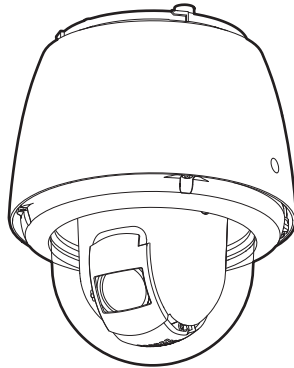# i-PRO

Basic Information

Network Camera

Model No. WV-S65340-Z4, WV-S65340-Z2
WV-S65340-Z4K, WV-S65340-Z2K
(Heavy salt damage resistance)   (Heavy salt damage resistance)

WV-S65340-Z4

About the user manuals
Product documentation is composed of the following documents.
- **Installation Guide (accessory):** Provides information about "Precautions", "Precautions for installation" and the installation method.
- **Basic Information (this document):** Provides information about "Precautions for use", "Parts and functions" and "Detail specifications".
- **Operating Instructions (Refer to the link on the following product information website):** Explains how to perform the settings and how to operate this camera.
https://i-pro.com/global/en/surveillance/training-support/documentation-database-list

"<Control No.: C****>" used in these documents should be used to search for information on our technical information website (https://i-pro.com/global/en/surveillance/training-support/support/technical-information) and will guide you to the right information.

- microSDXC/ microSDHC/ microSD memory card is described as microSD memory card.
- The external appearance and other parts shown in this manual may differ from the actual product within the scope that will not interfere with normal use due to improvement of the product.

microSDXC™

Contents

Limitation of liability

THIS PUBLICATION IS PROVIDED "AS IS" WITHOUT WARRANTY OF ANY KIND, EITHER EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY, FITNESS FOR ANY PARTICULAR PURPOSE, OR NON-INFRINGEMENT OF THE THIRD PARTY'S RIGHT.
THIS PUBLICATION COULD INCLUDE TECHNICAL INACCURACIES OR TYPOGRAPHICAL ERRORS. CHANGES ARE ADDED TO THE INFORMATION HEREIN, AT ANY TIME, FOR THE IMPROVEMENTS OF THIS PUBLICATION AND/OR THE CORRESPONDING PRODUCT (S).

Disclaimer of warranty

IN NO EVENT SHALL i-PRO Co., Ltd. BE LIABLE TO ANY PARTY OR ANY PERSON, EXCEPT FOR REPLACEMENT OR REASONABLE MAINTENANCE OF THE PRODUCT, FOR THE CASES, INCLUDING BUT NOT LIMITED TO BELOW:

(1) ANY LOSS OR DAMAGE, INCLUDING WITHOUT LIMITATION, DIRECT OR INDIRECT, SPECIAL, CONSEQUENTIAL OR EXEMPLARY, ARISING OUT OF OR RELATING TO THE PRODUCT;

(2) ANY INCONVENIENCE, LOSS, OR DAMAGE CAUSED BY INAPPROPRIATE USE OR NEGLIGENT OPERATION OF THE USER;

(3) ALL MALFUNCTIONS OR TROUBLES FROM UNAUTHORIZED DISASSEMBLE, REPAIR OR MODIFICATION OF THE PRODUCT BY THE USER, REGARDLESS OF THE CAUSE OF THE MALFUNCTION OR TROUBLE;

(4) INCONVENIENCE OR ANY LOSS ARISING WHEN IMAGES ARE NOT DISPLAYED, DUE TO ANY REASON OR CAUSE INCLUDING ANY FAILURE OR PROBLEM OF THE PRODUCT;

(5) ANY PROBLEM, CONSEQUENTIAL INCONVENIENCE, OR LOSS OR DAMAGE, ARISING OUT OF THE SYSTEM COMBINED BY THE DEVICES OF THIRD PARTY;

(6) ANY CLAIM OR ACTION FOR DAMAGES BROUGHT BY ANY PERSON OR ORGANIZATION AS A PHOTOGRAPHED SUBJECT DUE TO VIOLATION OF PRIVACY CONCERNING A SURVEILLANCE CAMERA'S PICTURE OR SAVED DATA, FOR SOME REASON (INCLUDING USE WHEN USER AUTHENTICATION ON THE AUTHENTICATION SETTING SCREEN IS SET TO OFF), BECOMING PUBLIC OR BEING USED FOR ANY PURPOSE;

(7) LOSS OF REGISTERED DATA CAUSED BY ANY FAILURE (INCLUDING INITIALIZATION OF THE PRODUCT DUE TO FORGOTTEN AUTHENTICATION INFORMATION SUCH AS A USER NAME AND PASSWORD).

About notations

Some functions are expressed with the following notations in this document.

S65340Z4	The functions with this notation are available when using the model WV-S65340-Z4 or WV-S65340-Z4K.
S65340Z2	The functions with this notation are available when using the model WV-S65340-Z2 or WV-S65340-Z2K.
C	Clear dome cover
G	Smoke dome cover
W	i-PRO white body
B	Black body
Coating	With ClearSight coating
Non-Coating	No ClearSight coating

System requirements for a PC

CPU:	Intel® Core™ Processor family
	- Intel® Core™ i5-6500 or faster
	- Intel® Core™ i7-6700 or faster recommended
Memory:	4 GB (2 GB x 2, Dual Channel) or more recommended.
Network interface:	10BASE-T/100BASE-TX 1 port
Audio interface:	Sound card (when using the audio function)
Monitor:	Image capture size: 1024 x 768 pixels or more
	Color: 24-bit True color or better
OS:	Microsoft Windows 11
	Microsoft Windows 10
Web browser:	Microsoft Edge
	Firefox
	Google Chrome™
Others:	Adobe® Reader® or Acrobat Reader®
	(It is necessary to view the PDF file.)

IMPORTANT:
- For information on the operation verification of web browsers, refer to our technical information website <Control No.: C0132>.
- When using a PC that does not meet the above requirements, displaying of images may become slower or the web browser may become inoperable.
- Audio may not be heard if a sound card is not installed on a PC. Audio may be interrupted depending on the network environment.

Network security

As you will use this unit connected to a network, your attention is called to the following security risks.
① Leakage or theft of information through this unit
② Use of this unit for illegal operations by persons with malicious intent
③ Interference with or stoppage of this unit by persons with malicious intent
It is your responsibility to take precautions such as those described below to protect yourself against the above network security risks.
- Use this unit in a network secured by a firewall, etc.
- If this unit is connected to a network that includes PCs, make sure that the system is not infected by computer viruses or other malicious entities (using a regularly updated anti-virus program, anti-spyware program, etc.).
- To prevent unauthorized access, use user-authentication, set user names and passwords, and limit which users can log in.
- Apply measures such as user authentication to protect your network against leakage or theft of information, including image data, authentication information (user names and passwords), alarm mail information and DDNS server information.
- After the unit is accessed by the administrator, make sure to close the browser.
- Change the administrator password periodically. Additionally, save user authentication information (user names and passwords) in such a way that it is kept out of the hands of third parties.
- Do not install the camera in locations where the camera or the cables can be destroyed or damaged by persons with malicious intent.

Precautions for use

When the product is accessible from the Internet

To prevent unauthorized access, note the following.
- Leave user authentication turned on.
- Periodically change passwords that are used to access the product.
  Refer to the Operating Instructions for information about how to change passwords.

