



Handheld Acoustic Imaging Camera

User Manual



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This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

- (1) This device may not cause harmful interference, and
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This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment.

Note: This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

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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).

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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

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

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Industry Canada ICES-003 Compliance

This device meets the CAN ICES-003 (A)/NMB-003(A) 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.

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.

For this device, please pay attention to the following notes when the device is operating in 5 GHz:

- (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.
- (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.

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.




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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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.

Safety Instruction

These instructions are intended to ensure that user can use the product correctly to avoid danger or property loss.

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

- Please purchase the charger by yourself. Input voltage should meet the Limited Power Source (5 VDC, 2 A) according to the IEC61010-1 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.

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.
- 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.
- The lithium battery voltage is 3.6 V, and the battery capacity is 6230 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.
- We recommend you send the device back for calibration once a year, and please contact the local dealer for the information on maintenance points.
- 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.

Using Environment

- Make sure the running environment meets the requirement of the device. The operating temperature shall be -20 °C to 50 °C (-4 °F to 122 °F), and the operating humidity shall be 95% or less.
- 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.

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.

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 HIKMIRCO AI56 acoustic imaging camera is a professional product for sound source localization. With 64 Low-noise MEMS microphones and adjustable bandwidth range from 2 kHz to 65 kHz, AI56 provides an easy and effective way to locate the pressurized air leaks in industrial environments. By using a large 4.3" LCD touch screen, the results presented on top of a digital picture allows you to quickly find the source of the problems. Adopting this lightweight and easy-to-use tool, you can discover the potential safety risks, minimize troubleshooting, and save extra costs of equipment failures and downtime.

1.2 Main Function

Acoustic Imaging

Device detects the real-time sound intensity of the sources, and locates the sources in the scene.

Palette

Device supports multiple palettes to display the detected sound sources and their intensities.

Record Videos & Capture Snapshots

Device supports recording videos, capturing snapshots, and managing albums.

