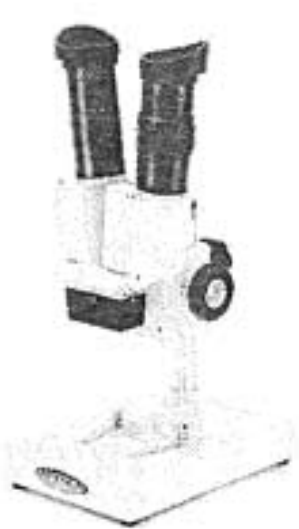
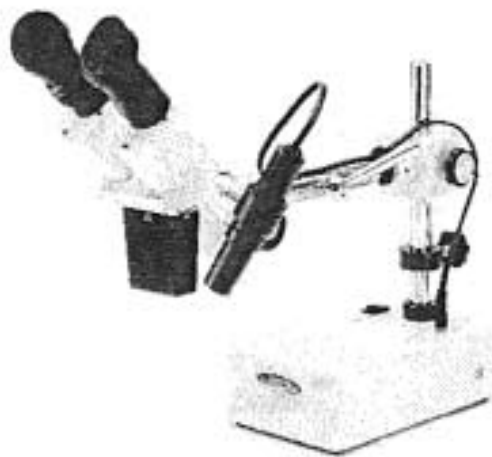


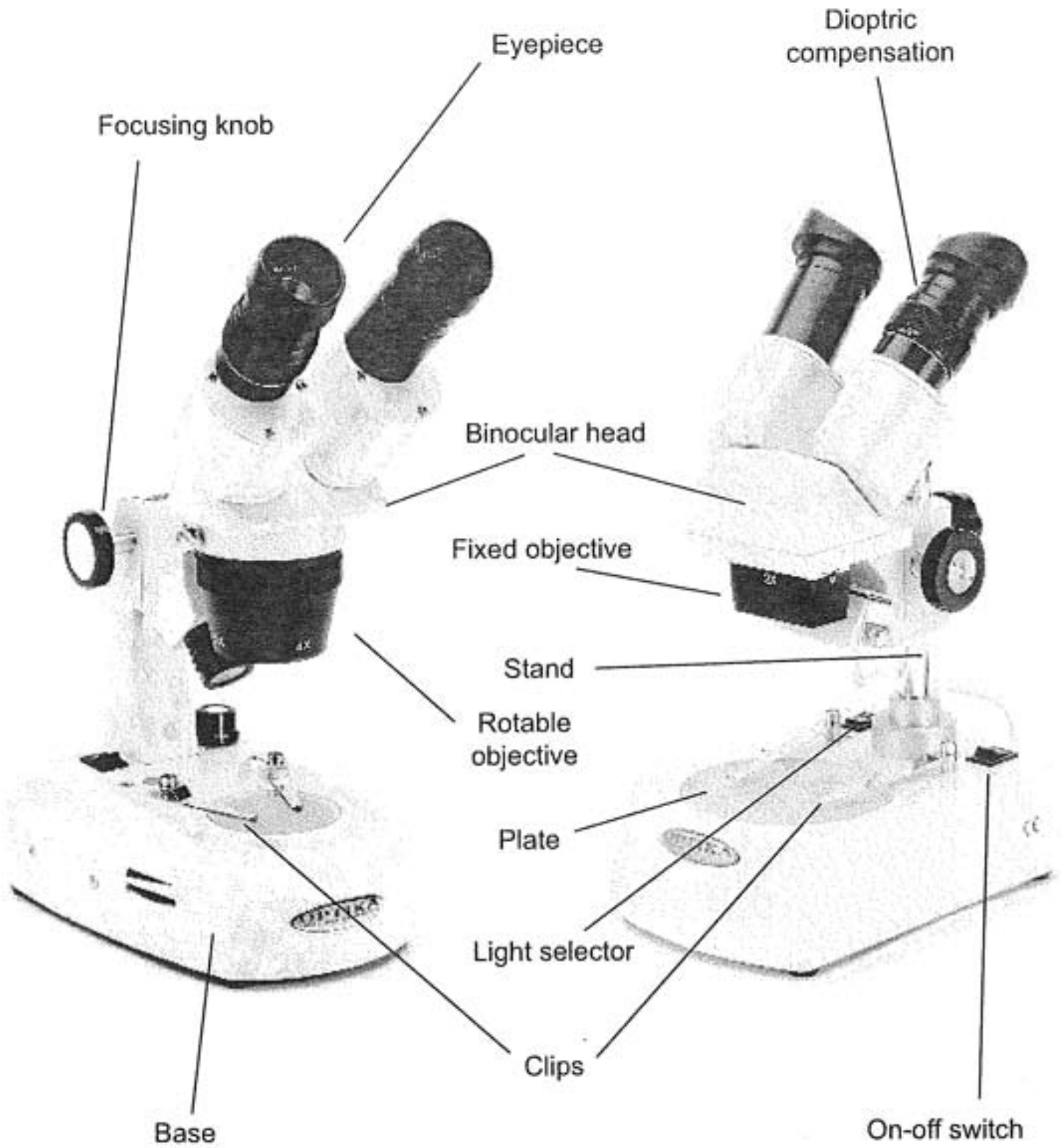
zu beziehen bei  
sold by  
[www.conatex.com](http://www.conatex.com)



# STEREO



# DESCRIPTION



# INTRODUCTION

zu beziehen bei  
sold by  
[www.conatex.com](http://www.conatex.com)



The OPTIKA microscopes STEREO series are high-performance stereo microscopes with a large possibility of choice between various models with fixed magnification or rotatable objective. Total magnification ranges from 5x to 80x depending on the eyepieces (standard or optional).

