

New functions and addendum

- This document contains descriptions of how to set the new functions and their restrictions. It is recommended to read them while referring to the Operating Instructions provided with this product together.
- Depending on the model used, the screens shown in the explanations may differ to the actual camera screens.
- The model number is abbreviated in some descriptions in this manual.
- This document is for the following models.
WV-U2542L, WV-U2540L, WV-U2532L, WV-U2530L, WV-U1542L, WV-U1532L, WV-U2142L, WV-U2140L, WV-U2132L, WV-U2130L, WV-U1142, WV-U1132, WV-U1130

Due to software upgrade, the following functions have been added and changed to this product.

- **Firmware Ver.1.00 for WV-U2540L, WV-U2530L, WV-U2140L, WV-U2130L**
Ver.1.02 except for WV-U2540L, WV-U2530L, WV-U2140L, WV-U2130L

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- **Firmware Ver.1.10**

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1. Change of [Viewer software (nwc5Ssetup.exe)] - [Smoother live video display on the browser (buffering)] default setting (Operating Instructions “Configure the basic settings of the camera” [Basic]- “Configure the basic settings” [Basic])

Change of [Viewer software (nwc5Ssetup.exe)] - [Smoother live video display on the browser (buffering)] default setting.

Viewer software (nwc5Ssetup.exe)	Automatic installation	<input type="radio"/> On	<input checked="" type="radio"/> Off	
	Drawing method	<input type="radio"/> GDI	<input checked="" type="radio"/> Direct2D	
	Decoding Options	<input type="radio"/> Software	<input checked="" type="radio"/> Hardware	Confirm
	Smoother live video display on the browser (buffering)	<input checked="" type="radio"/> On	<input type="radio"/> Off	
	Frame Skip Options (When PC is Heavy Processing Load)	<input type="radio"/> Auto	<input checked="" type="radio"/> Manual	
	Contrast enhancement (RGB:0 to 255)	<input checked="" type="radio"/> On	<input type="radio"/> Off	
	Download	Execute		

[Viewer software (nwc5Ssetup.exe)] - [Smoother live video display on the browser (buffering)]

Perform settings to display camera images on the viewer software.

- **On:** Images are temporarily stored on the computer and are displayed smoother.
- **Off:** Images are displayed in real-time and are not stored on the computer.
- **Default:** Off

Note

- If the image is not displayed smoothly, set to “On”.

2. Change of [Internet mode] default setting

(Operating Instructions “Configure the settings relating to images” [Image]-
“Configure the settings relating to Stream” [Image])

Change of [Internet mode] default setting.

Stream(1)	
Stream transmission	<input type="radio"/> On <input checked="" type="radio"/> Off
Internet mode	<input type="radio"/> On <input checked="" type="radio"/> Off

[Internet mode]

Select “On” when transmitting H.265 images via the Internet. It is possible to transmit stream without changing the broadband router settings configured for JPEG image transmission.

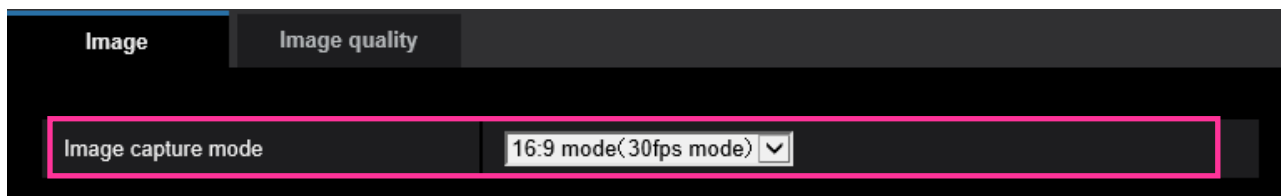
- **On:** H.265 images will be transmitted using the HTTP port. Refer to [HTTP port] for further information about the HTTP port number settings.
- **Off:** H.265 images will be transmitted using the UDP port.
- **Default:** On

Note

- When “On” is selected, only “Unicast port (AUTO)” will be available for “Transmission type”.
- When “On” is selected, it may take time to start displaying stream images.
- When “On” is selected, stream images may not be displayed depending on the number of the concurrent access user, etc.
- When “On” is selected, only IPv4 access is available.

