



# **WL-1000CAM**

**Wireless-G Motion JPEG  
Camera**

## **User's Manual**



[www.airlive.com](http://www.airlive.com)

# Declaration of Conformity

We, Manufacturer/Importer

**OvisLink Corp.**

**5F., NO.6, Lane 130, Min-Chuan Rd.,  
Hsin-Tien City, Taipei County, Taiwan**

Declare that the product

**Wireless-G Motion JPEG Camera**

**AirLive WL-1000CAM**

**is in conformity with**

In accordance with 89/336 EEC-EMC Directive and 1999/5 EC-R & TTE Directive

## Clause

## Description

- **EN 300 328 v1.7.1  
(2006-05)** Electromagnetic compatibility and Radio spectrum Matters (ERM);  
Wideband transmission equipment operating in the 2.4GHz ISM band  
And using spread spectrum modulation techniques; Part 1 : technical  
Characteristics and test conditions Part2 : Harmonized EN covering  
Essential requirements under article 3.2 of the R&TTE Directive
  
- **EN 301 489-1 V1.5.1  
(2004-11)** Electromagnetic compatibility and Radio spectrum Matters (ERM);  
Electromagnetic compatibility(EMC) standard for radio equipment and
- **EN 301 489-17 V1.2.1  
(2002-08)** Services; Part 17 : Specific conditions for wideband data and  
HIPERLAN equipment
  
- **EN 50371:2002** Generic standard to demonstrate the compliance of low power  
Electronic and electrical apparatus with the basic restrictions related  
to human exposure to electromagnetic field (10MHz – 300GHz)  
-General public
  
- **EN 60950-1:2001/A11  
:2004** Safety for information technology equipment including electrical  
business equipment

■ **CE marking**



Manufacturer/Importer

Signature :

Name :

Position/ Title :

*Albert Yeh*

**Albert Yeh**

**Vice President**

(Stamp)

Date : **2008/2/13**

## AirLive WL-1000CAM CE Declaration Statement

Country	Declaration	Country	Declaration
<b>cs</b> Česky [Czech]	OvisLink Corp. tímto prohlašuje, že tento AirLive WL-1000CAM je ve shodě se základními požadavky a dalšími příslušnými ustanoveními směrnice 1999/5/ES.	<b>lt</b> Lietuvių [Lithuanian]	Šiuo OvisLink Corp. deklaruoja, kad šis AirLive WL-1000CAM atitinka esminius reikalavimus ir kitas 1999/5/EB Direktyvos nuostatas.
<b>da</b> Dansk [Danish]	Undertegnede OvisLink Corp. erklærer herved, at følgende udstyr AirLive WL-1000CAM overholder de væsentlige krav og øvrige relevante krav i direktiv 1999/5/EF.	<b>nl</b> Nederlands [Dutch]	Hierbij verklaart OvisLink Corp. dat het toestel AirLive WL-1000CAM in overeenstemming is met de essentiële eisen en de andere relevante bepalingen van richtlijn 1999/5/EG.
<b>de</b> Deutsch [German]	Hiermit erkläre OvisLink Corp., dass sich das Gerät AirLive WL-1000CAM in Übereinstimmung mit den grundlegenden Anforderungen und den übrigen einschlägigen Bestimmungen der Richtlinie 1999/5/EG befindet.	<b>mt</b> Malti [Maltese]	Hawnhekk, OvisLink Corp, jiddikjara li dan AirLive WL-1000CAM jikkonforma mal-ftigijiet essenzjali u ma provvedimenti oħrajn relevanti li hemm fid-Dirrettiva 1999/5/EC.
<b>et</b> Eesti [Estonian]	Käesolevaga kinnitab OvisLink Corp. seadme AirLive WL-1000CAM vastavust direktiivi 1999/5/EÜ põhinõuetele ja nimetatud direktiivist tulenevatele teistele asjakohastele sätetele.	<b>hu</b> Magyar [Hungarian]	Az OvisLink Corporation kijelenti, hogy az AirLive WL-1000CAM megfelel az 1999/05/CE irányelv alapvető követelményeinek és egyéb vonatkozó rendelkezéseinek.
<b>en</b> English	Hereby, OvisLink Corp., declares that this AirLive WL-1000CAM is in compliance with the essential requirements and other relevant provisions of Directive 1999/5/EC.	<b>pl</b> Polski [Polish]	Niniejszym OvisLink Corp oświadcza, że AirLive WL-1000CAM jest zgodny z zasadniczymi wymogami oraz pozostałymi stosownymi postanowieniami Dyrektywy 1999/5/EC.
<b>es</b> Español [Spanish]	Por medio de la presente OvisLink Corp. declara que el AirLive WL-1000CAM cumple con los requisitos esenciales y cualesquiera otras disposiciones aplicables o exigibles de la Directiva 1999/5/CE.	<b>pt</b> Português [Portuguese]	OvisLink Corp declara que este AirLive WL-1000CAM está conforme com os requisitos essenciais e outras disposições da Directiva 1999/5/CE.
<b>el</b> Ελληνική [Greek]	ΜΕ ΤΗΝ ΠΑΡΟΥΣΑ OvisLink Corp. ΔΗΛΩΝΕΙ ΟΤΙ AirLive WL-1000CAM ΣΥΜΜΟΡΦΩΝΕΤΑΙ ΠΡΟΣ ΤΙΣ ΟΥΣΙΩΔΕΙΣ ΑΠΑΙΤΗΣΕΙΣ ΚΑΙ ΤΙΣ ΛΟΙΠΕΣ ΣΧΕΤΙΚΕΣ ΔΙΑΤΑΞΕΙΣ ΤΗΣ ΟΔΗΓΙΑΣ 1999/5/ΕΚ.	<b>sl</b> Slovensko [Slovenian]	OvisLink Corp izjavlja, da je ta AirLive WL-1000CAM v skladu z bistvenimi zahtevami in ostalimi relevantnimi določili direktive 1999/5/ES.
<b>fr</b> Français [French]	Par la présente OvisLink Corp. déclare que l'appareil AirLive WL-1000CAM est conforme aux exigences essentielles et aux autres dispositions pertinentes de la directive 1999/5/CE	<b>sk</b> Slovensky [Slovak]	OvisLink Corp týmto vyhlasuje, že AirLive WL-1000CAM spĺňa základné požiadavky a všetky príslušné ustanovenia Smernice 1999/5/ES.
<b>it</b> Italiano [Italian]	Con la presente OvisLink Corp. dichiara che questo AirLive WL-1000CAM è conforme ai requisiti essenziali ed alle altre disposizioni pertinenti stabilite dalla direttiva 1999/5/CE.	<b>fi</b> Suomi [Finnish]	OvisLink Corp vakuuttaa täten että AirLive WL-1000CAM tyyppinen laite on direktiivin 1999/5/EY oleellisten vaatimusten ja sitä koskevien direktiivin muiden ehtojen mukainen
<b>lv</b> Latviski [Latvian]	Ar šo OvisLink Corp. deklarē, ka AirLive WL-1000CAM atbilst Direktīvas 1999/5/EK būtiskajām prasībām un citiem ar to saistītajiem noteikumiem.	<b>is</b> Íslenska [Icelandic]	Hér með lýsir OvisLink Corp yfir því að AirLive WL-1000CAM er í samræmi við grunnkröfur og aðrar kröfur, sem gerðar eru í tilskipun 1999/5/EC.
<b>sv</b> Svenska [Swedish]	Härmed intygar OvisLink Corp. att denna AirLive WL-1000CAM står i överensstämmelse med de väsentliga egenskapskrav och övriga relevanta bestämmelser som framgår av direktiv 1999/5/EG.	<b>no</b> Norsk [Norwegian]	OvisLink Corp erklærer herved at utstyret AirLive WL-1000CAM er i samsvar med de grunnleggende krav og øvrige relevante krav i direktiv 1999/5/EF.

A copy of the full CE report can be obtained from the following address:

**OvisLink Corp.**  
**5F, No.6 Lane 130,**  
**Min-Chuan Rd, Hsin-Tien City,**  
**Taipei, Taiwan, R.O.C.**

This equipment may be used in AT, BE, CY, CZ, DK, EE, FI, FR, DE, GR, HU, IE, IT, LV, LT, LU, MT, NL, PL, PT, SK, SI, ES, SE, GB, IS, LI, NO, CH, BG, RO, TR

## **Federal Communication Commission Interference Statement**

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of 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 measures:

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

## **FCC Caution**

This device and its antenna must not be co-located or operating in conjunction with any other antenna or transmitter.

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. Any changes or modifications not expressly approved by the party responsible for compliance could void the authority to operate equipment.

## **IMPORTANT NOTE: 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. This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

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# Chapter 1: Product Information

## 1-1 Introduction

Thank you for choosing the Internet Camera. This Internet Camera sends live video through 10/100Mbps wired network to a web browser or camera viewer across Internet anywhere in the world! This compact, self-contained unit lets you keep an eye on your home, your kids, and your workplace—whatever's important to you.

How does the Camera do all of this? Unlike standard “web cams” that require an attached PC, the Internet Camera can connect directly to a network. The MJPEG video compression produces a high quality, high-frame rate, 640 x 480 video streams.

The included Camera Viewer utility lets you record the video to your local hard drive, “live” or on a predetermined schedule.

Use the instructions in this Guide to help you integrate the Camera into your network. These instructions should be all you need to get the most out of the Internet Camera.

## 1-2 Package Content

- One Internet Camera
- One Power Adapter
- One Camera Stand
- One Ethernet Cable
- One Quick Installation Guide
- One CD (Including Manual/Utility/Driver)
- One 2dBi Antenna

If any of the above items are missing, please contact your supplier.

## 1-3 System Requirements

System requirement for PC, MAC or Notebook PC to access the Internet Camera are:

- OS System: Windows 98 , ME , 2000, XP + SP2, Server 2003
- IE Version: 6.0.29 + SP2 or above
- CPU: Intel Pentium III 750MHz above or Intel Celeron 1GHz above
- Memory Size: 128MB (256MB recommended)
- DirectX 9.0 or above
- VGA card with fully DirectX 9.0 supported.
- VGA Card Resolution: 800 x 600 or above

# Chapter 2: Hardware Installation

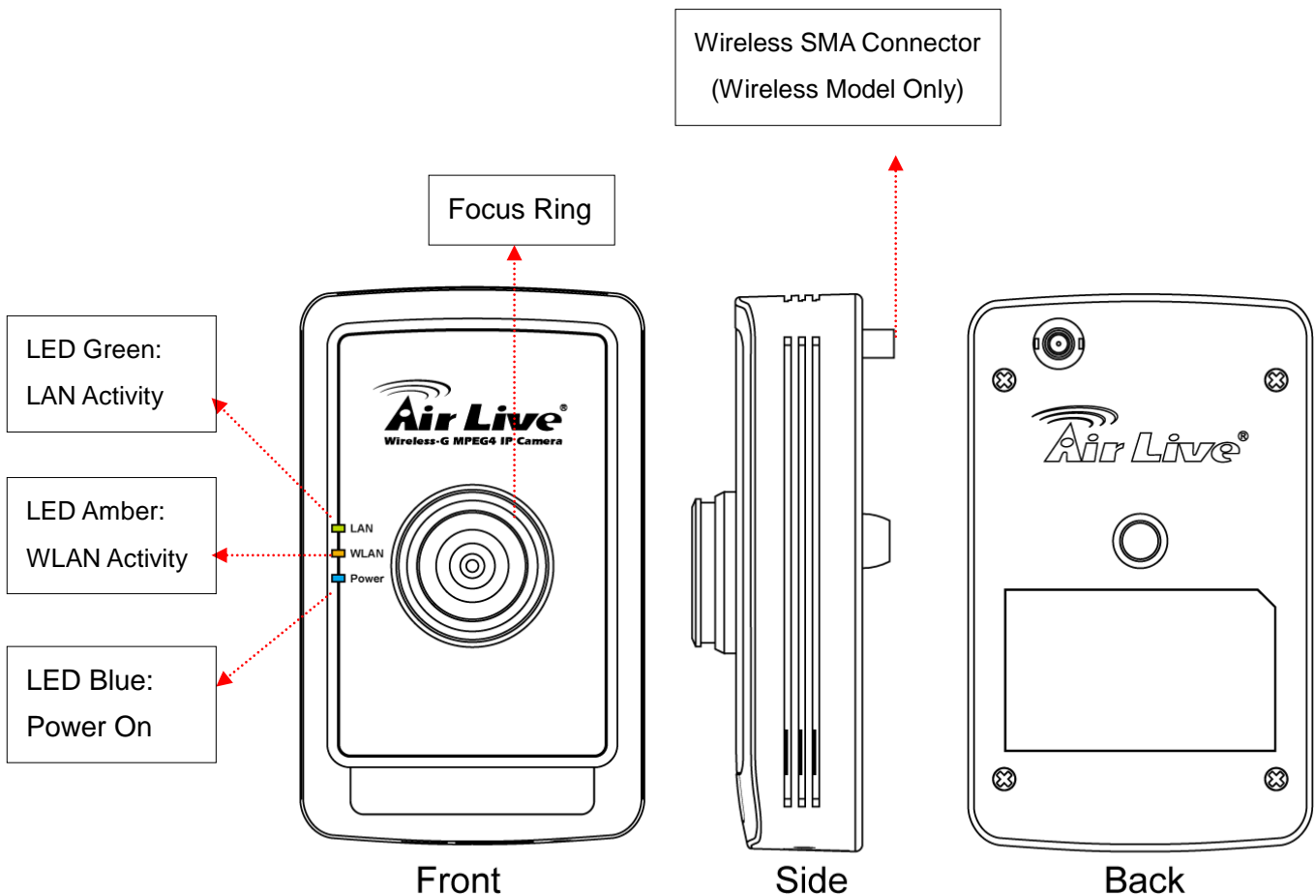
## 2-1 LED and Focusing

The Camera head and its focus ring allow you to modify the aim and focus of the Camera.

To adjust the Camera's focus, rotate the dark focus ring.

There are four LEDs indicating the camera status and networking status.

- **Power**  
When the camera is power on, the LED will light.
- **LAN**  
When the Internet Camera is linking to wired network, the LED is lighting. The LED is flashing when video is transmitted or received through wired network.
- **WLAN**  
When the Internet Camera is linking to wireless network, the LED is lighting. The LED is flashing when video is transmitted or received through wireless network.

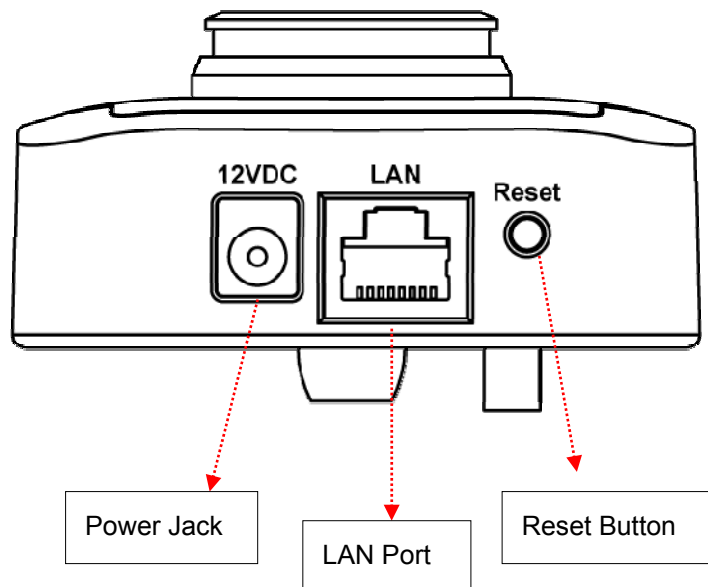




## 2-2 Camera Ports

The Camera features three ports and a Reset button.

