



**LevelOne**

**FCS-1020**

**100Mbps IP Network Camera**



**User's Manual**

# Contents

1.	Introduction.....	3
2.	Package Content.....	3
3.	System Requirement.....	3
4.	Hardware Installation.....	4
4.1.	LED and Focusing .....	4
4.2.	Camera Ports.....	4
4.3.	Installation Procedure .....	5
5.	Software Installation .....	5
6.	Using the Administrator Utility .....	11
6.1.	General Setting.....	12
6.2.	Detail Setting .....	14
6.3.	Setting Wizard .....	19
7.	Using the Camera Viewer.....	21
7.1.	Panel Introduction.....	21
7.2.	Camera Buttons.....	22
7.3.	Camera Status .....	23
7.4.	Control Buttons.....	23
7.5.	Video Recording .....	24
7.6.	Change resolution.....	25
7.7.	View Four Cameras Simultaneously.....	26
7.8.	Viewer Utility Setting.....	26
7.8.1.	Setting.....	27
7.8.2.	Recording.....	28
7.8.3.	Status:.....	31
7.8.4.	General .....	32
7.9.	Playback .....	33
7.10.	Rotate Video .....	35
8.	Web Connection and Setup.....	36
8.1.	View Video .....	38
8.2.	Camera Setting.....	39
8.3.	Advanced Setting.....	41
8.4.	User Password .....	42
9.	Frequently Asked Questions .....	43
10.	Technical Specifications .....	44

# 1. Introduction

Thank you for choosing the **FCS-1020** IP Network Camera. This Camera sends live video through the Internet to a web browser or camera viewer 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 IP Network Camera can connect directly to a network. The Motion JPEG video compression produces a high quality, high-frame rate, 640 x 480 video stream.

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

Use the instructions in this Manual to help you integrate the Camera into your network.

# 2. Package Content

- One FCS-1020 IP Network Camera
- One Power Adapter
- One Camera Stand
- One Cate.5 Ethernet Cable
- One Quick Installation Guide
- One CD

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

# 3. System Requirement

System requirement for PC and Notebook PC to access the IP Network Camera are:

- OS System: Windows XP, Me, 2000, 98SE
- CPU: Pentium III, 450MHz or above
- Memory Size: 128MB (256MB recommended)
- VGA card resolution: 800 x 600 or above

## 4. Hardware Installation

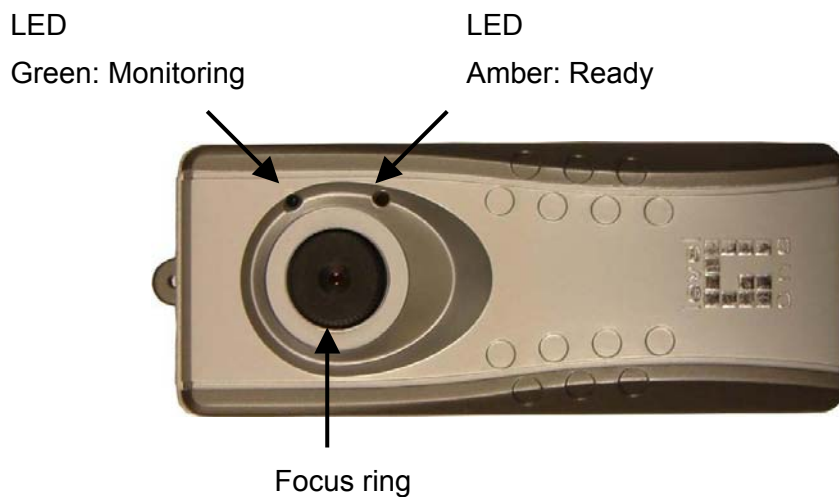
### 4.1. LED and Focusing

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 focus ring.

There are two LEDs indicating the camera status.

**Monitoring:** When someone is viewing the camera, the LED will light.

**Ready:** When the camera is power on and ready for access, the LED will light.



### 4.2. Camera Ports

The Camera features two ports and a Reset button.

**Power:** The Power port is where you will connect the power adapter.

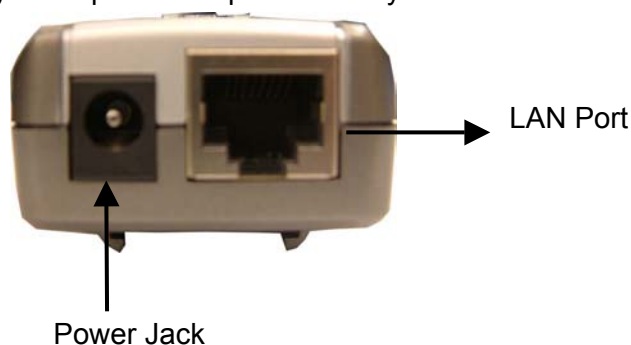
**LAN:** The LAN port is where you will connect the Ethernet network cable.

**Reset:** The Reset button is what you will press if you need to reset the Camera. Insert a paper clip into the hole. Then press the button and hold it in for five seconds.

### 4.3. Installation Procedure

1. Unpack the **FCS-1020** IP Network Camera package and verify that all the items listed in the Chapter 2 are provided.
2. Connect the **FCS-1020** IP Network Camera to your network by attached the network cable to the UTP port of the IP Network Camera.
3. Connect the power adapter to the IP Network Camera and plug the power adapter to outlet. The IP Network Camera will be powered on. When the IP Network Camera is ready, the Ready LED will show orange color.

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



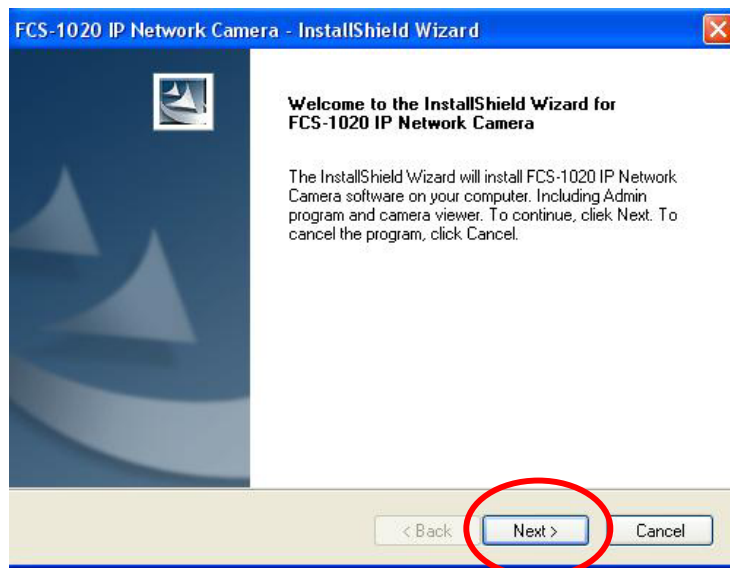
## 5. Software Installation

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 98SE/Me/2000/Server 2003 are similar.

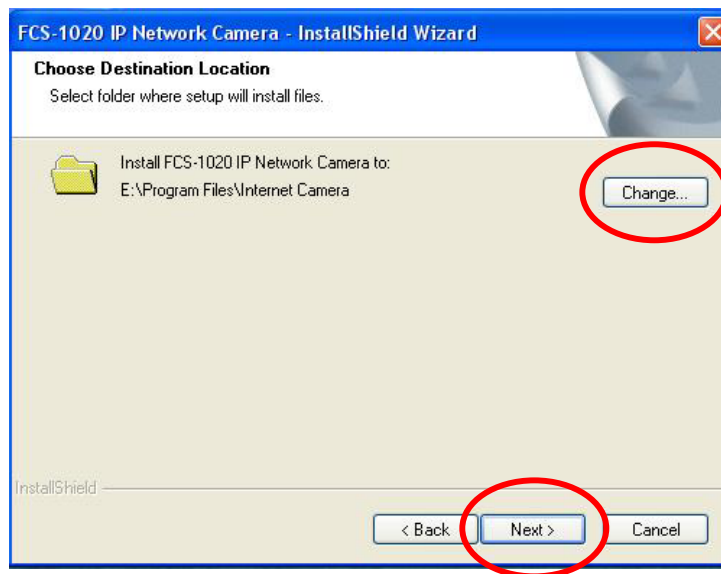
1. Insert the CD shipped along with the IP Network Camera into your CD-ROM drive. The Autorun.exe program should be executed automatically. If not, run Autorun.exe manually from "AutoRun" folder in the CD.
2. The Install Wizard will show four selections, select "**Install Utility & Viewer**" to install or click "**Exit**" to install the program later.



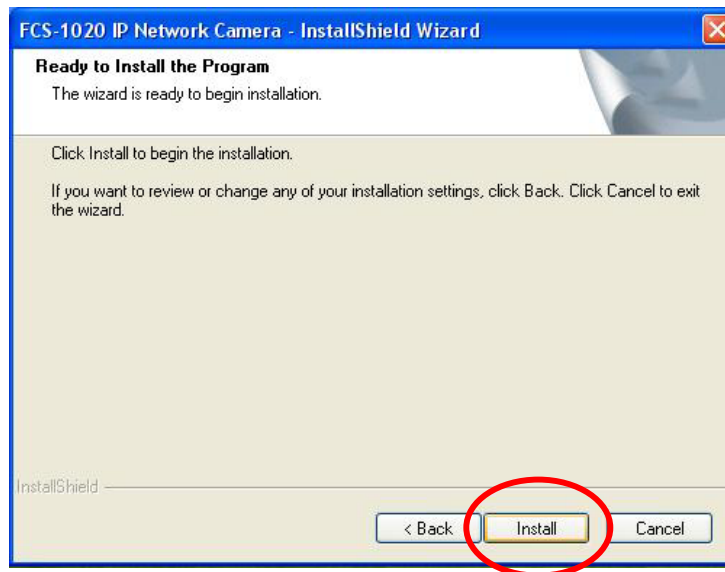
3. The system will start the installation procedures. Click “**Next**” to continue installation.



