Dino-Lite AM413ZTA

Dino-Lite Pro AM413ZTA Digital Microscope and MS35B Pole Stand User Manual

1. Introduction

This manual provides instructions for the Dino-Lite Pro AM413ZTA Digital Microscope and the MS35B Pole Stand. The AM413ZTA is a 1.3-megapixel handheld digital microscope featuring a rotatable polarizer filter, designed for detailed observation and analysis. The MS35B is an economical, rigid vertical stand that provides stable support and adjustable positioning for the Dino-Lite microscope.

2. Key Features

2.1 Dino-Lite Pro AM413ZTA Digital Microscope

- **Polarizer Filter:** A rotatable polarizer filter is integrated to significantly reduce reflection glare from surfaces, enabling clear viewing of transparent or highly reflective materials such as jewelry, skin, glass, plastic, metal, or soldering.
- **H11 Housing:** This second-generation housing design incorporates an improved magnification dial for smooth adjustment and focusing, a scroll lock feature to secure desired magnification/focus, and a cable strain relief (SR) for enhanced durability against pulls and twists.
- **Magnification:** Offers a magnification range of 10x to 50x and up to 220x.
- **Image Sensor:** 1.3 Megapixel resolution for clear image capture.

2.2 MS35B Pole Stand

- **Vertical Stability:** Provides rigid vertical support for the Dino-Lite microscope.
- **Rotational Perspective:** Allows up to 360 degrees of horizontal axis rotation.
- **Adjustable Working Distance:** Offers up to 8 inches of vertical working distance from the object.
- **Lateral Viewing Angles:** The scope holster is mounted on a slider with a ball and socket joint, permitting up to 45 degrees of adjustable lateral viewing angles.
- **Durable Construction:** Manufactured from resilient stainless steel and lightweight recycled aluminum for smooth adjustment and stability.

3. Setup

3.1 Stand Assembly (MS35B)

1. Place the base plate on a stable, flat surface.
2. Insert the vertical pole into the designated slot on the base plate and secure it firmly.
3. Attach the microscope holder assembly to the vertical pole at the desired height. Ensure all screws are tightened to prevent movement.

3.2 Microscope Installation (AM413ZTA)

1. Gently insert the Dino-Lite AM413ZTA microscope into the holster of the MS35B stand. Ensure it is securely seated.
2. Connect the microscope's USB cable to an available USB port on your computer.
3. Install the Dino-Lite software (typically included with the product or available for download from the manufacturer's website). Follow the on-screen instructions for software installation.

Figure 1: Dino-Lite Pro AM413ZTA Digital Microscope mounted on the MS35B Pole Stand, ready for use.

4. Operating Instructions

4.1 Powering On and Software Launch

The microscope is powered via the USB connection. Once connected to your computer and the software is installed, launch the Dino-Lite application. The live image from the microscope should appear on your screen.

4.2 Adjusting Magnification and Focus

1. **Magnification:** Rotate the magnification dial on the microscope body to adjust the desired magnification level. The H11 housing provides a smooth movement for this adjustment.
2. **Scroll Lock:** To maintain a specific magnification, engage the scroll lock feature on the H11 housing.
3. **Focus:** Use the focus ring on the microscope to bring the image into sharp clarity. For fine adjustments, you may also adjust the height of the microscope on the MS35B stand.

Figure 2: Handheld view of the Dino-Lite AM413ZTA, highlighting the magnification dial and clear housing.

4.3 Using the Polarizer Filter

The AM413ZTA features a rotatable polarizer filter to reduce glare. To use it:

1. Observe the object through the microscope.
2. Gently rotate the polarizer ring located near the objective lens.
3. Continue rotating until the reflection glare is minimized or eliminated, allowing for a clearer view of the surface or subsurface features.

Figure 3: Microscopic view of a metal object with glare.

Figure 4: Microscopic view of the same object with glare reduced by the polarizer.

4.4 Image and Video Capture

The Dino-Lite software provides functions for capturing still images and recording videos. Refer to the software's help documentation for detailed instructions on using these features, including measurement tools.