1.3 Appearance

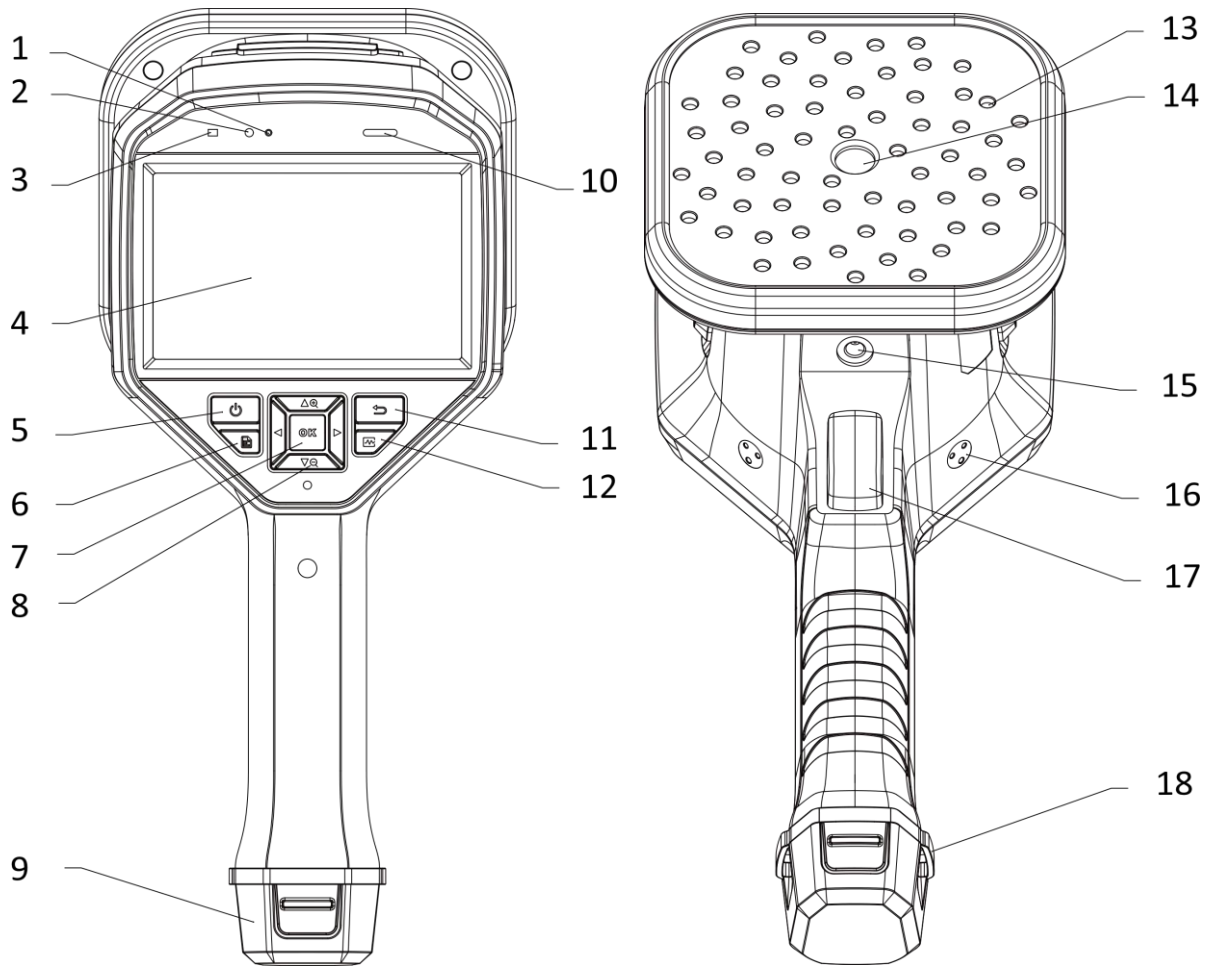


Figure 1-1 Appearance

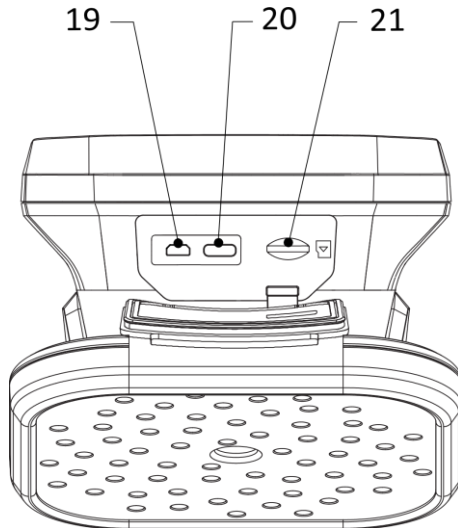


Figure 1-2 USB Interface

Table 1-1 Interface Description

No.	Component	Function
1	Light Sensor	Senses the ambient brightness.
2	Microphone	Records voice remarks.
3	Power Indicator	Solid red: Charge normally. Solid green: Fully charged.
4	LCD Touch Screen	Allows live view and touch-screen operation.
5	Power Button	Hold to power on/off.
6	File Button	Press to access the albums.
7	Confirm Button	Non-Menu Mode: Press to enter menu. Menu Mode: Press to confirm.
8	Navigation Button	Non-Menu Mode: <ul style="list-style-type: none"> ● Press or to zoom in or zoom out by 0.1× continuously. ● Hold or to zoom in or zoom out by 1× continuously. Menu Mode: Press , , and to select parameters.
9	Battery Compartment	For holding the battery.
10	Loudspeaker	Plays voice remarks.
11	Back Button	Press to save the parameters and return to previous menu.
12	Frequency Button	Press to select the frequency range frame edges and configure the frequency parameters.
13	Microphone Array	Detects sound in the scene.
14	Optical Lens	Views the optical images.
15	Tripod Attachment Point	Mounts the tripod.

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No.	Component	Function
16	Hand Strap Attachment Points	Mounts the hand strap.
17	Trigger	Non-Menu Mode: <ul style="list-style-type: none">● Press: Capture snapshots.● Hold: Record videos. Menu Mode: Press to return to live view interface.
18	Hand Strap Attachment Holes	Fixes the lower part of the hand strap to the device.
19	Micro HDMI Interface	Displays the image and menu interface via HDMI output.
20	Type-C Interface	Charges the device or exports files with supplied cable.
21	MicroSD Card Slot	For holding the MicroSD card.

Chapter 2 Preparation

2.1 Mount Hand Strap

The hand straps aim at attaching to the device and stabilizing it. Please make sure wrap your hands with the hand straps to prevent the device from accidental falling or bumping.

The upper part of the hand strap is attached to the camera by a buckle. There are two buckle attachment points on both sides of the device. The lower part of the hand strap is threaded through the holes at the base of the device.

