



DMX Controller SDC-16

DMX controller

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# 1 General notes

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](http://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.

### Displays

Texts 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]*.
  - ⇒ 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
<b>DANGER!</b>	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.
<b>NOTICE!</b>	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.



### **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 parquet, linoleum, laminate or PVC floor and after some time cause permanent dark stains.

In case of doubt, do not put the rubber feet directly on the floor, but use felt-pad floor protectors or a carpet.

## 3 Features

Special features of this DMX controller:

- 16 channel faders
- 1 master fader
- Compact design
- Simple operation
- Power supply via the supplied 9 V external power adapter

## 4 Starting up

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.

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!**

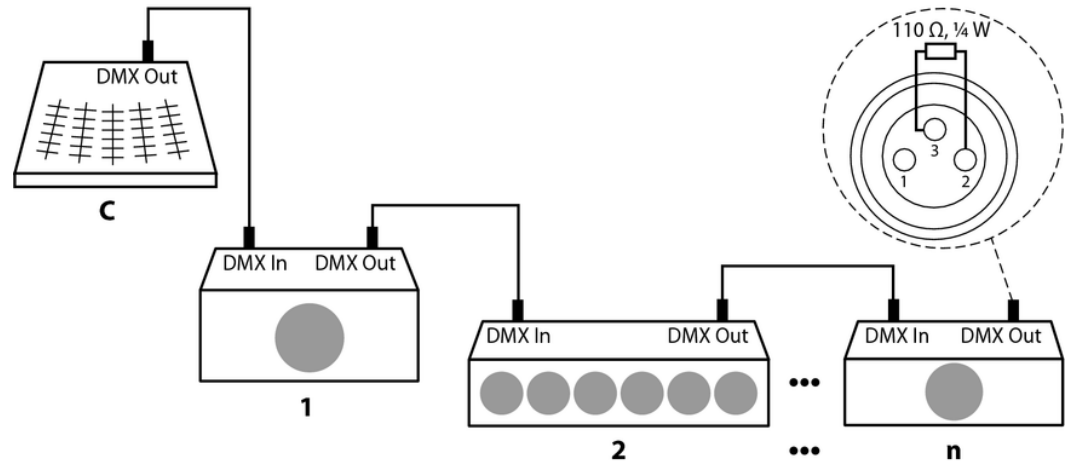
#### **Possible data transmission errors**

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 output of the device (C) to the DMX input of the first DMX device (1). 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 ( $110\ \Omega$ ,  $\frac{1}{4}\text{ W}$ ).





**Connecting the power adapter**

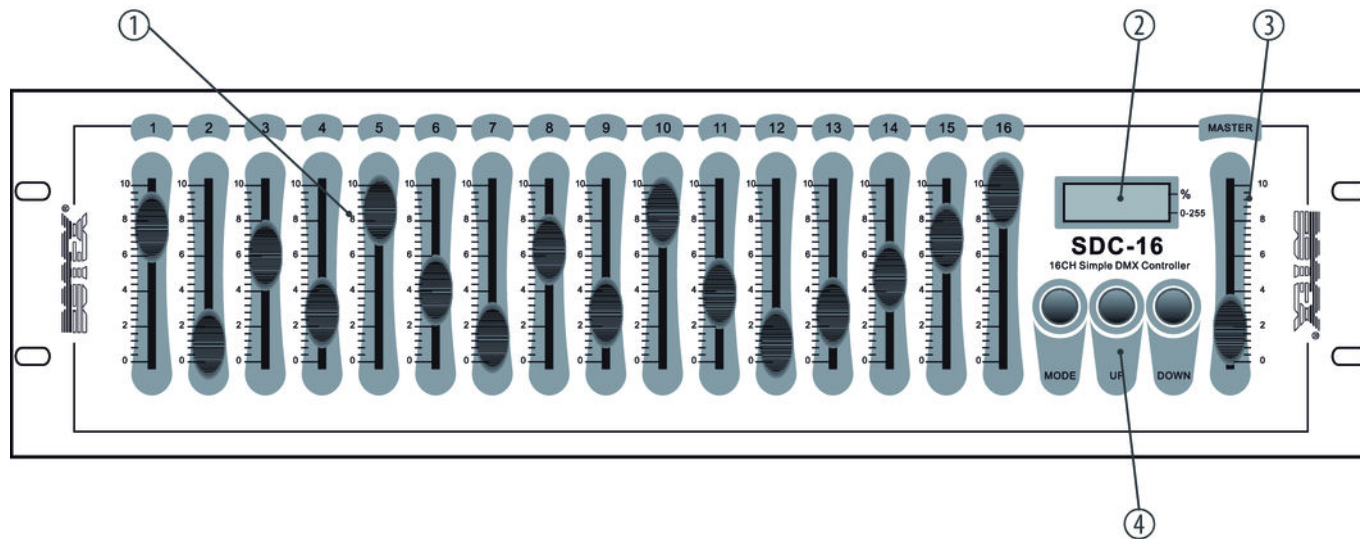
Connect the included 9V power supply unit to the power supply input of the unit and then plug the power cord plug into the wall outlet.

