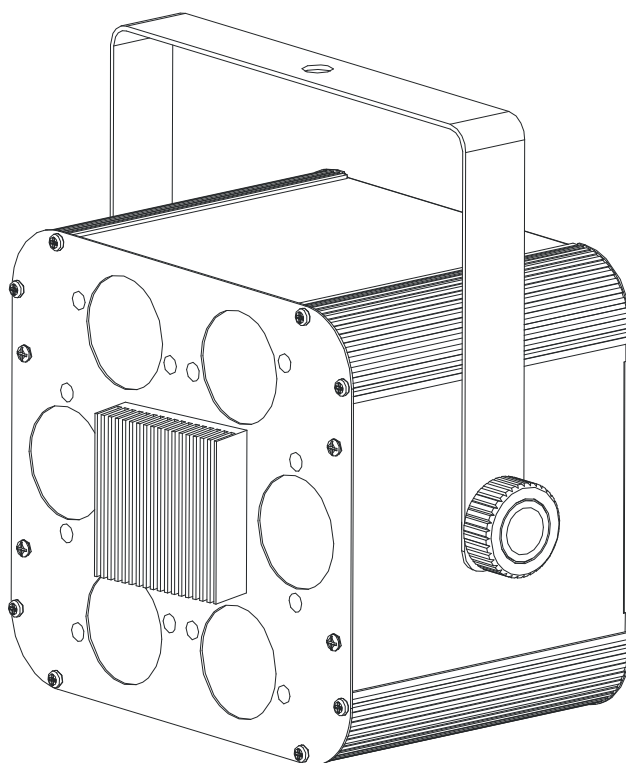# ACME ®

## InvincibLed

# LED-767 RGBW II

## User Manual

Please read the instructions carefully before use

# CONTENTS

## 1. Safety Instructions

⚠️
**WARNING**

Please read the instructions carefully as they include important information about installation, usage 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 the 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. 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 main power before replacement or servicing.

• Make sure there are no flammable materials close to the unit while operating as it is fire hazard.

• Use safety cables when installing this unit.

• Maximum ambient temperature is Ta: 40 degrees C. DO NOT operate it where the temperature is higher than this.

• Turn off the power and allow about 5 minutes for the unit to cool down before servicing.

• In the event of a serious operating problem, stop using the unit immediately. Never try to repair the unit by yourself. Repairs carried out by unskilled people can lead to damage or malfunction. Please contact the nearest authorized technical assistance center. Always use the same type spare parts.

• DO NOT touch any cables during operation as high voltage may cause electric shock.

**Warning:**

• To prevent or reduce the risk of electrical shock or fire, do not expose the unit to rain or moisture.

• The housing and lenses must be replaced if they are visibly damaged.

**Caution:**

There are no user serviceable parts inside the unit. Do not open the housing or attempt any repairs yourself. In the unlikely event your unit may require service, please contact your nearest dealer.

**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. Make sure 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 installed by professionals. It must be installed in a place where is out of the reach of people and no one can pass by or under it.

## 2. Technical Specifications

◇ 3 DMX channels: Dimmer/Strobe, Colour, Rotation;

◇ 3 operation modes: DMX, Master/Slave, Sound Active;

◇ Built-in programs in Master/Slave operation triggered by music;

◇ Full range dimmer and variable strobe effects;

◇ Optional easy controller CA-8 for instant lighting shows;

