# Wifi HD Cube Camera

EPK-EC10L1 (EC10)



**Instruction Manual** 

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# 1. INTRODUCTION

This user manual will show the details to set up your camera with your computer; if you are viewing with a Smartphone, please check Quick Start Guide, as it is very easy to set up.

**Important Note:** You need to use smart phone to set camera connecting to wifi, so that you can get IP in search tool, and login via computer. Smart phone settings details see QSG.

#### **IMPORTANT NOTICE**

The various screens throughout this owner's manual will look different depending on the browser you use. Full functionality is available when using Internet Explorer (IE) with EzykamOCX installed. Limited functionality is available with other browsers, such as Safari, Chrome, and Firefox.

Please Read this manual carefully, according to the browser you are using.

This is an integrated wireless IP Camera. It combines a high quality digital Video Camera with network connectivity and a powerful web server to bring clear pictures to your Desktop from anywhere on your local network or over the Internet.

The main function of the camera is to transmit remote video over IP network. The high quality video image can be transmitted with 30fps speed on the LAN/WAN by using H.264, MJPEG compression technology.

It is based on the TCP/IP standard, build-in WEB server which supports Internet Explorer. Therefore the management and maintenance of your camera becomes simple by using the network to achieve the remote configuration, start-up and to upgrade firmware.

You can use your IP Camera to monitor your home or your office. Also, controlling and managing images are simple by visiting the web site.

## 1.1. Features

- ➤ Powerful high-speed video protocol processor
- ➤ High-sensitivity 1/4" CMOS sensor
- ➤ Picture total 1000K pixels (1megapixel)
- > Optimized H.264 MJPEG video compression for transmission
- ➤ Multi-level user management and passwords definition
- > Embedded Web Server for users to visit by IE
- Supports wireless network (WI-FI/802.11/b/g/n)
- Supports Dynamic IP (DDNS) and UPNP LAN and Internet (ADSL, Cable Modem)
- > Gives an alarm in case of motion detection
- > Supports image snapshot
- $\succ \ \, \text{Supports multiple protocols} : \text{TCP/IP, HTTP, DNS, DHCP, PPPoE, SMTP, FTP, SSL, TFTP, } \\$ 
  - NTP, ARP/RARP, NFS, RTSP, RTP and RTCP.
- ➤ Supports WEP/WPA/WPA2 encryption
- > Supports IE, Firefox, Safari, and Google chrome browsers

# 1.2. Packing List

- IP Camera
- Quick Setup Guide
- DC Power Supply
- CD
- Network Cable
- Mountings

### 1.3. Product Views

## 1.3.1. Front View



Wireless: Built-in WI-FI Antenna.

**Infrared LEDs:** infrared LEDs with 8 meters night vision.

**LENS:** Megapixel lens.

**Network Light:** The green LED will be on when the network is connected, the yellow LED will blink when data is transferred.

**Reset:** If you press and hold the RESET button for about 10 seconds, all the parameters will be set back to the factory default settings. (Please keep the power on when doing a RESET).

# 1.4. PC System Requirements

#### **System configuration requirements:**

**CPU:** 2.06 GHZ or above. **Memory**: 256M or above.

**Network Card:** 10M or above.

**Display Card**: 64M or above memory.

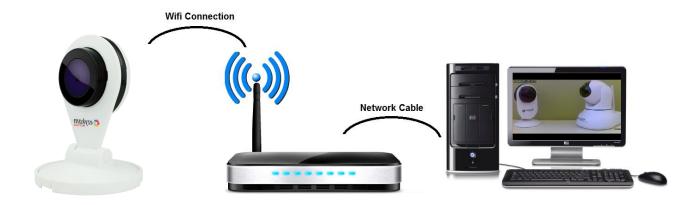
**Recommended Operating system:** Windows XP, Windows Vista, Windows 7.

## 1.5. Hardware Installation

Follow the steps below to set up your camera hardware.

- 1. Plug the power adaptor into the camera and into an AC outlet.
- 2. Use your Smartphone to search and connect the Camera SSID wifi signal, and set camera connect to the router wifi via App.
- 4. It takes approx 30 seconds to boot up the camera, then you will find the IP address from "Ezykam finder" (Figure 2.1.5).
- 5. When the power is on and the network cable is connected, the green LED on the rear panel will stay on.

The Green LED will keep flashing, and the Indicator LED on the front of the camera will flash.



# 2. INSTALLATION AND SETTINGS

### **System Requirement:**

Operating System: Windows 2000 / XP / Vista / 7

Network Protocol: TCP/IP

Network Structure: Applies to all network connections 10/100M LAN platform Browser: Internet Explorer 6.0 or above. Firefox, Google, Safari, or Chrome.

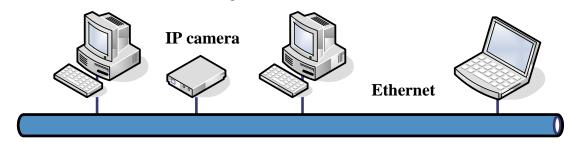
#### 2.1. Network Connection

#### **Intranet and Extranet Connection Reference:**

Extranet means public IP (i.e. The Internet), Intranet means private IP. If your IP belongs to the follow range, then it's a private IP:

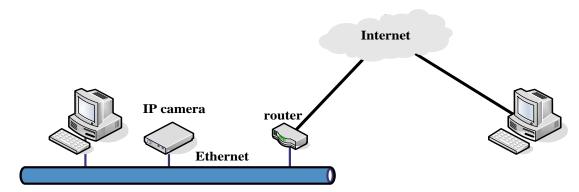
Category A: 10.0.0.0 - 10.255.255.255 Category B: 172.16.0.0 - 172.31.255.255 Category C: 192.168.0.0 - 192.168.255.255

Intranet Connection: The IP camera and your computer (device) should be under the same network environment, and both of the IPs should be under the same subnet, pictured as below:

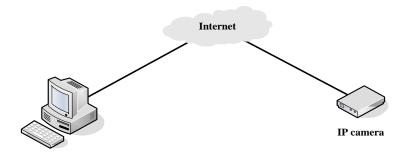


Extranet Connection: there are 2 ways as below:

(1). IP camera connects to the Internet via a router, here camera's IP is a private IP, client needs to connect to the IP camera through a router, with port forwarding to be connected correctly, as below:



(2). IP camera connects to the Internet directly, if it's a fixed IP provided by your ISP, just input it. If it's a floating IP, then input the account and password provided by your ISP to dial-up connection.



