

TOMLOV DM301 Max

TOMLOV DM301 Max Digital Microscope User Manual

Model: DM301 Max

1. INTRODUCTION

This manual provides detailed instructions for the setup, operation, and maintenance of your TOMLOV DM301 Max Digital Microscope. Please read this manual thoroughly before using the device to ensure proper function and longevity.

2. WHAT'S INCLUDED

- 1 X TOMLOV DM301 Max Biological Digital Microscope with Screen
- 1 X Power Cable
- 1 X HDMI Cable
- 1 X Power Adapter
- 5 X Prepared Slides
- 5 X Blank Slides
- 1 X 32GB Micro SD Card
- 1 X Carrying Case



Image 2.1: The TOMLOV DM301 Max Digital Microscope with its complete set of accessories, including the carrying case, power cables, HDMI cable, power adapter, prepared slides, blank slides, and a 32GB Micro SD card.

3. SETUP GUIDE

3.1 Initial Assembly

Carefully remove all components from the packaging. Place the microscope base on a stable, flat surface. Ensure the screen is securely attached and adjusted to a comfortable viewing angle.



Image 3.1: The TOMLOV DM301 Max Digital Microscope fully assembled, showing the main unit, screen, and the X-Y stage with slides.

3.2 Power Connection

Connect the power adapter to the microscope and plug it into a power outlet. The microscope features a built-in 2000mAh rechargeable battery, offering up to 3 hours of cordless use once fully charged.

3.3 Screen Adjustment

The 7-inch IPS display can be adjusted up to 120 degrees for optimal viewing comfort, reducing neck strain during extended use.



Image 3.2: The microscope screen can be tilted up to 120 degrees to provide a comfortable viewing angle for users.

4. OPERATING INSTRUCTIONS

4.1 Placing Specimens

Place your prepared or blank slide onto the X-Y axis metal stage. Use the stage adjustment knobs to precisely position the specimen under the objective lens.



Image 4.1: A close-up view of the X-Y axis metal stage, demonstrating how a specimen slide is secured and positioned for observation.

4.2 Magnification and Focusing

The microscope features 3 achromatic lenses, providing up to 1200X magnification. Rotate the objective lens turret to select the desired magnification. Use the coarse and fine focus knobs on the side of the microscope to bring your specimen into sharp focus on the screen.



Image 4.2: Detail of the objective lenses and the easy-to-operate focus knob for precise adjustments.

4.3 Illumination

Adjustable dual LED lights provide balanced lighting for both solid objects (top light) and slide specimens (bottom light), ensuring clear visibility in various environments.

