Android live streaming+groupPTT

MCP APP

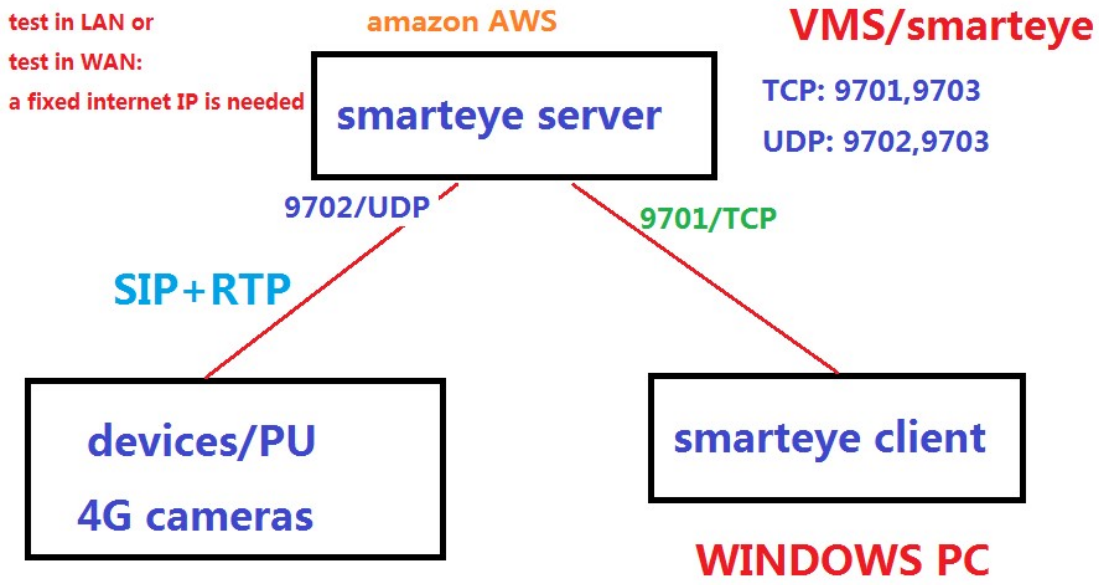
MCP provides below functions,

- ✓ encoder+live streaming push to VMS/smarteye, including recording,live streaming, GPS tracking, 2-way audio , alarm report and snapshot. This part of work is called MPU
- ✓ groupPTT/PoC
- ✓ mobileClient(pull stream+decoder) + privateIM(like wechat)
- ✓ e-map to locate other units
- ✓ playback

free download MCP APK from below URL by web browser on your phone for free test with VMS/smarteye.

http://up.besovideo.com:7780/MCP.apk

MCP can work as a 4G camera, and also as a mobile client to live view other ca meras, together with group PTT/PoC.

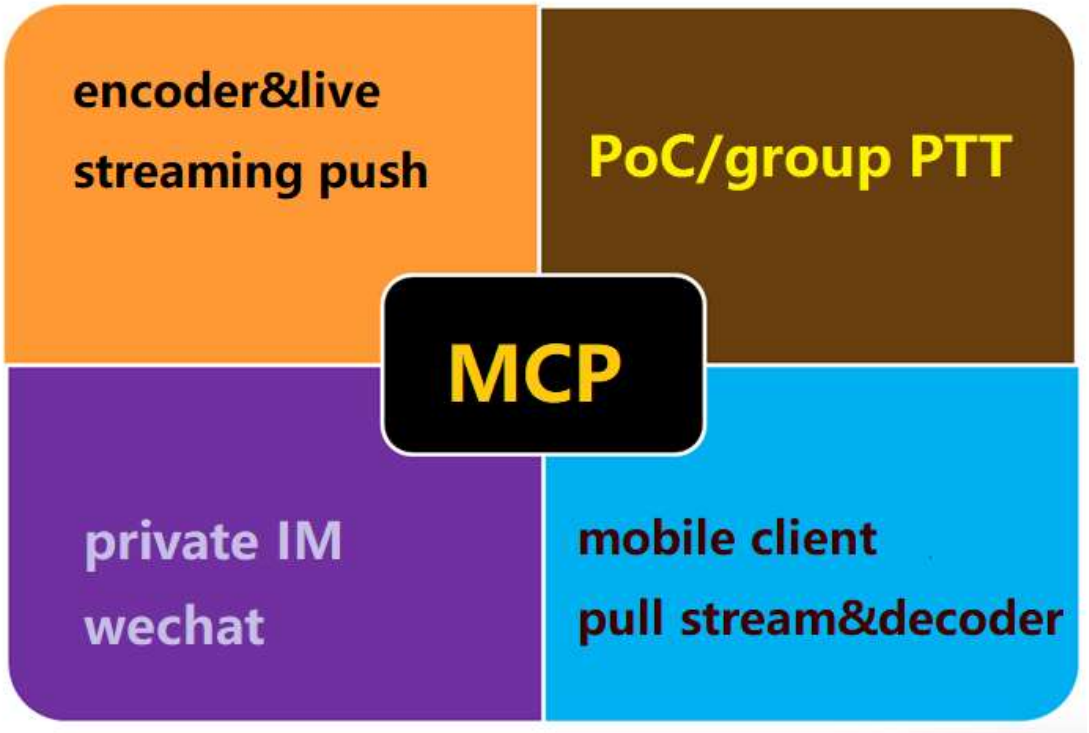


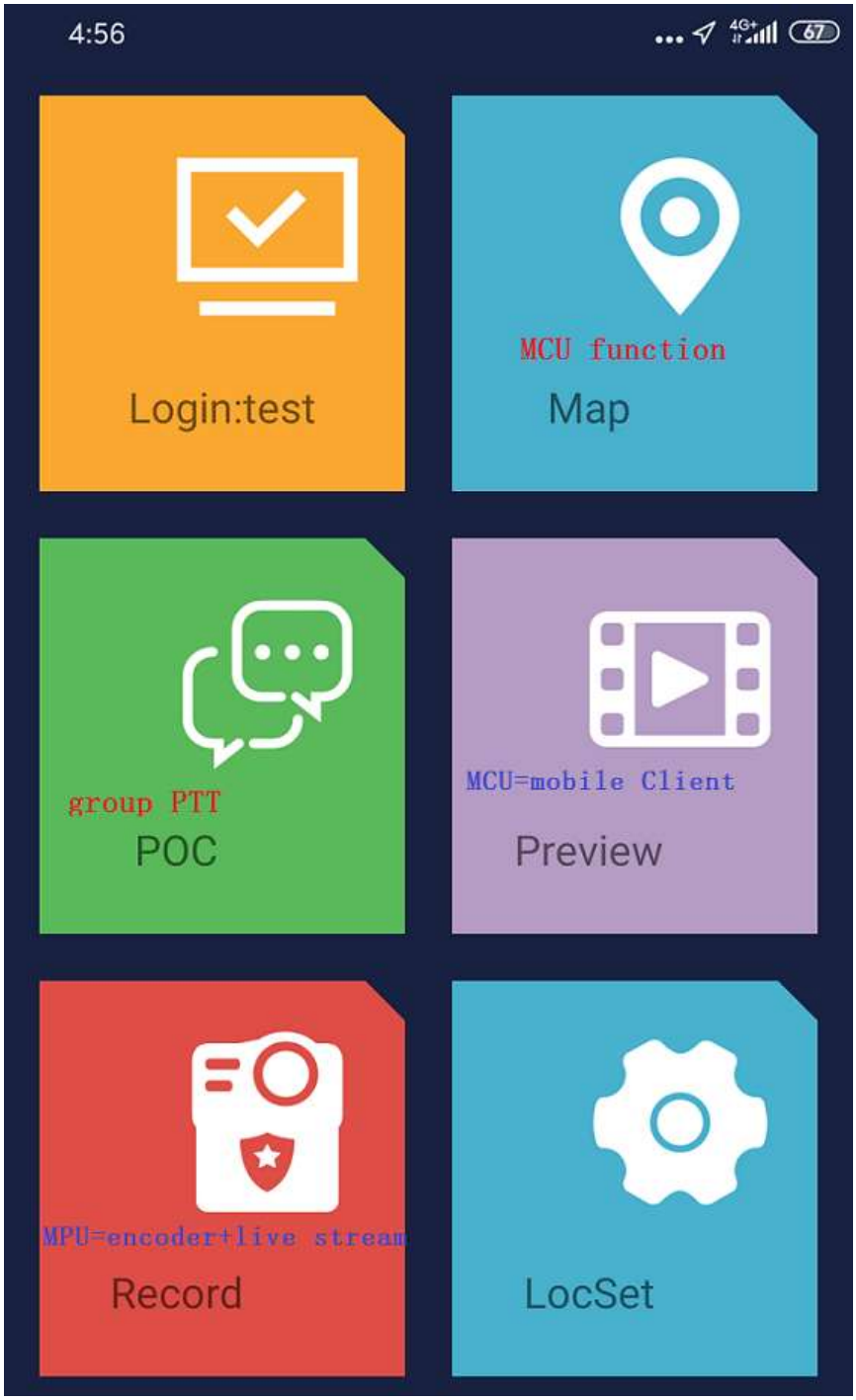
large scale VMS/smarteye,

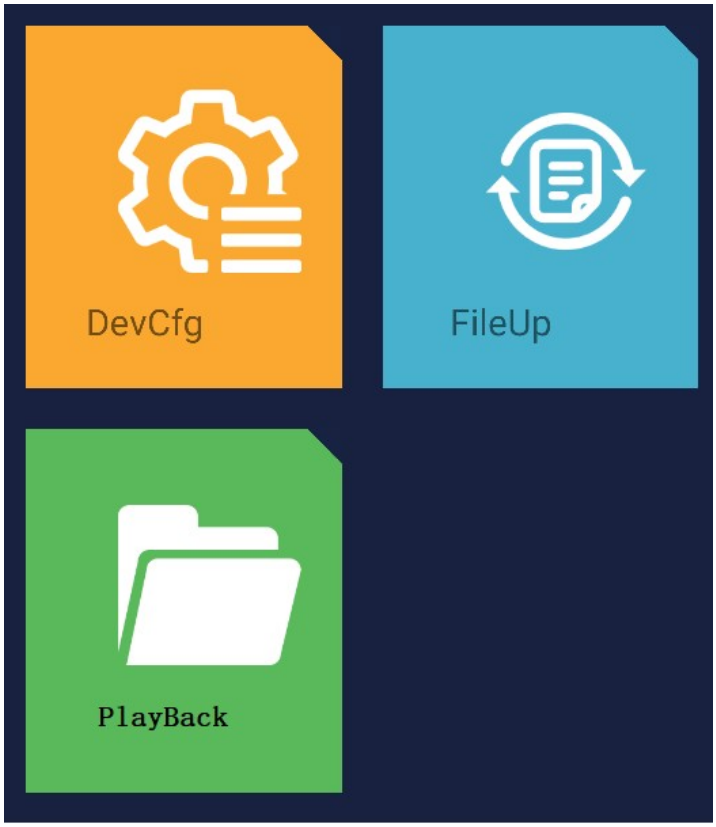
http://en.besovideo.com/product/38.html

1 main functions

main function blocks shown as below,

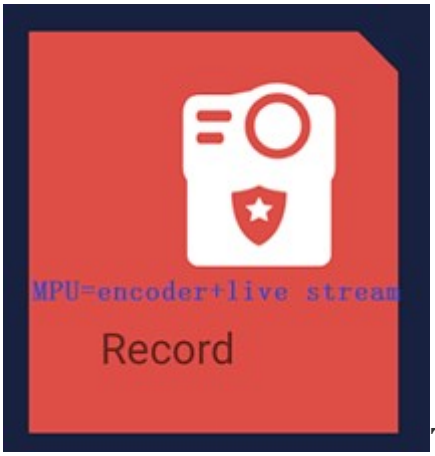



4:56
Login:test
MCU function
Map
group PTT
POC
MCU=mobile Client
Preview
MPU=encoder+live stream
Record
LocSet



Work on body cameras,

2 Encoder&live streaming upload



This audio&video encoder&live streaming upload function is called MPU(mobile pre-set,that is a mobile video terminal), that means a device, a 4G camera or a 4G DVR.

