

# **Instruction Manual**



EUS 12/24

EUS12/24



## Imprint

#### **Product identification**

Peak saver	EUS 12/24
Item number	6401012

#### Manufacturer

Stürmer Maschinen GmbH Dr.-Robert-Pfleger-Str. 26 D-96103 Hallstadt

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#### Indications regarding the operating instructions

Original instruction

20.07.2021
2.03
English

Author: MS/FL

#### Indications regarding the copyright

Copyright © 2021 Stürmer Maschinen GmbH, Hallstadt, Germany.

Subject to technical modifications and error.

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## 1 Introduction

You have made a good choice by purchasing the UNI-CRAFT Peak saver.

#### Read the operating manual thoroughly before commissioning the device.

It gives you information about the proper commissioning, intended use and safe and efficient operation and maintenance of your Peak saver.

The operating manual is part of the Peak saver. Always keep this operating manual in the location where your Peak saver is being operated. All local accident prevention regulations and general safety instructions for the operating range of your Peak saver must also be complied with.

## 1.1 Copyright

The contents of these instructions are protected by copyright and are the sole property of Stürmer Maschinen GmbH. Their use is permitted within the scope of the use of the Peak saver. Any other use is not permitted without the written consent of the manufacturer.

Passing on as well as duplication of this document, utilization and communication of its contents are forbidden, as far as not expressly permitted. We register trademark, patent and design rights for the protection of our products, insofar as this is possible in individual cases. We emphatically oppose any infringement of our intellectual property.

## 1.2 Customer service

Please contact your dealer if you have questions concering your product or if you need technical advice. They will help you with specialist information an expert advice.

#### Germany: Stürmer Maschinen GmbH Dr.-Robert-Pfleger-Str. 26 D-96103 Hallstadt

Repair service:	
Fax:	0049 (0)951 96555-111
E-Mail:	service@stuermer-maschinen.de
Internet:	ww.unicraft.de

#### Spare parts orders:

Fax:	0049 (0)951 96555-119
E-Mail:	ersatzteile@stuermer-maschinen.de

We are always interested in valuable experience and knowledge gained from using the application-which then could be shared and be valuable to develop our products even further.

## 1.3 Limitation of liability

All information and notes in these operating instructions were summarised while taking applicable standards and rules, the state-of-the-art technology and our long-term knowledge and experiences into consideration.

In the following cases the manufacturer is not liable for damages:

- Non-observance of the operating instructions,
- Inappropriate use
- Use of untrained staff
- Unauthorised modifications
- Technical changes
- Use of not allowed spare parts

The actual scope of delivery may deviate from the explanations and presentations described here in case of special models, when using additional ordering options or due to latest technical modifications.

The obligations agreed in the delivery contract, the general terms and conditions as well as the delivery conditions of the manufacturer and the legal regulations valid at the time of the conclusion of the contract apply.

## 2 Safety

This section provides an overview of all important safety packages for the protection of operating personnel as well as for safe and fault-free operation. Other task-based safety notes are included in the paragraphs of the individual phases of life.

## 2.1 Symbol explanation

#### Safety instructions

The safety notes in these operating instructions are highlightet by symbols. The safety notes are introduced by signal words which express the concern of the risk.





#### **DANGER!**

This combination of symbol and signal words indicates an imminently dangerous situation which may lead to death or severe injuries if they are not avoided.

#### WARNING!

This combination of symbol and signal words indicates a possibly dangerous situation which may lead to death or severe injuries if they are not avoided.

#### **CAUTION!**

This combination of symbol and signal word indicates a potentially hazardous situation which, if not avoided, could result in material and environmental damage.

#### **ATTENTION!**

This combination of symbol and signal word indicates a possibly dangerous situation which may result mild or minor injuries.



### NOTE!

This combination of symbol and signal words indi-cates a possibly dangerous situation which may lead to property and environmental damages if they are not avoided.

#### Tips and recommendations



#### Tips and recommendations

This symbol highlights useful tips and recommendations as well as information for an efficient and trouble-free operation.

It is necessary to observe the safety notes written in these operating instructions in order to reduce the risk of personal injuries and damages to property.

### 2.2 Personal protective equipment

The personal protective equipment serves to protect persons against impairments of safety and health while working. The staff member has to wear personal protec-tive equipment while performing different tasks on and with the machine which are indicated in the individual paragraphs of these instructions.

