



LED Bar 240/8 RGB LED floodlight

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## 1 General information

This user manual contains important information on the 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 to another user, be sure that they also receive this manual.

Our products and user manuals are subject to a process of continuous development. We therefore reserve the right to make changes without notice. Please refer to the latest version of the user manual which is ready for download under <u>www.thomann.de</u>.



## 1.1 Further information

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

Download	nload 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'.

## 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	
A	Warning – high-voltage.
	Warning – dangerous optical radiation.



Warning signs	Type of danger
	Warning – suspended load.
<u>^</u>	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.





## 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.





## **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.





## **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.



#### NOTICE!

## Possible damage due to installation of a wrong fuse

The use of different types of fuses can cause serious damage to the unit. Fire hazard!

Only fuses of the same type may be used.



## 3 Features

The LED floodlight is particularly suitable for professional lighting tasks, for example at events, on rock stages, in theatres and musicals. It's characterized by low power consumption and long service life.

Special features of the device:

- 240 LEDs (96 × red, 72 × green, 72 × blue) in eight segments
- Control via DMX (4 different modes), via buttons and display on the unit as well as an
  optionally available IR remote control
- 21 preprogrammed automatic shows
- Sound control
- Master / Slave mode
- Robust metal housing

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.



#### 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.





## **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.





#### 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.

## **Mounting options**

You can install the unit in hanging or standing position. When in use, the device must always be attached to a solid surface or an approved truss. Use the openings of the bracket provided for mounting.

Always work from a stable platform whenever installing, moving or servicing the unit. In doing so, the area underneath the unit must be cordoned off.

The safety cable must be attached to both brackets.





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



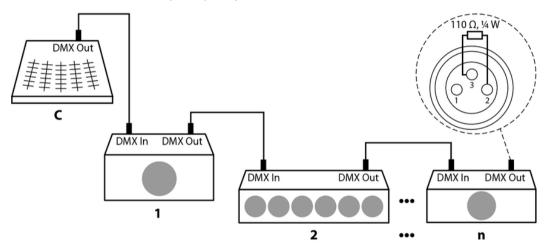
# 5 Starting up

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  $\Omega$ ,  $\frac{1}{4}$  W).





#### **DMX** indicator

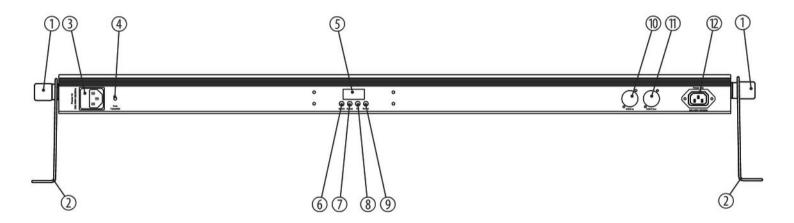
If the indicator is flashing in the DMX mode, no DMX signal is received. Maybe the DMX controller is not switched on or there is a cabling error. If the indicator lights permanently, the device receives a valid DMX signal.

# 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



1	Locking screws for the mounting bracket.
2	Mounting bracket.
3	[POWER In]
	IEC chassis plug for mains connection.
4	[FUSE 1A/250V]
	Fuse holder.
5	Display.
6	Button [Mode]
	Activates the main menu and toggles between menu items.
7	Button [Setup]
	Selects an option of the respective operating mode.
8	Button [Up]
	Navigates upwards in a menu list. Increases the displayed value by one.



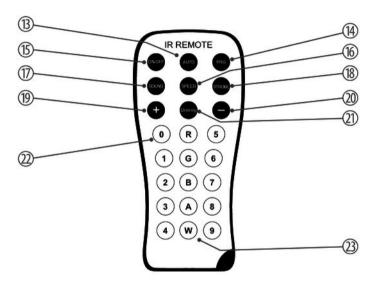
## Connections and operating elements

9	Button [Down]	
	Navigates downwards in a menu list. Decreases the displayed value by one.	
10	[DMX In]	
	DMX input.	
11	[DMX Out]	
	DMX output.	
12	[POWER Out]	
	IEC chassis socket for the power supply cable to the next unit.	



## IR remote control

IR remote control is optional accessory and not included.





