HIKMICRO

PocketE

Thermal Camera
User Manual

Contact Us

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

- CAUTION: Risk of explosion if the battery is replaced by an incorrect type. Replace with the same or equivalent type only. Dispose of used batteries in conformance with the instructions provided by the battery manufacturer.
- Improper replacement of the battery with an incorrect type may defeat a safeguard (for example, in the case of some lithium battery types).
- Do not dispose of the battery into fire or a hot oven, or mechanically crush or cut the battery, which may result in an explosion.
- Do not leave the battery in an extremely high temperature surrounding environment, which may result in an explosion or the leakage of flammable liquid or gas.
- Do not subject the battery to extremely low air pressure, which may result in an explosion or the leakage of flammable liquid or gas.
- 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 three months 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.
- When the device is powered off and the RTC battery is full, the time settings can be kept for 6 months.
- In the first use, charge the device for more than 3 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

- DO NOT maintain the camera when it is powered on, or it may cause electric shock! 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.
- 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.

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.
- 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 device is suitable for indoor use only.

Emergency

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

Calibration Service

- Please contact the local dealer for the information on maintenance points. For more detailed calibration service, please refer to *https://www.hikmicrotech.com/en/support/*.

Technical Support

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

Limited Warranty

Scan the QR code for the product warranty policy.

Manufacture Address

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

Hangzhou Microimage Software Co., Ltd.

COMPLIANCE NOTICE

The thermal series products might be subject to export controls in various countries or regions, including without limitation, the United States, European Union, United Kingdom and/or other member countries of the Wassenaar Arrangement. Please consult your professional legal or compliance expert or local government authorities for any necessary export license requirements if you intend to transfer, export, re-export the thermal series products between different countries.

Symbol Conventions

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

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

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CONTENTS

CHAPTER 1 OVERVIEW

1.1 Notice to User

This manual describes and explains the features for multiple camera models. Because the camera models of a series have different features, this manual may contain descriptions and explanations that do not apply to your particular camera model.

Not all the camera models of a series support the mobile applications, software, and all their functions mentioned (or not mentioned) in this manual. Please refer to the user manuals of the application and software for more detailed information.

This manual is updated on a regular basis. It means that this manual may not contain the information about the new features of the latest firmware, mobile clients, and software.

1.2 Device Description

The pocket thermal camera is a device with both visual images and thermal images. It can measure temperatures, record videos, take snapshots, and trigger alarms.

With its Wi-Fi/hotspot function, it can work with Apps on your phone.

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

1.3 Main Function

SuperIR

The camera supports SuperIR to enhance object outlines. Some camera models can display the real-time SuperIR image in live view.

Scene Mode

The camera supports multiple scene modes for different detection targets and scenarios. Some scene modes support SuperScene, an intelligent function. It can assist in anomaly detection and give prompts on top of the live view interface.

Temperature Measurement

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

Image Mode

The camera can display thermal view and/or visual view. Thermal, Fusion, PIP, Blending, and Visual are selectable

Palettes

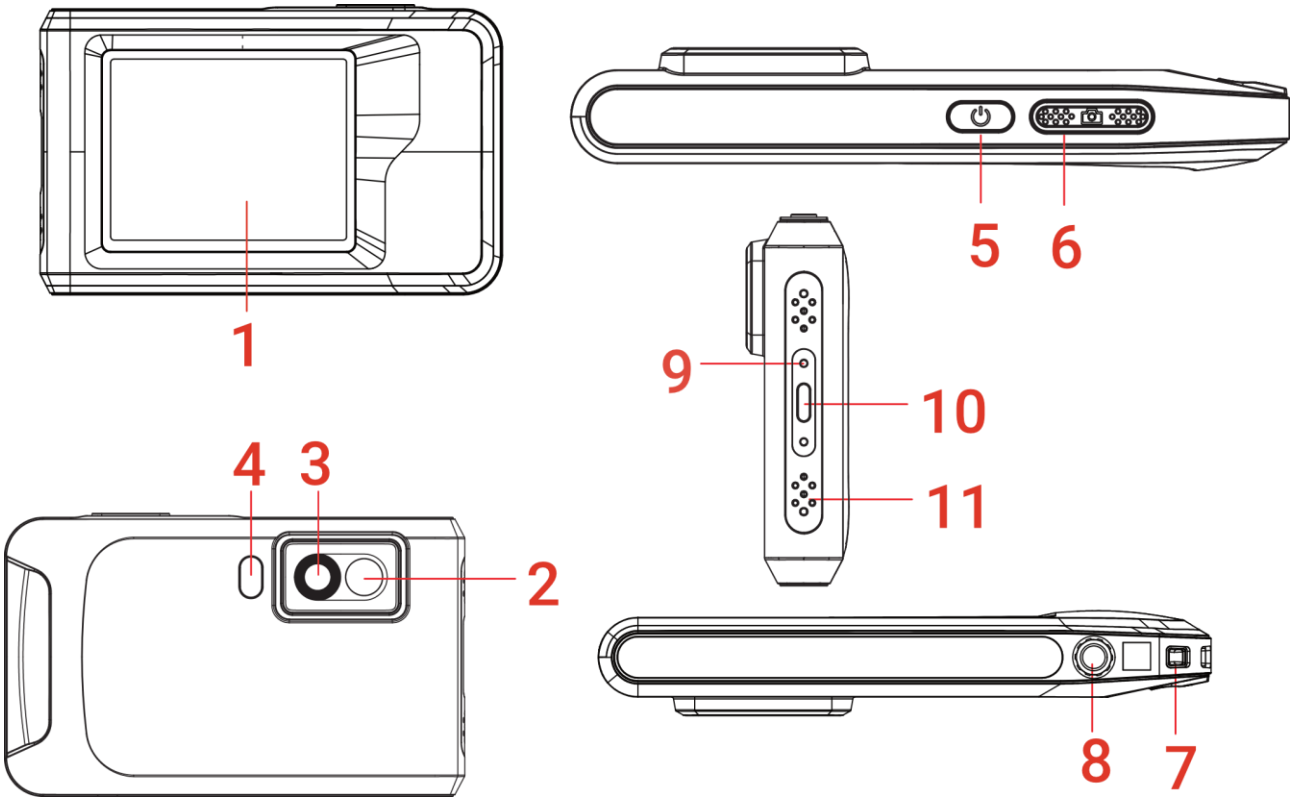
The camera supports multiple color palettes for different targets and user preference.

