



LED Powerbar 12

ORDERCODE 41330



SHOWELECTRONICS FOR PROFESSIONALS

Congratulations!

You have bought a great, innovative product from Showtec.

The Showtec LED Powerbar 12 brings excitement to any venue. Whether you want simple plug-&-play action or a sophisticated DMX show, this product provides the effect you need.

You can rely on Showtec, for more excellent lighting products.

We design and manufacture professional light equipment for the entertainment industry.

New products are being launched regularly. We work hard to keep you, our customer, satisfied.

For more information: iwant@showtec.info

You can get some of the best quality, best priced products on the market from Showtec.

So next time, turn to Showtec for more great lighting equipment.

Always get the best -- with Showtec !

Thank you!



Showtec LED Powerbar 12™ Product Guide

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WARNING

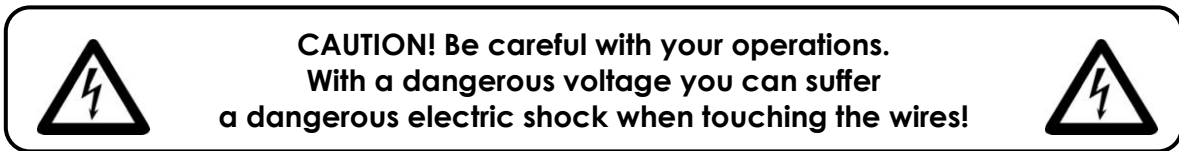


**FOR YOUR OWN SAFETY, PLEASE READ THIS USER MANUAL CAREFULLY
BEFORE YOUR INITIAL START-UP!**

SAFETY INSTRUCTIONS

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

- be qualified
- follow the instructions of this manual



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 use 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 leave any cables lying around.
- 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 power-cord from time to time.
- 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.
- Repairs, servicing and electric connection must be carried out by a qualified technician.
- **WARRANTY:** Till one year after date of purchase.

OPERATING DETERMINATIONS

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, lamp explosion, 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 !

Procedure:


- If the LED Powerbar 12 is lowered from the ceiling or high joists, professional trussing systems have to be used.
- Use a clamp to mount the LED Powerbar 12, with the mounting-bracket, to the trussing system.
- The LED Powerbar 12 must never be fixed swinging freely in the room.
- The installation must always be secured with a safety attachment, e.g. an appropriate safety net or safety-cable.
- When rigging, derigging or servicing the LED Powerbar 12, always make sure, that the area below the installation place is blocked and staying in the area is forbidden.

The LED Powerbar 12 can be placed on a flat stage floor or mounted to any kind of truss by a clamp.

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.

International	EU Cable	UK Cable	US Cable	Pin
L	BROWN	RED	YELLOW/COPPER	FASE
N	BLUE	BLACK	SILVER	NUL
	YELLOW/GREEN	GREEN	GREEN	EARTH

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

Improper installation can cause serious damage to people and property !

Description of the device

Features

The LED Powerbar is a LED system from Showtec.

- 2 Modes: Stand-alone, DMX-controlled
- 3 Channels (R, G, B)
- IP-Rating: IP-65
- Color range: 16,000,000 colors.
- Light source: High Power LED
- 12 High power LEDs (4 Red, 4 Green, 4 Blue)
- Beam angle: 25°
- Light spacing: 20M
- Digital interface: Standard DMX compatible
- Controlling system: DMX512
- Shell material: aluminum alloy
- Connecting mode: standard signal cord and power cord
- Connector: 3-pin signal connector

NOTE: Knowledge of DMX is required to fully utilize this unit.

Overview



Fig. 1

Backside



Fig. 2

Installation

Remove all packing materials from the LED Powerbar 12. 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

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.



Powercable



3-pin waterproof cable



special 3-pin to XLR cable

Connection

Connect the input connector of the first fixture to the output connector of the DMX console; connect the output connector of first fixture to the input connector of the second fixture; etc., as shown in following diagram.

