

ignition

Manual



LED EXPO 310

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1. Safety instructions



- This device is suitable for indoor use (not outdoors) only.
- All modifications to the device will void the warranty.
- Repairs are to carry out by skilled personnel only.
- Use only fuses of the same type and original parts as spare parts.
- Protect the unit from rain and humidity to avoid fire and electric shocks.
- Make sure to unplug the power supply before opening the housing.

1.1. For safe and efficient operation

Be careful with heat and extreme temperature

Avoid exposing it to direct rays of the sun or near a heating appliance.
Not put it in a temperature bellow 32°F /0°C, or exceeding 104°F /40°C.

Keep away from humidity, water and dust

Do not place the set in a location with high humidity or lots of dust.
Containers with water should not be placed on the set.

To avoid placing on un-stable location

Select a level and stable location to avoid vibration.

Do not use chemicals or volatile liquids for cleaning

Use a clean dry cloth to wipe off the dust, or a wet soft cloth for stubborn dirt.

If out of work, contact sales agency immediately

Any troubles arose, remove the power plug soon, and contact with an engineer for repairing, do not open the cabinet by yourself, it might result a danger of electric shock.

Take care with the power cable

Never pull the power cable to remove the plug from the receptacle, be sure to hold the plug. When not using the device for an extended period of time, be sure to disconnect the plug from the receptacle.

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. Make sure the electrical connection is carried out by qualified personnel. All electrical and mechanical connections have to be carried out according to the European safety standards.

2. Designated use

This device was developed for professional use on stages, in discos, theatres etc. The device is only approved for a connection up to 230V 50/60 Hz AC voltage and only for indoor use.

Regular breaks during operation increase the lifetime of your device.

Avoid convulsions or any form of forceful impact during the installation or the start-up of the device.

Make sure that the device is not exposed excessive heat, humidity or dust at the place of installation. Take care that no cables are lying around. You would endanger your own safety and also the safety of a third party.

It is not allowed to operate or store the device in an environment in which spray water, rain, humidity or fog is expected. Humidity or very high atmospheric humidity could reduce the isolation of the device and could cause deathly electric shocks. If you use fog devices the device has not be exposed to a direct smoke jet. There has to be a safety distance of at least 0,5m between this device and the fog machine. Make sure that the saturation of the fog has to enable a visibility of at least 10m.

Operate the device not during thunderstorms. Surge voltages could destroy the device. Unplug the power supply during thunderstorms.

During the installation the use of the mounting bracket is obligatory.

Surrounding objects or surfaces should not be in contact with the device. And make sure that there is a distance of at least 0,2m between the lenses and illuminated objects.

Make sure that during the installation and removal of the device the area below the place of installation is basically cordoned off. This also applies to implementation of service.

The device has basically been protected by a suitable safety.

Make familiar yourself with the functions of the device before start-up. People without the experience should not handle with the device. The most cause of functional disorder is inappropriate handling.

Do not use chemicals or volatile liquids for cleaning. Use a clean dry cloth to wipe off the dust, or a wet soft cloth for stubborn dirt.

For transport use the original packing or designated accessory to avoid damages during the transport.

For reasons of safety unauthorized changes are forbidden.

A usage of the device which differs from usages which are described in this manual can cause damages of the device. In that case the warranty expires. Additional you should notice that every differed usage is related with dangers and can cause e.g. an electrical short, fire, electric shock or crash.

2.1. Overhead installation



Danger of life!

You have to observe the regulations of BGV C1 (formerly VBG 70) and EN60598-2-17 Installations are to carry out by skilled personnel only.

The suspension devices have to be build and measured so they can withstand for an hour the tenfold of the payload without suffering a permanent detrimental deformation.

Basically installation has to be made by using a second separate suspension. This can be e.g. a suitable net. The second suspension must be designed and attached so no part of the installation can fall down in case of failure.

During construction, reconstruction and deconstruction unnecessary stay in the range of moving areas, on lightning bridges, under elevated work stations or any other danger zones is forbidden.

The operator is obliged to following safety-related and mechanical facilities:

- Before the first start-up or after critical changes before restarting it has to be checked by an expert.
- Review in the frame of the inspection test at least all four years by an expert. .
- Review by a qualified person at least once a year.

