



# Handheld Thermography Camera HIKMICRO Pocket Series

User Manual



Contact Us

## Legal Information


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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 (<http://www.hikmicrotech.com>).

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### FCC Information

Note: This product has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This product generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this product does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

Note: Due to the device size limit, the above statement may not be disclaimed on the device.

### EU/UKCA Conformity Statement



This product and - if applicable - the supplied accessories too are marked with "CE" and comply therefore with the applicable harmonized European standards listed under the Directive 2014/30/EU (EMCD), Directive 2014/35/EU (LVD), Directive 2011/65/EU (RoHS).



This product and - if applicable - the supplied accessories too are marked with "UKCA" and comply therefore with the following directives: Radio Equipment Regulations 2017, Electromagnetic Compatibility Regulations 2016, Electrical Equipment (Safety) Regulations 2016, the Restriction of the Use of Certain Hazardous Substances in Electrical and Electronic Equipment Regulations 2012.

#### Restrictions in the 5 GHz band:

According to Article 10 (10) of Directive 2014/53/EU, when operating in the 5150 to 5350 MHz frequency range, this device is restricted to indoor use in: Austria (AT), Belgium (BE), Bulgaria (BG), Croatia (HR), Cyprus (CY), the Czech Republic (CZ), Denmark (DK), Estonia (EE), Finland (FI), France (FR), Germany (DE), Greece (EL), Hungary (HU), Iceland (IS), Ireland (IE), Italy (IT), Latvia (LV), Liechtenstein (LI), Lithuania (LT), Luxembourg (LU), Malta (MT), Netherlands (NL), Northern Ireland (UK(NI)), Norway (NO), Poland (PL), Portugal (PT), Romania (RO), Slovakia

(SK), Slovenia (SI), Spain (ES), Sweden (SE), Switzerland (CH), and Turkey (TR).

In accordance with the Radio Equipment Regulations 2017 in the UK, the device working in the 5150 to 5350 MHz frequency range is restricted to indoor use in the United Kingdom.

### Frequency Bands and Power (for CE/UKCA)

The frequency bands and modes and transmitting power (radiated and/or conducted) nominal limits applicable to the following radio equipment are as follows:

**Wi-Fi:** 2.4 GHz (2.4 GHz to 2.4835 GHz): 20 dBm; 5 GHz (5.15 GHz to 5.25 GHz): 23 dBm; 5 GHz (5.25 GHz to 5.35 GHz): 23 dBm; 5 GHz (5.47 GHz to 5.725GHz): 23 dBm; 5 GHz (5.725 GHz to 5.85 GHz): 14 dBm

**Bluetooth:** 2.4 GHz (2.4 GHz to 2.4835 GHz): 20 dBm

Use the power adapter provided by a qualified manufacturer. Refer to the product specification for detailed power requirements.

Use the battery provided by a qualified manufacturer. Refer to the product specification for detailed battery requirements.



Directive 2012/19/EU (WEEE Directive): Products marked with this symbol cannot be disposed of as unsorted municipal waste in the European Union. For proper recycling, return this product to your local supplier upon the purchase of equivalent new equipment, or dispose of it at designated collection points. For more information see: [www.recyclethis.info](http://www.recyclethis.info)

According to the Waste Electrical and Electronic Equipment Regulations 2013: Products marked with this symbol cannot be disposed of as unsorted municipal waste in the United Kingdom. For proper recycling, return this product to your local supplier upon the purchase of equivalent new equipment, or dispose of it at designated collection points. For more information see: [www.recyclethis.info](http://www.recyclethis.info).



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the battery to your supplier or to a designated collection point. For more information see: [www.recyclethis.info](http://www.recyclethis.info).

### Industry Canada ICES-003 Compliance

This device meets the CAN ICES-003 (B)/NMB-003 (B) standards requirements.

This device complies with Industry Canada licence-exempt RSS standard(s). Operation is subject to the following two conditions:

- (1) this device may not cause interference, and
- (2) this device must accept any interference, including interference that may cause undesired operation of the device.

This equipment complies with IC RSS-102 radiation exposure limits set forth for an uncontrolled environment.

- (i) The device for operation in the band 5150-5250 MHz is only for indoor use to reduce the potential for harmful interference to co-channel mobile satellite systems;
- (ii) The maximum antenna gain permitted for devices in the bands 5250-5350 MHz and 5470-5725 MHz shall comply with the e.i.r.p. limit; and
- (iii) The maximum antenna gain permitted for devices in the band 5725-5825 MHz shall comply with the e.i.r.p. limits specified for point-to-point and non point-to-point operation as appropriate.

### Conformité Industrie Canada ICES-003

Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radioexempts de licence. L'exploitation est autorisée aux deux conditions suivantes:

- (1) l'appareil ne doit pas produire de brouillage, et
- (2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

ce matériel est conforme aux limites de dose d'exposition aux rayonnements, CNR-102 énoncée dans un autre environnement.




- (i) Les dispositifs fonctionnant dans la bande 5150-5250 MHz sont réservés uniquement pour une utilisation à l'intérieur afin de réduire les risques de brouillage préjudiciable aux systèmes de satellites mobiles utilisant les mêmes canaux.
- (ii) Le gain d'antenne maximal autorisé pour les appareils dans les bandes 5250-5350 MHz et 5470-5725 MHz doivent respecter le pire limiter; et
- (iii) Le gain d'antenne maximal autorisé pour les appareils dans la bande 5725-5825 MHz doivent respecter le pire limites spécifiées pour le point-à-point et l'exploitation non point à point, le cas échéant.

### KC

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The symbols that may be found in this document are defined as follows.

Symbol	Description
 <b>Danger</b>	Indicates a hazardous situation which, if not avoided, will or could result in death or serious injury.
 <b>Caution</b>	Indicates a potentially hazardous situation which, if not avoided, could result in equipment damage, data loss, performance degradation, or unexpected results.
 <b>Note</b>	Provides additional information to emphasize or supplement important points of the main text.

### Safety Instruction

These instructions are intended to ensure that user can use the product correctly to avoid danger or property loss. Please read all the safety information carefully before using.

