BOTEX

T-4 BAR

dimmer pack

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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)* 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
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 appliance is designed for professional use only and is intended to be used to control the brightness of connected spotlights. 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.

DANGER!

Hazardous voltage

Hazardous voltage may be present at cable ends and screw terminals.

The connection of screw terminals as well as all maintenance and repair work on the electrical installation of the device must only be performed by qualified electrical personnel in volt-free condition. Failure to do so may result in electric shock and risk of fire and loss of life.

By all means you have to observe all electrical safety instructions applicable at the place of operation.

!

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

■ Four dimmer channels
■ Output: 4 × dimmable EU power sockets, 1 × EU power socket with constant voltage
■ Digital control system
■ Control via DMX 512
■ Preheating control to protect the illuminants
■ 16 preprogrammed chaser programmes
■ Sound control
■ Various mounting options for spotlights
■ TV spigot (28 mm adapter) for attachment to a tripod.

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.

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.

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!**
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.
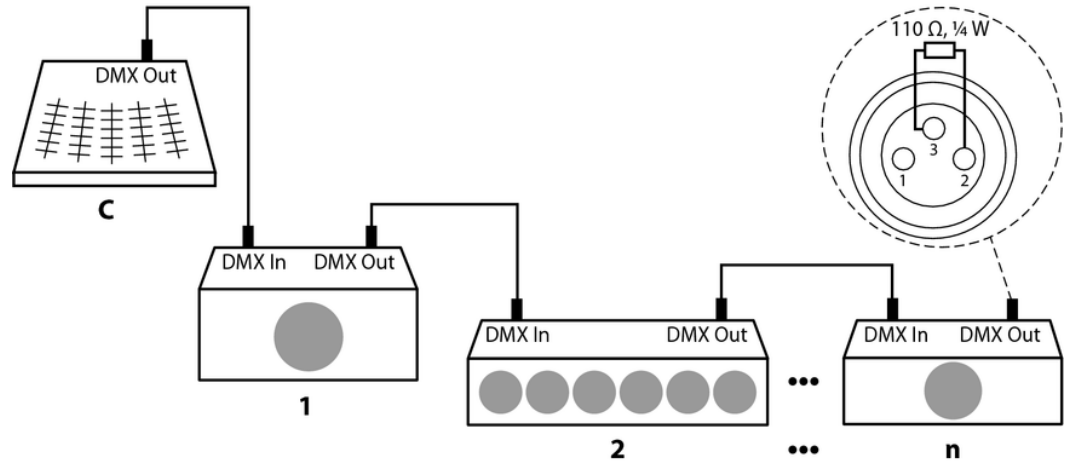
Never connect the DMX input or output to audio devices such as mixers or amplifiers.

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).

Connections in master/slave mode

When you configure a group of devices in master/slave mode, the first unit will control the other units for an automatic, sound-activated, synchronized show. This function is ideal when you want to start a show immediately. Connect the DMX output of the master device to the DMX input of the first slave device. Then connect the DMX output of the first slave device to the DMX input of the second slave device and so on.

Starting the device

> **DANGER!**
>
> **Hazardous voltage**
>
> Hazardous voltage may be present at cable ends and screw terminals.
>
> The connection of screw terminals as well as all maintenance and repair work on the electrical installation of the device must only be performed by qualified electrical personnel in volt-free condition. Failure to do so may result in electric shock and risk of fire and loss of life.
>
> By all means you have to observe all electrical safety instructions applicable at the place of operation.
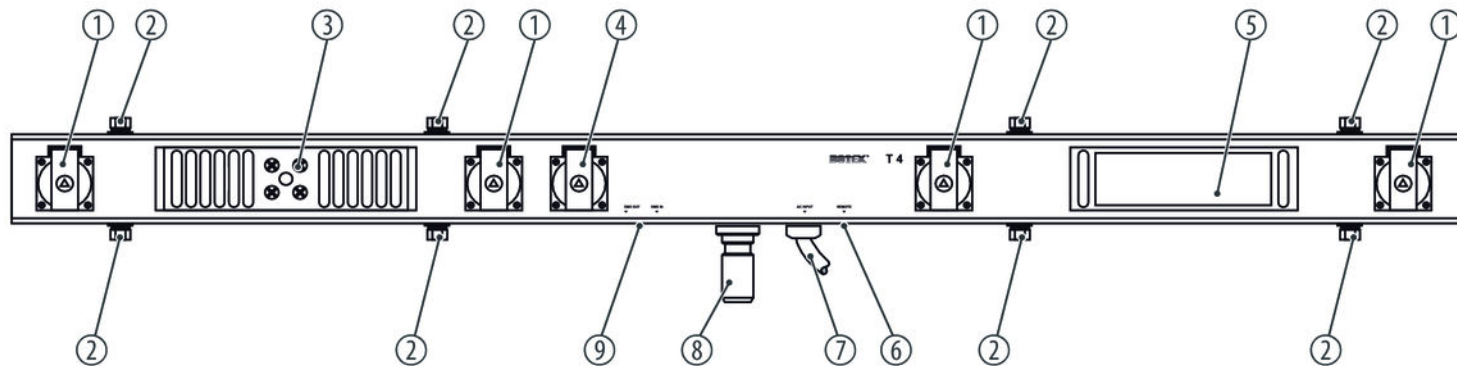
Install a standard-compliant safety plug (for example, Item no. 199576) technically correctly and in compliance with the safety rules on the power cable.

