



BAT.BALL 6in1 RGBWAP

LED effect

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23.06.2021, ID: 385482 (V5)

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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 www.thomann.de.

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'*.

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 – dangerous optical radiation.
	Warning – suspended load.

Warning signs	Type of danger
	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!

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.



WARNING!

Eye damage caused by high light intensity

Never look directly into the light source.



WARNING!

Incorrect handling of lithium batteries can result in injury

In the event of a short circuit, overheating or mechanical damage, lithium batteries can cause severe injuries. Follow the advice on the correct handling of lithium batteries in the present section.



NOTICE!

External power supply

The device is powered by an external power supply. Before connecting the external power supply, 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 the user. Unplug the external power supply before electrical storms occur and when the device is unused for long periods of time to reduce the risk of electric shock or fire.

**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!****Possible damage to lithium-ion batteries through incorrect storage**

By deep discharge, lithium-ion batteries can be permanently damaged or lose some of their capacity. Before long breaks, charge the batteries to around 50 % of their capacity and then switch off the device. Store the device at room temperature or cooler in an environment as dry as possible. If the batteries are stored for a longer period, recharge them to 50 % every three months. Fully charge the batteries only shortly before use at room temperature.



NOTICE!

Possible damage by leaking batteries

- Leaking batteries can cause permanent damage to the device. Take batteries out of the device if it is not going to be used for a longer period.



NOTICE!

Risk of fire due to incorrect polarity

- Incorrectly inserted batteries may destroy the device or the batteries. Ensure that proper polarity is observed when inserting batteries.



NOTICE!

Possible staining

- The plasticiser contained in the rubber feet of this product may possibly react with the coating of your parquet, linoleum, laminate or PVC floor and after some time cause permanent dark stains. In case of doubt, do not put the rubber feet directly on the floor, but use felt-pad floor protectors or a carpet.

3 Features

The LED-effect is suitable for almost all applications, for example in clubs, bars, small stages and theatres. It is characterized by small size, solid construction also for use 'on tour' and enormous power.

Special features of the device:

- 6 × 3 W RGBWAP LEDs
- Operation via supplied rechargeable battery or via supplied power adapter
- Produces countless dots in red, green, blue, white, amber and purple
- Control via DMX, via buttons and display on the unit and also via infrared remote control
- Automatic mode and sound control
- Master / Slave operation
- Display of charge status in battery operation
- Battery charging time in the device approx. 3 h
- Operating time with full light output approx. 3.5 hours in battery operation

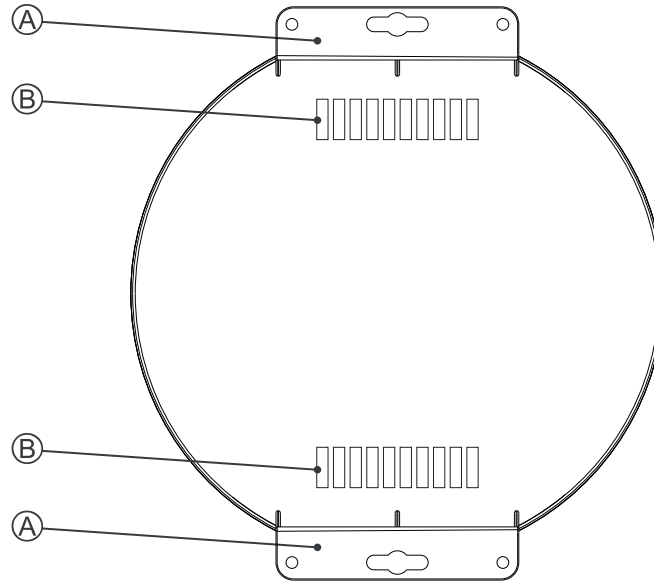
For technological reasons, the light output of LEDs decreases over their lifetime. This effect increases with higher operating temperature. You can extend the service life of the illuminants by providing adequate ventilation and operating the LEDs with the lowest possible brightness.

4 Installation and starting up

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.

Ceiling or wall mounting

The device is designed for ceiling or wall mounting and has for this purpose two mounting tabs on the bottom.



A Mounting tabs for ceiling or wall mounting of the unit.

B Air vents



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

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!

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.

Use appropriate mounting hardware to attach the unit to the ceiling or a wall. The designated fastening area must be sufficiently stable for the load, level and vibration-free.

