



Wired Internet Camera RXS-3323  
Wireless Internet Camera RXS-4324

*User Manual*



## FCC STATEMENT

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

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

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.
- 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 user's authority to operate the equipment.

## FCC RF Radiation Exposure Statement

This equipment complies with FCC RF radiation exposure limits set forth for an uncontrolled environment. This device and its antenna must not be co-located or operating in conjunction with any other antenna or transmitter.

"To comply with FCC RF exposure compliance requirements, this grant is applicable to only Mobile Configurations. The antennas used for this transmitter must be installed to provide a separation distance of at least 20 cm from all persons and must not be co-located or operating in conjunction with any other antenna or transmitter."

## CE Mark Warning

This is a class B product. In a domestic environment, this product may cause radio interference, in which case the user may be required to take adequate measures.

## National Restrictions

### 2400.0-2483.5 MHz

Country	Restriction	Reason/remark
Bulgaria		General authorization required for outdoor use and public service
France	Outdoor use limited to 10 mW EIRP within the band 2454-2483.5 MHz	Military Radiolocation use. Refarming of the 2.4 GHz band has been ongoing in recent years to allow current relaxed regulation. Full implementation planned 2012
Italy		If used outside of own premises, general authorization is required
Luxembourg		General authorization required for network and service supply(not for spectrum)
Norway	Implemented	This subsection does not apply for the geographical area within a radius of 20 km from the centre of Ny-Ålesund
Russian Federation		Only for indoor applications

**Note:** Please don't use the product outdoors in France.







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# Chapter 1. Product Overview

## Package Contents

Item	Descriptions
	<b>1. RXS-3323 or RXS-432 Camera</b>
	<b>2. Manual and Software Package CD</b>
	<b>3. Quick Installation Guide</b>
	<b>4. Detachable Wireless LAN Antenna</b> (optional, only comes with Wireless Camera)
	<b>5. RJ 45 Cable</b>
	<b>6. 12V/1A Power Adapter</b>
	<b>7. Camera Mount Kit</b>

Please contact your reseller, if any of the above items are missing.

## System Requirements

- Windows 2000, XP, Vista, or Windows 7.
- At least 256 MB of memory (512MB recommended)
- A wireless (802.11n or 802.11g) or Ethernet network.
- Internet Explorer 6.x or higher, Firefox 2.0 or later/ Safari Internet Web Browser
- VGA card resolution: 800 x 600 or above
- CPU: 1.3GHz or above processor

## Product Features

RXS-3323/RXS-4324 is the Day/Night, Pan/Tilt Internet Camera with two-way Audio provides you with a 24 hours security. You will be able to see, hear, and talk to people in your camera's viewing field via Internet connection.

- **H2.64, MPEG4, and MJPEG Tri-Codec supported**

The camera provides you with excellent images by the H.264/ MPEG4/ MJPEG Tri-codec selectable technology. The H.264 codec can reduce the size of a video stream up to 80% compare to MJPEG, allowing the optimization of your networking environment and storage space.

- **2-Way Audio Capability**

The built-in microphone of the camera provides on-the-spot audio via the Internet, allowing you to monitor the on-site voice. In addition, you can connect an external speaker to the camera which allowing broadcast via the camera.

- **Day & Night Surveillance Supported**

The four White LEDs around the camera lens enable the camera to capture images in the dark environment or at night. When the Light Sensor detects the environmental light level becomes low, the LEDs will automatically turn on,

ensuring seamless protection.

- **Optimal Viewing**

With the pan/tilt functions, the camera can monitor everywhere from the left/right (0~355 degrees) or up/down (-10~90 degrees). In addition, there is 128 preset points and 16 camera tours can be assigning to move the camera lens to cover the desired area quickly.

- **Supports Multiple Profiles**

The camera supports multiple profiles simultaneously, so that you can separately set up different image settings (such as image quality and frame rate) for the different video types of the camera: H.264, MPEG4, MJPEG, and 3GPP.

- **Remote Control Supported**

By using a standard Web browser or the bundled viewing software application, you can easily change the configuration of the camera via Intranet or Internet. In addition, the camera can be upgraded remotely when a new firmware is available. The users can also monitor the image and take snapshots via the network.

- **Multiple Platforms Supported**

The camera supports multiple network protocols, including TCP/IP, SMTP e-mail, HTTP, and other Internet related protocols. Therefore, you can use the camera in a mixed operating system environment, such as Windows 2000, Windows XP, Windows Vista, and Windows 7; and via your smart phone devices.

## **- Highlights**

- Easy installation with setup wizard
- UPnP device discovery and NAT router transversal for easy installation
- Dynamic IP Service and DIPS Server help remotely view your IP camera

easily

- Covers wider area than Wide and fast Pan range: 355 degree and 180 degree/sec Wide and fast Tilt range: 100 degree and 120 degree/sec
- H.264, MPEG4 and JPEG triple compression simultaneously
- Mega-pixel resolution up to 1280x1024
- Up to 11-profile encoder simultaneously
- Mega-pixel or VGA mode selectable
- UDP / TCP / HTTP protocols selectable
- Supports video/audio multi-casting
- IEEE 802.11n wireless LAN (Wireless model only)
- WEP/WPA/WPA2-PSK wireless security (Wireless model only)
- 3GPP for 3G mobile remote application
- 30 fps for VGA mode
- 15 fps for Mega-pixel mode
- Digital zoom
- Built-in 4 White LEDs for night mode or low Lux. Environment estimated distance 5M~10M



## Introduction of Hardware

### - Front View



<b><u>IR LEDs:</u></b>	These LEDs are used for night vision during night or dark environment to provide extra light source for the camera.
<b><u>Lens and Focus Ring:</u></b>	User can use this ring to make minor focus adjustment.
<b><u>Power and Wireless LED (Orange Color):</u></b>	Indicates the power and wireless connection.
<b><u>Microphone:</u></b>	Built-in microphone for sound and voice reception.
<b><u>LAN LED:</u></b>	This LED is used to indicate whether DC power is on or not. In addition, this LED will be flashing under Ethernet/LAN connection.

## - Rear View



### **Audio Output Jack:**

The Audio Output Jack allows the camera to output audio or alerting sound. Connect with a 3.5Ø phone jack speaker or headphone (speaker or headphone don't come with camera)

### **Power Jack:**

The input power is 12VDC which is provided by the power adapter included in package

**Note: Improper power adapter may damage the camera and result in danger.**

### **Antenna Connector:**

User can attach the included antenna to this connector to connect to a wireless 802.11b/g/n network. (optional, for Wireless Camera only)

### **LAN port:**

The RJ45 LAN socket is for connections to 10/100Base-TX Fast Ethernet cabling. Please use Category 5 or 6 "straight through" cable (doesn't come with camera) to connect to Ethernet network switch, hub, or router.

**Note: Please use "cross-over" cable if you need to connect the camera to computer directly**

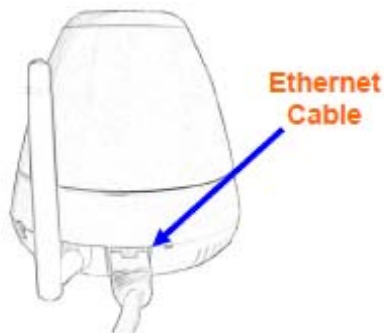
### **Factory Default Reset:**

Reset the Camera back to Factory Default

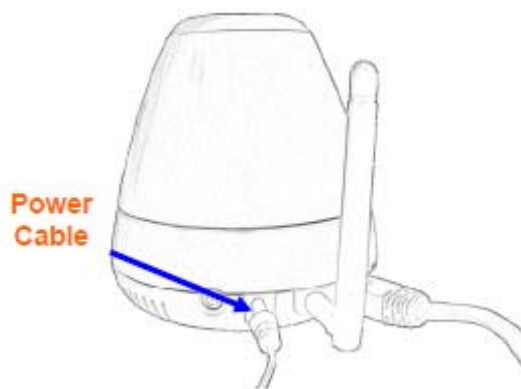
## Chapter 2. Installation

### Hardware Installation:

#### - Camera LAN and Power Installation:



1. Please use cable connection for the first time setup. Using the RXS-4324 as example, please connect an Ethernet cable to the LAN socket located on the camera's rear and attach it to the network.
- 



2. Connect the attached power adapter to the DC power jack of the camera. **Note:** Use the power adapter, 12VDC, included in the package and connect it to wall outlet for AC power.
- 

3. Once you have installed the camera well and powered it on, the power LED will turn on. It means the system is booting up successfully. Furthermore, if you have a proper network connection, and access to the camera, the LED will flash blue under wired mode.
- 

#### - Ceiling Mount:

1. Fix the camera to L-type bracket with the two supplied screws
  2. Fix the bracket and camera to the ceiling using two wall anchors and screws
-



### - Wall Mount:

1. Fix the L-type bracket to the wall using two wall anchors and screws
2. Fix the camera to L-type bracket with the two supplied screws

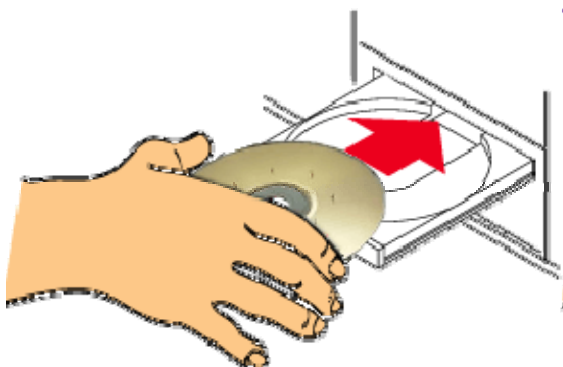


## Software Installation:

When you installed the Camera on a LAN environment, there are two easy ways to search your Cameras by IPWizard or UPnP discovery. First is the guide to install the IPWizard II:

### - IPWizard II Installation:

IPWizard II is a software designed to help you search and link to the Rosewill's Camera which connects under your network.



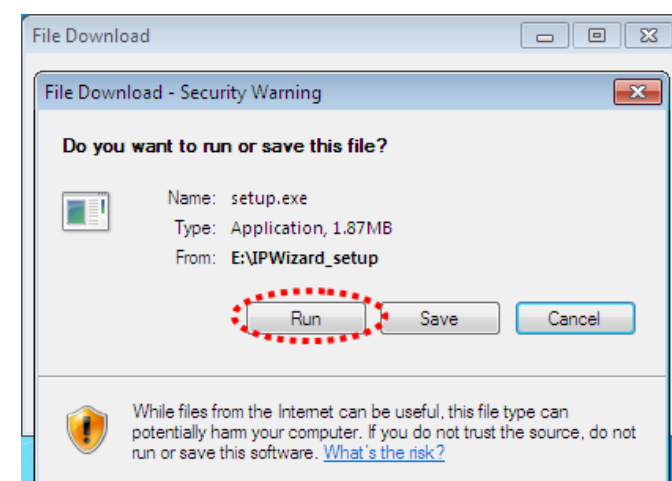
1. Please insert the CD into your CD-Rom / DVD-Rom drive



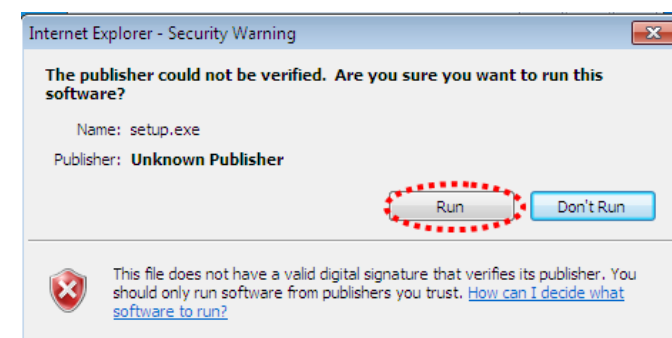
2. A browser should automatically open up with “Software Package” info.



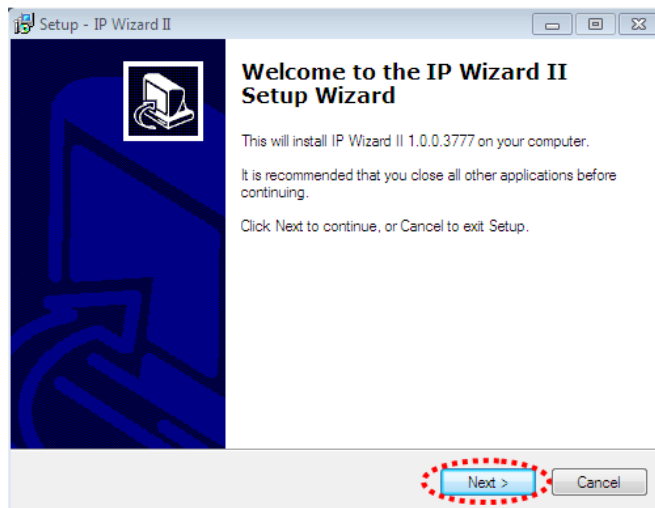
3. Please click on “IPWizard” under “Software & Tools” to continue



4. Click on “Run” to continue.



5. You may be prompt to this window depending on your Internet Browser’s security level, please click “Run” to continue.



6. Click on “Next” to continue



7. Click on “Finish” to finish the installation.



8. After installation, you should be able to see a new icon “IPWizard II” on your desktop

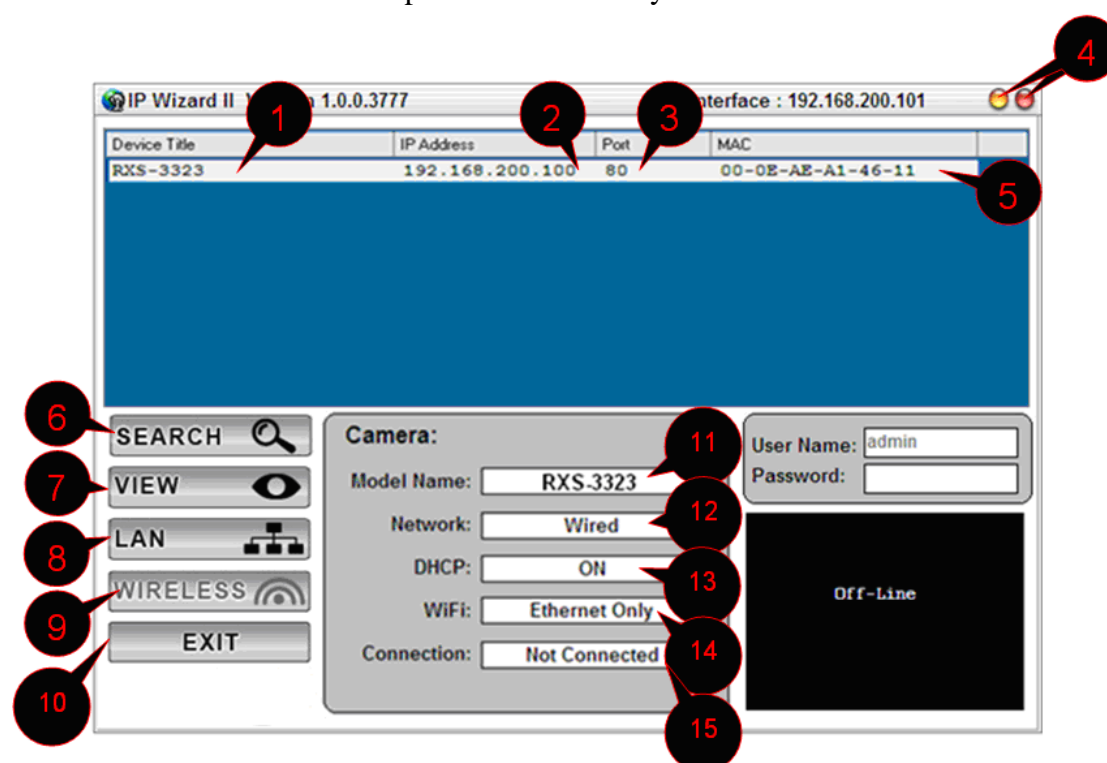
## Chapter 3. Connecting to the Camera

### Using IPWizard II:



After the installation of the IPWizard II, double click on the icon, you will see this window popup as the basic management of the IPWizard II. Once it popup, the wizard will perform an auto search to see if you have any camera in the Network.

The window below is an example of what this may look like:



<b><u>1. Device Title</u></b>	This part shows the Device name found in the network
<b><u>2. IP address</u></b>	Here shows the IP address of the found Camera
<b><u>3. Port</u></b>	Here shows the Port used of the found Camera
<b><u>4. Minimize and Close Window</u></b>	The orange circle will minimize the window and the red circle will close this window
<b><u>5. MAC</u></b>	This shows the MAC address of your Camera

**Double Click on the above information bar will open up the Camera management page in your default Web Browser.**

<b><u>6. Search</u></b>	When launch the IPWizard II, a searching window will pop up. IPWizard II is starting to search Network Cameras on the LAN. The existed devices will be listed.
<b><u>7. View</u></b>	If IPWizard II finds network devices, <b>View</b> button will be available. Please

**(One click to view the video from the IPWizardII directly)**

select the device you want to view and click the **View** button. Then you could see the video from camera directly.

**8. LAN**

In case you want to change the IP related parameters of wired interface, please select the device you want to configure and click the **LAN** button. Further description will be show at below.

**9. Wireless**

**(For RXS-4324 only)**

In case you want to change the IP related parameters of wireless interface, please select the device you want to configure and click the **WIRELESS** button. Further description will be show at below.

**10. EXIT**

This will close the IPWizard II window.

**11. Model Name**

This shows you the device model name.

**12. Network**

This tells you what your connection type is; wired or wireless.

**13. DHCP**

Here tells that whether your camera is under the DHCP IP or Static IP.

**14. WiFi**

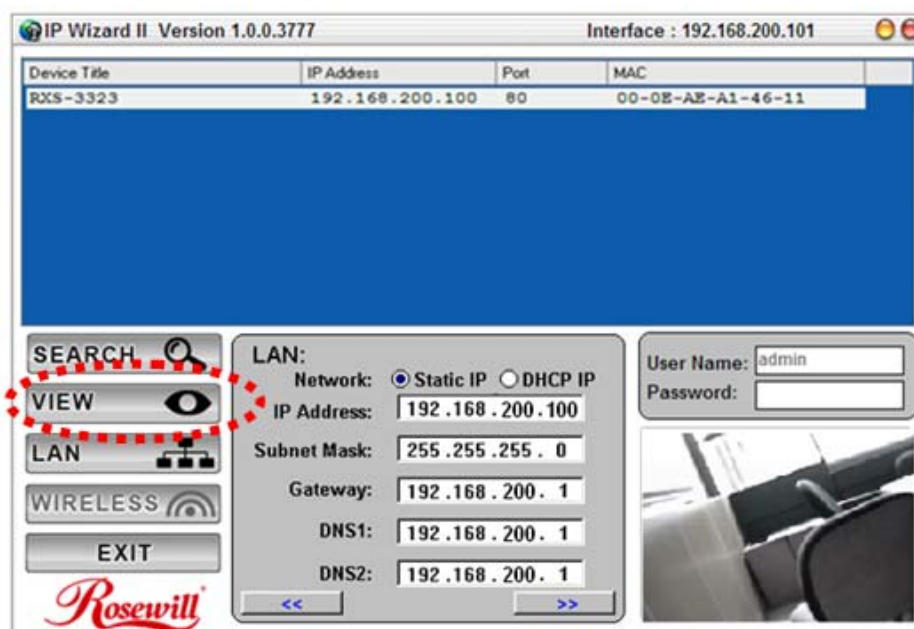
This tells you what your connection type is; Ethernet only or wireless.

**15. Connection**

Shows if your connection is successful

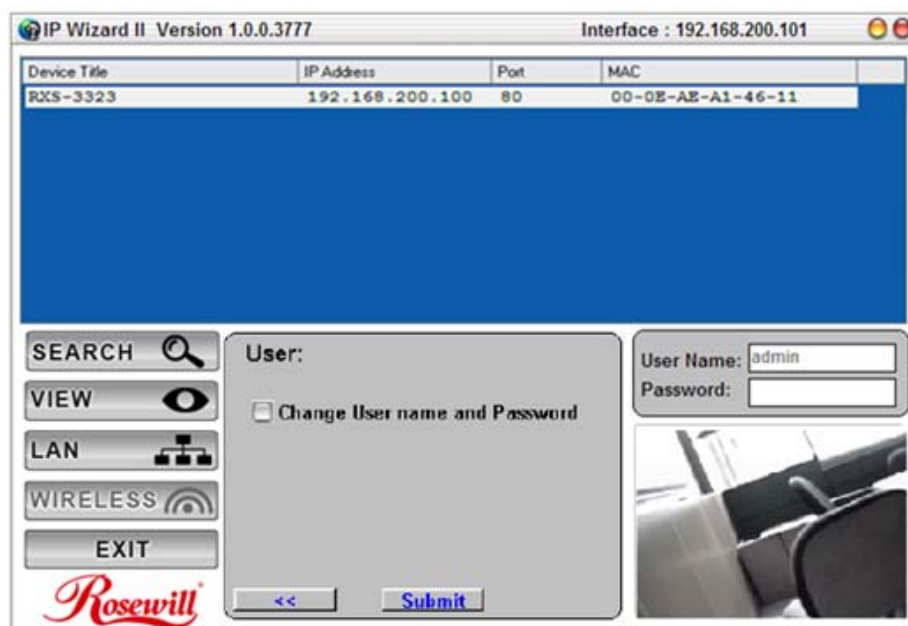
**- LAN:**

Here you can set the IP of the camera to be either by Static or DHCP base on your needs. It is recommended and by default to use DHCP as your IP address of the camera.