#### Laws and Regulations

- Use of the product must be in strict compliance with the local electrical safety regulations.

#### Transportation

- Keep the device in original or similar packaging while transporting it.
- Keep all wrappers after unpacking them for future use. In case of any failure occurred, you need to return the device to the factory with the original wrapper. Transportation without the original wrapper may result in damage on the device and the company shall not take any responsibilities.
- DO NOT drop the product or subject it to physical shock. Keep the device away from magnetic interference.

#### Power Supply

- Input voltage should meet the Limited Power Source (3.85 VDC, 570 mA) according to the IEC62368 standard. Please refer to technical specifications for detailed information.
- Make sure the plug is properly connected to the power socket.
- DO NOT connect multiple devices to one power adapter, to avoid over-heating or fire hazards caused by overload.
- Use the power adapter provided by a qualified manufacturer. Refer to the product specification for detailed power requirements.

#### Battery

- Improper use or replacement of the battery may result in explosion hazard. Replace with the same or equivalent type only. Dispose of used batteries in conformance with the instructions provided by the battery manufacturer.
- The built-in battery cannot be dismantled. Please contact the manufacture for repair if necessary.
- For long-term storage of the battery, make sure it is fully charged every half year to ensure the battery quality. Otherwise, damage may occur.
- Use the battery provided by a qualified manufacturer. Refer to the product specification for detailed battery requirements.
- DO NOT charge other battery types with the supplied charger. Confirm there is no flammable material within 2 m of the charger during charging.
- DO NOT place the battery near heating or fire source. Avoid direct sunlight.
- DO NOT swallow the battery to avoid chemical burns.
- DO NOT place the battery in the reach of children.
- When the device is powered off and the RTC battery is full, the time settings can be kept for 6 months.



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- In the first use, charge the device for more than 2.5 hours in the power-off status.
- The lithium battery voltage is 3.85 V, and the battery capacity is 2100 mAh.
- The battery is certified by UL2054.

## Maintenance

- If the product does not work properly, please contact your dealer or the nearest service center. We shall not assume any responsibility for problems caused by unauthorized repair or maintenance.
- A few device components (e.g., electrolytic capacitor) require regular replacement. The average lifespan varies, so periodic checking is recommended. Contact your dealer for details.
- Wipe the device gently with a clean cloth and a small quantity of ethanol, if necessary.
- If the equipment is used in a manner not specified by the manufacturer, the protection provided by the device may be impaired.
- Please notice that the current limit of USB 3.0 PowerShare port may vary with the PC brand, which is likely to result in incompatibility issue. Therefore, it's advised to use regular USB 3.0 or USB 2.0 port if the USB device fails to be recognized by PC via USB 3.0 PowerShare port.
- Your camera will periodically perform a self-calibration to optimize image quality and measurement accuracy. In this process, the image will pause briefly and you will hear a "click" as a shutter moves in front of the detector. The self-calibration will be more frequent during start up or in very cold or hot environments. This is a normal part of operation to ensure optimum performance for your camera.

## Calibration Service

- We recommend you send the device back for calibration once a year, and please contact the local dealer for the information on maintenance points. For more detailed calibration services, please refer to <https://www.hikmicrotech.com/en/calibrationservices/2>.

## Using Environment

- Make sure the running environment meets the requirement of the device. The operating temperature shall be -10 °C to 50 °C (14 °F to 122 °F), and the operating humidity shall be 95% or less.
- This device can only be safely used in the region below 2000 meters above the sea level.
- Place the device in a dry and well-ventilated environment.
- DO NOT expose the device to high electromagnetic radiation or dusty environments.
- DO NOT aim the lens at the sun or any other bright light.
- When any laser equipment is in use, make sure that the device lens is not exposed to the laser beam, or it may burn out.
- DO NOT aim the lens at the sun or any other bright light.
- The device is suitable for indoor and outdoor uses, but do not expose it in wet conditions.
- The level of protection is IP 54.
- The pollution degree is 2.

## Technical Support

The <https://www.hikmicrotech.com/en/contact-us.html> portal will help you as a HIKMICRO

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customer to get the most out of your HIKMICRO products. The portal gives you access to our support team, software and documentation, service contacts, etc.

### **Emergency**

- If smoke, odor, or noise arises from the device, immediately turn off the power, unplug the power cable, and contact the service center.

### **Manufacture Address**

Room 313, Unit B, Building 2, 399 Danfeng Road, Xixing Subdistrict, Binjiang District, Hangzhou, Zhejiang 310052, China

Hangzhou Microimage Software Co., Ltd.

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## Chapter 1 Overview

### 1.1 Device Description

The handheld thermography camera is a device with both optical images and thermal images. It can do thermography, video recording, snapshot capturing, alarm, and it can connect to Wi-Fi, hotspot and Bluetooth. The built-in high-sensitivity IR detector and high-performance sensor detects the variation of temperature and measure the real-time temperature.

The device is easy to use, and adopts ergonomic design. It is widely used for building inspection, HVAC, as well as electrical and mechanical equipment maintenance.

### 1.2 Main Function

#### Temperature Measurement

Device detects the real-time temperature, and displays it on the screen.

#### Fusion

Device can display fusion of thermal view and optical view.

#### Palettes and Alarm

Device supports multiple palettes, and you can set the palette mode according to the alarm function.

#### Client Software Connection

- Mobile Phone: You can view live view, capture snapshots, and record videos via HIKMICRO Viewer App on your phone. You can also, analyze pictures offline, generate and share a report via the app. Scan the QR codes below to download the App.



Android



iOS

- PC: You can download HIKMICRO Analyzer

(<https://www.hikmicrotech.com/en/industrial-products/hikmicro-analyzer-software.html>) to analyze pictures offline professionally, and generate a custom format report on your PC.

### Bluetooth

Device can be connected to headset via Bluetooth, and you can hear the voice in the recording.

