# Mini WiFi IP camera with build-in or external battery User manual

   This device is IP camera with WiFi and P2P function, functional motion detection, with video recording on a Micro SD card. The camera is powered via a 5V micro USB port with the supplied USB cable, external or built-in battery. Camera lens have focus for short distance. Induction coil can wireless transmit sound to micro earpiece.

Main parts:

1.   ON / OFF
2.   Indicator
3.   Reset
4.   USB connector
5.   Micro SD card slot
6.   Induction coil
7.   Camera Lens
8.   External Battery
9.   Wireless Micro Earpiece
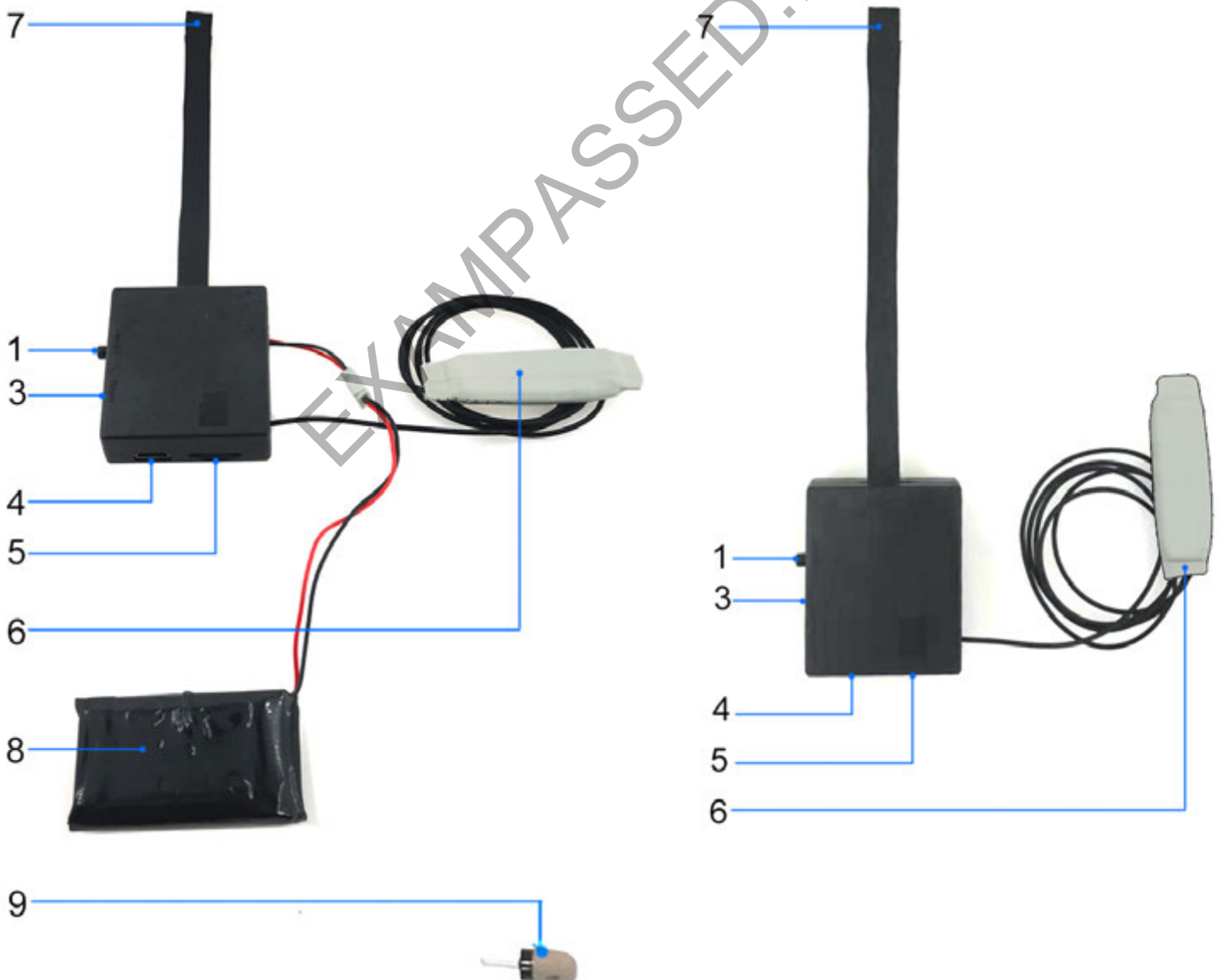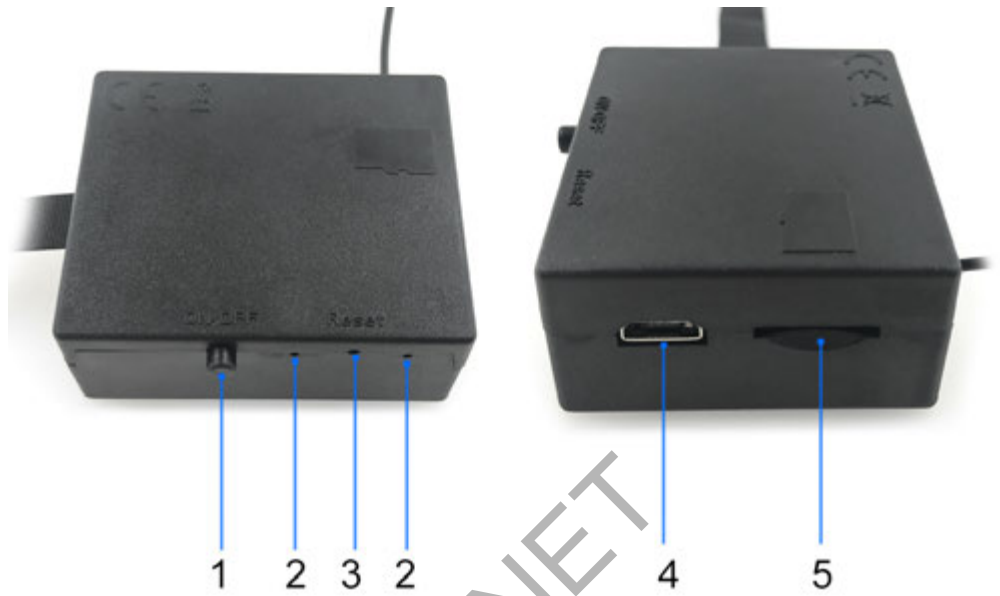
Battery Insertion into the earphone

- Unscrew earphone cover
- Insert battery
- Make sure that battery side with letters faces up

- Close cover

Charging:
- Connect USB cable to USB connector (4) and charger

Before use:
- Install the application on your mobile phone HDCameraPro
- Charge the camera
- Read this manual
- Insert the Micro SD card (5) into the camera (optional step, and the card is not included)

Reset:
- Use toothpick, click and hold reset button (3) for 7 seconds
- Watch indicator (2)

First start:
- Install the HDCameraPro application on your mobile phone
- Press ON/OFF button on the camera (1) for two seconds and wait 20 seconds (camera booting)
- Open the WiFi settings on your mobile phone and connect to the newly created WiFi network. "HW- …"
- Turn on the HDCameraPro application
- The application should recognize the camera itself or click REFRESH icon to add to the camera list.
- Now you are in AP mode (Access Point) and you can watch video few meters around camera

Set you camera watch worldwide by choose your WiFi
- In app, in camera list, click on + in right top corner
- Click on the top "Equipment AP distribution network"
- Click Start connecting
- Click Next
- Choose your WIFi and write password, click Configure Wi-Fi
- The camera restarts and connects to your WiFi network. From now on, you can watch videos from anywhere in the world..

Set you camera watch worldwide by QR code
- In app, in camera list, click on + in right top corner
- Click on the second "Equipment scan code distribution network"
- Click Start connecting
- Choose your WIFi and write password, click Configure Wi-Fi
- Your phone will create QR code
- Show this code to your camera (around 10 cm in front of lens)
- Camera will read QR code, make settings, restarts and connects to your WiFi network. From now on, you can watch videos from anywhere in the world.

Power OFF:
- Click and hold ON/OFF button (1) for 3 seconds
- Watch indicator (2)

Use wireless Micro Earpiece:
- Insert battery into earpiece. Unscrew black cover. Hold is as cup. Put battery inside black cover, face battery positive "nose" to sky. Cover it with earpiece body and screw them together.
- Earpiece don't have any ON/OFF button. Insert battery will automatically start.
- Wireless transmit distance to earpiece is 15 cm from induction coil (6).
- Click "Mic" icon on app screen, and start talk. Sound will be transmit to earpiece.
- If earpiece not use, unplug battery.
- If no any sound in earpiece, please use new battery.
- Battery 337 or earpiece cannot charging.

Note: Camera chip can heating around 65-70 degrees C. Its chip's feature, not a manifestation of failure.

Technical data:

- Video resolution: 4K / 1080p / 720p
- Battery: rechargeable 1000 mA li-on
- Battery working time: up to 4 hours
- Charging: USB 5V 1A or 2A
- Memory: Micro SC card up to 128 GB
- Connection: Wifi standard IEEE802.11b/g/n/
- WiFi frequency: 2,4GHz~2,4835GHz (don't use 5.8 GHz)
- Working mode: Local AP mode 6 meters around camera / P2P worldwide
- Antenna: internal
- APP name: HDCameraPro
- Camera size: Lens 12 x 0.8 cm, Camera body 8 x 4 cm, Induction coil 32 cm

Important Notice:

This is not a toy. Keep out of reach of children. Do not charge more than necessary. Use and charge the device only under supervision. Do not use as usual. Do not rotate the camera in the sun or in direct light. It is not waterproof or waterresistant. Use only indoors. Do not use for illegal purposes. Do not dispose of in a fire and dispose of in accordance with the waste law.

Package:
1 * Camera
1 * USB charging cable
1 * Earpiece
1 * Battery 337
1 * Digital user manual (PDF download link)

FAQ:
Q: I want use camera for make video of room, but video is unclear.
A: Yes, camera lens is focus for short distance. Rotate lens half turn with clockwise direction, then video will be clear.

Q: Can charge battery and use at same time?
A: Can.

Q: What charger need use?
A: Common USB charger 5V 1A or 2A.

Q: How to fix button cover on lens?
A: Use a little part of double side tape or glue. Notice, if use glue, very likely it will fix also lens position, and cannot change focus.

Q: How to change focus?
A: Rotate lens, till video not clear on distance as you want.

Q: How to power ON earpiece?
A: Insert battery 337, earpiece will start work.

Q: How to power OFF earpiece?
A: Unplug battery. If battery still inside earpiece, after few hours there will be no power.

Q: How long can battery work?
A: Battery in camera 5 hours. Battery 337 in earpiece depends of brand from 2 to 4 hours.

Q: How far must be earpiece from camera?
A: Up to 15 cm far from induction coil (white part). Black part of camera (camera body) have no effect to earpiece.

Q: Camera is hot !
A: Yes, every chipset get hot. Camera chip can get around 65-70 degrees C. Its chip's feature, not a manifestation of failure. For this reason chip is located on outer side.

Q: Missing user manual in package.
A: There isn't "paper style" user manual in package. User manual can online download in PDF format. Its in english language, pictures can be zoom for clear understanding. Also its much more easy to translate to another languages.

Q: Is video with sound?
A: Yes, its with sound. To start sound, must click on speaker icon on APP screen.

Q: How to adjust sound volume in earpiece?
A: Change distance of earpiece from "white part" (induction coil). More close they together it make louder sound. To make it more silent, dont stick "white part" it on shoulder, but on arm or chest.

Q: Where is microphone?
A: Microphone is on camera body, located between buttons.

Q: Must be Micro SD card inside camera when use?
A: Not need plug-in Micro SD card, camera will work. But without Micro SD card no video recordings.There is no "video recording on cloud" function.

