

# **CamPilot URH900A**

## **User Manual**

### **Web Monitoring and Setting**

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## NVT Web Server

- The web server of an NVT 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 an NVT 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 NVT IP address should be same as the range of IP address of the monitoring PC.
  - 2) The NVT 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)

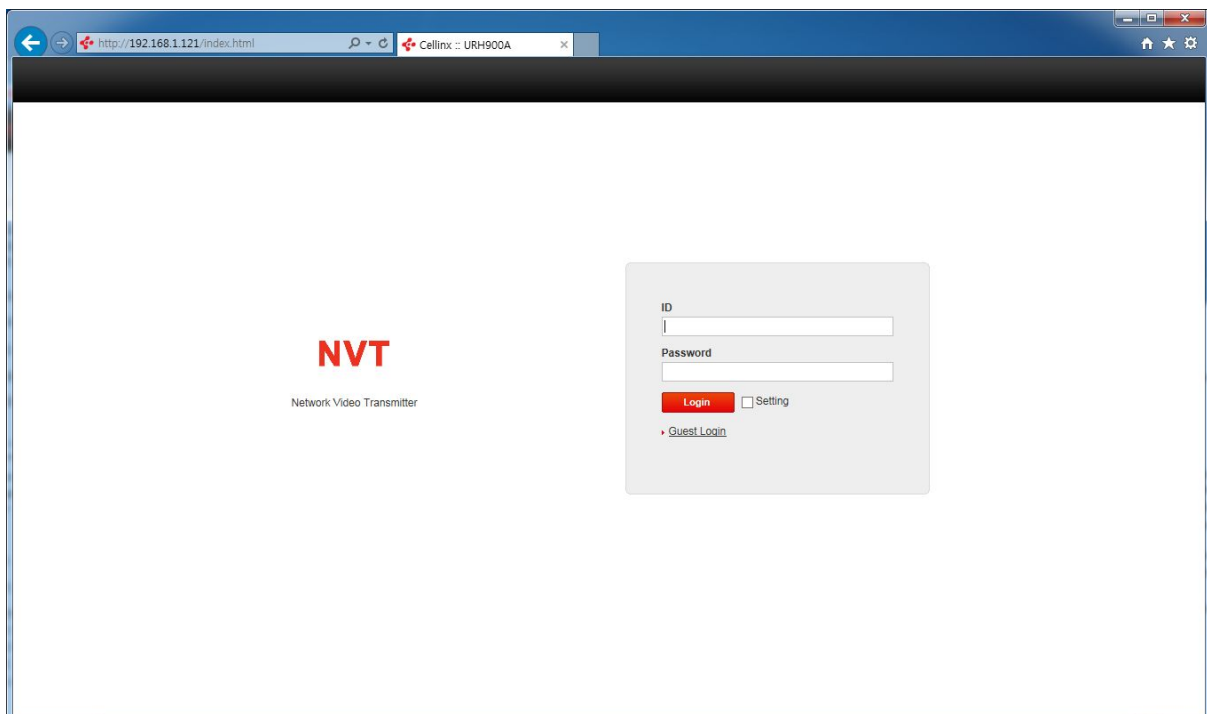
[ **Password** ] pass (the default password, it can be changed on the web setting page)

- 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.)

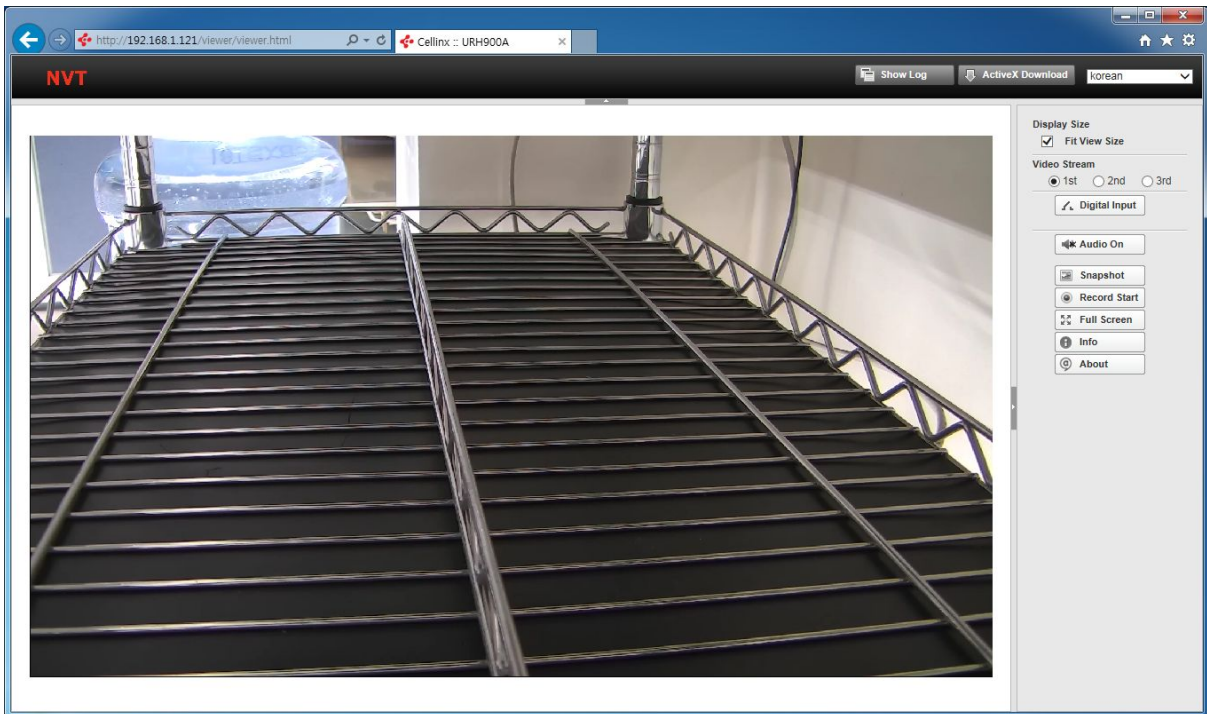
### Guest connection (on the initial page)

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

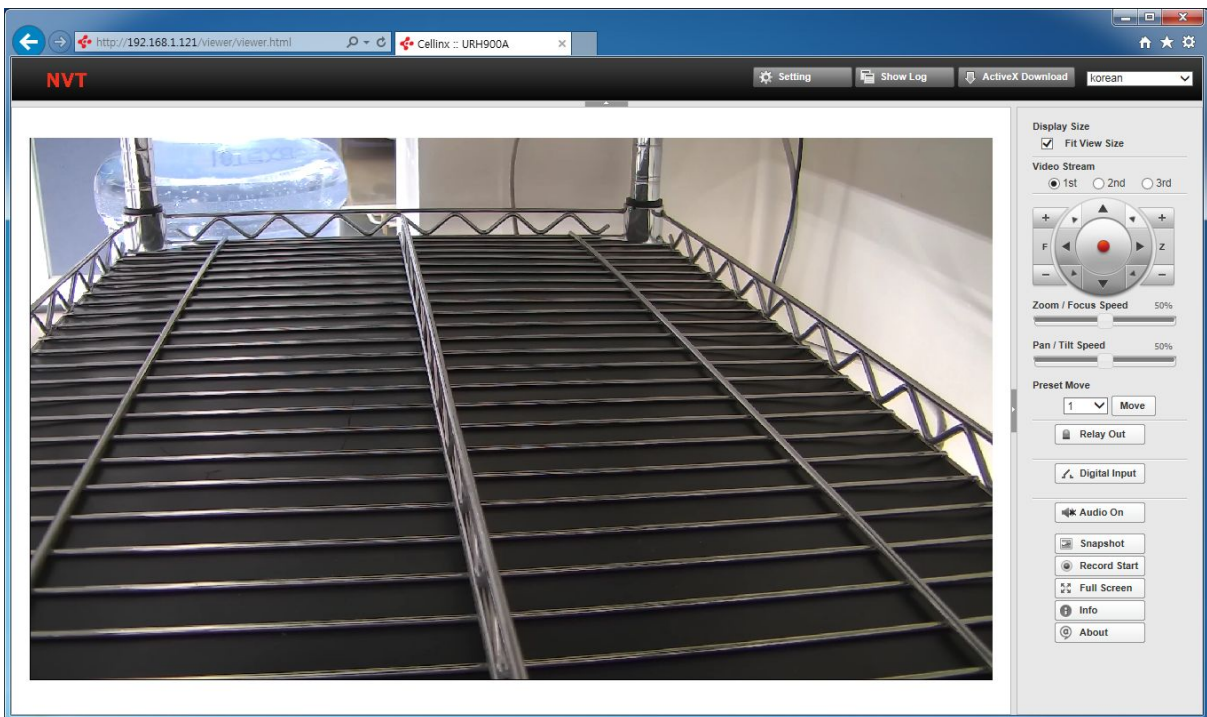
- On the guest connection, it is available to use only the functions that are allowed restrictively on the web monitoring page and it is not allowed to access to the web setting page.



- ▶The initial page of the web server



► Web monitoring page 1 (Guest connection)



► Web monitoring page 2 (Administrator connection)

From the next page, the articles are explained based on the administrator connection.

