



Retro Blinder TRI 380

Blinder

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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 www.thomann.de.

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 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 – suspended load.

Warning signs	Type of danger
	Warning – danger zone.

2 Safety instructions

Intended use

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

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



Extend the operating life of the device by regular breaks and by avoiding frequent switching on and off. The device is not suitable for continuous operation.

Safety



DANGER!

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.



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 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). Ensure that the power cord plug is easily accessible at all times if it is the only device to safely disconnect the device from the mains supply. As a precaution, disconnect the device from the power grid when storms are approaching or if 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 maximum permitted power consumption can be exceeded, 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 output current specified on the device and in the "Technical specifications" chapter of the user manual is not exceeded. Only use power cords with a cable cross-section designed for the required current intensity when connecting the devices in series.

**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 blinder with ambient effect in stylish triangle shape
- Ideal as decoration for clubs and bars or for small and medium-sized stages
- 3 × 80 W warm white COB LEDs can be used as blinder effect or strobe
- 48 × 3 W RGB-SMD LEDs as backlight
- Can be controlled in 6 segments (2 segments per side)
- Control via DMX (5/10/23/25 CH) and via buttons and display on the device
- Automatic mode
- OLED display

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 positions. When in use, the device must always be attached to a solid surface or an approved mount. Attach using the openings provided on the mounting bracket.

Always work from a stable platform whenever installing, moving or servicing the device. While you do this, the area underneath the device must be cordoned off.

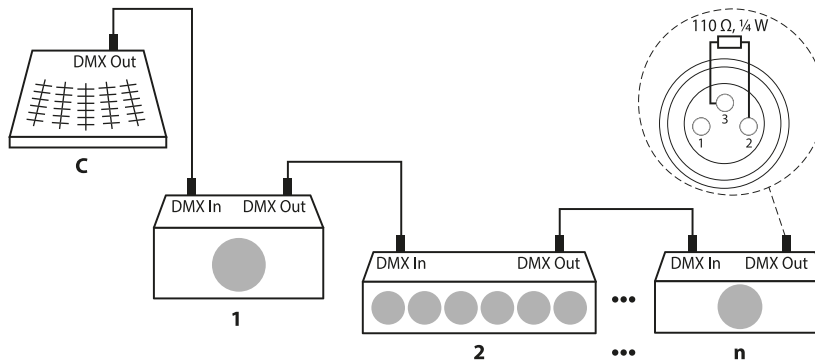
The safety cable must be attached to the safety eyelet.

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



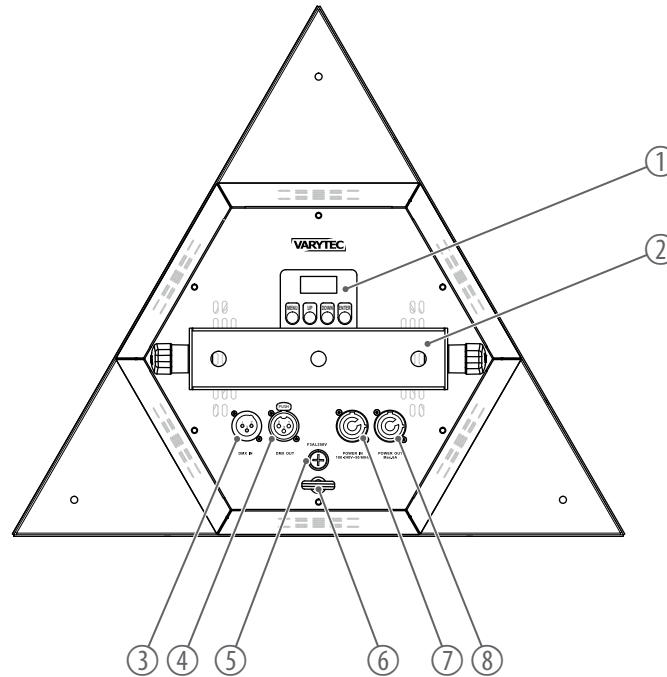
Connections in 'Master / Slave' mode

When you configure a group of devices in 'Master / Slave' mode, the first unit will control the others. 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.



