BOTEX
STAGE TECHNOLOGY

SDC-24 DMX Desk

User Manual

DMX controller

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SDC-24 DMX Desk
CH
DMX

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*.

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.
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 – danger zone.

2 Safety instructions

Intended use

This device is used to control spotlights, dimmers, lighting effects equipment or other DMX-controlled devices. 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.

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!

External power supply

The device is powered by an external power supply. Before connecting the external power supply, 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 the user. Unplug the external power supply before electrical storms occur and when the device is unused for long periods of time to reduce the risk of electric shock or fire.

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.

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.

3 Features

Special features of the device:

- 24 channel faders
- 2 displays to display channel values
- Start address selectable via DIP switches
- Linking of up to 4 desks to control up to 96 channels
- Simple operation
- Ideal for testing DMX devices or simple applications
- 16 coloured fader caps included

4 Starting up

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.

NOTICE!

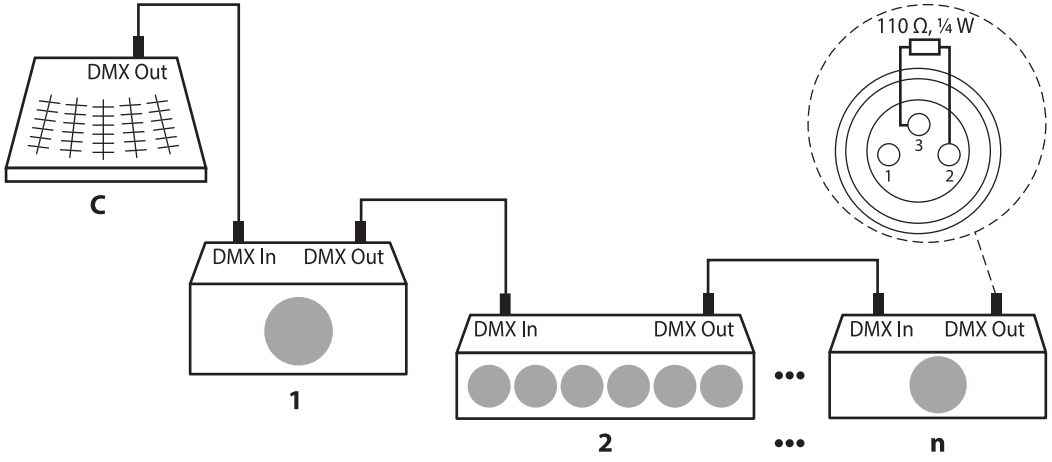
Possible data transmission errors

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.

