

P2P PNP HD720P Wifi IP Network Bulb DVR Camera



**P2P HD720P
BULB**



**IP NETWORK
DVR CAMERA**

Key-points For Setup in Router

When in WiFi mode, bulb camera will be connected with router. To have better performance and being successfully connected with router, there are some key points must be aware :

1. Router's DHCP service must be enabled. Bulb camera depends on it to get IP address.
2. Router's SSID, must no space in between, that means format like "my ssid" is not acceptable, only acceptable "myssid"
3. Router's wireless channel, we would suggest using no. "13" (if supported, old models may not support "13", if in that case, then change to channel "11")
4. Router's security method, we would suggest using "WPA2-PSK"
5. Router's encryption method, we would suggest using "AES"

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1. Summary





1.1 Overview

It is a WiFi enabled IP Network CCTV Security Digital Video Recorder (DVR) camera, not a real lamp. This is an innovative design and being patented. The idea is very simple to use and can be used worldwide, just insert a Micro-SD card and screw-in like a bulb, turn on power, it will be auto recording. Using this device, there is no drilling holes and no cabling, just using existing bulb holder. It is no need technical background, you know how to replace a normal bulb, then you know how to install it.

Besides, you can use your mobile phones or computers remotely access it via internet, real time watching and hearing what is happening at there on your mobile phone and PC. It can be broadly used in any environments and setup by your own like home, office, factory, shopping mall, restaurant and so on.

1.2 Key Functions

	Provide true HD 720P resolution 1280x720 pixels.
	Provide two operation modes, AP mode that is point to point access. WiFi mode that is joining existing network and to be accessed outside via internet.
	Using H.264 compression, delivers high quality video and a superb compression ratio
	Onvif compatible that means video can be saved to ONVIF supported NVR machines for backup large volume video files
	Using Peer-to-Peer technology, no need setting on routers, and no need DDNS and no need IP address setting, just plug and play.
	Local storage using Micro-SD card, accepting 2GB-32GB, 32GB card can store 12 days video files, recommend using CLASS 10 card.
	When there is motion detected, it will trigger alarms by email alert or push warning message to mobile phone.

	When there is motion detected, email alert can send 3 pictures to your dedicated email account
	Able to hear sound from bulb camera on mobile phones,PCs and MAC and so on.
	Built-in IR-cut, no color casting
	Provide clear image at night (in black and white)

1.3 Specifications

System	Embedded Linux OS
	Using industrial grade TI solution CPU, TIDM365
Image Sensor	1/4" CMOS progressive sensor,1.0M pixels
Video	H.264 Compression Format
	Resolution : 720P (1280*720) / VGA (640*480) / QVGA(320*240)
	Frame Rate : 0 – 25 FPS
	Data Rate : 32Kbps – 2.0M Kbps
	Light intensity, contrast ratio, saturation level are adjustable
Network	Using Peer to Peer (P2P) technology, no need configuration and no DDNS
	Support two modes, AP mode and WiFi mode : AP mode – For local usage, no need internet remote access and no need to connect to wifi router WiFi mode – Connect to wifi router and to be accessed via internet
	Wi-Fi compliant with wireless standards IEEE 802.11b/g/n
	Support both WEP & WPA WPA2 encryption for wireless
	Wireless transmission distance in open area around 100 meters
	Online remote live view and control via iPhones/iPad/Android Smart Phones/Wins PC/Notepads/Notebooks/MAC
Watch	Free client software for mobile phones and computers
	Its software can display max. 64 bulbs
	Simple installation, just download and launch it. No configuration and no setup at all.

Storage	Local storage, support Micro-SD card, 2GB-32GB (class10 card recommended)
	32GB card can store 12days video by using VGA(640*480) format
	Support looping and motion detection recording
	Recorded files can be remotely downloaded to computer or mobile phone for viewing
	Support client side recording, on PC or mobile phones
Alarm	Motion detection triggering email alert
	Motion detection triggering mobile phone push alert
Night Vision	Using 2pcs of 3rd generation LED ARRAY, more longer life 3-5yrs and more brighter Night vision distance about 20 meters
LENs	3.6mm, 90 degree viewing angle, 3.0M pixels
Min.Illumination	0.1 Lux (IR Off), 0 Lux (IR ON)
IR-CUT	Built in IR-CUT, no color cast in day, clearer images at night
Audio	ADPCM Format
	Built-in microphone
	Could hear sound by Client software
Motion Detection	Motion detection distance 5 meters
Adapters	E27/E26/B22 optional
Voltage	Worldwide usage, AC 100-250V
Power Consumption	< 5W
Operation Temp.	From -20 to 50°C
Weight	Gross: 300g with box
Packaging size	85*85*175mm (L*W*H)

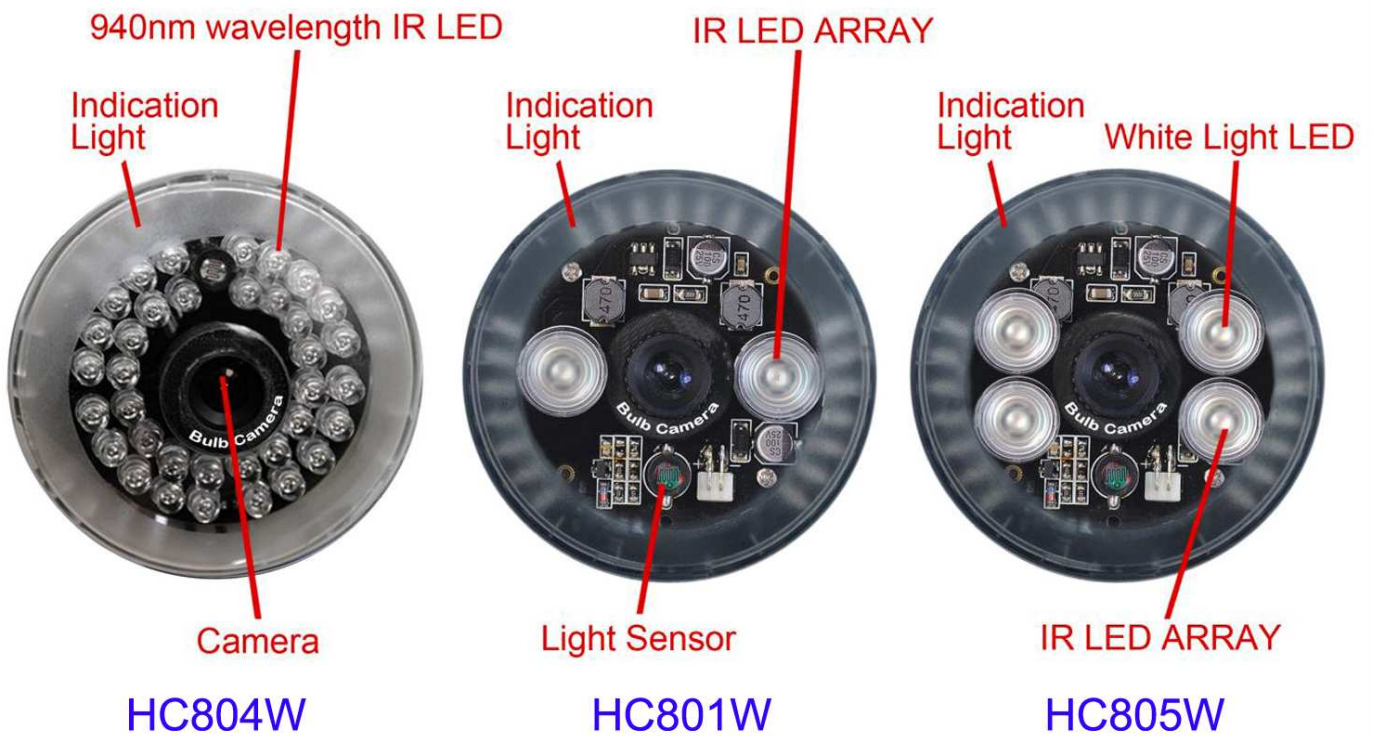
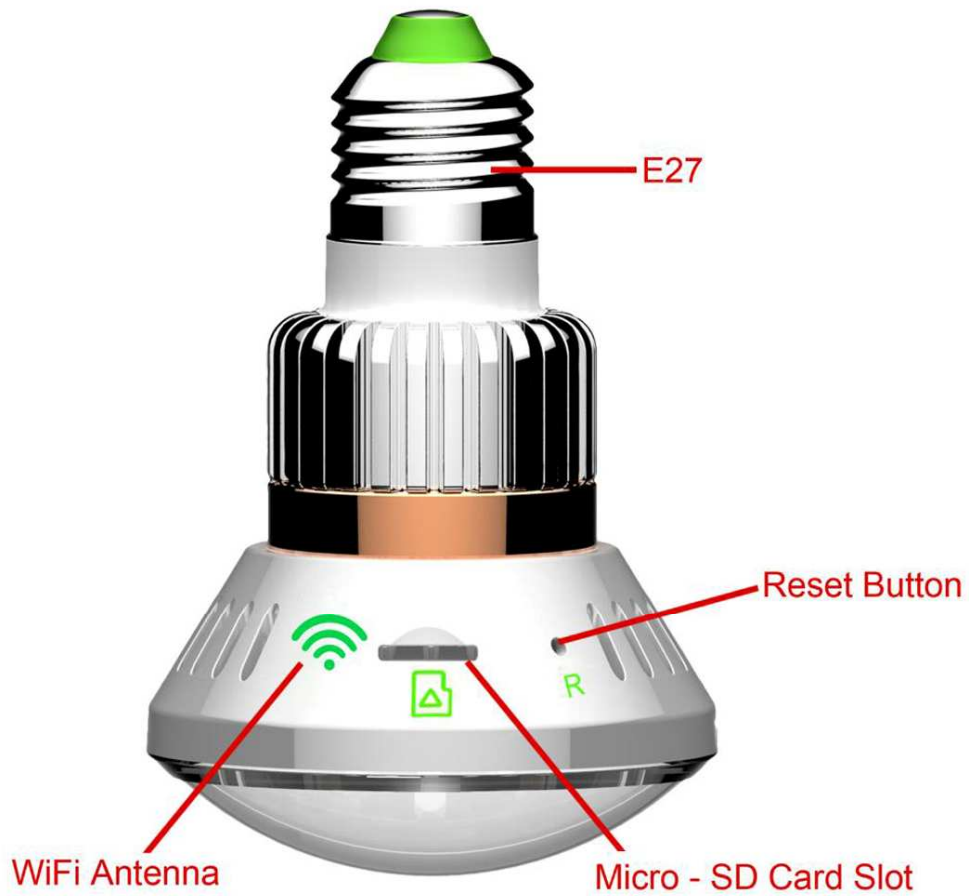
1.4 Package Content

