# HIKVISION

## **Body Camera**

**User Manual** 

## Initiatives on the Use of Video Products

### Thank you for choosing Hikvision products.

Technology affects every aspect of our life. As a high-tech company, we are increasingly aware of the role technology plays in improving business efficiency and quality of life, but at the same time, the potential harm of its improper usage. For example, video products are capable of recording real, complete and clear images. This provides a high value in retrospect and preserving real-time facts. However, it may also result in the infringement of a third party's legitimate rights and interests if improper distribution, use and/or processing of video data takes place. With the philosophy of "Technology for the Good", Hikvision requests that every end user of video technology and video products shall comply with all the applicable laws and regulations, as well as ethical customs, aiming to jointly create a better community.

### Please read the following initiatives carefully:

- Everyone has a reasonable expectation of privacy, and the installation of video products should
  not be in conflict with this reasonable expectation. Therefore, a warning notice shall be given in
  a reasonable and effective manner and clarify the monitoring range, when installing video
  products in public areas. For non-public areas, a third party's rights and interests shall be
  evaluated when installing video products, including but not limited to, installing video products
  only after obtaining the consent of the stakeholders, and not installing highly-invisible video
  products.
- The purpose of video products is to record real activities within a specific time and space and
  under specific conditions. Therefore, every user shall first reasonably define his/her own rights in
  such specific scope, in order to avoid infringing on a third party's portraits, privacy or other
  legitimate rights.
- During the use of video products, video image data derived from real scenes will continue to be generated, including a large amount of biological data (such as facial images), and the data could be further applied or reprocessed. Video products themselves could not distinguish good from bad regarding how to use the data based solely on the images captured by the video products. The result of data usage depends on the method and purpose of use of the data controllers. Therefore, data controllers shall not only comply with all the applicable laws and regulations and other normative requirements, but also respect international norms, social morality, good morals, common practices and other non-mandatory requirements, and respect individual privacy, portrait and other rights and interests.
- The rights, values and other demands of various stakeholders should always be considered when
  processing video data that is continuously generated by video products. In this regard, product
  security and data security are extremely crucial. Therefore, every end user and data controller,
  shall undertake all reasonable and necessary measures to ensure data security and avoid data
  leakage, improper disclosure and improper use, including but not limited to, setting up access

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- control, selecting a suitable network environment (the Internet or Intranet) where video products are connected, establishing and constantly optimizing network security.
- Video products have made great contributions to the improvement of social security around the
  world, and we believe that these products will also play an active role in more aspects of social
  life. Any abuse of video products in violation of human rights or leading to criminal activities are
  contrary to the original intent of technological innovation and product development. Therefore,
  each user shall establish an evaluation and tracking mechanism of their product application to
  ensure that every product is used in a proper and reasonable manner and with good faith.

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

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DEVELOPMENT OR PRODUCTION OF WEAPONS OF MASS DESTRUCTION, THE DEVELOPMENT OR PRODUCTION OF CHEMICAL OR BIOLOGICAL WEAPONS, ANY ACTIVITIES IN THE CONTEXT RELATED TO ANY NUCLEAR EXPLOSIVE OR UNSAFE NUCLEAR FUEL-CYCLE, OR IN SUPPORT OF HUMAN RIGHTS ABUSES.

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## **Regulatory 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.

FCC compliance: This equipment 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 equipment 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 equipment 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.

#### **FCC Conditions**

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

#### **EU Conformity Statement**

 $\epsilon$ 

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 EMC Directive 2014/30/EU, the LVD Directive 2014/35/EU, the RoHS Directive 2011/65/EU.

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 2011/65/EU (RoHS).

Hereby, Hangzhou Hikvision Digital Technology Co., Ltd. declares that this wireless device is in compliance with Directive 2014/53/EU. The full text of the EU

declaration of conformity is available at the following Internet address: <a href="https://www.hikvision.com/europe/support/download/declaration-of-conformity/">https://www.hikvision.com/europe/support/download/declaration-of-conformity/</a>.

X

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-3 (B)/NMB-3(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.

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.

Under Industry Canada regulations, this radio transmitter may only operate using an antenna of a type and maximum (or lesser) gain approved for the transmitter by Industry Canada. To reduce potential radio interference to other users, the antenna type and its gain should be so chosen that the equivalent isotropically radiated power (e.i.r.p.) is not more than that necessary for successful communication.