## 1.3 Appearance

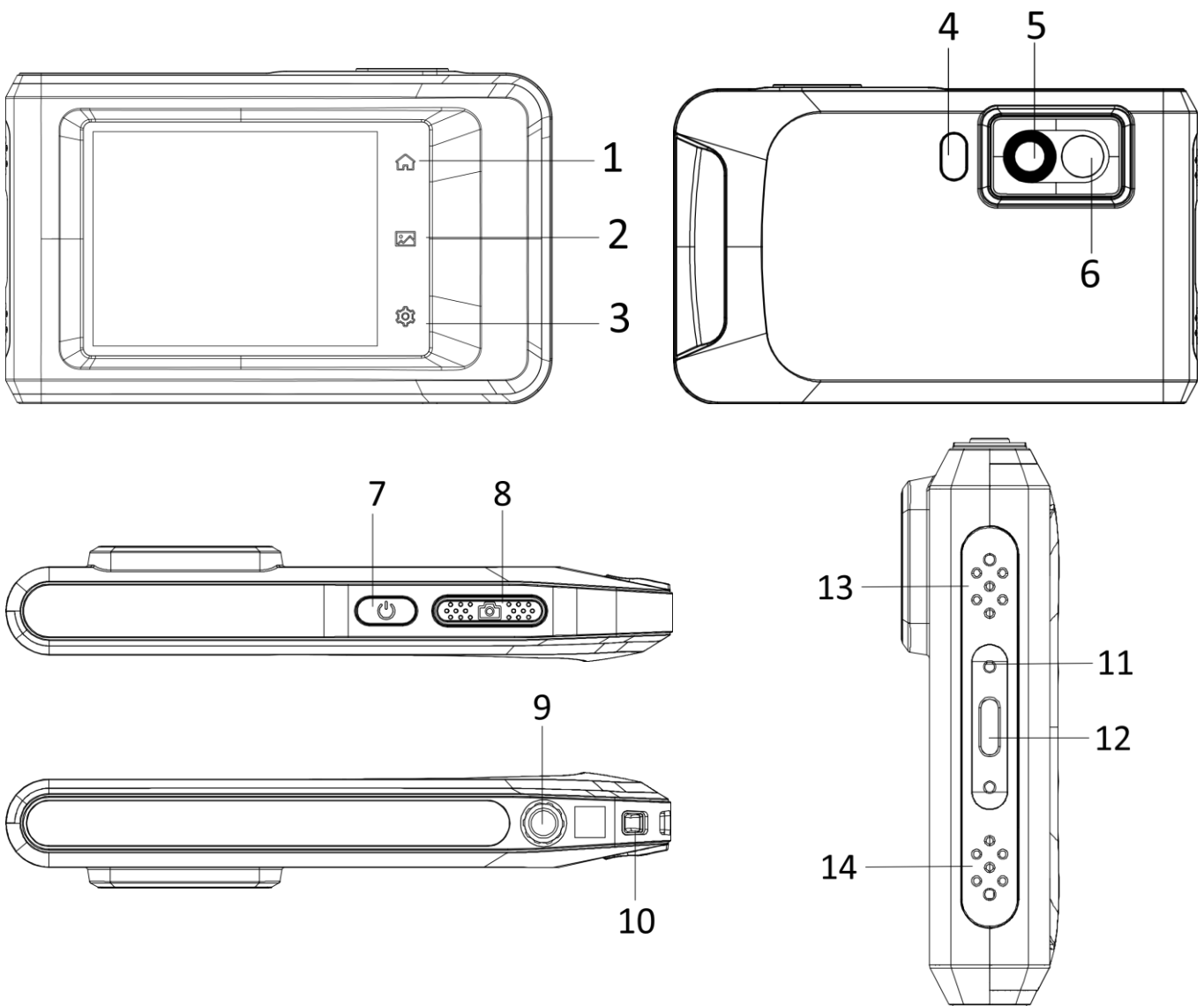


Figure 1-1 Appearance

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Table 1-1 Button and Interface Description

No.	Description	Function
1	Home Key	Tap to return to the live view interface.
2	File Key	Tap to enter albums.
3	Settings Key	Tap to enter settings interface.
4	Flash Light	Fill light on objects and output flashing alarm.
5	Thermal Lens	View the thermal image.
6	Optical Lens	View the optical image.
7	Power Key	Hold to power on/off the device.
8	Capture Key	<ul style="list-style-type: none"><li>● Press in live view mode: capture snapshots/stop recording</li><li>● Press in menu mode: return to the live view interface</li><li>● Hold: start recording</li></ul>
9	Tripod Mount	Mount the tripod.
10	Strap Attachment Point	Mount the strap.
11	Indicator	Indicate the charging status of the device. <ul style="list-style-type: none"><li>● Solid red: charging normally</li><li>● Flashing red: charging exception</li><li>● Solid green: fully charged</li></ul>
12	Type-C Interface	Charge the device or export files with Type-C cable.
13	Buzzer	Output audible alarm.
14	Microphone	Record audio.

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### Note

Your camera will periodically perform a self-calibration to optimize image quality and measurement accuracy. In this process, the image will pause briefly and you'll hear a "click" as a shutter moves in front of the detector. The prompt

“Calibrating ...” appears in the upper center of the screen as the device is calibrating itself. The self-calibration will be more frequent during start up or in very cold or hot environments. This is a normal part of operation to ensure optimum performance for your camera.

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## Chapter 2 Preparation

### 2.1 Charge Device

Plug in the cable, and connect the device to the power supply to charge the device.

### 2.2 Power On/Off

#### Power On

Hold  for over three seconds to turn on the device. You can observe the target when the interface of the device is stable.

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#### Note


It may take at least 30 s until the device is ready for using after you power on it.

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#### Power Off

When the device is turned on, hold  for about three seconds to power off the device.