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.

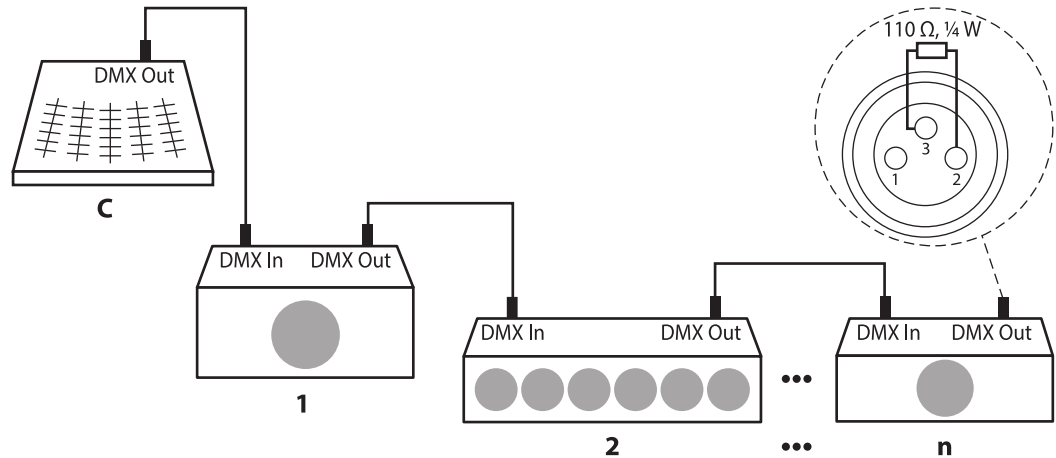


Please note that this device must not be connected to a dimmer.

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 series connection.

Such a chain may consist of up to 30 DMX devices. Make sure that the output of the last device in the chain is terminated by a resistor ($110\ \Omega$, $\frac{1}{4}\ W$).

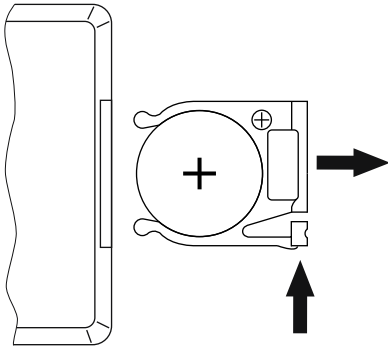


Connections in 'Master / Slave' mode

When you configure a group of devices in 'Master / Slave' mode, the first device controls the others and allows an automatic, music-controlled and synchronized show. This feature is especially useful to start a show without much programming. Connect the DMX output of the master unit to the DMX input of the first slave unit. Then connect the DMX output of the first slave unit to the DMX input of the second slave unit and so on (maximum 30 slaves).

Insert the battery into the remote control

Push the lock of the battery holder towards 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 bottom of the remote control. Slide the battery holder back into the remote until it clicks into place.



4.1 Dealing with lithium batteries



WARNING!

Incorrect handling of lithium batteries can result in injury

In the event of a short circuit, overheating or mechanical damage, lithium batteries can cause severe injuries.

Follow the advice on the correct handling of lithium batteries in the present section.

When handled correctly and appropriately lithium batteries pose no risk.

Store lithium batteries in a cool, dry place, ideally in the original packaging.

Store lithium batteries away from heat sources (e.g. radiators or sunlight). Lithium batteries are hermetically sealed. Never attempt to open a lithium battery.