- 1 x Bulb WiFi IP Network DVR Camera (*not include memory card*)
- 1 x CD (*user manuals inside*)
- 1 x Micro-SD card reader (*plug to computer for viewing videos if needed*)
- 1 x Reset Pin (*manually reset the camera*)
- 1 x Reset Remote Control (*remotely reset the camera or control light for HC805W*)




1.5 Attention

1. Before replacing the camera, please ensure the power is OFF and the circuit voltage is within the operation range (100 – 250V AC)
2. Please hold the plastic enclosure of the camera during installation or removal to ensure safety
3. If camera running for more than 2hrs with IR light On, the plastic case will be little bit warm that is normal, and the metal part will be warm too. But when IR light off, it will cool down quickly.

2. Product Layout



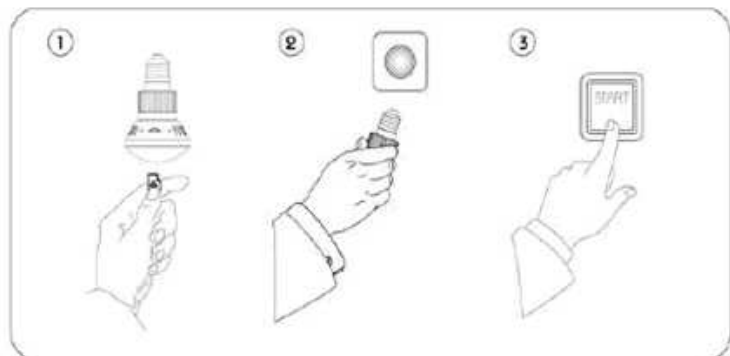
Buttons

Button	Function	Picture
Micro-SD card slot	For inserting Micro-SD card, accepting 2GB-32GB, recommend CLASS 10 card	
Reset	Using reset pin, press and hold for 10 seconds, device will be reset to factory default mode(AP mode) Or Press reset button on remote control once and hearing 10 beeps, device will be reset to factory default mode (AP mode)	 

3. How to install



Camera upward direction is at same direction as Micro-SD slot



1. Insert a Micro SD card (2GB-32GB, format it for first time usage) into the camera card-slot Before screw-in the camera, ensure the socket power is off and the voltage is within the

operation range (AC 100 – 250V)

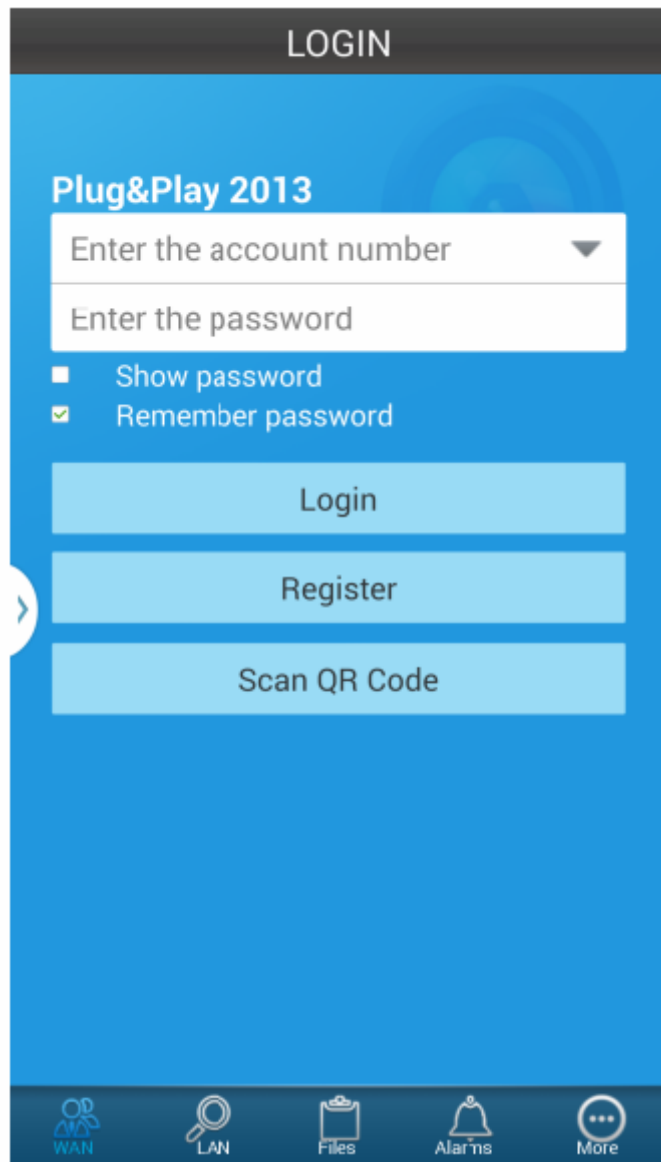
2. Screw-in the camera into a bulb holder like a bulb

3. Turn on power

4. Client Software Installation

4.1 Andriod Smart Phones

Download at <http://www.bulbcam.net/download/bulbcam.apk>



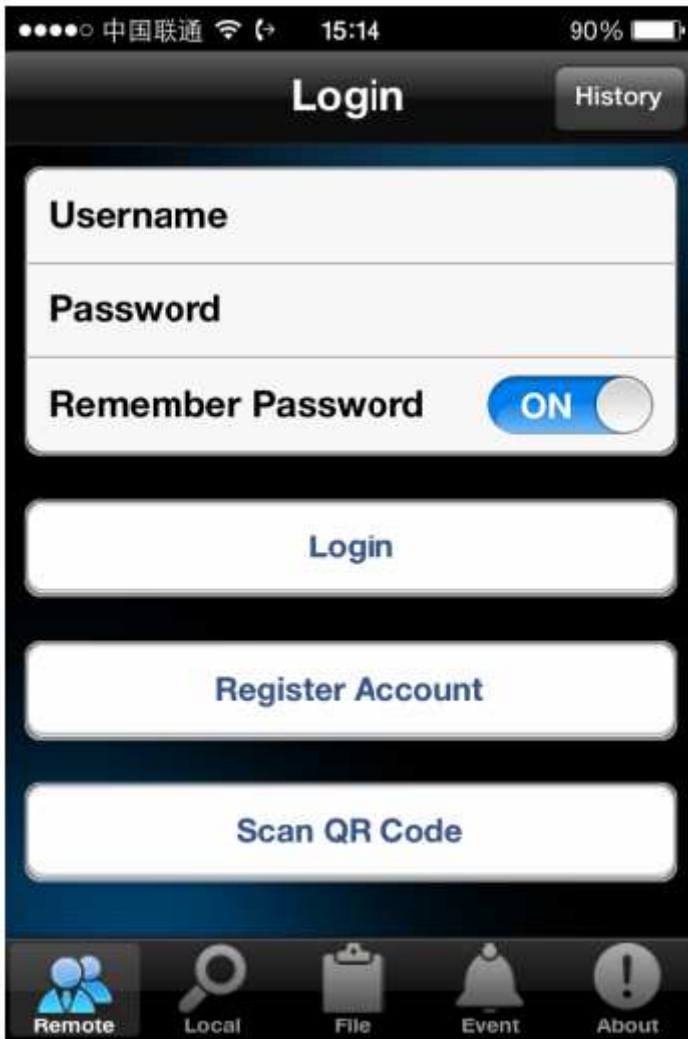
Software name : BulbCam

4.2 iPhone /iPad

Scan to install



Or search “BulbCam” in APP Store and install it



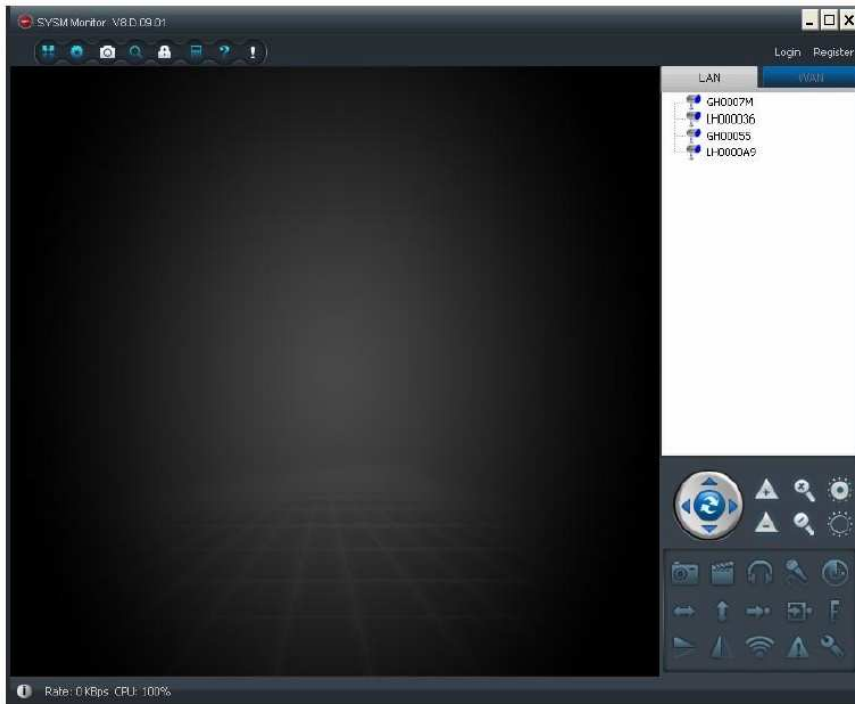
Software name : BulbCam

4.3 Win PC

Download it from <http://www.bulbcam.net/download/bulbcam.zip>

Unzip the file

Click “bulb cam.exe” to install it



Software name: BulbCam

4.4 MAC

Software name : BulbCam

Download it from <http://www.bulbcam.net/download/bulbcam.dmg>

Install it

5. Operation Mode

This device supports two operation modes.

