

SNC-CH115/CH120/CH160/CH220/CH260

SNC-DH120/DH120T/DH160

SNC-DH220/DH220T/DH260

SNC-EB520/EM520/EM521

SNC-ZB550/ZM550/ZM551

## Release Note

Ver. 1.88

June 29, 2018

Sony Corporation

## History

#	Release Date	Version	Comment
1	2010/6/17	1.12	First release SNC-DH120/DH120T/CH120
2	2010/7/20	1.13	First release SNC-DH160/CH160
3	2010/8/24	1.21	<ul style="list-style-type: none"> <li>- SNC-DH220/DH220T/CH220 First release</li> <li>- Improved performance of Easy Focus function</li> <li>- Language support               <ul style="list-style-type: none"> <li>- Traditional Chinese character</li> <li>- Korean</li> </ul> </li> </ul>
4	2010/10/15	1.23.01	<ul style="list-style-type: none"> <li>- Improved Iris Control</li> <li>- Added restriction of RTSP</li> <li>- Added Major Improvements</li> </ul>
5	2010/10/21	1.23.02	First release SNC-DH260/CH260
6	2010/12/20	1.30	<ul style="list-style-type: none"> <li>•Add: New Function, Improved Function</li> <li>•Update: Known Issues</li> </ul>
7	2011/03/04	1.31	<ul style="list-style-type: none"> <li>•Bug Fix</li> <li>•Add: "Notes" to "Exposure" in "Changed or improved Functions in Ver. 1.3"</li> </ul>
8	2011/05/30	1.35	•Bug Fix
9	2011/08/22	1.50	<ul style="list-style-type: none"> <li>•First release SNC-CH115</li> <li>•Add New Function, Improved Function</li> <li>•Update Known Issues</li> </ul>
10	2011/09/15	1.52	Dedicated first release for SNC-EB520/EM520 /EM521.
11	2012/04/27	1.71	<ul style="list-style-type: none"> <li>•Support for SNC-EB520/EM520/EM521</li> <li>•Add New Function, Improved Function</li> <li>•New section in 'Changed or improved Functions in Ver. 1.30'</li> </ul>
12	2012/05/24	ditto	Only description of this release note is revised as "Known issues" is updated (18.7. added).
13	2012/07/09	1.72.01	Dedicated first release for SNC-ZB550/ZM550 /ZM551
14	2012/07/11	1.74.01	<ul style="list-style-type: none"> <li>•Add: New Function and Corrected Problem for Ver. 1.74.01</li> <li>•Update: 5.1. (General information on NTCIP will not be provided)</li> <li>•Add: 17.14, 18.9.</li> </ul>
15	2012/10/05	1.75	<ul style="list-style-type: none"> <li>• Add: New Function and Corrected Problem for Ver. 1.75</li> <li>• Update: Known issues (20.9, 20.10)</li> </ul>
16	2012/11/22	1.77	• Add: New Function and Corrected Problem for Ver. 1.77
17	2012/12/27	1.78	• Add: New Function and Corrected Problem for Ver. 1.78

# Release Note

18	2013/08/01	1.79	▪ Add: New Function and Corrected Problem for Ver. 1.79
19	2013/09/27	1.80	▪ Add: Corrected Problem for Ver. 1.80
20	2014/02/27	1.82.01	▪ Add: New Function and Corrected Problem for Ver. 1.82.01
21	2014/11/10	1.85	▪ Add: New Function for Ver. 1.85
22	2016/11/25	1.86	▪ Add: Improved Function ▪ Add: New Function for Ver. 1.86
23	2017/04/25	1.87	▪ Add: New Function for Ver. 1.87
24	2018/06/29	1.88	▪ Add: New Function and Corrected Problem ▪ Update: Known issues (37.10)

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## 1. About the release version

### 1.1. General Information

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

- SNC-CH115 (CN)
- SNC-CH120 (SYM, CN)
- SNC-CH160 (SYM, CN)
- SNC-CH220 (SYM, CN)
- SNC-CH260 (SYM, CN)
- SNC-DH120 (SYM, CN)
- SNC-DH120T (SYM, CN)
- SNC-DH160 (SYM, CN)
- SNC-DH220 (SYM, CN)
- SNC-DH220T (SYM, CN)
- SNC-DH260 (SYM, CN)
- SNC-EB520 (SYM, CN)
- SNC-EM520 (SYM, CN)
- SNC-EM521 (SYM)
- SNC-ZB550 (SYM, CN)
- SNC-ZM550 (SYM, CN)
- SNC-ZM551 (SYM)

