

## LED Bar 240/8 RGB LED floodlight

Musikhaus Thomann e.K.

Treppendorf 30

96138 Burgebrach

Germany

Telephone: +49 (0) 9546 9223-0

E-mail: [info@thomann.de](mailto:info@thomann.de)

Internet: [www.thomann.de](http://www.thomann.de)

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# 1 General notes

This user manual contains important information on safe operation of the device. Read and follow all safety notes and all instructions. Save this manual for future reference. Make sure that it is available to all persons using this device. If you sell the device, include the manual for the next owner.

Our products are subject to a process of continuous development. We therefore reserve the right to make changes without notice.

## **Symbols and signal words**

This section provides an overview of the symbols and signal words used in this user manual.

Signal word	Meaning
<b>DANGER!</b>	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.
<b>WARNING!</b>	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.
<b>NOTICE!</b>	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 signs	Type of danger
 A yellow triangular warning sign with a black border. Inside the triangle, a black silhouette shows a person standing on a platform, with a line representing a cable or rope extending upwards from the platform to a hook or pulley above.	Warning – suspended load.
 A yellow triangular warning sign with a black border. Inside the triangle, a large black exclamation mark is centered.	Warning – danger zone.

## 2 Safety instructions

### Intended use

This device is intended to be used as an electronic illumination effect using LED technics. 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.

### 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.



**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 cover the device nor any ventilation slots. Do not place 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.



**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

The LED floodlight is particularly suitable for professional lighting applications, for example at events, on rock stages as well as in theatres and musicals. It is characterized by a low power consumption and long life span.

Special features of this device:

- 240 LEDs (96 × red, 72 × green, 72 × blue) in eight segments
- Control via DMX (4 different modes) or buttons and display on the unit
- 21 preprogrammed automatic shows
- Sound control
- Master / slave mode
- Robust metal housing

## 4 Installation

Unpack and check carefully 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.

You can install the device on the wall, the ceiling or on the floor. Two mounting bracket with different lengths and the necessary screws are included.



### **WARNING!**

#### **Risk of injury caused by falling objects**

Make sure that the installation complies with the standards and rules that apply in your country. Always secure the device with a secondary safety attachment, such as a safety cable or a safety chain.



### **NOTICE!**

#### **Risk of overheating**

Always ensure sufficient ventilation.

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



### **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 output to audio devices such as mixers or amplifiers.

### **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 pin assignment.



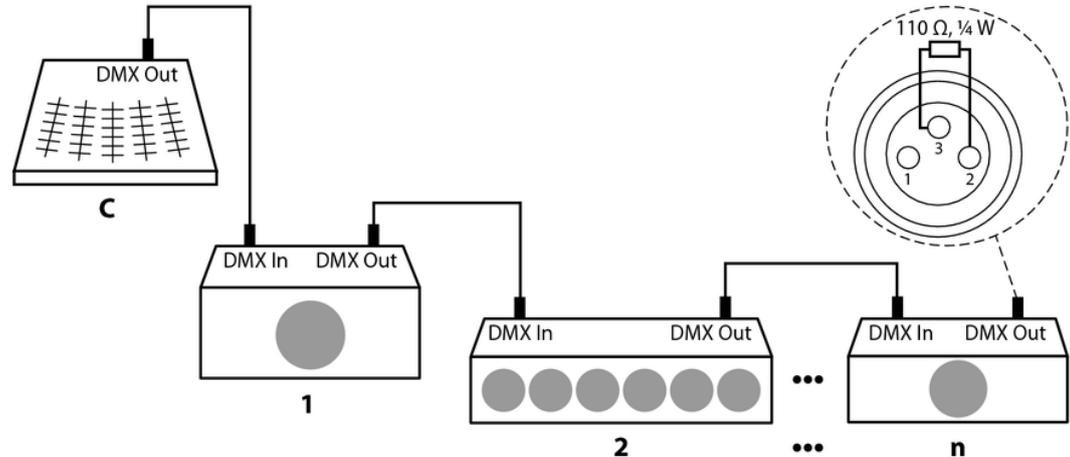
1	Ground, shielding
2	DMX data (-)
3	DMX data (+)

## 5 Starting up

Establish all connections as long as the unit is switched off. Use the shortest possible high-quality cables for all connections.