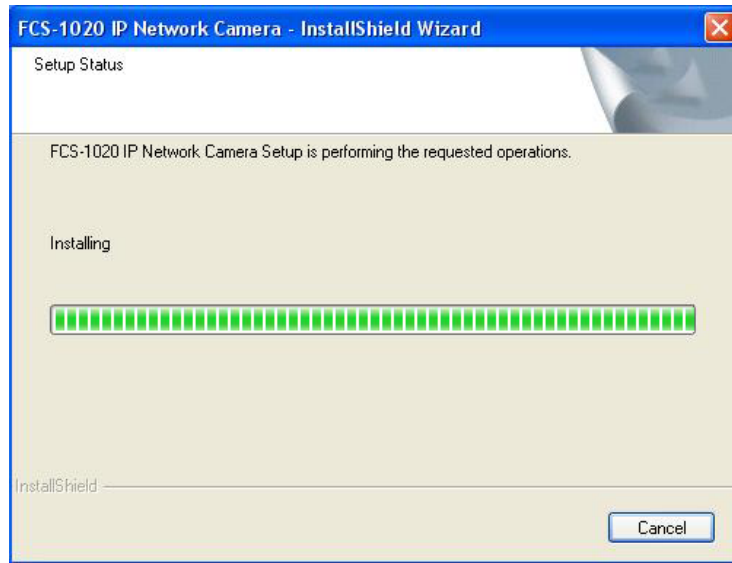
4. If you wish to install the software program in an alternate location, click “**Change**”, otherwise click “**Next**” to move on to the next step.



5. Click “**Install**” to start installing the program.



6. The system will install the program automatically.

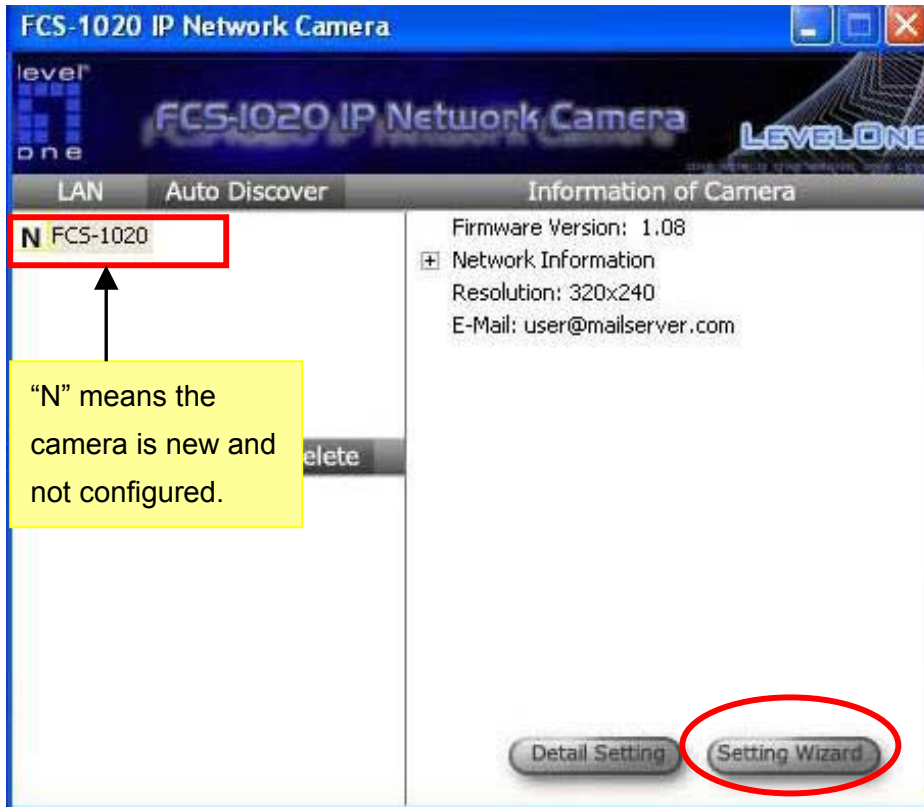


7. Click "**Finish**" to complete the software installation.



8. When the installation is completed. The system will auto run "**Administrator Utility**". On the IP Network 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.





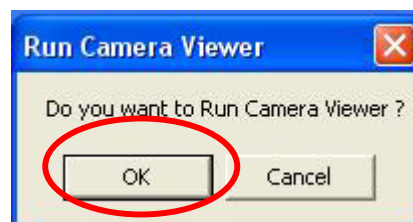
9. For the first time configuration, please enter the default password “1234” and click “OK” to access to the IP setup page.



10. **FCS-1020** IP Network Camera is working through the network (TCP/IP Protocol). The IP address 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 must be the same for both the camera and the PC. Click “**Finish**” to apply the configuration. Congratulations, you have finished setting the camera and can start to view the video of the Camera.



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 “OK” 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.



## 6. 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.

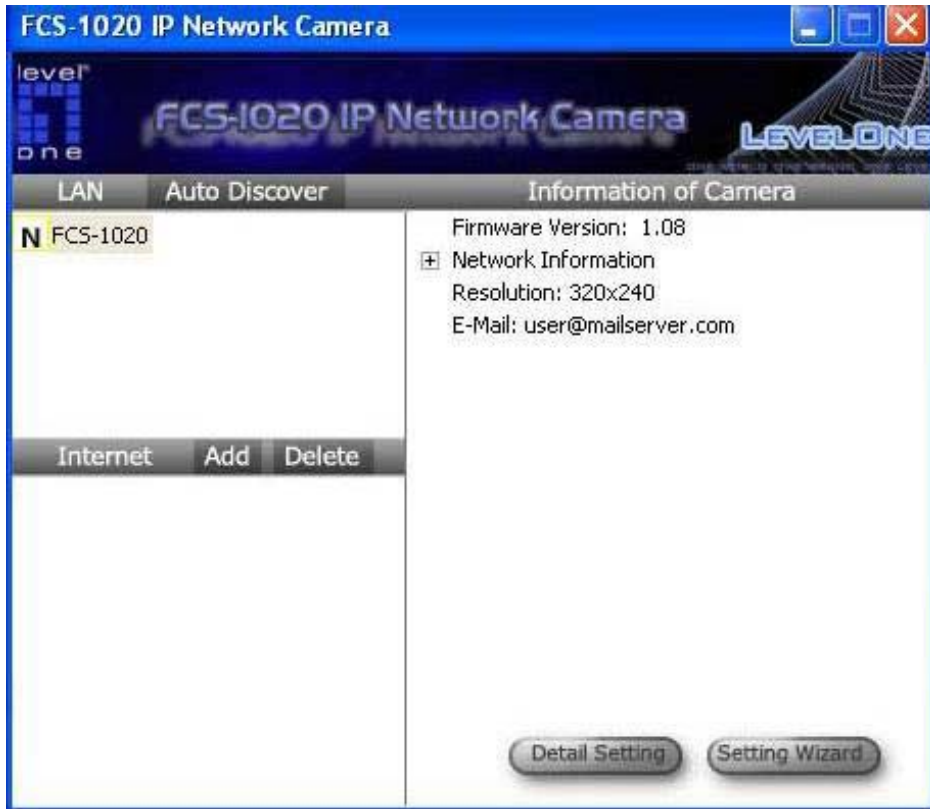
There are two ways to run the Administrator Utility as follows.

1. Click "Start", select "Programs\IP Camera\Admin Utility" to run the utility.

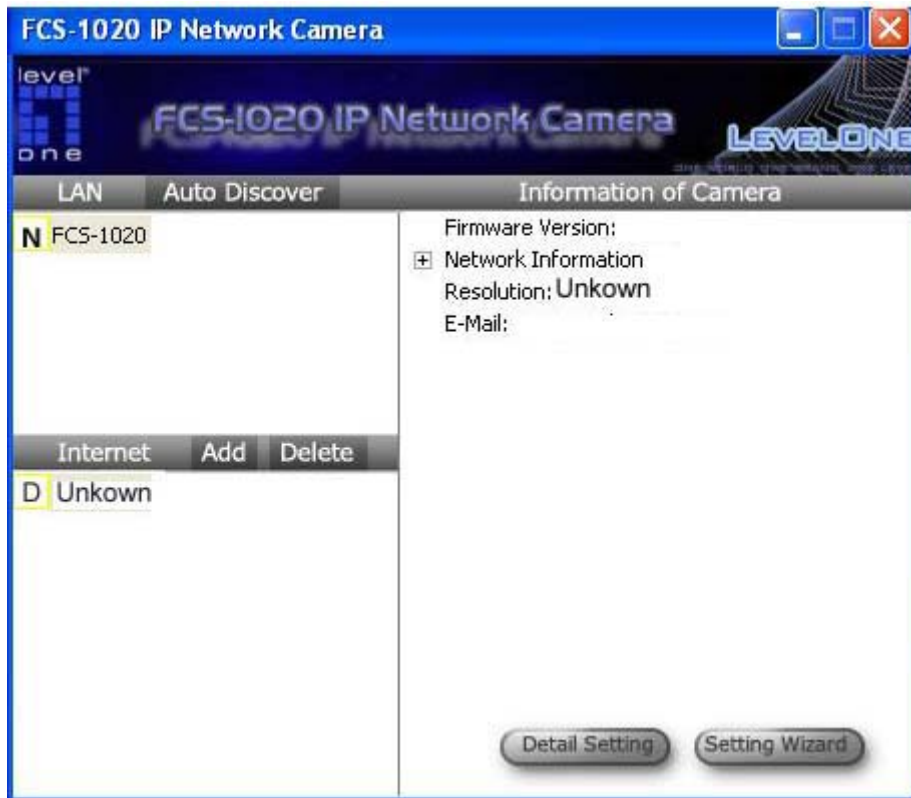


2. Click the "IP Camera Admin" icon to run the utility.

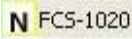
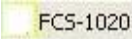
Once the utility is started, it will search all the cameras within the network. To do more settings, please refer to the description in the following sections.




