

## 9 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.

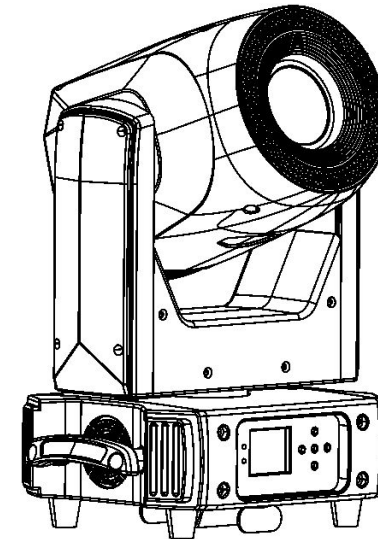
There are no serviceable parts inside the device. Please refer to the instructions under "Installation instructions".

Should you need any spare parts, please order genuine parts from your local dealer.

**CYCLOPS**  
LIGHTING

## LEDE 20S

150W LED Spot Moving Head  
with RGB Front Face Ring



# 1 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.

20	28	Effect	(50-70)	Auto Effect 4
			(71-91)	Auto Effect 5
			(92-112)	Auto Effect 6
			(113-133)	Auto Effect 7
			(134-154)	Auto Effect 8
			(155-175)	Auto Effect 9
			(176-196)	Auto Effect 10
			(197-217)	Auto Effect 11
			(218-238)	Auto Effect 12
			(239-255)	Auto Effect 13
21	29	Effect Speed	(0-255)	Effect Speed (slow to fast)

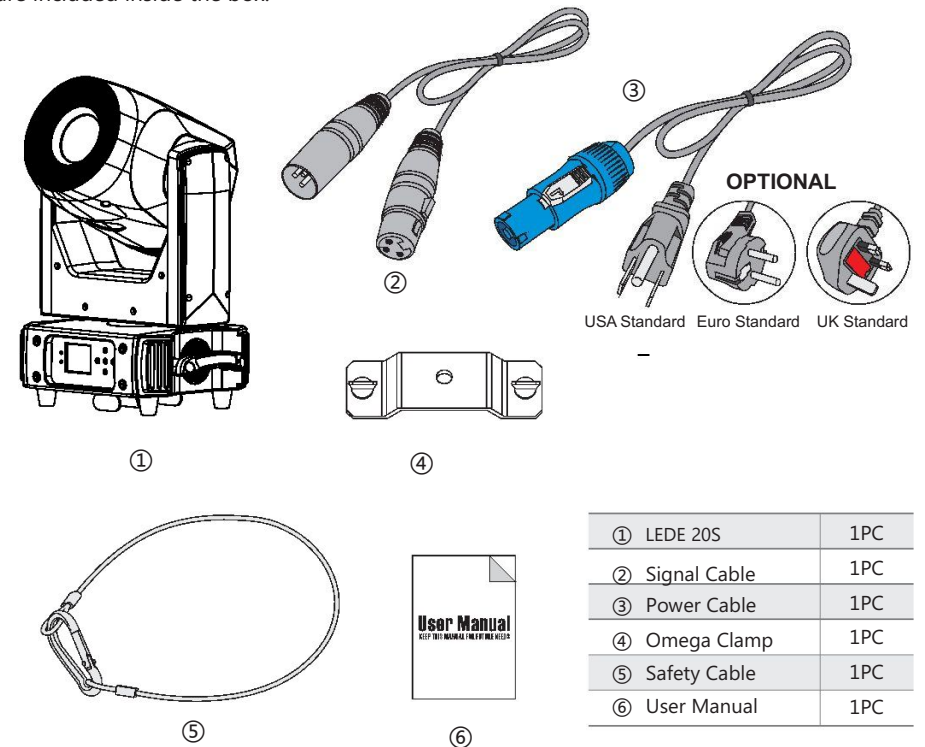
12	19	PRISM / GOBO MACROS	(50-59)	Macro 05			
			(60-69)	Macro 06			
			(70-79)	Macro 07			
			(80-89)	Macro 08			
			(90-99)	Macro 09			
			(100-109)	Macro 10			
			(110-119)	Macro 11			
			(120-129)	Macro 12			
			(130-139)	Macro 13			
			(140-149)	Macro 14			
			(150-159)	Macro 15			
			(160-169)	Macro 16			
			(170-255)	Reserved			
			13	20	Focus	(0-255)	Focus
				21	Focus Fine	(0-255)	Focus Fine
			14	22	Special Function	(0-19)	No Function
(20-29)	Lamp On(Reserved)						
(30-39)	Dimmer Curve SQUARE_LAW						
(40-49)	Dimmer Curve INVERSE_SQUARE_LAE						
(50-59)	Dimmer Curve LINE						
(60-69)	Dimmer Curve S						
(70-79)	Black Out When XY Move Enable						
(80-89)	Black Out When XY Move Disable						
(90-99)	Black Out When Color Change Enable						
(100-109)	Black Out When Color Change Disable						
(110-119)	Black Out When Gobo Change Enable						
(120-129)	Black Out When Gobo Change Disable						
(130-139)	Dimmer Speed Default						
(140-149)	Dimmer Speed Fast						
(150-159)	Dimmer Speed Smooth						
(160-169)	Reset All						
(170-179)	Reset Effect						
(180-189)	Reset XY						
(190-199)	Lamp Off(Reserved)						
(200-209)	Internal program 1						
(210-219)	Internal program 2						
(220-229)	Internal program 3						
(230-239)	Internal program 4						
(240-255)	Sound control						
15	23	Effect DIM				(0-255)	Effect LED 0-100% Linear dimmer
16	24	Effect Shutter				(0-255)	Effect LED Linear Strobe from Slow to Fast
17	25	Effect DIM-R				(0-255)	Effect LED-R 0-100% Linear dimmer
18	26	Effect DIM-G				(0-255)	Effect LED-G 0-100% Linear dimmer
19	27	Effect DIM-B	(0-255)	Effect LED-B 0-100% Linear dimmer			
20	28	Effect	(0-7)	Auto Effect 1			
			(8-28)	Auto Effect 2			
			(29-49)	Auto Effect 3			

