



Network Camera
User's Manual

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Introduction

Thank you for purchased this network camera. This Network Camera unlike traditional CCTV, this is built in the Web Server and Camera to provide users with a mechanism for the security or remote monitoring applications, and it can deliver dual video streams simultaneously (Motion JPEG and H.264), allowing for optimization in image quality and bandwidth.

It offers the many application functions such as two-way audio, DDNS, samba, FTP, Mail, Multicast, motion detection, privacy mask, event management and multi-level passwords for meeting user variety level of security needs.

It is easy to install, convenient to operate, and provide the infrared LED application for Night environment.

System Requirements

Before installing the network camera, please make sure your system has the following recommended minimum hardware requirements.

Internet Environment

Ethernet 10/100M Ethernet

Monitor System Requirements

OS support Microsoft Windows 2000, XP, Vista, Windows 7
Browser support Internet Explorer 6.x or later, Chrome, Firefox, Safari
Hardware **CPU:** Intel Dual Core 2.0 GHz or later
 Memory: 1G MB (2G MB recommended)
 VGA card resolution: 1024x768 or higher

Software Installation

After the hardware has been installed, insert the installation CD into the CD-ROM driver and run the “Cam Finder.exe” following the steps below to search and change the IP address of the Bullet Network Camera.

NOTE :

If the network environment has the router, please make reference to the chapter of **Appendix: Set up the Router Setting with IP Camera** for different environment description.



Click **Run** to set up camera immediately.

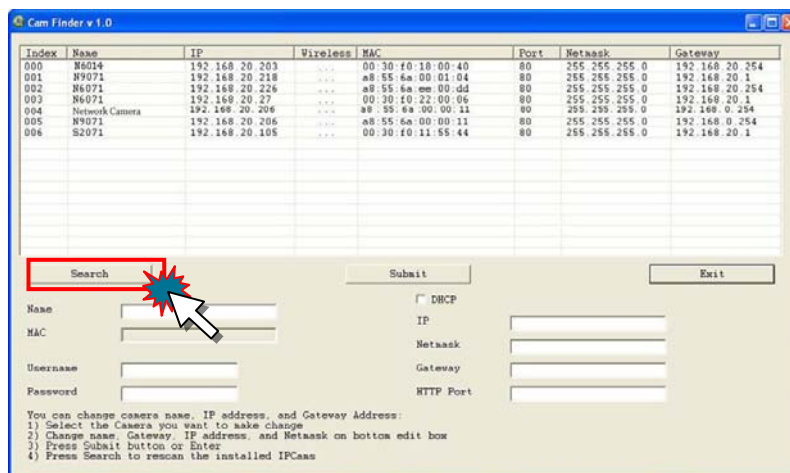
Download the **Cam Finder.exe**.

1. Start the Camera Setting.

Run the **Cam Finder.exe** from the installation CD.

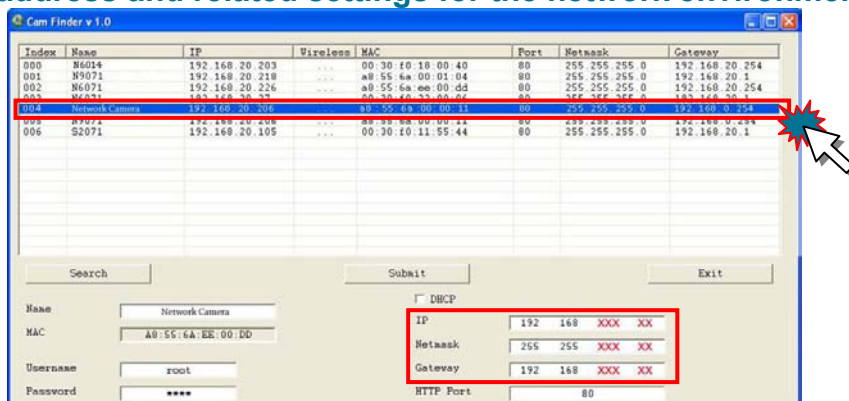


2. Set the IP address of the Network Camera.



Click **Search** to find the IP Camera on the LAN, the factory IP setting **192.168.0.20** appears on the screen.

3. Change the IP address and related settings for the network environment.

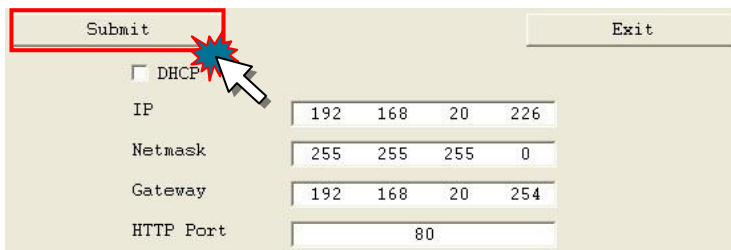


When you find the camera, click it and the settings will appear on the right side. You can change the settings for the new network environment as you need.

NOTE:

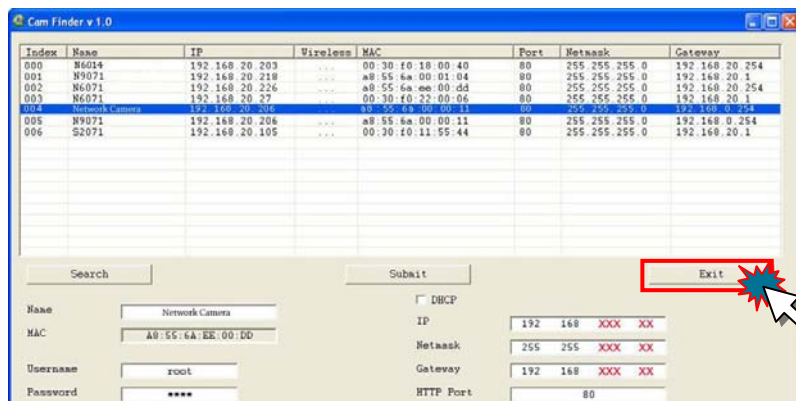
Enter new settings in the field of the **IP**, **Netmask** and **Gateway** fields and keep the settings in other fields unchanged.

4. Submit data



Click **Submit** to apply the new settings.

5. Confirmation



Click **Exit** to quit, after all changes have been confirmed.

NOTE:

The **Cam Finder** can only find the IP addresses of the cameras that share the same hub on the LAN. For more information about finding IP addresses on the Internet, refer to the “**DDNS Setting**”, or “**UPnP Setting**”.

All 3Svision camera/network server products can be found and changed using the **Cam Finder** software.

When the **Cam Finder** software cannot be executed, check your antivirus software or firewall to remove the block.

Field description: You can give a name to your camera (such as “IR_IP” or “IR-IP”). No spaces allowed (such as “PI IP”).

You can change the settings for IP, Gateway Address and Network Mask to meet the requirements of your network environment. The Bullet Network Camera uses HTTP Port1 and does not support Port2 settings.

MAC: Factory default network identity of the Bullet Network Camera.

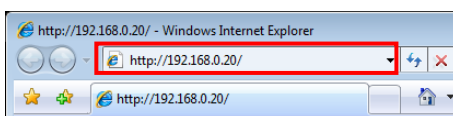
Ready to Use

Access to the IP Camera

You can access the IP Camera through web browsers, follow the instructions to install the required plug-in on your computer.

1. Using Web Browsers

Launch your web browser. (eg. Microsoft Internet Explorer, Mozilla Firefox or Netscape...) and enter the IP address of the IP Camera in the address field.



After fill in "root" in the User Name and Password fields, Click **OK**.



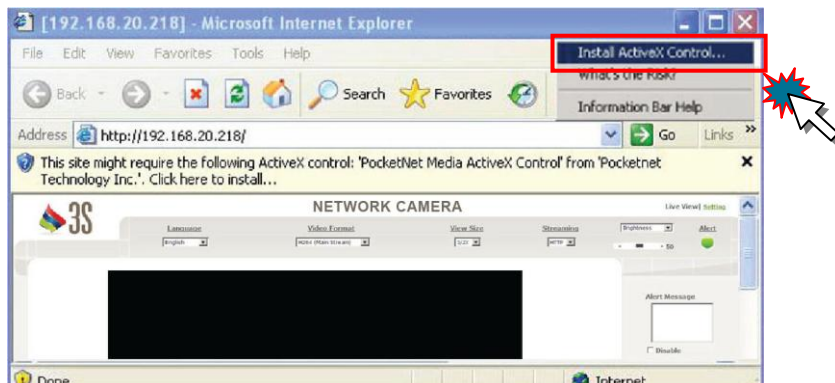
User Name: **root**
Password: **root**

NOTE :

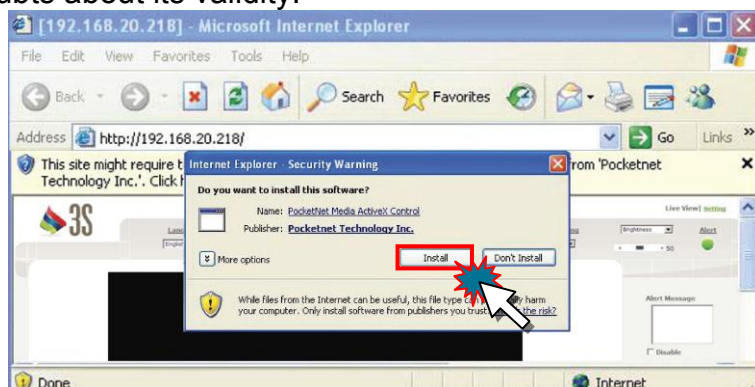
1. If the web browser cannot be display the Camera Main Page, please make reference to the chapter of **Appendix: Change the Inter Explorer Setting** for further detailed description.
2. You can access the camera as an administrator by default and set up for other users or privileges from the "**Basic Settings**" → "**User**".

2. Installation of Internet Explorer ActiveX Controller

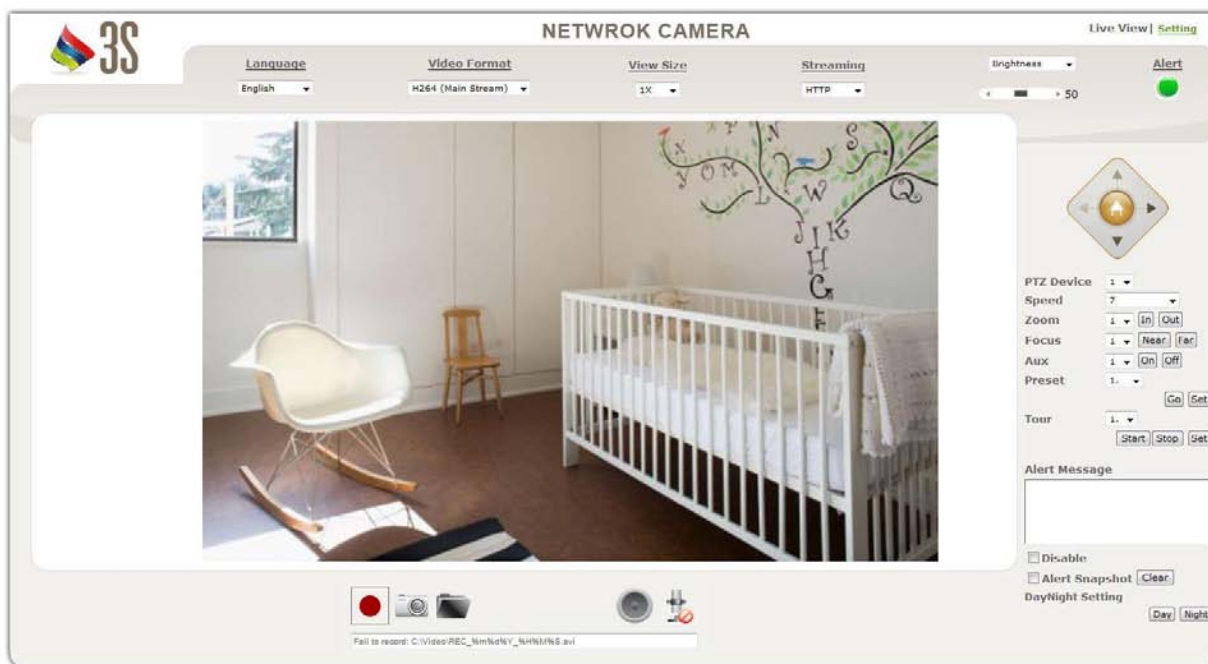
After the Username and Password are confirmed, a control setup screen pops up under the IE address bar. Click "**Install ActiveX Control**" to continue.



The security warning screen appears. Click "**Install**". The ActiveX Control is named "**ActiveX Control**". This software is owned by PocketNet and well certified. You can use it without any doubts about its validity.



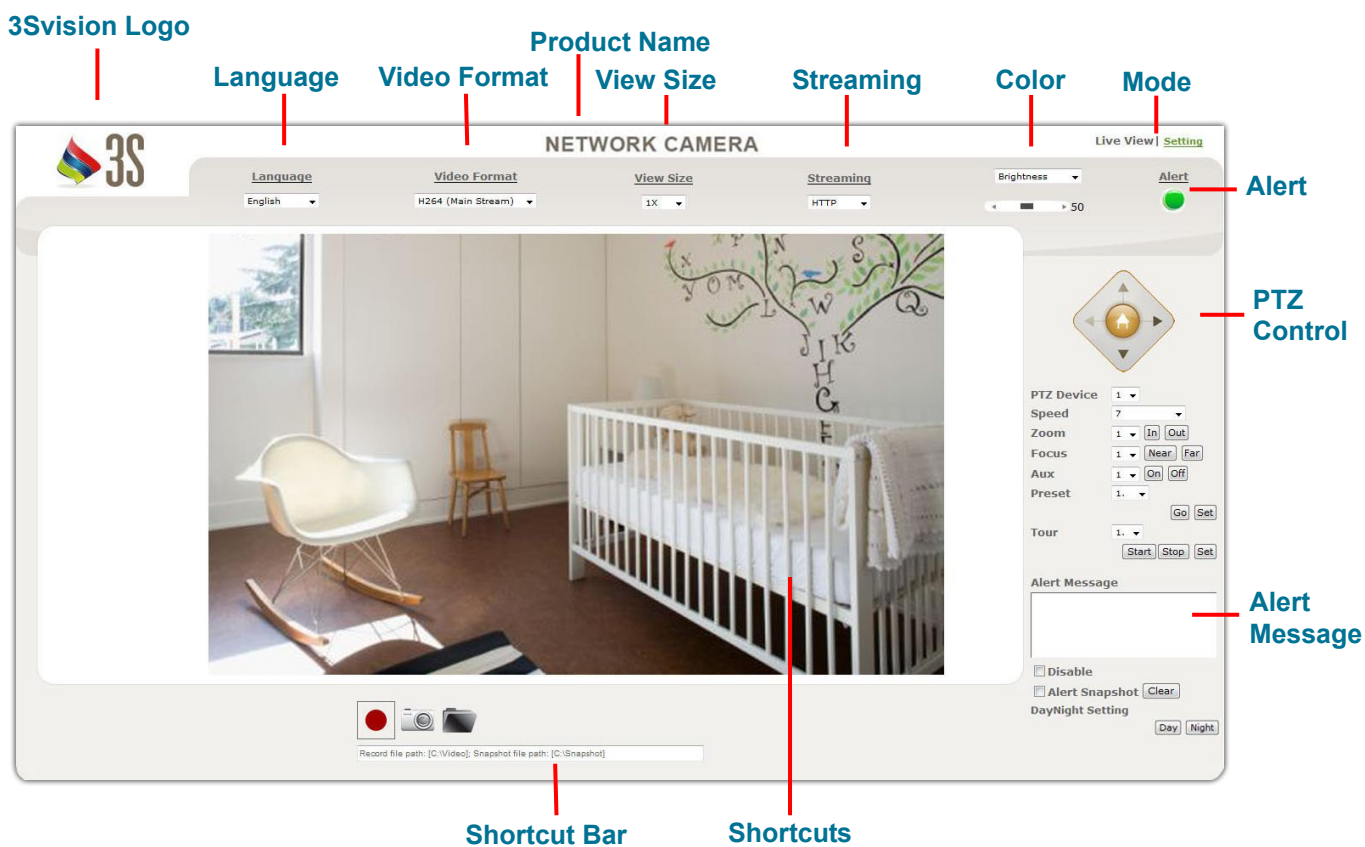
When ActiveX Control is installed successfully, you can see the camera image and interface on your screen.



View of Camera Main Page

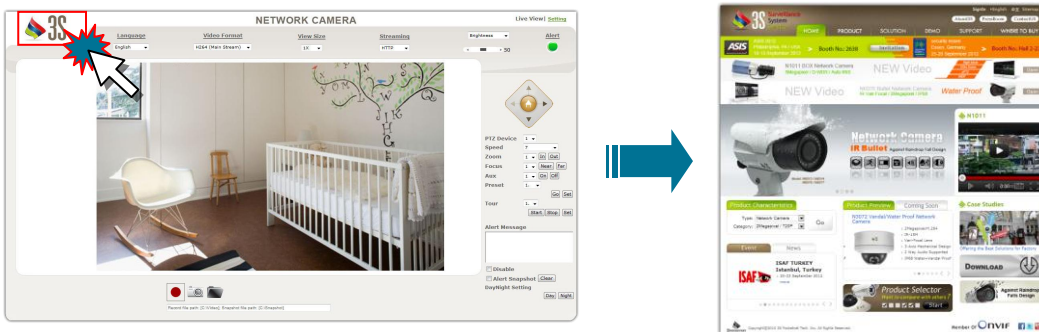
Once you have installed the software from the IE and you are ready to start the setup menu. The Camera utility enables you to change language, video settings. And you can also change the other setting by “**Setting**”.

Live View



3Svision Logo

Click here to visit the website of **3S POCKETNET Tech. Inc.**

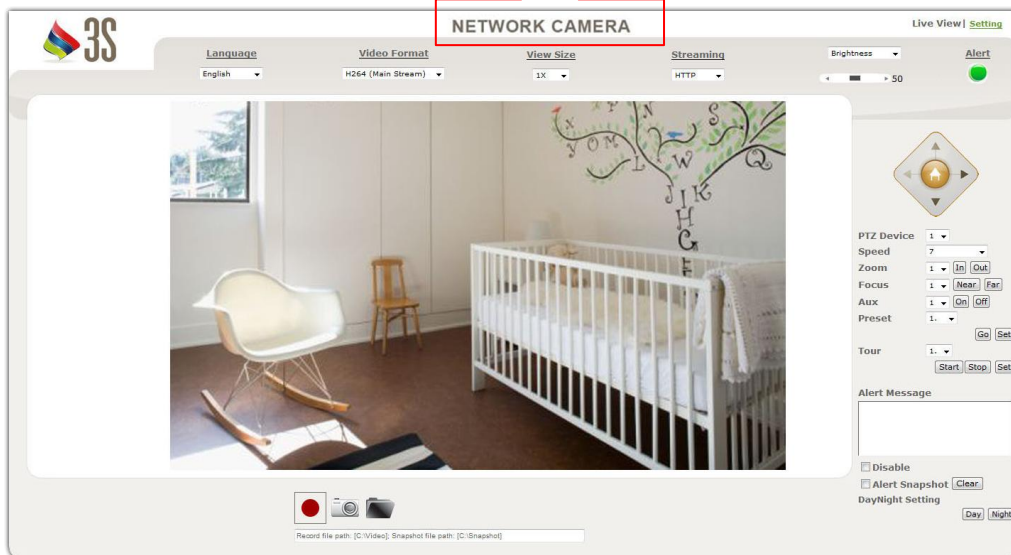


Product Name

Display the product name.

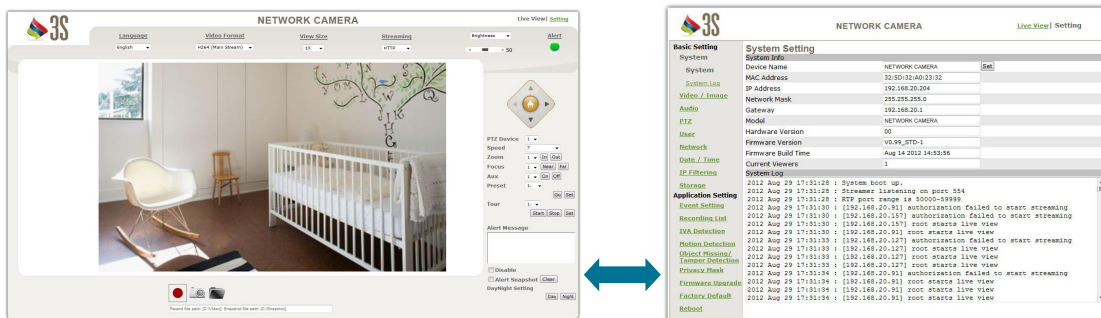
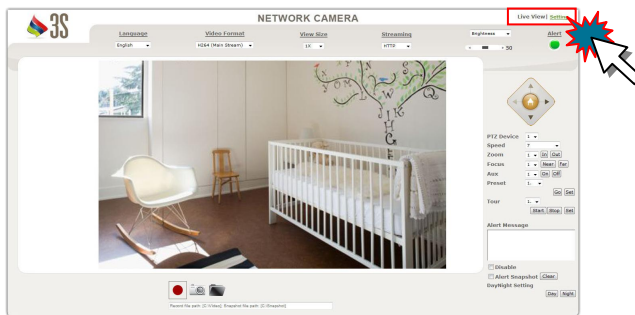
The default name follows the product, and it not releases the permission of modification to customer.

Product Name



Mode

Select the display mode between **Live View** and **Setting**.

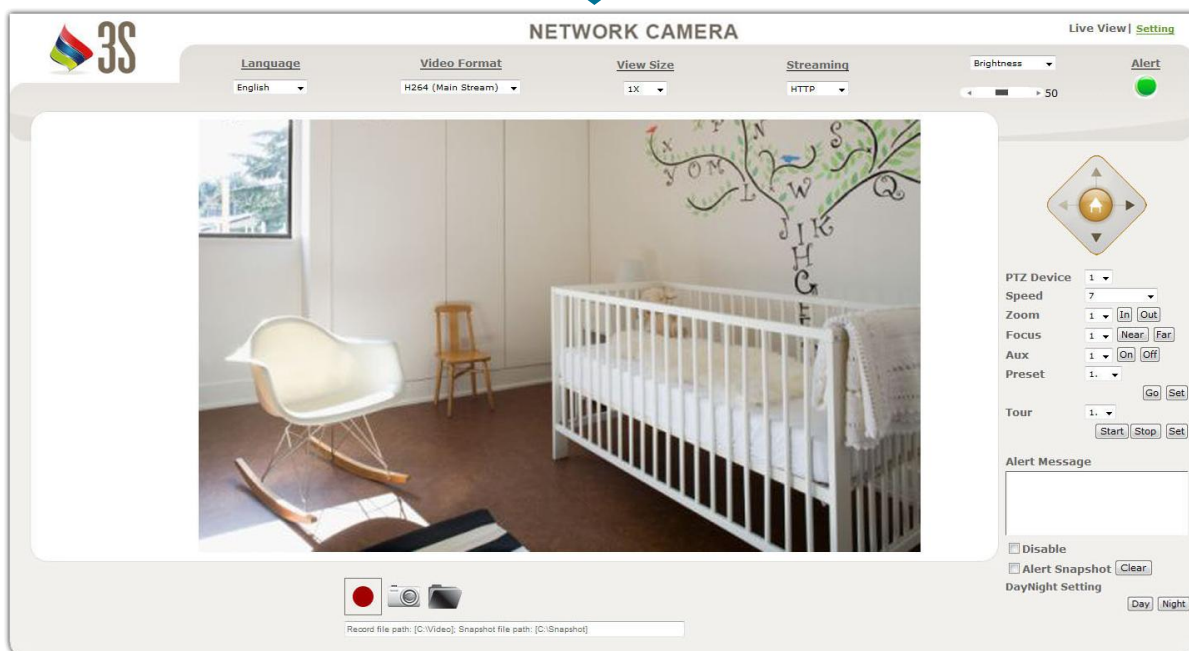


NOTE :

User interface will be customized by the exactly product you purchased.

Language

It supports 7 kinds of different languages in web browser and the default setting is English. Click the pull-down menu to select the language for web browser from **English**, 简体中文 (Simplified Chinese), 繁體中文 (Traditional Chinese), Español (Spanish), Deutsch (German), Français (French) and Nederlandse (Dutch).



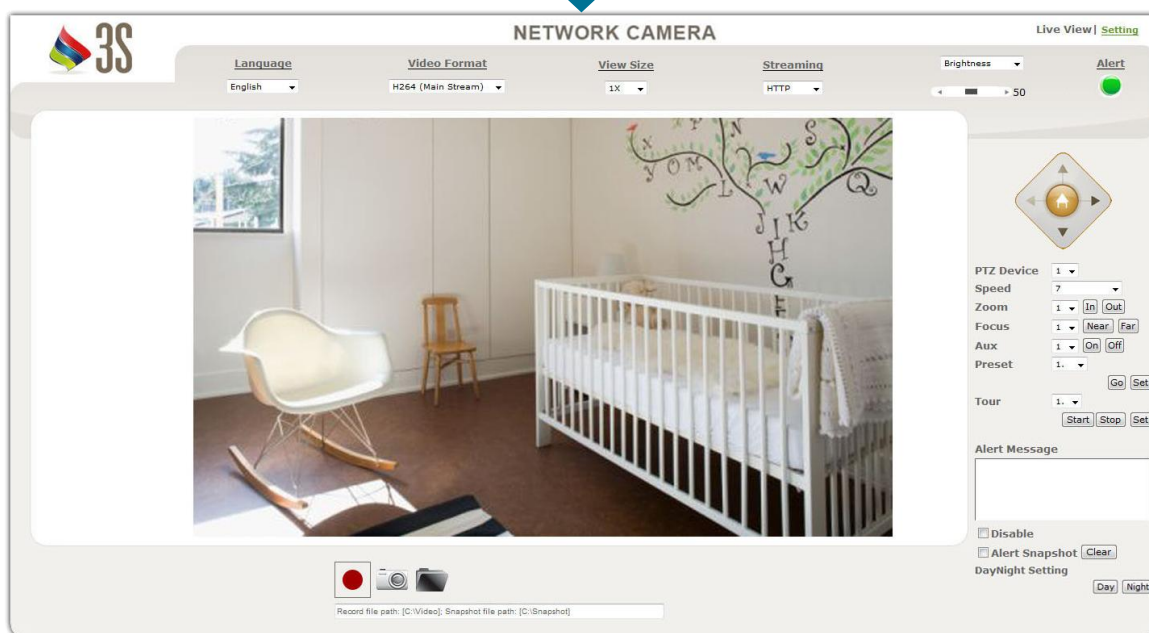
NOTE :
The language selection is not suitable for Shortcuts, because the Shortcut follows the OS language.

Video Format

It provides the triplex streaming, but it can use one streaming on the live view. The default setting is the MPEG H.264 (Main).

Click the pull-down menu to select the video format from **H264 (Main Stream)**, **H264 (Sub Stream)** and **Motion JPEG**.

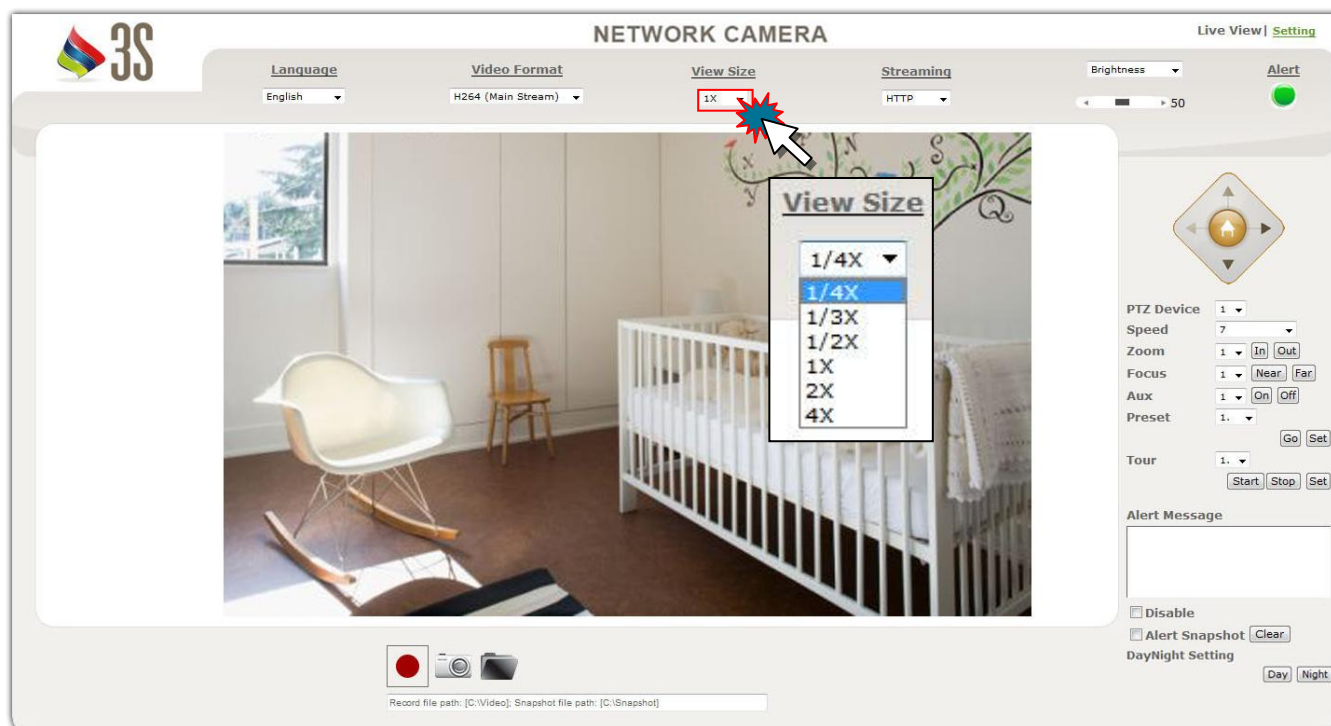
Video Format
H.264 (Main)
H.264 (Sub)
Motion JPEG



View Size

It can fix well the resolution when enlarge or reduce the live view image.

Click the pull-down menu to select the video format from **1/4X**, **1/3X**, **1/2X**, **1X**, **2X** and **4X**.



NOTE :

The quality of the image will become to poor, when you enlarge the view image size.

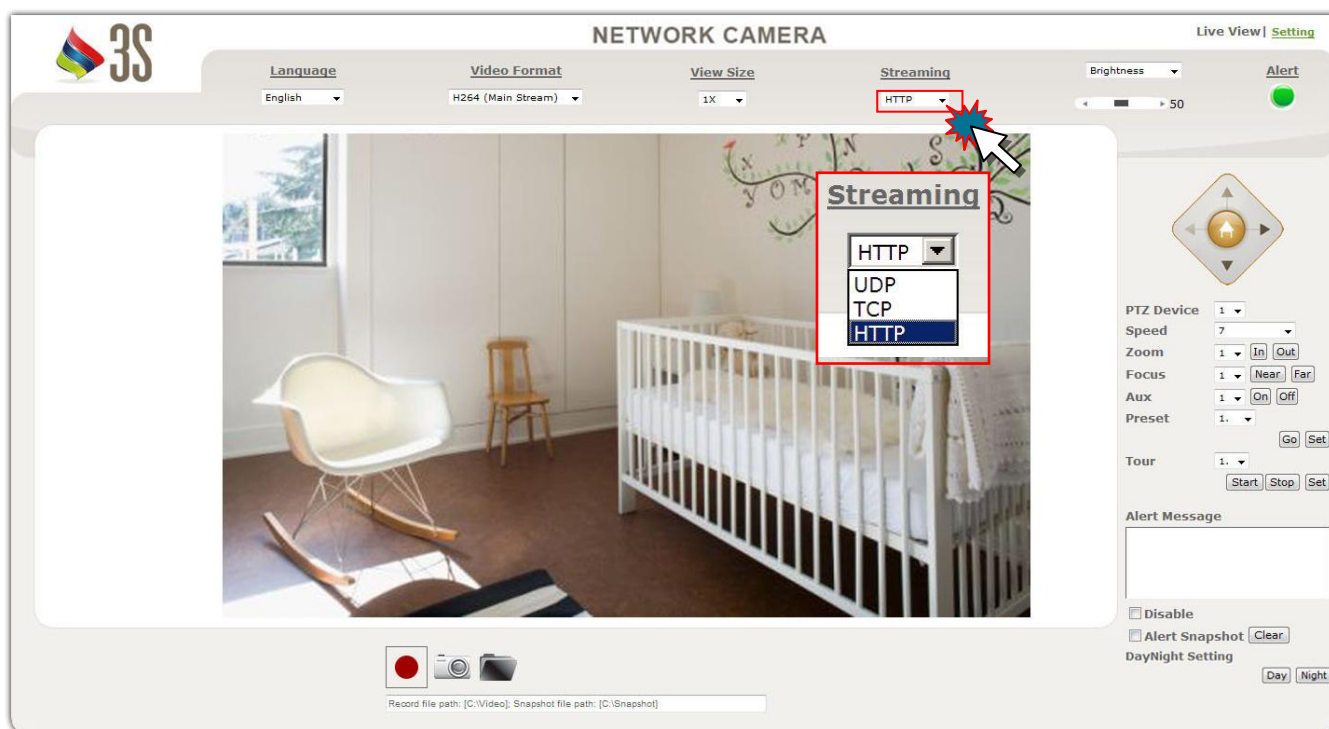
Streaming

It provides 3 kinds of different streaming protocols.

Click the pull-down menu to select the video format from **UDP**, **TCP**, and **HTTP** to apply or integrate on different requirement and environment.

The following tables show the difference between UDP, TCP and HTTP.

Differences Protocol	Tunneling	Pocket Loss	Speed
HTTP	Easy	Fair	Fair
TCP	Fair	Lower	Fast
UDP	Hard	Lowest	Fastest



1. UDP

Provide the fastest but most unreliable transmission service. Video streams are transmitted through RTP 50000~60000 Port to ensure the fastest image transmission.



IP Camera



PC

NOTE :

However, video fragment or mosaics may occur due to poor transmission quality.

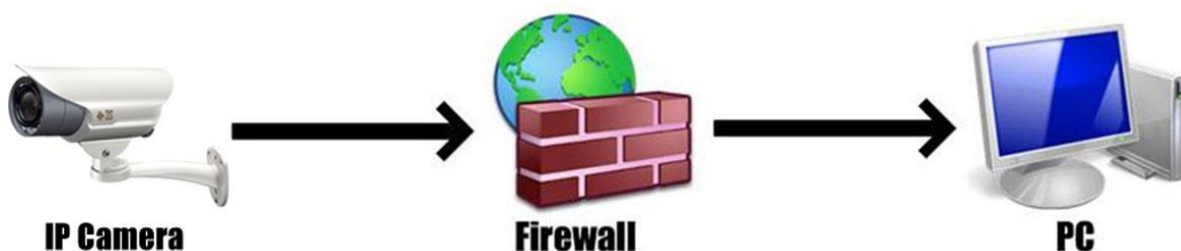
2. TCP

Provide reliable data transmission, because the transmission will check the receiver first. Video streams are transmitted through RTSP 554 Port to avoid video fragment or mosaics, but this protocol will affect the FPS to reduce.



3. HTTP

Video streams are transmitted through HTTP 80 Port to ensure passing through firewalls.



NOTE :

HTTP is recommended if your network is protected with firewalls.

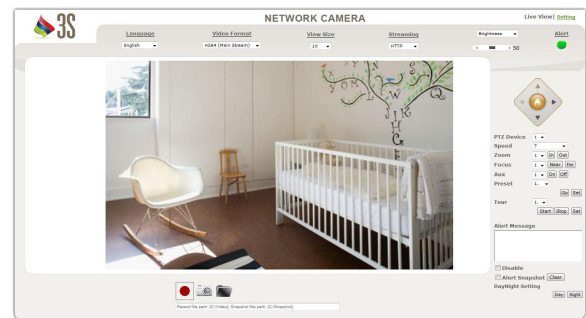
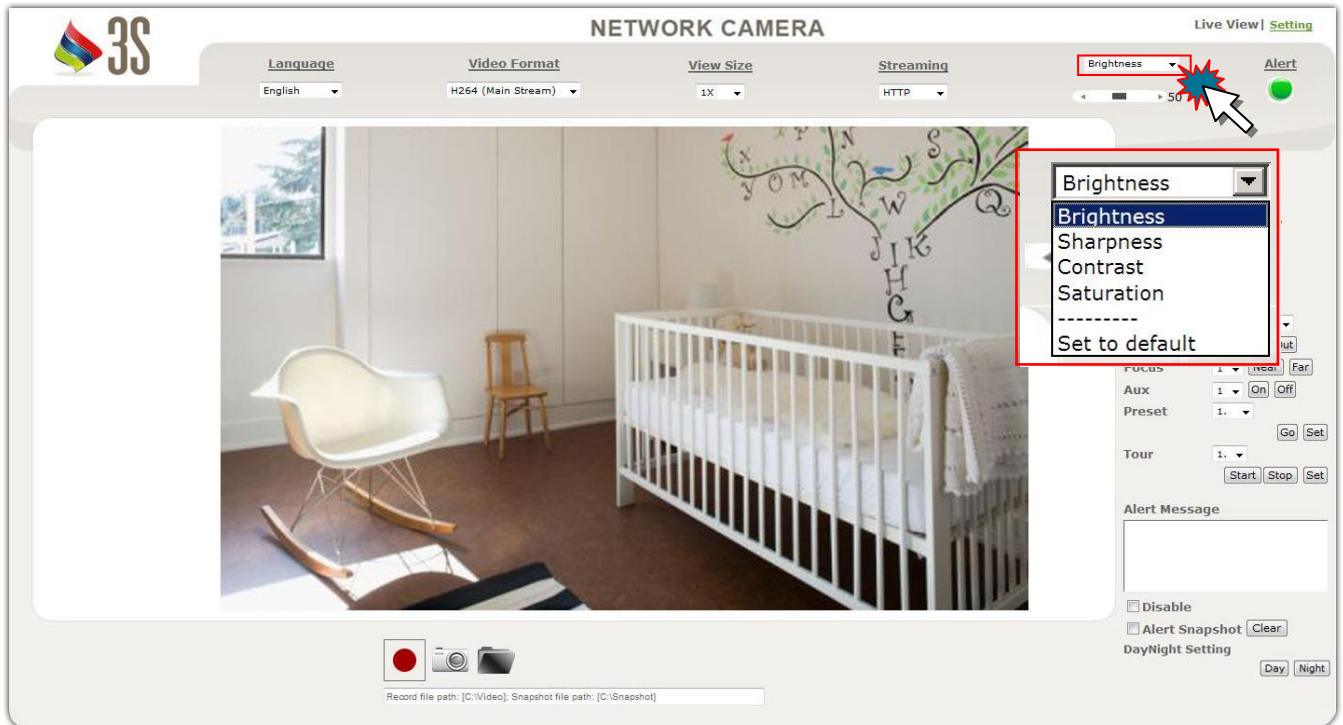
Color

Adjust the value of the color settings for the live view image such as **Brightness**, **Hue**, **Contrast** and **Saturation** by click the ◀ / ▶ button.



You can also adjust the value by drag the slide bar to left or right.





Brightness

Adjust the brightness of image.

Contrast

Adjust the contrast of colors.

Saturation

Adjust the saturation of colors.

Set to default

Reset all of the color settings to default figures.

NOTE :

50 is the default figures of the value for color setting, the range is 0~100. After the value had change and the result will be shown on your screen.

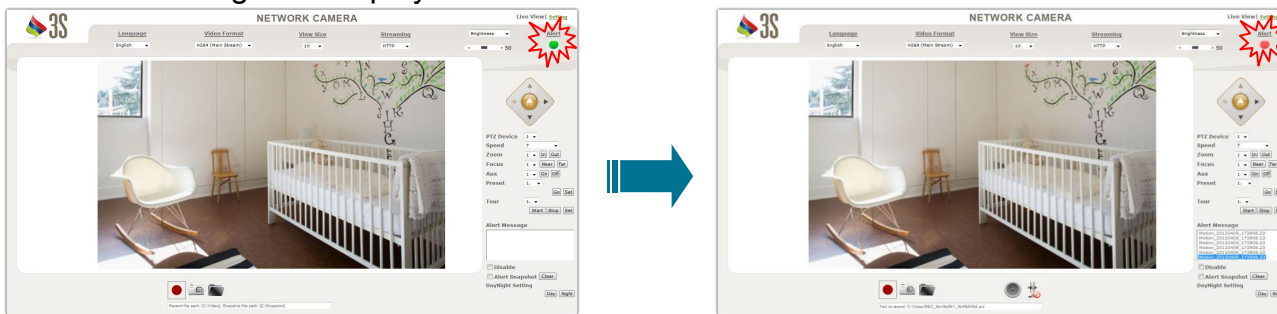
Alert

The alert flash will be changed from green to red in order to warning users immediately when any event is triggered.

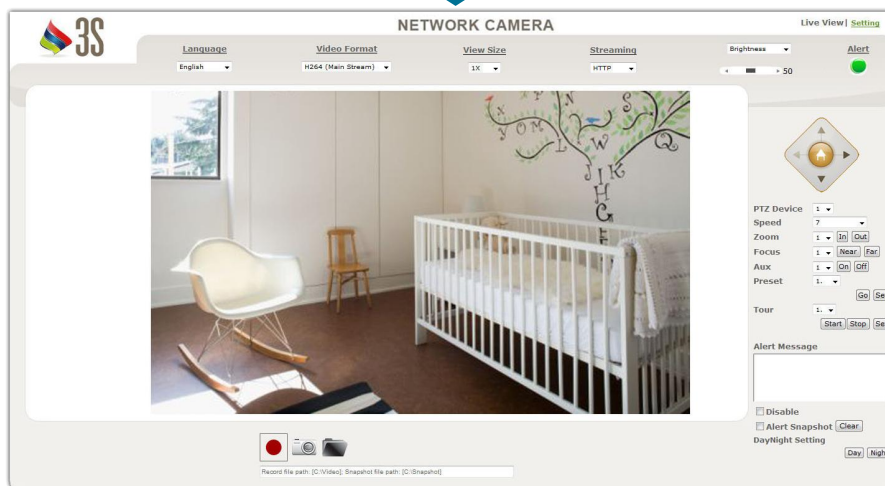
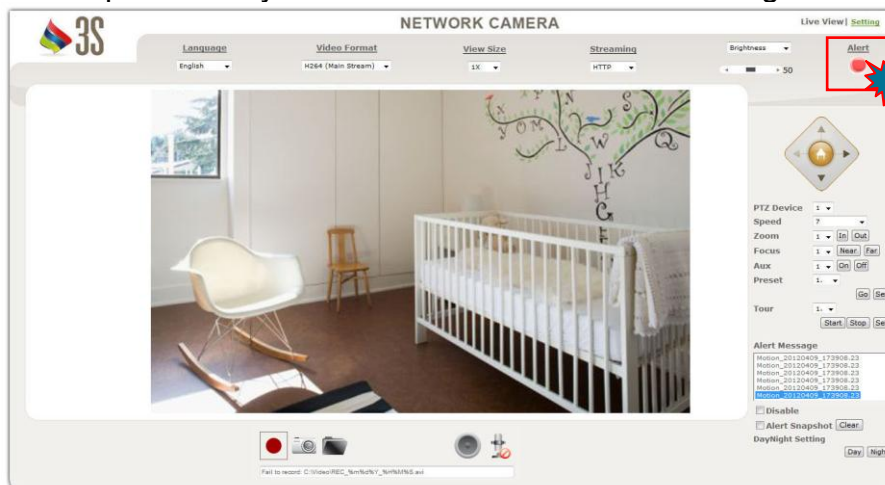
This smart design can prevent the user omitting from any event.