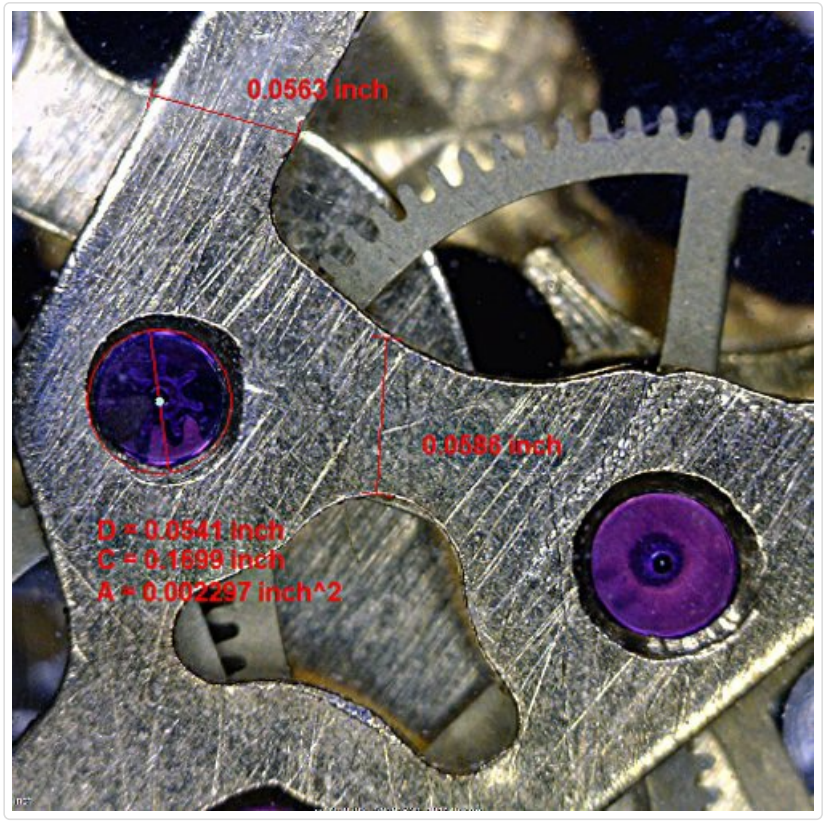


Figure 5: Microscopic image with measurement annotations.

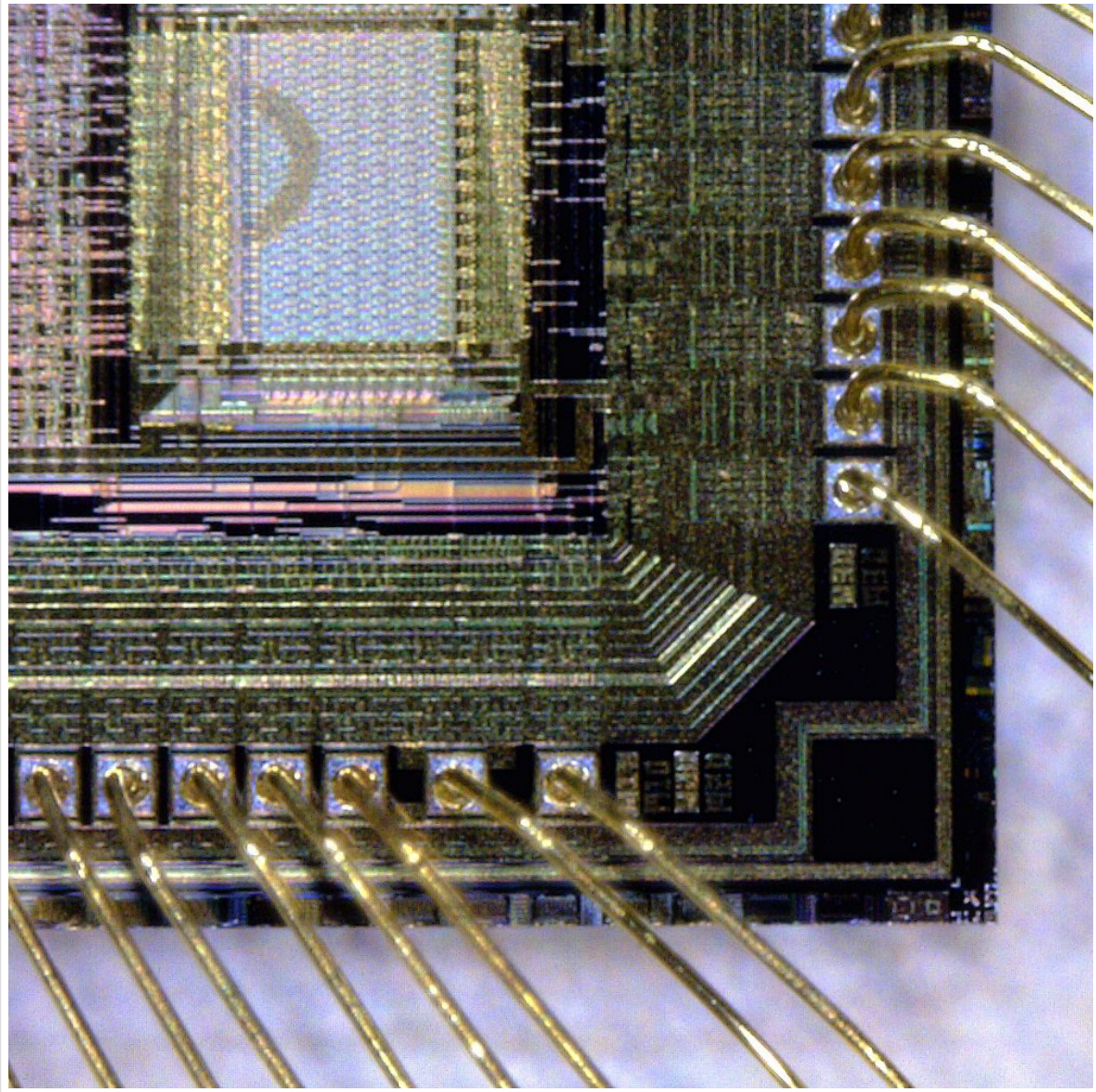


Figure 6: Microscopic view of a circuit board.

