

Body Camera

User's Manual








Foreword

General

This manual introduces the functions and operations of the Mobile Portable Terminal (hereinafter referred to as "the Device").

Safety Instructions

The following categorized signal words with defined meaning might appear in the manual.

Signal Words	Meaning
 DANGER	Indicates a high potential hazard which, if not avoided, will result in death or serious injury.
 WARNING	Indicates a medium or low potential hazard which, if not avoided, could result in slight or moderate injury.
 CAUTION	Indicates a potential risk which, if not avoided, could result in property damage, data loss, lower performance, or unpredictable result.
 TIPS	Provides methods to help you solve a problem or save you time.
 NOTE	Provides additional information as the emphasis and supplement to the text.

Revision History

Version	Revision Content	Release Time
V1.0.0	First release.	November 2020

About the Manual

- The manual is for reference only. If there is inconsistency between the manual and the actual product, the actual product shall prevail.
- We are not liable for any loss caused by the operations that do not comply with the manual.
- The manual would be updated according to the latest laws and regulations of related jurisdictions. For detailed information, refer to the paper manual, CD-ROM, QR code or our official website. If there is inconsistency between paper manual and the electronic version, the electronic version shall prevail.
- All the designs and software are subject to change without prior written notice. The product updates might cause some differences between the actual product and the manual. Please contact the customer service for the latest program and supplementary documentation.
- There still might be deviation in technical data, functions and operations description, or errors in print. If there is any doubt or dispute, we reserve the right of final explanation.
- Upgrade the reader software or try other mainstream reader software if the manual (in PDF format) cannot be opened.
- All trademarks, registered trademarks and the company names in the manual are the properties of their respective owners.
- Please visit our website, contact the supplier or customer service if there is any problem

occurring when using the device.

- If there is any uncertainty or controversy, we reserve the right of final explanation.

Important Safeguards and Warnings

This chapter describes the contents covering proper handling of the Device, hazard prevention, and prevention of property damage. Read these contents carefully before using the Device, comply with them when using, and keep the manual well for future reference.

Operation Requirement

- Do not place or install the Device in a place exposed to sunlight or near the heat source.
- Operate the device within the rated range of power input and output.
- Do not disassemble the Device.
- Transport, use and store the Device under the allowed humidity and temperature conditions.

Electrical Safety

- Use the battery of specified manufacturer; otherwise there might result in explosion. When replacing battery, make sure the same type is used. Improper battery use might result in fire, explosion, or inflammation.
- Follow the instructions to dispose of the used battery.
- Use the recommended power cables in the region and conform to the rated power specification.
- Use the power adapter provided with the Device; otherwise, it might result in people injury and device damage.
- The power source shall conform to the requirement of the Safety Extra Low Voltage (SELV) standard, and supply power with rated voltage which conforms to Limited power Source requirement according to IEC60950-1. Please note that the power supply requirement is subject to the device label.
- Connect the device (I-type structure) to the power socket with protective earthing.
- The appliance coupler is a disconnection device. When using the coupler, keep the angle for easy operation.

General Precautions for Battery

- The Device and battery must be used within the specified temperature and humidity range; otherwise the Terminal and battery might be damaged.
- Charge with the provided power adapter or acquisition device. Mixed use might cause damage to the battery.
- If any abnormality is found in use, such as serious heat, bulge, deformation and strange smell, stop using the battery immediately.
- Do not store the battery with other metals to avoid metal objects touching the battery anode and cathode, thus resulting in short circuit.
- Do not decompose the battery in any way.
- Do not charge the battery continuously for more than 24 hours.

Battery Maintenance

- If the Device will not be used for a week or more, charge it to 60%, take the battery out of the Device, and store it in a clean, dry and ventilated room with ambient temperature of $20\pm5^{\circ}\text{C}$.
- Charge the battery once every four months during storage.
- The battery is a consumable accessory. It is recommended to replace it after one year of use.

Table of Contents

Foreword	I
Important Safeguards and Warnings	III
1 Product Introduction	2
2 Structure and Installation	3
2.1 Packing List	3
2.2 Device Structure	3
2.3 Indicator Lights.....	4
2.4 Installing Shoulder Clip	4
3 Basic Operation	6
3.1 Starting/Shutting down	6
3.2 Initialization.....	6
3.3 Main Interface	8
3.4 User Management	8
3.4.1 Changing Password	8
3.4.2 Setting Pattern Lock.....	9
3.5 Configuring the Device	9
3.5.1 Network	10
3.5.2 Device	14
3.5.3 System	21
3.6 Audio Recording.....	26
3.6.1 Recording Audio	26
3.6.2 One Press to Record Audio	27
3.7 Video Recording	27
3.7.1 Recording Video	27
3.7.2 One Press to Record Video.....	28
3.7.3 Focusing.....	28
3.7.4 Marking Important Video	28
3.8 Pictures	29
3.8.1 Taking a Picture.....	29
3.8.2 One Press to Take a Picture	29
3.9 Files.....	29
3.9.1 Viewing Pictures	29
3.9.2 Playing Video	31
3.9.3 Playing Audio	32
3.10 Switching between Video and Audio Recording	32
3.11 Recording Audio & Video at the Same Time.....	33
3.12 IR Light	33
3.13 White Light.....	33
3.14 Data Transmission	33
4 System Update.....	34
5 SIM Card and Battery Installation.....	35
5.1 Installing SIM Card	35
5.2 Replace Main Battery	36
Appendix 1 Cybersecurity Recommendations	37

1 Product Introduction

This product is a mobile portable terminal for persons of public security, insurance, traffic police and more. It integrates audio/video record and snapshot together.

This product can record the data during the whole law enforcement process. It is light and has small compact design, easy to install. It is waterproof and shockproof. The built-in IR light can guarantee clear video at night. The recorded video supports onsite playback and prevents the file from being tampered. The recorded data is fair and can be recognized by the authorities to solve a case and provide as the evidence on the court.

2 Structure and Installation

2.1 Packing List

Table 2-1 Packing list

Name	Quantity
Device	1
Shoulder clip	1
USB cable	1
Micro USB-to-mini USB adapter	1
Battery	1
Power adapter	1
Quick Start Guide	1

2.2 Device Structure

Figure 2-1 Front and rear panels

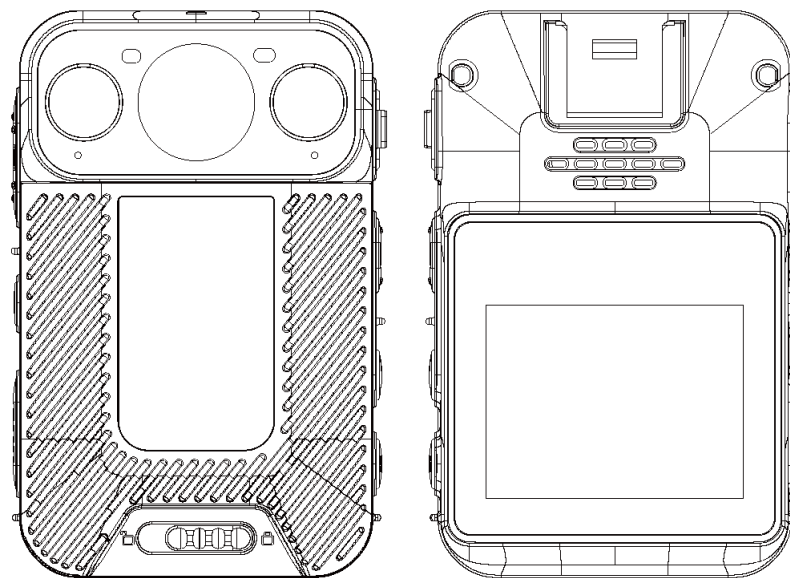


Figure 2-2 Sides

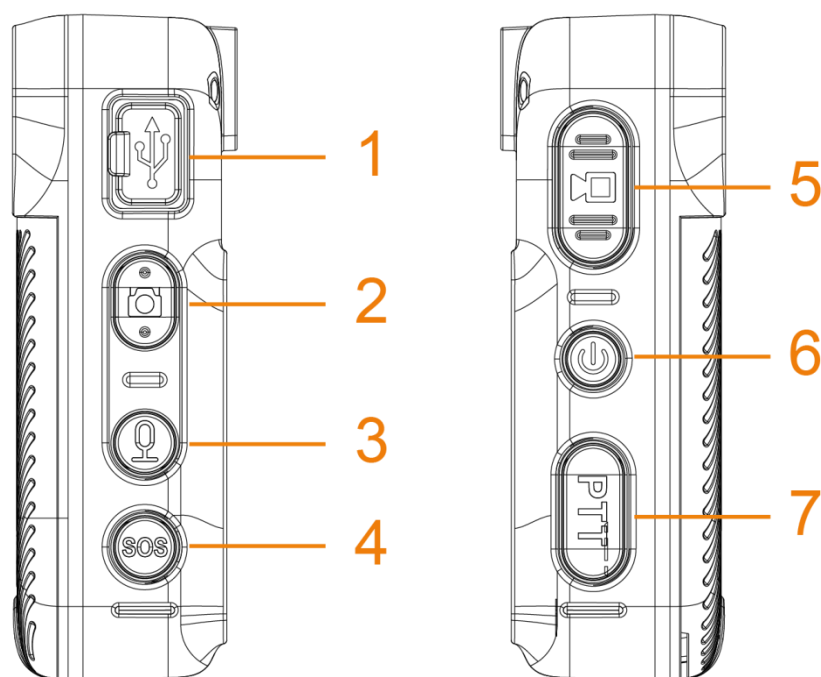


Table 2-2 Structure introduction

No.	Name	No.	Name
1	USB port/Power input	5	Reocrd video
2	Capture button	6	Power button
3	Record audio	7	Voice talk
4	Alarm	—	—

2.3 Indicator Lights

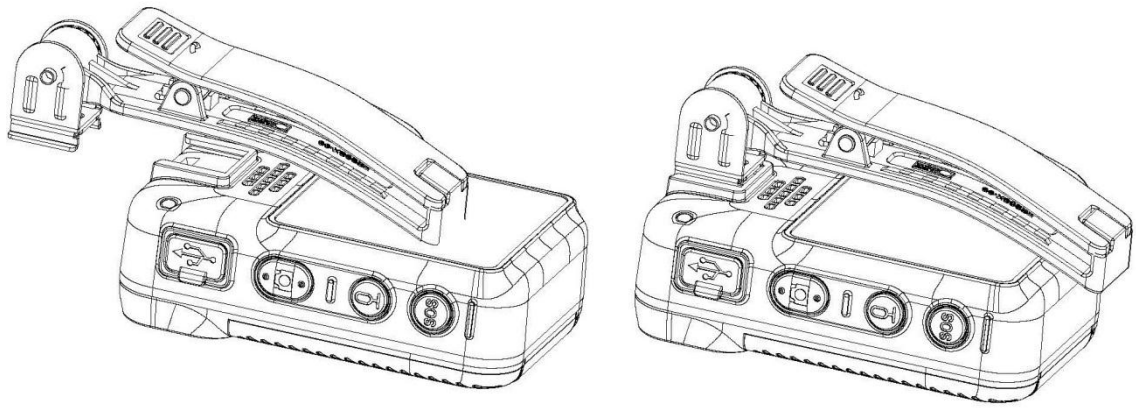
Table 2-3 Indicator lights

Working Status	Indicator Light	Working Status	Indicator Light
Standby	Green light is on.	Recording audio	Yellow light flashes.
Standby (voltage \leq 5%)	Red light is on.	Recharging	Red light is on.
Recording video	Red light flashes.	Battery is full when recharging	Green light is on.
Snapshot	Red light flashes.	Platform is pulling stream	Blue light flashes.