Conformément à la réglementation d'Industrie Canada, le présent émetteur radio peut fonctionner avec une antenne d'un type et d'un gain maximal (ou inférieur) approuvé pour l'émetteur par Industrie Canada. Dans le but de réduire les risques de brouillage radioélectrique à l'intention des autres utilisateurs, il faut choisir le type d'antenne et son gain de sorte que la puissance isotrope rayonnée équivalente (p.i.r.e.) ne dépasse pas l'intensité nécessaire à l'établissement d'une communication satisfaisante.

This equipment should be installed and operated with a minimum distance of 20 cm between the radiator and your body.

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Cet équipement doit être installé et utilisé à une distance minimale de 20 cm entre le radiateur et votre corps.	

## **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.
<b>Caution</b>	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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## **Chapter 1 Product Introduction**

#### 1.1 Introduction

Body camera (hereinafter referred to as device) highly integrates with record, taping, capture, positioning, etc. It is embedded with positioning module with high sensitivity to locate the occurring position of events accurately. It can record the process and condition of events completely via record, taping, and capture. You can also tag the important data for future search.

It is small and light, convenient to carry, and can be worn on the shoulder, satisfying the requirement of mobile duty and evidence record for single person. It is widely applicable to public security protection, city management, industry and commerce, etc.

## 1.2 Key Feature

- Supports record, taping, capture, etc. Capture is available during recording.
- Supports H.264/H.265 video encoding compression technology, and can save network transmission bandwidth and storage space.
- The recorded videos can be uploaded to the central video platform via mobile wireless communication.
- Embedded with positioning module with high sensitivity to locate the occurring position of events accurately. Supports GPS, Beidou, and GPS+Beidou. The location information can be uploaded to the command center in real time.
- Supports IR night vision. Even in the dark scene, the facial features of the persons in the scene can be recognized clearly.
- · Supports group talk.
- Tri-proof design to support all-weather filed operation.
- Built-in battery with large capacity, supporting longer working hour.
- · Small size, light weight, and convenient to carry.



Functions vary with different models. The actual device prevails.

### 1.3 Default Information

The default information of the device is shown as below.

- · Default user name (administrator): admin
- · Default password: 123456

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For your data safety, change the device password in time.

## **Chapter 2 Startup and Main Menu**

## 2.1 Login

Multiple users issued by the dock station or the platform can log in to the device. The logged user can view all the videos, audios, and pictures of all the users.

#### **Before You Start**

Set multiple users via the dock station or the platform. Refer to the user manual of the dock station or the platform for details.

#### **Steps**

1. Start up the device to enter the login page.

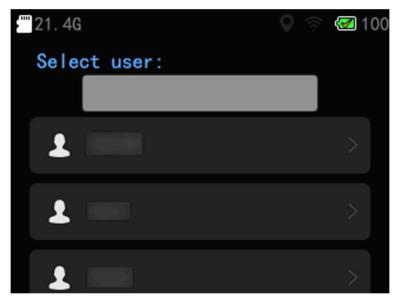


Figure 2-1 Login Page

- 2. Select the user.
- **3. Optional:** If there are multiple users, you can enter the key words of the user name to search.



You can search the user only when there are more than 20 users.

4. Enter the password of the user.

## 2.2 Startup

When the device is off, hold the startup/shutdown button on the device side to start it up. Then you will enter the following page.

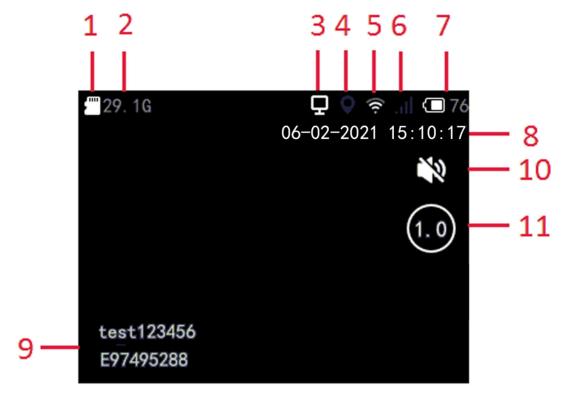


Figure 2-2 Startup Page

**Table 2-1 Startup Page Description** 

No.	Description
1	The TF card status.
	Note
	If the TF card is abnormal, there will be an exclamation mark on the icon.
2	The available memory.
3	Platform connection status: If the device is not connected to the platform, or the connection fails, the icon will not display. After the device is connected to the platform, the icon changes to white.
4	Positioning status: If positioning is not enabled, or is enabled but fails, the icon is gray. After positioning is enabled and succeeds, the icon changes to white.
5	Wi-Fi connection status: If the device is not connected to Wi-Fi, or the connection fails, the icon is gray. After the device is connected to Wi-Fi, the icon changes to white.