3. Add the image capture size 2688 x 1520 in the image capture mode (WV-U2542L, WV-U2540L, WV-U2142L, WV-U2140L, WV-U1542L, WV-U1142) (Operating Instructions “Configure the settings relating to images” [Image]- “Configure the settings relating to the image capture mode” [Image])

Add “16:9 (2688x1520 30fps mode)” and “16:9 (2688x1520 25fps mode)” in the “image capture mode”.



[Image capture mode]

Select an image to be displayed on the “Live” page.

16:9 (30fps mode)/16:9 (25fps mode)/16:9 (2688x1520 30fps mode)/16:9 (2688x1520 25fps mode)

Default: 16:9(30fps mode)

For 16:9 (2688 x 1520 30 fps mode) or 16:9 (2688 x 1520 25 fps mode), the JPEG (1)/ JPEG (2)/ Stream (1)/ Stream (2)/ Stream (3) items are listed below

Settings Item		Settings
JPEG(1)	Image capture size	2688x1520 1920x1080 640x360 320x180
JPEG(2)		Not available
Stream(1)	Stream Transmission	On/ Off
	Image capture size	2688x1520 1920x1080 640x360 320x180
	Frame rate	Max. 30fps/ 25fps
	Smart Coding - GOP control	Not available (Off)
	Smart Coding – AUTO VIQS	Not available (Off)
Stream(2)/ Stream(3)		Not available (Off)
Image rotation		0°(Off), 180°(Upside-down)

Note

- The maximum refresh interval of JPEG(1) / JPEG(2) will be as follows.

Image capture mode	Stream transmission			
	On		Off	
	JPEG(1)	JPEG(2)	JPEG(1)	JPEG(2)
16:9 (2688x1520 30fps mode)	Max. 3fps	Not available	Max. 10fps	Not available
16:9 (2688x1520 25fps mode)	Max. 3.1fps	Not available	Max. 8.3fps	Not available

- “Image rotation” cannot be set “90°” and “270°”.

4. Improve the maximum frame rate of the stream

(Operating Instructions “Configure the settings relating to images” [Image]- “Configure the settings relating to Stream” [Image])

The default JPEG and stream values have been changed so that the frame rate can be delivered at 30 fps and 25 fps even if Stream (1) and Stream (2) are set to On.

Note

- When the image capture mode is changed to 25 fps mode, the frame rate is increased up to 25 fps.
- When Stream (1) and Stream (2) are set to On, if the "Stream Transmission" of Stream (3) is set to "On", the "Frame rate" for Stream (1) and Stream (2) will be "15 fps"/"12.5 fps".
However, for 4M models, the image capture size of Stream (1) should be greater than 1920 x 1080.
- If the "Frame rate" for Stream (1) or Stream (2) is "30 fps"/"25 fps", the "Refresh interval (JPEG)*" is limited to a maximum of 1 fps.
- If the "Frame rate" for Stream (1) and Stream (2) is set to "15 fps"/"12.5 fps", the "Refresh interval (JPEG) *" will be up to "3 fps"/"3.1 fps".
- To set "GOP control" and "AUTO VIQS" of "Smart Coding" to "On", please set the "Frame rate" for Stream (1) and Stream (2) to "15 fps"/"12.5 fps" or below

WV-U2532L, WV-U2530L, WV-U1532L, WV-U2132L, WV-U2130L, WV-U1132, WV-U1130

Settings Item		Settings(Default)
Image capture mode		16:9 (30fps mode)
Refresh interval (JPEG)*		<u>1fps</u>
JPEG(1)	Image capture size	1920x1080
JPEG(2)	Image capture size	640x360
Stream(1)	Stream Transmission	On
	Image capture size	1920x1080
	Frame rate	30fps
	Smart Coding - GOP control	<u>Not available (Off)</u>
	Smart Coding – AUTO VIQS	<u>Not available (Off)</u>
Stream(2)	Stream Transmission	<u>On</u>
	Image capture size	640x360
	Frame rate	30fps
	Smart Coding - GOP control	<u>Not available (Off)</u>
Stream(3)	Stream Transmission	Off

