SNT-EX101/EX101E/EX104/EP104/EX154/EP154
Release Note

Ver. 1.87

April 25, 2017

Sony Corporation

Modification history

#	Release date	Version	Content of major change and comment
1	2009/09/14	1.00/1.01	First release SNT-EP: Ver. 1.00 others : Ver. 1.01
2	2009/09/30	1.02	Bug Fix Add: Camera tampering detection alarm, VMF function, Major Improvements
3	2009/10/15	1.03	This version is only available for SNT-EX, EP series. - Supports the SNT-EX101E PoE model newly launched - Supports the China model.
4	2009/10/26	1.03.01	This version is only available for SNT-EX, EP series. Bug fix from Ver. 1.03
5	2009/11/09	1.04	Bug Fix Add: Note On Upgrading Firmware Major Improvements at Ver1.04
6	2009/12/15	1.06	Bug Fix Add: Major Improvements at Ver1.06
7	2010/04/22	1.10.01	Add: Newly Function, Improved Function Update: Major Improvements, Known Issues
8	2010/08/03	1.20	Add: Newly Function, Improved Function Update: Major Improvements, Known Issues
9	2010/08/27	1.22	Bug Fix
10	2010/09/17	1.25	Bug Fix
11	2010/12/20	1.30	・Add: New Function, Improved Function ・Update: Known Issues
12	2011/03/04	1.31	・Bug Fix ・“Edge Storage” in “Functions”
13	2011/04/28	1.34	Bug Fix
14	2011/08/22	1.50	・Add: New Function, Improved Function ・Update: Major Improvements, Known Issues
15	2012/03/6	1.61	・Add Improved Function ・Add ”Note on firmware version” section ・Add “USB memory when using Edge Storage function” section
16	2012/04/27	1.73	Add: New Function, Improved Function
17	2012/07/19	1.73.02	Add: Corrected Problem for Ver.1.73.02 Update: 7.1. (General information on NTCIP will not be provided)
18	2012/11/22	1.77	Add: New Function, Improved Function
19	2012/12/14	1.77.01	Improved Function

20	2013/03/29	1.77.03	Improved Function
21	2013/08/01	1.79	Add: New Function, Improved Function
22	2013/09/27	1.80	Add: Improved Function
23	2014/01/22	1.82.01	Add: Improved Function
24	2014/03/28	1.82.02	Add: Improved Function
25	2014/11/10	1.85	
26	2016/12/22	1.86	Add Improved Function Add New function for Ver. 1.86
27	2017/04/25	1.87	Add New function for Ver. 1.87

Table of contents

1. About this release version 8
1.1. General Information 8
1.2. System Requirements 8
1.3. Compatibility 8
1.4. ONVIF Conformance 8
2. Notes on Upgrading Firmware 9
2.1. How to upgrade 9
2.2. Note on firmware version 9
3. Newly Added Functions in Ver. 1.87 9
3.1. The security has been enhanced. 9
4. Function changed and Problems corrected in Ver.1.87 9
5. Newly Added Functions in Ver. 1.86 9
5.1. The security has been enhanced. 9
5.2. ONVIF Ver. 16.07 support 9
6. Function changed and Problems corrected in Ver.1.86 9
7. Newly Added Functions in Ver. 1.85 9
7.1. Windows 8.1 IE11 support 9
7.2. ONVIF Ver. 14.06 support 9
8. Newly Added Functions in Ver.1.82.02 10
9. Function changed and Problems corrected in Ver.1.82.02 10
9.1. Improved a failure in superimposed date indication 10
9.2. Improved LAN fixed mode setting problem 10
10. Newly Added Functions in Ver.1.82.01 10
10.1. ONVIF Ver. 13.06 support 10
11. Function changed and Problems corrected in Ver.1.82.01 10
11.1. Clock information's problem gained incorrectly in daylight saving time (DST) 10
11.2. Enhanced error correction capability for the firmware data stored in the memory 10
12. Newly Added Functions in Ver.1.80 10
13. Function changed and Problems corrected in Ver.1.80 10
13.1. 802.1x authentication failure after reboot 10
14. Newly Added Functions in Ver.1.79 11
14.1. Windows 8 IE10 support 11
14.2. ONVIF Ver. 12.12 support 11
14.3. Additional function of RTP stream with user data 11
14.4. RFC3551 format support for G.726 11
15. Function changed and Problems corrected in Ver.1.79 11
15.1. Support ONVIF Profile which includes Audio only 11
15.2. Several Time Zone settings will be available by using ONVIF command 11
15.3. No update of Port number after changing HTTP's port setting by using ONVIF command 12
15.4. Improved some Video Encoder Configuration's problems of ONVIF 12
15.5. Improvement of Edge Storage's recording performance 12

