



HIKMICRO Eco Series
Handheld Thermal Camera (**V5.5.82**)
Release Notes

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The Manual includes instructions for using and managing the Product. Pictures, charts, images and all other information hereinafter are for description and explanation only.

The information contained in the Manual is subject to change, without notice, due to firmware updates or other reasons. Please find the latest version of this Manual at the HIKMICRO website

(www.hikmicrotech.com/).

Please use this Manual with the guidance and assistance of professionals trained in supporting the Product.

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1 Introduction

The handheld thermal camera is an ideal solution which provides accurate touch-free temperature measurement and heat distribution image display for electrical predictive maintenance, building inspection, HVAC inspection, manufacturing monitor, etc. HIKMICRO's handheld thermal cameras have been used widely in detecting temperature anomalies before detecting radiator efficiency for HVAC inspection, searching for heat loss in buildings, finding hot spots and invisible defects on mechanical or electrical systems that could indicate a potential problem. They are also used for surveying areas that are hard to reach with conventional measurement tools.

This document introduces optimizations in V5.5.82 of Eco Series.

1.1 Version Information

Item	Description
Firmware Version	V5.5.82 build 250416
Models	Eco, Eco-V

1.2 More Information

- Mobile Client: HIKMICRO Viewer (only for the camera models with Wi-Fi and Hotspot)
<https://www.hikmicrotech.com/en/industrial-products/hikmicro-viewer-software/>
- PC Client for analysis and report: HIKMICRO Analyzer
<https://www.hikmicrotech.com/en/industrial-products/hikmicro-analyzer-software/> or contact technical support for help.
- Welcome to visit our website and see more Compatibility Lists.
<https://www.hikmicrotech.com/en/support/download-center/compatibility/>

1.3 Upgrade Device

1.3.1 Upgrade Device with USB

Before upgrading your camera, make sure:

- Fully charge your camera.

- Auto Power-off function is turned-off to avoid accidental suspension during upgrading.
1. Download new firmware from our website (<https://www.hikmicrotech.com/en/industrial-products/eco-eco-v-handheld-infrared-camera/>), and save it to your PC.
 2. Use supplied USB cable (USB-C to USB-A) to connect the device to PC.
 3. Open the detected disk on your PC.
 4. Unzip the firmware, and copy and paste the .dav file to the root directory of the disk.
 5. Disconnect the device from PC and reboot the device to start upgrading automatically. The upgrading lasts several minutes, please wait for the process to complete.

1.3.2 Upgrade Device via HIKMICRO Viewer

Before You Start

Scan the QR code below to download and install HIKMICRO Viewer on your phone.



Android



iOS

1. Launch HIKMICRO Viewer on your phone.
2. Upgrade the device. You can choose one of the following paths:
 - In the home screen, tap **Device Upgrade > Check for Updates**.
 - In the home screen, tap **Device Info > Device Upgrade > Check for Updates**.

2 New Features

2.1 Scene Mode for Fast Anomaly Detection

To conduct fast anomaly detection, several preset modes are included in **Scene** mode for various detection scenarios. Users can choose or customize a scene based on targets.




Scene Mode	Description
Water Leak	Inspect the water leak of building ceilings, walls and floors indoors.
Insulation	Detect indoor insulation deficiency of building walls, ceilings, common users can apply this scene.
Floor Heating	Detect and observe the faults of floor heating system.
Electrical Faults	Detect and observe the faults of wires, circuits, electrical components, terminators, etc
Solar Panel	Detect and observe the faults of solar panels
Custom	Users can customize a mode to save desired temperature measurement parameters for future use.



SuperScene technology can assist in fast recognition for anomalies during water leak and insulation detection. When **SuperScene** is enabled and water leak/insulation anomalies are detected, *Suspect* will be displayed on top of live view.




Please refer to the user manual of Eco Series to access more detailed information.

2.2 Record Video is Available

1. In the live view interface, press  and go to **Settings > Capture Mode**. Press , and enable **Record**. Press  to save and back to the live view.
2. Hold the trigger in live view. When the recording icon and time display in the interface, recording begins, and you can release the trigger.
3. Press the trigger completes the recording. The device will display a pop-up notification saying "Recording Succeeded". The recording video will be saved.

2.3 Thermometer Mode is Available

The Thermometer Mode utilizes a laser pointer to help users quickly locate temperature measurement points. When enabled, the laser pointer indicates the target in the scene, allowing users to visualize its temperature in real time.

