MPEG-4 IP Module

User Manual

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Chapter 1. General Introduction

Thank you for purchasing this product. It is a versatile and high image solution for small office or home surveillance. It's also a stand-alone surveillance system with a built-in processor and web server that provides highest quality video and system performance.

This IP Module can be accessed remotely, and controlled from any PC/Notebook over the Intranet or Internet via web browser or remote application software. The user-friendly installation procedure and intuitive web-based interface offer easy integration with your LAN environment. It also comes with a lot of useful alarm tool for notice user any situation. It's a really good choice to build a stable and remote security system.

1.1 Product Package Contents

Before installation, please check your package contents to ensure that all items have been included in product. If any of the listed items are missing, please contact your reseller from where you purchased this product for assistance.

The standard package includes:

※. IP Camera * 1

※ Adaptor * 1 (None if you purchased IP Module with PoE)

※ Installation & Manual CD * 1

1.2 System Requirements of IE browser

Local Area Network: 10Base-T Ethernet or 100BaseTX Fast Ethernet

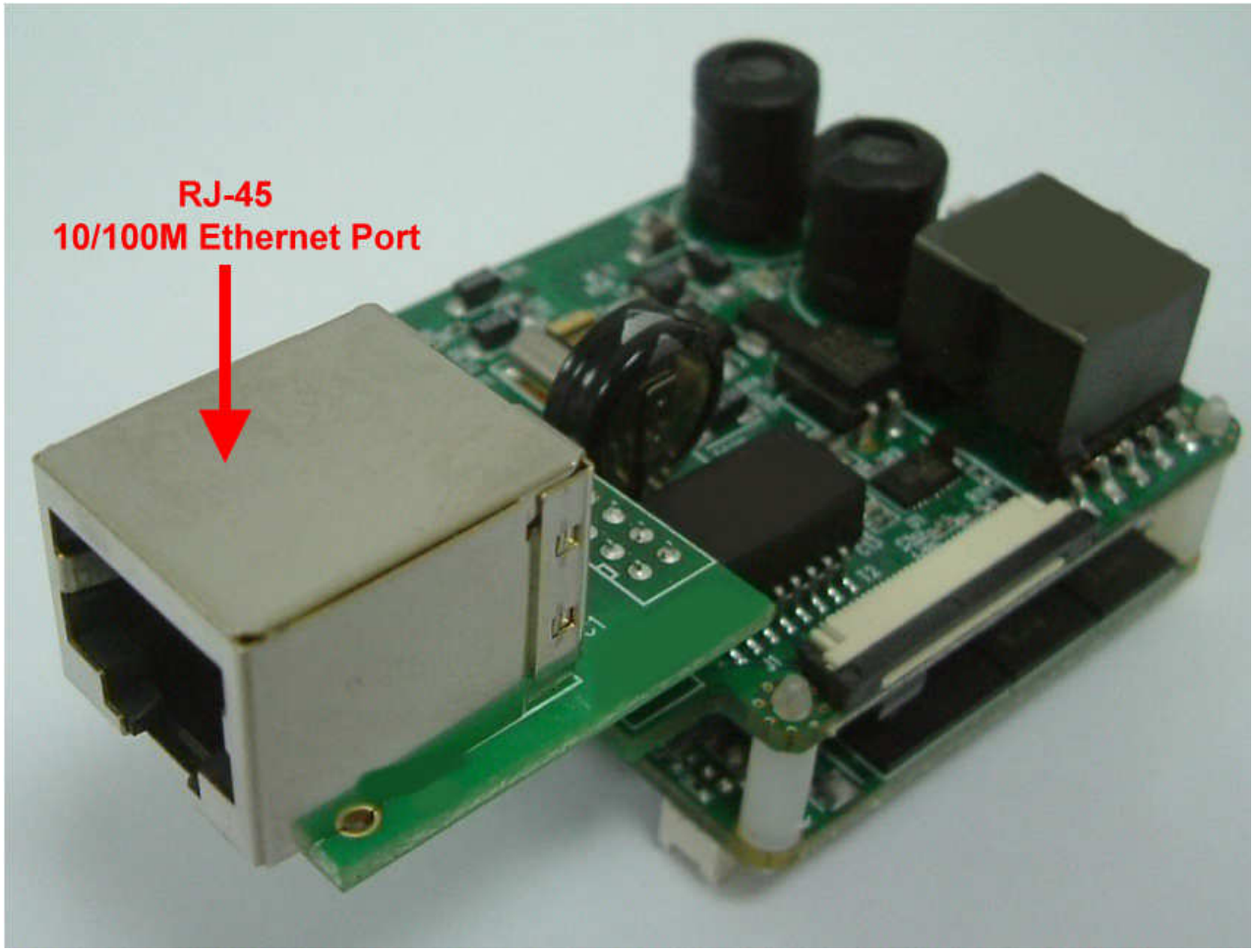
Configuration Environment of browser:

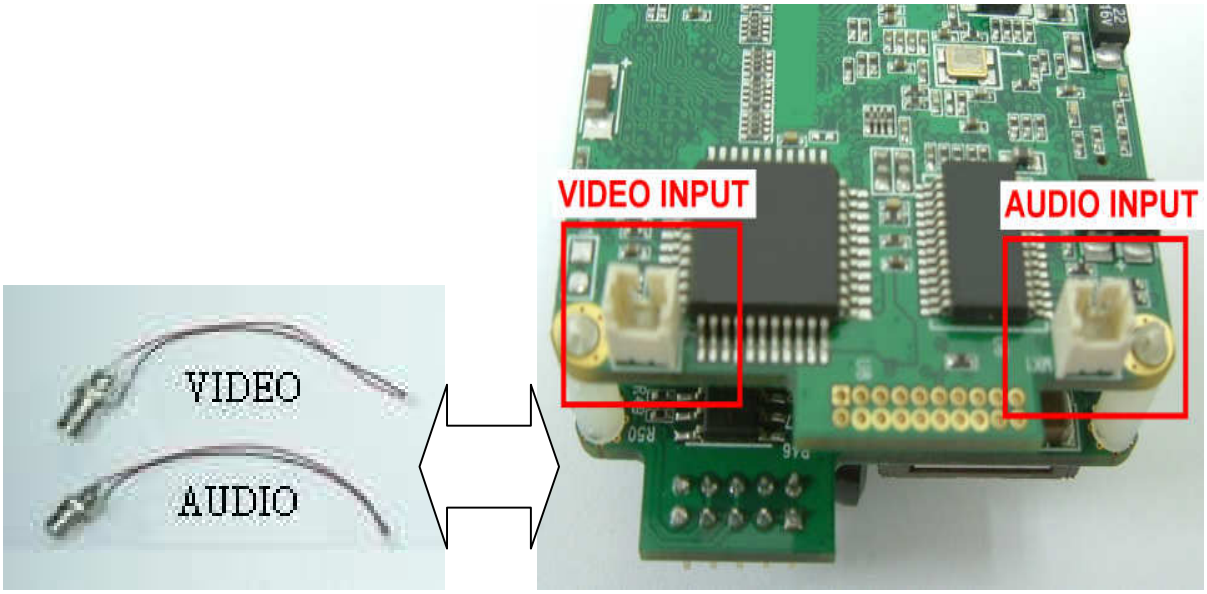
- ActiveX Enabled and Compliant Web Browser (recommended: Microsoft™ Internet Explore 6.0 or later)
- CPU: Pentium IV, 1.8 GHz or above
- Memory Size: 512MB recommended
- VGA card resolution: 1024*768 (recommended: Support Overlay function VGA Card)
- OS: Windows™ 2000 SP4, XP SP2 and VISTA (32 bits) with DirectX9.0c or above
- Other suggestion requirement: CD-ROM.

Important! : A fixed IP address is not required to access server from the Internet. However, if your IP address is dynamic IP, provider by your Internet service provider. Then singing up for a dynamic DNS (DDNS) service will make accessing form the Internet much convenient. Singing up for a DDNS is easy and cost-free. More method for dynamic IP connect please sees FAQ for more detail.

1.3 Hardware Diagram and Connection

IP module device:





How to connect the cables with IP Module, please check below steps:

Step 1. Plug the VIDEO and AUDIO cable as above picture.

Step 2. Plug the RJ-45 network jack on the Ethernet port.

Step 3. Connect the power supply to the Power connector, and then plug the supply into an available power outlet.

Caution 1: Make sure that you used correct power adapter for IP module device. Using an incorrect power adapter may damage the device.

Caution 2: If you’re using PoE IP Module, there’s no connection of Power supply.

Chapter 2. Basic Introduction of IE

2.1 Foreword

For easy and convenient setup, we recommended to use Windows™ Internet Explorer

6.0 or above version at the first time to login and setup the IP Module. **For IE of Windows™ Vista OS, please refer to Internet Explorer Security Settings**.

Please connect the power core with IP Module well and then use network cable to connect IP Module with hub or switch hub directly. And please note that IP of PC should be under the same network area which's like: 192.168.0.xxx (except 192.168.0.100), subnet: 255.255.255.0

The IP Module had a default IP was: 192.168.0.100

The default account name & password were: admin

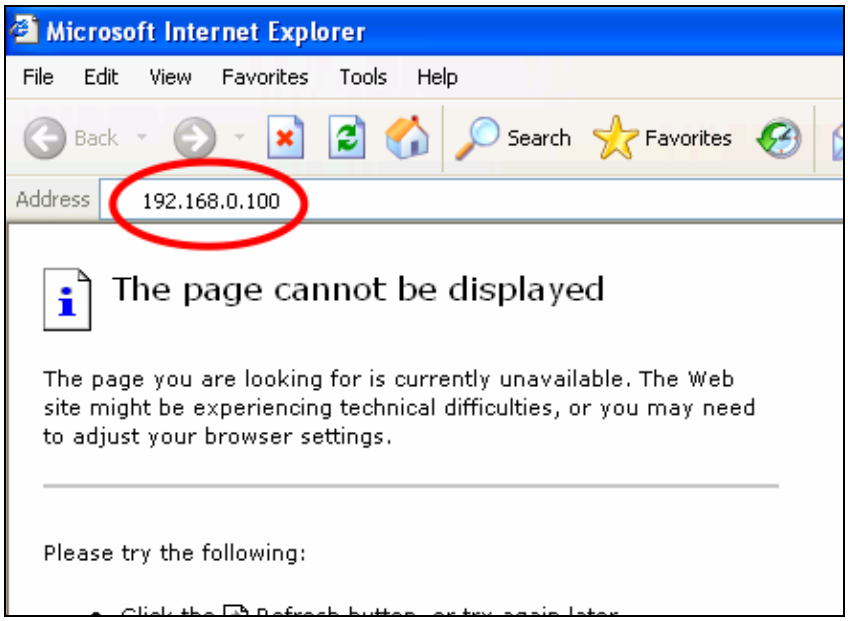
Now, we can start to login and setup IP Module as below chapter.

Note! : At the first time to connect and setup the IP Module, we didn't recommend to connect with PC directly because the IP Module needs to download a MPEG-4 codec from Internet as below chapter. The PC will not be able to connect with internet if only have one network card to connect with IP Module directly.

2.2 The first time to login and setup IP Module

Step 1. Please use mouse to double-click the IE icon on desktop or quick launch bar.

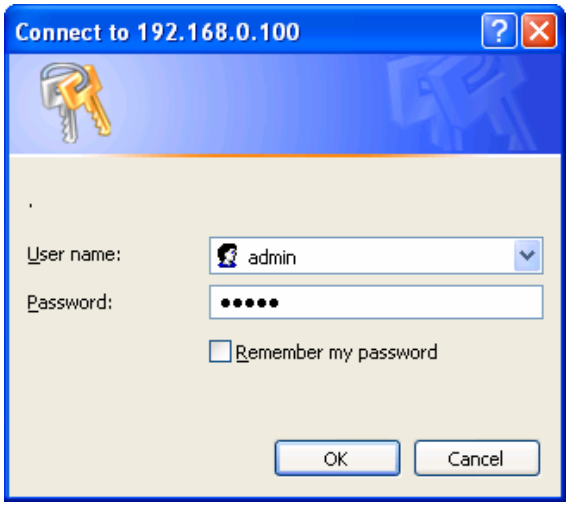
Step 2. After IE launch, please key-in the IP, 192.168.0.100 into the IP address blank as below and then just press “ENTER” on keyboard.



