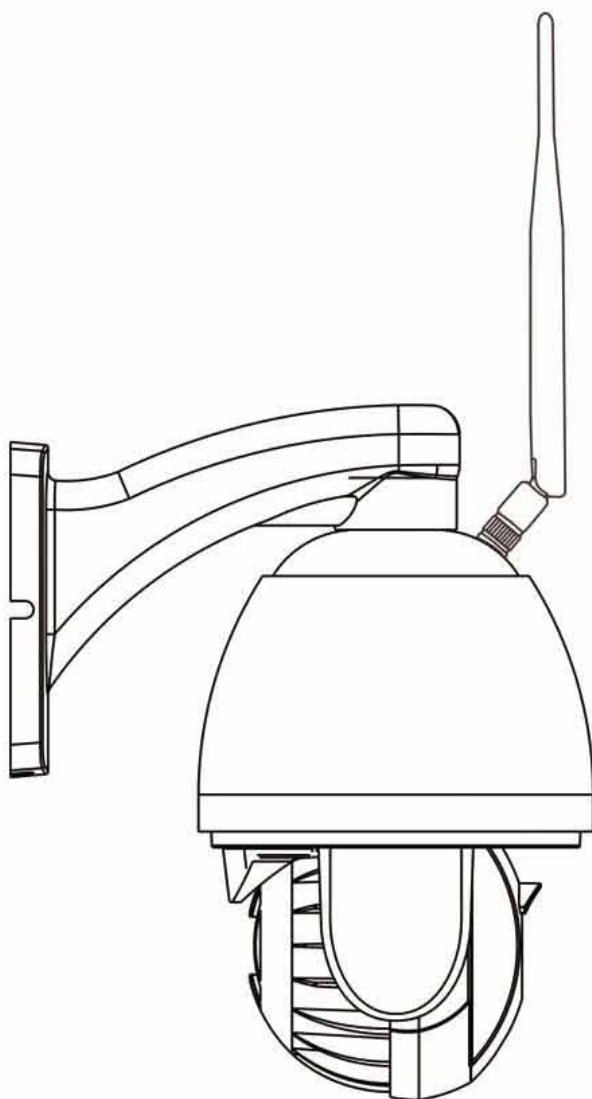


# 2BillionWiFiMiniWireless High-definition Ball Camera

Model: BT-HD20M64HX-355-WIFI-TF

## USER MANUAL



Phone's APP

Respect customer, welcome to choose our product, before using it, please be sure to read the instructions, and save the operation guide for future reference.

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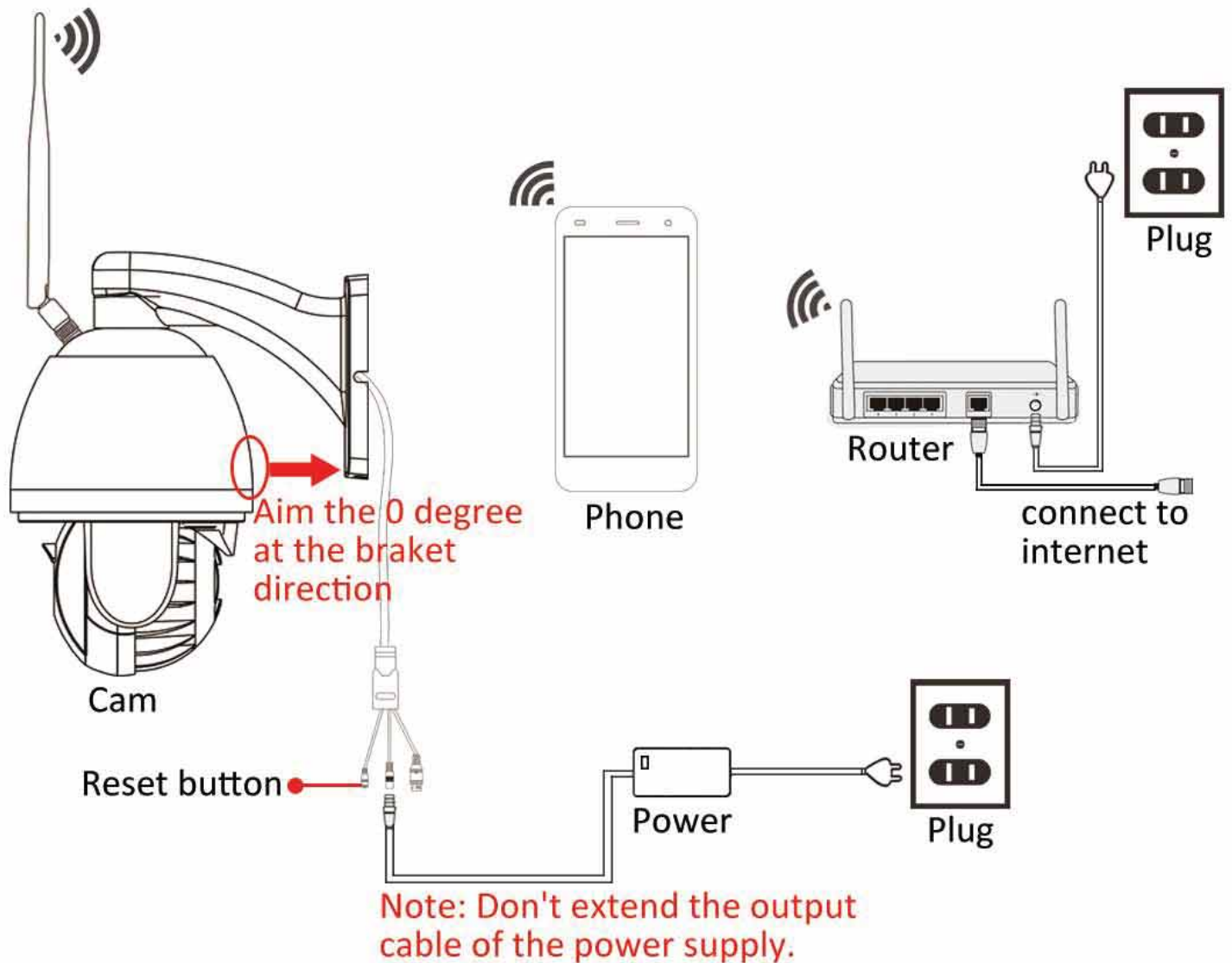
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## NOTE:

- 1.The cable end of DC 12v adapter can't be extended, otherwise will lead to power shortage, then burn out the mainboard. If install the camera outdoor, the adapter should be protected by the waterproof box.
- 2.Both ceiling and wall installation suit for indoor, but for outdoor, only wall installation is permitted, and must make sure the bracket is in right position, otherwise the water easy to enter the inside of camera.
- 3.Before install the camera, test it first. Don't mount the bracket as test the camera to avoid the screw scratch the top slot of the camera (The scratched camera will not enjoy free returns).
- 4.Please ensure that the WIFI signal strength is above 90%, if the signal is weak, please replace it with the high-powered WIFI routers or select cable connection.
- 5.For the security of your personal monitoring, after install, please timely modify the password, and remember the new password. if you forget your password, please press reset button up to 20s, it will restore to default Settings and reset the password and other related function.
- 6.The camera comes with preset cruise, which can just set at the PC APP or PC IE browser, The details please refer to Page 22.
- 7.For fully functional camera, the alarm setting can just be made in IE interface through computer, The details please refer to Page 41.
- 8.The camera comes with power supply, bracket, mounting screws, and instruction book. Some cameras will be equipped with pick-up and sound and light alarm. More detailed accessories, please contact the sales service.

