

19*15W 4 in 1 AURA moving head
zoom



User Manual

Unpacking

Thank you for choosing LED Wash 19*15W.. 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.

LED BEAM 190w 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.

4-IN-1 LEDs(RGBW) 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:

Moving Head-----One	Signal Cable----One
Hanging Bracket-----One	Power Cable----One
User Manual----One	

Specifications

Input Voltage: AC90-260V 50/60Hz

LED Quantities: 19pcs OSRAM 15W 4-IN-1 LEDs (R, G, B, W)

Aura Led PCB :30*0.5W Leds (RGB)

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

Control Channel: 14/25 DMX channels

Power Consumption: 350W

Dimensions: 320(L)*210(W)*380(H)mm

Packing Dimensions:450(D)*370(W)*420(H)mm

Net Weight: 8kg

Gross Weight: 9kg

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.

Key Features

Source: 19pcs 15W high brightness OSRAM 4-in-1 LEDs

ZOOM: 3 ZOOM motors work together with the same step

Working lifetime: 100,000 hours with low power consumption

Channel: 14/25

Control: DMX512/Master-slave/Auto/Sound

Strobe: 1-25 times/second

PAN: 540 degree with 16bit rotate

Tilt: 240 degree with 16bit rotate

Beam angle: 8-58 degrees

Color: RGBW infinite mixture

Dimmer: 0-100% linear dimming system

Display: LCD blue display with Chinese and English language.

Protection: Auto temperature control system with big cooling fan.

Quiet, smooth and fast PAN/TILT movement

Low noise and efficient FAN cooling system

Built-in pre-programs with macro effects.

IPOWERCON power connector

45°C max ambient temperature

IP20 protection rating

3-Pin XLR DMX input/output

Function: With LED shutter, scan position memory and auto reposition.

LED rainbow effect.

Perfectly suitable for stage, theatre, TV studio, rental, DISCO and more

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.

Operation Instructions

- The moving head 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.

4. Mounting and Installation

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.

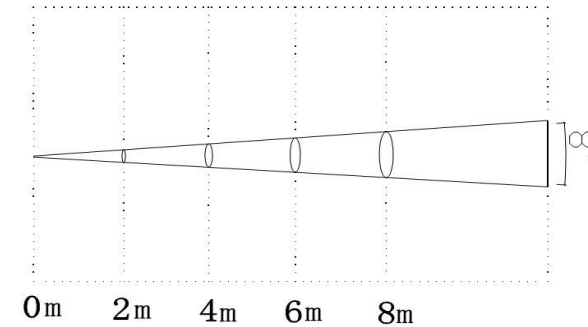
Before mounting the fixture to any surface, make sure that the installation area can hold a minimum point load of 10 times the device's weight.

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

Photometric Data

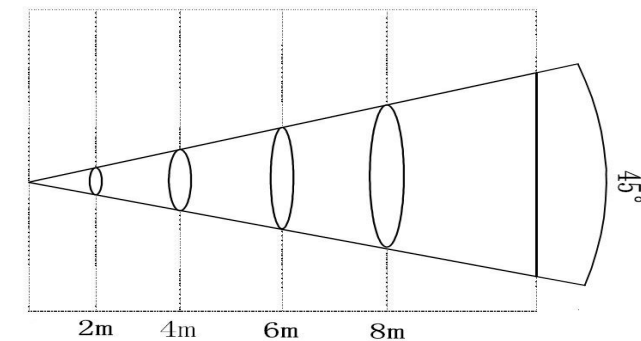
LUX Data of 8degree beam angle:

R	7200LUX	1900LUX	1000LUX	620LUX
G	14800LUX	3900LUX	1900LUX	1200LUX
B	14800LUX	3950LUX	1950LUX	1200LUX
W	15200LUX	3850LUX	1950LUX	1200 LUX
RGBW	41100LUX	10000LUX	4600LUX	2550LUX



LUX Data of 45degree beam angle:

R	1150 LUX	310 LUX	200 LUX	110 LUX
G	2450 LUX	100 LUX	350 LUX	180 LUX
B	2450 LUX	710 LUX	350 LUX	200 LUX
W	2350 LUX	700 LUX	320 LUX	200 LUX
RGBW	6600 LUX	2000 LUX	1200 LUX	700 LUX



DMX Chart

STD.	EXT	Func	Values	Description
1	.	.	0 - 19 20 - 24 25 - 64 65 - 69 70 - 84 85 - 89 90 - 104 105 - 109 110 - 124 125 - 129 130 - 144 145 - 149 150 - 164 165 - 169 170 - 184 185 - 189 190 - 204 205 - 209 210 - 224 225 - 229 230 - 244 245 - 255	Shutter closed Shutter open Strobe 1 (fast → slow) Shutter open Strobe 2: opening pulse (fast → slow) Shutter open Strobe 3: closing pulse (fast → slow) Shutter open Strobe 4: random strobe (fast → slow) Shutter open Strobe 5: random opening pulse (fast → slow) Shutter open Strobe 6: random closing pulse (fast → slow) Shutter open Strobe 7: burst pulse (fast → slow) Shutter open Strobe 8: random burst pulse (fast → slow) Shutter open Strobe 9: sine wave (fast → slow) Shutter open Strobe 10: burst
2		dimmer	0-255	0 → 100% intensity
3		Zoom	0-255	Wide → narrow
4		Pan	0-255	0° - 540°
5		fine	0-255	Pan fine adjustment

6	Tilt	0-255	Tilt 0° - 240°
7	fine	0-255	Tilt fine adjustment
8	function	0 - 9 10 - 14 15 - 39 40 - 44 45 - 49 50 - 54 55 - 59 60 - 64 65 - 69 70 - 74 75 - 89 90 - 94 95 - 99 100 - 104 105 - 109 110 - 114 115 - 119 120 - 124 125 - 249 250 - 255	No function Reset entire fixture1 No function PTSP = NORM2 PTSP = FAST2 PTSP = SLOW2 No function Fan mode FULL2 No function Fan mode REGULATED2 No function Calibrated color output mode COLOR CALIB = ON3 No function Raw color output mode COLOR CALIB = OFF3 No function Fast dimming, speed of changes unrestricted2 No function Smooth dimming, speed of changes restricted slightly2 No function Illuminate display
9	Marcos	0 - 9 10 - 14 15 - 19 20 - 24 25 - 29 30 - 34 35 - 39 40 - 44	Open. RGBW color mixing enabled LEE 790 - Moroccan pink LEE 157 - Pink LEE 332 - Special rose pink LEE 328 - Follies pink LEE 345 - Fuchsia pink LEE 194 - Surprise pink LEE 181 - Congo Blue

	45 - 49	LEE 071 - Tokyo Blue
	50 - 54	LEE 120 - Deep Blue
	55 - 59	LEE 079 - Just Blue
	60 - 64	LEE 132 - Medium Blue
	65 - 69	LEE 200 - Double CT Blue
	70 - 74	LEE 161 - Slate Blue
	75 - 79	LEE 201 - Full CT Blue
	80 - 84	LEE 202 - Half CT Blue
	85 - 89	LEE 117 - Steel Blue
	90 - 94	LEE 353 - Lighter Blue
	95 - 99	LEE 118 - Light Blue
	100 - 104	LEE 116 - Medium Blue Green
	105 - 109	LEE 124 - Dark Green
	110 - 114	LEE 139 - Primary Green
	115 - 119	LEE 089 - Moss Green
	120 - 124	LEE 122 - Fern Green
	125 - 129	LEE 738 - JAS Green
	130 - 134	LEE 088 - Lime Green
	135 - 139	LEE 100 - Spring Yellow
	140 - 144	LEE 104 - Deep Amber
	145 - 149	LEE 179 - Chrome Orange
	150 - 154	LEE 105 - Orange
	155 - 159	LEE 021 - Gold Amber
	160 - 164	LEE 778 - Millennium Gold
	165 - 169	LEE 135 - Deep Golden Amber
	170 - 174	LEE 164 - Flame Red
	175 - 179	Open Color wheel rotation effect
	180 - 201	Clockwise, fast → slow
	202 - 207	Stop (this will stop wherever the color is at the time)

