



  
STAIRVILLE

DDS-405 LC DMX  
4 ch. Dimmer  
dimmer pack

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# 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](http://www.thomann.de).

## 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'*.

## 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 – high-voltage.
	Warning – danger zone.

## 2 Safety instructions

### Intended use

This appliance is intended to be used to control the brightness of connected spotlights. 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.



### **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

- 4 dimmer channels
- Outputs: 4 protective contact sockets
- Control via DMX 512
- Individual DMX addressing per channel
- Channel function selectable per channel
- Operating modes:
  - DMX
  - Automatic
  - Sound control
- Single channel protection

## 4 Installation and 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.

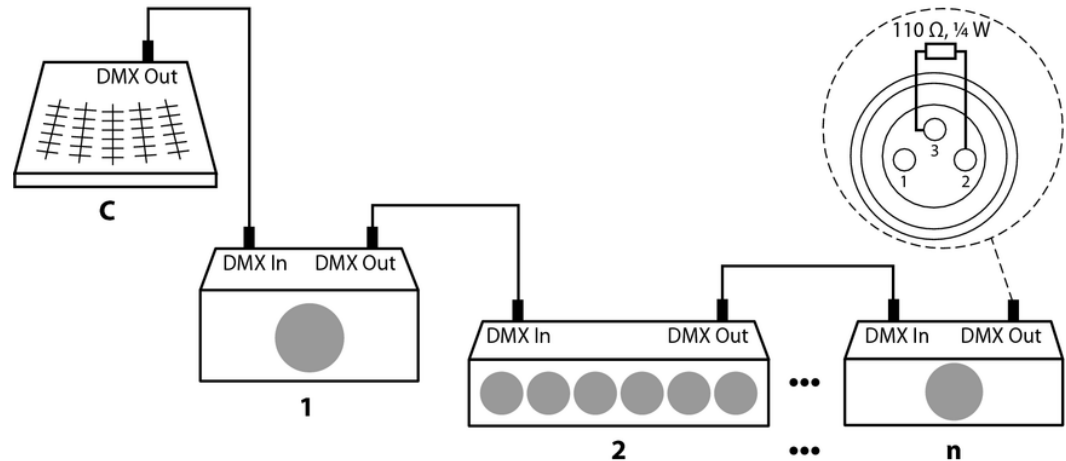
Create all connections while the device is off. Use the shortest possible high-quality cables for all connections. Take care when running the cables to prevent tripping hazards.

The unit is designed for wall or tripod mounting. For this purpose, there is a mounting bracket on top of the unit. Using the two M10 threads, the device can be mounted vertically or horizontally with suitable screws on a tripod. Alternatively, there are two bores available for wall mounting using suitable mounting hooks and anchors (mounting hardware not included).

First, connect the loads to the terminals on the sides of the device. If you want to operate the device in 'DMX' mode, establish the DMX connection to the controller. Finally, connect the power plug of the device to a mains power socket.

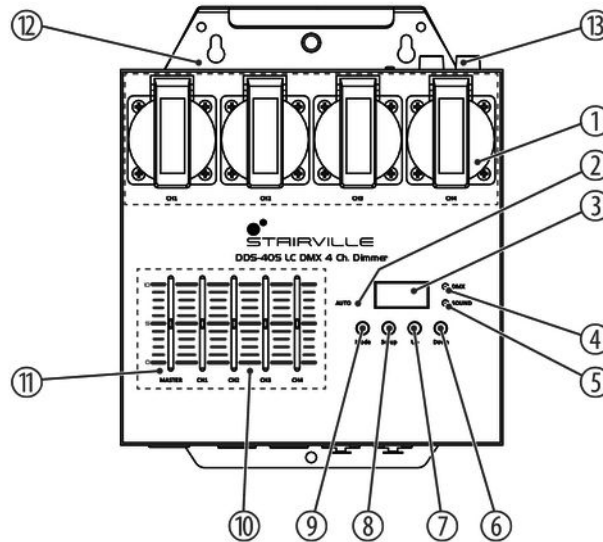
## Connections in DMX mode

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 ( $110\ \Omega$ ,  $\frac{1}{4}\text{ W}$ ).



