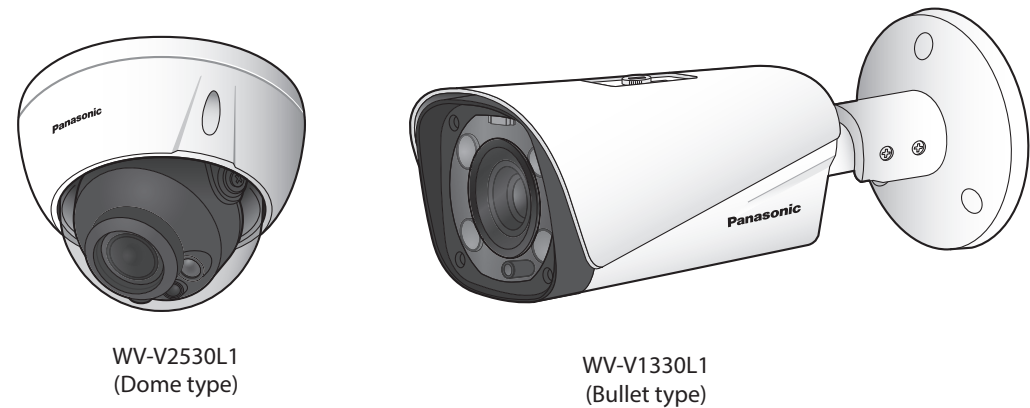


Installation Guide

Network Camera

Model No. WV-V2530L1/WV-V1330L1



- For information about how to perform the settings and how to operate the camera, refer to the operation manual on the provided CD-ROM.
- Before attempting to connect or operate this product, please read these instructions carefully and save this manual for future use.

For U.S. and Canada:

**Panasonic System Communications
Company of North America,
Unit of Panasonic Corporation
of North America**
www.panasonic.com/business/
For customer support, call 1.800.528.6747
Two Riverfront Plaza, Newark, NJ 07102-5490

Panasonic Canada Inc.
5770 Ambler Drive, Mississauga,
Ontario, L4W 2T3 Canada
(905)624-5010
www.panasonic.ca

For Europe and other countries:

Panasonic Corporation
http://www.panasonic.com

Panasonic System Networks Co., Ltd.
Fukuoka, Japan

Authorised Representative in EU:

Panasonic Testing Centre
Panasonic Marketing Europe GmbH
Winsbergiring 15, 22525 Hamburg, Germany

© Panasonic System Networks Co., Ltd. 2016

FDu1016-0 **PGQX2137ZA**
Printed in China

WARNING:

- To prevent injury, this apparatus must be securely attached to the wall/ceiling in accordance with the installation guide.
- All work related to the installation of this product should be made by qualified service personnel or system installers.
- The installation shall be carried out in accordance with all applicable installation rules.
- The connections should comply with local electrical code.
- Batteries (battery pack or batteries installed) shall not be exposed to excessive heat such as sunlight, fire or the like.

CAUTION:

- Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.
- The network camera is only intended for a connection to an ethernet or PoE network without routing to the outside plant.

NOTE: This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

FCC Caution: To assure continued compliance, (example - use only shielded interface cables when connecting to computer or peripheral devices). Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment.

⎓ : Direct current symbol

For U.S.A.


The model number and serial number of this product may be found on the surface of the unit.
You should note the model number and serial number of this unit in the space provided and retain this book as a permanent record of your purchase to aid identification in the event of theft.


Model No. _____
Serial No. _____

For Canada

CAN ICES-3(A)/NMB-3(A)

Disposal of Old Equipment and Batteries
Only for European Union and countries with recycling systems

 These symbols on the products, packaging, and/or accompanying documents mean that used electrical and electronic products and batteries must not be mixed with general household waste. For proper treatment, recovery and recycling of old products and used batteries, please take them to applicable collection points in accordance with your national legislation. By disposing of them correctly, you will help to save valuable resources and prevent any potential negative effects on human health and the environment. For more information about collection and recycling, please contact your local municipality. Penalties may be applicable for incorrect disposal of this waste, in accordance with national legislation.

 **Note for the battery symbol (bottom symbol)**
This symbol might be used in combination with a chemical symbol. In this case it complies with the requirement set by the Directive for the chemical involved.

Important safety instructions

- Read these instructions.
- Keep these instructions.
- Heed all warnings.
- Follow all instructions.
- Do not block any ventilation openings. Install in accordance with the manufacturer's instructions.
- Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.
- Only use attachments/accessories specified by the manufacturer.
- Unplug this apparatus during lightning storms or when unused for long periods of time.
- Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as power-supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.

