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WV-X6531N(S)/X6511N Release Note

This document describes software package upgrade for WV-X6531N(S)/X6511N.
1. Release version： 5.09
2. Release Note Reference Number： X6531_036

March 27, 2024
i-PRO Co., Ltd.

Contents

VER (ActiveX VER) Release Date	Priority Rank Level				Issue (Phenomenon)	Occurrence condition	Correspondence
	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
1.03 (4.50.14) May, '17					First production.		
1.05 (4.50.14) June, '17				x	Not working VMD function after a power cycle (turned power off then on) even if the VMD setting were activated.	On firmware version 1.03.	Fixed.
1.08 (4.50.14) July, '17	U			x	-	-	Improved Auto-Focus function.
	Added on July 8,2017						
1.20 (4.50.14) July, '17	U			x	-	-	Supported Extension Software, Model WV-XAE100W.
1.21 (4.50.14) Sept., '17	C			x	Camera may not start up at low temperature.	When using some certain PoE+ compatible switches.	Fixed.
				x	Aborted video transmission in multicast transmission.	When "On" is selected for "Stabilizer".	Fixed.
1.22 (4.50.14) Oct., '17	C			x	Camera picture may be solid black.	-	Fixed.
Ver1.70 (4.50.20) Nov.,'17	C			x	-	-	Added a support page and so that it possible to access to support page by QR code.
				x	-	-	RTSP distribution abolished the constraint which was only unicast while selecting multicast.
				x	-	-	In CGI command, expanded the parameter of "get_io2". Added response format "3" so that information on sound detection / command alarm / i-VMD could be acquired.
				x	-		In ONVIF®, improved accuracy of PTZ value up to 5 decimal places.
					For WV-X6531NH only		
				x	-	-	Profile S compliant service on ONVIF®, made available for streaming in H.265 settings.
				x	-	-	Added HD EX optical zoom function.
				x	-	-	Added a message in the setting screen for SD memory card; "It is not available when "60fps" is selected for [Image capture mode]."
			x		Tilt's coordinates were reversed for ceiling and tabletop installations.	-	Fixed.
			x		-	-	Changed the hue etc. even if only the brightness were changed.
			x		Missing display the "VMD / i-VMD" column in i-VMD "Alarm".	In Spanish only.	Fixed.
			x		When setting i-VMD depth, after drawing and registered rectangle, the coordinates of the rectangle would be shifted in the upper left direction when the screen was redisplayed.	-	Fixed.

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Ver1.70 (4.50.20) Nov.,'17	C				x	At displaying system log, display the log in two lines. Also display shifting the date and time of occurrence and contents column each other.	In case outputting log with a long character string.	Fixed.
					x	Camera may reboot by changing image capture mode.	When use with recorder.	Fixed.
					x	Camera may reboot by accessing with a browser other than Internet Explorer (IE).	-	Fixed.
				x		-	-	Deleted encryption protocol TLS 1.0 for security purpose.
				x		-	-	Improved Auto Focus speed at normal brightness and low light intensity.
				x		-	-	Improved optical zoom speed.
				x		-	-	Improved for the image at the high luminance part not to saturate over when Super Dynamic "On".
					x	RTSP connection may be disconnected upon receiving an incorrect RTSP request.	-	Fixed.
					x	RSTP connection may be disconnected very rarely by sending RTSP request reception and RTSP response transmission at the same time.	-	Fixed.
					x	-	-	Improved communication quality on video streaming in H.265/H.264.
Deleted on Nov.29,2017						Except WV-X6511N.		
Ver1.80 (4.50.20) Dec.,'17	C				*	=	=	Added SD memory card password lock function.
				x		-	-	Fixed an issue in the cgi command "/Set?Func=Bright&Kind=1&Data=-2"
				x		-	-	Improved autofocus during manual zooming.
Ver1.81 (4.50.20) Feb.,'18	U				x	Upgrading firmware might fail.	Revised on Nov.29,2017	Fixed.
Ver1.82 (4.50.20) Mar.,'18	C				x	For WV-X6531NH only. -	-	Changed factory default setting values as follow; 传送模式: 恒定速率 带宽(每个客户端: 3072kbps 音频模式: 音频输出 输入音量: 线路 中 AGC(音频): Middle
					x	The specified image capture size may not be obtained even if it were specified with ImageViewer by CGI command.	-	Fixed.
					x	-	-	Improved auto focus convergence speed quicker.
Ver1.83 (4.50.20) Apr.,'18	C			x		Administrator password may be deleted.	-	Fixed.
					x	"Additional info for detecting alteration" might not displayed on SD memory card security settings.	-	Fixed.
Corrected on May22,2018					x	The stabilizer might not effect.	-	Improved stabilizer to be more effective when it was used for a long time. Fixed.

