

STAR

DMX Splitter 4 MK II



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user manual

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1 General notes

This user manual contains important information on 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, include the manual for the next owner.

Our products are subject to a process of continuous development. We therefore reserve the right to make changes without notice.

Symbols and signal words

This section provides an overview of the symbols and signal words used in this user manual.

Signal word

DANGER!

NOTICE!

Warning signs



Meaning

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.

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.

Type of danger

Warning – high-voltage.

Warning – danger zone.

2 Safety instructions

Intended use

This device is intended to be used for the distribution of DMX signals from one to multiple DMX chains, or to extend a DMX chain. 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.

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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.



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.



NOTICE!

Risk of fire

Do not cover the device nor any ventilation slots. Do not place 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

The professional DMX splitter is characterized by the following special features:

- Distribution of DMX signals from one to four DMX chains
- DMX outputs galvanically isolated from the DMX input
- Processing and level adjustment of DMX output signals
- All DMX inputs and outputs in three- and five-pin version
- Switchable termination resistor
- Robust metal housing
- Control LEDs for DMX signals
- Suitable for rack mounting

4 Installation

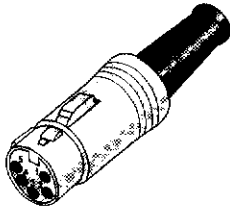
Unpack and check carefully there is no transportation damage before using the unit. Keep the equipment packaging. To fully protect the device against vibration, dust and moisture during transportation or storage use the original packaging or your own packaging material suitable for transport or storage,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

Establish all connections as long as the unit is switched off. Use the shortest possible high-quality cables for all connections.

Rack mounting

The unit has been designed for rack mounting in a standard 19-inch rack; it occupies one rack unit.

DMX connections



Three- and five-pin XLR sockets serve as DMX outputs, a three- or five-pin XLR plug is (optionally) used as DMX input. The drawing below and the table show the pin assignment.

Pin	5-pin	3-pin
1	Ground (shielding)	Ground (shielding)
2	Signal reversed (DMX-, 'cold')	Signal reversed (DMX-, 'cold')
3	Signal (DMX+, 'hot')	Signal (DMX+, 'hot')
4	not in use / second connection (DMX-)	
5	not in use / second connection (DMX+)	

5 Starting up

Establish all connections as long as the unit is switched off. Use the shortest possible high-quality cables for all connections.



NOTICE!

Possible interference in data transmission

To ensure smooth operation use special DMX cable instead of normal microphone cable.

Never connect DMX outputs to any audio equipment such as mixers or amplifiers.

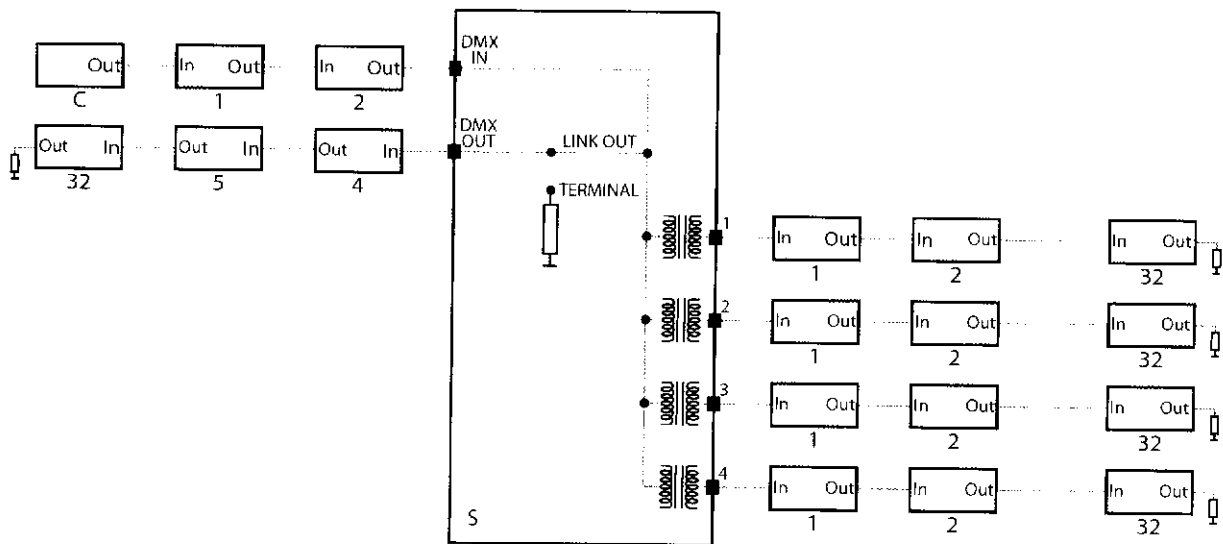
DMX connections

The figure below shows schematically how to integrate the unit into a DMX configuration.

Connect the device (S) as the last part of the DMX chain, which starts with your DMX controller (C). To do so, connect the DMX input of the device to the DMX output of the second last DMX device in this DMX chain.

