

Blitz Bar 240

User Manual



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1 General information

This document contains important instructions for the safe operation of the product. Read and follow the safety instructions and all other instructions. Keep the document for future reference. Make sure that it is available to all those using the product. If you sell the product to another user, be sure that they also receive this document.

Our products and documentation are subject to a process of continuous development. They are therefore subject to change. Please refer to the latest version of the documentation, which is ready for download under <u>www.thomann.de</u>.

1.1 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 document.

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 pos- sible 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 pos- sible dangerous situation that can result in material and environmental damage if it is not avoided.
Warning signs	Type of danger
Warning signs	Type of danger Warning – high-voltage.
Warning signs	

Warning signs	Type of danger
	Warning – danger zone.



2 Safety instructions

Intended use

This device is intended to be used as an illumination effect. 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!

Risk of injury and choking hazard for children!

Children can suffocate on packaging material and small parts. Children can injure themselves when handling the device. Never allow children to play with the packaging material and the device. Always store packaging material out of the reach of babies and small children. Always dispose of packaging material properly when it is not in use. Never allow children to use the device without supervision. Keep small parts away from children and make sure that the device does not shed any small parts (such knobs) that children could play with.



DANGER!

Danger to life due to electric current!

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 when covers, safety equipment or optical components are missing or damaged.



DANGER!

Danger to life due to electric current!

A short circuit could lead to a fire hazard and risk of death. Always use proper ready-made insulated triple-core mains cable with a safety plug. Do not modify the mains cable or the plug. In case of isolation damage, disconnect immediately the power supply and arrange repair. If in doubt, seek advice from a qualified electrician.



WARNING!

Risk of eye damage caused by high light intensity!

The device generates highly intense light radiation. Looking directly into the light source can damage the eyes. Never look directly into the light source.



WARNING!

Risk of epileptic fit due to flashing lights!

The device emits flashing lights (strobe effects). Flashing lights can trigger epileptic fits in specific people. If you are at risk of epilepsy, avoid spending longer periods of time subjected to flashing lights and looking into strobing light.



NOTICE!

Risk of fire due to covered vents and neighbouring heat sources!

If the vents of the device are covered or the device is operated in the immediate vicinity of other heat sources, the device can overheat and burst into flames. Never cover the device or the vents. Do not install the device in the immediate vicinity of other heat sources. Never operate the device in the immediate vicinity of naked flames.



NOTICE!

Damage to the device if operated in unsuitable ambient conditions!

The device can be damaged if it is operated in unsuitable ambient conditions. Only operate the device indoors within the ambient conditions specified in the "Technical specifications" chapter of this user manual. Avoid operating it in environments with direct sunlight, heavy dirt and strong vibrations. Avoid operating it in environments with strong temperature fluctuations. If temperature fluctuations cannot be avoided (for example after transport in low outside temperatures), do not switch on the device immediately. Never subject the device to liquids or moisture. Never move the device to another location while it is in operation. In environments with increased dirt levels (for example due to dust, smoke, nicotine or mist): Have the device cleaned by qualified specialists at regular intervals to prevent damage due to overheating and other malfunctions.

NOTICE!

Damage to the device due to high voltages!

The device can be damaged if it is operated with the incorrect voltage or if high voltage peaks occur. In the worst case, excess voltages can also cause a risk of injury and fires. Make sure that the voltage specification on the device matches the local power grid before plugging in the device. Only operate the device from professionally installed mains sockets that are protected by a residual current circuit breaker (FI). As a precaution, disconnect the device from the power grid when storms are approaching or it the device will not be used for a longer period.

NOTICE!

Risk of fire by exceeding the maximum current

The device can supply power to other devices of identical design and connected in series. If too many devices are connected, the power consumption can exceed the maximum permitted power consumption, which can cause the device to overheat and burst into flames. Only connect devices of identical design to the device. When deciding how many devices you can connect in series, make sure that the maximum permitted power consumption as stated on the device is not exceeded. Also refer to the specifications in the technical specifications for the device. Only use power cords with a cable cross-section designed for the required current intensity when connecting the devices in series.



Safety instructions



NOTICE!

Risk of fire due to installation of a wrong fuse!

Using fuses of a different type than compatible with the device may cause a fire and seriously damage the device. Only use fuses of the same type. Observe the labelling on the device casing and the information in the "Technical data" chapter.