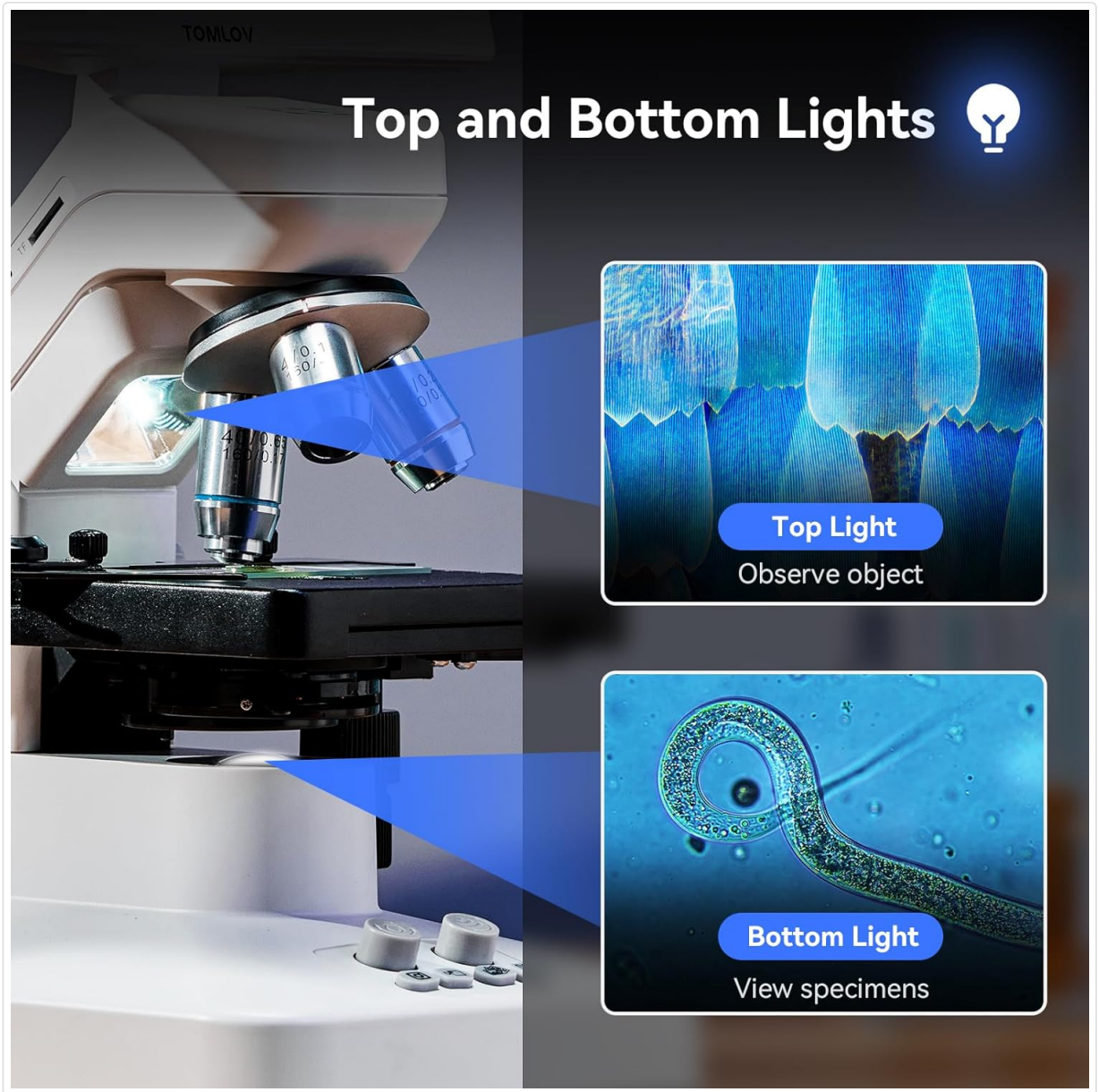


Image 4.3: The microscope's top and bottom LED lights illuminate specimens for optimal viewing.

4.4 Connectivity and Output

The DM301 Max offers multiple output options:

- **WiFi & App Control:** Connect wirelessly to Android and iOS devices for real-time zooming, capturing, and sharing. Dual-saving to the SD card and your phone is supported.
- **USB & HDMI Output:** Connect directly to TVs, laptops, and projectors via USB or HDMI for larger displays without driver installation.



Image 4.4: The microscope connected to a larger screen via HDMI or USB for collaborative viewing.