No.	Description
6	Dial connection status: If the device is not connected to the mobile network or the connection fails, the icon is gray. After the device is connected to the mobile network, the icon changes to white.
7	The battery status and remaining battery.
8	The current date and time.
9	The device ID and user ID.
10	Mute. If the system volume is not 0, the icon will not display. If the system volume is 0, the icon will display.
11	The zooming multiple. Tap the icon to adjust the zooming multiple.

### 2.3 Main Menu

After the device starts up, it will enter the live view page automatically. Tap or press the main menu button below the screen to enter the main menu. The description of the main menu is shown as the table below.

**Table 2-2 Main Menu Description** 

Menu	Description
File	Select it to view the videos, audios, and pictures saved in the device.
GroupTalk	Select it to set group intercom parameters and join the group intercom.
Set	Select it to set camera, network and system.

**i** Note

If you have enabled **Menu Verification** or **Playback Verification**, you need to enter the device password when you enter the main menu or **File** page. Please operate according to the prompt.

## Chapter 3 Storage, Playback, and Backup

### 3.1 Storage

The recorded videos, taped audios, and captured pictures will be stored in the device.

### 3.1.1 Release Storage Capacity

When the storage capacity is full, you can back up the device data to the computer first, and then release the storage capacity.

#### **Steps**

- 1. Back up files via USB mode. Refer to "Backup" for details.
- 2. Delete the files backed up under DCIM folder to release the storage capacity.

#### **3.1.2** Record

You can record videos via the device.

#### Steps

- 1. After the device starts up, press the recording button.
  - After the recording starts, the flashing red point and recorded time will appear on the upper left corner of the live view page, and the remaining available recording time will appear on the lower right corner of the live view page.
- 2. Press the recording button again to stop recording.
- 3. Optional: Select File on the main menu to view the recorded videos.



- If you want to record a period of time before recording starts, select Set → Camera → Record
   Param. → Pre-Record to set pre-record.
- If you want to record a period of time after recording ends, select Set → Camera → Record
   Param. → Post-Record to set post-record.

#### 3.1.3 Tape

You can tape audios via the device.

#### **Steps**

1. After the device starts up, press the taping button.

After the taping starts, the flashing white taping icon and taped time will appear on the upper left corner of the live view page, and the TF card status and available memory will appear on the lower right corner of the live view page.

- 2. Press the taping button again to stop taping.
- 3. Optional: Select File on the main menu to view the taped audios.

#### 3.1.4 Capture

You can capture pictures via the device.

#### Steps

- **1.** After the device starts up, press the capture button.
  - The device captures a picture.
- 2. Optional: Select File on the main menu to view the captured pictures.

## 3.2 Playback

You can play back videos, audios, and pictures via the device.

#### **Steps**

- 1. Select File on the main menu.
- 2. Select Video, Picture, or Audio.
- 3. Select the file to play or view from the file list.

## 3.3 Backup

You can switch the device as a USB flash disk and export files to your computer.

#### **Before You Start**

Connect the device to the computer via data cable.

#### **Steps**

- 1. Switch the device to USB mode. Refer to "Switch USB Mode" for details.
- 2. Copy the data of the device to the computer.



You can only play the backed up video or audio files via Hikvision player or other players with Hikvision play plugin.

- Hikvision Player: If you select Hikvision player to play the files, visit Hikvision official website to download VSPlayer and install it.
- Hikvision Play Plugin: If you select other players to play the files, visit Hikvision official website to download MFPlugins and install it.

## 3.4 Set Tag

### 3.4.1 Set Tag During Recording

During recording, press the tag button to set a tag for the current video. The icon will appear on the upper left corner of the live view page. Hold the tag button again to cancel the tag.