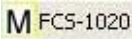
## 6.1. General Setting



## LAN Setting

Auto Discover	Click the button will search the camera within the network automatically.
Camera List	The list shows the camera name and the setup status of the camera.  It means the camera is in the default setting.  It means the camera is configured before.

## Internet Setting

Add	Click “Add” will appear a window for you to enter the IP Address of the camera on the Internet.
Delete	Click “Delete” to delete the camera from the list.
Camera List	The list shows the camera name and the connect status of the camera.  It means the camera is disconnected or not in the Internet.  It means the camera is connected.

## Information of Camera

Camera Information	It displays all information of the selected camera. The information includes firmware version, network information, IP Address, 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.


---

## 6.2. Detail Setting

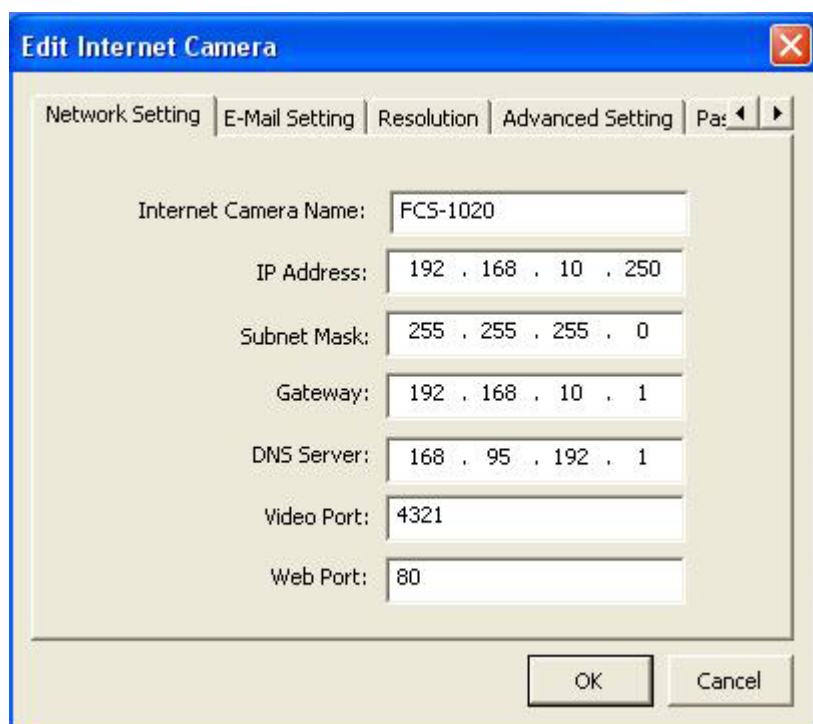
When you click the “Detail Setting”, a screen will pop up for you to enter the “Administrator Name” and “Password”. The default value is as follows.

Name: **Admin**

Password: **1234**



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



### Network Setting

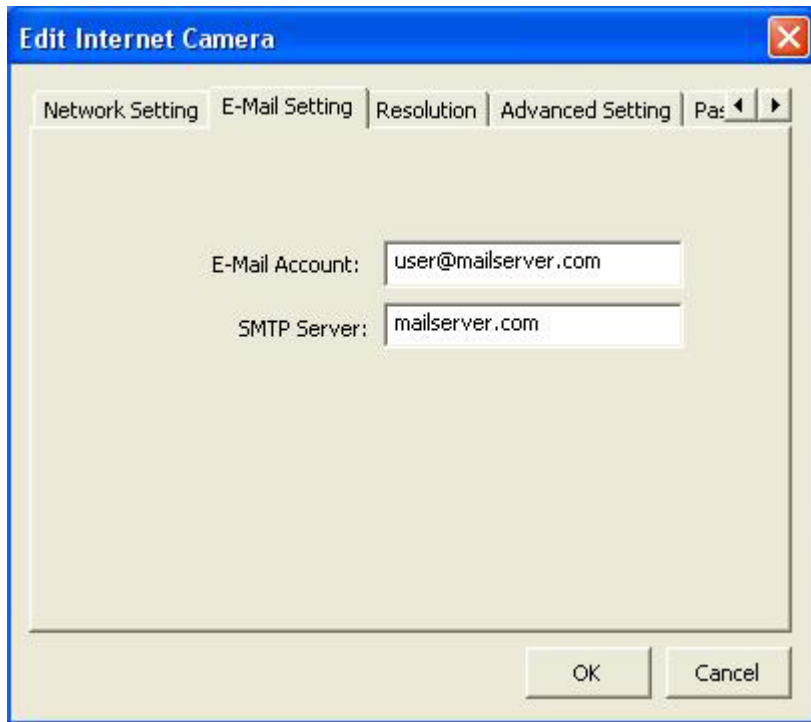
**IP Network Camera Name** The default camera name is “FCS-1020”. It is recommended to name a meaningful name for the camera.

**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 match the values used by the PCs on your LAN.
DNS Server	DNS Server (Domain Name Server) that translates names to IP addresses. Set the same values as the PCs on your LAN.
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 <a href="http://192.168.2.3:8080">http://192.168.2.3:8080</a> to connect the camera through the web browser.

---



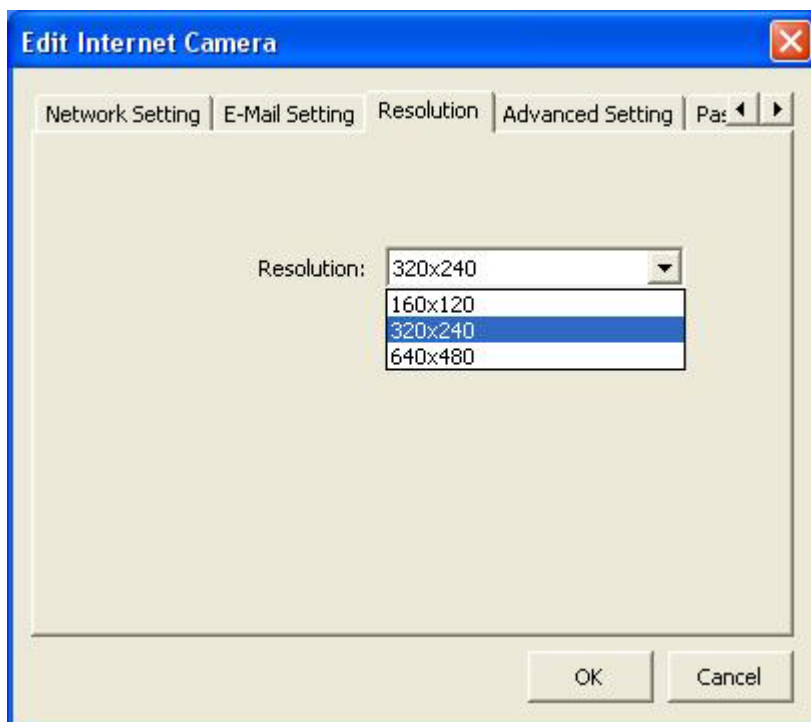
## E-Mail Setting

### E-Mail Account

This camera supports “Snap Shot” function. 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.

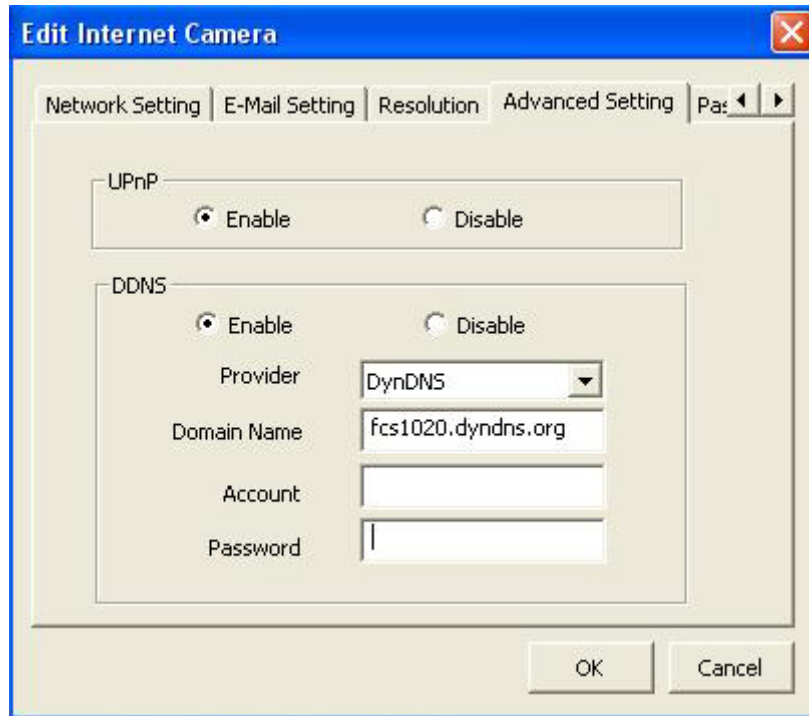




## Resolution

**Resolution** Select the desired video resolution format. Larger resolution requires more bandwidth. 640 x 480 is "VGA" format. 320 x 240 is "CIF" format.

