TOMLOV DM702 Flex-S

TOMLOV DM702 Flex-S Digital Microscope User Manual

Model: DM702 Flex-S | Brand: TOMLOV

INTRODUCTION

The TOMLOV DM702 Flex-S is a versatile 10.1-inch digital microscope system designed for detailed observation and precision work, particularly in electronics repair, soldering, and coin examination. It features a flexible boom arm, a large display, and integrated helping hands with a ring light, providing an ergonomic and efficient workspace.

SAFETY INFORMATION

- Always ensure the device is powered off and unplugged before cleaning or performing maintenance.

- Do not expose the microscope to extreme temperatures, humidity, or corrosive substances.

- Avoid direct eye exposure to the LED ring light for prolonged periods.

- Keep the device away from water or other liquids to prevent electric shock.

- Use only the provided power adapter.

- Handle the flexible boom arm and helping hands carefully to prevent pinching or damage.

PACKAGE CONTENTS

Verify that all components are present upon unboxing:

- TOMLOV DM702 Flex-S Digital Microscope Unit (10.1" LCD screen and microscope body)

- Flexible Boom Arm Stand

- Soldering Helping Hands Station with Magnetic Arms

- LED Ring Light

- Power Adapter

- USB Cable

- HDMI Cable

- Remote Control

- 32GB MicroSD Card (pre-installed or included separately)

- User Manual (this document)

Image: Complete TOMLOV DM702 Flex-S system including the digital microscope, flexible boom arm, and soldering helping hands station.

PRODUCT OVERVIEW

Familiarize yourself with the main components of your TOMLOV DM702 Flex-S system.

- **10.1-inch LCD Screen:** High-resolution display for viewing magnified images.

- **Microscope Body:** Contains the lens, sensor, and focus wheel.

- **Flexible Boom Arm:** Provides adjustable positioning and stability for the microscope.

- **Helping Hands Station:** Base mat with magnetic attachment points for flexible arms to hold objects.

- **LED Ring Light:** Provides uniform illumination for clear viewing.

- **Control Buttons:** Located on the LCD screen for menu navigation, capture, and settings.

- **Remote Control:** For convenient operation without touching the unit.

Image: The DM702 microscope base unit, showing the screen, microscope lens, flexible gooseneck lights, remote control, and a 32GB SD card.

SETUP

1. **Assemble the Boom Arm Stand:** Securely attach the boom arm to your workbench or table using the clamp provided. Ensure it is stable and can support the microscope's weight.

2. **Attach the Microscope:** Mount the DM702 microscope unit onto the flexible boom arm. Tighten all securing screws to prevent movement.

3. **Position the Helping Hands Station:** Place the soldering helping hands mat on your workbench. Position the magnetic flexible arms as needed for your work.

4. **Connect Power:** Plug the power adapter into the microscope unit and then into a wall outlet.

5. **Insert MicroSD Card:** If not already pre-installed, insert the 32GB MicroSD card into the designated slot on the microscope unit.

6. **Initial Power On:** Press the power button on the microscope unit to turn it on. The display should illuminate.

Image: Demonstrates the extensive flexibility and adjustability of the boom arm, allowing for 180-degree, 360-degree, and further 360-degree rotations for precise positioning.

Image: A user soldering a circuit board, utilizing the helping hands station to securely hold the PCB, illustrating the practical application of the setup.

OPERATING INSTRUCTIONS

Basic Operation

1. **Power On/Off:** Press and hold the power button on the LCD screen to turn the unit on or off.

2. **Focus Adjustment:** Rotate the focus wheel on the microscope body to achieve a clear image of your subject on the screen.

3. **Magnification:** Adjust the distance between the microscope lens and the object to change the magnification level. The DM702 Flex-S offers up to 1300X magnification.

4. **Ring Light Control:** The integrated LED ring light can be adjusted for brightness to ensure optimal illumination of your subject.