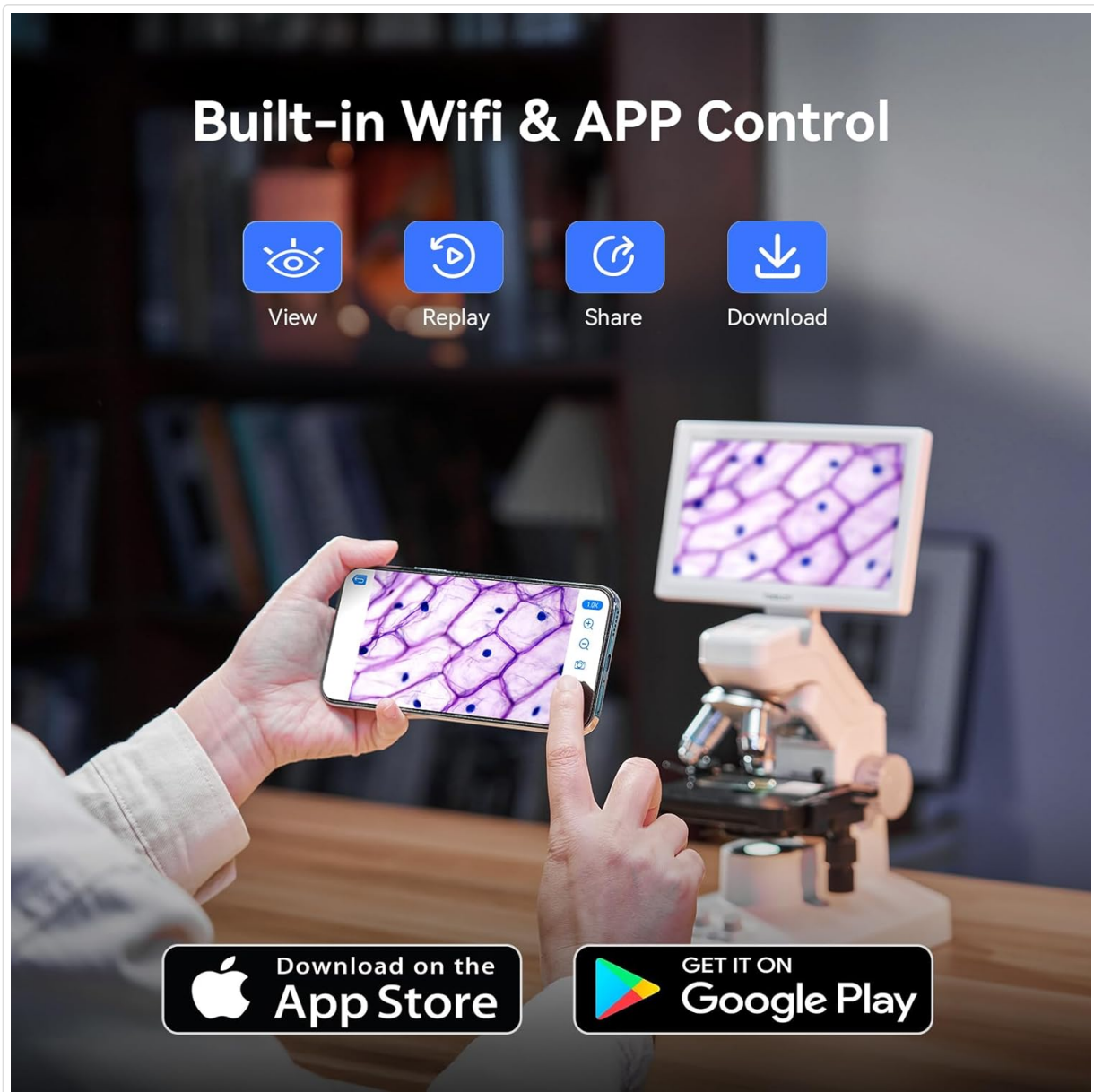


Image 4.5: The microscope's built-in WiFi and app control features, allowing connection to smartphones for viewing and control.

4.5 Capturing Images and Videos

With built-in 8MP imaging and 1080P video capabilities, you can capture high-quality scientific moments. The included 32GB Micro SD card provides ample storage.