15.6. Add RTP-Info Header in the Information of response to PLAY over RTSP..... 13
15.7. Improvement of Serial control abort in transparency mode (SNT-EX101/EX101E/EX104/EX154)..... 13
16. Newly Added Functions in Ver. 1.77.03..... 13
17. Problems corrected in Ver. 1.77.03 13
17.1. Improvement of CH1's failure in start-up after power-on (SNT-EP104/EX104) 13
18. Newly Added Functions in Ver. 1.77.01..... 14
19. Problems corrected in Ver. 1.77.01 14
19.1. Abnormal audio noise and video streaming unreceived problem (SNT-EX101/EX101E/EX104/EX154)..... 14
20. Newly Added Functions in Ver. 1.77..... 14
20.1. ONVIF Profile S support..... 14
20.2. CGI command setting to disable "No Video" display 14
20.3. CGI command setting for WS-Discovery 14
21. Problems corrected in Ver. 1.77 14
21.1. Improvement of streaming video performance over SSL 14
21.2. Support of Iris close/stop command for AD protocol 14
21.3. Correction of MPEG-4 SDP data..... 14
21.4. Connectivity with other vendors' client software 15
21.5. alarmdata.cgi sending when SSL is on..... 15
21.6. Incorrect return value by alarmdata.cgi during continuous motion detection 15
21.7. Improvement of responsiveness in multicast streaming..... 15
21.8. Error response to ONVIF command SetVideoEncoderConfiguration 15
21.9. Maximum detection size of Motion Detection 15
22. Problems corrected in Ver. 1.73.02 15
22.1. Throughput degradation in full-duplex transmission 15
23. Newly Added Functions in Ver. 1.73..... 15
23.1. Supported Web Browser..... 15
23.2. Multicast address setting per video instance (SNT-EX101/EX101E/EX104/EX154) 15
24. Problems corrected in Ver. 1.73 16
24.1. Default setting of multicast address..... 16
24.2. Response message issue with ONVIF protocol connection 16
24.3. Effectiveness of RtpExpire value 16
25. Problems corrected in Ver. 1.61 16
25.1. Improvement of video codec mode update 16
25.2. Landscape mode display of Smartphone viewer 16
25.3. Streaming problem in Smartphone viewer 16
25.4. Incorrect value in Fragment Offset of JPEG RTP packet header 16
25.5. Reconnection problem on audio upload authentication error 17
25.6. Play operation problem of Edge Storage 17
25.7. Abnormal e-mail sending for USB memory..... 17
26. Newly Added Functions in Ver. 1.50..... 17
26.1. NTCIP support..... 17

26.2. Connection List 17
26.3. Smartphone viewer 17
27. Problems corrected in Ver. 1.50 18
27.1. Saving setting for SNMP 18
28. Problems corrected in Ver. 1.34 18
28.1. Edge Storage 18
28.2. Alarm buffer 18
28.3. Streaming 18
29. Problems corrected in Ver. 1.31 18
29.1. Motion detection 18
29.2. SNMP 19
29.3. Event file 19
30. Newly Added Functions in Ver. 1.30 19
30.1. Language 19
30.2. Supported OS and browsers 19
30.3. ONVIF 19
30.4. Edge Storage 19
31. Changed or improved Functions in Ver. 1.30 19
31.1. Preset name 19
31.2. PTZ control interface 19
31.3. Image disturbance in H.264 20
32. Newly Added Functions in Ver. 1.25 20
32.1. RTSP Multicast streaming 20
33. Major Improvements in Ver. 1.25 20
33.1. Time 20
33.2. Edge Storage 20
34. Major Improvements at Ver 1.22 20
34.1. Problem under Factory default settings 20
35. Newly Added Functions in Ver. 1.20 21
35.1. Language 21
35.2. Default operation speed for the connected camera. (SNT-EX101/EX101E/EX104 /EX154) 21
35.3. Analog camera protocol support 21
36. Changed or improved Functions in Ver. 1.20 21
36.1. Assigning the IP address to the camera using ARP commands 21
36.2. Image quality of JPEG (without streaming) 21
36.3. Bit rate in MPEG-4 21
36.4. Motion Detection area 21
36.5. RTSP 21
36.6. Preset tour 22
37. Functions 22
37.1. Audio Upload Tool 22
37.2. Motion Detection Function 22
37.3. Camera tampering detection alarm 22
37.4. VMF function 22

