

Ver. 1.02

XNET **(IDC4000T/IVC4000T)** **User Manual**



About this Manual

A compatibility and durability test ensures this product's high performance.

This manual is for XNET Network product users only, and it describes operations related to XNET Network products.

Please read this manual thoroughly paying attention to cautions and warnings before using the product even if you have used similar products before.

Important Notices

- The copyright of this manual is owned by CNB Technology Inc.
- It is illegal to copy and distribute this manual without permission.
- Damages caused by use of parts not recommended and by misuse will not be applicable for support.
- Contact the store or the manufacturer immediately if (you think) there is any problem with the product.
- Contact the store or the manufacturer before disassembling the product for alteration or repair.
- XNET is a trademark of CNB Technology Inc.
- This product complies for CE (Europe) and FCC (USA) regulations for industrial/home use electrical device.

Index

1. System Administration	4
1.1. Logging On	4
1.1.1. Using Internet Explorer.....	4
1.1.2. ID and Password.....	4
1.2. Web Viewer	6
1.3. Status Window	8
1.4. Configuring Users	9
1.5. Setting Date & Time	11
1.7. Generating Log Report	15
1.8. Configuring Video	16
1.9. Configuring Camera Condition	18
1.10. Configuration Audio	21
1.11. Configuration the Network(TCP/IP) parameters	22
1.12. Configuration DDNS	24
1.13. Configuration RTP/RTSP	25
1.14. SMTP Setup	26
1.15. FTP Setup	27
1.16. Configuration Motion Detection area	28
1.17. Configuration Event Type	29
1.18. Configuration Sensor / Alarm	30

1. System Administration

1.1. Logging On

You can log on as an administrator using either Internet browser or 'CNB CMS' software. (This manual will describe about using Internet browser only.)

1.1.1. Using Internet Explorer

Type the IP Address of the XNET product in the address bar and press enter.

e.g.) : `http://192.168.123.100`



For your convenience, Internet Explorer 8 is recommended.

If the HTTP port has been changed from the default value, enter the new port as shown below:

IP Address of the XNET:Port No.

e.g.) : `http://192.168.123.100:8080`

1.1.2. ID and Password

If you are logging in as an administrator, the Log-In box will appear as shown in figure 1-1. Basic Setup page will appear when you enter id and password.

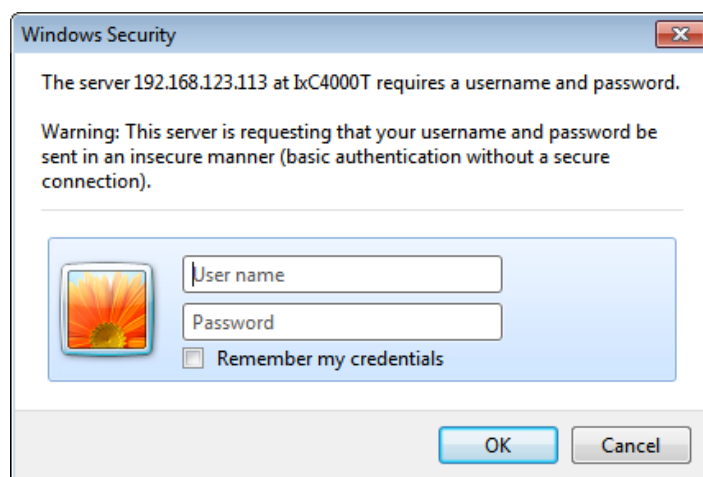


Figure 1-1

The default user name and password is "**root**" and "**admin**" respectively.



log in as an administrator, XNET's Basic Setup page will appear as shown in Figure 1-2. Setup pages for different features can be accessed from this page. Access to each feature are controlled by different For security purpose, it is recommended to change the administrator's id and password from their default values. Please be careful not to forget them or expose them to others. Please refer to [1.5] for detail.



If you forget the administrator's password, "Factory Reset" is the only way to regain access. However, since this will retrieve all default settings, you need to configure the network settings using IP installer software again.

1.2. Web Viewer

When you access an XNET product, Web Viewer page will appear automatically. Viewer area displays the video output from the camera, and menu bar contains taps that lead to each feature setting page.

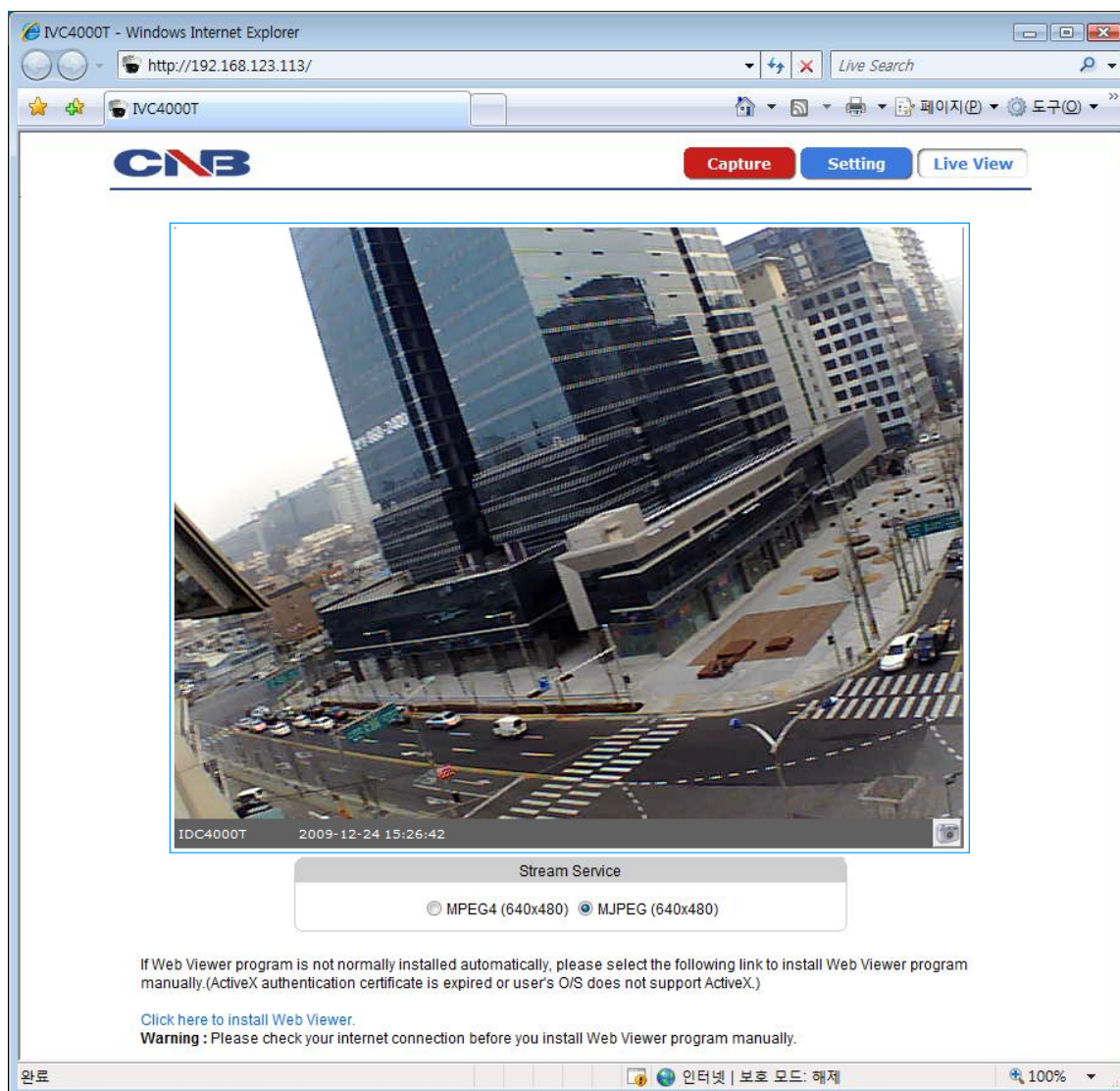


Figure 1-2



If Live View page is broken, press the refresh button(F5) of Internet Explorer.

Item	Sub Item	Description
Capture	-	Captures the still image. My DocumentW XNetCapture (2000, XP) DocumentW XNetCapture (Vista, 7)
Setting	-	Opens up Basic Setup Page. Setup page for each XNET feature can be opened from this Menu screen. (Please refer to 1.4 for detail)
Live View	-	Opens up Index View page. Index View Page will display Video as well as setting up Stream
Stream Service	-	Main Stream Video is displayed. (MPEG4, MJPEG)

Table 1-1

1.3. Status Window

Status page displays XNET System's Version and its Ethernet address. Click [Status] button to open the page shown in Figure 1-3.