### 3.4.2 Set Tag After Recording, Taping, or Capturing

You can set a tag in two ways:

- After recording, tap File → Video to enter the file folder named after recording date, and select a video to play. During playing, tap anywhere on the screen, and then tap 
   into set a tag for the current video. Tap the icon again to cancel the tag.
- After recording, taping, or capturing, tap **File**, and select a certain file from the video, audio, or picture file list. Hold the file name to set a tag. The name of the tagged file will be displayed as red. Hold the file name again to cancel the tag.

## **Chapter 4 Alarm Settings**

The device will detect the storage capacity and battery automatically. When the storage capacity is full or the battery is low, corresponding prompt will pop up on the live view page to send the auto alarm. Back up the files and release the storage capacity in time when the storage capacity is full. Charge the device in time when the device is in low power.

## **Chapter 5 Network Settings**

#### **5.1 Dial**

You can connect the device to the network via SIM card dialing.

#### **Before You Start**

Install the SIM card.

#### Steps

- 1. Enable Dial via the below operations.
  - Swipe the screen down to open the notification center. Tap 10 to enable dialing.
  - On the main menu, tap Set → Network → Dial to enable Dial.
- 2. Select **Set**  $\rightarrow$  **Network**  $\rightarrow$  **Dial**  $\rightarrow$  **APN** to set APN parameters.

Note

Contact the service supplier to get the APN information.

3. Optional: You can do the below operations.

View the dial Select Set → Network → Dial → Dial Information to view the dial

**information** information.

View the APN Select Set → Network → Dial → APN Information to view the APN

**information** information.

#### Result

The white dial icon appears on the status bar, indicating dialing succeeded.

#### 5.2 Connect to Wi-Fi

Set Wi-Fi parameters if you want to connect the device to the network via Wi-Fi.

#### Steps

- 1. Enable the Wi-Fi via the below operations.
  - Swipe the screen down to open the notification center. Tap \square to enable the Wi-Fi.
  - On the main menu, tap Set → Network → Wi-Fi to enable Wi-Fi.
- 2. Select Refresh to search available Wi-Fi.
- 3. Select the Wi-Fi to connect, and enter the password.
- **4. Optional:** You can do the below operations.

**View the connected Wi-Fi** Select the connected Wi-Fi to view the information. **information** 

Set the static Wi-Fi

- a. Select Static Wi-Fi.
- b. Enable Connect.
- c. Select **Set Static Wi-Fi** to set **IP**, **Mask**, and other parameters.

#### Result

The white Wi-Fi connection icon appears on the status bar, indicating the Wi-Fi is connected.

#### What to do next

Swipe the screen down after the first successful connection, and tap the Wi-Fi icon on the notification bar to enable or disable the Wi-Fi.

#### 5.3 Connect to Platform

#### 5.3.1 Connect to EHome Platform

EHome is the platform access protocol. You can log in to the device via the platform to realize live view, data management, and so on.

#### **Before You Start**

Set the connected platform. Refer to the platform user manual for details. Ensure the device can communicate with the platform normally.

#### **Steps**

- 1. Select Set → Network → EHome Platform .
- 2. Enable Platform Connection.

Note

After enabling platform connection, reboot the device to take the new settings into effect.

3. Select Platform to set Address, ID, and other parameters.

 $\bigcap_{\mathbf{i}}_{\mathsf{Note}}$ 

The device ID should be the same as the ID set on the platform.

4. Optional: You can do the below operations.

**Enable Force Sub-Stream** Enable **Force Sub-Stream** to force the platform only to transmit

via the sub-stream.

**Enable Pic. Auto Upload** Enable **Pic. Auto Upload**, and the captured pictures will be

automatically uploaded to the platform.

View the platform

information

Select **Platform Information** to view the information.

#### 5.3.2 Connect to ISUP Platform

ISUP is the platform access protocol. You can log in to the device via the platform to realize live view, data management, and so on.

#### **Before You Start**

Set the connected platform. Refer to the platform user manual for details. Ensure the device can communicate with the platform normally.

#### **Steps**

- 1. Select Set → Network → ISUP .
- 2. Enable ISUP Connection.

**i**Note

After enabling platform connection, reboot the device to take the new settings into effect.

3. Select ISUP to set IP, Port, and other parameters.

**i** Note

The device ID should be the same as the ID set on the platform.

4. Optional: You can do the below operations.

**Enable Force Sub-Stream** Enable **Force Sub-Stream** to force the platform only to

transmit via the sub-stream.

View the platform information

Select **ISUP Information** to view the information.

