Panasonic

[Application Firmware(Network)]

This document describes WV-SW458(M), SF438 and SF448 firmware upgrade information.

1. Release version： Version 2.60
2. Release Note Reference Number：SW458-029

WV-SW458,SW458M,SF438,SF448 Firmware Release Note

*: ONVIF is a trademark of Onvif, Inc.

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)

WV-SW458 WV-SW458M WV-SF438	WV-SF448	Priority Rank Level					Issue (Phenomenon)	Occurrence condition	Correspondence
			A	B	C	U	**Contents**		
1.03 (4.13.04) Feb.,'13		C				x	While in quad stream mode and VMD is activated in a stream, detecting VMD on the other 3 streams is disabled in 5 sec. （Occurrence frequency : High）	VMD for quad stream is in active.	Fixed not to be disabled the other 3 streams.
						x	While displaying quad PTZ picture, lower-right picture may not be returned to home-position. (Occurrence frequency : Mid)	In a case home positions for all 4 quad pictures were changed from factory default.	Fixed to return home-position properly.
						x	-	-	Improved position of displays were vary while choosing 4-stream picture.
						x	Level of audio volume is displayed "Middle" and unable to switch it to "High". (Occurrence frequency : High)	WV-SW458 and SW458M only.	Fixed to adjust properly.
						x	In 360-deg view mode:quad stream mode (impossible PTZ control), possible C&C (Click and Centering) although PTZ should not be available. (Occurrence frequency : High)	In a case C&C (Click and Centering) in quad stream by the other devices (such as ASM series and recorders).	Fixed not to control PTZ. This will be effective by installing new firmware of ASM series and recorders that will be released round end of March, 2013.
						x	-	-	Added cgi commands to fix mismatching between ASM series and external capability; - Added cgi command to know if internal/external microphone were exist. - Add cgi command to know if electronic shutter function is exist. /cgi-bin/get_capability Get camera capability information
						x	-	-	Fixed camera external information to be unsettled right after starting camera with ASM series.
						x	-	-	Added external information for ASM series; 1) Fixed issue that external information to be Quad PTZ although single picture were sent while presetting. 2) Fixed an issue that external information to be single picture although quad picture were sent while moving between presets.
						x	-	-	Fixed PCC CGI (as follows) to work properly; - To receive valid resolution: /Get?Func=ValidResolution - To receive corresponding image resolution: /Get?Func=ImageResolution
						x	-	-	Fixed an issue on getuid information (/cgi-bin/getuid) after presetting by ASM series did not work properly.
						x	-	-	Fixed an issue that external information cannot be obtained while operating from ASM series through recorder.
1.04 (4.13.04) Apr.,'13		C				x	-	-	Improved visibility of boarder lines at displaying in Quad PTZ and Double Panorama.
						x	-	-	Expanded acceptable file size of firmware for future version.
1.40 (4.13.04) Jul.,'13	-	C				x	-	-	Added "6144kbps" to "Max bit rate (per client)". Note: Resolution for the video must be one of 1920x1080, 1280x960 or 1280x720.
	-					x	-	-	Added playback function for contents in H.264 on SD memory card.
	-					x	-	-	Added pre-alarm recording in JPEG on SD memory card.
	-					x	-	-	Added "Advanced VBR" to the "Transmission priority" of H.264.
	-					x	-	-	Added "Forcible black & white mode", "Forcible Super Dynamic" and "Forcible WDR" to the schedule.
	-					x	-	-	Changed to an optional function of "Face detection outline display" and "Advanced func."effective from newly production units in July, 2013. This is effective from newly production units only and nothing influences existing units (which the function is already usable) even if the firmware version 1.80 (and newer) would be installed.
	-					x	-	-	Added a message of "Time past from the date of manufacture" in the page of Upgrade (Maintenance).
	-					x	-	-	Added "Auto" as choice in language selection.