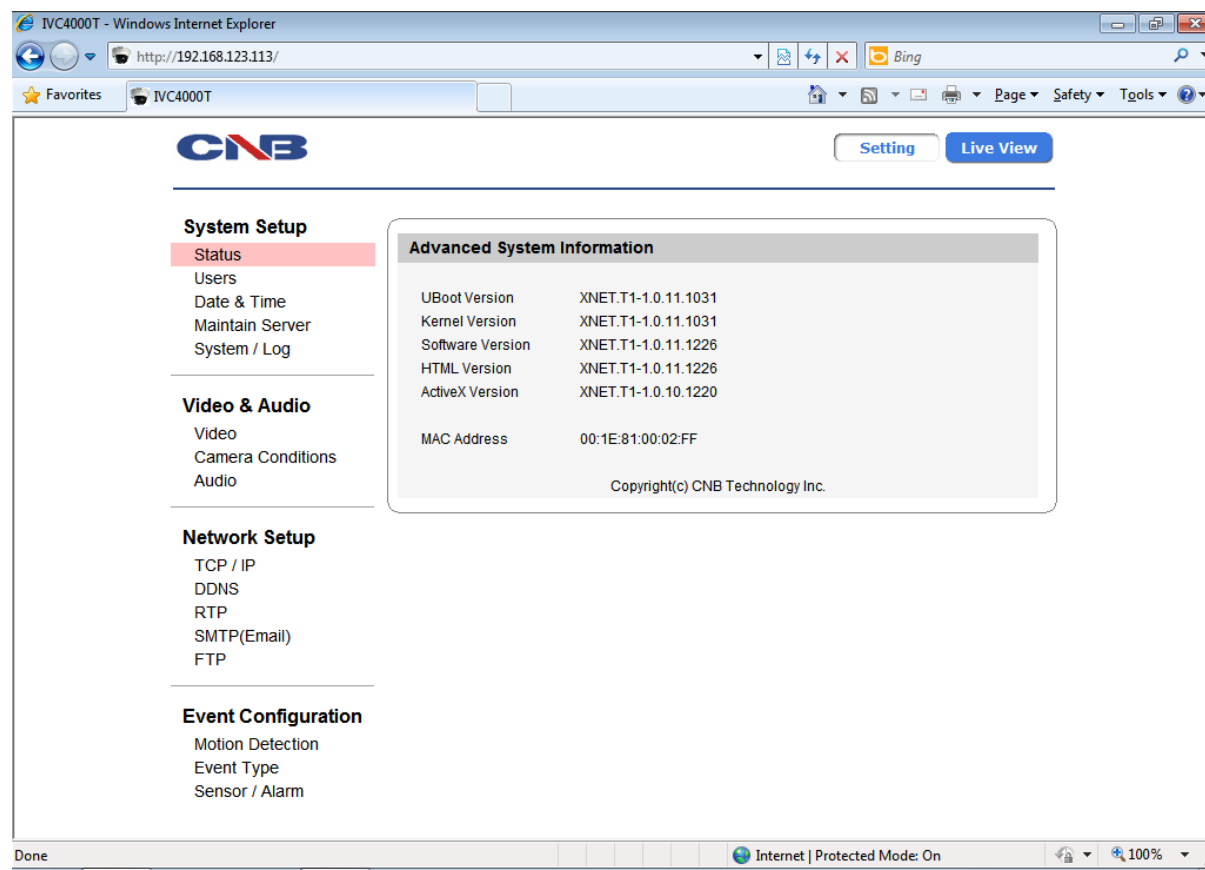


Figure 1-3

1.4. Configuring Users

This can give or limit authority to users for controlling Video and other features of XNET system. Click [Users] button to open the page shown in Figure 1-4.

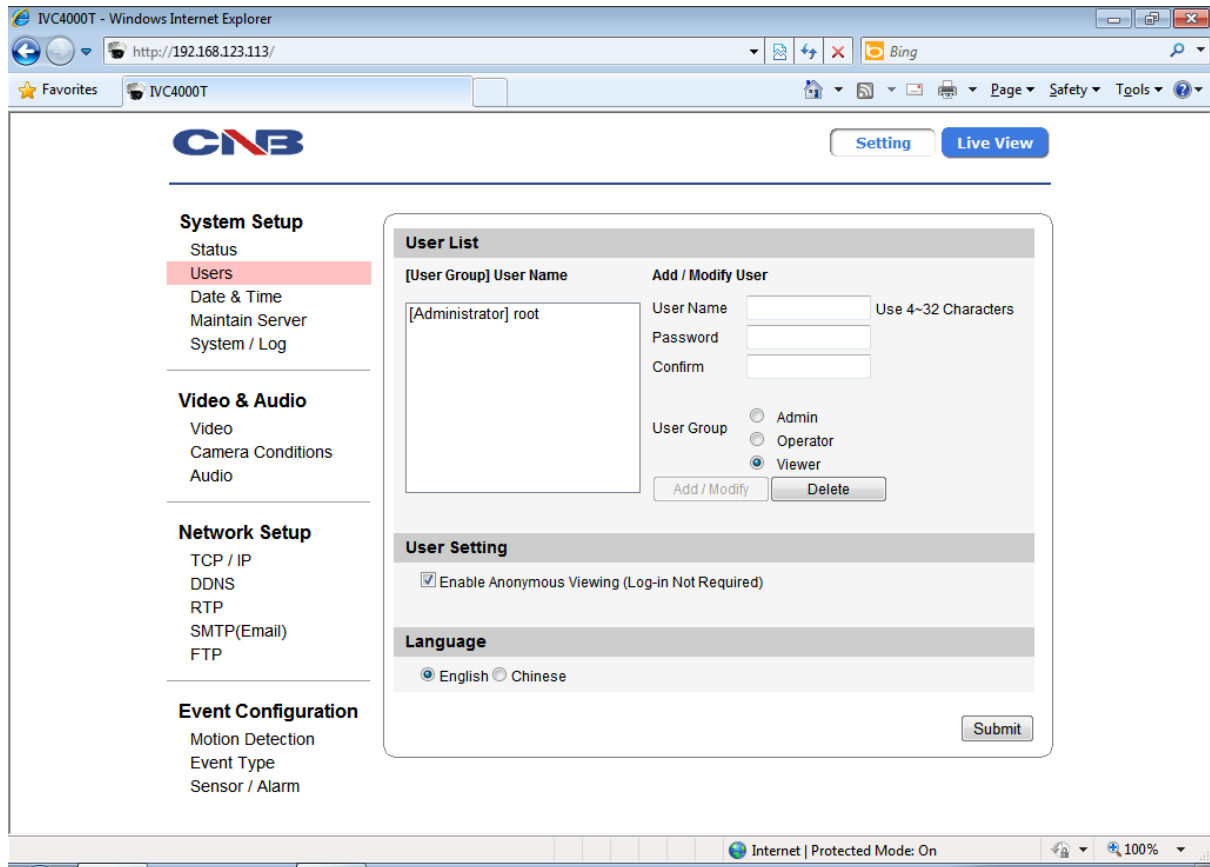


Figure 1-4

Item	Sub Item	Description
User List	[User Group] User Name	Displays list of registered users. "root" is the system's administrator. "root" cannot be added or deleted. Only the password for "root" can be changed.
	Add/ Modify User	Adds a new user. Select "[Add_User]" tap in User List Box. To add a new user, enter User name, Password, and User group then click Add button. Updated User list can be viewed in User List Box. - Up to 10 users can be added. - Authority of different User Groups Administrator : Full control of the XNET system. Operator : Control over Viewer, Audio&Video Setup, and Event Configuration. Viewer : View camera's video signal only. Modifies information for each user. Select a user in User Listbox, enter new Password/ User Group, and click modify button to save the changes. Updated detail can be viewed in User List Box.
	Delete	Removes a user. Select a user in User Listbox and click remove button to remove. Updated user list can be viewed in User List Box.
	Enable Anonymous Viewing (Log-in Not Required)	Helps with use of the Live View page without login if you selected this item.
Language	English / Chinese	Applies the selected language to XNET's webpage.

Table 1-2



Registration of users is available up to 10 persons.

1.5. Setting Date & Time

This page will change Date and Time of XNET system.
Click [Date & Time] to open the page shown in Figure 1-5.

The screenshot shows the XNET IVC4000T web interface in a Windows Internet Explorer browser. The address bar shows the URL <http://192.168.123.113/>. The page features a sidebar with navigation links: System Setup (Status, Users, Date & Time, Maintain Server, System / Log), Video & Audio (Video, Camera Conditions, Audio), Network Setup (TCP / IP, DDNS, RTP, SMTP(Email), FTP), and Event Configuration (Motion Detection, Event Type, Sensor / Alarm). The 'Date & Time' link is highlighted. The main content area is titled 'Setting' and 'Live View'. It contains three sections: 'Current Server Time' showing Date: 2011/12/28 and Time: 15:07:18; 'New Server Time' with three options: 'Set Manually' (Date: 2011/12/28, Time: 15:07:13), 'Synchronize with Computer Time' (Date: 2011/12/28, Time: 15:07:15), and 'Synchronize with NTP Server' (SNTP Server: time.nist.gov, Time Zone: GMT+9 (Seoul, Osaka, Tokyo)); and 'SNTP Server Configuration' (SNTP Server: time.nist.gov, GMT Setting: GMT+9 (Seoul, Osaka, Tokyo), and a checkbox for 'Automatically Adjust for Daylight Saving Time Changes').