2.4 Installing Shoulder Clip


Slide the shoulder clip down.






Figure 2-1 Install shoulder clip



3 Basic Operation

3.1 Starting/Shutting down

Press  on right side to start, shut down or let the Device sleep.


- When the Device is shut down, press and hold  to start the Device.
- When the Device is running, press and hold , and then tap **Power off** to shut down the Device.
- When Device is running, press and hold , and then tap **Restart** to restart the Device.
- When the Device is running, press and hold  for 10 s to restart the Device forcibly.
- When Device is running, press  to let the Device sleep; press again to activate the Device.

3.2 Initialization

For the first-time use, set device login password and at least three security questions. If you forget the password, click **Forgot Password**, and then answer the security questions to reset login password.



- Password resetting function is only available for admin user.
- Password resetting will delete the pattern lock, and you need to set it after resetting password.

Step 1 When the Device is shut down, press and hold  to start the Device.

Step 2 Select a language and the check box of software license agreement, and then tap **Next**.

Step 3 Enter the new password and then confirm.

Figure 3-1 Set password

20:03 42%

Password Setting

The password must consist of at least 8 non-blank characters and contain at least two types of characters among upper case, lower case, and number

New Password

Confirm Password

[Security Questions](#)

Back Finish

Step 4 Tap **Security Questions** to set security questions.

Figure 3-2 Select security question

23:59 100%

Select Security Question

Please select at least three security questions.

What was your favorite book when you were a child? ☐

What was your dream career when you were young? ☐

Next

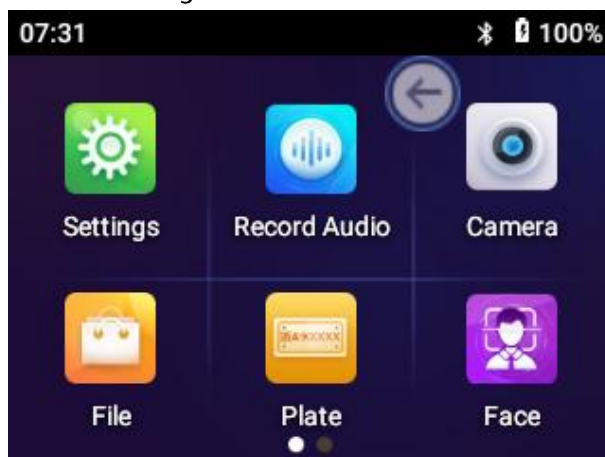
Step 5 Select at least three security questions and then tap **Next**.

Step 6 Enter the answers and then tap **Save**.

Step 7 Tap **Finish**.

3.3 Main Interface

Figure 3-3 Menu



- The notification bar displays message, working status, and operator status. Swipe down to view time and date, and select the white light or IR light.
- Swipe the main interface left or right to turn the page.

3.4 User Management

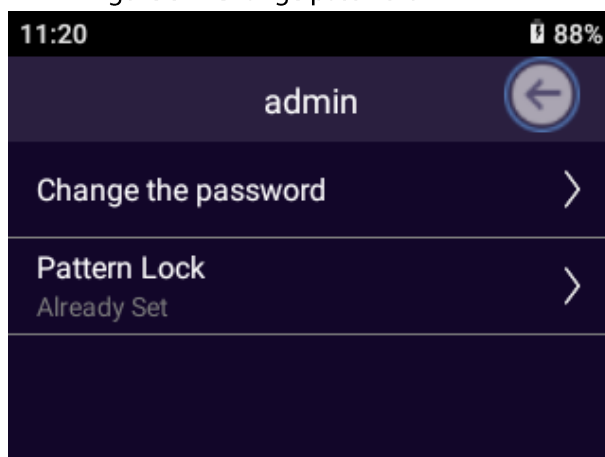
3.4.1 Changing Password

Change the password regularly to enhance the device security.

Step 1 On the main interface, tap .

Step 2 Select the account that you want to change the password, and then tap **Change the password**.

Figure 3-4 Change password



Step 3 Enter the old password, new password and confirm password.

The password must contain two character types (number, uppercase letters, and lowercase letters).

Step 4 Tap **OK**.

3.4.2 Setting Pattern Lock


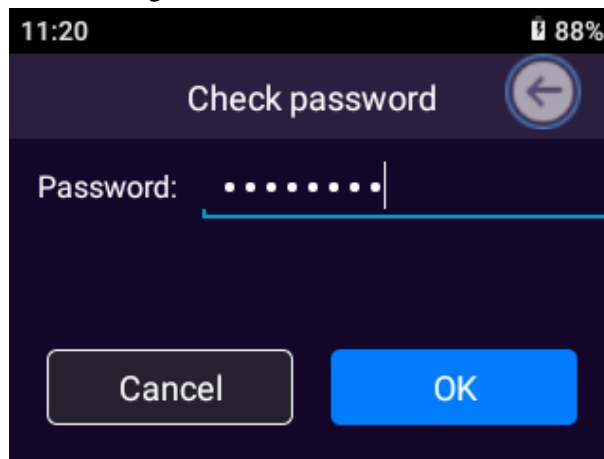
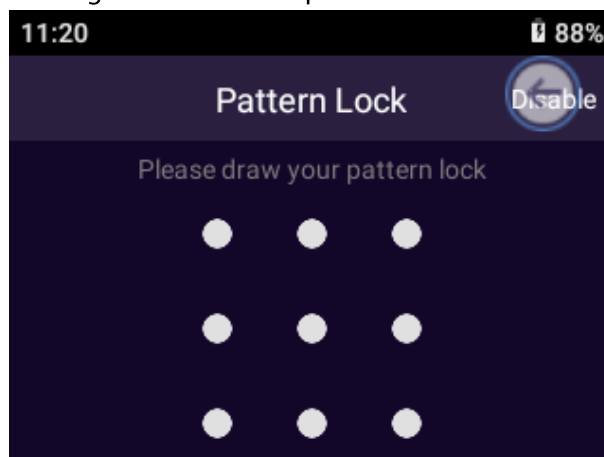
- Step 1 On the main interface, tap .
- Step 2 Select the account that you want to change the password, and the tap **Pattern Lock**.
- Step 3 Enter the login password.

Figure 3-5 Verification



- Step 4 Draw the pattern lock.

Figure 3-6 Draw the pattern lock



- A pattern lock must contains at least 4 points.
- Tap **Disable** to disable the pattern lock.



The pattern lock will be displayed on the login interface by default after setting successfully, and you can tap **Password** to go to the login interface with password.

3.5 Configuring the Device

Before using the Device, configure recording parameters, camera parameters, network mode, and more.

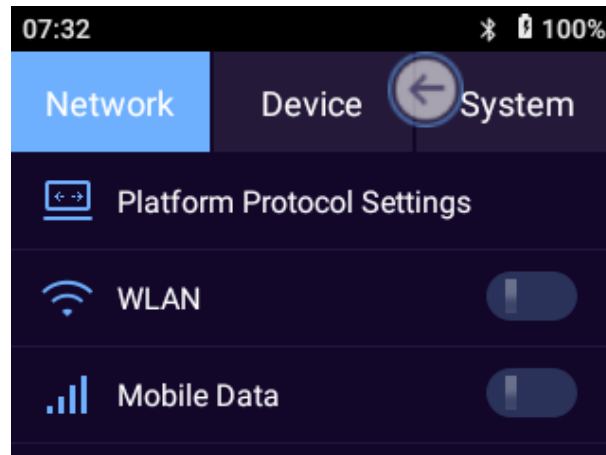
3.5.1 Network

On the main interface, tap .





When the Device does not have a SIM card, **Mobile Data** switch is grayed out.

Figure 3-7 Network



Tap an icon to go to the corresponding interface for configuration.

-  means that the function is disabled.
-  means that the function is enabled.

3.5.1.1 Platform

3.5.1.1.1 RTSP

- Step 1 Select **Network > Platform**.
- Step 2 Select **RTSP**.
- Step 3 Configure the parameters as needed.
- Step 4 Tap **OK**.

3.5.1.1.2 GPS Config

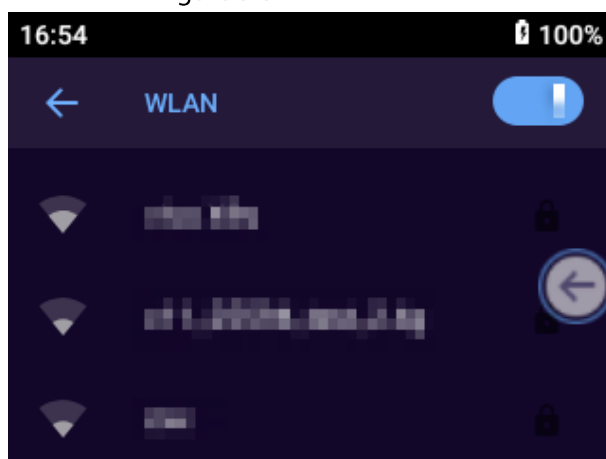
Select the coordinate system as needed.

