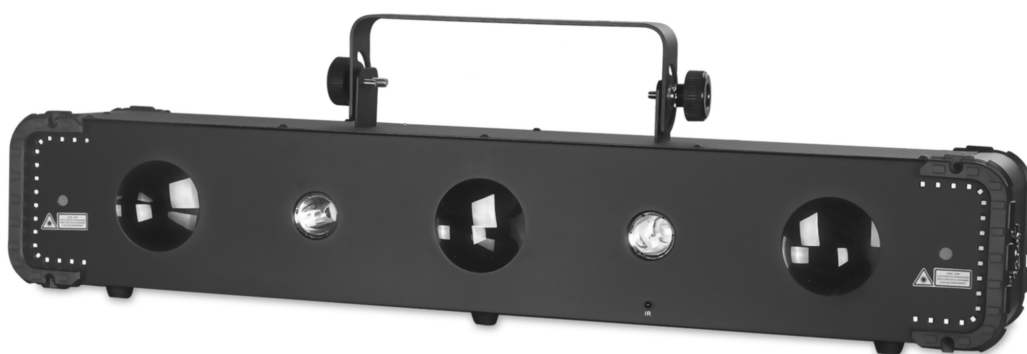




## All FX Bar LED effect



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

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## Table of contents

<b>1</b>	<b>General information</b>	<b>4</b>
1.1	Further information	4
1.2	Notational conventions	4
1.3	Symbols and signal words	5
<b>2</b>	<b>Safety instructions</b>	<b>7</b>
<b>3</b>	<b>Features</b>	<b>9</b>
<b>4</b>	<b>Installation</b>	<b>10</b>
<b>5</b>	<b>Starting up</b>	<b>13</b>
<b>6</b>	<b>Connections and controls</b>	<b>14</b>
<b>7</b>	<b>Operating</b>	<b>17</b>
7.1	Switching the device on / off	17
7.2	Operating mode Automatic	17
7.3	Sound control	18
7.4	Operating mode DMX	19
7.5	Operating mode Slave	19
7.6	System settings	20
7.6.1	Display illumination	20
7.6.2	Display reversal	20
7.7	Reset to factory default setting	20
7.8	Menu overview	21
7.9	Functions in 2-channel DMX mode	22
7.10	Functions in 5-channel DMX mode	23
7.11	Functions in 8-channel DMX mode	25
7.12	Functions in 10-channel DMX mode	28
<b>8</b>	<b>Technical specifications</b>	<b>31</b>
<b>9</b>	<b>Plug and connection assignments</b>	<b>33</b>
<b>10</b>	<b>Troubleshooting</b>	<b>34</b>
<b>11</b>	<b>Cleaning</b>	<b>35</b>
<b>12</b>	<b>Protecting the environment</b>	<b>36</b>

# 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](http://www.thomann.de).

## 1.1 Further information

On our website ([www.thomann.de](http://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'.

## Instructions

The individual steps of an instruction are numbered consecutively. The result of a step is indented and highlighted by an arrow.

### Example:

1. ➤ Switch on the device.
2. ➤ Press [Auto].  
⇒ Automatic operation is started.
3. ➤ Switch off the device.





## Cross-references



References to other locations in this manual are identified by an arrow and the specified page number. In the electronic version of the manual, you can click the cross-reference to jump to the specified location.

Example: See ➤ 'Cross-references' on page 5.

## 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
<b>DANGER!</b>	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.
<b>WARNING!</b>	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.
<b>NOTICE!</b>	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 – laser radiation.
	Warning – dangerous optical radiation.

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

## 2 Safety instructions

### Intended use

This device is intended for use as an electronic lighting effect by means of LED technology and for the projection of laser light effects. 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.*

### Laser safety basics

It is based on DIN EN 60825-1: 2015. The corresponding accident prevention regulation of the professional association in Germany is DGUV V11.

This device uses a class-2M laser. It is equipped with a safety key and a connection for an external safety switch. Always remove the safety key when the device is not operated.

### Safety



#### **DANGER!**

##### **Danger for children**

Ensure that plastic bags, packaging, etc. are disposed of properly and are not within reach of babies and young children. Choking hazard! Ensure that children do not detach any small parts (e.g. knobs or the like) from the unit. They could swallow the pieces and choke! Never let children unattended use electrical devices.



#### **DANGER!**

##### **Electric shock caused by high voltages inside**

Within the device there are areas where high voltages may be present. Never remove any covers. There are no user-serviceable parts inside. Do not use the device if covers, protectors or optical components are missing or damaged.



#### **DANGER!**

##### **Electric shock caused by short-circuit**

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



#### **DANGER!**

##### **Laser radiation – avoid exposure to beam**

The device uses a class-2M laser, classified according to EN 60825-1:2015. In this context take extreme care when using converging optical instruments.



#### **WARNING!**

##### **Laser radiation – safety switch required**

The laser beam must be defeatable any time during operation, to avoid hazards by faults, unsafe operation conditions, or disturbance within the audience. Therefore you have to connect a safety switch (emergency shut off) to the unit, by which you can switch off the laser any time even from a remote observation point (e.g. FOH position).

