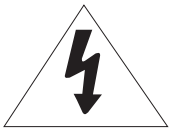
MEGApix® PANO™ 6 Megapixel Three-Sensor Indoor/Outdoor Bullet IP Camera

DWC-PB6M4T

User's Manual Ver. 05/17

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 shoc hazard, do not expose this appliance to rain or moisture.

WARNING

1. Be sure to use only the standard adapter that is specified i the specification sheet. Using any other adapter could caus 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 th 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 o 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 sorce 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 ÿelds 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 form the municipal waste stream 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.

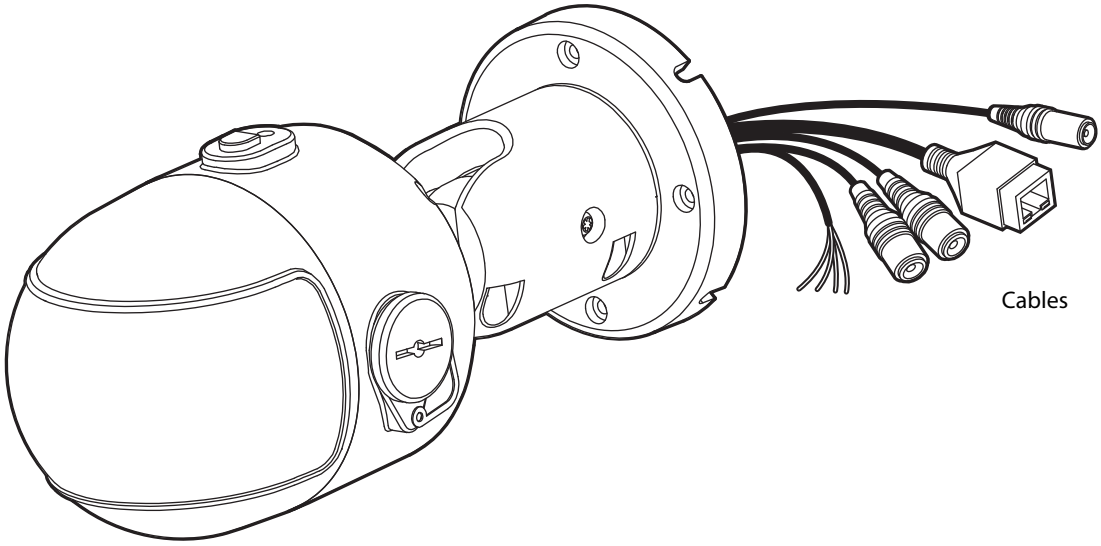
FC CE

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 interferenece at his own expense.

Table of Contents

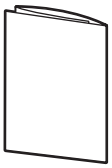
Introduction -
Product & Accessories

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



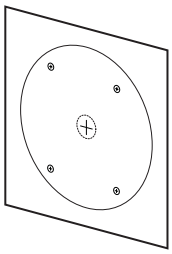
Cables

Camera

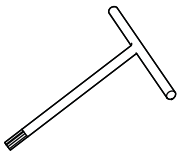


Quick Manual

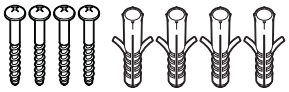
Sunshield Screws



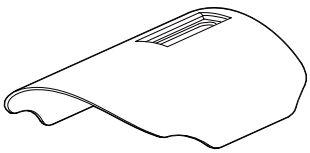
Template Sheet



T-Wrench

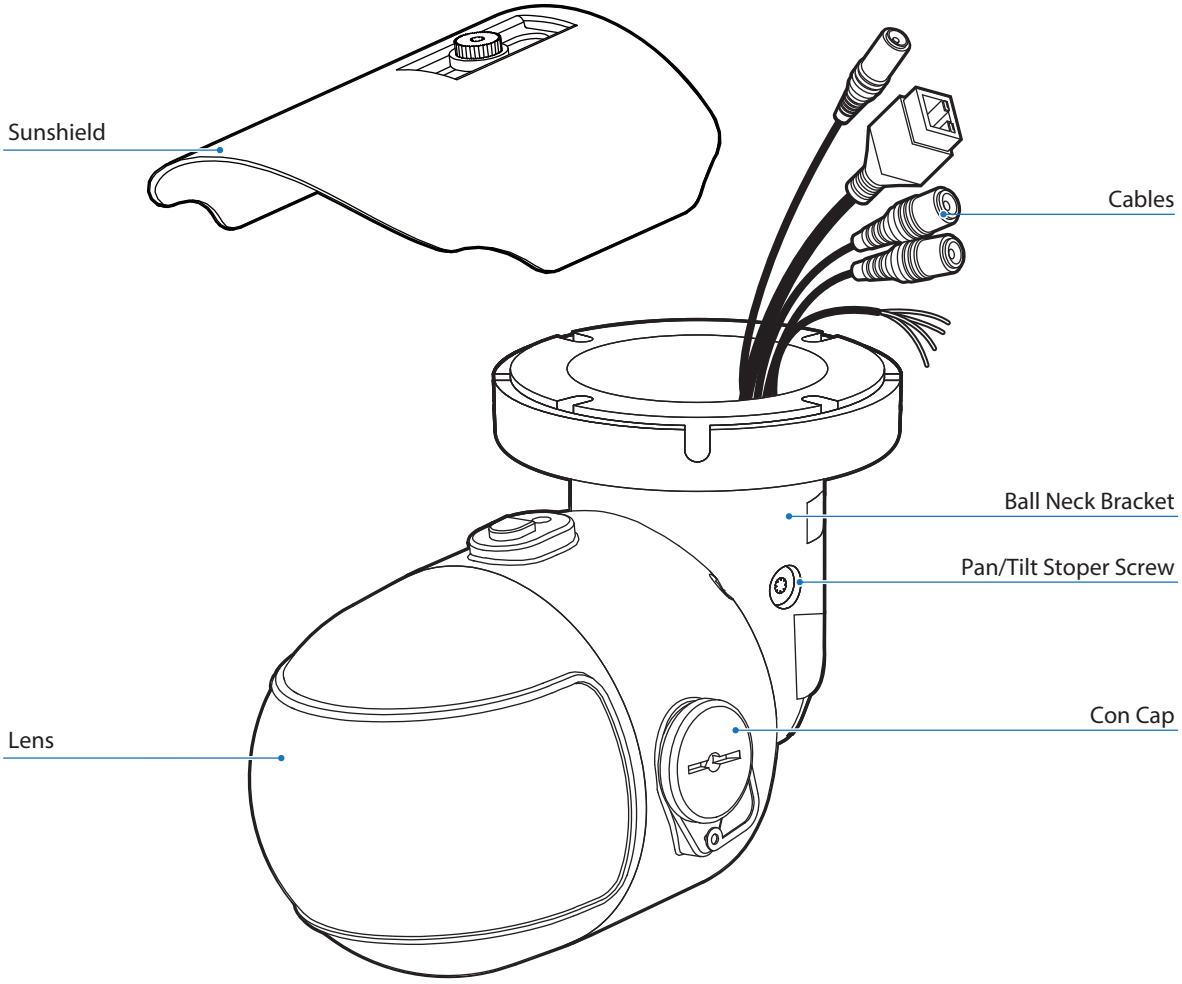


Screw & Plastic Anchor-4pcs



Sunshield

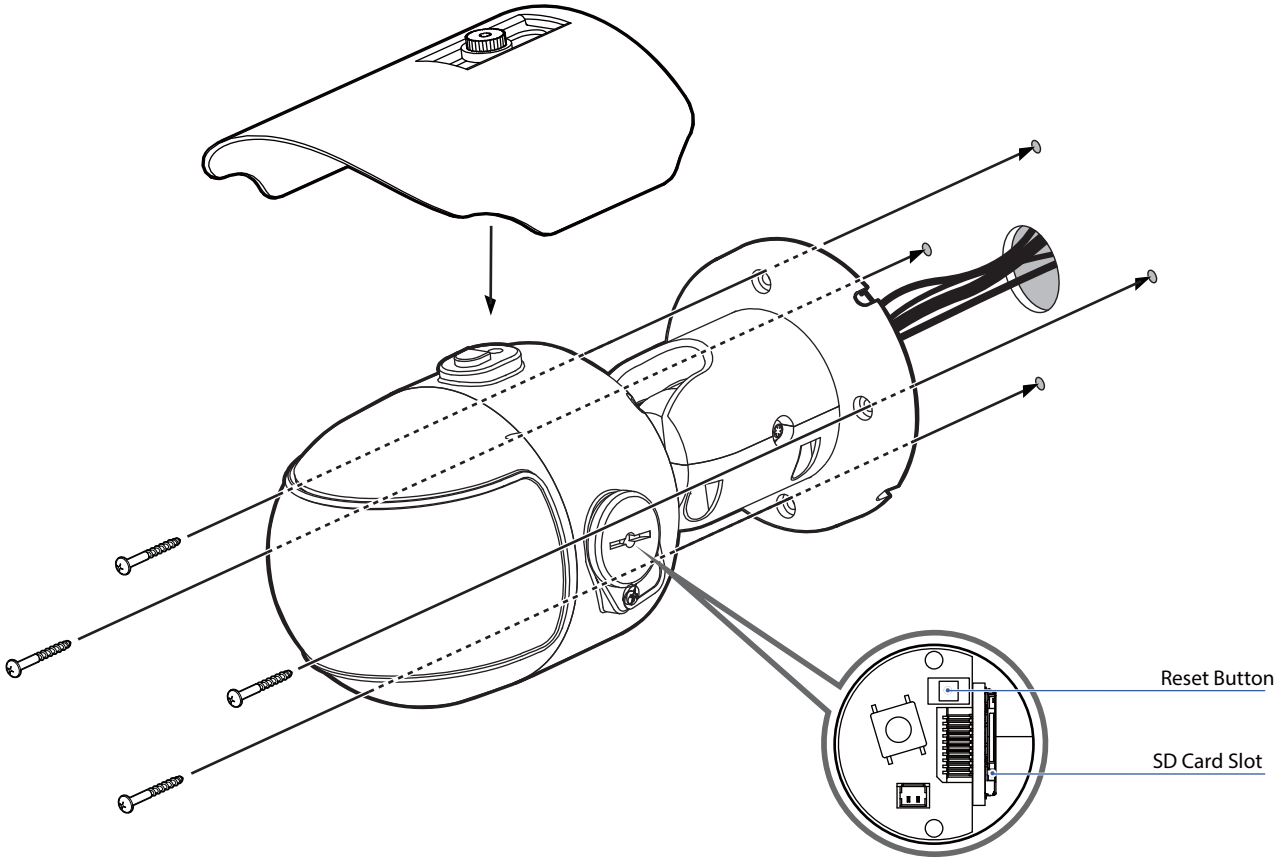
Introduction -
Parts and Description



Installation -
Installation

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

1. The mounting surface must bear five times the weight of your camera (2.2 lbs).
2. Mind the cables and power line to avoid damage
3. Using the mounting template sheet or the camera itself, mark and drill the necessary holes in the wall or ceiling.



1. Pass cables through the mounting surface as needed.

2. Connect the network cable, power cable respectively.
   See the section 'Installation - Cabling' for details.

3. Once all cables are connected, secure the camera to the mounting surface using the included screws.

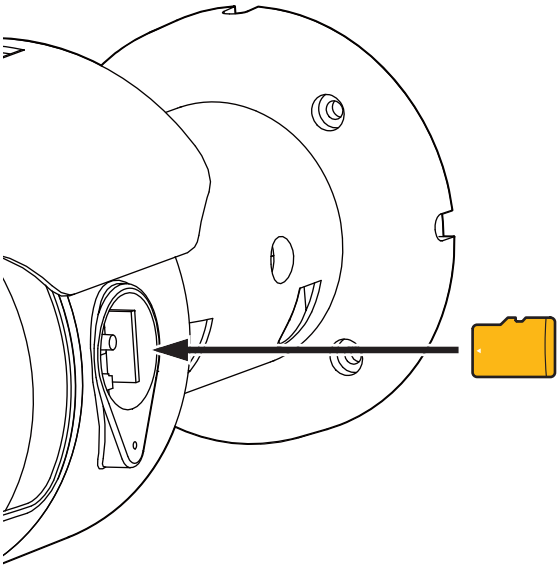
4. To adjust the camera's pan and tilt, loosen the pan/tilt stopper screw. Adjust the camera's position as needed.

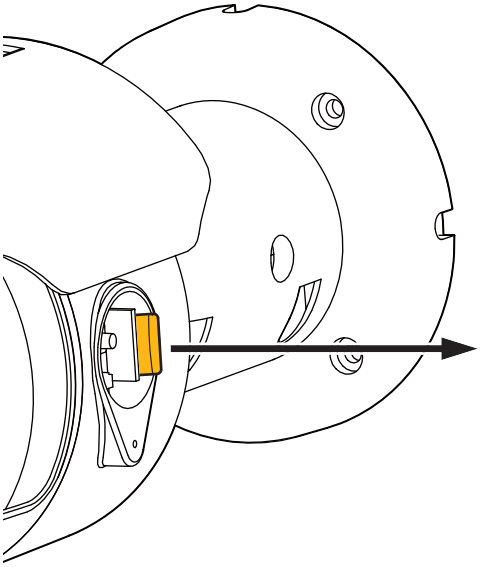
5. Attach the sunshield to the camera by using the provided Sunshield screws.

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

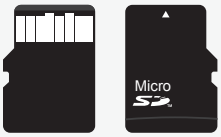
Warning
If you press the 'Reset' button, you will lose all setting data. If needed, please, make a note for further installation.

Installation -
Inserting/Removing an 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 (SDHC)
- Manufacturer: Transcend, Kingston, Toshiba, Sanddisk
- Capacity: 4~16G
- Class: over Class 6

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.

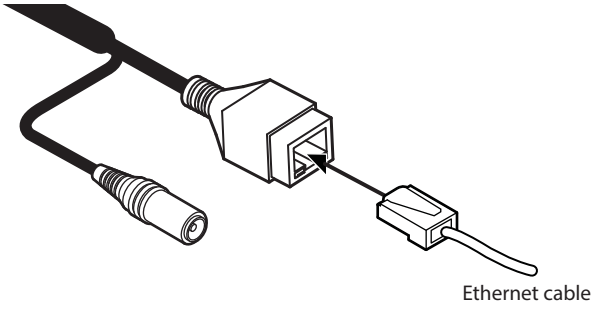
※ Pressing too hard on the SD memory card can cause the card to shoot out uncontrollably from the slot when released.

※ 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.