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1.90 (4.50.20) June, '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.
1.90 (4.50.20) June, '18	C				x	-	-	Became saving history of login failure into system log.
						Except Chinese market model, WV-X6531NH.		
					x	-	-	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	Except Chinese market model, WV-X6531NH.		
						-	-	Added "EAP-TLS" to the EAP method for IEEE802.1x.
					x	-	-	Added "Drawing method", "Decoding options" and "Frame Skip Options (When PC is Heavy Processing Load)" onto plug-in software.
					x	-	-	Added "Reboot" to "Schedule".
					x	-	-	Added a choice of "2pics/2s" for "Transmission interval" setting of "Transmission mode" in "Best shot function". Note: Concerning the models on this document, the models are NOT recommended to use the Best shot function.
					x	-	-	Changed factory default setting for "Bandwidth control(bit rate)" Previous: Unlimited New: 51200kbps
			x		Communication may be disconnected when acquiring network information with SNMP.	-	Fixed.
			x		Network connection may not be possible due to the MAC address authentication with the network device may not be done properly at startup.	-	Fixed.
		x			Temperature compensation at lens may not work correctly and the focus sometimes shifts little by little.	-	Fixed.

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1.90 (4.50.20) June, '18	C				x	Unable to configure the setting relating to the e-mail notification by the cgi command "reg_mailaddr".	-	Fixed.
					x	Focusing may not work.	-	Fixed.
					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.
Added on July 27,2018					x	It was usable even if the certificate for using HTTPS has expired.	-	Fixed.
1.91 (4.50.20) July, '18	C				x	Solid black screen may appear during sequencing with the network disk recorder due to it takes time to output the video.	-	Fixed.
					x	SD memory backup recording did not stop.	By turning power on / off while SD memory backup recording during connecting with the network disk recorder.	Fixed.
					x	Camera may reboot, unexpectedly.	Revised on Sept. 7, 2018 — When sequencing the network disk recorder ~~and or the video management software (WV-ASM series) with "SD memory backup" enabled simultaneously~~.	Fixed.
					x		By downloading the SD memory backed up data with the network disk recorder	Fixed.
					x	Recording may not retain when restarting camera.	In an environment where the communication state is unstable	Fixed.
					x	Recording may not stop at restoration of communication		Fixed.
1.92 (4.50.34) Aug., '18	C				x	~~Did not work~~ Hardware decode of plug-in software may not work when selecting compression method "H.265".	-	Fixed.
			x			Frame rate and bit rate may drop.	By transmitting H.264/H.265/JPEG live images continuously over 1 year without being rebooted.	Fixed.
					x	May not be able to zoom in with multi-screen display by dragging with mouse.	-	Fixed.
					x	Camera may restart by disconnecting the camera's LAN cable while transmitting video in UDP.	In AC power operation.	Fixed.
1.93 (4.50.34) Oct., '18	C				x	Picture may not be displayed according to the frame rate. (Occurrence frequency : Rare)	When Image quality to be set in Motion priority (Frame rate).	Fixed.
					x	The frame rate may be temporarily decreased. (Occurrence frequency : Rare)	During the pan/tilt operation.	Fixed.
					x	The operation speed may slow down and the followability may be decreased.		Fixed.
					x	Operating speed may be slowed.	During the manual zooming.	Fixed.
					x	Focus may shift out.	In an outdoor low light environment	Fixed.
					x	ONVIF RTSP Multicast may not be transmitted.	-	Fixed.
1.94 (4.50.34) Nov., '18	C				x	Multicast related settings ("Transmission type" setting and some others) may restore to the factory default settings by upgrading firmware from version 1.82 (or earlier) to version 1.90 (or later).	-	Fixed.

