

SNC-CH110/CH210  
SNC-DH110/DH110T/DH210/DH210T

Release Note

Ver. 1.88

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Sony Corporation

## Release Note

### Modification history

#	Release date	Version	Content of change and comment
1	2010/6/17	1.12	SNC- CH210 First Release
2	2011/2/2	1.27.00	SNC-CH110, DH210, DH210T Support Release
3	2011/2/2	1.27.02	<ul style="list-style-type: none"> <li>Update: Minor Improvements for SNC-CH110</li> </ul> SNC-DH110, DH110T Support Release
4	2011/5/10	1.33.00	<ul style="list-style-type: none"> <li>Add: New Functions, Improved Functions</li> <li>Update: Major Improvements, Known Issues</li> </ul> Edit: [8.6 The Restriction of Motion Detection] Edit: [11. Improved Functions in Ver. 1.27.00] Edit: [12. Known issues]
5	2011/8/22	1.50	<ul style="list-style-type: none"> <li>Add: New Functions, Improved Functions</li> <li>Update: Major Improvements, Known Issues</li> </ul>
6	2012/4/27	1.73	<ul style="list-style-type: none"> <li>Add: New Functions, Improved Functions</li> </ul>
7	2012/11/05	1.76	<ul style="list-style-type: none"> <li>Add: New Function and Corrected Problem for Ver. 1.76</li> <li>Add: 6.6, 16.7, 16.8.</li> </ul>
8	2012/12/27	1.78	Add: New Function and Corrected Problem for Ver. 1.78
9	2013/08/01	1.79	Add: New Function and Corrected Problem for Ver. 1.79
10	2013/09/27	1.80	Corrected Problem for Ver. 1.80
11	2014/02/27	1.82.01	Add: New Function and Corrected Problem for Ver. 1.82.01
12	2014/11/10	1.85	Add New function for Ver. 1.85
13	2016/12/22	1.86	Add Improved Function Add New function for Ver. 1.86
14	2017/04/25	1.87	Add New function for Ver. 1.87
15	2018/06/29	1.88	Add: New Function and Corrected Problem Update: Known issues (31.8)

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## 1. About This Release Version

### 1.1. General Information

This version is Ver. 1.88. This firmware can be applied to the following models.

- SNC-CH110 (SYM, CN)
- SNC-CH210 (SYM, CN)
- SNC-DH110 (SYM, CN)
- SNC-DH110T (SYM, CN)
- SNC-DH210 (SYM, CN)
- SNC-DH210T (SYM, CN)

This release note describes the detailed information about this version.

### 1.2. System Requirements

The following computer environment is necessary for the computer to display images and the controls of the camera.

- OS  
Windows 7 (32-bit version, 64-bit version)  
Windows 8.1 (32-bit version, 64-bit version)  
Authorized editions:  
    Windows 7 : Ultimate, Professional  
    Windows 8.1 : Pro  
Microsoft DirectX 9.0c or higher
- Web Browser  
Microsoft Internet Explorer Ver. 11.0 (Windows 8.1 Desktop Mode only)  
Firefox Ver. 50.1 (Plug-in free viewer only)  
Google Chrome Ver. 55.0 (Plug-in free viewer only)
- CPU  
Intel Core 2 Duo, 2 GHz or higher
- Memory  
1 GB or more
- Display  
1600 × 1200 pixels or higher (SNC-CH110/DH110/DH110T)  
1600 × 1200 pixels or higher (2560 × 1600 pixels or higher is recommended.)  
(SNC-CH210/DH210/DH210T)

### 1.3. Compatibility

There is no change on CGI command, RTSP, other network protocols and the streaming format. It is compatible with Ver. 1.87 about connectivity between the external network devices and the camera.

## 2. Note on Upgrading Firmware

When upgrading the firmware, you should use the SNC toolbox of Ver. 1.3.8.0 or later. Please refer to "Using the SNC toolbox" in the User's Guide for details on how to use.

3. Newly Added Function in Ver. 1.88

3.1. The security has been enhanced.

4. Problems corrected in Ver.1.88

4.1. Fixed a problem that camera image might not be displayed in ActiveX viewer.

There is a problem that the camera image may not be displayed when connecting to the camera with Internet Explorer (IE). When the problem occurs, a × mark is displayed at the upper left of the ActiveX viewer (And motion detection setting monitor screen). This problem was corrected.

