Panasonic

This document describes WV-SFV781L/SPV781L firmware upgrade Information.
1. Release version： Version 4.70
2. Release Note Reference Number：SFV781-018

March 26, 2021
Panasonic i-PRO Sensing Solutions Co., Ltd.

WV-SFV781L/SPV781L Firmware Release Note

VER (ActiveX Ver) Release Date	Priority Rank Level				Contents		
	A	B	C	U	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) *: ONVIF is a trademark of Onvif, Inc.		
	A	B	C	U	Issue (Phenomenon)	Occurrence condition	Correspondence
Ver1.05 (4.37.03) June,'15	-				First production		
Ver1.06 (4.37.04) Aug.,'15				x	White line may be seen.	When the black-and-white image state.	Fixed.
				x	Unable to adjust zooming ratio 4.3x by slide-bar of Zoom ratio designation at Zoom/focus adjustment	-	Fixed.
				x	-	-	Improved by reducing the 8-Megapixel[16:9](30fps mode) of H.264(1) time of transmission until the start.
				x	In CGI command, capability information responded incorrect parameter about "drag_zoom" and "default_zoom". （Occurrence frequency : High）	-	Fixed.
				x	-	-	Added information of capability by CGI command; - available modes supporting VIQS. - available range for VMD area.
	C			x	-	-	Improved on CGI command, it would accept and respond to keep_alive, while cropping [16:9] (30fps) mode, even comes with unnecessary ch information. (It was responded an error).
				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	May not display camera image in 4-screen or 9-screen on WJ-NV300.	Under the conditions as follow; - Registering WV-SFV481/WV-SFN480. - Set camera to be multicast. - Changed the setting of "Upside-down" from "On (desktop)" to "Wall" by WJ-NV300.	Fixed.
				x	Camera would be rarely restarted while streaming due to an encode error. （Occurrence frequency : Low）	When the load of the camera is high.	Fixed.
				x	Transmitting 1.5fps even if the frame rate of H.264 were set 1fps.	In a case, setting one of the following; - 8-Megapixel [16:9]（15fps mode）: H.264(2) - 12-Megapixel [4:3]（15fps mode）: H.264(1) - 5-Megapixel [4:3]（30fps mode）: H.264(1)、H.264(2) - 4-Megapixel [16:9]（30fps mode）: H.264(1) to H.264(4) - Cropping [16:9]（30fps mode）: H.264(1)、H.264(2)	Fixed.
Ver1.07 (4.37.04) Sept.,'15	C			x	It may restarts while starting up (as a result, it takes longer).	-	Fixed.
Ver2.01 (4.38.08) Feb.,'16	C			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. Click here to request the version 9.99.
				x	-	-	Added "Smart Coding mode" function.

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Ver2.01 (4.38.08) Feb.,'16	C				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 On version 2.00, restrictions using Safari/Firefox/Google Chrome are as follow; - Google Chrome: Unable to playback H.264. - Unable to set Privacy zone. - Unable to set iVMD detection area. - Unable to set audio detection. - Unable to set Cropping area for cropping. - Unable to display the frame of face detection when using face detection. - Unable to set iVMD area nor depth (when using WV-SAE200) Appears a pop-up message "*The browser is not compatible with Viewer software. Use Internet Explorer for further settings.* " when attempting to do the above.
					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.
Ver2.02 (4.38.08) Mar.,'16	U				x	-	-	Added a notice for each screen that alarm notification will not be appeared while displaying VMD and audio detection.
Ver2.04 (4.38.08) Mar.,'16	C				x	No images were output after upgrading firmware from version 1.xx to 2.xx.	While the image capture mode is set either "4 mega pixel [16:9](30fps mode)" or "Cropping [16:9](30fps)".	Fixed.
						Except Chinese market models (WV-SFV781LH/WV-SPV781LH).		

Added on Nov. 6, 2019

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Ver2.40 (4.38.08) Apr.,'16			C	x	-	-	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.

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Ver2.40 (4.38.08) Apr.,'16			C	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.	Fixed.
			x		Stereo audio may be played back in monaural.	-	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.