Revised on Aug. 9, 2018
Revised on Nov. 7, 2018

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Ver2.00 (4.50.34) Dec.,'18	C				x	-	-	Improved detection capability of "face wearing a mask" at detecting face by Facial Recognition Server Software, WV-ASF950, etc. Note: Not recommended product for Face best shot function.
					x	-	-	Settings of "HTTP max segment size(MSS)" to be relating to the camera action; - JPEG transmission for Face Best Shot - "HTTP alarm notification"
				x		Camera may restart, unexpectedly. (Occurrence frequency: Rare)	In case of high load such as multi-stream transmission at 60fps etc.	Fixed.
				x			By receiving ONVIF command continuously.	Fixed.
				x		Camera may send corrupt AAC-LC data.	When the transmission is delayed due to the network environment etc.	Fixed.
				x		Video distribution may not be possible.	When the configuration of UI setting for Baseline Profile were as follow; - 30fps, H.264, FHD, Other than VBR	Fixed.
				x		Communication error may occur. (Occurrence frequency: Rare)	While connecting with Network Disk Recorder, WJ-NX series.	Fixed.
Ver4.00 (4.50.35) Feb.,'19	C				x	-	-	Added "Overlay Image" function.
					x	-	-	Added "VIQS (Variable Image Quality on Specified area)" function.
					x	-	-	Added a choice of "On(Frame rate control)" to "GOP Control" in "Smart coding".
					x	The refresh interval value may not be reflected in the CGI command as follow; /cgi-bin/set_h264?f_priority=4&nr_framerate=1&h264_bandwidth=64&h264_quality=9&h264_Ivop=0.2	-	Fixed.
				x		Black screen may be displayed back while recording H.264/H.265 to SD memory card and turning power Off and On.	-	Fixed.
					x	-	-	Improved resolution feeling in JPEG still image update at multiscreen in full screen display.
				x		May not be able to change the save destination at the time of FTP periodical transmission error.	-	Fixed.
				x		The settings of SMTP server may return before the setting by restarting the camera.	-	Fixed.
					x	Except Chinese market model, WV-X6531NH.		
						-	-	Enhanced security.
					x	-	-	Changed the URLs of hype-link destination according to change of support page URL (from "http" to "https").

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Ver4.00 (4.50.35) Feb.,'19	C				x	Displayed full screen on the main monitor when placing IE on the sub monitor and clicking the full screen display button.	When using the two monitor screens of main and sub.	Fixed.
					x	-	-	Improved the visibility of characters in the date/time screen.
						For Chinese market model, WV-X6531NH, 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	-	-	Added a message as follow in the "Schedule" page; "VMD permission" is required when assigning the period to be detected. Setting is not necessary when detection at any time.
						-	-	Changed a message by clicking the Delete button in the log list window to; Delete the log and image as the result of retrieval including the page where log is not displayed. （All of data selected by "Event" and "Recording time" are deleted.)
						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	-	-	ONVIF ProfileT Supported Scope/Scene Change Event, Property/DeviceIO/Metadata Sync.
					x	-	-	ONVIF ProfileT Supported Scene Change Event.
					x	-	-	ONVIF ProfileT Supported ONVIF Event Content Filter.
				x		There was an issue at GetVideoEncoderConfigurationOptions in ONVIF 60fps mode.	-	Fixed.
				x		Camera may restart unexpectedly while receiving ONVIF command continuously.	-	Fixed.
				x		XML may be a syntax error by ONVIF Event command due to the XML namespace prefix was not defined at WS-Addressing.	-	Fixed.
				x		Multicast parameters did not appear in the Milestone stream setting when ONVIF camera was registered in Media 2.	-	Fixed.
					x	-		Changed the response of "/cgi-bin/get_io2?format=3&"; It became not to notify CGI response each time even if detecting command alarm continuously.

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Ver4.00 (4.50.35) Feb.,'19	C				x	When one network is disconnected from the network, the same alert screen is displayed for other cameras.	While using multi-screen display.	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	-	-	Made Stream(3) available when "On" is set for Stabilizer.
					x	RTC communication may not be normal in rare cases when turning power from OFF to ON.	-	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	Camera may restart upon receipt of certain CGI commands (those are to change H.264/H.265 1st stream quality / bitrate / resolution without disconnect the stream).	While face detection or face best-shot is enabled.	Fixed.
					x	Transmission type (H.264/H.265) and image capture size of stream may not be changed (transmission type and image capture size hold before change).	If those were changed within 2 minutes after the network had been disconnected with over RTSP connection.	Fixed.
					x	-	-	Improved visibility of "SDREC" button on the window for tablet PC.
					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.
Ver4.01 (4.50.35) Feb.,'19	B				x	The oldest recorded data may bot be able to play back.	When the setting of overwrite recording to SD memory card is "On".	Fixed.
					x	Communication may stop even if connected with a PC or switch after starting up by PoE injector or external power supply (24V AC / 12V DC).	-	Fixed.
Ver4.10 (4.50.35) 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 a note in the window of DDNS setting page when using "Dynamic DNS Update", "Dynamic DNS Update(DHCP)".
					x	-	-	Supported multi-browsers other than the Internet Explorer. Some restrictions apply: click here for details.
					x	-	-	Improved smooth text display by changing the texts on the screen from 2 gradations to grayscale.

