



**HIKMICRO SP Series  
Handheld Thermal Camera (V5.5.49)**

**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/](http://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 handheld Thermal cameras 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 V5.5.49 of SP series cameras.

## 1.1 Version Information

Item	Description
Firmware Version	V5.5.49 Build 230628
FPGA Version	V7.3 build 230627
Algorithm Version	V1.00.06 BUILD 20230627
Models	SP40, SP40H, SP60, SP60H
Mobile Client	HIKMICRO Viewer, V2.0.0 and later versions
PC Client	HIKMICRO Analyzer, V1.3.1.5 build230626 HIKMICRO Inspector, V1.2.1.3 build230522

## 1.2 Upgrade Device with USB

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/m-series-handheld-thermal-imager/>), and save it to your PC.

Step 2 Use supplied USB cable 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.  
The upgrading lasts several minutes, please wait for the process to complete.

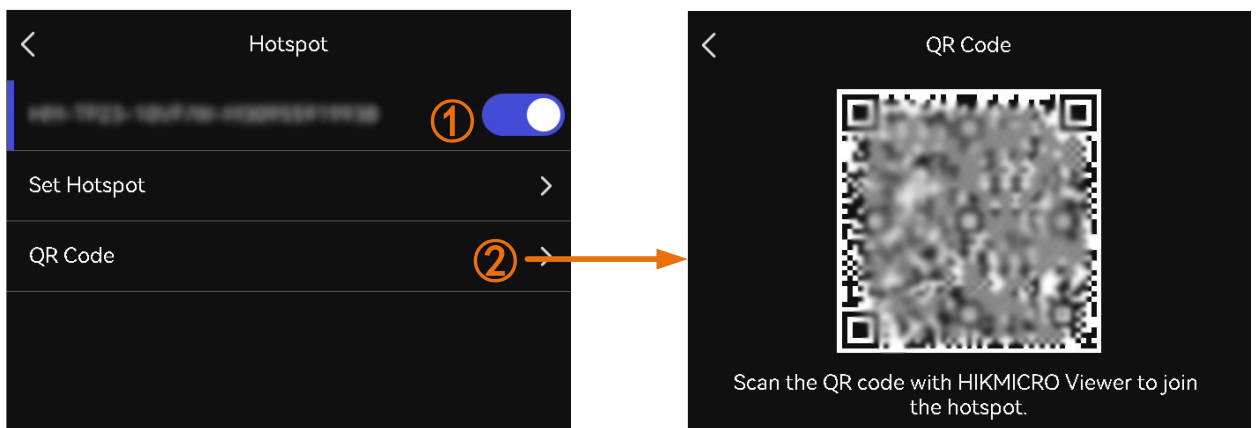
## Chapter 2 New Features

### 2.1 Connect to HIKMICRO Viewer by QR code scanning

SP Series in this version can quickly connect to HIKMICRO Viewer by scanning an embedded QR code on device, saving your time of discovering, setting and inputting password of the hotspot.

Step 1 To use the function, you should first upgrade your HIKMICRO Viewer to the latest version (V2.0.0 and newer version) that supports QR code scanning.

Step 2 Turn on Hotspot function on M30 and display the QR code for scanning.



Step 3 Run the HIKMICRO Viewer, and scan the QR code with its scanning function.

#### Note

If scanning fails, follow the APP instruction to try other methods.

## Chapter 3 Optimizations

HIKMICRO SP series handheld thermal cameras have been optimized to improve your experience.

### 3.1 One-tap temperature setting for focus mode palette

In this version, when setting focus mode palette, temperature threshold can be automatically read and input by tapping on an interested area on the screen. The camera analyzes temperature of the selected area and returns a temperature range to best display its details.