**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 ( $110\ \Omega$ ,  $\frac{1}{4}\ \text{W}$ ).



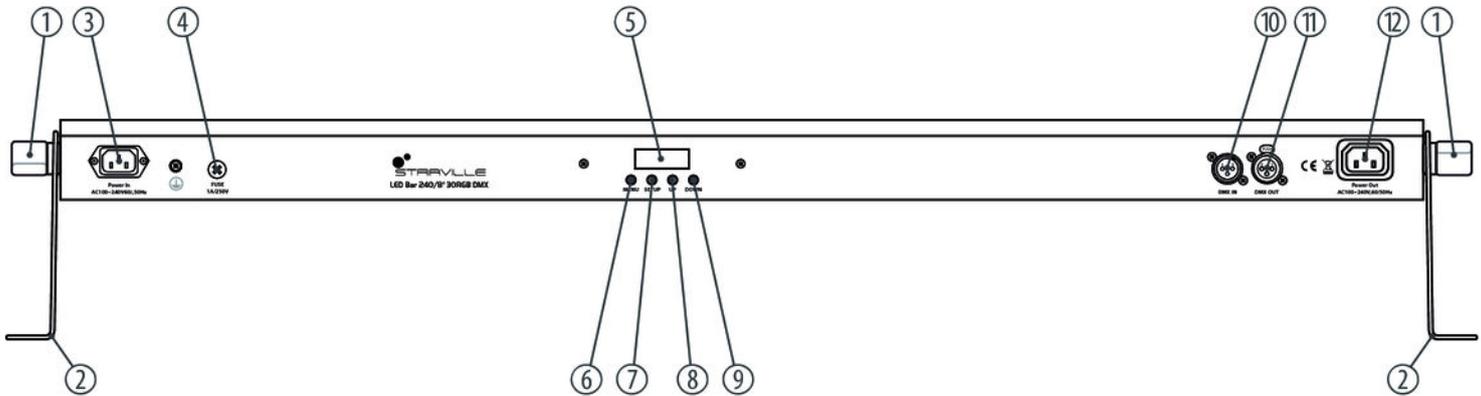
### **DMX indicator**

When the display is flashing in 'DMX' mode, no DMX signal is received. Perhaps the DMX controller is shut down or the wiring is incorrect. If the display lights up solid, the device is receiving a valid DMX signal.

### **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 operating elements



LED Bar 240/8 RGB

1	Locking screw for the bracket.
2	Mounting bracket.
3	<b>POWER In</b> IEC chassis plug for operating voltage supply.
4	<b>FUSE 1A/250V</b> Fuse holder.
5	Display.
6	<i>[Mode]</i> button Activates the main menu and toggles between menu items.
7	<i>[Setup]</i> button Selects an option of the respective operating mode.
8	<i>[Up]</i> button Menu navigation upward. Increases the displayed value by one.

9	<i>[Down]</i> button Menu navigation downward. Decreases the displayed value by one.
10	<b>DMX In</b> DMX input.
11	<b>DMX Out</b> DMX output.
12	<b>POWER Out</b> IEC chassis socket for the power supply cable to the next unit.

## 7 Operating

### 7.1 Starting up the device

Connect the unit to the power grid to start the operation. After a few seconds, the display shows a running reset. The unit is then ready for use.

### 7.2 Main menu

Press *[Mode]* to activate the main menu and to select an operating mode. Use *[Up]* and *[Down]* to change the respectively indicated value. When the display shows the desired value, press *[Mode]*.

If you don't press any button for about 30 seconds, the current setting is being applied and the display turns dark. The set values are retained as long as the unit is connected to the power supply.