Figure 1-5

Item	Sub Item	Description
Current Server Time	-	Displays time of XNET system.
New Server Time	-	Sets Date and Time of the Server. <Default : None> [Set Manually] - Set date and time of Server manually. [Synchronize with computer time] - Synchronizes time and date of Client PC to Server. [Synchronize with NTP server] - Synchronizes server's time and date to NTP Server. (Enter NTP Server address in Network Setup Page)
SNTP Server Configuration	-	Selects Time Zone. <Default : GMT+09>

Table 1-3

1.6. Maintain Server Configuration

This page configures system parameters such as system restart, factory default settings, system upgrade, saving configurations, saving images, and other additional features. Click [Maintain Server] to open the page shown in Figure 1-6.

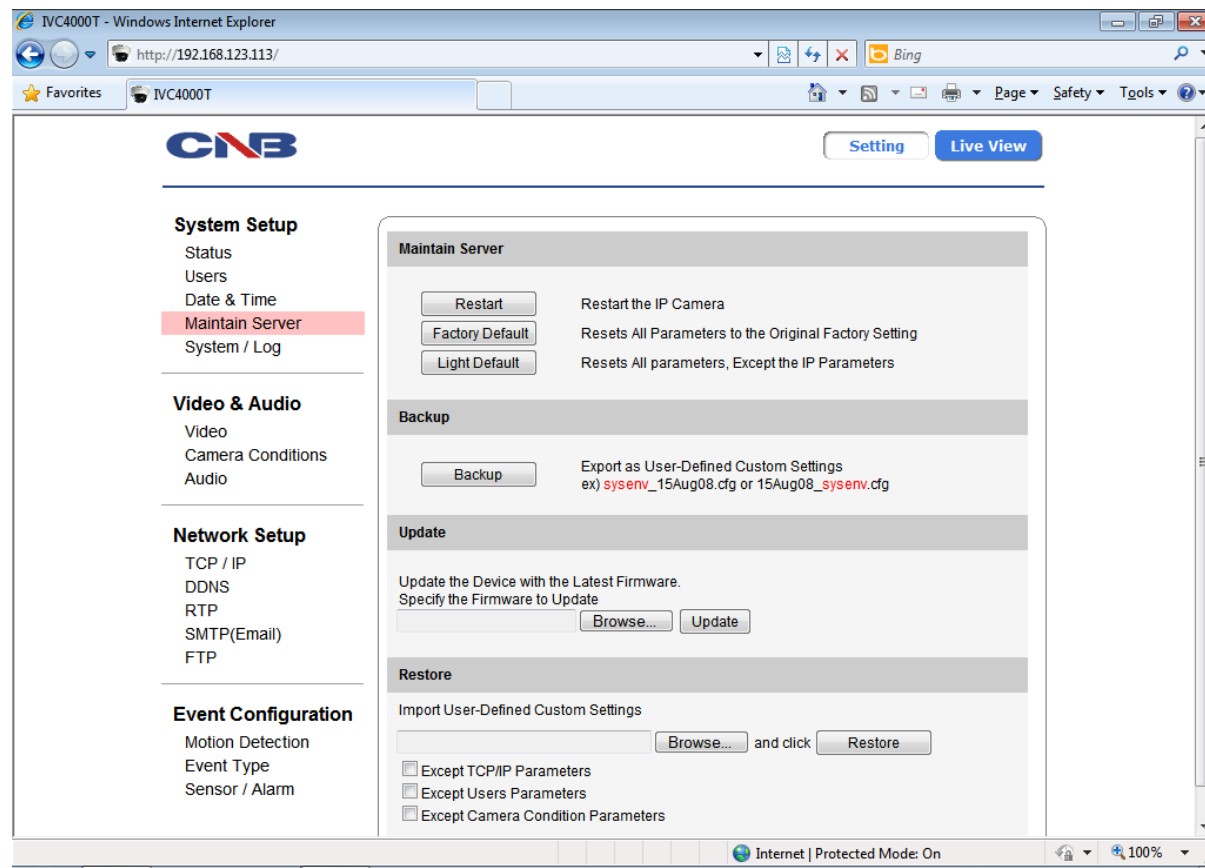


Figure 1-6

Item	Sub Item	Description
Maintain Server	Restart	Restarts the system. It takes about 45 seconds.
	Factory Default	Resets all parameters to Factory Default setting. This will be followed by a 45 seconds system restart.
	Light Default	Resets all parameters except for TCP/IP settings. This will be followed by a 45 seconds system reset.
Backup	-	This saves current configurations in Client PC.
Update	-	Use this to upgrade the system. Select location of Update file in Client PC and click Upgrade button. This will be followed by one-minute system update and the system must be restart using 'restart' button. (Note) Please do not disconnect power and LAN cable from the XNET while the upgrade is in process. It might cause a system error. Upgrade File can be downloaded from http://www.cnbtec.com
Restore	-	This loads up settings from a saved Backup file. Click restore button after selecting backup files in Client PC. Optional check boxes can be used to select settings to be excluded from the restore process. - Except TCP/IP Parameters : Restore only TCP/IP info. - Except Users Parameters : Exclude Users settings. - Except Camera Condition Parameters : Exclude Camera Condition settings. This will be followed by a one-minute system reset.

Table 1-4

It is recommended to initialize system by clicking the 'Factory Default' button after updating our firmware.

1.7. Generating Log Report

Log report contains detailed information about XNET's image, setup, and error. Click [System / Log] button to open the page shown in Figure 1-7.

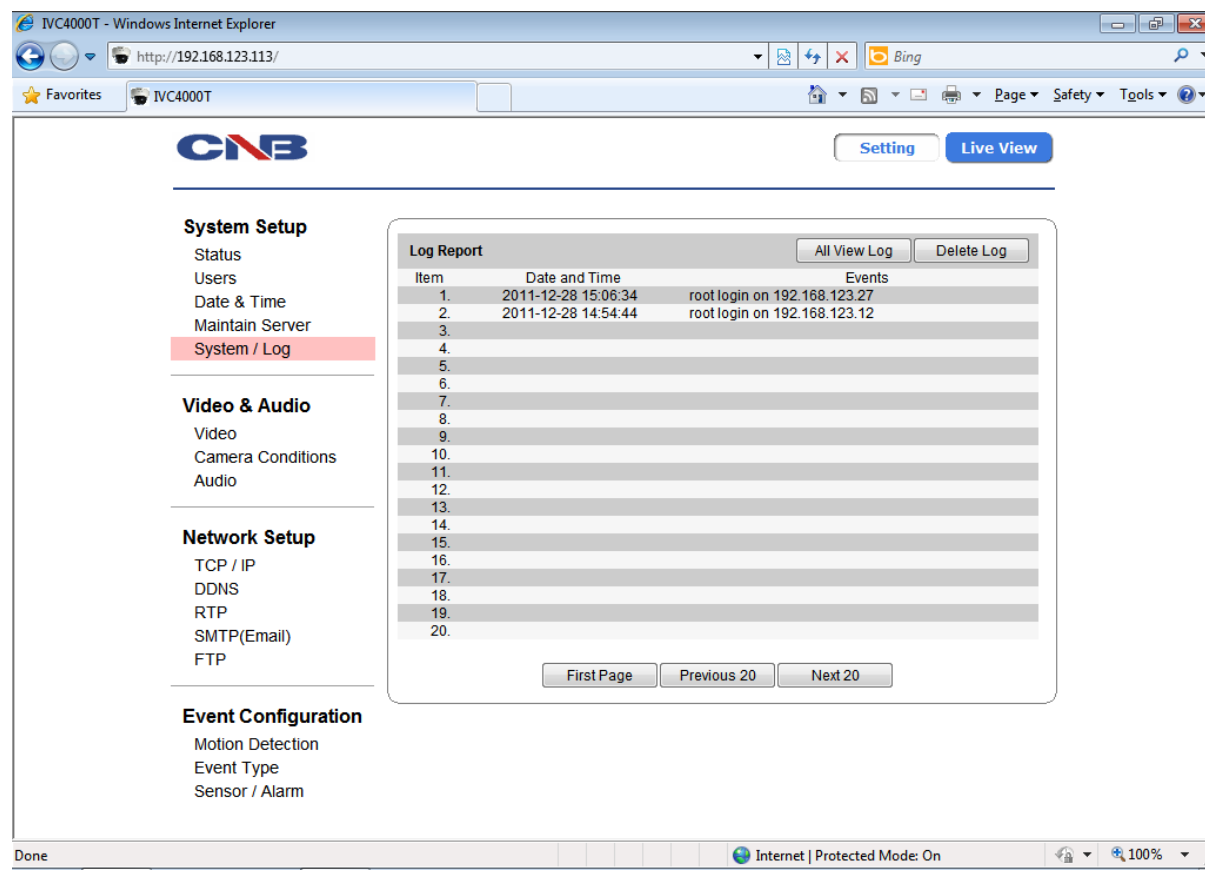


Figure 1-7

Item	Sub Item	Description
Log Report	-	Displays login time and alarm information.