Step 3. The IE will require to the User Name and Password for login. Please input the default Name and Password which both were: admin

They can be changed in IP Module’s configuration, please check System Set -

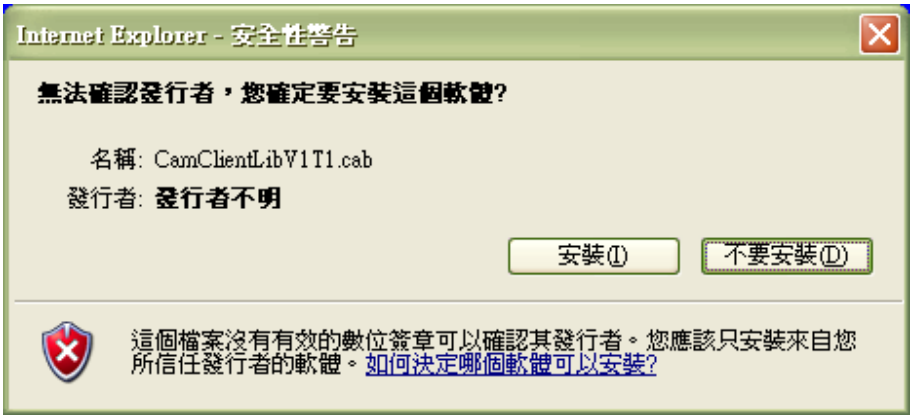
Account.



Step 4. After login, you'll see a yellow bar upon the webpage, please do click the bar to install ActiveX™ program or the IP Module cannot work well.

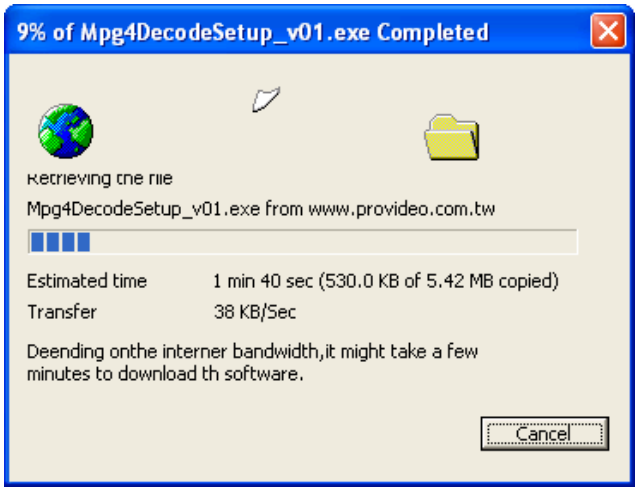
Step 5. After above, please click "Install ActiveX Control" item again to install the program of IP Module.

Step 6. Please select Install to continue installation.



Step 7. If your PC connect to internet well, the installation will auto download and install all the required programs. Please wait for little time to finish the installation and please DO NOT interrupt the process.

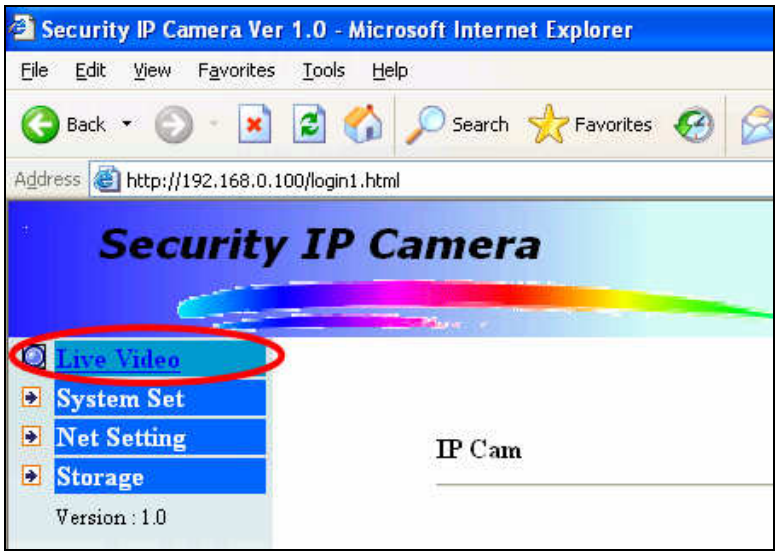
If the installation have not begin to process automatically, please check your internet connection of PC and then download / install the programs according to the IP Module's first webpage description.



Below contents was the IP Module's first webpage description. For your info.

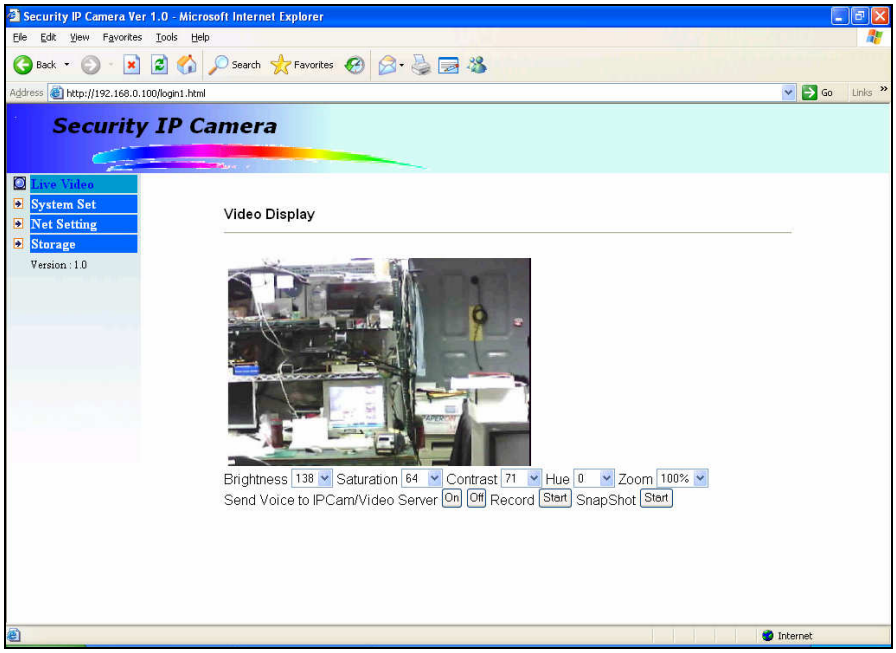
Important!: It will auto-install the decoder program
while you first time see this webpage.If not, please click
Download Mpg4DecodeSetup
to download and then install the decoder program by yourself. Thank you.

Step 8. It means FINISH if the auto-installation window shut down, please click Live Video to check the Live Video of IP Module.

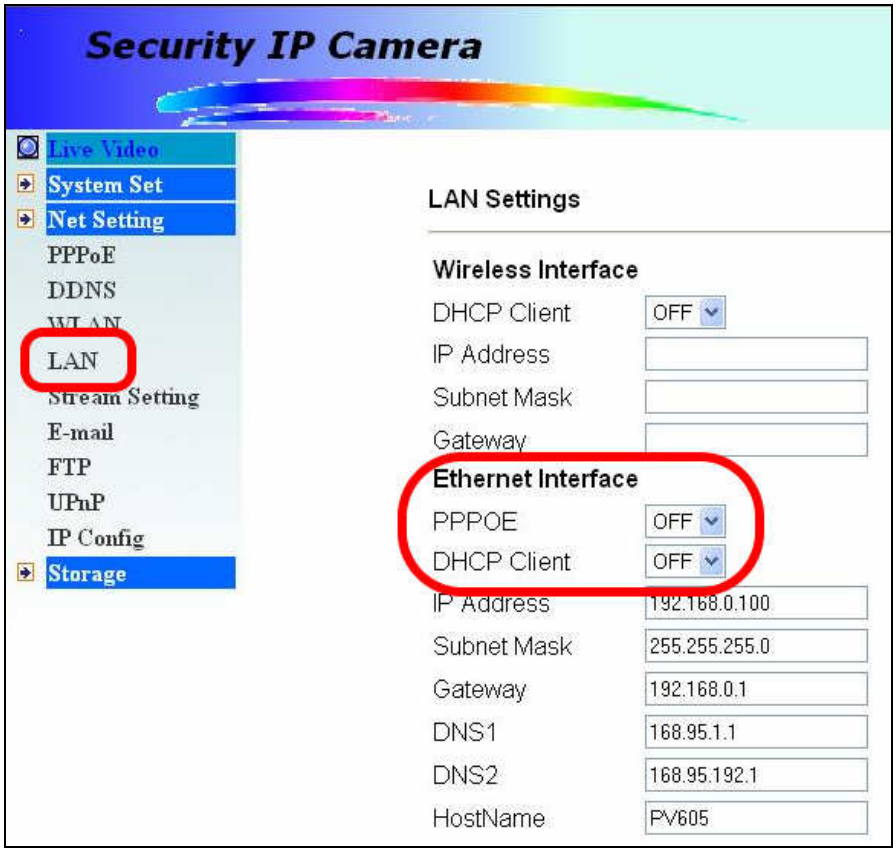


Step 9. At this time, sometimes the Windows™ firewall will popup the alert message to ask for blocking. Please DO NOT block the traffic between IE and IP Module. Please select Unblock to continue the process.

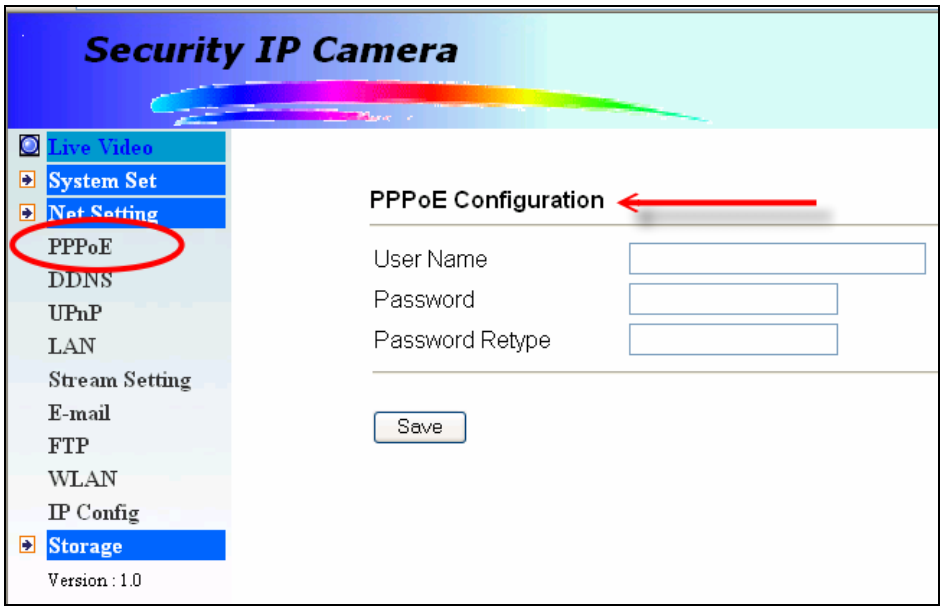
Step 10. Finally, we can see the Live Video from IP Module. If you cannot see the video, may be caused by the Mpeg4DecodeSetup program didn't install well. Please download and install manually and then check the video again.



Step 11. If the video have no problem, users can setup the basic network configuration which was like: LAN or PPPoE as below diagrams. For advanced setup of the configurations, please refer to Net Setting - LAN.