Client Software Connection

Scan the QR code to download the HIKMICRO Viewer App for live view, capture snapshots, record videos, etc.

Download HIKMICRO Analyzer (*https://www.hikmicrotech.com/en/industrial-products/hikmicro-analyzer-software.html*) to analyze files.

1.4 Appearance



No.	Description	Function
1	Touch Control Screen	View image and operate device with touch control.
2	Visual Lens	View the visual image.
3	Thermal Lens	View the thermal image.
4	Flash Light	Fill light on objects and output flashing alarm.
5	Power Key	◆ Hold: Power on/off the device. ◆ Press: Manual sleep /Wake up the device.

No.	Description	Function
6	Capture Key	◆ Press to capture an image. ◆ Hold to start recording a video and press again to stop.
7	Strap Attachment Point	Mount the wrist strap.
8	Tripod Mount	Mount the tripod.
9	Charging Indicator	Indicate the charging status of the device. ◆ Solid red: charging normally ◆ Flashing red: charging exception ◆ Solid green: fully charged
10	Type-C Interface	Charge the device or export files with the supplied USB cable.
11	Microphone	Record audio.

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 "Image 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.

CHAPTER 2 PREPARATION

2.1 Charge Device

The camera is equipped with a built-in battery. It is recommended to charge the camera with the included USB cable and the Type-C interface on camera. Do not use the USB-C to USB-C cable of other manufacturers. The power adapter (not included) should meet the following standards:

- Output Voltage/Current: 5 VDC/2 A
- Minimum Power Output: 10 W

Check the power indicator for the charging status:

- Solid red: charging normally
- Flashing red: charging exception
- Solid green: fully charged

NOTE

- The power delivered by the charger must be between min 8 Watts required by the radio equipment, and max 10 Watts in order to achieve the maximum charging speed.
- If the camera is not in use for an extended period and is over-discharged, it is recommended to charge for at least 30 min before powering it on.
- It is recommended to use the USB cable included in the package for both charging and data transfer.

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.

NOTE It may take at least 6 s until the device is ready for using when you power on it.

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 Duration

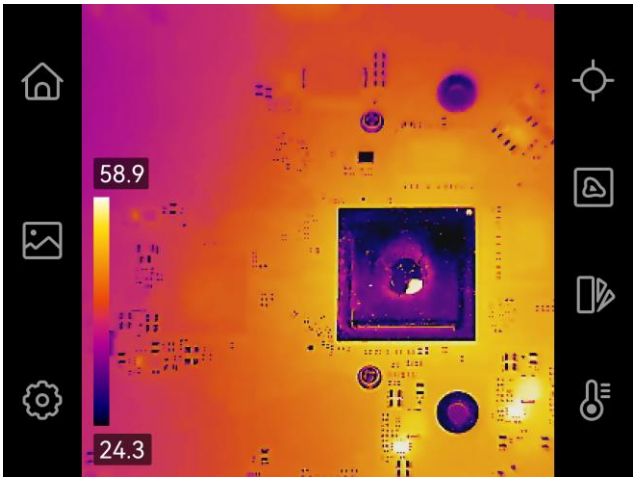
Select ⚙, and go to **Device Settings** > **Auto Power-off** to set the automatic shutdown time for device as required.

2.3 Operation Method

The device supports touch-screen control. You can tap the screen to operate the device.

2.4 Menus and Operations

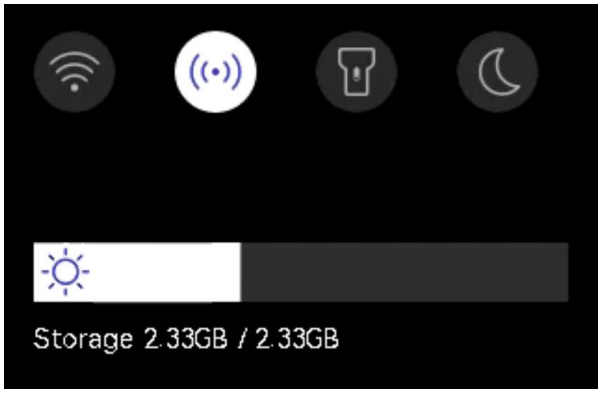
Live View



Icon	*Description*
	Return to live view interface.
	Enter albums to view captured images and videos. See ***7.3 Manage Albums*** for instructions.
	Adjust device local settings.
	Turn on/off measurement tools. See *4.2 Set Measurement Tools* for instructions.
	Switch image mode from thermal, visual, fusion, etc. See *6.3 Set Display Image Mode* for instructions.
	Switch thermal image color palettes. You can quick change palettes via **MENU** > **Palettes.**
	Adjust level & span for thermal image display. See *6.4 Adjust Level & Span* for instructions.

