



HIKMICRO SP Series
Handheld Thermal Camera (V5.5.77)
Release Notes

Legal Information

© Hangzhou Microimage Software Co., Ltd.
All rights reserved.


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.

Trademarks Acknowledgement

 HIKMICRO and other HIKMICRO's trademarks and logos are the properties of HIKMICRO in various jurisdictions. Other trademarks and logos mentioned are the properties of their respective owners.

 The terms HDMI and HDMI High-Definition Multimedia Interface, and the HDMI Logo are trademarks or registered trademarks of HDMI Licensing Administrator, Inc. in the United States and other countries.

LEGAL DISCLAIMER

TO THE MAXIMUM EXTENT PERMITTED BY APPLICABLE LAW, THIS MANUAL AND THE PRODUCT DESCRIBED, WITH ITS HARDWARE, SOFTWARE AND FIRMWARE, ARE PROVIDED "AS IS" AND "WITH ALL FAULTS AND ERRORS". HIKMICRO MAKES NO WARRANTIES, EXPRESS OR IMPLIED, INCLUDING WITHOUT LIMITATION, MERCHANTABILITY, SATISFACTORY QUALITY, OR FITNESS FOR A PARTICULAR PURPOSE. THE USE OF THE PRODUCT BY YOU IS AT YOUR OWN RISK. IN NO EVENT WILL HIKMICRO BE LIABLE TO YOU FOR ANY SPECIAL, CONSEQUENTIAL, INCIDENTAL, OR INDIRECT DAMAGES, INCLUDING, AMONG OTHERS, DAMAGES FOR LOSS OF BUSINESS PROFITS,

BUSINESS INTERRUPTION, OR LOSS OF DATA, CORRUPTION OF SYSTEMS, OR LOSS OF DOCUMENTATION, WHETHER BASED ON BREACH OF CONTRACT, TORT (INCLUDING NEGLIGENCE), PRODUCT LIABILITY, OR OTHERWISE, IN CONNECTION WITH THE USE OF THE PRODUCT, EVEN IF HIKMICRO HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES OR LOSS. YOU ACKNOWLEDGE THAT THE NATURE OF THE INTERNET PROVIDES FOR INHERENT SECURITY RISKS, AND HIKMICRO SHALL NOT TAKE ANY RESPONSIBILITIES FOR ABNORMAL OPERATION, PRIVACY LEAKAGE OR OTHER DAMAGES RESULTING FROM CYBER-ATTACK, HACKER ATTACK, VIRUS INFECTION, OR OTHER INTERNET SECURITY RISKS; HOWEVER, HIKMICRO WILL PROVIDE TIMELY TECHNICAL SUPPORT IF REQUIRED.

YOU AGREE TO USE THIS PRODUCT IN COMPLIANCE WITH ALL APPLICABLE LAWS, AND YOU ARE SOLELY RESPONSIBLE FOR ENSURING THAT YOUR USE CONFORMS TO THE APPLICABLE LAW. ESPECIALLY, YOU ARE RESPONSIBLE, FOR USING THIS PRODUCT IN A MANNER THAT DOES NOT INFRINGE ON THE RIGHTS OF THIRD PARTIES, INCLUDING WITHOUT LIMITATION, RIGHTS OF PUBLICITY, INTELLECTUAL PROPERTY RIGHTS, OR DATA PROTECTION AND OTHER PRIVACY RIGHTS. YOU SHALL NOT USE THIS PRODUCT FOR ANY PROHIBITED END-USES, INCLUDING THE DEVELOPMENT OR PRODUCTION OF WEAPONS OF MASS DESTRUCTION, THE DEVELOPMENT OR PRODUCTION OF CHEMICAL OR BIOLOGICAL WEAPONS, ANY ACTIVITIES IN THE CONTEXT RELATED TO ANY NUCLEAR EXPLOSIVE OR UNSAFE NUCLEAR FUEL-CYCLE, OR IN SUPPORT OF HUMAN RIGHTS ABUSES.

IN THE EVENT OF ANY CONFLICTS BETWEEN THIS MANUAL AND THE APPLICABLE LAW, THE LATTER PREVAILS.

CONTENTS

1	Introduction	1
1.1	Version information.....	1
1.2	How to update to new version	1
1.2.1	Upgrade with PC	1
1.2.2	Upgrade with HIKMICRO Viewer APP	2
2	New Features.....	2
2.1	More macro lenses are available	2
2.2	Ultra-high temperature range is available	3
2.3	Edit temperature tools in live view	3
2.4	Connect device to HIKMICRO Viewer by Wi-Fi QR code scanning	3
2.5	Add picture notes and tag notes to captured images	4
2.6	Export files	5
2.6.1	Export files to HIKMICRO Viewer	5
2.6.2	Export files via Bluetooth.....	5
2.7	F1/F2 programmable buttons update.....	6
2.8	OSD information update	6
2.9	RTSP protocol update	7
3	Optimizations.....	8
4	FAQ on Upgrade	9
4.1	Why my PC failed to detect the camera as a USB drive?	9
4.2	What should I do when my PC notifies power surge on the USB port?	9
4.3	What should I do when my PC notifies USB device not recognized?	9
4.4	What should I do if my PC notifies the USB drive has a problem to be fixed?	10

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 V5.5.77 of SP series cameras.