How to carry out the overhead installation:

In tidal fall you should install the device out of the lounge area of people

IMPORTANT! Overhead installation requires a high level of experience. This includes knowledge of calculating the payload, used installation material and safety inspections of the used material and the projector whereas the required experience is not limited to this. Do not try to carry out installation yourself under any circumstances if you are not qualified. Contact a professional installer. An inappropriate installation can lead to injuries and/or damaged properties.

It is not allowed to install the device in the grip area of people.

If the device may hang from the ceiling or from high beams, the use of truss systems is mandatory. The device may not be installed so it can swing freely in the room.

Please note: Crashing down items can cause serious injuries! Do not install the projector, if you doubt the safety of a possible installation form!

Before installation make sure that the mounting surface has the ability to carry the tenfold point load of the own weight of the device.

Mount the device with the mounting-bracket to your trussing system using an appropriate clamp.

During overhead installation the device must be always secured by a safety rope which is designed to hold the twelvefold weight of device. Only safety ropes with quick-release safety fastener elements may be used. Hang up the safety rope in the hole of the mounting bracket. Direct the rope over the truss or an appropriate fastening point. Hang up the end in the fastening element and tie up the locking nut. A safety rope once exposed to failing load or damaged may not be used furthermore.

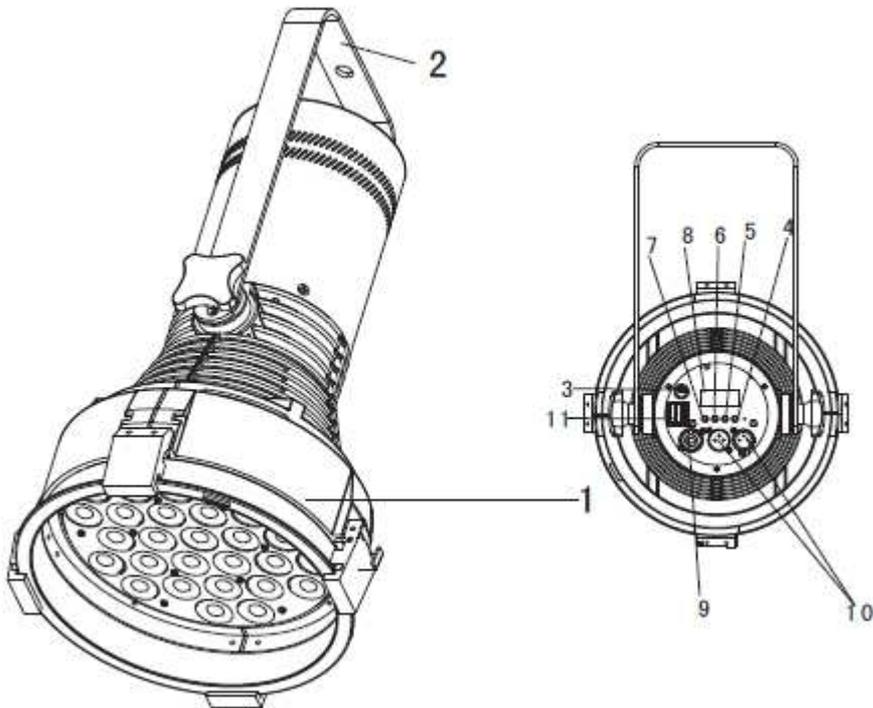
The maximum drop exceed must not exceed 20cm.

A safety rope once exposed to failing load or damaged may not be used furthermore.
Adjust the desired inclination angle via the mounting bracket and tighten the screw.

