

# MEGApix® 5 Megapixel Indoor/ Outdoor Bullet Camera DWC-MB45DiA



***User's Manual*** Ver. 04/17

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

# Safety Information



## CAUTION

RISK OF ELECTRIC SHOCK.  
DO NOT OPEN.



## CAUTION:

TO REDUCE THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE COVER (OR BACK) NO USER SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.



### Warning

This symbol indicates that dangerous voltage consisting a risk of electric shock is present within this unit.



### Precaution

This exclamation point symbol is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

## WARNING

To prevent damage which may result in fire or electric shock hazard, do not expose this appliance to rain or moisture.

## WARNING

1. Be sure to use only the standard adapter that is specified in the specification sheet. Using any other adapter could cause fire, electrical shock, or damage to the product
2. Incorrectly connecting the power supply or replacing battery may cause explosion, fire, electric shock, or damage to the product.
3. Do not connect multiple cameras to a single adapter. Exceeding the capacity may cause excessive heat generation or fire
4. Securely plug the power cord into the power receptacle. Insecure connection may cause fire
5. When installing the camera, fasten it securely and firmly. A falling camera may cause personal injury.
6. Do not place conductive objects (e.g. screw drivers, coins, metal items, etc.) or containers filled with water on top of the camera. Doing so may cause personal injury due to fire electric shock, or falling objects.
7. Do not install the unit in humid, dusty, or sooty locations. Doing so may cause fire or electric shock
8. If any unusual smells or smoke come from the unit, stop using the product. Immediately disconnect the power source and contact the service center. Continued use in such a condition may cause fire or electric shock
9. If this product fails to operate normally, contact the nearest service center. Never disassemble or modify this product in any way.
10. When cleaning, do not spray water directly onto parts of the product. Doing so may cause fire or electric shock

## Precaution

### Operating

- Before using, make sure power supply and all other parts are properly connected.
- While operating, if any abnormal condition or malfunction is observed, stop using the camera immediately and contact your dealer.

### Handling

- Do not disassemble or tamper with parts inside the camera.
- Do not drop the camera or subject it to shock or vibration as this can damage the camera.
- Clean the clear dome cover with extra care. Scratches and dust can ruin the quality of the camera image.

### Installation and Storage

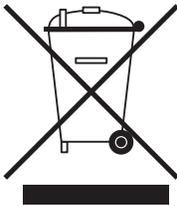
- Do not install the camera in areas of extreme temperature, exceeding the allowed range.
- Avoid installing in humid or dusty environments.
- Avoid installing in places where radiation is present.
- Avoid installing in places where there are strong magnetic fields and electric signals.
- Avoid installing in places where the camera would be subject to strong vibrations.
- Never expose the camera to rain or water.

# Important Safety Instructions

1. **Read these instructions.** - All safety and operating instructions should be read before installation or operation.
2. **Keep these instructions.** - The safety, operating and use instructions should be retained for future reference.
3. **Heed all warnings.** - All warnings on the product and in the operating instructions should be adhered to.
4. **Follow all instructions.** - All operating and use instructions should be followed.
5. **Do not use this device near water.** - For example: near a bath tub, wash bowl, kitchen sink, laundry tub, in a wet basement; near a swimming pool; etc.
6. **Clean only with dry cloth.** - Unplug this product from the wall outlet before cleaning. Do not use liquid cleaners.
7. **Do not block any ventilation openings. Install in accordance with the manufacturer's instructions.** - Slots and openings in the cabinet are provided for ventilation, to ensure reliable operation of the product, and to protect it from over-heating. The openings should never be blocked by placing the product on bed, sofa, rug or other similar surfaces. This product should not be placed in a built-in installation such as a bookcase or rack unless proper ventilation is provided and the manufacturer's instructions have been adhere to.
8. **Do not install near any heat sources such as radiators, heat registers, or other apparatus (including amplifiers) that produce heat.**
9. **Do not defeat the safety purpose of the polarized or grounding-type plug.** A polarized plug has two blades with one wider than the other. A grounding type plug has two blades and a third grounding prong. The wide blade or the third prong are provided for your safety. If the provided plug does not fit into your outlet, consult an electrician for replacement.
10. **Protect the power cord from being walked on or pinched particularly at plugs, convenience receptacles, and the point where they exit from the apparatus.**
11. **Only use attachments/accessories specified by the manufacturer.**
12. **Use only with cart, stand, tripod, bracket, or table specified by the manufacturer, or sold with the apparatus. When a cart is used, use caution when moving the cart/apparatus combination to avoid injury from tip-over.**
13. **Unplug the apparatus during lightning storms or when unused for long periods of time.**
14. **Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as power supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.**



## Disposal of Old Appliances



1. When this crossed-out wheel bin symbol is attached to a product it means the product is covered by the European Directive 2002/96/EC.
2. All electrical and electronic products should be disposed of separately from the municipal waste stream in accordance to laws designated by the government or the local authorities.
3. The correct disposal of your old appliance will help prevent potential negative consequences for the environment and human health.
4. For more detailed information about disposal of your old appliance, please contact your city office, waste disposal service or the shop where you purchased the product.



This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC Rules.

These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment.

This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

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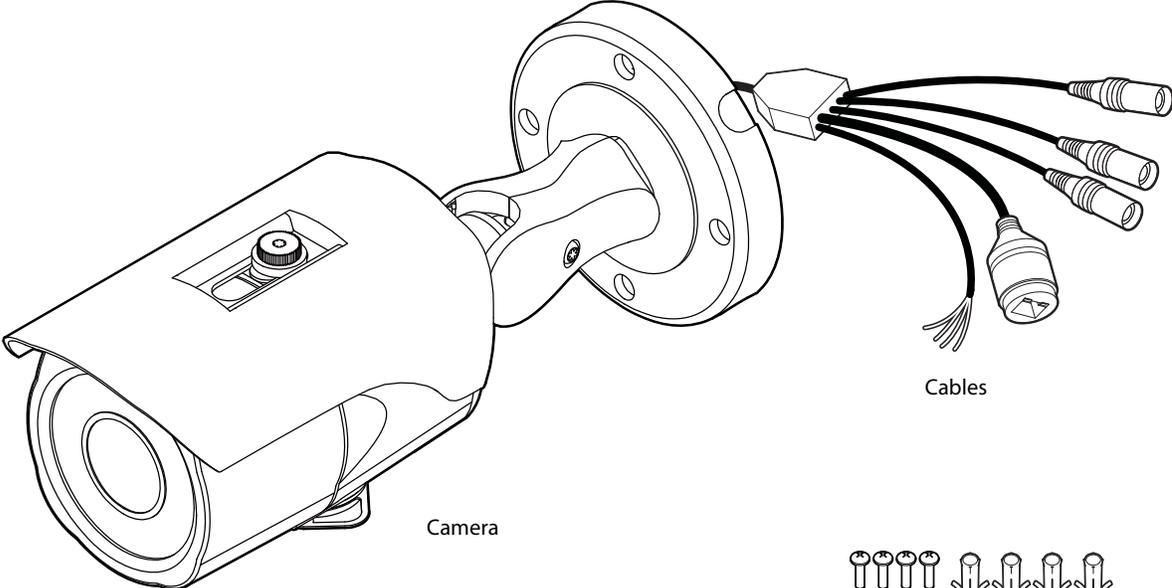
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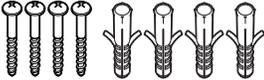
# Introduction - Product & Accessories

※ Please check if all the camera and accessories are included in the package.



Camera

Cables



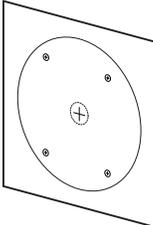
Screw & Plastic Anchor-4pcs



Torx Wrench



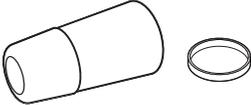
Test Monitor Cable



Template Sheet



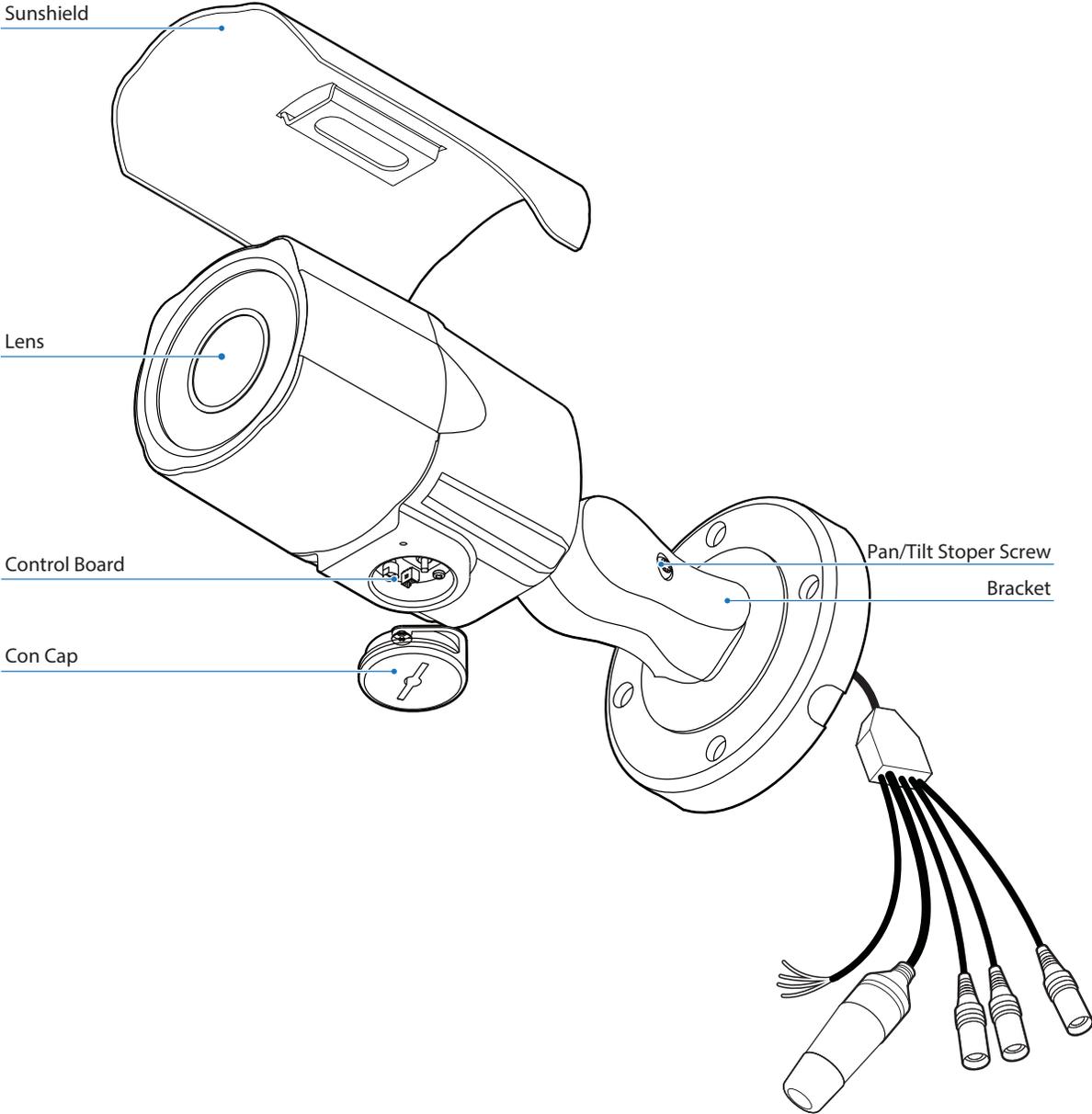
Quick Manual



Waterproof cap & Gasket

# Introduction - Part Name

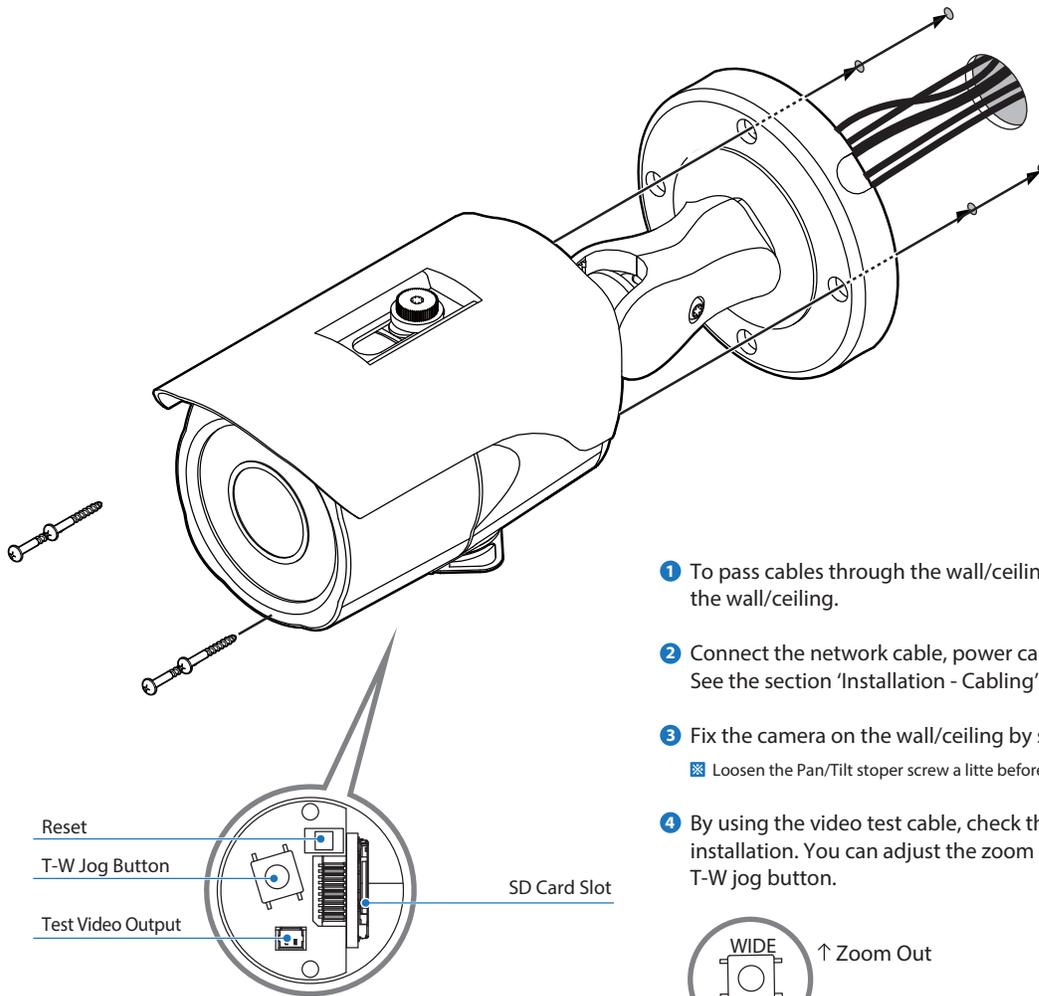
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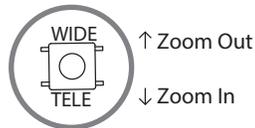
# Installation - Installation

Before installing your camera, you have to read the following cautions.

1. You have to check whether the location can bear five times of the weight of your camera.
2. Don't let the cable to be caught in improper place or the electric line cover to be damaged. Otherwise it may cause a breakdown or fire.
3. When installing your camera, don't allow any person to approach the installation site. If you have any valuable things under the place, move them away.



- 1 To pass cables through the wall/ceiling, drill holes on the wall/ceiling.
- 2 Connect the network cable, power cable respectively. See the section 'Installation - Cabling' for details.
- 3 Fix the camera on the wall/ceiling by screw provided.
  - ⊠ Loosen the Pan/Tilt stopper screw a little before fixing the camera.
- 4 By using the video test cable, check the screen during installation. You can adjust the zoom ratio using the T-W jog button.



⊠ **Reset to the Factory Default**

Press the reset button for 5 seconds to return the setup to the factory default.

⊠ **Warning**

If you press the 'Reset' button, you will lose all setting data. If needed, please, make a note for further installation.

# Installation - Cabling

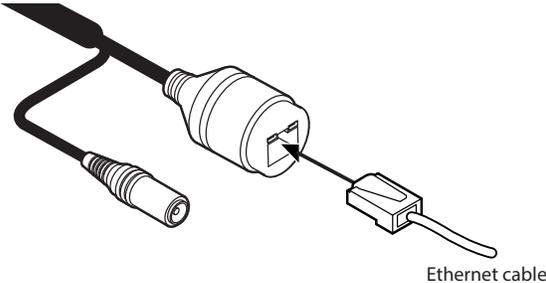
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### Two Options

Use a PoE-enabled switch to connect data and power through a single cable and begin viewing and recording images instantly. A non-PoE switch will require an adaptor for power transmission.

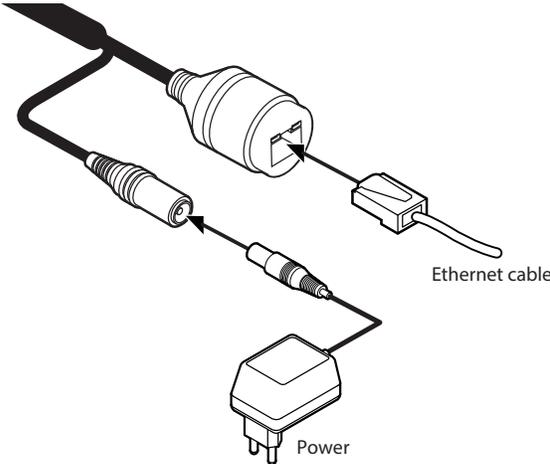
#### 1. Using a PoE-Enabled Switch

The Camera is PoE-compliant, allowing transmission of power and data via a single Ethernet cable. PoE eliminates the need for the different cables used to power, record, or control the camera. Follow the illustration below to connect the camera to a PoE-enabled switch using an Ethernet cable.

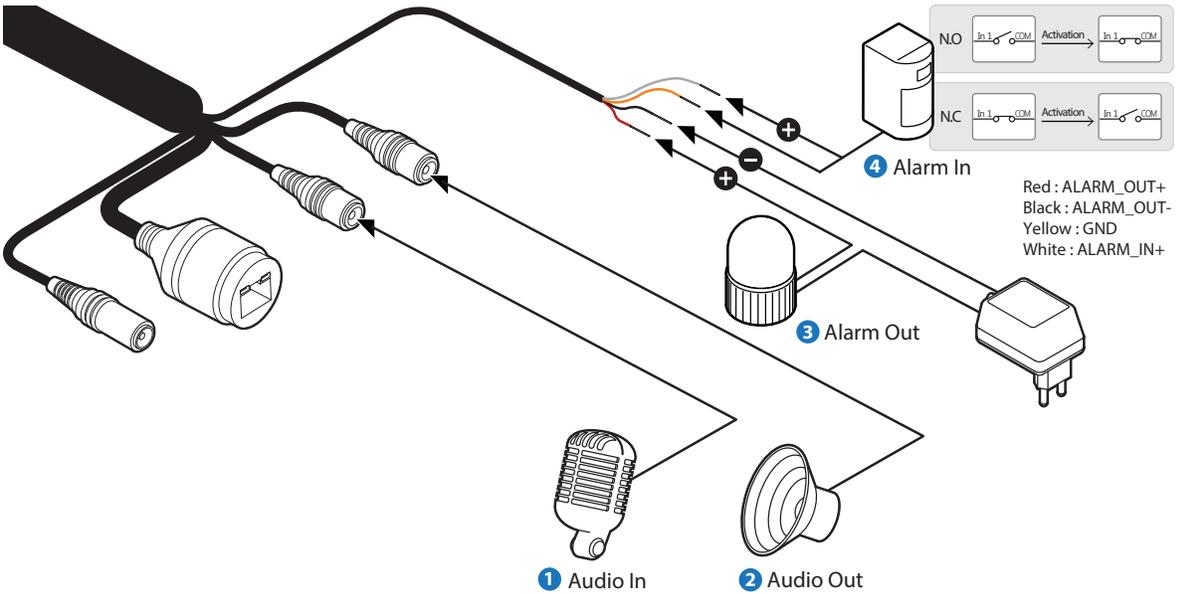


#### 2. Using a Non-PoE Switch

If a PoE-enabled switch is not used, use a power adaptor for power transmission and non-PoE switch for data transmission. Follow the illustrations below to connect the camera without a PoE-enabled Switch.