1.1 Version information


Item	Description
Firmware Version	V5.5.77 Build 250324
FPGA Version	V1.00.26 Build 20250207
Models	SP120H

1.2 How to update to new version

1.2.1 Upgrade with PC

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. Connect the device to your PC with cable.
2. 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.
3. Click the disk on your PC to open it.

4. 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.

5. Disconnect the device from your PC.
6. 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.



Make sure that you download and install the latest version of HIKMICRO Viewer.

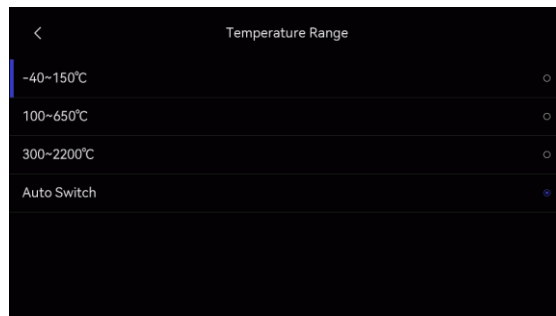
2 New Features

2.1 More macro lenses are available

This version supports various kinds of macro lens, including 1x, 0.5x, 2x and 3x.




2.2 Ultra-high temperature range is available

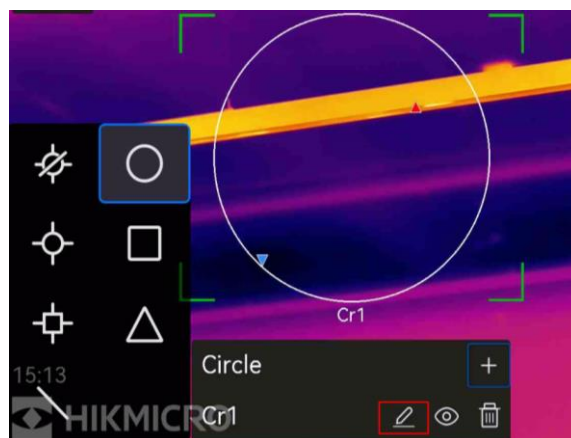
An ultra-high temperature range of 300 °C ~ 200 °C is supported.




2.3 Edit temperature tools in live view

Users can modify the set temperature measurement tools in live view directly.

1. Tap  in the main menu to select the set temperature tool in live view.
2. Tap  in the bottom box to edit the tools.
3. Tap  in the bottom left corner to edit the temperature measurement parameters in Measurement pop-up window.






2.4 Connect device to HIKMICRO Viewer by Wi-Fi QR code scanning

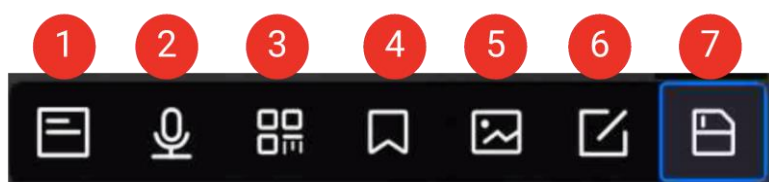
1. Connect your phone to the Wi-Fi network that the device is in
2. Tap  on the WLAN interface, and a QR code will pop up.
3. Launch HIKMICRO Viewer to tap + > **Scan QR Code**.
4. Scan the QR code on the device with HIKMICRO Viewer.
5. Tap **Join** in the pop-up window on your phone to confirm the settings.








2.5 Add picture notes and tag notes to captured images




Before You Start

Make sure that you have enabled **Edit before Saving**. Tap , and go to **Capture Settings > Edit before Saving**.

1. Aim the lens at your target and press  or tap  to capture images.
2. Add notes to the captured images.



No.	Description
1	Text Note. See <i>Handheld Thermography Camera User Manual</i> for detailed information.
2	Voice Note. See <i>Handheld Thermography Camera User Manual</i> for detailed information.
3	QR Code Note. See <i>Handheld Thermography Camera User Manual</i> for detailed information.
4	Tag Note. Set Tag Note to add text for captured pictures. It is a prerequisite to import a template first. <ol style="list-style-type: none"> 1. Select Tag Note. 2. Select a tag and enter the tag settings. 3. Select at least 1 tag, and press OK to save the settings. 4. Optional: Press  or  button to switch between different tags, and press OK to save the settings.
5	Picture Note. Add visual image notes for captured radiometric images: <ol style="list-style-type: none"> 1. Tap  in live view to enter Capture Settings. 2. Switch on Edit before Saving. 3. Press  button or Tap  in the shortcut bar in live view to capture snapshots. An image edition bar will pop up after the captured image freezes. 4. Tap  to enter Picture Note interface. 5. Press  button behind the device to add picture notes. 6. Press OK to save captured visual images to the local album. 7. Repeat step 5 and step 6 to add the next picture note.