- **Power**  
The Power port is where you can connect the power adapter.
- **LAN**  
The LAN port is where you can connect the Ethernet network cable.
- **WLAN (Antenna Connector)**  
This round connection is standard Reverse SMA connector where any antennas with Reverse SMA connector can connect to the Internet Camera..
- **Reset**
  1. If problems occur with your Internet Camera, press the reset button with a pencil tip (for less than 2 seconds) and the Internet Camera will re-boot itself, keeping your original configurations.
  2. If problems persist or you experience extreme problems or you forgot your password, press the reset button for longer than 5 seconds and the Internet Camera will reset itself to the factory default settings (warning: your original configurations will be replaced with the factory default settings).



## 2-3 Installation Procedure

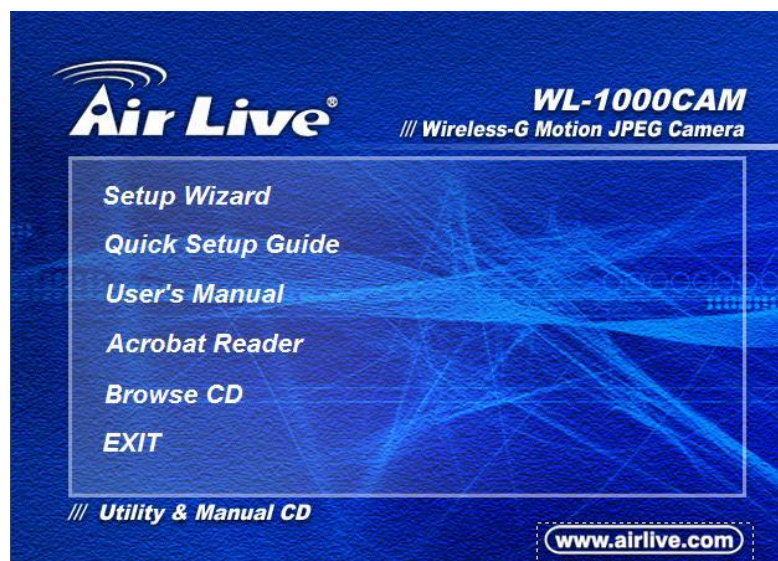
1. Unpack the Internet Camera package and verify that all the items listed in the Chapter 2 are provided.
2. Connect the Internet Camera to your network by attached the network cable from the switch/router to the UTP port of the Internet Camera.
3. Connect the power adapter to the Internet Camera and plug the power adapter to power outlet. The Internet Camera will be powered on. When the Internet Camera is ready, the Ready LED will light.
4. Make sure that you have installed correct VGA driver and DirectX 9.0 or above.

**Note:** It is highly recommended to use the power adapter shipped with the Internet Camera, do NOT use any other power adapter from any sources.

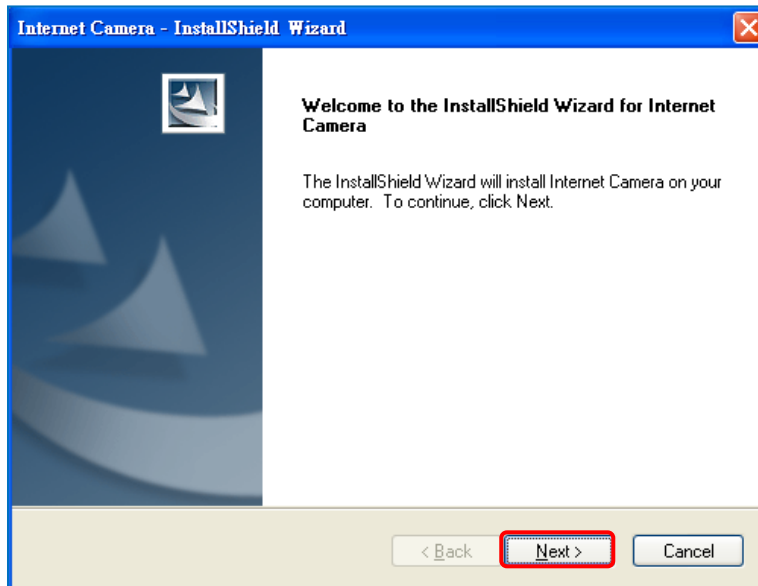
## Chapter 3: Software Installation

Follow the simple steps below to run the Install Wizard to guide you quickly through the Installation process. The following installation is implemented in Windows XP. The installation procedures in Windows 2000/Server 2003 are similar.

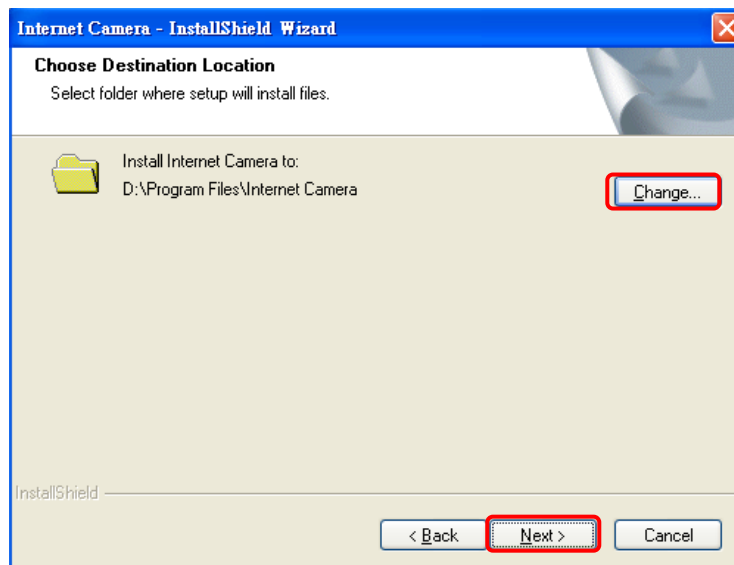
1. Insert the CD shipped along with the Internet Camera into your CD-ROM drive. The “Autorun.exe” program should be executed automatically. If not, run “Autorun.exe” manually from “Autorun” folder in the CD.
2. The Install Wizard will show six selections, select the program you want to install or click “Exit” to install the program later. The following installation steps are the demonstration of “Install Administrator Utility & Camera Viewer”.



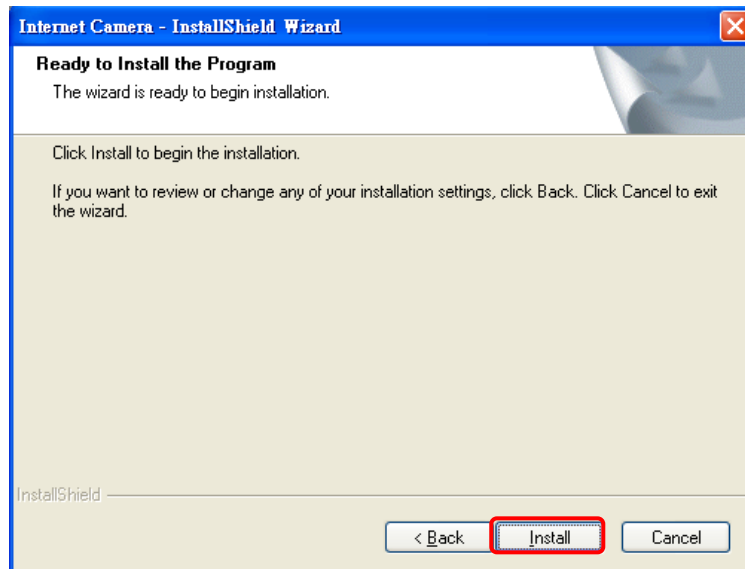
3. The system will start the installation procedures. Click “Next” to continue installation.



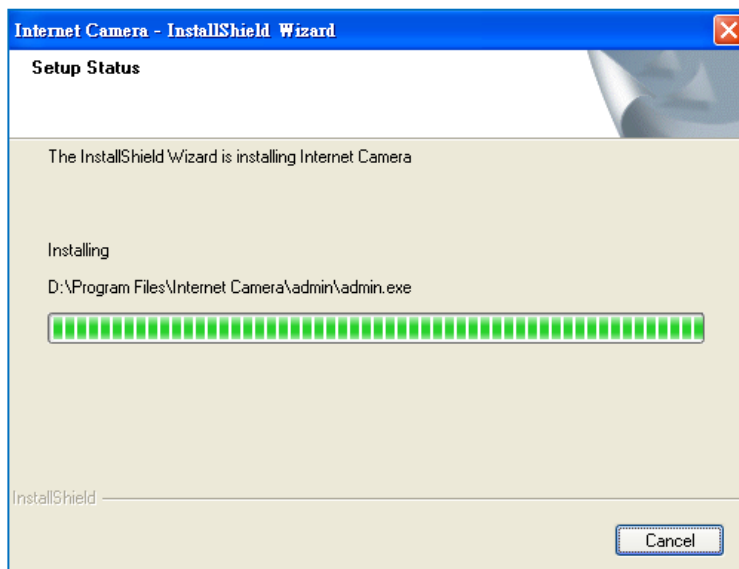
4. If you wish to install the software program in an alternate location, click “Change”; otherwise click “Next” to move on to the next step.



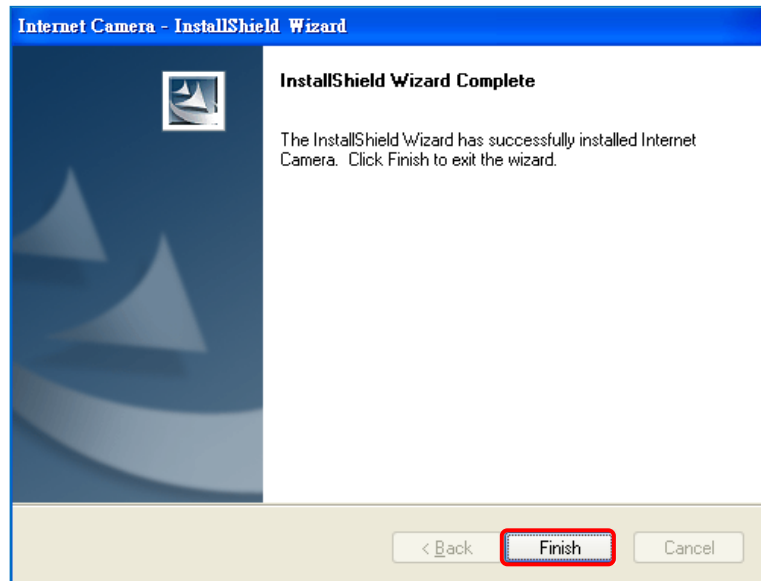
5. Click "Install" to start installing the program.



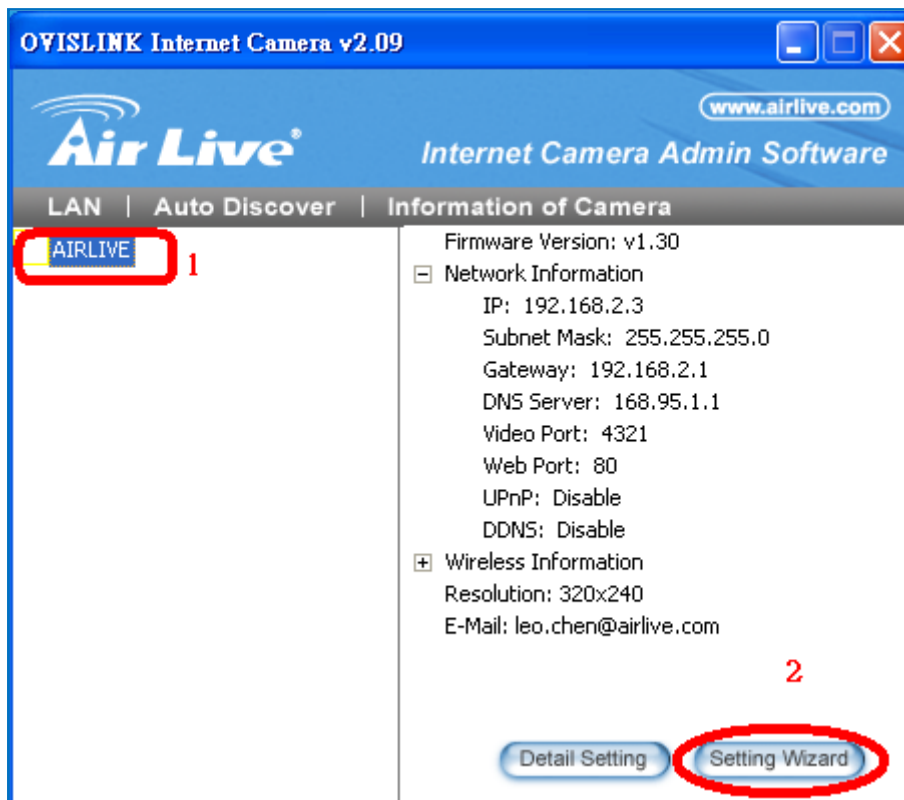
6. The system will install the program automatically.



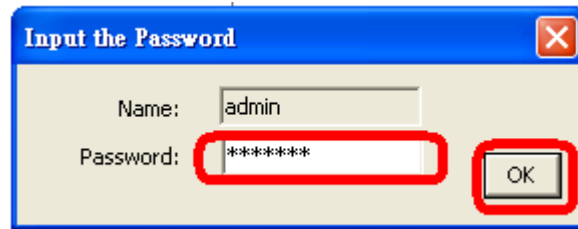
7. Click "Finish" to complete the software installation.



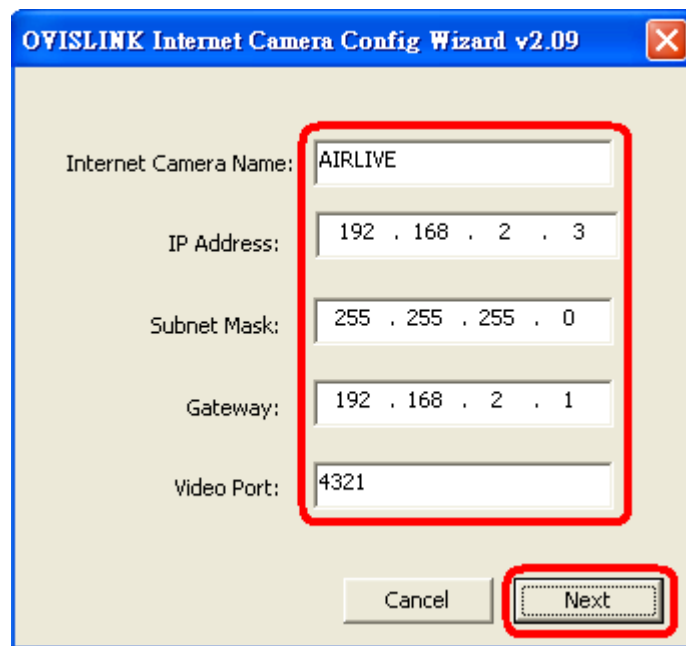
8. "Administrator Utility" will be run automatically after installation. On the Internet Camera first page, the cameras found in the network are listed in the left window. Choose the one you want to configure and click "Setting Wizard" to proceed.



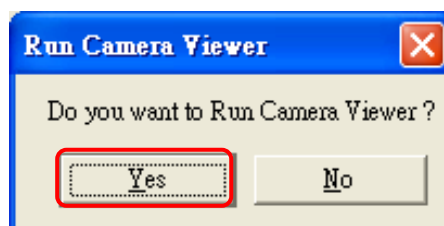
9. Please enter the default password “airlive” and click “OK” to login to the IP setup page.