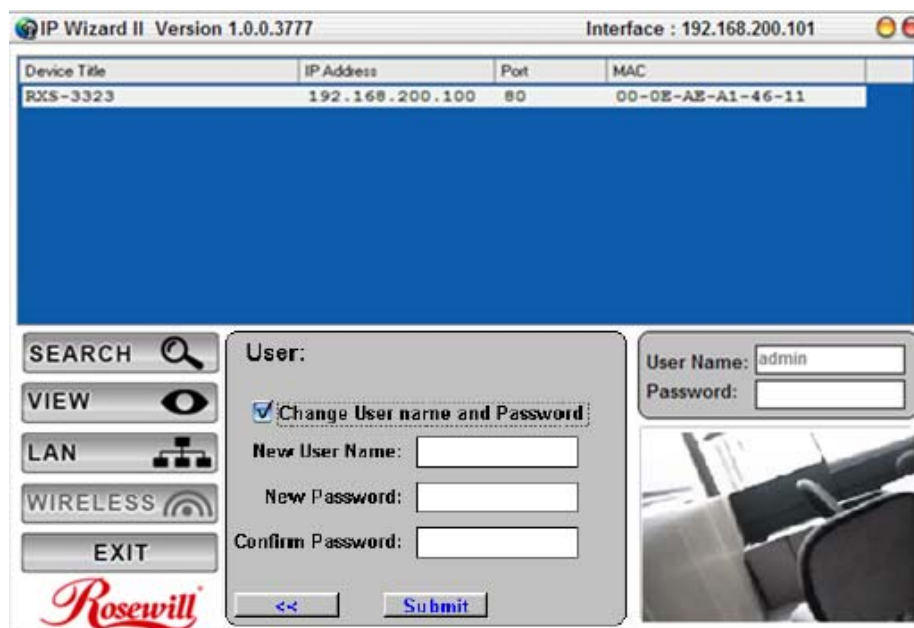


You could modify the relative settings of the selected device. Click “<<” button will quit the LAN setting procedure and click “>>” button will move to next page as below.





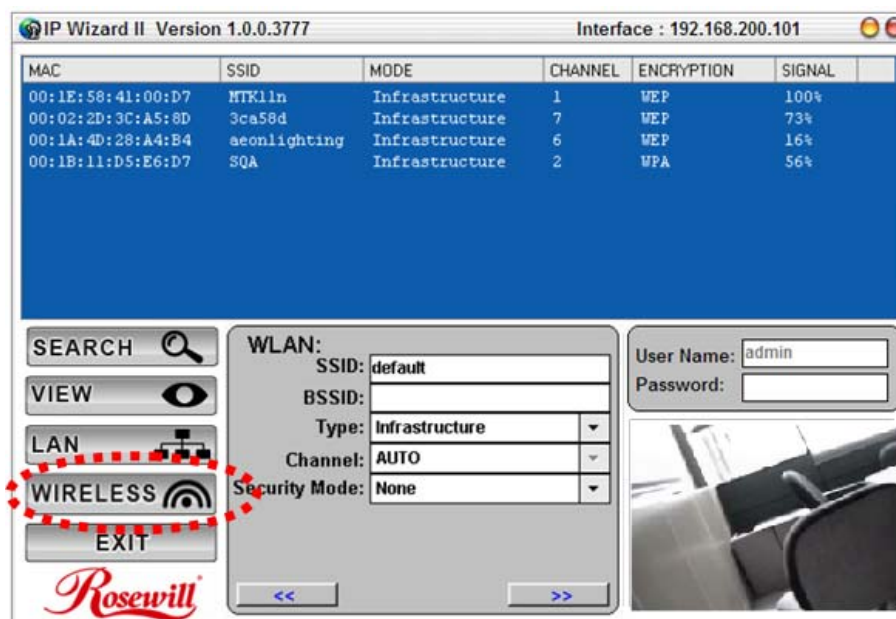
If you do not want to change username and/or password, then just click “**Submit**” button to perform your setting accordingly. Click “<<” button will go back to previous page. If you like to change username and/or password of the device, just click the check button. Then, you will be able to change the username and password as below.



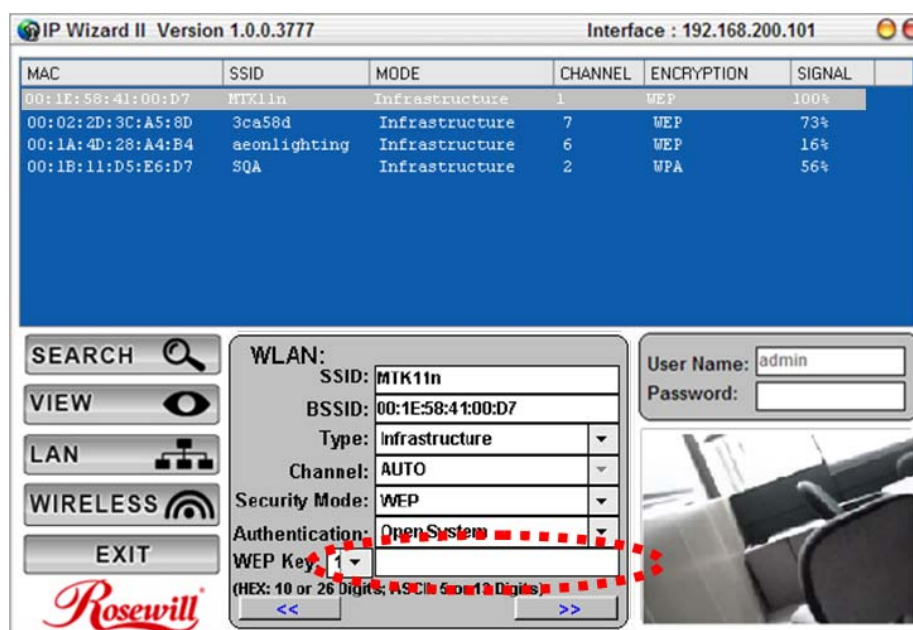
After type in the new username and password, click “**Submit**” button to perform your setting accordingly. Click “<<” button will go back to previous page.

## - Wireless:

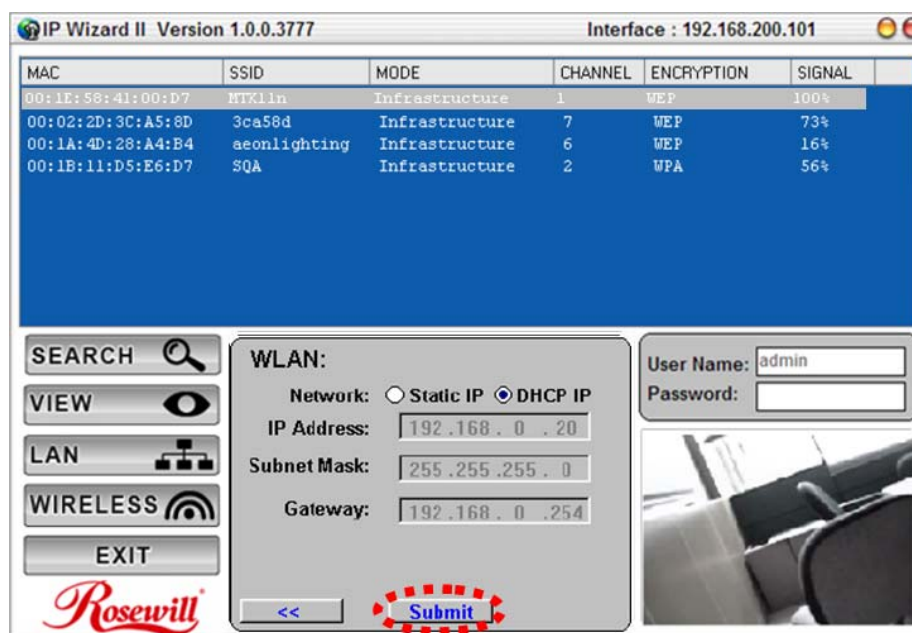
Selecting **WIRELESS** will start the search for the SSID around your area.



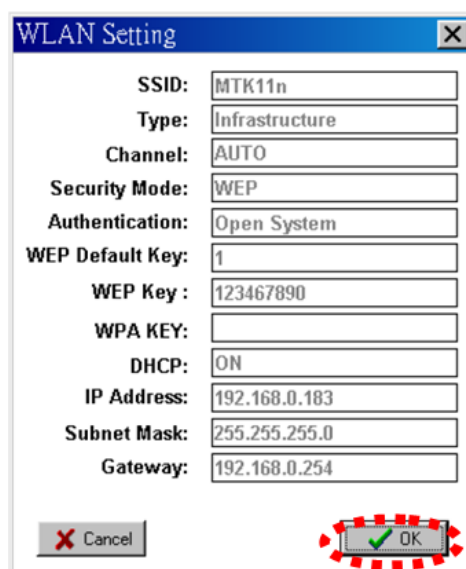
Click on the SSID to select your wireless AP or router. We use WEP as an example here. Enter your SSID's WEP key, then click ">>"



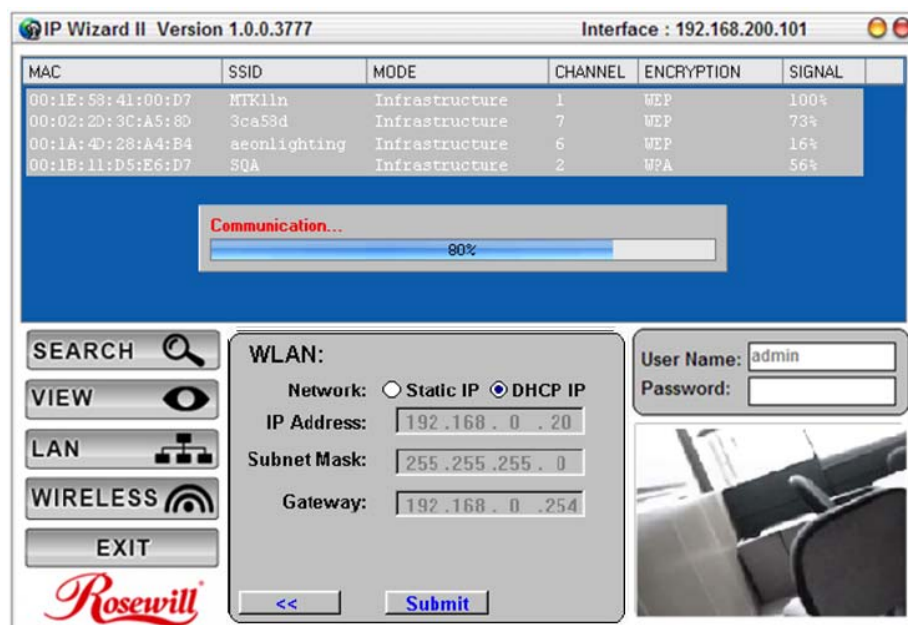
Double check your WLAN setting (Default using DHCP IP as your wireless router provides IP address for the Camera) then click "**Submit**".



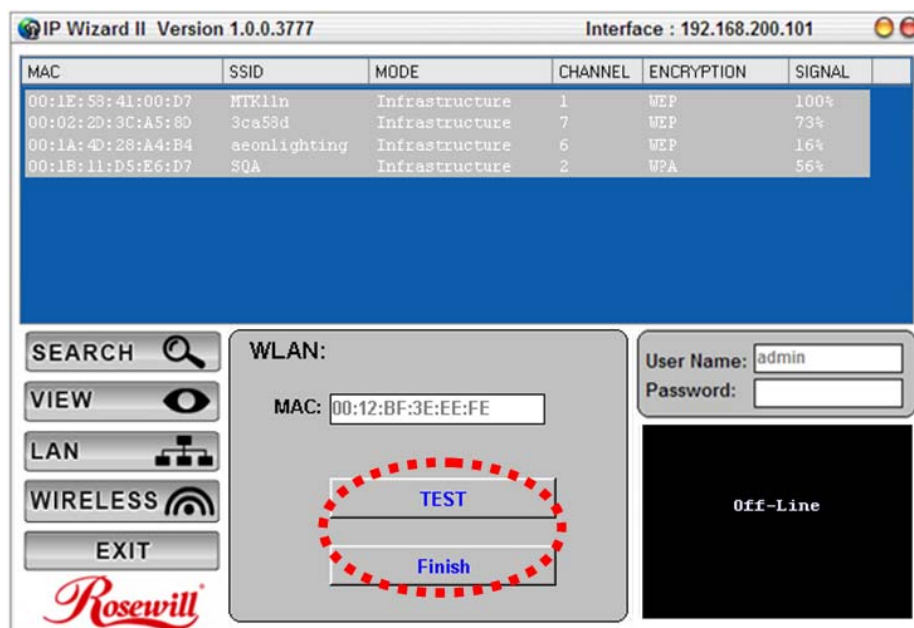
You should see the confirmation Status Window popup as below. Please select “OK” to confirm these settings.



The IPWizard II will start to configure this camera with your updated information.




Once this step finished, IPWizard II will prompt you to unplug the Ethernet cable to activate wireless access. Then IPWizard II will prompt you to test wireless setting or finish wireless procedure as below.



# Managing the Camera

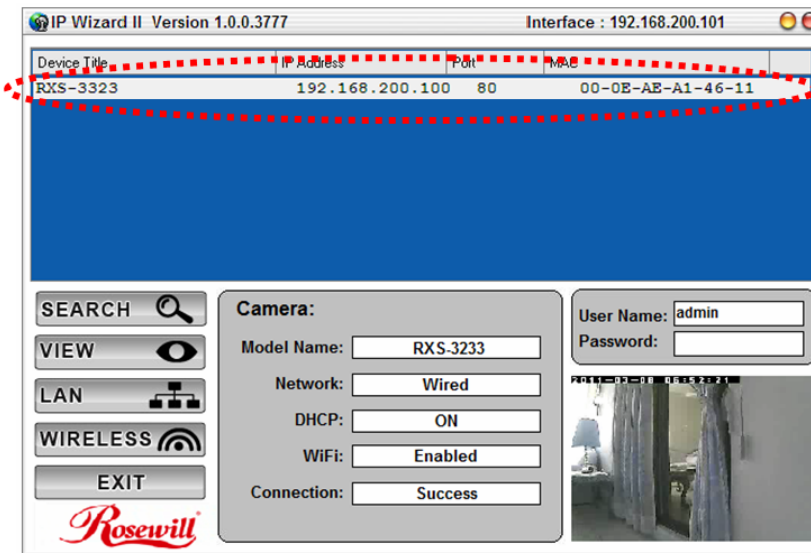
## Access the device using IE for the first time:

IPWizard II provides a very easy access for you in finding out your Camera's IP address within your Network. You can start up the IPWizard II program by double

click on this icon. 

### - Three ways to access the Camera for the first time.

#### 1. If your default Web Browser is Internet Explorer:



- Double click on the information bar in the IPWizard II program to open the Camera's management page in Internet Explorer or your default web browser.
- If IE isn't your default browser, we recommend to copy the IP address from the address bar and paste to IE.

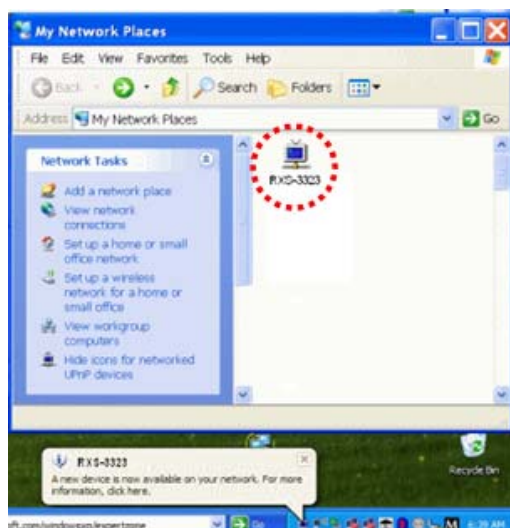
**Note:** Rosewill's Cameras can be supported by all other web browsers, however, there are certain features requires to be manage under Internet Explorer. Therefore, we recommed using Internet Explorer when managing the Camera for the first time.

#### 2. Using the UPnP for WinXP or Network Discovery for Win7 to access to the browser.

##### Opening up UPnP in Win XP



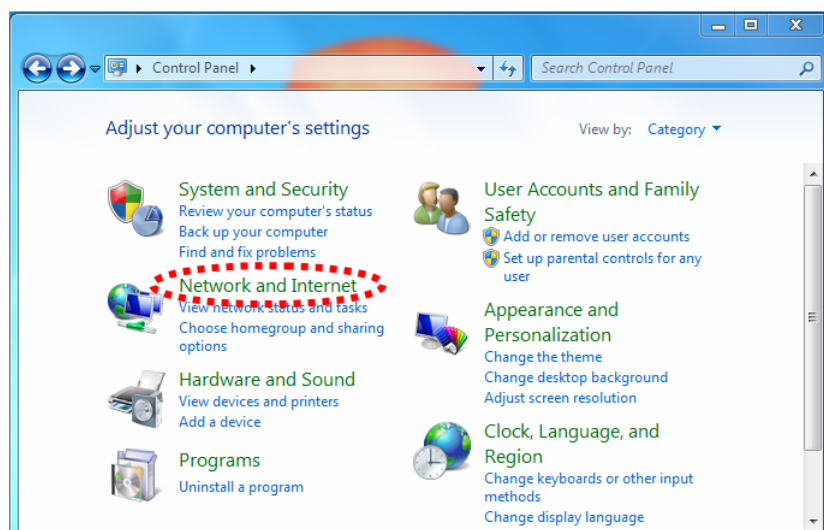
- Unless you have set your computer, you should see the UPnP icon popup in the lower right hand corner when your network discover the Camera.



- Double click on the icon to open up the UPnP device window

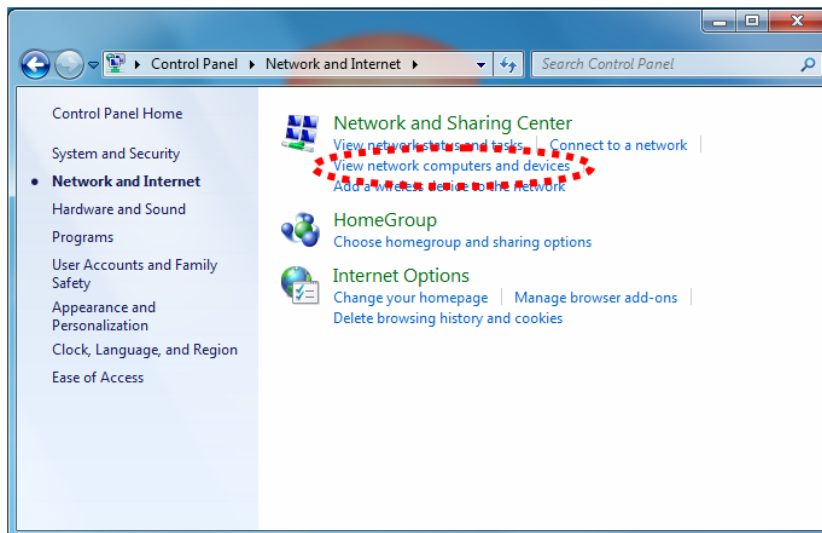
- Make sure that the UPnP icons are not hidden. If they're hidden, from the **Network Tasks** pane in **My Network Places**, click **Show icons for UPnP networked devices**, and click **Yes** to open Windows Firewall. Windows XP will automatically make the needed configuration changes.
- For Window XP: To discover your device, go to your Desktop and click **My Network Places**.
- For Window Vista: Typing in **Control Panel\Network and Internet\Network and Sharing Center** in the **Start Search** menu item on the **Start** menu. In the **Sharing and Discovery** section you should see a **On** light for **Network Discovery**.

### Opening up Network Discovery in Win7

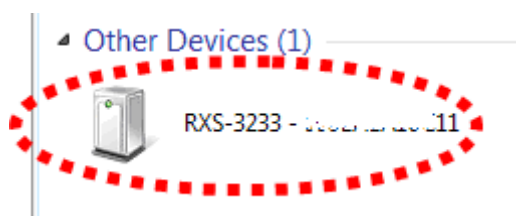


- Open **Control Panel**
- Click on **Network and Internet**



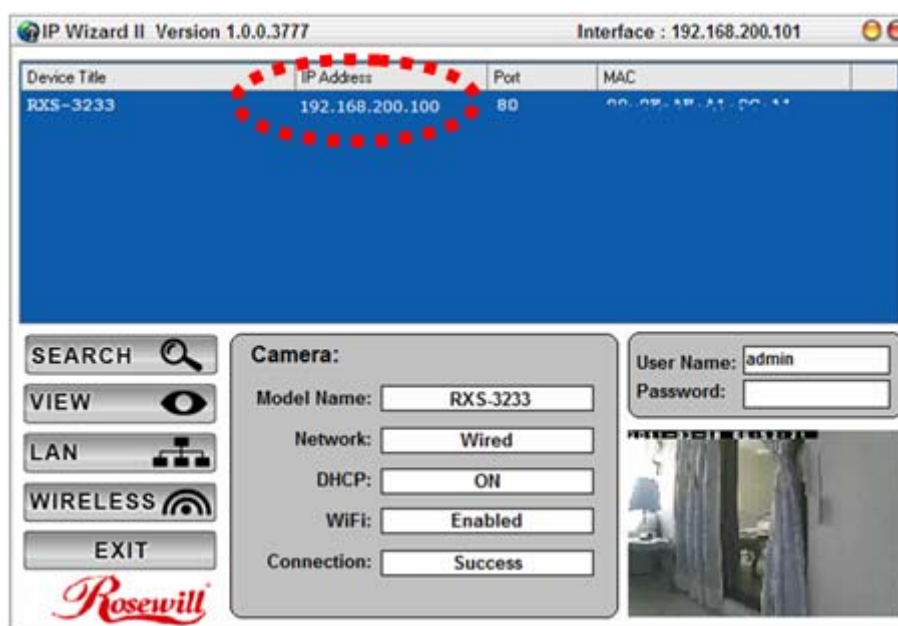


- Click on **View Network Computers and devices**



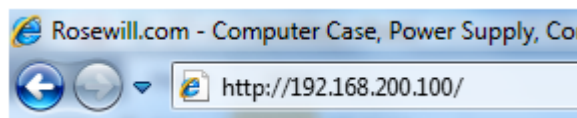
- Once opened, you should see the Rosewill Camera model under the **Other Device**.
- Please double click this to start the web browser for management.

