

## WV-SFV481/SFN480 Firmware Release Note

VER (ActiveX Ver) Release Date	Priority Rank Level				Issue (Phenomenon)	Occurrence condition	Correspondence
	A	B	C	U			
Ver1.02 (4.31.03) Dec., '14	-				First production		
Ver1.11 (4.33.06) Feb., '15	C			x	-	-	Supported Extension Software WV-SAE200, i-VMD function TYPE3.
				x	-	-	Added a button to install additional application software in the "Upgrade" tab of the "Maintenance" page.
				x	Browser (Internet Explorer) does not response. (Occurrence frequency : High)	On H.264 recording or playing back page, by drag slide-bar and drop without moving mouse at all.	Fixed.
				x	Buttons may not be seen on Camera Information display. (Occurrence frequency : High)	When turning power off right after started up.	Fixed.
				x	Unable to change configure settings, downloading log and so on. (Occurrence frequency : High)	"Alarm image FTP transmission" were "On" and alarm occurrence continuously.	Fixed.
				x	Recording may not be restored after interrupting power source. (Occurrence frequency : very rare)	While recording SD memory card.	Fixed.
				x	ASM200 could not receive information of resolution and preset memory on cameras.	By the response of the cgi command "cgi-bin/get_capability" due to missing 1600x1200 resolution.	Fixed.
				x	ASM200 could not receive preset memory information from cameras, correctly.	By the response of cgi command "cgi-bin/getuid" while in the other mode than Quad-PTZ mode or Single-PTZ mode.	Fixed.
				x	-	-	Supported new display options on WV-ASM200; top-bottom inversion                      drag-to-zoom click-to-center                              preset memory
				x	Neither click-to-center nor drag-to-zoom on WV-ASM200 work properly while in Single-PTZ.	By missing "ch" as a parameter.	Fixed.
				x	Picture may be trouble due to transmitting a multicast double.	When auto-starting a multicast.	Fixed.
				x	Unable to make preset memory after POSI2. (Unable to make preset memory on WV-ASM200)	By a cgi command, "cgi-bin/camposiset".	Fixed.
				x	Unable to download from SD memory card.	Via FTP (File-Transfer-Protocol).	Fixed. (WV-ASM200 must be version 3.20 or newer)
				x	Focus was not optimum.	By turning Power ON at low illumination while setting slow-shutter speed.	Fixed.
		x	Unable to transmit H.264 audio from PC to camera. (Occurrence frequency : High)	By starting/stopping audio transmission many times.	Fixed.		
		x	Camera would not disconnect session. (Occurrence frequency : High)	After receiving a JPEG Snapshot by cgi command and so on.	Fixed the camera to disconnect session.		
		x	Camera picture may be corrupted. (Occurrence frequency : High)	By setting H.264(2)/JPEG(2) to be "320x320", then by changing image capture mode to be "Double" mode by cgi command.	Fixed.		
		x	JPEG picture quality may be worse. (Occurrence frequency : Mid)	By using the camera long term, continuously.	Fixed.		

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Ver1.12 (4.33.07) Apr.,'15	C			x	Uninstalled iVMD after restarting.	In a case, installed the extension software i-VMD under the factory default settings, then restarted the camera.	Fixed.
				x	Refresh interval of MOR (moving Object Remover) was 1/15 fps (usually it should be 1 fps).	By changing configuration of the extension software i-VMD.	Fixed.
				x	By CGI command, image capture mode could be configured other than Fisheye mode and live would not be refreshed. (Occurrence frequency : High)	Image capture mode were in 9M Fisheye or 4M Fisheye mode.	Fixed.
				x	Selecting a line for People count (Cross line) may not be selected after defining the line. (Occurrence frequency : High)	If the line were defined by almost horizontally.	Fixed.
				x	Unable to HTTP access. (Occurrence frequency : Mid)	Once removed LAN cable at PC-end while downloading CSV file.	Fixed.
				x	Unable to transmit H.264(2) overHTTP. (Occurrence frequency : High)	By using PS-API.	Fixed.
				x	CH4 out of 4 stream may be solid black picture.	When configured 4 streams, VBR and 12Mbps or more.	Fixed.
Ver1.13 (4.33.07) June,'15	C			x	-	-	Improved an issue that video of H.264(1) may be distorted at restarting or change setting capture mode.
				x	-	-	Improved an error at SD memory card to be notified.
				x	4-screen/9-screen on WJ-NV300 may not display video.	By registering WV-SFV481 and/or WV-SFN480 and change settings from WJ-NV300 that Light control mode (Outdoor/Indoor) while in multicast on camera.	Fixed.
				x	-	-	Added information of capability by CGI command; - available modes supporting VIQS. - available range for VMD area.
				x	Chang of time zone setting may not be effected even if it would be synchronized.	When changing time zone setting after changing Time adjustment by NTP from "Off" to "On".	Fixed.
		x	-	-	Improved reliability the camera not to restart unexpectedly.		
Ver1.14 (4.33.07) Sept.,'15	C			x	Startup time may be longer than usual due to restart during starting up.	-	Fixed.
Ver1.15 (4.33.07) Nov.,'15	C			x	Occur "503-Service Unavailable" and need restart.	When accessing a camera by browser.	Fixed.
				x	-	-	Added the log indicating a hardware (Main Board) change.