10. Internet Camera is working through the network (TCP/IP Protocol). The IP address and subnet mask setting must be correct, or you cannot access to the camera. The wizard program will detect the IP address status of your network automatically and suggest a free IP address for the Camera. You can accept the suggested value or enter the value manually. If you enter the value manually, please be aware that the “Subnet Mask” must be the same for both the camera and the PC. Click “Next” to apply the configuration.



11. This wizard will pop up a window to ask you if you want to run the “Camera Viewer” and see the video of the Camera immediately. Select “Yes” to run “Camera Viewer”.



12. The “Camera Viewer” will show the video automatically. Congratulations, you can use the camera through the network to view the video from now on.

The screenshot displays the web interface for the AirLive WL-1000CAM. At the top, the AirLive logo is on the left, and the website URL [www.airlive.com](http://www.airlive.com) is on the right. Below the logo, the model name **WL-1000CAM** and description **802.11g Wireless Motion JPEG IP Camera** are shown. On the left side, there is a vertical navigation menu with the following items: Camera (selected), LAN, WLAN, Audio & Video, Motion Detection, System, Status, Users, and Log. The main area features a large video window showing a live feed of an office interior with cubicles and people. Below the video window, there are two control options: "Video Format:" with a dropdown menu set to "MPEG4", and "Audio Output:" with a button labeled "Speak to IPCam".



## Chapter 4: Using the Administrator Utility

The Administrator Utility allows users to search and setup the cameras located within the Intranet or on the Internet. From the utility, users can view all the information of the selected camera; furthermore, it provides a setting wizard, which can guide users to add the camera to the network easily and promptly.

There are two ways to run the Administrator Utility as follows.

1. Click “Start”, select “Programs\IP Camera\Admin Utility” to run the utility.
2. Double click the “IP Camera Admin” icon to run the utility.

Once the utility is started, it will search all the cameras within the network. To do more settings, please refer to the description in the following sections.



## 4-1 General Setting



### LAN

Auto Discover

Click the button will search the camera within the network.

### Information of Camera

Camera Information

It displays all information of the selected camera. The information includes Firmware Version, Network Information, IP Address, UPnP Setting, DDNS Setting, Resolution and E-mail setting, etc.

### Camera Setting

Detail Setting

Click "Detail Setting" to do more setting of the camera such as IP address, Resolution, password and firmware upgrade, etc.

Setting Wizard

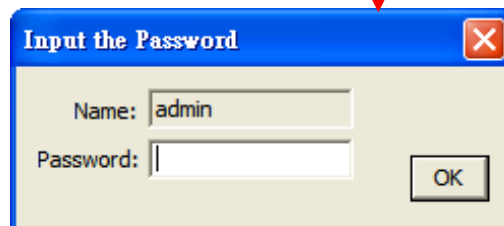
Click "Setting Wizard" to setup the necessary setting for the camera.

## 4-2 Detail Setting

When you click the “Detail Setting”, a screen will pop up for you to enter the “Administrator Name” and “Password”. The default value is as follows.

Name: “Admin”

Password: “airlive”



If the name and password you enter are correct, you can start to setup the camera.

## 4-2-1 Network Setting

The screenshot shows a window titled "Edit Internet Camera" with a close button in the top right. Below the title bar are four tabs: "Network Settings", "Wireless Settings", "E-Mail Settings", and "PPPoE Setti". The "Network Settings" tab is active. Inside the window, there are several settings:

- DHCP:  Enable  Disable
- Camera Name: AIRLIVE
- IP Address: 192 . 168 . 2 . 3
- Subnet Mask: 255 . 255 . 0 . 0
- Gateway: 192 . 168 . 2 . 1
- DNS Server: 168 . 95 . 1 . 1
- Video Port: 4321
- Web Port: 80

At the bottom of the window are two buttons: "Cancel" and "OK".

### Network Setting

- |                      |  |
|----------------------|--|
| Internet Camera Name | The default camera name is "WL-1000CAM". It is recommended to name a meaningful name for the camera.   |
| IP Address           | Enter an unused IP Address within the IP address range used on your LAN. If the IP Address of your LAN is from the 192.168.2.1 to 192.168.2.254, you can set an unused IP Address from the range for the camera, for example: 192.168.2.250. |
| Subnet Mask          | The Subnet Mask field must match the subnet setting on your LAN. For example: 255.255.255.0.   |
| Gateway              | The Gateway is used to forward frames to destinations in a different subnet on the Internet. The Gateway setting must be the same with the gateway used by the PCs on your LAN.  |

DNS Server                      DNS Server (Domain Name Server) that translates names to IP addresses. Set the same DNS Server as the PCs on your LAN.

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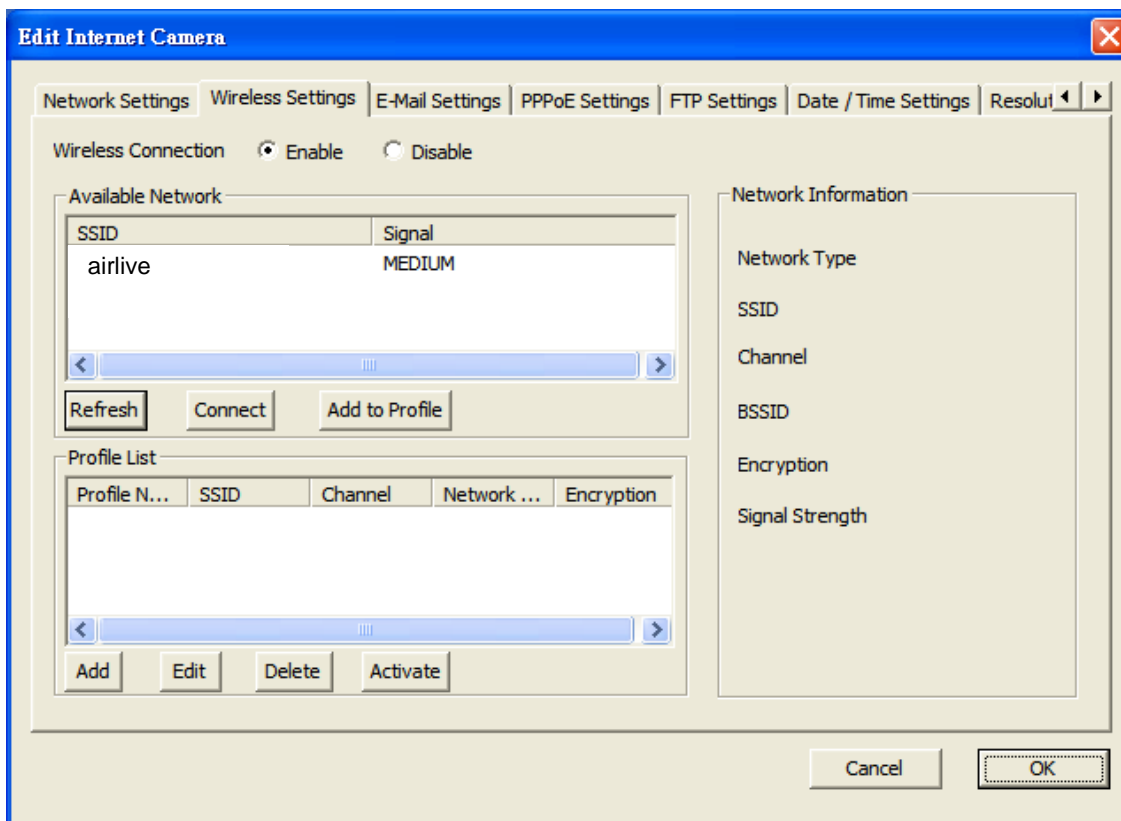
## Network Setting

Video Port                      The Video Port is used to transmit or receive the video streaming in the network. The default port setting is “4321”. If you want to view the video from the camera, the port setting should be correct.

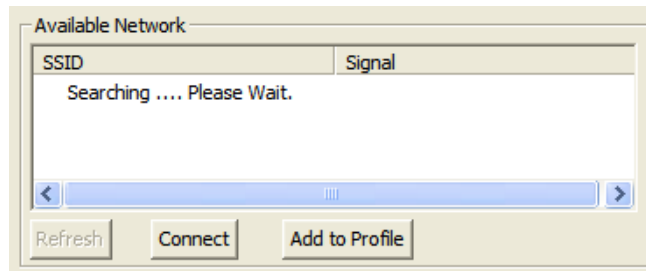
Web Port                         This camera support web connection, the default web port is 80. Since the web server may use port 80, you can use a different port for the camera. If you change the web port from 80 to 8080, you must type <http://192.168.2.3:8080> to connect the camera through the web browser.

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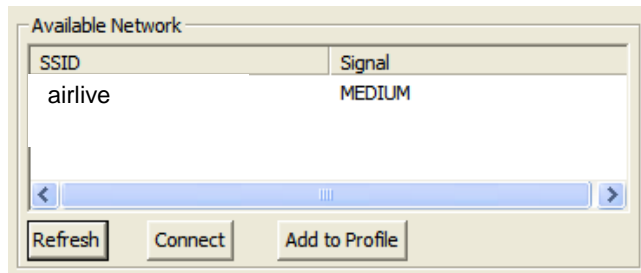
### 4-2-2 Wireless Settings (\*Wireless Model Only)



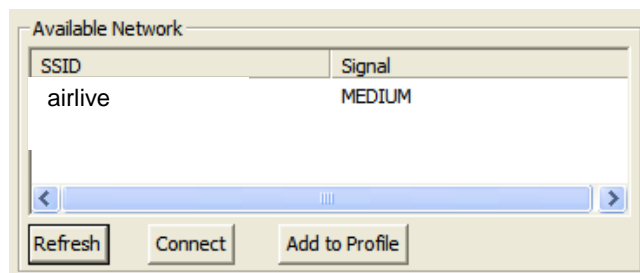
Utility will site survey automatically or you can press “Refresh” button to survey the AP router manually.

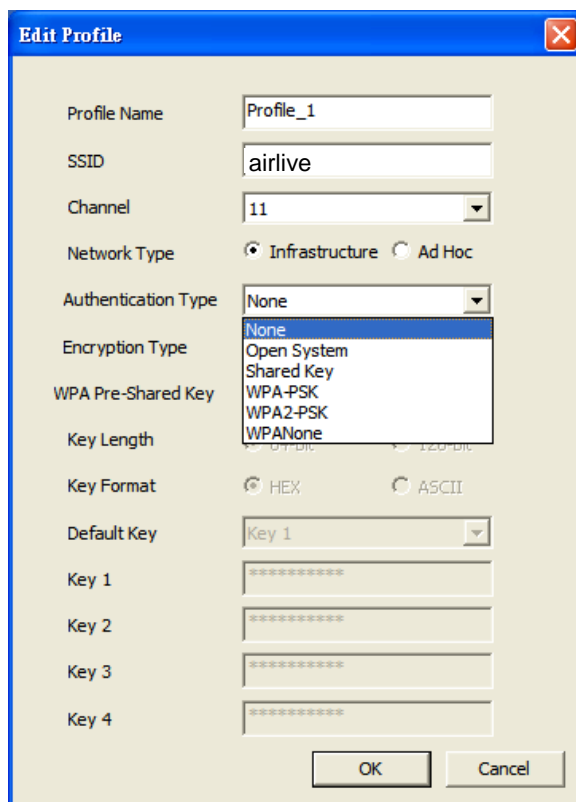


After site survey procedure, there will show existing AP SSID.

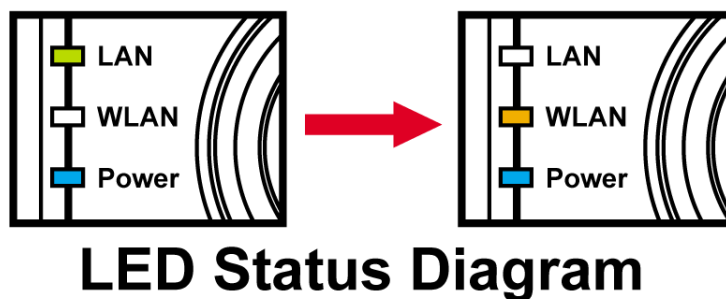


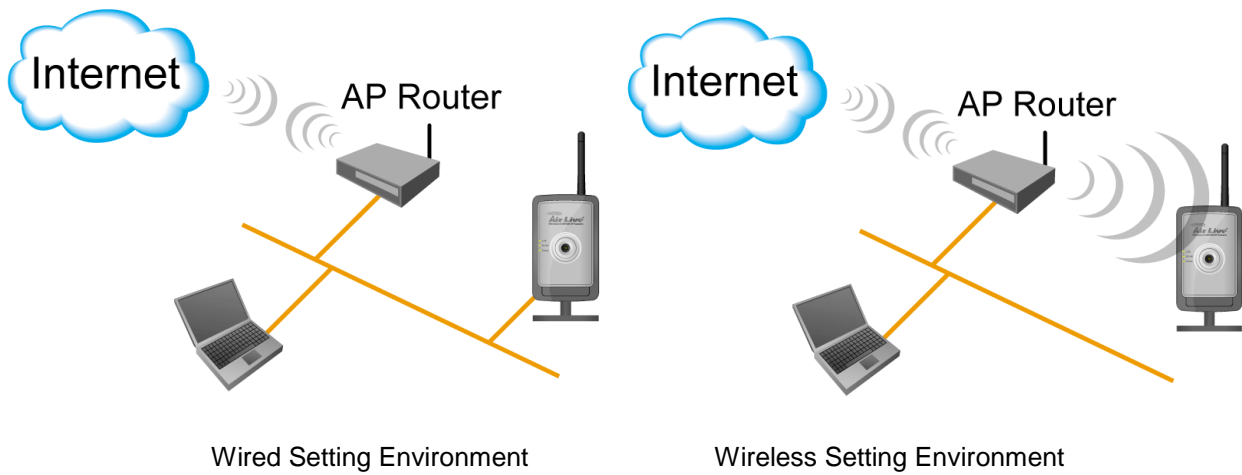
Then press "Connect" to connect AP router or press "Add to Profile" to configure the Wireless WEP and WPA encryption.





There are WEP(Open System/Shared Key) ,WPA-PSK,WPA2-PSK and WPA None encryption settings. You can choose one to match AP router wireless settings. After set the profile, Please remove the LAN cable then IP Camera will connect to AP router automatically.





**You must configure the wireless settings from wired environment. Then you can remove the wired cable and start wireless connection.**

#### 4-2-3 E-Mail Setting

**Edit Internet Camera**

Network Settings | **Wireless Settings** | **E-Mail Settings** | PPPoE Setti

Send a Test Email

Recipient E-Mail Address:

SMTP Server:

Sender E-Mail Address:

SMTP Authentication:  Enable  Disable

Username:

Password:

Cancel      OK



## E-Mail Setting

Recipient E-Mail Address	This camera supports “Snap Shot” and “Motion Detection” functions. You can snapshot a picture and send the picture by E-Mail. Enter the E-Mail Account for receiving the picture.
SMTP Server	Enter the SMTP Server for the E-Mail sending.
Sender E-Mail Address	Specified the e-mail address of the e-mail sender.
Authentication	Enable or Disable the SMTP Authentication function
Username	When Authentication is enabled, input the SMTP Username.
Password	When Authentication is enabled, input the password.
Send a Test Email	Press this button to send a test e-mail to your mailbox. You can use this function to test if your setting is correct.