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

6 Connections and controls



1	Display
	<i>[MENU]</i> Activates the main menu for selecting the operating mode.
	<i>[UP]</i> Increases the displayed value by one.
	<i>[DOWN]</i> Decreases the displayed value by one.
	<i>[ENTER]</i> Selects an option of the respective operating mode, confirms the set value
2	Mounting bracket with locking screws
3	<i>[DMX IN]</i> DMX input, designed as XLR panel plug, 3-pin
4	<i>[DMX OUT]</i> DMX output, designed as XLR panel socket, 3-pin
5	<i>[F3AL250V]</i> Fuse holder
6	Safety cable eyelet
7	<i>[POWER IN]</i> Lockable input socket (Power Twist) for the power supply of the device
8	<i>[POWER OUT]</i> Lockable output socket (Power Twist) for powering further devices

7 Operation

7.1 Starting the device

Connect the device to the mains to start operation. The device is immediately operational. The set values are retained during a power interruption.

7.2 Operating modes

Setting the DMX address

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

1. ➤ Press *[MENU]* repeatedly until 'Address' appears on the display.
2. ➤ Confirm with *[ENTER]*.
3. ➤ Use *[UP]* and *[DOWN]* to select a DMX address between '001' and '512'.
4. ➤ Confirm with *[ENTER]*.

⇒ The chosen DMX address is saved.

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

DMX mode	Highest possible DMX address
5-channel mode	508
10-channel mode	503
23-channel mode	490
25-channel mode	488

Specifying the DMX mode

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

1. ➤ Press *[MENU]* repeatedly until 'CH Mode' appears on the display.
2. ➤ Confirm with *[ENTER]*.
3. ➤ Use *[UP]* and *[DOWN]* to choose between '05 CH', '10 CH', '23 CH' and '25 CH'.
4. ➤ Confirm with *[ENTER]*.
⇒ The chosen DMX mode is saved.

Activating DMX control

1. ▶ Press *[MENU]* repeatedly until 'Mode' appears on the display.
 2. ▶ Confirm with *[ENTER]*.
 3. ▶ Use *[UP]* and *[DOWN]* to select the 'DMX' menu item.
 4. ▶ Confirm with *[ENTER]*.
- ⇒ The device is controlled via DMX.

Automatic mode

This operating mode can only be activated when the device 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 *[MENU]* repeatedly until 'Mode' appears on the display.
2. ▶ Confirm with *[ENTER]*.
3. ▶ Use *[UP]* and *[DOWN]* to select the 'Auto' menu item.
4. ▶ Confirm with *[ENTER]*.
⇒ Automatic mode is activated.
5. ▶ Press *[MENU]* repeatedly until 'Speed' appears on the display.
6. ▶ Confirm with *[ENTER]*.
7. ▶ Use *[UP]* and *[DOWN]* to select the desired running speed 'Slow' or 'Quick' for automatic mode.
8. ▶ Confirm with *[ENTER]*.
⇒ The chosen running speed is saved.
9. ▶ To enable automatic mode only for the COB LEDs, press *[MENU]* repeatedly until the display shows 'Backlight'.
10. ▶ Confirm with *[ENTER]*.
11. ▶ Use *[UP]* and *[DOWN]* to select the 'Auto' menu item.
12. ▶ Confirm with *[ENTER]*.
⇒ Automatic mode for the COB LEDs is activated.

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- 13.** ▶ To disable automatic mode for the COB LEDs, use *[UP]* and *[DOWN]* to select the 'Keep' menu item.
 - 14.** ▶ Confirm with *[ENTER]*.
 - ⇒ Automatic mode for the COB LEDs is deactivated.

Manual operation

This operating mode can only be activated when the device 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.