Mode Name	Function
AP Mode (Point-to-Point)	It is the default mode, Mobile phones or PCs can directly connect with bulb camera using WiFi feature provided by bulb camera itself, so also called point-to-point connection. In any stage, pressing RESET button, will go back to this mode.
WiFi Mode	Using WiFi feature provided by exiting WiFi router and that has been connected to internet, setting bulb camera connect to the router. Then the bulb camera can be accessed via internet.

Remark :

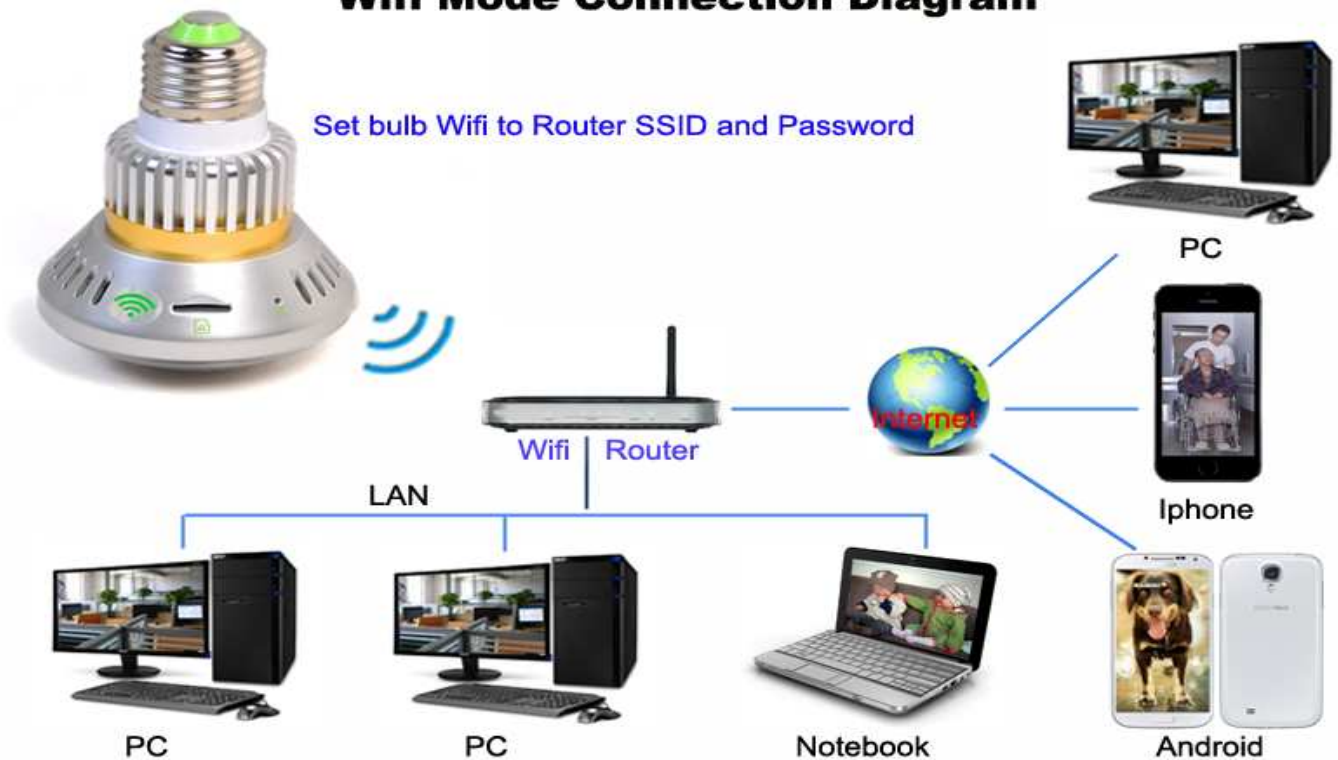
1. Computer with WiFi feature can also be used to set AP mode or WiFi mode in case your mobile phones failure. If no Computer wifi device, you can be found in our accessory list.
2. Sample pictures are from iPhone, but all functions are the same on other devices.

3. Different connection Diagrams are demonstrated separately.

AP Mode(Point-Point) Connection Diagram



Wifi Mode Connection Diagram



5.1 AP Mode (point-to-point)

It is known as a point-to-point connection and the bulb camera is in this mode by default. Bulb camera has its own SSID and password for watch devices (mobile phones, PC and so on) to connect to it.

Search Bulb camera in watch devices setting WiFi section

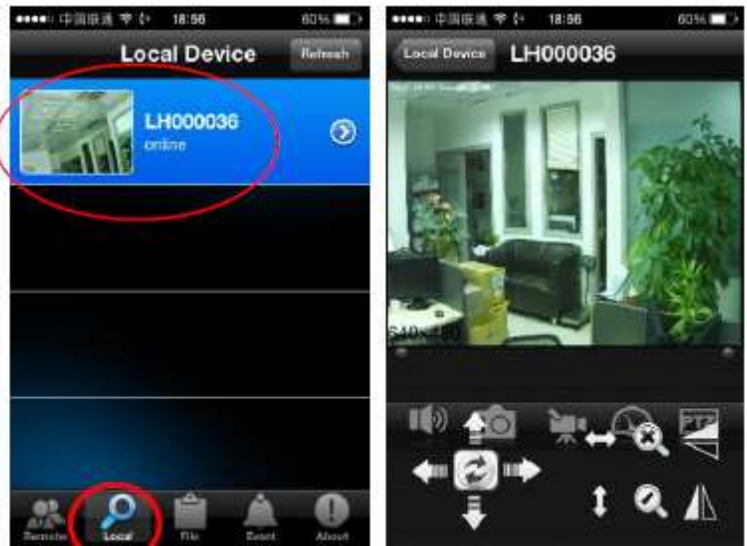


Select SSID same as device ID, and key in Password

SSID : LH0000xxx
Pwd. : 88888
(stick at back of packing box)

Launch installed bulb client software in watch devices

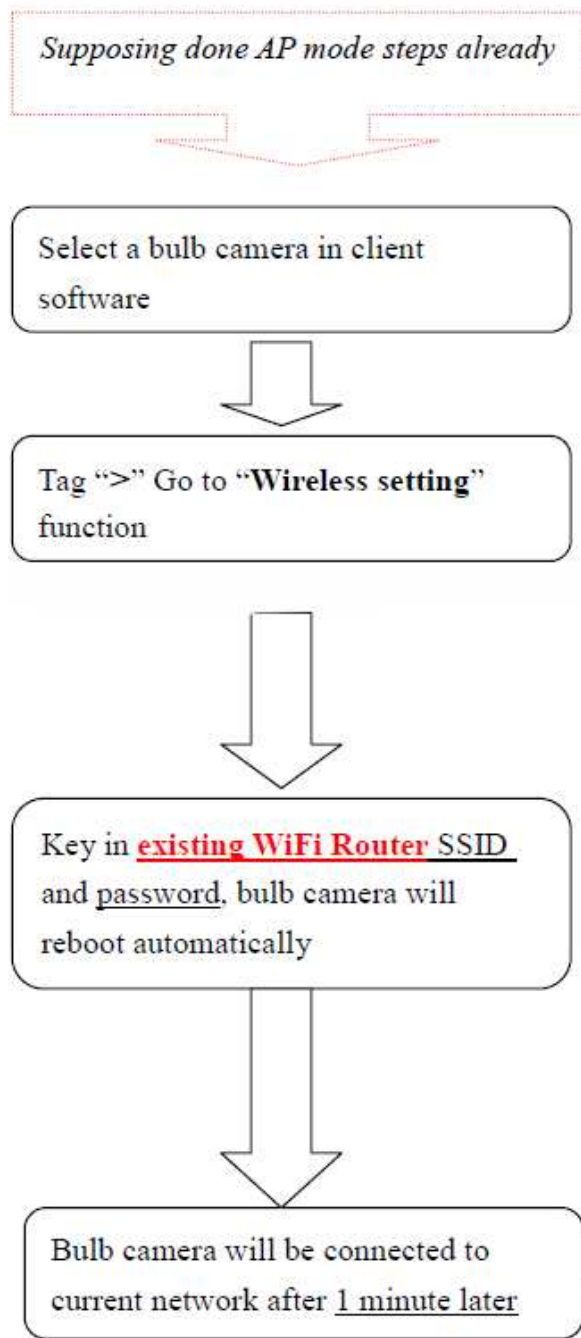
Tap "Local" or "LAN", then tap device id to watch



5.2 WiFi Mode (Internet Access)

It is joining existing WiFi network, let connected watch devices (Andriod smartphone/ iphone/ ipad/ PC/MAC/Notepad..) over the network to access it. If the existing WiFi network is connected to internet, then the bulb camera can be accessed outside. The action is

transforming from AP mode to Wifi mode.



