

ENGLISH

50 mm Half Coupler 300 kg

V1

Product code: 75003/75003B

Preface

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 50 mm Half Coupler 300 kg
- User manual

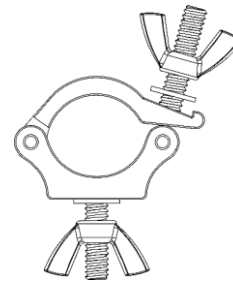


Fig. 01

1.2. Intended Use

This device is intended for professional use as a connection element for trusses in the entertainment technology. It shall be used only on steel or aluminum round tubes. Any other use, not mentioned under intended use, is regarded as non-intended and incorrect use.

1.3. Text Conventions

Throughout the user manual the following text conventions are used:

- 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

1.4. 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.

2. Safety



Important

Read and follow the instructions in this user manual before installing, using 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



WARNING

Incorrect installation can cause serious injuries and damage of property.

This product may be installed only by instructed or skilled persons.

- Do not exceed the working load limit (WLL) as indicated on the device and in this user manual.
- When the device is used together with other accessories, make sure that the working load limit (WLL) of each component is not exceeded.



Attention

For professional use only

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

This device is intended for professional use as a connection element for trusses in the entertainment technology. It shall be used only on steel or aluminum round tubes. Any incorrect use may lead to hazardous situations and result in injuries and material damage.

- Do not use the device on tubes with parameters different from those indicated in this user manual.
- Do not modify the device. Unauthorized modifications to the device will render the warranty void. Such modifications may result in injuries and material damage.
- Use the device only in environments with an ambient temperature between -20 °C and 60 °C.



Attention

Before every use, examine the device visually for any defects

- Follow the inspection schedule established for the site.
- Check the device for damage, cracks and corrosion. If any fault is found, mark the device clearly and remove it from service.
- Do not use the device if it is damaged.

2.2. Requirements for the User



DANGER

This product may not be used by ordinary persons.

This product may be used only by instructed or skilled persons. Installation and maintenance may be carried out by instructed or skilled persons. Service shall be carried out only by skilled persons. Contact your Highlite International 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 50 mm Half Coupler 300 kg is a connection element for trusses in the entertainment technology. It is suitable for use only with steel or aluminum round tubes. It is available in two colors: silver (75003) and black (75003B).

3.1. Overview

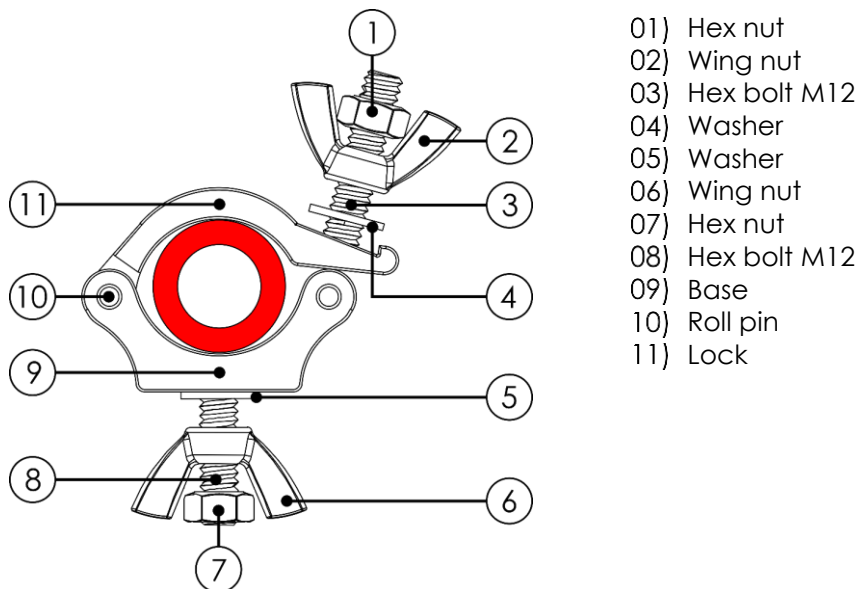


Fig. 02

3.2. Product Specifications

Model:	50 mm Half Coupler 300 kg
Physical:	
Dimensions:	100 x 50 x 130 mm (LxWxH)
Weight:	0,5 kg
Mechanical:	
Main tube diameter:	Ø 48–51 mm
Thread:	M12
WLL:	300 kg
Construction:	
Material:	Aluminum
Color:	Silver (75003), Black (75003B)
Thermal:	
Ambient temperature t_a :	From -20 °C to 60 °C