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
  - (SNC-CH115/CH120/CH160/DH120/DH120T/DH160/EB520/EM520/EM521/ZB550/ZM550/ZM551)



Intel Core 2 Duo, 2.33 GHz or higher

(SNC-CH220/CH260/DH220/DH220T/DH260)

- Memory

1 GB or more

(SNC-CH115/CH120/CH160/DH120/DH120T/DH160/EB520/EM520/EM521  
/ZB550/ZM550/ZM551)

2 GB or more

(SNC-CH220/CH260/DH220/DH220T/DH260)

- Display

1600 × 1200 pixels or higher

(SNC-CH115/CH120/CH160/DH120/DH120T/DH160/EB520/EM520/EM521  
/ZB550/ZM550/ZM551)

1600 × 1200 pixels or higher (2560 × 1600 pixels or higher is recommended.)

(SNC-CH220/CH260/DH220/DH220T/DH260)

### 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. The Upgrade of firmware

When upgrading the firmware, you should use the SNC toolbox of Ver. 1.3.8.0 or later. Refer to the release note of the SNC toolbox for the details of cameras supported by the SNC toolbox.

See “Using the SNC toolbox” section in the User’s Guide for the usage.

## 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 Function 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. 1.01)

## 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-CH220/DH220/DH220T/CH260/DH260)

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\\_adr/command/userdata.cgi?RTPUserData=on](http://ip_adr/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\\_adr/command/camera.cgi?RTPInfo=on](http://ip_adr/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.

For SNC-ZB550/ZM550/ZM551 motion detection function is activated even when Video Output is set to ON(Image 2 Codec is set to OFF).

In this case, superimposing on Image 2 and video output is not available.

## 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. Solid PTZ setting when Maximum image size is changed

There was a problem that the Solid PTZ setting could not return to its factory default value OFF when Maximum image size is changed.

This problem has been fixed.

(Problem from Ver. 1.12)

## 18. Newly Added Functions in Ver. 1.77

### 18.1. ONVIF Profile S support

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

## 19. Function changed and Problems corrected in Ver. 1.77

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

The frame rate of SSL streaming video is improved.

(Problem from Ver. 1.12)

### 19.2. 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)

### 19.3. 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. 1.30)

#### 19.4. Solid PTZ 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.

#### 19.5. Video output signal format problem (SNC-CH160/CH260)

There was the problem that the video output signal format turned out to be NTSC when it was set to PAL according to the setting of the camera's NTSC/PAL switch and the setting data of the camera were saved and restored. This problem has been fixed.

(Problem from Ver. 1.12)

#### 19.6. 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)

### 20. Newly Added Functions in Ver. 1.75

#### 20.1. Motion detection / Camera tampering detection support (SNC-CH115)

SNC-CH115 has not ever supported Motion detection and Camera tampering detection. From this version these functions are available.

#### 20.2. 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\\_addr/command/system.cgi?WsDiscovery=off](http://ip_addr/command/system.cgi?WsDiscovery=off)

For details, refer to the CGI Command Manual.

### 21. Newly Added Functions in Ver. 1.74.01

#### 21.1. Supported models

This firmware supports SNC-ZB550/ZM550/ZM551 SLOC models.

From now on a single common firmware will support all of the 17 applied models described in section 1.1.

#### 21.2. Supported Web Browser

Microsoft Internet Explorer Ver. 9.0 is newly supported.

The verification test is executed for Windows 7.

#### 21.3. Camera operating mode (Except for SNC-EB520/EM520/EM521)

Video capture used to always be done in 30fps. From this version it is possible to capture video in 25fps besides 30fps by setting menu and CGI command.

For details on CGI command, refer to the CGI Command Manual.

[Note]

This function cannot be used by the SNC toolbox.

## 22. Newly Added Functions in Ver. 1.71

### 22.1. Supported models

This firmware has supported SNC-EB520/EM520/EM521 SD models.

### 22.2. 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.

## 23. Newly Added Functions in Ver. 1.50

### 23.1. 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.

### 23.2. 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.

### 23.3. 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>

### 23.4. Newly supported model

SNC-CH115 is supported with this version.

## 24. Newly Added Functions in Ver. 1.30

### 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 supported.

#### 24.4. Image size

800 x 600 is newly added to the image size.

#### 24.5. Letter box

Letter box function is newly added.

Letter box function is a function to resize maintaining the aspect ratio when the aspect ratio of the input video is different from the aspect ratio of the image to be streamed.

#### 24.6. Privacy Masking (SNC-CH120/CH160/DH120/DH120T/DH160)

Privacy masking function is added.

