

HIKMICRO B01

HIKMICRO B01 Thermal Camera User Manual

Model: B01

1. INTRODUCTION

Thank you for choosing the HIKMICRO B01 Thermal Camera. This handheld thermal imager is designed for professional inspections and troubleshooting across various applications, including missing insulation, air leaks, water leakage, facility maintenance, HVAC troubleshooting, and electrical inspections. It features a 256x192 IR resolution, WiFi connectivity, and a 3.2-inch LCD screen, providing high-definition thermal clarity and efficient operation.



Figure 1: HIKMICRO B01 Thermal Camera

2. PRODUCT FEATURES

- **High IR Resolution and Accuracy:** Powered by HIKMICRO SuperIR image enhancement technology, the B01 upscales thermal images from 256x192 (49,152 pixels) to 320x240 (76,800 pixels). It features a thermal sensitivity of $< 40\text{mK}$ and an accuracy of $\pm 2\text{ }^{\circ}\text{C}$, $\pm 2\%$.

SuperIR Image Enhancement

Upscales **captured thermal images** to 320 × 240 with enhanced detail for clearer visuals.



*Note: Based on **captured images**, not real-time enhancement.*

Figure 2: SuperIR Image Enhancement

- **High Image Quality:** The camera provides high-definition color clarity with center point and max/min temperature ranges, a fast 25Hz frame rate, and a wide temperature range from -4°F to 1022°F (-20°C to 550°C).

High Image Quality

Easier to spot subtle heat loss or gain and delivers high images quality.



Figure 3: High Image Quality

- **WiFi Connectivity:** Connects to mobile devices via built-in Wi-Fi and the free HIKMICRO Viewer App, allowing live streaming, remote image capture and editing, and quick sharing of images.

Real-time Wireless Transfer

Easily transfer thermal images to analysis app
when anomalies occur.



Figure 4: Real-time Wireless Transfer

- **Fast Image Frequency:** A 25Hz refresh rate ensures smooth thermal imaging and accurate measurements, even when panning across scenes or viewing moving targets.

Fast Image Frequency

25 Hz delivers smooth shooting and measurements while panning across scenes or viewing moving targets.

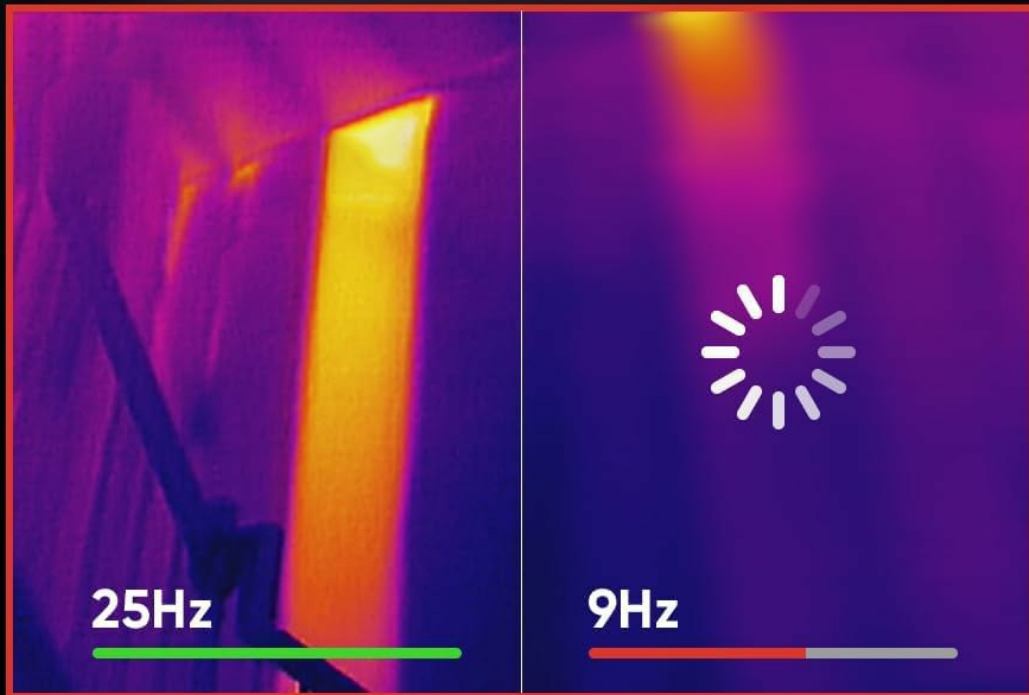


Figure 5: Fast Image Frequency

- **Full-Screen Temperature Measurement:** Pinpoint temperature anomalies with center spot, cold spot, hot spot, and three user-defined spots, supported by an automatic spot tracker.