Pictures from iPhone

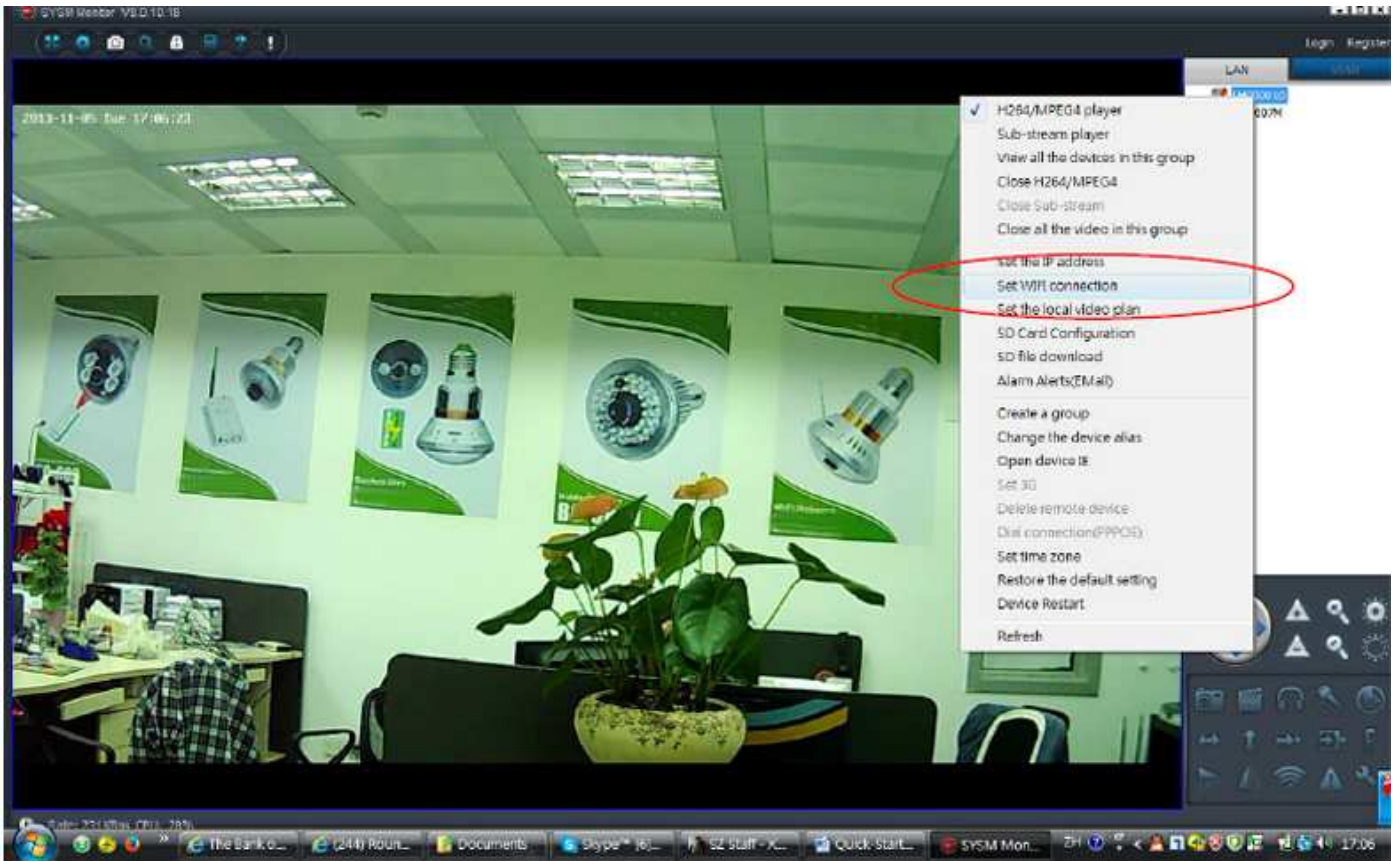


Press **RESET** button (if wrong SSID or PWD entered, or not found after 2 mins),back to **AP mode repeat again**

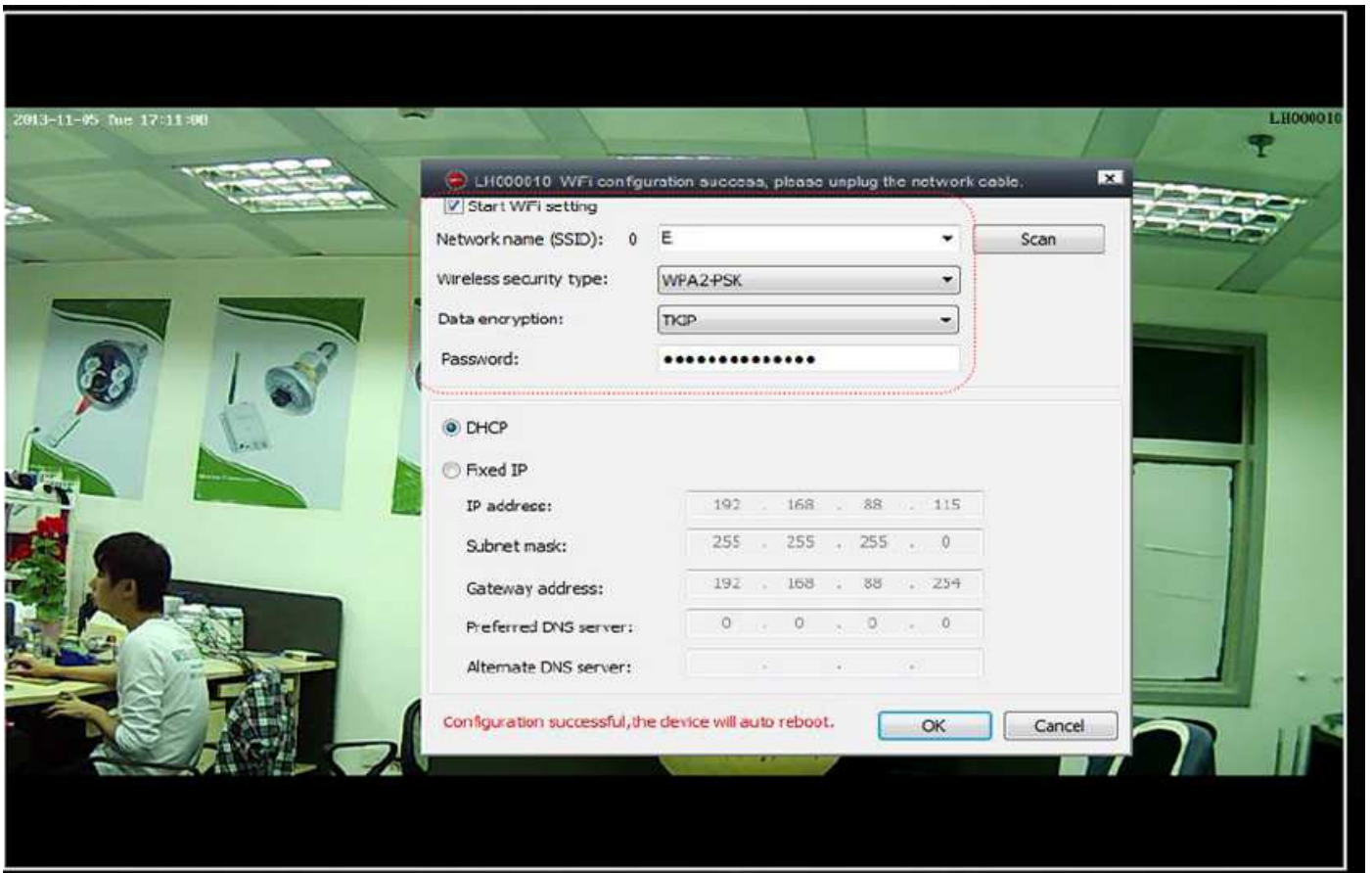
5.3 On PC, Change to WiFi Mode

If your mobile phone is not available, you can also use computer changing WiFi setting. The steps are :

Select a bulb device ID in Local section, click right hand mouse button, select "Set WiFi Connection"



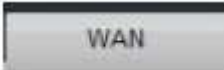



Manually typing **SSID**, select Wireless security type “**WPA2-PSK**”, select Data Encryption “**TKIP**”, manually type **password**. (SSID and password are case sensitive, must be 100% match)