NOTE :

The alert message will display the information at the same time.



The alert flash will keep in red till you disable it. Click the alert flash again to disable it.

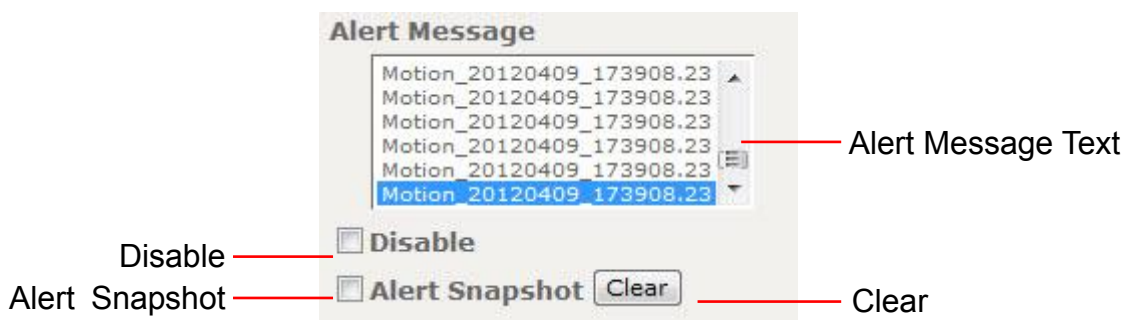
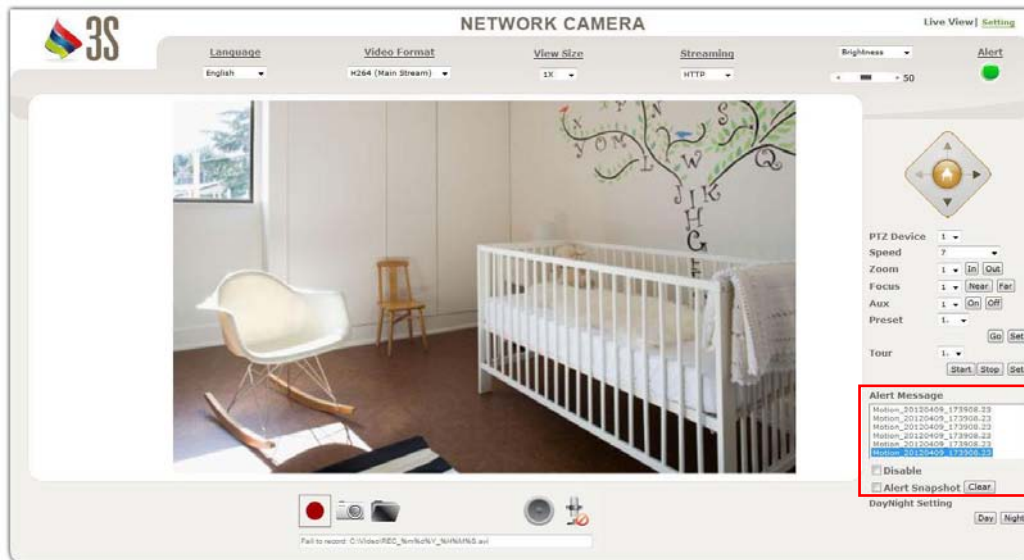


NOTE :

The function of **Alert** needs to match and use with **Event Setting**, please confirmed the **Event Device** and **Setting** before you start this function.

Alert Message

It will display the event message when receiving the event. And some controls and applications will be available. Please see the detail illustration as below:

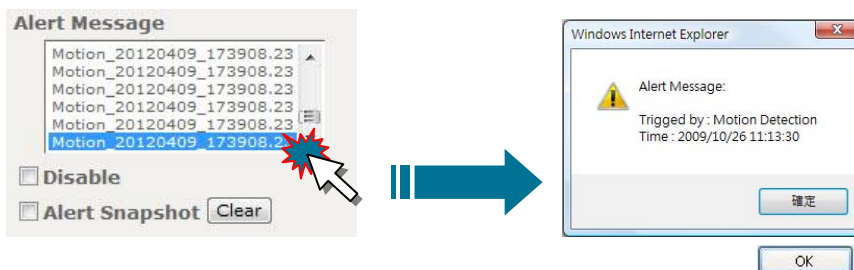


Alert Message Text

Display the message in the field of the **Alert Message Text** when the event is activated. The event message format as below:

Event Type	Date	Time
Motion	MM/DD/YY	HH:MM:SS
Alarm	MM/DD/YY	HH:MM:SS

For the detail information, please double click the event message at the alert message text field and a pop-up window of the alert message will be shown.



NOTE :

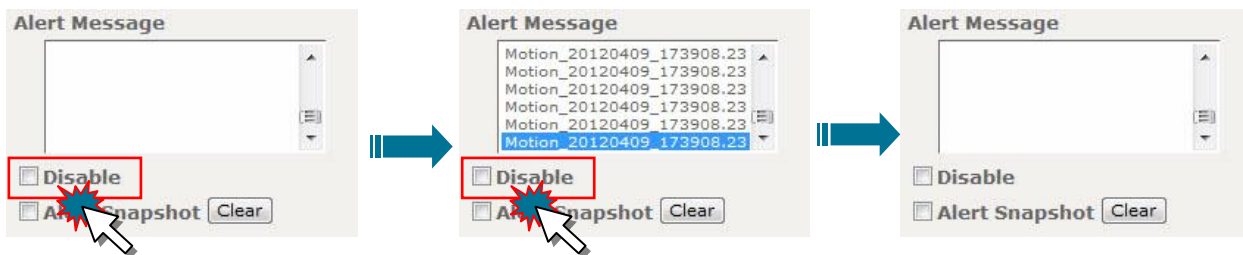
The event type will be different based on the model.

Disable

Enable/Display the Alert Message

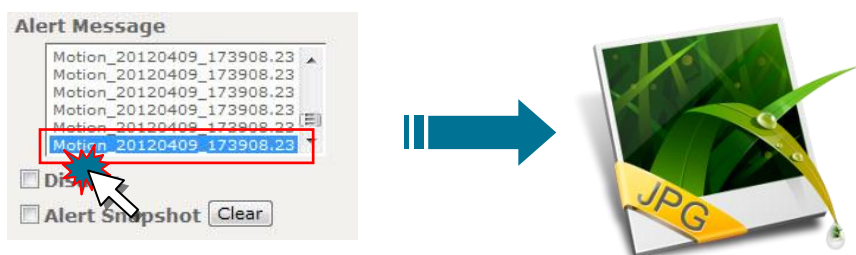
The function of displaying message in field of Alert Message Text can be hidden when Alert is triggered.

Alert Message Text field will keep previous values before Alert being triggered if there is a message already recorded.



Alert Snapshot

It will Snapshot the image when event is triggered. The saving name will follow the Alert Message Text.

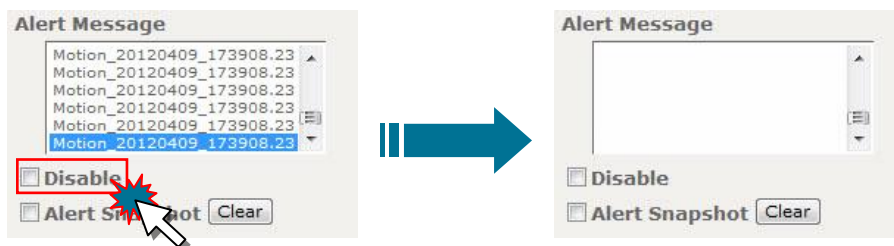


NOTE :

The saving path will follow the path setting from Shortcut Bar.

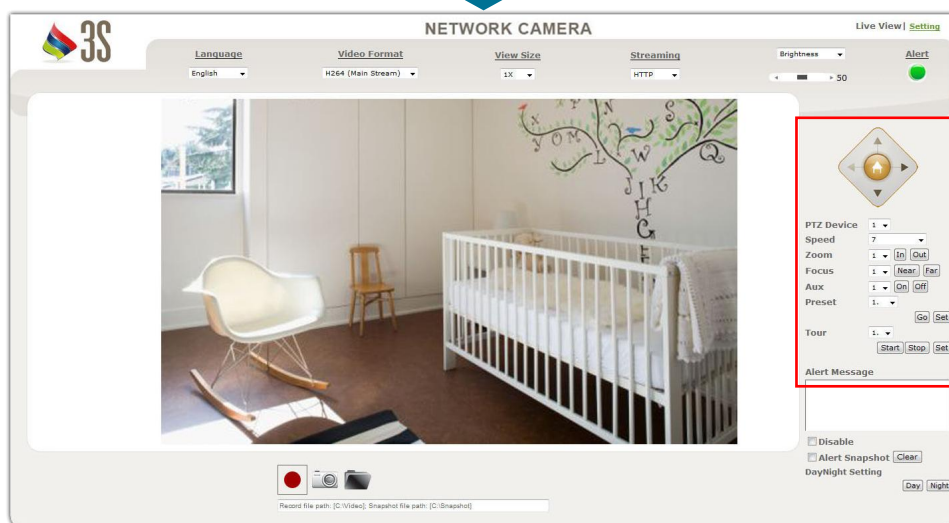
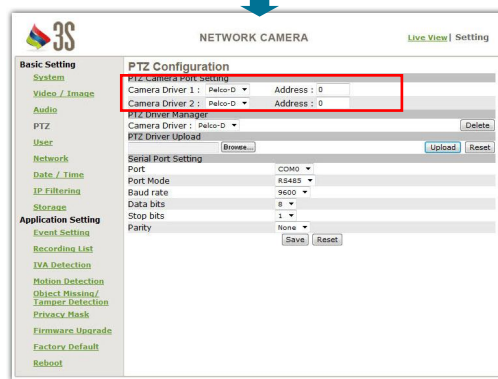
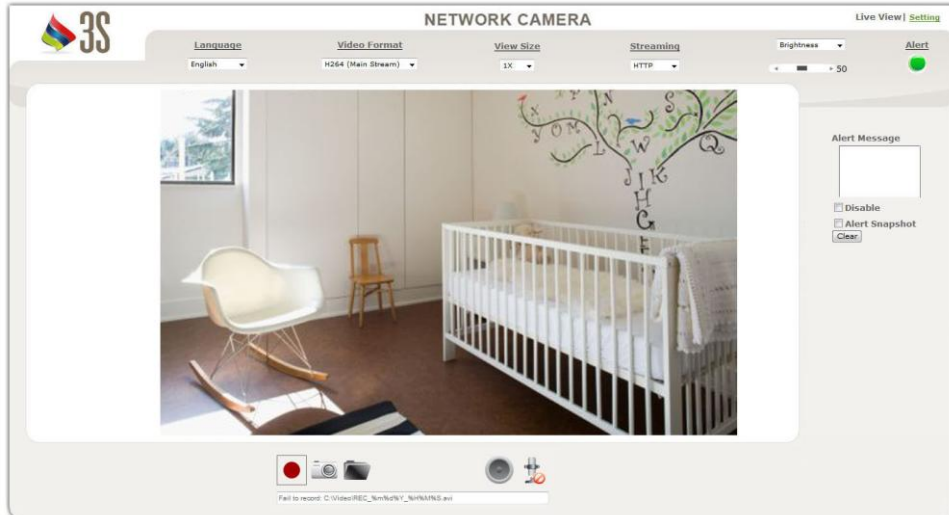
Clear

Click **clear** button to remove all of the event messages from the Alert Message Text.



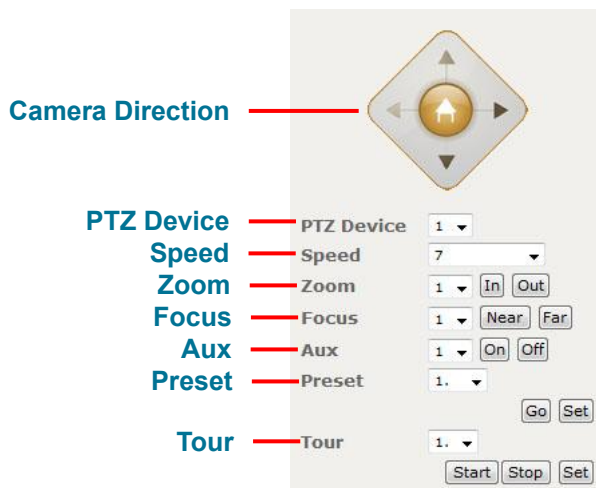
PTZ Control Panel

After enable the PTZ function the control panel of the PTZ will show on your screen. The detail function illustration as below:



NOTE :

It is only available for the model which supports PTZ function.



- Camera Direction** Control the Pan/Tilt function
- PTZ Device** Device selected
- Speed** Adjust the Pan/Tilt movement speed
- Zoom** Control the Zoom IN/OUT function
- Focus** Use the manual Focus function
- Aux** Control the external device
- Preset** Set up/Enable the Preset
- Tour** Set up/Enable the Tour

Camera Direction

Adjust the lens of camera by press Up, Dow, Left, Right and Home).



PTZ Device

Select the device to control the RS485 device, the different device can setup the different protocol.

Camera Speed

Control the rotation speed of the camera form 1(lowest) to 8 (highest).

Function	Parameter							
Speed	1	2	3	4	5	6	7	8
Angle/Sec.	3	20	40	60	80	100	120	140

Zoom

To enable the **Zoom In/Out** function by click the Zoom In or Zoom Out button. The Zoom distance will follow up the source device, select the speed form 1(lowest) to 4 (highest).

Focus

Click the **Near/Far** to adjust the focus by manual control. Select the speed form 1(lowest) to 4 (highest).

NOTE :

Please confirm whether the lens of your camera supports the application.

Aux

Control the external device through RS485. Enable or disable the device activity by click **On/Off**. Select the device from 1 to 8.

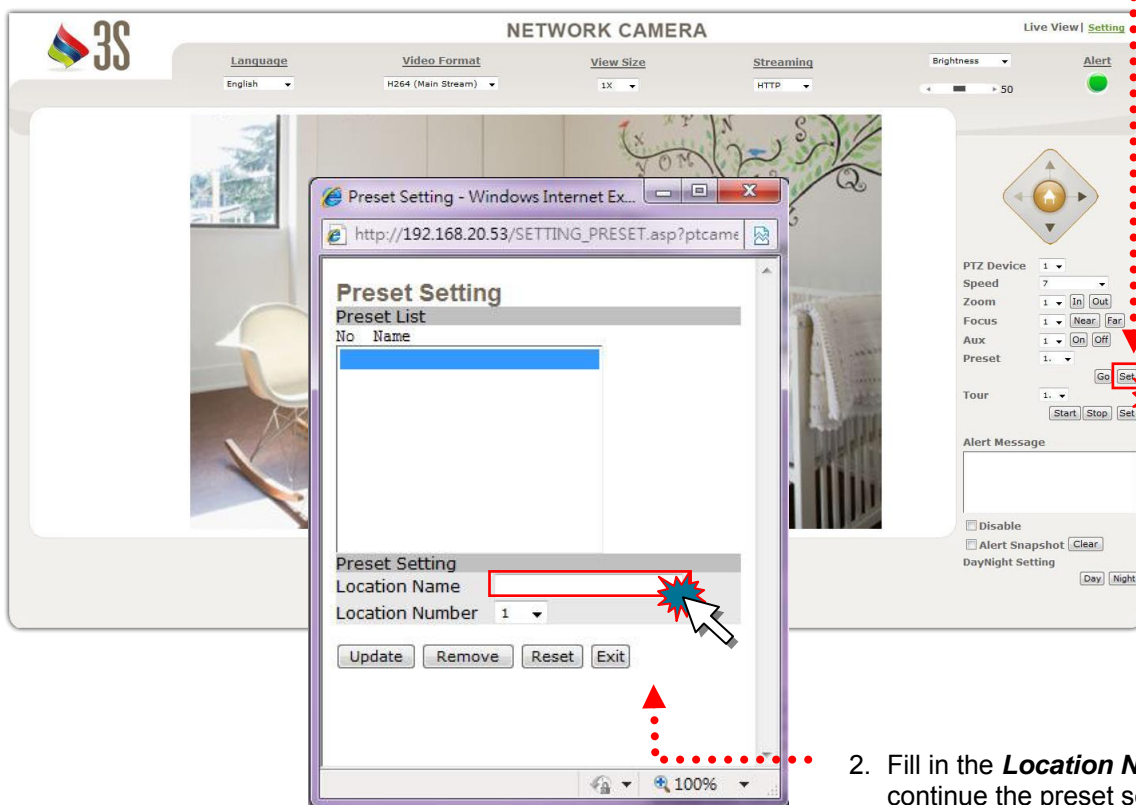
NOTE :

Please confirm whether the device supports the application.

Preset

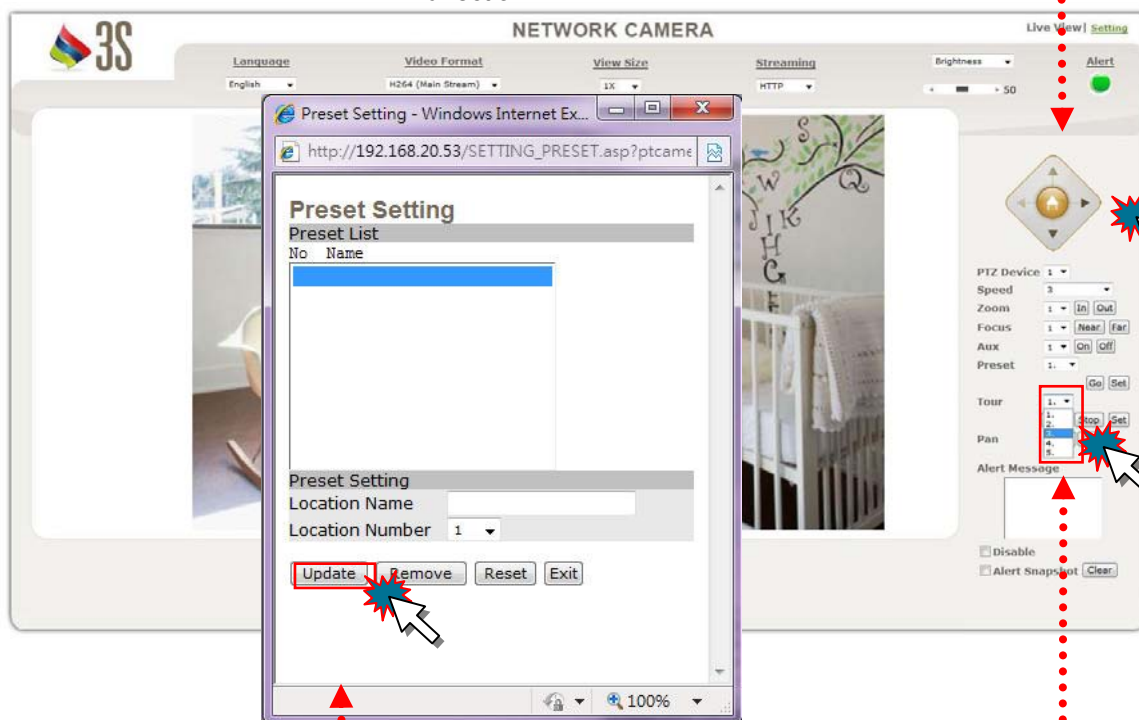
Preset the rotation points from the camera. (16 points)

1. Click **Set** to enter the Preset Setting page.



2. Fill in the **Location Name** to continue the preset setting.

3. Click the Up, Down, Left, Right and Home to adjust the camera direction.

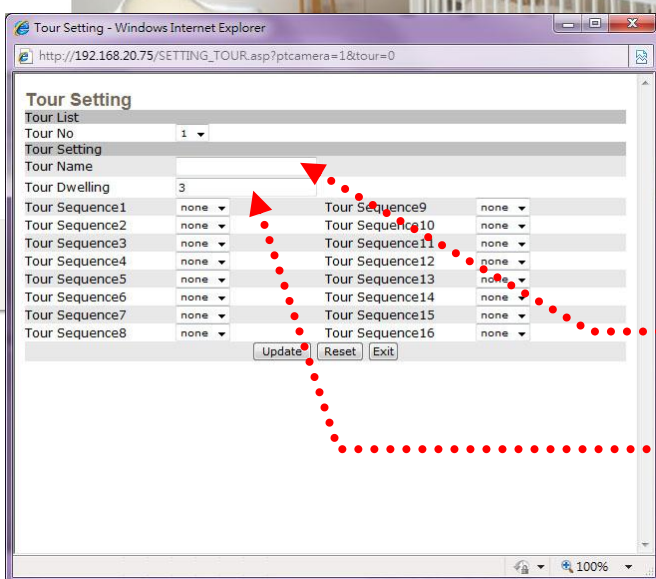
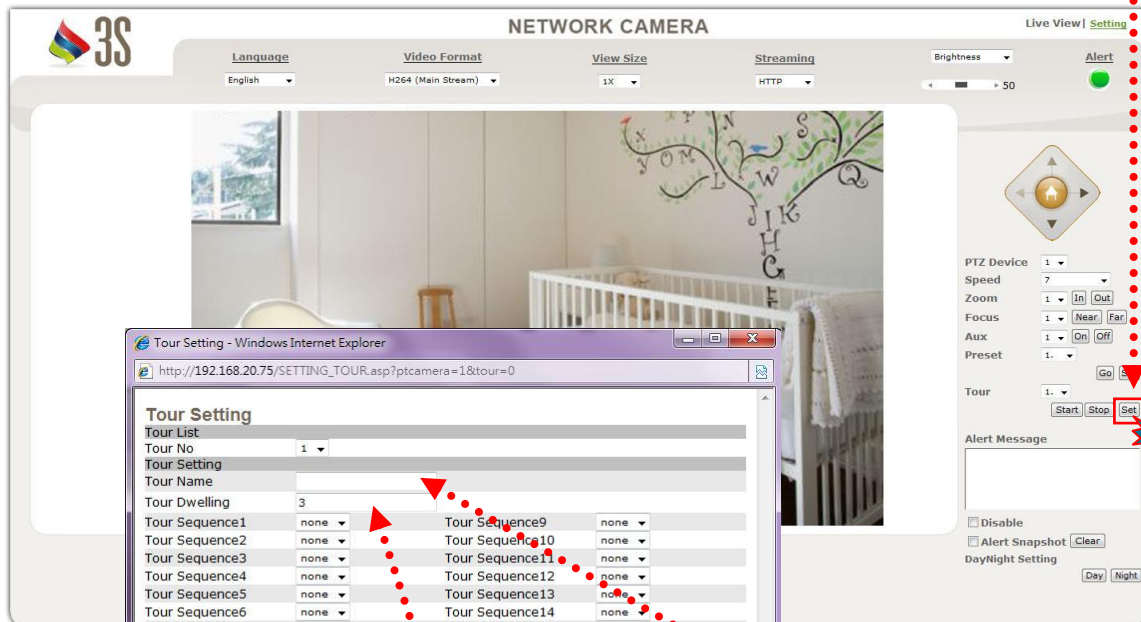


4. Exit the preset setting page by click **Update**.
5. After select the number for preset, click **Go**. The camera will move to the area automatically as setup by the select number.

Tour

Enable/Disable the tour mode of the camera. The rotation points of the camera must be setup in advance and provide five tour addresses to use it.

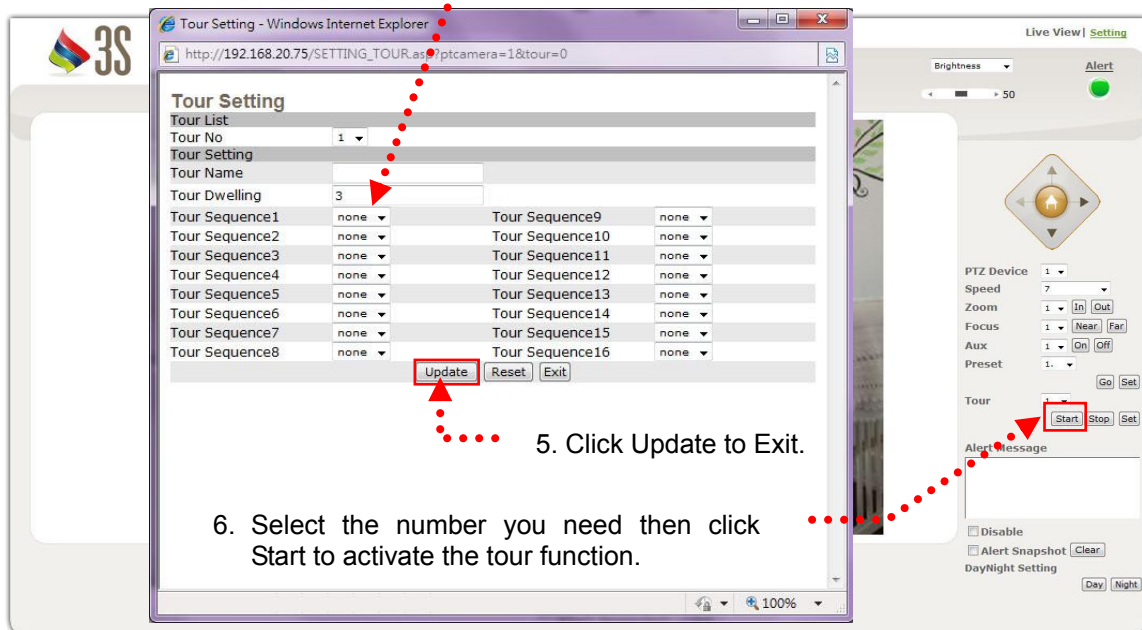
1. Click **Set** to enter the Tour Setting page.



2. Name the tour. You can set up 5 tour groups at maximum.

3. Dwelling time (sec.) at each tour point.

4. Select a preset location for the camera.

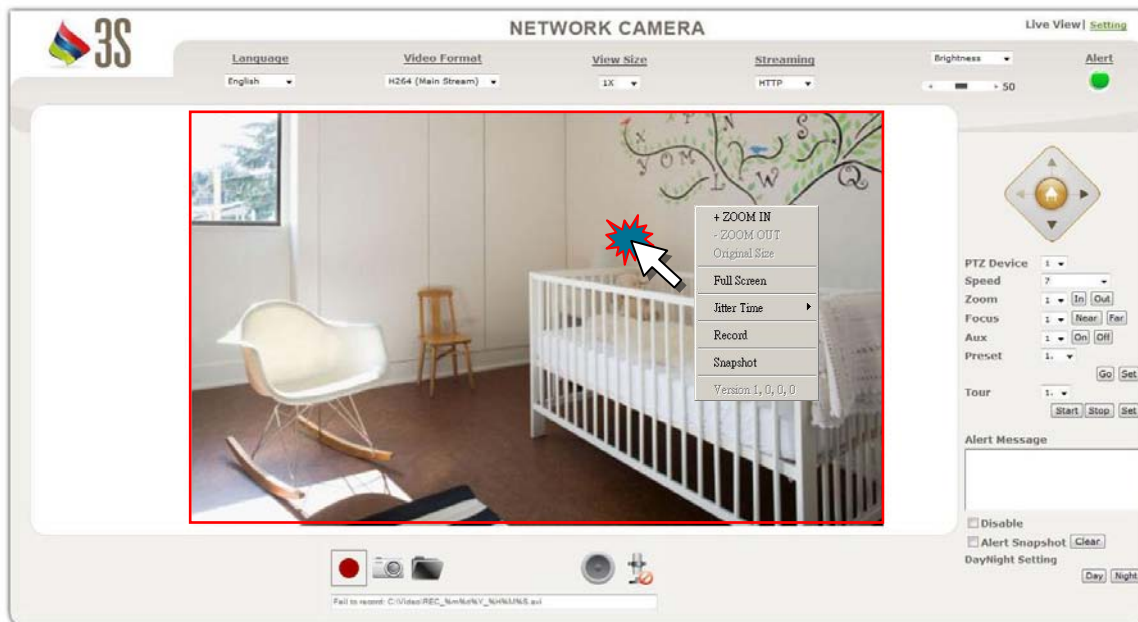


5. Click Update to Exit.

6. Select the number you need then click Start to activate the tour function.

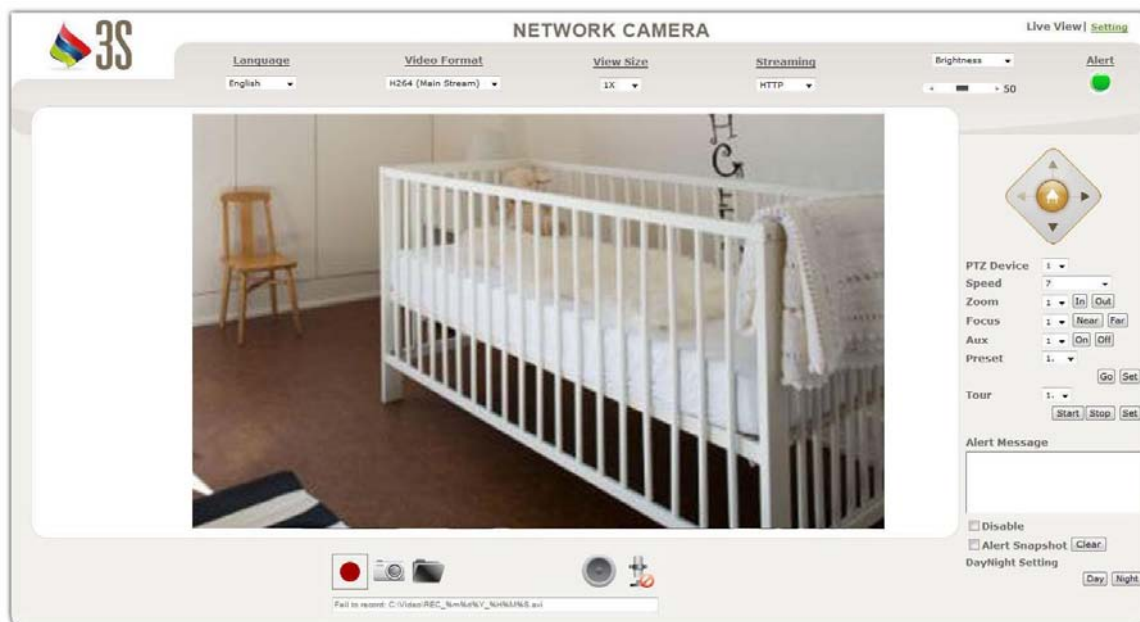
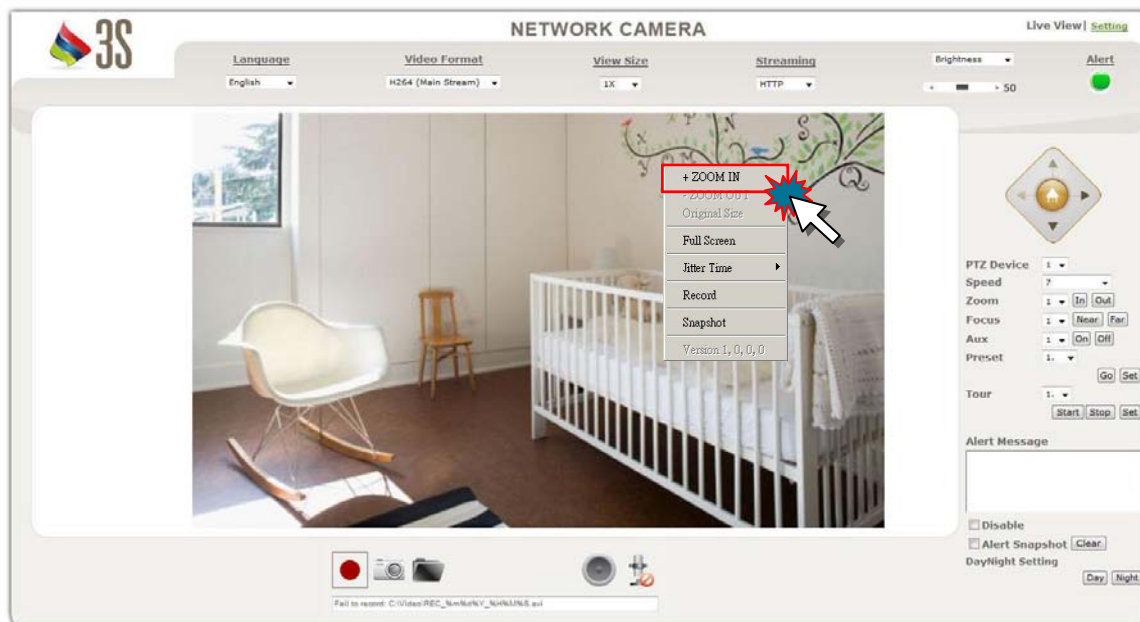
Shortcuts

Click the **right-button** of your mouse in Live View mode to display the Shortcuts List. Choose the option directly depend on different system requirements. The detail function illustration as below:



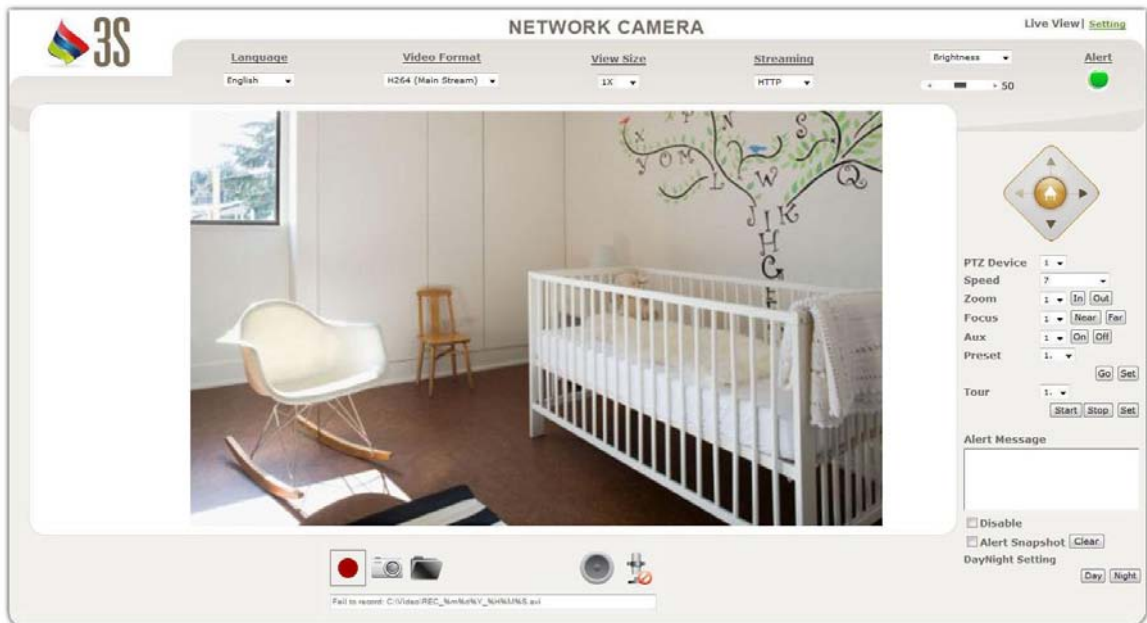
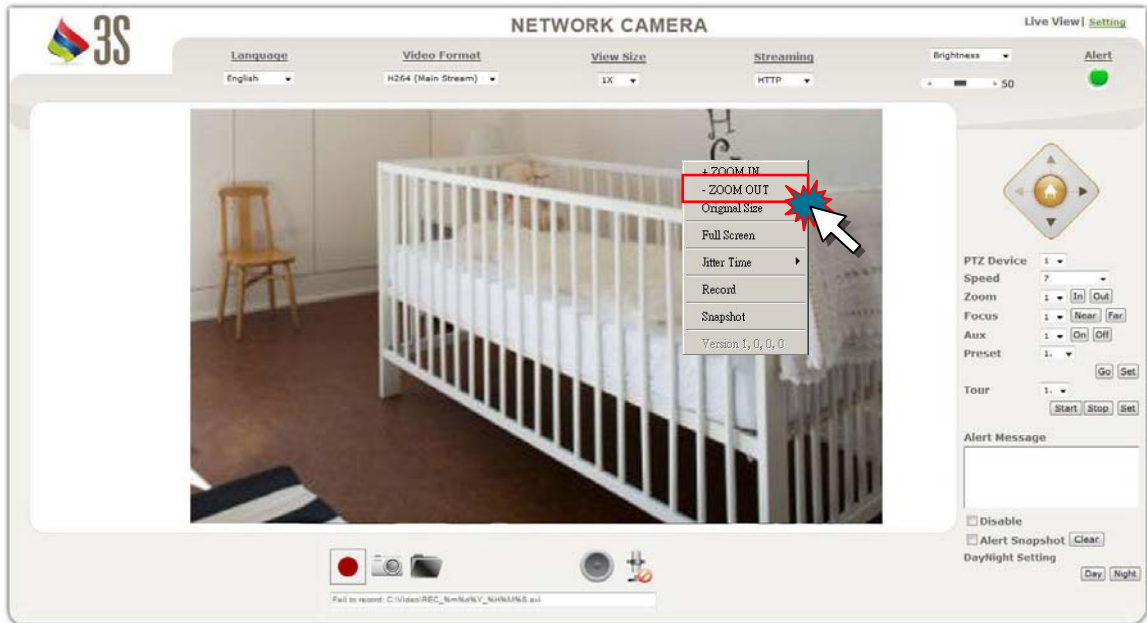
+ZOOM IN

Click the **right button** of your mouse and select **+ZOOM IN** to enlarge the image. The navigation screen indicates the part of the image being magnified. 8 Levels of zoom in/out are supported.



-ZOOM OUT

Click the **right button** of your mouse and select **+ZOOM out** to reduce the image. 8 Levels of zoom in/out are supported.

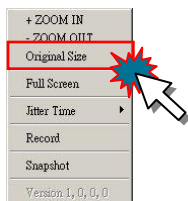


NOTE :

You can also Zoom In/Out the image by press the scroll wheel button of your mouse.

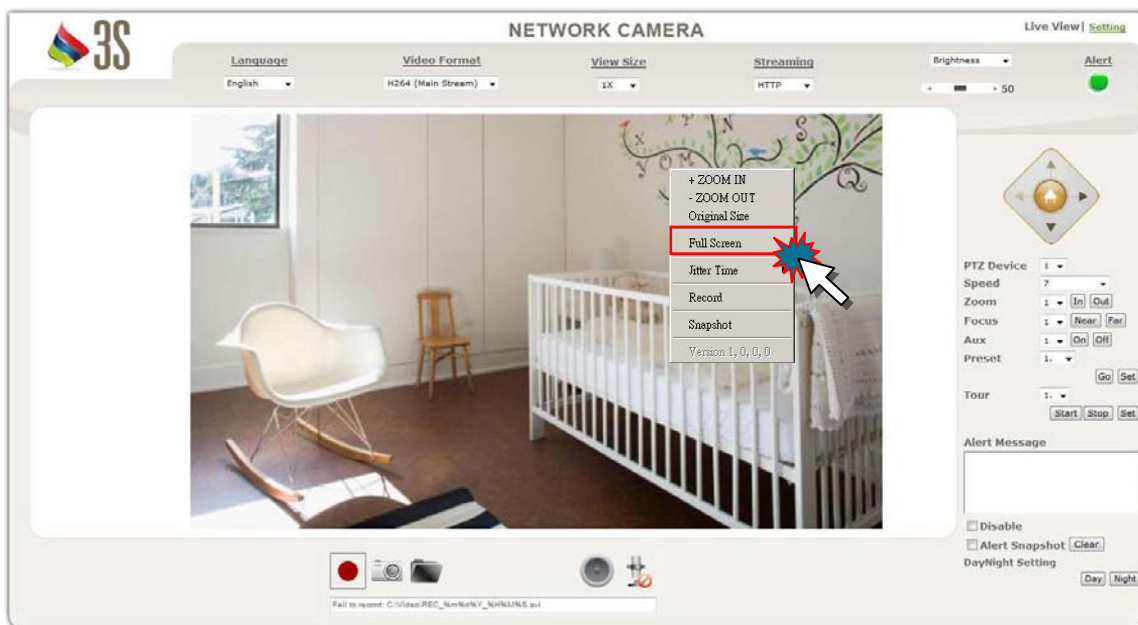
Original Size

No matter what the multiple of digital zoom is, you can reset the image size by click the **right button** of your mouse and select **Original Size**.



Full Screen

Click the **right button** of your mouse and select **Full Screen** to change the screen to full screen mode and release it by click the button again. You can also release it by click the **“ESC”** button on the keyboard.



NOTE :

You can also use the other shortcuts function when it is enable.

