Supereyes Y002

Supereyes Y002 7mm 200X Waterproof Handheld Digital Microscope User Manual

Model: Y002 | Brand: Supereyes

1. Introduction

This manual provides comprehensive instructions for the Supereyes Y002 7mm 200X Waterproof Handheld Digital Microscope. This device utilizes optoelectronic technology to inspect hard-to-reach areas, offering a magnification range of 1X to 200X. Its compact design and waterproof capabilities make it suitable for various inspection tasks.
Key features include:

- Unique IP67 waterproof rating.
- Powered via USB 2.0.
- 2 Megapixel CMOS sensor for clear imaging.
- Automatic white balance and brightness adjustment.
- Continuous zoom capability (combined optical and digital).
- Snapshot and video recording functions.
- Compact 7mm camera diameter and durable aluminum alloy body.

2. Safety Information

Please read and understand all safety instructions before using the device.

- **Waterproof Feature:** The device is IP67 waterproof, allowing for use in wet environments and underwater. It can be rinsed with water or wiped with damp clothes for cleaning. Ensure the USB connection port is dry before connecting to a computer.
- **Temperature:** The LED light may generate heat during prolonged use. Avoid direct contact with sensitive skin for extended periods.
- **Power Source:** Use only standard USB 2.0 ports for power. Do not attempt to power the device with non-standard or damaged power sources.
- **Handling:** Handle the device with care. Avoid dropping or subjecting it to strong impacts.

3. Package Contents

Verify that all items are present in the package:

- Supereyes Y002 USB Microscope (x1)
- Software CD (x1)
- Ruler for calibration (x1)

Note: If your computer lacks a CD-ROM drive, please visit the official Supereyes website to download the necessary software.

4. Product Overview

Familiarize yourself with the components of your Supereyes Y002 microscope:

Image 4.1: Structure Diagram of the Supereyes Y002 Digital Microscope. This image illustrates the main components including the focus knob, LED light waterproof camera, tripod attachment point, light adjustable button, camera button, and optional 60-degree and 45-degree side mirrors.

- **Focus Knob:** Used to adjust the focus for clear images.
- **LED Light Waterproof Camera:** The main camera unit with integrated LED illumination.

- **Tripod:** A small stand for stable positioning (may be an optional accessory or included depending on package).
- **Light Adjustable Button:** Controls the brightness of the LED lights.
- **Camera Button:** Triggers snapshot capture or video recording.
- **Side Mirrors (60° and 45°):** Optional attachments for viewing at an angle.

5. Setup

5.1 Software Installation

For Windows Users:

1. Insert the provided software CD into your computer's CD-ROM drive.
2. Follow the on-screen instructions to install the Supereyes software.
3. For full compatibility with Windows 8 (32/64 bit) and newer operating systems, it is recommended to download the latest Supereyes V3.5 software from the official Supereyes website.

For Mac OS Users:

- No specific driver or additional software is required.
- Simply connect the device, and use built-in applications like Photo Booth or FaceTime to access the microscope's camera feed.

For Linux Users:

- The device is compatible with Linux. Specific software or drivers may vary depending on your distribution.

5.2 Connecting the Device

1. Ensure the software is installed (for Windows) or your Mac/Linux system is ready to recognize a USB camera.
2. Connect the USB cable of the Supereyes Y002 microscope to an available USB 2.0 port on your computer.
3. The system should automatically detect the device.

6. Operating Instructions

6.1 Basic Operation

1. Launch the Supereyes software (Windows) or Photo Booth/FaceTime (Mac).
2. Position the microscope over the object you wish to inspect.
3. Adjust the **Focus Knob** on the microscope body until the image on your screen is clear.
4. Use the **Light Adjustable Button** on the cable to control the brightness of the LED illumination for optimal viewing.

6.2 Magnification

The Supereyes Y002 offers a continuous magnification range from 1X to 200X. This is achieved through a combination of optical and digital zoom. The 200X magnification is calculated based on a 21-inch display.