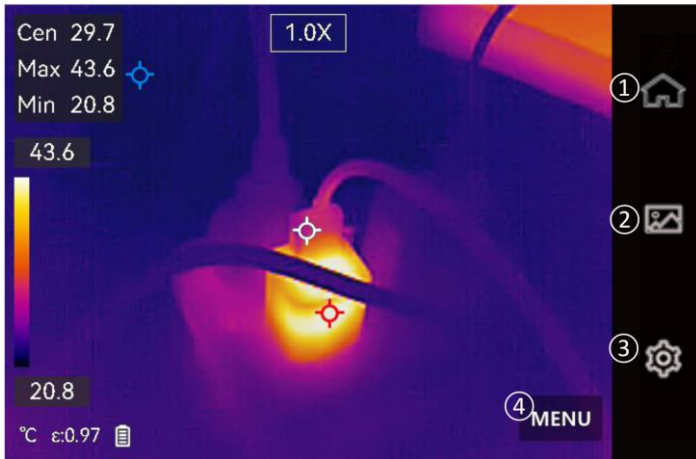
#### 2.2.1 Set Auto Power-Off

Select , and go to **Device Settings** → **Auto Power-off** to set the automatic shutdown time for device as required.

### 2.3 Operation Method

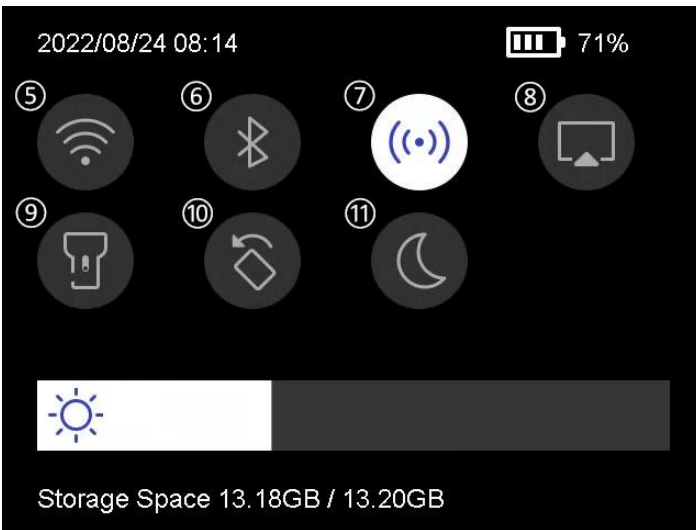
The device supports touch-screen control. You can tap the screen to set parameters and configurations.

### 2.4 Menu Description



- ① Home
- ② File
- ③ Settings
- ④ Menu

Figure 2-1 Main Menu



- ⑤ Wi-Fi
- ⑥ Bluetooth
- ⑦ Hotspot
- ⑧ Screen Cast
- ⑨ Flashlight
- ⑩ Auto-Rotate
- ⑪ Dark/Bright Mode

Figure 2-2 Swipe-Down Menu

**Note**

Tap and hold Wi-Fi, Hotspot, and Bluetooth icon in swipe-down menu to enter corresponding configuration interface.

## Chapter 3 Display Settings

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### Note

Your device will periodically perform a self-calibration to optimize image quality and measurement accuracy. In this process the image will pause briefly and you'll hear a "click" as a shutter moves in front of the detector. The self-calibration will be more frequent during start up or in very cold or hot environments. This is a normal part of operation to ensure optimum performance for your device.

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### 3.1 Set Screen Brightness

Go to **Settings** → **Device Settings** → **Screen Brightness** to adjust the screen brightness.


Or tap , and drag it to adjust the screen brightness.




Figure 2-3 Adjust Brightness via Swipe-Down Menu

### 3.2 Set Display Mode

You can set the thermal/optical view of the device. **Thermal**, **Fusion**, **PIP**, **Visual**, and **Blending** are selectable.

#### Steps

1. Tap **Menu**, and select .
2. Tap the icons to select a display mode.



In thermal mode, the device displays the thermal view.



In fusion mode, the device overlays the optical view on the thermal view to better enhance image details.

### Note

When selecting the fusion mode, you need to set the parallax correction in the live view interface according to the distance to the target, so as to better overlap the thermal and optical images.

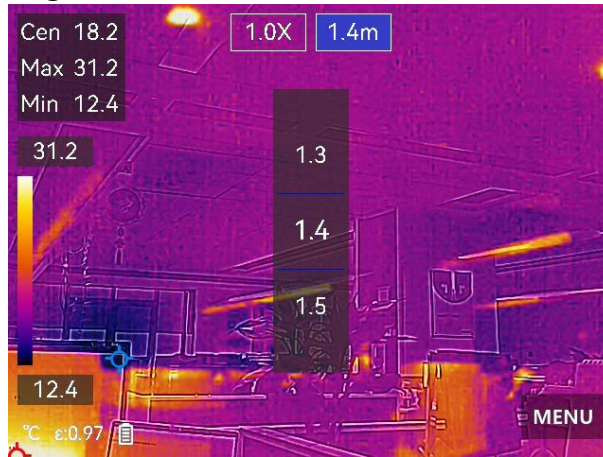


Figure 2-4 Adjust Parallax Correction

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In PIP (Picture in Picture) mode, the device displays thermal view inside the optical view.

### Note

You can adjust the size, distance and digital zoom of the PIP.

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In visual mode, the device displays the optical view.



In blending mode, the device displays the mixture view of thermal channel and optical channel. Adjust the optical-thermal ratio to change the ratio of thermal view and optical view. The lower the value is, the better the optical effect is.

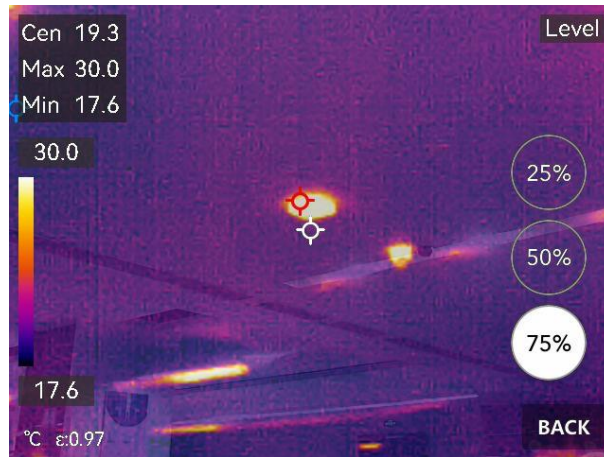



Figure 2-5 Adjust Optical-Thermal Ratio

3. Tap **Back** to exit.

## 3.3 Set Palettes

The palettes allow you to select the desired colors.

