



Street Bar MK3
IP65 16x3W RGB

LED bar

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

06.08.2019, ID: 458125

Table of contents

1	General information	6
	1.1 Further information.....	7
	1.2 Notational conventions.....	8
	1.3 Symbols and signal words.....	8
2	Safety	11
3	Features	16
4	Installation	18
5	Starting up	23
6	Connections and controls	26
7	Operating	29
	7.1 Starting the device.....	29
	7.2 Main menu.....	29
	7.3 Menu overview.....	38
	7.4 Functions in 2-channel DMX mode.....	41
	7.5 Functions in 3-channel DMX mode.....	43

7.6	Functions in 5-channel DMX mode.....	44
7.7	Functions in 24-channel DMX mode.....	45
8	Technical specifications.....	48
9	Plug and connection assignment.....	51
10	Troubleshooting.....	52
11	Cleaning.....	54
12	Protecting the environment.....	55



Street Bar MK3 IP65 16x3W RGB
LED bar

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 – hot surface.

Warning signs	Type of danger
 A yellow triangular warning sign with a black border and a black sunburst symbol in the center, representing laser radiation.	Warning – dangerous optical radiation.
 A yellow triangular warning sign with a black border and a black symbol of a crane hook lifting a load, representing a suspended load.	Warning – suspended load.
 A yellow triangular warning sign with a black border and a black exclamation mark in the center, representing a general warning or danger zone.	Warning – danger zone.

2 Safety

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 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.



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.



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.



WARNING!

Risk of burns

The surface of the device can become very hot during operation.

Do not touch the device with bare hands during operation, and after switching off wait for at least 15 minutes.



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!

Power supply

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

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

3 Features

Special features of the device:

- Outdoor-ready LED bar with Full-Colour RGB colour mixing
- Ideal for noise-sensitive events
- Control via DMX (4 different modes) and via buttons and display on the unit
- Built-in automatic show programmes
- Static colours
- Master / Slave operation
- IP65 (suitable for outdoor use)
- Pressure compensation element (prevents condensation inside the device)
- Connectors for power supply and DMX control via splashproof screw-mountable plugs and couplings
- Sturdy mounting bracket for easy handling and secure stand

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.

Information about protection class IP65

Equipment with protection class IP65 are dust-tight and completely protected against contact (first code number). They are also protected against splash water from any angle (second code digit). That is why this equipment can also be used outdoors. Event technology equipment is generally only designed for temporary use however (event lighting) and not for permanent use outdoors.

The specified protection class does not make a statement about the weather resistance of the equipment (resistance to changing ambient conditions as well as against the effects of sunlight and UV rays).

The seals and screw connections of the equipment must be checked regularly to ensure a fault-free operation. In cases of doubt, consult a specialist workshop in due time.

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.



NOTICE!

Risk of overheating

Always ensure sufficient ventilation.

The ambient temperature must not exceed the limits stated in the chapter Technical Specifications of the User Manual.



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.



NOTICE!

Possible damage due to moisture

Moisture entering into open connectors (plugs and couplers) of DMX or power cords can cause short circuits.

Close unused connectors with end caps intended for this purpose (www.thomann.de).

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. Benutzen Sie zur Befestigung die dafür vorgesehenen Öffnungen des zweiteiligen Bügels.

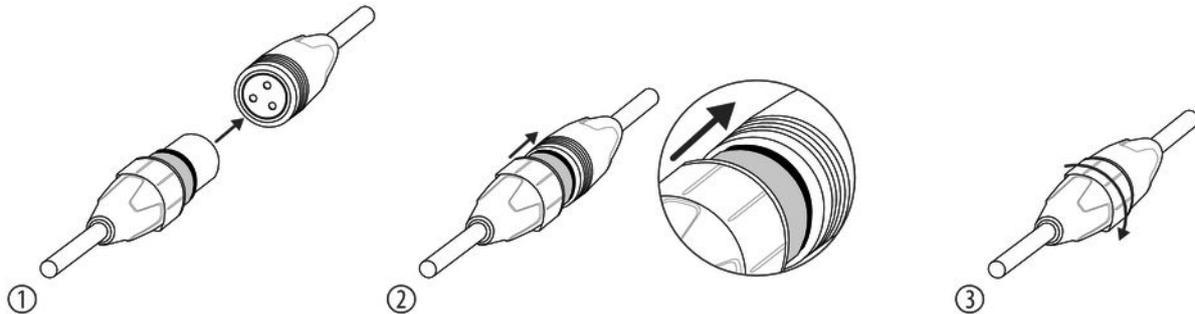
Always work from a stable platform whenever installing, moving or servicing the unit. In doing so, the area underneath the unit must be cordoned off.