6. Online watch

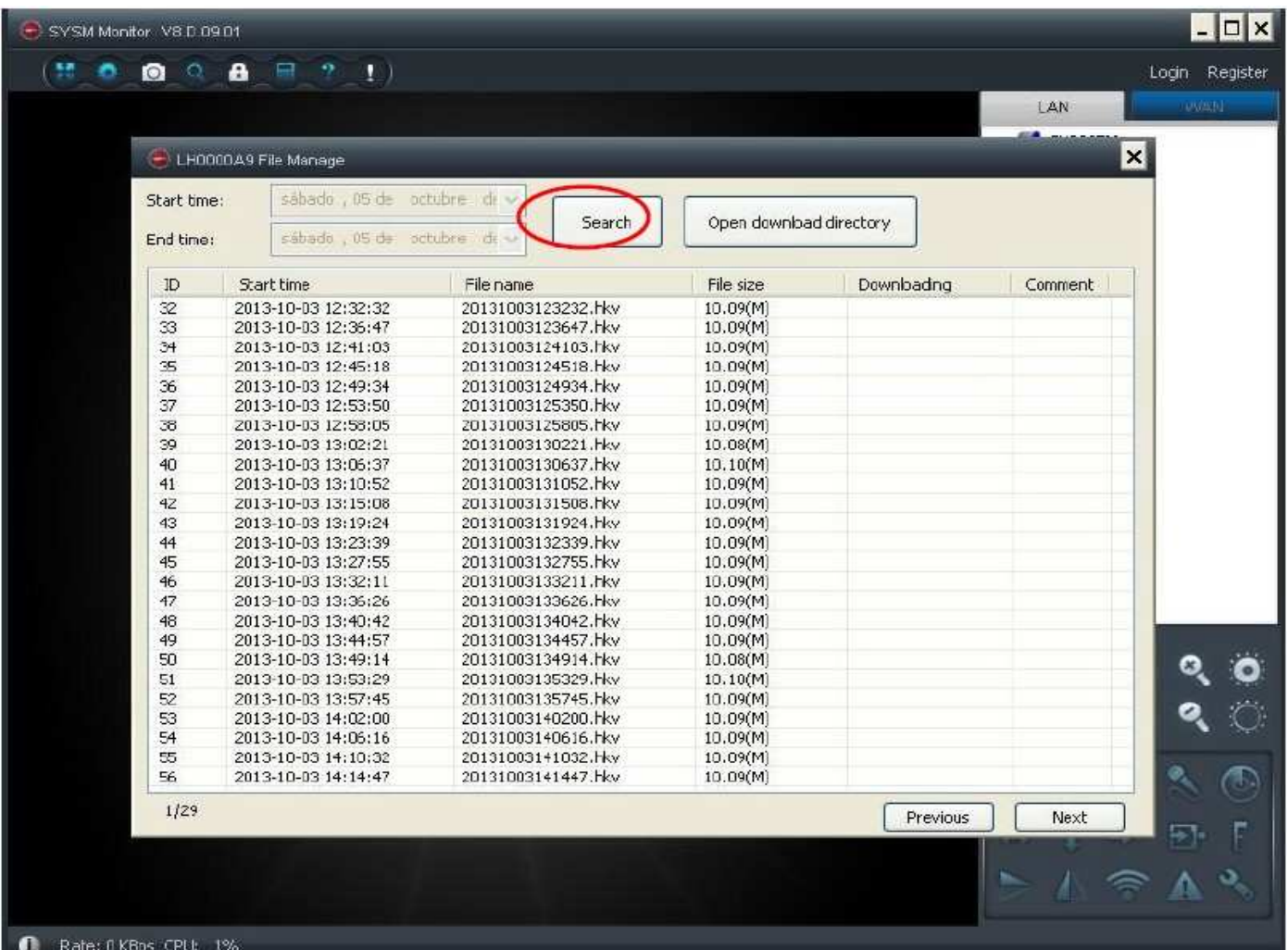
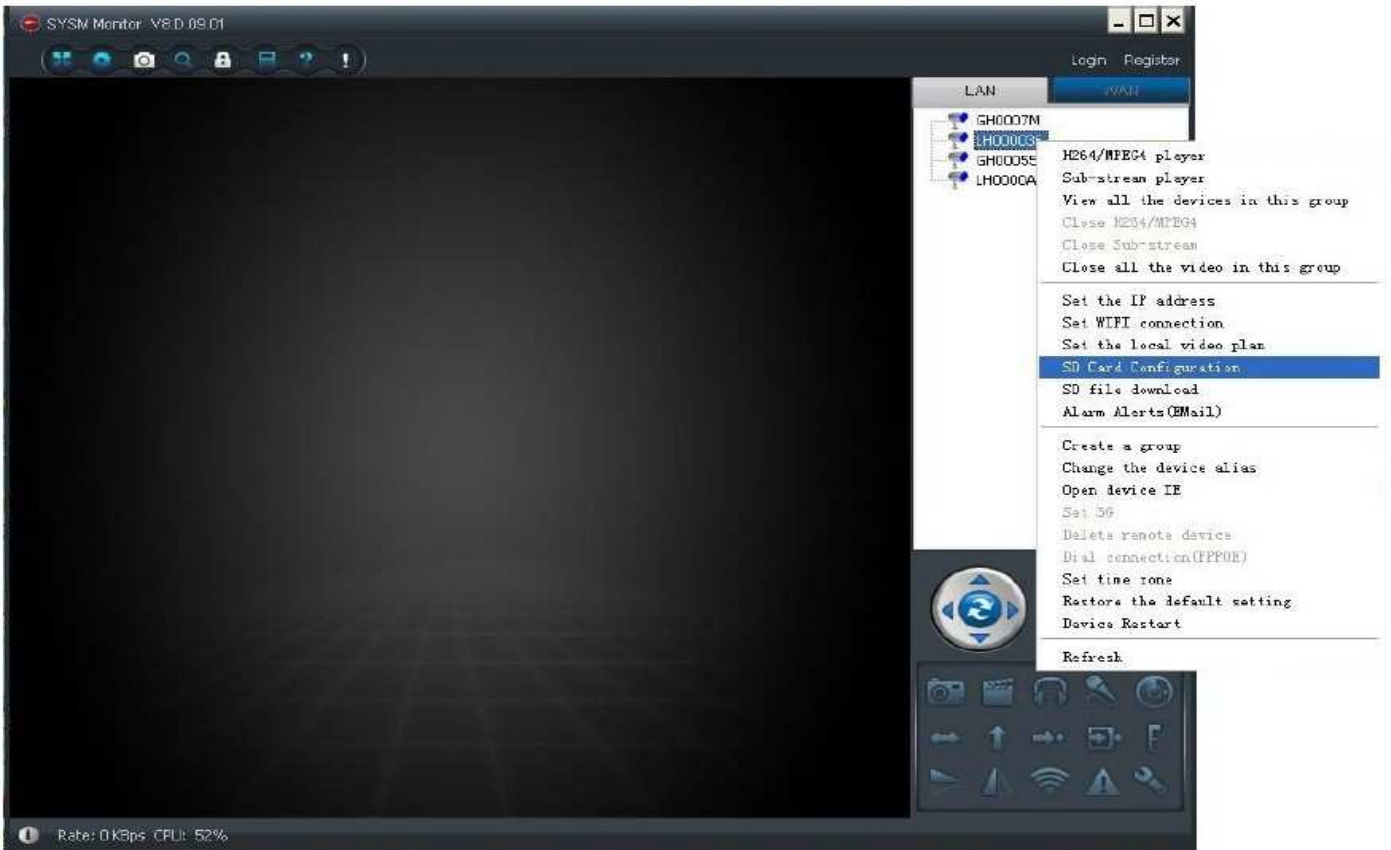
There are two viewing types, they can be selected at the first page of client software. Select which type to use, and then click/tag the device ID in list to viewing it.

Watch Types	Description
LAN / Local  PC  Phone	Means if you are in house or office, and the bulb camera is at the same local network or point to point network. Then you can use Local/Lan type to watch online. No need to login account, but you can use setting watching passwords to prevent other accessing it. This can save your network usage and save money access via internet. And the speed is much faster because it is in local lan.
WAN / Remote  PC  Phone	Means you are not in local area network and have to use internet as the media to access the bulb camera (you are outside). It requires to login an account first before viewing. The default administrator account [Login : device ID (LH0000xx), password: 123456] has been given. But you can create other accounts and add other bulb cameras into it as a central management account.

7. Download recorded video

If a micro-SD card has been placed inside a bulb wifi dvr camera, when it is power on, it will auto record video by itself. To preview the content of Micro-SD card, you can download recorded video files from bulb camera to your computer by using the function "SD File Download" in PC client software.

Select a bulb camera in list -> click right hand mouse button -> select "SD File Download" -> Click "Search" ->Click on a file to download -> when download done, click to preview



8. Set Alarms

There are two alarm types, Email Alert and Push Message Alert (on Mobile phone). But these alarms are basing on Motion Detection, when a motion is detected, it will trigger these functions.

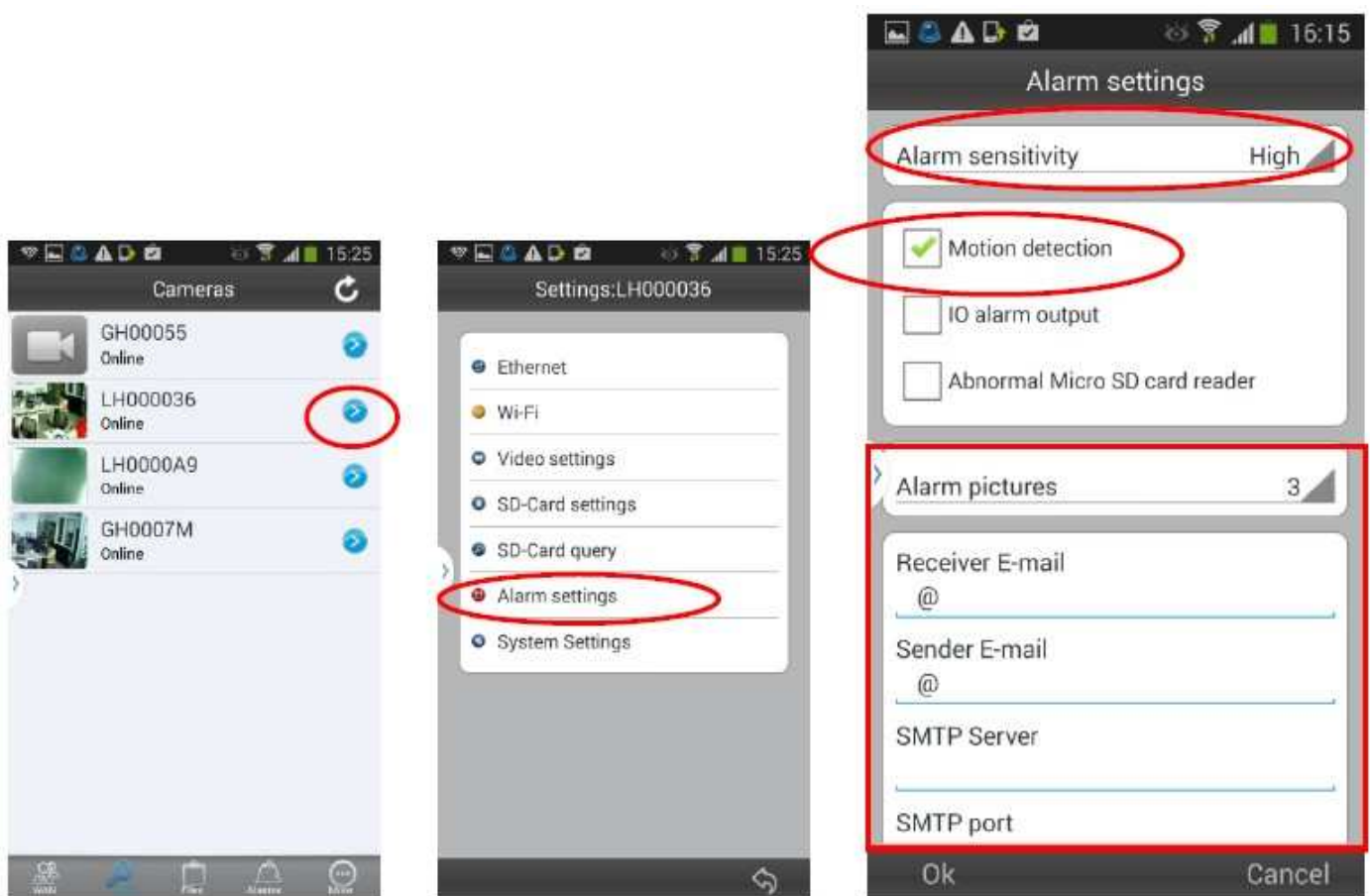
Set Motion Detection and Email Alert:

On mobile phones:

Select a bulb camera in device list of local section, tag ">" -> select "Alarm Settings" -> Set "Alarm sensitivity" to "High", tick Motion detection checkbox.

If you want Email Alert, then fill in other fields. "Reciever E-mail", "Sender E-mail" so on, all needed.

***Here you need smtp-server and smtp port information, if you don't know that you have to ask email Service provider. But these information can be filled-in later on.

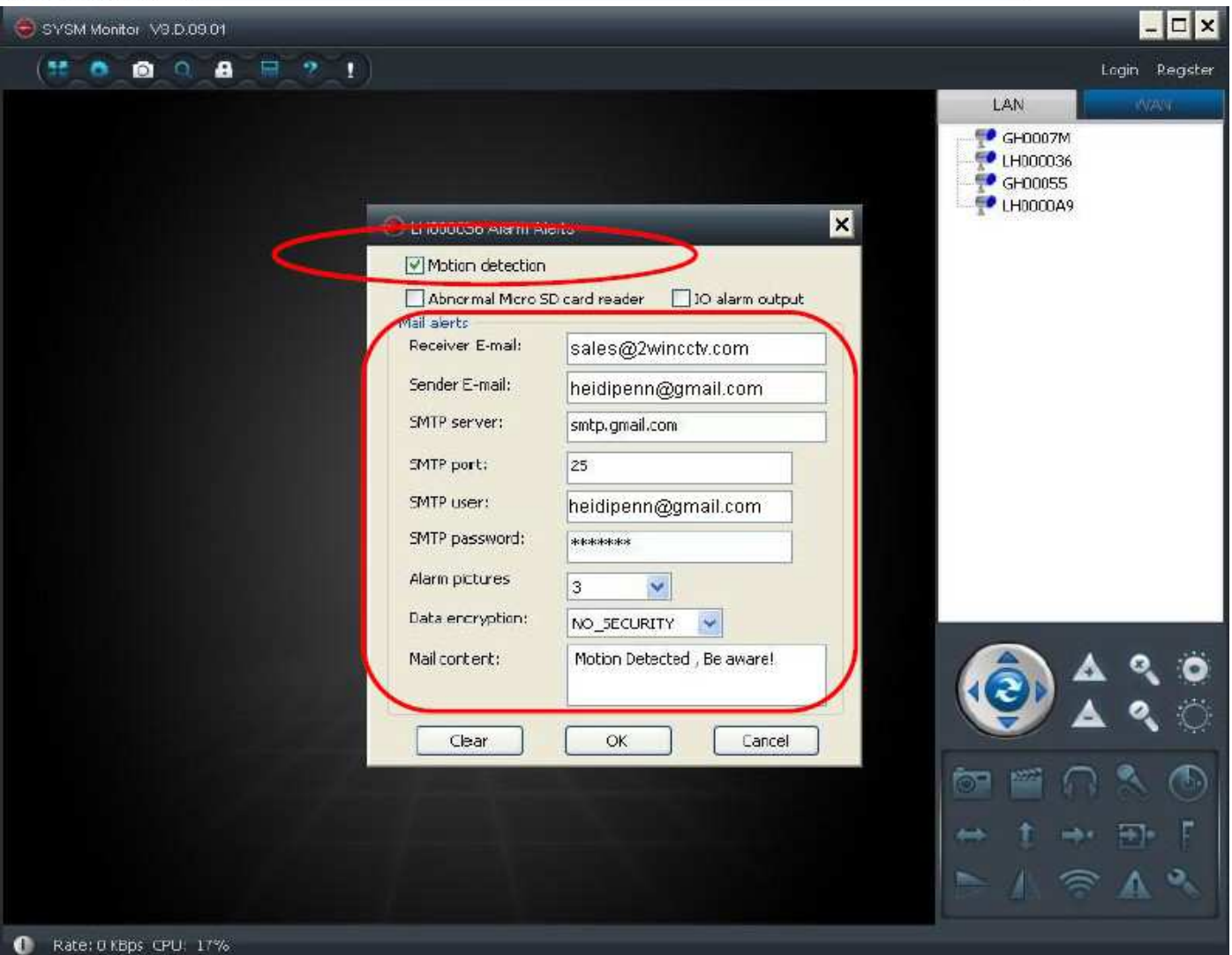
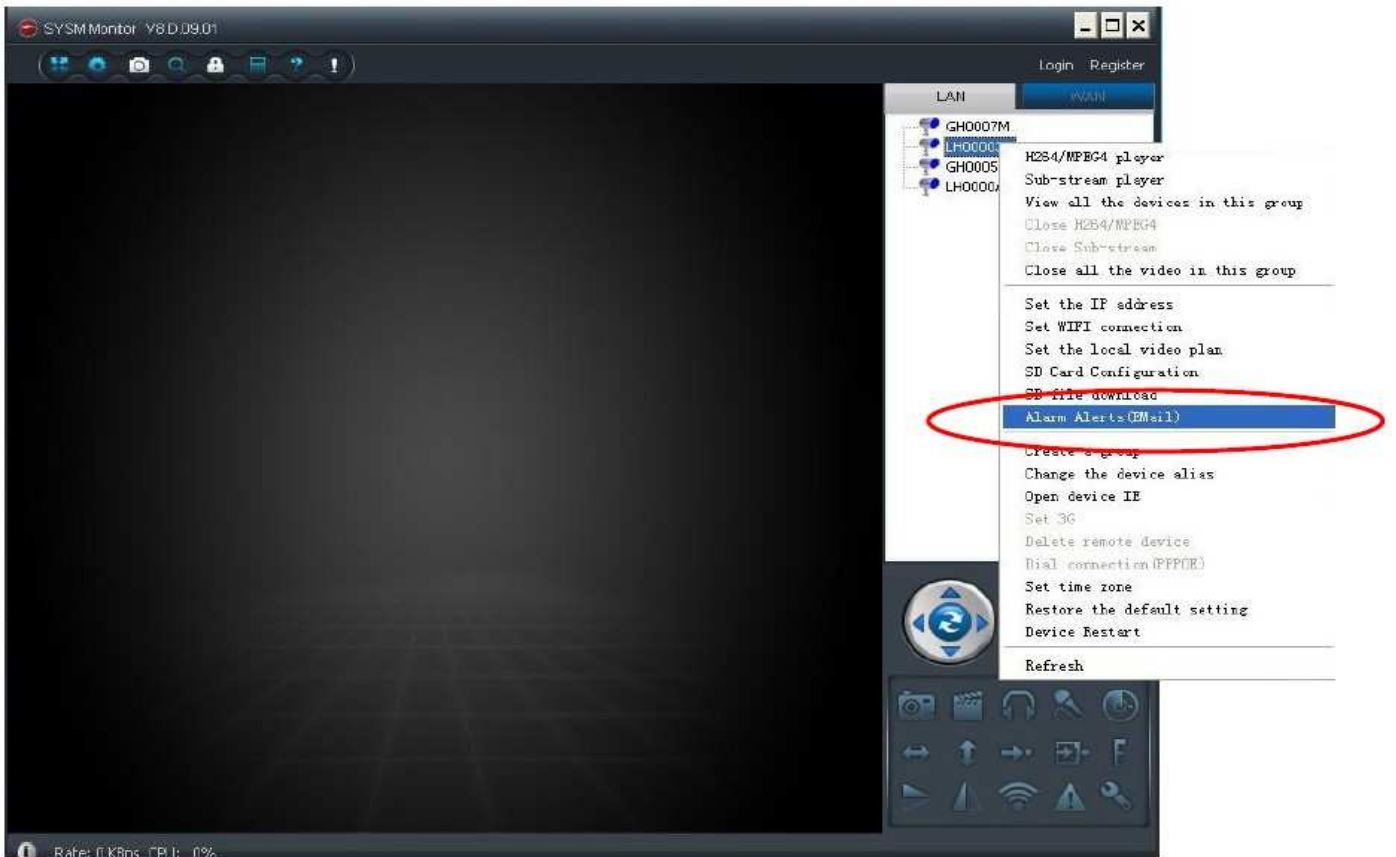


On PC

Select a bulb camera in device list of LAN section, click right hand mouse button -> select "Alarm Alerts/Email" -> Tick "Motion Detection" box

If you want Email Alert, then fill in other fields. "Reciever E-mail", "Sender E-mail"...so on, all needed.