		208 - 229	Counter-clockwise, slow → fast
		230 - 234	Open
		235 - 239	Fast
		240 - 244	Medium
		245 - 249	Slow
		250 - 255	Open
10	Red	0-255	Red 0 → 100%
11	Green	0-255	Green 0 → 100%
12	Blue	0-255	Blue 0 → 100%
13	White	0-255	White 0 → 100%
14	CTC	0 - 19 20 - 255	CTC disabled CTC 10 000K → 2 500K
*	15	Pre-program 1	0-255 Effect selection (FX1)
*	16	speed	0-255 Zero → maximum (to CH 15)
*	17	Pre-program 1	181-244 Effect selection (FX2)
*	18	speed	245-255 Zero → maximum (to CH 17)
*	19	Setting of FX	0 - 49 No sync • FX1 and FX2 run through cycles independently • Cycle duration is regular • Channel 16 and channel 18 adjust FX1 and FX2 independently 50 Sync • FX1 and FX2 run through cycles in sync

			51 - 169	<ul style="list-style-type: none"> • Cycle duration is regular • Channel 16 adjusts overall speed, channel 18 has no effect Sync shift
			170 - 209	<ul style="list-style-type: none"> • FX1 and FX2 run through cycles in sync • FX2 is offset (delayed) relative to FX1 • Offset is adjustable from zero → maximum • Channel 16 adjusts overall speed, channel 18 has no effect Sync random
			210 - 255	<ul style="list-style-type: none"> • FX1 and FX2 run through cycles in sync • Cycle duration for synchronized FX1 and FX2 is made shorter and longer at random. • Channel 16 adjusts overall speed, channel 18 has no effect No sync, random
				<ul style="list-style-type: none"> • FX1 and FX2 run through cycles independently • Cycle duration is for FX1 and FX2 is made shorter and longer at random • Channel 16 and channel 18 adjust FX1 and FX2 speed independentl
*	20	Aura shutter and strobe effect	0 - 19	Shutter closed
			20 - 24	Shutter open
			25 - 64	Strobe 1 (fast → slow)
			65 - 69	Shutter open
			70 - 84	Strobe 2: opening pulse (fast → slow)
			85 - 89	Shutter open
			90 - 104	Strobe 3: closing pulse (fast → slow)
			105 - 109	Shutter open
			110 - 124	Strobe 4: random strobe (fast → slow)
			125 - 129	Shutter open
			130 - 144	Strobe 5: random opening pulse (fast → slow)
			145 - 149	Shutter open

			150 - 164	Strobe 6: random closing pulse (fast → slow)
			165 - 169	Shutter open
			170 - 184	Strobe 7: burst pulse (fast → slow)
			185 - 189	Shutter open
			190 - 204	Strobe 8: random burst pulse (fast → slow)
			205 - 209	Shutter open
			210 - 224	Strobe 9: sine wave (fast → slow)
			225 - 229	Shutter open
			230 - 244	Strobe 10: burst (fast → slow)
			245 - 255	Shutter open
*	21	Aura dimmer	0-255	0 → 100% intensity
*	22	Aura marcro	0 - 9	Open. RGB color mixing enabled
			10 - 14	LEE 790 - Moroccan pink
			15 - 19	LEE 157 - Pink
			20 - 24	LEE 332 - Special rose pink
			25 - 29	LEE 328 - Follies pink
			30 - 34	LEE 345 - Fuchsia pink
			35 - 39	LEE 194 - Surprise pink
			40 - 44	LEE 181 - Congo Blue
			45 - 49	LEE 071 - Tokyo Blue
			50 - 54	LEE 120 - Deep Blue
			55 - 59	LEE 079 - Just Blue
			60 - 64	LEE 132 - Medium Blue
			65 - 69	LEE 200 - Double CT Blue
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			75 - 79	LEE 201 - Full CT Blue
			80 - 84	LEE 202 - Half CT Blue
			85 - 89	LEE 117 - Steel Blue