# Fast connection for cellphone

## 1.Connection diagram





## 2.App installation for phones

First, ensure the phone already in the Network coverage (4g/wifi), then scan below QR code and download the "CamHi" App to install it. or you can also search "CamHi" in the APP store and install it.



The OR code of APP for Iphone/Android

### 3.The connection of Access Point

As the camera given power supply, it will automatically rotate for self-checking (up and down, left and right rotation once time). After 1 minute, The camera will generate a wifi number which initial parts are “IPCAM”. Then go to the camera WLAN setting to find this AP number IPCAM-XXXXXX, click connect(as picture 3-1), if it is in lock,  fill the password “01234567”, if it is unlock,  password is empty. (As picture 3-2), the phone already successful connect to the camera AP.





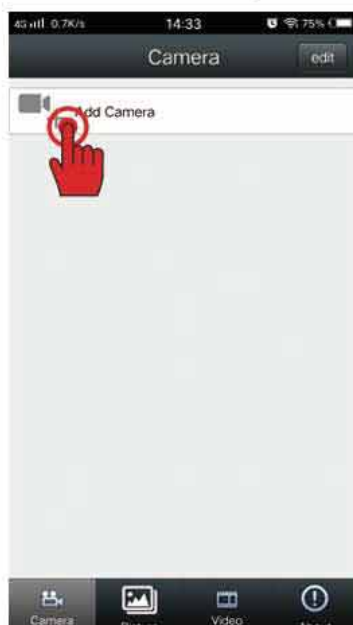
(picture 3-1)



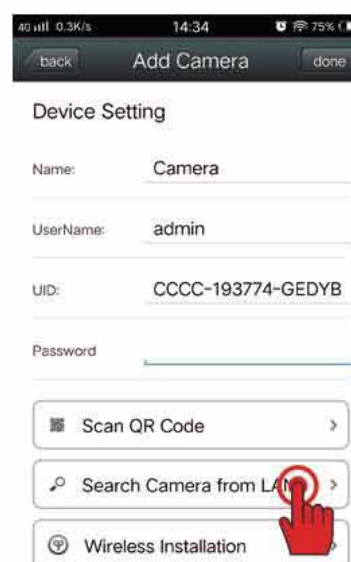
(picture 3-2)

### 4.Add camera

Open the APP “CamHi” and enter into the operation interface, click “ ” (As the picture 4-1), then click “ ”(As picture 4-2), the devices list will pop-up, choose the device you want to add.



(picture 4-1)



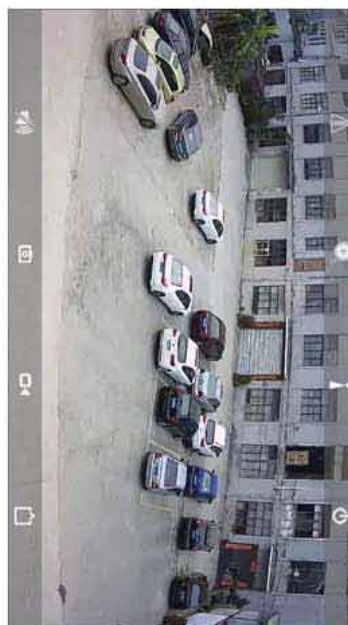
(picture 4-2)

Click the device UID, and input the default password “admin” (as picture 4-3), click “Done”, then back to the device list and click the “camera” to view the video image(As picture 4-4).

**Remark:** If the camera already connected to the internet, just fill the UID and password at the device setting directly, the camera will be added successful.



(picture 4-3)



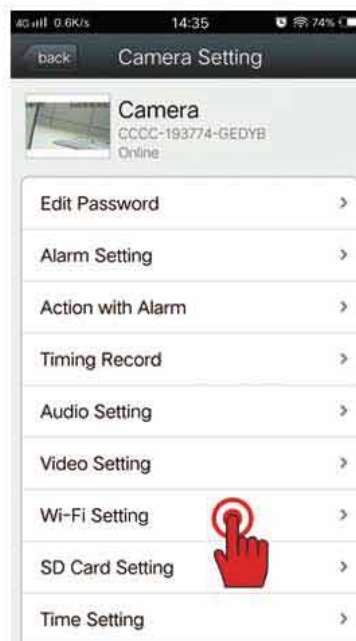
(picture 4-4)

## 5.WIFI Connection for camera

Click the “camera” enter into the main interface, then select the “Edit”-click the icon of “⚙️” --“wi-fi setting”, Please refer to picture 5-1 and picture 5-2



(picture 5-1)



(picture 5-2)

Find “WI-FI manager”(As Picture 5-3)-then choose the right wifi name you want to connect(please ensure the wifi signal above 90%, the wifi name and password in normal characters such as numbers and letters to avoid failure connection), Input the right wifi password to connect(As Picture 5-4). If the box which in front of the wifi name is ticked, means the camera already successful connected to WIFI internet.(warm prompt: the AP mode will disappear as the configuration of WIFI made, if you want to use back the AP mode, Please press the reset button to 20s to restore the camera to default.)



(picture 5-3)



(picture 5-4)

## 6.Delete Camera

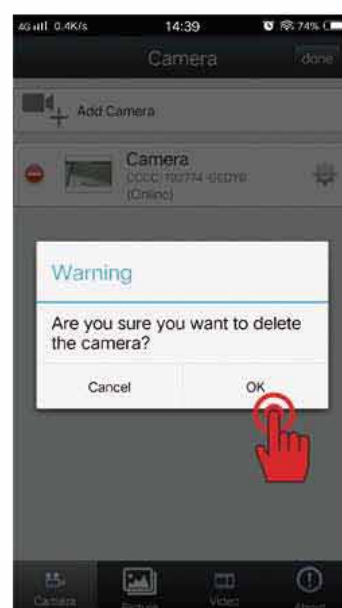
Click “camera” back to the main interface(As picture 6-1), click “Edit” then will come out a icon of delete in front of the cameras(As picture 6-2),and choose the device you want to remove, click delete and “OK”(as shown in figure 6-3).