Each of the unit's DMX outputs **1** to **4** allow connection of one DMX chain, which in turn may consist of a maximum of 32 DMX devices. Connect the output of the first DMX device to the DMX input of the second and so on, to form a series circuit. Make sure that the output of the last DMX device in the chain is terminated by a resistor (110 Ω , 1/4 W). You can further expand the configuration of your DMX network by using additional DMX splitters at the end of the DMX chains. Keep in mind that the total number of usable DMX addresses in a so-called 'DMX universe' is limited to 512.

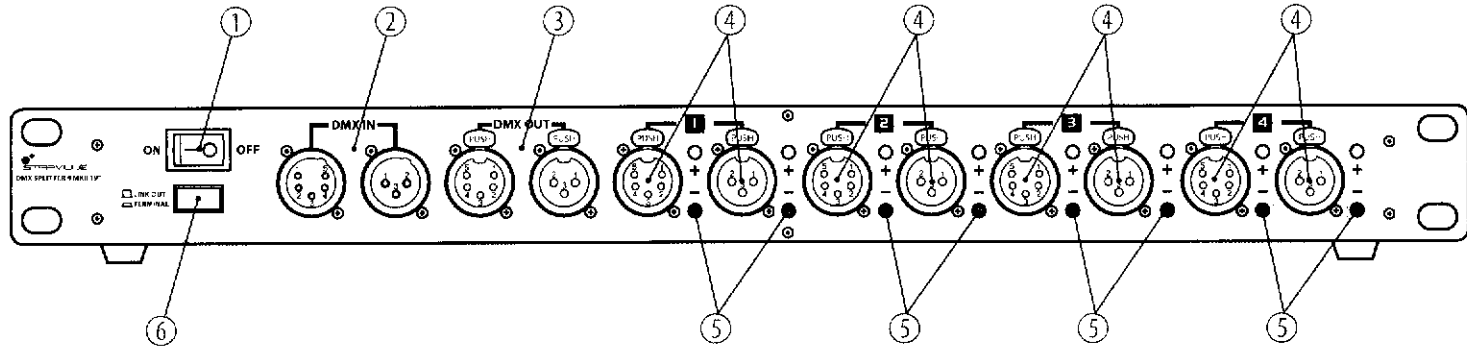
You can connect an additional DMX-chain with up to 32 DMX devices to the direct DMX output **DMX OUT**. If you use this output, the **LINK OUT / TERMINAL** switch must be in the **LINK OUT** position (released). If the device itself terminates a DMX chain, the **LINK OUT / TERMINAL** switch must be in the **TERMINAL** position (pressed). Then a termination resistor is connected.



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6 Components and functions

Front panel



1 Main switch

Turns the device on or off.

2 **DMX IN**

DMX input.

3 **DMX OUT**

Direct DMX output for connecting additional DMX devices or DMX splitter within the same DMX chain as the DMX input. This output is only active when the **LINK OUT / TERMINAL** switch is not pressed.

4 **1, 2, 3, 4**

DMX outputs 1 to 4 to connect further DMX chains. The outputs are galvanically isolated from the DMX input.

5 +, -

Control LEDs for the signals on the DMX data lines of the DMX outputs.

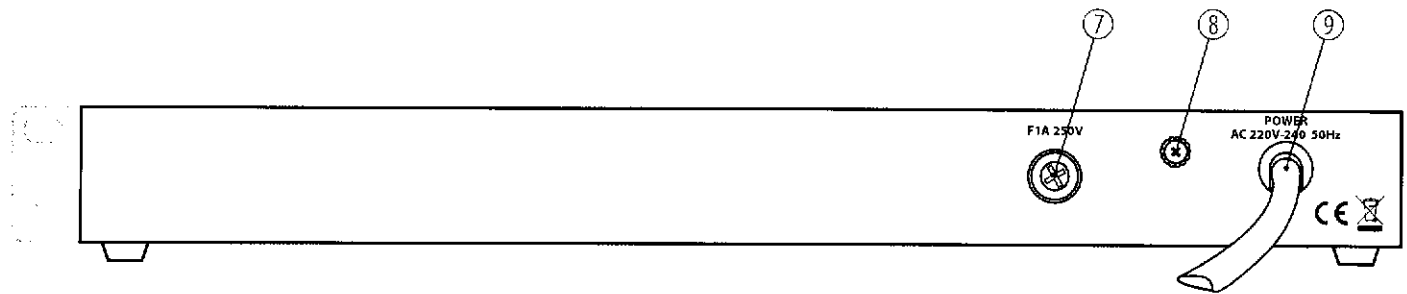
6 **LINK OUT / TERMINAL**

Operating mode switch

In **TERMINAL** position (switch is pressed), the DMX line of the DMX input is terminated by a resistor. The direct DMX output (3) is off.

In **LINK OUT** position (switch is not pressed), the direct DMX output (3) is active.

Rear panel



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- 7 Fuse holder.
- 8 Ground connection.
- 9 Mains connection.

7 Technical specifications

Operating supply voltage	AC 220 – 240 V ~ , 50/60 Hz
Fuse	1 A, / 250 V, slow-blow, 5 mm × 20 mm
Dimensions (B × T × H)	482 mm × 175 mm × 50 mm (1 RU)
Weight	3.1 kg