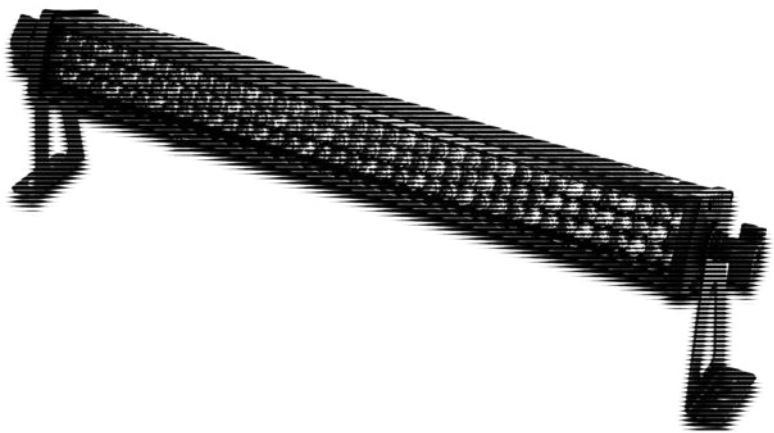
STAIRVILLE



LED Bar 120/4 RGB DMX

LED floodlight

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MUSIC IS OUR PASSION

user manual

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

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Table of contents

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 – high-voltage.
	Warning – dangerous optical radiation.

Warning signs	Type of danger
	Warning – suspended load.
	Warning – danger zone.

2 Safety instructions

Intended use

This device is intended for use as an electronic lighting effect by means of LED technology. The device is designed for professional use and is not suitable for use in households. Use the device only as described in this user manual. Any other use or use under other operating conditions is considered to be improper and may result in personal injury or property damage. No liability will be assumed for damages resulting from improper use.

This device may be used only by persons with sufficient physical, sensorial, and intellectual abilities and having corresponding knowledge and experience. Other persons may use this device only if they are supervised or instructed by a person who is responsible for their safety.

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

Safety

DANGER!

Danger for children

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

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

Never let children unattended use electrical devices.

DANGER!

Electric shock caused by high voltages inside

Within the device there are areas where high voltages may be present. Never remove any covers.

There are no user-serviceable parts inside.

Do not use the device if covers, protectors or optical components are missing or damaged.

DANGER!

Electric shock caused by short-circuit

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

WARNING!

Eye damage caused by high light intensity

Never look directly into the light source.

WARNING!

Risk of epileptic shock

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

NOTICE!

Risk of fire

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

NOTICE!

Operating conditions

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

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

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

NOTICE!

Power supply

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

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

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 lighting applications in clubs and discotheques, on rock stages, in theatres and musicals. It can also be used for effect lighting of stage backgrounds or framing catwalks.

Special features of the device:

- 120 10 mm LEDs (48 × red, 36 × green, 36 × blue), divided into four segments
- Control via DMX (four different modes) and via buttons and display on the unit
- 20 preprogrammed automatic shows
- Sound control
- Master / Slave mode
- Robust metal housing with compact design
- Versatile placement and mounting options
- Looped through mains voltage output for powering further devices
- Optional infrared remote control (item no. 354223)

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.

You can install the device on the wall, the ceiling or on the floor. The package includes four mounting brackets in two different sizes.

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!

Use of stands

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

NOTICE!