Security IP Camera
Live Video
System Set
Net Setting
PPPoE
DDNS
WLAN
LAN
Stream Setting
E-mail
FTP
UPnP
IP Config
Storage
LAN Settings
Wireless Interface
DHCP Client
OFF
IP Address
Subnet Mask
Gateway
Ethernet Interface
PPPOE
OFF
DHCP Client
OFF
IP Address
192.168.0.100
Subnet Mask
255.255.255.0
Gateway
192.168.0.1
DNS1
168.95.1.1
DNS2
168.95.192.1
HostName
PV605

LAN


Security IP Camera
Live Video
System Set
Net Setting
PPPoE
DDNS
UPnP
LAN
Stream Setting
E-mail
FTP
WLAN
IP Config
Storage
Version : 1.0
PPPoE Configuration
User Name
Password
Password Retype
Save

PPPoE

Chapter 3. Advanced Configuration of IE

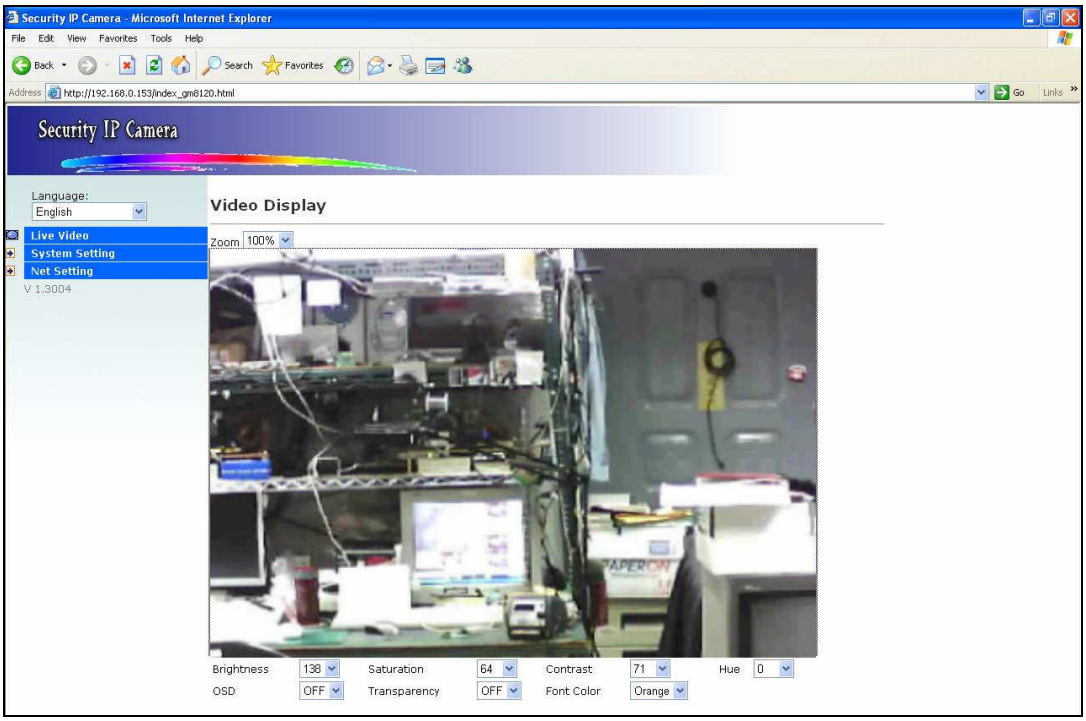
3.1 Foreword

This chapter's mainly to introduce about the IE advanced configurations of IP Module. Users can setup ALL detail in IE's configurations of IP Modules. Thus please pay much attention to read this chapter will help to know more about IP Modules. If you use the IE of Windows™ VISTA operating system, please refer to Internet Explorer Security Settings. We'll have detail introduction of all IE function pages in this chapter. Please read it one by one if need to setup advanced configurations.

3.2 IE Function Pages

Live Video page

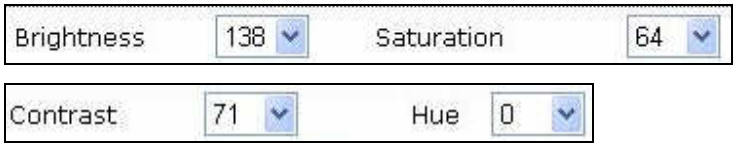
Live Video



Live Video window:

Display OSD timer

Live Video configurations:



Users can adjust the brightness, saturation, contrast and hue values of live video.

To change the zoom's value can enlarge or shrink the display size of live video window.

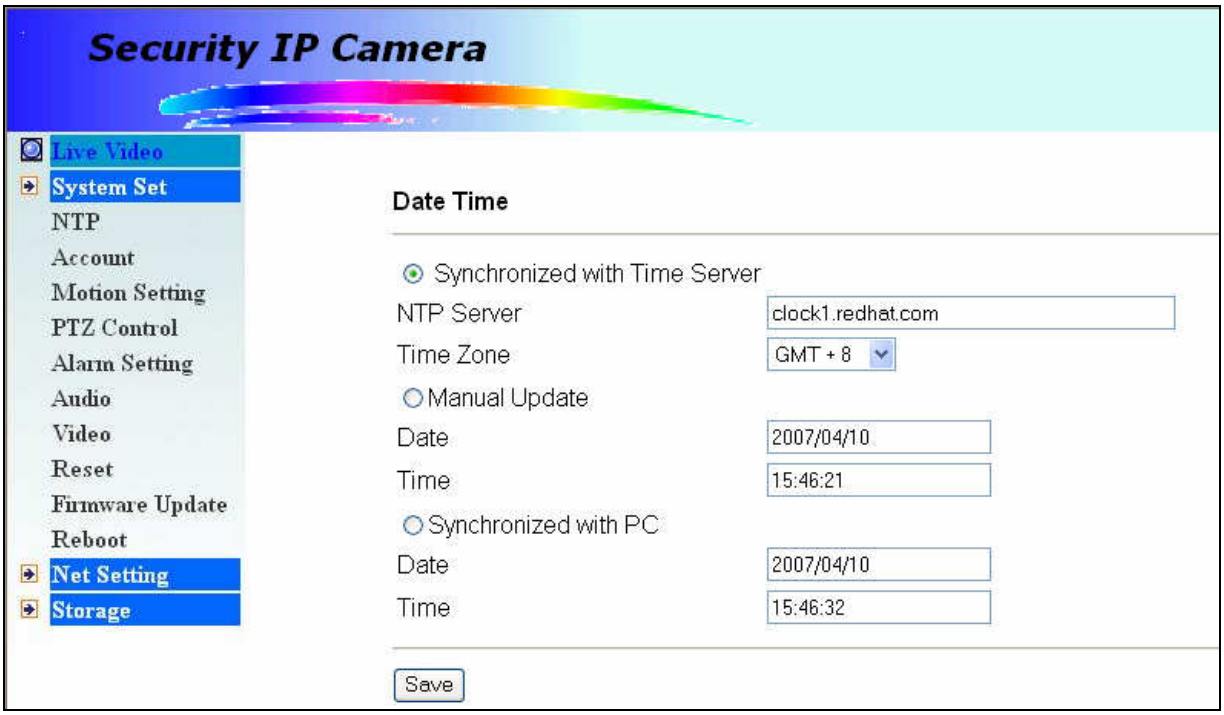
Reset to default values please refer to System Setting - Reset.

OSD configurations:

Users can set the OSD configurations which included Transparency and Font Color.

System Set page – NTP

System Set ⇨ NTP



To setup the correct date and time of IP Module in this webpage. Just select one of below three synchronizing modes from A to C and then the program will update the date & timer to the choice.

A. Select Synchronized with Time Server, then please find and input the IP / address of NTP Server and select the correct Time Zone. The IP Module will auto update with the NTP server to correct date and time.

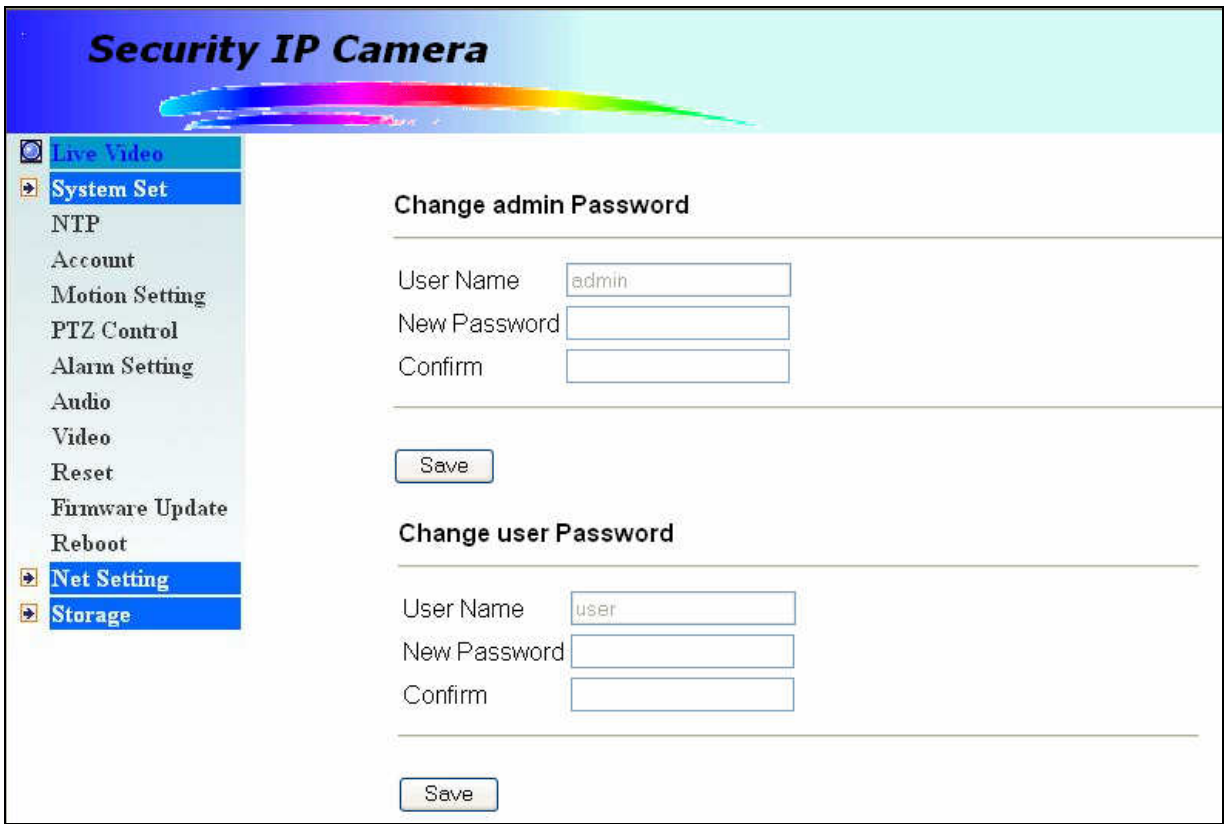
B. Select Manual Update, then input the correct date and time manually. The IP Module will change the time settings as user's setup.

C. Select Synchronized with PC, then click Save to synchronize the date and time with users' PC timer.

NOTE! : Please be assured that you already pressed Save to save the settings as modified or the IP Module may not work well.

