fungeneration

WUFSL FX Box

User Manual

LED Effect

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IR
Austrittsöffnung
für Laserstrahlung
Outlet for laser beam

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.
CAUTION!	This combination of symbol and signal word indicates a possible dangerous situation that can result in minor 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 – laser radiation.

Warning signs	Type of danger
	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 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.

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.

CAUTION!

Risk of injury from laser!

This device contains a class 2M laser, classified according to EN 60825-1:2014+A11:2021. The accessible laser radiation is in a wavelength range of 400 nm to 700 nm, the output is 1 mW or less. If the beam cross-section is bundled by optical collecting instruments, looking into the laser beam can cause injuries to the eyes and affect the person's vision temporarily. As the operator, observe the applicable legal duties regarding safe operation before putting the device into service. Install the laser system in such a way that persons are not at risk while it is in operation. Do not look into the laser beam for any longer period of time. Do not use optical collecting instruments (such as magnifying glasses or lenses) to look into the laser beam, and ensure that laser beams are not directed to areas where optical collecting instruments are used. Have all work and repairs on class 2M lasers performed by trained experts. Never open a class 2M laser and do not make any technical changes. If you are unsure how to handle the laser safely, include a laser protection representative in your planning.

CAUTION!

Risk of injury due to stray laser radiation!

Additional components inadequately secured to the device as well as reflective objects and surfaces at the operating location can cause stray laser radiation, which can cause injuries. Make sure that additional components are always secured adequately. Make sure there are no reflective objects or surfaces in the range of the laser beams.

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 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.

NOTICE!

Risk of fire due to incorrect polarity!

Incorrectly inserted batteries may cause fires and destroy the device and the batteries. Observe the markings on the batteries and on the device. Ensure that proper polarity is observed when inserting batteries.

NOTICE!

Possible damage due to leaking batteries!

Batteries can leak and cause permanent damage to the device. Take the batteries out of the device if it is not going to be used for an extended period of time.

NOTICE!

Possible staining due to plasticiser in rubber feet!

The plasticiser contained in the rubber feet of this product may react with the coating of the floor and cause permanent dark stains after some time. If necessary, use a suitable mat or felt slide to prevent direct contact between the device's rubber feet and the floor.

Duties of the operator

As the operator of the laser system, you must comply with legal occupational safety obligations as per the OStrV (in Germany). The following applies in particular:

- Before putting into service, draw up an assessment of the risk posed by the direct and indirect effects of laser beams in line with the regulations applicable at the operating location.
- Apply appropriate technical safety measures (e.g. shielding, protective walls, barriers) on the basis of the exposure limits determined in the risk assessment.
- Restrict the range of the laser beams to a limited area in order to reduce the risk to persons as much as possible.
- Use technical and organisational safety measures to restrict access to the running laser system for unauthorised persons.
- Instruct staff on the basis of the risk assessment and familiarise them with the necessary safety measures.

3 Features

The LED effect is suitable for almost any application, for example in clubs, bars, and party rooms. The two laser diodes together with the LED lighting ensure extraordinary effects.

Special features of the device:

- 5-in-1 light effect
- Control via the supplied IR remote control
- Laser diodes:
  - Red: 100 mW
  - Green: 130 mW
- Waterfall effect: 1 × RGBW LED (5 W)
- Rays effect: 1 × RGB LED (6 W)
- UV and strobe effect: 4 × WUV LED (each 4 W)
- Automatic mode and sound control

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.

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.

Mounting options

You can install the unit in hanging or standing positions. When in use, the device must always be attached to a solid surface or an approved mount.

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 threaded through the safety eyelet on the rear side of the unit.

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.

CAUTION!

Risk of injury due to stray laser radiation!

Additional components inadequately secured to the device as well as reflective objects and surfaces at the operating location can cause stray laser radiation, which can cause injuries.

Make sure that additional components are always secured adequately.

Make sure there are no reflective objects or surfaces in the range of the laser beams.

CAUTION!

Risk of injury due to improper installation!

There is a risk of injury if a laser is set up incorrectly and the installation point is too low or too close to persons.

In order to comply with the maximum legal exposure limits, determine the actual radiation intensities at the operating location as well as the distances for laser attachment, and install the laser in line with the ambient conditions.

Make sure the laser is firmly attached, and prevent the laser beam from leaving the planned laser beam area (e.g. through screens, housings or software-specific direction restrictions).

Shield laser beams from each other if multiple lasers are operated simultaneously.

Install the laser in such a way that the laser beam does not enter any traffic zones.

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.

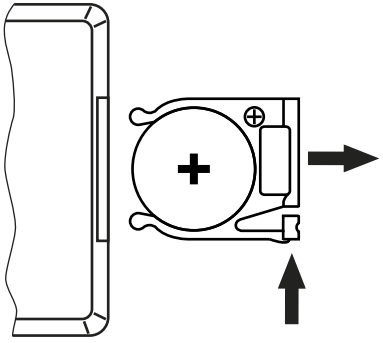
Make sure that illuminated surfaces are more than 2 m away.

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

Always ensure sufficient ventilation at the operating location.

