

EAZZYDV[®]
Easy For You

**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"
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, watching and hearing what is happening at there. 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

Function	Description
	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 <u>plug and play</u> .
	Local storage using Micro-SD card, accepting 2GB-32GB, 32GB card can <u>store 12 days video files</u> , 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
Watch	Wireless transmission distance in open area around 100 meters
	On line viewing and control via iPhones 、 iPad 、 Android Smart Phones 、 Wins PC 、 Notepads 、 Notebooks 、 MAC
	Free client software for mobile phones and computers
	One 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
LEN	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
	Through Client software able to hear sound
Motion Detection	Motion detection distance 5 meters
Adapters	E27/E26/B22 optional
Voltage	Worldwide usage, AC 100-240V
Power Consumpt.	< 5W
Operation Temp.	-20~50°C
Weight	Gross: 300g
Packaging size	85*85*175mm (L*W*H)

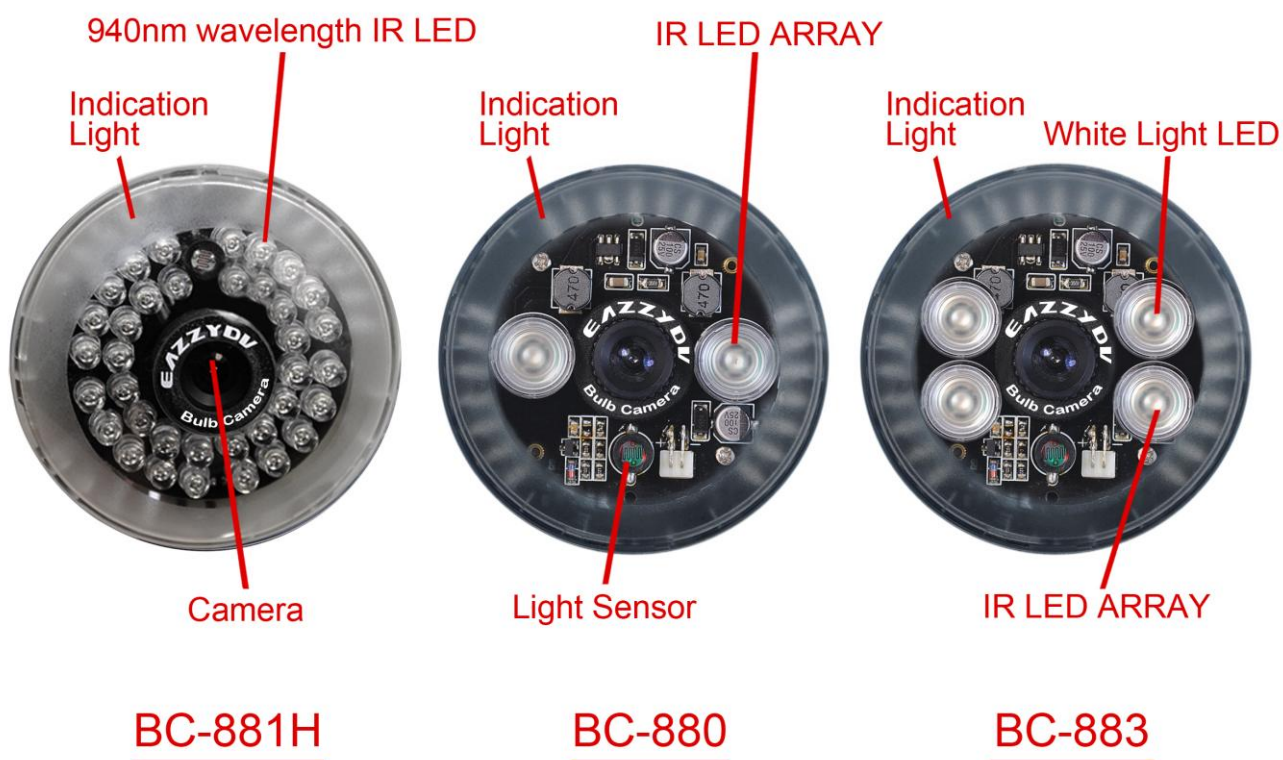
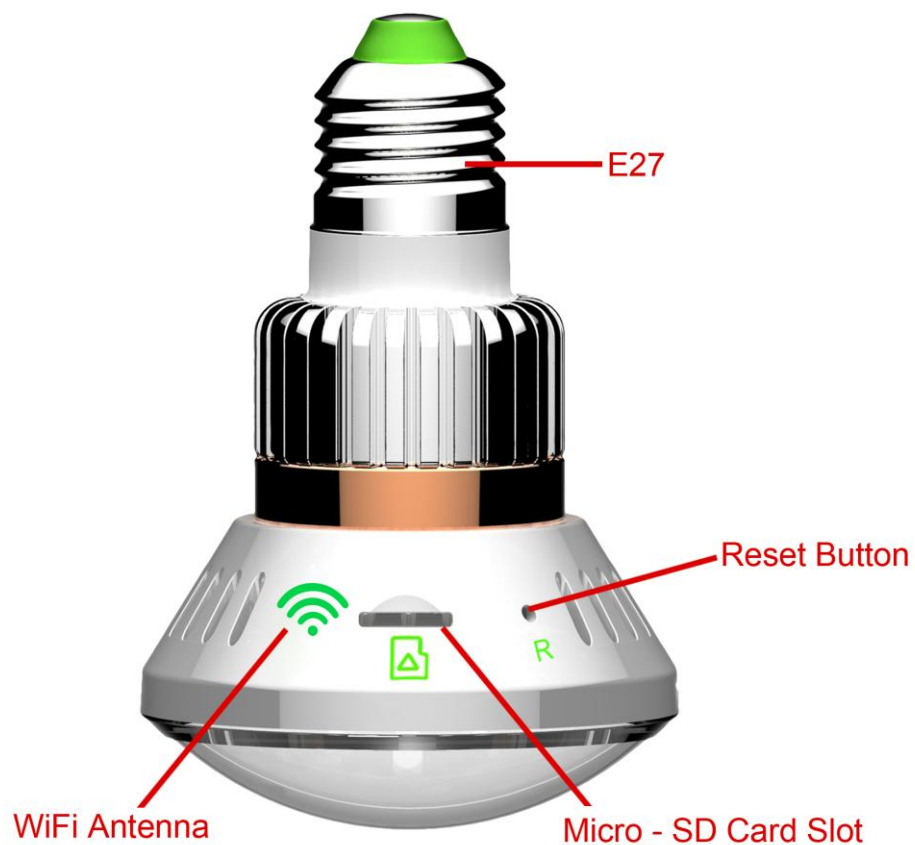
1.4 Package Content

- 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 (*reset the camera bc-881m only or control light for bc-883 only*)





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.

