

# SparkMini Strobe 3C



**USER MANUAL**

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# SAFETY INSTRUCTIONS

This device has left the factory in perfect condition. In order to maintain this condition and to ensure a safe operation, it's absolutely necessary for the user to follow the safety instructions and warning notes written in this user manual.

This device falls under protection-class I. Therefore it is essential that the device should be earthed.

The electric connection must carry out by qualified person.

If the external flexible cable or cord of this luminaire is damaged, it shall be exclusively replaced by the manufacturer or his service agent or a similar qualified person in order to avoid a hazard.

Make sure that the available voltage is not higher than stated at the end of this manual.

Make sure the power cord is never crimped or damaged by sharp edges. If this would be the case, replacement of the cable must be done by an authorized dealer.

Always disconnect from the mains, when the device is not in use or before cleaning it. Only handle the power cord by the plug. Never pull out the plug by tugging the power cord.

**Never look directly into the light source, as sensitive persons may suffer an epileptic shock.**

## **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.**

# PREPARATION FOR USE

## UNPACKING

Thank you for having chosen LEDING

Unpack the device, inside the box you should find:

The fixture device

One power cable

One XLR connection cable

This manual

Please check carefully that there is no damage caused by transportation.

Should there be any, consult your dealer and don't install this device.

## DMX-512 control connection

The product has a DMX 512 input fitted with 3-pin XLR connectors. Screened cables in compliance with EIA RS-485 specifications and the following characteristics must be used for connections:

- 2 conductors plus screen
- 120Ohm impedance
- low capacitance
- max. transmission rate 250kBaud.

## DMX-512 connection with DMX terminator

For installations where the DMX cable has to run a long distance or is in an electrically noisy environment, such as in a discotheque, it is recommended to use a DMX terminator. This helps in preventing corruption of the digital control signal by electrical noise. The DMX terminator is simply an XLR plug with a 120 OHM resistor connected between pins 2 and 3, which is then plugged into the output XLR socket of the last fixture in the chain.

### AC Power Connection

The auto-ranging power supply automatically adjusts to AC power from 110-240 volts nominal at 50/60 Hz.

The current required by the SparkMini Strobe 3C is 4.5 amps. To avoid overload, allow one 4.5 amp branch circuit per fixture to operate the SparkMini Strobe 3C model at full power.

Use 2.5 mm<sup>2</sup> (14 AWG) or larger power feed cables and keep runs as short as possible.

Do not link more than 4 fixtures for the one single power chain.

# Specifications

**Light Source :** 324pcs RGB/White 5050 LED, no ultraviolet radiation

**Life Time:** More than 50000 hours for the LED light source

**Output:** 35000 for white version,15000lm for RGB version

**DMX mode:** 1/3/4/6/7/16

**Dimmer:** 16Bit Dimmer

**Operating Mode:** DMX Mode /Master-slave mode

**Power:** AC110-240V 50/60Hz 300W

**Cooling:** Diecasting heatsink, Convection cooling, no fans, no noise

**Over Heat Protect:** With temperature sensor to extend the lamp life

**LED Scan Rate:** 7000Hz LED scan rate

**Size:** Compact size, 2.8kg

## **Effects:**

9 segments LED/ 3 segments for RGB version, can be controlled separately, with 16bit dimmer

Flash duration can be set from 0 to 650ms in DMX mode (except 1 channel mode) 0-30 flashes per second

Ramp up effect: Light gradually increases in intensity, then blacks out

Ramp down effect: Light flashes to full intensity, then gradually fades.

Ramp up-down effect: Light gradually increases and decreases

Radom flash effect: Light flashes randomly with variable rate and intensity.

Multiple units flash independently of each other.

Blinder effect: the light remains on (Lamp power is electronically regulated to prevent the lamp from overheating)

Lightning effect: the flashes simulate lightning, duration is not adjustable.

Spikes: the lamp remains dimly illuminated between flashes, set flash intensity, duration and rate as normal.

