ignition

Cosima 640

User Manual

LED Bar

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

16.01.2024, ID: 561671 (V2)

Table of contents

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 – hot surface.
	Warning – dangerous optical radiation.
	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 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!

Danger of burns on the device surface!

The surface of the device becomes very hot during operation. Skin contact can result in burns. Never touch the device with your bare hands during operation. After switching off the device, wait for at least 15 minutes before touching it.

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). 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.

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.

3 Features

The LED bar is particularly suitable for professional lighting tasks, for example at events, on rock stages, in theatres and musicals. It has low power consumption and a long service life.

Special features of the device:

- 6 individually controllable RGBW LEDs at 40 W each
- Extremely sharp beam
- Control via DMX (3 different modes) and via buttons and the display on the unit
- Pre-programmed pixel effects
- Robust metal housing

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!

Potential property damage due to unsuitable stands!

If the device is mounted on an unsuitable stand, there is a risk that the stand will fall over and cause damage.

Only use stands whose maximum bearing capacity is at least as high as the weight of the device. Always ensure that the stand is stable.

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 unit in hanging or standing position. When in use, the device must always be attached to a solid surface or an approved mount. Use the designated openings on the underside of the device to attach it.

Always work from a stable platform whenever installing, moving or servicing the unit. The area underneath the device must be cordoned off while you are working.

The safety cable must be attached to the openings on the back.

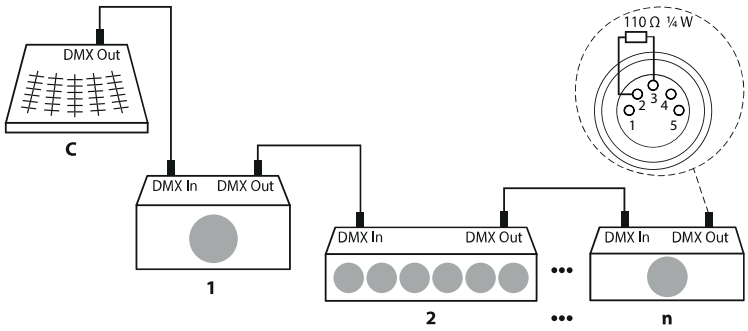
Please note that this device must not be connected to a dimmer.

5 Starting up

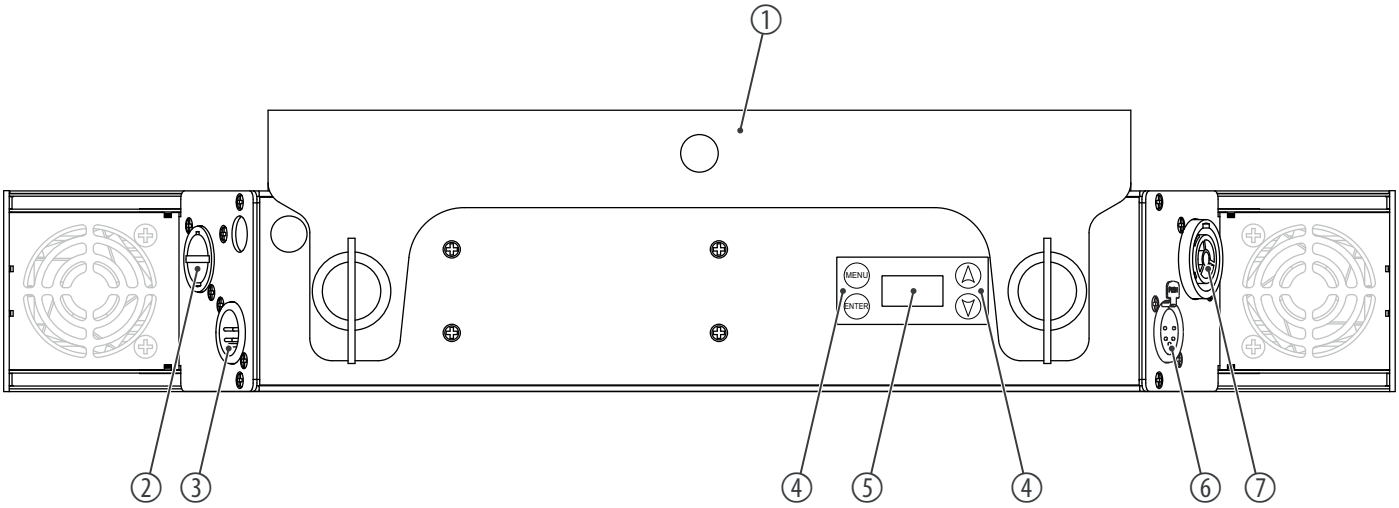
Create all connections while the device is off. Use the shortest possible high-quality cables for all connections. Take care when running the cables to prevent tripping hazards.

