

## WV-X1551LN/ WV-X2551LN/ WV-X2251L/ WV-X1571LN/ WV-X2571LN/ WV-X2271L

Version of WV-X1551LN WV-X2551LN WV-X2251L, SDK ver, ActiveX ver	Version of WV-X1571LN WV-X2571LN WV-X2271L SDK ver, ActiveX ver	Priority Rank Level				Issue (Phenomenon)	Occurrence condition	Correspondence	
		A	B	C	U				
Ver1.00 (4.60.03) July,'20	/	-				First production			
Ver1.11 (4.60.03) Oct.,'20		C				x	-	-	Supports version 1.20 of WV-XAE200W Note: When the installed version of WV-XAE200W is 1.00, the camera displays "1.00 (Version error)". (Displayed in [Ext. software] page> [Software mng.] tab> [Software version])
					x		Live image or recorded images of the stream for AI Privacy guard recording partially have green tint. (Occurrence frequency: Rare)	When either of below changes is made: - Register the camera on a recorder - Change the images capture size of "Stream(1)"	Fixed.
				x		The camera may reboot. (Occurrence frequency: Rare)	-	Fixed.	
-	Ver1.20 (4.60.03) Oct.,'20	-				First production			
Ver1.30 (4.60.04) Nov.,'20	Ver1.30 (4.60.04) Nov.,'20	C				x	-	-	Added the "Control log" tab to the [Ext. software] window in the camera setting.
						x	-	-	Added "Ext. software mode" to the [SD memory card] tab to enable the extension software to use SD memory card.
				x			Cannot upgrade an extension software larger than 25 Mbyte. (Occurrence frequency: High)	-	Expanded the data size of one extension software from 25 Mbyte to 100 Mbyte.
				x			Motion blur appears on moving subjects such as pedestrians.	Under low illuminance	Improved the visibility by reducing motion blur.
				x		The contrast of bright areas on the backlit image is low.	When "Super Dynamic(SD)" is ON.	Improved the image quality to enhance the contrast.	
					x	AI frames appear in red instead of the correct color green. (Occurrence frequency: High)	Under all of the below conditions: - WV-XAE200W is installed on the camera - "With detected object information (AI frame information)" is selected for [Additional information type] - The schedule for WV-XAE200W has been once switched to "Off" in [Operation content], and then switched back to "Detection program 1" or "Detection program 2"	Fixed.	
	Already supported in Ver.1.20				x	The position of a detection frame on the live image may be shifted from the one on the setup menu. (Occurrence frequency: Low)	Under both of the below conditions: - WV-XAE200W is installed on the camera - "90 °" or "270 °" is selected for "Image rotation" in the camera setting	Fixed.	

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Ver1.40 (4.60.04) March,'21	Ver1.40 (4.60.04) March,'21	C				X	-	-	Improved the response to the CGI command "/cgi-bin/get_io2" by adding VMD ratio in percentage.	
						X	-	-	Changed the default setting of [Network Settings] in [Setup]-> [Network] page-> [Network] tab, from "Auto(Advanced)" to "DHCP".	
						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 - Entering "https://" in [Address] enables HTTPS communication.	
						X	-	-	Added the On/Off setting for ONVIF® to the [Network] tab in [Setup]-> [Network] page. (Default : On)	
						X	-	-	Supports application development using Python. *i-PRO CAMERA SDK needs to be version 1.30 or later for using Python.	
						X	-	-	Supports Vieureka Manager which enables the remote management of AI image analysis applications on a camera.	
						X	-	-	Improved the pop-up message when upgrading the extension software by adding "Upgrade target" and "Caution", to prevent accidental deletion by selecting wrong extension software.	
						X	-	-	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	-	-	Supports the change of audio codec IC in a camera. Note: Audio will not work if the camera installed new IC is downgraded to version 1.30 or older.	
							X	-	-	Corrected the RTSP protocol for transmitting H.265 images using ONVIF®.
							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.			

