

## Carson MM-940

# Carson zPix 300 USB Digital Microscope Instruction Manual

Model: MM-940

## 1. INTRODUCTION

---

The Carson zPix 300 (MM-940) is a versatile USB digital microscope designed to display magnified images directly on your computer screen. It provides an effective magnification range of 86x to 457x, enabling detailed observation of various specimens. This microscope is ideal for educational purposes, hobbyists, and anyone interested in exploring the microscopic world.

### Key Features:

- Capture Images and Record Video directly on your computer.
- Effective Magnification: 86x - 457x (based on a 21-inch monitor). Magnification increases on larger monitors.
- Compatible with Mac and PC operating systems.
- Requires a USB 2.0 or 3.0 port.
- No batteries required.
- 1600x1200 Picture Resolution.
- Can be used with the included specimen base or in handheld mode.
- Equipped with four super bright LEDs for shadow-free illumination.

## 2. PACKAGE CONTENTS

---

Please ensure all the following items are included in your package:

- Carson zPix 300 USB Digital Microscope (MM-940)
- Specimen Base
- 3 Blank Slides
- 1 Prepared Specimen Slide
- Forceps
- Eyedropper
- USB Cable



Figure 1: Carson zPix 300 Digital Microscope and its accessories.

### 3. SETUP

---

#### System Requirements:

- Compatible Operating Systems: Windows 7 (32/64 bit), Windows 8/8.1, Windows 10, Windows XP SP2, Windows Vista (32/64 bit), All Mac operating systems.
- USB Port: USB 2.0 or 3.0 port required.
- **Note:** The zPix 300 is **NOT** compatible with tablets (e.g., iPad, iPhone, Chromebook) or TVs.