Possible data transmission errors

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

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

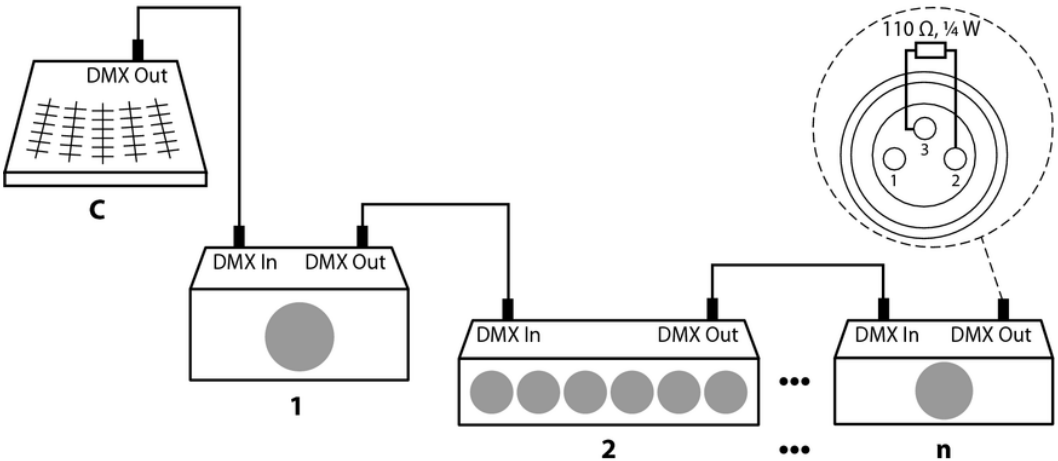
Please note that this device must not be connected to a dimmer.

5 Starting up

Create all connections while the device is off. Use the shortest possible high-quality cables for all connections. Take care when running the cables to prevent tripping hazards.

Connections in DMX mode

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



DMX indicator

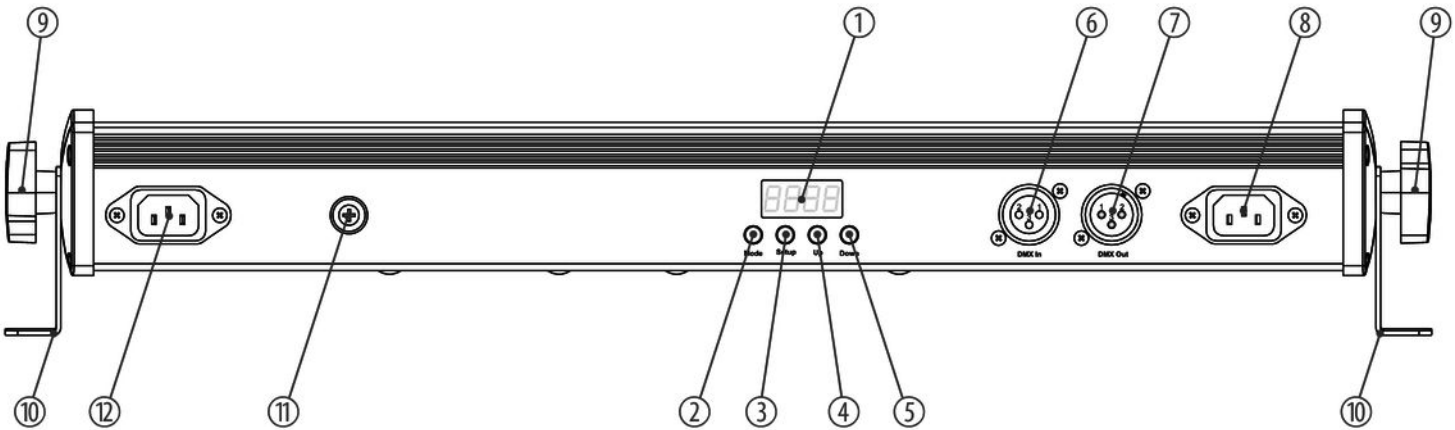
As long as the display is active, the first digit is used as a DMX indicator.

If the unit is in DMX mode and a DMX controller is connected and turned on, the first digit of the display will flash. If the unit is in DMX mode, but without a turned on DMX controller connected, the first digit of the display will light constantly.

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.