Main functions

- 2 Megapixel Full-HD vari-focal network camera
- H.265, H.264 and MJPEG triple-stream encoding
H.265 outputs and H.264 output can be provided.
- Wide-angle lens with day/night functionality and built-in IR-LED

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 Panasonic System Networks 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:

- ANY LOSS OR DAMAGE, INCLUDING WITHOUT LIMITATION, DIRECT OR INDIRECT, SPECIAL, CONSEQUENTIAL OR EXEMPLARY, ARISING OUT OF OR RELATING TO THE PRODUCT;
- ANY INCONVENIENCE, LOSS, OR DAMAGE CAUSED BY INAPPROPRIATE USE OR NEGLIGENCE OPERATION OF THE USER;
- 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;
- INCONVENIENCE OR ANY LOSS ARISING WHEN IMAGES ARE NOT DISPLAYED, DUE TO ANY REASON OR CAUSE INCLUDING ANY FAILURE OR PROBLEM OF THE PRODUCT;
- ANY PROBLEM, CONSEQUENTIAL INCONVENIENCE, OR LOSS OR DAMAGE, ARISING OUT OF THE SYSTEM COMBINED BY THE DEVICES OF THIRD PARTY;
- 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;
- 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).

Network security

As you will use this unit connected to a network, your attention is called to the following security risks.

- Leakage or theft of information through this unit
- Use of this unit for illegal operations by persons with malicious intent
- 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 E-mail information, FTP server 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

⚠ WARNING

- Refer installation work to the dealer.**
Installation work requires technique and experiences. Failure to observe this may cause fire, electric shock, injury, or damage to the product.
 - Be sure to consult the dealer.
- Turn the power off when do wiring of this product.**
Failure to observe this may cause electric shock. In addition, short circuit or wrong wiring may cause fire.
- Correctly perform all wiring.**
Short circuits in the wiring or incorrect wiring may cause fire or electrical shock.
- Stop the operation immediately when something is wrong with this product.**
When smoke goes up from the product, the smell of smoke comes from the product, or the exterior of the product has deteriorated, continued use will cause a fire or fall of the product resulting in injury, or damage to the product.
 - In this case, turn the power off immediately and contact qualified service personnel for service.
- Select an installation area that can support the total weight.**
Selecting an inappropriate installation surface may cause this product to fall down or topple over, resulting in injury or accidents.
 - Installation work shall be started after sufficient reinforcement.
- Periodic inspections shall be conducted.**
Rust on the metal parts or screws may cause a fall of the product resulting in injury or accidents.
 - Consult the dealer for the inspections.
- Do not install this product in locations subject to vibration.**
Loosening of mounting screws or bolts may cause a fall of the product resulting in injury or accidents.
- Install this product in a location high enough to avoid people and objects from bumping the product.**
Failure to observe this may cause injury.
- Do not attempt to disassemble or modify this product.**
Failure to observe this may cause fire or electric shock. Consult the dealer for the repair or inspections.
- The screws and bolts must be tightened to the specified torque.**
Failure to observe this may cause a drop resulting in injury or accidents.
- Do not insert any foreign objects.**
Fire or electrical shock may be caused if water or any foreign objects, such as metal objects, enter inside the unit. Turn the power off immediately and contact qualified service personnel for service.
- Do not use this product in an inflammable atmosphere.**
Failure to observe this may cause an explosion resulting in injury.
- Avoid installing this product in the locations where salt damage occurs or corrosive gas is produced.**
Otherwise, the mounting portions will deteriorate and accidents such as a fall of the product may occur.
- Do not strike or give a strong shock to this product.**
Failure to observe this may cause fire or injury.
- Do not install or clean the camera, or touch this product, the power cable or the connected cables during thunder storms.**
Failure to observe this may cause electric shock.
- Keep SDXC/SDHC/SD memory cards away from infants and children.**
Otherwise, they may swallow the cards by mistake. In this case, consult a doctor immediately.

⚠ CAUTION

- Turn the power off when cleaning this product.**
Failure to observe this may cause injury.

Precautions for use

This product has no power switch.
When turning off the power, disconnect the power supply from the12 V DC power supply or the PoE device.

To keep on using with stable performance
Do not use this camera 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 camera to direct heat sources such as a heater.

Do not touch the lens with your bare hands.
A dirty lens causes deterioration of picture quality.

Handle this camera with care.
Do not drop this camera, nor apply shock or vibration to this camera. Failure to observe this may cause trouble. If a strong shock or vibration is applied to the enclosure, it may cause damage or allow water to enter this product.

About the battery
A battery is installed inside the camera. Do not leave the battery exposed in environments of excessive heat as a result of sunlight or fire.

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.

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.

About the MOS image sensor

- When continuously shooting a bright light source such as a spotlight, the color filter of the MOS image sensor may have deteriorated and it 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.

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

- ENCODE VIDEO IN COMPLIANCE WITH THE AVC STANDARD ("AVC VIDEO") AND/OR
- 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

Equipment classification and power source indication label
Refer to the indication label on the bottom side of this unit for the equipment classification, power source, and other information.

