



MiniSpider FX 8 × 3 W RGBW

LED Effect

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4 MiniSpider FX 8 x 3 W RGBW
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1 General information

This document contains important instructions for the safe operation of the product. Read and follow the safety instructions and all other instructions. Keep the document for future reference. Make sure that it is available to all those using the product. If you sell the product to another user, be sure that they also receive this document.

Our products and documentation are subject to a process of continuous development. They are therefore subject to change. Please refer to the latest version of the documentation, which is ready for download under www.thomann.de.

1.1 Symbols and signal words

In this section you will find an overview of the meaning of symbols and signal words that are used in this document.

Signal word	Meaning
DANGER!	This combination of symbol and signal word indicates an immediate dangerous situation that will result in death or serious injury if it is not avoided.
WARNING!	This combination of symbol and signal word indicates a possible dangerous situation that can result in death or serious injury if it is not avoided.
NOTICE!	This combination of symbol and signal word indicates a possible dangerous situation that can result in material and environmental damage if it is not avoided.
Warning signs	Type of danger
	Warning – high-voltage.
	Warning – dangerous optical radiation.
	Warning – danger zone.

2 Safety instructions

Intended use

This device is intended for use as an electronic lighting effect by means of LED technology. The device is designed for professional use only and is not suitable for use in households. Use the device only as described in this user manual. Any other use or use under other operating conditions is considered to be improper and may result in personal injury or property damage. No liability will be assumed for damages resulting from improper use.

This device may be used only by persons with sufficient physical, sensorial, and intellectual abilities and having corresponding knowledge and experience. Other persons may use this device only if they are supervised or instructed by a person who is responsible for their safety.



Extend the operating life of the device by regular breaks and by avoiding frequent switching on and off. The device is not suitable for continuous operation.

Safety



DANGER!

Risk of injury and choking hazard for children!

Children can suffocate on packaging material and small parts. Children can injure themselves when handling the device. Never allow children to play with the packaging material and the device. Always store packaging material out of the reach of babies and small children. Always dispose of packaging material properly when it is not in use. Never allow children to use the device without supervision. Keep small parts away from children and make sure that the device does not shed any small parts (such knobs) that children could play with.

**DANGER!****Danger to life due to electric current!**

Within the device there are areas where high voltages may be present. Never remove any covers. There are no user-serviceable parts inside. Do not use the device when covers, safety equipment or optical components are missing or damaged.

**DANGER!****Danger to life due to electric current!**

A short circuit could lead to a fire hazard and risk of death. Always use proper ready-made insulated triple-core mains cable with a safety plug. Do not modify the mains cable or the plug. In case of isolation damage, disconnect immediately the power supply and arrange repair. If in doubt, seek advice from a qualified electrician.

**WARNING!****Risk of eye damage caused by high light intensity!**

The device generates highly intense light radiation. Looking directly into the light source can damage the eyes. Never look directly into the light source.

**WARNING!****Risk of epileptic fit due to flashing lights!**

The device emits flashing lights (strobe effects). Flashing lights can trigger epileptic fits in specific people. If you are at risk of epilepsy, avoid spending longer periods of time subjected to flashing lights and looking into strobing light.

**NOTICE!****Risk of fire due to covered vents and neighbouring heat sources!**

If the vents of the device are covered or the device is operated in the immediate vicinity of other heat sources, the device can over-heat and burst into flames. Never cover the device or the vents. Do not install the device in the immediate vicinity of other heat sources. Never operate the device in the immediate vicinity of naked flames.

**NOTICE!****Damage to the device if operated in unsuitable ambient conditions!**

The device can be damaged if it is operated in unsuitable ambient conditions. Only operate the device indoors within the ambient conditions specified in the “Technical specifications” chapter of this user manual. Avoid operating it in environments with direct sunlight, heavy dirt and strong vibrations. Avoid operating it in environments with strong temperature fluctuations. If temperature fluctuations cannot be avoided (for example after transport in low outside temperatures), do not switch on the device immediately. Never subject the device to liquids or moisture. Never move the device to another location while it is in operation. In environments with increased dirt levels (for example due to dust, smoke, nicotine or mist): Have the device cleaned by qualified specialists at regular intervals to prevent damage due to overheating and other malfunctions.

**NOTICE!****Damage to the device due to high voltages!**

The device can be damaged if it is operated with the incorrect voltage or if high voltage peaks occur. In the worst case, excess voltages can also cause a risk of injury and fires. Make sure that the voltage specification on the device matches the local power grid before plugging in the device. Only operate the device from professionally installed mains sockets that are protected by a residual current circuit breaker (FI). As a precaution, disconnect the device from the power grid when storms are approaching or if the device will not be used for a longer period.