To keep on using with stable performance

Do not use this product in hot and humid conditions for a long time. Failure to observe this causes component degradation resulting in life shortening of this product. Do not expose this product to direct heat sources such as a heater.

**<WV-S65340-Z4K><WV-S65340-Z2K>
When installing on the sea or in coastal streets**
- When installing this product in seashore area or a place where a snow-melting agent is applied, inspect the condition of it regularly. (Replace the parts as required.)
- When installing this product in seashore area or a place where a snow-melting agent is applied, and also where rainwater is avoided, it is recommended to regularly clean and rinse off salt with water.

Usage such as switching the power ON/ OFF frequently could lead to failure of the camera.

Handle this product with care.

Do not drop this product, nor apply shock or vibration to the product. Failure to observe this may cause trouble.

Do not subject dome cover to strong impact.

Doing so may cause damage or immersion.

Do not directly touch the dome cover with your bare hands.

A dirty dome cover causes deterioration of picture quality.

When an error is detected, this product will restart automatically.

This product will be inoperable for around 2 minutes after the restart just as when the power is turned on.
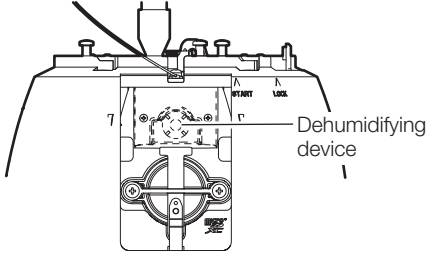
About the automatic status detection function

When this product malfunctions due to exogenous noise, etc. for 30 seconds or more, the product will automatically restart and will return to normal state. When the product is restart, initialization will be carried out as when the power of the product is turned on. When the product repeatedly resets, exogenous noise level around the product may be high and that may cause malfunction. Contact your dealer for instructions.

Periodically images on the screen appear to be distorted

When the camera is installed in a location where it is subject to small vibrations (for example, when it is installed near devices that vibrate), images may appear distorted and stretched lengthways. This phenomenon is a characteristic of image pickup devices that use CMOS sensors and is caused by the relationship between the periodic movements of the camera and the timing that the image sensor reads images. This is not a problem with the camera. To reduce the possibility of this phenomenon occurring, install the camera in a secure location.

About dehumidifying device
- This product has dehumidifying device to keep the inside at a low humidity level.
- Depending on conditions such as temperature, humidity or the climate, condensation may form and it may take time to dehumidify.

Dehumidifying device

* The back cover of the sunshield and the indication label are omitted.

What to do if "WARMING UP-PLEASE WAIT" appears on the display.
This message indicates that the temperature inside the camera has become extremely low. The camera will be automatically restarted when the inside the camera is warmed up by the built-in heater. Please wait for a while.

We shall not be liable for content compensation, losses of recorded or edited content and any direct or indirect consequent damages caused by failure to record or edit due to faults with this unit or the microSD memory card. In addition, the same provisions apply after unit is reparied.

About the CMOS image sensor
- When continuously shooting a bright light source such as a spotlight, the color filter of the CMOS image sensor may become deteriorated and this may cause discoloration. Even when changing the fixed shooting direction after continuously shooting a spotlight for a certain period, the discoloration may remain.
- When shooting fast-moving subjects or performing panning/tilting operations, objects crossing the shooting area may look to be bending askew.

Cleaning this product body
Be sure to turn off the power before cleaning. Failure to observe this may cause injury.
Do not use benzine, thinner, alcohol, or any other types of solvents or detergents. Otherwise, it may cause discoloration. When using a chemical cloth for cleaning, read the caution provided with the chemical cloth product.
- Do not loozen or remove screws unless instructed to do so in the product documentation.
- The camera position may be moved inadvertently while cleaning the camera body. Restart the product or refresh the camera position (position refresh) to correct the camera position. Refer to the Operating Instructions for further information.

(Coating)

Cleaning of the dome cover
- When cleaning the dome cover, use a hose or spray to wash away grains of sand and other deposits with fresh water that is free from lubricants and silicon-based substances. If the dirt is still not removed, use a soft sponge soaked in the fresh water mentioned above and wipe off.
- Do not wipe the cover with a dry cloth (oil components adhered to the surface may spread or the rain wash coating may be damaged).
- If the dirt cannot be wiped off with a damp cloth, use a neutral detergent and thoroughly rinse off the detergent.
- Do not use organic solvent such as benzine and thinner.
- Before using a spray, blow it in the air to eliminate initial impurities.
- * Improper cleaning of the dome cover may cause the rain wash coating to become less effective. In this case, in order to restore the rain wash coating effect, a new dome cover must be purchased to replace the existing one. Consult with your dealer or construction contractor.

Non-Coating

Cleaning of the dome cover

Use lens cleaning paper (used to clean camera or spectacles lenses) to remove any dirt on the dome cover. (If dust or the like is adhered at this time, the dome cover may get scratched. We recommend rinsing for stubborn stains.)

Coating

About ClearSight coating

Due to the rain wash coating effect of the dome cover, drips tend to be accumulated right below the camera and it may cause a partial distortion of the video.

About the stabilizer function

Depending on the conditions in the installation area, the effects of the stabilizer function may not be fully achieved.

Consumable parts

The following are consumables: Replace them in accordance with their operating lifetimes. Their operating lifetimes vary depending on the usage environment and conditions. The operating lifetimes below are just guides for when using the camera at +35 °C {95 °F}.
Lens unit, panning motor, tilting motor, slip ring, flat cable for tilting: Approx. 3.7 million operations (Approx. 20000 hours)

* When continuing the action of moving the set position for a long period, dust may accumulate in a slip ring. It can be prevented by executing the position refresh action regularly (about once a week) using the schedule setting.
Refer to our technical information website <Control No.: C0125>) for slip ring information.

AVC Patent Portfolio License

THIS PRODUCT IS LICENSED UNDER THE AVC PATENT PORTFOLIO LICENSE FOR THE PERSONAL USE OF A CONSUMER OR OTHER USES IN WHICH IT DOES NOT RECEIVE REMUNERATION TO (i) ENCODE VIDEO IN COMPLIANCE WITH THE AVC STANDARD ("AVC VIDEO") AND/OR (ii) DECODE AVC VIDEO THAT WAS ENCODED BY A CONSUMER ENGAGED IN A PERSONAL ACTIVITY AND/OR WAS OBTAINED FROM A VIDEO PROVIDER LICENSED TO PROVIDE AVC VIDEO. NO LICENSE IS GRANTED OR SHALL BE IMPLIED FOR ANY OTHER USE. ADDITIONAL INFORMATION MAY BE OBTAINED FROM MPEG LA, L.L.C. SEE HTTP://WWW.MPEGLA.COM

Lens and pan/tilt head

If a lens and pan/tilt head are not performed for a long period of time, the grease coating inside these parts may become sticky. That may obstruct the parts from moving. To prevent this, move the lens or pan/tilt head periodically. Or perform position refresh periodically in the manner described in "Position refresh".

Position refresh

During the use for a long period of time, the preset positions may become inaccurate.
When "Position refresh" is set for the created schedule, the camera position will be corrected periodically.
Refer to the Operating Instructions for how to perform the settings.