Jitter Time

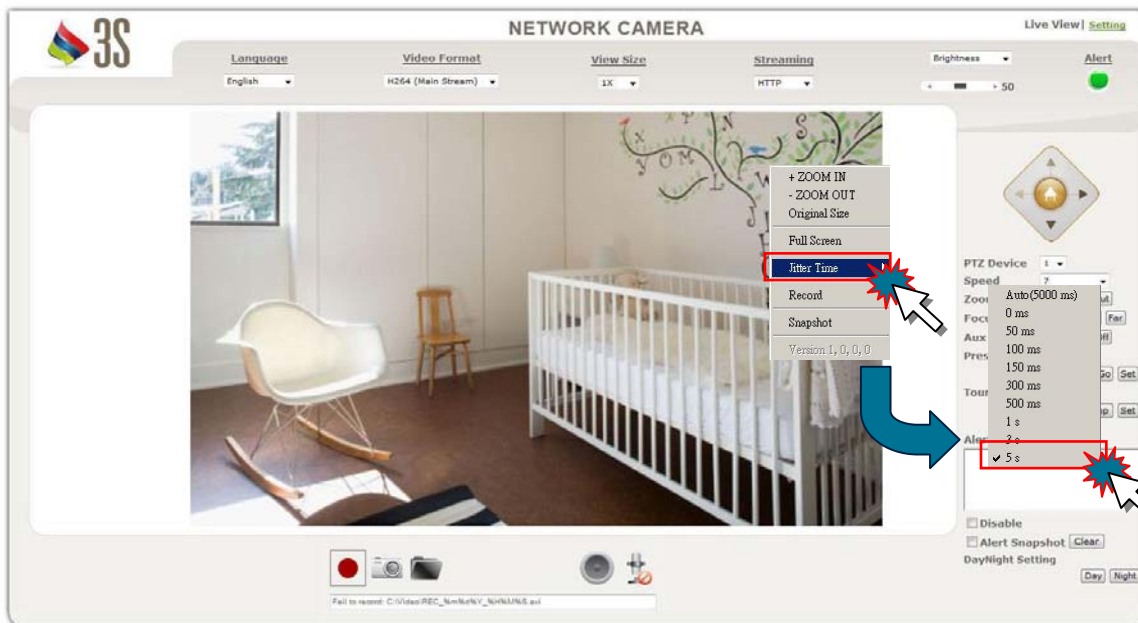
Click the **right button** of your mouse and select **Jitter Time** to set up the buffer time to make audio sync which can help the video and audio smoother.

It is not a standard settings but according to your bandwidth to adjust the buffer time.

7 kinds of parameters are supported as below: N/A, 150ms, 300ms, 500ms, 1s, 3s and 5s.



The delay time will appear probably in the image if the jitter time is highest.

150ms is the default parameter.

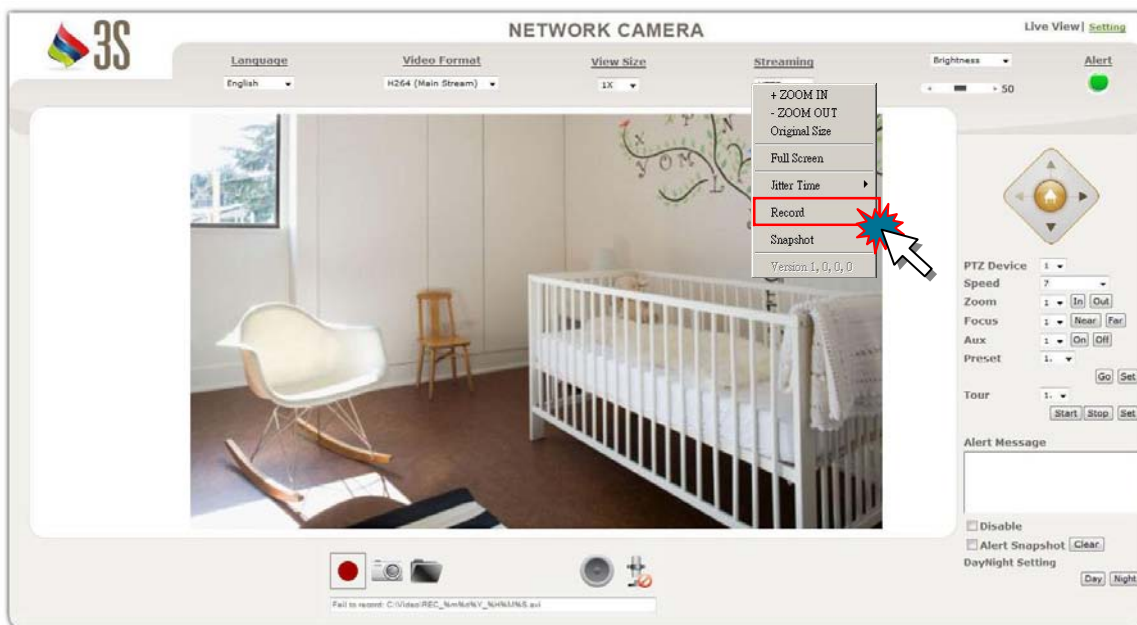


Record

Click the **right button** of your mouse and select **Record** to start to record the image and the file will saved at the default path. Stop the recording by click the button again.


You can also start /stop recording by press  and  on the shortcut bar.

The record icon of Shortcut Bar will change the status and the Live View image will display with the red square signal in the left corner when it is recording.



Snapshot

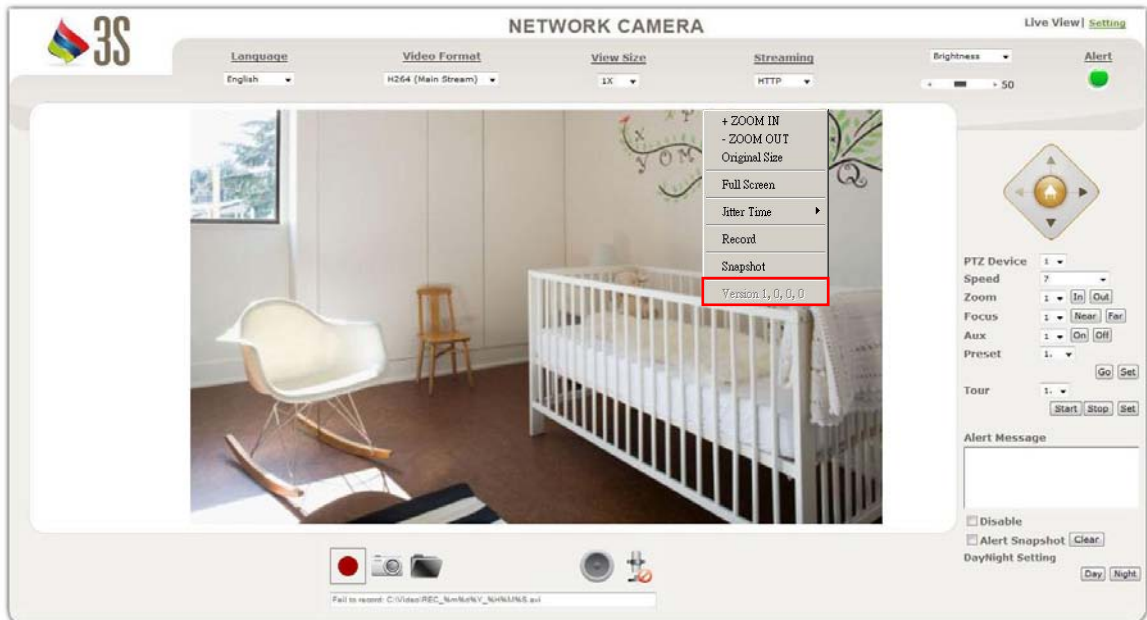
Click the **right button** of your mouse and select **Snapshot** to Snapshot the image and the file will save at the default path.

You can also take snapshot by press  on the shortcut bar.



Version

Show the ActiveX Control version by click the **right button** of your mouse and you will see the version on the bottom.

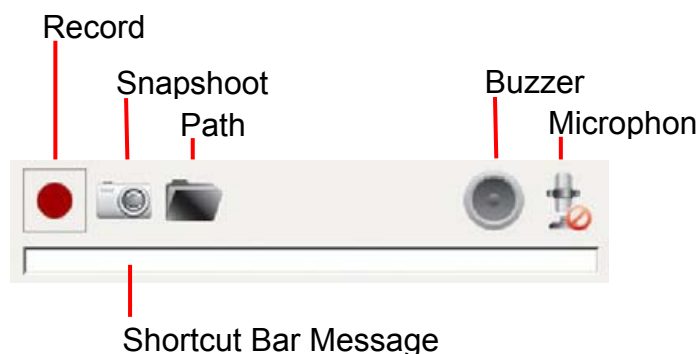


NOTE :

The version will depend on the actual product spec of shipment.

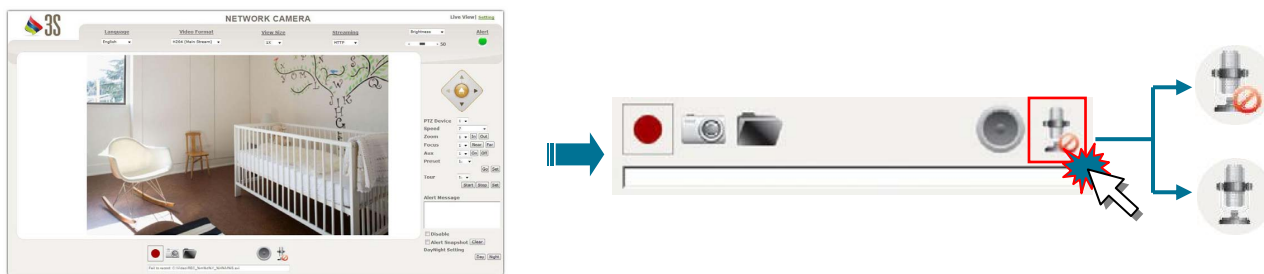
Shortcut Bar

Enable/Disable the application function from Shortcut Bar.



Microphone

Click the thumbnail of the **Microphone** on the shortcut bar to enable/disable it (one-way audio).

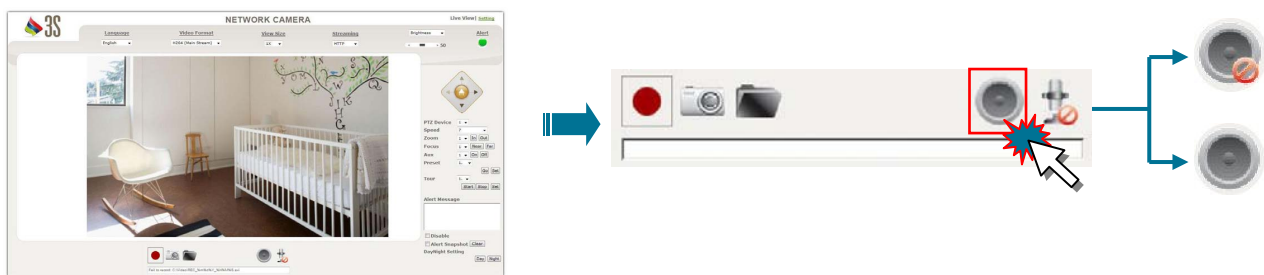


- Transmit the voice into the Bullet Network Camera by using the PC's microphone.

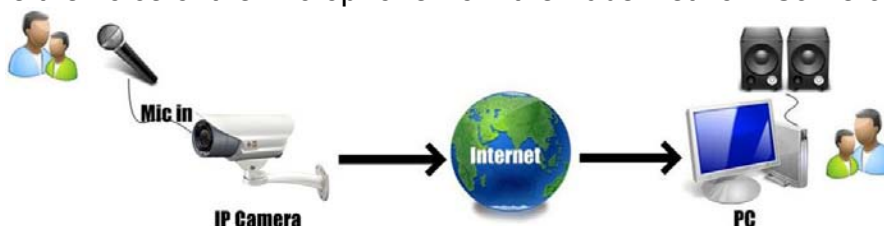


Buzzer

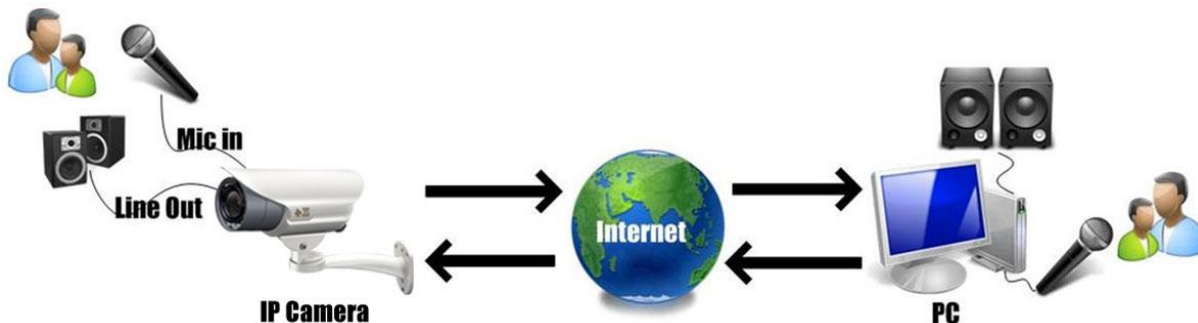
Click the thumbnail of the **Buzzer** on the shortcut bar to enable/disable it (one-way audio).



- It can receive the voice of the microphone from the Tube Network Camera.



- Enable the **Microphone** and **Buzzer** at the same time to achieve the two-way audio application if you like it.



NOTE :

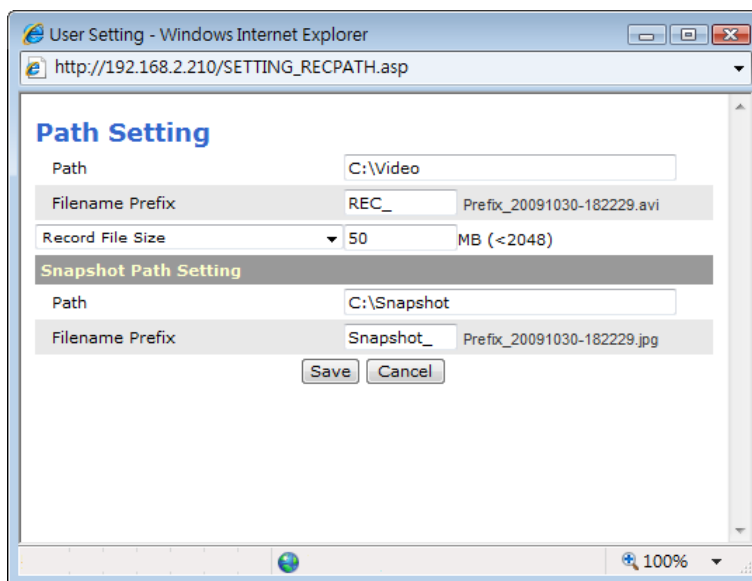
Adjust the parameter of the audio according to the **Audio Setting**. It will hide the **Audio** icon from the Live View if the Audio Function is disabled.



Path

Click the thumbnail of the **Path Setting** on the shortcut bar to change the saving folder path.

Please see the detail setting as below: **Path, Filename Prefix and Recording Limit**



NOTE :

Due to the path setting will saved the modification into ActiveX Control and the *.ini file. No matter what the type of the IP Camera is changing, the path will follow the same folder to save it.

1. Path

To assign a folder for saved the **Record** and **Snapshot**, and the file would be saving to the default folder. You can also change the other folder to save the files as you want.

Function	Default Path
Record	C:\Video
Snapshot	C:\Snapshot

2. Filename Prefix

To set up a prefix of the filename which you are recorded or snapshotted, and it will follow up the format to save it.

Please see the detail information as below:

Type	Prefix	Fixed Format
Record	Rec_	YY/MM/DD-HH:MM:SS.avi
Snapshot	Snapshot_	YY/MM/DD-HH:MM:SS.jpg

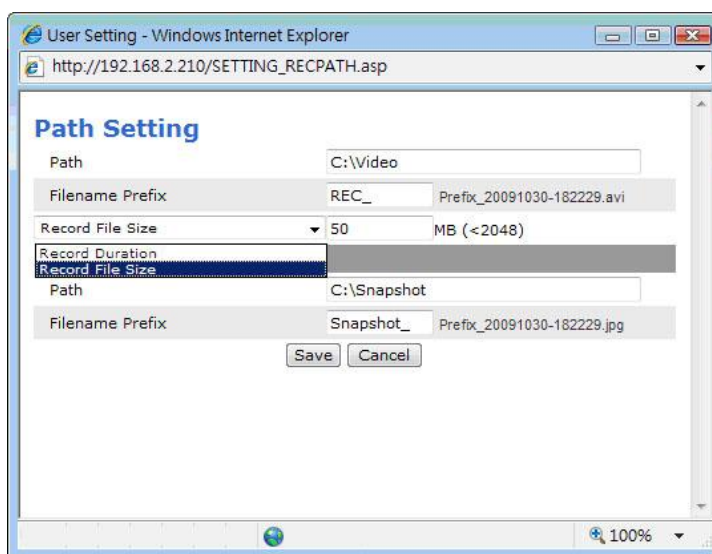
3. Record Limit

The **Record Path Setting** supported only and it has limit of file size.

The Bullet Network Camera will create the fixed recording file according to this setting.

It provides two kinds of setting for record file size as below:

- Record File Size**
- Record Duration.**



Record File Size

Record File Size MB (<2048)

50 MB is the default size of the record file and the limit is 2048MB.

Record Duration

Record Duration Seconds

50 Seconds is the default duration of the record file and the limit is 99999 Seconds. The default duration is the 50 Seconds, and the limit is the 99999 Seconds.

NOTE :

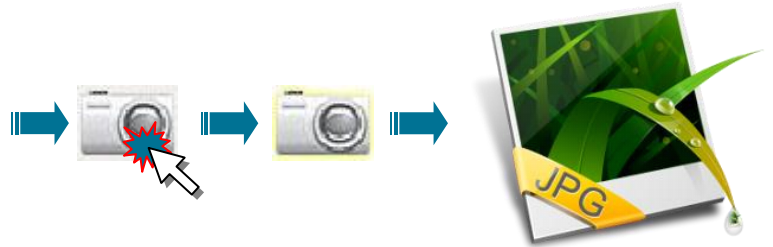
No matter what the type is, the value will keep the same figure.

Snapshot

Snapshot the Live View image

Click the thumbnail of the **Snapshot** on the shortcut bar to Snapshot the image in Live View and the file will save at the default path.

The icon of the Snapshot will flash the status when Snapshot.



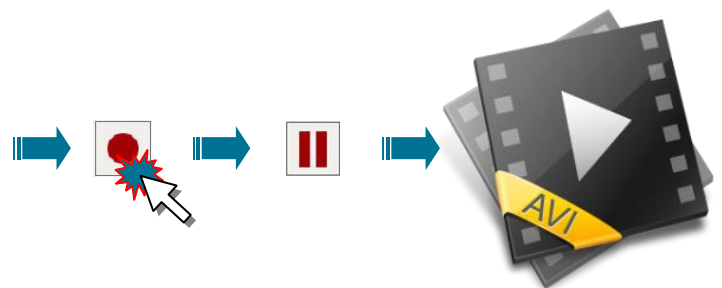
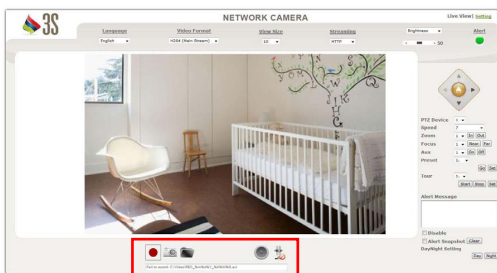
Record

Record the streaming image.

Click the thumbnail of the Record on the shortcut bar to record the image in Live View and the file will save at the default path.

The icon of the Record will display with red square signal in the bottom of the left corner when record.

The Record can detect the status of web browser and it will keep the recording image file completely when the Network disconnection suddenly.



Shortcut Bar Message

Display the information of record or Snapshot in the Shortcut Bar Message.

All of the status for Shortcut Bar Message, please see the illustration as below:



- Login Record file path: [C:\Video]; Snapshot file path: [C:\Snapshot]



- Record Start recording to : C:\Video\REC__%Y%m%d-%H%M%S.avi
Recording to C:\Video\REC__%Y%m%d-%H%M%S.avi is stopped
Fail to record: C:\Video\REC__%Y%m%d-%H%M%S.avi



- Snapshot Snapshot: C:\Snapshot\Snapshot__20091102-181620-804.jpg has been saved.
Fail to snapshot in path C:\Snapshot

NOTE :

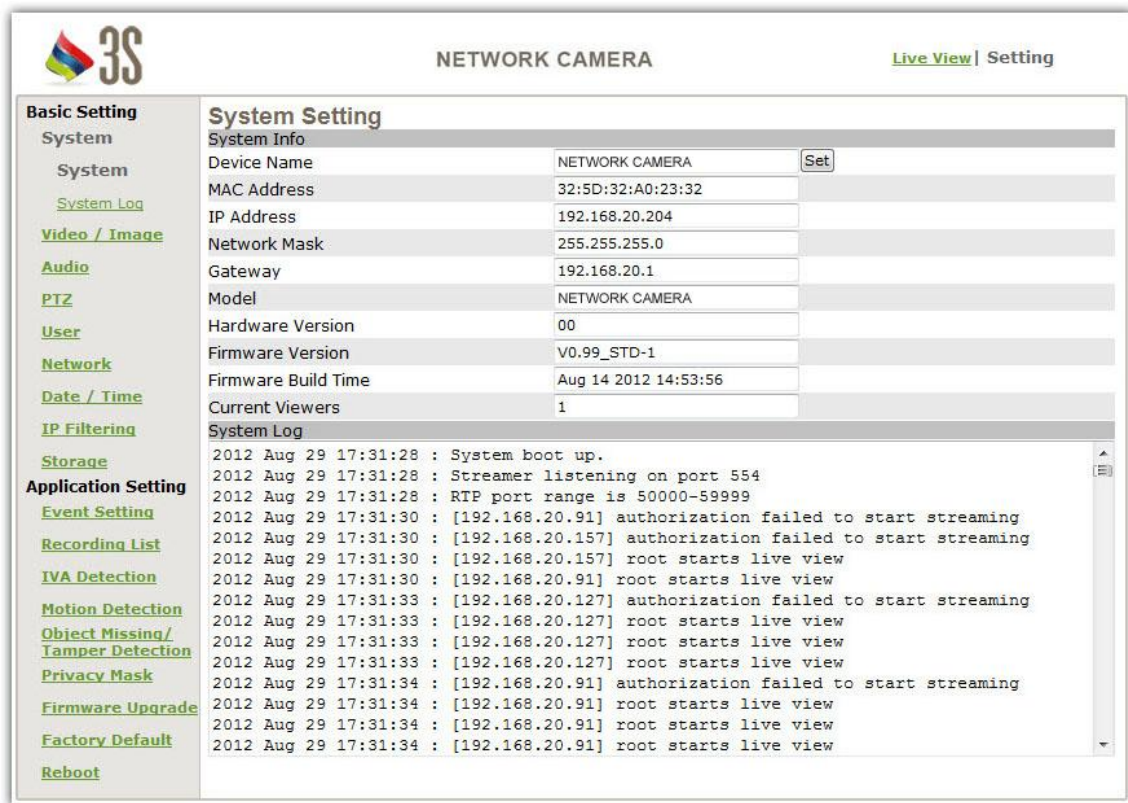
The setting of the path and filename will follow the **Path Setting**.

Setting User Preferences

The Setting menu let you change the following settings:

- Basic Setting**
 - System
 - Video/Image
 - Audio
 - PTZ
 - User
 - Network
 - Date/Time
 - IP Filtering
 - Storage
- Application Setting**
 - Event Setting
 - Recording List
 - IVA Detection
 - Motion Detection
 - Object Missing / Tamper Detection
 - Privacy Mask
 - Firmware Upgrade
 - Factory Default
 - Reboot

*** After each setting, click **Save** to save and apply them.**



Basic Setting

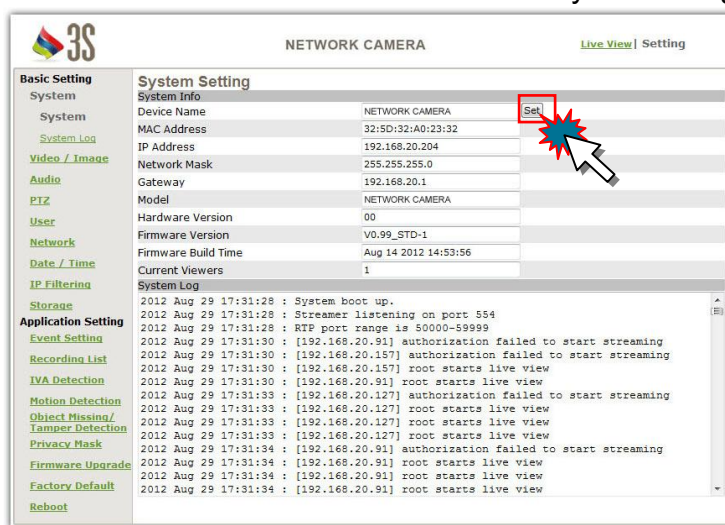
The Basic Setting menu lets you view the Basic Setting for the Bullet Network Camera and change the following setting:

- System**
 - System
 - System Log
- Video Image**
 - Video
 - ROI (Region of interest)
 - R
 - Sensor
- Audio**
- PTZ**
- User**
- Network**
 - Network Setting
 - Stream Setting
 - PPPoE
 - DDNS
 - UPnP
 - SMTP
 - SAMBA
 - Notification
 - Multicast

- Date/Time**
- IP Filtering**
- Storage**

System
System Setting

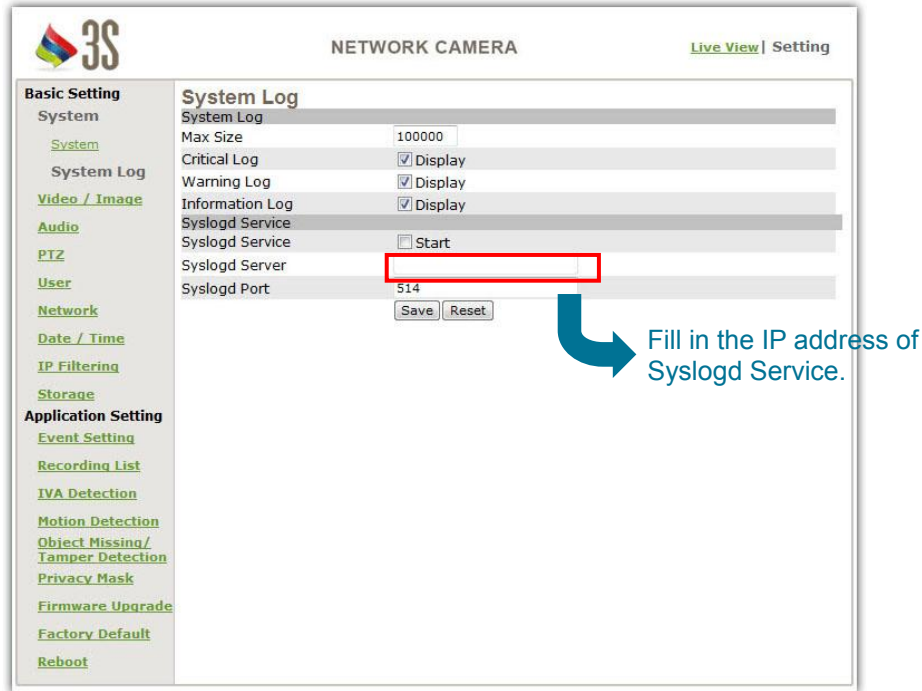
- Device Name:** Give the name of your camera here. Complete the setting by Click **Set**.
- MAC Address, IP Address, Network Mask, and Gateway:** Network information
- Model:** Display the product model name.
- Hardware Version, Firmware Version and Firmware Build time:** Firmware information.
- Current Viewers:** The number of viewers who are currently accessing the video stream.



System Log

The Bullet Network Camera allows administrator to view all of the login information, including boot record, video streaming mode, login IP, changes, and the date/time information. You can save the entries to a Word document by manual.

Notice all of the information is deleted when you turn off the Bullet Network Camera.



• **System Log**

- Max Size: Set the Number allowed for the log file, 100000 is the default.
- Critical Log: Click **Display** to show the most important log file.
- Warning Log: Click **Display** to show the warning log file.
- Information Log: Click **Display** to show the information log file.

• **Syslog Service**

- Syslogd Service: Click **Start** to send the log file to server.
- Server: Fill in the IP address that the Syslogd Service is.
- Port: Set the port number.

Video/Image
Video

- **Video Setting**

Sensor Mode: Set the mode of the sensor as below:
5M: QSXGA (2560x1920) and Full HD Mode (1920x1080).
3M: QXGA (2048x1536) and Full HD (1920x1080).
2M: UXGA (1600x1200) and WXGA (1280x720).
D1: PAL (704x576) and NTSC (704x480).

- **H264**

Resolution: Set the resolution of the image as below:
5M: Full HD (1920x1080), 1280x720, 720x400 and 360x192.
3M: Full HD (1920x1080), 1280x720, 720x400 and 360x192.
2M: WXGA (1280x720), 640x352 and 320x176.
D1: D1 704x576/704x480 (PAL/NTSC)
 CIF 352x288/352x240 (PAL/NTSC).

Frame Rate (FPS): Set the frame rate from:
2M/5M: 1, 3, 5, 10, 15, 20, 25 and 30.
3M: 1, 3, 5, 10, 15, 20, 22, 25 and 30.
D1: 1, 3, 5, 10, 15, 20 and 25.

Quality: It provides two kinds of the quality as below:
 Bitrate: **3M/5M:** 128, 256, 384, 512, 640, 768, 1024, 1280, 1536, 2048, 2560, 3072, 4096, 6144 and 8192.
2M: 128, 256, 384, 512, 640, 768, 1024, 1280, 1536, 2048, 2560 and 3072.
D1: 64, 128, 256, 384, 512, 640, 768, 1024 and 1280.
 Fix Quality: Best, Better, Normal, Fast and Fastest.

GOP: Set the frames for GOP from 1, 5, 10, 15, 30, 60, 120 and 150.

- **H264 (Sub)**

Resolution: Set the resolution of the image as below:
3M/5M: 720x400, 360x192 and 192x112.
2M: 640x352, 320x176 and 192x112.
D1: D1 704x576/704x480 (PAL/NTSC)
 CIF 352x288/352x240 (PAL/NTSC)
 QCIF 176x144/176x112 (PAL/NTSC)

Frame Rate (FPS): Set the frame rate from 1, 3, 5, 10, 15, 20, 25 and 30.(2M/5M)
 1, 3, 5, 10, 15, 20, 22, 25 and 30. (3M)

Quality: It provides two kinds of the quality as below:
 Bitrate: **3M/5M:** 128, 256, 384, 512, 640, 768, 1024, 1280, 1536, 2048, 2560, 3072 and 4096.
2M: 128, 256, 384, 512, 640, 768, 1024, 1280, 1536, 2048, 2560 and 3072.
D1: 256, 384, 512, 640, 768, 1024, 1280, 1536, 2048, 2560, 3072 and 4096.
 Fix Quality: Best, Better, Normal, Fast and Fastest.

GOP: Set the frames for GOP from 1, 5, 10, 15, 30, 60, 120 and 150.

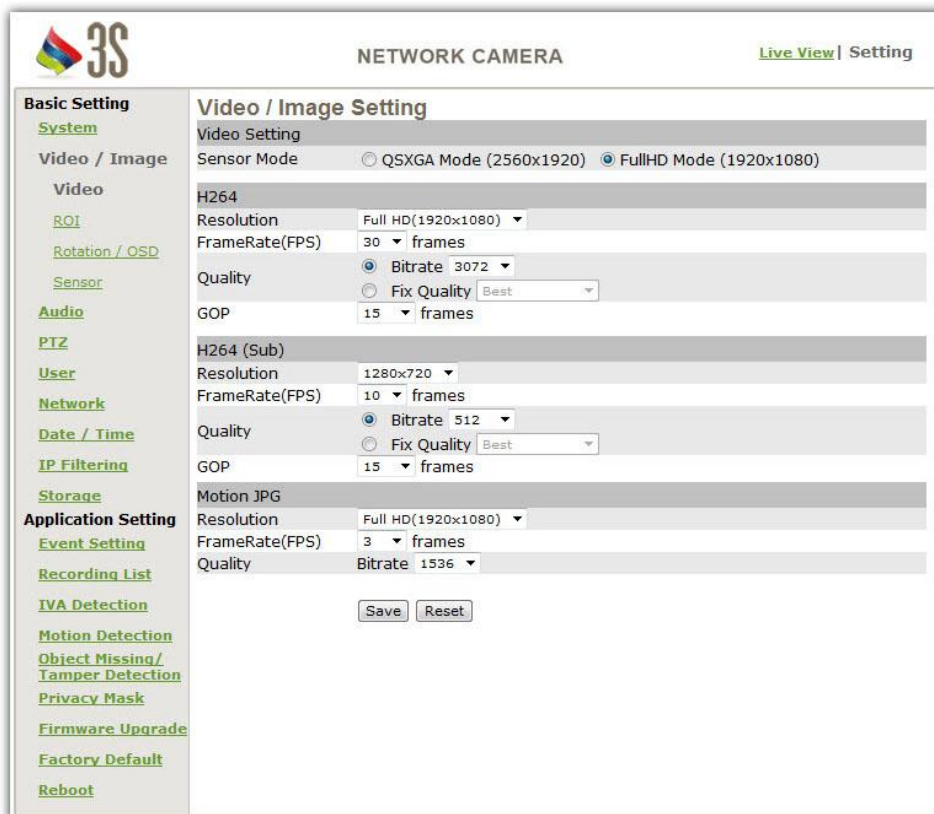
• **Motion JPG**

- Resolution: Set the resolution of the image as below:
3M/5M: Full HD (1920x1080), 1280x720, 720x400 and 360x192.
2M: WXGA(1280x720), 640x352 and 320x176.
D1: D1 704x576/704x480 (PAL/NTSC)
 CIF 352x288/352x240 (PAL/NTSC)
- Frame Rate (FPS): Set the frame rate from 1, 3, 5, 10 and 15.
- Quality: Bitrate: **3M/5M:** 256, 384, 512, 640, 768, 1024, 1280, 1536, 2048, 2560, 3072, 4096, 6144 and 8192.
2M: 256, 384, 512, 640, 768, 1024, 1280, 1536, 2048, 2560 and 3072.
D1: 256, 384, 512, 640, 768, 1024, 1280, 1536, 2048, 2560, 3072 and 4096.

NOTE :

The setting value will be different depending on the model.

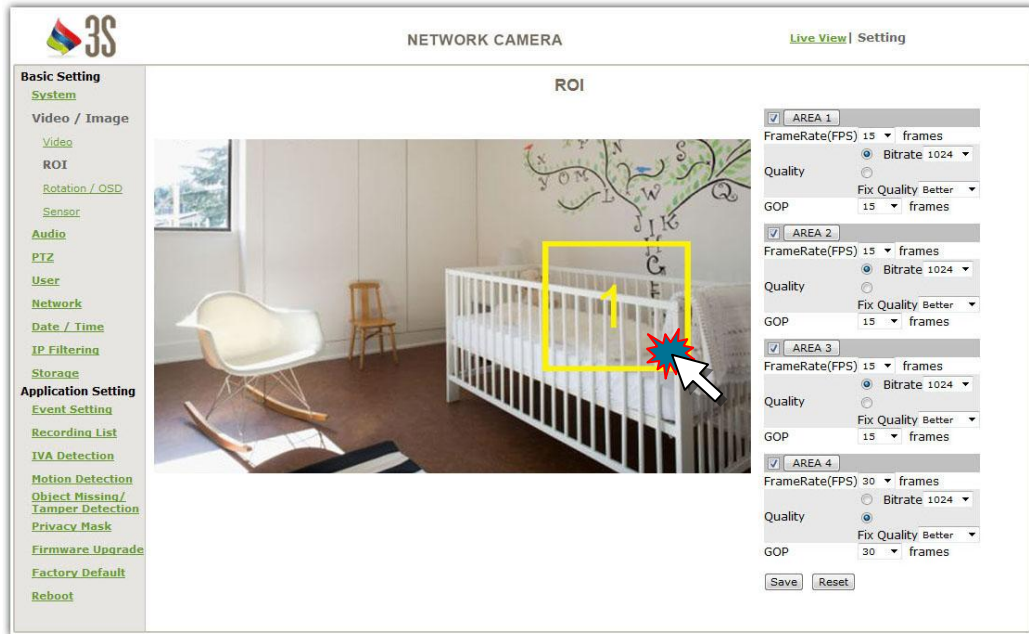
(2Megapixel / 3Megapixel /5Megapixel)



ROI (Region of interest)

Multi-streaming with H.264 and M-JPEG compression with 4 ROI (Region of interest) allows high quality / high resolution recording and low bandwidth live view at the same time.

- Area: Set the Frame rate(FPS) and quality of the image and the GOP of the frames.



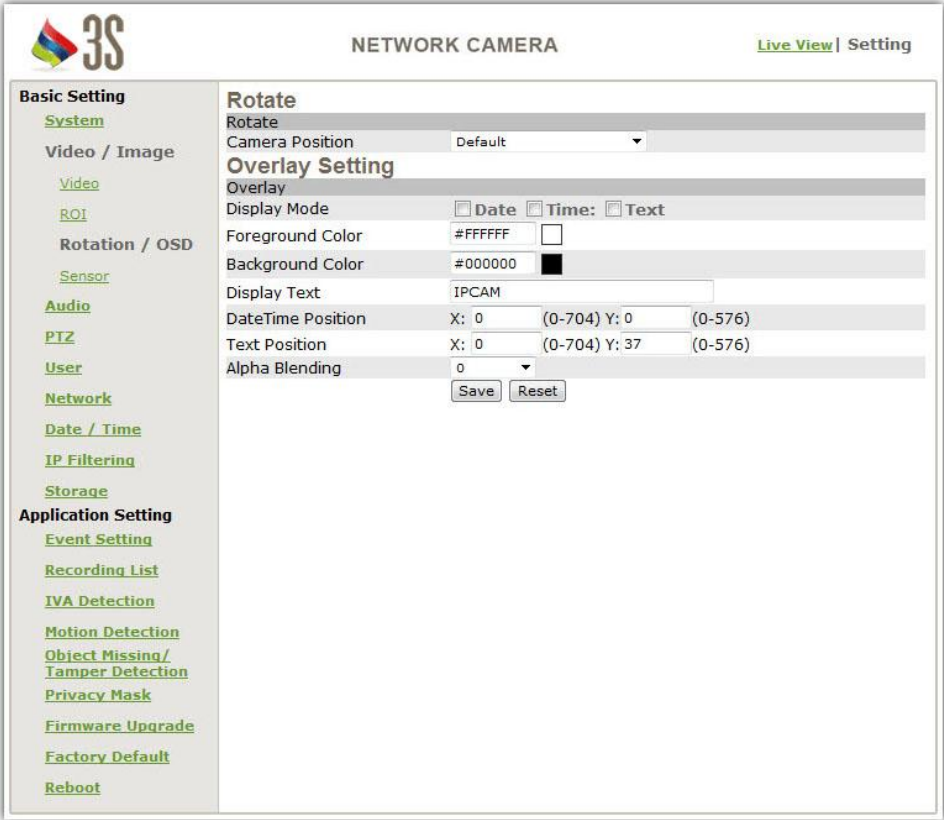
NOTE :

This function is available only for 5Megapixel.

Rotate / OSD

• Rotate

Camera Position: Set the position of the camera from Default, Flip, Mirror and Rotate 180.



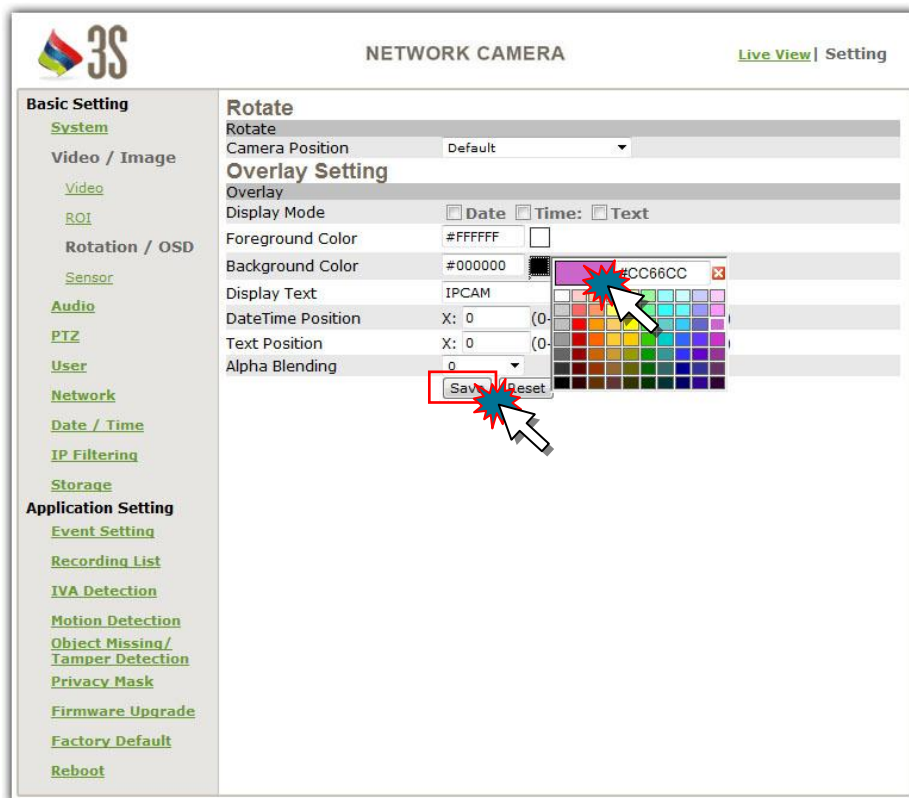
The screenshot displays the 'NETWORK CAMERA' web interface. The top navigation bar includes a logo, the title 'NETWORK CAMERA', and links for 'Live View' and 'Setting'. A left sidebar lists various configuration categories: Basic Setting (System, Video/Image, Video, ROI, Rotation/OSD, Sensor, Audio, PTZ, User, Network, Date/Time, IP Filtering, Storage), Application Setting (Event Setting, Recording List, IVA Detection, Motion Detection, Object Missing/Tamper Detection, Privacy Mask, Firmware Upgrade, Factory Default, Reboot), and others. The main content area is titled 'Rotate' and contains the following settings:

- Rotate**
 - Camera Position: Default (dropdown menu)
- Overlay Setting**
 - Overlay: Date Time: Text
 - Display Mode: Date Time: Text
 - Foreground Color: #FFFFFF (color picker)
 - Background Color: #000000 (color picker)
 - Display Text: IPCAM (text input)
 - Date/Time Position: X: 0 (0-704) Y: 0 (0-576)
 - Text Position: X: 0 (0-704) Y: 37 (0-576)
 - Alpha Blending: 0 (dropdown menu)

At the bottom of the settings are 'Save' and 'Reset' buttons.

• **Overlay Setting**

- Language: Set the language for the overlay.
- Display mode: Set the display mode from Date, Time and Txt or not.
- Foreground color: Selects the foreground color for Date, Time and Text to display. Click the color block in order to show the palette. Move the arrow point and click on the color what you like.
- Background color: Selects the background color for Date, Time and Text to display. Click the color block in order to show the palette. Move the arrow point and click on the color what you like.
- Display text: Fill in the text what you want to show on the screen, e.g. Lobby IP Cam.
- Date/time position: Set the value of the X/Y-axis for the location that the Date/Time will show on the screen. (Anyone on the four corners is available.)
- Text position: Set the value of the X/Y-axis for the location that the text will show on the screen. (Anyone on the four corners is available.)
- Alpha Blending: Set the Alpha Blending for the transparency of the overlay from 0%, 50% and 90%.



