

KEDACOM

Body Worn Camera DSJ-U1-LPN

User Manual

V2
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苏州科达科技股份有限公司
Suzhou Keda Technology Co.,Ltd

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1 Instruction

Based on Qualcomm platform and meeting GA/T947-2015 standard of the public security industry, DSJ-U1-LPN is a body worn camera for the policemen to record live video, take photos and record audio as evidences during law enforcement.

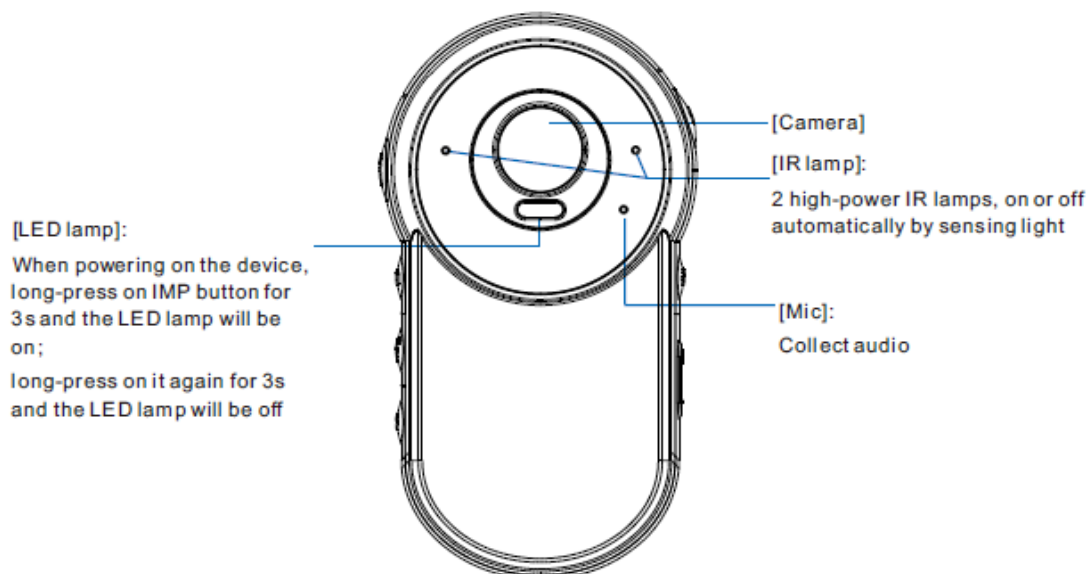
1.1 Appearance

Dimensions of the device are 111.3mm (L) * 62.1mm (W) * 30.3mm (H), and it has irreplaceable built-in EMMC storage card.



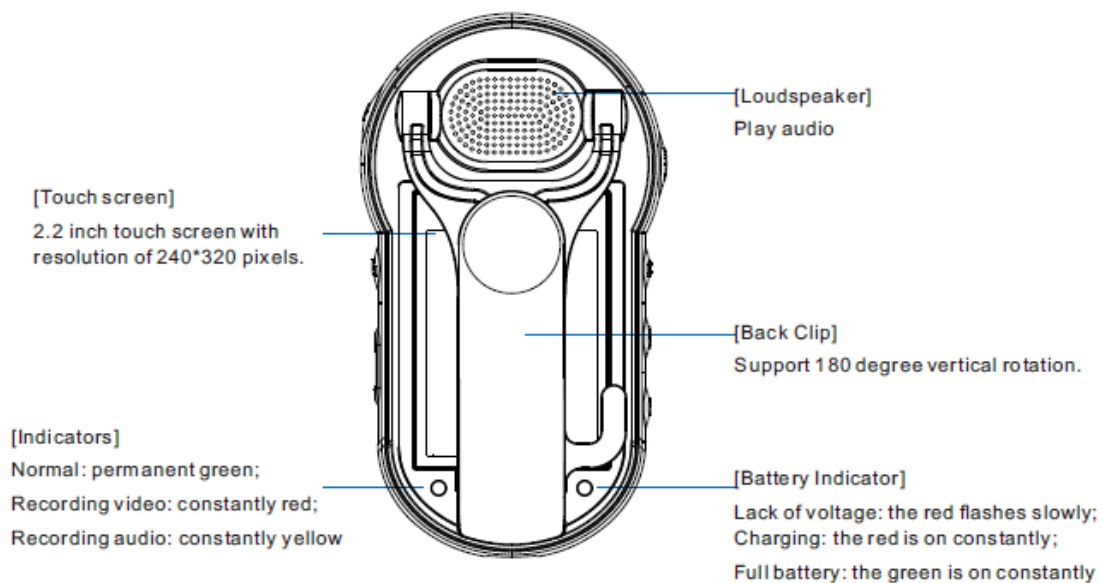
Picture 1-1 Appearance

1.2 Function Buttons



Picture 1-2 Back panel

i Note: When the light is dim and short-distance shooting is necessary, long-press on [IMP] button for 3s to enable the LED lamp.

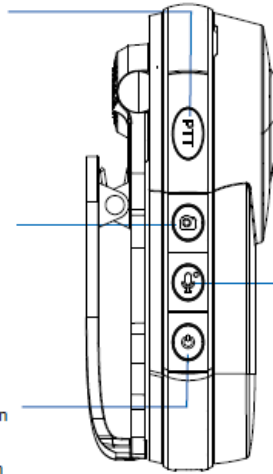


Picture 1-3 Front panel

[PTT] (push to talk)
Press to talk; release to stop talking

[Photograph]
Under the viewing mode, press it to take a photo of current image in the viewing scene; under the recording mode, press it to capture the image in the video record

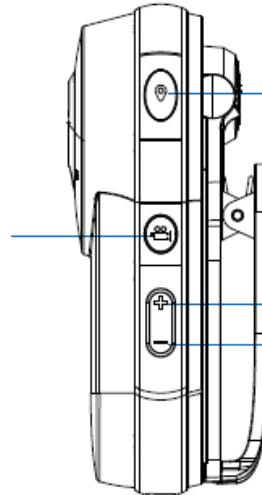
[Power Supply]
When the device is powered off, long-press on it for 3s to power on the device; when the device is powered on, long-press on it for 3s to power it off



[Audio Recording]:
Under the viewing mode, press it to start audio recording; under audio recording mode, re-press it to finish audio recording and save it.

Picture 1-4 Side buttons 1

[Video Recording]
Under the viewing mode, press it to start video recording; Under video recording mode, re-press it to stop recording and save the video record.

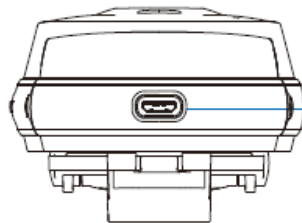


[IMP]
Under any mode, press IMP to trigger alarm snapshot (with alarm OSD). Under video or audio recording mode, press this button to mark the file as important one; under any mode, long-press on IMP for 3s and the LED lamp will be on to compensate light; long-press again for 3s and the LED lamp will be off

[Volume+]
[Volume-]
[Volume Adjustment]
Press "+" or "-" to adjust volume.

Picture 1-5 Side buttons 2

i Note: Under the video recording mode, press audio recording button and after the notice tone sounds, the video record will be saved and the audio recording starts; the indicator turns from red to yellow. Under the audio recording mode, press video recording button and after the notice tone sounds, the audio record will be saved and the video recording starts; the indicator turns from yellow to red.



[USB interface]
To charge, import/export data or connect to HD IP camera (shoulder/button type, ear-hung type) or connect to DV.

Picture 1-6 USB interface

2 Safety Instructions

DSJ-U1-LPN is a custom precise electronic device. To prevent damage on device caused by improper operation during using, please follow the instructions below:



Use only the attached battery or battery and adaptor authenticated by this company. Never electrify the device with power adaptor over the rated voltage; otherwise, the device may be damaged.



Note: This device is equipped with replaceable battery and the design of the battery compartment is intrinsically safe. If installing a wrong model battery or the polarity is inversed, it may cause explosion or fire.



Do not use the device under temperature out of the specified range (-30degree ~ 60 degree) or the battery may be damaged.

Never make the battery short circuit, decomposed or throw it into fire.

Do not shield the heat dissipation part of the device.



If any liquid enters the device by accident, take out the battery immediately.

If the device is not used for a long time, take out the battery.

Battery replacement should be done within 30 minutes to avoid system time abnormality.

Charging Operation

You can charge the device in either of the following methods:

- USB wire connecting to PC;
- Attached power adaptor.



For repairing, please contact professional technicians or this company. Never disassemble the device or transform it by yourself.

Disclaimer

KEDACOM body worn camera DSJ-U1-LPN reaches the industrial protection level IP67. If you want to open the battery cover, please keep the device dry and away from water or other liquids; when recovering the battery cover, make sure all sides are tightly locked; otherwise, its waterproofness may be affected.

3 Startup

3.1 Start Device

Start device: Long-press on the power button for 3s and it takes about 24s to enter the system.

3.2 Viewing Interface

After starting the body worn camera, it is the viewing interface, from which user can see live images through the camera.

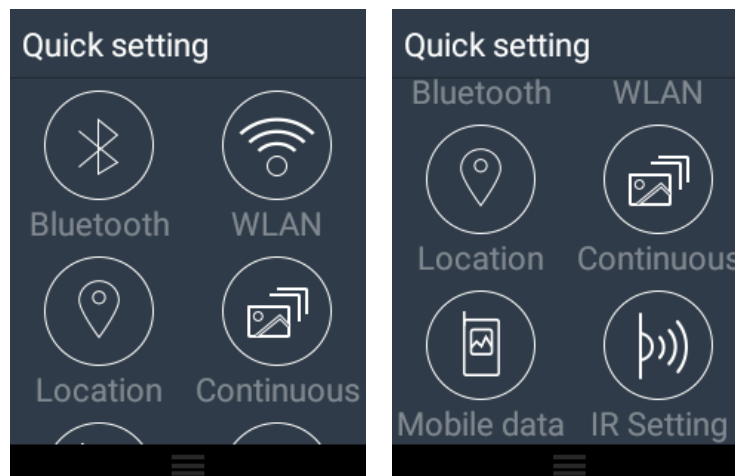


Picture 3-1 Viewing interface

- **Status bar:** icons of time, location info status, VMS registration status or viewing interface of device through VMS, WiFi status, SIM card and battery status.

Note: If removing the battery for more than 10 hours and installing it again, the system will restore to the default time: 8:00 a.m., Jan. 1st, 2016.

- **Quick setting:** under the viewing mode, slide down from the top of the screen with a finger and the quick setting interface will show. Enable or disable the functions displayed.



Picture 3-2 Quick Setting

- **Information bar:** show the date and available storage of the device. When recording video or audio, show the icons of recording duration and recording status.
- **Viewing frame:** image displaying in the pattern of 16:9.
- **Setting:** go to the setting interface and configure device parameters and information display.
- **File management:** browse or search videos, audios or pictures.
- **VLine:** fixed group talking, temporary group talking, private call, contacts list management.



Picture 3-3 Interface

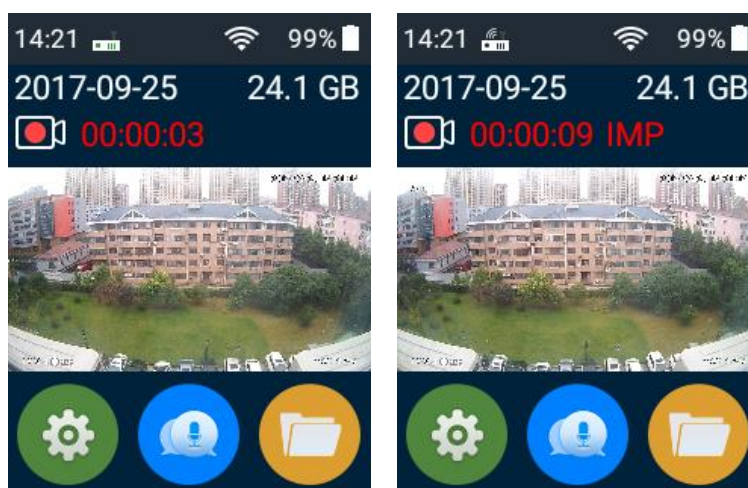
4 Basic Functions

4.1 Video Recording

Under the viewing mode, press [Video Recording] button on the device and it will start recording after the notice tone sounds. There will be a flashing icon on the screen which means the device is recording a video. Behind the icon is the recording duration and the working indicator is constantly red.

Under the video recording mode, press [IMP] button on the device and after the notice tone sounds, letters of “IMP” will show behind the recording duration and meanwhile it will capture a picture, which means current recording is marked as important video. On the interface of video file searching, user can check the “IMP” checkbox to search and playback important videos, or search and filter important files through the management software.

Short-press on “IMP” button anytime to trigger an alarm and meanwhile capture a picture (with alarm text) and save it in the body worn camera. If the body worn camera is registered to the VMS, the alarm text will also be sent to the VMS.