Steps

1. Insert the upper part of the hand straps into the buckles.

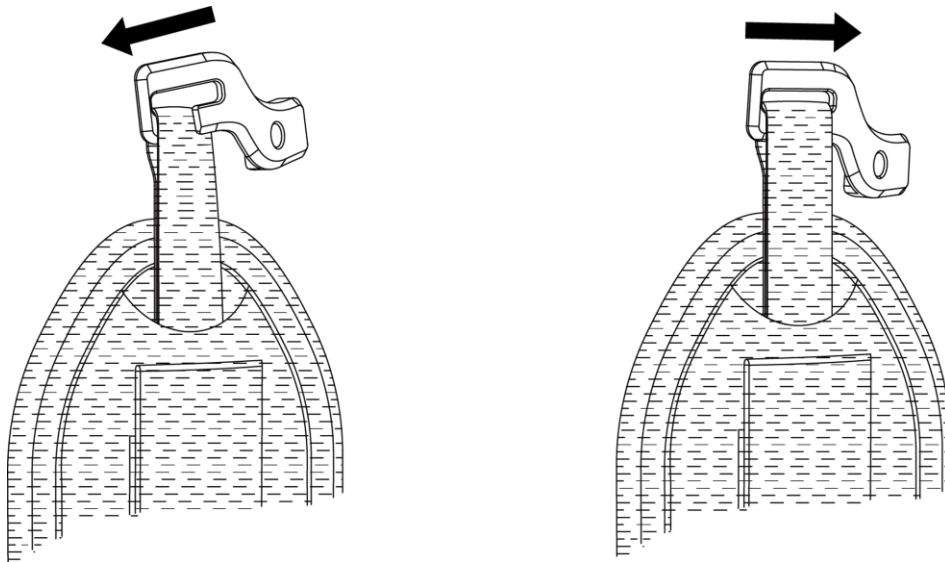


Figure 2-1 Insert Upper Part of Hand Strap

2. Fit the buckle on the device and tighten the screw with the supplied wrench.
3. Thread the lower part of the hand strap through the hole at the base of the device.
4. Secure the hand strap with the hook-and-loop fastener. Adjust the tightness according to your hands.

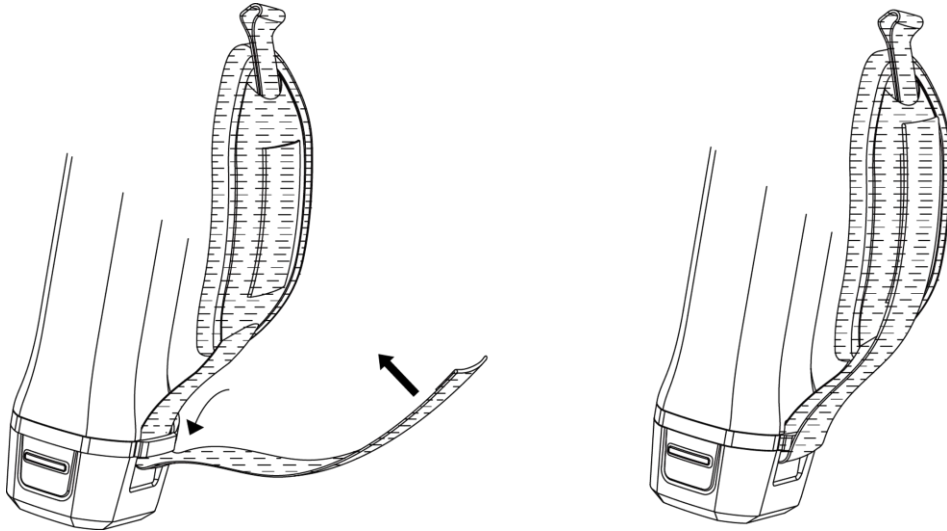


Figure 2-2 Secure Lower Part of Hand Strap

2.2 Operation Method

The device supports both touch-screen control and button control.

Touch-Screen Control

Tap on the screen to set parameters and configurations.

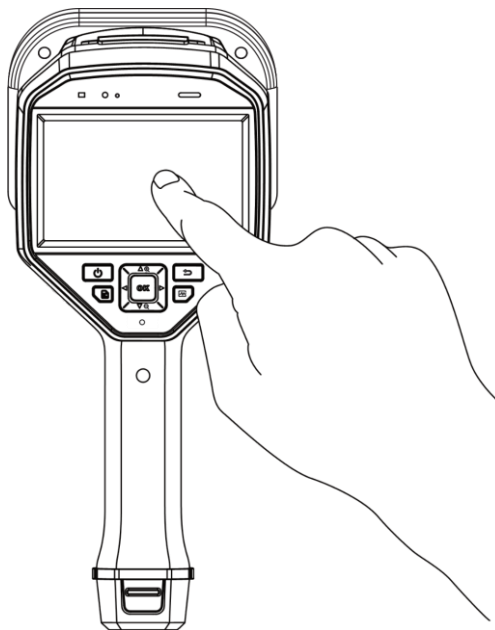


Figure 2-3 Touch-Screen Control

Button Control

Press the navigation buttons to set parameters and configurations.

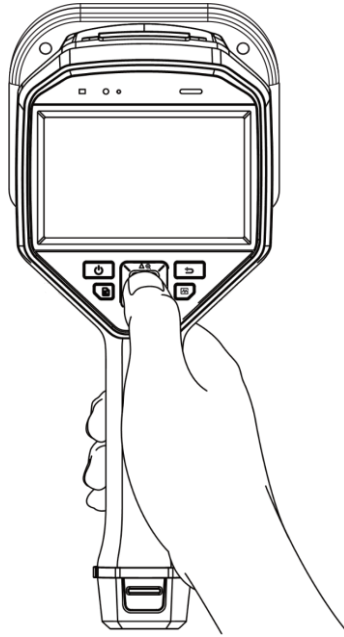


Figure 2-4 Button Control

2.3 Charge Device

Please fully charge the device before it is used for the first time or when it is in low battery.

2.3.1 Charge Device via Cable Interface

Before You Start

Please make sure the battery is installed before charging via cables.