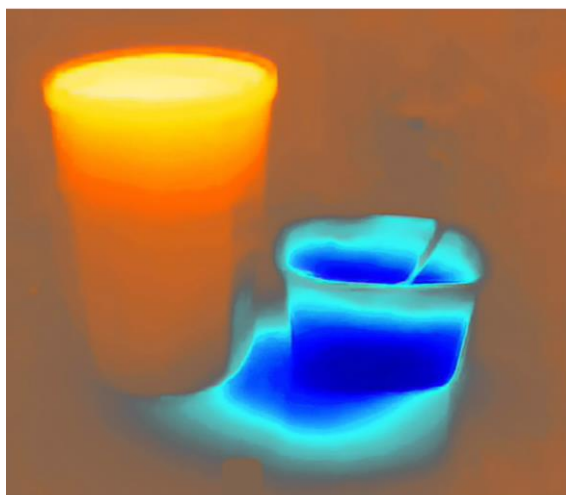
1. In the live view, press  to show the menu, then press  to enable **Thermometer Mode**. Press  to save and exit.
2. In the live view, hold the trigger. The device will emit laser to aim at the target. A red laser indicator dot will appear at the center of the screen, accompanied by the temperature value of the target (consistent with the center point temperature).
3. Release the trigger.
 - If video recording is enabled, the device will continue recording, and the laser dot will disappear.
 - If video recording is not enabled, the device will automatically capture an image of the current scene and save the temperature data.



- In Thermometer Mode, the laser pointer cannot be turned off. To turn off the laser, disable this mode first.
 - In Thermometer Mode, the maximum, minimum, and center temperature values are not displayed in the top-left corner of the observation interface.
 - Video recording and the laser share the same trigger button.
-

2.4 A New Palette is Available: Blue Yellow

A new palette **Blue Yellow** is available in this version.



2.5 Status Prompts are Supported During Power On

When the device is powered on, there appears "~" before a temperature value, it means that your device is not well prepared for accurate temperature measurement.

When the device is powered on and conducting image calibration, the prompt "image calibrating..." is displayed on the top of live image.

2.6 Alarm Mode Palettes is Available in Alarm Function

Alarm Mode Palettes is one of the alarm linkage. When the target's temperature is higher than the set value, the target will become red; when the target's temperature is lower than the set value, the target will become blue.

2.7 Casting Screen via HIKMICRO Analyzer is Supported

In this version, the device supports casting screen to PC by HIKMICRO Analyzer, a UVC protocol-based client software.

Please visit our website www.hikmicrotech.com or contact our technical supports or customer service teams for installation packages, and download and install HIKMICRO Analyzer.

2.8 Others

- UVC protocol - based video streaming with third-party software like Xcapture is supported by macOS.
- Estonian is available in this version. Go to **Settings > More Settings > Language**.

3 Optimizations

3.1 Distance and Parallax Correction are Merged

In this version, when you adjust the value of distance, it works for both **Distance** in temperature measurement parameters and **Parallax Correction** in Fusion image mode.

In live view, go to **Settings > Distance**, to adjust the distance.

3.2 The Default Image Mode of Eco-V is Changed

For better user experience, the default image mode of Eco-V is changed to Fusion.

3.3 Others

- Image calibration, display settings and the algorithm of Fusion mode were optimized.
- The minimum difference value between the maximum temperature and the minimum temperature of the temperature scale is 1 Celsius degree.

4 FAQ on Upgrade

4.1 Why my PC failed to detect the camera as a USB drive?

Check the following items:

- Use a good quality USB-C to USB-A cable to connect your PC to your camera. The supplied cable is recommended. Normally, a cable should be able to charge a camera and transfer data.
- Select USB Drive as the USB mode.
- Keep the camera powered on.

4.2 What should I do when my PC notifies power surge on the USB port?



Check the following items:

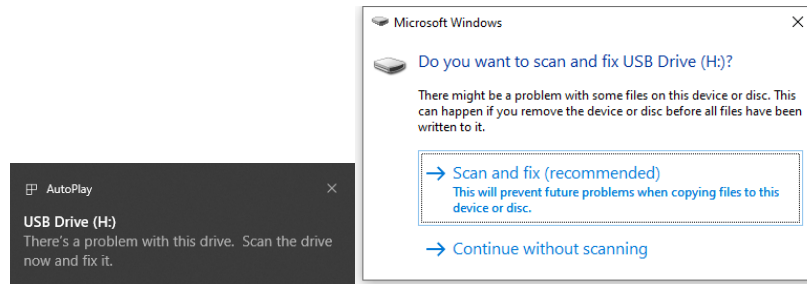
- When you are looking for an adapter of USB-C to USB-A, please choose an unpowered hub. A powered hub such as Surface Dock Station is not compatible.
- If you are using a built-in USB PowerShare port in your PC, please try another port.

4.3 What should I do when my PC notifies USB device not recognized?



In most cases, it does not affect use. You can just ignore the prompt and find the detected USB drive in **This PC**.

4.4 What should I do if my PC notifies the USB drive has a problem to be fixed?



Some Windows computers will scan a USB drive when it is connected, and show the error. Click scan and fix, Windows will confirm the drive is fine and connect to it. You can also skip scanning and find the detected USB drive in **This PC**, which does not affect use in most cases.



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