## 2 UNPACKING

Thank you for choosing our LEDE 20S. 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. Meanwhile, please keep this manual well for future needs.

The LEDE 20S 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.

The LEDE 20S adopts 1PCS 150W White LED engine 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	LEDE 20S	1PC
②	Signal Cable	1PC
③	Power Cable	1PC
④	Omega Clamp	1PC
⑤	Safety Cable	1PC
⑥	User Manual	1PC

### 3 FEATURES & SPECIFICATIONS

#### Features

- A 150W White LED engine,7500K
- 50000 hours life span and low power consumption
- A set of high resolution and precise optics
- 15°Projection angle
- Linear electric focus
- PAN movement: 540°(8/16 bit)
- PAN movement: 270°(8/16 bit)
- Fast, quiet, smooth and precise 2-Phase motors
- Smooth, fast and precise resolution for PAN/TILT movement with low noise operation
- Scan position memory, auto reposition after unexpected movement
- 1 Color wheel with 7 dichroic colors plus open (half color mode available)
- Variable direction rainbow effect with speed adjustable
- 1 Rotating gobo wheel with 6 rotatable and interchangeable glass gobos plus open with speed adjustable, stream effect, dithering effect and rotatable clockwise or anticlockwise
- 1 Static gobo wheel with 8 gobos plus open with dithering effect
- Gobo overlay (gobo morphing)
- Gobo indexing
- Gobo size 22mm (external)/16mm (inner)
- 3-Facet prism with variable speed and direction
- Prism indexing
- 25T/sec high speed LED shutter/strobe effect with variable speed
- Preset variable/random strobe and dimming pulse effect
- 0-100% Smooth linear LED dimming
- 21/29 DMX channels USITT DMX-512
- DMX512, master-slave, or auto operation
- DMX recorder and edit function integrated
- RDM available (Remote Device Management)
- Art-NET (optional)
- Wireless receiver system built-in (optional)
- Shielded input signal protection for stable signal without interference
- RJ45 etherCON IN/OUT (optional as Art-NET)
- 3-Pin XLR DMX connectors IN/OUT
- Auto programs
- Ip20 protection rating