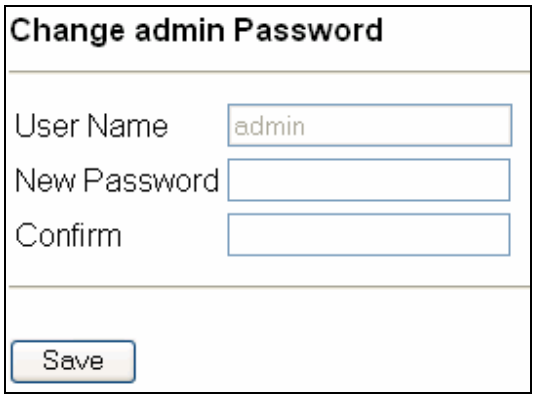
System Set page – Account

System Set ⇨ Account



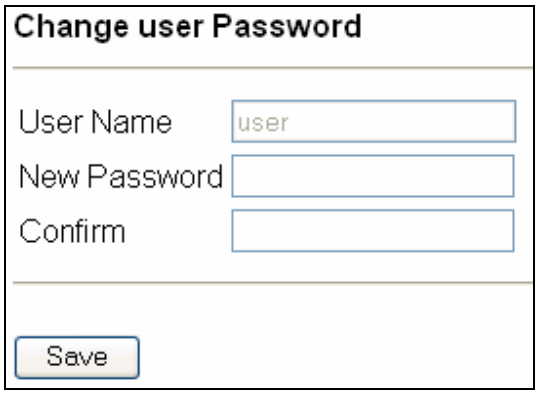
Users can modify the management of users' accounts in this webpage. We provided two different levels of Administrator and General User to be used. Please setup the account management as below instruction.

Administrator level: This level had authority to setup and modify all settings of IP Modules, thus please keep this account for higher securing.



Administrator Name was fixed,『admin』, it cannot be modified. Please change the password and confirm again, then click Save to save the settings.

General User level: This level only had authority of video previewing, thus it cannot modify any setting of IP Module.

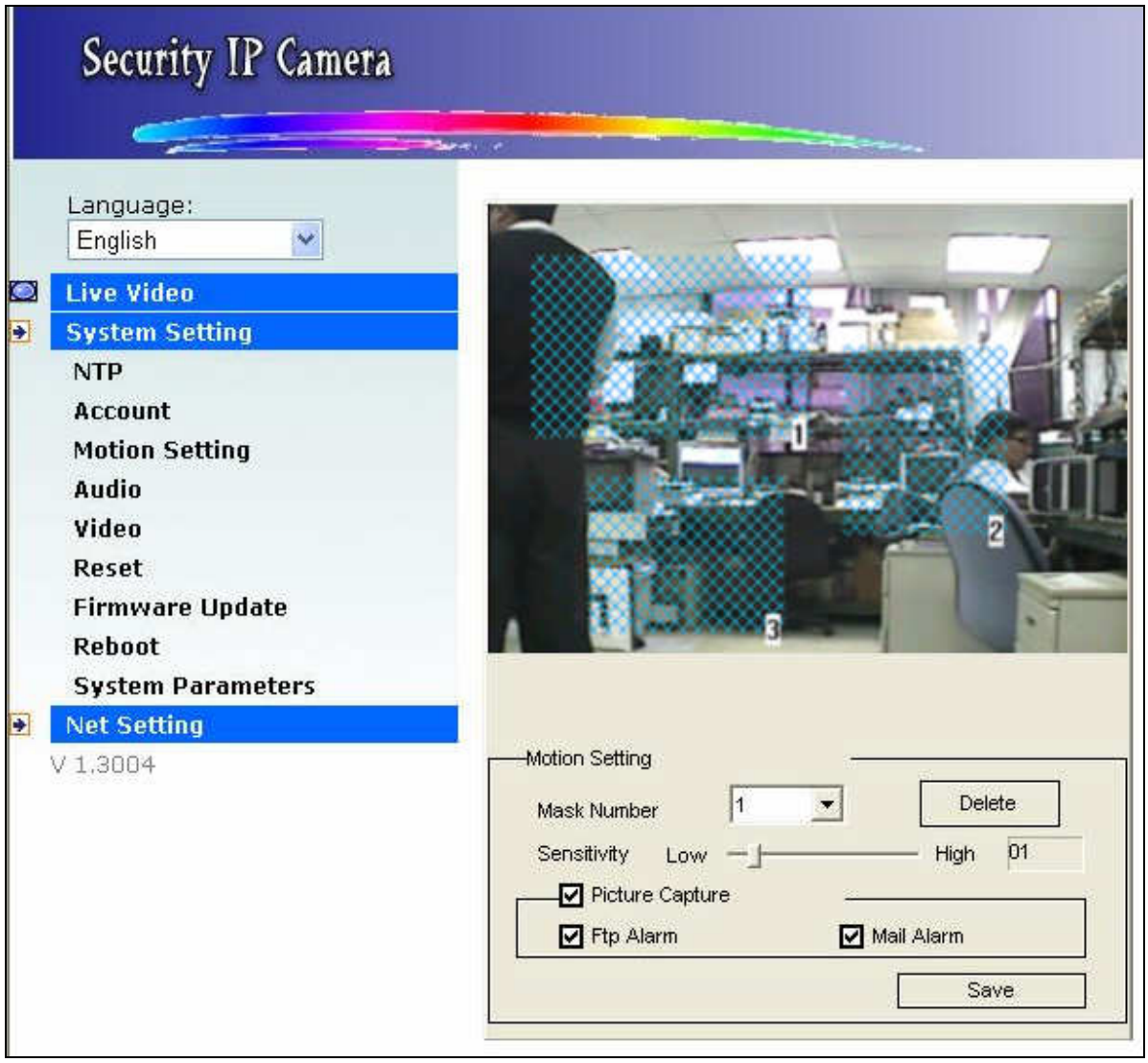


User Name was fixed,『user』, it cannot be modified. Please change the password and confirm again, then click Save to save the settings.

NOTE! : Please be assured that you already pressed Save to save the settings as modified or you may not login to IP Module again.

System Set page – Motion Setting

System Set ⇨ Motion Setting

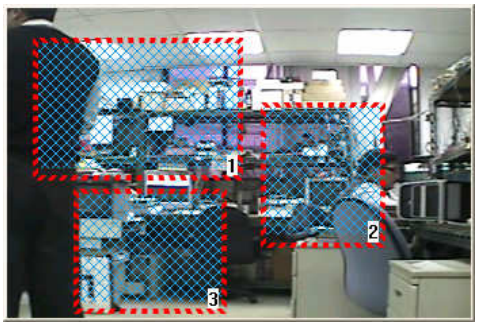


This IP Module supports Motion Detection on-line by itself and also can send alarm out to notify users. About Motion Detect, users can find and modify the settings in this webpage. We'll introduce the detail as following.

Video Window:

This video window displays the server's video and the marked area of motion detecting

(if you haven't arrange the mask area, enable MD will have the program to detect ALL area).



In this picture, we already arranged 3*mask areas for examples, so you can see 3*blue color masks on video window.

Mask Number:

If you want to setup the mask of motion detecting, please select the mask number firstly and then use mouse (press left button) to drag on video window for drawing a blue area. You'll see a blue area after dragging (release mouse key) and marked to the mask number on video window.

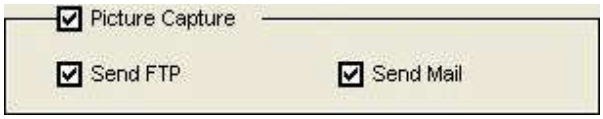
If you want to delete the mask, also please select the Mask Number firstly. Then click

to delete the mask.

Sensitivity:

Users can adjust the sensitivity of Motion Detection. Just need to use mouse to click the slide bar and then move on the level between Low (L) and High (H) sensitivity.

Picture Capture:



Enable Picture Capture to snapshot and then send to Send FTP(FTP) or Send Mail(Mail box) while motion being detected. About how to setup the FTP and MAIL, please refer to Net Setting - Email and Net Setting - FTP

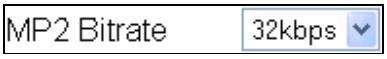
NOTE! : Please note that Motion Detect function will work after pressed Save to save the settings.

System Set page – Audio

System Set ⊃ Audio

This setting's for users to setup the compressed audio to storage or transmitting on network.

Codec Settings:



To setup the Bitrate in 32kbps, 48kbps or 64kbps of the audio compression. Set to smaller will get smaller size to storage or transmitting on network.

NOTE! : Please note that Audio will be changed after pressed button.

System Set page – Video

This setting's for users to setup the compressed video to storage or transmitting on

network. We designed two different setup modes for user's choice. One is for Beginner and the other's for Professional Users. Generally we strongly recommended to use the Beginner Mode, it's enough to setup the video compression. Below we will introduce the detail about the two modes:

In Beginner mode, we can setup the main video stream simply.

Resolution: Select the resolution of video to QCIF, CIF or D1. This will have effect on storage and network transmission.

Quality: Select the quality to Highest, Higher, Medium, Lower or Lowest. This will also have effect on storage and network transmission.

Tip: The Quality item's relate to the video's Bitrate, the Bitrate will get higher if set to better quality.

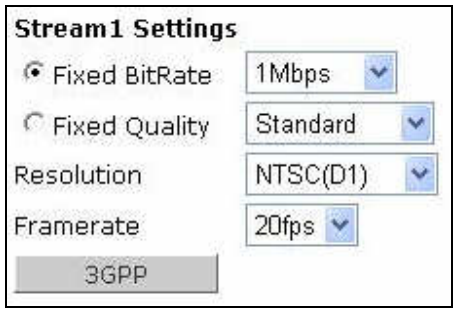
In Professional mode, we can setup dual-streaming (both of Main stream and sub stream) and the video of 3GPP. Generally we take the Stream1 for main stream and the Stream2 for sub stream.

Of course the two streams can be used to record, analyze, network surveillance or re-process depends on users' requests.

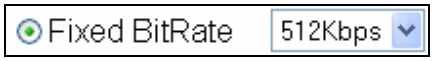
We'll introduce one by one as following:

==========

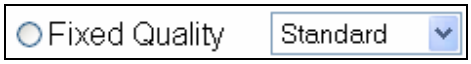
Stream1 Settings:



Main Stream

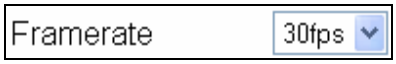


Setup the video compression of Fixed BitRate (File Size) to get stable video transmission. (From 48Kbps to 2Mbps) Users can choose either of Fixed Bitrate or Fixed Quality to setup.



Setup the video compression of Fixed Quality to get stable video quality (from Standard to Excellent quality). Users can choose either of Fixed Bitrate or Fixed Quality to setup.

Select the resolution of video to QCIF, CIF or D1. This will have effect on storage and network transmission.

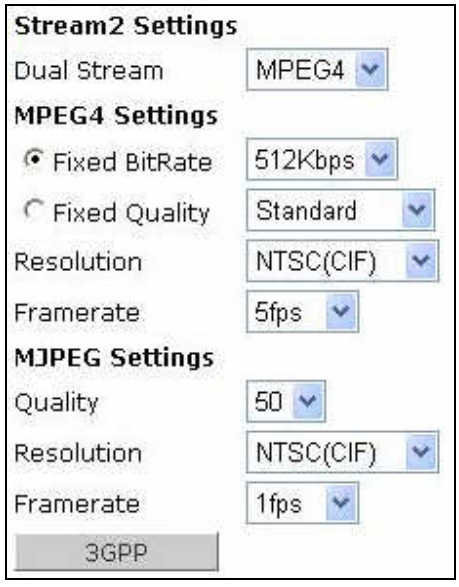


Important! Dual-Stream will share the FrameRate to each streaming. The Stream2 will not show-up if Stream1 shared Full FrameRate (30fps). Please setup the Framerate for using or requests.

Important! Click 3GPP button will send this stream (1 or 2) out for 3GPP signal. There's also a 3GPP button at the down side of Stream2 settings for choice. Please setup this function depends on the 3G bandwidth and status, of course, please use 3G mobile phone and assure there's 3G signal at local. About the 3G mobile phone compatible list, please refer to 3G Mobile List.

