



HIKMICRO M Series
Handheld Thermal Camera (**V5.5.96**)
Release Notes

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(www.hikmicrotech.com/).

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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 new features and optimizations in V5.5.96 of M Series.

1.1 Version information

Item	Description
Firmware Version	V5.5.96 build 250422
Models	M20, M20W, M11, M11W, M31, M60
Mobile Client	HIKMICRO Viewer, the latest version
PC Client	HIKMICRO Analyzer, the latest version


1.2 How to upgrade to new version

1.2.1 Upgrade device by upgrade file

Before upgrading your device, make sure:

- Device battery is fully charged.
- Auto Power-off function is turned off to avoid accidental suspension during upgrading.
- A memory card has been installed to device.

1. Download the upgrade file from our website:
<https://www.hikmicrotech.com/en/industrial-products/ai56-acoustic-camera/>, and save it to your PC.
2. Connect the device to your PC with cable.

3. Select USB Drive on the pop-up USB Mode window of the device.  will be displayed on the device status bar, and a notice for detected disk will pop up in your PC.
4. Click the disk on your PC to open it.
5. Select and copy the upgrade file, and paste it to the root directory of the device.



Make sure that the upgrade file pasted to the root directory is extracted.

6. Disconnect the device from your PC.
7. Reboot the device and then it will upgrade automatically. The upgrading process will be displayed in the main interface.



After upgrading, the device reboots automatically. You can view the current version in **Device Settings >Device Information**.

1.2.2 Upgrade with HIKMICRO Viewer APP

Connect your device to HIKMICRO Viewer APP and tap on **Device Upgrade** to check device firmware version and proceed online upgrading.

Download and install HIKMICRO Viewer to your phone. Search the APP name in your APP store, or scan the following QR code.



2 New Features

2.1 SuperScene+ for Smart PCB and Electrical Panel Inspection

SuperScene+ uses device built-in algorithms to recognize critical components on printed circuit boards (PCBs) and electrical terminals, and determines if any temperature anomalies exist.

2.1.1 PCB Inspection

PCB inspection mode is to identify high-temperature anomalies on PCBs. These are typically components experiencing issues such as breakdowns or soldering short circuits.

The function is handy for problematic component locating in PCB manufacturing.

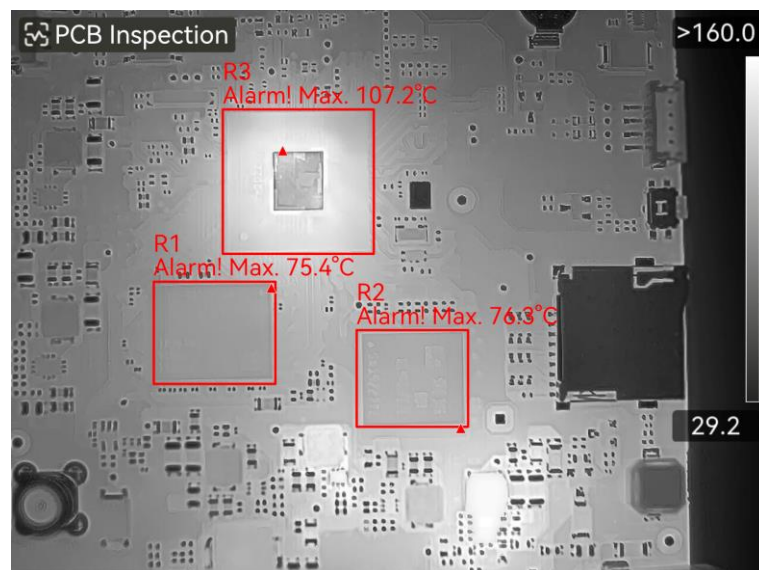


Figure 2-1 An Example of the PCB Inspection

To use this function, users should configure a set of PCB template as the reference for more inspection on similar targets.

The device supports one set of PCB template with up to 10 scene templates. A scene template is a thermal image of a part of a PCB (or a whole one) with marked component rectangles for temperature inspection.

The measurement parameters and the alarming temperature of each component can be set separately.

Go to **Settings > Capture Settings > SuperScene+** to select **PCB Inspection** and start configuration. For detailed configuration and using instructions, please refer to the user manual of M Series products V5.5.96.

2.1.2 Electrical Panel Inspection

Electrical panel inspection mode is to identify and detect temperature anomalies in terminals and fuses on electrical panels.

After users set the detection parameters for electrical panel and temperature alarm rules, the device can automatically identify the detection target and determine if any anomalies exist in relevant electrical panel detection scenarios.

