

User Manual

Digital Day & Night Vision Scope

CHEETAH LRF SERIES

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Contact Us

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1 Overview

1.1 Device Description

The digital day & night vision scope can perform in all ambient light. It has an advanced HD sensor and a high resolution OLED display, which provides full-color clarity in daytime and classic black & white viewing at night. The device is applicable for scenarios such as field and forest hunting, hiking, and rescuing.

1.2 Main Function

- **Built-in Adjustable IR Emitter**: With optional IR emitter, the device can be used in total darkness and view targets clearly.
- Built-in Laser Rangefinder: The device allows you to determine the distance in various scenarios with built-in laser rangefinder module.
- Display Mode: The device supports multiple display modes, and you can set day/night/green/yellow/defog/auto mode according to the scene.
- Zeroing: The reticle helps you to aim at the target fast and accurately.
 See Zeroing.
- App Connection: The device can capture snapshots, record videos, and set parameters by HIKMICRO Sight app after being connected to your phone via hotspot.

1.3 Appearance



Pictures in this manual are for illustration purpose only. Please take the actual product for reference.

The appearance description of the device is shown below. Please take the actual product for reference.

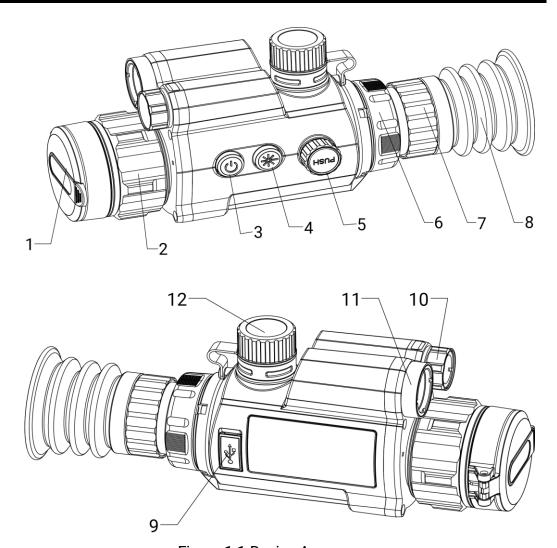


Figure 1-1 Device Appearance

Table 1-1 Buttons and Components

No.	Description	Function
1	Lens Cover	Protect the lens.
2	Focus Ring	Adjust the focus to find clear targets.
3	Power Key	Press: standby mode/Wake up deviceHold: power on/off
4	Laser Key	 Press: measure distance with laser Hold: switch display modes Double-press: turn off laser ranging
5	Wheel	 Press: start/stop recording Hold: menu operation Double-press: display/hide OSD Rotate: switch digital zoom
6	Fixing Ring	Fix the eyepiece.

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No.	Description	Function
7	Diopter Adjustment Ring	Adjust the dioptric.
8	Eyepiece	The eye end of the device. You can view target from this part.
9	Type-C Interface	Connect the device to power supply or transmit data with a type-C cable.
10	Infrared Light	Help to view target clearly in dark environment.
11	Laser Range Finder	Measure the distance with laser.
12	Battery Compartment	Install the battery in it.
4 + 5	Laser Key + Wheel	Press to capture snapshots.

2 Preparation

2.1 Cable Connection

Connect the device and power adaptor with a type-C cable to power on the device. Alternatively, connect the device and PC to export files.

Steps

- 1. Lift the cable interface cover.
- 2. Connect the device and power adapter with a Type-C cable to charge the device. Alternatively, connect the device and PC to export files.

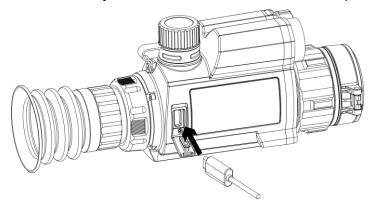


Figure 2-1 Cable Connection

2.2 Install Battery

2.2.1 Battery Instruction

- Charge the battery for 4 hours before the first use.
- Remove the battery from the battery compartment if the device is not used for a long time.
- The battery size is 19 mm × 70 mm. The rated voltage is 3.6 VDC, and the battery capacity is 3200 mAh.

2.2.2 Battery Installation

Insert the batteries into the battery compartment.