3.5.1.2 WLAN

When WLAN is turned on, you can search for or add WLAN networks.

Select **Network > WLAN**, select the Wi-Fi that you need to connect to, and then enter the password.

Figure 3-8 WLAN

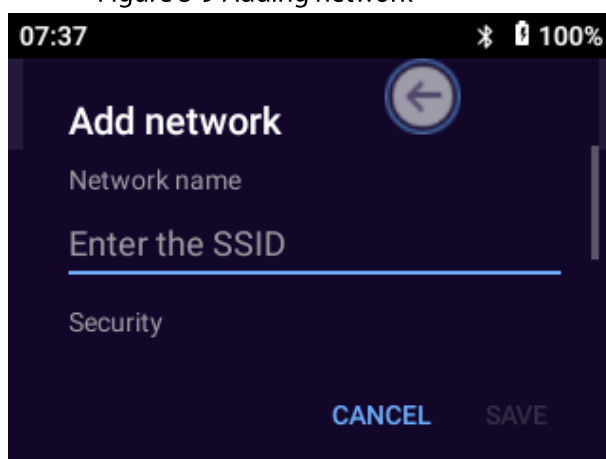


3.5.1.2.2 Adding Network

Step 1 Select **Network** > **WLAN**, and then enable WLAN.

Step 2 Tap **+Add network**.

Figure 3-9 Adding network



Step 3 Configure the parameters as needed.

Table 3-1 Adding network description

Parameter	Description
Network name	Enter the router SSID (the name of the WLAN) that needs to be connected.
Security	Set security settings. <ul style="list-style-type: none"> If you select None, you do not need to enter a password to log in to the WLAN. If you select a different type, you need to enter a password or certificate.
Advanced options	When Advanced options is selected, you can set the proxy and IP addresses.
Proxy	<ul style="list-style-type: none"> None: Do not need proxy. Manual: Set the proxy server parameters manually. Proxy Auto-Config: The Device will automatically set proxy server parameters.
IP settings	<ul style="list-style-type: none"> If you select DHCP, the Device will automatically search for WLAN IP. If you select Static, you need to manually configure the IP address, Gateway, Network prefix length, DNS 1, and DNS 2 IP address needs to be in the same segment as the router. Other parameters should be consistent with those on the router.

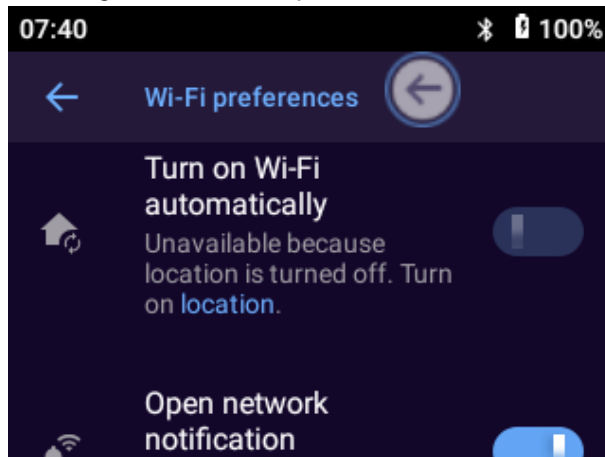
Step 4 Tap **SAVE**.

3.5.1.2.3 Wi-Fi Preferences

Step 1 Select **Network > WLAN**, and then enable WLAN.

Step 2 Tap **WLAN preferences**.

Figure 3-10 WLAN preferences



Step 3 Configure the parameters as needed.

Table 3-2 Adding network description

Parameter	Description
Turn on Wi-Fi automatically	You can be notified when there is an open, high-quality public network nearby.
Open network notification	Automatically enable Wi-Fi when the Device is in a saved high-quality Wi-Fi.
Install certificates	Upload the security certificate to your device.
Wi-Fi Direct	Transfer files over Wi-Fi.
MAC address and IP address	Displays the MAC address and IP address of the network card.

3.5.1.3 Mobile Data

Select **Network > Mobile Data**, and then configure the parameters.

Figure 3-11 Mobile Data

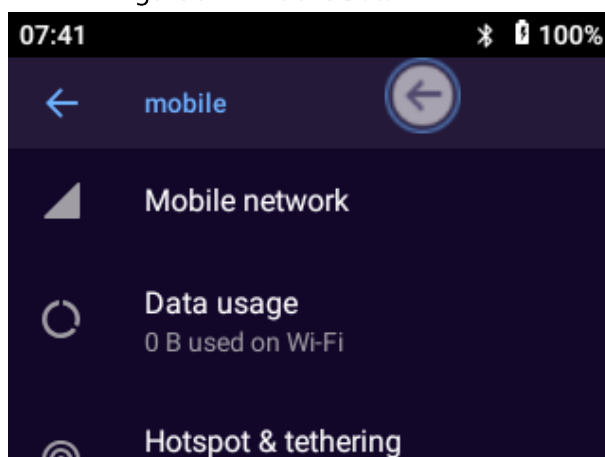


Table 3-3 Mobile data description

Parameter	Description
Mobile network	<ul style="list-style-type: none"> • Mobile data: Enable mobile network. • Roaming: Enable the Device to connect to the mobile network service while roaming. • User Controlled PLMN: Define the preferred order of the PLMN. • Preferred network type: Configure the preferred network mode. It is 4G by default. • Access Point Names: APN (Access Point Name), the parameter that your phone needs to configure to access the Internet. APN determines how the Device accesses the network. • Network operator: Select the network operator.
Data usage	Displays data usage.
Hotspot and tethering	<ul style="list-style-type: none"> • Wi-Fi hotspot: Share an Internet connection or content with other devices by entering a password. • USB tethering: Share your phone Internet connection over USB. • Bluetooth tethering: Share your phone Internet connection through Bluetooth.
Airplane mode	Enable airplane mode, and cellular, WiFi, and Bluetooth functions are disabled.
VPN	Add the appropriate VPN as needed.

3.5.1.4 Positioning

The Device can be located by satellite. Location information is reported to the platform if the Device is connected to the platform.

Select **Network > Positioning** to configure the positioning parameters.

Figure 3-12 Positioning

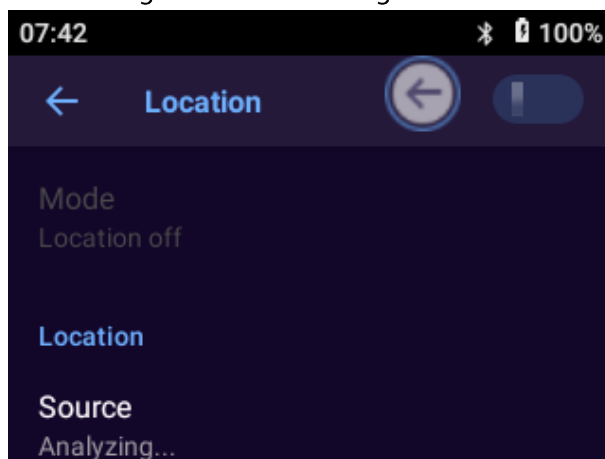


Table 3-4 Positioning description

Parameter	Description
Mode	Configure device positioning mode. <ul style="list-style-type: none"> • High accuracy: Locate through satellite, Wi-Fi, Bluetooth, or mobile network. • Battery saving: Locate through Wi-Fi, Bluetooth, or mobile network. • Device only: Locate through satellite.
Location	Displays the current location source, latitude, and longitude.

3.5.1.5 Bluetooth

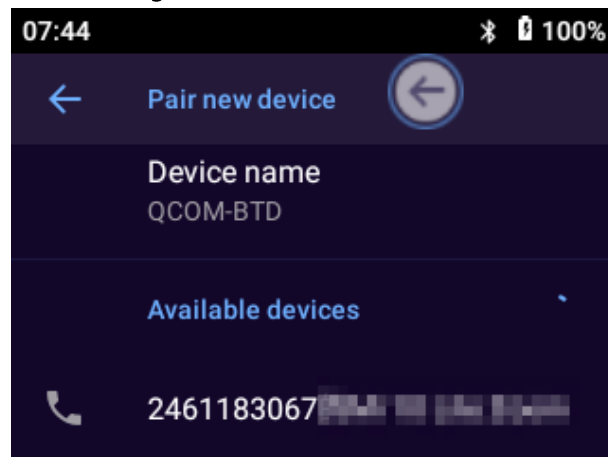
When Bluetooth is enabled, a nearby device will be able to detect the Device, and then you can receive files through Bluetooth.

Step 1 Select **Network > Bluetooth**, and enable Bluetooth.

Step 2 Tap **Pair new device**.

Step 3 Select the Bluetooth device to pair with, and then tap **Pair**.

Figure 3-13 Bluetooth



- To rename the Device, click **Device Name**.
- To view the files received through Bluetooth, click **Show received files**.

3.5.2 Device


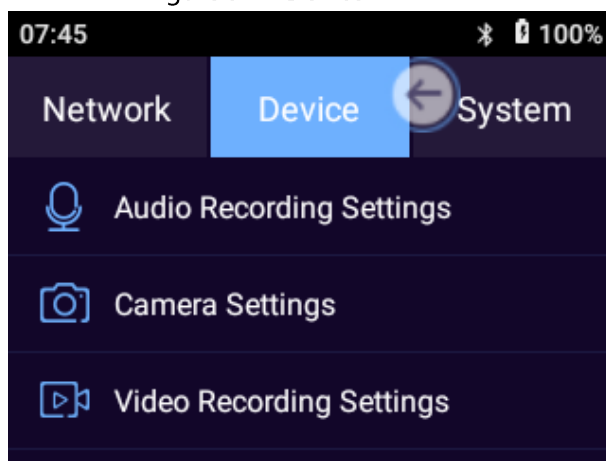
On the main interface, click , and then tap the **Device** tab to configure video recording settings, audio recording settings, camera settings, OSD, NFC, and more.

Figure 3-14 Device



3.5.2.2 Audio Recording Settings

Select **Device** > **Audio** to configure audio recording parameters.