Note

- When Stream (1) and Stream (2) are set to On, if the "Image capture size" for Stream (2) is set to "1280 x 720" ("1280 x 960"), the "Frame rate" for Stream (1) and Stream (2) will be "15 fps"/"12.5 fps"

WV-U2542L, WV-U2540L, WV-U2142L, WV-U2140L, WV-U1542L, WV-U1142

Settings Item		Settings(Default)
Image capture mode		16:9 (30fps mode)
Refresh interval (JPEG)*		<u>1</u> fps
JPEG(1)	Image capture size	2560x1440
JPEG(2)	Image capture size	640x360
Stream(1)	Stream Transmission	On
	Image capture size	2560x1440
	Frame rate	30fps
	Smart Coding - GOP control	<u>Not available (Off)</u>
	Smart Coding – AUTO VIQS	<u>Not available (Off)</u>
Stream(2)	Stream Transmission	<u>On</u>
	Image capture size	640x360
	Frame rate	30fps
	Smart Coding - GOP control	<u>Not available (Off)</u>
Stream(3)	Stream Transmission	Off

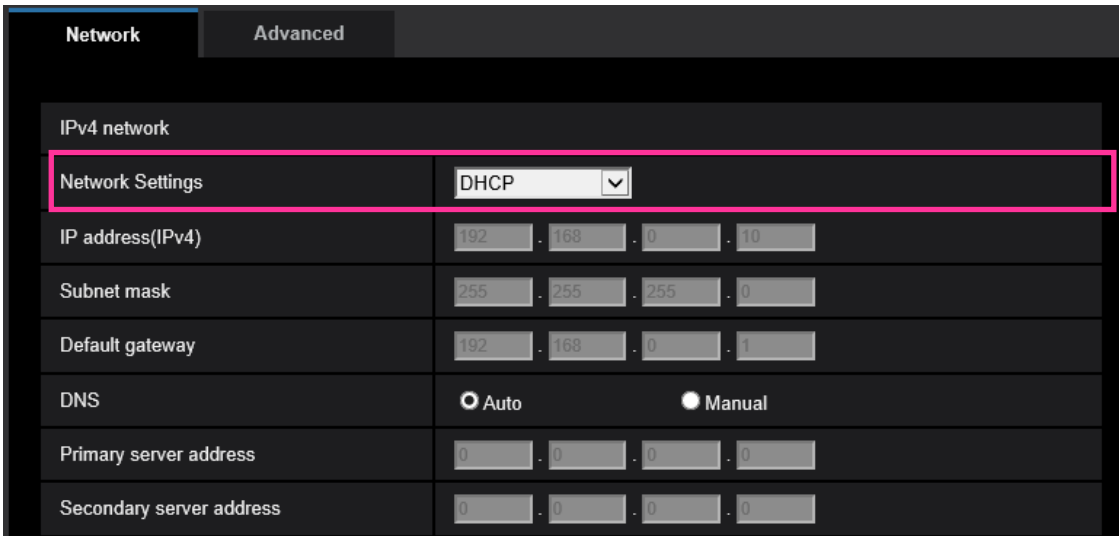
Note

- When Stream (1) and Stream (2) are set to On, if the "Image capture size" for Stream (2) is set to "1920 x 1080", the "Frame rate" for Stream (1) and Stream (2) will be "15 fps"/"12.5 fps".

5. Change the initial value of Network Settings and DHCP behavior in IPv4 network of Network

(Operating Instructions “Configuring the network settings” [Network]-
“Configuring the network settings” [Network])

Change the initial value of Network Settings and DHCP behavior in IPv4 network of Network.



The screenshot shows the 'Network' configuration page with the 'Advanced' tab selected. Under the 'IPv4 network' section, the 'Network Settings' dropdown menu is highlighted with a red box and set to 'DHCP'. Below this, the IP address is set to 192.168.0.10, the subnet mask to 255.255.255.0, and the default gateway to 192.168.0.1. The DNS settings are set to 'Auto'.