==========

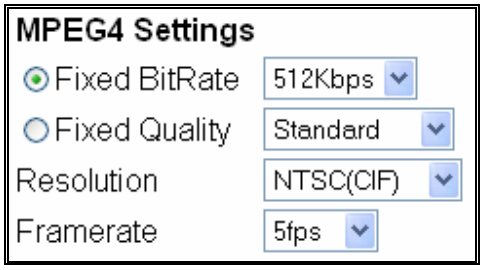
Stream2 Settings:



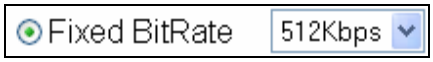
Sub Stream

Enable to send Stream2 out for MPEG4 or M-JPEG (either). Please note that Stream2 will not be enabled if Stream1 took Full Framerate (30 fps).

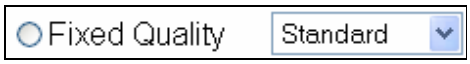
MPEG4:



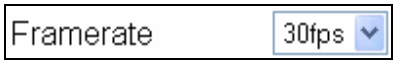
Select MPEG4 for Stream2



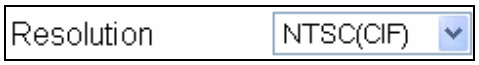
Setup the video compression of Fixed BitRate (File Size) to get stable video transmission. (From 48Kbps to 2Mbps) Users can choose either of Fixed Bitrate or Fixed Quality to setup.



Setup the video compression of Fixed Quality to get stable video quality. (From Standard to Excellent quality) Users can choose either of Fixed Bitrate or Fixed Quality to setup.

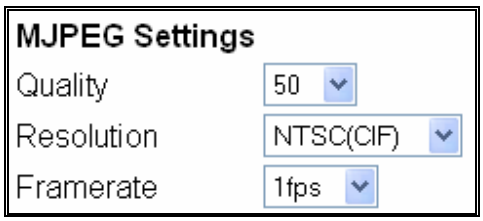


Important! Dual-Stream will share the FrameRate to each streaming. For example, under Dual-Streaming (Full Framerate: 30 fps), Stream2 can be set to 5fps if Stream1 set to 25fps.

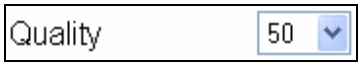


Select the resolution of video to QCIF, CIF or D1. This will have effect on storage and network transmission.

MJPEG:

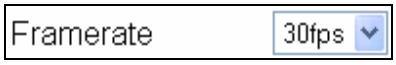


Select JPEG for Stream2



Adjust the video quality of JPEG compression from 1 to 90. The higher value will get higher quality and bigger file size.

Select the resolution of video to QCIF, CIF or D1. This will have effect on storage and network transmission.



Important! Dual-Stream will share the FrameRate to each streaming. For example, under Dual-Streaming (Full Framerate: 30 fps), Stream2 can be set to 5fps if Stream1 set to 25fps.

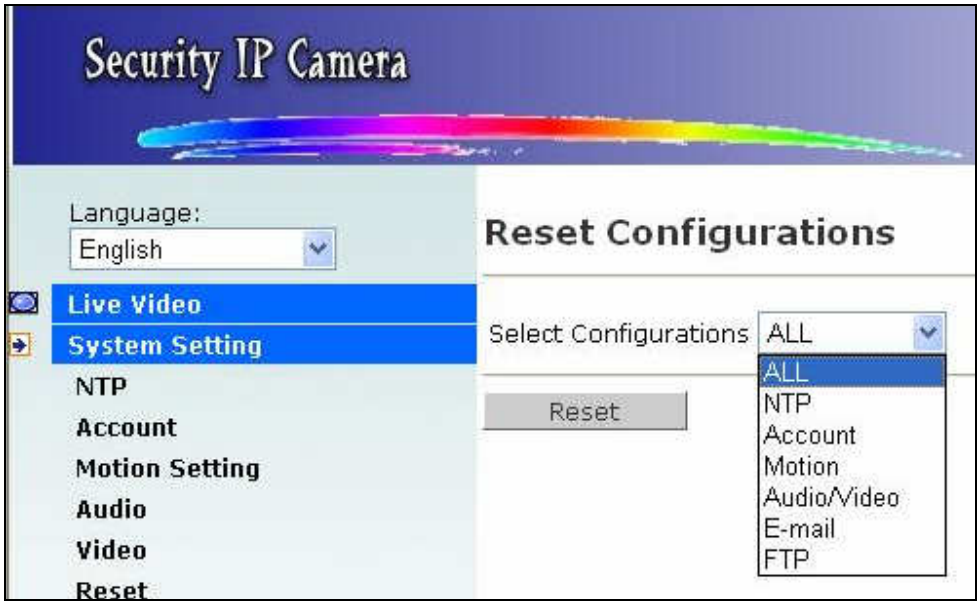
Important! Click 3GPP button will send this stream (1 or 2) out for 3GPP signal. There's also a 3GPP button at the down side of Stream2 settings for choice. Please setup this function depends on the 3G bandwidth and status, of course, please use 3G mobile phone and assure there's 3G signal at local. About how to use it or the 3G mobile phone compatible list, please refer to 3G Mobile List.

NOTE! : Please note that Video will be changed after pressed

button.

System Set page – Reset

System Set ⇨ Reset

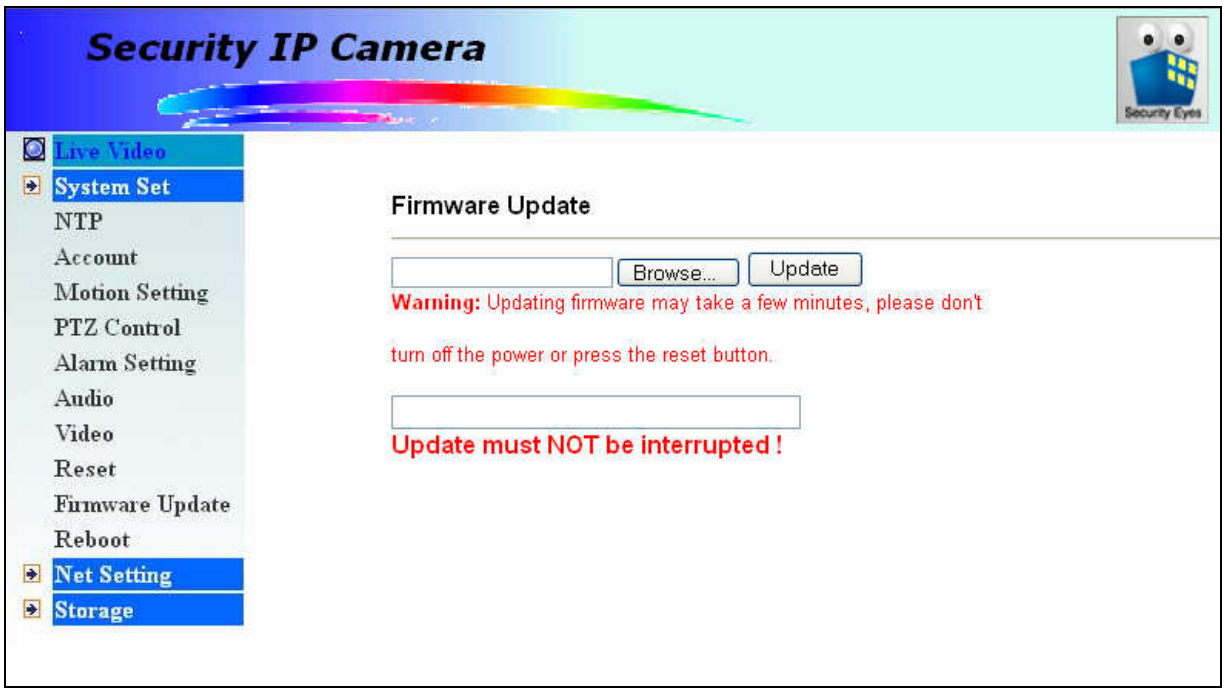


This setting's for users (Administrator) to reset the wrong or trouble settings. Users can reset All, NTP, Account, Motion, Audio/Video, E-mail and FTP settings. After reset, the selected settings will return to factory default values.

After reset, the IP Module default settings needs to be rebooted for taking effect. The data stored in ALARM, PPPoE, LAN, WLAN, DDNS, Stream, Email, UPnP, USB and SD will not be deleted after reset process.

System Set page – Firmware Update

System Set ⇨ Firmware Update



This function's for users (Administrator) to update the firmware of IP Module.

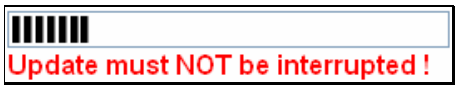
Update Procedures:

Step1. To get or download the new firmware from technical support, sales, retailer or website and save in local disk.

Step2. Login to IP Module, click System Set → Firmware Update → Browse...

Step3. Select the new firmware file

Step4. Click Update to start update process and wait for few minutes.

Step5. 

You'll see the process bar moving from beginning to the end and then screen will become to BLANK when it finish the

update procedure.

Step6. Please download and install the Mpg4DecodeSetup files again. About this, please send request to technical support of Provideo Co., Ltd. We'll have more detail about the firmware update to maintain the product.

Step7. After above, please close ALL IE browser window and then re-launch it again to login to IP Module.

Step8. Please DO re-setup the settings and check the video display. If any question, please contact the sales or technical support for more help.

NOTE! : Updating firmware may cause some unexpected errors or damage the devices. Please request for more professional opinions and technical support before use this function.

System Set page – Reboot

System Set ⇨ Reboot

This function's for users (Administrator) reboot the IP Module.

Just press the Reboot button, then the IP Module will auto shut-down and initial again by itself. The time length of **Reboot** procedure will be about 30 seconds.

When to use:

A. System upgrading, setup or reset errors.

B. No video display at local (not at remote side).

C. The device cannot connect to network (wire, PPPoE or DDNS fail).

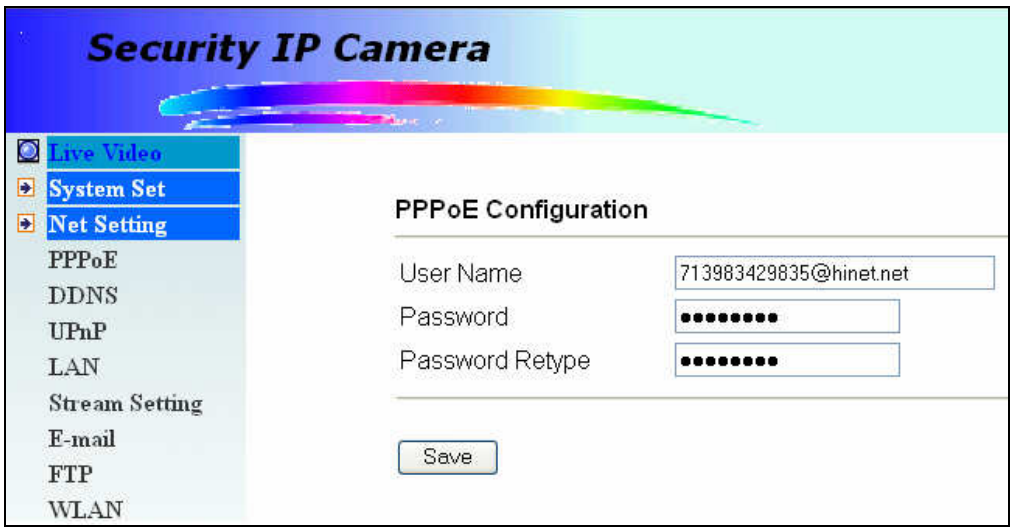
D. Abnormal IP Module working.