# 2.2. Browser Settings (For IE only)

OCX will be downloaded automatically when you login to the IP Camera, but you might have to set the IE browser to enable the OCX to be downloaded automatically after signing in. Steps as below:

1. Close the firewall of your computer.

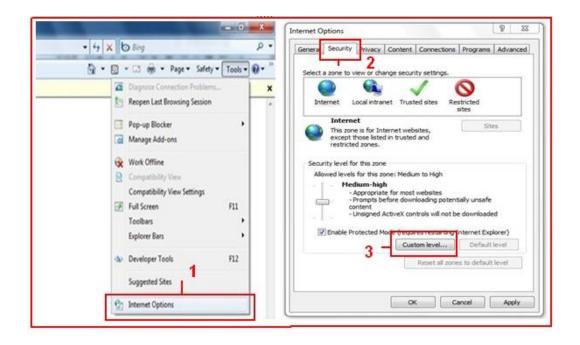
2. Change the ActiveX settings, "IE" browser > "Tool" > "Internet Options" > "Security"> "Custom Level" > "ActiveX control and Plug-ins", all the ActiveX options set to be "Enable":

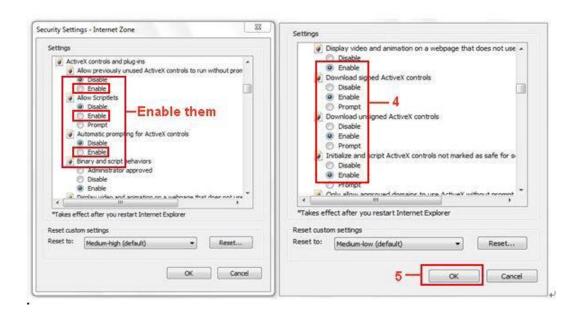
Especially:

**Enable: Download unsigned ActiveX controls** 

Enable: Initialize and script ActiveX controls not marked as safe

Enable: Run ActiveX controls and plug-ins





You can also click "Start" menu->"Internet Explorer", and choose "Internet attributes", or via "Control Panel" ->"Internet Explorer", to access Security settings.

**NOTE**: Make sure that your firewall or anti-virus software doesn't block the software or ActiveX. If you couldn't see live video, please close your firewall or anti-virus software, and try again.

### 2.3. UPnP Service

UPnP could help you to find your camera's IP more quickly. For Window XP, from "Control Panel" > "Add or remove applications" > "Add or remove Windows component" > "Network service" > "Detailed data" > "UPnP users interface", the factory default settings is disabled. Enable it, and then it can allow your operating system to support UPnP.

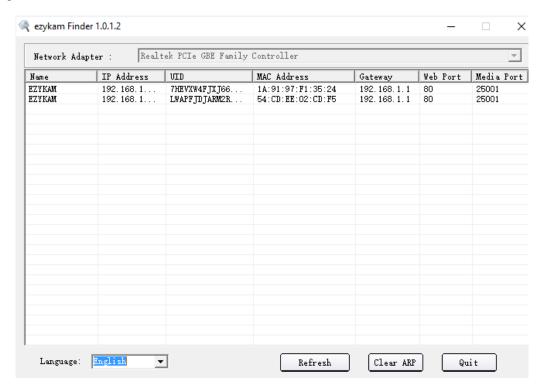
Alternatively, you can also click "Start" menu>"Internet Explorer", and choose "Internet attributes", or via "Control Panel">"Internet Explorer", enter to Security settings.

# 2.4. Ezykam Search Tool (for IE browser only)

Step 1: Use tool "Ezykam finder.exe" to find IP address of LAN.



Step 2: Double click "Ezykam finder" on your desktop, the camera's IP & MAC address will be displayed. If you want to search again, click "Search".



Step 3: Double-click the IP address of your camera to enter the login interface.(default user: admin; password: admin)



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# 2.5.Install the EzykamOCX (For IE only)

Install the EzykamOCX for the first time login; you will get tips after enter user and password in login page.

Download the EsykamOCX file, and then double click to install it automatically.

After EzykamOCX installed fully, and then input the user and password to login the camera.

# 2.6. For other Browsers, e.g., Safari, Firefox, Chrome, there is no need to install the ActiveX control, see below:

User can input the IP address in the other browsers, select the view mode such as Server Push; VLC, Quick time to view

If User cannot find the correct IP address, the default IP address for each camera is 192.168.1.155. You can run the browser, and input the IP address directly into your browser to login to the camera.

**NOTE**: If the IP segment of the computer is different from the camera, such as 192.168.0.xx, please change the IP segment of the computer's to the same as camera's, such as 192.168.1.xx, then connect the IP Camera to the computer via network cable directly, run the browser, input the IP address and the login screen below will pop-up:



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# 3. SOFTWARE OPERATION

# 3.1. Software operation for IE Browser

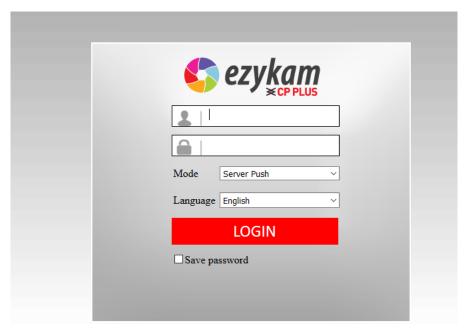
Choose your desired language, input correct user name and password, and then click "**Login**" **User name**: admin **Password**: admin,



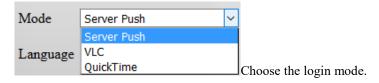
# 3.2. Software Operation for Chrome, Firefox, Safari:

Choose the suitable language, input correct user name and password, and then click "Login"

User name: admin Password: admin



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**QuickTime**: Choose QuickTime, login to the camera directly. If there is prompt for installing the QuickTime player, just download and install it.

Sever Push: For Firefox, Chrome, or Safari browser.

VLC: If you use VLC, should download the VLC player first.