#### 5.3.3 Connect to Guarding Vision

The device can be remotely accessed via Guarding Vision.

#### **Before You Start**

- · Connect the device to network.
- Set the IP address, subnet mask, gateway, and DNS server of the LAN.
- Set Guarding Vision parameters via Body Camera Assistant. Refer to the user manual of Body Camera Assistant for details.

#### **Steps**

- 1. Select Set → Network → Guarding Vision .
- 2. Enable Guarding Vision.

iNote

After enabling Guarding Vision connection, reboot the device to take the new settings into effect.

- **3. Optional:** For the first-time to add the device to the Guarding Vision platform, you need to tap **Settings** to enter the **Code** and **Encryption**.
- **4. Optional:** Select **Set** → **Network** → **Guarding Vision** → **Guarding Vision Info.** to view the platform information.
- 5. Get Guarding Vision application from the following ways.
  - For computer user: Visit *dev.guardingvision.com* .
  - For mobile phone user: Download Guarding Vision in App Store (iOS system) or Google Play<sup>™</sup>
    (Android system).
- 6. Register an account and add the device to Guarding Vision.

Note

Refer to the user manual of Guarding Vision for details.

## 5.4 Upload to FTP

You can upload the video, audio, and picture files stored in the device to the FTP server.

#### **Before You Start**

Allocate the FTP server, and ensure the device can communicate normally with the server network.

#### **Steps**

- 1. Select Set → Network → FTP.
- 2. Enable FTP.
- 3. Select FTP to set the FTP server parameters.
- 4. Enable Video Upload, Pic. Upload or Audio Upload according to your needs.
- 5. Optional: You can do the below operations.

**Automatically delete local** Enable **FTP Upload Delete**, and the local files will be automatically deleted after uploaded to the FTP server.

**View the file upload status** Select **FTP Information** to view the file upload status.

## 5.5 Ping Test

Test the network connection between the device and target host.

#### **Before You Start**

- Enable the debug log.
- · Ensure the network is connected.

- 1. Select Set → Network → Network → Ping Test.
- 2. Select **Network** to set the target host address.
- 3. Select Network Test to test according to the information and view the test result.

## **5.6 Network Packet**

The technicians can enable the network packet to save the current network data for troubleshooting.

### **Before You Start**

- Enable the debug log.
- Ensure the network is connected.

### **Steps**



This function is only for the technicians to debug.

- 1. Select Set → Network → Network .
- 2. Enable Network Packet.

## **Chapter 6 Group Intercom**

You can realize group intercom via the device.

#### **Before You Start**

- The device is connected to the platform.
- Register the device on the group intercom service configuration interface via the web browser.

#### **Steps**

- 1. Select GroupTalk on the main menu.
- 2. Set platform parameters.
  - 1) Select Platform.
  - 2) Select **Group Intercom** to choose group intercom mode.
  - 3) Set IP Address, Port, and other parameters.
- **3.** Go back to the login page, enter the registered **User Name** and **Password** on the group intercom service configuration interface, and select **Login**.

After login, you will enter **Group List** page. The device will show the group list which is managed by the central platform automatically.

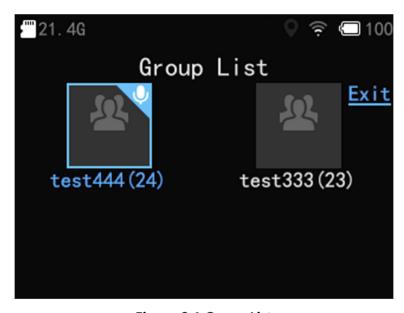


Figure 6-1 Group List

- **4.** Select a group to view group members and status.
- 5. You can do the below operations.

group	can see the red <b>Now group yet.</b> prompt.
Make an audio call	On <b>Group Member</b> page, select an online member, and select <b>Audio Call</b> to make a full-duplex audio call. Before the member received, you can select

### **Body Camera User Manual**

**Hang Up** to cancel the audio call. After the member received, you can start the audio call. After the call is over, you can tap **\_\_\_\_** to end the audio call.

## Send a realtime audio message

Hold **PTT** button to record and release to send the audio message to the online group members.