# Installation - Cabling



## 1 Audio In

Cable of the sensor/alarm input device should connect to alarm in+ and alarm in- of the cable slot.

## 2 Audio Out

It connects to the alarm lights, siren or lamps and the sensor types are normal open and normal close. Cable of the alarm output device should connect to alarm out+ and alarm out- of the cable slot.

⊠ If the speaker without the amplifier is connected to Audio Out port, it doesn't work properly. Therefore, the speaker with the amplifier or the separate amplifier is needed.

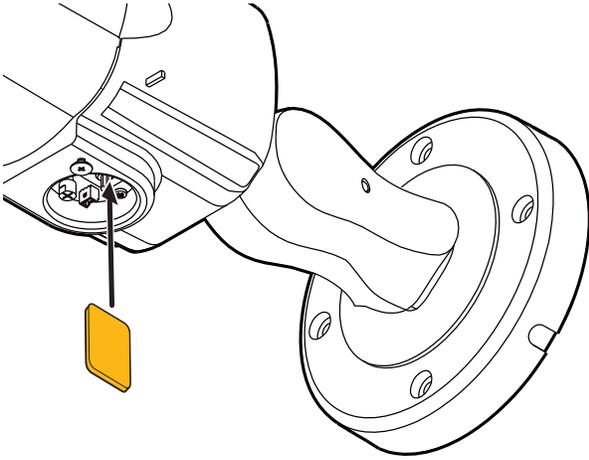
## 3 Alarm Out

It connects to the alarm lights, siren or lamps and the sensor types are normal open and normal close. Alarm & light bar + need to be connected with power + or adaptor +. Alarm out+ need to be connected with Alarm - or light bar -. Alarm out- need to be connected with power - or adaptor -.

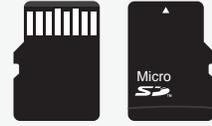
## 4 Alarm In

Cable of the sensor/alarm input device should connect to white and yellow line of the Alarm cable.

# Installation - Inserting/Removing SD Memory Card



The memory card is an external data storage device that has been developed to offer an entirely new way to record and share video, audio, and text data using digital devices.



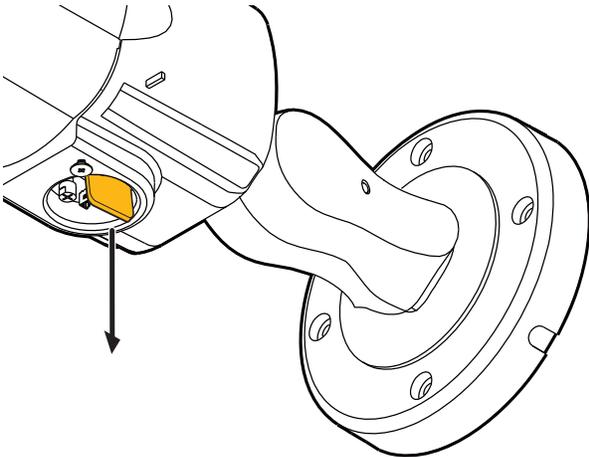
※ **Recommended SD Card Specification (Not Included)**

- Type: Micro SD (SD/SDHC/SDXC)
- Manufacturer: Transcend, Kingston, Toshiba, SanDisk
- Capacity: 4GB~128GB
- Class: over UHS-I U3 Class 10

**1 Inserting an SD Memory Card**

Insert the SD card in the arrow direction.

- ※ Don't insert the SD memory card while it's upside down by force. Otherwise, it may damage the SD memory card.
- ※ Use the tweezers when inserting or picking out the SD card.

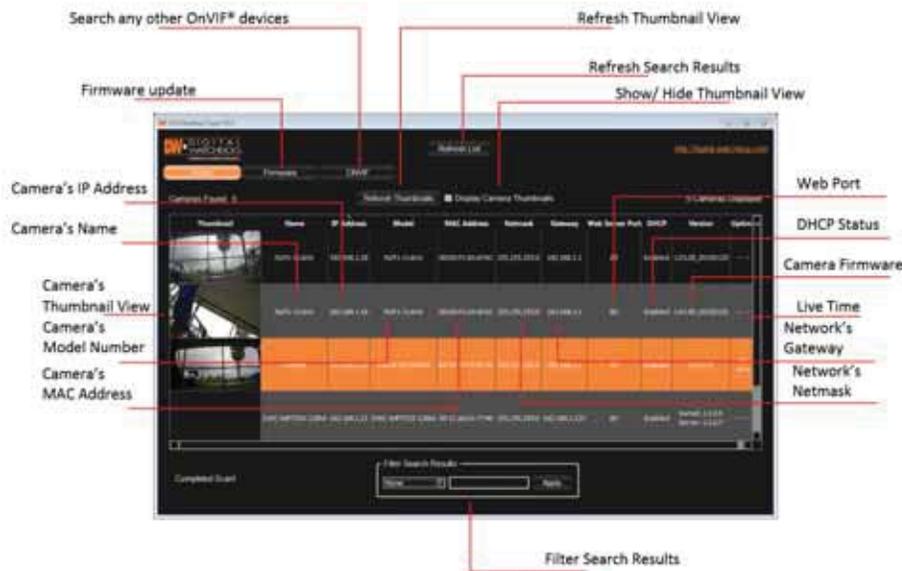


**2 Removing an SD Memory Card**

Removing an SD Memory Card Gently press down on the exposed end of the memory card as shown in the diagram to eject the memory card from the slot.

- ※ Pressing too hard on the SD memory card can cause the card to shoot out uncontrollably from the slot when released.
- ※ If you have saved data in the SD memory card, removing the SD memory card prior to setting record to OFF will cause damage to the data stored in the card.

# Network Setup - DW IP Finder™

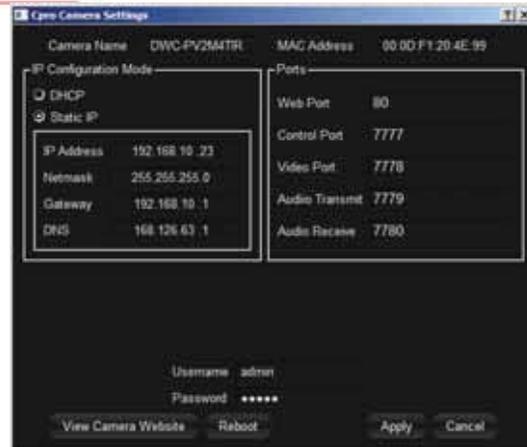


- 1 Go to: <http://www.digital-watchdog.com> and search for 'IP Finder' on the quick search bar at the top of the page.
- 2 The latest IP Finder software will appear in the search results. Click on the link to download the file to your computer.
- 3 The software will scan your network for all supported cameras and display the results in the table. Allow up to 5 seconds for the IP Installer to find the camera on the network.
- 4 you can press the 'Refresh List' to search the network again, or filter the search results by entering a value in the filter box at the bottom of the page.
- 5 Check the box next to 'Display Camera Thumbnail' to view a JPEG image of the camera's view next to the camera name on supported models.

- 1 Select DHCP if the internet service is dynamic IP. This will allow the camera to receive its IP address from the DHCP server.
- 1 Select STATIC to manually enter the camera's IP address, subnet mask, Gateway and DNS information.
- 1 Contact your network administrator for more information.

6 The camera's default network information is:

- 1 Default TCP/IP information
  - IP: 192.168.1.80
  - Subnet Mask: 255.255.255.0
  - Gateway: 192.168.1.1
  - DNS : 168.126.63.1



7 To view the camera's web client, click on 'View Camera Website'.

1 A 'Port Forwarding' has to be set in your network's router for external access to the camera.

8 To save the changes made to the camera's settings, input ID and PW of the camera for authentication.

9 If the camera needs to be rebooted after the settings were changed, press the 'Reboot' button. The camera will power cycle and will appear back in the search results once the reboot is complete.

1 Default ID / PW : admin / admin

10 Click 'Save' to save changed values.

11 To update the camera's firmware from the DW IP Finder™, click on the firmware tab, upload the firmware file and select the cameras to update. You can update multiple cameras at the same time.

# Network Setup - Quick Start of Network Connection

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## Please follow the steps below to complete the initial setup of the network function.

- i** Please do not power on the IP Camera until instructed.
- i** Temporarily disable any proxy servers configured in internet Explorer.
- i** If connecting the IP Camera directly to a modem, power down and reset the modem. Leave the modem powered down until configurations are finalized with the IP Camera and the IP Camera has been correctly connected to the modem.

1. Connect the IP Camera and PC to the configured network.
2. Open the IP Installer on a PC, then search for the IP camera.

- i** If you have a DHCP server, it will automatically set the Camera IP.
- i** If you do not have a DHCP server, Camera IP is set to 192.168.1.80 after one minute. In this case, PC IP must be changed to the IP to be able to access the 192.168.1.80.

3. If multiple numbers of camera are connected it should be distinguished by the mac address of the Camera.
4. Click the Camera IP, and connect to the WEB PAGE.
5. Default ID/Password to access IP Camera are both the word: admin.
6. Familiarize yourself with the Viewer Interface Screen.
7. please install VLC to display live video.
8. The IP setting can be set to 'STATIC' at IP Installer or web viewer followed by Setup -> Network -> Network Settings.
9. If the IP Camera is connected to a network which utilizes a router, you must have Port Forwarding configured on your personal router to forward all ports to the IP address you have assigned the IP Camera.
10. After configuring Port Forwarding on your router (if necessary), you may access your IP Camera on your local network by opening Internet Explorer and specifying the IP address and Web Port that you have assigned to the IP Camera.

- i** Example: <http://192.168.0.200:8888>
- i** If you leave your Web Port set to 80, you don't need to specify the port in the Address Bar to access to your IP Camera.

## 11. Access your IP Camera via the Internet :

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### *If you use a static IP address assigned by your ISP*

- 1) Open Internet Explorer.
  - 2) Type the IP of the IP Camera.
  - 3) If you use a router, type the routers' static IP and the web port number of the IP Camera.
- 

### *If you have a dynamic address provided by your ISP*

- 1) Open Internet Explorer and visit the DDNS website.
  - 2) Register the IP Camera.
  - 3) Reboot the IP Camera.
  - 4) Give the DDNS server 10 minutes to locate your IP Camera's IP information.
  - 5) Click the refresh button in the Internet Explore.
  - 6) After your camera is connected, select your camera.
-

# Network Setup - DDNS Registration

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If you have DYNAMIC IP service from your Internet Service Provider (ISP), you can't tell the current IP address of the IP Camera. To solve this problem, you have to register to our DDNS service.

At first, you have to check if you are using dynamic addressing. If so, register your IP Video Server on our DDNS website before you configure, setup, or install the IP Camera.

Even though your IP is not dynamic, you will get benefit if you register to DDNS. In this case, just remember 'hostname.dyndns.com/gate1' instead of complicated series of numbers like `http://201.23.4.76:8078`.

For more details, contact our Support Center.

✘ To use a public DDNS called 'dyndns' or 'no-ip', refer to the detail information on how to use the service.  
(Visit the web site : <http://www.dyndns.com> or <http://www.no-ip.com>)

# Network Setup - Guide to Network Environment

**Please configure the IP Camera at the installation site. You must determine your network scenario in order to configure the IP Camera with the proper TCP/IP settings. This tutorial will guide you through the process. Before actually configuring the IP Camera, determine settings to be applied. Record those settings to be used to configure your IP Camera for reference.**

**When configuring your IP Camera, treat the IP Camera as another PC on your network. You will assign it several addresses and other TCP/IP properties to match your current network.**

**This step-by-step tutorial will teach what IP addresses and network configurations should be assigned based on the network scenario.**

5. The following descriptions are several basic network scenarios. Determine which scenario describes your network. If your network does not match one of the scenarios below and you are unsure how to setup your IP Camera, contact your network administrator and then call our Support Center.

**i** You cannot control the rectangular gray areas and only the ISP has access to the devices.

1. Before you begin, locate any information and settings received from your Internet Service Provider (ISP). You may need to refer to these IP addresses at a later time during the configuration.

Current TCP/IP Settings	
IP Address	
Subnet Mask	
Default Gateway	
Primary DNS Server	
Secondary DNS Server (Option)	

Static     Dynamic

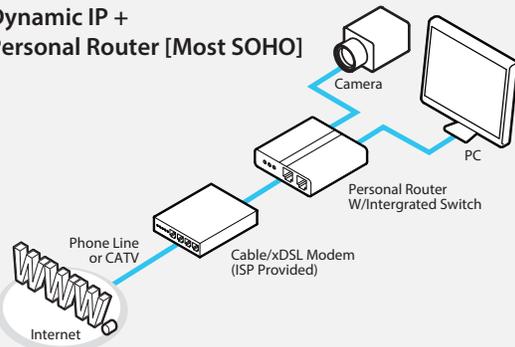
**i** If you were not given any IP addresses or the ISP was responsible for the setup and installation of your Internet connection, go to step 2.

**i** If you are not using a router on your network, your 'Current TCP/IP Settings' (from the previous section) and 'Assigned IP Addresses from My ISP' will be exactly the same.

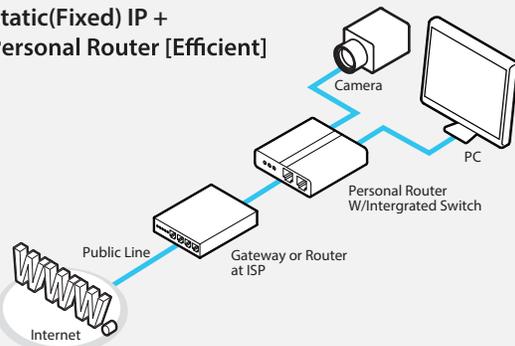
2. You must determine whether the IP address is STATIC or DYNAMIC. At this moment, you are only concerned about the ISP. Did they provide you with a STATIC or DYNAMIC address? If you are unsure, contact your ISP.
3. Configure your IP Camera's TCP/IP settings for network connectivity by selecting Setup from the main interface and selecting TCP/IP located on the left of the Setup screen.
4. If prompted for ID and Password, use 'admin' for both entries.  
  
The default web port number is 80. If port 80 is blocked by the ISP, a value between 1025 ~ 60000 should be used. If TCP port 80 is blocked, consult the ISP

# Network Setup - Setup Case A, B

## Case A: Dynamic IP + Personal Router [Most SOHO]



## Case B: Static(Fixed) IP + Personal Router [Efficient]



## Configure your IP Camera's TCP/IP properties as follows :

**1. Network Type :** STATIC (even though you have Dynamic IP from your ISP, use STATIC on the IP Camera)

**2. Internet Address :** A private IP address such as 192.168.0.200 (Example)

**i** You need to assign an IP address to the IP Camera just as you do with PC.

**i** The IP address you assign must be unique to your network and match your network as well. For information on how to choose a unique IP and match your network, read the FAQ.

**i** The IP address you assign must be a private IP. For information on how to choose a private IP please, read the FAQ.

**3. Subnet Mask :** 255.255.255.0 (Example)

**i** You must use the same subnet mask as the one you noted under 'Current TCP/IP Settings'.

**4. Default Gateway :** 192.168.0.1 (Example)

**i** This IP address must be the IP address of your router. (private or LAN side)

**i** Use the same Default Gateway you noted under 'Current TCP/IP Settings'.

**5. Preferred DNS Server :** Use the 1st DNS Server from 'Assigned IP Address from My ISP'.

**i** If you did not receive any IP addresses from your ISP, contact the ISP and acquire the IP address of their DNS server.

**6. DDNS Server :** Use the DDNS server.

**i** This is the same site you will register later to accommodate dynamic IP from your ISP.

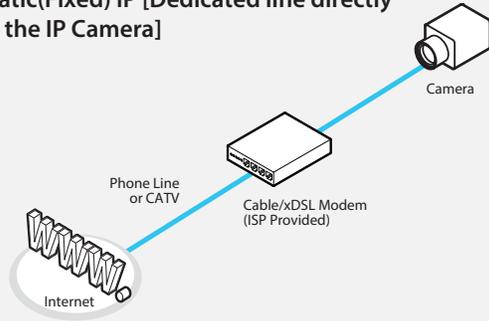
**7. Web Port :** 8888

**i** Do not use the default port 80 as this number must be changed.

**i** You may select any number between 1025 ~ 60000.

# Network Setup - Setup Case C, D

## Case C: Static(Fixed) IP [Dedicated line directly to the IP Camera]



### Configure your IP Camera's TCP/IP properties as follows :

1. **Network Type** : STATIC
2. **Internet Address** : A static IP address received from your ISP such as 24.107.88.125 (Example)

**i** You need to assign an IP address to the IP Camera just as you do with PC.

3. **Subnet Mask** : Subnet mask assigned from your ISP such as 255.255.255.240 (Example)
4. **Default Gateway** : 24.107.88.113 (Example)

**i** Use the assigned default gateway from your ISP

5. **Preferred DNS Server** : Use the 1st DNS Server from 'Assigned IP Address from My ISP'

**i** If you have not received any IP addresses from your ISP, contact them to acquire the IP address of their DNS server.

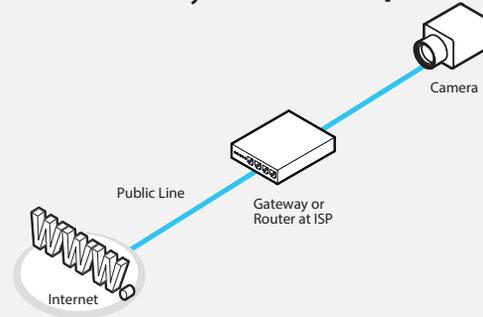
6. **DDNS Server** : Use the DDNS server

**i** This is the same site you will register later to utilize our DDNS service.

7. **Web Port** : 80

**i** You may select any number between 1025 ~ 60000.

## Case D: Dynamic IP + DSL/Cable Modem [Connected directly to the IP Camera]



**i** To connect the IP Camera directly to a modem, power down and reset the modem. Leave the modem powered down until configurations are finalized with the IP Camera and the IP Camera has been connected correctly to the modem. Then power on the modem, followed by the IP Camera.

### Configure your IP Camera's TCP/IP properties as follows :

1. **Network Type** : DYNAMIC
2. **DDNS Server** : Use the DDNS server

**i** This is the same site you will register later to accommodate dynamic IP from your ISP.

3. **Web Port** : 80

**i** You may select any number between 1025 ~ 60000.

# Network Setup - Port Forwarding

---

**After entering the correct TCP/IP settings, you are ready for 'Port Forwarding'(Cases A, B).**

1. Please record the TCP/IP settings of your IP Camera for future reference. You may need this information to access your IP Camera and to configure 'Port Forwarding'.

IP Camera TCP/IP Settings	
IP Address	
Subnet Mask	
Default Gateway	
Preferred DNS Server	
DDNS Server	
Web Port	

2. After clicking 'Apply', the system will prompt for a reboot. Please allow the system 50 seconds to reboot and accept the changes. After 50 seconds, close the configuration screen. The view will display 'Trying to Reconnect'. If the ACTIVE light on the IP Camera has gone off and is now back on again flashing, the IP Camera has rebooted. After the system reboots completely, remove the power supply from the unit and close Internet Explorer.
3. Return your PC/Laptop TCP/IP properties to their original settings.
4. Before installing the IP Camera, you must use 'Port Forwarding' on your personal router (Cases A, B).