6.3 Capturing Images and Videos

- **Snapshot:** Press the **Camera Button** on the cable to take a still image. Alternatively, use the snapshot function within the software. Photo format is JPEG. Photo Capture Resolution: 640 x 480, 320 x 240.
- **Video Recording:** Use the software's video recording function. Video format is WMV for Windows systems and AVI for Mac OS. Video Capture Resolution: 320 x 240. Maximum display speed is 30 frames per second (f/s).

6.4 Software Functions (Windows Only)

The Supereyes software provides advanced functionalities:

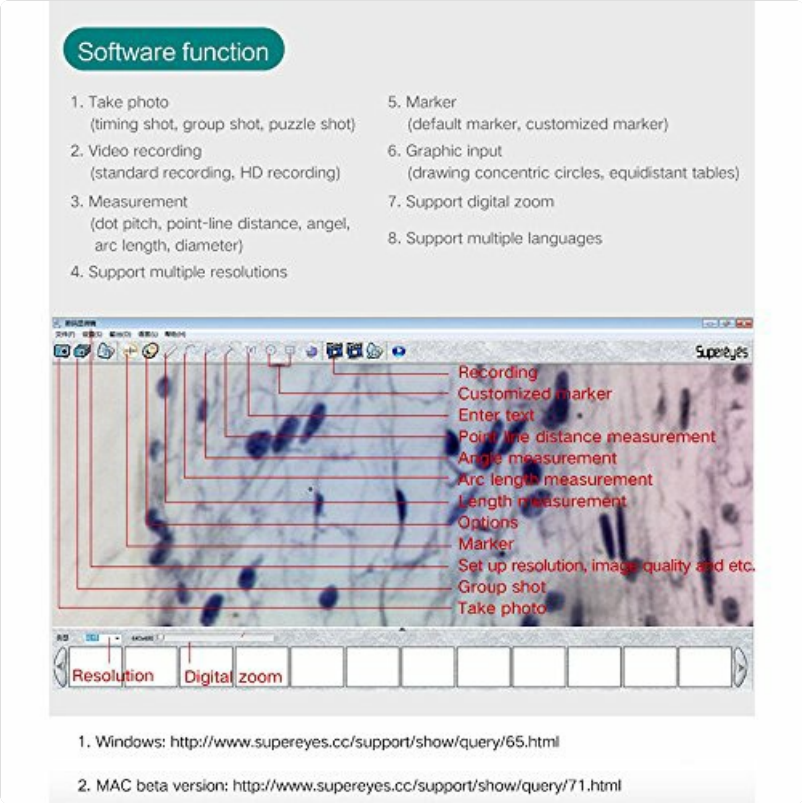


Image 6.1: Screenshot of the Supereyes software interface, showing various functions such as recording, customized markers, measurement tools (point-line distance, angle, arc length, length), options, resolution settings, and digital zoom.

- **Take Photo:** Includes timing shot, group shot, and puzzle shot options.
- **Video Recording:** Standard and HD recording capabilities.
- **Measurement:** Perform measurements such as dot pitch, point-line distance, angle, arc length, and diameter. *This function is exclusive to Windows systems.*
- **Support Multiple Resolutions:** Adjust the display and capture resolution.
- **Marker:** Utilize default or customized markers on the image.
- **Graphic Input:** Tools for drawing concentric circles, equidistant tables, etc.
- **Support Digital Zoom:** Further magnify the image digitally.
- **Support Multiple Languages:** Change the software interface language.