### 'Preprogrammed automatic show' mode

A preprogrammed automatic show can only be activated if the unit is working in stand-alone mode or as master device in a master / slave combination. This setting is only relevant if the unit is not controlled via DMX.

Press *[Mode]* repeatedly until the display shows 'Prxx'. Now you can select one of the preprogrammed automatic shows. Use *[Up]* and *[Down]* to select a value between 'Pr01' and 'Pr21'.

For programmes Pr20 and Pr21, you can set a static colour (background colour) for all segments, or a colour that lights up segmentally (hopping colour). Press *[Setup]* repeatedly until the display shows '1xxx' (background colour) or '2xxx' (hopping colour). With *[Up]* and *[Down]* you can toggle between the following options:

Display	Description
'--r'	Red
'-rg'	Red and green
'--g'	Green
'-gb'	Green and blue
'--b'	Blue

Display	Description
'-rb'	Red and blue
'rgb'	Red, green and blue
' OFF'	LEDs off

To adjust the speed of the selected automatic show, press *[Setup]* repeatedly until the display shows 'SPxx'. With *[Up]* and *[Down]* you can now select a value between 'SP01' (slow) and 'SP99' (fast) or 'SPFL' (Flash effect).

To adjust the flash frequency, press *[Setup]* repeatedly until the display shows 'FSxx'. With *[Up]* and *[Down]* you can now select a value between 'FS00' (slow) and 'FS99' (fast).

To adjust the fade speed of the selected automatic show, press *[Setup]* repeatedly until the display shows 'Fdx'. With *[Up]* and *[Down]* you can now select a value between 'Fd00' (slow) and 'Fd99' (fast).

Wait for about 30 seconds until the display turns dark. Then the settings have been applied. Press *[Mode]* to return to the parent menu without any changes.

**'Automatic' mode**

Automatic operation can only be activated if the unit is working in stand-alone mode or as master device in a master / slave combination. This setting is only relevant if the unit is not controlled via DMX.

Press *[Mode]* repeatedly until the display shows 'Auto'. Press *[Setup]*. Now you can select one of the Automatic options. Use *[Up]* and *[Down]* to select a value between 'n001' and 'n100'.

To adjust the speed of the selected Automatic option, press *[Setup]* repeatedly until the display shows 'SPxx'. With *[Up]* and *[Down]* you can now select a value between 'SP01' (slow) and 'SP99' (fast) or 'SPFL' (Flash effect).

To adjust the flash frequency, press *[Setup]* repeatedly until the display shows 'FSxx'. With *[Up]* and *[Down]* you can now select a value between 'FS00' (slow) and 'FS99' (fast).

To adjust the fade speed of the selected Automatic option, press *[Setup]* repeatedly until the display shows 'Fdxx'. With *[Up]* and *[Down]* you can now select a value between 'Fd00' (slow) and 'Fd99' (fast).

Wait for about 30 seconds until the display turns dark. Then the settings have been applied. Press *[Mode]* to return to the parent menu without any changes.

### DMX address

This setting is only relevant if the unit is controlled via DMX.

Press *[Mode]* repeatedly until the display shows 'dxxx'.

Now you can set the number of the first DMX channel to be used by the device (DMX address). Use *[Up]* and *[Down]* to select a value between 1 and 512 (the display shows 'd001' ... 'd512').

Make sure that this number matches the configuration of your DMX controller. The following table shows the highest possible DMX address for the different DMX modes.

Mode	Highest possible DMX address
2-channel	511
3-channel	510
5-channel	508
24-channel	489

Wait for about 30 seconds until the display turns dark. Then the settings have been applied. Press *[Mode]* to return to the parent menu without any changes.

**'DMX' mode**

This setting is only relevant if the unit is controlled via DMX.