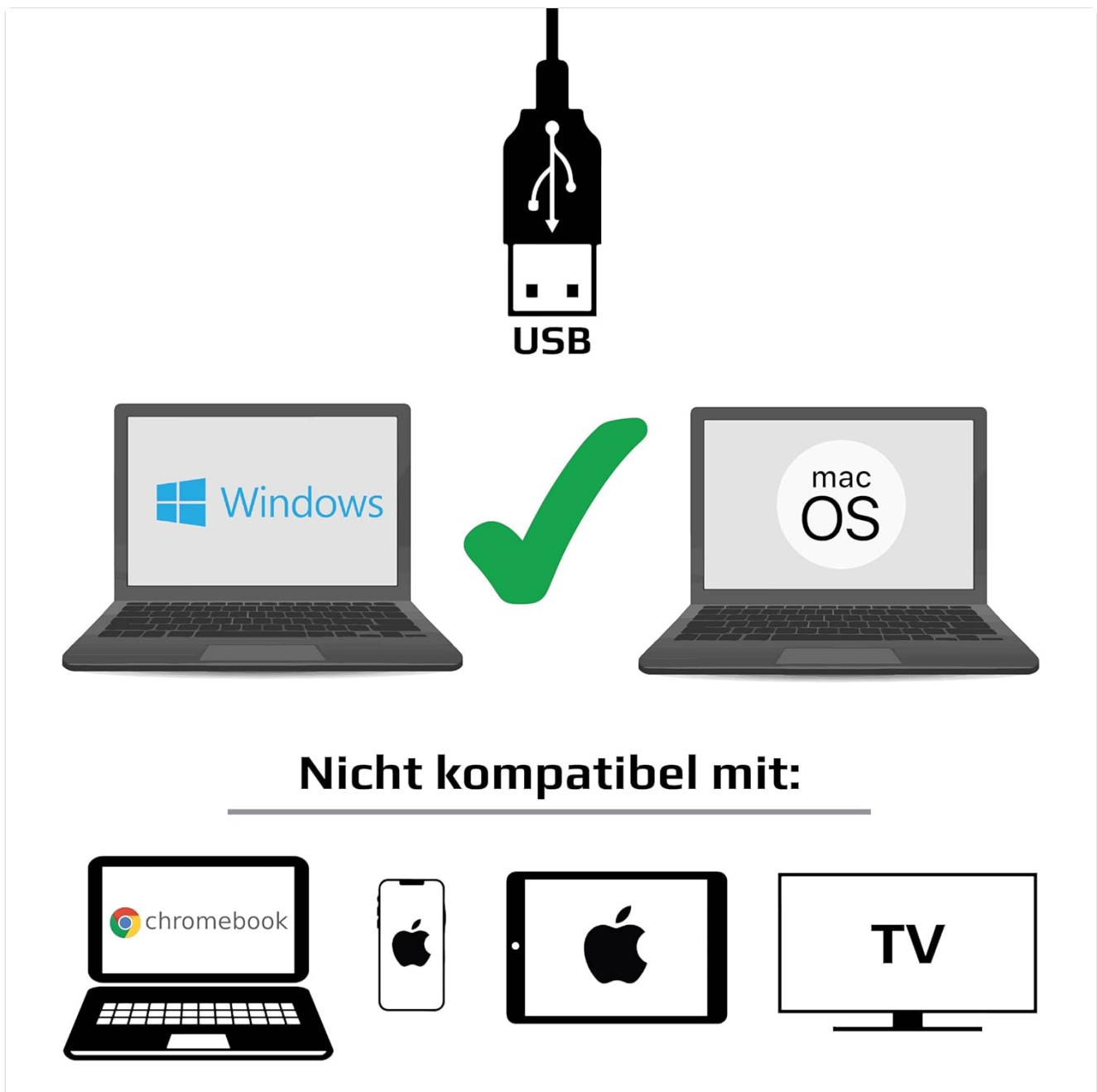


Figure 2: Device Compatibility Overview.

### Software Installation:

1. Connect the zPix 300 to an available USB port on your computer using the provided USB cable.
2. Visit the official Carson website at [www.carson.com/zpix940](http://www.carson.com/zpix940) to download the appropriate zPix driver for your operating system.
3. Follow the on-screen instructions to complete the software installation.



Figure 3: zPix 300 connected to a laptop for operation.

Your browser does not support the video tag.

Video 1: An overview of the Carson zPix 300 Digital Microscope, demonstrating its features, setup, and various applications, including viewing fabric, salt crystals, microscope slides, stamps, monitor pixels, and jewelry. The video highlights its compatibility with PC and Mac, the process of downloading drivers, and how to use it in both base and handheld modes.

## 4. OPERATING INSTRUCTIONS

---

### Basic Operation:

1. Once the software is installed and the microscope is connected, open the zPix application on your computer.
2. Place the microscope over the object you wish to observe. The magnified image will appear on your computer screen.
3. To capture an image, press the button located on the top of the microscope. The picture will be automatically saved to your computer.
4. The software also allows for video recording. Refer to the software interface for recording options.

### Magnification and Focus:

- **Zoom:** Slowly rotate the **bottom ring** of the microscope to adjust the zoom level.

- **Focus:** Slowly rotate the **top ring** of the microscope to bring the image into sharp focus.
- The effective magnification (86x-457x) is relative to the size of your computer monitor; larger monitors will display higher magnification.

### Using the Specimen Base:

The included specimen base provides a stable platform for viewing microscope slides and other flat objects.

1. Place the zPix 300 securely into the specimen base.
2. Position your prepared slide or flat specimen on the base directly under the microscope lens.
3. Adjust the zoom and focus as described above to achieve the desired view.



Figure 4: zPix 300 on its specimen base.

### Handheld Mode:

For greater flexibility, the zPix 300 can be removed from its base and used as a handheld device to examine larger or three-dimensional objects.

- Gently lift the microscope from its base.
- Place the microscope directly onto the surface of the object you wish to inspect.

- Adjust the zoom and focus as needed. The handheld mode is particularly useful for examining items like jewelry, coins, textiles, or plants.

## Illumination:

The zPix 300 is equipped with four super bright LED lights positioned around the lens. These LEDs provide ample illumination, ensuring shadow-free images in various lighting conditions.

## 5. MAINTENANCE

---

- Keep the microscope clean by wiping it with a soft, dry cloth.
- For cleaning the lens, use a lens cleaning cloth or a soft, lint-free cloth specifically designed for optical surfaces. Avoid abrasive materials.
- Store the microscope in a cool, dry place away from direct sunlight and extreme temperatures.
- Avoid dropping or subjecting the device to strong impacts.