Tilt angles and the zoom ratio

This product contains a function to prevent deterioration of image quality when using the tilt angle upwards from horizontal (0° to –15°). However, when this product is used with the tilt angle upwards from 0° true horizontal, the image quality may deteriorate or the upper part of the screen may become dark depending on the zoom ratio.
In this case, adjust the zoom ratio and tilt angle optimally.

Product disposal/transfer

Data saved on this product or a storage device used with this product may lead to personal information leakage. When it is necessary to dispose or give this product to someone, even when for repair, make sure that there is no data on this product.

When abandoning the memory media, it is recommended to destroy it physically after deleting data by PC.

Effects on images and image quality

Under the following conditions, image quality may deteriorate or images may become difficult to see.

- When there are raindrops on the dome cover due to wind during rainfall.
- When there is snow on the dome cover due to wind during snowfall. (varies depending on the amount and quality of snowfall).
- When the dome cover is dirty due to dust in the air or vehicle exhaust.

About HEVC (High Efficiency Video Coding) patents

Covered by one or more claims of the HEVC patents listed at patentlist.accessadvance.com.

Router

When connecting this product to the Internet, use a broadband router with the port forwarding function (NAT, IP masquerade).

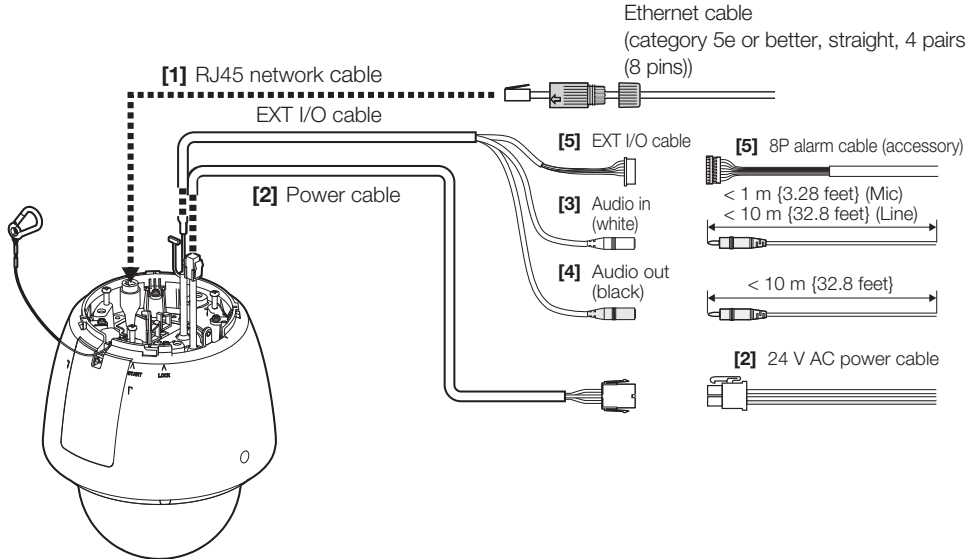Refer to the Operating Instructions for further information about the port forwarding function.

Time & date setting

It is necessary to set the time & date before putting this product into operation. Refer to the Operating Instructions for descriptions of how to perform the settings.

Parts and functions

■ Cables

The following are descriptions when using the model WV-S65340-Z4.

[1] Ethernet cable
(category 5e or better, straight, 4 pairs (8 pins))

[1] RJ45 network cable

EXT I/O cable

[5] EXT I/O cable

[5] 8P alarm cable (accessory)

[2] Power cable

[3] Audio in (white)

< 1 m {3.28 feet} (Mic)
< 10 m {32.8 feet} (Line)

[4] Audio out (black)

< 10 m {32.8 feet}

[2] 24 V AC power cable

[1] RJ45 Network cable
Connect an Ethernet cable (category 5e or better, straight, 4 pairs (8 pins)) to the RJ45 network cable.

IMPORTANT:
- Use all 4 pairs (8 pins) of the Ethernet cable.
- The maximum cable length is 100 m {328 feet}.
- Make sure that the PoE+ / PoE++ device in use is compliant with IEEE802.3at / IEEE802.3bt standard.
- When connecting both the 24 V AC power supply and the PoE+ / PoE++ device for power supply, 24 V AC will be used for power supply.
- When the Ethernet cable is disconnected once, reconnect the cable after around 2 seconds. When the cable is quickly reconnected, the power may not be supplied from the PoE+ / PoE++ device.

---

[2] Power cable / 24 V AC power supply connector kit (accessory)

When using a 24 V AC power supply, connect the output of the AC transformer to the 24 V AC power supply connector (accessory) with the contact (accessory). Then, connect the 24 V AC power supply connector to the connection terminal of the power cable.

IMPORTANT:
- Be sure to use the 24 V AC power supply connector kit (accessory) provided with this product.
- Be sure to fully insert the 24 V AC power supply connector into the power supply cable. Otherwise, it may damage the camera or cause malfunction.
- When installing the camera, make sure that excessive force is not applied to the power cable.
- Be sure to use an AC transformer that is insulated from a commercial power supply that meets the power supply and power consumption ratings of this product (indicated inside the back cover of the sunshield).

---

[3] Audio input cable (white)

Connect a microphone or the line out of an external device using a stereo mini plug (ø3.5 mm).
<For microphone input>
- Recommended microphone (locally procured): Plug-in power type
  (Sensitivity of microphone: –51 dB to –38 dB (0 dB=1 V/Pa,1 kHz))
- Input impedance: Approx. 2 kΩ (unbalanced)
- Supply voltage: 2.5 V ±0.5 V
- Recommended cable length: Less than 1 m {3.28 feet}
<For line input>
- Input level for the line input: Approx. –10 dBV
- Recommended cable length: Less than 10 m {32.8 feet}

[4] Audio output cable (black)

Connect an external speaker* using a stereo mini plug (ø3.5 mm). (Audio output is monaural.)
- Output impedance: Approx. 600 Ω (unbalanced)
- Recommended cable length: Less than 10 m {32.8 feet}
- Output level: –20 dBV   * Use a powered speaker.

Note:
- The audio output can be switched to the monitor output. Refer to the Operating Instructions for descriptions of how to switch the output.
- The video output is set to NTSC in the default settings of the camera. If you want to change the video output setting to PAL, refer to the Operating Instructions.

IMPORTANT:
- Connect/disconnect the audio cables and turn on the power of the camera after turning off the power of the audio output devices. Otherwise, loud noise may be heard from the speaker.
- Make sure that the stereo mini plug is connected to this cable. When a monaural mini plug is connected, audio may not be heard.
  When connecting a monaural speaker with amplifier, use a locally procured conversion cable (mono-stereo).

---

[5] EXT I/O / 8P alarm cable (accessory)

Connect the 8P alarm cable (accessory) to the EXT I/O. Then, connect the external device cable to the 8P alarm cable.
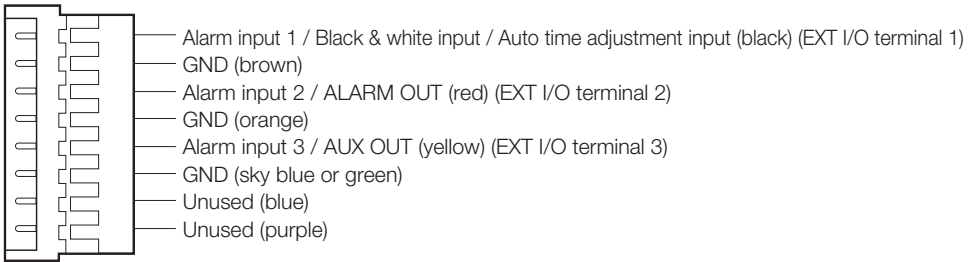

Note:
- Off, input, and output of the EXT I/O terminal 2 and 3 can be switched by configuring the setting. Refer to the Operating Instructions for further information about the EXT I/O terminal 2 and 3 settings ("Off", "Alarm input", "Alarm output" or "AUX output").