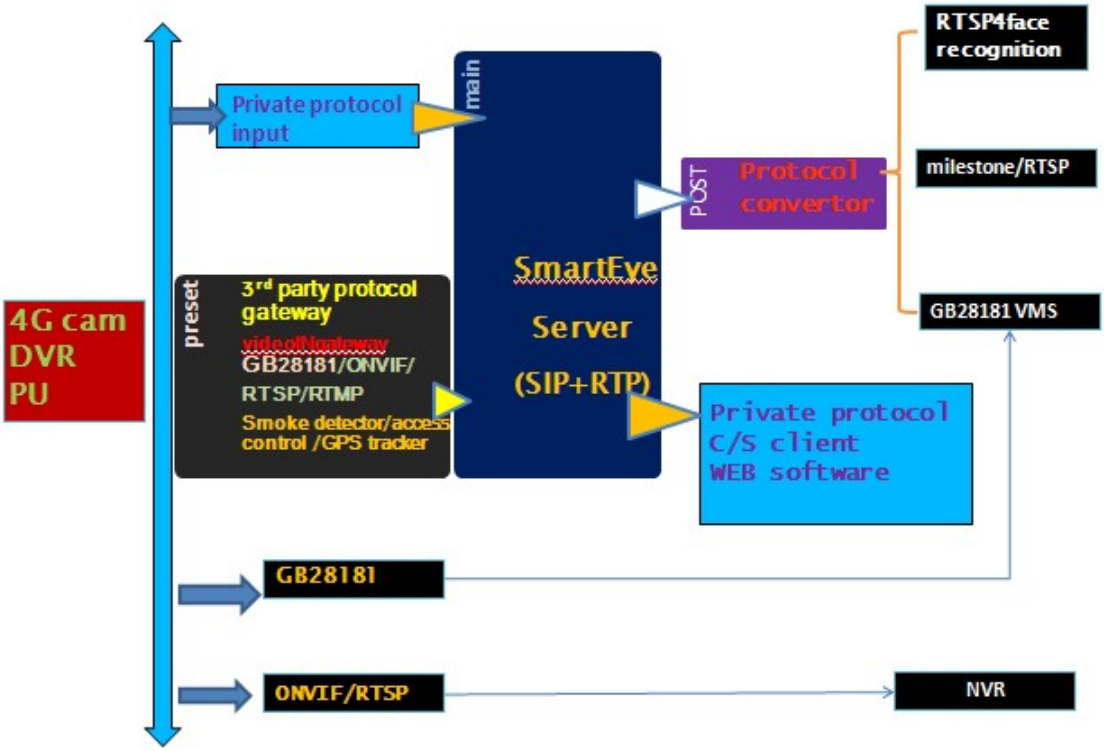
It responds to those keystrobes, including REC/snapshot/SoS/PTT etc, and the response is global in this APP, that means it works even in other function part within this APP.

It works on an android phone like this,

It works on 4G body camera like this,

This part of software provides below functions,

And multiple protocols supported by the system, basic is the SIP+RTP based private protocol called smarteye, and ONVIF/RTSP etc well supported, e.g., good cooperation with milestone,



2.1 Live streaming to VMS

Demo test on the smarteye server in China,

- ✓ Server IP: 115.28.79.237, 9701/TCP for client login, 9702/UDP for camera login,
- ✓ username/passwd: test/123, bwc1/123456, bwc3/123456

there are two main mechanisms in live streaming,

1) The VMS/client requests actively, called VoD, there will be no data flow from the device if no request from the VMS, this is the usual way the unit works, that means the device won't push streaming to VMS by itself.
2) The device push stream to VMS on some certain urgent circumstances, for example, the SoS key is pressed.

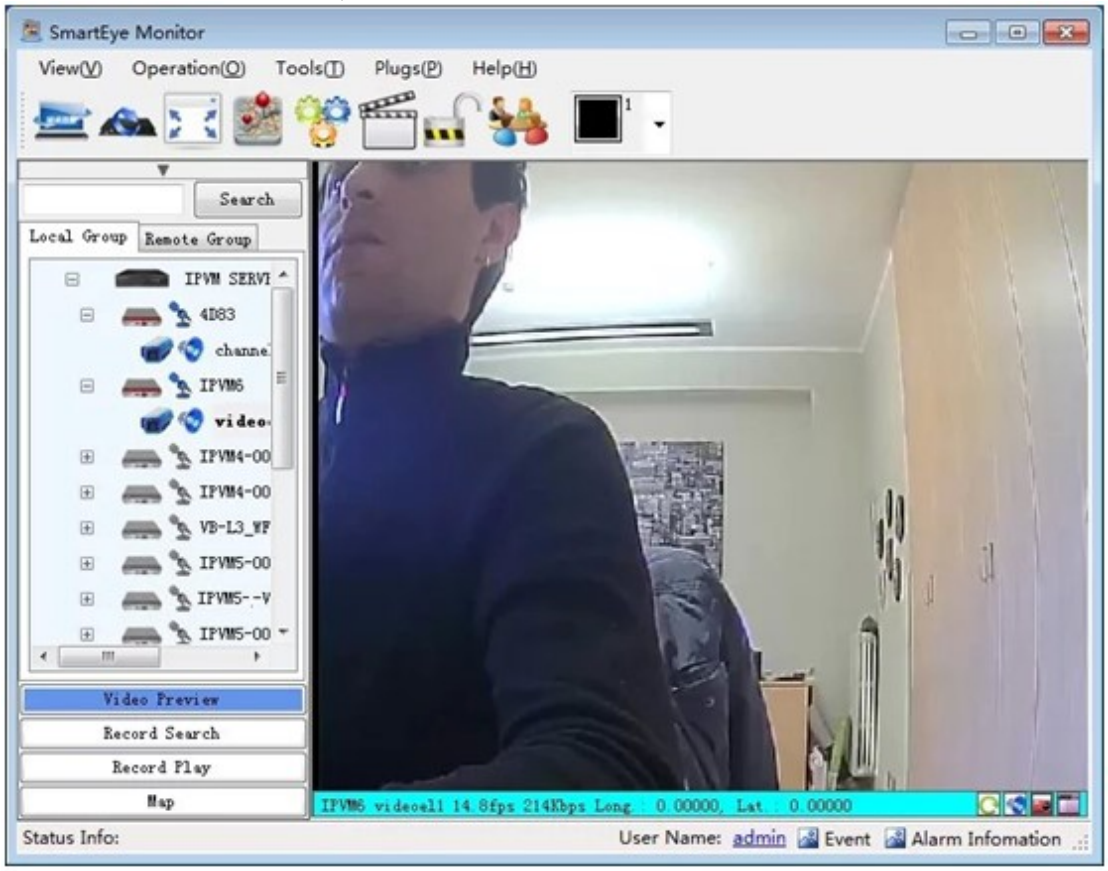
test MCP with smarteye server in China

on android phone, MCP

on windows PC smarteye client

MCP can work as a 4G camera, and also as a mobile client to live view other cameras, together with group PTT/PoC

Run smarteye client/Monitor, Double click on “video” channel to get live stream from the camera,



2.2 recording

there are three places where the audio/video recording files locate.

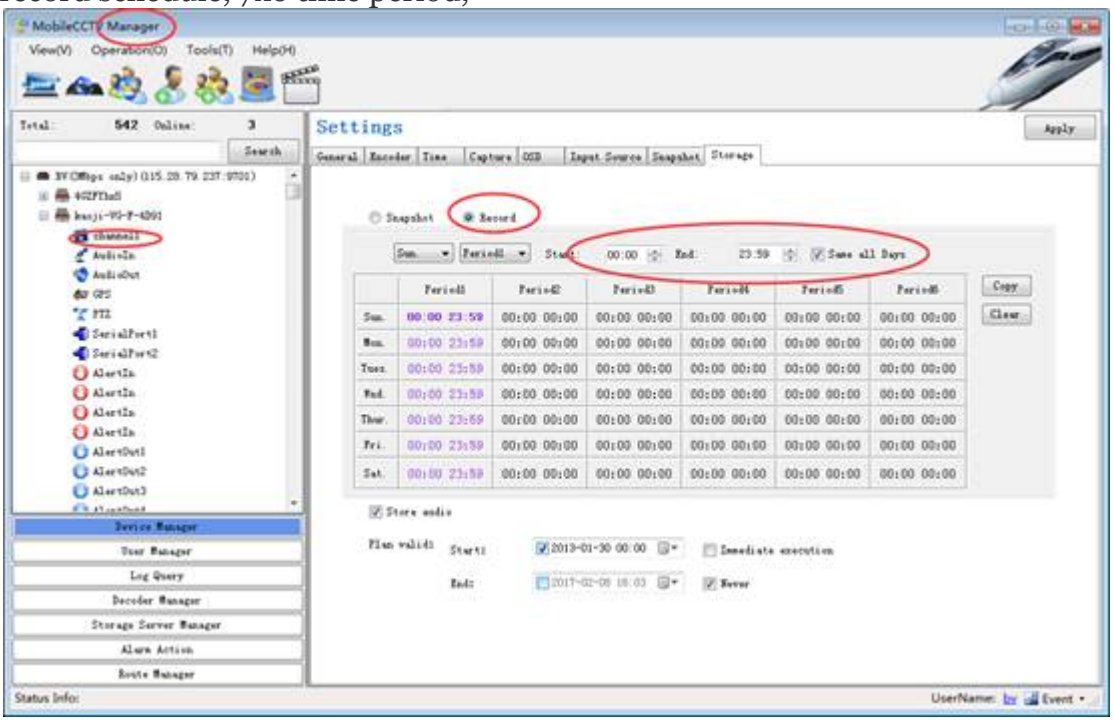
1) Recording on the device,
2) Recording on the VMS/smarteye server side(NRU),
3) Recording on the smarteye client, that is recording at live view.