The safety cable must be attached to the bracket.



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

Connecting the DMX IP65 connectors



Proceed as follows to connect the DMX-IP65 connectors:

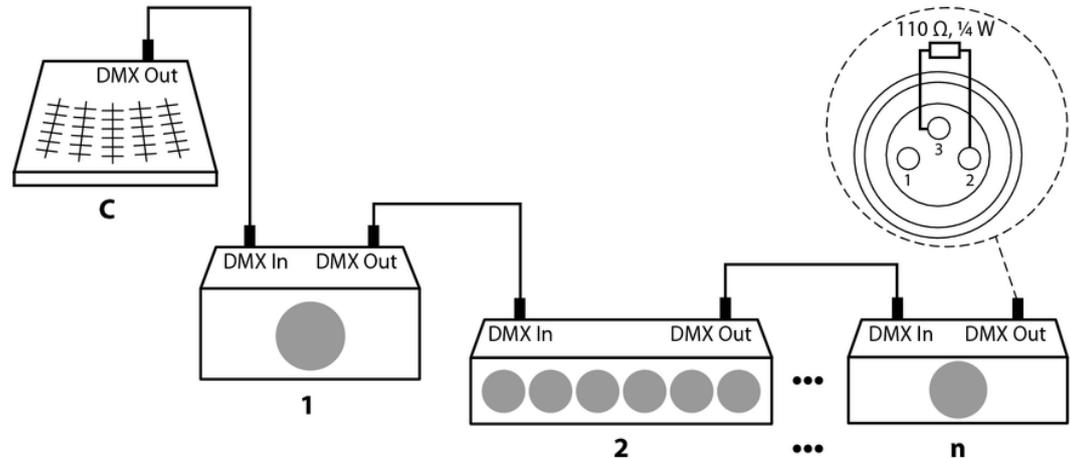
1. ➤ Insert the plug completely and straight into the coupling.
2. ➤ Make sure that the flexible sealing ring has complete contact.
3. ➤ Turn the union nut straight onto the thread of the coupling. Hand-tighten the union nut.

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



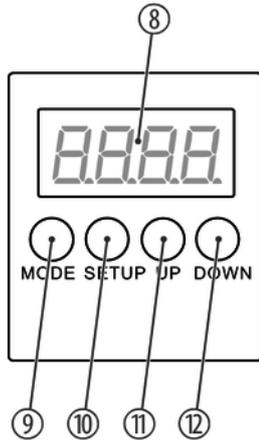
Connections in master/slave mode

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 controls



1	Bracket for hanging or installation and for securing the safety cable
2	<i>[POWER IN]</i> Mains cable for the power supply of the device
3	<i>[DMX IN]</i> DMX input.
4	Pressure compensation element
5	<i>[DMX OUT]</i> DMX output
6	<i>[POWER OUT]</i> Power cord for the voltage supply of a connected device
7	Display



8	Display
9	<i>[MODE]</i> Activates the main menu and toggles between menu items.
10	<i>[SETUP]</i> Selects an option of the respective operating mode.
11	<i>[UP]</i> Navigates upwards in a menu list. Increases the displayed value by one.
12	<i>[DOWN]</i> Navigates downwards in a menu list. Decreases the displayed value by one.

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.

7.2 Main menu

Press *[MODE]* to activate the main menu and 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 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 'Built-in automatic show'

A built-in 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 '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 across all segments (background colour) or a colour that lights up segment-wise (hopping colour). Press *[SETUP]* repeatedly until the display shows '1xxx' (background colour) or '2xxx' (hopping colour), respectively. With *[UP]* and *[DOWN]* you can choose from the following options:

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

Display	Meaning
'-rb'	Red and blue
'rgb'	Red and 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) as well as '*SPFL*' (flash effect).

To adjust the strobe frequency, press *[SETUP]* repeatedly until the display shows '*FSxx*'. With *[UP]* and *[DOWN]* you can now select a value between '*SPFS00*' (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).

Wait about 30 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'.

To adjust the speed of the automatic mode, press *[SETUP]* repeatedly until the display shows 'SPxx'. With *[UP]* and *[DOWN]* you can now select a value between 'SP01' (slow) and 'SP99' (fast) as well as 'SPFL' (flash effect).