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Ver4.10 (4.50.35) June,'19	C				x	-	-	Added a CGI command to make an alarm; /Set?Func=SoftTrigger or /cgi-bin/Set?Func=SoftTrigger or /cgi-bin/comalarm.cgi
				x		Sent an e-mail with an image being moved to the preset position upon receipt of the alarm.	-	Fixed.
					x	For Chinese market models only -	-	Changed factory default setting of the time zone to Chinese Standard Time(CST)，UTC+8.
					x	-	-	Added interference detection information to additional information when using the i-VMD function of Extension software.
					x	-	-	Added "Alarm area No." setting to the "Preset per sender".
					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		JPEG frame rate setting display becomes 0.33 fps by changing image capture mode rom 25 fps to 30 fps with CGI (/ cgi-bin / setdata? IMG_MODE) although actual transmission rate is 5 fps.	-	Fixed.
					x	For Chinese market models only -	-	Supported On-Screen Display (OSD) in Chinese.
					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.
					x	-	-	The camera may restart by encrypting the stream 1 only, selecting audio transmission mode AAC-LC and recording video and audio simultaneously.
					x	-	-	Improved accuracy of Click-to-Center".
				x		Displayed "Approx. 2 min." for an alert of initializing operation.	-	Corrected the display to "3 min".
				x		Displayed "8 min" at upgrading firmware with selecting "Reset the settings to the default after completing the upgrade".	-	Corrected the display to "11 min".

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Ver4.11 (4.50.35) July,'19	C				x	The image may shake slightly to the left and right at stopping by manual pan and tilt operations with a zoom ratio of 4.0 times or less.	-	Fixed.
					x	The face best-shot image used to display face search history data on Video Management Software may not be created correctly. (Occurrence frequency: Rare)	-	Fixed. Note: The cameras are NOT recommended to use the face best-shot function.
					x	The camera may restart when live sequence display by network disk recorder or Video Management Software without distributing H.264 or H.265 for recording. (Occurrence frequency: Rare)	-	Fixed.
Ver4.20 (4.50.35) Sept.,'19	C				x	-	-	Improved accuracy of the privacy mask position.
					x	-	-	In FTP / SNMP authentication, "Authentication error" is logged in the system log by failing authentication more than a certain condition.
					x	-	-	Supported EasyIpSetup software（Ver4.31R00) and became to display serial numbers of devices.
					x	-	-	Updated (Enhanced) SNMP MIB information. The document of i-PRO camera management information (MIB) is available at the following URL; https://security.panasonic.com/training_support/panasonic_device_integration/snmp-mib/ (Corrected on Nov. 8, 2019)
					x	-	-	Improved so that available to connect with HIKVision recorder by CGI command.
					x	-	-	Improved Pan/Tilt operability when connected to VMS (Video Management Software).
				x		Failed upgrading firmware by sending a certain CGI command for camera operation under VMS (Video Management Software) environment. Also unable to operate Pan/Tilt.	-	Fixed.
				x		Recording may not stop when changing imaging capture mode.	-	Fixed.
				x		"Auto track" by self-return does not work after losing the object when Lost object search of Auto track = "off".	-	Fixed.
				x		VMD Alarm may not be detected even if crossing the line at the bottom of the screen.	-	Fixed.
				x		Zoom stops momentarily for each Zoom operation by making a PTZ operation with ContinuousMove command of ONVIF.	-	Fixed.
				x		The slide-bar for VMD may not be able to be slid.	In Compatibility View mode on Internet Explorer.	Fixed.
				x		Stop position by patrol may shift when the shutter becomes slower, such as at night.	-	Fixed.