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WV-SW458 WV-SW458M WV-SF438	WV-SF448	Priority Rank Level					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)	Contents	
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			A	B	C	U	Issue (Phenomenon)	Occurrence condition	Correspondence
1.40 (4.13.04) Jul.,'13	-					x	-	-	Changed the settings about "Time zone" and "Summer time" from NTP (Server) to Basic (Basic).
	-					x	-	-	Added "Area" selection to the "DDNS" setting.
	-					x	-	-	Added "HTTP alarm notification".
	-					x	-	-	Supported SSL Mail Server.
	-					x	-	-	Supported the cgi commands as follows; - /ImageViewer - /Set,Get?Func=ImageTransfer to set alarm notifications and to receive setting values - /Set?Func=Network to add dns parameters - /Set,Get?Func=Upnp to set Upnp and to receive setting values
	-					x	-	-	Supported case of missing "/" (slash) at the end of "HTTP" in path or header "Host:".
	-					x	-	-	Added displaying the "Log" in live and "Permission level of viewing logs" settings.
	-					x	-	-	Changed the label of "List" button on the "Live" page to "List/Play".
	-					x	-	-	Added "Initial display stream on the browser" setting.
	-					x	-	-	Added Internet function.
	-					x	-	-	Added "Maximum file size" and "Pre alarm (recording) duration" to the "H.264 recording".
	-				C	x	-	-	Added cgi commands to receive the capability information as follows from camera: 1. Aspect ration of image sensor 2. Possibility of SSL 3. Advanced VBR (Variable Bit Rate) 4. Bitrates 6144kbps in H.264 5. Playing back recorded video clip 6. ONVIF® 7. Type of license for Key Management System 8. "Maximum file size" in H.264 recording
	-					x	-	-	In cases of use with Panasonic alarm notifications, the following new Panasonic Alarm Notifications will be sent by e-mail; 1. Message after a year: SD memory card is used for long-term. (over 1 years) (*% of the estimated life). 2. After 6 years, the message recommend to replace the card: It is time to replace the SD memory card as it is used long-term. (over * years). Or, it may be a cause of deterioration. 3. Messages when the over-written counter of SD memory card counted every 200. 4. Message when the over-written counter of SD memory card counted every 2000: It is time to replace the SD memory card as usage counter reached its estimated life. Or, it may be a cause of deterioration.
	-					x	-	-	Added new Panasonic Alarm Notifications about life time of SD memory card. To activate, choose ALARM - NOTIFICATION - Panasonic Alarm Notification and turn Diag to be ON. 1. A message will be sent after a year. 2. A message to recommend replacing the SD memory card after 6 years. 3. Messages over-written every 200 times. 4. A message to recommend replacing the SD memory card after over-written 2000 times.

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WV-SW458,SW458M,SF438,SF448 Firmware Release Note

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1. Release version： Version 2.60
2. Release Note Reference Number：SW458-029

