

MANUAL

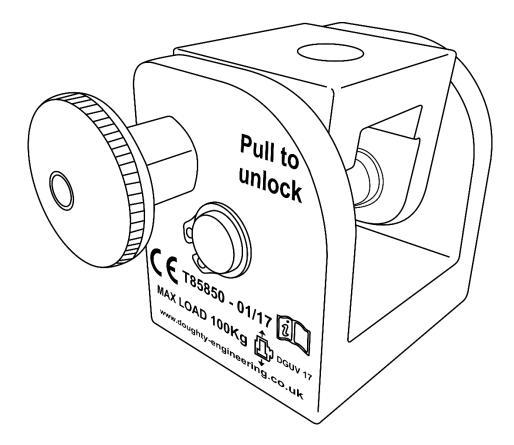




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Warning



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

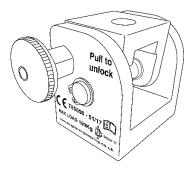


Unpacking Instructions

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:

- Doughty Space Saver
- User manual



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 use, 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 remove warning or informative labels from the unit.
- Never use or continue to work with a damaged or defective Space Saver.
- The Space Saver has to be taken out of services immediately if, during use, repair or maintenance serious damages are discovered.
- All Space Savers should be visually inspected before use. In the event of any damage, the device should be taken out of service and returned to an approved Showtec dealer for inspection.
- Never use the Space Saver for loads that exceed the maximums provided in this manual (SWL: 100 kg).
- Carefully inspect the Space Saver before use.
- Do not shake the device. Avoid brute force when installing or operating the device.
- Always pay attention to local regulations, with respect to occupational health, safety and general rules for safe working.
- Always check the national standards and regulations of the country where the Space Saver is used.



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- Avoid contact with water or other liquids.
- Only operate the device after having familiarized with its functions.
- Only move a load, after having made sure that the load is safely and correctly attached and that there are no persons within the immediate vicinity of the hoist and/or the load.
- Avoid flames and do not put close to flammable liquids or gases.
- Make sure that the device is not exposed to extreme heat, moisture or dust.
- If device was dropped or struck, discontinue the use of the device. Have a qualified engineer inspect for safety before operating.
- If your Showtec device fails to work properly, discontinue the 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 beyond the reach of children.
- For semi-permanent installation applications, check integrity of welds, joints and Space Saver's tightness weekly.
- Space Savers are engraved with the maximum working load corresponding to the 8:1 safety factor in order to meet the German standard for overhead lifting.
- Make sure the resulting forces on the supporting structure are approved by a qualified technician.
- All loads imposed shall be considered, e.g. dynamic forces caused by the lifting machinery.
- Bolts and nuts must be tightened with a spanner in such a manner they cannot be released by manpower.
- When loads are using electrical power, equip-potential bonding must be put in place.
- When used as lifting accessory, Space Savers must be inspected by a qualified technician as often as required but at least once a year.
- Salt water environments require cleaning with fresh water at least once a week.
- The user is responsible for correct positioning and operating of the device. The manufacturer will not accept liability for damages caused by the misuse or incorrect installation of this device.
- Applications that are not described in this manual, are not allowed.
- Installation, repairs and servicing must be carried out by a qualified technician.
- WARRANTY: Till one year after date of purchase.

Compliance

- 2006/42/EC: Machinery directive
- DGUV regulation 17: Regulations for stages and studios. (Formerly known as BGVc1)
- DGUV Information 215-313: Safety at productions and events for television, radio, film, theater, exhibitions: Loads above persons (Formerly known as BGI 810-3)
- CWA 15902-1 European code of practice for lifting and loadbearing equipment for stages and other production areas within the entertainment industry.
- BS 7905-1: Lifting equipment for performance broadcast and similar applications. Part 1 specifications for the design and manufacture of above stage equipment.