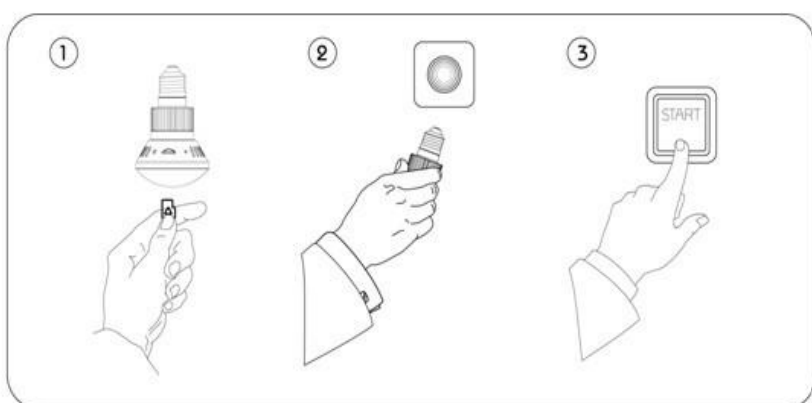
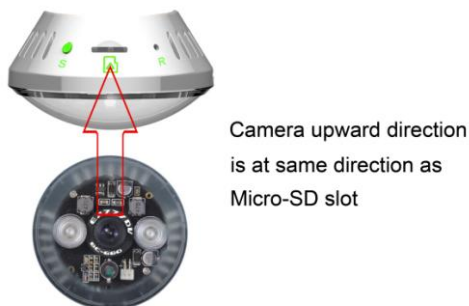
2. Product Layout



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



1. Insert a Micro SD card (2GB-32GB, format it for first time usage) into the camera card-slot
 - 1.1. 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

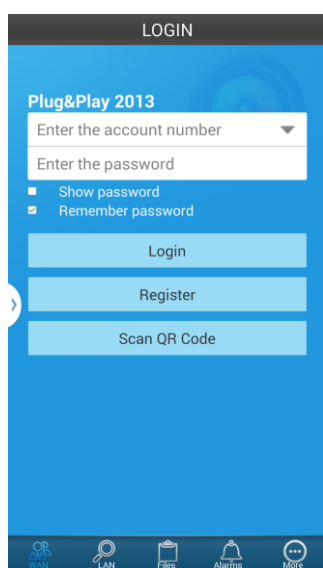
4. Client Software Installation

4.1 Andriod Smart Phones

Scan to install



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



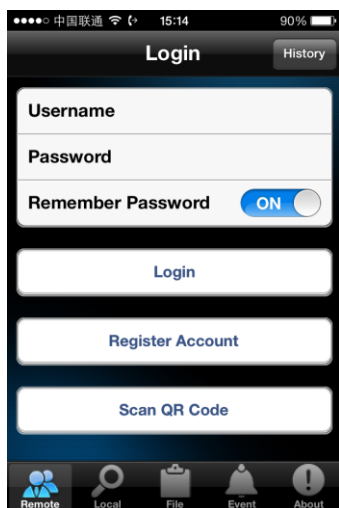
Software name : BulbCam

4.2 iPhone /iPad

Scan to install



Or search “BulbCam” in APP Store and install it



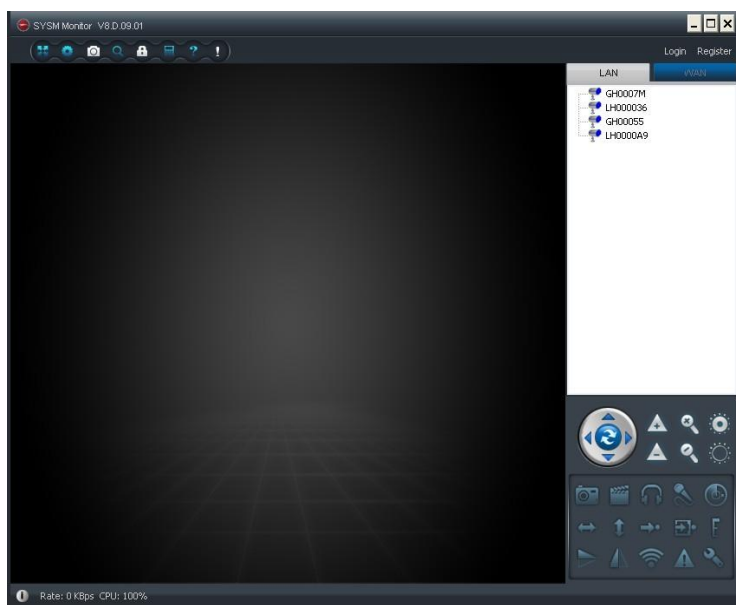
Software name : BulbCam

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

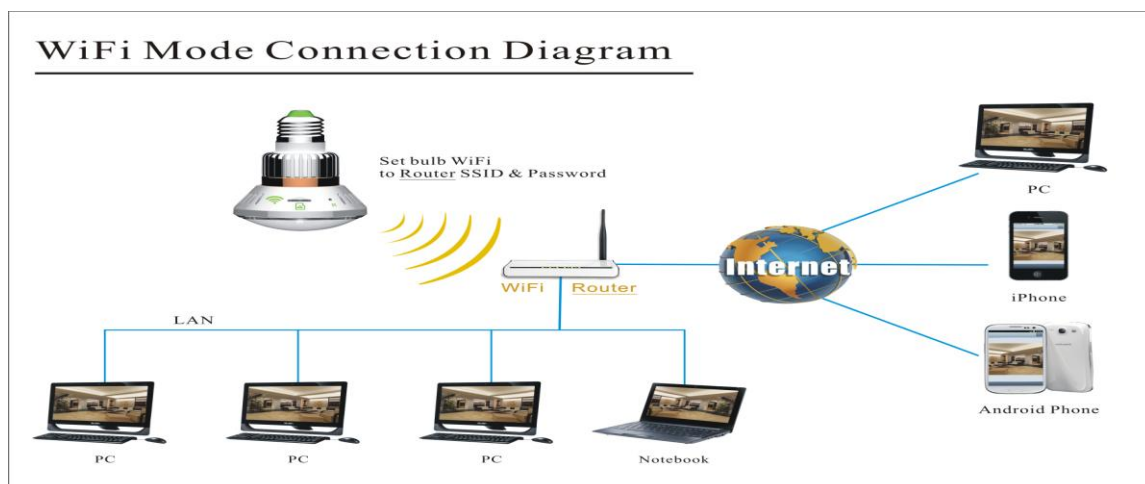
5. Operation Mode

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. <i>In any stage, pressing RESET button, will go back to this mode.</i>
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.