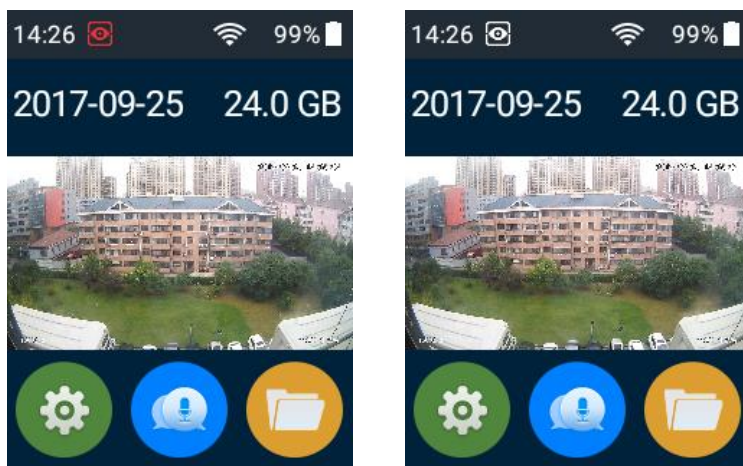
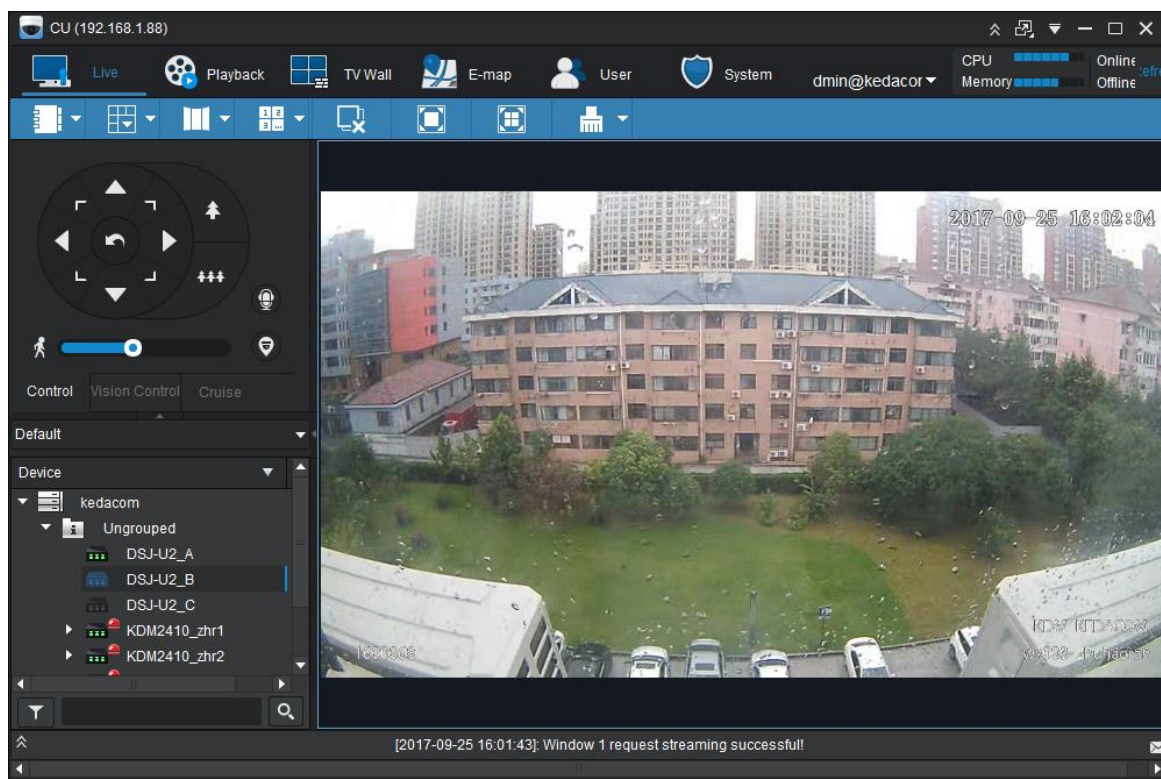
Picture 4-1 Video recording

Under video recording mode, re-press [Video Recording] button on the device and after hearing the notice tone, the video is completed and saved. Meanwhile, the device stops recording and the red indicator turns green.

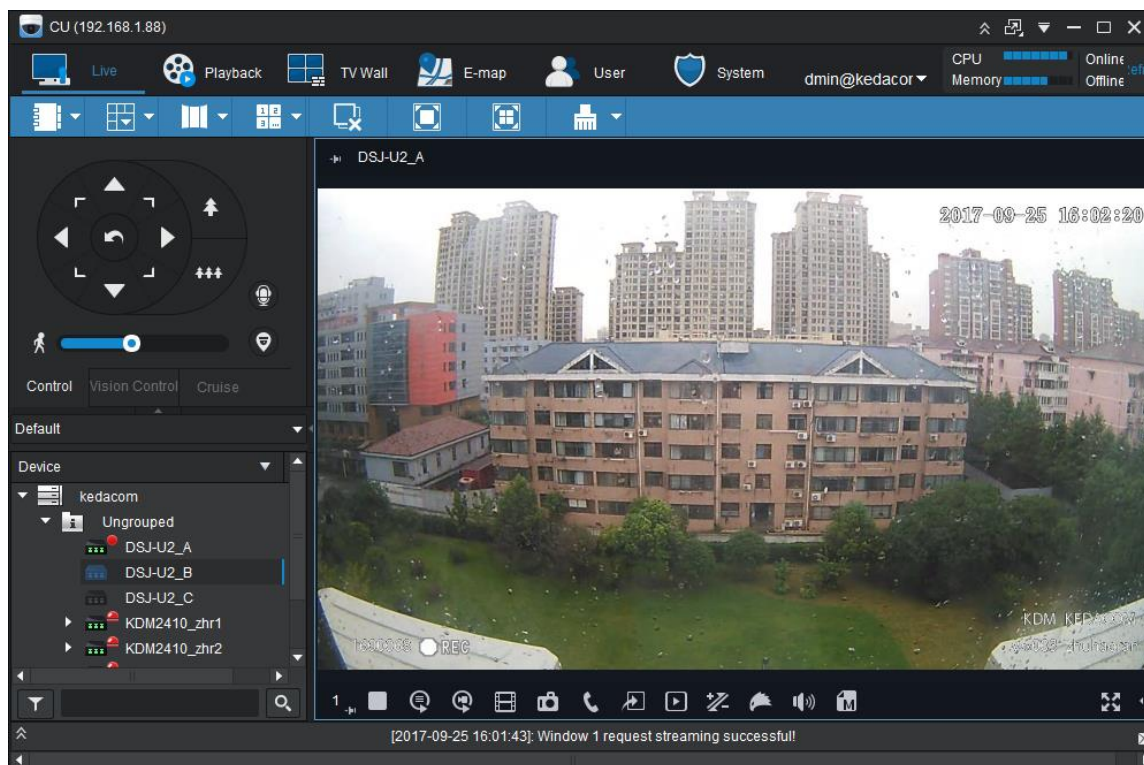
The max duration of a video can be configured in Settings > Advanced > File Duration. When the recording time exceeds the configured duration, it will be divided into multiple records. The body worn camera applies automatic segmentation to record time and the max interval between 2 adjacent records is no more than 0.1s.

i Note: Under video or audio recording mode, short-press [IMP] button and an alarm picture (with alarm text) will be captured at mean time, and all the video or audio files starting from the moment of pressing the button till the end of recording are marked as important files.

i Note: The body worn camera can register to the VMS. Login to the CU client of VMS to view the viewing interface of the body worn camera, start or stop video recording and etc. The following is an example of CU client of VMS version 2.0.



Picture 4-2 Viewing interface of body worn camera through CU of VMS 2.0

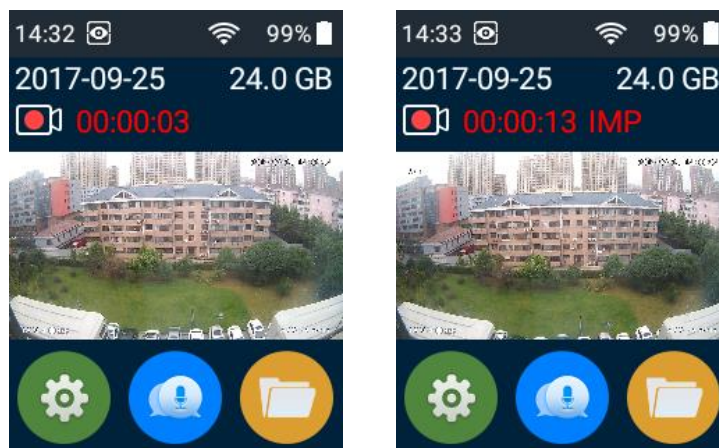


Picture 4-3 Start video recording of body worn camera through CU of VMS 2.0

4.2 Audio Recording

Under the viewing mode, press [Audio Recording] button on the device and it will start audio recording after the notice tone sounds. There will be a flashing icon on the screen which means the device is recording audio voice. Behind the icon is the recording duration and the working indicator is constantly yellow.

Under the audio recording mode, press [IMP] button on the device, letters of "IMP" will show behind the recording duration and meanwhile it will capture a picture, which means current recording is marked as important audio. On the interface of audio file searching, user can check the "IMP" checkbox to search and playback important audio files, or search and filter important files through the management software.



Picture 4-4 Audio recording

Under audio recording mode, re-press [Audio Recording] button on the device and after hearing notice tone, the audio file is completed and saved. Meanwhile, the device stops recording and the yellow indicator turns green.

The max duration of an audio file can be configured in Settings > Advanced > File Duration. When the recording time exceeds the configured duration, it will be divided into multiple records. The body worn camera applies automatic segmentation to record time and the max interval between 2 adjacent records is no more than 0.1s.



Note:


- 1) Under video or audio recording mode, short-press [IMP] button and an alarm picture (with alarm text) will be captured at mean time, and all the video or audio files starting from the moment of pressing the button till the end of recording are marked as important files.
- 2) Short-press [PTT] button to capture current viewing image and mark it as important file. When viewing this snapshot, you will find that its resolution is the same as the video file.

4.3 Photograph

Under the viewing mode, press [Photograph] button on the device to take a photo of the viewing image and generate a .jpeg image.

Go to **Settings > Advanced** to set the resolution.

4.3.1 Continuous Shooting

Under the viewing mode, go to Quick Setting interface and tap the icon  of “Continuous Shooting”. Then press the [Photograph] button on the device and the device will shoot pictures in the viewing scene continuously and save them.

Go to **Settings > Advanced** and set resolution and shoot count.

4.3.2 Snapshot

Under the video recording mode, press the [Photograph] button on the device to capture current image in the recording. The resolution of the snapshot is the same as that of the video. If continuous shooting is enabled, it will capture images continuously.

4.4 Text-Overlay Info

Images in the videos, photos and snapshots are all overlaid with text automatically.


Information on photos include time, serial No., user info, unit info, video source, longitude and latitude.

Information on videos and snapshots include time, serial No., user info (user ID + username), unit info (unit ID + unit name), video source, 3G Beacon, rec tag, longitude and latitude. Among them the 3G Beacon include 1-5 columns of signal status and the rec tag is a circle with "rec" in it.

- Text content: time, serial No. and user ID.
- Video source: max 64 characters can be entered.
- Time format: YYYY-MM-DD HH:MM:SS, at the top right corner of the image.
- Device ID: group of 7 digits or letters, at the bottom left corner of image.
- User info: user ID (max 18 digits or letters) + space key + username (max 32 digits or letters), at the bottom right corner of image.
- Unit info: unit ID (max 12 digits or letters) + space key + unit name (max 32 digits or letters), at the bottom right corner of image.
- Longitude and latitude: the location info of the device.

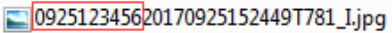
5 Settings

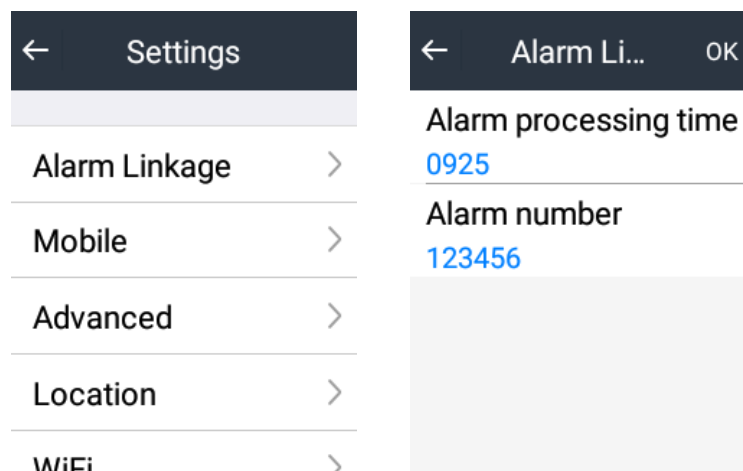
Go to Settings to perform simple configurations to the device.

Tap the **Settings** icon  on the main interface and enter the interface. Options include BWC settings (Alarm Linkage, Mobile Setting, Advanced, Location, WiFi, Bluetooth and Smart Search), VLine settings (Personal and Talkback settings) and others (About).

5.1 Alarm Linkage

Go to Alarm Linkage interface to configure “Alarm processing time” and “Alarm number” and tap “OK”. When a video or audio file or photo is generated by the body worn camera, it saves the file with the last

“Alarm processing time + Alarm number” prefixing the file name  .

