SP-1500 DMX Strobe

User manual

# stroboscope

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

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# Table of contents

# 1 General information

This manual contains important instructions for the safe operation of the unit. Read and follow the safety instructions and all other instructions. Keep the manual for future reference. Make sure that it is available to all those using the device. If you sell the unit please make sure that the buyer also receives this manual.

Our products are subject to a process of continuous development. Thus, they are subject to change.

## 1.1 Further information

On our website (*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.

## 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 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 – suspended load. |

| Warning signs | Type of danger |
| --- | --- |
|  | 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.

**DANGER!**

**Electric shock caused by short-circuit**

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.

**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.

**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.

# 3 Features

- powerful Stroboscope effect
- flash light energy: 1500 W
- strobe frequency steplessly adjustable
- brightness steplessly adjustable
- control via DMX (2 channels)
- operating modes: automatic or manual self-test, DMX
- DMX address and operating mode adjustable via DIP switches
- built-in line circuit breaker
- illuminant included

# 4 Installation

Unpack and carefully check that there is no transportation damage before using the unit. Keep the equipment packaging. To fully protect the device 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.

**NOTICE!**

**Risk of overheating**

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.

**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 opening of the bracket provided for mounting.

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-rope must be attached to the bracket.

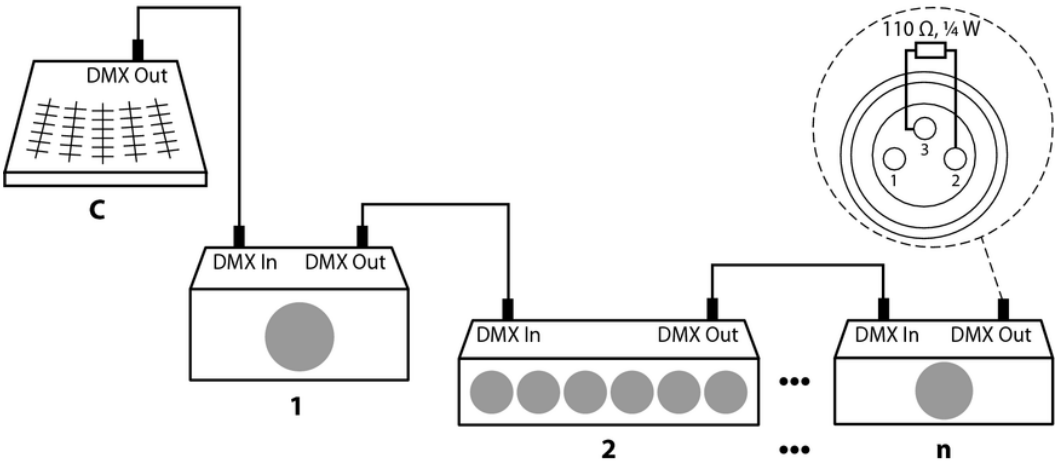
*Please note that this device must not be connected to a dimmer.*