E. Unstable IP Module working.

F. Unexpected system crash.

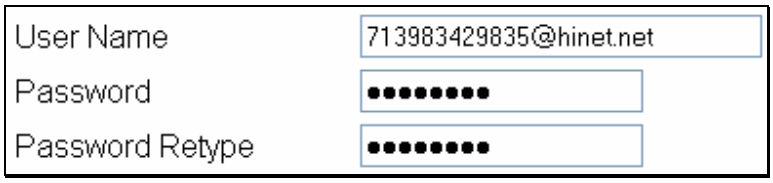
Net Setting page – PPPoE

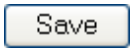
Net Setting ⇨ PPPoE



This function's for users (Administrator) to setup PPPoE dial network.

Please input the PPPoE information (User Name and password) to:

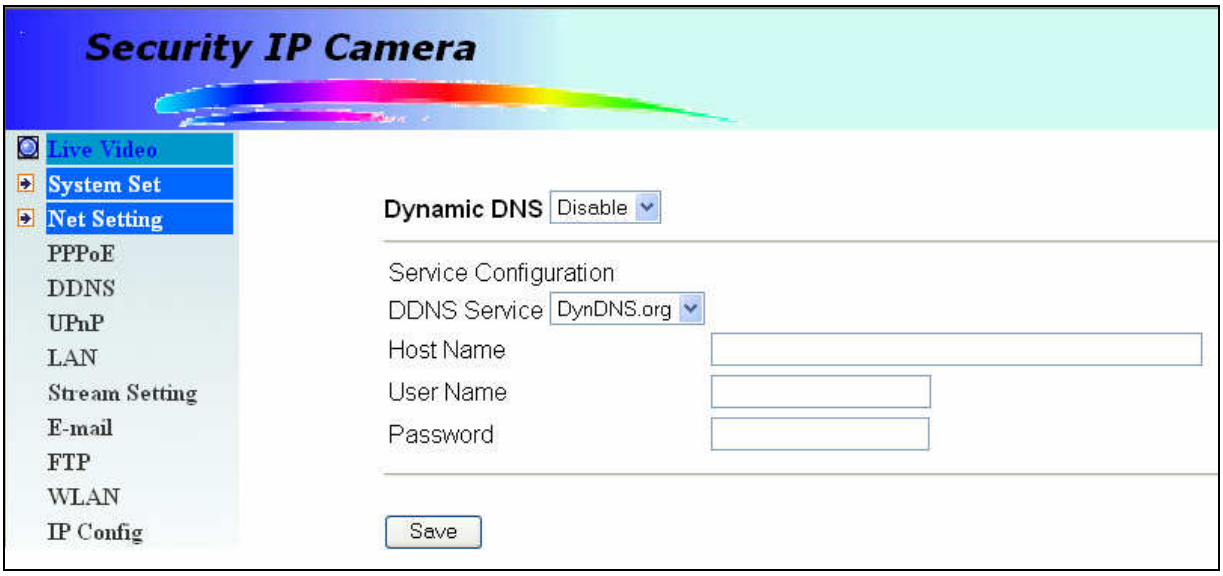


Click  to save the settings as modified.

Please disconnect the power cable of the IP Module and then re-connect IP Module to PPPoE modem. The IP Module will connect to internet via PPPoE.

Net Setting page – DDNS

Net Setting ⇨ DDNS



This function's for users (Administrator) to setup DDNS.

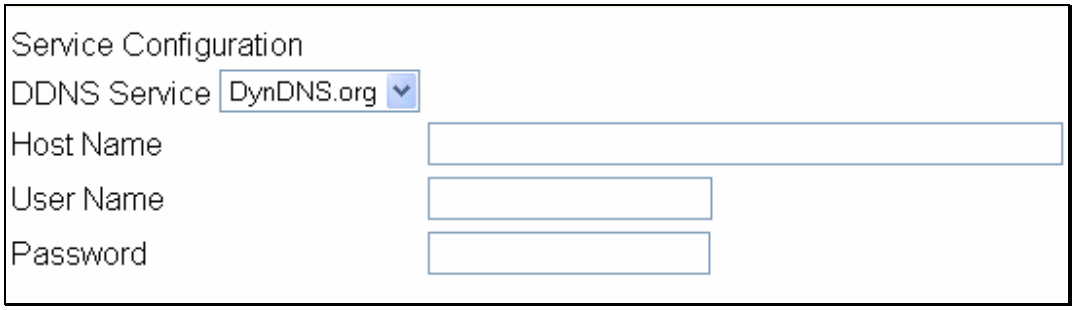
What's DDNS?

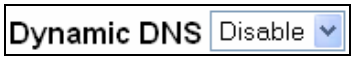
Dynamic Domain Name Server : This function was used for dynamic IP users, especially for xDSL internet connection. If you want to build a surveillance server on internet but you have no physical IP address can be used for the server.

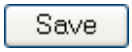
Now the IP Module can support the DDNS service of **DynDNS.org** and **3322.org**

Please register an account at either of these two websites and then you will get the DDNS service information.

Please input the DDNS service information:



And then please enable 

After above, please remember to press 

to save the settings and get it work.

Before DDNS work, please assure that your PPPoE function of IP Module can dial-up to internet without any problem.

Then please reboot IP Module and then wait it to initial the DDNS service.

If you want to see the video of the IP Module based on DDNS, just type the DDNS Host Name in address and it will be transferred to the current IP of IP Module's internet connection.

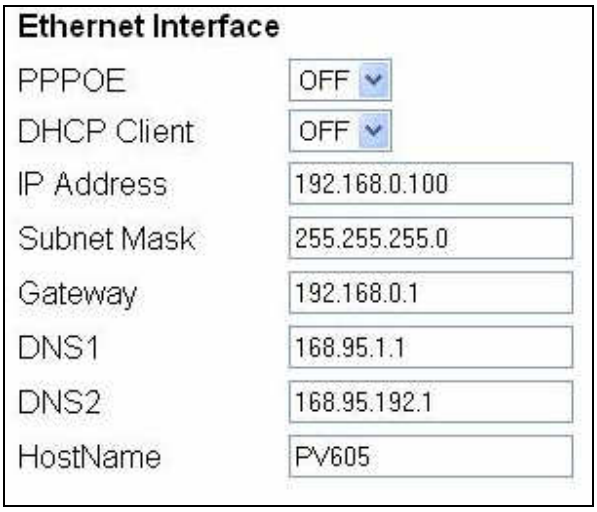
Net Setting page – LAN

Net Setting ⇨ LAN

In LAN settings, users can setup the DHCP or IP information of Ethernet (Wire) network connection. We recommended to setup this function by professional MIS people will be better an IP surveillance system.

Wireless: **Please note this IP Module device didn't support Wireless function.**

Ethernet: (Wired)



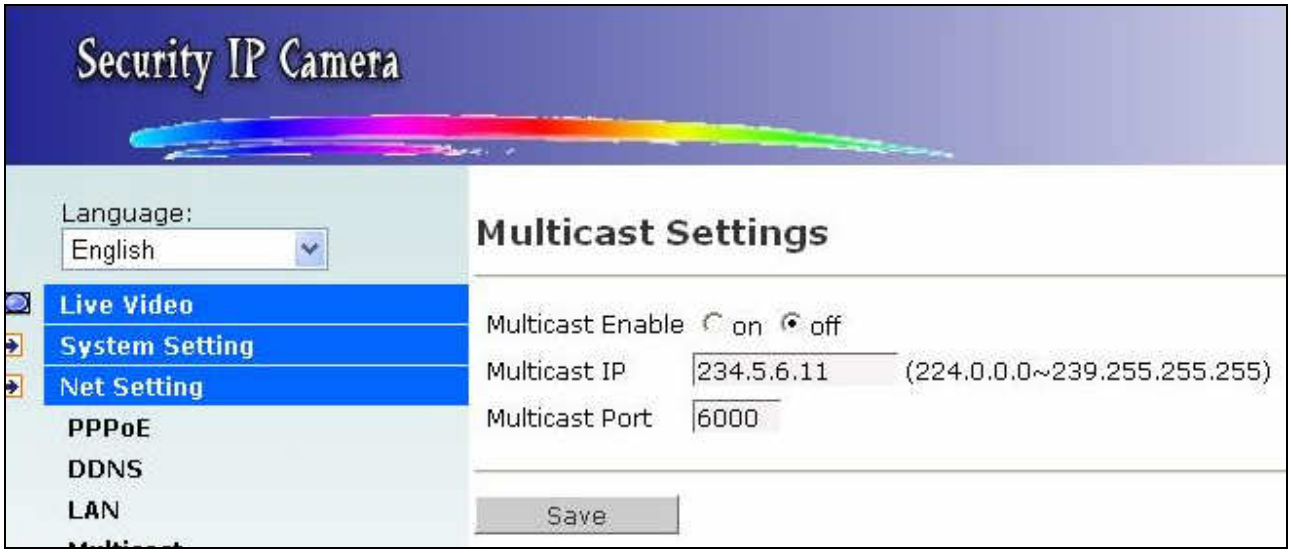
PPPoE: Users can setup PPPoE dial-up to internet. Select ON to enable PPPoE function, about the configuration, please refer to PPPoE.

DHCP Client: Users can have a fix IP or DHCP for IP Module. Select ON to enable DHCP client and then the IP Module will get an IP from the router or server. If no, please turn it off OFF and then input the information of IP Address, Subnet Mask, Gateway, DNS and HostName by yourself.

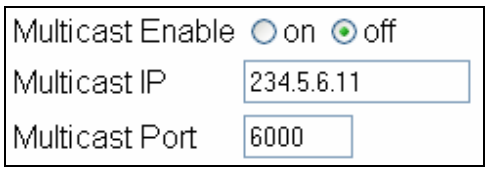
After above, please remember to press Save to save the settings and get it work.

Net Setting page – Multicast Settings

Net Setting ⇨ Multicast



In Stream Setting, users can setup the Multicast Server IP and define the network ports by themselves. We recommended to setup this function by professional MIS people will be better to build an IP surveillance system. Please check these settings if your network connection's behind a firewall, router or network filter.



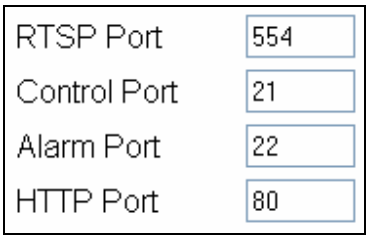
The Multicast function's general using only for Client Application on **Intranet**. Using this can reduce the data flow while many remote clients created connections with IP Module in Intranet network at the same time.

Just need to assign a Multicast IP (range: 224.0.0.0 ~ 239.255.255.255) for IP Module using to do Multicast function. After that, the further connections from remote clients will link to the Multicast IP directly for receiving the video/audio. Therefore the data flow will be reduced between the IP Module and Multicast IP.

Net Setting page – Port Settings

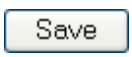
Net Setting ⇨ Port

In this Setting, users can define the network ports to fit port-forwarding or firewall issue.



These ports can be changed to the special network transmission policy if the IP Modules were built behind a firewall or router.

Please note that firewall or router may also be set for receiving input and output data to (or from) IP Modules from network.

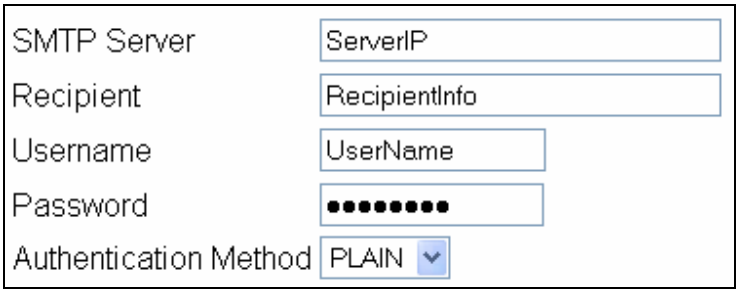
After above, please remember to press  to save the settings and get it work.