(Problem from Ver.1.87)

5. Newly Added Functions in Ver. 1.87

5.1. The security has been enhanced.

[Note] When you fail in installation of ActiveX, apply the latest Windows security patches.

6. Function changed and Problems corrected in Ver.1.87

There is no function which is changed and there is no problem which is fixed in this version.

7. Newly Added Functions in Ver. 1.86

7.1. The security has been enhanced.

7.2. ONVIF Ver. 16.07 support

Conformance testing has been passed with ONVIF Device Test Tool Version 16.07.

8. Function changed and Problems corrected in Ver.1.86

There was a problem that the camera rarely fails to start up correctly. This problem has been corrected.

(Problem from Ver. 1.12)

9. Newly Added Functions in Ver. 1.85

9.1. Windows 8.1 IE11 support

This version supports Internet Explorer 11 (IE11) in Desktop User Interface Mode on Windows 8.1. But it does not support IE11 launching from Start Screen in Windows 8.1 and it has no evaluations of IE11 for Windows 7.

9.2. ONVIF Ver. 14.06 support

Conformance testing has been passed with ONVIF Device Test Tool Version 14.06.

10. Newly Added Functions in Ver. 1.82.01

10.1. ONVIF Ver. 13.06 support

Conformance testing has been passed with ONVIF Device Test Tool Version 13.06.

11. Function changed and Problems corrected in Ver.1.82.01

11.1. Enhanced error correction capability for the firmware data stored in the memory

Some defect data in a part of the memory's area may cause the problem which is camera

may not launch or some particular function may not work correctly after power-on or after rebooting. Therefore error correction capability was enhanced for the improvement to them.  
(Problem from Ver. 1.12)

## 12. Newly Added Functions in Ver. 1.80

Nothing.

## 13. Function changed and Problems corrected in Ver.1.80

### 13.1. Frame rate settings failure from '1280x720' up to '1920x1080' by using ONVIF command (SNC-CH210/DH210/DH210T)

Frame rate settings of Image size from '1280x720' up to '1920x1080' had been limited incorrect values in H.264 codec by using ONVIF command. (There has been no concern with CGI command.) This version improved this problem.  
(Problem from Ver. 1.12)

### 13.2. 802.1x authentication failure after reboot

The problem of 802.1x authentication failure had been found in connection with 802.1x authentication PoE Hub. This version improved this problem.  
(Problem from Ver. 1.12)

## 14. Newly Added Functions in Ver. 1.79

### 14.1. Windows 8 IE10 support

This version supports Internet Explorer 10 (IE10) in Desktop User Interface Mode on Windows 8. But it does not support IE10 launching from Start Screen in Windows 8 and it has no evaluations of IE10 for Windows 7.

### 14.2. ONVIF Ver. 12.12 support

Conformance testing has been passed with ONVIF Device Test Tool Version 12.12.

### 14.3. Additional function of RTP stream with user data

Additional function of RTP stream with user data is installed in this version. New CGI category is added as 'userdata.cgi', and this function is available to change its parameter 'RTPUserData' value from default setting 'off' to 'on' as shown below.

[http://ip\\_addr/command/userdata.cgi?RTPUserData=on](http://ip_addr/command/userdata.cgi?RTPUserData=on)

For details regarding this function, refer to the instructions for the CGI Command Manual.

## 15. Function changed and Problems corrected in Ver.1.79

### 15.1. Several Time Zone settings will be available by using ONVIF command

CET-1, IDLW time zone settings had been unavailable by using ONVIF command. This version improved this problem and supported a setting of offset hours from GMT (e.g. 'GMT-5' is meaning to Eastern Time of USA and Canada, but it does not support offsets of minutes and seconds).

(Problem from Ver. 1.12)

### 15.2. No update of Port number after changing HTTP's port setting by using ONVIF



#### command

Even though HTTP's port number was changed from default value, there would be no update of new port number in Device Service Address of ONVIF command. This version improved this problem.