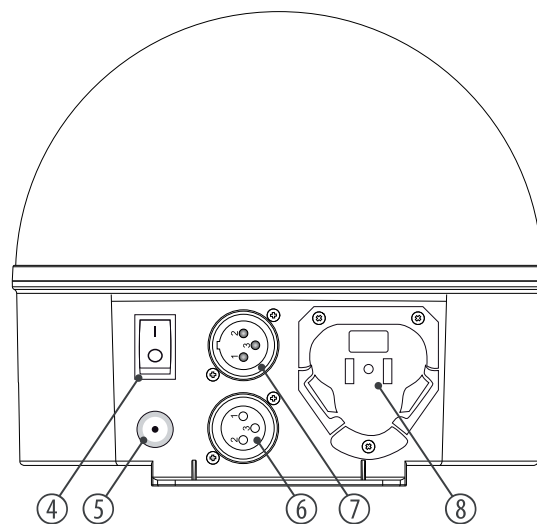
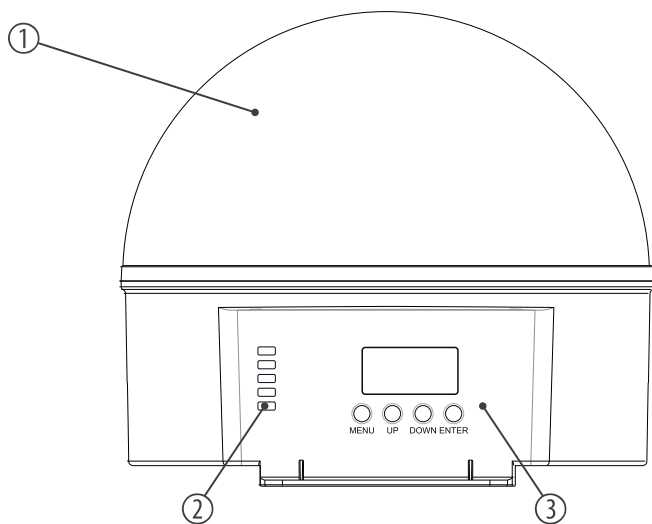
If the battery housing is damaged small amounts of the electrolyte may leak out. If this should happen, seal the lithium battery in airtight packaging and wipe up the traces of electrolyte using absorbent paper towels. You must wear protective rubber gloves when doing so. Clean your hands and the affected surface thoroughly with cold water.

Never attempt to recharge non-rechargeable lithium batteries. When charging lithium batteries you must use a suitable charging device intended for the purpose.

Before disposing of the device remove the lithium batteries. Protect used lithium batteries against potential short circuits, e.g. by covering the poles with adhesive tape.

Only use powder extinguishers or other suitable extinguishing agents to extinguish a burning lithium battery.

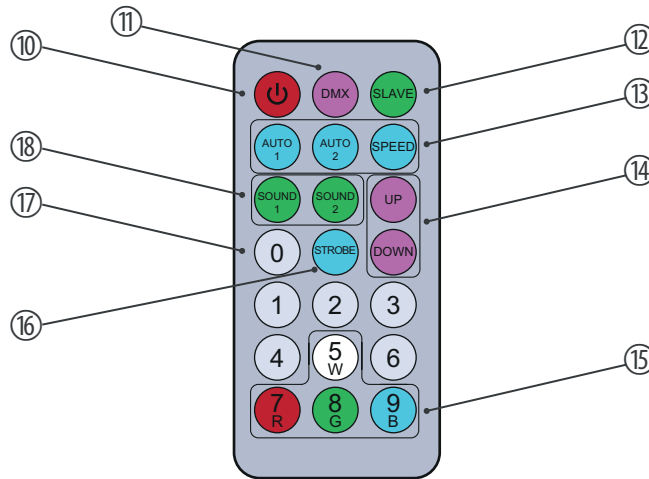
5 Connections and controls



1	Transparent hemisphere
2	<i>[BATTERY INDICATOR]</i> Charge status indicator for rechargeable battery
3	Display and control buttons: <i>[MENU]</i> : Calls up the main menu or a submenu <i>[UP]</i> : Button to increase the displayed value by one <i>[DOWN]</i> : Button to decrease the displayed value by one <i>[ENTER]</i> : Confirms a selected value
4	<i>[SWITCH]</i> On / off switch
5	<i>[POWER]</i> Connector for the power adapter
6	<i>[DMX OUT]</i> DMX output

- | | |
|---|------------------------------|
| 7 | <i>[DMX IN]</i>
DMX input |
| 8 | Rechargeable battery slot |

Remote control



10	Button to turn the device on and off
11	<i>[DMX]</i> Button to switch between DMX and stand-alone mode
12	<i>[SLAVE]</i> Button to switch between master and slave mode
13	<i>[AUTO 1], [AUTO 2], [SPEED]</i> Buttons to activate automatic mode 1 or 2 and to adjust the programme speed
14	<i>[UP], [DOWN]</i> Buttons to switch between programmes and to increase / decrease numeric values
15	Buttons for colour selection Use <ul style="list-style-type: none">■ <i>[W]</i> for white light.■ <i>[R], [G], or [B]</i> for primary colours red, green and blue
16	<i>[STROBE]</i> No function

17 Numeric buttons 0 ... 9 for direct value input

18 *[SOUND 1], [SOUND 2]*

Buttons to activate sound-control mode 1 or 2

6 Operating

6.1 Starting the device

Connect the cable of the power adapter supplied to the *[POWER]* socket on the device. Plug the power adapter into an outlet. If a rechargeable battery is used, the battery gets charged. If no segment of the charge status indicator is lit, the battery is exhausted and must be charged. If all 5 segments are lit, charging is complete. The device can be used during charging. Before disconnecting the device from the power supply, the battery should be fully charged. Press the on / off switch to start operation.