Brighter, Sharper Details

Image: A close-up view of the LED ring light illuminating a circuit board, highlighting its effectiveness in providing bright, uniform lighting for detailed work.
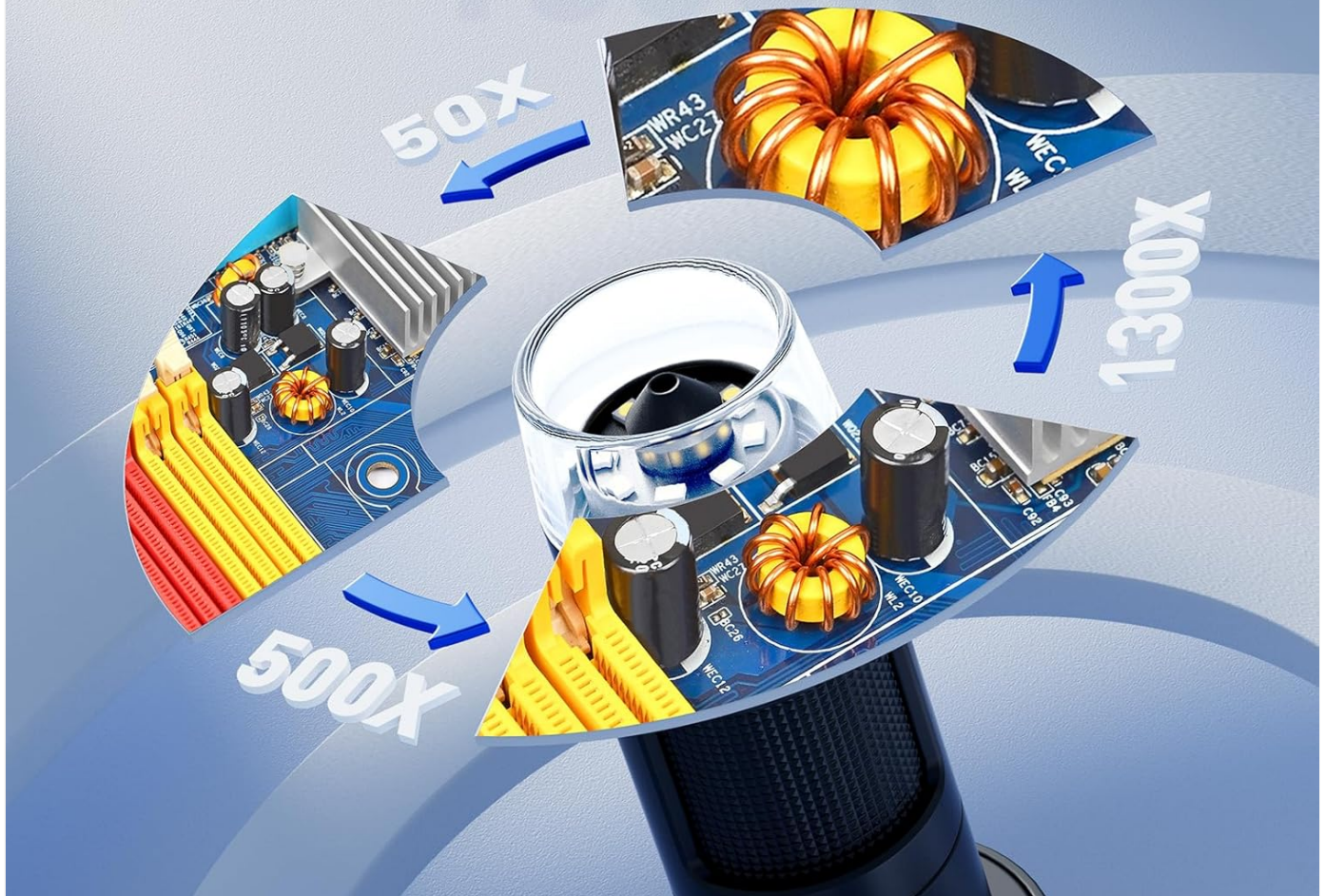
Image: Illustrates various magnification levels (50X, 500X, 1300X) achievable with the microscope, showing increasing detail of a circuit board component.

Menu Navigation and Functions

Use the buttons on the LCD screen or the remote control to navigate the menu and access various functions.

- **MENU Button:** Access the main settings menu.

- **OK Button:** Confirm selections or capture photos/videos.

- **Left/Right Arrows:** Navigate through menu options or zoom in/out.

- **BACK Button:** Return to the previous screen or exit the menu.

- **Photo/Video Mode:** Switch between photo and video capture modes.

Capturing Images and Videos

1. Ensure a MicroSD card is inserted.

2. Select the desired mode (photo or video) using the mode button.

3. For photos, press the OK button to capture an image.

4. For videos, press the OK button once to start recording and again to stop.

5. Captured files are saved to the MicroSD card.

Image: Demonstrates the microscope's ability to capture 12MP photos and 1080P videos, and its connectivity for live streaming to a laptop, enhancing documentation and sharing.

MAINTENANCE

- **Cleaning the Lens and Screen:** Use a soft, lint-free cloth specifically designed for optical surfaces to clean the microscope lens and LCD screen. Do not use abrasive cleaners or solvents.

- **Cleaning the Body:** Wipe the microscope body and stand with a dry or slightly damp cloth.

- **Storage:** When not in use, store the microscope in a clean, dry, and dust-free environment.

- **Cable Management:** Ensure all cables are neatly arranged and not under tension to prevent damage.

TROUBLESHOOTING

Problem	Possible Cause	Solution
No image on screen.	Not powered on; loose cable; lens cap on.	Ensure power is connected and unit is on; check all cable connections; remove lens cap.
Image is blurry.	Out of focus; incorrect working distance.	Adjust the focus wheel; change the distance between the lens and the object.
Cannot capture photos/videos.	No MicroSD card; card full; card error.	Insert MicroSD card; delete unnecessary files; format card (backup data first).
Ring light not working.	Light is off; power issue.	Check light settings in menu; ensure power connection is stable.

SPECIFICATIONS

- **Model:** DM702 Flex-S
- **Display:** 10.1-inch LCD Screen
- **Magnification:** Up to 1300X
- **Image Resolution:** Up to 12MP
- **Video Resolution:** Up to 1080P
- **Storage:** MicroSD Card (up to 32GB included)
- **Illumination:** Adjustable LED Ring Light
- **Connectivity:** USB, HDMI
- **Power Input:** DC 5V

Superior Soldering System

Customized, professional, efficient

M702 Flex-S

DM702

19.7″

11.8″

15.7″

11″

9″

7″

295%

Working Area

Image: A comparison illustrating the significantly larger working area provided by the DM702 Flex-S (19.7" x 11.8" x 15.7") compared to the standard DM702 (11" x 9" x 7"), highlighting the enhanced space for soldering and other tasks.

Image: A visual comparison showing the ergonomic advantage of the 10.1-inch screen of the DM702 Flex-S, allowing for a more comfortable posture compared to smaller screens that require bending over.

WARRANTY AND SUPPORT

TOMLOV products are designed for reliability and performance. For warranty information, technical support, or service inquiries, please refer to the contact details provided on the official TOMLOV website or your purchase documentation. Please retain your proof of purchase for warranty claims.

For the most up-to-date support resources, visit: www.tomlov.com/support