---

### 4-2-4 PPPoE Settings

Wireless Settings | E-Mail Settings | **PPPoE Settings** | FTP Settings

PPPoE

Enable       Disable

Username:

Password:

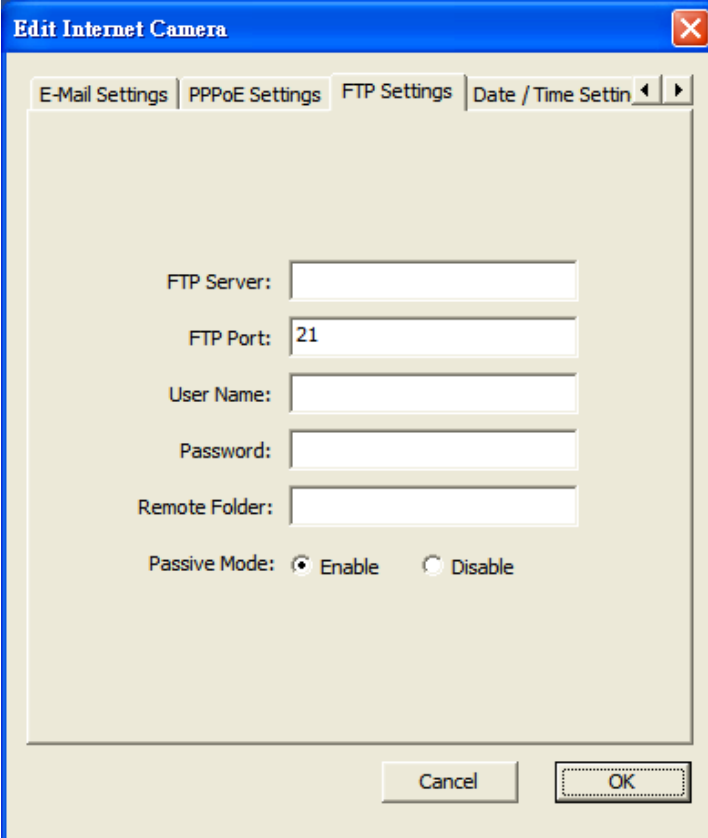
MTU:

Cancel      OK

## PPPoE Settings

Enable/Disable	If enable the PPPoE function, IP Camera will use PPPoE for network connection first. The default value is “Disable”.
Username	Enter the Username of PPPoE connection.
Password	Enter the Password of PPPoE connection
MTU	A maximum transmission unit (MTU) is the largest size packet or frame, specified in octets (eight-bit bytes), that can be sent in a packet or frame based network such as the Internet.

## 4-2-5 FTP Settings



The screenshot shows a dialog box titled "Edit Internet Camera" with a close button in the top right corner. The dialog has four tabs: "E-Mail Settings", "PPPoE Settings", "FTP Settings" (which is selected), and "Date / Time Setting". The "FTP Settings" tab contains the following fields and options:

- FTP Server: [Text Input Field]
- FTP Port: [Text Input Field] containing the value "21"
- User Name: [Text Input Field]
- Password: [Text Input Field]
- Remote Folder: [Text Input Field]
- Passive Mode:  Enable  Disable

At the bottom of the dialog are two buttons: "Cancel" and "OK".

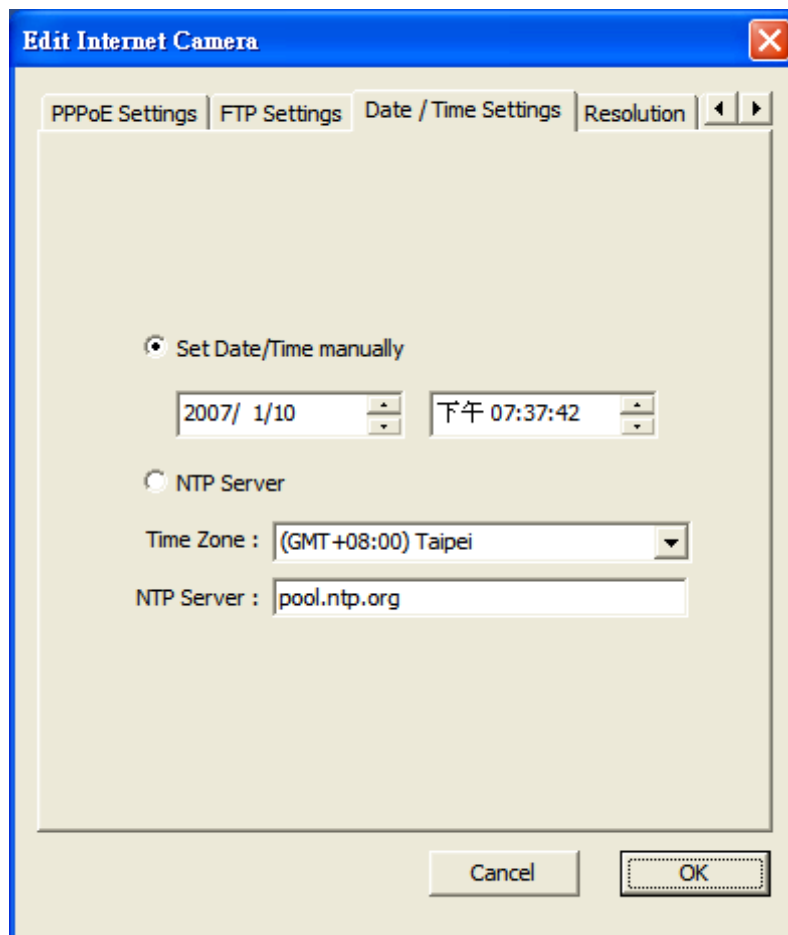
## FTP Settings

FTP Server	This camera supports “Motion Detection” functions. When Motion Detection event occurred, you can record the pictures to FTP server. Enter the FTP address for receiving the pictures.
------------	---

FTP Port	Enter the port of the FTP server.
User Name	Specify the user account of ftp server.
Password	Specify the Password of your ftp account.
Remote Folder	Specify the folder of the ftp site that you want to store the video.
Passive Mode	If your Camera is under NAT, you usually need to enable this feature.

---

#### 4-2-6 Date / Time Settings

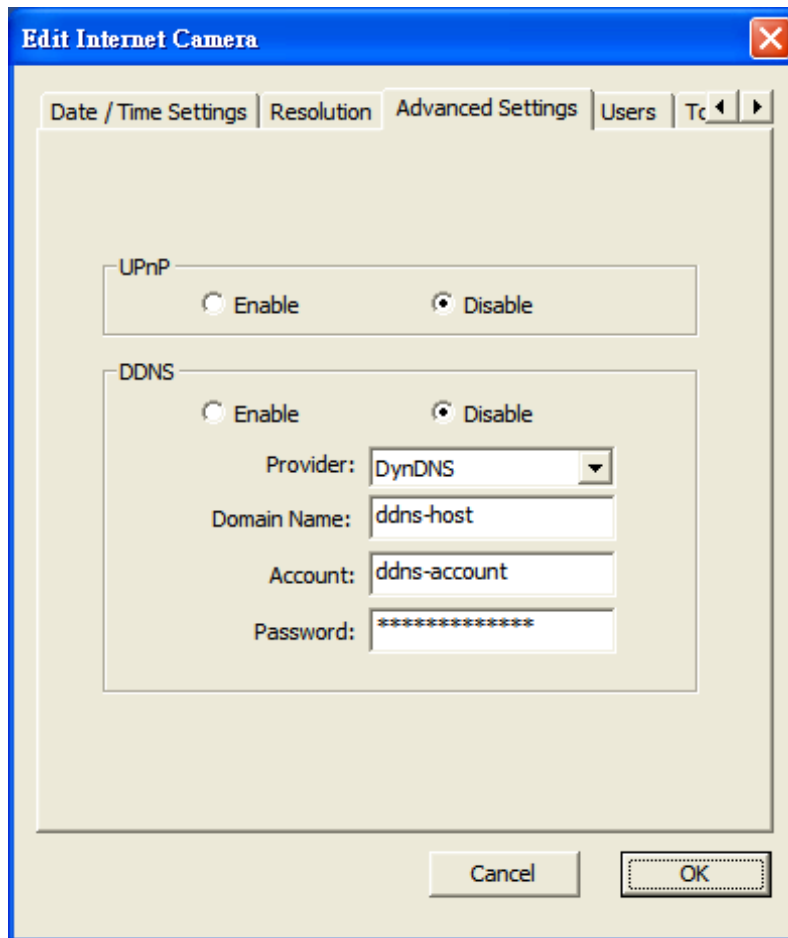


#### Date / Time Settings

Set Date/Time manually	Set the current Date and Time.
NTP Server	Synchronize the Date and Time with NTP server.



## 4-2-8 Advanced Setting



### Advanced Setting

#### UPnP

When the UPnP function is enabled, the camera can be detected by UPnP compliant system such as Windows XP. The camera will be displayed in the Neighborhood of Windows XP, so you can directly click the camera to view the video through web browser.

#### DDNS

Many internet connections use a "Dynamic IP address", where the Internet IP address is allocated dynamically whenever the Internet connection is established. Internet users should know the IP Address of the camera when they want to connect to the camera every time. DDNS is designed to solve this problem, by allowing users to connect to your LAN using a domain name, rather than an IP address.

#### Enable/Disable

Enable or disable DDNS function of the camera.

Provider	Several companies provide DDNS service. This camera supports the service from DynDNS who is one of the DDNS providers.
Domain Name	The domain name given by DynDNS is “registername.dyndns.com”. Enter the domain name that you register for the camera from DynDNS web site.
Account	Enter the login name for the DDNS service.
Password	Enter the password for the DDNS service.

---

#### 4-2-9 Users

The screenshot shows the 'Edit Internet Camera' window with the 'Users' tab selected. The window has a blue title bar and a standard Windows-style interface. The 'Administrator' section contains four text input fields: 'Login Name' (pre-filled with 'Admin'), 'Current Password', 'New Password', and 'Confirm New Password'. The 'User' section contains a table with four rows, each representing a user account. Each row has a checkbox, a 'User Name' field, a 'Password' field, and a 'Confirm Password' field. The 'Cancel' and 'OK' buttons are located at the bottom right of the window.

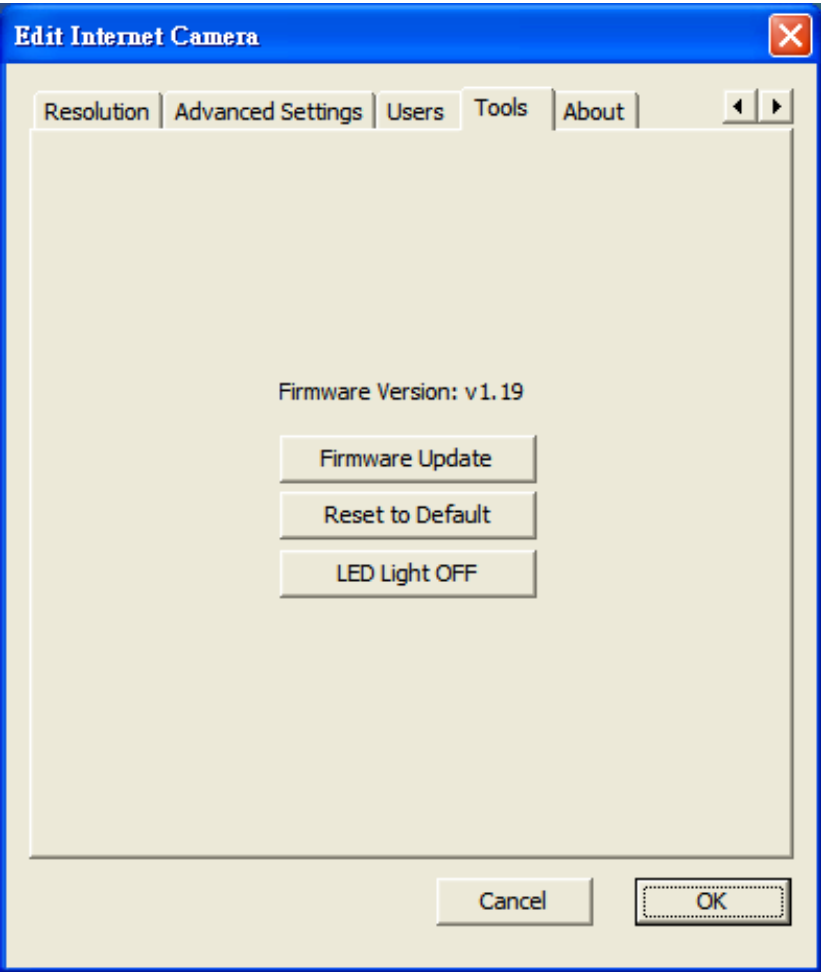
#### Users

Administrator	Setting the password of Administrator account
Current Password	Enter the current password of the camera.

New Password	Enter the new password you want to use for the camera.
Confirm New Password	Retype the new password to confirm the setting.
User	Setting the user account and password. Your camera can support 4 user account.

---

**4-2-10 Tools**



**Tools**

Firmware Version	Display current firmware version.
Firmware Update	You can upgrade camera’s firmware via this function. Press this button and select the correct firmware to upgrade.

## Reset to Default

If you want to reset the camera, click this button. The default settings of the camera are as follows.

Camera Name: "WL-1000CAM"

IP Address: "192.168.2.3"

Subnet Mask: 255.255.255.0

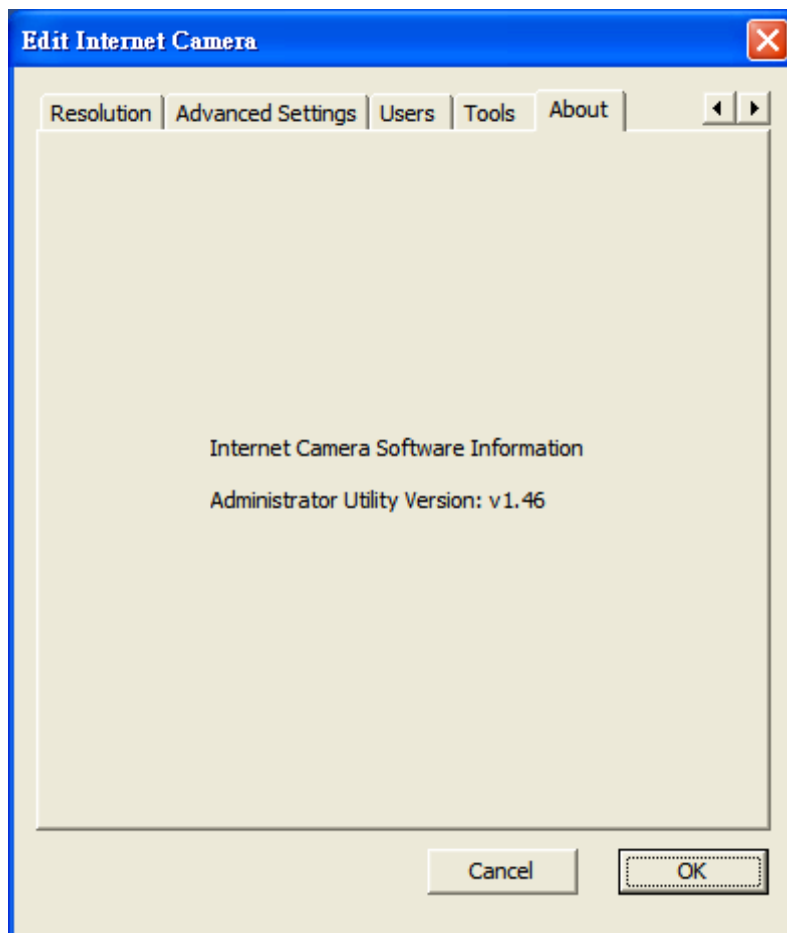
Administrator Name: "Admin"

Password: "airlive"

Video Port: "4321"

Web Port: "80"

## 4-2-11 About



### About

Administrator Utility Version    Display current Administrator Utility Version.