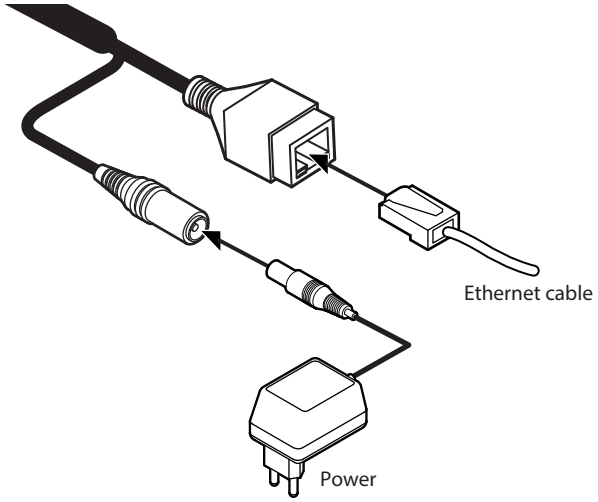
Installation - Cabling

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.

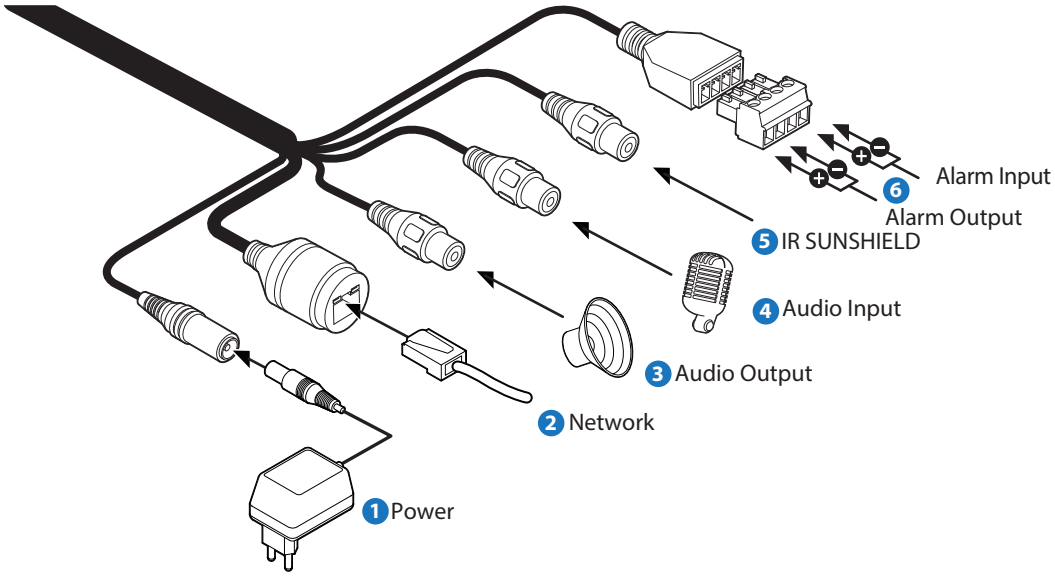
1. Using a PoE-Enabled Switch
   The Camera is PoE-compliant, allowing transmission of power and data via a single Ethernet cable.
   PoE eliminates the need for the different cables used to power, record, or control the camera. Follow the illustration below to connect the camera to a PoE-enabled switch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



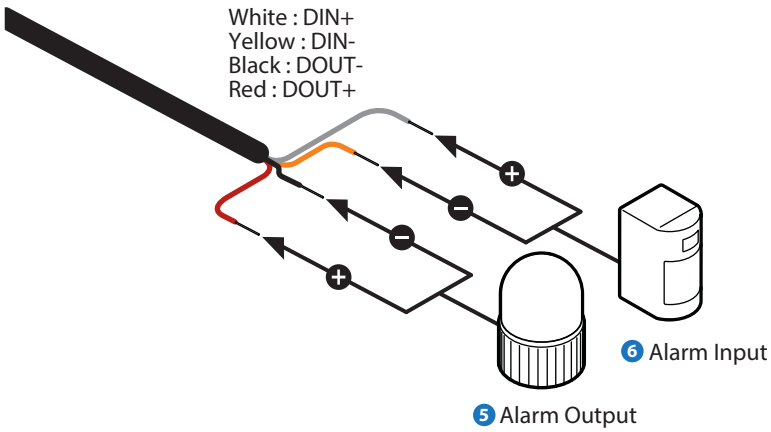
1 Power Connection
Please, check the voltage and current capacity of rated power carefully.

Rate Power	Current Consumption	PoE
DC 12V	18W	IEEE 802.3af Class 4

2 Network Connection
Connect the crossover cable into the RJ-45.

3 Audio Output
Connect the 'Audio Out' cable of the camera to device like speaker.

4 Audio Input
Connect the 'Audio In' cable of the camera to the device like microphone.

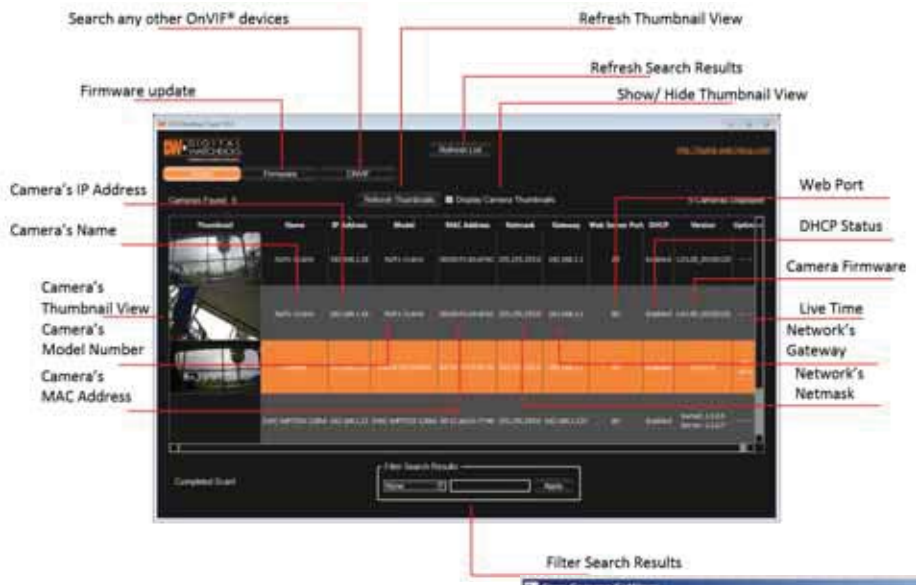


5 Alarm Output
It connects to the alarm lights, siren or lamps, and it is activated according to the Setup menu setting.

Cable of the relay output device should connect to red and black line of the Alarm Cable.

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

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.

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

6. The camera's default network information is:

- 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'.

- 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.

- 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

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

- Please do not power on the IP Camera until instructed.
- Temporarily disable any proxy servers configured in internet Explorer.
- 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.

- If you have a DHCP server, it will automatically set the Camera IP.
- 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.

- Example: http://192.168.0.200:8888
- 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 :

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

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.

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☐

ⓘ 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.

ⓘ 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.

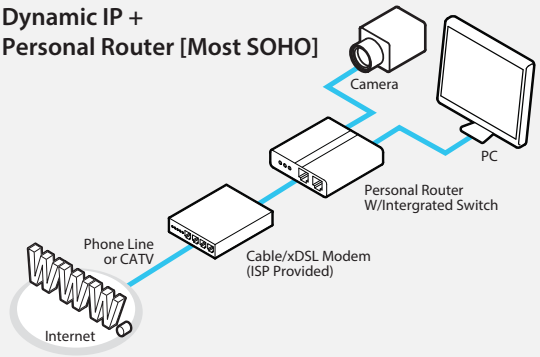
The default web port number is 80. If port 80 is blocked by the ISP, a value between 1025 ~ 60000 should be used. If TCP port 80 is blocked, consult the ISP

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.

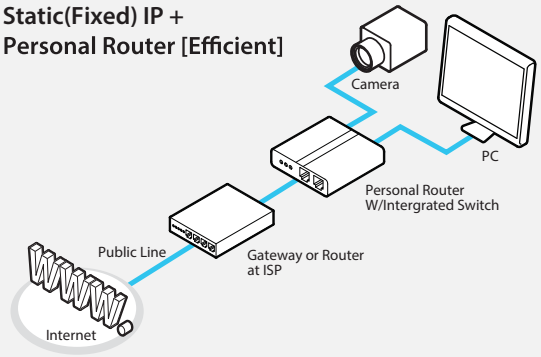
ⓘ You cannot control the rectangular gray areas and only the ISP has access to the devices.

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)

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

- 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)

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

- 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.

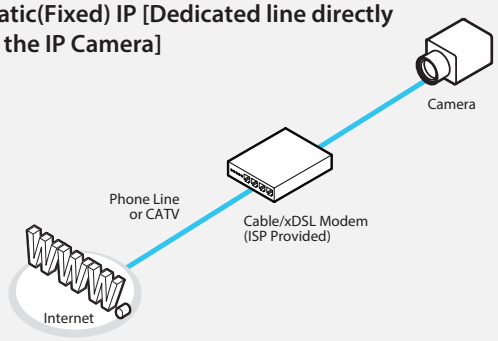
- This is the same site you will register later to accommodate dynamic IP from your ISP.

7. **Web Port :** 8888

- Do not use the default port 80 as this number must be changed.
- 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)

> 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)

> Use the assigned default gateway from your ISP

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

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

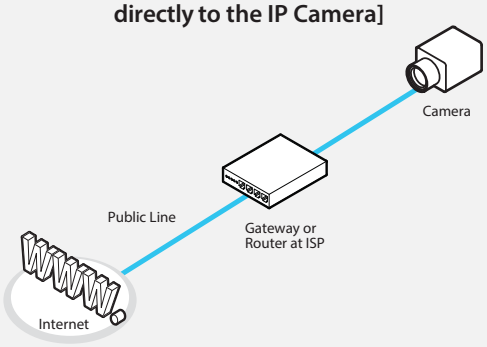
6. **DDNS Server :** Use the DDNS server

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

7. **Web Port :** 80

> You may select any number between 1025 ~ 60000.

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



> 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

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

3. **Web Port :** 80

> 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

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

Network Setup -
Starting IP Camera

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.

ⓘ Examples: http://192.168.0.200:8888 or http://24.106.88.123

ⓘ 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.

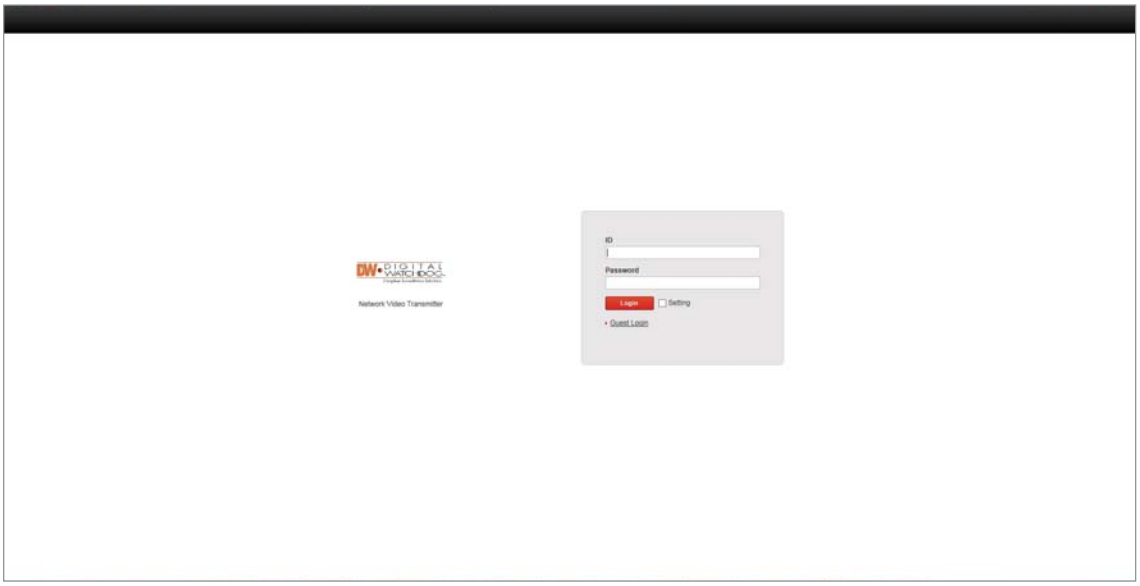
If you use Case A, D

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.

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

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

Webviewer - Settings
Login



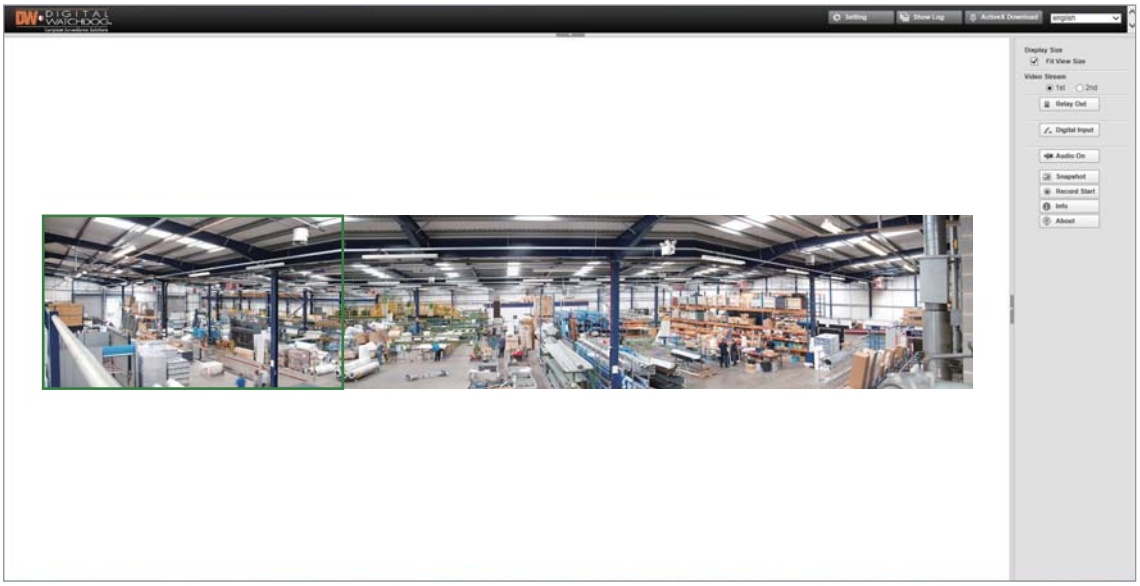
1 Administrator connection (on the initial page)

1) "ID" admin (Unchangeable)
2) "Password" admin (the default password can be changed in the web setting page.
3) Type the ID and password and click the button "Login", the web monitoring page shows up.
4) You can also type the ID and password and click "Login" after checking the box "Setting" to go directly to the camera's settings page.

2 Guest connection (on the initial page)

1) "Guest Login" click the test "Guest Login" below the button "Login" without an ID and a password.
2) Under the guest connection, only restrictive functions will be available. Settings page cannout be accessed as a guest.

Webviewer - Settings
Web viewer



Monitor and configure the MEGApix® PANO™ camera through a built-in web viewer.