May 18, '20
Panasonic i-PRO Sensing Solutions Co., Ltd,

WV-SW458 WV-SW458M WV-SF438	WV-SF448	Priority Rank Level	A	B	C	U	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)					**Contents** *: ONVIF is a trademark of Onvif, Inc.		
1.40 (4.13.04) Jul.,'13	-	C				x	-	-	Added playback function for contents in H.264 on SD memory card. Restrictions: - Unable to attach JPEG image on mail notification. - Max. bitrates for H.264 recording onto SD memory card is 2048Kbps. - Number of connectable users may be decreased than version 1.60 (or older). - Max. bitrates per client (such as viewing live picture) is 2048Kbps. - Transmission priority of streaming for recording, cannot be set to "Best Effort". - Refresh interval for recording cannot be set to "1s" or longer.
	-					x	-	-	Made time adjustment function would not work if current time were shifted within 5 sec. than the time on NTP server to avoid adjusting frequently that might effect recording.
	-					x	-	-	Improved to allow shutter can be released at 1/100 or faster even if setting SD memory card were in use and setting "Indoor scene" at "Light control mode".
	-					x	-	-	Eliminated blind spot at around the border of double-panorama.
	-					x	-	-	Improved response time for HTTPS access.
	-					x	-	-	Supported the combination of Windows 8 and Internet Explorer 10.
	-					x	-	-	Improved that Authentication error took some time while connecting with Digest Authentication.
	-					x	Schedule recording may not be started even if "Use" were selected at setting of SD Memory Card.	Switching it to "Use" within scheduled period.	Fixed to start recording, properly.
	-				x		Port number cannot be selected in grey color.	When "H.264(1)/H.264(2)" is selected at "Recording format" and either "Unicast port (MANUAL)" or "Multicast" is selected.	Fixed port number can be selected, properly.
	-					x	Changing Frame rate may not become effective.	Changing frame rate while "H.264(1)/H.264(2)" is selected at "Recording format".	Fixed to become effective, properly.
	-					x	-	-	Supported ONVIF® when "1Monitor" is selected at "Image capture mode type" and "Fisheye" is selected at "Image capture mode".
	Ver1.50 (4.17.01) Feb.'14					x	-	-	Changed archive file format for installation file from executable file to cabinet file that is to install ActiveX upon accessing browser.
	1.11 (4.13.04) Jul.,'13					x	Unable to access the camera.	In a case UPnP is set to "ON".	Fixed to access the camera, properly.
					x		FTP image transmission does not work.	In a case, "SD memory card" is set in "Not use" and "Alarm trigger" is set in either "Alarm input" or "Manual".	Fixed it works, properly.
					x		First alarm recording may not work after restarting the camera.	In a case, setting "Recording format" for SD memory card were "H.264(2), "Save trigger" were "Alarm input" and "Pre alarm" were "Use".	Fixed to record, properly.
					x		Camera may restart when it is sending SSL e-mail.	In a case, settings for port were incorrect.	Fixed.
					x		The buttons of Initial position setup（Panorama/Double Panorama/Fisheye) on browser does not work, properly.	Internet Explorer (IE) 8 and 9.	Fixed.
1.42 (4.13.04) Jul.,'13	1.11 (4.13.04) Jul.,'13	C				x	Transmission may be stopped by sending the CGI (get_io) to obtain the status of alarm terminals and VMD.	In a case, sending the CGI (get_io) to obtain the status of Alarm terminals and VMD repeatedly.	Fixed not to stop transmission.
	-					x	Recording will not be started after restarting camera.	When turn power off once and on while manual recording in 20MB.	Fixed to retain recording, properly.
	-					x	Playback on WJ-ND400 may be collapse.	While connecting with WJ-ND400 and recording H.264 onto SD memory card as backup.	Fixed.

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WV-SW458 WV-SW458M WV-SF438	WV-SF448	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

Added on Sept. 10, 2013 upgrade/downgrade the firmware for **WV-SW458/SW458M/SF438 only.**

1. For the cameras prior to version 1.04, upgrade the firmware to ver1.04 first, then upgrade to ver 1.40 (or newer).
   Please refer to the web site as follow for more details;
      http://security.panasonic.com/pss/security/library/download/Products/2step_vup_info/2step_vup_info2.html
2. You can install any firmware version for the products manufactured prior to July 2013.
   But only firmware version 1.40 and newer can be installed for the products manufactured in July 2013 and after (Serial Number "MGxxxx", "MHxxxx", "MIxxxx" and so on).

WV-SW458	WV-SF448	A	B	C	U	Issue (Phenomenon)	Occurrence condition	Correspondence
	-				x	-	-	Language of E-mail notification in Notification tab is selected to either Japanese (if language selection were Japanese) or English (if language selection were non Japanese) automatically.
	-				x	-	-	Added Portuguese as a choice at [Select language] pull-down menu.
	-				x	-	-	Improved video not to be jumpy at high bitrate.
Ver1.44 (4.17.01) Nov.'13	Ver1.50 (4.17.01) Feb.'14			C	x	Time difference between on-screen and NTP of RTCP was bigger and bigger.	-	Fixed.
					x	Playback screen of System log may be closed and backed to live picture. (Occurrence frequency: High)	While using under Internet Explorer (IE) 10.	Fixed.
	-				x	Camera moved into Safe mode. (Occurrence frequency: High)	In a case upgrading the driver firmware after registering ONVIF®.	~~Fixed to start up, properly.~~
					x	The System log may showed incorrect reasons for errors at "Not found Panasonic alarm protocol notification".	-	Fixed.
	Ver1.50 (4.17.01) Feb.'14				x	- Deleted on Feb.13, 2014	-	Improved vertical lines not to be shown while using slow shutter speed.
					x	Camera may restart, unexpectedly. (Occurrence frequency: High)	In a case, failed to send Panasonic Alarm Notification repeatedly.	Fixed not to restart, unexpectedly.
					x	While playing back H.264 recorded video on SD memory card, returned "500 Internal Server Error" upon receiving TEARDOWN (request to disconnect session) from client. (Occurrence frequency: High)	Recording compression format is set in H.264(1)/H.264(2).	Fixed to disconnect session, properly.
Ver1.45 (4.17.01) Nov.'13	Ver1.12 (4.13.04) Nov.'13			C		Streaming may stop, unexpectedly. (Occurrence frequency: Low)	In a case, setting to backup video in JPEG onto SD memory card. Note: It does not always occur under the condition as above but also it might occur under another condition	Fixed not to stop streaming.
Ver1.50 (4.17.01) Feb.'14	Ver1.50 (4.17.01) Feb.'14			C	x	- Added on Jan. 10, 2014	-	Added new image capture modes; (1) 2M Double Panorama + Fisheye (2) 1M Double Panorama + Fisheye (3) Fisheye + Quad PTZ (4) 2M Panorama + Fisheye (5) 1M Panorama + Fisheye
					x	-	-	Added adjusting tilting angle to adjust blind angle in Double Panorama mode.
					x	-	-	Added Audio Output Duration setting so that various durations of audio transmission (such as 1/2/3/5/10/20/30/60min) can be set (instead of 5-min fixed).
					x	-	-	Added FTP transmitting Pre alarm picture.