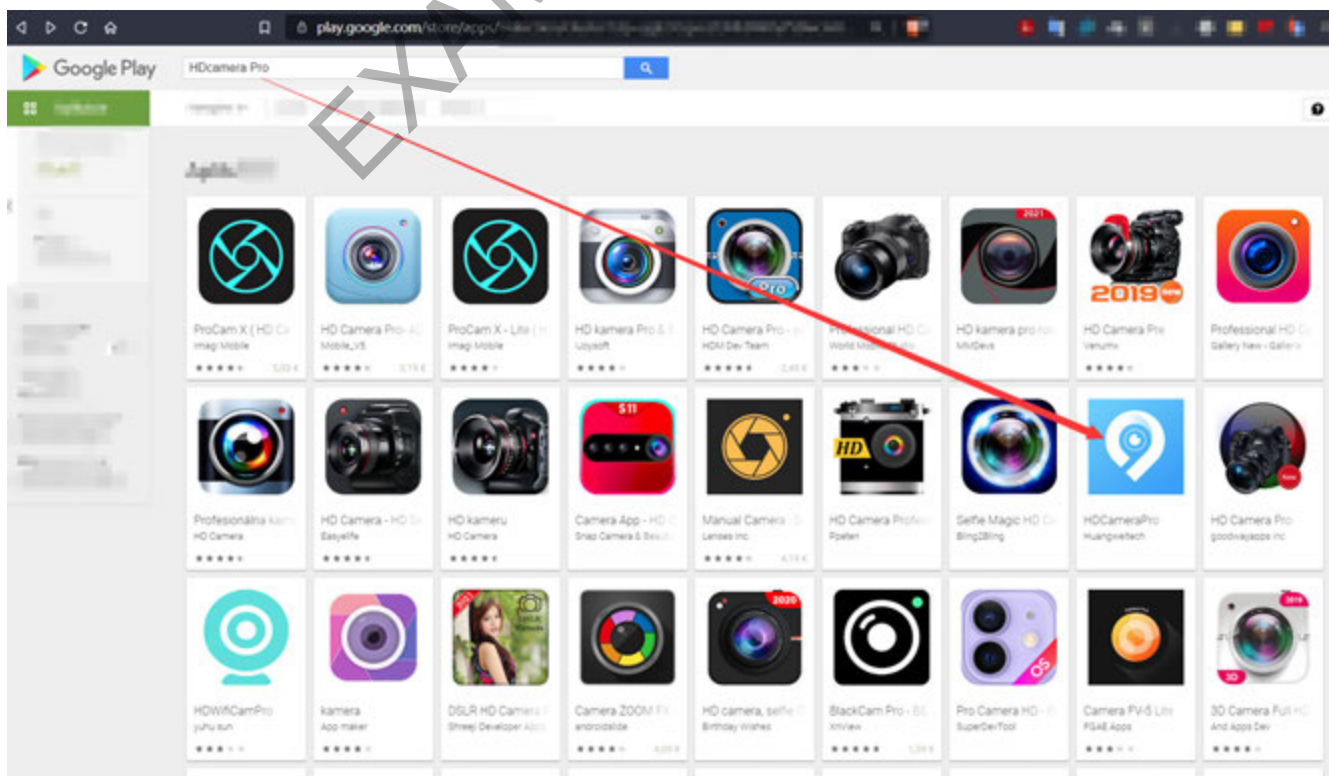Q: What's that antenna on earpiece?
A: Its not antenna. Its just holder for more easy move out from ear.

Q: How to insert battery into earpiece?
A: Unscrew black cover. Hold is as cup. Put battery inside black cover, face battery positive "nose" to sky. Cover it with earpiece body and screw them together.

Video guide user manuals

App download from Google Play store

How to change camera focus

- Lens dont have Auto-focus, its manual.
- Must use your hand to rotate lens, to change focus. (on picture in yellow)
- When rotate lens, please hold tide only camera base (on picture is pink)
- Don't hold by camera cable (on picture its brown)
- There is a white point on the lens.

Focus for reading from paper:
- If imagine clock around lens, white point is on number 7, its focus around 10-15 cm

Focus for reading from computer:
- If rotate lens white point clockwise direction to number 9, its focus around 25 cm.

Focus for long distance:
- If rotate lens white point clockwise direction to number 12, its focus for room monitor

Return focus for reading:
- Rotate lens **opposite direction** to to correct position. (white point to 9 or 7 o'clock)
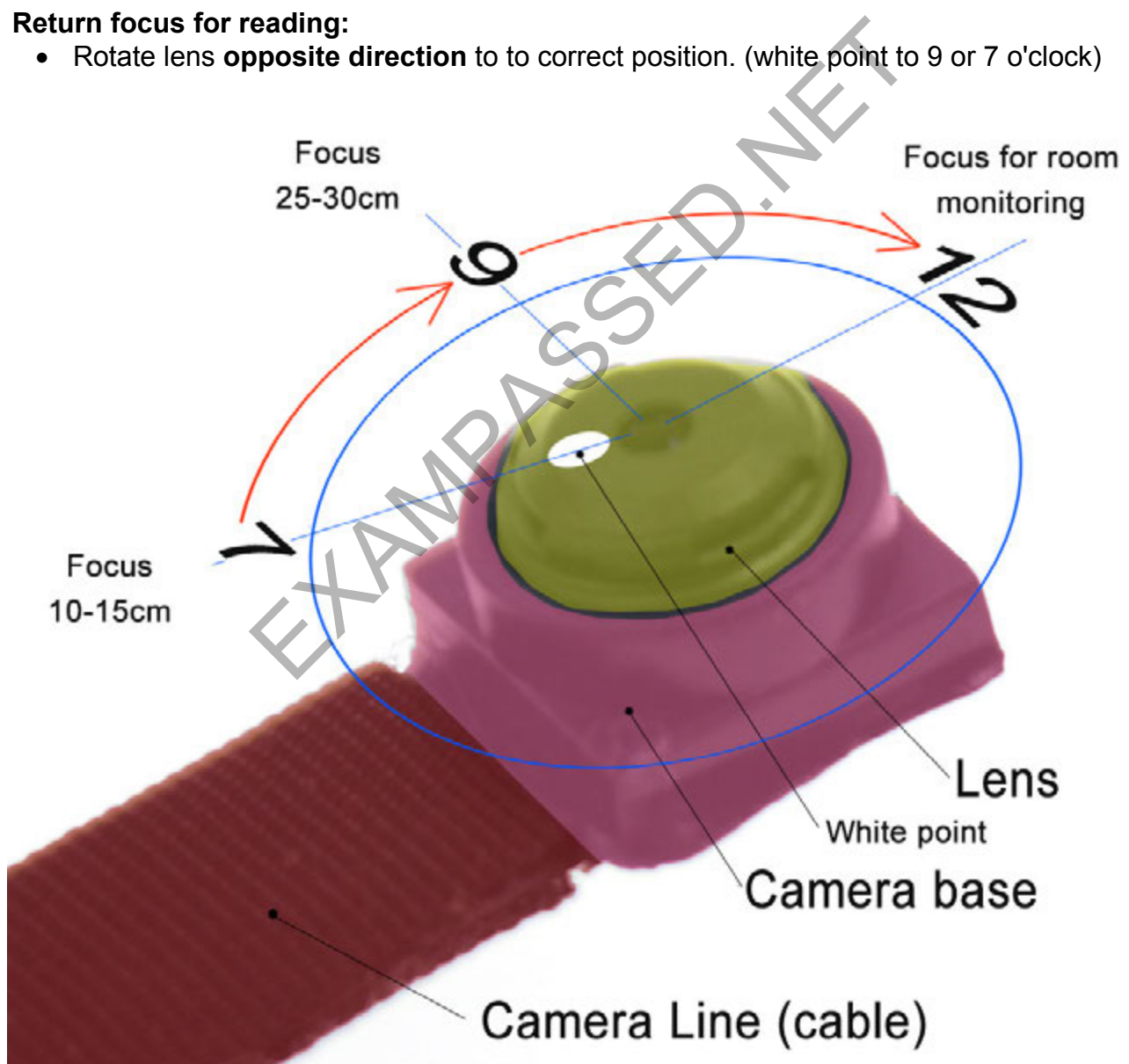
Notice: if you set reading from computer to 25 cm, you must hold camera around 25 cm far from PC screen. Do not hold 45 cm or 1 meter.

Lens focus set for reading
from paper (10-15 cm)

Change focus to 25-30 cm
Rotate clockwise direction

Lens focus set for reading
from computer screen
(25-30 cm)
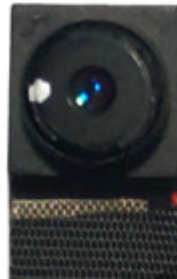
Change focus to room monitor,
Rotate clockwise direction
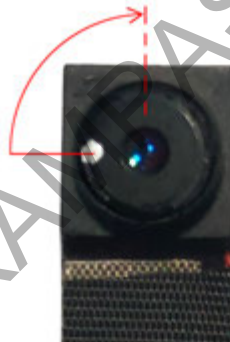
Lens focus set for room
monitoring

Change focus to 25-30 cm
and 10-15 cm
Rotate opposite direction
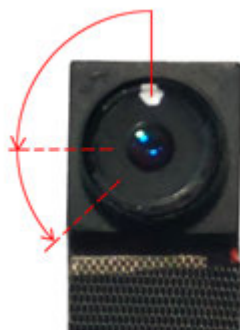
For rotate lens, use some tools.

Lens position is fix by wax, to avoid unexpected rotation.

Hold tide by camera base and rotate only lens. Do not hold by camera cable, you may broken it.

First step- add camera

1. Install the **HDCameraPro** application on your mobile phone

2. Press ON/OFF button on the camera for two seconds and wait 20 seconds (camera booting)
3. Open the WiFi settings on your mobile phone and connect to the newly created WiFi network. "HW- …"
4. Turn on the HDCameraPro application
5. The application should recognize the camera itself or click REFRESH icon to add to the camera list.

6. Now you are in AP mode (Access Point), click on camera picture on screen, and you can watch video few meters around camera
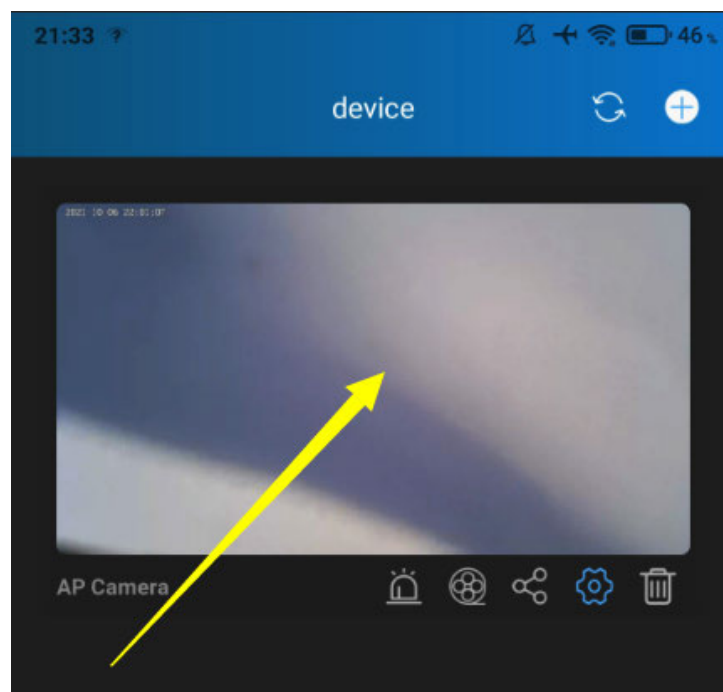
How you set WiFi
How to Add camera to Your Friend's
phone if he is not beside you

Start your camera and login camera's WiFi
Start APP "HDCameraPro"