**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!****Laser radiation – risk of fire**

Keep the area exposed to laser radiation free from flammable substances.

**NOTICE!****Risk of fire**

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

**NOTICE!****Operating conditions**

This device has been designed for indoor use only. To prevent damage, never expose the device to any liquid or moisture. Avoid direct sunlight, heavy dirt, and strong vibrations. Only operate the device within the ambient conditions specified in the chapter 'Technical specifications' of this user manual. Avoid heavy temperature fluctuations and do not switch the device on immediately after it was exposed to temperature fluctuations (for example after transport at low outside temperatures). Dust and dirt inside can damage the unit. When operated in harmful ambient conditions (dust, smoke, nicotine, fog, etc.), the unit should be maintained by qualified service personnel at regular intervals to prevent overheating and other malfunction.

**NOTICE!****Power supply**

Before connecting the device, ensure that the input voltage (AC outlet) matches the voltage rating of the device and that the AC outlet is protected by a residual current circuit breaker. Failure to do so could result in damage to the device and possibly injure the user. Unplug the device before electrical storms occur and when it is unused for long periods of time to reduce the risk of electric shock or fire.

**NOTICE!****Fire hazard due to exceedance of the maximum current**

The device can power other devices of identical construction. The current consumption of all other devices connected in series must not exceed the values indicated in the technical specifications. Otherwise you risk injuries and irreparable damages to the device. Only connect so many identical devices that the maximum current consumption is not exceeded. Ensure the sufficient dimensioning (wire cross section) of the power cables used for all devices connected in series.

**NOTICE!****Possible damage due to installation of a wrong fuse**

The use of different types of fuses can cause serious damage to the unit. Fire hazard! Only fuses of the same type may be used.

**NOTICE!****Possible staining**

The plasticiser contained in the rubber feet of this product may possibly react with the coating of your surface and after some time cause permanent dark stains. In case of doubt, do not put the rubber feet directly on the surface and use a suitable underlay if necessary, i.e. felt-pad floor protectors or similar.



### 3 Features

Special features of the device:

- 2 strobe arrays each with 18 cold white LEDs, 0.5 W each
- Grading laser with two laser diodes
- 2 beam spots each with 192 RGBWA LEDs, 0.12 W each
- 2 UV LEDs, 3 W each
- Control via DMX (4 different modes), buttons and display on the unit as well as the supplied infrared remote control
- 10 preprogrammed automatic shows
- Sound control
- Master / Slave mode
- Key switch secured

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

## 4 Installation

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

You can install the device standing or hanging. When in use, the device must be mounted at a solid surface or clamped to an approved truss.

Work from a stable platform whenever you install or move the device or when you perform any kind of maintenance. Block access under the work area.



### **DANGER!**

Follow the instructions in the chapter titled "Safety Instructions" in the user manual.

To avoid laser emission, remove the safety key before you start to install the device.



### **WARNING!**

#### **Stray laser radiation**

Inadequately secured additional components may cause stray laser radiation.

Make sure that all additional components are adequately secured.



### **WARNING!**

#### **Laser radiation – safety switch required**

The laser beam must be defeatable any time during operation, to avoid hazards by faults, unsafe operation conditions, or disturbance within the audience.

Therefore you have to connect a safety switch (emergency shut off) to the unit, by which you can switch off the laser any time even from a remote observation point (e.g. FOH position).



### **DANGER!**

Follow the instructions in the chapter titled "Safety Instructions" in the user manual.

To avoid laser emission, remove the safety key before you start to install the device.



## **WARNING!**

### **Risk of injury caused by falling objects**

Make sure that the installation complies with the standards and rules that apply in your country. Always secure the device with a secondary safety attachment, such as a safety cable or a safety chain.



## **NOTICE!**

### **Risk of overheating**

The distance between the light output and the illuminated surface must be more than 2.0 m (78.7 in).

Always ensure sufficient ventilation.

The ambient temperature must always be below 40 °C (104 °F).



## **NOTICE!**

### **Use of stands**

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



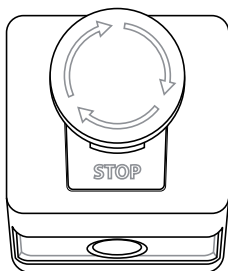
## **NOTICE!**

### **Possible data transmission errors**

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

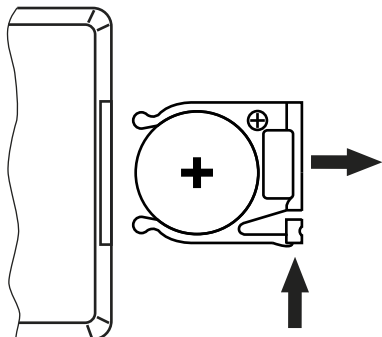
Never connect the DMX input or output to audio devices such as mixers or amplifiers.

## **Safety switch (emergency stop)**



Connect the optional remote-control safety switch to the corresponding socket of the device. If you press the switch, the laser beam will be switched off immediately. To unlock the switch and resume operation, turn the knob clockwise.