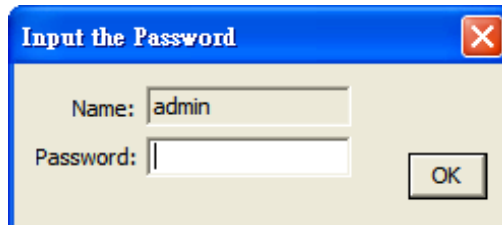


### 4-3 Setting Wizard

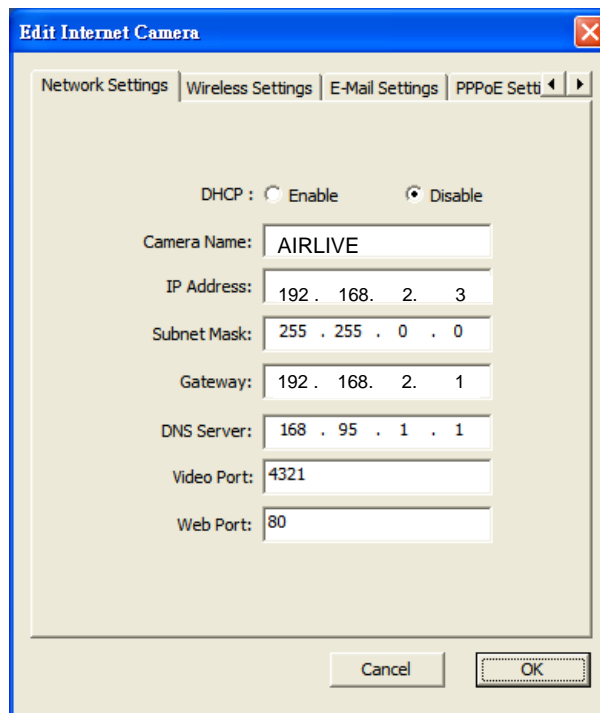
When you click the “Setting Wizard”, a screen will pop up for you to enter the “Administrator Name” and “Password”. The default value is as follows.

Name: “Admin”

Password: “airlive”



If the name and password you enter are correct, you can start to setup the camera.



#### Setting Wizard

**Internet Camera Name** The default camera name is “WL-1000CAM”. It is recommended to enter a meaningful name for the camera.

**IP Address** The wizard will auto setup an available IP Address to the camera. For example: if the IP address of the network is 192.168.2.x, the wizard will search an unused IP Address from 192.168.2.1 to 192.168.2.250 and assign the camera an available IP Address.

You are allowed to enter another IP Address to change the setting.

**Subnet Mask**

The wizard will auto search the Subnet Mask setting of the network and set the camera in the same Subnet Mask.

You can enter another Subnet Mask to change the setting.

**Gateway**

The wizard will auto search the Gateway setting of the network and set the camera to use the same Gateway.

You can enter another Gateway to change the setting.

**Video Port**

It defines the video stream port. The default value is "4321".

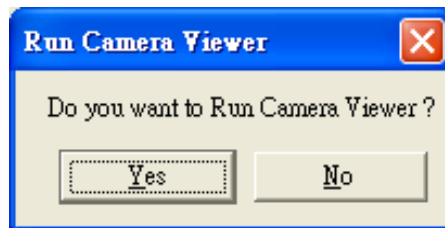
**Cancel**

Click "Cancel" to stop wizard setting.

**Finish**

Click "Finish" to complete the camera setting.

---



When you finish the camera setting, you can click "Ok" to run the "Camera Viewer" immediately or click "Cancel" to run the "Camera Viewer" later.

# Chapter 5: Using the Camera Viewer

The Camera Viewer Utility allows users to view video up to four cameras. It also allows users to manual/schedule recording video and playback the video file. The status of camera viewing such as frame rate, video received, and etc. are also recorded in time.

There are three ways to run the Camera Viewer Utility as follows.

1. Click “Start”, select “Programs\IP Camera\Camera Viewer” to run the utility.
2. Double click the “IP Camera Viewer” icon to run the utility.
3. Click “Setting Wizard” from Administrator Utility and follow the instructions in the utility.

## 5-1 Panel Introduction

In the beginning when you start the Camera Viewer, you would see a Control Panel and a four division Viewer window.



## 5-2 Camera Buttons



### Camera Buttons

Camera



Click one of these four cameras will connect to the selected camera that you want to view and configure. If you want to remove the camera from the viewer, please **right click** the icon and select “Reset Camera x”. If you want to configure the camera, please **right click** the icon and select “Configure Camera x”.

## 5-3 Camera Status

There is a status bar shown different color to indicate the status of each Internet Camera.



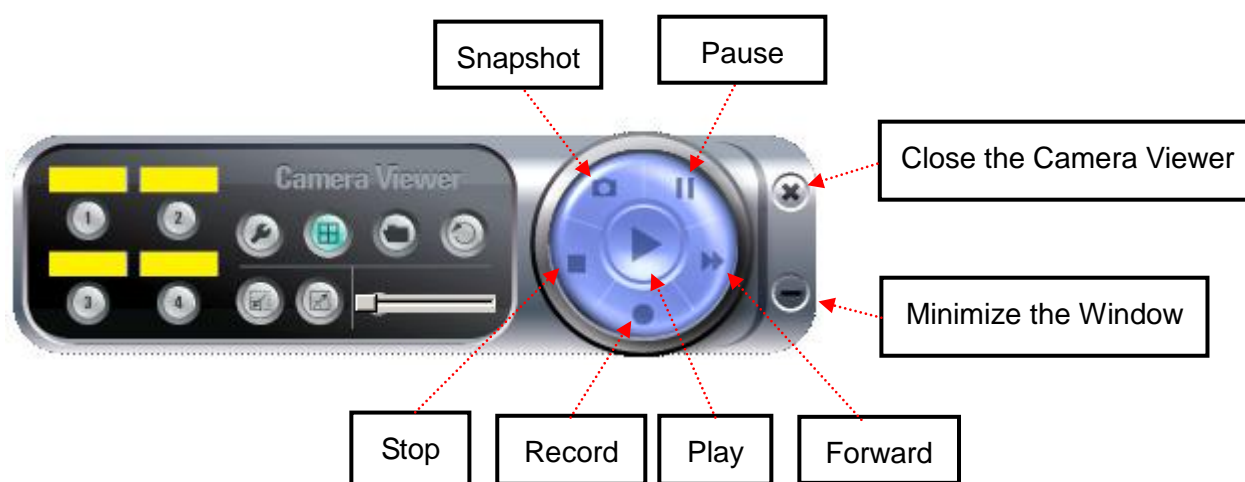
### Camera Status

**YELLOW**

It means that there is no camera set to connect.

<b>BLUE</b>	It means that the camera is connected and playing the live video.
<b>PINK</b>	It means that the camera is not connected now.
<b>RED</b>	It means that the camera is recording.

## 5-4 Control Buttons



### Control Buttons

#### Play



The “Play” button is an intelligent play user-interface. In the normal display mode and the Internet Camera is disconnected, clicking on the “Play” can make the viewer connect to the Internet Camera. In the playback mode, clicking on the “Play” can play the video in the normal speed.

#### Stop



The “Stop” button is an intelligent play user-interface. In the normal display mode and the Internet Camera is connected, clicking on the “Stop” can make the viewer disconnect the camera. In the playback mode, clicking on the “Stop” can stop playing the video.

#### Pause



The “Pause” button provides you a way to pause the current video display. When the displaying video is paused, click on the “Play” again to resume the video display.

#### Forward

The “Forward” button to forward the speed of display when playback the



recording file. Click the button at a time will increase the playing speed one time.

Snapshot



Click “Snapshot” will make the viewer to take a snapshot of the video and save the picture as a bitmap file in the hard disk. (You can set the directory for storing these bitmap files at the Section 7.8.4)

Record



By clicking “Record” you can record video immediately. (You can set the directory for storing video files at the section 7.8.4)

---

## 5-5 Video Recording

This utility allows you record the video in AVI files. There are two ways of video recording – Manual Recording and Schedule Recording.

### Manual Recording

You can manually record the video stream into an assigned video file.

Click “Record”, then the viewer utility will start to record the video stream. You can assign the path in the setting dialog.(at section 7.8.4) Clicking “Stop” will stop recording.

**Note:** Before manual recording, you have to click the camera button to select the Internet Camera that you want to record first and make sure that the viewer is successfully connecting to the Internet Camera.

---

### Schedule Recording

You can assign a schedule and let this viewer automatically recording the video stream. Please refer to Section 7.8 to see how to setup schedule for the recording. The file name of the recorded video file is the start time of recording. For example, the file name “IPCamera\_2004-10-8-23-56-40.avi” means it

---

## 5-6 Change Resolution

The Internet Camera supports two resolution, 640x480 (VGA) and 320x240 (CIF). You can change the resolution of each Internet Camera by clicking the resolution button.

**Note:** Before changing the resolution of the Internet Camera, you have to select the Internet Camera



by clicking the camera button first. If you change the resolution of an Internet Camera, other clients who are viewing the same Internet Camera simultaneously will also see the video with the changed resolution, too.

## Resolution


VGA Change the resolution to 640x480 (VGA) mode.



QVGA Change the resolution to 320x240 (QVGA) mode.




## 5-7 View Four Cameras Simultaneously

Click the four division button  can view the 4 cameras simultaneously in a four-division window.

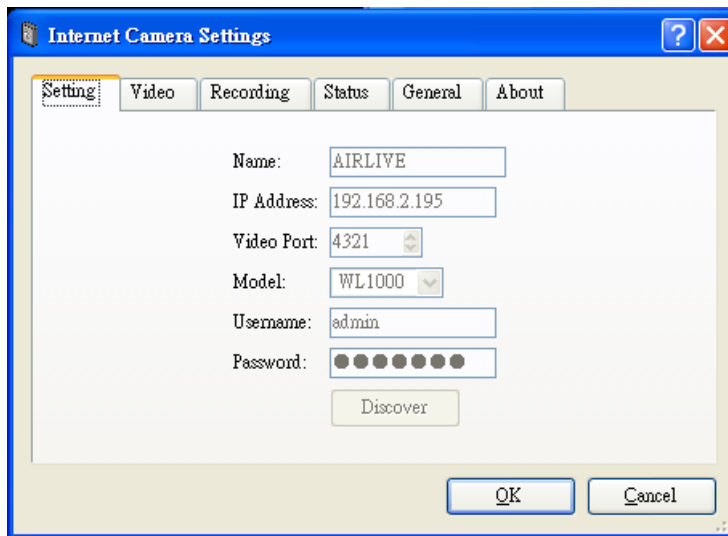




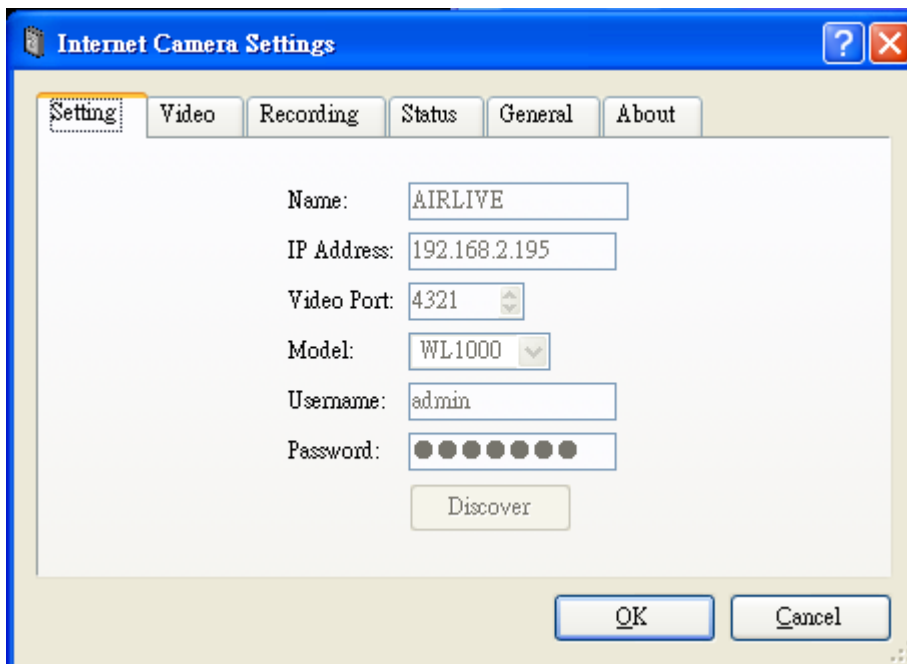
## 5-8 Viewer Utility Setting

Click the “Setting” button , then the setting window of the Internet Camera will pop up.

**Note:** When you want to change the settings such as IP Address, Video Port, etc. in the “Setting” option, you must disconnect the Internet Camera first by clicking the “Stop”.



### 5-8-1 Setting



## Setting

Name	It is not required to fill the camera name for connecting camera. It is for users to identify the camera.
IP Address	IP address/Domain name of the Internet Camera.
Video Port	The number of service port used by the Internet Camera.
Model	Select "Internet Camera" (This camera only supports MJPEG).
Username	The user name for login into the Internet Camera. By default, the user name is "Admin".
Password	The password for login into the Internet Camera. By default, the password is "airlive".
Discover	Click "Discover", then camera auto-discover windows will pop up. The window will show all the discovered cameras on LAN environment for you to select.

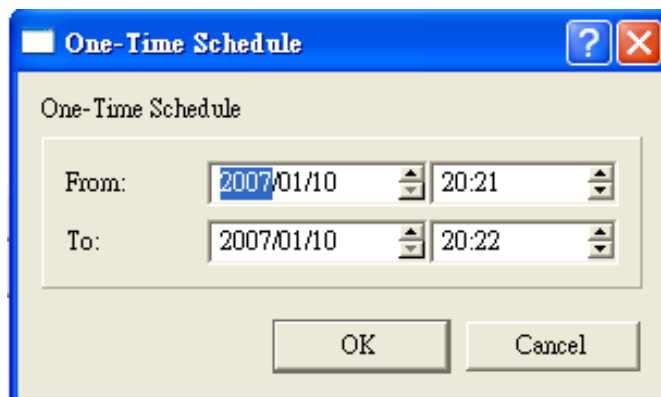
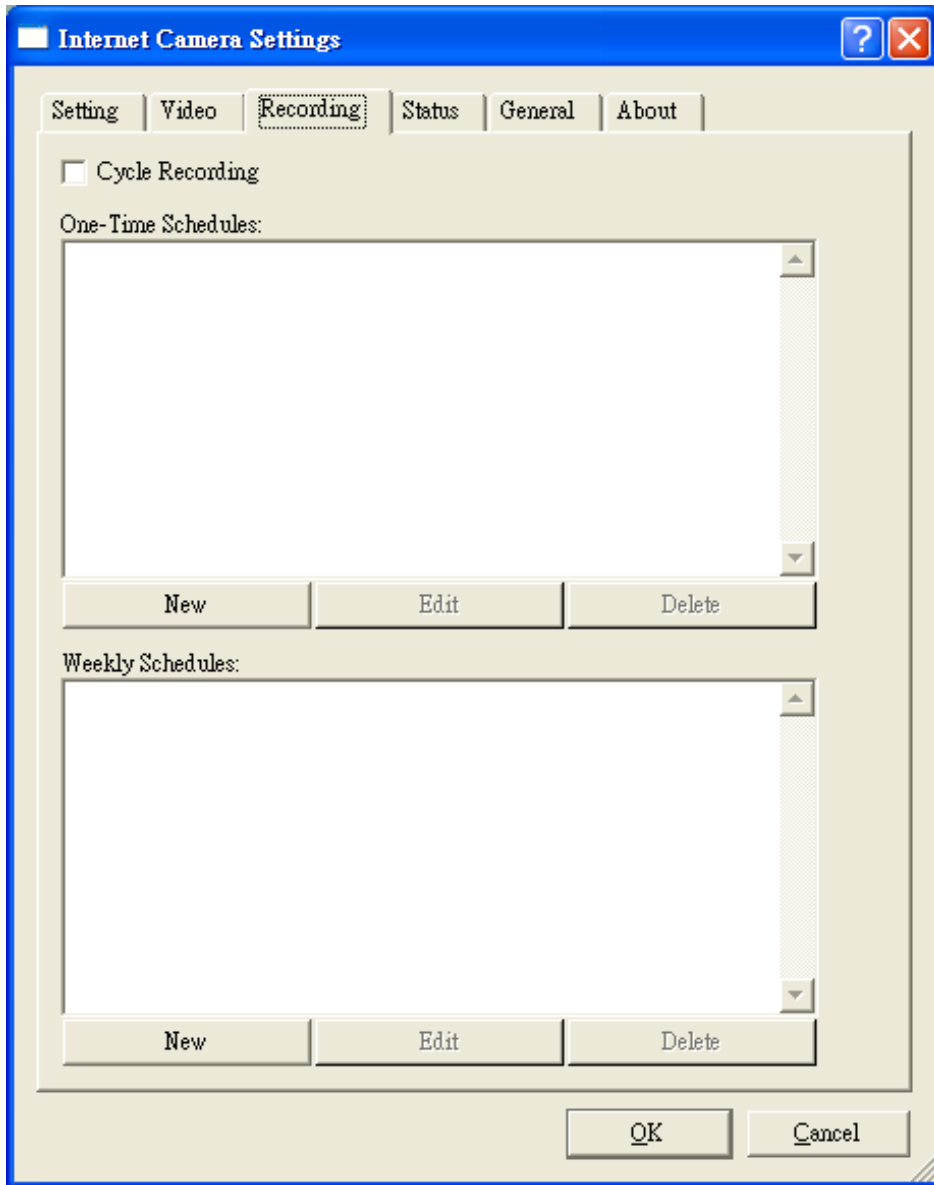
---