Press *[Mode]* repeatedly until the display shows 'dxxx'. Press *[Setup]*. With *[Up]* and *[Down]* you can now select one of the following DMX operating modes:

- '2-ch' (two channels)
- '3-ch' (three channels)
- '5-ch' (five channels)
- '24ch' (twenty-five channels)

Wait for about 30 seconds until the display turns dark. Then the settings have been applied. Press *[Mode]* to return to the parent menu without any changes.

**'Slave' mode**

This setting is only relevant if the unit is operated as slave device in a master / slave configuration and is not controlled via DMX.

Press *[Mode]* repeatedly until the display shows 'SLAv'.

Wait for about 30 seconds until the display turns dark. Then the settings have been applied. Press *[Mode]* to return to the parent menu without any changes.

### **Sound-control and microphone sensitivity**

A sound-controlled automatic show can only be activated if the unit is working in stand-alone mode or as master device in a master / slave combination. This setting is only relevant if the unit is not controlled via DMX.

Press *[Mode]* repeatedly until the display shows 'SUxx'. This will activate a sound-controlled automatic show.

Now you can adjust the sensitivity of the built-in microphone for the sound-control. Use *[Up]* and *[Down]* to select a value between 0 (low sensitivity) and 31 (high sensitivity), the display shows 'SU00' ... 'SU31'.

Wait for about 30 seconds until the display turns dark. Then the settings have been applied. Press *[Mode]* to return to the parent menu without any changes.

**Constant unicoloured pattern**

A constant unicoloured pattern can only be activated if the unit is working in stand-alone mode or as master device in a master / slave combination. This setting is only relevant if the unit is not controlled via DMX.

Press *[Mode]* repeatedly until the display shows 'Colr'.

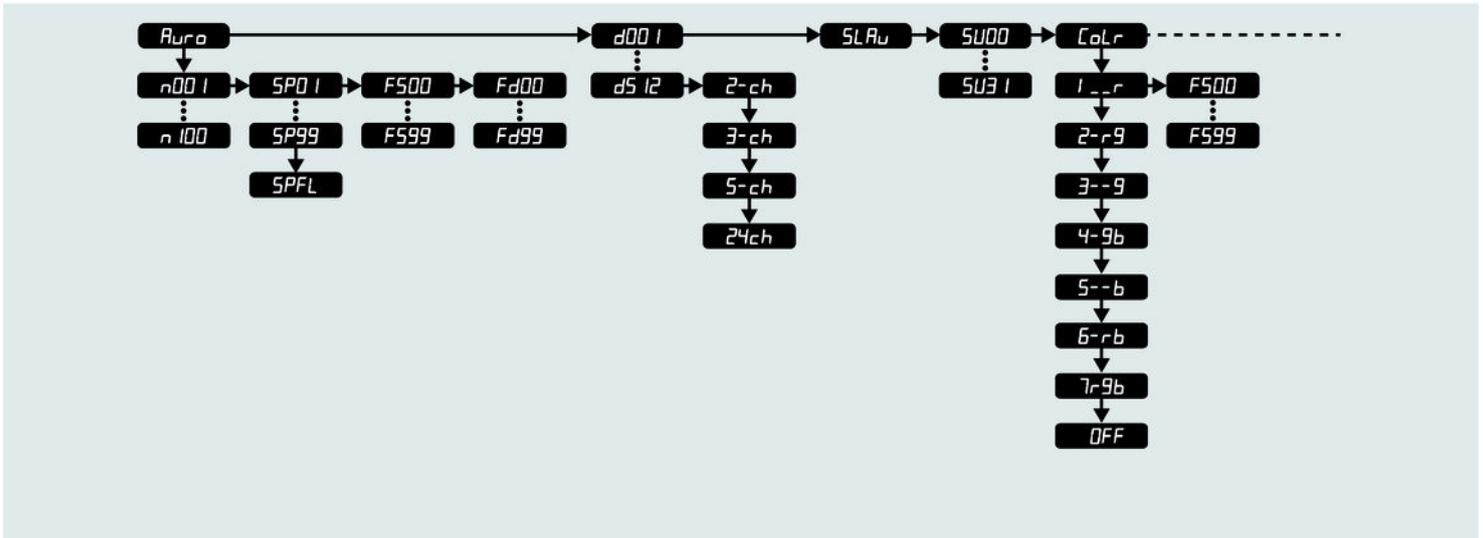
Press *[Setup]*. With *[Up]* and *[Down]* to choose from the following options:

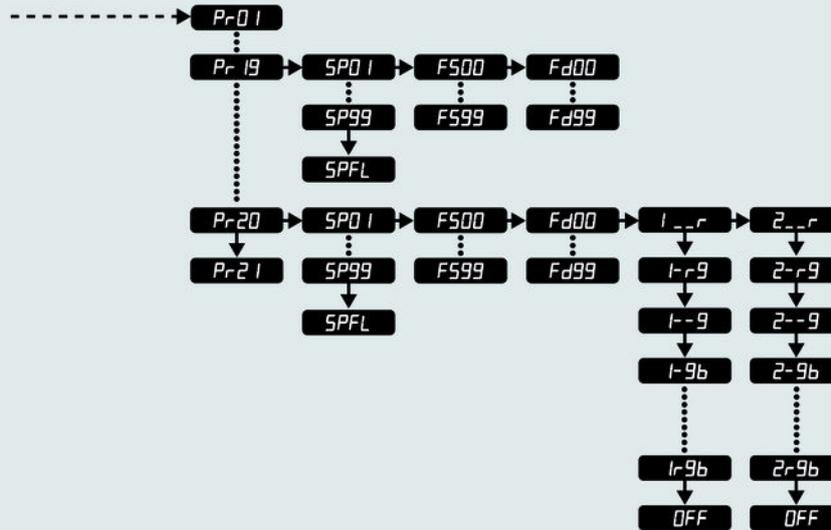
Display	Description
'1--r'	Red
'2-rg'	Red and green
'3--g'	Green
'4-gb'	Green and blue
'5--b'	Blue
'6-rb'	Red and blue
'7rgb'	Red, green and blue
' OFF'	LEDs off

To adjust the flash frequency, press *[Setup]* repeatedly until the display shows 'FSxx'. With *[Up]* and *[Down]* you can now select a value between 'FS00' (slow) and 'FS99' (fast).

Wait for about 30 seconds until the display turns dark. Then the settings have been applied. Press *[Mode]* to return to the parent menu without any changes.

### 7.3 Menu overview





## 7.4 Functions in 2-channel DMX mode

Channel	Value	Function
1	0...7	LEDs off
	8...15	Constant unicoloured pattern in red
	16...23	Constant unicoloured pattern in red and green
	24...31	Constant unicoloured pattern in green
	32...39	Constant unicoloured pattern in blue and green
	40...47	Constant unicoloured pattern in blue
	48...55	Constant unicoloured pattern in blue and red
	56...63	Constant unicoloured pattern in red, green and blue
	64...231	Preprogrammed automatic shows
	232...255	Sound-controlled shows
2	Function depends on settings in channel 1	

Channel	Value	Function
	Channel 1 = 0...63	
	No function	
	Channel 1 = 64...231	
	0...255	Increasing speed
	Channel 1 = 232...255	
	0...255	Sensitivity of the built-in microphone for sound control

## 7.5 Functions in 3-channel DMX mode

Channel	Value	Function
1	0...255	Intensity (0 % to 100 %) of the 96 red LEDs
2	0...255	Intensity (0 % to 100 %) of the 72 green LEDs
3	0...255	Intensity (0 % to 100 %) of the 72 blue LEDs

## 7.6 Functions in 5-channel DMX mode

Channel	Value	Function
1	0...255	Intensity (0 % to 100 %) of the 96 red LEDs
2	0...255	Intensity (0 % to 100 %) of the 72 green LEDs
3	0...255	Intensity (0 % to 100 %) of the 72 blue LEDs