◇ **Power Voltage:**          AC 100~240V, 50/60Hz

◇ **Power Consumption:**      23W

  **Power Cable Daisy Chains:**  24 Fixtures Max. (230V, 50Hz)

                                      16 Fixtures Max. (120V, 60Hz)

◇ **LED Sources:**           1 × 10W CREE Quad-Color LED

◇ **Weight:**                3.3Kgs

◇ **Dimension:**             215 × 172 × 195mm
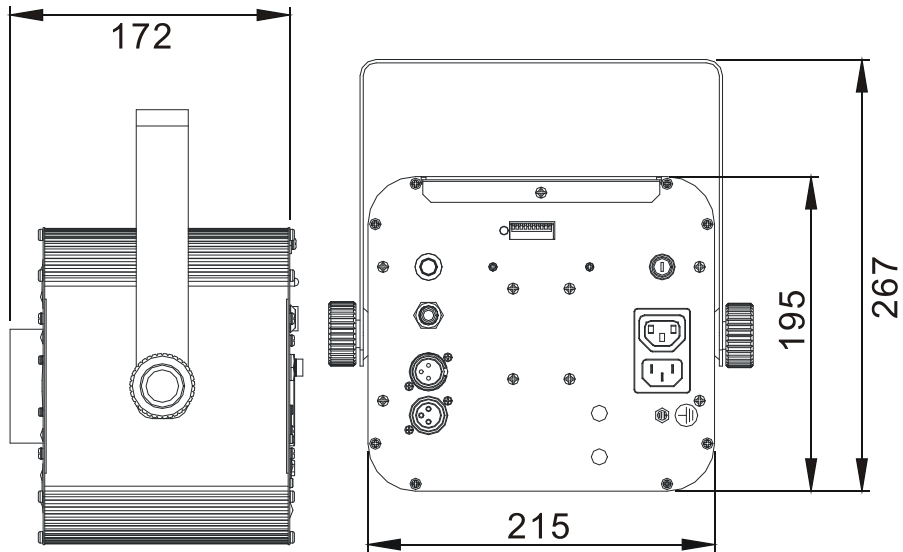
## 3. How To Set The Unit

## 3.1 Control Panel
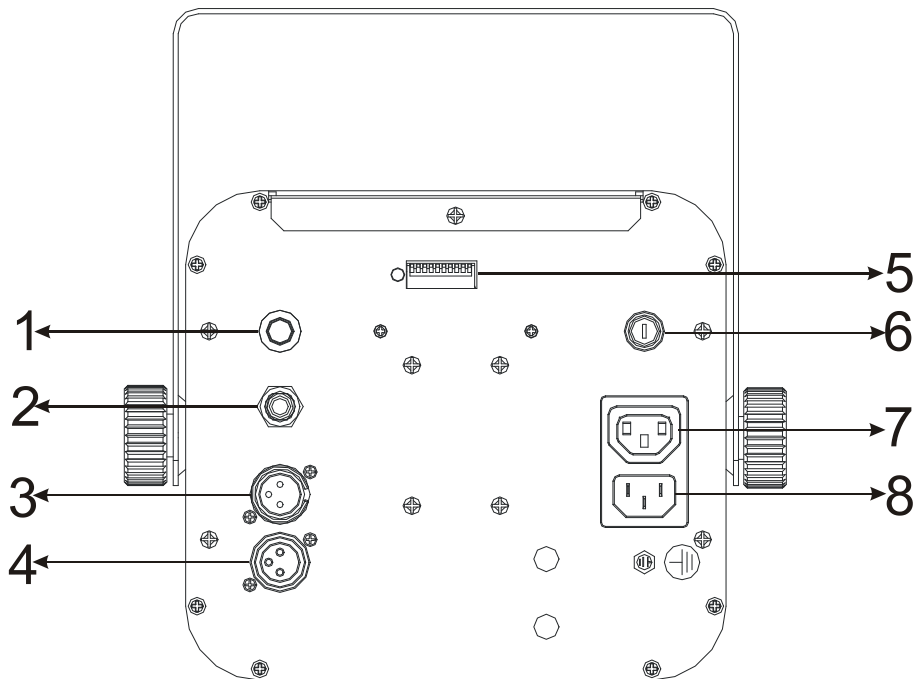


**1. MICROPHONE:** Receives music signals for sound active mode;

**2. ONLY FOR REMOTE CONTROL:** Connects with the optional CA-8 to control the unit;

**3. DMX IN:** DMX 512 link, use a 3-pin XLR cable to link the unit to the DMX controller;

**4. DMX OUT:** DMX 512 link, use a 3-pin XLR cable to link to the next unit;

**5. DIP SWITCH:** Manually selects the start address;

**6. FUSE (**T 6.3A**):** Protects the unit from over-voltage or short circuit;

**7. POWER OUT:** Connects to the next unit;

**8. POWER IN:** Connects to power supply;

## 4. How To Control The Unit

You can operate the unit in three ways:

  1. Master/slave built-in pre-program function

  2. Easy controller (optional CA-8)

  3. Universal DMX controller

You do not need to turn the unit off when you change the DMX address, the new DMX address setting will take effect immediately.

## 4.1 Master/Slave Built In Preprogrammed Function

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

<u>In Master/Slave mode refer to the DMX settings below:</u>

**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.   Performs the built-in pre-programs to the music.

2.   Auto mode: Eight Chase(In this mode press dip switch 3 and this will change the direction of rotation, press dip switch 4,5,6 to 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 linked to the master unit to get contrast movement to the master unit even if you only have two units. 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.