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					x	The camera may restart due to memory access error. (Occurrence frequency: Rare)	-	Fixed.
Corrected on Oct.9, 2019 → Ver4.20 (4.50.35) Sept.,'19	C				x	Fixed the auto tracking standby display that was displayed as Operation mode display: On. ("AUTO TRACK WAITTING"--->"AUTO TRACK WAITING")	-	Fixed.
Added on Nov.25, 2019 →					x	The camera may fail in upgrading of firmware, in VMS (Video Management Software) connection environment (sending a certain CGI command for camera control), and become unable to do Pan/Tilt operation or the like.	-	Upgrade the camera with the file of firmware version 4.20 (or later) for a second time.
Ver4.22 (4.50.35) Nov.,'19	C				x	"Transmission type" and "Multicast address" configured by system configuration tool, may not be saved.	-	Fixed.
					x	-	-	Improved a phenomenon that CPU load might increase after updating for V4.20.
Ver4.23 (4.50.38) Jan.,'20	U				x	-	-	Supports multi-browsers Google Chrome, Firefox and Microsoft Edge in addition to Internet Explorer for; - the setup screen of the extension function "i-VMD" - i-VMD frame display on the live image - the face detection frame on the live image
					x	-	-	Changed the company name in the plug-in software Active X to the new one.
Ver4.25 (4.50.38) Mar.,'20	C			x		The camera may restart unexpectedly due to the irregularity in the data transmission/receiving process in the memory. (Occurrence frequency: Rare)	-	Fixed.
				x		The camera may restart unexpectedly due to the irregularity in the alive monitoring process. (Occurrence frequency: Rare)	-	Fixed.
				x		The camera may show black images on its "Live" window. (Occurrence frequency: Rare)	-	Fixed.
Ver4.30 (4.50.38) April, '20	B				x	-	-	Added "SNMP trap setting" in [Network] > [Advanced] > [SNMP]. (Click here for detail)
					x	-	-	Added a CGI command "/cgi-bin/setup_menu_disp?25fps=1" to make 25/50fps selectable on the "Image capture mode" menu.
					x	-	-	Private zone setting / Patrol setting: Changed the image display format from JPEG to H264/ H265 to make it easier to check the changes on the image.
				x		The camera recognizes a specific PoE+ injector as PoE.	The injector does not support the specification of PoE+ negotiation.	Added a CGI command "/cgi-bin/poe_ctrl?mode=on" to force the camera to start operating on PoE+ injector.
					x	-	-	Improved the response speed of the ONVIF command related to PTZ preset.
				x		Live image may not be displayed and keeps showing warming-up warning. (Occurrence frequency: Rare)	When the camera has started in the low temperature out of specification. Then, restart the camera after rising to the temperature within specification.	Fixed.

Added: June, 2020

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This document describes software package upgrade for WV-X6531N(S)/X6511N.
1. Release version： 5.09
2. Release Note Reference Number： X6531_036

VER (ActiveX VER) Release Date	Priority Rank Level				Contents		
	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
Ver4.30 (4.50.38) April, '20 B			x		All sessions get disconnected by executing the ONVIF® commands for changing the framerate and the resolution.	-	Fixed.
				x	-	-	Changed the date character string format for response which responds via SNMP to "DateAndTime" format as it was not transmitted correctly.
				x	-	-	Supports multi-browsers Google Chrome, Firefox and Microsoft Edge in addition to Internet Explorer for; - Playing back the images on SD memory card (Click here for detail)
				x	-	-	Changed the URL, QR code and Data_Matrix linked to the support page on the "Support" menu.
			x		Manual recording may not work outside of "Access permission" hours on "Schedule".	-	Fixed.
				x	Except Chinese market model, WV-X6531NH. Installing "CA certificate" opens two installation screens, a small window and a tab.	-	Fixed.
				x	On the "/cam" window for mobile terminal, reloading the image will show the normal live images when the camera is switched to the "Access permission" period from inaccessible period.	-	Fixed.
				x	-	-	Improved the response when reconnecting in HTTPS connection on Windows 10.
			x		Selecting the image capture size on the "Image" tab may change the bit rate to 3Mbps.	-	Fixed.
				x	-	-	Changed the default value of ONVIF DefaultPTZTimeout from 2 seconds to 60 seconds.
			x		-	-	Corrected the coordinate of the transmitted contents in ONVIF Metadata.
				x	-	-	Enhanced the access restriction function of SNMP v1/v2. (Click here for detail)
			x		The below phenomena occur: - Fail in acquiring the setting data - Fail in upgrading firmware - Auto-pan does not stop at the time set to stop	Under both of below conditions: - "Maximum shutter" is 6/30s or longer - The shooting subject is dark	Fixed.
				x	-	-	Enhanced security.

