ACME®

DMX512

LINKABLE
STAND ALONE

Marvelous
Sound
Activation

LED-275 D

User Manual
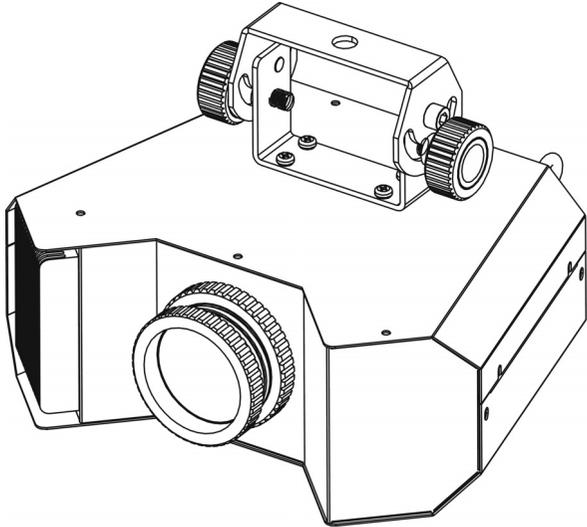
Please read the instructions carefully before use

Innovation, Quality, Performance

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.

EN 55103-1:1996, EN 55103-2:1996, EN 61000-3-2:2006,

EN 61000-3-3:1995+A1:2001+A2:2005

&

Harmonized Standard

EN 60598-2-17:1989+A2:1991, EN 60598-1:2008

EN62471:2008

Safety of household and similar electrical appliances

Part 1: General requirements

9. Fixture Cleaning

The cleaning of internal 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 fixture'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.

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1. Safety Introductions

- 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.
- Maximum ambient temperature is TA: 40℃ and don't operate it where the temperature is higher than this.
- Unit surface temperature may reach up to 60℃. Don't touch the housing bare-hand during its operation. Turn the power off and wait for 15 minutes for cool down before replacing bulb or serving.
- There are no user serviceable parts inside the fixture. Do not open the housing or attempt any repairs by yourself. In the unlikely event your fixture may require service, please contact the nearest authorized technical assistance center and always use the same type spare parts.   .
- Don't connect the device to any dimmer pack or power pack.
- Do not look directly at the LED light beam while the fixture is on.
- The housing must be replaced if they are visibly damaged.
- Do not touch any wire during operation as high voltage might be causing electric shock.
- Due to the magnifying type lens, please keep the lens out of contact with direct sunlight.

8. Troubleshooting

Following are a few common problems that may occur during operation. Here are some suggestions for easy troubleshooting:

A. The fixture does not work, no light
1. Check the connection of power and main fuse.
2. Measure the mains voltage on the main connector.

B. Not responding to DMX controller
1. DMX LED should be on. If not, check DMX connectors, cables to see if link properly.
2. If the DMX LED is on and no response to the channel, check the address settings and DMX polarity.
3. If you have intermittent DMX signal problems, check the pins on connectors or on PCB of the fixture or the previous one.
4. Try to use another DMX controller.
5. Check if the DMX cables run near or run alongside to high voltage cables that may cause damage or interference to DMX interface circuit.

C. Some fixtures don't respond to the easy controller
1. Check the LED for the response of the master/ slave mode signal.
2. Check if the unit is receiving DMX signal and cut it off.

D. No response to the sound
1. Make sure the fixture does not receive DMX signal.
2. Check microphone to see if it is good by tapping the microphone.

**E. One of the channels is not working well**
1. The stepper motor might be damaged or the cable connected to the PCB is broken.
2. The motor's drive IC on the PCB might be out of condition.