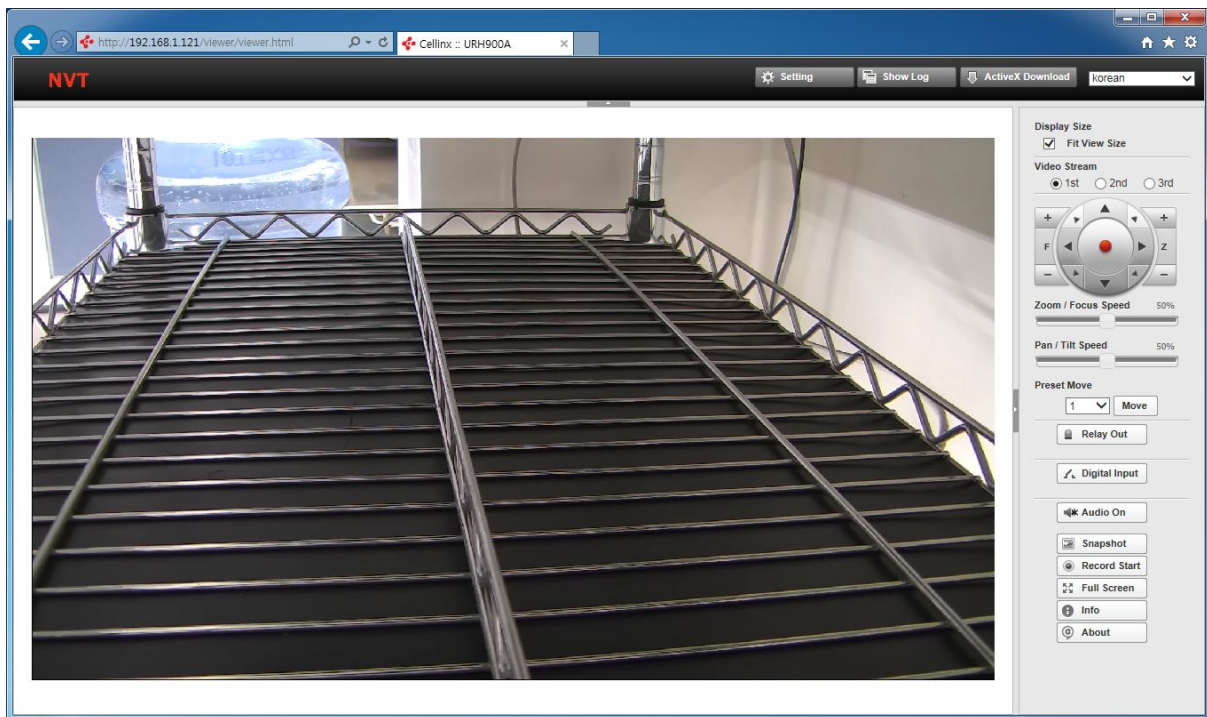
## Web Monitoring Page

[ **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.

[ **PTZ panel** ] (Before use, check the availability of the product features or the connection status of the installed equipment.)

- PTZ : use the direction keys for the Pan/Tilt (left-right/up-down) function. "F" means Focus and "Z" means Zoom.

- Zoom / Focus Speed bar: the speed value for the zoom or focus function

- Tilt / Pan Speed bar: the speed value for the tilting or panning function

[ **Preset Move** ] When the button "Move" is clicked, the PTZ works as the preset PTZ coordination value. (Before use, check the availability of the product features or the connection status of the installed equipment.)

[ **Relay Out button** ] controls the external device that is connected to the NVT. (Before use, check the connection status and specification of the installed equipment.)

[ **Digital Input** ] shows the status in case that the Digital Input contact signal of NVT occurs.

[ **Audio On/Off** ] enables you to monitor the audio signal of the microphone connected to the NVT. (Before use, check the connection status and specification of the installed equipment.)

**[ Snapshot ]** captures a JPEG Image of the current video stream (JPEG file path: C:/) The browser must be run with administrator privileges.

**[ Record Start ]** records the video of the current video stream (AVI file path: C:/), The red outline shows up on recording. The browser must be run with administrator privileges.

**[ Info ]** shows the information of the transferred data on the upper side of the image.

- Image information : FPS (frame/sec) / Camera (Channel) Name / Resolution
- Event status : Motion Detect (red) / Video signal (green) / Digital IN (blue)
- For the use of the motion detection, the check box "Enable" of the item "Motion Detect" should be checked.

**/30/cam1/720x480**



- ▶ Web monitoring page (Info button)

**[ About ]** displays the ActiveX information.

## Web Setting Page

### Menu button

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

[ **Show** ] the window for the NVT log data shows up.

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

[ **Language menu** ] the language can be selected out of the items of the language box.

## Status

The screenshot shows the NVT web interface with the following data:

Network Status	
MAC Address	00:0A:61:13:20:DC
IP Address	192.168.1.121
Subnet Mask	255.255.255.0
Gateway	192.168.1.1
Default DNS	168.126.63.1
IPv4 Link Local IP Address	169.254.32.220
Received Data	3.69 Kbps
Transmitted Data	2.05 Kbps
Link Speed / Duplex Mode	negotiated, 100Mb/s Full

Model Information	
Model	URH900A
Serial Number	S145000476
System Mode	Encoder
Firmware Version	ver. 3.2.1.020b, Build at 2018-03-12
Boot Loader Version	U-Boot 2010.06 (Oct 01 2013 - 02:27:23)
Camera Module Info	1080p_30fps
Local Storage Info	[ sd ] uninstalled [ usb ] uninstalled

URH900A Time	
Server Time	1970년 1월 3일 오전 4:23:51 (GMT+09:00) Seoul
Running Time	1 day, 19:23

CPU Temperature	
Min. / Current / Max.	64 / 66 / 71 (unit : °C)

▶ Web setting page (Status)

## Network Status

[ **MAC Address** ] the unique address of the NVT

[ **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

[ **Model** ] the product model name

[ **Serial Number** ] the product serial number

[ **System Mode** ] the NVT running mode

[ **Firmware Version** ] the firmware version

[ **Boot Loader Version** ] the boot loader version

[ **Camera Module Info** ] the version of the built-in camera module

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

**NVT Time**

[ **Server Time** ] the NVT time information

[ **Running Time** ] the running time after the booting

**CPU Temperature**

[ **Min. / Current / Max. (unit : °C)** ] the minimum / current / maximum value of CPU after the booting



## Network

The screenshot shows the NVT Network Setting web page. The page is titled "Network" and contains several configuration sections:

- Network Setting:** A table with a dropdown menu set to "Static IP". Fields include IP Address (192.168.1.121), Subnet Mask (255.255.255.0), Gateway (192.168.1.1), and Default DNS (168.126.63.1).
- IPv4 Link Local Network Setting:** A table with an "Enable" checkbox checked. Fields include IP Address (169.254.32.220) and Subnet Mask (255.255.0.0).
- IPv6 Network Setting:** A table with an "Enable" checkbox unchecked. Fields include IPv6 Address, IPv6 Gateway, and IPv6 LinkLocal (fe80::20a:61ff:fe13:20dc:64).
- Link Speed / Duplex Mode Setting:** A table with a dropdown menu set to "auto" and a "Status" field showing "negotiated, 100Mb/s Full".

An "OK" button is located at the bottom right of the configuration area.

### ► Web setting page (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.)

#### IPv4 Link Local Network Setting

This function enables you not to set the IP address of the NVTs 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.

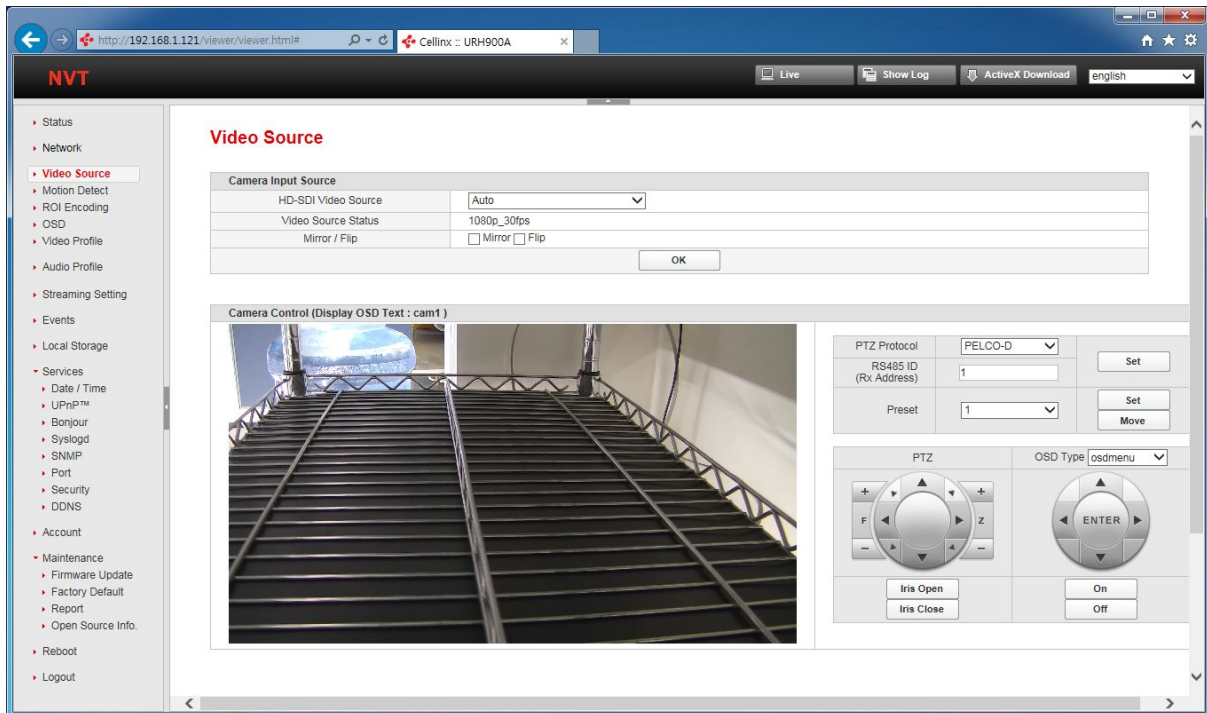
#### Link Speed / Duplex Mode Setting

[ **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 NVT 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.

## Video Source



### ▶ Web setting page (Video Source)

#### Camera Input Source

[ **HD-SDI Video Source** ] the input signal can be changed manually. If it is not AUTO, it should be set the same as the camera side.

[ **Video Source Status** ] the input signal is represented.

[ **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

- Check the related specification of the product and the serial communication connection with the device.

[ **PTZ Protocol** ] this value should be same as the protocol of the connected PTZ mechanism or camera module. Click the button "Set" to apply the changed setting values.

[ **RS485 ID (Rx Address)** ] this value should be same as the ID of the connected PTZ mechanism or camera module. Click the button "Set" to apply the changed setting values.

[ **Preset** ] Set button (saves the PTZ coordinate values into the number value on the box) / Move button (enables to move the PTZ camera with the number value)

[ **PTZ panel** ] this is for the adjustment of Pan / Tilt / Zoom / Focus.