Table 1-5

1.8. Configuring Video

XNET's Video features can be configured in this page.

Click [Video] button to open the page shown in Figure 1-8.

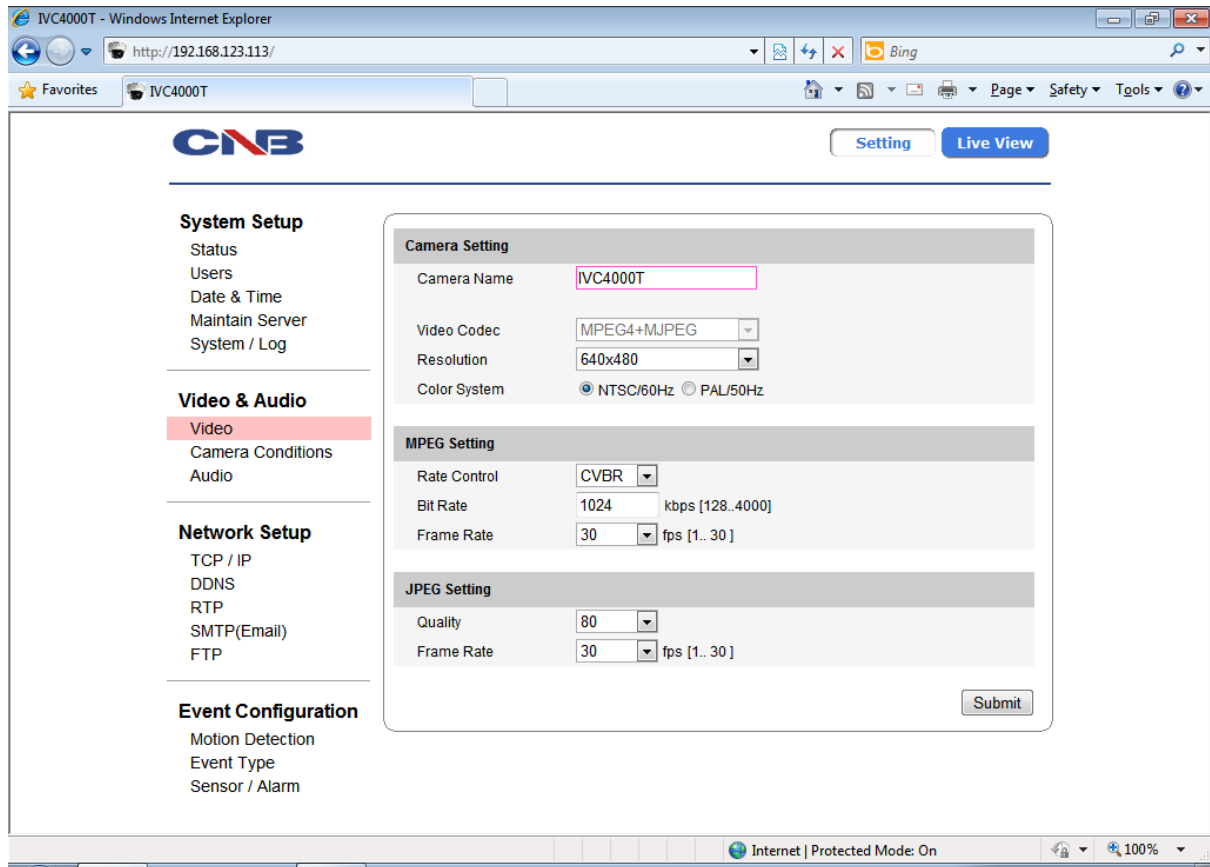


Figure 1-8

제목	부제목	설명
Camera Setting	Camera Name	Rename the network camera.
	Video Codec	-
	Resolution	Select a resolution of the video image. 640x480 320x240
	Color System	Selects Video format at Video Out terminal between NTSC and PAL.
MPEG Setting	Rate Control	Select a bit rate type of the MPEG4 video image.
	Bit Rate	Select a bit rate of the MPEG4 video image.
	Frame Rate	Select a frame rate of the MPEG4 video image.
	GOP Setting	Select a frame rate of GOP(Group Of Picture).
JPEG Setting	Quality	Select a quality of the MJPEG video image.
	Frame Rate	Select a frame rate of the MJPEG video image.

Table 1-6

CVBR : Constrained Variable Bit Rate
CBR : Constant Bit Rate
VBR : Variable Bit Rate

1.9. Configuring Camera Condition

This page configures XNET's camera features.

Click [Camera Condition] button to open the page shown in Figure 1-9.

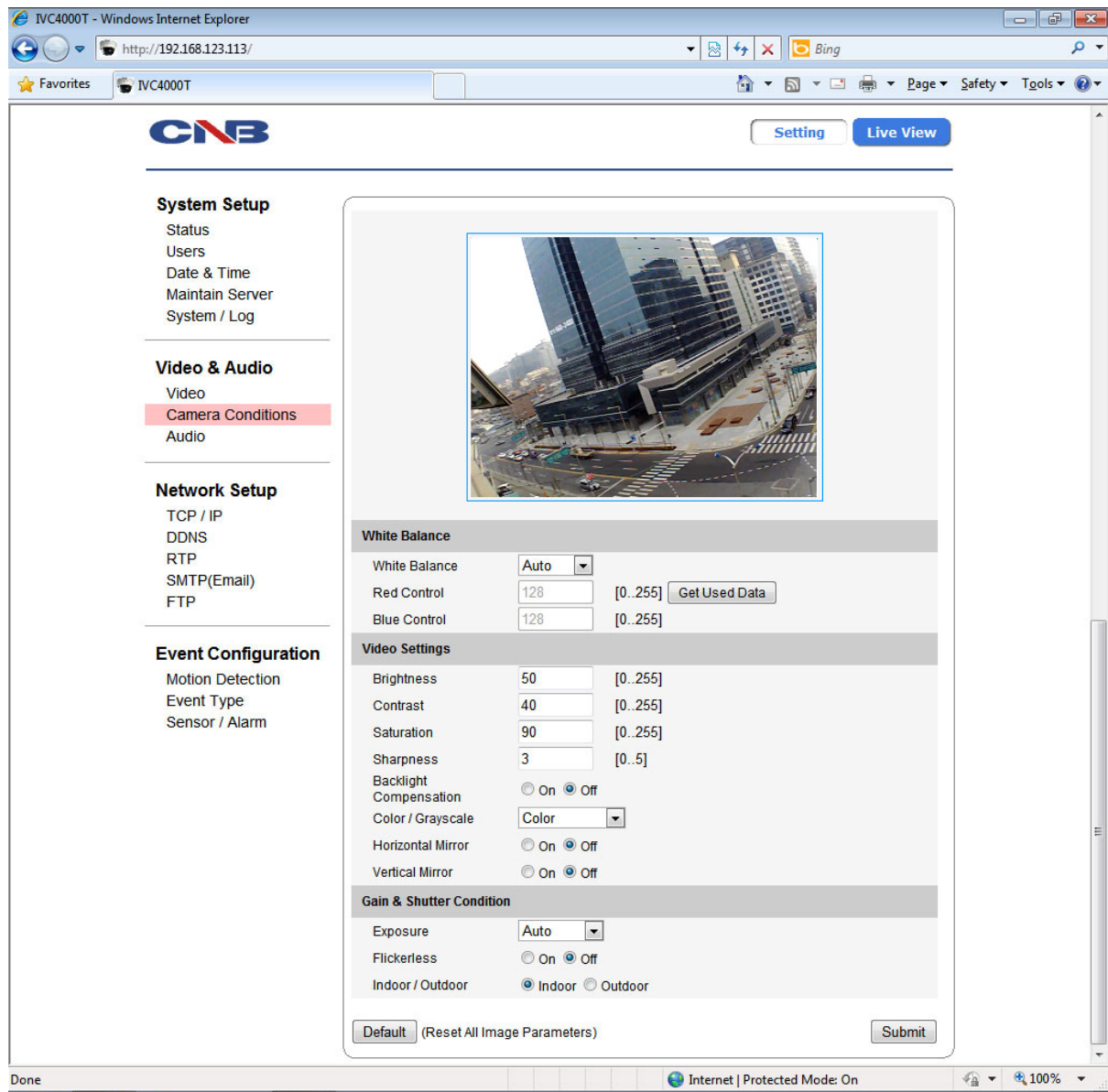


Figure 1-9

Item	Sub Item	Description
White Balance	White Balance	Configures Video's White Balance. White Balance means balancing color temperature by adjusting Red and Blue level. Auto mode will adjust White Balance automatically, while manual mode will adjust white balance level according to manually configured Red and Blue level.
	Red Control	Select Video's Red level between brightness of 0 and 255. This can only be enabled when White Balance is configured as Manual mode.
	Blue Control	Select Video's Blue level between brightness of 0 and 255. This can only be enabled when White Balance is configured as Manual mode.
Video Setting	Brightness	Select Brightness of Video between 0 and 255.
	Contrast	Select Contrast of Video between 0 and 255.
	Saturation	Select Saturation of Video between 0 and 255.
	Sharpness	Select Sharpness of Video between 0 and 5.
	Backlight Compensation	Turns Back Light Compensation on or off. When enabled, the images will not be saturated even when too much light comes into the lens.
	Color / Grayscale	Selects between Color / Grayscale of the video.
	Horizontal Mirror	Flip horizontal mirror image.
	Vertical Mirror	Flip vertical mirror image.