Specifications

● Basic	WV-V2530L1	WV-V1330L1
Power source:*	12 V DC, PoE (IEEE802.3af compliant)	
Power consumption:*	12 V DC: 1 A PoE 48 V DC: 180 mA (Class 0 device)	12 V DC: 1 A PoE 48 V DC: 230 mA (Class 0 device)
Operating environment Ambient operating temperature: Ambient operating humidity:	-30 °C to +60 °C (-22 °F to 140 °F), 10 % to 90 % (no condensation)	
Storage environment Storage temperature: Storage humidity:	-30 °C to +60 °C (-22 °F to 140 °F) 10 % to 95 % (no condensation)	
Waterproof:	Main body: IP66	
Shock resistance:	Compliant with IK10 (IEC62262)	Not supported
Dimensions:	ø122 mm × 89 mm (H) {ø4-13/16 inches × 3-1/2 inches (H)}	90 mm (W) × 214 mm (D) × 90 mm (H) {3-17/32 inches (W) × 8-7/16 inches (D) × 3-17/32 inches (H)}
Mass:	Approx. 460 g {1.01 lbs}	Approx. 700 g {1.54 lbs}

* Refer to our website (<http://security.panasonic.com/library/v/en/>) for further information about Power source and Power consumption.

● Camera		
Image sensor:	Approx. 1/2.8" type MOS image sensor	
Effective pixels:	Approx. 2 mega pixels	
Scanning system:	Progressive	
Minimum illumination:	0.2 lx/F1.4 (Color)*, 0 lx/F1.4 (IR on) * [Image Adjust] Shutter: (0-)80 ms, Gain: (0-)100"	
Gain:	Auto/ Manual	
Back light compensation:	OFF/ BLC/ HLC/ WDR	
Shutter speed:	Auto/ Manual, 1/3 sec~1/100000 sec	
Day/Night:	Auto(ICR)/ Color/ Black & White	
IR LED Light:	Irradiation distance: 30 m {Approx. 98 ft}	Irradiation distance: 60 m {Approx. 196 ft}
White balance:	Auto/ Natural/ Street Lamp/ Outdoor/ Manual	
Digital noise reduction:	3DNR ON/ OFF	
Privacy masking:	Up to 4 areas	
Video Motion Detection (VMD):	Off/ On (4 Zone, Rectangle)	
Tampering detection	Off/ On	
Image rotation	0 °/ 90 °/ 180 °/ 270 °	

● Lens		
Zoom ratio:	4.4x Optical (Motorized zoom/ Motorized focus)	
Focal length:	2.7~12 mm	
Aperture:	1 : 1.4	
Angular field of view:	H : 99 ° (WIDE)~37 ° (TELE) V : 52 ° (WIDE)~21 ° (TELE)	

● Network		
Network:	10BASE-T/ 100BASE-TX, RJ45 connector	
Resolution:	1080P (1920x1080)/ 1.3 M (1280x960)/ 720P (1280x720)/ 640x480/ 640x360/ 320x240	
Image compression method:	H.265/ H.264/ MJPEG	
Frame Rate:	1 ~ 25/30 fps	
Protocol:	IPv4/ IPv6, HTTP, HTTPS, SSL, TCP/ IP, UDP, UPnP, ICMP, IGMP, SNMP, RTSP, RTP, SMTP, NTP, DHCP, DNS, DDNS, FTP, QoS, 802.1x, Multicast	
Maximum concurrent access number:	20 users (Number of sessions that can connect to cameras at the same time)	
OS:	Microsoft® Windows® 10 Microsoft® Windows® 8.1 Microsoft® Windows® 8 Microsoft® Windows® 7	
Browser:	Windows® Internet Explorer® 11	
Compatible micro SDXC/ SDHC memory card:*	1 ~ 128 GB	

*1 When repeatedly recording images on a micro SD memory card using the auto overwrite function, make sure to use a micro SD memory card with high reliability and durability.
*2 Use the micro SD memory card that complies with UHS-I (Ultra High Speed-I) and SD Speed Class 10. Refer to our websight (<http://security.panasonic.com/library/v/en/>) in detail.

Trademarks and registered trademarks

- Microsoft, Windows, Windows Media, Internet Explorer, and ActiveX are either registered trademarks or trademarks of Microsoft Corporation in the United States and/or other countries.
- Microsoft product screen shot(s) reprinted with permission from Microsoft Corporation.
- All other trademarks identified herein are the property of their respective owners.

Standard accessories

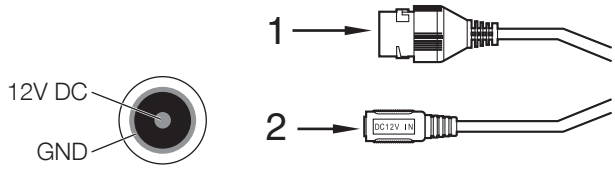
Confirm the following items are included in the camera's packaging.

