MiniSpider FX 8 × 3 W RGBW

LED effect

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user manual

Musikhaus Thomann
Thomann GmbH
Hans-Thomann-Straße 1
96138 Burgebrach
Germany
Telephone: +49 (0) 9546 9223-0
E-mail: info@thomann.de
Internet: www.thomann.de

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1 General notes

This manual contains important instructions for the safe operation of the unit. Read and follow the safety instructions and all other instructions. Keep the manual for future reference. Make sure that it is available to all those using the device. If you sell the unit please make sure that the buyer also receives this manual.

Our products are subject to a process of continuous development. Thus, they are subject to change.

1.1 Further information

On our website (*www.thomann.de)* you will find lots of further information and details on the following points:

Download	This manual is also available as PDF file for you to download.
Keyword search	Use the search function in the electronic version to find the topics of interest for you quickly.
Online guides	Our online guides provide detailed information on technical basics and terms.
Personal consultation	For personal consultation please contact our technical hotline.
Service	If you have any problems with the device the customer service will gladly assist you.

1.2 Notational conventions

This manual uses the following notational conventions:

Letterings

The letterings for connectors and controls are marked by square brackets and italics.

Examples: *[VOLUME]* control, *[Mono]* button.

Displays

Texts and values displayed on the device are marked by quotation marks and italics.

Examples: *'24ch'*, *'OFF'*.

Instructions

The individual steps of an instruction are numbered consecutively. The result of a step is indented and highlighted by an arrow.

Example:

1. Switch on the device.
2. Press *[Auto]*.

   ⇨ Automatic operation is started.
3. Switch off the device.

1.3 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 manual.

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 – 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 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 life of the device by regular breaks in operation and avoid switching it on and off frequently. This device is not suitable for continuous use.

Safety

DANGER!

Danger for children

Ensure that plastic bags, packaging, etc. are disposed of properly and are not within reach of babies and young children. Choking hazard!

Ensure that children do not detach any small parts (e.g. knobs or the like) from the unit. They could swallow the pieces and choke!

Never let children unattended use electrical devices.

DANGER!

Electric shock caused by high voltages inside

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 if covers, protectors or optical components are missing or damaged.

DANGER!

Electric shock caused by short-circuit

Always use proper ready-made insulated mains cabling (power cord) with a protective contact plug. Do not modify the mains cable or the plug. Failure to do so could result in electric shock/death or fire. If in doubt, seek advice from a registered electrician.

WARNING!

Eye damage caused by high light intensity

Never look directly into the light source.

WARNING!

Risk of epileptic shock

Strobe lighting can trigger seizures in photosensitive epilepsy. Sensitive persons should avoid looking at strobe lights.

NOTICE!

Risk of fire

Do not block areas of ventilation. Do not install the device near any direct heat source. Keep the device away from naked flames.

NOTICE!

Operating conditions

This device has been designed for indoor use only. To prevent damage, never expose the device to any liquid or moisture. Avoid direct sunlight, heavy dirt, and strong vibrations.

Only operate the device within the ambient conditions specified in the chapter 'Technical specifications' of this user manual. Avoid heavy temperature fluctuations and do not switch the device on immediately after it was exposed to temperature fluctuations (for example after transport at low outside temperatures).

Dust and dirt inside can damage the unit. When operated in harmful ambient conditions (dust, smoke, nicotine, fog, etc.), the unit should be maintained by qualified service personnel at regular intervals to prevent overheating and other malfunction.

NOTICE!

Power supply

Before connecting the device, ensure that the input voltage (AC outlet) matches the voltage rating of the device and that the AC outlet is protected by a residual current circuit breaker. Failure to do so could result in damage to the device and possibly injure the user.

Unplug the device before electrical storms occur and when it is unused for long periods of time to reduce the risk of electric shock or fire.

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 carefully check that there is no transportation damage before using the unit. Keep the equipment packaging. To fully protect the device 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

The distance between light output and the illuminated surface must be more than 1.5 m (19.7in).

Provide sufficient ventilation.

The ambient temperature must always be below 40 °C (104 °F).

NOTICE!

Use of stands

When mounting the device onto a stand, ensure that the stand is in a safe and stable position and that the weight of the device does not exceed the maximum permissible load capacity of the stand.

NOTICE!

Possible data transmission errors

For error-free operation make use of dedicated DMX cables and do not use ordinary microphone cables.

Never connect the DMX input or output to audio devices such as mixers or amplifiers.

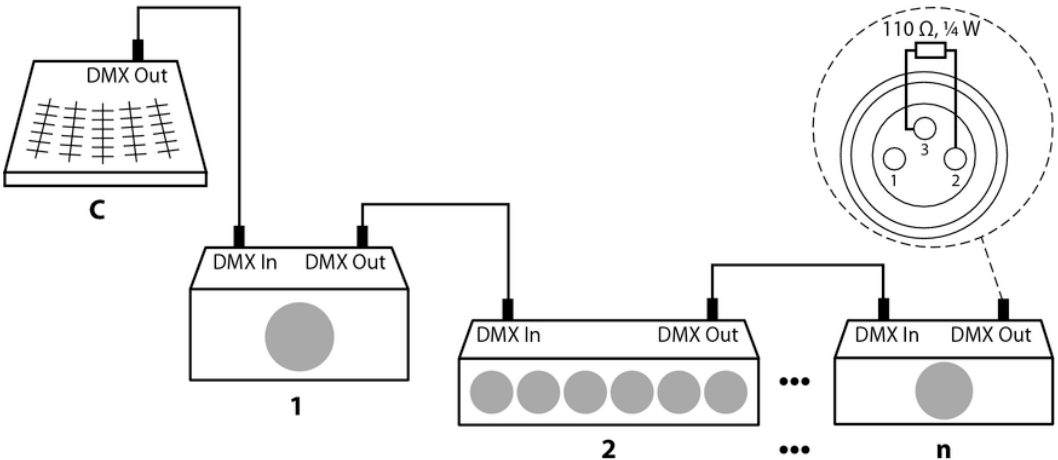
Please note that this device must not be connected to a dimmer.