IPv4 network	
Network Settings	DHCP
IP address(IPv4)	192 . 168 . 0 . 10
Subnet mask	255 . 255 . 255 . 0
Default gateway	192 . 168 . 0 . 1
DNS	<input type="radio"/> Auto <input checked="" type="radio"/> Manual
Primary server address	0 . 0 . 0 . 0
Secondary server address	0 . 0 . 0 . 0

IPv4 network

[Network Settings]

Select the method of how to configure the IP address from the following.

- **Static:** The IP address is configured by entering manually on “IP address(IPv4)”.
- **DHCP:** The IP address is configured using the DHCP function.
If the camera cannot acquire an IP address from the DHCP server, set the IP address to 192.168.0.10.
After that, once an IP address is acquired from the DHCP server, change it to that IP address.
- **Auto(AutoIP):** The IP address is configured using the DHCP function. When the DHCP server is not found, the IP address is automatically configured.
- **Auto(Advanced):** Using the DHCP function, network address information is referred to, and an unused IP address is configured to the camera as a static IP address. The configured IP address is automatically determined within the subnet mask range by the camera. When the DHCP server is not found, the IP address is set to 192.168.0.10.
- **Default:** DHCP

6. Add ONVIF® settings in Network

(Operating Instructions “Configuring the network settings” [Network]-
“Configuring the network settings” [Network])

Add ONVIF® settings in the network settings.

Network		Advanced	
IPv4 network			
Network Settings	DHCP		
IP address(IPv4)	192	168	0 . 10
Subnet mask	255	255	255 . 0
Default gateway	192	168	0 . 1
DNS	<input type="radio"/> Auto <input checked="" type="radio"/> Manual		
Primary server address	0	0	0 . 0
Secondary server address	0	0	0 . 0
IPv6 network			
Manual	<input checked="" type="radio"/> On <input type="radio"/> Off		
IP address(IPv6)			
Default gateway			
DHCPv6	<input checked="" type="radio"/> On <input type="radio"/> Off		
Primary DNS server address			
Secondary DNS server address			
Common			
HTTP port	80	(1-65535)	
Line speed	Auto		
Max RTP packet size	<input type="radio"/> Unlimited(1500byte) <input checked="" type="radio"/> Limited(1280byte)		
HTTP max segment size(MSS)	Unlimited(1460byte)		
Bandwidth control(bit rate)	25600kbps		
Easy IP Setup accommodate period	<input type="radio"/> 20min <input checked="" type="radio"/> Unlimited		
ONVIF® *ONVIF is a trademark of Onvif, Inc.	<input checked="" type="radio"/> On <input type="radio"/> Off		
Set			

[ONVIF®]

Set the ONVIF to On/Off.

On: Enables the access from the ONVIF camera.

Off: Disables the access from the ONVIF camera

Default: On

*ONVIF is the trademark of ONVIF, Inc.

7. Added “SNMP transmission upon alarm detection” to “Camera action on alarm”

(Operating Instructions “Configure the alarm settings” [Alarm] - “Configure the settings relating to the camera action on alarm occurrence” [Alarm])

“SNMP transmission upon alarm detection” is newly added to the settings relating to the camera action on alarm.

Click “To SNMP setting” to display the setup menu that can configure the settings relating to SNMP transmission when an alarm occurs. The setup menu will be displayed in a newly opened window.

(→ 9. Added “SNMP trap setting” to “SNMP”)

Camera action on alarm	
Alarm E-mail notification	E-mail server >>
Alarm image recording(SD memory card)	SD memory card setup >>
Panasonic alarm protocol	Panasonic alarm protocol notification >>
HTTP alarm notification	HTTP alarm notification setup >>
SNMP transmission upon alarm detection	To SNMP setting

8. Enhanced the access restriction function of SNMP v1/v2

(Operating Instructions “Configuring the network settings” [Network]
 - “Configure advanced network settings” [Advanced]
 - “Configure the settings relating to SNMP”)

The address range setting of the SNMP manager that receives requests from the camera is newly added.

Network		Advanced	
SMTP(E-mail) NTP UPnP HTTPS DDNS SNMP QoS			
SNMP agent setting			
SNMP version		SNMPv1/v2	
SNMPv1/v2	Community	<input type="text"/>	
	Manager address	<input type="text"/>	
SNMPv3	User name (1 to 32 characters)	<input type="text"/>	
	Authentication	<input type="radio"/> MD5	<input type="radio"/> SHA1
	Encryption method	<input type="radio"/> DES	<input type="radio"/> AES
	Password (8 to 16 characters)	<input type="text"/>	

- **[Manager address]**

Enter the IP address of the SNMP manager from which requests are to be permitted when the SNMP version is v1 or v2. When left blank, requests from all IP addresses will be permitted.