Steps

1. Turn the battery cover anticlockwise to loosen it.

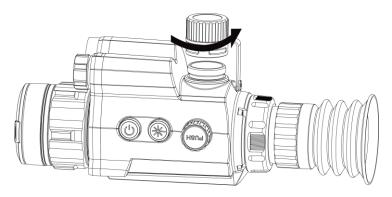


Figure 2-2 Open Battery Cover

2. Insert the battery into the battery compartment with the positive mark inward.

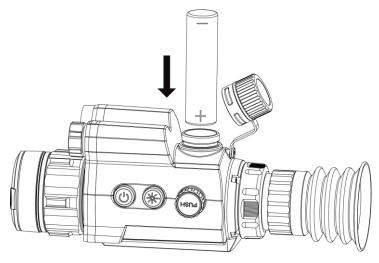


Figure 2-3 Install Battery

3. Turn the battery cover clockwise to tighten it.

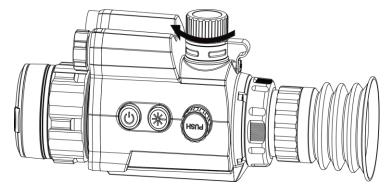


Figure 2-4 Close Battery Cover

2.3 Install Rail

Install the device on the rail.

Before You Start

- Turn off the device first.
- Use the non-dust cloth to clean the device base and the rail.

Steps

1. Align the installation holes on the device and the rail.

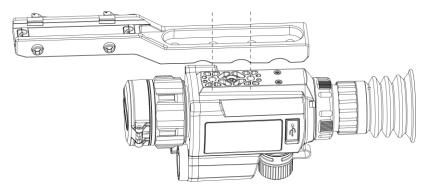


Figure 2-5 Align Installation Holes

2. Insert the screws.

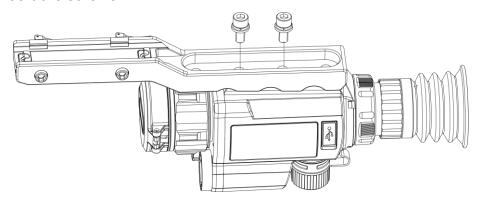


Figure 2-6 Install Screws

3. Tighten the screws to secure the device.

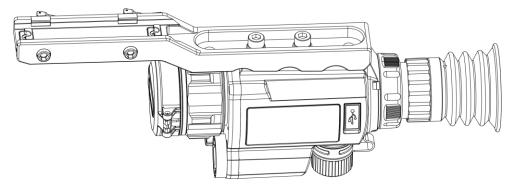


Figure 2-7 Tighten Screws

2.4 Power On/Off

Power On

When the battery is sufficiently charged, hold \circlearrowleft to power on the device.

Power Off

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

Auto Power Off

Set the auto power off time for your device, and then the device will automatically shut down as the set time.

Steps

- 2. Rotate the wheel to select (1).
- 3. Press and rotate the wheel to the auto power-off time as required.
- 4. Hold the wheel to save and exit.



- See the battery icon for the battery status. means the battery is fully charged, and means that the battery is low.
- When the low power note shows, charge the battery.
- The auto power off takes effect only when the device isn't in operation or connected with HIKMICRO Sight app.
- The auto power off countdown will start again when the device reenters standby mode, or the device is restarted.

2.5 Menu Description

When the device is turned on, hold the wheel to show the menu.

In the menu, you can rotate the wheel to select functions, press the wheel to configure the selected function, and hold the wheel to exit the menu.

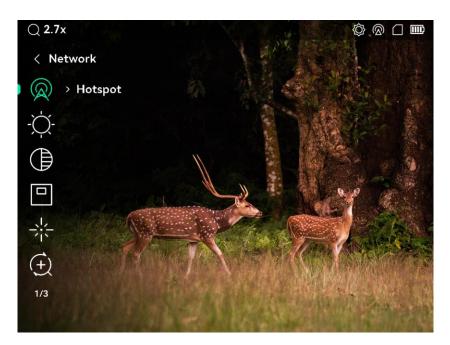


Figure 2-8 Device Menu

2.6 **App Connection**

Connect the device to the HIKMICRO Sight App via hotspot, then you can capture picture, record video, or configure parameters on your phone.

Steps

1. Search the HIKMICRO Sight on App Store (iOS System) or Google Play™ (Android System) to download it, or scan the QR code to download and install the app.