1. Type the camera's IP address in a web browser.
Enter Username and Password.Default: Username: admin | Password: admin

2. The web browser may ask to install ActiveX to view video from the camera. Once it has been installed, Internet Explorer will display video images from the camera.

3. Internet Explorer version 8.0 or higher are recommended.

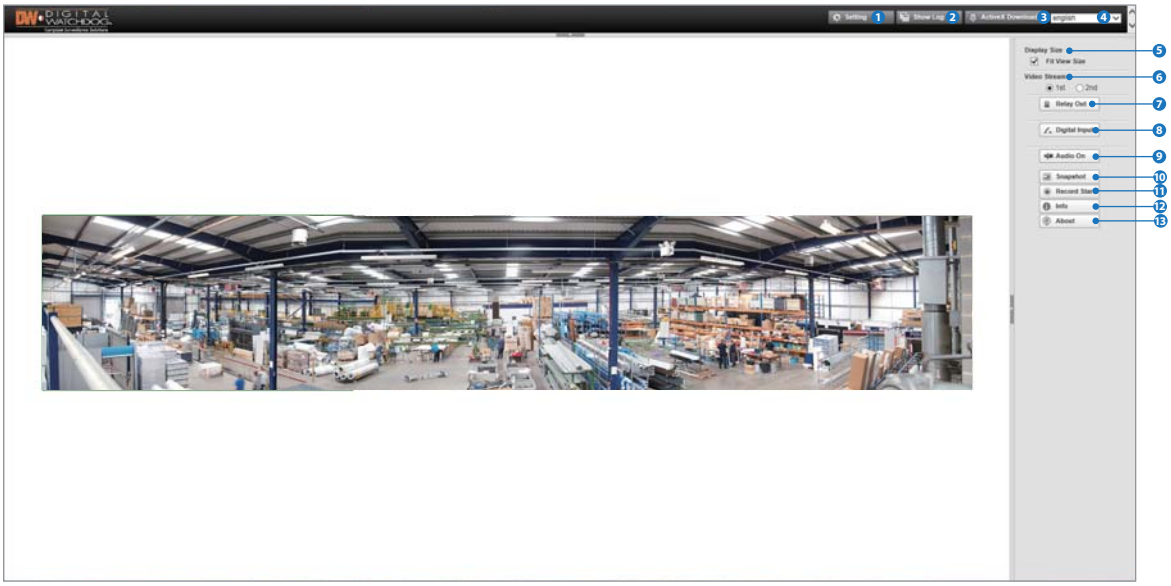
4. The Web Client is also available in Google Chrome, Safari and Firefox web viewers. Please note that features may be limited.

5. Snapshot: Capture a still image from the camera's live view. The image is saved as a .jpeg file to your local downloads directory.

6. View the camera in full screen: you can hide all the settings and menu options and display the camera's view across your entire monitor. Press Esc to exit the full screen mode.

7. Local Recording: Record short videos from the camera's streaming and save them locally.
   1) Click the Record button to start recording.
      A red frame will appear around the display area.
   2) Click the Record button a second time to stop recording.
   3) the recorded video will be saved locally to your directory.

Webviewer - Settings
Web viewer



Monitor and configure the MEGApix® PANO™ camera through a built-in web viewer.

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

2 Show Log button
the window for the log data shows up.

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

4 Language menu
the language can be selected out of the items of the language box.

5 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.

6 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

7 Relay Out button
controls the external device that is connected to the NVT. (Before use, check the availability of the product features or the connection status of the installed equipment.)

8 Audio On/Off
enables you to monitor the audio signal of the microphone connected to the NVT. (Audio IN connector)
(Before use, check the availability of the product features or the connection status of the installed equipment.)

9 Snapshot
captures a JPEG Image of the current video stream
(JPEG file path: C:/)

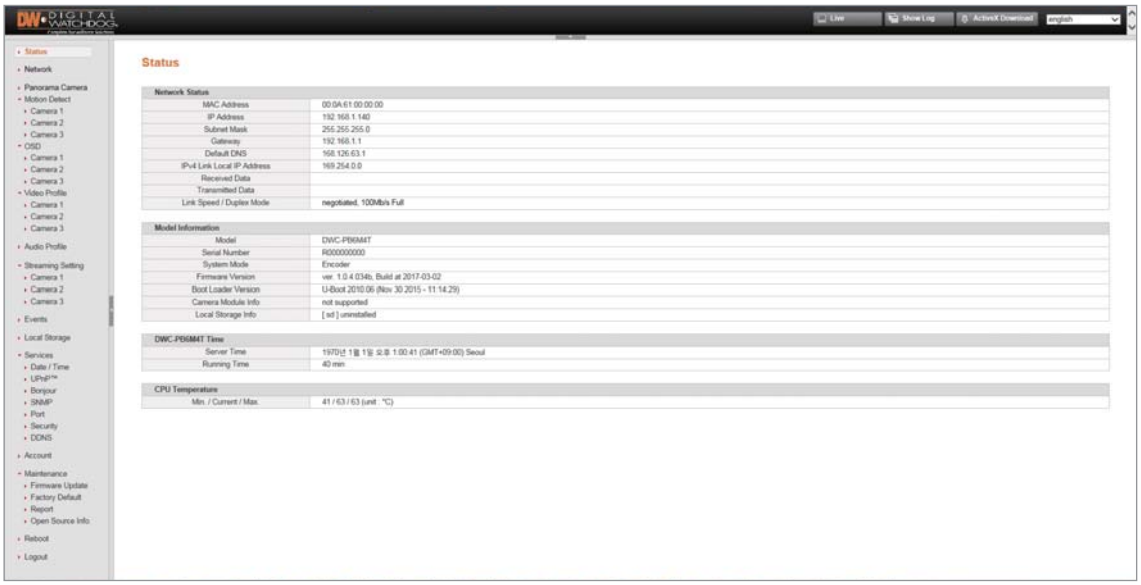
10 Record Start
records the video of the current video stream (AVI file path: C:/), The red outline shows up on recording

11 Full Screen
extends the image of the current video stream to fit the monitor size.

12 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.

13 About
displays the ActiveX information.

Webviewer - Settings
Status



View the camera's basic settings and status.

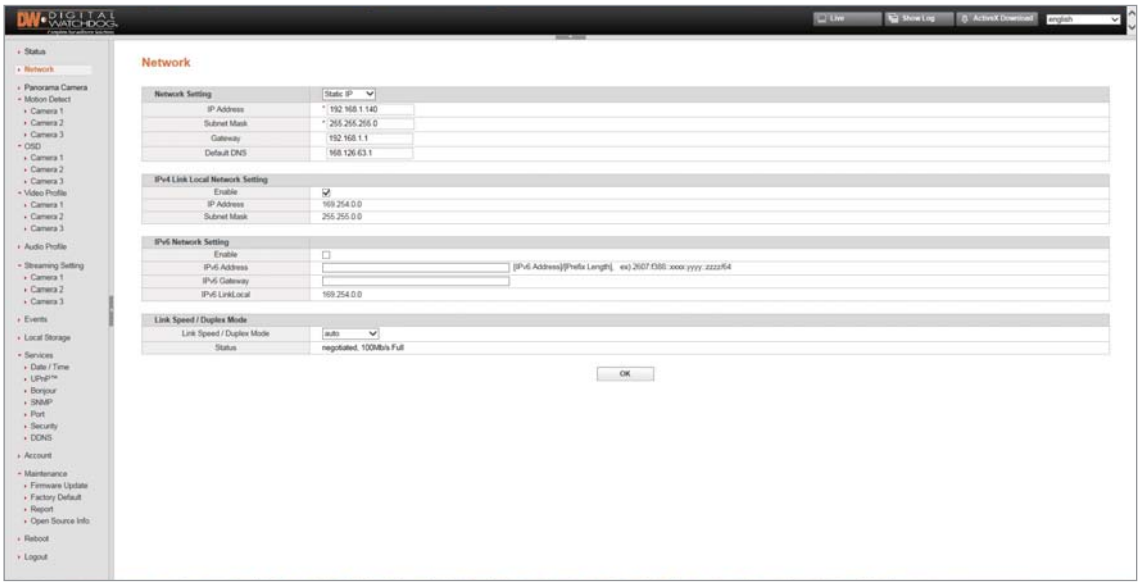
1 Network Status
Displays the camera's current network information, including MAC Address, IP Address, Subnet Mask, Gateway, Default DNS, IPv4, Received Data velocity, Transmitted Data celocity, and the connection status for Link Speed/Duplex Mode.

2 Model Information
Displays the camera's hardware information, including Firmware and Boot Loader versions, camera's Model, Serial Number, System Mode and local storage information.

3 NVT Time
Displays the camera's time information including the camera's current time settings and the running time (how long the camera has been running since the last time it booted up).

4 CPU Temperature
Show the camera's CPU running temperature, including proper range in °C.

Webviewer - Settings
Network



View the camera's network information.

1 IP Address
1. Dynamic IP - Select Dynamic IP if you are using a DHCP Server. The camera will obtain all its network information automatically from the server.
2. If you do not have a DHCP server, or wish to manually enter the camera's network information, select static IP Address from the drop-down options. Contact you Internet Service Provider(ISP) or Network Administrator for more information.

2 Subnet Mask
The camera is set to DHCP. Subnet will change according to network settings.

3 Gateway
This is your router's external IP address. This address is used when accessing the camera remotely from outside the network. The router will channel the data request to the appropriate port associated with the camera.

4 Default DNS
Enter a Domain Name Server(DNS) address. This translates a web addresses to an IP addresses.

5 IPv4 Link Local Network Setting
Enabled by default.
1. IP Address, Subnet Mask
   These are set automatically based on you settings in the Network Setting section.

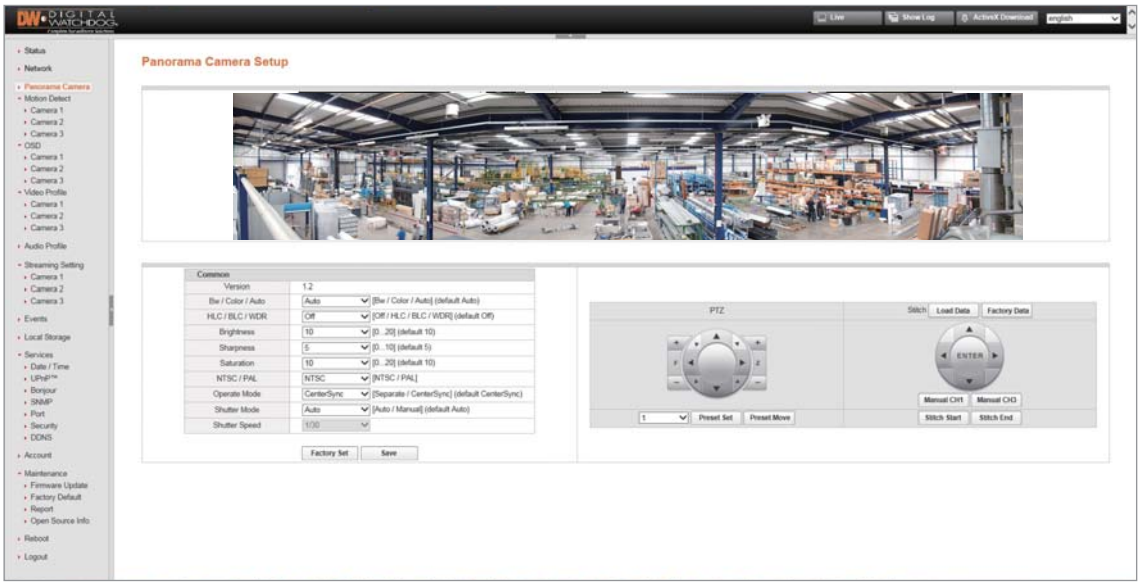
6 IPv6 Network Setting
Disabled by default.
1. Manually set the camera's IP address and gateway. The number next to "/" on IPv6 Address are setting value for the sub-network.
2. IPv6 LinkLocal - Set automatically by the commnuication between the local network devices. This is disabled by default.

7 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 the same.

8 Status
The status of the current network connection.

9 Click OK to apply any changes to the settings.

Webviewer - Settings
Panorama Camera Setup



Set the camera's common options.

1 BW/Color/Auto
Auto : The camera will switch between color and BW based on the AGC levels.
BW : The camera will remain in BW mode regardless of the lighting environment.
Color : The camera will remain in COLOR mode regardless of the lighting environment.

2 HLC/BLC/WDR
HLC : HLC allows objects to appear clearly on the screen by masking extremely bright areas.
BLC : BLC is used to improve the image quality in the back-light state.
WDR : Depends on the difference in brightness between the darkest and lightest part of and image.

3 Brightness
Set the brightness of the camera's image from 0~20. The higher the number, the brighter the camera's image will appear. Default is 10.

4 Sharpness
Sets the image sharpness. The highter the number, the sharper the image.

5 Saturation
The higher the number, the more vibrant the colors will appear on the camera's image. The lower the number, the more black and white the image will appear.
Default value is 10.

6 NTSC/PAL
The camera will switch between NTSC and PAL.
NTSC 60Hz / PAL 50Hz.

7 Operate Mode
The camera will switch between Seperate mode and Center Sync. Center Sync adjusts White Balance according to the center.

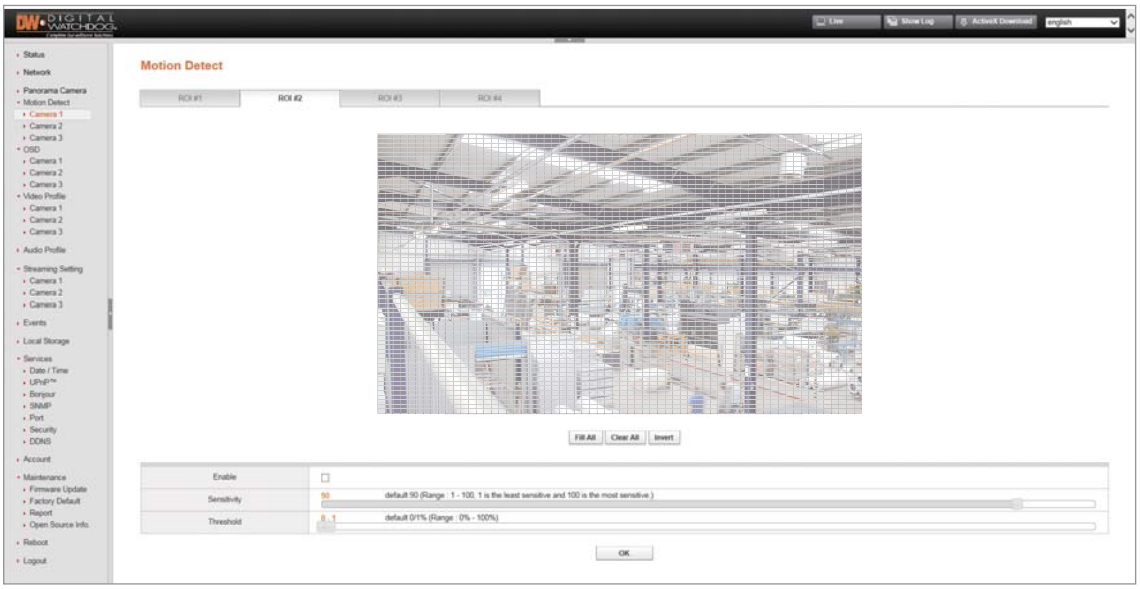
8 Shutter mode
If Shutter is set to Auto, shutter speed is adjusted automatically accroding to the surrounding illumination.

