RUZIZAO XDZ-XVH2003

RUZIZAO XDZ-XVH2003 1080P Digital HDMI/VGA Microscope User Manual

Model: XDZ-XVH2003 | Brand: RUZIZAO

1. Introduction

Thank you for choosing the RUZIZAO XDZ-XVH2003 Digital HDMI/VGA Microscope. This professional-grade electronic microscope is designed for detailed observation and inspection, featuring a 1080P camera, 130X zoom lens, and an adjustable LED ring light. Its stable metal base and versatile connectivity options make it suitable for various applications, including electronic repair, coin inspection, and scientific research. Please read this manual thoroughly before operation to ensure proper use and optimal performance.

2. Package Contents

Verify that all items listed below are included in your package. If any components are missing or damaged, please contact customer support.

- Digital Microscope Camera (1)
- 130X Zoom Lens (1)
- Adjustable LED Ring Light (1)
- Metal Base Stand Combination (1)
- Wireless Remote Control (1) *(Battery not included)*
- Power Adapter (1)
- HDMI Cable (1)
- User Manual (1)



Image: All components included in the RUZIZAO XDZ-XVH2003 Digital Microscope package.

3. Product Overview

The RUZIZAO XDZ-XVH2003 microscope features a high-definition camera and a robust stand for stable observation. Key components include:

- **1080P Camera:** Equipped with a CMOS sensor for clear, high-resolution imaging. Supports HDMI and VGA output for display on various screens.
- **130X Zoom Lens:** Offers a working distance of 40mm to 220mm, allowing for detailed magnification of small objects.
- **56-LED Ring Light:** Provides uniform illumination (6500K-7000K, up to 60,000 Lux) with adjustable brightness to eliminate shadows and enhance visibility.
- **Stable Metal Base:** A 22x15 cm metal base with a 30 cm support pole ensures stability and minimizes vibrations during operation.
- **Adjustable Stand:** Features 360° rotation and a rotary knob for precise up and down fine adjustment, allowing for flexible positioning.

- **Wireless Remote Control:** Facilitates stable and precise observations by reducing physical interaction with the microscope. *(Note: Remote control functions only in HDMI mode.)*



Image: The microscope camera with its 130X zoom lens and the adjustable LED ring light.

4. Setup Instructions

Follow these steps to assemble and set up your RUZIZAO XDZ-XVH2003 Digital Microscope:

1. **Attach the Riser to the Base:** Insert the metal stand (riser) into the designated hole on the metal base. Secure it firmly.
2. **Install Stand Accessories:** Attach the small accessories (screws and rings) to the stand and bracket as shown in the diagram.
3. **Mount the Bracket:** Slide the bracket onto the metal stand and tighten the screws to secure it at your desired height.
4. **Attach Camera and Lens:** Screw the 130X zoom lens onto the microscope camera. Then, attach the assembled camera and lens unit to the bracket, ensuring it is securely fastened.
5. **Connect Ring Light:** Attach the LED ring light to the bottom of the lens.
6. **Power and Display Connection:** Connect the microscope camera to a monitor (computer screen, TV, or projector) using the provided HDMI cable. Plug the power adapter into the microscope and then into a power outlet.

