DW · DIGITAL WATCHDOG

Everything's Digital

iV3377WD, iV3377WTIR

Vandal Proof IP Dome Camera

USER'S MANUAL

Before installing and using the camera, please read this manual carefully.
Be sure to keep it handy for future reference.

iV3377WD /
iV3377WTIR
20101209

FEATURES

- 1/3" Sony Super HAD II CCD

- 560 TV Line

- OMNI-Focus 2.9~8.5mm, 3X Motorized Zoom, Auto Iris

- Easy Icon Driven OSD Menu with Built-in Joystick

- Power over Ethernet [PoE] IEEE802.3af

- 70ft Range IR with Intelligent Camera Sync iV3377WTIR Only

- 3D-DNR (3D Digital Noise Reduction)

- EWDR (Electronic Wide Dynamic Range)

- Star-Light (Super Low Light Technology)

- Electronic Day and Night iV3377WD Only

- TDN (True Day and Night / IR Cut Filter) iV3377WTIR Only

- HME (Highlight Masking Exposure)

- Produces Negative Image

- Secondary Video-BNC Output for Easy Installation

- Auto Sensing 12VDC / 24VAC with Line Lock

- Zoom and OSD Control by IR Remote Controller

- 3X Digital Zoom

- AGC (Auto Gain Control)

- BLC (Back Light Compensation)

- AWB (Auto White Balance)

- Mirror Image Control

- Programmable Privacy Zone (6) & Motion Detection

- Sharpness Control

FEATURES OF NETWORK

- H.264 Video Compression Based Linux Embedded

- Up to 30fps (D1, 4CIF, VGA, CIF, QVGA)

- Interactive 2-Way Audio Communication

- Variable Bandwidth Control

- Web-Server Built-in / Free DDNS / No Additional Software Required

- SW Functions Remotely Upgradable

- Auto IP and UPnP Support

- Static and Dynamic IP (ADSL, DHCP, and DDNS) Support

- Event Notification by Email on Sensor and Motion Detection Trigger

- Multiple Levels of Password Protection

- PDA: WinCE & WinCE.NET Mobile Manager

- Integrated to DW-Hybrid DVR, NV5200, DW 9000VMS, DW-NEXUS

PRECAUTIONS

- Do not open or modify.
  Do not open the case except during maintenance and installation, as it may be dangerous and cause damages.

- Do not put objects inside the unit.
  Make sure that no metal objects or flammable substances get inside the camera. It could cause fire, short-circuits or damages.

- Be careful when handling the unit.
  To prevent damage, do not drop the camera or subject it to strong shock or vibration.

- Install away from electric or magnetic fields.

- Protect from humidity and dust.

- Protect from high temperature.
  Be careful when installing close to the ceiling or in a kitchen or boiler room, as the temperature may rise to high levels.

- Cleaning
  Dirt can be removed from the case only by wiping it with a soft cloth moistened with a soft detergent solution.

- Mounting Surface
  The mounting surface material must be strong enough to support the camera.

TROUBLESHOOTING

Before sending the camera out for repair, check the items below.

If the problem persists after checking these items, contact your service center.

▲ If no image appears

- – Is the LAN cable attached securely?
- – Are the power and voltage normal?
- – Has the iris of the lens inside the camera been adjusted correctly with the level volume?
- – Is there adequate illumination?

▲ If the image is unclear

- – Is the lens in focus?
- – Is the lens dirty?
- – Dirt or fingerprints on the lens can adversely affect the images.
  Gently wipe any dirt or fingerprints off the lens with a soft cloth or lens cleaning paper and cleaning fluid (commercially available).
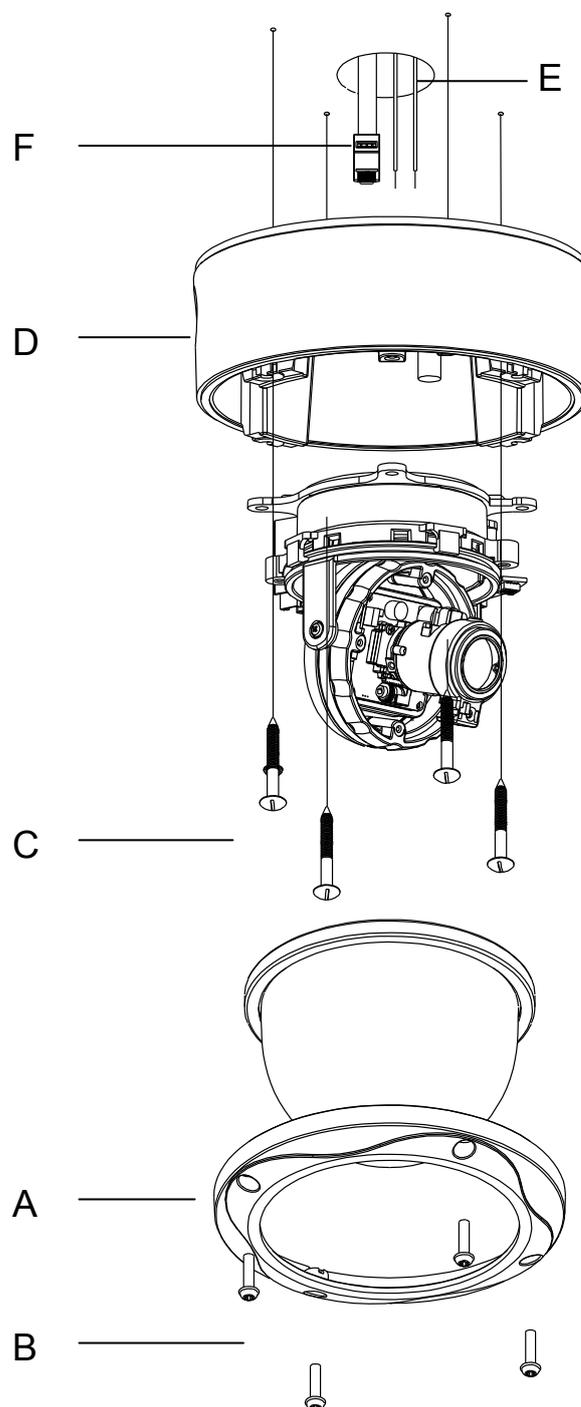- – Is the monitor adjusted correctly?

WARNING:

TO PREVENT THE RISK OF FIRE OR ELECTRIC SHOCK,

DO NOT EXPOSE THIS APPLIANCE TO RAIN OR MOISTURE.
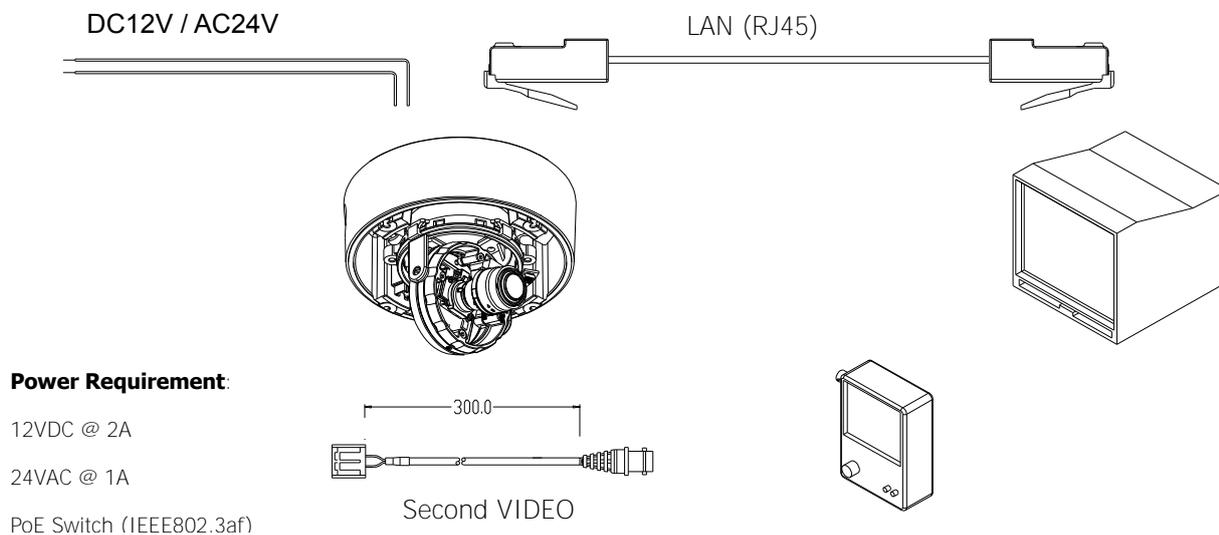

DIMENSION (mm)
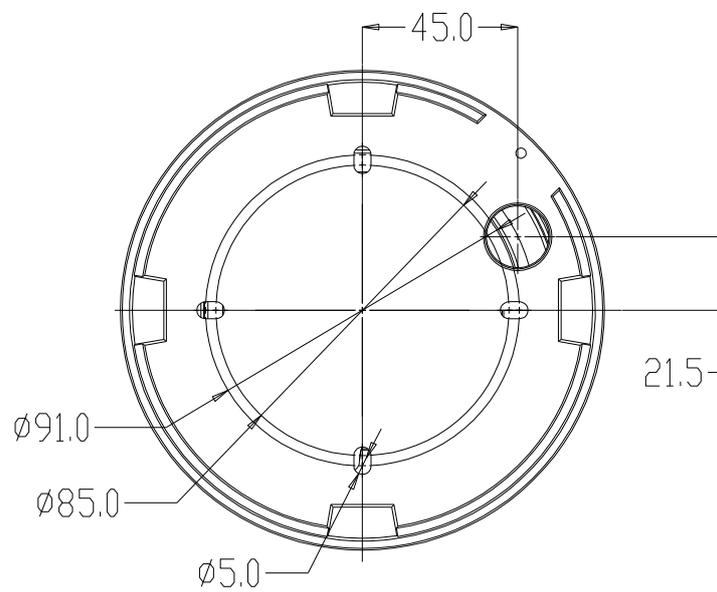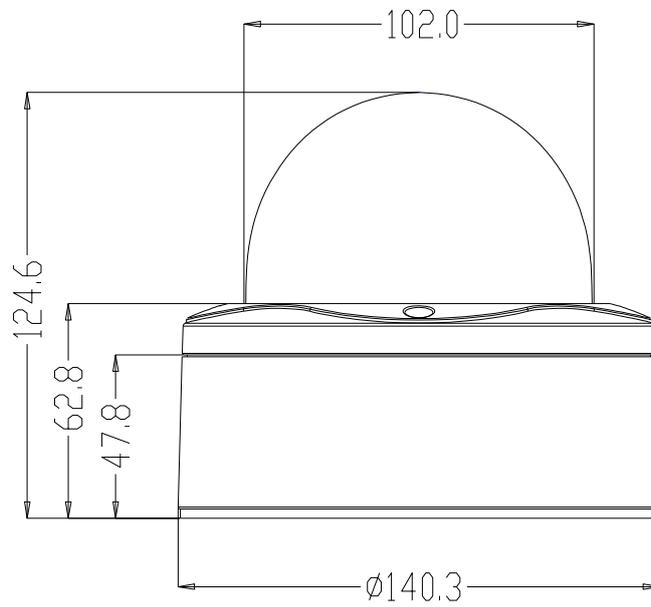
INSTALLATION

1. Use the supplied L-wrench to remove the four fixing screws (B) of dome cover (A).

2. Align the camera unit with the surface of the ceiling; make marks on the ceiling in the places where the screw holes are to be drilled; and then drill the four holes.

3. Cut a hole (diameter 2.9in/0.73mm) in the ceiling for routing the cables.

4. Pass the power cable (E) and LEN cable (F) from the camera unit through the cable hole in the ceiling.

5. Align the four screw holes in the camera unit (D) with the screw holes in the ceiling, and then secure the camera in place by tightening the four or more screws (C) through the washers.

6. Carry out the settings and adjustments for the camera.

7. Secure the dome cover (A) by tightening the screws (B).
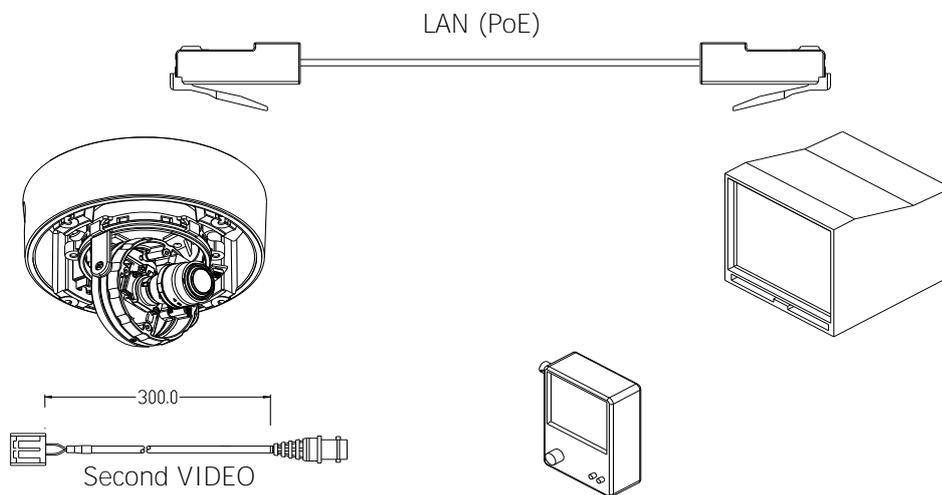
CONNECTION

▲ CONNECTION (I)

DC12V / AC24V   LAN (RJ45)

Power Requirement:

12VDC @ 2A

24VAC @ 1A

PoE Switch (IEEE802.3af)   ├─── 300.0 ───┤

Second VIDEO

   CAUTION:

   Check for polarity when using a DC voltage.
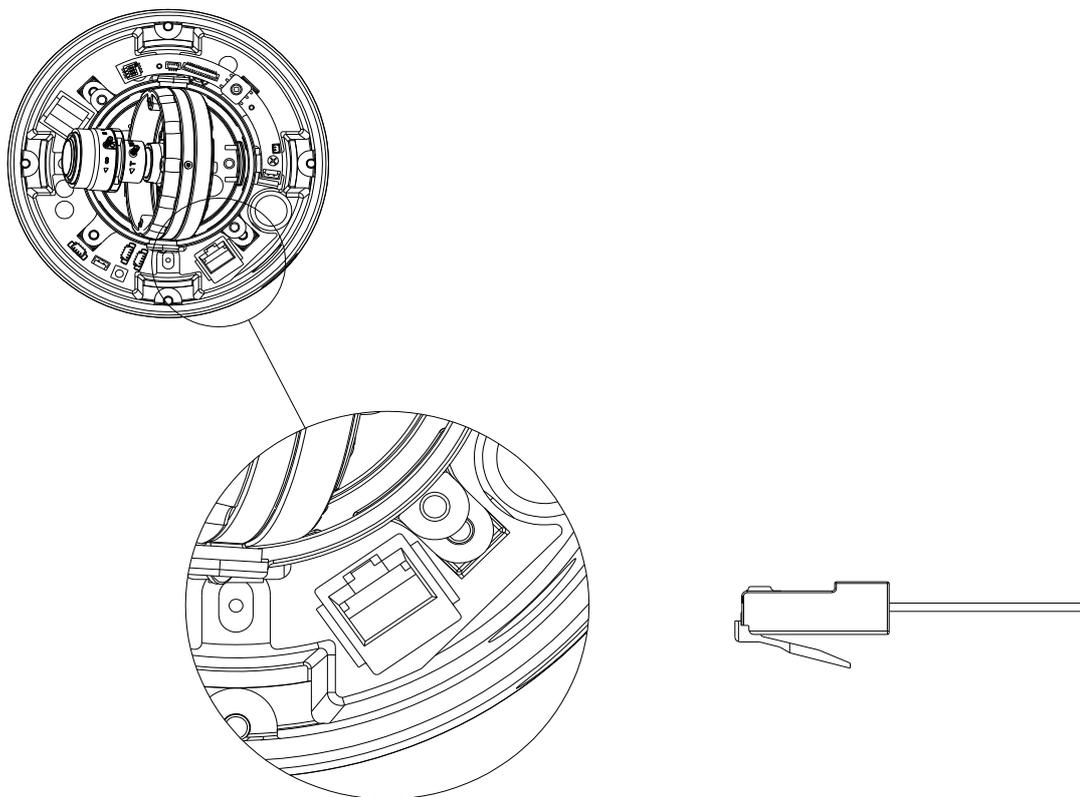

▲ CONNECTION (II)

LAN (PoE)

├── 300.0 ──┤

Second VIDEO

   CAUTION:

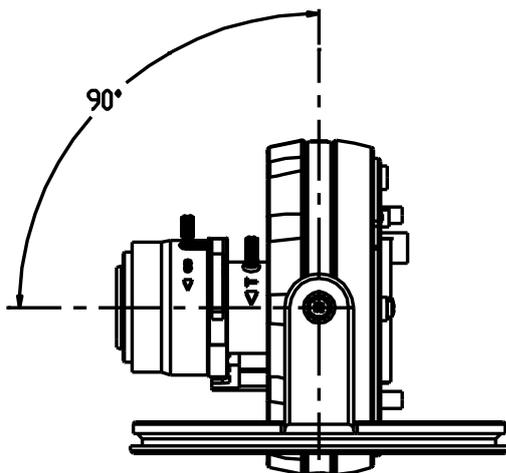   **Check for polarity when using a POE (Power of Ethernet) power supply.**
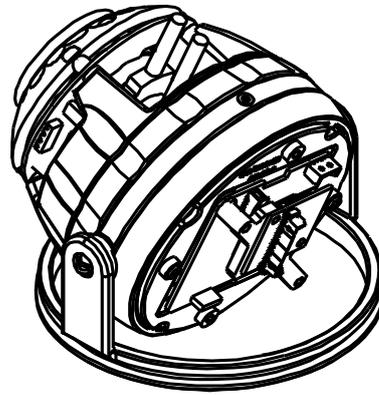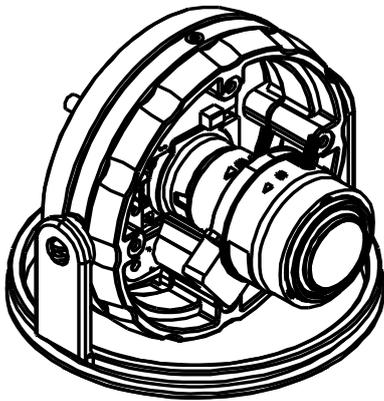
▲ ETHERNET CONNECTION

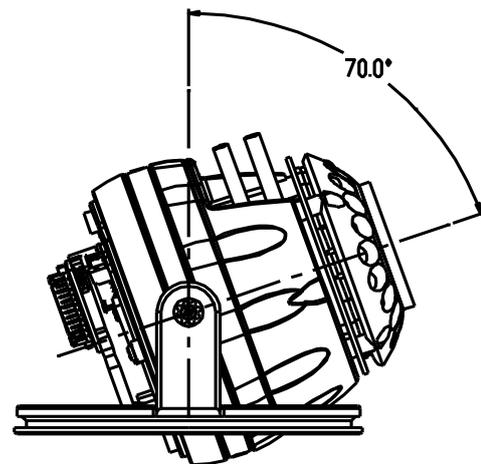**Connect Ethernet Cable to the network.**

CAMERA SETTING

▲ LENS ADJUSTMENT & GIMBAL ADJUSTMENT
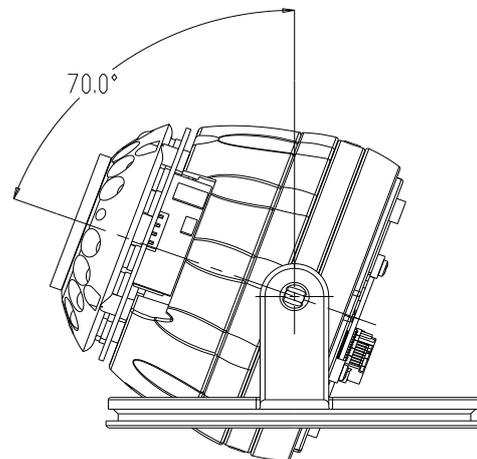

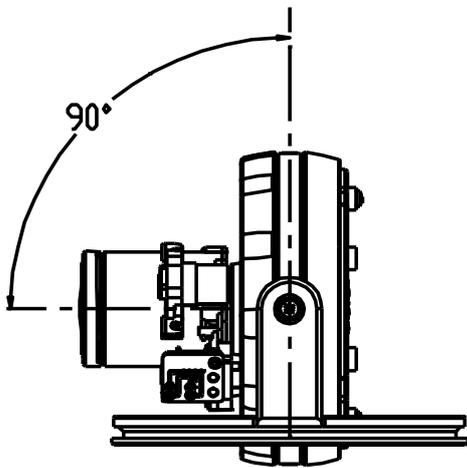<DV LENS TYPE>   <DV LENS & IR LED TYPE>

1. Adjust the panning (360°) and tilt (90°) position. (DV LENS TYPE)
   Adjust the panning (360°) and tilt (70°) position. (DV LENS & IR LED TYPE)