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 series connection. Make sure that the output of the last DMX device in the chain is terminated by a resistor (110 Ω, ¼ W).



6 Connections and operating elements



1	Mounting bracket
2	*[100-240V~50/60Hz]* | lockable Power Twist TR1 input socket for power supply
3	*[DMX IN]* | DMX input, designed as XLR panel plug, 5-pin
4	Operating elements
	[MENU] | activates the main menu and toggles between menu items. Closes an opened sub menu.
	[ENTER] | selects an option of the respective operating mode, confirms the set value.
	▲ | increases the displayed value by one.
	▼ | decreases the displayed value by one.
5	Display
6	*[DMX OUT]* | DMX output, designed as XLR panel socket, 5-pin
7	*[Mains OUT]* | lockable Power Twist TR1 output socket for power supply of other devices

7 Operation

7.1 Starting the device

Connect the device to the power supply to start operation. After a few seconds, the fans start to work, and the device is operational.

7.2 Main menu

How to use the main menu

1. To enter the main menu, press *[MENU]*.
2. To scroll between the individual menu items, press *[UP]* and *[DOWN]*. To open the selected menu item, press *[ENTER]*.
3. To exit the menu, press *[MENU]*, or wait 30 seconds.
   ⇨ All previous settings are retained even when the device is switched off and disconnected from the mains.
4. To restart with default values, use the functions under *'Factory Settings'* in the main menu.

Setting the DMX address

1. Open the main menu.
2. Navigate to *'DMX Settings ➔ DMX Address'*.
3. Use *[UP]* and *[DOWN]* to select an address between 001 and 486/503/506.
4. Confirm your selection with *[ENTER]*.
   ⇨ The desired address is saved.
5. To exit the menu, press *[MENU]*, or wait 30 seconds.

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

Mode	Highest possible DMX address
7 channels	506
10 channels	503
27 channels	486

Specifying the DMX mode

The device can be controlled in 27, 10 or 7-channel mode. To specify the desired mode, proceed as follows:

1. Open the main menu.
2. Navigate to *'DMX Settings ➔ Channel Mode'*.
3. Use *[UP]* and *[DOWN]* to switch between *'Mode1(27)'*, *'Mode2(10)'* and *'Mode3(7)'*.
4. Confirm your selection with *[ENTER]*.
   ⇨ The desired mode is saved.
5. To exit the menu, press *[MENU]*, or wait 30 seconds.

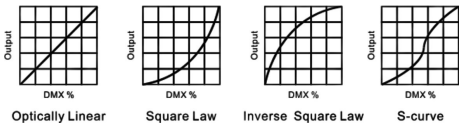
Behaviour on DMX signal interrupt

1. Open the main menu.
2. Navigate to *'DMX Settings ➔ No DMX Status'*.
3. Use *[UP]* and *[DOWN]* to select one of the following statuses:
   - *'Blackout'* (The lamp turns off)
   - *'Hold'* (The device continues to operate in the current mode with the last active DMX values until the signal returns)
   - *'Manual'* (The device accepts the DMX value stored in the *'Manual Test'* menu)
4. Confirm your selection with *[ENTER]*.
   ⇨ The desired status is saved.
5. To exit the menu, press *[MENU]*, or wait 30 seconds.