### 25. Newly added functions in Ver. 1.21

#### 25.1. Newly supported SNC-DH220/DH220T/CH220

SNC-DH220, DH220T and CH220 are supported in this version. And the Privacy Masking function is also implemented.

The model name will be displayed as "SNC-DH220", "SNC-DH220T" and "SNC-CH220" in Active X Viewer.

#### 25.2. Added language

The following languages are newly supported.

- Chinese (Traditional Chinese character)
- Korean

### 26. Changed or improved Functions in Ver. 1.30

#### 26.1. Bit rate in MPEG-4

There was the problem that actual bit rate might overrun the specified rate when the image codec was set to "MPEG-4" and bit rate was set to low. It has been corrected.

#### 26.2. Preset name

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

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

#### 26.3. Exposure

- Setup UI/CGI for the iris and shutter speed control is changed.
- Setting for the auto iris is eliminated, and it is made so the iris is closed only when it is too bright even with the fastest shutter speed.

- Notes

- When the version is upgraded from the one before Ver. 1.30 to Ver. 1.30 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.

#### 26.4. Absolute PTZF

The bottom right of the screen was the positive direction for the models only with a solid PTZ function before Ver. 1.30.

In order to match to other models, this positive direction has been changed to the top right.  
(Problem from Ver. 1.12)

To set the bottom right of the screen as the positive direction with firmware Ver. 1.30 and later, set camera.cgi SolidPTZTiltDirection to “down.”

Please refer to CGI manual for details.

#### Caution

- It will operate upside down when connected to the camera with firmware prior to Ver. 1.30.

#### 26.5. 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.

(Problem from Ver. 1.1)

#### 27. Changed or improved function in Ver. 1.23.01

##### 27.1. Improved Iris control

The iris control of SNC-CH220 is modified. This modification is automatically applied only to the products with hardware changed on the related parts.

#### 28. Changed or improved function in Ver. 1.21

##### 28.1. Improved performance of the Easy Focus function

As the performance of the Easy Focus function is improved, the focus is detected more accurately in many scenes including low illumination environment.

##### 28.2. Assigning the IP address to the camera using ARP commands

ON/OFF of the function of assigning the IP address to the camera using ARP commands are added.

Please refer to the CGI manual for details.

##### 28.3. 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.



Prior to Ver. 1.21, Image quality setting is fixed to Level 8 when you use "Capture full image".

## 29. Function changed and Problems corrected in Ver. 1.75

### 29.1. alarmdata.cgi sending problem when SSL is on

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

(Problem from Ver. 1.30)

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

There was the 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 solved.

(Problem from Ver. 1.50)

### 29.3. 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 solved.

(Problem from Ver. 1.12)

## 30. Function changed and Problems corrected in Ver. 1.74.01

### 30.1. Video codec bit rate of the factory settings changed

(SNC-CH220/DH220/DH220T/CH260/DH260)

The video codec bit rate is changed from 2Mbps to 4Mbps in the factory settings.

(Specification from Ver. 1.12)

### 30.2. Auto exposure malfunction on boot/reboot

There was the problem that auto exposure may not work properly and the image is greenish when the camera is rebooted or booted by power-on. This problem has been corrected.

(Problem from Ver. 1.12)

### 30.3. Improvement of responsiveness in multicast streaming

The CGI command responsiveness has been improved in multicast streaming.

(Problem from Ver. 1.12)

### 30.4. Effectiveness of RtpExpire value

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

(Problem from Ver. 1.21)

### 30.5. Incorrect response to GetVideoSourceConfigurationOptionsRequest ONVIF command

When both Configuration and Profile are not specified on

GetVideoSourceConfigurationOptionsRequest, VideoSourceTokenAvailable field is missing on GetVideoSourceConfigurationOptionsResponse. This problem has been solved.

(Problem from Ver. 1.21)

### 30.6. Error response to ONVIF command SetVideoEncoderConfiguration

There was the 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. 1.21)

## 31. Problems corrected in Ver. 1.71

### 31.1. Backlight compensation problem

When the camera is rebooted or booted by power-on while the setting of backlight compensation is ON, the backlight compensation function does not work properly. This problem has been corrected.

(Problem from Ver. 1.12)

### 31.2. 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)

### 31.3. 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)

### 31.4. 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)

### 31.5. 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)

### 31.6. 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 solved. 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)

### 31.7. 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

solved.

(Problem from Ver. 1.50)

### 31.8. 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 solved. 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. 1.12)

### 31.9. Default setting of multicast address

The default setting of multicast address was 224.0.0.200 which is assigned as "Local Network Control Block" by RFC3171. This value has been changed to 239.192.0.200.