### Steps

1. Tap **Menu**, and select .
2. Tap the icons to select a palette type.

#### **White Hot**

The hot part is light-colored in view.

#### **Black Hot**

The hot part is black-colored in view.

#### **Rainbow**

The target displays multiple colors. It is suitable for scene without obvious temperature difference.

#### **Ironbow**

The target is colored as heated iron.

#### **Red Hot**

The hot part is red-colored in view.

#### **Fusion**

The hot part is yellow-colored and the cold part is purple-colored in view.

#### **Rain**

The hot part in the image are colored, and the else is blue.

### Blue Red

The hot part in the image is colored red, and the else is blue.


3. Tap **Back** to exit the setting interface.

## 3.4 Adjust Level & Span

Set a temperature range and the palette only works for targets within the temperature range. You can adjust the temperature range.

### Steps

1. Tap **Menu**, and select .
2. Select auto adjustment  or manual adjustment .

**Auto** Select . The device adjusts temperature range parameters automatically.

**Manual**

- a. Tap on an interest area of the screen. A circle is displayed around the area, and the temperature range readjusts to show as many details of the area as possible.
- b. Tap on the value on screen to lock or unlock a value.
- c. Scroll the adjustment wheel on the screen to fine-tune the max. temperature and the min. temperature respectively.
- d. Tap **OK** to finish.

3. Tap **Back** to exit.

### 2.4.2 Color Distribution

Color distribution function provides different image display effects in auto level & span. Liner and histogram color distribution modes can be selected for different application scenes.

### Steps

1. Go to **Settings** → **Measurement Settings** → **Color Distribution**.
2. Select a color distribution mode.

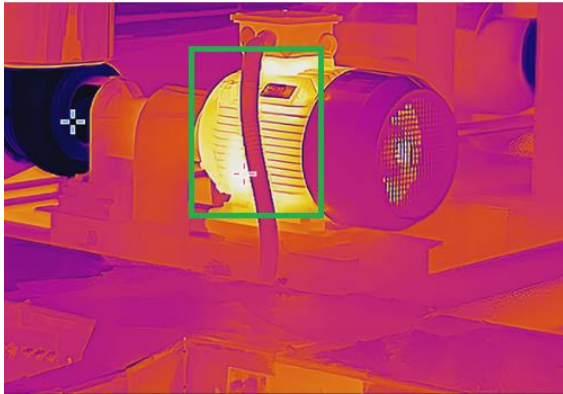
### Liner

Liner mode is used to detect small high temperature targets in low temperature background. Linear color distribution enhances and displays more details of high temperature targets, which is good for checking small high temperature defective

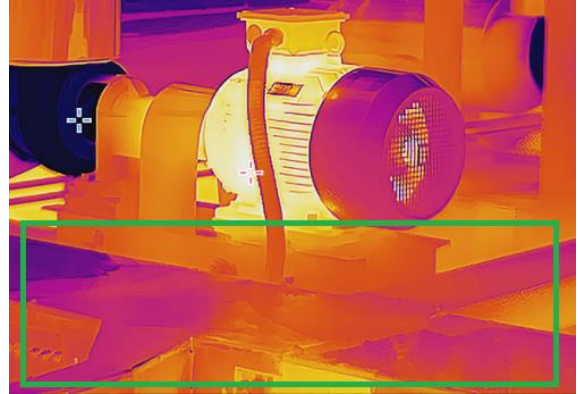
areas such as cable connectors.

## Histogram

Histogram mode is used to detect temperature distribution in large areas. Histogram color distribution enhances high temperature targets and remains some details of low temperature objects in the area, which is good for discovering small low temperature targets such as cracks.



Liner



Histogram

3. Tap < to save and exit.

---

### Note

This function is only supported in auto level & span.

---

## 3.5 Adjust Digital Zoom

### Steps

1. Tap the live view interface to call the digital zoom frame.
2. Tap the digital zoom frame.

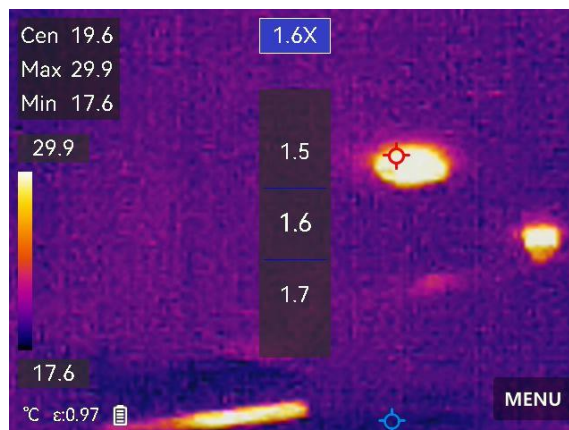


Figure 2-6 Adjust Digital Zoom

2. Select the digital zoom value as required
3. Tap the screen to save and exit.

### 3.6 Display OSD Info

Go to **Settings** → **Display Settings** to enable the information on-screen display.

#### **Time and Date**

Device time and date.

#### **Parameters**

Thermography parameters, for example, target emissivity, temperature unit, etc.

#### **Brand Logo**

The brand logo is a manufacturer logo displayed at the middle bottom of the screen.



## Chapter 4 Temperature Measurement

The temperature measurement function provides the real-time temperature of the scene. The device displays the measurement results on the left of your screen. This function is turned on by default.

### 4.1 Set Measurement Parameters

You can set measurement parameters to improve the accuracy of temperature measurement.

#### Steps

1. Go to **Settings** → **Measurement Settings**.
2. Set the **Temperature Range**, **Emissivity**, etc.

#### Temperature Range

Select the temperature measurement range. The device can detect the temperature and switch thermography range automatically in **Auto Switch** mode.

#### Emissivity

Refer to *Common Material Emissivity Reference* to set the emissivity of your target.