Swipe-down Menu

In live view interface, swipe down from the top of the screen to invoke the swipe-down menu. With this menu, you can turn on/off device function, change display theme, and adjust screen brightness.



Icon	Description
	Turn on/off Wi-Fi. For Wi-Fi configuration, see *8.2.1 Connection via Wi-Fi* for instructions.
	Turn on/off hotspot. For hotspot configuration, see *8.2.2 Connection via Hotspot* for instructions.
	Turn on/off LED light.
	Switch themes, day and night are supported.
	Adjust screen brightness.

CHAPTER 3 START WITH SCENE MODE

To conduct fast anomaly detection, several preset templates are included in **Scene** mode for various detection scenarios. Users can choose an appropriate scene or customize a scene as per targets, and set high temperature alarms as needed.

1. Select an appropriate scene mode. See *3.1 Select a Scene Mode* for details.
2. (Optional) Fine-tune scene mode parameters as needed. See *3.2 (Optional) Set Scene Mode Parameters* for details.
3. (Optional) Set alarms as needed. See *Chapter 5 (Optional)* Set Alarm*s* for details.
4. Observe detection results in live view interface.

3.1 Select a Scene Mode

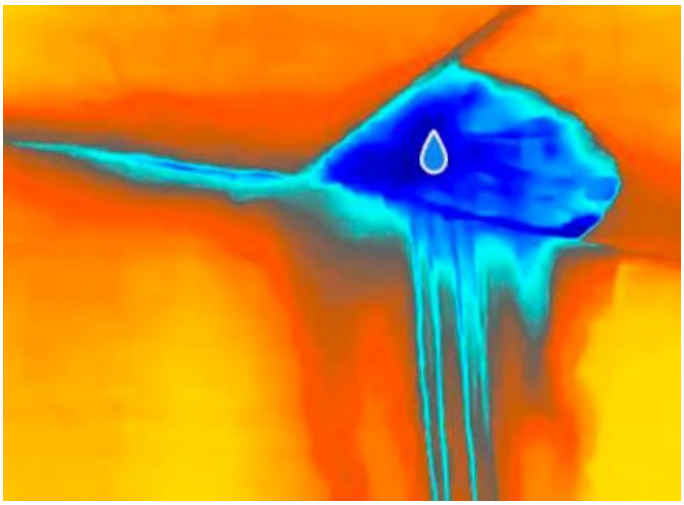
In live view, tap > **Scene** to choose an appropriate scene mode.

NOTE Default value of parameters work for most cases. If users want to fine-tune the related parameters as needed, please refer to 3.2 (Optional) Set Scene Mode Parameters.

Water Leak

To inspect the water leak of building ceilings, walls and floors indoors.

SuperScene technology can assist in fast recognition for anomalies during water leak detection. When **SuperScene** is enabled and water leak anomalies are detected, *Suspect* will be displayed on top of live view.



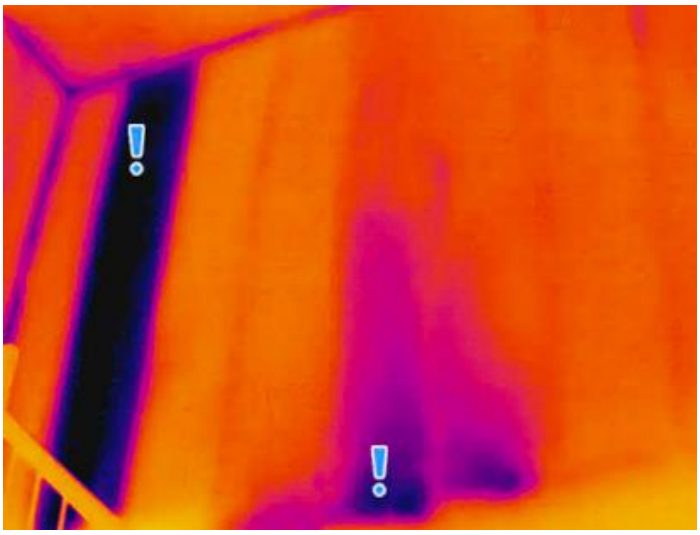
NOTE
- Missed or even wrong reporting emerges when temperature difference of the areas with leak anomalies is too subtle to be recognized, etc.

- It is recommended to give a second diagnosis based on SuperScene function. The algorithm of SuperScene function is being updated.
- Switching image modes is not supported in this mode.

Insulation

To detect indoor insulation deficiency of building walls, ceilings, common users can apply this scene.

SuperScene technology can assist in fast recognition for anomalies during insulation detection. When **SuperScene** is enabled and insulation anomalies are detected, *Suspect* will be displayed on top of live view.



NOTE

- Missed or even wrong reporting emerges when temperature difference of the areas with leak anomalies is too subtle to be recognized, etc.
- It is recommended to give a second diagnosis based on SuperScene function. The algorithm of SuperScene function is being updated.
- Switching image modes is not supported in this mode.