Step 1. - Setting your WiFi -   press +
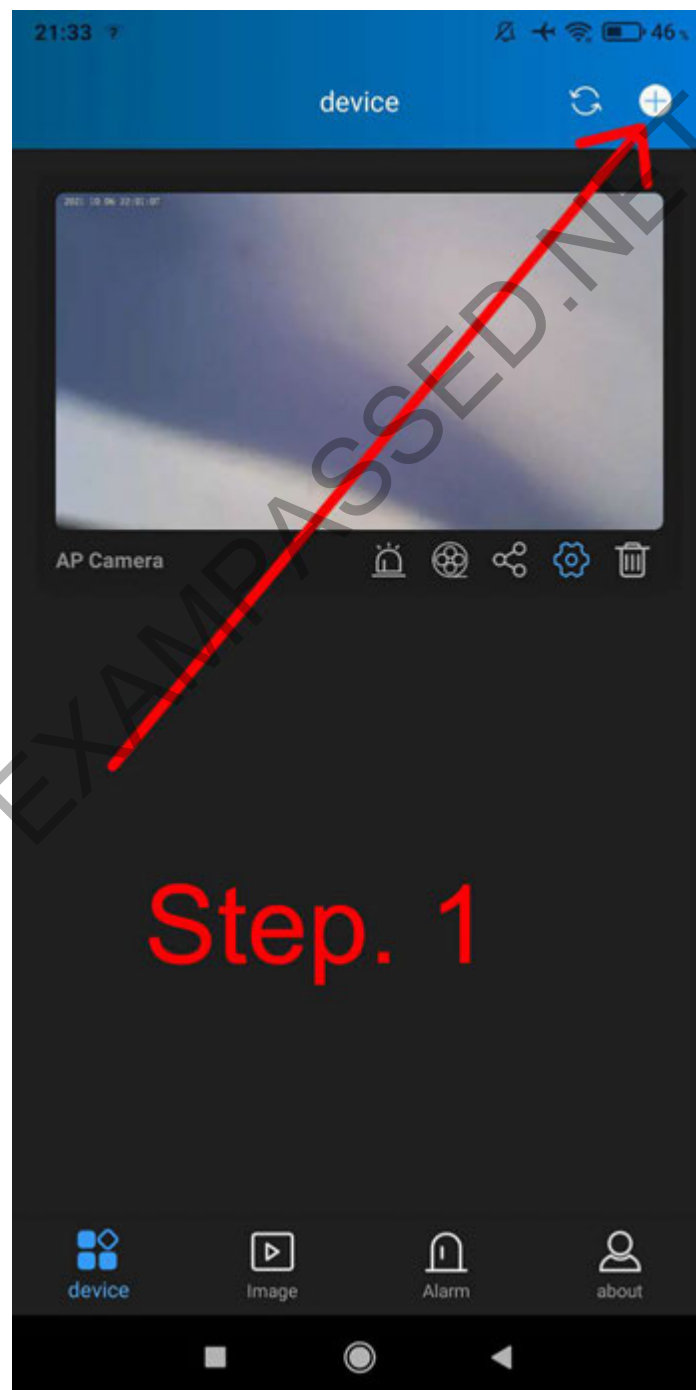
Step 2. -   Choose "Equipment AP distribution network"
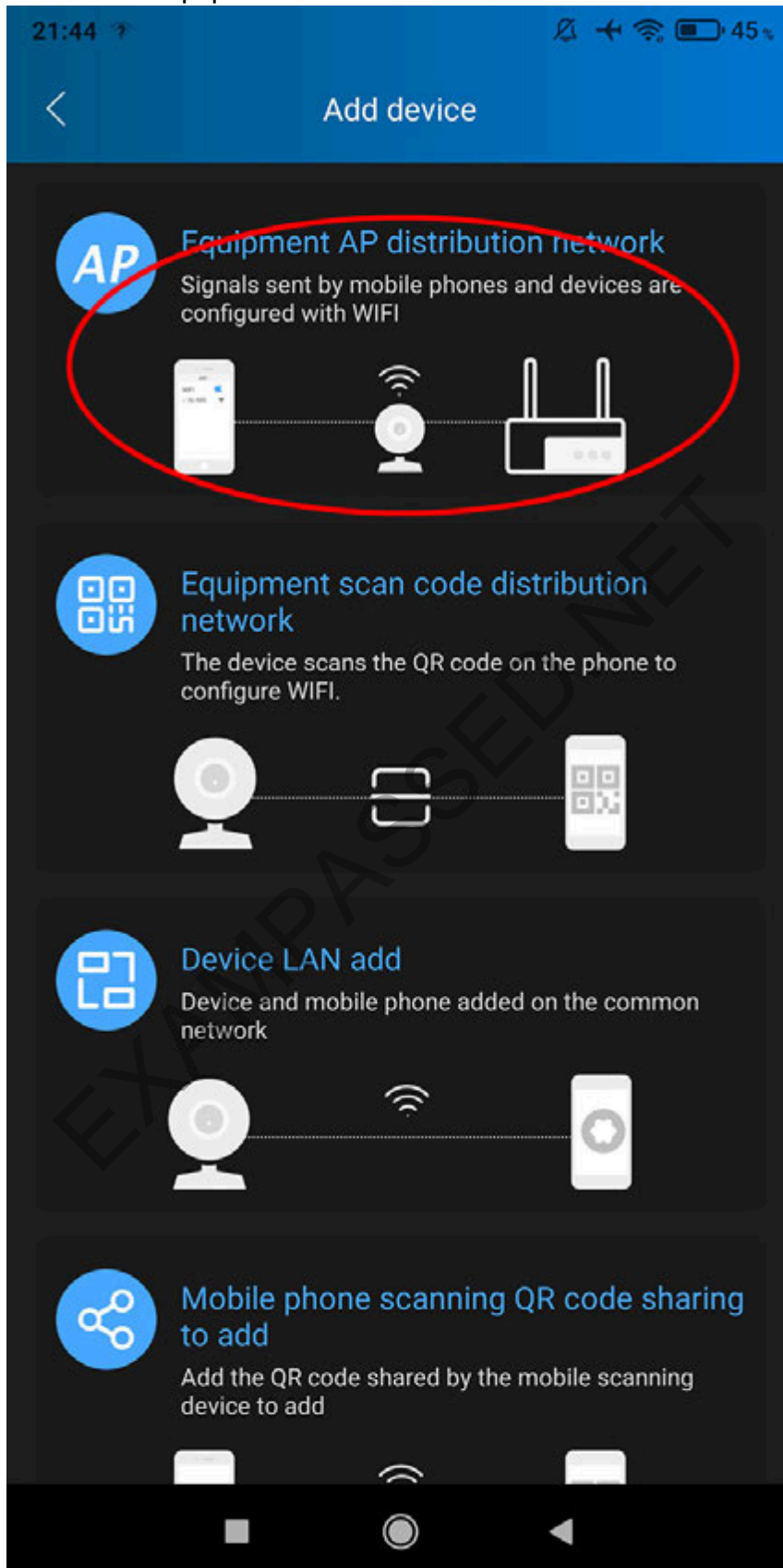
Step 3. - Choose from list your home WiFi name and write your WiFi password. (or portable modem's WiFi, or your phone WiFi hotspot). Camera will restart. Blue and Green light shine. Try watch camera video. Set your camera password.
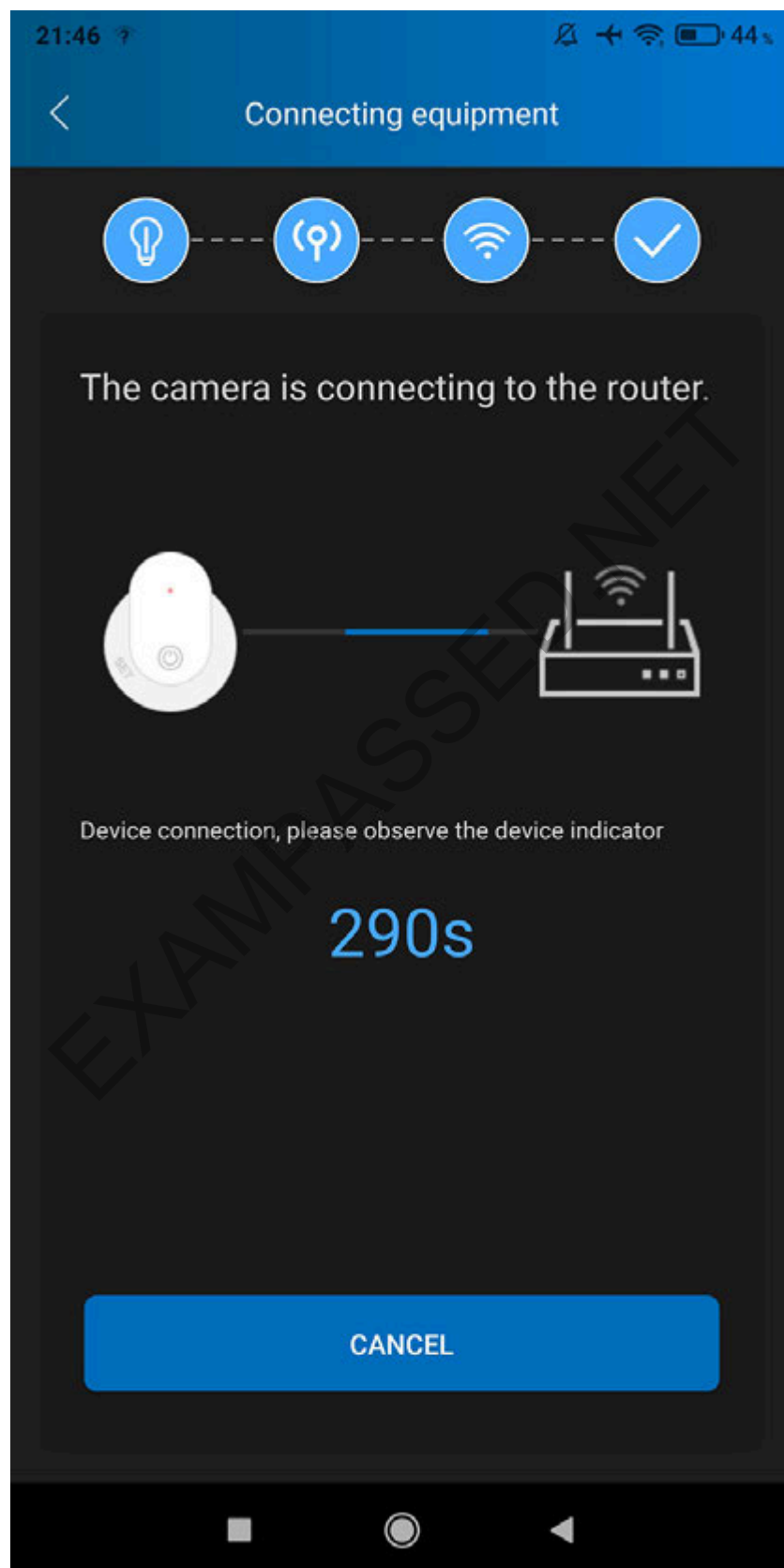
Step 4. - Press settings
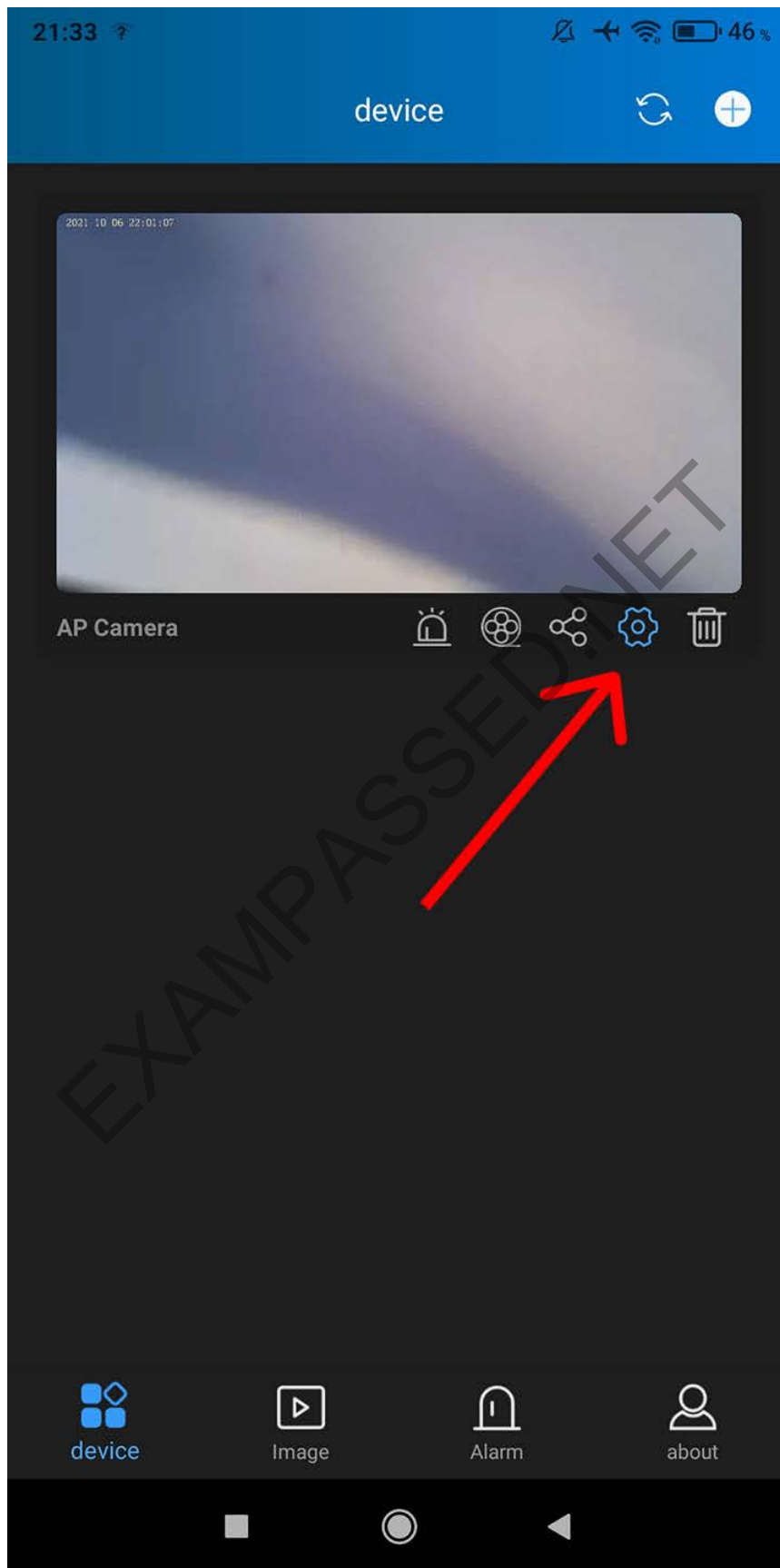
Step 5. - Press "Device information"
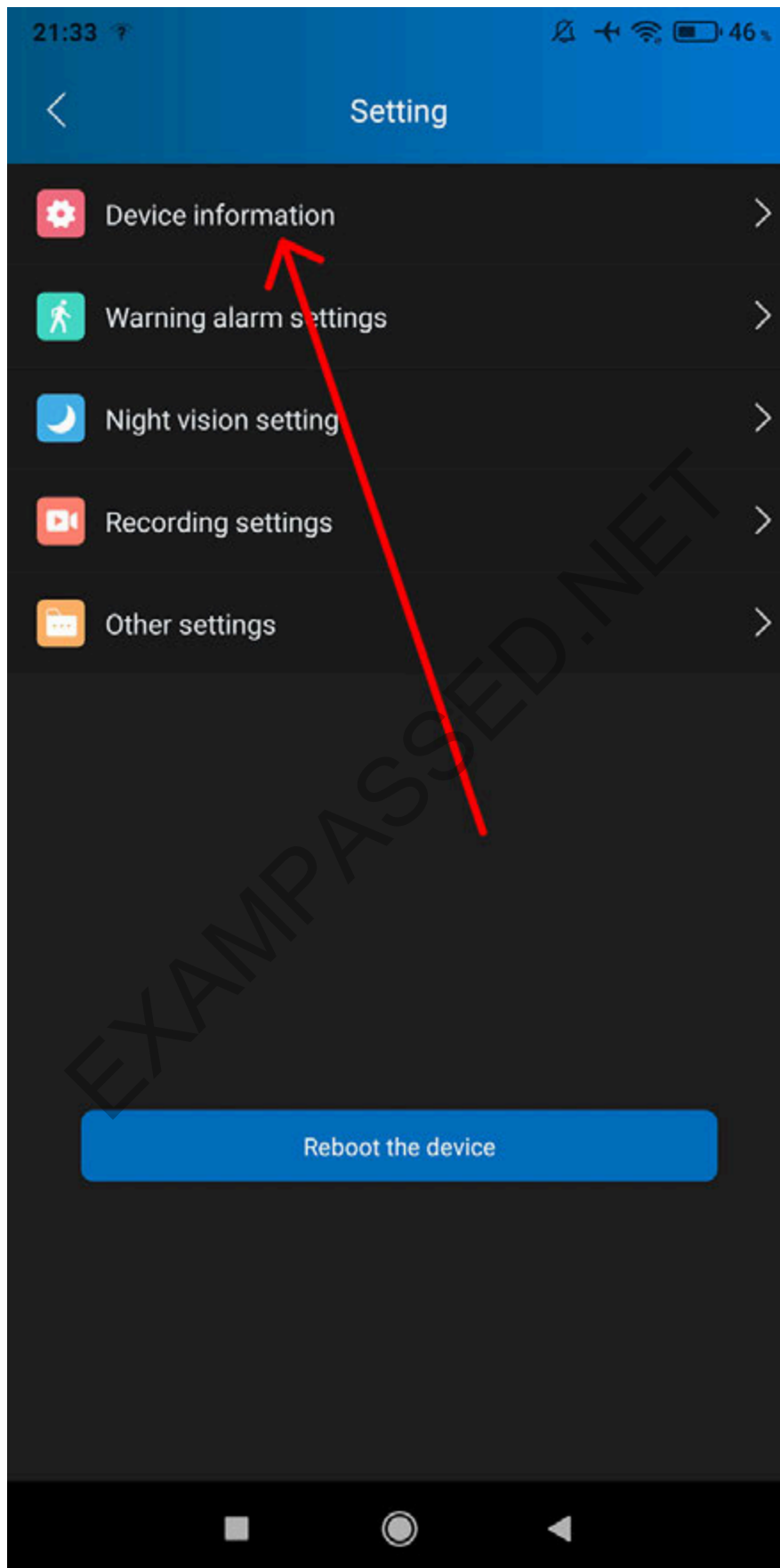
Step 6. - Device UID, it's a long number. Click this to get QR code.
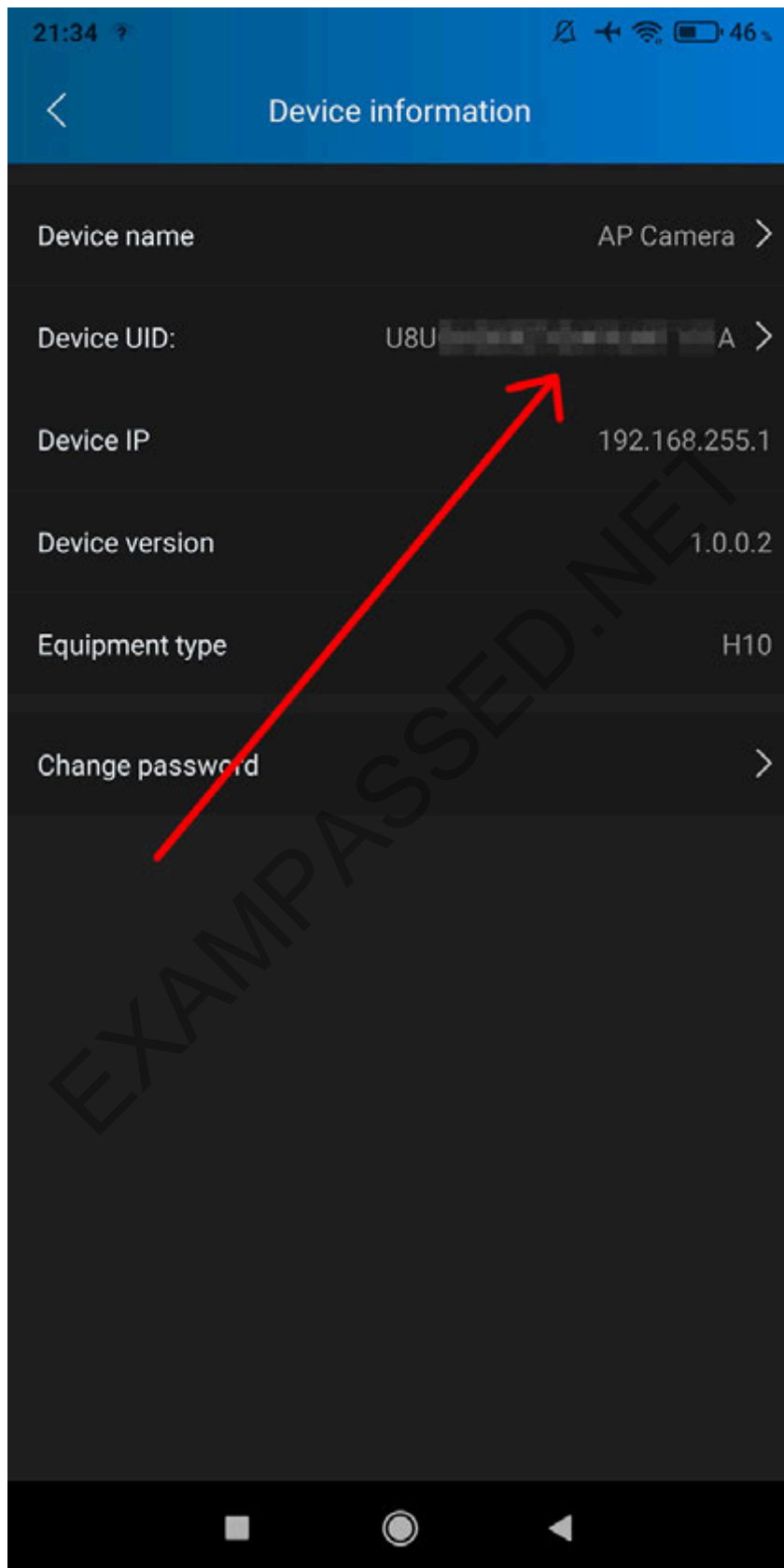
Step 7: make printscreen and you give to your friend. Tell him password you just set.