37.5. Thumbnails in the Preset Position Panel 22
37.6. SSL 22
37.7. RTSP Streaming 23
37.8. Edge Storage 23
37.9. Analog Camera Control (Panasonic) 24
37.10. Analog Camera Control (GE) 24
38. Known issues 24
38.1. About IPv6 DHCPv6 24
38.2. About Safari 24
38.3. Edge Storage 24
38.4. RTSP 24
38.5. SNC video player 24
38.6. Long-time Viewing with Smartphone Viewer 25
38.7. Simultaneous pressing of multiple buttons with Smartphone Viewer 25
39. USB memory when using Edge Storage function 25

1. About this release version

1.1. General Information

This version is Ver. 1.87. This firmware can be applied to the following models.

- SNT-EX101 (SYP, CN)
- SNT-EX101E (SYP, CN)
- SNT-EX104 (SYQ, CN, J1)
- SNT-EP104 (SYQ, CN, J1)
- SNT-EX154 (SYM, CN)
- SNT-EP154 (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、1.8 GHz or higher
- Memory
  1 GB or more
- Display
  1280 × 1024 pixels or higher

1.3. Compatibility

There is no change on CGI command, RTSP, other network protocols and the streaming format. It is compatible with Ver. 1.86 about connectivity between the external network devices and the camera.

1.4. ONVIF Conformance

This version firmware validates ONVIF conformance with ONVIF Device Test Tool version 17.01.

2. Notes on Upgrading Firmware

2.1. How to upgrade

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” in the User’s Guide for the usage.

2.2. Note on firmware version

The unit which has one of the following serial numbers should be applied to the firmware version 1.6x or later owing to the hardware change. If this unit is applied to the firmware version 1.50 or earlier, this unit does not display video image properly. To avoid this issue please reinstall the firmware version 1.6x or later.

Model / Destination		Serial Number
SNT-EP104	SYQ	101359 -101859
SNT-EP104	CN	500537 -501037
SNT-EP154	SYM	103095 -103595

3. Newly Added Functions in Ver. 1.87

3.1. The security has been enhanced.

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

4. 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.

5. Newly Added Functions in Ver. 1.86

5.1. The security has been enhanced.

5.2. ONVIF Ver. 16.07 support

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

6. 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. 1.01)

7. Newly Added Functions in Ver. 1.85

7.1. 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.

7.2. ONVIF Ver. 14.06 support

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

8. Newly Added Functions in Ver.1.82.02

Nothing.

9. Function changed and Problems corrected in Ver.1.82.02

9.1. Improved a failure in superimposed date indication

The failure in superimposed date indication occurs in leap year adjustment function which will detect all years involved the last 1 digit is 4 or 8 as leap-year. This version improved this problem. For example of this failure, the date of Feb. 29 will be superimposed on the indication after Feb. 28 instead of Mar.1 in 2014, 2018, 2034, 2038 and later wrong years and superimposed date indication will make delay of one day from system setting.
But “Date and time” Tab of GUI will correctly update to Mar.1 and it is possible to correct the wrong date indication by re-setting from this Tab.
(Problem from Ver. 1.01)

9.2. Improved LAN fixed mode setting problem

When LAN speed parameter will be set to 10Mbps fixed or 100Mbps fixed by CGI command, the fixed mode will not be working correctly after rebooting or power-on reset. This version improved this problem. After rebooting or power-on reset in this problem, it will not be set to fix speed mode but it will be adjusted to the speed based on the detection of receiving pulse.
(Problem from Ver. 1.79)

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. Clock information’s problem gained incorrectly in daylight saving time (DST)

When the setting of ‘automatically adjust clock for DST changes’ had been activated, this problem would occur in Camera’s clock information which gained an hour at every 3 or 4 days in DST. This version improved this problem.
(Problem from Ver. 1.01)

11.2. 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. 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. 1.01)

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

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

14.4. RFC3551 format support for G.726

RFC3551 besides ITU-T formats are supported for G.726 audio codec. Generally RFC3551 format is selected on ONVIF connection.
These two formats are specified by streaming request URI as below.