**NOTICE!****Risk of fire by exceeding the maximum current**

The device can supply power to other devices of identical design and connected in series. If too many devices are connected, the power consumption can exceed the maximum permitted power consumption, which can cause the device to overheat and burst into flames. Only connect devices of identical design to the device. When deciding how many devices you can connect in series, make sure that the maximum permitted power consumption as stated on the device is not exceeded. Also refer to the specifications in the technical specifications for the device. Only use power cords with a cable cross-section designed for the required current intensity when connecting the devices in series.



NOTICE!

Possible staining due to plasticiser in rubber feet!

The plasticiser contained in the rubber feet of this product may react with the coating of the floor and cause permanent dark stains after some time. If necessary, use a suitable mat or felt slide to prevent direct contact between the device's rubber feet and the floor.

3 Features

With a dual moving bar, each with four coloured beams, the LED effect provides impressive effects on stages and dance floors. The fast-paced light show with razor-sharp beams is especially effective in combination with haze or fog.

- Dual moving bar with RGBW LEDs
- Four coloured beams per bar
- Each LED individually controllable
- Both moving bars can be swiveled 270° independently of each other:
- Control via DMX (3 different modes) or via display with four buttons
- Preprogrammed automatic shows
- Sound control
- Master / Slave mode
- Noiseless operation due to convection cooling
- Power cable included

For technological reasons, the light output of LEDs decreases over their lifetime. This effect increases with higher operating temperature. You can extend the service life of the illuminants by providing adequate ventilation and operating the LEDs with the lowest possible brightness.

4 Installation

Unpack and check carefully there is no transportation damage before using the unit. Keep the equipment packaging. To fully protect the product against vibration, dust and moisture during transportation or storage use the original packaging or your own packaging material suitable for transport or storage, respectively.



NOTICE!

Risk of overheating and fire due to inadequate distance and bad ventilation!

If the distance between the light source and the illuminated surface is too short or the device is badly ventilated, the device can overheat and cause fires.

Make sure that illuminated surfaces are more than 2 m away.

Do not operate the device in ambient temperatures above 40 °C.

Always ensure sufficient ventilation at the operating location.

**NOTICE!****Potential property damage due to unsuitable stands!**

If the device is mounted on an unsuitable stand, there is a risk that the stand will fall over and cause damage.

Only use stands whose maximum bearing capacity is at least as high as the weight of the device. Always ensure that the stand is stable.

**NOTICE!****Data transfer errors due to improper wiring!**

If the DMX connections are wired incorrectly, this can cause errors during the data transfer.

Do not connect the DMX input and output to audio devices, e.g. mixers or amplifiers.

Use special DMX cables for the wiring instead of normal microphone cables.



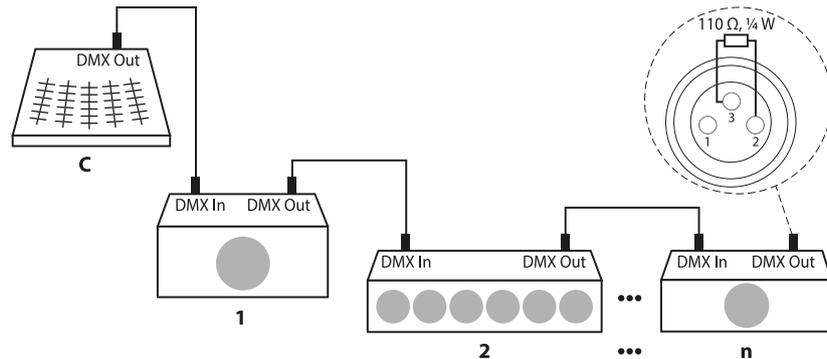
Please note that this device must not be connected to a dimmer.

5 Starting up

Create all connections while the device is off. Use the shortest possible high-quality cables for all connections. Take care when running the cables to prevent tripping hazards.