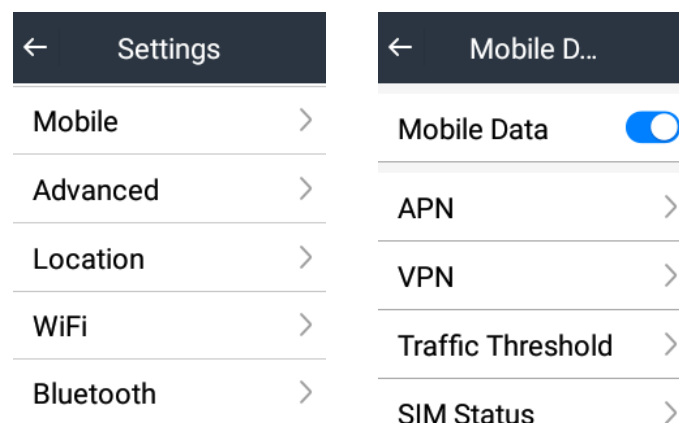


Picture 5-1 Alarm linkage


5.2 Mobile

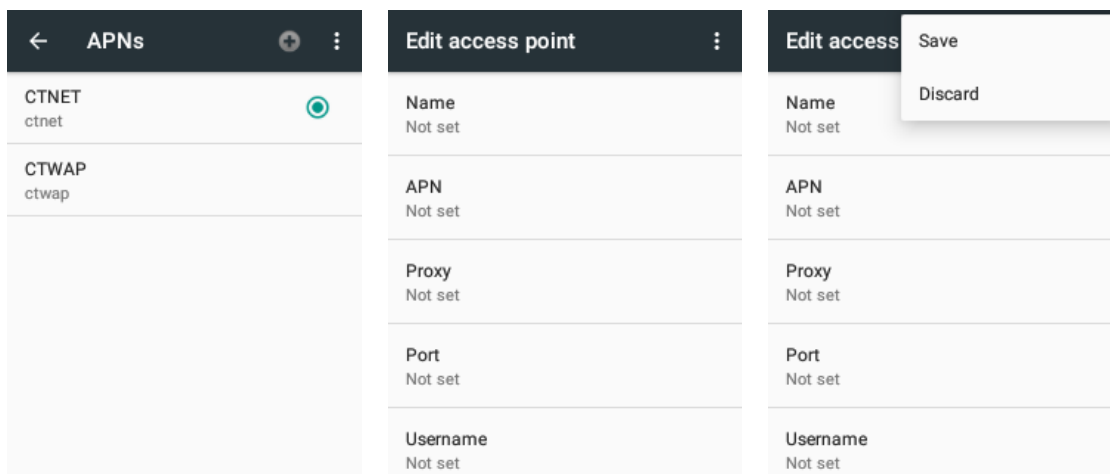
When the body worn camera is of mobile version and the SIM card works normally, user can enable / disable mobile data; configure APN, VPN and traffic threshold; and view SIM card status.

- **Mobile data:** enable or disable **Mobile data**.





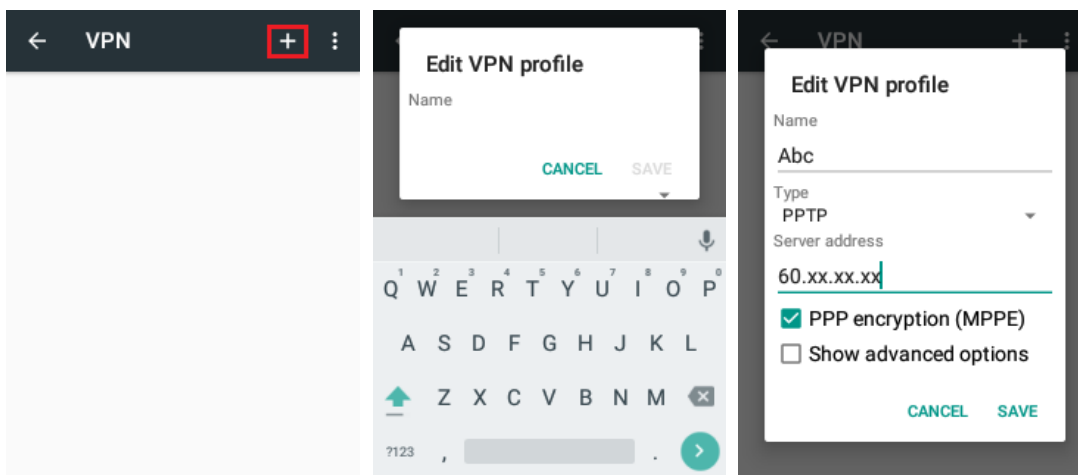
Picture 5-2 Mobile data

- **APN:** Tap to enter APN setting interface. When user needs to access to the network with specific APN, perform the following settings:
 - Enable “Mobile data”, tap “APN” to enter the default interface of APN setting.
 - Tap  to add specific APN, select authentication type, enter APN access point name, APN, proxy, port and username, and tap “Save”, as shown below.



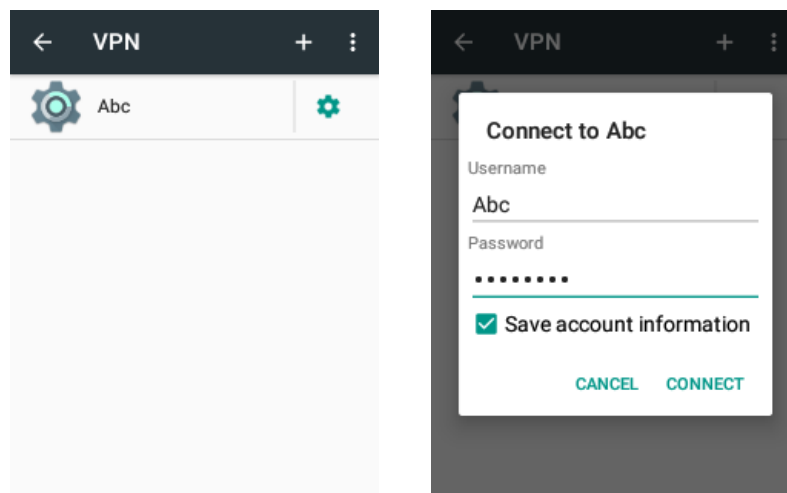
Picture 5-3 APN setting

- **VPN setting:** If user needs to access to the server of company intranet remotely, perform the following steps to configure VPN:
 - Enable “Mobile data”, tap “VPN” to enter the interface of VPN setting. Tap icon  to enter the interface of “Edit VPN profile”.
 - Tap icon  to show complete interface. Enter VPN name, select type, enter server address, and tap “Save”.




Picture 5-4 VPN setting

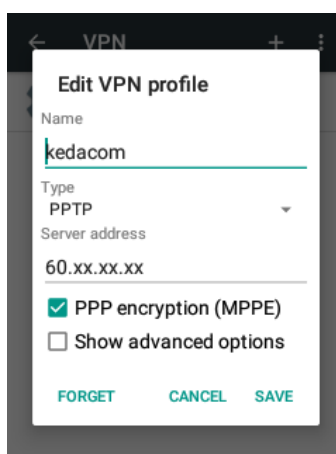
- The VPN interface shows the list of saved VPN. Tap the needed VPN and a window of “Connect to xVPN” pops up. Enter “Username” and “Password”, and tap “CONNECT”. Long-pressing the configuration file to edit or delete it, as shown below.



Picture 5-5 Connect to VPN

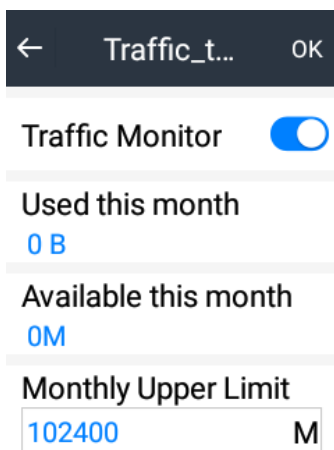
- On VPN interface, there is “Connecting” displaying under the configuration file. If connecting successfully, it will show “Connected”, which means this network can be used normally.

i Note: Tap the icon  behind the needed VPN and the interface of “Edit VPN profile” pops up. Tap “Save” to save edition and tap “Cancel” to delete the VPN.



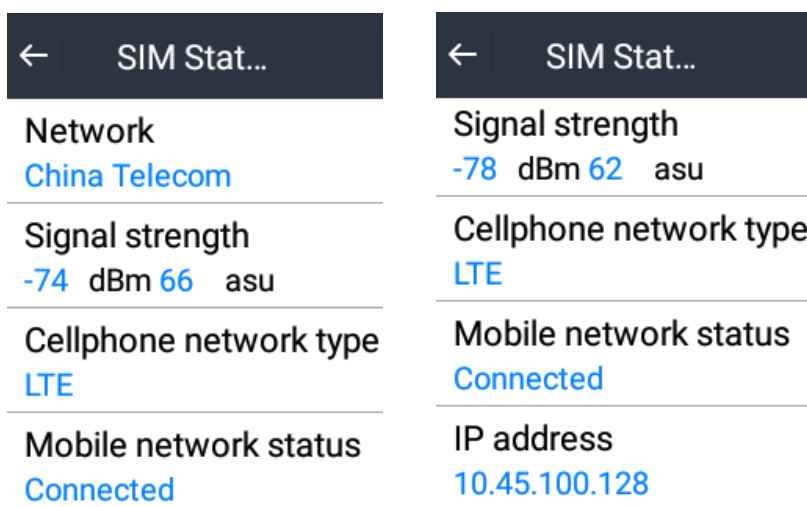
Picture 5-6 Edit VPN profile

- **Traffic threshold:** tap and enable **Traffic Monitor**. Set **Monthly Upper Limit** and **Monthly Warning**. Afterwards, tap “OK”.



Picture 5-7 Traffic threshold

- **SIM status:** tap to view SIM card status.



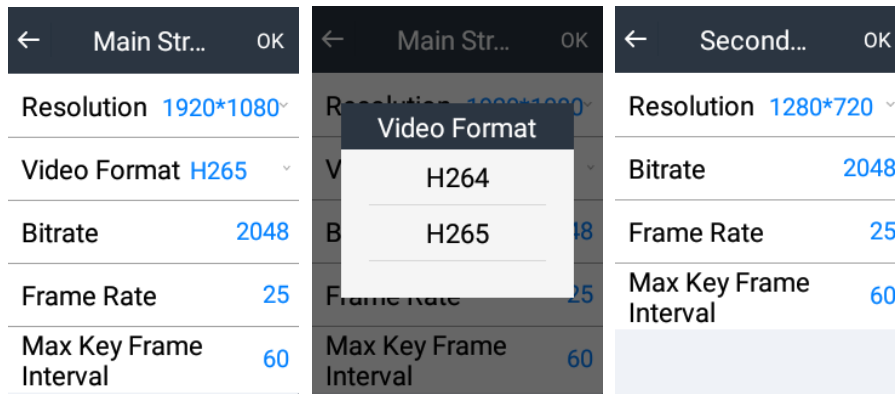
Picture 5-8 SIM card status

5.3 Advanced

Advanced settings include main stream, secondary stream, other, VMS registration, Stream Transmission, Resolution, Shoot count, Notice tone and Screen delay.

5.3.1 Video parameters

Main stream/Secondary stream: set main/secondary stream **Resolution, Bitrate, Frame Rate** and **Max Key Frame Interval**. Default values are recommended. If the network is too poor and the video blocks, adjust the main/secondary stream parameters such as reducing resolution, bitrate or frame rate.



Picture 5-9 Main/Secondary Stream

5.3.2 Access Protocol

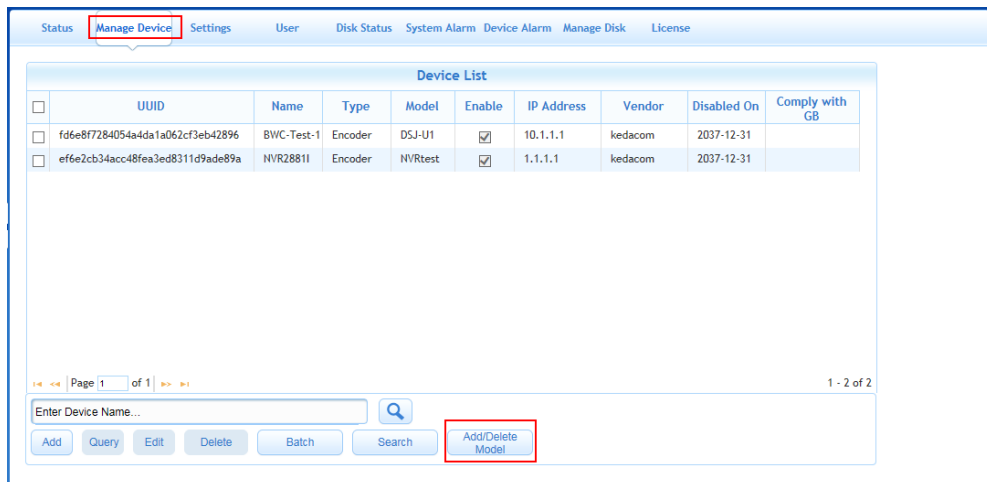
DSJ-U1-LPN can access the VMS through the GB28181 protocol and can report its GPS information to a third-party server through the JT808 protocol.