9 Shutter speed
The faster the shutter speed is, moving objects will appear without ghosting effect. However, this will also cause the picture to appear darker if there is no sufficient lighting. This menu is activated when Shutter is set to Manual.

10 Camera Control (Not supported)
Only Zoom, Focus buttons on the PTZ panel are availabel. "F" means Focus and "Z" means Zoom.

11 Stitch
Adjust the video position of each individual lens. Select a "CH" and adjust the position by using buttons.
Load Data : Restore last saved values.
Factory Data : Restore the default value.

Webviewer - Settings
Motion Detection



This setup menu is unique to each of the camera's sensor. Please note that you will have to setup each of them separately. You can select the appropriate sensor from the settings tree on the left.

To setup a motion detection mask on the camera's view, click on any point in the camera's preview and drag to make a detection range. Once a motion detection mask is set, a red mark will appear on the upper bar of the video image on the web monitoring page. The camera supports four different motion detection masks per each sensor. Each one can be setup individually be selecting the appropriate tab.

1. **Fill All**
   If enabled, the entire camera's FoV will be set to motion detection.

2. **Clear All**
   Deselects the selected area.

3. **Invert**
   Inverts the selected area.

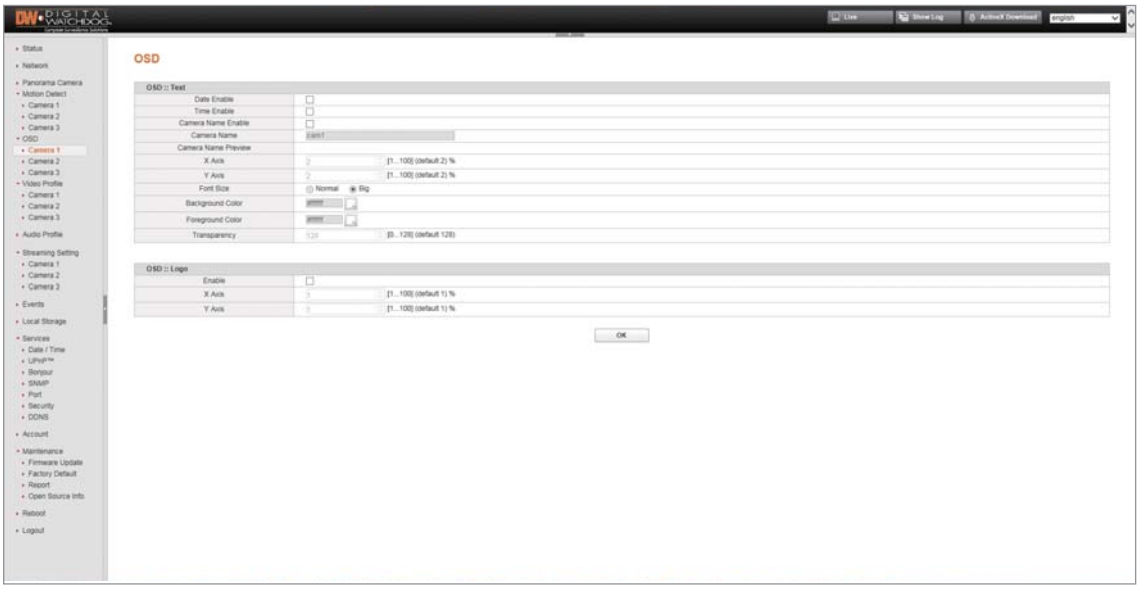
4. **Enable**
   Check the box for the activation.

5. **Sensitivity**
   The higher the value, the more sensitive to motion the area will be.

6. **Threshold**
   When the ratio of the moving parts to the whole image is on the range, the detection is checked.

7. Click OK to apply any changes to the settings.

Webviewer - Settings
OSD



This setup menu is unique to each of the camera's sensor. Please note that you will have to setup each of them separately. You can select the appropriate sensor from the settings tree on the left.

Use this setup menu to adjust any text that you would like to appear over the camera's image.

Add OSD text or a logo to the camera's view.
OSD : : Text

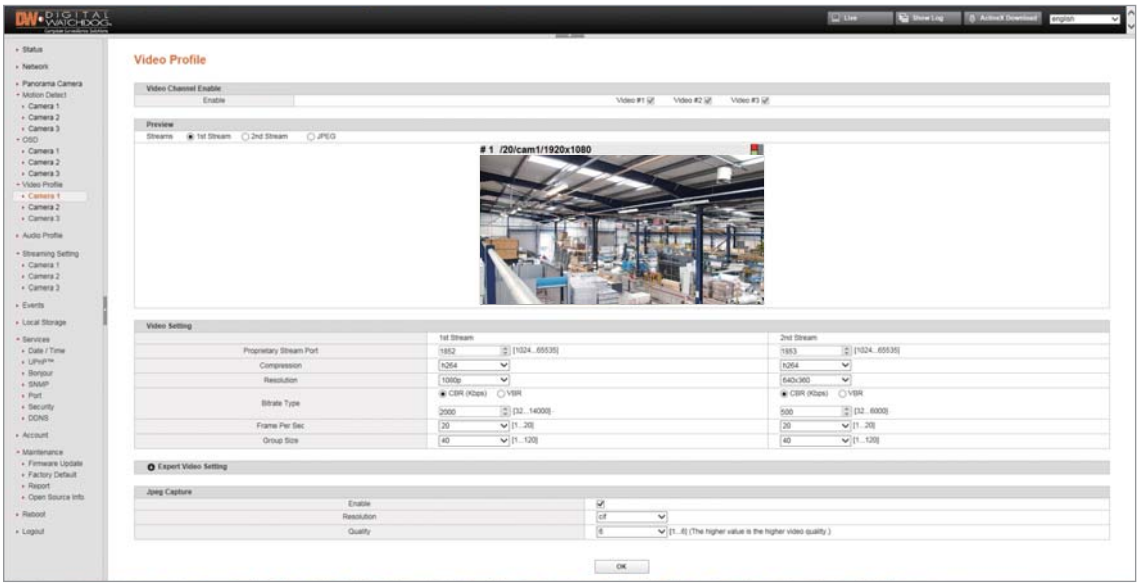
1. **Date / Time / Camera Name Enable**
   check the box next to the information you want to show on the camera's image. If the Camera Name is enabled, enter an appropriate name for the camera.
2. **X Axis**
   Adjust the X axis position of the OSD text.
3. **Y Axis**
   Adjust the Y axis position of the OSD text.
4. **Font Size**
   Adjust the size of the OSD text.
5. **Background Color**
   Select a color for the text's background.
6. **Foreground Color**
   Select a color for the text's font.
7. **Transparency**
   Adjust the transparency of the OSD text.

OSD : : Text

1. **Enable**
   Check for the activation.
2. **X Axis**
   Adjust the X axis positionof the OSD Logo.
3. **Y Axis**
   Adjust the Y axis position of the OSD Logo.
4. Click OK to apply any changes to the settings.

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

Webviewer - Settings
Video Profile



This setup menu is unique to each of the camera's sensor. Please note that you will have to setup each of them separately. You can select the appropriate sensor from the settings tree on the left.

Use this setup menu to adjust video settings for each of the camera's sensors. These settings include resolution, image compression, which stream to use for each specific camera, and export settings such as video and JPEG capture settings.

1 Streams
Select which stream to show in the preview and adjust in the settings of this page. The camera supports two simultaneous stream plus a JPEG stream.

2 Proprietary Stream Port
The port number for transferring the video and audio data.

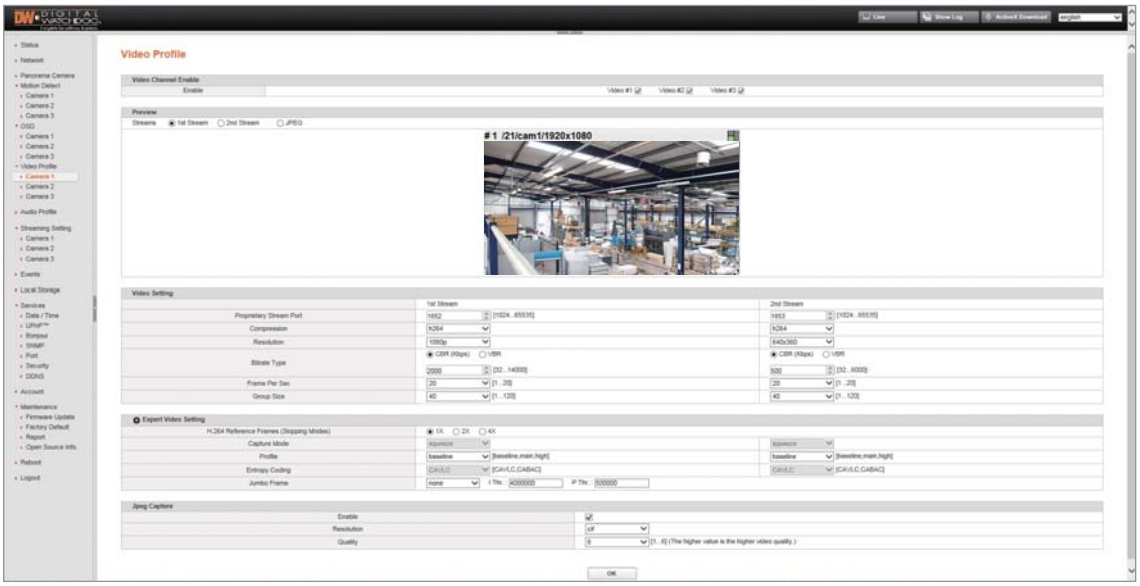
3 Compression
Select the compression type for the stream (H.265 / H.264 / MJPEG).

4 Bitrate Type
1. CBR : the unit is kbps.
   Bitrate Recommendation : 1080p > 4000 ~ 6000
   720p > 2000 ~ 3000
   D1 > 1000 ~ 1500
   CIF > 500 ~ 750
2. VBR : 1(best) ~ 6

5 Frame Per Sec
The number of frames transferred in a second (default: 20).

6 Group Size
This sets the number of I-frames and P-frames per second. If GOP is set to 30, the camera will record 1 I-frame and 29 P-frames. To improve the recording quality, lower the GOP number. However, the lower the number, the larger the streaming file size will be. (default: 40)

Webviewer - Settings
Video Profile



This setup menu is unique to each of the camera's sensor. Please note that you will have to setup each of them separately. You can select the appropriate sensor from the settings tree on the left.

Use this setup menu to adjust video settings for each of the camera's sensors. These settings include resolution, image compression, which stream to use for each specific camera, and export settings such as video and JPEG capture settings.

1 H.264 Reference Frames (Skipping Modes)
Once the value is set to "4X", the camera will play recorded video at "4X" with less system resources.

2 Capture Mode
In case the resolution of the monitor is SD (Standard Definition), the HD (High Definition) video ratio (16:9) will be changed to the SD video ratio (4:3).
1. Squeeze : stretches the video horizontally to make the ration 4:3
2. Crop : crops the video by the left and right end (the video ratio is kept).

3 Profile
Set the video's encoding to decoding settings. Baseline is set as the default profile. Compression ratio, system load: baseline < main < high. The bandwidth of "high profile" is less by 20% than that of "baseline".

4 Entropy Coding
The camera runs as CAVLC. (compression ratio: CAVLC < CABAC, system load: CAVLC < CABAC)

5 Jumbo Frame
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).

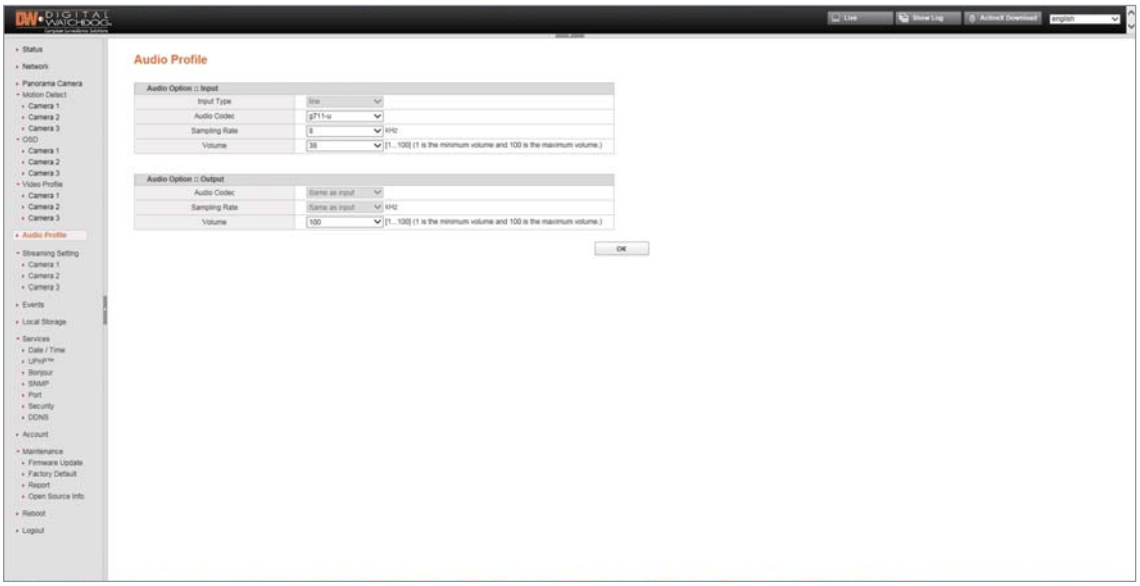
6 Enable
Capture the camera's view as JPEG.