During the VLC installation, you must enable Mozilla plug-in as the picture shows below:

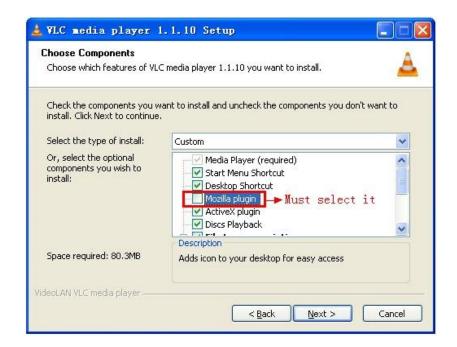


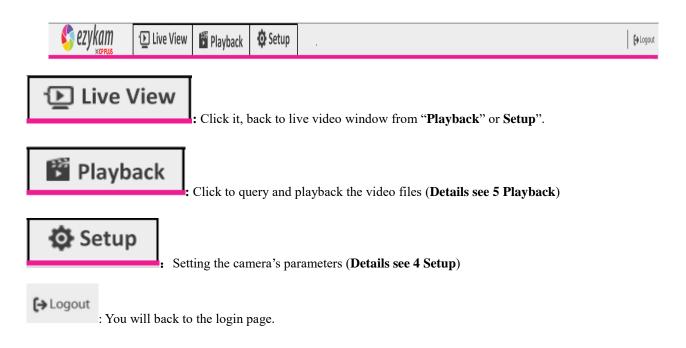




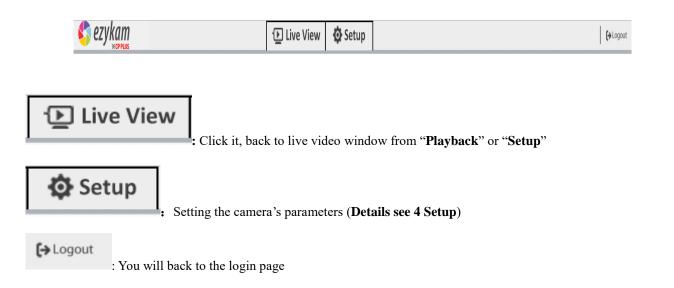
Figure 2.3

## 3.3. Functions

# 3.3.1. Three main functions (For IE):



# 3.3.2. Two main functions (For Safari, Chrome, Firefox)



## 3.4. For Live Video (for IE browser)

#### 3.4.1. Video Menu:

#### 1.1.1. Video Menu:



Play: Play the live video.

Stop: Stop the live video.

**Snapshot:** Click to take snapshot, the picture be saved in the PC to its appointed path as JPG format, and pop-up the prompt as below: (you can click "Save" to save the snapshot)



**Record:** Click to start record manually; the icon will change to green color. Record file will be saved in the PC to its appointed path as AVI format. Click it again, will stop record function.

Audio: Click it to enable listen function, the icon will change to green color camera via PC if audio is ON. Click it again, will stop listen function.

Talk: Click it to enable talk function, the icon will change to green color camera if audio device connected. Click it again, will stop talk function.

Clear Alarm: Click to stop the alarm manually when there is an alarm triggered, and pop-up prompt as below:



osd Silver 🗸

OSD Settings: Click it will pop-up the OSD settings interface, including OSD

Color, Frequency, Image Mirror and Flip.



OSD: Means "On-Screen Display"

**OSD Color:** Including Disabled, Black, Red, Green, Blue, Purple, Gray, Silver, Yellow, Olive, Turquoise, White, Light Blue etc.



Frequency: Including 50HZ, 60HZ, Outdoor.

50HZ/60HZ for the users who use 50HZ/60HZ frequency, outdoor for the users who want to use this camera to monitor an outdoor environment (through a window).

NOTE: The camera should only be used in an indoor environment



## Mirror and Flip

Mirror: Select this checkbox to see a mirror image. Uncheck it to go back to normal.

Flip: Select this checkbox to flip the image upside down. Uncheck it to go back to normal.



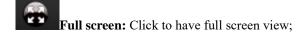
**NOTE**: You can choose Mirror and Flip function if you set up the camera in a special position, upside down for example.

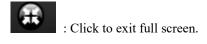
#### 3.5. Live Video for Safari, Chrome, and Firefox:

## 3.5.1. Play Menu for QuickTime Mode:



Capture: Click to take snapshot, the picture be saved in the PC to its appointed path as JPG format, will pop-up the snapshot, right click the picture to save it.



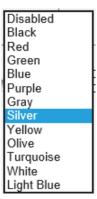


OSD Settings: Click it will pop-up the OSD settings interface, including OSD Color, Frequency, Image Mirror and Flip.



OSD: Means "On-Screen Display"

**OSD Color:** Including Disabled, Black, Red, Green, Blue, Purple, Gray, Silver, Yellow, Olive, Turquoise, White, Light Blue etc.

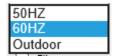


Frequency: Including 50HZ, 60HZ, Outdoor.

50HZ/60HZ for the users who use 50HZ/60HZ frequency, outdoor for the users who want to use this camera to

monitor an outdoor environment (through a window).

**NOTE**: The camera should only be used in an indoor environment.



#### Mirror and Flip

Mirror: Select this checkbox to see a mirror image. Uncheck it to go back to normal.

Flip: Select this checkbox to flip the image upside down. Uncheck it to go back to normal.



**NOTE**: You can choose Mirror and Flip function if you set up the camera in a special position, upside down for example.

## **3.5.2.** Top Menu for VLC Mode:

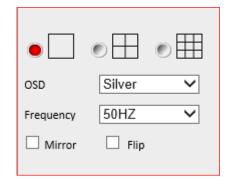


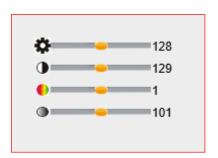
This will be the same as 3.3.1 TOP Menu for QuickTime Mode.

#### 3.6. Left Side Menu:

#### 3.6.1. Left Side Menu for IE browser

There is some basic operation icons listed on the left side menu as below:







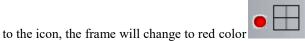
Click this one, you can view the main channel of the camera you login to, move the mouse to the icon, the



frame will change to red color



Click this one; you can view 4 Channels of cameras that are connected, from CH1 to CH4. Move the mouse

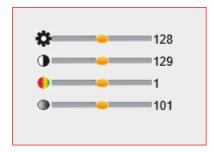




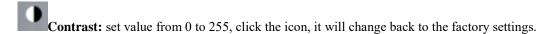
Click this one; you can view 9 Channels of cameras that are connected, from CH1 to CH9. Move the mouse

to the icon, the frame will change to red color

**NOTE**: If you want to view 4/9 channels, you should set the Multi-Device firstly (See section 4.13 Multi-Device Settings).



**Brightness:** set value from 0 to 255, click the icon, it will change back to the factory settings.

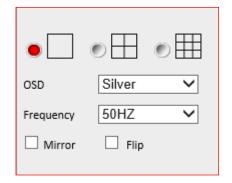


**Hue:** set value from -128 to 127, click the icon, it will change back to the factory settings.

Saturation: Set video saturation here.

# 3.6.2. Left Side Menu for Safari, Chrome, Firefox:

There is some basic operation icons listed on the left side menu as below:



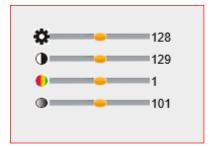
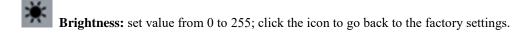


Figure 4.4



- **Contrast:** set value from 0 to 255; click the icon to go back to the factory settings.
- **Hue:** set value from -128 to 127; click the icon to go back to the factory settings.
- Saturation: Set video saturation here.

