

ENGLISH

**BO6S1 Breakoutbox 6 Schuko**

**V1**

Product code: 50287

## Preface

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Thank you for purchasing this Showgear product.

The purpose of this user manual is to provide instructions for the correct and safe use of this product.

Keep the user manual for future reference as it is an integral part of the product. The user manual shall be stored at an easily accessible location.

This user manual contains information concerning:

- Safety instructions
- Installation and operation of the device
- Intended and non-intended use of the device
- Maintenance procedures
- Troubleshooting
- Transport, storage and disposal of the device

Non-observance of the instructions in this user manual may result in serious injuries and damage of property.

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## 1. Introduction

### 1.1. Before Using the Product



#### Important

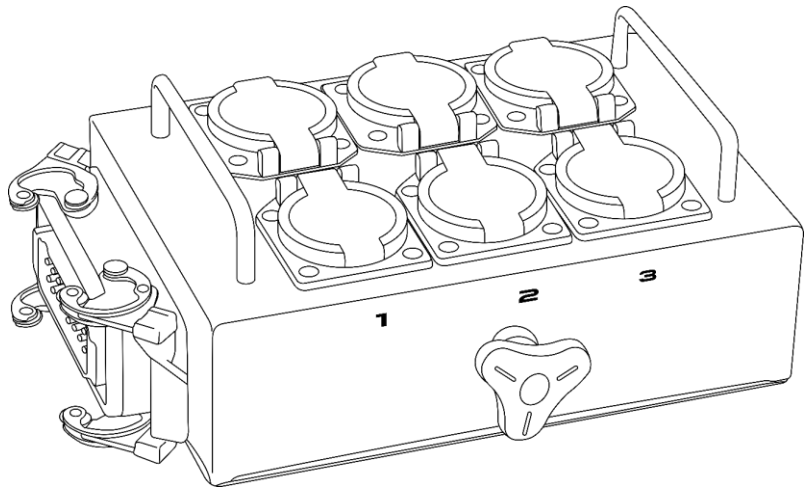
**Read and follow the instructions in this user manual before installing, operating or servicing this product.**

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

After unpacking, check the contents of the box. If any parts are missing or damaged, contact your Highlite International dealer.

Your shipment includes:

- Showgear 4 BO6S1 Breakoutbox 6 Schuko
- User manual



**Fig. 01**

### 1.2. Intended Use

This device is intended for professional use as a breakout box. It is suitable only for indoor installation. This device is not suitable for households and residential buildings.

This device is designed for use in environment B.

Any other use, not mentioned under intended use, is regarded as non-intended and incorrect use.

### 1.3. Product Lifespan

This device is not designed for permanent operation. Disconnect the device from the electrical power supply when the device is not in operation. This will reduce the wear and will improve the device's lifespan.

### 1.4. Text Conventions

Throughout the user manual the following text conventions are used:

- Buttons: All buttons are in bold lettering, for example "Press the **UP/DOWN** buttons"
- References: References to chapters and parts of the device are in bold lettering, for example: "Refer to **2. Safety**", "turn the **adjustment screw (02)**"
- 0–255: Defines a range of values
- Notes: **Note:** (in bold lettering) is followed by useful information or tips

## 1.5. Symbols and Signal Words

Safety notes and warnings are indicated throughout the user manual by safety signs.

Always follow the instructions provided in this user manual.



### **DANGER**

Indicates an imminently hazardous situation which, if not avoided, will result in death or serious injury.



### **WARNING**

Indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury.



### **CAUTION**

Indicates a potentially hazardous situation, which, if not avoided, may result in minor or moderate injury.



### **Attention**

Indicates important information for the correct operation and use of the product.



### **Important**

Read and observe the instructions in this document.



### **Electrical hazard**



Provides important information about the disposal of this product.

## 1.6. Symbols on the Information Label

This product is provided with an information label. The information label is located on the backside of the device.