Steps

1. Open the connector cover of the device.
2. Plug the type-C male connector of the charging cable to the device and the other type-A connector to power adapter.

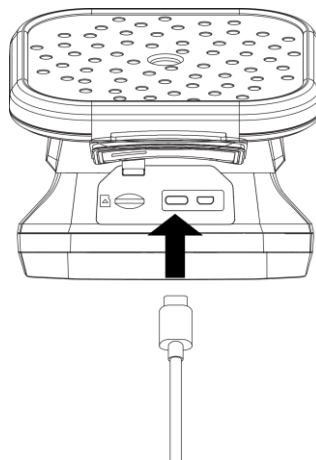


Figure 2-5 Charge via Type-C Cable

2.3.2 Charge Device via Charging Base

You can take out the battery and insert it into the charging base for fast charging.

Before You Start

Please make sure the device is power off before removing the battery.

Steps

1. Hold the device, and press both battery lock catches of the device.

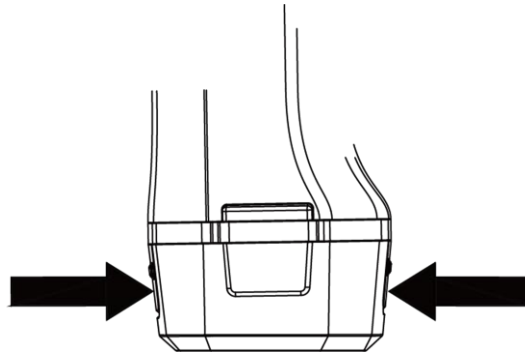


Figure 2-6 Remove Battery Base

2. Hold the lock catches, and draw the battery base to take out the battery.
3. Insert the battery into the charging base. You can see the charging status via the pilot lamp on the charging base.

Note

The red indicating light is on if the battery is charging properly, and the green indicating light is on if the battery is fully charged.

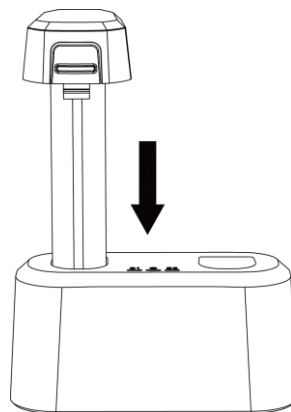



Figure 2-7 Charge Battery

4. When the battery is fully charged, draw the battery from the charging base.
5. Insert the battery into the device and push it into the locked position.

2.4 Power On/Off


Power On

Hold  to turn on the device. You can observe the target when the live view interface is stable.

Note




If the battery of the device is low, please charge it in time or replace it with a fully-charged standard battery, so as to ensure that the device functions normally.

Power Off

When the device is turned on, hold  to power off the device.

2.4.1 Set Auto Power-off Countdown

Steps

1. Press  in the live view interface to show the menu.
2. Go to **Settings** → **Device Settings** → **Auto Off**.
3. Tap **Auto Off** or press  to enable auto power-off.
5. Set the automatic shutdown time for device as required.
4. Press  to save and return to previous menu.

2.5 Live Interface and Menu

2.5.1 Live View Interface

After starting up, device screen shows the live view interface with detected acoustic wave.

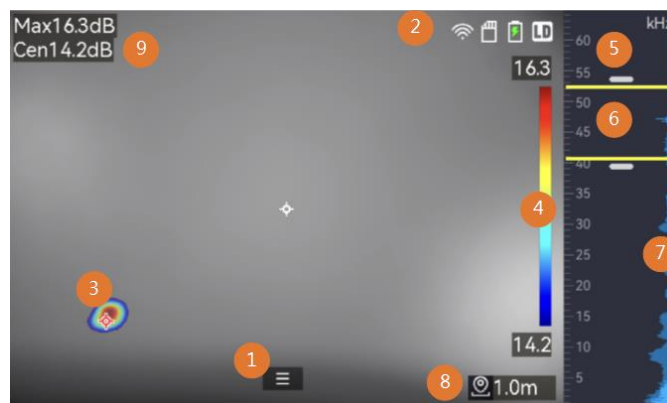




Figure 2-8 Live View Interface

Table 2-1 Live View Interface Description

No.	Part Name	Function
1	Menu Icon	Tap on the icon to call the main menu.
2	Status Bar	Device working status icons are displayed in the bar. You can turn on/off the display from Settings → Display Settings → Status Icons .
3	Acoustic Palette	The location and intensity of detected sound source are converted to palette colors overlaying on the visual image for easy observation. The size of palette stands for the intensity of the sound source. Bigger acoustic palette means higher sound intensity.
4	Intensity Scale (Palette Bar)	Intensity scale (palette bar) show the relation between displayed color and sound intensity. The value at the ends of the bar stands for the maximum and minimum intensity of the set frequency range. See 3.2 Set Palettes for Sound Display for setting instructions.
5	Device Frequency Range	Shows the supported frequency range of the device.
6	Target Frequency Range	Sound intensity of this range is detected and converted to acoustic palette. See 4.1 Set Frequency Range for setting instructions.
7	Dynamic Intensity of All Frequencies	Shows the intensity change of device supported frequencies.
8	Sound Source Distance	Shows the set distance of sound source. The distance is a reserved value for further applications. See 4.3 Set Sound Source Distance for setting instructions.
9	Maximum Intensity and Intensity of Center	Stands for the detected maximum intensity and the intensity at center of the scene. See 4.1 Set Frequency Range for setting instructions.