Gain & Shutter Condition	Exposure	Configures Exposure of Video. Exposure means to control brightness of video by adjusting Gain value. In auto mode, Exposure will automatically be adjusted to proper level according to its selected Indoor or Outdoor type. In manual mode, Exposure will be adjusted to the gain value and shutter speed entered. In advance mode, Exposure will be adjusted to the limit auto gain control and frame rate entered for night.
	Flickerless	The flickerless function will remove the flicker of video.
	Indoor / Outdoor	Selects between Indoor / Outdoor of the video.

Table 1-7

1.10. Configuration Audio

XNET's audio features can be configured in this page.
Click [Audio] button to open the page shown in Figure 1-10.

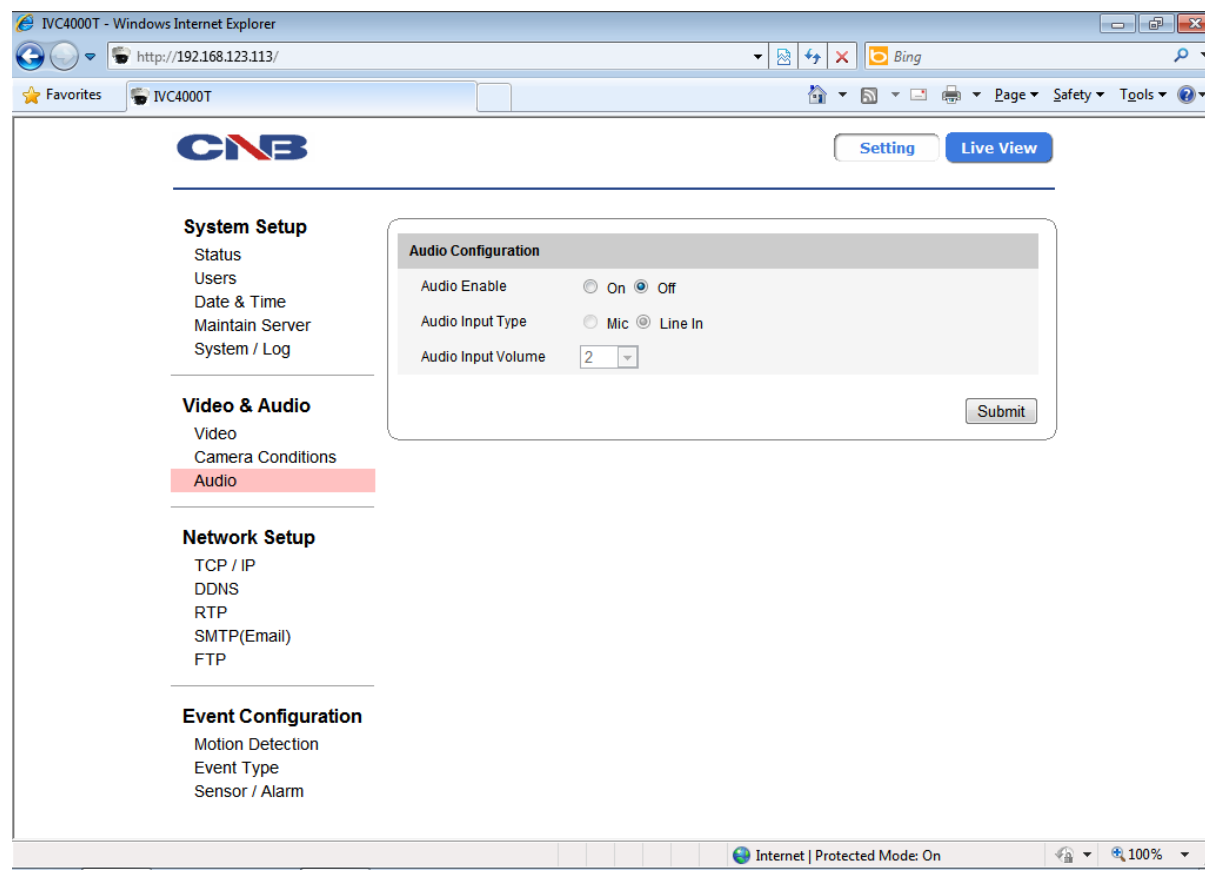


Figure 1-10

Item	Sub Item	Description
Audio Configuration	Audio Enable	Enables or Disables audio feature.
	Audio Input Type	Select audio input source between Microphone and line. Microphone input can be used when users send their voice over XNET system. Line in takes the input from an audio device to send over XNET. Audio sent to XNET can be played at a Client's PC or an audio device.
	Alarm Sound Volume	Select volume for alarm event sound.

Table 1-8

1.11. Configuration the Network(TCP/IP) parameters

This configures XNET's network related parameters.

Click [TCP/IP] button to open the page shown in Figure 1-11.

The screenshot displays the XNET web interface in a Windows Internet Explorer browser window. The address bar shows the URL `http://192.168.123.113/`. The page features a sidebar with navigation menus: 'System Setup' (Status, Users, Date & Time, Maintain Server, System / Log), 'Video & Audio' (Video, Camera Conditions, Audio), 'Network Setup' (TCP / IP, DDNS, RTP, SMTP(Email), FTP), and 'Event Configuration' (Motion Detection, Event Type, Sensor / Alarm). The 'TCP / IP' option under 'Network Setup' is highlighted. The main content area is titled 'IP Address Configuration' and includes a checkbox for 'Enable DHCP' which is checked. Below this are input fields for 'IP Address' (192.168.123.113), 'HTTP Port' (80), 'Subnet Mask' (255.255.255.0), 'Default Gateway' (192.168.123.254), and 'Primary DNS Server' (168.126.63.1). A 'Submit' button is located at the bottom right of the configuration area. The browser's status bar at the bottom indicates 'Internet | Protected Mode: On' and a zoom level of 100%.

Figure 1-11

Item	Sub Item	Description
IP Address Configuration	Enable DHCP	Turns DHCP on or off. Check DHCP checkbox to get an IP address automatically from the network using DHCP protocol. Obtained IP address can be viewed by IP Installer. (Note) If the network does not use DHCP server, the product will wait for server's response for two minutes and restart with its previous IP address.
	IP Address	Enter an IP address. Configure IP address after checking IP address range configuration of the router where the XNET product is connected.
	HTTP Port	Enter HTTP Port to access the webpage. Default port is 80, and any other port number has to be entered at the end of the ip address when accessing. (e.g.: When using HTTP Port 8080, enter http://192.168.123.100:8080)
	Subnet Mask	Enter Subnet mask. IPv4 Address Use this when you want to access only from the same subnet by masking out upper portion of the IP address. Use 255.255.255.255 when you want to connect from one PC only.
	Default Gateway	Enter default gateway.
	Primary DNS Server	Enter primary DNS address.

Table 1-9

1.12. Configuration DDNS

You can enable or disable this DDNS and configures XNET's DDNS server information. Click [DDNS] to open the page shown in Figure 1-12.