5. Maintenance

- **Cleaning the Lens:** Use a soft, lint-free cloth specifically designed for optical lenses to clean the microscope's objective lens. Avoid abrasive materials or harsh chemicals.
- **Cleaning the Body:** Wipe the microscope body and stand with a soft, damp cloth. Do not immerse any part of the device in liquid.
- **Storage:** Store the microscope and stand in a clean, dry environment, away from direct sunlight and extreme temperatures. Use the original packaging or a protective case if available.

6. Troubleshooting

- **No Image on Screen:**
  - Ensure the USB cable is securely connected to both the microscope and the computer.
  - Verify that the Dino-Lite software is running and the correct device is selected.
  - Try connecting to a different USB port or another computer to rule out port or computer issues.
- **Blurry Image:**

- Adjust the focus ring on the microscope.
- Ensure the object is within the microscope's working distance. Adjust the height of the microscope on the stand if necessary.
- Clean the objective lens for any smudges or dust.

- **Excessive Glare:**
  - Rotate the polarizer filter on the microscope to reduce reflections.
  - Adjust the lighting conditions of your workspace.
- **Software Not Detecting Device:**
  - Reinstall the Dino-Lite software and drivers.
  - Restart your computer.
  - Check the manufacturer's website for updated drivers or software.

7. Specifications

Feature	Specification
Model Number	AM413ZTA
Image Sensor	1.3 Megapixel
Magnification Range	10x~50x, 220x
Polarizer	Yes, Rotatable
Housing	H11 (Improved magnification dial, scroll lock, cable strain relief)
Light Source Type	Halogen
Material (Microscope)	Metallic
Material (Stand)	Stainless steel, recycled aluminum
Item Weight (Microscope)	0.35 Pounds
Real Angle of View	45 Degrees
Power Source	Battery Powered (Note: USB connection provides power for operation)
Objective Lens Description	Achromatic

8. Warranty Information

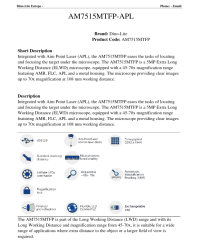
The Dino-Lite Pro AM413ZTA Digital Microscope and MS35B Pole Stand are covered by a manufacturer's warranty. Please refer to the warranty card included with your product or visit the official Dino-Lite website for detailed information regarding warranty terms, conditions, and registration procedures.

9. Support

For technical assistance, software updates, or further inquiries, please visit the official Dino-Lite website or contact their customer support. You can find more information and resources at the Dino-Lite Store on

Amazon.

Related Documents - AM413ZTA

	Dino-Lite WF-20 CONNECT Instruction Manual for Digital Microscope User guide for the Dino-Lite WF-20 CONNECT, detailing setup, operation, app usage for iOS and Android, battery information, and technical specifications for this digital microscope Wi-Fi streamer.
	DinoCapture User Manual - AnMo Electronics Dino-Lite Digital Microscope Guide Comprehensive user manual for DinoCapture software, designed for use with Dino-Lite digital microscopes. Learn about installation, software features, image and video capture, measurement tools, and calibration.
	DinoCapture 2.0 Silent Installer Guide Comprehensive guide detailing the process for silent installation and uninstallation of DinoCapture 2.0 software using command-line methods.
	Dino-Lite AM7515MTFP-APL 5MP ELWD Digital Microscope with Aim Point Laser Explore the Dino-Lite AM7515MTFP-APL, a 5MP Extra Long Working Distance (ELWD) digital microscope featuring a 45-70x magnification range, Aim Point Laser (APL), and Flexible LED Control (FLC) for detailed inspection and measurement.
	Dino-Lite AF7115MZTW - Edge 5MP Digital Microscope Discover the Dino-Lite AF7115MZTW - Edge, a high-resolution 5MP digital microscope featuring Flexible LED Control (FLC), an adjustable polarizer, and macro zoom optics for detailed imaging.


AM4515ZTL - EDGE

????? Dino-Lite
??? ??????? AM4515ZTL

Short Description
1.3 Megapixel resolution
Polarizer (anti-reflection)
Automatic Magnification Reading (AMR)
Long Working Distance

????????
The Dino-Lite Edge models provide superior image quality and a high level of flexibility due to the adaptable cap design. The built-in adjustable polarizer reduces glare and reflection on shiny objects.

[Dino-Lite AM4515ZTL - EDGE Digital Microscope: Features, Specifications, and Overview]

Explore the Dino-Lite AM4515ZTL - EDGE digital microscope, a high-performance tool featuring 1.3 Megapixel resolution, 10-140x magnification, an integrated polarizer, and Automatic Magnification Reading (AMR). Ideal for professional applications requiring precision and flexibility.