Floor Heating

To detect and observe the faults of floor heating system.

Electrical Faults

To detect and observe the faults of wires, circuits, electrical components, terminators, etc.

Solar Panel

To detect and observe the faults of solar panels.

Custom

Users can customize a mode to save desired temperature measurement parameters for future use. See *3.2 (Optional) Set Scene Mode Parameters.*

3.2 (Optional) Set Scene Mode Parameters

To obtain a more precise detection results, users can fine-tune the related parameters through > **Scene.**

NOTE Parameters vary from the different scenes.

Parameters	*Description*
Emissivity	Set the emissivity according to your target.
Palettes	Thermal images are created by temperature difference. Palettes are colors standing for temperature. Users can choose a palette according to preferred colors. Temperature scale on left supports browsing color-temperature relationship in the image. See *6.4 Adjust Level & Span*.
Temperature Range	Select the temperature measurement range. The device can detect the temperature and switch temperature measurement range automatically in **Auto Switch** mode
Alarm	When the temperature of targets triggers the set alarm rule, users can be notified in the set ways. See *Chapter 5 (Optional) Set Alarms.*
Color Distribution	**Linear** and **Histogram** modes are selectable for different application scenes, so as to display more details. ◆ **Linear**: Detect small high temperature targets in low temperature background to enhance and display more details of high temperature targets, such as cable connectors. ◆ **Histogram**: Detect small low temperature targets in high temperature areas to enhance temperature difference and remain details of low temperature objects, such as cracks.

CHAPTER 4 PRECISE TEMPERATURE MEASUREMENT

To get more precise and real-time temperature of the target, user can set spot tools and high temperature alarm as needed.

1. Select a proper scene to speed up the measurement settings. See *Chapter 3 Start With Scene Mode.*
2. Verify temperature values in the top-left corner of live view. If they are not precise enough, fine-tune temperature measurement parameters. See *4.1 Set Temperature Measurement Parameters*.
3. Set spot tools to get the real-time temperature of the highest/lowest/center temperature spot. See *4.2 Set Measurement Tools.*
4. (Optional) Set the alarm for high temperature targets. See *Chapter 5 (Optional)* Set Alarms.
5. Observe temperature results in live view interface.

4.1 Set Temperature Measurement Parameters

4.1.1 Adjust Distance

The distance between the camera and the observation target affects the accuracy of the temperature results. Before temperature measurement, users should set the distance first.

If users desire for a predefined template according to the approximate distance between the camera and the target, there are **Near**/**Middle**/**Far** modes available.

If users desire for more accurate results, there are **Custom** mode available.

1. In live view, tap > **Temp Measurement Settings > Distance**.
2. Choose a distance mode.

NOTE Users can quick adjust temperature measurement distance in live view by scrolling the distance wheel.

4.1.2 Adjust Emissivity

Emissivity directly affects the measurement accuracy and it is necessary to be re-adjusted according to the characteristics of the target material.

1. Go to > **Scene** to select a scene.
2. In scene setting interface, choose a recommended value or customize it.
3. Tap < to save and exit.

4.1.3 (Optional) Adjust Other Parameters

To improve the accuracy of temperature measurement, fine-tune temperature measurement parameters through > **Temp Measurement Settings**.

Parameters	*Description*
Refl. Temp.	If any object (not the target) of high temperature is in the scene, and the target emissivity is low, the target would reflect the high temperature object, resulting in poor accuracy. Set **Refl. Temp** as the value of high temperature object to cancel the interference.
Humidity	Set the humidity of current environment the camera is in.

4.2 Set Measurement Tools

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

1. Tap in live view.
2. Tap to select a temperature measurement tool as required. **Hot**, **Cold**, and **Center** are selectable.
3. Tap any place on screen to save and exit.

NOTE

- The min., max., and center temperatures are displayed on the top left of the screen. Tap the tool again to delete.
- If there is serious inaccuracy in temperature results, turn off **SuperTemp** button by > **Temp Measurement Settings** > **SuperTemp.** SuperTemp function is ONLY supported by some models.

4.3 Clear Measurement Tools

Users can clear all the set measurement tools via > **Device Settings** > **Device Initialization** > **Remove All Measurement Tools**. And a window pops up to prompt **Setting Succeed**.

NOTE The palette is also restored to the default settings.

CHAPTER 5 (OPTIONAL) SET ALARMS

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

1. Select a scene mode via > **Scene.**
2. In **Scene** setting interface, tap **Alarm** to enter **Alarm Settings** interface.

NOTE ONLY some scenes support Alarm. Please refer to your actual device.

3. Enable **Temperature Alarm** button.
4. Tap **Alarm Threshold** to set the temperature upper limits by scrolling the wheel.
5. Tap < to save and exit.

NOTE If the target temperature exceeds the set value of **Alarm Threshold**, the **Max.** temperature row on the top left of live view will be marked in red.

6. (Optional) Tap > **Temp Measurement Settings** > **Alarm Linkage** to set sound and/or flash light alarms.

NOTE **Alarm Linkage** is a common parameter which works for all the triggered alarms.

CHAPTER 6 DISPLAY SETTINGS

6.1 Set Screen Brightness

Go to **Local Settings** > **Display Settings** > **Screen Brightness** to adjust the screen brightness.

