

**Leica S Series**

**User Manual**

**Safety concept**

Before using your stereo microscope for the first time, please read the "Safety Concept" booklet included with your instrument. It contains additional information about handling and care.



**About cleaning**

O Do not use any unsuitable cleaning agents, chemicals or techniques for cleaning.

O Never use chemicals to clean colored surfaces or accessories with rubberized parts. This could damage the surfaces, and specimens could be contaminated by abraded particles.

**Servicing**

**Responsibilities of person in charge of instrument**

O Ensure that the Leica stereo microscope is operated, maintained and repaired by authorized and trained personnel only.

**User manual**

User manuals and updates are available for you to download and print from our website [www.leica-microsystems.com.](http://www.leica-microsystems.com) Keep it in a safe place, and readily accessible to the user.

This user manual describes the special functions of the Leica stereo microscopes (S series) and contains important instructions for their operational safety, maintenance, and accessories.

The "Safety Concept" booklet contains additional safety information regarding the service work, requirements and the handling of the stereo microscope, accessories and electrical accessories as well as general safety instructions.

You can combine individual system articles with articles from external suppliers (e.g. cold light sources, etc.). Please read the user manual and the safety requirements of the supplier.

Before installing, operating or using the instruments, read the user manuals listed above. In particular, please observe all safety instructions.

To maintain the unit in its original condition and to ensure safe operation, the user must follow the instructions and warnings contained in these user manuals.

**Warning of a danger**

This symbol indicates especially important information that is mandatory

to read and observe.

Failure to comply can cause the following:

O Hazards to personnel

O Functional disturbances or damaged instruments

**Warning of hazardous electrical voltage**

This symbol indicates especially important information that is

mandatory to read and observe.

Failure to comply can cause the following:

O Hazards to personnel

O Functional disturbances or damaged instruments

**Danger due to hot surface**

This symbol warns against touching hot surfaces, e.g. those of light bulbs.

**Important information**

This symbol indicates additional information or explanations that intend

to provide clarity.

**Explanatory notes**

O This symbol within the text stands for additional information and explanations.

**Figures**

(1) Numbers in parentheses within the descriptions relate to the figures and the items within those figures.

**Description**

The individual modules fulfill the highest requirements for observation and documentation of Leica stereo microscopes of the S series.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | O | Refer to "Safety Concept" booklet | O | The S series stereo microscopes and |
| **Intended use** |  |  |  | accessories are operated, maintained |
| O Refer to "Safety Concept" booklet | O | Electrical components must be placed at |  | and repaired by authorized and trained |
|  |  | least 10 cm away from the wall and from |  | personnel only. |
|  |  | flammable substances. |  |  |
| **Non-intended use** |  |  | O | All operators have read, understood and |
| O Refer to "Safety Concept" booklet | O | Avoid large temperature fluctuations, |  | observe this User Manual, and particularly |
|  |  | direct sunlight and vibrations. These |  | the safety instructions. |
| Never use S series microscopes or their |  | conditions can distort measurements \* and |  |  |
| components for surgical procedures (e.g. on |  | micrographic images. |  |  |
| the eye) unless they are specifically intended |  |  |  |  |
| for that purpose. | O | In warm and warm-damp climatic zones, |  |  |
|  |  | the individual components require special |  |  |
| The devices and accessories described in this |  | care in order to prevent the build-up of |  |  |
| User Manual have been tested with regard to |  | fungus. |  |  |
| potential hazards. The responsible Leica affiliate |  |  |  |  |
| must be consulted whenever the instrument is |  | \* Measurement results depend on used |  |  |
| altered, modified or used in conjunction with |  | objective, zoom and microscope settings. |  |  |
| non-Leica components that are outside of the |  |  |  |  |
| scope of this manual! |  |  |  |  |

Unauthorized alterations to the instrument or noncompliant use shall void all rights to any warranty claims!

**Place of use**

**Responsibilities of person in charge of instrument**

O Refer to "Safety Concept" booklet

Ensure that:

**Repairs, service work**

O Refer to "Safety Concept" booklet

O Only original Leica Microsystems spare parts may be used.

O Before opening the instruments, switch off the power and unplug the power cable.

Touching the live circuit can cause injury.

**Transport**

O Use the original packaging for shipping or transporting the individual modules of the Leica S stereo microscopes and the accessory components.

O In order to prevent damage from vibrations, all moving parts that (according to the user manual) can be assembled and disassembled by the customer should be disassembled and packed separately.

**Integration in third-party products**

O Refer to "Safety Concept" booklet

**Disposal**

O Refer to "Safety Concept" booklet

**Legal regulations**

O Refer to "Safety Concept" booklet

**EC Declaration of Conformity**

O Refer to "Safety Concept" booklet

**Health risks**

Workplaces with stereo microscopes

• facilitate and improve the viewing task,

but they also impose high demands on the eyes

and holding muscles of the user. Depending on the duration of uninterrupted work, asthenopia and musculoskeletal problems may occur. For this reason, appropriate measures for reduction of the workload must be taken:

O Optimal arrangement of workplace, work assignments and work flow (changing tasks frequently).

O Thorough training of the personnel, giving consideration to ergonomic and organizational aspects.

O The ergonomic optical design and construction of the Leica S stereo microscopes are intended to reduce the exertion of the user to a minimum.

Direct contact with eyepieces is a

• potential transmission method for

bacterial and viral infections of the eye.

The risk can be kept to a minimum by using personal eyepieces for each individual or detachable eyecups.

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