Figure 3-15 Audio recording

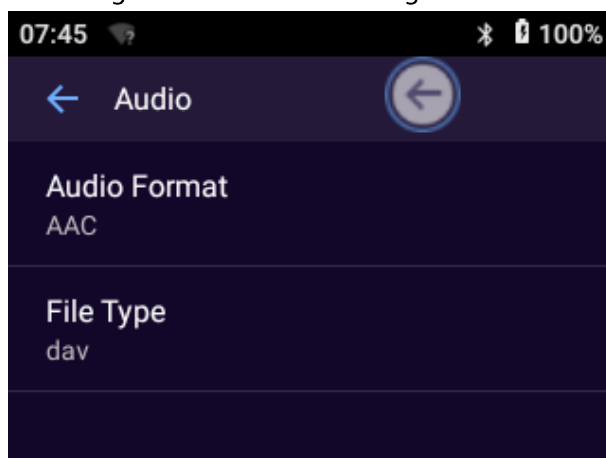



Table 3-5 Audio recording parameter description

Parameter	Description
Audio Format	<ul style="list-style-type: none"> • AAC • G.711A • AMR  <p>When Recording File Type is set to aac, only AAC is supported.</p>
File Type	<ul style="list-style-type: none"> • dav (default) • aac

3.5.2.3 Snap Settings

Select **Device** > **Snap** to configure picture settings.

Figure 3-16 Camera settings

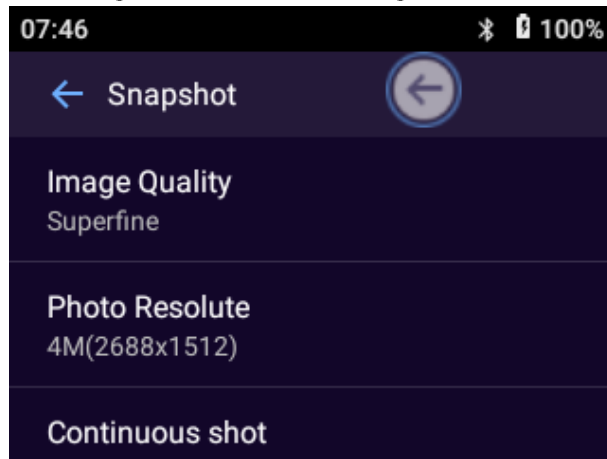


Table 3-6 Camera settings description

Parameter	Description
Image Quality	Configure the picture quality. <ul style="list-style-type: none"> • Normal • Fine • Spuerfine
Picture Resolute	Configure picture size. <ul style="list-style-type: none"> • 34M (7808 × 4392) • 16M (5312 × 2988) • 4M (2688 × 1512) • 0.4 M (864 × 480)
Continuous shot	Configure the number of continuous shooting. <ul style="list-style-type: none"> • OFF • 2 shots • 3 shots • 5 shots • 10 shots
Snap Sound	Turn on or off the sound for shooting.

3.5.2.4 Video Recording Settings

Configure video quality, encoding stream, file type, and more.

Select **Device > Video** to configure video recording settings.

Figure 3-17 Video recording settings

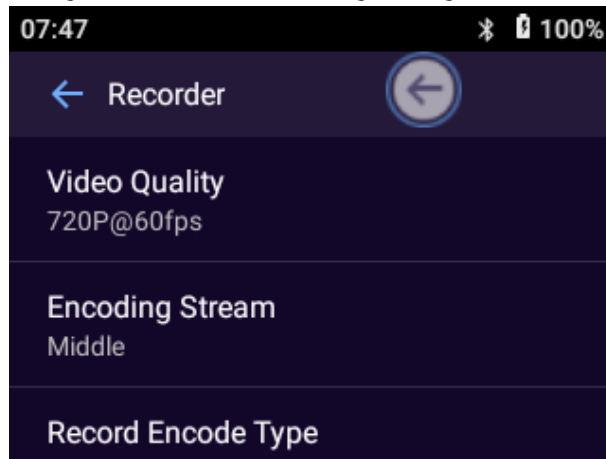







Table 3-7 Video recording settings description

Parameter	Description
Video Quality	<p>Configure the video resolution. The higher the resolution, the better the video quality, and the more the storage space consumption.</p> <ul style="list-style-type: none"> • 1080p@30 fps • 720p@60 fps • 720p@30 fps • WVGA@30 fps <p>For example, if you select 1080p@30 fps, the recording resolution is 1080p and the frame rate is 30fps.</p>
Encoding Stream	<p>Configure the encoding rate for the video.</p> <ul style="list-style-type: none"> • High • Middle • Low
Record Encode Type	<p>Configure the encoding type.</p> <ul style="list-style-type: none"> • H.264 • H.265
Video Format	<ul style="list-style-type: none"> • Dav • Mp4 <p> When Recording File Type is set to MP4, AMR and G.711A are not supported.</p>
Record File Pack Time	<p>Configure the interval at which the recorded video is saved as a file. For example, if you select 5 min, during recording, the recorded video is saved every 5 min, and the saved file is named after the recording start time.</p> <p></p> <ul style="list-style-type: none"> • To avoid small files, the packaging time will fluctuate. For example, if you select 30 min and the start time of recording is 10:26, the stop time will be 11:00. • A single recorded video file size cannot exceed 2 GB and is automatically repackaged if beyond the limit.

Parameter	Description
Pre-Record	Configure the pre-record time. For example, if you select 15 s, the 15 s video prior to recording will be saved automatically. <ul style="list-style-type: none"> • OFF • 15 s • 30 s • 60 s
Post-Record	Configure the post-record time. For example, if you select 15 s, 15 s video after the recording ends will be saved automatically. <ul style="list-style-type: none"> • OFF • 15 s • 30 s • 60 s
Record Video&Audio	When it is enabled, the Device can record both video and audio after you press  or  .  This function is disabled by default.
Video sound	Enable it to acquire sound.
Anti banding	Avoids flashing lines of the target during video recording. <ul style="list-style-type: none"> • 50Hz (AC frequency in China). • 60Hz (AC frequency in countries such as Japan and United States).

3.5.2.5 OSD Settings

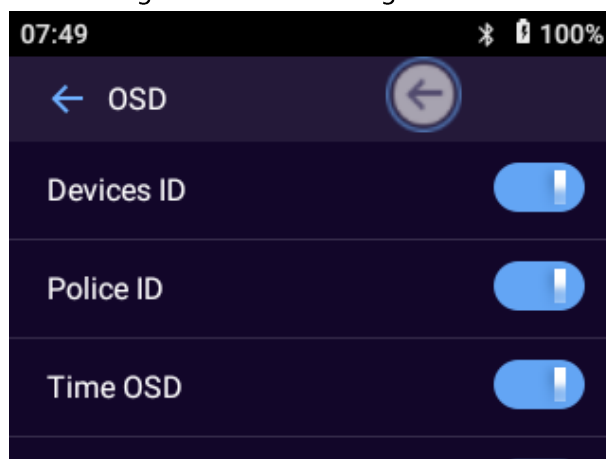
You can enable OSD display to show on-screen characters over video and picture, such as device ID, police officer ID, time display, GPS, and more.



When OSD display is enabled, device ID, police officer ID, time OSD, GPS information, and custom information are displayed at the upper-left corner of the interface.

Select **Device > OSD**.

Figure 3-18 OSD setting



- **Device ID**, **Police ID**, and **Time OSD** are enabled by default.

- To show GPS information, enable location information in **Settings > Network > Location** and GPS display in **Settings > Device > OSD > GPS OSD**.
- You can set 2 pieces of custom information at most, and to show the custom content, you need to enable custom content display through MPT. Connect the Device and PC with a USB cable, start MPT Manager through USB cable, enter and confirm the password, set the OSD content (no more than 20 characters in length), and then go to **Settings > Device > OSD** to enable custom content display.

3.5.2.6 Net Transfer Settings

Configure the video quality, frame rate, bitrate, bitrate type, and recording encoding type of the sub stream for live viewing on the platform.

Select **Device > Net Transmit Settings**.

Figure 3-19 Camera transfer settings

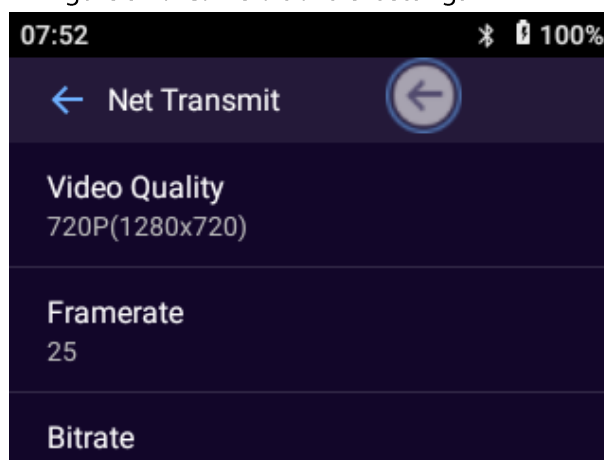


Table 3-8 Camera transfer settings

Parameter	Description
Video Quality	The higher the resolution, the better the video quality but the more network bandwidth consumption. <ul style="list-style-type: none"> • 720p (1280 × 720) • WVGA (864 × 480)
Framerate	You can set the frame rate to 5, 10, 15, 20, 25, or 30. The higher the frame rate, the smoother the video, but the more network bandwidth consumption.
Bitrate	Depending on the video resolution and frame rate, the corresponding stream values can be set different. You can set the bit rate to 768 kbps, 1Mbps, 1.5 Mbps, 2 Mbps, 4 Mbps, or 6 Mbps.
Bitrate Type	<ul style="list-style-type: none"> • VBR, Variable Bit Rate. When the network connection is good, the stream size is adjusted within a certain extent as the image quality changes. • CBR, Constant Bit Rate. The average bit rate remains the same
Record Encode Type	Configure encoding type for recording. <ul style="list-style-type: none"> • H.264 • H.265
Net Transmission	Configure transmission type.

Parameter	Description
Type	<ul style="list-style-type: none"> Quality First Fluency First

3.5.2.7 Infrared Settings

Turn on infrared mode as needed.

Select **Device > Infrared Settings**.