2. Set the zoom lever as desired position by moving Zoom lever.

3. Set the Focus lever as the image is focused by moving Focus lever.
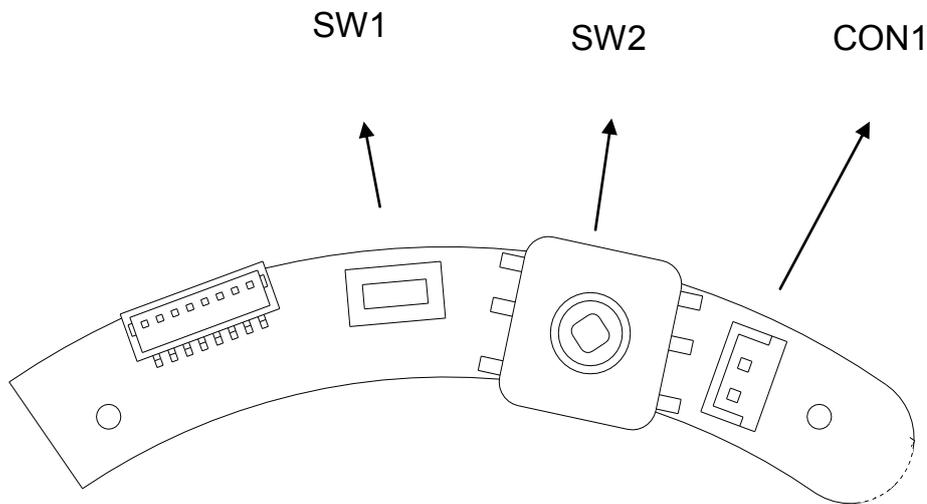
▲ GIMBAL ADJUSTMENT
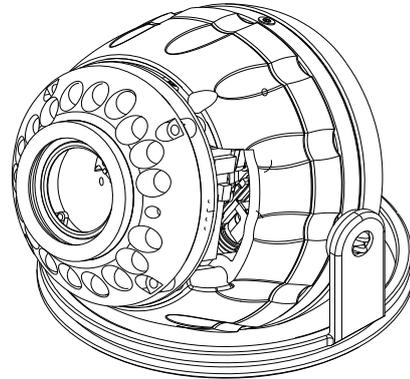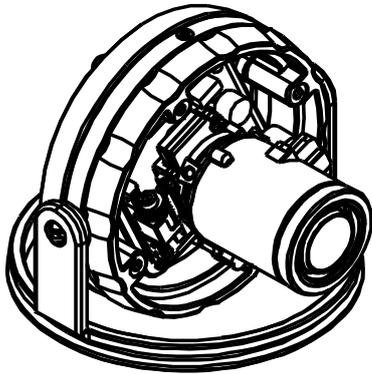
1. Adjust the panning (360˚) and tilt (90˚) position.
   (OMNI-FOCUS LENS TYPE)

2. Adjust the panning (360˚) and tilt (70˚) position.
   (OMNI-FOCUS LENS & IR LED TYPE)

▲ CAMERA SETTING FOR SIDE OSD CONTROL BOARD

SW1   SW2   CON1

FUNCTIONAL OF CONTROL BOARD

[1] Functional control of O.S.D (On Screen Display) (SW2)

[2] Functional of VIDEO OUT (2ND) (CON1)

[3] Functional when using PAN FOCUS LENS [OPTION]
   a) You push SW1 for 2 seconds.
      Then the function of SW2 changes from OSD control key to zooming control key.
   b) You press SW1 again for 2 seconds.
   c) At this time, the SW2 function switches from zooming control key to OSD control key.

   ***User can control OSD controller on the web setting page via network.**
   (Refer to the page 42)

▲ REMOTE CONTROL Instructions:

1) Press [KEY] button + [ID].
   Default is "001" for ID=1.

2) Point the remote control towards the camera, then press and hold [0] until the Red LED light starts flashing.

3) Press and hold the [KEY] button, until LED turns a solid Red color.

4) Press the [+] button to ZOOM IN, and [-] button to ZOOM OUT.

5) Press the [Ent] button to access the Menu and press [KEY] button to exit.

6) Press the [9] button to turn the Alarm ON or OFF.
   *Note: Turning the Alarm ON disables the zoom function.
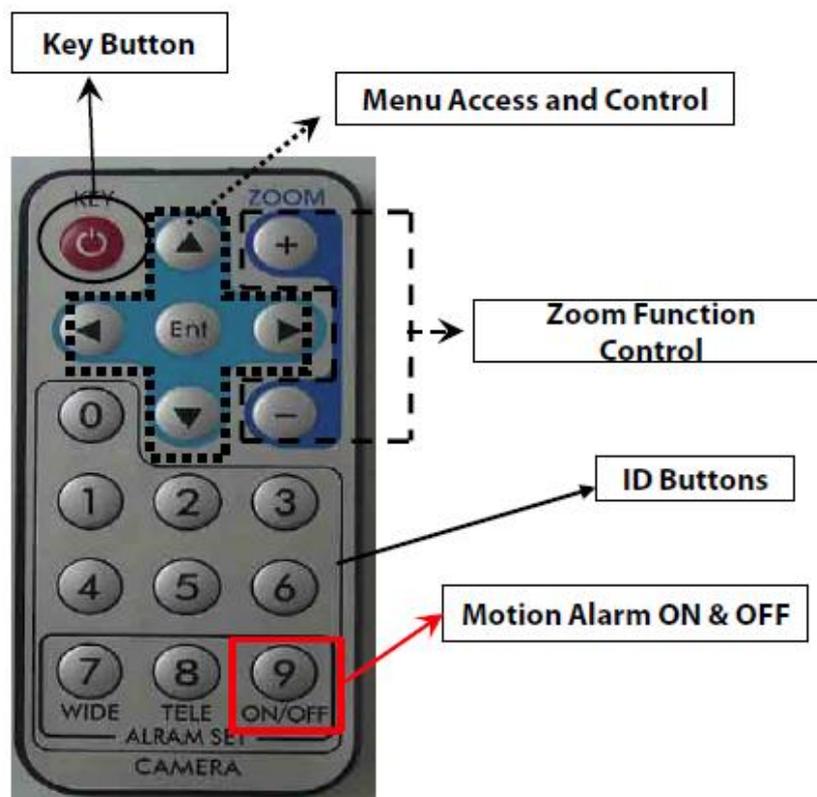
▲ OSD MENU SETTINGS - iV3377WD, iV3377WTIR Series

EXPOSURE	
LENS	DC (0-100) / MANUAL / VIDEO DC Lens is recommended.
SHUTTER	1/160 / 1/100 / FLC / 1/250~10000 / SENS-UP x2~250
BLC **Back Light** **Compensation**	OFF / ON
AGC **Auto Gain Control**	HIGH / MIDDLE / LOW / OFF
MAX-DR **Electronic Wide** **Dynamic Range**	OFF / ON (0~20)
STAR-LIGHT	AUTO (x2~x250) / OFF x32 is recommended.
EXIT JUMP	EXIT / SAVE&EXIT / FACTORY RESET
COLOR	
WB MODE	AWC / ATW / MANUAL / PUSH LOCK
R-Y GAIN	0~100
B-Y GAIN	0~100
DAY & NIGHT	
DAY & NIGHT MODE	AUTO / COLOR / BW / EX-CONT COLOR --) BW: Switching from Color to BW. If the number is higher, the camera will only switch during a super low light condition. BW --) COLOR: Switching from BW to Color. This number should always be lower than COLOR --) BW. Read Time: Time interval to switch from Color to BW
	BW: BURST (OFF / ON) When the BURST is OFF, the camera will make less noise.
C-SUP	Color Suppression: Color will be reduced at low illumination, if the C-SUP level is higher. 0~100 (Not available when 3D-DNR is ON.)
A-SUP	Aperture Suppression: The sharpness of the edges will be reduced at low illumination, if A-SUP level is higher. 0~100 (Not available when 3D-DNR is ON.)
EXIT JUMP	EXIT / SAVE&EXIT / FACTORY SET
FUNCTION	
MIRROR	OFF / MIRROR / V-FLIP / ROTATE
SHARPNESS	0~31
GAMMA	0.05~1.00 / USER
FREEZE	OFF / ON
NEGATIVE	OFF / ON
3D-DNR **3D Digital Noise** **Reduction**	OFF / LOW / MIDDLE / HIGH
D-ZOOM	OFF / ON (x1.0~x32 PTZ)
SLC **Side Light** **Compensation**	OFF / ON
HME **Highlight Masking** **Exposure**	OFF / ON
DIS **Digital Image Stabilizer**	OFF / ON
EXIT JUMP	EXIT / SAVE&EXIT / FACTORY SET

| MOTION	
MOTION	OFF / ON
	SET WINDOW
	ALL SET (Set the Entire Screen)
	ALL CLEAR (Clear the Entire Screen)
	SENSITIVITY (1~120)
	SHOW INDICATOR (OFF / ICON / TRACE)
	DELAY OUT (1~15)
	Motion Alarm Zoom-In Delay
EXIT JUMP	EXIT / SAVE&EXIT / FACTORY SET
SYNC	
SYNC	INTERNAL / AUTO
V-PHASE	0~199
EXIT JUMP	EXIT / SAVE&EXIT / FAVTORY SET
EXIT	
EXIT	Exit the menu.
SAVE&EXIT	Exit the menu and save the settings.
FACTORY SET	Reset the menu setting to factory default.

NETWORK CONFIGURATION

▲ INSTALLATION PROCESS

1. **Connecting power supply, LAN, and audio cables to an iV3377WD (iV3377WTIR).**
   - **DC 12V** - Power (Adapter, DC 12V/1000mA)
   - **ETHERNET** - LAN cable (RJ45 Jack)
     - A client PC or a network device is connected to the iV3377WD/iV3377WTIR.
   - **AUDIO** - Audio IN/OUT cable
     - IN: Input from a microphone (RCA)
     - OUT: Output to a speaker (RCA)

※ Network Configuration Example
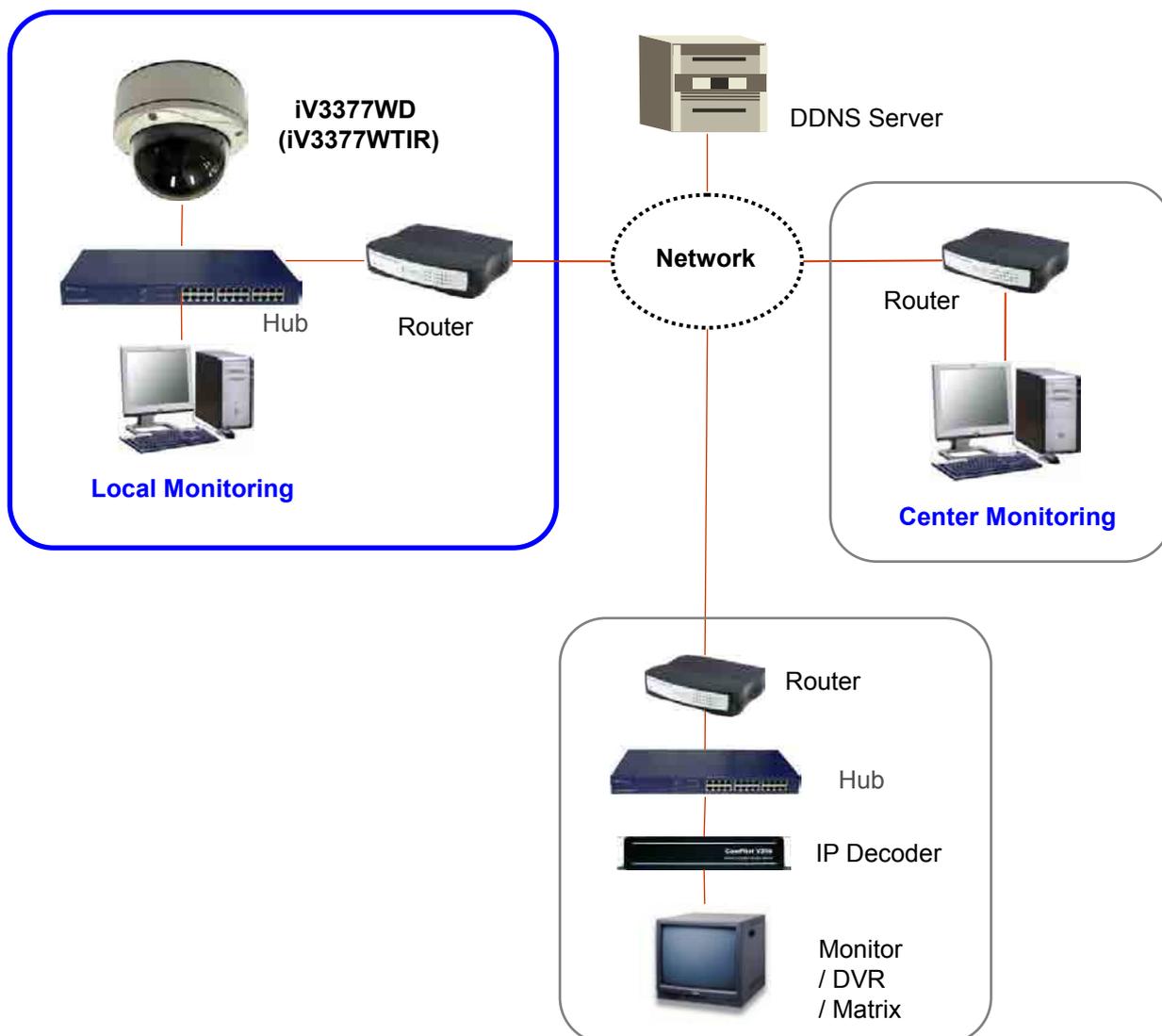
## 2. Executing NVR program Installation on PC (Ex: NVS 4.1 Installation)

– On each installing process, click [Yes] or [Next] to install by default.

– The programs like ENCP, NDC Manager, and NDC Viewer are installed after the entire process.
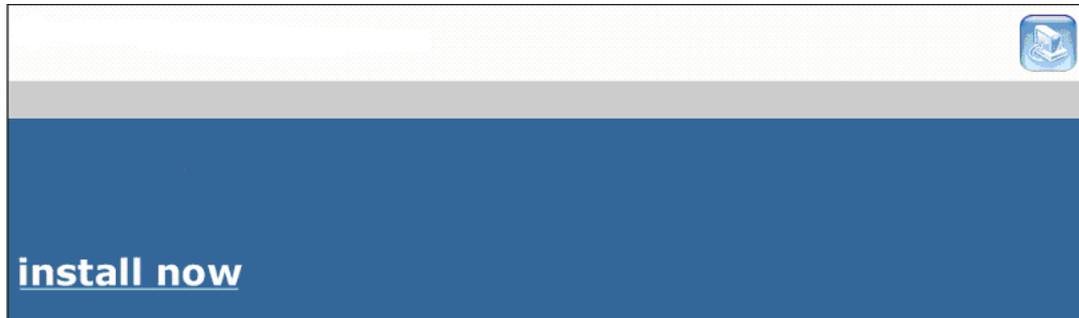
▶ NVS 4.1 Installation

3. Assigning an IP address to the iV3377WD/iV3377WTIR.

– Assign an IP address with ENCP 2.0

– Running **Start > Program > NVS 4.1 > ENCP 2.0**
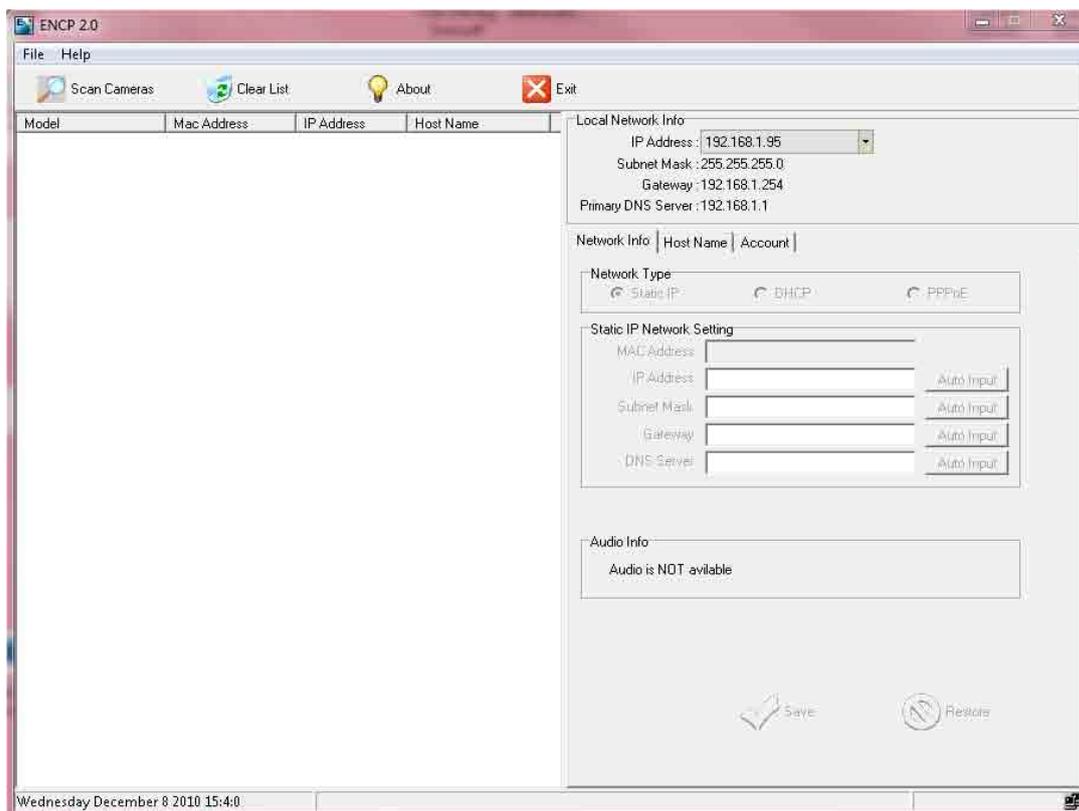

▶ ENCP 2.0

4. Scan iV3377WD/iV3377WTIR and network configuration

- – Click [Scan Cameras] button to search iV3377WD/iV3377WTIR Network Video Streamer on the local network where ENCP runs.
- – The Camera List displays the basic information of the searched iV3377WD/iV3377WTIR on the local network.
  Default IP address is **192.168.1.2**
- – Select an iV3377WD/iV3377WTIR and change the network setup appropriately.
- – After the setup, click [Save] button.
- – **Refer to "ENCP 2.0" manual for details.**

5. Accessing to iV3377WD/iV3377WTIR with a web browser

- – Open a web browser on PC and enter the IP address assigned to a iV3377WD/iV3377WTIR in the following format.