<Ratings>
- Alarm input1 / Black & white input / Auto time adjustment input, Alarm input2, Alarm input3
  Input specification: No-voltage make contact input (4 V - 5 V DC, internally pulled up)
  OFF: Open or 4 V - 5 V DC
  ON: Make contact with GND (required drive current: 1 mA or more)
- Alarm output, AUX output
  Output specification: Open collector output (maximum applied voltage: 20 V DC)
  OPEN: 4 V - 5 V DC by internal pull-up
  CLOSE: Output voltage 1 V DC or less (maximum drive current: 50 mA)

8P alarm cable

Alarm input 1 / Black & white input / Auto time adjustment input (black) (EXT I/O terminal 1)
GND (brown)
Alarm input 2 / ALARM OUT (red) (EXT I/O terminal 2)
GND (orange)
Alarm input 3 / AUX OUT (yellow) (EXT I/O terminal 3)
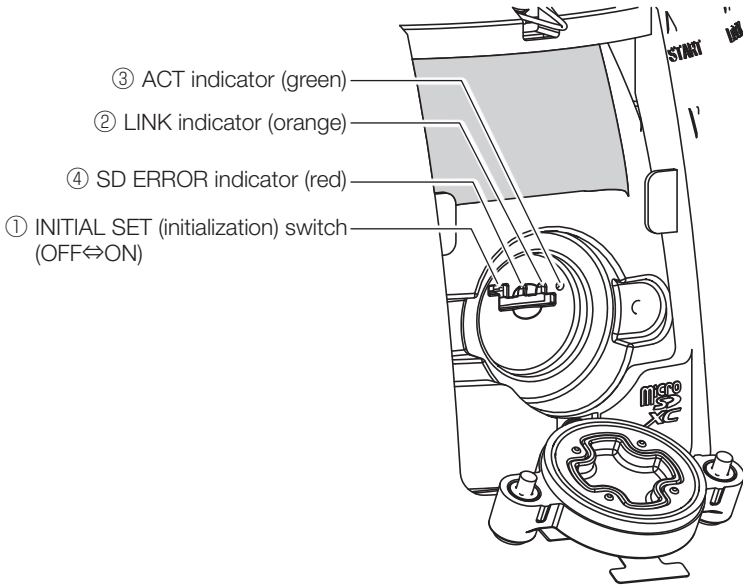GND (sky blue or green)
Unused (blue)
Unused (purple)

IMPORTANT:
- Install external devices so that they do not exceed the rating of the network camera.
- When using the EXT I/O terminal as the output terminals, ensure they do not cause signal collision with external signals.

■ Indicators and buttons

③ ACT indicator (green)

② LINK indicator (orange)

④ SD ERROR indicator (red)

① INITIAL SET (initialization) switch
(OFF⇔ON)

① **INITIAL SET switch**
Follow the steps below to initialize the network camera.

IMPORTANT:
• When the camera is initialized, the settings including the network settings will be initialized.
Note that the preset position settings and the CRT key (SSL encryption key) used for the
HTTPS protocol will not be initialized.

---

(1) Remove the back cover of the sunshield and open the waterproof cap by following the
instruction from ① to ③ of "Insert a microSD memory card".
(2) Turn the INITIAL SET switch to ON (move it to the right).
By default, the switch is set to OFF.
(3) After moving the INITIAL SET switch to the right, turn on the power of the camera. Turn on
the power of the camera, and after about 15 seconds, turn the INITIAL SET switch to OFF
(move it to the left). After about 2 minutes the camera will start up and the setting data
including network setting data will be initialized. If it is not initialized, please try again.
(4) Turn off the power of the camera.

IMPORTANT:
• If the INITIAL SET switch is left ON, the camera cannot enter the normal operation mode.
Be sure to turn the INITIAL SET switch back to OFF.

---

(5) Return the waterproof cap and the back cover of the sunshield to the original state by
following the instruction ⑤ of "Insert a microSD memory card".
(6) Turn on the power of the camera.

IMPORTANT:
- When the camera is initialized, the settings including the network settings will be initialized. Before initializing the settings, it is recommended to write down the settings in advance.
- Do not turn off the power of the camera during the process of initialization. Otherwise, it may fail to initialize and may cause malfunction.

② LINK indicator

- When the camera is able to communicate with the connected device
  Lights orange

③ ACT indicator

- When data is being sent via the network camera
  Blinks green (accessing)

④ SD ERROR indicator

- When an error status is detected
  Lights red
  * SD memory card error detection conditions: Write error, read error, etc.

Note:
- Lighting/blinking LED can be turned off with the software settings at any time. (The initial state is lighting or blinking.) Set the LED to be solid off if necessary, depending on the installation conditions. (☞ Operating instructions on our product information website)
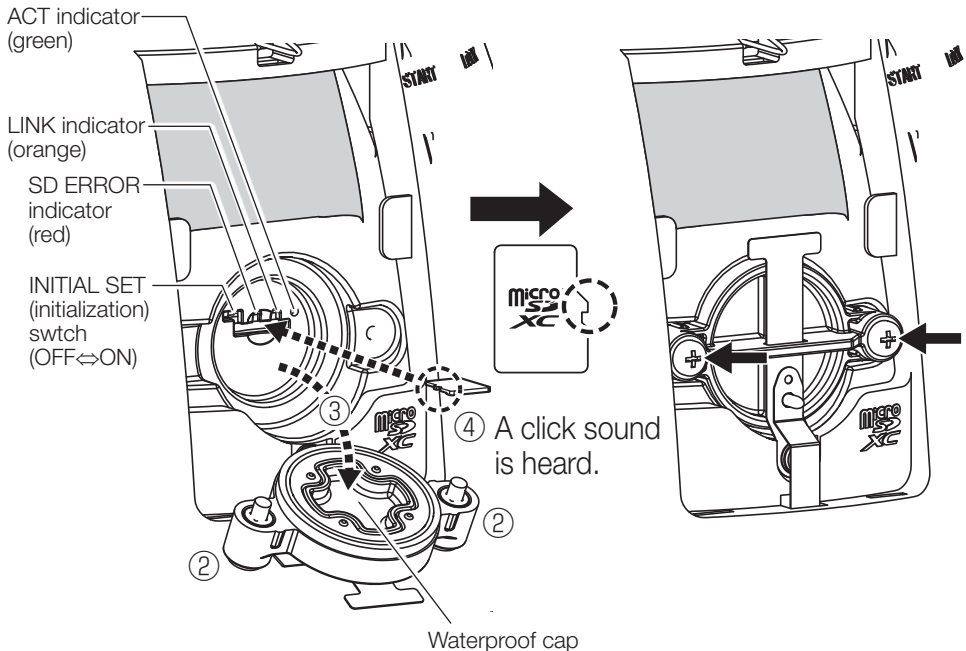
Insert / remove a microSD memory card

Note:
- Use a microSD memory card dedicated to i-PRO cameras.
- Refer to the Operating Instructions on our product information website for further information about the microSD memory card settings.