### Inserting the battery into the remote control



Press the lock of the battery holder to the centre of the housing and pull out the battery holder like a drawer. Insert the battery. The battery is correct if the positive pole points to the housing base of the remote control. Slide the battery holder back into the remote until it clicks into place.

When shipping, the battery is already installed in the remote and protected against discharge by a transparent plastic foil. Remove the plastic foil prior to first use.



#### **NOTICE!**

##### **Possible damage by leaking batteries**

Leaking batteries can cause permanent damage to the device.

Take batteries out of the device if it is not going to be used for a longer period.



#### **NOTICE!**

##### **Risk of fire due to incorrect polarity**

Incorrectly inserted batteries may destroy the device or the batteries.

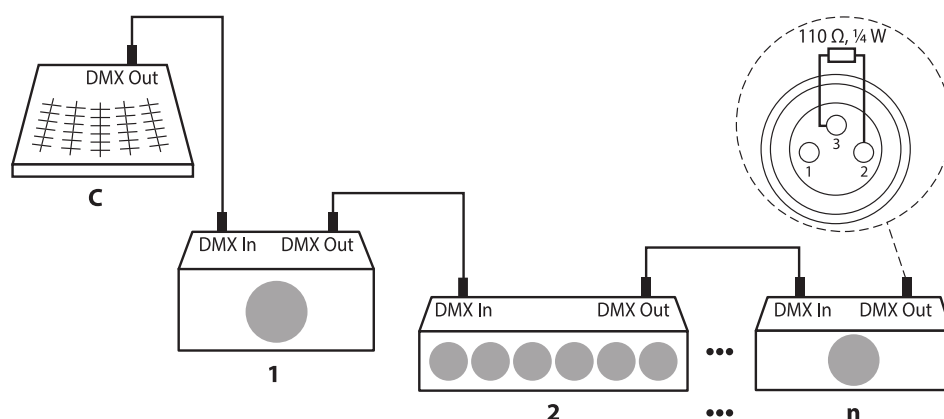
Ensure that proper polarity is observed when inserting batteries.

## 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  $\Omega$ , 1/4 W).



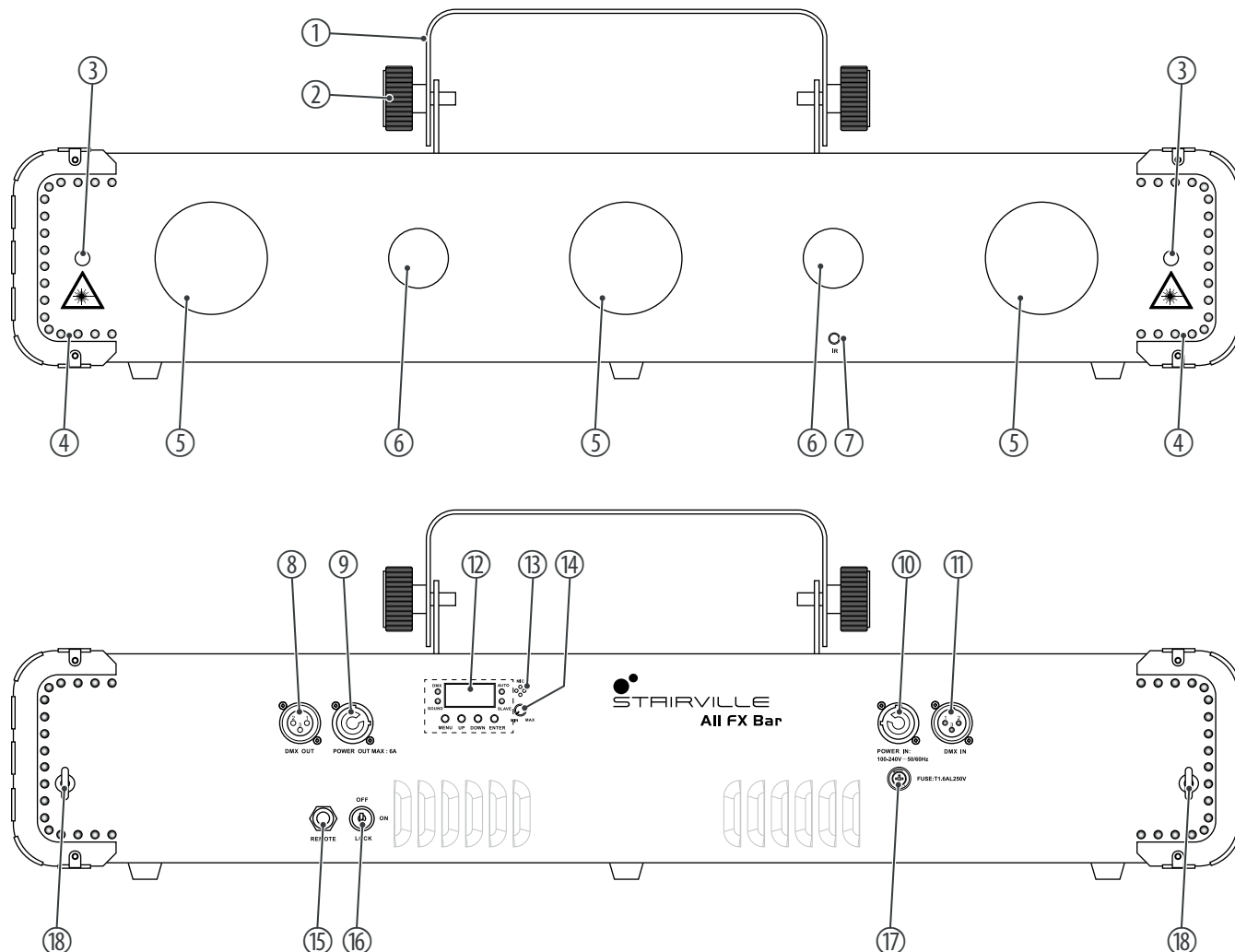
The DMX indicator next to the display lights up as soon as a DMX signal is present.