Step 7. - Friend start APP in his phone.   Press +
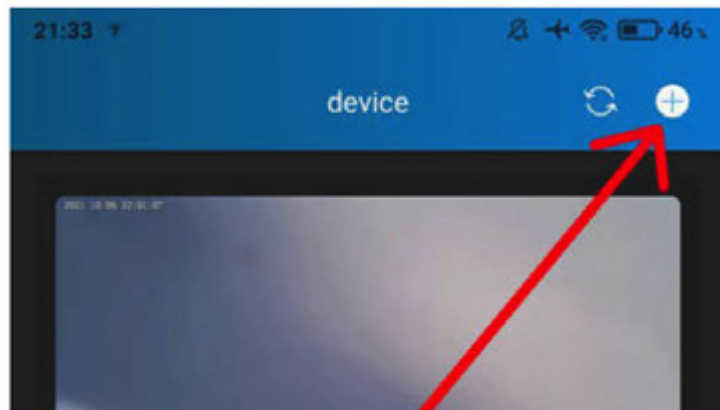
Press Mobile phone Scanning QR code.
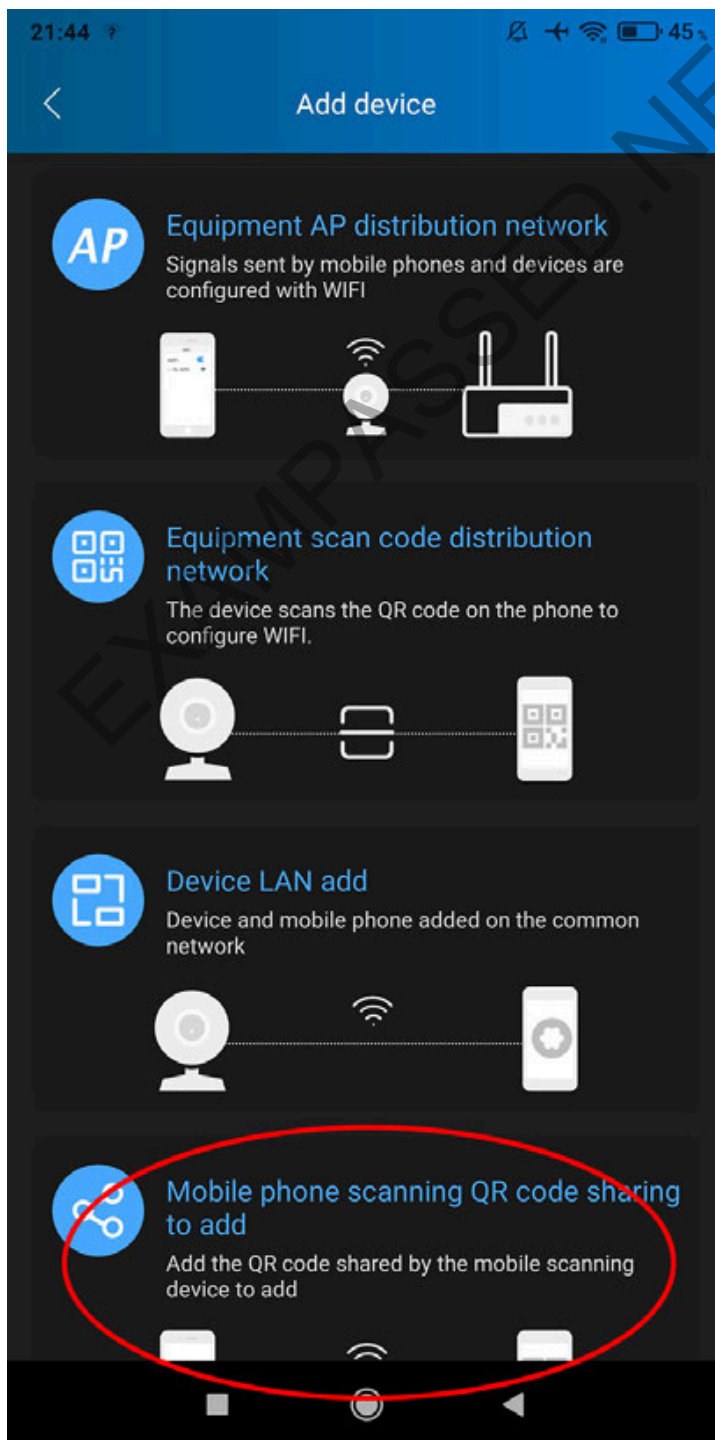
Step 8. - Your friend will scan QR code you printscreen and sent him
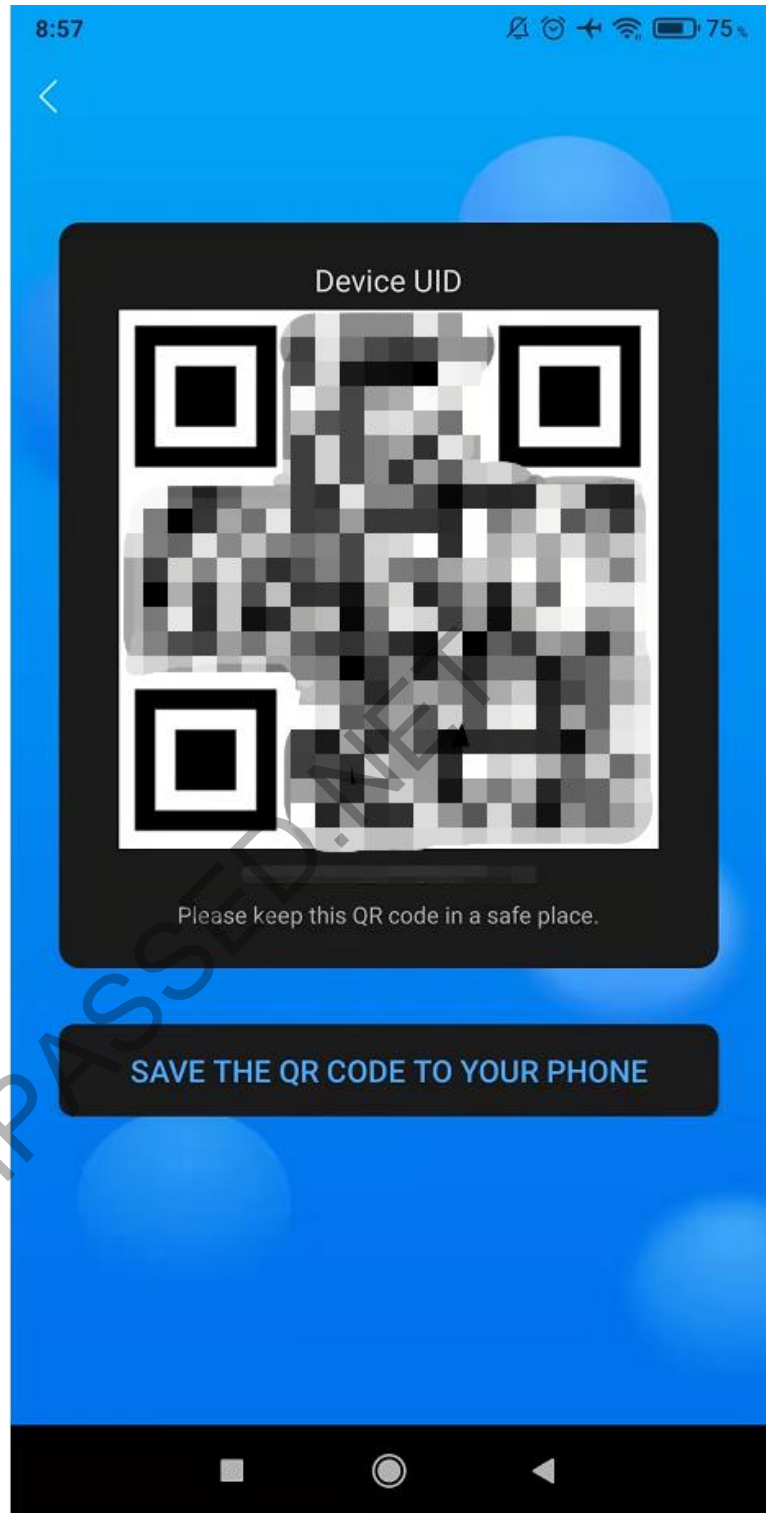
or scan this this QR code for manually insert UID