http:// 192.168.1.2/
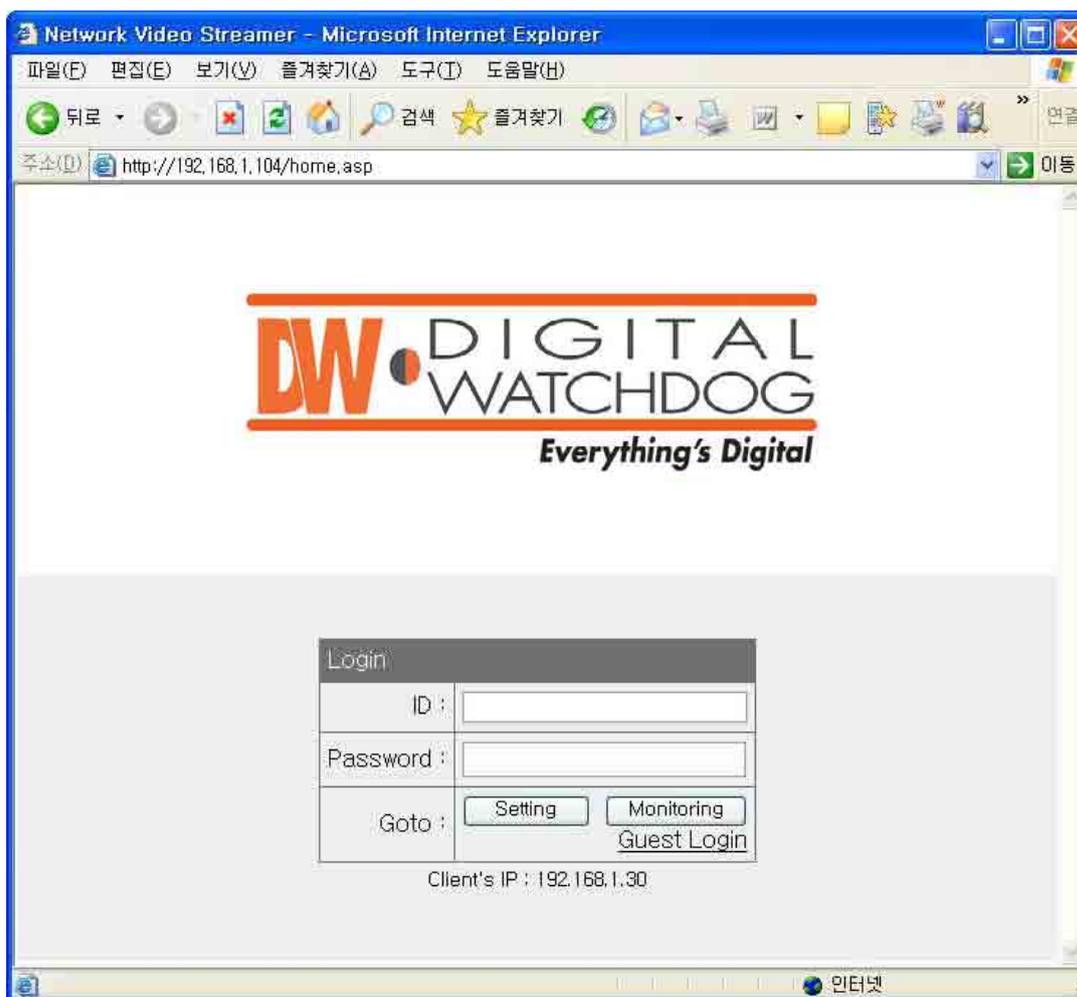
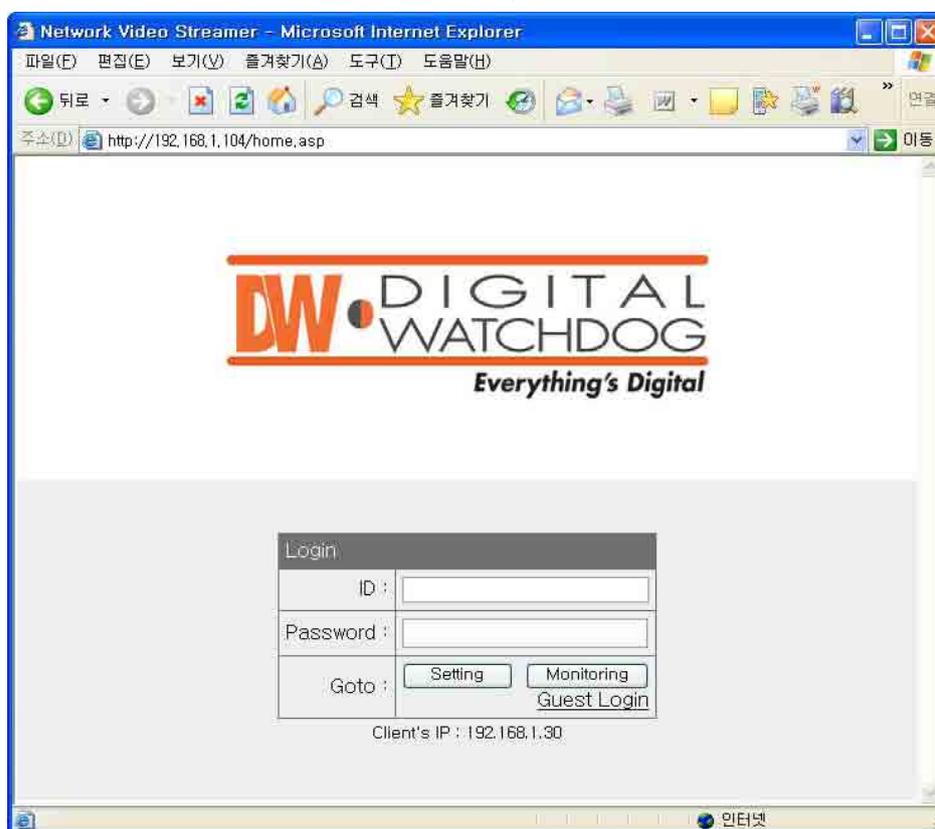▶ Login Page

Using Web Browser

▲ OVERVIEW

- User can monitor the video and audio data and manage iV3377WD/iV3377WTIR through a web browser over internet.
- User can select a type between encoder mode and decoder mode through a web browser.
- Basic Functions:

Monitoring

- Monitoring the video and audio data from an iV3377WD/iV3377WTIR.
- Changing the setup related to monitoring
- Resolution, Info. Display, D/O (Digital Output), Bit Rate, Audio, PTZ, etc.

Managing

- Confirming the status of a iV3377WD/iV3377WTIR
- Network Status, Model Info, Connection List, Log
- Changing the basic setting (Network, Video, Audio, Event, Date/Time, OSD)
- Changing the expert setting (RS485, RS232, Port, Security Level, Account, DDNS, UPnP, Motion Detect, Firmware Update)

▶ Login Page

▲ CONNECTION

- To connect to an iV3377WD/iV3377WTIR, type the IP address that is given to the iV3377WD/iV3377WTIR on the address window of a web browser as below.

  (Refer to "ENCP 2.0" program manual to set IP address of the iV3377WD/iV3377WTIR.)

http://(iV3377D/iV3377TIR IP Address)

► Type on the address window of a web browser and enter

http://192.168.1.2

► Example (Default IP Address)

- Connection and Accounts

  ① Administrator Account
  - It is available to monitor and manage an iV3377WD/iV3377WTIR.
  - Default ID / Password of the administrator is **root / pass**.
  - **Only the password is changeable. (Administrator's ID is fixed.)**

  ② Guest Account
  - It is available to use only the functions that are permitted limitedly on monitoring.
  - It is shown as inactivated for the limited functions on monitoring page.

► Login window

Setting page login

: Type the ID and Password of the administrator and click "Setting" button.

Monitoring page login

: Type the ID and Password of the administrator and click "Monitoring" button

Guest login

: Click "Guest Login" to enter the monitoring page of guest account

Client's IP

: Displays the IP address of the connected PC.

► Monitoring Page

► Server Setting Page

- Note for Monitoring Page

  – When first connecting to the monitoring page, click [Yes] to download ActiveX if "Security **warning**" window appears. (CASE ①)
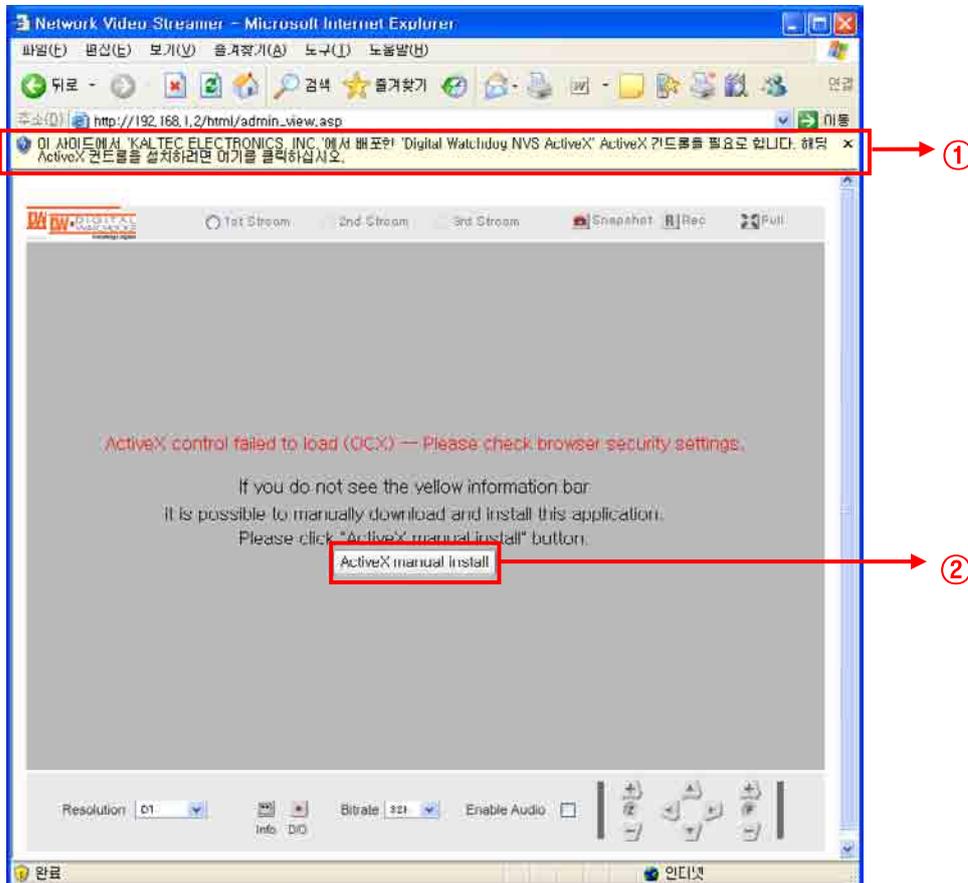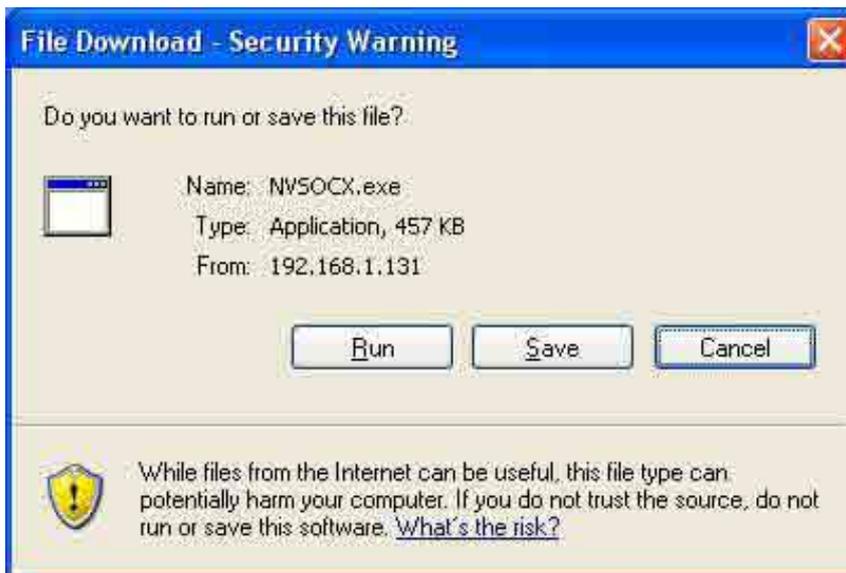

  – Click the yellow information bar to download ActiveX control.

  – User can download and install ActiveX Setup manually if the information bar does not appear. (CASE ②)
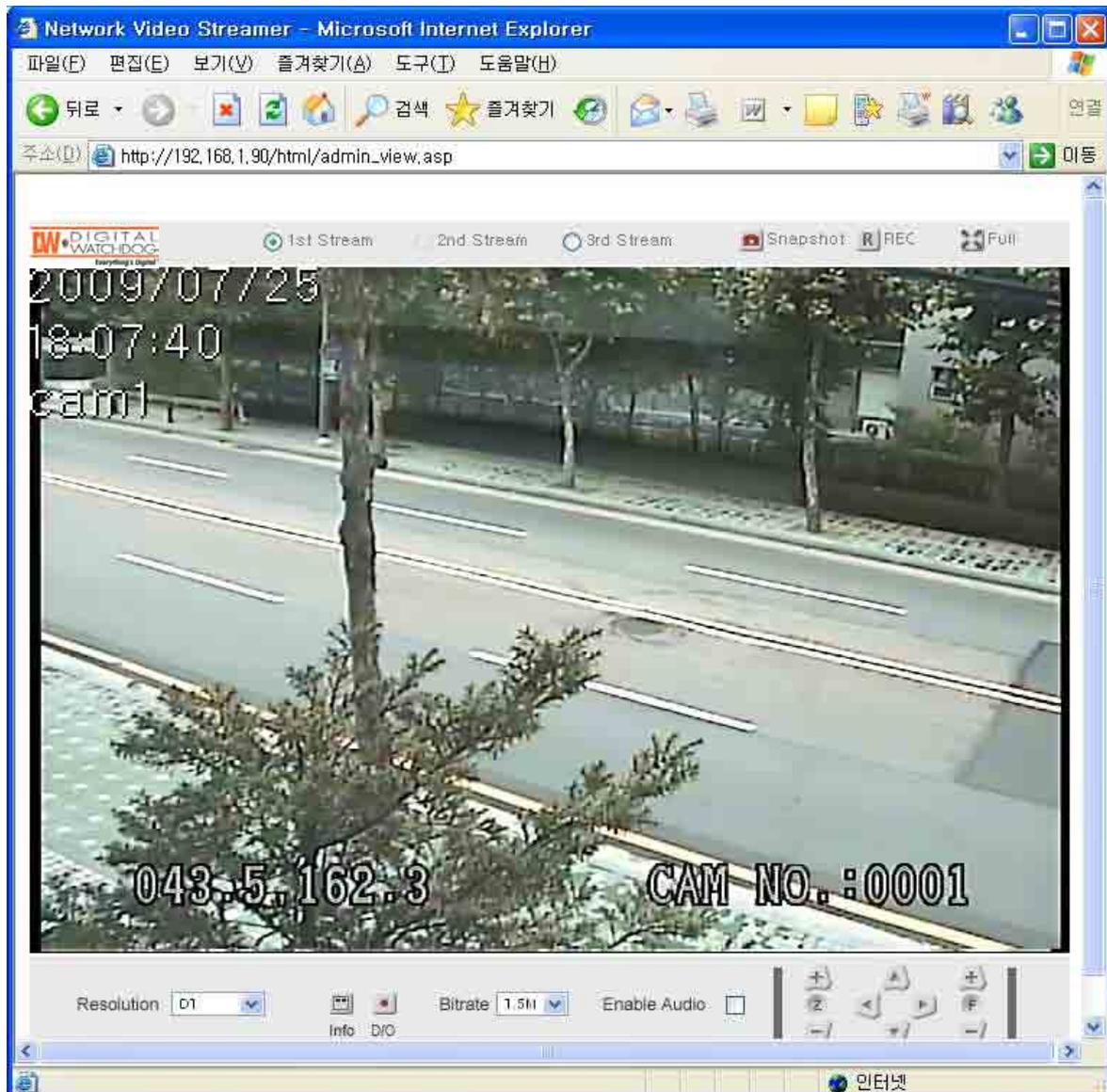
– Click [Run] button to install ActiveX file manually (NVSOCX.exe)

► ActiveX Setup window

▲ MONITORING

Monitoring Page

- **1st / 2nd / 3rd Stream**
  - Select a Stream to monitor
  - If the stream button is inactivated, check the video setting of "server setting page."

- **Snapshot**
  - Capture a JPEG Image of current video stream (JPG file creation route: C:/root)

- **REC**
  - Record the video of current video stream (AVI file creation route: C:/root)

- **Full**
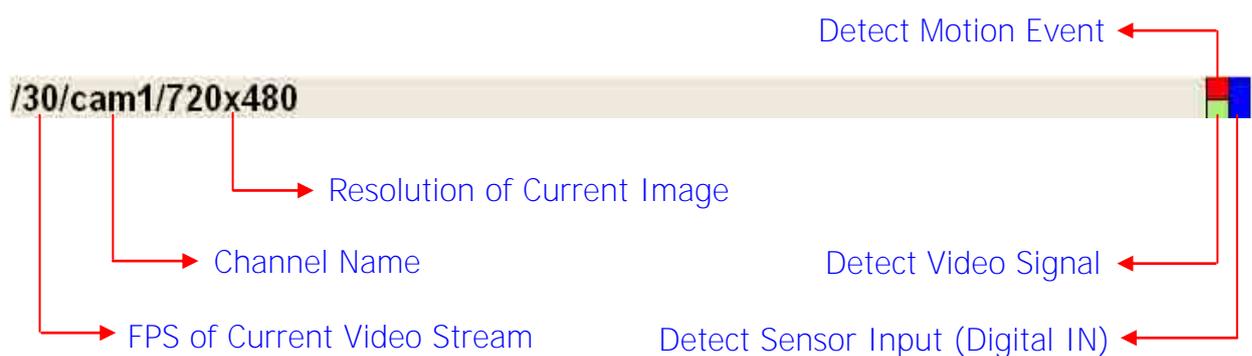 - Extend the image of current video stream to fit monitor size.

- **Resolution**
  - Display a current resolution.
  - User can select other resolution.
    If iV3377WD/iV3377WTIR is rebooted, the resolution on the monitoring page is initialized to the designated **value of "server setting page".**
  - Changing the resolution is not available on a guest account.

Resolution	QQVGA	QCIF	QVGA	CIF	VGA	4CIF	D1
NTSC	160X112	176X112	320X240	352X240	640X480	704X480	720X480
PAL	160X112	176X144	320X240	352X288	640X480	704X576	720X576

- **Info**.
  - Shows the information of the transferred data from the iV3377WD/iV3377WTIR on the upper of the image.
  - FPS / Camera (Channel) Name / Resolution
  - Event Status: Motion Detect (red) / Digital IN (blue) / Video Signal (green)

Detect Motion Event

/30/cam1/720x480

Resolution of Current Image

Channel Name

FPS of Current Video Stream

Detect Video Signal

Detect Sensor Input (Digital IN)

- **D/O**
  - Digital Out - This controls the device that is connected to the iV3377WD/iV3377WTIR.

- **Bit Rate**
  - Display the bit rate of current video stream.
  - User can select other bit rate. If iV3377WD/iV3377WTIR is rebooted, the bit rate on the monitoring page is initialized to the designated **value of "server setting page".**
  - Changing the bit rate is not available on a guest account.

- **Enable Audio**
  - If the box is checked the iV3377WD/iV3377WTIR sends the audio data with the video data.

- **PTZ Control**
  - User can control PTZ camera or receiver through RS485.
    - Z (Zoom): zoom in (+) / zoom out (-)
    - Pan/Tilt: iV3377WD/iV3377WTIR does not support Pan/Tilt function
    - F (Focus): focus in (+) / focus out (-)
    - PTZ control is not supported on a guest account.