Connections in DMX mode

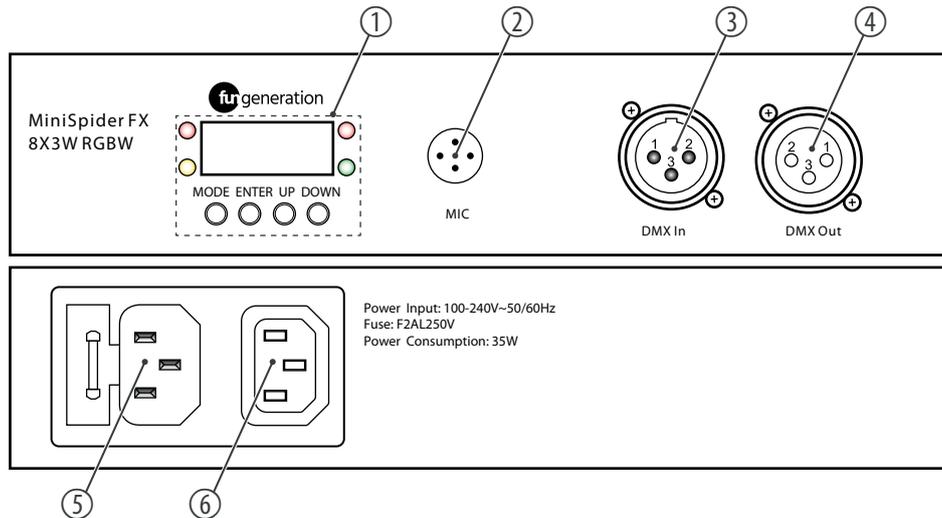
Connect the DMX input of the device to the DMX output of a DMX controller or another DMX device. Connect the output of the first DMX device to the input of the second one, and so on to form a daisy chain. Always ensure that the output of the last DMX device in the daisy chain is terminated with a resistor ($110\ \Omega$, $\frac{1}{4}\ \text{W}$).



Connections in master/slave mode

When you configure a group of devices in master/slave mode, the first unit will control the other units for an automatic, sound-activated, synchronized show. This function is ideal when you want to start a show immediately. Connect the DMX output of the master device to the DMX input of the first slave device. Then connect the DMX output of the first slave device to the DMX input of the second slave device and so on.

6 Connections and controls



1	Display with 4-digit LED display and function buttons
	<i>[MODE]</i>
	<i>[ENTER]</i>
	<i>[UP]</i>
	<i>[DOWN]</i>
2	Microphone for sound control
3	DMX input, 3-pin XLR socket for connection to a DMX controller
4	DMX output, 3-pin XLR socket for sending a DMX control signal
5	IEC chassis plug (C14) with built-in fuse switch for power supply
6	IEC chassis socket (C13) to supply further devices.

7 Operating

7.1 Starting the device

Connect the device to the power supply to start operation. After a few seconds, the device is ready for operation and the previously set operating mode is activated.

7.2 Main menu

DMX start address configuration

1. ➤ Press *[MODE]* until the display shows 'Addr'.
2. ➤ Press *[ENTER]* and select with *[UP]* and *[DOWN]* the desired DMX start address (A001 - A512).
3. ➤ Confirm your input with *[ENTER]*.

Synchronous control of several devices of the same model with one DMX controller is possible if you configure the devices with the same DMX start address and the same DMX channel mode.

Setting the DMX mode

1. ➤ Press *[MODE]*.
2. ➤ Press *[UP]* or *[DOWN]* until the display shows 'ModE'.
3. ➤ Confirm your input with *[ENTER]*.
4. ➤ Press *[UP]* oder *[DOWN]* until the display shows 'ChAn'.
5. ➤ Confirm your input with *[ENTER]*.
6. ➤ Use *[UP]* or *[DOWN]* to select the desired DMX mode (7-channel mode, 11-channel mode, 17-channel mode).

Tables with the channel assignment of the various DMX modes can be found here in this manual ↪ *Chapter 7.2.1 'Functions in 7-channel DMX mode' on page 24*, ↪ *Chapter 7.2.2 'Functions in 11-channel DMX mode' on page 25* and ↪ *Chapter 7.2.3 'Functions in 17-channel DMX mode' on page 27*.

⇒ If the device does not receive a DMX signal, the display flashes. When a DMX signal is present, the display stops flashing.

Setting the standalone mode

1. ➤ Press *[UP]* or *[DOWN]* until the display shows 'ModE'.
2. ➤ Press *[ENTER]* and select with *[UP]* and *[DOWN]* the desired stand-alone mode (Soun, AUto).
3. ➤ Confirm your selection with *[ENTER]*.

Setting the slave mode

- 1.** ▶ Press *[UP]* or *[DOWN]* until the display shows 'ModE'.
 - 2.** ▶ Press *[ENTER]* and use *[UP]* or *[DOWN]* to select the mode 'SLAV'.
 - 3.** ▶ Confirm your selection with *[ENTER]*.
 - 4.** ▶ Connect the slave devices and the master device (same model) to each other with a DMX cable. Start with the DMX output of the device, which is configured as master device.
 - 5.** ▶ On the master device, activate the desired standalone mode auto control 'AUto' or sound control 'Soun'.
- ⇒ The slave devices now follow the settings of the master device.