To adjust the strobe frequency of the automatic mode, press *[SETUP]* repeatedly until the display shows 'FSxx'. With *[UP]* and *[DOWN]* you can now select a value between 'SPFS00' (slow) and 'FS99' (fast).

To adjust the fade speed of the automatic mode, press *[SETUP]* repeatedly until the display shows 'Fdxx'. With *[UP]* and *[DOWN]* you can now select a value between 'Fd00' (slow) and 'Fd99' (fast).

Wait about 30 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 when 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 (the display shows 'd001' ... 'd512').

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

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

Wait about 30 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 when the device 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-four channels)

Wait about 30 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 30 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 'SUxx'. 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), the display shows 'SU00' ... 'SU31'.

Wait about 30 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]*. With *[UP]* and *[DOWN]* you can choose from the following options:

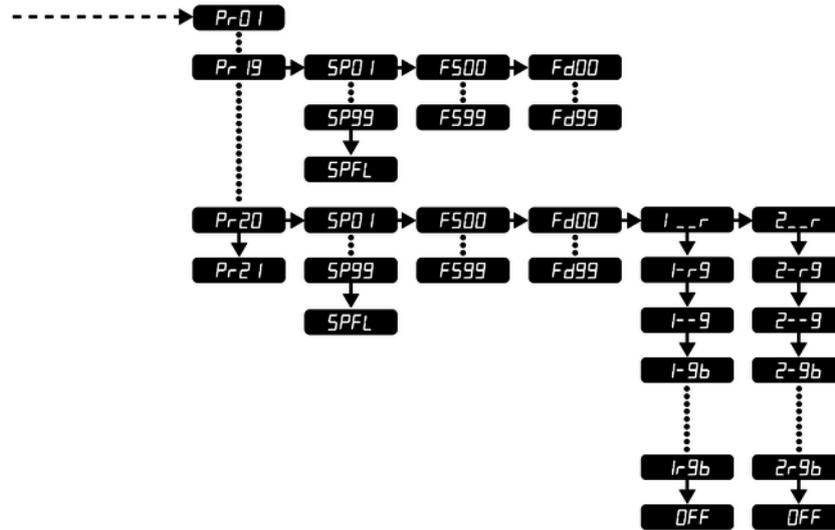
Display	Meaning
'1--r'	Red
'2-rg'	Red and green
'3--g'	Green
'4-gb'	Green and blue
'5--b'	Blue
'6-rb'	Red and blue

Display	Meaning
'7rgb'	Red and green and blue
' OFF'	LEDs off

To adjust the strobe frequency, press *[SETUP]* repeatedly until the display shows 'FSxx'. With *[UP]* and *[DOWN]* you can now select a value between 'SPFS00' (slow) and 'FS99' (fast).

Wait about 30 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	0...7	LEDs off
	8...15	Constant unicoloured pattern in red
	16...23	Constant unicoloured pattern in red and green
	24...31	Constant unicoloured pattern in green
	32...39	Constant unicoloured pattern in blue and green
	40...47	Constant unicoloured pattern in blue
	48...55	Constant unicoloured pattern in blue and red
	56...63	Constant unicoloured pattern in red, green and blue
	64...231	Built-in automatic show programmes
	232...255	Sound-controlled show
2	Function depending on setting of channel 1	

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

7.5 Functions in 3-channel DMX mode

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

7.6 Functions in 5-channel DMX mode

Channel	Value	Function
1	0...255	Intensity (0 % to 100 %) of the 96 red LEDs
2	0...255	Intensity (0 % to 100 %) of the 72 green LEDs
3	0...255	Intensity (0 % to 100 %) of the 72 blue LEDs
4	0...255	Dimmer (0 % to 100 %), for all LEDs
5	0...255	Strobe effect, increasing speed