You will need to forward 1 ports:

- Web Port

All the ports will be forwarded to the IP address you assigned to the IP Camera.

In the example above, you would forward:

- 8888 → 192.168.0.200

**i** For information on how to use 'Port Forwarding', please read Appendix C.

# Network Setup - Starting IP Camera

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**After forwarding correctly the Web Port, through your router (if applicable), install the IP Camera in a proper location.**

1. Locate the serial number located on the label attached to the bottom of the IP Camera, you will need this for DDNS registration.
2. Connect the IP Camera to your router or cable/DSL modem (per your network scenario) via a Cat5/5e UTP Ethernet network cable.
3. Supply power to the IP Camera.
4. After 1 minute, verify the IP Camera indicators:
  - LINK : Flickering/Solid
5. After configuring Port Forwarding on your computer (if necessary), access your IP Camera on your local network by opening Internet Explorer and specifying the IP address and Web Port assigned to the IP Camera.

**i** Examples: <http://192.168.0.200:8888> or <http://24.106.88.123>

**i** If you left your Web Port set to 80, do not need to specify the port in the Address Bar to access the IP Camera.

6. Access your IP Camera via the Internet :

---

***If you use Case B, C***

- 1) Open Internet Explorer.
- 2) Type the IP of the IP Camera.

---

***If you use Case A, D***

- 1) Open Internet Explorer.
  - 2) Visit the DDNS website.
  - 3) Register the IP Camera.
  - 4) Give the DDNS server 10 minutes (MAX) to locate your IP Camera's IP information. You may reboot the server to send an immediate request to our DDNS server.
  - 5) After your camera is connected, select your camera.
- 

**i** The difference between B and C is that B needs to set the port forwarding.

**i** Since the type of DDNS differs from the service type, refer to the related service site.

# Web Viewer Screen- Camera Web Server

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- The web server of a camera consists of two parts. The parts are Web Monitoring Page and Web Setting Page.
- Internet Explorer version 8.0 or higher are recommended as the Internet browser to be used.
- Type the IP address that is assigned to a camera on the address window of a web browser and press "Enter".  
(The default IP address is 192.168.1.2.)
- Checkpoints before access
  - 1) The range of the camera IP address should be same as the range of IP address of the monitoring PC.
  - 2) The camera IP address should be unique on the local network that are connected to the monitoring PC.

## Administrator connection (on the initial page)

[ID] root (Unchangeable)

[Password] pass (the default password, it can be changed on the web setting page)

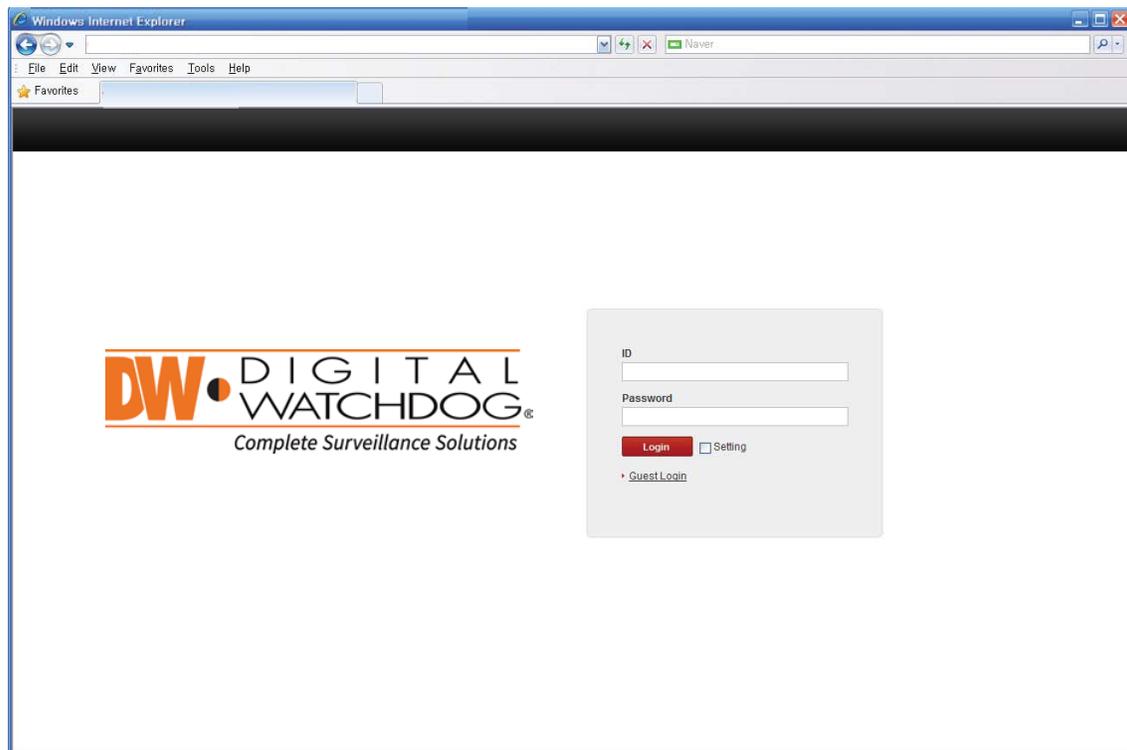
- Type the ID and password and click the button "Login", the web monitoring page shows up.

(Type the ID and password and click the button "Login after checking the box "Setting", the web setting page shows up.)

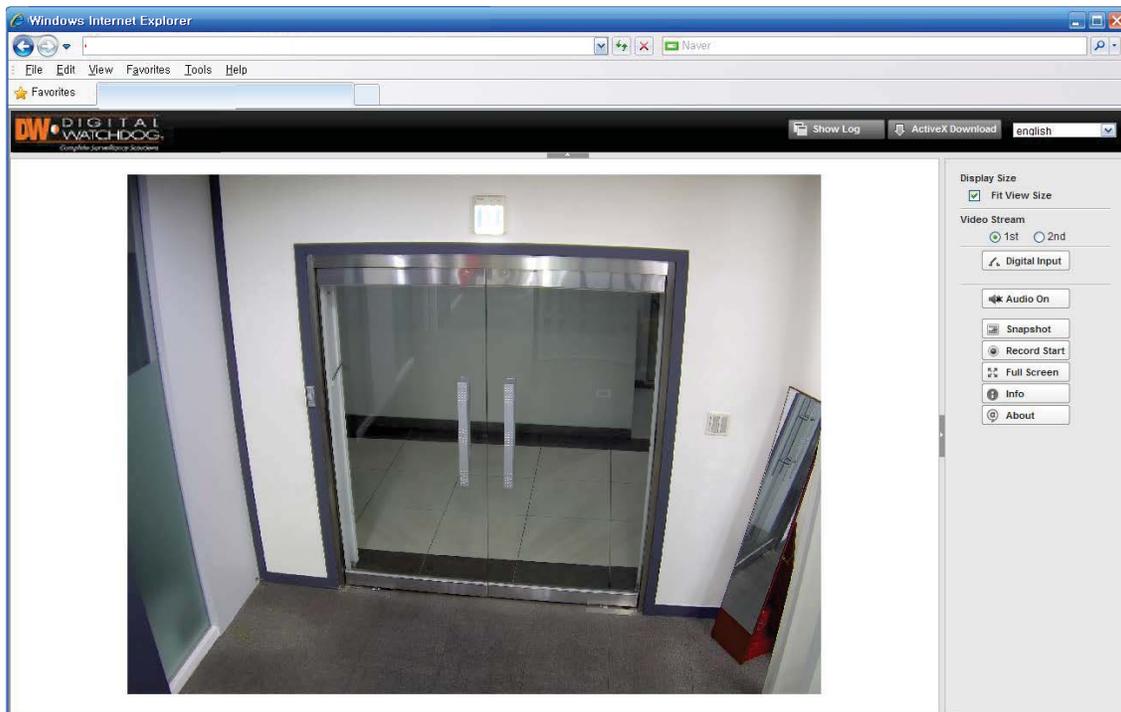
## Guest connection (on the initial page)

[Guest Login] click the text "Guest Login" below the button "Login" without an ID and a password.

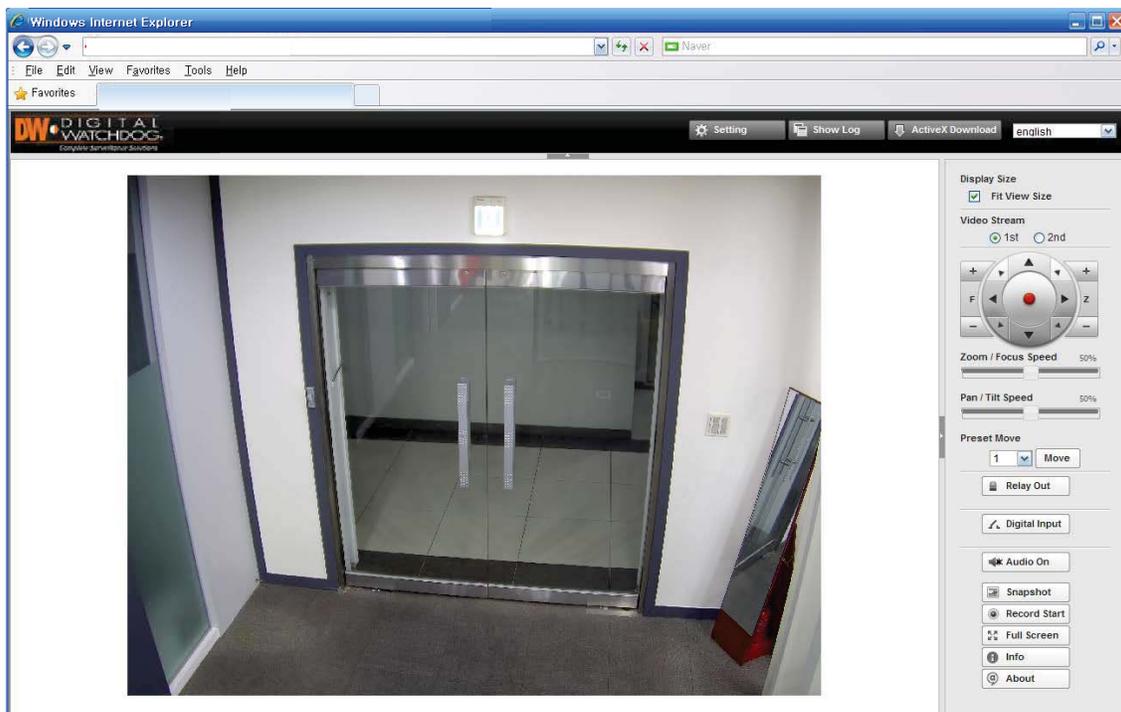
- On the guest connection, it is available to use only the functions that are allowed restrictively on the web monitoring page and it is not allowed to access to the web setting page.



▶The initial page of the web server



► Web monitoring page 1 (Guest connection)



► Web monitoring page 2 (Administrator connection)

**NOTE:** All information provided in the following pages display options available to the administrator user.

# Web Viewer Screen- Web Monitoring Page

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[Setting button]

Enables you to move to the web setting page (Live button: Web setting page -> Web monitoring page)

[Show Log button]

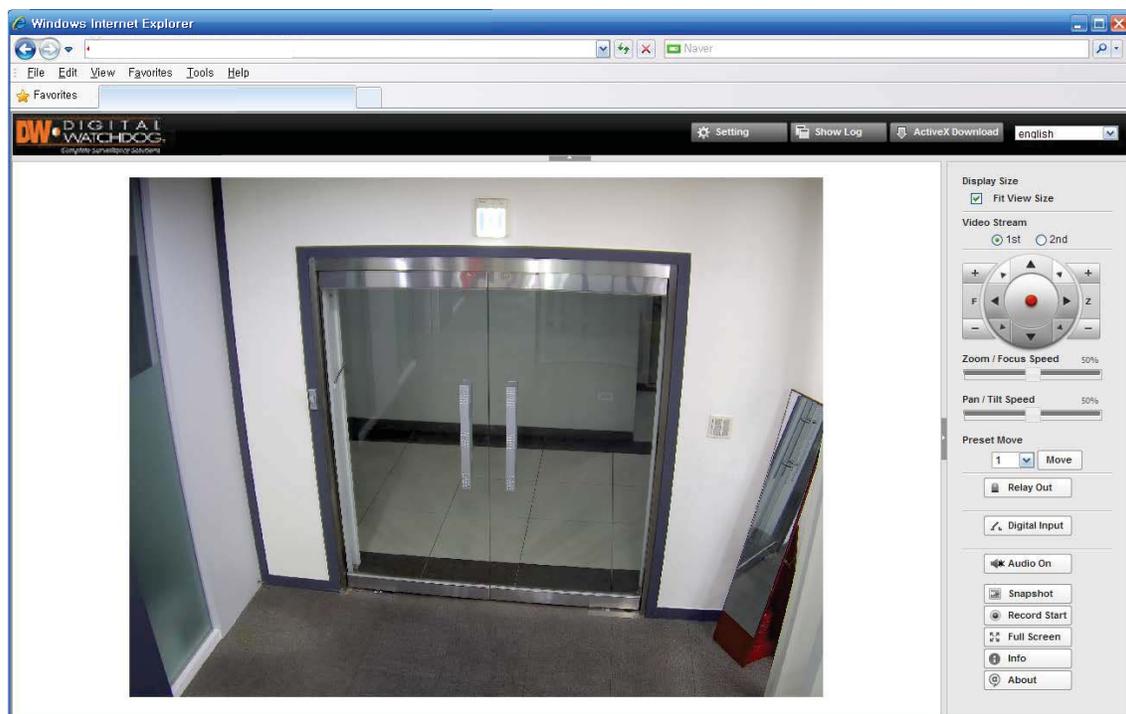
The window for the log data shows up.

[ActiveX Download button]

Click this button if the ActiveX for video monitoring is not downloaded automatically.

[Language menu]

The language can be selected out of the items of the language box.



► Web monitoring page 2 (Administrator connection)

[Display Size]

Fit View Size check box: The adjustment bar shows up when this check box is unchecked. The bar reduces or enlarges the monitoring image.

[Video & Stream]

The selected one out of the streams displays on the page. For the activation of the streams, check the item "Video Profile" on the web setting page.

[PTZ panel]

PTZ: This product does not support the Pan/Tilt (Left-Right/Up-Down) direction key feature.

"F" means Focus and "Z" means Zoom.

Zoom / Focus Speed bar: This product does not support this feature.

Tilt / Pan Speed bar: This product does not support this feature.

[Preset Move]

This product does not support this feature.

[Relay Out button]

Controls the external device that is connected to the camera. (Before use, check the availability of the product features or the connection status of the installed equipment.)

[Digital Input button]

Shows the contact signal connected to the camera. (Before use, check the availability of the product features or the connection status of the installed equipment.)

[Audio On/Off]

Enables you to monitor the audio signal of the microphone connected to the camera. (Audio IN connector) (Before use, check the availability of the product features or the connection status of the installed equipment.)

[Snapshot]

Captures a JPEG Image of the current video stream (JPEG file path: C :/)

[Record Start]

Records the video of the current video stream (AVI file path: C :/), the red outline shows up on recording.

[Full Screen]

Extends the image of the current video stream to fit the monitor size.

[Info]

Shows the information of the transferred data on the upper side of the image.

1) Image information: FPS (frame/sec) / Camera (Channel) Name / Resolution

2) Event Status: Motion Detect (red) / Video signal (green) / Digital IN (blue)

3) For the use of the motion detection, the check box "Enable" of the item "Motion Detect" should be checked.

**/30/cam1/720x480**



▶ Info bar

[About]

Displays the ActiveX information.

# Setup- Web Setting Page

## Menu buttons

[Live button] this enables you to move to the web monitoring page.

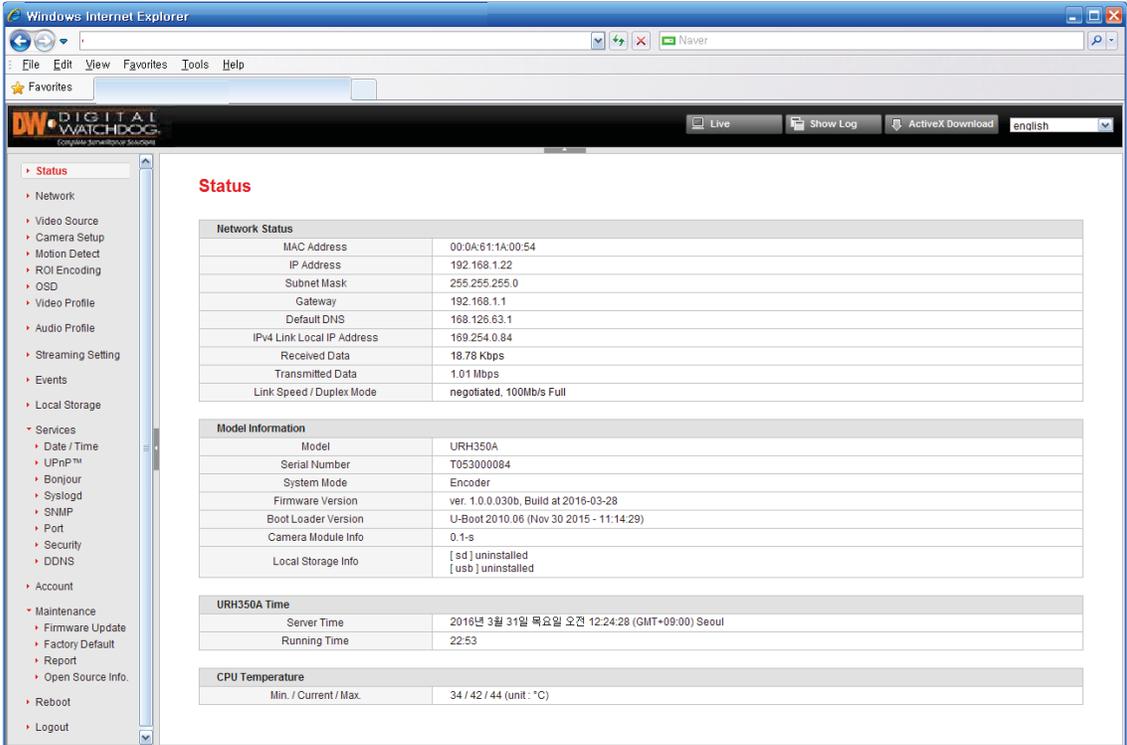
[Show Log button] the window for the camera log data shows up.

[ActiveX Download button]

Click this button if the ActiveX for video monitoring is not downloaded automatically.

[Language combo box] a language can be selected out of the items. (English, Korean)

## Status



The screenshot shows the Digital Watchdog web interface in Internet Explorer. The left sidebar contains a navigation menu with categories like Status, Network, Video Source, Camera Setup, Motion Detect, ROI Encoding, OSD, Video Profile, Audio Profile, Streaming Setting, Events, Local Storage, Services, Date / Time, UPnP™, Bonjour, Syslogd, SNMP, Port, Security, DDNS, Account, Maintenance, Firmware Update, Factory Default, Report, Open Source Info, Reboot, and Logout. The main content area is titled 'Status' and contains several tables:

Network Status	
MAC Address	00:0A:61:1A:00:54
IP Address	192.168.1.22
Subnet Mask	255.255.255.0
Gateway	192.168.1.1
Default DNS	168.126.63.1
IPv4 Link Local IP Address	169.254.0.84
Received Data	18.78 Kbps
Transmitted Data	1.01 Mbps
Link Speed / Duplex Mode	negotiated, 100Mb/s Full

Model Information	
Model	URH350A
Serial Number	T053000084
System Mode	Encoder
Firmware Version	ver. 1.0.0.030b, Build at 2016-03-28
Boot Loader Version	U-Boot 2010.06 (Nov 30 2015 - 11:14:29)
Camera Module Info	0.1-s
Local Storage Info	[sd] uninstalled [usb] uninstalled

URH350A Time	
Server Time	2016년 3월 31일 목요일 오전 12:24:28 (GMT+09:00) Seoul
Running Time	22:53

CPU Temperature	
Min. / Current / Max.	34 / 42 / 44 (unit: °C)

▶ Web setting page (Status)

## Network Status

- the current network information

[MAC Address] the unique address of the camera.