(Problem from Ver. 1.12)

#### 15.3. Improved some Video Encoder Configuration's problems of ONVIF

Some problems have been found on getting and setting Image2's parameter in Video Encoder Configuration of ONVIF. These problems occur under the restriction of camera performance because image2's parameter depends on Image1's setting. And so this version improved them in accordance with the condition.

And some format (e.g. PTxxHxxMxxS) of RTSP session time out setting is available from this version. (Maximum period of time out is 600 seconds, and the value more than it will be limited to 600 seconds.)

(Problem from Ver. 1.12)

#### 15.4. Add RTP-Info Header in the Information of response to PLAY over RTSP

Over RTSP, RTP-Info Header has not included in the information of response to PLAY command. This version is able to add the information by using CGI command as shown below.

[http://ip\\_addr/command/camera.cgi?RTPInfo=on](http://ip_addr/command/camera.cgi?RTPInfo=on) (default setting is 'off')

For details regarding this function, refer to the instructions for the CGI Command Manual.

(Problem from Ver. 1.12)

### 16. Newly Added Functions in Ver. 1.78

#### 16.1. Motion detection when Image 2 Codec is used

Motion detection function is activated even when Image 2 Codec is used. In this case, superimposing on Image 2 is not available.

#### 16.2. ONVIF Profile S support

ONVIF Profile S is supported. Conformance to Profile S is validated with ONVIF Device Test Tool Version 12.06.

### 17. Function changed and Problems corrected in Ver. 1.78

#### 17.1. Parameter setting for ONVIF command SetImagingSettings

There was a problem that the camera returned the "HTTP/1.1 400 Bad Request" to ONVIF SetImagingSettings command with Brightness and ColorSaturation parameter expressed by decimals.

This problem has been fixed.

(Problem from Ver. 1.12)

#### 17.2. SolidPTZ setting when Aspect ratio is changed

There was a problem that the SolidPTZ setting could not return to its factory default value OFF when Aspect ratio is changed.

This problem has been fixed.

(Problem from Ver. 1.12)

#### 17.3. Improvement of streaming video performance over SSL

The frame rate of SSL streaming video is improved.

(Problem from Ver. 1.12)

#### 17.4. Correction of MPEG-4 SDP data

The extraneous last four bytes of SDP (Session Description Protocol) data for MPEG-4 in RTSP streaming are removed.

(Problem from Ver. 1.12)

#### 17.5. SolidPTZ on ONVIF connection

Absolute Pan/Tilt/Zoom and Relative Pan/Tilt/Zoom functions on ONVIF connection are supported.

(Problem from Ver. 1.12)

#### [Note]

- Relative Pan/Tilt and Relative Zoom do not work concurrently.
- Continuous Pan/Tilt/Zoom functions are not supported.

#### 17.6. Image 2 setting data restoration problem

There was the problem that the Image 2 setting data may not be restored properly. This problem has been fixed.

(Problem from Ver. 1.12)

### 18. Newly Added Functions in Ver. 1.76

#### 18.1. CGI command setting for WS-Discovery

The following CGI command disables WS-Discovery protocol for ONVIF connection. At this time the multicast join message packet to 239.255.255.250 is not sent at startup.

[http://ip\\_adr/command/system.cgi?WsDiscovery=off](http://ip_adr/command/system.cgi?WsDiscovery=off)

For details, refer to the CGI Command Manual.

### 19. Function changed and Problems corrected in Ver. 1.76

#### 19.1. Connectivity with other vendors' client software

There was a problem that connections with Omnicast client software provided by Genetec may be lost. This problem has been fixed.

(Problem from Ver. 1.33)

#### 19.2. alarmdata.cgi sending when SSL is on

There was a problem that alarmdata.cgi could not be sent when SSL is enabled. This problem has been fixed.