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Ver2.52 (4.39.00) Dec.,'16			C	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.
Added on May 31,2017							
Ver2.56 (4.39.23) Sept.,'17			C	x	-	-	Changed company name to the new company name in the plug-in (ActiveX) software.
				x	-	-	Updated the URL of support website displayed on screen.
Ver2.58 (4.39.23) Mar.,'18			C	x	-	-	Improved security.
				x	-	-	In CGI command of "get_io2", added new parameter "3" for "format" so that possible to obtain Command alarm / i-VMD information.
				x	-	-	Added new Panasonic alarm notifications as follow; SD-MEMORY WRITE ERROR SD-MEMORY READ ERROR SD-MEMORY DELETE ERROR SD-MEMORY FILESYSTEM ERROR SD-MEMORY OTHER ERROR
				x	-	-	Discarded a restriction that only "Unicast port (AUTO)" in RTSP transmission would be available when "Transmission type" is "On".
			x		Leaked POST connection.	in a case of disconnect network in "over HTTP" for 2 and half minutes or more.	Fixed.
			x		Image capture size may become incorrect.	By setting Image capture size from Image Viewer.	Fixed.
				x	Administrator password may be deleted.	-	Fixed.

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Ver2.60 (4.39.23) Jun.,'18	C				x	-	-	Changed factory default setting for Authentication method; Previous: "Digest or Basic" New: "Digest"
								For more details:　　　security_upgrade_June2018.pdf
					x	-	-	Changed password policy that it must include at least 3 types of characters among "upper case letters / lower case letters / numbers / symbols". For more details, click here. Note: Original passwords and authentication method of products on the system are kept unchanged even firmware and software have been updated.
								For more details:　　　security_upgrade_June2018.pdf
					x	-	-	Added user authentication at host authentication.
					x	-	-	Became saving history of login failure into system log.
					x	Except Chinese market models (WV-SFV781LH/WV-SPV781LH). -	-	Changed saving setting data with encryption. Note: unable to restore the setting data if you would downgrade the firmware.
					x	-	-	Made some other security measures enhanced.
					x	-	-	Added "Drawing method", "Decoding options" and "Frame Skip Options (When PC is Heavy Processing Load)" onto plug-in software.
					x	-	-	Changed factory default setting for "Bandwidth control(bit 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-Agentheaders.	-	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	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-SFV781LH and WV-SPV781LH. -	-	Enhanced security.

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Ver4.00 (4.39.23) Feb.,'19	C				x	-		Improved to link HTTP alarm function with "HTTP max segment size" setting in "Network setting"
				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.
				x		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.
				x		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	-	-	Changed the URLs of hype-link destination according to change of support page URL (from "http" to "https").
						For Chinese market models, WV-SFV781LH and WV-SPN781LH only.		
					x	-	-	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.
				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.

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Ver4.00 (4.39.23) Feb.,'19	C				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. [Important Information] 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.
					x	-	-	Improved responses to ONVIF commands for PTZ cameras.
					x	PTZ may not stop even if it received stop command in ONVIF.	-	Fixed.
Ver4.30 (4.39.24) May,'20	C				x	The camera may show a black image on the "Live" page.	-	Fixed.
						Except Chinese market models, WV-SFV781LH and WV-SPV781LH.		
					x	-	-	Improved the response when reconnecting in HTTPS connection on Windows 10.
					x	-	-	Changed the company name in the plug-in software Active X to the new one.

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Ver4.70 (4.39.24) Mar.,'21	U				x	Except Chinese market models, WV-SFV781LH and WV-SPV781LH. -	-	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-SFV781LH and WV-SPV781LH. -	-	Enabled both digital certificates "Digicert" and "GlobalSign". Note: Firmware upgrade does not change the certificate in a camera. Click here for further information in case of SSL communication.
					x	Except Chinese market models, WV-SFV781LH and WV-SPV781LH. -	-	Changed the behavior related to bit rate when the communication protocol is changed from "HTTP" to "HTTPS" as below. Previous versions: the camera automatically sets the bit rate to 4 Mbps when the selected one is larger than 4 Mbps. This version or later: the camera does not change the bit rate.