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› Ralcam N505-R1.5M 10FT Two-Way Articulating Borescope User Manual

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Ralcam N505-R1.5M 10FT Two-Way Articulating Borescope User Manual

Model: N505-R1.5M

1. INTRODUCTION

This manual provides comprehensive instructions for the safe and effective operation, setup, maintenance, and troubleshooting of your Ralcam N505-R1.5M 10FT Two-Way Articulating Borescope. Please read this manual thoroughly before using the device and retain it for future reference.

2. SAFETY INFORMATION

- Read all instructions carefully before operating the device.
- Do not immerse the main unit of the borescope in water or other liquids. The probe is IP67 waterproof, but the main unit is not.
- Do not use the device in explosive atmospheres, such as in the presence of flammable liquids, gases, or dust.
- Keep the device out of reach of children.
- Use only the specified charging cable and power adapter.
- Do not attempt to modify, disassemble, or repair the device yourself. Contact authorized service personnel for assistance.
- Avoid direct exposure of the camera lens to strong light sources to prevent damage.

3. PACKAGE CONTENTS

Verify that all items are present in the package:

- 1 x Industrial Borescope (Main Unit)
- 1 x USB-C Cable
- 1 x Carrying Bag
- 1 x User Manual

4. PRODUCT FEATURES

- **5-Inch IPS Display with 8x Zoom:** Provides clear visuals for detailed inspection, allowing identification of hairline cracks,

corrosion, or tiny leaks.

- **8.5mm/0.33in Slim Probe with Adjustable Brightness:** Accesses confined spaces with 6 bright LEDs and 3 adjustable brightness levels to eliminate shadows.
- **2-Way 210° Articulation with Angle Lock:** Offers maximum 210° articulation for navigating complex pathways and a one-touch lock button for stable observation.
- **4400mAh Rechargeable Battery & Voice Recording:** High-capacity battery supports up to 4 hours of continuous use. Built-in voice recording function allows narration of findings in real-time.
- **10FT Semi-Rigid Snake Cable:** Balances flexibility for navigating bends and rigidity for maintaining shape when pushed, suitable for various applications.

5. SETUP

1. **Charging the Device:** Connect the provided USB-C cable to the borescope's charging port and then to a compatible USB power adapter (not included). The battery indicator on the screen will show the charging status. Ensure the device is fully charged before first use.
2. **Inserting Micro SD Card:** Locate the Micro SD card slot on the side of the main unit. Insert a Micro SD card (up to 32GB, often included) with the gold contacts facing down until it clicks into place. This card is necessary for saving photos and videos.
3. **Attaching the Probe:** Align the connector of the 10FT semi-rigid snake cable with the port on the main unit. Push firmly until it is securely connected. Ensure the connection is tight to prevent signal loss.

6. OPERATING INSTRUCTIONS

1. **Power On/Off:** Press and hold the power button (usually located on the front or side) for a few seconds to turn the device on or off.
2. **Menu Navigation:** Use the directional buttons (Up, Down, Left, Right) to navigate through the on-screen menu options. Press the 'OK' or 'Enter' button to confirm a selection.
3. **Adjusting LED Brightness:** Locate the LED brightness control button (often marked with a light bulb icon). Press it repeatedly to cycle through the 3 available brightness levels for the probe's LEDs.
4. **2-Way Articulation:** Use the articulation control wheel or joystick (typically on the main unit) to bend the probe tip up to 210 degrees in two directions. Gently manipulate the control to guide the probe.
5. **Angle Lock:** While articulating the probe, press the 'Lock' button to hold the probe tip at a desired angle. This provides stability for detailed inspection or hands-free operation. Press again to release.
6. **Capturing Photos/Videos:** Press the dedicated 'Photo/Video' button (often marked with a camera or video camera icon) to take a still image. Press and hold the same button to start video recording; press again to stop.
7. **Voice Recording:** If available, activate the voice recording function through the menu settings. This allows you to narrate your findings in real-time, which will be synchronized with your video recordings.
8. **Zoom Function:** Use the 'Zoom In' and 'Zoom Out' buttons (often marked with '+' and '-' icons) to apply up to 8x digital zoom on the live image displayed on the 5-inch IPS screen.
9. **Reviewing Media:** Enter the 'Gallery' or 'Playback' mode via the main menu to view captured photos and videos. Use directional buttons to browse and 'OK' to select.

7. MAINTENANCE

- **Cleaning:** Wipe the main unit with a soft, dry cloth. For the probe tip, use a damp cloth with a mild detergent if necessary, ensuring it is completely dry before storage. Do not use abrasive cleaners or solvents.
- **Storage:** Store the borescope and all accessories in the provided protective carry case. Keep it in a cool, dry place, away from direct sunlight and extreme temperatures.

- **Battery Care:** To prolong battery life, charge the device regularly, even if it is not in frequent use. Avoid fully discharging the battery for extended periods.
- **Probe Care:** Handle the semi-rigid probe cable with care. Avoid sharp bends or excessive force that could damage the internal wiring or articulation mechanism.

8. TROUBLESHOOTING

Problem	Possible Cause	Solution
Device won't power on	Low battery; Power button not held long enough	Charge the battery; Press and hold the power button for 3-5 seconds
No image on screen	Probe not connected properly; LED brightness too low	Ensure probe cable is securely connected; Adjust LED brightness
Image is blurry	Incorrect focus distance; Dirty camera lens	Ensure object is within 15-100mm focus range; Clean the camera lens gently
Articulation not working	Articulation lock engaged; Obstruction in probe path	Release the articulation lock; Carefully check for and remove any obstructions
Cannot save photos/videos	Micro SD card not inserted; SD card full or corrupted	Insert Micro SD card correctly; Delete old files or format the SD card (this will erase all data)

9. SPECIFICATIONS

Feature	Specification
Model Number	N505-R1.5M
Display	5-inch IPS
Probe Diameter	8.5mm (0.33in)
Probe Length	10FT (approximately 3 meters)
Articulation	2-Way, 210°
LED Lights	6 adjustable brightness levels
Zoom	8x Digital Zoom
Battery Capacity	4400mAh (up to 4 hours continuous use)
Video Capture Resolution	1080p
Media Type	Micro SD Card
Water Resistance Level	Probe: IP67 Waterproof
Connectivity Technology	USB
Item Weight	2.86 pounds

Feature	Specification
Package Dimensions	4.33 x 2.36 x 2.36 inches

10. WARRANTY AND SUPPORT

For warranty information, technical support, or service inquiries, please refer to the contact details provided with your purchase documentation or visit the official Ralcam website. Do not attempt to repair the device yourself, as this may void your warranty.

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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