### 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

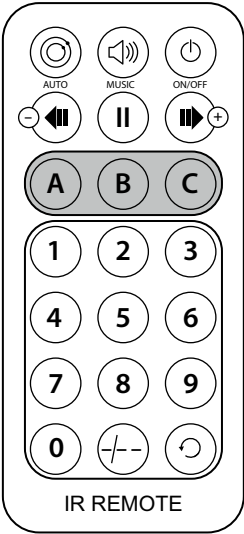
### Front panel



- |   |  |
|---|--|
| 1 | Swivelling mounting bracket                            |
| 2 | Locking screw for the mounting bracket                 |
| 3 | Laser aperture.  |
| 4 | Strobe LEDs  |
| 5 | Beam spots   |
| 6 | UV spots   |
| 7 | [IR]<br>Infrared sensor for the remote control signals |

8	<i>[DMX OUT]</i> DMX output, designed as XLR panel socket, 3-pin
9	<i>[POWER OUT]</i> Lockable output socket (Power Twist) for powering a connected device Output current 6 A max.
10	<i>[POWER IN]</i> Lockable input socket (Power Twist) for mains power supply
11	<i>[DMX IN]</i> DMX input, designed as XLR panel plug, 3-pin
12	Display, function buttons and status LEDs
	<i>[MENU]</i> Activates the main menu and toggles between menu items. Closes an opened submenu.
	<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.
	<i>[DMX]</i> The LED indicates that a signal is present at the DMX input.
	<i>[SOUND]</i> The LED lights up when the built-in microphone for the sound control detects a signal.
	<i>[AUTO]</i> The LED lights up when an automatic show is running.
	<i>[SLAVE]</i> The LED indicates that the device is in 'Slave' mode.
13	<i>[MIC]</i> Microphone for sound control
14	<i>[MIN/MAX]</i> Controller for the sensitivity of the built-in microphone
15	<i>[REMOTE]</i> Connection for optional remote safety switch (emergency stop).
16	Safety key switch for the laser
17	Fuse holder
18	Safety cable eyelet

Infrared remote control



Button labelling:	Function
[AUTO]	Enable / disable the automatic mode, selecting programme 'Au01' ... 'Au14'.
[MUSIC]	Enable / disable the sound-controlled mode, selecting mode 'So01' ... 'So14'.
[ON/OFF]	Turns the device on and off
⏮, ⏭	Buttons for increasing / decreasing the programme run speed.
[II]	Without function
[A], [B], [C]	Without function
[0] ... [9]	Selecting programme speed (0 = slow, 9 = fast)
[-/--]	Without function
↻	Button to switch between auto and sound-controlled mode.



## 7 Operating

### 7.1 Switching the device on / off

#### Switching on

1. ➤ Verify that all required laser safety precautions have been taken. Make sure that there is no one in the reach of the laser beam.
2. ➤ Connect an external safety switch to the *[REMOTE]* connection (e.g. an emergency stop button) or another equivalent device with protection function.
3. ➤ Insert the safety key into the lock.
4. ➤ If not already done, connect the device to the mains.
5. ➤ After a few seconds, the fan and the motors start to work. The display shows the current version number of the device.  
⇒ The device is operational.
6. ➤ Turn the safety key to the 'ON' position to turn the laser beam on.

#### Turning off

1. ➤ Turn the safety key to the 'OFF' position to turn the laser beam off and remove the key. Keep the safety key under control.
2. ➤ Disconnect the device from the mains.

### 7.2 Operating mode Automatic

This setting is only relevant if the device is not controlled via a DMX controller and not working as slave in a master / slave configuration.

1. ➤ Press *[MENU]* repeatedly, until the display shows 'Aut' and confirm with *[ENTER]*.
2. ➤ Press *[UP]* or *[DOWN]* to select between automatic programmes 'Au01' ... 'Au14'.
3. ➤ Confirm the selection with *[ENTER]*.  
⇒ The selected automatic programme is played back immediately.
4. ➤ Press *[ENTER]* again to open the settings menu for the programme run speed.
5. ➤ Press *[UP]* or *[DOWN]* to set the programme run speed between 'S 1' (slow) ... 'S100' (fast).
6. ➤ Confirm the selection with *[ENTER]*.
7. ➤ To return to the main menu without making changes, press *[MENU]*.