(picture 6-1)



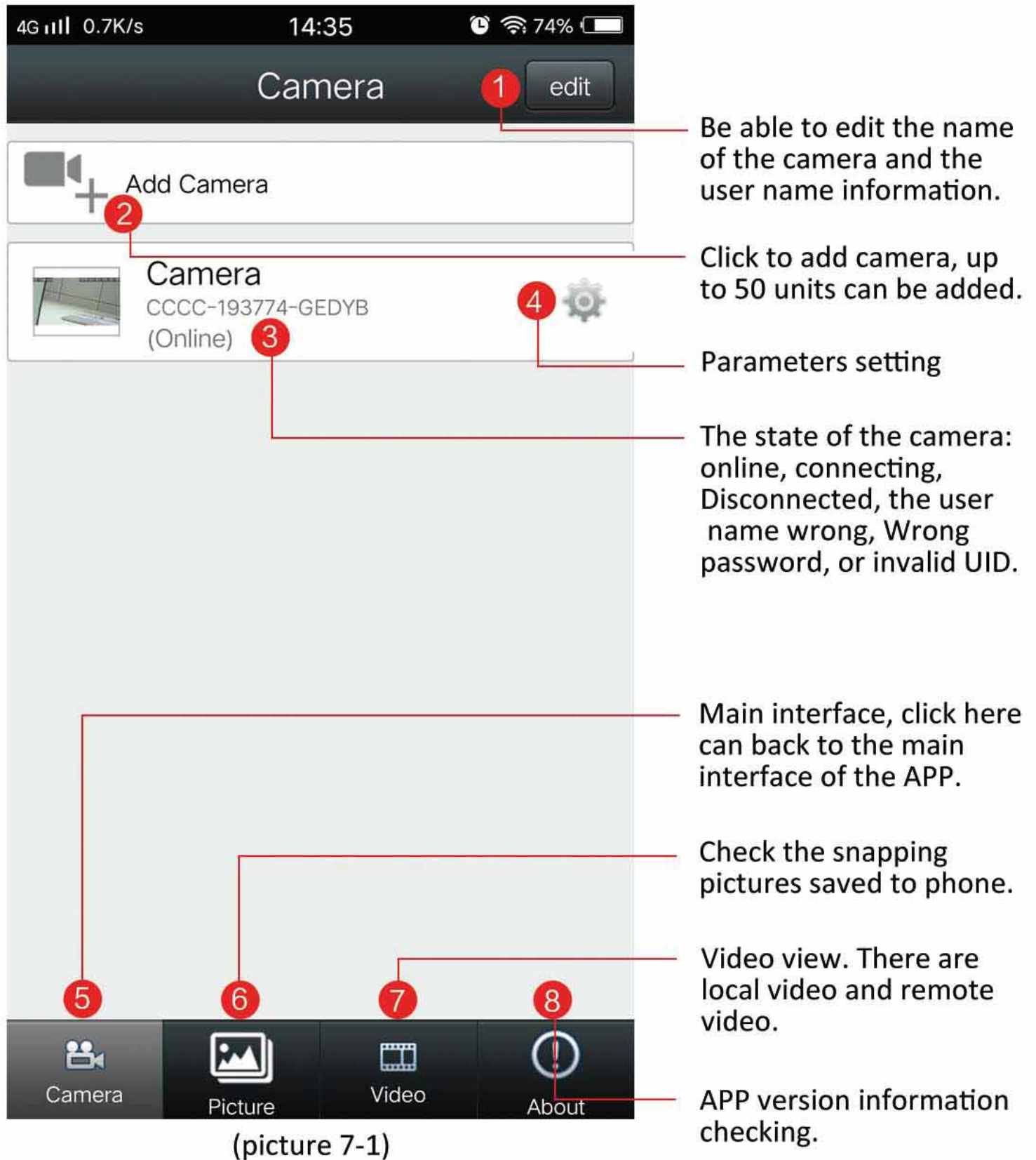
(picture 6-2)



(picture 6-3)

## 7.Functional Specification of APP

### 7-1. Interface specification

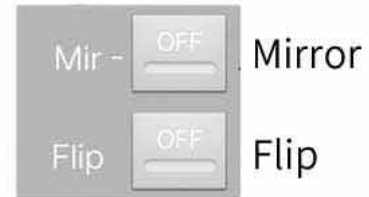


## 7-2.Video graphic interface description



(picture 7-2)

① Horizontal or vertical flip for the monitor screen.




② Here can set the zoom in/zoom out/focus in/focus out.



③ Preset setting



Phone can make 8 preset points.  
After setting, Please call it to test.

④  Exit the monitoring screen.

⑤ Voice monitor

 Speaker mute       Voice monitoring       Hold to talkback

**Warm prompt:** Default is speaker mute, need to click the icon of trumpet to open voice monitoring. And this function can just be made as the camera followed the sound pickup and microphone.

⑥ picture capture

⑦ Local Recording

Click this icon, it will turn into red color, and the screen will come to "REC..".  
The videos will save to the phone as a videos file which name is "videoRecoding".

⑧ image quality optional

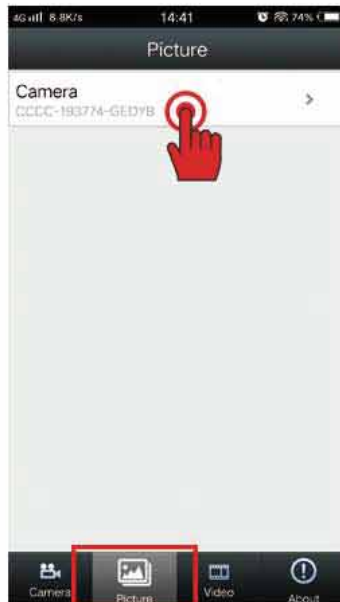


MAX: The high quality image is Priority

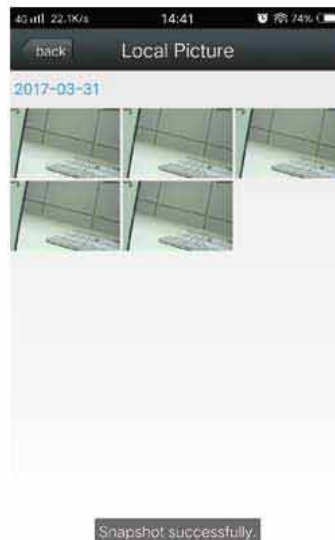
LOW: The Transmission speed is priority

### 7-3.Photo check

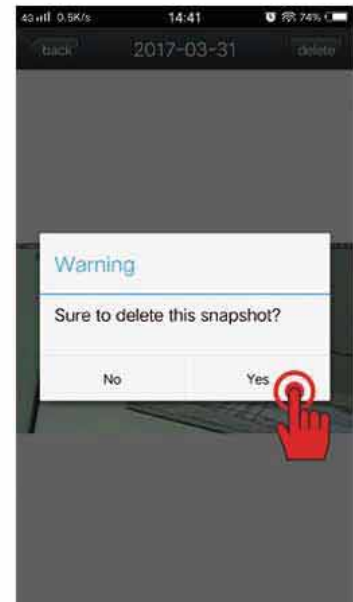
In the APP main interface, click "picture" and click the device(UID) which you want to check (as shown in figure 7-3), the Snapshots will be shown(as shown in figure 7-4). Local Snapshots saved separately in different ID, click the image will come out delete optional, then click delete and "yes" can remove the pictures(The snapshots are saved into their corresponding album).