GB28181

To configure the GB28181 protocol:

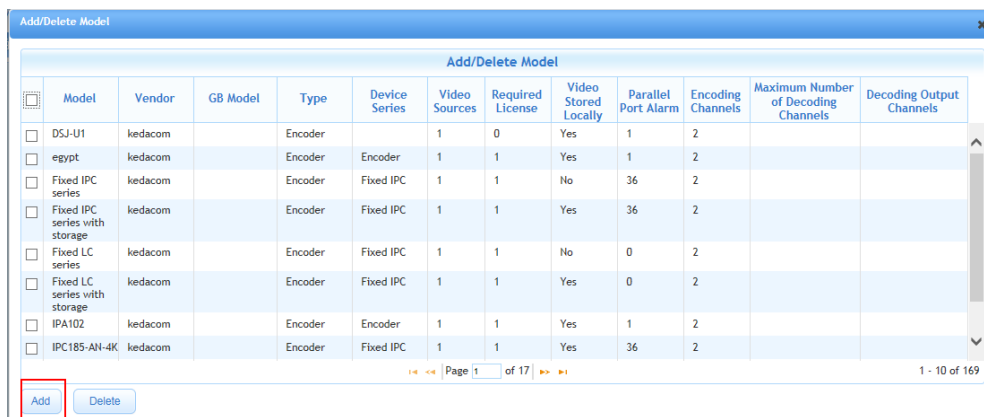
1. Add DSJ-U1-LPN to the VMS on the PMC.

1) Choose **Manage Device > Add/Delete Model**.



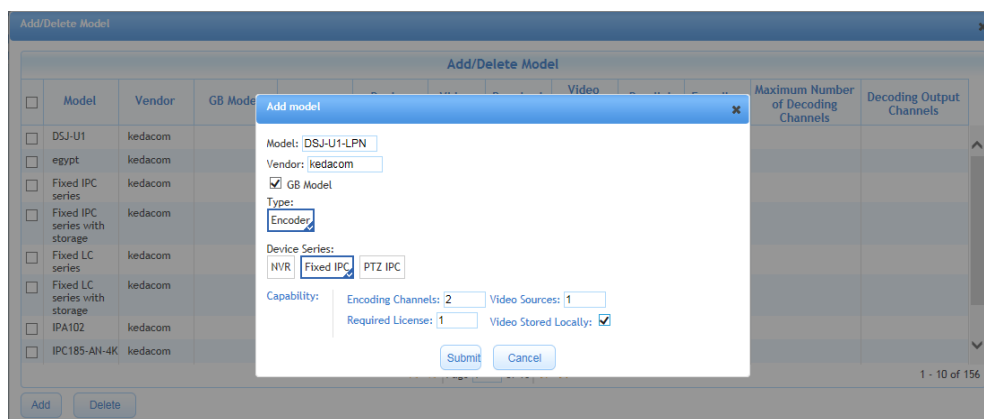
Picture 5-10 VMS > Device

2) In the displayed **Add/Delete Model** dialog box, tap **Add**.



Picture 5-11 Add device

3) In the **Add model** dialog box, configure parameters displayed.



Picture 5-12 Configure device

In this step, you should select **GB Model**, keep the default values for the **Type** and **Device Series** parameters, and configure the capability parameters according to the actual capability of DSJ-U1-LPN.

4) Tap **Submit**.

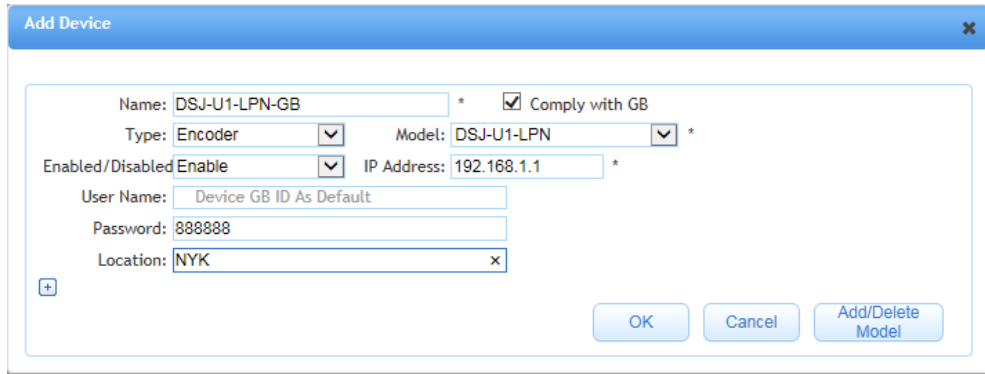
5) Under **Manage Device**, tap **Add**.

6) In the **Add Device** dialog box, configure parameters displayed.

In this step:

- Select **Comply with GB**.
- Set **Model** to the previously added model and **IP Address** to a random value.
- Keep the default values for the **Type** and **Enabled/Disabled**, and **User Name**.
- Configure the **Password** parameter. You can either use the default password or create your own password.
- The **Location** parameter is optional.

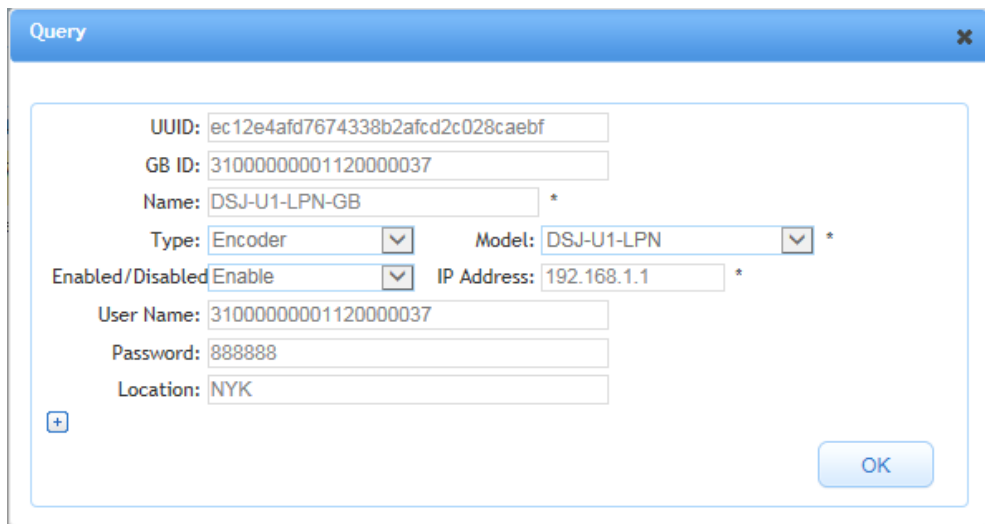
The following is an example.



Picture 5-13 Location

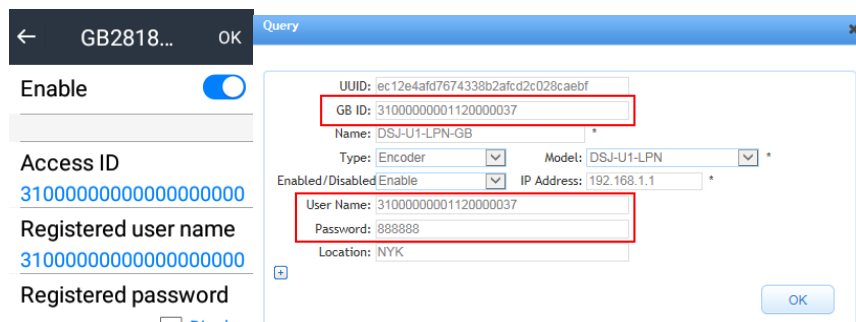
- 7) Tap **OK**.
- 8) Select DSJ-U1-LPN from the device list and tap **Query** to query its information.

The following is an example.



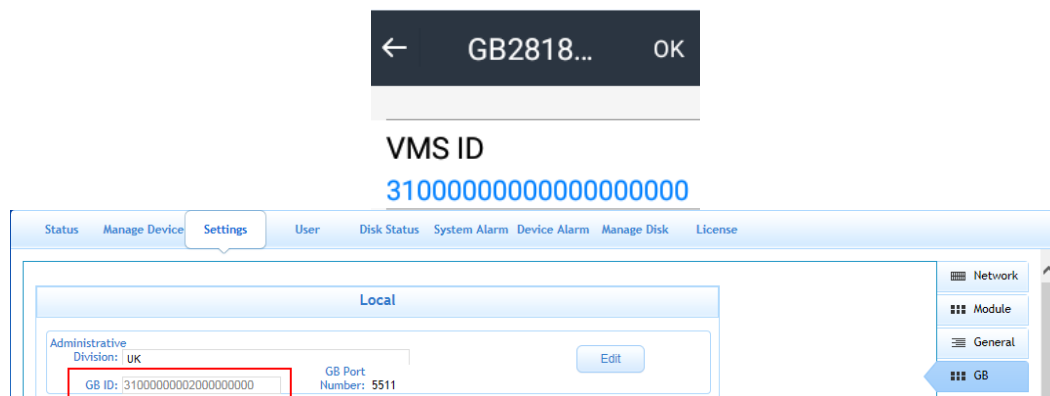
Picture 5-14 Query

2. Choose **Settings > Advanced > Protocol access > GB28181 access** to configure the GB28181 protocol.
 - 1) Turn on **Enable**.
 - 2) Set **Access ID**, **Registered user name**, and **Registered password** to the **GB ID**, **User Name**, and **Password** values, respectively.



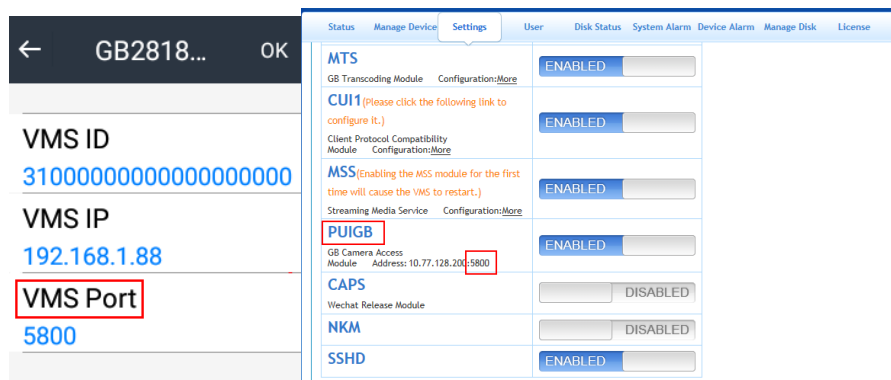
Picture 5-15 GB ID

- 3) Set **VMS ID** to the **GB ID** value of the VMS.



Picture 5-16 VMS ID

- 4) Set **VMS IP** to the IP address of the VMS.
- 5) Set **VMS Port** to the port number of the PUIGB module on the VMS.



Picture 5-17 VMS port

- 6) Do not configure **Local IP** and **Local Port**.

3. Tap **OK**.

After DSJ-U1-LPN accesses the VMS, you can find  is displayed on the main screen.

JT808

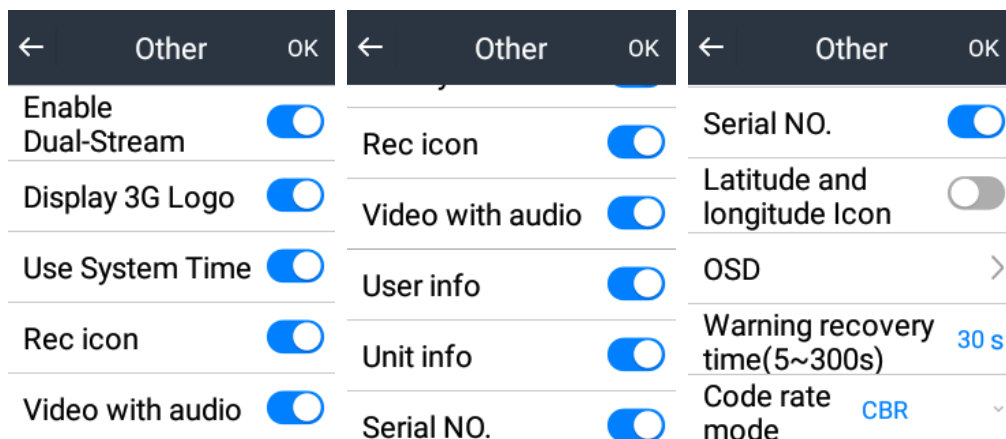
To configure the JT808 protocol:

1. Choose **Settings > Advanced > Protocol access > JT808 access**.
2. Set **VMS IP** to the IP address of the third-party server to which DSJ-U1-LPN reports its GPS information.
3. Set **VMS Port** to the port number of the third-party server.
4. Tap **OK**.

