fun generation

LED Diamond Dome
LED effect

user manual

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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.

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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'* .

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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 – suspended load.

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Warning signs	Type of danger
	Warning – danger zone.

2 Safety instructions

Intended use

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

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
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.

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! **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.

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3 Features

The LED Diamond Dome is characterized by an extraordinary light output and effects.

- LED configuration
    - **LED Diamond Dome RGBW 4-in-1** with 1 × 4-in-1 LED, RGBW, 10 W
    - **LED Diamond Dome RGBWA UV 6-in-1** with 1 × 6-in-1 LED, RGBWA and UV, 12 W
    - **LED Diamond Dome UV** with 3 × UV LED, 3 W
- Dispersion characteristics: VNSP (Very Narrow Spot)
- transparent hemisphere with Narrow-Beam lenses
- Diamond circle effect
- Control via DMX (four channels), buttons and display on the unit or an optional IR remote control
- preprogrammed automatic shows
- Sound control
- Stand-alone mode
- Master / Slave mode
- Strobe effect
- built-in fan

4 Installation and starting up

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.

Ceiling or wall mounting

The device is designed for ceiling or wall mounting and has for this purpose two mounting tabs on the bottom.
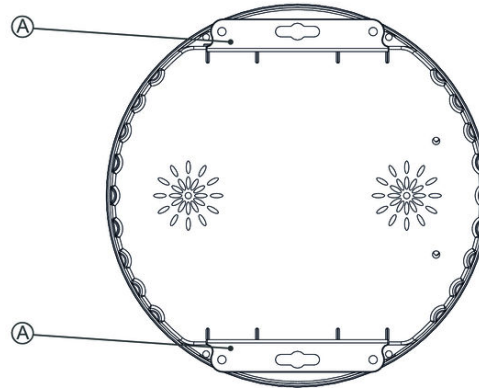
| A | Mounting tabs for ceiling or wall mounting of the unit. |

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).

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!

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.

Connections in 'DMX' mode

Connect the DMX input of the device to the DMX output of a DMX controller or other 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 Ω, ¼ W).
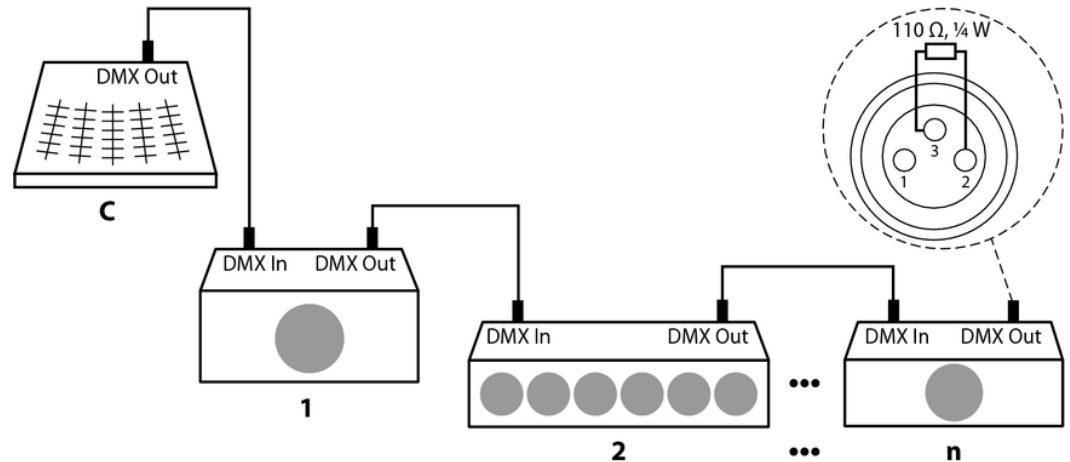
Connections in 'Master / Slave' mode

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).