The information label contains the following symbols:



This device shall not be treated as household waste.



This device is designed for indoor use.



Caution: Risk of electric shock. Do not open.

Caution: To reduce the risk of electric shock, do not remove cover. No user-serviceable parts inside. Refer servicing to qualified personnel.

## 2. Safety

**Important**

**Read and follow the instructions in this user manual before installing, operating or servicing this product.**

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

### 2.1. Warnings and Safety Instructions

**DANGER**

**Danger for children**

For adult use only. The device must be installed beyond the reach of children.

- Do not leave various parts of the packaging (plastic bags, polystyrene foam, nails, etc.) within children's reach. Packaging material is a potential source of danger for children.

**DANGER**

**Electric shock caused by dangerous voltage inside**

There are areas within the device where dangerous touch voltage may be present.

- Disconnect the device from electrical power supply before service and maintenance, and when the device is not in use.

**DANGER**

**Electric shock caused by short-circuit**

This device falls under IEC protection class I.

- Make sure that the device is electrically connected to ground (earth). Connect the device only to a socket-outlet with ground (earth) connection.
- Do not cover the ground (earth) connection.
- Do not immerse the device in water or other liquids. Do not install the device in a location where flooding may occur.
- Do not use the device during thunderstorms. Disconnect the device from the electrical power supply immediately.



**Attention**  
**Power supply**

- Before connecting the device to the power supply, make sure that the current, voltage and frequency match the input voltage, current and frequency specified on the information label on the device.
- Make sure that the cross-sectional area of the extension cords and power cables is sufficient for the required power consumption of the device.



**Attention**  
**General safety**

- Do not shake the device. Avoid brute force when installing or operating the device.
- If the device is dropped or struck, disconnect the device from the electrical power supply immediately.
- If the device is exposed to extreme temperature variations (e.g. after transportation), do not switch it on immediately. Let the device reach room temperature before switching it on, otherwise it may be damaged by the formed condensation.
- If the device fails to work properly, discontinue the use immediately.



**Attention**  
**For professional use only**  
**This device shall be used only for the purposes it is designed for.**

This device is designed to be used as a socket box. Any incorrect use may lead to hazardous situations and result in injuries and material damage.

- This device is not suitable for households and residential buildings.
- This device does not contain user-serviceable parts. Unauthorized modifications to the device will render the warranty void. Such modifications may result in injuries and material damage.



**Attention**  
**Before each use, examine the device visually for any defects.**

Make sure that:

- All screws used for installing the device or parts of the device are tightly fastened and are not corroded.
- There are no deformations on housings, fixations and installation points.
- The power cables are not damaged and do not show any material fatigue.

**Attention****Do not expose the device to conditions that exceed the rated IP class conditions.**

This device is IP20 rated. IP (Ingress Protection) 20 class provides protection against solid objects greater than 12 mm, such as fingers, and no protection against harmful ingress of water.

## 2.2. Requirements for the User

This product may be used by ordinary persons. Maintenance may be carried by ordinary persons. Installation and service shall be carried out only by instructed or skilled persons. Contact your Highlite dealer for more information.

Instructed persons have been instructed and trained by a skilled person, or are supervised by a skilled person, for specific tasks and work activities associated with the installation, service and maintenance of this product, so that they can identify risks and take precautions to avoid them.

Skilled persons have training or experience, which enables them to recognize risks and to avoid hazards associated with the installation, service and maintenance of this product.

Ordinary persons are all persons other than instructed persons and skilled persons. Ordinary persons include not only users of the product but also any other persons that may have access to the device or who may be in the vicinity of the device.

### 3. Description of the Device

The Showgear BO6S1 Breakoutbox 6 Schuko is a breakout box. Thanks to the 16-pin HAN16 power connector, the incoming signal connections are kept separately, which makes it easy to find and troubleshoot any faulty device or incorrect signal. The device is equipped with 6 Schuko outputs. The maximum allowed current load is 16 A per channel.

