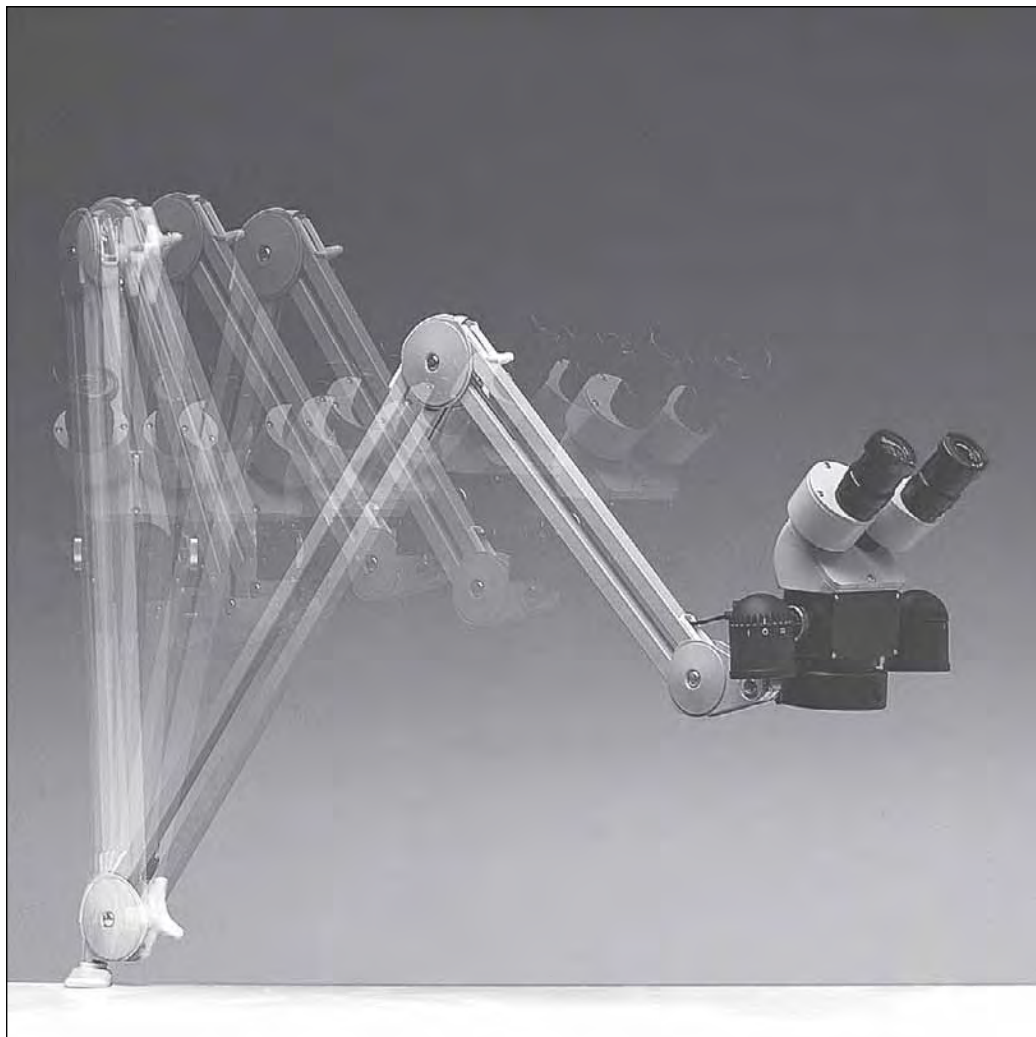


Mobiloskop 'S'

No. 2200-0802 / 2200-0602

Bedienungsanleitung
Instruction manual • Mode d'emploi • Istruzioni d'uso
Instrucciones para el servicio • Gebruiksaanwijzing



Mobiloskop 'S' with Standard / Extended Swivel Arm

No. 2200-0802 / 2200-0602

ENGLISH

1. Introduction

We are pleased with your decision to purchase the *Mobiloskop 'S'*, with swivel arm.

The 5x or 10x magnification offers optimal detail control during precision tasks.

2. Application Area

The stereoscopic microscope with swivel arm is intended for work performed in dental technology laboratories, where it can be employed simultaneously at several workstations. The microscope's position is infinitely adjustable with the aid of the flexible swivel arm (standard or extended length).

2.1 Ambient Conditions (in accordance with DIN EN 61010 - apply only in conjunction with the lamp adapter)

The unit may be operated:

- Indoors;
- At altitudes up to 2,000 m [6,560 ft] above sea level;
- At an ambient temperature range of 5 - 40°C [41 - 104°F];
- At a maximum relative humidity of 80% at 31°C [87.8°F], dropping linearly to 50% relative humidity at 40°C [104°F];
- Using a mains power supply, provided that voltage fluctuations do not exceed 10% of the nominal value;
- At excess voltage category II;
- At contamination level 2.



3. Safety Information

- **Remember that your field of view is greatly restricted when working with the *Mobiloskop*. Set up containers and nearby equipment (e.g., Bunsen burners) so that they cannot be knocked over.**
- **Working with magnifying equipment for long periods of time can impair your vision. Follow all guidelines issued by the responsible authorities (professional associations) and make sure you allow an adequate period of time for your eyes to readjust (judging distances).**

3.1 Liability Exclusion

Renfert GmbH shall be absolved from all claims for damages or warranty if:

- **The product is employed for any purposes other than those cited in the operating instructions;**

- **The product is altered in any way other than those alterations described in the operating instructions;**
- **The product is repaired by other than an authorized facility or if any but Renfert OEM parts are employed;**
- **The product continues to be employed, despite obvious safety faults.**

4. Installation / Commissioning

4.1 Installing the Device

1. Install the table clamp (Figure 1).
2. Connect the swivel arm / table clamp (Figure 2).
3. Connect the microscope head / swivel arm (Figure 3+4).
4. Secure with the knurled screw (Figure 5).