In the live view interface, tap  or press  to show the menu bar, and swipe down to call the swipe-down menu.

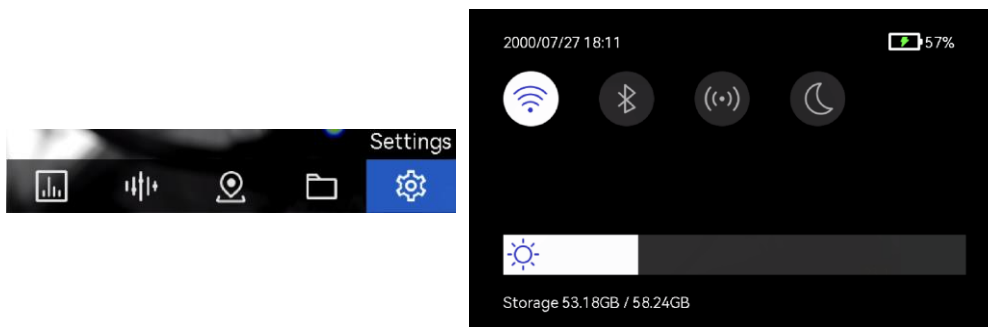












Figure 2-9 Main Menu and Swipe-Down Menu

Table 2-2 Menu Description

Menu Icon	Function
	Adjusts detection sensitivity. Bigger value means higher sensitivity. See 4.4 Set Detection Sensitivity for setting instructions.

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Menu Icon	Function
	Pre-defined target frequency ranges. See 4.1 Set Frequency Range for setting instructions.
	Distance to sound source. See 4.3 Set Sound Source Distance for setting instructions.
	Local albums of captured images and videos. See 5.4 View Local Files for setting instructions.
	Settings of all device function.
	Tap to turn on/off device Wi-Fi. See 6.1 Connect via Wi-Fi for setting instructions.
	Tap to turn on/off device Bluetooth. See 6.3 Connect to Bluetooth Device for setting instructions.
	Tap to turn on/off device hotspot. See 6.2 Connect via Hotspot for setting instructions.
	Tap to switch menu themes between dark and light.
	Swipe to adjust screen brightness.

Chapter 3 Display Settings

3.1 Set Screen Brightness

You can manually adjust the screen brightness or enable automatic brightness adjustment to fine-tune the brightness levels for the screen.

Steps

1. In the live view interface, tap  or press  to show the menu.
2. Select  from the main menu, go to **Device Settings** → **Screen Brightness**.
 - Auto: The device adjusts screen brightness automatically according to the ambient brightness.
 - Manually: Drag the brightness adjustment slider to the left or right to manually adjust screen brightness.



You can also manually adjust brightness from swipe-down menu.






Figure 3-1 Brightness Adjustment Slider

3.2 Set Palettes for Sound Display

The location and intensity of detected sound source are converted to palette colors overlaying on the visual image for easy observation. Palette colors can be changed according to user preference.

Steps

1. Press  in the live view interface to show the menu.
2. Select  from the main menu, go to **Acoustic Settings** → **Palettes**, and select a desired palette.
3. Press  to save and exit.





Result

Acoustic palette overlaid above the sound source and palette bar change to the selected palette.

3.3 Set Opacity Level of Acoustic Palette

You can adjust the opacity level of acoustic palette, and view the acoustic palette and the visual images at the same time if the opacity is properly set.

Steps

1. In the live view interface, tap  or press  to show the menu.
2. Select  from the main menu, go to **Acoustic Settings** → **Level**, and select a desired level.
3. Press  to save and exit.

Note

The opacity level ranges from 0% to 100%. The lower the value is, the more transparent the acoustic palette is.

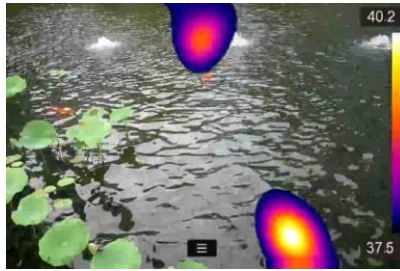


Figure 3-2 100%

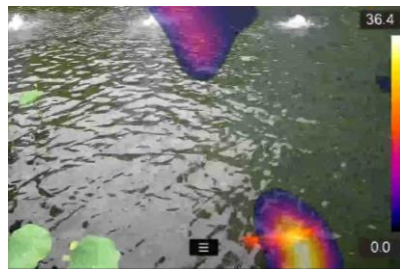


Figure 3-3 50%

3.4 Adjust Digital Zoom




The device supports 1× to 8× digital zoom.