Or tap , and drag it to adjust the screen brightness from swipe-down menu.

6.2 Set SuperIR

The device supports **SuperIR** on live view (for some models) and on snapshots which can enhance the object outlines for better image display. The actual effect is subject to the actual product.

- On live view: For some models, the object outlines can be enhanced in live view when SuperIR is on.
- On captured images: the object outlines in the image are enhanced after SuperIR is on.

NOTE SuperIR is turned on by default. Go to **Local Settings** > **Capture Settings** > **SuperIR** to turn it off.

6.3 Set Display Image Mode

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

1. Tap .
2. Tap the icons to select an image mode.

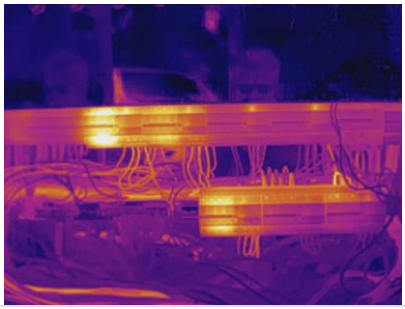
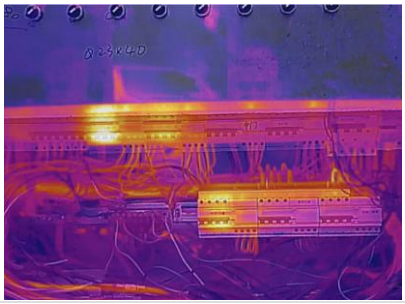
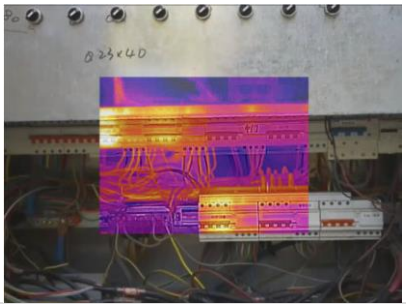
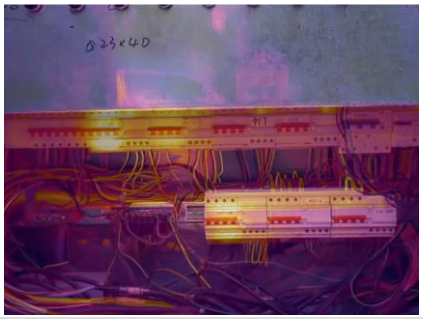
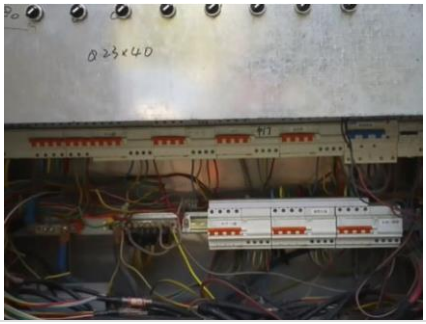
Image Mode	*Description*	*Example*
Thermal	In thermal mode, the device displays the thermal view.	

Image Mode	Description	Example
Fusion	Thermal object image with visual outlines.	
PIP	In **PIP** (Picture in Picture) mode, the device displays thermal view inside the visual view. You can adjust the size, distance of the PIP.	
Blending	In **Blending** mode, the device displays the mixture view of thermal channel and visual channel. You can select the visual-thermal **Level** to change the visual-thermal ratio.	
Visual	Visual object image only.	

3. Tap screen to exit.

6.4 Adjust Level & Span

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

Before You Start

Choose an appropriate palette.

- For model with scene mode, select a scene, and tap **Palettes** in scene setting interface to choose a proper one.

- For model without scene mode, tap **MENU**, and select to get a proper one.

1. Tap in live view.
2. Select auto adjustment or manual adjustment .

Auto	Select . The device adjusts display temperature range automatically.
Manual	1) Tap on an interest area of the screen. A circle is displayed around the area, and the display temperature range readjusts to show as many details of the area as possible. 2) Tap on the min./max. value of the temperature scale to lock or unlock the value. 3) Scroll the wheel to fine-tune the max./min. temperature respectively. 4) Tap **OK** to finish. **Note** When the min. and max. temperature are both unlocked, scrolling the wheel will adjust the min. and max. temperature at the same time.

6.5 Display On-Screen Info

Tap and go to **Local Settings** > **Display Settings** to turn on/off the information for on-screen display.

- **Time and Date**: Device time and date.
- **Parameters**: Temperature measurement parameters, for example, target emissivity.
- **Brand Logo**: The brand logo is a manufacturer logo overlapped on images.
- **Temperature Scale:** Display the palettes bar and temperature range on the left side of the screen.

CHAPTER 7 PICTURE AND VIDEO

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.
- Tap and go to **Local Settings** > **Device Settings** > **Device Initialization** to initialize the storage as needed.

7.1 Capture Picture

In live view, press to capture a snapshot. Enable the flashlight via the swipe-down menu in dark environment.

You can also set the following parameters in **Local Settings** > **Capture Settings** as needed.

