

Retoo M043

Retoo M043 HD Waterproof Endoscope Camera User Manual

Model: M043 | Brand: Retoo

INTRODUCTION

This manual provides detailed instructions for the proper setup, operation, and maintenance of your Retoo M043 HD Waterproof Endoscope Camera. Please read this manual thoroughly before using the device to ensure optimal performance and longevity.



Image: The Retoo M043 Endoscope Camera connected to a smartphone, displaying an image of internal machinery. The camera head emits a light beam.

PACKAGE CONTENTS

Verify that all items are present in your package:

- Retoo M043 Endoscope Camera with integrated USB/Micro USB/Type-C connector
- Hook attachment
- Magnet attachment
- Side-view mirror attachment
- User Manual (this document)



Image: The Retoo M043 Endoscope Camera, showing the camera head, flexible cable, control unit, and multi-interface connector (USB, Micro USB, Type-C) plugged into a smartphone.

SETUP INSTRUCTIONS

1. **Compatibility Check:** Ensure your smartphone supports OTG (On-The-Go) functionality. The camera is compatible with Android devices that support OTG. For PC use, a standard USB port is required.
2. **Application Installation (for Smartphones):**
 - Search for "inskam" in your device's application store (e.g., Google Play Store).
 - Download and install the "inskam" application.
 - Upon first launch, the application will request permissions for camera, microphone, and file access. Grant these permissions for the camera to function correctly.
 - The application may then request access to "CameraHD". Approve this access to proceed.
3. **Connection:**

- Connect the endoscope camera to your device using the appropriate connector (USB for PC, Micro USB or Type-C for smartphones).
- For PC users, simply launch a compatible image capture application after connecting the camera.



Image: The versatile connector of the endoscope camera, featuring standard USB, Micro USB, and Type-C interfaces for broad compatibility with various devices like PCs, laptops, and smartphones.

OPERATING INSTRUCTIONS

1. **Power On:** Once connected and the application is running, the camera should automatically power on and display a live feed.
2. **Adjusting LED Brightness:** The camera features 6 white LED diodes. Use the integrated control unit on the cable to adjust the brightness of the LEDs. This helps illuminate dark inspection areas.
3. **Resolution Selection:** The camera supports two resolutions: 640x480 pixels and 1024x720 pixels. Select your desired resolution within the "inskam" application settings or your PC's image capture software.

4. **Capturing Images/Videos:** Use the dedicated buttons within the "inskam" application or your PC software to capture still images or record video footage. The video recording speed is 30 frames per second.

5. **Using Attachments:**

- **Hook:** Attach the hook to retrieve small objects from inaccessible areas.
- **Magnet:** Attach the magnet to pick up metallic items.
- **Side-view Mirror:** Attach the mirror to change the viewing angle and inspect areas perpendicular to the camera's direct view.



Image: A close-up of the endoscope camera head demonstrating the adjustable brightness of its 6 LED lights, from off to full illumination.



Image: Examples of the endoscope camera in use, showing inspections inside a car wheel well, an air conditioning unit, behind a washing machine, and down a sink drain, all viewed on a connected smartphone.

MAINTENANCE AND CARE

- **Cleaning:** After use, especially in dirty or wet environments, gently wipe the camera head and cable with a soft, damp cloth. Avoid harsh chemicals or abrasive materials.
- **Water Resistance:** The camera is IP67 waterproof, allowing for use in wet or submerged conditions. Ensure the lens is clean and free of debris for clear underwater viewing.
- **Temperature Range:** The device is designed to operate within a temperature range of -10°C to 120°C. Avoid exposing it to temperatures outside this range.
- **Storage:** Store the endoscope camera in a clean, dry place, away from direct sunlight and extreme temperatures. Coil the cable loosely to prevent damage.
- **Handling:** The cable is semi-rigid, allowing it to hold its shape for easier navigation. Avoid excessive bending or sharp folds that could damage internal wiring.