7	11	Rotating Gobo Wheel	(90-99)	R-Gobo1-3 Shaking(Slow to Fast)
			(100-109)	R-Gobo1-4 Shaking(Slow to Fast)
			(110-119)	R-Gobo1-5 Shaking(Slow to Fast)
			(120-129)	R-Gobo1-6 Shaking(Slow to Fast)
			(130-191)	Gobo1 CW(fast to slow)
			(192-193)	Gobo1 Stop
8	12	Gobo Rotation	(194-255)	Gobo1 CCW(slow to fast)
			(0-127)	R-Gobo 1-6 index
			(128-190)	Rotation CW(fast to slow)
			(191-192)	Rotation Stop
	13	R-Gobo1 Fine	(193-255)	Rotation CCW(slow to fast)
			(0-255)	Fine control for rotating gobo wheel
9	14	Static Gobo Wheel	(0-7)	Open
			(8-15)	Gobo2-1 index
			(16-23)	Gobo2-2 index
			(24-31)	Gobo2-3 index
			(32-39)	Gobo2-4 index
			(40-47)	Gobo2-5 index
			(48-55)	Gobo2-6 index
			(56-63)	Gobo2-7 index
			(64-71)	Gobo2-8 index
			(72-79)	Gobo2-1 Shaking(Slow to Fast)
			(80-87)	Gobo2-2 Shaking(Slow to Fast)
			(88-95)	Gobo2-3 Shaking(Slow to Fast)
			(96-103)	Gobo2-4 Shaking(Slow to Fast)
			(104-111)	Gobo2-5 Shaking(Slow to Fast)
			(112-119)	Gobo2-6 Shaking(Slow to Fast)
			(120-127)	Gobo2-7 Shaking(Slow to Fast)
			(128-135)	Gobo2-8 Shaking(Slow to Fast)
(136-194)	Gobo2 CW(fast to slow)			
(195-196)	Gobo2 Stop			
(197-255)	Gobo2 CCW(slow to fast)			
	15	Gobo2 wheel fine	(0-255)	Fine control for static gobo wheel
10	16	Prism	(0-10)	Prism off
			(11-255)	Prism On
11	17	Prism Rotation	(0-127)	Index 0°-360° Index
			(128-190)	Rotation CW(fast to slow)
			(191-192)	Rotation Stop
			(193-255)	Rotation CCW(slow to fast)
	18	R-Prism Fine	(0-255)	Fine control for prism
12	19	PRISM / GOBO MACROS	(0-9)	No Function
			(10-19)	Macro 01
			(20-29)	Macro 02
			(30-39)	Macro 03
			(40-49)	Macro 04