---



## Advanced Setting

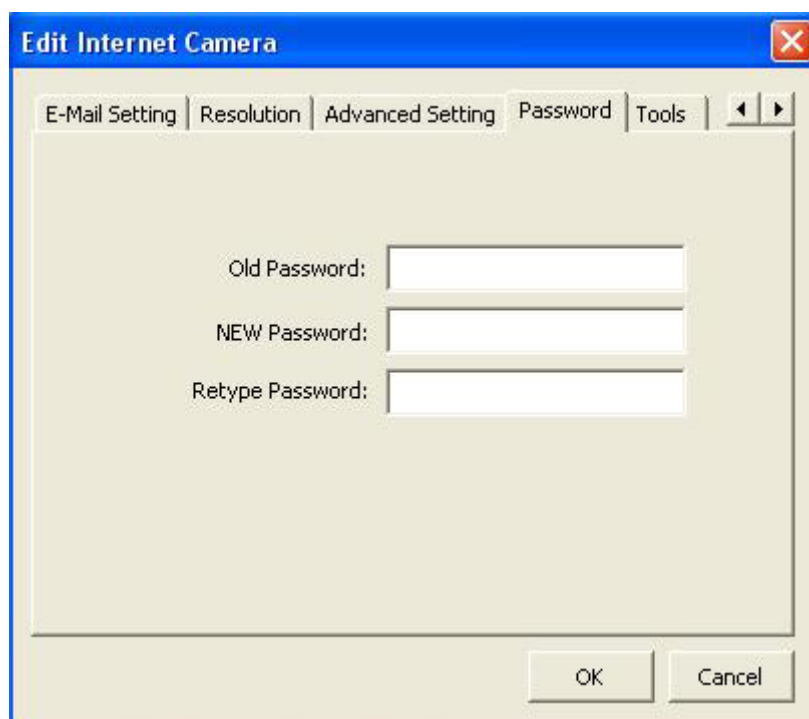
**UPnP** Enable UPnP is required. When the UPnP function is enabled, the camera can be detected by UPnP compliant system such as Windows XP. The camera will be displayed in the Neighborhood of Windows XP, so you can directly click the camera to view the video through web browser.

**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. You can apply an account from <a href="http://www.dyndns.rog/">http://www.dyndns.rog/</a>
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.

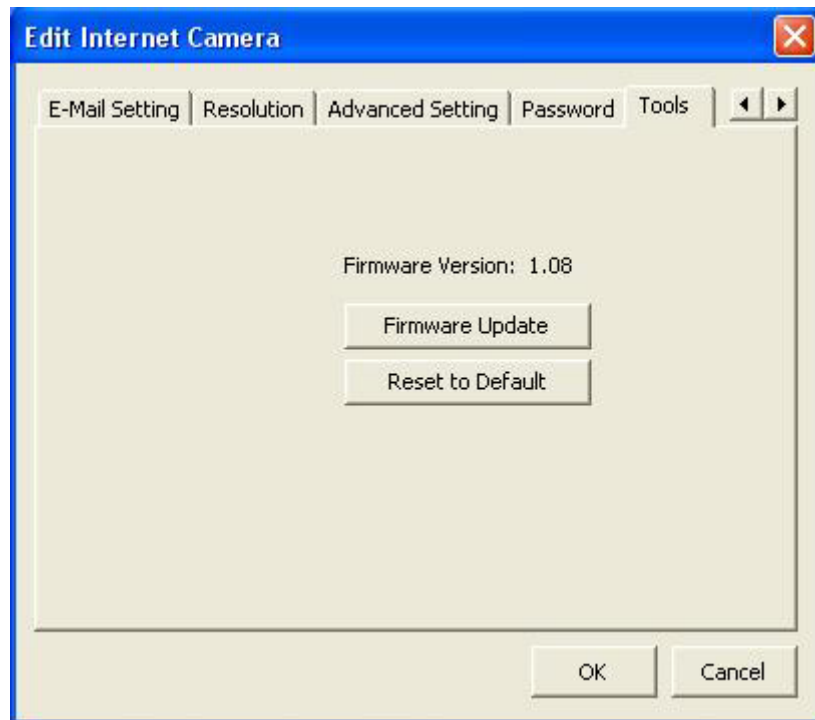
---



### Password

Old Password	Enter the current password of the camera.
New Password	Enter the new password you want to use for the camera.
Retype Password	Retype the new password to confirm the setting.

---



## Tools

Firmware Version	Display current firmware version.
Firmware Update	Click “Firmware Update” to update new firmware for the camera. You have to wait for a while for the firmware 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: “FCS-1020” IP Address: “192.168.2.3” Subnet Mask: 255.255.255.0 Administrator Name: “Admin” Password: “1234” Video Port: “4321” Web Port: “80”

## 6.3. Setting Wizard

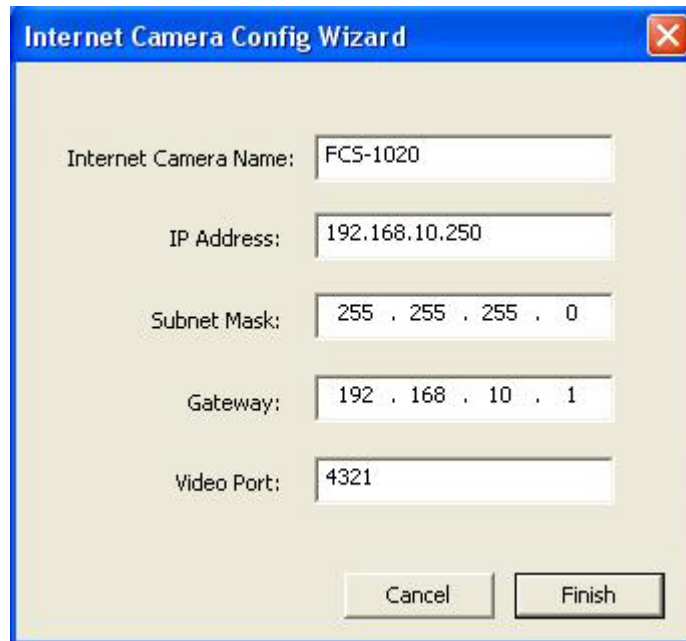
When you click the “Setting Wizard”, a screen will pop up for you to enter the “Administrator Name” and “Password”. The default value is as follows.

Name: **Admin**

Password: **1234**



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



## Setting Wizard

**IP Network Camera Name** The default camera name is “FCS-1020”. 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 192.168.2.250 to 192.168.2.0 and assign the camera an available IP Address.

You can 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.

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.

## 7. Using the Camera Viewer

### 7.1. Panel Introduction

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





## 7.2. Camera Buttons



### Camera Buttons

Camera



Click one of these four cameras will connect to the selected camera that you want to view and configure.

### 7.3. Camera Status

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

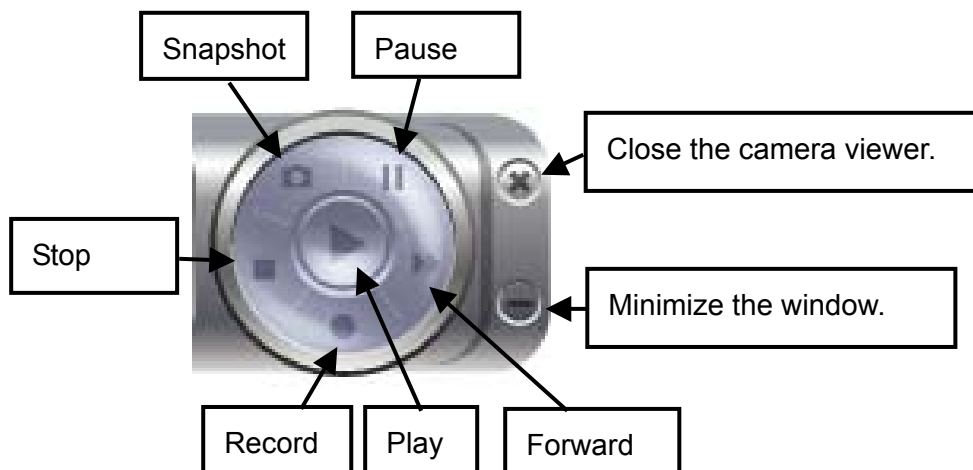


#### Camera Status

Yellow	It means that there is no camera set to connect.
Blue	It means that the camera is connected and playing the live video.
Pink	It means that the camera is not connected now.
Red	It means that the camera is recording.

---

### 7.4. Control Buttons



## Control Buttons

Play



The “Play” button is an intelligent play user-interface. In the normal display mode and the IP Network Camera is disconnected, clicking on the “Play” can make the viewer connect to the IP Network 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 IP Network 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 to the hard disk. (You can set the directory for storing these bitmap files at the Section 7.8.)

Record



By clicking on “Record” you can record video manually.


---

## 7.5. Video Recording


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


### Manual Recording

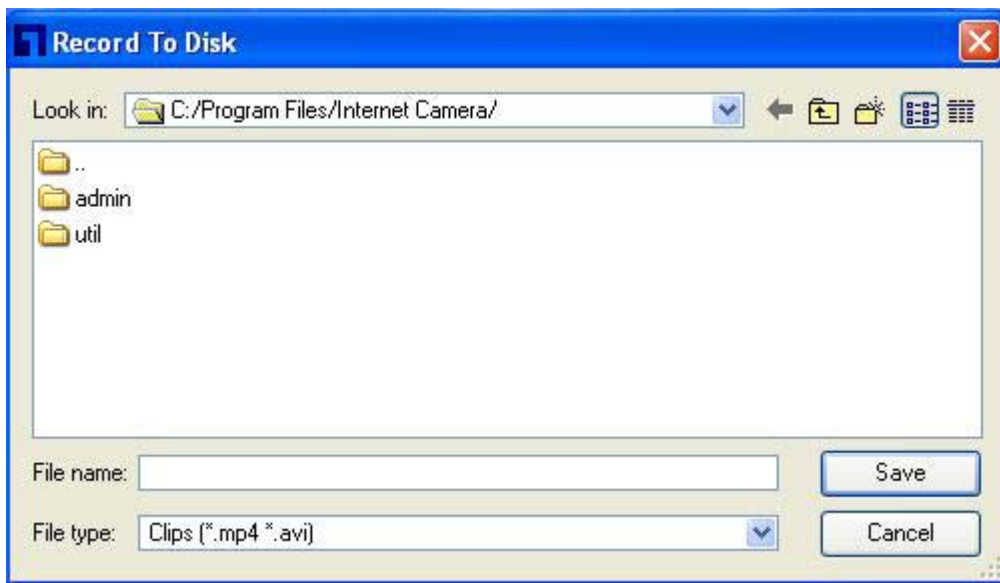
You can manually record the video stream into an assigned video file.