# 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).

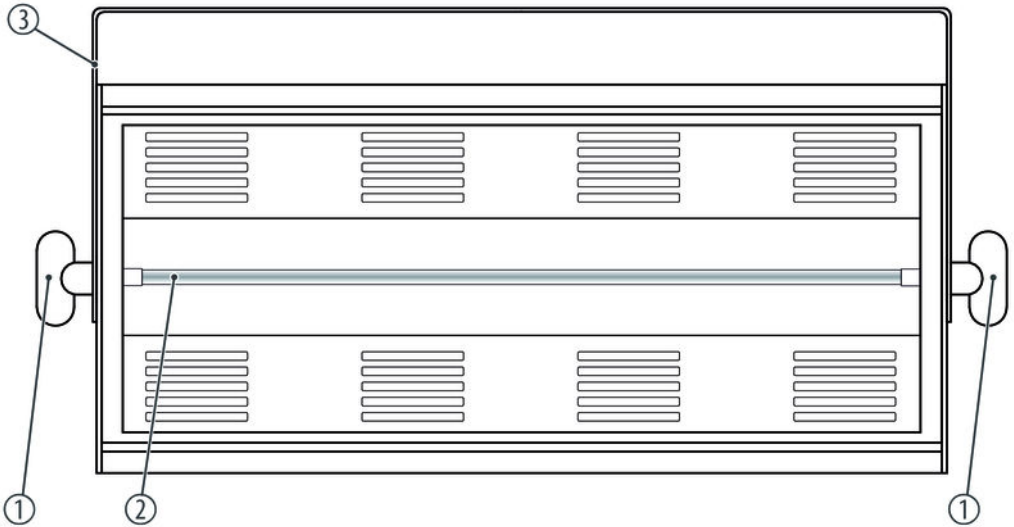


**Starting the device**

To start up the device, connect it to the mains. The device is immediately operational.

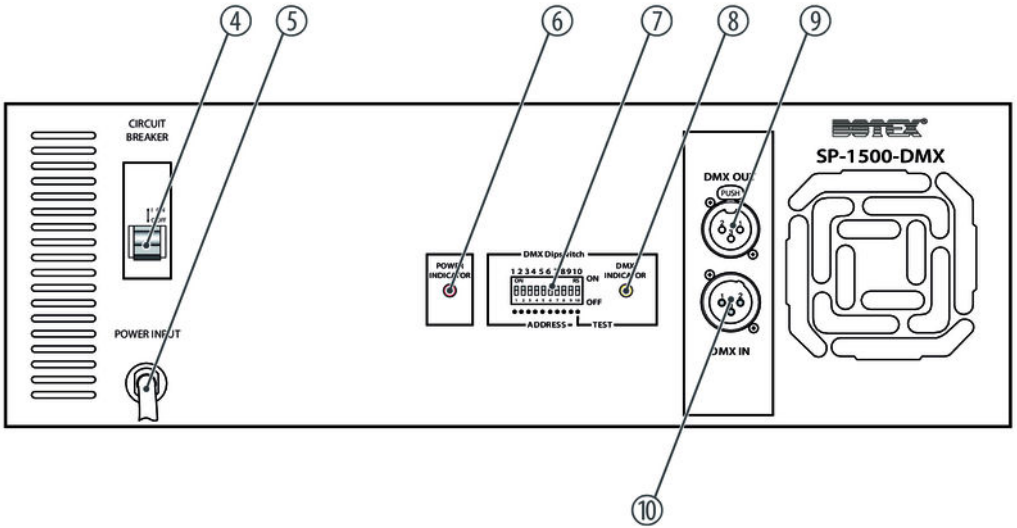
# 6 Connections and controls

**Front panel**



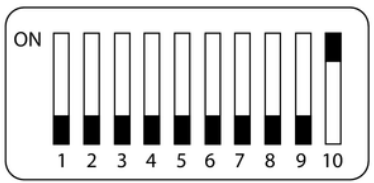
| | |
|---|---|
| 1 | Locking screws for the mounting bracket |
| 2 | Illuminant |
| 3 | Mounting bracket |

**Control panel and connections**



| | |
|---|---|
| 4 | *[CIRCUIT BREAKER]*<br>Line circuit breaker as automatic fuse. |
| 5 | *[POWER INPUT]*<br>Mains cable for power supply. |
| 6 | *[POWER INDICATOR]*<br>Indicates that the unit is connected to the power supply. |
| 7 | *[DMX Dipswitch]*<br>DIP switches for setting the DMX address and operating mode. |
| 8 | *[DMX INDICATOR]*<br>Indicates that a signal is present at the DMX input. |
| 9 | *[DMX OUT]*<br>DMX output |
| 10 | *[DMX IN]*<br>DMX input. |

# 7 Operating




When DIP switch 10 is set to *'ON'*, the device operates in DMX mode and can be controlled by a DMX controller.