Android System



iOS System

- 2. In the menu, rotate the wheel to select \(\omega \).
- 3. Press and rotate the wheel to select **Hotspot**.
- 4. Turn on the WLAN of your phone and connect to the hotspot.
 - Hotspot Name: HIK-IPTS Serial No.
 - Hotspot Password: Go to Hotspot in the menu to check the password.



If the password is not displayed, please upgrade the device to the latest version. Or enter the Serial No. as the password.

5. Open the app and connect your phone with the device. You can view the interface of device on your phone.

2.7 Firmware Status

2.7.1 Check Firmware Status

Steps

- 1. Open HIKMICRO Sight and connect your device to the app.
- 2. Check if there is an upgrade prompt on the device management interface. If there is no upgrade prompt, the firmware is the latest version. Otherwise, the firmware is not the latest version.

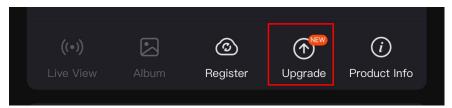


Figure 2-9 Check Firmware Status

3. (Optional) If the firmware is not the latest version, upgrade the device. See *Upgrade Device*.

2.7.2 Upgrade Device

Upgrade Device via HIKMICRO Sight

Before You Start

Install HIKMICRO Sight on your phone and connect your device to the app.

Steps

- 1. Tap the upgrade prompt to enter the firmware upgrade interface.
- 2. Tap **Upgrade** to start upgrade.



The upgrading operation may vary due to app updates. Please take the actual app version for reference.

Upgrade Device via PC

Before You Start

- Please get the upgrade package first.
- Turn on the device after connecting it to your PC, and keep the device on for 10 to 15 seconds before other operations.

Steps

- 1. Connect the device to your PC with cable, and then turn on the device.
- 2. Open the detected disk, copy the upgrade file and paste it to the root directory of the device.
- 3. Hold to reboot the device, and the device upgrades automatically. The upgrading process will be displayed in the main interface.



During the upgrade package transmission, make sure the device is connected to your PC. Otherwise, it may cause unnecessary upgrade failure, firmware damage, etc.

2.8 Zeroing (Overview)

You can enable the reticle to view the position of the target. The functions such as freeze and zoom help to adjust the reticle more accurately. See **Zeroing** for detailed instructions.





Figure 2-10 Zeroing

3 Image Settings

3.1 Adjust Diopter

Steps

- 1. Power on the device.
- 2. Open the lens cover.
- 3. Hold the device and make sure the eyepiece covers your eye.
- 4. Rotate the diopter adjust ring until the OSD text or image is clear.

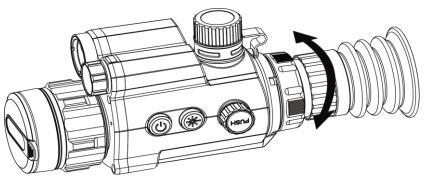


Figure 3-1 Adjust Diopter



When adjusting diopter, DO NOT touch the surface of lens to avoid smearing the lens.

3.2 Adjust Focus

Steps

- 1. Power on the device.
- 2. Hold the device and make sure the eyepiece covers your eye.
- 3. Adjust the focus ring until the image is clear.

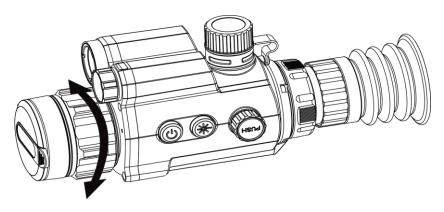


Figure 3-2 Adjust Focus



When focusing, do not touch the surface of lens to avoid smearing the lens.

3.3 Adjust Brightness

Steps

- 1. In the menu, select \rightarrow , and press the wheel to confirm.
- 2. Rotate the wheel to adjust brightness.
- 3. Hold the wheel to save and exit.

3.4 Adjust Contrast

Steps

- 1. In the menu, select), and press the wheel to confirm.
- 2. Rotate the wheel to adjust contrast.
- 3. Hold the wheel to save and exit.

3.5 Set Smart IR

Image overexposure may occur in too bright environment. The smart IR function helps to adjust the overexposed images, and it can improve the image effect in night mode by adjusting the brightness of the supplement light.

Steps

1. In the menu, select o, and press the wheel to confirm.

- 2. Rotate the wheel to switch mode.
 - Smart IR: Switch to smart IR, then the device can automatically adjust the IR light intensity according to the environment brightness.
 - High/Medium/Low: Select the IR light intensity from high, medium, or low as needed.
- 3. Hold the wheel to save and exit.