Operating Determinations

- The ambient temperature should be between -20°C and +60°C and must never be exceeded.
- 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 serious damage and/or severe injuries.
- Space Savers can be judged as lifting accessories under the EU machine Directive 2006/42/EC as well as German DGUV-BGV-C1 for lifting and holding loads above persons, but also as a joining part in constructions. As for the last application, no universal standard is available, therefore no CE Declaration of Performance can be provided.
- The intended use of a Space Saver is to be used as lifting accessory to hang or suspend loads. Loads can be light fixtures, video projectors, sound systems and set pieces. The Space Saver also enables the clamp/spigot attached to be folded at 90 degrees to the object, which it is attached to, reducing the storage height. ("Saving Space")
- Any use other than that mentioned is considered to be a case of misuse. The user/operator and not the manufacturer shall be liable for any damage or injury resulting from such cases of misuse.

You endanger your own safety and the safety of others!



Not permitted use

List of applications which the Space Saver is not allowed to be used for.

Please note, that when an application is not included in this list, it does not mean that the use of the Space Saver is allowed. When in doubt, consult your Showtec dealer.

- The use of lifting equipment for the transport of people is not permitted.
- The "pulling loose" of jammed loads is prohibited.
- Welding on the Space Saver is prohibited.
- The hoisting or transporting of loads should be avoided, if there is anybody within the range of the load.
- It is prohibited to stay under a suspended load.
- Loads should not be prolonged or unattended in a raised position.
- The use of the Space Savers in a potentially explosive atmosphere is prohibited.
- Do not drop the Space Saver; the device should always be properly stored.
- A defective or damaged Space Saver must not be used.

Rigging

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

Do not attempt the installation yourself!

Always have the inspections carried out by an authorized dealer!





🛕 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 <u>aftersales@highlite.nl</u> 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 shortcomings 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

Manufactured from high tensile aluminum, the Space Saver enables for a clamp to be permanently fitted to a light fixture or projector and be folded into a storage position to save space. The Space Saver features a quick release lock, to quickly fold the device without any tools. The top section fits an M10 hex nut or a hex bolt, while the bottom section fits an M10 socket cap bolt. This means that the device can be tilted to any angle.

- Maximum load capacity (SWL): 100 kg
- Fixing: M10 bolt
- Material: High tensile aluminum
- Dimensions: 49 x 40 x 50 mm (LxWxH)
- Weight: 0,2 kg