(picture 7-3)



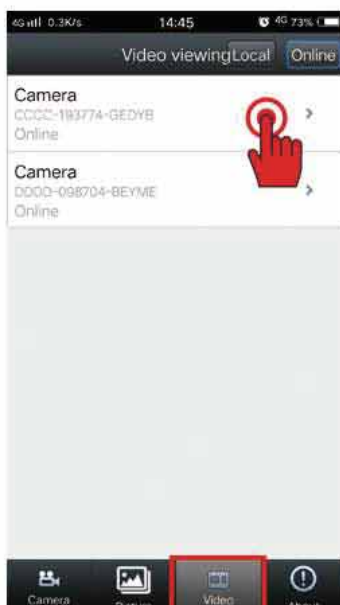
(picture 7-4)



(picture 7-5)

### 7-4.Video Viewing

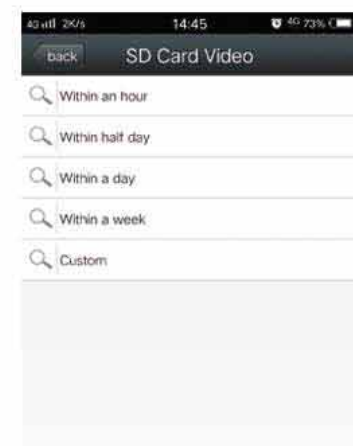
In the APP main interface, click "Video" Into "Video viewing", there are "local" and "online" videos(As picture 7-6). "Local" means the videos are stored to the phone, "online" means the videos are stored to the Build-in SD card. Before you view video, please choose the right storage path. If you want to view the data of few days ago, choose "search" to find it(As picture 7-8).



(picture 7-6)



(picture 7-7)



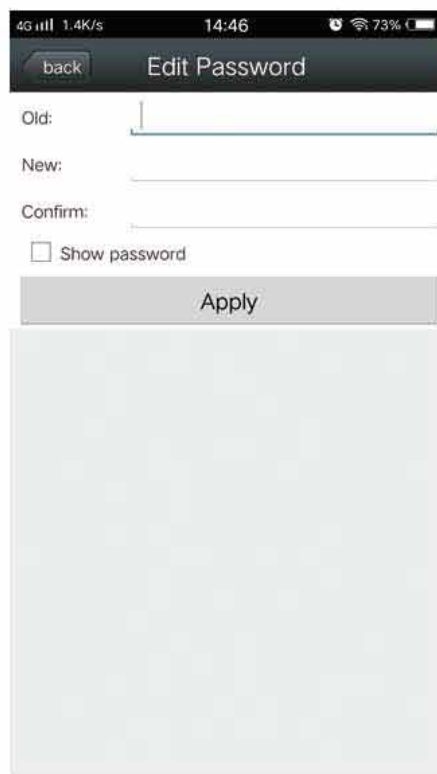
(picture 7-8)

## 8.Parameters Settings

Please refer to page 6 figure 7-1 to enter into the parameters interface

### 8-1. Edit Password

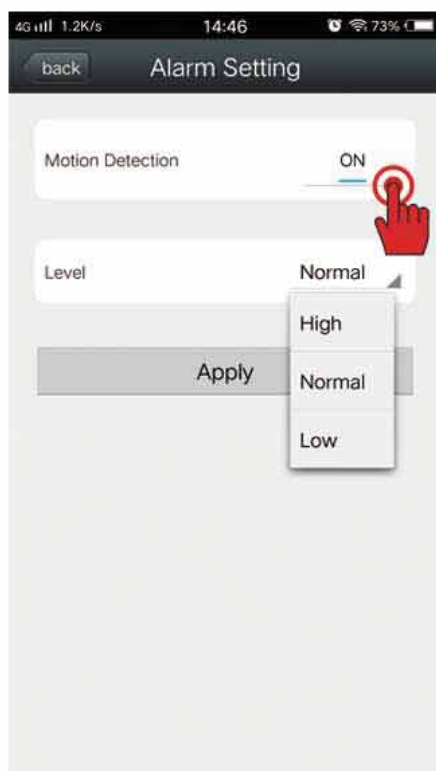
Edit password: can change the view password of each camera.



### 8-2. Alarm Setting

Motion Detection: ON/OFF optional

Level: the level of the motion detecting sensitivity, High/Normal/Low optional



## 8-3. Action with Alarm

### Alarm Notifications

“ON” means the alarm will come a push Notification

### Alarm SD REC

“ON” means the Alarm Recoding will storage to SD card.

### E-mail Alarm With pictures

“ON” means the Alarm snapshots will send to the assigned Email.

### Save pictures to FTP server

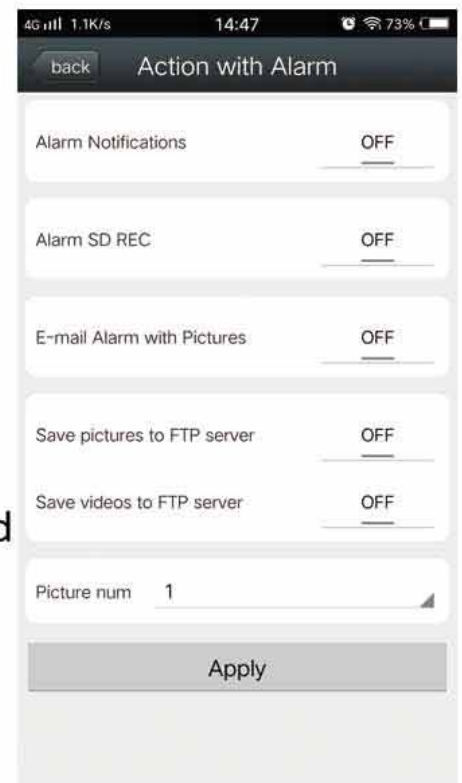
“ON” means save the alarm snapshots to the assigned FTP server.

### Save videos to FTP server

“ON” means save videos to the assigned FTP server.

### Picture Num

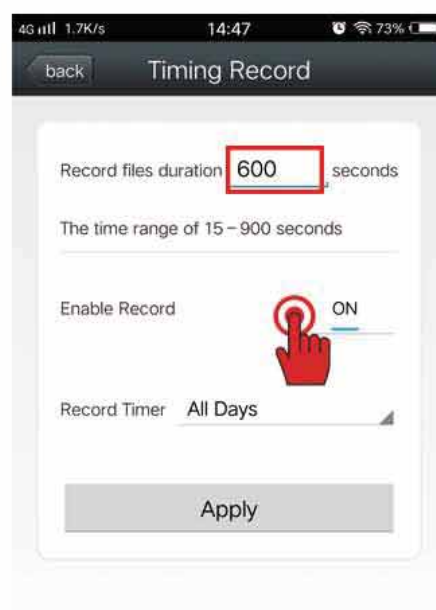
The quantity of snapshots you want to catch. 1-3pcs optional.