▲ SERVER SETTING

- – To apply the changed setting, reboot iV3377WD/iV3377WTIR.
  (Click **Reboot** on the menu)

- **Network Status**
  - – This is the initial page of Server Setting.
  - – This shows network status, model information, network traffic status, connection list, and system log.
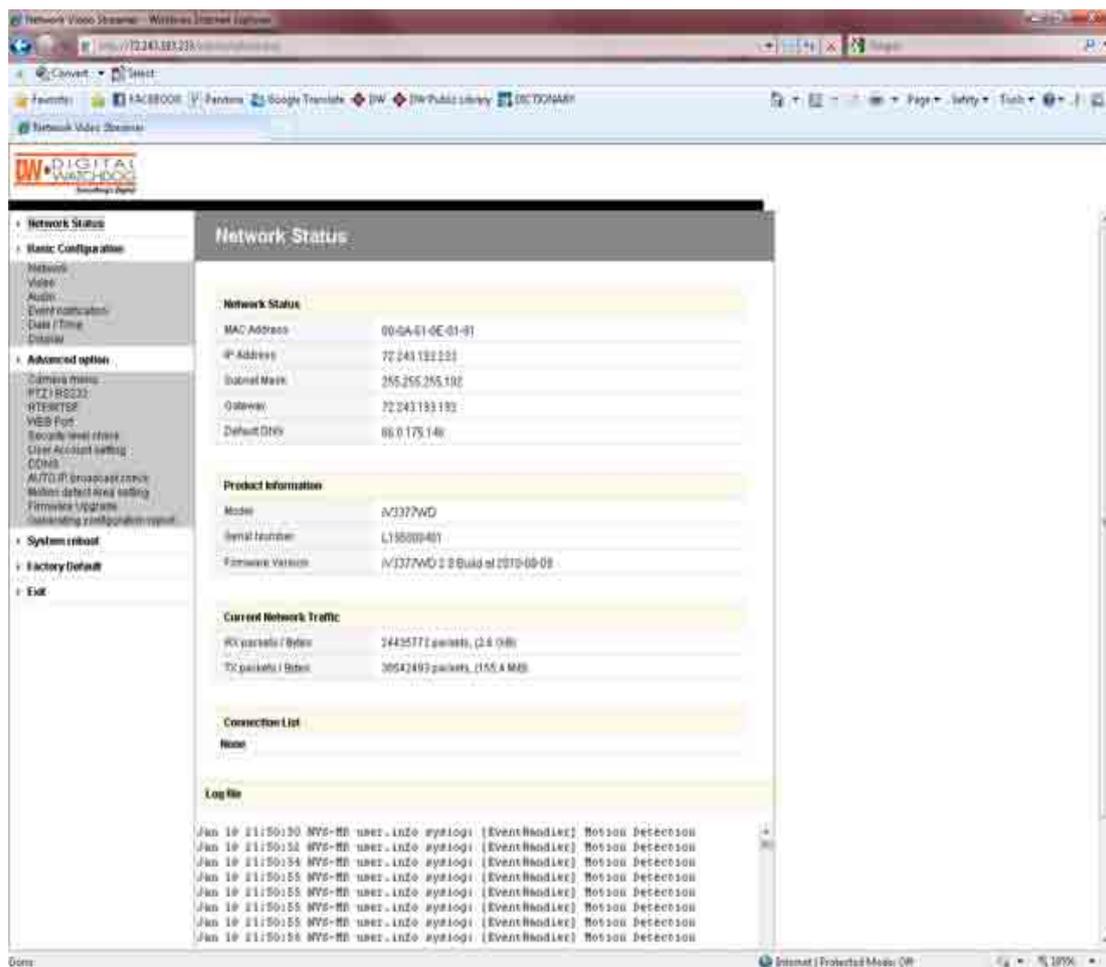
- **Network Status**
  - MAC Address: Media Access Control Address of iV3377WD/iV3377WTIR; this is unchangeable.
  - IP Address: the assigned IP Address of iV3377WD/iV3377WTIR
  - Subnet Mask: where the Sub-network of the IP address belongs to. (Use the value to fit the network environment)
  - Gateway: Gateway Address (Use the value to fit the network environment)
  - Default DNS: IP Address of Default DNS server

- **Connection List**
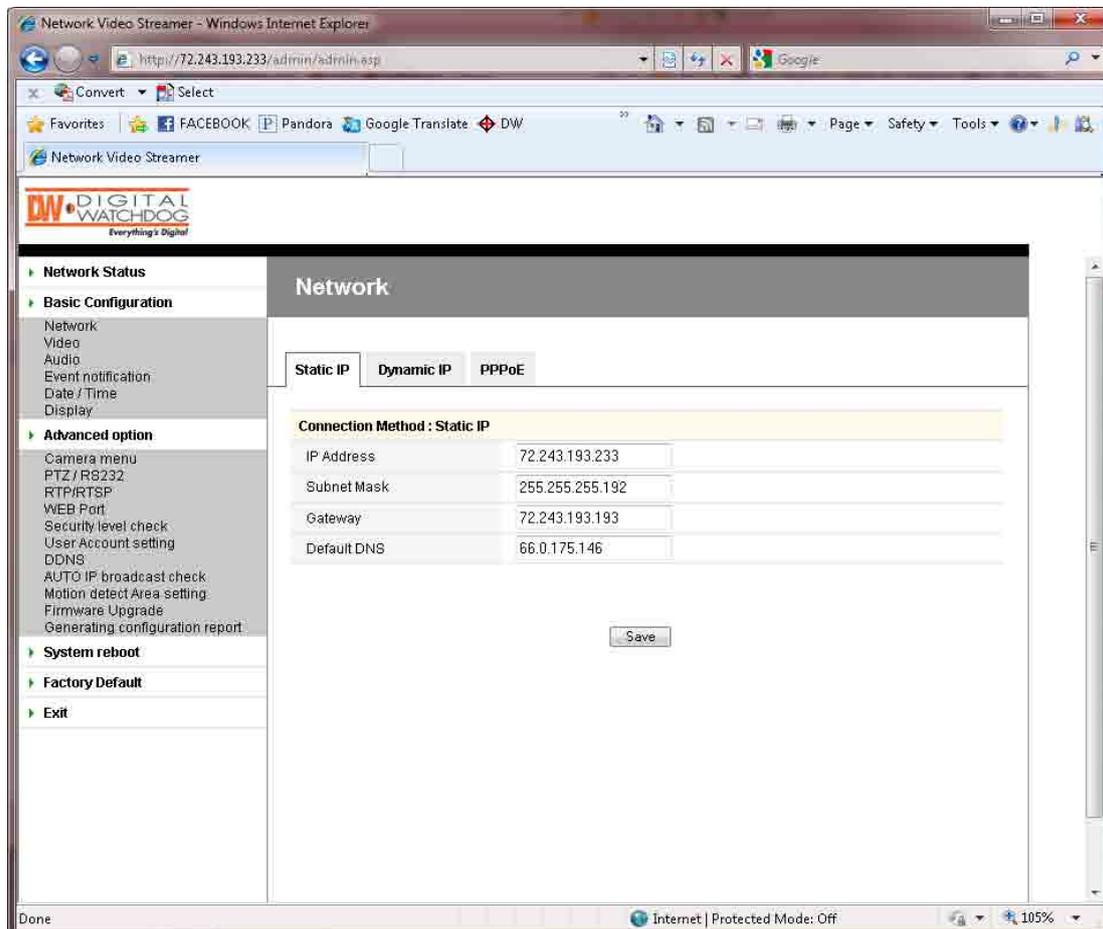 - User can check the number of connected clients and IP addresses.

- **Log**
  - "Log" displays the logs of general events of iV3377WD/iV3377WTIR.

• **Basic Configuration > Network**

– User can set Network Information of iV3377WD/iV3377WTIR—IP Address, Subnet Mask, Gateway, and Default DNS

① **Static IP**

– IP Address: Ask network administrator for an appropriate address.

– Subnet Mask / Gateway / Default DNS: Ask network administrator.

– After setting, click [OK] button.

– Click [Reboot] to apply the setting to iV3377WD/iV3377WTIR.

② Dynamic IP
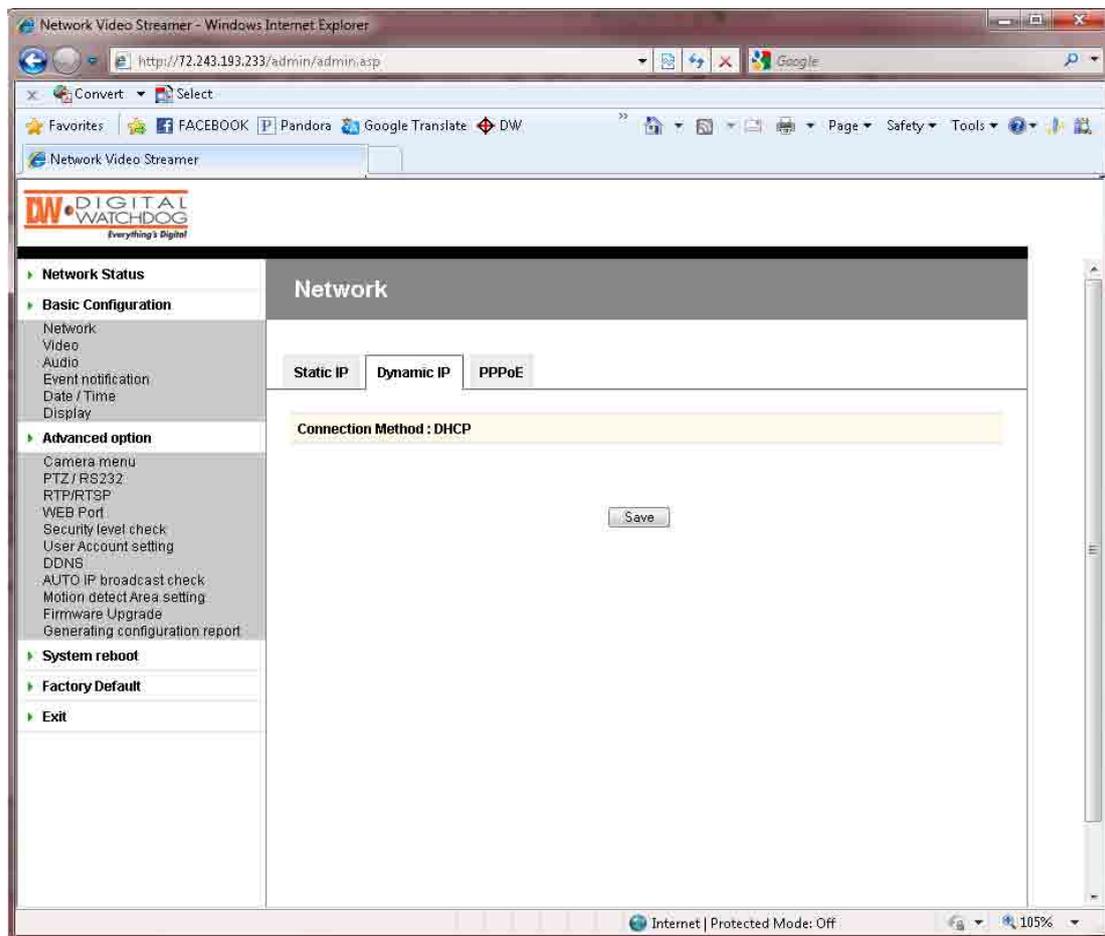
- If DHCP server is on the local network and you intend to allocate IP address dynamically, use this method.
- Select **Dynamic IP** tab; click [OK] button; and reboot iV3377WD/iV3377WTIR.
- If you want to select **Dynamic IP**, set Dynamic DNS to access iV3377WD/iV3377WTIR.

③ PPPoE
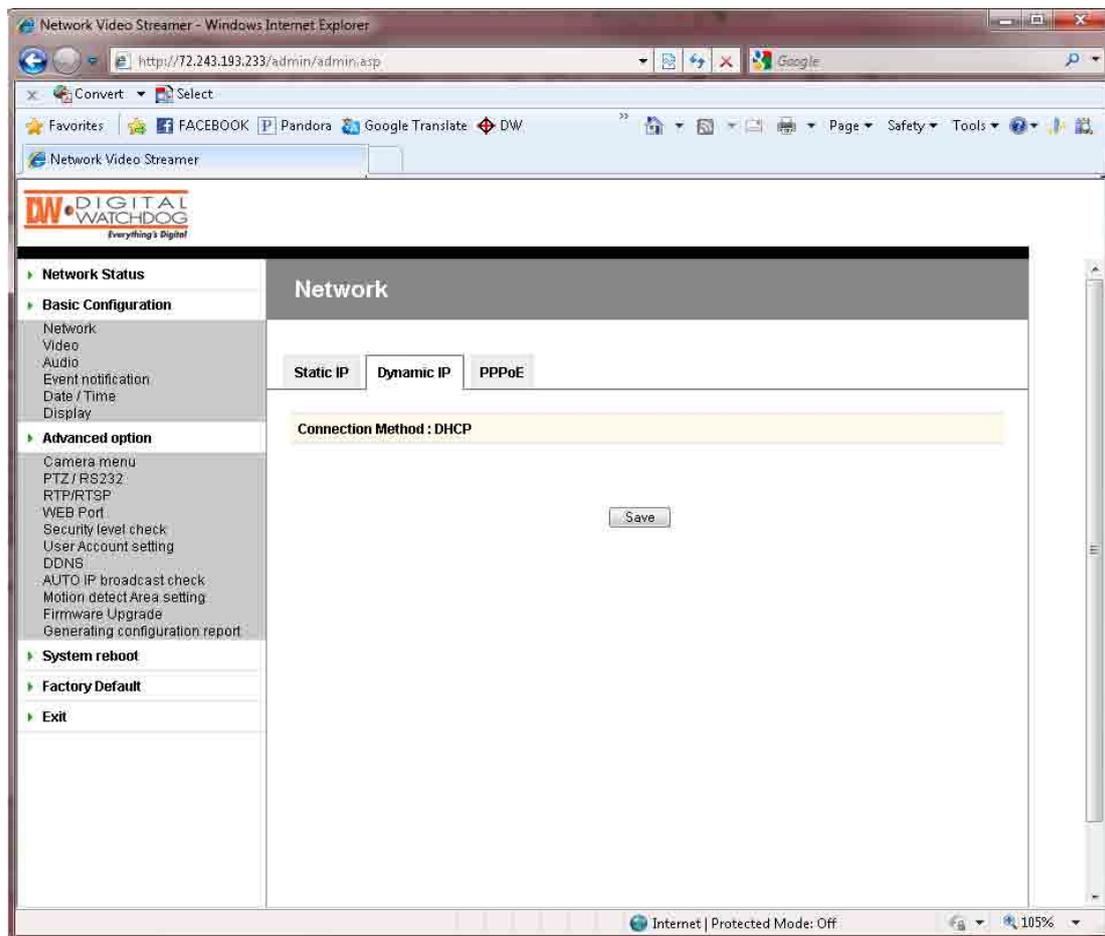
- Use in case the network supports PPPoE like xDSL.

- Ask ISP (Internet Service Provider) for details.

- User ID: xDSL User ID

- User Password: xDSL User Password

- Service Name: Service Name of ISP

- MTU: Maximum Transmission Unit of Data

- IP address of DNS sever can be set to create automatically.

- If your xDSL does not use static IP type, you should use Dynamic DNS setting like DHCP.

• **Basic Configuration > Video**

– User can select video streaming type (Encoder or Decoder Mode).

– iV3377WD/iV3377WTIR supports only an Encoder mode.

① **Encoder Mode**
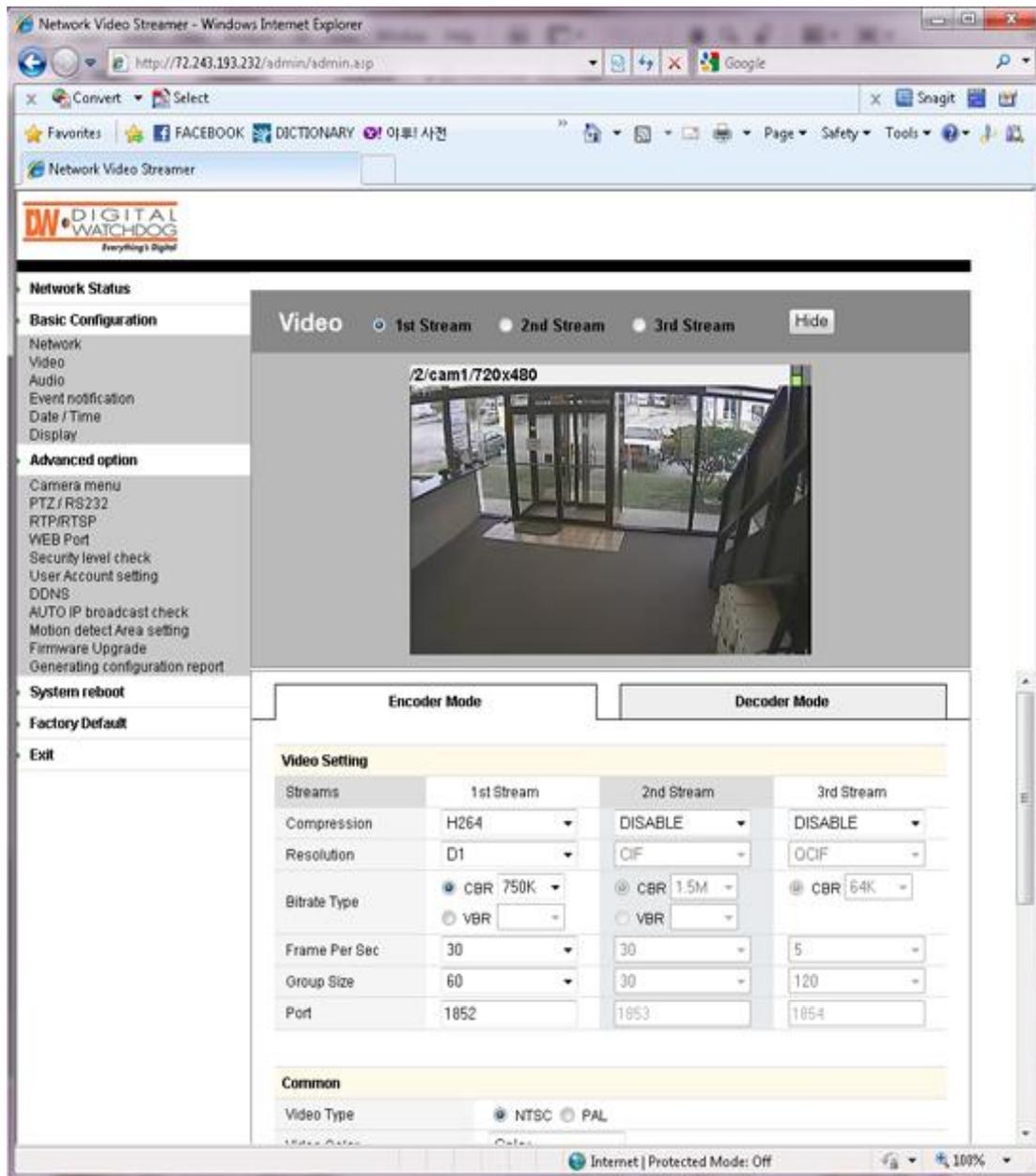
Video Setting

– Preview: User can check the current video setting through the preview images.

(First / Second / Third Stream Selectable)

– Video Compressed Type: H.264 / MJPEG

(Compression Type of Third Stream: MPEG4)

– Resolution: QQVGA / QCIF / QVGA / CIF / VGA / 4CIF / D1

(Resolution of Third Stream: QCIF Fixed)

– Bit Rate Type : CBR / VBR

• Constant Bit Rate : 8M / 7M / 6M / 5M / 4M / 2M / 1.5M / 1M / 750K / 500K / 384K

/ 256K / 128K / 64K / 32K

• Variable Bit Rate: **1~6 (The highest quality is "1.")**

– Frame per Sec: 1 ~ 30 (NTSC) / 1~25 (PAL)

– Group Size: 1~200 (NTSC / PAL)

– Port: Video and Audio Streaming Port (Each stream must use a different port.)

– Video Type: NTSC / PAL

– Video Color: Auto / Color / B&W

– Aperture: 0~15 (Maximum Emphasis **Value is "15.")**

– Brightness / Contrast / Saturation / Hue: 0~255
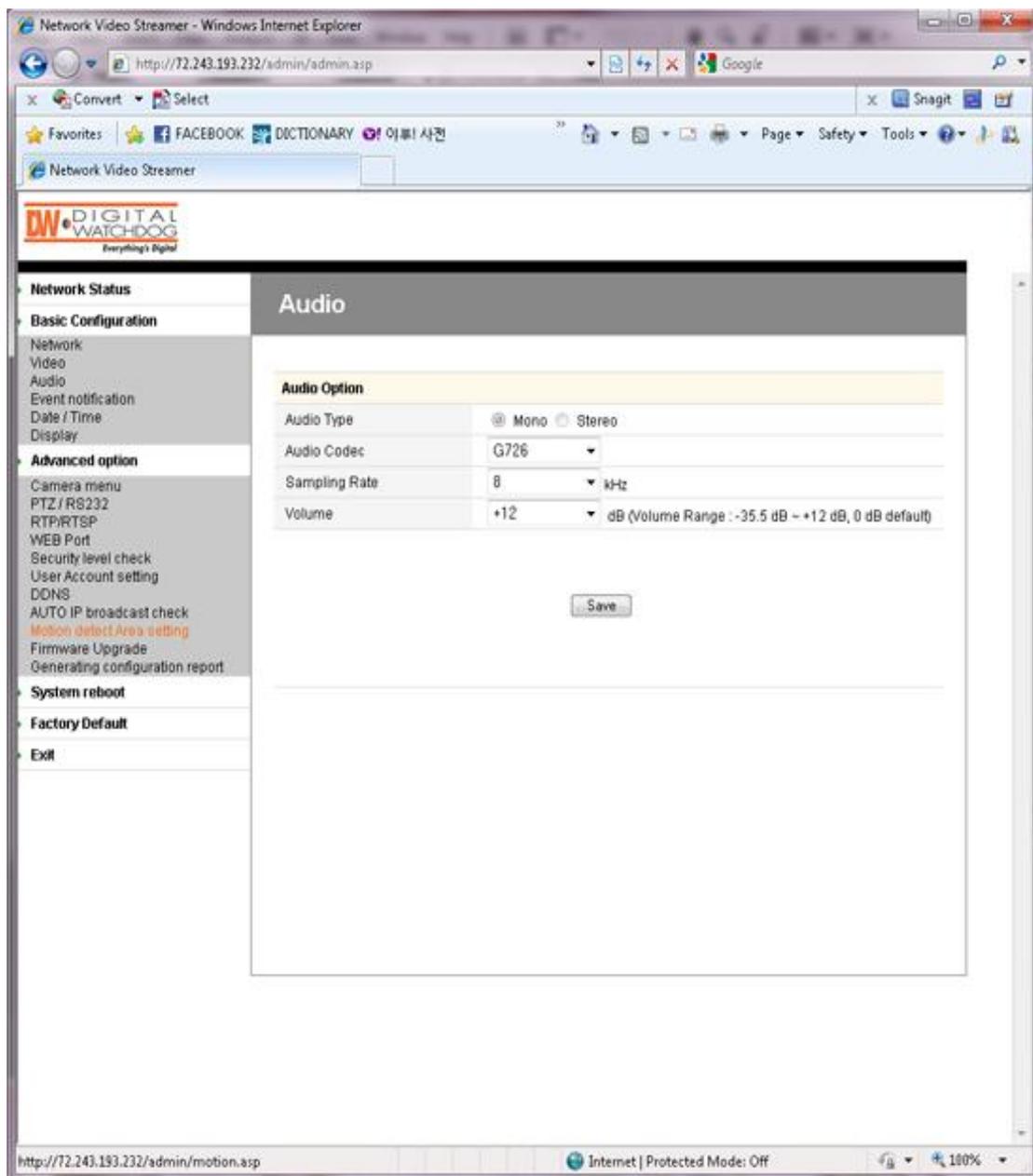
– X / Y Offset 1~21