- In the live view interface, hold $\Delta\oplus$ or $\nabla\ominus$ to zoom in or zoom out by 1× continuously.
- In the live view interface, press $\Delta\oplus$ or $\nabla\ominus$ to zoom in or zoom out by 0.1× precisely.

3.5 Display OSD Info.





OSD information informs you the status, time and date, and other information of the device in the live view interface.

Steps

1. In the live view interface, tap  or press \textcircled{K} to show the menu.
2. Go to **Settings** → **Display Settings**.
3. Tap  or press \textcircled{K} to select the on-screen information.
4. Press  to save and exit.

3.6 Set Grayscale of Visual Image

The colored live view image turns to black and white if grayscale image is enabled. The black and white image makes colored acoustic palettes more prominent for observation.

1. In the live view interface, tap  or press  to show the menu.
2. Go to **Settings** → **Display Settings**.
3. Tap  to enable **Grayscale Image**.
4. Press  to save and exit.

Chapter 4 Acoustic Wave Detection

The device supports acoustic wave detection. You can locate and mark the sound sources with acoustic palettes, and view the real-time sound intensities in the scene.

4.1 Set Frequency Range

The device supports intensity detection of a wide frequency range from 2 kHz to 65 kHz. You can set a smaller frequency range (target frequency range) for acoustic imaging, filtering out the interference from unwanted frequency range.

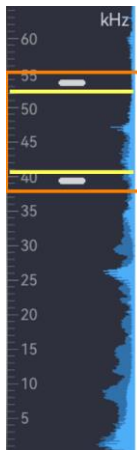


Figure 4-1 Frequency Range

You can switch to 3 pre-defined frequency ranges from the main menu or manually adjust the upper and lower limit of the range.

4.1.1 Switch among Pre-defined Frequency Ranges

1. In the live view interface, tap  or press  to show the menu.
2. Select  and select a range option.



Figure 4-2 Pre-defined Frequency Ranges

Result

The target frequency range on the right of the screen changes as the option changes.

4.1.2 Set Overall Frequency Range

Steps

1. Press  for once or tap the frequency range frame in the live view interface.

2. Press/hold $\Delta\oplus$ and $\nabla\ominus$, or drag the frequency range frame up and down to adjust the overall frequency range.
3. Press \hookrightarrow to save and exit.

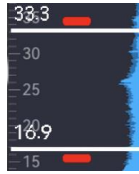


Figure 4-3 Set Overall Frequency Range

4.2.2 Set Max. Frequency

Steps

1. Press \square for 2 consecutive times or tap the top edge of the frequency range frame in the live view interface.
2. Press/hold $\Delta\oplus$ and $\nabla\ominus$, or drag the top edge of the frequency range frame up and down to adjust the maximum frequency.
3. Press \hookrightarrow to save and exit.



Figure 4-4 Set Max. Frequency

4.2.3 Set Min. Frequency

Steps

1. Press \square for 3 consecutive times or tap the bottom edge of the frequency range frame in the live view interface.
2. Press/hold $\Delta\oplus$ and $\nabla\ominus$, or drag the bottom edge of the frequency range frame up and down to adjust the minimum frequency.
3. Press \hookrightarrow to save and exit.

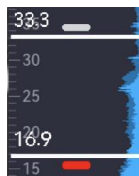


Figure 4-5 Set Min. Frequency









Note

The frequency range is from 2 kHz to 65 kHz. The difference between max. and min. frequency ranges from 1 kHz to 24 kHz.

4.3 Set Sound Source Distance

The sound source distance is a reserved function for further application development.

Steps

1. In the live view interface, tap  or press  to show the menu.
2. Select .
3. Adjust the distance value by pressing/holding  and  or tapping  and .
4. Press  to save and exit.

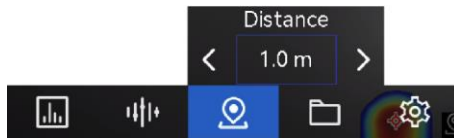


Figure 4-6 Set Sound Source Distance

4.3 Set Sound Intensity Rule

You can view the real-time sound intensities of the target or the surroundings, and mark them with cursor. The corresponding results are displayed on the left of the interface.

Steps







1. In the live view interface, tap  or press  to show the menu.
2. Go to **Settings** → **Acoustic Settings** → **Sound Intensity Display**.
3. Set the point rules, and tap the icons or press .
4. Press  to save and exit.

Table 4-1 Icon Description

Icon	Description
	Peak Point: locate the peak sound intensity in the scene
	Center Point: display the sound intensity of the center in the scene

4.4 Set Detection Sensitivity

It stands for the sensitivity of the device to sound sources. The higher sensitivity is, the lower intensity of target sound sources can be discovered. Higher sensitivity also means that interferences are more easily to be detected and displayed. Adjust a suitable sensitivity according to device actual using environment.

Steps







1. In the live view interface, tap  or press  to show the menu.
2. Select .
3. Press  and  or tapping on screen to select a level. Bigger number means higher sensitivity.
4. Press  to save and exit.