Full-Screen Temperature Measurement

Pinpoint temperature anomalies at first sight.



Figure 6: Full-Screen Temperature Measurement

- **Professional Analysis:** Utilize the free PC software Analyzer for batch image analysis and professional report generation. The Feature Cast Screen allows real-time streaming to a laptop or computer for fixed inspections.

Make Professional Analysis Easy



iOS & Android



PC Windows



HIKMICRO
VIEWER



HIKMICRO
Analyzer

Figure 7: Make Professional Analysis Easy

3. SETUP

3.1 Initial Charging

Before first use, fully charge the HIKMICRO B01. Use the included USB-A to USB-C cable and wall adapter. Note that standard USB-C to USB-C cables may not be supported for charging.



Figure 8: Charging Cable Compatibility

3.2 Powering On/Off

Press and hold the power button located on the device to turn it on or off. The device will display the HIKMICRO logo during startup.

3.3 App Installation (HIKMICRO Viewer)

Download the free HIKMICRO Viewer App from the Google Play Store (for Android) or the Apple App Store (for iOS) on your mobile device.

3.4 Connecting via Wi-Fi

To connect your thermal camera to the HIKMICRO Viewer App via Wi-Fi, follow these steps:

1. On your HIKMICRO B01, navigate to the 'More Settings' menu.
2. Select 'Hotspot' and then 'QR Code' to display the Wi-Fi connection QR code on the camera screen.
3. Open the HIKMICRO Viewer App on your smartphone or tablet.
4. In the app, tap the '+' icon to add a device, then select 'Scan QR Code'.
5. Scan the QR code displayed on your thermal camera's screen.
6. Confirm the connection when prompted by the app.

Your browser does not support the video tag.

Video 1: How to connect HIKMICRO B01 to the HIKMICRO Viewer App via QR code.

4. OPERATING INSTRUCTIONS

4.1 Basic Operation

The HIKMICRO B01 is designed for intuitive use. Use the navigation buttons below the screen to move through menus and select options. The trigger button on the handle is used to capture thermal images.

4.2 Understanding the Display

The 3.2-inch LCD screen displays real-time thermal images along with key temperature data:

- **Cen:** Center point temperature.
- **Max:** Maximum temperature detected in the current view.

- **Min:** Minimum temperature detected in the current view.
- **Temperature Scale:** A color bar on the side indicates the temperature range represented by the colors in the thermal image.

4.3 Color Palettes

The HIKMICRO B01 offers 6 different color palettes to suit various inspection needs and preferences. These can be selected from the device's settings menu to enhance visualization of temperature differences.

4.4 Temperature Alarm

Set high and low temperature alarms to be notified when temperatures fall outside a specified range. The device will provide visual and audible alerts.

4.5 Emissivity Adjustment

For accurate temperature measurements, it is crucial to adjust the emissivity setting based on the material being inspected. The device allows for custom emissivity settings. Refer to the table below for common material emissivity values:



Figure 9: Common Material Emissivity Reference

Your browser does not support the video tag.

Video 2: Introduction to HIKMICRO B Series Thermal Imagers, demonstrating various features.

5. MAINTENANCE

5.1 Cleaning Instructions

To clean the thermal camera body, simply wipe it with a clean, dry cloth. Avoid using abrasive cleaners or solvents that could damage the device.

5.2 Battery Care

The built-in Li-Ion rechargeable battery supports up to 6 hours of continuous operation. To prolong battery life, avoid fully discharging the battery frequently and store the device in a cool, dry place when not in use for extended periods.

6. TROUBLESHOOTING

6.1 Common Issues

If your device is not turning on or charging, ensure you are using the original USB-A to USB-C cable and wall adapter provided with the camera. Some standard USB-C to USB-C cables may not be compatible for charging.

6.2 Receiving a Used Product

In rare cases, a product might be returned and then restocked by Amazon. If you believe you have received a used product, please contact HIKMICRO Direct immediately for a resolution. They are committed to ensuring customer satisfaction.

