

**About security enhancement of network camera, recorder, and video monitoring software**

When upgrading the network camera to the firmware after June 2018 release, we will inform you about contents that need attention about the combination between versions of network disk recorder and video management software.

**1 . Password Policy**

Change of condition on character combination for the login user password

Present	After Change
Use at least 2 types of characters among alphabetical characters, numeric characters and symbols	Use at least 3 types of characters among alphabetic characters (upper case), alphabetic characters (lower case), numeric characters and symbols

**2 . User authentication method**

Change the factory default setting of the user authentication method

Present	After Change
Digest or Basic	Digest

Depending on the type of system equipment such as Network disk recorder, there may be cases where you cannot connect, so please follow the instructions as follow.

**The password will NOT be changed even if the firmware of the existing device will be upgraded. The same password before the upgrade will be kept.  
It will be applied when changing the password after upgrading.**

System device	Version	Network camera (New firmware version) *1	Network camera (Old firmware version) *1
WJ-NX400K, NX300 Series and NX200 Series	V2.20 or later	Connectable	Connectable
	Before V2.20	NOT Connectable *4 or *5	Connectable *3
WV-ASM300	V1.41 or later	Connectable	Connectable
	Before V1.41	NOT Connectable *4 or *5	Connectable *3
WJ-NV300 and NV200 Series	-	Connectable *2 *3	Connectable *2 *3
WJ-ND400, ND300 and ND200 series	-	NOT Connectable *3 *5	Connectable *3
WV-ASM200, ASM970, ASC970 and ASR500	-	NOT Connectable *3 *5	Connectable *3
WJ-GXD400	-	NOT Connectable *3 *5	Connectable *3
BB-HNP17	-	NOT Connectable *3 *5	Connectable *3
Panasonic Security Viewer	Ver3.4 or later	Connectable	Connectable
	Before Ver3.4	NOT Connectable *4 or *5	Connectable *3
Panasonic Security System Configuration Tool	Ver6.6 or later	Connectable	Connectable
	Before Ver6.6	NOT Connectable *4 or *5	Connectable *3

\*1:For the version of the camera, refer to the corresponding version list as follow.

\*2:When connecting to these devices, the network camera automatically recognizes the recorder at the time of administrator registration and connects through "Basic" authentication.

\*3:Because it becomes a connection with basic authentication, please be careful enough for unauthorized access etc. by a third party when using by way of the Internet etc.

\*4: To connect, update the firmware of the system device.

\*5: To connect, change the camera setting (Authorized method: "Digest" to "Digest or Basic")

\*Digest authentication: Authentication method that hashes the entered "user name" "password" by hashing with a hash function called MD5, making it difficult for eavesdropping or falsification to be made from "basic authentication" and transmitting it.

## Firmware Version for Security Enhancement by Model

A: Digest Authentication

B: New policy (Required 3-type of Characters among 4-type)

Network Cameras (i-pro EXTREME series)			Firmware Version for A	Firmware Version for B
<i>Indoor</i>	<i>Box</i>	WV-S1111	V1.90	V1.90
		WV-S1112	V1.90	V1.90
		WV-S1131	V1.90	V1.90
		WV-S1132	V1.90	V1.90
	<i>Dome</i>	WV-S2110	V1.90	V1.90
		WV-S2111L	V1.90	V1.90
		WV-S2130	V1.90	V1.90
		WV-S2131	V1.90	V1.90
		WV-S2131L	V1.90	V1.90
		WV-S2211L	V1.90	V1.90
		WV-S2231L	V1.90	V1.90
	<i>PTZ</i>	WV-S6110	V1.90	V1.90
		WV-S6111	V1.90	V1.90
		WV-S6130	V1.90	V1.90
		WV-S6131	V1.90	V1.90
	<i>360-degree</i>	WV-S4150	V1.20	V1.20
WV-X4170		V1.50	V1.50	
WV-X4171		V1.50	V1.50	
<i>Outdoor</i>	<i>Box</i>	WV-S1511LN	V1.90	V1.90
		WV-S1531LN	V1.90	V1.90
		WV-S1531LTN	V1.90	V1.90
	<i>Dome</i>	WV-S2511LN	V1.90	V1.90
		WV-S2531LN	V1.90	V1.90
		WV-S2531LTN	V1.90	V1.90
	<i>PTZ</i>	WV-S6530N	V1.90	V1.90
		WV-S6530NS	V1.90	V1.90
		WV-X6511N	V1.90	V1.90
		WV-X6531N	V1.90	V1.90
		WV-X6531NS	V1.90	V1.90
	<i>360-degree</i>	WV-S4550L	V1.20	V1.20
		WV-S4550LM	V1.20	V1.20
		WV-X4571L	V1.50	V1.50
		WV-X4571LM	V1.50	V1.50
	Network Cameras (Current Models)			Firmware Version for A
<i>Indoor</i>	<i>Box</i>	WV-SP102	V2.50	V2.50
		WV-SP105	V2.50	V2.50
		WV-SPN310	V2.60	V2.60
		WV-SPN310A	V2.60	V2.60
		WV-SPN311	V2.60	V2.60
		WV-SPN310V	V2.60	V2.60
		WV-SPN311A	V2.60	V2.60
		WV-SPN531	V2.60	V2.60
		WV-SPN531A	V2.60	V2.60
		WV-SPN611	V2.60	V2.60
		WV-SPN631	V2.60	V2.60
		<i>Dome</i>	WV-SFN110	V2.60
	WV-SFN130		V2.60	V2.60
	WV-SF132		V2.50	V2.50
	WV-SFN310		V2.60	V2.60