## Make a video call

- On Group Member page, select an online member, and select Video Call
  to make a full-duplex video call. Before the member received, you can
  select Hang Up to cancel the video call. After the member received, you
  can start the video call. After the call is over, you can tap to end the
  video call.
- Press Fn button twice continuously to make a full-duplex video call to the
  platform members. Before the member received, you can select Hang Up
  to cancel the video call. After the member received, you can start the
  video call. After the call is over, you can tap \_\_\_\_\_\_ to end the video call.

Receive/hang up the audio/ video call

When the other member in the group makes an audio call to you, you can select \subsetent to receive the audio call, or you can select to hang up.

**6. Optional:** On **Group List** page, select **Exit** to exit the group intercom.

## **Chapter 7 System Settings**

## 7.1 Set Positioning

You can set positioning to locate the position of the device.

#### **Before You Start**

Disable the serial port mode.

#### Steps

1. Enable positioning via the below operations.

Touch-screen devices

- Swipe the screen down to open the notification center. Tap to enable the positioning.
- On the main menu, tap Set → Network → Positioning → Positioning to select the positioning mode.

Non-touch screen devices

On the main menu, select **Set**  $\rightarrow$  **Network**  $\rightarrow$  **Positioning**  $\rightarrow$  **Positioning** to select the positioning mode.

2. Optional: Select Set → Network → Positioning → GPS Overlay to enable GPS overlay.

The positioning information will be overlaid on the live view image.

#### Result

The white positioning icon appears on the status bar, indicating positioning succeeded.

### 7.2 Enable Indicator

Enable indicator to indicate the device status.

#### **Steps**

- 1. Select Set → System .
- 2. Enable Led.

∐i≀Note

Refer to Quick Start Guide for the indicator status and colors.

## 7.3 Enable IR Light

You can enable IR light to supplement light for record at night or in dim environment.

- 1. Select Set → Camera → Infrared .
- 2. Select On, Auto, or Off according to your needs.

#### **Auto**

IR light will be enabled only when the environment is dim and recording or remote live view starts.

#### On

No matter how the environment light is, once you start recording, IR light will be enabled.

## 7.4 Enable Logo Display

You can use the screen to display the logo picture.

#### **Steps**

- 1. Enable logo display via the below operations.
  - On the main menu, select **Set** → **System** to enable **Show Logo**. Reboot the device and the live view page will display the logo picture.
  - On the live view page, when the recording is disabled, you can press the **Fn** button to enable the logo display.
- **2. Optional:** On the live view page, when the recording is disabled, you can press the **Fn** button to disable the logo display.
- 3. Optional: Edit the logo picture.
  - Send the logo picture to the device via the Body Camera Assistant.
  - Switch to the USB mode, connect the device to the computer via a data cable, and move the logo picture into the "logo" content.



The logo picture should be BMP format and the size should be  $320 \times 216$ .

## 7.5 Set System Sound

#### **Touch-Screen Devices**

Swipe the screen down to open the notification center. Set system sound at . When the sound is decreased to mute, the icon will display on the live view page.

#### Non-Touch Screen Devices

On the live view page, press the up button below the screen to increase the sound, and press the down button to decrease the sound. When the sound is decreased to mute, the icon will display on the live view page.

## 7.6 Set Screen Brightness

 $\bigcap$ i Note

This function is only for touch-screen devices.

Swipe the screen down to open the notification center. Set screen brightness at ......

## 7.7 Set Voice Prompt

You can enable or disable the voice prompt when you start/stop recording/taping.

#### **Steps**

- 1. Select Set → System .
- 2. Enable or disable Voice Prompt according to your needs.

#### Result

If you enable the function, there will be voice prompt when you start/stop recording/taping.

## 7.8 Set Encoding Parameters

## 7.8.1 Set Video Encoding Type

The video encoding type will affect the quality of live view, videos, and captured pictures.

#### **Steps**

- 1. Select Set → Camera → Encode Type .
- 2. Select the video encoding type.

\_\_\_\_i Note

Video bitrate varies with different encoding types. Please select according to your needs. H.265 is a new encoding technology. Compared with H.264, it reduces the transmission bitrate under the same resolution, frame rate, and image quality.

#### What to do next

Reboot the device to take the new settings into effect.

#### 7.8.2 Set Video Stream Parameters

You can set the video stream parameters when recording.

#### **Steps**

- 1. Select Set → Camera → Record Param.
- 2. Set the parameters below.

#### Video Resolution

The higher the resolution is, the clearer the image will be. Meanwhile, the network bandwidth requirement is higher.