These microscopes are suitable to analyze a variety of objects in 3D, for industrial, biological or educational applications.

Using the rotatable objective (ST-30/40/45) you can change the magnification keeping a perfect parfocality (the focus is kept when changing the magnification) and a perfect centering of the field. Depending on the model, the binocular head can be fixed or 360° rotating.

## UNPACKING AND ASSEMBLING OF THE MICROSCOPE

The components for stereo series are shipped detached for protection.

Open the styrofoam protection with care and do not leave any components attached to the packing being removed.

Normally this series is shipped ready to be used and you have only to put the eyepieces into their tube.

If damage occurs during the transport please contact immediately both the carrier and your supplier.

# ALIGNMENT AND OPERATION OF THE MICROSCOPE

## **Interpupillary distance**

Move the two eyepiece tubes until only one circular field can be seen through the two eyepieces. If two circles appear the interpupillary distance is too big, if two overlapped circles appear the interpupillary distance is too small.

## **Focusing the microscope**

Try to focus the sample with the magnification 2x by using the focusing knobs or, if necessary, adjust the height of the microscope along the vertical stand.

## **Magnification**

Select the magnification (when it's possible) by adjusting the rotatable objective. The total magnification can be calculated by the following equation:

$$\text{EYEPIECE MAGNIFICATION} \times \text{OBJECTIVE LENS MAGNIFICATION}$$

# KNOWING YOUR MICROSCOPE

## **Stereo head**

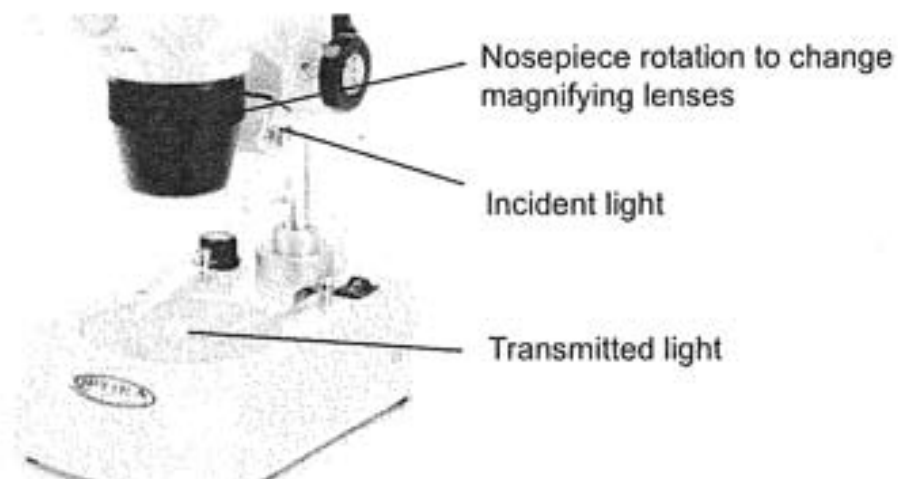
In the microscopes ST-30, ST-40, ST-45, the binocular tube is built together with the stereo body to form a single piece named "stereo-head". Stereo-head contains two optical systems that work separately for the right and the left eyepiece. With this system, the user can obtain a great depth of view and a stereoscopic effect.

## **Stand, illuminator**

The stand is equipped with an inox pole and the focusing mechanism (with stereo head) can be moved vertically to obtain the right focusing.

The double illumination system of model ST-40-2L allows to use two illuminators at the same time; use the master switch and selector switch to turn one or both lights on.

The plate for the samples is provided with two clips that help to "block" in place the object. The plate is supplied in two different versions: black/white (for incident light) and translucent glass (for transmitted light).