6.2 Main menu

Press *[MENU]* to activate the main menu. Use *[UP]* or *[DOWN]* to change the respectively displayed value. Wenn das Display den gewünschten Wert anzeigt, drücken Sie *[ENTER]*.

Wait for approx. 15 seconds after confirming the last modification of the setting until the display turns off. Now the settings are saved.

DMX address

Press *[MENU]* repeatedly until the display shows 'Addr'. Press *[ENTER]*. 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 (display shows 'A001' ... 'A512').

When the display shows the desired value, press *[ENTER]* to confirm the selection and then *[MENU]* to return to the parent menu. To return to the parent menu without making changes, press *[MENU]*.

Make sure that this number matches the configuration of your DMX controller.

Sound control

Press *[MENU]* repeatedly until the display shows 'SoU1'. Use *[UP]* or *[DOWN]* to select a sound control programme (display shows 'SoU1' ... 'SoU3'). Press *[ENTER]*.

Use *[UP]* or *[DOWN]* to select a value for the einen Wert microphone sensitivity between 1 and 9 (display shows 'S 0' ... 'S 9'). When the display shows the desired value, press *[ENTER]* to confirm the selection and then *[MENU]* to return to the parent menu. To return to the parent menu without making changes, press *[MENU]*.

This setting is only relevant if the device is not controlled via DMX. The device can operate in stand-alone mode or control connected devices of the same type, that must be configured as slaves. The auto show can only be activated on the master device.

Operating mode 'Auto'

Press *[MENU]* repeatedly until the display shows 'Auto'. Use *[UP]* or *[DOWN]* to select an automatic programme (display shows 'Aut1' ... 'Aut3'. When the display shows the desired value, press *[ENTER]* to confirm the selection and then *[MENU]* to return to the parent menu. To return to the parent menu without making changes, press *[MENU]*.

This setting is only relevant if the device is not controlled via DMX. The device can operate in stand-alone mode or control connected devices of the same type, that must be configured as slaves. The auto show can only be activated on the master device.

Colour selection

Press *[MENU]* repeatedly until the display shows 'Colo'. Use *[UP]* or *[DOWN]* to select one of nine predefined colours (display shows 'Col1' ... 'Col9') or select 'AtF' to define an individual colour. When the display shows the desired value, press *[ENTER]* to confirm the selection and then *[MENU]* to return to the parent menu. To return to the parent menu without making changes, press *[MENU]*.

Firmware version

Press *[MENU]* repeatedly until the display shows 'ver'. Press *[ENTER]*. The current firmware version will appear on the display.

To return to the parent menu, press *[MENU]*.

Operating mode 'Slave'

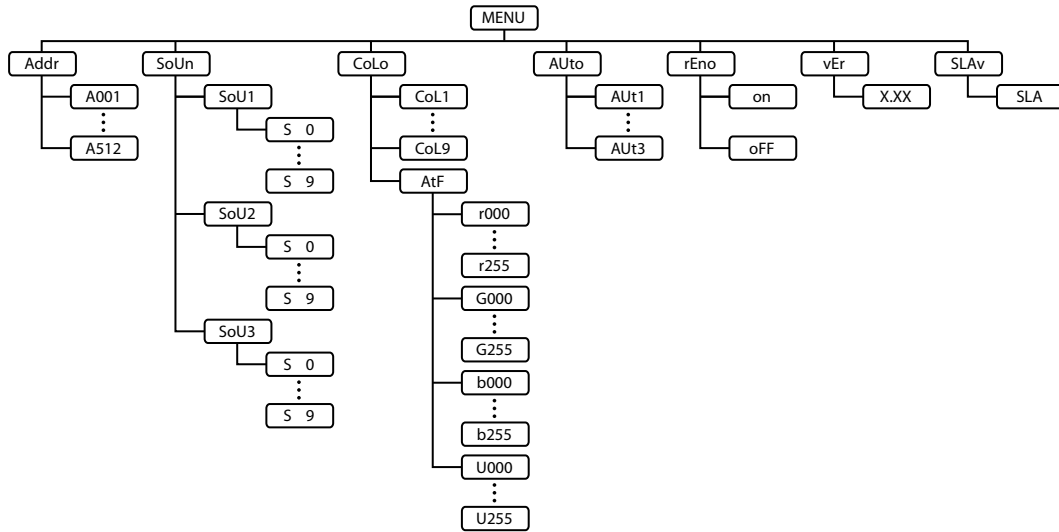
Press *[MENU]* repeatedly until the display shows 'SLA'. Press *[ENTER]*. 'SLA' is flashing in the display. The device is now configured as slave and follows the settings of the master device to which it is connected. Press *[MENU]* to return to the parent menu. This setting is only relevant if the device is not controlled via DMX.