- ITU-T format
  rtsp://ip_adr/media/video1
  or
  rtsp://ip_adr/media/video1?g726=itu-t
- RFC3551 format
  rtsp://ip_adr/media/video1?g726=rfc3551

The following CGI parameter specifies audio streaming port number for RFC3551.

- Unicast: RTSPUcAudioG726RfcPort (default 51004)
- Multicast: RTSPMcAudioG726RfcPort (default 61004)

15. Function changed and Problems corrected in Ver.1.79

15.1. Support ONVIF Profile which includes Audio only

When ONVIF profile which includes Audio only is created, previous version returns BadRequest to GetStreamUri command. This version fixed the problem by returning URI.
(Problem from Ver. 1.77)

15.2. 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. 1.00)

15.3. 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. 1.00)

15.4. 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. 1.00)

15.5. Improvement of Edge Storage's recording performance

It has been found some defaults in the recording to memory media of Edge Storage, and it would cause media error and make irregular stop. This version improved the cause of defaults by changing data format and structure in the media.
(Problem from Ver. 1.31)

Caution

- The old data recorded in the media cannot be transformed into new format.
- Depending on media, it has possibilities to produce a condition unrecordable for about 1 second infrequently under using this version.

Edge storage function needs updating Ver1.79 to avoid media error.
Please follow the procedure to update firmware as below.

1) Stop Edge Storage or Image memory function.
2) Back up the data in memory media. (Refer to the explanation below.)
3) Update camera firmware.
4) Format the memory media by camera. (All of data recorded in the media will be deleted.)
5) Restart Edge Storage or Image memory.

Please back up the data in memory media by one of following procedures.

a) By using Recorder which can receive RTSP streaming, play back the data in the media and record it.
b) Validate camera's FTP server, and get the data recorded in the media to FTP clients.

[Note]

c) After power-off, remove the media from the camera, and copy the data recorded in the media to computer. [Note]

[Note]

SNC video player is available to play back the image data (*.maf files) which are backed up by the procedure b) or c).

When firmware is updated before backup of the old data in the media, please return to a previous version and back up according to the above-mentioned procedure. Updated firmware will detect old data format, will show the message “FORMAT MEDIA PLEASE” on display and will record a message which requests to format the media to system log. In this condition, camera cannot restart Edge Storage function.

15.6. 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 (default setting is ‘off’)

For details regarding this function, refer to the instructions for the CGI Command Manual.
(Problem from Ver.1.00)

15.7. Improvement of Serial control abort in transparency mode (SNT-EX101/EX101E/EX104/EX154)

This problem has occurred occasionally when Encoder receives Reset (RST) from TCP client in the progress that it transfers receiving serial response data from analog camera to TCP client. This version improved the problem by getting out from the error status in the above situation.
(Problem from Ver. 1.01)

16. Newly Added Functions in Ver. 1.77.03

Nothing.

17. Problems corrected in Ver. 1.77.03

17.1. Improvement of CH1’s failure in start-up after power-on (SNT-EP104/EX104)

There was a problem that some hardware would fail in CH1’s start-up after power-up. Occurrence frequency of this problem turns on its hardware, and is not same in each situation. This firmware has fixed the problem.
(From Ver.1.00)

In addition, this problem has already been fixed by hardware change after S/N below.
(Compliant version is Ver. 1.77.01)

SNT-EP104： [SY] 3010001~、[J] 3900001~、[CN] 3610001~
SNT-EX104： [SY] 3010074~、[J] 3900147~、[CN] 3610001~

This version is able to sidestep the problem without hardware change.

18. Newly Added Functions in Ver. 1.77.01

Nothing.