[IP Address] the IP address that is set (default: 192.168.1.2)

[Subnet Mask] the value for the subnetwork range (default: 255.255.255.0)

[Gateway] the IP address of the network device that roles as the gate of the subnetwork (default: 192.168.1.1)

[Default DNS] the IP address of a DNS server (default: 168.126.63.1)

[IPv4 Link Local IP Address] the IP address that is set automatically for the automatic connection on a subnetwork (169.254.xxx.xxx)

[Received Data] the velocity of the received data

[Transmitted Data] the velocity of the transmitted data

[Link Speed / Duplex Mode] the connection status that is connected to the network equipment.

### **Model Information**

- the product information

[Model] the product model name

[Serial Number] the product serial number

[System Mode] the camera running mode (in case of the camera that runs as a decoder the System Mode is "Decoder")

[Firmware Version] the firmware version

[Boot Loader Version] the boot loader version

[Camera Module Info] This product does not support this feature.

[Local Storage Info] the SD(SDHC) card information (mounting status / type / format / volume)

### **Camera Time**

- the product time information

[Server Time] the camera time information

[Running Time] the running time after the booting

### **CPU Temperature**

- CPU running temperature

[Min. / Current / Max. (Unit: °C)] Minimum / current / maximum value of CPU

# Setup- Network

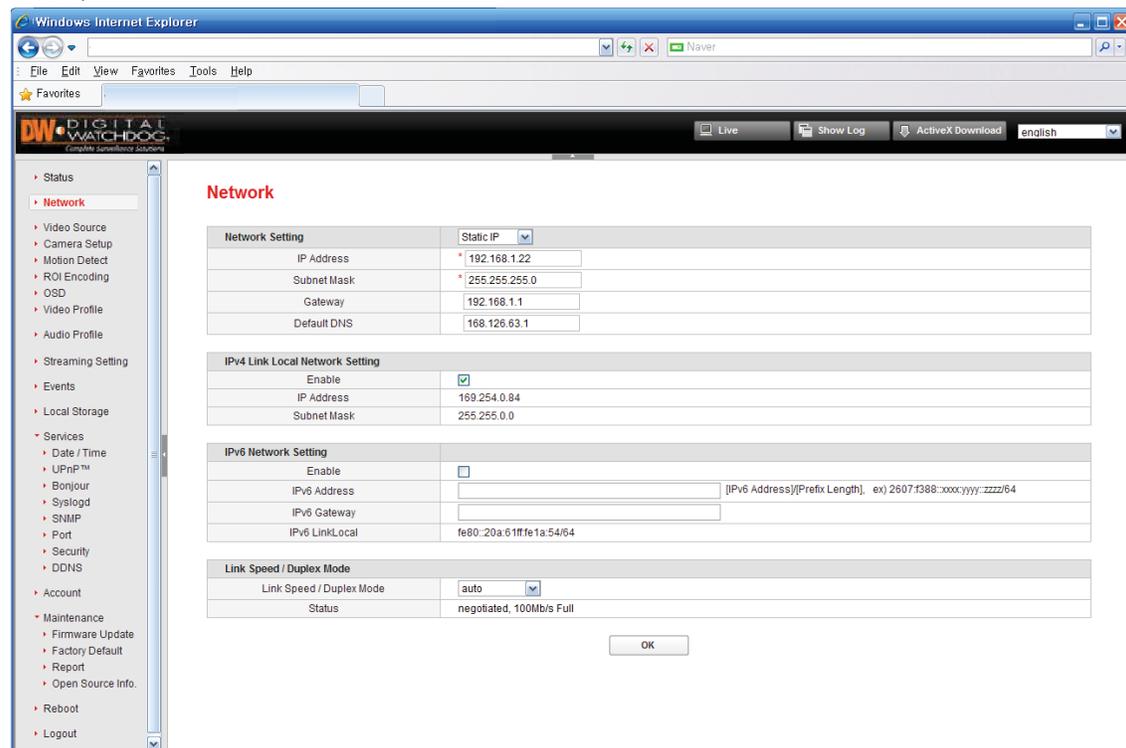
## Network Setting

[Static IP / Dynamic IP]

select "Static IP" or "Dynamic IP". For the use of the dynamic IP, the router that supports DHCP should be on the local network.

[IP Address / Subnet Mask / Gateway / Default DNS]

set the value that is appropriate to the network (ask the network administrator for the proper network values.)



► Web setting page (Network)

## IPv4 Link Local Network Setting

- This function enables you not to set the IP address of the cameras in case that you use the NVR that supports the "IPv4 Link Local Network" function.

[Enable] check the box for the activation (default: Enable)

[IP Address, Subnet Mask] These are set automatically.

## IPv6 Network Setting

[Enable] check the box for the activation (default: Enable)

[IPv6 Address, Gateway] set the value that is appropriate to the network (ask the network administrator for the proper network values.) The number next to "/" on IPv6 Address means the setting value for the sub-network.

[IPv6 LinkLocal] This is set automatically by the communication between the local network devices.

**Link Speed / Duplex Mode**

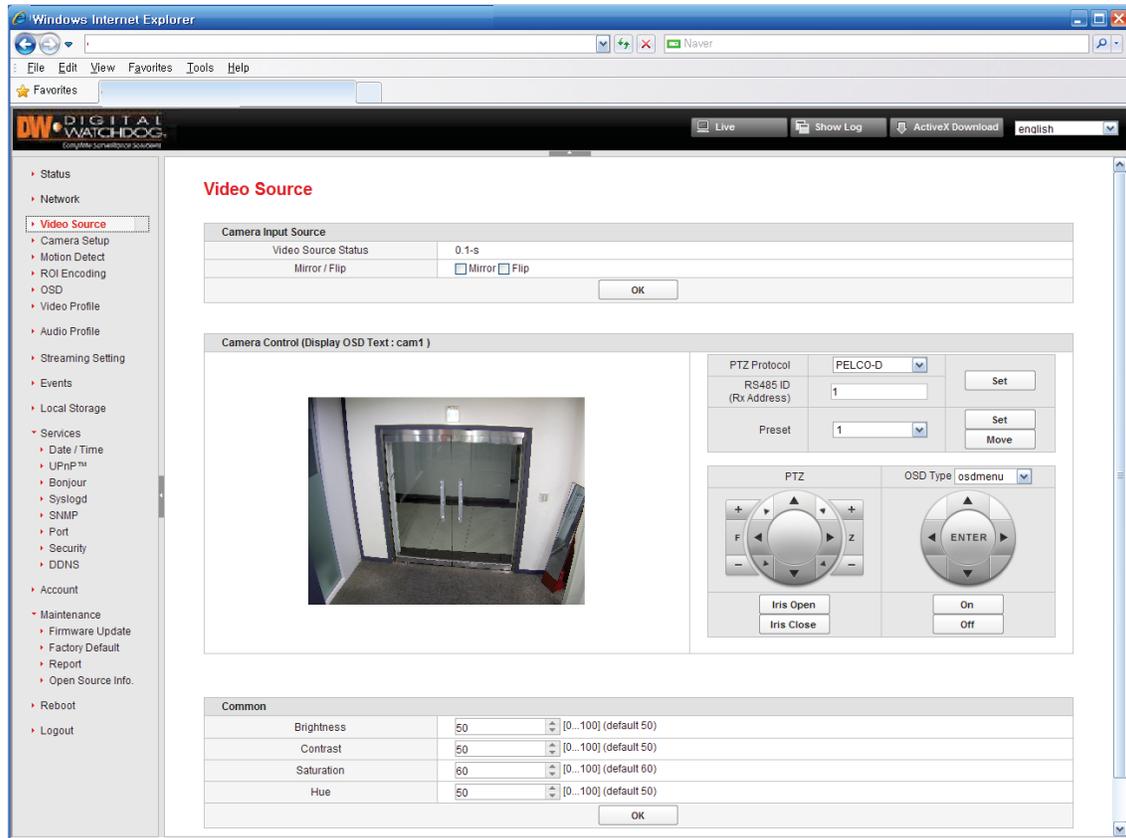
[Link Speed / Duplex Mode]

if the auto negotiation mode has a problem with the connected network device, use a specified value. The value of the camera and the network device should be same.

[Status] the status of the current network connection

[OK button] click this button to apply the changed setting values.

# Setup- Video Source



► Web setting page (Video Source)

## Camera Input Source

[Mirror / Flip] reverse of left and right / reverse of up and down

[OK button] click the button "OK" to apply the changed setting values.

## Camera Control (Display OSD Text)

- This product does not support this feature.

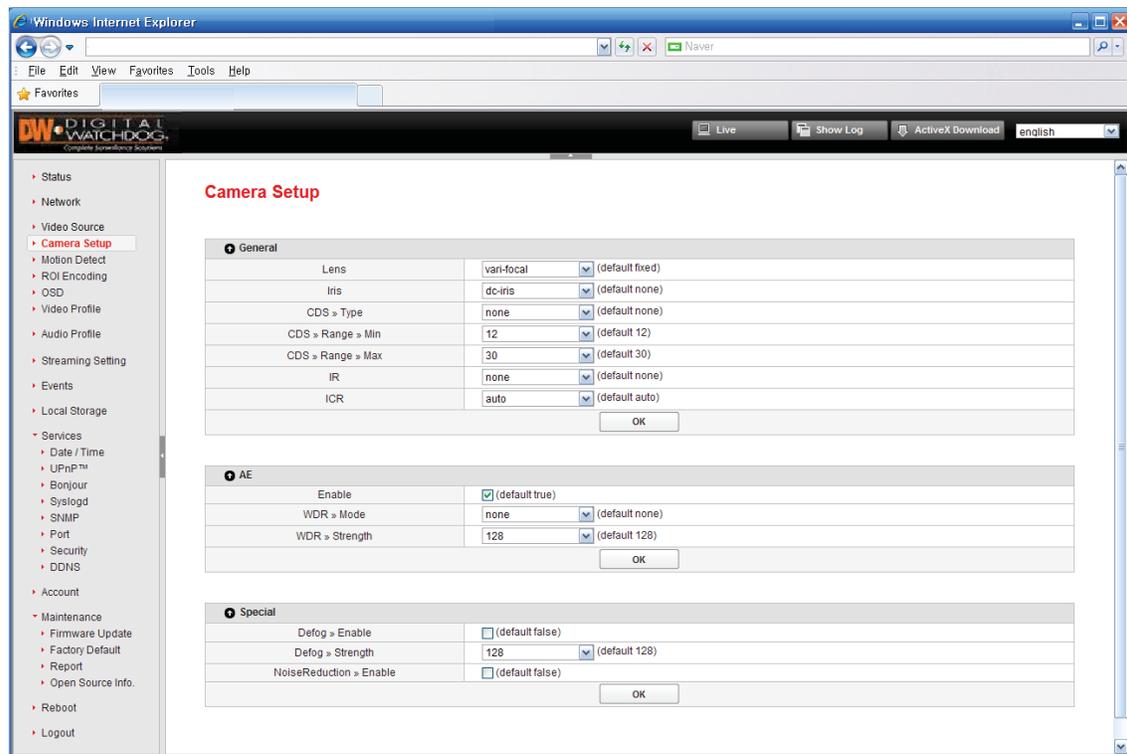
- Only Zoom, Focus buttons on the PTZ panel are available. "F" means Focus and "Z" means Zoom.

## Common (Analog to Digital)

[Aperture, Brightness, Contrast, Saturation, Hue] the defaults are recommended.

[OK button] click the button "OK" to apply the changed setting values.

# Setup- Camera Setup



► Web setting page (Camera Setup)

## General

[Lens] sets the type of the Lens

[Iris] sets the type of the Iris

[CDS >> Type] sets the type of the CDS

[CDS >> Range >> Min] sets the minimum of the CDS range

[CDS >> Range >> Max] sets the maximum of the CDS range

[IR] sets the type of the IR

[ICR] sets the type of the ICR operation

[OK button] click the button "OK" to apply the changed setting values.

## AE

[Enable] check for the function of the automatic exposure.

[WDR >> Mode] check for the function of the Wide Dynamic Range

[WDR >> Strength] adjusts the strength of the WDR

[OK button] click the button "OK" to apply the changed setting values.

## Special

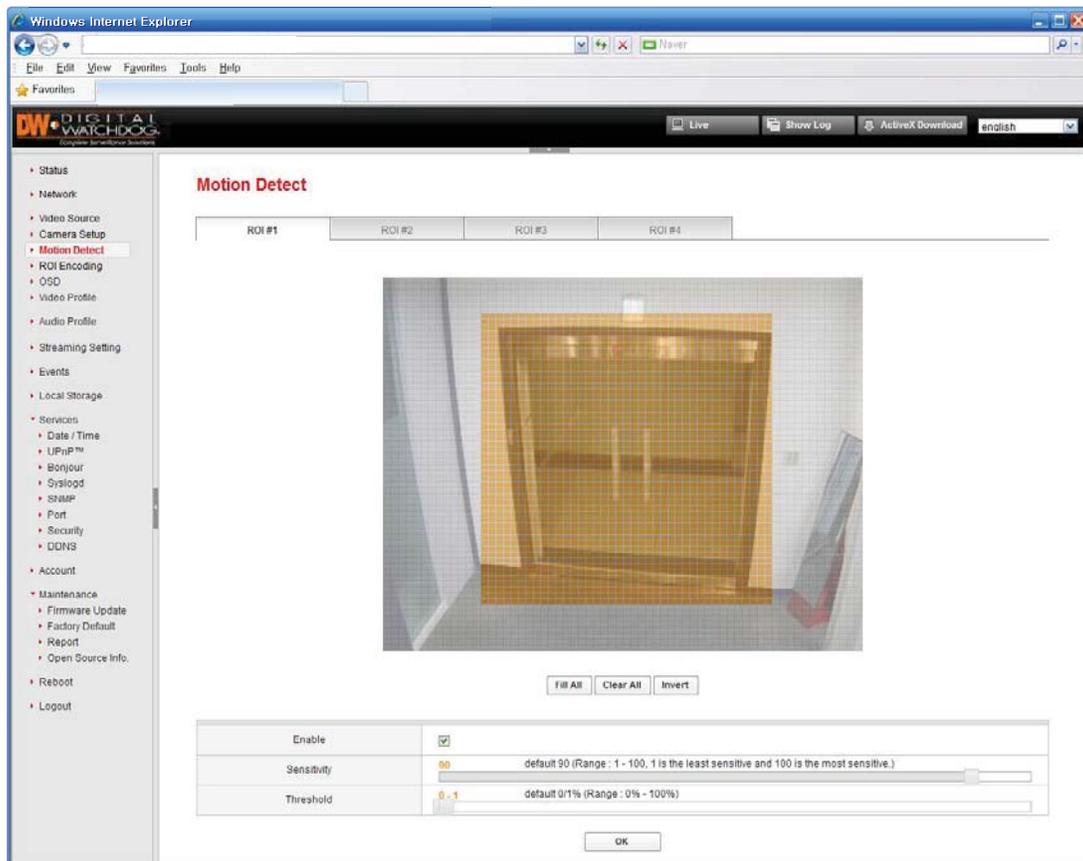
[Defog >> Enable] check for the function of the defog

[Defog >> Strength] adjusts the strength of the defog

[Noise Reduction >> Enable] check for the function of the noise reduction

[OK button] click the button "OK" to apply the changed setting values.

# Setup- Motion Detect



► Web setting page (Motion Detect)

## Overview

- click on any point and drag on the image to create a detection zone. Once motion detection is setup, a red mark will appear on the upper bar of the video image on the web monitoring page. (The upper bar is shown clicking the button "info".)

[ROI#1~4 tab]

the four ranges can be set separately. The function is useful on the NVC that supports the various motion detection range. (Ex. in case of detecting on the ranges of both ROI#1 and ROI#2, a specific event occurs)

[Fill all button] selects all the area for the motion detection.

[Clear all button] deselects the selected area.

[Invert button] inverts the selected area.

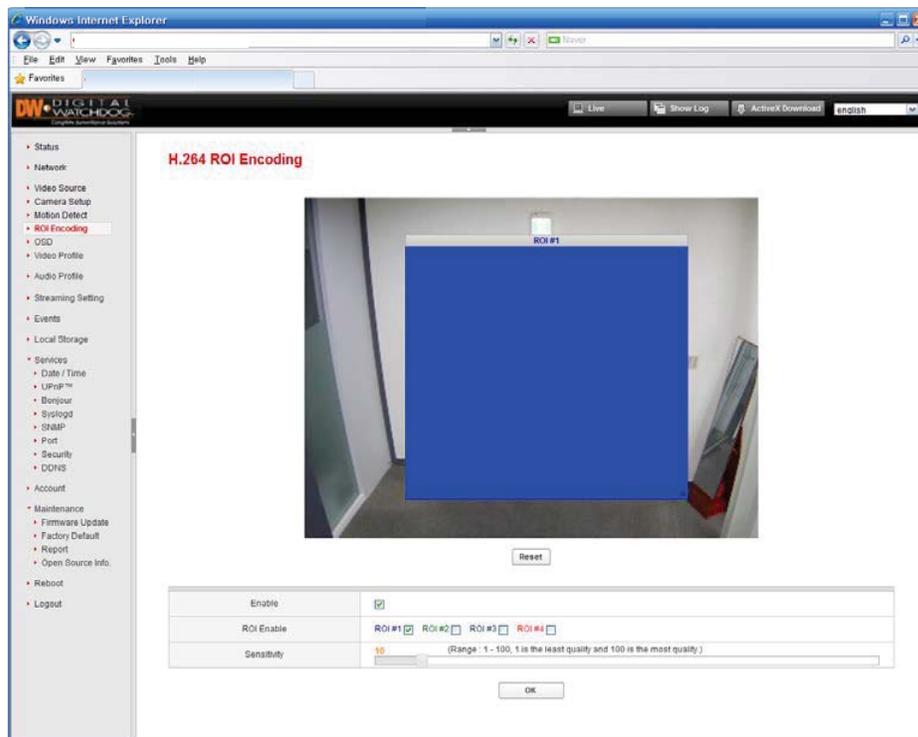
[Enable] check the box for the activation.

[Sensitivity] the value gets bigger, the sensitivity gets higher.

[Threshold] when the ratio of the moving parts to the whole image is on the range, the detection is checked.

[OK button] click this button to apply the changed setting values.

# Setup- ROI Encoding



## Overview

- ROI (Region of Interest) Encoding function: the region specified by a ROI is encoded to transmit a relatively good image compared to other regions.

[Enable] check the box for the activation.

[ROI Enable check box] select out of "ROI#1~4". The rectangular box in which you can specify the region appears. Click and drag to adjust the position and size of the region. ROI # 2 ~ 4 activation is a useful feature in NVC that support multiple regions.

[Sensitivity]

1~100 (The higher the value is sensitive.)

If the value is set to be about 50, you can see the difference in the eyes.

(Though the video bit rate is set to less than the recommended bit rate, the image quality of the ROI designated region can be maintained.)

[OK button] click this button to apply the changed setting values.