2.2.1 for recording on server side

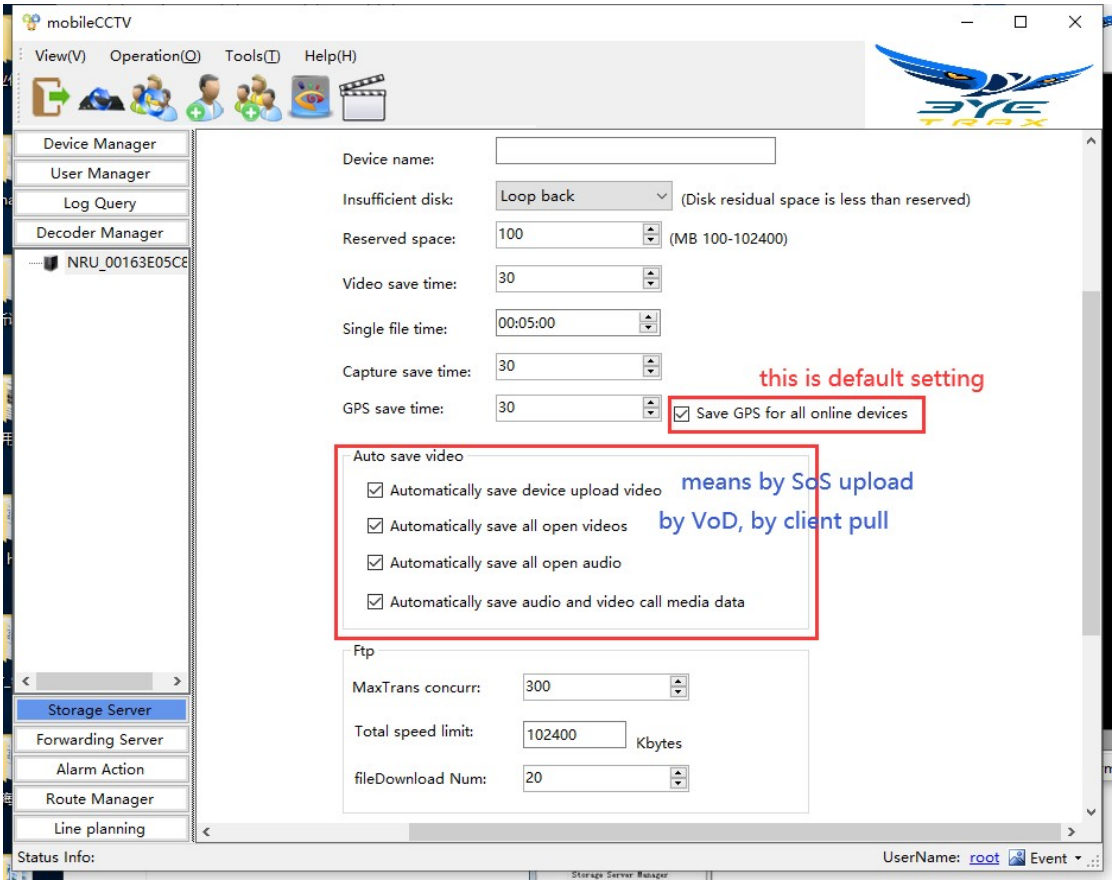
there is recording schedule and downloading schedule,

A) Recording schedule is to

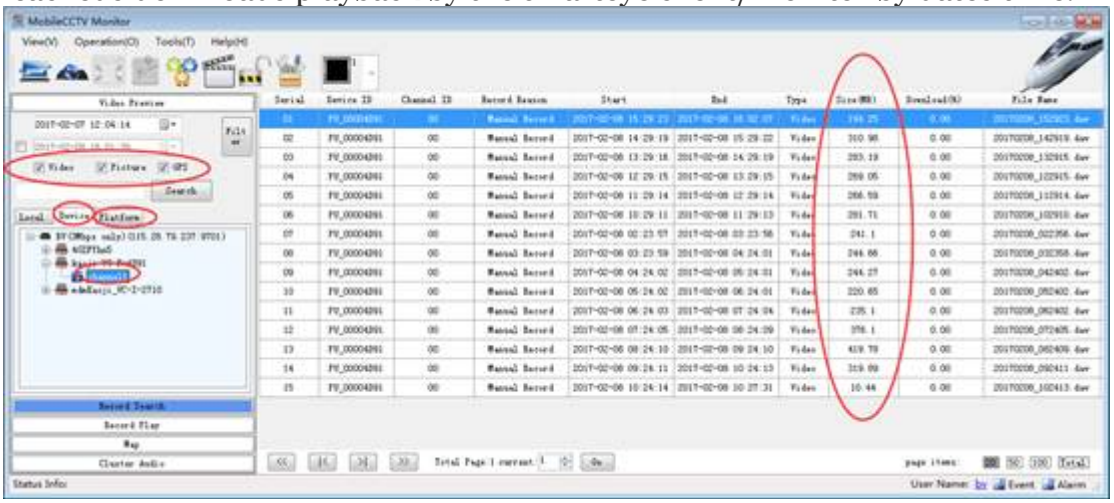
record schedule, 7x6 time period,



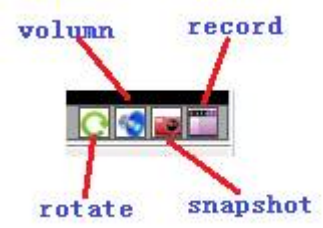
and may recording any streaming through the server,



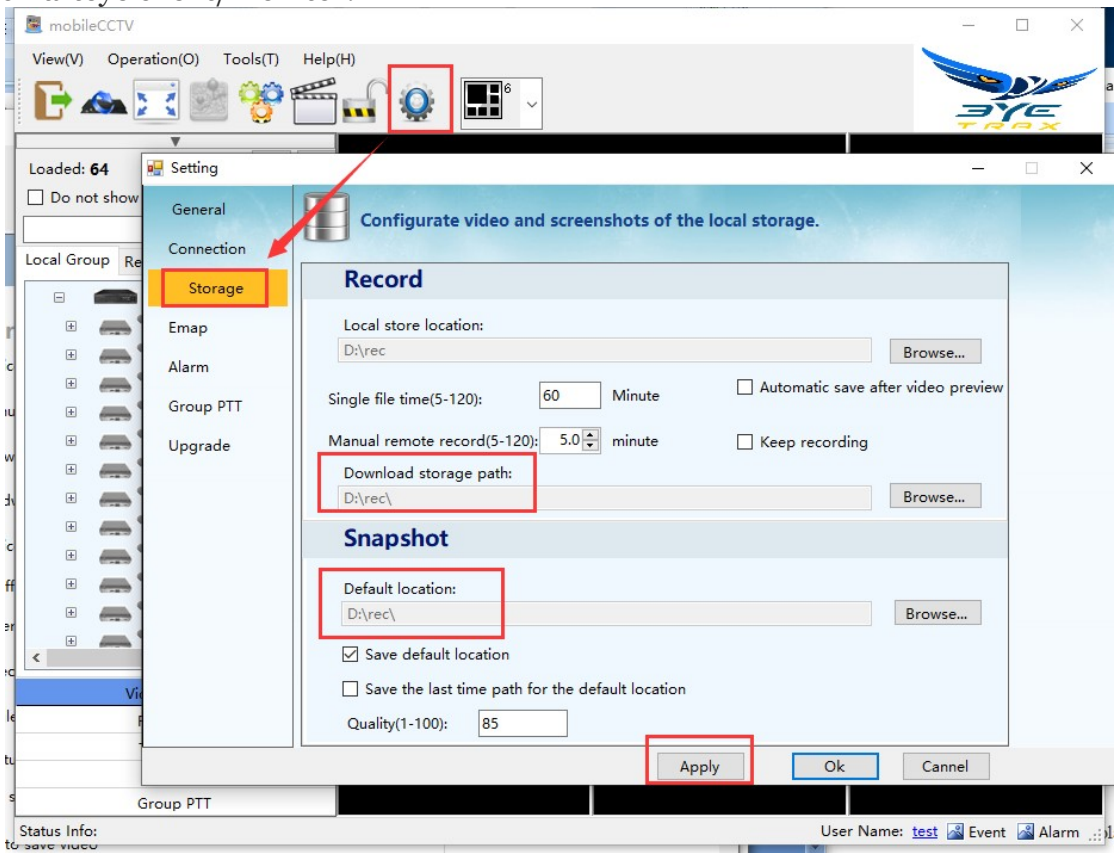
The recording files in the above three places can be reached&download&playback by the smarteye client/Monitor by date&time.



2.2.2 for recording on client



click this “record” to record audio/video stream in smarteye client/monitor.



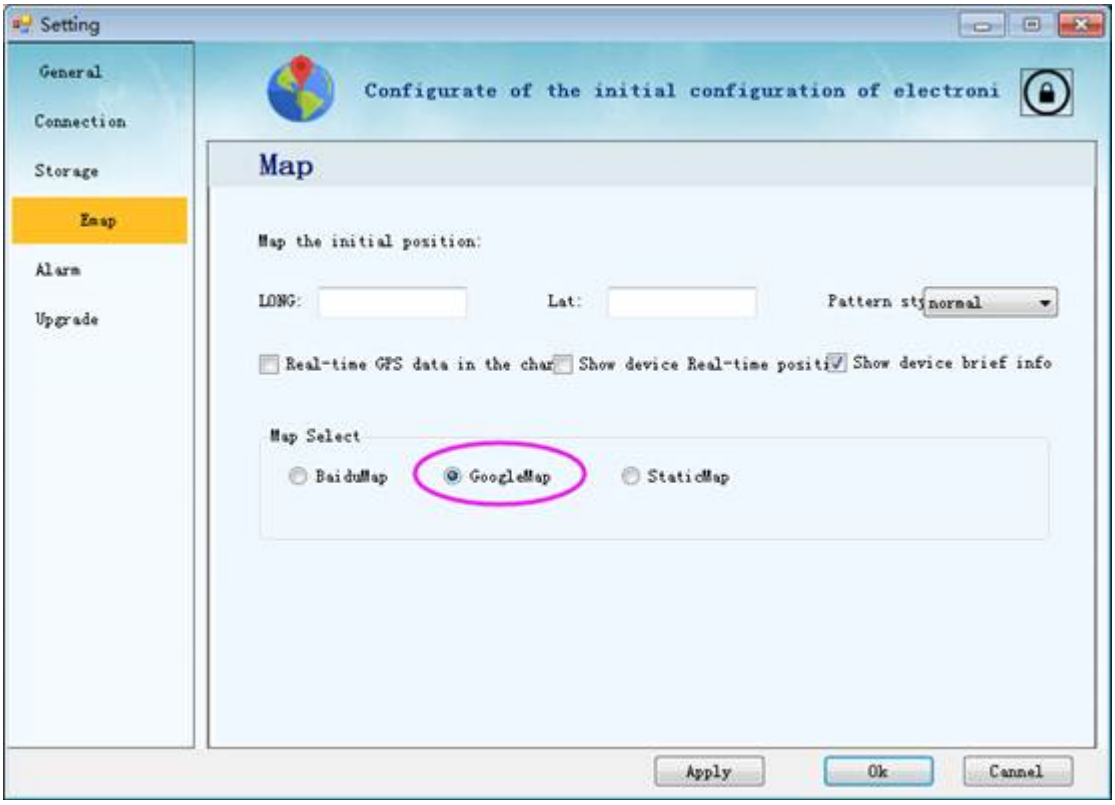
2.2.3 for recording within the camera

the camera records audio&video when “REC” key pressed, there will be a red dot to indicate recording, and a red LED blinking slowly at the same time. Note, keystrobe only valid for body cameras, not for phones.