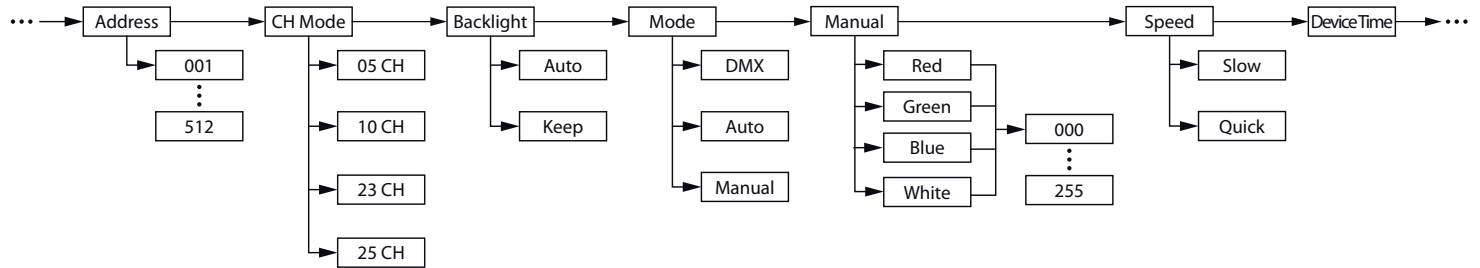
1. ➤ Press *[MENU]* repeatedly until 'Mode' appears on the display.
2. ➤ Confirm with *[ENTER]*.
3. ➤ Use *[UP]* and *[DOWN]* to select the 'Manual' menu item.
4. ➤ Confirm with *[ENTER]*.
⇒ Manual mode is activated.
5. ➤ Press *[MENU]* repeatedly until 'Manual' appears on the display.
6. ➤ Use *[UP]* and *[DOWN]* to select the desired colour ('Red', 'Green', 'Blue' or 'White').
7. ➤ Confirm with *[ENTER]*.
8. ➤ Use *[UP]* and *[DOWN]* to set the required intensity of the selected colour to between '000' and '255'.
9. ➤ Confirm with *[ENTER]*.

7.3 Operating time

Use the 'Device Time' menu to call up information about the current runtime of the LEDs.

- 1.** ▶ Press [MENU] repeatedly until 'Device Time' appears on the display.
- 2.** ▶ Confirm with [ENTER].
 - ⇒ The display shows the total runtime of the LEDs.

7.4 Menu overview



7.5 Functions in 5-channel DMX mode

Channel	LED	Value	Function
1	Ambient LED	0...255	Red intensity (0% to 100%)
2	Ambient LED	0...255	Green intensity (0% to 100%)
3	Ambient LED	0...255	Blue intensity (0% to 100%)
4	Ambient LED	0...255	White intensity (0% to 100%)
5	Strobe LED	0...3	Open
		4...103	Strobe effect, increasing speed
		104...107	Open
		108...207	Pulsing strobe effect, increasing speed
		208...212	Open
		213...251	Random strobe effect, increasing speed
		252...255	Open

7.6 Functions in 10-channel DMX mode

Channel	LED	Value	Function
1	Ambient LED	0...255	Dimmer (0% to 100%)
2	Strobe LED	0...3	Open
		4...103	Strobe effect, increasing speed
		104...107	Open
		108...207	Pulsing strobe effect, increasing speed
		208...212	Open
		213...251	Random strobe effect, increasing speed
		252...255	Open
3	Ambient LED	0...255	Red intensity (0% to 100%)
4	Ambient LED	0...255	Green intensity (0% to 100%)
5	Ambient LED	0...255	Blue intensity (0% to 100%)
6	Ambient LED	0...255	White intensity (0% to 100%)
7	Ambient LED	0...99	Open
		100...255	Automatic mode

Channel	LED	Value	Function
8	Ambient LED	0...255	Run speed of automatic mode, increasing speed
9	Strobe LED	0...99	Open
		100...255	Automatic mode
10	Strobe LED	0...255	Run speed of automatic mode, increasing speed