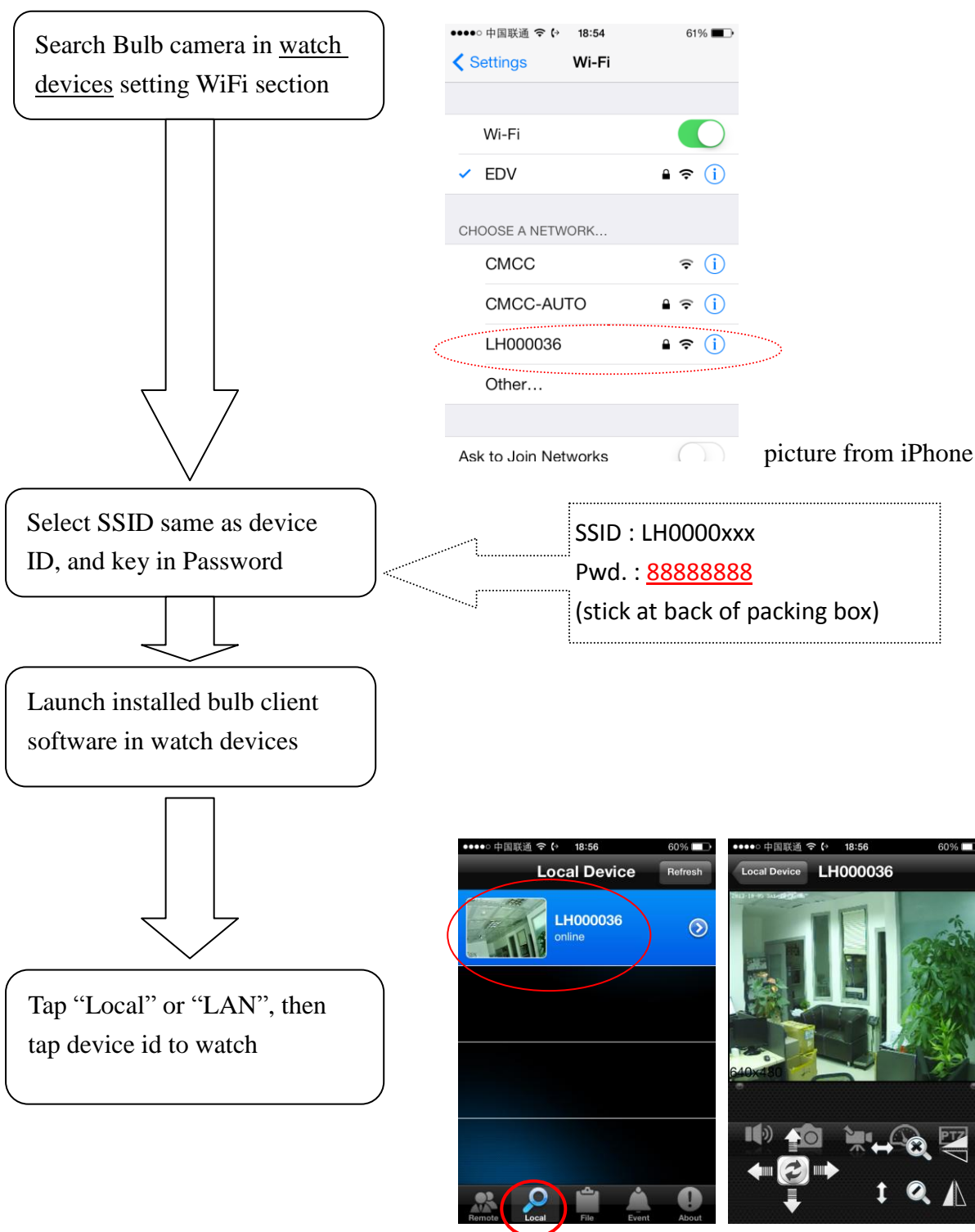
Remark :

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.



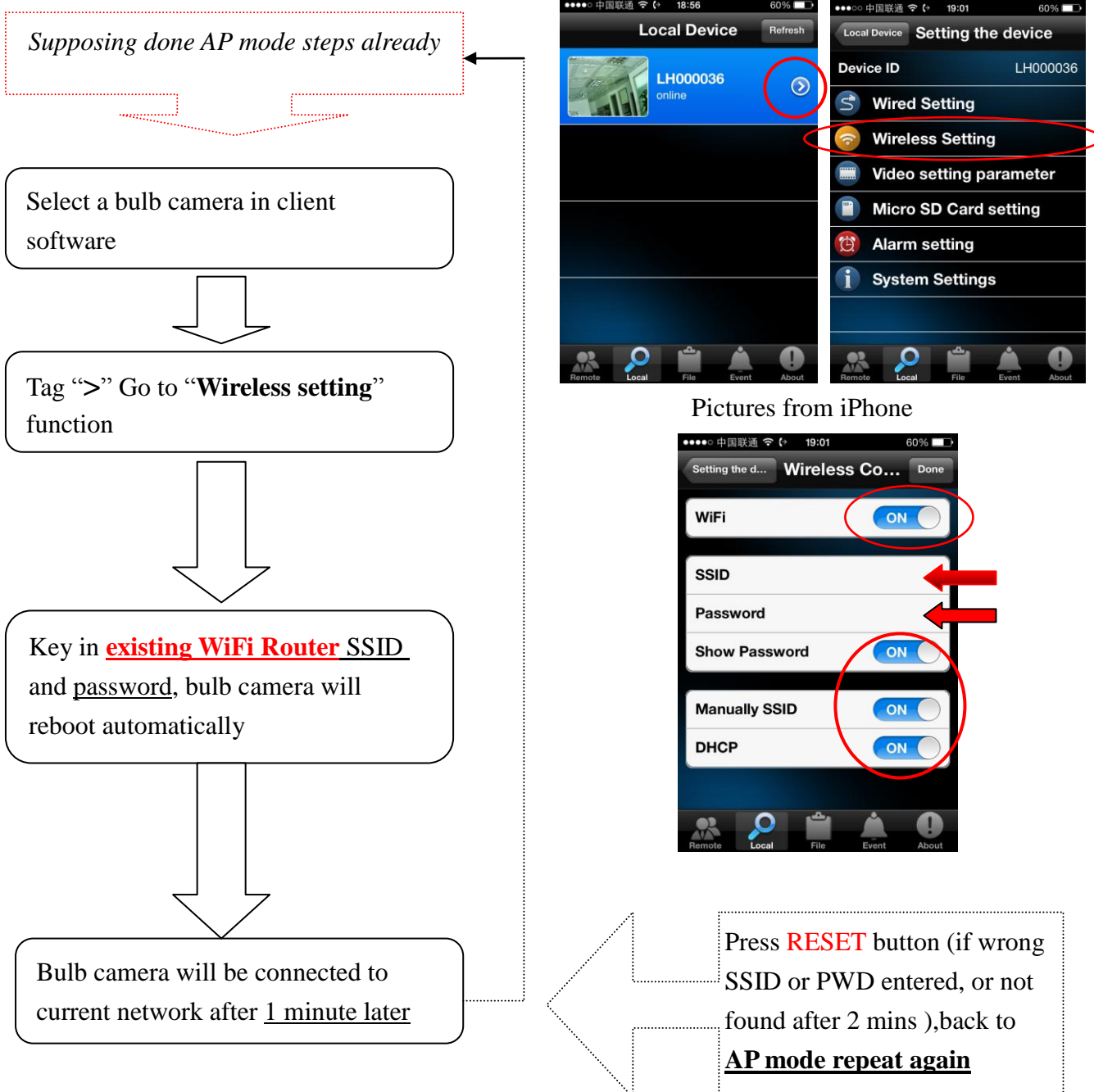
5.1 AP Mode (point-to-point)

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.