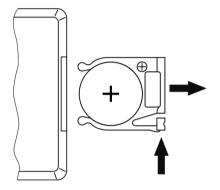
## Connections and operating elements

13	[AUTO]
	Enables the auto mode.
14	[PRG]
	Enables the Programme mode. Select the desired programme with the buttons [+] and [-].
15	[ON/OFF]
	Activates / deactivates the device.
16	[SPEED]
	Activates the setting mode for the programme speed. Adjust the speed using the buttons [+] and [-].
17	[SOUND]
	Activates the sound-controlled mode.
18	[STROBE]
	Turns the strobe function on / off.
19	[+]
	Increases the set value.



20	[-]
	Decreases the set value.
21	[Dimming]
	Enables the dimmer function.
22	[09]
	Numeric buttons for direct selection of a fixed colour.
23	[R], [G], [B], [A], [W]
	Buttons to select a colour tone for the dimmer mode.

# Inserting the battery into the remote control



Press the lock of the battery holder to the centre of the housing and pull out the battery holder like a drawer. Insert the battery. The battery is correct if the positive pole points to the housing base of the remote control. Slide the battery holder back into the remote until it clicks into place.

When shipping, the battery is already installed in the remote and protected against discharge by a transparent plastic foil. Remove the plastic foil prior to first use.

# 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 'Fdxx'. With [Up] and [Down] you can now select a value between 'Fd00' (slow) and 'Fd99' (fast).



#### '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).



#### 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



#### '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'.



# 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
′Ir′	Red
'2-rg'	Red and green
'3g' '4-gb' '5b'	Green
'4-gb'	Green and blue
'5b'	Blue
'6-rb'	Red and blue
'7rgb'	Red, green and blue
' OFF'	LEDs off

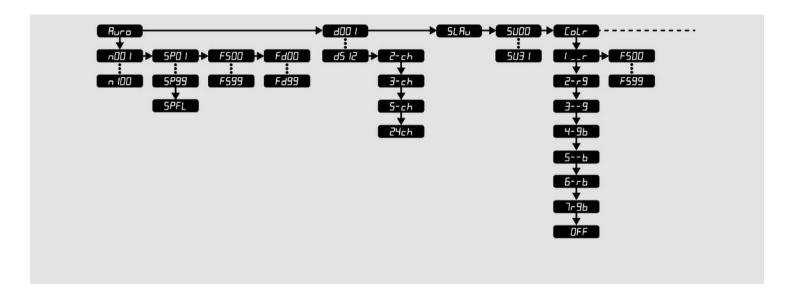


To adjust the flash frequency, press [Setup] repeatedly until the display shows 'FSxx'. With [Up] and [Down] you can now select a value between 'FS00' (slow) and 'FS99' (fast).

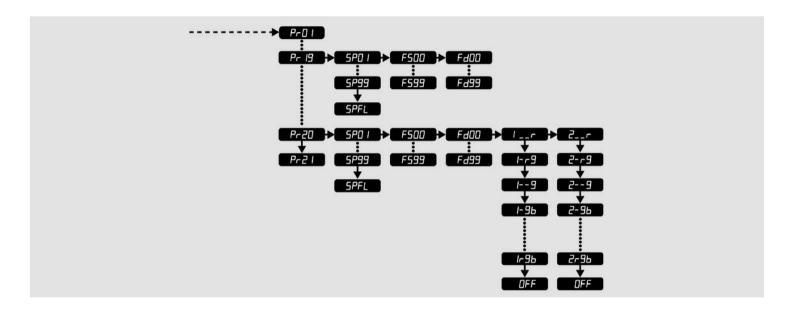
Wait for about 30 seconds until the display turns dark. Then the settings have been applied. Press [Mode] to return to the parent menu without any changes.



### 7.3 Menu overview









### 7.4 Functions in 2-channel DMX mode

Channel	Value	Function
1	07	LEDs off
	815	Constant unicoloured pattern in red
	1623	Constant unicoloured pattern in red and green
	2431	Constant unicoloured pattern in green
	3239	Constant unicoloured pattern in blue and green
	4047	Constant unicoloured pattern in blue
	4855	Constant unicoloured pattern in blue and red
	5663	Constant unicoloured pattern in red, green and blue
	64231	Preprogrammed automatic shows
	232255	Sound-controlled shows
2	Function depends on settings in channel 1	



Channel	Value	Function
	Channel 1 = 063	
	No function	
	Channel 1 = 642	31
	0255	Increasing speed
	Channel 1 = 232	255
	0255	Sensitivity of the built-in microphone for sound control