(Problem from Ver. 1.12)

### 31.10. 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 solved. When a version is to be updated from the version prior to Ver. 1.71 or the setting is to be called from the file saved in the version prior to Ver. 1.71, note down the required SNMP related setting values and reset them after the version is updated or the setting is called. (Ver. 1.50 did not fix this problem perfectly.)

(Problem from Ver. 1.12)

## 32. Problems corrected in Ver. 1.50

### 32.1. Iris control (SNC-CH120/CH160/DH120/DH120T /DH160)

As an improvement not to occur a hunting phenomenon, the iris control curve and iris control algorithm were modified.

(Problem from Ver. 1.12)

Since the SNC-CH115/EB520/EM520/EM521/ZB520/ZM550/ZM551 is delivered with Ver. 1.50 or later version, it is supporting the improved iris control from the beginning.

## 33. Problems corrected in Ver. 1.35

### 33.1. Streaming

The streaming was temporarily not distributed when the stream acquire request from Multicast is repeated within a short period of time. This problem has been fixed.

(Problem from Ver. 1.12)

### 33.2. Focus

There was the problem that Easy Focus may not work properly. This problem has been corrected.

(Problem from Ver. 1.21)

### 34. Problems corrected in Ver. 1.31

#### 34.1. SNMP

The CGI command of SNMP did not operate. This problem has been fixed.  
(Problem from Ver. 1.30)

#### 34.2. Event file

An abnormal frame existed in the event file. This problem has been fixed.  
(Problem from Ver. 1.22)

#### 34.3. Area zoom

When operating the camera with the image size set to 800x600 and the operation mode of the camera set to "Area zoom", the operation was disabled. This problem has been fixed.  
(Problem from Ver. 1.30)

### 35. Problems corrected in Ver. 1.23.01

#### 35.1. Preset call

There was the problem that when the preset of image2 was only registered (the preset of image1 was not registered), the preset was not called. It has been corrected.  
(Problem from Ver. 1.21.02)

## 36. Functional Restrictions

### 36.1. SNC video player

When the last character of folder name which stored a playing file is number, on occasion SNC video player doesn't play properly.

At that time, please use the last character of folder name excluding number.

(Among all models)

### 36.2. Thumbnails in the Preset Position Panel

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

(Among all models)

### 36.3. Video out

The video out have to be turned off, when the motion detection function will be used.

(SNC-ZB550/ZM550/ZM551)

### 36.4. Monitor out

In order to prevent system performance from decreasing, be sure to turn off the monitor out after installation unless it is particularly needed.

(SNC- CH115/CH120/ DH120/DH120T/CH160/DH160/EB520/EM520/EM521/  
CH220/CH260/DH220/DH220T/DH260)

### 36.5. Day/Night mode

When "Day/Night mode" is "Auto", the following will work.

- It doesn't change into the night mode when "AGC" ("Exposure" in "Picture" tab) is 18dB or less. Please set "AGC" to 24dB or more when you want to switch to the night mode.

(Among all models)

### 36.6. The field angle using Solid PTZ

The field angle is set by the frame rate priority when solid PTZ is used, and when the setting is changed to the resolution priority afterwards, the field angle becomes small. Please do not do the priority setting change to prevent the field angle from changing. Moreover, please readjust the field angle when you change the priority setting.

(SNC-CH220/CH260/DH220/DH220T/DH260)

### 36.7. The Detection of Camera Tampering

- When the setting of "Camera tampering detection" is turned to on, the detection of camera tampering will be started in about 2 minutes after the restart of camera. Please notice that during this period, the trigger of camera tampering detection is not able to work.
- Once the "Clear" button in the "camera tampering detection" tab is pressed, the status of detector will be updated properly inside. However the result will not be displayed until the web page is refreshed.
- About the setting of superimpose, if the "Event" option is selected in GUI, "Tampering" message will be displayed for about 10 seconds once the tampering

operation is detected. Please notice that the message will not disappear even if the “Clear” button is pressed.

- When the “Sensitivity” is set to “High” or “Middle” in case of using Easy Focus function, “Detection status” may be “Detected”.

(Among all models except for SNC-CH115)

### 36.8. Easy Focus

Please use it in full screen when you use Easy Focus. Moreover, to adjust focus in the center part on the screen in Easy Focus, focus might become weak slightly in the image that selects the part in the surrounding in Solid PTZ mode and Cropping mode. For this case, please fine-tune it by the manual focus. However, when the Preset position of Solid PTZ or 2nd stream is available, the focus can be adjusted individually, please check in advance for work and adjustments.