First, connect the loads to the power sockets of the device. Establish the DMX link to the controller. Lastly, connect the device to the power supply.

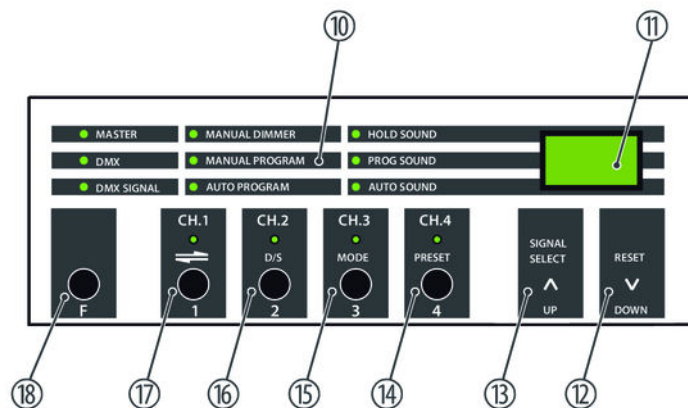Connect the device to the power supply to start operation.

6   Connections and controls

Front panel

1	*[CH.1]…[CH.4]*
	EU power sockets for channels 1…4.
2	Star grip screws (M8) for mounting spotlights.
3	*[FUSE 1]…[FUSE 4]*
	Single fuses for channels 1…4.
4	*[CONSTANT POWER]*
	EU power socket with constant voltage.
5	Control panel with display, control LEDs and function buttons.
6	*[REMOTE]*: 1/4" phone socket.
7	*[AC INPUT]*
	Mains cable for power supply.
8	TV spigot (28 mm adapter) for attachment to a tripod.
9	*[DMX OUT]*: DMX output
	[DMX IN]: DMX input.

Control panel

10	Control LEDs:
	■ *[MASTER]*: Indicates that the device is operating in 'Master' mode. It controls the devices connected as 'Slaves'.
	■ *[DMX]*: Indicates that the device is operating in 'DMX' mode.
	■ *[DMX SIGNAL]*: Flashes when a signal is present at the DMX input.
	■ *[MANUAL DIMMER]*: Indicates that the device is operating in 'Master' mode, 'Manual Dimmer' function.
	■ *[MANUAL PROGRAM]*: Indicates that the device is operating in 'Master' mode, 'Manual Program' function.
	■ *[AUTO PROGRAM]*: Indicates that the device is operating in 'Master' mode, 'Auto Program' function.
	■ *[HOLD SOUND]*: Indicates that the device is operating in 'Master' mode, 'Hold Sound' function.
	■ *[PROG SOUND]*: Indicates that the device is operating in 'Master' mode, 'Prog Sound' function.
	■ *[AUTO SOUND]*: Indicates that the device is operating in 'Master' mode, 'Auto Sound' function.
11	Display
12	*[RESET]* / *[DOWN]* / ▼ Decreases the displayed value.
13	*[SIGNAL SELECT]* / *[UP]* / ▲ Increases the displayed value.

14	*[CH.4] / [PRESET]* Selects channel 4.
15	*[CH.3] / [MODE]* Selects channel 3.
16	*[CH.2] / [D/S]* Selects channel 2.
17	*[CH.1] /* ⇌ Selects channel 1.
18	*[F]* Function button for selecting a menu item.

7   Operating

Mode selection

Simultaneously press *[F]* and *[SIGNAL SELECT]* repeatedly until the desired operating mode is displayed:

- *'OUT'*: The device operates in „Master" mode. The brightness of the connected spotlights is set on the device or controlled by an automatic show programme.
- *'IN'*: The device operates in „MDX" mode. The brightness of the connected spotlights is controlled by the DMX signal.

Reset to factory defaults

Press *[F]*, *[SIGNAL SELECT]* and *[RESET]* simultaneously. The device is reset to the factory default settings.