(Problem from Ver. 1.33)

#### 19.3. Incorrect return value by alarmdata.cgi during continuous motion detection

There was a problem that alarmdata.cgi returned 1 and 0 (which indicate motion is detected

and not respectively) repeatedly even though motion was detected continuously. This problem has been fixed.  
(Problem from Ver. 1.12)

19.4. Throughput degradation in full-duplex transmission  
When 10Mbps or 100Mbps full-duplex mode is specified by CGI command, Ethernet throughput may be degraded. This problem has been fixed.  
(Problem from Ver. 1.12)

19.5. Improvement of responsiveness in multicast streaming  
The CGI command responsiveness has been improved in multicast streaming.  
(Problem from Ver. 1.12)

19.6. Error response to ONVIF command SetVideoEncoderConfiguration  
There was a problem that the camera may return the "HTTP/1.1 500 Internal Server Error" to ONVIF SetVideoEncoderConfiguration request.  
This problem has been fixed.  
(Problem from Ver. 1.12)

## 20. Newly Added Functions in Ver. 1.73

20.1. Supported Web Browser  
Microsoft Internet Explorer Ver. 9.0 is newly supported.

20.2. Multicast address setting per video instance  
It is possible to set and request different multicast address respectively for image1, image2.  
For details, refer to the CGI Command Manual.

### [Note]

This function can't be used by ActiveX viewer, setting menu and the SNC toolbox.

## 21. Problems corrected in Ver. 1.73

21.1. White-out image problem by backlight compensation  
When the camera is rebooted or booted by power-on while the setting of backlight compensation is ON, the images turn out white-out. This problem has been corrected.  
(Problem from Ver. 1.12)

21.2. Auto exposure malfunction  
There is the problem that auto exposure does not work properly and the images turn out white-out. This problem has been corrected.  
(Problem from Ver. 1.12)

21.3. Changes in brightness by change of video codec setting  
When a frame rate or a bit rate of the video codec is updated, changes in brightness may appear for a moment. This problem has been corrected.  
(Problem from Ver. 1.12)

21.4. Changes in brightness by retrieving Eflip CGI command

Even though Eflip CGI commands without update are retrieved, changes in brightness may appear for a moment. This problem has been corrected.

(Problem from Ver. 1.12)

21.5. ONVIF protocol issue

When both Configuration and Profile are not specified on

GetVideoSourceConfigurationOptionsRequest, VideoSourceTokenAvailable field is missing on GetVideoSourceConfigurationOptionsResponse.

(Problem from Ver. 1.12)

21.6. Effectiveness of RtpExpire value

There was a problem that the changed value of CGI parameter RtpExpire had not been effective without reboot. It is no longer required to reboot for changing this value from this version.

(Problem from Ver. 1.12)

21.7. Improvement of video codec mode update

It used to take about 3 seconds to update a frame rate or a bit rate of the video codec. By improvement of this version the duration is reduced by approximately 90 percent.

(Problem from Ver. 1.12)

21.8. Landscape mode display of Smartphone viewer

The lower part of the video may not be displayed in landscape mode of Smartphone viewer. This problem has been fixed. The blank image on the both horizontal side of the video may be displayed so that the whole video is displayed on the display area keeping the image aspect ratio.

(Problem from Ver. 1.50)

21.9. Streaming problem in Smartphone viewer

When HTTP port number is set to a number other than 80(default) in the Network menu, the streaming data could not be received in the Smartphone viewer. This problem has been fixed.

(Problem from Ver. 1.50)

21.10. Incorrect value in Fragment Offset of JPEG RTP packet header

The value of Fragment Offset in JPEG RTP packet header differs from the correct one defined by RFC 2435. This problem has been fixed. For the client software which wants to use the former incorrect value to keep compatibility, the following CGI command is provided.

[http://ip\\_adr/command/camera.cgi?RTPMJPEGOOffset=off](http://ip_adr/command/camera.cgi?RTPMJPEGOOffset=off)

For details regarding this function, refer to the instructions for the CGI Command Manual.

(Problem from Ver.1.00)

## 22. Newly Added Functions in Ver. 1.50

### 22.1. NTCIP support

NTCIP (National Transportation Communications for ITS protocol) is the protocol for the transportation monitoring standardized in the U.S.A. The registration and calling of the preset and PTZ control are working with the VidShield software by VidSys in the U.S.A.

There is no setting item regarding this function in the Administrator menu.

### 22.2. Connection List

This is a function to acquire information regarding the delivery destination of the streaming. This is used to recognize which client is receiving the streaming.

It is possible to acquire the IP address, port number, protocol using HTTP or UDP, and detailed information, such as media type for H.264, etc., for every session.