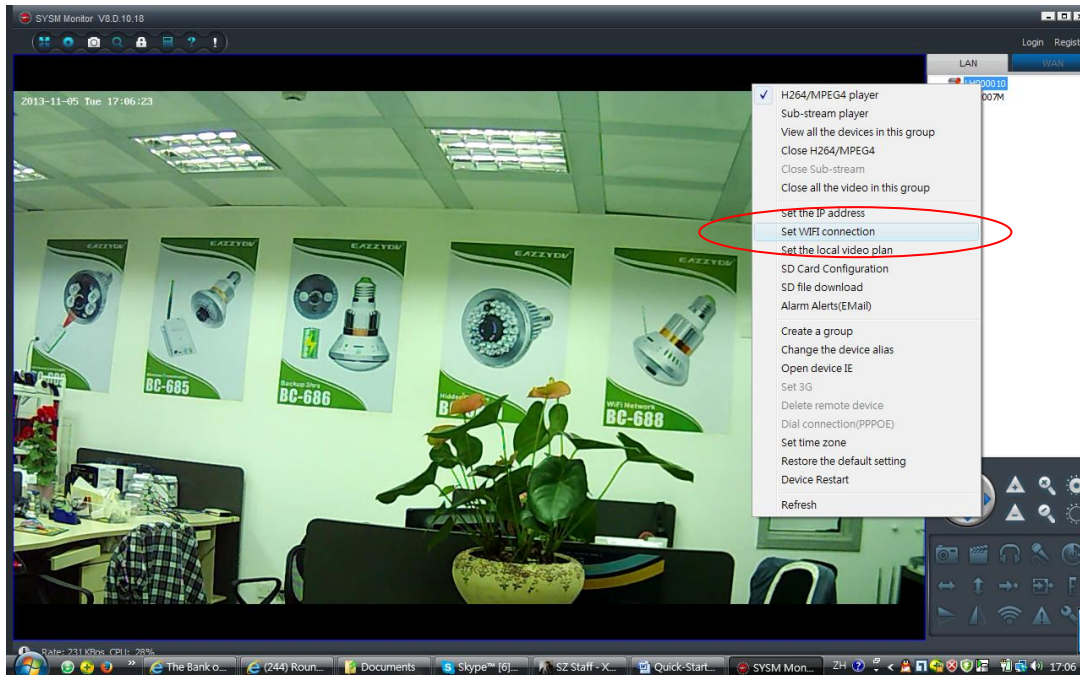
5.2 WiFi Mode (Internet Access)

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.

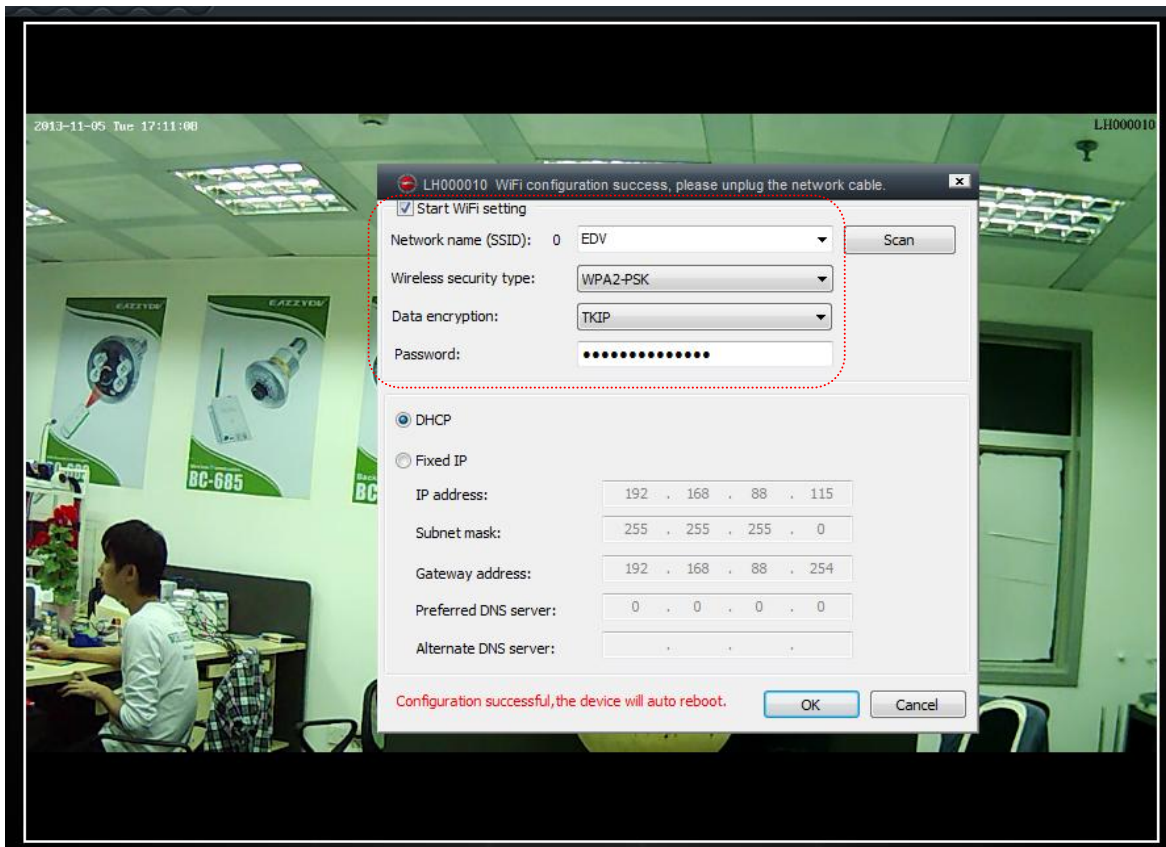


5.3 On PC, Change to WiFi Mode

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”

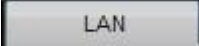

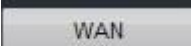



Manually typing **SSID**, select Wireless security type “**WPA2-PSK**”, select Data Encryption “**TKIP**”, manually type **password**. (SSID and password are case sensitive, must be 100% match)