Figure 4-7 Set Detection Sensitivity

Chapter 5 Picture and Video

In the live view interface, you can record videos or capture snapshots to save important data. You can also export the recorded videos and snapshots to PC via USB cable.



Note

- Capturing or recording is not allowed in menu mode.
 - When the device has no memory cards or it is connected to your PC, capturing, recording, and accessing to the albums are not allowed.
-

5.1 Initialize Memory Card

You can initialize the memory card if needed.

Steps

1. Go to **Settings** → **Device Settings** → **Device Initialization**.
2. Select **SD Card Initialization**, and tap **OK** to initialize the memory card.

5.2 Capture Picture

You can capture snapshots of the target, and the snapshots will be automatically saved in the memory card. The capture modes are selectable.

Before You Start

The memory card must be inserted for picture storage.


Steps

1. Go to **Settings** → **Capture Settings**.
2. Select **Capture Mode** to set the capture mode.

Single Capture Capture one picture for one time by pulling the trigger for once.

Timed Capture Device captures one picture after the specified time interval. You can set the time interval as needed.

Continuous Capture Capture multiple pictures for one time by pulling the trigger for once. You can set the amount of pictures.

3. **Optional:** After capturing, you can tap the thumbnail of the captured image at the right part of the interface to view and edit the image.
4. Select **Filename Header** to set filename header. The snapshot name consists of the header and the capture date and time.
4. Press  to save and exit.
5. In the live view interface, pull the trigger to capture snapshot.
6. Refer to **5.5 Export Files** to export the snapshots.

5.3 Record Video

You can record videos of the target. The recorded video and audio are saved in the memory card.

Steps

1. In the live view interface, hold the trigger to start recording. The recording status icon and time icon appear.

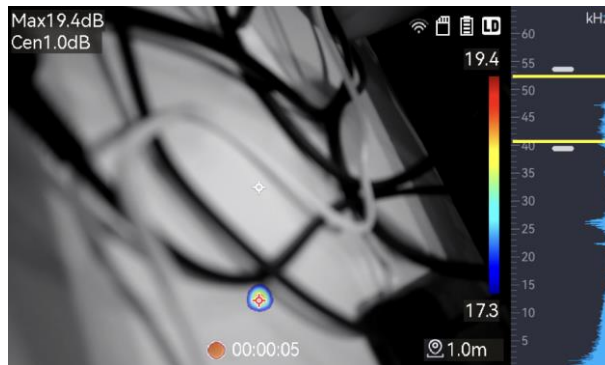




Figure 5-1 Record Video

2. When you finish, pull the trigger again to stop recording. The recorded video will be saved automatically and exit.

Note

You can also press  or  to stop recording.









3. Refer to **5.5 Export Files** to export the snapshots.

Note

The video format is MP4 format. You can play videos on the device or export to the compatible players to play.

5.4 View Local Files

Steps

1. In the live view interface, press  to enter **Albums**.
2. Press  and  to select an album.
3. Press , , , and  to select a video clip or snapshot.
4. Press  to view the 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 **7.2 Set Time and Date** for instructions.
 - For file exporting, see **5.5 Export Files** for instructions.
-













What to do next

For file management, see **5.4.2 Manage Files** for instructions; for album management, see **5.4.1 Manage Albums** for instructions.

5.4.1 Manage Albums

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



Table 5-2 Album Operations











Task	Operations
Create a New Album	a. Press  to enter Albums . b. Tap  . c. Enter an album name by the soft keyboard. d. Tap  to finish.
Rename an Album	a. Press  to enter Albums . b. Select the album to rename. c. Tap  , and select Rename . A soft keyboard is displayed. d. Tap  to delete the old name, and enter the new name for the album by touching the screen. e. Tap  to finish.
Change the Default Saving Album	a. Press  to enter Albums . b. Select the album you want to use as the default saving album. c. Tap  , and select Set as Default Saving Album .  Note The default saving album appears at the top of the album list.
Delete an Album	a. Press  to enter Albums . b. Select the album you want to delete. c. Tap  , and select Delete . A prompt box appears on the interface. d. Tap OK to delete the album.

5.4.2 Manage Files



You can delete the recorded files and move the files to other albums on the device.

Table 5-3 File Operations

Task	Operations
Delete File(s)	a. Press  to enter Albums . b. Tap to select the album storing the file to be deleted. c. In the album, tap to select the file to be deleted. d. Tap  , and select Delete . A prompt box appears on the interface. e. Tap OK to delete the file.