3. Type in the IP address provided by the IPWizard II into the Internet Explorer directly.



## - Entering into Camera's Management page via IE

1. You may be asking to enter the username and password when entering into the web browser on the computer.

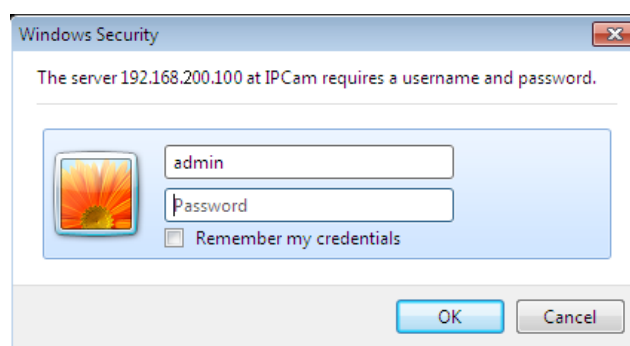


2. If you are prompt to ask entering the username and password. Please type in “**admin**” and leave the Password blank as the default username and password.

For the first time use (default value), input the

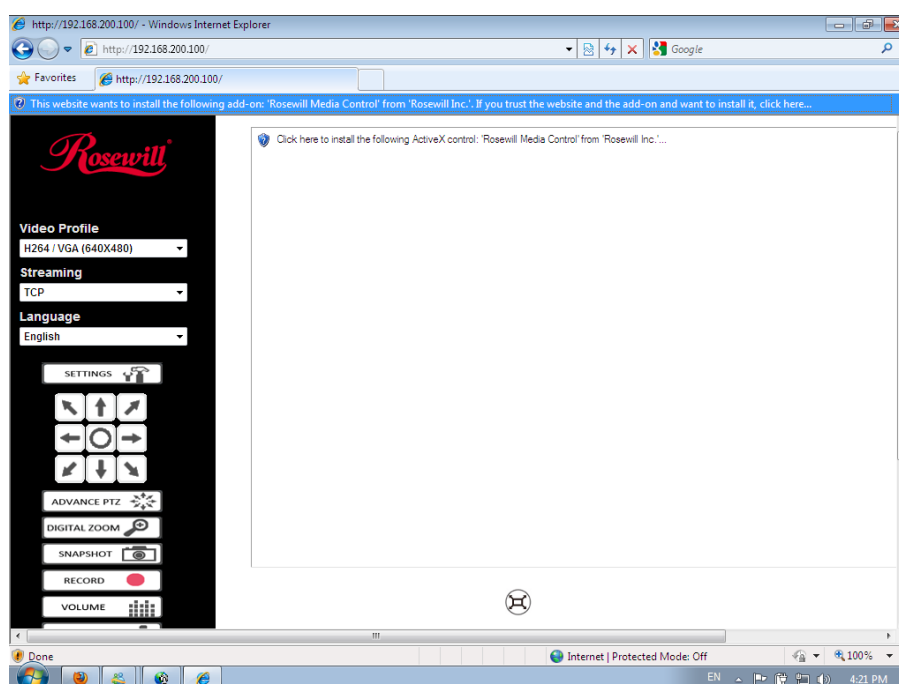
User Name: **admin**

Password:



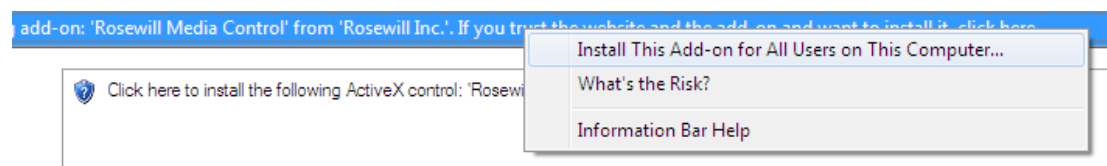
**Note:** If you log in the Camera as an User, “**Setting**” function will be not accessible.

3. According your browser's security setting, the IE Web Page may prompt the “Security Warning” window. If so, select “Yes” to install and run the ActiveX control into your PC. Otherwise, the system will load the ActiveX silently.





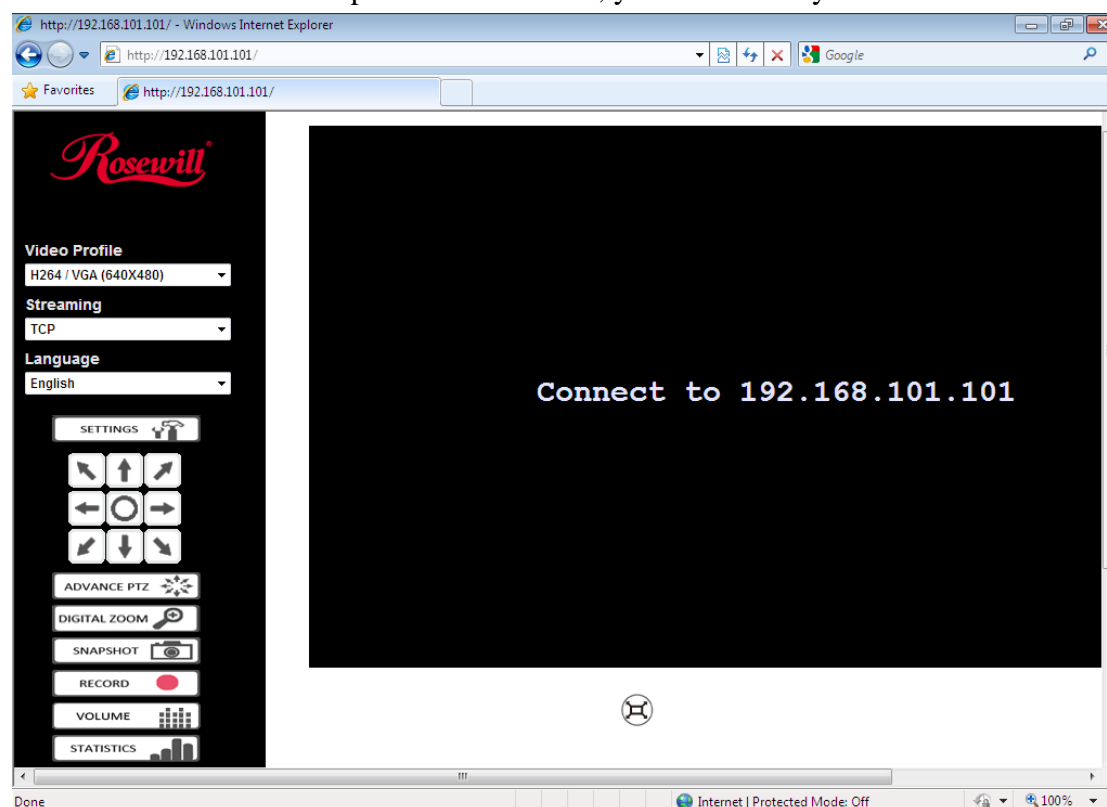
- You may also be asked to install the **Rosewill Media Control** to load the video properly. Please click on the highlighted bar and select **“Install This Add-on for All User on This Computer”**



- Upon selecting the **“Install This Add-on for All User on This Computer”**, you will see an Security Warning Window asking your permission to install the Rosewill Media Control. Please click **“Install”** to continue.

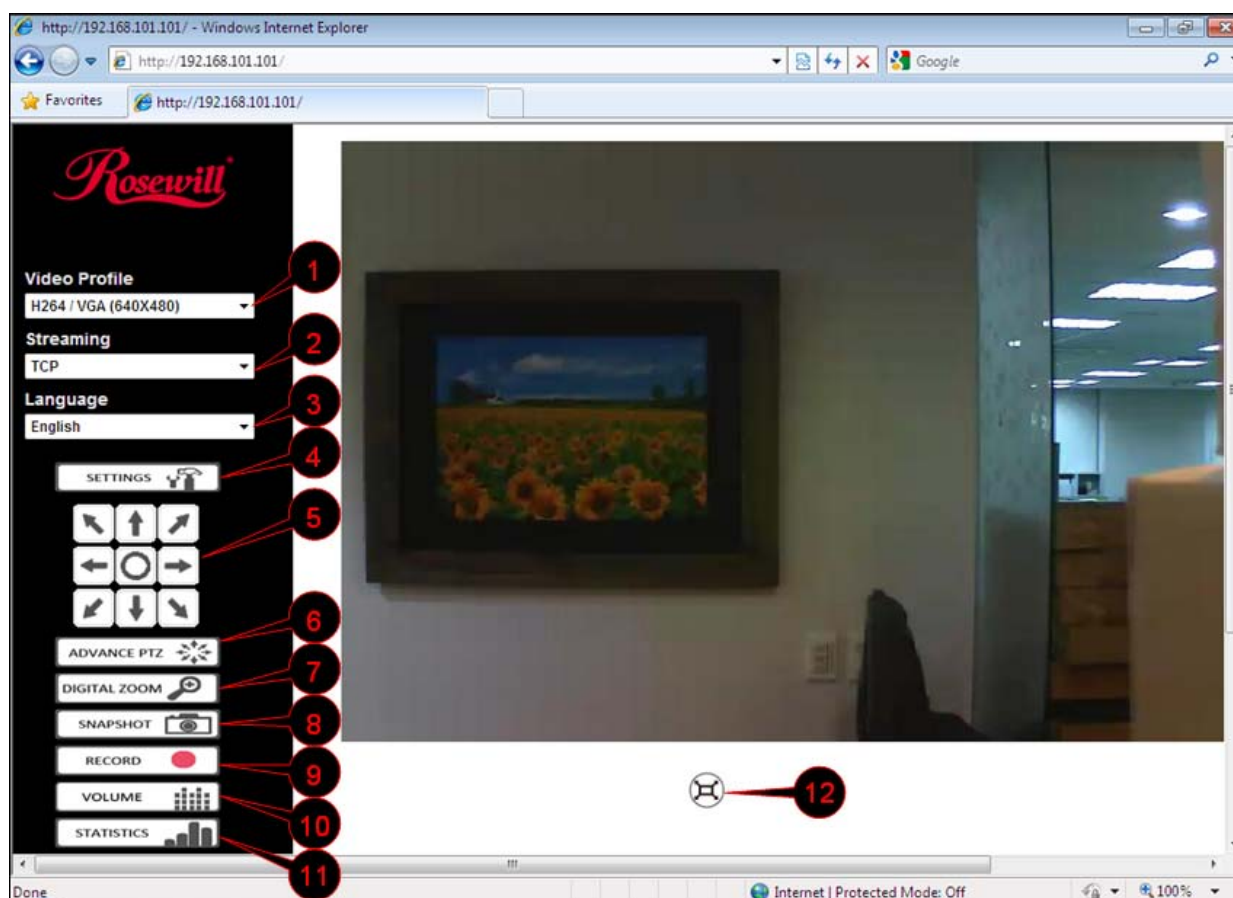


- After the complete of installation, you should see your IE like below.



## Management Page:

When you first entering into the management page, you should see your IE as below:



### 1. Video Profile

RXS-3323 and RXS-4323 provide 13 Video Profiles. The default Profile is H.264 / VGA (640 x 480). Please refer to Appendix for more detail comparison of the video profiles.

### 2. Streaming

There are three types of streaming. User can adjust to the streaming protocol based on the network environment.

### 3. Language










RXS-3323 and RXS-4323 provide multiple languages to meet customer's requirement.

### 4. Settings

This will opens up more detail setting functions of the Camera

### 5. PTZ Control

You can use this to adjust the camera lens

	Move Camera to the upper left direction		Move Camera upward		Move Camera to the upper right direction
	Move Camera to the left direction		Move Camera back to the original position		Move Camera to the right direction
	Move Camera to the lower left direction		Move Camera downward		Move Camera to the lower right direction

<b><u>6. Advance PTZ</u></b>	This will opens up PTZ advance control. You can adjust the speed, add preset points, or Camera tours, and etc.
<b><u>7. Digital Zoom</u></b>	User can drag or scale the box over the video to adjust zoom ratio and position.
<b><u>8. Snapshot</u></b>	Press <b>Snapshot</b> button to take a picture. The image file is saved as JPEG format into your local PC. Select <b>Browser</b> , the pop-up window to select the save path and file name prefix, select <b>OK</b> to continue.
<b><u>9. Record</u></b>	<p>Press <b>Record</b> button to start recording. The video file is saved as ASF format into your local PC. While you want to stop it, press <b>Stop</b> to stop recording. Select <b>Browser</b>, the pop-up window to select the save path and file name prefix, select <b>OK</b> to continue.</p> <p>After stop recording, list the files, this file is named as Video_yyyymmddhhmmss.avi</p> <p>The video files can be display by the standard Windows Media Player, but it needs the DixectX 9.0 or later version to be installed.</p>
<b><u>10. Volume</u></b>	<p>There are two control bars for speaker and microphone volume respectively. Scroll these control bars to adjust the audio attribute.</p> <p>Check the volume mute will mute the speaker output</p>
<b><u>11. Statistics</u></b>	<p>A window will be popup to show the statistics information of the streaming status.</p> <p><b>Note</b> that this information is the statistics between the device and your local PC.</p>
<b><u>12. Full Screen</u></b>	Adjust the video to full screen of your monitor.

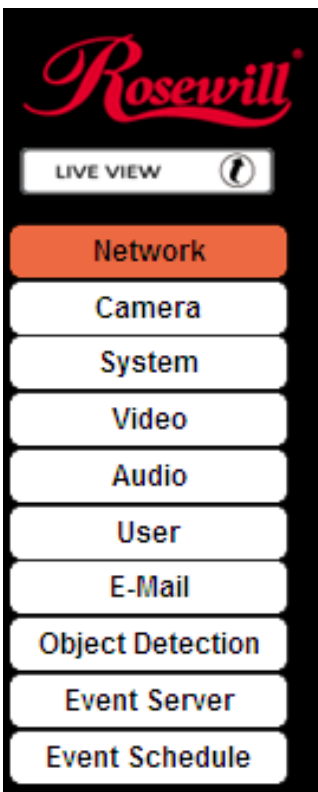
## Chapter 4. Managing the Device

There are many functions of the Camera can help to make you rlife easier! However, they also require a careful setting to meet your needs. Please see the following section as we will introduce in detail on what these setups are and how they can help you.

### Setting

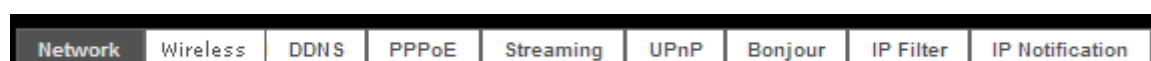
**Note:** Setting will only be avaiable when user is login as an administrator.

When click on “**Setting**”, you should see below window as entering into the Setting page.

 <p>The sidebar menu on the left of the setting page includes the following items: LIVE VIEW (with a camera icon), Network (highlighted in orange), Camera, System, Video, Audio, User, E-Mail, Object Detection, Event Server, and Event Schedule.</p>	<b><u>Live View:</u></b>	Returns to the main viewing page
	<b><u>Network:</u></b>	Configure Network settings such as DHCP, DDNS, 3GPP, PPPoE and UPnP
	<b><u>Camera:</u></b>	Adjust camera parameters, day & night
	<b><u>System:</u></b>	Configure system information, date & time, maintenance, and view system log file.
	<b><u>Video:</u></b>	Select Mega-pixel or Multi-profile mode and configure bit rate and frame rate of video profiles
	<b><u>Audio:</u></b>	Configure audio parameters
	<b><u>User:</u></b>	Setup user name, password and login privilege
	<b><u>E-Mail:</u></b>	Setup E-Mail configuration
	<b><u>Object Detection:</u></b>	Setup Object detection
	<b><u>Event Server:</u></b>	Setup FTP/TCP/HTTP server for event
	<b><u>Event Schedule:</u></b>	Configure the schedule while event triggered

#### - Network

Use this menu to configure the network to connect the device and the clients. The Wireless function only supports RXS-4324, the wireless version of Rosewill's Network Camera. You will not see this function in RXS-3323.



#### Network:

This section provides the menu for connecting the device through Ethernet cable.

The screenshot shows the 'Network' configuration page with the following fields and callouts:

- 1**: Points to the MAC Address field, which displays '00:0E:AE:A1:46:11'.
- 2**: Points to the checkbox labeled 'Obtain IP address automatically (DHCP)', which is checked.
- 3**: Points to the 'Test' button next to the IP Address field.
- 4**: Points to the IP Address field, which contains '192.168.200.100'.
- 5**: Points to the Subnet Mask field, which contains '255.255.255.0'.
- 6**: Points to the checkbox labeled 'Obtain DNS from DHCP', which is checked.
- 7**: Points to the Primary DNS field, which contains '192.168.200.1'.
- 8**: Points to the Secondary DNS field, which is empty.
- 9**: Points to the 'Test' button next to the HTTP Port field.

Other fields include Gateway (192.168.200.1) and HTTP Port (80). The page has tabs for Network, Wireless, DDNS, PPPoE, Streaming, UPnP, and Bonjour. At the bottom are OK and Cancel buttons.

<b><u>1. MAC address:</u></b>	Displays the Ethernet MAC address of the device. Note that user can not change it.
<b><u>2. Obtain IP address automatically (DHCP):</u></b>	DHCP: Dynamic Host Configuration Protocol.  Enable this checked box when a DHCP server is installed on the network to issue IP address assignment. With this setting, the IP address is assigned automatically. If this device can not get an IP address within limited tries, the device will assign a default IP address, 192.168.0.100, by itself as the default IP address.
<b><u>3. IP address:</u></b> <b><u>4. Subnet mask:</u></b> <b><u>5. Gateway:</u></b>	If you do not select <b>Obtain an IP address automatically</b> , then you need to enter these network parameters manually.
<b><u>6. Obtain DNS from DHCP:</u></b>	DNS: Stands for Domain Name System.  Enable this checked box when a DHCP server is installed on the network and provide DNS service.
<b><u>7. Primary DNS:</u></b> <b><u>8. Secondary DNS:</u></b>	If you do not select <b>Obtain DNS from DHCP</b> , then you need to enter these parameters manually.
<b><u>9. HTTP Port:</u></b>	The device supports two HTTP ports. The first one is default port 80 and this port is fixed.  This port is very useful for Intranet usage. The second HTTP port is changeable. Users

could assign the second port number of http protocol, and the WAN users should follow the port number to login. If the http port is not assigned as 80, users have to add the port number in back of IP address. For example: <http://192.168.0.100:8080>. Therefore, the user can access the device by either <http://xx.xx.xx.xx/>, or <http://xx.xx.xx.xx:xxxx/> to access the device.

If multiple devices are installed on the LAN and also required to be accessed from the WAN, then the **HTTP Port** can be assigned as the virtual server port mapping to support multiple devices

## Wireless:

This function only supports RXS-4324, the wireless version of Rosewill's Network Camera. You will not see this function in RXS-3323.

The screenshot displays the 'Wireless' configuration page of a Rosewill network camera. The left sidebar contains navigation buttons for Network, Camera, System, Video, Audio, User, E-Mail, Object Detection, Event Server, and Event Schedule. The main content area is titled 'Setting' and features an 'Easy Installation' sub-tab. A 'Site Survey' table lists nearby wireless networks with their MAC addresses, SSIDs, types, channels, encryption methods, and signal strengths. Below the table, there are input fields and dropdown menus for configuring the camera's wireless settings, including MAC Address, Interface Select, SSID, BSSID, Channel, Security Mode, Authentication, and WEP key.

MAC	SSID	Type	Channel	Encryption	Signal Strength
00:1E:58:41:00:D7	MTK11n	Infrastructure	1	WEP	50%
00:02:2D:3C:A5:8D	3ca58d	Infrastructure	7	WEP	56%
02:80:F6:D3:74:80	bridge	Adhoc	11	Off	6%
00:0A:79:8A:49:3C	vericon1	Infrastructure	6	WEP	1%
00:1B:11:D5:E6:D7	SQA	Infrastructure	2	WPA	56%

Below the table, the configuration fields are as follows:

- MAC Address: 00.C0.A8.F0.A1.38
- Interface Select: ☐ Wired Only ☒ Auto – wired if cable connected, otherwise wireless
- Type: ☐ Adhoc ☒ Infrastructure
- SSID: MTK11n
- BSSID: 00:1E:58:41:00:D7
- Channel: ETSI, Europe (dropdown) AUTO (dropdown)
- Security Mode: ☐ None ☒ WEP ☐ WPA\_PSK/WPA2\_PSK
- Authentication: ☒ Open System ☐ Shared Key
- WEP key: 1 (dropdown) 1975640602 (text input)

At the bottom, there are 'OK' and 'Cancel' buttons.

### 1. Setting (Easy Installation):

This provides you with an easy setup for configuration of the Wireless Setting:

**Step 1:** Select SSID of wireless router or access point (AP).

**Step 2:** Key in security key of WEP or WPA. Then click “**Submit**” button to activate wireless setting.

### 2. Site survey:

Click the “Refresh” button. It will refresh information window which list is the result of a network scan. Access points with a disabled SSID Broadcast will not appear unless the camera is associated with it.

### 3. MAC address:

Displays the Ethernet MAC address of the WLAN card. Note that user can not change it.

### 4. Interface Select:

“Wired (Ethernet) only” or “Auto – wired if cable connected otherwise wireless”: Choose wired or wireless mode. However, note that wired is priority.

### 5. Type:

Select one of WLAN modes from Infrastructure or Ad-Hoc mode.

