

## TOMLOV DM702 Flex-S

# TOMLOV DM702 Flex-S 10.1" Digital Microscope

## USER MANUAL

### Introduction

The TOMLOV DM702 Flex-S is a professional digital microscope system designed for detailed inspection and soldering tasks. It features a 10.1-inch display, a flexible boom arm, and a soldering helping hands station, providing an expansive and adaptable workspace. This manual provides comprehensive instructions for the assembly, operation, and maintenance of your DM702 Flex-S system.

### Package Contents

- DM702 Flex-S Digital Microscope Unit
- 10.1-inch Display Screen
- Flexible Boom Arm Stand
- Soldering Helping Hands Station with Magnetic Arms
- Ring Light
- Power Adapter
- USB Cable
- Remote Control
- User Manual (this document)

### Setup Instructions

Follow these steps to assemble your TOMLOV DM702 Flex-S Digital Microscope system.

1. **Assemble the Boom Arm Stand:** Securely attach the boom arm base to a sturdy workbench or table using the integrated clamp. Ensure it is stable and can support the weight of the microscope and display.
2. **Attach the Display:** Mount the 10.1-inch display screen to the designated attachment point on the boom arm. Tighten all connections to prevent wobbling.
3. **Install the Microscope Unit:** Carefully attach the digital microscope unit to the boom arm, ensuring it is securely fastened and can be adjusted vertically.
4. **Connect the Ring Light:** Position the ring light around the microscope lens and connect its power cable if separate. This provides uniform illumination for your subjects.
5. **Set up the Helping Hands Station:** Place the soldering helping hands station on your workbench. The magnetic

arms can be positioned as needed to hold PCBs or other small components during soldering or inspection.

6. **Power Connection:** Connect the power adapter to the microscope unit and plug it into a standard electrical outlet.



Figure 1: Complete setup of the TOMLOV DM702 Flex-S Digital Microscope with boom arm and helping hands station.

# Superior Soldering System

Customized, professional, efficient



Figure 2: Overview of the soldering system's dimensions, highlighting the large working area provided by the Flex-S model compared to standard setups.



# Flexibility at Its Finest

Great flexibility of movement and positions



Figure 3: Demonstrates the extensive flexibility and range of motion of the boom arm, allowing for precise positioning of the microscope.

## Operating Instructions

This section details how to operate your digital microscope for various tasks.

### Powering On/Off

Press the power button on the microscope unit or the remote control to turn the device on. Press and hold the power button to turn it off.

### Adjusting Magnification and Focus

Rotate the focus wheel on the microscope unit to achieve a clear image on the 10.1-inch display. The DM702 Flex-S offers up to 1300X magnification, allowing for detailed inspection of small components and intricate details.