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								*: ONVIF is a trademark of Onvif, Inc.
		A	B	C	U	Issue (Phenomenon)	Occurrence condition	Correspondence
Ver4.30 (4.50.38) April, '20	B				x	-	-	Changed the below default setting. - [Internet mode]: from "OFF" to "ON" (Click here for detail)
					x	The process load on the camera may become high unexpectedly when: - The LAN cable of the network disk recorder on thereceiving side is disconnected. - The network disk recorder is powered off. (Occurrence frequency: Rare)	When streaming H.265 video using RTP over RTSP protocol	Fixed.
					x	The camera may not record the images in an SD memory card.	-	Fixed.
					x	-	-	Changed the company name in the plug-in software Active X to the new one.
Ver4.31 (4.50.38) July, '20	B		x			The camera keeps changing the image brightness to low and high alternately until it is rebooted. (Occurrence frequency: High)	When the camera operates continuously with [Image capture mode] set to the default value "30fps mode" for more than approx. 2 years* without being rebooted. * This period will be shortened to approx 1 year for "60fps mode".	Fixed.
Ver4.50 (4.50.38) Nov., '20	B				x	The camera may reboot. (Occurrence frequency: Low)	Continued operation of the following: - sequence display with a network disk recorder - sequence display with WV-ASM series software when [Live image source] is set to "Camera"	Fixed.
					x	-	-	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.
					x	The position or area specified in the below operations is misaligned: - click to adjust the center position on the "Live" page - drag the mouse to select a desired area in the main area of Live image (Occurrence frequency: High)	When "Stabilizer" is "On"	Improved the positioning accuracy.

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VER (ActiveX VER) Release Date	Priority Rank Level	A	B	C	U	Issue (Phenomenon)	Occurrence condition	Correspondence
Ver4.60 (4.50.38) Feb., '21	C				x	-	-	Improved the response to the CGI command "/cgi-bin/get_io2" by adding VMD ratio in percentage.
					x	-	-	Changed the dafault setting of [Transmission priority] to "VBR" when the browser's language is not Japanese.
					x	-	-	Changed the default setting of [Network Settings] in [Setup]-> [Network] page-> [Network] tab, from "Auto(Advanced)" to "DHCP".

Added: March, 2021 ► Except Chinese market model, WV-X6531NH.

VER (ActiveX VER) Release Date	Priority Rank Level	A	B	C	U	Issue (Phenomenon)	Occurrence condition	Correspondence
					x	-	-	Added the On/Off setting for the Secure Real-time Transport Protocol (SRTP) function to the [Advanced] tab in [Setup]-> [Network] page.
					x	-	-	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 *except WV-X6531NH - Entering "https://" in [Address] enables HTTPS communication.

Added: March, 2021 ►

VER (ActiveX VER) Release Date	Priority Rank Level	A	B	C	U	Issue (Phenomenon)	Occurrence condition	Correspondence
					x	-	-	Added the On/Off setting for ONVIF® to the [Network] tab in [Setup]-> [Network] page. (Default : On)
					x	-	-	Added the following note to the "HTTPS" window in [Setup]-> [Network] page-> [Advanced] tab. - When "HTTPS" is selected for "Connection", the maximum bandwidth(bit rate) is limited to 16Mbps.
				x		-	-	Corrected the RTSP protocol for transmitting H.265 images using ONVIF®.
				x		The camera does not issue a terminal alarm. (Occurrence frequency: High)	After the camera issues a terminal alarm, and the user turns off the terminal alarm during the time set in [Alarm deactivation time].	Fixed.
				x		The camera may reboot. (Occurrence frequency: Rare)	While performing JPEG recording.	Fixed.
				x		The camera may fail to load preset position when booted. (Occurrence frequency: Rare)	When using the ONVIF® commend "GetPresets" to obtain preset position.	Fixed.
				x		The camera does not display the full-width left parenthesis "（" on the live image.	-	Fixed.
				x		-	-	Corrected a typographical error in German from "Oibjektsuche" to "Objektsuche". Note: "Lost object search" in [Image/Audio] page-> [Image/Position] tab->[Auto track ->[Auto track setting].