Parameters	*Description*
SuperIR	◆ Enable **SuperIR** before capturing to enhance the object outlines of the captured images.
Save Visual Image	◆ If a visual image is needed to be saved separately, enable **Save Visual Image** first.
Capture Mode	◆ **Capture One Image**: Press once to capture one image. ◆ **Scheduled Capture**: Set **Interval** (the time interval of each snapshot to be taken) and **Number** (the number of snapshots to be taken in a roll, ranging from 1 to 10,000). Press in live view, and the camera captures the set number of images according to the set interval. Press again to stop capturing.
Filename Header	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.
File Naming	The files can be named after **Time Stamp** or **Numbering** (filename header + sequence number).

NOTE

- For **Capture One Image**, the live image freezes and is saved in the default saving album.
- For **Scheduled Capture**, a counter displays in live view showing the completed amounts of capturing.

What to do next

- Tap to enter albums to view and manage files and albums. See *7.3 Manage Albums* and *7.5 Manage Files* for operation instructions.

- You can connect your device to PC to export local files in albums for further use. See *7.6 Export Files*.

7.2 Record Video

Before You Start

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

1. (Optional) In live view, tap , and go to **Capture Settings** > **Record Audio** to turn on/off the sound during video recording.
2. In the live view interface, hold the capture key to start recording. The recording icon and count down number display in the interface.
3. When you finish, press to stop recording. The recording video will be saved automatically.

7.3 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	*1)* Tap to enter **Albums**. *2)* Tap + to add a new album. *3)* A soft keyboard is displayed to input the album name. *4)* Tap ✓ to finish. NOTE The newly created album becomes the default saving album and appears at the top of the album list.
Rename an Album	*1)* Tap to enter **Albums**. *2)* Select the album to rename. *3)* Tap ···, and select **Rename**. A soft keyboard is displayed. *4)* Enter the new name with the soft keyboard. *5)* Tap ✓ to finish.
Change the Default Saving Album	*1)* Tap to enter **Albums**. *2)* Select the album you want to use as the default saving album. *3)* Tap ···, and select **Set as Default Saving Album**. NOTE Default saving album appears at the top of the album list.
Delete an Album	*1)* Tap to enter **Albums**.

Task	Operations
	2) Select the album you want to delete. 3) Tap ···, and select **Delete**. A dialog box appears on the interface. 4) Tap **OK** to delete the album. NOTE 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 *5.5 Manage Files* for instructions.

7.4 View Files

1. Press to enter **Albums**.
2. Tap to select the album storing the files.
3. Tap to select the video or snapshot to view.
4. View the selected file and relevant information.

NOTE

- Files are arranged in chronological order, with the most recent at the top. If you fail to find the most recently taken snapshots or videos, please check the time and date settings of your device. See *9.1Set Time and Date* 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 software to analyze them.

7.5 Manage Files

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

Task	Operations
Delete a File	1) Tap to enter **Albums**. 2) Tap to select the album storing the file to be deleted. 3) In the album, tap to view the file to be deleted. 4) Tap the screen to show the menu bar below, and tap . A dialog box appears on the interface. 5) Tap **OK** to delete the file.
Delete Multiple Files	1) Tap to enter **Albums**. 2) Tap to select the album storing the files to be deleted. 3) In the album, tap , and tap the files to be deleted. 4) Tap . A dialog box appears on the interface. 5) Tap **OK** to delete the files.

Task	Operations
Move a File	1) Tap to enter **Albums**. 2) Tap to select the album storing the file to be moved. 3) In the album, tap to view the file to be moved. 4) Tap the file to show the menu bar below, and select . The album list is displayed. 5) Tap to select the album to move to.
Move Multiple Files	1) Tap to enter **Albums**. 2) Tap to select the album storing the files to be moved. 3) In the album, tap to select the files to be moved. 4) Tap . The album list is displayed. 5) Tap to select the album to move to.
Add Text Note on File	1) Tap to enter **Albums**. 2) Tap to select the album storing the file to be edited. 3) In the album, tap to view the file to be edited. 4) Tap the screen to show the menu bar below, and tap . A soft keyboard is displayed. 5) Enter the text note by touching the screen. 6) Tap to finish. ***What to do next*** You can open the edited photo to view the text note.

NOTE You can tap / to select/deselect all files in an album after tapping .

7.6 Export Files

7.6.1 Export via HIKMICRO Viewer

1. Launch HIKMICRO Viewer and add the device. Refer to *Chapter 8 Device Connections*.
2. Select **On-Device Files** on the app to access the on-device albums.
3. Select a file, and tap **Download** to save to your local albums.

7.6.2 Export via PC

1. Connect the device to your PC with the supplied USB cable, and select **USB Drive** mode as the USB mode in the prompt on the device. In **USB Drive** mode, casting screen is not supported.
2. Open the detected disk, copy and paste the videos or snapshots to PC to view the files.
3. Disconnect the device from your PC.

NOTE For the first connection, the driver will be installed automatically.

CHAPTER 8 DEVICE CONNECTIONS

When the device is connected to certain applications or software clients on your mobile phone or computer, you can browse the real-time image in the camera, record videos and capture snapshots via phones or computers.

8.1 Cast Device Screen to PC

The device supports casting screen to PC by HIKMICRO Analyzer, a UVC protocol-based client software. You can cast the live view of the device to your PC, take snapshots and record videos via the client.

Please visit our website *www.hikmicrotech.com* or contact our technical supports or customer service teams for installation packages, and download and install HIKMICRO Analyzer.

See the user manual of HIKMICRO Analyzer client for specific connection and more operations.