[ **Iris Open / Iris Close buttons** ] this is for the adjustment of Iris.

[ **OSD Type** ] the default is "osdmenu". if it is set to the value "custom" out of the pull down items, the specified data can be sent. (this is for the development of a program.)

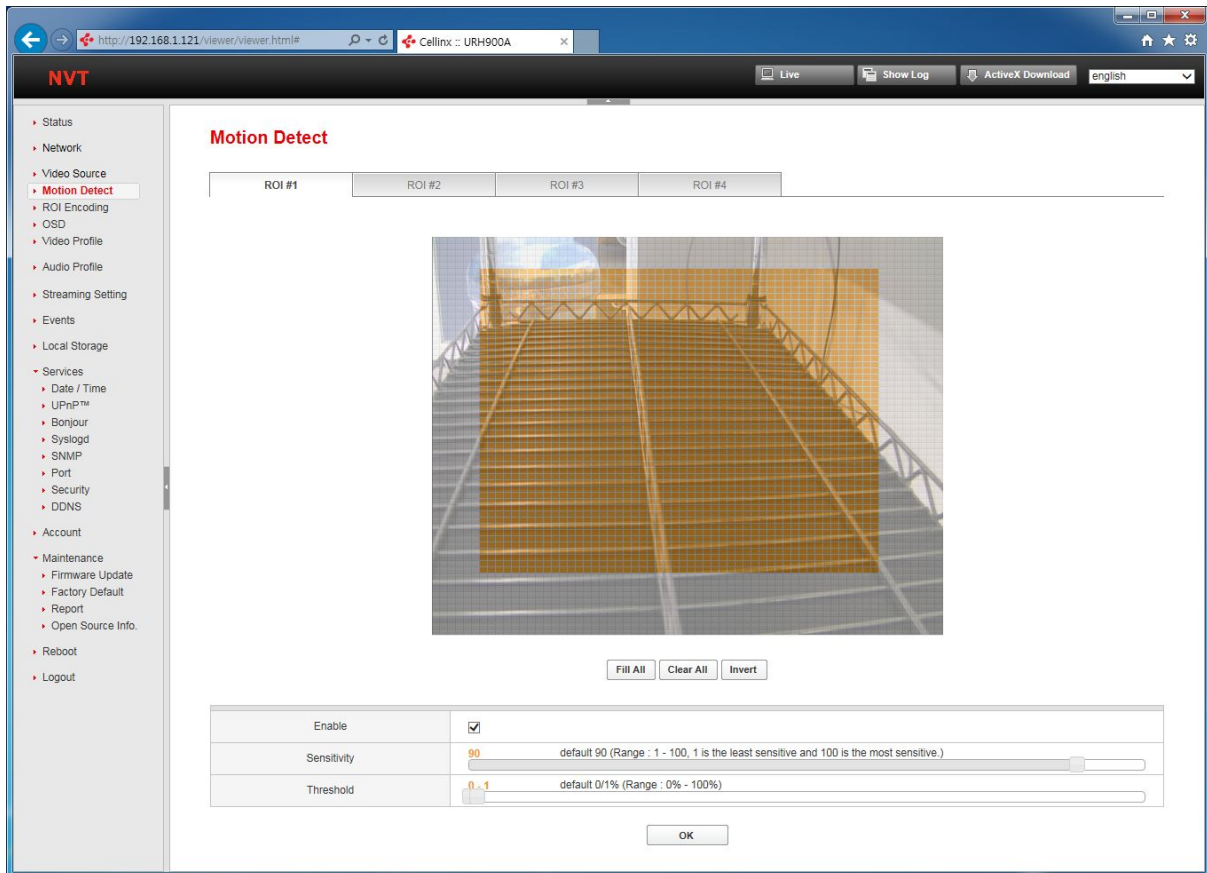
[ **ENTER button / Direction key panel** ] enables to enter into the OSD of the camera module and move / select the item and value. ENTER button (entering / setting) / Direction key (moving to an item / selecting a value)

#### Common

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

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

## Motion Detect



### ► Web setting page (Motion Detect)

#### Overview

- Click a point and drag on the image to make a detection range. After setting and detecting a motion, the red mark shows up 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.

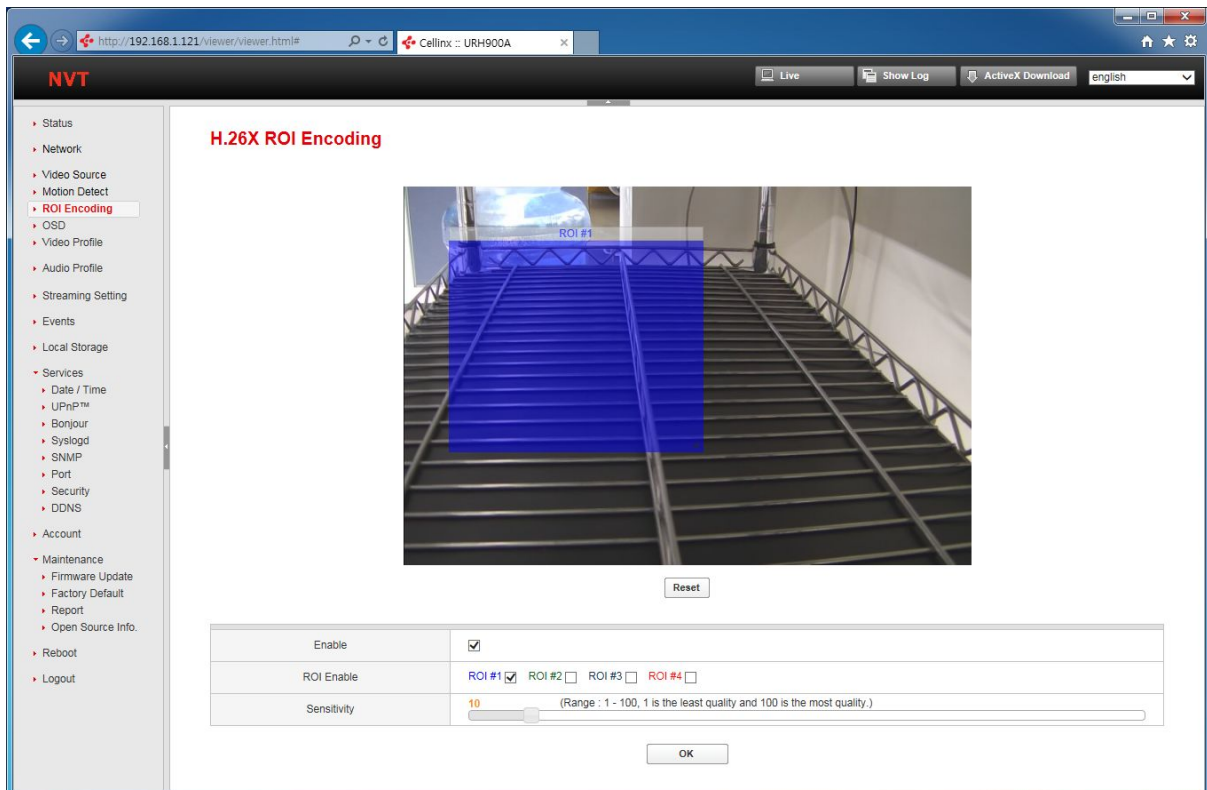
[ Enable ] check the box for the activation.

[ 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.

## ROI Encoding



- ▶ Web setting page (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.

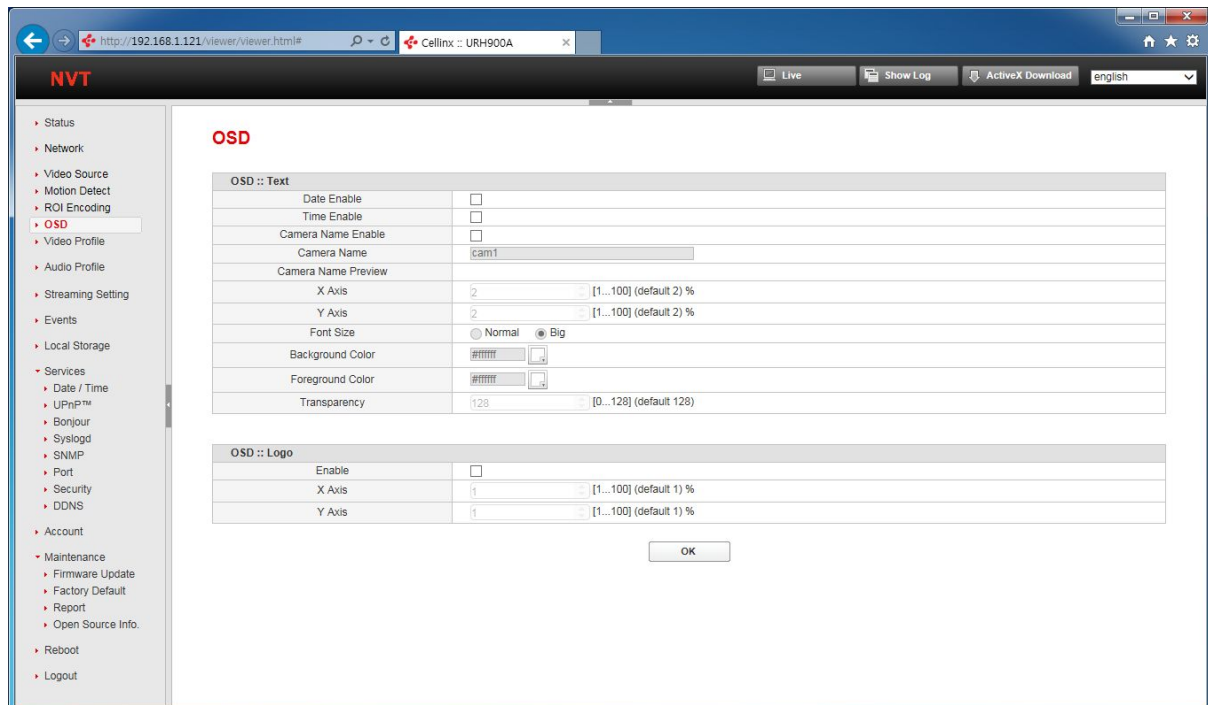
### Example

- 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 that is transferred by the transfer rate "4Mbps" (the default value of 1920x1080 resolution). You can also monitor the circumstances for the non-ROI part.

