

## WV-X4173/X4172/X4573L(M)/S4151/S4551L(M) firmware

WV-X4173 WV-X4172 WV-X4573L(M)	WV-S4151 WV-S4551L(M)	Priority Rank Level				Issue (Phenomenon)	Occurrence condition	Correspondence	
		A	B	C	U				
New models added on Feb. 8, 2021						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)			
Ver1.00 (4.60.03) Jan.,'21	Ver1.00 (4.60.03) Feb.,'21	-				First production.			
Ver1.01 (4.60.03) Jan.,'21	Ver1.01 (4.60.03) Feb.,'21	C			x	The camera may start recording outside of scheduled time when it is booted. (Occurrence frequency: Rare)	When SD recording is scheduled	Fixed.	
Ver1.02 (4.60.03) Jan.,'21	Added on Feb. 8, 2021								
	Ver1.02 (4.60.03) Feb.,'21	C				-	-	Improved the image quality as below: - Image noise on a face under high illuminance condition - Image lag under low illuminance condition - Signal-to-noise ratio when the illuminance changes from normal to low level	
Ver1.02 (4.60.03) Jan.,'21	Ver1.02 (4.60.03) Feb.,'21				x	-	-	Improved the image quality when shooting outside under low illuminance condition.	
	Ver1.02 (4.60.03) Feb.,'21				x	Image distortion may occur in the Single PTZ screen. (Occurrence frequency: Low)	-	Fixed.	
Ver1.40 (4.60.03) Mar.,'21	Ver1.40 (4.60.03) Mar.,'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	-	-	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.	

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			A	B	C	U	Issue (Phenomenon)	Occurrence condition	Correspondence
New models added on Feb. 8, 2021					X		-	-	Corrected the RTSP protocol for transmitting H.265 images using ONVIF®.
Ver1.40 (4.60.03) Mar.,'21	Ver1.40 (4.60.03) Mar.,'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.
					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 Mozilla 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 parameter of UtcTime attribute in ONVIF Metadata Analytics Stream.
Ver1.50 (4.60.03) July,'21	Ver1.50 (4.60.03) July,'21	C				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	-	-	Corrected the camera response to the CGI command "cgi-bin/setdata".
					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.	

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			A	B	C	U				
New models added on Feb. 8, 2021										
Ver1.50 (4.60.03) July,'21	Ver1.50 (4.60.03) July,'21	C			x		-	-	Corrected the camera response to the "GetVideoEncoderConfigurationOptions" command of ONVIF Profile S.	
					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		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 (4.60.03) Sept.,'21	Ver1.51 (4.60.03) Sept.,'21	U				x	-	-	Changed the digital signature of the viewer software (nwc4Ssetup.exe) from "Panasonic Corporation" to "Panasonic i-PRO Sensing Solutions Co., Ltd."	
Ver1.52 (4.60.03) Nov.,'21	Ver1.52 (4.60.03) Nov.,'21	C			x		The camera may display partly pink-tinted image when it is started. (Occurrence frequency: Rare)	-	Fixed.	
Ver1.60 (4.60.03) Dec.,'21	Ver1.60 (4.60.03) 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"	
						x		-	-	Supports SSH File Transfer Protocol (SFTP) for image transmission. SFTP setting has been added to the [Setup] page.
						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.
						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".	

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New models added on Feb. 8, 2021												
Ver1.60 (4.60.03) Dec.,'21	Ver1.60 (4.60.03) Dec.,'21	B				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			
							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	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.				
						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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New models added on Feb. 8, 2021									
Ver1.60 (4.60.03) Dec.,'21	Ver1.60 (4.60.03) Dec.,'21	B		x		Unable to change the [Image capture size] setting of Stream 1 or Stream 2 from Genetec Security Center. (Occurrence frequency: High)	Under the following conditions: - [Stream encoding format] is set to H.265 for Stream 1 - [Stream encoding format] is set to H.264 or H.265 for Stream 2	Fixed.	
Ver2.00 (4.60.30) Apr.,'22	Ver2.00 (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:  <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 (4.60.30) Aug., '22	Ver2.01 (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	-	-	Added the note "Use the latest edition of the software product." to the [Upgrade] tab in the [Maintenance] page.
						x	-	-	Improved the contents of the CGI command "get_capability"
						x	-	-	Enhanced security.