MCP can do local playback, pls refer to below chapter for “playback”.

2.3 GPS tracking

There are real time GPS location, tracking and history track playback. Set to google map, archgis is supported.


Setting
General
Connection
Storage
Emap
Alarm
Upgrade
Configurate of the initial configuration of electroni
Map
Map the initial position:
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Real-time GPS data in the char
Show device Real-time positi
Show device brief info
Map Select
BaiduMap
GoogleMap
StaticMap
Apply
Ok
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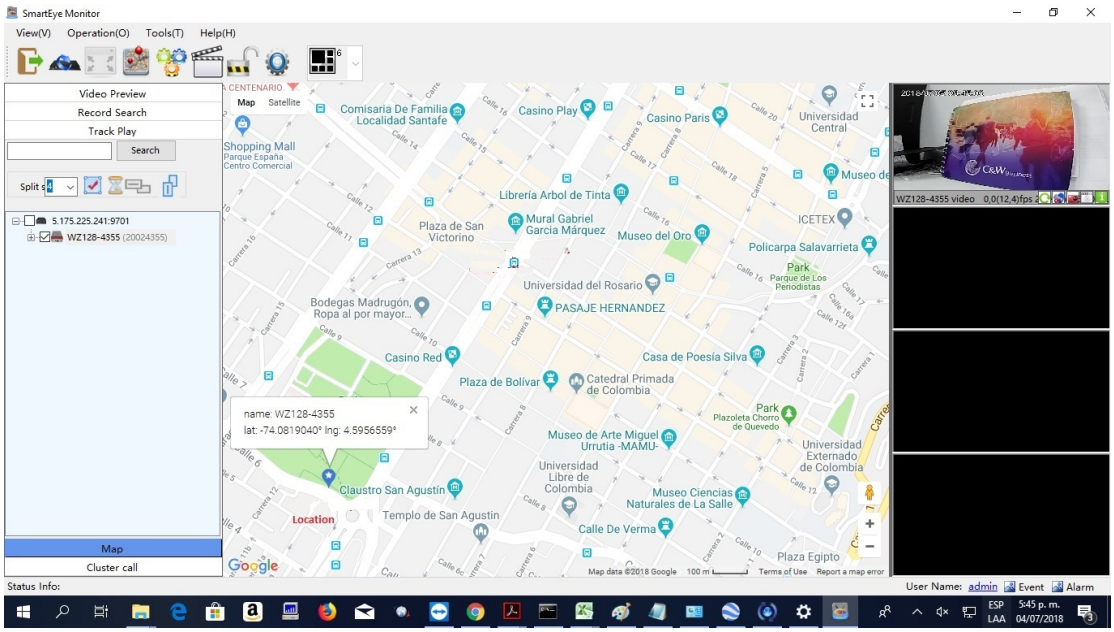
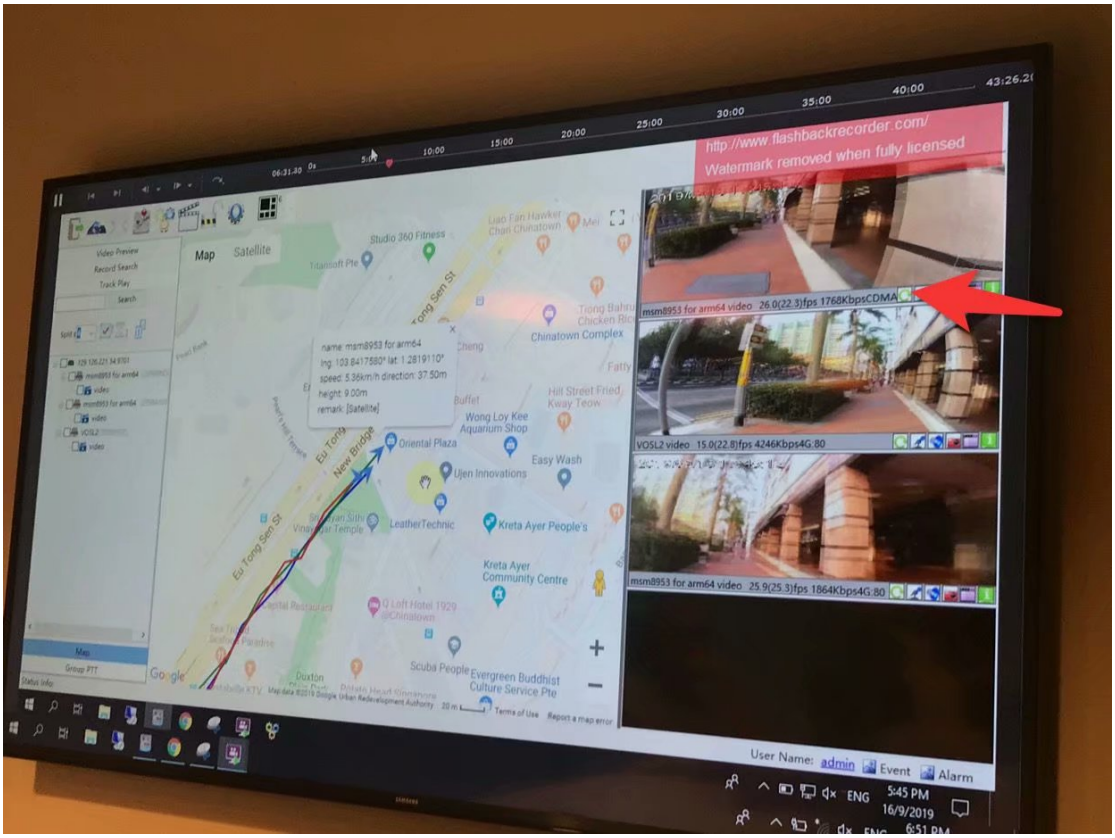

SmartEye Monitor
View(V)
Operation(O)
Tools(T)
Help(H)
Video Preview
Record Search
Track Play
Search
5.175.225.241:9701
WZ128-4355 (20024355)
Map
Cluster call
Map
Satellite
Comisaria De Familia Localidad Santafe
Casino Play
Casino Paris
Universidad Central
Shopping Mall
Parque España Centro Comercial
Librería Arbol de Tinta
Mural Gabriel Garcia Márquez
Plaza de San Victorino
Museo del Oro
ICETEX
Policarpa Salavarrieta
Park
Parque de Los Periodistas
Universidad del Rosario
PASAJE HERNANDEZ
Bodegas Madrugón, Ropa al por mayor...
Casino Red
Casa de Poesía Silva
Plaza de Bolivar
Catedral Primada de Colombia
name: WZ128-4355
lat: -74.0819040° lng: 4.5956559°
Park
Plazoleta Chorro de Quevedo
Museo de Arte Miguel Urrutia -MAMU-
Universidad Externado de Colombia
Universidad Libre de Colombia
Museo Ciencias Naturales de La Salle
Claustro San Agustín
Location
Templo de San Agustin
Calle De Verma
Plaza Egipto
Google
Map data ©2018 Google
100 m
Terms of Use
Report a map error
WZ128-4355 video 0.0(12.4)fps
Status Info:
User Name: admin
Event
Alarm
ESP
LAA
5:45 p. m.
04/07/2018



2.4 audio

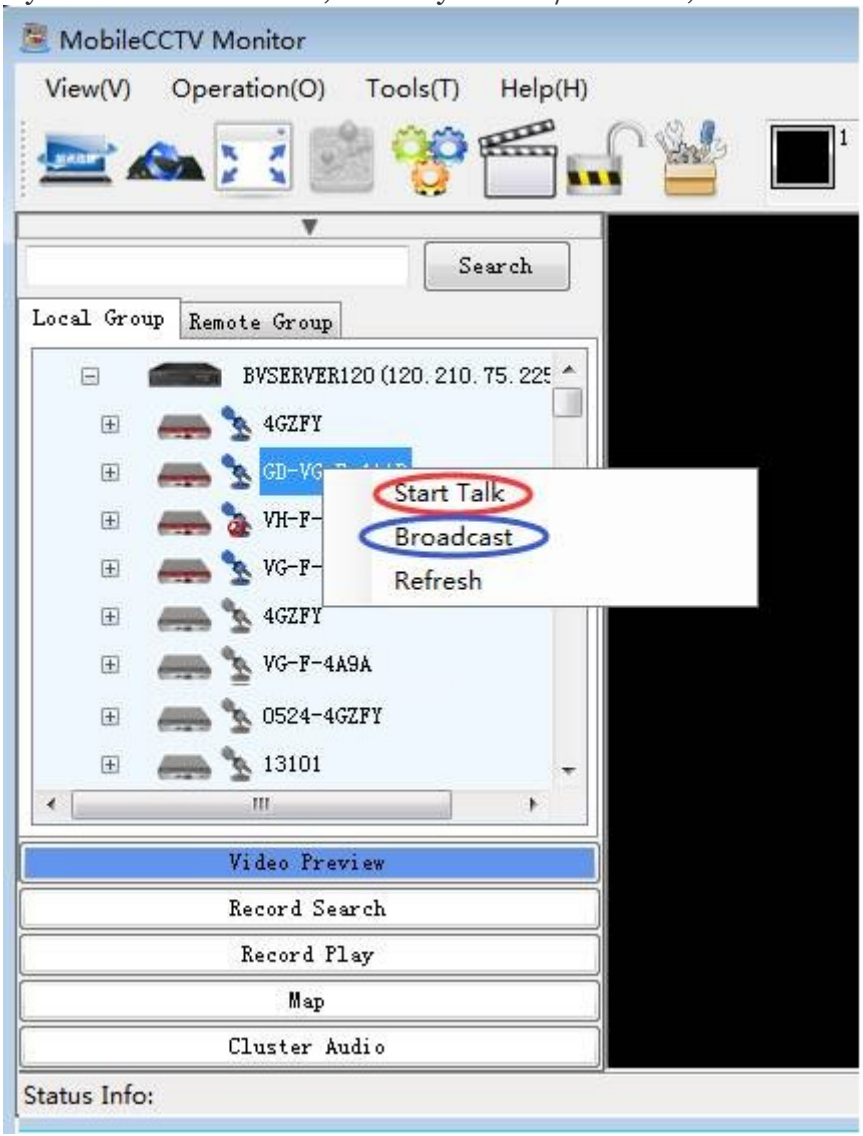
there are below audio functions,

1) audio from device to VMS, single direction,
2) audio broadcast from VMS to many units, single direction,
3) 2-way audio between VMS and device,
4) group PTT among many devices and client