6. Online watch

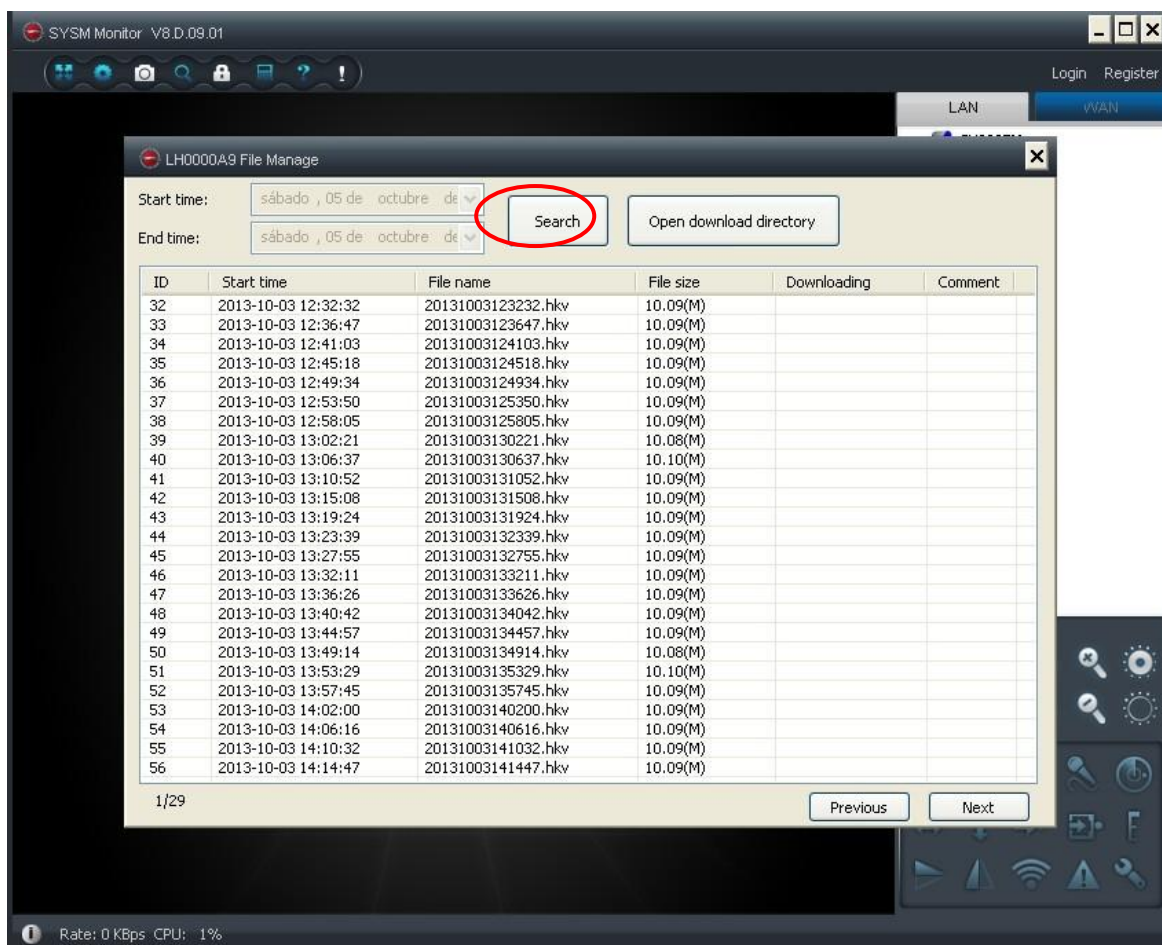
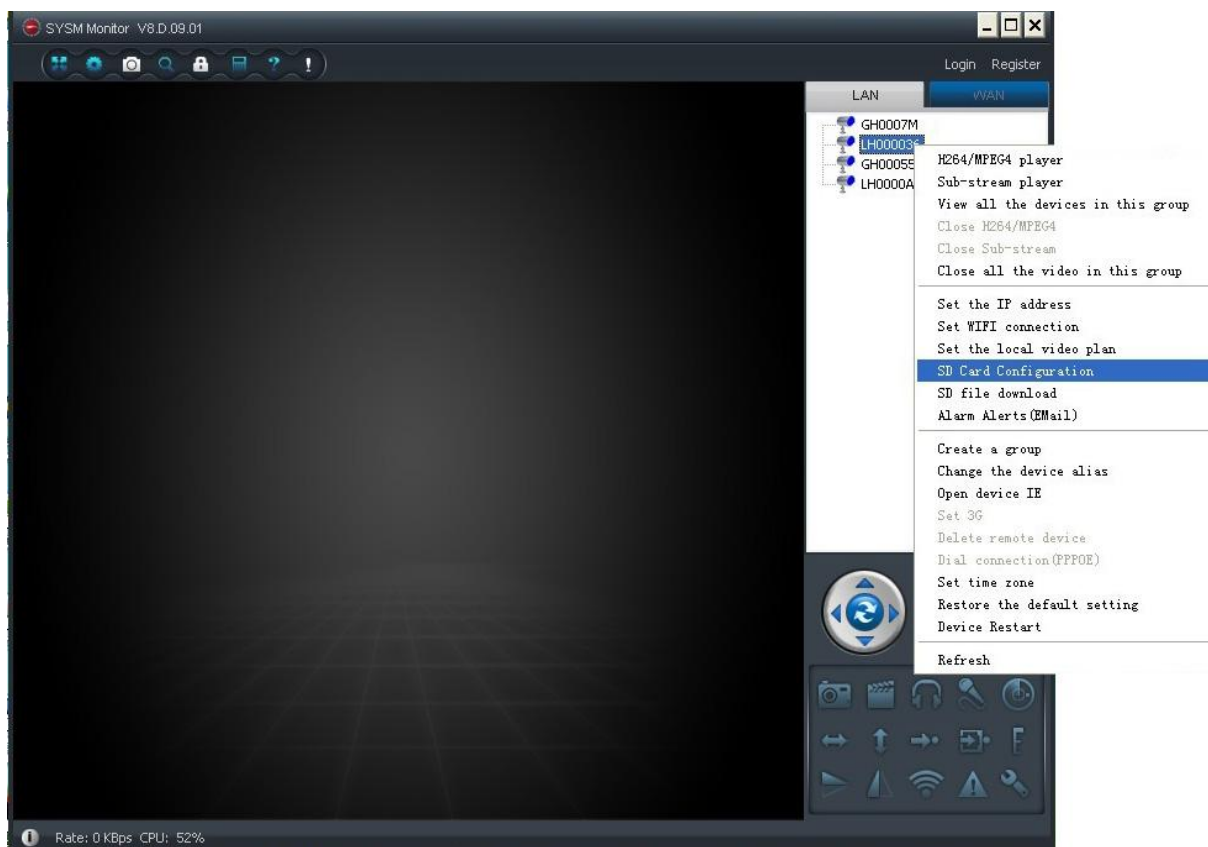
There are two viewing types, they can be selected at the first page of client software. Select which type to use, and then click/tag the device ID in list to viewing it.

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.

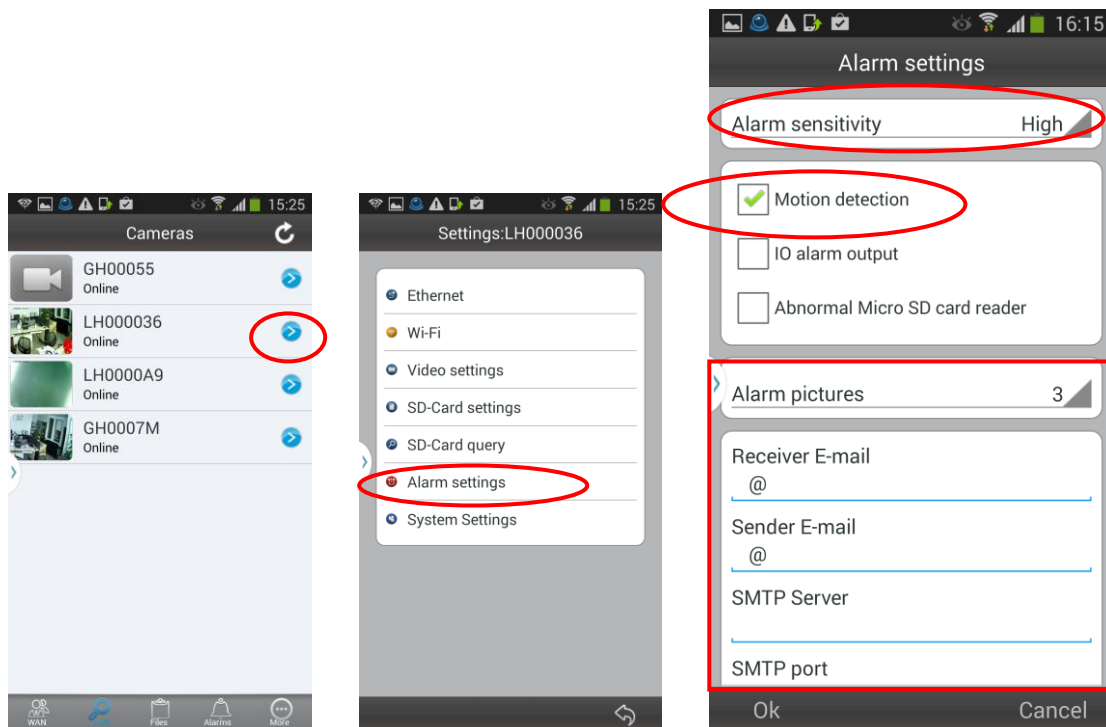
Set Motion Detection and Email Alert:

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.