There are two alarm modes serving users' different needs.

- Find the terminals whose temperatures are higher than the set value.
- Find the one terminal whose temperature is alarmingly higher (higher than an allowed temperature difference) than its kind.

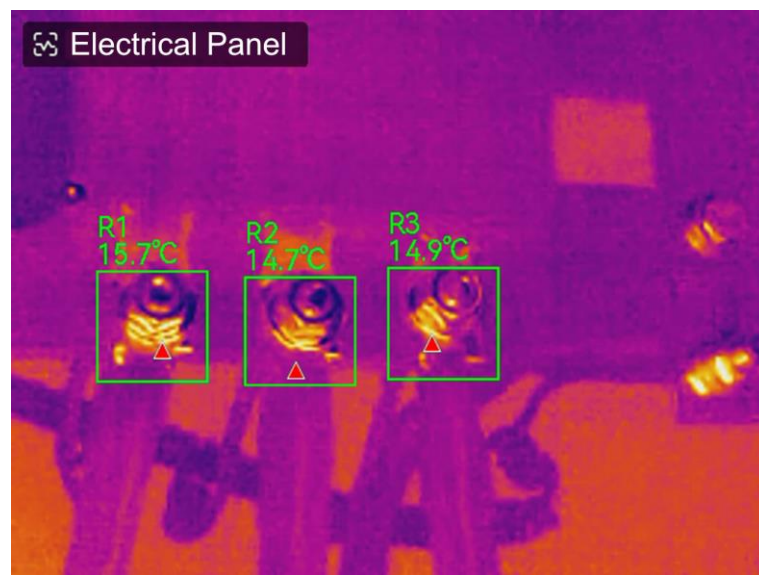


Figure 2-2 An Example of Electrical Panel Inspection

Go to **Settings > Capture Settings > SuperScene+** to select **Electrical Panel** and start configuration. For detailed configuration and using instructions, please refer to the user manual of M Series products V5.5.96.

2.2 More Image Adjustment Options

2.2.1 All Common Palettes are Reversible

This version offers a switch to reverse common palettes. With the palette reversed, the colors representing the high and low temperature display in a reverse order.

Go to **Settings > Capture Settings > Reversed Palette** to proceed the settings.

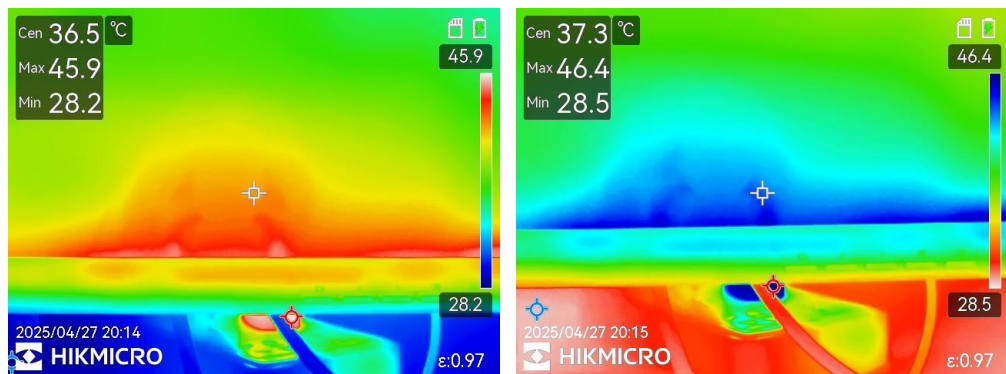


Figure 2-3 Example: Blue Red vs Reversed Blue Red

2.2.2 More Convenient Level and Span Adjustment

In this version, when you switch to manual level and span, the temperature scroll sticks in the right of the screen (even when you exit the menu) to offer quicker adjustment and instant effect check.

