fast
			230.255	Forward wheel spin,slow to fast
9	7	9	<b>Shutter</b>	
			0.31	Shutter closed
			32.63	shutter open
			64.95	Strobe effect ,slow to fast
			96.127	shutter open
			128.159	Pulse effect ,slow to fast
			160.191	shutter open
			192.223	Random strobe effect,slow to fast
224.255	shutter open			
10	8	10	<b>Dimmer</b>	
			0.255	Dimmer 0%...100%
11	9	11	<b>Focus</b>	
			0.255	In (near) to out (far)
12	10	12	<b>Zoom</b>	
			0.255	In (near) to out (far)
13	11	13	<b>Rotating prism, Prism</b>	
			0.5	OFF
			6.127	ON
			128.189	Forward rotation ,fast to slow
			190.193	Prism rotation stop
194.255	Reverse rotation ,fast to slow			
14	12	14	<b>Frost</b>	
			0.199	Frost OFF
			200.255	Frost ON
15	13	15	<b>Speed pan/tilt</b>	
			0.225	Pan /tilt speed fast ,to slow
			226.235	Blackout during pan/ tilt functions
			236.245	Blackout when colour and gobo switching
			246.255	TBD
16	14	16	<b>Special function</b>	
			0.19	TBD
			20.29	TBD
			30.39	TBD
			40.79	TBD
			80.84	Reset all
			85.87	Reset scan
			88.90	Reset colour
91.93	Reset gobo			

### 3.TECHNICAL INFORMATION

**SPECIFICATIONS:**

- Led Quantities:A\*250W white LED
- lamp,7500K,50000 hours life span
- Input Voltage: AC90-260V 50/60Hz
- Power Consumption: 320W
- Control Signal: DMX512, master-slave and sound activated or auto operation (9 built-in programs)
- Control Channel: 16/14/18 D MX channels USITT DMX-512
- Dimensions: 357(D)\*224(W)\*505(H)mm
- Packing Dimensions: 450(D)\*410(W)\*520(H)mm
- Net Weight: 14kgs
- Gross Weight: 17.12kgs

**FEATURES:**

- Low power consumption
- Built-in wireless is available
- Linear motorized zoom with 12°-36° beam angle
- 2.5m-15m electric focus
- 3-Facet prism with variable speed and direction
- Frost Filter (Hybrid effect for wash)
- 0-100% Linear LED dimmer
- DMX512, master-slave and sound activated or auto operation
- 2.4" TFT LCD display (320\*240pix) with 4 control buttons
- Powercon IN/OUT
- 3-Pin XLR connectors IN/OUT
- IP20 protection rating
- 55dB at 3' dB rating
- 2\*1/4 turn fastening Omega clamps
- 25T/sec high speed LED shutter/strobe effect with variable speed
- Preset variable/random strobe and dimming pulse

**movement**

- 540°/630°/360° PAN and 270°/180°/90° TILT movement

**COLORS:**

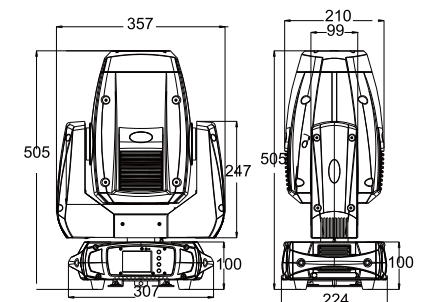
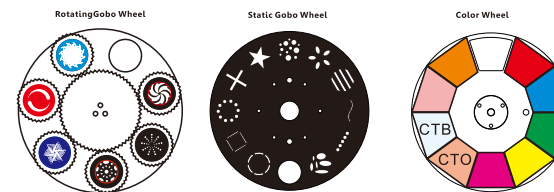
- 1 Color wheel with 9 colors plus open
- Scan position memory, auto reposition after unexpected movement