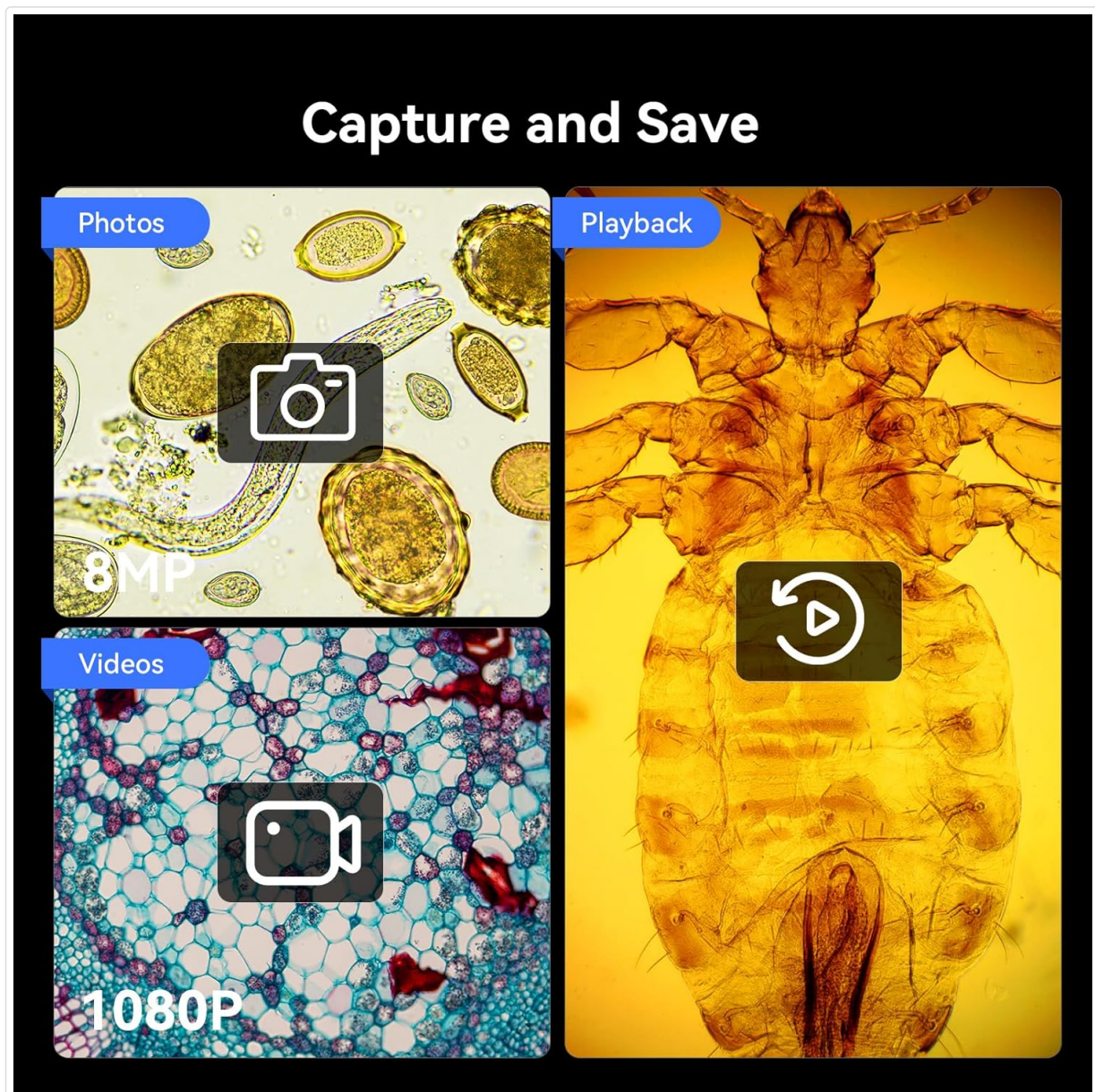


Image 4.6: Visual representation of the microscope's ability to capture 8MP photos and 1080P videos of microscopic subjects.

4.6 On-Screen Measurement

A built-in measuring overlay allows for precise readings across different magnification levels, enhancing interactive and measurable STEM learning.