3. Introduction

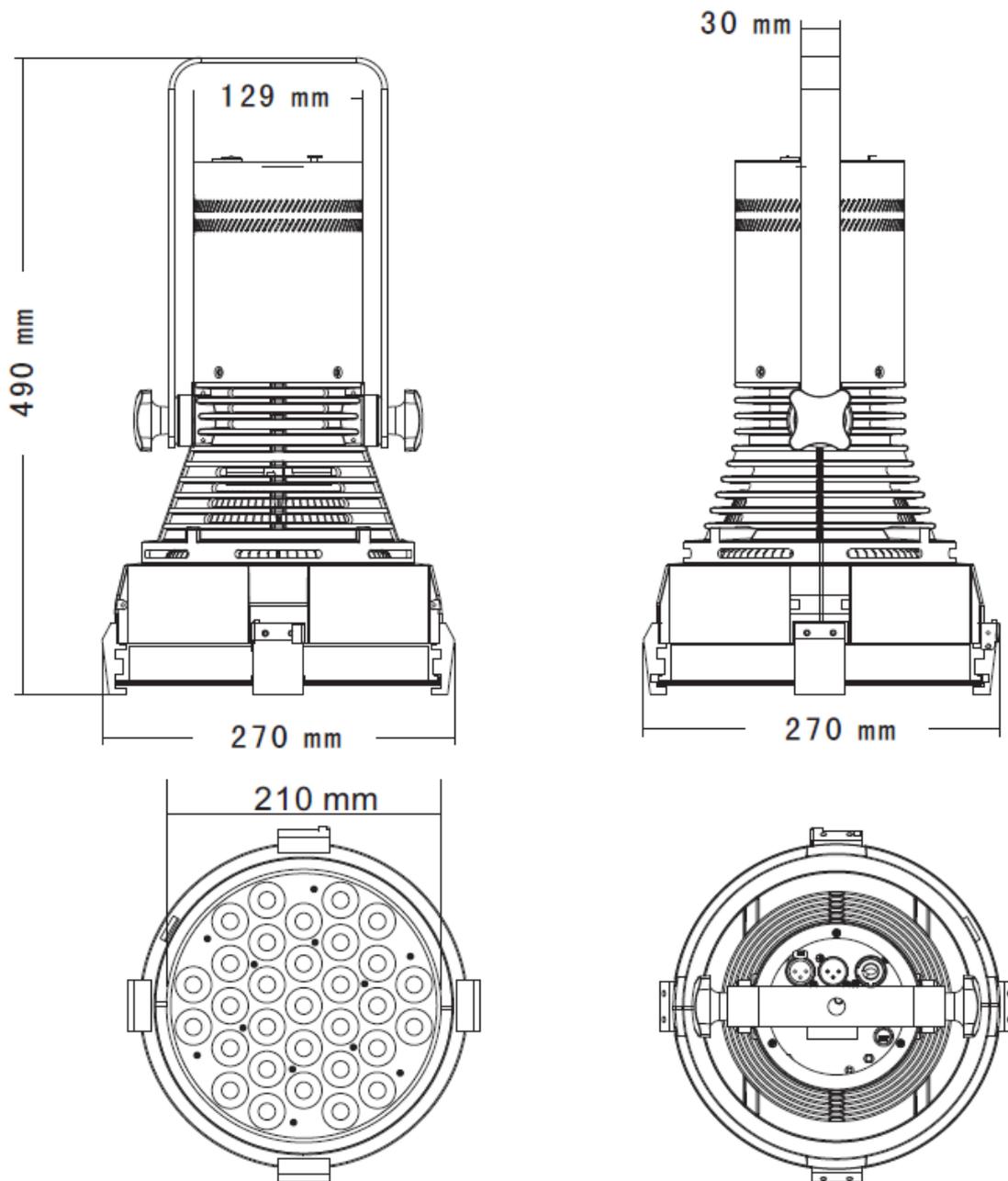
Thank you for buying the **LED EXPO 310**. It is a powerful device.
For a successful installation and operation, please read this manual carefully.

3.1. Product overview



1. Head
2. Arm
3. Fuse
4. ENTER Button
5. DOWN Button
6. UP Button
7. MODE Button
8. Display
9. Power connection
10. XLR 3pol In/Out
11. On/Off switch

3.2. Dimensions



4. Connections

4.1. Electrical connections

If you wish to change the power supply settings, see the chapter Appendix. Connect the fixture to the mains with the enclosed power cable and plug. The earth has to be connected.