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Priority Rank Level A: Recommend to apply (Major or serious update) B: When issue happened C: Maintenance timing U: Function /Performance improvement (Not Necessary to update)							
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Ver2.01 (4.38.08) Feb., '16	C				<b>Please see the note at the bottom of this page.</b>		
				x	-	-	Made encrypting the firmware. To upgrade the firmware from version 1.15 or older, required 2-step upgrading; - First step: upgrade to version 9.99. - Second step: upgrade to version 2.01. <a href="#">Click here to request the version 9.99.</a>
				x	-	-	Added "Smart Coding mode" function.
				x	-	-	Supported Safari/Firefox/Google Chrome at configuration settings Note: Tested version; - Safari: Version 5.34.57 - Google Chrome: Version 44.0.2403 (Except displaying H.264 images) - Firefox: Version 39.0.0
				x	-	-	Support upgrading firmware by CGI command (StartFirmwareUpgrade).
			x		Wrote settings onto the Flash-ROM by clicking the "Set" button on menu setting page even if nothing changed. (Occurrence frequency : High)	-	Fixed.
				x	-	-	Changed the word in Chinese at SD memory card information (SD记忆卡信息) in System log (系统日志); [Prev.] 错误内容 (Description) [New] 内容 (Description)
				x	-	-	Changed response to the CGI commands; "/cgi-bin/get_capability" : Added about SD card recorder. "/cgi-bin/get_capability2" : Added capture size for 4K cameras.
				x	-	-	Corrected the vulnerability by upgrading OSS for NTP; [Prev.] ntp-4.2.6 p3 [New] ntp-4.2.8 p4
		x	Maintenance page layout may collapse. (Occurrence frequency : High)	In the page of User mng.	Fixed.		
		x	-	Revised on Feb. 5, 2016	Supported the Extension software, WV-SAE200; - Improved the functions of the People count and the Heat map.		
Ver2.02 (4.38.08) Feb., '16	U	<b>Please see the note at the bottom of this page.</b>					
				x	-	-	Updated for Japanese market models only.

**<For WV-SAE200 TYPE3 version 1.15 (or older) users>**  
**DO NOT UPGRADE to this version 2.01 or newer due to the WV-SAE200 version 1.15 or (older) does NOT support this version.**

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	A	B	C	U		Issue (Phenomenon)	Occurrence condition	Correspondence
Ver2.40 (4.38.08) Apr.,'16	C				x	Except Chinese market models (WV-SFV481H/WV-SFN480H).	-	Added a choice to select a certification when using HTTPS. This is effective from products manufactured in April, 2016. Those serial numbers are as follow; "PDxxxxxx", PExxxxxx, PFxxxxxx and after. "Qxxxxxxx", Rxxxxxxx and after.
					x	Except Chinese market models (WV-SFV481H/WV-SFN480H).	-	Added a choice to select a certification when using the "Alteration detection". This is effective from products manufactured in April, 2016. Those serial numbers are as follow; "PDxxxxxx", PExxxxxx, PFxxxxxx and after. "Qxxxxxxx", Rxxxxxxx and after.
					x	-	-	1. Changed factory default setting value at User Authentication from "OFF" to "ON". 2. Deleted pre-registered User name (admin), and Password (12345). 3. All users must register User name(s) and Password(s) at initial access. - User name: 1 to 32 characters - Password; 8 to 32 characters, two or more types of characters among alphabets, numbers and symbols. Note: Currently registered User name(s) and Password(s) will NOT be deleted by upgrading firmware, however, you have to register them under the new policy (above "3") after initializing (default reset) by the INITIAL SET button or by the setup menu.
Ver2.43 (4.38.08) June,'16	C				x	Unable to connect the cameras by the HTTPS protocol.	After turning power off and on if the connection protocol were configured in "HTTPS" and using with the Root Certification Authorities (CA).	Fixed.
Ver2.50 (4.39.00) July,'16	C				x	-	-	Corrected the vulnerability by upgrading OSS for NTP; [Prev.] ntp-4.2.6 p4 [New] ntp-4.2.8 p7
					x	-	-	Added choices of "Bandwidth control(bit rate)". 1024kbps/15360kbps/20480kbps/25600kbps/30720kbps/35840kbps/40960kbps/51200kbps
					x	-	-	Added choices of "On(Mid)" and "On(High)" to "Smart Coding mode".
					x	-	-	ONVIF®: Supported "WS Addressing".
					x	-	-	Added information about place of product destination and model number with suffix to the reply of CGI command "/cgi-bin/getinfo".
					x	-	-	Updated hyperlink to the web sites of support.
					x	-	-	Layout of image display may be collapsed. By inputting "</script>" at input-field.
				x	-	-	Stereo audio may be played back in monaural. Fixed.	