Two-Way Measurement

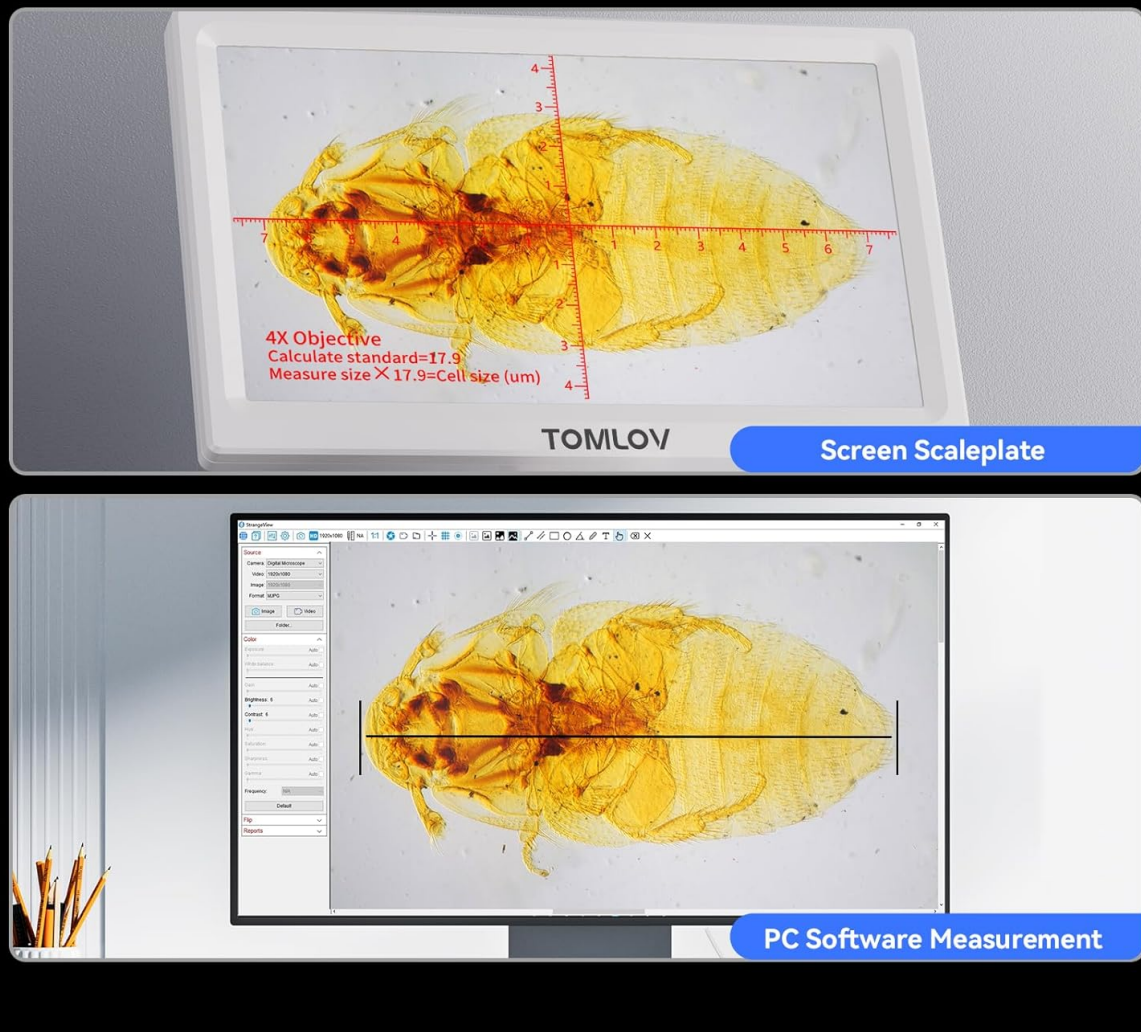


Image 4.7: The microscope's screen showing a specimen with an on-screen scale for measurement.

5. MAINTENANCE

- **Cleaning:** Use a soft, lint-free cloth to clean the screen and exterior. For lenses, use specialized lens cleaning solutions and cloths to avoid scratches.
- **Battery Care:** To prolong battery life, avoid fully discharging the battery frequently. Charge the microscope regularly, especially if it will be stored for an extended period.
- **Storage:** Store the microscope in its carrying case in a cool, dry place away from direct sunlight and extreme temperatures.

6. TROUBLESHOOTING

- **Blurry Image:** Adjust the coarse and fine focus knobs. Ensure the objective lens is clean and correctly rotated into position.
- **No Image on Screen:** Check power connection and battery level. Ensure the specimen is correctly placed and illuminated. Verify the objective lens is properly engaged.
- **Connectivity Issues (WiFi/HDMI/USB):** For WiFi, ensure the microscope and device are within range and correctly paired via the app. For HDMI/USB, check cable connections and ensure the external

display input is set correctly.

- **Lights Not Working:** Check the power source and ensure the light intensity controls are adjusted.

7. SPECIFICATIONS

Feature	Detail
Product Dimensions	7.31 x 5.3 x 12.5 inches
Item Weight	4.9 pounds
Item Model Number	DM301 Max
Batteries	1 Lithium Ion battery required (included)
Light Source Type	LED
Material	7" IPS Display + ABS Stand
Color	White
Real Angle of View	178 Degrees
Magnification Maximum	1200 x
Voltage	5 Volts

8. WARRANTY AND SUPPORT

For warranty information and technical support, please refer to the official TOMLOV website or contact customer service directly. Keep your purchase receipt for warranty claims.

9. OFFICIAL PRODUCT VIDEOS

TOMLOV DM301 Biological Microscope with Screen

Your browser does not support the video tag.

This video provides an overview of the TOMLOV DM301 Biological Microscope, highlighting its screen and general features. It demonstrates the microscope in use, showcasing its capabilities for observing biological specimens.

TOMLOV DM301 Biological Microscope for Kids and Adults

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This video illustrates the user-friendly aspects of the TOMLOV DM301 biological microscope, making it suitable for both children and adults. It shows various applications in educational and home settings.

TOMLOV Biological Microscope with Screen (Short Overview)

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A brief video showcasing the TOMLOV biological microscope with its screen, emphasizing its ease of use for educational purposes for both kids and adults.

TOMLOV DM301 Max Microscope with X-Y Stage Features

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This video highlights the advanced features of the TOMLOV DM301 Max Microscope, specifically focusing on the precision X-Y stage for accurate specimen manipulation, suitable for students and adults.

Related Documents - DM301 Max

	<p>Инструкция по эксплуатации цифровых микроскопов Tomlov DM401/DM401 Pro/DM402 Pro</p> <p>Полное руководство пользователя для цифровых микроскопов Tomlov DM401, DM401 Pro и DM402 Pro, охватывающее установку, эксплуатацию, функции, подключение к различным устройствам и настройки.</p>
	<p>TOMLOV DM201 Digital LCD Microscope User Manual</p> <p>User manual for the TOMLOV DM201 Digital LCD Microscope, covering installation, operation, menu settings, specifications, and troubleshooting.</p>
	<p>TOMLOV DM201 SE LCD Digital Microscope User Manual</p> <p>Comprehensive user manual for the TOMLOV DM201 SE LCD Digital Microscope, covering setup, operation, features, specifications, and troubleshooting for optimal use.</p>