### 5-8-2 Recording

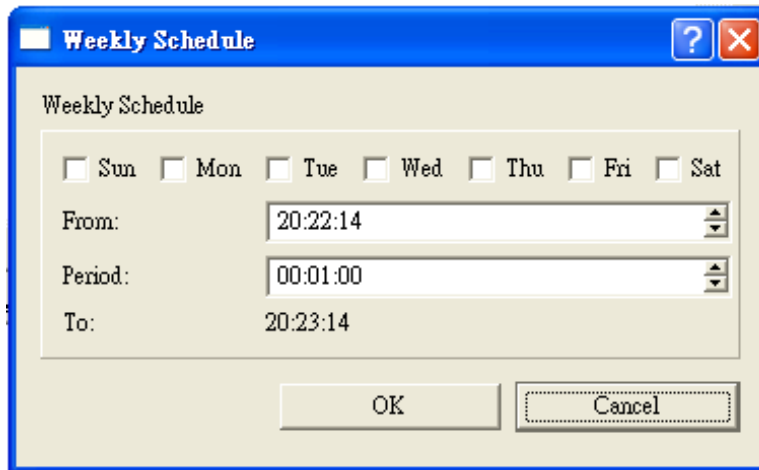
You can setup schedule for the recording here. This utility will record the video stream in the assigned file folder according to the schedule automatically. The recorded video files are AVI format.

#### **Note:**

1. The utility will only start to record the video stream when this utility is running and is successfully connecting to the Internet camera in the beginning of the schedule.
2. The schedule setting of one-time or weekly schedule should not overlap, or the recording will fail.



**One-Time Schedule**



**Weekly Schedule**

## Schedule

Cycle Recording	Check this check box to enable cycle recording. When the Cycle Recording is checked and the storage usage has already reached the maximum reserved storage space, the utility will automatically delete the oldest recorded video file and use the space to store the newly recorded video stream.
One-Time Schedule	You can assign a range of time and the utility will automatically record the video stream only during the period of time. The default time is 2 minutes later from the current time.
Weekly Schedule	You can assign the days in a week and the period of time in a day when you want to record the video stream. The utility will automatically record the video stream during the periods of time every week again and again.

---

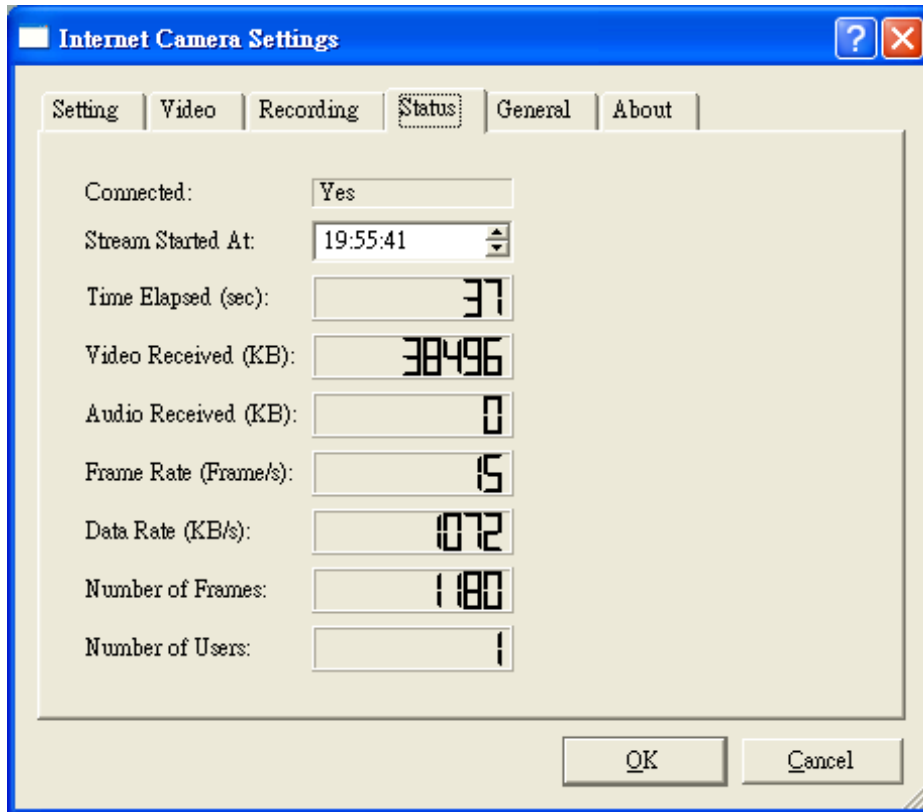
## Schedule

New	Click "New" to add a new recording schedule.
Edit	Select an existing schedule in the schedule list and click "Edit" to edit the schedule.
Delete	Select an existing schedule in the schedule list and click "Delete" to delete the schedule.

---

### 5-8-3 Status

You can see the current status information of the connection session between the utility and the Internet Camera.



#### Status

Connected	It displays "Yes" when the utility is connecting to the Internet Camera and displays "No" when the utility is not connecting to the Internet Camera.
-----------	--

#### Status

Stream Started At	The beginning time of the current connection session between the utility and the Internet Camera.
-------------------	---

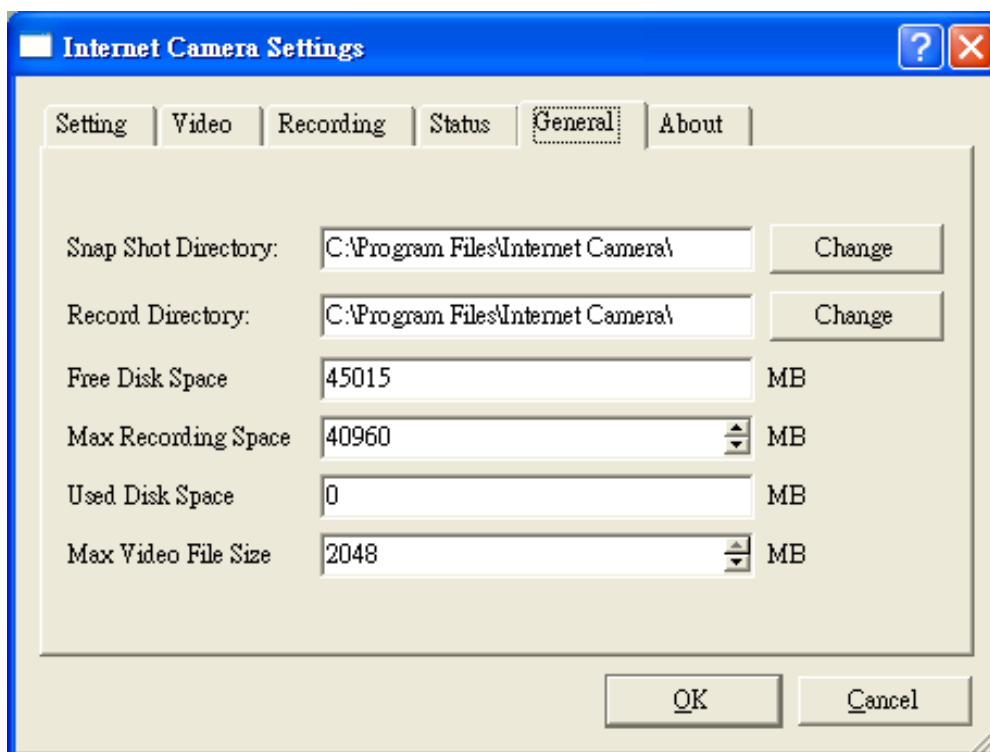
Time Elapsed	The elapsed time of the current connection session between the utility and the Internet Camera.
--------------	---

Video Received	The total size (Unit is KByte) of video stream received during the current connection session between the utility and the Internet Camera.
----------------	--

Audio Received	The total size (Unit is KByte) of audio stream received during the current connection session between the utility and the Internet Camera.
Frame Rate	The frame rate (frame per second) of the current video download speed from the Internet Camera to the utility.
Data Rate	The data rate (KByte per second) of the current video download speed from the Internet Camera to the utility.
Number of Frames	The total number of video frames received during the current connection session between the utility and the Internet Camera.
Number of Users	The total number of users that viewing this camera currently.

#### 5-8-4 General

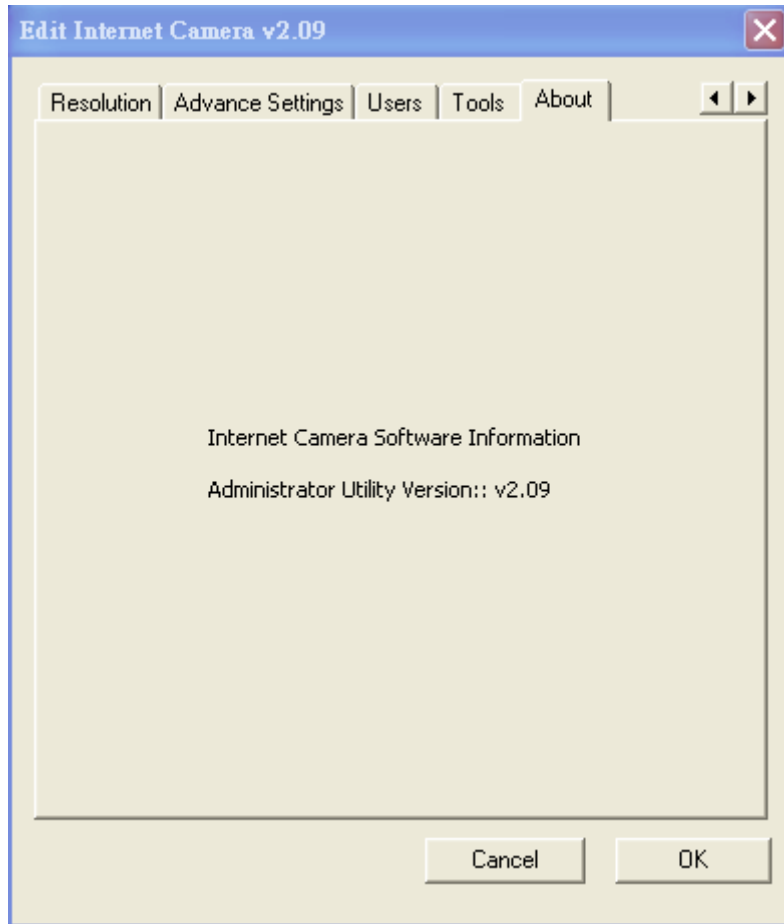
You can manage storage usage for this Internet Camera here.



Snap Shot Directory	This lets you assign the directory where bitmap files will be stored when you click “Snapshot” to take pictures. The default folder is where the software program is installed, for example: “C:\Program Files\Internet Camera”.
Record Directory	This lets you assign the directory where the recorded video files will be stored. The default folder is where the software program is installed, for example: “C:\Program Files\Internet Camera”.
Free Disk Space	The current free disk space of the hard drive where is assigned to save recording files.
Max Recording Space	You can reserve a disk space to store the recorded video and snapshot files. If the space is run out, a message will pop up to remind you.
Used Disk Space	The current used disk space for saving the recording file.
Max Video File Size	This let you assign a maximum size of each video file. The upper bound of this value is 2 GB per file.

---

### 5-8-5 About



### About

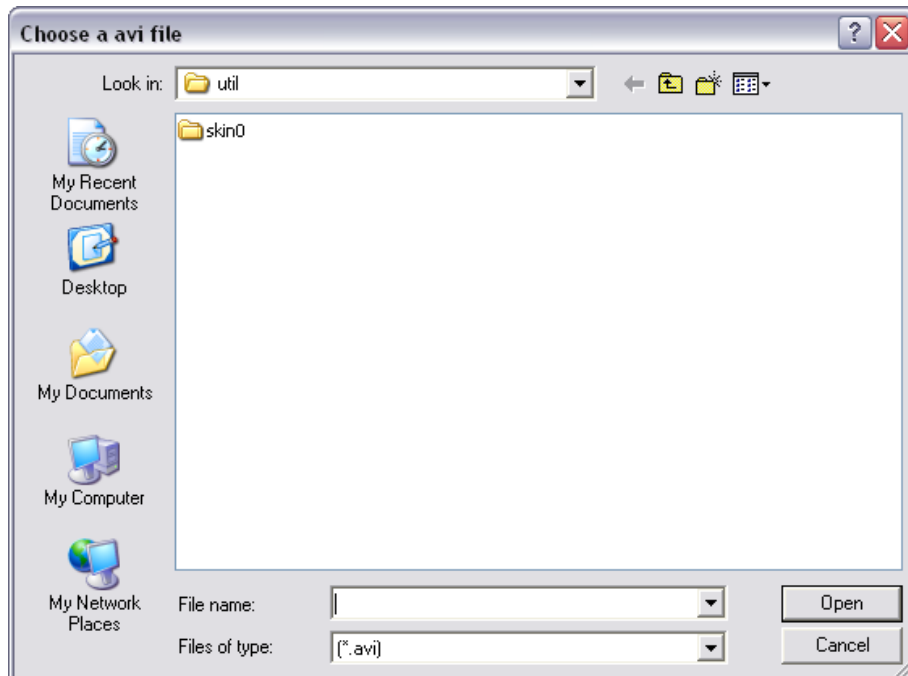
Camera Viewer Utility Version Display current Camera Viewer Utility Version.

---



## 5-9 Playback

Click the “Open File” and a “Load File” window will be popped up. Select the file that you want to play.



The viewer will start to play the selected video file.



## Playing Control

Play



When the video playback is in Stop state, just click “Play” and the viewer will play the video file from the beginning point. When the video playback is in Pause state, just click “Play” and the viewer will play the video file from the current pause point. When the viewer is playing with fast speed, just click “Play” to let the viewer play with the normal speed.

Pause



When the recorded video is playing, you can click “Pause” to freeze the playback. If you want the viewer to continue playing from the current pause point, just click “Play”.