■ Insert a microSD memory card

① Remove the back cover of the sunshield on the rear of the camera by pushing the claws on the top of the sunshield and pulling it forward.
② Remove the locking screw on the waterproof cap.
③ Remove the waterproof cap by pulling it forward.
④ Insert the microSD memory card and check that a click sound is heard.

ACT indicator (green)

LINK indicator (orange)

SD ERROR indicator (red)

INITIAL SET (initialization) swtch (OFF⇔ON)

④ A click sound is heard.

Waterproof cap

⑤ Perform steps in the reverse order of ③ to ①, remount the waterproof cap and attach the back cover of the sunshield in its original position.
Recommended tightening torque for waterproof cap locking screws: 0.69 N·m {0.51 lbf·ft}

15

■ Remove a microSD memory card

When removing a microSD memory card, reverse the procedure.
- Before removing the microSD memory card, make sure to select "Not use" for "SD memory card" on the [SD memory card] tab of "Basic" page on the setup menu first. (☞ Operating Instructions)

Note:
- Refer to the Operating Instructions for further information about the microSD memory card settings.
- When using a microSD memory card, format it using this product. Recorded data on the microSD memory card will be deleted when formatted.
  If an unformatted microSD memory card or a microSD memory card formatted with other devices is used, this product may not work properly or performance deterioration may be caused. Refer to the Operating Instructions for how to format a microSD memory card.

Troubleshooting

Before asking for repairs, check the symptoms with the following table.

Contact your dealer if a problem cannot be solved even after checking and trying the solution in the table or a problem is not described below.

Symptom	Cause/solution	Reference pages
Power is not turned on.	**When using a PoE+ / PoE++ device for power supply** • Are the PoE+ (IEEE802.3at compliant) / PoE++ (IEEE802.3bt compliant) device and the RJ45 (female) network cable of the camera connected using a Ethernet cable (category 5e or better)? Check whether the connection is appropriately established. • Depending on the PoE+ / PoE++ device, the power supply will stop when the demanded power exceeds its total power limit for all PoE+ / PoE++ ports. Refer to the operating instructions of the PoE+ / PoE++ device in use.	Installation Guide
	When using AC power supply • Is the power cable firmly connected to a power supply that meets the specifications of this product? Confirm the power plug is firmly connected. • Is the power supply connector housing attached to the camera firmly? Check if it is attached correctly and firmly.	
The camera does not move to the preset positions accurately.	• When the preset positions become inaccurate during use, it is possible to correct the positions by executing the position refresh function. In addition, when "Position refresh" is set for the created schedule, the camera position will be corrected periodically. In some situations, reconfigure the preset positions.	Operating Instructions
When the camera is panning/tilting, the camera stops panning/ tilting and mechanical noise comes from the camera.	• The camera position may have become inaccurate. Carry out the refresh position function from the [Default reset] tab of the "Maintenance" page of the setup menu.	Operating Instructions
The camera starts panning unpredictably.	• This may be caused by noise. Check the exogenous noise level around the camera.	6
	• The position refresh may be done automatically to improve the positional accuracy of PAN, TILT and ZOOM when turned on in low temperature, which is not a failure.	–

Symptom	Cause/solution	Reference pages
The LINK indicator does not light in orange even when the Ethernet cable is connected to the camera.	• Is the Ethernet cable connected appropriately? Connect the Ethernet cable appropriately. • Is the hub or router connected to the camera operating appropriately? Check if the hub or router in use is operating appropriately. • Is the Ethernet cable connected to the camera broken? Replace the cable with another one.	10
SD ERROR indicator lights red.	**This indicator lights up red when data cannot be saved on the microSD memory card.** • Has the inserted microSD memory card been formatted on a PC? Use a microSD memory card formatted on the camera. Or install the software to format the microSD memory card on the PC. Refer to our technical information website <Control No.: C0105> for further information about the software to format the microSD memory card on the PC. • Is the inserted microSD memory card faulty? Replace the card with a normal one.	14

Audio input contains noise.	• Check the following.
	  • Grounding of the camera, a switching hub or peripheral devices are not done.
	  • The camera is used near an electrical power line.
	  • The camera is used near a device which produces strong magnetic field or radio waves (such as near a TV/radio antenna, a motor of an air conditioning system, a transformer, etc.)
	When audio input still contains noise even after checking the above possibilities, use a powered microphone or connect audio output with low output impedance.
		Installation Guide

When it rains, raindrops on the dome cover are reflected in the images, making it difficult to see the situation on site.	⬭ Coating • The rain wash coating may be less effective. Refer to "Cleaning of the dome cover" in "Precautions for use" and clean the dome cover. If the condition does not improve, contact your dealer.	7

Symptom	Cause/solution	Reference pages

Auto focus (AF) can not be automatically adjusted.	• In the following locations or with the following subjects, the focus may not be able to be automatically adjusted. In this case, manually adjust the focus from the software screen.
	  • When the subject moves a lot
	  • When there are large changes to the lighting intensity
	  • When the light level is low
	  • When the subject or location is extremely bright or reflective
	  • When viewing through windows
	  • When the dome cover is in a locations where it can easily become dirty
	  • Locations where there is not much contrast such as a white wall
	  • When there is harsh flickering
		Operating Instructions

Detail specifications

• **Basic**

Power source*¹:	24 V AC
	PoE++ (IEEE802.3bt compliant)
	PoE+(IEEE802.3at compliant)
Power consumption*¹:	■ **When using in the operating temperature range of**
	–50 °C to +60 °C {–58 °F to +140 °F}
	24 V AC: 3.4 A/ Approx. 53.3 W
	PoE++ 54 V DC: 940 mA/ Approx. 50.8 W (Class 6 device)
	■ **When using in the operating temperature range of**
	–30 °C to +60 °C {–22 °F to +140 °F}
	PoE+ 54 V DC: 470 mA/ Approx. 25.4 W (Class 4 device)
Operating environment	
Ambient operating temperature:	–50 °C to +60 °C {–58 °F to +140 °F} (24 V AC, PoE++)
	–30 °C to +60 °C {–22 °F to +140 °F} (PoE+)
	(Power On range: –30 °C to +60 °C {–22 °F to +140 °F})
Ambient operating humidity:	10 % to 100 % (no condensation)
Storage environment	
Storage temperature:	–30 °C to +60 °C {–22 °F to +140 °F}
Storage humidity:	10 % to 95 % (no condensation)
EXT I/O terminals:	ALARM IN1
	(Alarm input 1/ Black & white input/ Auto time adjustment input) (x1)
	ALARM IN2 (Alarm input 2/ ALARM OUT) (x1)
	ALARM IN3 (Alarm input 3/ AUX OUT) (x1)
Audio input:	ø3.5 mm stereo mini jack
For microphone input:	Recommended applicable microphone: Plug-in power type
	(Sensitivity of microphone: –51 dB to –38 dB (0 dB=1 V/Pa, 1 kHz))
	Input impedance: Approx. 2 kΩ (unbalanced)
	Supply voltage: 2.5 V ±0.5 V
For line input:	Input level: Approx. –10 dBV
Audio output*²:	ø3.5 mm stereo mini jack (Audio output is monaural.)
	Output impedance: Approx. 600 Ω (unbalanced)
	Output level: –20 dBV
Waterproof*³:	IP67/ IP66 (IEC 60529), Type 4X (UL50E)
	NEMA 4X compliant
Shock resistance:	IK10 (IEC 62262)
Wind resistance:	Up to 40 m/s {approx. 89 mph}
Dimensions:	Maximum diameter: ø229 mm × 278 mm (H)
	{ø9-1/32 inches × 10-15/16 inches (H)}
	Dome radius 80 mm {3-5/32 inches}
Mass:	(S65340Z4)
	Approx. 4.3 kg {9.49 lbs.}
	(S65340Z2)
	Approx. 4.2 kg {9.27 lbs.}