Figure 3-20 Infrared settings

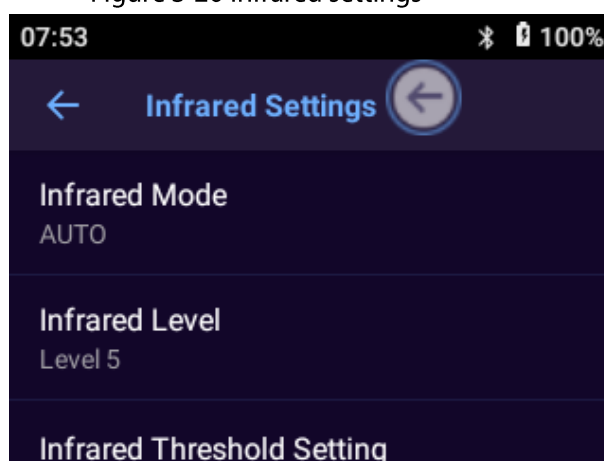


Table 3-9 Infrared settings

Parameter	Description
Infrared Mode	<p>Night vision mode. Select the mode as needed.</p> <ul style="list-style-type: none"> Auto Open Close
Infrared Level	<p>Configure the brightness of the infrared light as needed.</p> <p>You can set the level to Level 1, Level 2, Level 3, Level 4, Level 5, and Level 6, and it is Level 5 by default.</p>
Infrared Threshold Setting	<p>The lower the value is, the easier the Infrared mode will switch.</p>

3.5.2.8 Video Storage

You can add **External Storage** as needed, or **Overwrite**.



- External storage: The check box can be selected after the Device read the inserted TF card. For IF card with memory larger than 32 GB, format it to FAT32 through DiskGenus before use.
- Overwrite: After it is enabled, some non-key files will be deleted when the storage space is full.

3.5.2.9 Volume

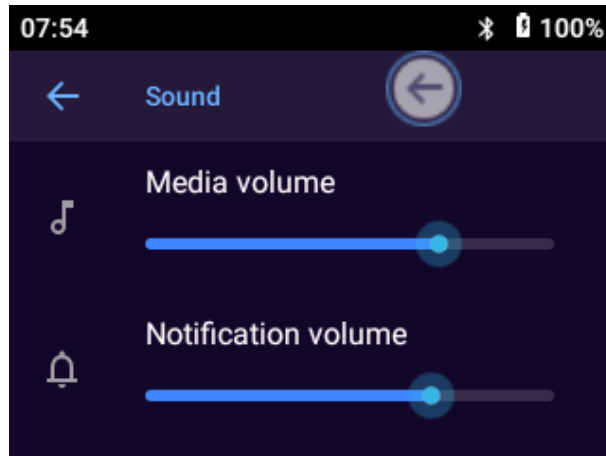
Configure media and notification volume.



- Media volume involves video and audio playback.
- Notification volume includes key tones, capture success sound, and more.

Select **Device > Volume**, and then drag the slider to adjust volume.

Figure 3-21 Adjust volume



3.5.2.10 NFC

Select **Device > NFC**, and enable **NFC**. The Device exchanges data with other nearby devices.



- The NFC can read data from TypeA and TypeB.
- Before using NFC, install third-party software that supports NFC. If there is no third-party software, there will be a sound prompt when the card closes to the Device.

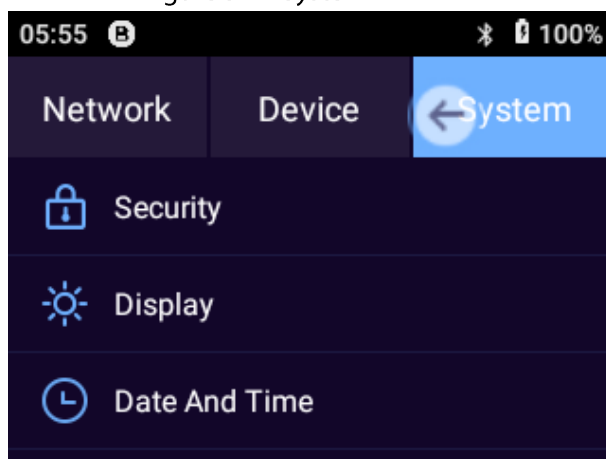
3.5.2.11 Voice Prompt

Enable or disable voice prompt.

3.5.3 System

On the main interface, tap , and then select **System**. You can configure security, display, date and time, language, default and more settings.

Figure 3-22 System

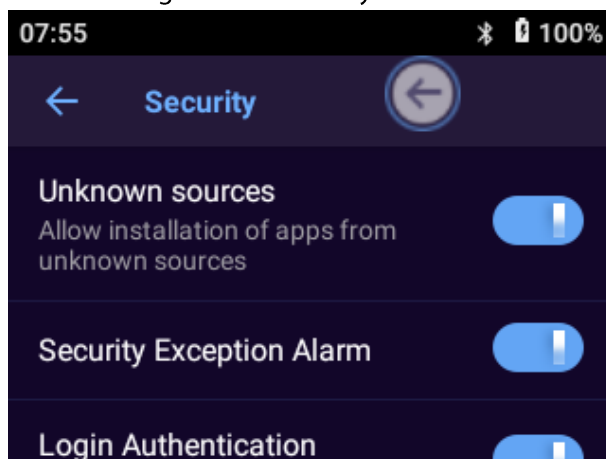


3.5.3.1 Security

You can allow apps from unknown sources to be installed.


Step 1 Select **System** > **Security**.

Figure 3-23 Security



Step 2 Configure the parameters.

Table 3-10 Security parameters

Parameter	Description
Unknown sources	Allow apps from unknown sources to be installed.
Security Exception Alarm	Display alarm information when an exception occurs.
Login Authentication	Configure login mode. You are recommended to turn on security mode to avoid security risks.
Encryption	<p>Enable encryption for the pairing devices.</p> <p> Make sure that the pairing devices or software supports video decryption.</p>
Drop alarm	When Drop alarm is enabled, the Device triggers an alarm message when dropping from a height of 30 centimeters or more.
Dynamic link	Enable it to set an independent link for each request. It is used during live view video, voice talk and playback.

Parameter	Description
Network Allowlist	To allow access of only trusted IPs, MACs and ports, you can enable Network Allowlist and then add the trusted IPs, MACs and ports.

Step 3 Tap **OK**.

3.5.3.2 Display

Adjust the screen brightness and device hibernation time.

Select **System > Display**.

Figure 3-24 Display

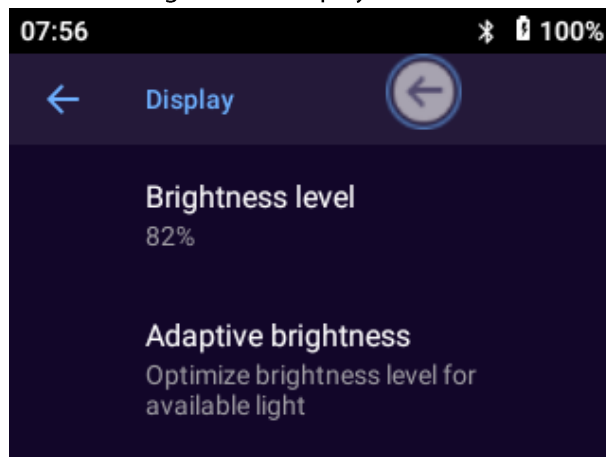


Table 3-11 Display parameters

Parameter	Description
Brightness level	Adjust brightness.
Adaptive brightness	Automatically adjust the screen brightness according to the environment and activity.
Sleep	Configure the hibernation time. The Device automatically hibernates after inactivity of the pre-defined certain time.

3.5.3.3 Date and Time

Select **System > Date And Time** to enable automatic time sync.

Figure 3-25 Date and time

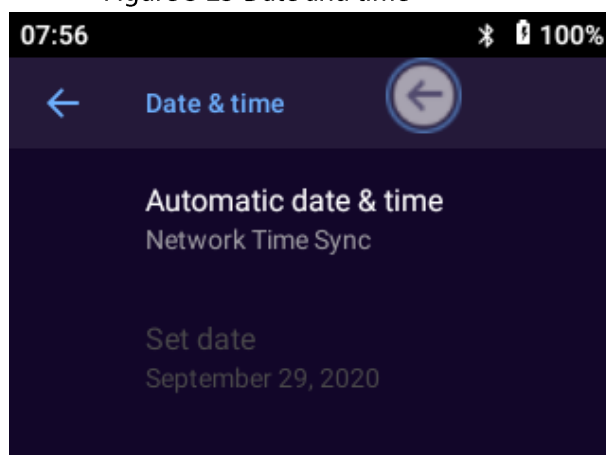



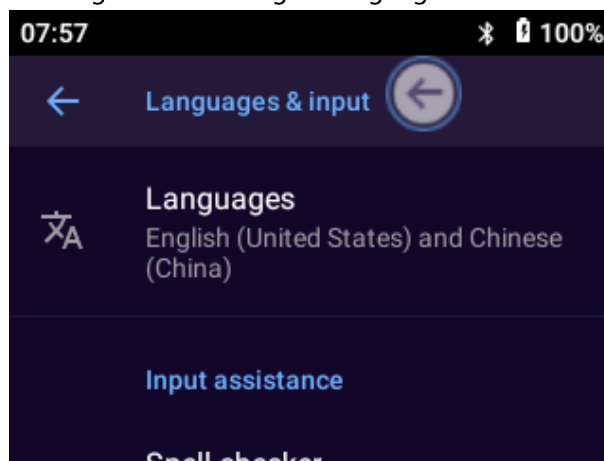
Table 3-12 Date and time parameters

Parameter	Description
Automatic date & time	<p>Sync device time with the network, GPS or platform.</p> <p></p> <ul style="list-style-type: none"> To sync with the network time, ensure that the Device is connected to the network, such as a 4G or Wi-Fi. To sync with platform time, ensure that the Device is connected to the platform The Device can also sync time through MPT Manager.
Automatic time zone	Enable it to use network-provided time zone.
Select time zone	To select time zone, disable Automatic time zone , and then tap select time zone .
Clock Striking	When Clock Striking enabled, the Device strikes the hour.

3.5.3.4 Language

Select **System > Language** to configure device language.