**GOBOS:**

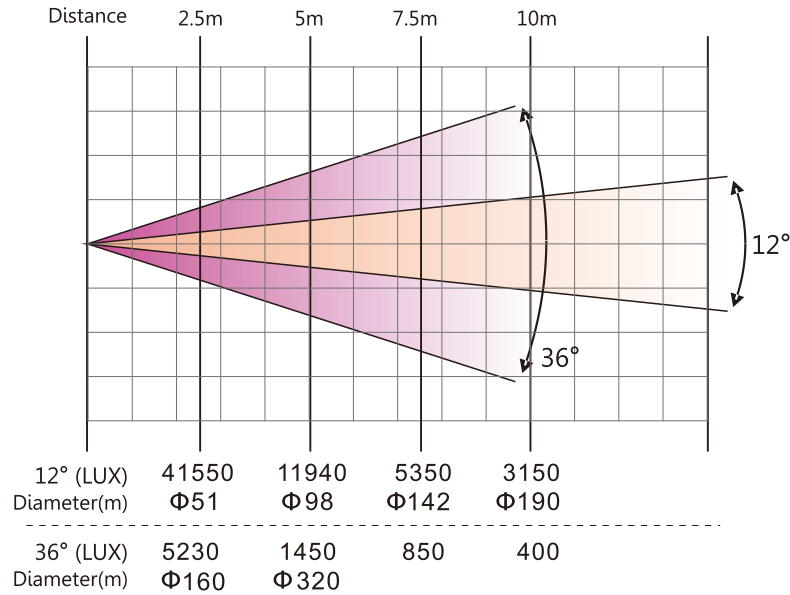
- 1 Static gobo wheel with 8 gobos plus open
- 1 Rotatable gobo wheel with 6 rotatable and interchangeable glass
- gobos plus open with speed adjustable, stream effect, dithering
- effect and rotatable clockwise or anticlockwise
- Rotatable gobo wheel can be Gobo indexing
- Gobo size 22.9mm (external dimensions)/18mm (inner dimensions)
- Gobo overlay (gobo morphing)

**FUNCTION:**

- Improved optics and flat beam field
- Variable direction rainbow effect with speed adjustable
- Fan cooling system
- Constant temperature readout and management function
- -35°C ~ 45°C max ambient temperature



### 4. PHOTOMETRICS DIAGRAM



### 5. OPERATION INSTRUCTIONS

- The ATTCO SPOT 250Z is 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 condision. 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	3	5	95..127	Colour9 + White
			128..189	Forward rainbow effect,fast to slow
			190-193	Colourorotation stop
			194.255	Reverse rainbow effect ,slow to fast
6	4	6		<b>Rotation Gobo</b>
			0.9	Open
			10..19	gobo 1
			20.29	gobo2
			30.39	gobo3
			40.49	gobo4
			50.59	gobo5
			60.69	gobo6
			70.89	Gobo1 shake slow to fast
			90..109	Gobo2 shake slow to fast
			110..129	Gobo3 shake slow to fast
			130.149	Gobo4 shake slow to fast
			150.169	Gobo5 shake slow to fast
			170.189	Gobo6 shake slow to fast
190.255	Forward wheel spin, slow to fast			
7	5	7		<b>Rotation Gobo</b>
			0..127	Gobo indexing
			128..189	Forward gobo rotation fast to slow
			190..193	Gobo rotation stop
194.255	Reverse gobo rotation, slow to fast			
8	6	8		<b>Static Gobo</b>
			0.9	Open
			10..19	Gobo1
			20.29	Gobo2
			30.39	Gobo3
			40.49	Gobo4
			50.59	Gobo5
			60.69	Gobo6
			70.79	Gobo7
			80.89	Gobo8
			90.99	Gobo9
			100..109	Gobo10
			110..119	Gobo11
			120.129	Gobo1 shake slow to fast
130.139	Gobo2 shake slow to fast			
140.149	Gobo3 shake slow to fast			
150.159	Gobo4 shake slow to fast			
160.169	Gobo5 shake slow to fast			
170.179	Gobo6 shake slow to fast			
180.189	Gobo7 shake slow to fast			
190..199	Gobo8 shake slow to fast			

### 9.DMX PROTOCOL

Mode/Channel			Value	Function
16CH	14CH	18CH		
1	1	1	0.255	<b>Pan</b> PAN Movement
2		2	0.255	<b>Pan-fine</b> Fine control of Pan movement
3	2	3	0.255	<b>Tilt</b> Tilt Movement
4		4	0.255	<b>Tile-fine</b> Fine control of Pan movement
5	3	5		<b>Colour</b> Open/ white
			0.9	Colour 1
			10.19	Colour 2
			20.29	Colour 3
			30.39	Colour 4
			40.49	Colour 5
			50.59	Colour 6
			60.69	Colour 7
			70.79	Colour 8
			80.89	Colour 9
			90.127	Colour 9
			128.189	Forward rainbow effect, fast to slow
			190.193	Colour rotation stop
194.255	Reverse rainbow effect, slow to fast			
5	3	5		<b>Colour (Mode 2)</b> Open/ white
			0.4	White+ Colour1
			5.9	Colour1
			10.14	Colour1 + Colour2
			15.19	Colour2
			20.24	Colour2 + Colour3
			25.29	Colour3
			30.34	Colour3 + Colour4
			35.39	Colour4
			40.44	Colour4 + Colour5
			45.49	Colour5
			50.54	Colour5 + Colour6
			55.59	Colour6
			60.64	Colour6 + Colour7
			65.69	Colour7
			70.74	Colour7 + Colour8
			75.79	Colour8
80.84	Colour8			
85.89	Colour8 + Colour9			
90.94	Colour 9			