<b><u>6. SSID:</u></b>	<p>This is the name of the wireless network the device is configured for. The field accepts up to 32 alphanumeric characters. The name must be exactly the same as that used in the wireless access point, or the connection will not be established.</p> <p>Leaving this field blank means the device will attempt to access the nearest open network.</p>
<b><u>7. BSSID:</u></b>	This is the MAC address of the wireless AP detected.
<b><u>8. Channel:</u></b>	You can choose the wireless channel that you currently using.
<b><u>9. Security mode:</u></b>	<p>This shows which type of security the network uses. The device supports three security methods: None, WEP, and WPA_PSK/WPA2_PSK.</p> <p><b>- WEP settings:</b></p> <p><b>- Authentication:</b></p> <p>Select Open or Shared Key System Authentication, depending on the method used by your access point. Not all access points have this option, in which case they probably use Open System, which is sometimes known as SSID Authentication.</p> <p><b>- WEP Mode:</b></p> <p>The key types available depend on the access point being used. The following options are available:</p> <ul style="list-style-type: none"> <li>■ ASCII - In this method the string must be exactly 5 characters for 64-bit WEP and 13 characters for 128-bit WEP.</li> <li>■ HEX - In this method the string must be exactly 10 hexadecimal (0-9, A-F) characters for 64-bit WEP and 26 hexadecimal characters for 128-bit WEP.</li> </ul> <p><b>- Web Key 1~4:</b></p> <p>Key-in the password of WEP.</p> <p><b>- WPA_PSK/WPA2_PSK settings:</b></p> <p><b>- WPA Key:</b></p> <p>Key-in the password of WPA. The device uses a pre-shared key (PSK) for key management. The pre-shared key can be entered either as Manual hex, as 64 hexadecimal characters, or as a Passphrase, using 8 to 63 ASCII characters.</p>
<b><u>11. Obtain IP address automatically (DHCP):</u></b>	Enable this checked box when a DHCP server is installed on the network to issue IP address assignment. With this setting, the IP address is assigned automatically.
<b><u>12. IP address, Subnet mask, and Gateway:</u></b>	<p>If you do not select <b>Obtain an IP address automatically</b>, then you need to enter these network parameters manually.</p> <p>Select "OK" to save and enable the setting.</p>
<p><b>Note:</b> To enable WLAN function, user must set these related parameters correctly at first. Then power off the device and remove Ethernet cable from device. Power on the device again and WLAN mode will be available accordingly.</p>	

## DDNS:

DDNS: Stands for Dynamic Domain Name Server

Your Internet Service Provider (ISP) provides you at least one IP address which you use to connect to the Internet. The address you get may be static, meaning it never changes, or dynamic, meaning it's likely to change periodically. Just how often it changes, depends on your ISP. A dynamic IP address complicates remote access since you may not know what your current WAN IP address is when you want to access your device over the Internet. One of the possible solutions to the dynamic IP address problem comes in the form of a dynamic DNS service.

A dynamic DNS service is unique because it provides a means of updating your IP address so that your listing will remain current when your IP address changes. There are several excellent DDNS services available on the Internet. One such service you can use is [www.DynDNS.org](http://www.DynDNS.org). You'll need to register with the service and set up the domain name of your choice to begin using it. Please refer to the home page of the service for detailed instructions or refer to Appendix G for more information.

If your device is connected to xDSL directly, you might need this feature. However, if your device is behind a NAT router, you will not need to enable this feature because your NAT router should take care of this job. As to xDSL environment, most of the users will use dynamic IP addresses. If users want to set up a web or a FTP server, then the Dynamic Domain Name Server is necessary.

<b><u>1. DDNS:</u></b>	To enable or disable the DDNS service here.
<b><u>2. Server name:</u></b>	Choose the built-in DDNS server.
<b><u>3. DDNSHost:</u></b>	The domain name is applied of this device.
<b><u>4. User name:</u></b>	The user name is used to log into DDNS.
<b><u>5. Password:</u></b>	The password is used to log into DDNS.



## PPPoE:

PPPoE: Stands for Point to Point Protocol over Ethernet

A standard builds on Ethernet and Point-to-Point network protocol. It allows your device with xDSL or cable connects with broadband network directly, then your device can dial up and get a dynamic IP address. For more PPPoE and Internet configuration, please consult your dealer or ISP.

The device can directly connect to the xDSL, however, it should be setup on a LAN environment to program the PPPoE information first, and then connect to the xDSL modem. Power on again, then the device will dial on to the ISP connect to the WAN through the xDSL modem.

The procedures are

- Connect to a LAN by DHCP or Fixed IP
- Access the device; enter **Setting -> Network -> PPPoE** as below

<b><u>1. PPPoE:</u></b>	To enable or disable the PPPoE service here.
<b><u>2. User name:</u></b>	Type the user name for the PPPoE service which is provided by the ISP.
<b><u>3. Password:</u></b>	Type the password for the PPPoE service which is provided by the ISP.
<b><u>4. IP address, Subnet mask, and Gateway (read only):</u></b>	Shows the IP information got from PPPoE server site.
<b><u>5. Status:</u></b>	Shows the Status of PPPoE connection.

## Streaming:

RTSP is a streaming control protocol, and a starting point for negotiating transports such as RTP, multicast and Unicast, and for negotiating codecs. RTSP can be considered a "remote control" for controlling the media stream delivered by a media server. RTSP servers typically use RTP as the protocol for the actual transport of audio/video data.

<b><u>1. RTSP Port:</u></b>	Choose the RTSP port. The RTSP protocol allows a connecting client to start a video stream. Enter the RTSP port number to use. The default value is 554.
<b><u>2. RTP Port:</u></b>	Specify the range of transmission port number of video stream. The default range is 50000 to 50999. User can specify a number between 1024 and 65535.

## UPnP:

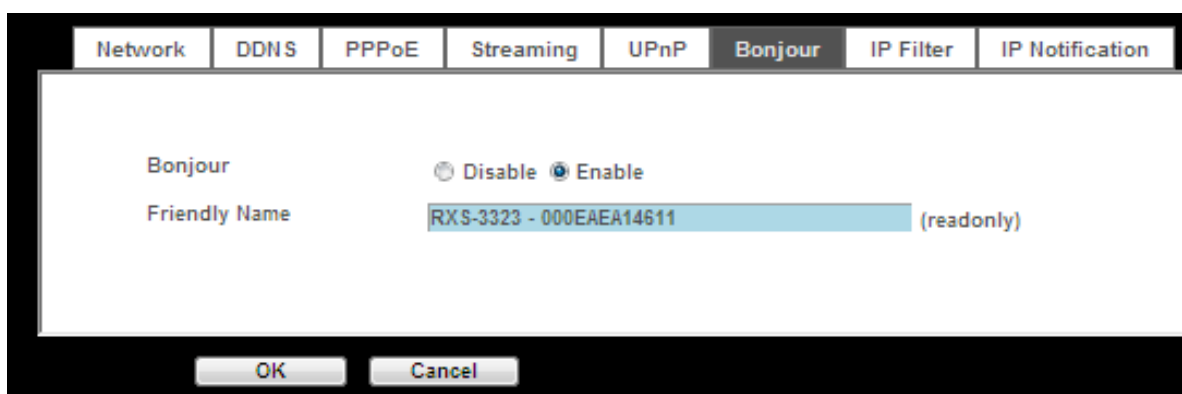
UPnP is short for Universal Plug and Play, which is a networking architecture that provides compatibility among networking equipment, software, and peripherals. This device is an UPnP enabled Network Camera. If your operating system is UPnP enabled, the device will automatically be detected and a new icon will be added to “My Network Places.” If you do not want to use the UPnP functionality, it can be disabled.

In addition, this device also provides UPnP IGD function for NAT traversal easily. Use NAT traversal when your device is located on an intranet (LAN) and you wish to make it available from the other (WAN) side of a NAT router. With NAT traversal properly configured, all HTTP traffic to an external HTTP port in the NAT router will be forwarded to the device.

<b><u>1. UPnP:</u></b>	To enable or disable the UPnP service here.
<b><u>2. Friendly Name:</u></b>	Shows the friendly name of this device here.
<b><u>3. UPnP NAT Traversal:</u></b>	When enabled, the device will attempt to configure port mapping in a NAT router on your network, using UPnP™. <b>Note</b> that UPnP™ must be enabled in the NAT router first.
<b><u>4. Port Range:</u></b>	The port range will open in NAT router.
<b><u>5. External IP address:</u></b>	Show the IP address and port for WAN access through Internet. If NAT traversal is configured successfully, user can use this IP address and port to access this device. The external IP address is not shown in case NAT traversal function is failed.

### Bonjour:

Bonjour is Apple Inc.'s trade name for service discovery protocol. It will help locates printers, other computers, and devices on a local network using multicast Domain Name System service records.



<b><u>1. Bonjour:</u></b>	To enable or disable the Bonjour service here.
<b><u>2. Friendly Name:</u></b>	Shows the friendly name of this device here.

### IP Filter:

You can enter different user's IP address which are allowing enter or denying by the device.

<b><u>1. IP Filter:</u></b>	To enable or disable the IP filter function here.
<b><u>2. IP Filter Policy:</u></b>	Choose the filter policy where is denying or allowing.

IP Filter ☒ Disable ☐ Enable

IP Filter Policy ☐ Deny ☒ Allow

Filter IP List
Filter IP <input type="text"/>
<input type="button" value="Add"/> <input type="button" value="Delete"/> <input type="button" value="DeleteAll"/>

## IP Notification:

In case the IP address is changed, system is able to send out an email to alert someone if the function is enabled.

SMTP Notification(email) ☒ Disable ☐ Enable

Send To  (< 129 Digits)

Subject  IP notification (< 65 Digits)

TCP Notification ☒ Disable ☐ Enable

TCP Server  (< 65 Digits)

TCP Port  (1 ~ 65535)

Message  (< 65 Digits)

HTTP Notification ☒ Disable ☐ Enable

URL  http:// (< 61 Digits)

HTTP Login Name  (< 22 Digits)

HTTP Login Password  (< 22 Digits)

Proxy Address  (< 129 Digits)

Proxy Port  (1 ~ 65535)

Proxy Login Name  (< 22 Digits)

Proxy Login Password  (< 22 Digits)

Customer parameters  (< 65 Digits)

Message  (< 65 Digits)

<b><u>1. SMTP Notification (e-mail):</u></b>	If enable this function, then the “Send to“ and “Subject” fields need to be filled. You will also need to set the “ <a href="#">E-Mail</a> “ function in the Management Page such as “SMTP Server“ in order to send email successfully.
<b><u>2. Send To:</u></b>	Type the receiver’s e-mail address. This address is used for reply mail.
<b><u>3. Subject:</u></b>	Type the subject/title of the E-mail.

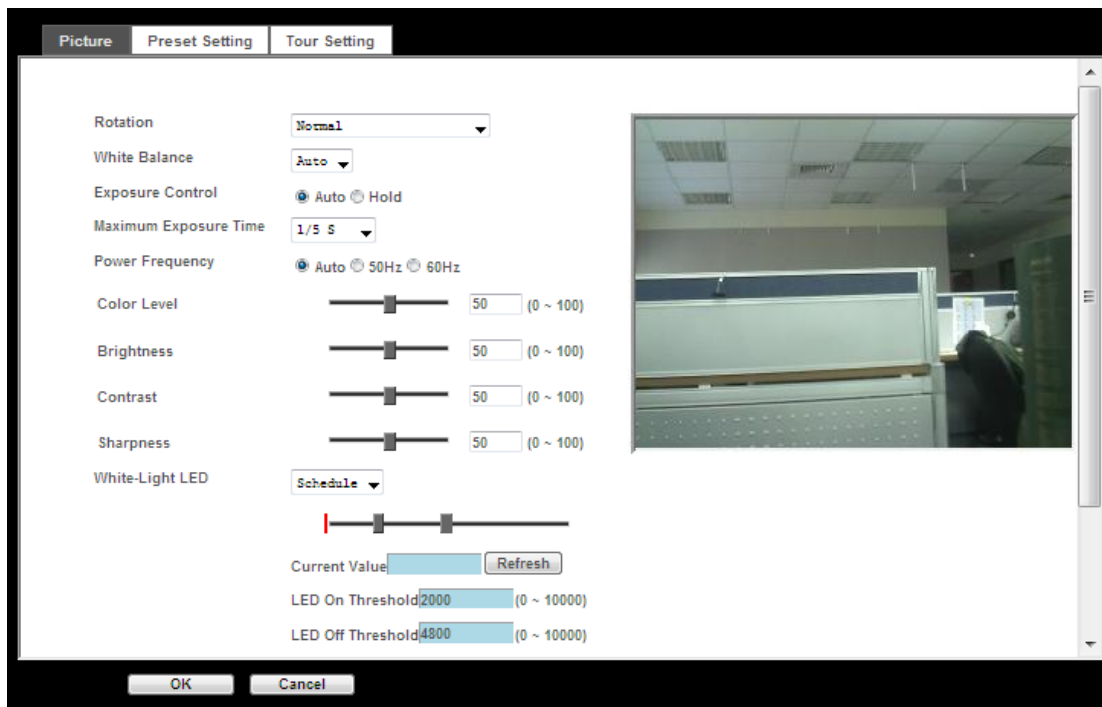
<b><u>4. TCP Notification:</u></b>	If enable this function, then the “TCP Server“, “TCP Port”, and “Message” fields need to be filled.
<b><u>5. TCP Server:</u></b>	Type the server name or the IP address of the TCP server.
<b><u>6. TCP Port:</u></b>	Set port number of TCP server.
<b><u>7. Message:</u></b>	Type the Message for the TCP Server.
<b><u>8. HTTP Notification:</u></b>	If enable this function, then the “URL”, “HTTP Login Name”, “HTTP Login Password”, “Proxy Address”, “Proxy Port”, “Proxy Login Name”, “Proxy Login Password”, “Customer Parameters”, “Message” fields need to be filled.
<b><u>9. URL:</u></b>	Type the server name or the IP address of the HTTP server.
<b><u>10. HTTP Login Name:</u></b>	Type the user name for the website.
<b><u>11. HTTP Login Password:</u></b>	Type the user name for the website.
<b><u>12. Proxy Address:</u></b>	Type the server name or the IP address of the HTTP Proxy.
<b><u>13. Proxy Port:</u></b>	Set port number for the proxy.
<b><u>14. Proxy Login Name:</u></b>	Type the user name for the proxy.
<b><u>15. Proxy Login Password:</u></b>	Type the password for the proxy.
<b><u>16. Customer Parameters:</u></b>	User can set specific parameters to HTTP server.
<b><u>17. Message:</u></b>	The message will be sent to HTTP server.

## - Camera

Use this menu to set the functions of the camera settings of the device.

Picture:

<b><u>1. Rotation:</u></b>	<p>Turn the “Mirror” and “Vertical Flip” On or OFF. The image will be overturned as below.</p> <div style="text-align: center;"> </div>
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<b><u>2. White Balance:</u></b>	Auto: will adjust the white balance automatically. Hold: will hold the white balance.
<b><u>3. Exposure Control:</u></b>	Auto: will adjust the internal gain automatically. Hold: will hold the internal gain.
<b><u>4. Color Level:</u></b>	Larger value will increase the colorfulness of the video.
<b><u>5. Brightness:</u></b>	Larger value will increase the brightness of the video.
<b><u>6. Sharpness:</u></b>	Larger value will sharpen the video.
<b><u>7. Contrast:</u></b>	Larger value will increase the contrast of the video.
<b><u>8. Night Mode:</u></b>	User can turn Auto or Off of the night mode. This function is very useful under low illumination environment.
<b><u>9. White-Light LED:</u></b>	<p>User can turn On, Off, Auto or Schedule of the built-in White-light LEDs. This function is very useful under low illumination environment even 0 Lux.</p> <p>In case the Auto mode is selected, user needs to specify 3 parameters in advance:</p> <ul style="list-style-type: none"> <li>- <b>LED ON Threshold (0~10000):</b> This value set the threshold to turn on white-light LED. It should be lower or equal to LED OFF Threshold.</li> <li>- <b>LED OFF Threshold (0~10000):</b> This value set the threshold to turn off white-light LED. It should be higher or equal to LED ON Threshold.</li> <li>- <b>Delay Time:</b> The delay time between LED ON/OFF switching.</li> </ul> <p>Note that Current Value is the current luminance from the captured video. It's a useful</p>

	reference to set LED ON/OFF Threshold.
<b>10. De-Noise:</b>	De-Noise can remove or lower unwanted noise and preserve fine details and edges.



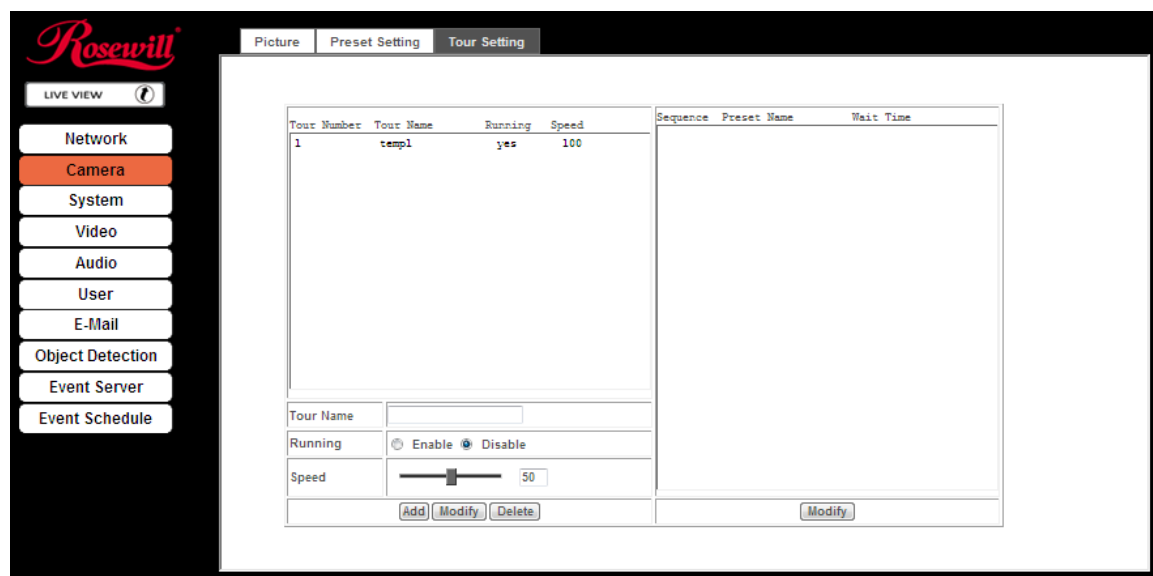
### Preset Setting:

This page provides the edit tool to modify or delete the **Preset points** where you set under **Advanced PTZ**.



### Tour Setting:

Up to 128 positions can be preset, and the camera can be programming to move to the preset position sequentially. To use the camera tour function, user must preset some camera positions first.

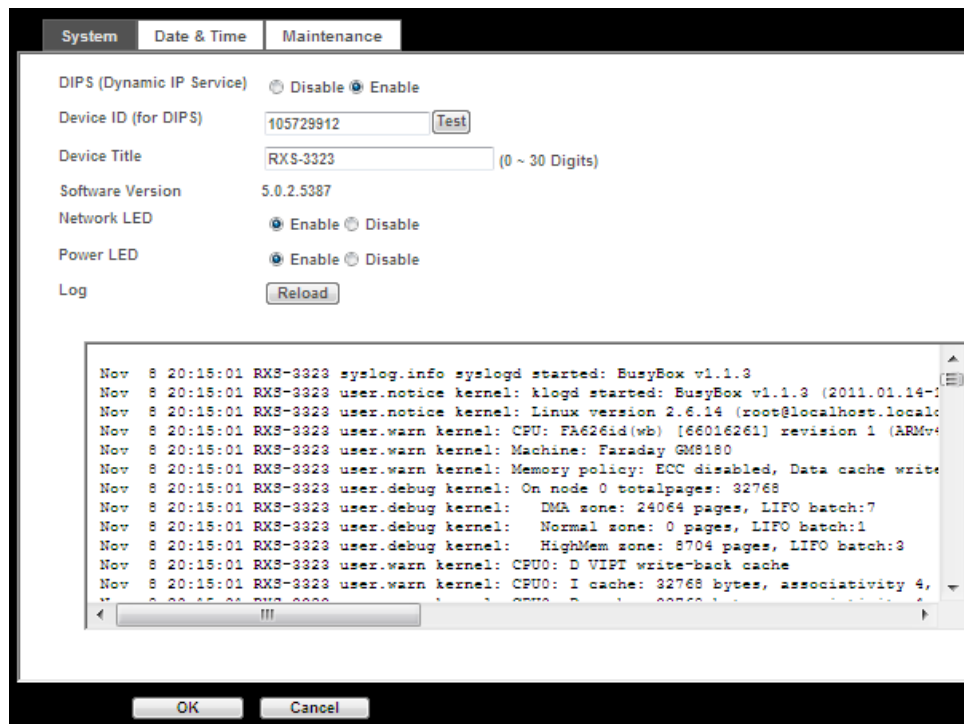


<b><u>1. Tour Name:</u></b>	The group name of the sequence of camera tour. The maximum number of camera tour is 16.
<b><u>2. Running:</u></b>	Enable or disable this camera tour.
<b><u>3. Preset:</u></b>	Set the sequence of the tour. Maximum 16 points can be assigned. The selected preset position is added in the Sequence list from 1 to 16.
<b><u>4. Wait Time:</u></b>	Type a period of time during which the camera is to stay at each preset point, between 0 to 36000 seconds.

## - System

Use this menu to Configure and maintain system, and to perform the principal settings of the device.