3.6 Set Display Mode

You can select different display modes in different scenes.

Hold * in live view interface to switch display modes. D Day, D Night, D Green, D Yellow, D Defog, and D Auto are selectable. The current mode is displayed on the right top of the interface.

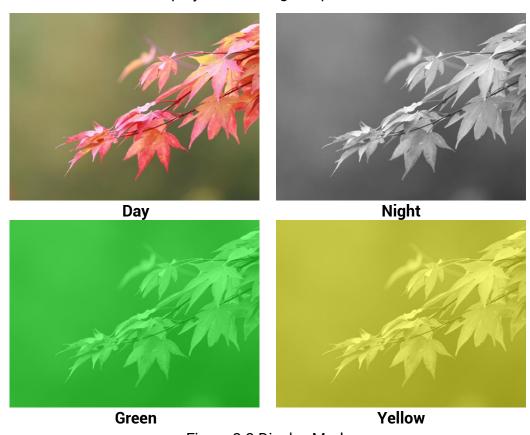


Figure 3-3 Display Mode

3.7 Adjust Digital Zoom

You can zoom the image by using this function.

Steps

- 1. In the menu, select (+), and press the wheel to confirm.
- 2. Rotate the wheel to select a zoom mode.
 - **Multiple**: The digital zoom ratio can be set to 1×, 2×, 4×, and 8×.
 - Continuous: The digital zoom ratio can be set from 1.0× to 8.0× continuously.
- 3. Hold the wheel to save and exit.
- 4. In the live view interface, rotate the wheel to switch the digital zoom of the device.



When switching the digital zoom ratio, the top-left corner of interface displays the actual magnification (Actual Magnification = Lens Optical Magnification × Digital Zoom Ratio). For example, the lens optical magnification is 2.7× and the digital zoom ratio is 2×, and the actual magnification is 5.4×.

3.8 Set Picture in Picture Mode

Steps

- 1. In the menu, select

 .
- 2. Press the wheel to enable PIP function. The details show in the upper center of the view.
 - When reticle is enabled, the PIP view is the detail of reticle.
 - When reticle is not enabled, the PIP view is the detail of central part.



Figure 3-4 Picture in Picture Mode

3. Hold the wheel to exit.

4 Zeroing

4.1 Set Reticle Mode

You can select a reticle mode according to your preference and different situations.

Steps

- 1. Hold the wheel to show the menu.
- 2. In the menu, select [O].
- 3. Press the wheel to enter the setting interface, and rotate the wheel to select a reticle mode.
 - **Central Reticle**: This mode centers around the reticle when switching the digital zoom ratio, with the reticle and zoomed image moved to the center of the display.
 - **Fixed Reticle**: This mode centers around the reticle when switching the digital zoom ratio, with the reticle position unchanged.
- 4. Hold the wheel to save and exit.



- The digital zoom ratio returns to 1x when switching the reticle mode.
- If you select fixed reticle, the continuous zoom ratio can be set from 1.0× to 8.0×.
- If you select central reticle, the continuous zoom ratio can be set from 2.0× to 8.0×.

4.2 Select Zeroing Profile

If different users use the same device, the users can configure and save the reticle settings in their respective zeroing profile.

Steps

- 1. In the menu, select 🔒 , and press the wheel to confirm.
- 2. Rotate the wheel to switch the zeroing profile.
- Hold the wheel to save and exit.

Result

The right top of the image displays the reticle information. For example, A5-109 yard means you are using the No. 5 reticle in zeroing profile A, and the set distance is 109 yards.

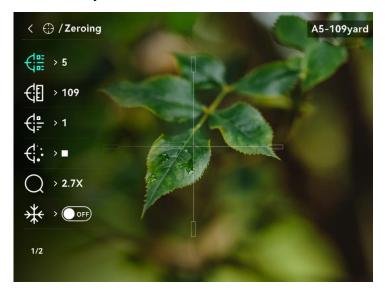


Figure 4-1 Set Zeroing Profile



There are 5 zeroing profiles in total, and you can configure 5 reticles in each zeroing profile.

4.3 Set Reticle Style

You can select color and type for your reticle in different environments.

Before You Start

Select a reticle No. you want to correct first.