7. DMX512 Connections

The DMX512 is widely used in intelligent lighting control, with a maximum of 512 channels.
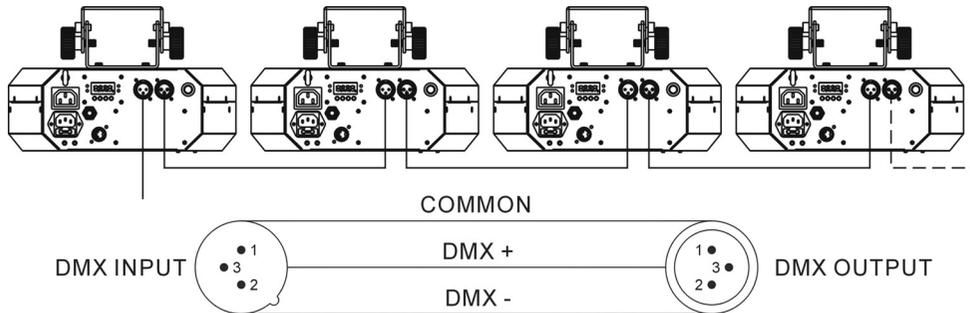
Termination reduces signal errors and to avoid signal transmission problems and interference. It is always advisable to connect a DMX terminal.
(Resistance 120 ohm 1/4W)between pin2(DMX-)and pin3(DMX+) of the last fixture.
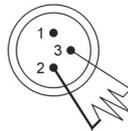
1. Connect the fixture together in a "daisy chain" by XLR plug cable from the output of the fixture to the input of the next fixture. The cable cannot be branched or split to a "Y" cable. Inadequate or damaged cables, soldered joints or corroded connectors can easily distort the signal and shut down the system
2. The DMX output and input connectors are pass-through to maintain the DMX circuit when one of the units' power is disconnected.
3. At last fixture, the DMX cable has to be terminated with a terminator to reduce signal errors. 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 fixture.
4. Each lighting fixture needs to have an address set to receive the data sent by the controller. The address number is between 0-511 (usually 0 & 1 are equal to 1).
5. 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 (+),
   Pin4/5: not used

Direct sunlight can cause heat to build up inside of the unit, which will seriously damage unit.

> For power supply, do not connect in series much more than 37 units, use another mains supply for next 37 units.

2. Technical Specifications

- 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.
- 4 Channels
  Channel 1 = Shutter&Strobe
  Channel 2 = Gobo
  Channel 3 = Rotation
  Channel 4 = Dimmer

- **Voltage**：100V~240V 50/60Hz
- **LED:** 1 x 10W white
- **Power consumption**：16W
- **Fuse: T 6.3A**
- **Dimension**： 213 x 291 x 183mm
- **Weight**： 3.1KG
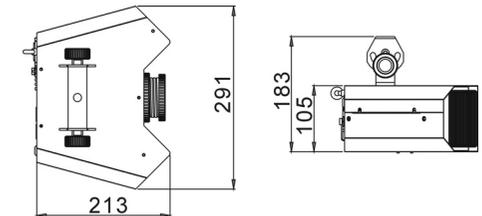
3. Installation

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 Set The Fixture

4.1 Control Panel
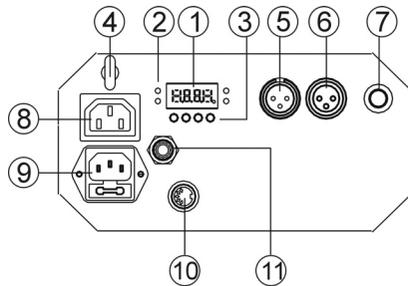
① **Display:** To show the various menus and the selected functions

② **LED:**

DMX	On	DMX input present
MASTER	On	Master Mode
SLAVE	On	Slave Mode
SOUND	Flashing	Sound activation

③ **Button:**

MENU	To select the programming functions
DOWN	To go backward in the selected functions
UP	To go forward in the selected functions
ENTER	To confirm the selected functions

④ **Safety Ring:** Keep the installation safe

⑤ **DMX input:** For DMX512 link, use 3/5-pin XLR plug cable to input DMX signal

⑥ **DMX output:** For DMX512 link, use 3-pin XLR plug cable to link the next unit.

⑦ **Microphone:** Receive music for the sound active.

⑧ **Mains output:** Connect to supply mains power for the next unit.

⑨ **Mains input:** Connect to supply mains power.

⑩ **CA-9 connector:** Connect and control the unit via CA-9.

⑪ **CA-8 connector:** Connect and control the unit via CA-8.

5.3 DMX Controller

Use universal DMX controller to control the units, you have to set DMX address from 1 to 512 channel so that the units can receive DMX signal.

Press the **MENU** button up to when the `Addr` is showing on the display. Pressing **ENTER** button and the display will blink. Use **DOWN** and **UP** button to change the DMX512 address. Once the address has been selected, press and keep **ENTER** button pressed up to when the display stops blinking or storing automatically 30 seconds later. To go back to the functions without any change press the **MENU** button again. If you use please refer to the following diagram to address your DMX512 channel for the first 4 units.

4 channels:

6. DMX512 Configuration

2. By easy controller

3. By DMX controller

No need to turn the unit off when you change the DMX address, as new DMX address setting will be effected at once. Every time you turn the unit on, it will show "275d" on the display and move all the motors to their 'home' position. After that the unit will be ready to receive DMX signal or run the built in programs.