DMX value display

1. Open the main menu.
2. Navigate to *'DMX Settings ➔ View DMX Value'*.
3. Use *[UP]* and *[DOWN]* to select the desired DMX channel for which the value is to be displayed.
4. To exit the menu, press *[MENU]*, or wait 30 seconds.

Specify dimming mode



1. Open the main menu.
2. Navigate to *'Fixture Settings ➔ Dimmer Curve'*.
3. Use *[UP]* and *[DOWN]* to select one of the following settings:
   - *'Linear'*: The light intensity increases linearly with the DMX value.
   - *'Square Law'*: The light intensity is finer in the lower range, and can be adjusted in the upper range.
   - *'Inv SQ Law'*: The light intensity is coarser in the lower range, and can be adjusted in the upper range.
   - *'S Curve'*: The light intensity is fine in the upper and lower range, and can be adjusted in the mid range.
4. Confirm your selection with *[ENTER]*.
   ⇨ The desired setting is saved.
5. To exit the menu, press *[MENU]*, or wait 30 seconds.

Specifying the dimmer speed

1. Open the main menu.
2. Navigate to *'Fixture Settings ➔ Dimmer Speed'*.
3. Use *[UP]* and *[DOWN]* to select *'Fast'* or *'Smooth'*.
4. Confirm your selection with *[ENTER]*.
   ⇨ The dimmer speed is specified.
5. To exit the menu, press *[MENU]*, or wait 30 seconds.

Specifying the white balance

You can specify the white balance for all LEDs, or make individual settings for each of the 6 LEDs.

1. Open the main menu.
2. Navigate to *'Fixture Settings ➔ White Balance'*.
3. Use *[UP]* and *[DOWN]* to select one of the following settings:
   - *'Red'* / *'Green'* / *'Blue'*: Overall balance for the respective colour for all LEDs.
   - *'Red1'* … *'Red6'*: Individual balance for the colour red for each LED.
   - *'Green1'* … *'Green6'*: Individual balance for the colour green for each LED.
   - *'Blue1'* … *'Blue6'*: Individual balance for the colour blue for each LED.
4. Confirm your selection with *[ENTER]*.
5. Use *[UP]* and *[DOWN]* to select a value between *'125'* and *'255'*.
   ⇨ The white balance is specified.
6. To exit the menu, press *[MENU]*, or wait 30 seconds.

Specifying pixel inversion

1. Open the main menu.
2. Navigate to *'Fixture Settings ➔ Invert Pixel'*.
3. Use *[UP]* and *[DOWN]* to select *'No'* (do not invert pixels) or *'Yes'* (invert pixels).
4. Confirm your selection with *[ENTER]*.
   ⇨ The pixel inversion is specified.
5. To exit the menu, press *[MENU]*, or wait 30 seconds.

Inverting the display

1. Open the main menu.
2. Navigate to *'Display Settings ➔ Display Invert'*.
3. Use *[UP]* and *[DOWN]* to select *'No'* (Display normal) or *'Yes'* (Display inverted).
   ⇨ Selecting *'Yes'* rotates the display by 180°.
4. Confirm your selection with *[ENTER]*.
   ⇨ The desired setting is saved.
5. To exit the menu, press *[MENU]*, or wait 30 seconds.

Selecting the unit for the temperature display

1. Open the main menu.
2. Navigate to *'Display Settings ➔ Temperature Unit'*.
3. Use *[UP]* and *[DOWN]* to select the *'°C'* (degrees Celsius) or *'°F'* (degrees Fahrenheit) submenu.
4. Confirm your selection with *[ENTER]*.
   ⇨ The desired setting is saved.
5. To exit the menu, press *[MENU]*, or wait 30 seconds.

Performing an automatic self test

1. Open the main menu.
2. Navigate to *'Fixture Test ➔ Auto Test'*.
   ⇨ The device immediately performs an automatic self test. The following functions are tested: Strobe, dimmer, all colours and pixel control.
3. To end the automatic self test and exit the menu, press *[MENU]*, or wait 30 seconds.