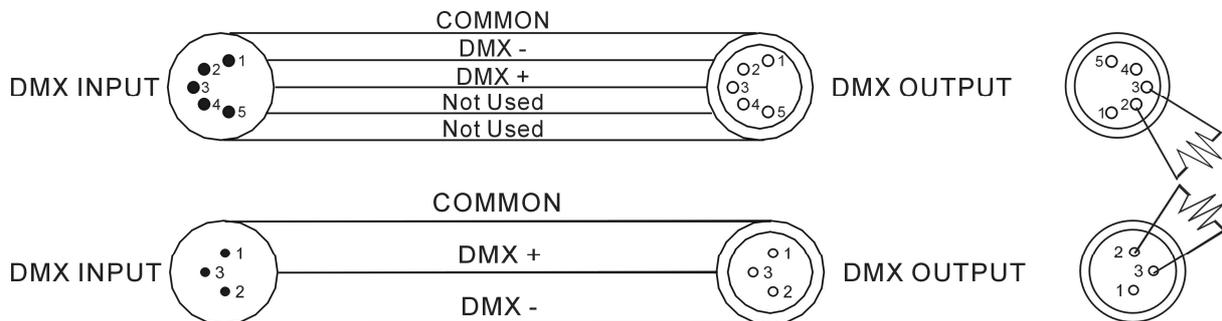
Cable (EU)	Cable (US)	Pin	International
Brown	Black	Live	L
Light blue	White	Neutral	N
Yellow/Green	Green	Earth	⊕

4.2. DMX connections

To make a DMX512 connection go ahead like it is described in the picture. Make sure that you use shielded cable. 3pole or 5pole XLR cables are suitable. If you use a controller with a 5 pin DMX output connector, you will need to use a 5pin to 3 pin adapter.

4.3. DMX connection with terminator

Where the DMX cable has to run a long distance or the equipment is operated in an electrically noisy environment like a disco for installations, we recommend using a DMX terminator. This prevents corruption of the digital control signal by electrical noise. The DMX terminator is simply an XLR connector with a 120 Ω resistor between pins 2 and 3, which is then plugged into the XLR output socket of the last device in the series. Please look to the bottom drawings.



5. Control

Press MODE to get to the menu. With UP/DOWN you can select the required point of menu. Confirm your selection with ENTER. With UP/DOWN you can make your settings after this confirm your settings with ENTER.

5.1. Structure of the menu

Menu	Submenu 1	Submenu 2	Submenu 3	Function
Function	Addr	001 – 512		Setting the DMX address.
	Value	Free Ch		Shows the current DMX value.
Adjust	Test	DIM	000 – 255	Dimmer 0 – 100%
		PINS	000 – 255	Strobe slow – fast
Personal	Status	Addr DMX	On / Off	(De-)Activates the DMX mode.
		No DMX	Hold	The last received value is hold if the DMX signal is interrupted.
			Open	All values will be set to 0 if the DMX signal is interrupted.
	Default			Reset
	Display	ClosT	02s – 59s	Setting the time after which the display shuts down.
		Rev	On/Off	(De-)Activates the function that the display is inverted.
Info	Time	Current		Shows the current fixture times.
		Clear		Clears the current fixture times.
		Total		Shows the total fixture times.
	Product			Shows the current software version.

6. DMX chart

Channel	Value from	Value o	Function
1	0	255	Dimmer 0 – 100%
2	0		Shutter open
	1	95	Strobe slow – fast
	96	127	Shutter open
	128	159	Pulse effect
	160	191	Shutter open
	192	223	Strobe (Random) slow – fast
	224	255	Shutter open

7. Technical data

Power supply	
Voltage	100 – 240 V AC / 50-60 Hz
Power consumption max.	350 W
Light source	
LM type	LED single color
Color spectrum	CW
Wavelength / Color temperature	6300 K
Power	310 W
Number / Power	31x 10 W
Optics	
Beam angle	20°
Connections	
Power in	P-Con
XLR in/out	3pol
Controlling	
DMX512	Yes
Number of channels	2 channels
Hardware	
Protection class	IP20
Suitability	Indoor
Dimensions (L/B/H)	490 x 270 x 270 mm
Weight	6,6 kg

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