### 7.3 Sound control

1. ➤ Press *[MENU]* repeatedly, until the display shows 'Sou' and confirm with *[ENTER]*.
2. ➤ Press *[UP]* or *[DOWN]* to select between sound-controlled programmes 'So01' ... 'So14'.
3. ➤ Confirm the selection with *[ENTER]*.
4. ➤ Use the controller *[MIN/MAX]* to adjust the sensitivity of the built-in microphone.
5. ➤ To return to the main menu without making changes, press *[MENU]*.

## 7.4 Operating mode DMX

### Setting the DMX mode

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

1. ➤ Press **[MENU]** repeatedly, until the display shows 'dMX' and confirm with **[ENTER]**.  
⇒ The display shows 'd 1'.
2. ➤ Press **[ENTER]** again to open the settings menu for the DMX mode.
3. ➤ Press **[UP]** or **[DOWN]** to select the desired DMX mode and confirm with **[ENTER]**.

The following DMX modes are available:

Menu level 2	Description
'02Ch'	2-channel mode
'05Ch'	5-channel mode
'08Ch'	8-channel mode
'10Ch'	10-channel mode

### Setting the DMX address

5. ➤ After confirming the DMX mode, press **[UP]** or **[DOWN]** to select a value between 1 and 512 for the desired DMX address (display shows 'd 1'... 'd512') and confirm the selection with **[ENTER]**.

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

Mode	Highest possible DMX address
2-channel mode	511
5-channel mode	508
8-channel mode	505
10-channel mode	503

6. ➤ To return to the main menu without making changes, press **[MENU]**.

## 7.5 Operating mode Slave

In this mode, the device exactly follows the operation of the master that it is connected to.

1. ➤ Press **[MENU]** repeatedly, until the display shows 'SLA' and confirm with **[ENTER]**.  
⇒ The display shows 'SLAV'. The Slave mode is activated.
2. ➤ To return to the main menu without making changes, press **[MENU]**.

## 7.6 System settings

### 7.6.1 Display illumination

1. ➤ Press *[MENU]* repeatedly, until the display shows 'SYS' and confirm with *[ENTER]*.
2. ➤ Press *[UP]* or *[DOWN]* and select 'LEdS' and confirm with *[ENTER]*.
3. ➤ Press *[UP]* or *[DOWN]* and choose between 'on' (display lighting is switched off after 35 seconds) and 'oFF' (display lighting is permanently switched on).
4. ➤ Confirm the selection with *[ENTER]*.
5. ➤ To return to the main menu without making changes, press *[MENU]*.

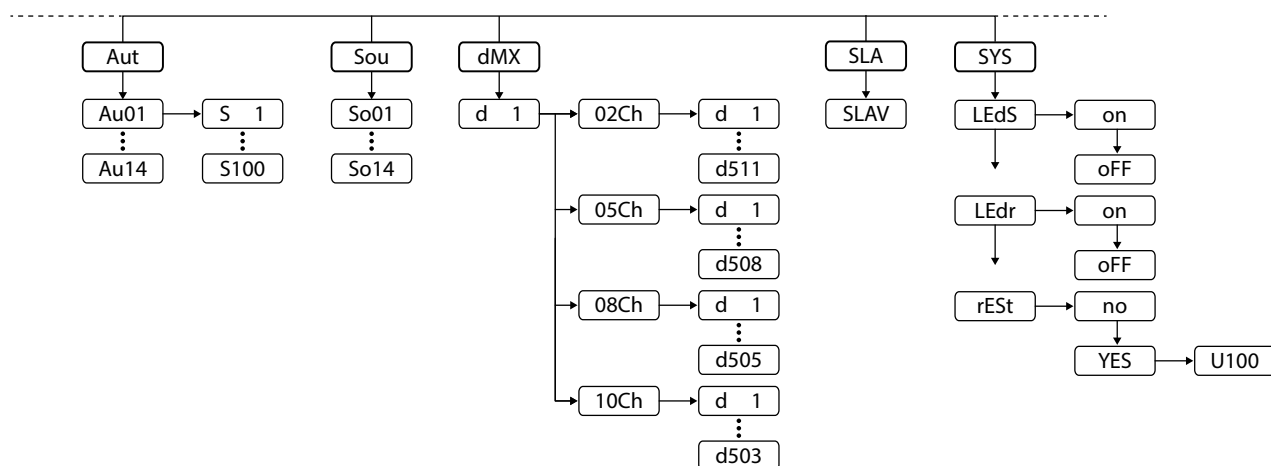
### 7.6.2 Display reversal

1. ➤ Press *[MENU]* repeatedly, until the display shows 'SYS' and confirm with *[ENTER]*.
2. ➤ Press *[UP]* or *[DOWN]* and select 'LEdr' and confirm with *[ENTER]*.
3. ➤ Press *[UP]* or *[DOWN]* and choose between 'on' (display is rotated by 180°) and 'oFF' (display is in standard orientation).
4. ➤ Confirm the selection with *[ENTER]*.
5. ➤ To return to the main menu without making changes, press *[MENU]*.