Steps

- 1. In the zeroing interface, select \Leftrightarrow or \Leftrightarrow and press the wheel to confirm.
- 2. Rotate the wheel to switch reticle type and color.
- 3. Hold the wheel to exit the interface according to the prompt.
 - **OK**: Save the parameter and exit.
 - Cancel: Exit without saving the parameters.

4.4 Correct Reticle

Correcting the reticle can help you aim at the target with high accuracy by marking the offset between the big reticle and small reticle. Functions such as **Freeze** and **Zoom** help to adjust the reticle more accurately.

4.4.1 Correct Reticle on Device

Before You Start

Select a zeroing profile first.

Steps

- 1. In the menu, select in and press the wheel to enter zeroing interface.
- 2. Select a zeroing No. You can set 5 reticles.
 - 1) Rotate the wheel to select 👯 , and press the wheel to confirm.
 - 2) Rotate the wheel to select a zeroing No. to correct.
 - 3) Press the wheel again to confirm.
- 3. Set distance to target.
 - 1) Rotate the wheel to select digit.
 - 2) Rotate the wheel to change the number.
 - 3) Press the wheel again to confirm.
- 4. Select \(\int\), and press the wheel confirm. Rotate the wheel to enlarge the image until the target position is clear enough.
- 5. Aim at the target and pull the trigger, and align the reticle with the point of impact.
 - 1) Rotate the wheel to select #, press the wheel to freeze the image.



Figure 4-2 Freeze Image

2) Select and press the wheel to set the coordinates until the big reticle aligns with the point of impact. Press the wheel to select **X** or **Y** Axis. If you select X-axis, the reticle moves left and right; if you select Y-axis, the reticle moves up and down.



Figure 4-3 Correct Reticle



- When you switch the zeroing No., a prompt will appear on the interface.
 Select OK to save the parameters for the current reticle.
- When enabling the freeze function in reticle, you can adjust the position of the cursor on a frozen image. This function can prevent image flutter.
- 6. Hold the wheel to exit the interface according to the prompt.
 - **OK**: Save the parameters and exit.
 - CANCEL: Exit without saving the parameters.

- 7. Pull the trigger again to verify that the aiming point aligns with the point of impact.
- 8. (Optional) Repeat 2 to 7 to set the position for other reticles in this zeroing profile.

4.4.2 Correct Reticle via HIKMICRO Sight

You can also correct the reticle by HIKMICRO Sight app.

Before You Start

Install HIKMICRO Sight on your phone.

Step

- 1. Open HIKMICRO Sight and connect your device to the app.
- 2. Tap **Product Info**, and tap **Zero** to enter configuration interface.
- 3. Set reticle to the target.
 - 1) After synchronizing data from the device, select a zeroing profile.
 - 2) Select a reticle you want to correct.
 - 3) Input the number to set the distance to the target.
 - 4) Select digital zoom ratio.
- 4. After synchronizing parameters to the device, aim at the target and pull the trigger.
- 5. Measure the deviation of the point of impact from the target, and input the number to adjust the position of reticle.
- 6. Pull the trigger again and check the point of impact. Ensure the big reticle aligns with it.
- 7. (Optional) Tap **Next Profile** to set the position for other reticles.

Result

The position of the reticle is saved and synchronized to your device, so you can check it on your device.



- When you enter the zeroing setting interface on your app, the device will return to the live view interface automatically.
- The zeroing operation may vary due to app updates. Please take the actual app version for reference.

5 Measure Distance

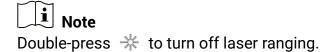
The device can detect the distance between the target and the observation position with laser.

Before You Start

When measuring the distance, keep the hand and the position steady. Otherwise, the accuracy may be affected.

Steps

- 1. In the menu, rotate the wheel to select \Rightarrow , and press the wheel to confirm.
- 2. Rotate the wheel to select a laser ranging mode and press the wheel to confirm. **Once** and **Continuous** are selectable.
 - Once: Measure the distance once.
 - Continuous: Measure the distance continuously, and the measurement duration can be selected. The measurement result will be refreshed every 1 s.
- 3. Hold the wheel to return to the live view interface.
- 4. Aim the cursor at the target, press * to turn on the laser and press * again to measure the target distance.



Result

The distance measurement result is displayed at the upper right of the image.