Step 9. – Friend will write your UID number and password you just gave him, press SURE
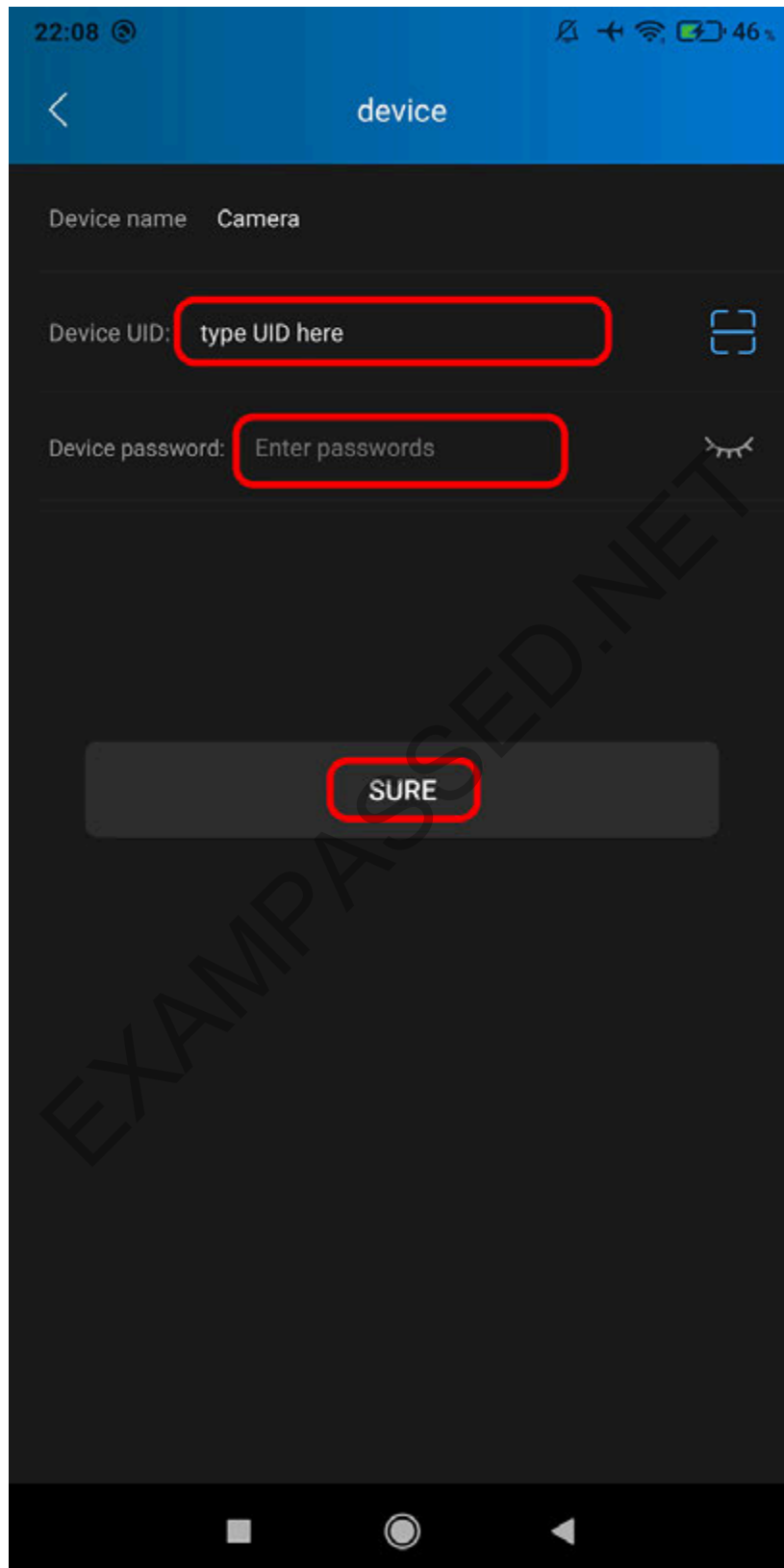
Done. Camera add in his phone, he can watch video.

Suggestions Before Taking Camera to Exam:

- Fix camera on hand, its most easy to operate it
- Learn how to aim with camera correct direction view angle.
- Learn how to hold it steady without shaking.
- Learn hold it in correct distance from paper or computer screen (use ruller)
- Friend can „Adjust" student by talk „more up, more down, left, stop, move to next page…etc"
- Once as friend got nice view, he can pause video and make phone printscreen.
- Then friend continue make printscreens of whole page (pages)
- One page size A4 can be 2-3 printscreens. Dont try make A4 page into one printscreen, its useless.
- Friend will transfer printscreens to computer.
- Friend open printscreen in computer, and make it zoom to whole computer screen, he can see all details.
- After that, student not need continue „play" with camera, friend already have all, friend will talk to student, and student only listen and fulfill exam papers.