3 Features

- LED strobe bar with ambient effect
- Futuristic effects through pixel control of the stroboscope
- Creative running effects
- 240 × CW LEDs for bright and dynamic strobe effects, arranged tubularly in the middle
- 384 × RGB LEDs for wash effects and colourful accents in the background
- Up to 20 individually controllable segments with the CW LEDs
- Up to 32 individually controllable segments with the RGB LEDs
- Control via DMX and via buttons and display on the device
- Operating modes:
 - Master/Slave
 - Sound control via built-in microphone
 - Auto operation
 - DMX (3 modes)
- 20 built-in chase programmes in automatic mode and sound control
- Flash rate: 0...20 Hz
- OLED display with four touch-sensitive buttons
- Swivelling mounting bracket
- Without fan due to convection cooling
- With Omega bracket for safe, hanging installation

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



4 Installation

Unpack and check carefully there is no transportation damage before using the unit. Keep the equipment packaging. To fully protect the product against vibration, dust and moisture during transportation or storage use the original packaging or your own packaging material suitable for transport or storage, respectively.



WARNING!

Risk of injury from falling devices that were inadequately secured!

If devices are not properly secured during assembly, they can cause severe injury and considerable damage by falling.

When installing and operating, make sure to follow the standards and regulations 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 and fire due to inadequate distance and bad ventilation!

If the distance between the light source and the illuminated surface is too short or the device is badly ventilated, the device can overheat and cause fires.

Make sure that illuminated surfaces are more than 2 m away.

Do not operate the device in ambient temperatures above 40 °C.

Always ensure sufficient ventilation at the operating location.

NOTICE!

Data transfer errors due to improper wiring!

If the DMX connections are wired incorrectly, this can cause errors during the data transfer.

Do not connect the DMX input and output to audio devices, e.g. mixers or amplifiers.

Use special DMX cables for the wiring instead of normal microphone cables.

Mounting options

You can install the device in hanging or standing position. When in use, the device must always be attached to a solid surface or an approved truss. Use the openings provided on the two-piece bracket for attaching.



Always work from a stable platform whenever installing, moving or servicing the device. In doing so, the area underneath the device 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.

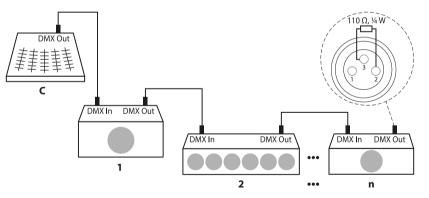


5 Starting up

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 , ½ W).

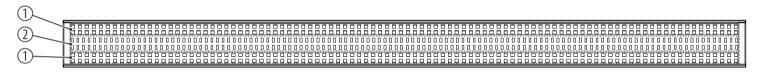


Connections in master/slave mode

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 operating elements

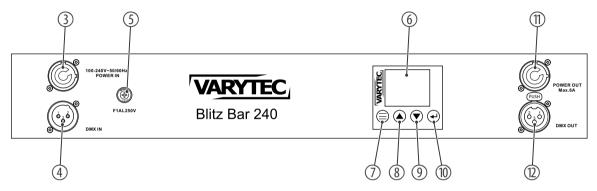
Front panel







Connection panel



- 3 [POWER IN] | lockable input socket (Power Twist) for the power supply of the device
- 4 [DMX IN] | DMX input, designed as XLR panel plug, 3-pin
- 5 [F1AL250V] | fuse holder
- 6 Display
- 7 😂 | activates the main menu for selecting the operating mode
- 8 (a) | increases the displayed value by one
- 9 decreases the displayed value by one



- 10 \odot | selects an option of the respective operating mode, confirms the displayed value
- 11 [POWER OUT] | lockable output socket (Power Twist) for the power supply of further devices
- 12 [DMX OUT] | DMX output, designed as XLR panel socket, 3-pin



7 Operating

7.1 Starting the device

- **1.** Connect the device to the power grid. The device is immediately operational.
- **2.** The set values are retained during a power supply interruption.

7.2 Main menu

- **1.** Press
 in to activate the main menu.
- 2. ▶ Press ④ or to select a menu item.
- **3.** \blacktriangleright Press e to confirm the selection.
- **4.** Use (a) or (c) to change the respectively displayed value.
- **5.** When the display shows the desired value, confirm with Θ .
- **6.** To exit a menu item without making changes, press **a**.