This is supported by the CGI command. There is no setting item regarding this function in the Administrator menu.

For details regarding this function, refer to the instructions for the CGI Command Manual.

### 22.3. Smartphone viewer

This is a viewer for smart phones to display an image or perform the PTZ operation by accessing from a smart phone.

The user manual and support information for this function are at the following site.

<http://www.sony.net/ipela/snc>

## 23. Problems corrected in Ver. 1.50

### 23.1. Saving setting for SNMP

SNMP related settings may not be saved when the version was updated or a setting was called. This problem has been fixed. When a version is to be updated from the version prior to Ver. 1.50 or the setting is to be called from the file saved in the version prior to Ver. 1.50, note down the required SNMP related setting values and reset them after the version is updated or the setting is called.

(Problem from Ver. 1.12)

## 24. Newly Added Functions in Ver. 1.33

### 24.1. Language

Use of Portuguese is newly supported.

### 24.2. Supported OS and browsers

64-bit Windows 7 is newly supported.

Operation certified edition

- Windows 7 Professional

### 24.3. ONVIF

ONVIF Core Spec Version 1.02 is newly supported.

### 24.4. Image size

800 x 600 is newly added to the image size.

## 25. Changed or improved Functions in Ver. 1.33

### 25.1. Preset name

Double-byte characters are allowed to be used with the preset name.

However, double-byte characters are not displayed in the superimposed.

### 25.2. Exposure

The UI for the shutter speed control in the Picture tab of Camera setup is changed and it is available to set the shutter speed from Minimum value to Maximum value easily. With this improvement, AutoShutterMaxSpeed and AutoShutterMinSpeed are newly added in CGI commands.

#### [Notes]

When the version is upgraded from the one before Ver. 1.33 to Ver. 1.33 or later, the value displayed on the UI and the actual operation may differ. In such a case, configure the setup again with the UI.

- When using the newly added CGI (AutoShutterMaxSpeed, AutoShutterMinSpeed), turn on AutoShutter and AutoSlowShutter.

### 25.3. Absolute PTZF

The bottom right of the screen was the positive direction for the models only with a solid PTZ function before Ver. 1.33. In order to match to other models, this positive direction has been changed to the top right. When it is needed same direction used before Ver. 1.33, please set camera.cgi SolidPTZTiltDirection to "down".

With firmware Ver. 1.33 and later, the default value of camera.cgi SolidPTZTiltDirection is "up", and the behavior looks like opposite (upside down) to the previous firmware.

Please refer to CGI manual for details.

### 25.4. Image disturbance in H.264

There was a problem that image with movement was disturbed when image is displayed on the ActiveX Viewer with the video codec set to H.264. It has been corrected.

### 25.5. Camera setup: About the GUI display of the Image size setting (SNC-CH210/D210/DH210T)

When the image size of Image1 would be 1280x960, same image size (1280x960) has been appeared in the image size selection area of Image 2 even though this size is not available for Image 2.

With firmware Ver. 1.33, when the image size of image 1 is 1280x960, maximum image size of Image 2 shows 640x480 in the area. The upper limitation has been corrected, which is available parameter actually.

(Problem since Ver. 1.27.00)

## 26. Newly Added Functions in Ver. 1.27.02

### 26.1. Support of the model newly launched

Ver. 1.27.02 can now recognize and operate the hardware of the SNC-DH110 / DH110T.

In Active X Viewer, SNC-DH110 / DH110T are added as a displayed model name.

## 27. Major improvements at Ver. 1.27.02

### 27.1. Issue solved: Electrical Day/Night function operation in specific environment

When the Electrical Day/Night function is set to Auto as the factory default for Ver. 1.27.00 for CH110, there was an issue where it gets stuck to slow shutter speed when the ambient luminance gets brighter at the timing when the image is switched to black and white, resulting in inappropriate exposure. This issue was improved with Ver. 1.27.02.

## 28. Newly Added Functions in Ver. 1.27.00

### 28.1. Support of the model newly launched

Ver. 1.27.00 can now recognize and operate the hardware of the SNC-CH110 / DH110 / DH110T.