System:



<b><u>1. DIPS (Dynamic IP Service):</u></b>	To enable or disable the DIPS® (Dynamic IP Service) function.
<b><u>2. Device ID (for DIPS):</u></b>	<p>It's a unique number of each device for identification and this ID is used for DIPS.</p> <p>In the Appendix G, it describes how to locate your device from Internet by DDNS service. However, we provide another easier way to do the same job called Dynamic IP Service, DIPS®.</p> <p>To use this service, just follow four steps below:</p>



	<ol style="list-style-type: none"> <li>1. Enable DIPS function of the device</li> <li>2. Check your Device ID from this page. This is a unique number for each device.</li> <li>3. If your device is behind a NAT router, please configure your device properly. You could refer to section “Install the Camera behind a NAT Router” above. You only need to do this job one time.</li> <li>4. Visiting our company’s web site, you can find DIPS service page as below:</li> </ol> <div data-bbox="699 483 992 710" data-label="Image"> </div> <p>Enter your Device Number and press “OK” button.</p> <p>Then, a new web page will pop up and link to your device accordingly.</p> <p>You will see that DIPS is a much easier service than DDNS.</p>
<b><u>3. Device Title:</u></b>	You can enter the name of this unit here. It’s very useful to identify the specific device from multiple units. The information will be shown on IPWizard II once the device is found.
<b><u>4. Software Version:</u></b>	This information shows the software version of the device.
<b><u>5. Network LED:</u></b>	To turn on or off Network LED.
<b><u>6. Power LED (Wireless LED):</u></b>	To turn on or off Power LED (wireless LED if WLAN model).
<b><u>7. Log:</u></b>	User can check the system log information of the device, including the <i>Main Info</i> , <i>Appended Info</i> , <i>Operator IP</i> , and so on ...
<b><u>8. Reload:</u></b>	Click this button; user can refresh the log information of the device.

## Date & Time:

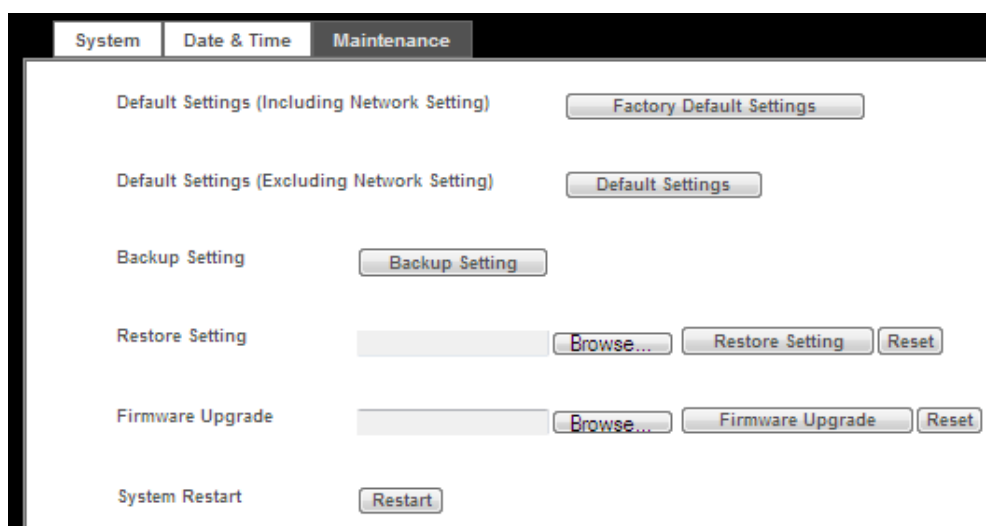
You can setup the device or make it synchronized with PC or remote NTP server. Also, you may select your time zone in order to synchronize time locally.

<b><u>1. Server Date &amp; Time:</u></b>	Displays the date and time of the device.
<b><u>2. PC Time:</u></b>	Displays the date and time of the connected PC.
<b><u>3. Adjust:</u></b>	<ul style="list-style-type: none"> <li>- <b>Synchronize with PC:</b> Click this option to enable time synchronization with PC time.</li> <li>- <b>Manual setting:</b> Click this option to set time and date manually.</li> <li>- <b>Synchronize with NTP:</b> Click this option if you want to synchronize the device’s date and time with those of time server called NTP server (Network Time Protocol).</li> </ul>

<b><u>4. NTP Server:</u></b>	Type the host name or IP address or domain name of the NTP server.
<b><u>5. NTP Sync. Interval:</u></b>	Select an interval between 1 and 23 hours at which you want to adjust the device's time referring to NTP server
<b><u>6. Time zone:</u></b>	Set the time difference from Greenwich Mean Time in the area where the device is installed.
<b><u>7. Daylight Saving:</u></b>	Disable or enable the daylight saving adjustment.

## Maintenance

<b><u>1. Hard Factory Default (Include the network setting):</u></b>	Recall the device hard factory default settings. Note that click this button will reset all device's parameters to the factory settings (including the IP address).
<b><u>2. Factory Default (Except the network setting):</u></b>	The unit is restarted and most current settings are reset to factory default values. This action will not reset the network setting.
<b><u>3. Backup Setting:</u></b>	To take a backup of all of the parameters, click this button. If necessary, it will then be possible to return to the previous settings, if settings are changed and there is unexpected behavior.
<b><u>4. Restore Setting:</u></b>	Click the “ <b>Browse</b> ” button to locate the saved backup file and then click the “ <b>Restore Setting</b> ” button. The settings will be restored to the previous configuration.



## **5. Firmware Upgrade procedure:**

The device supports new firmware upgrade (the software that controls the operation in the device). Please contact your dealer for the latest version if necessary.

Download the latest firmware file from our website or your dealer. Unzip this firmware file to binary file and store it into your PC. Then follow the steps as bellows carefully:

1. Close all other application programs which are not necessary for firmware update.
- 2. Make sure that only you access this device while firmware updating.**
3. Disable Motion Detection function.
4. Click “**Browse**” button. Select the Firmware binary file. (**Note that it must make sure that the Firmware only applies to this device, once update, it will be burned into FLASH ROM of system.**)
5. Once the firmware file was selected, click “**Firmware Upgrade**” button.
6. The upgrade progress information will be displayed. Once the uploading process completed, the device will reboot the system automatically.

Please wait for timer countdown, and then you can use IPWizard II to search the device again.

## **Warning!!!**

**The download firmware procedure can not be interrupted. If the power and/or network connection are broken during the download procedure, it might possibly cause serious damage to the device.**

**We strongly suggest that DO NOT upgrade firmware via Wireless LAN due to high error rate possibly and don't allow any other clients to access this unit during updating procedure.**

**Be aware that you should not turn off the power during updating the firmware and wait for finish message. Furthermore, the firmware upgrade procedure always is risk and do not try to upgrade new firmware if it's not necessary.**

## **6. System Restart:**

The device is restarted without changing any of the network settings. It means the IP address of the device will be the same after firmware upgrade.

## - Video

This device provides 2 modes of video profile. The first one is Mega-pixel mode which supports video resolution up to Mega-pixel. However the maximum frame rate of this mode is up to 15fps only. The second one is VGA mode which supports video resolution up to VGA but frame rate can be up to 30fps. User only can select either Mega-pixel or VGA mode to operate the camera. Switching Mega-pixel and VGA, the device will take time to reboot system.

### Common

The screenshot shows a configuration window with three tabs: 'Common', 'Video Profile', and 'ROI'. The 'Common' tab is active. Under 'Text Overlay Setting', there are checkboxes for 'Include Date' and 'Include Time'. 'Include Date' has radio buttons for 'Predefined' (with a dropdown showing 'YYYY-MM-DD') and 'Own' (with a text field '%Y-%m-%d' and a note '(0 ~ 12 Digits)'). 'Include Time' has radio buttons for 'Predefined' (with a dropdown showing '24h') and 'Own' (with a text field '%H:%M:%S' and a note '(0 ~ 12 Digits)'). There is also a checkbox for 'Include Text' with a text field and a note '(0 ~ 20 Digits)'. At the bottom, under 'Video Profile', there are radio buttons for 'VGA Mode' and 'MEGA Mode', with 'MEGA Mode' being selected. 'OK' and 'Cancel' buttons are at the bottom.

<b><u>1. Text Overlay Setting:</u></b>	There are some important information can be embedded into image, including date, time, and/or text.
<b><u>2. Video Profile</u></b>	User can only choose either VGA Multi-profile or Mega Multi-profile mode. VGA Multi-profile mode can serve H.264, MPEG4, and JPEG streams up to VGA resolution simultaneously. On the other hand, Mega-pixel mode, in addition to VGA resolution, it can serve H.264/Mega and JPEG/Mega two more streams simultaneously.

## Video Profile

This is the encoder editing mode.

<b><u>1. Video Type:</u></b>	There are 13 Video types in the profile.
<b><u>2. Rate Control:</u></b>	Here defines the rate control method of this profile. There are two options: Constant Bit Rate (CBR) or Variable Bit Rate (VBR). For CBR, the video bit rate is between low to high bandwidth based on different resolutions. User can set the desired bit rate to match the limitation of bandwidth. For VBR, user should choose the quality level to set the video quality rather than bit rate. The quality level is between 1 and 100. The higher value can reach the better quality but of course will consume higher bandwidth.
<b><u>3. Max Frame Rate:</u></b>	Here defines the targeted frame rate of this profile. For example, set the frame rate to 15

	fps, then the image will be updated for 15 frames per second as possible. User need to set reasonable max frame rate versus video quality under the limited bandwidth.
<b>4. GOP Control:</b>	This defines the Intra/Inter-frame (I/P) ratio of this profile. For example, set the GOP to 30, then the video stream will have one Intra-frame every 30 frames.

CommonVideo ProfileROI

Video Type	Resolution	Rate Control	Quality	Bitrate	Max Frame Rate	GOP Control	ROI
h264	sxga	vbr	75	3072	15	30	no
h264	vga	vbr	75	2048	15	30	no
h264	qvga	vbr	90	1024	15	30	no
h264	qqvga	vbr	90	256	15	30	no
mpeg4	vga	vbr	75	2048	15	30	no
mpeg4	qvga	vbr	90	1024	15	30	no
mpeg4	qqvga	vbr	90	512	15	30	no
mjpeg	sxga	vbr	90	4096	5	1	no
mjpeg	vga	vbr	90	2048	5	1	no
mjpeg	qvga	vbr	90	1024	15	1	no
mjpeg	qqvga	vbr	90	512	15	1	no
h264	vga	vbr	90	2048	15	30	yes
h264	qvga	vbr	90	1024	15	30	yes

Video Type

h264

Resolution

sxga

Rate Control

☒ Quality 75
 ☐ Bitrate 3072
 

K bps 384 ~ 4096

Max Frame Rate

15

GOP Control

30

OK

Cancel

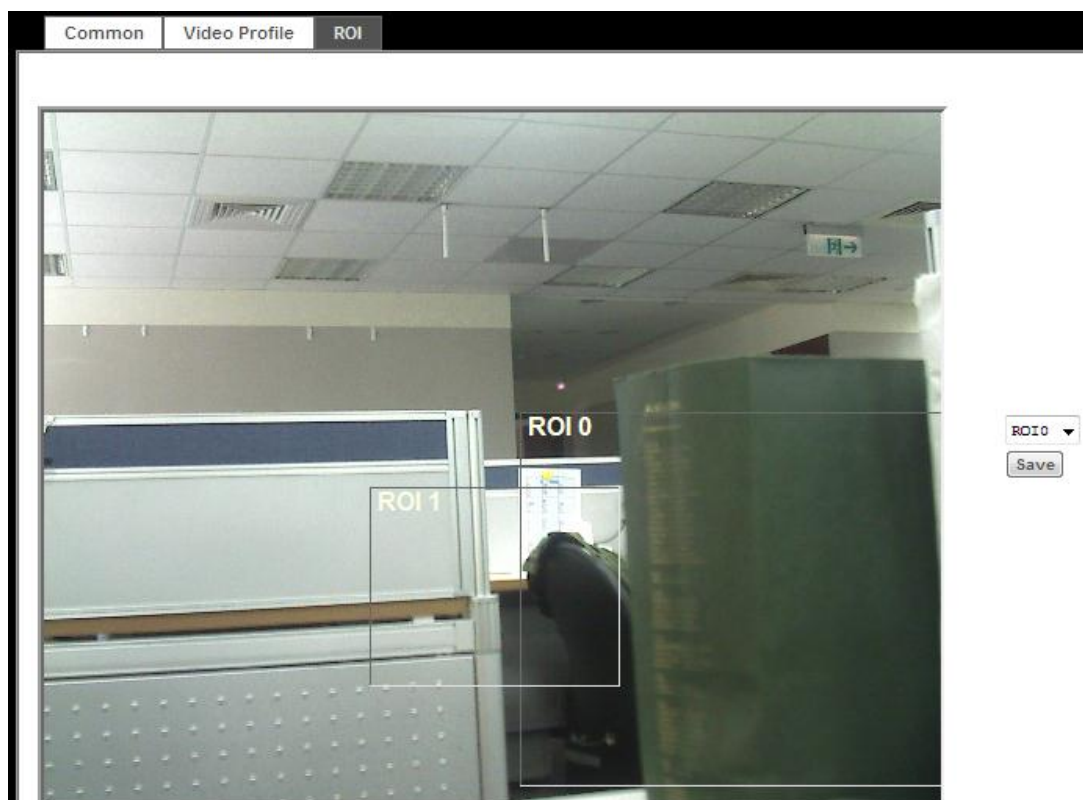
## ROI:

ROI stands for Region of Interest.

You can select the video to focus on your ROI in order to minimum the video size.

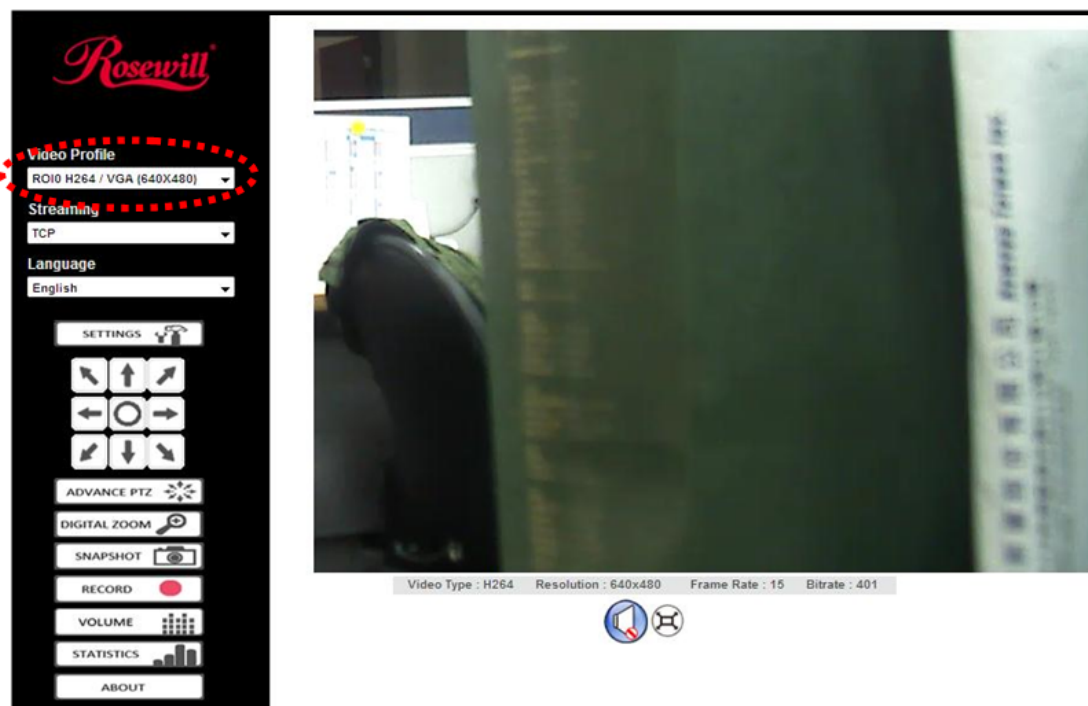
There are two ROI areas provided in the camera management. You can use the mouse to drag both ROI around in your video.

Once the ROI has been set, you need to click Save, then go to **Live View** to adjust to view the preset ROI.



Once set ROI, you can select ROI in the **Video Profile**; you can then see the focus image of the ROI area:

**ROI 0:** The area size of ROI 0 is H.264 / VGA, 640 x 480.

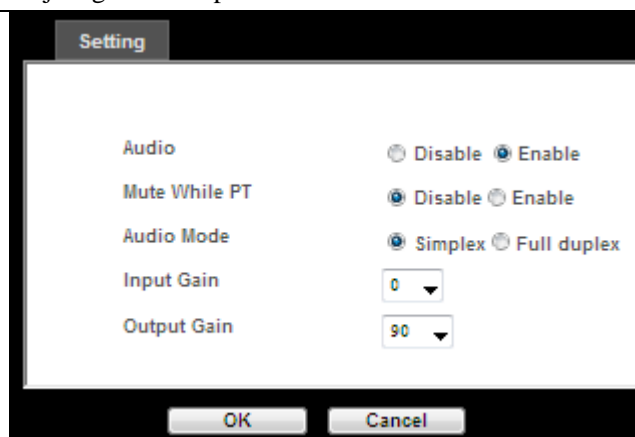


**ROI 1:** The area size of ROI 1 is H.264 / QVGA, 320 x 240.



## - Audio

<b><u>1. Audio:</u></b>	To enable or disable audio function
<b><u>2. Audio Mode:</u></b>	To select Simplex or Full duplex (2-way audio) mode
<b><u>3. Input Gain:</u></b>	To adjust gain of input audio
<b><u>4. Output Gain:</u></b>	To adjust gain of output audio



## - User

Use this menu to add, update, or remove the usernames and passwords of the Administrator and viewer. You can allow 20 simultaneous unicast users login at the same time.

<b><u>1. Viewer login:</u></b>	Select "Anonymous" to allow any one viewing the video once connected. Otherwise, only users in database can view the video after login.
<b><u>2. Access right:</u></b>	Administrator can access every function in this device. However, Viewers only can view the video and access limited function.

### **3. Add, update, and remove of Users account:**

Manage the user's account of viewer user.

Setting

Viewer Login ☒ Anonymous ☐ Only users in database

User Name	Access Right	PTZ Control
admin	administrator	yes
root	administrator	yes

User List

User Name  (1 ~ 20 Digits)

Password  (0 ~ 20 Digits)

Verify Password  (0 ~ 20 Digits)

Access Right ☐ Administrator ☒ Viewer

PTZ Control ☐ Enable ☒ Disable

## **- E-Mail**

You may setup SMTP mail parameters for further operation of Event Schedule. That's, if users want to send the alarm message out, it will need to configure parameters here and also add at least one event schedule to enable event triggering.

Setting

SMTP Server  (< 129 Digits)

SMTP Port  25 (1 ~ 65535)

SSL ☒ Disable ☐ Enable

SMTP Authentication ☒ Disable ☐ Enable

Authentication User Name  (< 65 Digits)

Authentication Password  (< 22 Digits)

E-mail From  (< 129 Digits)

E-mail To  (< 129 Digits)

E-mail Subject  (< 65 Digits)

**1. SMTP Server:** Type the SMTP server name or the IP address of the SMTP server.

**2. Test:** Send a test mail to mail server to check this account is available or not.

**3. SMTP Port:** Set port number of SMTP service.

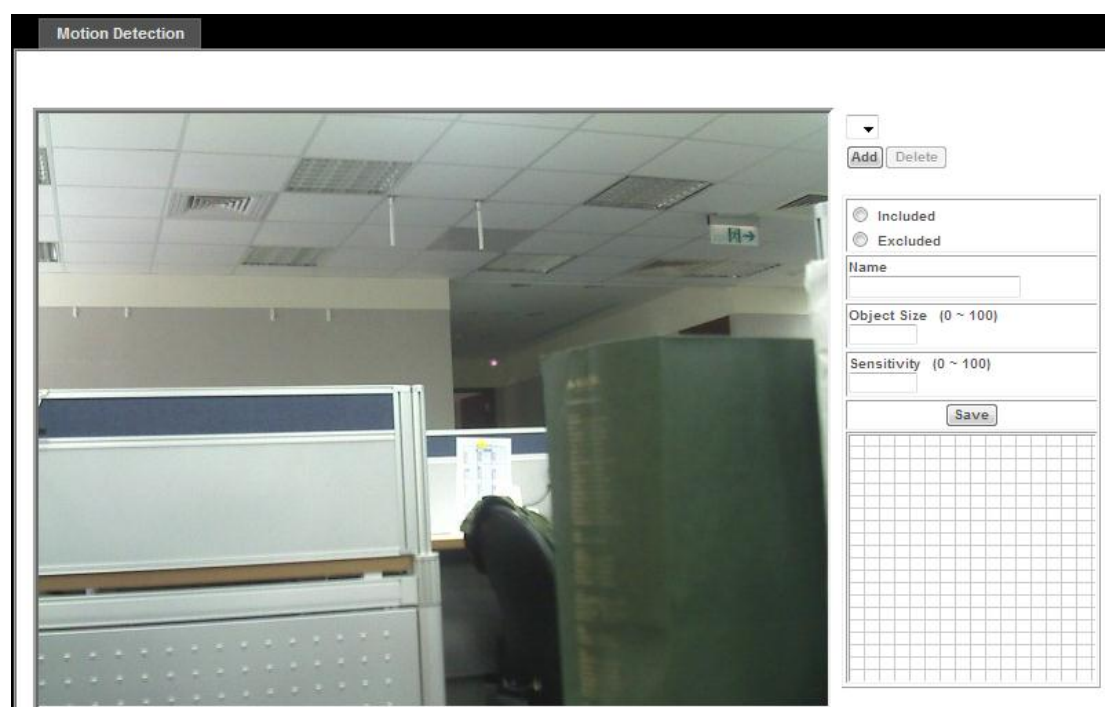
**4. SMTP** Select the authentication required when you send an e-mail.



<b><u>Authentication:</u></b>	<b>Disable:</b> if no authentication is required when an e-mail is sent. <b>Enable:</b> if authentication is required when an e-mail is sent.
<b><u>5. Authentication User name:</u></b>	Type the user name for the SMTP server if <b>Authentication</b> is <b>Enable</b> .
<b><u>6. Authentication Password:</u></b>	Type the password for the SMTP server if <b>Authentication</b> is <b>Enable</b> .
<b><u>7. E-mail To:</u></b>	Type the receiver's e-mail address.
<b><u>8. E-mail From:</u></b>	Type the sender's E-mail address. This address is used for reply e-mails.
<b><u>9. E-mail Subject:</u></b>	Type the subject/title of the e-mail.