# 4. Setup

### 4.1. Status $\rightarrow$ Device Info.

Click "Settings" icon select "Status", it will show the basic information such as "Device ID", "Device Client Version", "Device System Version", "Description", "IPAddress", "UPNP Status", "DDNS Status" etc.

Default device name is "IP Camera", users can change the camera's description here, picture as below:

### 4.1.1. For IE, camera will show as below:



Figure 4.7

### 4.1.2. For Safari, Chrome, Firefox, camera will show like picture as below:



Figure 4.8

# 4.2. General Settings

#### 4.2.1. User Permission

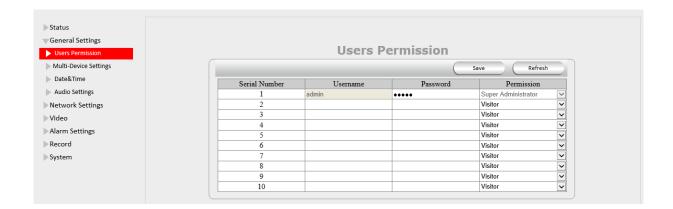
User can set 10 different usernames and passwords for different permission; Permission: Administrator, Operator; Visitor;

**Super Administrator:** Every device has a super administrator, it has the highest permission, can set all the parameters.

**Administrator:** Lower permission than super administrator, it can set most of the parameters except adding or editing other administrator accounts.

**Operator**: Lower permission than administrator, can do some operation such as pan/tilt control and set some parameters.

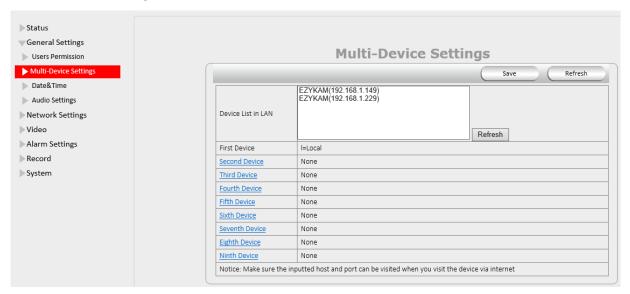
Visitor: The lowest permission, only can view live video, can't control the pan/tilt, parameter settings etc.



## 4.2.2. Multi-Device Settings

**Note:** Multi-Device only can be set under IE Browser, for Firefox, Safari, Chrome, you cannot see these setting, as they do not support ActiveX.

Click "Multi-Device Settings" to enter the interface:



If you have more cameras in same LAN network, software can auto-detect them and list in "Device List in LAN" Enable the channel you want to add; Choose the IP, input host(for camera in different network, you will need to input external ip address/DDNS address), web port, media port, username, and password manually, click Add to submit.

#### 4.2.3. Date & Time

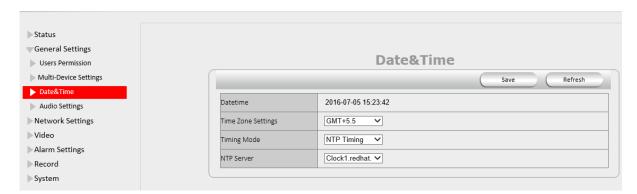
Date Time: Display the current date and time

**Time Zone**: Set the current time zone Select the working time server.

Time Mode: Can choose PC Time or NTP Time.

**PC Timing:** Camera will set the time the same as your PC.

**NTP Server:** User will need to select a working time server, and select the time zone.



# 4.2.4. Audio Settings

**External Headset**: User need to enable this feature, and connect external audio device like speak, Mic. So that this feature work.

**Built-in Headset:** This means the built-in Headset port; with located in the cable. User can connect to the audio devices;

Microphone Volume: User can adjust the volume of Microphone.

**Speaker Volume**: User can adjust the volume of Speaker.



## 4.3. Network Settings

#### 4.3.1. IP

Network Type: User can set Dynamic Address to obtain IP directly from router, or set a Static IP manually.

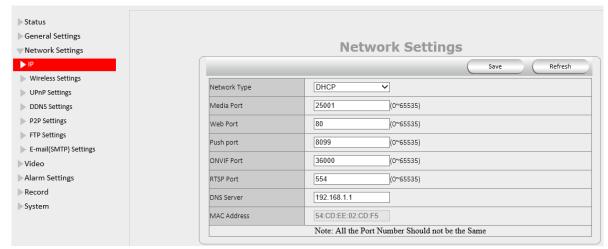
**Media Port:** User can set the Media port to transfer video if need to view camera remotely. (Work with DDNS or external IP)

**Web Port:** User can set the web port to transfer video if need to view camera remotely. (Work with DDNS or external IP)

ONViF: User can set ONViF port to work with other ONViF device like NVR Etc;

RTSP Port: Default 554;

**DNS server:** User can change DNS IP settings.



# 4.3.2. Wireless Settings

Click the icon "Search" to scan the wireless network in this environment automatically.

Using Wireless LAN: Set WI-Fi ON/OFF.

SSID: the ID of Wireless network, it should be the same SSID as the connected Wi-Fi router.

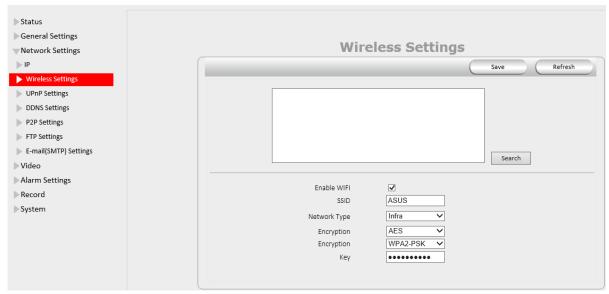
Network Type: Two modes:

- 1. Infra (Infrastructure Mode), if using normal AP, choose Infra mode.
- 2. Ad-Hoc Mode. If using point-to-point transmission, choose Ad-Hoc mode.

The factory setting is **Infra**.

- Encryption: WEP, TKIP, AES optional.
- Authentication: WEP: Open System or Share Key. TKIP (AES): WPA-PSK or WPA2-PSK.
- **Select Key**: Choose the channel of WEP share Key.
- **Key**: Input the key the same as the settings in your router.

All the Wi-Fi encryption mode settings should be the same as your Wi-Fi router, and different encryption has different authentication menu.