## **NOTE!**

**The brightness will decrease gradually when the led temperature is over 55°C,and if over 70°C,then will black out**

# OPERATION

## Display Menu

Menu	Sub-menu	
Address	Set DMX Address	001-512
Auto	Mode 1	Auto Mode 1
	Mode 2	Auto Mode 2
	Mode 3	Auto Mode 3
	Mode 4	Auto Mode 4
	Mode 5	Auto Mode 5
	Mode6	Auto Mode 6
Speed	000-031	Auto Run Speed
Color	W1/Red	0-255
	W2/Green	0-255
	W3/Blue	0-255
Test LED	All on	All On + Individual LED Segment Testing
	White1 /Red1 on	
	White2 /Red2 on	
	White3 /Red3 on	
	White4/Green1 on	
	White5/Green2 on	
	White6/Green3 on	
	White7/Blue1 on	
	White8/Blue2 on	
White9/Blue3 on		
Temp	<ENTER>	Internal Temperature
Time	<ENTER>	Total Run Time
Config	DMX Status	Value Hold Holds the last DMX values if signal is lost
		Value Clear Clears the DMX values if signal is lost
	Display Mode	LCD Display ON or Auto OFF
	Temp Unit CS	Celsius degree and Fahrenheit degree for selection
	Factory Settings	W1-W9
	Channel Mode	<b>Channel 1</b> (1ch DMX mode)
		<b>Channel 3</b> (1ch DMX mode)
		<b>Channel 4</b> (1ch DMX mode)
		<b>Channel 6</b> (1ch DMX mode)
		<b>Channel 7</b> (1ch DMX mode)
		<b>Channel 16</b> (1ch DMX mode)
	Key Mode	<b>Pixel 3</b> (3ch DMX pixel control)
		<b>Pixel 9</b> (9ch DMX pixel control)
<b>Key Lock</b> Menu buttons lock after 30sec of inactivity (push more than once to temporarily unlock buttons). <b>Key Unlock</b> Menu buttons are not locked.		
Load Default	Load Default Resets all values to default	

# DMX Control Summary

## Intensity

Flash intensity can be set from minimum (blackout) to maximum in all DMX modes except 1 channel mode (where it is always at maximum intensity). A special pixel mode enables the fixture to be used as a blinder, where the intensity of blinder colour can be set.

## Duration

Flash duration can be set from 0 to 650 ms on 50 Hz power supplies, or 0 to 530 ms on 60 Hz power supplies in 3, 4, 6 or 7 channel DMX modes. Flash duration is fixed in 1-channel DMX.

## Rate

Flash rate can be set from 0 flashes per second to 25 flashes per second on 50 Hz power supplies or from 0 to 30 flashes per second on 60 Hz power supplies, when the fixture is set to 3, 4, 6 or 7 channel DMX mode. The flash rate is also controllable in 1-channel DMX mode.

## Programmed Effects

Six programmed effects are available in 4 and 7 channel DMX modes. The effects may be altered using the intensity, duration, and rate controls

## DMX functions and values

1 Channel Mode		
CH	Values	Functions
1	0-255	Strobe rate(0-30HZ)

3 Channel Mode		
CH	Values	Functions
1	0-255	Master Dimmer (0-100%)
2	0-255	Flash duration(0-full on)
3	0-255	Strobe rate(0-30HZ)

4 Channel Mode		
CH	Values	Functions
1	0-255	Master Dimmer (0-100%)
2	0-255	Flash duration(0-full on)
3	0-255	Strobe rate(0-30HZ)

4	0-5	No effect
	6-42	Ramp up effect
	43-85	Ramp down effect
	86-128	Ramp up-down effect
	129-171	Random effect
	172-214	Lightning effect
	215-255	Spike effect

6 Channel Mode		
CH	Values	Functions
1	0-255	Master Dimmer (0-100%)
2	0-255	Red/Segment 1-3 Dimmer(0-100%)
3	0-255	Green/Segment 4-6 Dimmer(0-100%)
4	0-255	Blue/Segment 7-9 Dimmer(0-100%)
5	0-255	Flash duration (0-full on)
6	0-255	Strobe rate (0-30HZ)