## 5 Connections and controls

### Front panel



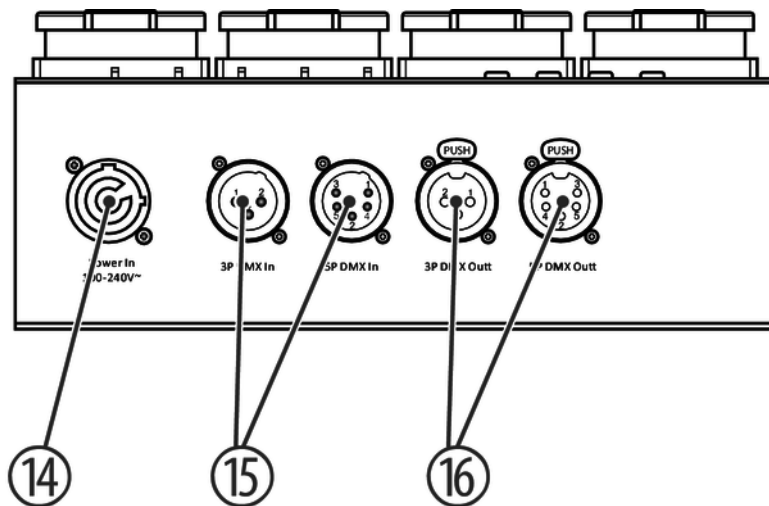
DDS-405 LC DMX 4 ch. Dimmer

1	<i>[CH1]...[CH4]</i> Dimmer outputs, 4 protective contact sockets.
2	<i>[AUTO]</i> Lights up when the unit is operating in 'Automatic' mode
3	Display
4	<i>[DMX]</i> Lights up when the unit is operating in 'DMX' mode.
5	<i>[SOUND]</i> Lights up when the unit is operating in 'Sound control' mode.
6	<i>[Down]</i> Decreases the displayed value by one and selects menu items
7	<i>[Up]</i> Increases the displayed value by one and selects menu items



8	<i>[Setup]</i> Chooses between the options of the selected mode
9	<i>[Mode]</i> Opens the menu and selects a menu item
10	<i>[CH1]...[CH4]</i> Sliders (faders) to set the brightness of each channel
11	<i>[MASTER]</i> Slider (fader) to set the overall brightness
12	Angles to attach the device to a wall or a crossbeam
13	Fuses for the channels 1...4

Rear panel



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14	<i>[Power In]</i> Lockable input socket (Power Twist) for the power supply of the connected spotlights and the device itself.
15	<i>[DMX In]</i> DMX input, 3 and 5-pin
16	<i>[DMX Out]</i> DMX output, 3 and 5-pin

## 6 Operating

### Starting the device

To start operation, connect the device to the mains. The device is immediately operational.  
Pull the power plug of the unit to turn it completely volt-free.

**Main menu**

Press *[Mode]* to activate the main menu. Use *[UP]* or *[DOWN]* to select a submenu. When the display shows the desired submenu press *[Setup]* to open it up. To close the main menu, press *[Mode]*.

The following table shows the setting options.

Main menu	Menu level 2	Menu level 3	Menu level 4
Meaning			
'AUTO'	Automatic chase, speed and strobe effect as set in the menu item 'PRO' .		
'PRO'	Preprogrammed automatic show		
	'Pr.01'	'-.OFF'	All outputs off
		'-.ALL'	All outputs switched on with full intensity
		'-1--'	Output 1 switched on with full intensity
		'-2--'	Output 2 switched on with full intensity
		'-3--'	Output 3 switched on with full intensity
	'-4--'	Output 4 switched on with full intensity	