Note

- When “IP address/subnet mask” is entered, it is possible to restrict IP address of SNMP manager from which request is permitted by subnet.
 For example, when “192.168.0.1/24” is entered, all requests from the SMNP managers in the range from “192.168.0.1” to “192.168.0.254” will be permitted.

Available number of characters: 0 - 128 characters

Available characters: Alphanumeric characters, the colon (:), the period (.) and the slash (/).

Default: None (blank)

9. Added “SNMP trap setting” to “SNMP”

(Operating Instructions “Configuring the network settings” [Network] - “Configure advanced network settings” [Advanced] - “Configure the settings relating to SNMP”)

“SNMP trap setting” is newly added to the settings relating to SNMP.
Configure settings relating to SNMP trap when an alarm occurs.

SNMP trap setting		<input checked="" type="radio"/> On <input type="radio"/> Off
Destination of Trap	Address	<input type="text"/>
	Port number	<input type="text" value="162"/> (1-65535)
SNMPv2c	Community	<input type="text"/>
Trap setting		
	Enable/Disable	Trap string
SNMP Generic trap	<input type="checkbox"/> coldStart	<input type="text" value="cold start"/>
	<input type="checkbox"/> linkUp	<input type="text" value="linkup"/>
	<input type="checkbox"/> authenticationFailure	<input type="text" value="auth error"/>
Alarm	<input type="checkbox"/> VMD	<input type="text" value="VMD alarm"/>
	<input type="checkbox"/> Command alarm	<input type="text" value="cmd"/>
SD memory card	<input type="checkbox"/> Diag.	<input type="text" value="sd alarm"/>

- **[SNMP trap setting]**
Set On/Off of the SNMP trap.
Default: Off
- **[Destination of Trap] - [Address]**
Enter the destination address of the SNMP trap.
Available number of characters: 0 - 128 characters
Available characters: Alphanumeric characters, the colon (:) and the period (.).
Default: None (blank)
- **[Destination of Trap] - [Port number]**
Enter the port number of the destination address of the SNMP trap.
Available port number: 1 - 65535
Default: 162
The following port numbers are unavailable since they are already in use.
20, 21, 23, 25, 42, 53, 67, 68, 69, 80, 110, 123, 161, 443, 554, 995, 10669, 10670, 59000 - 61000
- **[SNMPv2c] - [Community]**
Enter the community name of the destination address of the SNMP trap.
Available number of characters: 0 - 32 characters
Unavailable characters: 2-byte characters
Default: None (blank)

IMPORTANT

- When using the SNMP trap function, it is necessary to enter the community name.
When no community name is entered, the SNMP trap function will not work.
- **[SNMP Generic trap] - [coldStart] - [Enable/Disable]**
When the check box is checked, a trap (SNMPv2-MIB::coldStart) will be sent.
Default: Not checked (Disable)
- **[SNMP Generic trap] - [coldStart] - [Trap string]**
When a camera startup trap is to be extended and sent, set the string of characters of the extended trap.
Available number of characters: 0 - 32 characters
Unavailable characters: 2-byte characters
Default: cold start
- **[SNMP Generic trap] - [linkUP] - [Enable/Disable]**
When the check box is checked, a trap (SNMPv2-MIB::linkup) will be sent at the time when the camera is linked up.
Default: Not checked (Disable)
- **[SNMP Generic trap] - [linkUP] - [Trap string]**
When a camera linkup trap is to be extended and sent, set the string of characters of the extended trap.
Available number of characters: 0 - 32 characters
Unavailable characters: 2-byte characters
Default: linkup
- **[SNMP Generic trap] - [authenticationFailure] - [Enable/Disable]**
When the check box is checked, a trap (SNMPv2-MIB::coldStart) will be sent at the time when an SNMP authentication error occurs.
Default: Not checked (Disable)
- **[SNMP Generic trap] - [authenticationFailure] - [Trap string]**
When a SNMP authentication error occurrence trap is to be extended and sent, set the string of characters.
Available number of characters: 0 - 32 characters
Unavailable characters: 2-byte characters
Default: auth error
- **[Alarm] - [VMD] - [Enable/Disable]**
When the check box is checked, a trap will be sent at the time when a video motion detection is activated.
Default: Not checked (Disable)
- **[Alarm] - [VMD] - [Trap string]**
Set the string of characters to be used for the trap of [VMD].
Available number of characters: 0 - 32 characters
Unavailable characters: 2-byte characters
Default: VMD alarm
- **[Alarm] - [Command alarm] - [Enable/Disable]**
When the check box is checked, a trap will be sent at the time when a command alarm occurs.
Default: Not checked (Disable)