JPEG Capture

– Enable: Send JPEG Image via HTTP Protocol (1fps fixed)

– Resolution: Select a Resolution (QQVGA~D1)

– Quality: High / One / Two / Three / Four / Low

Jpeg Capture		
Enable	☑	
Resolution	D1	
Quality	High	default 3 (High, 1, 2, 3, 4, Low)

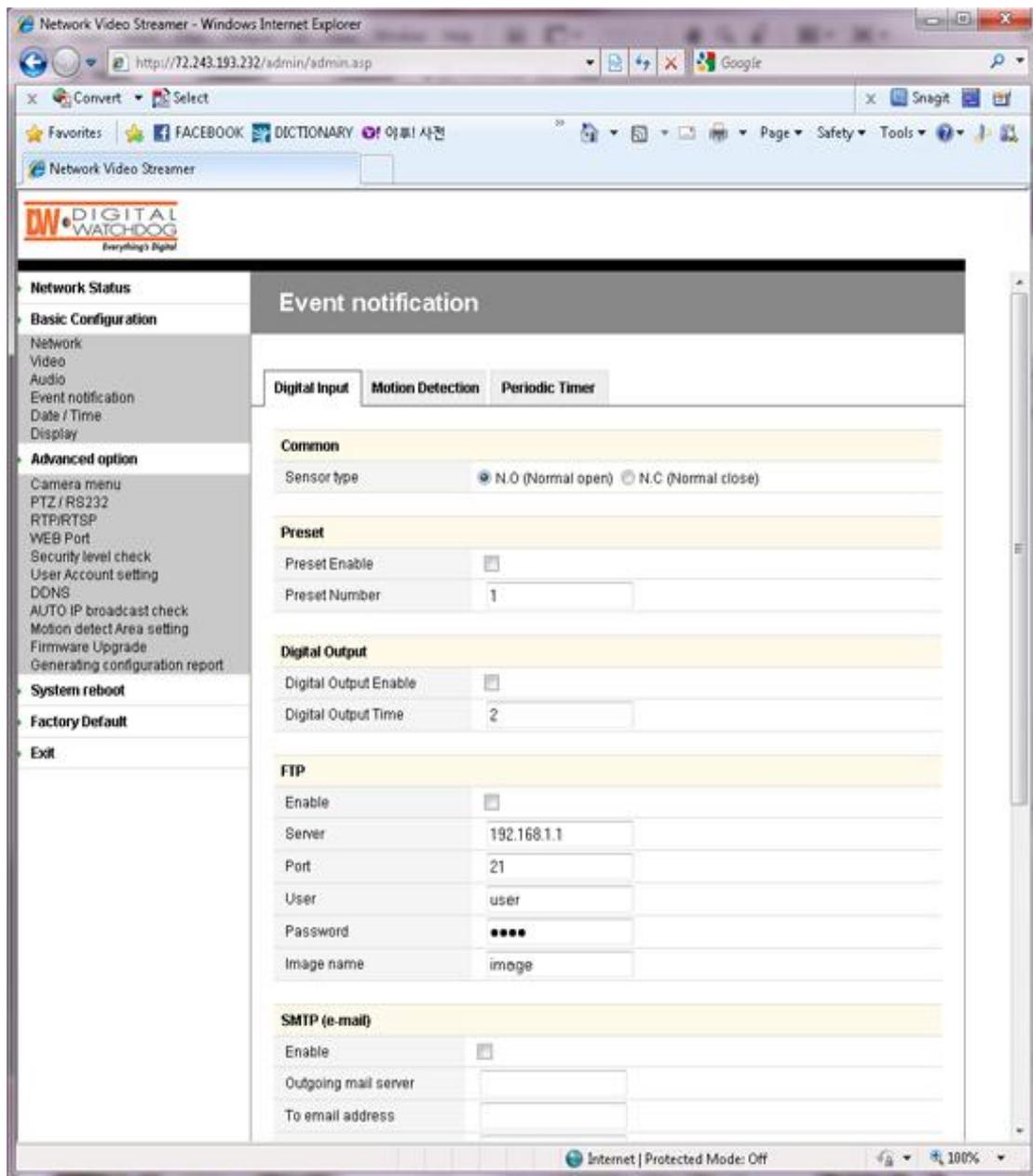▶ Jpeg Capture

• **Basic Configuration > Audio**

Server to PC Audio Option

– Audio Type: Mono (Fixed)

– Audio Codec: G.711 / G.726

– Sampling Rate: 8 kHz/ 32kHz

– Volume: -34.5~12dB

• **Basic Configuration > Event notification**

① **Digital Input**

Common

– Sensor Type: Select a type out of two types

Preset

– Preset Enable: Enables the iV3377WD/iV3377WTIR to send the preset signal to the connected camera which supports preset function
– Preset Number: Preset number that assigned to the camera which supports preset function

Digital Output

– Digital Output Enable: Enables the iV3377WD/iV3377WTIR to send the digital signal to the connected device
– Digital Output Time: Adjusts the time for the iV3377WD/iV3377WTIR to send the signal (unit: sec)

FTP

– Enable: Enables the iV3377WD/iV3377WTIR to send captured image to FTP server (Assuming JPEG Capture is enabled on the video setting page.)
– Server: IP Address of FTP server
– Port: FTP Server Port
– User: Account of FTP Server
– Password: Password of FTP Server
– Image name: File name of Captured Image
(Time information will be added with the image name.)

SMTP (E-mail)

– Enable: Enables the iV3377WD/iV3377WTIR to send captured image via e-mail.
– Outgoing Mail Server: SMTP Server
– To e-mail address: E-mail Address of Receiver
– From E-mail Address: E-mail Address of Sender
– Subject: User can specify e-mail title.
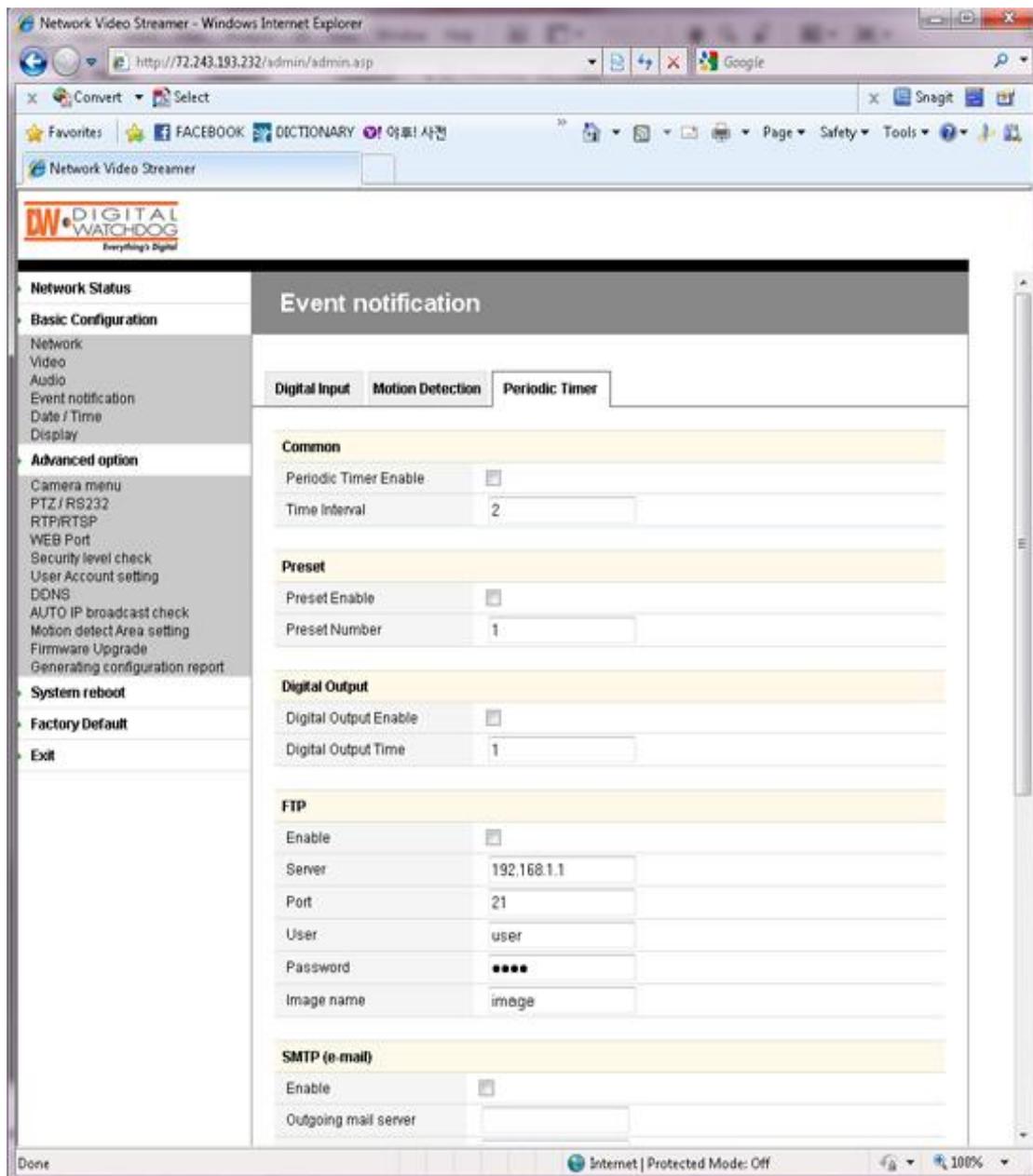– Body: User can specify e-mail message.

② **Motion Detection**
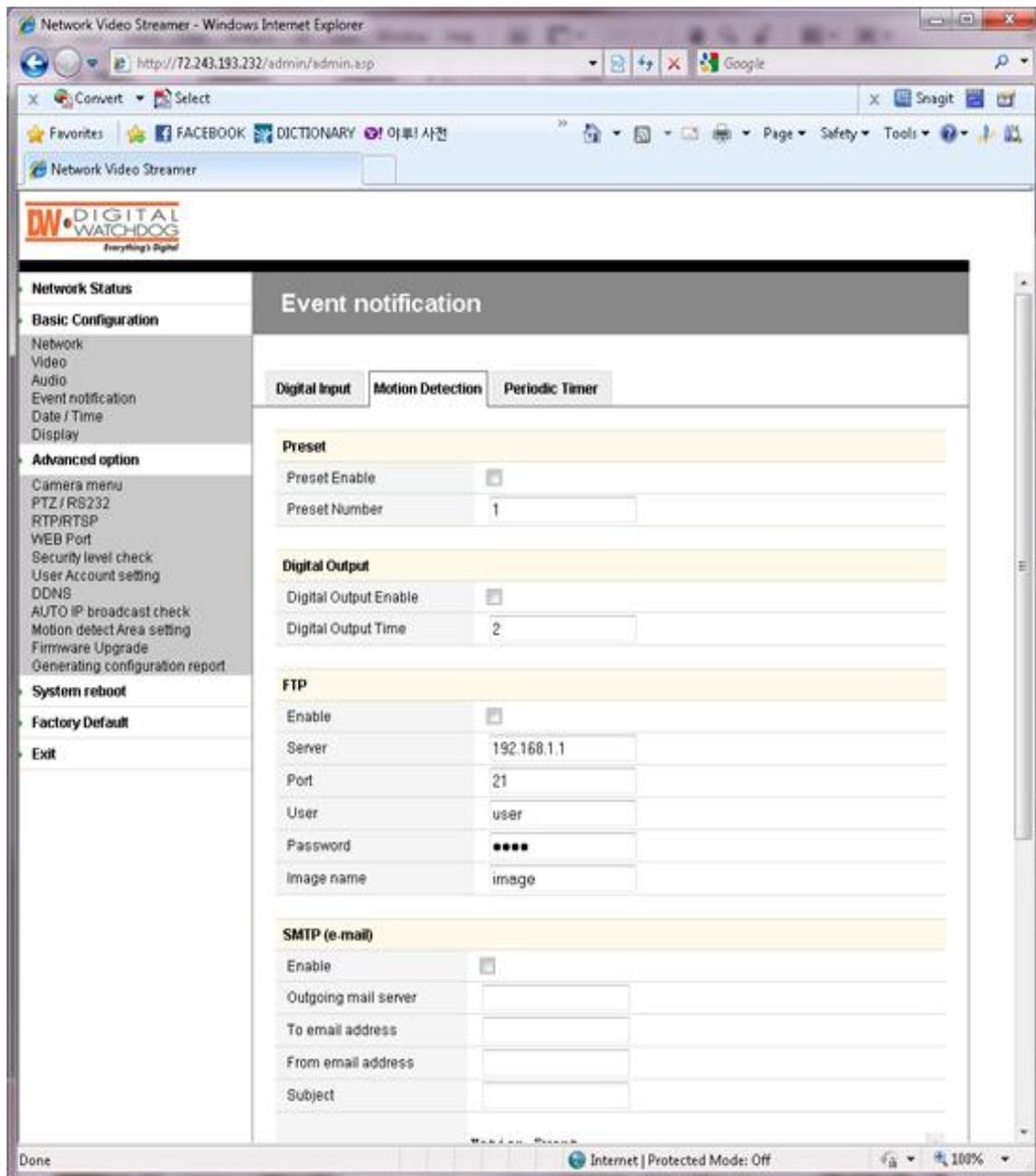
Preset: Same as "Digital Input" Setting

Digital Output: Same as "Digital Input" Setting

FTP: Same as "Digital Input" Setting

SMTP (E-mail): Same as "Digital Input" Setting

③ Periodic Timer

Common

– Periodic Timer Enable: Enables the iV3377WD/iV3377WTIR to send the signal to the client PC periodically.

– Time Interval: Period (in seconds)
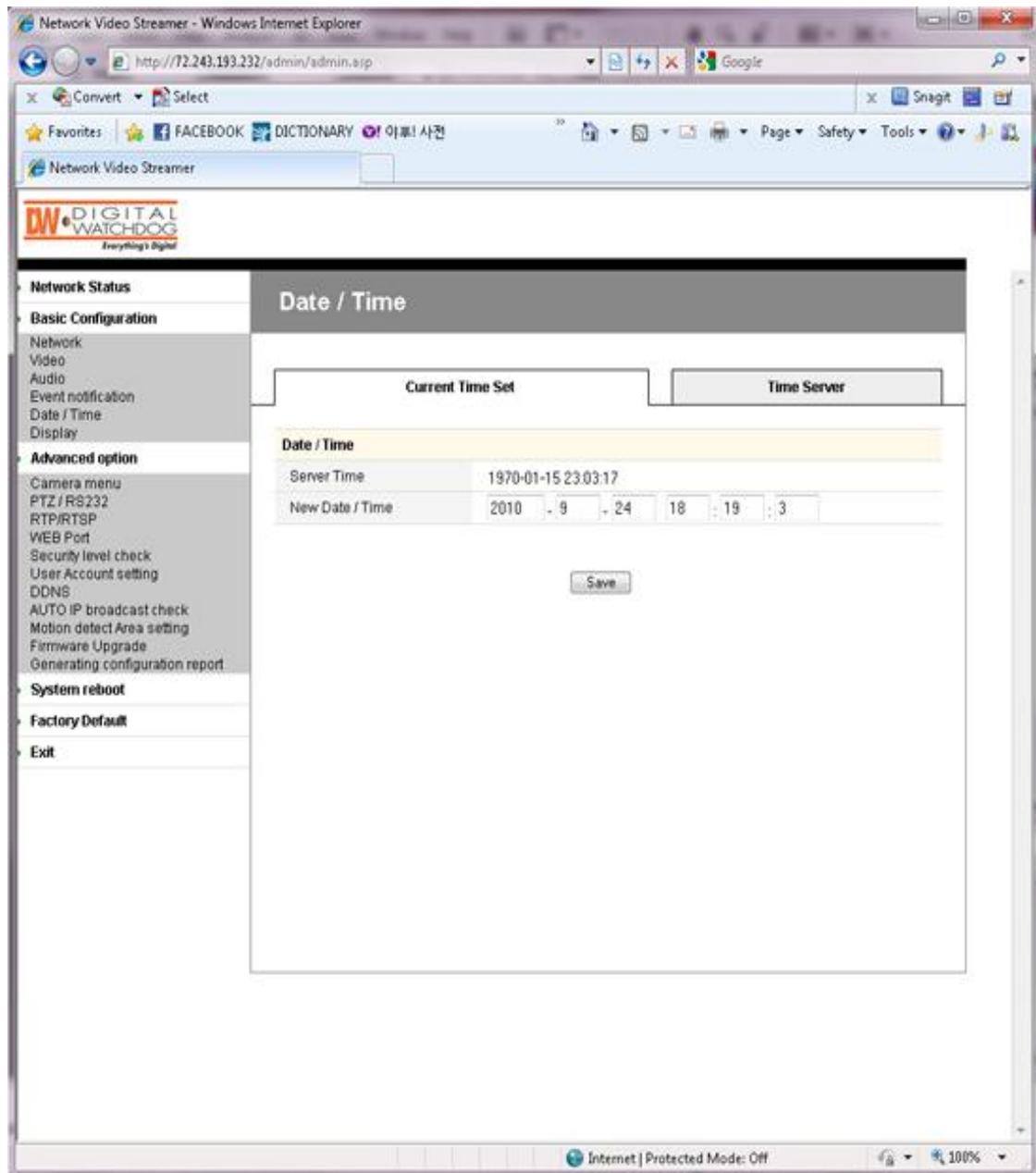
Preset: Same as "Digital Input" Setting Form

Digital Output: Same as "Digital Input" Setting Form

FTP: Same as "Digital Input" Setting Form

SMTP (E-mail): Same as "Digital Input" Setting
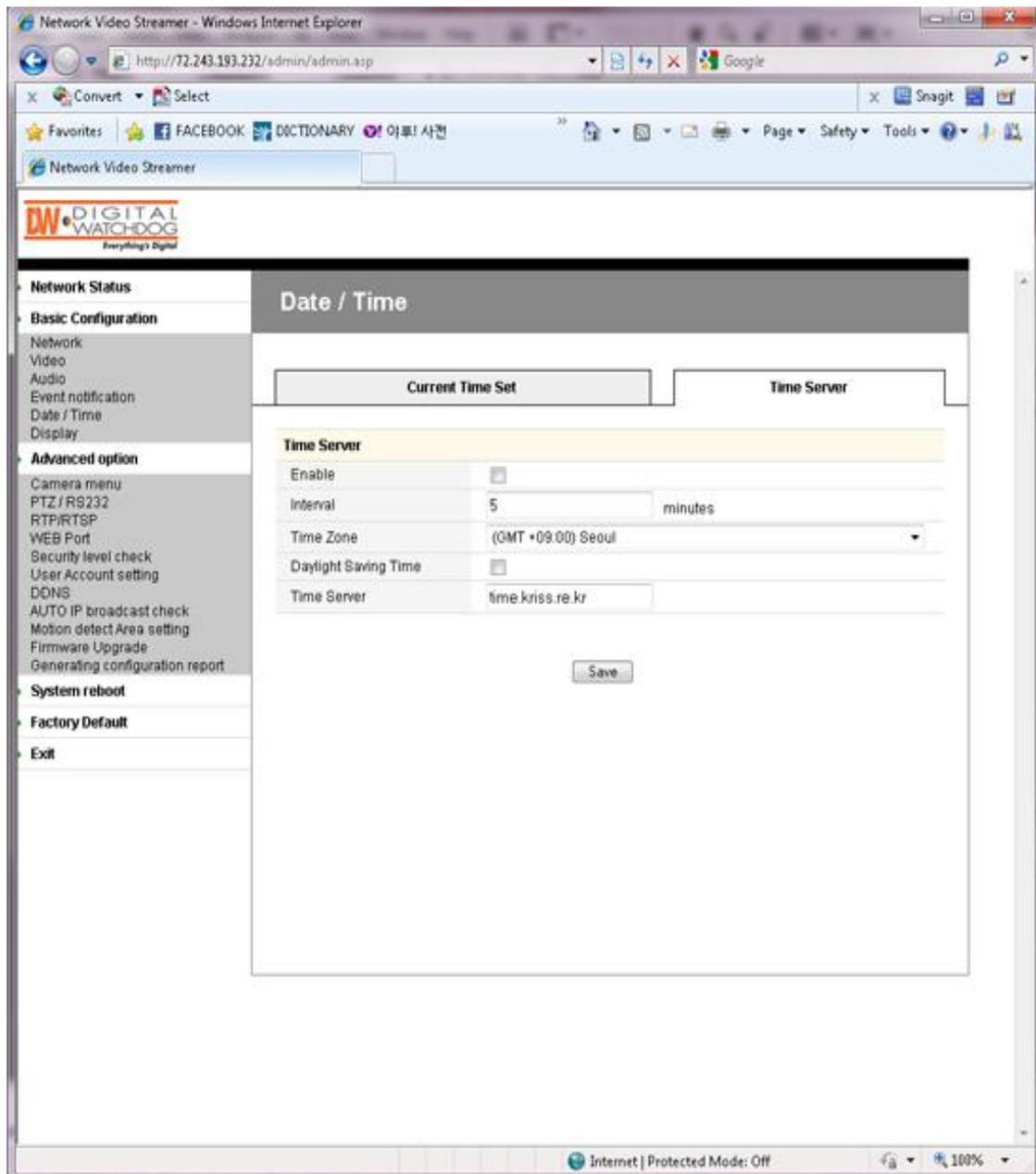
• **Basic Configuration > Date / Time**

① **Current Time Set**

Date / Time

– Server Time: Time that the iV3377WD/iV3377WTIR keeps internally

– New Date / Time: User can assign the specific time voluntarily

② Time Server

Time Server

– Enable: Enables time of iV3377WD/iV3377WTIR to synchronize with time server periodically

– Interval: Period (in seconds)

– Time Zone: User can select a time zone

– Daylight Saving Time: Check this box in using daylight saving time

– Time Server: User can assign a Time Server to apply the current time to iV3377WD/iV3377WTIR

– After setting, click the [OK] button and reboot Camera.