**Turning the unit on**

When all cable connections are made, turn on the device with the main switch on the rear panel. The device is immediately ready for operation, the display shows the current DMX start address, for example 'A001'.

## 5 Connections and controls

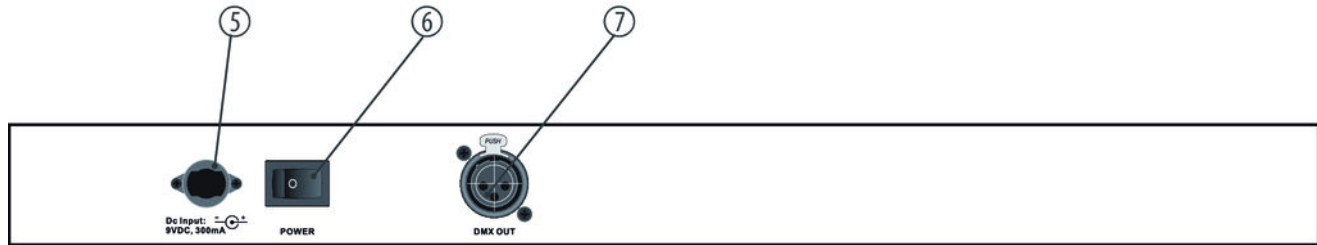
### Front panel



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1	<p><i>[1] ... [16]</i></p> <p>Channel faders 1 through 16.</p> <p>Use the channel faders to individually control DMX channels 1 ... 16.</p>
2	<p>Display for DMX address and set values with indicator LEDs:</p> <ul style="list-style-type: none"><li>■ <i>[%]</i>: indicates that the display has been switched to percentage display</li><li>■ <i>[0-255]</i>: indicates that the display has been switched to DMX value display</li></ul>
3	<p><i>[MASTER]</i></p> <p>Master fader</p> <p>The master fader serves as a controller for all 512 channels of the DMX universe.</p>
4	<p>Control buttons</p> <p><i>[MODE]</i>: Toggles the display mode.</p> <p><i>[UP]</i>, <i>[DOWN]</i>: Increases or decreases the displayed value.</p>

### Rear panel



- |   |  |
|---|--|
| 5 | [Dc Input]<br>Connection socket for the power adapter. |
| 6 | [POWER]<br>Main switch. Turns the device on and off.   |
| 7 | [DMX OUT]<br>DMX output                                |

## 6 Operating

### Setting the DMX start address

On delivery, the DMX start address, i.e. the DMX channel controlled by channel fader [1], is set to 1. Proceed as follows to change the DMX start address:

1. ▶ Press [UP] or [DOWN] once to increase or decrease the DMX start address by one. The value has to be within a range of 1 to 512.
2. ▶ If you press and hold [UP] or [DOWN], the set value changes more quickly.
  - ⇒ The new DMX start address is shown in the display.


### Using channel faders

1. ▶ Move the channel faders to the desired value. The corresponding DMX value in the range 0 to 255 appears in the display for approximately 10 seconds.
2. ▶ To switch the display to percentage (0 to 100), press [MODE].
  - ⇒ The LED [%] lights.
3. ▶ To switch the display to DMX values (0 to 255), press again [MODE].
  - ⇒ The [0-255] LED lights.

### Using the master fader

- 1.** ➤ Move the master fader to the desired value. It is output on all 512 channels of the DMX universe. The corresponding DMX value in the range 0 to 255 appears in the display for approximately 10 seconds.
- 2.** ➤ To switch the display to percentage (0 to 100), press *[MODE]*.  
⇒ The LED [%] lights.
- 3.** ➤ To switch the display to DMX values (0 to 255), press again *[MODE]*.  
⇒ The *[0-255]* LED lights.

## 7 Technical specifications

Output	XLR socket, 3-pin
Voltage supply	9 V plug-in power supply  , 300 mA, positive pole via inner contact
Dimensions (W × H × D)	482 mm × 80 mm × 132 mm
Weight	2.3 kg

## 8 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')



## 9 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 these materials with your normal household waste, but make sure that they are fed to a recovery. Please follow the notes and markings on the packaging.

### Disposal of batteries



Batteries must not be disposed of as domestic waste or thrown into fire. Dispose of the batteries according to national or local regulations regarding hazardous waste. To protect the environment, dispose of empty batteries at your retail store or at appropriate collection sites.

### Disposal of your old device



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

Dispose 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.



