



HIKMICRO AI Series
Acoustic Imaging Camera (V5.5.47)

Release Notes

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About this Manual

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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Chapter 1 Introduction

The HIKMICRO AI56 acoustic imaging camera is a professional product for sound source localization. With 64 Low-noise MEMS microphones and an adjustable bandwidth range from 2 kHz to 65 kHz, AI56 provides an easy and effective way to locate pressurized air leaks in industrial environments or detect partial discharge in high-voltage systems. By using a large 4.3" LCD touch screen, the results presented on top of a digital picture allow you to quickly find the source of the problems. The maximum operating distance could reach 100 meters, which can ensure you stay at a safe distance to inspect the high-voltage equipment. By adopting this lightweight and easy-to-use tool, you can discover potential safety risks, minimize troubleshooting, and save extra costs of equipment failures and downtime.

This document introduces new features and optimizations in V5.5.47 of AI series cameras.

For detailed operation guide, please refer to the user manual of AI series acoustic imaging camera, V5.5.47.

1.1 Version Information

| Item | Description |
|-------------------|------------------------|
| Firmware Version | V5.5.47 build 230506 |
| FPGA Version | V1.01.04 BUILD20220903 |
| Algorithm Version | V7.3 build 230506 |
| Models | AI56 |

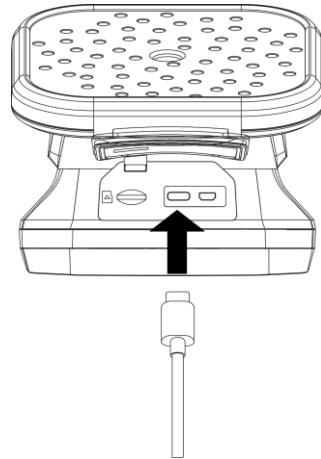
1.2 How to Update to New Version

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.

Step 1 Download new firmware from our website (<https://www.hikmicrotech.com/en/industrial-products/ai56-acoustic-camera/>), and save it to your PC. FPGA has not been updated this time.

Step 2 Use supplied USB cable (USB type C to USB type A) to connect the device to PC.



Step 3 Open the detected disk on your PC.

Step 4 Unzip the firmware and copy the .dav file to the root directory of the disk.

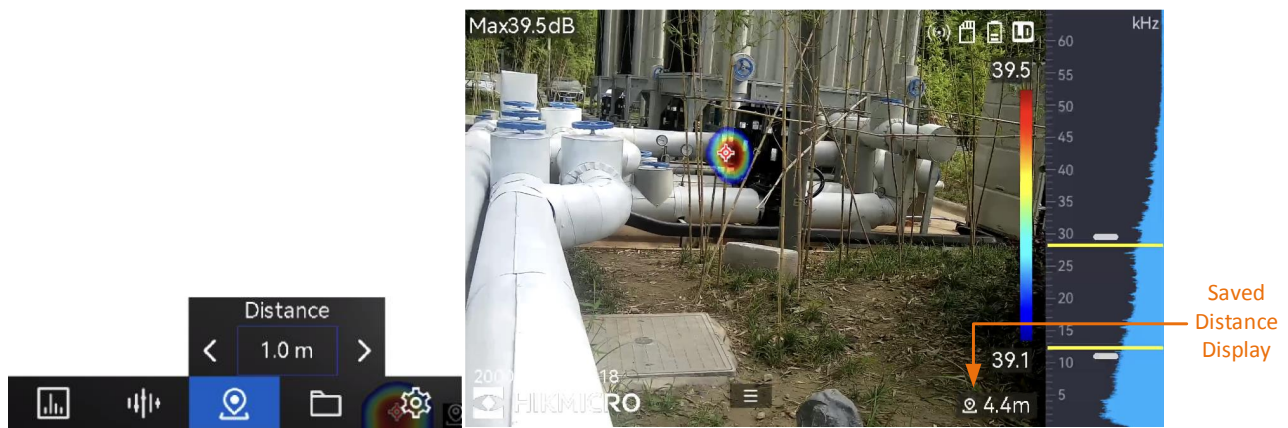
Step 5 Disconnect the device from PC and reboot the device to start upgrading automatically.

Chapter 2 New Features

2.1 Set and Save Sound Source Distance on Snapshot

When you set a sound source distance and take a snapshot of the source, the set distance is stamped on the snapshot.

Distance unit is changeable from **Settings** → **Device Settings** → **Unit**

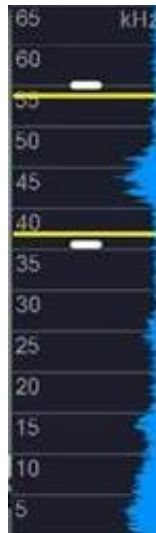


Chapter 3 Optimizations

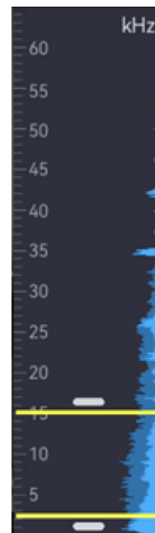
HIKMICRO AI series acoustic imaging cameras have been optimized to improve your experience.