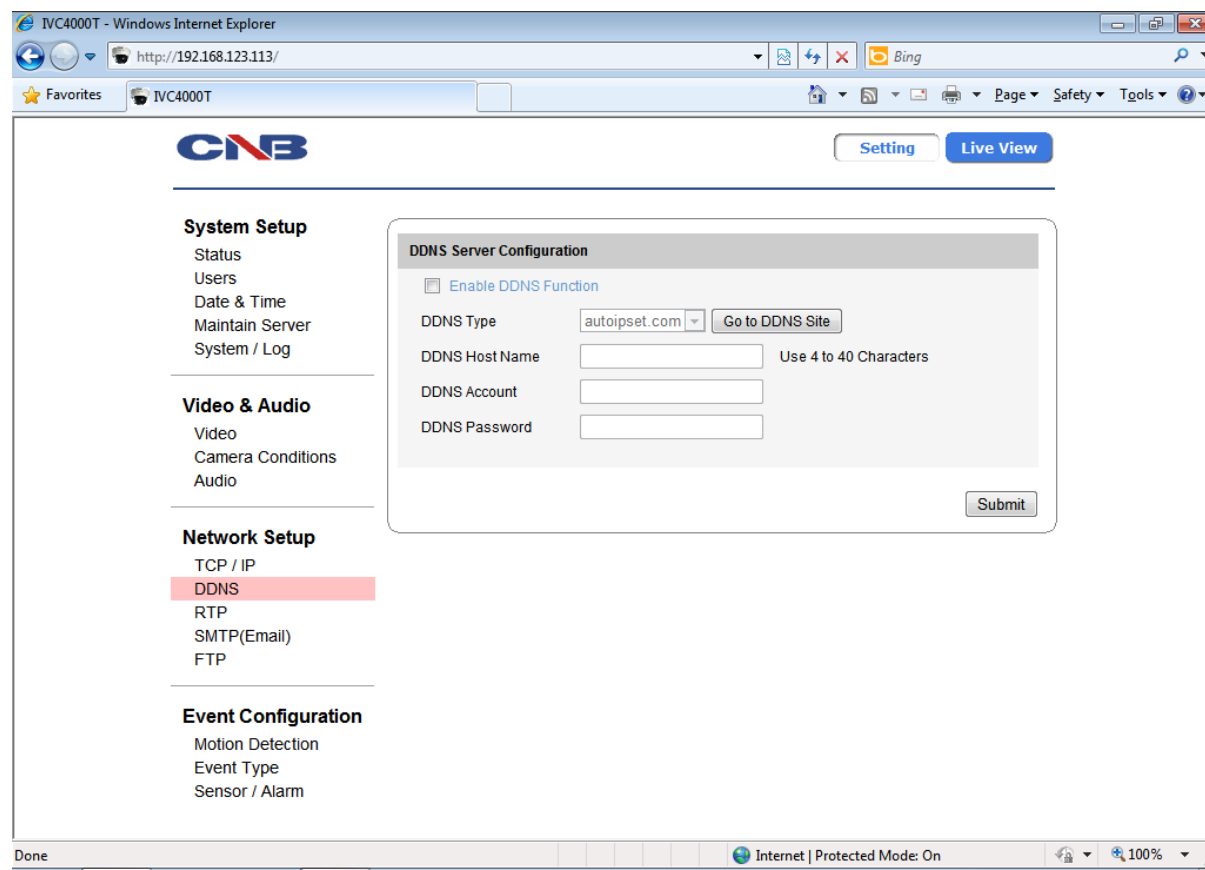


Figure 1-12

Item	Sub Item	Description
DDNS Server Configuration	Enable DDNS Function	Enables or disables DDNS. When enabled, you can automatically obtain a domain from DDNS server by simply registering the XNET product.
	DDNS Type	-
	DDNS Host Name	Enter a host name for the DynDNS server.
	DDNS Account	Enter a your name for the DynDNS server.
	DDNS Password	Enter a password for the DynDNS server.

Table 1-10

1.13. Configuration RTP/RTSP

This is related to XNET's DDNS server information.
Click [RTP/RTSP] to open the page shown in Figure 1-13.

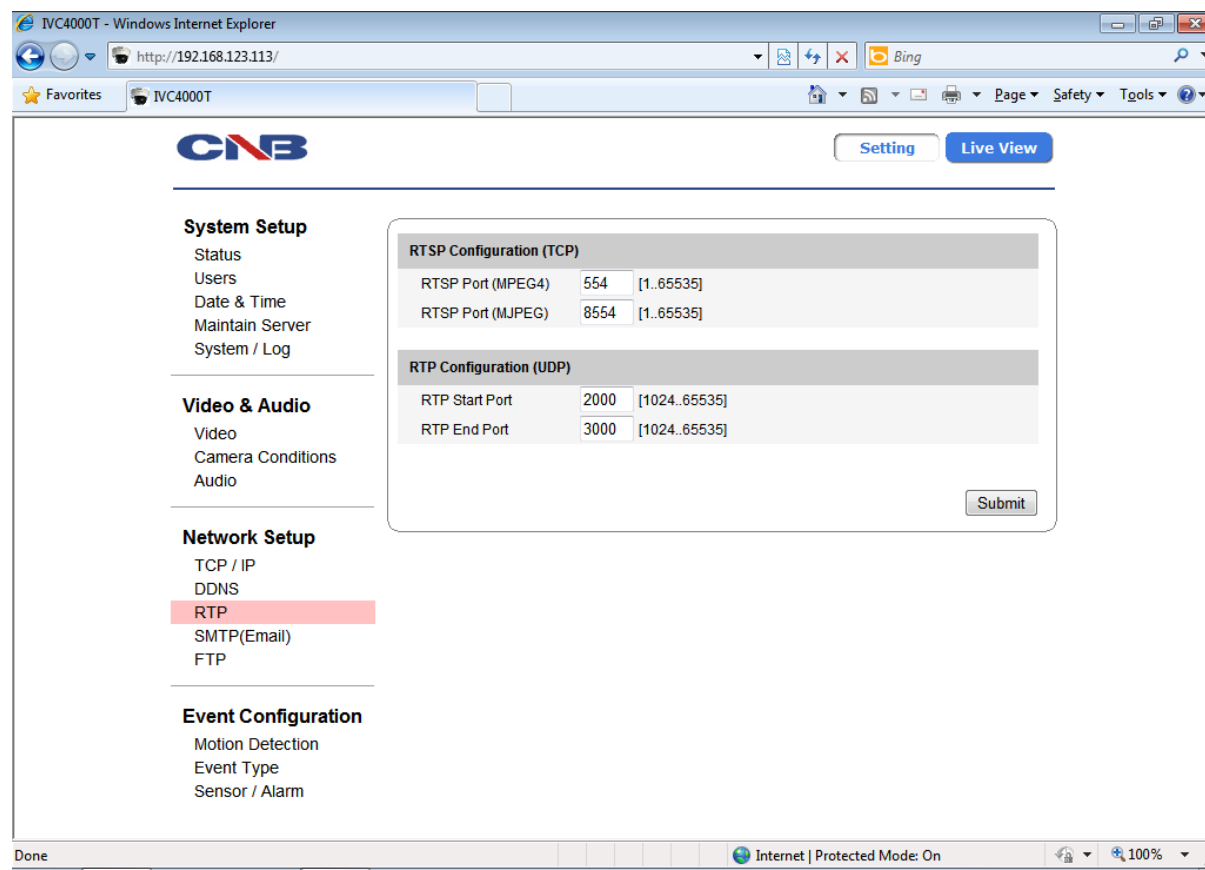


Figure 1-13

Item	Sub Item	Description
RTSP Configuration (TCP)	RTSP Port (MPEG4)	Enter RTSP port of the MPEG4 stream between 1 and 65535. The default is 554.
	RTSP Port (MJPEG)	Enter RTSP port of the MJPEG stream between 1 and 65535. The default is 8554.
RTP Configuration (UDP)	RTP Start Port	Enter RTP start port between 1024 and 65534. The default is 2000.
	RTP End Port	Enter RTP end port between 1024 and 65534. The default is 2000.

Table 1-11

1.14. SMTP Setup

This configures mailing out method of Alarm Images once 'event' occurred in the XNET system. Click [SMTP] button to open the page shown in Figure 1-14.