## 8 DMX CHANNELS

21CH	29CH	Function	Value	Description
1	1	Pan	(0-255)	Pan
	2	Pan Fine	(0-255)	Pan Fine
2	3	Tilt	(0-255)	Tilt
	4	Tilt Fine	(0-255)	Tilt Fine
3	5	Pan&Tilt	0-225	Pan&Tilt Speed from fast to slow
4	6	Dimmer	0-255	0-100% Linear dimmer
	7	Dimmer Fine	(0-255)	Fine control for dimmer
5	8	Strobe/Shutter	(0-31)	Shutter Close
			(32-63)	Shutter Open
			(64-95)	Linear Strobe from Slow to Fast
			(96-127)	Shutter Open
			(128-159)	Random strobe from slow to fast
			(160-191)	Shutter Open
			(192-223)	Random strobe from slow to fast
			(224-255)	Shutter Open
6	9	Color Wheel	(000-007)	Open
			(008-015)	Color Open and Color 1
			(016-023)	Color 1
			(024-031)	Color 1 and Color 2
			(032-039)	Color 2
			(040-047)	Color 2 and Color 3
			(048-055)	Color 3
			(056-063)	Color 3 and Color 4
			(064-071)	Color4
			(072-079)	Color 4 and Color 5
			(080-087)	Color 5
			(088-095)	Color 5 and Color 6
			(096-103)	Color 6
			(104-111)	Color 6 and Color 7
			(112-119)	Color 7
			(120-127)	Color 7 and Open
			(128-190)	Rotation CW(fast to slow)
			(191-192)	Stop
			(193-255)	Rotation CCW(slow to fast)
	10	Color Wheel Fine	(0-255)	Color wheel fine adjustment
7	11	Rotating Gobo Wheel	(0-9)	Open
			(10-19)	R-Gobo1-1 index
			(20-29)	R-Gobo1-2 index
			(30-39)	R-Gobo1-3 index
			(40-49)	R-Gobo1-4 index
			(50-59)	R-Gobo1-5 index
			(60-69)	R-Gobo1-6 index
			(70-79)	R-Gobo1-1 Shaking(Slow to Fast)
			(80-89)	R-Gobo1-2 Shaking(Slow to Fast)

## Specifications

Input Voltage:AC100-240V 50/60Hz

LED Quantities:1\*150W White LED engine

Control Signal:DMX512, master-slave and sound activated or auto operation

Control Channel: 21/29 DMX channels USITT DMX-512

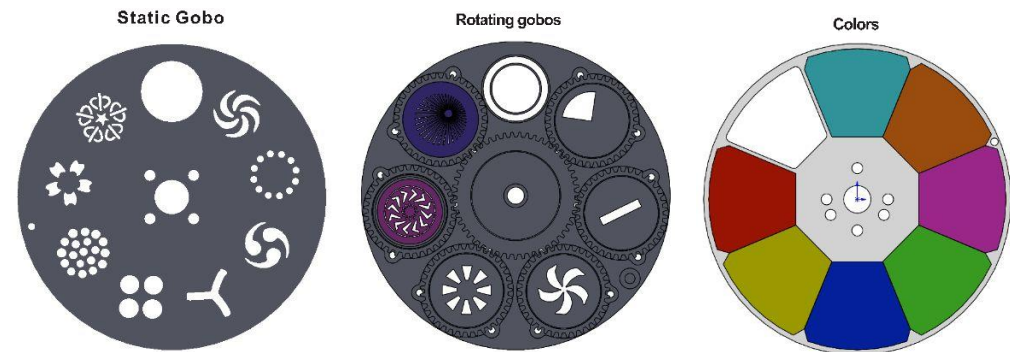
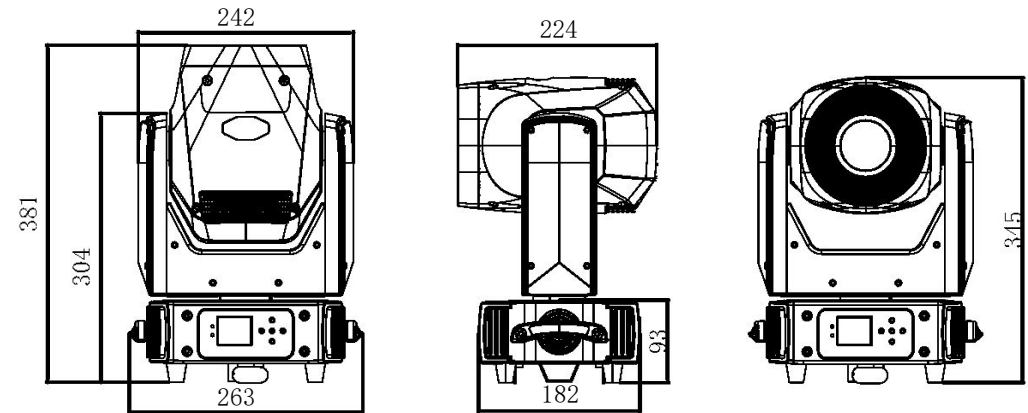
Power Consumption: 250W