## 6. TROUBLESHOOTING

---

- **No Image on Screen:** Ensure the USB cable is securely connected to both the microscope and your computer. Verify that the zPix software is running and the correct device is selected.
- **Software Issues:** If you experience problems with the software, try reinstalling the driver from the Carson website ([www.carson.com/zpix940](http://www.carson.com/zpix940)). Ensure your operating system is up to date.
- **Unclear Image:** Adjust both the zoom (bottom ring) and focus (top ring) carefully. Ensure the microscope is placed flat on the specimen or that the specimen is properly positioned on the base.
- **Device Not Recognized:** Try connecting the microscope to a different USB port on your computer. Restart your computer and try again.

## 7. SPECIFICATIONS

---

Specification	Detail
Model Name	Carson Mm-940 Zpix 300 86x-457x Digital Microscope With Integrated Camera
Item Model Number	MM-940
Brand	Carson
Magnification Maximum	457x (effective, based on 21" monitor)
Picture Resolution	1600x1200
Light Source Type	LED (4 super bright LEDs)
Connectivity	USB 2.0 or 3.0
Power Source	USB Powered (No batteries required)
Product Dimensions	5.25"L x 5.25"W x 2.6"H
Item Weight	0.3 Pounds
Material	Plastic
Color	Black



Manufacturer	Carson Optical, Inc
--------------	---------------------

## 8. WARRANTY & SUPPORT

### Warranty Information:


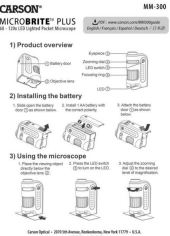

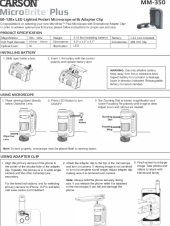
The Carson zPix 300 (MM-940) is backed by Carson's one-year limited warranty. This warranty covers defects in material and workmanship for a period of one year from the date of purchase. For specific details regarding warranty coverage and claims, please refer to the warranty documentation included with your product or visit the official Carson website.

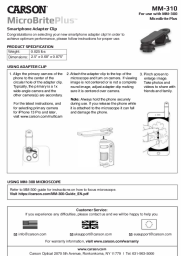
### Customer Support:

For further assistance, technical support, or to inquire about product information, please visit the Carson website or contact their customer service department. Up-to-date contact information and FAQs can be found on their official website: [www.carson.com](http://www.carson.com).

© 2024 Carson Optical, Inc. All rights reserved.

### Related Documents - MM-940

	<a href="#">Carson Pocket Microscopes: MicroMini 20x and MicroBrite Plus 60x-120x User Manuals</a> Comprehensive user manuals for Carson MicroMini 20x LED Pocket Microscope (MM-280 series) and Carson MicroBrite Plus 60x-120x LED Pocket Microscope (MM-300), including setup, usage, specifications, and care instructions.
	<a href="#">Carson MicroBrite Plus MM-300 Pocket Microscope User Guide</a> User guide for the Carson MicroBrite Plus MM-300, a 60x-120x LED lighted pocket microscope. Includes setup, usage instructions, specifications, and safety warnings.
	<a href="#">Carson MS-170 Biological Microscope: User Guide and Specifications</a> Detailed guide for the Carson MS-170 Intermediate Biological Microscope (40x-1600x). Learn about setup, focusing, magnification, color filters, and care. Features product specifications and customer support information.
	<a href="#">CARSON MM-350 MicroBrite Plus LED Lighted Pocket Microscope with Adapter Clip User Guide</a> Instructions and specifications for the CARSON MM-350 MicroBrite Plus LED Lighted Pocket Microscope with Adapter Clip, including setup, usage, and safety warnings.



Comprehensive guide for the Carson MM-380 20x Microscope, detailing setup, usage, battery replacement, and safety warnings for optimal performance with your smartphone.

Instructions and specifications for the Carson MM-310 MicroBrite Plus Smartphone Adapter Clip, enabling smartphone use with Carson microscopes for magnified photography and videography.