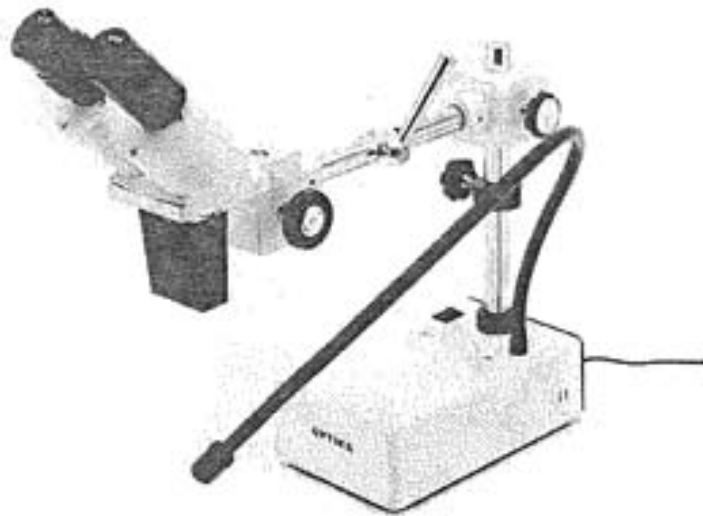


# KNOWING YOUR MICROSCOPE

zu beziehen bei  
sold by  
[www.conatex.com](http://www.conatex.com)



The models **ST-50** and **ST-50LED** are provided with overhanging stand with flexible arm and a stop ring that prevents the binocular head from being taken down too much



## **External illumination**

The light can be incident, transmitted and if necessary it is possible to use an external cold light source (optical fiber or LED illumination). By using the correct light it's possible to obtain the best image of your sample.

## MAINTENANCE

To take good care of the microscope, the user should avoid the attack of dust and water. If dust and water come to the microscope, sooner or later, fungus will grow and kill the microscope. Please notice that once fungus is grown, even after cleaning, the microscope will have a good chance to be re-infected again. Moreover, grease stain and fingerprints will distort the image, which should be avoided.

### **Protection against Dust**

When the instrument is not used for a long period of time, cover it with the enclosed dust cover. Never leave the eyepiece tube open without any covers. Either leave the eyepiece in the tube (recommended if the microscope is used very frequently) or cover it with wrapping paper or covering cap. Eyepieces and other optical accessories, when not in use, are recommended to be kept in a dry box to protect them against dust and water.

### **Protection against Water**

The instrument should be kept away from water source, pipeline or water sink. Humidity in the room where the instrument located should be as low as possible (relative humidity should be kept below 70%). All the optical accessories are recommended to be kept in a dry box when not in use. The use of dehumidifier and 24-hours air conditioning is highly recommended if the surrounding is too humid.

## **Cleaning**

If dust is found on the optical surface, try to remove by air blower or compress air.

For fingerprint, grease stain or dust which cannot be removed by the air blower, 2 possible methods are recommended:

- To breathe lightly on the glass surface and wipe with a clean piece of cloth, lens paper or cotton swab. Please notice that small cotton fibre may be left onto the lens surface if cotton swab is used.
- Use a cotton swab or lens paper, dip with a small amount of absolute alcohol, and clean the lens surface carefully. No other aggressive solvents should be used.

In no circumstances should the user clean any lens surface with dry cotton swab, cloth or lens paper. This will scratch the lens surface causing irreparable damage.

Water is not recommended for cleaning of lens as it will leave some water stain on the lens surface and if water residue is left on the lens, fungus can grow causing irreparable damage.

## **Electrical Parts of the Microscope**

Before plugging in the power cord with the supply, make sure that the supplied voltage matches with the operation voltage of the equipment.

Turn off the equipment before plugging in the power cord with the supply.

Do not turn the power on-off-on rapidly as this will shorten the life span of the bulb and may cause damage to the electrical system.

Users should observe all safety regulations of the region.

The equipment has acquired the CE safety label. However, users do have full responsibility to use this equipment safely.

# OPTIONAL ACCESSORIES

zu beziehen bei  
sold by  
[www.conatex.com](http://www.conatex.com)



- ST-001 Eyepieces WF5x/22mm
- ST-002 Eyepieces WF10x/20 Mm
- ST-003 Eyepieces WF15x/15 Mm
- ST-004 Eyepieces WF20x/13 Mm
- ST-005 Micrometric Eyepieces WF10x/20 Mm
- ST-040 Dark Field Condenser
- ST-041 Jewellery Clips
- ST-020 Objective 1x for S-10-P and S-10-L
- ST-021 Objective 3x for S-10-P and S-10-L
- ST-022 Objective 4x for S-10-P and S-10-L
- ST-025 Objective 1x (165 mm) for ST-50
- ST-026 Objective 3,5x (124 mm) for ST-50



# RECYCLING AND RECOVERY

zu beziehen bei  
sold by  
[www.conatex.com](http://www.conatex.com)



Art.13 Dlsg 25 july 2005 N°151. "According to directives 2002/95/EC, 2002/96/EC and 2003/108/EC relating to the reduction in the use of hazardous substances in electrical and electronic equipment and waste disposal."



The basket symbol on equipment or on its box indicates that the product at the end of its useful life should be collected separately from other waste.

The separate collection of this equipment at the end of its lifetime is organized and managed by the producer. The user will have to contact the manufacturer and follow the rules that he adopted for end-of-life equipment collection. The collection of the equipment for recycling, treatment and environmentally compatible disposal, helps to prevent possible adverse effects on the environment and health and promotes reuse and/or recycling of materials of the equipment. Improper disposal of the product involves the application of administrative penalties as provided by the laws in force.