19. Problems corrected in Ver. 1.77.01

19.1. Abnormal audio noise and video streaming unreceived problem (SNT-EX101/EX101E/EX104/EX154)

There was a problem that abnormal audio noise occurred whether streaming was on or not and video streaming could not be retrieved and displayed. This problem has been fixed.
(Problem from Ver. 1.01)

20. Newly Added Functions in Ver. 1.77

20.1. ONVIF Profile S support

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

20.2. CGI command setting to disable “No Video” display

The following CGI command disables “No Video” OSD display when no video signal input.

http://ip_adr/command/system.cgi?SiVideoInputLostWarning=off

For details, refer to the CGI Command Manual.

20.3. 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

For details, refer to the CGI Command Manual.

21. Problems corrected in Ver. 1.77

21.1. Improvement of streaming video performance over SSL

The frame rate of SSL streaming video is improved.
(Problem from Ver. 1.00)

21.2. Support of Iris close/stop command for AD protocol

Iris close/stop command is supported for AD (American Dynamics) protocol to control a connected camera.
(Problem from Ver. 1.00)

21.3. 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. 1.00)

21.4. 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)

21.5. 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. 1.30)

21.6. Incorrect return value by alarmdata.cgi during continuous motion detection

There was a problem that alarmdata.cgi has possibilities to return 0 (which indicates no motion is detected) in very rare cases even though motion was detected continuously. This problem has been fixed.
(Problem from Ver. 1.00)

21.7. Improvement of responsiveness in multicast streaming

The CGI command responsiveness has been improved in multicast streaming.
(Problem from Ver. 1.00)

21.8. 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. 1.04)

21.9. Maximum detection size of Motion Detection

There was a problem that the value over 720x480 cannot be set to "Maximum detection size" when input video signal is PAL format. This problem has been corrected.
(Problem from Ver. 1.50)

22. Problems corrected in Ver. 1.73.02

22.1. 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. 1.00)

23. Newly Added Functions in Ver. 1.73

23.1. Supported Web Browser

Microsoft Internet Explorer Ver. 9.0 is newly supported.

23.2. Multicast address setting per video instance (SNT-EX101/EX101E/EX104/EX154)

It is possible to set and request different multicast address respectively for image1, image2, and audio.

For details, refer to the CGI Command Manual.

[Note]
This function can’t be used by ActiveX viewer, setting menu and the SNC toolbox.

24. Problems corrected in Ver. 1.73

24.1. 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. 1.00)

24.2. Response message issue with ONVIF protocol connection

When both Configuration and Profile are not specified on GetVideoSourceConfigurationOptionsRequest, VideoSourceTokenAvailable field is missing on GetVideoSourceConfigurationOptionsResponse.
(Problem from Ver. 1.00)

24.3. 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. 1.00)

25. Problems corrected in Ver. 1.61

25.1. 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. 1.00)

25.2. 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)

25.3. 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)

25.4. 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?RTPMJPEGOffset=off
For details regarding this function, refer to the instructions for the CGI Command Manual.
(Problem from Ver. 1.00)

25.5. Reconnection problem on audio upload authentication error

When a network connection for audio upload from a client software causes authentication error, the camera does not close its connection. If the client tries to reconnect by using the same connection, it fails to reconnect. This problem has been solved by closing the failure connection from the camera. SNC audio upload tool close the failure connection from the client and has no problem.
(Problem from Ver. 1.01)

25.6. Play operation problem of Edge Storage

Play operation of Edge Storage may not start depending on the specified start time and end time. This problem has been solved.
(Problem from Ver. 1.30)

25.7. Abnormal e-mail sending for USB memory

When the trouble sending is set to ON in the trouble sending tab, the abnormal e-mail is sent if USB memory write or read error occurs.
(Problem from Ver. 1.01)

26. Newly Added Functions in Ver. 1.50

26.1. 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.

26.2. 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.