Performing a manual self test

1. Open the main menu.
2. Navigate to *'Fixture Test ➔ Manual Test'*.
   ⇨ The current channel is displayed.
3. Use *[UP]* and *[DOWN]* to select the channel for which the self test is to be performed.
4. Confirm your selection with *[ENTER]*.
5. Use *[UP]* and *[DOWN]* to select the type of self-test (strobe, dimmer, all colours or pixel control).
6. Confirm your selection with *[ENTER]*.
   ⇨ The device immediately performs the selected self test. The selected channel is displayed.
7. To end the self test and exit the menu, press *[MENU]*, or wait 30 seconds.

The device returns to its original DMX state after the self test. The test values are saved automatically when the device is switched off.

Displaying device information

1. Open the main menu.
2. Navigate to *'Information'*.
3. Use *[UP]* and *[DOWN]* to select the *'Fixture Use Hour'*, *'Temperature'*, *'Firmware Version'* or *'RDM UID'* submenu.
4. Confirm your selection with *[ENTER]*.
   ⇨ Depending on your selection, the operating hours, the device temperature, the firmware version or the RDM UID is displayed.
5. To exit the menu, press *[MENU]*, or wait 30 seconds.

Displaying and resetting LED information

1. Open the main menu.
2. Navigate to *'Information ➔ LED Use Hour'*.
3. Use *[UP]* and *[DOWN]* to select the *'Total LED Hour'* (total time) or *'LED On Hour'* (current switch-on time) submenu.
4. Confirm your selection with *[ENTER]*.
   ⇨ The desired selection is saved.

5. Use *[UP]* and *[DOWN]* to select the *'LED Hours Reset'* submenu.
6. Confirm your selection with *[ENTER]*.
   ⇨ A three-digit PIN is displayed.
7. Use *[UP]* and *[DOWN]* to enter the digits *'050'*.
8. Confirm your input with *[ENTER]*.
   ⇨ The previously selected LED operating hours are reset.
9. To exit the menu, press *[MENU]*, or wait 30 seconds.

Displaying the fan state

1. Open the main menu.
2. Navigate to *'Information ➔ Fan State'*.
3. Use *[UP]* and *[DOWN]* to select *'Base 1'* or *'Base 2'*.
4. Confirm your selection with *[ENTER]*.
   ⇨ The fan state is displayed.
5. To exit the menu, press *[MENU]*, or wait 30 seconds.

Displaying and resetting an error log

1. Open the main menu.
2. Navigate to *'Information ➔ Error Logs'*.
3. Use *[UP]* and *[DOWN]* to select the *'Fixture Errors'* submenu.
4. Confirm your selection with *[ENTER]*.
   ⇨ The desired selection is saved.
5. Use *[UP]* and *[DOWN]* to select the *'Reset Error Log'* submenu.
6. Confirm your selection with *[ENTER]*.
7. If you wish to reset the relevant error logs, select *'Yes'*. If you do not wish to reset anything, select *'No'*.
8. Confirm your selection with *[ENTER]*.
   ⇨ If you selected *'Yes'*, a three-digit PIN is displayed; otherwise the previous submenu is displayed again.
9. Use *[UP]* and *[DOWN]* to enter the digits *'050'*.
10. Confirm your input with *[ENTER]*.
    ⇨ The error logs are reset.
11. To exit the menu, press *[MENU]*, or wait 30 seconds.

Resetting to factory defaults

1. Open the main menu.
2. Navigate to *'Factory Settings'*.
3. Confirm your selection with *[ENTER]*.
4. If you wish to reset the device to the factory settings, select *'Yes'* and confirm with *[ENTER]*.
5. Use *[UP]* and *[DOWN]* to enter the password *'011'* and confirm with *[SET]*
6. If you do not wish to reset anything, select *'No'* and confirm with *[ENTER]*.