Channel	Value	Function
4	0...255	Dimmer (0 % to 100 %) for all LEDs
5	0...255	Strobe effect, increasing speed

## 7.7 Functions in 24-channel DMX mode

Channel	Value	Function
1	0...255	Intensity (0 % to 100 %) of the red LEDs in the 1. segment
2	0...255	Intensity (0 % to 100 %) of the green LEDs in the 1. segment
3	0...255	Intensity (0 % to 100 %) of the blue LEDs in the 1. segment
4	0...255	Intensity (0 % to 100 %) of the red LEDs in the 2. segment
5	0...255	Intensity (0 % to 100 %) of the green LEDs in the 2. segment
6	0...255	Intensity (0 % to 100 %) of the blue LEDs in the 2. segment

Channel	Value	Function
7	0...255	Intensity (0 % to 100 %) of the red LEDs in the 3. segment
8	0...255	Intensity (0 % to 100 %) of the green LEDs in the 3. segment
9	0...255	Intensity (0 % to 100 %) of the blue LEDs in the 3. segment
10	0...255	Intensity (0 % to 100 %) of the red LEDs in the 4. segment
11	0...255	Intensity (0 % to 100 %) of the green LEDs in the 4. segment
12	0...255	Intensity (0 % to 100 %) of the blue LEDs in the 4. segment
13	0...255	Intensity (0 % to 100 %) of the red LEDs in the 5. segment
14	0...255	Intensity (0 % to 100 %) of the green LEDs in the 5. segment
15	0...255	Intensity (0 % to 100 %) of the blue LEDs in the 5. segment
16	0...255	Intensity (0 % to 100 %) of the red LEDs in the 6. segment
17	0...255	Intensity (0 % to 100 %) of the green LEDs in the 6. segment
18	0...255	Intensity (0 % to 100 %) of the blue LEDs in the 6. segment
19	0...255	Intensity (0 % to 100 %) of the red LEDs in the 7. segment

Channel	Value	Function
20	0...255	Intensity (0 % to 100 %) of the green LEDs in the 7. segment
21	0...255	Intensity (0 % to 100 %) of the blue LEDs in the 7. segment
22	0...255	Intensity (0 % to 100 %) of the red LEDs in the 8. segment
23	0...255	Intensity (0 % to 100 %) of the green LEDs in the 8. segment
24	0...255	Intensity (0 % to 100 %) of the blue LEDs in the 8. segment

## 8 Technical specifications

LEDs	240 LEDs (96 × red, 72 × green, 72 × blue) in eight segments
Dispersion angle	30 °
Number of DMX channels	2, 3, 5 or 24
Operating supply voltage	AC 230 V ~ 50 Hz
Power consumption	36 W
Dimensions (W × D × H)	1064 mm × 88 mm × 65 mm
Weight	2.6 kg

## 9 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 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 fuse.
No response to the DMX controller.	<ol style="list-style-type: none"> <li data-bbox="888 296 1516 423">1. When the display is flashing, e.g. 'd001', no valid DMX signal can be received. Make sure that the DMX controller is turned on. Check the DMX ports and cables for proper connection.</li> <li data-bbox="888 428 1516 501">2. If the display does not flash and still no response, check the address settings and the DMX polarity.</li> <li data-bbox="888 507 1516 555">3. Try using another DMX controller.</li> <li data-bbox="888 561 1516 647">4. Check to see if the DMX cables run near or alongside to high voltage cables that may cause damage or interference to DMX interface circuits.</li> </ol>

If the procedures recommended above do not succeed, please contact our Service Center. You can find the contact information at [www.thomann.de](http://www.thomann.de).

## 10 Cleaning

### Optical lenses

Clean the exterior of accessible optical lenses periodically to optimise 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 normal glass cleaning products.
- 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 device is subject to the European directive 2002/96/EC.

Do not dispose of the device 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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