## 5.1 Master/Slave Built In Preprogrammed Function

By linking the units in master/slave connection, the first unit will control the other units to give an automatic, sound activated, synchronized light show. This function is good when you want an instant show. You have to set the first unit in master mode 【∏Ǝ5Ł】 and select 【5h 1】 (show 1) or 【5h 2】 (show 2) or 【5h 3】 (show 3) ···or 【5h 6】 (show 6) mode. Its DMX input jack will have nothing plugged into it, and Its master LED will be constantly on and sound LED will flash to the music. The other units will have to set in slave mode 【5L∏d】 and select 【5L 1】 (normal) or 【5L 2】 (2 light show) mode, Their DMX cables plugged into the DMX input jacks (daisy chain) and the slave led lights will constantly on.

2-light show

In 【5L∏d】 (slave mode), 【5L 1】 means the unit works normally and 【5L 2】 means 2-light show. In order to create a great light show, you can set 【5L 2】 on the second unit to get contrast movement to each other, even if you have two units only.

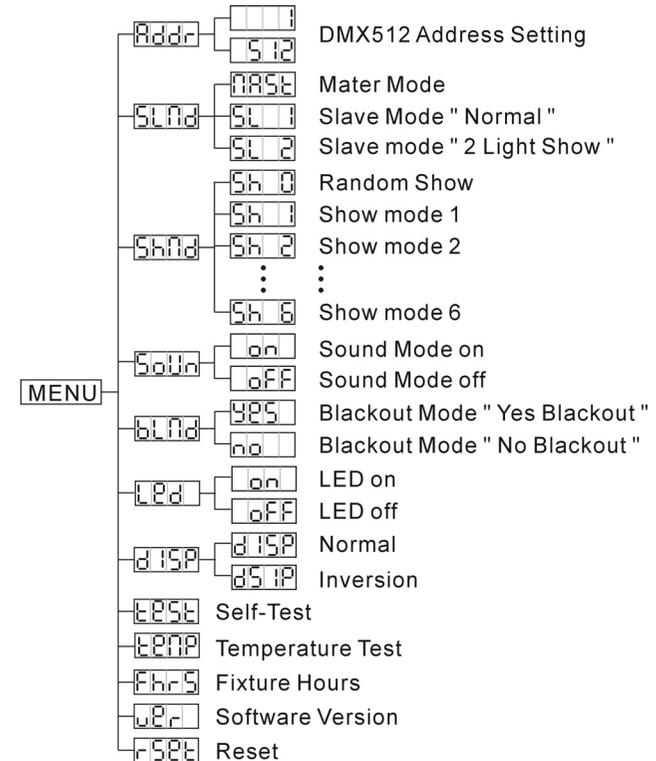## 5.2. Easy Controller (by CA-8/CA-9)

The easy remote control is used only in master/slave mode. By connecting to connector of the first unit, you will find that the remote controller on the first unit will control all the other units for Stand by, Function and Mode selection
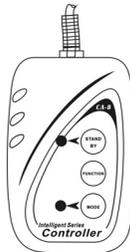
Blackout	Blackout the unit		
Function	1. Synchronous Strobe 2. Two light Strobe 3. Sound Strobe	Select Show 1-6	Select Gobo
Mode	Sound/Strobe (LED OFF)	Show (LED ON)	Gobo (LED blinking)

4.2 Main Function

To select any functions, press **MENU** button until the required one is shown on the display. Select the function by **ENTER** button and the display will blink. Use **DOWN** and **UP** button to change the mode. Once the required mode has been selected, press **ENTER** button to setup or it will automatically return to the main functions without any change after idling 30 seconds. Back to the functions without any change press **MENU** button. The main functions are shown below:

MENU

- Addr ─ [1] / [512] — DMX512 Address Setting
- 5L∏d ─ ∏Ǝ5Ł — Mater Mode
  - 5L 1 — Slave Mode " Normal "
  - 5L 2 — Slave mode " 2 Light Show "
- 5h∏d ─ 5h 0 — Random Show
  - 5h 1 — Show mode 1
  - 5h 2 — Show mode 2
  - ⋮
  - 5h 6 — Show mode 6
- 5oUn ─ on — Sound Mode on
  - oFF — Sound Mode off
- bL∏d ─ 4E5 — Blackout Mode " Yes Blackout "
  - no — Blackout Mode " No Blackout "
- LƎd ─ on — LED on
  - oFF — LED off
- d15P ─ d15P — Normal
  - d51P — Inversion
- ŁƎ5Ł — Self-Test
- ŁƎ∏P — Temperature Test
- Fhr5 — Fixture Hours
- uPr — Software Version
- r5ƎŁ — Reset