WV-X6531N(S)/X6511N Release Note

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VER (ActiveX VER) Release Date	Priority Rank Level	A	B	C	U	Issue (Phenomenon)	Occurrence condition	Correspondence
Ver4.60 (4.50.38) Feb., '21	C				x	UDP communication may be disconnected depending on the network environment. (Occurrence frequency: Rare)	When transmitting high resolution or high bit rate images.	Fixed.
					x	-	-	Enhanced security.
Ver4.70 (4.50.38) Mar., '21 **Corrected: April, 2021**	B		x			Except Chinese market model, WV-X6531NH.		
					x	-	-	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	-	-	Enhanced security.
				x		The camera may reboot ~~when connected to WV-ASM300~~. (Occurrence frequency: High)	When the camera repeatedly receives the requests to start and stop transmission ~~from WV-ASM300~~ at short interval.	Fixed.
					x	The camera reboots when connected to a recorder. (Occurrence frequency: Rare)	Under both of below conditions: - [Maximum shutter] is set to "Max.2/30s" - The recorder is performing sequence display - When using both main monitor and sub monitor	Fixed.
Ver4.80 (4.50.38) July, '21	C				x	-	-	Added the following actions for SD memory card error: - Displays the following alert when a bit rate higher than "6144kbps" is selected in [Max bit rate (per client)*]: "Since the value of "Max bit rate (per client)" of H.265/H.264 recording stream set for "Recording format" is larger than "6144kbps", there is a possibility an abnormality will occur in continuity of recorded video. It is recommended to set it to "6144kbps" or less." - Records SD memory card logs on the [Status] tab in the [Maintenance] page, in the case of loss of recording or abnormal response from an SD memory card - Sends Panasonic alarm protocol "Diag." to the destination servers designated in the [Notification] tab of the [Alarm] page, in the case of abnormal response from an SD memory card
					x	-	-	Added the "Download" function to "Viewer software (nwcv4Ssetup.exe)" in the [Basic] tab of the "Basic" page.
					x	-	-	Increased the maximum password length from 32 to 128 characters for "Authentication" in the [Network] page-> [Advanced] tab-> "SMTP(E-mail)".
				x		-	-	Corrected the camera response to the CGI command "cgi-bin/setdata".
				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.	Fixed.
				x		-	-	Corrected the camera response to the "GetVideoEncoderConfigurationOptions" command of ONVIF Profile S.
				x		Unable to upgrade firmware. (Occurrence frequency: Rare)	When failing to upgrade firmware due to a power failure	Fixed.

WV-X6531N(S)/X6511N Release Note

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VER (ActiveX VER) Release Date	Priority Rank Level					Issue (Phenomenon)	Occurrence condition	Correspondence
		A	B	C	U			
Ver4.80 (4.50.38) July, '21	C				x	Unable to issue i-VMD alarm. (Occurrence frequency: High)	When satisfying the following conditions: - i-VMD schedule is configured - Repeat the following steps 11 or more times: 1. Move the direction of the camera to the preset position where i-VMD is configured while i-VMD is enabled on the schedule 2. Move the direction of the camera to the other preset position when i-VMD is not enabled on the schedule	Fixed.
Ver4.91 (4.50.38) Dec., '21	B				x			Added Link Layer Discovery Protocol (LLDP) setting tab to the [Advanced] tab on the [Network] page.
					x			Added a CGI command to transmit H.265/H.264 stream without NAL unit. Without NAL: "cgi-bin/setdata?H264NONALFLG=1" With NAL (default): "cgi-bin/setdata?H264NONALFLG=0"
						Except Chinese market model, WV-X6531NH.		
					x	-	-	Supports TLS 1.3. TLS setting has been added to the "HTTPS" window on the [Advanced] tab in the [Network] page.
					x			Added the following note under the on/off setting of "Internet mode" on the [Image] tab in the [Image/Audio] page： "When "On" is selected, streams will be transmitted using the HTTP port. When "Off" is selected, streams will be transmitted using the UDP port."
					x			Added the "Set PC time to the camera" checkbox to the "Date/time" field on the [Basic] tab.
					x	-	-	Added supported browser information to the camera response to IP Setting Software and the CGI command "getinfo".
					x	-	-	Changed the alarm name from "Panasonic alarm protocol notification" to "TCP alarm notification".
					x	-	-	Added Subject Alternative Name (SAN) to the certificate signing request (CSR) for creating an HTTPS server certificate.
					x	-	-	Added "NTP test" function to the "NTP" window on the [Advanced] tab in the [Network] page.
					x	-	-	Improved the visibility of camera setting screen as follows: - Removed unnecessary titles - Switched the position of "Next" and "Back" button