			90 - 94	LEE 353 - Lighter Blue
			95 - 99	LEE 118 - Light Blue
			100 - 104	LEE 116 - Medium Blue Green
			105 - 109	LEE 124 - Dark Green
			110 - 114	LEE 139 - Primary Green
			115 - 119	LEE 089 - Moss Green
			120 - 124	LEE 122 - Fern Green
			125 - 129	LEE 738 - JAS Green
			130 - 134	LEE 088 - Lime Green
			135 - 139	LEE 100 - Spring Yellow
			140 - 144	LEE 104 - Deep Amber
			145 - 149	LEE 179 - Chrome Orange
			150 - 154	LEE 105 - Orange
			155 - 159	LEE 021 - Gold Amber
			160 - 164	LEE 778 - Millennium Gold
			165 - 169	LEE 135 - Deep Golden Amber
			170 - 174	LEE 164 - Flame Red
			175 - 179	Open
				Color wheel rotation effect
			180 - 201	Clockwise, fast → slow
			202 - 207	Stop (this will stop wherever the color is at the time)
			208 - 229	Counter-clockwise, slow → fast
			230 - 234	Open
				Random color
			235 - 239	Fast
			240 - 244	Medium
			245 - 249	Slow
			250 - 255	Open
*	23	Aura red	0-255	Red 0 → 100%