#### Reflection Temperature

If any object (not the target) of high temperature is in the scene, and the target emissivity is low, set the reflection temperature as the high temperature to correct the thermography effect.

#### Distance

The distance between the target and the device. You can customize the target distance or select the target distance as **Near**, **Middle**, or **Far**.

#### Humidity

Set the relative humidity of current environment.

3. Return to previous menu to save the settings.

---

#### Note

- You can go to **Settings** → **Device Settings** → **Device Initialization** → **Remove All**


**Measurement Tools** to initialize the temperature measurement parameters.

- For setting temperature unit, see **Set Unit**.
- 

### 4.2 Set Image Measurement

You can set measurement tools to measure the min., max., and center temperatures of the current scene.

#### Steps

1. Tap **Menu**, and select .
  2. Tap to select the temperature measurement tool as required. **Hot**, **Cold**, and **Center** are selectable.
  3. Tap **Back** to save and exit.
- 

#### Note

- The min., max., and center temperatures are displayed on the left top of the screen.
  - Tap the tool again to delete the rule.
- 

### 4.3 Set Temperature Alarm

When the temperature of targets triggers the set alarm rule, the device will perform configured actions, such as making audible warning and flash alarm.

#### Steps

1. Go to **Settings** → **Measurement Settings** → **Alarm Settings**.
2. Enable **Temperature Alarm** and set the alarm parameters.

#### Alarm Threshold

When the tested temperature exceeds the threshold, the device sends alarm notification to the client software. The device will buzz if the audible warning is enabled, and the flashlight will flash if the flashing alarm is enabled.

#### Alarm Linkage

- **Audible Warning:** The device beeps when target temperature exceeds the alarm threshold.
  - **Flashing Alarm:** The flash light flashes when target temperature exceeds the alarm threshold.
-

4. Tap < to save and exit.

## Chapter 5 Picture and Video

The device can record videos and capture snapshots. The files are saved in the local albums.

---

### Note

- The device does not support capturing or recording when the menu is shown.
  - When the device is connected to your PC, it does not support capturing or recording.
  - Go to **Settings** → **Capture Settings** → **Filename Header** to set the filename header for capturing or recording, so as to distinguish the files recorded in a specify scene.
  - Go to **Settings** → **Device Settings** → **Device Initialization** to initialize the memory card as needed.
- 

## 5.1 Capture Picture


### Before You Start

Enable the flashlight via the swipe-down menu in dark environment.

### Steps

1. Go to **Settings** → **Capture Settings**.
  - 1) Set **Capture Mode**. Three modes are available.

#### Capture One Image

Press  once to capture one image.

---


### Note

If you need to edit captured images immediately, enable **Edit before Saving**.

---



#### Continuous Capture

Set the continuous capture amount after select this mode.

Press  in live view, and device captures the set amount of images continuously.

#### Scheduled Capture

Set the interval for scheduled capture after select this mode.



Press  in live view, and the device captures images according to the set interval. Press  again to stop capturing.

- 2) Set the naming rule for the saved files. The default image naming is filename header + saving time. **Filename Header** is configurable. Saving time is the device system time when the saving occurs.
  - 3) Optional: If a visual image is needed to be saved separately, enable **Save Visual Image** and set **Visual Image Resolution**.
- 

### Note

If the targets are in poor light condition, enable **Flashlight**. The device turns on the flashlight when capturing images.

---


2. Tap  to exit. In the live view interface, aim the lens to your target and press  to capture images.
- 

### Note

- For **Capture One Image**, if **Edit before Saving** is NOT enabled, the live image freezes and is saved in the default saving album. If **Edit before Saving** is enabled, the device enters the image editing interface.
  - For **Continuous Capture/Scheduled Capture**, a counter displays in top of the screen showing the completed amounts of capturing.
- 

3. Edit the image.



Select text note and enter the editing page. Tap on screen to input content and tap  to save.



View the image information.




Move the image to a required album.



Delete the image.

### What to do next

- Tap  to enter albums to view and manage files and albums. See [Manage Albums](#) and [Manage Files](#) for operation instructions.
- You can connect your device to PC to export local files in albums for further use. See [Export Files](#).

## 5.2 Record Video

### Before You Start

Enable the flashlight via the swipe-down menu in dark environment.

### Steps

1. In the live view interface, hold the capture key to start recording. The recording icon and count down number display in the interface.

















Figure 2-7 Record Video

2. When you finish, press the capture key to stop recording. The recording video will be saved automatically.
3. Refer to [Export Files](#) to export the videos.

## 5.3 5.3 Manage Albums

The recorded image/video files are saved in the albums. You can create new albums, rename an album, change the default album, move files between the albums, and delete albums.

Task	Operations
Create a New Album	<ol style="list-style-type: none"> <li>1. Tap  to enter <b>Albums</b>.</li> <li>2. Tap  to add a new album.</li> <li>3. A soft keyboard is displayed, where you can enter the name of the album by touching the screen.</li> <li>4. Tap  to finish.</li> </ol> <hr/> <p> <b>Note</b></p> <p>The newly created album becomes the default saving album and appears at the top of the album list.</p> <hr/>
Rename an Album	<ol style="list-style-type: none"> <li>1. Tap  to enter <b>Albums</b>.</li> <li>2. Select the album to rename.</li> <li>3. Tap , and select <b>Rename</b>. A soft keyboard is displayed.</li> <li>4. Tap  to delete the old name, and enter the new name for the album by touching the screen.</li> <li>5. Tap  to finish.</li> </ol>
Change the Default Saving Album	<ol style="list-style-type: none"> <li>1. Tap  to enter <b>Albums</b>.</li> <li>2. Select the album you want to use as the default saving album.</li> <li>3. Tap , and select <b>Set as Default Saving Album</b>.</li> </ol> <hr/> <p> <b>Note</b></p> <p>The default saving album appears at the top of the album list.</p> <hr/>
Delete an Album	<ol style="list-style-type: none"> <li>1. Tap  to enter <b>Albums</b>.</li> <li>2. Select the album you want to delete.</li> <li>3. Tap , and select <b>Delete</b>. A prompt box appears on the interface.</li> <li>4. Tap <b>OK</b> to delete the album.</li> </ol>

Task	Operations
	<p> <b>Note</b></p> <p>The files in an album are deleted as well when deleting the album. Move the files to other albums if they are still needed. See <b><i>Manage Files</i></b> for instructions.</p>

## 5.4 View Recorded Files

### Steps





1. Tap  to enter **Albums**.
2. Tap to select the target album.
3. Tap to select a video or snapshot to open it.
4. Tap the image or video, and tap  to view more information.