## - Object Detection

Use this menu to specify motion detection window 1 to window 10 and set the conditions for detection while observing a captured image. (You can set up to 10 maximum detection windows.)



<b><u>1. Add and Del:</u></b>	To add or delete the motion windows. User can specify up to 4 Included and/or Excluded windows to monitor the video captured by this device. By dragging mouse on the image, you can change the position and size of the selected motion window accordingly.
<b><u>2. Included or Excluded Window:</u></b>	These windows can be specified as Included or Excluded type. <b>Included</b> windows target specific areas within the whole video image <b>Excluded</b> windows define areas within an Include window that should be ignored (areas outside Include windows are automatically ignored)
<b><u>3. Name:</u></b>	You can name of the specified motion window as you desire.
<b><u>4. Object Size:</u></b>	Defines the object size of motion detection. The higher object size will only larger

	objects trigger motion detection. The lower object size will even small objects trigger motion detection too. Generally speaking, the smaller size will be easier to trigger event.
<b><u>5. Sensitivity:</u></b>	Defines the sensitivity value of motion detection. The higher value will be more sensitivity.

## - Event Server

### FTP Server

You may setup FTP parameters for further operation of Event Schedule. That's, if users want to send the alarm message to an FTP server, it will need to configure parameters here and also add at least one event schedule to enable event triggering as SMTP.

<b><u>1. Name:</u></b>	User can specify multiple FTP paths as wish. Therefore, user needs to specify a name for each FTP setting.
<b><u>2. FTP Server:</u></b>	Type the server name or the IP address of the FTP server.
<b><u>3. Test:</u></b>	Type the user name for the FTP server.
<b><u>4. FTP Login name:</u></b>	Type the user name for the FTP server.
<b><u>5. FTP Login Password:</u></b>	Type the password for the FTP server.
<b><u>6. FTP Port:</u></b>	Set port number of FTP service.
<b><u>7. FTP Path:</u></b>	Set working directory path of FTP server.
<b><u>8. FTP Passive Mode:</u></b>	Select passive or active mode connecting to FTP server.

### TCP Server

In addition to send video file to FTP server, the device also can send event message to specified TCP server.

Name	TCP Server	TCP Port

Name  (< 22 Digits)  
 TCP Server  (< 65 Digits)   
 TCP Port  (1 ~ 65535)

<b><u>1. Name:</u></b>	User can specify multiple TCP servers as wish. Therefore, user needs to specify a name for each TCP server setting.
<b><u>2. TCP Server:</u></b>	Type the server name or the IP address of the TCP server.
<b><u>3. TCP Port:</u></b>	Set port number of TCP server.

## HTTP Server

The device also can send event message to specified HTTP server.

Name	HTTP Server	Proxy Address

Name  (< 22 Digits)  
 URL  (< 129 Digits)   
 HTTP Login Name  (< 22 Digits)  
 HTTP Login Password  (< 22 Digits)  
 Proxy Address  (< 129 Digits)  
 Proxy Login Name  (< 22 Digits)  
 Proxy Login Password  (< 22 Digits)  
 Proxy Port  (1 ~ 65535)

<b><u>1. Name:</u></b>	User can specify multiple HTTP servers as wish. Therefore, user needs to specify a name
------------------------	---

	for each HTTP server setting.
<b><u>2. URL:</u></b>	Type the server name or the IP address of the HTTP server.
<b><u>3. Test:</u></b>	Check the HTTP server whether it is available or not.
<b><u>4. HTTP Login name:</u></b>	Type the user name for the HTTP server.
<b><u>5. HTTP Login Password:</u></b>	Type the password for the HTTP server.
<b><u>6. Proxy Address:</u></b>	Type the server name or the IP address of the HTTP Proxy.
<b><u>7. Proxy Login name:</u></b>	Type the user name for the HTTP Proxy.
<b><u>8. Proxy Login Password:</u></b>	Type the password for the HTTP Proxy.
<b><u>9. Proxy Port:</u></b>	Set port number of Proxy.

## SAMBA Server

The device also can send video stream to specified SAMBA server.

<b><u>1. Name:</u></b>	User can specify multiple SAMBA servers as wish. Therefore, user needs to specify a name for each SAMBA server setting.
<b><u>2. SAMBA Server:</u></b>	Type the server name or the IP address of the SAMBA server.
<b><u>3. Test:</u></b>	Check the SAMBA server whether this account is available or not.
<b><u>4. SAMBA Login name:</u></b>	Type the user name for the SAMBA server.
<b><u>5. SAMBA Login</u></b>	Type the password for the SAMBA server.

<b><u>Password:</u></b>	
<b><u>6. SAMBA Path:</u></b>	Set working directory path of SAMBA server.

## - Event Schedule

### Setting

This menu is used to specify the schedule of Event or Schedule Trigger and activate the some actions provided by this device. Where the Schedule Trigger will be activated by user-define interval without event happened.

Name	Enable	Type	Weekday	Start	Duration	Trigger by Prefix	Action
<div> <div>Name</div> <div> <input type="text"/> </div> </div> <div> <div>Enable</div> <div> <input checked="" type="radio"/> Yes <input type="radio"/> No         </div> </div> <div> <div>Type</div> <div> <input checked="" type="radio"/> Event Trigger <input type="radio"/> Schedule Trigger, Interval <input type="text" value="60"/> ( Seconds)         </div> </div> <div> <div>Enable Time</div> <div> <input checked="" type="checkbox"/> Sun <input checked="" type="checkbox"/> Mon <input checked="" type="checkbox"/> Tue <input checked="" type="checkbox"/> Wed <input checked="" type="checkbox"/> Thu <input checked="" type="checkbox"/> Fri <input checked="" type="checkbox"/> Sat            Start from <input type="text" value="0"/> : <input type="text" value="0"/> , Duration <input type="text" value="24"/> : <input type="text" value="0"/> ((max 168:00 hours) )         </div> </div> <div> <div>Trigger by</div> <div> <input type="checkbox"/> Motion Area         </div> </div> <div> <div>Record File Prefix</div> <div> <input type="text"/> (0 ~ 20 Digits)         </div> </div> <div> <div>Action</div> <div> <input type="checkbox"/> Go <input checked="" type="radio"/> Preset <input type="text" value="1"/> <input type="text" value="temp1"/>  <input type="checkbox"/> Voice Alert, Duration <input type="text" value="5"/> ( 0~86400 Seconds )  <input type="checkbox"/> Send FTP  <input type="checkbox"/> Send TCP  <input type="checkbox"/> Send HTTP  <input type="checkbox"/> Send E-Mail  <input type="checkbox"/> Open LED Light <input type="text" value="0"/> ( 0~86400 Seconds )  <input type="checkbox"/> Send Samba         </div> </div>							

<b><u>1. Name:</u></b>	Name of the Event or the Schedule.
<b><u>2. Enable:</u></b>	Enable or disable this Event or Schedule.
<b><u>3. Type:</u></b>	Event trigger or Schedule trigger.
<b><u>4. Enable Time:</u></b>	Define the feasible time slot.
<b><u>5. Trigger by:</u></b>	Select the triggered sources.
<b><u>6. Action:</u></b>	Define the actions once event triggered.

#### Example 1:

Send file to FTP server by motion triggered always:

1. Select event trigger
2. Enable time: start from 00:00 to 24:00 every day
3. Trigger by: Motion Area (Added in Object Detection page)
4. Action: Send FTP (Add in Event Server -> FTP Server page)

**Example 2:**

Send file to E-Mail server by motion triggered from Friday 18:00 to Saturday 06:00

1. Select event trigger.
2. Enable time: start from Friday 18:00 and keep work in 12 hours, so it will stop on Saturday 06:00.
3. Trigger by: Motion Area (Added in Object Detection page)
4. Action: Send e-mail (Add in E-Mail page)
  - i. To email address: You need to input the receiver email address.
  - ii. Subject: You could specify the email subject.
  - iii. Message: You could specify the email content.

**Example 3:**

Enable Voice Alert every 10-minute during 18:00 to 24:00 from Monday to Friday.

1. Type: Select schedule trigger and interval is 10-minute.
2. Enable time: Select Monday to Friday, and set start time from 18:00 and keep work in 6 hours.
3. Trigger by: You do not need to choose it, because this will be triggered every minute
4. Action: Voice Alert

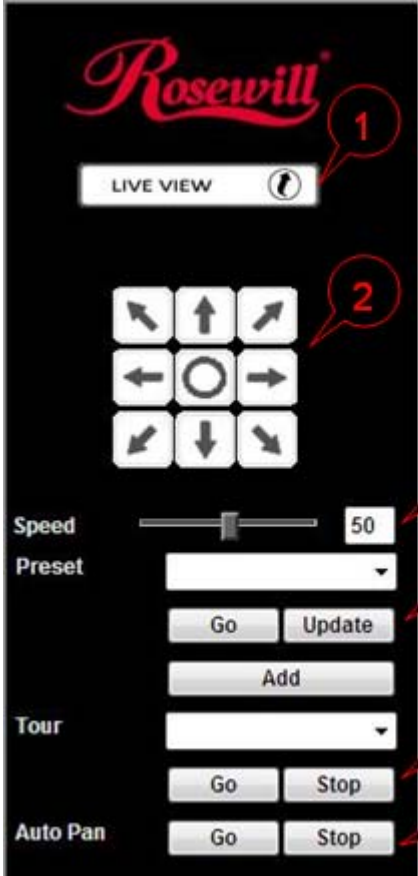

**Record**

User can choose the type of record file for event or schedule application.

<b><u>1. Record File Type:</u></b>	Choose AVI or JPEG file format.
<b><u>2. Record File Prefix:</u></b>	Define the prefix of recorded filename.
<b><u>3. JPEG Picture Numbers:</u></b>	Define the picture numbers of JPEG to be sent out.

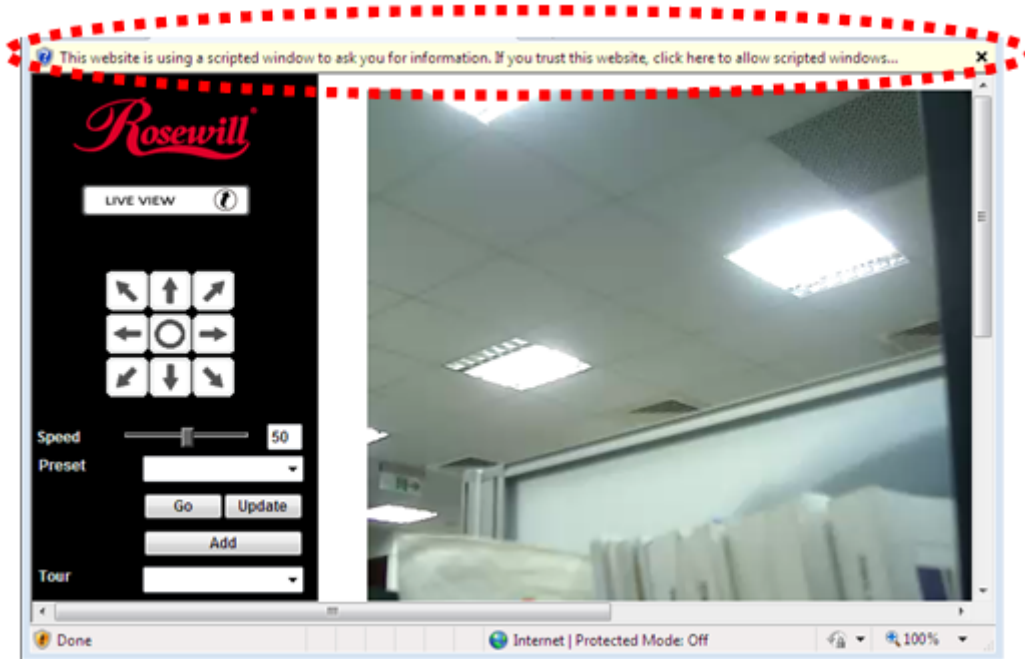
## Advance PTZ

Advance PTZ allows you to set the Camera movement and speed. You can also set Preset points and enable Tour (combine by different Preset Points) here.

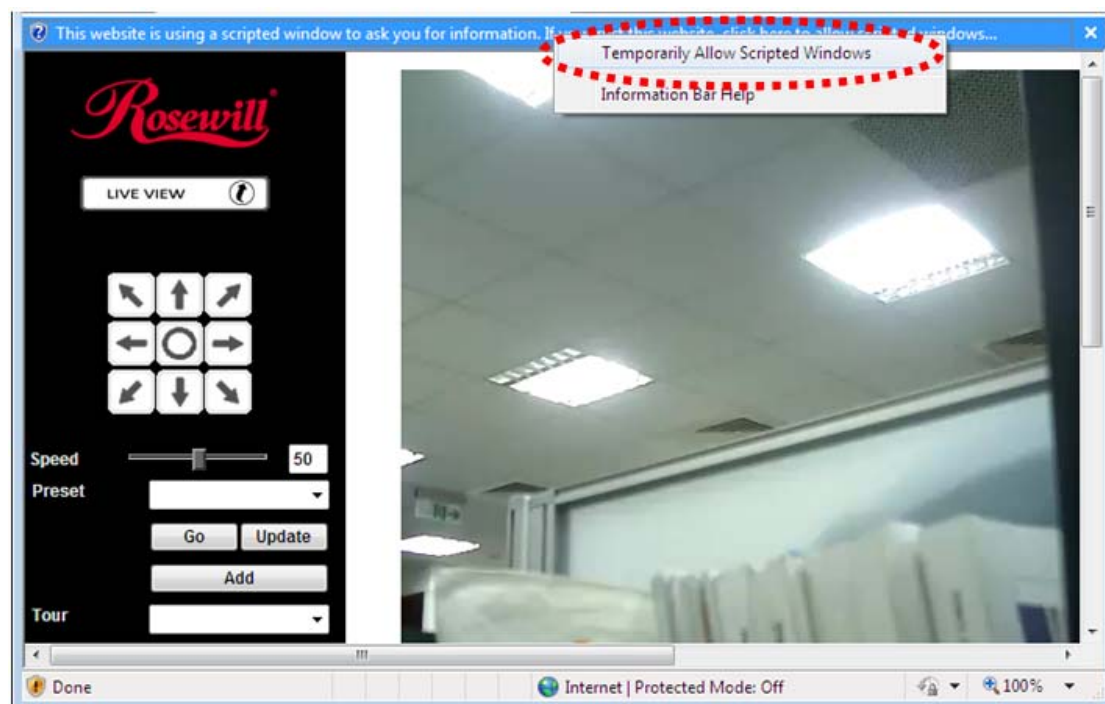
 <p>The screenshot shows the Rosewill PTZ control interface. It includes a 'LIVE VIEW' button (1), a 9-directional arrow pad (2), a speed slider set to 50 (3), a 'Preset' dropdown menu (4) with 'Go' and 'Update' buttons, an 'Add' button, a 'Tour' dropdown menu (5) with 'Go' and 'Stop' buttons, and an 'Auto Pan' section with 'Go' and 'Stop' buttons (6). A 'Return to Center' button is also visible at the bottom right.</p>	<b><u>1. Live View:</u></b>	Returns to the main viewing page
	<b><u>2. PTZ</u></b>	Control camera up/down/left/right and home position.
	<b><u>3. Speed:</u></b>	Choose the speed of Pan and Tilt.
	<b><u>4. Preset:</u></b>	Add/Update the preset positions or go to one of these positions.
	<b><u>5. Tour:</u></b>	Select one of the camera tours. Camera tour is comprised by series of preset locations. <b>Go:</b> Execute the selected camera tour.
	<b><u>6. Auto Pan:</u></b>	Execute the auto pan of camera. While auto pan is running, the camera will move around automatically. <b>Note:</b> The speed of auto pan is fixed and can not be adjustable. One cycle will take up to 7~8 minutes and return to center location. (  )

### - Adding Preset point:

1. When selecting “**Add**”, you may see a scripted enable bar appear; depending on the security level set on your Web browser.

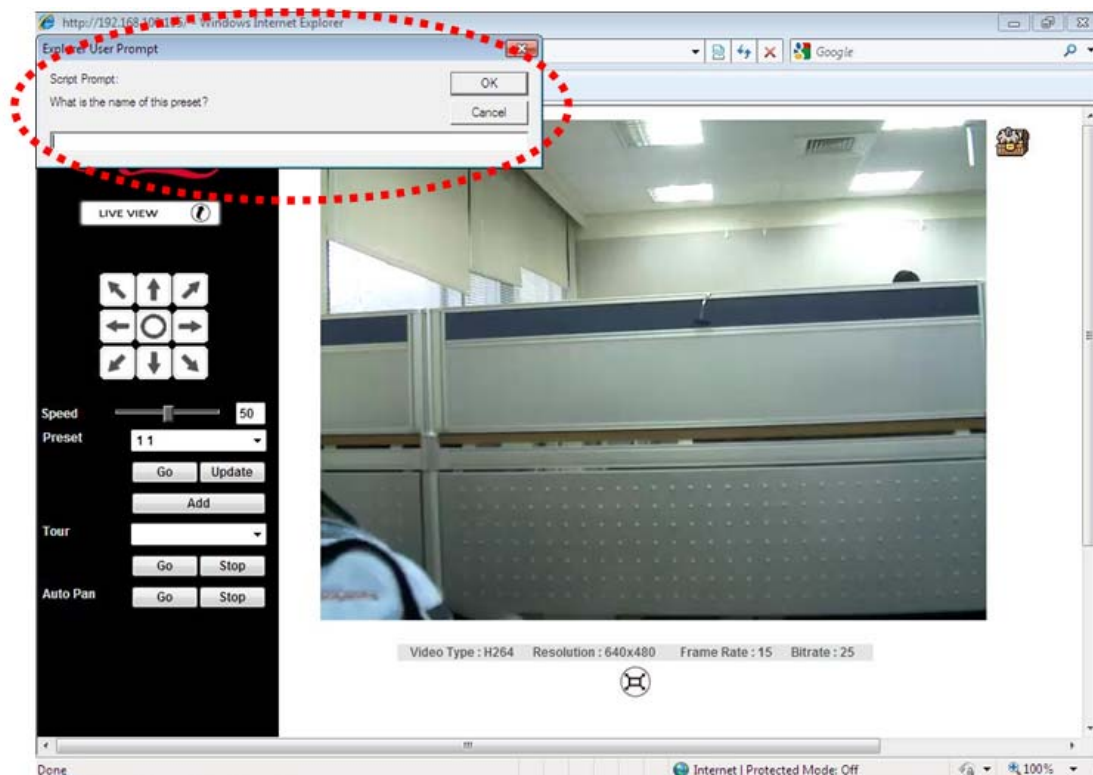


2. Please right click on it and select **“Temporarily Allow Scripted Windows”**



3. Click the arrow until your desired area appear, then click **“Add”**. You will be asking to enter the name of the Preset point you want to call. Please enter your desired name, and then click **“OK”**.





4. Whenever you move your camera to, you can always return to your Preset point by selecting it and then click “Go”.

### - Selecting Tour:

1. You will need to set Tour under **Setting -> Camera -> Tour Setting**.
2. You will also need to set at least One Preset point to enable the Tour movement.


**Note:** Due to preserving the camera life cycle, the tour will run only once and does not support repeat.

## Digital Zoom

Click **Digital Zoom** to active this function as above. User can drag or scale the box over the video to adjust zoom ratio and position.

## Snapshot

Click **Snapshot** to activate this function. Press **Snapshot** button to take a picture. The image file is saved as JPEG format into your local PC.

By selecting the tool box  on the upper right hand corner, you can change the preset folder by


selecting **Browse**, the pop-up window allows you to select the save path and file name, select **OK** to continue.

If you like to retrieve the saved image, select the file to display the saved image by using any one of graph editing tools.

## Record

Click **Record** to activate this function. Press **Record** button to start recording. The video file is saved as ASF format into your local PC. While you want to stop it, press **Stop Record** to stop recording.

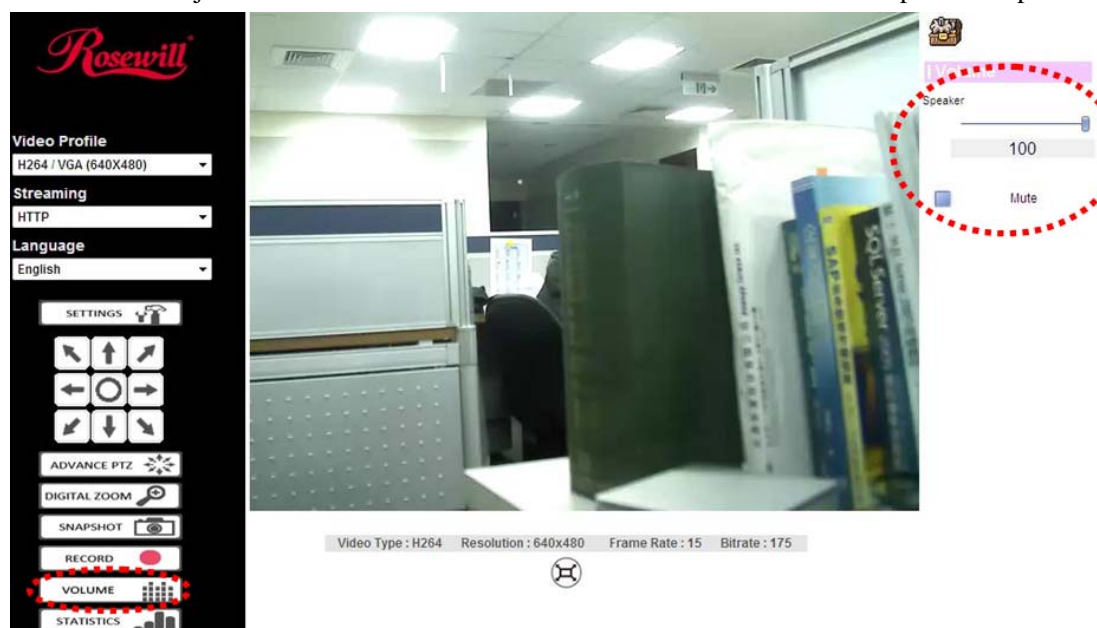
After stop recording, list the files, this file is named as Video\_yyyymmddhhmmss.avi

By selecting the tool box  on the upper right hand corner, you can change the preset folder by selecting **Browse**, the pop-up window allows you to select the save path and file name, select **OK** to continue.