In Active X Viewer, SNC-CH110 / DH110 / DH110T are added as a displayed model name.

### 28.2. RTSP Multicast streaming

The request of multicast streaming by RTSP is newly supported from Ver. 1.27.00. The function that ARP commands assign an IP address to the camera is now selectable either ON or OFF. Please refer to CGI manual for details.

### 28.3. Language support

The following languages are newly supported from Ver. 1.27.00.

- Chinese (Traditional Chinese character)
- Korean

## 29. Changed or improved Functions in Ver. 1.27.00

### 29.1. Assigning the IP address to the camera by ARP commands

The function that ARP commands assign an IP address to the camera is now selectable either ON or OFF.

Please refer to CGI manual for details.

### 29.2. Camera setup: About the GUI display of the frame rate limitation

With the SNC-CH210 and DH210/DH210T, the maximum frame rate is limited to 15 fps for both Image 1 and Image 2 when the image size for Image 1 is selected such as the following:

- For the 16:9 mode, 1680 x 1056 (WSXGA) or larger
- For the 4:3 mode, 1600 x 1200 (UXGA) or larger

With Ver. 1.12.00, it was possible to select the frame rate parameter larger than 15 fps in the GUI for Image 2 under the above limitation, but with Ver. 1.27.00, it is corrected so the selectable frame rate is limited to 15 fps and the maximum rate in the GUI corresponds to the actual behavior.

29.3. Issue solved: Camera tampering detection with image cropping on

There was an issue that the camera tampering detection was not working properly during the image cropping with Ver. 1.12.00. This issue was improved with Ver. 1.27.00.

29.4. Image quality of JPEG (except streaming)

There was a problem that the image quality of JPEG was constant when e-Mail function, FTP client function or image memory function were used. This problem has been corrected.

29.5. Bit-rate of MPEG-4

There was a problem that actual bit rate might become higher than selected bit-rate when the image codec was set to "MPEG-4". This problem has been corrected.

29.6. Motion Detection area

There was a problem that when the setting detection area of the motion detection function was not rectangle, the setting detection area might not be restored correctly after you push "backup setting data" and "restore setting". It has been corrected.

29.7. RTSP

There was a problem that the stream of RTSP/RTP/UDP might not be able to be get when the setting of codec was changed. It has been corrected.

There was a problem that the image might not come out when to connect and disconnect the RTSP were repeated. It has been corrected.

There was a problem that the image did not come out when the image size of JPEG exceeded 280Kbyte. It has been corrected.

There was a problem that the image might not come out when connected cutting of RTSP was done while switching the codec. It has been corrected.

29.8. Preset tour

There was a problem that the Preset tour didn't start when the starting position was the first position. It has been corrected.



### 30. Other Functions

#### 30.1. Electrical Day/Night function

When the Exposure compensation is higher in the setup of Exposure in Picture tab, or the value of AGC is limited from maximum, it may prevent the Electrical Day/Night function from correct operation.

When the Electrical Day/Night function would not be operated correctly, please set the Exposure compensation value lower and set the AGC value higher.

#### 30.2. Image quality setting for Capture full image

When you use "Capture full image", quality setting will be variable. If JPEG is selected by image 1 of the Video codec setting, and the Image quality is set, it becomes it thoroughly to the image quality setting when you use Capture full image.

#### 30.3. Camera tampering detection

- When the setting for the camera tampering detection is on, it takes about 2 minutes for the camera tampering detection to start after the camera is turned on. Be aware that the functions that are triggered by the camera tampering detection do not operate during that time.
- When the "Clear" button is pressed in GUI, the detection status of the camera is set to [Undetected] and the display is updated correctly, but the detection status of the camera after the detection does not get updated unless that page is drawn again by pressing the [Camera tampering detection] tab or other means.
- When the "Event" display is set to each of the image at the superimpose setting of the system, "Tampering" is displayed for approximately 10 seconds when a tampering is detected. Please note that even when the detection status is set to "Undetected" by pressing the "Clear" button during this time, the display will be maintained.

#### 30.4. The Restriction of Frame Rate

For the case of selecting H.264 or MPEG4, the maximum frame rate is calculated from the processing performance of the codec for the selected image size and available parameters are displayed, but the actual frame rate value may become smaller depending on the number of streams to be used, etc.