3.1 Better Display for Frequency Range and Intensities

- For the intensity display,
 1. The refresh rate is increased from the former 12 fps to 25 fps, which makes the intensity diagram more visually pleasant to watch.
 2. Previously detected intensities are also displayed as darker blue shadows in the intensity diagram. The degree of overlapping shows the stability of the intensities.
- The scale style of frequency range changed: Its minimum scale reading is down to 1 kHz.



V5.5.33



V5.5.47

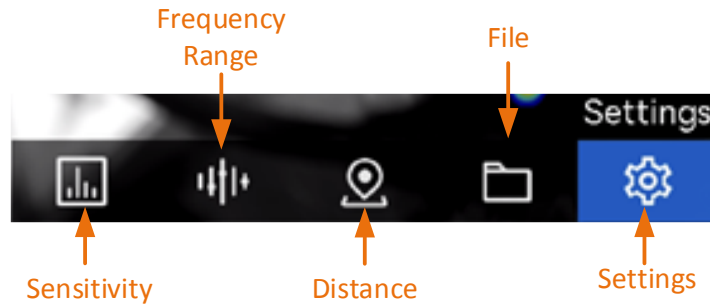
3.2 Improved Sound Intensity Rule Display

- The sound source with strongest intensity is displayed by default instead of the center spot of the image.
- Occasional deviation of acoustic palette center from the maximum intensity spot is fixed.



3.3 Menu Structure Reorganized for Convenient Operation

- Main menu changed to show more often used function.



- Detection sensitivity is user-adjustable. Higher sensitivity means that sound source with lower intensity can be detected.
- Palette and opacity level settings are moved to **Settings** → **Acoustic Settings**.

3.4 More Optimizations

- Detection mode setting is not adjustable in this version. Gas Leakage detection is the default detection mode. Partial discharge detection is not supported in this version.
- Improved the detection performance for low intensity sounds.
- Improved the stability of acoustic palette display.

Chapter 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 the microSD card inserted and do not remove it during connection.
- Keep the camera powered on.

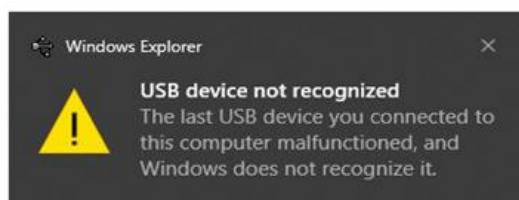
4.2 What should I do when my PC notifies power surge on the USB port?



Check the following items:

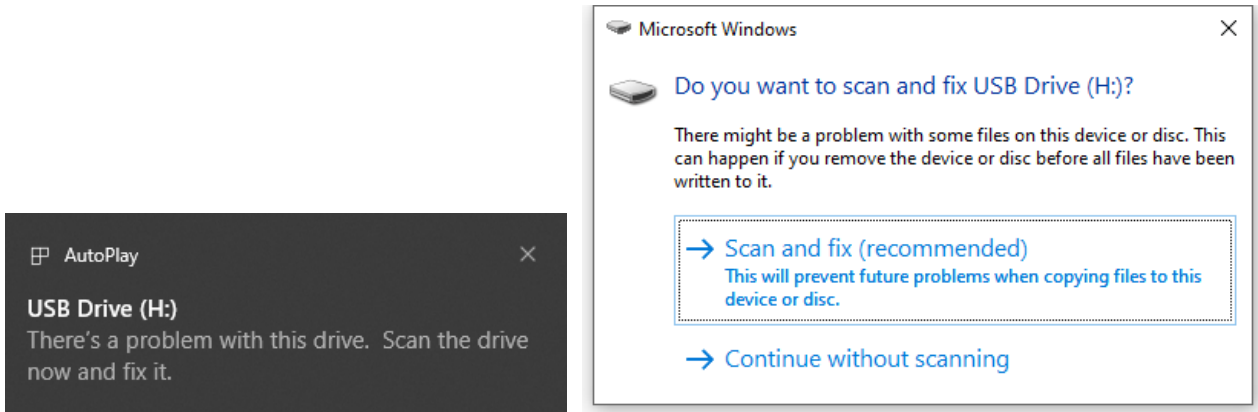
- When you are looking for an adapter of USB type C to USB type A, please choose an unpowered hub. A powered hub such as Surface Dock Station is not compatible.
- If you are using a built-in USB type A port in your PC, please try another port.

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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