Stop



When the viewer is playing, you can click “Stop” to stop the playback. If you want the viewer to play again, just click “Play” and the viewer will play the video file from the beginning point.

---

## Playing Control

Forward



If you want the viewer to play the video file in a faster speed when the viewer is playing the video file, just click “Forward” and the viewer will double the playing speed. If you want the viewer play with the normal speed when the viewer is playing with fast speed, just click “Play”.

---

## 5-10 Rotate Video

Rotate function lets you rotate the video frame 180 of degree angle each time you click the “Rotate”



. With this function, you can view the live video with normal, and 180 degree angles counterclockwise.



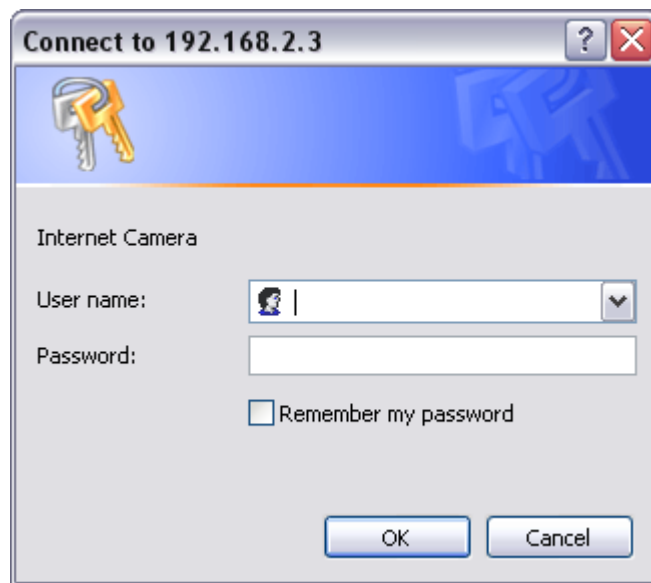
# Chapter 6: Web Connection and Setup

You can use the Web browser to connect the camera for viewing or setting. Open the web browser and enter the IP Address of the camera to establish a connection. The default IP Address of the camera is “192.168.2.3”.

When the welcome screen appears, enter the “Admin Name” and “Password”. The default values are:

Admin Name: “admin”

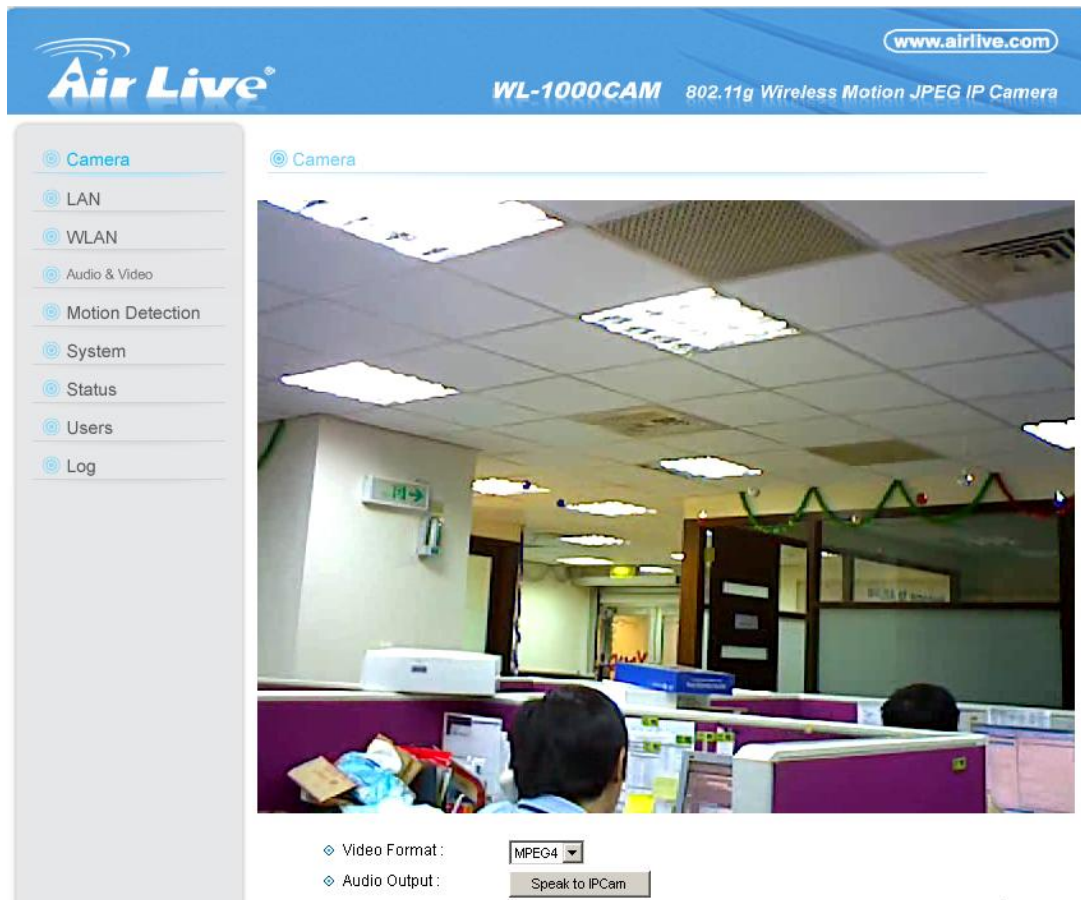
Password: “airlive”



When the camera is connected, the browser will take you to the live video page. If you are viewing this camera at first time, the following dialog will appear to install the ActiveX plug in. Please check the publisher part, you should only accept it if it is published by AirLive Ovislink Crop.



After installed the ActiveX plug-in, the video image will be shown up in the web screen directly.



The menu options for the web control screen are as follows.

**Camera** – View live video and adjust the video format from the menu.

**LAN** – Setup the camera LAN port functions in the menu.

**WLAN** – Setup the camera WLAN port functions in the menu.

**Motion Detection** – Configure the Motion Detection Actions here.

**System** – Setup System utilities and settings in this menu.

**Status** – Shows the camera information and current status in this page.

**Users** – This camera support up to 4 user accounts. You can setup them in this menu.

**Log**- System Log

## 6-1 Camera Setting

**Air Live** www.airlive.com

**WL-1000CAM** 802.11g Wireless Motion JPEG IP Camera

- Camera
- LAN
- WLAN
- Motion Detection
- System
- Status
- Users
- Log

Camera



Snapshot file path : C:\

Record file path : C:\

Resolution : 320X240

Image Quality : Highest

Max Framerate : 30

Frequency : 60 Hz

Brightness : - 50 +

Contrast : - 50 +

Saturation : - 50 +

Hue : - 50 +

Whiteness : - 10 +

Enable Auto Exposure

### Camera Setting

- Resolution** Select the desired video resolution format. Larger resolution requires more bandwidth. 640 x 480 is "VGA" format. 320 x 240 is "CIF" format. The default resolution is CIF format.
- Image Quality** Adjust this property to control the video quality
- Max Frame Rate** Set the video max frame rate. This camera can support at most 30 frames per second. Set the frame rate higher can get video more smooth. But will use more bandwidth.

Frequency	Adjust this property to fitting light frequency.
Brightness	You can adjust the brightness of the video. If the video is too dark, you can input the larger number in this text box. The video will be brighter. This value can be from 1 to 100.
Contrast	You can adjust the contrast by change the value. This value can be from 1 to 100.
Saturation	You can adjust the saturation by change the value. This value can be from 1 to 100.
Hue	You can adjust the hue by change the value. This value can be from 1 to 100.
Whiteness	You can adjust the white balance by change this value. This value can be from 10 to 30.
Enable Auto Exposure	You can enable Auto Exposure by check this box.
Enable OSD	You can enable or disable “Time Stamp” function in this item. When you disable “OSD” function, the “Time Stamp” will be hidden.
Apply	When you finish “AV Server” setting, click this button to validate the setting values.

---

## 6-2 LAN Setting

The screenshot shows the configuration page for the AirLive WL-1000CAM. The interface includes a navigation menu on the left and a main settings area on the right. The settings are organized into sections: LAN, PPPoE, Dynamic DNS, UPnP, and LoginFree. Each section contains various input fields and radio buttons for configuration.

**LAN Settings:**

- Network Type:  DHCP  Static IP Address
- IP Address: 192.168.2.3
- Subnet Mask: 255.255.255.0
- Gateway: 192.168.2.1
- Primary DNS: 168.95.1.1
- Secondary DNS: (empty)
- Video Port: 4321
- HTTP Port: 80

**PPPoE Settings:**

- Enable PPPoE:  Enable  Disable
- User Name: (empty)
- Password: (empty)
- MTU: 1392 (512<=MTU Value<=1492)

**Dynamic DNS Settings:**

- Enable DDNS:  Enable  Disable
- Provider: dyndns.org
- Host Name: (empty)
- User Name: (empty)
- Password: (empty)

**UPnP Settings:**

- Enable UPnP:  Enable  Disable

**LoginFree Settings:**

- Filename: loginfree.jpg

### LAN

Network Type

This camera can obtain IP via DHCP protocol or specified static IP Address to it..

IP Address

Enter an unused IP Address within the IP address range used on your LAN. If the IP Address of your LAN is from the 192.168.2.0 to 192.168.2.250, you can set an unused IP Address from the range for the camera, for example: 192.168.2.250.



Subnet Mask	The Subnet Mask field must match the subnet setting on your LAN. For example: 255.255.255.0.
Gateway	The Gateway is used to forward frames to destinations in a different subnet on the Internet. The Gateway setting must be the same with the gateway used by the PCs on your LAN.
DNS Server	DNS Server (Domain Name Server) that translates names to IP addresses. Set the same DNS Server as the PCs on your LAN.
Video Port	The AV Control Port is used to transmit or receive the AV streaming in the network. The default port setting is "4321". If you want to view the video from the camera, the port setting should be correct.
Web Port	This camera support web connection, the default web port is 80. Since the web server may use port 80, you can use a different port for the camera. If you change the web port from 80 to 8080, you must type <a href="http://192.168.2.3:8080">http://192.168.2.3:8080</a> to connect the camera through the web browser.
Apply	When you finish the "LAN", click "Apply".

---

## PPPoE

Enable PPPoE	Enable or disable PPPoE function of the camera.
User Name	Enter the User Name for the PPPoE Connection.
Password	Enter the Password for the PPPoE Connection.
MTU	A maximum transmission unit (MTU) is the largest size packet or frame, specified in octets (eight-bit bytes), that can be sent in a packet or frame based network such as the Internet.
<b>APPLY</b>	When you finish the "PPPoE" setting, click "Apply".

---

## Dynamic DNS

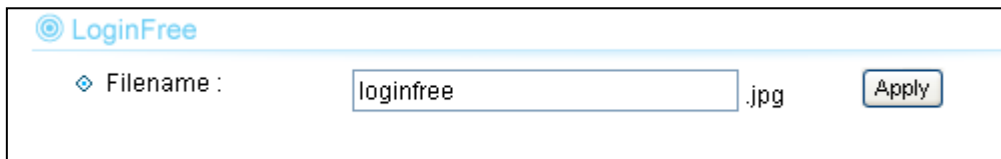
Enable DDNS	Enable or disable DDNS function of the camera.
Provider	Several companies provide DDNS service. This camera supports the service from DynDNS company.
Domain Name	The domain name given by DynDNS is “registername.dyndns.com”. Enter the domain name that you register for the camera from DynDNS web site.
User Name	Enter the login name for the DDNS service.
Password	Enter the password for the DDNS service.
<b>APPLY</b>	When you finish the “Dynamic DNS” setting, click “Apply”.

---

## UPnP

Enable UPnP	Enable or disable UPnP function of the camera.
<b>APPLY</b>	When you finish the “UPnP” setting, click “Apply”.

---



The screenshot shows a web interface for 'LoginFree'. It features a header with the 'LoginFree' logo. Below the header, there is a label 'Filename :' followed by a text input field containing the text 'loginfree'. To the right of the input field is the file extension '.jpg'. Further to the right is a button labeled 'Apply'.

## LoginFree

Filename	The default value is “loginfree”. That’s mean user can get a snapshot image from Internet Explorer. The format is like:  IP Camera will send a snapshot image to Internet Explorer. If user changed file name (Ex: “1234”), the URL must be changed to “http://192.168.2.3/1234.jpg”
<b>APPLY</b>	When you finish the “UPnP” setting, click “Apply”.

---

## 6-3 WLAN Setting

Air Live®
www.airlive.com

**WL-1000CAM** 802.11g Wireless Motion JPEG IP Camera

- [Camera](#)
- [LAN](#)
- [WLAN](#)
- [Motion Detection](#)
- [System](#)
- [Status](#)
- [Users](#)
- [Log](#)

**Wireless LAN**

Wireless Connection :  Enable  Disable

Network Type : Infrastructure

Available Networks :

Connect	SSID	MAC Address	Signal	Channel	Encryption	Network Type
<input checked="" type="radio"/>	5000rv2	00:0E:2E:44:82:78	98	6	WPA2PSK(AES)	Infrastructure
<input type="radio"/>	airlive	00:4F:67:02:DB:7F	78	1	Disabled	Infrastructure
<input type="radio"/>	airlive	00:C0:A8:F0:AB:12	90	2	Disabled	Infrastructure

SSID :

Channel :

Basic Rate :

---

Authentication : WPA2-PSK

Encryption Type : AES

WPA Pre-Shared Key :

WEP Key Length : 64-Bit

WEP Key Format : HEX

Default Key : 1

WEP Key 1 :

WEP Key 2 :

WEP Key 3 :

WEP Key 4 :

## Wireless Setting

Wireless connection	Enable or disable the wireless function of the Internet Camera. By default, the function is disabled.
Network Type	<p>Infrastructure – This operation mode requires the presence of a Wireless LAN Access Point or Router. All communication is done via the Access Point or Router.</p> <p>Ad-Hoc – Select this mode if you want to connect to another wireless stations in the Wireless LAN network without through an Access Point or Router.</p>
Available Networks	Select the networks listed below and click apply to connect to the specified network.
SSID	<p>The SSID (up to 32 printable ASCII characters) is the unique name identified in a WLAN. The ID prevents the unintentional merging of two co-located WLANs.</p> <p>You may specify a SSID for the card and then only the device with the same SSID can interconnect to the card. If you want to add one of the networks nearby to the profile list, pull down the menu, all the networks nearby will be listed and you can add one of them to the profile list.</p>
Channel	This setting is only available for Ad Hoc mode. Select the number of the radio channel used for the networking. The channel setting should be the same with the network you are connecting to.
Basic Rate	The camera will force to the data rate that you selected to transmit data.
Authentication and Encryption Type	<p>Choose the authentication type you want to use.</p> <p>“None” means that you don’t want any encryption for wireless.</p> <p>“Open System” means that you can use WEP for encryption or not to encryption. When you select “Shared Key”, you must use WEP for encryption. The last option is “WPA-PSK”. When you select this authentication type, you can encryption your wireless</p>

with WPA-TKIP or WPA-AES.

WPA Pre-Shared Key	The WPA-PSK key can be from 8 to 64 characters and can be letters or numbers. This same key must be used on all of the wireless stations in the network.
WEP Key Length	You may select 64-bit or 128-bit to encrypt transmitted data. Larger key length will provide higher level of security, but the throughput will be lower.
WEP Key Format	Hexdecimal – Only “A-F“, “a-f“ and “0-9“ are allowed to be set as WEP key. ASCII – Numerical values, characters or signs are allowed to be WEP key. It is more recognizable for user.
Default Key	Select one of the keys (1~4) as the encryption key.
Key1 ~ Key4	The WEP keys are used to encrypt data transmitted in the wireless network. Fill the text box by following rules below. 64-bit – Input 10-digit Hex values (in the “A-F“, “a-f“ and “0-9“ range) or 5-digit ASCII characters (including “a-z“ and “0-9“) as the encryption keys. For example: “0123456aef“ or “test1”.  128-bit – Input 26-digit Hex values (in the “A-F“, “a-f“ and “0-9“ range) or 13-digit ASCII characters (including “a-z“ and “0-9“) as the encryption keys. For example: “01234567890123456789abcdef“ or “administrator”.
Apply	When you finish “WLAN” setting, click this button to validate the setting values.