Figure 3-26 Configure language



3.5.3.5 Reset

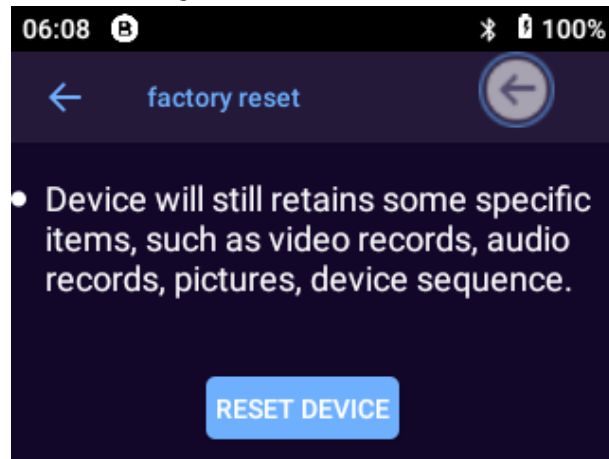
Restore default settings.



Do it with caution. Restoring default settings will clear all data stored in your device, including system and app data and settings. The Device still retains certain parameters, including audio, video, picture data, and the serial number. Only admin has the permission to reset the Device.

Select **System > Reset**. Tap **RESET DEVICE** and then **ERASE EVERYTHING**, enter device password, and then tap **OK**.

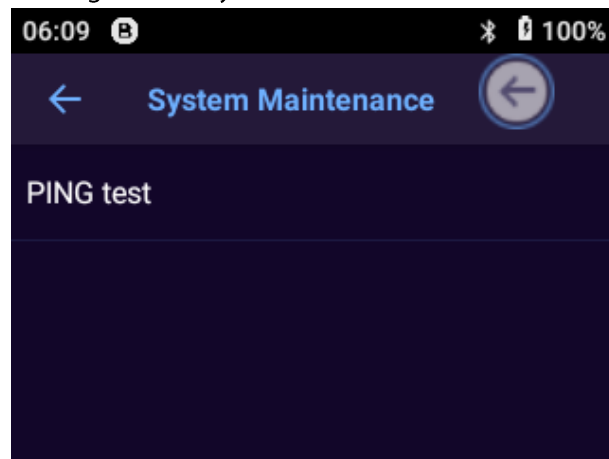
Figure 3-27 Reset



3.5.3.6 System Maintenance

You can test network connection. Select **System > System Maintenance**, tap **PING test**, enter the target IP address, and then tap **Start**.

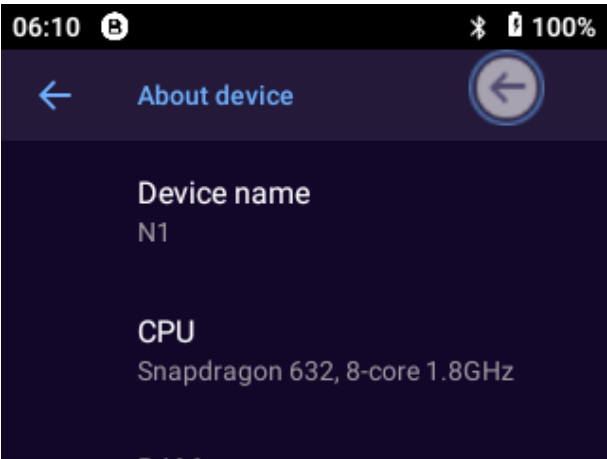
Figure 3-28 System maintenance



3.5.3.7 About Device

You can view device information such as status, model, serial number, and Android version. Select **System > About Device**.

Figure 3-29 About device



3.6 Audio Recording

3.6.1 Recording Audio




Press  on any interface to record audio, or tap  on the main interface, and then tap .

Figure 3-30 Record audio

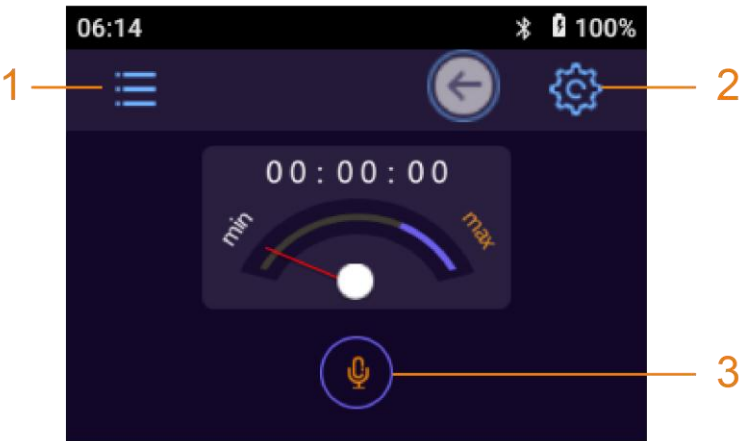






Table 3-13 Audio recording functions

SN	Function
1	Tap the icon and then enter password to go to file management interface to manage audio files.
2	<div>Tap the icon to set audio format and file format.<ul style="list-style-type: none">● Audio format: AAC, G.711A, AMR.● File format: dav, aac.</div> <div><ul style="list-style-type: none">● When the record file type is set to be MP4, the audio format AMR and G.711A are not supported.● When the record file type is set to be aac, only AAC audio format is supported.● During recording audio process, icon 1 and 2 are hidden.</div>

SN	Function
3	Tap the icon, the Device begins recording audio. Tap  , the Device stops recording audio. System prompts the audio recording process is end and file is saved.

3.6.2 One Press to Record Audio

When the Device is sleeping, Press  to begin recording audio. Press  again to stop recording audio.

3.7 Video Recording

3.7.1 Recording Video





- To start recording, tap  on the main interface, and then tap  to start recording video.
- Press  to start recording video, and press  again to stop recording.

Figure 3-31 Record video

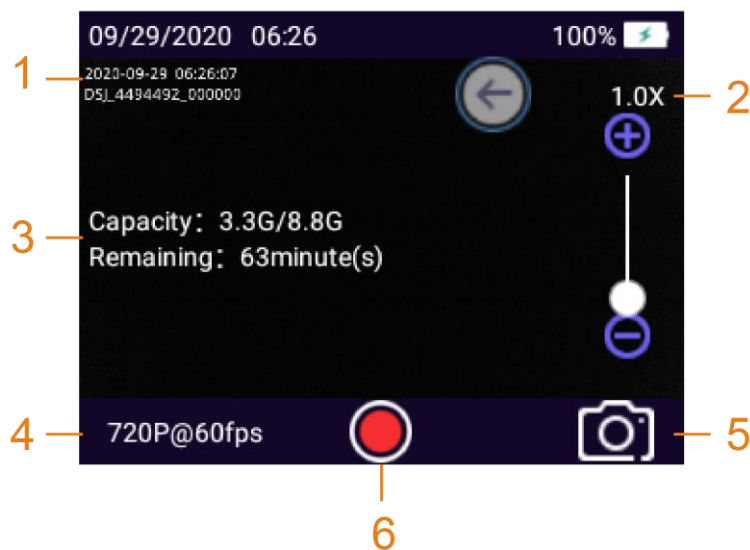











Figure 3-1 Video recording functions

No.	Description
1	<p>Date, time, serial number, police officer number, GPS information, and custom information.</p> <p></p> <ul style="list-style-type: none"> To show GPS information, make sure that positioning and GPS display are enabled. To Tap Settings > Network > Location to enable positioning; tap Settings > Device > OSD > GPS OSD to enable GPS display. To display the custom information, you need to connect the Device to MPT Manager, and then enable display in OSD configuration interface.

No.	Description
2	Tap the screen to display the zoom bar. The bar can be zoomed at 1.0 to 8.0 times by dragging the zoom bar.
3	<p>Remaining capacity/total capacity, and remaining recording time.</p>  <ul style="list-style-type: none"> • The remaining recording time varies with video quality. • Shows the remaining capacity/total capacity in capturing mode, and the remaining number of pictures that you can take.
4	<p>Video quality.</p>  <p>Shows picture resolution when the Device is in capturing mode.</p>
5	<p>Tap to switch to the capturing mode.</p>  <p>When the Device is in capturing mode, tap  to take a picture.</p>
6	<p>Start recording. Tap again to stop recording.</p>  <p>When the Device is in capturing mode, tap  to switch to recording mode.</p>

3.7.2 One Press to Record Video

When the Device is sleeping, press , the login interface is display, and you can hear a sound prompt "Start recording video". The recording icon is display in the notification bar, and the Device starts to recording video.

.Press  again to stop recording video, and you can hear a sound prompt "Stop recording video".

3.7.3 Focusing

On the live view interface or during recording, tap the screen, and then a focus bar displays. Drag the focus bar to zoom in or out the video at X1.0 to X8.0.

3.7.4 Marking Important Video


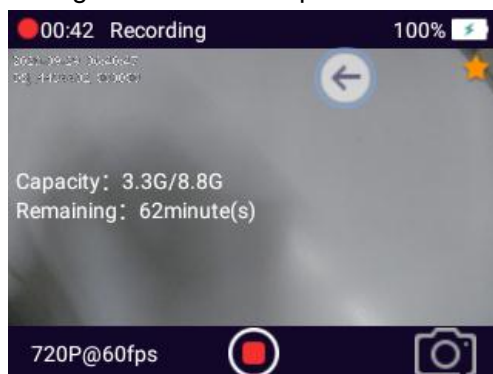
Press and hold  during recording, and a yellow mark ★ will be displayed at the upper-right corner of the screen to mark the video as an important file. And at the file management interface, the important files are marked with stars, and the file names are end with _IMP.

Figure 3-32 Mark important video



3.8 Pictures

3.8.1 Taking a Picture

On the live view interface, press  or tap . The working indicator light flashes and system prompts success.

3.8.2 One Press to Take a Picture

When the Device is sleeping, press  to take a picture.

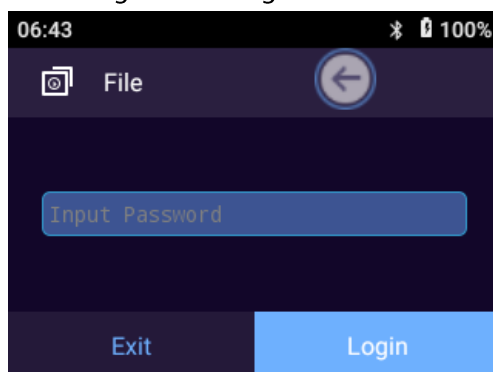
3.9 Files

View pictures, videos, and audio files saved in your device.