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Ver1.50 (4.17.01) Feb.'14	Ver1.50 (4.17.01) Feb.'14	C				x	-	-	Added hyper-link to the "Support Information on network camera (WV Series)" in the page of firmware upgrade.
						x	-	-	Added "Alarm deactivation time" setting so that various deactivation time (such as 5s/10s/30s/1min/3min/5min/10min) can be set (instead of 5-sec fixed).
						x	-	-	Add a function to make muting audio on privacy mask. Note: Factory default setting is "Mute=ON"
						x	-	-	Made possible to choose "BASELINE" or "HIGH" as H.264 Profile by CGI command.
					x		An object may be defocused in unusual way. (Occurrence frequency: Low)	In a case, the subject were a certain specific brightness.	Improved to become the natural image.
						x	-	-	Improved outputting frame rate while setting Max. bit rate were lower value in Advance Variable Bit Rate (AVBR).
						x	-	-	E-mail notification can attach an image when recording video is in use.
						x	-	-	In ONVIF®, supported as follows; (1) Video Source Mode (Image Capture Mode) command. (2) OSD command. (3) Standard event. (4) Audio Back Channel over HTTP
					x		By CGI command, unable to obtain the desired MP4 file(s) only but also all associated MP4 files will be obtained. (Occurrence frequency: High)	In a case, obtaining the desired MP4 file(s) by CGI command.	Fixed only desired MP4 file(s) to be obtained.
						x	-	-	Changed the factory default of max. bit rate to be an appropriate value at VGA. （From 4096kbps to 1536kbps）
					x		Missing buttons to select H.264 Stream. (Occurrence frequency: High)	When the "Image capture mode" type is 2 Monitor.	Fixed buttons to be displayed to select H.264 stream.
						x	-	-	CGI command, Get camera capability information (/cgi-bin/get_capability), returns resolution per image capture mode.
					x		Block-noise may appear. (Occurrence frequency: Mid)	When the image contains both complicated and simplified areas.	Improved so that a block-noise became hard to occur.
						x	-	-	Improved I-frame to be added when re-connection is made while in transmitting multicast.
						x	-	-	Improved the returning of CGI command (/cgi-bin/find_recording_seqs) would contain "Content-Length".
					x		Frame rate may be decreased. (Occurrence frequency: Low)	When many clients are accessing in Quad stream.	Fixed not to decrease frame rate.
					x		Picture in JPEG may be solid black. (Occurrence frequency: Low)	When transmitting Double Panorama or Panorama in JPEG.	Fixed the picture not to be solid black.
Ver1.51 (4.17.01) Feb.'14	Ver1.51 (4.17.01) Feb.'14	C				x	-	-	Added "IMAGE2SELECT," and "IMAGE2RATIO" onto CGI command "/cgi-bin/setdata, /cgi-bin/getdata". It improved to obtain the information of resolution and aspect ration those can support in H.264 Stream1, Stream2 of 2 monitor mode.
					x		Color of the picture looks incorrect.	All products manufactured by January, 2013 (Serial numbers MAxxxxxx and older).	Fixed.