8.2 Connect Device to HIKMICRO Viewer

Connect the device to HIKMICRO Viewer via hotspot or Wi-Fi, and users can view image, capture snapshot, and record videos on mobile phones.

8.2.1 Connection via Wi-Fi

Before You Start

Scan the QR code below to download and install HIKMICRO Viewer on your phone.

Android iOS

NOTE

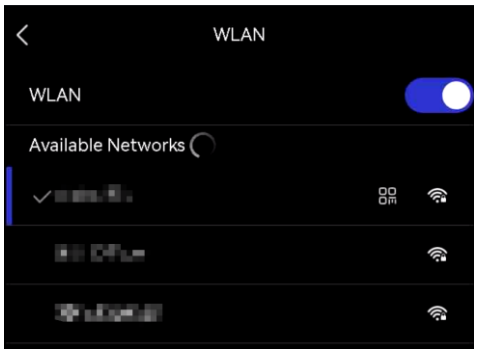
- DO NOT tap **space** in your password, or the password may be incorrect.
- Please tap ↵ to enter password into the password field.

1. Connect your device to a Wi-Fi network.
   1) In live view, tap ⚙ and go to **Connections** > **WLAN.**
   2) Tap ◯ to enable Wi-Fi, and the searched Wi-Fi will be listed.

3) Select a Wi-Fi to connect to. A soft keyboard is displayed.
4) Tap ✓ to save the settings.

2. Add the device to HIKMICRO Viewer.

- Using Wi-Fi password.
  1) Select the same Wi-Fi network the device is in on your phone, enter password and join in.
  2) Launch HIKMICRO Viewer.
  3) Tap **+** > **Add Device** > **Connect** to add the device.
- Scanning the Wi-Fi QR code.
  1) Tap next to the joined Wi-Fi on device to show the Wi-Fi QR code.
  2) Launch HIKMICRO Viewer.
  3) Tap **+** > **Scan QR Code** to aim the scanning frame at the code.
  4) Tap **Join** in the pop-up window on your phone to confirm the settings.



8.2.2 Connection via Hotspot

Before You Start

Scan the QR code below to download and install HIKMICRO Viewer on your phone.

Android iOS

1. In live view, tap and go to **Connections** > **Hotspot**.
2. Tap to enable the hotspot function. The hotspot name is the last 9 digits of the device serial number.
3. Set the device's hotspot and join it with your phone.
   - **Using hotspot password:**
     1) Tap **Set Password**. A soft keyboard is displayed.
     2) Set the password for the hotspot by tapping the screen.

3) Tap ✓ to finish.

4) Enable the Wi-Fi function of your phone and search the device hotspot to join.

◆ **Using hotspot QR code:**

1) Launch HIKMICRO Viewer, and tap **+** > **Scan QR Code.**

2) Aim the phone camera at the QR code of the device hotspot.

3) Tap **Join** > **Connect** in the pop-up window on your phone to confirm the settings.

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.

CHAPTER 9 SYSTEM SETTINGS

9.1 Set Time and Date

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

NOTE Go to **Local Settings** > **Display Settings** to turn on/off time and date display.

9.2 Set Unit

Go to **Local Settings** > **Display Settings** > **Unit** to set the temperature unit and distance unit.

9.3 Set Language

Go to **Local Settings** > **Device Settings** > **Language** to select a required language.

CHAPTER 10 MAINTENANCE

10.1 View Device Information

Go to **Local Settings** > **Device Settings** > **About** to view the device information.

10.2 Upgrade Device

10.2.1 Upgrade Device via Upgrade File

Before You Start

Please download the upgrade file from the official website *http://www.hikmicrotech.com* or contact the customer service and technical support to get the upgrade file first.

1. Connect the device to your PC via the supplied USB cable, and select **USB Drive** as the USB mode in the prompt on the device.
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 Local Settings > Device Settings > About.

10.2.2 Upgrade Device via HIKMICRO Viewer

Before You Start

Make sure that you have installed HIKMICRO Viewer on your phone. Please see *8.2 Connect Device to HIKMICRO Viewer* for instruction.

1. Launch HIKMICRO Viewer on your phone.
2. Upgrade the device. You can choose one of the following path:
   - In the home screen, tap **Device Upgrade** > **Check for Updates**.
   - In the home screen, tap **Device Info** > **Device Upgrade > Check for Updates**.

10.3 Restore Device

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

10.4 Save Operation logs

The device can collect its operation logs and save in the storage only for troubleshooting.

You can turn on/off this function in **Local Settings** > **Device Settings** > **Save Logs**.

You can connect the camera to PC using the supplied USB cable, and select **USB Drive** as the USB mode on camera to export the operation logs (.log files) in the root directory of the camera, if necessary.

10.5 Initialize Storage

Go to **Device Settings** > **Device Initialization** > **Format Storage** to initialize the storage.

> ⚠ **Caution** If there are files, make sure that the files have been backed up before formatting. Once the storage is initialized, data and files cannot be recovered.

10.6 About Calibration

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*.

CHAPTER 11 FAQ

Scan the following QR code to get device common FAQ.

LEGAL INFORMATION

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 (*http://www.hikmicrotech.com*).

Please use this Manual with the guidance and assistance of professionals trained in supporting the Product.

Trademarks

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Disclaimer

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

REGULATORY INFORMATION

These clauses apply only to the products bearing the corresponding mark or information.

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 Conformity Statement

CE

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).