Installation Guide (this document)	1 pc.	Template	1 pc.
Warranty card	1 set	CD-ROM	1 pc.
RJ45 waterproof connector	1 bag.	Hexagonal wrench (3 mm {1/8 inches}) ...	1 pc.

Connection

◆ Device external cable

You can refer to the following figure for cable information.



1. LAN (Network port)RJ45 waterproof jack. Connect to standard Ethernet cable.

NOTE:

Some devices do not support PoE power supply.
Power port. Input 12V DC.
When a PoE power supply is used to power the camera, the power input port is not used. Process the jack as indicated below.

IMPORTANT:

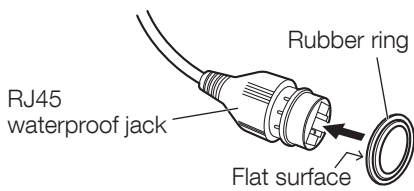
- Apply appropriate waterproofing.

◆ Assembling RJ45 waterproof connector

IMPORTANT:

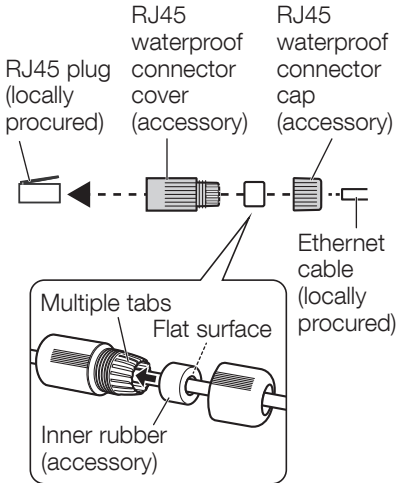
- The maximum cable length is 100 m.
- Make sure that the PoE device in use is compliant with IEEE802.3af standard.
- Use all 4 pairs (8 pins) of the Ethernet cable.
- The external dimensions of the Ethernet cable are ø5 mm to ø6.5 mm.
- If the procedure for the RJ45 waterproof connector (accessory) part is not correctly followed, the waterproofing may be compromised. Do not install the camera where the RJ45 waterproof connector is exposed to constant rain or moisture.

- ① Attach the rubber ring (accessory) to the RJ45 waterproof jack connected to the camera as shown.
 - Attach with the flat surface of the rubber ring facing the RJ45 waterproof jack.



- ② First pass the Ethernet cable through the RJ45 waterproof connector cap (accessory), the inner rubber (accessory) and then RJ45 waterproof connector cover (accessory).
Next, use a specialized tool (locally procured) to crimp the RJ45 plug (locally procured) to the end of the Ethernet cable.

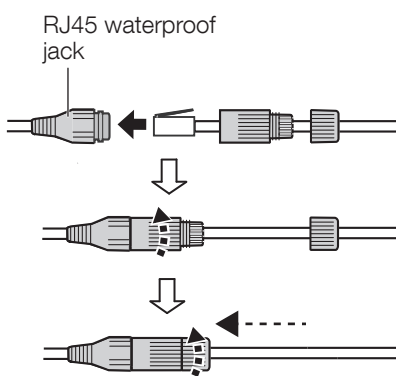
- Pass the inner rubber over the cable so that the grooved surface faces the RJ45 plug and the flat surface faces the Ethernet cable.



- ③ Insert the inner rubber into the far end of the waterproof connector cover (the direction in which multiple tabs are open) to secure it temporarily inside the multiple tabs.

The following steps illustrate how to attach the connector to a camera as it is being installed.

- ④ Connect the RJ45 plug to the RJ45 waterproof jack and then rotate and tighten firmly the RJ45 waterproof connector cover.



- ⑤ Connect the RJ45 waterproof connector cap to the RJ45 waterproof connector cover and rotate the RJ45 waterproof connector cap until there is no gap between it and the RJ45 waterproof connector cover.

◆ Connect 12 V DC AC adaptor to the power port (if necessary)

When the camera will run on an external power supply, use an AC adaptor that can provide a 12 V DC 1.5 A or higher power supply.

IMPORTANT:

When cables are used outdoors, there is a chance that they may be affected by lightning. In this case, install a lightning arrester just before where the cables connect to the camera.

CAUTION:

- A READILY ACCESSIBLE DISCONNECT DEVICE SHALL BE INCORPORATED TO THE EQUIPMENT POWERED BY 12 V DC POWER SUPPLY.
- ONLY CONNECT 12 V DC CLASS 2 POWER SUPPLY (UL1310/CSA 223) or LIMITED POWER SOURCE (IEC/EN/UL/CSA 60950-1).