5 Connections and controls

Front panel
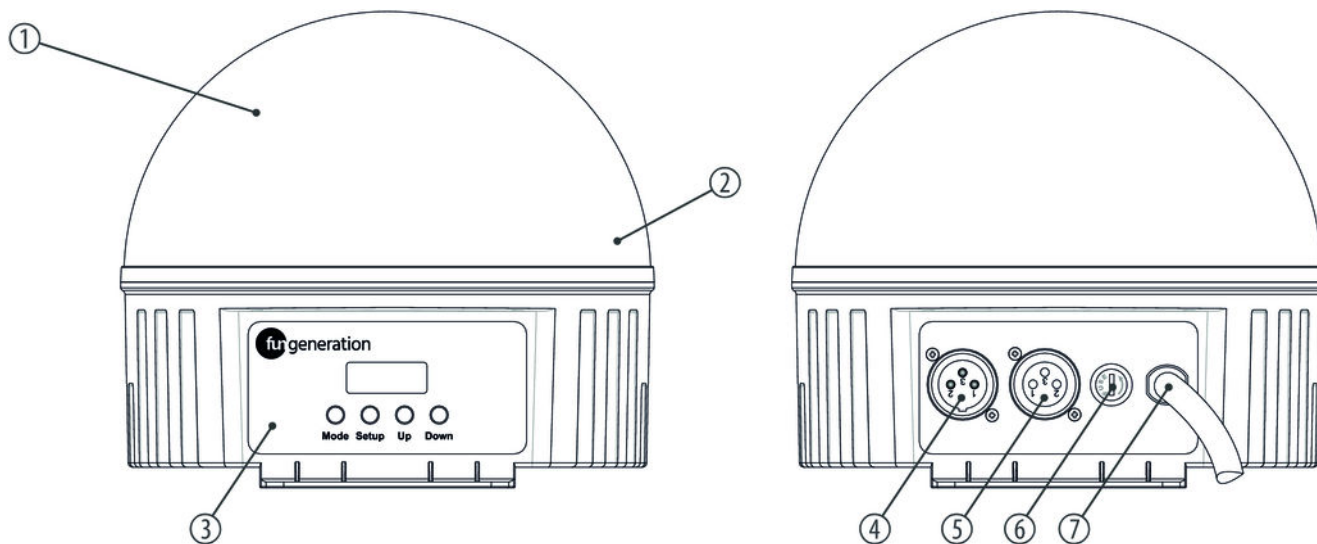
1	Transparent hemisphere with Narrow-Beam lenses
2	Infrared sensor for optionally available remote control.
3	Display and control buttons:
	[Mode] Activates the main menu and toggles between menu items. Closes an opened submenu.
	[Setup] Selects an option of the respective operating mode, confirms the set value.
	[Up] Increases the displayed value by one.
	[Down] Decreases the displayed value by one.
4	*[DMX IN]* DMX input.

5	*[DMX OUT]*
	DMX output.
6	*[FUSE]*
	Fuse holder.
7	*[POWER]*
	Power supply cable.

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Remote control (optional)

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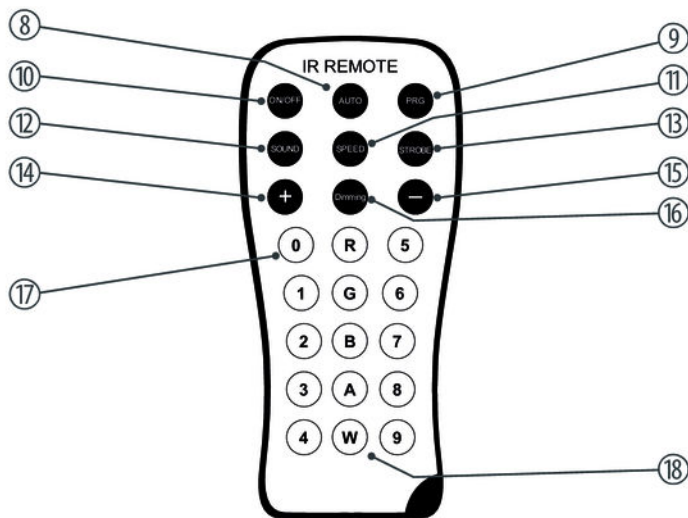
8	*[AUTO]*
	Activates the 'Automatic' mode.
9	*[PRG]*
	Activates the operating mode 'Preprogrammed automatic show'. Select the desired programme with the buttons *[+]* and *[–]*.
10	*[ON/OFF]*
	Activates / deactivates the device.
11	*[SPEED]*
	Activates the setting mode for the programme speed. Adjust the speed using the buttons *[+]* and *[–]* .
12	*[SOUND]*
	Activates the sound-controlled mode.
13	*[STROBE]*
	Turns the strobe effect on / off.
14	*[+]*
	Increases the set value.

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15	*[–]*
	Decreases the set value.
16	*[Dimming]*
	Enables the dimmer function.
17	*[0 … 9]*
	Numeric buttons for direct selection of a fixed colour.
18	*[R], [G], [B], [A], [W]*
	Buttons to select a colour tone for the dimmer mode.

6   Operating

Connect the device to the power supply to start operation.