## 8-4. Timing Record

Record files duration: The time range of 15-900 seconds, default is 600s.

Enable Record: ON/OFF, Default is ON.



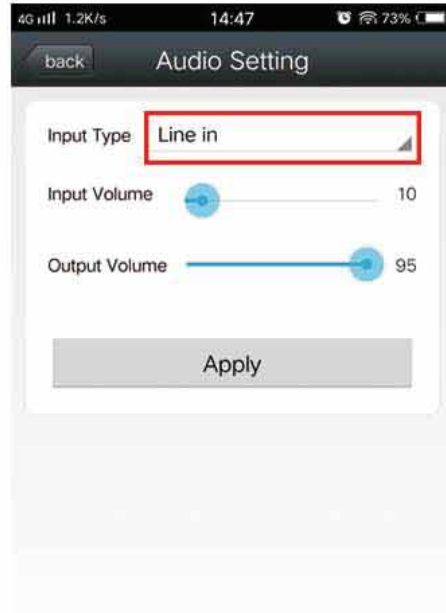
## 8-5. Audio Setting

Input Type: Line in/ Micphone optional.

Input Volume:0-100 optional.

Output Volume:0-100 optional.

Remark: Just Audio(with pick-up and speaker) camera need this feature setting.



## 8-6. Video setting

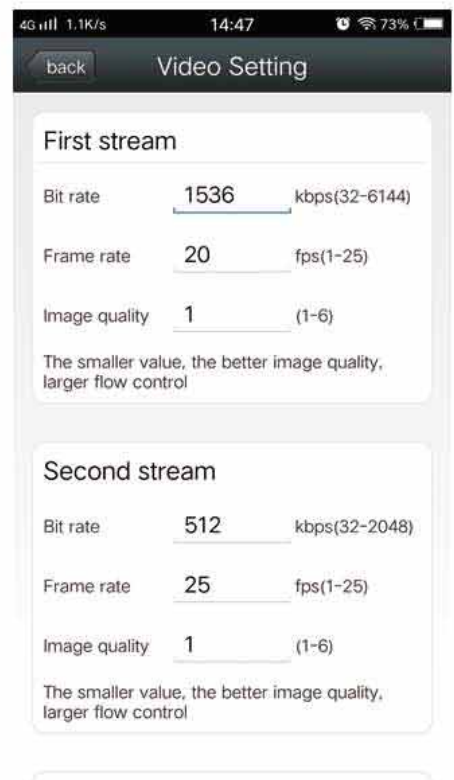
First Stream

Bit rate: The bit rate of first and second stream can be customized. Range is 32kbps~6144kbps.

Frame rate: The Frame rate of first and second stream can be customized, Range is 1fps~25fps.

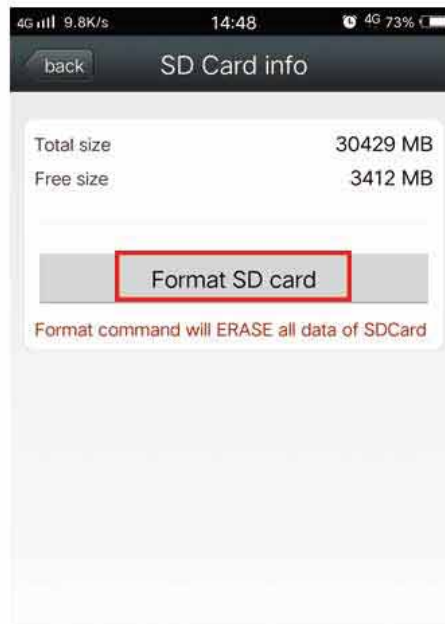
Image quality: The smaller value, the better image quality, larger flow control. 1-6 optional.

Video format: 50HZ/60HZ Optional.



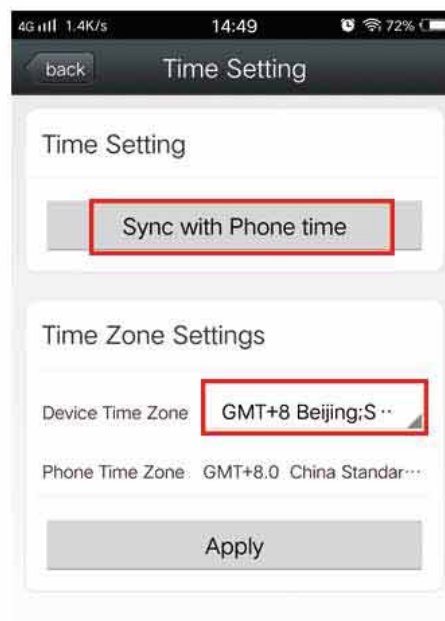
## 8-7. SD Card setting

Can obtain the total space and the available space of the SD card, and SD card format.



## 8-8. Time Setting

Enable Synchronize device time with phone time.  
After time Zone Setting successful, the device will restart.



## 8-9. Email Setting

Take QQ email for example as follow:

SMTP Server: smtp.qq.com

server Port:465

Encrypt Type: SSL

Username: fill the blank with your email address

password: the password of your email address

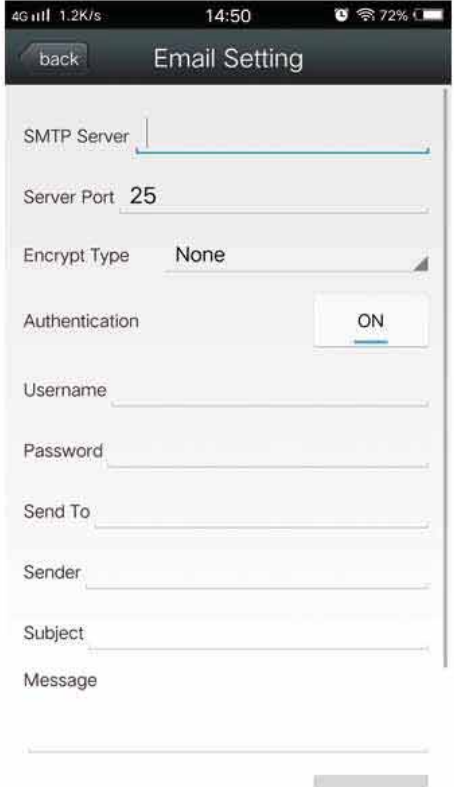
Sent To: fill this blank with the email address to receive the alarm snapshots.

Sender: Fill this blank with the Email address which send the pictures.

**Warm Prompt: All the email "username", "Send to", "Sender" can be the same Email Address. Please ensure the server of IMAP/SMTP&POP/SMTP is ON.**

Subject and Message: anything content is ok.

After completed, click "Test" to check the Email setting, if it is successful, click "Apply".