3.3. Dimensions

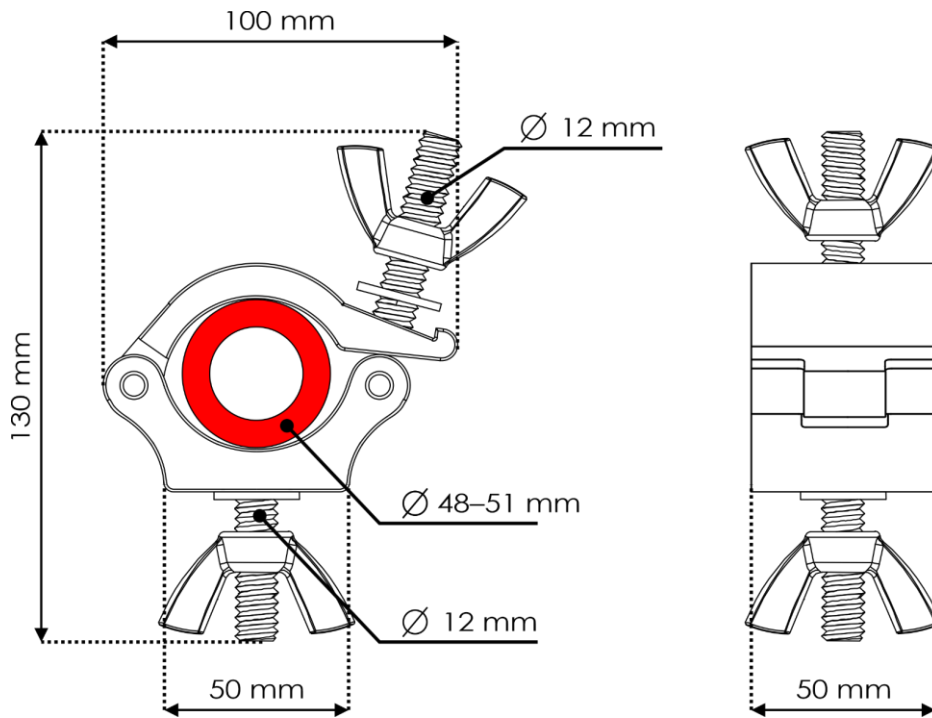


Fig. 03

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 rigging and trussing.

4.2. Personal Protective Equipment

During installation and rigging wear personal protective equipment in compliance with the national and site-specific regulations.

4.3. Mounting



CAUTION

Restrict the access under the work area during installation/deinstallation.



Attention

Do not use brute force when loosening or tightening the nuts/bolts.

Do not exceed the recommended tightening torque: 30 N m (22 lb-ft).

The device is supplied with 2 sets of mounting accessories: 2 **hex nuts (01/07)** (for fixed installation) and 2 **wing nuts (02/06)** (for temporary installation). Choose the preferred installation method before mounting the device and use only the accessories suitable for the installation method of your choice. Remove and store the unused accessories.

To mount the device, follow the steps below:

- 01) Turn the **hex nut (01)** counterclockwise, to remove it.
- 02) Turn the **wing nut (02)** counterclockwise to remove it.
- 03) Open the **lock (11)**. See Fig. 04.

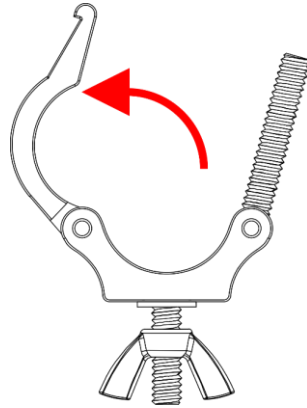


Fig. 04

- 04) Turn the **hex nut (07)** counterclockwise, to remove it.
- 05) Turn the **wing nut (06)** counterclockwise, to remove it.
- 06) Attach a load to the **hex bolt (08)** and secure it in one of the 2 ways:
 - Temporary installation: Put the **wing nut (06)** on the **hex bolt (08)** and turn it clockwise, to tighten the load (Fig. 05).