## 4.2 Easy Controller

The CA-8 remote control is used only in master/slave mode. By connecting to the 1/4"

jack socket to the first unit you will find that the remote control will control all the

other units in Stand by, Function and Mode selection.
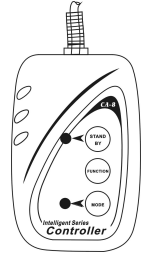
| Stand by | Blackout the unit | |
|---|---|---|
| Function | 1. Synchronous Strobe<br>2. Two light Strobe<br>3. Sound Strobe | Rotation Speed<br>1-8 |
| Mode | Strobe (LED OFF) | Rotation (LED ON) |

## 4.3 DMX Controller

When using a universal DMX controller to control the chain of units you have to set a DMX

address with Dip switches 1 to 9. Dip switch 10 is used to select channel mode, it's ON means 1

channel mode and OFF means 3 channel mode. Please refer to the following diagram to address

your DMX 512 system using 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 | CH mode |

• Examples:

1-CH mode: (Dip switch 10 ON)

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

Channel 2: dip / on: #2 (=2)

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

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

| Unit | Dip switches setting |
|---|---|
| 1 | ↓ ON  1 2 3 4 5 6 7 8 9 10 |
| 2 | ↓ ON  1 2 3 4 5 6 7 8 9 10 |
| 3 | ↓ ON  1 2 3 4 5 6 7 8 9 10 |
| 4 | ↓ ON  1 2 3 4 5 6 7 8 9 10 |

3-CH mode: (Dip switch 10 OFF)

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)

| Unit | Dip switches setting |
|------|----------------------|
| 1 | ↓ ON  1 2 3 4 5 6 7 8 9 10 |
| 2 | ↓ ON  1 2 3 4 5 6 7 8 9 10 |
| 3 | ↓ ON  1 2 3 4 5 6 7 8 9 10 |
| 4 | ↓ ON  1 2 3 4 5 6 7 8 9 10 |

## 5. DMX 512 Configuration

### 1/3 Channels Mode:

| 1 Channel Mode | 3 Channels Mode | | |
|---|---|---|---|
| **CH 1** | **CH 1** | **CH 2** | **CH 3** |
| ROTATION | DIMMER/STROBE | COLOR | ROTATION |
| 250-255 Sound Active | 248-255 Open | 248-255 Color 32 | 246-255 Stop |
| Fast | | 240-247 Color 31 | |
| 140-249 (Slow) | | 232-239 Color 30 | Fast |
| Slow | 200-247 | 224-231 Color 29 | |
| 125-139 Stop | | 216-223 Color 28 | 135-245 (Slow) |
| Slow | | 208-215 Color 27 | |
| | | 200-207 Color 26 | |
| 015-124 (Fast) | | 192-199 Color 25 | Slow |
| | | 184-191 Color 24 | 121-134 Stop |
| Fast | | 176-183 Color 23 | Slow |
| 000-014 Off | | 168-175 Color 22 | |
| | | 160-167 Color 21 | |
| | | 152-159 Color 20 | |
| | 100% | 144-151 Color 19 | 010-120 (Fast) |
| | | 136-143 Color 18 | |
| | | 128-135 Color 17 | |
| | | 120-127 Color 16 | |
| | | 112-119 Color 15 | |
| | 008-199 | 104-111 Color 14 | |
| | | 096-103 Color 13 | |
| | | 088-095 Color 12 | Fast |
| | | 080-087 Color 11 | 000-009 Stop |
| | | 072-079 Color 10 | |
| | | 064-071 Color 9 | |
| | | 056-063 Color 8 | |
| | 0% | 048-055 Color 7 | |
| | | 040-047 Color 6 | |
| | | 032-039 Color 5 | |
| | 000-007 Off | 024-031 Color 4 | |
| | | 016-023 Color 3 | |
| | | 008-015 Color 2 | |
| | | 000-007 Color 1 | |