7. To exit the menu, press *[MENU]*, or wait 30 seconds.

RDM functions

Certain menus of the device and functions can be called up via the RDM protocol.

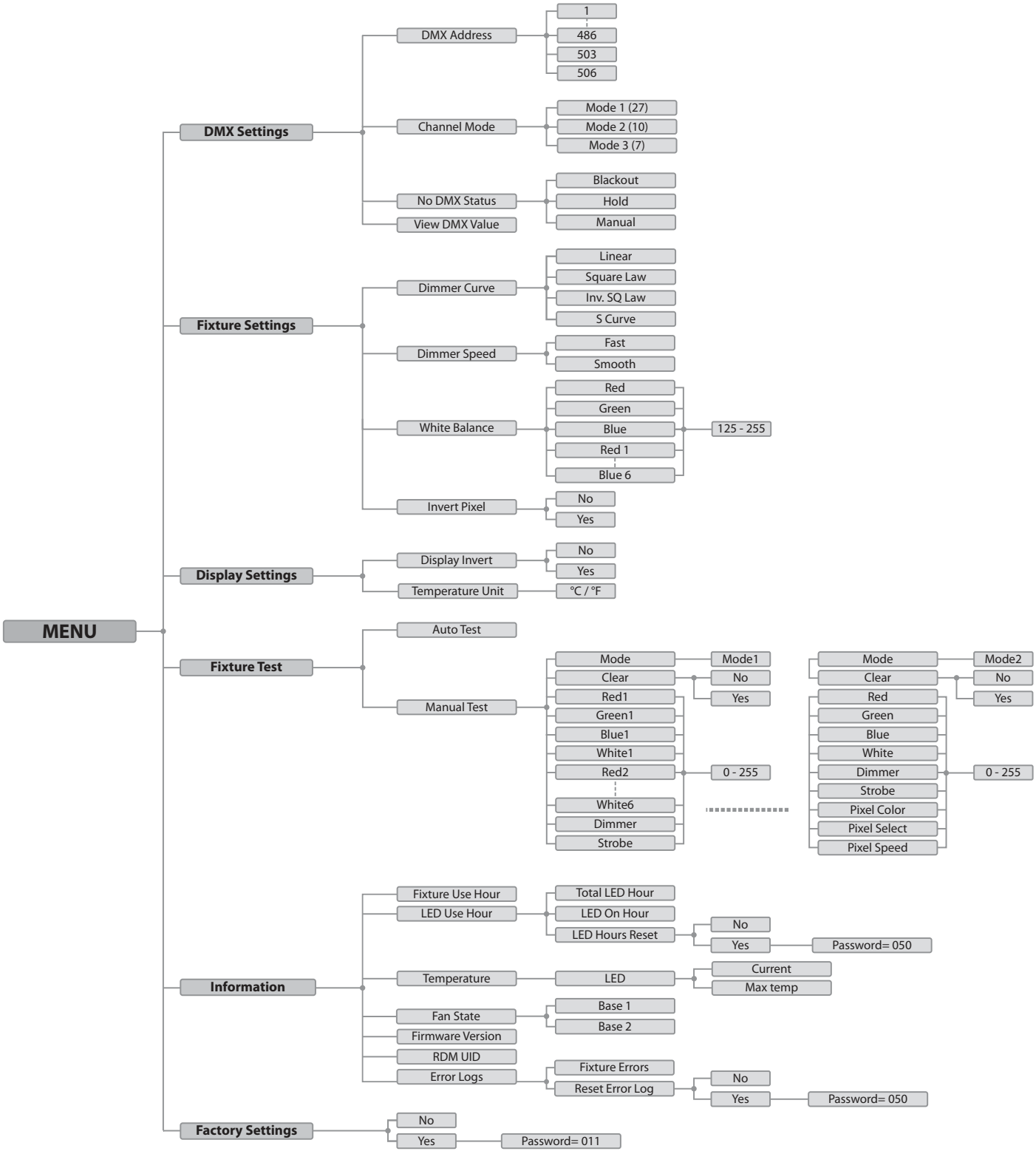
RDM-Code	RDM Device ID	Model ID	RDM Personality ID
0074h	Random, based on the respective device ID	0x536(1334)	0x0103(27CH) 0x0203(10CH) 0x0303(7CH)