### 6.INSTALLATIONS

**Cautions:**

For added protection mount the fixtures in areas outside walking paths, seating areas, or in areas where 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 ft) 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.

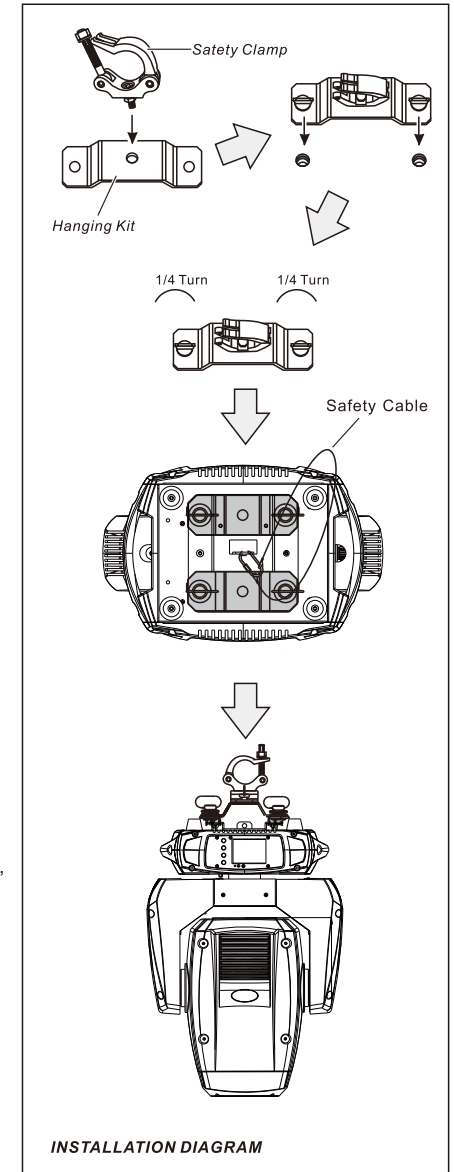
**Mounting points:**

**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.

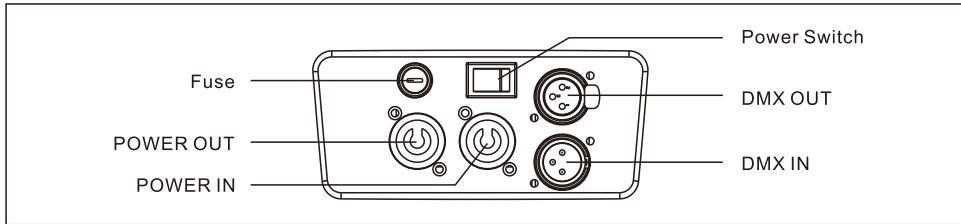
**Clamp Mounting:**

The ATTCO SPOT 250Z 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 "Hanging Kit". 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 .