All previously made settings are retained even when you disconnect the device from the power grid.

DMX address 7.2.1

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

- **1.** Press is to activate the main menu.
- **2.** Press O or O until the display shows *'Dmx Address'* and confirm with O.
- **3.** \triangleright Use \circledast or \circledast to select a value between 'A000' and 'A512' for the desired DMX address.

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
8-channel mode	505
14-channel mode	499
232-channel mode	281

4. ▶ When the display shows the desired value, confirm with *⊙*.



7.2.2 DMX mode

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

- **1.** Press
 i to activate the main menu.
- **2.** Press O or O until the display shows *'Mode'* and confirm with O.
- **3.** Press O or O until the display shows 'DMX' and confirm with O.
- **4.** \blacktriangleright Press o or o to select the desired DMX mode.

Menu level 3	Function
'8Ch'	8-channel mode
'14Ch'	14-channel mode
'232Ch'	232-channel mode

5. When the display shows the desired value, confirm with Θ .

7.2.3 Auto operation

Auto mode 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 a DMX controller. In auto mode, 20 different show programmes are available, which run with adjustable speed.

- **1.** Press \cong to activate the main menu.
- **2.** Press O or O until the display shows *'Mode'* and confirm with O.
- **3.** Press O or O until the display shows 'Auto' and confirm with O.
- **4.** Use ⁽● or ⁽● to select the desired show programme ('*Pro 00'* ... '*Pro 20'*) and confirm with ⁽⊕.
 - \Rightarrow The display shows 'SP'.
- **5.** Use o or o to set the running speed of the programme in a range from 'Sp 01' (slow) ... 'Sp 99' (fast) and confirm with o.



7.2.4 Sound control

Sound control mode 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 a DMX controller. In this operating mode, the device responds to acoustic pulses which are recorded by the integrated microphone.

- **1.** Press is to activate the main menu.
- **2.** ▶ Press ④ or ⑦ until the display shows *'Mode'* and confirm with ⑦.
- **3.** ▶ Press ④ or ⊙ until the display shows 'Sound' and confirm with ⊙.
- **4.** ► Use ④ or ⑦ to select the desired show programme (*'Pro 00' ... 'Pro 20'*) and confirm with ⊕.
 - \Rightarrow The display shows 'SP'.
- **5.** \triangleright Use \odot or \odot to set the running speed of the programme in a range from 'Se 01' (slow) ... 'Se 99' (fast) and confirm with ⊕.



7.2.5 Manual colour settings

This setting is only relevant if the device is not controlled via a DMX controller.

- **1.** Press \equiv to activate the main menu.
- **2.** Press \circledast or \circledast until the display shows '*Mode*' and confirm with O.
- **3.** Press O or O until the display shows 'Manual' and confirm with O.

The following table shows the setting options.

Menu level 2	Menu level 3	Menu level 4	Function
'Manual'	'Dimmer'	'000' '255'	Overall brightness
	'Red'	'000' '255'	Intensity red (0 % to 100 %)
	'Green'	'000' '255'	Intensity green (0 % to 100 %)
	'Blue'	'000' '255'	Intensity blue (0 % to 100 %)
	'White'	'000' '255'	Intensity white (0 % to 100 %)
	'35 Show'	'000' '255'	Brightness strobe LEDs
	'35 Sp'	'000' '255'	Running speed strobe LEDs
	'35'Str'	'000' '255'	Flash rate strobe LEDs
	'50 Show'	'000' '255'	Brightness ambient LEDs

Menu level 2	Menu level 3	Menu level 4	Function
	'50 Sp'	'000' '255'	Running speed ambient LEDs
	'50'Str'	'000' '255'	Flash rate ambient LEDs
	'50BG-R'	'000' '255'	Brightness ambient LEDs red
	'50BG-G'	'000' … '255'	Brightness ambient LEDs green
	'50BG-B'	'000' … '255'	Brightness ambient LEDs blue

<u>4.</u> When the display shows the desired value, confirm with \oplus .



7.3 System settings

- **1.** Press
 ightharpoonup to activate the main menu.
- **2.** Press O or O until the display shows *'Setting'* and confirm with O.