Finish:	Main body:	<WV-S65340-Z4><WV-S65340-Z2>
		Aluminum die cast, silver / PC resin, $\boxed{W}$ $\boxed{B}$
		<WV-S65340-Z4K><WV-S65340-Z2K>
		Aluminum die cast (The heavy salt damage
		resistance coating), silver / PC resin, $\boxed{W}$
	Outer fixing screws:	Stainless steel (Corrosion-resistant treatment)
	Dome cover:	PC resin, $\boxed{C}$ ⟨Coating⟩
		$\boxed{C}$ ⟨Non-Coating⟩
		$\boxed{G}$ ⟨Non-Coating⟩ (Transmittance: 45 %)
Others:	Tamper-resistant enclosure[4]	
	NEMA TS2 Compliant	
	Maximum temperature according to NEMA TS 2 (2.2.7): 74 °C (165 °F)	
	<WV-S65340-Z4K><WV-S65340-Z2K>	
	Heavy salt damage resistance specifications (ISO 14993 compliant)	

*1 Refer to our technical information website <Control No.: C0106> for further information about Power source and Power consumption information.
*2 The audio output can be switched to the monitor output. Refer to the "Operating Instructions" on our product information website for descriptions of how to switch the output.
*3 Only when installation work is properly performed according to the Installation Guide and appropriate waterproof treatment is performed.
*4 Component that has a structure on which the screws that are accessible after installation cannot be screwed or unscrewed using an ordinary screwdriver.

• **Camera**

Image sensor:	Approx. 1/2.8 type CMOS image sensor
Effective pixels:	Approx. 2.1 megapixels
Scanning area:	5.57 mm (H) × 3.13 mm (V) {7/32 inches (H) × 1/8 inches (V)}
Scanning system:	Progressive
Minimum illumination:	$\boxed{C}$
	Color: 0.011 lx {0.00102 footcandle} (30IRE, F1.6, Maximum shutter: Off (1/30 s), AGC: 11)* 0.015 lx {0.00139 footcandle} (50IRE, F1.6, Maximum shutter: Off (1/30 s), AGC: 11) 0.001 lx {0.00009 footcandle} (50IRE, F1.6, Maximum shutter: max. 16/30 s, AGC: 11)*
	BW: 0.006 lx {0.00056 footcandle} (50IRE, F1.6, Maximum shutter: Off (1/30 s), AGC: 11) 0.0004 lx {0.00004 footcandle} (50IRE, F1.6, Maximum shutter: max. 16/30 s, AGC: 11)*
	$\boxed{G}$
	Color: 0.08 lx {0.00743 footcandle} (30IRE, F1.6, Maximum shutter: Off(1/30 s), AGC: 11)* 0.11 lx {0.01022 footcandle} (50IRE, F1.6, Maximum shutter: Off(1/30 s), AGC: 11) 0.007 lx {0.00065 footcandle} (50IRE, F1.6, Maximum shutter: max. 16/30 s, AGC: 11)*
	BW: 0.017 lx {0.00158 footcandle} (50IRE, F1.6, Maximum shutter: Off(1/30 s), AGC: 11) 0.0011 lx {0.0001 footcandle} (50IRE, F1.6, Maximum shutter: max. 16/30 s, AGC: 11)*
	* Converted value

Intelligent Auto:	On/Off
Super Dynamic[1]:	On/Off The level can be set in the range of 0 to 31.
Dynamic range:	Max. 144 dB (Super Dynamic: On, Level: 31)
Maximum gain:	The level can be set in the range of 0 to 11.
Adaptive black stretch:	The level can be set in the range of 0 to 255.
Back light compensation (BLC)/ High light compensation (HLC):	BLC/ HLC/ Off The level can be set in the range of 0 to 31. (only when Super Dynamic/ Intelligent Auto: Off)
Fog compensation:	On/Off The level can be set in the range of 0 to 8. (only when Intelligent Auto / Auto contrast adjust: Off)
Light control mode setting:	Outdoor scene/ Indoor scene (50 Hz)/ Indoor scene (60 Hz)/ Fix shutter
Shutter speed:	**[60 fps mode]** 1/60 Fix, 1/100 Fix, 1/120 Fix, 1/250 Fix, 1/500 Fix, 1/1000 Fix, 1/2000 Fix, 1/4000 Fix, 1/10000 Fix **[30 fps/ 15 fps mode]** 1/30 Fix, 3/120 Fix, 2/100 Fix, 2/120 Fix, 1/100 Fix, 1/120 Fix, 1/250 Fix, 1/500 Fix, 1/1000 Fix, 1/2000 Fix, 1/4000 Fix, 1/10000 Fix **[50 fps mode]** 1/50 Fix, 1/100 Fix, 1/250 Fix, 1/500 Fix, 1/1000 Fix, 1/2000 Fix, 1/4000 Fix, 1/10000 Fix **[25 fps/ 12.5 fps mode]** 1/25 Fix, 3/100 Fix, 2/100 Fix, 1/100 Fix, 1/250 Fix, 1/500 Fix, 1/1000 Fix, 1/2000 Fix, 1/4000 Fix, 1/10000 Fix
Maximum shutter:	**[60 fps mode]** Max. 1/4000 s, Max. 1/2000 s, Max. 1/1000 s, Max. 1/500 s, Max. 1/250 s, Max. 1/120 s, Max. 1/100 s, Max. 2/120 s, Max. 1/30 s, Max. 2/30 s, Max. 4/30 s, Max. 6/30 s, Max. 10/30 s, Max. 16/30 s **[30 fps/ 15 fps mode]** Max. 1/4000 s, Max. 1/2000 s, Max. 1/1000 s, Max. 1/500 s, Max. 1/250 s, Max. 1/120 s, Max. 1/100 s, Max. 2/120 s, Max. 2/100 s, Max. 3/120 s, Max. 1/30 s, Max. 2/30 s, Max. 4/30 s, Max. 6/30 s, Max. 10/30 s, Max. 16/30 s **[50 fps mode]** Max. 1/4000 s, Max. 1/2000 s, Max. 1/1000 s, Max. 1/500 s, Max. 1/250 s, Max. 1/100 s, Max. 2/100 s, Max. 1/25 s, Max. 2/25 s, Max. 4/25 s, Max. 6/25 s, Max. 10/25 s, Max. 16/25 s **[25 fps/ 12.5 fps mode]** Max. 1/4000 s, Max. 1/2000 s, Max. 1/1000 s, Max. 1/500 s, Max. 1/250 s, Max. 1/100 s, Max. 2/100 s, Max. 3/100 s, Max. 1/25 s, Max. 2/25 s, Max. 4/25 s, Max. 6/25 s, Max. 10/25 s, Max. 16/25 s
Color/BW:	Off/ On/ Auto1/ Auto2/ Auto3(SCC)
White balance:	ATW1/ ATW2/ AWC
Digital noise reduction:	The level can be set in the range of 0 to 255.
Stabilizer:	On/Off
Privacy zone:	On/Off Up to 32 zones available
VIQS:	On/Off Up to 8 zones available