7 Resolution
Adjust the resolution.

8 Quality
Set 1(Best) ~ 6.

9 Click OK to apply any changes to the settings.

Webviewer - Settings
Audio Profile



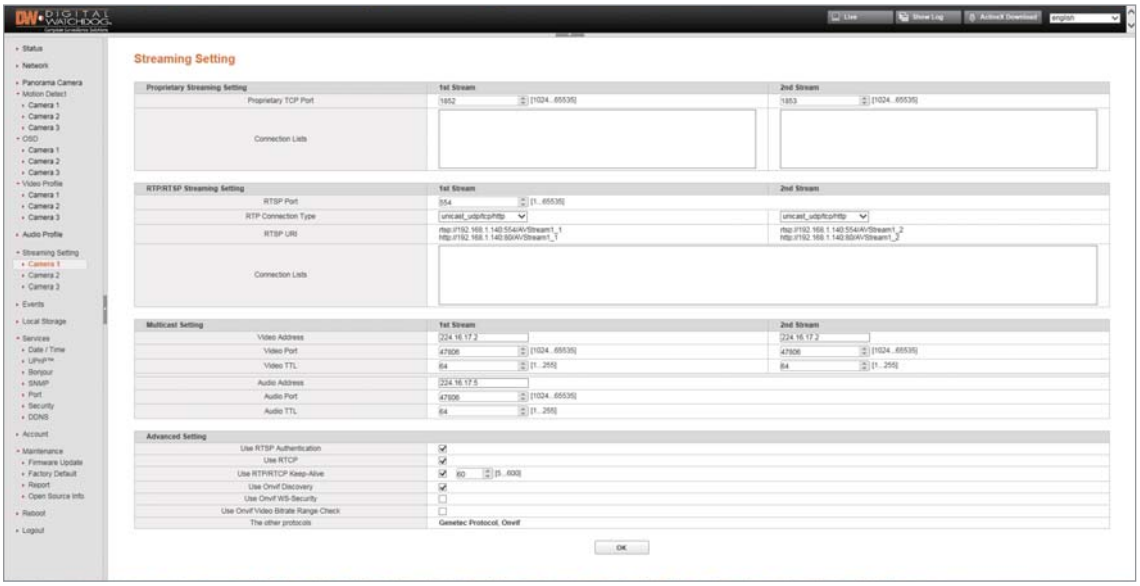
Audio Option : : Input

1. **Input Type**
   Line (or line / mic ; the models with built-in mic)
2. **Audio Codec**
   G.711-u / G.711-a / G.726 (quality : G.711>G.726, playing compatibility : G.711<G.726)
3. **Sampling Rate**
   8kHz (or 8kHz ; fixed on MR904)
4. **Volume**
   1 ~ 100

Audio Option : : Output

5. **Audio Codec**
   G.711-u / G.711-a / G.726 (quality : G.711>G.726, playing compatibility : G.711<G.726)
6. **Sampling Rate**
   8kHz (or 8kHz ; fixed on MR904)
7. **Volume**
   1 ~ 100
8. Click OK to apply any changes to the settings.

Webviewer - Settings
Streaming Setting



This setup menu is unique to each of the camera's sensor. Please note that you will have to setup each of them separately. You can select the appropriate sensor from the settings tree on the left.

Use this setup menu to adjust the camera's streams and their advanced settings such as RTSP, TCP and Multi-cast.

1 Proprietary TCP Port
The port for the transmission by the proprietary protocol (based on the settings under "Video Profile / Video Setting / Proprietary Stream Port ").

2 Connection Lists
The IP address and port information of the monitoring devices that are connected to the camera.

3 RTSP Port
The port number used for RTSP transmission.

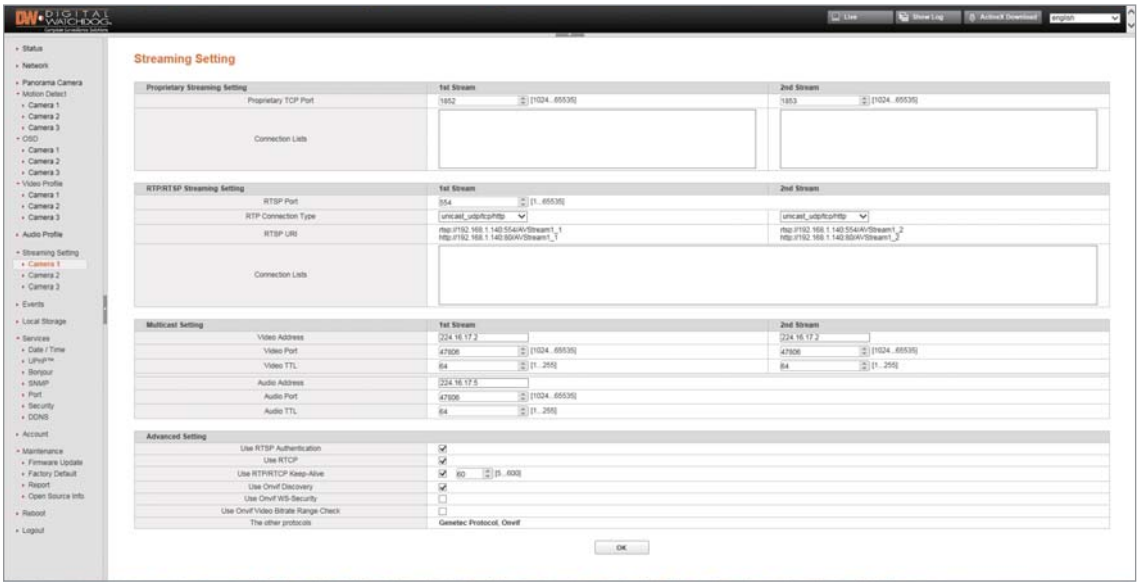
4 RTP/RTSP Connection Type
When a network device supports multicast, "multicast_udp" can be selected to improve network bandwidth. Additional settings are required under the Multicast settings.
See next page for more information.

5 RTSP URI (Uniform Resource Identifier)
This is the path that is used on the monitoring program for playing RTSP stream from the camera.The default paths are:

1. 1st Stream > rtsp://192.168.1.2:554/AVStream1_1
2. 2nd Stream > rtsp://192.168.1.2:554/AVStream1_2
3. 3rdStream > rtsp://192.168.1.2:554/AVStream1_3

6 Connection Lists
The IP address and port information of the monitoring devices that are connected to the camera.

Webviewer - Settings
Streaming Setting



Adjust the camera's streams and their advanced settings such as RTSP, TCP and Multi-cast.

1. **Video Address**
   The IP address for video data transmission.

2. **Video Port**
   The port number for video data transmission.

3. **Video TTL**
   Set the number of the routers that pass when transmitting the video data.

4. **Audio Address**
   The IP address for audio data transmission.

5. **Audio Port**
   The port number for audio data transmission.

6. **Audio TTL**
   Set the number of the routers that pass when transmitting the audio data.

7. **User RTSP Authentication**
   Check the box if an authentication process is required.

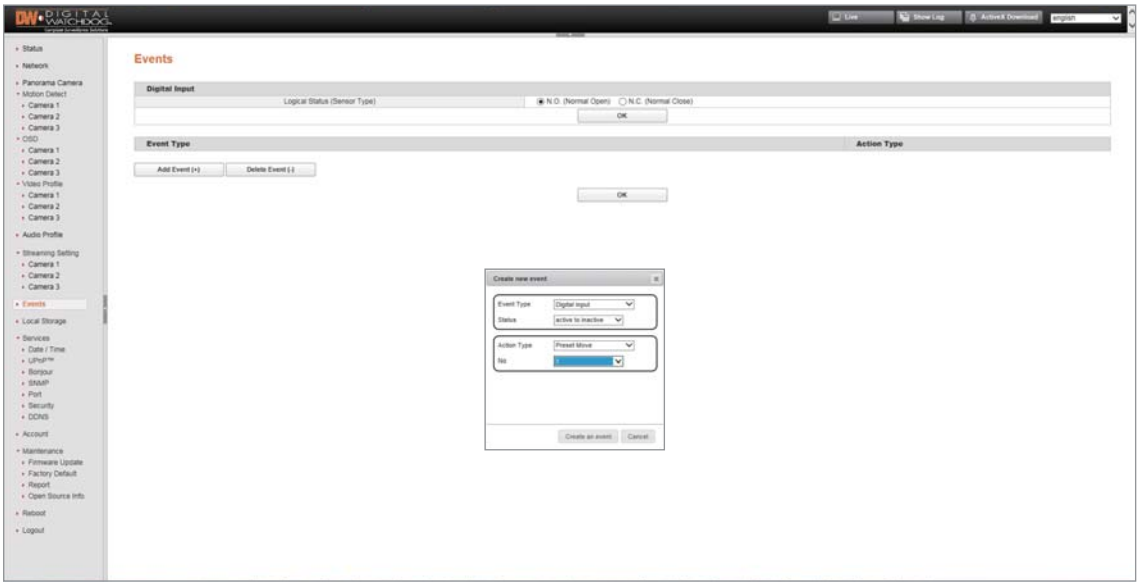
8. **Use RTCP**
   Check the box if RTCP function is required.

9. **Use RTCP Keep-Alive**
   Check the box if the stream times-out.

10. **The other protocols**
    Displays the supported protocols.

11. Click OK to apply any changes to the settings.

Webviewer - Settings
Events



Digital Input

1 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”

2 Click OK to apply any changes to the settings.

[Event Types]

3 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, and event occurs.
2) inactive to active : when the non detected state of the DI is changed into the detected state, and 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.

4 Motion
When the motion is detected, an event occurs.

5 Timer
The events occurs periodically. (unit : second)

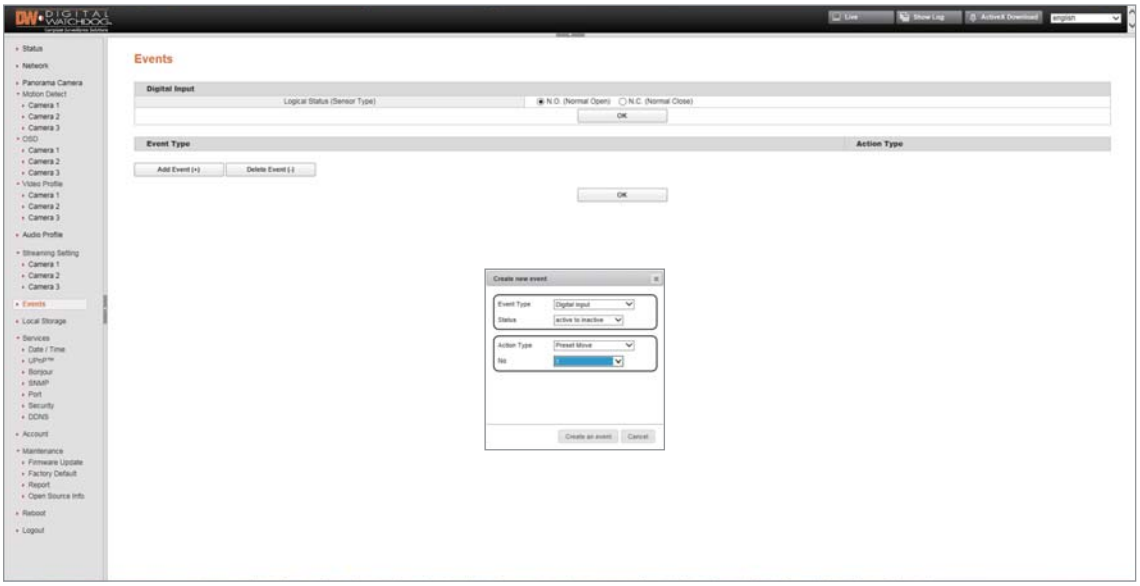
[Action Types]

6 Preset Move
When the PTZ Camera is connected to, the command “Preset Move” is sent to the PTZ camera.

7 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.

8 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”.

Webviewer - Settings
Events



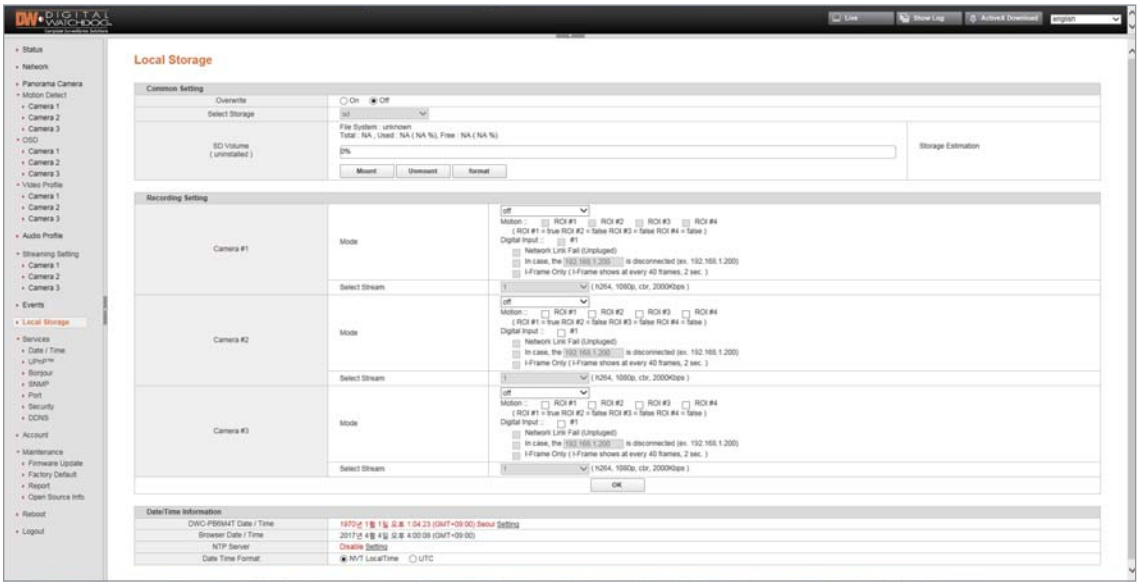
[Event Types]

9 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”
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”

4 Delete event (-) button
Click this button to remove the event entry.

5 OK button
Click this button to apply the changed setting values.

Webviewer - Settings
Local Storage



The camera supports SD/SDHC memory card for local recording.

1 Overwrite
Select whether to overwrite old data when the card is full.

2 Select Storage
This section shows the SD Card used for storage.

3 SD Volume
Shows memory information
1) File System : FAT32
2) Total : 14.83 GBytes
3) Used : 14.33 GBytes (96.65%)
4) Free : 508 MBytes (3.35%)

4 Storage Estimation
Shows the estimated time that can be saved.

5 Mode
Select off (not saving) / continuous (continuous recording) / event (records when an event occurs)

6 Event types that can be selected
1) Motion : When motion occurs using the motion detection values in the ROI setup page.
2) Sensor : When a sensor is activated using the camera's Digital Input Settings.
3) Network Link Fail (Unplugged) : When the camera's network connection with the monitoring PC is lost.
4) I-Frame Only (I-Frame shows at every 60 frames, 2sec.) : the camera will record only the main frames of the video. The contents of the black "(...)" are the values that are set on the "Video Profile" settings.