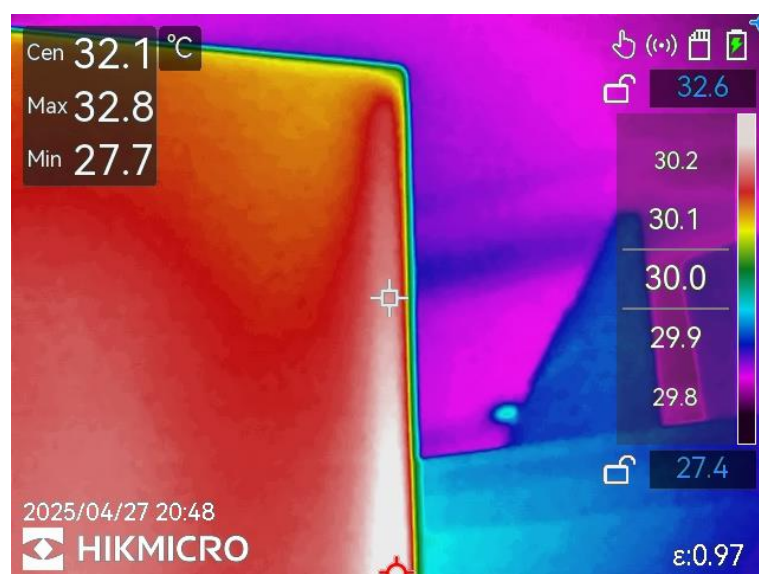


Figure 2-4 Live View: Manual Level and Span Mode

2.3 New Option of Marking-up: Sketch

This version provides sketch function to add marking-ups freely on captured images. You can add a sketch right after taking a snapshot, or when rearranging the images afterwards in albums.

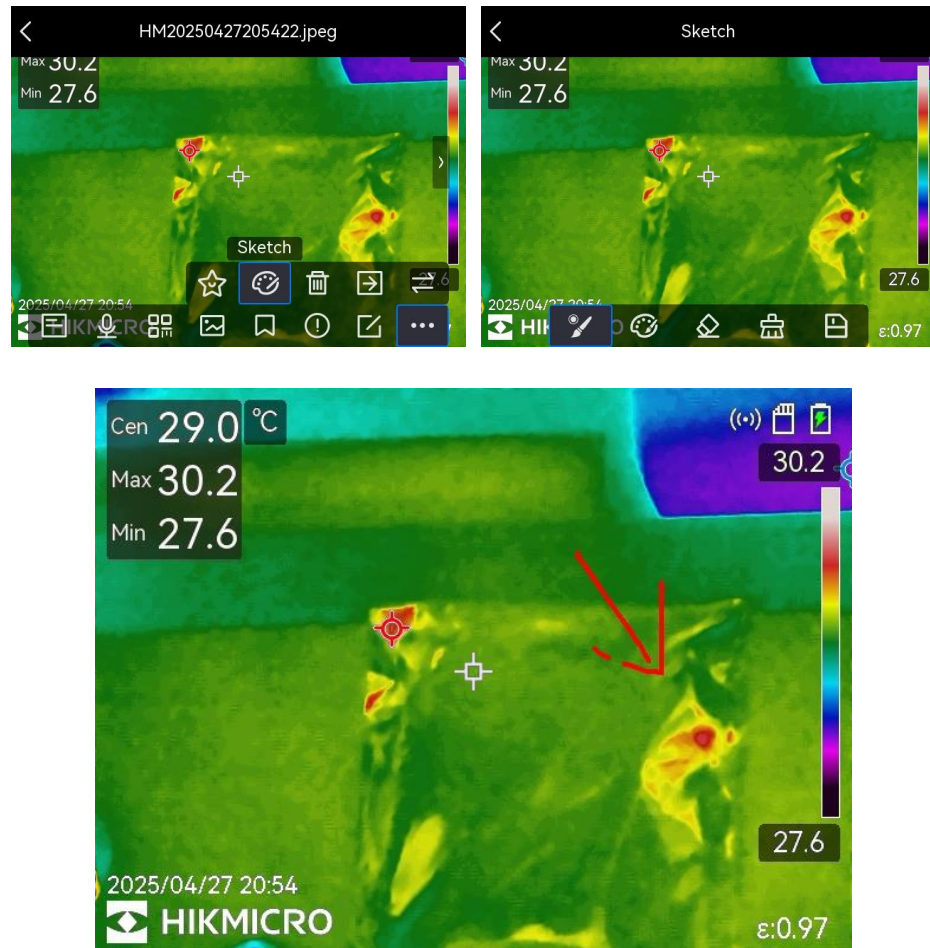


Figure 2-5 Example: Adding Sketch Note in Albums

2.4 Recording Mute Video Supported



This version provides an option to switch the audio off when recording a thermal video.

Go to **Settings > Capture Settings > Record Audio** to disable the function when audios are not needed.

2.5 More Powerful Albums

The album system is redesigned to provide



- 3 level folders for more file arranging demands. Up to 1000 objects (folders and files in total) allowed for the root directory or each folder.

- A folder  to save deleted files, in which the files are recoverable from wrong deletion.
- A folder  to save favorited files.

2.5.1 Up to 3 Folder Levels Supported

Users are allowed to create folders in the root directory, or create subfolders in a regular folder.