Setting the auto mode

You can choose between 9 different automatic shows (Au01 - Au09) and configure the program running speed (SP00 — SP99).

1. ➤ Press *[MODE]* until the display shows 'Mode'.
2. ➤ Press *[ENTER]* and use *[UP]* or *[DOWN]* to select the stand-alone mode 'Auto'.
3. ➤ Confirm your selection with *[ENTER]*.
⇒ The display is flashing.
4. ➤ Press *[ENTER]* to select the desired programme with *[UP]* and *[DOWN]*.
5. ➤ Confirm your selection with *[ENTER]*.
6. ➤ Press *[ENTER]* and use *[UP]* and *[DOWN]* to select the menu item 'SPxx' and confirm with *[ENTER]*.
7. ➤ Use *[UP]* and *[DOWN]* to select a programme running speed. You can set a value from 00 (minimum speed) to 99 (maximum speed). Confirm with *[ENTER]*.

If no further commands are entered, the display automatically returns to the main menu and the programme number is displayed.

Setting the sound control

In sound control mode, the LED effect lights are controlled by bass pulses transmitted through the built-in microphone.

1. ➤ Press *[MODE]* until the display shows 'Mode'.
2. ➤ Press *[ENTER]* and use *[UP]* or *[DOWN]* to select the stand-alone 'Soun'.
3. ➤ Confirm your selection with *[ENTER]*.
4. ➤ Press *[ENTER]* and select with *[UP]* and *[DOWN]* the desired microphone sensitivity (Su00 = Minimum - Su99 = Maximum).

If no further commands are entered, the display automatically returns to the main menu after approx. 10 seconds and 'Soun' is displayed.

Adjusting system settings

1. ➤ Press *[MODE]* until the display shows 'SEtt'. Confirm with *[ENTER]*.
2. ➤ Use *[UP]* and *[DOWN]* to select and edit one of the following options.
3. ➤ Confirm the selection with *[ENTER]*.

'dISr'	'no'	Normal display
	'YES'	Display in reverse order
'dIS'	'on'	Display permanently on
	'oFF'	Display turns off after 30 seconds
'tIL1'	'no'	Tilt setting 1
	'YES'	Tilt setting 1 in reverse order
'tIL2'	'no'	Tilt setting 2
	'YES'	Tilt setting 2 in reverse order
'noSG'	Determines which mode is activated when the DMX signal is interrupted in DMX mode	
	'hoLd'	Last DMX command
	'bLAc'	Blackout

	'Soun'	Sound control
	'Auto'	Automatic mode
'rSet'	Reset function	
'VErS'	Version	

7.2.1 Functions in 7-channel DMX mode

Channel	Value	Function
1	0...255	Tilt 1, inclination (0% - 100%)
2	0...255	Tilt 2, inclination (0% - 100%)
3	0...255	Motor speed (fast to slow)
4	0...255	Dimmer (0% - 100%)
5	0...009	Stroboscope
	010...255	Strobe slow to fast (1 Hz - 20 Hz)
6	Automatic mode / reset / sound control	
	0...139	Without function
	140...229	Automatic mode

Channel	Value	Function
	230...233	Without function
	234...236	Reset
	237...249	Without function
	250...255	Sound control
7	0...255	Sensitivity (low / high) Speed (low / high)

7.2.2 Functions in 11-channel DMX mode

Channel	Value	Function
1	0...255	Tilt 1, inclination (0% - 100%)
2	0...255	Tilt 2, inclination (0% - 100%)
3	0...255	Motor speed (fast to slow)
4	0...255	Dimmer (0% - 100%)
5	0...009	Stroboscope
	010...255	Strobe slow to fast, 1 Hz - 20 Hz

Channel	Value	Function
6	0...255	Red (0% - 100%)
7	0...255	Green (0% - 100%)
8	0...255	Blue (0% - 100%)
9	0...255	White (0% - 100%)
10	Automatic mode / reset / sound control	
	0...139	Without function
	140...229	Automatic mode
	230...233	Without function
	234...236	Reset
	237...249	Without function
	250...255	Sound control
11	0...255	Sensitivity (low / high)
		Speed (low / high)

7.2.3 Functions in 17-channel DMX mode

Channel	Value	Function	
1	0...255	Tilt 1, inclination (0% - 100%)	
2	0...255	Tilt 1 fine tuning, inclination (0% - 100%)	
3	0...255	Tilt 2, inclination (0% - 100%)	
4	0...255	Tilt 2 fine tuning, inclination (0% - 100%)	
5	0...255	Motor speed (fast to slow)	
6	0...255	Dimmer (0% - 100%)	
7	0...009	Stroboscope	
	010...255	Strobe slow to fast, 1 Hz - 20 Hz	
8	0...255	Red (0% - 100%)	Pixel 1
9	0...255	Green (0% - 100%)	Pixel 2
10	0...255	Blue (0% - 100%)	Pixel 3
11	0...255	White (0% - 100%)	Pixel 4
12	0...255	Red (0% - 100%)	Pixel 5
13	0...255	Green (0% - 100%)	Pixel 6