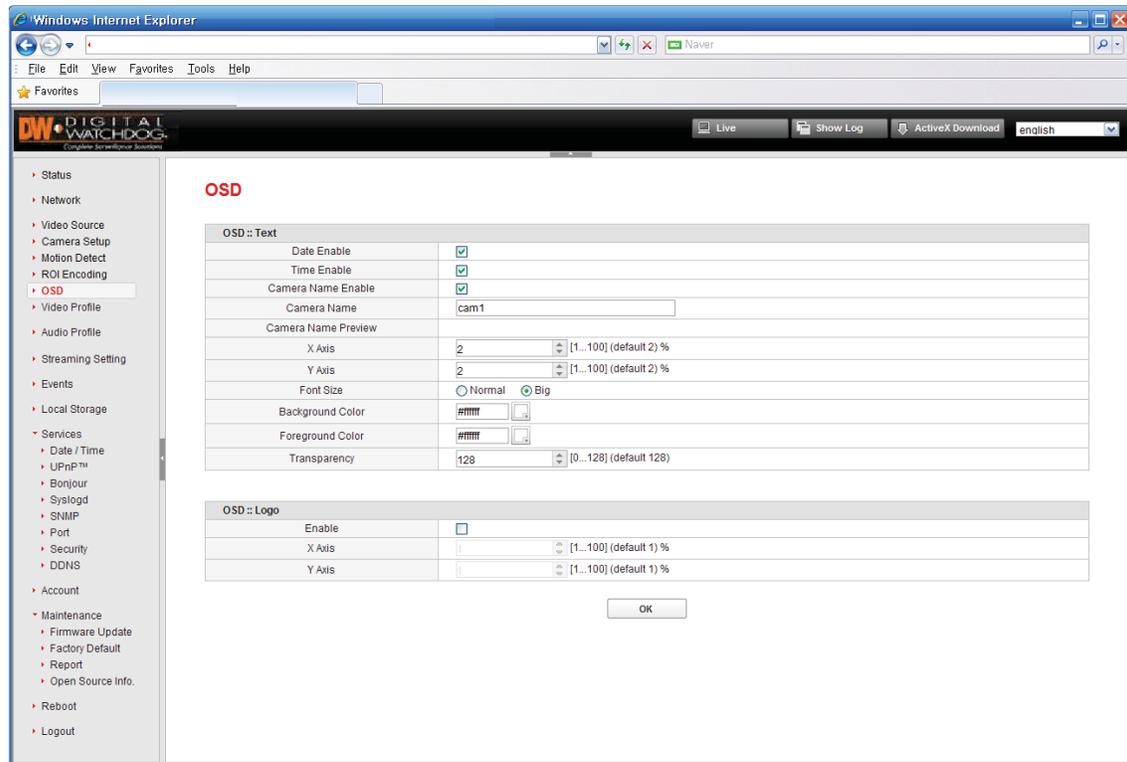
Setting an example

- Condition: 1920x1080 resolution encoding, 1.5 Mbps network bandwidth

- Setting: setting the ROI to 1/4 of the entire image and the sensitivity to a value out of 40~60.

- Effect: The quality of the image set to the ROI is similar to the image transferred by the transfer rate "4Mbps" (the default value of 1920x1080 resolution). You can also monitor the circumstances for the non-ROI part.

# Setup- OSD



► Web setting page (OSD)

## OSD: Text

[Date Enable / Time Enable / Camera Name Enable] check for the activation to show the text of the items on the video of the camera. (This is the camera OSD (On Screen Display) function and different from the function of the Camera Module OSD function.)[Camera Name] input the name on the OSD

[X Axis] adjusts the X axis position of the OSD text.

[Y Axis] adjusts the Y axis position of the OSD text.

[Font Size] adjusts the size of the OSD text.

[Background Color] select a color of text background.

[Foreground Color] select a color of text.

[Transparency] adjusts the transparency of the OSD text.

## OSD: Logo

- Before using refer to the firmware update / OSD Logo Update entries and upload a logo file.

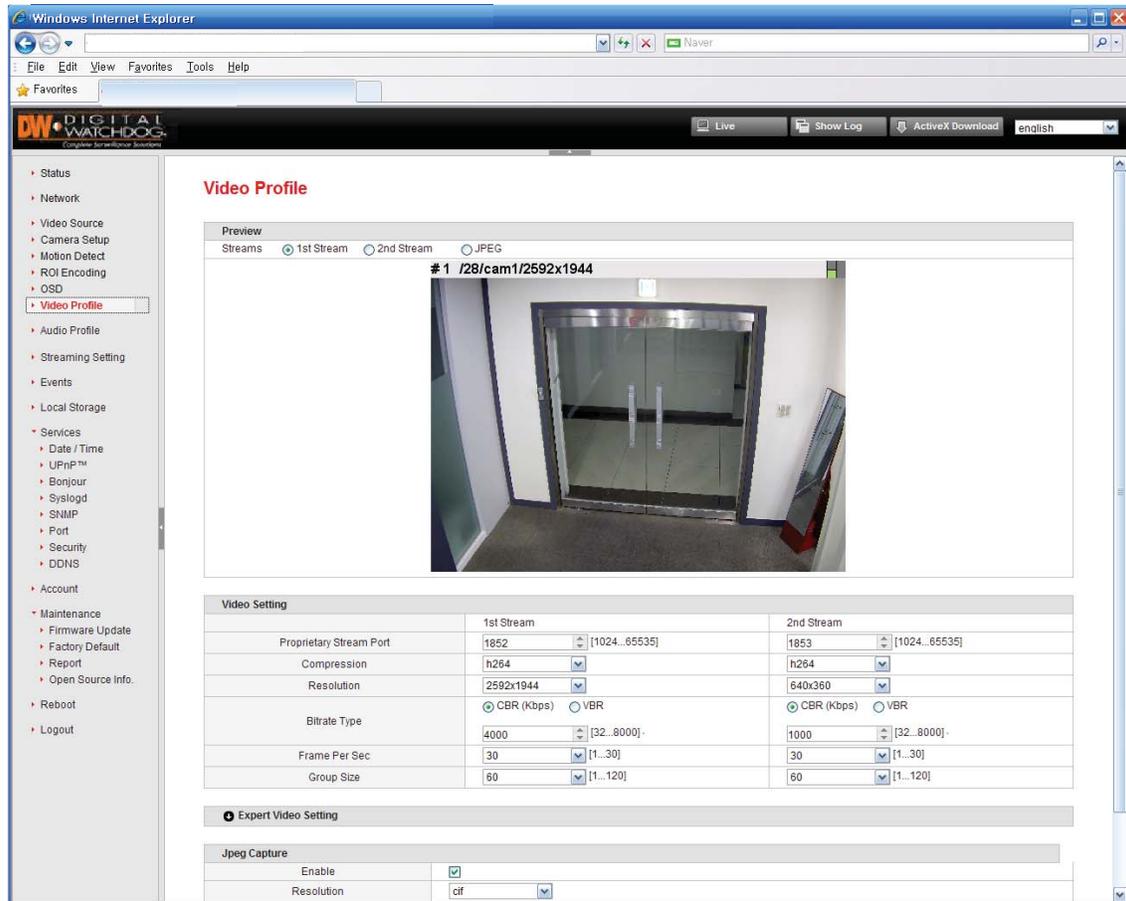
[Enable] check for the activation

[X Axis] adjusts the X axis position of the OSD logo.

[Y Axis] adjusts the Y axis position of the OSD logo.

[OK button] click this button to apply the changed setting values.

# Setup- Video Profile



► Web setting page (Video Profile)

## Preview

[Streams] the selected video is displayed.

## Video setting

The each stream can have the assigned value independently.

[ Proprietary Stream Port ] the port number for transferring the video and audio data

[ Compression ] the compression type for transferring the video data ( H.265 / H.264 / MJPEG )

[ Resolution ] the image size. The resolutions are different by the detailed model.

[Bitrate Type]

CBR (constant bitrate): the unit is kbps.

(Recommendation: 2592X1944 -> 8000, 2048X1536 -> 6000, 1080p -> 4000~6000, 720p -> 2000~3000, D1 -> 1000~1500, CIF -> 500~750)

VBR(variable bitrate): 1~6 (1: the best quality)

[ Frame Per Sec ] : the number of the frames to be transferred for a second (default: 30)

[ Group Size ] the period of making the I frame (default: 60)

## Expert Video Setting

[ H.264 Reference Frames (Skipping Modes) ]

After the value is set to "4X", the NVC plays the recorded video by "4X" with less system resources.

[ Capture Mode ]

in case that the resolution of the monitor or the ratio of the NVC partition display is the SD(Standard Definition) ratio, the HD(High Definition) video ratio (16:9) should be changed to the SD video ratio (4:3).

1) Squeeze: stretches the video horizontally to make the ratio 4:3.

2) Crop: crops the video by the left and right end (the video ratio is kept)

[ Profile ]

the video delay (encoding to decoding) is most less on the value "baseline" (default).

Compression ratio, system load: baseline < main < high

The NVC specification should be checked if the profile is supported.

The bandwidth of "high profile" is less by 20% than that of "baseline".

[Entropy Coding]

camera runs as CAVLC. (Compression ratio: CAVLC < CABAC, system load: CAVLC < CABAC)

[Jumbo Frame]

This function discards or processes the I-frames or P-frames in excess of a specific value.

(I-Thr.: I frame threshold, P-Thr.: P frame threshold)

### **JPEG Capture**

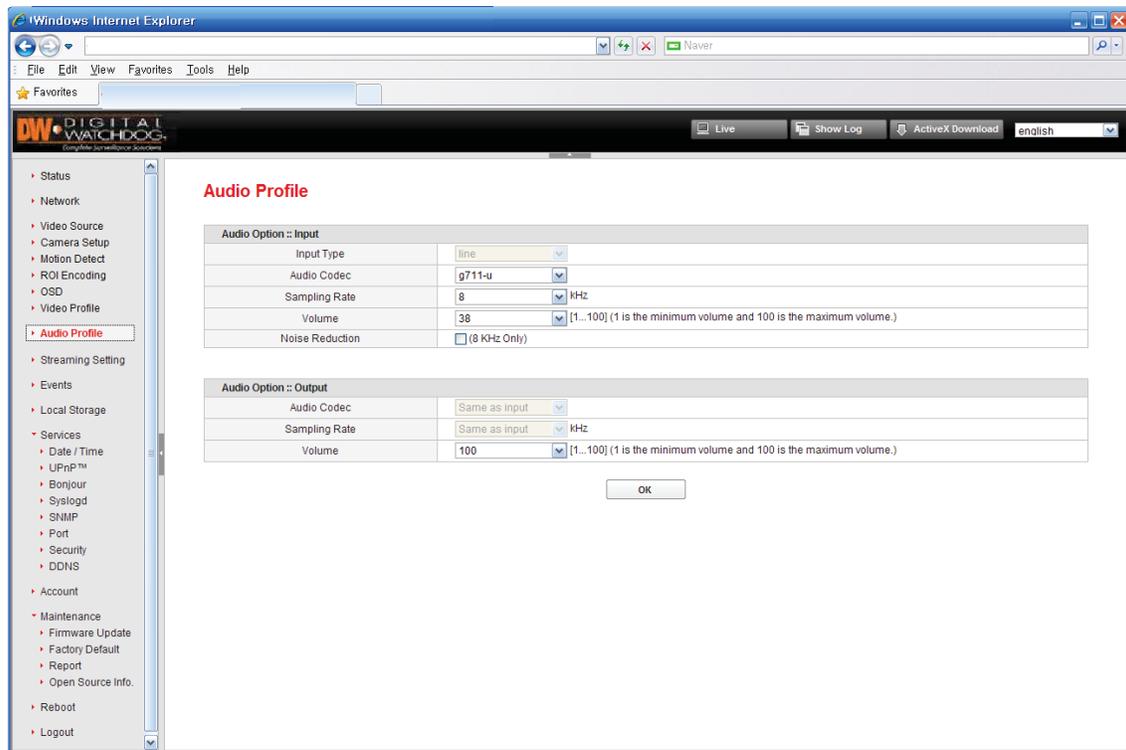
[Enable] if checked, the camera captures the JPEG image. (This is for developing a program.)

[ Resolution ] adjusts the resolution

[ Quality ] 1 / 2 / 3 / 4 / 5 / 6 (1: the best quality)

[ OK button ] click this button to apply the changed setting values.

# Setup- Audio Profile



## ▶ Web setting page (Audio Profile)

In case that a monitoring program is used in playing audio data, the program supports the codec of the camera.

### **Audio Option: Input**

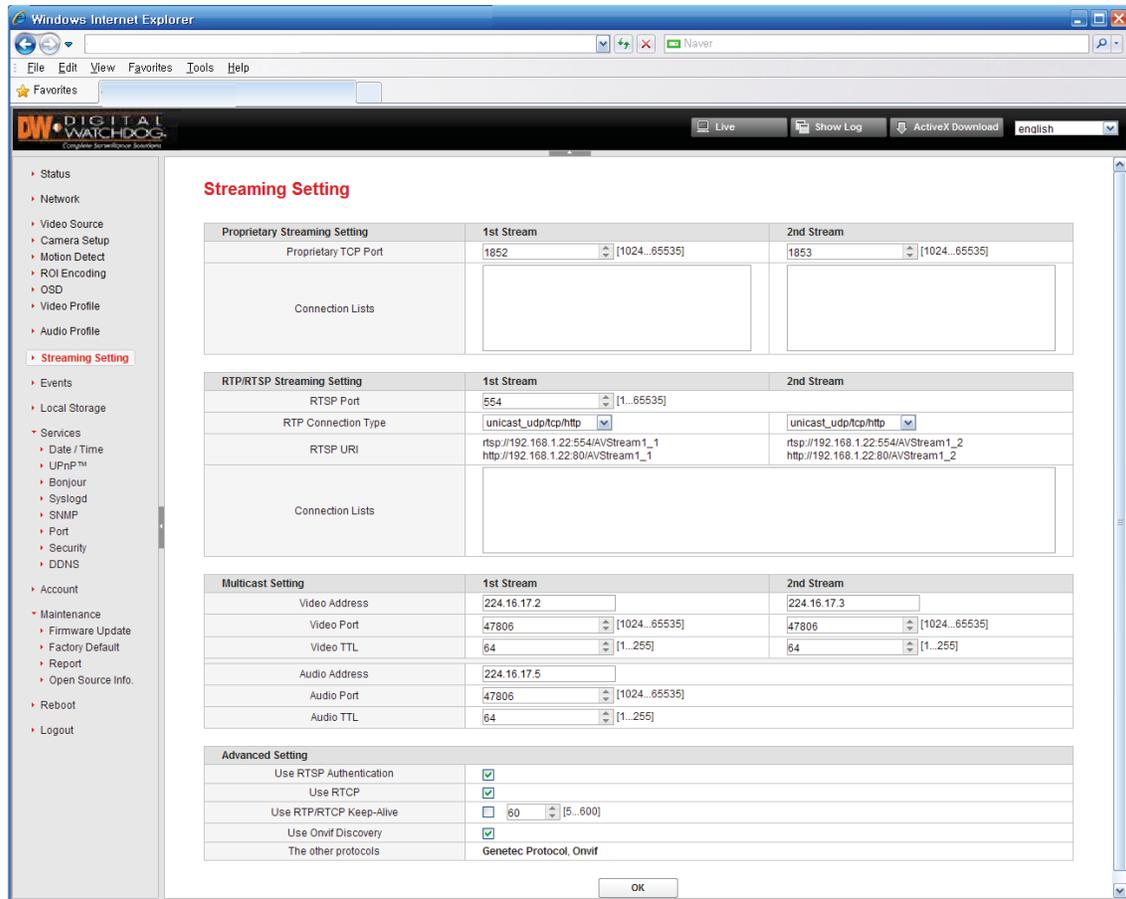
- [Input Type] line (or line / mic; the models with built-in mic)
- [Audio Codec] G.711-u / G.711-a / G.726
- (Quality: G.711 > G.726, playing compatibility: G.711 < G.726)
- [Sampling Rate] 8 kHz/ 32kHz (or 8 kHz; fixed on MR904)
- [Volume] 1~100
- [Noise Reduction] check the box for noise reduction function.

### **Audio Option: Output**

- [Audio Codec] same as Input.
- [Sampling Rate] same as Input.
- [Volume] 1~100

[OK button] click this button to apply the changed setting values.

# Setup- Streaming Setting



▶ Web setting page (Streaming Setting)

## Proprietary Streaming Setting

[Proprietary TCP Port] the port for the transmission by the proprietary protocol (This is dependent on the value of the item "Video Profile / Video Setting / Proprietary Stream Port")

[Connection Lists] the IP address and port information of the monitoring devices that are connected.

## RTP/RTSP Streaming Setting

[RTSP Port] the port number that is used for the transmission by the RSTP protocol

[RTP/RTSP Connection Type] in case that there is a network device supports the multicast function, the item "multicast\_udp" can be selected for the effective network bandwidth. (The additional setup is required on below.)

[RTSP URI (Uniform Resource Identifier)] the path that is used on the PC monitoring program for playing RTSP

The default paths are as below.

- 1) 1st Stream > rtsp://192.168.1.2:554/AVStream1\_1
- 2) 2nd Stream > rtsp://192.168.1.2:554/AVStream1\_2

3) 3rd Stream > rtsp://192.168.1.2:554/AVStream1\_3

[Connection Lists] the IP address and port information of the monitoring devices that are connected.

### **Multicast Setting**

[Video Address] the IP address for video data transmission

[Video Port] the port number for video data transmission

[Video TTL] set the number of the routers that pass when transmitting the video data.

[Audio Address] the IP address for audio data transmission

[Audio Port] the port number for audio data transmission

[Audio TTL] set the number of the routers that pass when transmitting the audio data.

### **Advanced Setting**

[Use RTSP Authentication] check the box in case that the authentication process is needed.

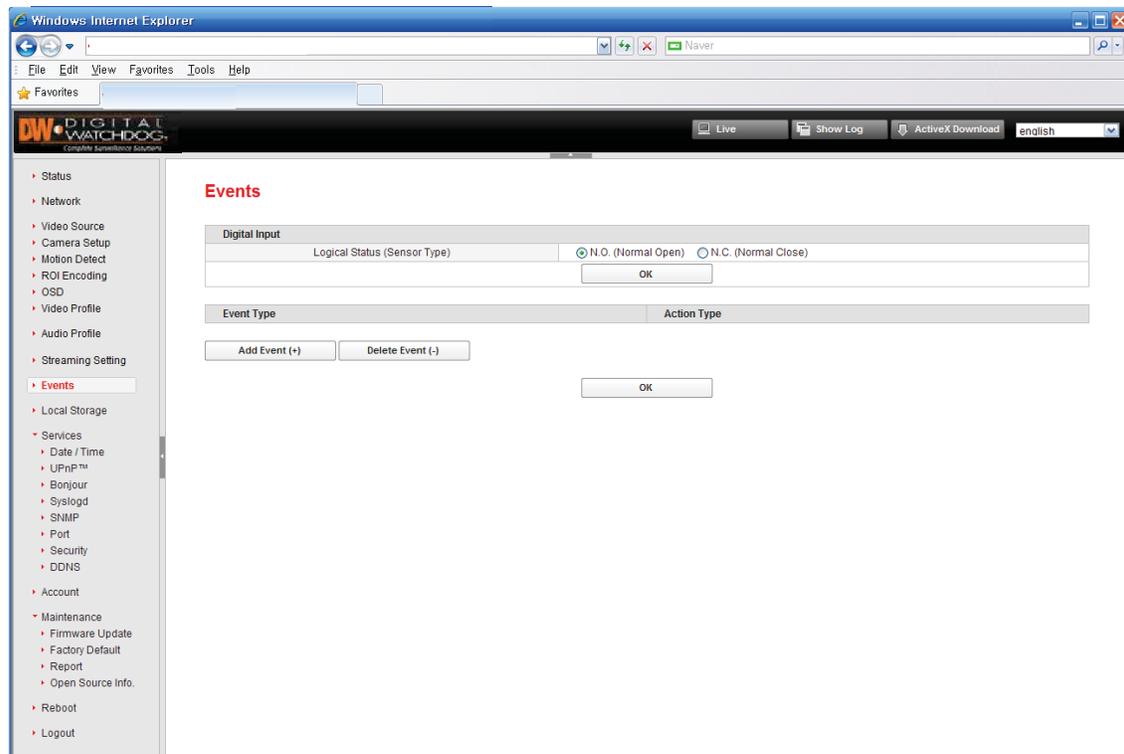
[Use RTCP] check the box in case that RTCP function is needed.