## 4.3.3. UPnP Settings

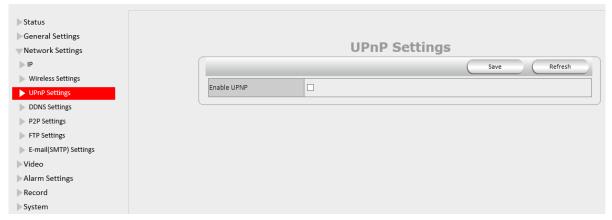
Enable UPNP: Set UPNP function ON/OFF.

Select it to enable UPNP, then the camera will do port forwarding automatically.

It's helpful for using DDNS, if your router support UPNP, then you no need do port forwarding in router.

**NOTE**: Here UPNP only for port forwarding now. It has much relation with security settings of your router; make sure the UPnP function of router is ON.

**ATTENTION**: If your router doesn't support UPNP function, it may show error information. So we recommend you do port forwarding manually in your router.



# 4.3.4. DDNS Settings

There are 2 options:

**CPPlus DDNS**: This domain is provided by CPPlus.

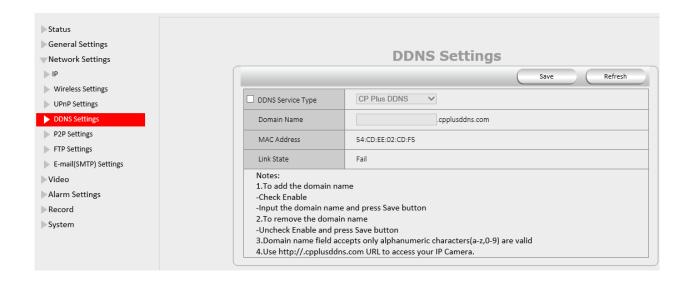
Third Party DDNS: This domain is provided by a 3rd party, such as Dyndns, 3322 etc.

- Enable DDNS: Set DDNS function ON/OFF.
- DDNS Server Type: Set DDNS server type, such as factory DDNS or third party DDNS server provider.
- DDNS User: Registered user name from DDNS server. (If you use factory DDNS, it can't be modified.)
- DDNS Password: Registered password from DDNS server. (If you use factory DDNS, it can't be modified.)

• DDNS Host Name: Domain name set by user. (If you use factory DDNS, it can't be modified.)

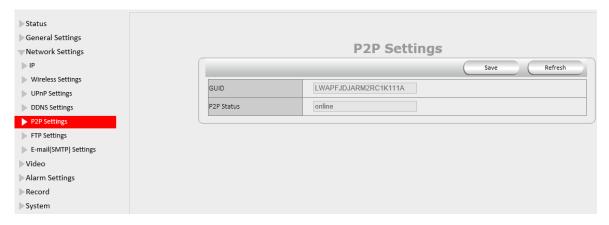
For the third party DDNS, you have to register an account first, keep the user, password, host, then input it.

**NOTE**: Only one DDNS can be chosen, for example, if you use manufacturer's DDNS, the 3rd one won't work, if you use a 3rd DDNS, the manufacturer's one won't work.



# 4.3.5. P2P Settings

Ezykam will provide P2P GUID for free using.



## 4.3.6. FTP Settings

Set FTP service, Snapshots will be delivered to appointed FTP server when alarmed.

Enable FTP: Set FTP function ON/OFF.

FTP Server: Set FTP server address.

**FTP Port**: Set the port of FTP server, default is 21.

FTP User: Set the user name of FTP server.

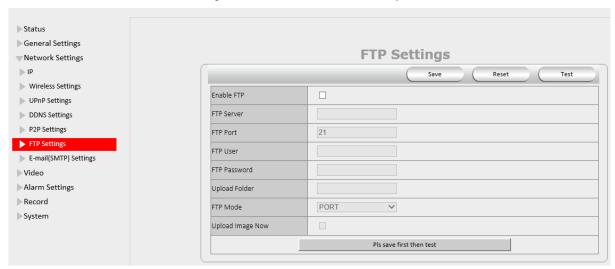
FTP Password: Set the password of FTP server.

**Upload Folder**: Set the path of remote FTP server. Make sure that the folder you plan to store images exists. (The camera cannot create the folder itself). Also, the folder must be erasable.

FTP Mode: It supports standard (POST) mode and passive (PASV) mode.

Click saves to submit, click test to check the settings.

NOTE: When alarmed, there will be 3 snapshots sent to the FTP server every 1 second



## 4.3.7. E-mail (SMTP) Settings

**Enable Email**: Set e-mail function ON/OFF.

**Sender**: Set sender's name or email address

Sender's email: Set sender's email address.

**Receiver**: Set receiver's email box. (Supports 3 receivers' emails simultaneously)

**SMTP Server**: The sender address SMTP server.

**SMTP Port**: The sender's SMTP Port usually is 25, some SMTP servers have their own port, e.g., the smtp port for Gmail is 465.

**Auth User**: Verify the user settings.

**SMTP Username**: Set sender's user name or email address.

SMTP password: Set sender's email address password.

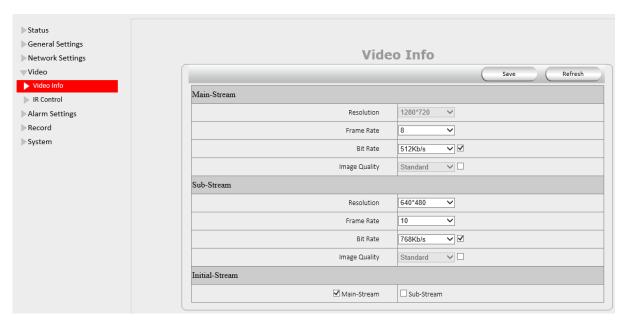
**Note**: User can save the settings first, then click Test button to see if settings working. If not, please double check your settings or spelling.



### 4.4. Video

### 4.4.1. Video Info

Click "Video Info" to enter the interface as below:



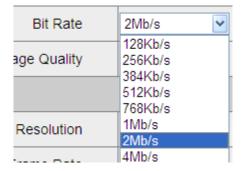
There are two options for stream, **Main-Stream** and **Sub-Stream**, you can set the stream based on the actual operation environment, for example, if the bandwidth is good enough, set Main-Stream as Initial-Stream, or choose Sub-Stream if better.

Set the parameters of Main-Stream and Sub-Stream as below:

**Resolution**: 1280 x 720, 640 x 368, 320 x 208 optional.

Frame Rate: Set the frame rate according to the bandwidth. Frame rate could be "Auto" or "from 1 fps to 30 fps (Real time)". If the network situation is not ideal, you can reduce the frame rate to control the coding rate, make the moving pictures smoother.

**Bit Rate**: Higher bite rate means better quality images, but takes more bandwidth, so adjust the settings according to the actual bandwidth available. The range of bit rate from  $128 \text{ Kbps} \sim 4 \text{ Mbps}$ .