The personal protective equipment is explained in the following paragraph:



#### Safety glasses

The protective glasses serve to protect the eyes against parts flying off.



#### Suitable protective gloves

The protective gloves serve to protect the hands against sharp components as well as against friction, abrasions or deep injuries.



### Protective clothes

Protective clothes are made of a tightly fitted fabric without the protruding parts of low tear strength.

## 2.3 Safety signs

The Peak saver has a number of safety markings that must be observed and followed.

The safety labels must not be removed. Damaged or missing safety markings can lead to malfunctions, personal injury and material damage. They are to be replaced immediately.

If the safety markings are not immediately recognizable and comprehendible, the Peak saver should be taken out of service until new safety markings have been made.

The following safety labels and symbols are appropriate:



Fig. 1: Safety signs



## 2.4 Safety instructions

#### Please note the following:

- Use the guards and secure them securely. Never work without guards and get them working.
- Always keep the Peak saver and its working environment clean. Ensure adequate lighting.
- Before using the device, make sure that it is not damaged and that it has no exposed cables or worn parts.
- The device must not be converted. The changes can reduce the effectiveness of the safety devices and thus increase the risk to the operator.
- Care and attention should be taken when working with this device. Do not use the device when you are tired or under the influence of drugs, alcohol or medication.
- Always wear protective goggles and protective gloves against physical impact.
- Use a dry cloth for cleaning and never damp or wet cloths.
- Perform all intended work in adequately ventilated and dry environments.
- The device may only be used and repaired by qualified personnel using original spare parts.
- Ensure that children or visitors can not approach the workplace when working with the device.



### DANGER!

During the connection process, keep the face away from the Peak saver.



#### DANGER!

Do not use the device in an explosive environment or close to flammable material, as it may cause sparks that could ignite dust or fumes.

## 3 Intended Use

The Peak saver is only for vehicles with 12 V or 24 V batteries. It is intended for the following use:

Avoidance of possible voltage spikes from external sources during arc welding on the vehicle or connection of the battery to another vehicle or starter.

The Peak saver may only be operated by persons who have been instructed in the device. Proper use also includes compliance with all information in this manual. Any use beyond the intended use or otherwise is considered misuse.For structural and technical changes to the surge protection, the company Stürmer Maschinen GmbH assumes no liability.

Claims of any kind due to damage due to improper use are excluded.

## 4 Technical Data

Model	EUS 12/24
Length	90 mm
Width / Depth	55 mm
Height	20 mm
Weight	0,22 kg
Supply voltage	12 / 24 V
Current type	DC
Fuse	T 3,15 A
Output cable length	550 mm
Degree of protection	IP 20
Operation temperature	-10°C to +40°C
Application	Krad, PKW, LW, Kb, Truck < 7,5 t

## 4.1 Type plate



Sturmer Maschinen GmbH, Dr.-Robert-Pfleger-Str. 2 96103 Hallstadt, Deutschland / Germany

Fig. 2: Type plate

## 5 Transport, Packaging, Storage

#### Delivery

Check the device for visible transport damage after delivery. If you discover any damage, immediately report it to the transport company or the dealer.

#### Transport

# <u>^</u> (

CAUTION!

Injuries caused by parts falling over or off a forklift, pallet truck or transport vehicle.

Only use means of transport that can carry the total weight and are suitable for it.



Improper transport of individual devices, unsecured devices stacked on top of each other or next to each other in packed or already unpacked condition is accidentprone and can cause damage or malfunctions for which we do not grant any liability or guarantee.

Transport the scope of delivery secured against shifting or tilting with a sufficiently dimensioned industrial truck to the installation site.

#### General risks during internal transport



## CAUTION: DANGER OF TIPPING!

The device may be lifted unsecured by a maximum of 2cm.

Employees must be outside the danger zone, the reach of loads. Warn employees and, if necessary, advise employees of the hazard.

Devices may only be transported by authorized and qualified persons. Act responsibly during transport and always consider the consequences. Refrain from daring and risky actions.

Gradients and descents (e.g. driveways, ramps and the like) are particularly dangerous. If such passages are unavoidable, special caution is required.

Before starting the transport check the transport route for possible danger points, unevenness and disturbances as well as for sufficient strength and load capacity.

Danger points, unevenness and disturbance points must be inspected before transport. The removal of danger spots, disturbances and unevenness at the time of transport by other employees leads to considerable dangers.

Careful planning of internal transport is therefore essential.