Sensor

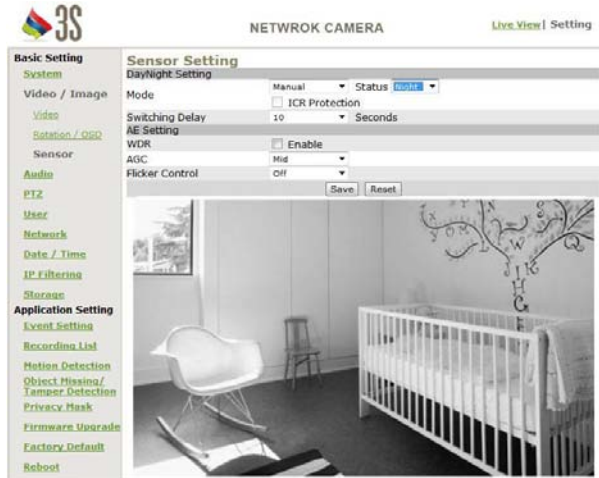
NOTE :

PIR & LED is only applicable for the model which supports it.

- Day/Night Setting: Set the mode for the Day and Night from Auto, Manual and External.
You can also select ICR Protection in Auto mode.

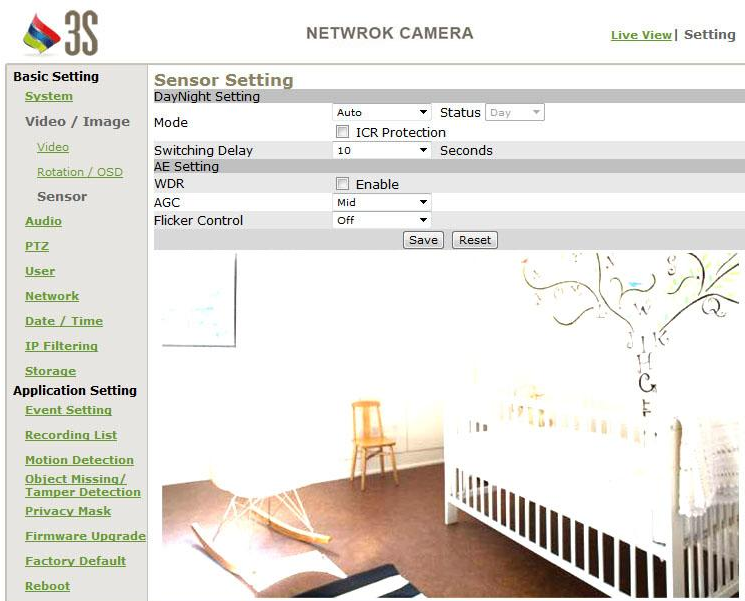


DAY



NIGHT

- Switching Delay: Set the time for switching delay from 0~15 Seconds.
- Sensitivity Level: Set the level for sensitivity level from Low, Mid and High.
- AE Setting: Click **Enable** to set the backlight for the image and set the Slow Shutter, AGC and Flicker Control.



- PIR & LED Setting: Set the mode for the Day and Night from Auto and Manual.
You can also select off or on in Manual mode.

Audio

Audio

Set the Audio mode from Full-Duplex, Half Duplex, Simplex-Speaker Only, Simplex-Microphone Only and Audio Off.

Full duplex: Microphone and Amplifier using allowed of at the same time, or turning them off.

Half duplex: Microphone or Amplifier using allowed of by manual switch.

Simplex microphone only: Microphone use only is allowed.

Simplex amplifier only: Speaker use only is allowed.

Audio off: Turn the audio off; i.e. both of the microphone and speaker will be off.

Audio in

Codec: Select the type of Codec for audio encryption from G726/32, G711a, G711u and AMR.

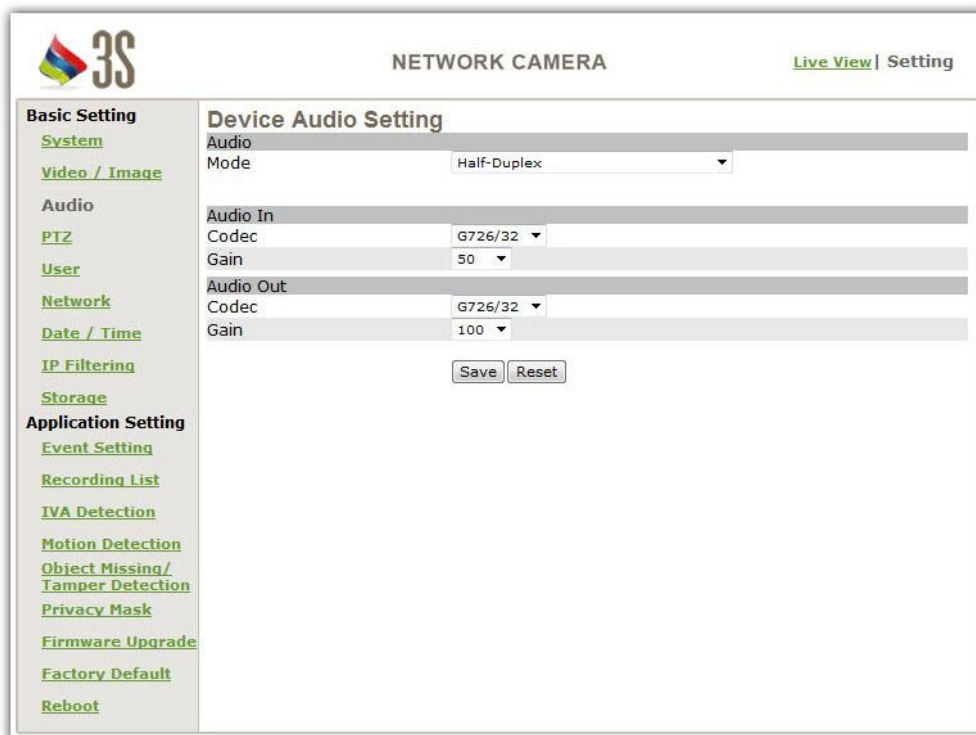
Gain: Set the Gain from 0, 25, 50, 75 and 100.

Audio out

Codec: Select the type of Codec for audio decryption from G726/32, G711a and G711u.

Gain: Set the Gain from 0, 25, 50, 75 and 100.

Code	Compression Bitrates (Kbit/s)	Note
G711a	64	PCM (For American System)
G711u	64	PCM (For European System)
G726/32K	32	ADPCM
AMR	4.75	



PTZ

PTZ Camera Port Setting

Camera Driver: The Bullet Network Camera supports the PTZ control of those analog PTZ cameras use the drivers of Pelco-D, Pelco-P. Refer to the user manual of your PTZ cameras, and you will know which driver to select. Moreover, select the serial number (address) of the targeted PTZ camera for controlled setting. If the selection is none, please upload the PTZ driver first.

PTZ Driver Manager

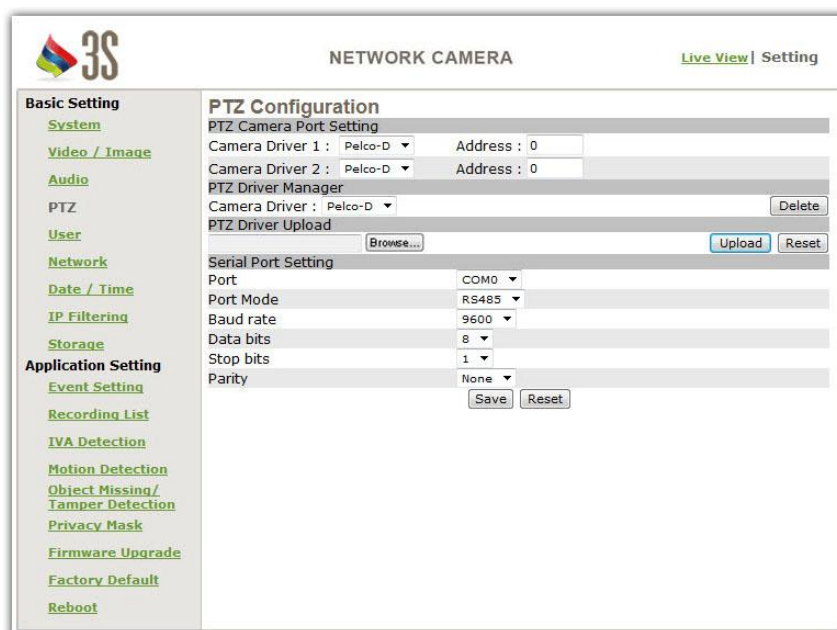
In the Camera Driver column, list all the drivers that are installed in the video server. Select **Delete** to eliminate any selected driver.

PTZ Driver Upload

Upload the PTZ drivers from **www.3Svision.com** for more camera drivers which are supported.

Serial Port Setting

- Port: COM0
- Port Mode: RS485
- Baud rate: Select the measure of the symbol rate from 2400, 4800 and 9600.
- Data bits: Select the number of bits used to represent one character of data from 7 and 8.
- Stop bits: Select the bit used in asynchronous communications to indicate the end of a piece of data from 1 and 2.
- Parity: Select the parity from None, Even and Odd.



NOTE :

The function of PTZ is only applicable for the model which supports it.

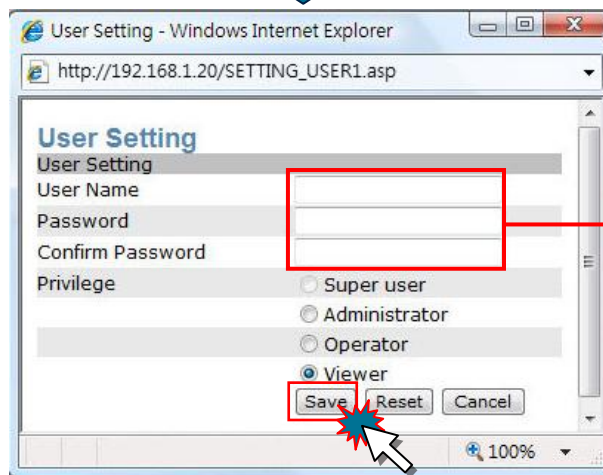
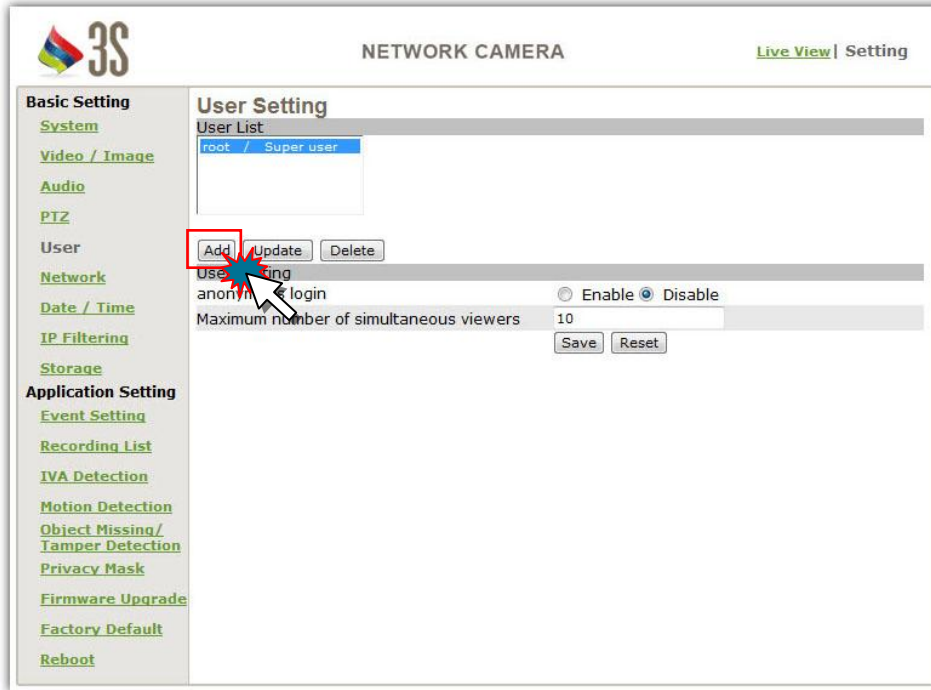
User List

Use this menu to set the following setting:

Add: Add a new user and to define a different privilege.

Update: Change the privilege or password of a user.
User name changed is not allowed.

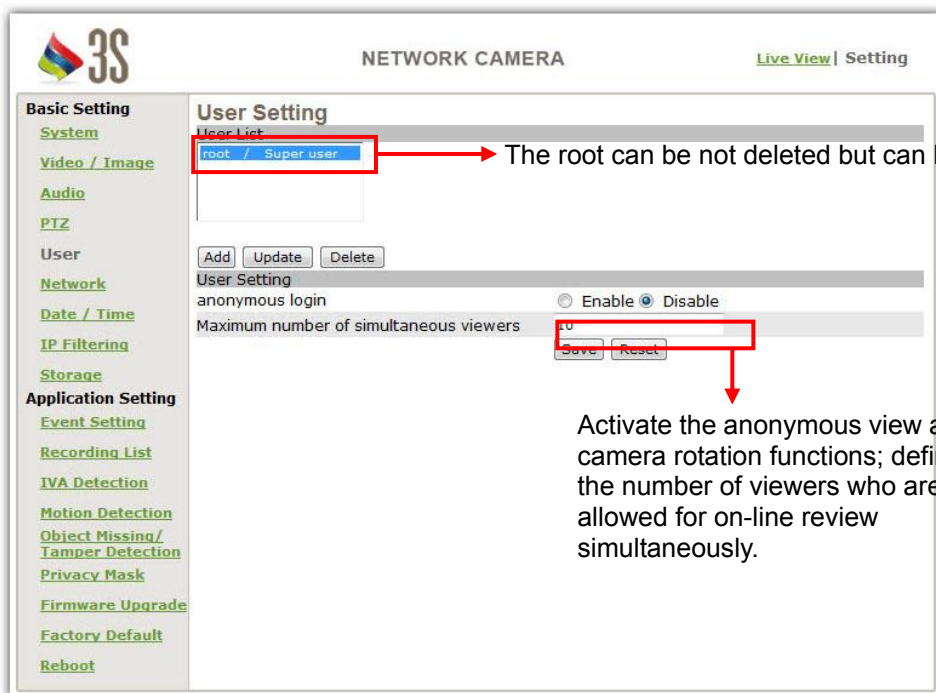
Delete: Delete a user here.



Fill in the username, password and privilege as required.

User Setting

- Anonymous login:** Click **Enable** to allow anyone user to login. For the special demand, login to the browse without username and password is allowed. The selection of **Disable** is recommended for the security.
- Maximum number of simultaneous viewers**
Depending on the bandwidth and requirements, a limit up to 20 viewers who are allowed to view the camera simultaneously can be defined.



Attention: The default user name and password have been set as “root”. The root user cannot be deleted but can be changed. For the safety consideration, it is recommended to change the root’s password when the first time login. You can press the reset bottom to reset to factory default.

User

The Bullet Network Camera provides the administrator to set the privileges for administrator, operator and viewer that ensure the security and control of the camera.

According to the requirements of the users, administrator owns the authority to define the privilege for each user.

The privileges of the administrator, operator, and viewer are listed as below:

	User	Administrator	Operator	Viewer
Live View				
Live View		v	v	v
Setting				
Basic Setting				
System		v	v	
Video / Image		v	v	
Audio		v	v	
PTZ		v	v	
User		root		
Network		v		
Date / Time		v		
IP Filtering		v		
Application Setting				
Event		v	v	
Motion Detection		v	v	
Privacy Mask		v	v	
Firmware Upgrade		root		
Factory Default		v		
Reboot		v		

Network

Network Setting

• IP Assignment

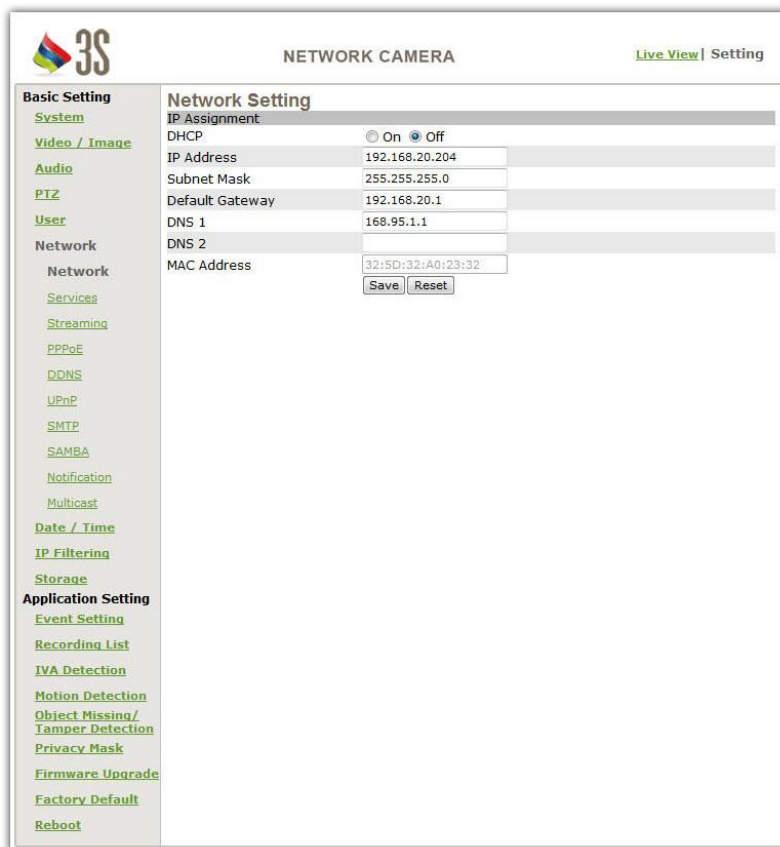
DHCP

DHCP (Dynamic Host Configuration Protocol) is a protocol that enables automatic assignment of TCP/IP information to the client. Each DHCP client connects to the DHCP server to access its network setting information, including IP address, gateway, and DNS server.

The IP address of the camera is 192.168.0.20 by default when DHCP is "OFF". When you select "DHCP ON" and access the DHCP network environment, the camera will automatically send a DHCP packet to request an IP address. This IP address is assigned automatically from the DHCP server on the network. No additional settings are required for this page unless you need to change the network configuration. The DHCP status of the camera is "OFF" by default.

Other settings:

For IP address, Subnet mask, Default gateway, DNS 1, and DNS 2, the DHCP server will assign these values automatically when DHCP is in "ON" status; otherwise, you need to key in the values manually.

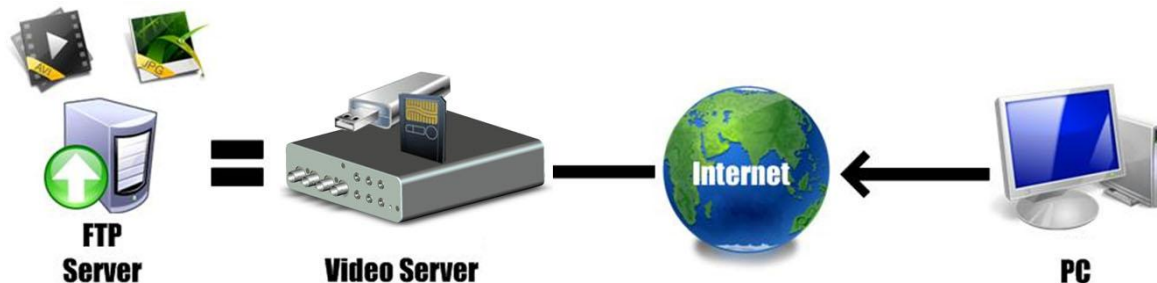


NOTE :

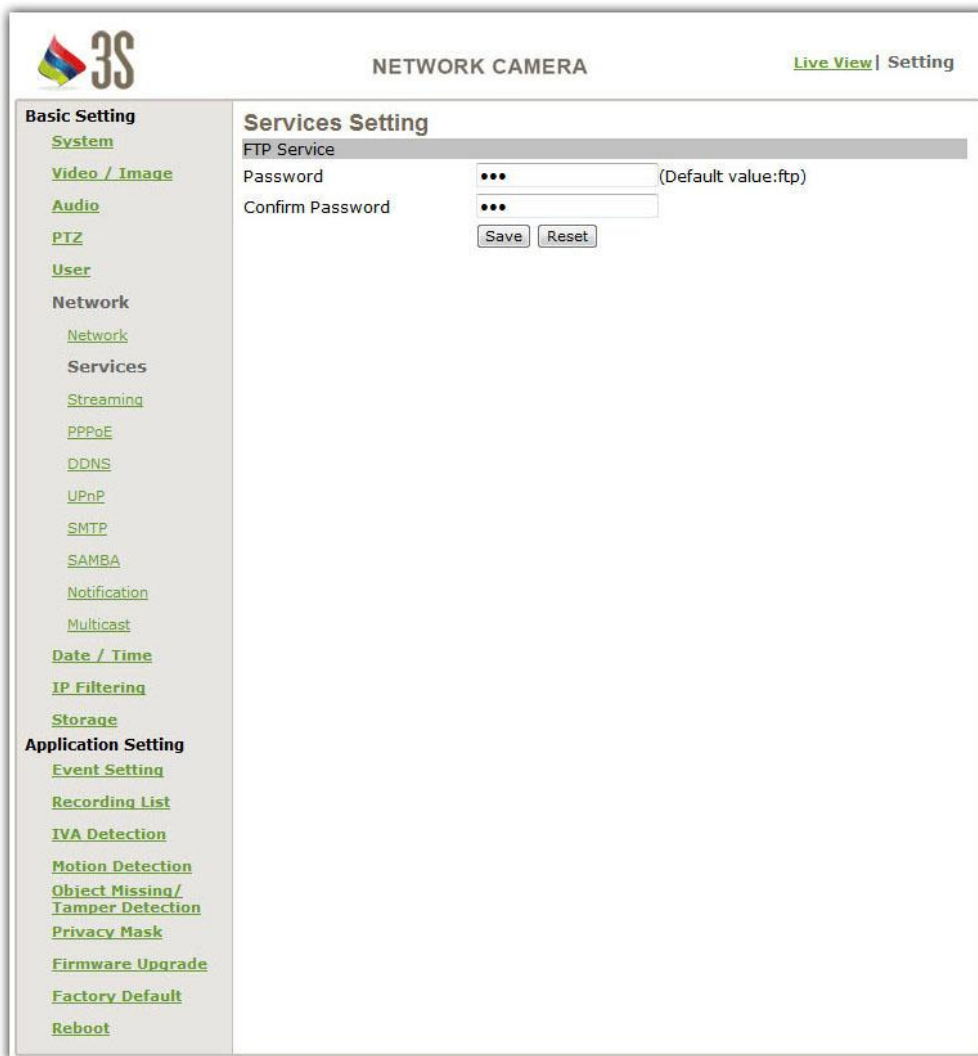
The system will be set the Link-Local Address by automatically when there is no any IP address is assigned from the DHCP server.

Services

It can become the small FTP server to download the AVI or JPEG file from SAMBA or SD Card. The default status is enabling the function. Due to the function only provide the SAMBA and SD Card applications, not release to all FTP setting for user.



The default account and password is *ftp*, and you can only modify the password by yourself.



Stream Setting

Set the video streaming port here. (HTTP and factory default are recommended)

- **Streaming**

HTTP: Port 80 can pass through most firewalls. Video streams are transmitted through HTTP Port (80 by default) to ensure passage through firewalls.

RTSP: Port 554 uses a fixed port (i.e. TCP) or can be defined by users to ensure reliable data transmission. Video streams are transmitted through RTSP Port (554 by default) to avoid video fragment or mosaics due to poor transmission quality.

RTP: Port 50000 to 60000 are UDP ports and can be defined by users. They provide the fastest but also most unreliable transmission service. Video streams are transmitted through UDP Port (50000~60000 by default) to ensure the fastest image transmission. However, video fragment or mosaics may occur due to poor transmission quality.

The screenshot shows the 'NETWORK CAMERA' web interface. The top right corner has 'Live View | Setting'. The left sidebar menu is titled 'Basic Setting' and includes the following items: System, Video / Image, Audio, PTZ, User, Network (Network, Services), Streaming (PPPoE, DDNS, UPnP, SMTP, SAMBA), Notification (Multicast), Date / Time, IP Filtering, Storage, Application Setting (Event Setting, Recording List, IVA Detection, Motion Detection, Object Missing / Tamper Detection, Privacy Mask), Firmware Upgrade, Factory Default, and Reboot. The main content area is titled 'Streaming Setting' and contains a table with the following data:

Streaming	
HTTP	<input type="text" value="80"/>
RTSP	<input type="text" value="554"/>
RTP	<input type="text" value="50000"/> ~ <input type="text" value="60000"/>

Below the RTP field are 'Save' and 'Reset' buttons.

NOTE :

Please refer to the chapter of **Stream** for further detailed description.

PPPoE Setting (Dial-up Networking Setting)

Point-to-Point Protocol over Ethernet is a protocol that supports access to a high-speed wideband network using a PC and a wideband modem (such as xDSL, Cable, Wireless modem). The user need only to equip the PC with an Ethernet card and apply to an ISP and an ADSL provider (such as Chunghwa Telecom) for ADSL service to roam the Internet through ordinary twisted copper wires.

PPPoE setting must be executed in the LAN environment for your PC to connect to ADSL. Follow the steps below to complete the setting:

1. Dial: You can select whether or not to dial when you boot the machine.
2. Use DHCP or fixed IP for connection to the LAN environment.
3. Key in the IP address of the camera and enter "PPPoE Setting" following the route Setting → Basic Setting → Network → PPPoE.
4. Key in the xDSL "Username" and "Password" acquired from your ISP. Click **Save** to confirm the setting.
5. Where the ADSL modem and the camera is connected via a switch-hub, you can press "Reboot" or restart the machine manually to try PPPoE dialing when the setting of the camera has been completed.
6. A different IP address is obtained after each dial-up network connection. You can get the new IP address from Setting → Basic Settings → System. If you want to know the new IP address anytime, you must enter Setting → Basic Settings → Notification to set some settings. There are three ways to get information: 1. SMTP 2. FTP 3. HTTP. For details, refer to the Notification Setup Menu.



NOTE :

You can use the DDNS function to access the camera. Refer to the **DDNS Setting** for more information

● PPPoE

Dial: You can select whether or not to dial when you boot the Camera. (On boot or Off).

Username: Enter the username provided by your ISP.

Password: Enter the password.

● PPPoE Information

IP Address: The IP address is acquired when the dialing has been executed successfully.

Subnet Mask: The subnet mask information is acquired when the dialing has been executed successfully.

Default Gateway: The gateway information is acquired when the dialing has been executed successfully.

DNS: The ISP domain name is acquired when the dialing has been executed successfully.

The screenshot displays the web interface for a Network Camera. At the top left is the '3S' logo. The page title is 'NETWORK CAMERA' and there are links for 'Live View' and 'Setting'. A left sidebar contains a 'Basic Setting' menu with various options like System, Video/Image, Audio, PTZ, User, Network, etc. The main content area is titled 'PPPoE Setting' and includes a 'Dial' section with radio buttons for 'On boot' and 'Off' (selected), and input fields for 'Username' and 'Password'. Below this are 'Save', 'Reset', and 'Dial' buttons. The 'PPPoE information' section contains input fields for 'IP Address', 'Subnet Mask', 'Default Gateway', and 'DNS'.

DDNS (Dynamic Domain Name Server)

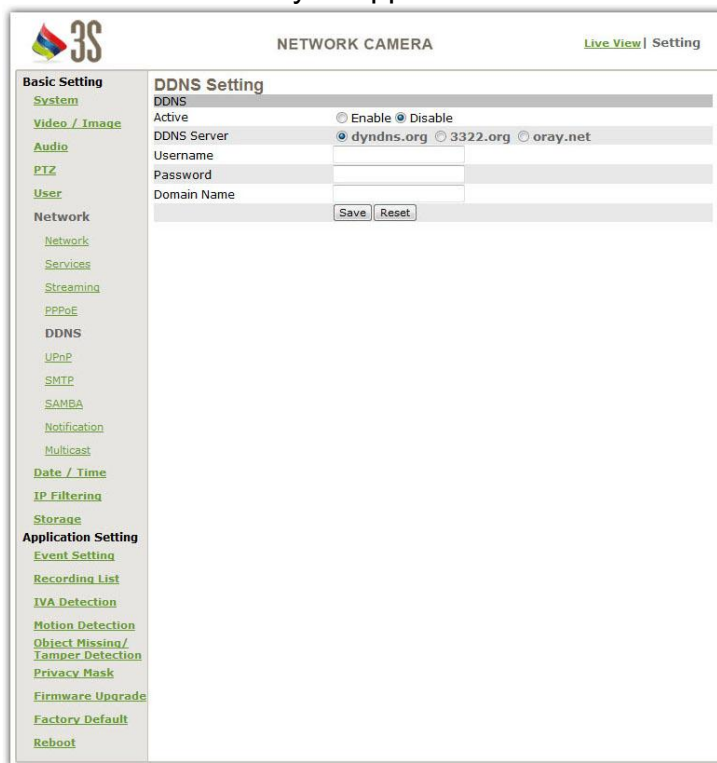
The IP address (Ex. 210.168.0.22) is like a telephone number, while the website address is like a name in an address book. The DDNS allows the user to access the website by entering the name of the website without memorizing a bunch of cold numbers.

When you apply for an Internet service, you will have at least one IP address from your ISP that is either fixed or dynamic. Most of the ADSL service providers will give you a dynamic IP for ADSL environments, which means your IP address will constantly change each time you connect to the Internet. As a result, users from WAN environments will have much difficulty finding the correct IP address. The DDNS (Dynamic DNS service) is created for exactly this kind of moment. By updating your WAN IP address each time you connect to the Internet, the DDNS helps you locate your website and access your website easily. You can find a lot of free DDNS service providers on the Internet, such as www.no-ip.com and www.DynDNS.org.

Some gateway-routers can directly communicate with DDNS. In this case, you may directly enter your DDNS account on the setting page in the Internet router, and then the router will update your WAN IP status whenever it is changed and report to the DDNS. If your router does not support direct communication with the DDNS, you can download a small application program on the DDNS service page to help you update your WAN IP.

• **DDNS**

- Active: Enables/disables DDNS
- DDNS Server: Currently we only support <http://dyndns.org>. This is a free domain name server provided by DynDNS. You may log on this website for relevant information and apply for free domain names.
- Username: Your account for the domain name you applied for
- Password: Your password for the domain name you applied for
- Domain Name: The domain name you applied for.



UPnP (Universal Plug and Play)

If you connect your camera to a router, IP allocator, or wireless AP, your camera will possibly be blocked by the NAT and can't be located on the Internet. To penetrate the firewall, activate the supportive item- UPnP. The Link URL shows the external IP address and the port of the router. Enter the IP address in the Internet Explorer to penetrate the NAT.

• **UPnP Device**

- Active: yes (enable)/no (disable)
- Device Name: the name of the UPnP device

• **UPnP Traversal**

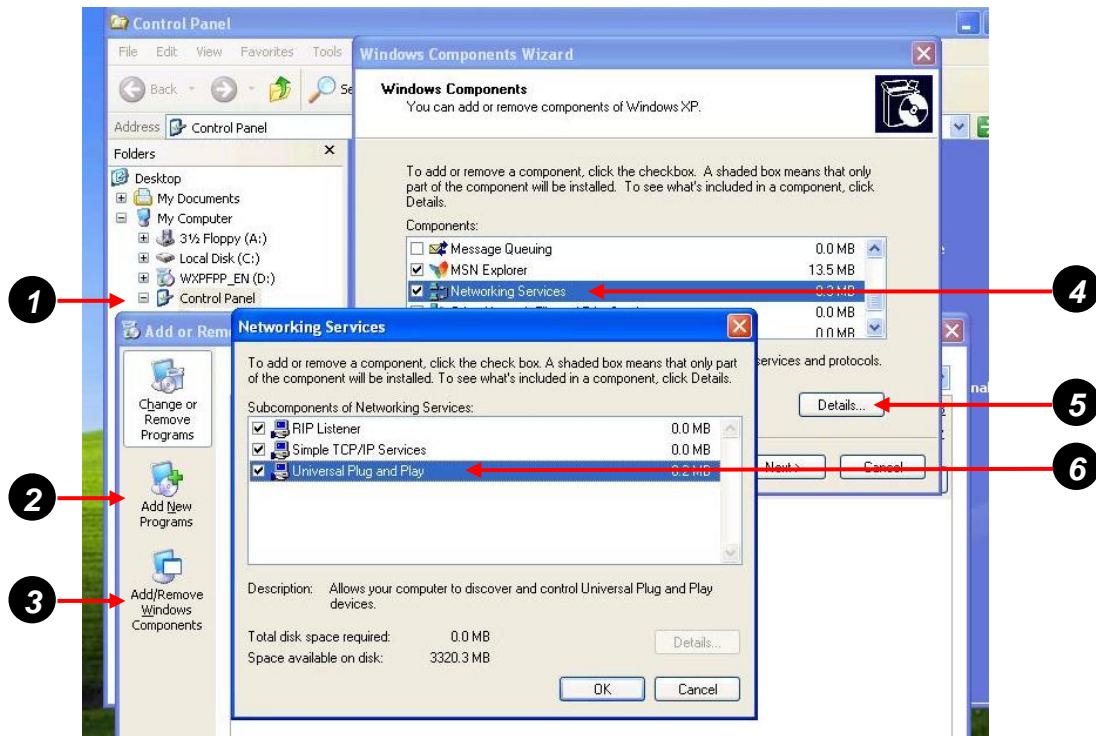
- Active: yes (enable)/no (disable)
- Port Range: the range of the usable ports, from 32768 to 65535 as default
- Link URL: After the network camera penetrates the firewall successfully, the actual external IP address and port will be shown.



To Activate the UPnP function in Windows OS

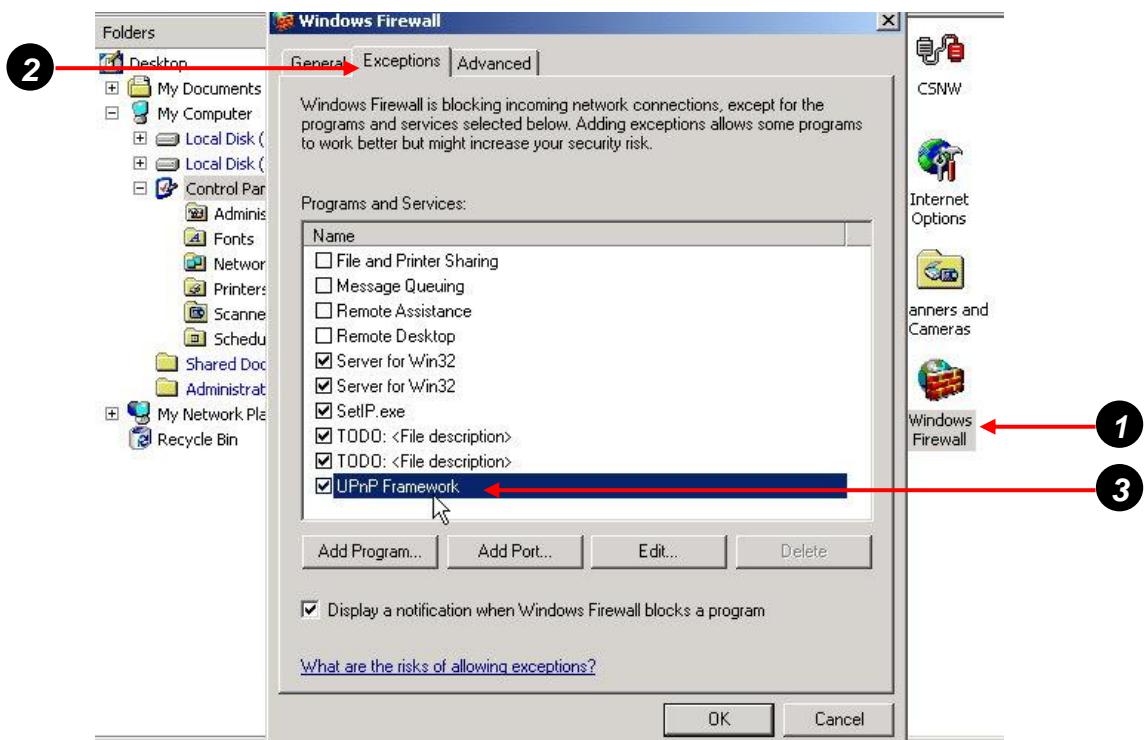
Windows XP

1. Windows component installation.



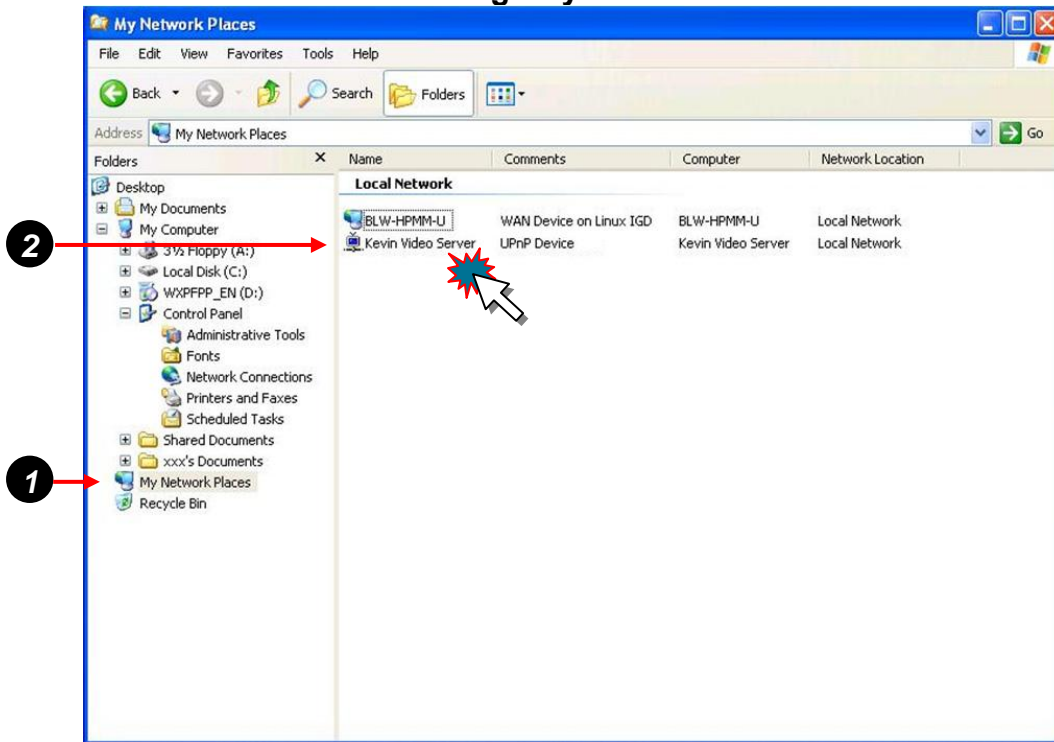
- Step 1 Select **Control Panel**.
- Step 2 Select **Add/Remove Programs**.
- Step 3 Select **Add/Remove Windows Components**.
- Step 4 Select **Networking Services**.
- Step 5 Click **Detail**.
- Step 6 Select **Universal Plug and Play**.

2. Open Windows firewall option



- Step 1 Select **Windows Firewall** in the Control Panel.
- Step 2 Select **Exceptions**.
- Step 3 Select **UPnP Framework**.

3. View the connection device using “My Network Place”



- Step 1 Open the folder of **My Network Place**.
- Step 2 The LAN camera will appear on the screen
Double click it.

SMTP (Mail Server Setting)

The Bullet Network Camera provides you to transmit images to a particular email address when a motion detection event occurred or a sensor is triggered.

A mail server setting for the camera is required, if you want to use this function.

• SMTP Setting

Enter the following information sequential to complete the settings as below:

- SMTP server: The SMTP server IP address.
- SMTP From: The email of the sender, i.e. xxx@xxx.com
- SMTP Authentication: Enables/disables
- User name: The user name is from SMTP server.
- Password: The password is from SMTP server.



NOTE :

The Bullet Network Camera support the mail account of SSL (Secure Sockets Layer) cryptographic protocol only, and the normal free webmail service belong the TLS (Transport Layer Security) cryptographic protocol.

Samba

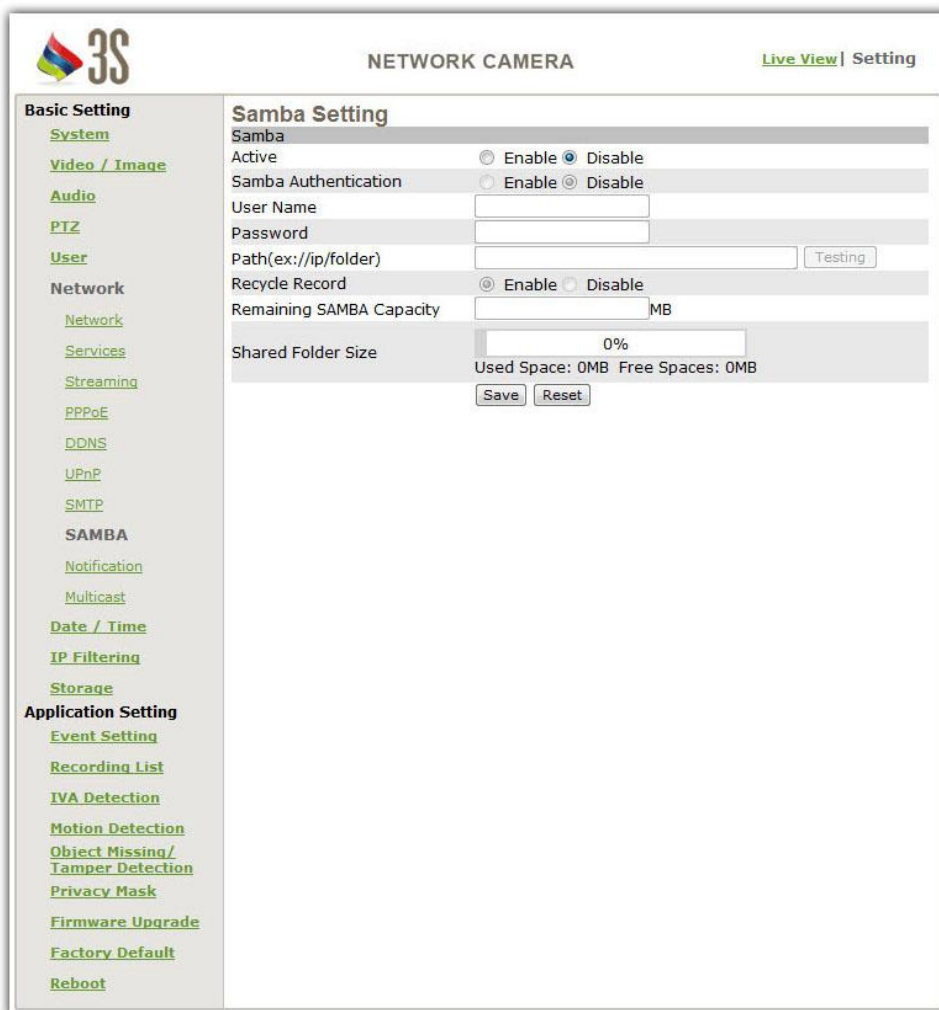
The Bullet Network Camera provides you to upload the snapshots to a specified shared folder when an event is triggered.