Example seating position: Reading from paper

Example sit pose: Reading from computer
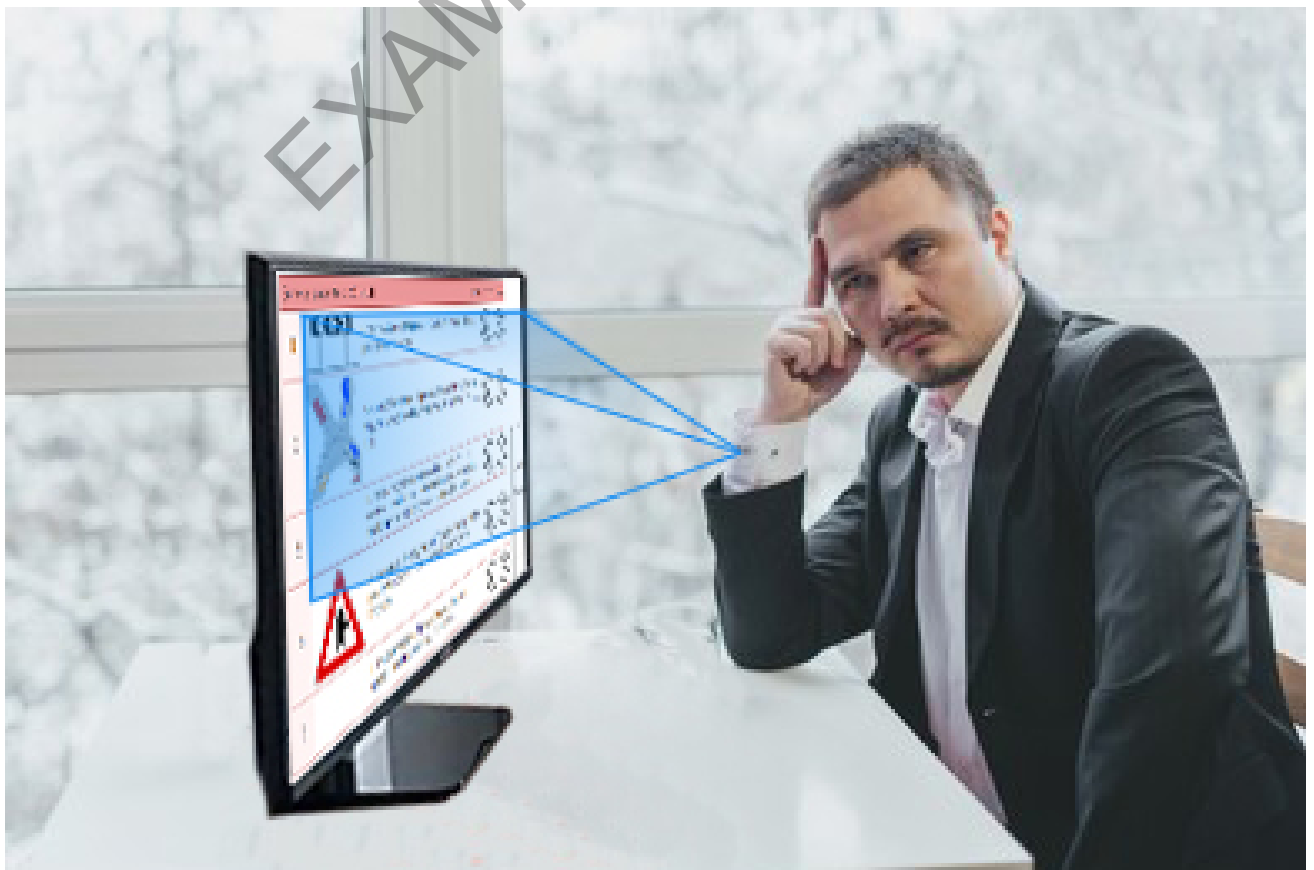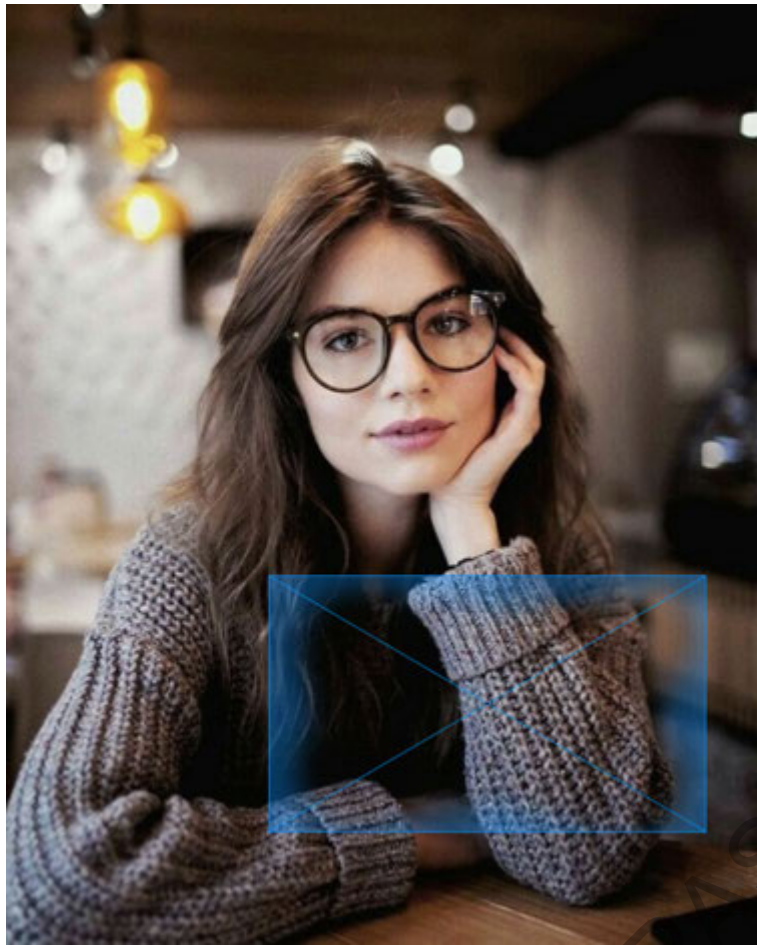
LED Indicator description

Common start camera to AP mode

Flashing green - Camera in AP mode.
Camera is showing WiFi name HW-...., you can login it, and wach video locally near camera

Green light steady - AP mode,
You already logged in to camera's WiFi and can
watch video.

Green and Blue steady - Camera connected to your WiFi.
Camera is online. You can watch video from anywhere in
the world.

Flashing Green and Blue - **Camera is trying to login WiFi you preset, but cannot find it!**
Make sure that you are in place with your WiFi you set for camera. Or Reset camera, and set a new WiFi settings.
This often happens if you setup camera at your home for your home WIFi's name, and then brought camera to a new place (which does not your home WiFi). Press Reset for 10 seconds.

Red light - Charging

Battery connector in detail

Only possible to connect one way. Connect cable red to red and black to black.
Red cable have positive +3.7V from battery. Connecting it opposite direction may cause damage of camera's main board. To unplug connector, do not pull it by the cable wires. Use nails to hold female (small) connector
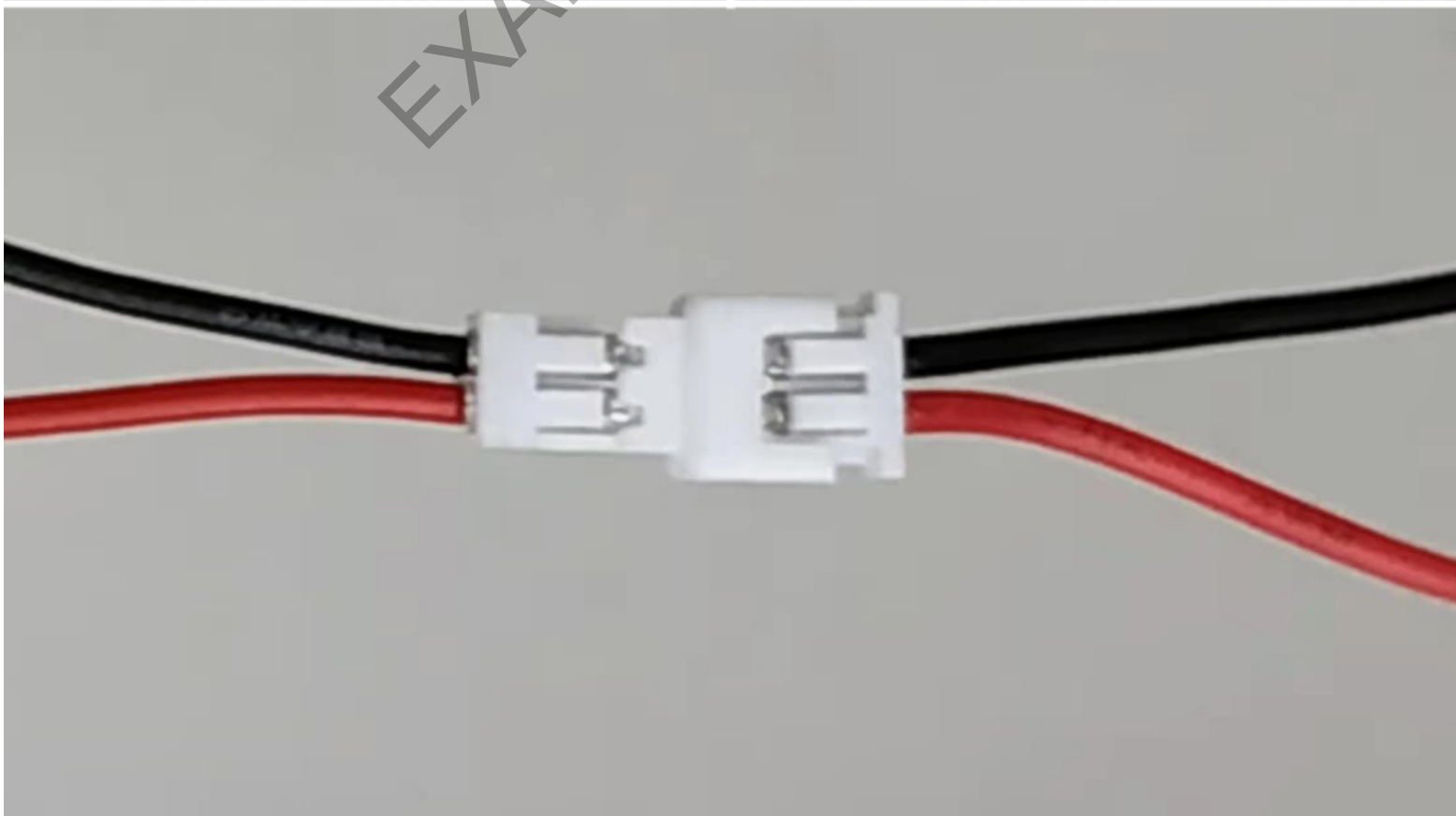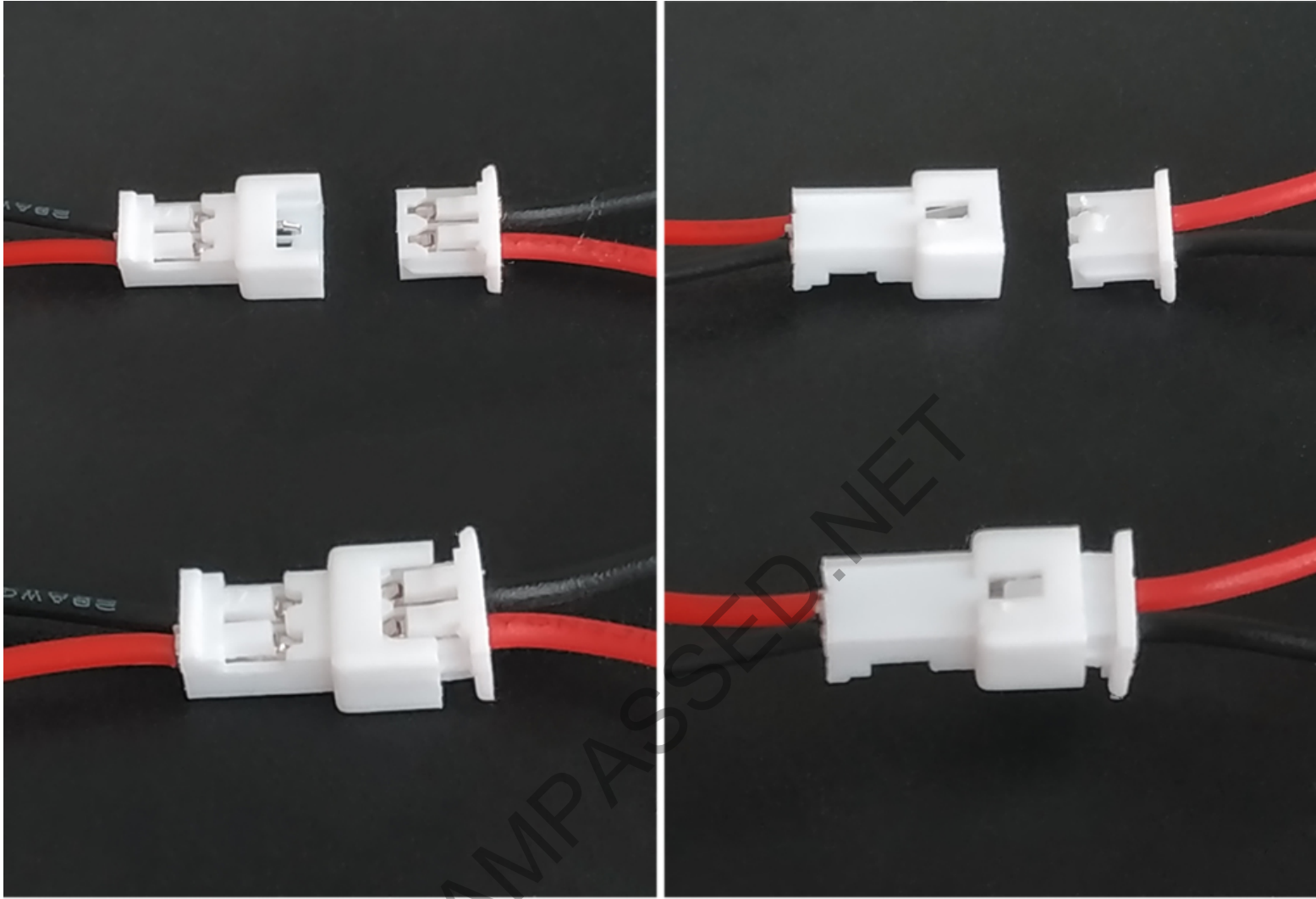
CAMERA DETAILED INSTRUCTION MANUAL FOR APP