[Use RTCP Keep-Alive] check the box in case that the function "Timeout".

[The other protocols] displays the other supported protocols.

[OK button] click this button to apply the changed setting values.

# Setup- Events



► Web setting page (Events)

## Digital Input

[Logical Status (Sensor Type)]

- Set according to the normal state of the electrical signal of the attached device. (Open / Close).

- 1) N.O. (Normal Open): in case of the normal state is "open"
- 2) N.C. (Normal Close): in case of the normal state is "close"

[OK button] click this button to apply the changed setting values.

## Overview of setting "Event"

- Define an action for which the event occurred.
- Each of the supported features vary by model.

### - Event Types

[Digital Input] when the Digital Input (DI) is detected, an event occurs. The detection status can be adjusted in detail as below.

- 1) Active to inactive: when the detected state of the DI is changed into the non detected state, an event occurs.
- 2) Inactive to active: when the non-detected state of the DI is changed into the detected state, an event occurs.
- 3) Active level: when the detected state of the DI maintains, the event maintains.
- 4) Inactive level: when the non-detected state of the DI maintains, the event maintains.

[Motion] when the motion is detected, an event occurs.

[Timer] the events occurs periodically. (Unit: second)

#### - Action Types

[Preset Move]

When the PTZ camera is connected to, the command "Preset Move" is sent to the PTZ camera.

[Digital Output]

This means "relay output". The signal "Digital Output" is sent by the time that is defined. The output status can be adjusted as below.

1) Close to open: sends the signal "Digital Output" to "open" state.

2) Open to close: sends the signal "Digital Output" to "close" state.

[TDN]

This means "True Day&Night". Available only to some IP camera models.

The color can be adjusted as below.

1) BW: sets the color to "black and white".

2) Color: sets the color to "color".

#### **Event Type**

[Add Event (+) button] click this button to add an event entry.

1) Event Type: select one out of "Digital Input / Motion / Timer"

1-1) Digital Input > Sensor: select a sensor to use.

Digital Input > Status: select one out of "close to open / open to close"

1-2) Motion > ROIs: Motion ROI (refer to the item "Motion Detect")

1-3) Motion > Status: select one out of "on / off"

1-4) Timer > Interval: select one out of "1 ~ 86400" (unit: second)

2) Action Type: select one out of "Preset Move / Digital Output / TDN"

2-1) Preset Move > No: select one out of "1~255". Set the preset on the item "Video Source".

2-2) Digital Output > Relay/No: select considering the connection "Digital Output".

2-3) Digital Output > Status: select one out of "close to open / open to close"

2-4) Digital Output > dwtime: duration (1~60 seconds)

2-5) TDN > Status: select one out of "BW / color"

Create an event button: Click to create the setting event.

Cancel button: Click to cancel the setting event.

[Delete event (-) button] click this button to remove the event entry.

[OK button] click this button to apply the changed setting values.

## Reference Scenario

1. When the emergency bell is pressed, the video of the connected PTZ camera goes to the position that the emergency bell was pressed.

- Connect an emergency bell to the connector "Digital Input" of the camera.
- Web setting page of camera > Video Source > camera Control: After moving the PTZ camera to the location of the emergency bell for the "Preset no. 1", click the button "Set".
- Click the button "Add Event (+)" and set as below.

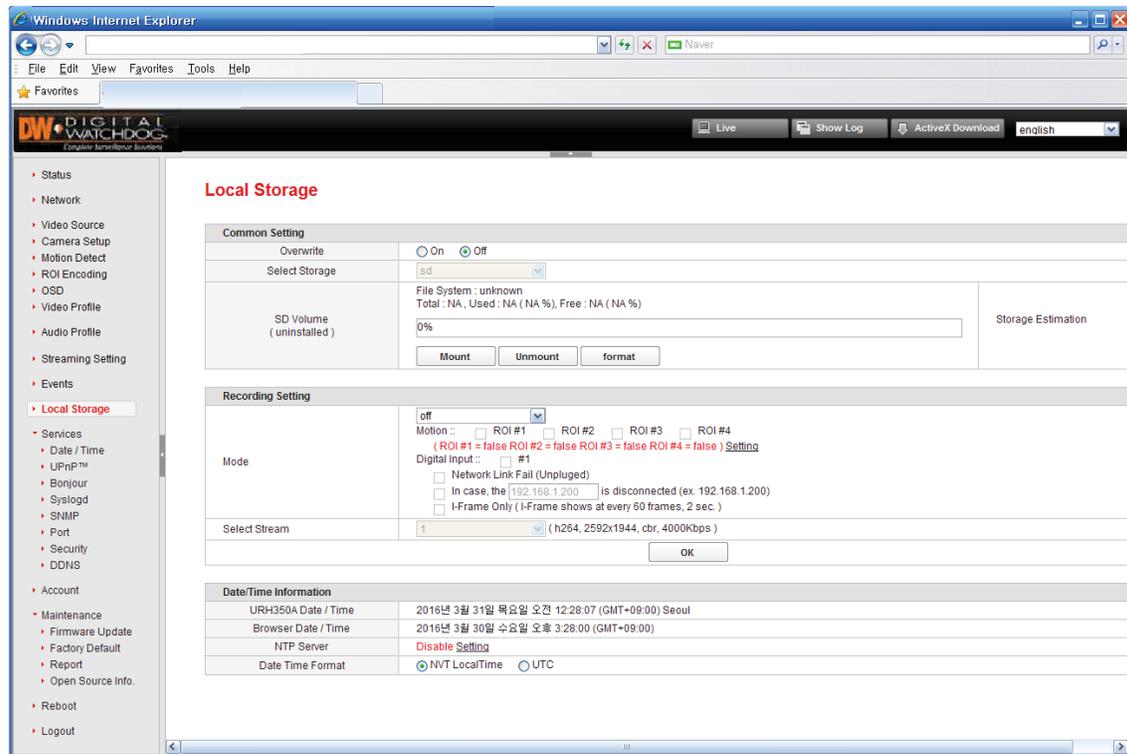
- 1) Event Type: Digital Input
- 2) Status: inactive to active
- 3) Action Type: Preset Move
- 4) No: 1

2. The TDN (True Day&Night) Operation by the "Digital Input"

- Connect the device that controls the output signals by day and night, to the connector "Digital Input" of the camera.
- Click the button "Add Event (+)" and set as below. On the status "active", the TDN "BW" maintains and on the status "inactive" it returns to the TDN "color".

- 1) Event Type: Digital Input
- 2) Status: active level
- 3) Action Type: TDN
- 4) No: BW

# Setup- Local Storage



▶ Web setting page (Local Storage)

## Overview

- This function is available when a memory card is inserted into the product that supports an SD/SDHC card.
- Time synchronization issues
  - 1) the video and the camera internal time are saved together on the local storage function.
  - 2) For the time differences of the camera and the monitoring PC occur as time goes, it is required to synchronize the time periodically with a specific server. (Refer to the item "Date / Time")
- VLC media player
  - 1) When the page is loaded for the first time, VLC media player should be installed.
  - 2) The related ActiveX program can be downloaded on the internet connection environment.

## Common Setting

[Overwrite] select the button "On" to use the function "overwriting data".

[Select Storage] fixed value

[SD Volume] the memory information is displayed in the following format.

- 1) File System: FAT32
- 2) Total: 14.83 GBytes
- 3) Used: 14.33 GBytes (96.65%)
- 4) Free : 508 MBytes(3.35%)

[Storage Estimation] the estimated time that can be saved.

### **Recording Setting**

[Mode] select one out of "off (not saving) / continuous (continuous saving) / event (saving when a event occurs)"

Event types that can be selected

1) Motion: the motion event

(A ROI is the setting value for the motion detection. At least one must be true to detect for the motion detection for more information, refer to the item "Motion Detect".)

2) Sensor: the event by the contact signal in case that the alarm input or digital input of the camera is used.

3) Network Link Fail (Unplugged): the event that occurs when the network connector of the camera is removed.

4) In case, the [xxx.xxx.xxx.xxx] is disconnected: the event that occurs when the network communication with the PC becomes not available.

5) I-Frame Only (I-Frame shows at every 60 frames, 2 sec.): the condition that saves the main frame of the video. The contents of the blank "(...)" are the values that are set on the item "Video Profile".

[Select Stream] select one stream out of the streams of the item "Video Profile"

[OK button] click this button to apply the changed setting values.

### **Date/Time Information**

[[Model name] Date / Time] the camera time information (the built-in clock)

[Browser Date / Time] the time information of the monitoring PC

[NTP Server]

- The local storage function is subject to the time synchronization settings.

[Date Time Format] select one out of "camera LocalTime / UTC"

### **File Lists**

[Time (bar)] displays the time that the data exists.

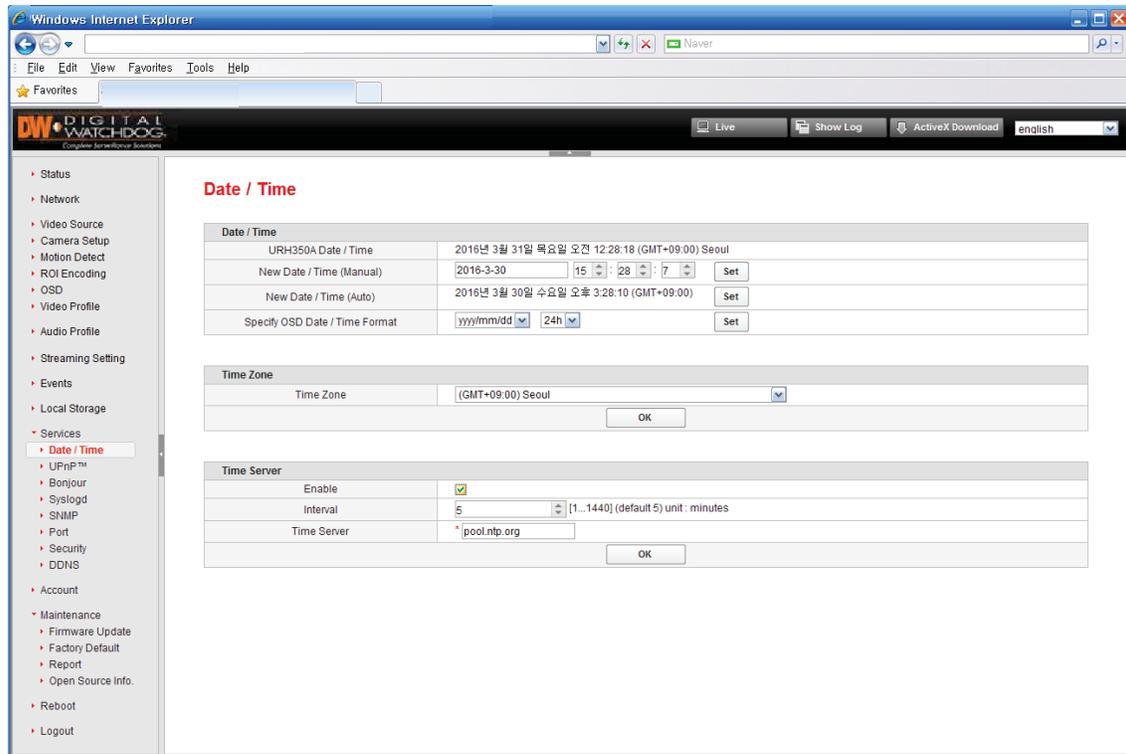
[Calendar] select a date and search the data

[File format] Stream / Start / End / Encoding / Size

[Download button] download the selected files.

[Delete button] deletes the selected files on the memory.

# Setup- Date / Time



▶ Web setting page (Date / Time)

## Date / Time

[Date / Time] displays the current time.

[New Date / Time (Manual)] type the time manually. Click the button “Set” to apply the changed value.

[New Date / Time (Auto)] synchronize the time with the time of monitoring PC. Click the button “Set” to apply the changed value.

[Specify OSD Date / Time Format] set the format of the date and time. Click the button “Set” to apply the changed value.

## Time Zone

[Time Zone] set the region.

[OK button] click this button to apply the changed setting values.

## Time Server

- It is available to synchronize the time with the information of a time server

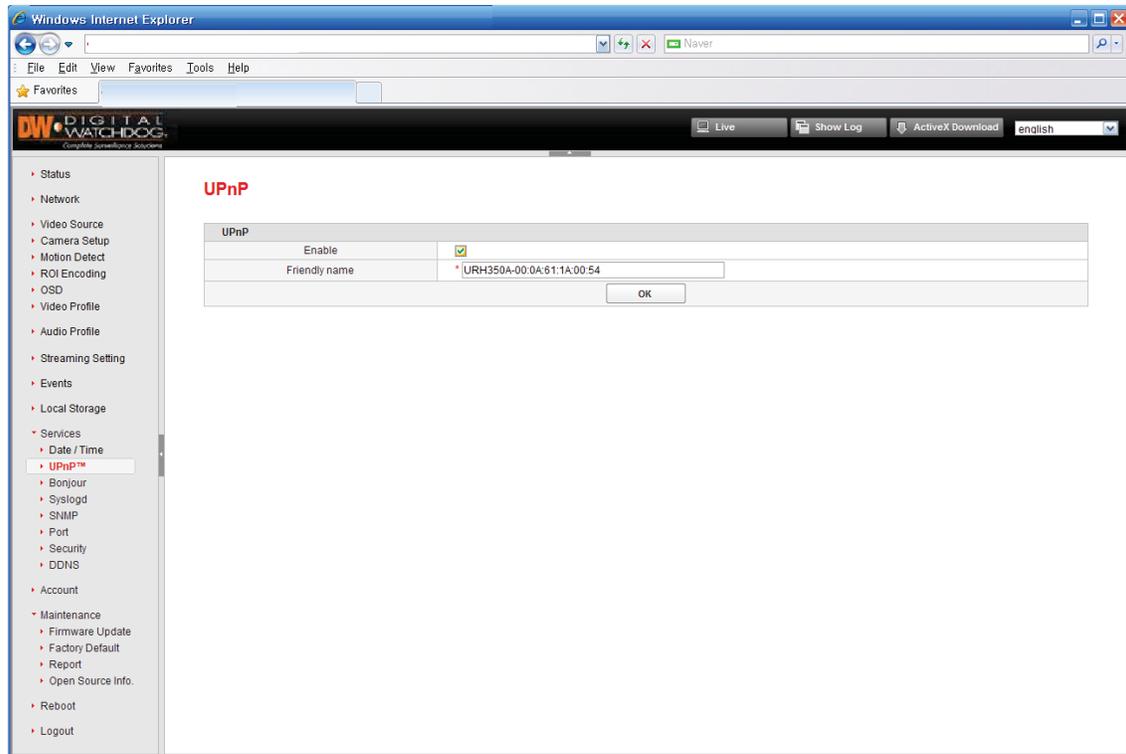
[Enable] check the box for the activation.

[Interval] the period that requests the time information for a time server (minute)

[Time Server] the IP address or hostname of a time server for the synchronization

[OK button] click this button to apply the changed setting values.

# Setup-UPnP



► Web setting page (UPnP)

## UPnP

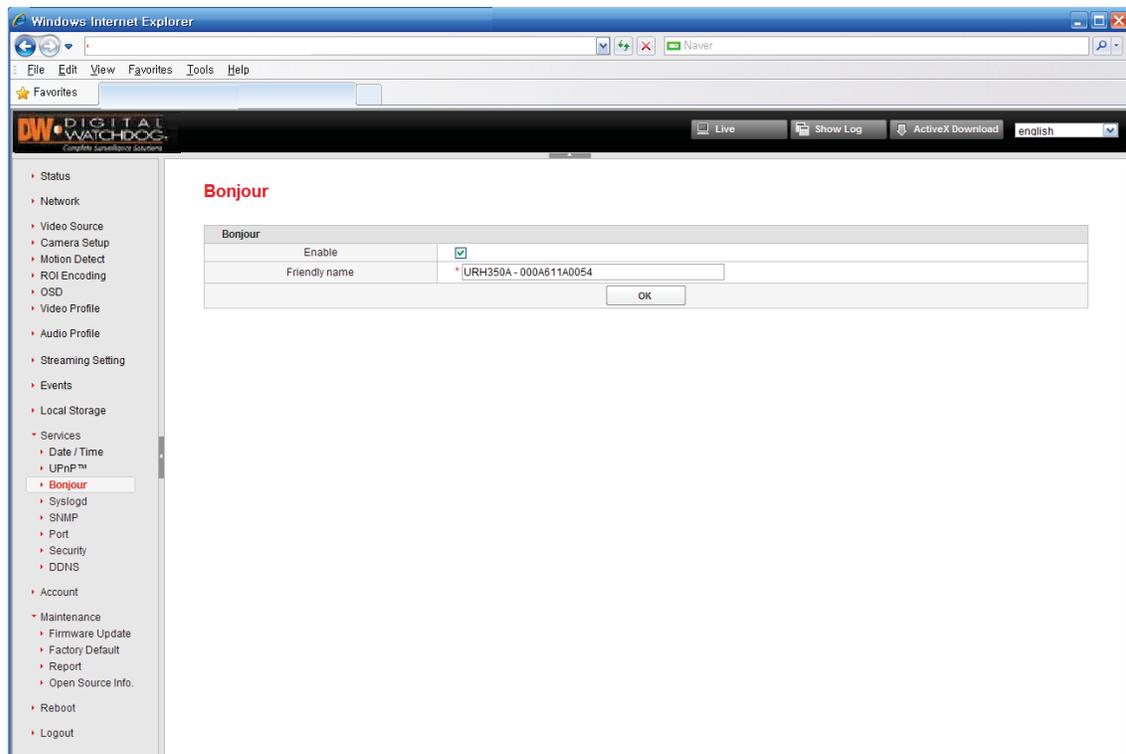
- It is available to scan cameras with Windows explorer and access to them with clicking. The Windows explorer should support the detection of the UPnP device.

[Enable] check the box for the activation.

[Friendly name] is created by the MAC address automatically. This can be changed after the check box "Enable" is checked.

[OK button] click this button to apply the changed setting values.

# Setup- Bonjour



► Web setting page (Bonjour)

## Bonjour

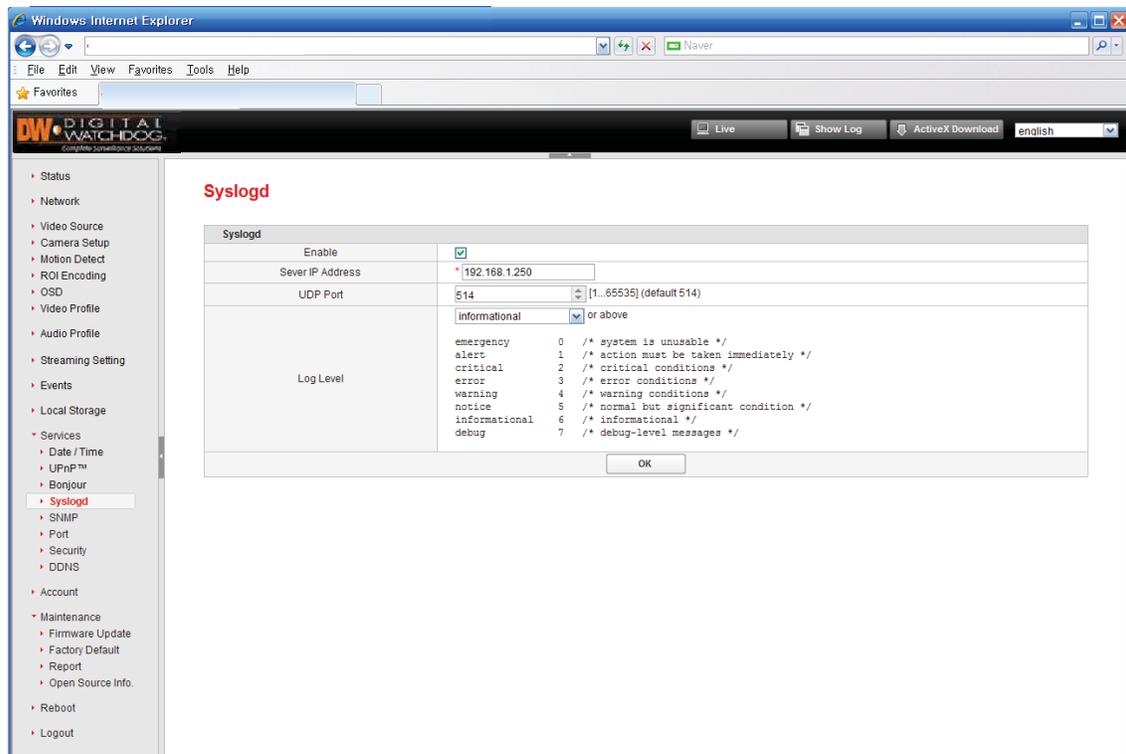
- It is available to scan cameras with Windows explorer and access to them with clicking. The Windows explorer should support the detection of the Bonjour device.