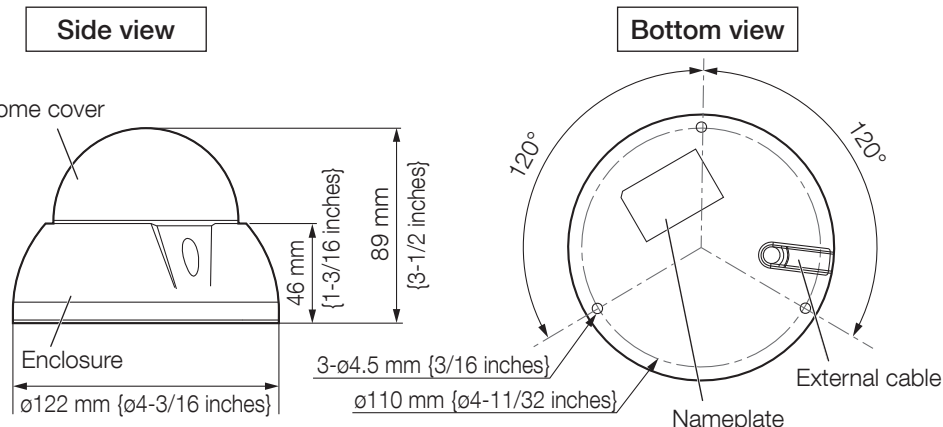
◆ INITIAL SET button

When you need to reset the camera, press and hold the "INITIAL SET button" for about 10 seconds while the power is connected. The button is shown in the illustration for Step 3 of the instructions for WV-V2530L1 and in the illustration for Step 5 of the instructions for WV-V1330L1.

WV-V2530L1

◆ Framework and dimension

Please refer to the following figure for dimension information.



◆ Device Installation

Secure the camera with 3 screws (M4) (locally procured).

IMPORTANT:

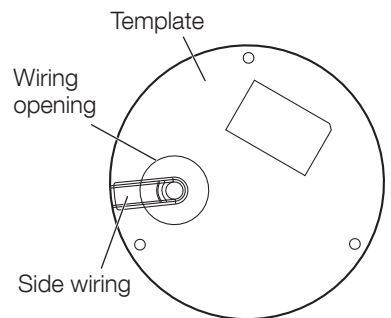
- Before starting the connection, turn off the power of the devices to be connected.
- Procure 3 screws (M4) to secure the camera to a ceiling or a wall, according to the material of the installation area. In this case, wood screws and nails should not be used.
- Required pull-out capacity of a single screw or anker is 196 N {44 lbf} or more.

Step 1 Open a hole for installing and cabling the camera on the ceiling or wall.

Remove the template from the carton box and use it to open holes in the positions for installation screws and the wiring opening to pass cabling through.

NOTE:

- The position of the Panasonic logo when the enclosure is attached is roughly halfway between the mounting holes. Orient the template to match the desired logo position.
- Determine the screw hole diameter based on screw specifications.
- To run cabling or make connections behind a ceiling or wall, drill a hole in the wiring opening position indicated on the template. If it is necessary to run the cabling to the side, it can be arranged in the side wiring direction shown on the template. Orient the template to match the desired wiring direction.



Step 2 Remove the enclosure from the camera.

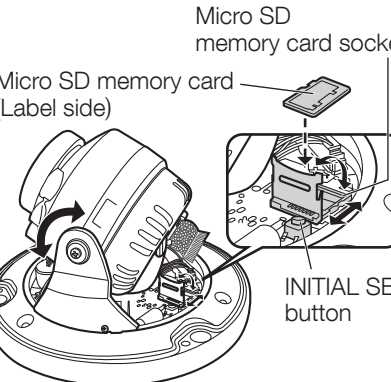
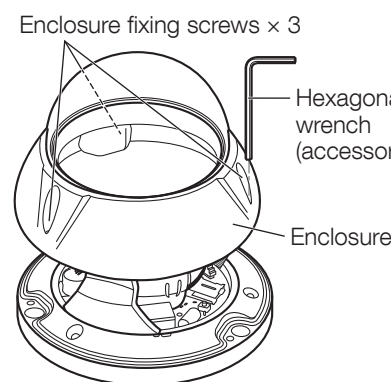
Use the hexagonal wrench (accessory) to loosen the three enclosure fixing screws. Then remove the enclosure from the camera.

Step 3 If necessary, install a Micro SD memory card in the camera.

- ① Confirm the position of the Micro SD memory card socket.
- ② Tilt the camera slightly on the tilt axis as shown in the figure to create an opening to access the Micro SD memory card socket.
- ③ Slide the cover of the Micro SD memory card socket and raise it as shown in the figure.
- ④ Place the Micro SD memory card in the slot, close the cover, and slide it back to its original position to secure the Micro SD memory card.