## 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 NVT. (This is the NVT OSD(On Screen Display) function and different from the function of the 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.

**OSD::Logo**

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

[ **Enable** ] check for the activation

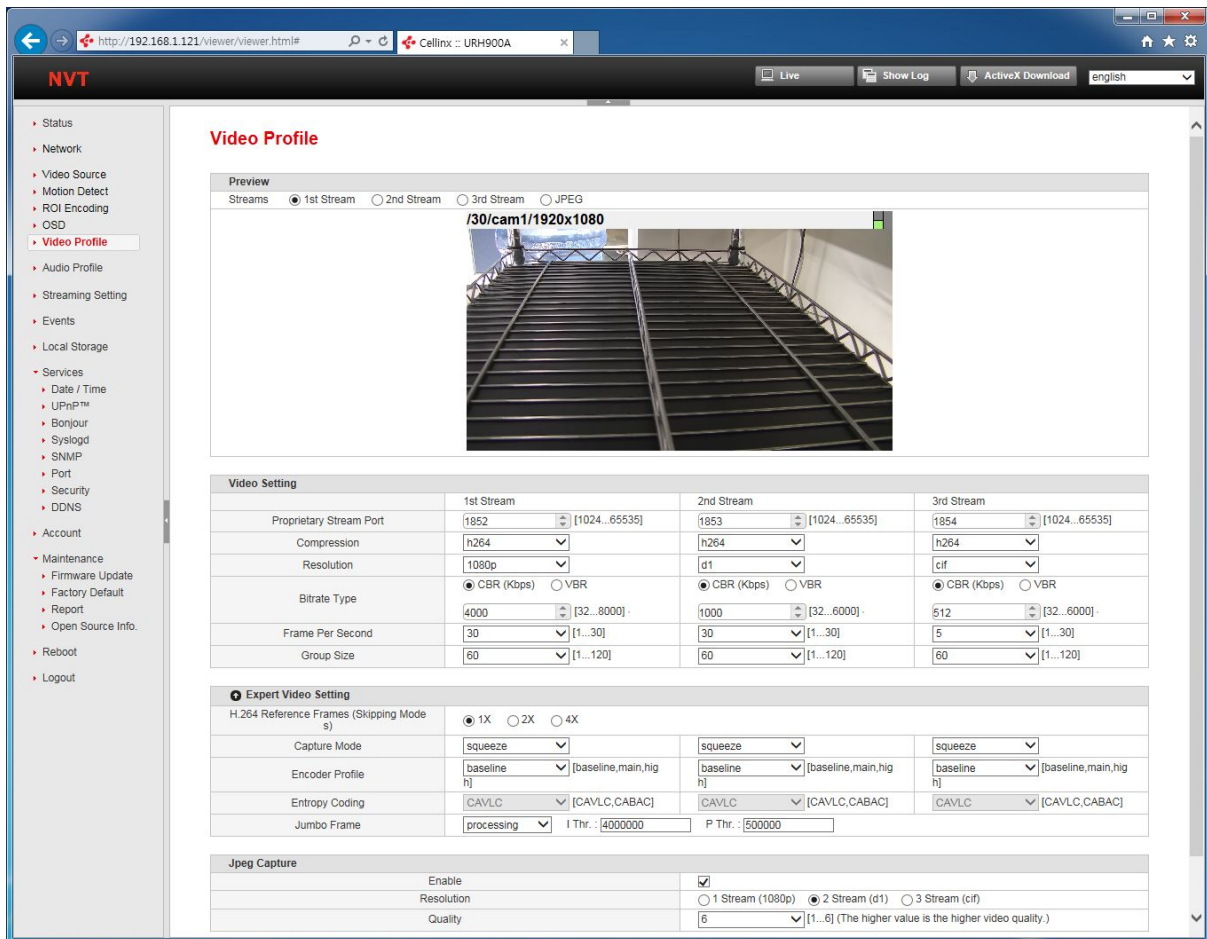
[ **X Axis** ] adjusts the X axis position of the OSD logo.

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

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



## 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: 3840X2160 -> 10000, 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 ]**

NVT 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 Capure**

- This is for developing a specific program.

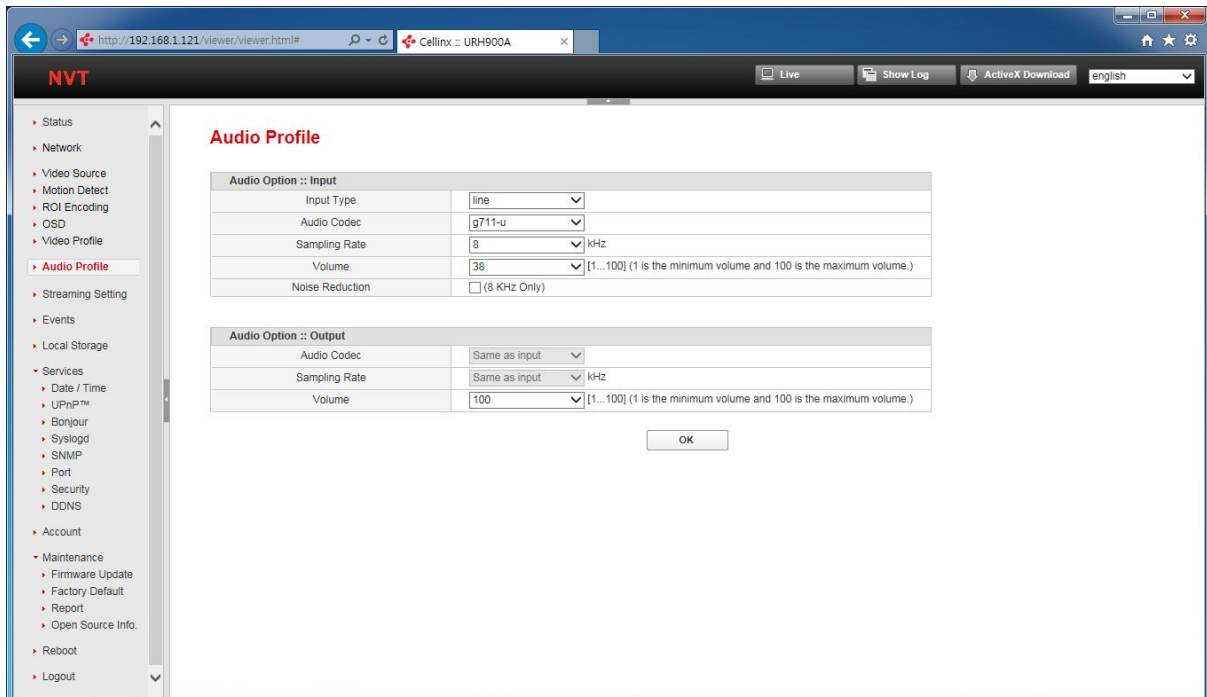
**[ Enable ]** if checked, the NVT captures the JPEG image.

**[ Resolution ]** adjusts the resolution

**[ Quality ]** 1 / 2 / 3 / 4 / 5 / 6

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

## Audio Profile



### ► Web setting page (Audio Profile)

In case that a monitoring program is used in playing audio data, the program must support the codec of the NVT.

#### Audio Option :: Input

[ **Input Type** ] line (fixed value)

[ **Audio Codec** ] G.711-u / G.711-a / G.726

(quality: G.711 > G.726, playing compatibility: G.711 < G.726)

[ **Sampling Rate** ] 8kHz / 32kHz (or 8kHz ; fixed on MR904)

[ **Volume** ] 1~100

#### Audio Option :: Output

[ **Audio Codec** ] It operates the same as the input side setting value.

[ **Sampling Rate** ] It operates the same as the input side setting value.

[ **Volume** ] 1~100

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



## Streaming Setting

The screenshot shows the NVT web interface for the Streaming Setting page. The browser address bar shows `http://192.168.1.121/viewer/viewer.html#`. The interface includes a sidebar with navigation options and a main content area with the following sections:

- Proprietary Streaming Setting:**

	1st Stream	2nd Stream	3rd Stream
Proprietary TCP Port	1852 [1024...6553]	1853 [1024...6553]	1854 [1024...6553]
Connection Lists			
- RTP/RTSP Streaming Setting:**

	1st Stream	2nd Stream	3rd Stream
RTSP Port	554 [1...65535]		
RTSP URI	rtsp://192.168.1.121:554/AVStream1_1	rtsp://192.168.1.121:554/AVStream1_2	rtsp://192.168.1.121:554/AVStream1_3
Connection Lists			
- Multicast Setting:**

	1st Stream	2nd Stream	3rd Stream
Video Address	224.16.17.2	224.16.17.3	224.16.17.4
Video Port	47806 [1024...6553]	47806 [1024...6553]	47806 [1024...6553]
Video TTL	64 [1...255]	64 [1...255]	64 [1...255]
Audio Address	224.16.17.5		
Audio Port	47806 [1024...65535]		
Audio TTL	64 [1...255]		
- Advanced Setting:**

Use RTSP Authentication	<input checked="" type="checkbox"/>
Use RTCP	<input checked="" type="checkbox"/>
Use RTP/RTCP Keep-Alive	<input checked="" type="checkbox"/> 60 [5...600]
Use Onvif Discovery	<input checked="" type="checkbox"/>
Use Onvif WS-Security	<input type="checkbox"/>
The other protocols	Genetec Protocol, Onvif

► 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

[ **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`

[ **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 RTP/RTCP Keep-Alive** ] check the box in case that the function "Timeout" is needed.