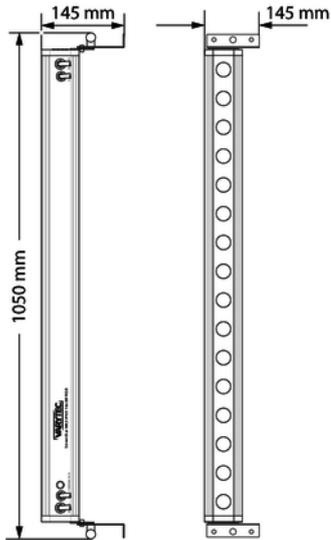
7.7 Functions in 24-channel DMX mode

Channel	Value	Function
1	0...255	Intensity (0 % bis 100 %) of the red LEDs in the 1. Segment
2	0...255	Intensity (0 % bis 100 %) of the green LEDs in the 1. Segment
3	0...255	Intensity (0 % bis 100 %) of the blue LEDs in the 1. Segment
4	0...255	Intensity (0 % bis 100 %) of the red LEDs in the 2. Segment
5	0...255	Intensity (0 % bis 100 %) of the green LEDs in the 2. Segment
6	0...255	Intensity (0 % bis 100 %) of the blue LEDs in the 2. Segment
7	0...255	Intensity (0 % bis 100 %) of the red LEDs in the 3. Segment
8	0...255	Intensity (0 % bis 100 %) of the green LEDs in the 3. Segment
9	0...255	Intensity (0 % bis 100 %) of the blue LEDs in the 3. Segment
10	0...255	Intensity (0 % bis 100 %) of the red LEDs in the 4. Segment
11	0...255	Intensity (0 % bis 100 %) of the green LEDs in the 4. Segment

Channel	Value	Function
12	0...255	Intensity (0 % bis 100 %) of the blue LEDs in the 4. Segment
13	0...255	Intensity (0 % bis 100 %) of the red LEDs in the 5. Segment
14	0...255	Intensity (0 % bis 100 %) of the green LEDs in the 5. Segment
15	0...255	Intensity (0 % bis 100 %) of the blue LEDs in the 5. Segment
16	0...255	Intensity (0 % bis 100 %) of the red LEDs in the 6. Segment
17	0...255	Intensity (0 % bis 100 %) of the green LEDs in the 6. Segment
18	0...255	Intensity (0 % bis 100 %) of the blue LEDs in the 6. Segment
19	0...255	Intensity (0 % bis 100 %) of the red LEDs in the 7. Segment
20	0...255	Intensity (0 % bis 100 %) of the green LEDs in the 7. Segment
21	0...255	Intensity (0 % bis 100 %) of the blue LEDs in the 7. Segment
22	0...255	Intensity (0 % bis 100 %) of the red LEDs in the 8. Segment

Channel	Value	Function
23	0...255	Intensity (0 % bis 100 %) of the green LEDs in the 8. Segment
24	0...255	Intensity (0 % bis 100 %) of the blue LEDs in the 8. Segment

8 Technical specifications



Light source	16 × 3in1 RGB LED, 3 W	
Optical properties	Beam angle	30°
Control	DMX manually via buttons and display on the unit	
Number of DMX channels	2, 3, 5, 24	
Input connections	Voltage supply	Power cable with IP65 screw connector (including power supply adapter IP65 connector to safety plug)
	DMX control	DMX cable with IP65 XLR plug, 3-pin (incl. adapter to XLR 3-pin male)
Output connections	Voltage supply	Power cable with IP65 screw connector

	DMX control	DMX cable with IP65 XLR coupling, 3-pin (incl. adapter to XLR 3-pin male)
Power consumption	48 W	
Operating supply voltage	100 – 240 V ~ 50/60 Hz	
Protection class	IP65	
Mounting options	hanging, standing	
Dimensions (W × H × D)	1050 mm × 145 mm × 145 mm	
Weight	5.5 kg	
Ambient conditions	Temperature range	0 °C...40 °C
	Relative humidity	50 %, non-condensing

Further information

Outdoor-ready	Yes
Colour mixture	RGB
LED type	x-in-1
Fanless	Yes
Remote control	Not possible
Wireless DMX	No
LEDs individually controllable	No
Housing	Aluminium, black

9 Plug and connection assignment

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

A three-pole coupling in IP65 design is used as DMX output, a three-pole plug in IP65 design is used as DMX input. The drawing below and the table show the pin assignment of a matching coupling.



Pin	Assignment
1	Ground (shielding)
2	Signal inverted (DMX-, 'cold')
3	Signal (DMX+, 'hot')

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 main fuse.
No response to the DMX controller	<ol style="list-style-type: none"> <li data-bbox="879 290 1524 423">1. When the display flashes, e.g. 'd001', no valid DMX signal is received. Check whether the DMX controller is switched on. Check the DMX connectors and cables for proper connection. <li data-bbox="879 423 1524 533">2. If the display is not flashing but there is still no response, check the address settings and the DMX polarity. <li data-bbox="879 533 1524 586">3. Try using another DMX controller. <li data-bbox="879 586 1524 678">4. Check whether the DMX cables run near or parallel to high-voltage cables that may cause damage or interference to a DMX interface circuit.

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 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.