7 Select Stream
Select which stream to record.

8 Click OK to apply any changes to the settings.

9 Model name Date/Time
Shows the camera's time information.

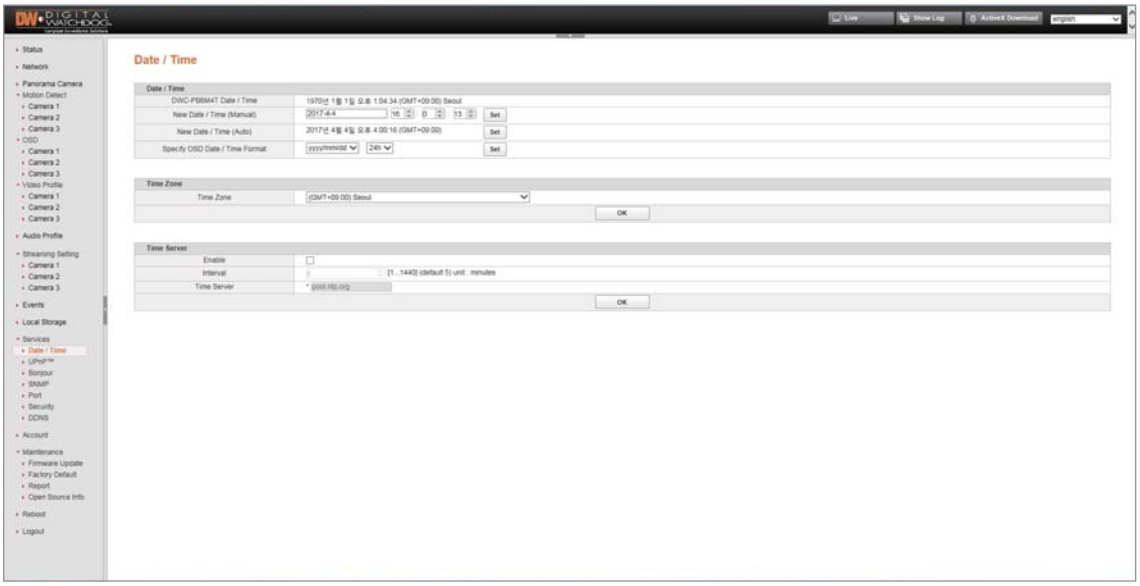
10 Browser Date/Time
Shows the time information of the monitoring PC.

11 NTP Server
Enable the local storage to sync with the time synchronization settings.

12 Date Time Format
Select NVT(camera) Local TIme /UTC

13 File Lists
1) Time(bar) : Displays the time for recorded data.
2) Calendar : Select a date and search the data.
3) File Format : Stream/Start/End/Encording/Size.
4) Download button : Download the selected Files.
5) Delete button : Delete the selected files on the memory.

Webviewer - Settings
Date/Time



Use this menu to adjust the camera's local date, time, and time server settings.

1 Date/Time
Displays the current time.

2 New Date/Time (Manual)
Adjust the camera's time manually. Click the "Set" button to apply the changes.

3 New Date/Time (Auto)
Synchronize the time with the time of the monitoring PC. Click the "Set" button to apply the changes.

4 Specify OSD Date/TIme Format
Set the date and time format. Click the "Set" button to apply the changes.

5 Time Zone
Select the time zone from the available options.

6 Click OK to apply any changes to the settings.

7 Enable
Check the box to enable.

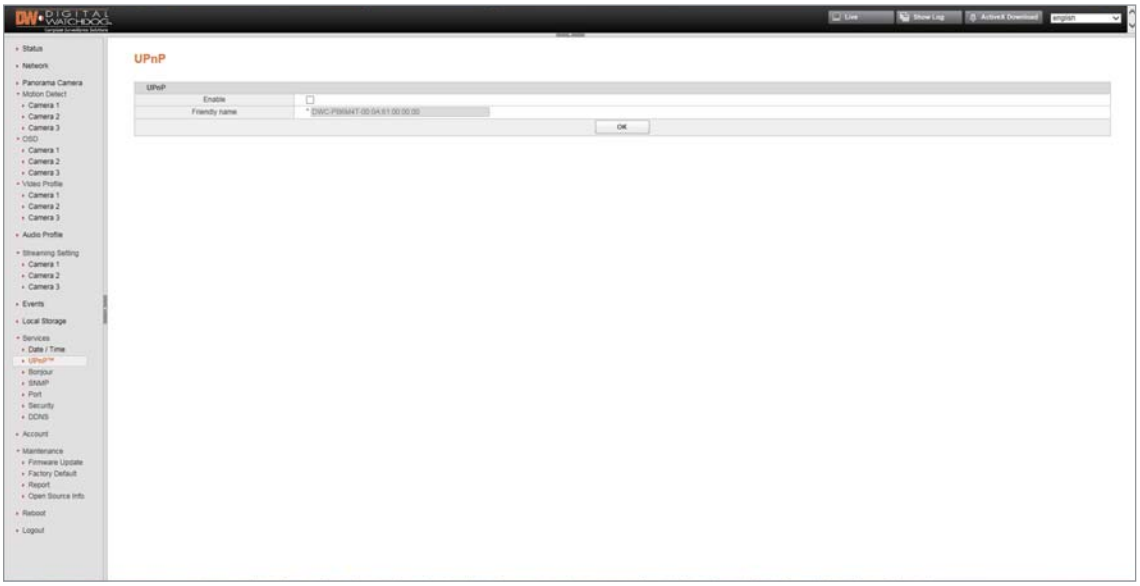
8 Interval
Set the request time intervals (in minutes).

9 Time Server
Enter the IP address or hostname of a time server.

10 Click OK to apply any changes to the settings.

※ Time Server : If enabled, the camera will synchronize its date and time with a time server.

Webviewer - Settings
UPnP



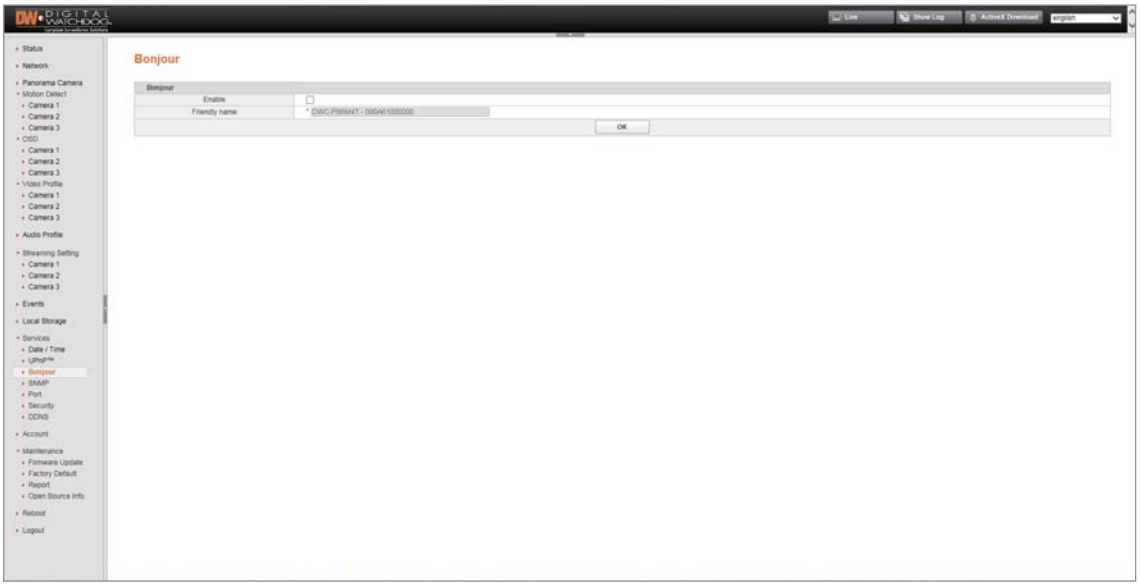
The camera supports UPnP for auto detection with Windows explorer.

1. **Enable**
   Check to enable UPnP.

2. **Friendly name**
   This is the name identifying the camera when using the UPnP search It is created by the camera's MAC address. You can modify it as needed.

3. Click OK to apply any changes to the settings.

Bonjour



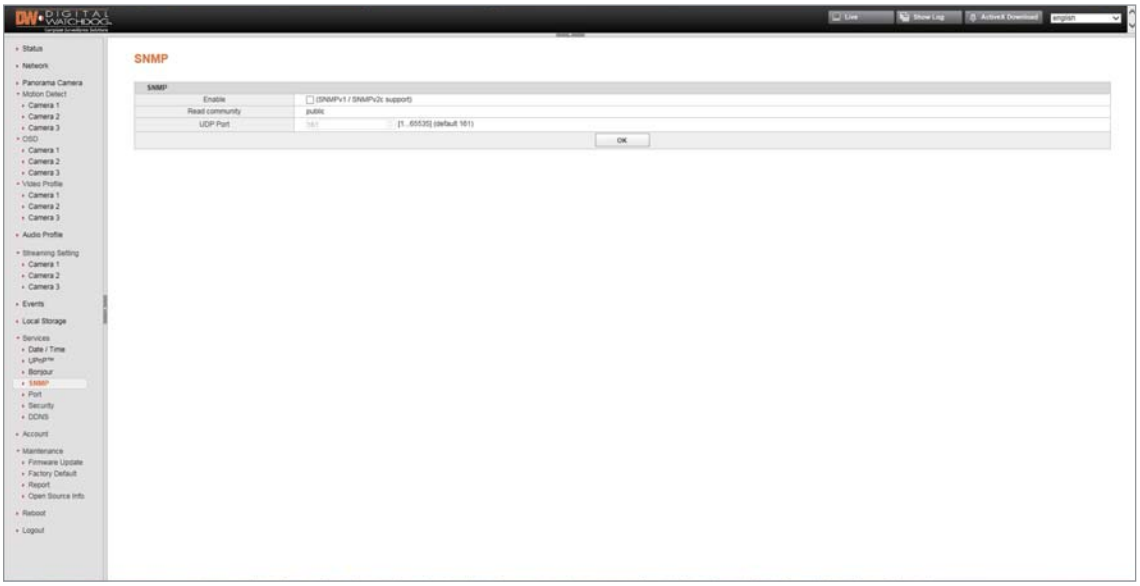
The camera supports Bonjour for auto detection with Windows explorer.

1. **Enable**
   Check to enable UPnP.

2. **Friendly name**
   This is the name identifying the camera when using the UPnP search. It is created by the camera's MAC address. You can modify it as needed.

3. Click OK to apply any changes to the settings.

Webviewer - Settings
SNMP



Use this menu to set the camera's SNMP settings.

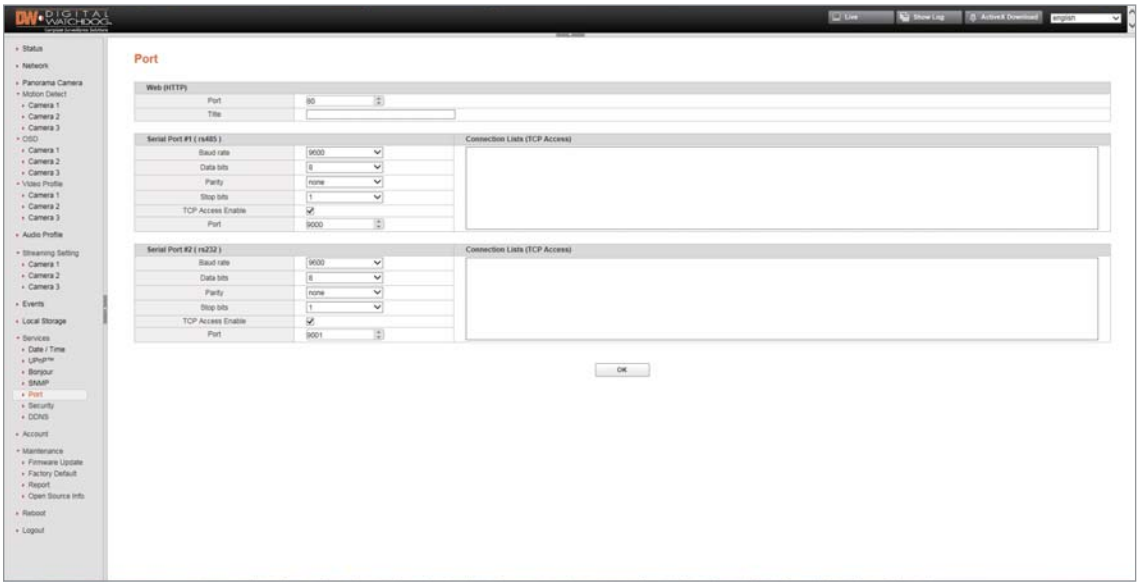
1. **Enable**
   Check to enable.

2. **Read community**
   Shows the running mode as "public". (fixed)

3. **UDP Port**
   Enter the port number for use.

4. Click OK to apply any changes to the settings.

Webviewer - Settings
Port



Use this menu to Set up the port number for the data communication.

1. **Web (HTTP)**
   The camera's web port is set by default to 80. You can modify it as needed.

2. **Serial Port #1(RS485) (Currently not supported)**

3. **Serial Port #2(RS232) (Currently not supported)**

4. Click OK to apply any changes to the settings.

Webviewer - Settings
Security

This menu allows you to restrict access to the camera according to IP addresses.

1. **Enable**
   Check to enable.

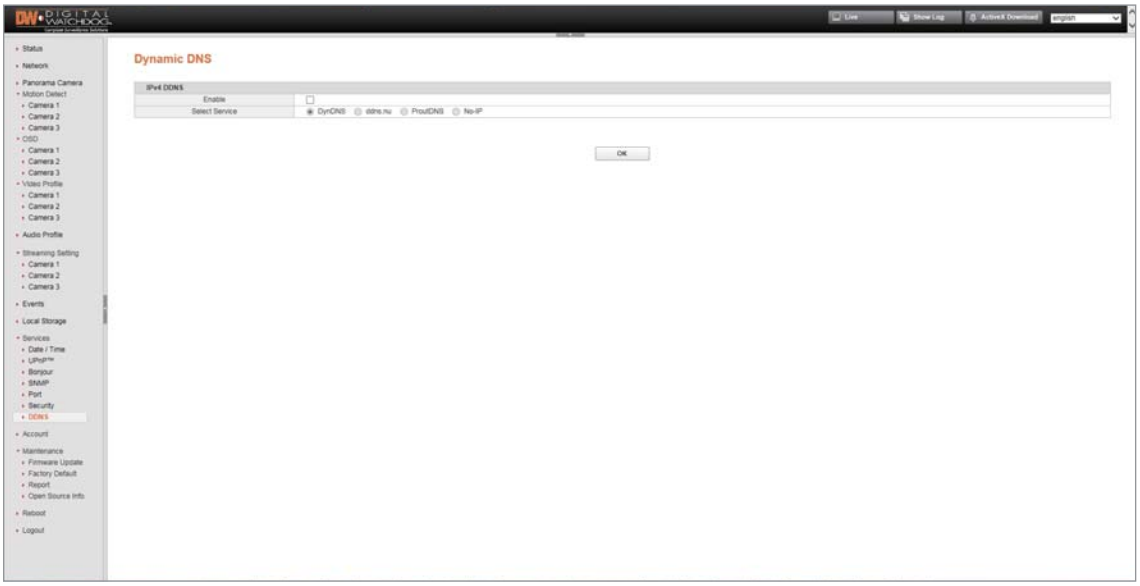
2. **Basic Policy**
   Select “allow” / “deny”

3. **IP Addresses Lisk**
   Create the IP address list for filtering. Press the ‘Add’ button to add new IP addresses to the list, or ‘delete’ to remove them from the list.