Move File(s)	<p>a. Press  to enter Albums.</p> <p>b. Tap to select the album storing the file to be moved.</p> <p>c. In the album, tap to select the file to be moved.</p> <p>d. Tap , and select Move. The album list is displayed.</p> <p>e. Tap to select the album to move to.</p>
Edit File(s)	<p>a. Press  to enter Albums.</p> <p>b. Tap to select the album storing the file to be edited.</p> <p>c. In the album, tap the file to be edited.</p> <p>d. Tap the video or snapshot file to start edit.</p> <ul style="list-style-type: none"> • Tap  to add a text note to the file. You can tap the file to view the added text note. • Tap  to add a voice note to the file. Tap  in the screen center to start or end recording the voice note. • Tap  to play recorded videos. • Tap  to move the file to other albums. • Tap  to delete the file. <p> Note The text and voice notes can only be added to snapshots.</p>

 **Note**

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

5.5 Export Files

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

 **Note**

- Plug the type-C male connector of USB cable to the device and the other type-A connector to PC.
- You can export the files using USB cable while the device is turned off.
- You can export the files by inserting the memory card to your PC which has a card slot.

Steps

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




 **Note**

You can play the recorded videos using the default players.

Chapter 6 Connect

6.1 Connect via Wi-Fi


Steps

1. Press  in the live view interface to show the menu.
2. Go to **Settings** → **Connect** → **WLAN**.
3. Tap  or press  to enable or disable **Wi-Fi**. When **Wi-Fi** is enabled, the device can automatically search and display available Wi-Fi networks.
4. Select a Wi-Fi network and enter password.

Note

- DO NOT tap space, or the password may be incorrect.
 - Leaving the Wi-Fi setting interface does not interrupt the connection.
-





Result

A Wi-Fi icon  shows in live view interface when the connection is completed.

6.2 Connect via Hotspot

When the device's hotspot is on, other equipment with Wi-Fi function can join the device for data transmission.

Steps

1. Press  in the live view interface to show the menu.
2. Go to **Settings** → **Connect** → **Hot Spot**.
3. Tap  or press  to enable or disable hotspot.  in the status bar indicates that the hotspot is on.

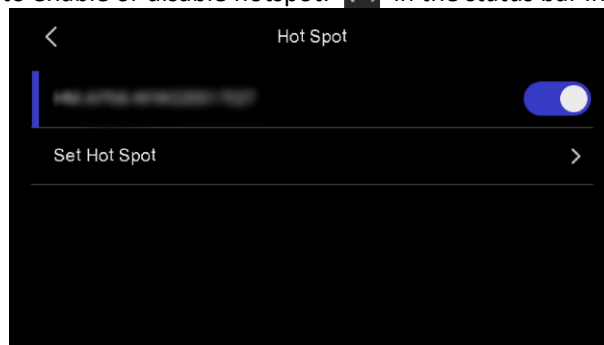


Figure 6-1 Hotspot


Note

The hotspot name consists of the device model No. and series No.. Refer to **7.1 View Device Information**.

4. Tap **Set Hot Spot** to set the hotspot password.

Note



When setting password, DO NOT tap **enter** or **space**, or the password may be incorrect. The password should include at least 8 digits, consisting of numbers and characters.

5. Tap  to save the password.

6.3 Connect to Bluetooth Device

The device has Bluetooth function. After pairing and connecting to a Bluetooth player, local voice notes and audios can be played via the player.


Steps

1. Press  in the live view interface to show the menu.
2. Go to **Settings** → **Connect** → **Bluetooth**.
3. Press  to enable device Bluetooth. The device scans available Bluetooth devices and displays the result under **Available Devices**.
4. Select a device to start connecting.

Result

The connected Bluetooth device displays **Connected** on the right, and you can play audios with it.



Note

- You can turn on/off Bluetooth function from  in the swipe-down menu.
 - Tap on a connected device in the **Available Devices** list to disconnect it. The device shows **Paired** instead.
 - The Bluetooth function is for audio play only. If you want to exporting local files, see **5.5 Export Files** for instructions.
-

Chapter 7 Maintenance

7.1 View Device Information



Steps

1. Press  to show the menu in the live view interface.
2. Go to **Settings** → **Device Settings** → **Device Information** to view the device information.
3. You can view the major information like device No., serial No., and the current version.
4. Press  to save and exit.

7.2 Set Time and Date

You can set and calibrate the system time and date.

Steps

1. Press  to show the menu in the live view interface.
2. Go to **Settings** → **Device Settings** → **Time and Date**.
3. Set the date and time.
4. Press  to save and exit.

Result

The time and date are displayed in the top area of the live view interface.



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

7.3 Upgrade Device

Before You Start

Please download the upgrade file and turn on the device.

Steps

1. Connect the device to your PC with cable and open the detected disk.
2. Copy the upgrade file and paste 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.



- Please make sure the battery is fully charged and Auto Power-off function disabled during upgrading to avoid accidental suspension.

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

7.4 Restore Device

You can default the device to the factory settings.



This function should be used with caution.

Steps

1. Press **Ⓚ** to show the menu in the live view interface.
2. Go to **Settings** → **Device Settings** → **Device Initialization**.
3. Select **Restore Device**. A prompt appears.
 - OK**: Tap **OK** to initialize the device.
 - Cancel**: Tap **Cancel** to exit and return to the previous menu.

Chapter 8 FAQ

Scan the following QR code to get device common FAQ.





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