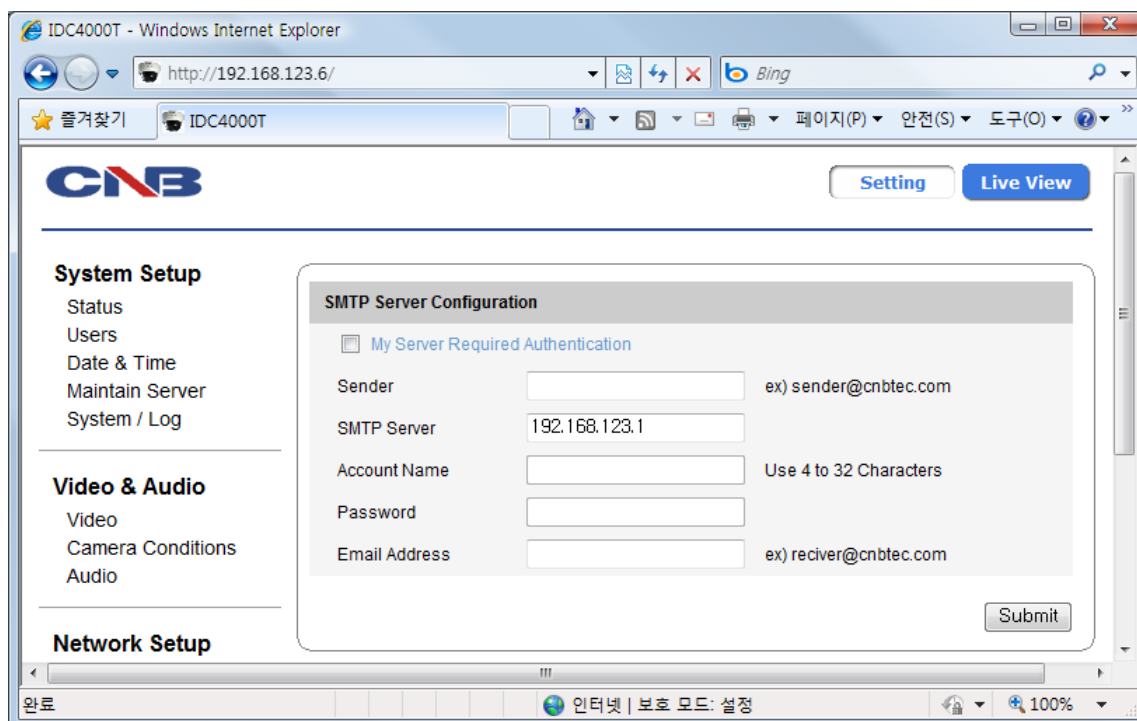


Figure 1-14

Item	Sub Item	Description
SMTP Server Configuration	My Server Required Authentication	Turns Internal SMTP Server on or off. When this box is checked, Alarm Image gets mailed out through an internal mail server. Mail Authentication cannot be used in this mode. When this box is unchecked, Alarm Image gets mailed out through an external mail server. Mail Authentication, port, user, password, mail address, etc. needs to be configured.
	SMTP Server	Enter the sender e-mail address.
	Sender	Enter the name of external mail server.
	Account Name	Enter the user name of the external mail server.
	Password	Enter the password of the external mail server user.
	Email Address	Enter the e-mail address of the external mail server user.

Table 1-12

1.15. FTP Setup

This configures how the Alarm Images get sent out using FTP once 'event' occurred in the XNET system.

Click [FTP] button to open the page shown in Figure 1-15.

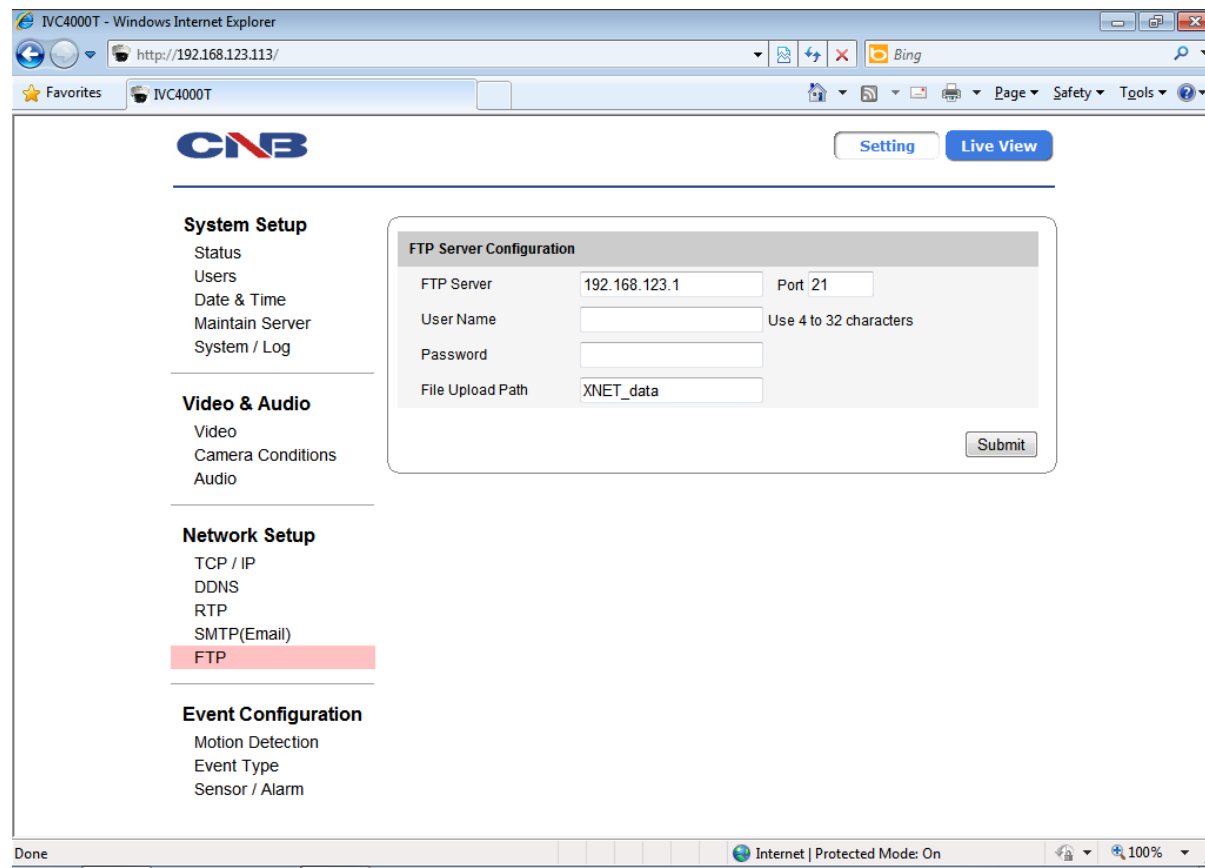


Figure 1-15

Item	Sub Item	Description
FTP Server Configuration	FTP Server	Enter the address of the FTP server to send Alarm Images to in the event processing. The client PC at that IP address has to run the FTP server in order to receive the Alarm Images.
	Port	Enter the port number for the FTP server to send Alarm Images to in the event processing.
	User Name	Enter the user name of the FTP server to send Alarm Images to in the event processing.
	Password	Enter the password of the FTP server to send Alarm Images to in the event processing.
	File Upload Path	Enter the upload directory of the FTP server to send Alarm Images to in the event processing.

Table 1-13

1.16. Configuration Motion Detection area

This defines areas that detect motion.

Click [Motion Detection] button to open the page shown in Figure 1-16.

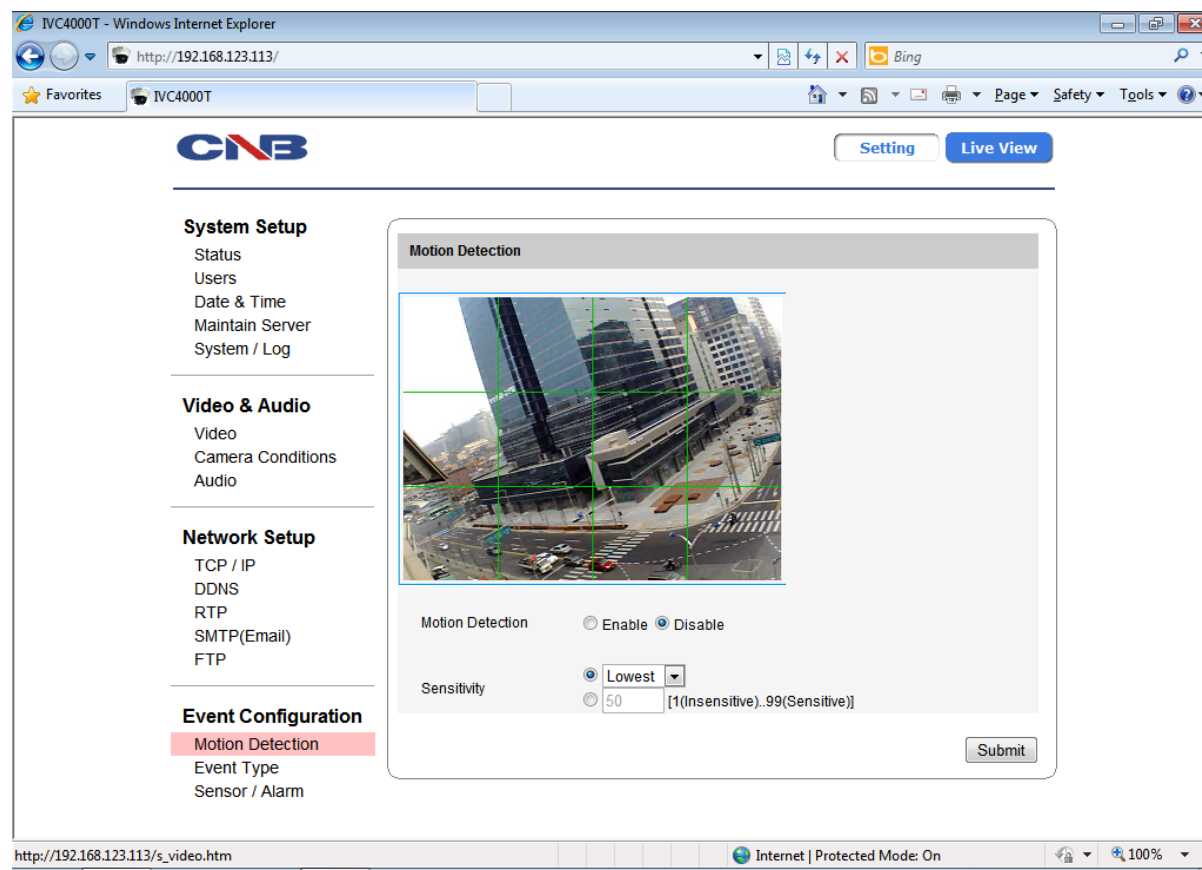


Figure 1-16

Item	Sub Item	Description
Motion Detection	Motion Detection	Enables or disables motion detection.
	Sensitivity	Sets sensitivity for detecting motions, "1" being the least sensitive and "99" being the most sensitive.