(Among all models)

### 36.9. The Restriction of Frame Rate

An actual frame rate might reach a value that is smaller than the setting though the frame rate that can be set in H.264 and MPEG4 according to the image size selected by the processing performance of the codec is displayed by the number of streams used. In JPEG, the frame rate that can be set according to the image quality setting and the number of streams is similarly limited.

(Among all models)

### 36.10. Bandwidth control for JPEG streaming

Bandwidth control function for JPEG streaming is effective for TCP connection only.

(Among all models)

### 36.11. The Restriction of Image Codec

In the factory default setting, H.264 1280x720 30fps (SNC-CH115/CH120/DH120/DH120T/DH160/CH160/ZB550/ZM550/ZM551) or H.264 1920x1080 30fps (SNC-CH220/DH220/DH220T/CH260/DH260) has been selected in image 1. When you use image 2, you should change the codec's setting of image 1 to MPEG4 or should reduce the image size or the frame rate. (Video out has been set to ON in the factory default setting of SNC-ZB550/ZM550/ZM551, so you should change video out setting to OFF when you will use image 2.)

In addition, H.264 and MPEG4 in the compression efficiency is determined by the bit rate. If you are looking to improve the image quality will be improved by increasing the bit rate, and due consideration to the network load, please be sure to check the actual operating environment

If JPEG is selected, the Image quality setting is obtained with giving an improvement in the quality may not be successful by applying the bandwidth limitations. Please set it after it confirms the operation.

(Among all models)

### 36.12. The Restriction of Motion Detection

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

(Among all models except for SNC-CH115)

- Image 2 is turned off.
- Cropping is turned off.  
(This function is not available in SNC- EB520/EM520/EM521.)
- Solid PTZ is turned off.
- Monitor out is turned off. (Video out is turned off in SNC-ZB550/ZM550/ZM551.)

### 36.13. RTSP Streaming

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

(Among all models)

As follows when H.264 or MPEG4 is used

- Monitor out is off. (Video out is off in SNC-ZB550/ZM550/ZM551.)
  - The number of sessions in which HTTP and RTP can be connected at the same time is 2.
  - Total connected bit rate is 4Mbps or less

As follows when JPEG is used

- Monitor out is off. (Video out is off in SNC-ZB550/ZM550/ZM551.)
  - The number of sessions in which HTTP and RTP can be connected at the same time is 1.
  - Frame rate: 10fps or less
  - Image quality: Level 4 or less
  - Image size is VGA or less.

### 36.14. Motion detection area setting

When a detection area has 180 degrees or more interior angles by CGI command setting, motion detection function may not work correctly. Please set every interior angle under 180 degrees as in the case of setting menu.

(All models except for SNC-CH115)

## 37. Known issues

### 37.1. About Safari

The usage of memory may increase and Safari may stop with an error when using JPEG as a streaming method with the Plug-in free viewer by Safari 4 or 5.

Please use JPEG Flash as a streaming method or use other browsers when continuous playback for a long time.

(Among all models)

### 37.2. Problem that occurs when noise increases in an extremely dark environment

When the codec is set to H.264, the video may time out under the condition where noise increases in an extremely dark environment.

In such a case, set NR to ON.

(Among all models)

### 37.3. RTSP

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

(Among all models)

### 37.4. 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.

(Among all models)

### 37.5. 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.

(Among all models)

### 37.6. Problem that hunting occurs for backlight

Hunting may occur when the recording image is in backlight. Hunting may be caused with the iris not operating when the maximum value of the shutter speed that is displayed when the Image tab in the Camera menu is selected to the high value such as 1/10000 (sec) as in the factory setting of 1/30 - 1/10000 (sec) (changed from Ver. 1.30). In such case, set the shutter speed to the fixed value by setting the minimum value and the maximum value to the same value, or set the maximum value to the slower value less than 1/1000 (sec), so it is easier for the iris to operate.

(Among all models)

### 37.7. Firmware upgrade by SNC toolbox of the versions 1.2.5.0 or before

The SNC toolbox of the versions 1.2.4.0 or before cannot upgrade the firmware from Ver. 1.71 or later to another version.

The version 1.2.5.0 cannot keep all of User names and Passwords which have been changed from the default parameter, so it will be back 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.

(Among all models)

#### 37.8. Superimpose on video out

When superimpose setting of Image 1 is set to on and image size of Image1 is set to 640x480 in video codec setting, same superimpose will be displayed on video out.

(Among all models)

#### 37.9. Camera tampering detection setting by SNC toolbox (SNC-CH115)

SNC toolbox cannot set camera tampering detection function for SNC-CH115.

Please set this function by the setting menu.

#### 37.10. 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)