- **[Alarm] - [Command alarm] - [Trap string]**

Set the string of characters to be used for the trap of [Command alarm].

Available number of characters: 0 - 32 characters

Unavailable characters: 2-byte characters

Default: cmd

- **[SD memory card] - [Diag.] - [Enable/Disable]**

When the check box is checked, a trap will be sent in the following cases.

– When a notification of the remaining capacity of SD memory card has been provided

– When the SD memory card has become full

– When the SD memory card cannot be recognized

Default: Not checked (Disable)

- **[SD memory card] - [Diag.] - [Trap string]**

Set the string of characters to be used for the trap of [Diag.]

Available number of characters: 0 - 32 characters

Unavailable characters: 2-byte characters

Default: sd alarm

10. Enable the HTTP alarm notification function to support the HTTPS communication and the Digest authentication

(Operating Instructions “Configure the alarm settings” [Alarm] – “Configuration of the settings relating to alarm notification” [Notification] – “Configure the settings relating to HTTP alarm notification”)

The HTTP alarm notification function is now supporting the HTTPS communication and Digest authentication.

- **HTTPS Communication:** Implement alarm notification over HTTPS communication by entering https:// in [Address].
- **Digest authentication:** Support Digest authentication with the HTTP server.

HTTP alarm notification		Alarm	
Address 1	<input type="checkbox"/>	http://	Delete
User name			
Password			
Notification data		/cgi-bin/comalarm.cgi?CMD=01	
Address 2	<input type="checkbox"/>	http://	Delete
User name			
Password			
Notification data		/cgi-bin/comalarm.cgi?CMD=01	
Address 3	<input type="checkbox"/>	http://	Delete
User name			
Password			
Notification data		/cgi-bin/comalarm.cgi?CMD=01	
Address 4	<input type="checkbox"/>	http://	Delete
User name			
Password			
Notification data		/cgi-bin/comalarm.cgi?CMD=01	
Address 5	<input type="checkbox"/>	http://	Delete
User name			
Password			
Notification data		/cgi-bin/comalarm.cgi?CMD=01	

Set

[Address 1] - [Address 5]

Enter the destination IP address or host name of the HTTP alarm notification. Up to 5 destination server addresses can be registered.

• **Available characters:** Alphanumeric characters, the colon (:), the period (.), the underscore (_), and the hyphen (-).

• **Default:** http://

Example of entry: “http://IP address of the HTTP server + : (colon) + port number” or

http://Host name: (colon)+ port number

“https://IP address of the HTTP server + : (colon) + port number” or

https://Host name: (colon)+ port number

[User name]

Enter the user name (login name) to access the HTTP server.

- **Available number of characters:** 0 - 63 characters
- **Unavailable characters:** " & ; ¥

[Password]

Enter the password to access the HTTP server.

- **Available number of characters:** 0 - 63 characters
- **Unavailable characters:** " &

Note

- Basic authentication or Digest authentication is performed on authentication request of the HTTP server.

11. Add to the system log when authentication fails for the HTTP alarm notification function

(Operating Instructions “Others” – “About the displayed system log”)

When the HTTP server user authentication fails, an error is added to "Error indications relating to HTTP alarm notification".

Category	Indication	Description
HTTP alarm notification	Authentication error	<ul style="list-style-type: none">Entered user name or password may be incorrect. Check if the HTTP alarm notification settings are configured correctly.