Click “Record” , then the “Record to Disk” window will pop up. Assign the path and file



name that you want to save and click “Save”, then the viewer utility will start to record the video stream. If you want to stop recording, click “Stop” .

**Notice:** Before manual recording, you have to click the Camera  to select the IP Network Camera that you want to record first and make sure that the viewer is successfully connecting to the IP Network Camera.



## Schedule Recording

You can assign a schedule and let this viewer automatically recording the video stream into video files. 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 “FCS-1020\_2004-10-8-23-56-40.avi” was started to record at 2004/10/8 23:56:40.

## 7.6. Change resolution

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

**Notice:** Before changing the resolution of the IP Network Camera, you have to select the IP Network Camera by clicking the camera button first. If you change the resolution of an IP Network Camera, other clients that are viewing the same IP Network Camera simultaneously will also see the video with the changed resolution, too.

## Resolution

VGA

Change the resolution to 640x480 (VGA) mode.




CIF

Change the resolution to 320x240 (CIF) mode.




## 7.7. View Four Cameras Simultaneously

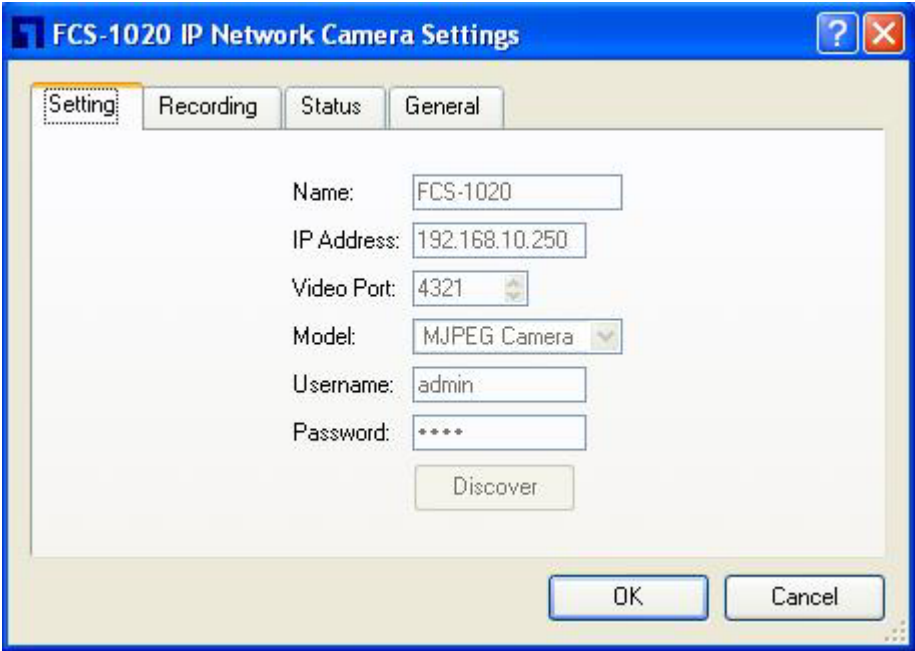
Click the four division button  can view the 4 cameras simultaneously in a four-division window.



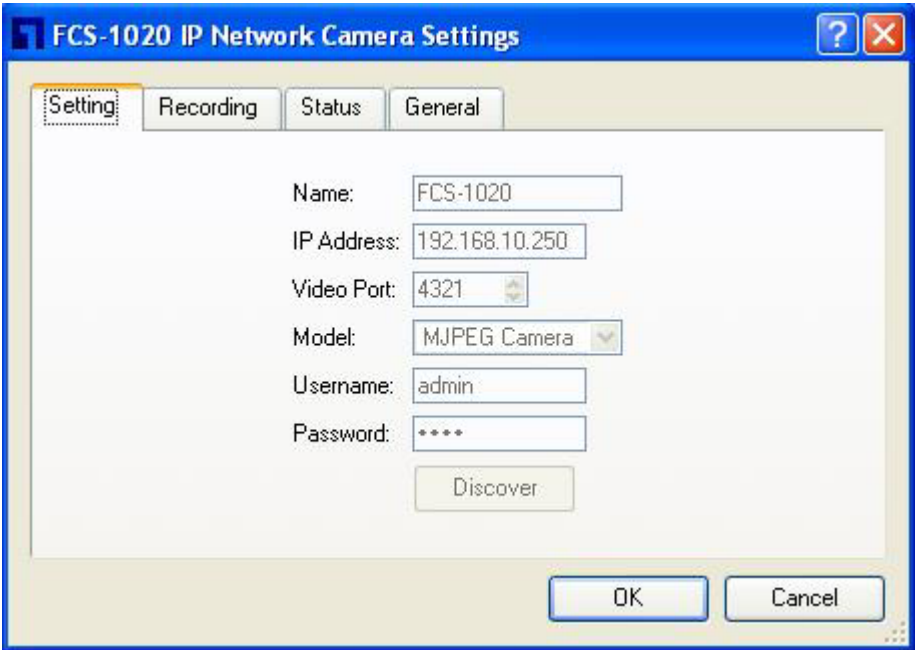
## 7.8. Viewer Utility Setting

Click the "Setting" , then the setting window of the IP Network Camera will pop up.

**Notice:** When you want to change the setting in the windows, you must disconnect the IP Network Camera first by clicking the “Stop” .



**7.8.1. Setting**



**Setting**

Name Camera name

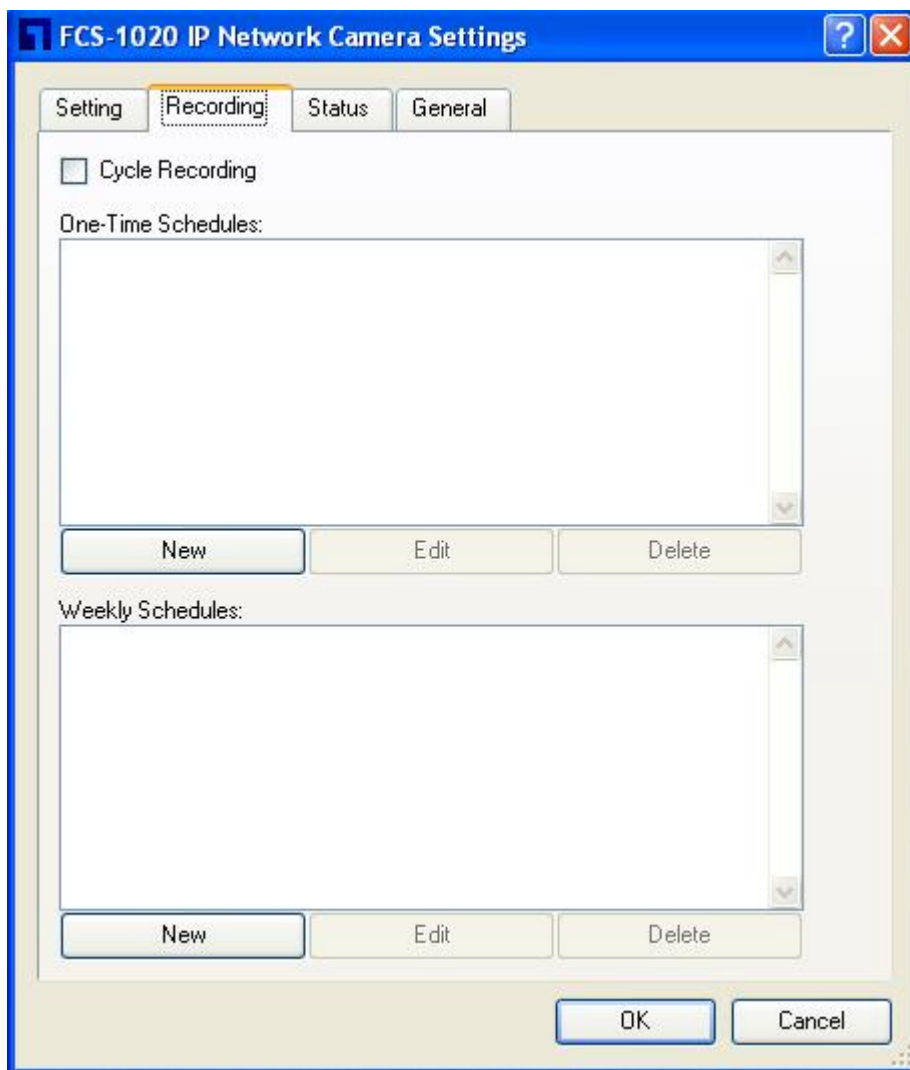
IP Address	IP address/Domain name of the IP Network Camera.
Video Port	The number of service port used by the IP Network Camera.
Model	Select "MJPEG Camera" (This camera only supports motion JPEG).
Username	The user name for login into the IP Network Camera.
Password	The password for login into the IP Network Camera.
Discover	Click "Discover", then camera auto-discover windows will pop up. The window will show all the discovered cameras on LAN environment. Select one IP Network Camera that you want to see from the list.

---

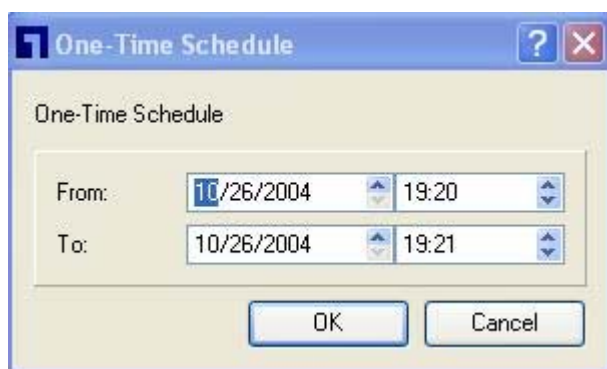
### **7.8.2. Recording**

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

**Notice:** The utility will only start to record the video stream when this utility is running and is successfully connecting to the IP Network Camera in the beginning of the schedule.