The parameter IDs are implemented as follows for different commands:

Parameter ID	Command *'Discovery'*	Command *'Set'*	Command *'Get'*
DISC_UNIQUE_BRANCH	X	X	X
DISC_MUTE	X	X	X
DISC_UN_MUTE	X	X	X
DEVICE_INFO	X		
SUPPORTED_PARAMETERS	X		X
SOFTWARE_VERSION_LABEL	X		X
DMX_START_ADDRESS	X	X	X
IDENTIFY_DEVICE	X		X
DEVICE_MODEL_DESCRIPTION	X		X
STATUS_MESSAGES	X		X
MANUFACTURER_LABEL	X		X
DEVICE_LABEL	X		X
FACTORY_DEFAULTS	X	X	
DMX_PERSONALITY	X	X	X
DMX_PERSONALITY_DESCRIPTION	X		
SENSOR_DEFINITION	X		
SENSOR_VALUE	X	X	X
DEVICE_HOURS	X		X
RESET_DEVICE	X	X	
DIMMER_SPEED	X	X	X
MOTOR_OFFSET	X	X	X

X - Command implemented for the respective parameter ID

7.3 Menu overview



7.4 Settings menu

The following basic settings can be adjusted in the settings menu:

- Colour zero position setting (color offset RGBW)

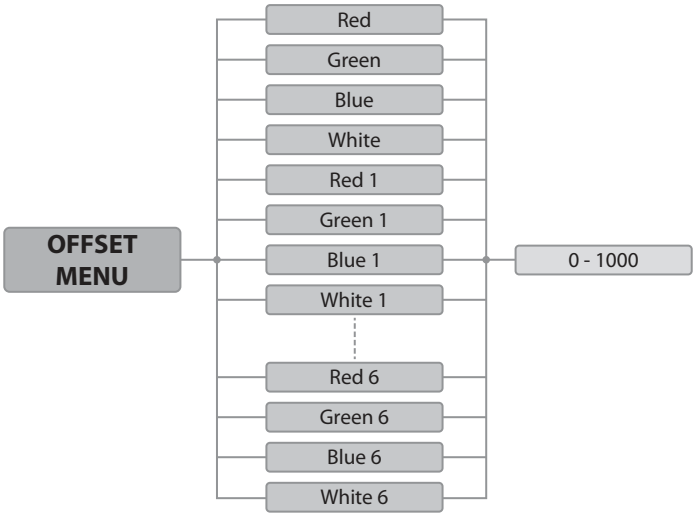
How to access the settings menu

1. Press *[MENU]*.
2. Press and hold *[ENTER]* for 3 seconds.
   ⇨ The settings menu opens up.
3. To exit the settings menu, press *[MENU]*, or wait 30 seconds.

Colour zero position setting (color offset RGBW)

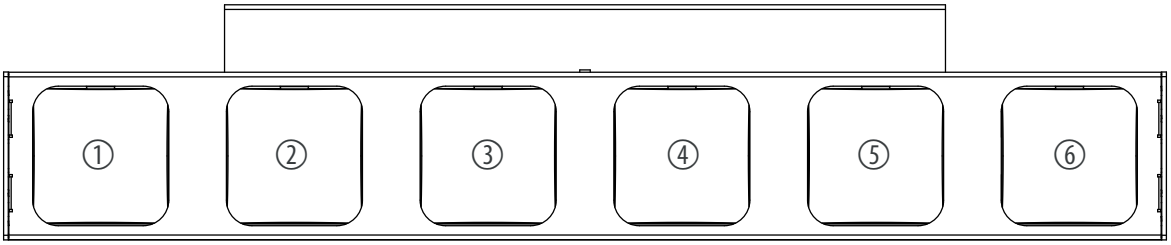
1. Open the settings menu.
2. Navigate to *'Red'/'Green'/'Blue'/'White'…'Red6'/'Green6'/'Blue6'/'White6'*.
3. Use *[UP]* and *[DOWN]* to select a value between 0 and 1000.
4. Confirm your selection with *[ENTER]*.
   ⇨ The settings are saved and immediately effective.
5. To exit the settings menu, press *[MENU]*, or wait 30 seconds.