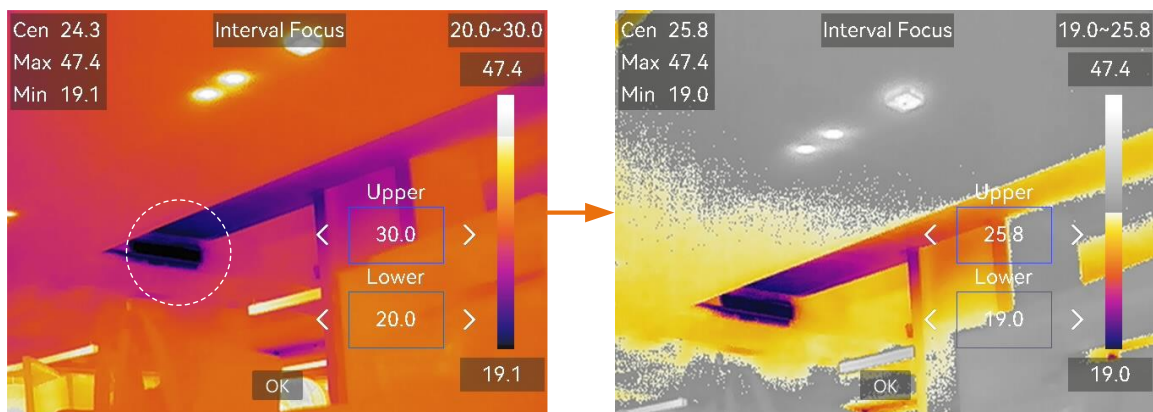
To set the focus mode palette quickly, it is recommended to 1) tap on an interested area; 2) fine tune the upper and/or the lower temperature threshold.

Step 1 Select **Palettes** from the main menu.

Step 2 Tap the icons to select a palette type.

Step 3 Tap on the screen to select an area of interest. The device automatically adjusts the upper and lower temperature limit of the selected scene.

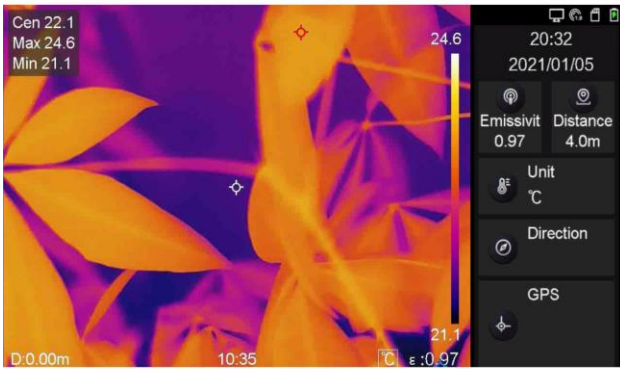
Step 4 Press  $\Delta$  and  $\nabla$  to select between upper limit and lower limit. Press  $\square$  and  $\triangleright$  to fine-tune the temperature.



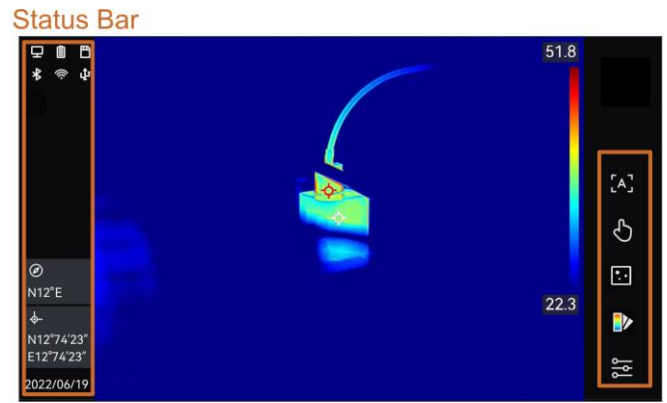
### 3.2 Live View Interface

In this version, the function layout on live view interface is optimized. The status bar on the left of the live view interface displays device working status, such as, battery and connections; the shortcut bar on the right is for the quick configuration of focus mode, level & span mode, display mode, palettes, and measurement settings.