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Ver4.91 (4.50.38) Dec., '21	B			x		Unable to perform multicast transmission. (Occurrence frequency: Rare)	When the camera is started with the following settings: - "DHCP" is selected for "Network Settings" on the[Network] tab of the [Network] page - "Multicast" is selected for [Transmission type]	Fixed.
			x			Recording loss of some frames may occur in SD memory card recording after receiving an alarm. (Occurrence frequency: High)	When post recording is enabled on the camera.	Fixed.
					x	-	-	Improved the accuracy of time synchronization with NTP server.
			x			The camera returns an error and the settings for face matching function cannot be configured on the camera. (Occurrrence frequency: High)	Under both of the following conditions: - Enable face matching function on an NX series recorder. - The HTTP port number on the recorder is larger than 256	Fixed.
				x		The camera may get stuck in the log deleting status. (Occurrence frequency: Rare)	When deleting logs on the log list.	Fixed.
				x		Unable to configure OSD settings using the ONVIF command "SetOSD() tt:OSDConfiguration Token"	-	Fixed.
				x		Firmware upgrade may fail. (Occurrence frequency: Rare)	When upgrading the camera(s) connected to WJ-NX100.	Fixed.
					x	-	-	Adjusted the Mic input volume on Google Chrome, Microsoft Edge, and Firefox to be equivalent to Internet Explorer.
					x	Long press on [Manual zoom adjustment] button or [Brightness adjustment] button incorrectly starts text input mode on the button. (Occurrence frequency: High)	On the setup menu of "/tab" window for tablet device.	Fixed.
					x	-	-	Changed the default setting of [Overwrite] from "Off" to "On" on the [SD memory card] tab in the [Basic] page.
						Except Chinese market model, WV-X6531NH.		
					x	-	-	Modified the French description on the [User. Auth] tab and [Host auth.] tab as below: 1. Camera control - From "Com. cam. Vid" to "Contrôle camera" 2. Live only - From "En dir.sl" to "Flux direct"

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Ver5.00 (4.60.30) Apr., '22	U				x	-	-	Changed company name from "Panasonic i-PRO Sensing Solutions Co., Ltd." to "i-PRO Co., Ltd."
					x	-	-	Updated SNMP extended MIB: Changed the extended Object ID(OID) from Panasonic(258) to i-PRO(57501). Note: - This change applies only to the products manufactured in April, 2022* or later, and is not applied by firmware upgrade. *Serial number: VDxxxxxx - MIB file and manual are available at the following link: https://i-pro.com/global/en/surveillance/database/i-pro-device-integration/snmp-mib
Ver5.01 (4.60.30) Aug., '22	U				x	-	-	Supports the notification of i-VMD detection area ID as follows: - Added the [i-VMD alarm area information] on/off setting to the [TCP alarm notification] window on the [Notification] tab. - Improved the response to the CGI command "/cgi-bin/get_io2" by adding the detection area ID.
					x	-	-	Removed the [SD memory card images] acquisition function for Internet Explorer (IE) on the [SD memory card] tab, according to the Internet Explorer (IE) end of support.
					x	-	-	Enhanced security.
Ver5.02 (4.60.30) Oct., '22	U				x	-	-	Changed the company name in the GlobalSign digital certificate installed on the camera to "i-PRO Co., Ltd."
Ver5.05 (4.60.30) Jan. '23	C				x	-	-	Changed company name in the plug-in (ActiveX) software to "i-PRO Co., Ltd."
				x		HTTPS connection is not available until the [Connection] setting is once switched from "HTTP" to "HTTPS", on the HTTPS setting page in the [Advanced] window.	-	Fixed.
Ver5.08 (4.60.30) Nov. '23	U				x	-	-	Improved the productivity at production line.
Ver5.09 (4.60.30) Mar. '24	C			x		The image might become blurry.	1. Other PTZ operation starts while manually zooming 2. #1 occurs frequently	Fixed.

Important notes for users of Chinese market models only:
1. The face detection function does not work when the frame rate is set to 25fps or 50fps.
2. Stabilizer does not work when the frame rate is set to 60 fps, 50 fps, or 25 fps.