A Samba setting is required, if you want to use this function.

• Samba Setting

Enter the following information sequential to complete the settings as below:

- Active: Enable/Disable
- Samba Authentication: Enable/Disable
- Username: The username
- Password: The password
- Path: To specify the IP address of the computer that you want to share with and the file name, i.e. 192.168.0.X/xxx
- Recycle Record: Enable for the last record file to mantle the first record file.
- Remaining SAMBA Capacity: The remaining capacity can be record.
- Shared Folder Size (MB): The total capacity of the folder. Always remember to set the size of the folder to avoid exhaustion of disk capacity.



Notification

For a dynamic IP, you need to update the IP address every time when you connect to the camera via internet. This setting allows you to update the IP address by automatic notification of IP address change.

Select one of the following three notice options to update the IP address:

• **SMTP Notification**

SMTP Notification: notification via SMTP mail server
 SMTP SendTo: the recipient, i.e. xxx@xxx.com
 SMTP Subject: mail subject

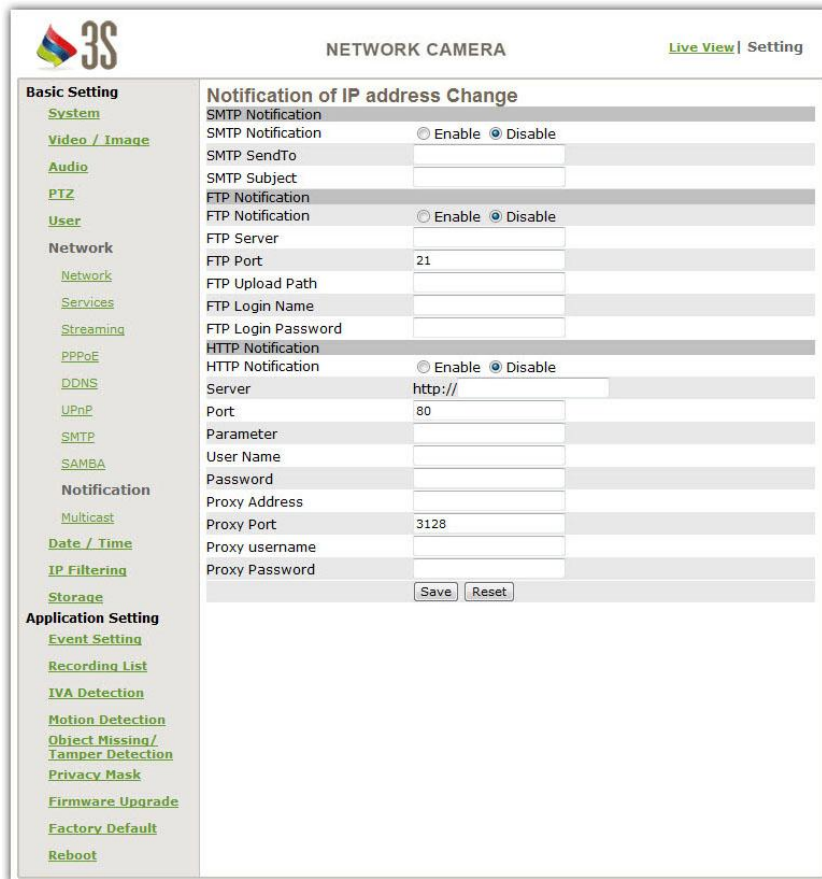
• **FTP Notification**

FTP Server: FTP Server name.
 FTP Port: FTP port. The default setting is 21 (recommended).
 FTP Upload path: The path to upload files.
 FTP Login name: The name to log in the FTP.
 FTP Login Password: The password to log in the FTP.

• **HTTP Notification**

Server: The address of the server, i.e. http://.
 Port: The port to access HTTP. The default setting is 80 (recommended).
 Parameter: The setting of the parameters, refer to the installation setting of your HTTP server.

Refer to the installation setting of your HTTP server for the setting of the parameters (such as Username, Password, and Proxy).



Multicast

This function allows multiple people to watch video streaming without limited in the number of users, but is only applicable to the LAN environment. Video streaming format (H.264) is depended on the selected image format setting in Basic Setting → Video/Image → Video Format.

• **H264 (Main Stream)**

It allowed multiple users to view the H.264 video stream free from limited in the number of users. However, this is only effective within the LAN.

• **H264 (Sub Stream)**

It allowed multiple users to view the H.264 video stream free from limited in the number of users. However, this is only effective within the LAN.

• **Motion JPEG**

It allowed multiple users to view the Motion JPEG video stream free from limited in the number of users. However, this is only effective within the LAN.



NOTE :

Please refer to the chapter of **Appendix: Multicast Application** for different environment

Date/Time

- **Server Time (the date/time of the server)**
- **PC Time (the date/time of your PC)**
- **Time Setting (date/time setting)**

It provides 3 ways for you to synchronized the time as below:

1. To synchronize the time from PC's time:
 - To preset time synchronized for the camera from your PC time.
2. Get the time from an NTP server:
 - To synchronize the time from the NTP (Network Time Protocol)
 - Click **NTP** in the Time Setting.
 - Enter the IP address in the NTP server. (1~3)
 - Press the **SAVE** to apply it.

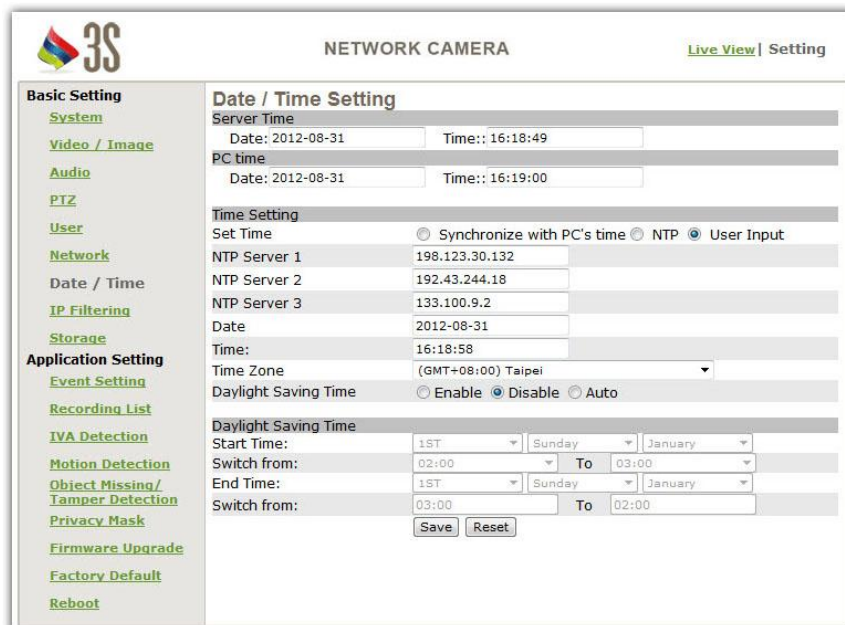
Once the NTP time obtain, the Bullet Network Camera will updated the time.

NOTE :

The default NTP servers as below:

- NTP Server 1: 198.123.30.132
- NTP Server 2: 192.43.244.18
- NTP Server 3: 133.100.9.2

3. Change the time by manually:
 - Click **User Input** in the Time Setting.
 - Select the format of date to display, i.e. "yyyy/mm/dd" format.
 - Select the format of date to display, "hh:mm:ss" by 24 hours format.
 - Select the time zone.
 - Select **Adjust** to adjust the time.



IP Filter

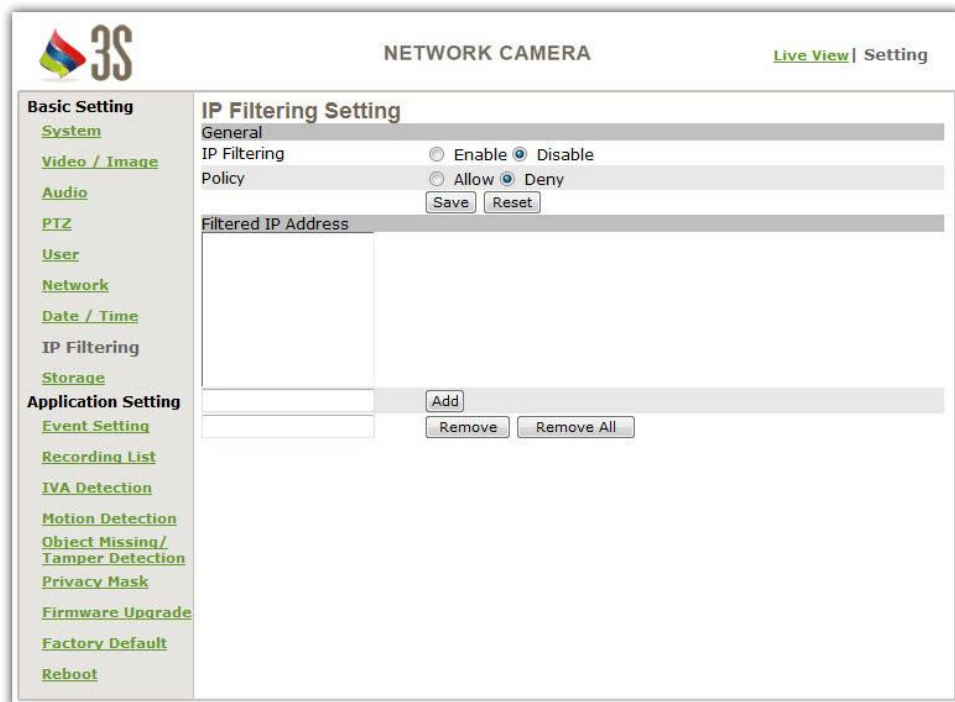
The Bullet Network Camera provides you to allowed or deny the visitors from particular/target address by IP Filter Setting.

• **General**

IP Filtering: Enable/disable
 Policy: Allow/deny

• **Filter IP Address (Overview of the setting for IPs)**

Add: Enter the IP address that you allowed or denied it.
 Remove: Remove the IP address existed.
 Remove All: Remove all of the IP address existed.



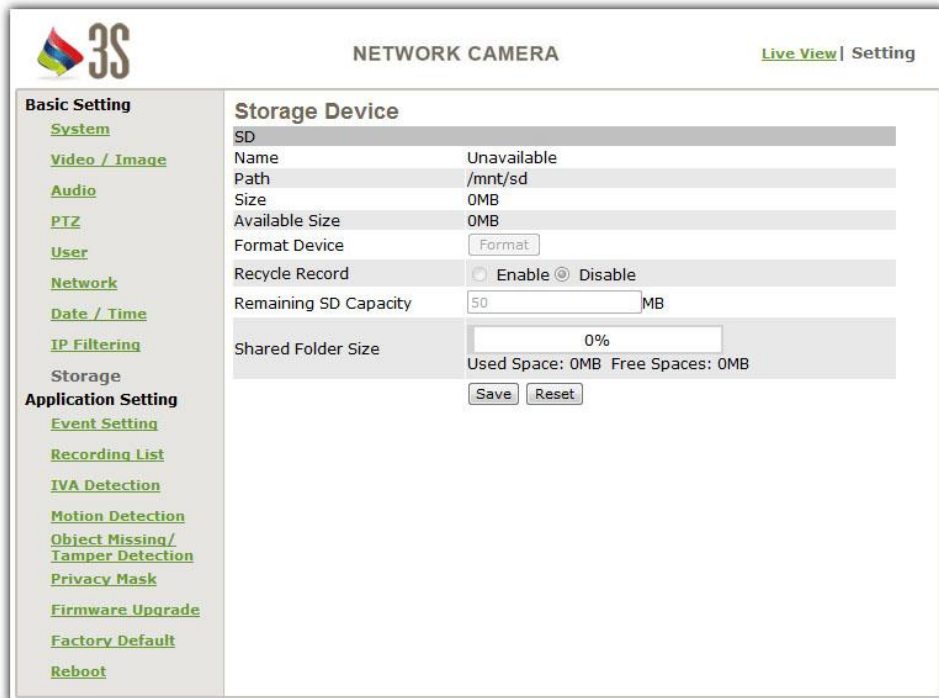
Attention:

Setting rules as below:

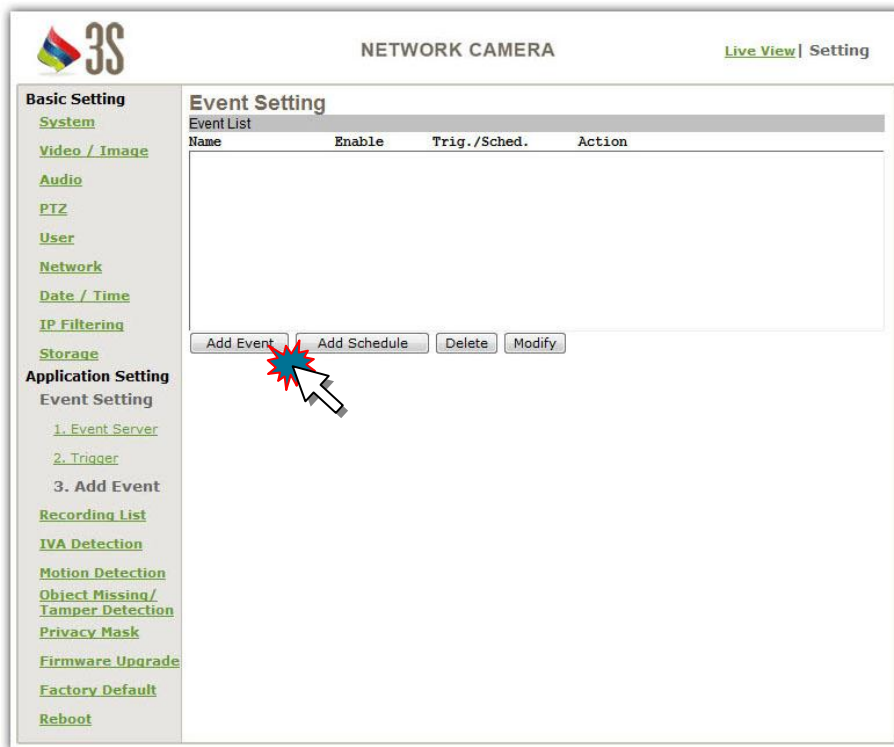
1. Actions that may cause a limited connection are to be denied.
2. Improper use of this function may cause disconnection from Internet. You might need to use hardware reset to reset to the factory default. Please refer to the “Factory Default” for details.

Storage

It is used to identify and monitor the status of the SD card. It shows the size of the SD card and how much free space is available for storage. It is also used to format SD cards for local storage.



- Follow the instructions to add events on SD card.



Event Setting

General

Name

Response to event trigger

Always

During time Sun Mon Tue Wed Thu Fri Sat

Start Time End Time

Never

Trigger by

Alarm input

Motion Detection Area 1 Area 2 Area 3

On boot

Blind Detection Area 1 Area 2 Area 3

Net Loss

Response process

Active alarm out

Upload video/image to server

Send HTTP notification

Send TCP notification

Send NAP notification

Day Night



Event Setting

General

Name

Response to event trigger

Always

During time Sun Mon Tue Wed Thu Fri Sat

Start Time End Time

Never

Trigger by

Alarm input

Motion Detection Area 1 Area 2 Area 3

On boot

Blind Detection Area 1 Area 2 Area 3

Net Loss

Response process

Active alarm out

Upload video/image to server

Base file name

File format

Add date/time suffix

Add sequence number suffix up to and then start over.

Upload Server Type :

FTP

SMTP To mail address

Subject

Include pre-trigger buffer : Seconds

Include post-trigger buffer : Seconds

Continue video upload : Seconds

Recording Storage Device :

Samba

SD Card

Include pre-trigger buffer : Seconds

Include post-trigger buffer : Seconds

Continue video upload : Seconds

Send HTTP notification

Send TCP notification

Send NAP notification

Day Night

NOTE :

1. The function of storage is only applicable for the model which supports it.
2. No SD/SDHC Card Slot & Local Storage Function apply for Argentina.

Application Setting

The Application Setting menu lets you view the Application Setting for the Bullet Network Camera and change the following setting:

Event Setting Event Server
 Trigger
 Add Event

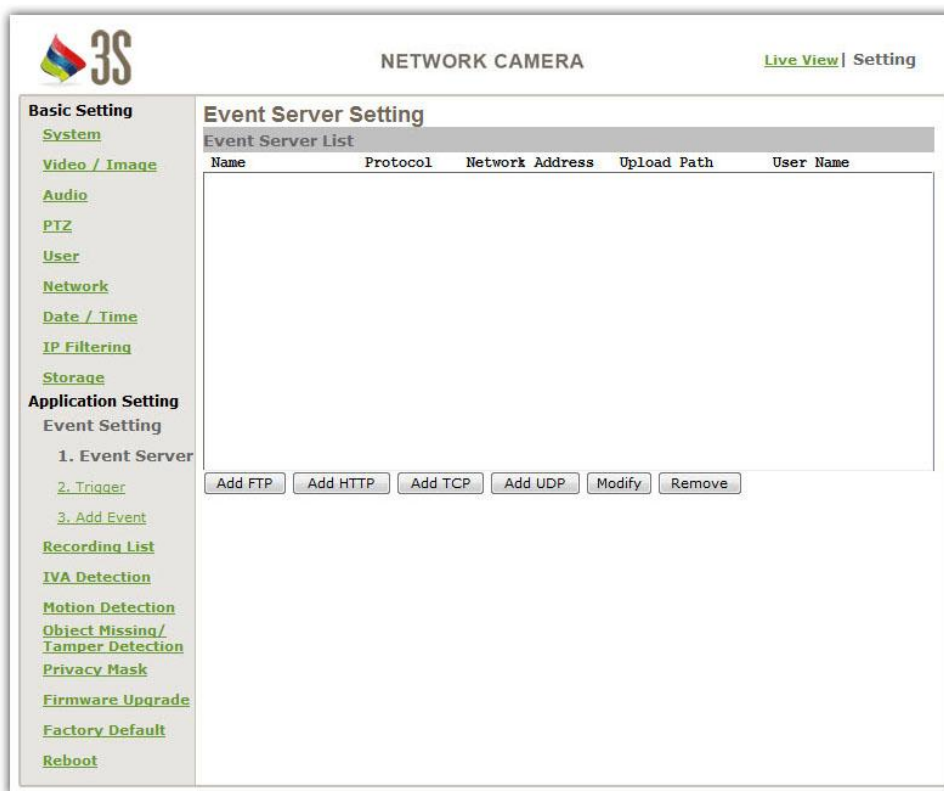
Motion Detection
Blind Detection
Privacy Mask
Firmware Upgrade
Factory Default
Reboot

Event Setting

The Bullet Network Camera is the equipment with intelligent security management function.

It ensure the security monitoring by authorized users to define the **Trigger Events** which is base on the particular times and situations, and set the respond to the event for the Camera.

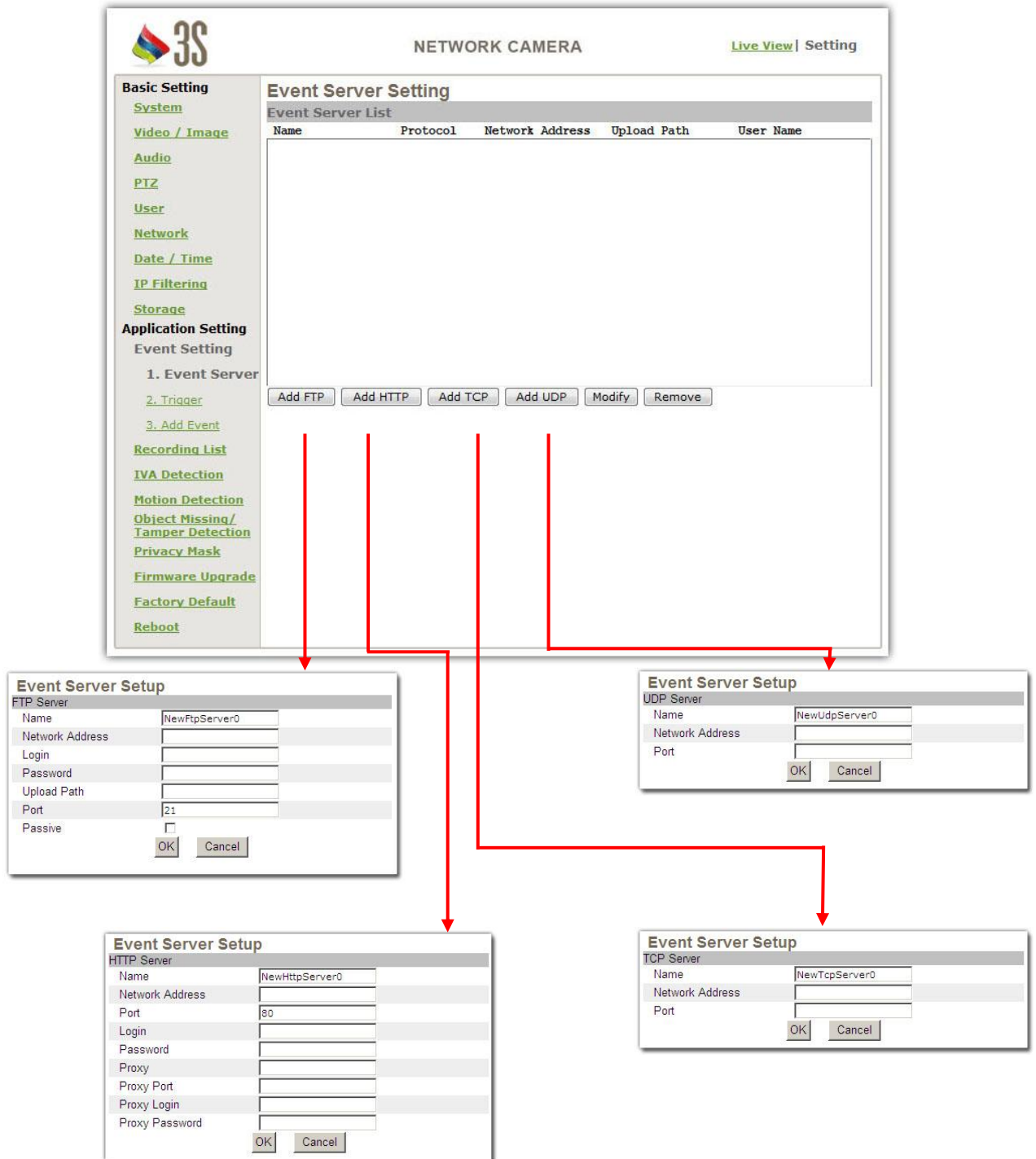
It proposed to avoid exceed in five to preview in **Event Seeing**.



Event Server (Upload Server)

You can make a setting to upload files to the server completely.

Please make a setting for servers in the **Event Server Setting** by following setting:



- **Event Server List**

Add FTP Enter the information of the FTP server you specified.

Name: The name of the FTP
Network Address: IP address of the FTP
Login: Log-in name
Password: Log-in password
Upload Path: Uploading path
Port: Port
Passive: Check to set the FTP status as passive

Add HTTP Enter the information of the HTTP server you specified.

Name: HTTP name
Network Address: HTTP IP address
Login: Log-in name
Password: Log-in password
Proxy: Proxy server name
Proxy Port: Proxy server port
Proxy Login: Proxy server log-in name
Proxy Password: Proxy server log-in password

Add TCP Enter the information of the TCP server you specified.

Name: TCP server name
Network Address: TCP IP address
Port: TCP port

Add UDP Enter the information of the UDP server you specified.

Name: UDP server name
Network Address: UDP IP address.
Port: UDP port

Modify **Modifies the setting value**

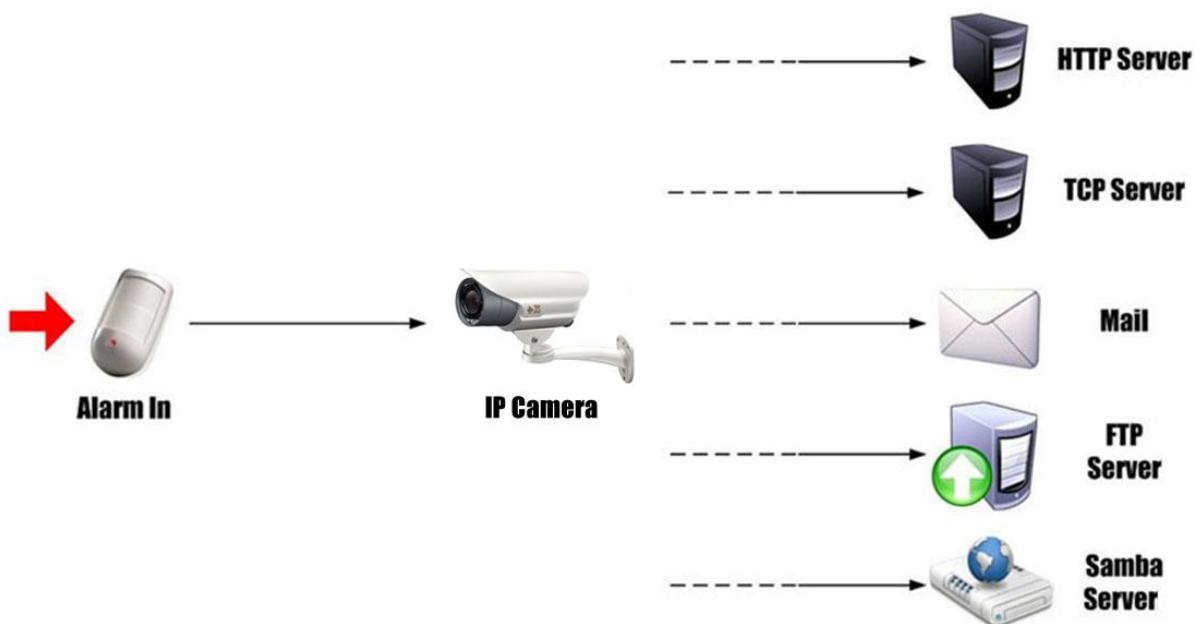
Delete **Removes the setting value**

Trigger

Whenever the camera detected abnormal events during the scheduled time, it will respond by active trigger automatically.

There are 2 types for the trigger response: Alarm messages sending and emailing. Recorded the image to the specify server.

Once you had completed this setting, you may requested to test by manually in this section to ensure all of the functions are working properly.



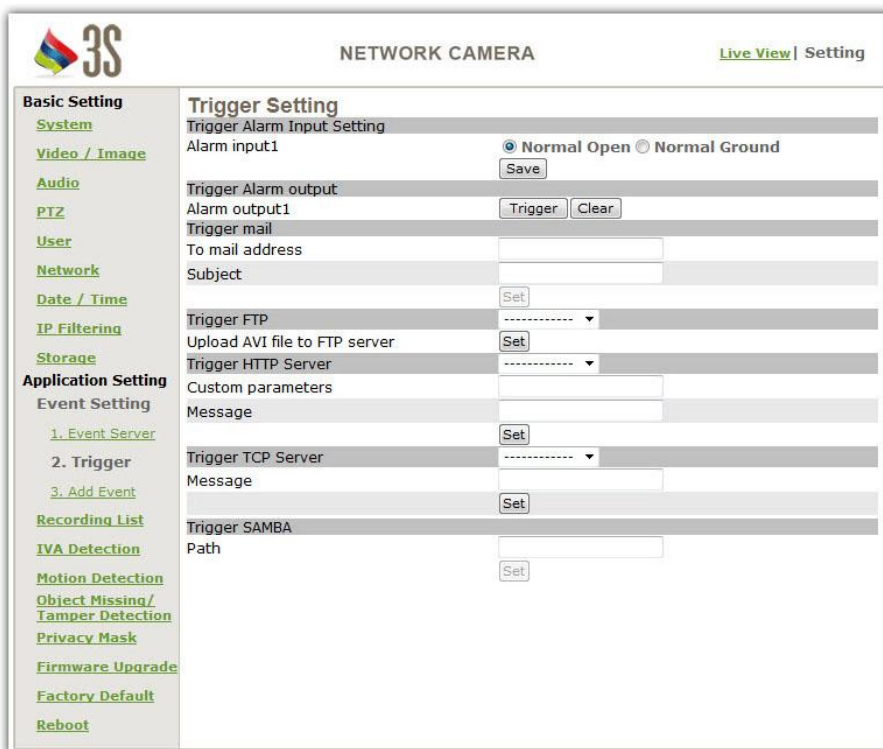
Normal Open has been set to the default status of the digital input pin, but you can change it to **Normal Ground** by setting in **Setting > Application > Event > Trigger**.

1. It will be **Open** status of the alarm input pin which is connected to external device when the alarm input has been set to **Normal Open**. Therefore, when the external device is triggered to close status, the alarm input pin will be triggered.
2. On the contrary, It will be **Close** status of the alarm input in which is connected to external device when the alarm input pin has been set to **Normal Grounded**. Therefore, when the external device is triggered to open status, the alarm input pin will be triggered.

NOTE :

Before you install the hardware for alarm I/O, please set up the **Trigger Setting** at first. (Setting > Application Setting > Event > Trigger)

- **Alarm Input Setting**
 Set the alarm input type between N.O.(Normal Open) and N.G. (Normal Ground).
 The N.G. means N.C.
- **Trigger Alarm output:**
 Click **Trigger** to start the alarm.
 Click **Clear** to stop the alarm.
 (Please make sure before you click **Clear** for close the alarm testing when the trigger testing is done).
- **Trigger mail**
 After you enter the email address and subject in the field, click the **Set** to test the mail sending completely.
- **Trigger FTP**
 Click the **Set** to upload AVI files to FTP server to test completely.
- **HTTP Server**
 After you enter the message in the **Message** field, click the **Set** to upload the message to HTTP server to test completely.
 You can make custom parameters settings completely through
Application Setting > Event > Event Server.
- **TCP Server**
 After you enter the message in the **Message** field, click the **Set** to upload the message to TCP server to test completely.
- **Trigger SAMBA**
 After you enter the Path in the field and click the **Set** to share the folder from your PC.



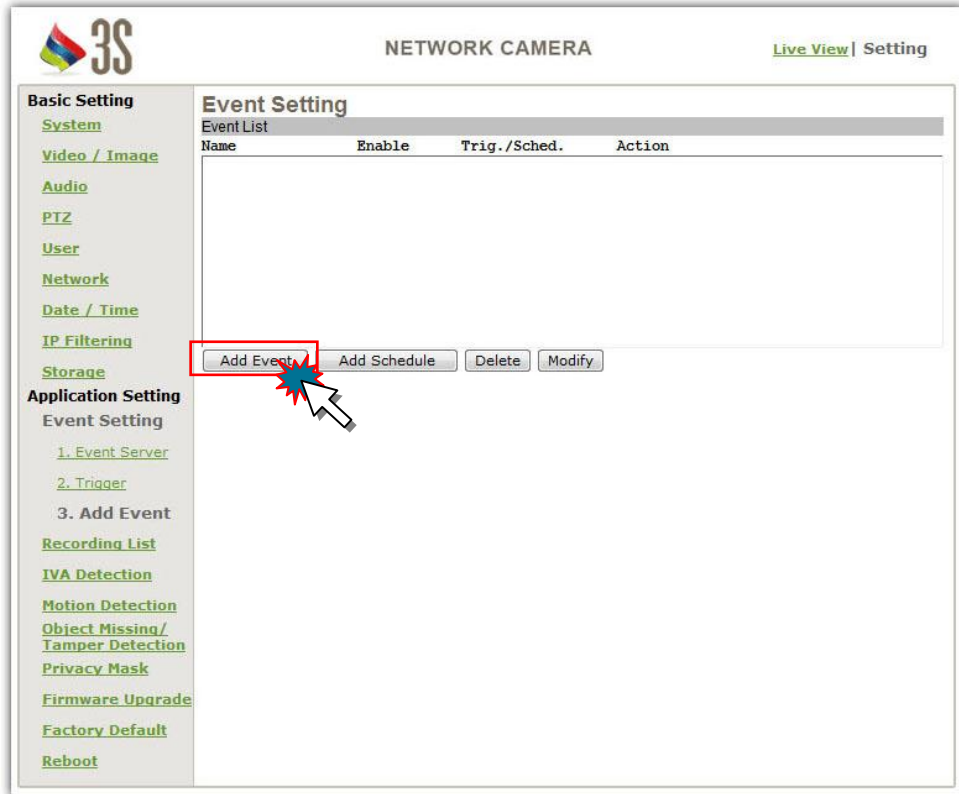
Add Event

• **Event List**

Add Event: Click **Add Event** to enter the **Trigger Even Setting**.

NOTE :

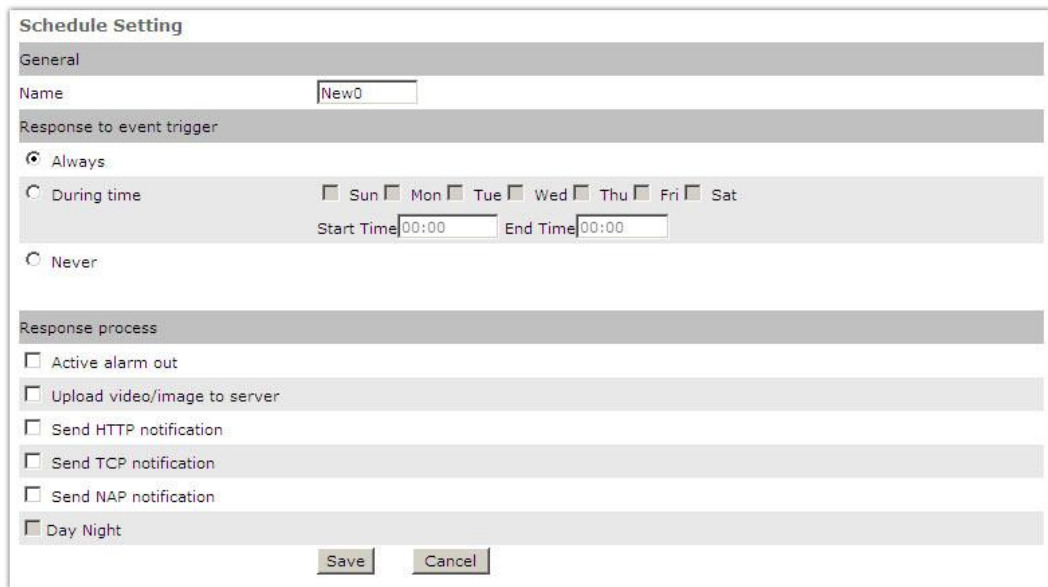
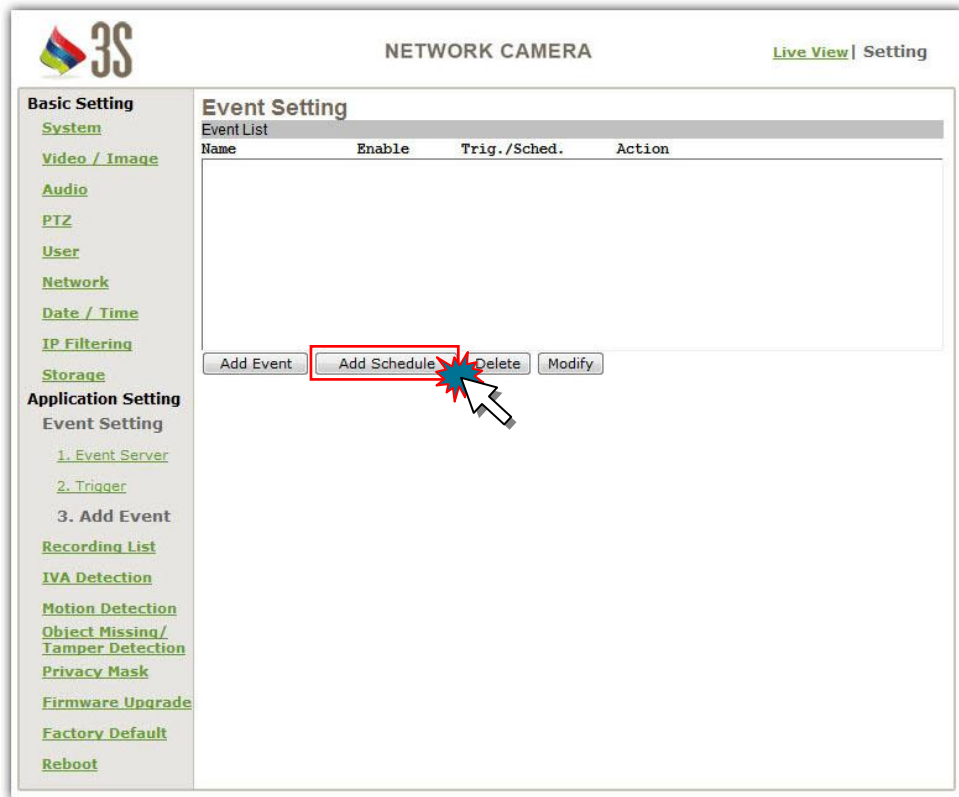
It can provide up to 10 event settings.



Add Schedule: Click **Add Schedule** to add a new schedule.

NOTE :

It can provide up to 10 schedule settings.



General:

Name: Name the trigger event.

Response to event trigger: Time setting for the trigger event

Always: Always monitoring

During time: Check the date you want to monitor (Sun.~Sat.) and the duration of monitoring.
For example, if you want to set the camera to monitor from 7 pm after work to 7 am next morning from Monday to Friday, check the boxes from Monday to Friday, enter "19:00" in the "Start From" field, and enter "12:00" in the "Duration" field.

Never: Do not set the time.

Trigger by: Sources of trigger events (Note: You can set only one trigger event once.)

Alarm input: The alarm is triggered by the security equipment connected from the DI terminals behind the machine, such as door/window detectors, infrared sensors.

Motion Detection: The alarm is triggered when motion is detected. The camera will send an alarm when any objects appear in the set detection area.

On boot: The alarm is triggered by reboot. The camera will send an alarm when the system is rebooted due to power shortage, sabotage, or other reasons.

Blind Detection: The alarm is triggered when blind area is detected. The camera will send an alarm when any objects appear in the set detection area.

Net Loss: The alarm is triggered when the network is disconnected. The camera response process by the selection which you have set.

Response process: trigger event response (Note: Multiple selections are available)

Active alarm out: An event is detected by the security equipment connected from the DI terminal behind the machine, such as high-decibel alarms, light projectors. You can set the alarm duration in the "Duration" field.

Upload video/image to server: The camera will save the Motion JPEG of the event to the Upload Server (FTP/SMTP) or the Recording Storage Device (Samba).

Include pre-trigger buffer: When an event is detected, the camera will record the previous video image up to 10 seconds.

Include post-trigger buffer: When an event is detected, the camera will record the post video image up to 10 seconds.

Continue video upload: When the event is continue, the camera will record the video image up to 10 seconds.

For example: If the pre-trigger 5 seconds, post-trigger 5 seconds and continue video upload 5 seconds have been selected, the total file size will be 15 seconds.

The camera will save the capture photo of the event to the Upload Server (FTP/SMTP) or the Recording Storage Device (Samba).

Send HTTP notification: The alarm will be sent to the HTTP server you specified. To use this function, set the coordinative HTTP server in the Event Server setting page in advance.

Send TCP notification: The alarm will be sent to the TCP Server you specified. To use this function, set the coordinative TCP server in the Event Server setting page in advance.

Send NAP notification: The alarm will be sent to the NAP Server you specified. To use this function, set the coordinative NAP server in the Event Server setting page in advance.

Day Night: Force the camera turn into Day/Night Mode when the trigger is detected.

NOTE :

The setting pages of Add Event and Add Schedule are the same. There is only one difference between them is the Add Schedule setting without the setting for **Trigger by**.

Delete: Delete the event cluster setting.

Modify: Modify the event cluster setting.

Recording List

Use this setting to management the recording list.