#### **Bitrate**

Select relatively large bitrate if you need good image quality and effect, but more storage spaces will be consumed. Select relatively small bitrate if storage requirement is in priority.

#### **Frame Rate**

It is to describe the frequency at which the video stream is updated and it is measured by frames per second (fps).

#### Video Clip

The max. recording duration of each video.

#### **Video Format**

Select **PS**, and the video files will be packed in PS format. You need to use Hikvision player to play the files. Visit Hikvision official website to download VSPlayer and install it.

Select **MP4**, and the video files will be packed in MP4 format. You can play the files via the Windows player or Hikvision player to play the files. Visit Hikvision official website to download VSPlayer and install it.

#### What to do next

Reboot the device to take the new settings into effect.

#### 7.8.3 Set Network Stream Parameters

You can set the network stream parameters when previewing the device via platform.

#### Steps

- 1. Select Set → Camera → Net Trans. Param.
- 2. Set the parameters below.

#### **Net Resolution**

The higher the resolution is, the clearer the image will be. Meanwhile, the network bandwidth requirement is higher.

#### **Net Bitrate**

Select relatively large bitrate if you need good image quality and effect, but more storage spaces will be consumed. Select relatively small bitrate if storage requirement is in priority.

#### **Net Frame Rate**

It is to describe the frequency at which the video stream is updated and it is measured by frames per second (fps).

#### **Network Stream**

Select transmit video stream or mixed stream.

### 7.8.4 Set Audio Encoding Type

The audio encoding type will affect the quality of audio.

#### **Steps**

- 1. Select Set → Camera → Intercom Audio .
- 2. Select audio encoding type according to your needs.

#### What to do next

Reboot the device to take the new settings into effect.

## 7.9 Set Capture Parameters

You can set the captured picture resolution.

#### Steps

- 1. Select Set → Camera → Picture Quality .
- 2. Select the picture resolution.

### 7.10 Set Multi-Line OSD

You can set the overlay information on the videos and pictures.

#### **Steps**

- 1. Select Set → Camera → Multi-Line OSD .
- 2. Enable Multi-Line OSD.
- 3. Select OSD to set OSD information.

#### Result

The OSD information will be overlaid on the videos and pictures.

#### 7.11 Set Pre-Record

You can set the time to record before the recording start time.

- 1. Select Set → Camera → Record Param. → Pre-Record.
- 2. Select the pre-record duration.

#### 7.12 Set Post-Record

You can set the time to record after the recording end time.

#### **Steps**

- 1. Select Set → Camera → Record Param. → Post-Record.
- 2. Select the post-record duration.

#### 7.13 Set Overwritten Record

You can enable overwritten record to keep recording when the available memory is insufficient, and the former recorded videos will be overwritten.

#### **Steps**



If you enable overwritten record, back up the important data in time, or they will be overwritten.

- 1. Select Set → Camera → Record Param.
- 2. Enable Overwrite.
- 3. Enter the device password.

#### Result

When the available memory is less than 150 MB, delete video files without a tag until the available memory is larger than 1 GB.

#### 7.14 Set Record once On

The device will start recording when startup after the function is enabled.

#### **Steps**

- 1. Select Set → Camera → Record Param.
- 2. Enable or disable Record once On.

## 7.15 Set Quick Charging Mode

You can enable or disable quick charging mode.

- 1. Select Set → System → Power Supply .
- 2. Enable or disable Quick Charging Mode according to your needs.

- Enable the quick charging mode, and all the power consuming functions, such as network, record, positioning, etc., will be disabled automatically. The fully-charged duration will be shorten.
- Disable the quick charging mode, and the device can be operated normally while being charged. The fully-charged duration will be longer than the quick charging mode.

#### 7.16 Switch USB Mode

You can switch the device to USB mode to import or export data.

#### **Before You Start**

Connect the device to the computer via a data cable.

#### **Steps**

- 1. Select Set → System .
- 2. Enable Auto USB Mode.
- 3. Enter the device password.

## 7.17 Set Read-Only USB Mode

After switching to the USB mode, you can set the video, audio, and picture files to be copied to the computer only, but cannot be deleted locally.

- 1. Select Set → System .
- 2. Enable or disable Readonly USB Mode.
  - Enable the read-only USB mode, and after switching to the USB mode, the video, audio, and picture files can only be copied to the computer, but cannot be deleted locally.
  - Disable the read-only USB mode, and after switching to USB mode, the video, audio, and picture files can both be copied or cut.