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

Inserting the battery into the remote control



Push the lock of the battery holder towards the centre of the housing and pull out the battery holder like a drawer. Insert the batteries. 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 film. Remove the plastic film before initial use.

NOTICE!

Risk of fire due to incorrect polarity!

Incorrectly inserted batteries may cause fires and destroy the device and the batteries.

Observe the markings on the batteries and on the device.

Ensure that proper polarity is observed when inserting batteries.

NOTICE!

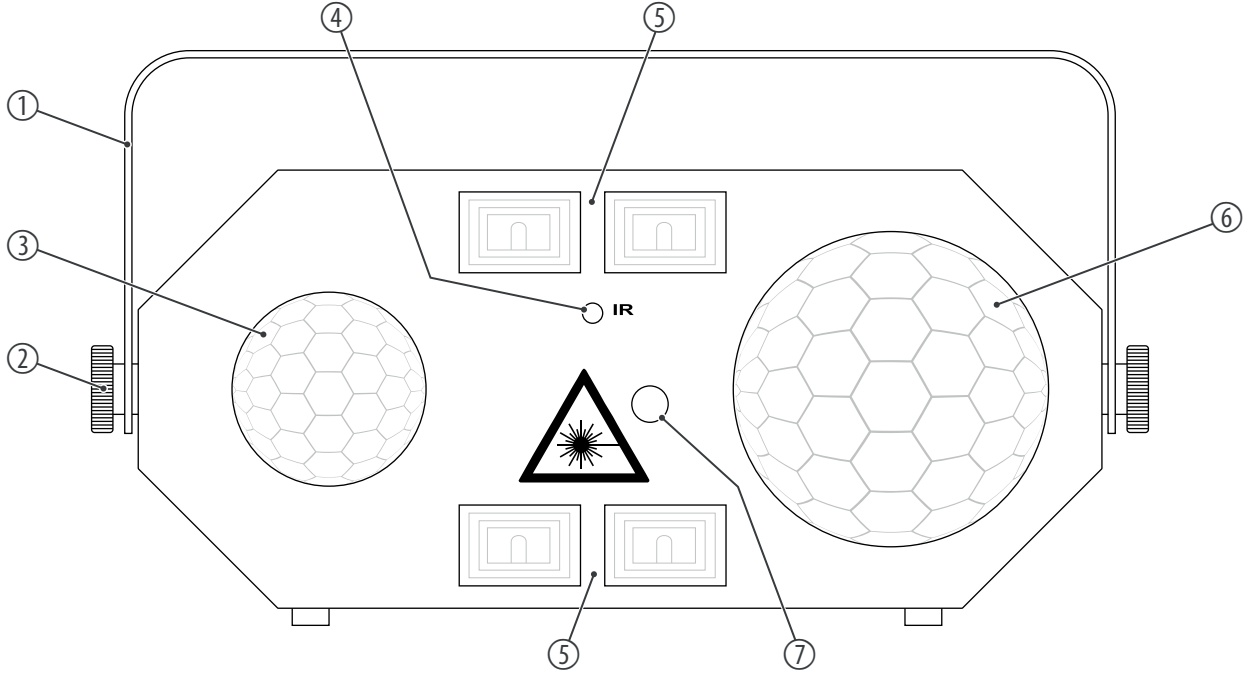
Possible damage due to leaking batteries!

Batteries can leak and cause permanent damage to the device.

Take the batteries out of the device if it is not going to be used for an extended period of time.