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			A	B	C	U			
Ver1.52 (4.17.01) Apr.'14	Ver1.52 (4.17.01) Apr.'14	U				x	-	-	Added a recommendation for enabling Compatible View setting on IE10 and IE11 if it were NOT enabled.
						x	-	-	Added a hyper-link for the page of Support Information on title bar at the top of the Live picture.
Ver1.53 (4.17.01) June'14	Ver1.53 (4.17.01) June'14	C			x		SD memory card error indicator may light red, unexpectedly. (Occurrence frequency: Low)	Power ON if SD Memory Card were in the slot.	Fixed.
Ver1.54 (4.17.01) July,'14	Ver1.54 (4.17.01) July,'14	U				x	-	-	Added a function to accept network connection while selecting 4 Stream mode and Internet mode on BB-HNP17.
Ver1.55 (4.17.01) Aug.,'14	Ver1.55 (4.17.01) Aug.,'14	U				x	-	-	Supported displaying H.264 on Safari for Macintosh.
						x	-	-	Supported Network Microphone, Model WV-SMR10.
						x	-	-	Improved displays even if the Compatible View Setting were in OFF.
-						x	-	-	Added "Privacy Mode" could be scheduled.
-						x	-	-	Added Privacy Mode control to the "Live" page
-						x	-	-	Improved displaying "Live" and changing configurations in the setup menu could be done even if it were in Privacy Mode.
-	Ver1.56 (4.17.01) Oct.,'14	U				x	-	-	Changed to Mic select operations when operating in Privacy Mode. The microphone used when Privacy Mode is operated by the Privacy button or schedule is not dependent on the setting for "Mic Select" of "Privacy action on alarm".
1.60 (4.27.02) Nov., '14	1.60 (4.27.02) Nov., '14	C				x	-	-	Supported displaying H.264/JPEG images on Safari (v5.1.7), Firefox (v32.0.3) and Google Chrome (v38.0.2125). Notes: there are some restrictions as follows; 1. To display H.264 images, required installing QuickTime plug-in (v7.7.6). 2. H.264 supports Unicast only and delays approx. 3 seconds. 3. Audio is available only in H.264 (is NOT available in JPEG) and supports G.711 only. Furthermore, it supports only "Audio reception" (receive audio from camera). 4. Full screen opens new window, So, it must be within the maximum number of concurrent access user.
						x	-	-	Improved displaying live picture even if the setting of the Compatibility View on Internet Explorer11 were "Off".
						x	-	-	For SD memory card, added warning output, usage information and error information. Notes: 1. The model number of SD memory card is displayed according to the information retrieved from SD memory card. 2. The "Total use time" is Not updated real-time but is updated every 1-hour.
						x	-	-	Added "SD memory card warning output" at the "Alarm output terminal".
						x	-	-	Added choices of "Upper center" and "Lower center" to the "Position" setting of "OSD".
						x	-	-	Supported time and camera title can be displayed by separation. Note: it must be sent a cgi command.