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

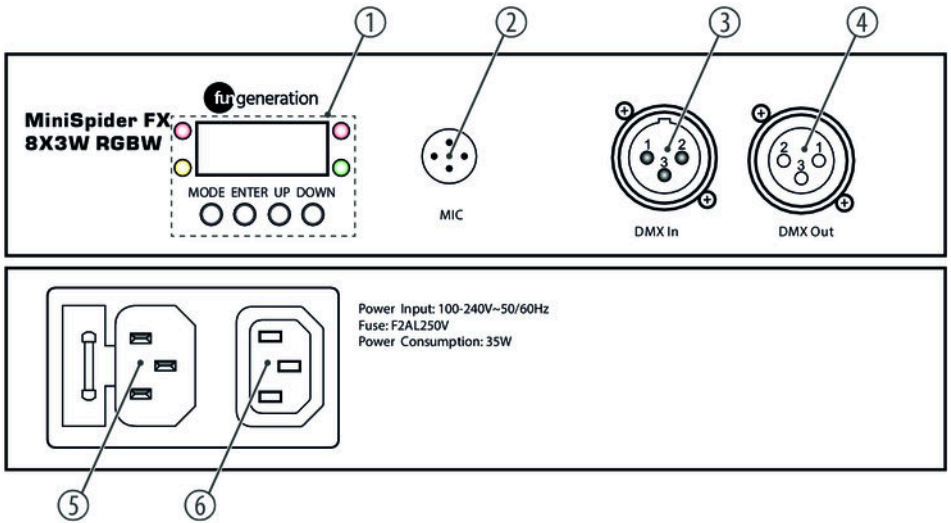
Connect the DMX input of the device to the DMX output of a DMX controller or another DMX device. Connect the output of the first DMX device to the input of the second one, and so on to form a daisy chain. Always ensure that the output of the last DMX device in the daisy chain is terminated with a resistor (110 Ω, ¼ 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.

5.1 Connections and controls



1	Display with 4-digit LED display and function buttons
	[MODE]
	[ENTER]
	[UP]
	[DOWN]
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.

6 Operating

6.1 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.

6.2 Main menu

DMX start address configuration

1. Press *[MODE]* until the display shows *'Addr'*.
2. Press *[ENTER]* and use *[UP]* and *[DOWN]* to enter the desired DMX start address (A001 - A512).
3. Confirm your entry 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 *'ModE-'* is displayed.
3. Confirm your entry with *[ENTER]*.
4. Press *[Up]* or *[Down]* until *'ChAn'* is displayed.
5. Confirm your entry with *[ENTER]*.
6. Use *[UP]* and *[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 6.2.1 'Functions in 7-channel DMX mode' on page 31*, ↳ *Chapter 6.2.2 'Functions in 11-channel DMX mode' on page 33* and ↳ *Chapter 6.2.3 'Functions in 17-channel DMX mode' on page 35*.

   ⇨ 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 use *[UP]* and *[DOWN]* to select the desired standalone 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]* and *[DOWN]* to select the *'SLAV'* mode.
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]* and *[DOWN]* to select the standalone mode *'AUto'*.
3. Confirm your selection with *[ENTER]*.

   ⇨ The display is flashing.
4. Press *[ENTER]* and use *[UP]* and *[DOWN]* to select the desired programme.
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 the 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]* and *[DOWN]* to select the standalone mode *'Soun'*.
3. Confirm your selection with *[ENTER]*.
4. Press *[ENTER]* and use *[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. With *[UP]* and *[DOWN]* you can select and edit the following menu items.
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
tILI	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	

6.2.1 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)

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

6.2.2 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
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	

Channel	Value	Function
	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)

6.2.3 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

Channel	Value	Function	
11	0…255	White (0% – 100%)	Pixel 4
12	0…255	Red (0% – 100%)	Pixel 5
13	0…255	Green (0% – 100%)	Pixel 6
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	

Channel	Value	Function
	250…255	Sound control
17	0…255	Sensitivity (low / high) Speed (low / high)

7 Technical specifications

Illuminant	4 × 3 W RGBW LED (Lens 1: red, lens 2: green, lens 3: blue, lens 4: white)
Number of DMX channels	7, 11 or 17 channels, depending on operating mode
Beam angle	3°
Shutter	1 — 20 Hz
DMX in and output	XLR 3-pin
Operating supply voltage	100 – 240 V ~ 50/60 Hz
Power consumption	35 W
Fuse	5 mm × 20 mm, 2 A, 250 V, fast acting
Protection class	IP20
Dimensions (W × H × D)	280 mm × 125 mm × 160 mm
Weight	2.2 kg

Environmental conditions

Temperature range	0 °C…40 °C
Relative humidity	50 %, non-condensing

8 Troubleshooting

NOTICE!

Possible data transmission errors

For error-free operation make use of dedicated DMX cables and do not use ordinary microphone cables.

Never connect the DMX input or output to audio devices such as mixers or amplifiers.

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 unit does not work, no light	Check the mains connection and the main fuse.
No response to the DMX controller	1. If the dot after the last digit in the display does not flash in 'DMX' mode, no DMX signal is received. Check whether the DMX controller is switched on. Check the DMX connectors and cables for proper connection.
	2. If the dot after the last digit in 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*.

9 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')

10 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.

11 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.

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