Network Cameras (Current Models)			Firmware Version for A	Firmware Version for B
Indoor	Dome	WV-SFN310A	V2.60	V2.60
		WV-SFN311	V2.60	V2.60
		WV-SFN311A	V2.60	V2.60
		WV-SFN311L	V2.60	V2.60
		WV-SFN311L/S	V2.60	V2.60
		WV-SFN531	V2.60	V2.60
		WV-SFN611L	V2.60	V2.60
		WV-SFN631L	V2.60	V2.60
	PTZ	WV-SC385	V2.50	V2.50
		WV-SC387A	V2.50	V2.50
WV-SC588A		V2.50	V2.50	
360-degree	WV-SF438	V2.50	V2.50	
	WV-SFN480	V2.60	V2.60	
Outdoor	Box	WV-SPV781L	V2.60	V2.60
	Dome	WV-SFV110	V2.60	V2.60
		WV-SFV110M	V2.60	V2.60
		WV-SFV130	V2.60	V2.60
		WV-SFV130M	V2.60	V2.60
		WV-SFV781L	V2.60	V2.60
		WV-SW155	V2.50	V2.50
		WV-SFV531	V2.60	V2.60
		WV-SFV631L	V2.60	V2.60
		WV-SFV631LT	V2.60	V2.60
	PTZ	WV-SW395A	V2.50	V2.50
		WV-SW395	V2.50	V2.50
		WV-SW397B	V2.50	V2.50
		WV-SW397N	V2.50	V2.50
		WV-SW598A	V2.50	V2.50
	Aero PTZ	WV-SUD638	V2.60	V2.60
		WV-SUD638-H	V2.60	V2.60
		WV-SUD638-T	V2.60	V2.60
	360-degree	WV-SW458	V2.50	V2.50
		WV-SFV481	V2.60	V2.60
<b>Network Cameras</b> <b>(Major Discontinued Models: Please refer to the</b> <b>other discontinued models at web site as follow)</b> <a href="https://security.panasonic.com/library/products_dc/">https://security.panasonic.com/library/products_dc/</a>			<b>Firmware Version for A</b>	<b>Firmware Version for B</b>
Indoor	Box	WV-SPN311A	V2.60	V2.60
		WV-SFN311A	V2.60	V2.60
		WV-SFN611L	V2.60	V2.60
		WV-SFN310	V2.60	V2.60
		WV-SFN311	V2.60	V2.60
Outdoor	Box	WV-SPW310	V2.60	V2.60
		WV-SPW311AL	V2.60	V2.60
		WV-SPW611	V2.60	V2.60
		WV-SPW611L	V2.60	V2.60
		WV-SPW631L	V2.60	V2.60
		WV-SPW631LT	V2.60	V2.60
	Dome	WV-SFV311A	V2.60	V2.60
		WV-SFV311	V2.60	V2.60
WV-SFV611L	V2.60	V2.60		
<b>Cameras</b> <b>(No plans to do other than the following cameras)</b>			<b>Firmware Version for A</b>	<b>Firmware Version for B</b>
Indoor		BL-VP101	V2.50	V2.50
		BL-VP104	V2.50	V2.50
		BL-VT164	V2.50	V2.50

Cameras (No plans to do other than the following cameras)		Firmware Version for A	Firmware Version for B
<i>Indoor</i>	BL-VP104W	V2.50	V2.50
	BL-VT164W	V2.50	V2.50
	WV-ST165	V2.50	V2.50
	WV-ST162	V2.50	V2.50
<i>Outdoor</i>	WV-SW172	V2.50	V2.50
	WV-SW174W	V2.50	V2.50
	WV-SW175	V2.50	V2.50
Network Video Encoders		Firmware Version for A	Firmware Version for B
<i>Network Video Encoder</i>	WJ-GXE100	V2.50	V2.50
	WJ-GXE500	V2.50 <span style="border: 1px solid red; padding: 0 2px;">Updated Aug., '18</span>	V2.50
Network Disk Recorders and Software		Firmware Version for A	Firmware Version for B
<i>Network Disk Recorder</i>	WJ-NX400K	V2.20	V2.40
	WJ-NX300 Series		
	WJ-NX200 Series		
<i>Video Surveillance Software</i>	WV-ASM300	V1.41 <span style="border: 1px solid red; padding: 0 2px;">Updated Nov., '18</span>	V1.41
<i>Application software for Smartphone</i>	Panasonic Security Viewer	V3.4	-

## Non-applicable Models

Network Disk Recorder Software Network Video Decoder		Firmware
<i>Network Disk Recorder</i>	WJ-NV300 Series	*1
	WJ-NV200 Series	
	WJ-ND400 Series	
	WJ-ND300 Series	
	WJ-ND200 Series	
<i>Video Surveillance Software</i>	WV-ASM200	*2
<i>Network Video Decoder</i>	WJ-GXD400	
<i>Network Camera Recorder with Viewer Software</i>	BB-HNP17	

\*1: The network camera will automatically determine the recorder when registering as an administrator user and connect with "Basic" authentication when connecting to these devices.

\*2: Change the setting of the authentication method of the network camera from "Digest" to "Digest or Basic" beforehand with PC (browser) prior to use when connecting to these devices.