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Ver1.40 (4.60.04) March,'21	Ver1.40 (4.60.04) March,'21	C				x	Opening [Software mng.] tab in the [Ext. software] page displays the following message: {"faultCode":"","4","faultString":"","Invalid Process ID"}.	Under either of below conditions: - While changing the setting of the extension software - When the operation schedule of the extension software is set to "Off"	Improved the visibility of the message as below: "Cannot access because the ext. software is not running. Check if "ON" is selected for the "Operation sched." setting of the ext. software. Check also the running conditions of the ext. software. Note that access may temporarily be disabled during the setting change. In this case, please wait for a while and execute again."		
						x	The audio may not work or the left and right sound may be reversed. (Occurrence frequency: Rare)	When the camera starts at low temperature.	Fixed.		
								x	-	-	Changed the notification message* of frame rate reduction as below: from "Frame thinning display" to "Reduced frame mode"  *Camera displays this message when: - streaming the H.265 / H.264 image - viewing live images in Google Chrome, Microsoft Edge, and Moriza Firefox
								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 ONVIF Interface as below: - Changed the value of "Object ID" in RULE EVENT.
								x	-	-	Corrected the parameter of UtcTime attribute in ONVIF Metadata Analytics Stream.
Ver1.50 (SDK: V1.40) (ActiveX: 4.60.04) June,'21	Ver1.50 (SDK: V1.40) (ActiveX: 4.60.04) June,'21	C				x	-	-	Improved OSD by adding the followings: 1. [Camera title on screen] - Increased the maximum character length from 20 to 40 - Increased the maximum number of lines from 1 to 2 2. [OSD] - [Character size] - Added "50%" and "75%" to the setting values 3. Added a new setting item "[OSD] - [Display style]" to select "Transparent" or "Opaque" for the letter style		
									x	Added SDK version to the [Software mng.] tab in the [Ext. software] page as below: - Displays SDK version of the camera in "SDK version" under "Unique information" - Displays SDK version of the extension software in "Software version" of each extension software information	
								x	-	-	Supports analytics module command for ONVIF®.

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Ver1.50 (SDK: V1.40) (ActiveX: 4.60.04) June,'21	Ver1.50 (SDK: V1.40) (ActiveX: 4.60.04) June,'21	C				X	-	-	Installs the following extension software after upgrading to this version or later: - AI-VMD - AI Privacy Guard *Installation will not be performed when any of extension software applications is already installed in the camera.
						X	-	-	Supports the audio detection function including "AI audio classification".
						X	-	-	Supports the following new extension software: - AI Face Detection - AI People Detection - AI Vehicle Detection
						X	-	-	Added the "Grid display" function to the live image on the camera browser.
						X	-	-	Added the following actions for SD memory card error: - Displays the following alert when a bit rate higher than "8192kbp" 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 "8192kbps", there is a possibility an abnormality will occur in continuity of recorded video. It is recommended to set it to "8192kbps" 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	-	-	Increased the maximum password length from 32 to 128 characters for "Authentication" in the [Network] page-> [Advanced] tab-> "SMTP(E-mail)".
						X	-	-	Improved the visibility of the [Setup] window by adjusting the color of blue letters.
						X	Playing back the image from the log list may show a black image on the camera browser. (Occurrence frequency: Rare)	When satisfying both of the following conditions: - Perform the playback after recovering from a temporary power failure that occurred during SD memory card recording - Select the log when the power failure occurred	Fixed.
						X	-	-	Corrected the camera response to the "GetVideoEncoderConfigurationOptions" command of ONVIF Profile S.