• Basic Configuration > Display
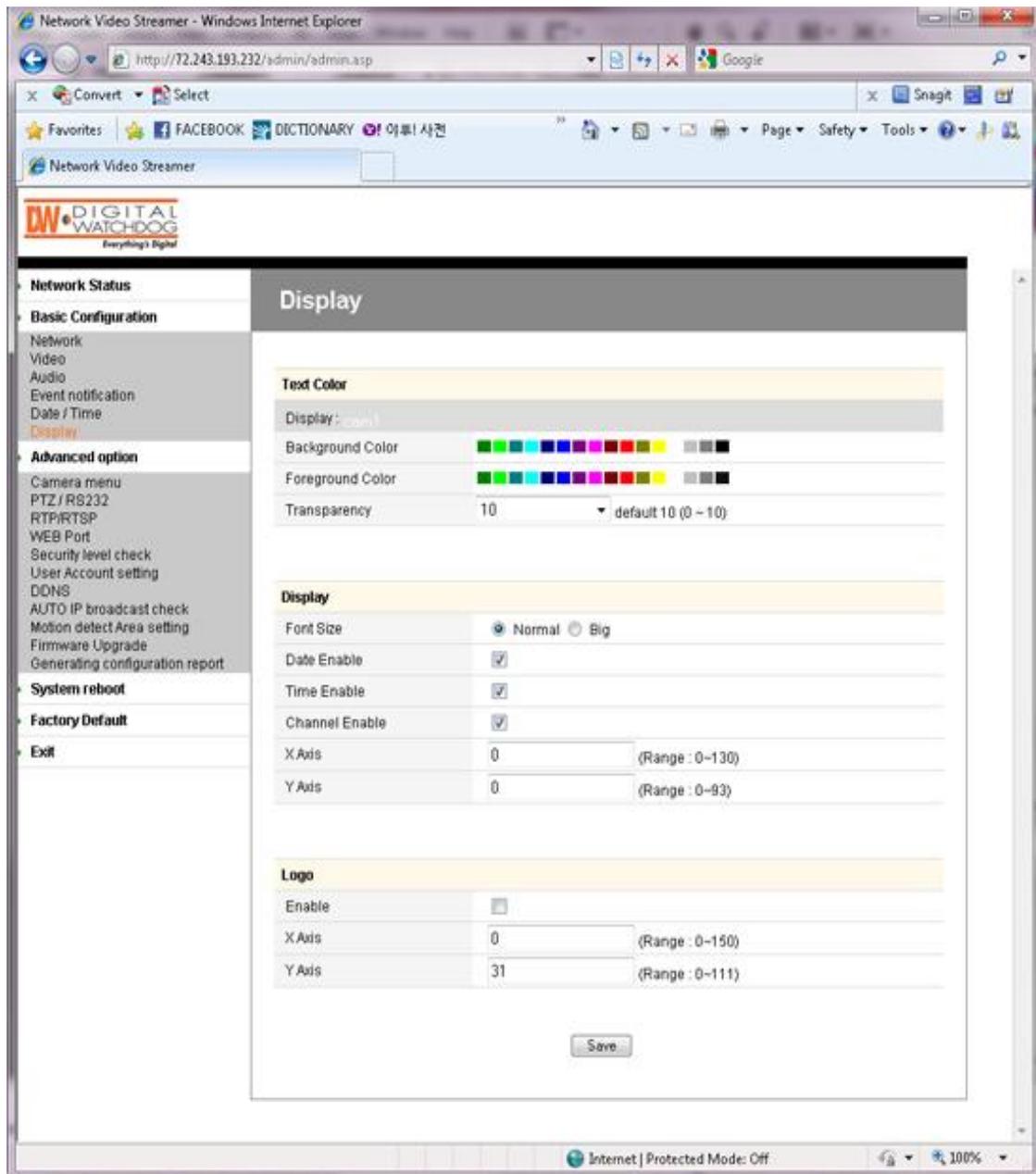

Text Color

– Background Color: Select a color for the background

– Foreground Color: Select a color for the text

– Transparency: 0~10

OSD

– Font Size: Normal / Big

– Date Enable: Display Date

– Time Enable: Display Time

– Channel Enable: Display Channel Name

– X Axis: Input a Point on the Coordinate

– Y Axis: Input a Point on the Coordinate

Logo

– This is the image that is displayed on the transferred image.

– **First, upload the logo image on "Expert/Firmware Update/OSD** Logo U**pload" (BMP**

File)

– Enable: Check the box to display the image

– X Axis: Input a Point on the Coordinate

– Y Axis: Input a Point on the Coordinate
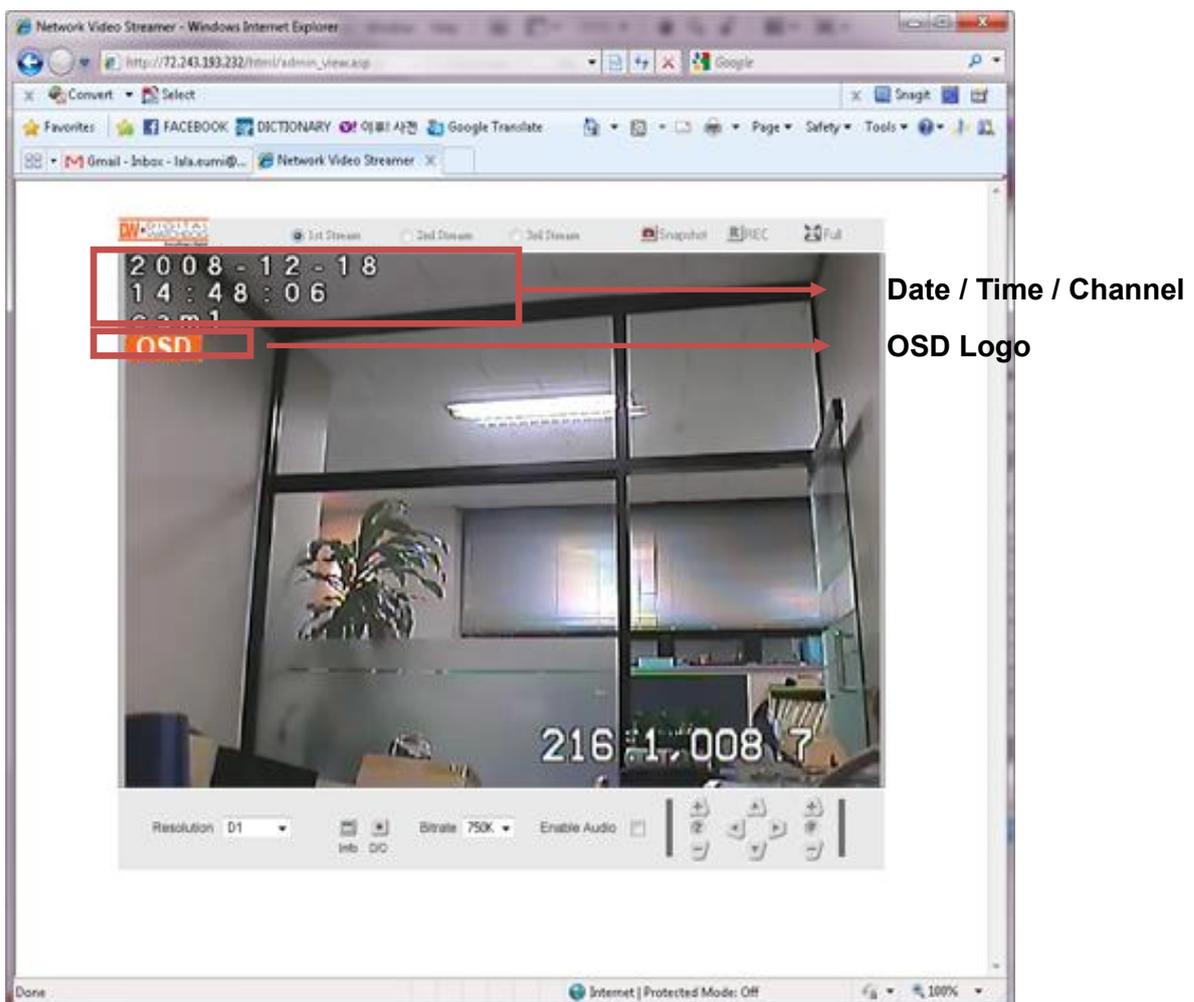
• **Advanced Option > Camera Setting**
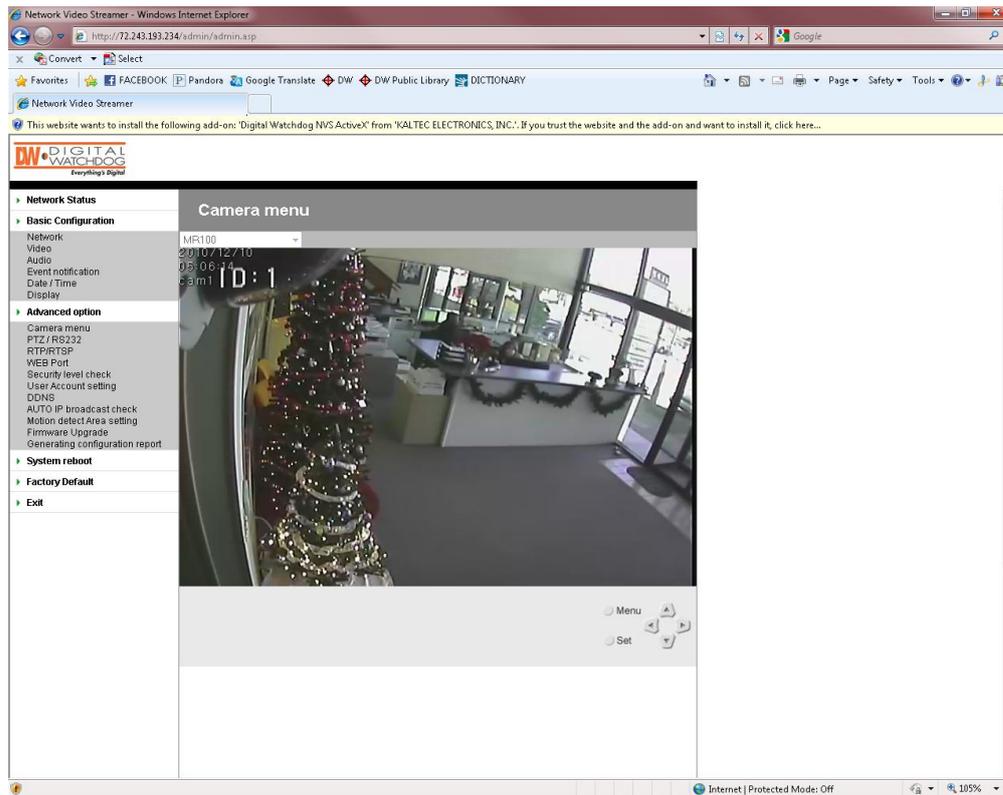
Menu

– Access to the OSD menu of iV3377WD, iV3377WTIR Series

Direction Keys

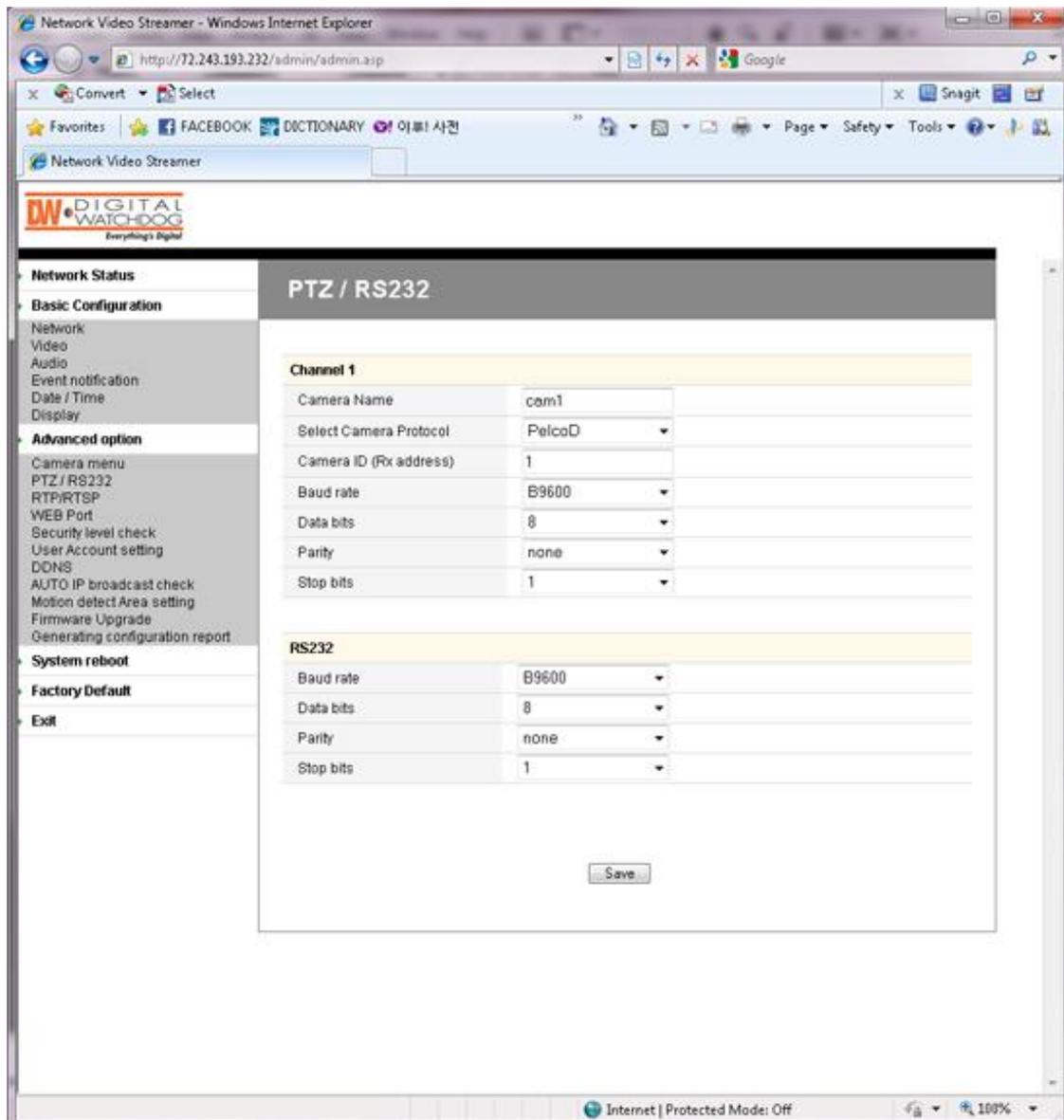– Operate the OSD setting menu of iV3377WD, iV3377WTIR Series

Set

– Select a value on the OSD setting menu of iV3377WD, iV3377WTIR Series

※ For detail setting values, refer to page 13.

(OSD MENU SETTINGS - iV3377WD, iV3377WTIR Series)

• Advanced Option > PTZ / RS232

– iV3377WD/iV3377WTIR does not support PTZ and RS232 function.

Channel 1

– Channel Name: Channel Name of OSD
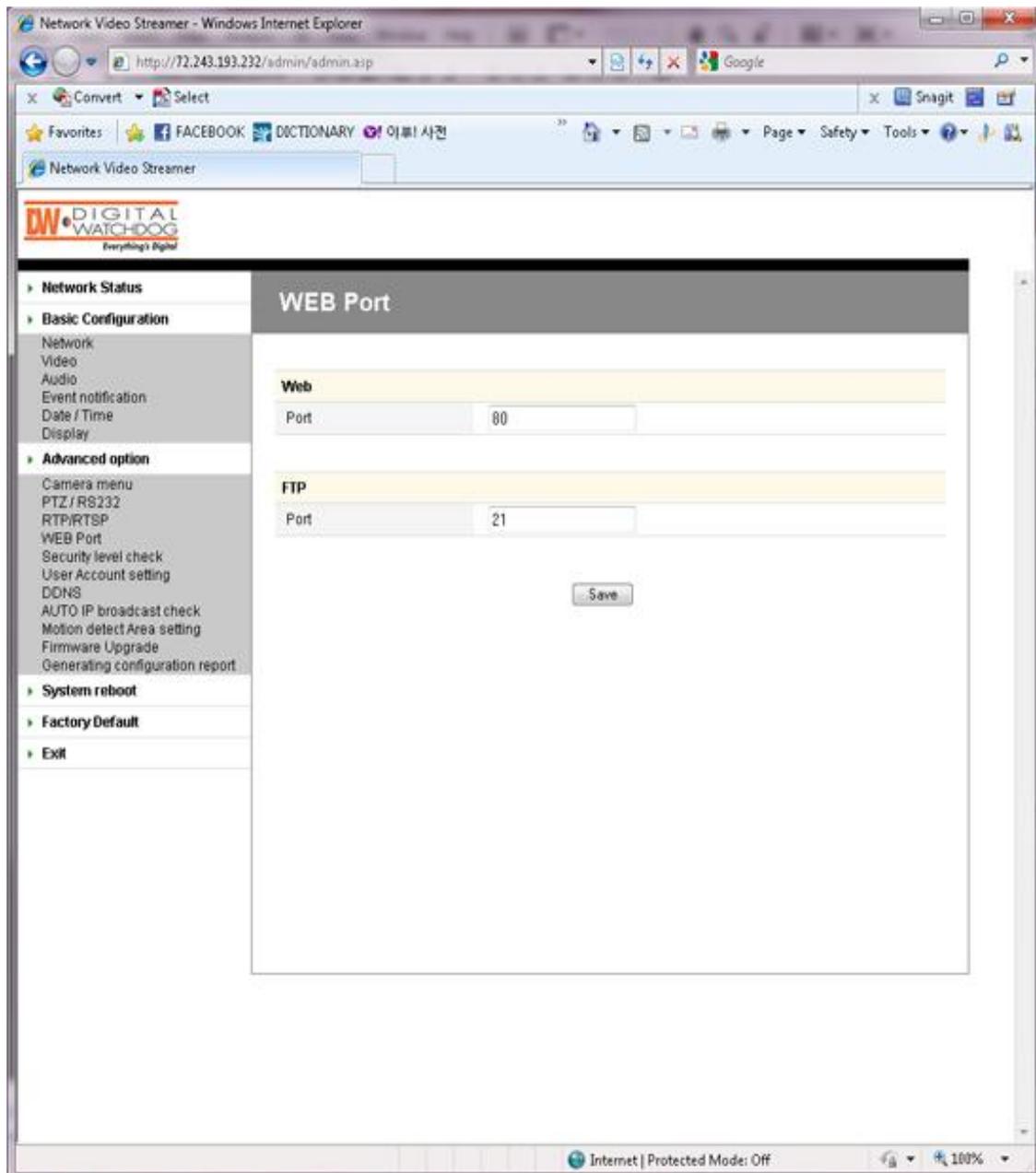
– Camera Protocol Type

– Camera ID

: The Rx address of the connected PTZ camera or receiver.

– Camera Baud Rate / Data Bits / Parity / Stop Bits

: Select the value properly by the receiver type.

RS232

– Baud Rate / Data Bits / Parity / Stop Bits

: Aelect the value properly by the receiver type.