Note: Secure the load with a secondary suspension, for example a safety cable. Make sure that the secondary suspension can hold 10 times the weight of the load. If possible, the secondary suspension should be attached to a supporting structure independent of the primary suspension. If possible, put the safety cable through the safety eye.

- Fixed installation: Put the **hex nut (07)** on the **hex bolt (08)**. Turn the **hex nut (07)** clockwise, to tighten the load (Fig. 06).

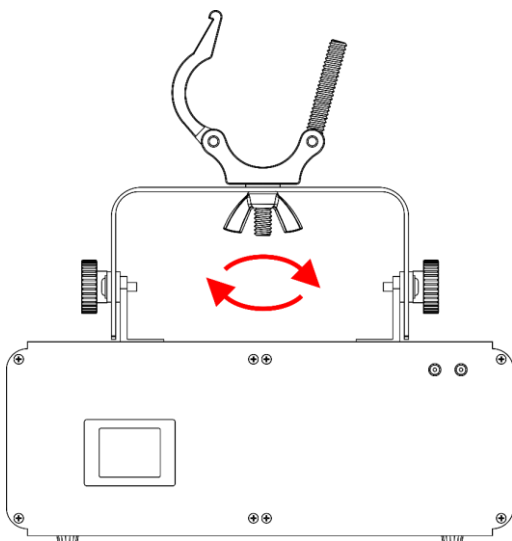


Fig. 05

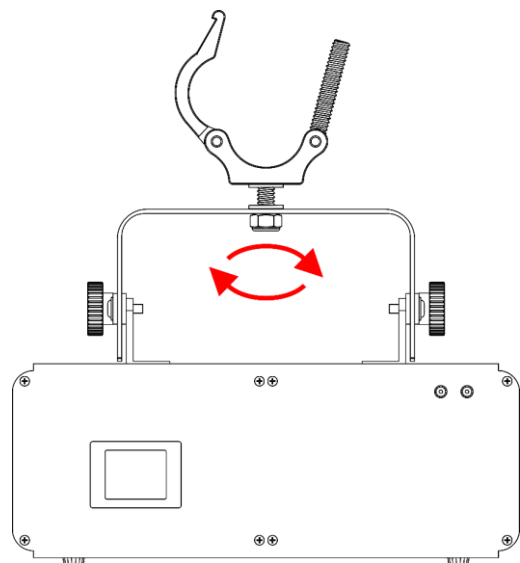


Fig. 06

07) Put the device, with the installed load, around a tube (Ø 48–51 mm) and close the **lock (11)**. See Fig. 07 or Fig. 08.

Notes:

- Make sure that the WLL of any installed accessory/device is not exceeded.
- The closed device shall entirely encompass the tube.

08) Put the **hex nut (01)** (fixed installation, Fig. 08) or the **wing nut (02)** (temporary installation, Fig. 07) on the **hex bolt (03)** and turn it clockwise, to tighten the device around the tube.