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Ver1.50 (SDK: V1.40) (ActiveX: 4.60.04) June,'21	Ver1.50 (SDK: V1.40) (ActiveX: 4.60.04) June,'21	C			x	The operation of extension software stops after its trial period has expired. (Occurrence frequency: High)	When the followings steps are performed during the trial period: 1. Register the Registration key while the extension software is running 2. Keep the camera working without restarting it	Fixed.
					x	The transmission of target stream for AI Privacy Guard may stop after powering off and on the camera. (Occurrence frequency: Rare)	When satisfying both of the following conditions: - AI-VMD is enabled on the camera - Recording the images of the target stream for AI Privacy Guard on an SD memory card	Fixed.
					x	Monitor output image becomes black. (Occurrence frequency: High)	When the camera is rebooted after changing the [Date/time display] setting from the initial setting at shipment (On) to "Off"	Fixed.
Ver1.51 (SDK: V1.40) (ActiveX: 4.60.04) Nov.,'21	Ver1.51 (SDK: V1.40) (ActiveX: 4.60.04) Nov.,'21	U			x	-	-	Supports the following extension software free of charge: - WV-XAE203 (AI Non-Mask Detection) - WV-XAE207 (AI Occupancy Detection) Note: Registration key is not required after upgrading to this version.
					x	-	-	Changed not to install extension software by firmware upgrade as below: - Previous version (V1.50) : Installs AI-VMD and AI Privacy Guard by firmware upgrade when no extension software is installed on the camera - This version or later : Does not install any extension software by firmware upgrade  Note: Pre-installed extension software at factory on this version or later is AI-VMD and AI People Detection.
					x	-	-	Increased the maximum RAM capacity for extension software as below: Prior to this version: 150MB This version or later: 250MB
Ver1.60 (SDK: V1.40) (ActiveX: 4.60.04) Dec.,'21	Ver1.60 (SDK: V1.40) (ActiveX: 4.60.04) Dec.,'21	C			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"
					x	-	-	Supports Message Queueing Telemetry Transport (MQTT) for alarm notification. MQTT setting has been added to the [Advanced] tab on the [Network] page.
					x	-	-	Supports TLS 1.3. TLS setting has been added to the "HTTPS" window on the [Advanced] tab in the [Network] page.



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Ver1.60 (SDK: V1.40) (ActiveX: 4.60.04) Dec.,'21	Ver1.60 (SDK: V1.40) (ActiveX: 4.60.04) Dec.,'21	C				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 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 contents of the CGI command "get_capability".	
						X	-	-	Improved the visibility of camera setting screen as follows: - Removed unnecessary titles - Switched the position of "Next" and "Back" button	
						X	-	-	Improved to enable image recording on an SD memory card even when "Ext. software mode" is set to "On" on the [SD memory card] tab.	
							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	-	-	Improved the accuracy of time synchronization with NTP server.
				X	The camera keeps changing the image brightness to low and high alternately. (Occurrence frequency: Very rare)	-	Fixed.			
				X	Firmware upgrade may fail. (Occurrence frequency: Rare)	When upgrading the camera(s) connected to WJ-NX100.	Fixed.			

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Ver1.60 (SDK: V1.40) (ActiveX: 4.60.04) Dec.,'21	Ver1.60 (SDK: V1.40) (ActiveX: 4.60.04) Dec.,'21	C				x	-	-	Improved the camera response to the ONVIF command "CreateAnalyticsModules" when the name of installed extension software includes slash (/).
						x	-	-	Improved the behavior when unsupported extension software "AI-VMD/AI People Counting for 360-degree fisheye" or "AI Privacy Guard for 360-degree fisheye" is installed on the camera as below: 1. Displays "Unsupported software" with software version on the [Ext. software] tab 2. Disables the setting window, registration of Registration Key, and operating schedule setting.
					x		The ONVIF command "CreateRules" does not work. (Occurrence frequency: High)	When the [Image rotation] setting is changed after configuring extension software settings using "CreateRules" command.	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.
						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"
						x	The "Display style" setting of OSD unexpectedly changes to "Opaque". (Occurrence frequency: High)	When the camera receives the unsupported CGI command "/cgi-bin/set_camfunc".	Fixed.
				x	-	-	Improved to manage multiple alarms of AI Occupancy Detection (WV-XAE207) by detection area. This enables alarm detection in Area 2 soon after the alarm detection in Area 1. Note: Version 1.20 or later of WV-XAE207 (AI Occupancy Detection) is required.		