Figure 2-8 View a File












### Note





- Files are arranged in chronological order, with the most recent at the top. If you fails to find the most recently taken snapshots or videos, please check the time and date settings of your device. See ***Set Time and*** for instructions. When you are viewing files, you can switch to other files by tapping  or .
- For more information contained in capture snapshots or videos, you can install the thermography client to analyze them.





## 5.5 Manage Files

You can move, delete, edit the recorded files, and add text notes to the files.

Task	Operations
Delete a File	<ol style="list-style-type: none"> <li>1. Tap  to enter <b>Albums</b>.</li> <li>2. Tap to select the album storing the file to be deleted.</li> <li>3. In the album, tap to view the file to be deleted.</li> <li>4. Tap the screen to show the menu bar below, and tap . A prompt box appears on the interface.</li> <li>5 Tap <b>OK</b> to delete the file.</li> </ol>
Delete Multiple Files	<ol style="list-style-type: none"> <li>1. Tap  to enter <b>Albums</b>.</li> <li>2. Tap to select the album storing the files to be deleted.</li> <li>3. In the album, tap , and tap the files to be deleted.</li> <li>4. Tap . A prompt box appears on the interface.</li> <li>5. Tap <b>OK</b> to delete the files.</li> </ol> <hr/> <p> <b>Note</b> You can also delete a single file in this way.</p> <hr/>
Move a File	<ol style="list-style-type: none"> <li>1. Tap  to enter <b>Albums</b>.</li> <li>2. Tap to select the album storing the file to be moved.</li> <li>3. In the album, tap to view the file to be moved.</li> <li>4. Tap the file to show the menu bar below, and select . The album list is displayed.</li> <li>5. Tap to select the album to move to.</li> </ol>
Move Multiple Files	<ol style="list-style-type: none"> <li>1. Tap  to enter <b>Albums</b>.</li> <li>2. Tap to select the album storing the files to be moved.</li> <li>3. In the album, tap , to select the files to be moved.</li> <li>4. Tap . The album list is displayed.</li> <li>5. Tap to select the album to move to.</li> </ol>

Task	Operations
	<hr/> <p> <b>Note</b></p> <p>You can also move a single file in this way.</p> <hr/>
Add Text Note on File	<ol style="list-style-type: none"> <li>1. Tap  to enter <b>Albums</b>.</li> <li>2. Tap to select the album storing the file to be edited.</li> <li>3. In the album, tap to view the file to be edited.</li> <li>4. Tap the screen to show the menu bar below, and tap . A soft keyboard is displayed.</li> <li>5. Enter the text note by touching the screen.</li> <li>6. Tap  to finish.</li> </ol> <p><b>What to do next</b></p> <p>You can open the edited photo to view the text note.</p>

 **Note**

You can tap  to select all files, and tap  to cancel the selection.

## 5.6 Export Files

Connect the device to your PC with supplied cable, you can export the recorded videos and captured snapshots.

### Steps

1. Connect the device to your PC with cable and open the detected disk.
2. Select and copy the videos or snapshots to PC to view the files.
3. Disconnect the device from your PC.

 **Note**

- Please make sure to turn off **Cast Screen** before connecting the device to your PC.
- For the first connection, the driver will be installed automatically.

## Chapter 6 Device Connections

### 6.1 Connect Bluetooth

You can record and hear the sound contained in the videos via bluetooth headsets after pairing the device with bluetooth headsets successfully.

#### Steps

1. Go to **Settings** → **Connections** → **Bluetooth**.
2. Tap  to enable **Bluetooth**.

---

#### **Note**

You can also tap  to quit pairing.

---

The device will search the nearby enabled bluetooth headsets and pair them automatically.


#### Result

After pairing you can hear the sound via the headsets while playing the video.

### 6.2 Cast Device Screen to PC

The device supports casting screen to PC by UVC protocol-based client software or player. You can connect the device to your PC via a type-C cable, and cast the real-time live view of the device to your PC.

#### Steps

1. Go to **Settings** → **Connections** → **Cast Screen**.
2. Tap  to enable the function.
3. Open UVC Alarm Client on your PC.
4. Connect the device to your PC via a type-C cable.

---

#### **Note**

Exporting files via USB connection is not allowed when you are casting the screen.

---

## What to do next

For more instructions about how to cast the screen, please visit our website:

<https://www.hikmicrotech.com>.

## 6.3 Connect Device to Wi-Fi

### Steps

1. Go to **Settings** → **Connections** → **WLAN**.
2. Tap  to enable Wi-Fi, and the searched Wi-Fi will be listed.

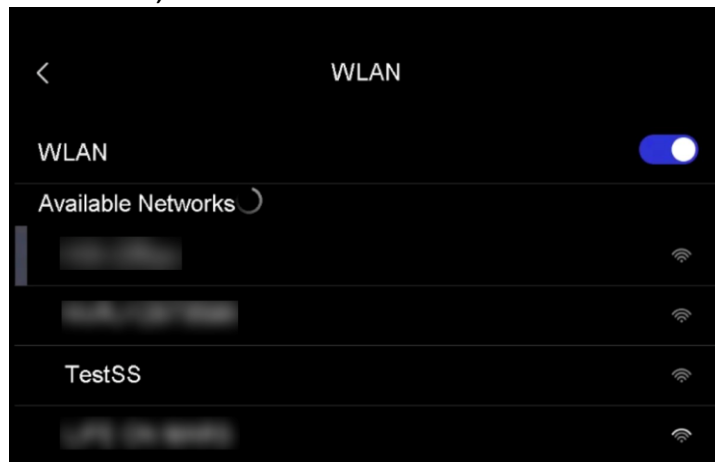


Figure 2-9 Wi-Fi List

3. Select the Wi-Fi to connect to. A soft keyboard is displayed.
4. Enter the password by touching the screen.

---

### Note

- DO NOT tap **space** in your password, or the password may be incorrect.
  - Please tap  to enter password into the password field.
- 

5. Tap  to save and connect Wi-Fi.

### Result


A Wi-Fi icon shows on the main interface when the connection is completed.