No.	Description
	<p>8. Optional: Press  on screen to save one captured visual image to the local album, and go back to image edition interface.</p> <hr/> <p></p> <p>The number of visual images will be displayed on the top of the Picture Note interface during taking the pictures, eg."1/3". No more than 3 pictures are supported.</p> <hr/> <p>9. Tap  to save and exit.</p>
6	Editing thermal parameters. See <i>Handheld Thermography Camera User Manual</i> for detailed information
7	After all information added to the image, select Save to exit. See <i>Handheld Thermography Camera User Manual</i> for detailed information

2.6 Export files


2.6.1 Export files to HIKMICRO Viewer

Connect the device to HIKMICRO Viewer application on the phone, and you can export the recorded videos, captured snapshots restored in the device to the APP albums.

1. Connect the device to HIKMICRO Viewer.
2. Tap **On-Device Files** in the home screen of HIKMICRO Viewer to select videos and snapshots.



When the device is connected via USB cable, it does NOT support On-Device Files viewing. Please disconnect the device at first.


3. Tap  to export the files to the **Albums** of HIKMICRO Viewer.

2.6.2 Export files via Bluetooth


It is available to export snapshots in the device **Albums** to the local album of your phone after the Bluetooth connection.







ONLY mobile phones with Android system are supported to receive images from the device via Bluetooth connection.


1. Turn on your phone Bluetooth.
2. Turn on the device Bluetooth. Select , and go to **Connections > Bluetooth** to enable the device Bluetooth.
3. Refresh the available Bluetooth list on the device, and pair the device Bluetooth with your phone Bluetooth.



- You can also press  or OK to quit pairing.
- When pairing successfully, “Paired” is displayed on the Available Devices list of the device, and “Connected” on the phone.

-
4. Send snapshots in the device **Albums** to your phone.
 - Send only one snapshot:
 - 1) Tap the required snapshot, and enter to the detailed page.
 - 2) Tap on any part of the screen to call the menu.
 - 3) Tap  > , and choose the paired phone Bluetooth.
 - 4) Tap OK to confirm the settings.
 - Send no more than 16 snapshots:
 - 1) Tap  to select more than one snapshots.
 - 2) Tap  to select a Bluetooth device.
 - 3) Choose the paired phone Bluetooth.
 - 4) Tap OK to confirm the settings.



- Videos are NOT supported to send to the phone via Bluetooth.
 - Tap  in the upper right corner to refresh the available Bluetooth list.
-

2.7 F1/F2 programmable buttons update

Auto focus, taking snapshots, level & span and palettes switching are programmable via F1/F2 buttons in this version.

Select , and go to **Device Settings > Programmable Buttons** to set F1 and F2 button respectively.

2.8 OSD information update

A toggle button of Reference Bar is added in this version to show/hide the reference bar displayed on the right side in live view.

Select , and go to **Display Settings > Reference Bar**.

2.9 RTSP protocol update

RTSP is supported to obtain real-time temperature matrix for the use of the third party applications.

3 Optimizations

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

- The focusing speed of Auto Focus mode is optimized.

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:

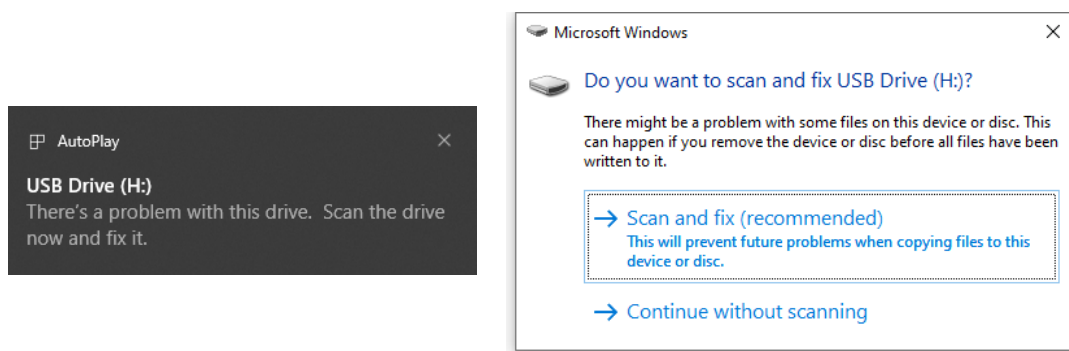
- When you are looking for an adapter of the supplied USB cable, please choose an unpowered hub. A powered hub such as Surface Dock Station is not compatible.
- If you are using a built-in USB PowerShare port in your PC, please try another port.

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.



HIKMICRO

See the World in a New Way