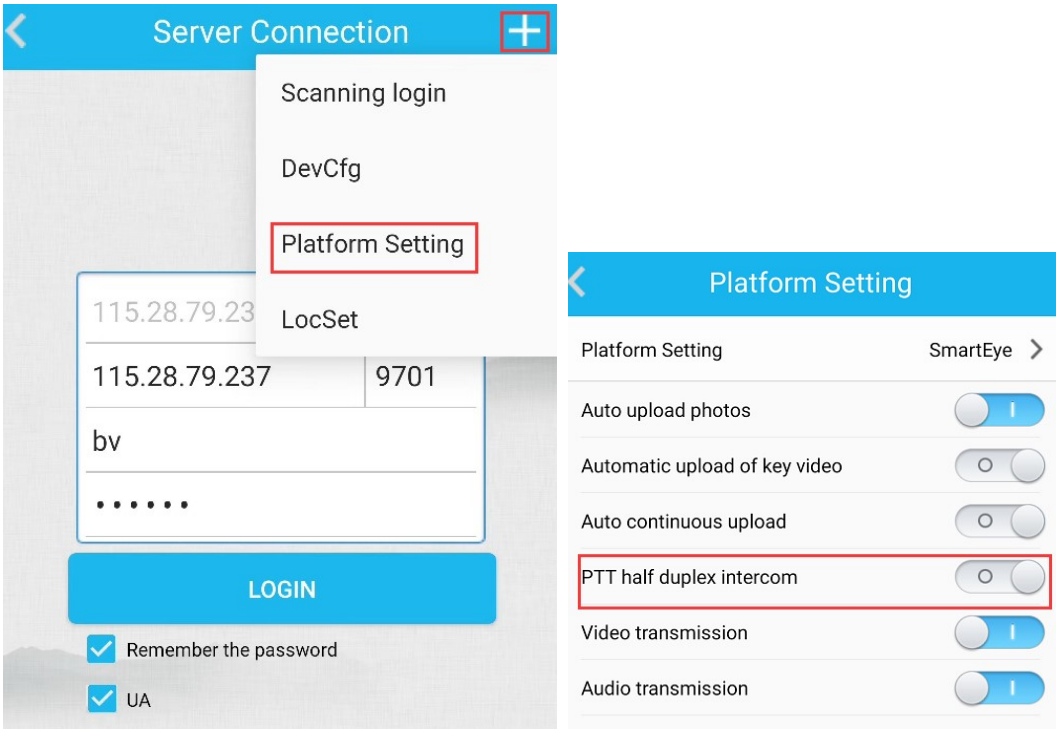
2.4.1 2-way audio

PTT is needed by default for 2-way audio between VMS/smarteye client/monitor and the camera, and Vol down key serves as the PTT key for common android phones, while for body cameras there are usually a dedicated PTT button. There is a switch option in MCP platform settings.

Start 2-way talk on PC software, smarteye client/Monitor,

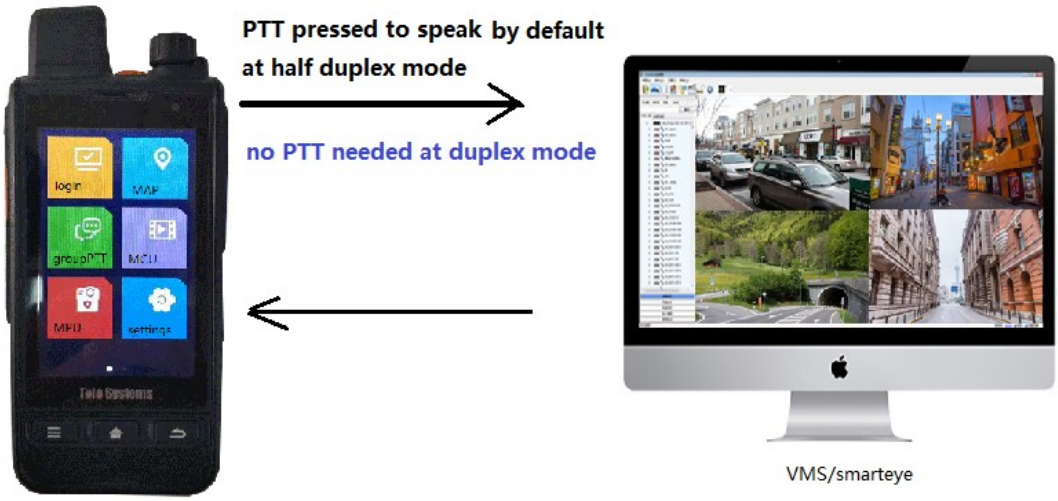


Settings in MCP,

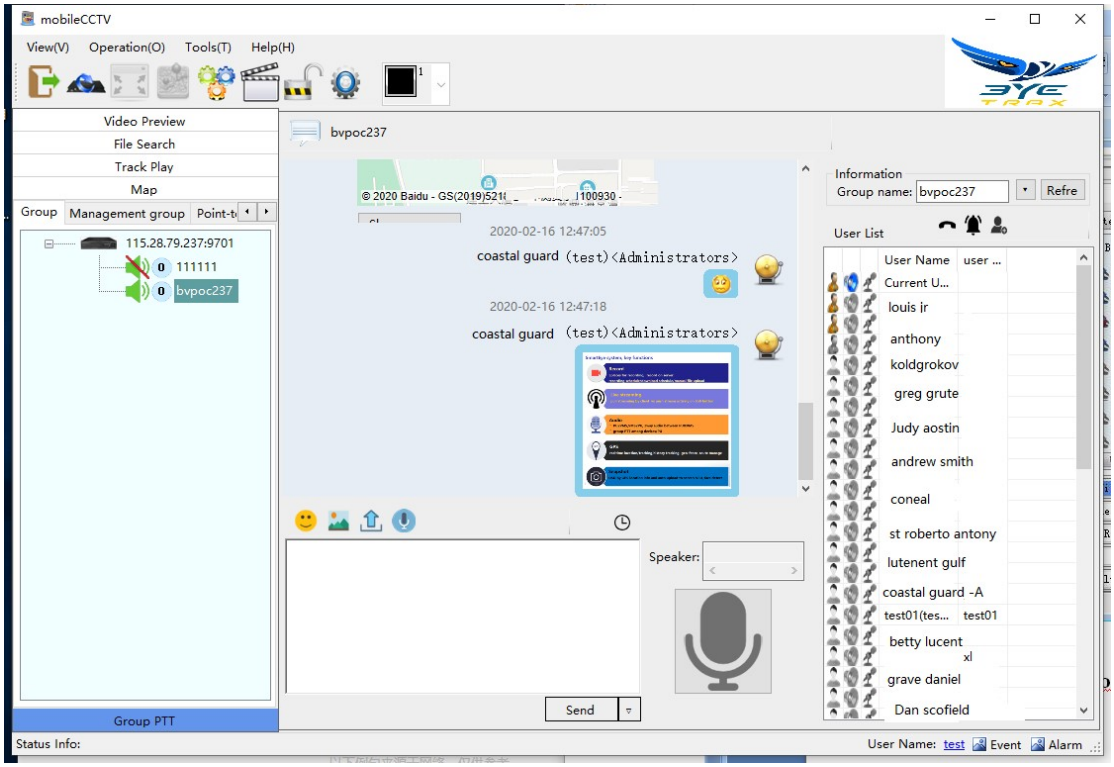


To diable this PTT half duplex option, it works in duplex mode, that means no PTT needed during the 2-way audio.

2-way audio between VMS and MCP/camera



2.4.2 group PTT on PC side



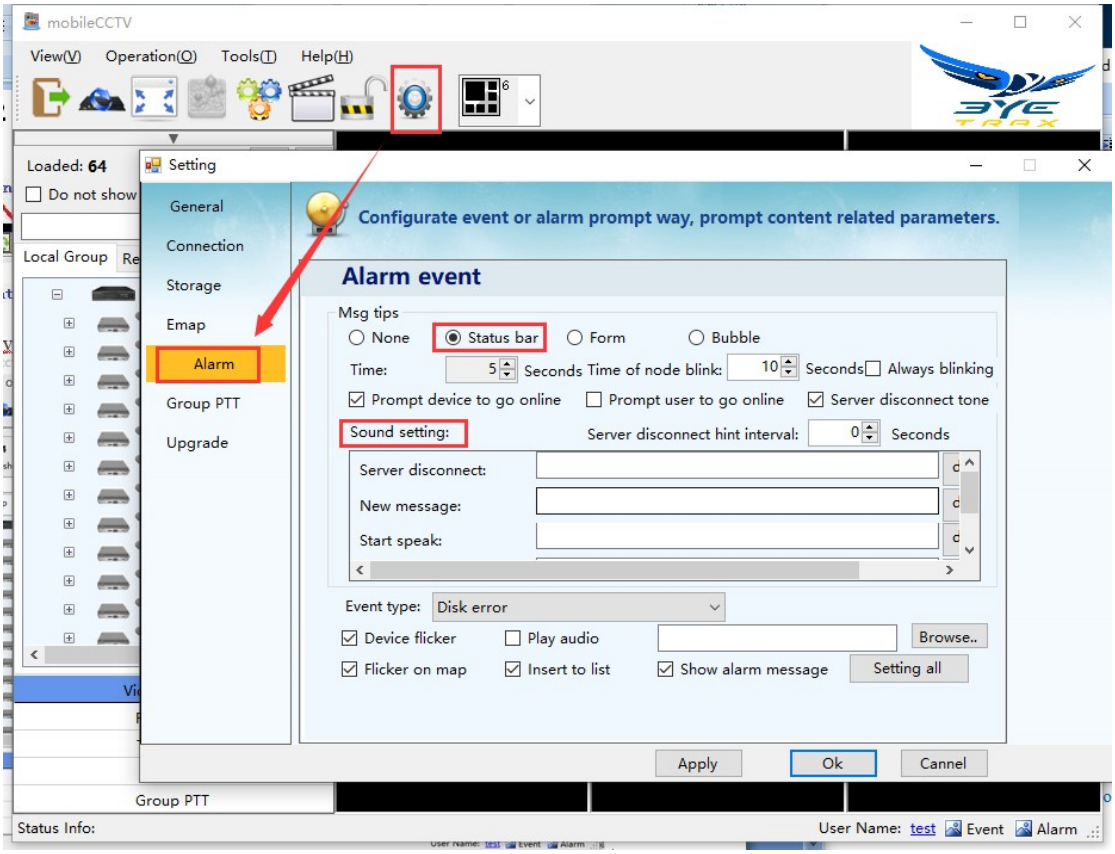
2.5 snapshot&upload

the camera will automatically upload the picture to the VMS soon after snapshot taken. There is a option in the settings for this operation ON/OFF.

2.6 alarm

SoS is a typical alarm action.

