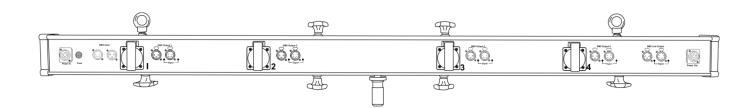


# **MANUAL**



**ENGLISH** 

# DMX Booster Bar 4 V1

Ordercode: 50781

## DMX Booster Bar 4

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## Warning



# For your own safety, please read this user manual carefully before your initial start-up!

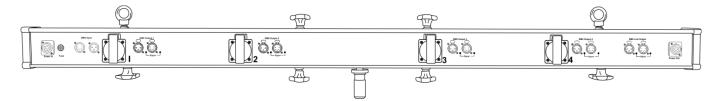


## **Unpacking Instructions**

Immediately upon receiving this product, carefully unpack the carton and check the contents to ensure that all parts are present and have been received in good condition. Notify the dealer immediately and retain packing material for inspection if any parts appear damaged from shipping or the carton itself shows signs of mishandling. Save the carton and all packing materials. In the event that a fixture must be returned to the factory, it is important that the fixture be returned in the original factory box and packing.

## Your shipment includes:

- DMX Booster Bar 4
- User manual





### **CAUTION!**

Keep this device away from rain and moisture! Unplug mains lead before opening the housing!



### **Safety Instructions**

Every person involved with the installation, operation and maintenance of this device has to:

- Be qualified
- Follow the instructions of this manual



CAUTION! Be careful with your operations.

With a dangerous voltage you can suffer a dangerous electric shock when touching the wires!



Before your initial start-up, please make sure that there is no damage caused by transportation. Should there be any, consult your dealer and do not the device.

To maintain perfect condition and to ensure a safe operation, it is absolutely necessary for the user to follow the safety instructions and warning notes written in this manual.

Please consider that damages caused by manual modifications to the device are not subject to warranty.

This device contains no user-serviceable parts. Refer servicing to qualified technicians only.



#### **IMPORTANT:**

The manufacturer will not accept liability for any resulting damages caused by the non-observance of this manual or any unauthorized modification to the device.

- Never let the power cord come into contact with other cables! Handle the power-cord and all connections with the mains with particular caution!
- Never remove warning or informative labels from the unit.
- Never use anything to cover the ground contact.
- Never leave any cables lying around.
- Never use the device during thunderstorms, unplug the device immediately.
- Never leave various parts of the packaging (plastic bags, polystyrene foam, nails, etc.) within children's reach, as they are potential sources of danger.
- Do not insert objects into air vents.
- Do not open the device and do not modify the device.
- Do not connect this device to a dimmerpack.
- Do not shake the device. Avoid brute force when installing or operating the device.
- Do not switch the device on and off in short intervals, as this would reduce the system's life.
- Only use device indoor, avoid contact with water or other liquids.
- Only operate the device after having familiarized with its functions.
- Avoid flames and do not put close to flammable liquids or gases.
- Always allow free air space of at least 50 cm around the unit for ventilation.
- Always disconnect power from the mains, when device is not used or before cleaning! Only handle
  the power-cord by the plug. Never pull out the plug by tugging the power-cord.
- Make sure that the device is not exposed to extreme heat, moisture or dust.
- Make sure that the available voltage is not higher than stated on the rear panel.
- Make sure that the power-cord is never crimped or damaged. Check the device and the powercord from time to time.
- Make sure that no side forces can impact on the truss system.
- The cable insert or the female part in the device must never be strained. There must always be sufficient cable to the device. Otherwise, the cable may be damaged which may lead to deadly electrical shocks.
- If the external cable is damaged, it has to be replaced by a qualified technician.
- If device is dropped or struck, disconnect mains power supply immediately. Have a qualified engineer inspect for safety before operating.
- If the device has been exposed to drastic temperature fluctuation (e.g. after transportation), do not switch it on immediately. The arising condensation water might damage your device. Leave the device switched off until it has reached room temperature.
- If your Showtec device fails to work properly, discontinue use immediately. Pack the unit securely (preferably in the original packing material), and return it to your Showtec dealer for service.
- For adult use only. The device must be installed out of the reach of children. Never leave the unit running unattended.
- For replacement use fuses of same type and rating only.
- The user is responsible for correct positioning and operating of the DMX Booster Bar 4. The manufacturer will not accept liability for damages caused by the misuse or incorrect installation of this device.
- This device falls under protection class I. Therefore it is essential to connect the yellow/green conductor to earth.
- Repairs, servicing and electric connection must be carried out by a qualified technician.
- WARRANTY: Till one year after date of purchase.



