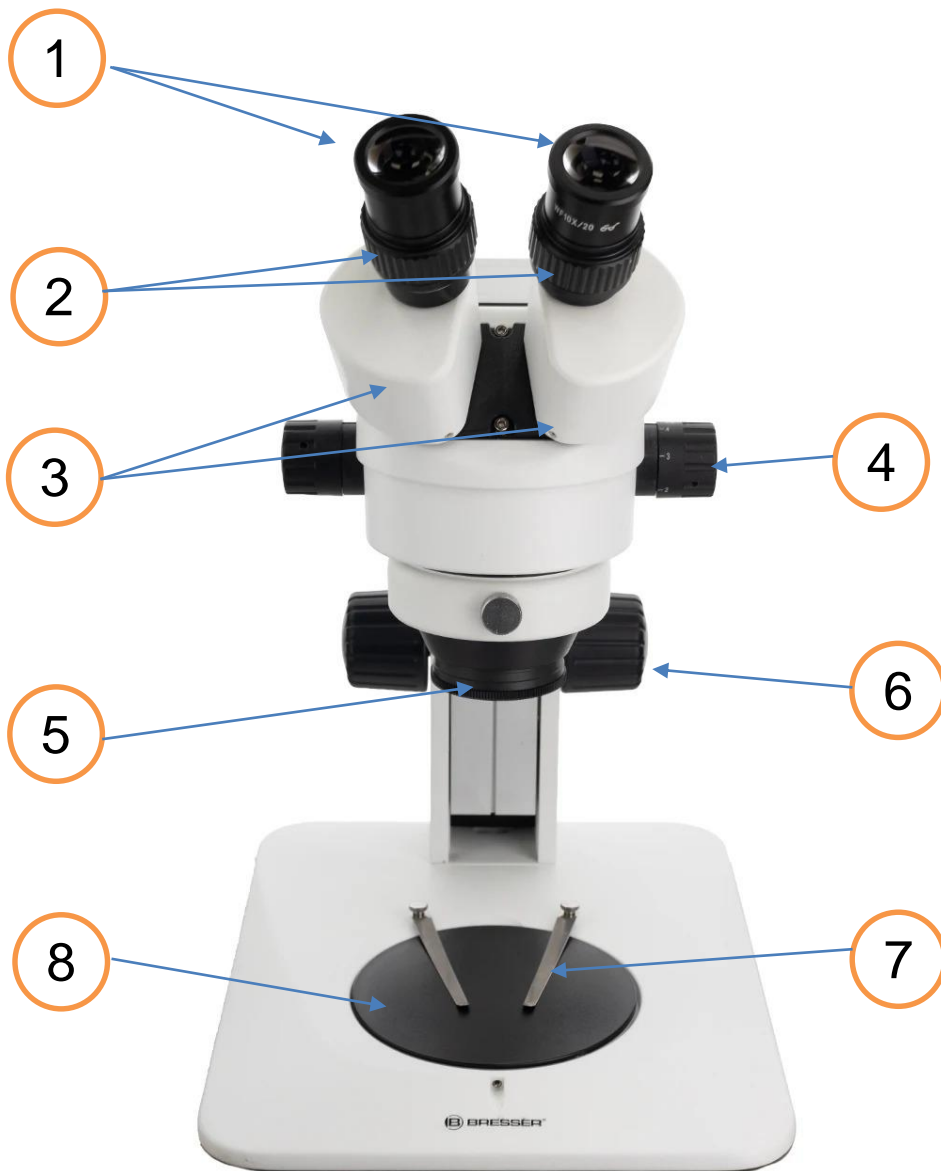


BRESSER Zoom Stereo Microscope 7x-45x INSTRUCTION MANUAL



Product Code: 5804100

To ensure safety and obtain optimum performance and familiarize yourself with the use of this microscope, we recommend you read this manual before operating the microscope.



ABOUT THIS INSTRUCTION MANUAL

These operating instructions are to be considered a component of the device. Please read the safety instructions carefully before use. Keep these instructions for renewed use at a later date. When the device is sold or given to someone else, the instruction manual must be provided to the owner/user of the product.

INTENDED USE

This product is intended only for private use.
It was developed for the magnification display of things in nature.

This device is not intended for use by individuals (including children) with limited physical, sensory or mental capabilities or those lacking in experience and/or knowledge, unless they are supervised by an individual responding for their safety or have received instructions from them regarding the use of the device. Children must be supervised to ensure that they do not play with the device.

GENERAL WARNING

RISK OF CHOKING!

Keep packaging material, like plastic bags and rubber bands, out of the reach of children, as these materials pose a choking hazard.

RISK of BODILY INJURY!

Contains functional sharp edges and points!

Tools with sharp edges and points are often used when working with this device. Because there is a risk of injury from such tools, store this device and all tools and accessories in a location that is out of the reach of children.

RISK of ELECTRIC SHOCK!

This device may contain electronic components that operate via a power source. Children should only use the device under adult supervision. Only use the device as described in manual; otherwise, you run the risk of an electric shock.

Before operating, check the device, cables and connections for damage. Never use a damaged unit or a unit with damaged power cables. Damaged parts must be exchanged immediately by an authorized service center.