## 6. DMX512 Connection



COMMON

DMX INPUT — DMX + — DMX OUTPUT

DMX -
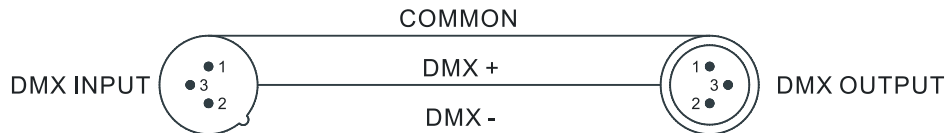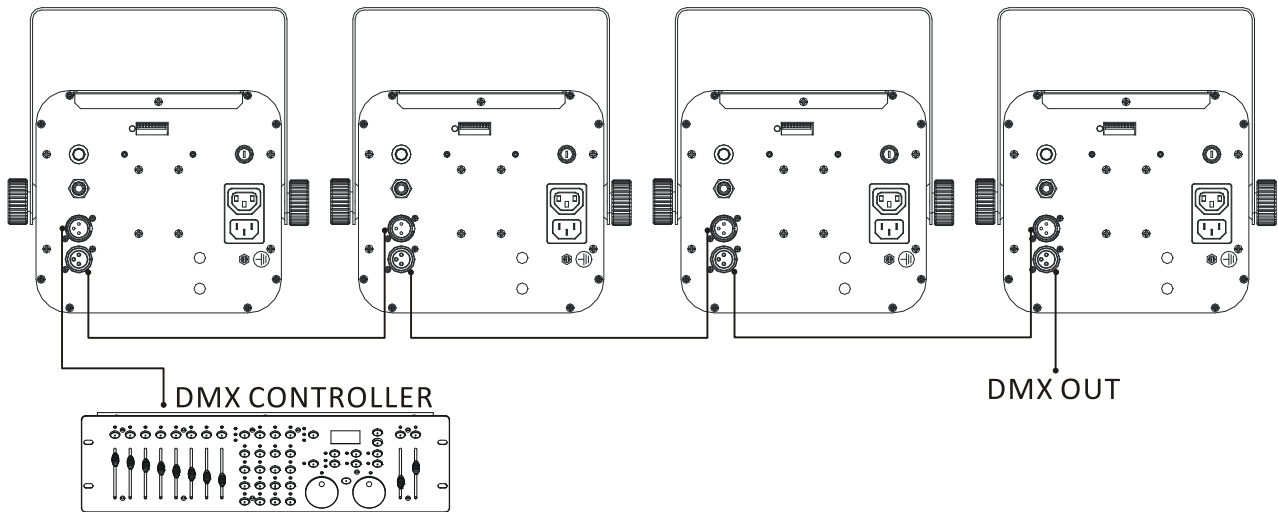
Termination reduces signal errors and to avoid signal transmission problems and interference. It is always advisable to connect a DMX terminal.
(Resistance 120 ohm 1/4W)between pin2(DMX-)and pin3(DMX+) of the last fixture.

1. The last units DMX has to be terminated. Use a 120 ohm 1/4W resistor between pin 2(DMX-) and pin 3(DMX+) of a 3-pin XLR-plug and plug it in the DMX output of the last unit.

2. Connect the units together in a `daisy chain` with an XLR cable from the output of the unit to the input of the next unit. The cable can not branched or split to a `Y` cable.

3. The DMX output and input connectors are pass-through type to maintain the DMX circuit even when one of the units' power is disconnected.

4. Each fixture 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).

5. DMX cabling configuration is as follows:

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

## 7. Troubleshooting

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

**A. The unit does not work, no light and the fan does not work**

1. Check the connection of power and main fuse.

**B. Not responding to DMX controller**

1. DMX LED should be on. If not, check DMX connectors and cables to see if linked properly.
2. If the DMX LED is on but no response check the address settings and DMX polarity.
3. If you have intermittent DMX signal problems check the cables and connectors.
4. Try another DMX controller.

**C. No response to the sound**

1. Make sure the unit is set into the correct mode.
2. Check the microphone by tapping it.
3. Make sure the fixture is not set into Blackout mode

## 8. Fixture Cleaning

Cleaning 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 a greater accumulation of dirt on the unit's optics.

• Clean with soft cloth using normal glass cleaning fluid or mild soapy water.

• Always dry the parts carefully.

• Clean the external optics at least every 30 days.

## 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.

EN55103-1: 2009 ; EN55103-2: 2009; EN62471: 2008;
EN61000-3-2: 2006 + A1:2009 + A2:2009; EN61000-3-3: 2008.

## &

## Harmonized Standard

EN 60598-1:2008 + All:2009; EN 60598-2-17:1989 + A2:1991;
EN 62471:2008; EN 62493: 2010
Safety of household and similar electrical appliances
Part 1: General requirements

**Innovation, Quality, Performance**