[Enable] check the box for the activation.

[Friendly name] is created by the MAC address automatically. This can be changed after the check box "Enable" is checked.

[OK button] click this button to apply the changed setting values.

# Setup- Syslogd



► Web setting page (Syslogd)

## Syslogd

- The camera can send the log files that occur on the operation. Ask the camera supplier for the PC program for receiving the log files.

[Enable] check the box for the activation.

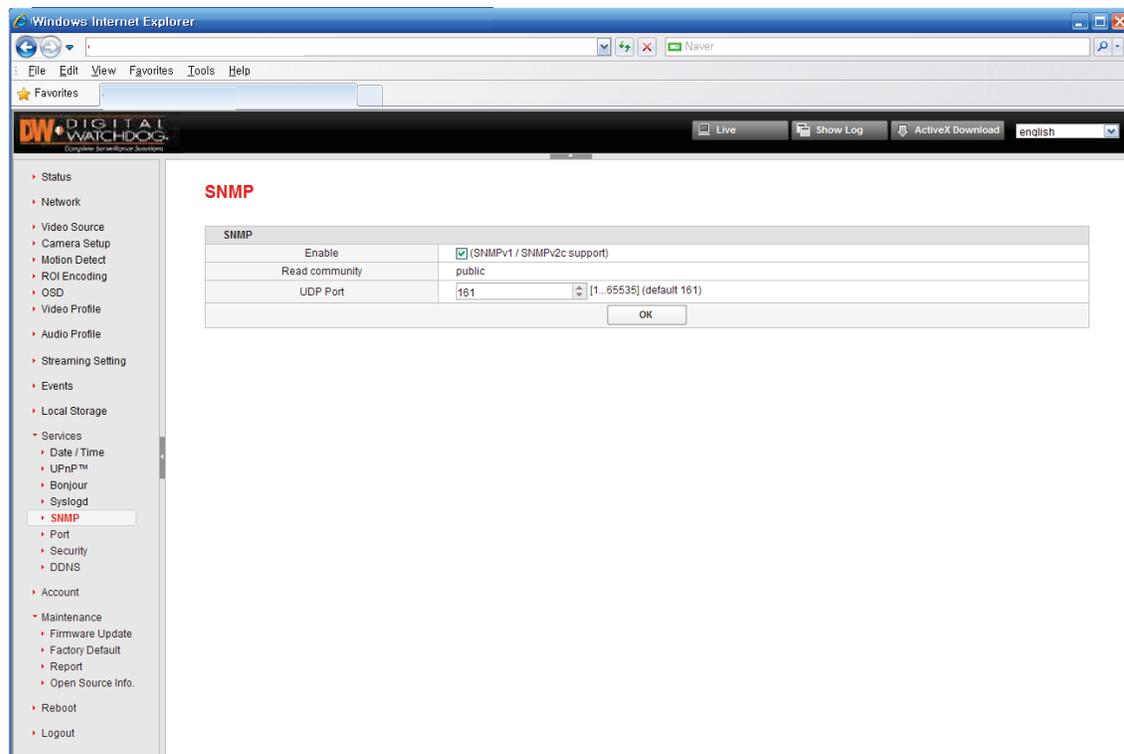
[Server IP Address] the IP address of the PC that receives the log files

[UDP Port] the port number for sending the log files

[Log Level] select the log items.

[OK button] click this button to apply the changed setting values.

# Setup- SNMP



► Web setting page (SNMP)

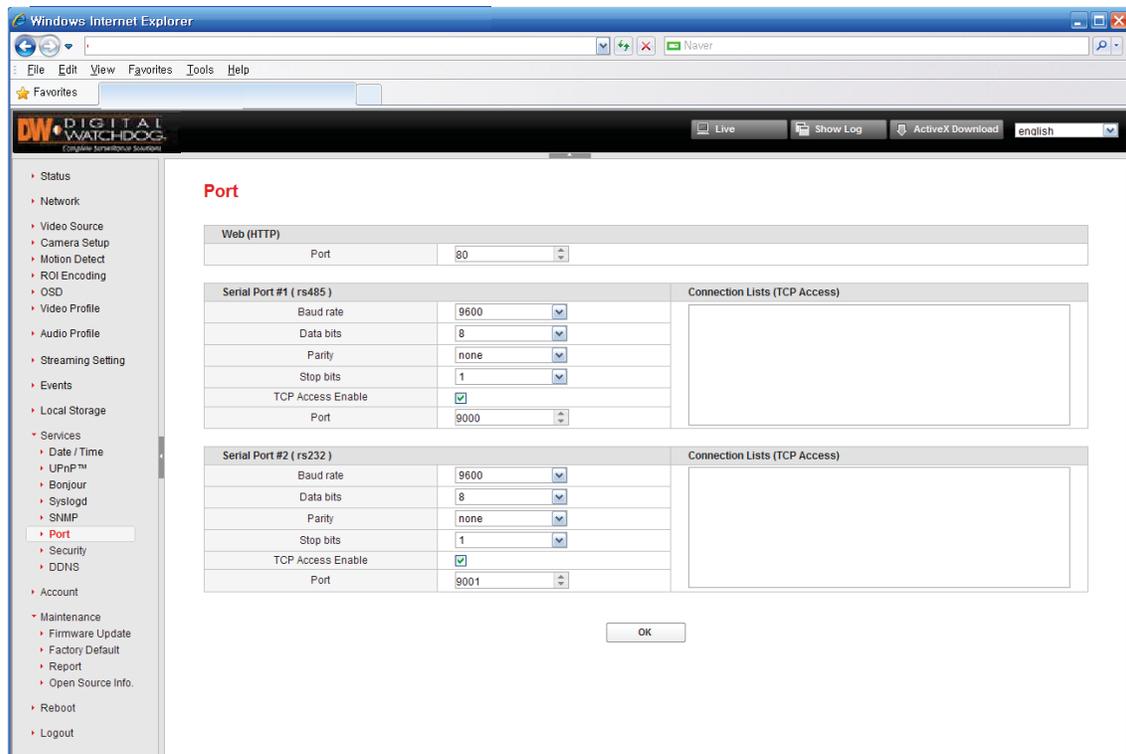
## SNMP

[Enable] check the box for the activation.

[Read community] the running mode is "public". (Fixed)

[UDP Port] the port number for use

# Setup- Port



► Web setting page (Port)

## Overview

- Set up the port number for the data communication

## Web (HTTP)

[Port] the web port number

## Serial Port #1 (rs485)

- This product does not support this feature.

## Connection Lists (TCP Access)

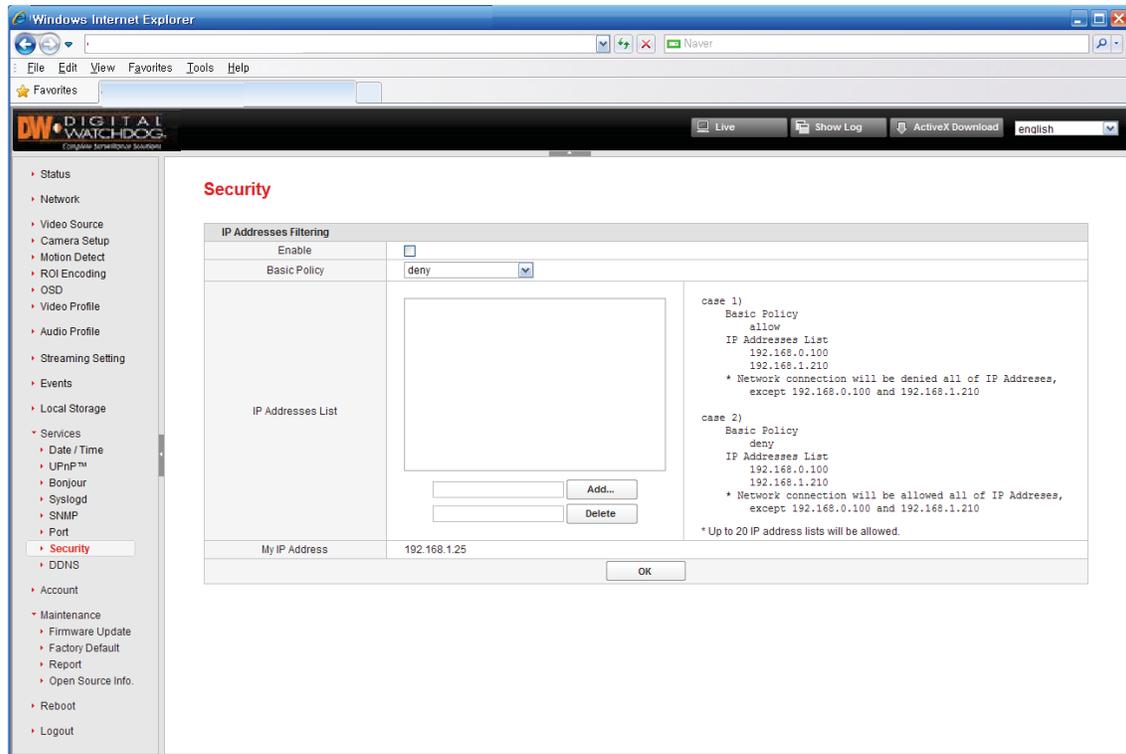
- This product does not support this feature.

## Serial Port #2 (rs232)

- This is the serial data communication for the zoom, focus function.

[OK button] click this button to apply the changed setting values.

# Setup- Security



► Web setting page (Security)

## IP Addresses Filtering

[Enable] check the box for the activation.

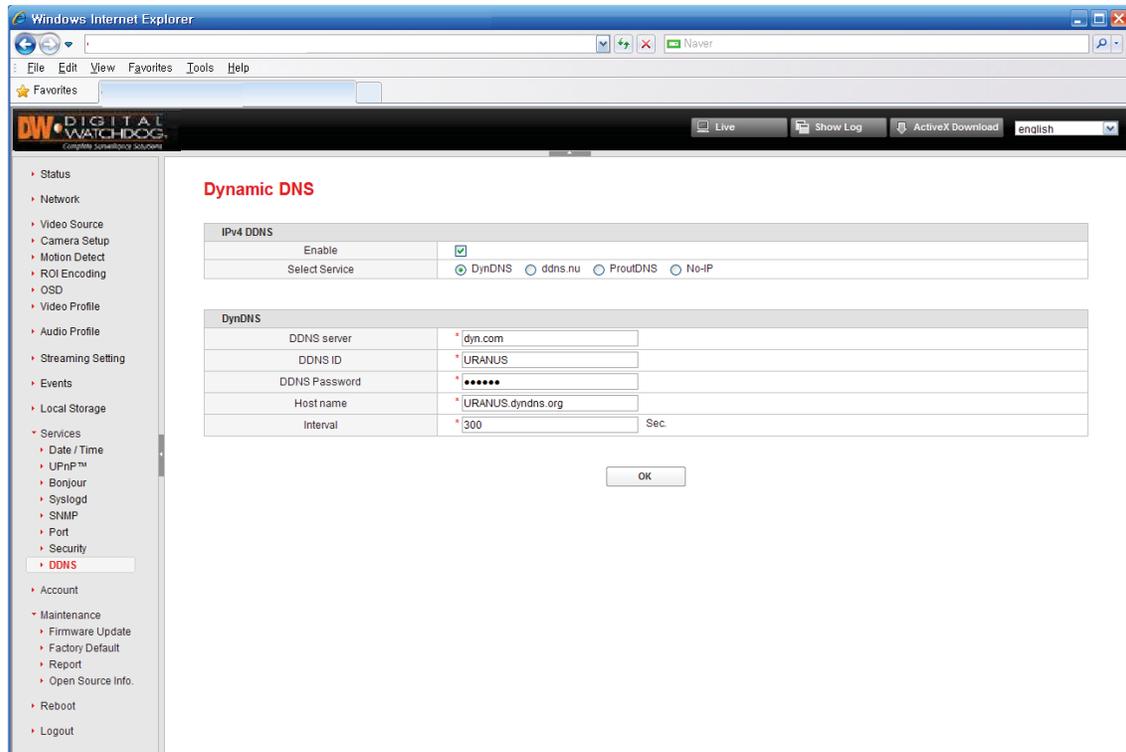
[Basic Policy] select one out of "allow" / "deny"

[IP Addresses List] make the IP address list for filtering with the button "Add" and "Delete"

[My IP Address] displays the IP address of the PC that are connected.

[OK button] click this button to apply the changed setting values.

# Setup- DDNS



► Web setting page (DDNS)

## IPv4 DDNS

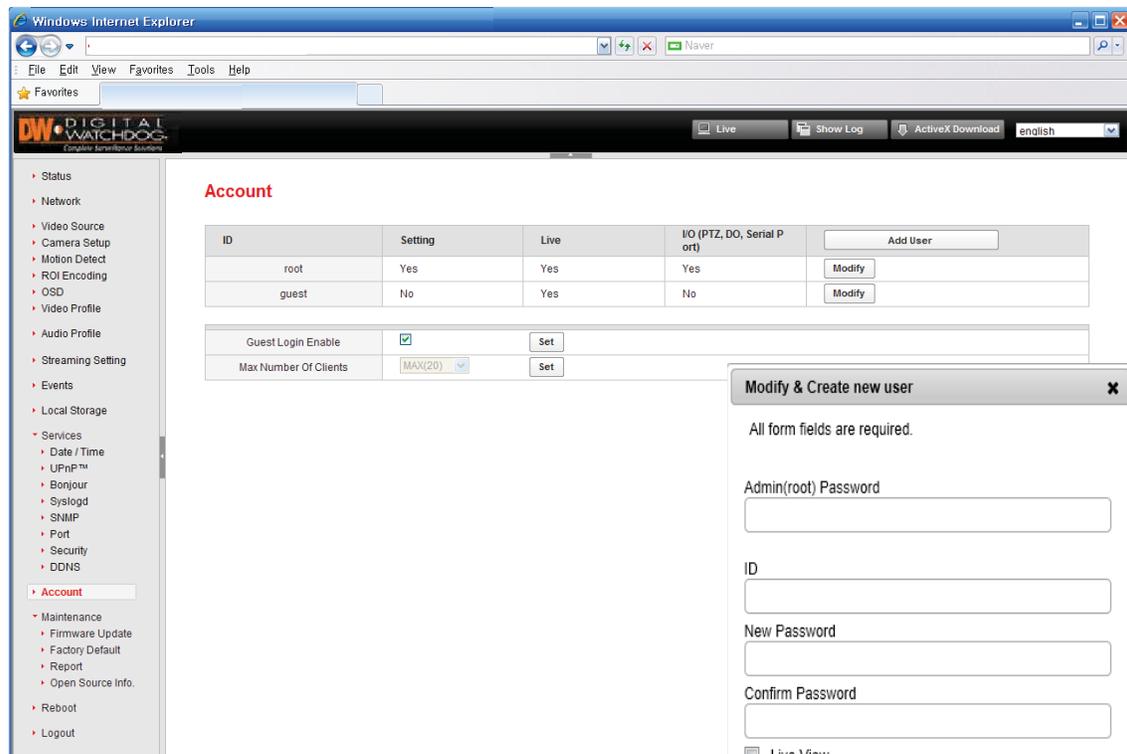
[Enable] check the box for the activation.

[Select Service] select a service for use.

Type the information that is used on the registration process of the DDNS server homepage.

[OK button] click this button to apply the changed setting values.

# Setup- Account



► Web setting page (Account)

[Add User button] click for adding an account.

[Modify button] click for modifying the registered account.

Modify & Create new user (after clicking the button "Add User")

[Admin Password] input the password of the account "root"

[ID] input an ID to be added

[New Password, Confirm Password] input the password for the ID to be added.

[Live View check box] check for the activation. this means the authority for the real time web monitoring.

[I/O (PTZ, DO, Serial Port) check box] check for the activation. this means the authority for the inputs and outputs.

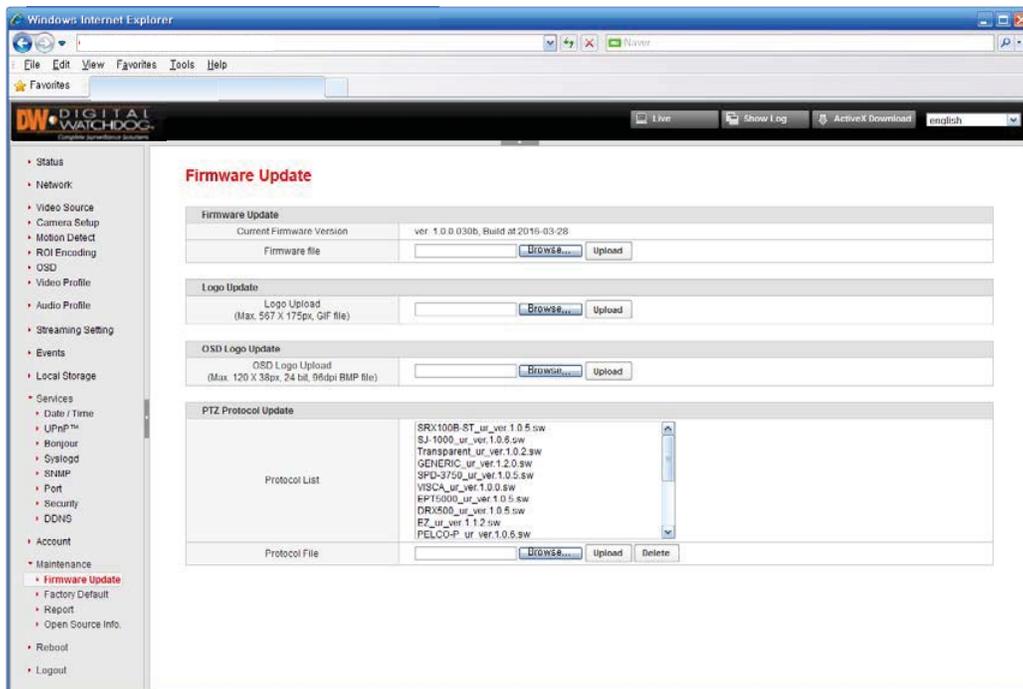
[Apply / Cancel button] click the button "Apply" to apply or click the button "Cancel" to cancel.

[Guest Login Enable check box] check for permission of the accesses of the guests. Click the button "Set" to apply the setting.

[Max Number Of Clients] the maximum allowed connections are 20. (fixed)

► Modify & Create new user dialog box

# Setup- Firmware Update



► Web setting page (Firmware Update)

## Firmware Update

[Current Firmware Version] displays the current firmware version.