*	24	Aura green	0-255	Green 0 → 100%
*	25	Aura blue	0-255	Blue 0 → 100%

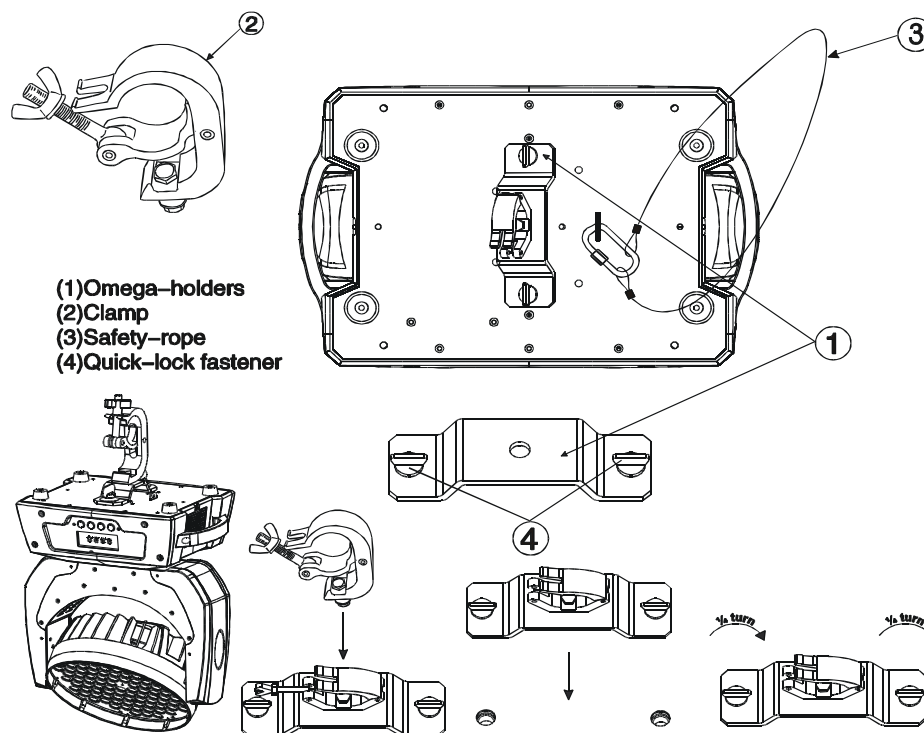
FX: pre-programmed effects

Type	DMX value	Percent	FX Name	FX Adjust
Aura Sync	0 - 9	0 - 3	Dimmer sync	
	10 - 12	4	Idle	n/a
	13 - 15	5	Dimmer sync	n/a
	16 - 18	6 - 7	Strobe sync	n/a
	19 - 21	8	Dimmer + strobe sync	n/a
	22 - 24	9	Aura color sync	n/a
	25 - 39	10 - 15	Aura all sync	n/a
			<i>Reserved</i>	n/a
Intensity FX	40 - 42	16	Aura strobe delay	Trigger Delay
	43 - 45	17	Aura strobe delay	Speed
	46 - 48	18	Strobe alternate single	Speed
	49 - 51	19 - 20	Strobe alternate dual	Speed
	52 - 54	21	Strobe alternate triple	Speed
	55 - 60	22 - 23	3-step strobe	Speed
	61 - 63	24	<i>Reserved</i>	n/a
	64 - 66	25	Intensity random alternate	Speed
	67 - 69	26 - 27	Aura ramp, Beam flash	Speed
	70 - 72	28	Beam ramp, Aura flash	Speed
	73 - 75	29	Intensity Aura, Beam ramp	Speed
	76 - 99	30 - 38	Intensity Beam, Aura ramp	Speed
			<i>Reserved</i>	n/a
Color FX	100 - 102	39	Aura color offset	Color offset
	103 - 108	40 - 42	Aura color offset	n/a
	109 - 111	43	<i>Reserved</i>	Amount
	112 - 114	44	Hue shimmer	Amount
	115 - 126	45 - 49	Saturation shimmer	n/a
	127 - 129	50	<i>Reserved</i>	n/a
	130 - 132	51	Color strobe	n/a
	133 - 135	52	Color offset strobe	Color offset on strobe
	136 - 138	53	Aura color strobe	n/a
	139 - 141	54 - 55	Aura color offset strobe	Aura color offset on strobe
	142 - 159	56 - 62	Color spikes	Strength
			<i>Reserved</i>	n/a
Zoom FX	160 - 162	63	Zoom / color offset	Speed
	163 - 165	64	Color zoom ramp in	Speed
	166 - 168	65	Color zoom ramp out	Speed
	169 - 171	66	Color zoom fade in	Speed
	172 - 174	67 - 68	Color zoom fade out	n/a
	175 - 177	69	<i>Reserved</i>	n/a
	178 - 180	70	Zoom ramp up	Speed
	181 - 219	71 - 85	Zoom ramp down	Speed
			<i>Reserved</i>	n/a
<i>Reserved</i>	220 - 255	86 - 100	<i>Reserved</i>	n/a

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 LEDBEAM 190w 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



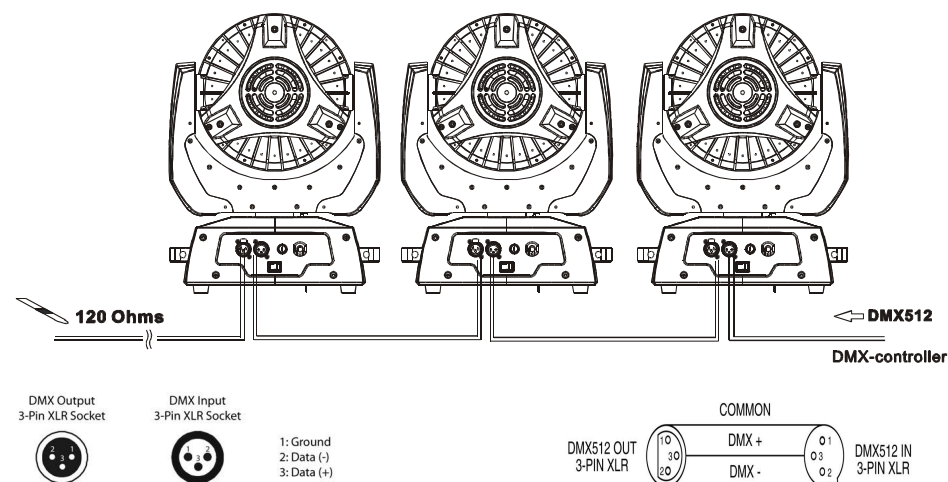
Regardless of the rigging option you choose for your LEDBEAM 120F, always be sure to secure your fixture with a safety cable. The fixture provides a built-in rigging point for a safety cable on the hanging bracket as illustrated above. Be sure to only use the designated rigging point for the safety cable and never secure a safety cable to a carrying handle.

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 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.