HDCameraPro

Equipment AP distribution network

1 Download and inst1P Name: HDCameraPro)
Method 1: App store download
(1)Android phone search for HDCameraPro in Google Store.
(2) iOS user can search "HDCameraPro " in Apple App Store.
Method 2: Use the mobile browser to scan the QR code below to download

HDCameraPro

2 Open the camera app, click the plus sign "+" in the upper right to add a camera, select the first one"Configure device to WiFi network"
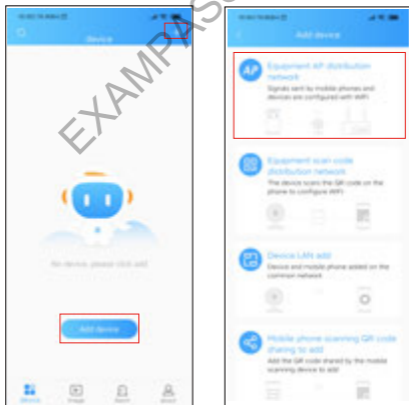
3 After the camera is turned on, confirm that the indicator light flashes green, enter the phone to set WiFi, connect to "HW-XXXX" is the camera hotspot at the beginning, return to APP point.
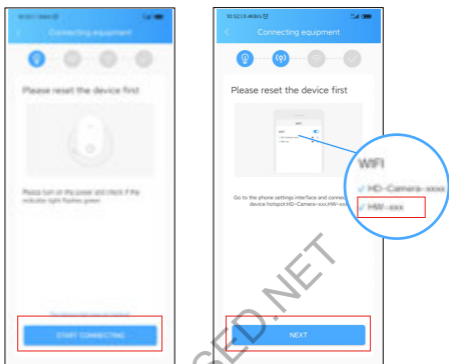
4 Select your home's WiFi, then enter the WiFi password, then click to start configuration (not supported twice Verified WIFI, such as WIFI on KFC and high-speed trains)
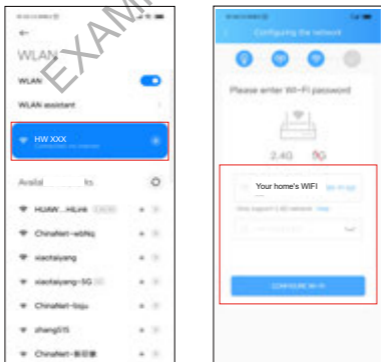
5 After waiting for the configuration to succ
the APP homepage.
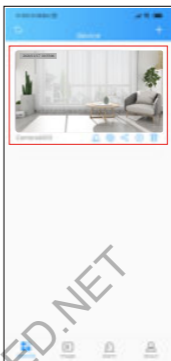
6 Click on the window to enter the ca and connect to the
camera and configure it.   ·xxx,HW-xxx

Set Password

— 3 —
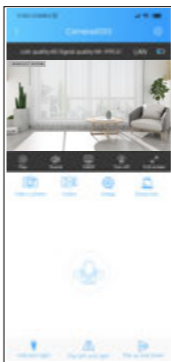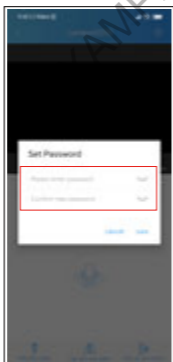
AP hotspot direct connection

① Turn on the camera and confirm that the green indicator light flashes
   (if not, press the reset button to restore the factory settings)
② Turn on the phone's WiFi settings and connect to the camera hotspot starting
   with "HW-XXXX, such as "HW-8888""
③ Open the camera application HDCamerapro, you will find that the APP home pa
   ge has a camera window, click to go to watch
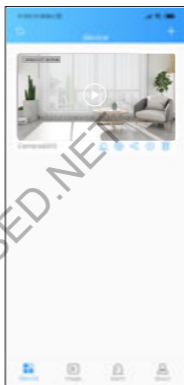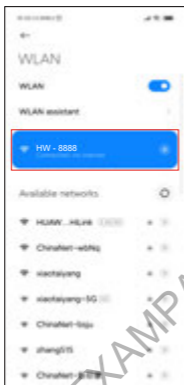
note:
The connection distance of the AP hotspot mode is about 10 meters,
and there is no limit to the distance after the distribution of the network;
Mobile phone will break the network in AP hotspot mode

Be careful
If the wifi connection is not successful, please press and hold the reset button to restore the
factory settings and reconnect again.

main interface description
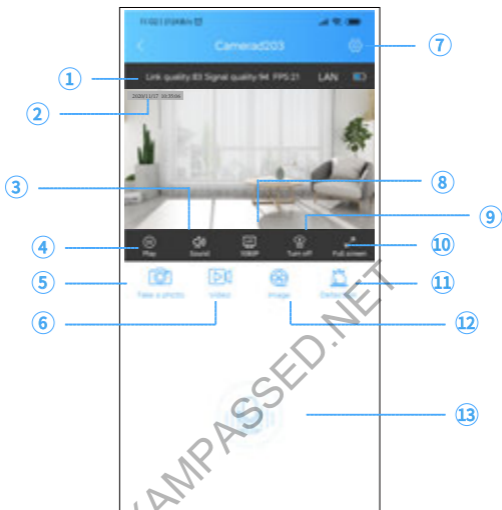
①	Picture quality	⑦	Setting
②	Time	⑧	Clarity adjustment
③	Sound	⑨	Night vision
④	play / Pause	⑩	Full screen
⑤	Take a photo	⑪	Motion detection alarm
⑥	Video (recorded on your phone)	⑫	Video and playback
⑬	Voice (This device does not have)		

Add a networked camera method

1 Add LAN (the phone and camera are connected to the same WiFi) Click the plus sign at the top right of the home page, select the Third "Add online device", select the new device, enter the password of this camera and press OK.
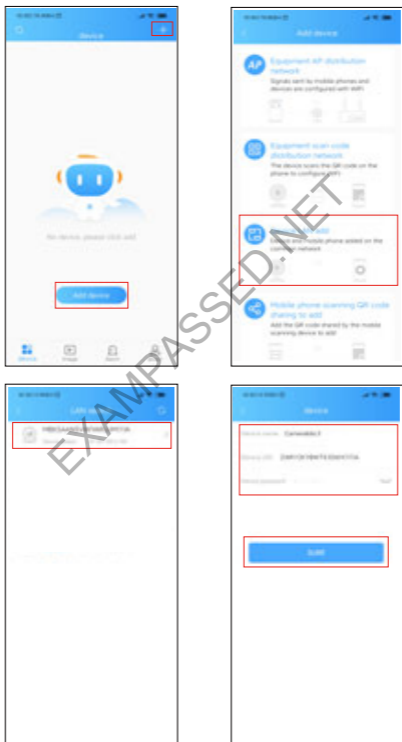
2 Manually add devices

Select the second "Manually add device", manually enter the
device UID or scan the device UID QR code, enter the change device password
and click OK.

Note: Add devices manually

Please make sure: 1. The device is connected to the network; 2. The device has
already set a password (UID can be viewed in the device information, there is a
device QR code)
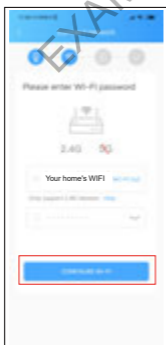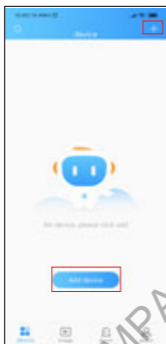
Camera Settings Page

Tips：
■ 1. Before setting , this camera must be configured route's WIFI and online.
■ 2. Open **HDCamerapro** >> Click **VIdeo Window** >> Click the **Settings icon** ⚙ >> Enter **Setting page.**
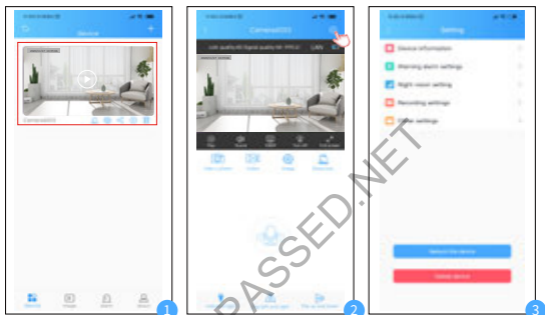
■ **Device Info:**   set device name, check UID, change camerapassword.
■ **Warning alarm settings:**   set motion detection sensitivity, alarminterval, message push.
■ **Night vision setting:**   turn off night vision, turn on auto night vision, forced to open night vision mode, timed night vision.
■ **Recording settings:**   set recording mode and video length.
■ **Other settings:**   24-hour format, synchronize phone time, storagespace, format SD card.
■ **Reboot the device:**   Camera restart work.
■ **Delete the device:**   after vou delete the device, vour phone needsconnect camera's hotspot again.