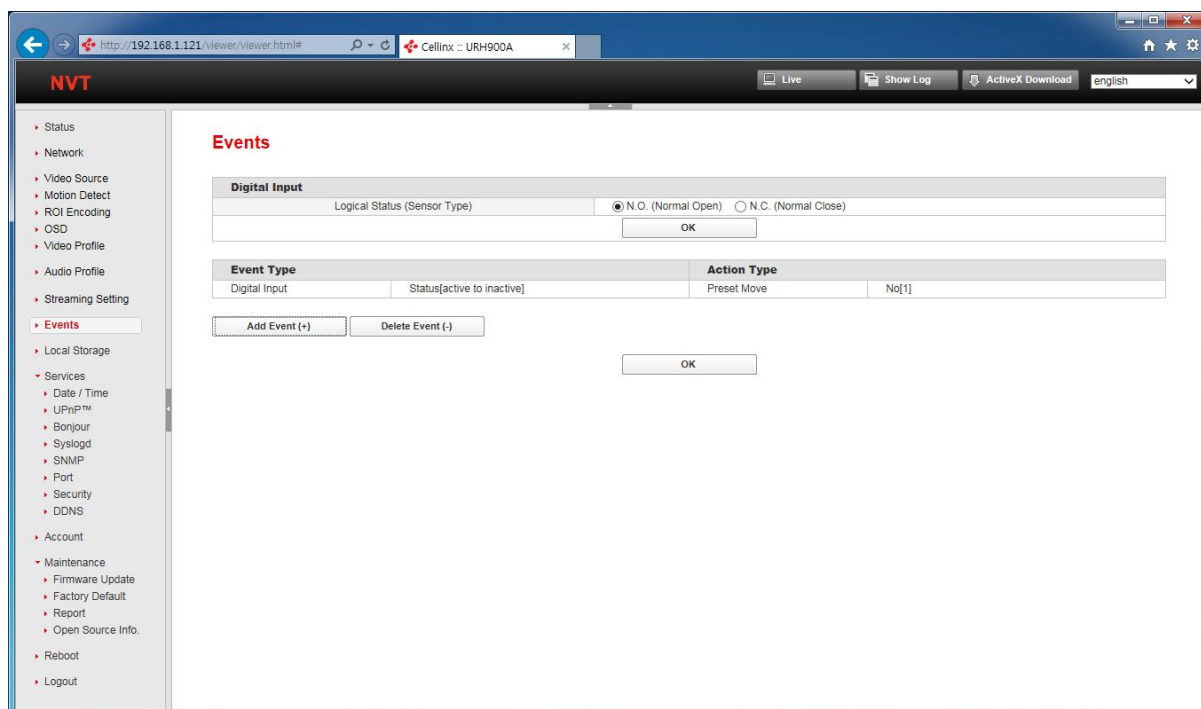
[ **Use Onvif Discovery** ] check the box for if the auto registration function by Onvif is used.

[ **Use Onvif WS-Security** ] check the box for if the WS-Security function by Onvif is used.

[ **The other protocols** ] displays the other supported protocols.

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

## 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.

[ **Add Event (+) button** ] click this button to add an event entry. Select one out of Digital Input / Motion / Timer. Please refer to the "Event Types" and "Action Types" as below.

- 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.

### 1) Event Types

- This defines the behavior for the event that occurred.

**1-1) Digital Input** : when the Digital Input (DI) is detected, an event occurs. The detection status can be adjusted in detail as below.

Status

- active to inactive : when the detected state of the DI is changed into the non detected state, an event occurs.

- inactive to active : when the non detected state of the DI is changed into the detected state, an event occurs.

- active level : when the detected state of the DI maintains, the event maintains.

- inactive level : when the non detected state of the DI maintains, the event maintains.

**1-2) Motion** : when the motion is detected, an event occurs.

---

ROIs : Refer to the setting value on the item "Motion Detect".

Status : Select either "on" or "off". (on: at detection, off: at detection release)

**1-3) Timer** : the events occurs periodically.

Interval : Input a value from 1 to 86400. (unit : second)

## 2) Action Types

- This defines the behavior for the output.

**2-1) Preset Move** :When the PTZ camera is connected to, the command "Preset Move" is sent to the PTZ camera.

- No : select one out of 1~255. Preset should be set on the item "Video Source".

**2-2) Digital Output** : This means "relay output". The signal "Digital Output" is sent by the time that is defined.

Status

- close to open : sends the signal "Digital Output" to "open" state.

- open to close : sends the signal "Digital Output" to "close" state.

dwttime : Output Duration

## 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 NVT.

- Web setting page of NVT > 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.

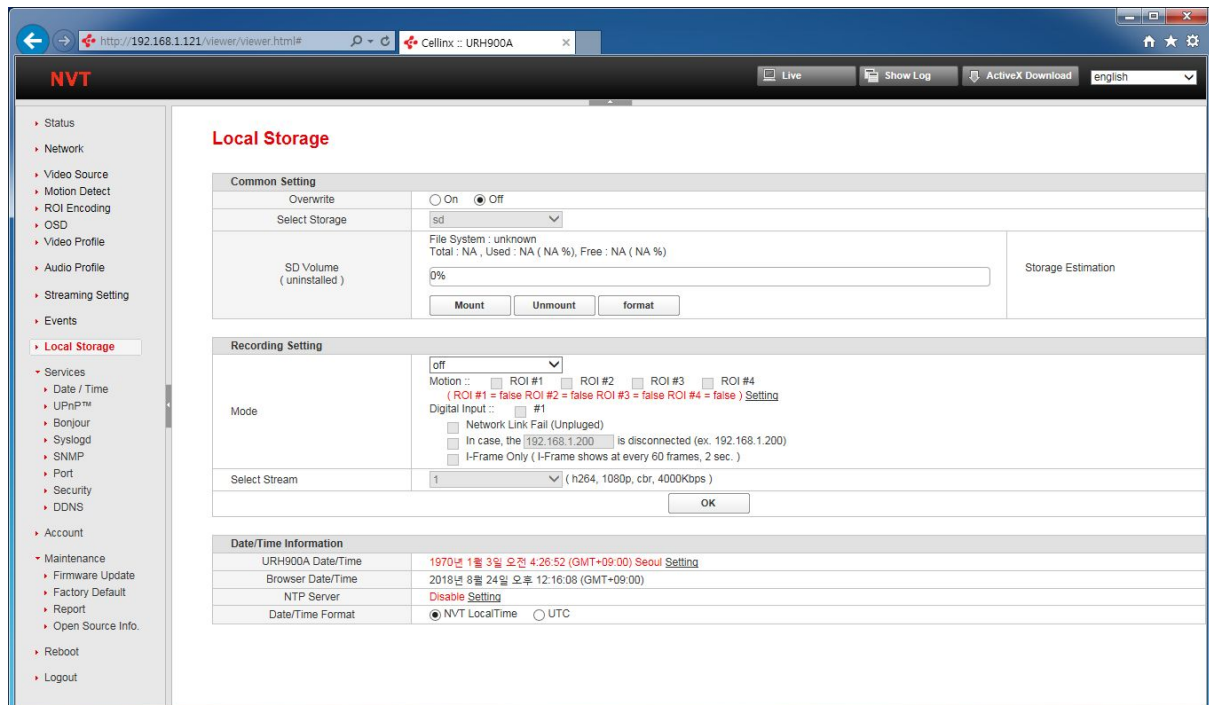
1) Event Type : Digital Input

2) Status : inactive to active

3) Action Type : Preset Move

4) No : 1

## Local Storage



### ► Web setting page (Local Storage)

#### Overview

- This function is available in case that the memory card is inserted into the product that supports an SD/SDHC card.

- Time synchronization issues

- 1) The video and the NVT internal time are saved together on the local storage function.
- 2) For the time differences of the NVT 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** ] shows the estimated storage time.

[ **Mount button** ] allows the memory to be used by the file system.

[ **Unmount button** ] prevents memory from being used by the file system.

[ **format button** ] formats the memory contents.

#### 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 NVT is used.

3) Network Link Fail (Unplugged) : the event that occurs when the network connector of the NVT 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 NVT 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 "NVT LocalTime / UTC"

#### **File Lists**

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

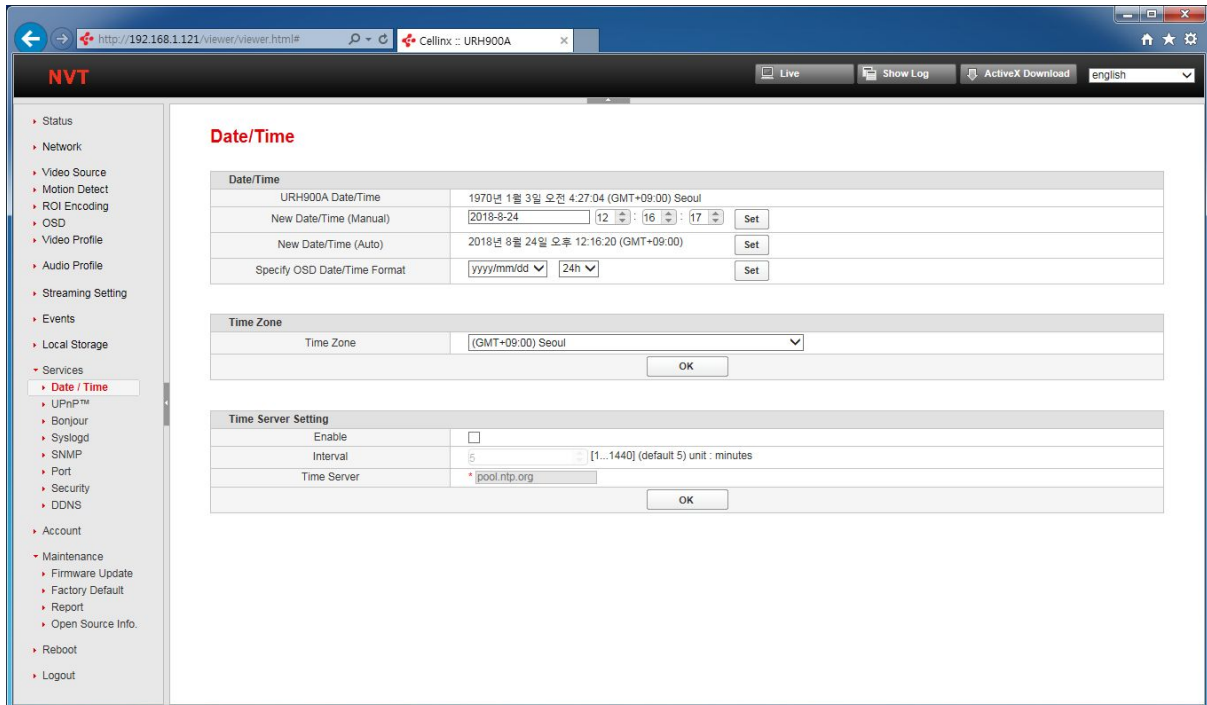
[ **Calendar** ] select a date and search the data

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

[ **Download button** ] download the selected files.