#### 3.1. Front View

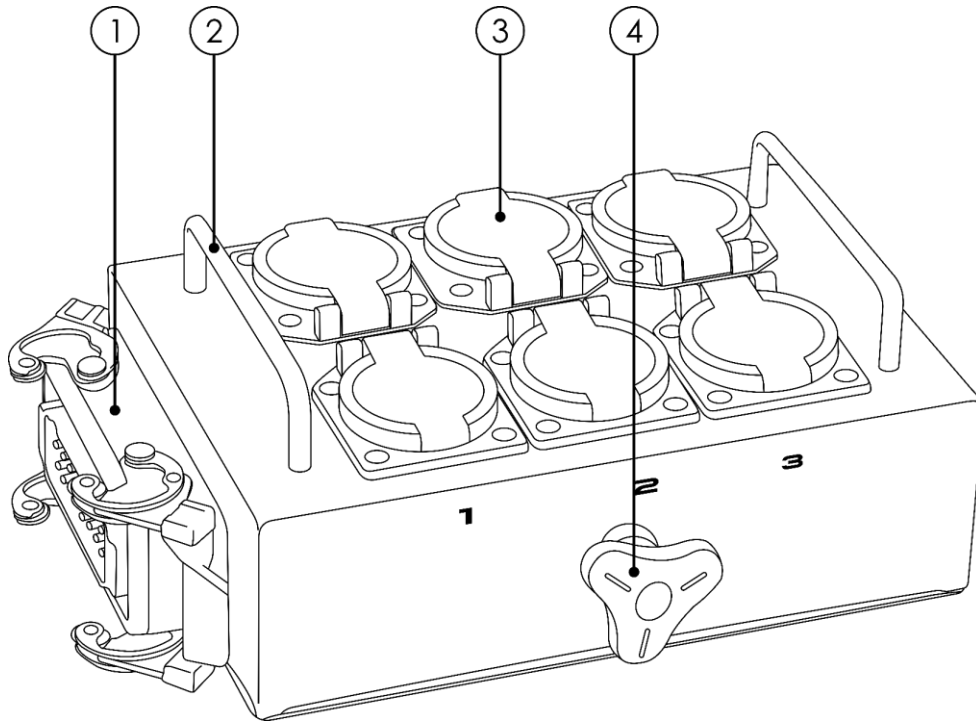


Fig. 02

- 01) 230 V 16-pin HAN16 male power connector IN    03) 6 x Schuko power connectors OUT (CH1–6)  
 02) 2 x carrying handle    04) 2 x M10 clamp mounting screw

#### 3.2. Product Specifications

Model:	BO6S1 Breakoutbox 6 Schuko
<b>Electrical:</b>	
Input voltage:	230 V AC, 50/60 Hz, max. 16 A per channel
Rated current:	16 A
<b>Physical:</b>	
Dimensions:	255 x 150 x 102 mm (LxWxH)
Weight:	1,96 kg
<b>Connections:</b>	
Power connections:	16-pin HAN16 connector IN
Power connectors OUT:	6 x Schuko connectors OUT
<b>Construction:</b>	
Housing:	Metal
Color:	Black
IP rating:	IP20
<b>Thermal:</b>	
Ambient temperature $t_a$ :	0–35 °C

### 3.1. Optional Accessories

You can additionally purchase the following accessories:

Product code: [FP035](#) (Power Multicable 16-pin, 16 x 1,5 mm<sup>2</sup>, 5 m)

Product code: [FP0315](#) (Power Multicable 16-pin, 16 x 1,5 mm<sup>2</sup>, 15 m)

Product code: [FP0325](#) (Power Multicable 16-pin, 16 x 1,5 mm<sup>2</sup>, 25 m)