Addr DMX 512 Address Setting

Press the **MENU** button up to when the **Addr** is shown on the display. Pressing **ENTER** button and the display will blink. Use **DOWN** and **UP** button to change the DMX 512 address. Once the address has been selected, press **ENTER** button to setup or automatically exit menu mode without any change after 30 seconds. Back to the previous functions without any change press **MENU** button.

⎡SLПd⎤ Slave Mode

Press the **MENU** button up to when the ⎡SLПd⎤ is shown on the display. Pressing **ENTER** button, Use **DOWN** and **UP** button to select the ⎡ПASt⎤ (master) or ⎡SL 1⎤ (slave 1) or ⎡SL 2⎤ (Slave 2) mode. Once select, press the **ENTER** button to setup or automatically exit menu mode without any change after 30 seconds. To go back to the functions without any change press the **MENU** button

⎡ShПd⎤ Show Mode

Press the **MENU** button up to when the ⎡ShПd⎤ is shown on the display. Pressing **ENTER** button, Use **DOWN** and **UP** button to select the ⎡Sh 0⎤ (Random show) or ⎡Sh 1⎤ (show 1) or ⎡Sh 2⎤ (Show 2) or … or ⎡Sh 6⎤ (show 6). Once select, press **ENTER** button to setup or automatically exit menu mode without any change after 30 seconds. To go back to the functions without any change press the **MENU** button

⎡SoUn⎤ Sound Mode

Press the **MENU** button up to when the ⎡SoUn⎤ is shown on the display. Pressing **ENTER** button, Use **DOWN** and **UP** button to select the ⎡ on ⎤ (sound on) or ⎡ oFF⎤ (sound off). Once select, press **ENTER** button to setup or automatically exit menu mode without any change after 30 seconds. To go back to the functions without any change press the **MENU** button

⎡bLПd⎤ Blackout mode

Press the **MENU** button up to when the ⎡bLПd⎤ is shown on the display. Pressing **ENTER** button, Use **DOWN** and **UP** button to select the ⎡YES ⎤ (blackout) or ⎡no ⎤ (normal). Once select, press **ENTER** button to setup or automatically exit menu mode without any change after 30 seconds. To go back to the functions without any change press the **MENU** button

⎡LEd ⎤ LED display

Press the **MENU** button up to when the ⎡LEd ⎤ is shown on the display. Pressing **ENTER** button and the display will blink. Use **DOWN** and **UP** button to select ⎡ on ⎤ (display on) or ⎡ oFF⎤(display off) mode. Once select, press **ENTER** button to setup or exit menu mode without any change after 30 seconds. Back to the functions without any change press

MENU button again.

⎡dISP⎤ Display Inverse

Press **MENU** button until ⎡dISP⎤ is blinking on the display. Use **DOWN** and **UP** button to select ⎡dISP⎤ (normal) or ⎡dSIP⎤ (inverse), press **ENTER** button to setup. Back to the functions without any change press **MENU** button.

⎡tESt⎤ Self-Test

Press the **MENU** button up to when the ⎡tESt⎤ is blinking on the display. Pressing **ENTER** button and the unit will run the built-in programmer for self-test. To go back to the functions press the **MENU** button.

⎡tEПP⎤ Temperature Test

Press the **MENU** button up to when the ⎡tEПP⎤ is blinking on the display. Pressing **ENTER** button and the temperature of the unit will show on the display. To go back to the functions press the **MENU** button.

⎡FhrS⎤ Fixture Hours

Press the **MENU** button up to when the ⎡FhrS⎤ is blinking on the display. Pressing **ENTER** button and the display will show the number of working hours of the unit. To go back to the functions press the **MENU** button.

⎡uEr ⎤ Software version

Press the **MENU** button up to when the ⎡uEr ⎤ is blinking on the display. Pressing **ENTER** button and the display will show the version of software of the unit. To go back to the functions press the **MENU** button.

⎡rSEt⎤ Reset

Press the **MENU** button up to when the ⎡rSEt⎤ is blinking on the display. Press **ENTER** button to reset the unit.

5. How To Control The Unit

You can operate the unit in three ways:

  1. By master/slave built-in preprogram function