6.5 Typical Applications

The Y002 microscope is versatile and can be used for inspecting various areas:

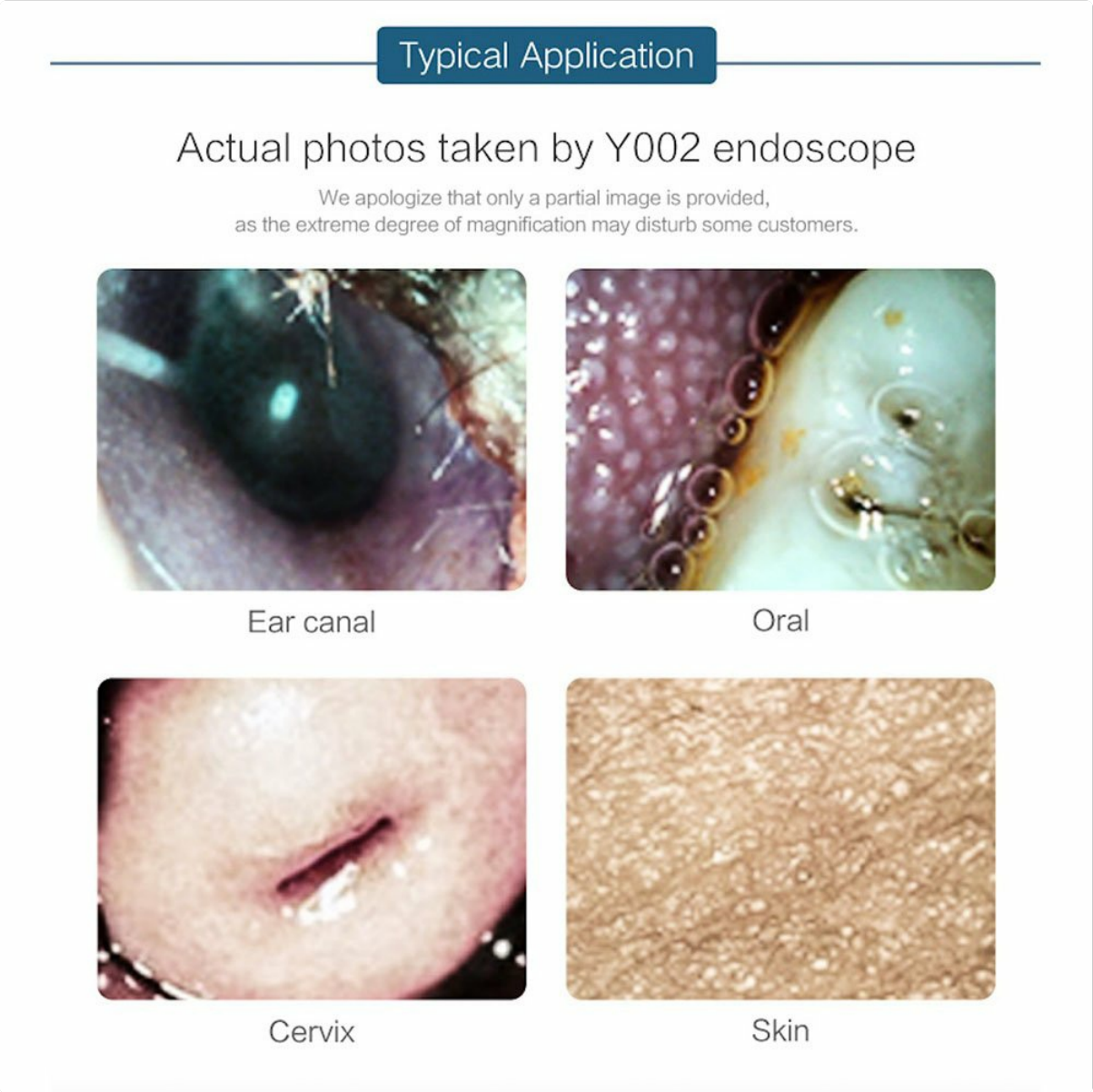


Image 6.2: Examples of actual photos taken by the Y002 endoscope, demonstrating its capability to capture detailed images of an ear canal, oral cavity, and skin surface.

- **Ear Inspection:** The 7mm diameter allows for inspection of ear canals.
- **Oral Inspection:** Suitable for examining the inner mouth, tongue, and teeth.
- **Skin Observation:** Useful for observing various skin conditions.
- **Industrial Inspection:** Ideal for quality control, PCB inspection, and examining hard-to-reach areas in machinery.