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Ver2.50 (4.39.00) July,'16	C				x	Missing ZOOM button on the live picture screen of Fisheye in JPEG.	If the settings are both as follows; 1. Type of image capture mode were "Fisheye + Panorama" or "Fisheye + Double Panorama" 2. "Live" page (Initial display)" are in JPEG.	Fixed.
					x	Unable to transmit MotionJPEG with configured picture size at JPEG(2) by CGI command, "/cgi-bin/nphMotionJpeg".	While image capture mode were in "4M Fisheye".	Fixed.
					x	Unable to change settings of "Transmission priority" and "Refresh interval" simultaneously by CGI command, "/cgi-bin/set_h264".	On firmware version between 2.01 and 2.43.	Fixed.
					x	Setting of "Refresh interval" left "8s" internally (should become "1s") even if settings both "Smart coding = On" and "H.264 streaming = SD" although "Smart coding" become "Off". As a result, recording in H.264 on SD memory card may be abnormal.	-	Fixed.
					x	The camera may restart, unexpectedly.	In a case, connect/disconnect H.264 streaming , repeatedly.	Fixed.
Ver2.52 (4.39.00) Dec.,'16	C				x	JPEG image may be transmitted by incorrect capture size.	In a case, configured a same image capture size for nphMotionJpeg and SnapShotJpeg.	Fixed.
					x	The Real-time Pull-Point Notification Interface did not conform to ONVIF®.	-	Fixed.
					x	-	-	Improved security.
Ver2.53 (4.39.00) Feb.,'17	C				x	Did not work data encryption during over RTSP streaming.	-	Fixed.
					x	RTSP distribution may be stopped during continuous operation.	Streaming to WJ-NX400 (Network Disk Recorder).	Fixed.
					x	Changing frame rate dynamically by CGI command at the time of an alarm may not be effected on camera.	While operating with WJ-NX400 (Network Disk Recorder).	Fixed.
Ver2.54 (4.39.00) May,'17	C				x	Unable to work time adjustment function synchronizing with NTP server.	When the difference between the clock and the NTP server is within 5 seconds.	Fixed.
					x	Refresh interval may be switched to "8s", unexpectedly.	By changing "Transmission priority" of H.264 for the options other than "VBR", initiated by PSSCT or WJ-NV300 only if it is the first time from the installation of the camera.	Fixed.

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Added on May 31,2017

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Ver2.60 (4.39.23) Jun., '18	C				x	-	-	Changed factory default setting for transmission rate: Previous: Unlimited New: 51200kbps
				x		If an RTSP header contains two or more User-Agent headers. no HTTP400(Bad Request) error returned and ignore the second and subsequent User-Agent headers.	-	Fixed.
Ver2.70 (4.39.23) Sept., '18	C			x		Revised on Nov. 7, 2018 Frame rate and bit rate may drop.	By transmitting JPEG live images continuously over 1 year without being rebooted.	Fixed.
Ver4.00 (4.39.23) Feb., '19	C			x		Network disk recorder may not be able to detect an alarm even if it detects an alarm with VMD setting of the stream 2 of the camera when connected to a network disk recorder.	-	Fixed.
						The streams 2 to 4 may not be detected when VMD detection area to be set from the recorder in the capture mode of "4 streams".	-	Fixed.
						Unable to set VMD that can identify cameras 2, 3 and 4 when operation detection is set from recorder in 4 stream mode.	-	Fixed.
				x		May not be able to change the save destination at the time of FTP periodical transmission error.	-	Fixed.
				x		ONVIF RTSP Multicast transmission may not work.	-	Fixed.
					x	-	-	Improved to link HTTP alarm function with "HTTP max segment size" setting in "Network setting"
					x	-	-	ONVIF: Supported DTT v18.06.
					x	Except Chinese market models, WV-SFV481H and WV-SFN480N.	-	Enhanced security.
					x	-	-	Changed the URLs of hype-link destination according to change of support page URL (from "http" to "https").
					x	-	For Chinese market models, WV-SFV481H and WV-SFN480N only.	Changed factory default settings as follow; - Internet mode (over HTTP) from "On" to "Off" - Image capture mode from 30fps to 25fps, SD from "Off" to "On" - Date/time display format from "DD/MM/YYYY" to "YYYY/MM/DD" - Time zone from "GMT+00:00" to "GMT+08:00"
			x	The recorded data of the log one before the relevant time might be downloaded when downloading the recorded data from the log list.	-	Fixed.		