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

## 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

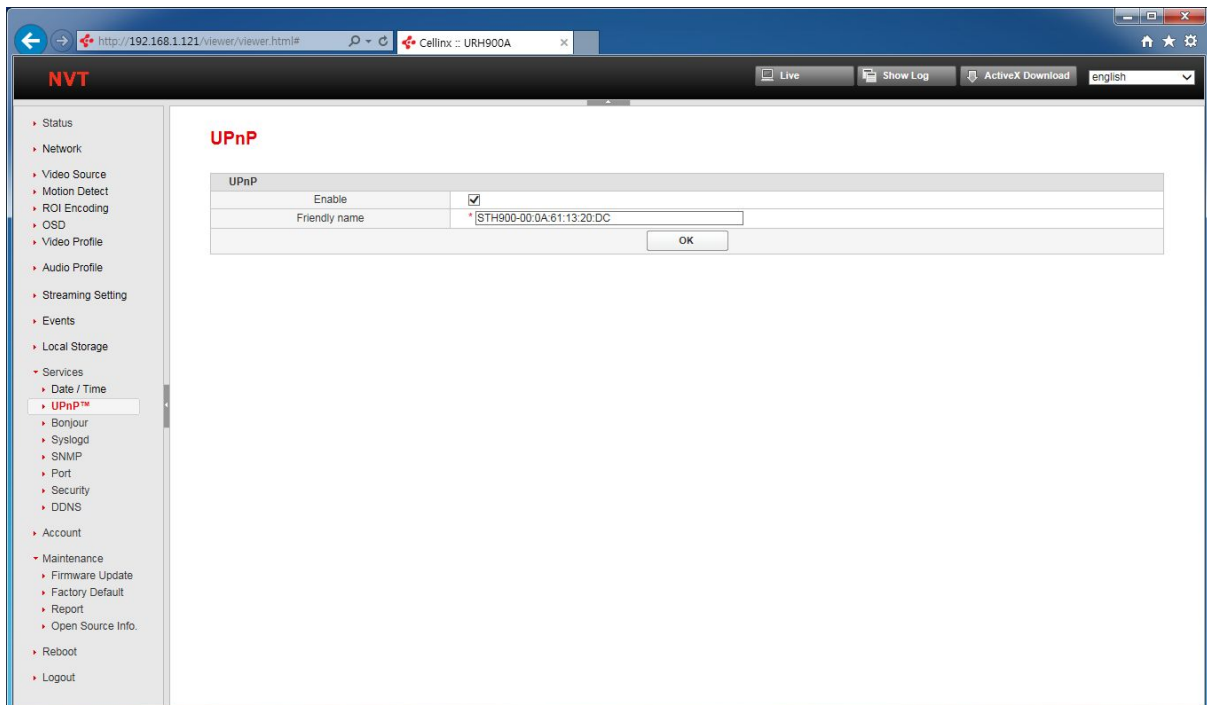
[ **Enable** ] check the box for the activation.

[ **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.

## UPnP



### ► Web setting page (UPnP)

#### UPnP

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

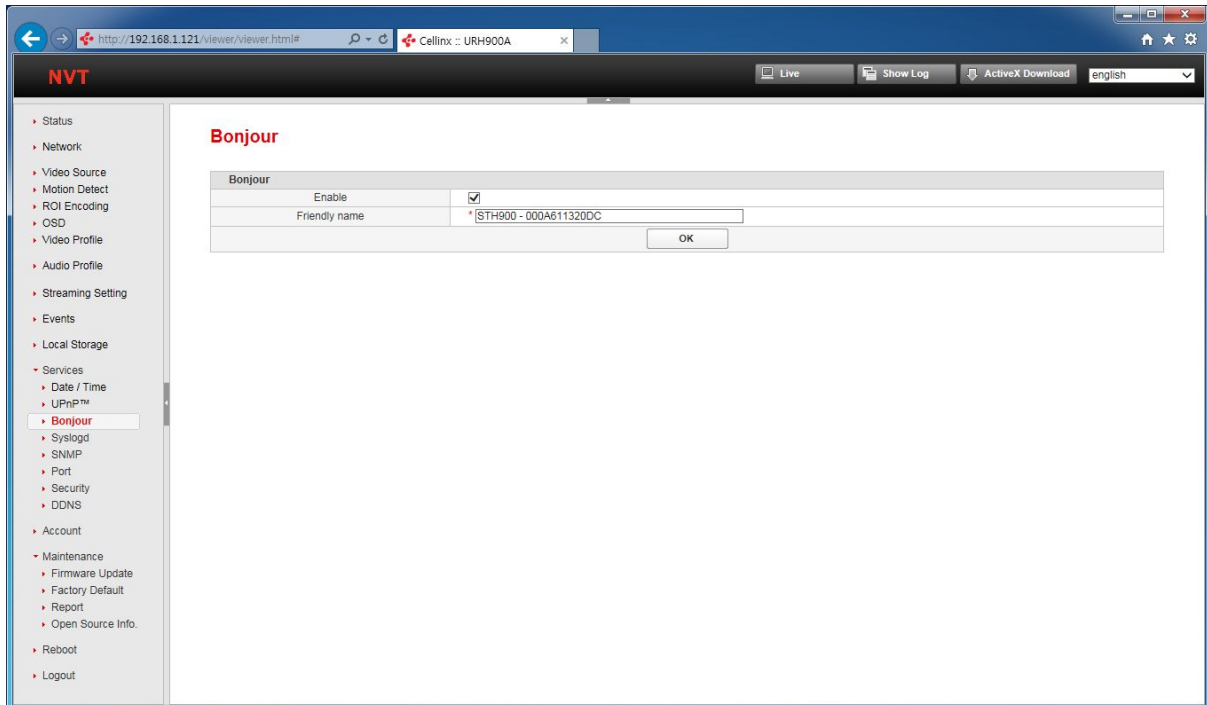
**[ Enable ]** check the box for the activation.

**[ 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.



## Bonjour



### ► Web setting page (Bonjour)

#### Bonjour

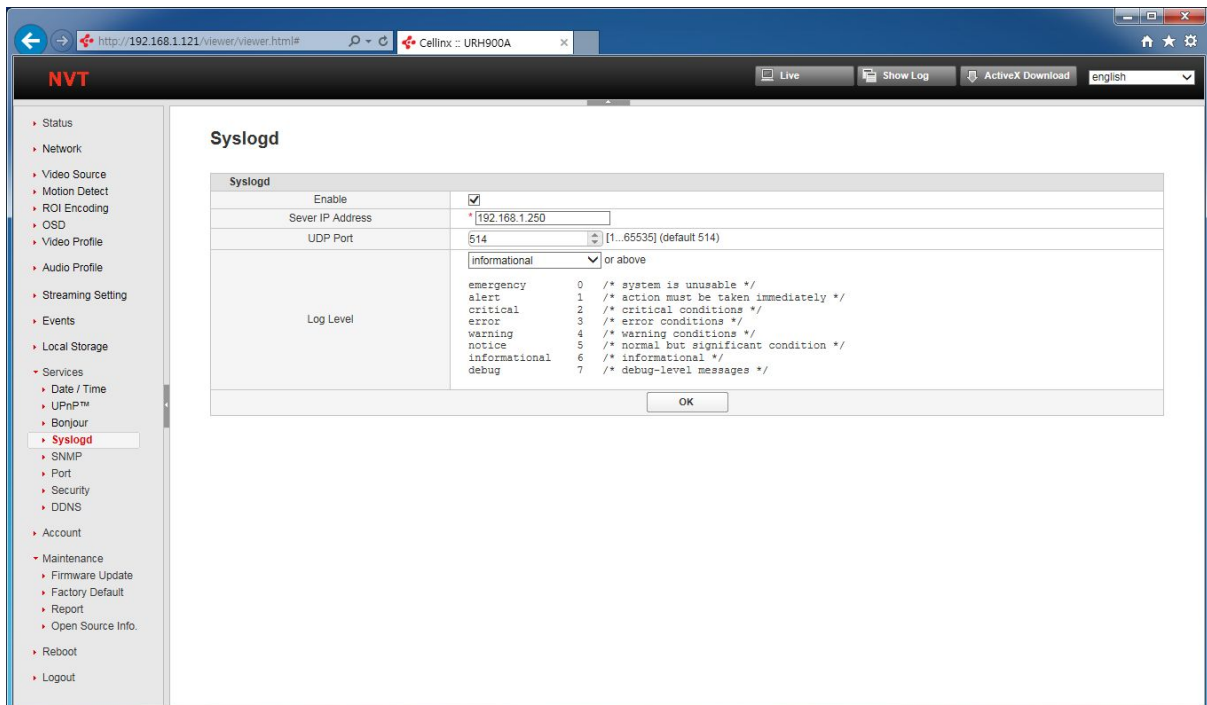
- It is available to scan NVTs with Windows explorer and access to them with clicking. The Windows explorer should support the detection of the Bonjour device.