## **Operating Determinations**

- This device is not designed for permanent operation. Consistent operation breaks will ensure that the device will serve you for a long time without defects.
- The maximum ambient temperature ta = 40°C must never be exceeded.
- The relative humidity must not exceed 50 % with an ambient temperature of 40° C.
- If this device is operated in any other way, than the one described in this manual, the product may suffer damages and the warranty becomes void.
- Any other operation may lead to dangers like short-circuit, burns, electric shock, crash etc.

You endanger your own safety and the safety of others!

## Rigging

Please follow the European and national guidelines concerning rigging, trussing and all other safety issues.

Do not attempt the installation yourself!

Always let the installation be carried out by an authorized dealer!

## Connection with the mains

Connect the device to the mains with the power-plug.

Always pay attention, that the right color cable is connected to the right place.

<u>International</u>	EU Cable	UK Cable	US Cable	Pin
L	BROWN	RED	YELLOW/COPPER	PHASE
N	BLUE	BLACK	SILVER	NEUTRAL
	YELLOW/GREEN	GREEN	GREEN	PROTECTIVE GROUND

Make sure that the device is always connected properly to the earth!

## Improper installation can cause serious damage to people and property!



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## Return Procedure



Returned merchandise must be sent prepaid and in the original packing, call tags will not be issued. Package must be clearly labeled with a Return Authorization Number (RMA number). Products returned without an RMA number will be refused. Highlite will not accept the returned goods or any responsibility. Call Highlite 0031-455667723 or mail <a href="mailto:aftersales@highlite.nl">aftersales@highlite.nl</a> and request an RMA prior to shipping the fixture. Be prepared to provide the model number, serial number and a brief description of the cause for the return. Be sure to properly pack fixture, any shipping damage resulting from inadequate packaging is the customer's responsibility. Highlite reserves the right to use its own discretion to repair or replace product(s). As a suggestion, proper UPS packing or double-boxing is always a safe method to use.

# Note: If you are given an RMA number, please include the following information on a piece of paper inside the box:

- 01) Your name
- 02) Your address
- 03) Your phone number
- 04) A brief description of the symptoms

#### Claims

The client has the obligation to check the delivered goods immediately upon delivery for any short-comings and/or visible defects, or perform this check after our announcement that the goods are at their disposal. Damage incurred in shipping is the responsibility of the shipper; therefore the damage must be reported to the carrier upon receipt of merchandise.

It is the customer's responsibility to notify and submit claims with the shipper in the event that a fixture is damaged due to shipping. Transportation damage has to be reported to us within one day after receipt of the delivery.

Any return shipment has to be made post-paid at all times. Return shipments must be accompanied with a letter defining the reason for return shipment. Non-prepaid return shipments will be refused, unless otherwise agreed in writing.

Complaints against us must be made known in writing or by fax within 10 working days after receipt of the invoice. After this period complaints will not be handled anymore.

Complaints will only then be considered if the client has so far complied with all parts of the agreement, regardless of the agreement of which the obligation is resulting.



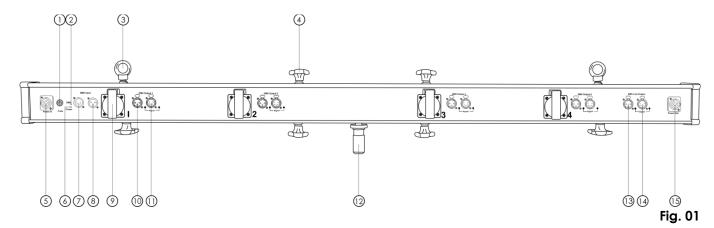
## Description of the device

#### **Features**

The DMX Booster Bar 4 is a 4 channel sliding T-Bar. Due to the built-in booster each channel is insulated and boosted ensuring that all your fixtures are getting the best DMX signal possible.

- Neutrik PowerCON Input 240V / 50Hz
- Neutrik PowerCON Output 240V / 50Hz
- 4x Channel Power Output 240V / 50Hz
- 1x DMX Input (3-pin XLR)
- 1x DMX Input (5-pin XLR)
- 1x Isolated DMX Link Output (3-pin XLR)
- 1x Isolated DMX Link Output (5-pin XLR)
- 4x Channel DMX Output (3-pin XLR)
- 4x Channel DMX Output (5-pin XLR)
- DMX signal LED
- Power Signal LED
- M-10 Sliding Profile
- Spigot Adapter
- Fuse: F10AL / 250V
- Dimensions: 1510 x 64 x 92 mm (LxWxH)
- Weight: 5,8 kg