NOTE:

- Be careful not to touch the wiring portion of the circuit board when you raise the cover of the Micro SD memory card socket.
- Make sure the Micro SD memory card is mounted with its label side visible.



Step 4 Connect the camera.

Connect the RJ45 waterproof connector to the camera's RJ45 waterproof jack. (Refer to steps ④ and ⑤ in "Assembling RJ45 waterproof connector".)
If necessary, also connect the plug of an AC adaptor for 12 V DC power to the power port.

Step 5 Attach the camera to the ceiling or wall.

Attach the camera using the three screws (locally procured) on the ceiling or wall.

NOTE:

- Required pull-out capacity of a single screw or anker is 196 N {44 lbf} or more.
- After connection, push extra cabling through the hole in the ceiling or wall to adjust the length.

Step 6 Turn the power on and check the screen on the computer.

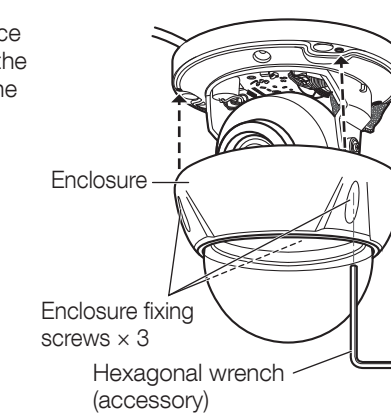
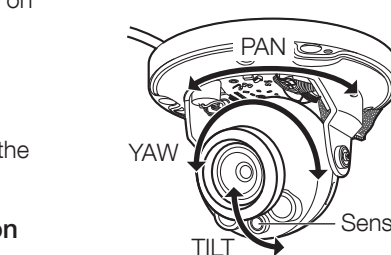
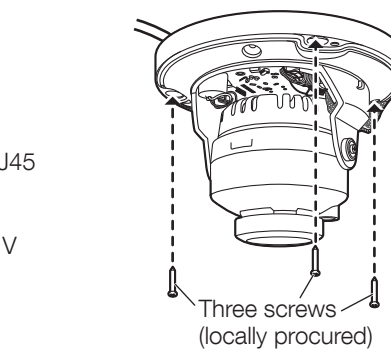
Turn on power from the 12 V DC power supply or PoE device and operate the camera. Check video from the camera on the computer screen and refer to "Network Configuration" on the right side of this document.

Step 7 Adjust the camera angle.

Adjust the camera angle by moving it on the PAN, TILT, and YAW axes as you check the video on the computer screen.

Step 8 Attach the enclosure.

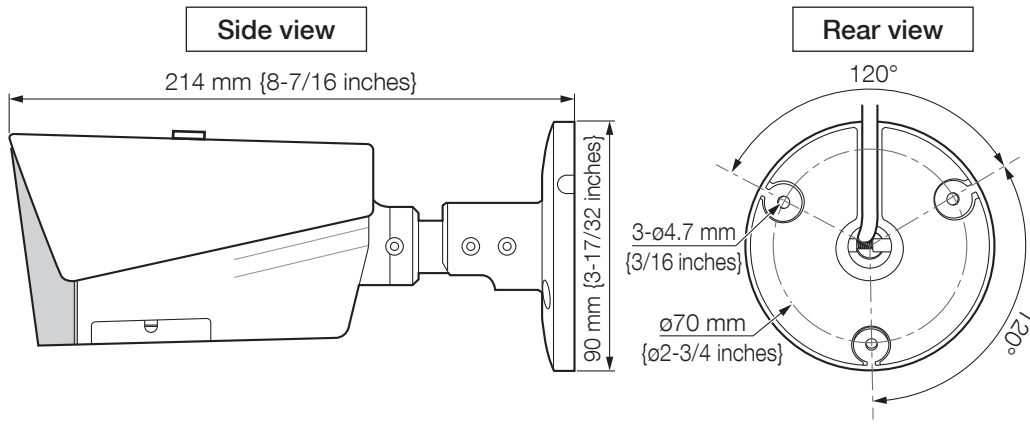
Use the hexagonal wrench (accessory) to tighten the three enclosure fixing screws to secure the enclosure on the camera. Finally, remove the protective sheet.
(Recommended tightening torque: 0.78 N·m {0.58 lbf·ft})



WV-V1330L1

◆ Framework and dimension

Please refer to the following figure for dimension information.