4.2 Adjusting the Focal Distance

Rotate the oculars to adjust the correct distance for your eyes (Figure 6).

4.3 Adjusting the Dioptre Compensation

1. Place an object on the table top for orientation (Figure 7).
2. Turn the dioptre compensation sleeves completely clockwise (to their stops) (Figure 8a).
3. Now turn the dioptre compensation sleeves one complete turn counter clockwise (Figure 8b).
4. Place your left eye against the left eyepiece.
5. Use the left dioptre compensation sleeve to bring the object into sharp focus (Figure 9).
6. Place your right eye against the right eyepiece.
7. Use the right dioptre compensation sleeve to bring the object into sharp focus (Figure 10).

4.4 Changing Magnification

Set the magnification to 5x (0.5) or 10x (1) (Figure 11).

5. Cleaning / Maintenance

Use a dry, lint-free cloth to clean the eyepiece and the protecting glass (Figure 12+13).

Never use solvents or cleansers containing abrasives!

6. Spare Parts

Please refer to the enclosed spare parts list for the part numbers of consumable or replacement parts.

7. Guarantee

Provided the unit is properly used, Renfert warrants all components of the *Mobiloskop 'S'* for a period of **3 years**. The original sales receipt from the specialist dealer must be presented with any warranty claims. Components subject to natural wear are excluded from this warranty.

The warranty is voided in case of improper use; failure to observe the operating, cleaning, maintenance, and connection instructions; in case of independent repairs or repairs by unauthorized personnel; if spare parts from other manufacturers are employed, or; in case of unusual influences or influences not in compliance with the utilization instructions. Warranty service shall not extend the original warranty.

8. Technical Specifications

Light path: 45°, angled
 Visual field diameter:
 44 mm [1.734 inches] (5x),
 22 mm [0.867 inches] (10x)
 Focal depth:
 22 mm [0.867 inches] (5x),
 10 mm [0.394 inches] (10x)
 Working distance:
 approx. 150 mm [5.91 inches]
 Weight: approx. 3 kg

9. Standard Delivery

- 1 *Mobiloskop 'S'*
- 1 Swivel arm, standard / extended (incl. electrical lead in the arm)
- 1 Lens retainer
- 1 Lens with eyepieces
- 1 Protecting glass
- 1 Cover
- 1 Operating instructions

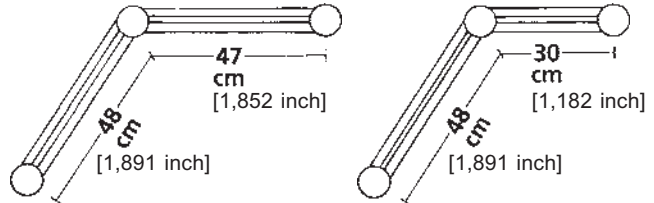
10. Delivery Versions

- No. 2200-0802 *Mobiloskop 'S'* with standard swivel arm
- No. 2200-0602 *Mobiloskop 'S'* with extended swivel arm

11. Accessories

- No. 2200-0901 Bench top adapter
- No. 2200-0902 Wall mounting adapter
- No. 2200-0110 Eyepiece pair, 10x
- No. 2200-0120 Eyepiece pair, 20x
- No. 2200-0200 Additional 2x lens, magnifies from 5x/10x to 10x/20x
- No. 3-0743 Replacement protecting glass to protect the lenses

Swivel arms:



No. 2200-0601
 Extended swivel arm

No. 2200-0801
 Standard swivel arm

Lamp adapter (Figure 14):

- No. 2200-0501 Lamp adapter incl. mains power pack, 230 V
- No. 2200-1501 Lamp adapter incl. mains power pack, 110-140 V
- No. 2200-2501 Lamp adapter incl. mains power pack, 240 V

For easy installation on the *Mobiloskop 'S'*. The lamps can be individually swivelled and switched on and off. Illuminating the object being viewed from both sides produces a high contrast, reflection free surface.

Technical specifications:

Mains voltage: 230 / 110-140 / 240 V
 Current consumption: 0.8 A
 Operating voltage: 12 V AC

Cold light source (Figure 15):

- No. 2200-3000 Microscope illumination, 230 V
- No. 2200-4000 Microscope illumination, 120 V

This cold light source assists in three-dimensional viewing under the microscope. The illumination, which can be adjusted to three intensity levels, is brought to the view field via two fibre optic cables. Illuminating the work area from two sides provides a high contrast view field, free of intrusive shadows. Both fibre optic cables are equipped with a focussing lens. The source can be easily attached to the *Mobiloskop 'S'* without tools.

Technical specifications:

Mains voltage: 230 / 120 V
 Power consumption: 24 VA
 Nominal lamp voltage: 8 V
 Nominal lamp power: 20 W
 Frequency: 50-60 Hz

12. Error List

Problem	Possible cause	Corrective action
No visible image.	<ul style="list-style-type: none"> • Magnification change knob incorrectly adjusted. 	<ul style="list-style-type: none"> • Turn the knob to its end stop.
Image is not sharply focussed.	<ul style="list-style-type: none"> • Incorrect dioptre compensation setting • Incorrect distance to the object • Dirty lens / protecting glass 	<ul style="list-style-type: none"> • Repeat the dioptre compensation procedure. • Change the distance to the object. • Use a clean, lint free cloth to clean the lens / protecting glass.
Swivel arm does not hold in place.	<ul style="list-style-type: none"> • Brake in the swivel arm joint is loose. 	<ul style="list-style-type: none"> • Tighten the brake using the star knob.

