









## Commissioning

The following can be found on the underside of the device:

- Red earth socket for connecting the red 1.5 mm² earth cable with earth clip and red angle connector
- Black marking jack for connecting the black 1.5 mm<sup>2</sup> marking cable with red marking handle and black angle connector

#### Preparations:

- Attach the felt to the carbon electrode before you connect the marking handle to the 90° carbon electrode port.
- Fold the felt in half and lay it over the carbon electrode.
- Secure the felt with the O-ring supplied. This prevents the current from flowing between the carbon electrode and the workpiece in the event of a short circuit.
- Connect the black safety plug to the marking stamp.
- Insert the black angle connector in the black device socket on the underside of the device
- Connect the red safety plug to
- · the earth clip.
- Connect the earth clip to the workpiece
- Ensure good electrical contact between the earth clip and the workpiece.
- Clean the contact point if necessary
- Insert the red angle connector in the red earth socket on the underside of the device.

The following can be found on the rear panel of the device:

- Mains fuse 4A
- Type plate with QR Code
- Power supply 230V/16A

**Caution:** If the device has been connected to the power supply and one of the pressed switches does not show blue, please check the 4 A blow-out fuse on the rear and replace it with a fuse of the same strength if required!

### Commissioning

#### Device main switch

- ON/OFF with integrated control LED
- The device can mark in dark colour in the "ON" position

### Light marking

• Set switch to "ON" for light marking (blue LED is lit)

#### Dark marking:

- Dark marking is a targeted oxidation process that takes place within the metal surface.
- The marking time should be between 1 3 seconds.
- Dark marking is not as ideal for non-ferrous metals.

  Aluminium materials cannot be dark marked.

#### Light marking:

- In contrast to dark marking, material is removed from the surface during this process in places where there are micro-perforations in the templates.
- An impression similar to an engraving is formed.
- Light marking is the preferred choice for aluminium materials, since they cannot be dark marked.
- The workflow is the same for dark and light marking.
- The marking time is somewhat longer for light marking.
- Guide value: 3 5 seconds.
- Prepare the workpiece and the marking tool in the same way as for dark marking.

## Caution: Wear appropriate protective clothing

- Safety goggles
- Gloves
- Apron or lab coat
- Immediately remove electrolyte residues from the workplace and floor to prevent staining
- Carefully reseal the electrolyte container
- The safety data sheets must always be adhered to

























These brief instructions do not replace CE-compliant operating instructions!

It is essential to take into account our safety data sheets regarding the electrolytes!

## Marking

- All electrically conductive surfaces can be marked in bright or dark colour; aluminium can only be marked in bright colour!
- You can produce your own short-term templates using label printers and appropriate 18, 24 or 36 mm marking strips of any length
- We will gladly produce high-quality long-term templates for you at short notice
- Select the appropriate marking electrolyte from our wide range
- Attach a white piece of felt to the electrode on the marking handle and fasten it with an O-ring
- Drip some electrolyte onto the felt until it is fully wetted
- Set the switch on the device to dark or light marking
- Attention: use the thin cable provided!
- Long-term templates can be reused up to 5,000 times
- We can provide you with individual templates by using imaging methods on reproducible samples
- Wet the template with water or electrolyte, so that it can be more easily fastened on the work piece
- Slowly move the marking handle over the template while applying gentle pressure for 1-3 seconds
- Proceed in the same way with short-term templates
- Caution: Do not move across the template edges, as this will blacken the surface
- Lift the template from the work piece and thoroughly rinse it with water or wipe it with Neutralyt
- Rub dry using paper towels
- Thoroughly clean the templates with water

## **Safety information**

The devices are approved for working in areas where there is an increased risk of electric shock and operate with a maximum of 35 volts.

Nevertheless, electrical current may be felt if the electrode is touched while in contact with the workpiece. However, this does not pose a risk and can be avoided by wearing gloves.

# **Brief instructions**

## **Electrochemical marking**

## Signox II





You will find the detailed CE-compliant operating instructions in the download section of our website at www.oreuter.de, or you can scan the bar code with a smartphone and immediately obtain the operating instructions as a PDF document.

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