7.1   Operating in 'Master' mode.

Function selection

Simultaneously press *[F]* and *[MODE]* repeatedly until the control LED of the desired function lights up:

- *'MANUAL DIMMER'*: The brightness of the connected spotlights is set on the device, separately for the four channels.
- *'MANUAL PROGRAM'*: One of the 16 automatic show programmes is started. Select the programme with *[UP]* / ▲ or *[DOWN]* / ▼.
- *'AUTO PROGRAM'*: The 16 automatic show programs will run one by one.
- *'HOLD SOUND'*: The brightness of the connected spotlights is controlled by the sound.
- *'PROG SOUND'*: One of the 16 automatic show programmes is started. Select the programme with *[UP]* / ▲ or *[DOWN]* / ▼. The programme runs sound-controlled.
- *'AUTO SOUND'*: The 16 automatic show programs will run one by one. The programmes run sound-controlled.

Adjusting the brightness (mode: 'master', function: 'Manual Dimmer')

1. ▷ Press one of the channel select buttons *[CH.1]* … *[CH.4]*.

⇨ The associated LED flashes.

2. ▷ Use *[UP]* / ▲ or *[DOWN]* / ▼ to adjust the brightness of the selected channel in a range of 0 % (display shows *'d00'*) … 100 % (display shows *'dFF'*).

Swapping channel order

Simultaneously press *[F]* and ⇌ repeatedly until the desired channel order is displayed:

■ *'L–'*: The channels are counted from left to right (1, 2, 3, 4)
■ *'R–'*: The channels are counted from right to left (4, 3, 2, 1)

Selecting between Dimmer and Switch Pack

Simultaneously press *[F]* and *[D/S]* repeatedly until the display shows the desired function:

■ *'NOR'*: The device serves as a dimmer (0 % … 100 %)
■ *'CRO'*: The device serves as a Switch Pack, the connected spotlights are either switched on or off.

Selecting presets

1. ▶ Press *[F]* and *[PRESET]* simultaneously. The display shows which preset can be changed:

    'Fxx': Response time (fade time) on changes in the range 0 s … 10 s

    'dxx': Maximum brightness value in the range 0 % … 100 %

    'Exx': Minimum brightness value (preheat) in the range 0 % … 25 %

2. ▶ Use *[UP]* / ▲ or *[DOWN]* / ▼ to set the desired value.

7.2 Operating in 'DMX' mode.

Setting the DMX address

1. ▶ Press one of the channel select buttons *[CH.1]* … *[CH.4]*.

⇨ The associated LED flashes.

2. ▶ Use *[UP]* / ▲ or *[DOWN]* / ▼ to set the DMX address of the selected channel in a range of 1 … 512.

3. ▶ Press the channel select button again.

⇨ The associated LED turns off.

Swapping channel order

Simultaneously press *[F]* and ⇌ repeatedly until the desired channel order is displayed:

- ■ *'L−'*: The channels are counted from left to right (1, 2, 3, 4)
- ■ *'R−'*: The channels are counted from right to left (4, 3, 2, 1)

Selecting between Dimmer and Switch Pack

Simultaneously press *[F]* and *[D/S]* repeatedly until the display shows the desired function:

■   *'NOR'*: The device serves as a dimmer (0 % … 100 %)

■   *'CRO'*: The device serves as a Switch Pack, the connected spotlights are either switched on or off.

Selecting presets

1. ▶ Press *[F]* and *[PRESET]* simultaneously. The display shows which preset can be changed:

'Fxx': Response time (fade time) on changes in the range 0 s … 10 s

'dxx': Maximum brightness value in the range 0 % … 100 %

'Exx': Minimum brightness value (preheat) in the range 0 % … 25 %

2. ▶ Use *[UP]* / ▲ or *[DOWN]* / ▼ to set the desired value.

DMX channel allocation

Channel	Value	Function
1	0 … 255	Brightness output CH.1 (0 % to 100 %)
2	0 … 255	Brightness output CH.2 (0 % to 100 %)
3	0 … 255	Brightness output CH.3 (0 % to 100 %)
4	0 … 255	Brightness output CH.4 (0 % to 100 %)

8 Technical specifications

Operating supply voltage	AC 230 V ∼ 50 Hz
Fuse (per dimmer channel)	5 mm × 20 mm, 6.3 A, fast-acting
Signal input	DMX 512 via 3-pin XLR socket
Outputs	4 dimmer channels (230 V, each 1.5 A), 1 output with constant voltage
Dimensions (W × H × D)	1310 mm × 80 mm × 70 mm
Weight	4 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 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.