Dimensions:182(D)\*263(W)\*381(H)mm

Packing Dimensions:280(D)\*295(W)\*385(H)mm

Net Weight: 8.2kg

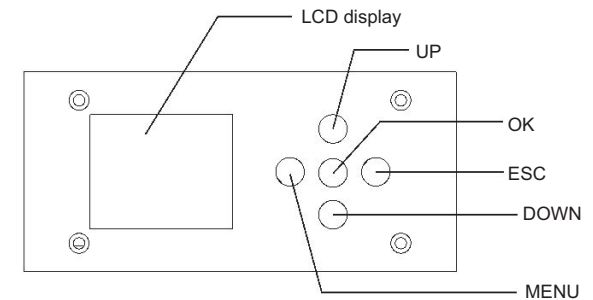
Gross Weight: 9.7kg



## 4 OPERATION INSTRUCTIONS

- The LEDE 20S is for spot 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.

MENU	Sys	DMX Monitor	/----
		System Errors	No Error
		DIS:xxxx-xxxx-xxx-xxxx	
		N:xxxx-xxxx-xxx-xxxx	
		DATE: xx xx xx	
	TIME: 00:00:00		
	Advan	Please input password:	
		OK/Cancel	
	EN/中		
	180°		



## 7 MENU OPERATIONS

MENU	Setup	RunMode	DMX
			Random
			Sound
			Auto
		DMX Address	001-512
		Channel Mode	Std.21CH
			Ext.29CH
		Sound Sensitivity	+000~-000
		Invert. PAN	OFF
			ON
		Invert. TILT	OFF
			ON
		PAN-TILT Swap	OFF
			ON
	PAN-TILT Encoder	OFF	
		ON	
	Dimmer Curve	Square Law	
		Inv Square Law	
		S-Curve	
		Linear	
	Dimmer Speed	Fast	
		Smooth	
	Dimmer Frequency	1.2kHz/3.6kHz/5kHz/ 10kHz/15kHz/25kHz	
	RDM	OFF	
		ON	
NO DMX Signal	KEEP		
	CLEAR		
Display	OFF		
	ON		
Load Default	Sure to Load Default?		
	OK/Cancel		
Manu	PAN	000-255	
	PAN Fine	000-255	
	TILT	000-255	
	TILT Fine	000-255	
	Dimmer	000-255	
	Strobe	000-255	
	Color	000-255	
	Gobo	000-255	
	Gobo Rotation	000-255	
	Prism	000-255	
	Prism Rotation	000-255	
	Macro	000-255	
Focus	000-255		
Reset	Sure to Reset?		
	OK/Cancel		