3.9.1 Viewing Pictures

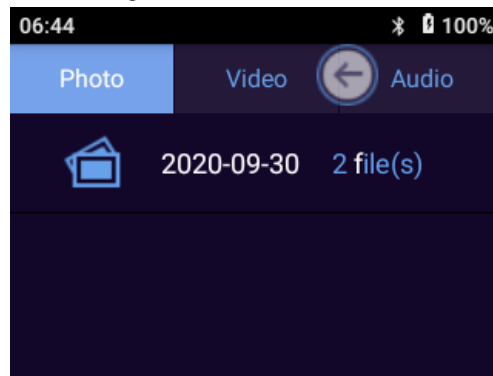
Step 1 On the main interface, tap .

Figure 3-33 Log in



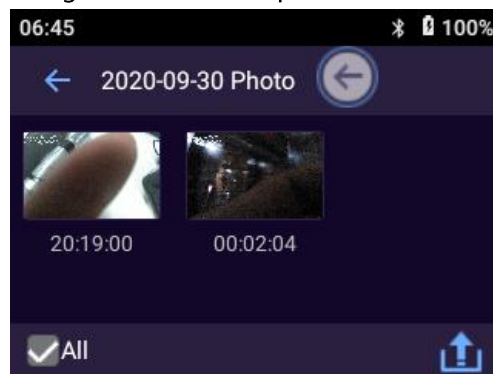
Step 2 Enter your login password, and then tap **Login**.

Figure 3-34 Files



Step 3 Select a folder, and then tap a picture to play.

Figure 3-35 Select a picture









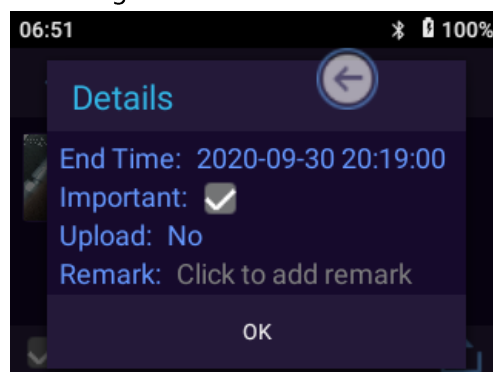

- To select a picture, press and hold it, and  is displayed on the right-upper corner of the picture.  means the picture has been selected.
 - Tap  All to select all the pictures on the current page.
 - Tap  to view details of the selected picture, such as file type, size, and resolution.
- Tap  next to next to **Important** to mark a yellow mark ★ for the key file. Tap  to cancel the mark.

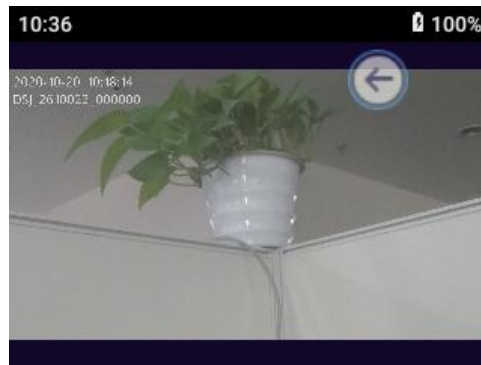
Figure 3-36 Details






- Tap  to upload the picture to platform.

Step 4 Tap a picture.

Figure 3-37 View a picture



- When viewing a picture, swipe left and right on the screen to see the previous and next pictures.
- Use two finger to zoom in or out the picture.
- Tap  to go back to the picture list.
- Tap  to view picture details
- Tap  to upload the picture to platform..

3.9.2 Playing Video

Step 1 On the main interface, tap .

Step 2 Enter your login password, and then tap **Login**.

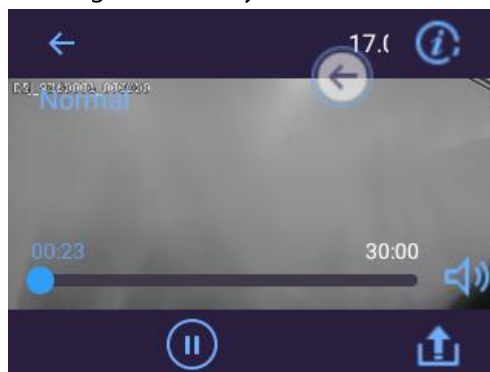
Step 3 Tap the **Video** tab.





Step 4 Select a folder.


The folders are displayed in chronological order, and the newest fold is on the top of the list.

Step 5 Tap the video file to play.

Figure 3-38 Play video



- Drag the progress bar to go back or forth quickly.
- Tap  to pause.
- Tap  to adjust volume.
- Tap  To go back to the video list.
- Tap  to view video details.

- Tap  to upload the current video to the platform.

3.9.3 Playing Audio

Step 1 On the main interface, tap .

Step 2 Enter your login password, and then tap **Login**.

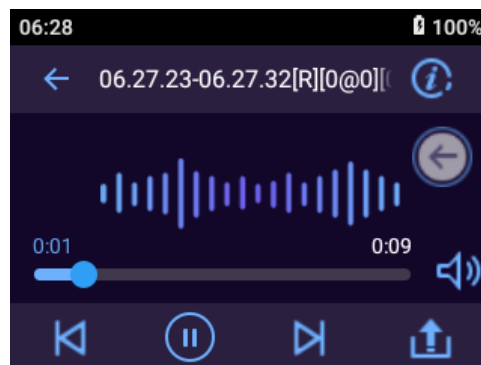
Step 3 Tap the **Audio** tab.








Step 4 Select a folder.

The folders are displayed in chronological order, and the newest fold is on the top of the list.

Step 5 Tap the audio file to play.

Figure 3-39 Play audio





- Drag the progress bar to go back or forth quickly.
- Tap  or  to play the previous or next audio in the folder.
- Tap  to pause.
- Tap  to adjust volume.
- Tap  to go back to the audio list.
- Tap  to view audio details.
- Tap  to upload the current audio to the platform.

3.10 Switching between Video and Audio Recording





Make sure that you have disabled **Record Video&Audio**. If not, go to **Settings > Device > Video**, and then disable **Record Video&Audio**.

- When the Device is recording video, you can press  to switch to audio recording.
- When the Device is recording audio, you can press  to switch to video recording.

3.11 Recording Audio & Video at the Same Time




Make sure that you have enabled **Record Video&Audio**. If not, go to **Settings > Device > Video**, and then enable **Record Video&Audio**.

- When the Device is recording video, you can press  to start recording audio at the same time.
- When the Device is recording audio, you can press  to start recording video at the same time.

3.12 IR Light

IR light can be used to assist in shooting at night or with low illuminance.


Swipe down the notification bar, and then tap  to enable the IR light, and the icon turns to .

Tap  to turn off the IR lights.

3.13 White Light

When shooting in dark, you can use white light to illuminate.

Swipe down the notification bar, and then tap  to enable the white light, and the icon turns to

. Tap  to turn off the white light.



The white light cannot be enabled when the battery level is lower than 5% low.

3.14 Data Transmission

The Device supports using MPT Manager and data acquisition station to upload data.



After the Device begins USB communication, all wireless function will be disabled.

- After starting the Device, use USB cable to connect the Device to the PC, start MPT Manager, enter password, and then confirm to download the data.
- Start the Device, and connect it to a legal data acquisition station through the USB cable. For the first-time use, you need to enter the password, and then the data on the Device can be uploaded to data acquisition station. If the device information is not displayed on the interface, unplug USB and plug it again.

4 System Update


Update the Device through MPT Manager.

Step 1 Install the MPT Manager.

Follow the system prompts and click **Next** until the installation is complete.

Step 2 Start the Device, and then connect it to PC through USB cable.

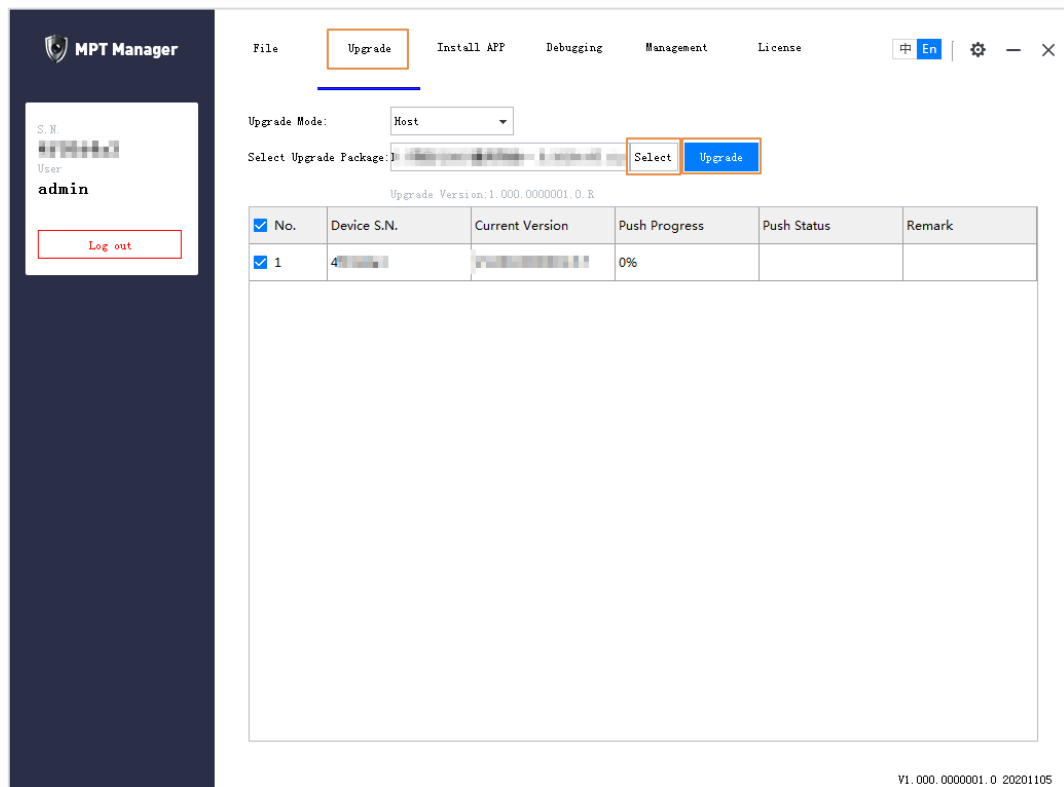


Step 3 Click  on the desktop, enter device password, and then confirm.

Step 4 Click the **Upgrade** tab.

Step 5 Select the update package, and then click **Update**.