---

## 6-4 Motion Detection Settings

The “Motion Detection” allows users to setup the behavior of motion detection feature.

The screenshot displays the web interface for the AirLive WL-1000CAM. The top navigation bar includes the AirLive logo, the model name 'WL-1000CAM', and the description '802.11g Wireless Motion JPEG IP Camera'. A sidebar on the left lists menu items: Camera, LAN, WLAN, Motion Detection (highlighted), System, Status, Users, and Log. The main content area is divided into three sections:

- Motion Detection:** Includes options to 'Enable Motion Detection' (radio buttons for Enable and Disable, with Disable selected), 'Motion Detection Interval' (input field with '5' and 'seconds'), 'Threshold' (dropdown menu with '3'), 'Send snapshot file to E-Mail' (radio buttons for Yes and No, with No selected), 'E-Mail Subject' (input field with 'Motion Detection Notification'), and 'Send snapshot file to FTP' (radio buttons for Yes and No, with No selected). An 'Apply' button is present.
- E-Mail:** Includes fields for 'Recipient E-Mail Address', 'SMTP Server', 'SMTP Port' (input field with '25'), 'Sender E-Mail Address', 'SMTP Authentication' (radio buttons for Enable and Disable, with Disable selected), 'User Name', and 'Password'. It also features 'Send a test email' and 'Apply' buttons.
- FTP Configuration:** Includes fields for 'FTP Server', 'FTP Port' (input field with '21'), 'User Name', 'Password', 'Remote Folder', and 'Passive Mode' (radio buttons for Enable and Disable, with Enable selected). It also features 'Upload a test file' and 'Apply' buttons.

### Motion Detection

**Motion Detection Enable** Enable or Disable the Motion Detection Function.

**Next Event Detected Interval** Setup the interval between two events. For example, if you setup the interval to 5 seconds, the next event will start after this event finished + 5 seconds.

Threshold	Setup the sensitivity of motion detection.
Send Recording File to E-Mail	Select Yes to send the recorded video file to your e-mail account that you had specified at “E-Mail & FTP” menu.
E-Mail Subject	Specify the subject of motion detection notify e-mail.
Send Recording File to FTP	Select Yes to send the recorded video file to your FTP server that you had specified at “E-Mail & FTP” menu.

## 6-5 System Settings

The “System” allows users to setup the camera’s parameters, like camera name, data/time setting. And also provide firmware upgrade and reset tools at this page.

The screenshot displays the 'System' configuration page for the AirLive WL-1000CAM. The page features a blue header with the 'Air Live' logo and the model name 'WL-1000CAM 802.11g Wireless Motion JPEG IP Camera'. A navigation sidebar on the left lists various settings categories, with 'System' currently selected. The main content area is organized into several sections:

- Camera Information:** Includes fields for 'Camera Name' (set to AIRLIVE), 'Password', and 'Confirm Password', with an 'Apply' button.
- Date / Time Setting:** Offers options to 'Synchronize to PC time' or 'Set Date/Time manually'. It also includes an 'NTP Server' section with a 'Time Zone' dropdown (set to '(GMT+08:00) Taipei') and an 'NTP Server' text field (set to 'pool.ntp.org').
- Utilities:** Contains buttons for 'Upgrade Firmware', 'Reset To Factory Defaults', 'Reboot Device', and 'LED Setting'.
- Mirror & Rotation:** Includes a 'Mode' dropdown menu set to 'Default'.

## System

Camera Name	The default camera name is "IC1500". It is recommended to name a meaningful name for the camera.
Login Name	Setup your administrator account's login name. Default name is "admin"
<b>PASSWORD</b>	Enter up to 4 digits password for the new user account.
<b>CONFIRM PASSWORD</b>	Enter the password again to confirm the setting.
Set Date/Time manually	Display the current Date and Time.
NTP Server	Synchronize the Date and Time with this NTP server.
Time Zone	Select the time zone that your camera put on.
NTP Server	Specify the IP Address of the NTP Server.
Upgrade Firmware	You can upgrade camera's firmware via this function. Press the browse button, find the correct firmware and press upgrade.
Reset to Factory Defaults	If you want to reset all the camera settings to default, click this button.
Reboot Device	To reboot the Internet Camera, click "Reboot".
LED Setting	There are four LEDs to indicate the status of Internet Camera. If you want to secure the camera from noticing, you can turn off the LED light by clicking "LED Light OFF". To turn on the LED light, click "LED Light ON".

---



## 6-6 Status Settings

The “Status” shows the current firmware version, uptime, system time and IP information of this camera.



The screenshot displays the web management interface for the AirLive WL-1000CAM. The top navigation bar includes the AirLive logo, the model name 'WL-1000CAM', and the description '802.11g Wireless Motion JPEG IP Camera'. A sidebar on the left contains menu items: Camera, LAN, WLAN, Motion Detection, System, Status (highlighted), Users, and Log. The main content area shows the 'Status' page with the following information:

- Status**
  - Firmware Version : v1.30 (Feb 20 2008 14:53:37)
  - Device Uptime : 50 min 38 sec
  - System Time : 2008/02/21 14:56:01
- LAN**
  - IP Address : 192.168.2.1
  - Subnet Mask : 255.255.255.0
  - Gateway : 192.168.2.3
  - DNS Server : 168.95.1.1
  - MAC Address : 00:0E:2E:ED:55:72
  - Video Port : 4321
  - HTTP Port : 80
- PPPoE**
  - Link Status : Disconnected
  - IP Address :
  - Subnet Mask :
  - Gateway :
  - DNS Server :

## 6-7 Users Settings

The “Users” allows users to add four user accounts which are able to view video from Camera Viewer and Web Management. These users, unlike Administrator, are not allowed to configure the camera.

- Camera
- LAN
- WLAN
- Motion Detection
- System
- Status
- Users**
- Log

**Users**

---

◆ User 1 :       Enable  Disable

◆ Login :     

◆ Password :   

◆ Confirm password :

---

◆ User 2 :       Enable  Disable

◆ Login :     

◆ Password :   

◆ Confirm password :

---

◆ User 3 :       Enable  Disable

◆ Login :     

◆ Password :   

◆ Confirm password :

---

◆ User 4 :       Enable  Disable

◆ Login :     

◆ Password :   

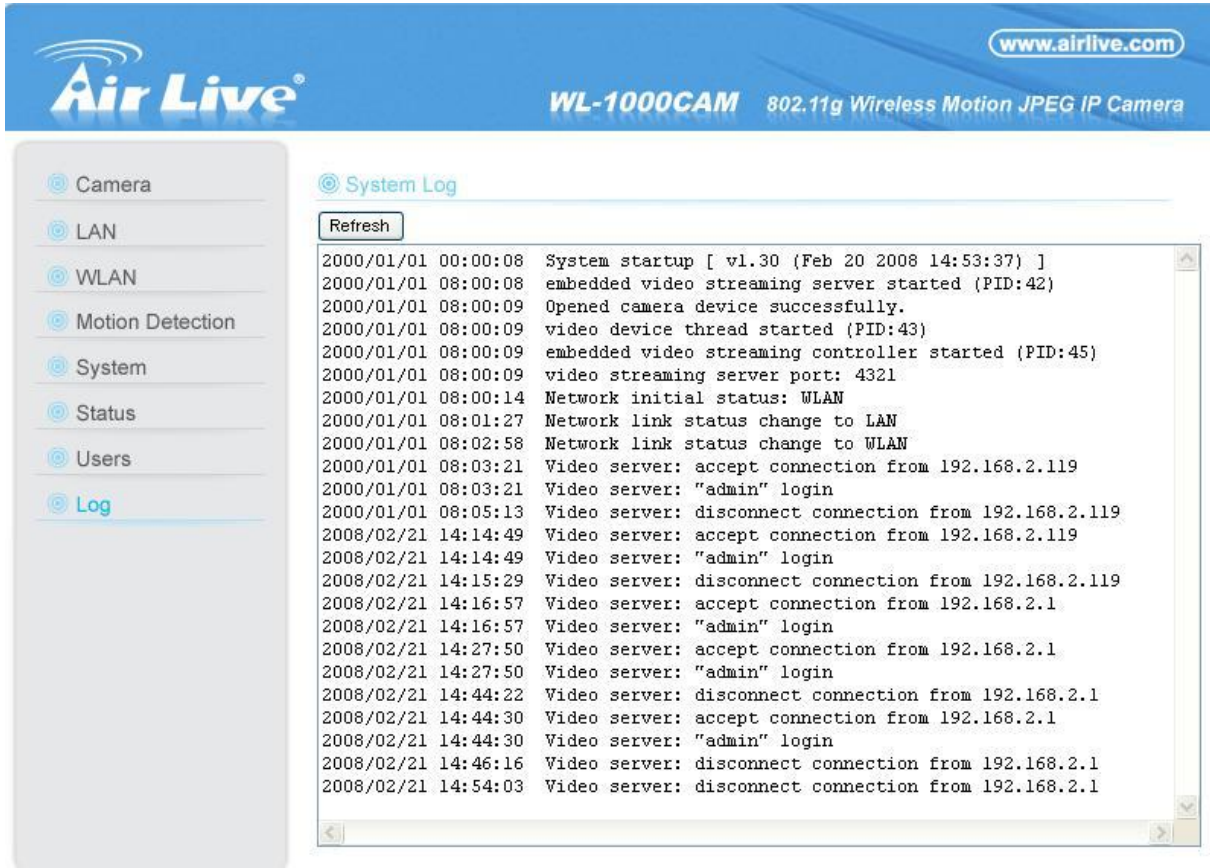
◆ Confirm password :

### User 1 / 2 / 3 / 4

<b>USER #</b>	Enable or Disable the user number #.
<b>LOGIN</b>	Enter the the login name to the camera.
<b>PASSWORD</b>	Enter up to 4 digits password for the new user account.
<b>CONFIRM PASSWORD</b>	Enter the password again to confirm the setting.
<b>APPLY</b>	Click “Apply” to save the user account setting.

## 6-8 Log Setting

The “Log” allows users to monitor the device event and time. If you have trouble to use this device, the log file will help administrator to know the status of device.



The screenshot shows the Air Live WL-1000CAM web interface. The header includes the Air Live logo and the website URL www.airlive.com. The device model is WL-1000CAM, an 802.11g Wireless Motion JPEG IP Camera. The left sidebar contains a navigation menu with the following items: Camera, LAN, WLAN, Motion Detection, System, Status, Users, and Log. The Log item is selected. The main content area shows the System Log window, which has a Refresh button and a scrollable log area. The log entries are as follows:

```
2000/01/01 00:00:08 System startup [ vl.30 (Feb 20 2008 14:53:37) ]
2000/01/01 08:00:08 embedded video streaming server started (PID:42)
2000/01/01 08:00:09 Opened camera device successfully.
2000/01/01 08:00:09 video device thread started (PID:43)
2000/01/01 08:00:09 embedded video streaming controller started (PID:45)
2000/01/01 08:00:09 video streaming server port: 4321
2000/01/01 08:00:14 Network initial status: WLAN
2000/01/01 08:01:27 Network link status change to LAN
2000/01/01 08:02:58 Network link status change to WLAN
2000/01/01 08:03:21 Video server: accept connection from 192.168.2.119
2000/01/01 08:03:21 Video server: "admin" login
2000/01/01 08:05:13 Video server: disconnect connection from 192.168.2.119
2008/02/21 14:14:49 Video server: accept connection from 192.168.2.119
2008/02/21 14:14:49 Video server: "admin" login
2008/02/21 14:15:29 Video server: disconnect connection from 192.168.2.119
2008/02/21 14:16:57 Video server: accept connection from 192.168.2.1
2008/02/21 14:16:57 Video server: "admin" login
2008/02/21 14:27:50 Video server: accept connection from 192.168.2.1
2008/02/21 14:27:50 Video server: "admin" login
2008/02/21 14:44:22 Video server: disconnect connection from 192.168.2.1
2008/02/21 14:44:30 Video server: accept connection from 192.168.2.1
2008/02/21 14:44:30 Video server: "admin" login
2008/02/21 14:46:16 Video server: disconnect connection from 192.168.2.1
2008/02/21 14:54:03 Video server: disconnect connection from 192.168.2.1
```

### Log

#### LOG SCREEN

The screen will show event and event time of device.

#### REFRESH

You can press “Refresh” button to refresh the log screen.

# Chapter 7: Frequently Asked Questions

**Q1: What is an Internet Camera?**

**A:** The Internet Camera is a standalone system connecting directly to an Ethernet or Fast Ethernet network. It is different from the conventional PC Camera; the Internet Camera is an all-in-one system with built-in CPU and web-based solutions providing a low cost solution that can transmit high quality video images for monitoring. The Internet Camera can be managed remotely, accessed and controlled from any PC/Notebook over the Intranet via a web browser or camera viewer.

**Q2: What algorithm is used to compress the digital image?**

**A:** The Internet Camera utilizes MJPEG video compression technology to provide high quality images. MJPEG is a standard for video compression and can be applied to various application software.

**Q3: Can I capture or record still images from the Internet Camera?**

**A:** Yes, you are able to capture or record still images with the snapshot function from the Camera Viewer application supplied with the Internet Camera CD-ROM.

**Q4: What network cabling is required for the Internet Camera?**

**A:** The Internet Camera uses Category 5 UTP Twisted-pair cable allowing 10 Base-T and 100 Base-T networking.

**Q5: Can the Internet Camera be setup as a PC-cam on the computer?**

**A:** No, the Internet Camera is used only on Ethernet and Fast Ethernet network.

**Q6: Can the Internet Camera be connected on the network if it consists of only private IP Addresses?**

**A:** Yes, the Internet Camera can be connected to a LAN with private IP Addresses.

**Q7: The focus on the Internet Camera is bad, how can I correct it?**

**A:** Adjust the Internet Camera focus manually.

# Chapter 8: Technical Specifications

## ■ Video specification

Max Resolution: 640 x 480 pixels

Sensor: 300K pixels 1/4" color CMOS sensor

Gain control: Automatic

Exposure: Automatic

White Balance: Automatic

Focal Length: 4.8 mm

Aperture: F=1.8

## ■ Image (Video Setting)

Image compression: MJPEG Image Video

Digital 24-bit Color

Frame rate: 30fps@QVGA, 20fps@VGA

Video resolution: 176 x 144, 320x240, 640x480

## ■ System Hardware

LAN Connector: One RJ-45 port to connect to 10/100Mbps Ethernet

Wireless: IEEE 802.11b/g(\*Wireless Model Only)

LED Indicator: LAN LED (Green), WLAN LED (Amber), Power LED (Blue)

Power Supply: 12V / 1A (Wireless Model)

Power Supply: 12V / 0.4A (Wired Model)

## ■ HTTP/Utility

Includes easy-to-use Viewer & Recorder utility

Provides Admin utility & WEB browser Management

View multiple cameras simultaneously - Up to 4 cameras at a time

Manual/Schedule Record, Video Playback/Stop/Forward/Pause

Supports four additional user accounts for viewing camera

Auto sending Snap Shot by E-mail or FTP

Support DDNS and UPnP functions

Supports Windows 2000/XP/2003

Firmware Upgradeable