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			A	B	C	U	Issue (Phenomenon)	Occurrence condition	Correspondence
1.60 (4.27.02) Nov., '14	1.60 (4.27.02) Nov., '14	C				x	-	-	Changed indication order of ONVIF® Profile when obtaining them; Previous: Ascending order of resolution in JPEG New: Descending order of resolution in H.264
						x	-	-	Reviewed and updated the Time Zone values
						x	-	-	Supported ONVIF® Profile G.
					x		Unable to record pre alarm recording. (Occurrence frequency: High)	In a case, configure the settings as follows; - Maximum image size: 20MB - Save trigger: FTP error	Fixed.
					x		Stopped recording and unable to start manual recording any more.	In a case, changing image capture mode while recording H.264 into SD memory card.	Fixed.
-					x		Mute during privacy mode, did not work.	Right after start up the camera only.	Fixed.
-					x		The text of "Privacy mode" would not be displayed.	After restarting the camera.	Fixed.
1.60 (4.27.02) Nov., '14					x		Unable to download the Alarm log. (Occurrence frequency: High)	When "Not Use" is selected for SD memory card and either "H.264(1)" or "H.264(2)" (in grey) is selected for recording compression.	Fixed.
					x		By detecting interruption of a camera connection for 2 minutes and leaving message "Connection has been disconnected. Please confirm connection." more than 2 minutes, the message on another camera would be sent every 30 seconds.	In a case, two or more cameras were registered and selected multi-screen.	Fixed.
					x		In second alarm, FTP alarm notification sent post-alarm images without pre-alarm JPEG images. (Occurrence frequency: High)	In a case, the followings were set; - "Not Use" for SD memory card - JPEG recording (in grey). - Alarm (in grey)	Fixed.
					x		In RTP over RTSP over HTTP, no replied to GET connection.	In a case, Method of POST connection became BASE64 and divided packets.	Fixed.
					x		GET Connection was disconnected before replying RTSP Error.	In a case, sending RTSP Method while disconnecting POST in RTP over RTSP over HTTP every time.	Fixed.
					x		Replied RTSP with a header of Speed. (Occurrence frequency: High)	When specifying "Rate-Control: no".	Fixed.
						x	-	-	In information range for GetRecordingOptions command, the responses of CompatibleSources was vary depends on job generation state.
					x		The following issues occurred; 1. E-mail notification: No images attached 2. FTP Periodic image transmission: Not sent (Occurrence frequency: High)	In a case; - "Not Use" is selected for SD memory card - either "H.264(1)" or "H.264(2)" (in gray) is selected for recording compression. - No configuration settings related with video after restarting.	Fixed.
					x		Added unnecessary "0" at the end of POST connection of RTP over RTSP over HTTP.	-	Fixed.
					x		Replied "500 Internal Server Error" by specifying a time that was out of recording to play.	While playing back on SD memory card.	Fixed to replay "404 Not Found」".

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1.60 (4.27.02) Nov., '14	1.60 (4.27.02) Nov., '14			C	x	Unable to switch FTP Periodic image transmission to ON. (Occurrence frequency: High)	In a case, configure settings; - "Not Use" is selected for SD memory card. - either "H.264(1)〉" or "H.264(2)" (in gray) is selected for recording format.	Fixed.
					x	FTP periodic image transmission did not send correct intervals; Example: 54-55 images per 60 sec although defining 1 image per 1 sec. (Occurrence frequency: High)	-	Fixed.
					x	The response by a cgi command as follow contains two "200 OK". /cgi-bin/terminal_default?input1=no&input2=no&input3=no （Occurrence frequency : High）	-	Deleted the redundant "HTTP/1.0 200 OK" from the response.
1.61 (4.27.02) Feb., '15	1.61 (4.27.02) Feb., '15			C	x	Downloading H.264 images may fail.	From playing back recorded images on SD memory card.	Fixed.
1.62 (4.27.02) Apr., '15	1.62 (4.27.02) Apr., '15			C	x	-	-	Supported downloading H.264 recorded data on SD memory card from WV-ASM200 that configured maximum file size to be 20MB. Note: Required upgrading firmware on WV-ASM200.
					x	Unable to download recorded data from SD memory card.	-	Fixed.
1.64 (4.27.02) Aug., '15	Added Sept., '15 ⇒ 1.64 (4.27.02) Aug., '15			C	x	Schedule recording may stop, will not resume by turning POWER OFF and ON.	While scheduled recording H.264 onto SD memory card.	Fixed.
					x	Stop recording due to failed to overwrite H.264 recording data.	Scheduled H.264 recording onto SD memory card.	Fixed.
1.65 (4.27.02) Sept., '15	1.65 (4.27.02) Sept., '15			C	x	The configuration settings were written onto flash memory every time receiving the CGI command from WJ-NV200 even if nothing changed.	-	Fixed.
1.66 (4.27.02) Oct., '15	1.66 (4.27.02) Oct., '15				U x	-	-	Improved reliability of the product, which had been used in combination with the WJ−NV200.
1.90 (4.27.02) Feb., '16	1.90 (4.27.02) Feb., '16				U x	-	Corrected on Mar. 2, 2016	Added a notice for each screen that alarm notification will not be appeared while displaying VMD ~~and audio detection~~.
					x	-	-	Regarding the header (WS-Addressing) which is attached with ONVIF® commands, supported WS-Addressing in August 2004, used to bethe one in August 2005 only.