7.7 Functions in 23-channel DMX mode

Channel	LED	Value	Function
1	Ambient LED	0...255	Dimmer (0% to 100%)
2	Ambient LED	0...255	White intensity (0% to 100%)
3	Strobe LED	0...3	Open
		4...103	Strobe effect, increasing speed
		104...107	Open
		108...207	Pulsing strobe effect, increasing speed
		208...212	Open
		213...251	Random strobe effect, increasing speed
		252...255	Open
4	Ambient LED	0...255	Red intensity (0% to 100%), segment 1
5	Ambient LED	0...255	Green intensity (0% to 100%), segment 1
6	Ambient LED	0...255	Blue intensity (0% to 100%), segment 1
7	Ambient LED	0...255	Red intensity (0% to 100%), segment 2
8	Ambient LED	0...255	Green intensity (0% to 100%), segment 2

Channel	LED	Value	Function
9	Ambient LED	0...255	Blue intensity (0% to 100%), segment 2
10	Ambient LED	0...255	Red intensity (0% to 100%), segment 3
11	Ambient LED	0...255	Green intensity (0% to 100%), segment 3
12	Ambient LED	0...255	Blue intensity (0% to 100%), segment 3
13	Ambient LED	0...255	Red intensity (0% to 100%), segment 4
14	Ambient LED	0...255	Green intensity (0% to 100%), segment 4
15	Ambient LED	0...255	Blue intensity (0% to 100%), segment 4
16	Ambient LED	0...255	Red intensity (0% to 100%), segment 5
17	Ambient LED	0...255	Green intensity (0% to 100%), segment 5
18	Ambient LED	0...255	Blue intensity (0% to 100%), segment 5
19	Ambient LED	0...255	Red intensity (0% to 100%), segment 6
20	Ambient LED	0...255	Green intensity (0% to 100%), segment 6
21	Ambient LED	0...255	Blue intensity (0% to 100%), segment 6
22	Strobe LED	0...99	Open

Channel	LED	Value	Function
		100...255	Automatic mode
23	Strobe LED	0...255	Run speed of automatic mode, increasing speed

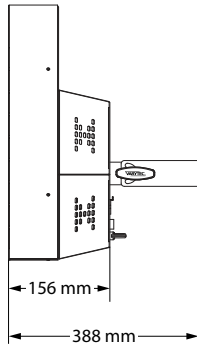
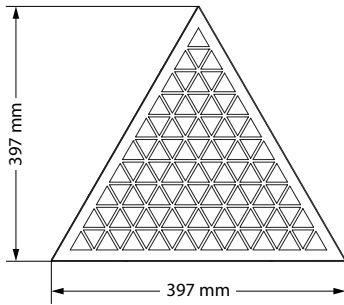
7.8 Functions in 25-channel DMX mode

Channel	LED	Value	Function
1	Ambient LED	0...255	Dimmer (0% to 100%)
2	Strobe LED	0...255	Intensity of COB-LED 1 (0% to 100%)
3	Strobe LED	0...255	Intensity of COB-LED 2 (0% to 100%)
4	Strobe LED	0...255	Intensity of COB-LED 3 (0% to 100%)
5	Strobe LED	0...3	Open
		6	Strobe effect, increasing speed
		7	Open
		8	Pulsing strobe effect, increasing speed
		9	Open
		10	Random strobe effect, increasing speed
		11	Open
6	Ambient LED	0...255	Red intensity (0% to 100%), segment 1
7	Ambient LED	0...255	Green intensity (0% to 100%), segment 1
8	Ambient LED	0...255	Blue intensity (0% to 100%), segment 1

Channel	LED	Value	Function
9	Ambient LED	0...255	Red intensity (0% to 100%), segment 2
10	Ambient LED	0...255	Green intensity (0% to 100%), segment 2
11	Ambient LED	0...255	Blue intensity (0% to 100%), segment 2
12	Ambient LED	0...255	Red intensity (0% to 100%), segment 3
13	Ambient LED	0...255	Green intensity (0% to 100%), segment 3
14	Ambient LED	0...255	Blue intensity (0% to 100%), segment 3
15	Ambient LED	0...255	Red intensity (0% to 100%), segment 4
16	Ambient LED	0...255	Green intensity (0% to 100%), segment 4
17	Ambient LED	0...255	Blue intensity (0% to 100%), segment 4
18	Ambient LED	0...255	Red intensity (0% to 100%), segment 5
19	Ambient LED	0...255	Green intensity (0% to 100%), segment 5
20	Ambient LED	0...255	Blue intensity (0% to 100%), segment 5
21	Ambient LED	0...255	Red intensity (0% to 100%), segment 6
22	Ambient LED	0...255	Green intensity (0% to 100%), segment 6
23	Ambient LED	0...255	Blue intensity (0% to 100%), segment 6
24	Strobe LED	0...99	Open