Overview

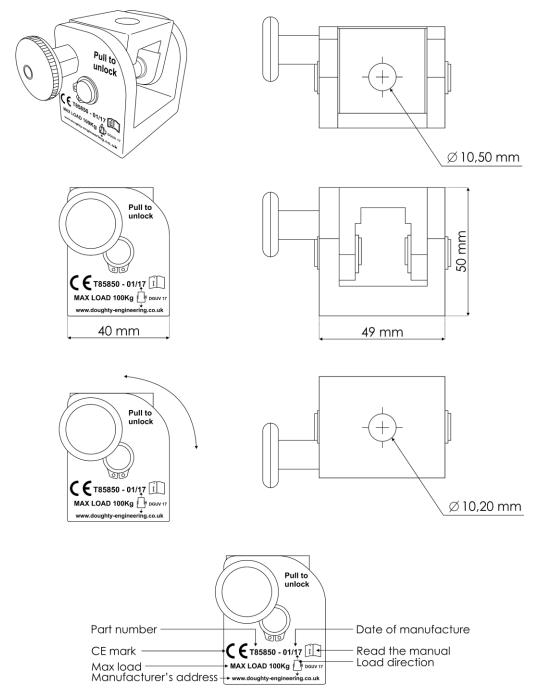


Fig. 01



Fixings

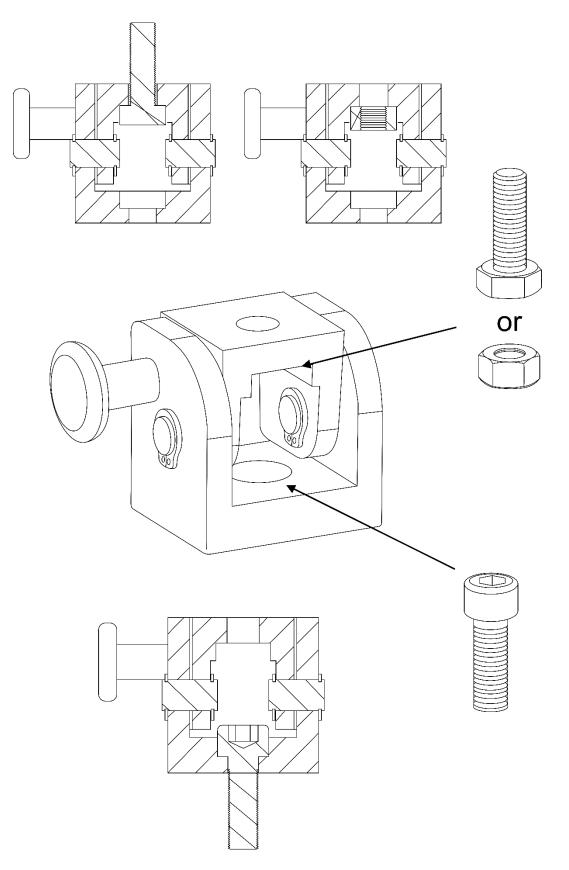


Fig. 02



Installation

Remove all packing materials from the Space Saver. Check if all foam and plastic padding is removed. **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.

Inspection Before First Use

Before the first use of the Space Saver, it needs to be inspected by a competent person, in order to rule out any damage sustained during transport or storage. This should happen at least once a year.

When installing the Space Saver, the user must make sure that the device is operated in a safe way. The strength and suitability of the suspension point should be checked in advance.



CAUTION Before installation, operators must be instructed and fully understand the safe use of the equipment.



Before each use, the Space Saver has to be inspected on the following points:

- Overall operation of the Space Saver itself
- Mounting of the Space Saver onto the structure
- Make sure that the Space Saver shows no trace of visual defects

Installing the Space Saver

- 01) Determine the bolt size and length needed to connect the Space Saver to an object.
- 02) Use hexagon socket bolts or standard hexagon bolts. Minimum 8,8 grade.
- 03) Tighten the bolt connection by means of correct tooling.
- 04) Use a secondary safety device if legislation requires so.



CAUTION Before applying a load, check if all connections are correct.



CAUTION Before lifting, check if all connections are still correct.



CAUTION Check if all parts are in good order.



CAUTION Repeat the safety check after 1 meter of lifting. Vibrations might loosen bolt connections.





- Nuts which cannot be turned by hand
- Load is hanging out of plumb while the device is positioned vertically
- The Space Saver does not hinge smoothly













Setup Examples

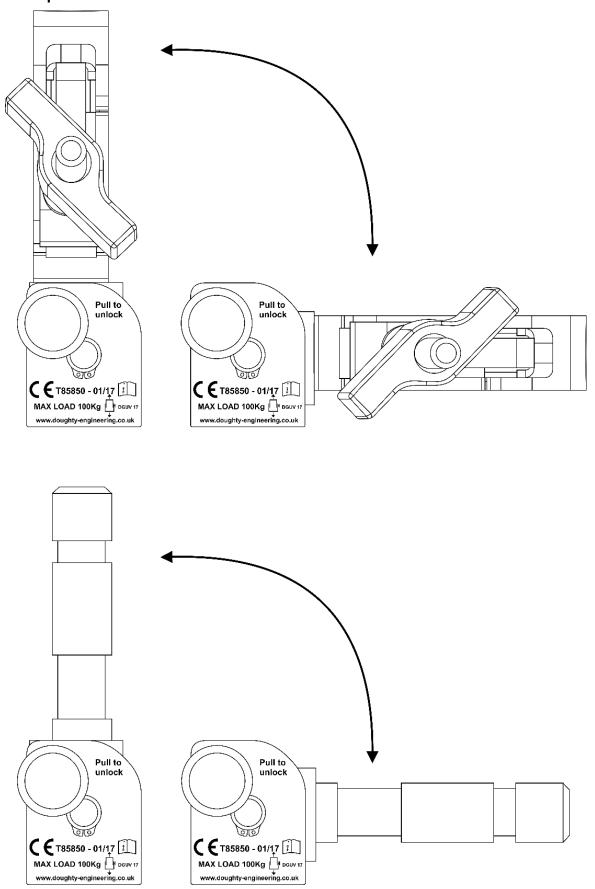
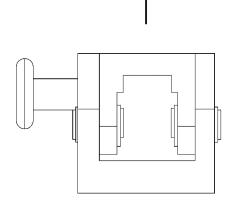


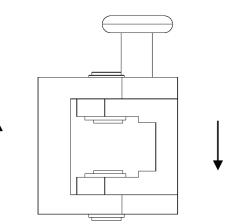
Fig. 03



CAUTION The working load engraved on the Space Saver is solely for a straight pull between fixing points.