3S NETWORK CAMERA [Live View](#) | [Setting](#)

Basic Setting

- [System](#)
- [Video / Image](#)
- [Audio](#)
- [PTZ](#)
- [User](#)
- [Network](#)
- [Date / Time](#)
- [IP Filtering](#)
- [Storage](#)
- Application Setting**
- [Event Setting](#)
- [Recording List](#)
- [IVA Detection](#)
- [Motion Detection](#)
- [Object Missing/Tamper Detection](#)
- [Privacy Mask](#)
- [Firmware Upgrade](#)
- [Factory Default](#)
- [Reboot](#)

Recording Management

Search Conditions

Date:

Trigger: Any Alarm MD BD Net Loss

Storage Device: SD

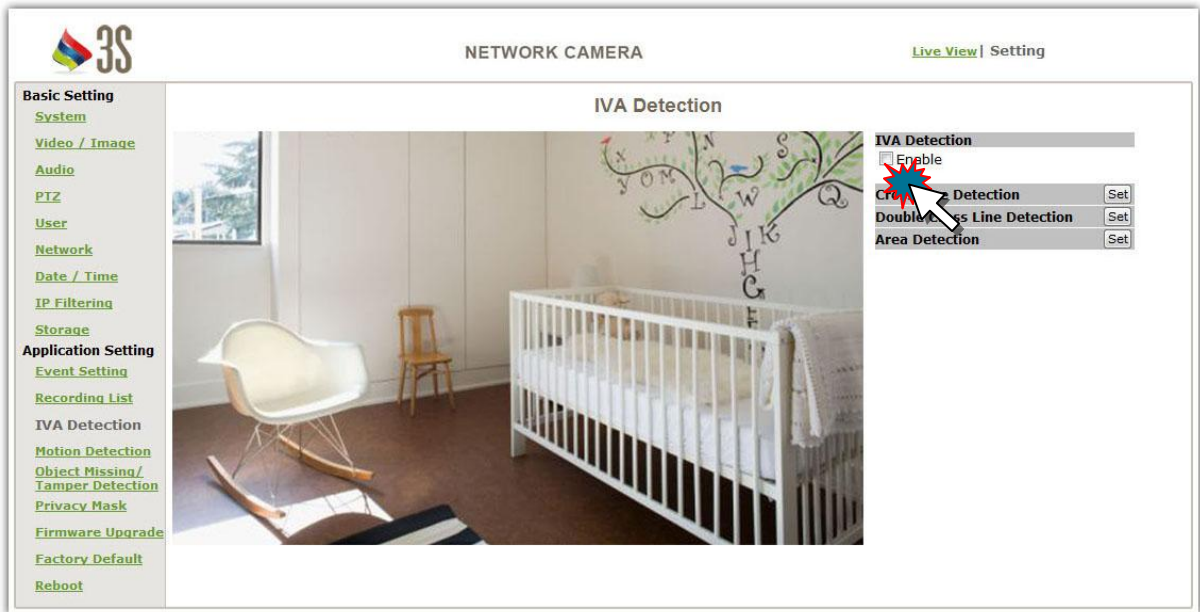
File format: AVI JPG

Recording List

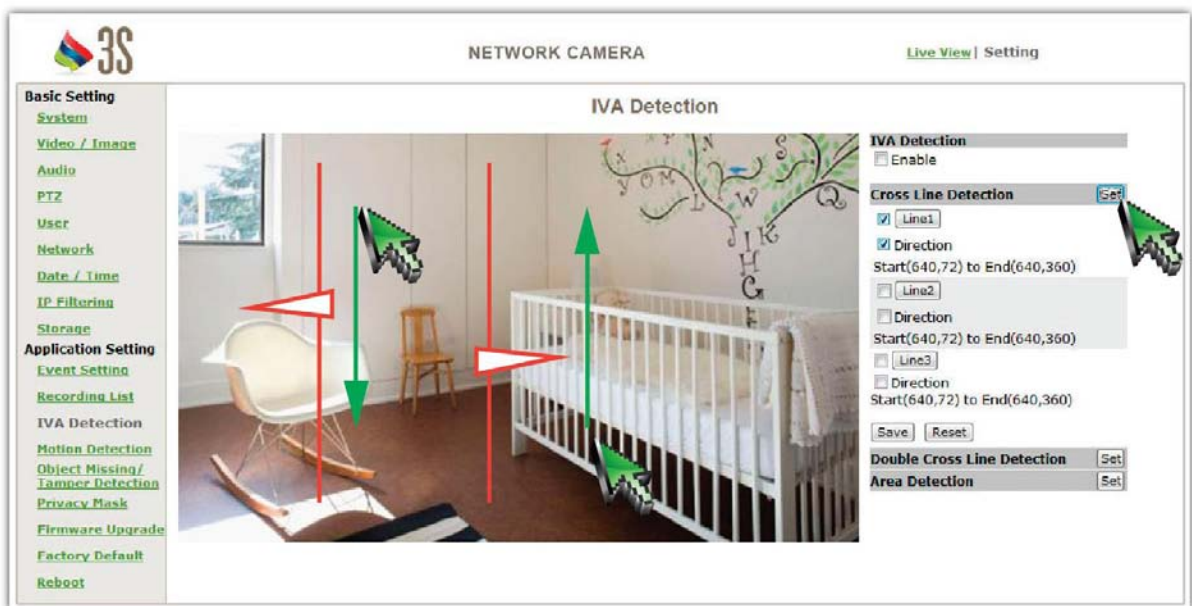
Trig./Sched.	Prefix	Time	Size

IVA Detection

Click the **Enable** to start IVA Detection after the setting had set.



• Cross Line Detection:



• Double Line Detection:

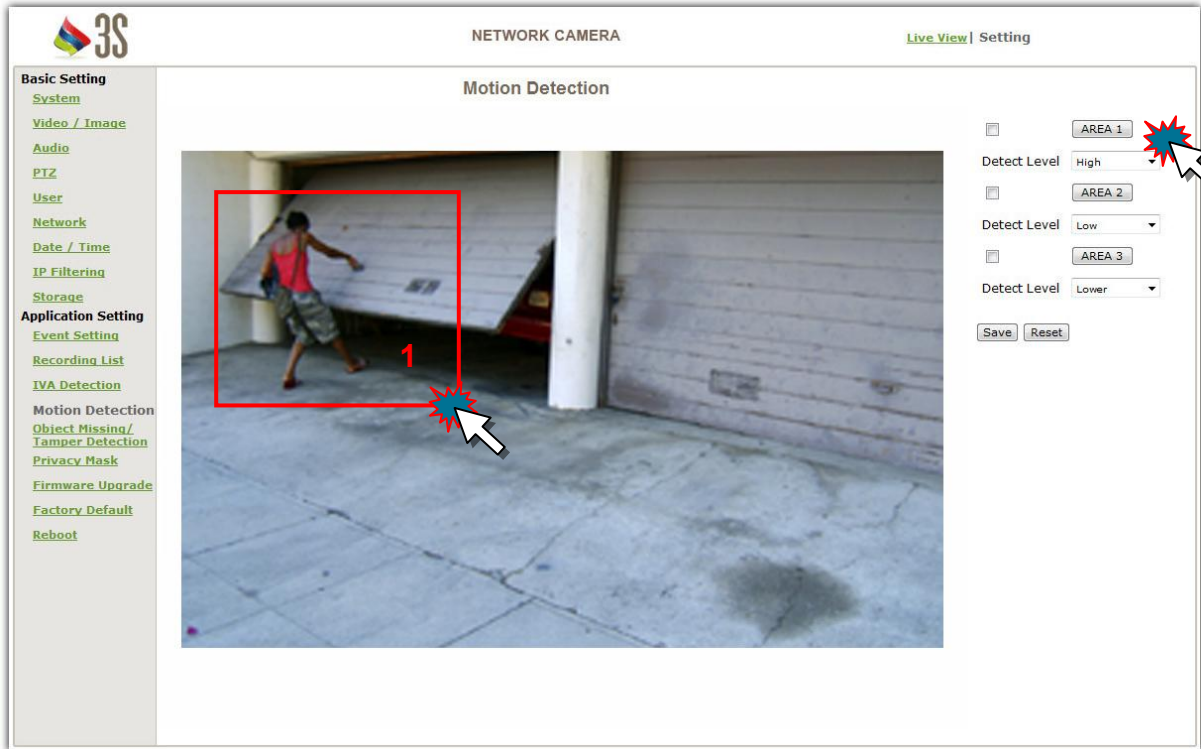
The screenshot shows the 'IVA Detection' configuration page. On the left is a sidebar with menu items: Basic Setting, System, Video / Image, Audio, PTZ, User, Network, Date / Time, IP Filtering, Storage, Application Setting, Event Setting, Recording List, IVA Detection, Motion Detection, Object Missing / Tamper Detection, Privacy Mask, Firmware Upgrade, Factory Default, and Reboot. The main area features a live video feed of a nursery room with a white crib and a rocking chair. Two vertical green lines are drawn across the image, with green arrows pointing to them. Below the video is a yellow clock icon and the text '30 seconds'. On the right, the settings for 'Double Cross Line Detection' are shown, including checkboxes for 'Line1', 'Line2', and 'Line3', and options for 'Direction1' and 'Direction2'. A mouse cursor is clicking the 'Set' button for 'Double Cross Line Detection'.

• Area Detection:

The screenshot shows the 'IVA Detection' configuration page with the same sidebar as above. The main area features the same live video feed of the nursery room. A blue rectangular area is drawn around the rocking chair and the lower part of the crib. Below the video is a yellow clock icon and the text '30 seconds'. On the right, the settings for 'Area Detection' are shown, including checkboxes for 'AREA 1', 'AREA 2', and 'AREA 3', and options for 'Loiter', 'Enter/Exit Detection', 'Speed', 'Abandon', 'Reverse', 'Appear', and 'Disappear'. A mouse cursor is clicking the 'Set' button for 'Area Detection'.

Motion Detection

Click the **Area** to open the setting frame and the setting frame will show on your screen. You can adjust the frame size by move and drag the edge of the frame on the arrow of your mouse, after adjusted click the left button of your mouse.



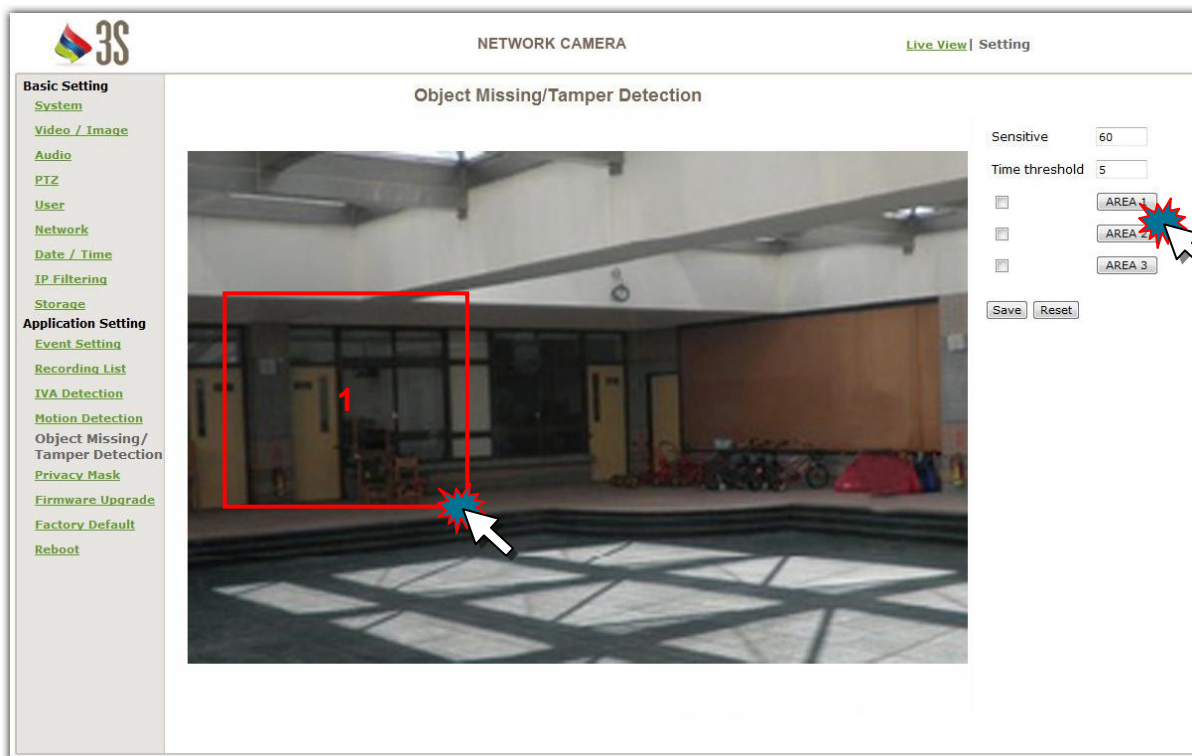
- **Area:**
 There are 3 frames available for setting: Area 1, Area 2 and Area 3.
 Click **Area** to open the detectable area then click the signal checkbox to enable the function.
- **Detect Level:**
 There are 5 levels for you to adjust the area: Lower, Low, Mid, High and Highest.

Object Missing / Tamper Detection

Tamper Detection means that you can set the inside/outside area for detect.

Tamper Detection triggered if any object activity in the area that you have set.

Click the **Area** to open the setting frame and the setting frame will show on your screen. You can adjust the frame size by move and drag the edge of the frame on the arrow of your mouse, after adjusted click the left button of your mouse.



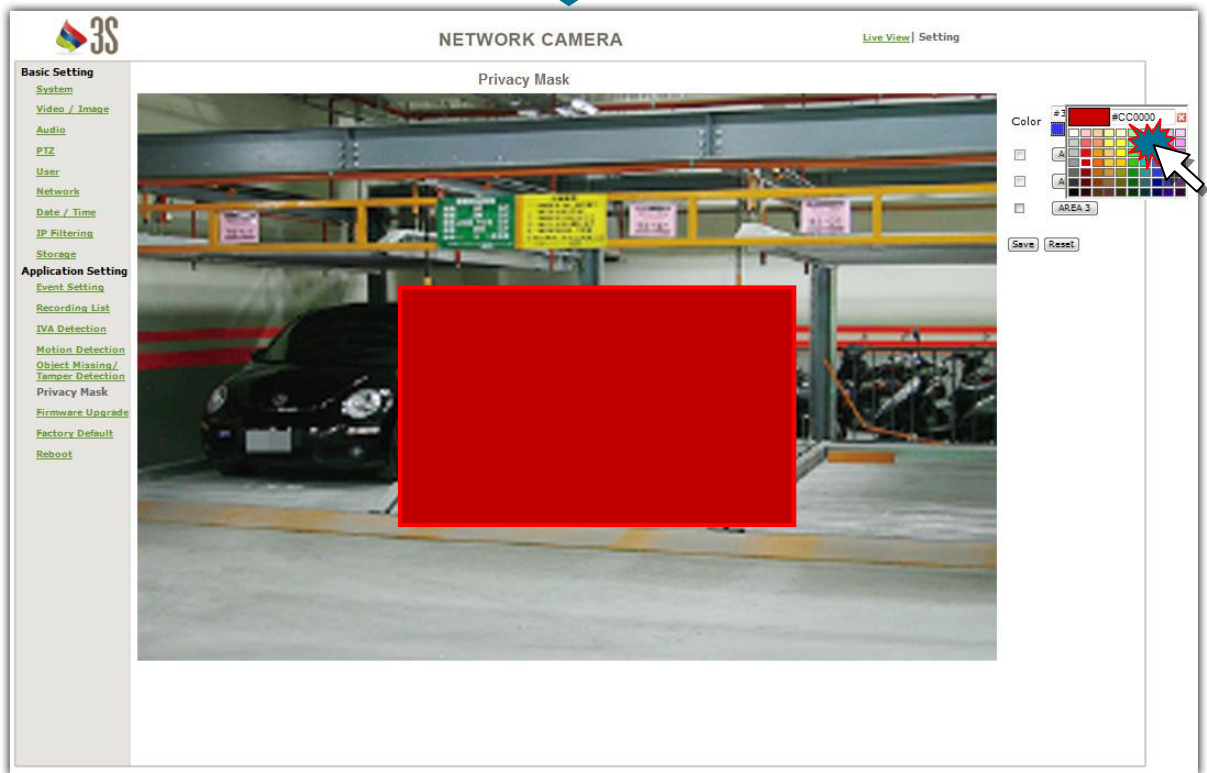
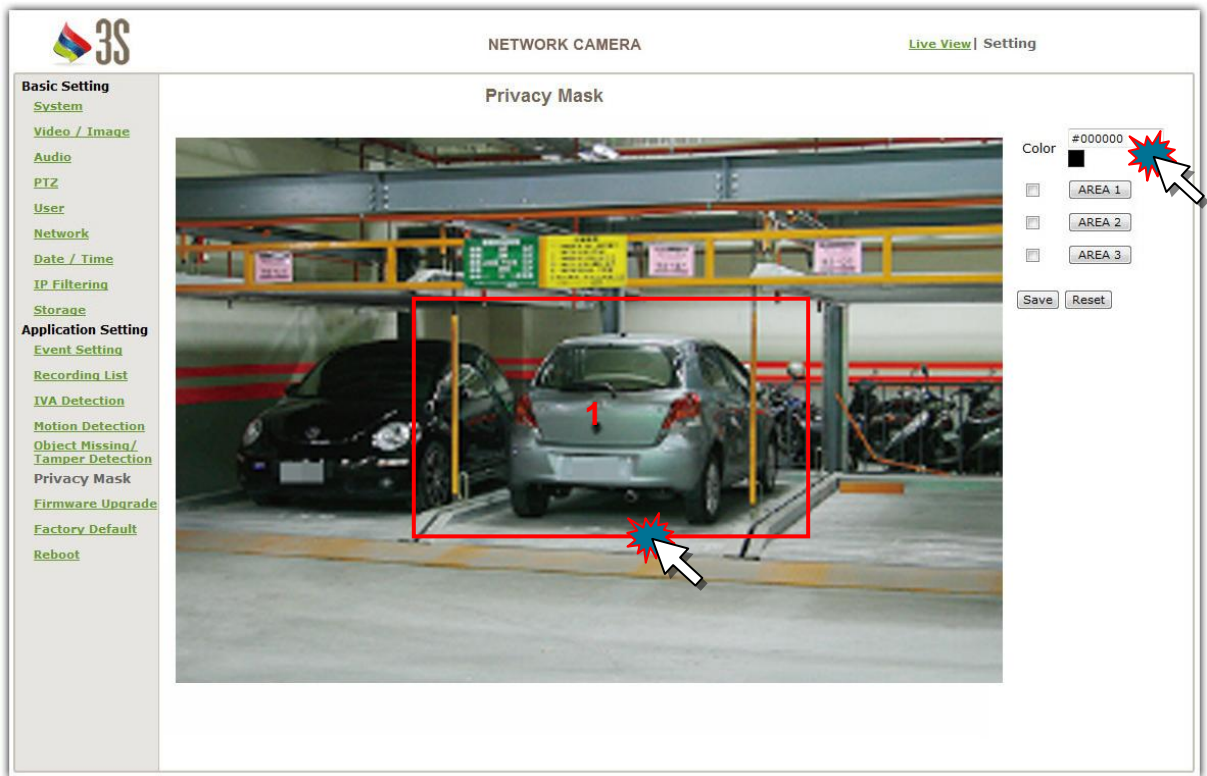
- **Area:**
 There are 3 frames available for setting: Area 1, Area 2 and Area 3.
 Click **Area** to open the detectable area then click the signal checkbox to enable the function.
- **Sensitive:**
 Adjust the Sensitive of the area by entering the degrees in the field of **Sensitive**.
 The setting range is **0~100**. **0** is the least sensitive and 100 is extremely sensitive.
- **Time threshold:**
 Adjust the stay time to detect the object in the area.
 The setting range is **0~100** seconds.

Privacy Mask

To ensure the confidential, the Bullet Network Camera provides the Privacy Mask for you to mask the image in the masked zone.

The following diagram illustrates how to set the Privacy Mask.

1. Click the **Area** to set the mask zone for you to open the setting frame and the setting frame will show on your screen.
(There are 3 frames available for setting: Area 1, Area 2 and Area 3.)
 2. Adjust the frame size by move and drag the edge of the frame on the arrow of your mouse, after adjusted click the left button of your mouse.
 3. Selects the color for Privacy Mask by click the **Color block** in order to show the palette, move the arrow point and click on the color what you like.
 4. After the setting is completed, click Save to apply it and the screen will refresh within a few second automatically.
- **Color:**
Click the black color to select the color from color-cord table, or input the color-cord to change the color.
 - **Area:**
There are 3 frames available for setting: Area 1, Area 2 and Area 3.
Click **Area** to open the detectable area then click the signal checkbox to enable the function.



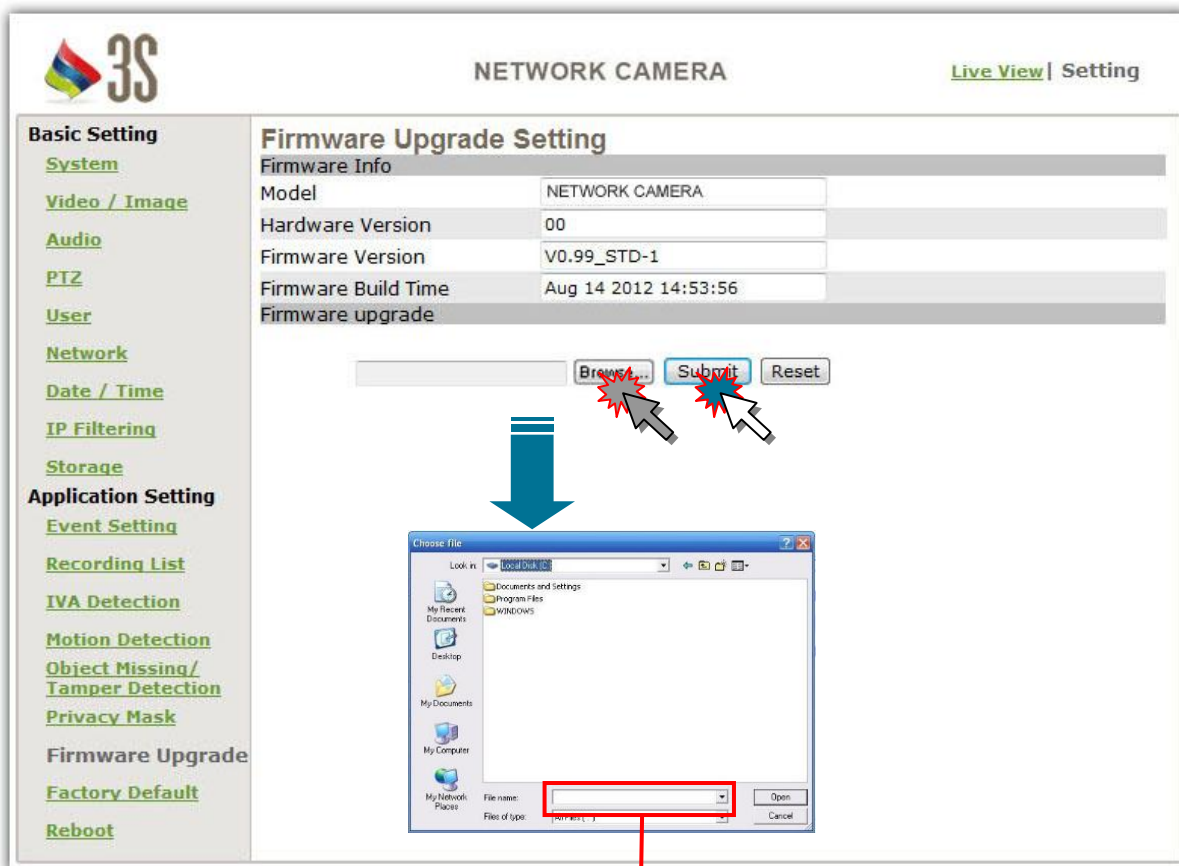
Firmware upgrade

Contact with your dealer for more information about firmware upgrade. Please follow the steps below to upgrade the firmware.



Attention: Important! Read Carefully!!

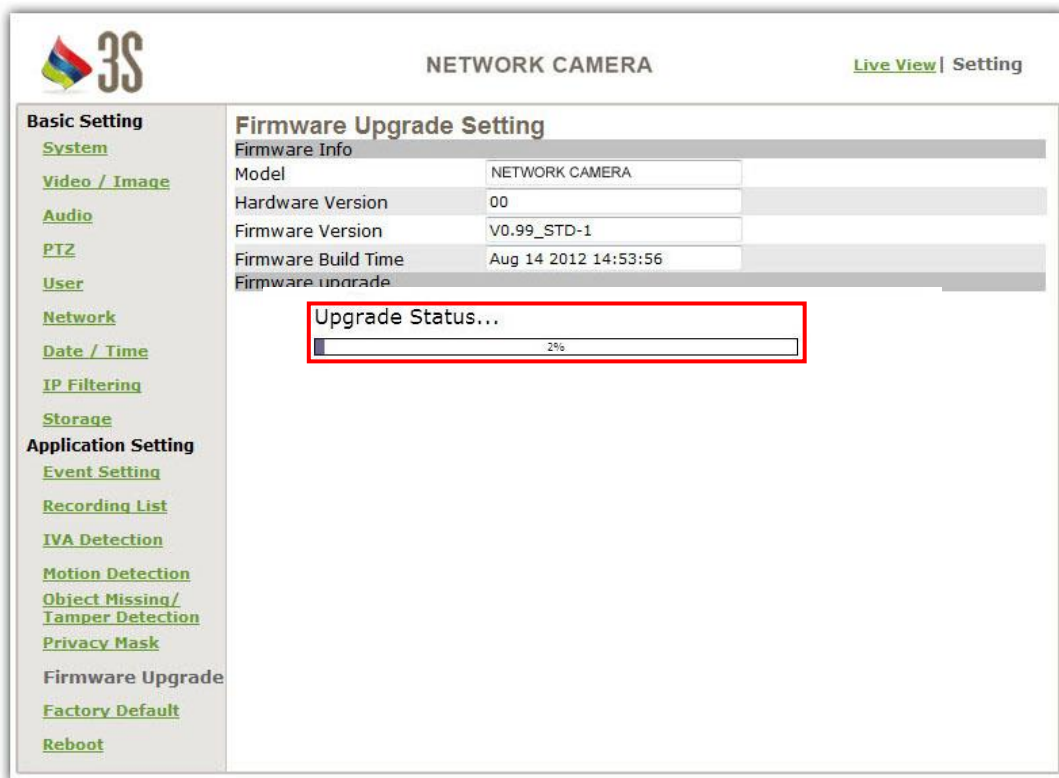
1. Please close all of the application that you are using on your PC.
2. Select **Firmware Upgrade** and the Firmware Upgrade Setting page will show on your screen.
3. Click **Browse** to select the location where the firmware file is.
4. Click **Submit** to upgrade the firmware immediately.



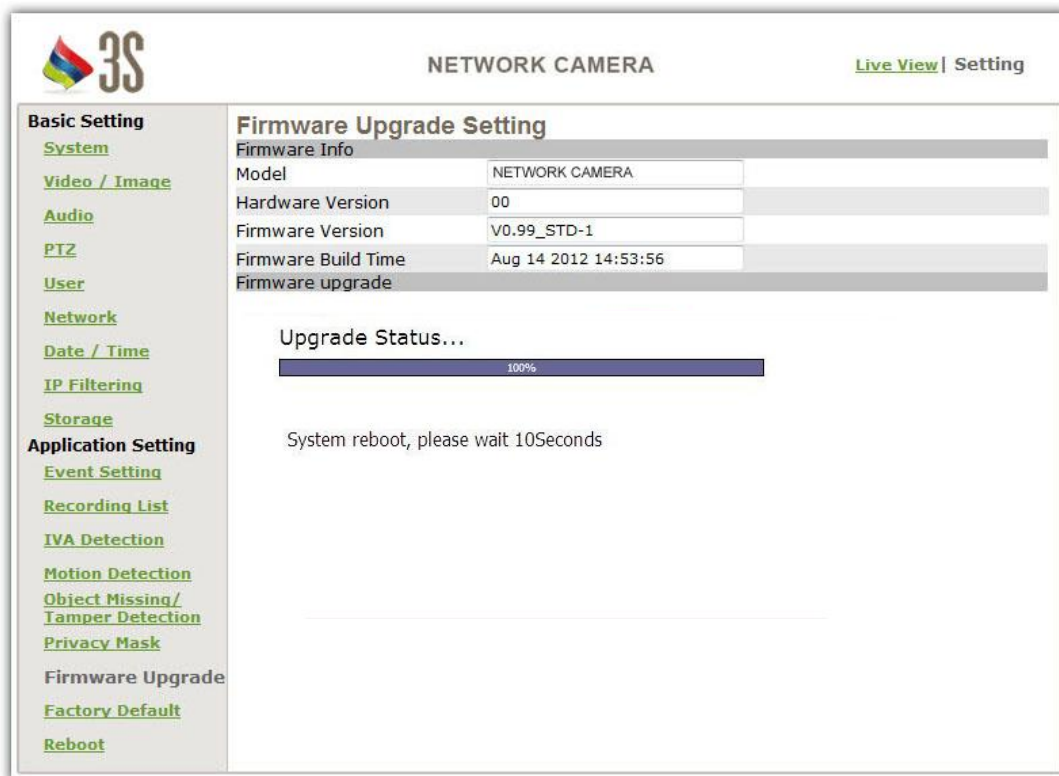
Select the location where the firmware file is.



5. The progressing status of the firmware upgrade will show on your screen.



6. The Bullet Network Camera reboots automatically after the firmware has been upgrade completed. Reconnect to the server after 60 seconds.



NOTE :

Please be careful and make sure there is no any interrupted during the process of the firmware upgrade because of the firmware is burned into the Flash Rom then.

System will probably damage seriously and need to rest to the factory default for repair it if the power cable has been removed or becomes loose during the upgrade.

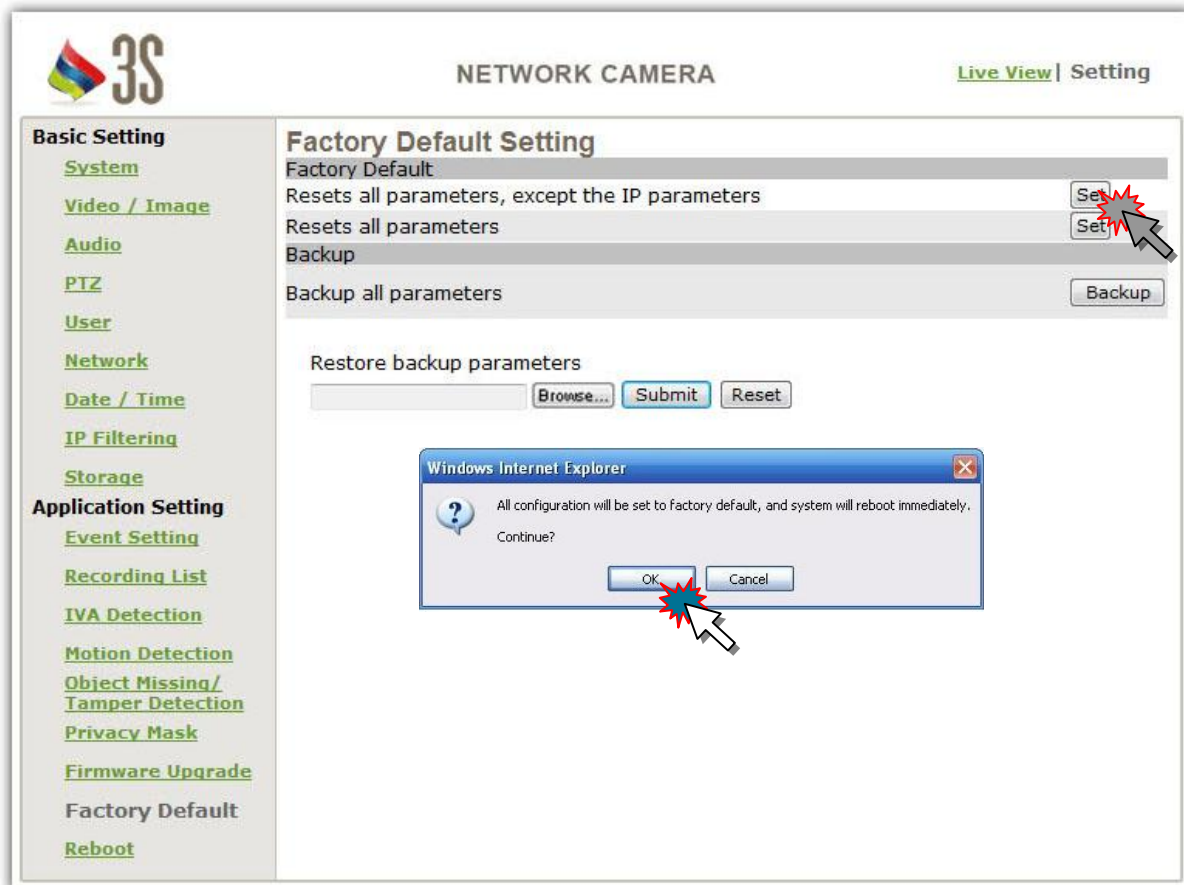
It is not recommend you to upgrade the firmware in a wireless network environment because of the unstable packet transmission may conduce to data loss.

It is not necessary for you to restart the camera by manual after the firmware upgrade completed. The camera will reboot automatically after 60 seconds (Reboot OK), and it will open the IE Browser and filled in the IP address (The original IP address remains undeleted).

Factory Default

You can use this setting to reset the Bullet Network Camera to the factory default value without any changes. Including the IP address all of you have set will be invalid.

- **Factory Default**



Resets all parameters, except the IP parameters:

Use this setting to reset the Bullet Network Camera to the factory default value and all of the changes you have set will be invalid except the IP address and all of the settings which is relation to network will remain the valid. (Cable and wireless network setting are included)

Click the **Set** to start the factory reset and a warning pop-up window will appear to ask whether you really want to reset to the factory default value or not.

Click **OK** to complete the reset.

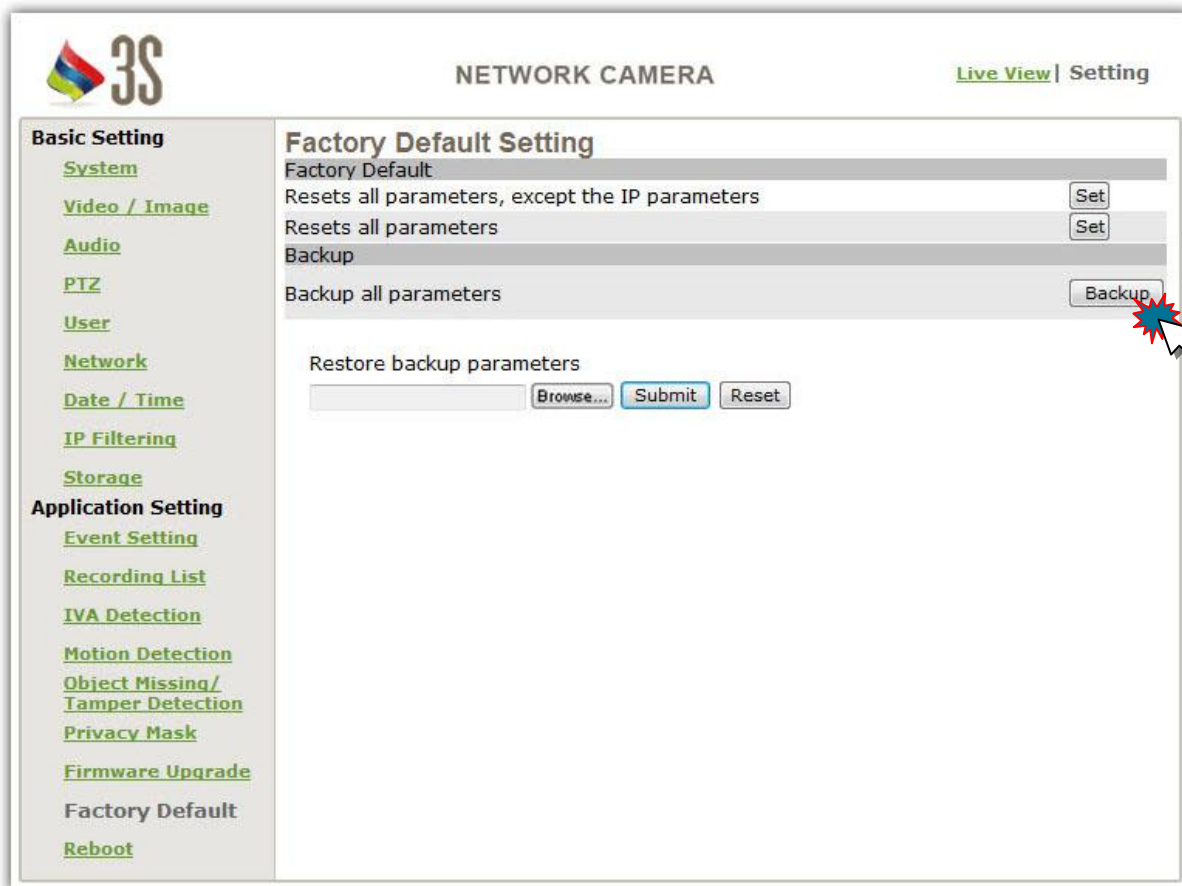
Resets all parameters:

Use this setting to reset the Bullet Network Camera to the factory default value. All of the changes will be invalid. (IP address is included)

Click the **Set** to start the factory reset and a warning pop-up window will appear to ask whether you really want to reset to the factory default value or not.

Click **OK** to complete the reset.

- Backup



Back all parameters:

Use this setting to backup all of the changes you have set. Click **Backup** and a file download inquired windows will pop up. Back up the file named **param.bin**.

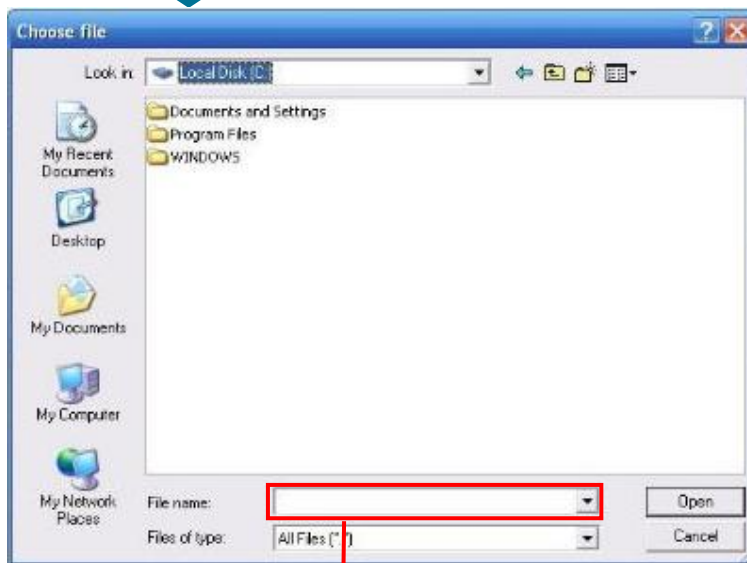
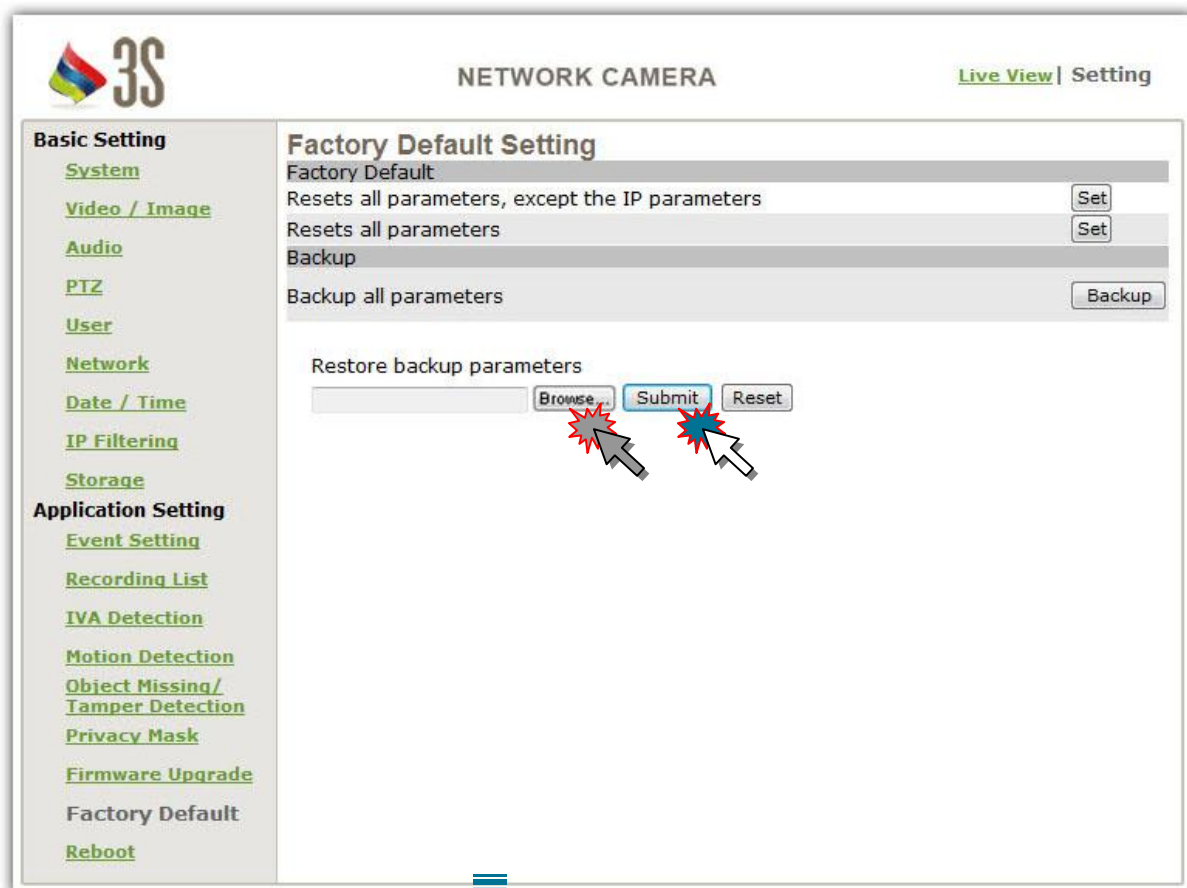


Attention: Don't change the file name; otherwise, the backup may fail.



Restore backup parameters:

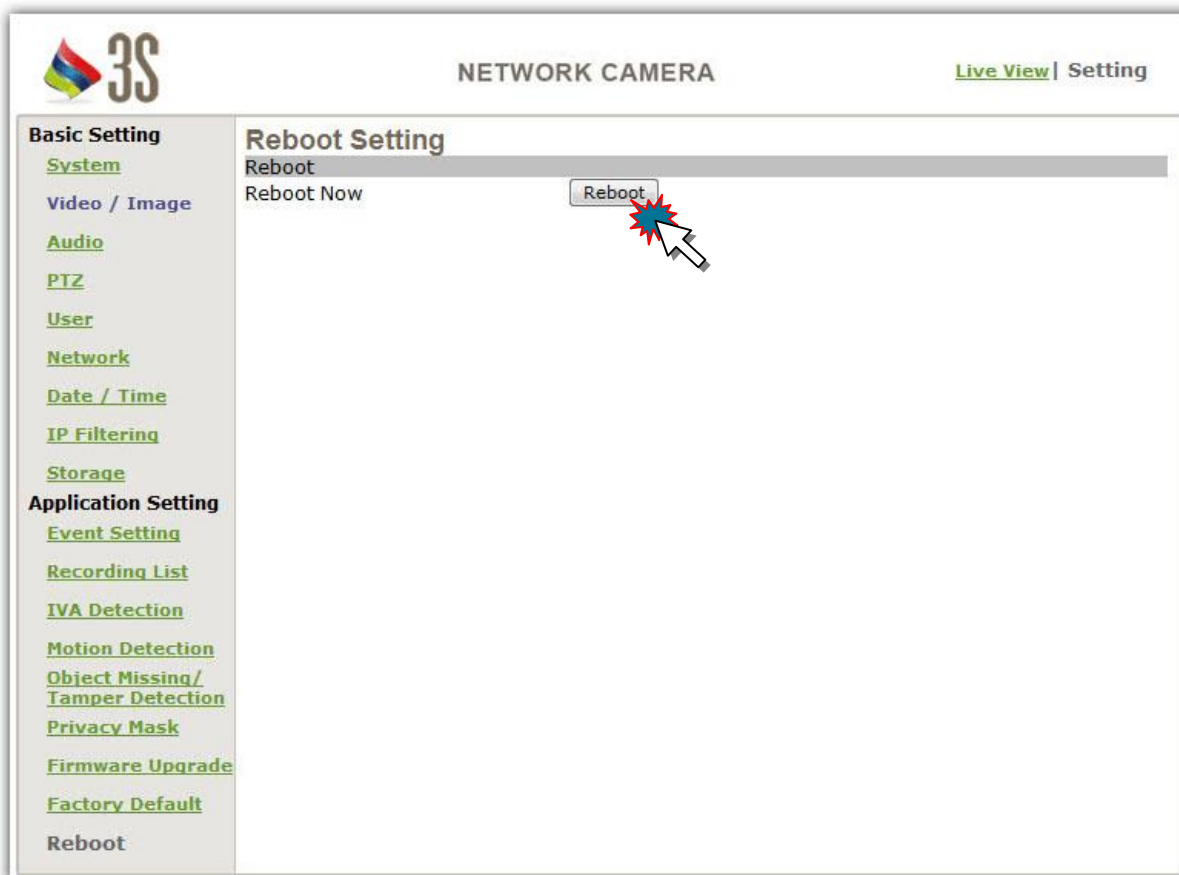
Use this setting to restore the changes that you have set. Click **Browse** to select a backup file and click **Submit** to confirm it.