Tap “+” icon in the upper right corner to add a folder. A newly created folder, no matter a root directory folder or a subfolder, becomes a **Default Saving Folder** for all new snapshots and videos.

- If a root directory folder is set as the default saving folder, the folder icon turns to .
- If a subfolder is set as the default saving folder, a quick access icon  for this folder will be generated in the root directory, with the folder path displayed below the icon.

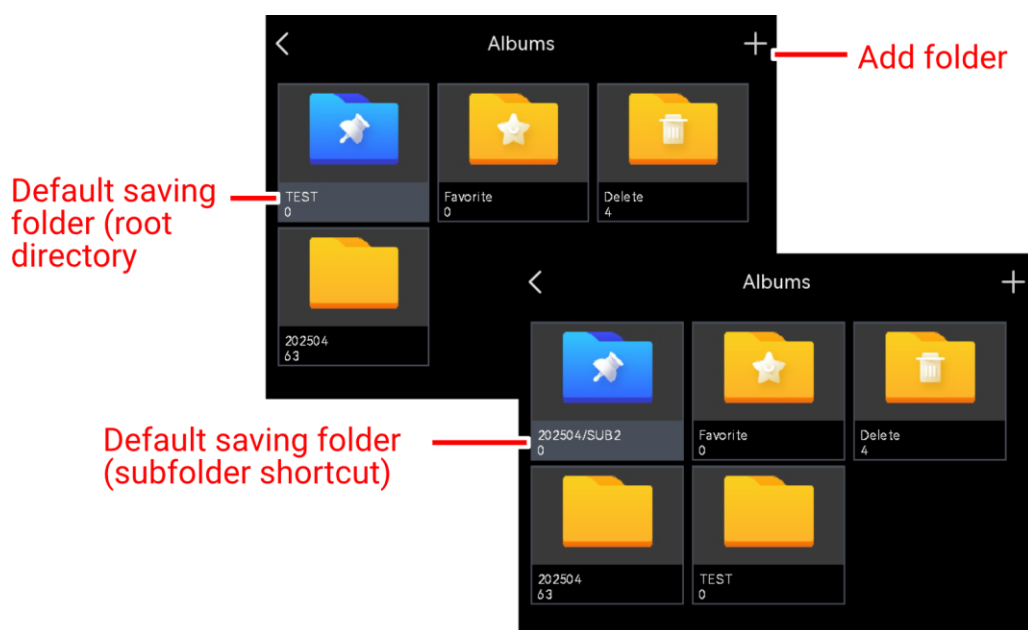



Figure 2-6 New Album Folders

2.5.2 Recoverable Deleted Files

Files deleted from the regular folder are saved in the Delete folder . They can be recovered to their original folders.

Enter the Delete folder, and tap  in the upper right corner to start file selection and further recovering or deleting completely.

Up to 1000 images and videos are allowed in the folder. Once it reaches the limit, users have to clean up the folder manually. Otherwise, newly deleted files will not be saved in this folder.

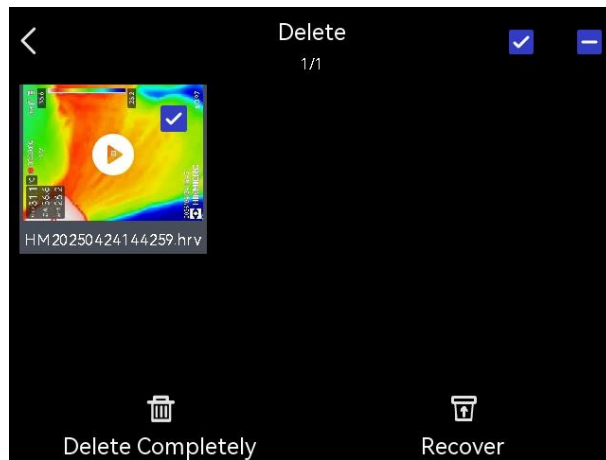


Figure 2-7 Delete Folder Operation

2.5.3 Favorite Files

You can mark favorite images and videos from regular folders, and then you can see them in the Favorite folder.

Up to 1000 files are allowed. Beyond this limit, no more files can be added to favorites until the user manually cleans up.

Note that the modification you make to the files in the Favorite folder also takes effect to the files in the original folders.