• Advanced Option > WEB Port

Web

– Web Port: Default is 80

• Advanced Option > Security level check
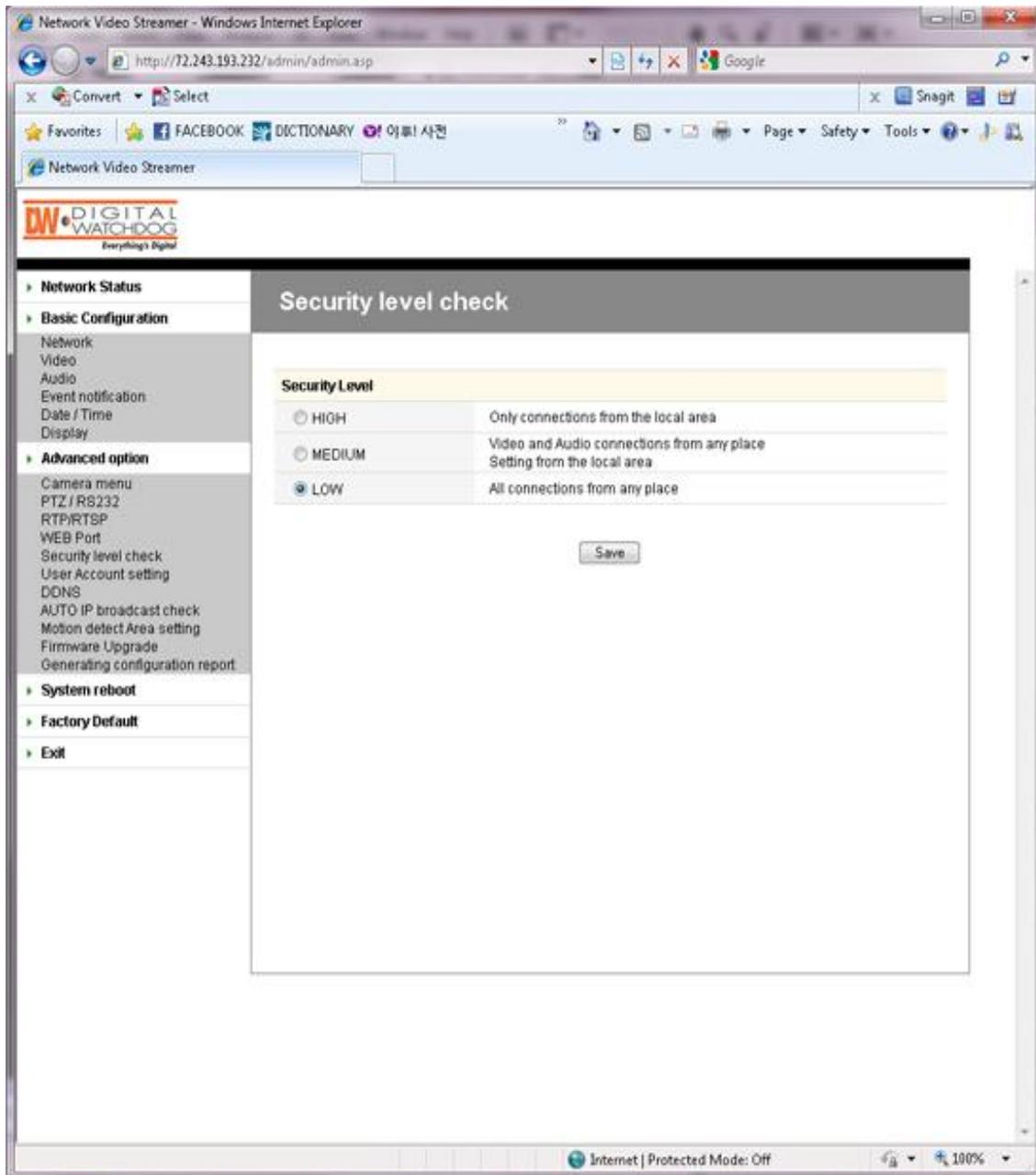
Security Level

– HIGH

: Only connections from the local area are permitted.

– MEDIUM

: Video and Audio connections from any place and setting from the local area

permitted.

– LOW

: All connections from any place permitted

• Advanced Option > User Account setting
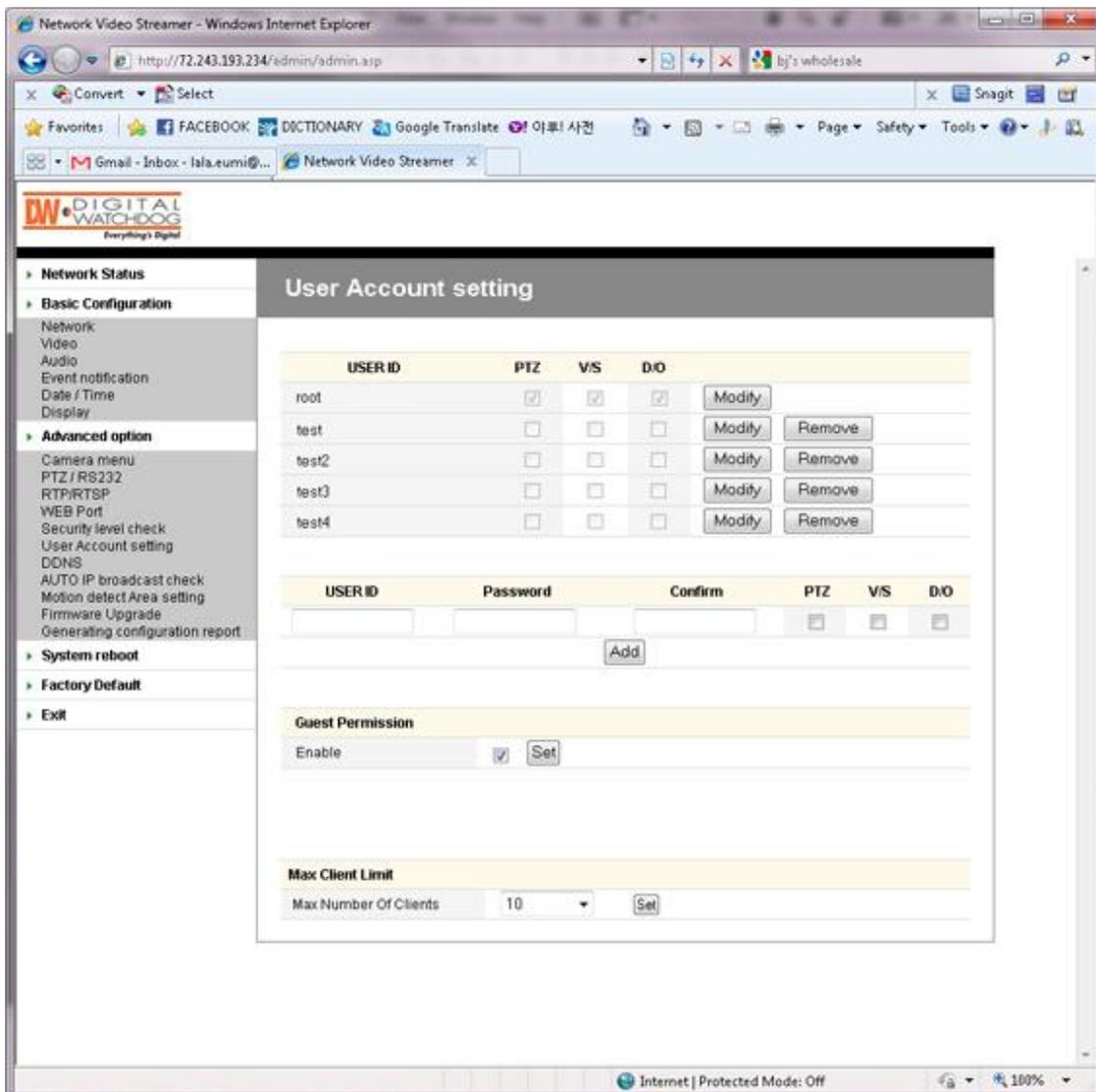
Account

– The password amendment of administrator account is available.

– The administrator can add up to 5 users and modify the properties.

Guest Permission

– This is to determine the guest permission for access to the iV3377WD/iV3377WTIR.

– At guest account, video and audio monitoring is permitted.

Max Client Limit

– The administrator can restrict the number of simultaneous access (1~20)

• Advanced Option > DDNS

– DDNS is the function that matches an IP address and a host name.

– If an iV3377WD/iV3377WTIR has the dynamic IP address, the host name by DDNS (Dynamic Domain Name Service) must be used instead of the IP address for the credibility of the network connection.

IPv4 DDNS

– **Check the "Enable" box** and select a service out of two.

– Both are required to register some items on each service site.
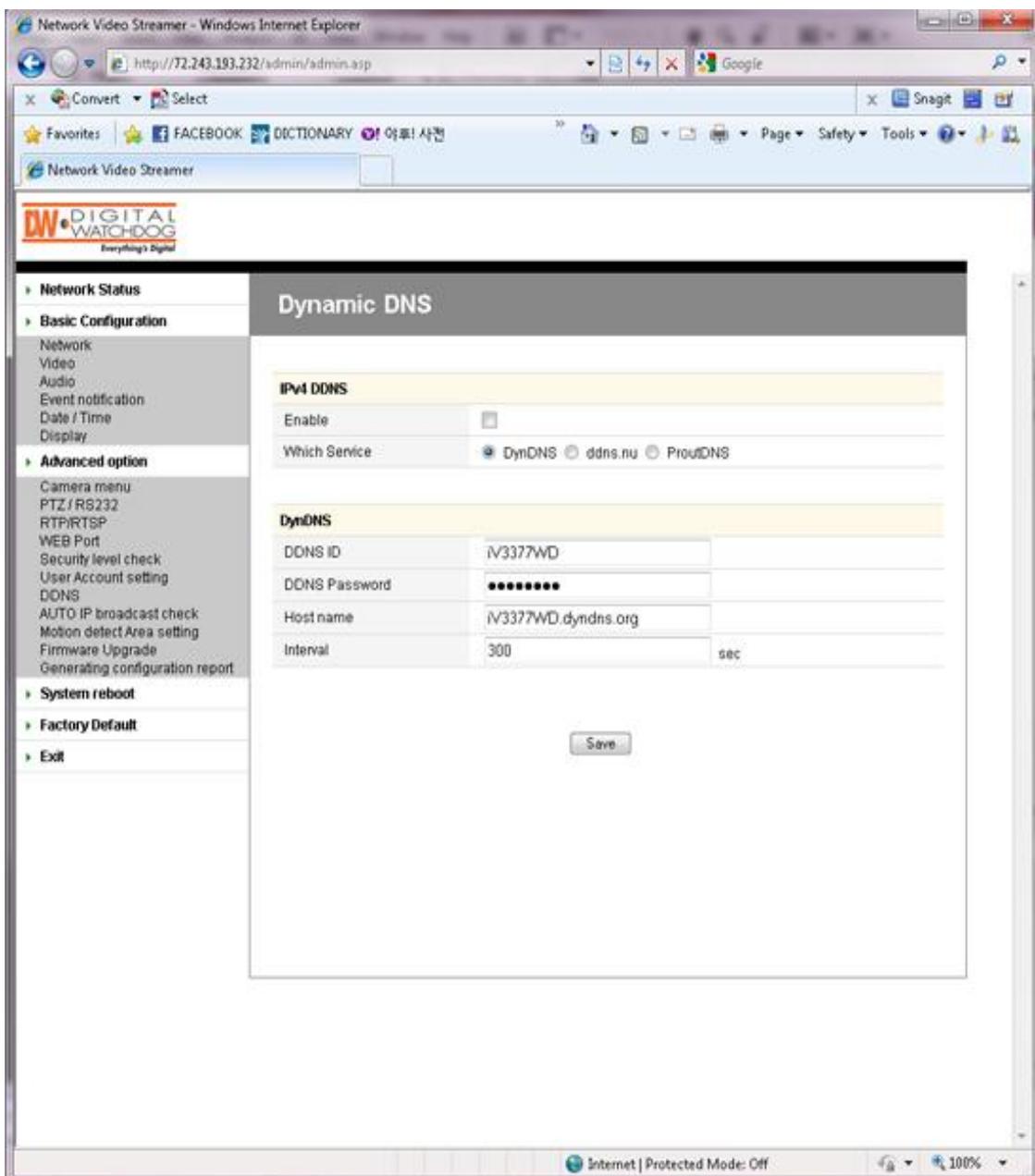
► Using "ddns.nu"

DynDNS

- For use of **"ddns.nu"**, register at www.dyndns.com.

- Type the registered DDNS ID, DDNS Password, Host Name, and Interval for updating and click [OK] button and reboot the iV3377WD/iV3377WTIR.
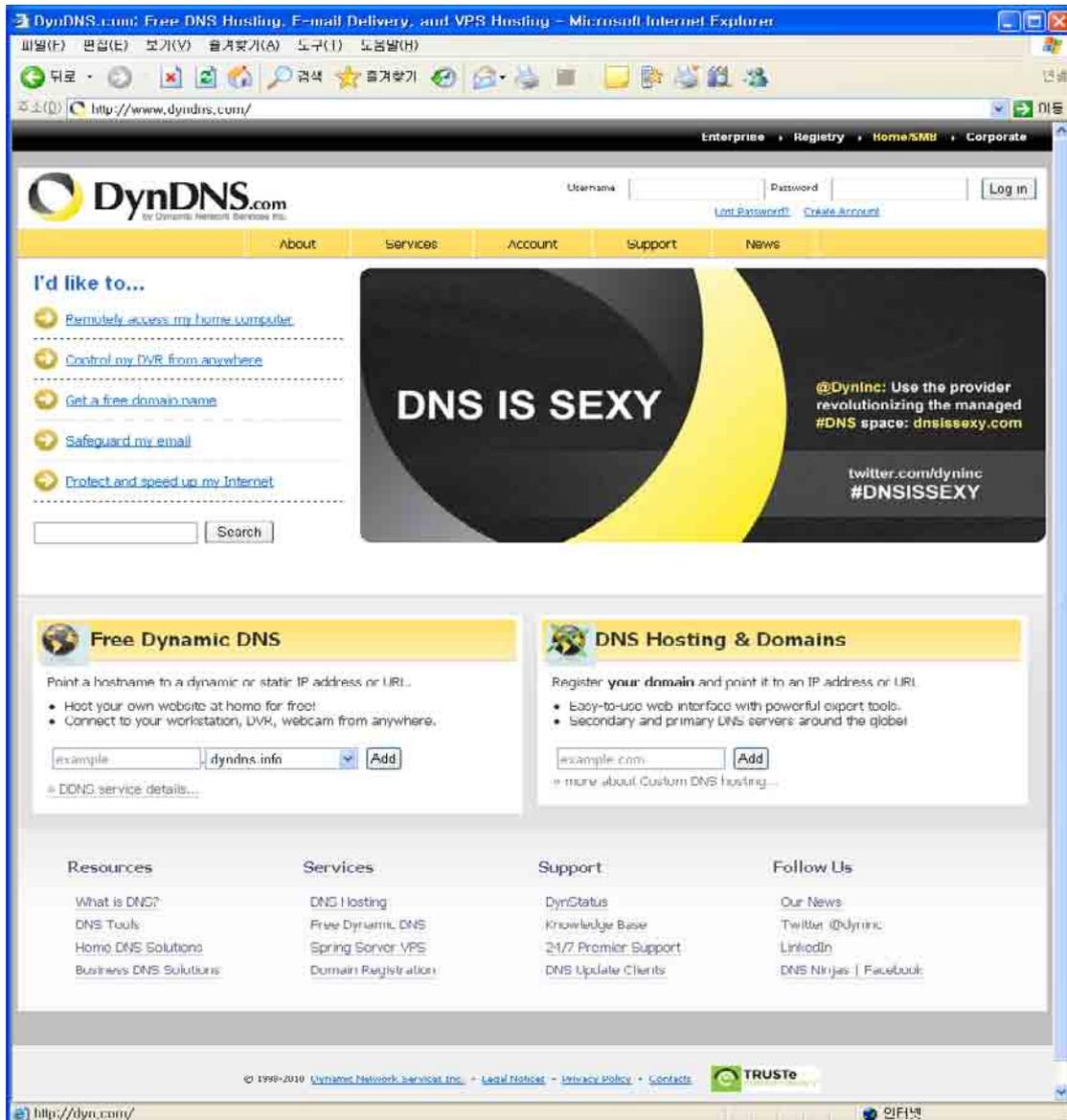
▶ Main page of "DynDNS"

ddns.nu

- For use of "ddns.nu", register at www.ddns.nu.
- Type the registered DDNS ID, DDNS Password, and DDNS Handle and click [OK] button. Reboot the iV3377WD/iV3377WTIR.
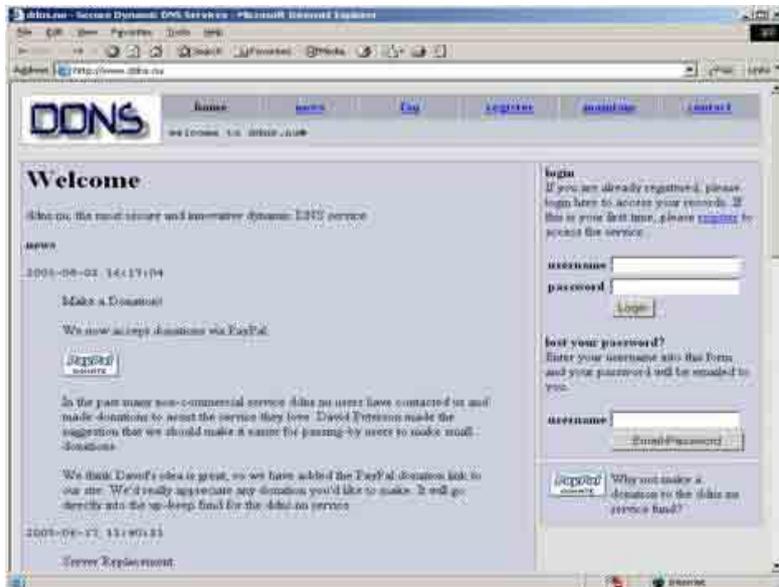
▶ Main page of "ddns.nu"

ProutDNS

- ProutDNS is a set of PHP scripts to create your own Dynamic DNS service.
- Type the DDNS server, the registered DDNS ID, DDNS Password, Host Name, and Interval for updating. Click [OK] button and reboot the iV3377WD/iV3377WTIR.
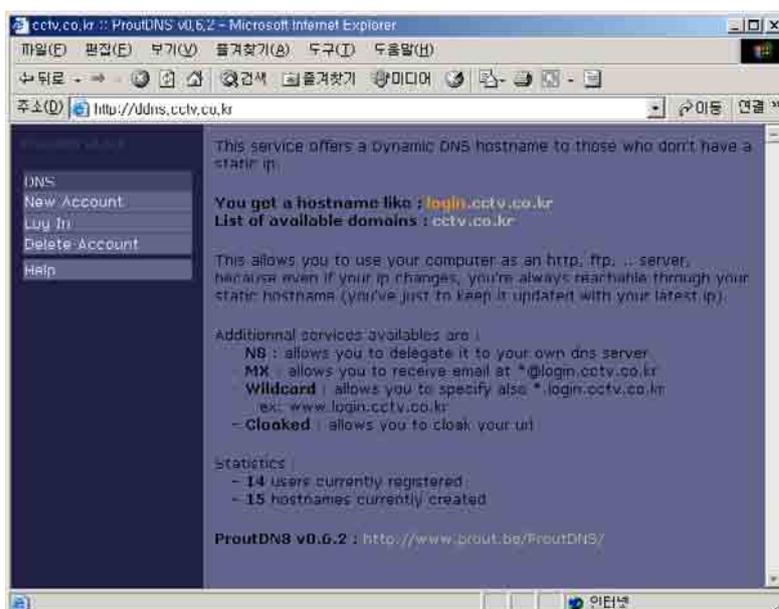
▶Main page of "ProutDNS"

※ For details, please refer to "DDNS setup" User's Guide.