**Image Quality**: Better image quality, higher bit rate value, but it will take more bandwidth, the image quality parameters could be set as below:



NOTE: When the device runs, only can select Bit Rate or Image Quality either.

# **4.4.2. IR Control**

Here you can control IR for night mode



# 4.5. Alarm Settings

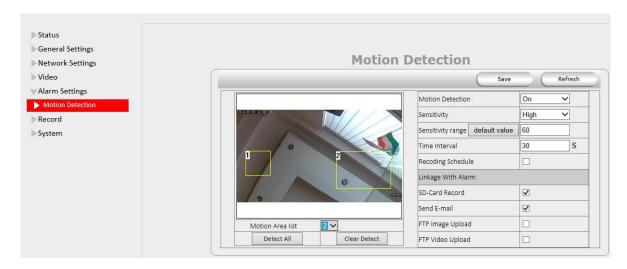
# 4.5.1. Motion Detection



### **Motion Detection Zone Armed:**

Can set all zones to be armed, or a specified zone armed.

Before setting a specified zone, you should set "Motion Detection" to "ON", then press left mouse, drag the mouse onto video area to set the detection zone, and save it, supports 3 areas.



- **Detect All**: Setting the whole video window as the motion detect armed zone.
- **Clear Detect**: Clear all armed zone.
- **Motion Detection**: Set motion detection armed function ON/OFF.
- Sensitivity: Set detection sensitivity as Low, Middle, High, Higher, and Highest.
- Alarm Duration: Set each alarm duration, can be forever, 5s, 10s, 15s, 30s, 60s.
- Action with Alarm: These are linkage actions optional for motion detection. User can select the alarm relative alarm convince to them.
- Alarm output: Select it to enable alarm output, unselect to stop.
- **SD-Card Record**: Select it to enable record to SD card, unselect to stop.
- **Send E-mail**: Select it to enable E-mail alert function, unselect to stop.

• FTP Upload: Select it to enable FTP upload function, unselect to stop.

Click **Save** to save all the settings.

Click **Update** to refresh the settings.

Linkage With Alarm	
Alarm Output	✓
SD-Card Record	<b>V</b>
Send E-mail	V
FTP Upload	✓

# 4.6. Record

# 4.6.1. Local Settings

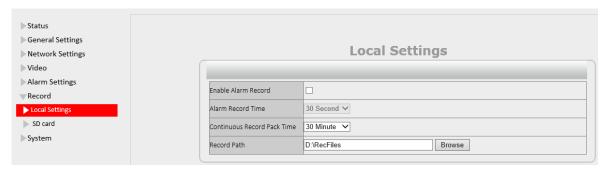
**Note:** This feature will suitable for IE only, as other browsers not support IE activeX.

**Enable Alarm Record:** Camera will record to the path user set when Alarm happens.

Alarm Record time: User can set the record time when Alarm happens. Such as 2 mins.

Manual Record Pack time: User can set the manual record time, such as 2 hours. Once click the "Record" button under the live video screen, camera will record as long as user set.

Path: This belongs to the PC path, user can set the PC path to store all records.



## 4.6.2. SD Card info

**Device Name**: Display the name of SD card. **Total Size**: Display the total size of SD card

Balance Space: Display the free space of SD card

Status: Display the state of SD card.

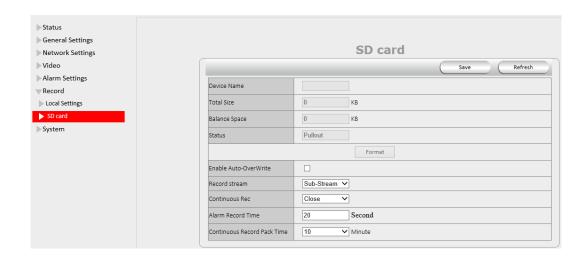
Format: Click it to delete all data and format the SD card. (All data will be lost if formatted).

Open Auto cover: Set SD card auto cover when it's full.

Open Pre-recording: Set Pre-recording function (Record the video before alarm triggered).

Pre-recording Time: Set the Pre-recording time, can be from 1 to 6 seconds.

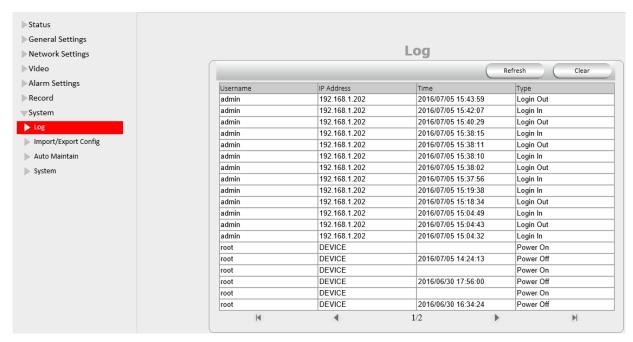
Record Stream: Choose the stream here: Main Stream and Sub Stream.



# **4.7. System**

# 4.7.1. Log

Log provides information of camera, login, log out, alarm, power on/off etc;



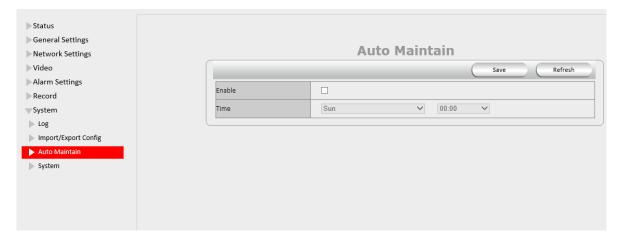
# 4.7.2. Import/Export Config

Import/Export Config provide us to copy complete configuration setting of one camera to another camera.



# 4.7.3. Auto Maintain

Auto Maintain provides an auto protection of hardware; Set a time such as 24:00; Then camera will auto reboot; and refresh the hardware performance.



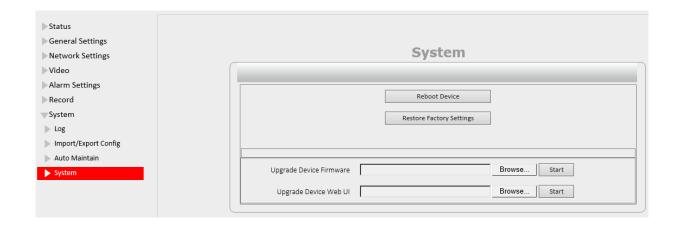
# 4.7.4. System

Reboot Device: Camera will get reboot.

Restore factory settings: User can restore factory settings once forget password, settings etc.

**Upgrade Device Firmware:** To upgrade or degrade the camera firmware. (The firmware needs to store in the same camera you are viewing camera.)