## 8-10. FTP Setting

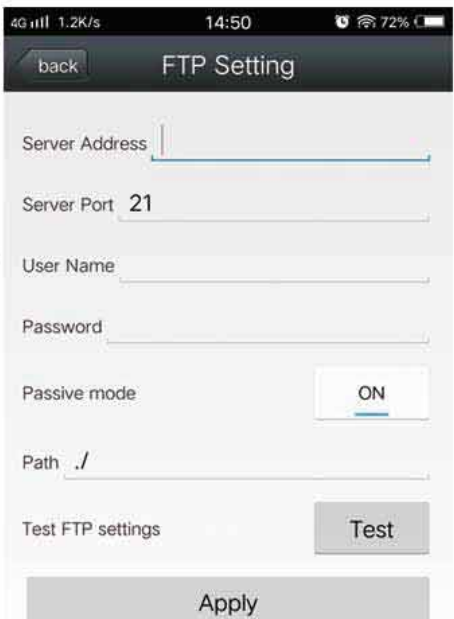
Server Address: Fill in the blank with the FTP address.

Server Port: Fill in the blank with the FTP port.

User Name: Fill the blank with the username of the FTP server.

Password: Fill the blank with the password of the FTP

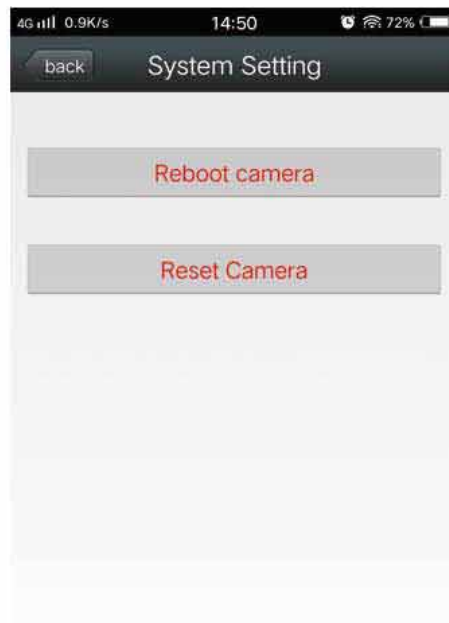
After completed, Please click "Test" to check it is successful work. Remark: This function setting is needed in the situation that FTP server already be set up.



## 8-11. System Setting

Here can restart and reset the camera, after reset the camera, all the setting will back to the default situation and the wifi need to reconfigure.

(To ensure the camera normal use, Don't reset camera casually)



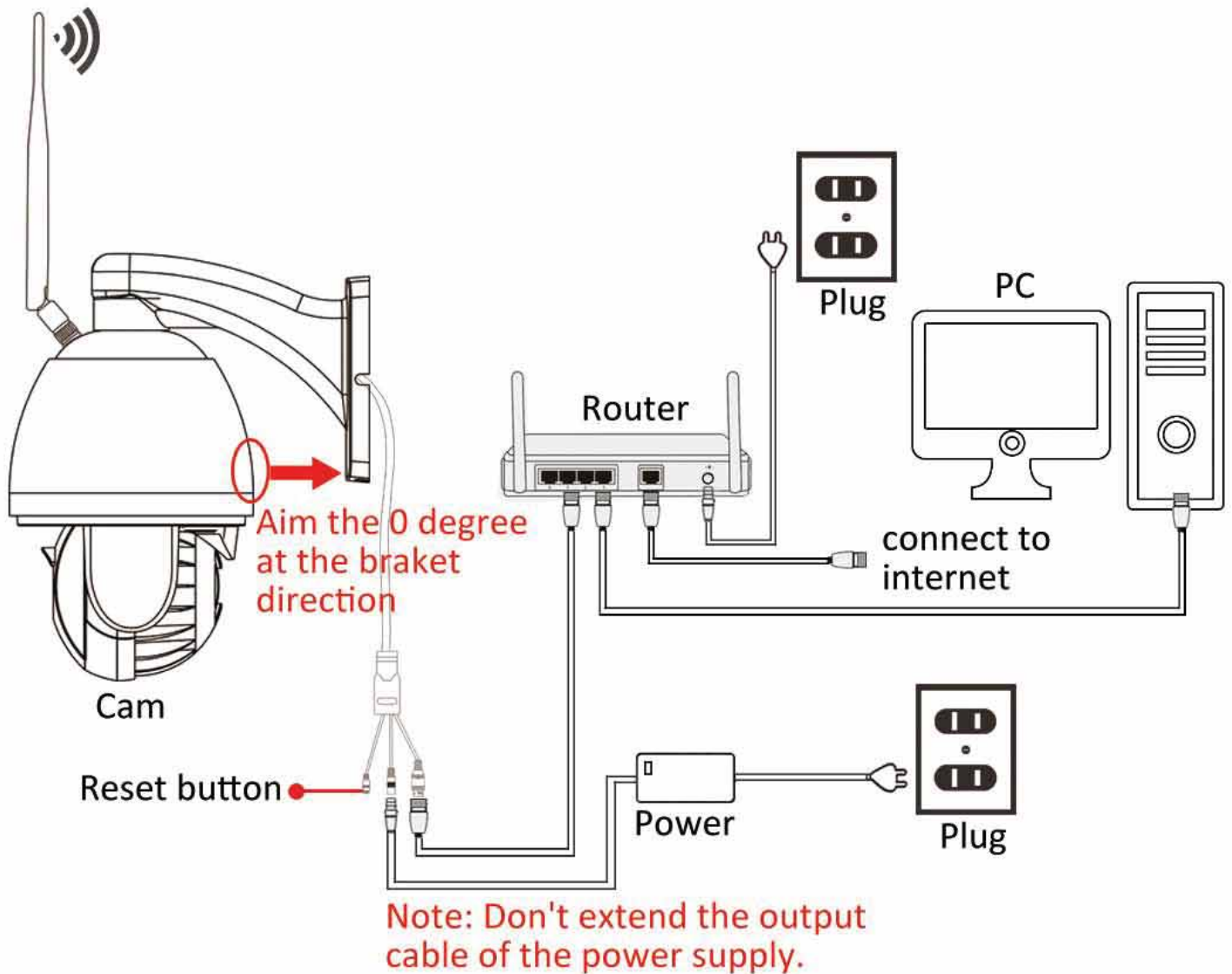
## 8-12. Device Information

Device information: including network status, user number, IP address, subnet mask, gateway, DNS, etc.



# PC App Instructions

## 1. Connection Diagram



## 2. PC App Download and installation

Open the attached CD on computer and download software or contact customer service for relevant software.