Overview (settings menu)



7.5 LED layout

The device is equipped with 6 RGBW LEDs. They are set up as follows and assigned to the corresponding DMX functions.



7.6 Functions in 7-channel DMX mode

Channel	Value	Function
1	0…255	Red intensity, 0 % … 100 %
2	0…255	Green intensity, 0 % … 100 %
3	0…255	Blue intensity, 0 % … 100 %
4	0…255	White intensity, 0 % … 100 %
5	0…255	Dimmer, 0 % … 100 %
6	0…255	Dimmer, fine adjustment
7	Strobe	
	0…15	Open
	16…131	Strobe effect (slow to fast)
	132…139	Open
	140…181	Pulse open effect (slow to fast)
	182…189	Open
	190…231	Pulse close effect (slow to fast)
	232…239	Open
	240…247	Random strobe effect (slow to fast)
	248…255	Open

7.7 Functions in 10-channel DMX mode

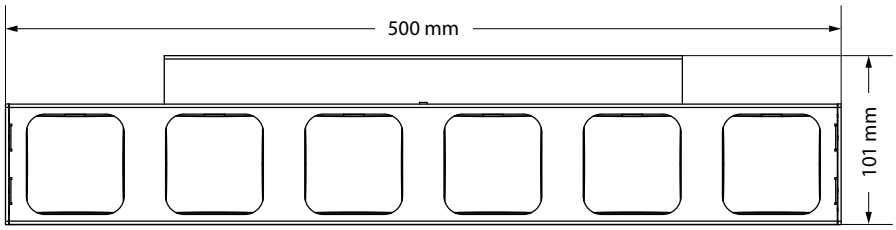
Channel	Value	Function
1	0…255	Red intensity, 0 % … 100 %
2	0…255	Green intensity, 0 % … 100 %
3	0…255	Blue intensity, 0 % … 100 %
4	0…255	White intensity, 0 % … 100 %
5	0…255	Dimmer, 0 % … 100 %
6	0…255	Dimmer, fine adjustment
7	Strobe	
	0…15	Open
	16…131	Strobe effect (slow to fast)
	132…139	Open
	140…181	Pulse open effect (slow to fast)
	182…189	Open
	190…231	Pulse close effect (slow to fast)
	232…239	Open
	240…247	Random strobe effect (slow to fast)
	248…255	Open
8	Colour macros	
	0…7	No function
	8…15	Colour 1
	16…23	Colour 2
	24…31	Colour 3
	32…39	Colour 4
	40…47	Colour 5
	48…55	Colour 6
	56…63	Colour 7
	64…71	Colour 8
	72…79	Colour 9
	80…87	Colour 10
	88…95	Colour 11
	96…103	Colour 12
	104…111	Colour 13
	112…119	Colour 14
	120…127	Colour 15
	128…135	Colour 16
	136…143	Colour 17