### 3.2. Dimensions

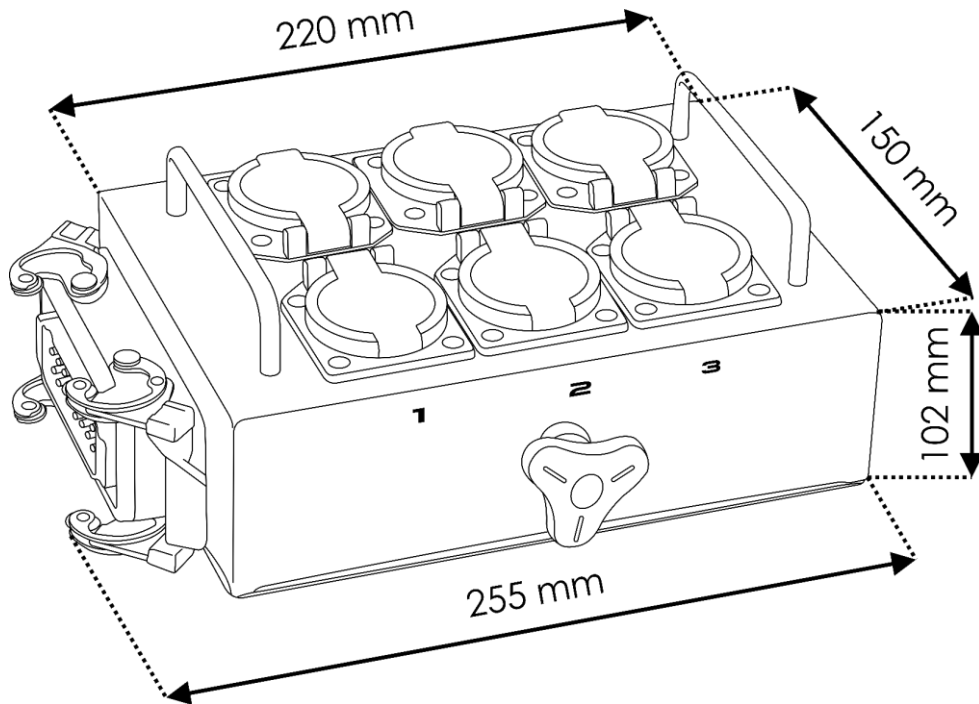


Fig. 03

## 4. Installation

### 4.1. Safety Instructions for Installation



**WARNING**

Incorrect installation can cause serious injuries and damage of property.

Installation must be carried out only by instructed or skilled persons.

Follow all applicable European, national and local safety regulations concerning electrical installations.



**Attention**

Make sure there is enough space for ventilation around the device.

### 4.2. Installation Site Requirements

- The device must be installed only indoors.
- The device can be mounted to a truss or other rigging structure in any orientation.
- The maximum ambient temperature  $t_a = 35\text{ °C}$  must never be exceeded.
- The relative humidity must not exceed 50 % with an ambient temperature of 35 °C.

### 4.3. Rigging

The device can be positioned on a flat surface or mounted to a truss or other rigging structure in any orientation. Make sure that all loads are within the pre-determined limits of the supporting structure.



#### CAUTION

Restrict the access under the work area during rigging and/or derigging.

To mount the device, follow the steps below:

- 01) Turn one or both the **M10 clamp mounting screws (04)** counterclockwise to remove them.
- 02) Install the clamp, as shown in Fig. 04. Make sure that the clamp is suitable for attaching the device to a truss.