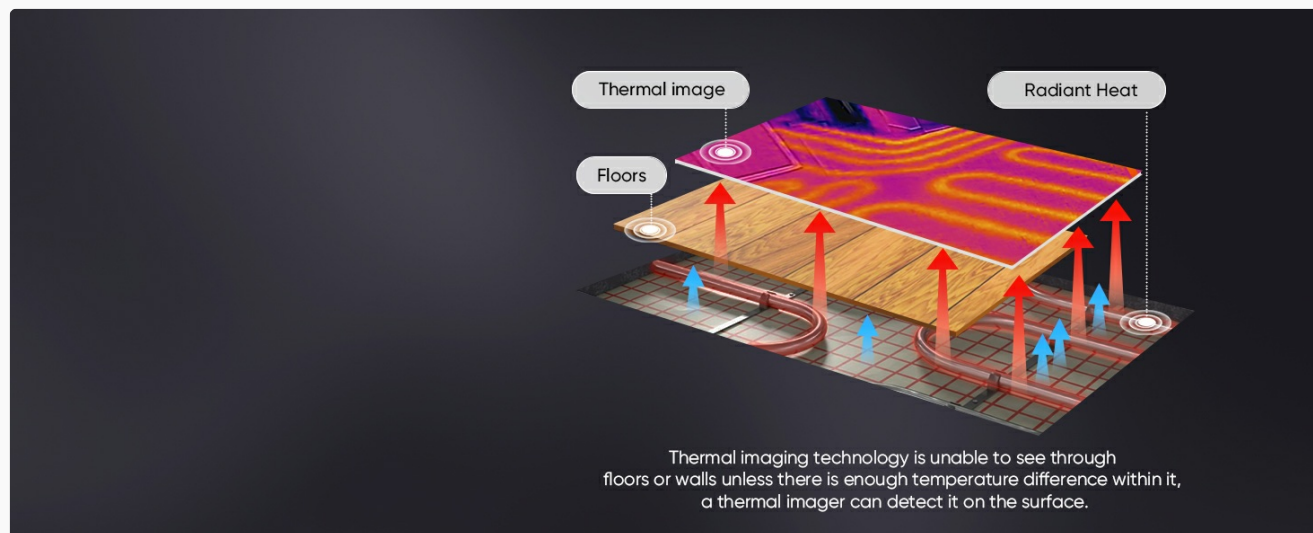


Figure 10: Why Receive a Used Product? (Explanation and Solution)

7. SPECIFICATIONS

Feature	Specification
IR Resolution	256 x 192 (49,152 pixels)
Thermal Sensitivity (NETD)	< 40mK
Thermal Accuracy	±2 °C, ±2%
Refresh Rate	25Hz
Temperature Range	-4°F to 1022°F (-20°C to 550°C)
Display Type	3.2" LCD Screen
Battery Life	Up to 6 Hrs. continuous operation
Connectivity	Wi-Fi
Material	Plastic
Item Model Number	B01

8. WARRANTY AND SUPPORT

HIKMICRO offers comprehensive warranty and support for the B01 Thermal Camera:

- **Battery:** 2 Years Warranty
- **Entire Device (Infrared Camera):** 3 Years Warranty
- **Sensor:** 10 Years Warranty

- **Firmware Updates:** Lifetime Free Updates
- **Technical Support:** Lifetime Technical Support
- **Recalibration Service:** Local Recalibration Service available








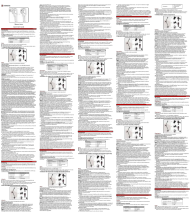
Figure 11: HIKMICRO Warranty Information

For any inquiries or support, please contact HIKMICRO Direct through their official channels.

© 2024 HIKMICRO. All rights reserved.

Related Documents - B01

	<p>HIKMICRO M Series Handheld Thermography Camera Quick Start Guide</p> <p>Quick Start Guide for the HIKMICRO M Series Handheld Thermography Camera. Learn how to set up, operate, and charge your device with this comprehensive manual.</p>
	<p>HIKMICRO E03 Pocket Thermal Camera User Manual</p> <p>User manual for the HIKMICRO E03 Pocket Thermal Camera, detailing its features, operation, and software integration.</p>
	<p>HIKMICRO Thermal Image Scope User Manual</p> <p>Comprehensive user manual for the HIKMICRO Thermal Image Scope, detailing features, operation, maintenance, and troubleshooting. Learn how to use distance measurement, hot tracking, reticle correction, and connect to the HIKMICRO Sight App.</p>

	<p>HIKMICRO Handheld Thermal Monocular Camera User Manual</p> <p>This user manual provides comprehensive instructions for the HIKMICRO Handheld Thermal Monocular Camera, covering device overview, functions, preparation, image settings, safety guidelines, maintenance, troubleshooting, and technical appendix.</p>
	<p>HIKMICRO Handheld Thermal Monocular Camera Quick Start Guide Thermal Imaging Device</p> <p>Discover the HIKMICRO Handheld Thermal Monocular Camera, a portable thermal imaging device for observation, target tracking, and distance measurement. Ideal for law enforcement, hunting, and outdoor exploration, it offers clear vision in darkness and connectivity via the T-Vision app. Learn more in this quick start guide.</p>
	<p>HIKMICRO Macro Lens Quick Start Guide for PCB Detection</p> <p>Learn how to use the HIKMICRO Macro Lens with your handheld thermography camera for precise PCB temperature anomaly detection. This guide provides essential setup and usage information.</p>