The ASF files can be display by the standard Windows Media Player, but it needs the DixectX 9.0 or later version to be installed.

## Volume

Click **Volume** to activate this function. There is a control bars for speaker volume. Scroll the control bar to adjust the audio attribute. Check the volume mute will mute the speaker output.

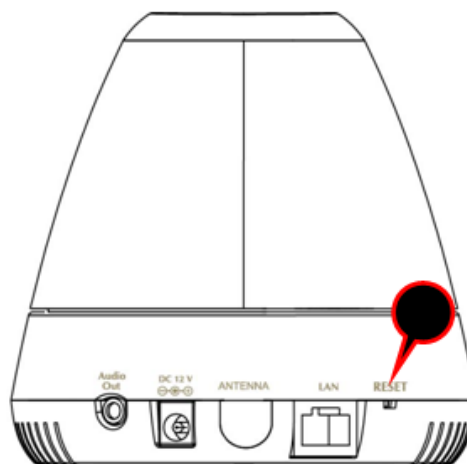


## Appendix A: Restore Factory Default Settings

There is a button hidden in the pinhole near to the RJ-45 connector. This button is used to restore the all factory default settings. Sometimes restarting the device will make the system back to a normal state. However, if the system still got problems after restart, user can restore the factory default settings and install it again.

### Restore the device:

1. Insert the paper clip or other suitable tool to press and hold the button down continuously.
2. Hold it at least 5 seconds and release the tool. Then the device has been restored to default settings and reboot again.



**Note:** Restoring the factory default setting will lose the all previous settings included IP address forever. User needs to run the IPWizard II program to search the device and configure it to let the device work properly again.

## Appendix B: Troubleshooting & FAQ

Question	Answer
<b>Features</b>	
The video and audio codec is adopted in the device.	The device utilizes H.264, MPEG4 and JPEG triple compression to providing high quality images. Where H.264 and MPEG4 are standards for video compression and JPEG is a standard for image compression. The audio codec is defined as AMR for 3GPP and G.711/G.726 for RTSP streaming.
The maximum number of users can access the device simultaneously.	The maximum number of users is limited to 20. However, it also depends on the total bandwidth accessed to this device from clients. The maximum data throughput of the device is around 20~25Mbps for UDP mode and 10Mbps for HTTP mode. Therefore, the actual number of connected clients is varying by streaming mode, settings of resolution, codec type, frame rate and bandwidth. Obviously, the performance of the each connected client will slow down when many users are logged on.
The device can be used outdoors or not.	The device is not weatherproof. It needs to be equipped with a weatherproof case for outdoors using. However, equipped with a weatherproof case might disable the audio function of the device.
<b>Install the Device</b>	
Status LED does not light up.	<ul style="list-style-type: none"> <li>• Check and confirm that the DC power adaptor, included in packaged, is used. Secure the power connector and re-power it on again.</li> <li>• If also check if IPWizard II can find out the camera over the network after plug in the power and network cable. This may due to the LED light has been set to turn off.</li> <li>• If the problem is not solved, the device might be faulty. Contact your dealer for further help.</li> </ul>
The network cabling is required for the device.	The device uses Category 5 UTP cable allowing 10 and/or 100 Base-T networking.
The device will be installed and work if a firewall exists on the network.	If a firewall exists on the network, port 80 is open for ordinary data communication. The HTTP port and RTSP port need to be opened on the firewall or NAT router.
The username and password for the first time or after factory default reset	Username = <b>admin</b> and leave password blank. <b>Note:</b> that it's all case sensitivity.
Forgot the username and password	Follow the steps below to restore the factory default. <ol style="list-style-type: none"> <li>1. Restore the factory default setting by press pressing and holding down more than 3 seconds on the device.</li> <li>2. Reconfigure the device.</li> </ol>
Forgot the IP address of	Check IP address of device by using the IPWizard II program or by UPnP discovery.

the device.	
IPWizard II program cannot find the device.	<ul style="list-style-type: none"> <li>• Re-power the device if cannot find the unit within 1 minutes.</li> <li>• Do not connect device over a router. IPWizard II program cannot detect device over a router.</li> <li>• If IP address is not assigned to the PC which running IPWizard II program, then IPWizard II program cannot find device. Make sure that IP address is assigned to the PC properly.</li> <li>• Antivirus software on the PC might interfere with the setup program. Disable the firewall of the antivirus software during setting up this device.</li> <li>• Check the firewall setting of your PC or Notebook.</li> </ul>
Internet Explorer does not seem to work well with the device	Make sure that your Internet Explorer is version 6.0 or later. If you are experiencing problems, try upgrading to the latest version of Microsoft's Internet Explorer from the Microsoft web page.
IPWizard II program fails to save the network parameters.	<ul style="list-style-type: none"> <li>• Network may have trouble. Please double check the parameters and connections of the device.</li> </ul>
<b>UPnP Connection</b>	
Can not work with my router	<ul style="list-style-type: none"> <li>• Maybe the router does not support UPnP function. Please check user's manual of the router and turn on UPnP function.</li> <li>• Maybe UPnP function of the router is not compatible to the IP camera. Please contact your dealer to get the approval routers list.</li> </ul>
Some IP cameras are working but others are failed	<ul style="list-style-type: none"> <li>• Maybe too many IP cameras have been installed on the LAN, and then NAT router is out of resource to support more cameras. You could turn off and on NAT router to clear out of date information inside router.</li> </ul>
<b>Access the Device</b>	
Cannot access the login page and other web pages of the Network Camera from Internet Explorer	<ul style="list-style-type: none"> <li>• Maybe the IP Address of the Network Camera is already being used by another device or computer. To confirm this possible problem, disconnect the Network Camera from the network first, and then run the PING utility to check it out.</li> <li>• Maybe due to the network cable. Try correcting your network cable and configuration. Test the network interface by connecting a local computer to the Network Camera via a crossover cable.</li> <li>• Make sure the Internet connection and setting is ok.</li> <li>• Make sure enter the IP address of Internet Explorer is correct. If the Network Camera has a dynamic address, it may have changed since you last checked it.</li> <li>• Network congestion may prevent the web page appearing quickly. Wait for a while. The IP address and Subnet Mask of the PC and Network Camera must be in the same class of the private IP address on the LAN.</li> <li>• Make sure the http port used by the Network Camera, default=80, is forward to the</li> </ul>

	<p>Network Camera's private IP address.</p> <ul style="list-style-type: none"> <li>• The port number assigned in your Network Camera might not be available via Internet. Check your ISP for available port.</li> <li>• The proxy server may prevent you from connecting directly to the Network Camera, set up not to use the proxy server.</li> <li>• Confirm that Default Gateway address is correct.</li> <li>• The router needs Port Forwarding feature. Refer to your router's manual for details.</li> <li>• Packet Filtering of the router may prohibit access from an external network. Refer to your router's manual for details.</li> <li>• Access the Network Camera from the Internet with the global IP address of the router and port number of Network Camera.</li> <li>• Some routers reject the global IP address to access the Network Camera on the same LAN. Access with the private IP address and correct port number of Network Camera.</li> <li>• When you use DDNS, you need to set Default Gateway and DNS server address.</li> <li>• If it's not working after above procedure, reset Network Camera to default setting and installed it again.</li> <li>• If the problem is not solved, the Network Camera might be faulty. Contact your dealer for further help.</li> </ul>
Image or video does not appear in the main page.	<ul style="list-style-type: none"> <li>• The first time the PC connects to Network Camera, a pop-up <b>Security Warning window</b> will appear to download ActiveX Controls. When using Windows XP, or Vista, log on with an appropriate account that is authorized to install applications.</li> <li>• Network congestion may prevent the Image screen from appearing quickly. You may choose lower resolution to reduce the required bandwidth.</li> </ul>
Check the device's ActiveX is installed on your computer	Go to C:\Windows\Downloaded Program Files and check to see if there is an entry for the file " <b>IPCamera Control</b> ". The status column should show "Installed". If the file is not listed, make sure your Security Settings in Internet Explorer are configured properly and then try reloading the device's home page. Most likely, the ActiveX control did not download and install correctly. Check your Internet Explorer security settings and then close and restart Internet Explorer. Try to browse and log in again.
Internet Explorer displays the following message: "Your current security settings prohibit downloading ActiveX controls".	Setup the IE security settings or configure the individual settings to allow downloading and scripting of ActiveX controls.
The device work locally but not externally.	<ul style="list-style-type: none"> <li>• Might be caused from the firewall protection. Check the Internet firewall with your system or network administrator. The firewall may need to have some settings</li> </ul>

	<p>changed in order for the device to be accessible outside your LAN.</p> <ul style="list-style-type: none"> <li>• Make sure that the device isn't conflicting with any other web server running on your LAN.</li> <li>• Check the configuration of the router settings allow the device to be accessed outside your local LAN.</li> <li>• Check the bandwidth of Internet connection. If the Internet bandwidth is lower than target bit rate, the video streaming will not work correctly.</li> </ul>
The unreadable characters are displayed.	Use the operating system of the selected language. Set the Encoding or the Character Set of the selected language on the Internet Explorer.
Frame rate is slower than the setting.	<ul style="list-style-type: none"> <li>• The traffic of the network and the object of the image affect the frame rate. The network congestion causes frame rate slower than the setting.</li> <li>• Check the bandwidth of Internet connection. If the Internet bandwidth is lower than target bit rate, the video streaming will not work correctly.</li> <li>• Ethernet switching hub can smooth the frame rate.</li> </ul>
Blank screen or very slow video when audio is enabled.	<ul style="list-style-type: none"> <li>• Your connection to the device does not have enough bandwidth to support a higher frame rate for the streamed image size. Try reducing the video streaming size to 160x120 or 320x240 and/or disabling audio.</li> <li>• Audio will consume 32 kbps. Disable audio to improve video. Your Internet connection may not have enough bandwidth to support streaming audio from the device.</li> </ul>
Image Transfer on e-mail or FTP does not work.	<ul style="list-style-type: none"> <li>• Default Gateway and DNS server address should be set up correctly.</li> <li>• If FTP does not work properly, ask your ISP or network administrator about the transferring mode of FTP server.</li> </ul>
Pan/Tilt does not work. (including Click to Center and Preset Positioning)	<ul style="list-style-type: none"> <li>• Click [<b>Refresh</b>] on the Internet Explorer when the communication stops with the device. The image will refresh.</li> <li>• Other clients may be operating Pan/Tilt.</li> <li>• Pan/Tilt operation has reached the end of corner.</li> </ul>
Pan/Tilt does not work smoothly.	There may be a slight delay when you are using the Pan/Tilt feature in conjunction with streaming audio and video. If you find that there is a significant delay while panning or tilting the camera, try disabling the audio streaming and/or reducing the video streaming size.
<b>Video Quality of the Device</b>	
The focus on the Camera is bad.	<ul style="list-style-type: none"> <li>• The lens may be dirty or dust is attached. Fingerprints, dust, stain, etc. on the lens can degrade the image quality.</li> </ul>
The color of the image is poor or strange.	<ul style="list-style-type: none"> <li>• Adjust White Balance.</li> <li>• To insure the images you are viewing are the best they can be, set the Display property setting (color quality) to 16bit at least and 24 bit or higher if possible within your computer.</li> </ul>

	<ul style="list-style-type: none"><li>•The configuration on the device image display is incorrect. You need to adjust the image related parameters such as brightness, contrast, hue and sharpness properly.</li></ul>
Image flickers.	<ul style="list-style-type: none"><li>• Wrong power line frequency makes images flicker. Make sure the 50 or 60Hz format of your device.</li><li>• If the object is dark, the image will flicker. Make the condition around the Camera brighter.</li></ul>
Noisy images occur.	The video images might be noisy if the device is located in a very low light environment. Make the condition around the camera brighter or turn the White-light LED on
<b>Miscellaneous</b>	
Can not play the recorded ASF file	You will need to install Microsoft®'s DirectX 9.0 or later and use the Windows Media Player 11.0 or later to play the AVI filed recorded by the Device.



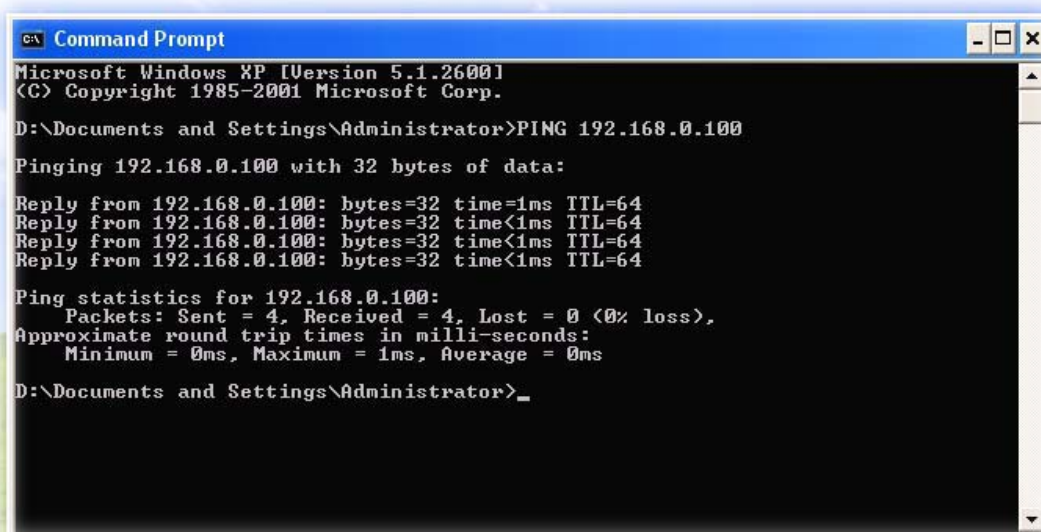
## Appendix C: Ping IP Address

The PING (stands for Packet Internet Groper) command is used to detect whether a specific IP address is accessible by sending a packet to the specific address and waiting for a reply. It's also a very useful tool to confirm the device installed or if the IP address conflicts with any other devices over the network.

If you want to make sure the IP address of the device, utilize the PING command as follows:

- Start a DOS window.
- Type ping x.x.x.x, where x.x.x.x is the IP address of the device.

The replies, as illustrated below, will provide an explanation to the problem.



```
C:\> Command Prompt
Microsoft Windows XP [Version 5.1.2600]
(C) Copyright 1985-2001 Microsoft Corp.

D:\Documents and Settings\Administrator>PING 192.168.0.100

Pinging 192.168.0.100 with 32 bytes of data:

Reply from 192.168.0.100: bytes=32 time=1ms TTL=64
Reply from 192.168.0.100: bytes=32 time<1ms TTL=64
Reply from 192.168.0.100: bytes=32 time<1ms TTL=64
Reply from 192.168.0.100: bytes=32 time<1ms TTL=64

Ping statistics for 192.168.0.100:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 0ms, Maximum = 1ms, Average = 0ms

D:\Documents and Settings\Administrator>_
```

If you want to detect any other devices conflicts with the IP address of Network Camera, also can utilize the PING command but you must disconnect the device from the network first.

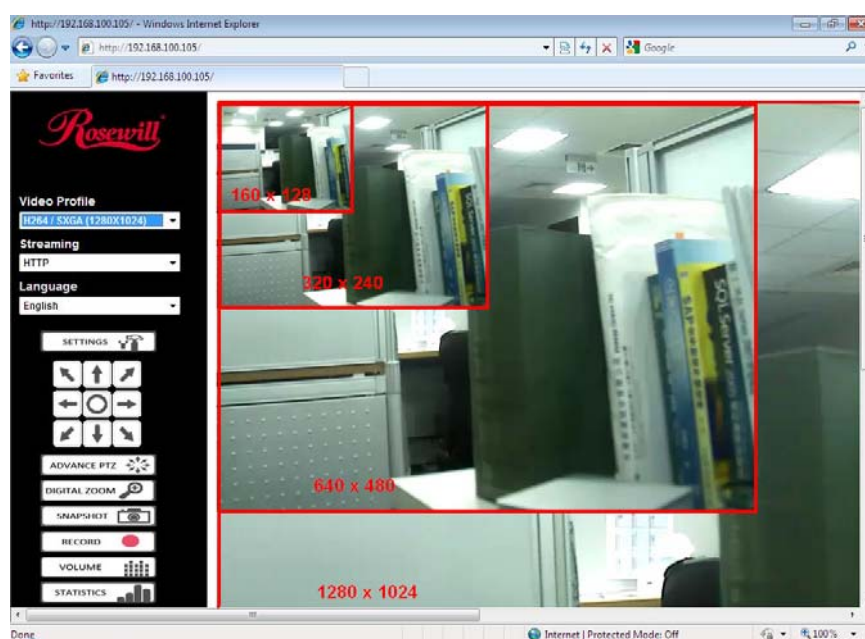
## Appendix D: Bandwidth Estimation

The frame rate of video transmitted from the device depends on connection bandwidth between client and server, video resolution, codec type, and quality setting of server. Here is a guideline to help you roughly estimate the bandwidth requirements from your device.

The required bandwidth depends on content of video source. The slow motion video will produce smaller bit rate generally and fast motion will produce higher bit rate vice versa. Actual results generated by the device may be varying.

Image Resolution	Average range of data sizes for JPEG mode	Average bit rate for MPEG4 mode	Average bit rate for H.264 mode
160 x 120 (QQVGA)	3 ~ 6k byte per frame	64kbps~256kbps @ 30fps	32kbps~192kbps @ 30fps
320 x 240 (QVGA)	8 ~ 20k byte per frame	256kbps~768kbps @ 30fps	192kbps~512kbps @ 30fps
640 x 480 (VGA)	20 ~ 50K byte per frame	512kbps~2048kbps @ 30fps	384kbps~1536kbps @ 30fps
1280x1024 (SXGA)	100 ~ 200k byte per frame	NA	512kbps~3076kbps @ 15fps

**Note:** Audio streaming also takes bandwidth around 32kbps. Some xDSL/Cable modem upload speeds could not even reach up to 128 kbps. Thus, you may not be able to receive good quality video while also streaming audio on a 128 kbps or lower connection. Even though the upload speed is more than 128kbps, for optimal video performance, disabling audio streaming will get better video performance.



## Appendix E: Specifications

Camera Specifications	
Camera	
<b>Image Device</b>	1.3 Mega-pixel image sensor
<b>Max Resolution</b>	1280 x 1024 pixels
<b>Lens</b>	f:4.3mm / F:1.8
<b>Sensitivity</b>	1.0V/lux-sec (550nm)
Video / Image / Audio	
<b>Video Format</b>	H.264, MPEG4 and Motion JPEG simultaneously
<b>Image Frame Rate</b>	Mega-pixel mode: Up to 15fps for all profiles VGA mode: Up to 30fps for all VGA or less profiles
<b>Resolution</b>	SXGA (1280 x 1024; H.264 and MJPEG only), VGA (640x480), QVGA(320x240) and QQVGA(160x120)
<b>Video Profile</b>	13 profiles simultaneously - H.264 SXGA/ VGA / QVGA / QQVGA - MPEG4 VGA / QVGA / QQVGA - M-JPEG SXGA/ VGA / QVGA / QQVGA - ROI-1: H.264@VGA (Allows focus and records on Regions of Interest) - ROI-2: H.264@QVGA (Allows focus and records on Regions of Interest)
<b>Image Setting</b>	De-noise Brightness, sharpness, contrast Text, time and date overlay
<b>Flip Images</b>	Normal / Mirror / Mirror + Vertical Flip / Vertical Flip
<b>Digital Zoom</b>	10x
<b>Light Frequency</b>	Auto, 50Hz, 60Hz
<b>Audio Port</b>	Audio Input: Integrated Microphone Audio Output: Line level out (3.5mm speaker/headphone output Jack)
<b>Audio Encoder</b>	RTSP: G.711 64kbps, G.726 32kbps 3GPP: AMR
Pan/Tilt	

<b>Pan Range / Speed</b>	0° ~ 355°; 180°/ second (MAX)
<b>Tilt Range / Speed</b>	-10° ~ +90°; 120°/ second (MAX)
<b>Preset Positions</b>	128 preset points
<b>Camera Tour</b>	16 tours
<b>Communication</b>	
<b>Network Connection</b>	LAN: 10/100Mbps Auto-MDIX (RXS-3323) Wireless LAN: B/G/N (RXS-4324)
<b>Protocol</b>	TCP, UDP, HTTP, SMTP, FTP, NTP, DNS, DDNS, DHCP, ARP, Bonjour, UPnP, RTSP, RTP, RTCP, PPPoE, 3GPP, ICMP, Samba
<b>System Requirement (via Web Configuration)</b>	
<b>CPU</b>	Pentium III 350MHz or above
<b>Memory Size</b>	128MB or above
<b>Resolution</b>	800 x 600 or above (Best at 1280 x 1024)
<b>Browser</b>	IE 6.0 or above, Firefox 2.0 or above, and Safari
<b>Supported OS</b>	Windows 2000/XP/Vista/Windows 7
<b>Physical /Environment</b>	
<b>Dimension and Weight</b>	Box: 9.50 x 6.50 x 5.75 inches (241 x 165 x 146 mm); 2lbs (907 g) Camera: 4.25 x 4.13 x 4.13 inches (108 x 105 x 105 mm); 0.61 lbs (280 g)
<b>Power</b>	12VDC, 1.5A external power adapter
<b>Power Consumption</b>	7W max (for RXS-4324 with WLAN and LEDs on) or 5W max (For RXS-3323 with LEDs on)
<b>LEDs indicator</b>	Power (Orange), link (Blue) LED enable/disable support
<b>Temperature</b>	Operation: 0°C ~ 40°C (32°F ~ 104°F) Storage : -10°C ~ 60°C (14°F ~ 140°F)

## Appendix F: Configure Port Forwarding Manually

If you want to access the Camera over the internet, you will need to use it together with a router / wireless router. The Camera's IP address needs to be setup as fixed IP address. You will also need to set up the port forwarding or Virtual Server function of router. Please follow the steps as below:

Manually installing the device with a router on your network is an easy 3-step procedure as following:

- (1) Assign a local/fixed IP address to your device
- (2) Access the Router with Your Web browser
- (3) Open/Configure Virtual Server Ports of Your Router

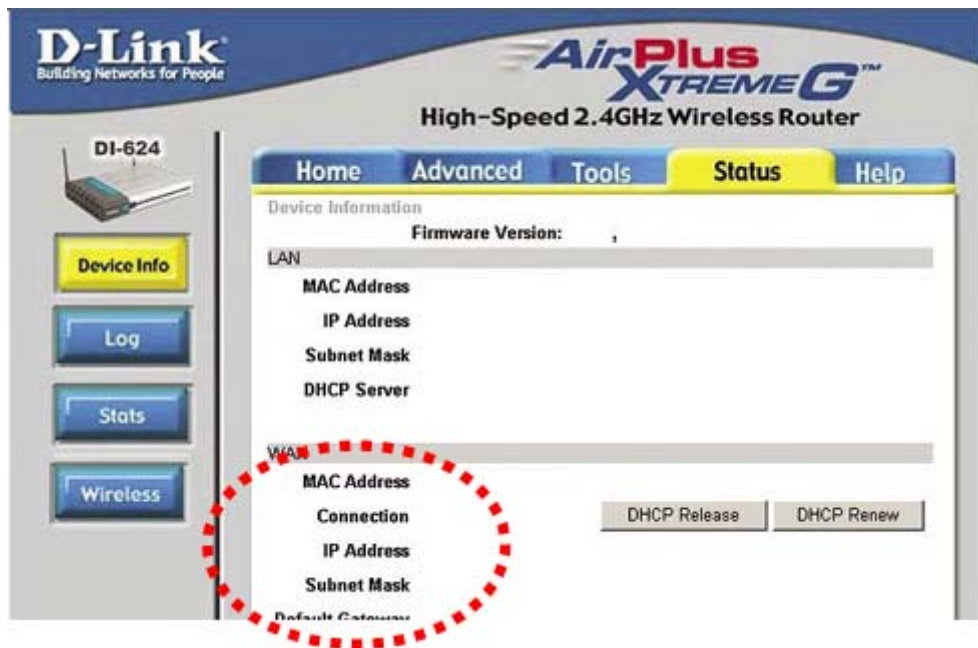
### (1) Assign a local/fixed IP address to your device

The device must be assigned a local and fixed IP Address that allows it to be recognized by the router. Manually setup the device with a fixed IP address, for example, *192.168.0.100*.