Previous Version



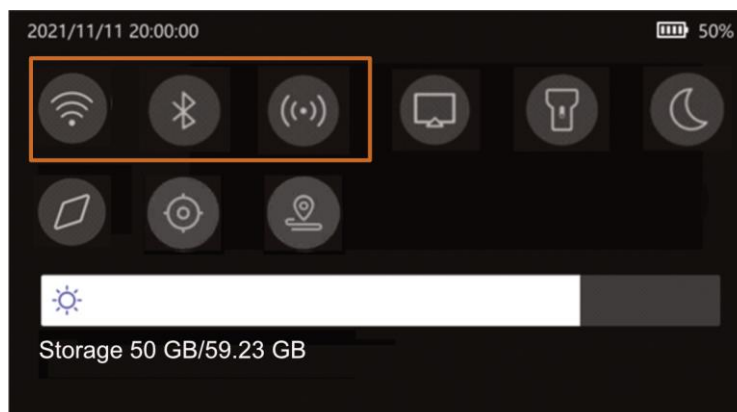
V5.5.49

Shortcut Bar

Icon	Description
	Tap to switch focus mode. Laser Assisted Focus, Auto Focus, and Continuous Autofocus are switchable.
	Tap to switch level & span mode. Manual and Auto are switchable.
	Tap to switch display mode. Thermal, Fusion, PIP, Visual, and Blending are switchable.
	Tap to switch palettes.
	Tap to set temperature measurement parameters such as Humidity, Emissivity, Distance, and Temperature.

### 3.3 More

- High frame rate radiometric video: .hrv format videos can be played and analyzed by HIKMICRO Analyzer. Stay tuned for the next version of HIKMICRO Analyzer, which will support this function.
- Swipe-down menu: Tap and hold Wi-Fi, Hotspot, and Bluetooth icon in swipe-down menu to enter corresponding configuration interface.



- Save Visual Image: The default visual image resolution is adjusted to 8 MP in this version.
- Added instant snapshot editing after capturing in live view.
- Improved on-screen keyboard experience.
- The blending ratio can be selected from 25%, 50%, 75%.

## Chapter 4 FAQ on Upgrade

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

Check the following items:

- Use the supplied 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 SD card inserted and do not remove it during connection.
- Keep the camera powered on.

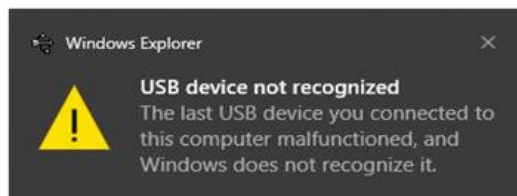
### 4.2 What should I do when my PC notifies power surge on the USB port?



Check the following items:

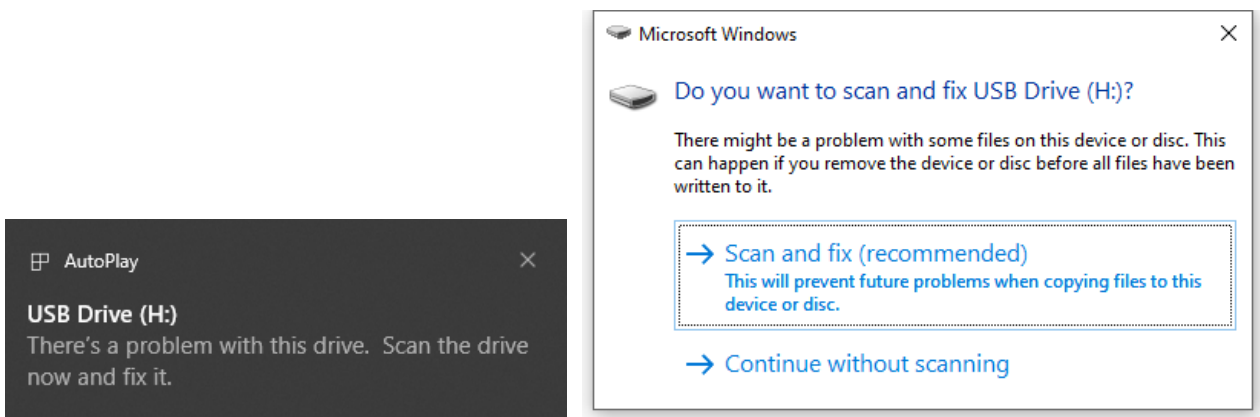
- When you are looking for an adapter of the supplied USB cable, please choose an unpowered hub. A powered hub such as Surface Dock Station is not compatible.
- If you are using a built-in USB PowerShare port in your PC, please try another port.

### 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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