5.3.3 Other Setting

Tap “Other” and options include Enable Dual-stream, Display 3G Logo, Use system time, Rec icon, Video with audio, User info, Serial NO., Latitude and longitude Icon, OSD, Warning recovery time

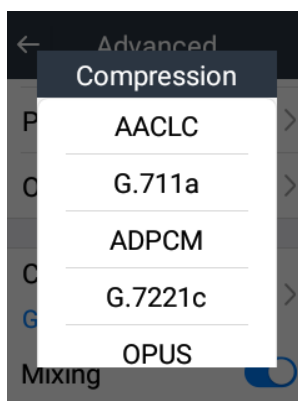
(pressing the IMP button at any time, the system will trigger an alarm and capture an image) and Code rate mode.



Picture 5-18 Other setting

5.3.4 Compression

Tap “**Compression**” and select audio compression format from the list.



Picture 5-19 Encoding type

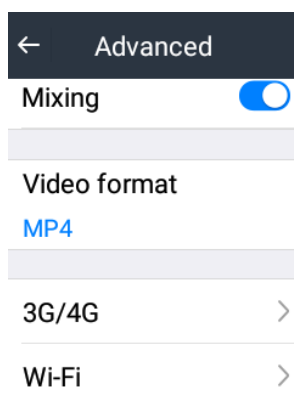
i Note: When the device accesses to and communicates with different systems or VMS in audio, user needs to set their audio compression format consistent. For example, when the device accesses to the video conference system, if the video conference system applies G.7221c format, user needs to set the compression format of body worn camera as G.7221c too, thus they will be able to communicate.

5.3.5 Mixing

Mixing is enabled by default. When the body worn camera records video or audio during calling or talking, it will record the content of call and talk. Mixing supports only the compression of ADPCM, so when mixing is enabled, make sure the audio compression format is ADPCM.

5.3.6 Video Format

The default video format is MP4. Press [Video Recording] button on the device and it will record video in MP4.

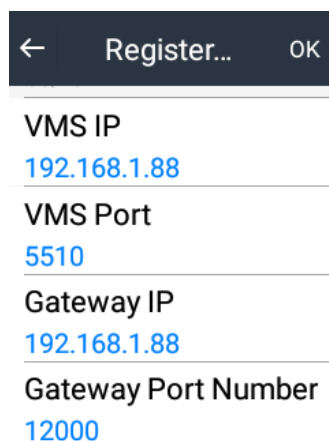


Picture 5-20 Video format

5.3.7 VMS registration

4G VMS registration

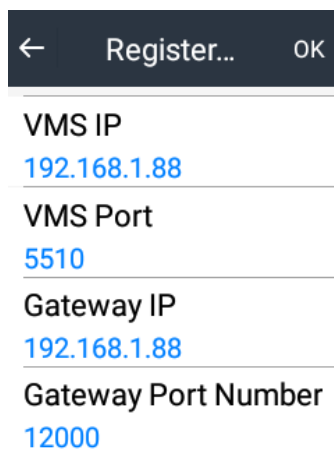
- VMS IP: input the public IP address of VMS 2.0.
- VMS port: keep the default parameters without edition.
- 3G / 4G Media Gateway IP: the same as that of the 3G/4G VMS.
- Gateway Port Number: keep the default parameters without edition.



Picture 5-21 4G VMS registration

WiFi VMS registration

- VMS IP: input the public IP address of VMS 2.0.
- VMS port: keep the default parameters without edition.
- WiFi Media Gateway IP: the same as that of the WiFi VMS.
- Gateway Port Number: keep the default parameters without edition.

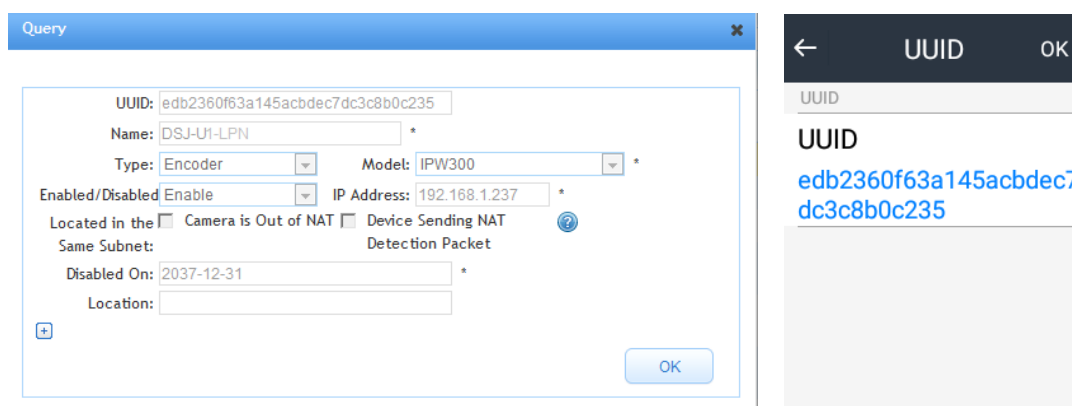


Picture 5-22 WiFi registration

i Note: 4G VMS registration and WiFi VMS registration should be configured according to actual VMS deployment. If 4G and WiFi coexist, the system will transmit stream through WiFi first.

5.3.8 UUID

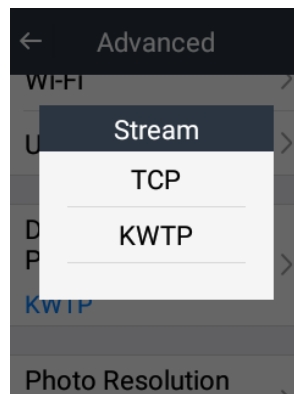
The body worn camera registers to VMS 2.0 through 3G/4G or WiFi, and through KWTP (KEDACOM protocol) by default. Login to the CU client of VMS and add body worn camera to the VMS, details of which can be referred to in part 5.3.2 Access Protocol step 1) ~3). Go to the window of viewing front-end devices (refer to 5.3.2 Access Protocol step 4)) and view device access info. Find device serial No. and fill it in the UUID blank of body worn camera and tap “OK”, as shown below. After the body worn camera is added to the VMS, you can browse the viewing image of the body worn camera through CU, as shown in picture 4-2.



Picture 5-23 UUID

5.3.9 Stream

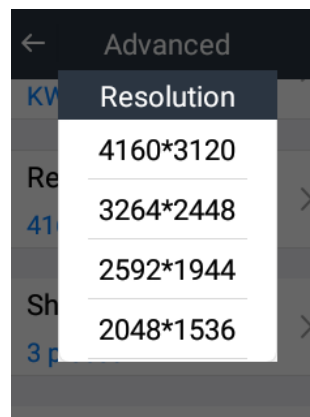
Tap “Stream” and select stream protocol: KWTP/TCP. KWTP is a KEDACOM transmission protocol applicable to unstable network and adjusts frame rate automatically; TCP is an international transmission protocol applicable to stable network. The default option is KWTP.



Picture 5-24 Stream

5.3.10 Resolution

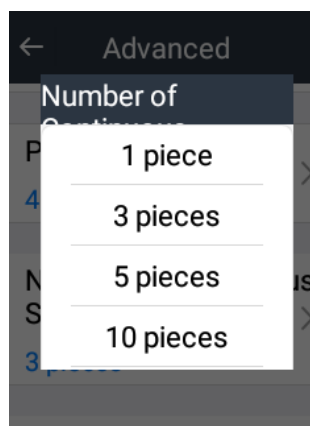
Tap "Resolution" to set resolution of snapshot pictures.



Picture 5-25 Resolution

5.3.11 Number of Continuous Shoot

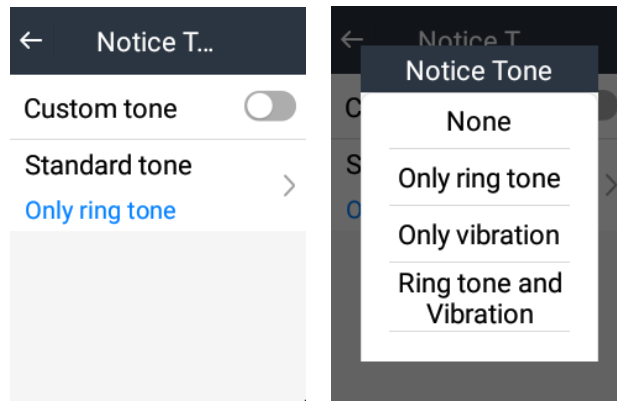
Set number of continuous shoot.



Picture 5-26 Number of continuous shoot

5.3.12 Notice Tone

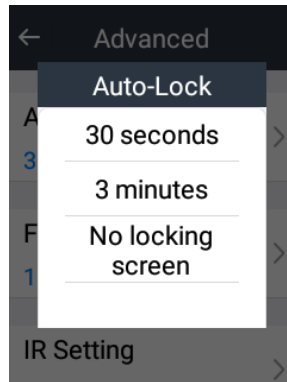
Tap "Notice Tone" and enable "Custom tone" to set notice tone, as shown below.



Picture 5-27 Notice tone

5.3.13 Auto Lock

Tap “Auto-Lock” and select an option from 30 seconds, 3 minutes and no locking screen. After selecting one mode, the screen will be locked for a certain period of time or never be locked. Tap power button and the screen will be locked to save electricity; tap power button again and the screen will be enabled.






Picture 5-28 Auto-Lock

5.3.14 File Duration

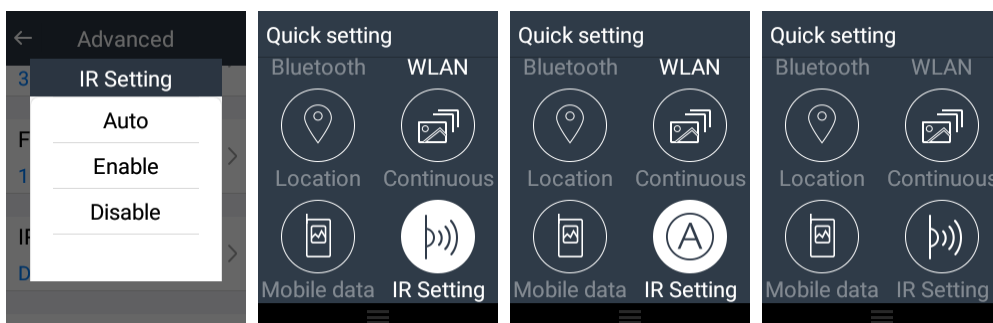
Tap “File Duration” and select the max duration for each video or audio file.

5.3.15 IR Setting

Tap “IR Setting” and select “Auto”, “Enable” or “Disable” from the list. Alternatively, tap Quick

Setting > IR Setting. Icon  means disabled,  enabled and  auto.

When selecting “Auto”, the device will turn on or turn off the IR lamp automatically by sensing the strength of light.



Picture 5-29 IR setting

5.3.16 Pre-record setting

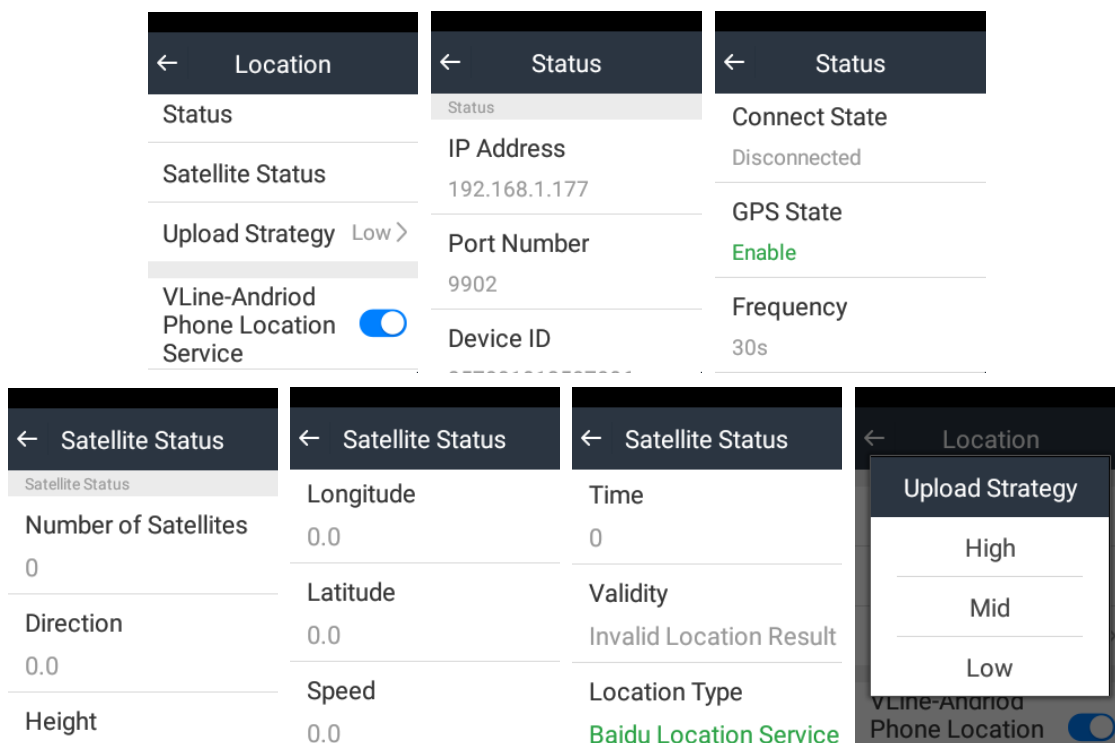
After enabling “Pre record setting”, when recording video or audio, the file duration is the actual recording duration plus a 30s-video/audio prior to the start time.