Table 1-14

1.17. Configuration Event Type

This is related to XNET's event information.

Click [Event Type] to view page shown in Figure 1-17.

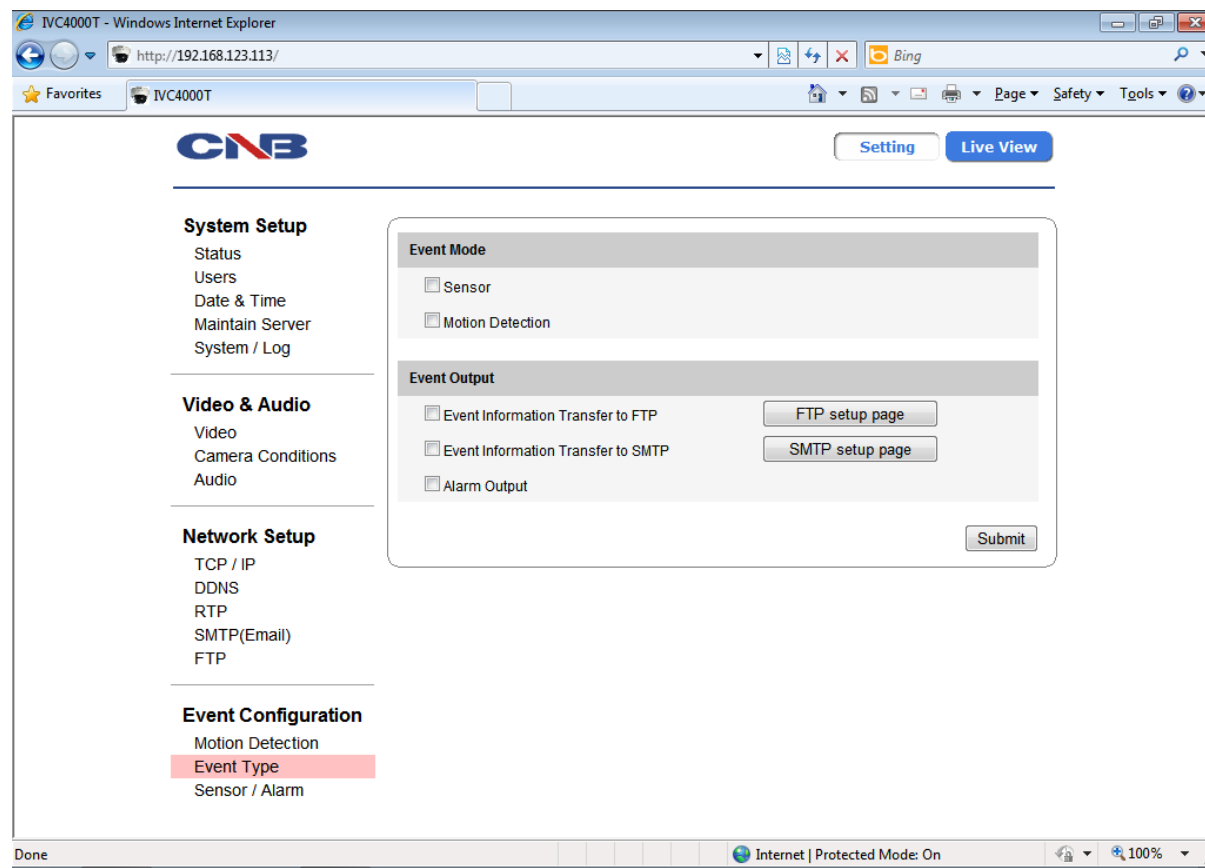


Figure 1-17

Item	Sub Item	Description
Event Mode	Sensor	Enables or disables the alarm sensor.
	Motion Detection	Enables or disables the motion detection.
Event Output	Event Information Transfer to FTP	This allows Alarm images to be uploaded to an FTP server when processing an event.
	Event Information Transfer to SMTP	This allows Alarm images to be sent out by an e-mail when processing an event.
	Alarm Output	This sends out Alarm signal to its output port during event processing.

Table 1-15

1.18. Configuration Sensor / Alarm

This is related to XNET's event information.

Click [Sensor / Alarm] to open the page shown in Figure 1-18.

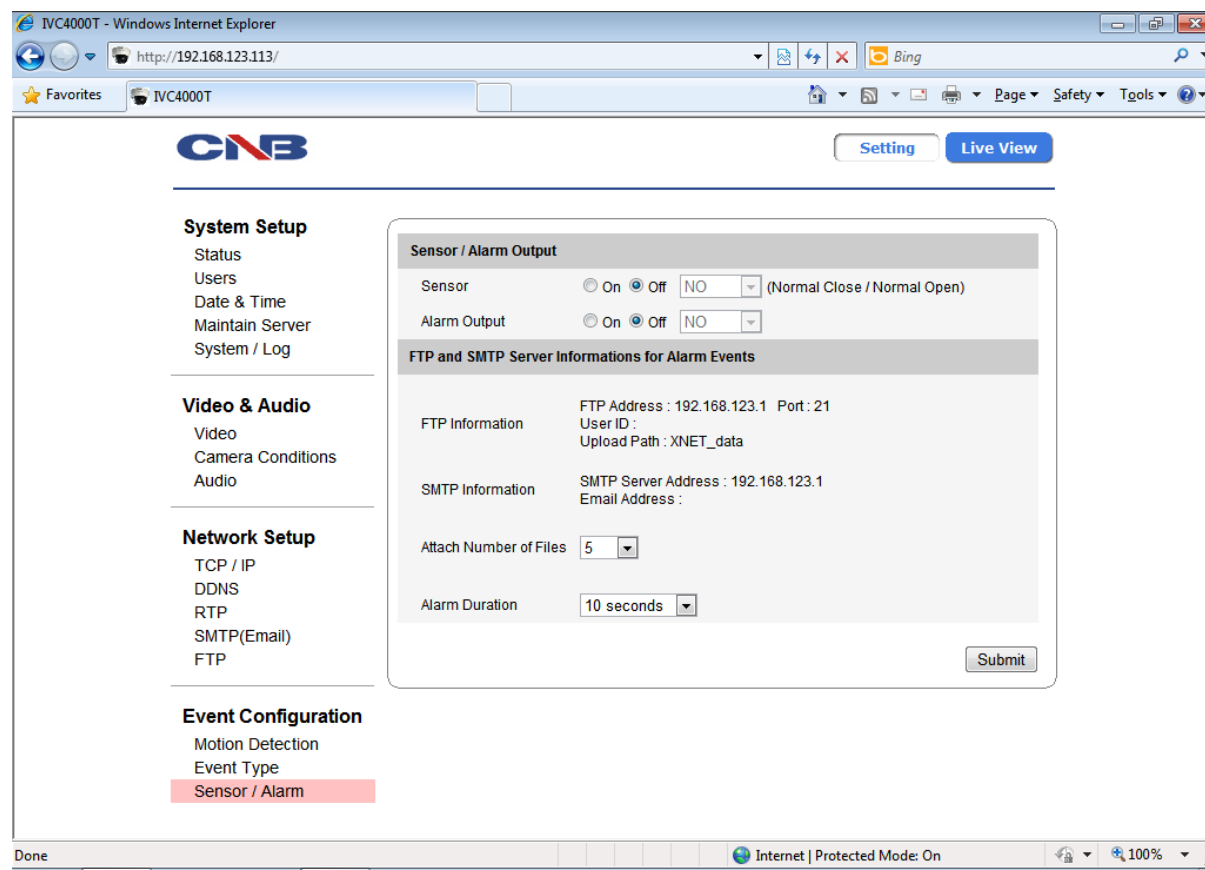


Figure 1-18

Item	Sub Item	Description
Sensor / Alarm Output	Sensor	Selects the signal type for alarm input port between Normally Close and Normally Open.
	Alarm Output	Selects the signal type for alarm output port between Normally Close and Normally Open.
Event Output	FTP Information	Display FTP information for event.
	SMTP Information	Display SMTP information for event.
	Attach Number of Files	Selects the alarm image to be send out.
	Alarm Duration	Configures interval between repeating Alarm Out signals

Table 1-16