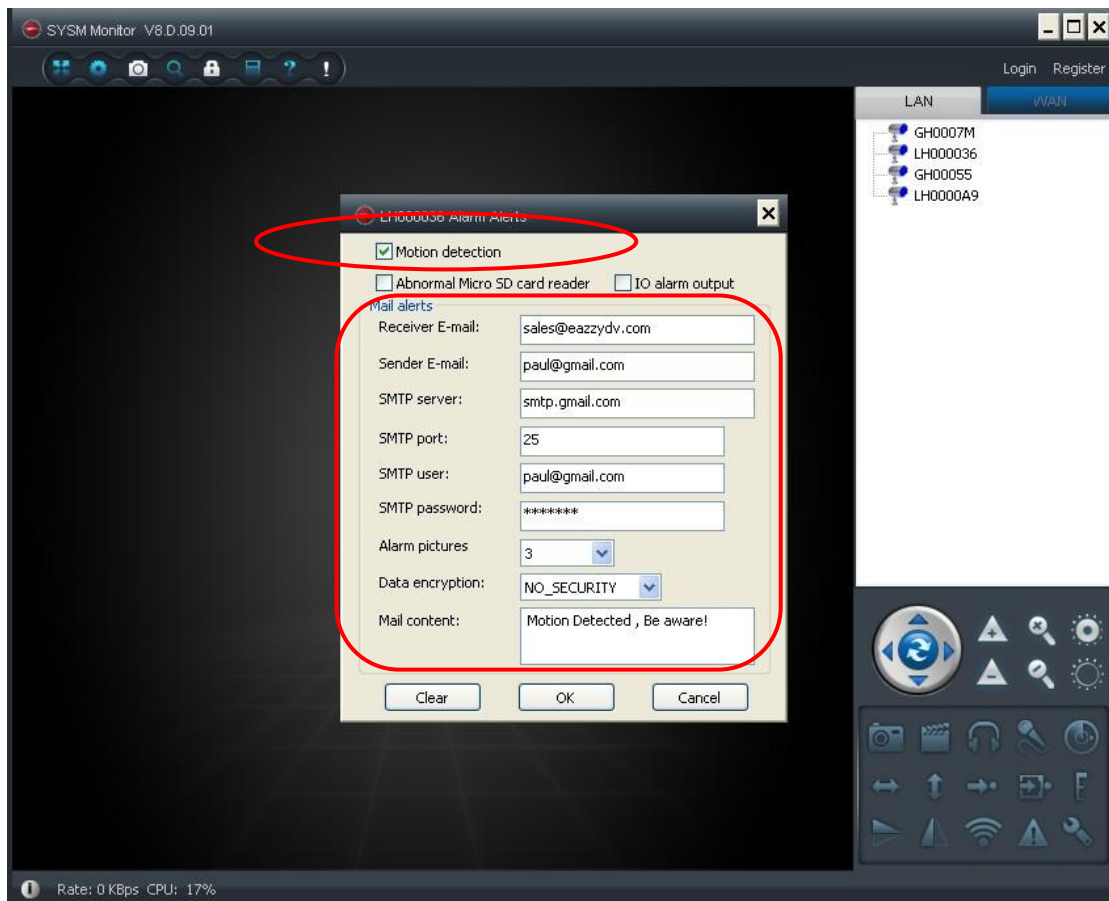
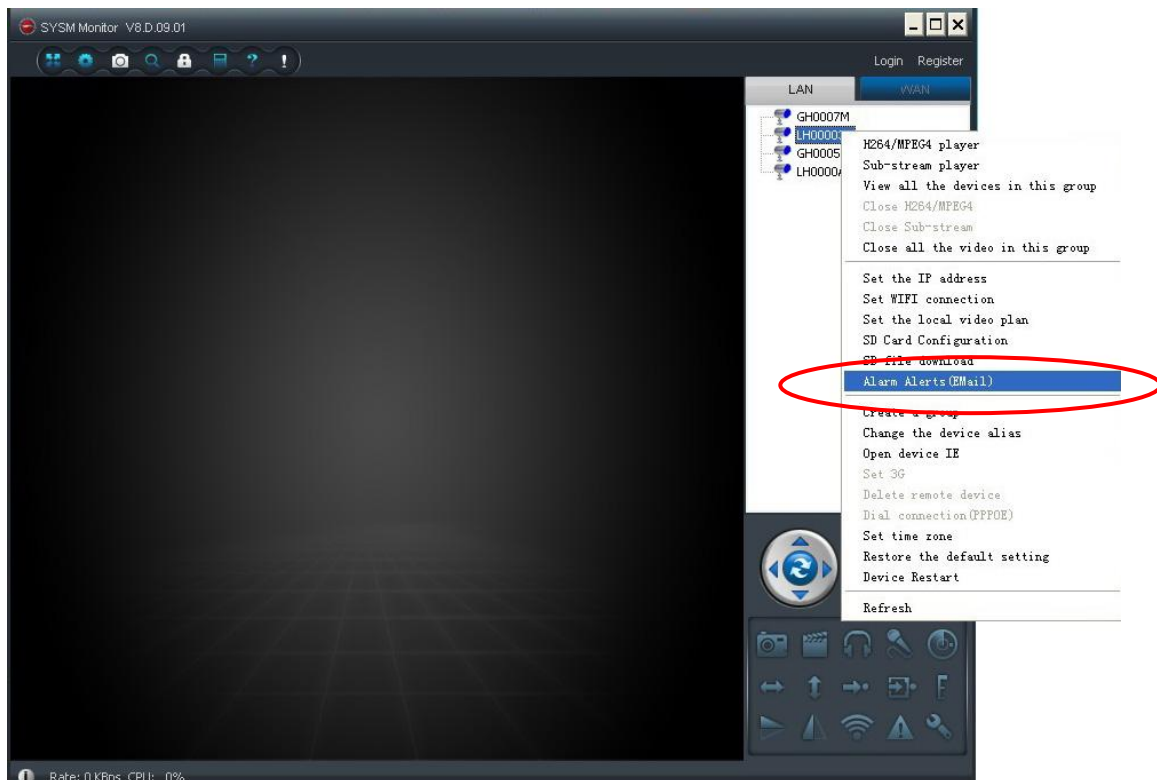