## 7.7 Reset to factory default setting

1. ➤ Press *[MENU]* repeatedly, until the display shows 'SYS' and confirm with *[ENTER]*.
2. ➤ Press *[UP]* or *[DOWN]* and select 'rESt' and confirm with *[ENTER]*.
3. ➤ Press *[UP]* or *[DOWN]* and choose between 'no' (cancel reset) and 'YES' (reset to factory settings).
4. ➤ Confirm the selection with *[ENTER]*.  
⇒ The device is reset to the factory settings without a security query.
5. ➤ After the reset, the device restarts and the display shows 'U100'.
6. ➤ To return to the main menu without making changes, press *[MENU]*.

## 7.8 Menu overview



## 7.9 Functions in 2-channel DMX mode

Channel	Value	Function	
1		Automatic show for all components, if channel 2 = 0...250	Sound-controlled automatic show for all components, if channel 2 = 251...255
	0...5	Without function	Without function
	6...22	AUT1	SOU1
	23...40	AUT2	SOU2
	41...58	AUT3	SOU3
	59...76	AUT4	SOU4
	77...94	AUT5	SOU5
	95...112	AUT6	SOU6
	113...129	AUT7	SOU7
	130...147	AUT8	SOU8
	148...165	AUT9	SOU9
	166...183	AUT10	SOU10
	184...201	AUT11/	SOU11
	202...219	AUT12	SOU12
	220...237	AUT13/	SOU13
	238...255	AUT14/	SOU14
2	0...250	Run speed of the automatic show, from slow to fast, if channel 1 = 6...255	
	251...255	Sensitivity of the music control microphone from low to high, if channel 1 = 6...255	

## 7.10 Functions in 5-channel DMX mode

Channel	Value	Function	
<b>UV LEDs</b>			
1		Automatic show for UV LEDs, if channel 5 = 0...250	Sound-controlled automatic show for UV LEDs, if channel 5 = 251...255
	0...5	Without function	Without function
	6...55	AP01	SP01
	56...106	AP02	SP02
	107...155	AP03	SP03
	156...205	AP04	SP04
	206...255	APM (mix programme)	SPM (mix programme)
<b>Beam LEDs</b>			
2		Automatic show for beam LEDs, if channel 5 = 0...250	Sound-controlled automatic show for beam LEDs, if channel 5 = 251...255
	0...5	Without function	Without function
	6...13	AB01	SB01
	14...21	AB02	SB02
	22...29	AB03	SB03
	30...37	AB04	SB04
	38...45	AB05	SB05
	46...53	AB06	SB06
	54...61	AB07	SB07
	62...69	AB08	SB08
	70...77	AB09	SB09
	78...85	AB10	SB10
	86...93	AB11	SB11
	94...101	AB12	SB12
	102...109	AB13	SB13
	110...117	AB14	SB14
	118...125	AB15	SB15
	126...133	AB16	SB16
	134...141	AB17	SB17
	142...149	AB18	SB18

Channel	Value	Function	
	150...157	AB19	SB19
	158...165	AB20	SB20
	166...173	AB21	SB21
	174...181	AB22	SB22
	182...189	AB23	SB23
	190...197	AB24	SB24
	198...205	AB25	SB25
	206...213	AB26	SB26
	214...221	AB27	SB27
	222...229	AB28	SB28
	230...237	AB29	SB29
	238...245	AB30	SB30
	246...255	ABM (mix programme)	SBM (mix programme)
<b>Laser</b>			
3		Automatic show for laser, if channel 5 = 0...250	Sound-controlled automatic show for laser, if channel 5 = 251...255
	0...5	Without function	Without function
	6...40	AL01	SL01
	41...76	AL02	SL02
	77...112	AL03	SL03
	113...147	AL04	SL04
	148...183	AL05	SL05
	184...219	AL06	SL06
	220...255	ALM (mix programme)	SLM (mix programme)
<b>Strobe LEDs</b>			
4		Automatic show for strobe LEDs, if channel 5 = 0...250	Sound-controlled automatic show for strobe LEDs, if channel 5 = 251...255
	0...5	Without function	Without function
	6...27	AF01	SF01
	28...50	AF02	SF02
	51...73	AF03	SF03
	74...95	AF04	SF04
	96...118	AF05	SF05



Channel	Value	Function	
	119...141	AF06	SF06
	142...163	AF07	SF07
	164...186	AF08	SF08
	187...209	AF09	SF09
	210...232	AF10	SF10
	233...255	AFM (mix programme)	SFM (mix programme)
<b>All components</b>			
5	0...250	Run speed of the automatic show from slow to fast, if channel 1, 2, 3 or 4 = 6...255	
	251...255	Sensitivity of the music control microphone from low to high, if channel 1, 2, 3 or 4 = 6...255	

## 7.11 Functions in 8-channel DMX mode

Channel	Value	Function	
UV LEDs 1 and 2			
1	0...128	Dimmer (0 % to 100 %)	
	129...255	Strobe effect with increasing speed	
Beam LEDs			
2		Automatic show for beam LEDs	Sound-controlled automatic show for beam LEDs, if channel 8 = 36...71, 142...176 or 212...255
	0...5	Without function	Without function
	6...13	AB01	SB01
	14...21	AB02	SB02
	22...29	AB03	SB03
	30...37	AB04	SB04
	38...45	AB05	SB05
	46...53	AB06	SB06
	54...61	AB07	SB07
	62...69	AB08	SB08
	70...77	AB09	SB09
	78...85	AB10	SB10
	86...93	AB11	SB11
	94...101	AB12	SB12