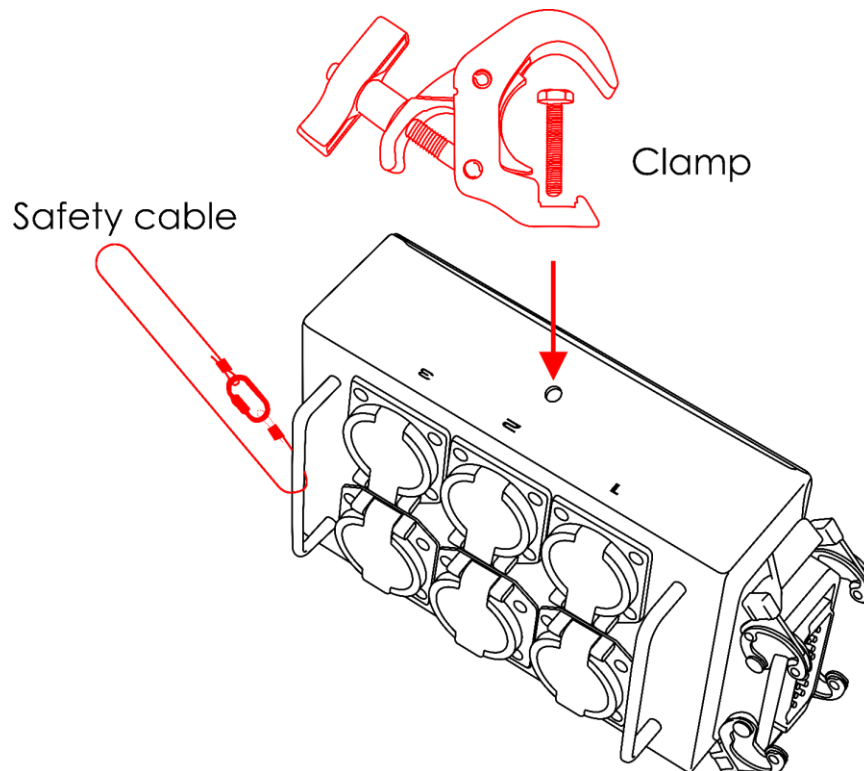


Fig. 04

- 03) Attach the device to the supporting structure. Make sure that the device cannot move freely.
- 04) Secure the device with a secondary suspension, for example a safety cable. Make sure that the secondary suspension can hold 10 times the weight of the device. If possible, the secondary suspension should be attached to a supporting structure independent of the primary suspension. Put the safety cable through the handle, as shown in Fig. 04.

## 5. Setup and Operation

### 5.1. Warnings and Precautions


**Attention**

**Connect all cables before supplying power.  
Disconnect power supply before connecting or disconnecting cables.**

### 5.2. Safety Instructions for Operation


**Attention**

**This device must be used only for the purposes it is designed for.**

This device is intended for professional use as a breakout box. It is suitable only for indoor installation. This device is not suitable for households and residential buildings.

This device is designed for use in environment B.

Any other use, not mentioned under intended use, is regarded as non-intended and incorrect use.


**Attention**

**Power supply**

Before connecting the device to the power supply, make sure that the current, voltage and frequency match the input voltage, current and frequency specified on the information label on the device.

To operate the device:

- 01) Connect the device to the power supply. See **5.3. Connecting to Power Supply** on page 11 for more information.
- 02) Connect external device(s) to the **6 x Schuko power connectors OUT (03)**.

### 5.3. Connecting to Power Supply


**DANGER**

**Electric shock caused by short-circuit**

The device accepts AC mains power at 230 V and 50/60 Hz. Do not supply power at any other voltage or frequency to the device.

This device falls under IEC protection class I. Make sure that the device is always electrically connected to the ground (earth).

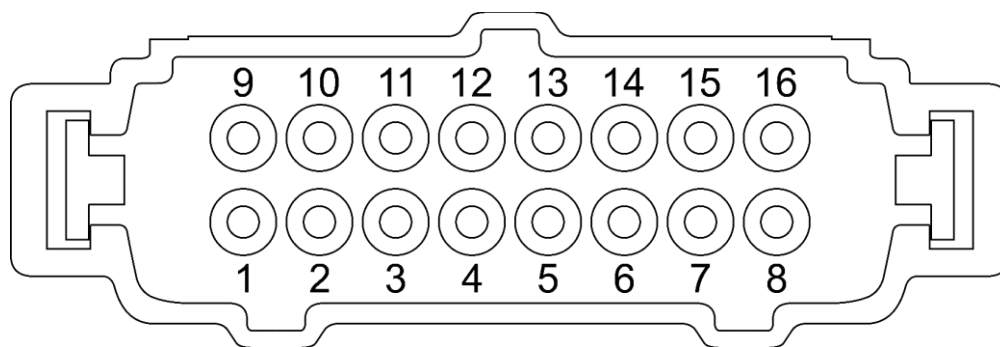
Before connecting the device to the socket-outlet:

- Make sure that the power supply matches the input voltage specified on the information label on the device.
- Make sure that the socket-outlet has ground (earth) connection.

Connect the device to the socket-outlet with the power plug.

### 5.3.1. HAN16 Connector

The **230 V 16-pin HAN16 male power connector IN (01)** has the following pinout:



**Fig. 05**

01) Channel 1, phase	09) Neutral
02) Channel 2, phase	10) Neutral
03) Channel 3, phase	11) Neutral
04) Channel 4, phase	12) Neutral
05) Channel 5, phase	13) Neutral
06) Channel 6, phase	14) Neutral
07) Not connected	15) Not connected
08) Not connected	16) Not connected

## 6. Troubleshooting

This troubleshooting guide contains solutions to problems which can be carried out by an ordinary person. The device does not contain user-serviceable parts.

Unauthorized modifications to the device will render the warranty void. Such modifications may result in injuries and material damage.

Refer servicing to instructed or skilled persons. Contact your Highlite International dealer in case the solution is not described in the table.

Problem	Probable cause(s)	Solution
The device does not function at all	No power to the device	<ul style="list-style-type: none"> <li>Check if power is switched on and cables are plugged in</li> <li>Check the total load of the connected devices.</li> </ul>

## 7. Maintenance

### 7.1. Safety Instructions for Maintenance

**DANGER**

Electric shock caused by dangerous voltage inside

Disconnect power supply before servicing or cleaning.

### 7.2. Preventive Maintenance

**Attention**

Before use, examine the device visually for any defects.

Make sure that:

- All screws used for installing the device or parts of the device are tightly fastened and are not corroded.
- There are no deformations on housings, fixations and installation points.
- The power cables are not damaged and do not show any material fatigue.

#### 7.2.1. Basic Cleaning Instructions

To clean the device, follow the steps below:

- 01) Disconnect the device from the electrical power supply.
- 02) Allow the device to cool down for 5 minutes.
- 03) Clean the device with a soft, lint-free cloth.

**Attention**

- Do not immerse the device in liquid.
- Do not use alcohol or solvents.

### 7.3. Corrective Maintenance

The device does not contain user-serviceable parts. Do not open the device and do not modify the device.

Refer repairs and servicing to instructed or skilled persons. Contact your Highlite International dealer for more information.

## 8. Deinstallation, Transportation and Storage

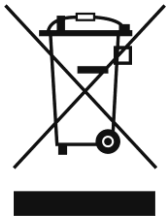
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- Disconnect power supply before deinstallation.
- Use the original packaging to transport the device, if possible.
- Clean the device before storing. Follow the cleaning instructions in chapter **7.2.1. Basic Cleaning Instructions** on page 13.
- Store the device in the original packaging, if possible.

## 9. Disposal

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### Correct disposal of this product



#### Waste Electrical and Electronic Equipment

This symbol on the product, its packaging or documents indicates that the product shall not be treated as household waste. Dispose of this product by handing it to the respective collection point for recycling of electrical and electronic equipment. This is to avoid environmental damage or personal injury due to uncontrolled waste disposal. For more detailed information about recycling of this product contact the local authorities or the authorized dealer.

## 10. Approval

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Check the respective product page on the website of Highlite International ([www.highlite.com](http://www.highlite.com)) for an available declaration of conformity.



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