**[ 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.

## Syslogd



► Web setting page (Syslogd)

### Syslogd

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

**[ Enable ]** check the box for the activation.

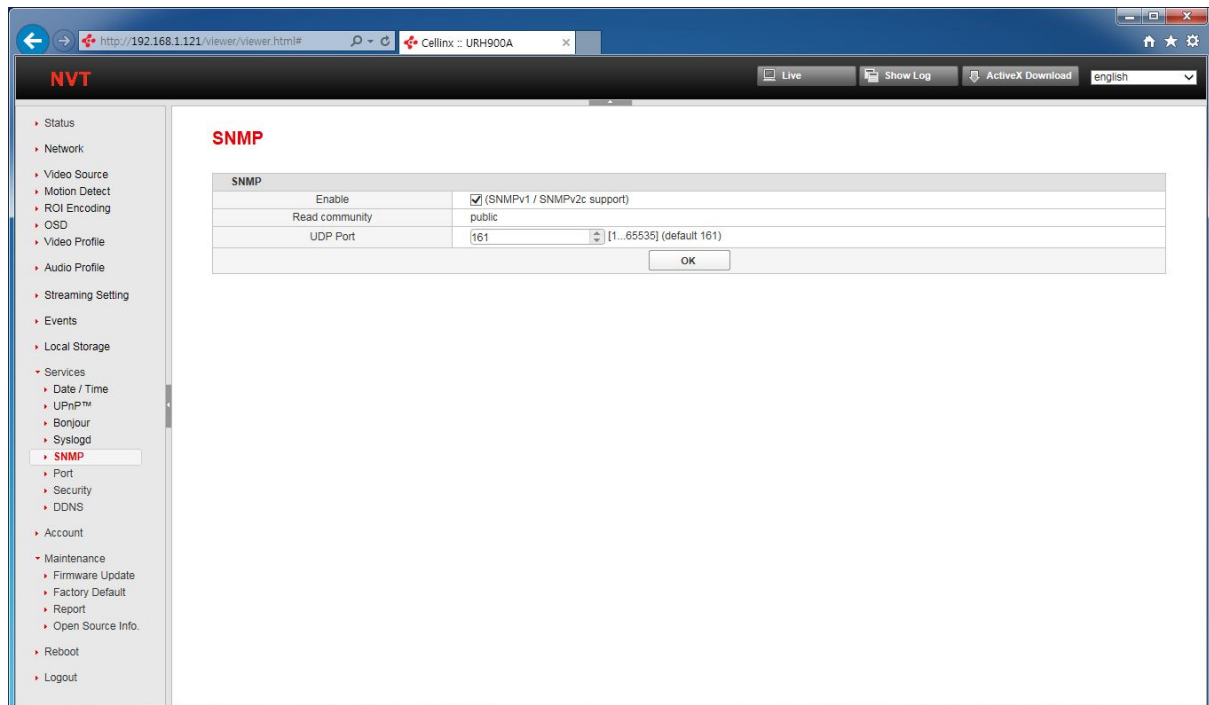
**[ Server IP Address ]** the IP address of the PC that receives the log files

**[ 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.

## 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

## Port

The screenshot shows the NVT web interface for the CamPilot URH900A. The browser address bar shows the URL `http://192.168.1.121/viewer/viewer.html#`. The interface has a sidebar menu on the left with the 'Port' option selected. The main content area is titled 'Port' and contains the following configuration sections:

- Web:**
  - HTTP Port: 80
  - Title: (empty text field)
- Serial Port #1 (rs485):**
  - Baud rate: 9600
  - Data bits: 8
  - Parity: none
  - Stop bits: 1
  - TCP Access Enable:
  - Port: 9000
- Serial Port #2 (rs232):**
  - Baud rate: 9600
  - Data bits: 8
  - Parity: none
  - Stop bits: 1
  - TCP Access Enable:
  - Port: 9001

Each serial port section includes a 'Connection Lists (TCP Access)' table, which is currently empty. An 'OK' button is located at the bottom center of the configuration area.

### ► Web setting page (Port)

#### Overview

- This sets up the port number for the data communication
- Support functions vary by model.

#### Web (HTTP)

[ **Port** ] the web port number

[ **Title** ] the name of your browser tab can be changed.

#### Serial Port #1 (rs485)

- This is for data communication with the outer device as a PTZ receiver. (RS485, RS422 etc.)
  - Set the ID and protocol on the item "Video Source" when a PTZ camera (receiver) is connected.
- [ **Baud rate, Data bits, Parity, Stop bits** ] the values should be same as the values of the devices that are communicated with.
- [ **Enable** ] check the box for the activation of TCP connection function.
- [ **Port** ] the port number for the serial communication

#### Connection Lists (TCP Access)

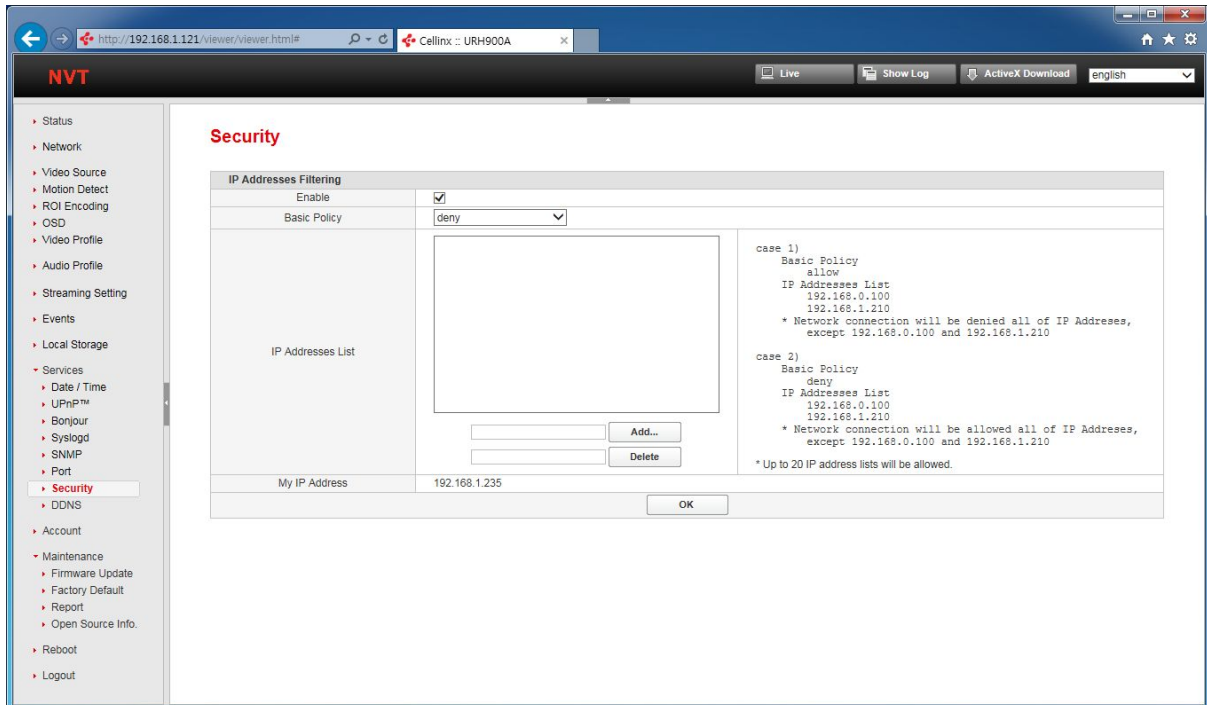
- This shows the IP addresses of the devices that are connected.

#### Serial Port #2 (rs232)

- This is for a special purpose serial data communication with the outer device.
- Refer to the items "Serial Port #1" to set up.

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

## Security



### ► Web setting page (Security)

#### IP Addresses Filtering

[ **Enable** ] check the box for the activation.

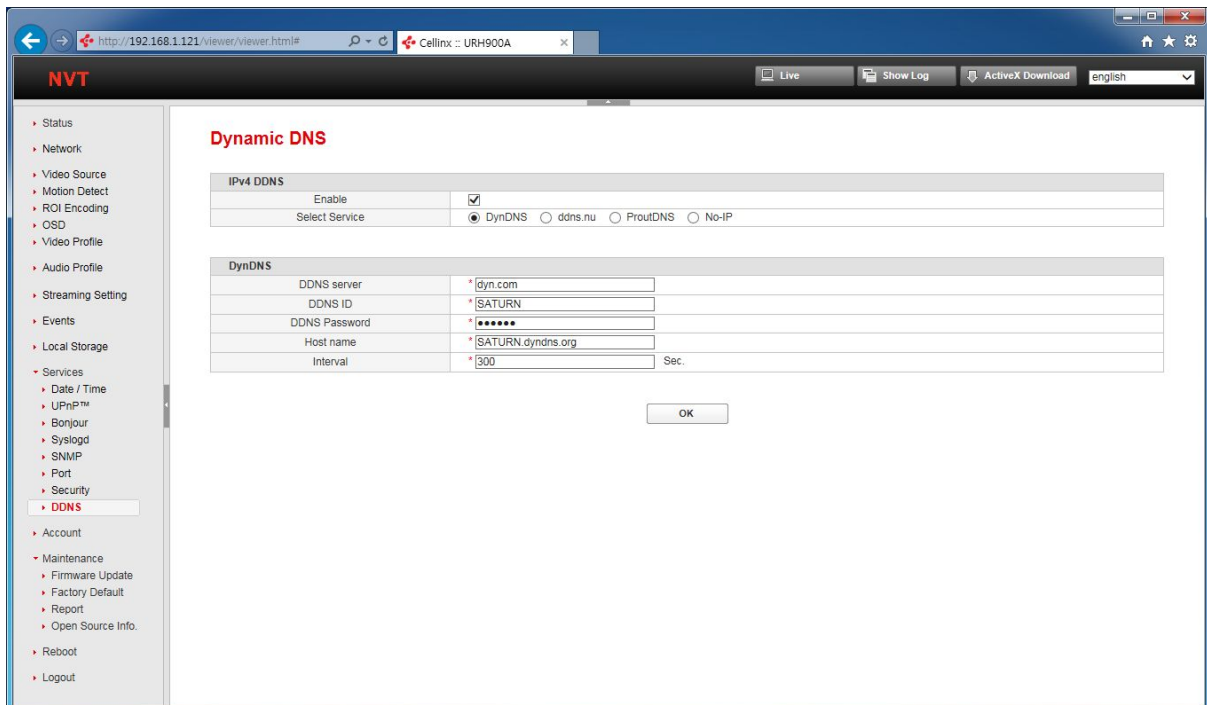
[ **Basic Policy** ] select one out of "allow" / "deny"

[ **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.