***Here you need smtp-server and smtp port information, if you don't know that you have to ask email Service provider. But these information can be filled-in later on.



9. Hearing Sound

On Mobile phone

When on viewing mode, there is a headphone logo  , click to hear sound

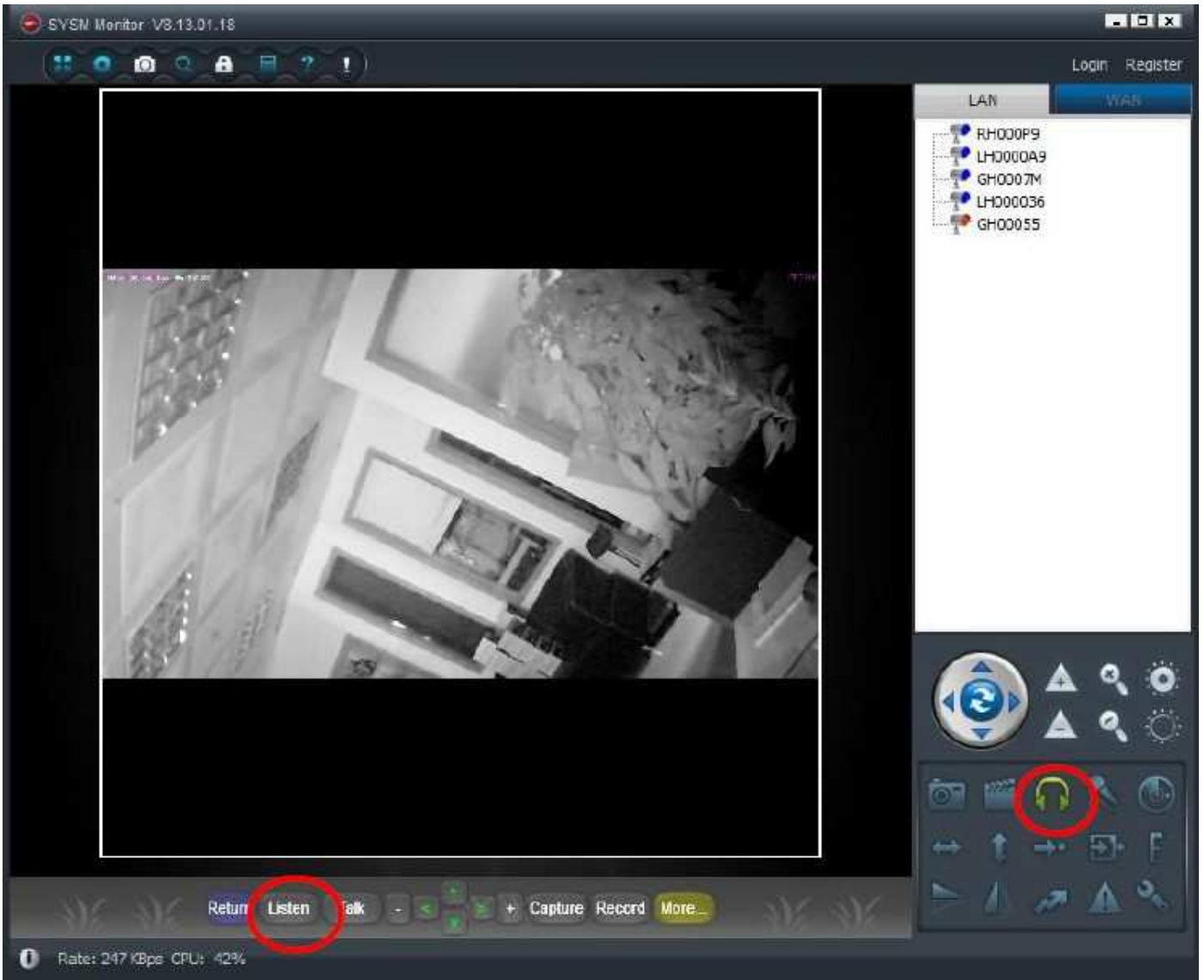


On PC

When on viewing mode, there is a headphone logo



, click to hear sound, or click “Listen” button



10. Video Recording Methods

There are three methods to record videos

1. Built-in Micro-SD card storage device - just simply insert a card then it will auto recording
2. Recording on Mobile phone or Computer – when online watching a bulb camera on mobile

phones or computers, simply press the video sign button



, it will start recording video, and the video files are stored on watching device.

3. Network Video Recorder device – NVR machine which supports ONVIF protocol, then it can connect to bulb camera recording video onto it. This suits for large video file storage application, like there are few bulb cameras and need to be centralize manage storage.

11. Advanced Setting for Professional

Administrator can use Internet Browser to control the backend of bulb camera.

Each bulb camera has a local IP address, IP address can be found in “Set IP address” function, then key in the IP address in a browser, like in IE, 192.168.88.111

If IE is the default web browser, select “Open device IE” on menu, direct go in.

Then a prompt screen will pop up for login

Login : admin Password : 888888

When login successful, an administration screen will be shown as below.

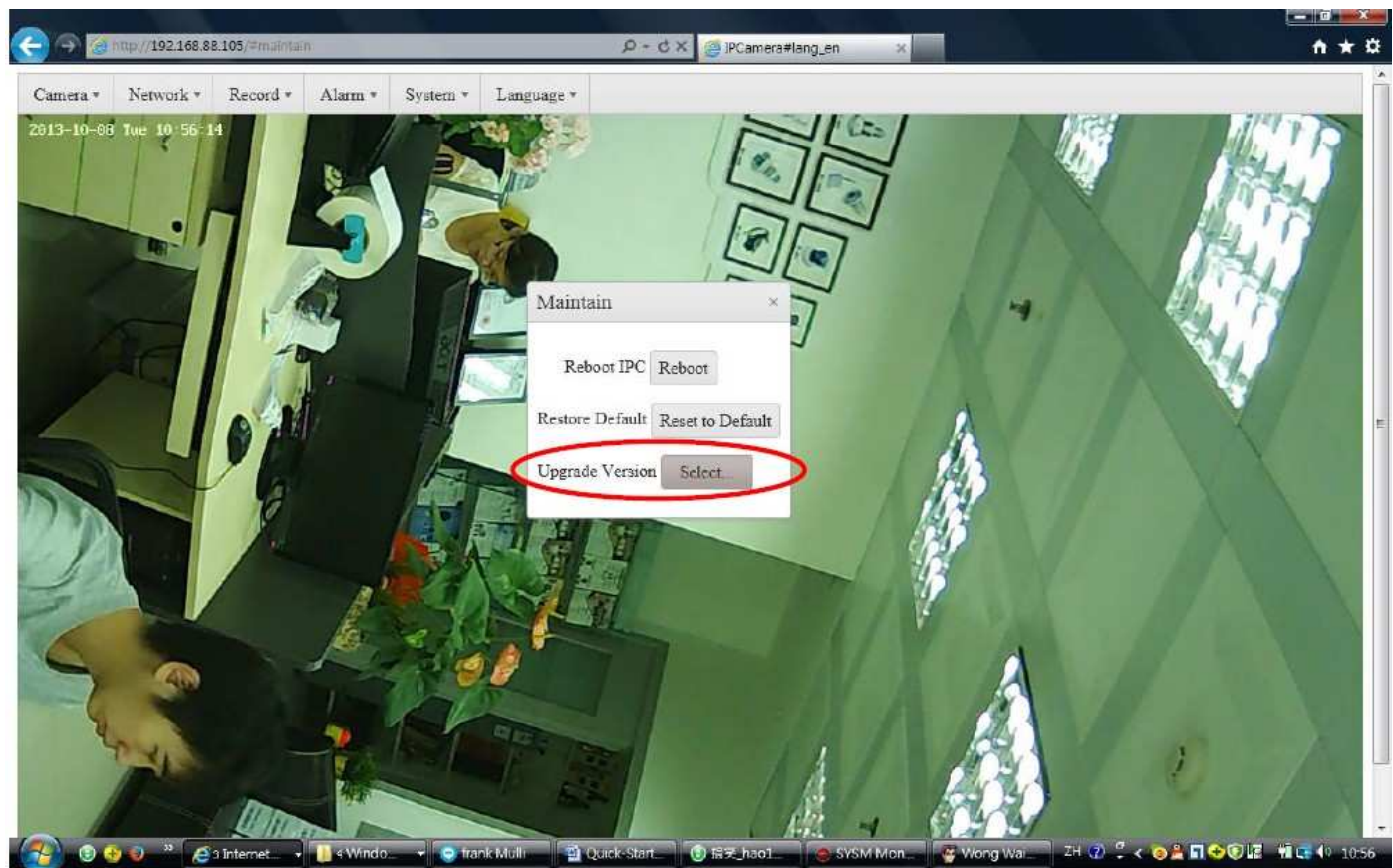
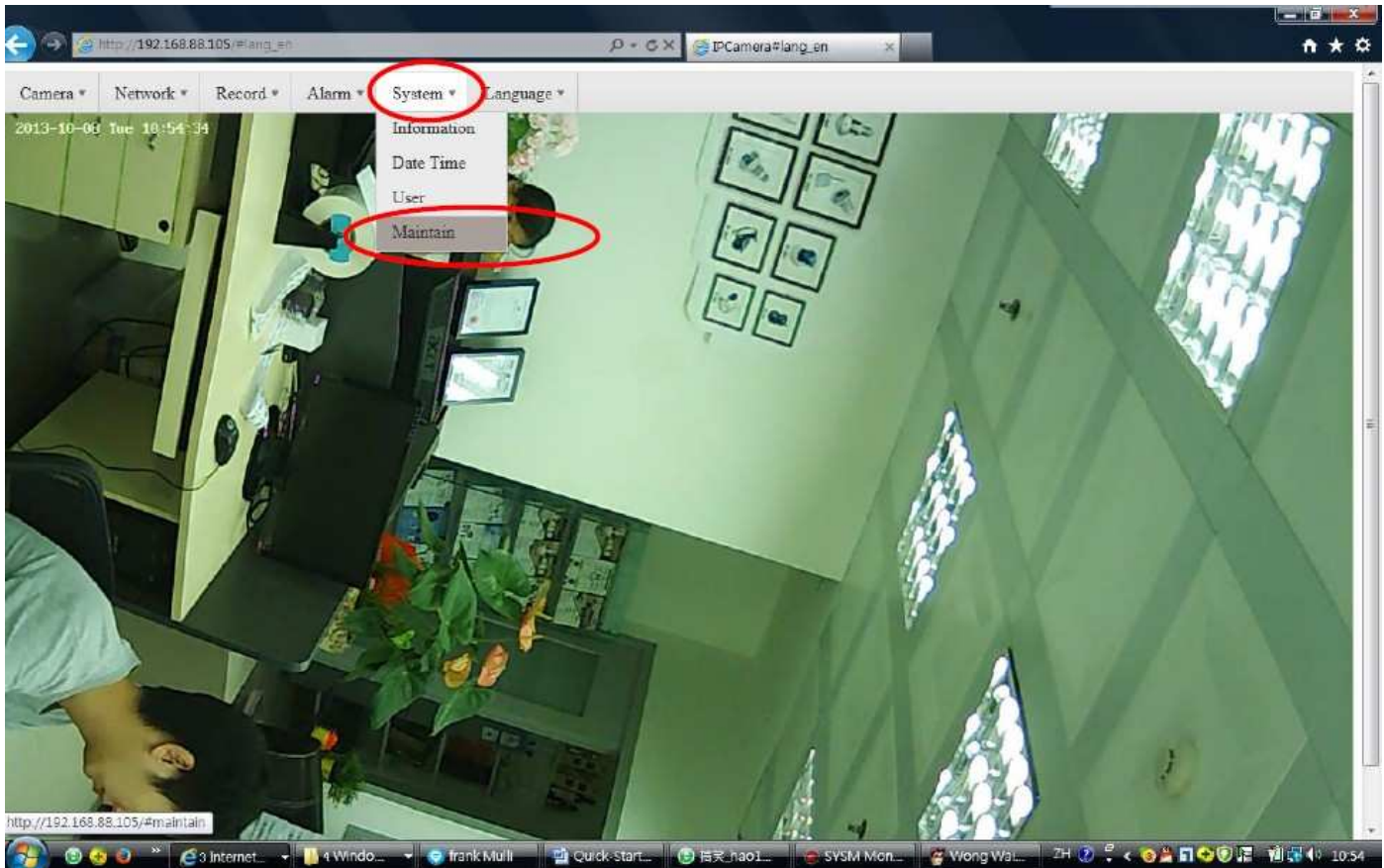


