# LED-256D RGB



# **User Manual**

**Professional Entertainment Technology** 

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## Широкий ассортимент оборудования ACME на www.maxlight.ru

## 1. Safety Instruction



Please read the instruction carefully which including important information about the installation, operation and maintenance.

- Please keep this User Manual for future consultation. If you sell the unit to another user, be sure that they also receive this instruction booklet.
- Unpack and check carefully there is no transportation damage before using the unit.
- Before operating, ensure that the voltage and frequency of power supply match the power requirements of the unit.
- It's important to ground the yellow/green conductor to earth in order to avoid electric shock.
- The unit is for indoor use only and use only in a dry location.
- The unit must be installed in a location with adequate ventilation, at least 50cm from adjacent surfaces. Be sure that no ventilation slots are blocked.
- Disconnect mains power before fuse replacement or servicing.
- Replace fuse only with the same type.
- Make sure there are not flammable materials close to the unit while operating as it is fire hazard.
- Use safety cable when fixes this unit.
- In the event of serious operating problem, stop using the unit immediately. Never try to repair the unit by yourself. Repair carried out by unskilled people can lead to damage or malfunction. Please contact the nearest authorized technical assistance center and always use the same type spare parts.
- Do not touch any wire during operation as high voltage might be causing electric shock.

## 2. Technical Specification

- It can be operated by DMX512 control or can be used as an individual unit without controller.
- It can be linked together as many as required in master/slave mode, and perform the great built-in programmed lighting shows triggered by music.
- Please use a 3 pin XLR cable/plug when connecting them together.
- Fan cooled.
- 3 Channels
  - Channel 1 = Dimmer/Strobe

Channel 2 = Color

Channel 3 = Rotation

- Voltage: AC 100V-240V 50/60Hz
- **Fuse:** T 1A
- **Power:** 13 W
- LED: 1X3W RGB LED
- Dimension: 210X210X179 mm
- Weight: 1.8kg

### 3. Installation

The unit should be mounted via its screw holes on the bracket. Always ensure that the unit is firmly fixed to avoid vibration and slipping while operating. Always ensure that the structure to which you are attaching the unit is secure and is able to support a weight of 10 times of the unit's weight. Also always use a safety cable that can hold 12 times of the weight of the unit when installing the fixture.

The equipment must be fixed by professionals. And it must be fixed at a place where is out of the touch of people and has no one pass by or under it.

## 4. How To Control The Unit

Three ways to operation:

- A. Master/Slave operation
- B. Easy controller CA-8
- C. Universal DMX controller

#### A. Master/Slave operation

The unit can be linked together in daisy chain as many as you need in master/slave mode to perform the great built-in pre-programmed lighting shows triggered by music.

#### In Master/Slave mode refer to the DMX settings below:

Master unit: DMX start address MUST be set to 001. (First DIP switch = ON, all other are OFF)

## Slave units: DMX start address may have any value but NOT 001 (example: set the first 3 DIP switches to ON)

- \* Dipswitch 2 "ON" has two functions:
- 1. Perform the built-in pre-programmed by music.
- 2. Auto mode: Eight Chase(At this mode press dip switch 3 will change the direction of rotation, press dip switch 4,5,6 will change the speed)

#### \* 2-light show

Dipswitch 10 "off" means the unit works normally and "on" means inversion. In order to create a great light show, you can set dip switch 10 "on" on any unit that is linking to the master unit to get contrast movement to the master unit, even if you have two units only. Dipswitch 10 on the first (Master) unit is no use for the 2-light show as it is the master unit that operates the light show.

#### B. Easy Controller (by CA-8)

The easy remote control is used only in master/slave mode. By connecting to the 1/4" microphone jack of the first unit (its DMX input plug is not used), you will find that the remote control all the first unit will control all the other units for Stand by, Function and Mode. Built-in lighting shows triggered by Easy Controller:

Stand by	Blackout the unit	
Function	<ol> <li>Synchronous Strobe</li> <li>Two light Strobe</li> <li>Sound Strobe</li> </ol>	Rotation Speed 1-8
Mode	Strobe (LED OFF)	Rotation (LED ON)



#### C. Universal DMX controller

When using a universal DMX controller to control the chain of units, you have to set DMX address by Dip switches from 1 to 9 to make sure all the units will receive its DMX signal. Please refer to the following diagram to know how to address your DMX 512 system in the binary code.