Set Motion Detection Alert

1. **Turn on Allow Notifications permissions on the phone**
Open your **phone Settings** >> Click **Notifications** >> Find and click
**HDCameraPro** >> Turn on **Allow Notifications**

Tips：
■ This part is take iOS13.3 as an example.
and online.
■ The notification permissions is different in different phones.
Pleaseopen the corresponding HDCameraPro notification according to
your mobile phone.
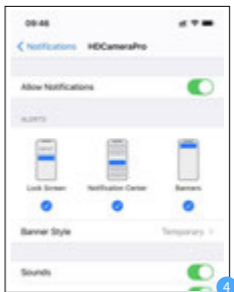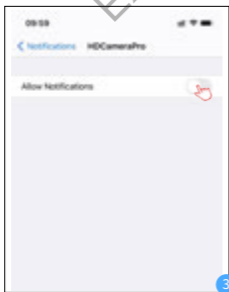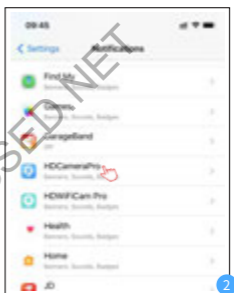
2. **Set motion detection details**
Open **HDCameraPro** >> Click **Video Window** >> Click the **Camera Settings icon** ⚙ >> Click **Warning alarm settings** >> Click **Motion detection** >> **Choose the motion detection sensitivity** you want >> Click **Save** >> Click **Alarm interval** >> **Choose the alarm interval** you want >> Click **Save** >>Turn on **Message Push** (if it is off).
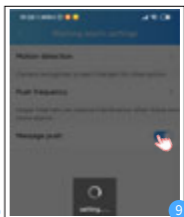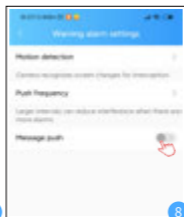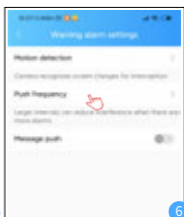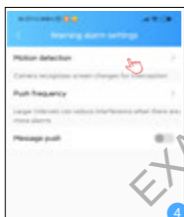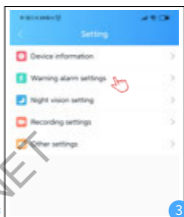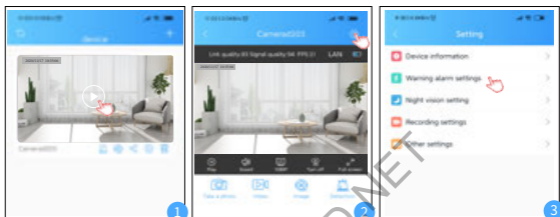
3. **Check alarm picture**

When a moving thing is detected, your mobile phone will receive an alert message, and the camera will snap a picture and save it to the detection. Open **HDCameraPro** APP, click **detection**, and check alarm picture.
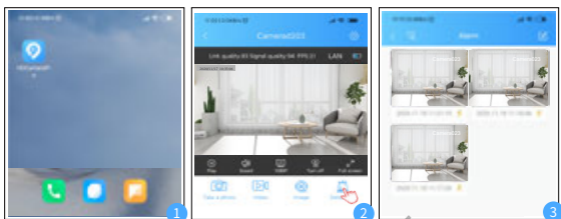
Night vision Settings

Click the **Settings icon** ⚙ >> Click **Night vision settings** >> Click **Turn on auto night vision**

Or you can set the night vision time >> Click **Time night vision** >> **Start time** >> **End time**
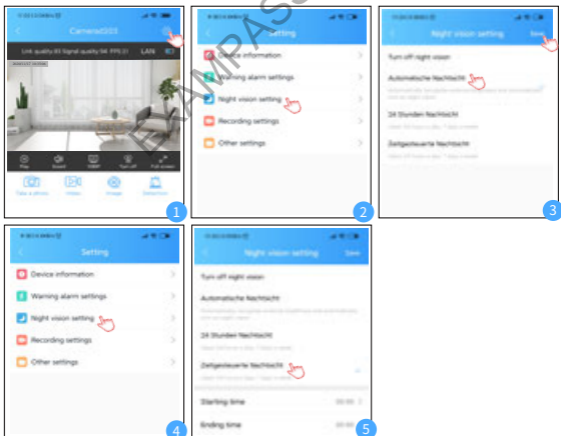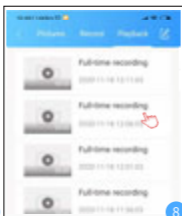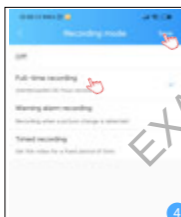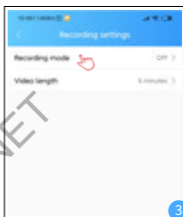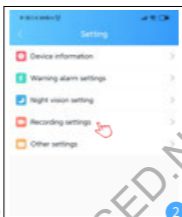
❙ Recording Settings

Tips：

■ 1.All the recording mode is required insert a micro SD card.

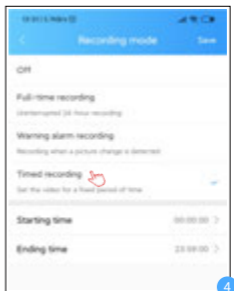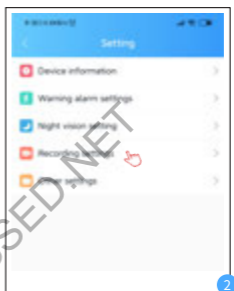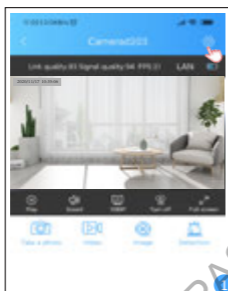■ 2.This camera supports 1GB to 128GB micro sD card.

Set Full-time Recording

Click the **Settings icon** ⚙ >> Click **Recording settings** >> Click **Recording mode** >> Choose **Full-time recording** >> Click **Save** >> Choose **Video length** >> **Choose the video length** you want.Then itwill save video to micro SD card,but you can also check it in APP.(Click **image** >>**Playback**)
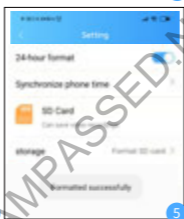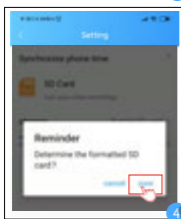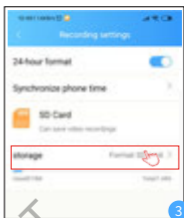
Set Timed Recording (Record at a certain time)

Click the **Settings icon** ⚙ >> Click **Recording settings** >> Click **Recording mode** >> Choose **Timed recording** >> Set the **StartingTime** >> Set **Ending Time**. The camera will automatically startrecording and stop recording at the time you set.

Format SD card & Synchronize phone time

Click the **Settings icon** ⚙ >> Click **Other settings** >> Click **Format SD card** >> Click **sure** to format >> Then the card is formatted successfully.

If you want to synchronize time, Click **synchronize phone time.**

Tips：
■ 1.Micro SD card is not included in the packge.
■ 2.This camera supports 1GB to 128GB micro sD card.

Set Alarm Recording

Click the **Settings icon** ⚙ >> Click **Recording settings** >> Click **Recording mode** >> Choose **Full-time recording** >> Click **Save.** Then the camera will start recording and save the 30 seconds video files to the SD card when it detects a moving object but you can also check it in APP.
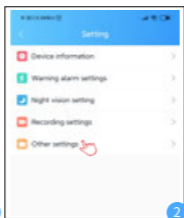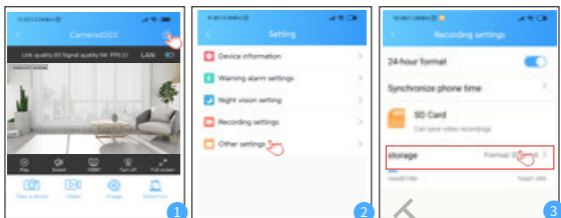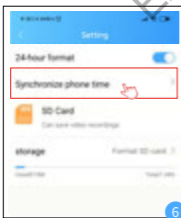(Click **image** >> **playback**)

View the interface

image	Alarm notification
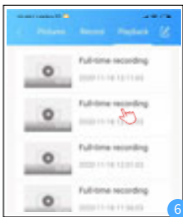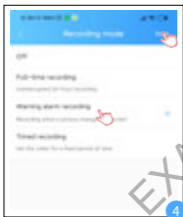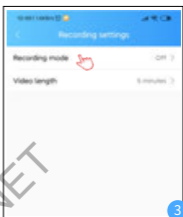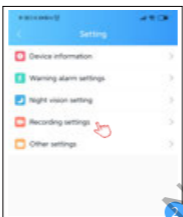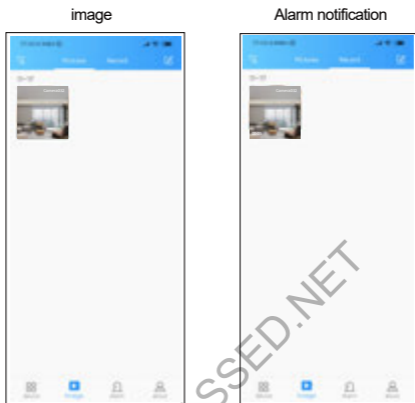
Android APP file directory

Video page screenshot:

Phone folder： HDCameraPro/UID/Snapshot

For example:HDCameraPro/UZUBW272DCRVNZBY111A/Snapshot

Video Page Video:

Phone folder： HDCameraPro/UID/Record

For example:HDCameraPro/UZUBW272DCRVNZBY111A/Record

Remote playback download:

Phone folder： HDCameraPro/UID/Download

For example:HDCameraPro/UZUBW272DCRVNZBY111A/Download

Motion detection pictures:

Phone folder： HDCameraPro/UID/Alarm

For example:HDCameraPro/UZUBW272DCRVNZBY111A/Alarm

Note: The ios system directly clicks on the image page, video, remote

playback,directly download and save to the mobile phone album.

Product parameters

Video Format	AVI
Frame Number	25
Motion Detection Camera Shooting	Straight line 6 meters
Minimal Illumination	1LUX
Compressed Format	H.264
Recording Range	25㎡
Consumption	240MA/3.7V
Storage Temperature	-20-80 degree centigrade
Operating Temperature	-10-60 degree centigrade
Operation Humidity	15-85%RH
Memory Card Type	TF card
Player Software	Mainstream player
Computer Operating System	Windows/Mac OS X
Mobile Phone Operating System	Android/iOS

Indicator light instructions

1. Charging: The red light is always on, and the light is off when it is full;

2. Recording while charging: the red light is always on and the green light is flashing;

3. Point-to-point mode: The device is not connected to the device hotspot, the device is off and the green light is blinking;

4. Point-to-point mode: the mobile phone is connected to the device hotspot, the device blue-green light is off, and the green light is on;

5. Remote configured: the blue and green lights are always on;

6. Remote switching proximity: the blue light is off and the green light is flashing;

Common problems and solutions

1. The permissions for reminding when downloading the app must be all open;

2. About the use scenario of reset (factory reset)

   1. The camera fails to connect to the network (remote connection), and the mobile phone cannot search for the WIFI hotspot of the camera;

   2. The router's WIFI password or name has changed, or the camera needs to be connected to another WIFI;

3. How to restore the factory settings: When the camera is powered on, press and hold the reset button for about 10 seconds until the green light flashes, and the device successfully restores the factory settings.

4. Before the camera starts to set up, please turn it on and plug it in, and set it within the range close to the router;

5. The camera needs to be turned on to charge;

6. The memory card needs to be inserted when the camera is turned off;
   (the memory card format needs to be FAT32 format)