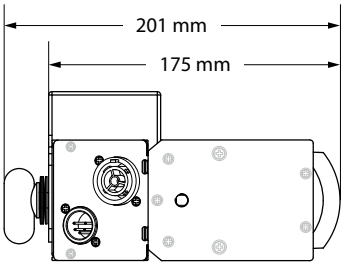
Channel	Value	Function
	144…151	Colour 18
	152…159	Colour 19
	160…167	Colour 20
	168…175	Colour 21
	176…183	Colour 22
	184…191	Colour 23
	192…199	Colour 24
	200…207	Colour 25
	208…215	Colour 26
	216…223	Colour 27
	224…231	Colour 28
	232…239	Colour 29
	240…247	Colour 30
	248…255	Colour 31
9	Pixel effect	
	0…15	No function
	16…31	Random
	32…47	Meteor effect 1
	48…63	Meteor effect 2
	64…79	Meteor effect 3
	80…95	Meteor effect 4
	96…111	Meteor effect 5
	112…127	Meteor effect 6
	128…143	Pixel effect 1
	144…159	Pixel effect 2
	160…175	Pixel effect 3
	176…191	Pixel effect 4
	192…207	Pixel effect 5
	208…223	Pixel effect 6
	224…239	Pixel effect 7
	240…255	Pixel effect 8
10	Speed of pixel effect	
	0…127	Increasing without transition
	128…255	Increasing with transition

7.8 Functions in 27-channel DMX mode

Channel	Value	Function
1	0…255	Red intensity 1, 0 % … 100 %
2	0…255	Green intensity 1, 0 % … 100 %
3	0…255	Blue intensity 1, 0 % … 100 %
4	0…255	White intensity 1, 0 % … 100 %
5	0…255	Red intensity 2, 0 % … 100 %
6	0…255	Green intensity 2, 0 % … 100 %
7	0…255	Blue intensity 2, 0 % … 100 %
8	0…255	White intensity 2, 0 % … 100 %
…	…	…
21	0…255	Red intensity 6, 0 % … 100 %
22	0…255	Green intensity 6, 0 % … 100 %
23	0…255	Blue intensity 6, 0 % … 100 %
24	0…255	White intensity 6, 0 % … 100 %
25	0…255	Dimmer, 0 % … 100 %
26	0…255	Dimmer, fine adjustment
27	Strobe	
	00…15	Open
	16…131	Strobe effect (slow to fast)
	132…139	Open
	140…181	Pulse open effect (slow to fast)
	182…189	Open
	190…231	Pulse close effect (slow to fast)
	232…239	Open
	240…247	Random strobe effect (slow to fast)
	248…255	Open

8 Technical specifications





Light source	6 × RGBW LED, each 40 W	
Optical properties	Beam angle	3°
Control	DMX or via buttons and display on the unit	
Number of DMX channels	7, 10, 27	
Input connections	Power supply	Lockable input socket (Power Twist TR1)
	DMX control	XLR chassis plug, 5-pin
Output connections	Power supply of further devices	Lockable output socket (Power Twist TR1)
	DMX control	XLR chassis socket, 5-pin
Power consumption	200 W	
Supply voltage	100 – 240 V ~ 50/60 Hz	
International Protection Rating	IP20	
Mounting options	Hanging, standing	
Dimensions (W × H × D)	500 mm × 101 mm × 201 mm	
Weight	5.9 kg	
Ambient conditions	Temperature range	0 °C…40 °C
	Relative humidity	20 %…80 % (non-condensing)

Further information

Suitable for outdoor use	no
Colour mix	RGBW
LED type	x-in-1
fanless	no
Remote control	not possible
Housing colour	black

9 Plug and connection assignment

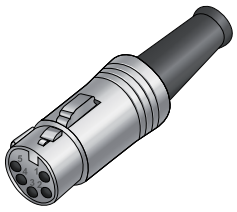
Introduction

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 five-pin XLR socket serves as DMX output, a five-pin XLR plug serves 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')
4	unused / second connection (DMX–)
5	unused / second connection (DMX+)

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	Check the mains connection and the main fuse.
No response to the DMX controller	1. Check the DMX connectors and cables for proper connection.
	2. Check the address settings and the DMX polarity.
	3. Try using another DMX controller.
	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.

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. When disposing of the device, comply with the rules and regulations that apply in your country. If in doubt, consult your local waste management facility. Proper disposal protects the environment as well as the health of your fellow human beings.

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.

You can return your old device to Thomann GmbH at no charge. Check the current conditions on *www.thomann.de*.

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