Hereby, Hangzhou Microimage Software Co., Ltd. declares that this device (refer to the label) is in compliance with Directive 2014/53/EU.

The full text of the EU declaration of conformity is available at the following internet address: *https://www.hikmicrotech.com/en/support/download-center/declaration-of-conformity/.*

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).

RF Exposure Information

This device has been tested and meets applicable limits for Radio Frequency (RF) exposure.

Frequency Bands and Power (for CE)

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 5.875 GHz): 14 dBm

5.15-5.35GHzバンドは室内でのみ使用になります。

For the device without a supplied power adapter, use the power adapter provided by a qualified manufacturer. Refer to the product specification for detailed power requirements.

For the device without a supplied battery, 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

Regulation (EU) 2023/1542(Battery Regulation): This product contains a battery and it is in conformity with the Regulation (EU) 2023/1542. The battery cannot be disposed of as unsorted municipal waste in the European Union. See the product documentation for specific battery information. The battery is marked with this symbol, which may include lettering to indicate cadmium (Cd), or lead (Pb). For proper recycling, return the battery to your supplier or to a designated collection point. For more information see: 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 5725-5875 MHz shall comply with the e.i.r.p. limits specified for point-to-point and non point-to-point operation as appropriate.

Users should also be advised that high-power radars are allocated as primary users (i.e. priority users) of the bands 5250-5350 MHz and 5650-5850 MHz and that these radars could cause interference and/or damage to LE-LAN devices.

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 5725-5875 MHz doivent respecter le pire limites spécifiées pour le point-à-point et l'exploitation non point à point, le cas échéant.

Les utilisateurs de radars de haute puissance sont désignés utilisateurs principaux (c.-à-d., qu'ils ont la priorité) pour les bandes 5250-5350 MHz et 5650-5850 MHz et que ces radars pourraient causer du brouillage et/ou des dommages aux dispositifs LAN-EL.

KC

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前述合法通信，指依電信管理法規定作業之無線電通信。

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應避免影響附近雷達系統之操作。

INFORMATIONEN FÜR PRIVATE HAUSHALTE

1. Getrennte Erfassung von Altgeräten:

Elektro- und Elektronikgeräte, die zu Abfall geworden sind, werden als Altgeräte bezeichnet. Besitzer von Altgeräten haben diese einer vom unsortierten Siedlungsabfall getrennten Erfassung zuzuführen. Altgeräte gehören insbesondere nicht in den Hausmüll, sondern in spezielle Sammel- und Rückgabesysteme.

2. Batterien und Akkus sowie Lampen:

Besitzer von Altgeräten haben Altbatterien und Altakkumulatoren, die nicht vom Altgerät umschlossen sind, die zerstörungsfrei aus dem Altgerät entnommen werden können, im Regelfall vor der Abgabe an einer Erfassungsstelle vom Altgerät zu trennen. Dies gilt nicht, soweit Altgeräte einer Vorbereitung zur Wiederverwendung unter Beteiligung eines öffentlich-rechtlichen Entsorgungsträgers zugeführt werden.

3. Möglichkeiten der Rückgabe von Altgeräten:

Besitzer von Altgeräten aus privaten Haushalten können diese bei den Sammelstellen der öffentlich-rechtlichen Entsorgungsträger oder bei den von Herstellern oder Vertreibern im Sinne des ElektroG eingerichteten Rücknahmestellen unentgeltlich abgeben. Rücknahmepflichtig sind Geschäfte mit einer Verkaufsfläche von mindestens 400 m² für Elektro- und Elektronikgeräte sowie diejenigen Lebensmittelgeschäfte mit einer Gesamtverkaufsfläche von mindestens 800 m², die mehrmals pro Jahr oder dauerhaft Elektro- und Elektronikgeräte anbieten und auf dem Markt bereitstellen. Dies gilt auch bei Vertrieb unter Verwendung von Fernkommunikationsmitteln, wenn die Lager- und Versandflächen für Elektro- und Elektronikgeräte mindestens 400 m² betragen oder die gesamten Lager- und Versandflächen mindestens 800 m² betragen. Vertreiber haben die Rücknahme grundsätzlich durch geeignete Rückgabemöglichkeiten in zumutbarer Entfernung zum jeweiligen Endnutzer zu gewährleisten. Die Möglichkeit der unentgeltlichen Rückgabe eines Altgerätes besteht bei rücknahmepflichtigen Vertreibern unter anderem dann, wenn ein neues gleichartiges Gerät, das im Wesentlichen die gleichen Funktionen erfüllt, an einen Endnutzer abgegeben wird.

4. Datenschutz-Hinweis:

Altgeräte enthalten häufig sensible personenbezogene Daten. Dies gilt insbesondere für Geräte der Informations- und Telekommunikationstechnik wie Computer und Smartphones. Bitte beachten Sie in Ihrem eigenen Interesse, dass für die Löschung der Daten auf den zu entsorgenden Altgeräten jeder Endnutzer selbst verantwortlich ist.

5. Bedeutung des Symbols „durchgestrichene Mülltonne“:

 Das auf Elektro- und Elektronikgeräten regelmäßig abgebildete Symbol einer durchgestrichenen Mülltonne weist darauf hin, dass das jeweilige Gerät am Ende seiner Lebensdauer getrennt vom unsortierten Siedlungsabfall zu erfassen ist.

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