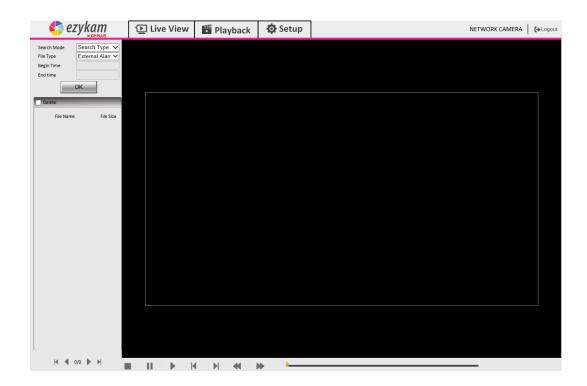
**Upgrade Device Web UI:** To upgrade or degrade the camera web UI. (The firmware needs to store in the same camera you are viewing camera.)



# 5. PLAYBACK for IE browser only

Note: Playback function shows under IE ActiveX mode only. Other browsers not support this feature.

Click login the playback interface, this is for SD Card files playback. So If User not have SD card in the camera or not have any file in SD card, will not work.



**Search Mode:** User can search the record, snapshot.etc by different methods.

**Search Type:** External Alarm and Motion detection optional; Select External Alarm; Camera will search the alarm file from External alarm which comes from other device; Select motion detection, Camera will search the alarm file from motion detection.

Search All: Camera will search all file in SD Card.

**File type:** External Alarm and Motion detection optional. This option works only work when user select Search Type from Search mode

Begin Time and End Time: This feature work when user select Search Time from Seach mode; Select a begin time, and end time, camera will search these files in the time area.

Click "OK" icon, will pop-up a window for search file, set the mode or time, click OK to submit, then all the correlative files will be listed on the left side.

After searching, files will be listed on the left side window, choose the file, double click it or click play icon start replay. Users can check the replay file information here; do other operation such as Stop, Pause, Previous, Next, Fast Backward, Fast Forward etc.



# 6. FREQUENTLY ASKED QUESTIONS

### 1. I have forgotten the administrator username and/or password

There is a [RST] button on the rear panel, keep the power on, hold the reset button for 30 seconds, it will restore back to factory default settings as below:

Username: admin
Password: admin

NOTE: Please don't press RST button unless you are sure you want to do it.

# 2. There is no picture displayed in IE browser (For IE only)

It maybe the ActiveX problem,

If using the IE browser for the first time, you should install the ActiveX control, details as below:

Before login, click the EzykamOCX at the right side of interface to download, save the file, run it to install the ActiveX.

### 3. Fail to visit IP camera via IE after upgrading (For IE Only)

Solution: Clear the browser buffer.

Steps: Open IE>click "Tools"> "Internet Options"> "General"> "Delete"> "Internet temporary files", delete the cookies and temporary files, then click "OK" and re-login.

#### 4. The video is not smooth

**Possible reason 1**: The frame rate value is too small.

**Solution**: Increase the frame rate value.

**Possible reason 2**: Too many users are connecting to the device.

**Solution**: Close some connection or reduce the video frame rate.

Possible reason 3: Network bandwidth is too low, lots of lost packets.

**Solution**: Reduce the video frame rate or video compression bit rate.

### 5. Fail to visit IP camera via IE browser

Possible Reason 1: Network is disconnected.

**Solution**: Connect your PC to network, check whether the network works well or not. Check if there's a problem with the cable connection, or network problem caused by PC virus.

**Possible reason 2**: IP Address has been occupied by other devices.

**Solution**: Stop the connection between IP camera and network; connect the IP camera to PC.

Directly reset IP address according to the proper operations recommended.

Possible reason 3: IP addresses are in different subnets.

Solution: Check IP address, Subnet masking and Gateway.

Possible reason 4: Physical address of network conflicts with the IP camera.

Solution: modify the physical address of IP camera.

Possible Reason 5: Web port has been modified.

Solution: Contact as Network Administrator to obtain related information.

Possible Reason 6: Unknown.

**Solution**: Press RESET to restore to factory settings then connect it again, the default IP address is 192.168.1.155, subnet mask is 255.255.255.0

### 6. The color of image is abnormal (Green or other color)

Sometimes the IP camera images cannot be displayed properly because of different graphics cards, the images appears to be green or other colors, then you should run the program "Config.exe" from the downloaded OCT files.

(or run C:\windows\system32\Config.exe) to set the following parameters for the display buffer: auto-detection, used display card memory or system memory, then run IE, connect IP camera again.

## 7. There is no voice while monitoring

Possible Reason 1: No audio input connection.

Solution: Check audio connection of the host.

Possible Reason 2: the relative audio option of IP camera is OFF.

Solution: Check audio parameter settings to see if you have set the audio option ON, but without external audio input.

## 8. Image processing doesn't work properly

**Possible Reason 1**: System problem, DirectX function is disabled, which will cause slow display of images and abnormal color.

**Possible Reason 2**: Hardware problem, graphics card doesn't support image acceleration and hardware zooming functions. (For hardware issue, the only solution is to change your graphics card).

Solution: Install DirectX image driver, then click "Start">"Run">input "dxdiag", set enable "DirectDraw Acceleration" "Direct3D Acceleration" "AGP Texture Acceleration" functions.

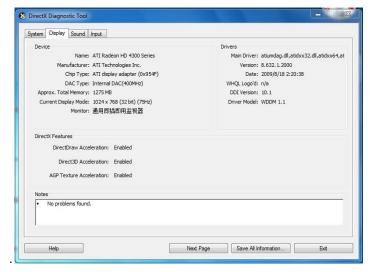


Figure 13.0

Note: If you are unable to do it, it means your DirectX is not installed properly or hardware doesn't support this function.

#### 9. Fail to use DDNS

Possible Reason 1: The PC or IP Camera can't connect to the internet.

**Solution**: Check the internet connection and settings.

Possible Reason 2: Port forward is not set in router.

**Solution**: Set the port forward of extranet in router correctly.

For example, if IP Camera address is: 192.168.1.100, Media port is 38401, Web port is 85, factory DDNS is http://test.aipcam.com.