# Professional Magnification

Amazing detail and extremely clear

# 1300X

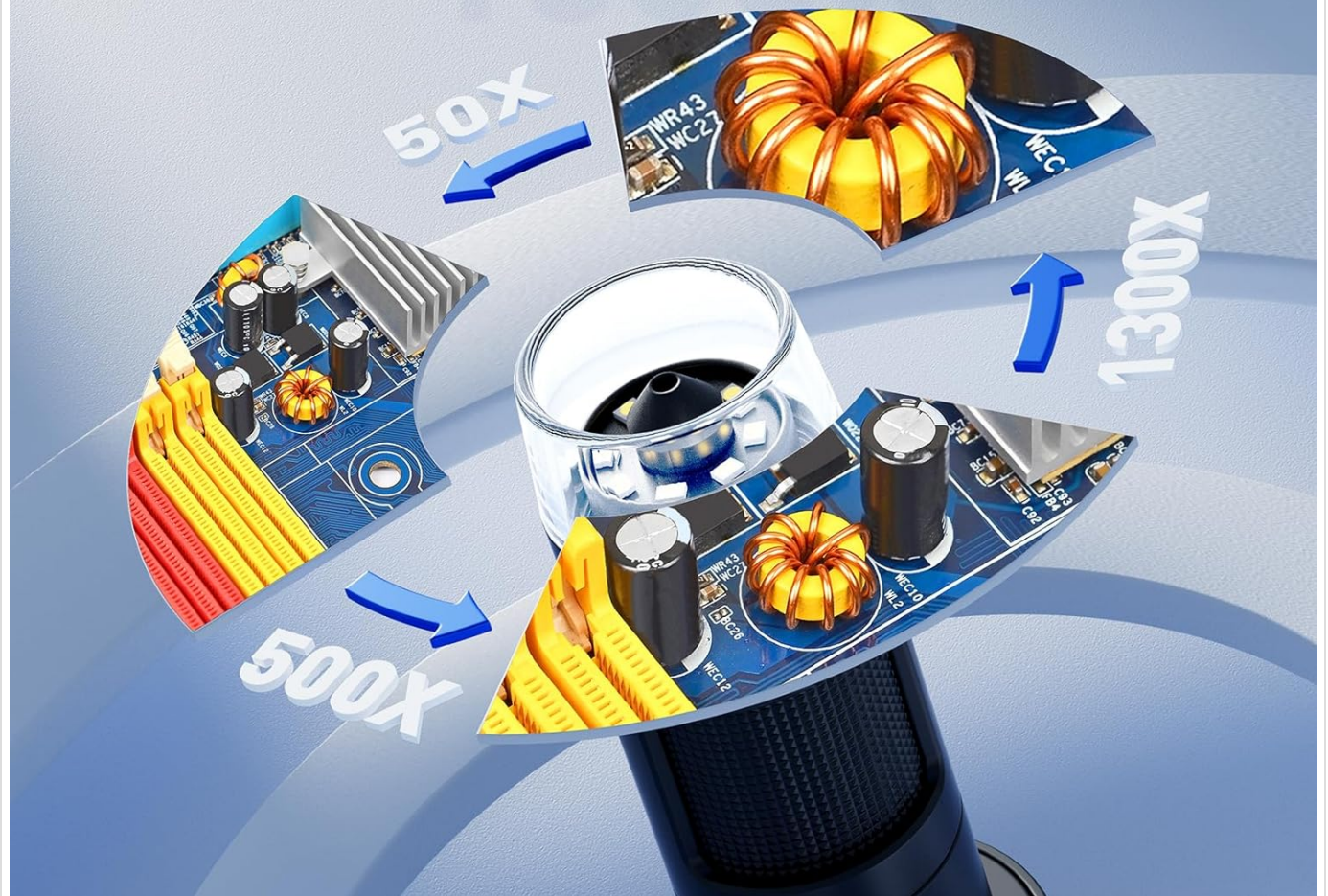


Figure 4: Illustrates the professional magnification capabilities, showing detailed views at 50X, 500X, and 1300X.

## Using the Ring Light

The integrated ring light provides uniform and bright illumination, crucial for clear imaging and reducing shadows. Adjust the brightness using the controls on the microscope unit or remote control to suit your viewing needs and minimize glare.





Figure 5: Shows the effective illumination provided by the ring light, enhancing visibility of intricate details on a circuit board.

### **Utilizing the Helping Hands Station**

The magnetic helping hands are designed to securely hold circuit boards, wires, and other small items in place, freeing your hands for soldering, inspection, or repair work. Position the flexible arms as needed for optimal access and stability.



Figure 6: Depicts the helping hands station in action, securely holding a circuit board for soldering, demonstrating its utility for precision tasks.

### **Image and Video Capture**

The microscope supports capturing high-resolution images (12MP) and 1080P video recordings. Use the dedicated buttons on the microscope unit or remote control to capture stills or start/stop video recording. Files are saved to an inserted memory card (not included).

### **Live Streaming and PC Connection**

Connect the microscope to a computer via USB to view the live feed on a larger screen, capture images/videos directly to your PC, or facilitate live streaming for collaborative work or presentations. Refer to the software instructions for PC connectivity.



# Capture, Document, Live Stream



Figure 7: Illustrates the microscope's ability to capture 12MP images and 1080P video, and its connectivity for live streaming to a laptop.

## Ergonomic Benefits of the 10.1-inch Screen

The large 10.1-inch display significantly reduces eye and neck strain during prolonged use, providing a comfortable viewing experience compared to traditional eyepieces or smaller screens.



# 10.1" Large Screen

Friendly to your eyes and neck

## Others



## Ours



Figure 8: Compares the ergonomic posture when using a traditional microscope setup versus the comfortable viewing angle provided by the 10.1-inch screen of the DM702 Flex-S.

## Maintenance

Proper maintenance ensures the longevity and optimal performance of your TOMLOV DM702 Flex-S.

- **Cleaning the Lens and Screen:** Use a soft, lint-free cloth specifically designed for optical surfaces to clean the microscope lens and display screen. For stubborn smudges, a small amount of lens cleaning solution can be applied to the cloth (never directly to the lens/screen).
- **General Cleaning:** Wipe down the body of the microscope, boom arm, and helping hands station with a dry or slightly damp cloth. Avoid using harsh chemicals or abrasive cleaners.
- **Storage:** When not in use, store the microscope in a clean, dry environment, away from direct sunlight and extreme temperatures. Consider covering the unit to protect it from dust.
- **Cable Management:** Ensure all cables are neatly routed and not under tension to prevent damage.

## Troubleshooting

If you encounter issues with your TOMLOV DM702 Flex-S, refer to the following common problems and solutions.

Problem	Possible Cause	Solution
No power/Display off	Power adapter not connected; Power button not pressed; Faulty outlet.	Check power connections; Press power button; Try a different outlet.
Blurry image	Incorrect focus; Lens dirty; Subject too close/far.	Adjust focus wheel; Clean lens; Adjust working distance.
Ring light not working	Light cable loose; Light damaged.	Check cable connection; Contact support if damaged.
Cannot capture images/video	No memory card; Memory card full/corrupt; Incorrect mode.	Insert/replace memory card; Format card; Switch to photo/video mode.

If the problem persists after attempting these solutions, please contact TOMLOV customer support for further assistance.

## Specifications

- **Model:** DM702 Flex-S
- **Display Size:** 10.1 inches
- **Magnification:** Up to 1300X
- **Image Resolution:** 12 Megapixels
- **Video Resolution:** 1080P
- **Illumination:** Adjustable Ring Light
- **Stand Type:** Flexible Boom Arm with Clamp
- **Additional Features:** Soldering Helping Hands Station, Remote Control, PC Connectivity
- **ASIN:** B0DMSMHV1P
- **Date First Available:** November 12, 2024

## Warranty and Support

TOMLOV products are designed for reliability and performance. For information regarding warranty coverage, technical support, or service, please refer to the warranty card included with your product or visit the official TOMLOV website. Keep your purchase receipt as proof of purchase for warranty claims.

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## Related Documents