## Overview



- 01) Fuse F10AL / 250V
- 02) DMX Signal LED
- 03) Rigging eye
- 04) M10 sliding profile mounting screw
- 05) Neutrik PowerCON IN (blue)
- 06) Power Signal LED
- 07) DMX IN (5-pin XLR)
- 08) DMX IN (3-pin XLR)
- 09) Channel Power Out
- 10) Channel DMX OUT (3-pin XLR)
- 11) Channel DMX OUT (5-pin XLR)
- 12) Spigot adapter
- 13) Link DMX OUT (3-pin XLR)
- 14) Link DMX OUT (5-pin XLR)
- 15) Neutrik PowerCON OUT (white)



## Installation

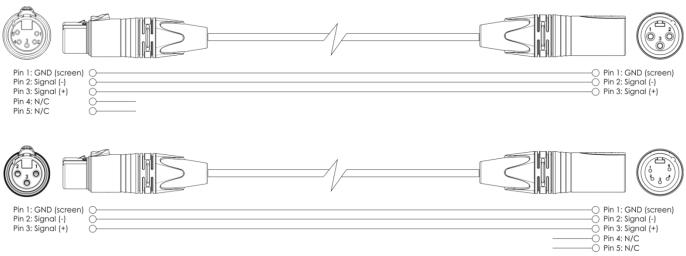
Remove all packing materials from the DMX Booster Bar 4. Check that all foam and plastic padding is removed. Connect all cables.

Do not supply power before the whole system is set up and connected properly. Always disconnect from electric mains power supply before cleaning or servicing. Damages caused by non-observance are not subject to warranty.

## **Set Up and Operation**

Follow the directions below, as they pertain to your preferred operation mode. Before plugging the unit in, always make sure that the power supply matches the product specification voltage. Do not attempt to operate a 120V specification product on 230V power, or vice versa.

- 01) Always use a safety cable (ordercode 70140 / 70141).
- 02) Plug the end of the electric mains power cord into a proper electric power supply socket.
- 03) Use a 3-pin or 5-pin XLR cable to connect the DMX Booster Bar 4 and other devices.



- 04) Link the units, connect a DMX signal cable from the first unit's DMX "out" socket to the second unit's "in" socket. Repeat this process to link the second, third, and fourth unit.
- 05) Supply electric power: Plug electric mains power cords into each unit's PowerCON socket, then plug the other end of the mains power cord into proper electric power supply sockets, starting with the first unit. Do not supply power before the whole system is set up and connected properly.

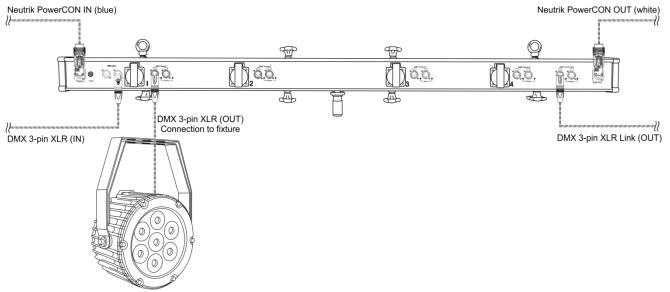


Fig. 02



## **Fixture Linking**

You will need a serial data link to run light shows of one or more fixtures using a DMX-512 controller or to run synchronized shows on two or more fixtures set to a master/slave operating mode. The combined number of channels required by all the fixtures on a serial data link determines the number of fixtures the data link can support.

Important:

Fixtures on a serial data link must be daisy chained in one single line. To comply with the EIA-485 standard no more than 30 devices should be connected on one data link. Connecting more than 30 fixtures on one serial data link without the use of a DMX optically isolated splitter may result in deterioration of the digital DMX signal.



Maximum recommended DMX data link distance: 100 meters

Maximum recommended number of Booster Bars depends on the power usage of the
connected fixtures to a single DMX Booster Bar 4. **Note: Fuse F10AL / 250V.** 

## **Data Cabling**

To link fixtures together you must obtain data cables. You can purchase DAP Audio certified DMX cables directly from a dealer/distributor or construct your own cable. If you choose to create your own cable please use data-grade cables that can carry a high quality signal and are less prone to electromagnetic interference.

#### **DAP Audio Certified DMX Data Cables**

- DAP Audio cable for all-round use. bal. XLR/M 3 p. > XLR/F 3 p.
   Ordercode FL01150 (1,5m.), FL013 (3m.), FL016 (6m.), FL0110 (10m.), FL0115 (15m.), FL0120 (20m.).
- DAP Audio cable for the demanding user with exceptional audio-qualities and connector made by Neutrik®. Ordercode FL71150 (1,5m.), FL713 (3m.), FL716 (6m.), FL7110 (10m.).



## Maintenance

The Showtec DMX Booster Bar 4 requires almost no maintenance. However, you should keep the unit clean. Disconnect the mains power supply and then wipe the cover with a damp cloth. Wipe the front panel with a damp cloth. Do not use alcohol or solvents. Do not immerse in liquid.