Select a backup file to restore.

Reboot

Use the setting to reboot the camera automatically by click **Reboot**.



Appendix

Change the Internet Explorer Settings

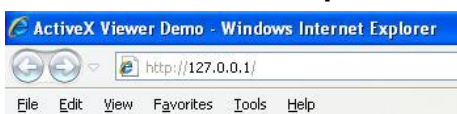
Change the security setting of IE browser to allow the ActiveX Control be plug-in to the IE browser.

Please follow the steps as below:

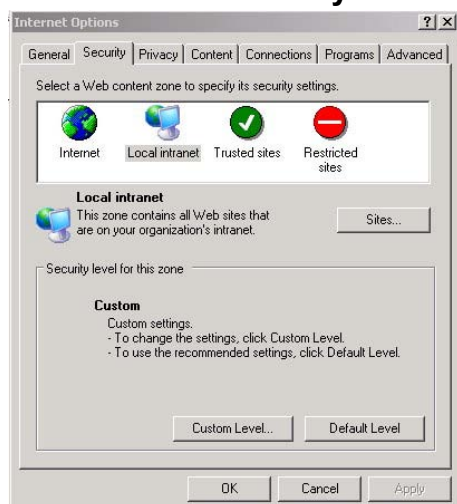
1. Open the **IE browser** from Desktop or State Menu.



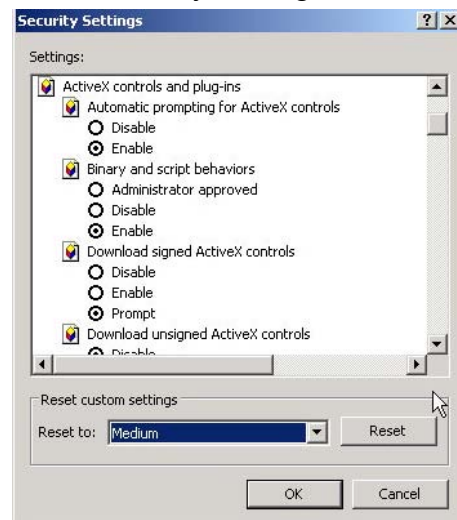
2. Select the **Tools** → **Internet Options** → **Security** → **Custom Level**



3. Select the bookmark of **Security** and click **Customer Level** to check the Security Level.



4. Make sure the security setting is **Medium**, and the commonly used default security level.



5. Click **OK** to save the parameter then quit the window. Please restart the IE Browser again.

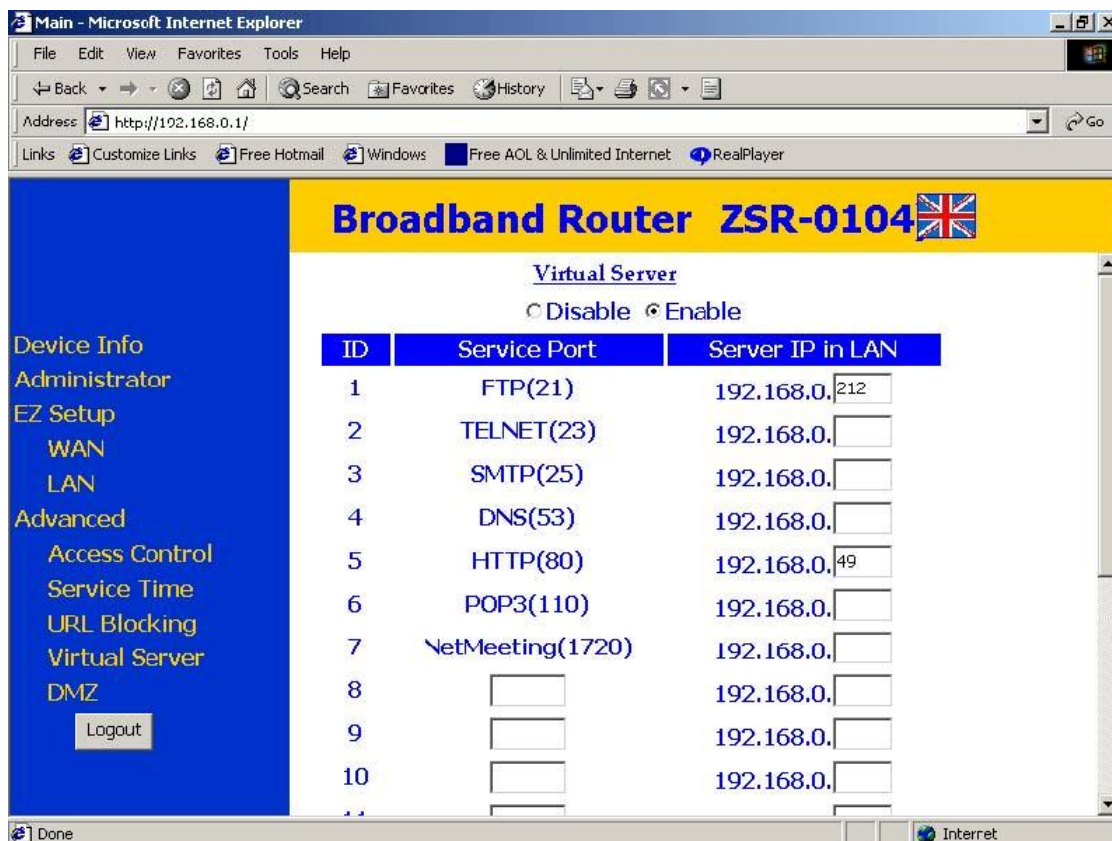
Set up the Router setting with IP Camera

Use DHCP if you want to use the Bullet Network Camera via the Internet (LAN). However, the IP must be set to fixed when you want to use the camera on a WAN. For this application, it is required to set up the function of the virtual server on the ADSL router.

Please follow the steps as below to complete the setting:

1. Enter the camera setting page to set a fixed IP.
(Refer to the **Network Setting**) Ex.: 192.168.0.49
2. Enter the ADSL router main setting page. Ex.: Zonet ADSL router
3. Enter the Virtual Server setting page.
 - a. Set “mapping of **HTTP Port (80)** and **Definition Port (554)** to 192.168.0.49”.
 - b. Restart ADSL router.

When the setting is completed, you can operate the camera from the WAN IP Address via the ADSL router.



NOTE :

The setting screen of the virtual server is not the same for all of the ADSL routers. Please refer to the manual of the ADSL router that you purchased for more information about the setting.

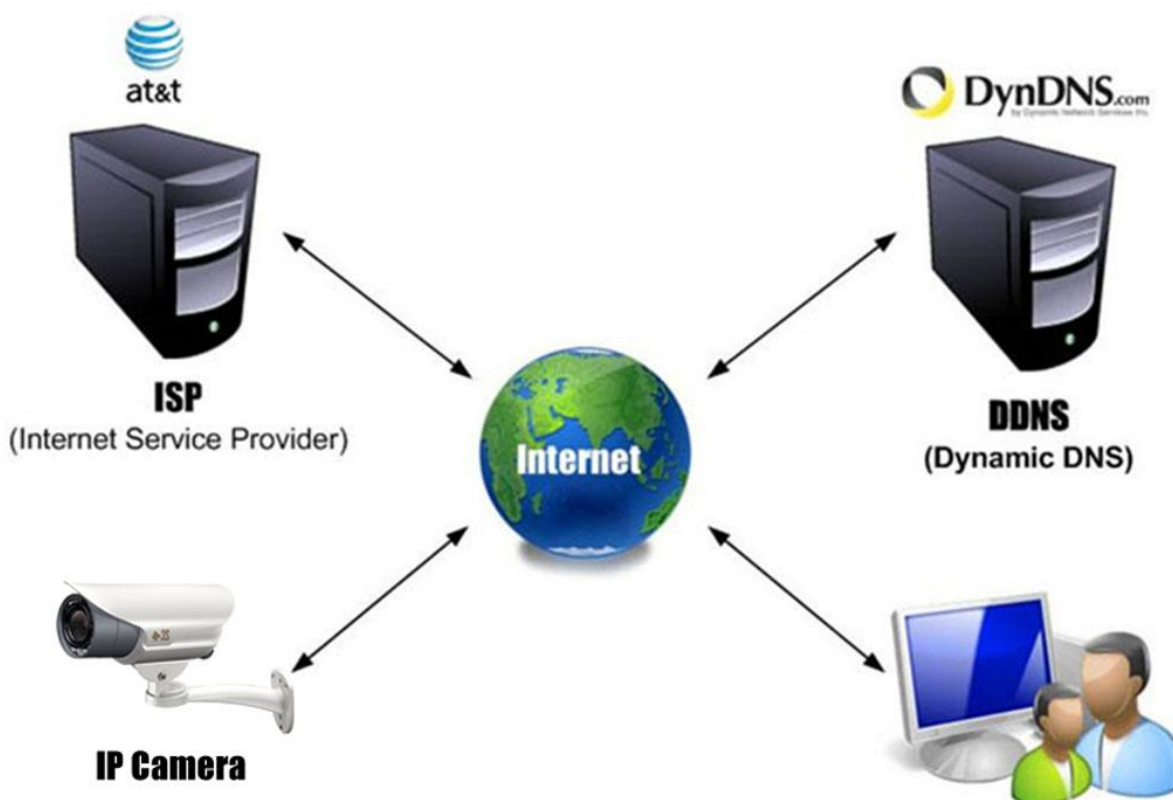
DDNS Application

How to apply and setup the DDNS service?

The DDNS (Dynamic DNS) is an application for network service. It can help you to solve the problem of dynamic IP change in network device. You can assign a name for favorable website to correspond with device IP address through DDNS.

(e.g.: www.IP_Camera.com and www.VideoServer.com).

After the setting is completed, you can connect the IP device through you have assigned the name.



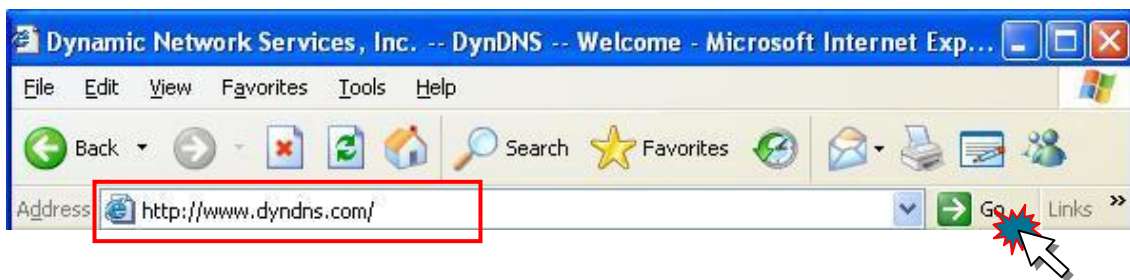
Firstly, please apply for an account from a DDNS supplier. These DDNS suppliers provide some free services for the users on the world. This chapter will demonstrate a step by step method of how to set up a DDNS account, for the example we illustrate here is DynDNS. Please follow the illustration as below:

NOTE :

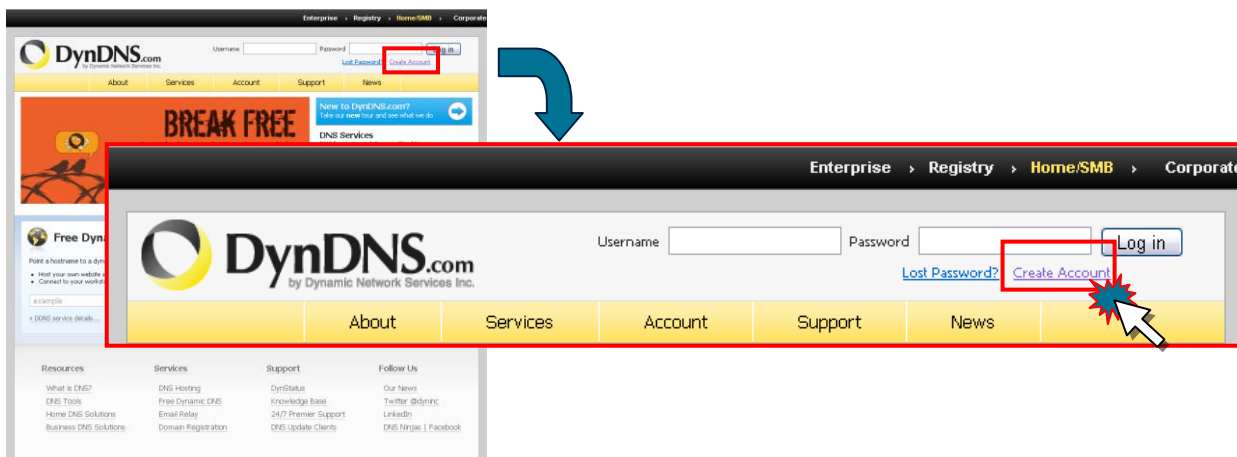
You can find some free DDNS suppliers on Internet. For example: [DynDNS](http://DynDNS.com), [No-IP](http://No-IP.com) and [Oray](http://Oray.com).



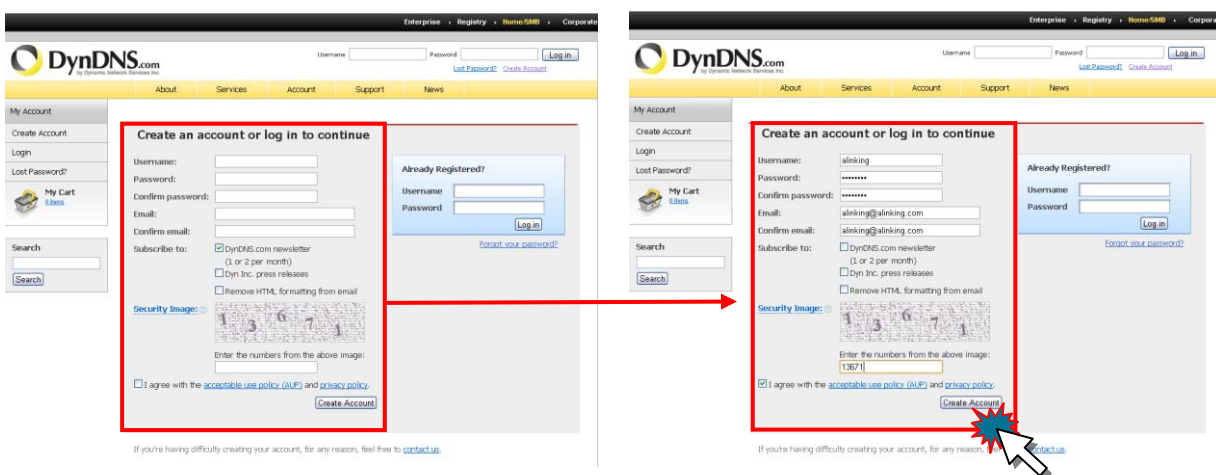
1. Please enter the website address of “DynDNS” (<http://www.dyndns.com/>) through Browser.



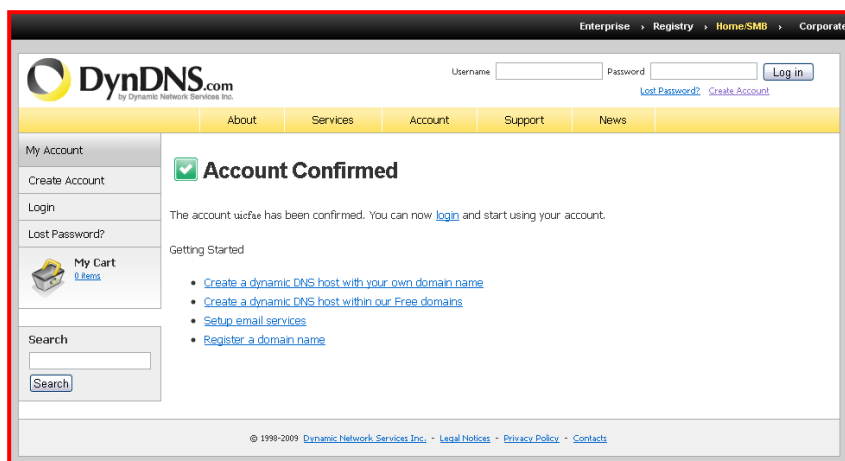
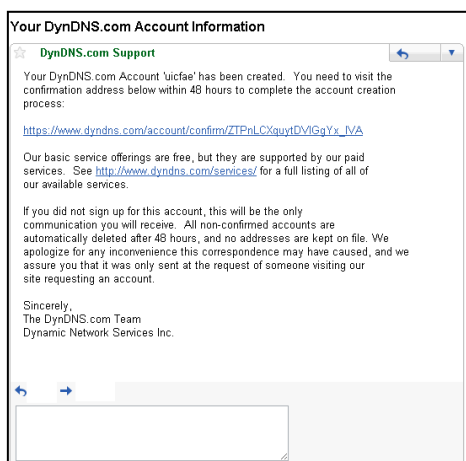
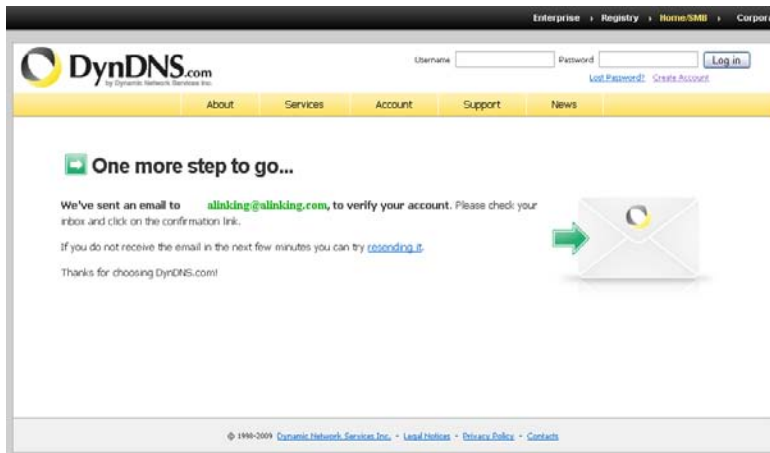
2. Please click **Create Account**.
(Skip step 2~9 if you have an account with DynDns.org already.)



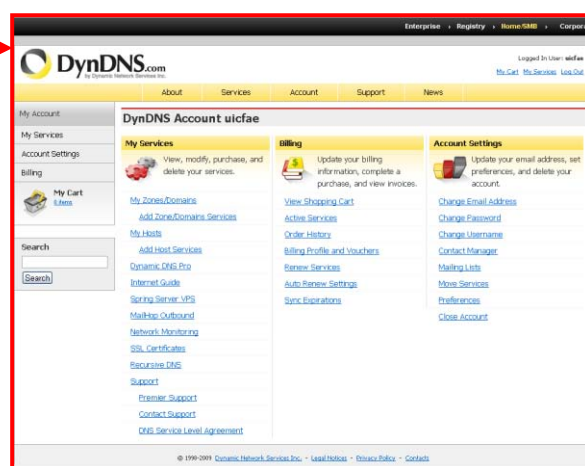
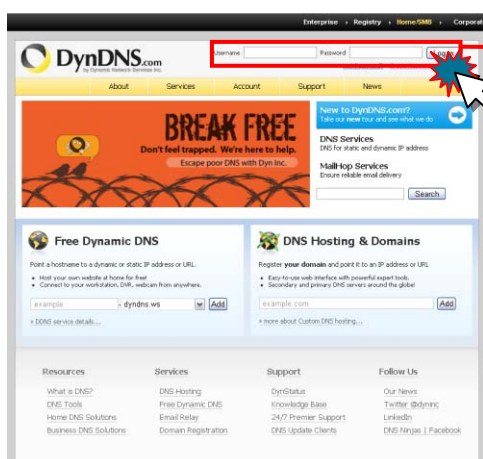
3. Please fill in all the required information in the table such as: **Username**, **Password**, **Email** and **Security Image Number** etc. When you have finished, please select **Agree Box** then click **Create Account**.



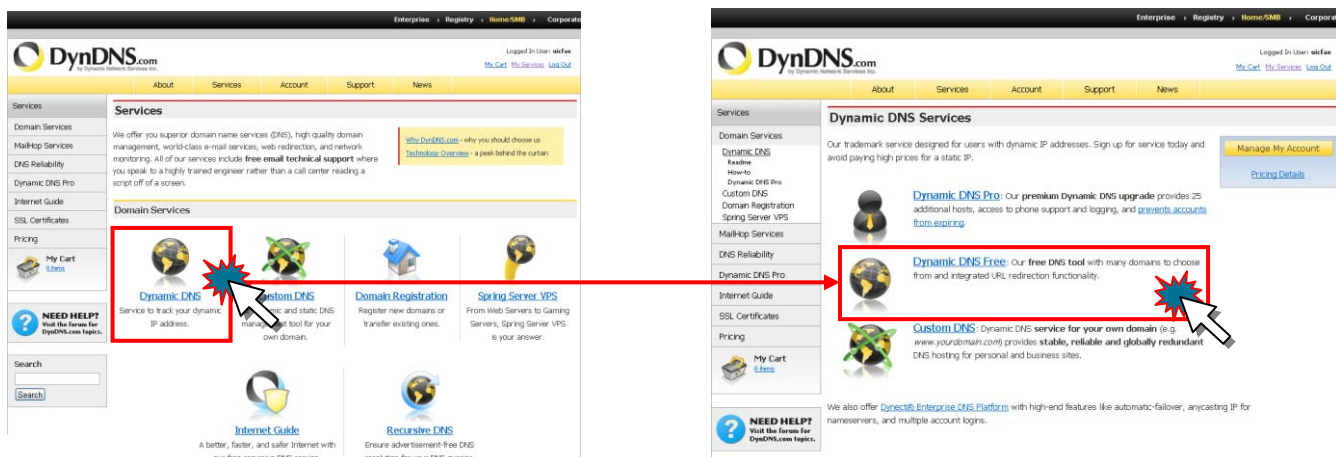
- 4. A confirmation letter will send to your mailbox after you click **Create Account**. Please acknowledge the confirmation letter by clicking on the link provided in the mail to continue with the steps



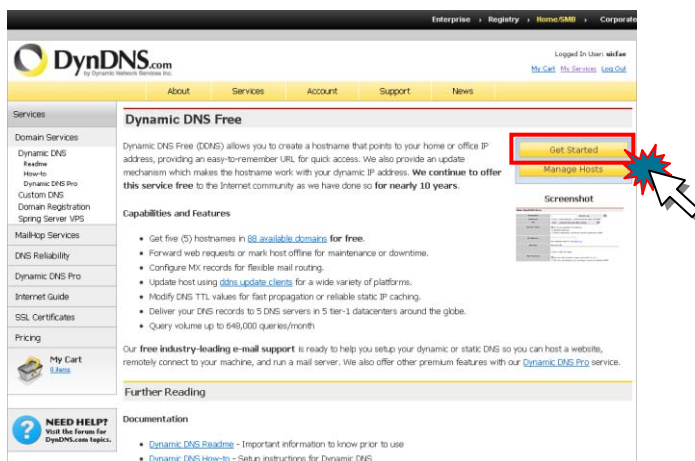
- 5. You can login to DynDns.org, please input the username and password on main webpage. And click "Service" button to set up the DDNS function.



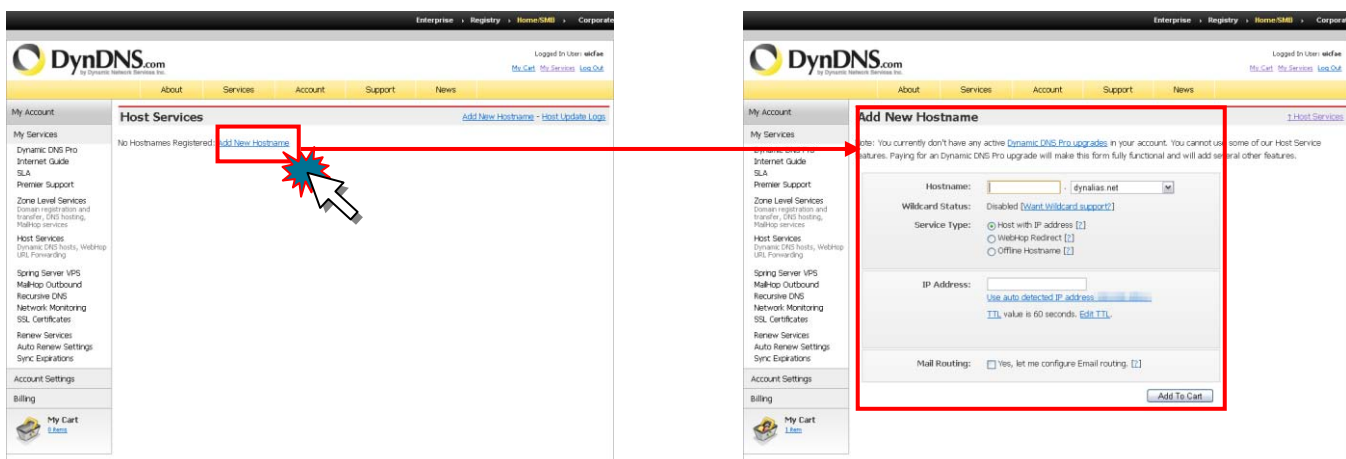
6. Please click **Dynamic DNS** then select **Dynamic DNS Free** service.



7. Click **Get Started** button to add the new Hostname.



8. Set up the **Hostname** and **IP Address** by yourself. You can enter your favorite domain name as your **Hostname**, and input correct **IP address** (e.g. the IP address need to input the real IP address from IP Camera, please see the NOTE illustration below). Finally, click **Add Host** to finish with the setting.



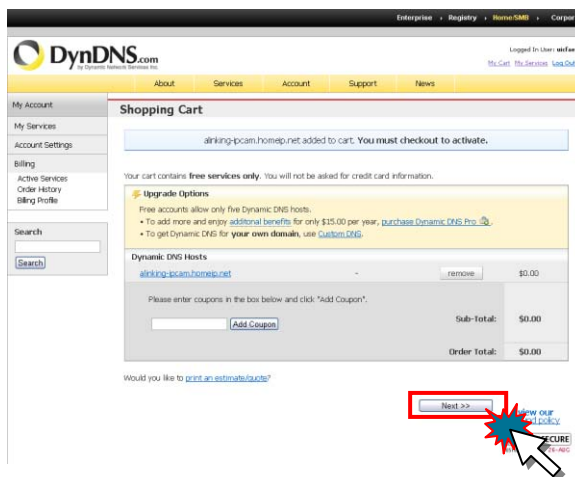
NOTE :

The IP almost appear after IP setting.
(PPPoE/DHCP/Fix IP). Click Setting > System > IP Address

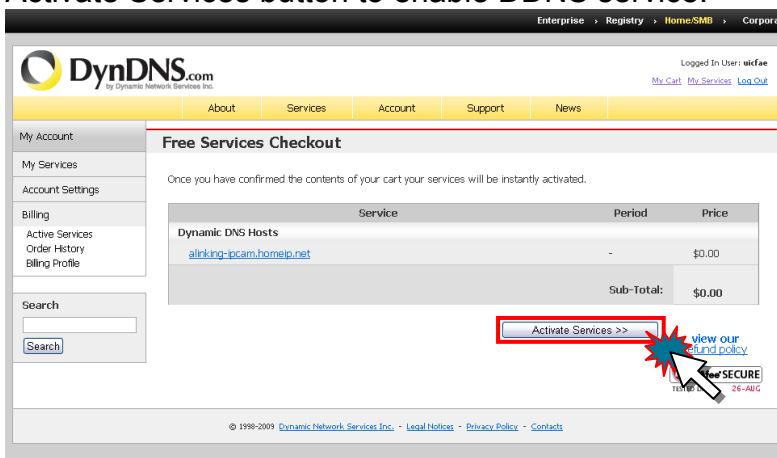
Basic Setting	System Setting
System	System Info
System	Device Name
System Log	MAC Address
	IP Address

Device Name	MegaPixel IPCAM	<input type="button" value="Set"/>
MAC Address	00:30:F0:0E:01:5D	
IP Address	122.147.155.171	

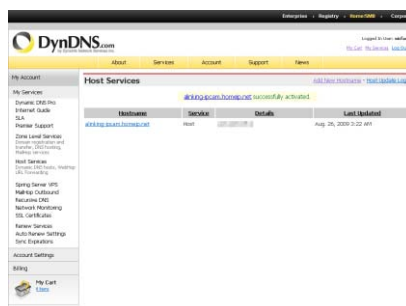
- After add new hostname, click **Next** to enter the next step.
(Note: as you are using **Dynamic DNS Free** service; so you can ignore the information of **Shopping Cart**.)



- Please click **Activate Services** button to enable DDNS service.

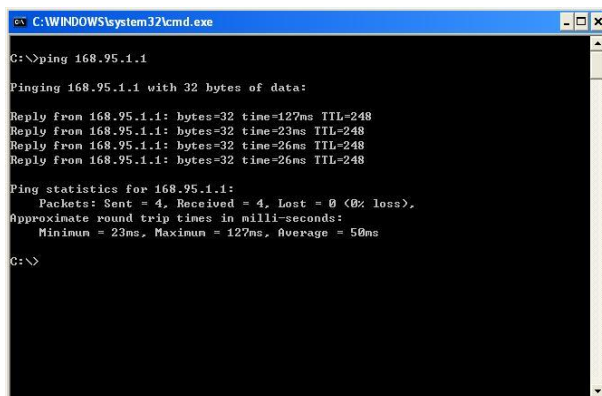


- The completion of the registration page is shown below. You can now use the DDNS service to your devices.



How to check if the DDNS service is successful?

1. If you can not connect the IP devices through the domain name, which you have set up, you can test the DDNS service on your PC.
2. Please open the “command mode” from “Start Menu”.
Start Menu > Program > Accessories > Command mode
3. Input the command: c:\>ping (Your domain name e.g. www.IP Camera.com) [ENTER].
If the command mode displays “Reply from” On the screen, then your DDNS is working correctly.

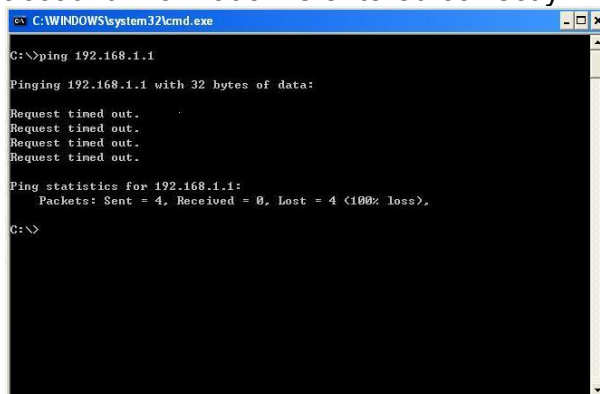


```

C:\WINDOWS\system32\cmd.exe
C:\>ping 168.95.1.1
Pinging 168.95.1.1 with 32 bytes of data:
Reply from 168.95.1.1: bytes=32 time=127ms TTL=248
Reply from 168.95.1.1: bytes=32 time=23ms TTL=248
Reply from 168.95.1.1: bytes=32 time=26ms TTL=248
Reply from 168.95.1.1: bytes=32 time=26ms TTL=248
Ping statistics for 168.95.1.1:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 23ms, Maximum = 127ms, Average = 50ms
C:\>

```

4. If the command mode displays “timed out”. Then your DDNS is not working. Please double check your account information is entered correctly.

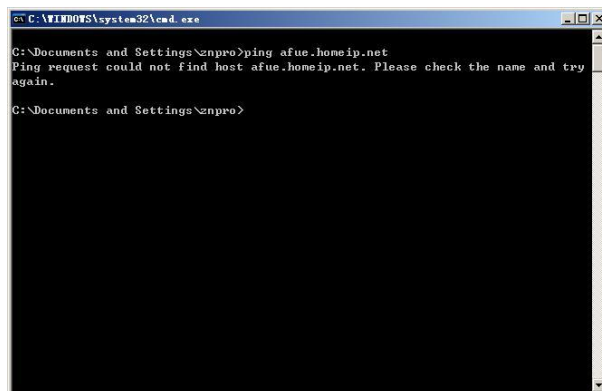


```

C:\WINDOWS\system32\cmd.exe
C:\>ping 192.168.1.1
Pinging 192.168.1.1 with 32 bytes of data:
Request timed out.
Request timed out.
Request timed out.
Request timed out.
Ping statistics for 192.168.1.1:
    Packets: Sent = 4, Received = 0, Lost = 4 (100% loss),
C:\>

```

5. If the command mode displays “Ping request could not find host...”. Then you need to re-visit DDNS website to confirm all the required information is correctly filled in. Alternatively, you can set up another account with start



```

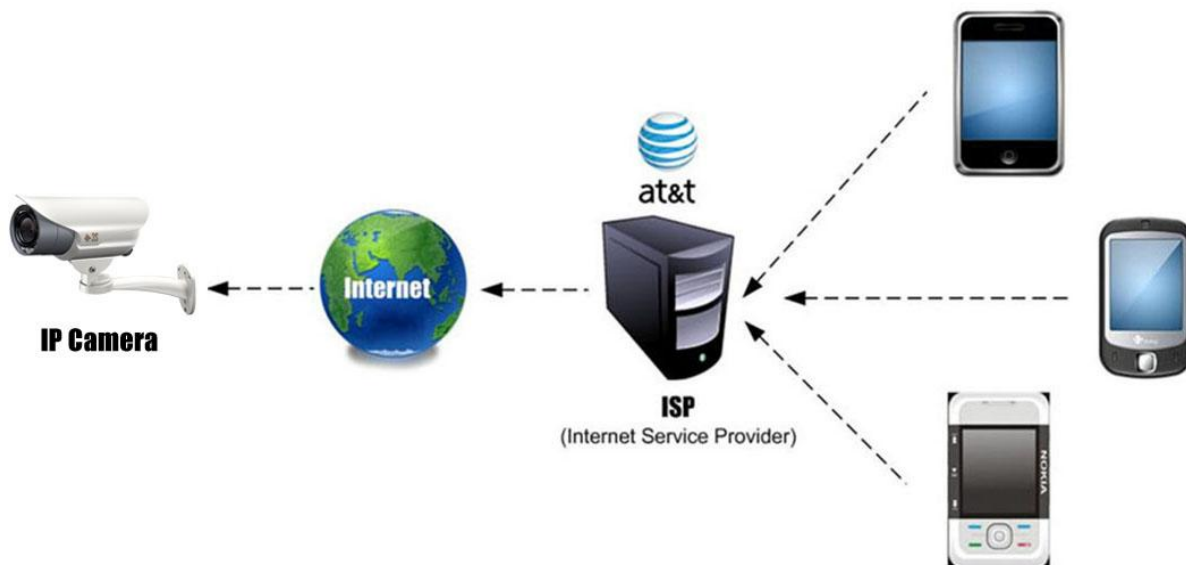
C:\WINDOWS\system32\cmd.exe
C:\Documents and Settings\apro>ping afue.homeip.net
Ping request could not find host afue.homeip.net. Please check the name and try
again.
C:\Documents and Settings\apro>

```

Mobile Application

Our Video server can support the 3GPP(RTSP) connection through the mobile phone. Please check your ISP to provide the mobile networking service which working on your mobile phone first. And modify the setting of Video server to enable the application.

Please see the detail illustration as below:



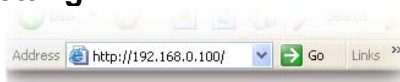
NOTE :

The 3GPP, which meaning the compression format, is not the same 3G. You can use the 2.5G/3G to connect to Internet through ISP.

Step1: Make sure the Video server is alive on Internet (WAN Environment)

Try to remote connect Video server via public IP. If you use the Router, please check the Port Setting of your camera and the Virtual Server Setting of Router.

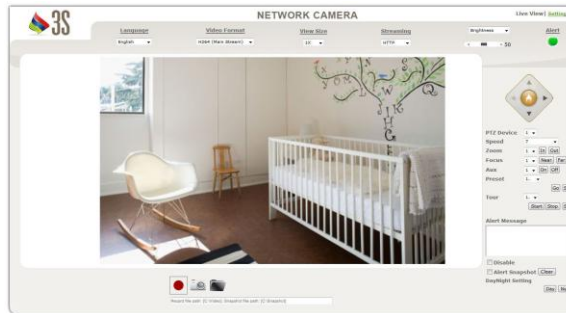
Step2: Check your Video server setting



Open the web browser then input the IP address from the video server. Input the user name & password to Login



Click the “Setting” on right-upper to enter the setting mode.



Step3: Check the RTSP streaming setting H.264 Type

Click “**Video/Image**” of Basic Setting → “**Video**” → Set up the sub streaming resolution (e.g. Please see the suggestion parameter as below picture) → Click **Save** to finish the setting.

Video / Image Setting	
Video Setting	
Sensor Mode	<input type="radio"/> QSXGA Mode (2560x1920) <input checked="" type="radio"/> FullHD Mode (1920x1080)
H264	
Resolution	Full HD(1920x1080) ▼
FrameRate(FPS)	30 ▼ frames
Quality	<input checked="" type="radio"/> Bitrate 3072 ▼ <input type="radio"/> Fix Quality Best ▼
GOP	15 ▼ frames
H264 (Sub)	
Resolution	1280x720 ▼
FrameRate(FPS)	10 ▼ frames
Quality	<input checked="" type="radio"/> Bitrate 512 ▼ <input type="radio"/> Fix Quality Best ▼
GOP	15 ▼ frames
Motion JPG	
Resolution	Full HD(1920x1080) ▼
FrameRate(FPS)	3 ▼ frames
Quality	Bitrate 1536 ▼

Step4: View limit Setting

According to the requirement, you can pass the live view limit.
Please see the illustration as below.

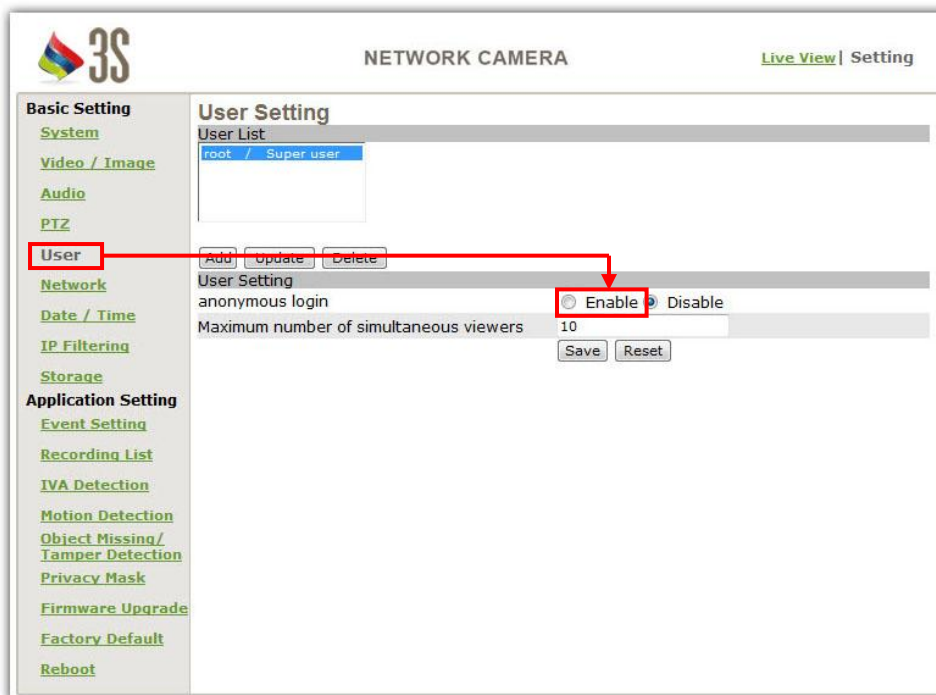


■ **With password**

Don't need to enable the "anonymous login" function, but you need to input the account information every login. The application can keep the video server privacy.
e.g. Input `rtsp://xxx.xxx.xxx.xxx:554/cam1/3gpp?user=root&pwd=root` in mobile phone.
The "-2" mean the sub stream.

■ **Without password:**

Enable anonymous login.
Click the "**User**" of Basic Setting →
Click the "**Enable**" from anonymous login of User Setting →
Click the **Save** to finish the setting.



e.g. Input `rtsp://xxx.xxx.xxx.xxx:554/cam1/3gpp` in mobile phone.