5.4 Location

Enable “VLine-Android Phone Location Service” to upload location info to the management platform of VLine.

Enable “VMS Location Service” to view location status and satellite status and configure upload strategy. After configuring IP address and VMS port number in “Status”, the location info will be uploaded to the VMS.

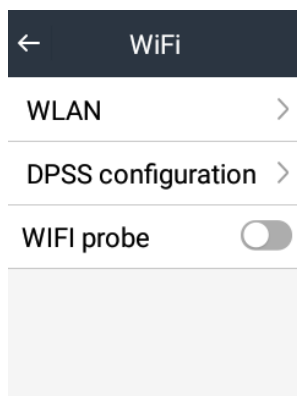
Enable Baidu positioning in VLine management software to solve the problem that traditional GPS’s incapable of positioning indoor. You can obtain the longitude and latitude info after enabling Baidu positioning and the internet simultaneously indoor.



Picture 5-30 Location

5.5 WiFi


Tap WiFi to configure WLAN, DPSS and WiFi Probe. The WiFi hotspot can only be enabled through mobile front-end device management software. When WiFi hotspot is enabled, WiFi will be disabled automatically. If enabling WiFi when the hotspot is enabled, the hotspot will be disabled automatically.

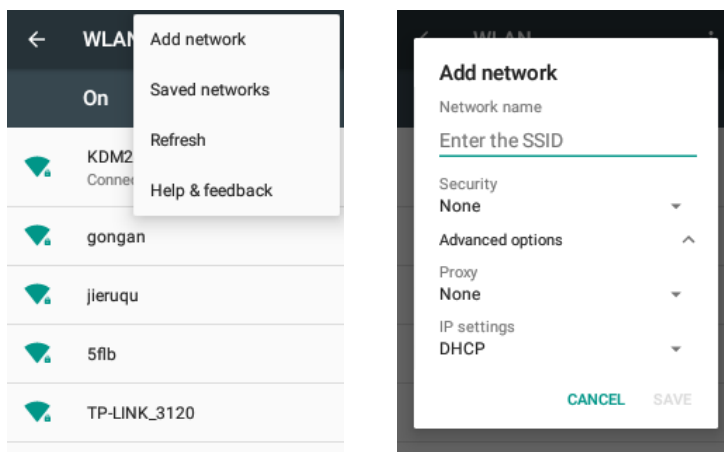


Picture 5-31 WIFI configuration

WLAN

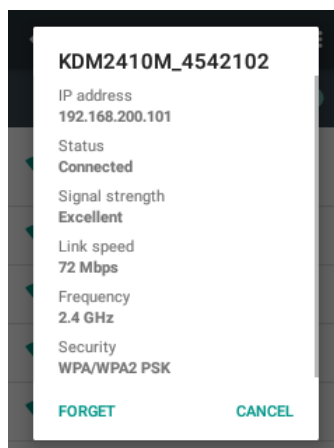
Tap “WLAN” to enter the interface. You can enable/disable WiFi, add network and configure WiFi hotspot.

- **Enable WIFI:** when WiFi is enabled, the device will search and display wireless networks automatically. If it has registered to VMS, it will be able to connect to VMS and transfer live viewing image to the VMS through WiFi. Login to the VMS to view live viewing image of the device.
- **Add network:** if user wants to add network manually, tap icon  at the top right corner of WLAN interface and select “Add network”. Enter network name (SSID), select security type or check advanced options, and tap “Save” to finish.



Picture 5-32 Add network

- **Connect to network:** select a network, enter the right password and tap “Connect”. Tap “Connected” on the list or any other WiFi network that the device has searched to view the details of the network such as status, signal strength and etc., as shown below.



Picture 5-33 WiFi network

DPSS configuration

Tap DPSS configuration to set DPSS IP and port. After finishing configuration, when WiFi probe is enabled, it will be able to upload WiFi networks probed by the WiFi probe to the DPSS server.

WiFi Probe

Before enabling WiFi probe, you need to enable WiFi hotspot at the mobile front-end device management software, details of which can be referred to in the *User Manual of Mobile Front-End Device Management Software*. After WiFi probe is enabled, it will be able to probe the networks nearby the body worn camera and upload them to the DPSS server. Details of WiFi probe info can be referred to in the chapter of WiFi probe in the *User Manual of Mobile Front-End Device Management Software*.




Note: The WiFi probe can be enabled only after the hotspot is enabled.

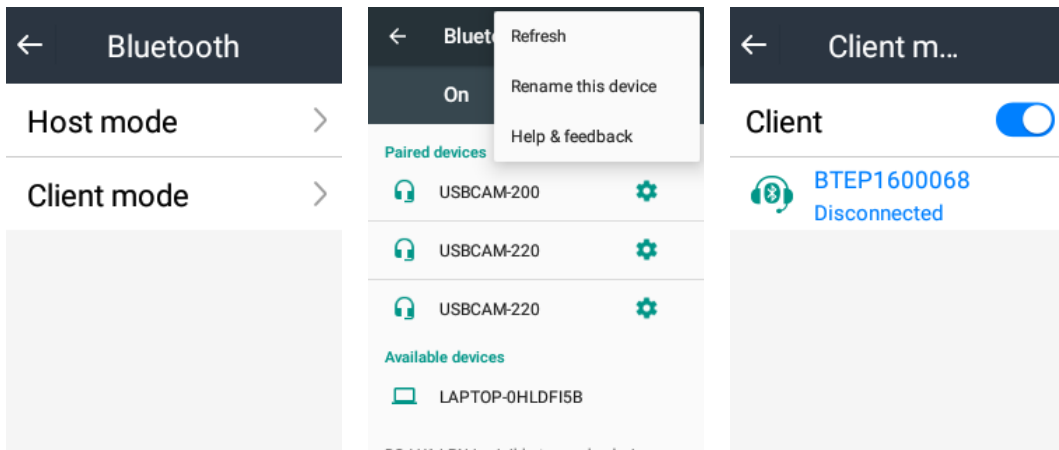
5.6 Bluetooth

Enable Bluetooth to enter Host mode, under which it will search and display devices on the list automatically. It will be able to connect to Bluetooth headset in a certain range of distance.

Under the Host mode, you can rename the device and pair devices through Bluetooth.

- **Rename this device:** if you want to rename the device, tap the icon  at the top right corner of the bluetooth interface and tap “Rename this device”. Enter a new name and tap “Rename” to finish.
- **Pairing:** tap the available device name to enter password, and tap “Pair”.

If the device has paired with the third-party interphone successfully under Host mode, it will enter Client mode and enable client, then the device will work as a Bluetooth headset of the interphone. The Client mode only supports interphone. If the paired devices include other devices apart from interphone, when Client mode is enabled, the device will show disconnected.

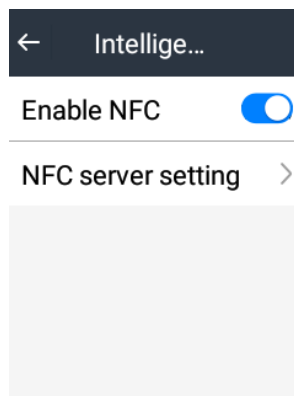


Picture 5-34 Bluetooth interface

5.7 Intelligent Search

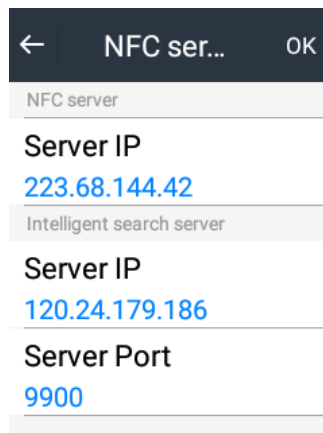
Non-contact ICC (integrated circuit card) recognition: recognize ID information with built-in NFC chip.

- Enable NFC: tap “Intelligent Search” and enable NFC. Put the ID card flatwise on the back of the device, and it will recognize information such as name, sex and ID number on the ID card.



Picture 5-35 Enable NFC

- NFC server setting: tap “NFC server setting”. Suggest using default setting. Tap the parameters to edit, details as shown below.



Picture 5-36 Intelligent search

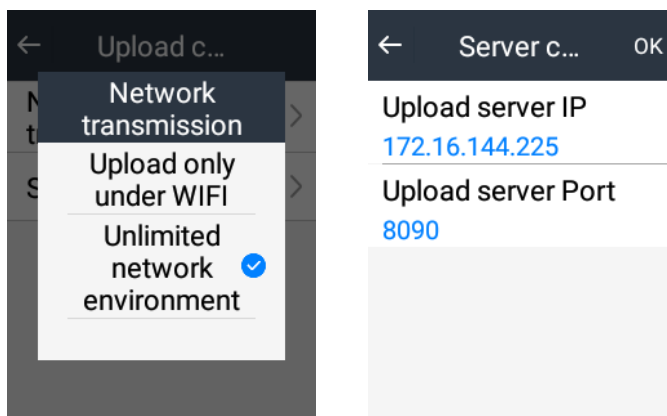
5.8 Wireless Transmission

Wireless transmission means to upload videos, audio files and pictures in the body worn camera to the specific server through wireless network. This function is available only when the wireless transmission is enabled through mobile front-end device management software. Refer to the *User Manual of Mobile Front-End Device Management Software* for details.

When the wireless transmission function is enabled and upload configuration is finished, you can upload files and view upload details on the upload list interface.

Upload Configuration

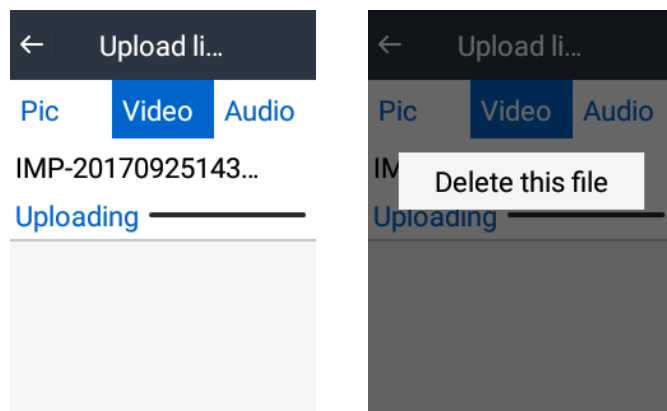
Tap “Upload configuration” to configure network transmission and server. Options on “Network transmission” interface include “Upload only under WiFi” and “Unlimited network environment”. On the interface of upload server configuration, you can configure “Upload server IP” and “Upload server port”.




Picture 5-37 Upload setting

Upload List

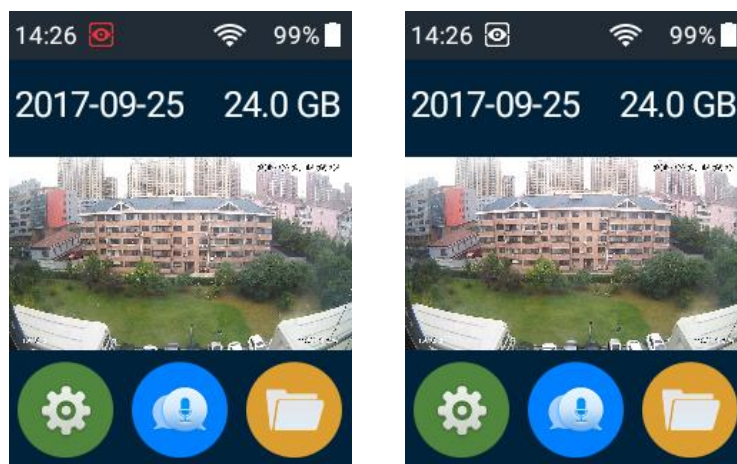
Tap “Upload list” to view the upload lists of pictures, videos and audio files. Tap the file on the list to pause uploading this file and tap again to re-upload it. Long-press on the file and it indicates “Delete this file”. Tap the indication to cancel uploading this file.



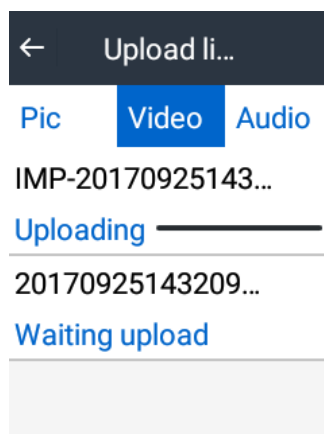
Picture 5-38 Upload list

i Note: When the VMS has connected with the body worn camera and is browsing its live viewing video, but the body worn camera is disconnected with the VMS due to unstable network condition, then the body worn camera will start video recording automatically until it recovers connection with the VMS and the VMS is able to go on browsing the live viewing video of the body worn camera (the video record is called disconnected video). Meanwhile, the device will upload the disconnected video to the server (such as the data docking station) automatically. You can view the uploading progress of all the disconnected videos on the upload list or view the files on file management interface. When there is the icon  behind the list of the file, it means this is a disconnected video.

i Note: During the recording of disconnected videos, you can perform any operation about video recording. Please refer to chapter 4.1 for details.