Camera title on screen:	On/Off
	Up to 40 characters, Up to 2 lines (alphanumeric characters, marks)
Video Motion Detection (VMD):	On/Off
	4 areas available
Scene Change Detection (SCD):	On/Off
	1 area available
Audio Detection:	On/Off
AI Sound classification:	Selectable from Gunshot, Yell, Vehicle horn, Glass break

*1   When 60 fps or 50 fps is selected, the Super Dynamic function is automatically set to off.

• **Lens**

Zoom ratio:	(S65340Z4)
Optical zoom	40x (Motorized zoom / Motorized focus)
Extra optical zoom	max 60x
	(40x – 60x when resolution is 1280x720)
	(S65340Z2)
Optical zoom	21x (Motorized zoom / Motorized focus)
Extra optical zoom	max 31x
	(21x – 31x when resolution is 1280x720)
Focal length:	(S65340Z4)
	4.25 mm – 170 mm {5/32 inches – 6-11/16 inches}
	(S65340Z2)
	4.0 mm – 84.6 mm {5/32 inches – 3-11/32 inches}
Maximum aperture ratio:	(S65340Z4)
	1:1.6 (WIDE) – 1:4.95 (TELE)
	(S65340Z2)
	1:1.6 (WIDE) – 1:4.5 (TELE)
Focus range:	(S65340Z4)
	3 m {118-7/64 inches} – ∞
	(S65340Z2)
	1.5 m {59-1/16 inches} – ∞
Aperture range:	F1.6 – Close
Angular field of view:	(S65340Z4)
	[16:9 mode]
	Horizontal: 2.1° (TELE) – 65° (WIDE)
	Vertical: 1.2° (TELE) – 39° (WIDE)
	[4:3 mode]
	Horizontal: 1.6° (TELE) – 51° (WIDE)
	Vertical: 1.2° (TELE) – 39° (WIDE)
	(S65340Z2)
	[16:9 mode]
	Horizontal: 3.7° (TELE) – 77° (WIDE)
	Vertical: 2.2° (TELE) – 44° (WIDE)
	[4:3 mode]
	Horizontal: 2.8° (TELE) – 58° (WIDE)
	Vertical: 2.2° (TELE) – 44° (WIDE)

DORI[*1]:	(S65340Z4)
Detect (25 ppm / 8 ppf)	2095.2 m {6873.9 ft} (TELE) 60.3 m {197.8 ft} (WIDE)
Observe (62.5 ppm / 19 ppf)	838.1 m {2749.5 ft} (TELE) 24.1 m {79.1 ft} (WIDE)
Recognize (125 ppm / 38 ppf)	419.0 m {1374.8 ft} (TELE) 12.1 m {39.6 ft} (WIDE)
Identify (250 ppm / 76 ppf)	209.5 m {687.4 ft} (TELE) 6.0 m {19.8 ft} (WIDE)
	(S65340Z2)
Detect (25 ppm / 8 ppf)	1293.8 m {4244.9 ft} (TELE) 51.9 m {170.3 ft} (WIDE)
Observe (62.5 ppm / 19 ppf)	517.5 m {1697.9 ft} (TELE) 20.8 m {68.1 ft} (WIDE)
Recognize (125 ppm / 38 ppf)	258.8 m {849.0 ft} (TELE) 10.4 m {34.1 ft} (WIDE)
Identify (250 ppm / 76 ppf)	129.4 m {424.5 ft} (TELE) 5.2 m {17.0 ft} (WIDE)

*1 Maximum distance at which a camera's tele and wide lens can meet DORI specifications. This value does not indicate the performance of the camera. Calculations made with the camera installed horizontally at resolution of maximum resolution.

• **Panning/tilting platform**

Adjusting angle:	(S65340Z4)
	Horizontal (PAN) angle: 360° turning
	Vertical (TILT) angle: −15° to +195°
	Azimuth (YAW) angle: ±0°
	(S65340Z2)
	Horizontal (PAN) angle: 0° to +350°
	Vertical (TILT) angle: −15° to +90°
	Azimuth (YAW) angle: ±0°
Panning range:	(S65340Z4)
	360° Endless panning
	(S65340Z2)
	0° to +350°
Panning speed:	Manual: Approx. 0.065°/s – 150°/s
	Preset: Up to approx. 500°/s
Tilting range:	(S65340Z4)
	Operational range: −15°– +195° (level – downward – level)
	(S65340Z2)
	Operational range: −15°– + 90° (level – downward)
Tilting speed:	Manual: Approx. 0.065°/s – 150°/s
	Preset: Up to approx. 500°/s
Number of the preset positions:	256
Auto mode:	Auto track, Auto pan, Preset sequence, Patrol
Self return:	10 s, 20 s, 30 s, 1 min, 2 min, 3 min, 5 min, 10 min, 20 min, 30 min, 60 min

- **Network**

Network:	10BASE-T/100BASE-TX, RJ45 connector
Resolution: H.265/ H.264*1 JPEG (MJPEG)	**[16:9 mode(60 fps mode)][16:9 mode(30 fps mode)]** **[16:9 mode(50 fps mode)][16:9 mode(25 fps mode)]** 1920×1080/ 1280×720/ 640×360/ 320×180 **[4:3 mode(30 fps mode)] [4:3 mode(25 fps mode)]** 1280×960/ VGA/ QVGA **[4:3 mode(15 fps mode)] [4:3 mode(12.5 fps mode)]** 2048×1536*2/ 1280×960/ VGA/ QVGA