### (2) Access the Router with Your Web browser

The following steps generally apply to any router that you have on your network. The D-Link DI-624 is used as an example to clarify the configuration process. Configure the initial settings of the router by following the steps outlined in the router's **Quick Installation Guide**.

If you have cable or DSL service, you will most likely have a dynamically assigned WAN IP Address. 'Dynamic' means that your router's WAN IP address can change from time to time depending on your ISP. A dynamic WAN IP Address identifies your router on the public network and allows it to access the Internet. To find out what your router's WAN IP Address is, go to the **Status** screen on your router and locate the WAN information for your router. As shown on the following page the WAN IP Address will be listed. This will be the address that you will need to type in your web browser to view your camera over the Internet. Be sure to uncheck the **Reset IP address at next boot** button at the top of the screen after modifying the IP address. Failure to do so will reset the IP address when you restart your computer.



Your WAN IP will be listed here

**Note:** Because a dynamic WAN IP can change from time to time depending on your ISP, you may want to obtain a Static IP address from your ISP. A Static IP address is a fixed IP address that will not change over time and will be more convenient for you to use to access your camera from a remote location. If you could not get a Static IP address from your ISP, the DIPSTM or DDNS is a solution alternatively. Please refer to Appendix G for more information.

### (3) Open/set Virtual Server Ports to enable remote image viewing

The firewall security features built into the router and most routers prevent users from accessing the video from the device over the Internet. The router connects to the Internet over a series of numbered ports. The ports normally used by the device are blocked from access over the Internet. Therefore, these ports need to be made accessible over the Internet. This is accomplished using the **Virtual Server** function on the router. The Virtual Server ports used by the camera must be opened through the router for remote access to your camera. Virtual Server is accessed by clicking on the **Advanced** tab of the router screen.

Follow these steps to configure your router's Virtual Server settings

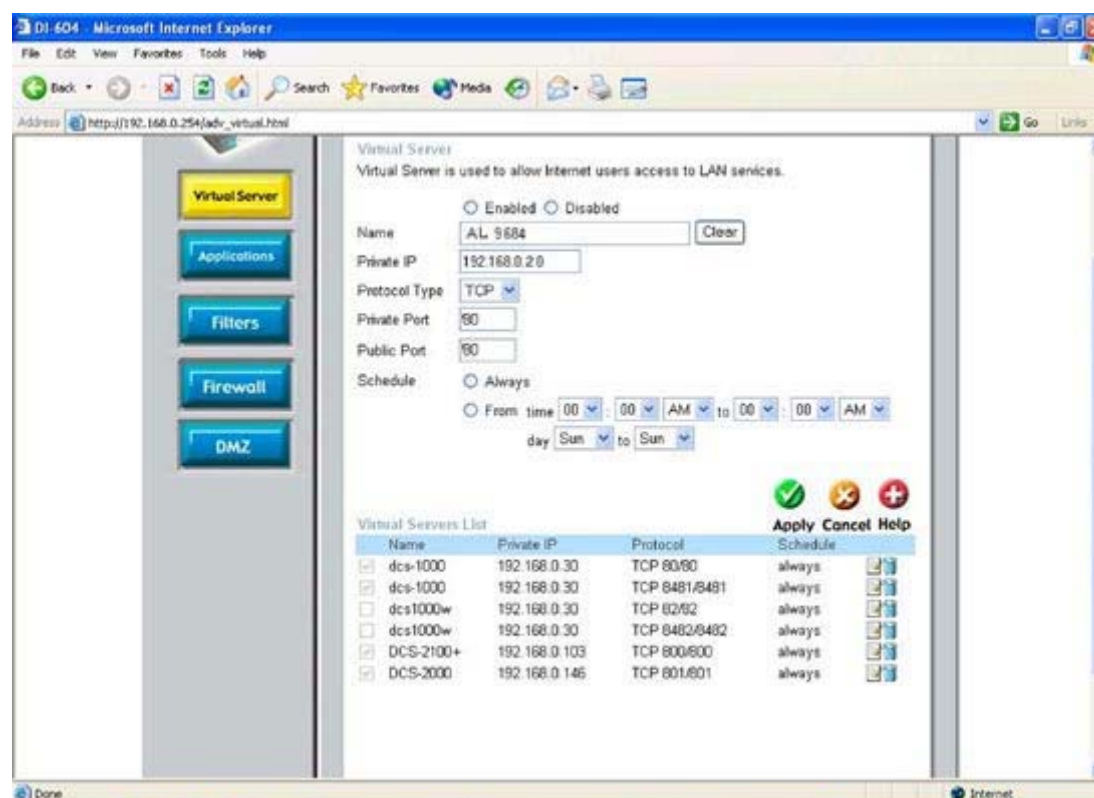
- Click **Enabled**.
- Enter a unique name for each entry.
- Select **Both** under **Protocol Type** (TCP and UDP)
- Enter your camera's local IP Address (e.g., **192.168.0.100**, for example) in the **Private IP** field.
- If you are using the default camera port settings, enter **80** into the **Public** and **Private**

**Port** section, click **Apply**.

- **Scheduling** should be set to **Always** so that the camera images can be accessed at any time.

A check mark appearing before the entry name will indicate that the ports are enabled.

**Important:** Some ISPs block access to port 80. Be sure to check with your ISP so that you can open the appropriate ports accordingly. If your ISP does not pass traffic on port 80, you will need to change the port the camera uses from 80 to something else, such as 8080. Not all routers are the same, so refer to your user manual for specific instructions on how to open ports.



Enter valid ports in the **Virtual Server** section of your router. Please make sure to check the box on this line to enable settings. Then the device can be access from WAN by the router's WAN IP Address.

By now, you have finished your entire PC configuration for this device.



## Appendix G: DDNS Configuration

If you have a Cable modem or xDSL, this is a great way to host your own Networked Device or other TCP/IP Service. Get your own domain like [www.yourname.com](http://www.yourname.com), [www.yourname.org](http://www.yourname.org) etc. Your domain name's dynamic IP address is automatically tracked by a DDNS server.

Host your own Networked Device and much more no matter what your computer's IP address may be and even if you have dialup, DSL or cable modem internet connection where your computer's IP address changes all the time!! DDNS service supports all top level domain names including but not limited to .com, .net, .org, .to, .uk etc.

Normally, DDNS service is only necessary for the users that could only obtain dynamic IP addresses. As to the users that could obtain the static valid IP address, they do not usually have to apply the DDNS service. **Before we can decide if DDNS is necessary, please check with your ISP if your service is using Dynamic IP network or Fix (Static IP network).**

### (1) Environment of Fixed Valid IP Network

If users could obtain valid IP addresses, they could save the effort to apply DDNS service.

Because the IP address in this environment is fixed, users could input the IP address or domain name of demo site directly in the IE browser.

### (2) Environment of Dynamic IP Network

If users is under an environment of dynamic IP network (Dial-up xDSL), they have to apply a domain name in advance. Then apply DDNS service. Finally setup the necessary information of DDNS and PPPoE of the Networked Device in order to let the outside administrator be able to access through internet.

Process of set up your own Domain Name:

- (1) Visit the following web site: <http://www.dyndns.org/>
- (2) Click “Account”





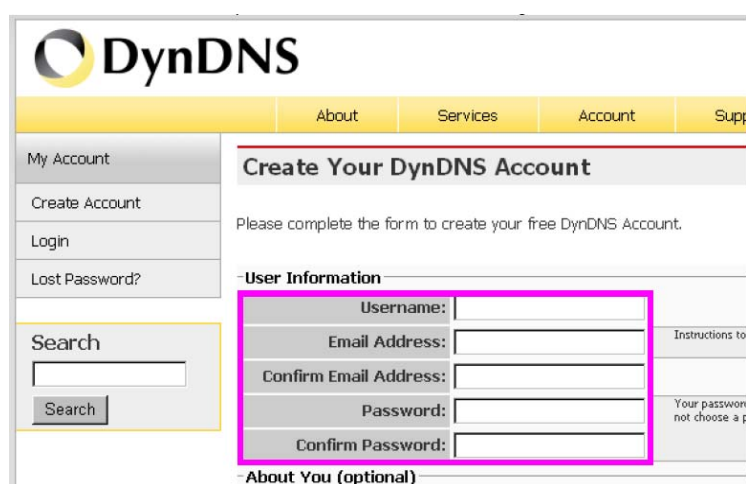
(3). After the columns show up at the left side, click “[Create Account](#)”.



The screenshot shows the DynDNS homepage. On the left, under the 'My Account' section, the 'Create Account' link is highlighted with a red dashed circle. To the right, there is a 'Login' section with a 'Username' input field. At the bottom left, there is a 'Search' bar with a 'Search' button. The top navigation bar includes 'About' and 'Services' links.

(4). Fill the application agreement and necessary information.

- Username
- E-mail address and confirmation
- Password and confirmation
- Submit all the input information and finish creating an account



The screenshot shows the 'Create Your DynDNS Account' form. The form is titled 'Create Your DynDNS Account' and includes the instruction 'Please complete the form to create your free DynDNS Account.' The form is divided into two sections: 'User Information' and 'About You (optional)'. The 'User Information' section contains five input fields: 'Username:', 'Email Address:', 'Confirm Email Address:', 'Password:', and 'Confirm Password:'. These fields are highlighted with a pink box. The 'About You (optional)' section is partially visible at the bottom. The top navigation bar includes 'About', 'Services', 'Account', and 'Support' links.

**Terms of Service**

Please read the acceptable use policy (AUP) and accept it prior to creating your account. Also acknowledge that you may only have one (1) free account, and that creation of multiple free accounts will result in the deletion of all of your accounts.

Policy Last Modified: February 6, 2006

1. ACKNOWLEDGMENT AND ACCEPTANCE OF TERMS OF SERVICE

All services provided by Dynamic Network Services, Inc. ("DynDNS") are provided to you (the "Member") under the Terms and Conditions set forth in this Acceptable Use Policy ("AUP") and any other operating rules and policies set forth by DynDNS. The AUP comprises the entire agreement between the Member and DynDNS and supersedes all prior agreements between the parties regarding the subject matter contained herein. BY COMPLETING THE REGISTRATION PROCESS AND CLICKING THE "Accept" BUTTON, YOU ARE INDICATING YOUR AGREEMENT TO BE BOUND BY ALL OF THE TERMS AND CONDITIONS OF THE AUP.

2. DESCRIPTION OF SERVICE

I agree to the AUP: ☐

I will only create one (1) free account: ☐

Click these two options

**Next Step**

After you click "Create Account", we will create your account and send you an e-mail to the address you provided. Please follow the instructions in that e-mail to confirm your account. You will need to confirm your account within 48 hours or we will automatically delete your account. (This helps prevent unwanted robots on our systems)

Create Account

- (5). Check your e-mail mailbox. There will be an e-mail with a title "Your DynDNS Account Information". Click the hyperlink address to confirm the DDNS service that you just applied. Then DDNS you applied activated.

Your DynDNS Account 'kkkkk' has been created. You need to visit the confirmation address below within 48 hours to complete the account creation process:


[https://www.dyndns.com/account/confirm/oDDGDYN75qTJk\\_ICGba6vQ](https://www.dyndns.com/account/confirm/oDDGDYN75qTJk_ICGba6vQ)

Click to confirm

Our basic service offerings are free, but they are supported by our paid services. See <http://www.dyndns.com/services/> for a full listing of all of our available services.

If you did not sign up for this account, this will be the only communication you will receive. All non-confirmed accounts are automatically deleted after 48 hours, and no addresses are kept on file. We apologize for any inconvenience this correspondence may have caused, and we assure you that it was only sent at the request of someone visiting our site requesting an account.

Sincerely,  
The DynDNS Team

 User:  Pass:

[Lost Password?](#) - [Create Account](#)

About Services Account Support News

My Account

Create Account

Login

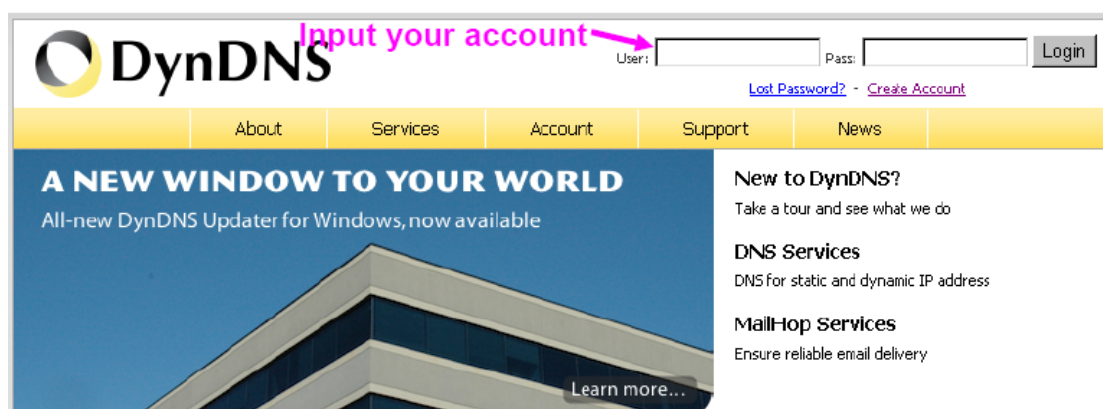
Lost Password?

**Account Confirmed**

The account 'kkkkk' has been confirmed. You can now [login](#) and start using your account.

Be informed of new services, changes to services, and important system maintenance/status notifications by subscribing to our. Once there, you may subscribe to the Announce list by checking the appropriate box and clicking the "Save Settings" button.

- (6). Enter the web page <http://www.dyndns.org/> again. Input your username and password that you just applied to login administration interface of DDNS server.

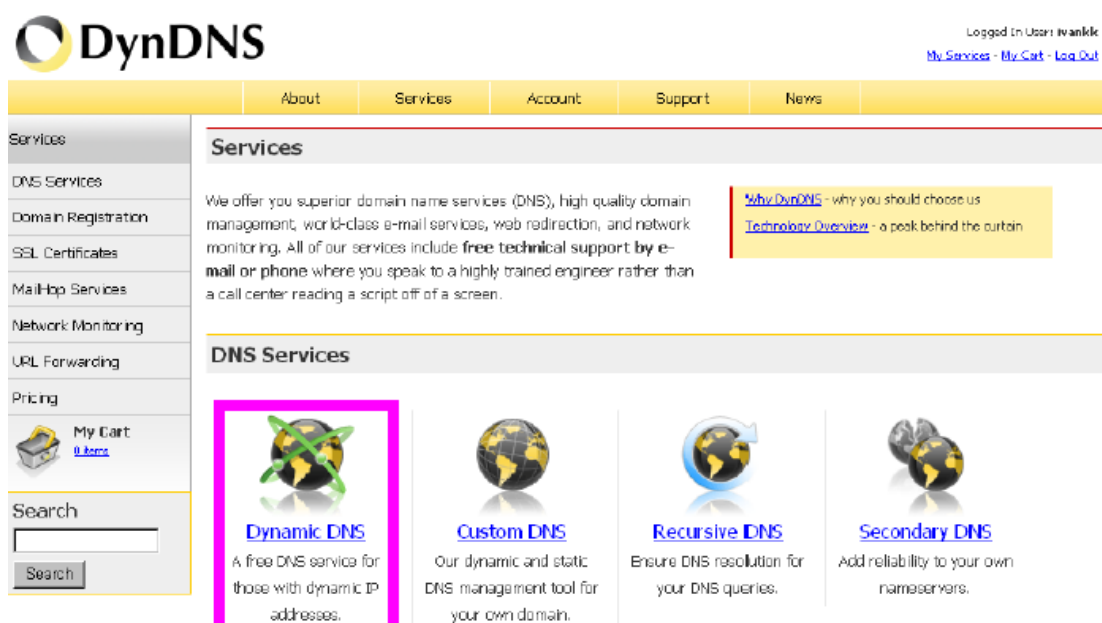


- (7). If the correct username and password are input, you can see the following picture at the top-right of the login page.

- (8). Click the “Services”.



- (9). Click the “Dynamic DNS”.



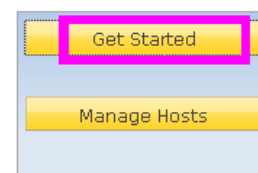
(10). Click the “[Get Started](#)”.

## Dynamic DNS

Dynamic DNS (DDNS) allows you to create a hostname that points to your dynamic IP or static IP address or URL. We also provide an update mechanism which makes the hostname work with your dynamic IP address. **We continue to offer this service free** to the Internet community as we have done so **for nearly 10 years**.

### Capabilities and Features

- Get five (5) hostnames in [88 available domains](#) for free.
- Create wildcard CNAME *\*.yourhost.dyndns.org* for *yourhost.dyndns.org*.
- Forward web requests or mark host offline for maintenance or downtime.
- Configure MX records for flexible mail routing.
- Update host using [cdns update clients](#) for a wide variety of platforms.



### Screenshot



(11). We could create a domain name without any charge at this step. First, we input the host name. (Pink No.1) Then we pick a domain that is easy to remember. (Pink No.2) The 3<sup>rd</sup> step is to click “Offline Hostname” from Service Type. (Pink No.3) Finally, click the “Create Host” to submit the domain name information and finish DDNS application. (Pink No.4)

### Add New Hostname

[↑ Host Services](#)

Note: You currently don't have Account Upgrades in your account. You cannot use some of our Host Service features. Please consider buying Account upgrade that make this form full-functional and will add several other features. [Learn More...](#)

1 → Hostname:   ← 2

Wildcard: ☐ Yes, alias "\*.hostname.domain" to same settings.

Service Type:

- ☐ Host with IP address
- ☐ WebHop Redirect
- ☒ Offline Hostname

3 →

IP Address:

[Use auto detected IP address 118.168.38.166.](#)

TTL value is 60 seconds. [Edit TTL.](#)

Please enter valid IP address (optional for Offline hostnames).

Mail Routing: ☐ Yes, let me configure Email routing.

4 →

At last, you have to enter the web page of Networked Device and setup the necessary information of DDNS and PPPoE after the application of DDNS service. Please check the user manual to access the DDNS and PPPoE pages. After saving the modification, restart the device. Then the external users could browse the Networked Device by the input of their domain name.

## Appendix H: 3GPP and iPhone

To use the 3GPP function, in addition to previous section, you might need more information or configuration to make this function work.

**Note:** that to use the 3GPP function, it strongly recommends to install the Networked Device with a public and fixed IP address without any firewall protection.

### RTSP Port:

Port 554 is the default for RTSP service. However, sometimes, some service providers change this port number for some reasons. If so, user needs to change this port accordingly.

### Dialing procedure:

1. Choose a verified player (PacketVideo or Realplayer currently)
2. Use the following URL to access:

`rtsp://host/mpeg4/media.3gp`

Where *host* is the host name or IP address of the camera.

### Compatible 3G mobile phone:

Please contact your dealer to get the approved list of compatible 3G phone.

### iPhone:

For iPhone, please enter the IP address or the DDNS website address into Safari to start viewing.

Thank you for purchasing a quality Rosewill Product.

Please register your product at: [www.rosewill.com](http://www.rosewill.com) for complete warranty information and future support for your product.