Keep connections clean. Disconnect electric power, and then wipe the DMX and audio connections with a damp cloth. Make sure connections are thoroughly dry before linking equipment or supplying electric power.

The operator has to make sure that safety-relating and machine-technical installations are to be inspected by an expert after every year in the course of an acceptance test.

The operator has to make sure that safety-relating and machine-technical installations are to be inspected by a skilled person once a year.

The following points have to be considered during the inspection:

- 01) All screws used for installing the device or parts of the device have to be tightly connected and must not be corroded.
- 02) There may not be any deformations on housings, fixations and installation spots.
- 03) Mechanically moving parts like axles, eyes and others may not show any traces of wearing.
- 04) The electric power supply cables must not show any damages or material fatigue.

## Replacing a Fuse

Power surges, short-circuit or inappropriate electrical power supply may cause a fuse to burn out. If the fuse burns out, the product will not function whatsoever. If this happens, follow the directions below to do so.

- 01) Unplug the unit from electric power source.
- 02) Insert a screwdriver into the slot in the fuse cover. Turn the fuse holder counterclockwise. The fuse will come out.
- 03) Remove the used fuse. If brown or unclear, it is burned out.
- 04) Insert the replacement fuse into the holder where the old fuse was. Reinsert the fuse holder. Be sure to use a fuse of the same type and specification. See the product specification label for details.

## **Troubleshooting**

#### No Function

This troubleshooting guide is meant to help solve simple problems.

If a problem occurs, carry out the steps below in sequence until a solution is found. Once the unit operates properly, do not carry out following steps.

If the DMX Booster Bar 4 does not operate properly, refer servicing to a technician.

Response: Suspect two potential problem areas as: the power supply or the fuse.

- 01) Power supply. Check that the unit is plugged into an appropriate power supply.
- 02) The fuse. Replace the fuse. See above for replacing the fuse.
- 03) If you are unable to determine the cause of the problem, do not open the DMX Booster Bar 4, as this may damage the unit and the warranty will become void.
- 04) Return the device to your Showtec dealer.

## No Response to DMX

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Response: Suspect the DMX cable or connectors, a controller malfunction, a light effect DMX card malfunction.

- 01) Check the DMX cable: Unplug the unit; change the DMX cable; then reconnect to electrical power. Try your DMX control again.
- 02) Determine whether the controller or light effect is at fault. Does the controller operate properly with other DMX products? If not, take the controller in for repair. If so, take the DMX cable and the light effect to a qualified technician.
- 03) Return the device to your Showtec dealer.



## **Product Specification**

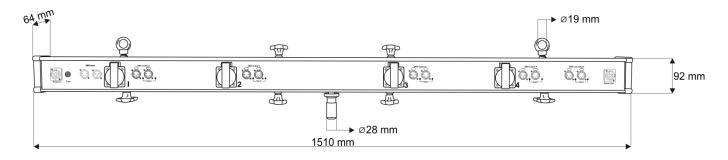
Model:	DMX Booster Bar 4		
Input Voltage:	240V / 50Hz		
Power linking:	240V / 50Hz		
Fuse:	F10AL / 250V		
Dimensions:	1510 x 64 x 92 mm (LxWxH)		
Spigot Adapter diameter:	28 mm		
Weight:	5,8 kg		
Operation			
Power IN:	1x Neutrik PowerCON (blue)		
Power OUT:	1x Neutrik PowerCON (white)		
Channel Power OUT:	4x Schuko		
DMX IN:	1x XLR 3-pin		
DMX IN:	1x XLR 5-pin		
DMX link OUT (isolated):	1x XLR 3-pin		
DMX link OUT (isolated):	1x XLR 5-pin		
DMX OUT:	4x XLR 3-pin		
DMX OUT:	4x XLR 5-pin		
Electro-mechanical effects			
IP Rating:	IP20		
Housing:	Specially designed housing ensures an optimum heat dissipation during operation		
Mounting:	Multiple mounting possibilities (spigot and rigging eye)		
Sliding Profile:	M10		
Housing:	Die Cast Aluminium Powder Coat Finish		
Connections:	Dedicated PowerCON & DMX Data Connector		
Cooling:	Convection (no fans)		
Max. ambient temperature $t_a$ :	40°C		
Max. housing temperature $t_B$ :	80°C		
Minimum distance:			
Minimum distance from flammable surfaces:	0.5 m		
Minimum distance to lighted object: 1 m			

Design and product specifications are subject to change without prior notice.



Website: <u>www.Showtec.info</u> Email: <u>service@highlite.nl</u>

## **Dimensions**







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