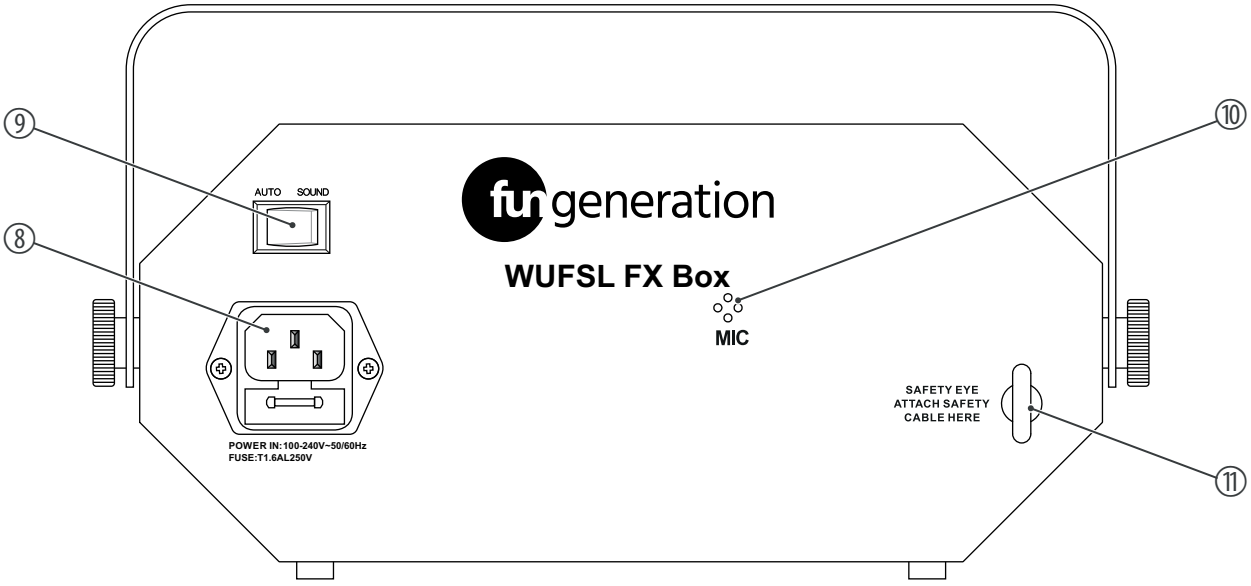
5 Connections and controls

Front panel



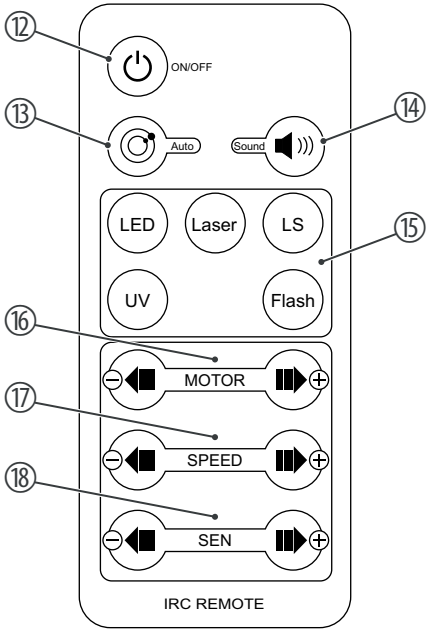
1	Mounting bracket
2	Locking screw for the mounting bracket
3	LED for the waterfall effect
4	Infrared sensor for the remote control signals
5	LEDs for UV and strobe effect
6	LED for the rays effect
7	Laser aperture.

Rear panel


⑨
⑧
⑩
⑪
AUTO SOUND
fungeneration
WUFSL FX Box
MIC
SAFETY EYE
ATTACH SAFETY
CABLE HERE
POWER IN:100-240V~50/60Hz
FUSE:T1.6AL250V

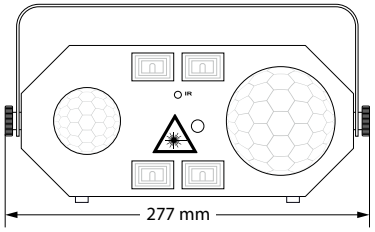
8	IEC chassis plug for the mains cable with fuse holder
9	Selector switch for the operating mode Set the selector switch to *[AUTO]* to activate the automatic mode. Set the selector switch to *[SOUND]* to activate the sound-controlled mode.
10	Microphone for sound-controlled operation
11	Safety cable eyelet

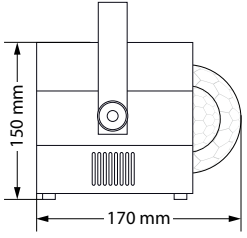
Remote control



12	*[ON/OFF]* | main switch, turns the device on and off.
13	*[AUTO]* | activates the Auto mode
14	*[SOUND]* | activates the sound-controlled operation
15	Effect buttons
	[LED] | activates the rays effect
	[Laser] | activates the green and red laser diode
	[LS] | activates the waterfall effect
	[UV] | activates the UV effect
	[Flash] | activates the strobe effect
16	*[MOTOR]* | with the rays effect or Waterfall effect activated, use *[–]* or *[+]* to adjust the motor speed.
17	*[SPEED]* | with the strobe effect activated, use *[–]* or *[+]* to adjust the flash frequency.
18	*[SEN]* | with activated sound-controlled operation, use *[–]* or *[+]* to adjust the sensitivity of the built-in microphone.

6 Technical specifications





Laser medium	Red: 650 nm	
	Green: 532 nm	
Laser power	Red: 100 mW	
	Green: 30 mW	
Laser class	2M	
Light source	Waterfall effect: 1 × RGBW LED, 5 W	
	Rays effect: 1 × RGB LED, 6 W	
	UV and strobe effect: 4 × WUV LED, each 4 W	
Control	Infrared remote control	
Input connections	Power supply	IEC chassis plug C14
Power consumption	max. 40 W	
Supply voltage	100 - 240 V ~ 50/60 Hz	
Battery remote control	Lithium-ion button cell CR2025, 3 V	
Fuse	5 mm × 20 mm, 1.6 A, 250 V, slow blow	

International Protection Rating	IP20	
Mounting options	Hanging, standing	
Dimensions (W × H × D), without bracket	277 mm × 150 mm × 170 mm	
Weight	2 kg	
Ambient conditions	Temperature range	0 °C…40 °C
	Relative humidity	20%…80% (non-condensing)

Further information

Similar design	Combination device
DMX control	No
Master/Slave	No
Remote control	included
Sound control	Yes
Display	No

7 Cleaning

CAUTION!

Risk of injury due to improper cleaning!

There is a risk of injury if cleaning is not performed properly.

To avoid unintentional laser radiation, switch off the laser before you start cleaning the device.

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.

8 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.