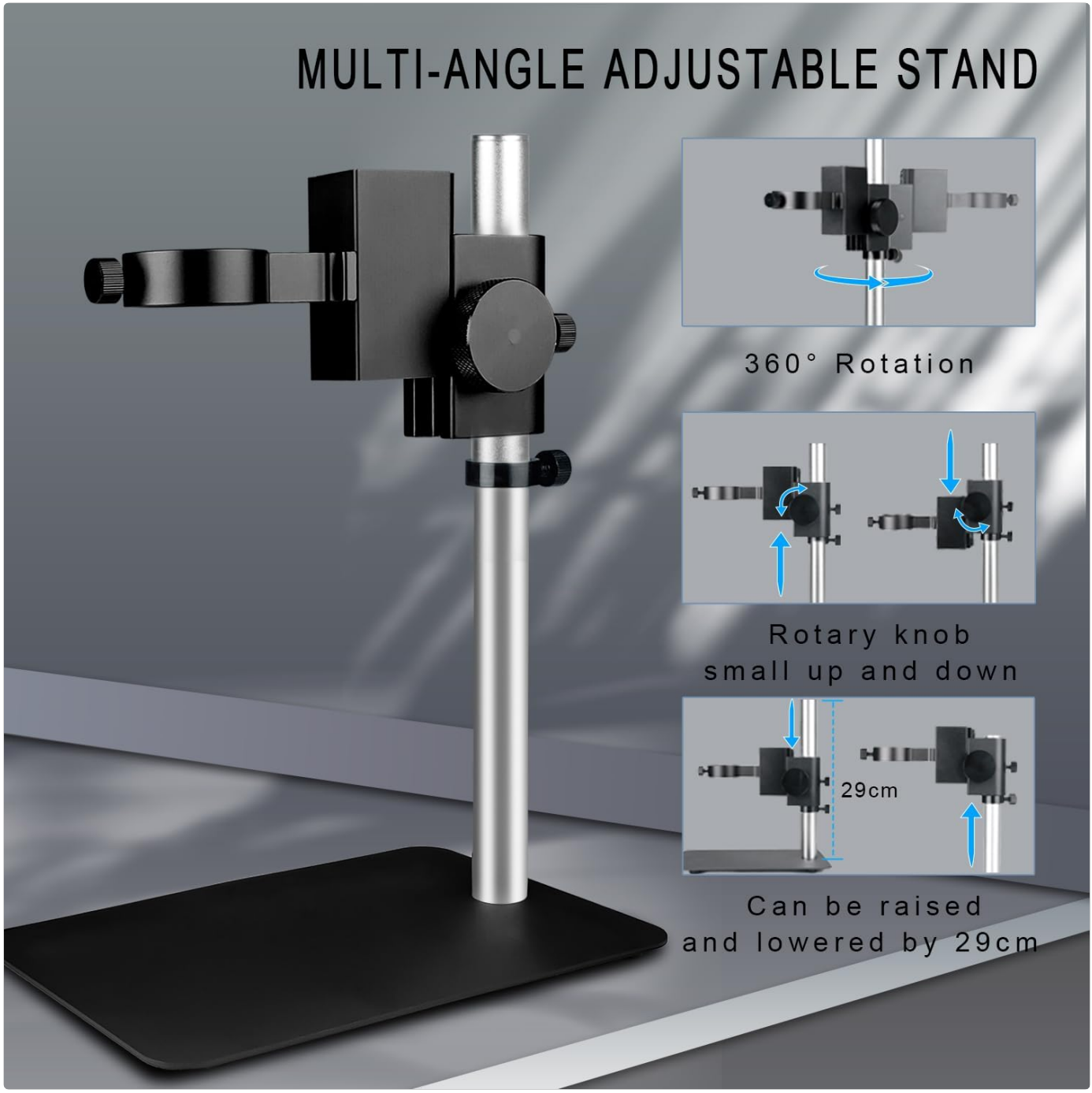


Image: The multi-angle adjustable stand for the RUZIZAO XDZ-XVH2003 Digital Microscope, showing 360° rotation and vertical adjustment.

5. Operating Instructions

Once assembled and connected to a display, you can begin using your microscope:

1. **Power On:** Turn on the microscope using the power button on the camera unit or the remote control.
2. **Adjust Height and Focus:** Use the rotary knob on the stand to adjust the microscope's height for initial positioning. Then, rotate the focus ring on the 130X lens to achieve a clear image on your display. The working distance can range from 40mm to 220mm.
3. **Adjust Illumination:** Turn on the LED ring light and rotate its side knob to adjust the brightness for optimal viewing conditions.
4. **Digital Zoom:** Use the UP/Zoom buttons on the camera or remote control to digitally enlarge the screen up to four times for closer inspection.

5. **Menu Settings:** Press the MENU button to access various settings such as White Balance, Exposure, Image adjustments (Luminance, Contrast, Saturation, Sharpen, Hue), Cross Line, and Resolution.
6. **Language Selection:** Navigate to the 'Language' option in the menu to select your preferred language.
7. **Exposure Control:** Adjust exposure manually, automatically, or with a one-touch setting for balanced lighting.
8. **Image Adjustments:** Fine-tune brightness, contrast, saturation, and sharpness through the 'Image' menu to optimize image quality.
9. **Cross Line Function:** Utilize the 8 adjustable cross lines (color, thickness, position) for precise measurements and alignment during inspections.
10. **Save Settings:** Ensure to save your preferred settings before exiting the menu.



Image: The RUZIZAO XDZ-XVH2003 Digital Microscope displaying a magnified view of a circuit board on an external monitor.

6. Maintenance

To ensure the longevity and optimal performance of your microscope, follow these maintenance guidelines:

- **Cleaning:** Use a soft, dry cloth to clean the exterior of the microscope. For the lens, use a specialized lens cleaning solution and a microfiber cloth to avoid scratches.
- **Storage:** Store the microscope in a clean, dry, and dust-free environment when not in use. Avoid extreme temperatures and humidity.
- **Handling:** Handle the microscope with care to prevent drops or impacts that could damage internal components or the lens.
- **Power Off:** Always power off the device and unplug it from the power source when not in use or during cleaning.

7. Troubleshooting

If you encounter any issues with your microscope, refer to the following common problems and solutions:

Problem	Possible Cause	Solution
No image on display	Power not connected; HDMI/VGA cable loose; Display input incorrect.	Ensure power adapter is plugged in; Check cable connections; Select correct input source on display.
Image is blurry	Lens not focused; Object too far/close; Lens dirty.	Rotate the focus ring on the lens; Adjust the microscope height; Clean the lens.
Image is too dark/bright	LED ring light brightness incorrect; Exposure settings.	Adjust the LED ring light knob; Modify exposure settings in the menu.
Remote control not working	No battery; Incorrect mode; Obstruction.	Insert CR2025 battery; Ensure microscope is in HDMI mode; Remove any obstructions between remote and camera.
Cannot connect to PC via software	Device limitation.	This digital microscope does not support software connection to a computer/PC for operation. It connects directly to a display via HDMI/VGA.

8. Specifications

Feature	Detail
Brand	RUZIZAO
Model Number	XDZ-XVH2003
Compatible Devices	Personal Computer, Laptop, Tablet, Television
Product Dimensions (L x W x H)	22 x 15 x 35 cm
Item Weight	1.5 Kilograms
Material	Metal
Max Magnification	130X
Image Sensor	2 Megapixel CMOS
Output Resolution	1080P (HDMI/VGA)

Feature	Detail
Frame Rate	30 fps
Working Distance	40mm - 220mm
Light Source Type	LED (56 LEDs)
LED Color Temperature	6500K-7000K
Max Illumination	60,000 Lux
Power Source	Cable Electric (DC 12V)

9. Warranty and Support

RUZIZAO products are manufactured to high-quality standards. For warranty information or technical support, please refer to the contact details provided with your purchase or visit the official RUZIZAO website. Our customer service team is available to assist you with any questions or concerns regarding your digital microscope.

Ask a question about this manual

Ask about setup, troubleshooting, compatibility, parts, safety, or missing instructions. Manuals+ will review the question and use this page's manual context to help answer it.

Name

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Question

Example: How do I reset this device or fix this error?

Details

Model number, symptoms, what you tried, or the section of the manual you are using.

Submit question