26.3. 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

27. Problems corrected in Ver. 1.50

27.1. 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 solved. 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. 1.00)

28. Problems corrected in Ver. 1.34

28.1. Edge Storage

When the overwrite setting was set to ON and there were 500 entries, there was the problem that the entry was not overwritten from the oldest one.
(Problem since Ver. 1.30)

The problem that playback was not possible with RTP/RTSP/HTTP has been corrected.
(Problem since Ver. 1.30)

If video loss occurred during constant recording, recording did not resume even after recovery from video loss. This problem has been fixed.
(Problem since Ver. 1.10)

There was an error in timestamp of streaming. This problem has been fixed.
(Problem since Ver. 1.10)

The Range parameter was rounded down to the whole number. This problem has been fixed.
(Problem since Ver. 1.30)

28.2. Alarm buffer

When using the alarm buffer, the data was discarded if the post time and event occurrence overlapped. This problem has been fixed.
(Problem since Ver. 1.00)

28.3. Streaming

Multicast’s stream acquisition request failed if it was performed consecutively. This problem has been fixed.
(Problem since Ver. 1.00)

29. Problems corrected in Ver. 1.31

29.1. Motion detection

If pan/tilt operation was repeated during motion detection, there was a case where motion detection did not operate. This problem has been fixed.
(Problem since Ver. 1.00)

With motion detection, when tour started with a detection target set to the preset position, motion detection did not resume even after two minutes elapsed. This problem has been fixed.
(Problem since Ver. 1.00)

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

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

30. Newly Added Functions in Ver. 1.30
30.1. Language
Use of Portuguese is newly supported.

30.2. Supported OS and browsers
64 bit Windows 7 is newly supported.
Operation certified edition

- Windows 7 Professional

30.3. ONVIF
ONVIF Core Spec Version 1.02 is newly supported.

30.4. Edge Storage
Following functions are added to the Edge Storage function

- Millisecond is now supported for the time
  Start and stop time of the recording is represented in millisecond unit.
- Volume display of recording data (1 Stream) with Search cgi
  Size of the recording data is represented in kbyte unit.
- On-Recording display of recording data with Search cgi
  Currently recording data and recorded data are distinguished as Recording and Recorded respectively.

31. Changed or improved Functions in Ver. 1.30
31.1. Preset name
Double-byte characters are allowed to be used with the preset name.
However, double-byte characters are not displayed in the superimposed.

31.2. PTZ control interface
The limitation of 32 is eliminated when the interface setting is set to Coaxitron.

31.3. 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. 1.10)

32. Newly Added Functions in Ver. 1.25

32.1. RTSP Multicast streaming

The request of multicast streaming by RTSP is newly supported.

33. Major Improvements in Ver. 1.25

33.1. Time

There was the problem that the setting of time was returned after a few seconds , when you changed the setting of time within 50 minutes.. It has been corrected.
(Problem from Ver. 1.00)

33.2. Edge Storage

There was the problem that video and audio might not be able to stream, when the audio recording setting was ON and the other settings were more than recommended setting. It has been corrected.
(Problem from Ver. 1.00)

There was the problem that audio and video recording might fail when the image codec "JPEG" was selected and the audio recording was ON. It has been corrected.
(Problem from Ver. 1.00)

There was the problem that it could not replay audio, and you could not connect since the second times, when the file that was recorded video and audio was replay with RTP/RTSP or RTP/RTSP/HTTP. It has been corrected.
(Problem from Ver. 1.00)

34. Major Improvements at Ver 1.22

34.1. Problem under Factory default settings

There was a problem that Image 2 picture did not come out without changing I-picture interval for Image 2 from the factory default state.
For example, this problem happened when the camera was used with RealShot Manager Advanced, RealShot Manager Lite or NSR-1200/1100/1050H and you tried to monitor the Image 2 picture without changing any settings from the factory default state.
This has been corrected at Ver. 1.22.

It is necessary to restore the camera to the factory default state after upgrading it to V1.22, especially when you restored the camera whose version was V1.20 to the factory default state, or upgraded the camera without saving the current settings.
(Problem from Ver. 1.20)

35. Newly Added Functions in Ver. 1.20

35.1. Language

The following languages are newly supported.

- Chinese (Traditional Chinese character)
- Korean

35.2. Default operation speed for the connected camera. (SNT-EX101/EX101E/EX104 /EX154)

To configure the default operation speed for the connected camera is newly added.

35.3. Analog camera protocol support

Added analog camera protocol is below.

- VISCA

36. Changed or improved Functions in Ver. 1.20.

36.1. 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 CGI manual for details.