4. **My IP Address**
   Displays the IP address of the PC currently connected to the camera.

5. Click OK to apply any changes to the settings.

Webviewer - Settings
DDNS



The camera supports a Dynamic DNS feature. Please note that these are third-part DDNS services, and some may require subscription or payment.

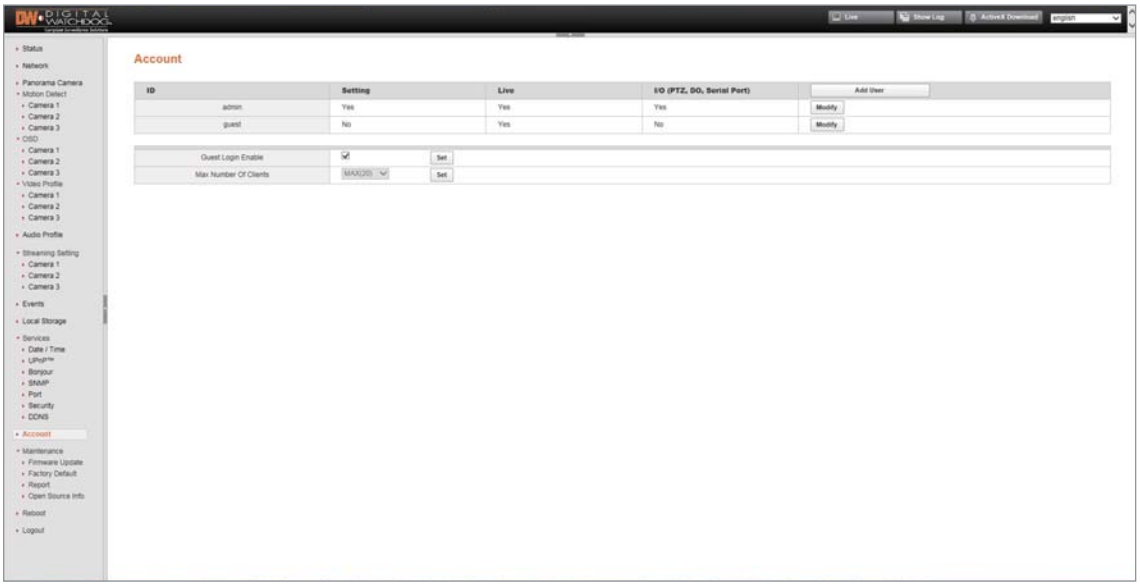
1. **Enable**
   Check to enable.

2. **Select Service**
   Select a service to use.

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

4. Click OK to apply any changes to the settings.

Webviewer - Settings
Account



The camera supports multiple users with different permission levels.

1 Admin Password
Enter the administrator's password.

2 ID
Enter or modify the ID for the user.

3 New Password, Confirm Password
Enter or modify the password for the ID to be added.

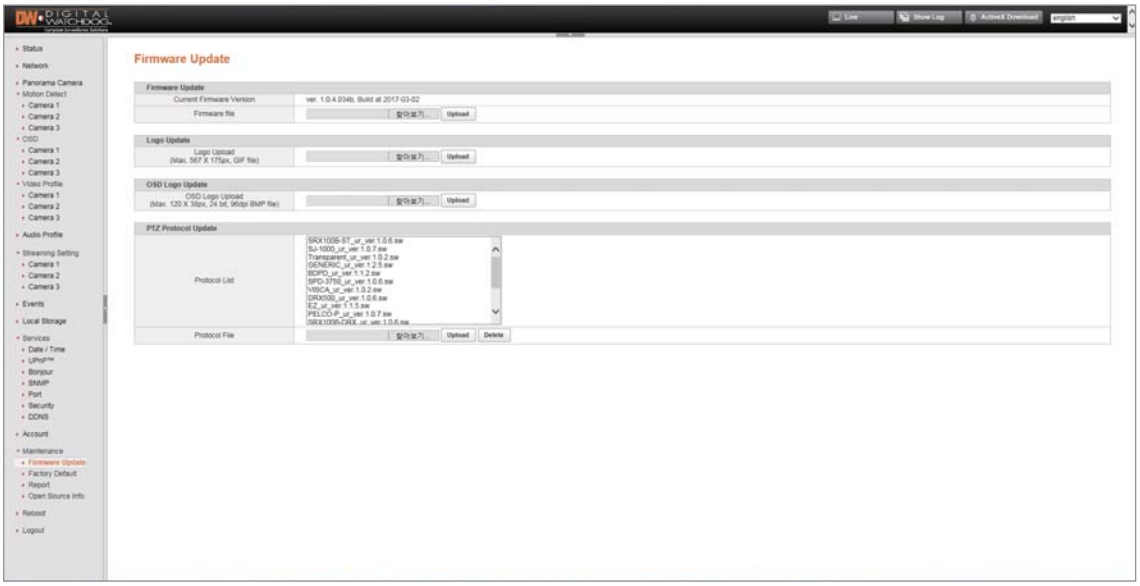
4 Apply/Cancel button
Click "Apply" to save the changes or "Cancel" to cancel.

5 Guest Login Enable check box
Check this box to enable guest login services. Click "Set" to apply the changes.

6 Max Number of Clients
The maximnum allowd connections are 20. (fixed)

※ To add a new user, press the "Add User" button. To modify an existing user, press the "Modify" button next to that user's name. The Modify & Create New user page will appear.

Webviewer - Settings
Firmware Update



Use this menu to update the camera's firmware when needed.

1 Current Firmware Version
Displays the current firmware version.

2 Firmware File
1) Click "Browse..." and select the file to upload.
2) Click "Upload" to start updating.
3) The camera's power supply must not be interrupted.
Updates can take up to 10 minutes.

3 Network setting will remain the same, however, video settings may be reset during the update.

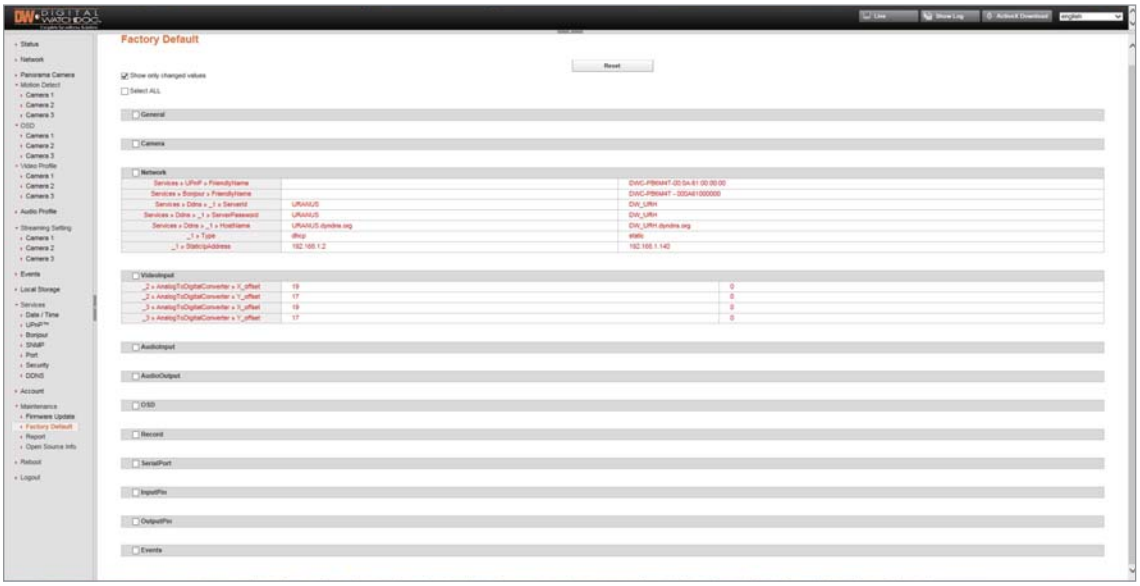
4 Logo Upload
1) Click "Browse..." and select the file to upload.
2) Click "Upload" to start updating.

5 OSD Logo Upload
1) Click "Browse..." and select the file to upload.
2) Click "Upload" to start updating.

6 PTZ Protocol Update (not supported)

※ If anew protocol is uploaded, select the new protocol in the Video Source settings page and apply it by clicking "Set".

Webviewer - Settings
Factory Default



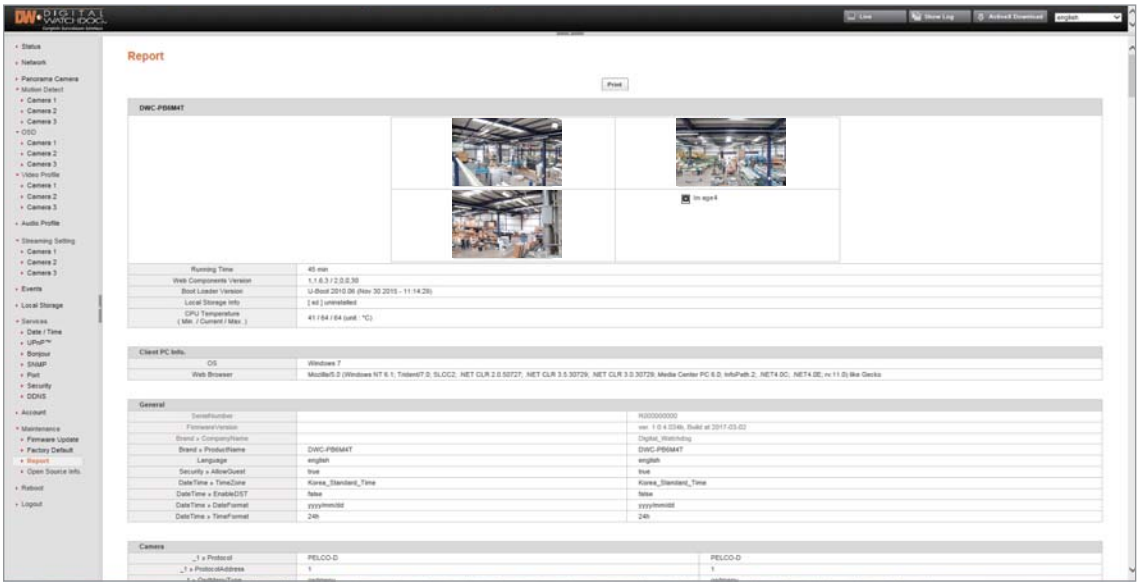
When necessary, you can reset the camera to its factory default.

1 Reset button
Click the button to initialize the reset of the selected values. Please note to click the reset button only afterselecting the values to be initialized.

2 Show only changed values check box
Check to display only the changed values (default).

3 Select All check box
You can manually check the box next to each settings you want to reset, or use the Select All button to selects all groups to be initialized.

Webviewer - Settings
Report



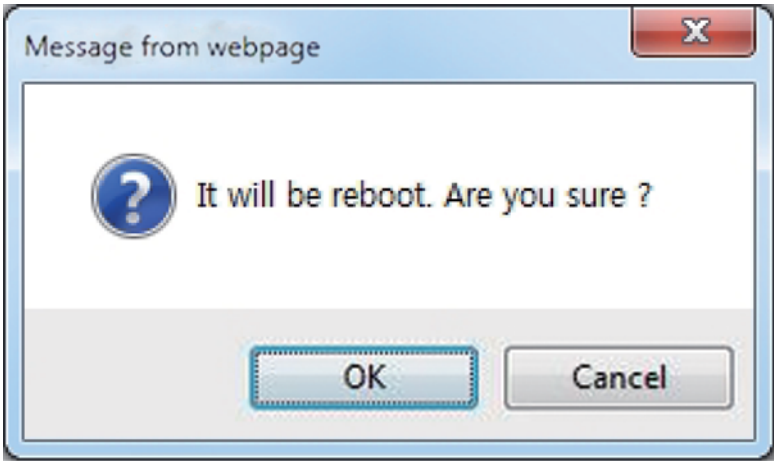
This page displays the camera's current setting and can be printed or saved as a PDF file for reference.

1. Use the "Print" button to export the report for you records.

Open Source Info.

This page documents the camera's firmware and web client information for open source integrations.

Reboot

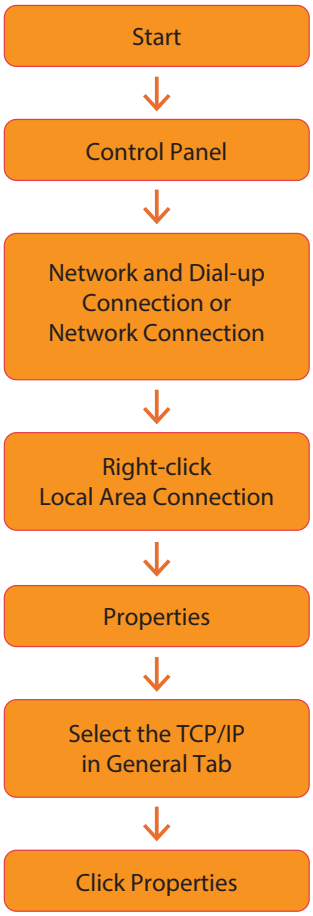


You can select to reboot the camera as needed. A confirmation window will appear to confirm the reboot.

Appendix
A : Current TCP/IP Settings

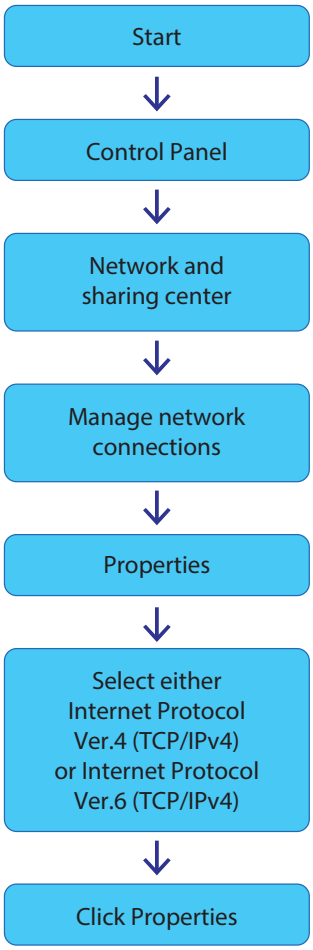
If your IP settings are obtained automatically, you could use the MS-DOS prompt (or Command Prompt) to determine your IP address. For information on how to do this, please read the FAQ.

1. Windows 2000 or XP Users



Under the 'General' tab of the TCP/IP Properties you will see your IP address information.