7. Maintenance

Proper maintenance ensures the longevity and optimal performance of your device.

- **Cleaning:** Due to its waterproof design, the camera head can be rinsed under water or wiped with a damp cloth. Ensure the lens is clean and free of debris for clear images. Do not use harsh chemicals or abrasive materials.
- **Storage:** Store the microscope in a dry, cool place away from direct sunlight and extreme temperatures.

- **Cable Care:** Avoid bending or kinking the USB cable excessively, as this can damage internal wires.

8. Troubleshooting

- **No Image on Screen:**
  - Ensure the USB cable is securely connected to both the microscope and the computer.
  - Verify that the correct software or application (e.g., Photo Booth) is open and selected the microscope as the input device.
  - Restart the software or computer.
- **Unclear Image:**
  - Adjust the **Focus Knob** on the microscope body.
  - Ensure the lens is clean and free from dust or smudges.
  - Adjust the LED light brightness using the**Light Adjustable Button**.
- **Software Compatibility Issues (Windows):**
  - If experiencing issues with the provided CD software, download the latest Supereyes V3.5 software from the official Supereyes website for improved compatibility with Windows 8/10.
- **Measurement Function Not Working (Mac/Linux):**
  - The measurement function is only available on Windows operating systems with the Supereyes software.

9. Specifications

Feature	Specification
Model Name	Y002
Magnification Maximum	200X
Light Source Type	LED
Waterproof Rating	IP67
Camera Diameter	7 mm
Product Dimensions	6.89"L x 0.28"W x 6.89"H
Material	Aluminum Alloy
Voltage	5 Volts (USB Powered)
Photo Capture Resolution	640 x 480, 320 x 240
Video Capture Resolution	320 x 240
Maximum Display Speed	30 f/s

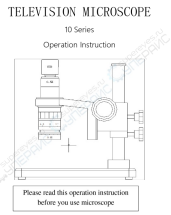
Operating System Compatibility	Windows 10/8/7/Vista/XP SP2/2000 (32/64 bit), Mac OS X 10.5 or above, Linux

10. Warranty and Support

This product is manufactured by Supereyes. For specific warranty information, technical support, or to download the latest software and drivers, please visit the official Supereyes website. Contact information for customer service can typically be found on the manufacturer's website or product packaging.

Related Documents - Y002

	Supereyes B003+ Handheld USB Digital Microscope User Guide User guide for the Supereyes B003+ Handheld USB Digital Microscope, covering installation, usage, technical specifications, troubleshooting, and safety precautions.
	USB Handheld Microscope User Manual and Guide - Andonstar V160 Comprehensive user introduction, installation guide, and maintenance instructions for the Andonstar V160 USB Handheld Microscope by Supereyes. Learn how to use, set up, and care for your digital microscope.
	Supereyes AD203 Digital Microscope User Manual - Setup, Operation, and Troubleshooting This user manual provides comprehensive instructions for the Supereyes AD203 Digital Microscope. It covers safety guidelines, basic parameters, package contents, button functions, a quick start guide, PC connectivity via USB with Amcap software, and a troubleshooting FAQ. Supports multiple languages.
	Supereyes B011 Portable Digital Microscope User Guide Comprehensive user guide for the Supereyes B011 portable digital microscope, detailing its specifications, applications in industry and research, hardware installation, troubleshooting solutions, and essential precautions for optimal use.

	[Digital Microscope AD407 Users Manual] User manual for the Supereyes AD407 Digital Microscope, providing detailed instructions on safety, basic parameters, assembly, operation, image capture, settings, and warranty information.
	[Supereyes 10 Series Television Microscope Operation Instruction and Specifications] Detailed operation instructions, usage guide, and technical specifications for the Supereyes 10 Series Television Microscope, covering safety, handling, applications, structure, and optical/digital parameters.