Picture 5-39 Browse the live viewing video of body worn camera through VMS



Picture 5-40 Video upload list during wire disconnection

5.9 Any Key Wake Up

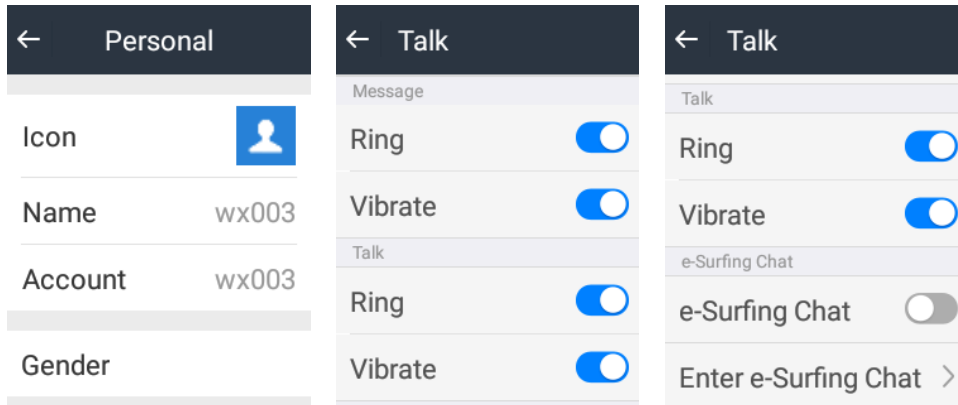
Enable “Any Key Wake Up”. When the screen is locked, press any button on the body worn camera to unlock it.

5.10 VLine Settings

VLine settings include personal and talk settings.

Tap “Personal” to enter personal setting interface and view personal info.

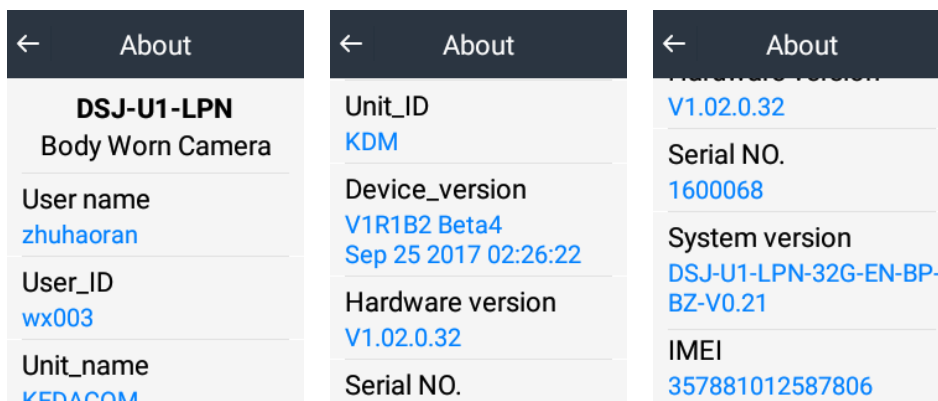
Tap “Talk” to enter talk setting interface and enable/disable “Ring” and “Vibrate”. “E-Surfing Chat” is disabled by default. To enable e-Surfing chat, tap “Enter e-Surfing Chat” and complete the settings.



Picture 5-41 VLine settings

5.11 About

On the **About** interface, user can view username, user ID, unit name and unit ID. Login to the PC client of mobile front-end device management software as an administrator and configure these parameters. Please refer to the *User Manual for Mobile Front-end Device Management Software* for details.




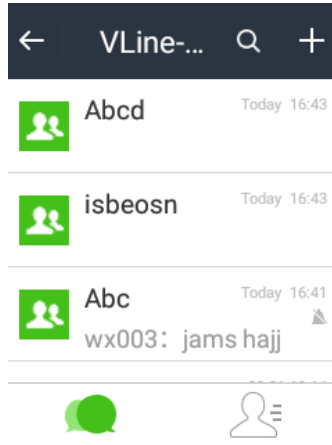
Picture 5-42 About

6 VLine Functions

The body worn camera supports function of digital voice intercom.


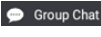

6.1 Chats

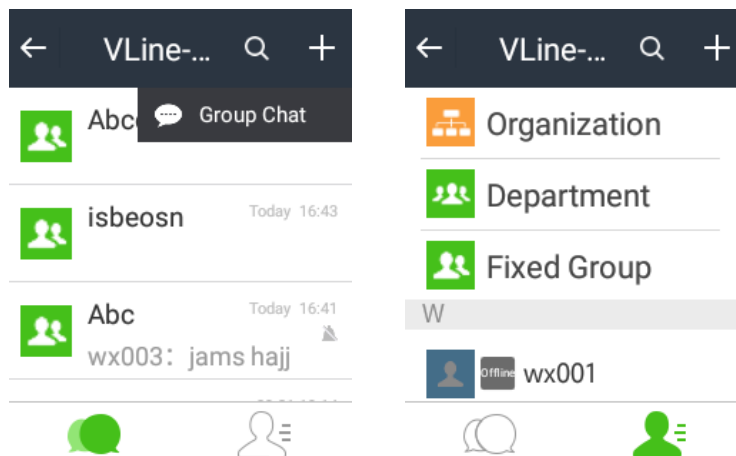
Tap the **VLine** icon  on the main interface to enter the chats interface by default, which shows recent chat list.




Picture 6-1 Chats

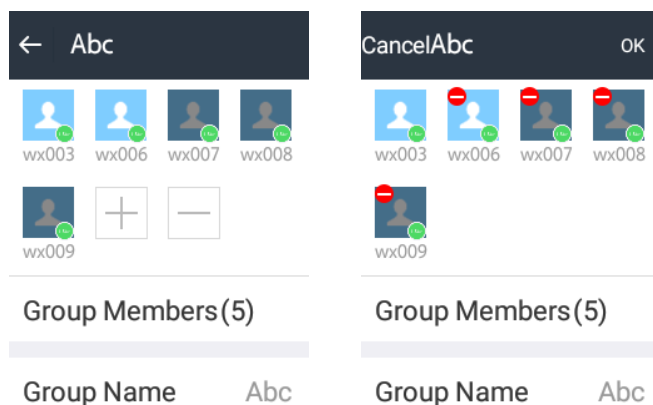
6.1.1 Create Chat Group

- Tap the icon  at the top right corner and select Group Chat . Check contacts from the contact list and the “OK” key shows the total members in the group including the chat starter. Tap OK(*) to create the chat group.
- Tap  to search contact or chat group.




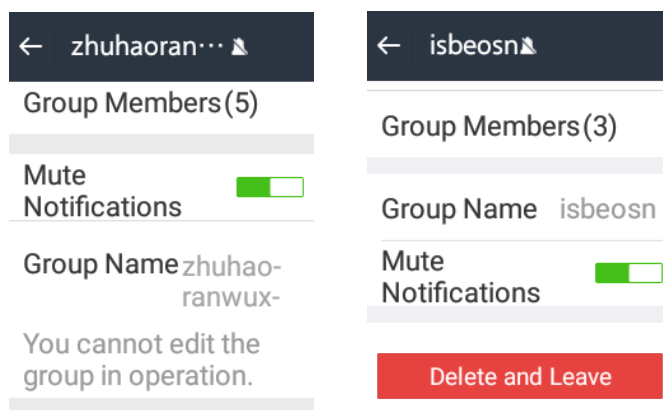
Picture 6-2 Create temp group

- Select and tap any chat group to enter. Tap the group member icon  at the top right corner to view all the members in the group, and to enable/disable “Mute Notifications” function. The group starter is able to remove or add members. Tap “OK” to save settings.




Picture 6-3 Manage chat group

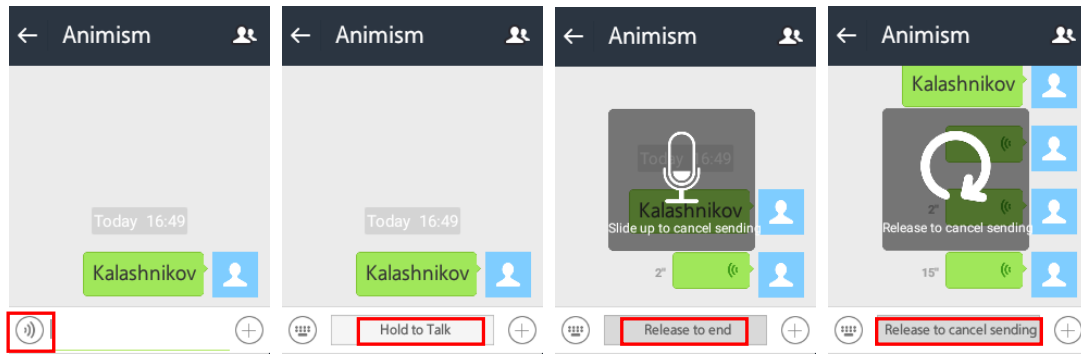
- When “Mute Notification” is enabled, user will be able to receive messages but without ring tone or vibration notification and there will be an icon  on the interface of this chat group.
- Members in a fixed chat group cannot delete and leave the chat group while those in a non-fixed chat group can (definitions of fixed and non-fixed chat groups can be referred to in chapter 6.2.1).



Picture 6-4 Delete and leave group

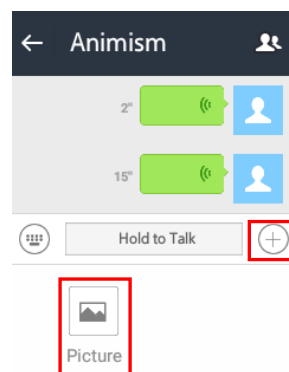
6.1.2 Group Chat

- Tap any group to enter the group chatting interface. Long-press [PTT] button to start talking and release the button to send the voice when finish talking.
- Tap  and **Hold to Talk** appears. You can also tap on **Hold to Talk** to talk; tap **Release to end** to finish talking and send the voice.
- During talking, there will be an OSD message “Slide up to cancel sending”. Slide up on the screen to cancel sending of current voice.



Picture 6-5 Group management

- Tap and the icon appears. Tap and select a picture to send it in the chatting group.



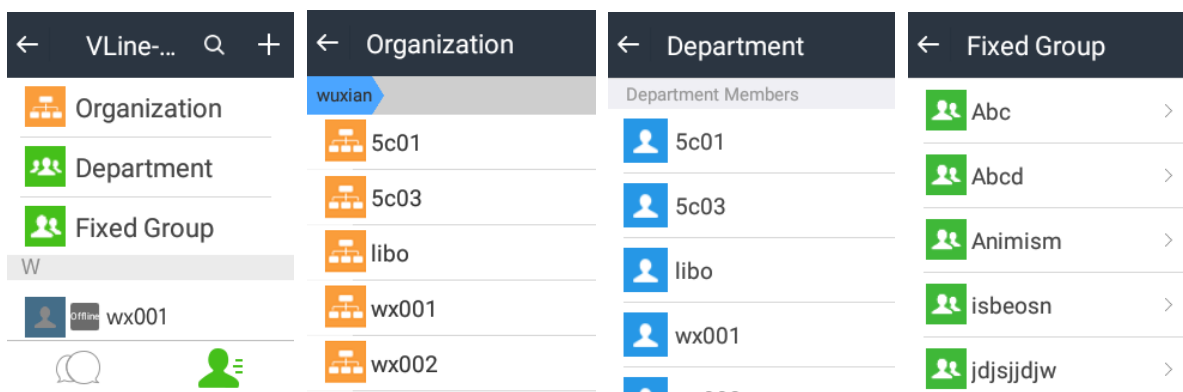
Picture 6-6 Send pictures

6.2 Contacts

Tap icon to enter the interface of contacts to view organization (group), department (group), chat groups (including fixed and non-fixed) and contacts.

6.2.1 Groups

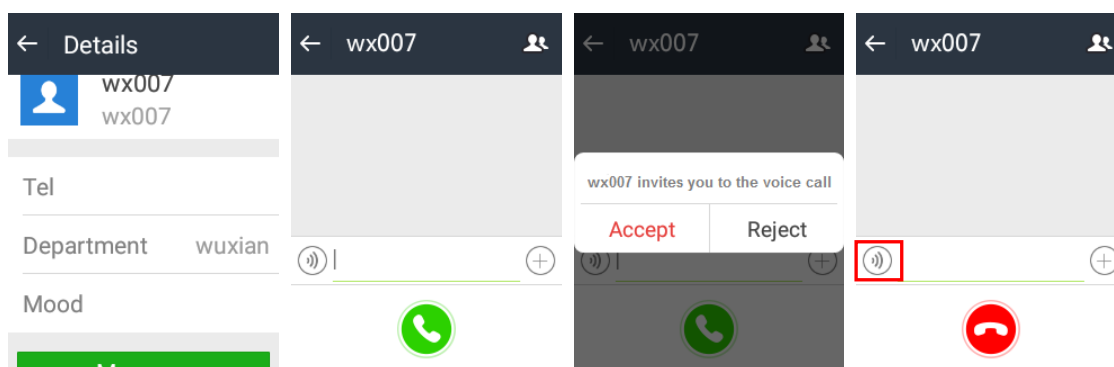
- Organization (group) and department (group) are all configured through the VLine Comprehensive Application Platform. The former includes all the members of all departments of the whole organization while the latter is composed of all the members of the department in which the BWC holder is in.
- The fixed groups are also configured through the VLine Comprehensive Application Platform while the non-fixed group are created through the BWC itself (refer to chapter 6.1.1).