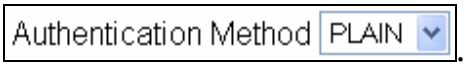
Net Setting page – Email

Net Setting ⇨ E-mail

IP Module had the ability to send alarm or message out via Email. Therefore we have to setup a SMTP server for sending email out. **We strongly recommended to have a SMTP server which's not in SPAM blacklist or the users may not receive any email from IP Module**.

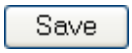
SMTP Server information:



Please input the information of SMTP server and then choose the authentication mode in 

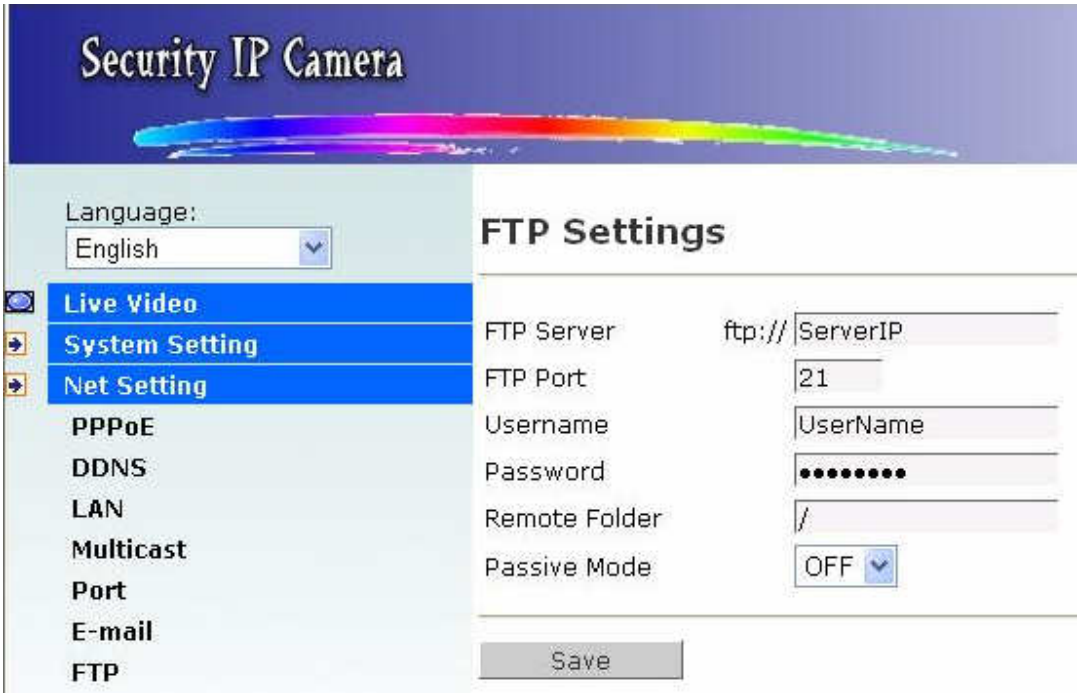
.

Please note that can only access 28*characters input in RECIPIENT item.

After above, please remember to press 

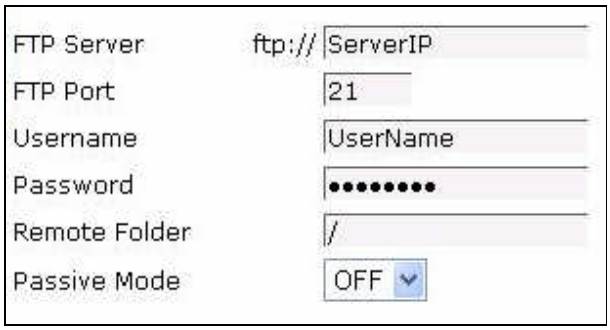
to save the settings and get it work.

Net Setting page – FTP



IP Module had the ability to send alarm picture or video out to FTP server. Therefore we can setup a FTP server to save the files. Please follow below instruction to input the settings of FTP.

FTP Server information:



Please input the information of FTP server.

After above, please remember to press Save to save the settings.

Net Setting page – UPnP

Net Setting ⇨ UPnP

This function's for users (Administrator) to setup UPnP.

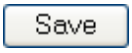
What's UPnP?

Universal Plug and Play : It allows peer-to-peer networking of PCs & networked appliances. It is a distributed, open architecture based on TCP/IP, UDP and HTTP.

UPnP enables communication between any two devices under the command of any control device on the network (LAN).

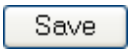
General speak, you'll easy to see the IP Module devices located in『My Network Places』in Windows™ operating system after enable this function.

Click

and then press 

to enable this function.

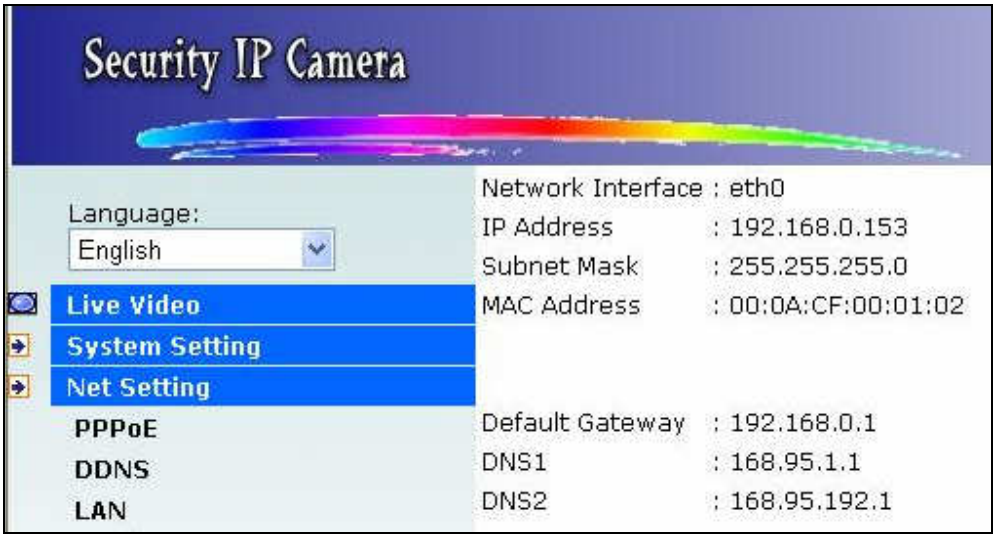
Click

and then press 

to disable this function.

Net Setting page – IP Config

Net Setting ⇨ IP Config



Users can check the ALL network information in this setting. These information's for professional users to check the advanced values of network transmission.

Also general users can check some usual values as below introduction.

NOTE! : "eth0" means "Wire", "eth1" mean "Wireless.

About other detail, please send request to Technical Support for more available information.

Appendix A: Reset and Factory Default Value

Press and hold the **Hardware Reset** button on IP Module over 10 seconds to reset the server to the factory defaults. You will see the Red indicator LED light again when it is finish reset procedure.

Tip: The system will reset to the Default IP (192.168.0.100).

Note! : You'll need to reconfigure the IP Module settings after resetting the server. The IP Module will recover to the factory default username (admin) and password (admin). The network settings on your server will also restore to the default value, therefore you may need to reconfigure the server using the Utility Tool program.

Factory Default Value Sheet

Video

Item	**Default Value**
Video Resolution	**D1**
Video Format	**Auto Detect**
OSD Timer	**Disable**
BitRate	**1Mbps**

Frame Rate	**30 fps (stream 1)** **Disable of stream 2**
Brightness	**138**
Contrast	**71**
Saturation	**64**
Hue	**0**
Flip	**Disable**
Zoom	**100%**

NTP

Item	**Default Value**
Synchronized with Time Server	**Enable**
NTP Server	**--**

Account

Item	Default Value
Administrator Name	**admin**
Administrator Password	**admin**
User Name	**user**
User Password	**user**

Motion Setting

Item	Default Value
Motion Detection	**Disable**
Mask	**All clear**
Sensitivity	**1**
Use Direct Draw	**Enable**
IO Alarm	**Disable**

Motion Capture Post I Frame	**1**
Picture Capture	**Disable**
Video Capture	**Disable**

Alarm Setting

Item	**Default Value**
Alarm Picture	**Off**
Alarm Mail	**Off**
Alarm FTP	**Off**
Video Loss Alarm Mail	**Off**
Output Alarm Event Select	**Off**
Output Alarm Action Time	**1 sec**

Audio

Item	**Default Value**
Audio Channel	**Mono**
MP2 Bitrate	**32kbps**

PPPoE

Item	**Default Value**
User Name	**--**
Password	**--**
Password Retype	**--**

DDNS

Item	**Default Value**
Dynamic DNS	**Off**
DDNS Service	**DynDNS.org**

Host Name	--
User Name	--
Password	--

WLan

Item	**Default Value**
Mode	**Infrastructure**
Operation mode	**Auto**
Channel	**Auto**
Wireless AP SSID	**PVAP**
Preamble Type	**Long**
Authentication	**Open System**
Encryption	**Off**
WEP Key use	**1**

WEP Key	**--**
WPA Encryption	**TKIP**
WPA PSK	**--**

LAN

Item	**Default Value**
DHCP Client	**Off**
PPPoE	**Off**
IP Address	**192.168.0.100**
Subnet Mask	**255.255.255.0**
Gateway	**192.168.0.1**
DNS 1	**168.95.1.1**
DNS 2	**168.95.192.1**
HostName	**PV605**

Stream Setting

Item	**Default Value**
Multicast Enable	**Off**
Multicast IP	**234.5.6.11**
Multicast Port	**6000**
RTSP Port	**554**
Control Port	**21**
Alarm Port	**22**
HTTP Port	**80**

E-mail

Item	**Default Value**
SMTP Server	**--**
Recipient	**--**

Username	**--**
Password	**--**
Authentication Mode	**PLAIN**

FTP

Item	**Default Value**
FTP Server	**ServerIP**
FTP Port	**21**
Username	**UserName**
Password	**--**
Remote Folder	**--**
Passive Mode	**Off**

UPnP

Item	**Default Value**
UPnP Service	**Off**

Storage Setting

Item	**Default Value**
Manual SnapShot Picture	**Off**
Manual Record Video	**Off**
Record Time	**5 seconds**
Schedule Snapshot	**Off**
Interval	**10 minutes**

NOTE:

***"--" means that default value had no meaning.**

***MAC address was assigned in factory which cannot be changed by users.**

Appendix B: Network problematic Utilities

Windows™ operating system includes various network information utilities to determine various network configurations. To determine your IP address and network settings, please follow the procedures.

1. Click on "***Start"*** => "***Run"*** and type in: **cmd** and then press "***ENTER***"

2. Type command: ipconfig and then press "***ENTER".***

3. This will display your network card's IP address, Subnet Mask, and Default Gateway. Please remember it, we will use it later.

4. Ping IP Module's IP address, the Default IP is 192.168.0.100. Please type in the same

   command windows: ping XXX.XXX.XXX.XXX. The XXX.XXX.XXX.XXX is your IP Module's IP address. For example: ping 192.168.0.100.

5. If there is a server, or a PC or other network device online and using this address, you will see:

   Pinging 192.168.0.100 with 32 bytes of data:

   Reply form 192.168.0.100: bytes=32 time<1ms TTL=128

   Reply form 192.168.0.100: bytes=32 time<1ms TTL=128

   Ping statistics for 192.168.0.100:

   Packets: Sent = 4, Received =4, Lost = 0 (0% loss),

   Approximate round trip times in million-seconds:

   Minimum = 0ms, Maximum = 0ms, Average = 0ms

6. If there is NO response on this address you'll see

   Pinging 192.168.0.100 with 32 bytes of data:

   Request timed out.

   Request timed out.

   Ping statistics for 192.168.0.100:

   Packets: Sent = 4, Received =0, Lost = 4 (100% loss),

This indicates that the address is available for use. However, there could still be a device which is currently offline which is configured to use the address. To be certain, make sure all your network devices are on and connected to your network when checking for address availability.

