



Manual



**LED Easy Move Wash**

**Unlimited**

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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 below 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.

#### **Keep away from sources of hum and noise**

Such as transformer motor, tuner, TV set and amplifier.

#### **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 1,3m between this device and the fog machine. Make sure that the saturation of the fog has to enable a visibility of at least 10m.

The ambient temperature has to be between 0°C and +40°C. Avoid direct sunlight and close proximity to heaters. You have also to attend it during the transport in closed motor vehicles.

You have to attend that with an ambient temperature von 40°C it is not allowed that the relative humidity exceeds 50%.

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.

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 Easy Move Wash Unlimited. It is a powerful device. For a successful installation and operation, please read this manual carefully.

### 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.

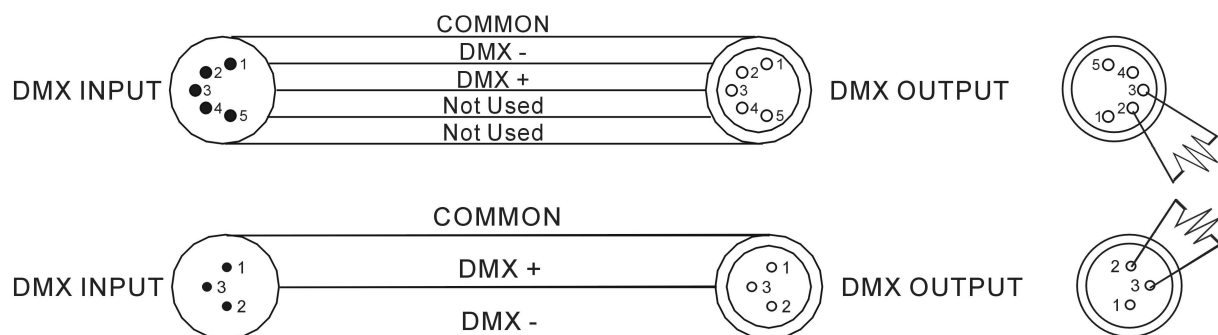
Cable (EU)	Cable (US)	Pin	International
Brown	Black	Live	L
Light blue	White	Neutral	N
Yellow/Green	Green	Earth	⊕

#### 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. Important! After the last device the line has to be terminated. In order to do this you have to solder a 120Ω resistor between the pins Data + and Data -. You can solder this end resistor on a 3pin or 5pin XLR: Plug this adapter into the DMX output of the device.

#### 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

Menu	Submenu 1	Function
Set DMX Address	001 - 512	Select a DMX address
Reload	ENTER	Reset to default
Reset	ENTER	Reset
Display Ver	Ver 1.0	Shows the Software version
Set LCD Light	Light ON / OFF	Switch ON / OFF the Display light
Run Manual	Manual PAN 000 – 255	Manual setting of PAN
	Manual Color-SP 000 - 255	Manual setting of speed for color change
	Manual Color 000 - 255	Manual setting of color and color change
	Manual Color-W 000 - 255	Manual setting of white
	Manual Color-B 000 - 255	Manual setting of blue
	Manual Color-G 000 - 255	Manual setting of green
	Manual Color-R 000 - 255	Manual setting of red
	Manual Dimmer 000 - 255	Manual setting of dimming
	Manual Shut 000 – 255	Manual setting of shutter
	Manual TILT 000 - 255	Manual setting of TILT
Set Run Channel	15 / 17	Select DMX Mode (15 / 17 channels)
Set TILT Reverse	YES / NO	Inverts the PAN-movement
Set PAN Reverse	YES / NO	Inverts the TILT-movement
Set Run Mode	Sound Slave Slow Auto	Select a mode



## 6. DMX chart

### 6.1. DMX Mode 1 (15 Channels)

Channel	Value from	Value to	Function
1	0	127	PAN 360°
	128	191	PAN unlimited counter clock wise, slow – fast
	255	255	PAN unlimited clock wise, slow - fast
2	0	127	TILT 360°
	128	191	TILT unlimited counter clock wise, slow – fast
	192	255	TILT unlimited clock wise, slow - fast
3	0	255	PAN / TILT speed, fast – slow
4	0	7	Open
	8	255	Strobe effect, slow - fast
5	0	255	Dimming 0-100%
6	0	255	Dimming red 0-100%
7	0	255	Dimming green 0-100%
8	0	255	Dimming blue 0-100%
9	0	255	Dimming white 0-100%
10	0	255	Color and color change
11	0	255	Speed of color change, fast – slow
12	0	255	Automatic programs
13	0	240	No function
	241	250	Reset
	251	255	No function
14	0	127	No function
	128	255	Stops the PAN unlimited Movement
15	0	127	No function
	128	255	Stops the TILT unlimited movement

## 6.2. DMX Mode 2 (17 Channels)

Channel	Value from	Value to	Function
1	0	127	PAN 360°
	128	191	PAN unlimited counter clock wise, slow – fast
	255	255	PAN unlimited clock wise, slow - fast
2	0	255	PAN calibration 16 Bit
3	0	127	TILT 360°
	128	191	TILT unlimited counter clock wise, slow – fast
	192	255	TILT unlimited clock wise, slow - fast
4	0	255	TILT calibration 16 Bit
5	0	255	PAN / TILT speed, fast – slow
6	0	7	Open
	8	255	Strobe effect, slow - fast
7	0	255	Dimming 0-100%
8	0	255	Dimming red 0-100%
9	0	255	Dimming green 0-100%
10	0	255	Dimming blue 0-100%
11	0	255	Dimming white 0-100%
12	0	255	Color and color change
13	0	255	Speed of color change, fast – slow
14	0	255	Automatic programs
15	0	240	No function
	241	250	Reset
	251	255	No function
16	0	127	No function
	128	255	Stops the PAN unlimited Movement
17	0	127	No function
	128	255	Stops the TILT unlimited movement

## 7. Technical data

<b>Power supply</b>	
Voltage	AC 100-240 V, 50/60 Hz
Power consumption max.	80 W
<b>Light source</b>	
LM type	LED 4in1
Color spectrum	RGBW
Power	60 W
Number / Power	6 / 10 W
<b>Connections</b>	
Power in	Pcon
XLR in/out	3pin XLR
<b>Controlling</b>	
Sound-to-light	YES
Automatic	YES
Master-Slave	YES
DMX512	15/17 Channels
<b>Hardware</b>	
Protection class	IP20
Suitability	Indoor
Dimensions	210 x 210 x 280 mm
Weight	3,7 kg

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