Figure 4-1 Update



5 SIM Card and Battery Installation

The product supports 5V/2A DC power recharge. When the battery power is low, recharge it in time.

- When the Device has the main battery, the interface displays main battery percentage.
- If you remove the main battery, the Device will shut down.
- After installing the main battery, start the Device manually.



- Recharge the battery if the Device is not in use for a long time.
- The system triggers low voltage alarm when the device voltage is $\leq 5\%$.
- The Device automatically shuts down when the power runs out.
- If the Device will not be used for a week or more, charge it to 60%, take the battery out of the Device, and store it in a clean, dry and ventilated room with ambient temperature of $20\pm 5^{\circ}\text{C}$.
- Charge the battery once every four months during storage.
- The battery is a consumable accessory. You are recommended to replace it after one year of use.

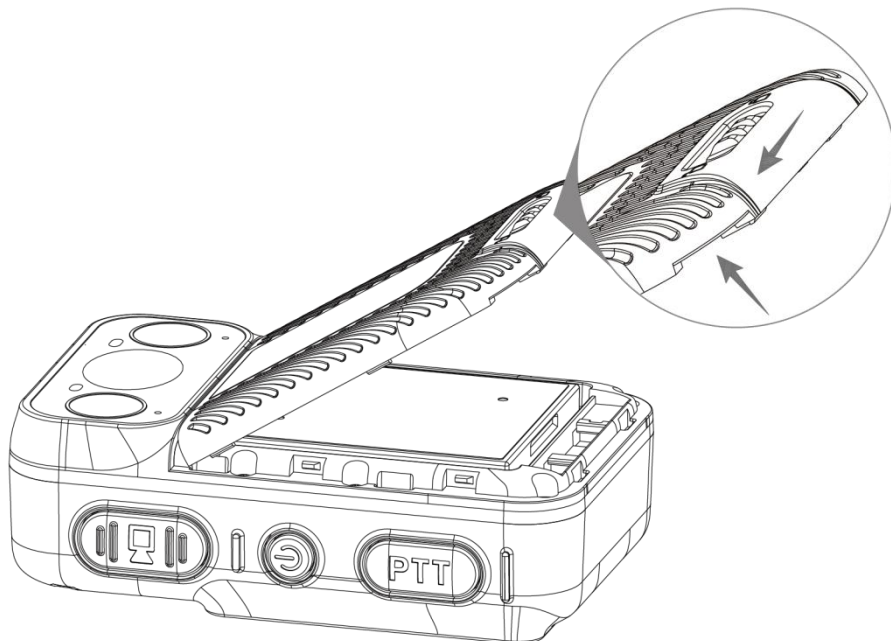
5.1 Installing SIM Card



- SIM card and then peripheral accessories do not support hot swapping. The card becomes activated after the Device restarts.
- Shut down the Device before installing the SIM card; otherwise the Device might be damaged.

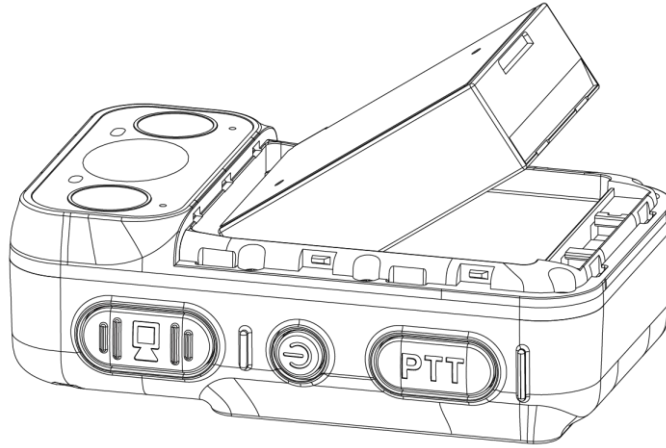
Step 1 Move the slider on the back of the Device left, and use your thumb to hold the tray on the left side of the Device.

Figure 5-1 Remove the battery cover



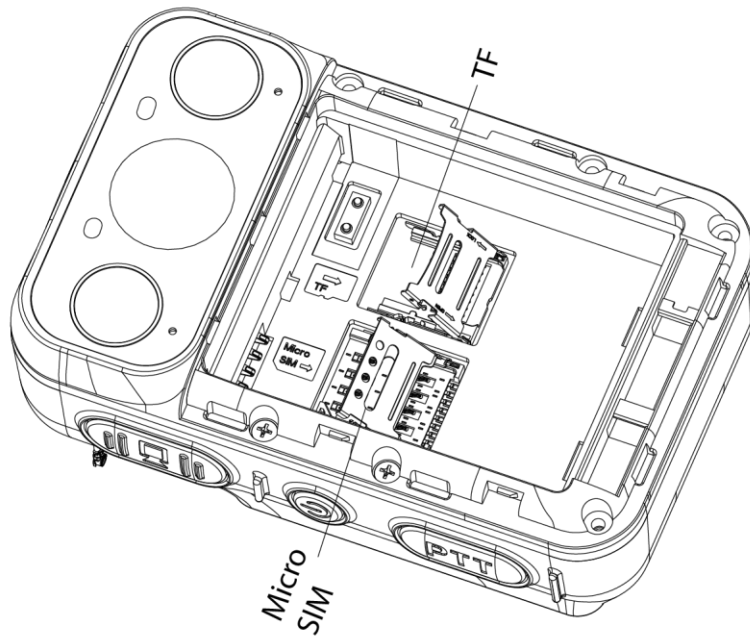
Step 2 Take out the main battery.

Figure 5-2 Take out main battery



Step 3 Make sure that the SIM card metal side is facing down. Follow the directions on Figure 5-3 to push the SIM card to the tray until SIM card is firm.

Figure 5-3 Installing SIM card



Step 4 Install the main battery.



Make sure that the SIM card installation is complete before installing the main battery in case the battery may jam the tray and result in tray damage.

Step 5 Pull down the battery cover tray to install the battery cover.

5.2 Replace Main Battery

See details, in "5.1 Installing SIM Card."

Appendix 1 Cybersecurity Recommendations

Cybersecurity is more than just a buzzword: it's something that pertains to every device that is connected to the internet. IP video surveillance is not immune to cyber risks, but taking basic steps toward protecting and strengthening networks and networked appliances will make them less susceptible to attacks. Below are some tips and recommendations on how to create a more secured security system.

Mandatory actions to be taken for basic device network security:

1. Use Strong Passwords

Please refer to the following suggestions to set passwords:

- The length should not be less than 8 characters;
- Include at least two types of characters; character types include upper and lower case letters, numbers and symbols;
- Do not contain the account name or the account name in reverse order;
- Do not use continuous characters, such as 123, abc, etc.;
- Do not use overlapped characters, such as 111, aaa, etc.;

2. Update Firmware and Client Software in Time

- According to the standard procedure in Tech-industry, we recommend to keep your device (such as NVR, DVR, IP camera, etc.) firmware up-to-date to ensure the system is equipped with the latest security patches and fixes. When the device is connected to the public network, it is recommended to enable the "auto-check for updates" function to obtain timely information of firmware updates released by the manufacturer.
- We suggest that you download and use the latest version of client software.

"Nice to have" recommendations to improve your device network security:

1. Physical Protection

We suggest that you perform physical protection to device, especially storage devices. For example, place the device in a special computer room and cabinet, and implement well-done access control permission and key management to prevent unauthorized personnel from carrying out physical contacts such as damaging hardware, unauthorized connection of removable device (such as USB flash disk, serial port), etc.

2. Change Passwords Regularly

We suggest that you change passwords regularly to reduce the risk of being guessed or cracked.

3. Set and Update Passwords Reset Information Timely

The device supports password reset function. Please set up related information for password reset in time, including the end user's mailbox and password protection questions. If the information changes, please modify it in time. When setting password protection questions, it is suggested not to use those that can be easily guessed.

4. Enable Account Lock

The account lock feature is enabled by default, and we recommend you to keep it on to guarantee the account security. If an attacker attempts to log in with the wrong password several times, the corresponding account and the source IP address will be locked.

5. Change Default HTTP and Other Service Ports

We suggest you to change default HTTP and other service ports into any set of numbers between 1024~65535, reducing the risk of outsiders being able to guess which ports you are using.

6. Enable HTTPS

We suggest you to enable HTTPS, so that you visit Web service through a secure communication channel.

7. MAC Address Binding

We recommend you to bind the IP and MAC address of the gateway to the device, thus reducing the risk of ARP spoofing.

8. Assign Accounts and Privileges Reasonably

According to business and management requirements, reasonably add users and assign a minimum set of permissions to them.

9. Disable Unnecessary Services and Choose Secure Modes

If not needed, it is recommended to turn off some services such as SNMP, SMTP, UPnP, etc., to reduce risks.

If necessary, it is highly recommended that you use safe modes, including but not limited to the following services:

- SNMP: Choose SNMP v3, and set up strong encryption passwords and authentication passwords.
- SMTP: Choose TLS to access mailbox server.
- FTP: Choose SFTP, and set up strong passwords.
- AP hotspot: Choose WPA2-PSK encryption mode, and set up strong passwords.

10. Audio and Video Encrypted Transmission

If your audio and video data contents are very important or sensitive, we recommend that you use encrypted transmission function, to reduce the risk of audio and video data being stolen during transmission.

Reminder: encrypted transmission will cause some loss in transmission efficiency.

11. Secure Auditing

- Check online users: we suggest that you check online users regularly to see if the device is logged in without authorization.
- Check device log: By viewing the logs, you can know the IP addresses that were used to log in to your devices and their key operations.

12. Network Log

Due to the limited storage capacity of the device, the stored log is limited. If you need to save the log for a long time, it is recommended that you enable the network log function to ensure that the critical logs are synchronized to the network log server for tracing.

13. Construct a Safe Network Environment

In order to better ensure the safety of device and reduce potential cyber risks, we recommend:

- Disable the port mapping function of the router to avoid direct access to the intranet devices from external network.
- The network should be partitioned and isolated according to the actual network needs. If there are no communication requirements between two sub networks, it is suggested to use VLAN, network GAP and other technologies to partition the network, so as to achieve the network isolation effect.
- Establish the 802.1x access authentication system to reduce the risk of unauthorized access to private networks.
- Enable IP/MAC address filtering function to limit the range of hosts allowed to access the device.