

HIKMICRO HIK-ECOV

HIKMICRO ECO-V Handheld Thermal Camera User Manual

Model: HIK-ECOV | Brand: HIKMICRO

1. INTRODUCTION

This manual provides comprehensive instructions for the HIKMICRO ECO-V handheld thermal camera. Designed for efficient and accurate temperature measurement, this compact device allows users to identify hot and cold spots, analyze temperature distribution, and capture thermal images for various applications. Please read this manual thoroughly before operating the device to ensure safe and effective use.

2. PRODUCT OVERVIEW

The HIKMICRO ECO-V is a portable thermal camera engineered for precise temperature detection. It offers advanced features such as automatic hot, cold, and center spot tracking, enhanced image clarity with SuperIR technology, and a long-lasting battery for extended operation.

2.1 Key Features

- **Full-Screen Precision Temperature Measurement:** Accurately measures temperatures across the entire screen.
- **Wide Temperature Range:** Capable of measuring temperatures from -20°C to 550°C.
- **Automatic Spot Tracking:** Identifies and tracks the hottest, coldest, and center temperature points.
- **SuperIR Technology:** Enhances thermal image resolution from 96x96 to 240x240 pixels for improved clarity.
- **Long Battery Life:** Up to 8 hours of continuous operation with a 3350mAh rechargeable battery.
- **Multiple Color Palettes:** Offers various visual modes for different inspection scenarios.

2.2 Device Components

Familiarize yourself with the main components of your HIKMICRO ECO-V thermal camera.



Figure 1: The HIKMICRO ECO-V thermal camera, illustrating its screen interface with automatic spot tracking for hot, cold, and center temperature points. Temperature readings and a temperature scale from -20°C to 550°C are visible, aiding in quick identification of critical temperature areas.

3. SETUP

3.1 Charging the Battery

Before first use, fully charge the internal 3350mAh lithium-ion battery. Connect the camera to a power source using the provided USB cable. The charging indicator will show the charging status.

連続動作8時間

内蔵のリチウムイオン充電電池により、最大8時間の連続動作が可能です



Figure 2: This image illustrates the HIKMICRO ECO-V's battery features, including up to 8 hours of continuous operation and a 3350mAh rechargeable battery. It also displays the auto power-off settings, which can be configured for 10, 20, 30, 40, 50, or 60 minutes to conserve power.

3.2 Powering On/Off

- **To Power On:** Press and hold the power button until the HIKMICRO logo appears on the screen.
- **To Power Off:** Press and hold the power button until the shutdown prompt appears, then confirm. The device also supports automatic power-off after a set period of inactivity (10/20/30/40/50/60 minutes).

3.3 Initial Settings

Upon first power-on, you may be prompted to set the language, date, and time. Follow the on-screen instructions to configure these basic settings.

4. OPERATING INSTRUCTIONS

4.1 Basic Temperature Measurement

Point the camera at the object or area you wish to inspect. The screen will display a real-time thermal image with temperature readings. The central crosshair indicates the spot measurement temperature.

4.2 Automatic Spot Tracking

The ECO-V automatically identifies and displays the hottest (hot spot), coldest (cold spot), and center temperature within the field of view. These points are marked on the screen with their respective temperature values, allowing for quick identification of anomalies.

4.3 SuperIR Technology

Activate SuperIR mode to enhance the thermal image resolution. This feature digitally processes the 96x96 pixel image to a clearer 240x240 pixel display, providing more detail for analysis.



Figure 3: This image demonstrates the effectiveness of SuperIR technology. On the left, a thermal image is shown with SuperIR off (96x96 resolution). On the right, the same image with SuperIR on, displaying significantly improved clarity and detail at 240x240 resolution.

4.4 Color Palettes

The camera offers several color palettes to visualize temperature differences. Select the palette that best suits your application for optimal contrast and detail.

- **Rainbow:** General purpose, good for showing gradual temperature changes.
- **Black Hot:** Hotter objects appear darker.
- **Ironbow Hot:** High contrast, good for identifying heat sources.
- **White Hot:** Hotter objects appear brighter.
- **Red Hot:** Highlights hot areas in red.
- **Fusion:** Blends visible and thermal images.
- **Alarm Above:** Highlights temperatures above a set threshold.