On PC

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

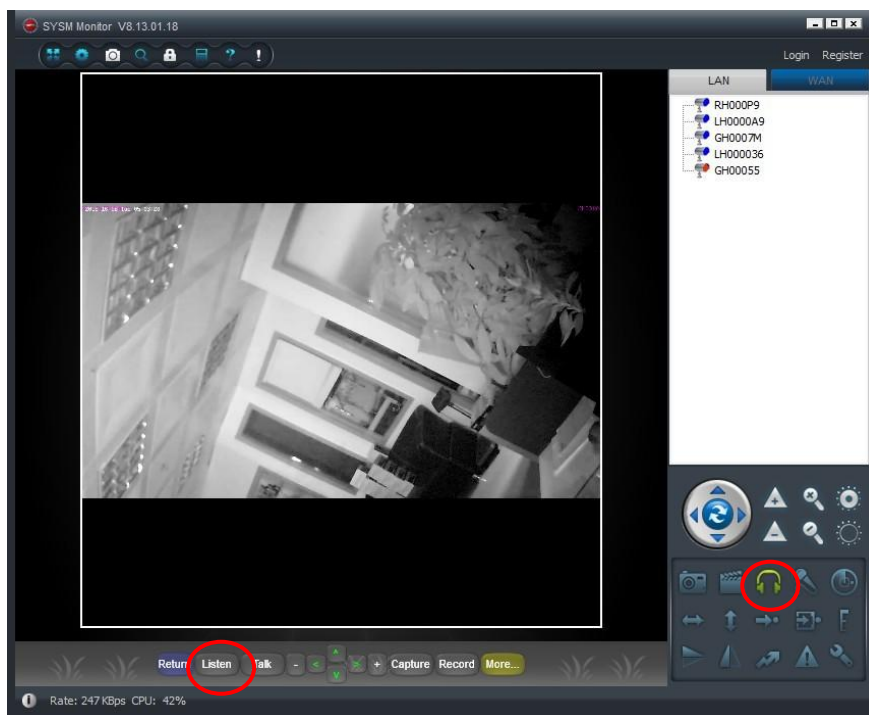
On Mobile phone

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.

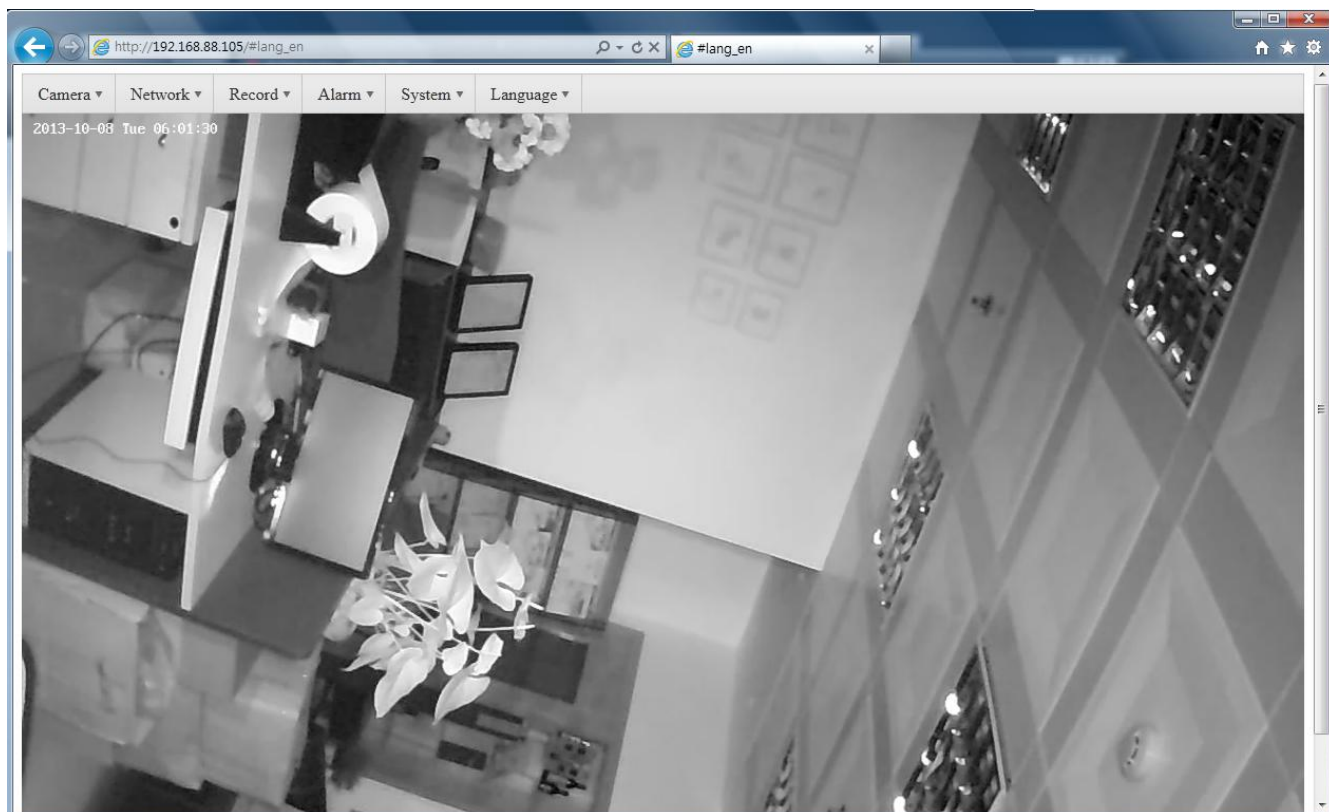
Each bulb camera has a local IP address, IP address can be found in “Set IP address” function, then key in the IP address in a browser, like in IE, 192.168.88.111

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.