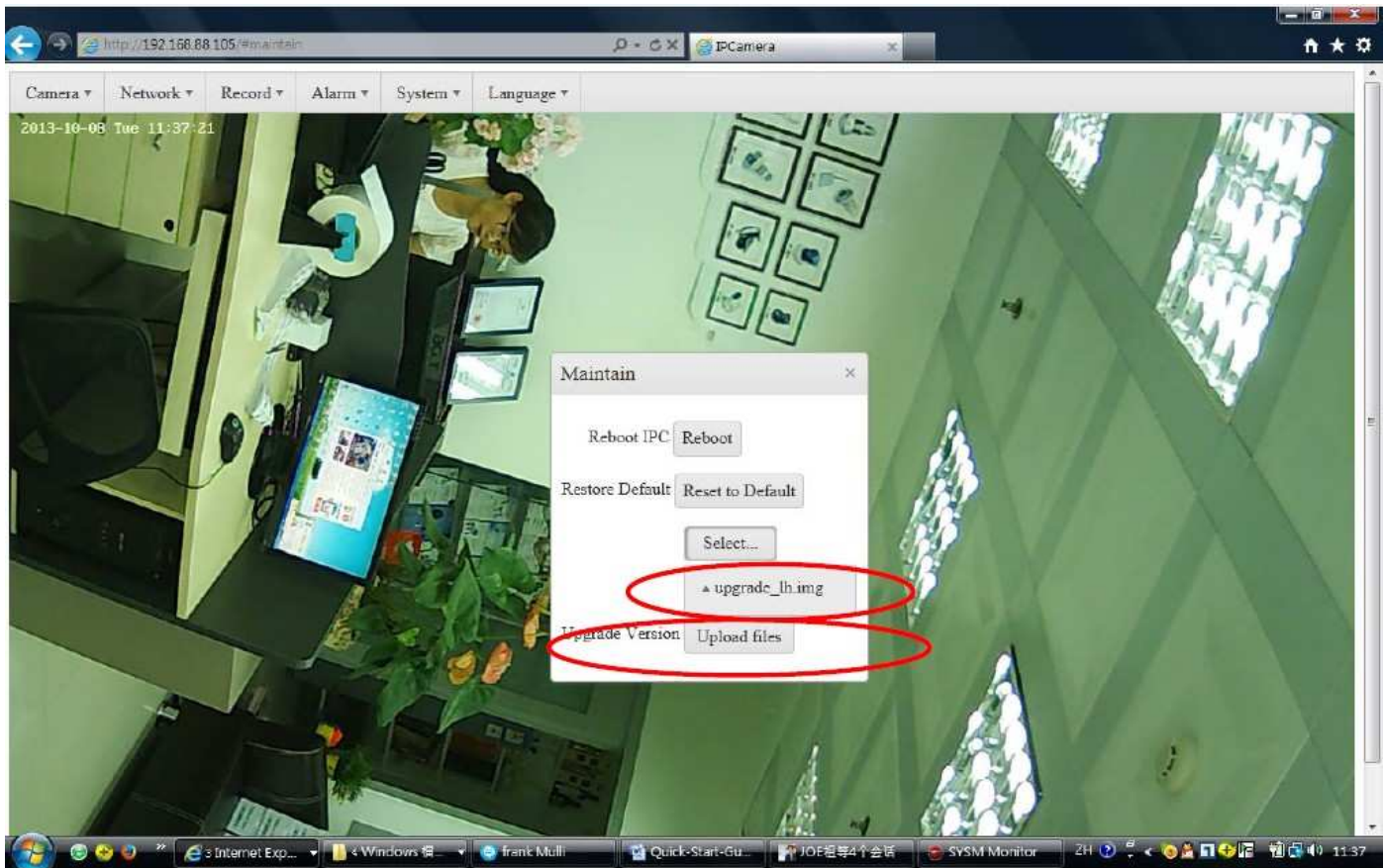
12. Advanced Setting for Professional – Update Patch

For updating patches, this must be done at the back-end on internet browser.

Login into the back-end of bulb camera as suggested above steps in chapter 11.

Then choose “System” -> select “Maintain” -> select “Select” to choose the update patch file in your computer -> press button “Upload files” -> when it is done, press button “Reset to Default” , finally the bulb camera will be back to default mode (AP mode)







13.Usage (Anytime,anywhere,conveniently and safely,clearly and smoothly)





14. Accessories


14.1 Extension Adapter




	<ol style="list-style-type: none"> 1. E27 to E27 extension adapter 2. Length 160mm 3. Bendable angle around 10° 	TW-EA16
	<ol style="list-style-type: none"> 1. E27 to E27 extension adapter 2. Length 200mm 3. Bendable angle around 90° 	TW-EA20
	<ol style="list-style-type: none"> 1. E27 to E27 extension adapter 2. Length 300mm 3. Bendable angle around 180° 	TW-EA30
	<ol style="list-style-type: none"> 1. E27 to E27 extension adapter 2. Length 450mm 3. Bendable angle around 360° 	TW-EA45

14.2 Extension Adapter with Plug

	<ol style="list-style-type: none"> 1. E27 to E27 extension adapter with UK plug 2. Length 300mm 3. Bendable angle around 360° 4. suitable for those places with bulb holder, only have a socket 	TW-EA30UK
	<ol style="list-style-type: none"> 1. E27 to E27 extension adapter with Clip and 1.5Meter cable plus UK Plug 2. Bendable tube Length 300mm 3. Cable length 1.5 meters 3. Bendable angle around 360° 4. suitable for removable security applications, clip 	TW-EA30UC

14.3 Bulb Converter

	<ol style="list-style-type: none"> 1. E27 to B22 converter 2. Suitable for B22 bulb holder 	TW-CEB22
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	1. E27 to GU10 converter 2. Suitable for GU10 bulb holder	TW-CEGU10
	1. E27 to E14 converter 2. Suitable for E14 bulb holder	TW-CEE14
	1. E27 to E12 converter 2. Suitable for E12 bulb holder	TW-CEE12

15. Trouble Shooting

1. When playback video, there is video only without sound

Solution : The problem is you did not tick the “recording sound” flag in sd-card configuration.

2. I have entered my router SSID and password and my devices has been connected to existing network, but I can not find the bulb camera on network after two minutes.

Solution : Press “Reboot” button on remote control, set the machine back to default mode “AP mode”, and retry again. Beware of small or large capital letters when entering the SSID and password, must exactly match

3. Can not receive email alert.

Solution : First you have to check your email service provider, make sure your entering information is correct, especially SMTP server and allowed to send email directly via that.

Disclaimer

This camera is for legal surveillance purpose. Our company does not warrant or assume any legal liability or responsibility for illegal usage or installation.