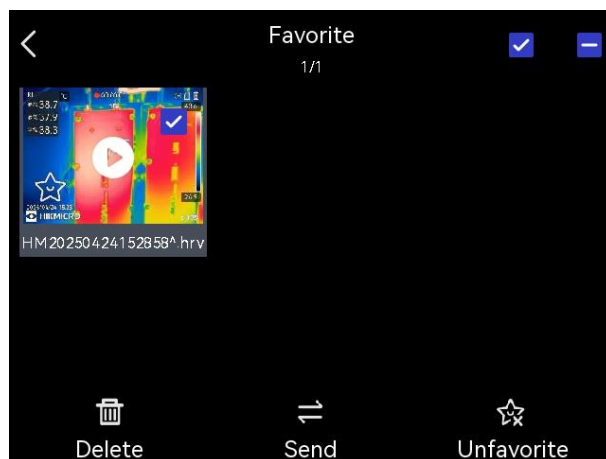


Figure 2-8 Favorite Folder Operation

2.6 Localization: Added Korean Keyboard and Estonia UI

- Korean keyboard is supported when the system language is set to Korean.

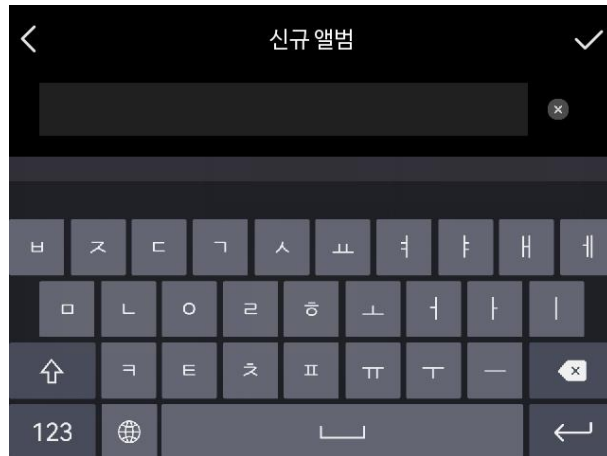


Figure 2-9 Korean Keyboard

- Estonia UI is supported. Go to **Settings > Device Settings > Language** to switch to this new language.

3 Optimizations

HIKMICRO M series handheld thermal cameras optimize to improve your experience.

- The minimum difference between the upper and lower temperature of the manual level and span is adjusted to 1°C.
- User interface is adjusted for better experience: text display, font size, interaction effects, etc.
- Improved the palette display of condensation alarm.
- Improved operation response speed of certain functions.

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 type A to type C USB 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.
- Keep USB Cast Screen function off.
- Keep the microSD card inserted and do not remove it during connection.
- Keep the camera powered on.

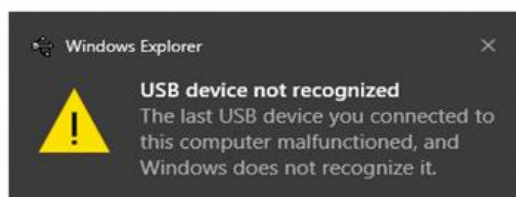
4.2 What should I do when my PC notifies power surge on the USB port?



Check the following items:

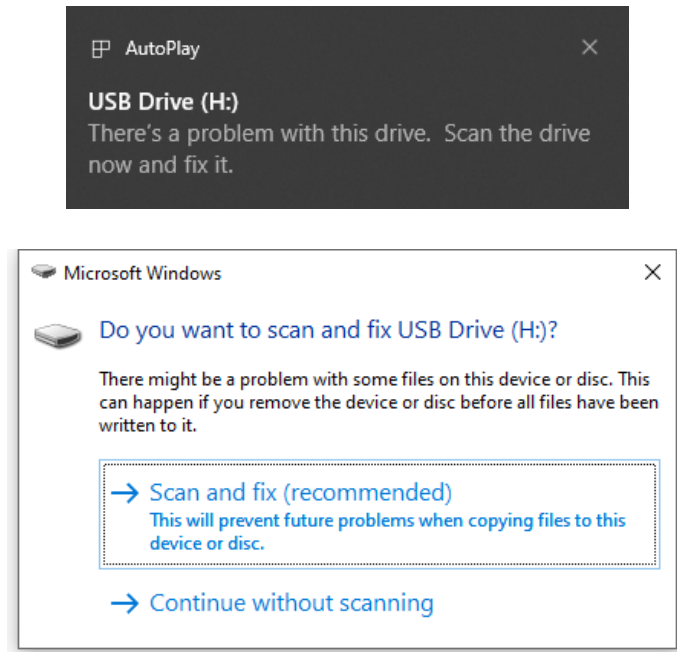
- When you are looking for an adapter of USB type C to USB type A, please choose an unpowered hub. A powered hub such as Surface Dock Station is not compatible.
- If you are using a built-in USB PowerShare port in your PC, please try another port.

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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