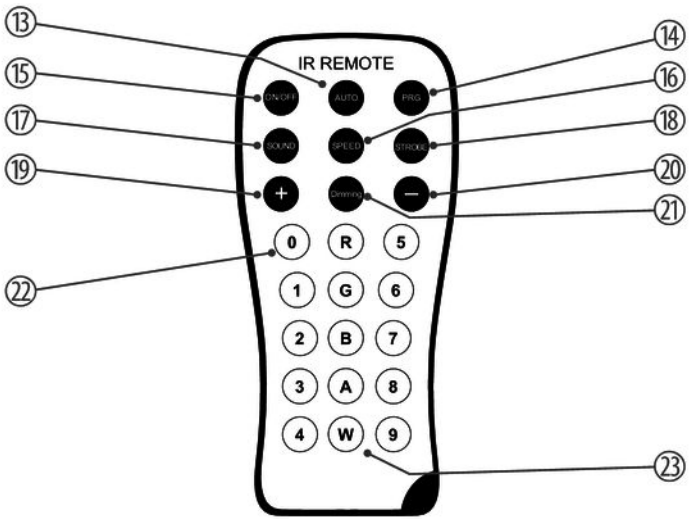
6 Connections and operating elements



1	Display.
2	Button *[Mode]* Activates the main menu and toggles between menu items.
3	Button *[Setup]* Selects an option of the respective operating mode.
4	Button *[Up]* Navigates upwards in a menu list. Increases the displayed value by one.
5	Button *[Down]* Navigates downwards in a menu list. Decreases the displayed value by one.
6	*[DMX In]* DMX input.
7	*[DMX Out]* DMX output.

8	*[POWER Out]* IEC chassis socket for the power supply cable to the next unit.
9	Locking screws for the mounting brackets / feet.
10	Adjustable and removable mounting brackets and feet.
11	Fuse holder
12	*[POWER In]* IEC chassis plug for mains connection.

Remote control (optional)



13	*[AUTO]* Activates the ‘Automatic‘ mode.
14	*[PRG]* Activates the operating mode ‘Preprogrammed automatic show’. 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 control.
18	*[STROBE]* Turns the strobe effect on / off.
19	*[+]* Increases the set value.

20	*[–]* Decreases the set value.
21	*[Dimming]* Enables the dimmer function.
22	*[0 … 9]* 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.

7 Operating

7.1 Starting the device

Connect the device to the power supply to start operation. After a few seconds, the display indicates that a reset is in progress. The device is then ready for use. The display shows the operating mode that was selected when the unit was last powered off.

7.2 Main menu

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

If you don't press any button for about ten 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.

Operating mode 'Preprogrammed automatic show'

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

Press *[Mode]* repeatedly until the display shows *'Pr.xx'*. Now you can select one of the preprogrammed automatic shows. Use *[Up]* and *[Down]* to select a value between *'Pr.01'* and *'Pr.20'*.

Settings for programme 01:

For *'Pr.01'*, you can choose from several colours or blackout. Press *[Setup]*. Now use *[Up]* and *[Down]* to select one of the colours.

Display	Description
'1.--r'	Red
'2.-rg'	Red and green
'3.-rg'	Red and intense green
'4.--g'	Green
'5.-gb'	Green and blue
'6.--b'	Blue

Display	Description
'7.-rb'	Red and blue
'8.-rb'	Intense red and blue
'9.-on'	Red, green and blue
' 0.OFF'	LEDs off

To adjust the flash frequency, press *[Setup]*. Now use *[Up]* and *[Down]* to select a value between *'FS.00'* (slow) and *'FS.99'* (fast).

Settings for programmes 02 to 20:

To adjust the speed of the selected auto show, press *[Setup]* repeatedly until the display indicates *'SPxx'*. Now use *[Up]* and *[Down]* to select a value between *'SP.01'* (slow) and *'SP.99'* (fast) or *'SP.FL'* (Flash effect).

To adjust the flash frequency, press *[Setup]*. Now use *[Up]* and *[Down]* to select a value between *'FS.00'* (slow) and *'FS.99'* (fast).

Wait about ten seconds until the display turns dark. Then the settings have been applied. To return to the parent menu without making changes, press *[Mode]*.

Operating mode 'Automatic'

Automatic operation 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.

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

Wait about ten seconds until the display turns dark. Then the settings have been applied. To return to the parent menu without making changes, press *[Mode]*.

DMX address

This setting is only relevant if the device 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 (display shows *'d001'* … *'d512'*).

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

Mode	Highest possible DMX address
2-channel	511
3-channel	510
5-channel	508
12-channel	501

Wait about ten seconds until the display turns dark. Then the settings have been applied. To return to the parent menu without making changes, press *[Mode]*.