**One-Time Schedule:**



**Weekly Schedule:**



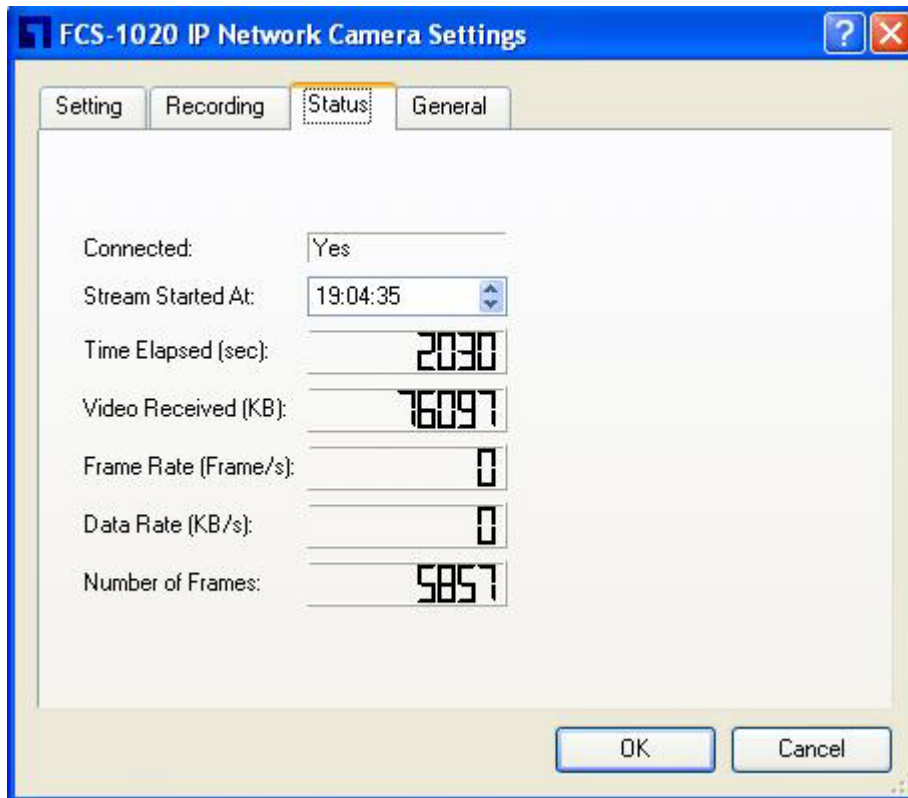
## Schedule

Cycle Recording	Select this item to enable cycle recording. When the Cycle Recording is enabled 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.
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.
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.

---

### 7.8.3. Status:

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



#### Status

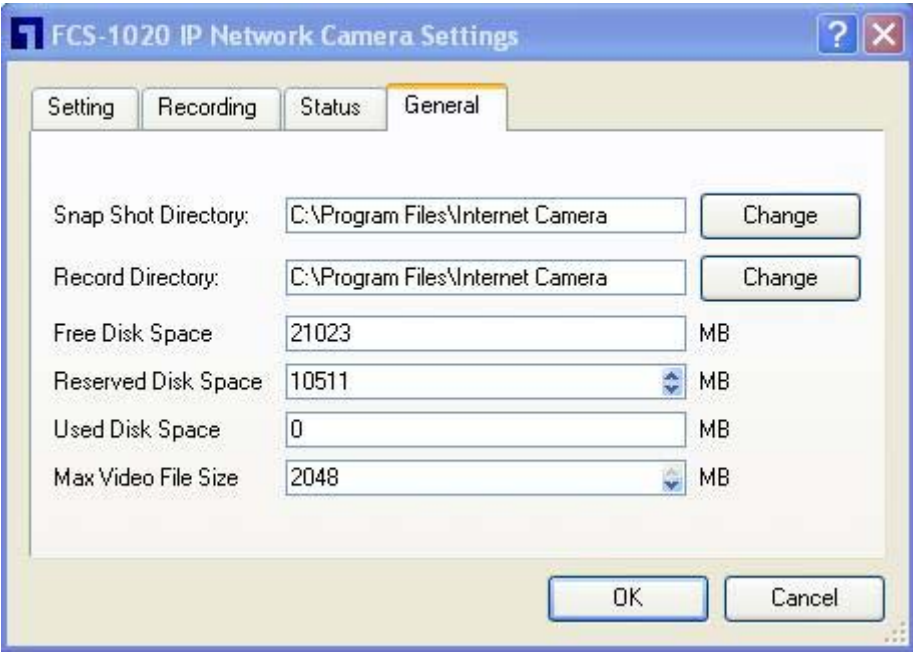
Connected	It displays "Yes" when the utility is connecting to the IP Network Camera and displays "No" is the utility is not connecting to the IP Network Camera.
Stream Started At	The beginning time of the current connection session between the utility and the IP Network Camera.
Time Elapsed	The elapsed time of the current connection session between the utility and the IP Network Camera.
Video Received	The total size (Unit: KByte) of video stream received during the current connection session between the utility and the IP Network Camera.

Frame Rate	The frame rate (frame per second) of the current video download speed from the IP Network Camera of the utility.
Data Rate	The data rate (KByte per second) of the current video download speed from the IP Network Camera of the utility.
Number of Frames	The total number of video frames received during the current connection session between the utility and the IP Network Camera.

---

**7.8.4. General**

You can manage storage usage of the utility for this IP Network Camera here.



**General**

Snap Shot Directory	This lets you assign the directory where bitmap files will be stored when you use the snapshot to take pictures.
Record Directory	This lets you assign the directory where the recorded video files will be stored.




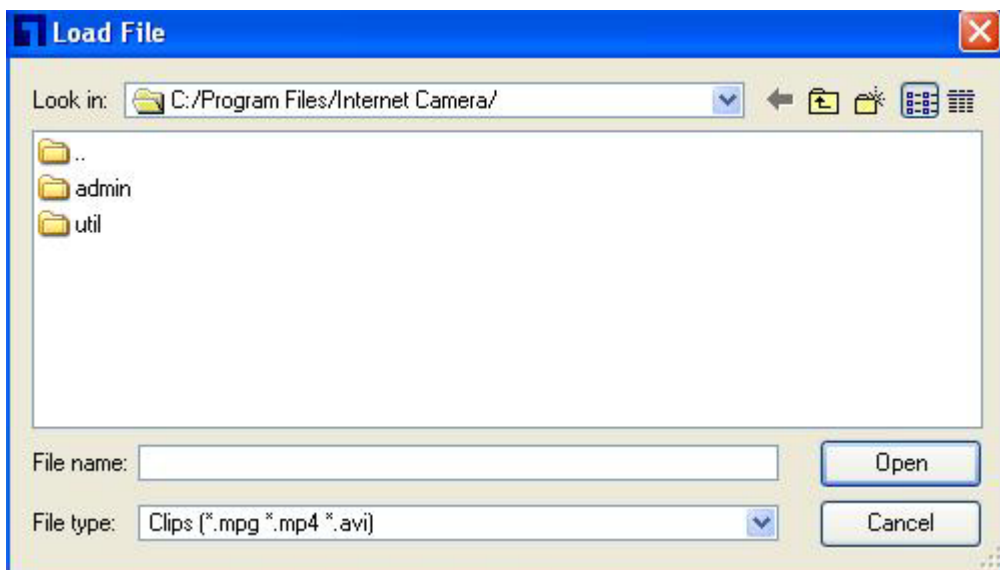
Free Disk Space	The current free disk space of your PC.
Reserved Disk Space	You can reserve a disk space to store the recorded video and snapshot files.
Used Disk Space	The current used disk space for saving the recording file.
Max Video File Size	This let you assign a maximum size of each video file. The upper bound of this value is 2 GB per file.

---

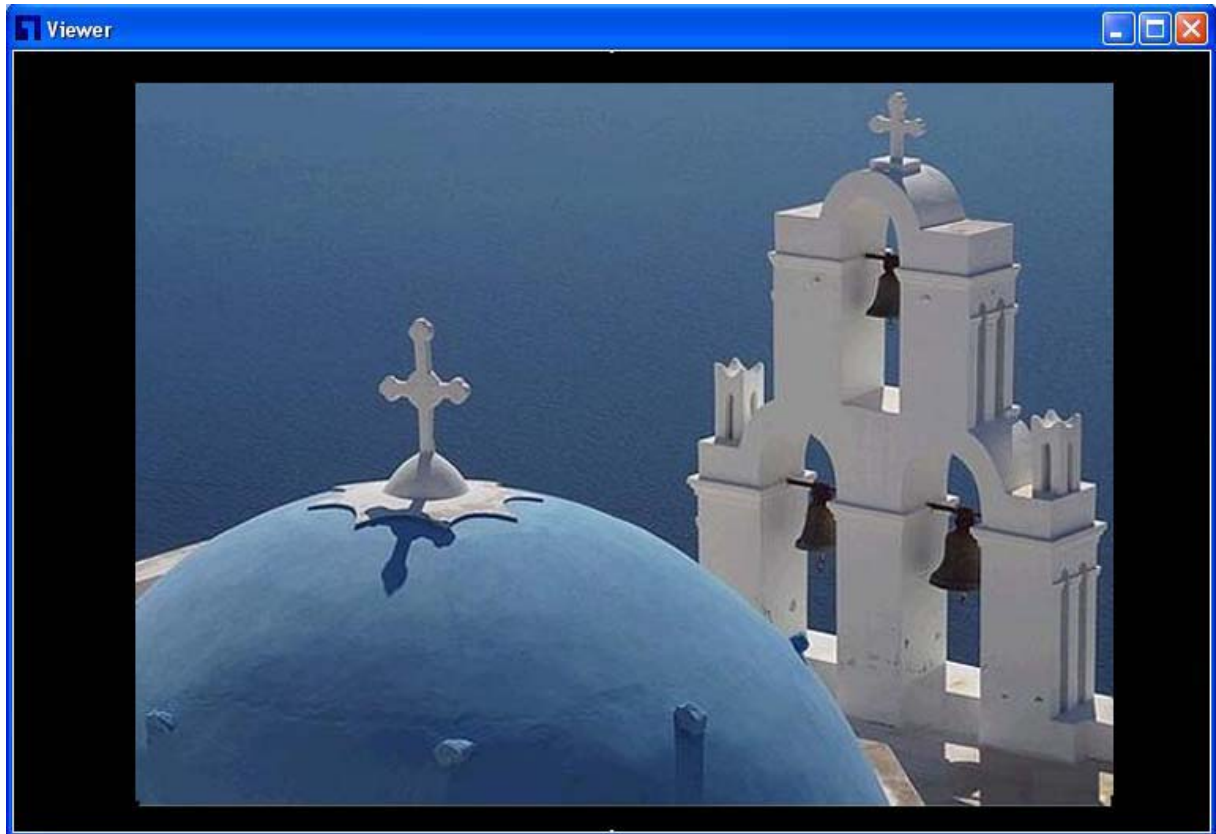
## 7.9. Playback

Playback function lets you select a file of previous recorded video stream and 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 viewer 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.