Channel	Value	Function	
	102...109	AB13	SB13
	110...117	AB14	SB14
	118...125	AB15	SB15
	126...133	AB16	SB16
	134...141	AB17	SB17
	142...149	AB18	SB18
	150...157	AB19	SB19
	158...165	AB20	SB20
	166...173	AB21	SB21
	174...181	AB22	SB22
	182...189	AB23	SB23
	190...197	AB24	SB24
	198...205	AB25	SB25
	206...213	AB26	SB26
	214...221	AB27	SB27
	222...229	AB28	SB28
	230...237	AB29	SB29
	238...245	AB30	SB30
	246...255	ABM (mix programme)	SBM (mix programme)
	3	0...255	Run speed of the automatic show, from slow to fast, if channel 2 = 6...255
0...255		Strobe effect with increasing speed, if channel 4 = 6...255	
Laser			
4	If channel 4 = 129...255, channel 3 must be = 1...255		
	Sound-controlled automatic show for laser, if channel 8 = 72...106, 142...176 or 212...255		
	0...5	Without function	
	6...48	Red laser switched on	
	49...89	Green laser switched on	
	90...131	Red and green lasers switched on	
	132...173	Strobe effect red laser, green laser switched on	
	174...215	Red laser switched on, strobe effect green laser	
	216...255	Strobe effect red and green lasers	
5	0	Without function	

Channel	Value	Function	
	1...127	Clockwise rotation, speed increasing	
	128	Laser paused SF01	
	129...255	Counter-clockwise rotation, speed increasing SF02	

**Strobe LEDs**

6		Automatic show for strobe LEDs	Sound-controlled automatic show for strobe LED, if channel 8 = 107...141, 177...211 or 212...255
	0...5	Without function	Without function
	6...27	AF01	SF01
	28...50	AF02	SF02
	51...73	AF03	SF03
	74...95	AF04	SF04
	96...118	AF05	SF05
	119...141	AF06	SF06
	142...163	AF07	SF07
	164...186	AF08	SF08
	187...209	AF09	SF09
	210...232	AF10	SF10
	233...255	AFM (mix programme)	SFM (mix programme)
7	0...250	Run speed of the automatic show, from slow to fast, if channel 6 = 6...255	

**Beam LEDs, laser, strobe LEDs**

8	0...35	Without function	
	36...71	Sound-controlled automatic show for beam LEDs (laser and strobe LEDs follow the speed settings in channel 5 and channel 7)	
	72...106	Sound-controlled automatic show for laser (beam LEDs and strobe LEDs follow the speed settings in channel 3 and channel 7)	
	107...141	Sound-controlled automatic show for strobe LEDs (beam LEDs and laser follow the speed settings in channel 3 and channel 5)	
	142...176	Sound-controlled automatic show for beam LEDs and laser (strobe LEDs follow the speed settings in channel 7)	
	177...211	Sound-controlled automatic show for strobe LEDs and laser (beam LEDs follow the speed settings in channel 3)	
	212...255	Sound-controlled automatic show for beam LEDs, laser and strobe LEDs	

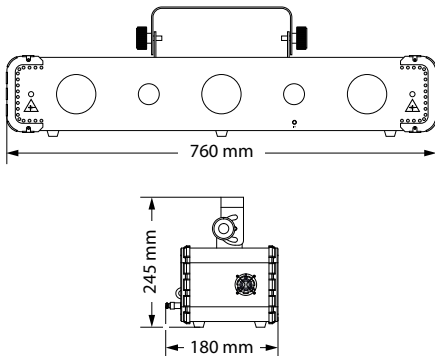
## 7.12 Functions in 10-channel DMX mode

Channel	Value	Function	
<b>UV LED 1</b>			
1	0...255	Dimmer (0 % to 100 %)	
<b>UV LED 2</b>			
2	0...255	Dimmer (0 % to 100 %)	
<b>UV LEDs 1 and 2</b>			
3		If channel 1 or 2 = 1...255	
	0...250	Strobe effect with increasing speed	
	251...255	Sound-controlled strobe effect	
<b>Beam LEDs</b>			
4		Automatic show for beam LEDs, if channel 5 = 0...250	Sound-controlled automatic show for beam LEDs, if channel 5 = 251...255
	0...5	Without function	Without function
	6...13	AB01	SB01
	14...21	AB02	SB02
	22...29	AB03	SB03
	30...37	AB04	SB04
	38...45	AB05	SB05
	46...53	AB06	SB06
	54...61	AB07	SB07
	62...69	AB08	SB08
	70...77	AB09	SB09
	78...85	AB10	SB10
	86...93	AB11	SB11
	94...101	AB12	SB12
	102...109	AB13	SB13
	110...117	AB14	SB14
	118...125	AB15	SB15
	126...133	AB16	SB16
	134...141	AB17	SB17
	142...149	AB18	SB18
	150...157	AB19	SB19