### 3. PC App Details

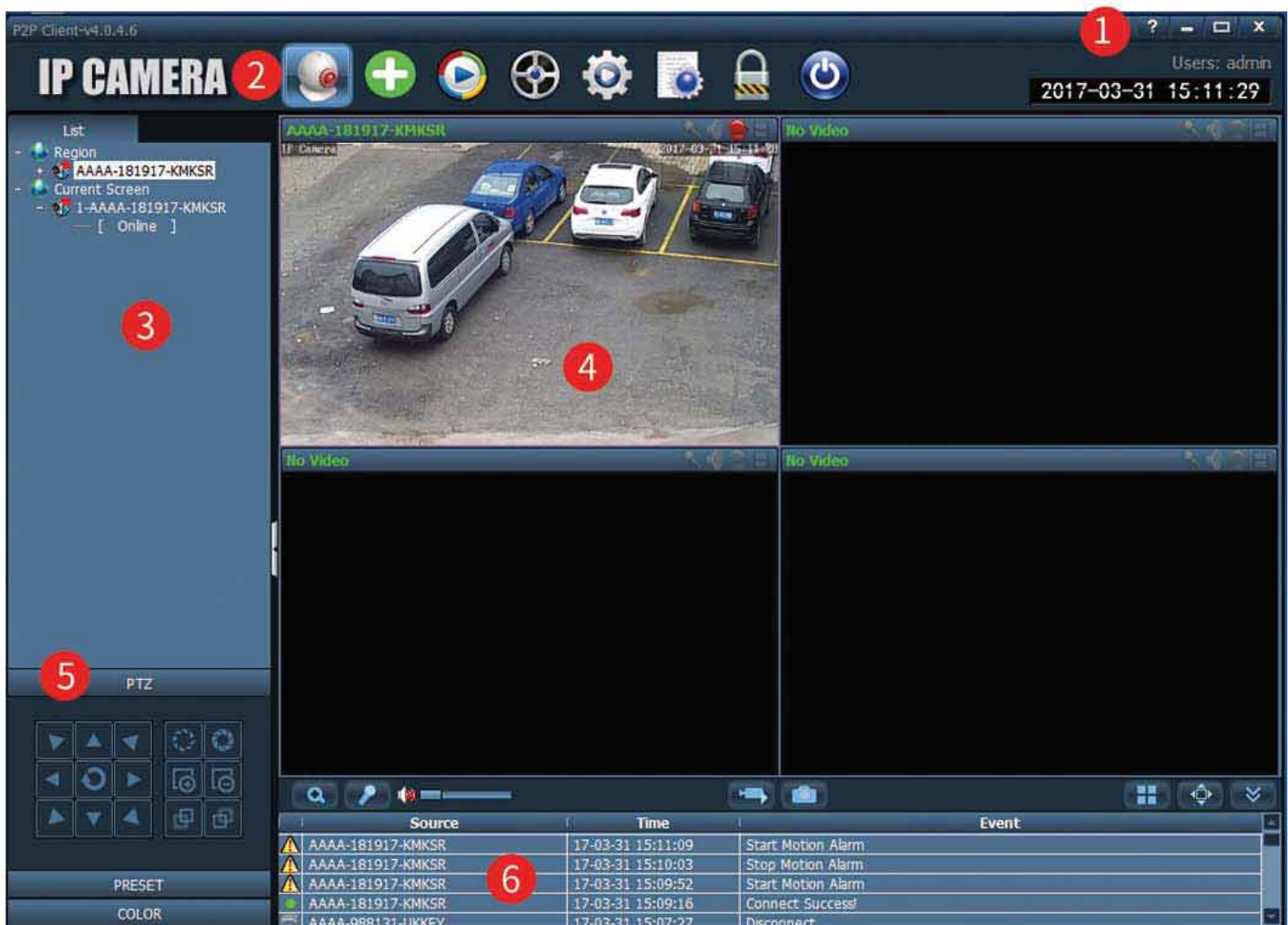
#### 3-1. Login and Introductions



【Login in】 Click the PC App, the windows come to the interface of login in, Default User Name “admin” ,password is empty, click "OK" enter into the client main interface.

Exit: Only the users with admin permissions can exit from CMS, user and guest can not exit from CMS. When exit from CMS, you need to input the authorized user name and password.





#### 3-2. Instructions of interface











The software interface as shown in above, mainly divided to 6 sections:

- |                     |               |                   |
|---------------------|---------------|-------------------|
| 1 System button bar | 2 tab bar     | 3 device list     |
| 4 realtime preview  | 5 PTZ control | 6 Alarm info list |

## System Button List

-  Help button, Click it to open CMS instruction
-  Hidden button, Click it to make the window hide into system tray
-  Maximize button, Click it the CMS window will cover full screen
-  Exit Button, Click it will pop up Exit Reminder

## Tab bar

-  Click it to preview the videos.
-  Automatically add the cameras(All the cameras will be added which share the same router)
-  Click it to replay the recording videos.
-  Click it to remote playback interface.
-  Click it to Setting interface
-  Click it to Logs operation
-  logout &Switch User
-  Exit App

## Device List






### 【Region】

According to user configuration to show area, setting ,and channel.


### 【Current Screen】

Display the connected device.

## Real-Time preview

-  Digital Zoom button, Click it then choose the screen area you want to magnify.
-  talk button. choose the device you want to talk, then click this button, As the window status bar come to  , the talk function is made succesfull .(only one device can be made talk at the same time).
-  Audio monitoring button, click it will open the audio function, As the window status bar come a  ,the audio is made successful. Click it again to close it. multiple devices can be monitored at the same time.



Record button, choose the video you want to record, then click this button, as the window status bar come a , the recording is beginning. click the button again will close recording.



Capture button, choose the image you want to capture, then click this button, the snapshots will be made. 2 photos can captured at 1 second at most.



Button of Multi-image screen, click it to choose multi-image display, 1,4,6,8,9,16 image optional.




Full screen button, click it to display the real-time preview area full screen.



The List roll of Alarm information ,Click it to show the alarm information and hidden it.

### 3-3.Device management

Before using the CMS, you need to add device and make configuration. Click , enter into device management interface.

【Region List】 When software run initially, default Region list is empty. Click “add area”button, pop-up “add area”dialog box. After filling area name, click “ok”, a subsidiary area will be made.

**Note: up to 128 areas can be added at present.**



Add area into device tree

Modify the name of selected area

Delete the selected area

Add device manually by UID number.

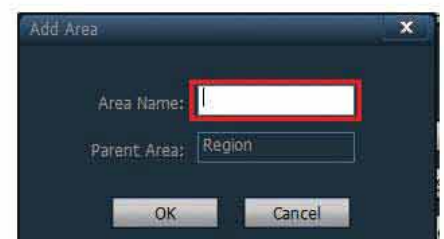
Edit device

Delete selected Device

Add the searched devices to selected area

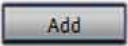
Click it to search the devices in LAN

Select all searched devices.




## Add devices

### I.Add device in LAN

Click “Search”, all the devices in LAN will come out, then tick the device needed to add from this search list, and choose the area you want to add to, click “” to add the device successful.

### II.One-Click to Add devices

Click “” button, all the device in the same LAN will be automatically added and connected.