Image compression method*3:
H.265/ H.264*1
	Transmission priority:
	Constant bit rate/ VBR/ Frame rate/ Best effort
	Frame rate:
	[60 fps mode]
	1 fps/ 3 fps/ 5 fps*/ 7.5 fps*/ 10 fps*/ 12 fps*/ 15 fps*/ 20 fps*/
	30 fps*/ 60 fps*
	[30 fps mode]
	1 fps/ 3 fps/ 5 fps*/ 7.5 fps*/ 10 fps*/ 12 fps*/ 15 fps*/ 20 fps*/
	30 fps*
	[15 fps mode]
	1 fps/ 3 fps/ 5 fps*/ 7.5 fps*/ 10 fps*/ 12 fps*/ 15 fps*
	[50 fps mode]
	1 fps/ 3.1 fps/ 4.2 fps*/ 6.25 fps*/ 8.3 fps*/ 12.5 fps*/ 20 fps*/
	25 fps*/ 50 fps*
	[25 fps mode]
	1 fps/ 3.1 fps/ 4.2 fps*/ 6.25 fps*/ 8.3 fps*/ 12.5 fps*/ 20 fps*/
	25 fps*
	[12.5 fps mode]
	1 fps/ 3.1 fps/ 4.2 fps*/ 6.25 fps*/ 8.3 fps*/ 12.5 fps*
	(The frame rate is limited to "bit rate". When a value with an asterisk
	(*) is selected, the actual frame rate may be lower that the value
	selected.)
	Bit rate per client:
	64 kbps/ 128 kbps*/ 256 kbps*/ 384 kbps*/ 512 kbps*/ 768 kbps*/
	1024 kbps*/ 1536 kbps*/ 2048 kbps*/ 3072 kbps*/ 4096 kbps*/
	6144 kbps*/ 8192 kbps*/ 10240 kbps*/ 12288 kbps*/ 14336 kbps*/
	16384 kbps*/ 20480 kbps*/ 24576 kbps*/ --FREE ENTRY--
	* The available range of the bit rate varies depending on the setting
	  selected for "image capture size".
	Image quality:
	• For "Constant bit rate", "Frame rate", and "Best effort":
	  Low(Motion priority)/ Normal/ Fine(Image quality priority)
	• "VBR":
	  0 Super fine/ 1 Fine/ 2/ 3/ 4/ 5 Normal/ 6/ 7/ 8/ 9 Low
	Transmission type:
	Unicast port (AUTO)/ Unicast port (MANUAL)/ Multicast

JPEG (MJPEG)	**Image quality:** 0 SUPER FINE/ 1 FINE/ 2/ 3/ 4/ 5 NORMAL/ 6/ 7/ 8/ 9 LOW (10 steps: 0-9) **Transmission type:** Pull (Refresh interval)/ Push (MJPEG) **Refresh interval:** **[60 fps mode]** 0.1 fps/ 0.2 fps/ 0.33 fps/ 0.5 fps/ 1 fps/ 2 fps/ 3 fps/ 5 fps/ 6 fps/ 10 fps/ 12 fps/ 15 fps/ 30 fps/ 60 fps **[30 fps mode]** 0.1 fps/ 0.2 fps/ 0.33 fps/ 0.5 fps/ 1 fps/ 2 fps/ 3 fps/ 5 fps/ 6 fps/ 10 fps/ 12 fps/ 15 fps/ 30 fps **[15 fps mode]** 0.1 fps/ 0.2 fps/ 0.33 fps/ 0.5 fps/ 1 fps/ 2 fps/ 3 fps/ 5 fps/ 6 fps/ 10 fps/ 12 fps/ 15 fps **[50 fps mode]** 0.08 fps/ 0.17 fps/ 0.28 fps/ 0.42 fps/ 1 fps/ 2.1 fps/ 3.1 fps/ 4.2 fps/ 5 fps/ 8.3 fps/ 12.5 fps/ 25 fps/ 50 fps **[25 fps mode]** 0.08 fps/ 0.17 fps/ 0.28 fps/ 0.42 fps/ 1 fps/ 2.1 fps/ 3.1 fps/ 4.2 fps/ 5 fps/ 8.3 fps/ 12.5 fps/ 25 fps **[12.5 fps mode]** 0.08 fps/ 0.17 fps/ 0.28 fps/ 0.42 fps/ 1 fps/ 2.1 fps/ 3.1 fps/ 4.2 fps/ 5 fps/ 8.3 fps/ 12.5 fps (JPEG frame rates are limited when using JPEG and H.265/H.264 simultaneously.)
Smart coding:	**GOP(Group of pictures) control** Off/ Low (Variable GOP 1s-8s)/Mid (Variable GOP 4s-16s)/ Advanced (Fixed GOP 60 seconds with 1 second Key frame)/ Frame rate control (Variable GOP 4s-16s with frame rate control) Advanced and Frame rate control are only available with H.265. **Smart VIQS** On (High)/ On (Low)/ Off **Smart P-picture control** On/Off
Audio compression method:	G.726 (ADPCM): 16 kbps/ 32 kbps G.711: 64 kbps AAC-LC[4]: 64 kbps/ 96 kbps/ 128 kbps
Bandwidth control:	Unlimited/ 64 kbps/ 128 kbps/ 256 kbps/ 384 kbps/ 512 kbps/ 768 kbps/ 1024 kbps/ 2048 kbps/ 4096 kbps/ 6144 kbps/ 8192 kbps/ 10240 kbps/ 15360 kbps/ 20480 kbps/ 25600 kbps/ 30720 kbps/ 35840 kbps/ 40960 kbps/ 51200 kbps
Protocol:	IPv6: TCP/IP, UDP/IP, HTTP, HTTPS, SSL/TLS, SMTP, DNS, NTP, SNMPv1/v2/v3, DHCPv6, RTP, MLD, ICMP, ARP, IEEE 802.1X, DiffServ, FTP, SFTP, MQTT, LLDP IPv4: TCP/IP, UDP/IP, HTTP, HTTPS, SSL/TLS, RTSP, RTP, RTP/RTCP, SMTP, DHCP, DNS, DDNS, NTP, SNMPv1/v2/v3, UPnP, IGMP, ICMP, ARP, IEEE 802.1X, DiffServ, SRTP, FTP, SFTP, MQTT, LLDP, NTCIP

Security:	User authentication, Host authentication, HTTPS
	FIPS 140-2 level3
OS:	Microsoft Windows 11
	Microsoft Windows 10
Browser[5]:	Microsoft Edge
	Firefox
	Google Chrome
Maximum concurrent access number:	14* (Number of sessions that can connect to cameras at the same time)
	* Depends on network conditions
Multi-screen:	Up to 16 camera images can be displayed simultaneously on a multi-screen.
	(Including the camera itself)[6]
microSD memory card[7, 8, 9, 10, 11]:	microSDXC memory card: 64 GB, 128 GB, 256 GB, 512 GB
	microSDHC memory card: 4 GB, 8 GB, 16 GB, 32 GB
	microSD memory card: 2 GB
Mobile terminal/ Tablet terminal compatibility:	iPad / iPhone (iOS 8.0 or later), Android™ terminals

*1 H.265/H.264 can be selected for each stream.
*2 Used by super resolution techniques.
*3 Transmission for 4 streams can be individually set.
*4 When recording audio on a microSD memory card, only use AAC-LC (Advanced Audio Coding - Low Complexity).
*5 For information on the operation verification of the supported web browsers, refer to our technical information website <Control No.: C0132>.
*6 When using MJPEG/JPEG (Refresh interval) only.
*7 Use a microSD memory card dedicated to i-PRO cameras.
*8 For possible number of images and duration (an indication) that can be saved on the microSD memory card, refer to our technical information website below.
    Possible number of JPEG images that can be saved: <Control No.: C0306>
    Possible duration of stream images (H.265 or H.264) that can be saved: <Control No.: C0307>
*9 Use the microSD memory card with SD Speed Class 6 or higher. Use the microSD memory card that complies with UHS-1(Ultra High Speed-1) in the case of SD Speed Class 10.
*10 Refer to our technical information website <Control No.:C0117> for the replacement cycle (target) of a microSD memory card.
*11 When repeatedly recording images on a microSD memory card using the auto overwrite function, make sure to use a microSD memory card with high reliability and durability.

i-PRO Co., Ltd.

Tokyo, Japan
https://www.i-pro.com/

CE

UK
CA