## Set Port forwarding in the router.

This is an important step. You need to set port forwarding in your router, to refer to the IP of your camera correctly, for DDNS to work. There are so many kinds of routers, so it's difficult to show fixed steps, but here are some samples of different router's port forwarding settings, just for reference:

### **TP-LINK:**

1. Login to the router.



- 2. Choose "Forwarding", select "Virtual Servers"
- 3. Click the Add New button, pop-up below:

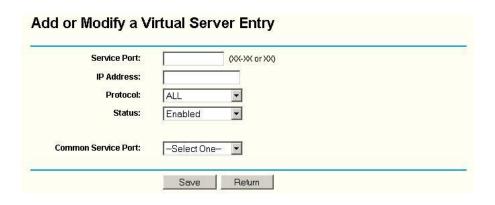


Figure 13.1

Fill in the service port (don't use 80), IP address of the camera, then click Save

**NOTE**: The port and IP address should be the same as the camera.

Fill in the web port, for example port 85, IP address as 192.168.1.100, click Save.

- (1) Repeat step 3 above, it will pop-up the window again, fill in the **media port** as 25001, IP address as 192.168.1.100, then save.
- (2) Then check the "Device Info" "DDNS Status",

It will show DDNS: <a href="http://test.aipcam.com:85">http://test.aipcam.com:85</a>, input this link in IE, then you can visit this camera remotely.

### **BELKIN:**

- 1. Login to the router.
- 2. Choose "Firewall", select "Virtual Servers"
- 3. Input the port (don't use 80) and IP address, then click save.

**NOTE**: The port and IP address should be the same as the camera.

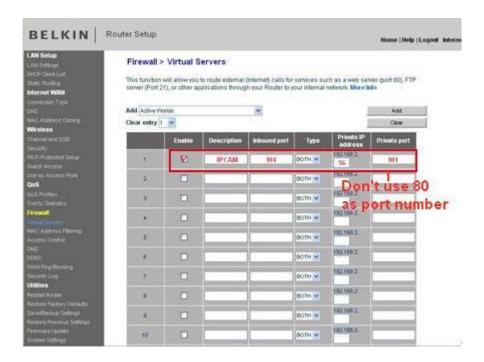


Figure 13.2

### **DLINK:**

- 1. Login to the router.
- 2. Choose "Advanced", select "Virtual Servers"
- 3. Input the port, IP address, Protocol, and then click save.

**NOTE**: The "public port" & "private port" should be the same as camera's port, choose the protocol to be "both".

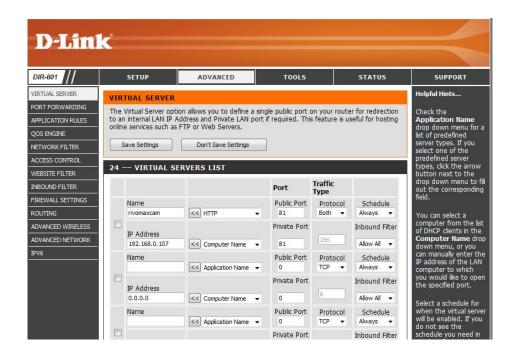


Figure 13.3

# 7. SPECIFICATIONS

Image Sensor	Image Sensor	1/4" Color CMOS Sensor
	Display Resolution	1280 x 720 Pixels (1000K Pixels, i.e. 1.0 Megapixel)
	Lens	3.6mm
	Mini. Illumination	0.5 Lux
	Viewing Angle	60-90 Degree
Audio	Input	Built-in Microphone
	Output	Built-in Speaker
	Audio Compression	ADPCM
Video	Image Compression	H.264, MJPEG
	Image Frame Rate	30fps (VGA),30fps (QVGA)
	Resolution	1280 x 720 (VGA), 640 x 368 (VGA), 320 x 208 (QVGA)
	Flip Mirror Images	Vertical / Horizontal
	Light Frequency	50Hz, 60Hz, Outdoor
	Video Parameters	Brightness, Saturation, Contrast, Hue
	Ethernet Interface	Build in 10/100Mbps,Auto MDI/MDIX , RJ-45
	Supported Protocol	TCP/IP HTTP DNS DHCP PPPoE SMTP FTP SSL TFTP NTP
		ARP/RARP NFS RTSP RTP RTCP
Communication	Compress rate level	128Kbps ~ 4Mbps
	Wireless Standard	IEEE 802.11b/g/n
	Data Rate	802.11b: 11Mbps (max.), 802.11g: 54Mbps (max.), 802.11n: 150Mbps (max.)
	Wireless Security	WEP & WPA WPA2 Encryption
Physical	Pan/Tilt Angle	Not Supported
	Infrared Light	12 IR LEDs, Night visibility up to 10 meters
	Alarm Input	Not Supported
	Alarm Output	Not Supported
Power	Power Supply	DC 5V/1.0A (EU,US,AU adapter or other types optional)
	Power Consumption	7 Watts (Max.)
Environment	Operate Temper.	$0^{\circ} \sim 55^{\circ} \text{C}  (14^{\circ} \text{F} \sim 131^{\circ} \text{F})$
	Operating Humidity	20% ~ 85% non-condensing
	Storage Temper.	$-10^{\circ}\text{C} \sim 60^{\circ} (14^{\circ}\text{F} \sim 140^{\circ}\text{F})$
	Storage Humidity	0% ~ 90% non-condensing
PC System Requirements	CPU	2.0GHZ or above (suggested 3.0GHz)
	Memory Size	256MB or above (suggested 1.0GHz)
	Display Card	64M or above
	Supported OS	Microsoft Windows 2000/XP/Vista/7
	Browser	IE6.0/7.0/8.0/Firefox/Safari/Google chrome or other standard browsers
Certification	CE, FCC, RoHS	

# 8. OBTAINING TECHNICAL SUPPORT

We hope your experience with your IP network camera is enjoyable, but if you experience any issues or have any questions that this User's Guide has not answered, please email us.

If your camera does not support some special functions shown in this manual, please contact our technical support team to obtain the latest Firmware and WEB UI file for upgrading.

Statement: If you found any bug of software, pls kindly not discuss in the public place or website, contact us by email or phone, we will give you a quick shot.

## **FCC Caution**

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.

This equipment generates and uses radio frequency energy, and if not installed and used properly, that is, in strict accordance with the manufacturer's instructions, it may cause interference to radio and television reception. It has been type tested and found to comply with the limits for remote control devices in accordance with the specifications in Sub-Parts B and C of Part 15 of FCC Rules, which are designed to provide reasonable protection against such interference in a residential installation. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause interference to radio or television reception, which can be determined by unplugging the equipment, try to correct the interference by one or more of the following measures.

- Reorient the antenna of the radio/TV experiencing the interference.
- Relocate the equipment with respect to the radio/TV.
- Move the equipment away from the radio/TV.
- Plug the equipment into an outlet on a different electrical circuit from the radio/TV experiencing the interference.
- If necessary, consult your local dealer for additional suggestions.

**NOTE:** Modifications to this product will void the user's authority to operate this equipment.

# **FCC Radiation Exposure Statement:**

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20cm between the radiator & your body.