#### DMX 512 Address Chart:

Dip-switches	# 1	#2	#3	#4	# 5	#6	#7	# 8	#9	#10
Value	1	2	4	8	16	32	64	128	256	2-light show

• Examples:

Channel 1 : dip / on: #1 (=1)

Channel 4 : dip / on: #3 (=4)

Channel 7 : dip / on: #1, #2, #3 (1+2+4=7)

Channel 10 : dip / on: #2, #4 (2+8=10)

Channel	Dip switches setting		
1	ON 1 2 3 4 5 6 7 8 9 10		
4	ON 1 2 3 4 5 6 7 8 9 10		
7	ON 1 2 3 4 5 6 7 8 9 10		
10	ON 1 2 3 4 5 6 7 8 9 10		

## 5. DMX 512 Configuration

DMX512 Configuration				
Ch1	Ch2	Ch3		
Dimmer/Strobe	Color	Rotation		
248-255 OPEN Slow // 200-247 /// //// 8-199 8-199 0-7 Dimmer CLOSED	248 - 255 Color 32 240 - 247 Color 31 232 - 239 Color 30 224 - 231 Color 29 216 - 223 Color 28 208 - 215 Color 27 200 - 207 Color 26 192 - 199 Color 25 184 - 191 Color 24 176 - 183 Color 23 168 - 175 Color 22 160 - 167 Color 21 152 - 159 Color 20 144 - 151 Color 19 136 - 143 Color 18 128 - 135 Color 17 120 - 127 Color 16 112 - 119 Color 15 104 - 111 Color 14 096 - 103 Color 13 088 - 095 Color 12 080 - 087 Color 11 072 - 079 Color 10 064 - 071 Color 09 056 - 063 Color 08 048 - 055 Color 09 056 - 063 Color 08 048 - 055 Color 09 056 - 063 Color 08 048 - 055 Color 07 040 - 047 Color 06 032 - 039 Color 05 024 - 031 Color 04 016 - 023 Color 03 008 - 015 Color 02 000 - 007 Color 01	246-255 Stop Fast 135-245 Slow 121-134 Stop 10-120 Fast 0-9 Stop		

## 6. DMX 512 Connection

The DMX 512 is widely used in intelligent lightings and with a maximum of 512 channels.



- 1. If you using a controller with 5 pins DMX output, you need to use a 5 to 3 pin adapter-cable.
- At last unit, the DMX cable has to be terminated with a terminator. Solder a 120 ohm 1/4W resistor between pin 2(DMX-) and pin 3(DMX+) into a 3-pin XLR-plug and plug it in the DMX-output of the last unit.
- Connect the unit together in a 'daisy chain' by XLR plug from the output of the unit to the input of the next unit. The cable can not be branched or split to a 'Y' cable. DMX 512 is a very high-speed signal. Inadequate or damaged cables, solder joints or corroded connectors can easily distort the signal and shut down the system.
- 4. The DMX output and input connectors are pass-through to maintain the DMX circuit, when power is connected to the unit.
- 5. Each lighting unit needs to have an address set to receive the data sent by the controller. The address number is between 0-512 (usually 0 & 1 are equal to 1).
- 6. The end of the DMX 512 system should be terminated to reduce signal errors.
- 7. 3 pin XLR connectors are more popular than 5 pins XLR.

3 pin XLR: Pin 1: GND, Pin 2: Negative signal (-), Pin 3: Positive signal (+)

5 pin XLR: Pin 1: GND, Pin 2: Negative signal (-), Pin 3: Positive signal (+)

## 7. Fixture Cleaning

The cleaning of internal and external optical lenses and/or mirrors must be carried out periodically to optimize light output. Cleaning frequency depends on the environment in which the fixture operates: damp, smoky or particularly dirty surrounding can cause greater accumulation of dirt on the unit's optics.

⊡Clean with soft cloth using normal glass cleaning fluid.

△Always dry the parts carefully.

□Clean the external optics at least every 20 days. Clean the internal optics at least every 30/60 days.

#### EC - Declaration of Conformity

We declare that our products (lighting equipments) comply with the following specification and bears CE mark in accordance with the provision of the Electromagnetic Compatibility (EMC) Directive 89/336/EEC.

EN55014-2: 1997 A1: 2001, EN61000-4-2: 1995; EN61000-4-3: 2002;

EN61000-4-4: 1995; EN61000-4-5: 1995, EN61000-4-6: 1996,

EN61000-4-11: 1994.

&

#### Harmonized Standard

EN60598-1: 2000+ALL: 2000+A12: 2002

Safety of household and similar electrical appliances

Part 1: General requirements

## Innovation, Quality, Performance