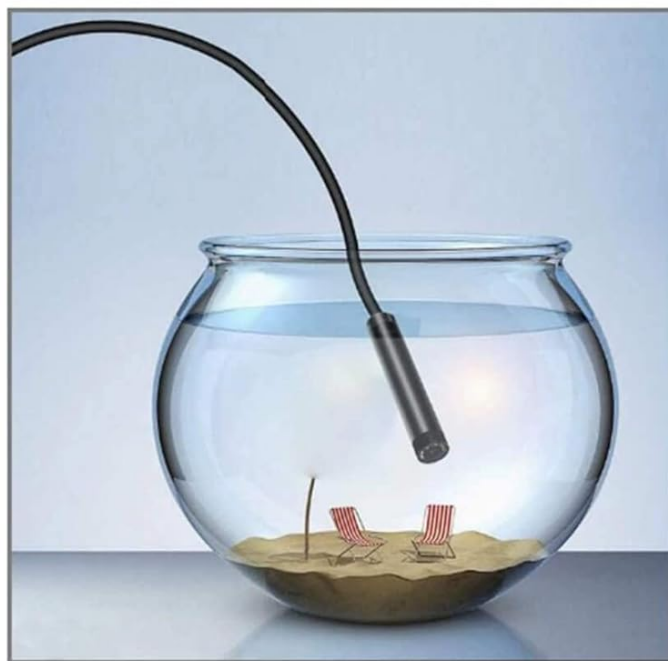


Image: Demonstrations of the endoscope camera's waterproof capabilities and versatility, showing it used in a sink drain, a street manhole, submerged in a glass of water, and inside a fishbowl.

TROUBLESHOOTING

Problem	Possible Cause	Solution
No image on screen / Camera not detected	<ul style="list-style-type: none"> • Smartphone does not support OTG. • Incorrect application permissions. • Loose connection. • Application not running or installed. • Defective camera or cable. 	<ul style="list-style-type: none"> • Verify your smartphone's OTG compatibility. • Check and grant all necessary permissions in the "inskam" app. • Ensure the camera is securely connected to your device. • Install the "inskam" app (for Android) or open an image capture app (for PC). • Test on another compatible device. If issue persists, contact support.

Problem	Possible Cause	Solution
Poor image quality / Blurry image	<ul style="list-style-type: none">• Dirty camera lens.• Insufficient lighting.• Incorrect resolution setting.• Focus issues (fixed focus camera, but distance to object matters).	<ul style="list-style-type: none">• Clean the camera lens gently.• Increase LED brightness using the control unit.• Select the highest available resolution (1024x720px) in the app settings.• Ensure the object is within the camera's optimal focal range.
LEDs not working or too dim	<ul style="list-style-type: none">• LED brightness set too low.• Power issue.	<ul style="list-style-type: none">• Adjust the LED brightness dial on the control unit.• Ensure the camera is properly connected and receiving power from the device.

SPECIFICATIONS

Feature	Detail
Brand	Retoo
Model Number	M043
Color	Black
Connectivity Technology	USB (Micro USB, Type-C adapters integrated)
Video Resolution	640x480p, 1024x720p
Frame Rate	30 frames/second
Camera Diameter	5.5 mm
Viewing Angle	67 degrees
Lighting	6 adjustable white LED diodes
Water Resistance Level	IP67 (Waterproof)
Operating Temperature	-10°C to 120°C
Compatible Devices	Android devices with OTG functionality, PCs
Cable Type	Semi-rigid
Weight	34 Grams



Image: An exploded diagram illustrating the internal structure of the endoscope camera head, highlighting the lens, image sensor, and surrounding LED lights.



Image: A detailed view of the endoscope camera head, showing its compact size with an indicated diameter of 8mm, alongside the control unit.

WARRANTY AND SUPPORT

Information regarding specific warranty terms and customer support contact details for the Retoo M043 Endoscope Camera was not provided in the available product data. For warranty claims or technical assistance, please refer to the product packaging or contact the seller directly through your purchase platform.