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Ver2.00 (SDK: V1.40) (ActiveX: 4.60.30) Apr., '22	Ver2.00 (SDK: V1.40) (ActiveX: 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: <a href="https://i-pro.com/global/en/surveillance/database/i-pro-device-integration/snmp-mib">https://i-pro.com/global/en/surveillance/database/i-pro-device-integration/snmp-mib</a>
Ver2.01 (SDK: V1.50) Aug., '22	Ver2.01 (SDK: V1.50) Aug., '22	C				X	-	-	Changed the color of AI-VMD detection frame at alarm occurrence from blue to red, for the ONVIF connection with Milestone.
						X	-	-	Improved to display the image transmission log on the [Status] tab in the [Maintenance] page. Clicking the "Confirm" button of [Image transmission log] displays logs on a separate window.
						X	-	-	Supports the notification of AI-VMD detection area ID as follows: - Added the [AI-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	-	-	Added the note "Use the latest edition of the software product." to the [Upgrade] tab in the [Maintenance] page and [Software mng.] tab in the [Ext. software] page.
						X	-	-	Supports new Graphical User Interface (GUI) for the camera window. For details, refer to "New functions and addendum (New GUI)" (Control number: 0324) at the following URL for details: <a href="https://i-pro.com/global/en/surveillance/training-support/support/technical-information">https://i-pro.com/global/en/surveillance/training-support/support/technical-information</a>
						X	-	-	Improved the human detection performance for extension software. Note: Extension software needs to be updated to the version released in July, 2022 or later.
						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.



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Ver2.01 (SDK: V1.50) Aug., '22	Ver2.01 (SDK: V1.50) Aug., '22	C				x	-	-	Removed the following functions according to the Internet Explorer (IE) end of support: 1. Live window - "Viewer Software" button  2. [Basic] tab in the [Basic] page - "Status update mode" setting - "Status reception port" setting - "Viewer software (nwc4Ssetup.exe)" setting  3. [Log] tab in the [Basic] menu  4. [Image] tab in the [Image/Audio] page - "Internet mode (over HTTP)" setting  5. [Upgrade] tab in the [Maintenance] page - "Viewer software installation counter"
					x		The 3rd party application on the camera may restart.	-	Fixed.
						x		-	Enhanced security.
						x		-	Improved the human detection accuracy.
Ver2.02 (SDK: V1.50) Sept., '22	Ver2.02 (SDK: V1.50) Sept., '22	C				x	-	-	Changed the company name in the GlobalSign digital certificate installed on the camera to "i-PRO Co., Ltd."
						x	-	-	Changed the frame rate restriction when the extension software AI People Detection is installed on the camera as below.  Previous versions : Restrict the maximum frame rate from 30fps to 15 fps when AI People Detection is installed on the camera.  This version or later : Restrict the maximum frame rate from 30fps to 15fps after the communication starts with i-PRO Active Guard or i-PRO Configuration Tool.  Note: The extension software AI People Detection needs to be updated to version 1.30 or later.
					x		The occupancy detection area information is not included in the HTTP alarm notification from the camera.	-	Fixed.

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Ver2.03 (SDK: V1.50) Dec. '22	Ver2.03 (SDK: V1.50) Dec. '22	B	x			The live image may not appear, as the maximum number of users concurrently accessible to the camera decreases.	When satisfying all of the following conditions: - Version 2.01 or 2.02 - [Internet mode] is set to Off by CGI command - H.264/H.265 transmission	Fixed.
Ver2.04 (SDK: V1.50) Feb. '23	Ver2.04 (SDK: V1.50) Feb. '23	C		x		Noise appears on the image.	A spotlight is captured on the image under low illuminance condition.	Fixed.