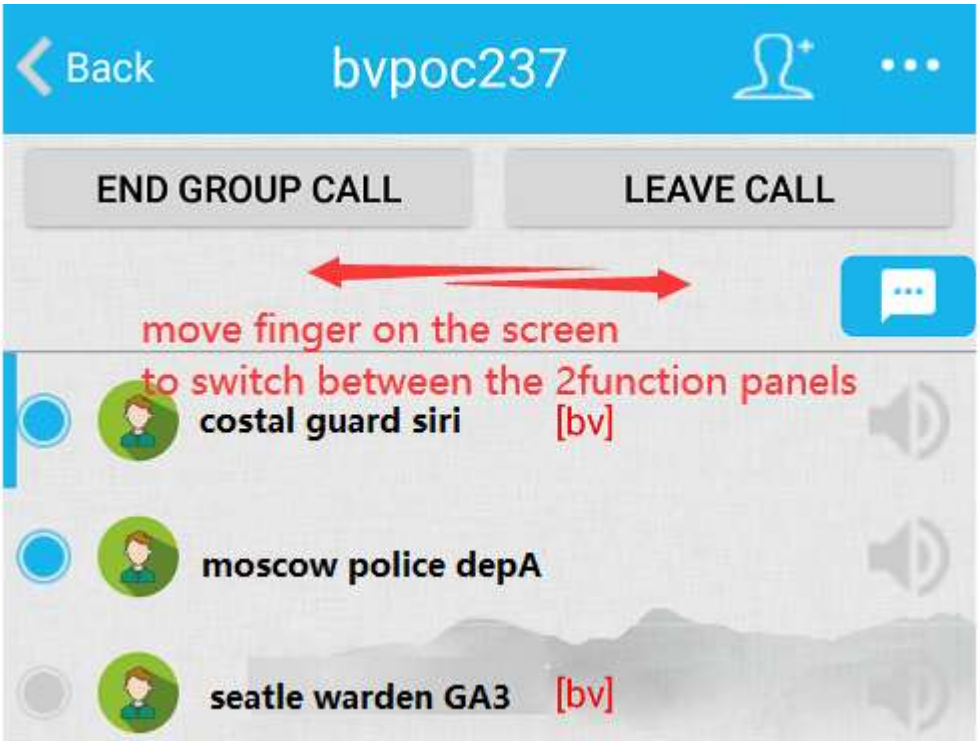
The camera will push streaming to the VMS actively when the SoS key is pressed, and live video appears in the smarteye client/monitor if any of it is on duty.



3 group PTT/PoC&built-in IM

there are two function panel, one is for group PTT/PoC, the other is a wechat-like IM function, to send text/audio messages, files, Expression pictures and location among contacts.

Move finger on the touch screen from right to left or vice versa to switch between these two panels.



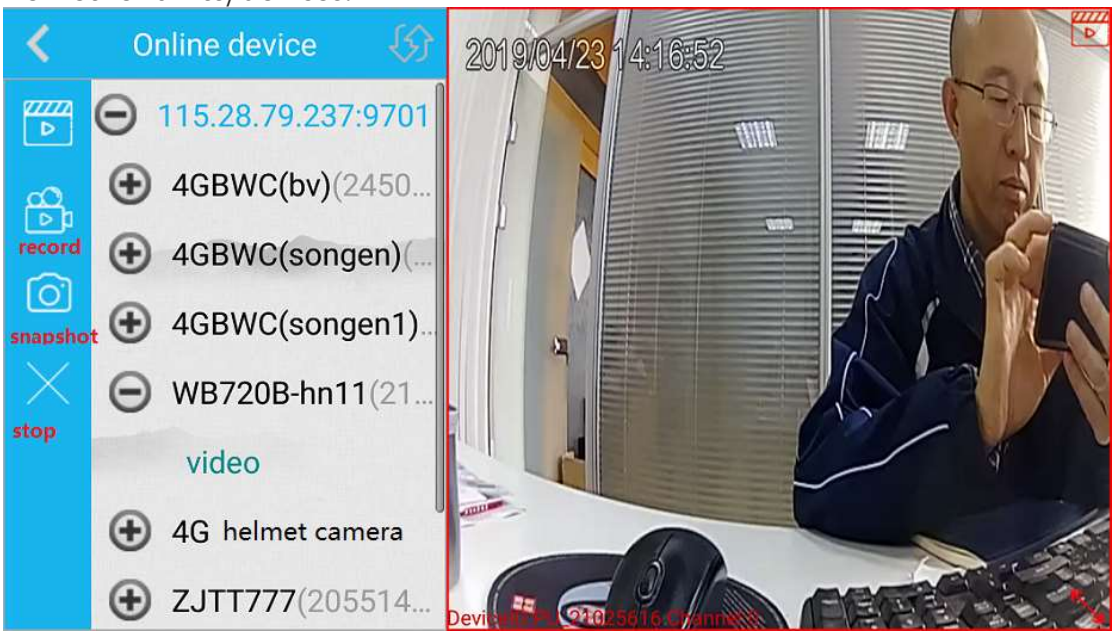
Below is the group PTT function panel,

Below is the IM function panel,

And wechat-like video call between contacts is well supported,

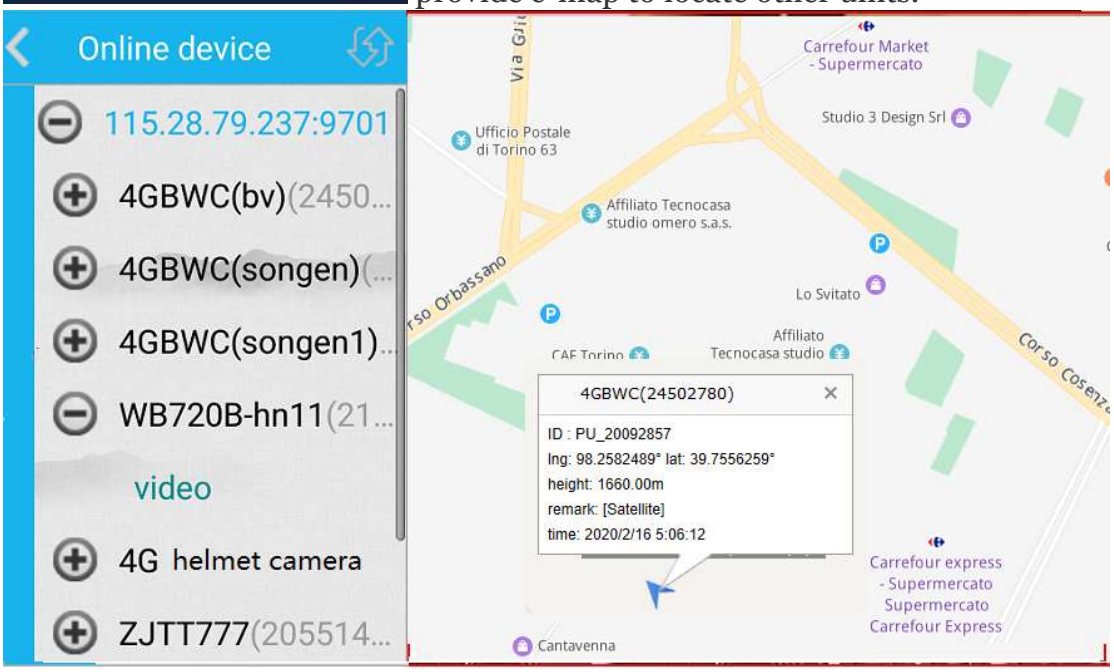
4 mobile client,MCU function

provides a mobile client function, that is to live view other units/devices.

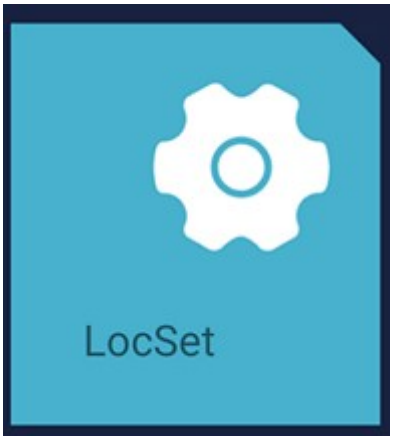


5 e-map to locate other units

provide e-map to locate other units.



6 local settings

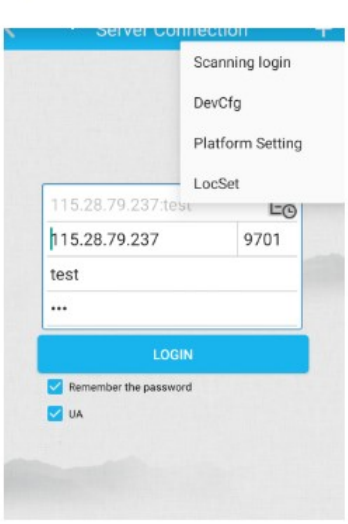


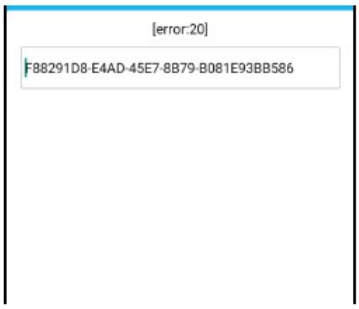
provides local settings.

6.1 authentication

there is two week free trial for new MCP user, and authentic needs to be done.