- 1) Put the output connector of the first fixture into a $\Phi 20$ thermal shrinking sleeve with glue inside. The end of the sleeve should be 5mm from the joint of the cable and the connector.
- 2) Put the input connector of the second fixture into the $\Phi 20$ thermal shrinking sleeve so as to connect it with the output connector of the first fixture.
- 3) Blow and shrink the sleeve ends with a hair drier so that the sleeve and the signal cable are tightly contacted for waterproof purpose.

The signal output connector of the last fixture (maximum 30 fixtures) of each series must be sealed with a $\Phi 20$ thermal shrinking sleeve and blow and shrink it with a hair drier for waterproof purpose.

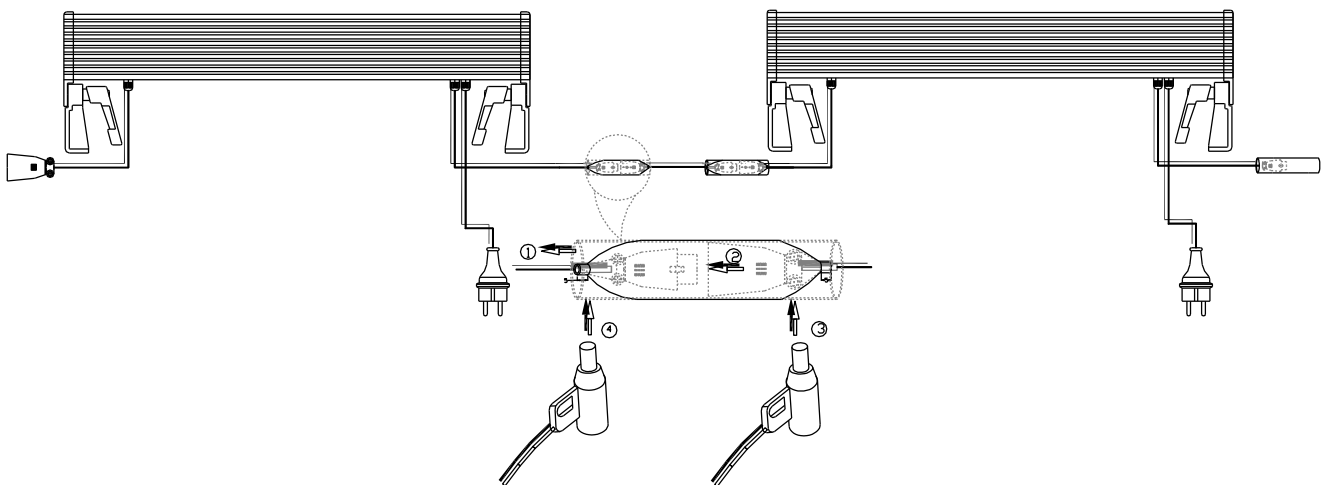


Fig. 3

DMX Operation

Press the Up/Down button to change the DMX address setting menu:

The DMX Channel functions when using the entire device as one:

Channel 1: Red (0-255)
Channel 2: Green (0-255)
Channel 3: Blue (0-255)

The LED Powerbar's built-in controller will automatically detect the presence of a DMX signal. In order to receive a DMX signal, the built-in controller must be attached to a DMX controller by a 3-pin DMX cable and the DMX controller must be turned on. To mix RGB color use channels 1, 2, 3.

Note: When there is no DMX signal, the LED Powerbar will switch to Stand-alone Mode after a few seconds.

DMX Addressing

Unit address	DMX address
1	1
2	4
3	7
4	10
5	13
6	16
7	19
8	22
9	25
.	.
.	.
Etc.	.