6.3 IR remote control

Press *[MENU]*, *[UP]* or *[DOWN]* repeatedly until the display shows 'reno'. Confirm with *[ENTER]*.

Use *[UP]* and *[DOWN]* to select the option 'on' to operate the unit via the IR remote control. Confirm with *[ENTER]*.

6.4 Menu overview



6.5 Functions in DMX mode

Channel	Value	Function
1	0...114	Fixed motor position
	115...255	Motor speed slow to fast
2	0...255	Intensity red and UV (0 % to 100 %)
3	0...255	Intensity green and white (0 % bis 100 %)
4	0...255	Intensity blue and amber (0 % to 100 %)
5	0...7	No function
	8...255	Strobe frequency slow to fast
6	0...15	No function
	16...239	Selecting an automatic programme
	240...255	Selecting a sound-controlled programme

7 Technical specifications

Light source	6 × RGBWAP LEDs, each 3 W	
Control	DMX	
	Remote control	
Control protocol	DMX 512	
Number of DMX channels	6	
Input connections	Power supply	Socket for power adapter
	DMX control	XLR chassis socket, 3-pin
Output connections	DMX control	XLR chassis socket, 3-pin
Power consumption	20 W	
Voltage supply	external power adapter, 100 - 240 V ~ 50/60 Hz	
Operating voltage	15 V $\overline{\text{---}}$, min. 2 A, centre positive	

Battery / rechargeable battery	Battery type	Lithium-ion Replaceable rechargeable battery packs, item no. 385488)
	Voltage	10.8 V
	Capacity	1500 mAh
	Operating time	3.5 h at full light output
	Charging time in the device	3 h
Battery remote control	Battery type	2 × button cells, LR1130/AG10, 1.5 V
Degree of protection	IP20	
Mounting options	Standing, wall or ceiling mounting	
Dimensions (W × H × D)	182 mm × 169 mm × 169 mm	
Weight	0.48 kg	
Ambient conditions	Temperature range	0 °C...40 °C
	Relative humidity	20 %...80 % (non-condensing)

Further information

Similar construction	Mirror ball
DMX control	Yes
Master/Slave	Yes
Remote control	included
Sound control	Yes
Display	Yes
Housing colour	Black

8 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')

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 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.
Apparently no function despite proper power supply	Check if the unit is in DMX mode or in 'slave' mode. If so, check the unit in another mode.
No response to the DMX controller	1. Check whether the DMX controller is switched on. Check the DMX connectors and cables for proper connection.
	2. 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 www.thomann.de.

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.

Fan grids

The fan grids of the device must be cleaned of any contamination, such as dust, etc. on a regular basis. Before cleaning, switch off the device and disconnect mains-operated devices from the mains. Only use pH-neutral, solvent-free and non-abrasive cleaning agents. Clean the unit with a slightly damp lint-free cloth.

11 Protecting the environment

Disposal of the packaging material



For the 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 batteries



Batteries do contain some hazardous chemicals so they should not be thrown away with the normal household waste. They should be returned to the manufacturer for disposal or recycled elsewhere in accordance with your local regulations.

Dispose lithium batteries only in discharged condition. Remove lithium batteries from the device before disposal. Protect used lithium batteries against potential short circuits, e.g. by covering the poles with adhesive tape. Dispose the built-in lithium batteries together with the device. Please check for an appropriate reception facility.

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.