## 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.

## Account

The screenshot shows the NVT web interface with the 'Account' settings page. The browser address bar shows 'http://192.168.1.121/viewer/viewer.html#'. The interface includes a sidebar with navigation options and a main content area with the following table and settings:

ID	Setting	Live View	I/O (PTZ, DO, Serial Port)	
root	Yes	Yes	Yes	<input type="button" value="Add User"/>
guest	No	Yes	No	<input type="button" value="Modify"/>

Below the table, there are two configuration options:

- Guest Login Enable:
- Max Number Of Clients: MAX(20)

► Web setting page (Account)

[ **Add User button** ] click for adding an account.

[ **Modify button** ] click for modifying the registered account.

The dialog box titled 'Modify & Create new user' contains the following fields and options:

- All form fields are required.
- Admin Password:
- ID:
- New Password:
- Confirm Password:
- I/O (PTZ, DO, Serial Port)
- 

► Modify & Create new user dialog box

### Modify & Create new 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.

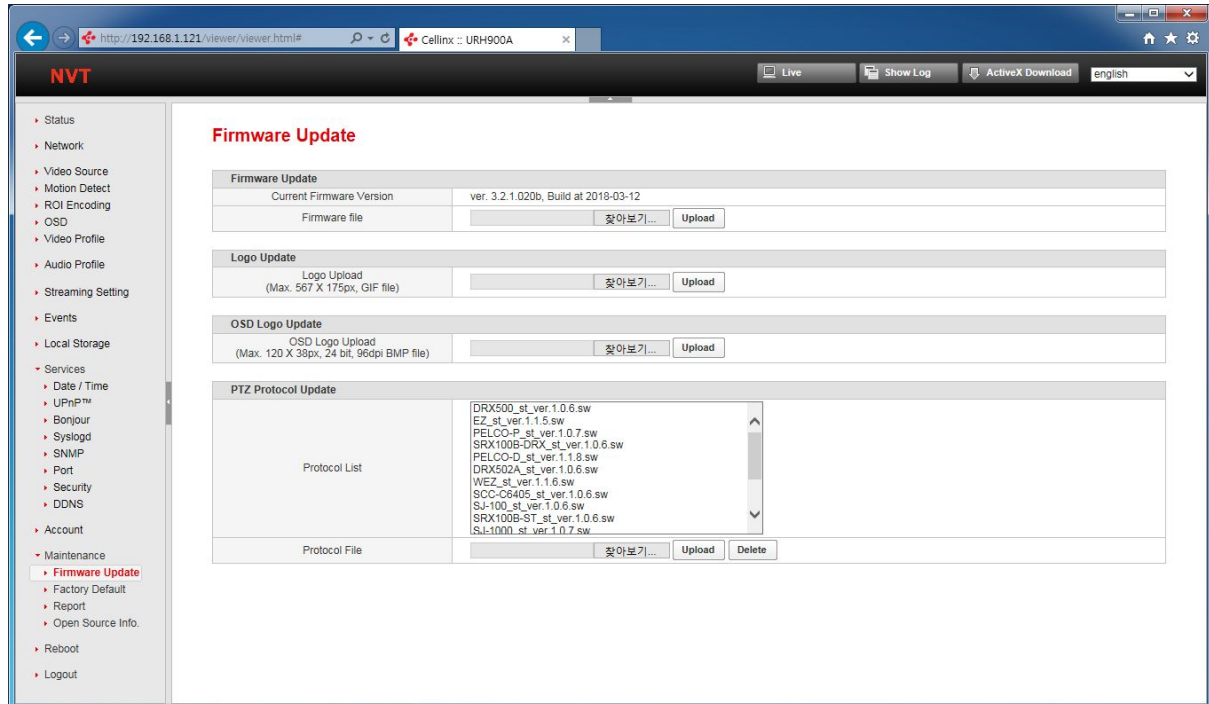
[ **I/O (PTZ, DO, Serial Port) check box** ] check for the activation. this means the authority for the inputs and outputs.

[ **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)

## Firmware Update



▶ Web setting page (Firmware Update)

### Firmware Update

[ **Current Firmware Version** ] displays the current firmware version.

[ **Firmware file** ] click the button "Browse..." and select the file to update. And click the button "Upload" for updating. On updating, the power supply should be kept. (10 minutes) The network setting is kept after the firmware update. (the video setting is initialized.)

### Logo Update

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

### OSD Logo Update

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

### PTZ Protocol Update

[ **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".



## Factory Default

The screenshot shows the NVT web interface for the CamPilot URH900A. The browser address bar shows the URL `http://192.168.1.121/viewer/viewer.html#`. The interface has a sidebar menu on the left with categories like Status, Network, Video Source, etc. The main content area is titled "Factory Default" and features a "Reset" button. Below the button are several expandable sections, each with a checkbox and a label: General, Camera, Network, VideoInput, AudioInput, AudioOutput, OSD, Record, SerialPort, InputPin, OutputPin, and Events. The "Network" section is expanded, displaying a table of service configurations.

Services » UPnP » FriendlyName		STH900-00:0A:61:13:20:DC
Services » Bonjour » FriendlyName		STH900 - 000A611320DC
_1 » StaticIpAddress	192.168.1.2	192.168.1.121

The "VideoInput" section is also expanded, showing a table of resolution settings:

_1 » JpegCapture » Resolution	cif	d1
_1 » _2 » h264 » Resolution	640x360	d1

### ► 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.

## Report

The screenshot shows the 'Report' page in the CamPilot URH900A web interface. The browser address bar shows 'http://192.168.1.121/viewer/viewer.html#'. The interface includes a navigation menu on the left with categories like Status, Network, Video Source, Motion Detect, ROI Encoding, OSD, Video Profile, Audio Profile, Streaming Setting, Events, Local Storage, Services, Maintenance, Account, and Reboot. The main content area is titled 'Report' and features a 'Print' button. Below the title is a camera view of a staircase. The page contains three tables of system information:

URH900A	
Running Time	1 day, 19:28
Web Components Version	1,1,6,3 / 2,0,0,30
Boot Loader Version	U-Boot 2010.06 (Oct 01 2013 - 02:27:23)
Camera Module Info	1080p_30fps
Local Storage Info	[sd] uninstalled [usb] uninstalled
CPU Temperature (Min. / Current / Max. )	64 / 66 / 71 (unit : °C)

Client PC Info.	
OS	Windows 7
Web Browser	Mozilla/5.0 (Windows NT 6.1; WOW64; Trident/7.0; SLCC2; NET CLR 2.0.50727; .NET CLR 3.5.30729; .NET CLR 3.0.30729; Media Center PC 6.0; NET4.0C; NET4.0E; rv:11.0) like Gecko

General		
SerialNumber		S145000476
FirmwareVersion		ver. 3.2.1.020b, Build at 2018-03-12
Brand » CompanyName		Cellinx
Brand » ProductName	URH900A	URH900A
Language	english	english
Security » AllowGuest	true	true
DateTime » TimeZone	Korea_Standard_Time	Korea_Standard_Time
DateTime » EnableDST	false	false
DateTime » DateFormat	yyyy/mm/dd	yyyy/mm/dd
DateTime » TimeFormat	24h	24h

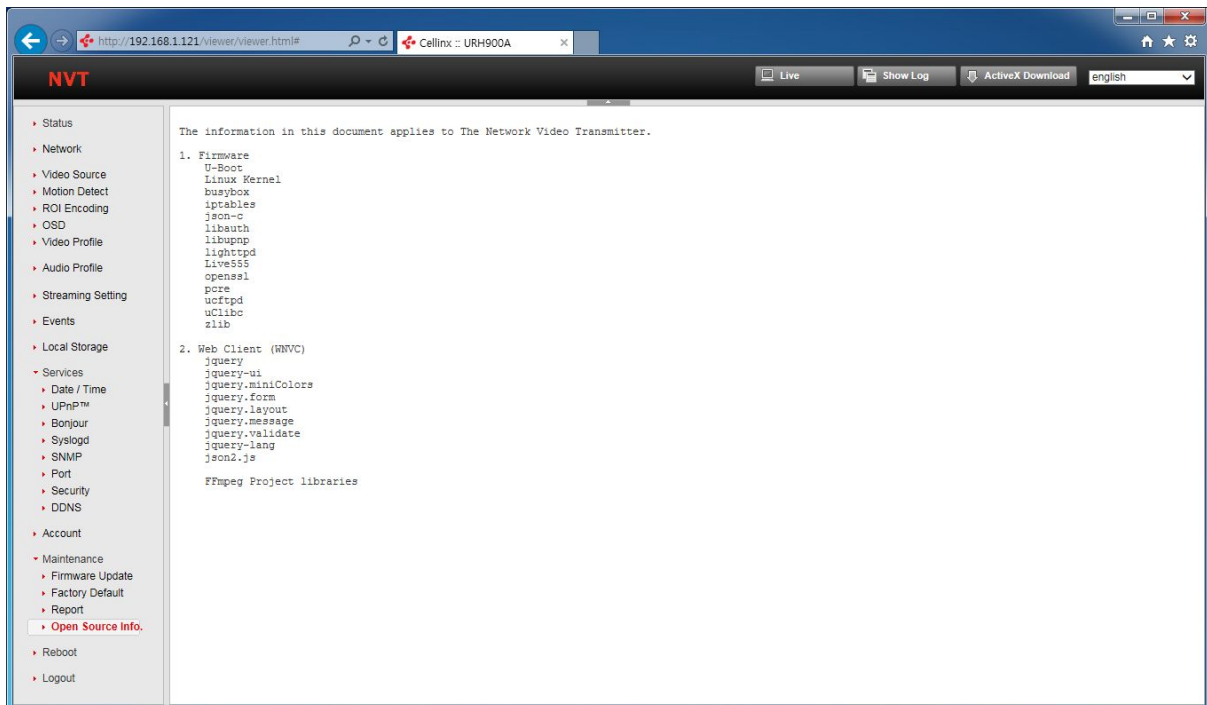
► Web setting page (Report)

### 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".

## Open Source Info.



► Web setting page (Open Source Info.)

## Reboot

- Click the text "Reboot" for rebooting the NVS



► Confirmation of reboot

## Logout

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