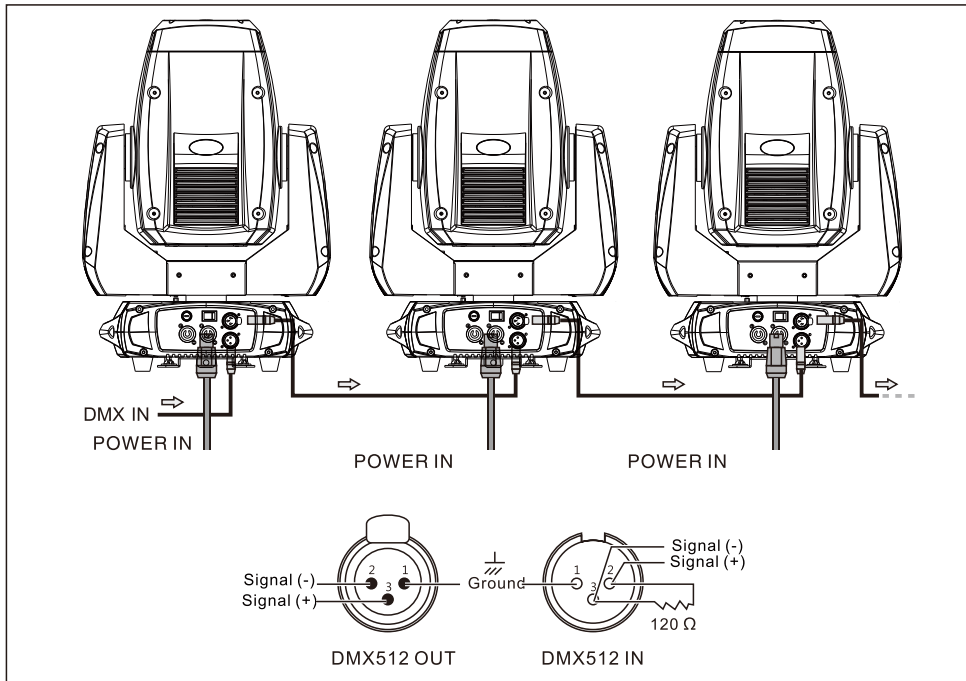


### 7.CONTROL CONNECTION

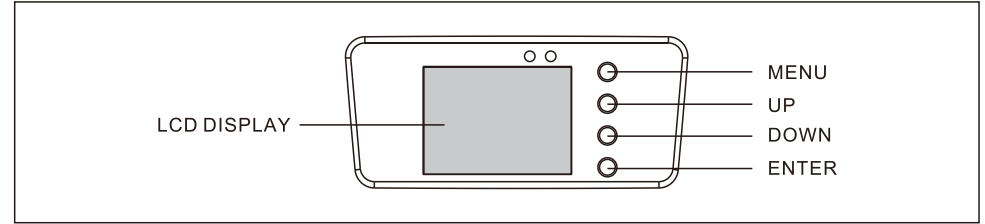


Connect the provided XLR cable to the female 3-pin XLR output of your controller and the other side to the male 3-pin XLR input of the moving head. You can chain multiple Moving head together through serial linking. The cable needed should be two core, screened cable with XLR input and output connectors. 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 a 120Ω 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.



### 8.MENU OPERATIONS



MENU			DESCRIPTION
Function Mode	DMX Address	A001~AXXX	DMX Address Setting
	Channel Mode	CH16	16 Channel Mode
		CH14	14 Channel Mode
		CH18	18 Channel Mode
	Auto Run	Internal Program1~8	Internal Program
		State: Master/Alone	Auto Run State
		Auto Run (On/Off)	Toggle Auto Run
	Music Control	Internal Program1~8	Internal Program
		State: Master/Alone	Sound Control State
Music Run (On/Off)		Toggle Sound Control	
Reset Default	Yes/No	Reset to Default Setting	
Option	Signal Set	DMX Wireless DMX Wireless TX Wireless DMX Transceiver Auto DMX Wireless first	Wired DMX Wireless DMX Receiver Wireless DMX Transceiver Wireless first
	Pan / Tilt	Reverse Pan (On/Off) Reverse Tilt (On/Off) Select Pan 630°/540°/360° Select Tilt 270°/180°/90° Limit Mode OFF/CEN./R/L	Reverse Pan Reverse Tilt Pan Degree (540°) Tilt Degree (270°) Select Edge or Corner Range
	UI SET	Mic Sens. 0~99% Hold on no DMX(On/Off) Half Colour (On/Off) Fast Scan(On/Off) Flip Display (On/Off) RF Remote(On/Off)	Microphone Sensitivity Setting Hold or no hold When no Signal Select half Colour Fast Scan Flip Display Default ON
	Information	Temperature Software Version	XXX C / F V1.0~V9.9
Manual Control	Reset	All Pan/Tilt Colour Gobo Others	Reset all Settings Reset Pan/tilt Settings Reset Colour Settings Reset Gobo Settings Reset Other Settings
	Channel	PAN=XXX.....	Manual Control Channel
ADVANCED (Access Code 088)	Calibration	PAN=XXX.....	Calibration

Special button function description: press the UP and DOWN buttons at the same time, for 3 seconds, the display direction is reversed