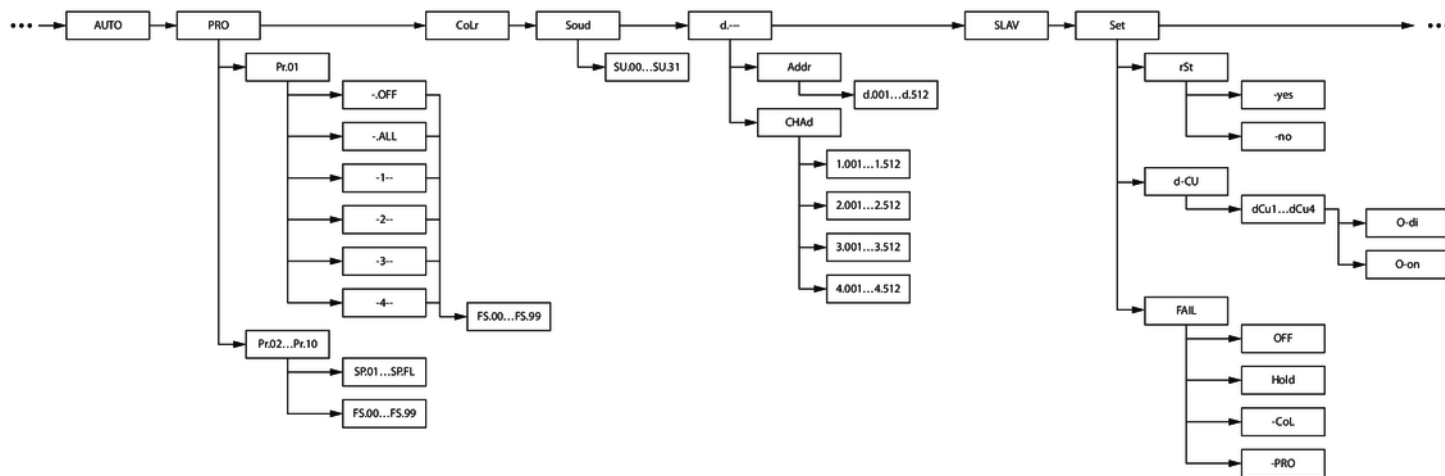
Main menu	Menu level 2	Menu level 3	Menu level 4
	<b>Meaning</b>		
		'FS.00' ... 'FS.99'	Strobe effect
	'Pr.02' ... 'Pr.10'	Selecting a show	
		'SP.01' ... 'SP.FL'	Running speed
		'FS.00' ... 'FS.99'	Strobe effect
'CoLr'	Brightness setting via the faders. The display shows the value last set with a fader.		
'Soud'	Sound control		
	'SU.00' ... 'SU.31'	Sensitivity setting of the built-in microphone	
'd.---'	Assignment of the DMX addresses		
	'Addr'	'd.001' ... 'd.512'	Continuous addressing, starting with the set address
	'CHAd'	Separate DMX addresses for the individual outputs (channels)	
		'1,001' ... '1,512'	Output 1

Main menu	Menu level 2	Menu level 3	Menu level 4
	<b>Meaning</b>		
		'2,001' ... '2,512'	Output 2
		'3,001' ... '3,512'	Output 3
		'4,001' ... '4,512'	Output 4
'SLAV'	Operating mode 'Slave'		
'Set'	Special functions		
	'rSt'	Reset	
		'-yes'	Trigger
		'no'	No trigger
	'd-CU'	Selection of a dimmer curve	
		'dCu1', 'dCu2', 'dCu3', 'dCu4'	Dimmer or switch mode selection

Main menu	Menu level 2	Menu level 3	Menu level 4		
Meaning					
			'O-di'	Dimmer mode	
			'O-on'	Switch mode	
	'FAIL'	Behaviour on DMX signal failure			
		'OFF'	Blackout		
		'HoLd'	The last signal is held.		
		'-CoL'	The brightnesses specified under '-CoL' (manual control) are used.		
	'-PRO'	The programme is started.			



## Menu overview



## 7 Technical specifications

Control principle	Leading edge phase control	
Dimmer type	Four-channel dimmer	
Input connections	Voltage supply	Power Twist, single phase, max. 16 A
	Signal input	DMX 512 via 3- or 5-pin XLR socket
Output connections	4 safety panel sockets, max. 5 A per channel	
Output power	max. 1100 W @ 110 V	
	max. 2300 W @ 230 V	
Channel fuse	5 mm × 20 mm, 8 A, 250 V, slow-blow (per channel)	
Operating supply voltage	AC 100 – 240 V ~ 50/60 Hz	
Protection class	IP20	
Dimensions (W × H × D)	220 mm × 93 mm × 265 mm	
Weight	2.9 kg	

Ambient conditions	Temperature range	5 °C...35 °C
	Relative humidity	50 %, non-condensing

## 8 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')

**DMX connections**



A five-pin XLR socket serves as DMX output, a five-pin XLR plug serves as DMX input. The drawing below and the table show the pin assignment of a matching coupling.

Pin	Assignment
1	Ground (shielding)
2	Signal inverted (DMX-, 'cold')
3	Signal (DMX+, 'hot')
4	unused / second connection (DMX-)
5	unused / second connection (DMX+)

## 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 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.



