



LED Flash LF12 stroboscope



user manual

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I 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 <u>www.thomann.de</u>.



1.1 Further information

On our website (<u>www.thomann.de</u>) 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:

LetteringsThe letterings for connectors and controls are marked by square brackets and italics.Examples: [VOLUME] control, [Mono] button.

DisplaysTexts 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].
 - \Rightarrow Automatic operation is started.
- **3.** Switch off the device.

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
DANGER!	This combination of symbol and signal word indicates an immediate dangerous situation that will result in death or serious injury if it is not avoided.
WARNING!	This combination of symbol and signal word indicates a pos- sible dangerous situation that can result in death or serious injury if it is not avoided.
NOTICE!	This combination of symbol and signal word indicates a pos- sible dangerous situation that can result in material and environmental damage if it is not avoided.
Warning signs	Time of doubles
	Type of danger
Â	Warning – high-voltage.



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



2 Safety instructions

Intended use

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

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



Safety



DANGER!

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.

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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.



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.

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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.



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.





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!

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.

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3 Features

- Very bright LED strobe with floodlight function (2-in-1 effect) for show applications
- 12 × 5 W LEDs
- Control via DMX and via buttons and display on the unit
- Operating modes:
 - Sound Active
 - Master/Slave
 - DMX
 - Static Color
- Low power consumption
- Compact design

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.

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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 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.

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Risk of overheating

The distance between light output and the illuminated surface must be more than 1.5 m (19.7in).

Provide 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.



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.

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 truss. Use the openings provided on the two-piece bracket for attaching.

Always work from a stable platform whenever installing, moving or servicing the unit. In doing so, the area underneath the unit must be cordoned off.

The safety cable must be attached to the bracket.





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



5 Starting up

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



Connections in DMX mode

Connect the DMX input of the device to the DMX output of a DMX controller or another DMX device. Connect the output of the first DMX device to the input of the second one, and so on to form a daisy chain. Always ensure that the output of the last DMX device in the daisy chain is terminated with a resistor (110 Ω , ¼ W).





Connections in master/slave mode

When you configure a group of devices in master/slave mode, the first unit will control the other units for an automatic, sound-activated, synchronized show. This function is ideal when you want to start a show immediately. Connect the DMX output of the master device to the DMX input of the first slave device. Then connect the DMX output of the first slave device to the DMX input of the second slave device and so on.



6 Connections and controls

Front panel





1	LEDs.
2	Bracket adjustment knobs
3	Hanging bracket/floor stand.



Control panel and connections





4	Display.
5	[DMX In]
	DMX input.
б	[DMX Out]
	DMX output.
7	[Power In]
	Plug for mains cable.
8	[Power Out]
	Output socket to power another device with mains voltage.
9	[Down]
	Decrements the displayed value by one.
10	[Up]
	Increments the displayed value by one.



11	[Setup]	
	Chooses between the options of the selected mode.	
12	[Mode]	
	Activates the main menu for selecting the operating mode.	



7 Operation

Starting up the device	To start up the device, connect it to the mains. The device is immediately ready for operation.
	To select an operating mode, press <i>[Mode]</i> . If you do not press any key for about ten seconds, the display will be blanked. To turn the display on again, press any key. The previously selected menu is displayed again.
	The set values are retained during a power interruption.
'Sound Active' operating mode	The 'Sound Active' operating mode can only be activated when the device is operating alone or is the master in a master/slave configuration. This setting takes effect only when the device is not operated under DMX control. In this operating mode, the device responds to acoustic pulses which are recorded by the integrated microphone.
	Press [Mode] until the display shows 'SoUn'.
	Press [Setup]. Use the [Up] und [Down] buttons to set the sensitivity of the built-in microphone for the sound control in a range from 'SU.00' to 'SU.31'.