7 Channel Mode		
CH	Values	Functions
1	0-255	Master Dimmer (0-100%)
2	0-255	Red/Segment 1-3 Dimmer(0-100%)
3	0-255	Green/Segment 4-6 Dimmer(0-100%)
4	0-255	Blue/Segment 7-9 Dimmer(0-100%)
5	0-255	Flash duration(0-full on)
6	0-255	Strobe rate(0-30HZ)
7	0-5	No effect
	6-42	Ramp up effect
	43-85	Ramp down effect
	86-128	Ramp up-down effect
	129-171	Random effect
	172-214	Lightning effect
	215-255	Spike effect



<b>16 Channel Mode</b>		
<b>CH</b>	<b>Values</b>	<b>Functions</b>
1	0-255	Master Dimmer (0-100%)
2	0-255	Red/Segment 1-3 Dimmer(0-100%)
3	0-255	Green/Segment 4-6 Dimmer(0-100%)
4	0-255	Blue/Segment 7-9 Dimmer(0-100%)
5	0-255	Flash duration(0-full on)
6	0-255	Strobe rate(0-30HZ)
7	0-5	No effect
	6-42	Ramp up effect
	43-85	Ramp down effect
	86-128	Ramp up-down effect
	129-171	Random effect
	172-214	Lightning effect
	215-255	Spike effect
8	0-255	Red1/Segment 1 Dimmer(0-100%)
9	0-255	Green1/Segment 2 Dimmer(0-100%)
10	0-255	Blue1/Segment 3 Dimmer(0-100%)
11	0-255	Red2/Segment 4 Dimmer(0-100%)
12	0-255	Green2/Segment 5 Dimmer(0-100%)
13	0-255	Blue2/Segment 6 Dimmer(0-100%)
14	0-255	Red3/Segment 7 Dimmer(0-100%)
15	0-255	Green3/Segment 8 Dimmer(0-100%)
16	0-255	Blue3/Segment9 Dimmer(0-100%)

<b>Pixel Mode</b>		
<b>3 Channel</b>	<b>Values</b>	<b>Blinder intensity</b>
1	0-5	Blackout
	6-255	Segment 1
2	0-5	Blackout
	6-255	Segment 2
3	0-5	Blackout
	6-255	Segment 3

<b>Pixel Mode (White)</b>		
<b>9 Channel</b>	<b>Values</b>	<b>Blinder intensity</b>
1	0-5	Blackout
	6-255	Segment 1 Dimmer
2	0-5	Blackout
	6-255	Segment 2 Dimmer
3	0-5	Blackout
	6-255	Segment 3 Dimmer
4	0-5	Blackout
	6-255	Segment 4 Dimmer
5	0-5	Blackout
	6-255	Segment 5 Dimmer
6	0-5	Blackout
	6-255	Segment 6 Dimmer
7	0-5	Blackout
	6-255	Segment 7 Dimmer
8	0-5	Blackout
	6-255	Segment 8 Dimmer
9	0-5	Blackout
	6-255	Segment 9 Dimmer

**When the lighting is under the Pixel mode, the brightness will be only 40% of Maximum power, and it can be used as wash/flood lighting.**

## **CLEANING AND MAINTENANCE**

We recommend a frequent cleaning of the device. Please use a soft lint-free and moistened cloth. Never use alcohol or solvents!

### **CAUTION!**

Disconnect from mains before starting maintenance operation.

There are no servicable parts inside the device. Maintenance and service operations are only to be carried out by authorized dealers.

If you need any spare parts, please use genuine parts.

If the power supply cable of this device becomes damaged, it has to be replaced by authorized dealers only in order to avoid hazards.

If you have further questions, please contact your dealer.

## **INSTALLATION**

The device must only be installed at a vibration-free, oscillation-free and fire-resistant location.

## **TECHNICAL SPECIFICATIONS**

Power supply: 110V~240V AC, 50 Hz /60Hz

Power consumption: max. 300 W

Waterproof grade: IP 20

Net weight: 2.8 KGS

**Remark:** errors and omissions for every information given in this manual except. All information is subject to change without prior notice.