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[Application Firmware(Network)]

WV-SW458,SW458M,SF438,SF448 Firmware Release Note

This document describes WV-SW458(M), SF438 and SF448 firmware upgrade information.

1. Release version： Version 2.60
2. Release Note Reference Number：SW458-029

WV-SW458 WV-SW458M WV-SF438	WV-SF448	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
2.40 (4.27.02) Apr., '16	2.00 (4.27.02) Apr., '16			C		x	False alarm may occur at power off and on.	When using the Terminal 1 and Terminal 2 for alarm input.	Fixed.
	2.40 (4.27.02) Apr., '16			U		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.
2.41 (4.27.02) May, '16	2.41 (4.27.02) May, '16			C		x	The bit rate of the stream 2, 3 and 4 were from 2 to 4 times than each setting value. (Occurrence frequency: High)	After starting up under the configuration of Quad stream / Advanced VBR.	Fixed.
2.42 (4.27.02) June, '16	-			C		x	Backup of recorded picture (in JPEG) from SD memory card to WJ-ND400 may be solid black.	-	Fixed.
2.43 (4.27.02) June, '16	2.43 (4.27.02) June, '16			C		x	Backup of recorded picture (in JPEG) from SD memory card to WJ-ND400 may be solid black.	-	Fixed.
						x	Recording may be stopped.	While "2MB" is selected at "Maximum file size".	Fixed.
						x	Unable to download video by "500 Internal Server Error".	When downloading video from browser during overwrite deletion.	Fixed.
						x	H.264 video within the latest log on SD memory card may not be able to download by web browser.	-	Fixed.
						x	Video on SD memory card may not be able to playback become a solid black.	Depending on the subjects.	Fixed.
						x	A log of exceeding 1 hour may be created.	By downloading video while recording.	Fixed.
						x	Recording resumption may take 3 minutes or more after starting up.	While recording onto SD memory card.	Fixed.
-	2.44 (4.27.02) Oct., '16			C		x	Changed audio output level, unexpectedly, once activating privacy zone by GUI.	-	Fixed.
2.45 (4.27.02) Feb., '17	-			C		x	Initial position setting may be shifted after restarting the camera.	In a case settings were copied from another camera by Panasonic Security System Configuration Tool.	Fixed.
2.46 (4.27.02) Jun., '17	Added on May 23, '17 2.46 (4.27.02) Jun., '17			C		x	Recording on SD memory card may stop when an error occurred at writing.	When selecting ~~"20MB" at "Maximum file size" in~~ the "H.264 recording". Corrected on June 26, 2017	Fixed.
						x	-	-	Added a choice, Reboot, at Schedule 5 in the schedule settings.

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[Application Firmware(Network)]

WV-SW458,SW458M,SF438,SF448 Firmware Release Note

This document describes WV-SW458(M), SF438 and SF448 firmware upgrade information.

1. Release version： Version 2.60
2. Release Note Reference Number：SW458-029

WV-SW458 WV-SW458M WV-SF438	WV-SF448	Priority Rank Level					Contents		
			A	B	C	U	Issue (Phenomenon)	Occurrence condition	Correspondence
2.47 (4.27.02) Jul., '17	2.47 (4.27.02) Jul., '17	C				x	-	-	Changed company name to the new company name in the plug-in (ActiveX) software.
						x	-	-	Updated the URL of the support WEB site displayed on the screen.
					x		Screen may show solid black.	-	Fixed. Improved fail-safe processing at the occurrence of abnormality of image encoding processing unit so that to avoid displaying solid black.
					x		WV-SW458 unable to transmit more than 4Mbps.	On ONVIF®.	Fixed.
2.48 (4.27.02) Feb., '18	2.48 (4.27.02) Feb., '18	C				x	-	-	Improved security.
2.50 (4.27.02) June, '18	2.50 (4.27.02) 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		Streaming may stop at camera startup while setting in multicast streaming.	-	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.
2.60 (4.27.08) May, '20	2.60 (4.27.08) May, '20	U				x	-	-	Changed the company name in the plug-in software Active X to the new one.

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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