• Advanced Option > AUTO IP Broadcast Check
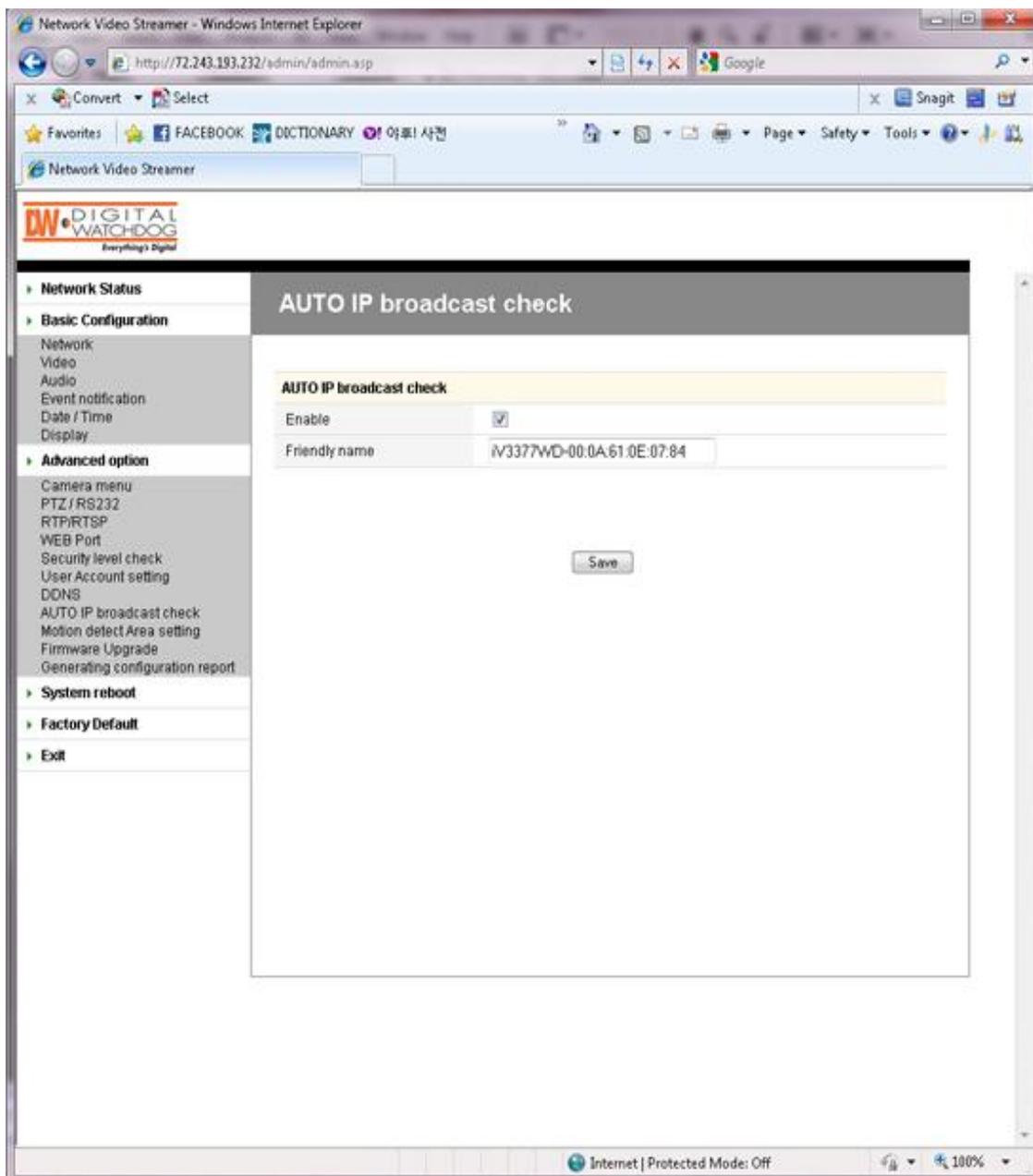
Auto IP broadcast check

– Enable: Check the box to use UPnP (Universal Plug and Play) of iV3377WD/iV3377WTIR.

– Friendly name: User can change the friendly name of iV3377WD/iV3377WTIR.

• **Advanced Option > Motion Detect Area Setting**
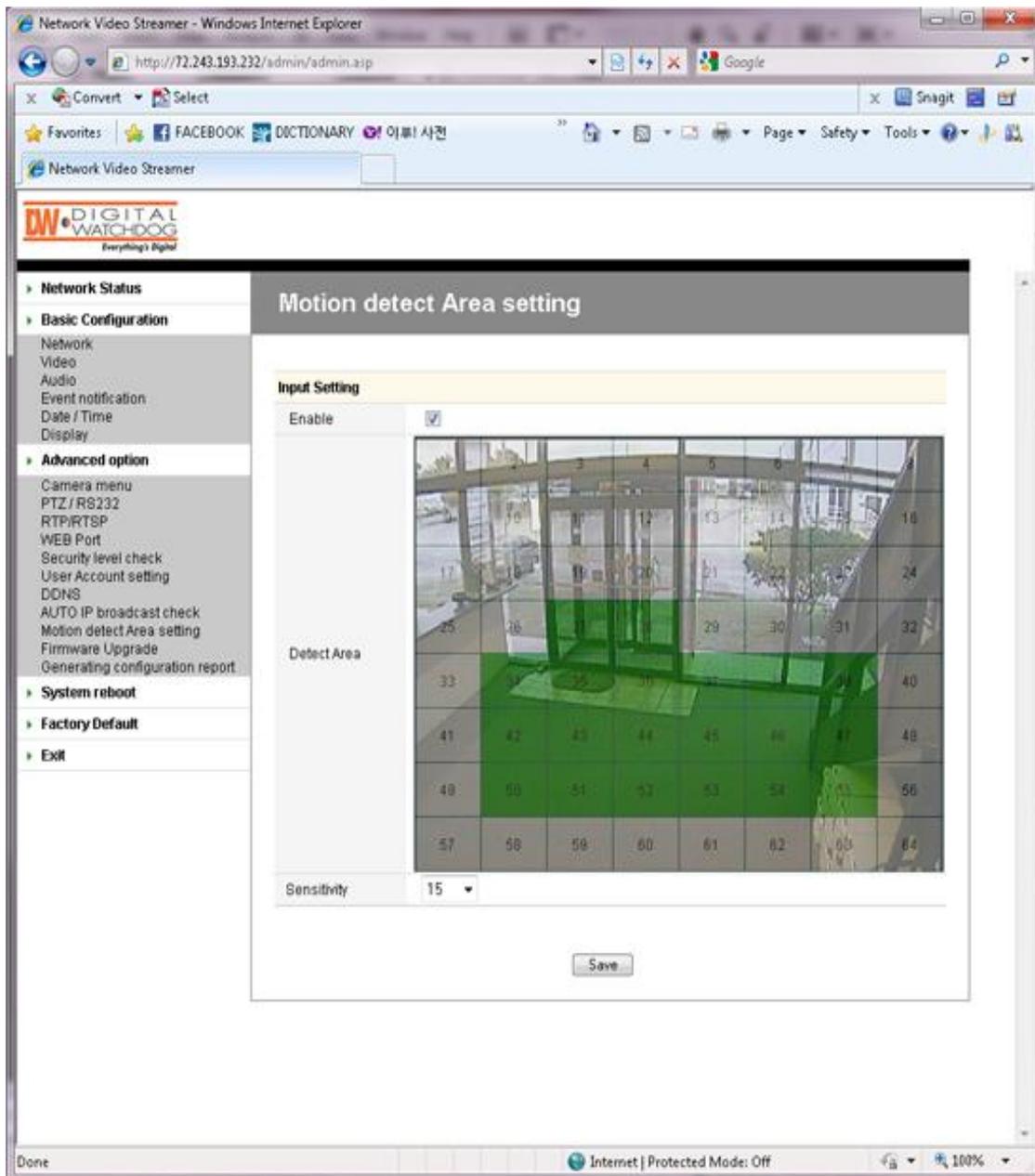
Input Setting

– Check "Enable" box for use of motion detection.

– Detect Area: If the detection area is selected, the selected area turns green.

(User can check preview image assuming JPEG Capture is enabled on the video setting page.)

– Sensitivity: 1~30 (Maximum sensitivity is "1".)

• **Advanced Option > Firmware Upgrade**
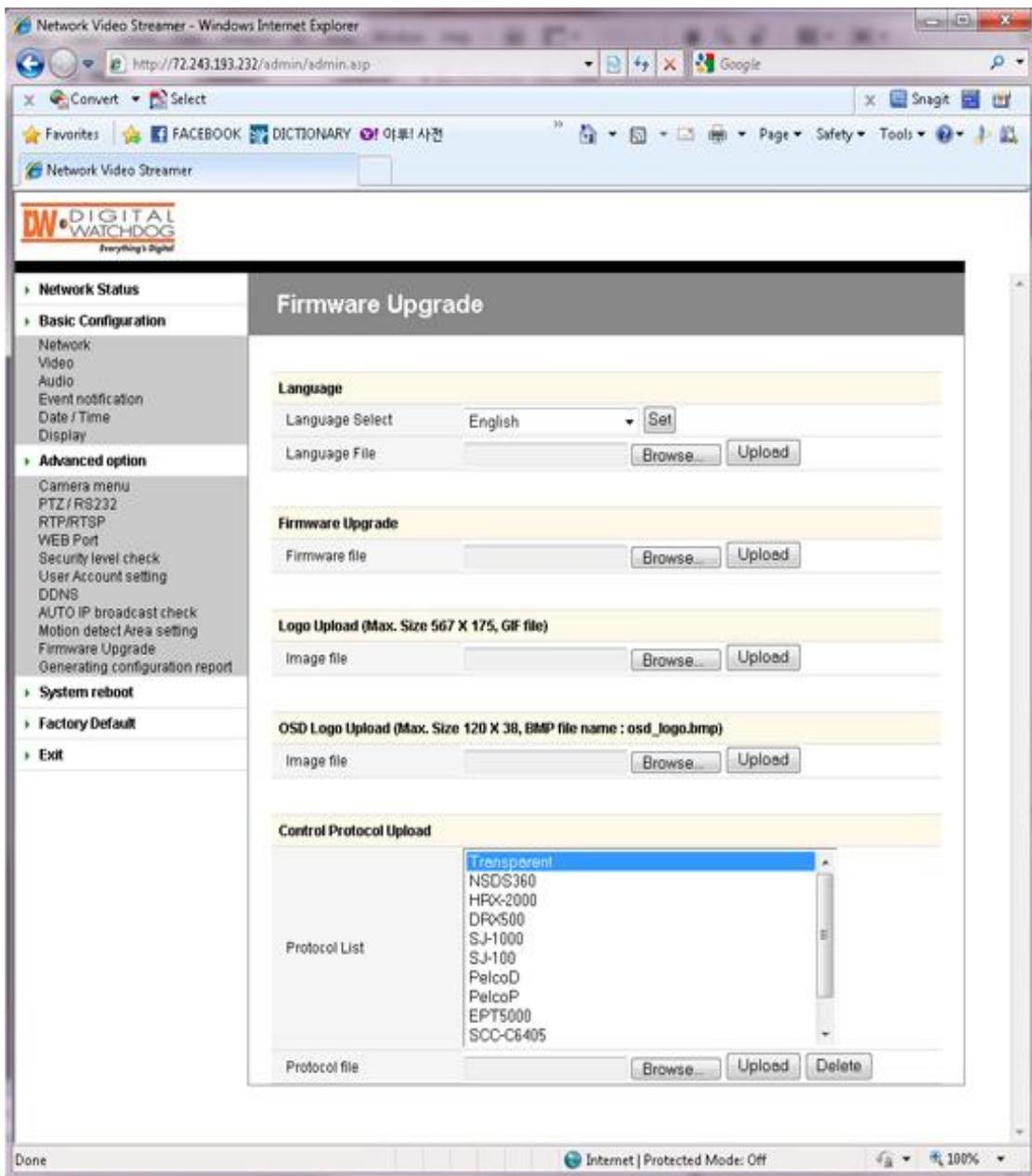
Language

– Language Select: Select a language file

(After that, it is required to refresh the web browser. Please push F5 button.)

– Language File: Add a language file

Firmware Upgrade

– Uploads the new firmware after clicking the browsing button and finding a new firmware.

Logo Upload

– Changes the logo image file.

– The process is **the same as "Firmware Upgrade."**

– Use GIF file (Maximum size: 567x175)

OSD Logo Upload

– Changes the logo image on OSD.

– The process is the **same as "Firmware Upgrade."**

– User has **to use file name by "osd_logo.bmp"**

– (Maximum size: 120x38)

Control Protocol Upload

– Add a camera control protocol.

– iV3377WD/iV3377WTIR does not support PTZ control function.

• Advanced Option > Generating configuration report
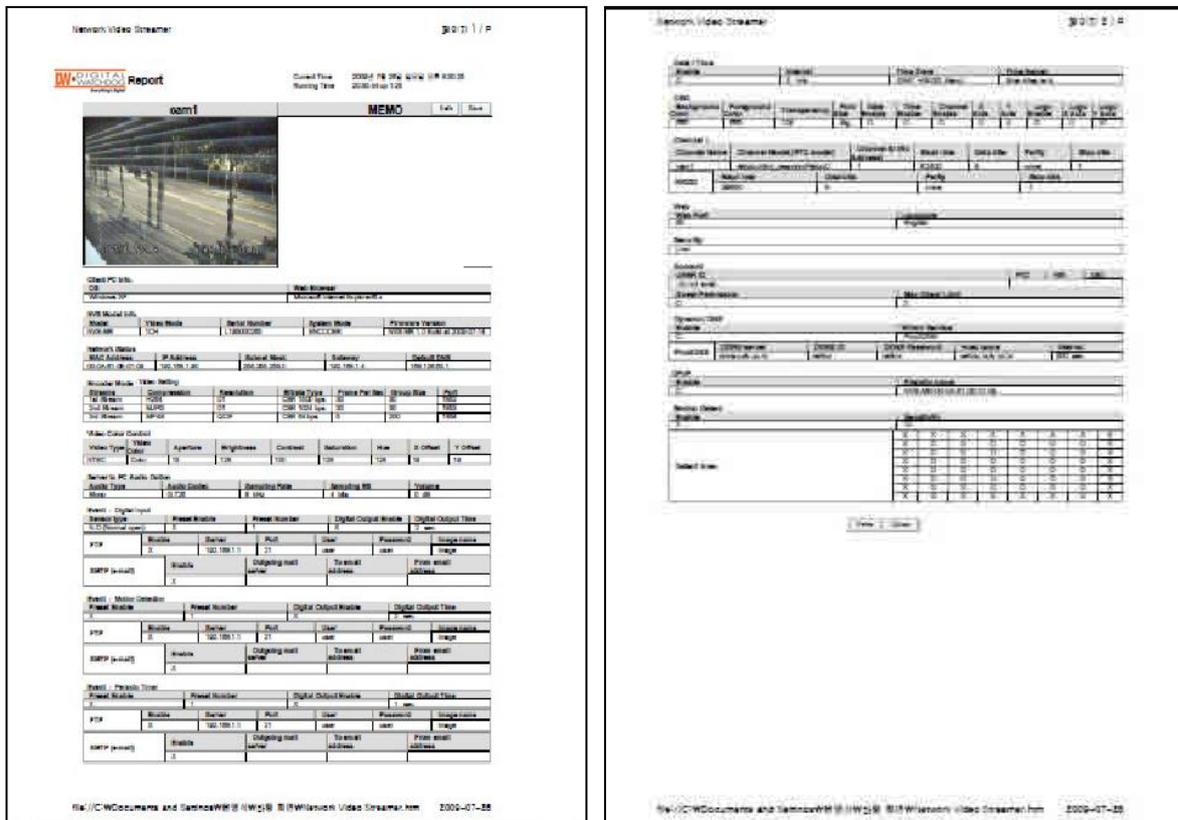
Report

- – User can check all of the settings for iV3377WD/iV3377WTIR.
- – User or installer can memo on the report page.
- – User or installer can print out the pages and use them for various usages

Reboot

- – To apply the changed settings, reboot iV3377WD/iV3377WTIR.

► Confirmation Dialog

Logout

- – Back to the initial connection page

CAMERA SPECIFICATION

Model		iV3377WD, iV3377WTIR Series
Camera Type	**Color/BW**	**Anti-Vandal 18IR-LED Day/Night Digital Dome Camera**
	Mount	Surface
Image	Device	Super HAD II CCD
	Size	**1/3"**
	Pixels-Total	811 (H) x 508 (V)
	Pixels-Effective	768 (H) x 494 (V)
Scanning	System	525 Line, 2:1 Interlace
	Horizontal Frequency	15,734 Hz
	Vertical Frequency	59.94 Hz
Min Scene Illumination	IR-LED On	0 Lux
Functions	BLC	ON / OFF
	MAX-DR	ON / OFF
	STARLIGHT	OFF ~ x256
	MIRROR	ON / OFF
	FREEZE	ON / OFF
	3D-DNR	ON / OFF
	D_ZOOM	x1.0 ~ x3.0
	SLC	ON / OFF
	HME	ON / OFF
	DIS	ON / OFF
	MOTION DETECTION	ON / OFF (Area / Sensitivity)
	PRIVACY ZONE	6 Programmable Zone / Size
Lens	Focal Length	3.3 ~ 12mm (3.6x Optical)
Resolution	Horizontal	540 TV Lines
Video Output	VBS 1.0Vp-p	VBS 1.0Vp-p (75 Load)
S/N Ratio	S/N Ratio	50dB
OSD	OSD MENU	Available
Environmental	Operating Temperature	-10oC ~ +55oC (14oF ~ 131oF)
Conditons	Humidity	Less than 90%
Power	Power Consumption	DC 12V: 4.4W / AC 24V: 4.4W
		DC 12V: 7.5W / AC 24V: 7.3W (LED ON)
Physical Specification	Dimensions	140.3 x 124.6mm
IP Rating	IP66	Certified

NETWORK SPECIFICATION

Model		iV3377WD, iV3377WTIR
Video Streaming	Compression Type	H.264 / MJPEG / MPEG-4
	Resolutions	D1 ~ QQVGA
	Bit Rate	32Kbps ~ 8Mbps
	Frame Rate	30/25fps (NTSC/PAL) in All Resolutions
	Streaming	H.264 Dual Stream or Simultaneous H.264 and MJPEG
Audio Streaming	Bi-Directional Audio	Two-Way, Full Duplex
	Audio Input Compression	G.711 / G.726
	Audio Line Input	1Ch (Line Level Input)
	Audio Output Compression	G.711 / G.726
	Audio Line Output	1Ch (Line Level Output)
External I/O	Sensor Input	1Ch (Dry Contact N.O/N.C)
	Alarm Output	1Ch (Relay Switching – Nominal Voltage 5VDC, 1A)
	Factory Default Button	Restore to Default Settings (Network, Passwords, etc)
	RS485	N/A
	OSD Menu	Camera Menu Settings
Network	Ethernet	Ethernet (10/1000 Based-T) RJ-45 Connector
	Protocol	TCP, IP, HTTP, DHCP, RTSP, PPPoE, FTP, DN, DDNS, NTP, ICMP, SMTPE, UPnP
Software	Web Browser	IE 5.5 or Above
	Security	MD5 Password / Iptables (Firewall)
Physical	Operation Temperature	-10oC ~ +55oC
	In Storage Temperature	-20oC ~ +75oC
	Operation Humidity	Under 90% (Non-Condensing)
	Case	Aluminum
	Weight	1000g (With IR LED)
Power	Power Requirement	DC 12V: 10~16[V] / AC24V: 20~28[V] / PoE
	Power Consumption	LED OFF: Max 4.4W (DC12V), Max 4.4W (AC24V)
		LED ON: Max 7.5W (DC12V), Max 7.3W (AC24V)

RECOMMENDED SPECIFICATION FOR EXTERNAL DEVICES

Item		Specification
Network		10/100 Base-T LAN (Dedicated IP Line, xDSL, Cable Modem)
Client PC	Processor	Pentium Dual Core or Above
	RAM	2GB or Above
	Graphic Card	512MB or Above
	OS	Windows 2003 / XP / Vista / Windows 7
	Monitor	1024 x 768 Pixels or Above

WARRANTY INFORMATION

Digital Watchdog (referred to as "the Warrantor") warrants the Digital Camera against defects in materials or workmanship as follows.

LABOR: For the initial five (5) years and one (1) year on IR LED from the date of original purchase, if the Digital Camera is determined to be defective, the Warrantor will repair or replace the unit with new or refurbished product at its option at no charge.

PARTS: In addition, the Warrantor will supply replacement parts for the initial five (5) Years and one (1) year on IR LED.

To obtain warranty or out of warranty service, please contact an RMA department Representative at 1-866-446-3595 option #5 Monday through Friday from 9:00 AM to 5:00 PM Eastern or visit our website at www.Digital-Watchdog.com.

A purchase receipt or other proof of the original purchase date is required before warranty service is rendered. This warranty only covers failures due to defects in materials and workmanship, which arise during normal use. This warranty does not cover damage which occurs in shipment or failures which are caused by products not supplied by the Warrantor or failures which result from accident, misuse, abuse, neglect, mishandling, misapplication, alteration, modification, faulty installation, set-up adjustments, improper antenna, inadequate signal pickup, maladjustment of consumer controls, improper operation, power line surge, improper voltage supply, lightning damage, and rental use of the product or service by anyone other than a Digital Camera authorized repair facility or damage that is attributable to acts of God.

LIMITS AND EXCLUSIONS

There are no express warranties except as listed above. The Warrantor will not be liable for incidental or consequential damages (including without limitation damage to recording media), resulting from the use of these products or arising out of any breach of the warranty.

All express and implied warranties, including the warranties of merchantability and fitness for particular purpose, are limited to the applicable warranty period set forth above.

Some states do not allow the exclusion or limitation of incidental or consequential damages, or limitations on how long an implied warranty last, so the above exclusions or limitations may not apply to you. This warranty gives you specific legal rights and you may have other rights that vary from state to state.

If the problem is not handled to your satisfaction, then write to the Address below.

Service calls which do not involve defective materials or workmanship as determined by the Warrantor, in its sole discretion, are not covered. Costs of such service calls are the responsibility of the purchaser.

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