NOTE :

The video server can support 4 channels streaming to use it. Modify the cam number of URI link to change the channel. E.g. Channel 2: `rtsp://xxx.xxx.xxx.xxx:554/cam2/h264-1`

Step5: Try to connect Video server through the mobile phone

Check the mobile phone can support the streaming media player and internet service, and then see the example operation as below:

NOTE :

Suggest using the wireless solution. It can provide the highest network speed and save the mobile network cost.

iPhone / iPad System

You can connect camera and VMS web server, please see the detail illustration as below:

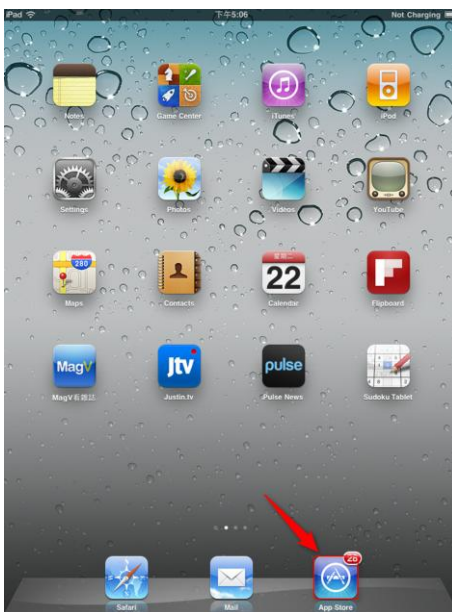
3VMS Pro

3VMS Pro turns your iPhone / iPad into a portable IP surveillance camera.

3VMS Pro allows you to see “what your IP Camera see” in real-time from your iPhone / iPad.

You can add as many video cameras as you want, private or public: a simple address is needed.

1. Tap “**APP Store**” to open the software.



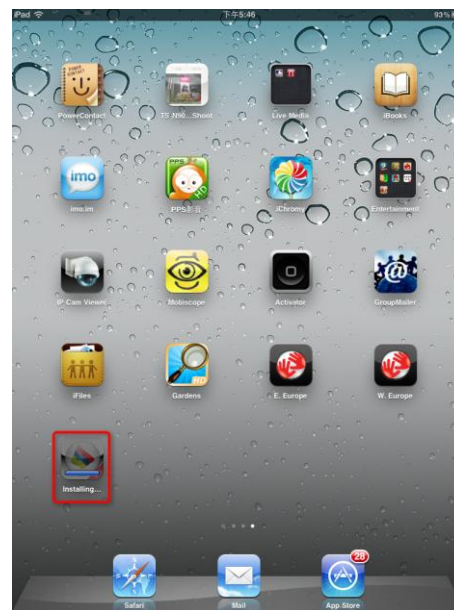
2. Tap “**Search**” to start searching after input the key word “**3VMS Pro**”.



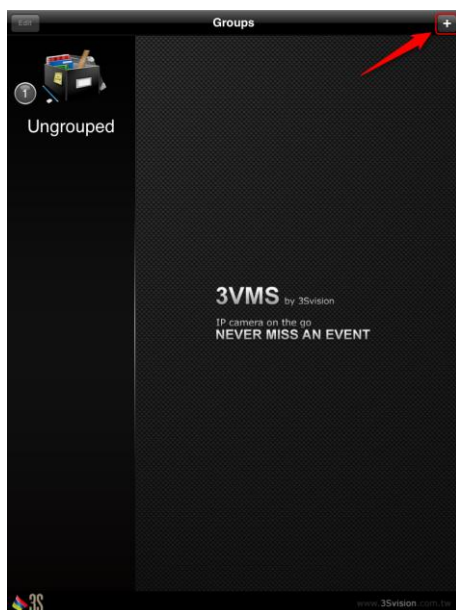
3. Install the software of **3VMS Pro HD** or **3VMS Pro** according to your camera model.



4. It will display the installed progressing and execute it after the setup is completely.

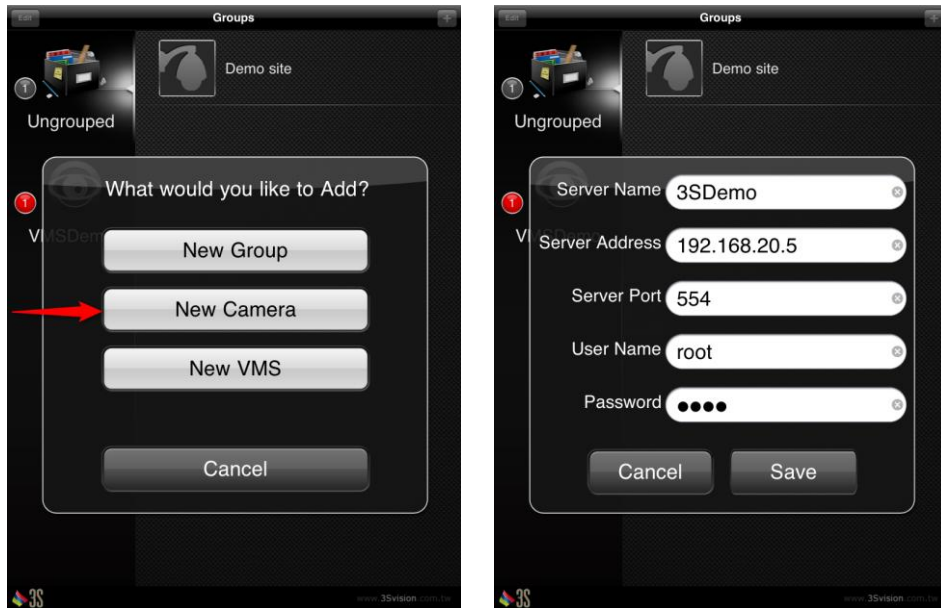


5. Add new camera or new VMS by click the “+” on the upper right corner.



New Camera

Follow the instructions to add new camera on your mobile phone.



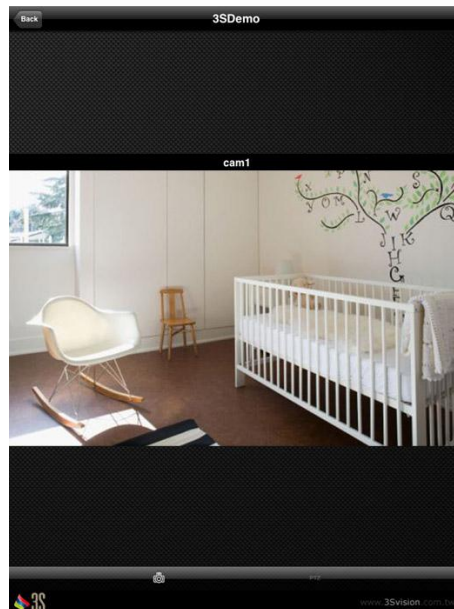
Sever Name : User defined

Server Address : Type camera ip address

Sever Port : Camera port (default value 554)

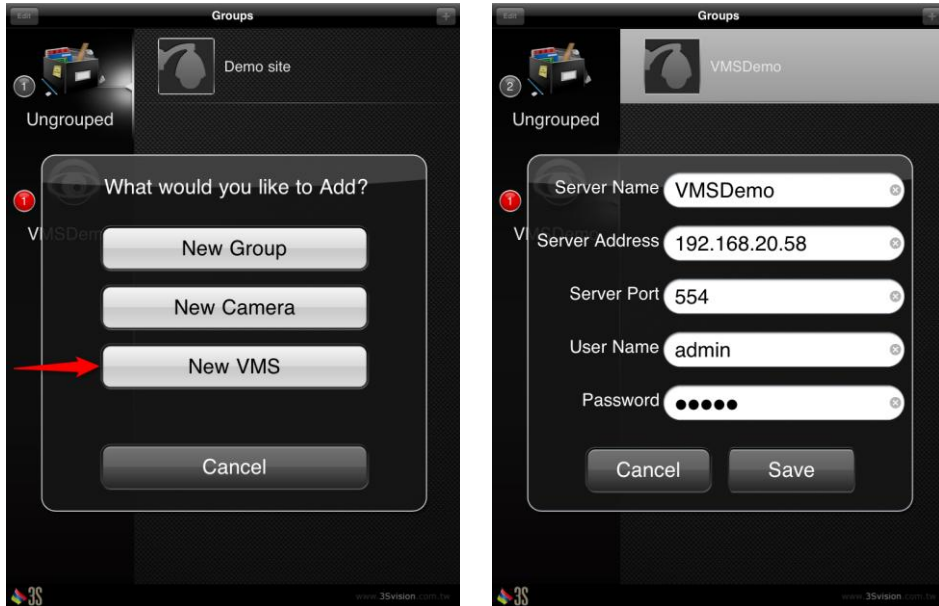
User Name and Password : Type camera login ID and Password

After the new camera had added successful the login screen is display as below:



New VMS

Follow the instructions to add new VMS on your mobile phone.



Sever Name : User defined

Server Address : Type VMS ip address (Please refer to page107)

Sever Port : Camera port (default value 554)

User Name and Password : Type the connection login name and password of the computer VMS.

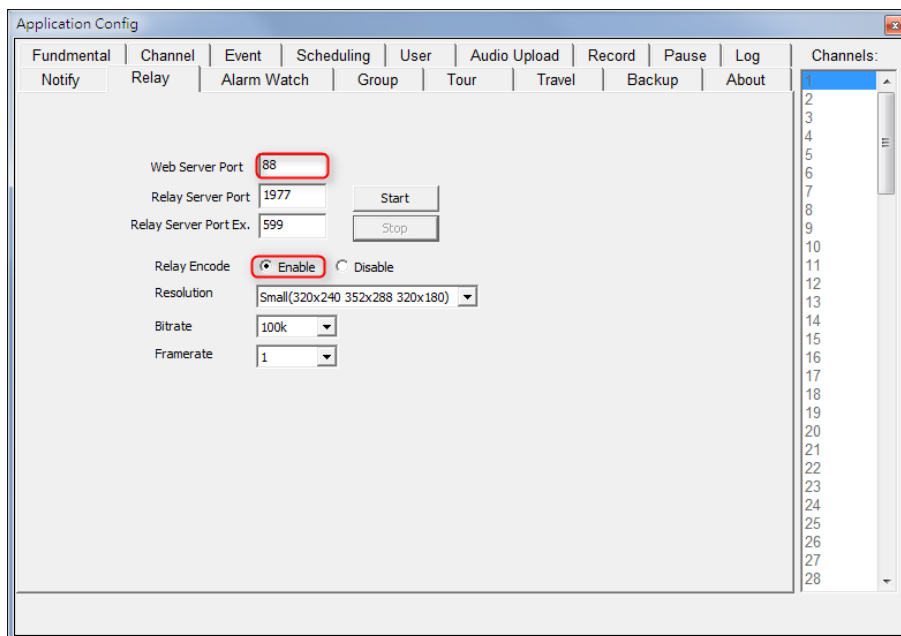
After the new VMS had added successful the login screen is display as below:



Trouble Shooting

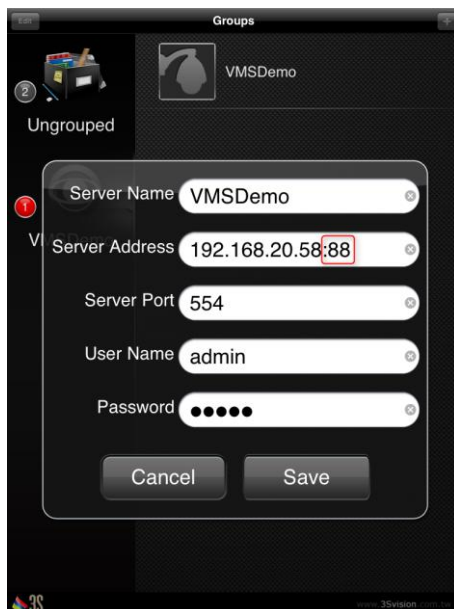
- 1. How to solve the bug if iPhone / iPad connected to the VMS failure.

Because of the default port value is 80 on VMS web server. Sometimes the 80 port will be occupied by other application programs which cause iPhone / iPad can't display images. In that situation, please try to change the port value.



We recommend you to enable the Relay Encode option (It can increase the image smoothness of iPhone / iPad in live view.)

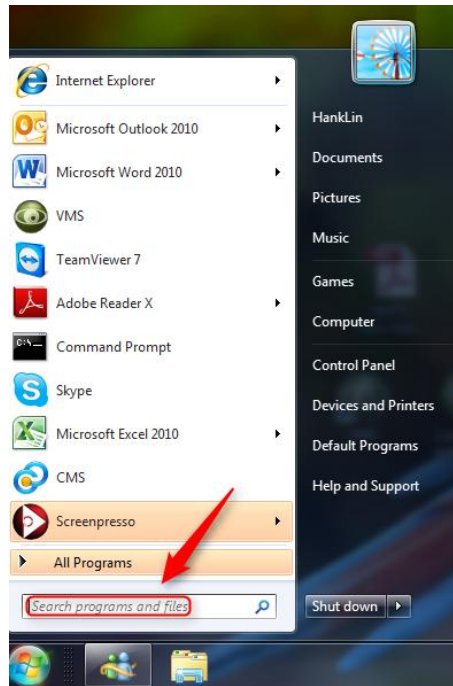
Remember to type correct changed port, user name and password correspond with your VMS configuration



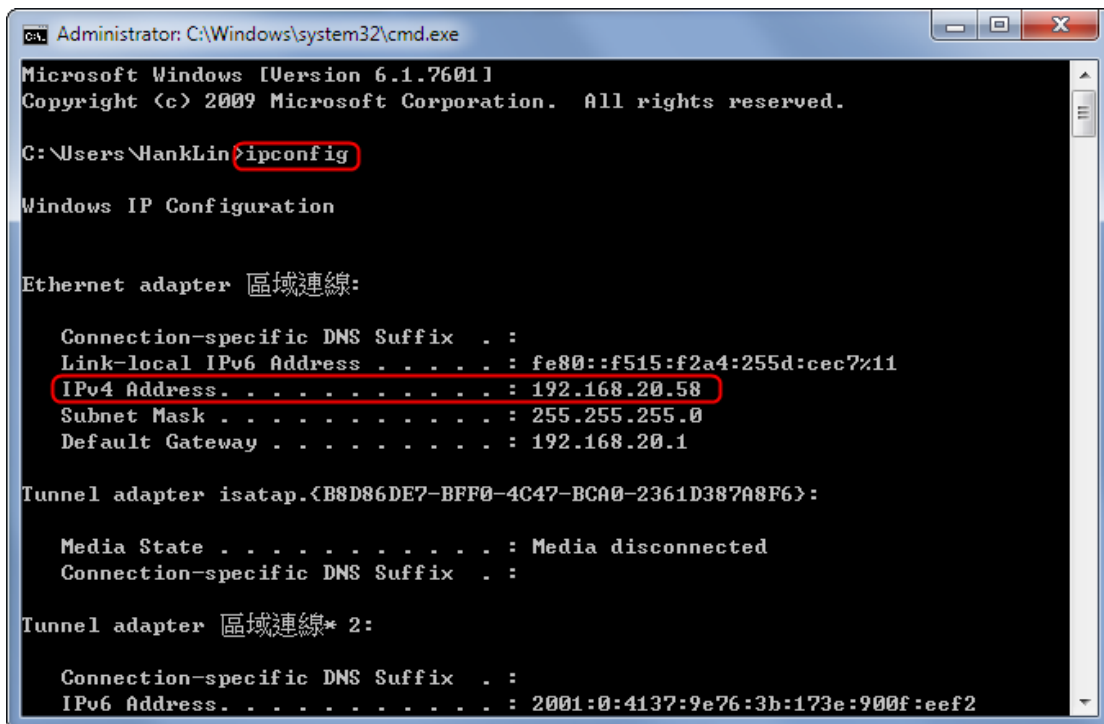
2. How to inquire the IP address of VMS?

Please refer to follow steps:

Step 1: Type **cmd** in the search box.



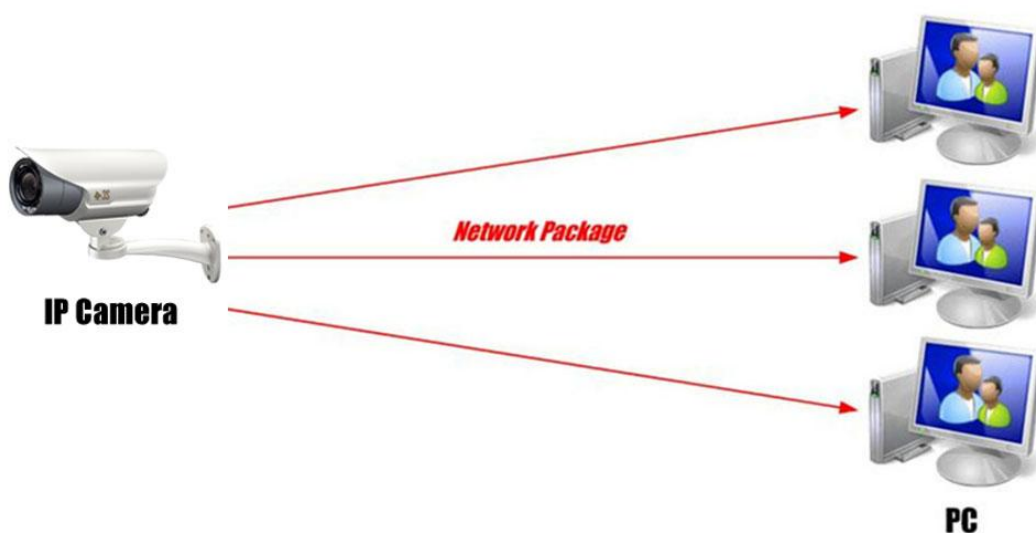
Step 2: Type **ipconfig** to check your IP address in PC. (It is also the VMS web server IP address.)



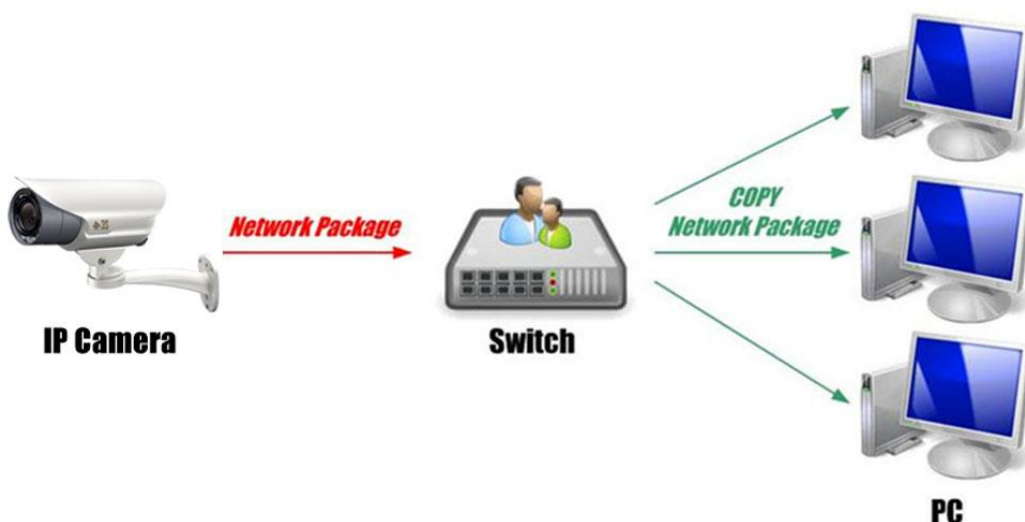
Multicast Application

The Multicast function is a technique for one-to-many communication over an IP infrastructure in a network. The PC can be given the network package after login the account, so the function can use one network package to copy many packages to PCs. It allows multiple people to watch video streaming without limitation on the number of users, but is only applicable in the LAN environment. The function must need to combine with the application of IGMP service (e.g. Layer 3 Switch.).

The Regular Mode: (Through TCP/UDP/HTTP)

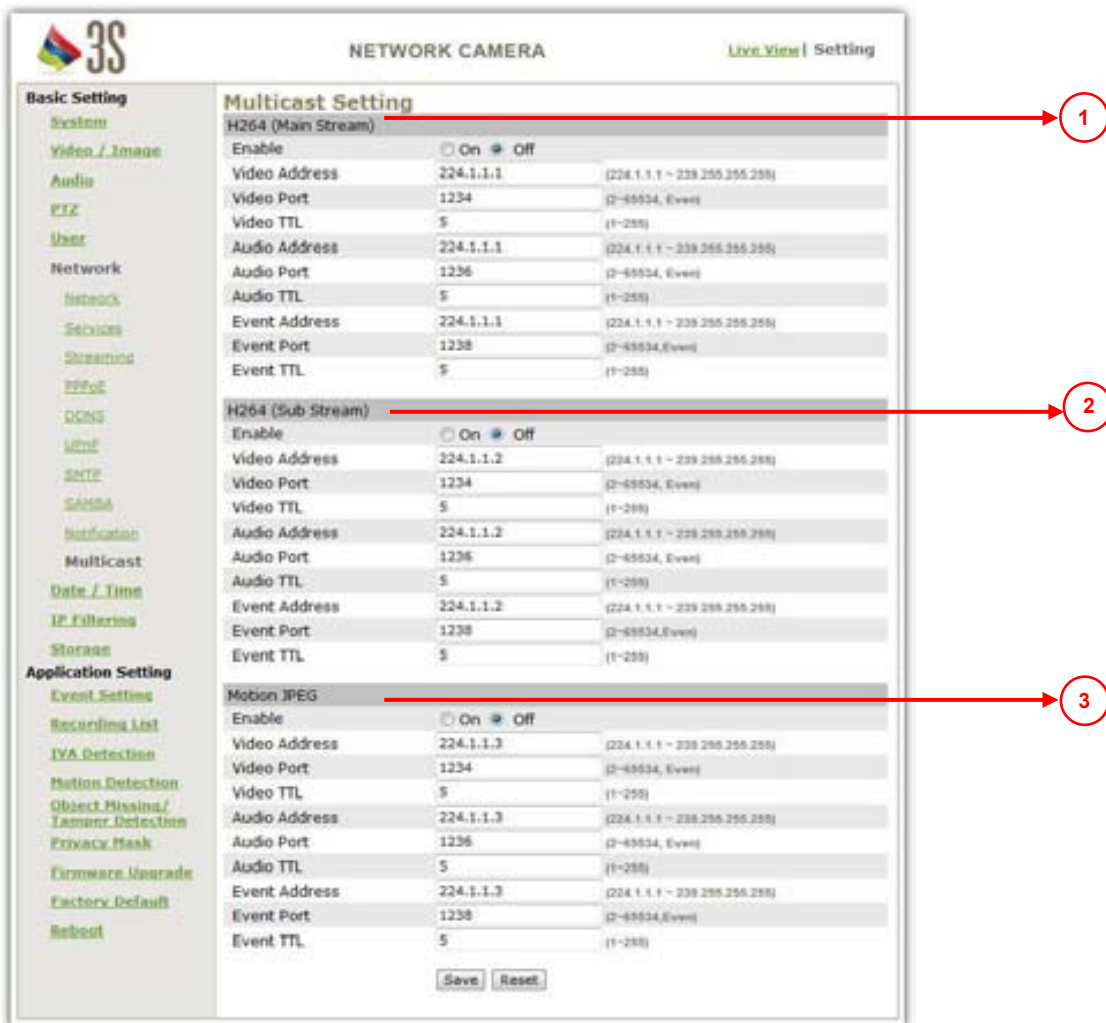


The Multicast Mode: (Through Multicast)



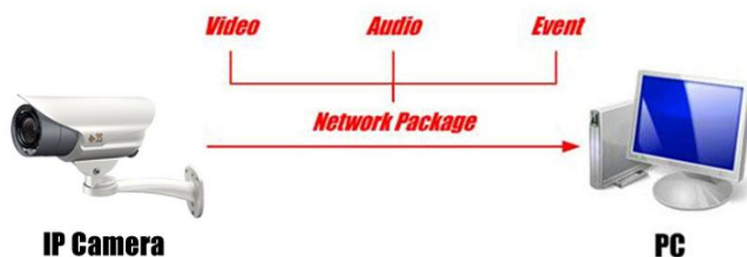
NOTE :

The function is not limit with the Layer 3 Switch, and you can also select the IGMP Server to use the application.



N.O.	Item	Illustration
1	H264 (Main)	Display the multicast setting of H264 (Main)
2	H264 (Sub)	Display the multicast setting of H264 (Sub)
3	Motion JPEG	Display the multicast setting of Motion JPEG

The function will display the different streaming mode from IP device. No matter how many modes to display, the content is the same setting to the user. There are three kinds of package type for User: Video, Audio and Event. Please see the detail setting as below:



NOTE :

The function can only enable one streaming to use the application.

H264 (Main)

The function has some limit parameter, so please follow our limit parameter to set up it. All restrictions exist in the rear of each option.

Enable	<input checked="" type="radio"/> On <input type="radio"/> Off	
Video Address	224.1.1.1	(224.1.1.1 ~ 239.255.255.255)
Video Port	1234	(2~65534, Even)
Video TTL	5	(1~255)
Audio Address	224.1.1.1	(224.1.1.1 ~ 239.255.255.255)
Audio Port	1236	(2~65534, Even)
Audio TTL	5	(1~255)
Event Address	224.1.1.1	(224.1.1.1 ~ 239.255.255.255)
Event Port	1238	(2~65534, Even)
Event TTL	5	(1~255)

NOTE :

Suggest using the default parameter to use the multicast function. Please make reference to the chapter of Basic Setting > Network > Multicast for further detailed description.

Enable

Click On or Off selection to enable or disable the function.

Video Address

Set up the IP address to transfer the Video package. The default setting is 224.1.1.1.

Video Port

Set up the Port to transfer the Video package. The default setting is 1234.

Video TTL

Set up the TTL time to transfer the Video package. The default setting is 5

Audio Address

Set up the IP address to transfer the Audio package. The default setting is 224.1.1.1

Audio Port

Set up the Port to transfer the Audio package. The default setting is 1236.

Audio TTL

Set up the TTL time to transfer the Audio package. The default setting is 5

Event Address

Set up the IP address to transfer the Event package. The default setting is 224.1.1.1

Event Port

Set up the Port to transfer the Event package. The default setting is 1238.

Event TTL

Set up the TTL time to transfer the Event package. The default setting is 5

H264 (Sub)

The setting is the same with the H264 (Sub).

Enable	<input checked="" type="radio"/> On <input type="radio"/> Off	
Video Address	224.1.1.1	(224.1.1.1 ~ 239.255.255.255)
Video Port	1234	(2~65534, Even)
Video TTL	5	(1~255)
Audio Address	224.1.1.1	(224.1.1.1 ~ 239.255.255.255)
Audio Port	1236	(2~65534, Even)
Audio TTL	5	(1~255)
Event Address	224.1.1.1	(224.1.1.1 ~ 239.255.255.255)
Event Port	1238	(2~65534, Even)
Event TTL	5	(1~255)

NOTE :

Suggest using the default parameter to use the multicast function.

Please make reference to the chapter of Basic Setting > Network > Multicast for further detailed description.

Enable

Click On or Off selection to enable or disable the function.

Video Address

Set up the IP address to transfer the Video package. The default setting is 224.1.1.2.

Video Port

Set up the Port to transfer the Video package. The default setting is 1234.

Video TTL

Set up the TTL time to transfer the Video package. The default setting is 5

Audio Address

Set up the IP address to transfer the Audio package. The default setting is 224.1.1.2

Audio Port

Set up the Port to transfer the Audio package. The default setting is 1236.

Audio TTL

Set up the TTL time to transfer the Audio package. The default setting is 5

Event Address

Set up the IP address to transfer the Event package. The default setting is 224.1.1.2

Event Port

Set up the Port to transfer the Event package. The default setting is 1238.

Event TTL

Set up the TTL time to transfer the Event package. The default setting is 5

Motion JPEG

The setting is the same with the MJPEG.

Enable	<input checked="" type="radio"/> On <input type="radio"/> Off	
Video Address	224.1.1.1	(224.1.1.1 ~ 239.255.255.255)
Video Port	1234	(2~65534, Even)
Video TTL	5	(1~255)
Audio Address	224.1.1.1	(224.1.1.1 ~ 239.255.255.255)
Audio Port	1236	(2~65534, Even)
Audio TTL	5	(1~255)
Event Address	224.1.1.1	(224.1.1.1 ~ 239.255.255.255)
Event Port	1238	(2~65534, Even)
Event TTL	5	(1~255)

NOTE :

Suggest using the default parameter to use the multicast function. Please make reference to the chapter of Basic Setting > Network > Multicast for further detailed description.

Enable

Click On or Off selection to enable or disable the function.

Video Address

Set up the IP address to transfer the Video package. The default setting is 224.1.1.3

Video Port

Set up the Port to transfer the Video package. The default setting is 1234.

Video TTL

Set up the TTL time to transfer the Video package. The default setting is 5

Audio Address

Set up the IP address to transfer the Audio package. The default setting is 224.1.1.3

Audio Port

Set up the Port to transfer the Audio package. The default setting is 1236.

Audio TTL

Set up the TTL time to transfer the Audio package. The default setting is 5

Event Address

Set up the IP address to transfer the Event package. The default setting is 224.1.1.3

Event Port

Set up the Port to transfer the Event package. The default setting is 1238.

Event TTL

Set up the TTL time to transfer the Event package. The default setting is 5

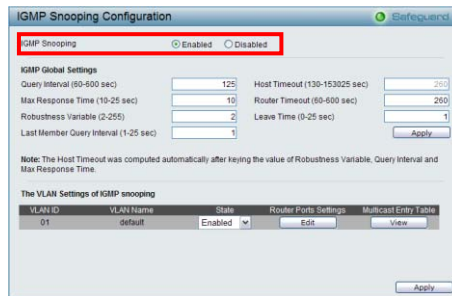
Please see the detailed steps to **Set up the Multicast function** as below:

1. First, check the LAN environment has the device of IGMP service.

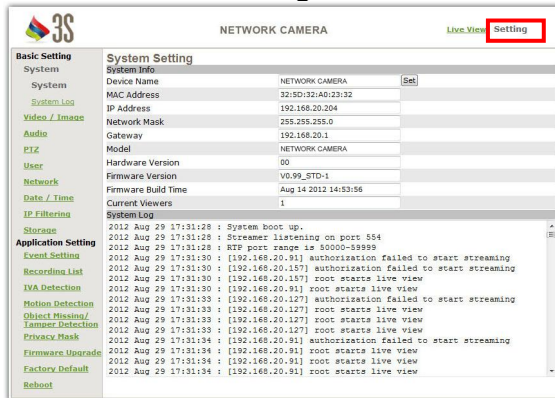


IGMP

2. Enter the device then enable the service.



3. Login the video server then enter the Setting mode.

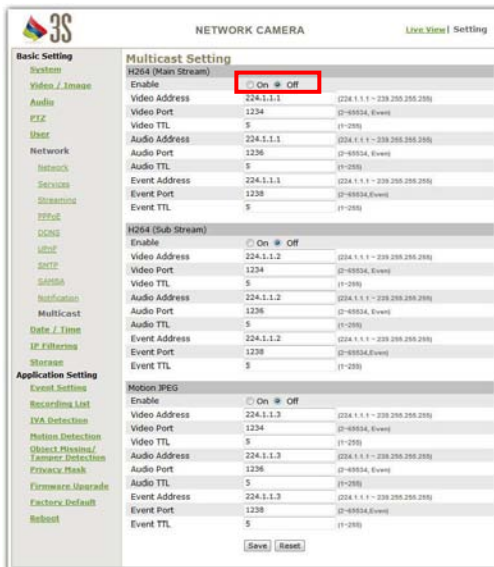


4. Click **Multicast** button from Network.

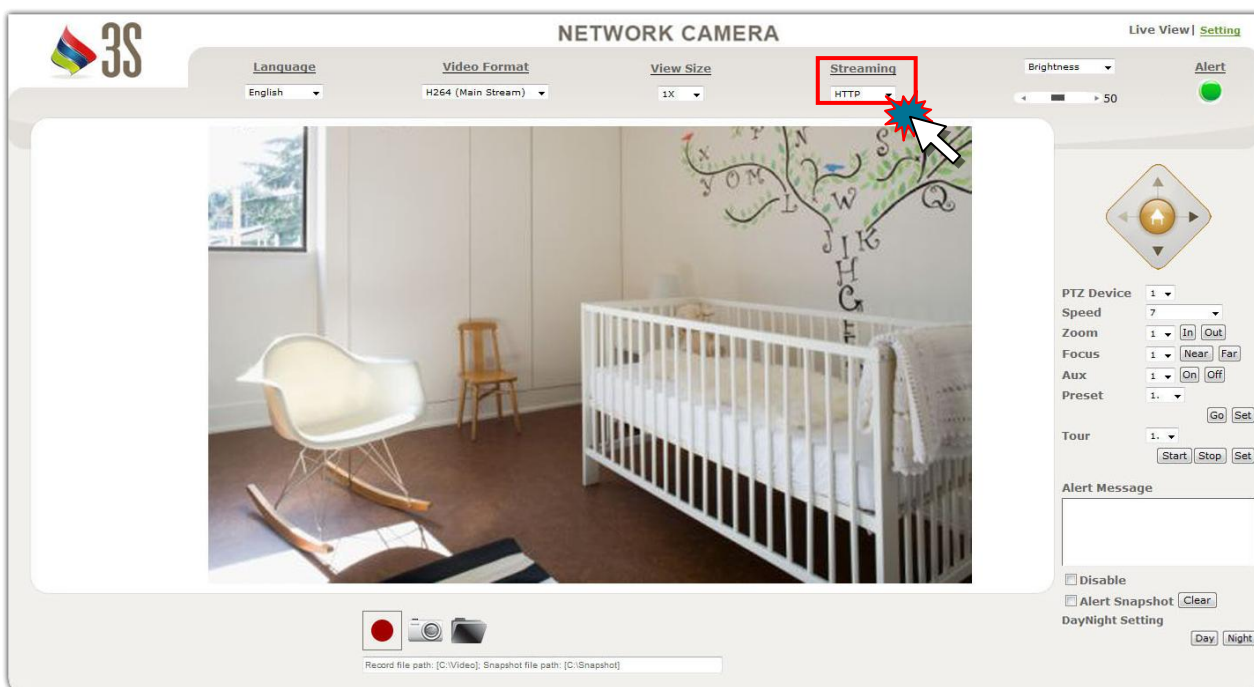


5. According to the requirement, select the streaming type to enable the function.

6. Click On button from Enable Selection to enable the Multicast function.



7. Go back the Live View Mode then click the pull-down menu of Streaming to select the Multicast



8. Wait a 5~10 sec to re-display the live image via Multicast

NOTE :

Please check the firewall and antivirus setting about IGMP to avoid the function fail.

Troubleshooting and FAQs

Question	Answer and Solution
Function	
What encoder and decoder are used by the camera for sounds and images?	The camera uses MJPEG or H264 compression technology to provide quality images. MJPEG is a standard image compression technology applicable to different browsers without the need to install additional software. H264 is a next-generation image compression standard and can provide high image quality at low bandwidth. The sound decoder uses PCM (Stereo, 16bit, 8kHz) compression technology.
How many users are allowed to view the camera simultaneously?	The maximum number of viewers depends on the bandwidth of the client accessing the camera. About 5~6Mbps are used to process data of the camera, so the maximum number of viewers changes in proportion to FPS and the resolution of the image. Obviously, the higher the number of viewers, the lower the performances at each client end.
Is it possible to catch the image from the camera in a real-time manner?	Yes, you can use the snapshot function from the main control page.
Camera Installation	
Can the camera be used outdoors?	The camera is not waterproof, so a special waterproof cover must be available for outdoor use. Please note that the waterproof cover may affect the built-in pickup function of the camera.
Link LED does not light up.	<ul style="list-style-type: none"> • Check that the attached standard transformer is not damaged. Plug the power cable and reboot the machine. • If the problem remains, contact your dealer for help.
What network cable is used for the camera?	The camera uses a 10 or 100 Base-T Category 5 UTP network cable.
How to install and operate the camera behind a firewall?	If you have a firewall in your network environment, please select HTTP mode (Port80). Generally the port 80 is always open for the browser to access the Internet.
What are the username and password for the first use and after reset to factory default?	Username = root Password= root Please change your password immediately after entering the system to ensure information security.
I forgot the username and password I used for the setting. What should I do?	Please proceed as follows: <ol style="list-style-type: none"> 1. Hold the Reset button for 4 seconds after booting to reset the password to preset. 2. Change the username and the password.
I forgot the IP address of the camera. What should I do?	Use IP Finder to locate the IP address of the camera. Please connect the camera and the PC on which the IP finder is executed to the same hub.

<p>IP Finder cannot find the camera.</p>	<ul style="list-style-type: none"> • When the camera still can't be located over 1 minute, re-activate the camera. • Do not connect the camera to more than one router. The IP Finder will not be able to detect the camera. • If the IP of PC on which the IP Finder is executed is not correctly set, the IP Finder will not be able to locate the camera. Please confirm that the IP address has been properly set. • The anti-virus applications on the PC or the firewall might block the IP Finder from execution. If you cannot execute the IP Finder, please disable your anti-virus applications or firewall.
<p>Internet Explorer does not display the camera screen correctly.</p>	<p>Please be sure that the version of your Internet Explorer is 6.0 or later. Should you have any difficulties, please log on the Microsoft website to update your browser. Microsoft website: http://www.microsoft.com/windows/ie.</p>
<p>IP Finder cannot store network parameters.</p>	<ul style="list-style-type: none"> • Do not use spaces. Use underline “_” or dash “-”. • Your connection might have problems. Please ensure that the network parameters and the camera connection are correctly set.
<p>Access to Camera</p>	
<p>I cannot enter the login screen and camera page from Internet Explorer. What should I do?</p>	<ul style="list-style-type: none"> • The IP address of the camera is possibly being used by another PC or device. Please disconnect the network cable from the camera and execute PING to confirm if the IP address has been used. • It is possibly due to the network cable. Please use the cross-line network cable to connect the PC and the camera, and see if the log-in screen appears. • Be sure that the network connection and the settings are properly configured. • Be sure to enter correct IP address in the Internet Explorer. If you use dynamic IP address, the address might have been changed after your last check. • Internet traffic might slow down the webpage access. Please wait. • Be sure that you are using http port. The default setting is Port 80. It will be converted to the private camera IP address. • The port assigned for your camera might not able to access the Internet. Contact your ISP to acquire a usable port. • The proxy server might be blocking you from connecting to the camera. Do not set the proxy server. • Please be sure that the default gateway address is correct. • Your router might need Port conversion. Refer to the user manual of your router for details. • The package filtering function of the router might have blocked the access to the external Internet. Refer to the user manual of your router for details. • If you are using DDNS, please remember to set the default gateway and server address. • If none of the procedures above is working, please reset to the factory default values and re-install. • If the problem still persists, there might be some problems with the product. Contact the dealer who sold you the product for more help.

<p>No image appears on the main control screen.</p>	<ul style="list-style-type: none"> • When using PC to connect to the camera for the first time, a security warning window will tell you that you need to download the ActiveX control. When you are using Windows 2000 or Windows XP, you might need a properly- authorized user account to install the application • Network traffic might slow down the video streams. If the video is extremely slow, select a lower resolution for a lower bandwidth requirement.
<p>Check whether the Active X control of the camera has been installed in your computer.</p>	<p>Select C:\Windows\Downloaded Program Files to check if the file "Media Viewer Class" is registered. The status bar should indicate the file has been installed. If you do not see this file, be sure that your Internet Explorer security is properly set (the default value is moderate). Re-connect to the camera main page and download the file again. Incomplete download or installation of the camera ActiveX control is the major reason for this problem. Check the security setting of your Internet Explorer. Close and re-open Internet Explorer, and enter the main page to see if you can log in.</p>
<p>Internet Explorer displays the following message: Downloading the ActiveX control is prohibited under the current security setting."</p>	<p>Change the IE security setting to allow downloading unsigned ActiveX control. IE→Tools→Internet Options→Security→Custom Level. Change "Inactive" to "Tips" for the ActiveX control if required.</p>
<p>The camera can operate only in the LAN rather in the Internet environment.</p>	<ul style="list-style-type: none"> • A firewall mechanism might have been activated. Check the setting of your system or ask your network administrator. To access the camera from the Internet, you may need to change the setting of the firewall. • Make sure that your camera does not conflict with other servers on the same LAN. • Check the router and make sure that its setting allows it to access your camera from the Internet.
<p>The number of frames transmitted is less than the defined value.</p>	<ul style="list-style-type: none"> • Congestion of the network or objects of the image may affect the number of frames transmitted. The number of frames may be less than the defined value when they are transmitted via a congested network. • The number of frames transmitted may become less when multiple users are viewing the video stream. • The network hub might be another reason for this problem, especially when multiple camera video streams are viewed simultaneously.
<p>When the audit function is activated, the video streaming area becomes black or the transmission becomes slower.</p>	<ul style="list-style-type: none"> • When you connect your PC to the camera, no sufficient bandwidth is available to support more frames with the current resolution of video streams. Reduce the resolution to QCIF(176x144) or CIF (320x240) and deactivate the audio function. • The audio signal needs 32 to 64 kbps of your bandwidth. You can deactivate the audio function to improve the image quality. Your Internet service may have not sufficient bandwidth to support audio transmission.
<p>Images cannot be transmitted via e-mail or FTP.</p>	<ul style="list-style-type: none"> • Make sure the IP address of the gateway and domain server (DNS) had been defined correctly. • Where FTP still fails, contact your ISP or network administrator to check the FTP server.
<p>I can't control the camera to move up, down, right, left or to the center or preset point.</p>	<ul style="list-style-type: none"> • When communication to the camera stops, click "Refresh" on your IE browser to refresh the transmission. • It might be that other users are controlling the movement of the camera. • The horizontal/vertical movement of the camera has reached its limit. • The horizontal/vertical remote control option of the camera might have been deselected.

I can't control the camera to move up, down, right, or left smoothly.	Delay might occur when you are accessing a video stream and remotely moving the camera horizontally. Where significant delay is identified when you move the camera horizontally or vertically deactivate the audio streams and/or reduce the size of the video stream...
Camera Image Quality	
Camera has a problem focusing.	<ul style="list-style-type: none"> The lens might be contaminated with dust, fingerprints, or other dirt. Use a special cleaning cloth to clean the lens or adjust the focus manually. Focusing might be impossible in some cases. If the object is too close to the lens, move it away from your camera.
Color of the video stream is too deep or light.	<ul style="list-style-type: none"> Please confirm that the image you are watching has the best quality. Adjust the setting of your display card (color quality) to at least 16 bits (24 bits or more are recommended). Incorrect camera video setting. You may need to adjust some parameters, such as brightness, contrast, color, and saturation.
Video stream flashes.	<ul style="list-style-type: none"> Incorrect power cord frequency may cause flashing of the image. Confirm that your camera uses NTSC or PAL system. The image flashes if the objects are black. In this case, adjust the illumination brighter around your camera.
This is noise problem during transmission of the image.	Noise may be produced if you install your camera at a very dark place. Adjust the illumination around your camera.
Others	
How to reboot my camera?	If you only need to re-boot the system and don't want to change any setting, enter the Setting page and select the Reboot option at the bottom of the screen. The system will reboot automatically.
I can't replay recorded files.	Confirm that you have installed Microsoft®'s DirectX 9.0 or above and use Windows Media Player 9 or above.