Picture 6-7 Groups

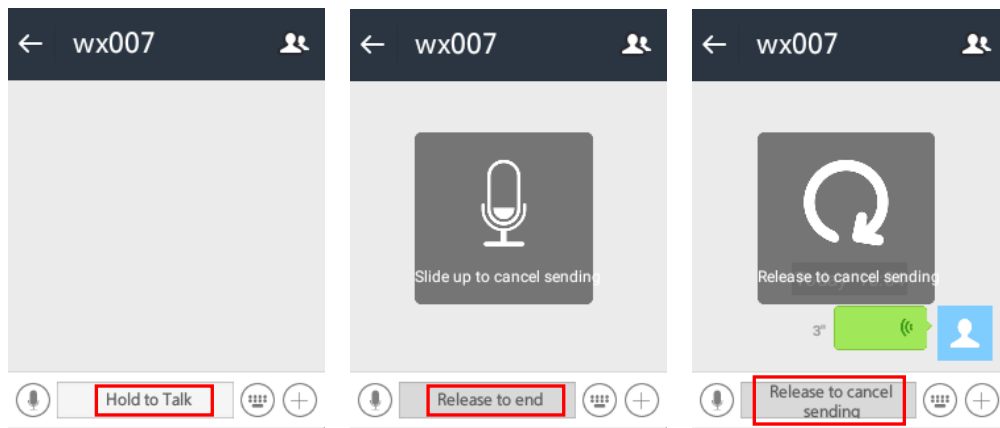
6.2.2 Private Call

- Select a contact from the contacts list and tap to enter the “Details” interface. Tap “Message” to enter the chat interface. Tap to call the contact in private.
- If the contact taps “Accept”, the private call is successful and long-press [PTT] button to talk; release the button to send the voice when finish talking. Tap to end voice call and meanwhile both parties become a contact of the opponent and are added to the contacts list.
- If the contact taps “Reject”, he refuses the voice call invitation and the call stops.






Picture 6-8 Private call




- Tap and **Hold to Talk** appears. You can also tap on **Hold to Talk** to talk; tap **Release to end** to finish talking and send the voice.
- During talking, there will be an OSD message “Slide up to cancel sending”. Slide up on the screen to cancel sending of current voice.

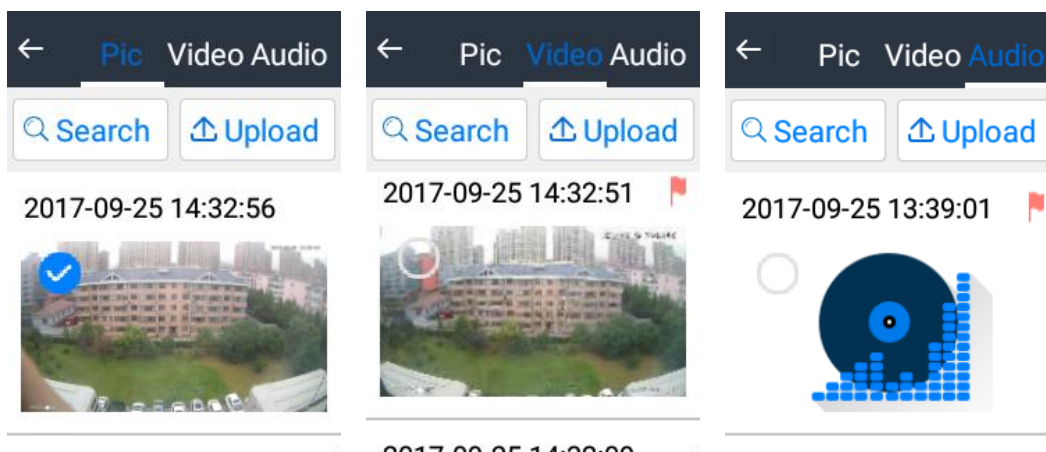


Picture 6-9 Voice call


- Tap  and the icon  appears. Tap  and select a picture to send it in the chatting window.

7 File Management

Tap the file management icon  on the main interface to browse, search or upload pictures, video and audio files. If there is the icon  at the top right corner of the video/audio file, it means this file is an “IMP” file; if there is the icon  at the top right corner of the video file, it means this file is a disconnected video. Check the circle at the top left corner of the file and tap “Upload” to upload the file to server.



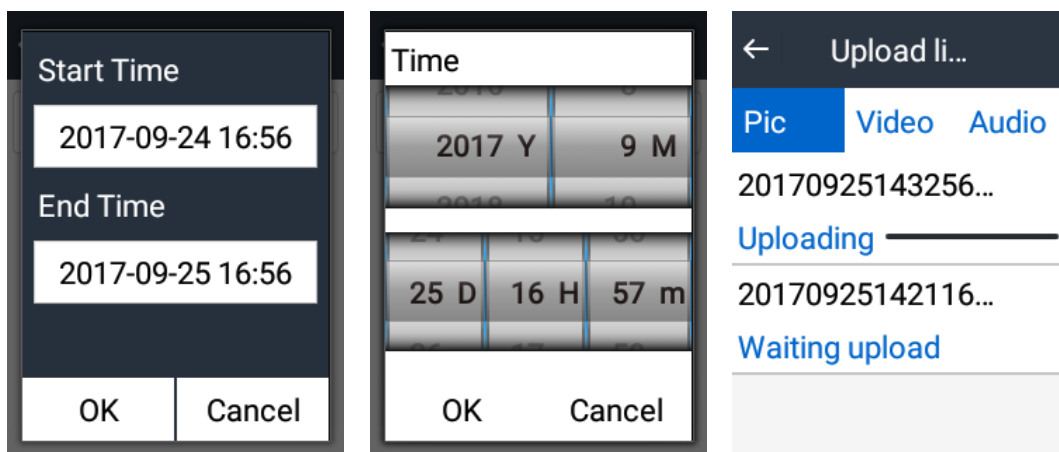
Picture 7-1 File management

 Note: Pictures, videos, audio files and logs in the body worn camera can be uploaded to the Data Docking Station and Law Enforcement Standardized Management Platform; you can view or delete data in body worn camera at Data Docking Station or Law Enforcement Standardized Management Platform. Details can be referred to in the chapter of *Device Management of User Manual of Data Docking Station* and the chapter of *Resource Management of User Manual of Law Enforcement Standardized Management Platform*.

7.1 Pictures


Pictures include the photographed photos and captured snapshots in video records. The pictures display in thumbnails by time sequence and the latest one is on the top.


Tap picture to browse. Double-tap to zoom in and double-tap again to recover; slide left and right on the screen to view previous or next picture. Tap the search box on the top and input **Start time** and **End time** to search all the pictures during the period of time. Check the circle at the top left corner of the picture and tap “Upload” to upload it to server.

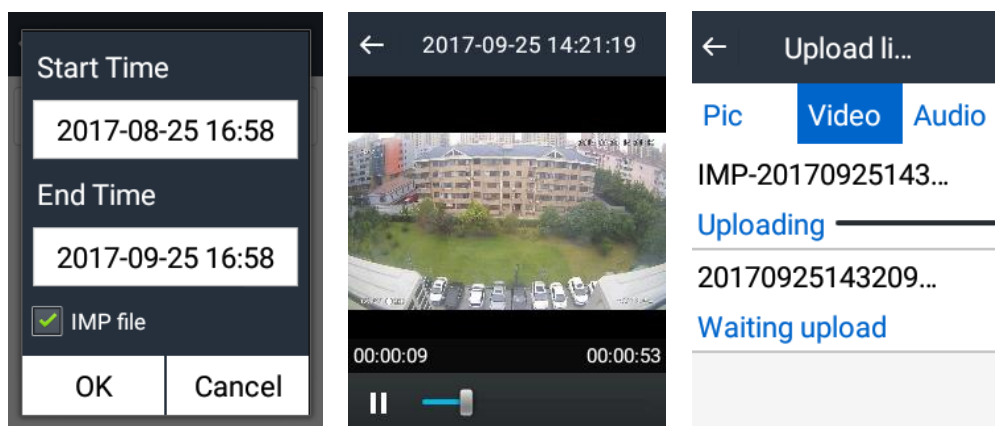


Picture 7-2 Pictures

7.2 Video


Video file: tap **Video** to view video records; the videos display by time sequence and the latest one is on the top. If there is the icon  behind the file name, it means this file is an “IMP” file. Tap the search box on the top and input **Start time** and **End time** to search all the videos during the period of time. Check **IMP** to search all important videos.

Tap the video to playback and drag the timeline to adjust playing progress; tap  to pause. Check the circle at the top left corner of the video and tap “Upload” to upload it to server.

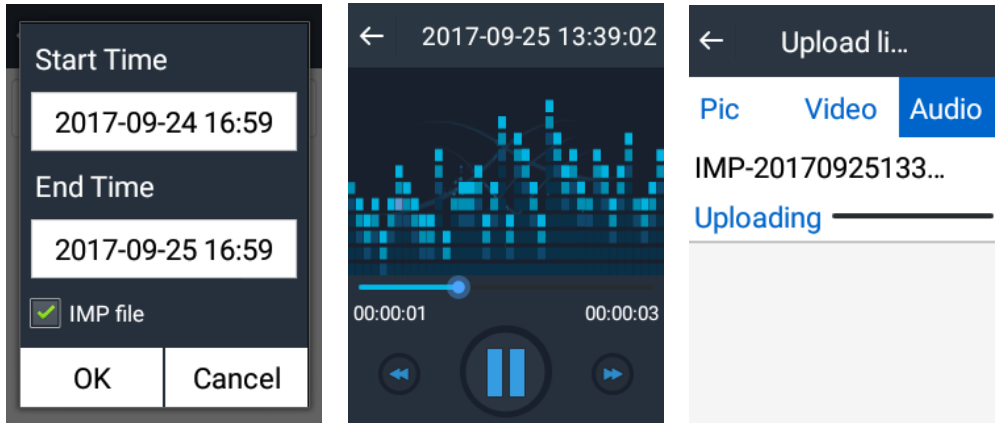


Picture 7-3 Video file

7.3 Audio

Audio file: tap **Audio** to view audio records; the voices display by time sequence and the latest one is on the top. If there is the icon  behind the file name, it means this file is an “IMP” file. Tap the search box on the top and input **Start time** and **End time** to search all the audio files during the period of time. Check **IMP** to search all important videos.

Tap the audio file to playback and drag the timeline to adjust playing progress. Check the circle at the top left corner of the audio file and tap “Upload” to upload it to server.



Picture 7-4 Audio file

8 Specification

Main Performance		Model No. (DSJ-U1-LPN)
Hardware	Operating System	Deep customized Android OS
	Application System	Customized law-enforcing recording software system
	Memory	32GB (ROM) + 3G (RAM)
Video Encoding	Compression	H.264 & H.265
	Image Resolution	Main stream: 1920*1080, Secondary stream: 1280*720
	Dual-Stream	Supported
	Frame Rate	Main stream: 1080P@30fps, Secondary stream: 720P@30fps
	Bitrate	64Kbps~8Mbps
Audio Encoding	Compression	G.711a / G.7221c / ADPCM / AACLC
	Coding Rate	32Kbps ~ 64Kbps
Display	Screen	2.2" touchscreen
Camera	Angle of View	Diagonal 140°, Horizontal 110°
	Snapshot Resolution	20MP (upscaled resolution)
	Night View	2 white LED (optional) , 2 IR LED, 15M Infrared Distance
Network	3G/ 4G	Supported
	WiFi	Supported
	Bluetooth	Supported
Location	Positioning	GPS, GLONASS, Beidou
Buttons	Shortcut Button	PTT (optional) , Power on/off, Video recording, Audio recording, Snapshot, IMP tag
Interface	USB	1 x Micro USB2.0
	SIM Card Slot	1 x Micro SIM card slot
Environment	Operating Temperature	-30°C ~ 70°C / -22°F ~ 158°F
	Humidity	10%~95%, non-condensing
	Protection Level	IP67, 2 meters drop
	Battery Capacity	2700mAh, replaceable
	Built-in Camera Usage Time	3G/4G (on): Up to 7h; Wi-Fi (on) : Up to 7h; 4G (off) / Wi-Fi (off): Up to 9h
	External Camera (720p) Usage Time	3G/4G (on): Up to 3.5h; Wi-Fi (on) : Up to 3.5h; 4G (off) / Wi-Fi (off): Up to 3.8h
	External Camera (1080p) Usage Time	3G/4G (on): Up to 3.2h; Wi-Fi (on) : Up to 3.2h; 4G (off) / Wi-Fi (off): Up to 3.5h
	Weight	199g / 0.439lb (including battery)
	Dimensions	112.2mm × 61.8mm × 29.4mm / 4.42" x 2.43" x 1.16"
Accessories	Standard	Power adapter, USB cable, Battery
	Optional	Additional battery, Button / Badge camera, Ear-hook camera