Channel	Value	Function	
14	0...255	Blue (0% - 100%)	Pixel 7
15	0...255	White (0% - 100%)	Pixel 8
16	Automatic mode / reset / sound control		
	0...139	Without function	
	140...229	Automatic mode	
	230...233	Without function	
	234...236	Reset	
	237...249	Without function	
	250...255	Sound control	
17	0...255	Sensitivity (low / high)	
		Speed (low / high)	

8 Technical specifications

Light source	4 × 3 W RGBW LED (Lens 1: red, lens 2: green, lens 3: blue, lens 4: white)	
Optical properties	Beam angle	3°
Shutter	1 - 20 Hz	
Control	DMX, buttons and display on the unit	
Number of DMX channels	7, 11 or 17	
Input connections	Power supply	IEC chassis plug C14
	DMX control	XLR chassis plug, 3-pin
Output connections	Power supply of further devices	IEC chassis plug C13
	DMX control	XLR chassis socket, 3-pin
Power consumption	35 W	
Supply voltage	100 - 240 V ~ 50/60 Hz	
Fuse	5 mm × 20 mm, 2 A, 250 V, fast acting	
Degree of protection	IP20	
Dimensions (W × H × D)	280 mm × 125 mm × 160 mm	

Technical specifications

Weight	2.2 kg	
Ambient conditions	Temperature range	0 °C...40 °C
	Relative humidity	20 %...80 % (non-condensing)

9 Troubleshooting



NOTICE!

Data transfer errors due to improper wiring!

If the DMX connections are wired incorrectly, this can cause errors during the data transfer.

Do not connect the DMX input and output to audio devices, e.g. mixers or amplifiers.

Use special DMX cables for the wiring instead of normal microphone cables.

In the following we list a few common problems that may occur during operation. We give you some suggestions for easy troubleshooting:

Symptom	Remedy
The device does not work, no light	Check the mains connection and the fuse.
No response to the DMX controller	<ol style="list-style-type: none">1. If the dot after the last digit on the display does not flash in "DMX" mode, no DMX signal is being received. Check that the DMX controller is switched on. Check the DMX connections and cables for proper connection.2. If the dot after the last digit on the display is flashing but there is still no response, check the address settings and the DMX polarity.3. Try using another DMX controller.4. Check whether the DMX cables run near or parallel to high-voltage cables that may cause damage or interference to a DMX interface circuit.

If the procedures recommended above do not succeed, please contact our Service Center. You can find the contact information at www.thomann.de.

10 Plug and connection assignments

Introduction

This chapter will help you select the right cables and plugs to connect your valuable equipment so that a perfect light experience is guaranteed.

Please take our tips, because especially in 'Sound & Light' caution is indicated: Even if a plug fits into a socket, the result of an incorrect connection may be a destroyed DMX controller, a short circuit or 'just' a not working light show!

DMX connections

The unit offers a 3-pin XLR socket for DMX output and a 3-pin XLR plug for DMX input. Please refer to the drawing and table below for the pin assignment of a suitable XLR plug.



Pin	Configuration
1	Ground, shielding
2	Signal inverted (DMX-, 'cold signal')
3	Signal (DMX+, 'hot signal')

11 Cleaning

Optical lenses

Clean the optical lenses, that are accessible from the outside, regularly in order to optimize the light output. The frequency of cleaning depends on the operating environment: wet, smoky or particularly dirty surroundings can cause more accumulation of dirt on the optics of the device.

- Clean with a soft cloth using our lamp and lens cleaner (item no. 280122).
- Always dry the parts carefully.

12 Protecting the environment

Disposal of the packaging material



For the transport and protective packaging, environmentally friendly materials have been chosen that can be supplied to normal recycling.

Ensure that plastic bags, packaging, etc. are properly disposed of.

Do not just dispose of these materials with your normal household waste, but make sure that they are collected for recycling. Please follow the notes and markings on the packaging.

Disposal of your old device



This product is subject to the European Waste Electrical and Electronic Equipment Directive (WEEE) in its currently valid version. Do not dispose with your normal household waste.

Dispose of this device through an approved waste disposal firm or through your local waste facility. When discarding the device, comply with the rules and regulations that apply in your country. If in doubt, consult your local waste disposal facility.