Light Output

Light Output Measurement (for 28° beam angle)

Illuminance Distribution

60.1	70.4	83.4	104.0	117.7	124.3	108.6	90.3	74.9	63.7
76.2	97.5	155.1	248.6	314.0	308.4	240.2	153.3	129.1	77.6
101.9	163.6	320.6	593.5	751.4	684.1	473.8	265.4	149.5	94.4
136.4	269.2	629.9	1047.7	1242.0	1157.9	829.9	475.7	220.6	118.7
156.1	370.1	801.9	1255.1	1619.6	1535.5	1114.0	630.8	281.3	141.1
147.7	329.9	746.7	1205.6	1296.0	1528.9	1129.9	680.4	298.1	142.1
128.9	237.4	529.9	923.4	1203.7	1213.1	943.9	542.9	246.7	120.6
103.7	154.2	291.6	550.5	752.3	761.7	567.3	306.5	144.9	92.5
89.7	112.1	152.3	240.2	317.8	315.9	214.9	135.5	93.5	71.0
72.9	86.9	100.9	116.8	129.9	121.5	101.9	81.3	67.3	57.0

0.5 m

0 m

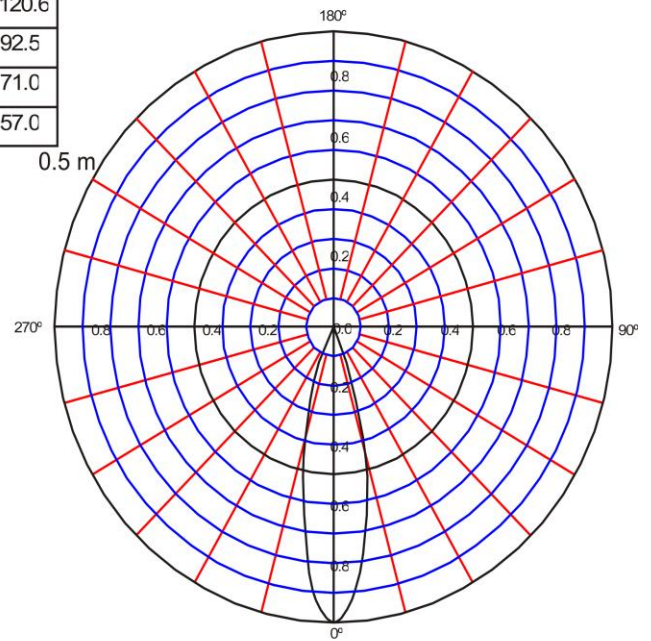
Units : LX
 Measured: on white
 Direction: on Axis
 Distance from surface: 1m.
 Multipliers: 0.115 Red
 0.378 Green
 0.506 Blue

Source Specifications

0.5 m

Source: 12 LEDs (4 Red, 4 Green, 4 Blue)

0 m



Illuminance Distribution

Distance (m) \ Color	1	2	3	4	5
White	3448.6	912.2	416.8	236.2	149.2
Red	426.2	114.0	54.2	30.4	18.6
Green	1401.8	371.8	171.8	95.8	60.8
Blue	1874.8	485.8	220.6	124.8	80.8

Units : LX
 Direction: on axis

Testing Circumstances
 Installation position: horizontal
 Max. Luminous intensity 2045.612 cd
 Luminous Flux: 741.4 lm
 Luminous Efficiency: 11.029 lm/w
 Beam Angle: 28°