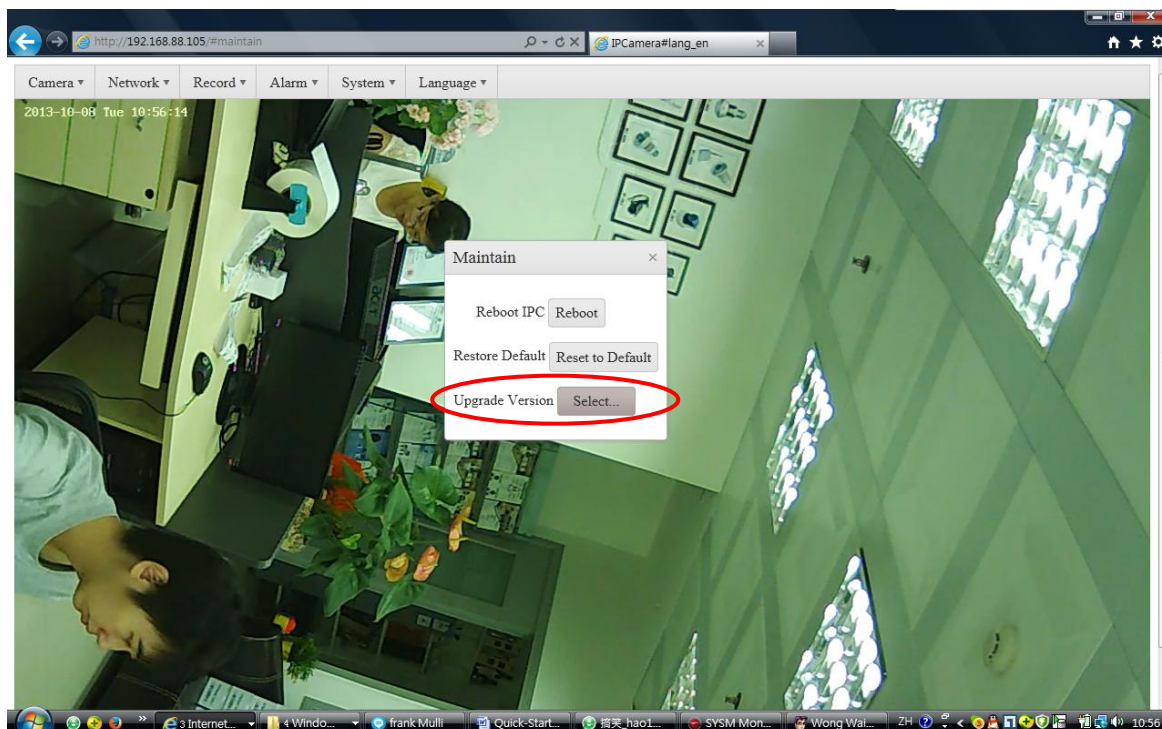
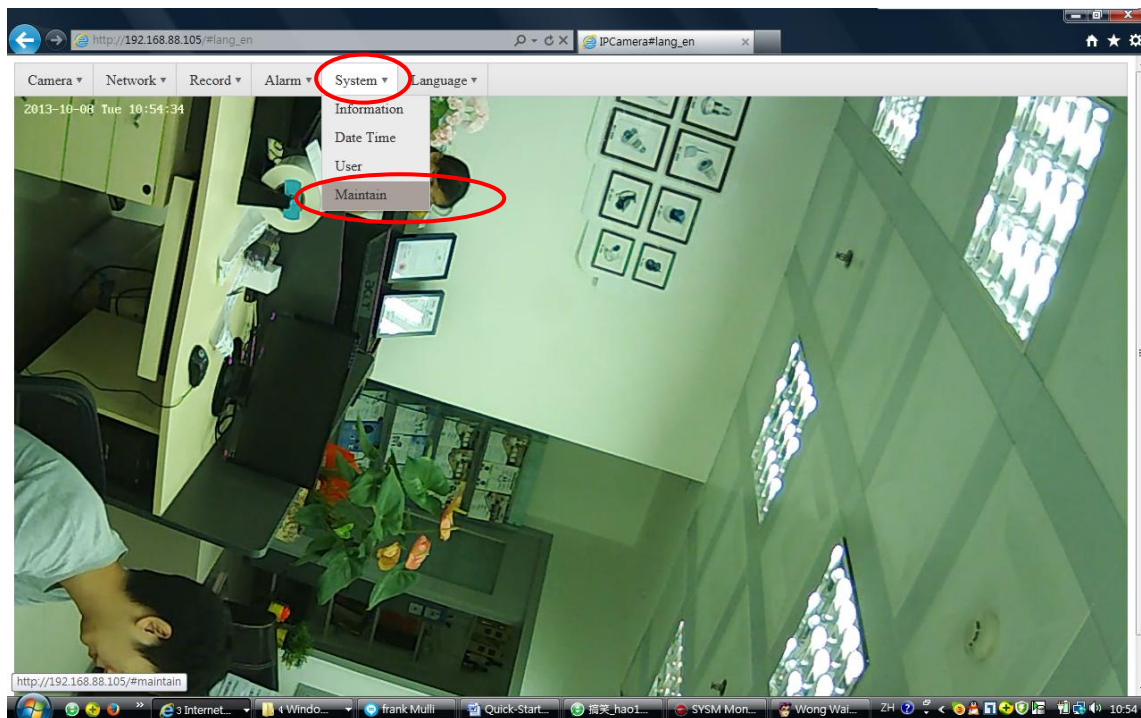


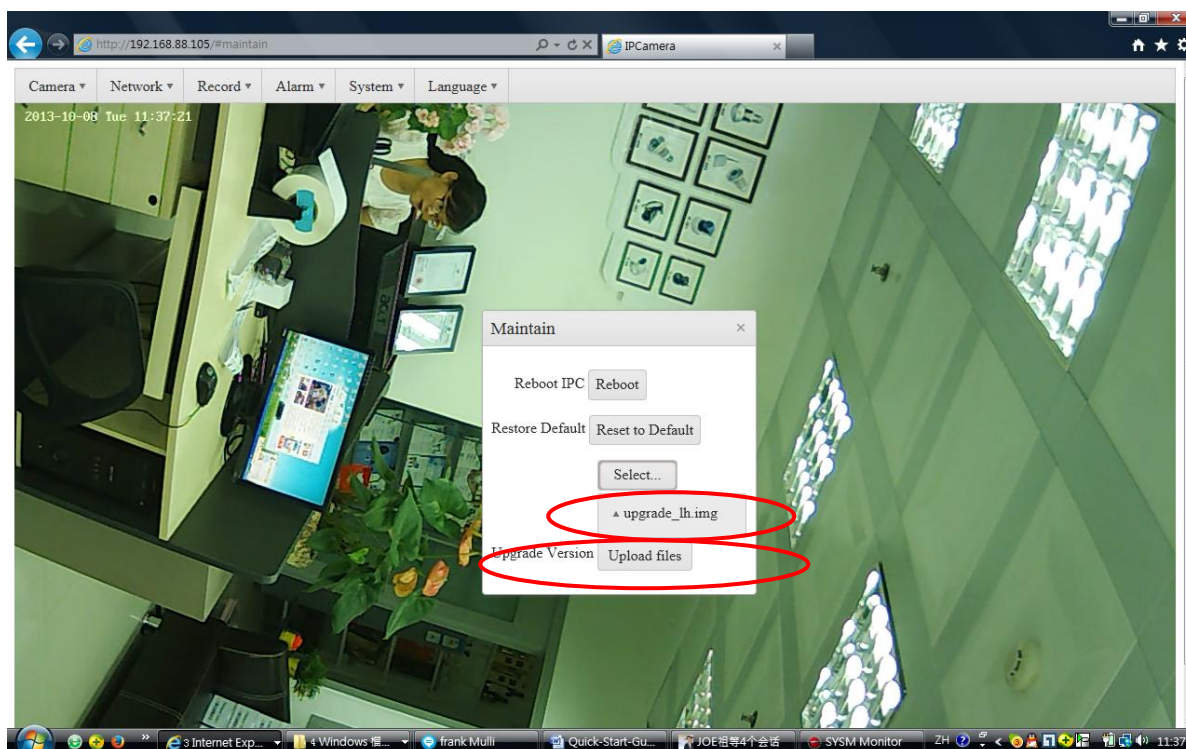
12. Advanced Setting for Professional – Update Patch

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. Accessories





13.1 Extension Adapter

Item No.	Picture	Description
BC-AE16		160mm extension adapter, bending angle is around 10 °
BC-AE20		200mm extension adapter, Max. bending angle is around 90 °
BC-AE30		300mm extension adapter, max. bending angle is around 180 °

BC-AE45		450mm extension adapter, max. bending angle is around 360 °
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13.1 Extension Adapter with Plug

Item No.	Picture	Description
BC-AEP30UK		300mm long extension adapter with UK plug
BC-AEPC30UK		300mm long extension adapter with UK plug plus clip and power cable



13.3 Bulb Converter

Item No.	Picture	Description
BC-ACB22		Converting E27 to B22
BC-ACGU10		Converting E27 to GU10
BC-ACE14		Converting E27 to E14

BC-ACE12		Converting E27 to E12
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14. 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.

4. Where is your technical supporting page ?

Solution : If there are any updates on bulb wifi dvr cameras, we will update under this link, http://www.eazzydv.com/cs-bulb_wifi_camera.html

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.

This device complies with part 15 of the FCC rules. Operation is subject to the following two conditions

- (1) this device may not cause harmful interference, and
- (2) this device must accept any interference received, including interference that may cause undesired operation.

RF Exposure Statement

The antennas used for this transmitter must be installed to provide a separation distance of at least 20 cm from all persons and must not be Co-located for operating in conjunction with any other antenna or transmitter.

FCC Warning Statement

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation.

If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measure

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.