The following table shows the setting options.

Menu level 2	Menu level 3	Function		
'Display'	Automatic display shutdown when not in use			
	'on'	The display illumination is permanently on		
	'off'	The display illumination is switched off after 30 seconds		
'Display Rev'	Display inversion			
	'on'	On, display is rotated by 180°		
	'off'	Off, normal display		
'DMX Fail'	Device behaviour on DMX signal failure			
	'Blackout'	Blackout		
	'Manual'	Performing the manual control		
	'Auto'	Performing an automatic run		
	'Hold'	Retaining last settings		

3. When the display shows the desired value, confirm with Θ .

7.4 System information

- **1.** Press (a) to activate the main menu.
- **2.** Press O or O until the display shows *'System Info'* and confirm with O.

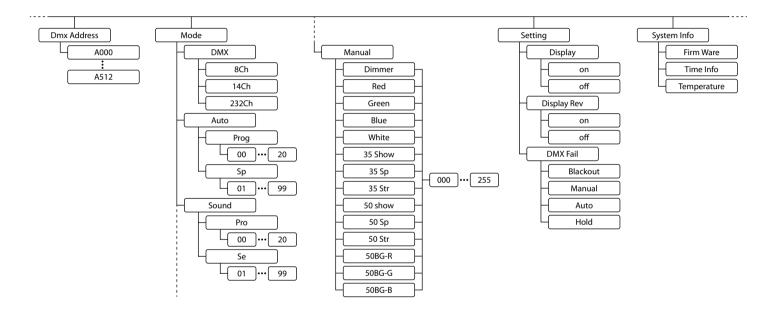
The following table shows the setting options.

Menu level 2	Function
'Firm Ware'	Displays the current firmware version.
'Time Info'	Displays the total running time of the device.
'Temperature'	Displays the current temperature of the device.

3. When the display shows the desired value, confirm with \odot .



7.5 Menu overview





7.6 Functions in 8-channel mode

Channel	LED	Value	Function
1	Ambient LED	0255	Intensity red (0 % to 100 %)
2	Ambient LED	0255	Intensity green (0 % to 100 %)
3	Ambient LED	0255	Intensity blue (0 % to 100 %)
4	Strobe LED	0255	Strobe, increasing speed, colours (0 % bis 100 %)
5	Strobe LED	07	No function
		819	Automatic show white 1
		2031	Automatic show white 2
		3243	Automatic show white 3
		212223	Automatic show white 18
		224235	Automatic show white 19
		236255	Automatic show white 20
6	Strobe LED	0255	Running speed of automatic show white, increasing (when channel $5 = 8255$)

Operating

Channel	LED	Value	Function
7	Ambient LED	07	No function
		812	Automatic show RGB 1
		1316	Automatic show RGB 2
		1720	Automatic show RGB 3
		244247	Automatic show RGB 60
		248251	Automatic show RGB 61
		252255	Automatic show RGB 62
8	Ambient LED	0255	Running speed of automatic show RGB, increasing (when channel 7 = 8255)



7.7 Functions in 14-channel mode

Channel	LED	Value	Function
1	Ambient LED	0255	Intensity red (0 % to 100 %)
2	Ambient LED	0255	Intensity green (0 % to 100 %)
3	Ambient LED	0255	Intensity blue (0 % to 100 %)
4	Strobe LED	0255	Intensity white (0 % to 100 %)
5	Strobe LED	07	No function
		819	Automatic show white 1
		2031	Automatic show white 2
		3243	Automatic show white 3
		212223	Automatic show white 18
		224235	Automatic show white 19
		236255	Automatic show white 20
6	Strobe LED	0255	Running speed of automatic show white, increasing (when channel 5 = 8255)



Operating

Channel	LED	Value	Function
7	Strobe LED	08	No stroboscope
		9255	Strobe, increasing speed (0 % to 100 %)
8	Ambient LED	07	No function
		812	Automatic show RGB 1
		1316	Automatic show RGB 2
		1720	Automatic show RGB 3
		244247	Automatic show RGB 60
		248251	Automatic show RGB 61
		252255	Automatic show RGB 62
9	Ambient LED	0255	Running speed of automatic show RGB, increasing (when channel $7 = 8255$)
10	Ambient LED	015	No stroboscope
		16255	RGB strobe, increasing speed (0 % to 100 %)
11	Ambient LED	0255	Background red (0 % to 100 %)
12	Ambient LED	0255	Background green (0 % to 100 %)