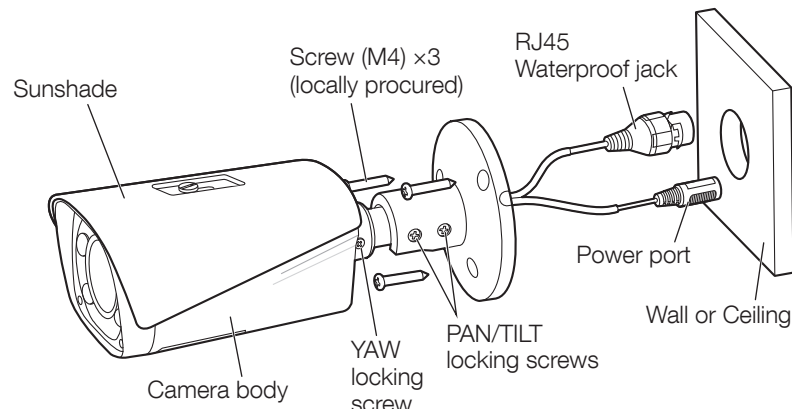


◆ Device Installation

Secure the camera with 3 screws (M4) (locally procured).

IMPORTANT:

- Before starting the connection, turn off the power of the devices to be connected.
- Procure 3 screws (M4) to secure the camera to a ceiling or a wall, according to the material of the installation area. In this case, wood screws and nails should not be used.
- Required pull-out capacity of a single screw is 196 N {44 lbf} or more.

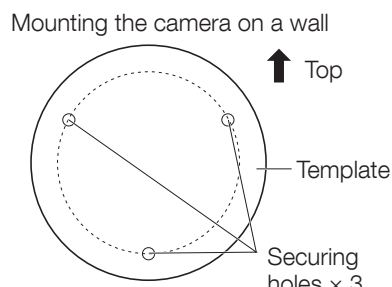


Step 1 Open a hole for installing the camera and cabling in the ceiling or wall.

Remove the template from the carton box and use it to open holes in the positions for installation screws and the wiring opening to pass cabling through.

NOTE:

- To mount the camera on a wall, orient the template such that the camera can be secured in place using two of the three securing screws on the top. (See figure at right.)
- Determine the screw hole diameter based on screw specifications.
- To run cabling or make connections behind a ceiling or wall, drill a hole in the center position indicated on the template. If it is necessary to run the cabling to the side, it can be fed through the base in a direction. Orient the wiring connection direction to match the camera base.

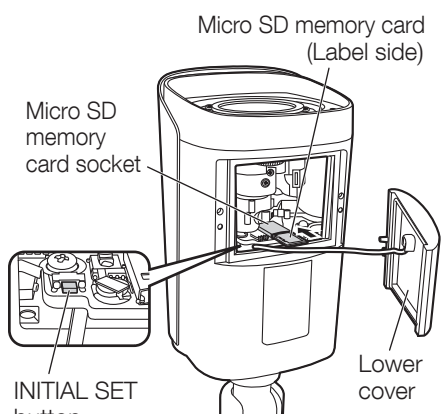


Step 2 If necessary, install a Micro SD memory card in the camera.

- ① Use a Phillips screwdriver to loosen two screws on the bottom of the camera. Then remove the lower cover.
- ② Insert the Micro SD memory card into the Micro SD memory card socket.
- ③ Replace the lower cover removed in step ① above, and secure it in place.

NOTE:

- Be careful not to touch the wiring portion of the circuit board when you install the Micro SD memory card.
- Make sure the Micro SD memory card is mounted with its label side visible.



Step 3 Connect the camera.

Connect the RJ45 waterproof connector to the camera's RJ45 waterproof jack. (Refer to steps ④ and ⑤ in "Assembling RJ45 waterproof connector".)
If necessary, also connect the plug of an AC adaptor for 12 V DC power to the power port.

Step 4 Installing the camera.

Use the hexagonal wrench (accessory) to loosen the PAN/TILT locking screws (one each). Then secure the camera to the ceiling or wall with three screws (M4) while panning and tilting the camera as shown in the figure at right.

NOTE:

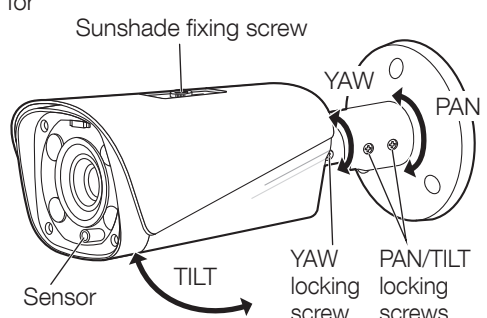
After connection, push extra cabling through the hole in the ceiling or wall to adjust the length.

Step 5 Turn the power on and check the screen on the computer.

Turn on power from the 12 V DC power supply or PoE device and operate the camera. Check video from the camera on the computer screen and refer to "Network Configuration" on the right side of this document.

Step 6 Adjust the camera angle.