Allowed

Not allowed

Fig. 04



CAUTION This product is not intended to be used as fall protection!



CAUTION The maximum load capacity for the Space Saver is 100 kg. Do not exceed this rating.



CAUTION Do not use the Space Saver to lift people or to lift loads above people!





Maintenance

The operator has to make sure that safety-related 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-related and machine-technical installations are to be inspected by a skilled person once a year **and more frequently if used intensively**.

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.

The Space Saver requires almost no maintenance. However, you should keep the Space Saver clean. Wipe with a damp cloth. Do not immerse in liquid. Do not use alcohol or solvents. Do not use any mechanical abrasive machines to remove sharp edges.

- All inspections and any actions taken, must be documented in writing.
- After using the Space Saver, any dirt needs to be removed, preferably with hot water and soap.
- Always store the Space Saver in a dry environment, to prevent corrosion.
- Do not store the Space Saver in a steel bin.
- Repairs may only be carried out by experts that are authorized in writing by Highlite International.
- In case that repairs or modifications are carried out by unauthorized personnel, the warranty and product liability will become void. Only use original parts for repairs.

Inspection & Maintenance Intervals

The following inspection and maintenance intervals apply for normal use. In case of use in harsh environment, such as regular deployment at full load or use in a hot / dusty or otherwise aggressive environment, the indicated intervals should be shortened.

	When commissioning	Daily inspection	1 st maintenance after 3 months	Inspection / maintenance annually
Check screw / bolt connections	Х	Х	Х	Х
Check spindle mechanism for proper functioning	Х	Х	Х	Х
Check for any deformations	Х	Х	Х	Х
Check and lubricate spindle mechanism				Х
Regular inspection by an expert				Х

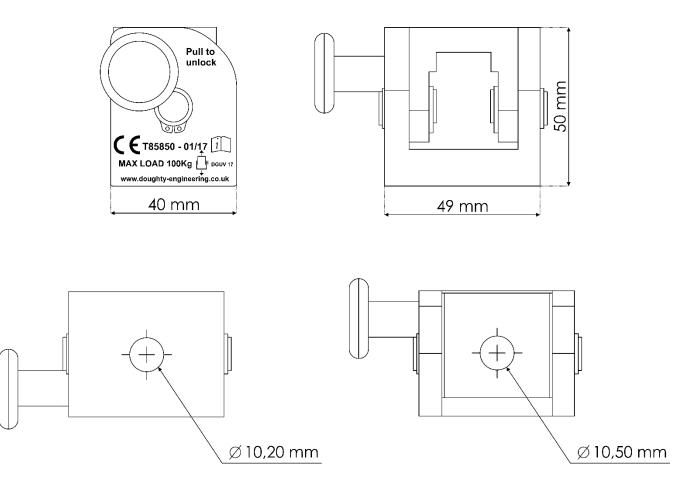
Regular Inspections

Regardless of national rules in the country of use, the Space Saver has to be inspected by an expert, at least once a year.

- In case of heavy/frequent usage, the inspection and maintenance intervals need to be more regular.
- Check the Space Saver carefully, to make sure that there are no unusual noises that could indicate faults or excessive wear.
- Make sure all bolts and nuts are tight and check presence and legibility of the type plate.

Product Specifications

Model:	Doughty Space Saver
Material:	High tensile aluminum
Dimensions:	49 x 40 x 50 mm (LxWxH)
Weight:	0,2 kg
Operation:	
Maximum load capacity (SWL):	100 kg
Fixing:	M10 bolt



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

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

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Doughty Space Saver	
Notes	
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