DMX mode

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

Press *[Mode]* repeatedly until the display shows *'dxxx'*. Press *[Setup]*. Now use *[Up]* and *[Down]* to select one of the following DMX operating modes:

- *'2-ch'* (two channels)
- *'3-ch'* (three channels)
- *'5-ch'* (five channels)
- *'12-ch'* (twelve channels)

Wait about ten seconds until the display turns dark. Then the settings have been applied. To return to the parent menu without making changes, press *[Mode]*.

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.

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

Wait about ten seconds until the display turns dark. Then the settings have been applied. To return to the parent menu without making changes, press *[Mode]*.

Sound control and microphone sensitivity

A sound controlled 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.

Press *[Mode]* repeatedly until the display shows *'Soud'*. This activates a sound controlled automatic show.

Now you can adjust the sensitivity of the built-in microphone for sound control. Use *[Up]* and *[Down]* to select a value between 0 (low sensitivity) and 31 (high sensitivity), display shows *'SU.00'* … *'SU.31'*.

Wait about ten seconds until the display turns dark. Then the settings have been applied. To return to the parent menu without making changes, press *[Mode]*.

Constant unicoloured pattern

A constant unicoloured pattern 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.

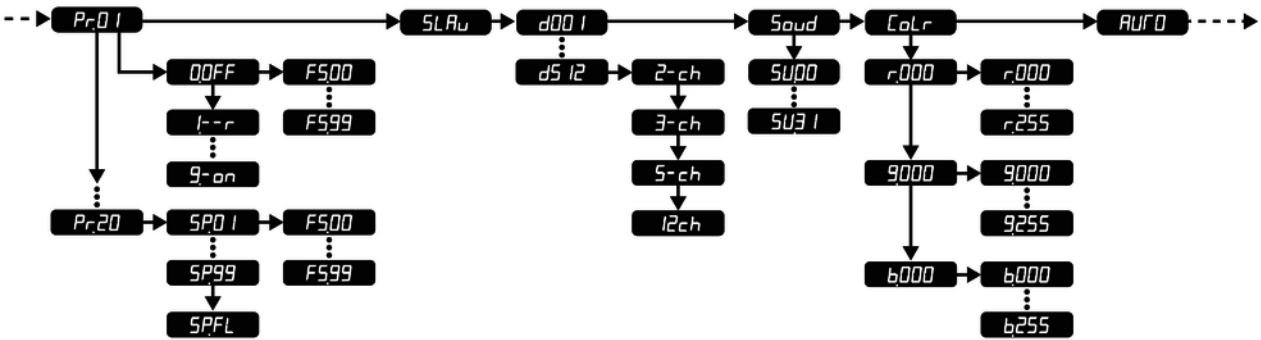
Press *[Mode]* repeatedly until the display shows *'CoLr'*.

Press *[Setup]*. Now use *[Up]* and *[Down]* to select one of the following options:

Display	Description
'r.000' … *'r.255'*	Red
'G.000' … *'G.255'*	Green
'b.000' … *'b.255'*	Blue

Wait about ten seconds until the display turns dark. Then the settings have been applied. To return to the parent menu without making changes, press *[Mode]*.

7.3 Menu overview



7.4 Functions in 2-channel DMX mode

Channel	Value	Function
1	Operating mode	
	0 … 11	Constant pattern, colour is defined via channel 2
	12 … 23	Preprogrammed automatic show no. 2
	24 … 35	Preprogrammed automatic show no. 3
	36 … 47	Preprogrammed automatic show no. 4
	48 … 59	Preprogrammed automatic show no. 5
	60 … 71	Preprogrammed automatic show no. 6
	72 … 83	Preprogrammed automatic show no. 7
	84 … 95	Preprogrammed automatic show no. 8
	96 … 107	Preprogrammed automatic show no. 9
	108 … 119	Preprogrammed automatic show no. 10