## 6.4 Set Device Hotspot


With the device hotspot, other equipment with Wi-Fi function can join the device

for data transmission.

### Steps

1. Go to **Settings** → **Connections** → **Hotspot**.
2. Tap  to enable the hotspot function. The hotspot name is the last 9 digits of the device serial No.
3. Set and join the hotspot.

### Using hotspot password


- a. Tap **Set Hotspot**. A soft keyboard is displayed.
- b. Set the password for the hotspot by tapping the screen.
- c. Tap  to finish.
- d. Enable the Wi-Fi function of other equipment and search the device hotspot to join.

### Using hotspot QR code

- a. Tap **QR Code**. A QR code is displayed.
- b. Scan the QR code with HIKMICRO Viewer to join the hotspot.

---

### Note

- DO NOT tap **space** in your password, or the password may be incorrect.
- The password should at least contain 8 digits, consisting of numbers and characters.
- Please tap  to enter password into the password field.

- 
4. Tap  to save.

## Chapter 7 Thermal View Mobile Client Connection

The device supports both Wi-Fi connection and hotspot. Connect the device to HIKMICRO Viewer, and you can control the device via mobile client.

### 7.1 Connect via Wi-Fi

#### Before You Start

Download and install HIKMICRO Viewer on your phone.

#### Steps

1. Connect your device to a Wi-Fi network. See [\*\*Connect Device to Wi-Fi\*\*](#) for instructions.
2. Connect your phone to the Wi-Fi network that the device is in.
3. Launch the app and follow the startup wizard to create, and register an account.
4. Search and add the device to the mobile client.

#### Result

You can view the live view, capture snapshots, and record videos via the client.

### 7.2 Connect via Hotspot

#### Before You Start

Download and install HIKMICRO Viewer on your phone.

#### Steps

1. Turn on the device hop spot and complete hot spot settings. See [\*\*Set Device Hotspot\*\*](#) for instructions.
2. Connect your phone to the hotspot of the device.
3. Launch the app and follow the startup wizard to create, and register an account.
4. Search and add the device to the mobile client.

#### Result

You can view the live view, capture snapshots, and record videos via the client.

## Chapter 8 System Settings


### 8.1 Set Macro Mode

In the macro mode, you can focus extremely close on a very small object, and the object appears much larger in the view (and in the final image) compared to the standard lens.

#### Before You Start

- Install the macro lens before using this function. Refer to the quick start guide of the macro lens for detailed operation.
- The macro lens is not included in the package. Please purchase it separately. The recommended model is HM-P201- MACRO.

#### Steps

1. Go to **Settings** → **Capture Settings** → **Macro Mode**.
2. Tap  to enable the function.


---

#### Note

- After the macro mode is enabled, only the emissivity can be modified. Parameters such as distance, image mode, parallax correction, and measurement range cannot be modified.
  - After this function is turned off, the parameters will be restored to the previous set values, and the measurement range will be set to auto switch.
- 

### 8.2 Set Time and Date

#### Steps

1. Go to **Settings** → **Device Settings** → **Time and Date**.
2. Set the date and time.
3. Tap  to save and exit.

---

#### Note

Go to **Settings** → **Device Settings** → **Display Settings** to enable or disable time and date display.

---

### **8.3 Set Unit**

Go to **Settings** → **Device Settings** → **Unit** to set the temperature unit and distance unit.

### **8.4 Set Language**

Go to **Settings** → **Device Settings** → **Language** to select a required language.

### **8.5 Set Auto-Rotation**

Turn on auto-rotation in swipe-down menu.

Or go to **Settings** → **Device Settings** → **Auto-Rotation** to turn on this function.



## Chapter 9 Maintenance

### 9.1 View Device Information

Go to **Settings** → **Device Settings** → **Device Information** to view the device information.

### 9.2 Upgrade Device

#### Before You Start

- Please download the upgrade file from the official website <http://www.hikmicrotech.com> or contact the custom service and technical support to get the upgrade file first.
- Make sure that the device battery is fully charged.
- Make sure that Auto Power-off function is turned-off to avoid accidental suspension during upgrading.

#### Steps

1. Connect the device to your PC with cable and open the detected disk.
2. Unzip the upgrade file and copy it to the root directory of the device.
3. Disconnect the device from your PC.
4. Reboot the device and then it will upgrade automatically. The upgrading process will be displayed in the main interface.

---

#### Note

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

---

### 9.3 Restore Device

Go to **Device Settings** → **Device Initialization** → **Restore Device** to initialize the device and restore default settings.

## 9.4 Format Storage

Format storage before first use of it.

Select , and go to **Device Settings** → **Device Initialization** → **Format Storage** to initialize the device memory.

## 9.5 About Calibration

We recommend you send the device back for calibration once a year, and please contact the local dealer for the information on maintenance points. For more detailed calibration services, please refer to

**<https://www.hikmicrotech.com/en/support/calibration-service/>**.

## Chapter 10 Appendix

### 10.1 Common Material Emissivity Reference

Material	Emissivity
Human Skin	0.98
Printed Circuit Board	0.91
Concrete	0.95
Ceramic	0.92
Rubber	0.95
Paint	0.93
Wood	0.85
Pitch	0.96
Brick	0.95
Sand	0.90
Soil	0.92
Cloth	0.98
Hard Paperboard	0.90
White Paper	0.90
Water	0.96

### 10.2 FAQ

Scan the following QR code to get device common FAQ.





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Instagram: hikmicro\_thermography    YouTube: HIKMICRO Thermography  
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**UD33843B**