

Konus 5425 Crystal-45

Konus 5425 Crystal-45 Trinocular Stereoscopic Microscope User Manual

Model: 5425 Crystal-45 | Brand: Konus

INTRODUCTION

This manual provides comprehensive instructions for the safe and effective use of your Konus 5425 Crystal-45 Trinocular Stereoscopic Microscope. Please read this manual thoroughly before operating the instrument to ensure proper setup, operation, and maintenance. This microscope is designed for detailed observation of three-dimensional objects, offering a wide field of view and adjustable magnification.

SAFETY INFORMATION

- **Age Restriction:** This product is not suitable for children under 14 years of age.
- **Handling:** Always handle the microscope with care. Avoid sudden impacts or dropping the instrument.
- **Power:** Ensure the microscope is disconnected from the power source before cleaning or performing any maintenance.
- **Environment:** Use the microscope in a stable, dry, and dust-free environment. Avoid direct sunlight or high humidity.
- **Cleaning:** Use only recommended cleaning materials for optical components. Avoid abrasive cloths or harsh chemicals.
- **Disassembly:** Do not attempt to disassemble the microscope or its components beyond what is described in this manual. This may void the warranty and cause damage.

PACKAGE CONTENTS

Verify that all items listed below are present in your package:

- Konus 5425 Crystal-45 Trinocular Stereoscopic Microscope Body
- Two WF 10x Eyepieces
- 0.7x to 4.5x Zoom Objective (integrated)
- Transparent Specimen Disc
- White/Black Reversible Specimen Disc
- Power Cable (if applicable for halogen illumination)
- Dust Cover

- User Manual (this document)

PRODUCT DIAGRAM AND PARTS IDENTIFICATION

Familiarize yourself with the various parts of your Konus 5425 Crystal-45 microscope:



Image: Konus 5425 Crystal-45 Trinocular Stereoscopic Microscope. This image shows the complete microscope unit, including the trinocular head, eyepieces, objective, focus knobs, and base with illumination controls.

1. **Eyepieces (WF 10x):** For viewing the magnified image.
2. **Trinocular Head:** Allows for simultaneous viewing through eyepieces and connection of a camera (camera not included).
3. **Zoom Objective (0.7x - 4.5x):** Provides variable magnification.
4. **Focus Knobs:** Used to adjust the clarity of the image.
5. **Interpapillary Distance Adjustment:** Adjusts the distance between the eyepieces to match the user's eye separation.
6. **Diopter Adjustment:** Compensates for differences in vision between the user's eyes.
7. **Specimen Stage:** Platform where the specimen is placed.
8. **Specimen Discs (Transparent/White-Black):** Used as a background for specimens.
9. **Illumination Controls:** Adjusts the brightness of the built-in halogen light source.
10. **Base:** Provides stability for the microscope.

SETUP

1. **Unpacking:** Carefully remove all components from the packaging. Retain the packaging for future transport or storage.
2. **Placement:** Place the microscope on a stable, level surface away from vibrations, direct sunlight, and heat sources.
3. **Eyepiece Installation:** Insert the two WF 10x eyepieces into the eyepiece tubes on the trinocular head.
4. **Specimen Disc:** Choose either the transparent or the white/black disc and place it onto the specimen stage. The transparent disc is suitable for transmitted light, while the white/black disc provides contrast for opaque specimens.
5. **Power Connection:** Connect the power cable to the microscope and then to a suitable electrical outlet.

OPERATING INSTRUCTIONS

1. **Power On:** Turn on the microscope's illumination using the power switch, usually located on the base. Adjust the brightness

using the illumination controls.

2. **Specimen Placement:** Place your specimen on the center of the chosen specimen disc.
3. **Interpapillary Distance Adjustment:** Look through the eyepieces and adjust the distance between them until you see a single, circular field of view.
4. **Diopter Adjustment:**
 - Close your right eye and focus the image using the main focus knob while looking through the left eyepiece.
 - Close your left eye and adjust the diopter ring on the right eyepiece until the image is sharp.
5. **Focusing:** Use the coarse and fine focus knobs to bring the specimen into sharp focus.
6. **Zoom Adjustment:** Rotate the zoom knobs located on both sides of the head to change the magnification from 0.7x to 4.5x. Refocus slightly if necessary after changing zoom.
7. **Trinocular Port Usage:** To attach a camera (not included), remove the protective cap from the trinocular port and secure the camera adapter. Refer to your camera's manual for specific attachment instructions.

MAINTENANCE

- **Cleaning Lenses:** Use a soft, lint-free cloth specifically designed for optical lenses. For stubborn smudges, a small amount of lens cleaning solution can be applied to the cloth, not directly to the lens.
- **Cleaning Body:** Wipe the microscope body with a soft, damp cloth. Avoid using solvents or abrasive cleaners.
- **Storage:** When not in use, cover the microscope with the provided dust cover to protect it from dust and debris. Store in a cool, dry place.
- **Bulb Replacement:** If the halogen light source dims or fails, replace the bulb with an identical type. Ensure the microscope is unplugged before attempting replacement. Consult a qualified technician if unsure.

TROUBLESHOOTING

Problem	Possible Cause	Solution
No illumination	Power cable disconnected, bulb faulty, power switch off.	Check power connection, replace bulb, ensure switch is on.
Image is blurry	Not properly focused, diopter not adjusted, dirty lenses.	Adjust focus knobs, perform diopter adjustment, clean lenses.
Only one eye sees image	Interpapillary distance incorrect, eyepiece not fully inserted.	Adjust interpapillary distance, ensure both eyepieces are fully seated.
Dust or spots in view	Dust on eyepieces or objective lens.	Clean eyepieces and objective lens carefully.

SPECIFICATIONS

Feature	Detail
Model Name	Crystal-45
Model Number	Konus_5425
Microscope Type	Trinocular Stereoscopic
Eyepieces	WF 10x (two included)

Feature	Detail
Zoom Objective	0.7x to 4.5x
Total Magnification Range	7x to 45x (with WF 10x eyepieces)
Interpapillary Distance Adjustment	Yes
Diopter Adjustment	Yes
Specimen Stage	Includes transparent and white/black discs
Light Source Type	Halogen
Optical Material	Crystal (glass)
Color	Multicolor
Product Dimensions (L x W x H)	30 x 30 x 30 cm
Item Weight	1 Kilogram
Manufacturer	Konus Italia Group S.R.L

Note: Specifications are subject to change without notice.

WARRANTY AND SUPPORT

For warranty information and technical support, please refer to the documentation provided with your purchase or visit the official Konus website. Keep your proof of purchase for warranty claims.

Manufacturer: Konus Italia Group S.R.L