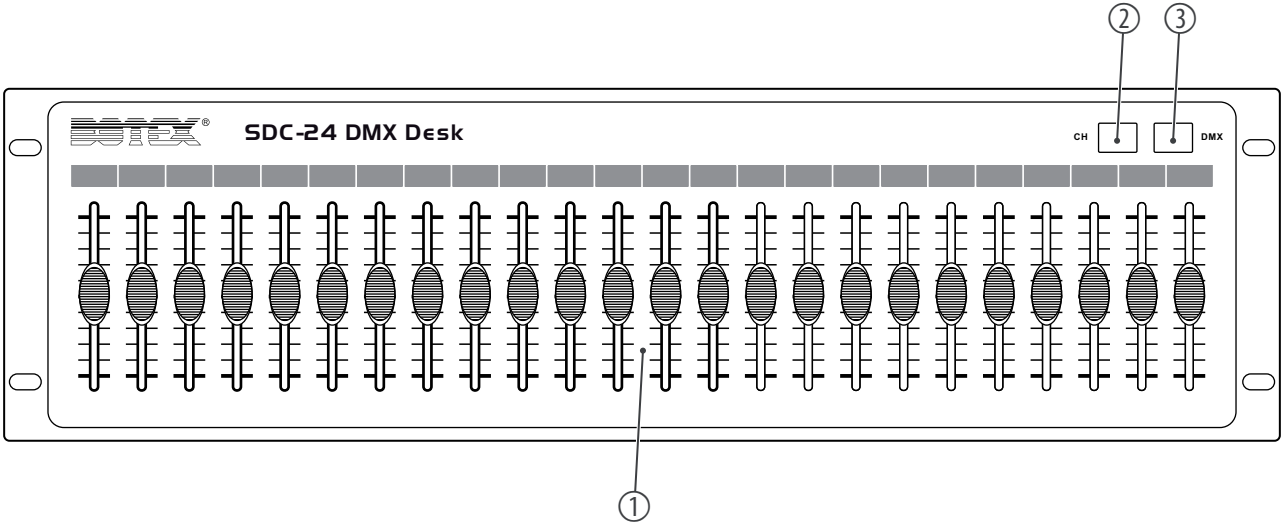
Connections in DMX mode

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).



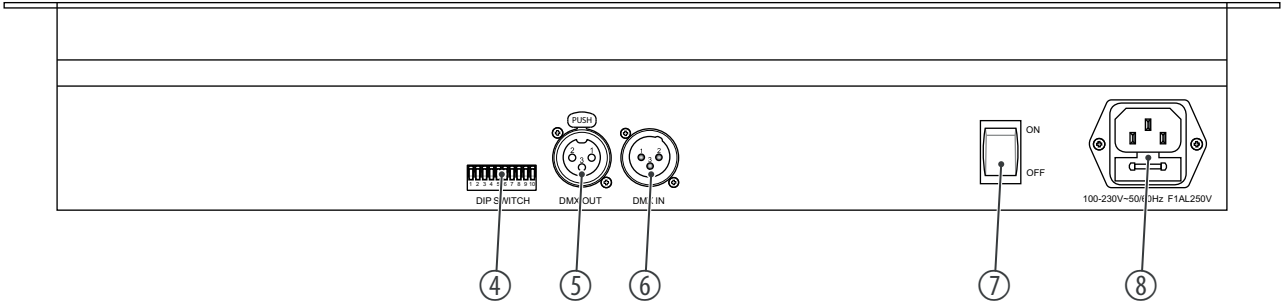
5 Connections and controls

Front panel



1	Channel faders *[1]* … *[24]* Individual control of up to 24 DMX channels
2	*[CH]* Display of the values set with the faders
3	*[DMX]* Display of assigned DMX channels

Rear panel


PUSH
DIP SWITCH
DMX OUT
DMX IN
ON
OFF
100-230V~50/60Hz F1AL250V
4
5
6
7
8

4 DIP switch for setting the DMX address

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

The value of the DIP switches 1-9 is binary coded. DIP switch 10 is without function. 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:

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

5 *[DMX OUT]*

DMX output

6	DMX input *[DMX IN]* An additional DMX controller can be connected via *[DMX IN]* to control more than 24 channels. Up to four controllers can be linked to control up to 96 channels. When the first device outputs the addresses *[1]* … *[24]* and a second device outputs the addresses *[25]* … *[48]*, for example, the signal is executed without change. If the DMX ranges of both controllers overlap, e.g. both controllers are set to channels *[1]* … *[24]*, the last changed setting of the controller is output.
7	*[ON | OFF]* Main switch. Turns the device on and off.
8	IEC chassis plug for mains connection, with fuse holder

6 Technical specifications

Control protocols	DMX512	
Input connections	Power supply	IEC chassis plug C14
	DMX control	XLR chassis plug, 3-pin
Output connections	DMX control	XLR chassis socket, 3-pin
Power consumption	4 W	
Supply voltage	100 - 240 V ~ 50/60 Hz	
Fuse	5 mm × 20 mm, 1 A, 250 V, fast-acting	
Installation	19", 2 RU	
Dimensions (W × H × D)	482 mm × 82 mm × 125 mm	
Weight	2.3 kg	
Ambient conditions	Temperature range	0 °C…40 °C
	Relative humidity	20 %…80 % (non-condensing)

Further information

Preset function	no
External storage option	no
DMX universes	1
max. control channels	24
Ethernet	no

7 Plug and connection assignment

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')

8 Protecting the environment

Disposal of the packaging material

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.

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.