And for the case of JPEG, please note that the frame rate that can be set is limited depending on the image quality setting or the number of streaming.

### 30.5. The Restriction of Image Codec

H.264, 1280 x 720, 30 fps is selected for Image 1 as the factory default, but when you will use Image 2, you should switch the codec for Image 1 to MPEG4 or reducing the image size or frame rate at first.

For the case of selecting H.264 or MPEG4, the compression rate is defined by the bit rate. To expect the enhancement of image quality, it is improved by increasing the bit rate, but you should consider the load to the network and always confirm in the actual operating environment.

And for the case of selecting JPEG, image quality can be improved by raising the level in the image quality settings, but the output of streaming may not be performed properly by placing a bandwidth limitation. You shall place the limitation only after confirming the operation.

### 30.6. The Restriction of Motion Detection

Please set it as follows when you use the motion detection for the performance restriction of the system.

- Image 2: OFF
- Image cropping mode: OFF
- Solid PTZ mode: OFF
- Monitor out: OFF

In some cases, a larger value of detection sensitivity might keep away from the correct detection of minimum detection size objects. In those cases, please adjust the detection sensitivity lower or set the minimum detection size larger until getting the correct detection.

### 30.7. Thumbnails in the Preset Position Panel

Firmware upgrade does not take over the thumbnails for the registered preset positions.

### 30.8. SSL

When the SSL communication is established using Windows Vista or Windows 7, you may not be able to open the Active X Viewer or motion detection screen. To work around this, proceed as follows:

1. Select [Tools] and then click [Internet Options]
2. Go to [Security] tab
3. Select [Trusted sites] in the Security level settings
4. Click the [Sites] button
5. Enter the camera address in [Add this website to the zone]. Always append the protocol (<https://>).
6. Click the [OK] button and finish the configuration

### 30.9. RTSP Streaming

The following settings are recommended on the RTSP Streaming, because the RTSP has a performance restriction.

When H.264 or MPEG4 is used

- Video output: OFF
- Number of simultaneous connecting sessions including HTTP and RTP: 2
- Total of connected bit rate: 4 Mbps or less

When JPEG is used

- Number of simultaneous connecting sessions including HTTP and RTP: 1
- Frame rate: 10 fps or less
- Image quality: Level 4 or less
- Image size: VGA or less

## 31. Known issues

### 31.1. Issue with MPEG4 QCIF settings

When a codec is set to MPEG4 and the image size is set to QCIF respectively, occasionally an image is not output correctly with the ActiveX connection at the startup. When such a case occurs, it can be displayed correctly by redrawing by pressing the “ActiveX” button or setting up the QCIF again after switching to a different image size once.

### 31.2. About Safari

Avoid continuous playback for a long time when using JPEG as a streaming method with Safari 4 or 5.

The usage of memory may increase and Safari may stop with an error.

### 31.3. About IPv6 DHCPv6

When using Windows Server 2008 as a DHCPv6 server under the IPv6 environment, an IP address may not be assigned correctly. Use the IPv6 state address auto setting under such an environment.

### 31.4. RTSP

The equipment may restart when used with the setting larger than the recommended one.

### 31.5. Long-time Viewing with Smartphone Viewer

If a large image size is set for the video codec of the camera, the viewer may stop if the viewer is open for a long time. In such a case, restart the viewer.

### 31.6. Simultaneous pressing of multiple buttons with Smartphone Viewer

With Xperia™ arc, pressing more than one PTZ button simultaneously may cause the PTZ operation of the camera to continue working. To stop the operation, press one of those buttons again.

### 31.7. Firmware upgrade by SNC toolbox of the Versions 1.2.5.0

The Version 1.2.5.0 cannot keep all of User names and Passwords which have been changed from the default parameter, so these will be reset to the factory default setting after updating of camera's firmware.

To upgrade the firmware, please use the SNC toolbox of Ver. 1.2.6.0 or later.

### 31.8. MPEG4 image may not be displayed in RTSP streaming

When viewing RTSP streaming with MPEG4 setting, image may not be displayed on some viewers. In that case, please use another viewer or change the video codec setting to H.264.

(Among all models)