`get authID in MCP`



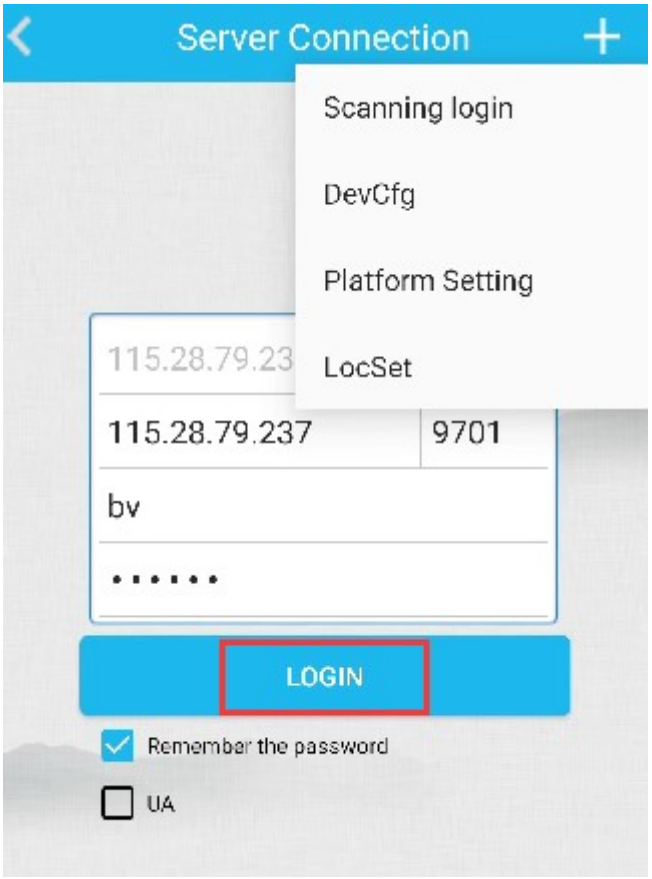


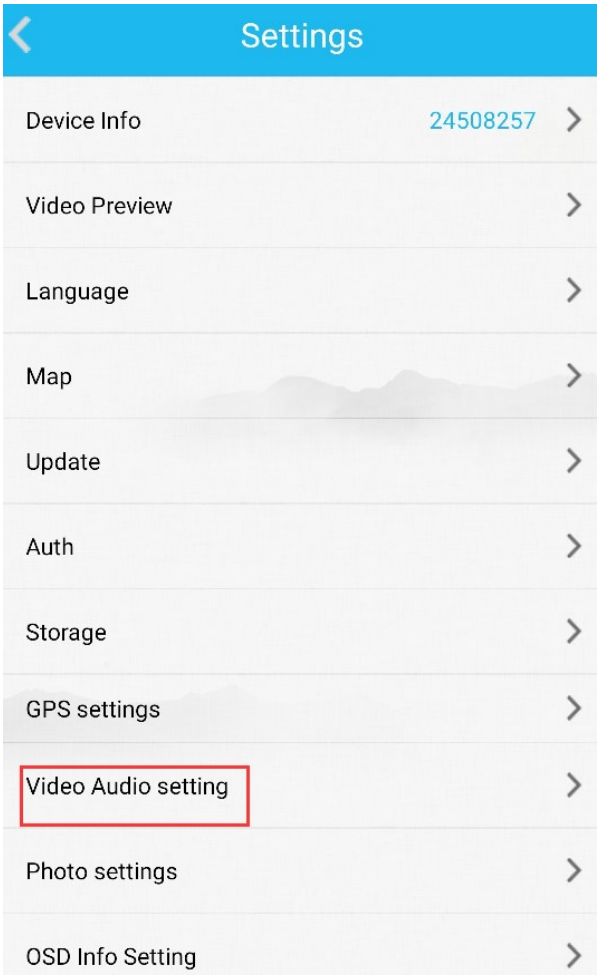
Pls note,

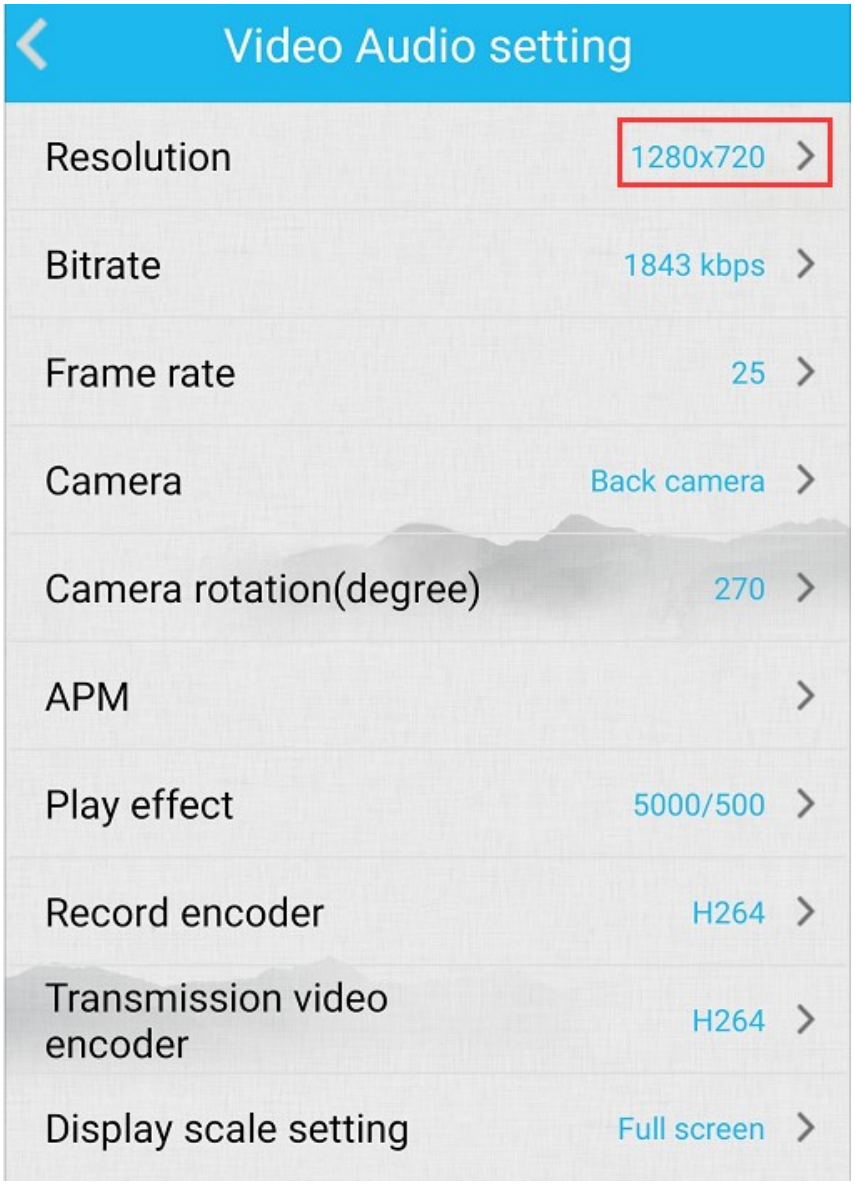
The camera/phone must have access to internet, better in SIM card/4G mode.

6.2 video resolution

this can not be modified before it disconnect from server.



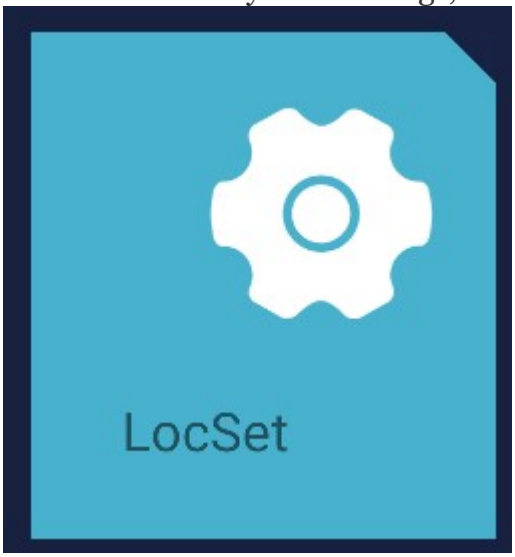

Settings
Device Info
24508257
Video Preview
Language
Map
Update
Auth
Storage
GPS settings
Video Audio setting
Photo settings
OSD Info Setting

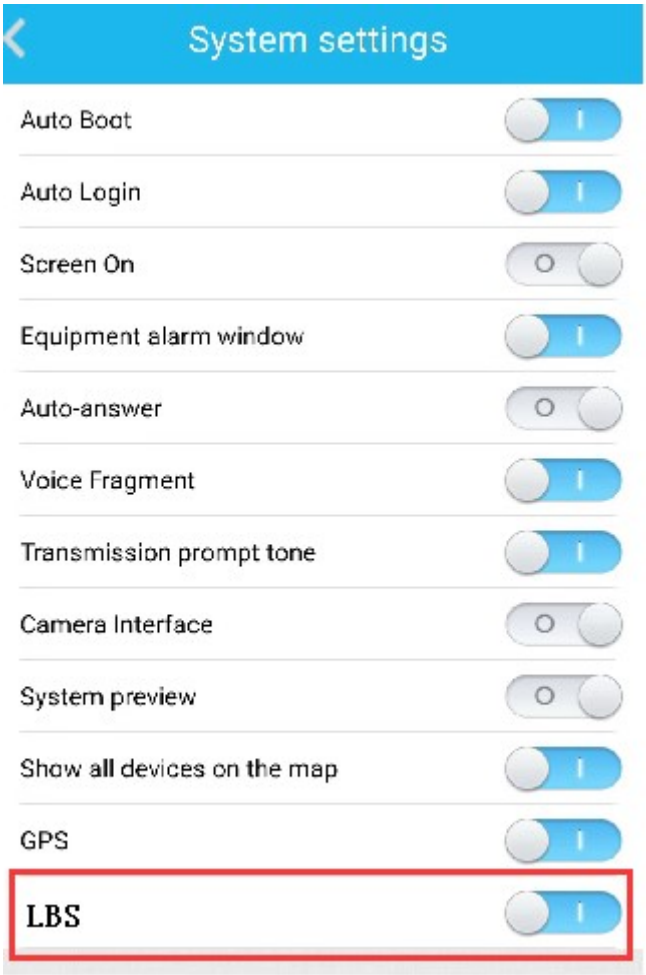

Video Audio setting
Resolution
1280x720
Bitrate
1843 kbps
Frame rate
25
Camera
Back camera
Camera rotation(degree)
270
APM
Play effect
5000/500
Record encoder
H264
Transmission video encoder
H264
Display scale setting
Full screen