## 5 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.

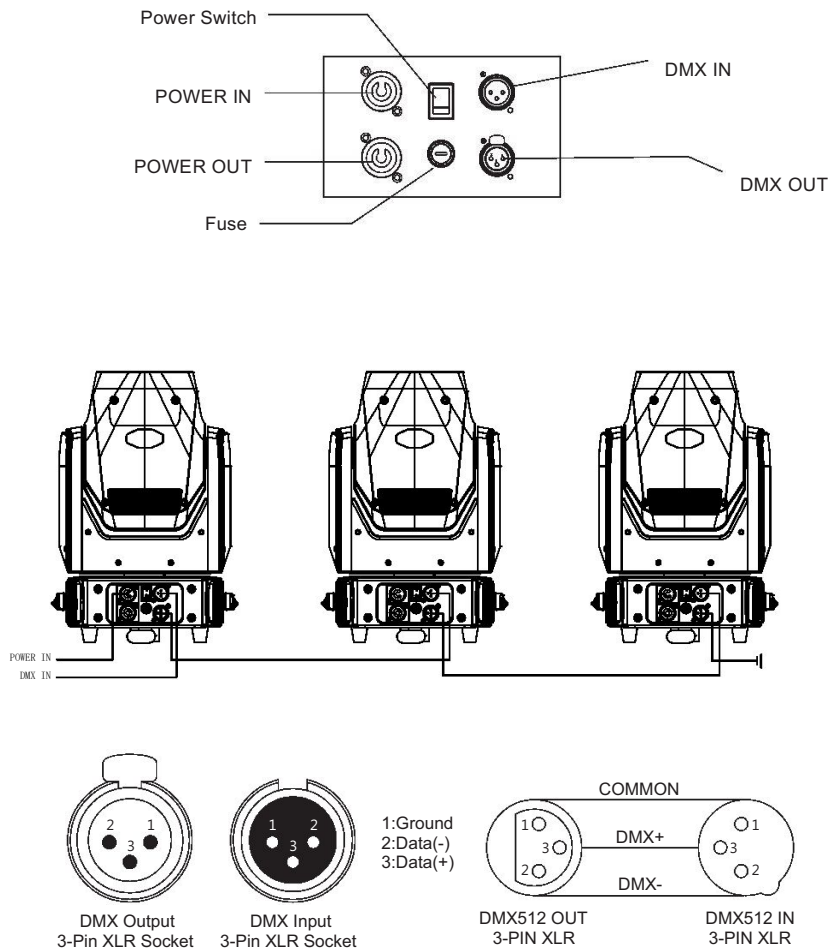
**Clamp Mounting:** The LEDE 20S provides a unique mounting bracket assembly that integrates the bottom of the base, and the safety cable rigging point in one unit (see the illustration below). When mounting this fixture to truss be sure to secure an appropriately rated clamp to the included omega bracket using a M10 screw fitted through the center hole of the "omega bracket". As an added safety measure be sure to attached at least one properly rated safety cable to the fixture using one of the safety cable rigging point integrated in the base assembly.

## 6 DMX-512 CONTROL CONNECTIONS

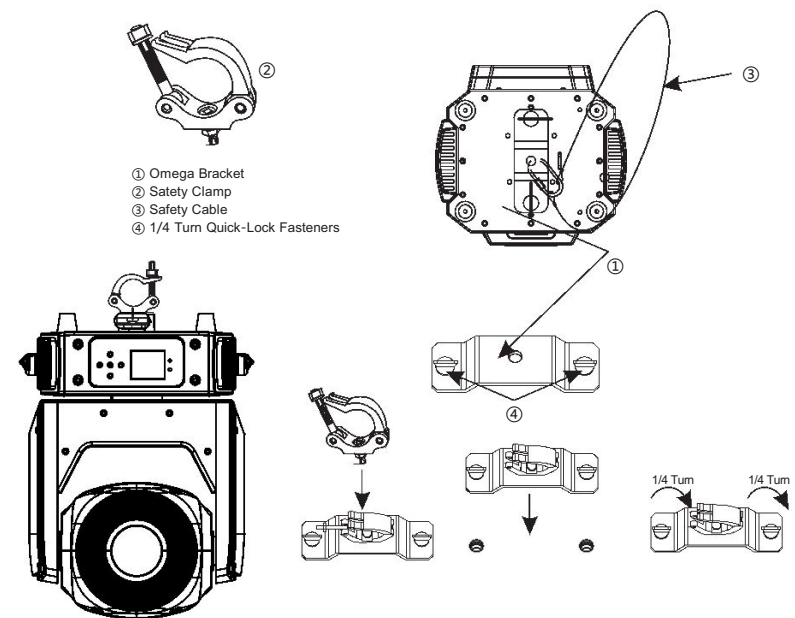
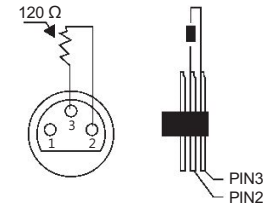
Connect the provided XLR cable to the female 3-pin XLR output of your controller and the other side to the male 3-pin XLR input of the moving head. You can chain multiple

Moving 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 120 Ω 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.



Regardless of the rigging option you choose for your LEDE 20S, 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.