## **Chapter 8 Maintenance**

## 8.1 View System Information

Select **Set** → **System** → **System > System Information** to view the system information such as model, serial No., software version, etc.

#### 8.2 View Device Information

Select **Set** → **System** → **Device Information** to view device information such as person ID, device ID, etc.

## 8.3 View Battery Information

Select **Set** → **System** → **Power Supply** → **Battery Information** to view the battery power and status.

### 8.4 Enable Password

You can enable password verification for playback, entering main menu, and shutdown.

#### Steps

**i**Note

It is recommended to enable password for data security.

- 1. Select Set → System → PWD Verification .
- 2. Enable or disable Playback Verification, Menu Verification, and Shutdown Verification according to your needs.
- 3. Enter the device password.

#### 8.5 Edit Password

It is recommended to edit device password regularly to raise data security.

- 1. Select Set → System → PWD Verification → Change Password.
- 2. Enter the old password and new password, and confirm the new password.
- 3. Select Save.

#### What to do next

Next time you log in to the device, use the new password.

## 8.6 Upgrade

You can upgrade the device version.

#### **Before You Start**

- Import the upgrade file to the root directory of the device storage media.
- Ensure the device battery power is larger than 20%.

#### **Steps**

- 1. Select Set → System → System → System Update.
- 2. Enter the device password.
- 3. Select OK.

#### Result

The device starts to upgrade. After upgrade finishes, the device will reboot automatically.

## 8.7 Export Debug Log

You can export the device debug log to view the log information.

#### **Steps**

- 1. Select Set → System → System → System Information .
- 2. Tap the system information for 3 times continuously.
- 3. Enable Debug Log.

#### Result

The debug log will be automatically exported to the debuglog directory of the device storage media. You can switch to USB mode to view the log.



If the debug log is not disabled manually after enabled, it will be automatically disabled after the device works for 7 days by default.

## 8.8 Set Serial Port Debug

After enabling debug log, you can enable serial port mode to debug the device.

#### **Steps**



After the serial port mode is enabled, the positioning will be not available.

- 1. Select Set → System .
- 2. Enable Serial Port Mode.

#### What to do next

Reboot the device to take the new settings into effect.

## 8.9 Set Satellite Time Synchronization

You can synchronize the device time with the satellite time when the device time is not accurate.

#### **Before You Start**

Positioning has been enabled, and positioning succeeded.

#### **Steps**

- 1. Select Set → Network → Positioning.
- 2. Enable Satellite Time Sync.

## 8.10 Restore Basic Settings

If there is device exception due to the wrong set parameters, you can restore the basic settings.

#### **Steps**

- 1. Select Set → System → System → Restore basic settings .
- 2. Enter the device password.
- 3. Select **OK** on the popup window.

#### Result

The device will reboot automatically. The parameters except the network parameters, bluetooth, device password, etc. will be restored to the factory settings.

## **8.11 Restore Factory Settings**

If there is device exception due to the wrong set parameters, you can restore factory settings.

- 1. Select Set → System → System → Restore Factory Param.
- 2. Enter the device password.
- 3. Select **OK** on the popup window.

#### Result

The device will reboot automatically. All the parameters will be restored to the factory settings, and the multi-users information will be cleared.

## 8.12 Shut down and Sleep

#### 8.12.1 Shut down

After the device starts up, hold the startup/shutdown button on the device side to shut it down.

### 8.12.2 Shut down Forcedly

If the device cannot be shut down normally, you can hold the startup/shutdown button on the device side for 15 seconds to shut it down forcedly.

### 8.12.3 Sleep Manually

After the device starts up, press the startup/shutdown button on the device side to sleep the device.

### 8.12.4 Sleep Automatically

You can set the device to sleep automatically to save power if there is no operation within a certain time.

#### **Steps**

- 1. Select Set → System → Power Supply → Auto-Lock.
- 2. Select time.



If you select **OFF**, the screen will always on no matter if there is operation or not.

#### Result

If no operation is done within the set time, the device will sleep automatically.

#### 8.12.5 Wake up

When the device is sleeping, you can press any button except the PTT button and the buttons below the screen to wake it up.

# Appendix A. Communication Matrix and Device Command

Scan the QR code below to get the communication matrix of the device.



Scan the QR code below to get the device command.