Appendix C: Internet Explore Security Settings

The IP Module's web environment Communications using both JavaScript and ActiveX control technologies. The ActiveX control must be downloaded form the server and installed on your PC. There are four things that your Internet Explorer security settings must allow for the web page to work correctly.

1. **Download signed ActiveX controls**
2. **Run ActiveX control and Plug-ins**
3. **Script ActiveX controls marked safe for scripting**
4. **Active Scripting (Java Scripts)**

All these things are enabled by the default Internet Explorer Security settings. You can restore the default settings in Internet Explorer by clicking "***Tool"*** => ***"Internet Options"*** => "***Security"*** => "***Default Level"***.

You can also click "***Custom Level***" and set each of the four items listed above to "**Enable**". The default security level n Internet Explorer is set to "**Medium**".

CAUTION! : You do not need to enable the option foe downloading **unsigned** ActiveX controls. Unsigned ActiveX controls may cause problems on your computer or allow hackers or a virus to be installed on your system without notice. Signed controls have a digital signature encoded in them verify the identity of the author.

Appendix D: Frequently Asked Questions

IP Module Features

Q: What is an IP Module?

A: The IP Module is a standalone system connecting directly to an Ethernet or Fast Ethernet network based on the IEEE 802.11b standard. It is different from the conventional PC Camera; the IP Module is an all-in-one system with built-in CPU and web-based solutions providing a low cost solution that can transmit high quality video images for monitoring. The IP Module can be managed remotely, accessed and controlled from any PC / Notebook over the Intranet or Internet via a web browser.

Q: **What is the maximum number of users that can be allowed to access IP Module simultaneously?**

A: Maximum number of users that can log onto the IP Module at the same time is 6. Please keep in mind the overall performance of the transmission speed will slow down when multiple users are logged on.

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

A: The IP Module utilizes JPEG image compression technology and Motion JPEG image compression technology to provide high quality images. JPEG is a standard for image compression and can be applied to various web browser and application software without the need to install extra software.

Q: Can I capture still images from the IP Module?

A: Yes, you are able to capture still images with the snapshot function from the Client Software supplied with the IP Module CD-ROM. You may also use the first page that shows up when you type in the IP Address of the server. When viewing this page, click the **"refresh"** button on your web browser to update the image. You can right-click the mouse on it and save to a new file. Also you can type: http://{IP address}:{port}/cgi-bin/image.cgi on IE browser and then the browser will get a current JPEG file of the live video.

IP Module Installation

Q: What username and password do I use for the first time access the IP Module or after a factory default reset?

A: User Name = admin, password = admin (all lowercase).

Q: What do I do if I can't remember my username and password?

A: Restore the factory default settings by pressing and holding down the **reset** button for 10 seconds. Caution: Any configuration settings you have entered will be lost.

Q: Can the IP Module be used outdoors?

A: The IP Module is not weatherproof. It needs to be equipped with a weatherproof case to be used outdoors and it is not recommended.

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

A: The IP Module uses RJ-45 Category 5 UTP Twisted-pair cable allowing 10 Base-T and 100 Base-T networking.

Q: Can the IP Module be setup as a PC-cam on the computer?

A: No, the IP Module is used only on Ethernet or Fast Ethernet network transmission.

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

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

Q: Can the IP Module be installed if a firewall exists on the network?

A: If a firewall exists on the network, port 80 is open for ordinary data communication. You will need to do port forwarding by opening a port to the server (NAT function). Please refer to your firewall's product manual for detailed instructions. Another way is modify the DMZ function on the Router, re-director the Internet connection Real IP to the IP Module's intranet Virtual IP.

Q: I cannot access the IP Module from a web browser.

A1: The possible cause might be the IP Address for the IP Module is already being used by another device. To correct the possible problem, you need to first disconnect the IP Module from the network. Then run the PING utility (follow the instructions in

Appendix B: Network problematic Utilities)

A2: Check the Ethernet status LED around the Ethernet ends. It should blink Green and orange light. If not, check that both ends of the Ethernet cable connection are secure.

A3: Confirm that you are using the correct IP address and port number. You can use the Utility Tool to observer the status. Please confirm that server's gateway setting matches the LAN IP of the gateway / router connection it to the Internet. The gateway may be configured not to respond to pings on its WAN IP.

A4: Confirm that the http port used by the server (default = 80) is forwarded to the server's LAN IP address in the gateway / router's configuration. Please refer to your gateway / router's manual.

A5: If IP Module is inside the intranet (Behind a NAT router). Then the Internet Explorer outside the NAT router can't access the IP Module's IP address. You can modify Router's DMZ function or NAT forwarding function let Internet connection can access the IP Module. Also you can use DDNS function together to access you IP Module in Web address around the world.

Q: How Can I Register DDNS service?

A: Please go to the fallowing DDNS provider or the other DDNS provider company. Register a account and finish the register procedure. Then apply a Domain on the DDNS provider. Then input the Domain name (from by DDNS provider), User Name (account of the DDNS), Password (password for the DDNS) and DDNS Server address (Please find in the DDNS provider Web Page) or the IP Module address in Your IPCam configuration. Then presses apply for Enable the DDNS services.

For example:

User Name: xxxxxxxx

Password: ●●●●●●●●

Server: dynupdate.dyndns.org

Here are some Free DDNS providers:

- http: //www.dyndns.org/ (recommended DDNS provide)
- http: //www.3322.org/

DDNS Service must operation under Real IP environment, if the IPCam is behind the NAT router or the Firewall. Please set NAT redirection or DMZ functions to the IPCam IP address.

Q: Why E-mail configuration's correct but cannot send E-mail?

A: Some times user configure E-mail setting is correctly, however the LAN setting configure didn't setup the DNS server address. Therefore the IPCam cannot find the correct E-mail server address. So E-mail cannot be sent. So, correction the DNS server address can solve this problem.

Q: Why server cannot be pinged?

A: Check the server is on and the Ethernet status LED is on and blinking. Cycle the power off and then on and re-check. Confirm that the IP address of the server does not conflict with another device on the network by ping the address with the server power off. Make sure your internet connection is not cross the NAT router.

Q: Why does the Power LED not light up constantly?

A: The power supply used might be at fault. Confirm that you are using the provided power supply, which is DC 12V, for the IP Module and verify that the power supply is well connected.

Q: Why does the LAN LED not light up properly?

A1: There might be a problem with the network cable. To confirm that the cables are working, ping the address of a known device on the network. If the cabling is OK and your network is reachable, you should receive a reply similar to the following (…bytes = 32 time = 2 ms).

A2: The network device utilized by the IP Module is not functioning properly, such as hubs or switches. Confirm the power for the devices are well connected and functioning properly. And please shout-sown and restart again.

Q: Why does the IP Module work locally but not externally?

A1: Might be caused from the firewall protection. Check the Internet firewall with your system administrator. The firewall may need to have some settings changed in order for the IP Module to be accessible outside your local LAN.

A2: Make sure that the IP Module isn't conflicting with any web server you may have running on your network.

A3: The default router setting might be a possible reason. Check that the configuration of the router settings, allow the IP Module to be accessed outside your local LAN.

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

A: Adjust the IP Module focus manually, it can turn left and right to adjust for the correct focus.

Q: Internet Explorer displays the following message: "Your current security settings prohibit downloading ActiveX controls".

A: Restore the default IE security settings (Medium) or configure the individual settings to allow downloading and scripts of signed ActiveX controls. Refer to Appendix C: Internet Explore Security Settings chapter for more detail.

Q: Internet Explorer displays message: "Error on Page in the status bar in the lower left corner of the web page".

A: Most likely, the server ActiveX control did not download and install correctly. Check your Internet Explorer security settings and them close and restart Internet Explorer. Try to browser and log in again.

Q: How can I tell if the server's ActiveX is installed on my PC?

A: Go to ***C: \Windows\Downloaded Program files*** and check to see if there is an entry for the file ***Cam Image Class.*** The status column should show "Installed". If the file is not listed, make sure your Security Settings in Internet Explorer are configured properly and then try reloading the server's home page.

Q: My browser does not seem to work too well with the IP Module?

A: Make sure that you are using Internet Explorer 5.0 or higher. If you are experiencing problems, try upgrading to the latest version of Microsoft's Internet Explorer from the Microsoft website ate: *http: //www.microsoft.com/windows/ie*

Q: Noisy images occur. How can I solve the problem?

A: The video images might be noisy if the IP Module is used in a very low light environment. To solve this issue you need more lighting.

Q: There are no images available through the web browser?

A1: The ActiveX might be disabled. If you are viewing the images from Internet Explorer 7.0 above and make sure ActiveX has been enabled in the Internet Options menu. Please see Appendix C: Internet Explore Security Settings to configure your Internet Explorer.

A2: Make sure that your web browser supports ActiveX. If you are using Internet Explorer with a version number of lower than 4, then you will need to upgrade your web browser software in order to view the streaming video transmitted by the IP Module.

Q: When I use IPCam Wi-Fi mode, seems it always can't connect. But the Wi-Fi setting is correct. What should I Do?

A: Sometimes according to your environment, some channel of Wi-Fi is jam or to much noise. So batter changes a channel for batter signal for IPCam. Please configuration

your Wi-Fi AP or Wi-Fi AP Router Wi-Fi Channel to another channel. Then restart the IPCam to connect the new channel of Wi-Fi signal.

Q: What can I do if I have more questions?

A: We hope your experience with IP Module is enjoyable; you may experience some issues or have some questions that this Q&A has not answered. To obtain the newest information and support for your IP Module, please call or mail to our Sales dept. (sales@xcore.com.tw) for additional help.

Appendix E: PoE (optional) Technical specifications

Important of POE (Power over Ethernet) pins definition:

Pin	Alternative B
1	--
2	--
3	--
4	**Vport Positive**
5	**Vport Positive**
6	--
7	**Vport Negative**
8	**Vport Negative**

Appendix F: 3G Mobile Surveillance compatible list

Following mobile phones have been tested without any problem with 3G view. If the mobile phone supported RTSP Streaming will be okay to view 3G signal from IP Module. The list may update without notice, please contact Sales dept. for further detail.

Dopod CHT9100
Dopod 595

Nokia N93
Nokia N80

Motorola E1070
Motorola raza 3.x
Motorola V3x

Sony Ericsson K608i
Sony Ericsson K610i
Sony Ericsson W900i

How to connect IP Module with 3G mobile phones.

Step 1. Use mobile phone to link 3G network and then launch the Internet browser of 3G mobile. (Note**! : For 3G mobile surveillance, the IP cannot be virtual IP**)

Step 2. Just need to input the IP address on mobile phone browser.

Step 3. Then you'll need to select Stream 1 or Stream 2 and then input account name and password to login and get the video/audio from IP Module.

About the streaming settings, please refer to System Set - Video

Appendix G: Note of Network Ports and

SD/USB compatible list

1. the ports used on IP Module
   a. Unicast (TCP), port=554, 21
   b. Unicast (UDP), port=554, 21
   c. Multicast (UDP), port=554, 21, 6000, 6002

   Please be noted that, On IE, Multicast mode only can be enabled, and the Multicast mode is really running on Client software only, it can not be run on IE.

   Http port=80
   Alarm port=22
   Audio port (from PC to IP Module) = 1500

2. Some limitation on SD and USB
   a. the maximum capacity of SD is 4GB
   b. the maximum capacity of USB interfaced storage is 80GB
   c. only support NTFS file system on USB interfaced storage
   d. the power of USB interfaced storage should be self-powered, rather than the IP Module.
   e. the suggested models of USB interfaced storage are PNY, ASUS, Sandisk, NuSlim, eSENSE

3. How to identify the IP Module is wired by our firmware?
   If you want use wired mode, please have the Ethernet cable connected, if you have the Ethernet cable disconnected, the firmware will detect it.