Channel	LED	Value	Function
		100...255	Automatic mode
25	Strobe LED	0...255	Run speed of automatic mode, increasing speed

8 Technical specifications



Light source	3 × COB LED, 80 W (strobe)	
	48 × RGB-SMD LED, 3 W (ambient)	
Properties of the COB LED	Colour temperature	2700 K
Control	DMX, buttons and display on the unit	
Number of DMX channels	5, 10, 23, 25	
Input connections	Power supply	Lockable input socket (Power Twist)
	DMX control	XLR panel plug, 3-pin
Output connections	Power supply for further devices	Lockable output socket (Power Twist) Output current, max.: 6 A
	DMX control	XLR panel socket, 3-pin
Power consumption	250 W	
Supply voltage	100 - 240 V ~ 50/60 Hz	
Fuse	5 mm × 20 mm, 3 A, 250 V, fast blow	

International Protection Rating	IP20	
Mounting options	Hanging, standing	
Dimensions (W × H × D)	With mounting bracket: 397 mm × 397 mm × 388 mm Without mounting bracket: 397 mm × 397 mm × 156 mm	
Weight	4.3 kg	
Ambient conditions	Temperature range	0 °C - 40 °C
	Relative humidity	20%...80% (non-condensing)

Further information

Design	3-fold
Light source included	Yes
Variant group	Retro blinder
Similar design	Combination device
DMX control	Yes
Master/slave	Yes
Remote control	Not possible
Sound control	No
Display	Yes

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 device is not working, no light	1. Check the mains connection and the fuse.
	2. Check the settings in <i>'manual'</i> mode.
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.

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.

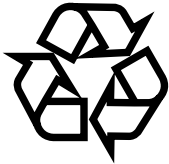
- Clean with a soft cloth using our lamp and lens cleaner (item no. 280122).
- Always dry the parts carefully.

Fan grids

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

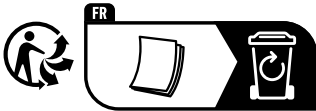
12 Protecting the environment

Disposal of the packing material



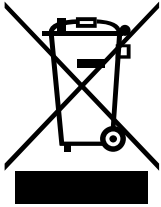
Environmentally friendly materials have been chosen for the packaging. These materials can be sent for normal recycling. Ensure that plastic bags, packaging, etc. are disposed of in the proper manner.

Do not dispose of these materials with your normal household waste, but make sure that they are collected for recycling. Please follow the instructions and markings on the packaging.



Observe the disposal note regarding documentation in France.

Disposal of your old device



This product is subject to the European Waste Electrical and Electronic Equipment Directive (WEEE) as amended.

Do not dispose of your old device with your normal household waste; instead, deliver it for controlled disposal by an approved waste disposal firm or through your local waste facility. If in doubt, consult your local waste management facility. You can also return the device to a retailer if they offer to take the device back for free or if they are legally obliged to do so. When disposing of the device, comply with the rules and regulations that apply in your country. You can also return your old device to Thomann GmbH at no charge. Check the current conditions on www.thomann.de.

Proper disposal protects the environment as well as the health of your fellow human beings. This is because the proper handling of old devices negates the potential negative effects of hazardous substances, and because it conserves resources by recycling them.

Also note that waste avoidance is a valuable contribution to environmental protection. Repairing a device or passing it on to another user is an ecologically valuable alternative to disposal.

If your old device contains personal data, delete those data before disposing of it.