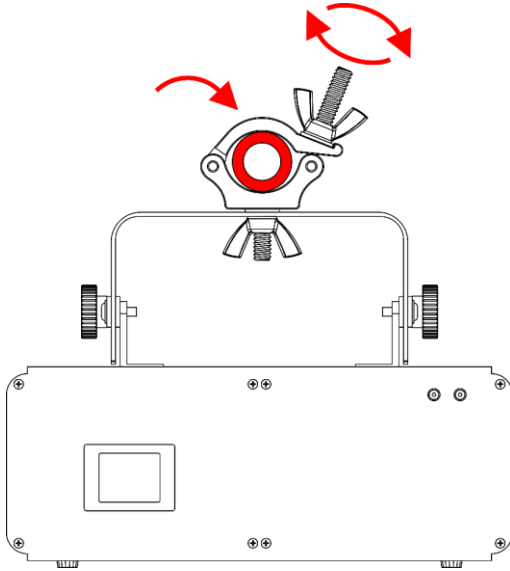


Fig. 07

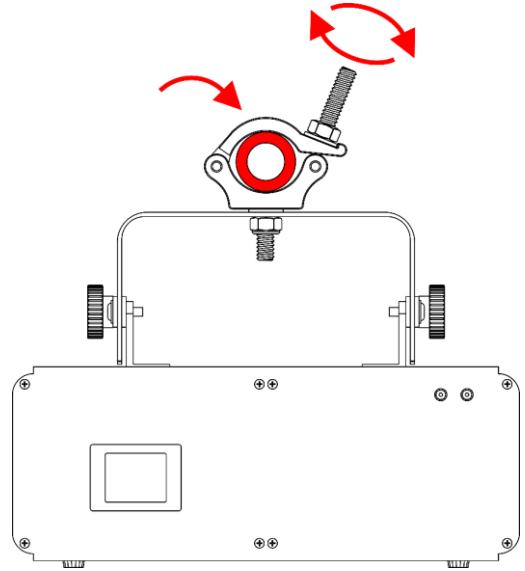


Fig. 08

4.3.1. Working Load Limit

When the device is installed in a vertical position, its WLL (Working Load Limit) is 300 kg.

This installation method does not put any additional strain on the system.

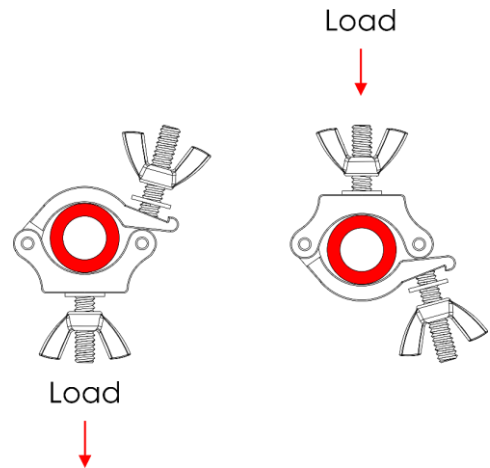


Fig. 09

When the device is installed in a non-vertical position, its WLL becomes lower than 300 kg.

The actual WLL value differs per situation because it depends on many variables (e.g., the tube's surface finish, the torque applied when tightening the device, the inclination angle, etc.)

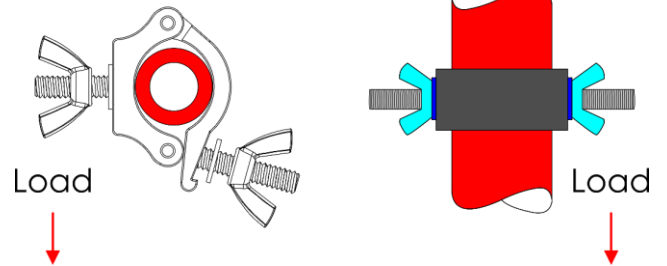


Fig. 10

5. Inspection and Maintenance



Attention

**Inspection and maintenance may be carried out only by instructed or skilled persons.
Service shall be carried out only by skilled persons.**

5.1. Inspection



Attention

Before every use, examine the device visually for any defects

Regular and periodic inspections shall be carried out throughout the period of service of the device. The frequency of the inspections depends on the inspection schedule established for the site where the device is installed.

- Check the device for damage, cracks and corrosion. If any fault is found, mark the device clearly and remove it from service.
- Do not use the device if it is damaged.

5.2. Corrective Maintenance

- Do not modify the device.
- Refer repairs and servicing to skilled persons. Contact your Highlite International dealer for more information.

5.3. Basic Cleaning Instructions

- Use a damp cloth to clean the device.
- Do not use alcohol, solvents or abrasive agents.

6. Deinstallation, Transportation and Storage

6.1. Instructions for Deinstallation



WARNING

Incorrect deinstallation can cause serious injuries and damage of property.

- Restrict the access under the working area during deinstallation.
- Always observe the national and site-specific regulations during deinstallation of the device.
- Wear personal protective equipment in compliance with the national and site-specific regulations.

6.2. Instructions for Transportation

Make sure that appropriate measures are taken to prevent damage to the device during transportation.

6.3. Storage

- Inspect the device for defects before storing. See **5.1. Inspection** on page 9 for more information.
- Clean the device before storing. Follow the cleaning instructions in chapter **5.3. Basic Cleaning Instructions** on page 9.
- Store the device in a dry, ventilated environment to avoid corrosion.

7. Disposal

After the device is removed from service it can be disposed of as scrap.

8. Compliance



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

**SHOW
GEAR**

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