Press *[Mode]*to activate the main menu and select an operating mode. Use *[Up]* and *[Down]*to change the respectively indicated value.

If you don't press any button for about 20 seconds, the current setting will be automatically applied and the display turns off. The set values are retained as long as the device is connected to the mains power supply.

6.1 Operating Modes 'Preprogrammed Automatic Show' and 'Manual'

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

1. ▶ Press *[Mode]* repeatedly until the display shows *'AUTO'*.

⇨ Playback of preprogrammed shows *'Pr.02'* and *'Pr.03'* starts automatically.

2. ▶ Press *[Setup]* repeatedly until the display shows *'n.00x'* and adjust the programme speed with *[Up]* and *[Down]* in a range from *'n.001'* … *'n.100'* (slow … fast).

3. ▶ Press *[Setup]* repeatedly until the display shows *'SP.xx'* and adjust the programme speed with *[Up]* and *[Down]* in a range from *'SP.01'* … *'SP.FL'* (slow … fast).

4. ▶ Press *[Setup]* repeatedly until the display shows *'F5.xx'* and adjust the frequency of the strobe effect with *[Up]* and *[Down]* in a range from *'F5.00'* … *'F5.99'* (slow … fast).

Settings for programme 01, Diamond Dome RGBW 4-in-1

When you have selected programme *'Pr.01'*, you can use *[Up]* and *[Down]* to select one of 15 static colour settings for all LEDs, see the following chart.

Colour	Display
Red	'00'
Green	'01'
Blue	'02'
White	'03'
Red / green	'04'
Red / blue	'05'
Red / white	'06'
Green / blue	'07'
Green / white	'08'
Blue / white	'09'

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Colour	Display
Red / green / blue	'10'
Red / green / white	'11'
Red / blue / white	'12'
Green / blue / white	'13'
All	'14'
Blackout	'15'

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Settings for programme 01, Diamond Dome RGBWA UV 6-in-1

When you have selected programme *'Pr.01'*, you can use *[Up]* and *[Down]* to select one of 15 static colour settings for all LEDs, see the following chart.

Colour	Display
Red	'00'
Green	'01'
Blue	'02'
White	'03'
Amber	'04'
UV light	'05'
Red / white	'06'
Red / UV	'07'
Green / blue	'08'
Green / white	'09'

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Colour	Display
Blue / white	'10'
Red / green / amber	'11'
Red / blue / UV	'12'
Red / green / white / amber	'13'
All	'14'
Blackout	'15'

Settings for programme 01, Diamond Dome UV

When you have selected programme *'Pr.01'*, you can use *[Up]* and *[Down]* to select one of seven static settings, see following chart.

Colour	Display
LED 2	'00'
LED 1	'01'
LED 3	'02'
LED 1 / LED 2	'03'
LED 2 / LED 3	'04'
LED 1 / LED 3	'05'
LED 1 / LED 2 / LED 3	'06'
Blackout	'07'

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6.2 Operating mode 'Slave'

This setting is only relevant if the device is serving as Slave in a Master / Slave configuration and is not controlled via DMX.

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

　　⇨　The device is in Slave mode.

2. ▸ Use *[Mode]* to select any other operating mode to exit Slave mode.

6.3 Operating mode 'Sound'

This setting is only relevant if the device is not controlled via DMX. In this operating mode, the device responds to acoustic pulses which are recorded by the integrated microphone.

1. ▸ Press *[Mode]* repeatedly until the display shows *'Soud'*.

　　⇨　The device is in Sound mode.

2. ▸ Use *[Mode]* to select any other operating mode to exit Sound mode.

6.4 Operating mode 'DMX'

This setting is only relevant when the device is controlled via DMX.

1. ▶ Press *[Setup]* repeatedly until the display shows *'d.xxx'*.

2. ▶ Use *[Up]* and *[Down]* to assign a DMX address between *'d.001'* … *'d.509'* to the device (highest possible DMX address in 4-channel operation).

3. ▶ Press again *[Mode]* and use *[Up]* and *[Down]* to highlight *'4-ch'* to enable 4-channel operation.