### 7.5 Functions in 3-channel DMX mode

Channel	Value	Function
1	0255	Intensity (0 % to 100 %) of the 96 red LEDs
2	0255	Intensity (0 % to 100 %) of the 72 green LEDs
3	0255	Intensity (0 % to 100 %) of the 72 blue LEDs

### 7.6 Functions in 5-channel DMX mode

Channel	Value	Function
1	0255	Intensity (0 % to 100 %) of the 96 red LEDs
2	0255	Intensity (0 % to 100 %) of the 72 green LEDs
3	0255	Intensity (0 % to 100 %) of the 72 blue LEDs



Channel	Value	Function
4	0255	Dimmer (0 % to 100 %) for all LEDs
5	0255	Strobe effect, increasing speed

### 7.7 Functions in 24-channel DMX mode

Channel	Value	Function
1	0255	Intensity (0 % to 100 %) of the red LEDs in the 1. segment
2	0255	Intensity (0 % to 100 %) of the green LEDs in the 1. segment
3	0255	Intensity (0 % to 100 %) of the blue LEDs in the 1. segment
4	0255	Intensity (0 % to 100 %) of the red LEDs in the 2. segment
5	0255	Intensity (0 % to 100 %) of the green LEDs in the 2. segment
6	0255	Intensity (0 % to 100 %) of the blue LEDs in the 2. segment



## Operating

Channel	Value	Function
7	0255	Intensity (0 % to 100 %) of the red LEDs in the 3. segment
8	0255	Intensity (0 % to 100 %) of the green LEDs in the 3. segment
9	0255	Intensity (0 % to 100 %) of the blue LEDs in the 3. segment
10	0255	Intensity (0 % to 100 %) of the red LEDs in the 4. segment
11	0255	Intensity (0 % to 100 %) of the green LEDs in the 4. segment
12	0255	Intensity (0 % to 100 %) of the blue LEDs in the 4. segment
13	0255	Intensity (0 % to 100 %) of the red LEDs in the 5. segment
14	0255	Intensity (0 % to 100 %) of the green LEDs in the 5. segment
15	0255	Intensity (0 % to 100 %) of the blue LEDs in the 5. segment
16	0255	Intensity (0 % to 100 %) of the red LEDs in the 6. segment
17	0255	Intensity (0 % to 100 %) of the green LEDs in the 6. segment
18	0255	Intensity (0 % to 100 %) of the blue LEDs in the 6. segment
19	0255	Intensity (0 % to 100 %) of the red LEDs in the 7. segment



## LED floodlight

Channel	Value	Function
20	0255	Intensity (0 % to 100 %) of the green LEDs in the 7. segment
21	0255	Intensity (0 % to 100 %) of the blue LEDs in the 7. segment
22	0255	Intensity (0 % to 100 %) of the red LEDs in the 8. segment
23	0255	Intensity (0 % to 100 %) of the green LEDs in the 8. segment
24	0255	Intensity (0 % to 100 %) of the blue LEDs in the 8. segment

# 8 Technical specifications

Light source	240 $\times$ 10 mm LED (96 $\times$ red, 72 $\times$ green, 72 $\times$ blue) in eight segments		
Optical properties	Beam angle	30°	
Control	DMX		
	IR remote control (optional)		
Number of DMX channels	2, 3, 5, 24		
Input connections	Voltage supply	IEC chassis plug C14	
	DMX control	XLR chassis socket, 3-pin	
Output connections	Voltage supply	IEC chassis plug C13	
	DMX control	XLR chassis socket, 3-pin	
Power consumption	25 W		
Supply voltage	100 − 240 V ~ 50/60 Hz		
Fuse	5 mm × 20 mm, 1 A, 250 V, slow-blow		



Degree of protection	IP20	
Mounting options	Hanging, standing	
	$4 \times$ mounting bracket (2 × short, 2 × lo	ng)
Dimensions (W $\times$ H $\times$ D)	1064 mm × 65 mm × 88 mm	
Weight	2.6 kg	
Ambient conditions	Temperature range	−10 °C…40 °C
	Relative humidity	50 %, non condensing



## Technical specifications

### **Further information**

Outdoor-ready	No
Colour mixture	RGB
LED type	Unicoloured
Fanless	Yes
Remote control	Optional
Wireless DMX	No
Housing colour	Black



## 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 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 fuse.
No response to the DMX controller.	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.
	2. If the display does not flash and still no response, check the address settings and the DMX polarity.
	3. Try using another DMX controller.
	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.

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



## 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.