'Master/slave' operating mode	This setting takes effect only when the device is the slave in a master/slave configuration and is not operated under DMX control. In this operating mode, the device responds to the control signals of the master device.
	Press [Mode] until the display shows 'SLAv'.
DMX mode	This setting takes effect only when the device is operated under DMX control.
	Press [Mode] until the display shows 'd.xxx'.
	Use the [Up] and [Down] buttons to select a DMX address in a range from 'd.001' to 'd.512'.
	Press [Setup]. Use the [Up] and [Down] buttons to select one of the following DMX modes:



'1.1ch.', one channel	Brightness control via the connected controller, range: 1 255
'1.2ch.', one channel	Flash frequency contro via the connected controller, range: 1 255
<i>'3-ch.'</i> , three channels	Channel CH1: Brightness control via the connected con- troller, range: 1 255 Channel CH2: Flash frequency contro via the connected controller, range: 1 255 Channel CH3: Sensitivity control of the built-in micro- phone for the sound control via the connected con- troller, range: 1 255

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'Static Color' operating mode	The 'Static Color' operating mode can only be activated when the device is operating alone or is the master in a master/slave configuration. This setting takes effect only when the device is not operated under DMX control. The brightness and flashing frequency can be set manually on the device.
	Press [Mode] until the display shows 'C-ON'.
	Press [Setup]. The display shows 'C.255'. Use the [Up] and [Down] buttons to set the brightness in a range from 'C.000' to 'C.255' (off to maximum brightness).
	Press [Setup] again. The display shows 'F5.00'. Use the [Up] and [Down] buttons to set the flash frequency in a range from 'F5.00' to 'F5.99' (permanent light to maximum flash frequency).
Resetting to factory defaults	Proceed as follows to reset the device to factory defaults (e.g. if the device or the display stops responding to inputs).
	1. To disconnect the device from the power supply, unplug the power cord.
	2. Press and hold [<i>Mode</i>] and [<i>Setup</i>] simultaneously.
	3. Reconnect the device to the mains. The display briefly sows ' <i>resr</i> ' and then the current operating mode.

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8 Technical specifications

Light source	12 × LED strips, 5 W	
Optical properties	Beam angle	71°
Control	DMX	
Number of DMX channels	1, 3	
Input connections	Voltage supply	IEC chassis plug C14
	DMX control	XLR chassis socket, 3-pin
Output connections	Voltage supply	IEC chassis plug C13
	DMX control	XLR chassis socket, 3-pin
Power consumption	70 W	
Supply voltage	100 – 240 V ~ 50/60 Hz	
Fuse	5 mm × 20 mm, 1,5 A, 250 V, slow-blow	
Degree of protection	IP20	



Mounting options	Hanging, standing	
Dimensions (W \times H \times D)	307 mm \times 170 mm \times 118 mm	
Weight	3.6 kg	
Ambient conditions	Temperature range	0 °C40 °C
	Relative humidity	50 %, non condensing

Further information

LED	Yes
Colour mixture	White

9 Plug and connection assignments

Introduction

This chapter will help you select the right cables and plugs to connect your valuable equipment so that a perfect light experience is guaranteed.

Please take our tips, because especially in 'Sound & Light' caution is indicated: Even if a plug fits into a socket, the result of an incorrect connection may be a destroyed DMX controller, a short circuit or 'just' a not working light show!

DMX connections

The unit offers a 3-pin XLR socket for DMX output and a 3-pin XLR plug for DMX input. Please refer to the drawing and table below for the pin assignment of a suitable XLR plug.



Pin	Configuration	
1	Ground, shielding	
2	Signal inverted (DMX-, 'cold signal')	
3	Signal (DMX+, 'hot signal')	



10 Troubleshooting

NOTICE!

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.

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

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Symptom	Remedy
Device not working, no light	1. Check mains connection and fuse.
	2. Check the settings for manual operation ('Static Color').
No response to the DMX con- troller	1. Check whether the DMX cables run near or parallel to high-voltage cables that may cause damage or interference to the DMX interface circuit.
	2. Try using another DMX controller.

If the procedures recommended above do not succeed, please contact our Service Center. You can find the contact information at <u>www.thomann.de</u>.



11 Cleaning

Device components

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

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

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12 Protecting the environment

Disposal of the packaging material



Disposal of your old device



For the transport and protective packaging, environmentally friendly materials have been chosen that can be supplied to normal recycling.

Ensure that plastic bags, packaging, etc. are properly disposed of.

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

This product is subject to the European Waste Electrical and Electronic Equipment Directive (WEEE) in its currently valid version. Do not dispose with your normal household waste.

Dispose of this device through an approved waste disposal firm or through your local waste facility. When discarding the device, comply with the rules and regulations that apply in your country. If in doubt, consult your local waste disposal facility.

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