36.2. Image quality of JPEG (without streaming)

There was the problem that the image quality of JPEG was fixed when e-Mail function, FTP client function or image memory function were used. It has been corrected.
(Problem from Ver. 1.00)

36.3. 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 bitrate was set to low. It has been corrected.
(Problem from Ver. 1.10)

36.4. Motion Detection area

There was the 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.
(Problem from Ver. 1.00)

36.5. RTSP

There was the 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.
(Problem from Ver. 1.10)

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

(Problem from Ver. 1.10)

There was the problem that the image did not come out when the image size of JPEG exceeded 280Kbyte. It has been corrected.
(Problem from Ver. 1.10)

There was the problem that the image might not come out when connected cutting of RTSP was done while switching the codec. It has been corrected.
(Problem from Ver. 1.10)

36.6. Preset tour

There was the problem that the Preset tour didn't start when the starting position was the first position. It has been corrected.
(Problem from Ver. 1.00)

37. Functions

37.1. Audio Upload Tool

When Proxy Server is set, Audio Upload Tool may not be connected with the camera depending on the Proxy Server in use.
Please connect the camera without using Proxy Server if connection fails.

37.2. Motion Detection Function

SNT-EX101/EX101E/EX104/EX154 have the following restriction.

- The motion detection stops for two minutes after the camera is moved to the registered preset position.

37.3. Camera tampering detection alarm

When no motion detection setting is configured, configure the motion detection area so that it is equal to almost the whole screen, or the camera tampering detection capability is reduced in some cases.

37.4. VMF function

The object might not be able to be detected correctly according to the use condition.
Please use this function after confirming the object is correctly detected in actual use conditions enough.

37.5. Thumbnails in the Preset Position Panel

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

37.6. SSL

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

1. Select [(T)ools] and then click [Internet (O)ptions]

2. Go to [Security] tab
3. Click [Trusted sites] and then press [Sites] button
4. In [Add this website to the zone], enter the camera's address as follows
   https://<camera’s address>
5. Press [OK] to finish configuration

37.7. RTSP Streaming

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

As follows when H.264 or MPEG4 is used

- Video output is off.
- The number of sessions in which HTTP and RTP can be connected at the same time is 2.
- Total connected bit rate is Mbps or less.

As follows when JPEG is used

- 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.

37.8. Edge Storage

The Edge Storage recording stops when you change video codec while it is set as "always recording".

Please don't use Image Memory and FTP client when you use the Edge Storage function.

- Image Memory: Please turn off the Image memory of the Common Tab, turn off the Alarm recording of the Alarm recording Tab, and turn off the Periodical recording of the Periodical recording Tab.
- FTP client: Please turn off the FTP client function of the Common Tab, turn off the Alarm sending of the Alarm sending Tab, and turn off the Periodical sending of the Periodical sending Tab.

Please don't use File attachment of e-Mail function when you use the Edge Storage function.

- Please turn off the File attachment of the Alarm sending tab, and turn off the Periodical sending of the Periodical sending tab.

The following settings are recommended on the Edge Storage, because the Edge Storage has restriction of the performance.

- Video output is OFF
- Image 2 of video codec tab is OFF.
- Image size is VGA or less.
- As follows when H.264 or MPEG4 is used

  - Bit rate: 2Mbps or less
  - Frame rate: 15fps or less
- As follows when JPEG is used
  - Frame rate: 10fps or less
  - Image quality: Level 4 or less

Up to 500 video clips can be stored in a USB memory. When the overwrite setting is set to OFF, no recording can be performed once the number of entries reaches 500. When the overwrite setting is set to ON, the oldest entry is overwritten after the number of entries reaches 500.

37.9. Analog Camera Control (Panasonic)

Maximum number to register and call the preset with the Panasonic analog camera is 64.

37.10. Analog Camera Control (GE)

Maximum number to register and call the preset with the GE analog camera is 99.

38. Known issues

38.1. 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.

38.2. 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.

38.3. Edge Storage

When the settings are more than recommended setting, video and audio might not be able to stream.
The playback might catch up with the recording when playback while recording. At that time, the playback will stop.
Video and audio might not be synchronized when the file that is recorded video and audio was replay.

38.4. RTSP

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

38.5. 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.

38.6. 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.

38.7. Simultaneous pressing of multiple buttons with Smartphone Viewer

With Xperia$_{TM}$ 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.

39. USB memory when using Edge Storage function

Please use the USB memory which guarantees an operating temperature up to 85 degree Celsius when using Edge Storage function.
Please format USB memory with over 32GB capacities by camera's own formatter before using.