Channel	Value	Function	
	158...165	AB20	SB20
	166...173	AB21	SB21
	174...181	AB22	SB22
	182...189	AB23	SB23
	190...197	AB24	SB24
	198...205	AB25	SB25
	206...213	AB26	SB26
	214...221	AB27	SB27
	222...229	AB28	SB28
	230...237	AB29	SB29
	238...245	AB30	SB30
	246...255	ABM (mix programme)	SBM (mix programme)
5	0...255	Run speed of the automatic show, from slow to fast, if channel 4 = 6...255	
	0...255	Sensitivity of the music control microphone from low to high, if channel 4 = 6...255	
Laser			
6	If channel 6 = 129...255, channel 7 must be = 6...255		
	Sound-controlled automatic show for laser, if channel 8 = 72...106, 142...176 or 212...255		
	0...5	Without function	
	6...48	Red laser switched on	
	49...89	Green laser switched on	
	90...131	Red and green lasers switched on	
	132...173	Strobe effect red laser, green laser switched on	
	174...215	Red laser switched on, strobe effect green laser	
	216...255	Strobe effect red and green lasers	
7	If channel 6 = 6...255		
	0...5	Without function	
	6...250	Strobe effect with increasing speed	
	251...255	Sound-controlled strobe effect	
8	0	Without function	
	1...127	Clockwise rotation, speed increasing	
	128	Laser paused SF01	

Channel	Value	Function	
	129...255	Counter-clockwise rotation, speed increasing SF02	
<b>Strobe LEDs</b>			
9		Automatic show for strobe LEDs, if channel 10 = 0...250	Sound-controlled automatic show for strobe LEDs, if channel 10 = 251...255
	0...5	Without function	Without function
	6...27	AF01	SF01
	28...50	AF02	SF02
	51...73	AF03	SF03
	74...95	AF04	SF04
	96...118	AF05	SF05
	119...141	AF06	SF06
	142...163	AF07	SF07
	164...186	AF08	SF08
	187...209	AF09	SF09
	210...232	AF10	SF10
	233...255	AFM (mix programme)	SFM (mix programme)
10	0...250	Run speed of the automatic show, from slow to fast, if channel 9 = 6...255	
	251...255	Sensitivity of the music control microphone from low to high, if channel 9 = 6...255	

## 8 Technical specifications



Light source	2 × strobe arrays: 18 × cold white LEDs 0.5 W each 3 × beam spots: 192 × RGBWA LEDs 0.12 W each 2 × laser: Green 30 mW / 532 nm, red 100 mW / 650 nm 2 × strobe arrays, 3 W each	
Control	DMX, infrared remote control, buttons and display on the unit	
Number of DMX channels	2, 5, 8 or 10	
Input connections	Voltage supply	Lockable input socket (Power Twist)
	DMX control	XLR chassis plug, 3-pin
	external safety switch	Interlock socket, 2-pin
Output connections	Power supply for further devices	Lockable output socket (Power Twist) Output current 6 A max.
	DMX control	XLR chassis socket, 3-pin
Laser class	2M	
Power consumption	40 W	
Operating supply voltage	100 - 240 V ~ 50/60 Hz	
Fuse	5 mm × 20 mm, 1.6 A, 250 V, slow-blow	
Battery remote control	Lithium ion button cell CR2025, 3 V	
Protection class	IP20	
Mounting options	hanging, standing	
Dimensions (W × H × D)	760 mm × 245 mm × 180 mm	
Weight	8.8 kg	
Ambient conditions	Temperature range	0 °C...40 °C
	relative humidity	20 %...80 % (non-condensing)

### Further information

Variant group	FX bar
Similar construction	Combination device
DMX control	yes
Master/Slave	yes
Remote control	included
Sound control	yes
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



### **DANGER!**

#### **Laser radiation inside**

During troubleshooting follow the instructions specified in [Chapter 2 'Safety instructions'](#) on page 7.

Only qualified personnel may carry out service work on the (open) device.

Suitable laser protection glasses are required for any activities at the device.

In the following we list a few common problems that may occur during operation. We give you some suggestions for easy troubleshooting:

Symptom	Remedy
The unit does not work, no light, the fan does not run	1. Check the power connection and main fuse.
	2. Check the safety key switch.
	3. Check the external safety switch (e.g., emergency stop button).
No response to the DMX controller	1. If the display shows a flashing number, for example '001', no DMX signal is being received. Check the DMX connectors and cables for proper connection.
	2. If the display does not flash and there is no response, check the address settings and 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.
No response to the remote control	1. Check the remote control battery.
	2. Try using the remote control at a different angle to the IR sensor on the front panel of the device.

## 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 packaging material



For the 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 batteries



Batteries must not be thrown away or incinerated; they must be disposed of in accordance with local regulations for the disposal of hazardous waste. Use the existing collection points for this.

Only dispose of lithium batteries when they are discharged. Remove replaceable lithium batteries from the device before disposal. Protect used lithium batteries against short circuits, for example by covering the poles with adhesive tape. Permanently built-in lithium batteries must be disposed of together with the device. Please inquire about an appropriate collection point.

### 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.