6.4.1 Functions in 4-channel operation, Diamond Dome RGBW 4-in-1

Channel	Value	Function
1	0 … 9	Blackout
	10 … 19	red
	20 … 29	green

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Channel	Value	Function
	30 … 39	blue
	40 … 49	white
	50 … 59	red / green
	60 … 69	red / blue
	70 … 79	red / white
	80 … 89	green / blue
	90 … 99	green / white
	100 … 109	blue / white
	110 … 119	red / green / blue
	120 … 129	red / green / white
	130 … 139	red / blue / white
	140 … 149	green / blue / white
	150 … 159	All colours

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Channel	Value	Function
	160 … 229	Auto operation
	230 … 255	Sound-controlled operation
2	Stroboscope effect, if channel 1 = 10 … 229	
	0 … 8	Stroboscope effect off
	9 … 255	Stroboscope effect on, increasing speed
3	Programme speed, if channel 1 = 160 … 229	
	0 … 8	No function
	9 … 255	Programme speed increasing to 100 %
4	Rotation speed, if channel 1 = 10 … 229	
	0 … 255	Rotation speed increasing to 100 %

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6.4.2 Functions in 4-channel DMX operation, Diamond Dome RGBWA UV 6-in-1

Channel	Value	Function
1	0 … 9	Blackout
	10 … 19	red
	20 … 29	green
	30 … 39	blue
	40 … 49	white
	50 … 59	amber
	60 … 69	UV light
	70 … 79	red / white
	80 … 89	red / UV
	90 … 99	green / blue
	100 … 109	green / white

Channel	Value	Function
	110 … 119	blue / white
	120 … 129	red / green / amber
	130 … 139	red / blue / UV
	140 … 149	red / green / white / amber
	150 … 159	All colours
	160 … 229	Auto operation
	230 … 255	Sound-controlled operation
2	Stroboscope effect, if channel 1 = 10 … 229	
	0 … 8	Stroboscope effect off
	9 … 255	Stroboscope effect on, increasing speed
3	Programme speed, if channel 1 = 160 … 229	
	0 … 8	No function
	9 … 255	Programme speed increasing to 100 %

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Channel	Value	Function
4	Rotation speed, if channel 1 = 10 … 229	
	0 … 255	Rotation speed increasing to 100 %

6.4.3   Functions in 4-channel DMX operation, Diamond Dome UV

Channel	Value	Function
1	0 … 9	Blackout
	10 … 24	LED 2
	25 … 49	LED 1
	50 … 74	LED 3
	75 … 99	LED 1 / LED 2
	100 … 124	LED 2 / LED 3

Channel	Value	Function
	125 … 149	LED 1 / LED 3
	150 … 159	LED 1 / LED 2 / LED 3
	160 … 229	Auto operation
	230 … 255	Sound-controlled operation
2	Stroboscope effect, if channel 1 = 10 … 229	
	0 … 8	Stroboscope effect off
	9 … 255	Stroboscope effect on, increasing speed
3	Programme speed, if channel 1 = 160 … 229	
	0 … 8	No function
	9 … 255	Programme speed increasing to 100 %
4	Rotation speed, if channel 1 = 10 … 229	
	0 … 255	Rotation speed increasing to 100 %

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7 Technical specifications

Item no. 383676	Diamond Dome RGBW 4-in-1	1 × 4-in-1-LED, RGBW, 10 W
Item no. 383684	Diamond Dome RGBWA UV 6-in-1	1 × 6-in-1-LED, RGBWPY, 12 W
Item no. 383686	Diamond Dome UV	3 × UV-LED, 3 W
Number of DMX channels		4
Dispersion characteristics (single beams)		VNSP (very narrow spot)
DMX input, DMX output		XLR 3-pin
Power consumption		25 W
Operating supply voltage		AC 100 – 240 V ∿ 50/60 Hz
Fuse		5 mm × 20 mm, 1 A, 250 V, slow-blow
Dimensions (W × H × D)		182 mm × 162 mm × 182 mm
Weight		0.8 kg

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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')

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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	1. Check the mains connection and the main fuse.
	2. Check the settings in manual operation.
No response to the DMX controller	1. Check whether the DMX cables run near or parallel to high-voltage cables that may cause damage or interference to a DMX interface circuit.
	2. Try using another DMX controller.

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

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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 on a regular basis to remove dust and dirt. Before cleaning, switch off the device and disconnect AC-powered devices from the mains. Use a lint-free damp cloth for cleaning. Never use solvents or alcohol for cleaning.

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 these materials with your normal household waste, but make sure that they are fed to a recovery. Please follow the notes and markings on the packaging.

Disposal of batteries

Batteries must not be disposed of as domestic waste or thrown into fire. Dispose of the batteries according to national or local regulations regarding hazardous waste. To protect the environment, dispose of empty batteries at your retail store or at appropriate collection sites.

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Disposal of your old device

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

Dispose 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.