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 **RISK of FIRE/ EXPLOSION!**

Do not expose the device to high temperatures. Do not short-circuit the device or throw into a fire. Excessive heat or improper handling could trigger a short-circuit, a fire or explosion.

 **RISK of PROPERTY DAMAGE!**

Protect the device from severe shocks!

Do not disassemble the device. In the event of a defect, please contact your dealer. The dealer will contact the Service Centre and can send the device in to be repaired, if necessary.

HERE ARE THE PARTS OF YOUR MICROSCOPE:

1. Eyepiece
2. Diopter ring
3. Microscope Head
4. Objective zooming wheel
5. Objective
6. Focusing wheel
7. Specimen clamp
8. Cover plate
(one side white, one side black)

1. LOCATION

Before you set up your microscope, it's important that you choose a spot with enough light for normal observation. Furthermore, you must make sure that your microscope is on a stable and solid surface, because a shaky surface will not lead to satisfactory results.

2. OBSERVATION

Put the specimen in the center of the cover plate, and fix it with specimen clamp if necessary. Magnification can be adjusted by the objective zooming wheel (4), objective magnification can be adjusted from 0.7x to 4.5x. Always start your observation from the low magnification. Look through the eyepieces (1), turning the focusing wheel until you can see the picture clearly, then adjust the diopter rings (2) to make the image sharp. The cover plate (8) has two sides, black and white. The black side is suitable for light-colored object and the white side for dark specimen. Different backgrounds provide a contrast of the images.

3. DIOPTER ADJUSTMENT

Observe the specimen. Close your left eye, Adjust right diopter ring(2), until the image in your right eye is sharp and clear; then close your right eye adjusting the left diopter ring(2), until the image in your left eye is sharp and clear.

4. ADJUSTING THE EYEPIECE DISTANCE

Place the specimen on the cover plate and bring it into the exact focus. Adjust the interpupillary distance by folding the eyepiece heads (3) over the center axis at the microscope head until the right and the left field of view can be composed to one.

5. CALCULATING THE MAGNIFICATION:

Formula:

Eye piece magnification x Objective magnification = Total magnification

Example:

10x (eyepiece) x 2x (objective) = 20x Total magnification

6.MAINTENANCE AND STORAGE



Do not disassemble the microscope!

Because of being a precise optical instrument, do not disassemble the microscope casually. That may cause serious damage to its performance. Do not disassemble the objectives.



Avoid contamination!

You should make sure that dust or moisture does not come in contact with your microscope. Avoid putting fingerprints on any optical surfaces! If dust or dirt nevertheless have gotten onto your microscope, or the accessories, remove it as described.



Cleaning non-optical parts

Remove the batteries from the device before cleaning non-optical parts (e.g. stage). Remove dust and dirt from your microscope or its accessories by using a soft brush. Clean the solid area with a soft, lint-free cloth; the cloth may be moistened with a mild detergent solution. Be sure that the microscope is dry before using it. For cleaning the painted parts or plastic components, DO NOT use organic solvents such as alcohol, ether, acetone or other thinner etc.!



Cleaning optical part

In order to enhance the optical quality, the lenses of eyepieces or objectives are coated. They should not be wiped because dry dirt or dust may scratch the coating. It is best to remove this parts be cleaned from the frame prior to cleaning. Always blow loose dust away first. Use lens tissue of good quality or soft fabric moistened with a small amount of pure alcohol (available in the chemist's shop); wipe the lens surface clean.

Being not used

Store the microscope properly when not using it and keep it in a dry and fungus-free place. In the case of non-use for a long time, you should stow the microscope and the accessories in their correct containers again. We suggest the storage of all objectives and eyepieces in a closed container with drying agent. Remove the batteries from the unit if it is not used for a long time.

Remember:

A well maintained microscope will keep its optical quality for years and thus maintain its value.



7.DISPOSAL

Dispose of the packaging materials properly, according to their type, such as paper or cardboard. Please take the current legal regulations into account when disposing of your device. You can get more information on the proper disposal from your local waste-disposal service or environmental authority.

BRESSER Zoom Stereo Microscope 7x-45x Technical Data:

Specification	Details
Product Name	BRESSER Zoom Stereo Microscope
Model	58-04100
Microscope Type	Stereo Zoom Microscope
Viewing Head	Binocular
Head Inclination	45° Inclined
Eyepieces	WF10x Wide-Field
Objective Zoom Range	0.7x – 4.5x
Total Magnification	7x – 45x
Zoom System	Continuous Zoom
Image Type	Upright 3D Stereo Image
Focusing System	Rack-and-Pinion Coarse Focus
Stand Type	Pillar Stand
Working Distance	Approx. 100 mm
Interpapillary Adjustment	Yes
Diopter Adjustment	Yes
Optical System	Optical Glass Elements
Construction Material	Metal Body
Illumination	External / Optional
Compatible Accessories	Ring Light, Auxiliary Lens, Microscope Camera
Applications	Electronics, PCB Inspection, Jewelry, Watch Repair, Biology, Education, Industrial Inspection
Color	White / Black
Power Requirement	Depends on Optional Illumination
Condition	Tabletop Stereo Inspection Microscope