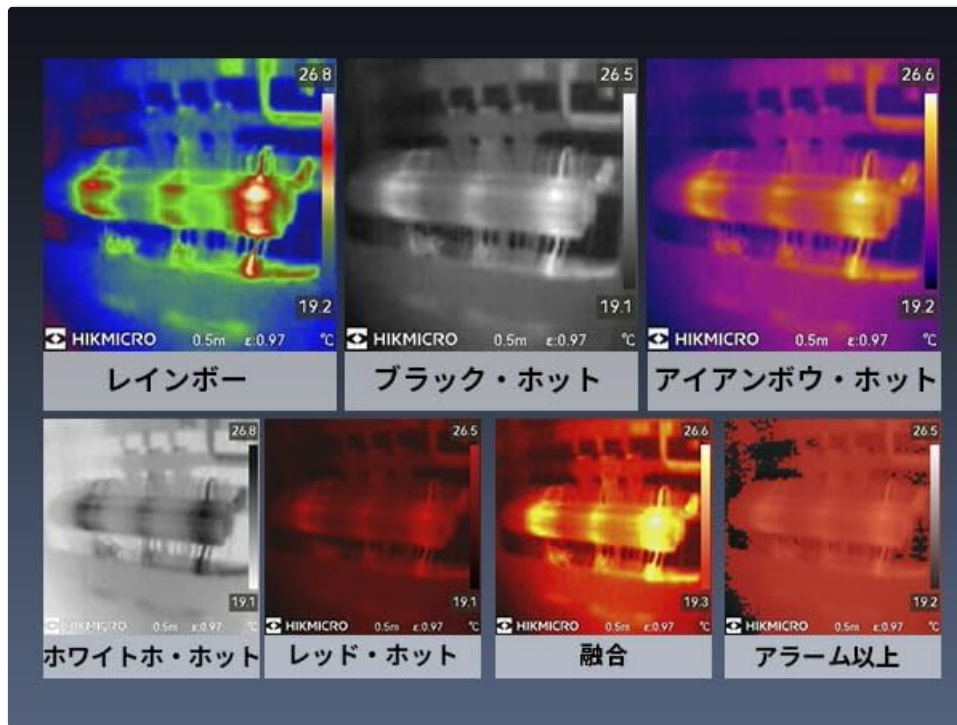


Figure 4: This image displays various color palettes available on the HIKMICRO ECO-V, including Rainbow, Black Hot, Ironbow Hot, White Hot, Red Hot, Fusion, and Alarm Above. Each palette provides a distinct visual representation of temperature differences, allowing users to choose the most effective display for their specific inspection tasks.

4.5 Image Capture

Press the capture button to save the current thermal image to the device's internal memory. Images can be reviewed later or transferred to a computer.

5. MAINTENANCE

5.1 Cleaning the Device

- Use a soft, dry cloth to clean the camera body.
- For the lens and screen, use a specialized lens cleaning cloth and solution to avoid scratches. Do not use abrasive cleaners.

5.2 Battery Care

- Recharge the battery regularly, even if the device is not in frequent use, to maintain battery health.
- Avoid exposing the device to extreme temperatures, which can degrade battery performance.

5.3 Storage

When not in use, store the camera in a cool, dry place, away from direct sunlight and moisture. Use the protective casing if

available.

6. TROUBLESHOOTING

6.1 Device Not Powering On

- Ensure the battery is fully charged. Connect the device to a power source and allow it to charge for at least 30 minutes before attempting to power on again.
- Press and hold the power button firmly for several seconds.

6.2 Inaccurate Temperature Readings

- Ensure the lens is clean and free from dust or smudges.
- Verify that the emissivity setting (if adjustable) is appropriate for the material being measured.
- Ensure there are no obstructions between the camera and the target.

6.3 Display Issues

- Restart the device.
- Check for any physical damage to the screen.

If problems persist, please contact customer support.

7. SPECIFICATIONS

Feature	Detail
Brand	HIKMICRO
Model Number	HIK-ECOV
ASIN	B0D8B74F87
First Available Date	2024/02/28
Temperature Range	-20°C to 550°C
Thermal Resolution	96x96 pixels (Enhanced to 240x240 with SuperIR)
Battery Type	3350mAh Rechargeable Lithium-ion
Operating Time	Up to 8 hours continuous
Auto Power-Off	Configurable (10/20/30/40/50/60 minutes)

8. WARRANTY AND SUPPORT

HIKMICRO products are designed for reliability and performance. For warranty information, please refer to the warranty card included with your product or visit the official HIKMICRO website. For technical support, troubleshooting assistance, or service inquiries, please contact HIKMICRO customer support through their official channels. You can find more information and contact details on the [HIKMICRO Brand Store](#).