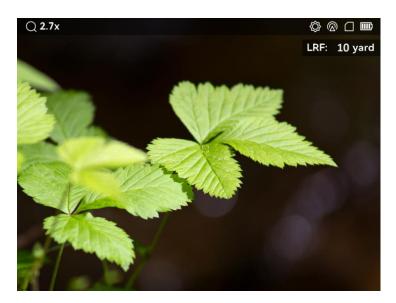


Figure 5-1 Distance Measurement Result

6 Ballistic Calculation for Hunting

The function helps you have a better experience in various conditions. Multiple parameters are used in calculation to ensure precision and flexibility of use.

Before You Start

- Make sure the **Ballistic Calculation** switch is on.
- Make sure the reticle is enabled.
- Make sure you have finished zeroing.

Steps

- 1. In the menu, rotate the wheel to select ②. Press the wheel to enter the setting interface.
- 2. Rotate the wheel to select **Ballistic Profile**, and press the wheel to switch the profile. You can configure and save the settings in respective profiles.
- 3. Rotate the wheel to select the following parameters, and press the wheel to input the data.
 - Initial Velocity: The velocity varies in different conditions.
 - Zero Range: The range you have zeroed the device at.
 - Ballistic Coefficient: The measure of its ability to overcome air resistance.
 - Sight Height: The distance between the bore and the center of the lens.
 - Altitude: Set this to your normal altitude.
 - Temperature: Set this to your normal temperature.
- 4. Press the wheel to switch digit, and rotate the wheel to change the number.
- 5. Hold the wheel to save and exit.
- 6. Aim the cursor at the target and press to measure the target distance. The screen will display the recommended aiming point and the drop distance in the upper right corner of the interface.



Figure 6-1 Drop Distance

7. (Optional) To adjust the distance, repeat above step.



- 5 ballistic profiles can be saved.
- The more parameters you specify, the more accurate the recommended aiming point will be.
- The drop distance is related to the input parameters. Please refer to the actual situation.

7 General Settings

7.1 Set OSD

You can choose whether to display the OSD information on the live view mode in this function.

Steps

- 1. In the menu, select **Function Settings** and press the wheel to confirm.
- 2. Rotate the wheel to select \(\limin \), and press the wheel to enter the setting interface.
- 3. Rotate the wheel to select **OSD** and press the wheel to enable it.
- 4. Rotate the wheel to select **Date** or **Time**, and press the wheel to display or hide the information.
- 5. Hold the wheel to save and exit.

7.2 Set Brand Logo

You can add brand logo on the live view interface.

Steps

- 1. In the menu, select **Function Settings**, and press the wheel to enter the sub-menu.
- 2. Rotate the wheel to select $\stackrel{\triangle}{=}$, and press the wheel to enable **Brand** Logo.
- 3. Hold the wheel to save the settings and exit.

Result

The brand logo is displayed at the bottom left of the image.

7.3 Capture Picture

In the main live view interface, press \Rightarrow and the wheel at the same time to capture images.



When capturing succeeds, the image freezes for 1 second and a prompt shows on the display. For exporting captured pictures, refer to *Export Files*.

7.4 Set Audio

If you enable the audio function, the sound will be recorded with the video. When there is too loud noise in the video, you can disable this function.

Steps

- 2. Press the wheel to enable this function.
- 3. Hold the wheel to save and exit.

7.5 Record Video

Steps

1. In the live view interface, press the wheel to start recording.

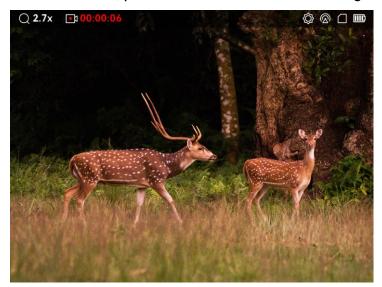


Figure 7-1 Start Recording

The left top of image displays the information of recording time.

2. Press the wheel again to stop recording.

What to do next

For exporting recording files, refer to **Export Files**.

7.6 Prerecord Video

After you enable this function and select the prerecording time, the device can automatically start recording the 7, 10 or 15 seconds before the recoilactivation and end recording the 7, 10 or 15 seconds after the recoilactivation.

Steps

- 1. In the menu, select \(\begin{aligned} \Pmathbb{I} \\ \mathbb{I} \end{aligned}, and press the wheel to confirm.
- 2. Rotate the wheel to switch the prerecording time. 7 s, 10 s, and 15 s are selectable.
- 3. Hold the wheel to save and exit.