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Ver4.00 (4.39.23) Feb., '19	C			x		Camera may restart unexpectedly while receiving ONVIF command continuously.	-	Fixed.
				x		Camera may restart when a file which cannot be deleted were created during JPEG overwrite recording on the SD memory card.	-	Fixed.
				x		When deleting SD card data on the log list screen, data that can not be deleted may be left while displaying the play window.	-	Fixed.
				x		Communication error may occur while connecting with WJ-NX series recorders. (Occurrence frequency: Rare)	-	Fixed.
				x		Solid black screen may appear during sequencing with the network disk recorder due to it takes time to output the video.	-	Fixed.
				x		Camera may reboot, unexpectedly.	When sequencing the network disk recorder or the video management software (WV-ASM series)	Fixed.
				x			By downloading the SD memory backed up data with the network disk recorder	Fixed.
				x		-	-	Changed encryption method of setting data along with strengthening security. <b>[Important Information]</b> It is not possible to restore the setting data backed up with firmware version 4.00 (or later) to the camera that operates in version earlier than Ver 4.00.
Ver4.10 (4.39.23) June, '19	C			x		-	Security has been enhanced.	
				x		Audio may not output by attempting to connect two sessions simultaneously and failure to authenticate one of them.	-	Fixed.
				x		-	-	Added an ONVIF command, "DeviceIO:GetVideoSources".
				x		-	-	Added a note in the window of DDNS setting page when using "Dynamic DNS Update", "Dynamic DNS Update(DHCP)".
				x		-	-	Display the license of open source software (OSS) on upgrade screen.
				x		ONVIF communication may become a cause of destroying resources.		Fixed.
				x		-	-	Fixed Session Description Protocol/SDP (IPv6) on ONVIF.
				x		Unable to find ONVIF search.	-	Fixed.
		x		-	-	The file may not be found by opening the log list during overwrite recording of the SD memory card and attempt to browse.		

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Ver4.70 (4.39.23) Mar.,'21	U				x	Except Chinese market models, WV-SFV481H and WV-SFN480H.	-	Improved the [HTTP alarm notification] function as follows: 1. Supports Digest authentication - The camera performs either "Digest" or "Basic" authentication according to the response from the HTTP server when initially accessed without ID and password. 2. Adds an error log for the failure in HTTP server user authentication - Displays "<HTTP alarm notification> authentication error" in the system log when the authentication fails. 3. Supports HTTPS Communication - Entering "https://" in [Address] enables HTTPS communication.
					x	Except Chinese market models, WV-SFV481H and WV-SFN480H.	-	Enabled both digital certificates "Digicert" and "GlobalSign". Note: Firmware upgrade does not change the certificate in a camera.  <a href="#">Click here for further information in case of SSL communication.</a>
					x	Except Chinese market models, WV-SFV481H and WV-SFN480H.	-	<div style="background-color: red; color: white; padding: 2px; display: inline-block;">Modified on Oct. 14, 2021</div> Changed the behavior related to bit rate when the communication protocol is changed from "HTTP" to "HTTPS" as below. <del>Previous versions: the camera automatically sets the bit rate to 4 Mbps when the selected one is larger than 4 Mbps.</del> <del>This version or later: the camera does not change the bit rate.</del>  Previous versions: - The camera automatically sets [Max bit rate (per client)*] to 4096kbps when the selected one is larger than 4096kbps.  This version or later: - The camera does not change the value in [Max bit rate (per client)*]. - The following note has been added to the "Connection" field in [Setup]-> [Network] page-> [Advanced] tab-> "HTTPS" window. When "HTTPS" is selected for "Connection", the maximum bandwidth(bit rate) is limited to 16Mbps.
Ver4.80 (4.39.24) Dec.,'21	C				x	The camera may show a black image. (Occurrence frequency: Rare)	When the setting in [Image capture size] or [Image capture mode] is changed repeatedly.	Enhanced security.  Fixed.

\*: ONVIF is a trademark of Onvif, Inc.