#### Packaging

All used packaging materials and packaging aids are recyclable and should be taken to a materials recycling depot to be disposed of.

The delivery packaging is made of cardboard, so please dispose carefully by having it chopped up and given to the recycling collection.

The film is made of polyethylene (PE) and the cushioned parts of polystyrene (PS). These materials should be taken to a collection point for recyclable materials or to the local waste disposal company.

#### Storage

Store the Peak saver in a dry, clean and frost-free environment.

## 6 Description of the device

Illustrations in this manual may differ from the original.

### 6.1 Illustration EUS 12/24



- 1 LED overvoltage protection
- 2 Clamp black (-)
- 3 Clamp red (+)

#### Standard equipment

- Protection against voltage peaks
- Protection against short circuit in case of wrong polarity
- Acoustic signal for voltage peaks
- Cable +/- with standard crocodile clamps

## 7 Principle of operation EUS 12 / 24

The electronic overvoltage protection is a passive system for protection against voltage peaks, to protect the on-board electronics from defects, e.g. caused by welding work on the bodywork without disconnecting the battery. The on-board electronics are thus protected against defects. As soon as the red LED lights up, overload protection is guaranteed.



## 8 Connection



#### Safety goggles

Always wear safety goggles while working with the surge protector .



The protective gloves are used to protect the hands from sharp-edged components, as well as from friction, abrasions or deeper injuries.



#### CAUTION!

During the connection procedures keep the face away from the vehicle battery. The liquid contained in the battery is corrosive or corrosive. In case of unintentional contact of the acid with the skin or eyes, rinse immediately with water and contact a physician.



#### CAUTION!

Use the Peak saver in a dry environment with adequate ventilation: do not expose to rain or snow. The two output terminals must not come into contact with each other.

- Step 1: Connect the terminals of the device to the battery of the vehicle without confusing the poles; red clamp (+) black clamp (-).
- Step 2: The flashing red LED indicates that the device is running.
- Step 3: If the red LED does not turn on, check that the device is properly connected and not damaged.
- Step 4: Begin the work on the vehicle.
- Step 5: After completing the operations, disconnect the unit from the vehicle battery.



#### NOTE!

The Peak saver is used under own responsibility during welding because the electronics of the vehicle may have been damaged before. In addition, it can not be determined later whether the contacts of the terminals have been properly applied.

## 9 Care maintenance and repair



#### DANGER!

#### Danger to life due to electric current!

There is an immediate danger of electrocution on contact with live components.

- Work on the electrical system should only be carried out by qualified electricians.

### 9.1 Care by cleaning

The Peak saver must always be kept in a clean state.



## NOTE!

Repairs or maintenance work on the device may only be carried out by qualified persons.



#### Wear suitable protective gloves!

NOTE!

Never use harsh cleaning agents for any cleaning work. This can lead to damage or destruction of the device.

When not in use, the surge protector must be stored in a dry place to avoid moisture.

All plastic parts and painted surfaces should be cleaned with a soft and dry cloth.



## 9.2 Maintenance and repair



#### NOTE!

Improper use of the charger or opening the electronics inside the device will void the warranty.



### DANGER!

In case of damage, the power cable of the device may only be replaced by a specialist workshop authorized by the manufacturer, as special tools are required.



#### DANGER!

The following maintenance work can be performed by the operator of the device.

- Check the supply cable and the tool cables. They must be insulated and in perfect condition. Pay particular attention to the bending points.
- Check the tool. Do not use tool parts with obvious defects of insulation or sheath.
- Protective tapes of the tools that have become unusable must be replaced.
- The Peak saver must be kept clean and free from corrosion.
- Prevent dirt and dust from entering the unit.
- The unobstructed cooling air circulation must always be guaranteed.



### ATTENTION!

The following maintenance and repair work may only be carried out by qualified personnel.

If the overvoltage protection does not work properly, contact a dealer or our customer service. The contact details can be found in chapter 1.2 Customer Service.

All protective and safety equipment must be reinstalled immediately after repair and maintenance work has been completed.

## 10 Disposal, recycling of old equipment

In the interest of the environment, it must be ensured that all components of the machine are disposed of only through the designated and approved channels.

## 10.1 Decommission

Discarded devices must be taken out of service immediately in a professional manner in order to avoid later misuse and danger to the environment or persons.

- Dispose of all environmentally hazardous operating materials from the old device.
- If necessary, dismantle the welding equipment into manageable and recyclable assemblies and components.
- Dispose of the components and operating materials in the appropriate disposal channels.