If you activate recoils continuously, the device will start recording the 7, 10 or 15 seconds before the first recoil and end recording the 7, 10, or 15 seconds after the last recoil.

What to do next

For exporting recording files, refer to **Export Files**.

7.7 Export Files

7.7.1 Export Files via HIKMICRO Sight

You can access device albums and export files to your phone via HIKMICRO Sight.

Before You Start

Install HIKMICRO Sight on your mobile phone.

Steps

- 1. Open HIKMICRO Sight and connect your device to the app. See *App Connection*.
- 2. Tap **Media** to access device albums.

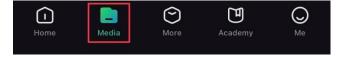


Figure 7-2 Access Device Albums

Tap Local or Device to view the photos and videos.

- Local: You can view the previous files on the app.
- **Device**: You can view the files of the current device.

i Note

The photos or videos may not show in **Device**. Please pull down to refresh the page.

4. Tap to select a file, and tap **Download** to export the file to your local phone albums.





- Go to Me > About > User Manual on the app to see more detailed operations.
- You can also access device albums by tapping bottom left icon in the live view interface.
- The exporting operation may vary due to app updates. Please take the actual app version for reference.

7.7.2 Export Files via PC

This function is used to export recorded videos and captured pictures.

Steps

1. Connect the device and PC with a Type-C cable.



Make sure the device is turned on when connecting the cable.

- Open computer disk and select the disk of device. Go to the **DCIM** folder and find the folder named after the capture year and month. For example, if you capture a picture or record a video in June 2022, go to **DCIM > 202206** to find the picture or video.
- 3. Select and copy the files to PC.
- 4. Disconnect the device from your PC.

i Note

- The device displays images when you connect it to PC, but functions such as recording, capturing and hotspot are disabled.
- When you connect the device to PC for the first time, it installs the drive program automatically.

8 System Settings

8.1 Adjust Date

Steps

- 2. Select = .
- 3. Press the wheel to select the year, month, or day, and rotate the wheel to change the number.
- 4. Hold the wheel to save settings and exit.

8.2 Synchronize Time

Steps

- 2. Select 🕔 .
- 3. Press and rotate the wheel to switch the clock system. 24-hour and 12-hour clock are selectable. If you select 12-hour clock, press and rotate the wheel to select AM or PM.
- 4. Press the wheel to select the hour or minute, and rotate the wheel to change the number.
- 5. Hold the wheel to save settings and exit.

8.3 Set Language

You can select the device language in this function.

Steps

- 2. Select \(\frac{1}{2} \), and press the wheel to enter the language configuration interface.

- 3. Rotate the wheel to select the language as required, and press the wheel to confirm.
- 4. Hold the wheel to exit.

8.4 Set Unit

You can switch the unit for the distance measurement function and the reticle function.

Steps

- 2. Select , and press the wheel to confirm.
- 3. Rotate the wheel to select **yard** or **m**.
- 4. Hold the wheel to save settings and exit.

8.5 View Device Information

- 2. Select (i), and press the wheel. You can view the device information such as version, and serial No.

8.6 Restore Device

Steps

- 2. Select , and press the wheel to restore the device to defaults according to the prompt.

9 Frequently Asked Questions

9.1 Why is the monitor off?

Check the following items.

- Check whether the device is off-battery or in standby mode.
- Connect the device to power supply and turn it on to check the monitor.

9.2 The image is not clear, how to adjust it?

Adjust the diopter adjustment ring or focus ring until the image is clear. Refer to **Adjust Diopter** or **Adjust Focus**.

9.3 Capturing or recording fails. What's the problem?

Check the following items.

- Whether the device is connected to your PC. Capturing or recording is disabled in this status.
- Whether the storage space is full.
- Whether the device is low-battery.

9.4 Why the PC cannot identify the device?

Check the following items.

- Whether the device is connected to your PC with supplied USB cable.
- If you use other USB cables, make sure the cable length is no longer than 1 m.

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.

Symbol Conventions

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

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

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 adapter by yourself. Input voltage should meet the Limited Power Source (5 VDC, 2A) according to the IEC62368 standard.
 Please refer to technical specifications for detailed information.
- Use the power adapter provided by qualified manufacturer. Refer to the product specification for detailed power requirements.
- Make sure the plug is properly connected to the power socket.
- DO NOT connect multiple devices to one power adapter, to avoid overheating or fire hazards caused by overload.
- The input voltage for the battery charger should meet the Limited Power

- Source (5 VDC, 2 A).
- The power source should meet limited power source or PS2 requirements according to IEC 62368-1 standard.