### III. Add devices manually

Click “” will pop-up below dialog box:

UID: device UID number, every camera own a unique UID number.

Name: The name of the device, can be customized. Device name can enter 15 characters at most.(Note: After input a name, the name will instead of UID number to display in the main device region list.)

User Name: the user name of the device, default is “admin”.

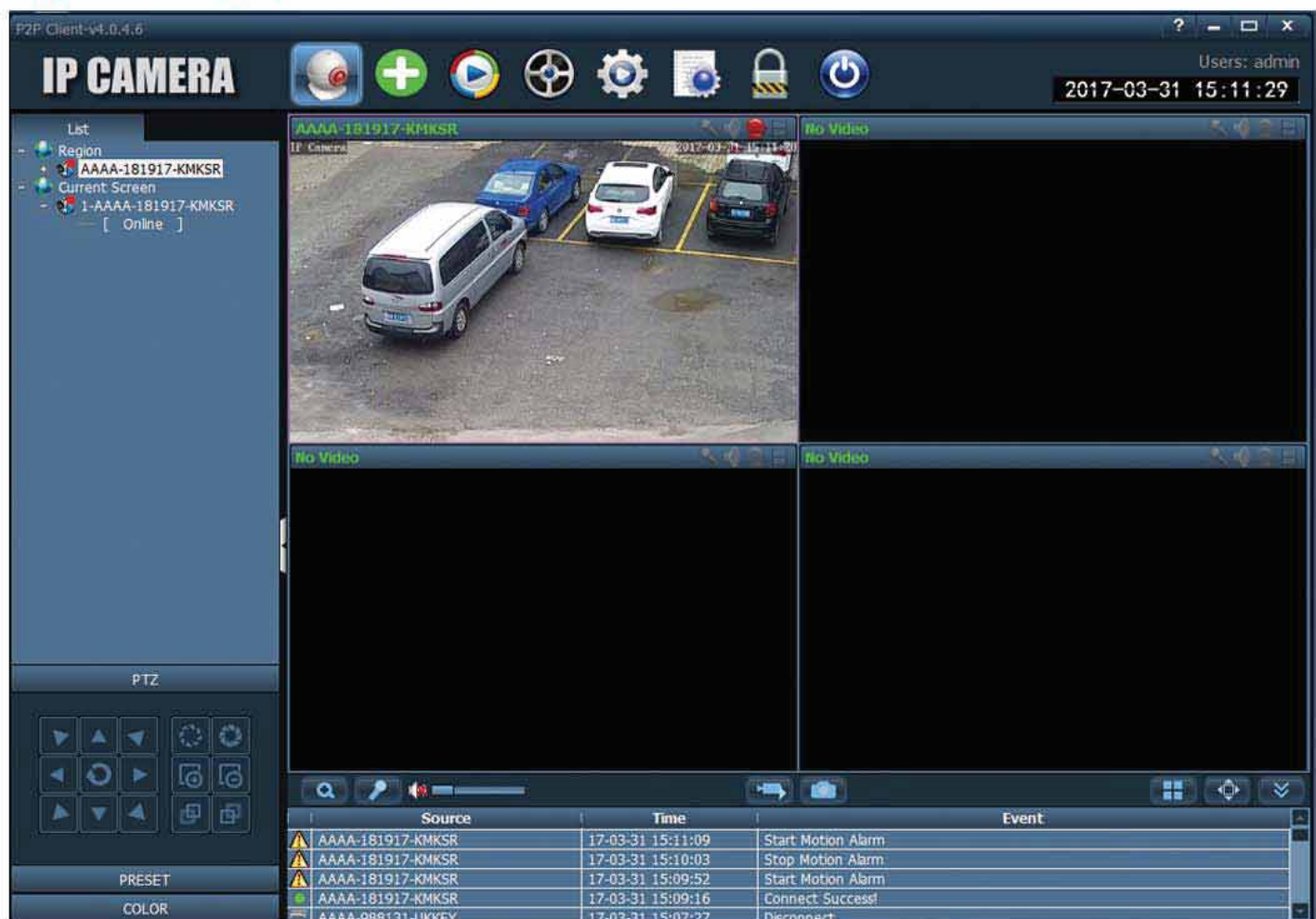
Password: The password of the device, default is “admin”

Area: The area of device belonged to, choose the area you want to add device, then click “OK” .

### 3-4. Image & videos Preview

After devices configuration, click the "preview" in the TAB bar, return to main interface, the device tree default in the form of list tree, click the "group" and "list" can switch group and list information. The default screen display is 4 image segmentation, can max up to 36 images segmentation, and 16/25/36 images optional, the more pictures, the host is corresponding to upgrade, If use 25 or 36 images, it is recommended to use more than i3 CPU with independent video card.

**Warm prompt:** if display black screen and the picture failed show, try to upgrade the graphics card driver.






#### Display image Instruction:

**No Video** It indicates this channel haven't connected any device. If connected, OSD information will be displayed.

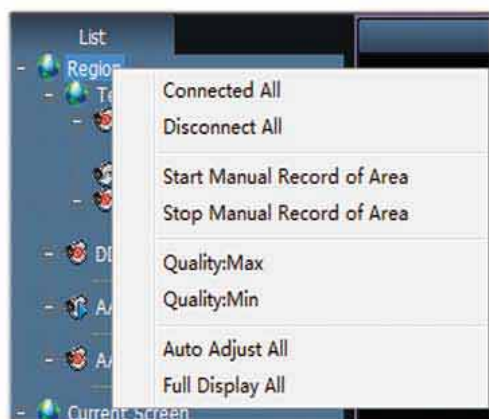
talk button, when the icon becomes , it means the talk function is on. Otherwise it is off.

Voice monitoring, when this icon becomes , it means the voice monitoring is beginning, otherwise already stopped.

videos status. When this icon becomes , it means the videos is manually recording, otherwise means this channel is recording as configuration.

Double-click the device name in list mode, or drag the UID on the window to display images. If connect successful , there is a blue triangle  show behind the UID or device name, if status as  , it means the device is not connected. If the device is showing  , means channel is video recording.

Right-click any area, it will pop-up the picture as shown below:



[connected ALL] Connect devices in selected area

[Disconnect All] Disconnect the devices in selected area

[start manual record of area] Open manual record in selected area

[stop manual record of area] stop manual record in selected area

[Quality] Max、 Middle and Min optional. according the internet environment to choose the suitable image quality.

[Auto adjust all] Adjust image display ratio automatically in select area

[Full display all] the device images display in select area as the size of segmentation picture.

**Note:** the device is still in the connection state after close the screen image display, and the videos recording keep same as before configuration.

## 3-5.PTZ control

### 3-5-1. PTZ Control

You can control PTZ rotation to eight different directions by direction key.



-  Iris enlarge button
-  Zoom in button
-  Focus in button
-  Iris shrink button.
-  Zoom out button
-  Focus in button

**Note:** Above function can just be made as the lens of camera support