## 10.2 Disposal of electrical equipment

Electrical equipment contains a large number of recyclable materials and environmentally harmful components.

These components must be disposed of separately and properly. In case of doubt, contact the municipal waste disposal service.

If necessary, use the services of a specialized waste disposal company for processing.

# 10.3 Disposal via municipal collection points

Disposal of used electrical and electronic equipment (Applicable in the countries of the European Union and other European countries with a separate collection system for these appliances).

The symbol on the product or its packaging indicates that this product should not be treated as normal household waste, but must be returned to a collection point for the recycling of electrical and electronic equipment. By helping to properly dispose of this product, you are protecting the environment and the health of others. Environment and health are endangered by improper disposal. Material recycling helps to reduce the consumption of raw materials. For more information about recycling this product, contact your local community, municipal waste management, or the shop where you purchased the product.



## 11 Spare parts



#### DANGER!

Risk of injury through use wrong spare parts!

The use of incorrect or faulty replacement parts may cause danger to the operator and cause damage and malfunction.

- Only original spare parts from the manufacturer or replacement parts approved by the manufacturer must be used.
- In case of doubt, always contact the manufacturer.



#### Tips and recommendations

Using non-approved spare parts voids the manufacturer's warranty.

### 11.1 Ordering spare parts

The spare parts can be obtained from the dealer.

Specify the following key data when inquiring or ordering spare parts:

- Device type
- Item number
- Position number
- Construction year
- Amount
- Desired shipping method (post, freight, sea, air, express)
- Delivery address

Spare parts orders without details given above can not be considered. If the shipping method is missing, shipping will be at the discretion of the supplier.

Details of the device type, article number and year of construction can be found on the type plate, which is attached to the Peak saver.

#### Example

The red clamp (+) for the Peak saver EUS 12/24 must be ordered. The red clamp (+) has the number 2 in the spare parts drawing 1.

By ordering spare parts, send a copy of the spare parts drawing (1) with the marked part (red clamp (+)) and marked positon number (2) to the dealer or spare parts department and provide the following information:

- Type of device: Peak saver EUS 12/24
- Item number: 6401012
- Drawing number: 1
- Position number: 2

#### Item number of your device:

Peak saver EUS 12 / 24: 6401012



## 11.2 Spare parts drawing

The following drawing are intended to identify the required spare parts in the event of service. If applicable, submit a copy of the parts drawing including the highlighted components to your authorised retailer.



Fig. 3: Spare parts drawing EUS 12 / 24

## 12 Electric circuit diagram

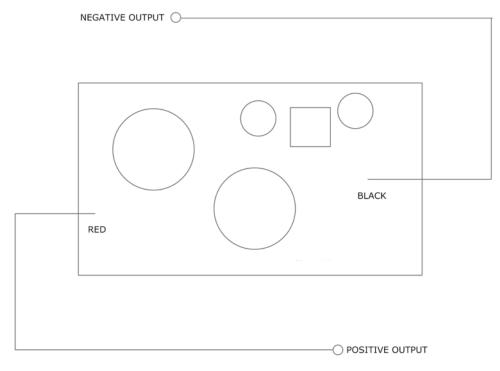


Fig. 4: Electric circuit diagram EUS 12 / 24



## 13 EC-Declaration of Conformity

Manufacturer:	Stürmer Maschinen GmbH DrRobert-Pfleger-Str. 26 D-96103 Hallstadt
hereby declares that the following product	
Product group:	Unicraft <sup>®</sup> Werkstatttechnik
Type of the device:	Peak saver
Designation of the device:	EUS 12/24
Item number:	6401012
Serial number *:	
Year of manufacture *:	20* please fill in according to the information on the type plate

Due to its design and construction, as well as in the version we have placed on the market, it complies with the relevant basic health and safety requirements of the above-mentioned and subsequent EC directives.

Applicable EU directives:	2011/65/EU	RoHS-Directive
	2012/19/EU	WEEE-Directive

The following harmonised standards have been applied:

DIN EN 50581:2013-02

Technical documentation for the assessment of electrical and electronic products with respect to the restriction of hazardous substances

**Responsible for documentation:** 

Kilian Stürmer, Dr.-Robert-Pfleger-Str. 26, D-96103 Hallstadt

Hallstadt, 10.01.2018

Kilian Stürmer Manager





## www.unicraft.de