Adjust the camera angle as you check video on the computer screen. Turn the base of the camera to pan, or move the camera itself to adjust tilt or yaw, as shown at upper right.
Adjust the PAN, TILT and YAW angles of the camera so that the sunshade fixing screw is positioned immediately above the camera.
Finally, tighten the PAN/TILT locking screws and YAW locking screw to secure the camera's position.
(Recommended tightening torque: 0.78 N·m {0.58 lbf·ft})

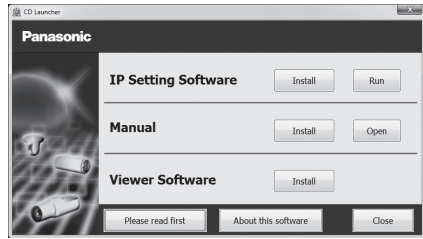


Network Configuration

Configure the setting of the camera after temporarily invalidating the firewall software. Once the camera configuration is completed, return to the original state.
Contact the network administrator or your Internet service provider for information about configuring the settings of the network.

[1] Insert the provided CD-ROM into the CD-ROM drive of your PC. Double click the "CDLauncher.exe" file on the CD-ROM.

- The License Agreement will be displayed. Read the Agreement and choose "I accept the term in the license agreement", and click [OK].
- ➔ The launcher window will be displayed.



NOTE:

- Refer to "Using the CD-ROM" in the Operating Instructions on the provided CD-ROM for further information about CDLauncher.

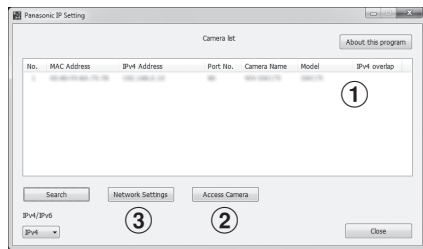
[2] Click the [Run] button next to [IP Setting Software].

- ➔ [Panasonic IP Setting] screen will be displayed. The MAC Address / IP address of the detected camera will be displayed.

[3] Select the camera you want to configure (①), and click [Access Camera] (②).

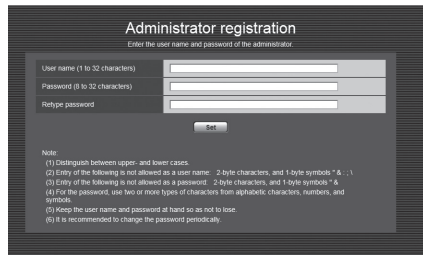
NOTE:

- Select the camera with same MAC address as the MAC address printed on the camera that you want to configure.
- To change the IP address in step [3], select [Network Settings] (③) and set the address before clicking [Access Camera] (②).



[4] When the administrator registration window is displayed, enter "User name", "Password" and "Retype password" by following the instructions displayed on the screen, and then click the [Set] button.

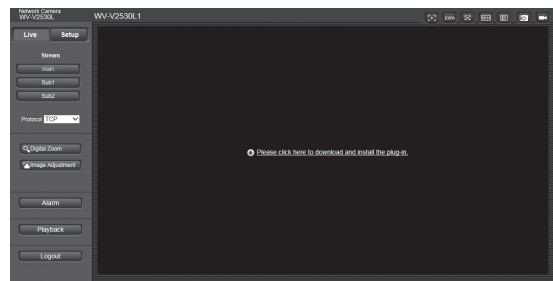
Please keep your user name and password in a safe place free from public view to ensure security. After completing the registration, the camera will automatically be re-connected and the authentication window will be displayed. Enter the registered user name and password. The default setting of user authentication is "On".



IMPORTANT:

- When the camera is used over the Internet, setting user authentication to "Off" may lead to unintended access by a third party. Please leave user authentication set to "On".

[5] If "Please click here to download and install the plug-in." is displayed in Live screen, follow the instructions to start the installation.



[6] When the live video of the camera is displayed, the network access is complete.

NOTE:

For more information on the following content, refer to the Operating Instructions.

- Please set [Date/time] on the [Basic] screen of "Setup" before using the camera.
- If images are not displayed, set the Web browser to compatibility view. For details on how to configure, refer to our website (<http://security.panasonic.com/library/v/en/>).
- To register to a Panasonic network recorder, select WV-SW558, the model number required for the WV-V2530L1 and WV-V1330L1. Refer to the Panasonic support website for details. <http://security.panasonic.com/library/v/en/>

Open Source Software

- This product contains open source software licensed under GPL (GNU General Public License), LGPL (GNU Lesser General Public License), etc.
- Customers can duplicate, distribute and modify the source code of the software under license of GPL and/or LGPL.
- Refer to the "readme.txt" file on the provided CD-ROM for further information about open source software licenses and the source code.
- Please note that Panasonic shall not respond to any inquiries regarding the contents of the source code.

Copyright

Except for open source software licensed under GPL/LGPL and so on, distributing, copying, disassembling, reverse compiling and reverse engineering of the software provided with this product are all expressly prohibited. In addition, exporting any software provided with this product violating export laws is prohibited.