Channel	Value	Function
	120 … 131	Preprogrammed automatic show no. 11
	132 … 143	Preprogrammed automatic show no. 12
	144 … 155	Preprogrammed automatic show no. 13
	156 … 167	Preprogrammed automatic show no. 14
	168 … 179	Preprogrammed automatic show no. 15
	180 … 191	Preprogrammed automatic show no. 16
	192 … 203	Preprogrammed automatic show no. 17
	204 … 215	Preprogrammed automatic show no. 18
	216 … 227	Preprogrammed automatic show no. 19
	228 … 239	Preprogrammed automatic show no. 20
	240 … 255	Sound-controlled show
2	Function depending on setting of channel 1	
	Channel 1 = 0 … 11:	

Channel	Value	Function
	0 … 27	LEDs off
	28 … 55	Red
	56 … 83	Red and green
	84 … 111	Red and intense green
	112 … 139	Green
	140 … 167	Green and blue
	168 … 195	Blue
	196 … 223	Red and blue
	224 … 251	Intense red and blue
	252 … 255	Red, green and blue
	Channel 1 = 12 … 239:	
	0 … 255	Auto shows speed (slow to fast)

Channel	Value	Function
	Channel 1 = 240 … 255:	
	0 … 255	Sound control sensitivity (from insensitive to highly sensitive)

7.5 Functions in 3-channel DMX mode

Channel	Value	Function
1	0 … 255	Intensity Red (0 % to 100 %)
2	0 … 255	Intensity Green (0 % to 100 %)
3	0 … 255	Intensity Blue (0 % to 100 %)

7.6 Functions in 5-channel DMX mode

Channel	Value	Function
1	0 … 255	Intensity Red (0 % to 100 %)
2	0 … 255	Intensity Green (0 % to 100 %)
3	0 … 255	Intensity Blue (0 % to 100 %)
4	0 … 255	Dimmer (0 % to 100 %)
5	0 … 255	Strobe effect, increasing speed

7.7 Functions in 12-channel DMX mode

In this mode, the LEDs are divided into four groups. Each channel controls a base colour of a group.

Channel	Value	Group	Function
1	0 … 255	1	Intensity Red (0 % to 100 %)
2	0 … 255		Intensity Green (0 % to 100 %)
3	0 … 255		Intensity Blue (0 % to 100 %)
4	0 … 255	2	Intensity Red (0 % to 100 %)
5	0 … 255		Intensity Green (0 % to 100 %)
6	0 … 255		Intensity Blue (0 % to 100 %)
7	0 … 255	3	Intensity Red (0 % to 100 %)
8	0 … 255		Intensity Green (0 % to 100 %)
9	0 … 255		Intensity Blue (0 % to 100 %)
10	0 … 255	4	Intensity Red (0 % to 100 %)
11	0 … 255		Intensity Green (0 % to 100 %)
12	0 … 255		Intensity Blue (0 % to 100 %)

8 Technical specifications

Light source	120 × 10 mm LEDs (48× red, 36 × green, 36 × blue), divided into four segments	
Optical properties	Beam angle	30°
Control	DMX	
	IR remote control (optional)	
Number of DMX channels	2, 3, 5, 12	
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	16 W	
Supply voltage	90 – 240 V ~ 50/60 Hz	
Fuse	5 mm × 20 mm, 1 A, 250 V, slow-blow	

Degree of protection	IP20	
Mounting options	Standing, wall mounting, ceiling mounting	
Dimensions (W × H × D)	510 mm × 65 mm × 88.5 mm	
Weight	1.1 kg	
Ambient conditions	Temperature range	0 °C…40 °C
	Relative humidity	50 %, non condensing

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, the display is dark	Check the mains connection and the main fuse.
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. If the unit is in DMX mode and the first digit of the display flashes, no DMX signal is received. Check that the DMX controller is switched on. Check the DMX connectors and cables for proper connection.
	2. If the unit is in DMX mode and a DMX controller is connected and turned on, the first digit of the display will light constantly. If it doesn't, no valid DMX signal is received. Check that the DMX controller is switched on. Check the DMX connectors and cables for proper connection.
	3. If the first digit of the display lights constantly but there is still no response, check the address settings and DMX polarity.

Symptom	Remedy
	4. Try using another DMX controller.
	5. 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*.

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 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.

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 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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