Battery

- The battery type is 18650 with the protection board. The battery size is 19 mm × 70 mm. The rated voltage is 3.6 VDC, and the battery capacity is 3200 mAh. Dispose of used batteries in conformance with the instructions provided by the battery manufacturer.
- CAUTION: Risk of explosion if the battery is replaced by an incorrect type. Replace with the same or equivalent type only.
- Batteries of improper size cannot be installed, and may cause abnormal shutdown.
- Please purchase the batteries recommended by the manufacturer if necessary.
- The purchased batteries by users need to comply with the relevant international standards about battery safety (e.g. EN/IEC standards).
- Use the battery provided by qualified manufacturer. Refer to the product specification for detailed battery requirements.
- Dispose of used batteries according to the instructions.
- Remove the battery if you do not use the device for a long time.
- 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.
- Make sure the battery temperature is between 0 °C to 45 °C (32 °F to 113 °F) when charging.
- 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 or low air pressure environment, which may result in an explosion or the leakage of flammable liquid or gas.
- Confirm there is no flammable material within 2 m of the charger during charging.
- DO NOT place the device with battery or the battery alone near heating or fire source. Avoid direct sunlight.
- DO NOT place the battery in the reach of children.
- DO NOT swallow the battery to avoid chemical burns.
- The battery cannot be charged with external power source directly.
- The device cannot be charged, please use the supplied charger to charge the battery.
- The using environment of the adapter should be consistent with that of the device.

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.
- 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.
- Clean the lens with soft and dry cloth or wiping paper to avoid scratching it.

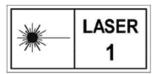
Using Environment

- Make sure the running environment meets the requirement of the device. The operating temperature shall be -30°C to 55°C (-22°F to 131°F), and the operating humidity shall be 95% or less.
- DO NOT expose the device to extremely hot, cold, dusty, corrosive, saline-alkali, or damp environments.
- Avoid equipment installation on vibratory surface or places subject to shock (neglect may cause equipment damage).
- DO NOT aim the lens at the sun or any other bright light.

Emergency

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

Laser



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. The laser radiation emitted from the device can cause eye injuries, burning of skin or

inflammable substances. Before enabling the laser ranging function, make sure no human or inflammable substances are in front of the laser lens. Do not place the device where minors can fetch it. The wavelength is 905 nm, and the max. power output is less than 1.328 mW. According to IEC 60825-1:2014 and EN 60825-1:2014+A11:2021, this laser product is classified as Class 1 laser product.

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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Legal Information

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About this Manual

The Manual includes instructions for using and managing the Product. Pictures, charts, images and all other information hereinafter are for description and explanation only. The information contained in the Manual is subject to change, without notice, due to firmware updates or other reasons. Please find the latest version of this Manual at the HIKMICRO website (http://www.hikmicrotech.com).

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

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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

Please take attention that changes or modification not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

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.

Please take attention that changes or modification not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

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
- (2) This device must accept any interference received, including interference that may cause undesired operation.

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

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment.

EU Compliance 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), Directive 2014/53/EU. 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/

Frequency Bands and Power (for CE)

The frequency bands and modes and the nominal limits of transmitted power (radiated and/or conducted) applicable to this radio device are the following: Wi-Fi 2.4 GHz (2.4 GHz to 2.4835 GHz), 20 dBm.



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.



Directive 2006/66/EC and its amendment 2013/56/EU (Battery Directive): This product contains a battery that 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), lead (Pb), or mercury (Hg). 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 license-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.

Conformité Industrie Canada ICES-003

Cet appareil répond aux exigences des normes CAN ICES-003 (B)/NMB-003 (B).

Cet appareil est conforme aux normes RSS exemptes de licence d'Industrie Canada. Son fonctionnement est soumis aux deux conditions suivantes :

- (1) cet appareil ne doit pas causer d'interférences, et
- (2) cet appareil doit accepter toute interférence reçue, notamment les interférences susceptibles d'occasionner un fonctionnement indésirable de l'appareil.

Cet appareil est conforme aux limites d'exposition au rayonnement IC RSS-102 établies pour un environnement non contrôlé.

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 Elektround 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.

KC

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