**Setting up the DMX address**

The value of the DIP switches 1-9 is binary coded. To set the desired DMX address, set the DIP switches so that the sum of the resulting numbers yields the desired DMX address. Please orient yourself by the following table:

| 9 | 8 | 7 | 6 | 5 | 4 | 3 | 2 | 1 | DMX address |
|---|---|---|---|---|---|---|---|---|---|
| 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 |
| 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 2 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 4 |
| 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 8 |
| 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 16 |
| 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 32 |
| 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 64 |
| 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 128 |
| 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 256 |

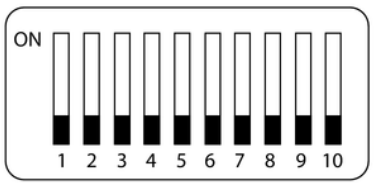
0: DIP switch is in 'OFF' position. 1: DIP switch is in *'ON'* position.

Example: To set the DMX address 10, set DIP switches 2 and 4 to *'ON'*, all others to *'OFF'*. The highest possible DMX address is 511 (all DIP switches to 'ON').

**DMX channel allocation**

| Channel | Value | Function |
|---|---|---|
| 1 | 0 … 255 | Increasing flash frequency |
| 2 | 0 … 15 | Dimmer (0 % bis 100 %) |

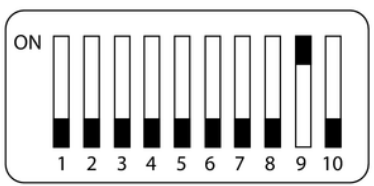
**Selecting operating mode 'Automatic self-test'**




→ Set DIP switches 9 and 10 to *'OFF'*.

⇨ The self-test starts.

**Selecting operating mode 'Manual self-test'**




**1.** → Set DIP switches 9 to *'ON'* and 10 to *'OFF'*.

**2.** → Use the DIP switches 1 to 4 to set the programme speed, and the DIP switches 5 to 8 to adjust the brightness of the self-test. The lowest programme speed or brightness is set when all four DIP switches are set to *'OFF'*. The highest programme speed or brightness is set, when all four DIP switches are set to *'ON'*.

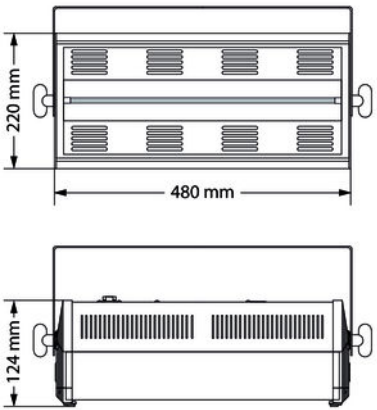
⇨ The self-test starts with the selected settings.

**Line circuit breaker**

After the fuse has tripped, set the button in the control panel of the device back to the *'ON'* position.

If the fuse trips repeatedly within a short time or can not be reset, the device must be checked and repaired by a qualified electrician.

# 8 Technical specifications




| | |
|---|---|
| Suitable illuminants | Stroboscope lamps 100 V / 1500 W, e.g. item no. 197075, 416046 |
| Number of DMX channels | 2 |
| Brightness | steplessly adjustable from 0 … 100 % |
| Power consumption | max. 1.600 W |
| Operating supply voltage | AC 230 V ~ 50 Hz |
| Protection class | IP20 |
| Resettable fuse | 16 A |
| Dimensions (W × H × D) | 480 mm × 220 mm × 124 mm |
| Weight | 5.65 kg |

# 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:

| Symptom | Remedy |
|---|---|
| The unit does not work, no light | 1. Check the mains connection and the main fuse.<br>2. Check the position of each DIP switch. |
| No response to the DMX controller | 1. Check whether the DMX cables run near or parallel to high-voltage cables that may cause damage or interference to a DMX interface circuit.<br>2. Check the position of each DIP switch.<br>3. Try using another DMX controller. |

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

# 11 Cleaning

**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.

# 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 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.

**Dispose of discharge lamps**

Dispose of broken or worn discharge lamps as hazardous waste according to legal regulations in a tightly closed container.