SET UP Example

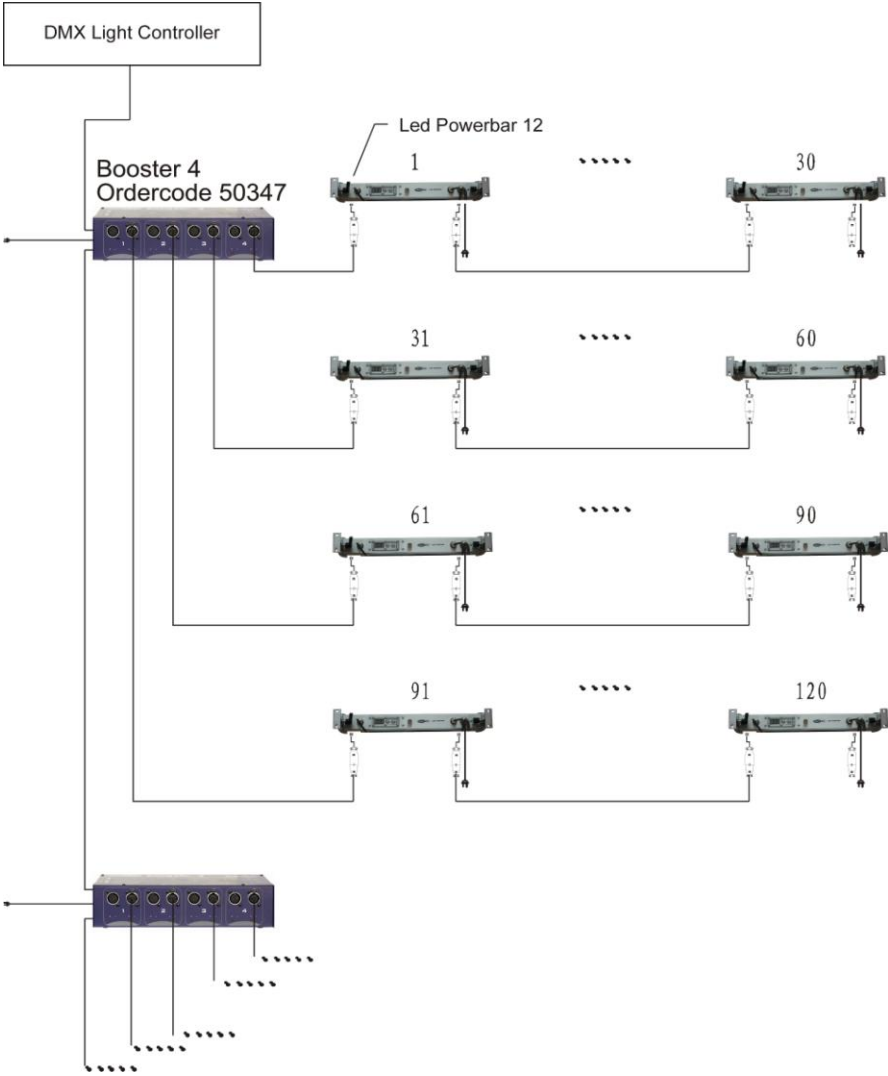


Fig. 4

Maintenance

The operator has to make sure that safety-relating and machine-technical installations are to be inspected by an expert after every four years 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:

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

The LED Powerbar 12 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. Do not immerse in liquid.

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

Troubleshooting

Showtec LED Powerbar 12

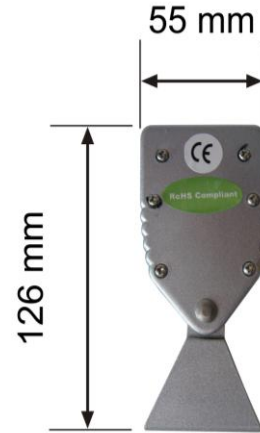
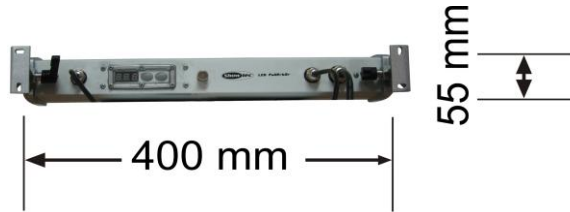
This troubleshooting guide is meant to help solve simple problems.

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.

1. If the device does not operate properly, unplug the device.
2. Check the controller, power from the wall, all cables etc.
3. If all of the above appears to be O.K., plug the unit in again.
4. If you are unable to determine the cause of the problem, do not open the LED Powerbar 12, as this may damage the unit and the warranty will become void.
5. Return the device to your Showtec dealer.

Product Specification

Model: Showtec LED Powerbar 12
Operating voltage: AC90-264V
Operating current: Max.5.4A
Power consumption: 64.8 W
Beam Angle: 25°
Light Source: 12 High power LEDs
(4 Red, 4 Green, 4 Blue)
Max Projecting distance: 30m.
Colors: RGB
Protection Rating: IP65
Weight: 1,44 kg



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



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