[Firmware file] click "Browse..." and select the file to update. Click "Upload" for updating. Do not turn off the power supply while firmware is being updated. Please note that updating the firmware may take up to 10 minutes. The network setting are kept after the firmware update. (video settings will be initialized.)

## Logo Update

[Logo Upload] click "Browse..." and select the file to update. And click the button "Upload" for updating.

## OSD Logo Update

[OSD Logo Upload] click "Browse..." and select the file to update. And click the button "Upload" for updating.

## PTZ Protocol Update (available only for the server type products)

[Protocol List] displays the control protocols that can be used presently.

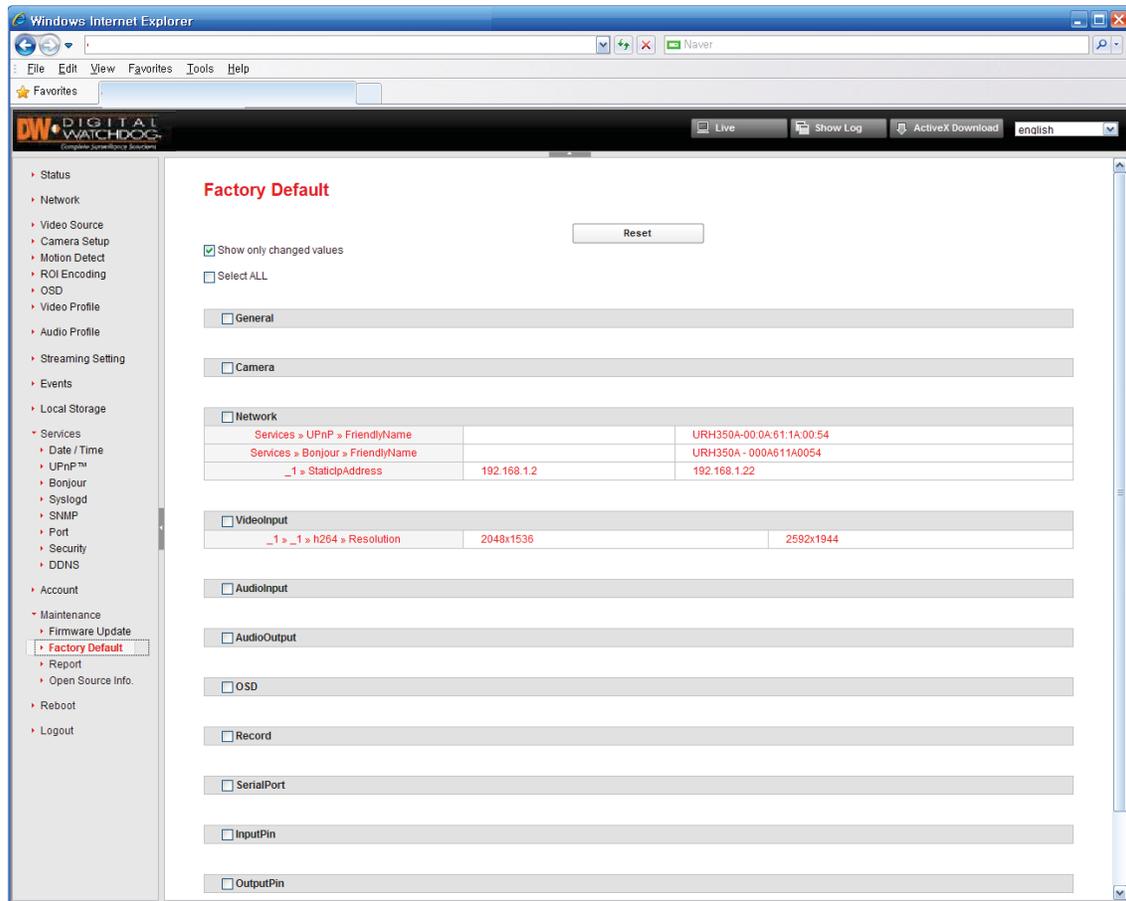
[Protocol File] click the button "Browse..." and select the file to update. And click the button "Upload" for updating.

[Delete button] in case that the protocol that has same name as the registered protocol is uploaded, use this button to delete the registered protocol.

## Reference

- in case that the new protocol is uploaded, select the new protocol on the item "Video Source / Camera Control" and apply the protocol with clicking the button "Set".

# Setup- Factory Default



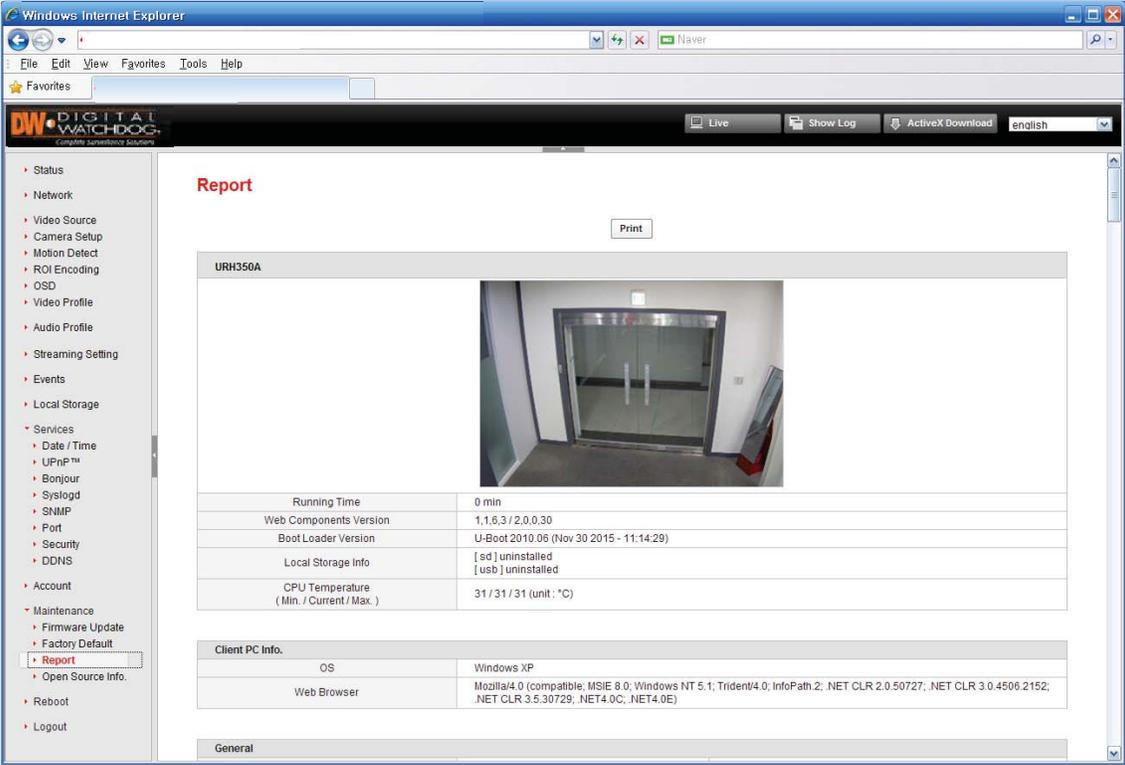
## ► Web setting page (Factory Default)

[Reset button] click the button to initialize the changed setting values. (click after selecting the values to be initialized.)

[Show only changed values check box] check for displaying only the changed values (default)

[Select All check box] selects all groups to be initialized.

# Setup- Report



The screenshot shows the Digital Watchdog web interface in Internet Explorer. The left sidebar contains a navigation menu with categories like Status, Network, Video Source, and Services. The 'Report' option is highlighted. The main content area is titled 'Report' and features a 'Print' button. Below the button is a camera feed labeled 'URH350A' showing a hallway with a glass door. Underneath the camera feed are two tables of system information.

Running Time	0 min
Web Components Version	1,1,6,3 / 2,0,0,30
Boot Loader Version	U-Boot 2010.06 (Nov 30 2015 - 11:14:29)
Local Storage Info	[sd] uninstalled [usb] uninstalled
CPU Temperature (Min. / Current / Max. )	31 / 31 / 31 (unit : °C)

Client PC Info.	
OS	Windows XP
Web Browser	Mozilla/4.0 (compatible; MSIE 8.0; Windows NT 5.1; Trident/4.0; InfoPath.2; .NET CLR 2.0.50727; .NET CLR 3.0.4506.2152; .NET CLR 3.5.30729; .NET4.0C; .NET4.0E)

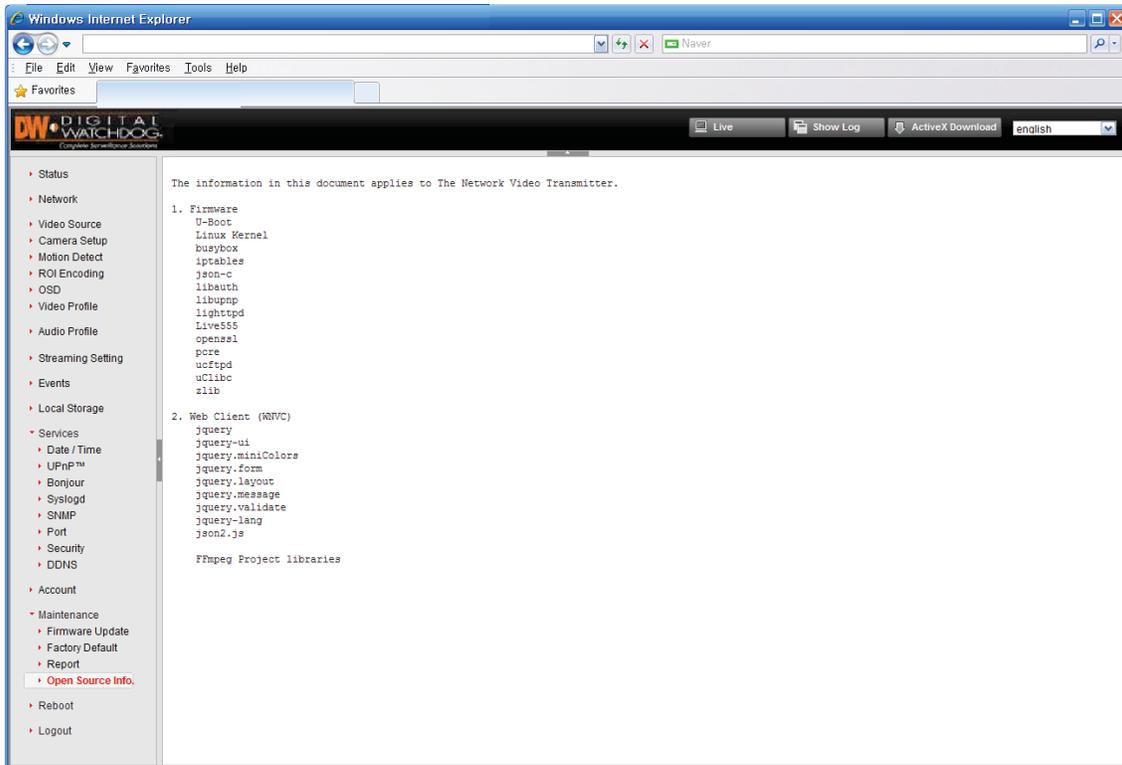
► Web setting page (Show Report)

## Overview

- This page displays the current setting values and can be printed or made into PDF file. For the PDF file output, the PDF output printer items should be on the PC.

[Print button] outputs the page "Report".

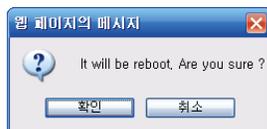
# Setup- Open Source Info.



▶ Web setting page (Open Source Info.)

## Reboot

- Click the text "Reboot" for rebooting the camera



▶ Confirmation of reboot

## Logout

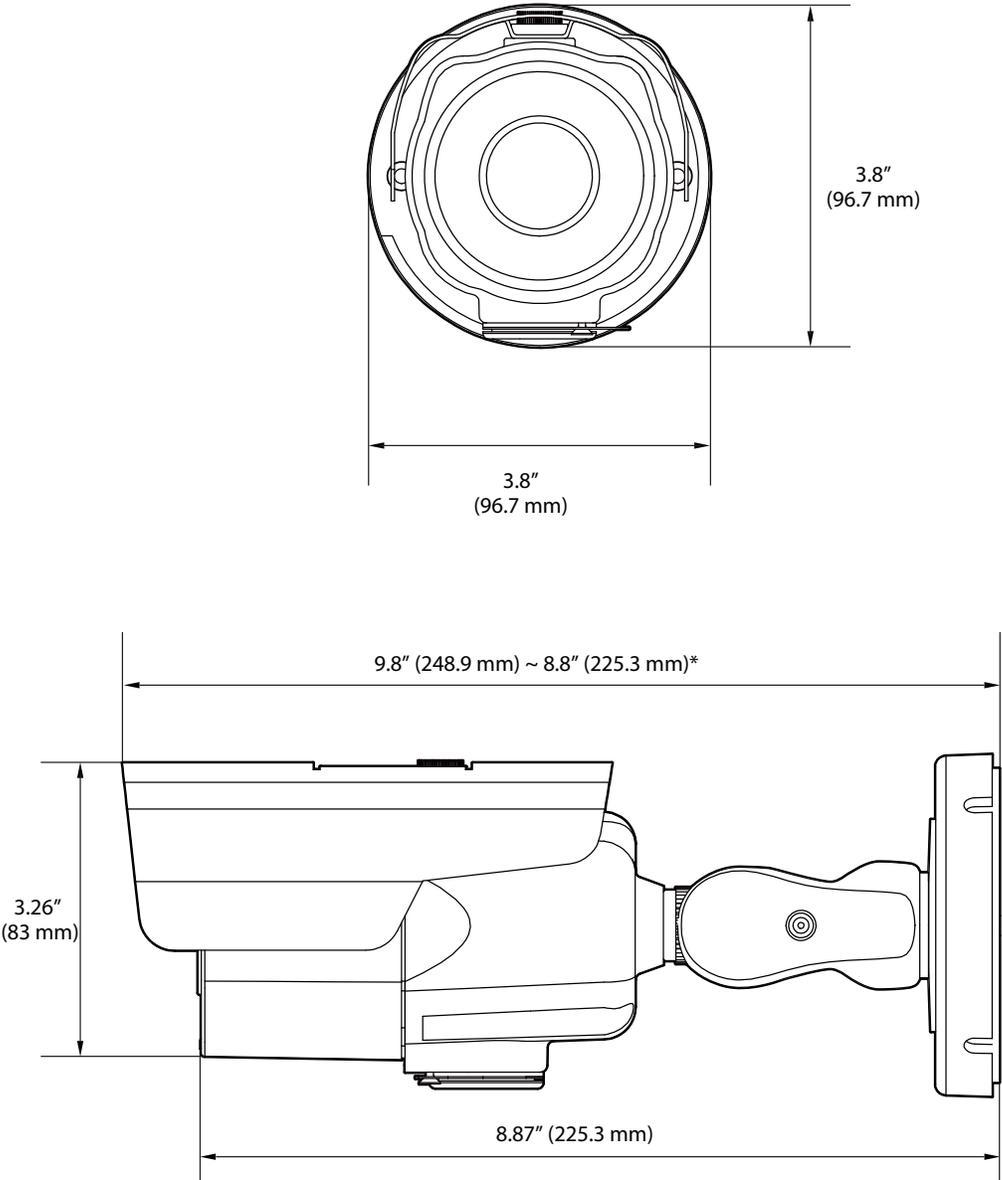
- This enables you to move to the initial web page.

# Specifications - Dimension

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Unit: Inch (mm)

\* Dimensions based on the position of the sun shield cover



# Warranty Information

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**Digital Watchdog** (referred to as “the Warrantor”) warrants the Camera against defects in materials or workmanships as follows:

**Labor:** For the initial five (5) years from the date of original purchase if the 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.

To obtain warranty or out of warranty service, please contact a technical support representative at 1+ (866) 446-3595, Monday through Friday from 9:00AM to 8:00PM EST.

A purchase receipt or other proof of the date of the original purchase 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 damages 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, maladjustments of consumer controls, improper operation, power line surge, improper voltage supply, lightning damage, rental use of the product or service by anyone other than an authorized repair facility or damage that is attributable to acts of God.

# Limits & Exclusions

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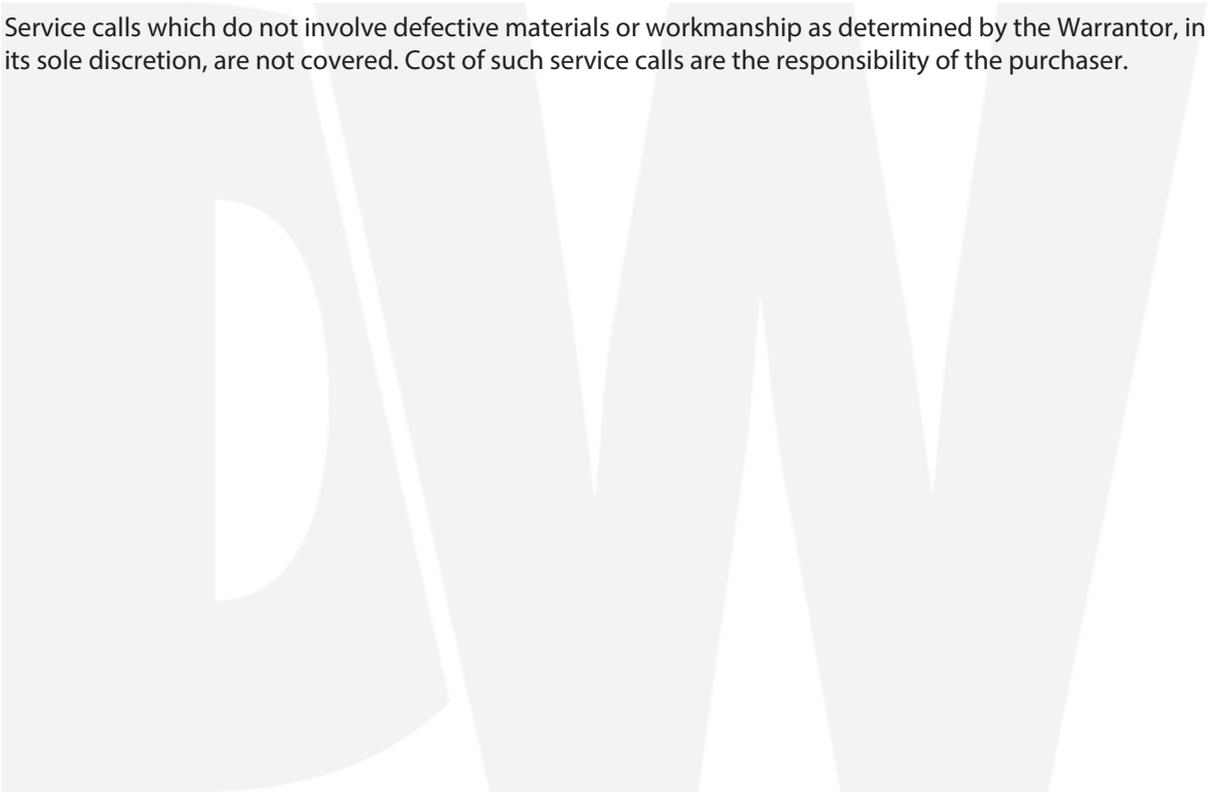
There are no express warranties except as listed above. The Warrantor will not be liable for incidental or consequential damages (including, without limitation, damage to recording media) resulting from the use of these products, or arising out of any breach of the warranty. All express and implied warranties, 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 lasts, so the above exclusions or limitations may not apply to you. This warranty gives you specific legal rights, and you may also have other rights from vary from state to state.

If the problem is not handled to your satisfaction, then write to the following address:

Digital Watchdog, Inc.  
ATTN: RMA Department  
5436 W Crenshaw St  
Tampa, FL 33634

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





*Complete Surveillance Solutions*

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Technical Support Hours: Monday-Friday

9:00am to 8:00pm Eastern Standard Time