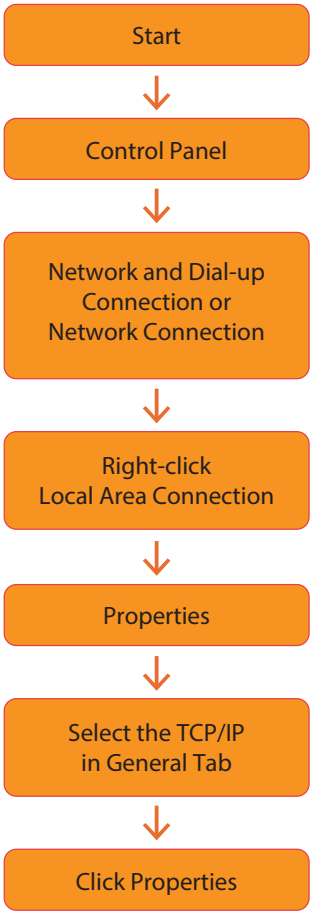
2. Windows Vista or 7 Users



Under the 'General' tab of the TCP/IP Properties you will see your IP address information.

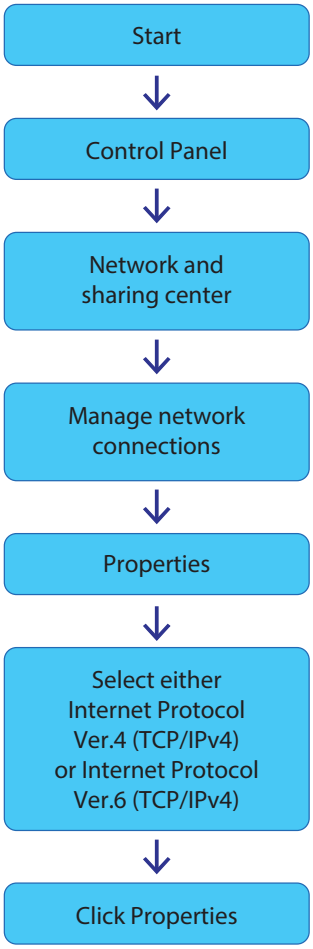
Appendix -
B : Changing IP address and subnet mask

1. Windows 2000 or XP Users



Select 'Use the following IP address'

2. Windows Vista or 7 Users



Select 'Use the following IP address'

Appendix -
C : Port Forwarding

After assigning the IP Camera a web server port and video server port you must use Port Forwarding. (for cases A, B)

Please consult your router's user guide on how to correctly configure Port Forwarding.

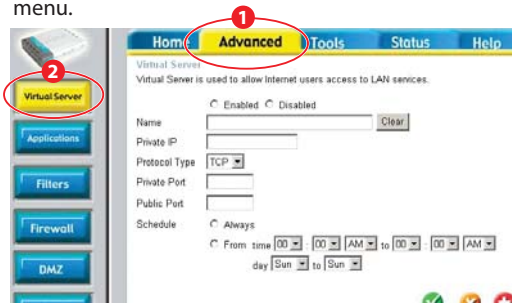
For your convenience, we have provided two example configurations.

1. For D-Link DI-604 broadband routers:

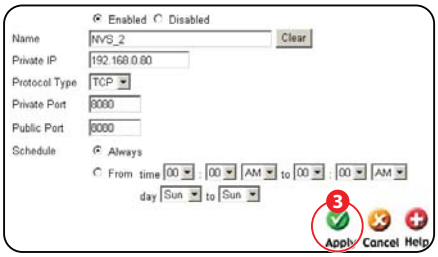
1) Open a web browser and type http://192.168.0.1 into your Address bar. (the default IP address to access the router)

2) You will have to supply your User Name and Password to log onto the router. Default from factory.
(User Name: admin Password: [leave blank])

3) Select the "❶Advanced" tab and click "❷Virtual Server" menu.



4) Click "❸Apply" button after inputting proper values. The example is as below



Enabled / Disabled	Select "Enabled".
Name	Input IVS name.
Private IP	Input IVS address.
Protocol Type	Select "TCP".
Private Port / Public Port	Input IVS Web Server Port.
Schedule	Select "Always"

5) If 'Setting Saved' shows, click [Continue] button.

6) With the same method as above, add Video Server Port.

7) The Web Server Port, Video Server Port and 2 Audio Ports shows in "Virtual Server List" as below.

Virtual Servers List

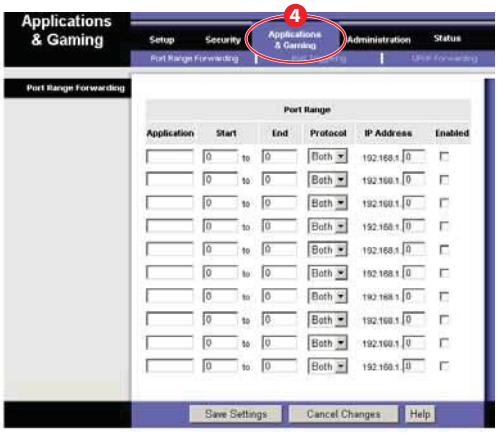
	Name	Private IP	Protocol	Schedule	
☑	NVS_2	192.168.0.80	TCP 8080/8080	always	
☑	NVS_2	192.168.0.80	TCP 7777/7777	always	
☑	NVS_2	192.168.0.80	TCP 7778/7778	always	
☑	NVS_2	192.168.0.80	TCP 7779/7779	always	
☑	NVS_2	192.168.0.80	TCP 7780/7780	always	

2. For Linksys BEFSR41 Cable/DSL routers:

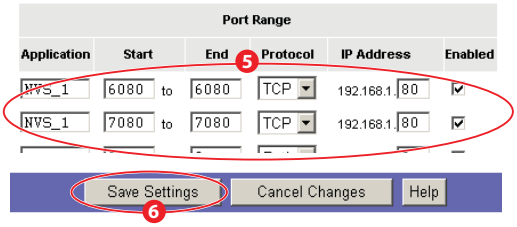
1) Open a web browser and type http://192.168.1.1 into you Address bar. (the default IP address to access the router)

2) You will have to supply your User Name and Password to log onto the router. Default from factory
(User Name:[leave blank] Password: admin)

3) Select "❹Applications & Gaming" from the menu bar.



4) Input port numbers in "❺Port Range" as below and click "❻Save Setting" button. Both of Web Server Port and Video Server Port should be added. The example is as below.



Enabled / Disabled	Input IP Camera name.
Start / End	Input IP Camera Web Server Port and Video Server Port. Start should be same as End. Both of Web Server Port and Video Server Port should be added.
Protocol	Select "TCP" in Protocol option.
IP Address	Input IP Camera IP Address.
Enabled	Check the square.

Appendix -
C : Port Forwarding

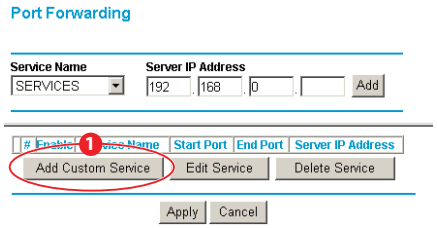
3. For Netgear RP614 routers:

1) Input http://192.168.0.1 in address bar of web browser. http://192.168.0.1 is the default IP address.

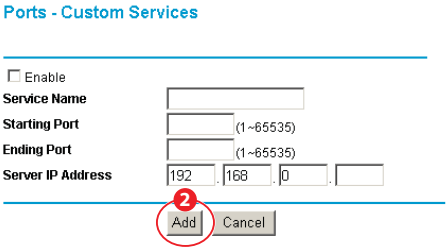
2) If it asks ID and password, input admin as ID and password as password.

3) Click "Port Forwarding" in "Advanced".

4) Click "❶Add Custom Service" button in Port Forwarding page.



5) Input proper values in "Ports - Custom Services" page as below.



Enable	Check it.
Service Name	Input IP Camera name.
Starting/ Ending Port	Input IP Camera Web Server port. Starting Port should be same as Ending Port.
Server IP Address	Input IP Camera IP Address.

6) Click "❷ Add" button.

7) With the same method as above, add Video Server Port.

8) Click "Apply" button to finish Port Forwarding.

Appendix - FAQ

1. My POWER light is not on?
Power is not being supplied to the unit. Please use the power supply shipped with the unit and verify that a power source is active from the attached power outlet used to connect the adapter. You can test this by plugging in any other electrical device and verify its operation. After using the power supply shipped with the product, checking the power source, and reinserting the power connector into the IP Camera, please call our Support Center. The power supply may be defective.

2. My ACTIVE light is not flashing?
Verify the power supply to the unit. Power off the unit and back on again, wait 1 minute, if the ACTIVE light still does not begin to flash, you will have to set the unit to its factory default (THIS WILL DELETE ANY CONFIGURATION AND SET THE UNIT TO THE FACTORY DEFAULTS). Power on the unit and insert the end of a paper clip into the small recessed opening on the back of the unit. Use the clip to press the button located within that opening.

3. My LINK light is not flashing or solid?
Verify the cable connection. 99% of the time the cable's connection to the unit is causing this problem. Try using a different network cable or crossover cable (for PC connection only). Try reinserting the cable, if this still doesn't solve the problem call our Support Center.

4. I can access the video server on my LAN, but not from the Internet.
Verify that your router (if applicable) has port forwarding properly configured. If accessing from our DDNS service, verify correct serial number. Firewall issues may prevent user access.

5. How do I open an MS-DOS or Command Prompt?
Start > (All) Programs > Accessories > Command Prompt

6. How do I find out my IP address information if my settings were automatically detected?
1) Open a Command Prompt
2) At the prompt type - "ipconfig / all" (without the quotes)
3) Near the end of the information supplied, should be your current IP address, subnet mask, default gateway and DNS servers

7. I can't connect!!
In the case of a connection failure.
Modem Reboot > Modem Reboot Finished > Router Reboot > Router Reboot Finished > IP Camera Reboot > IP Camera Reboot Finish > Verify DDNS and IP Camera connection, if applicable.

8. How do I "PING" an IP address?
1) Open an MS-DOS (or Command) prompt
2) At the prompt type - "ping xxx.xxx.xxx.xxx" (without the quotes and replace the "x"s with an IP address)
3) Press Enter

9. I'm accessing my video server remotely over the Internet and the video stream is choppy, is this normal?
Yes. The frames per second received remotely are determined by your bandwidth capabilities both at your site where the IP Camera is installed and your remote location. The lower of the two sites will determine how fast your video stream is received. It is recommended to have at least a 256Kb/sec upstream connection from the site where the IP Camera is installed. Lower speeds will operate properly, but provide poor remote performance. The Faster the Internet connection at both ends, the faster the video stream.

10. How do I enable or check VLC on my browser

Internet Explorer

Open Internet Explorer > Tools on the menu bar > Internet Options > Security Tab > Custom Level > Scroll down and verify that you are prompted or have enabled plug-ins to be downloaded and executed. > click OK > restart browser.

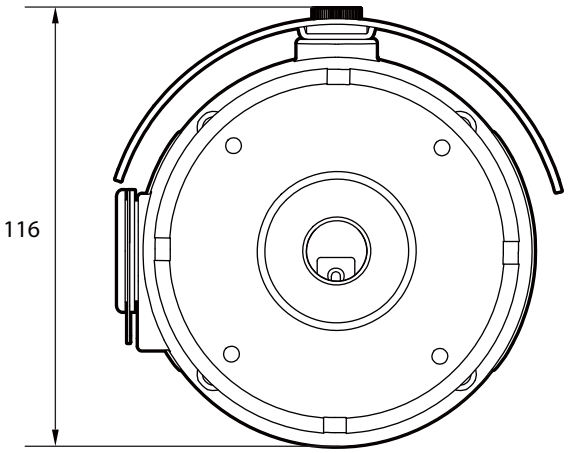
Chrome

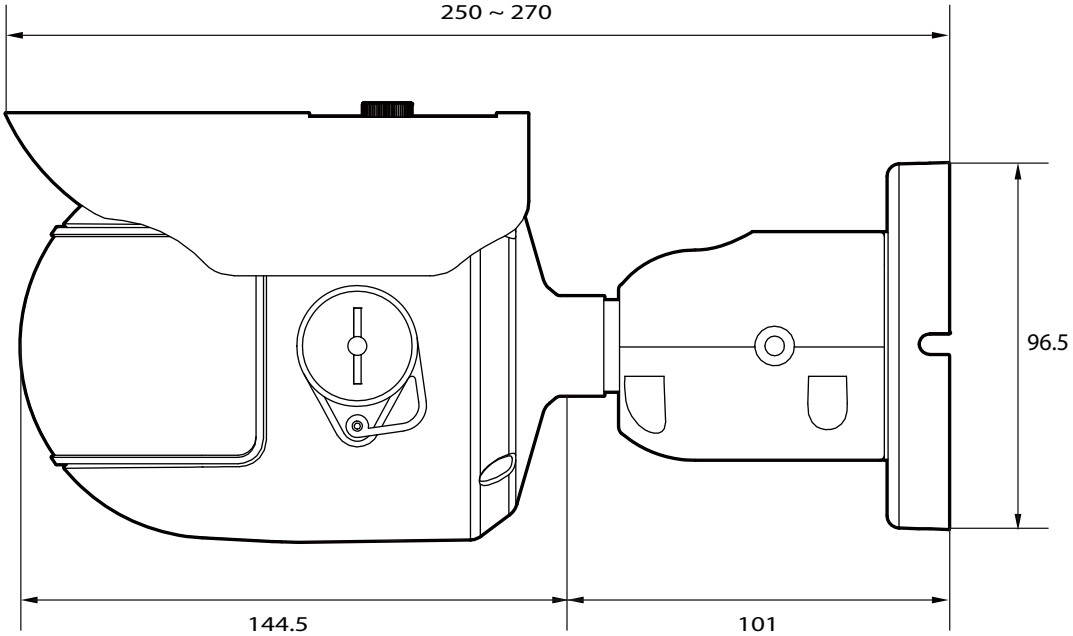
Open Chrome > Chrome menu settings > Advanced settings > Individual information - content settings > Run automatically

11. How do I reset the unit to factory defaults?
Refer to the previous functions page and find the reset button. Power ON the unit and use a paper clip to push the reset button within that opening. You should then see the ACTIVE light turn off and after a few seconds the ACTIVE light will begin to flash, signifying a successful reboot. If the ACTIVE light does not turn off after depressing the reset button, please try holding the button in for a few seconds and releasing. YOU WILL LOSE ALL DATA THAT HAD BEEN ENTERED PREVIOUSLY AND THE IP CAM -ERA WILL BE SET TO ITS FACTORY RESETS.

Specifications -
Dimension

Unit: mm





Warranty Information

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

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

East Coast Headquarters Office: 5436 W Crenshaw St, Tampa, FL 33634
West Coast Headquarters Office: 16220 Bloomfield Ave., Cerritos, CA 90703
PH: 866-446-35951 FAX: 813-888-9262
www.Digital-Watchdog.com Technical Support:
USA & Canada 1+ (866) 446-3595
International 1+ (813) 888-9555
French Canadian 1+ (514) 360-1309
Support Hours: Monday-Friday 9:00am to 8:00pm EST