6.3 online upgrade

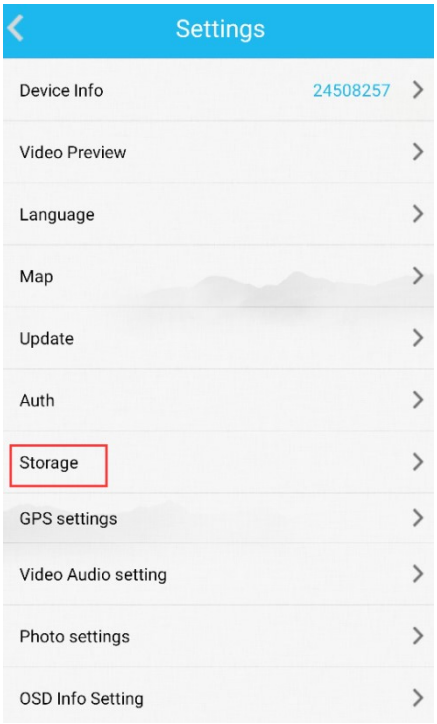
6.4 GPS&LBS for in/outdoor test

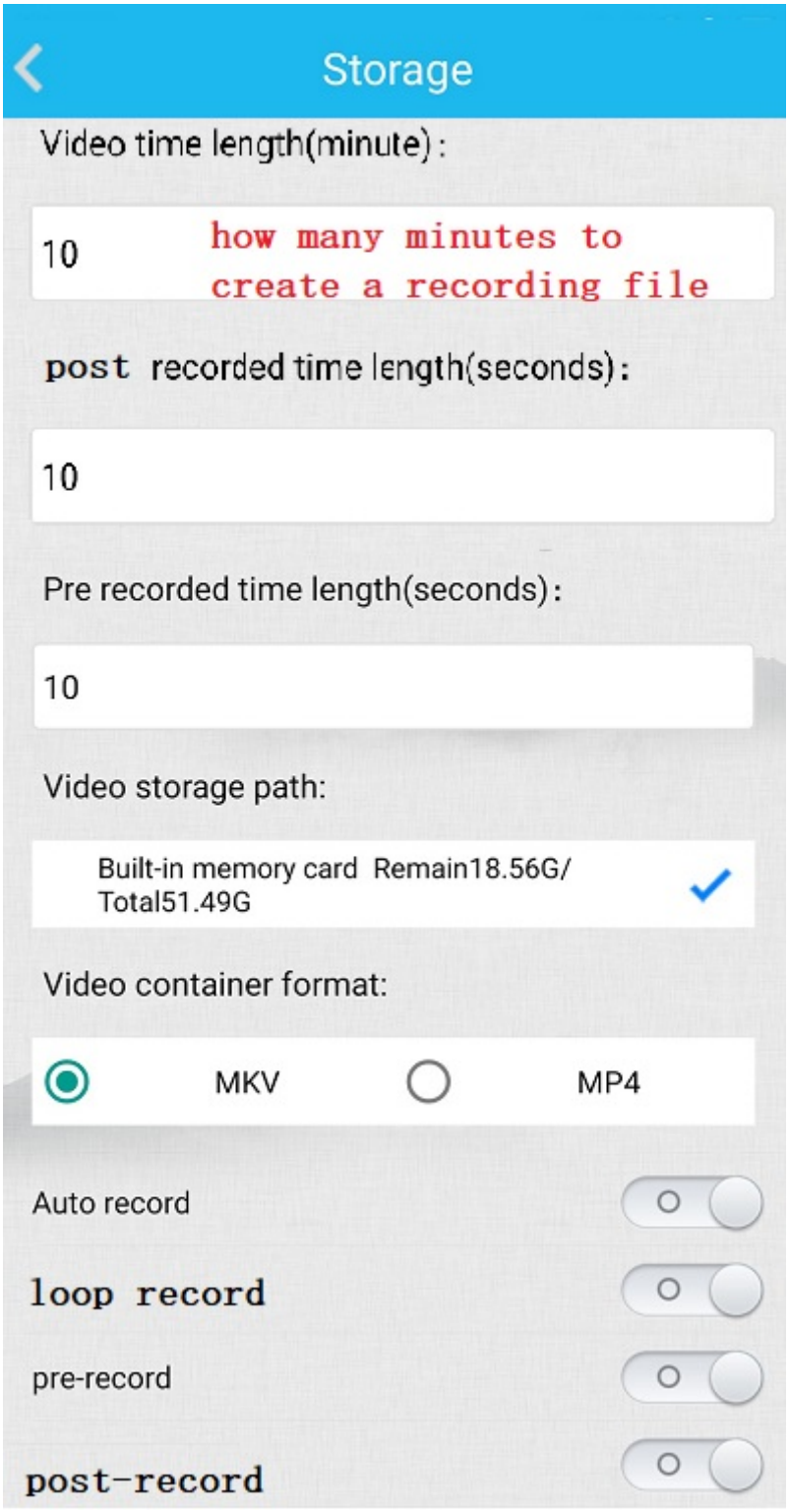
Enter LocSet → System settings,



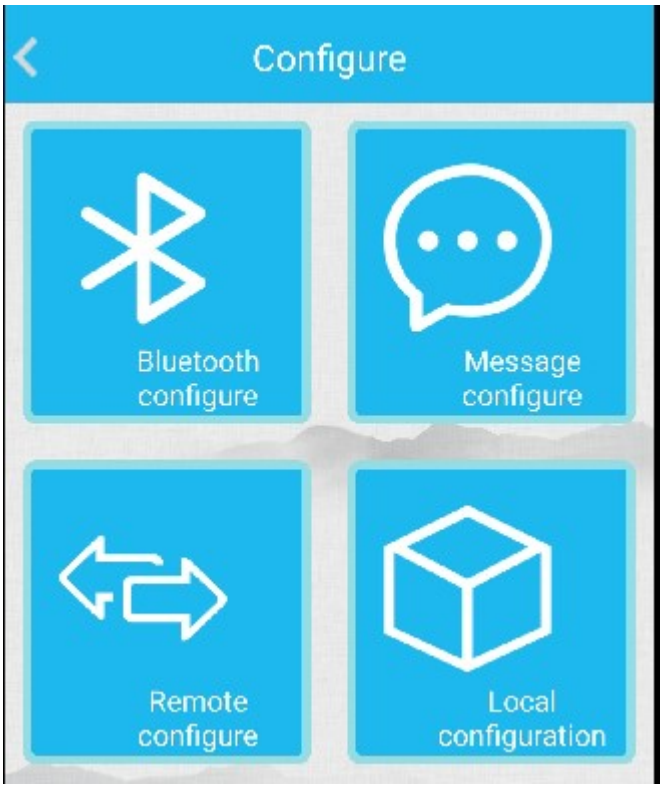


6.5 Storage settings for recording


Settings
Device Info
24508257
Video Preview
Language
Map
Update
Auth
Storage
GPS settings
Video Audio setting
Photo settings
OSD Info Setting


Storage
Video time length(minute):
10
how many minutes to create a recording file
post recorded time length(seconds):
10
Pre recorded time length(seconds):
10
Video storage path:
Built-in memory card Remain18.56G/ Total51.49G
Video container format:
MKV
MP4
Auto record
loop record
pre-record
post-record

7 remote configuration on other devices



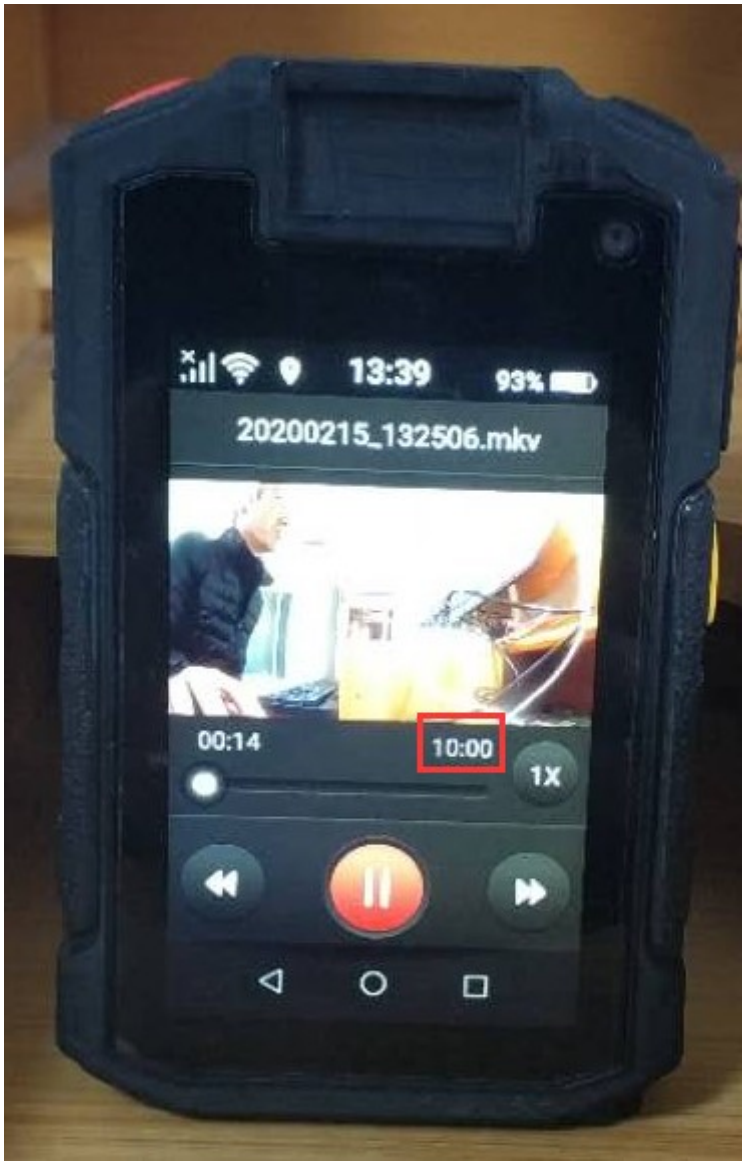
seldom used.

employed as a mobile client to do remote configuration to other units/devices, usually those embedded linux based 4G DVR/NVRs.

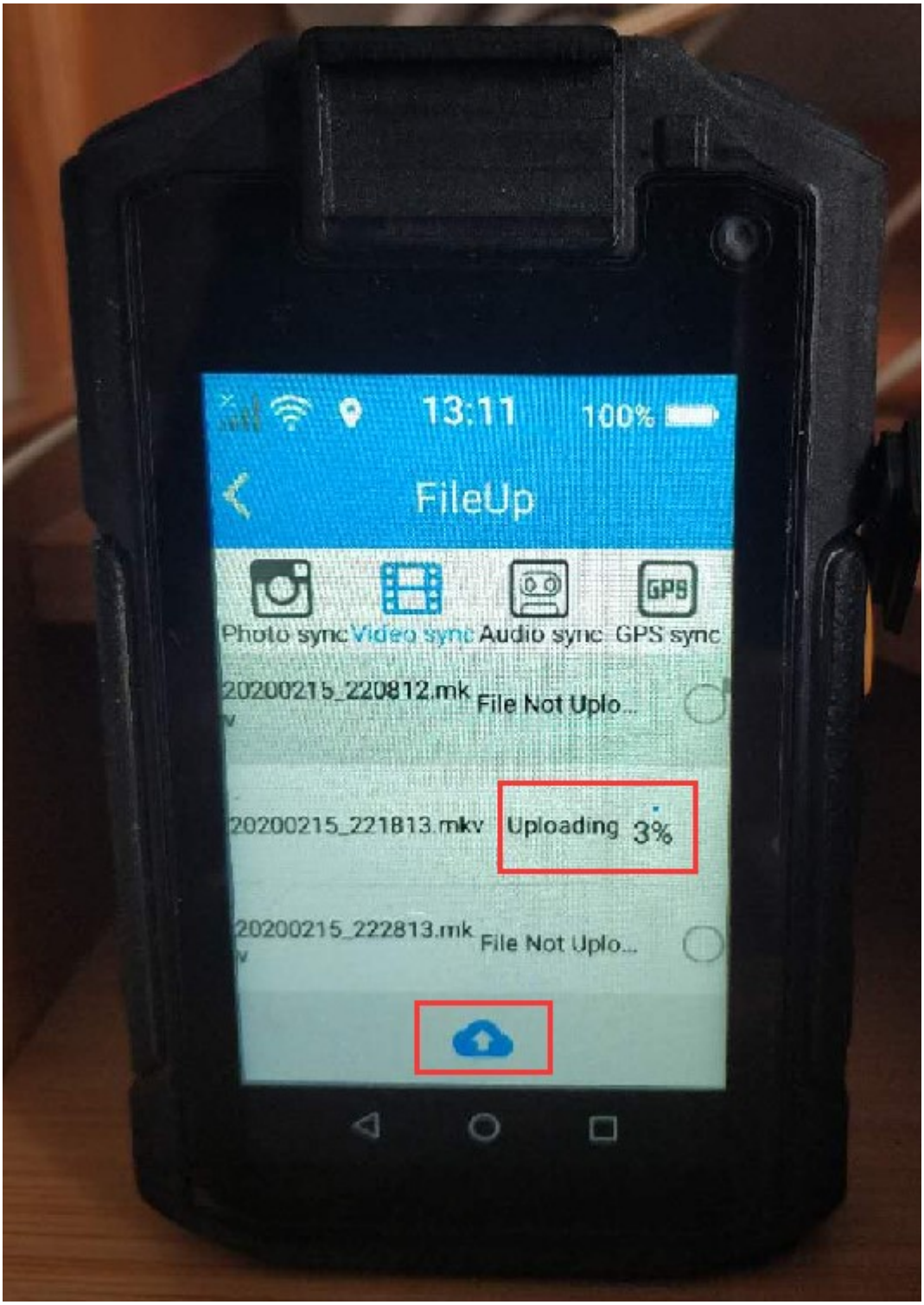
8 playback

MCP can do local playback.


13:41
93%
Replay
Photo
und record
Video
Log
1. 20200215_133506.mkv
2. 20200215_132506.mkv
3. 20200215_131506.mkv
4. 20200215_130506.mkv
Live streaming
Video Preview



9 manual file upload


13:11
100%
FileUp
Photo sync
Video sync
Audio sync
GPS sync
20200215_220812.mk
v
File Not Uplo...
20200215_221813.mkv
Uploading 3%
20200215_222813.mk
v
File Not Uplo...