Operating

Channel	LED	Value	Function
13	Ambient LED	0255	Background blue (0 % to 100 %)
14	14 Ambient LED	0127	Direction normal
		128255	Direction inverted

7.8 Functions in 232-channel mode

Channel	LED	Value	Function
1	Strobe LED	0255	Intensity white 1 (0 % to 100 %)
2	Strobe LED	0255	Intensity white 2 (0 % to 100 %)
3	Strobe LED	0255	Intensity white 3 (0 % to 100 %)
38	Strobe LED	0255	Intensity white 38 (0 % to 100 %)
39	Strobe LED	0255	Intensity white 39 (0 % to 100 %)
40	Strobe LED	0255	Intensity white 40 (0 % to 100 %)
41	Ambient LED	0255	Intensity red 1 (0 % to 100 %)
42	Ambient LED	0255	Intensity green 1 (0 % to 100 %)
43	Ambient LED	0255	Intensity blue 1 (0 % to 100 %)
44	Ambient LED	0255	Intensity red 2 (0 % to 100 %)
45	Ambient LED	0255	Intensity green 2 (0 % to 100 %)
46	Ambient LED	0255	Intensity blue 2 (0 % to 100 %)
47	Ambient LED	0255	Intensity red 3 (0 % to 100 %)

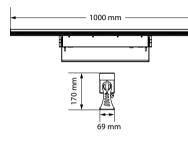


Operating

Channel	LED	Value	Function
48	Ambient LED	0255	Intensity green 3 (0 % to 100 %)
49	Ambient LED	0255	Intensity blue 3 (0 % to 100 %)
230	Ambient LED	0255	Intensity red 64 (0 % to 100 %)
231	Ambient LED	0255	Intensity green 64 (0 % to 100 %)
232	Ambient LED	0255	Intensity blue 64 (0 % to 100 %)



8 Technical specifications



Light source	240 × CW LED SMD 5730, 0.25 W (strobe)			
	$384 \times CW$ LED SMD 5050, 0.5 W (ambient)			
Properties of the CW LEDs SMD 5730	Colour tempera- ture	6200 K		
	Colour rendering index	CRI RA of 70		
Optical properties	Beam angle	60° (strobe) and 120° (ambient)		
Control	DMX, buttons and display on the unit			
Number of DMX channels	8, 14, 232			
Input connections	Power supply	Lockable input socket (Power Twist)		
	DMX control	XLR chassis plug, 3-pin		
Output connections	Power supply	Lockable output socket (Power Twist)		
	DMX control	XLR chassis socket, 3-pin		
Power consumption	250 W			
Supply voltage	100 - 240 V ~ 50/60 I	Hz		
Fuse	5 mm \times 20 mm, 2 A,	250 V, slow-blow		

Flash rate	020 Hz	
Mounting options	Hanging, standing	
Dimensions (W \times H \times D)	$1000 \text{ mm} \times 170 \text{ mm}$	× 69 mm
Weight	5.2 kg	
Ambient conditions	Temperature range	0 °C40 °C
	Relative humidity	20 %80 % (non-condensing)

Further information

Suitable for outdoor use	no
fanless	yes
Remote control	Not possible
Wireless DMX	no
Housing	Metal
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!

Data transfer errors due to improper wiring!

If the DMX connections are wired incorrectly, this can cause errors during the data transfer.

Do not connect the DMX input and output to audio devices, e.g. mixers or amplifiers.

Use special DMX cables for the wiring instead of normal microphone cables.

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 ('Static Color')
No response to the DMX con- troller	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 <u>www.thomann.de</u>.



11 Cleaning

Device components

Clean the device components that are accessible from the outside regularly. The cleaning frequency depends on the operating environment: damp, smoky or particularly dirty environments can cause greater accumulation of dirt on the device components.

- Clean with a dry soft cloth.
- Stubborn dirt can be removed with a slightly dampened cloth.
- Never use solvents or alcohol for cleaning.

12 Protecting the environment

Disposal of the packaging material



Disposal of your old device



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.

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.