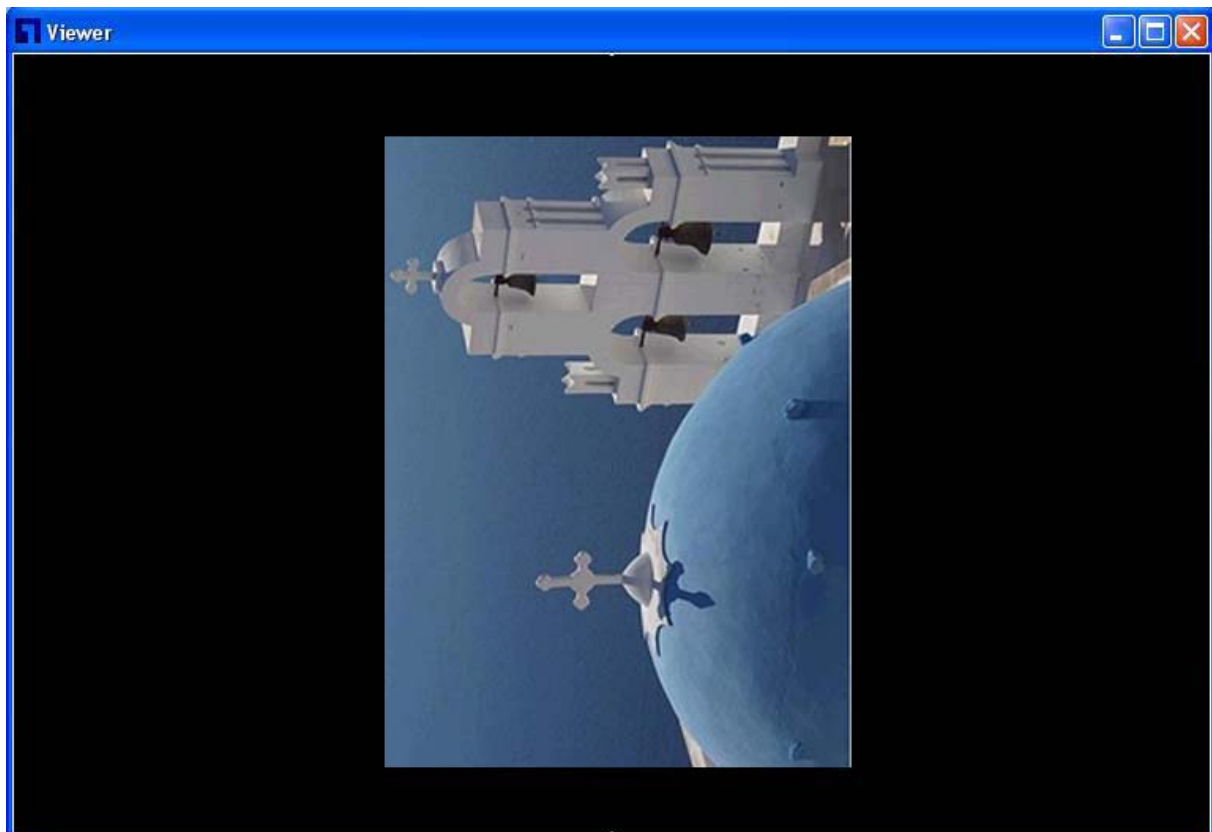
Forward

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” .

---

## 7.10. Rotate Video

Rotate function lets you rotate the video frame 90 of degree angle counterclockwise each time you click the “Rotate” . With this function, you can view the live video with normal, 90 degree, 180 degree and 270 degree angles counterclockwise. Below is the video with 90 of degree angle counterclockwise rotation.



## 8. Web Connection and Setup

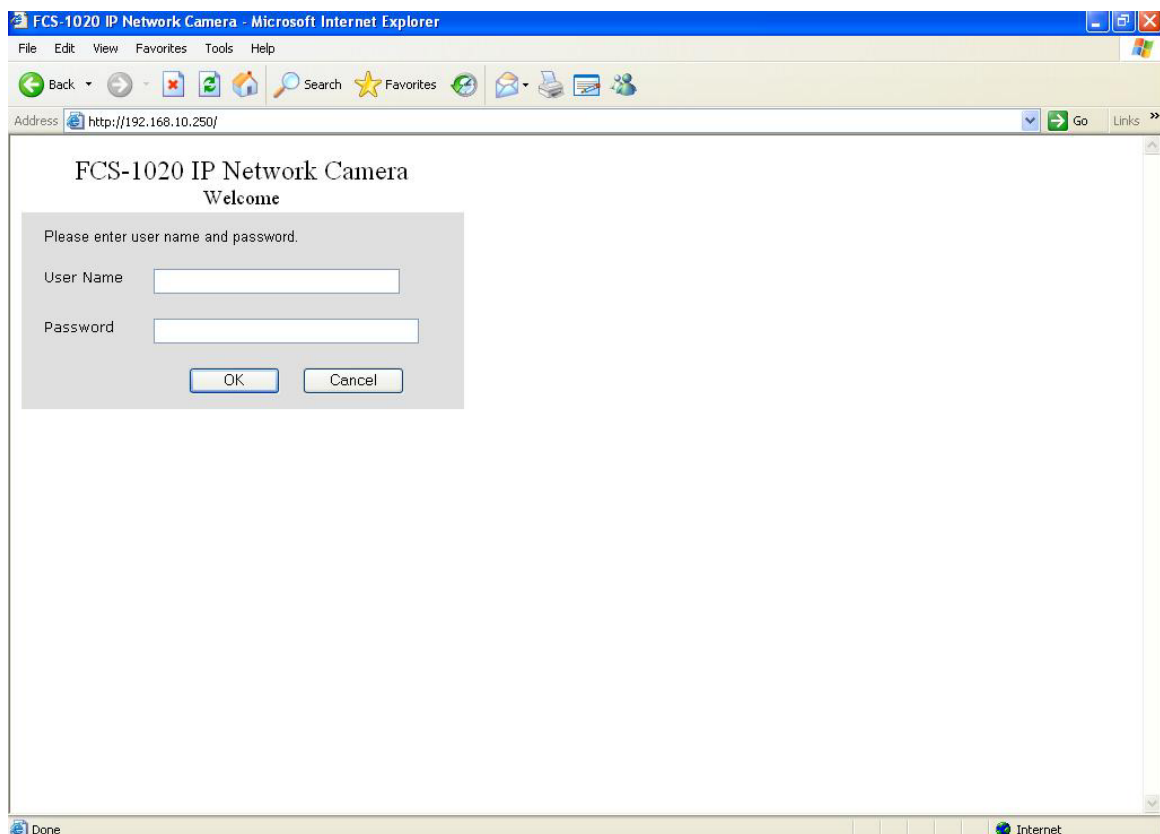
You can use the Web browser to connect the camera for viewing or setting. Open the web browser and enter the IP Address of the camera to establish a connection. The default IP Address of the camera is “**192.168.2.3**”.

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

Admin Name: “**admin**”

Password: “**1234**”

**Note:** Web connection only support “**admin**” account



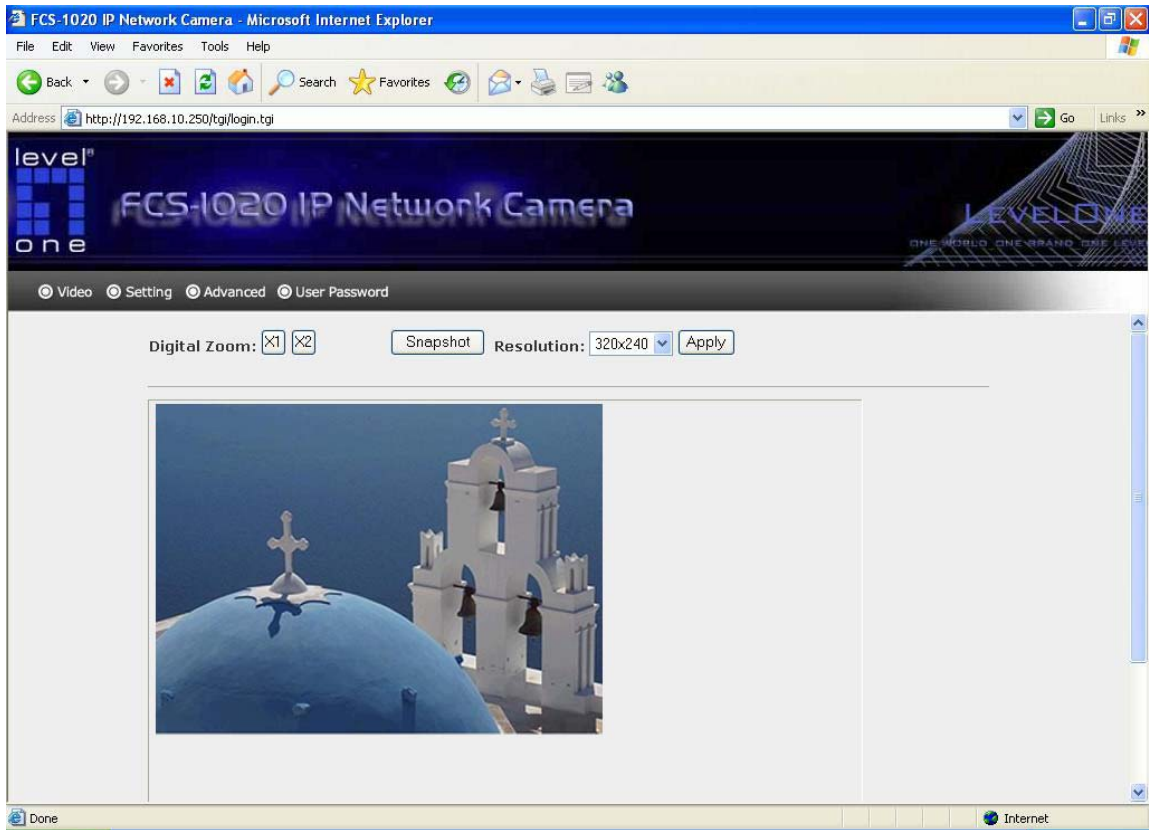
When the camera is connected, the video image will be shown up in the web screen directly. The menu options for the web control screen are as follows.

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

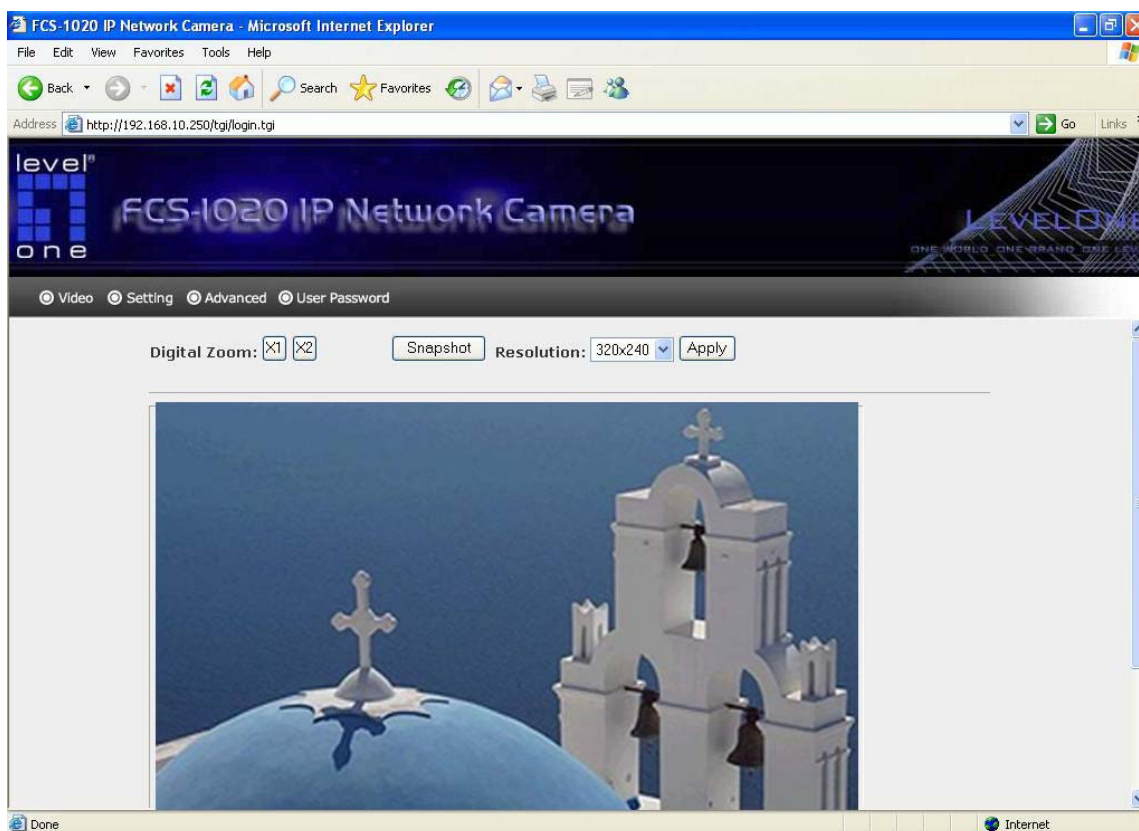
**Setting** – Set the necessary setting for the camera.

**Advanced** – Enable or disable UPnP and DDNS functions.

**User Password** – Up to four sets of administrator name and password can be set here.



## 8.1. View Video



### Video

#### Digital Zoom

It allows you to zoom in or zoom out the video size.

Click “x2”, the image size in the display area will be magnified 2 times to the original size. In 640x480 resolution, only upper left one fourth area of the screen will be magnified 2 times.

Click “x1”, the image size in the display area will be minified to the original size.

#### Snapshot

If you want to snapshot a picture for the current video, click this button. The system will send the picture to the E-Mail account you set up in the “E-Mail Setting” immediately.

#### Resolution

Select the desired video resolution format. Larger resolution requires more bandwidth. 640 x 480 is “VGA” format. 320 x 240 is “CIF” format.

#### Apply

Click “Apply” to validate resolution setting.

## 8.2. Camera Setting

The screenshot shows the web interface for the LevelOne FCS-1020 IP Network Camera. At the top, there is a navigation menu with options: Video, Setting (selected), Advanced, and User Password. The main content area is divided into several sections:

- Maintenance:** Includes a "Factory Defaults" section with a "Reset to Defaults" button.
- Email Setting:** Includes "E-Mail Account" (user@mailserver.com) and "SMTP Server" (mailserver.com) fields, with an "Apply" button.
- IP Information:** A table of configuration fields:

IP Address	192	168	10	.	250
Subnet Mask	255	255	255	.	0
Gateway	192	168	10	.	1
DNS Server	168	95	192	.	1
Video Port	4321				
Web Port	80				
Camera Name	FCS-1020				
Firmware Version	IP Camera Version 1.08				

An "Apply" button is located below the table.
- Change Password:** Includes "Current Password", "New Password", and "Confirm New Password" fields, with an "Apply" button.

### Maintenance

#### Factory Defaults

To reset the camera, click “Reset to Defaults”. Then, follow the instruction of the screen to complete the process.

### E-Mail Setting

#### Receiver

Set up the E-Mail account as the receiver for the snapshot picture.

#### Mails Server

Specify the SMTP mail server for sending E-Mail.

#### Apply

When you finish the “E-Mail Setting”, click “Apply”.

### IP Information

#### 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.
Default Gateway	The Gateway is used to forward frames to destinations in a different subnet on the Internet. The Gateway setting must match the values used by the PCs on your LAN.
DNS Server	DNS Server (Domain Name Server) that translates names to IP addresses. Set the same values as the PCs on your LAN.
Video Port Number	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.
Control Port Number	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.
Camera Name	The default camera name is "FCS-1020". It is recommended to name a meaningful name for the camera.
Firmware Version	Display the current firmware version of the camera.
Apply	When you finish the "IP Setting", click "Apply".

### Change Password

Old Password	Enter current password.
New Password	Specify the new password you want to change to.
Confirm New Password	Enter the new password again for confirmation.
Apply	When you finish the "Change Password", click "Apply".

---



## 8.3. Advanced Setting

level one  
FCS-1020 IP Network Camera  
LEVEL ONE  
ONE WORLD ONE BRAND ONE LIFE

Video Setting **Advanced** User Password

Line Frequency  50Hz  60Hz

UPnP  Enable  Disable

Enable  Disable

DDNS Service  
Provider: DynDNS  
Domain Name:   
Account:   
Password:

### Line Frequency

**Line Frequency** Select the line frequency (50 or 60MHz) to improve the viewing quality under the fluorescent light.

**Apply** When you finish the “Line Frequency”, click “Apply”.

### DDNS Service

**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.
Apply	When you finish the “DDNS Service”, click “Apply”.

---

## 8.4. User Password

**User 1 / 2 / 3 / 4 (Note: These 4 accounts only can be used in viewer utility.)**

User Name	Up to four sets of user name and password can be defined. Enter the user name for login name to the camera.
Password	Enter the password of the new user account.
Confirm Password	Enter the password again to confirm the setting.
Apply	Click “Apply” to add the user account.

---

## 9. Frequently Asked Questions

**Q: What is an IP Network Camera?**

**A:** The IP Network Camera is a standalone system connecting directly to an Ethernet or Fast Ethernet network. It is different from the conventional PC Camera; the IP Network 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 IP Network Camera can be managed remotely, accessed and controlled from any PC/Notebook over the Intranet via a web browser or camera viewer.

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

**A:** The IP Network Camera utilizes JPEG image compression technology to provide high quality images. JPEG is a standard for image compression and can be applied to various web browser and application software.

**Q: Can I capture or record still images from the IP Network Camera?**

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

**Q: What network cabling is required for the IP Network Camera?**

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

**Q: Can the IP Network Camera be setup as a PC-cam on the computer?**

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

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

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

**Q: The focus on the IP Network Camera is bad, how can I correct it?**

**A1:** Adjust the IP Network Camera focus manually.

## 10. Technical Specifications

### ■ Video specification

Max Resolution: 640 x 480 pixels

Sensor: 300,000K pixels 1/4" color CMOS sensor

Gain control: Automatic

Exposure: Automatic

White Balance: Automatic

Focal Length: 6.0 mm

Aperture: F=1.8

### ■ Image (Video Setting)

Image compression: Motion-JPEG Image Video

Digital 24-bit Color

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

Video resolution: 320x240, 640x480

### ■ System Hardware

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

LED Indicator: Monitoring LED (Green), Ready LED (Orange)

Power Supply: DC 7.5V/0.5A

### ■ 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

Auto sending Snap Shot by E-mail

Supports Windows 98SE/ME/NT/2000/XP/2003

Firmware Upgradeable

### ■ EMI & Safety

FCC, CE, C-Tick, VCCI