

# **Installation Guide** Included Installation Instructions



Network Camera | For professional use only

Model No. WV-X8571N Outdoor use WV-S8531N Outdoor use



## About the user manuals

Product documentation is composed of the following documents.

- Installation Guide (this document): Provides information about "Precautions", "Precautions for installation" and the installation method.
- Basic Information (in the following website): Provides information about "Precautions for use" and "Detail specifications".
- Operating Instructions (in the following website): Explains how to perform the

settings and how to operate this camera. nttps://i-pro.com/global/en/surveillance/documentation\_database



- Before attempting to connect or operate this product, please read these instructions carefully and save this manual for future use.
- SDXC/SDHC/SD memory card is described as SD 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.

## For U.S. and Canada:

# i-PRO Americas Inc.

https://www.i-pro.com/

For Europe and other countries:

i-PRO Co., Ltd. Fukuoka, Japan https://www.i-pro.com/

i-PRO EMEA B.V. UK Branch 1010 Cambourne Business Park, Cambridgeshire CB23 6DP

Authorised Representative in EU: i-PRO EMEA B.V. Laarderhoogtweg 25, 1101 EB Amsterdam, Netherlands



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# \* PGQX2428XA \* Ns0221-2042 Printed in China

# **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 authority. 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.

For U.S.A.

NOTE: This equipment has been tested and found to FCC CAUTION: Changes or modifications not 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 harm-

ful 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

expressly approved by the party responsible for compliance could void the user's authority to operate the

EXT I/O cable / Audio input cable / Power supply cable with ferrite core must be used. (WV-X8571N)

Supplier's Declaration of conformity Trade name : i-PRO

Model No.: WV-X8571N, WV-S8531N Responsible Party:

i-PRO Americas Inc. 8550 Fallbrook Drive, Suite 200 Houston, Texas 77064

Support Contact: 1-800-513-5417

# — 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)

Vis de La capacité de Méthode fixation traction minimale d'installation recomrequise mandée Quand la caméra vidéo est directement M4/ 4 él. 539 N {121 lbf} nstallée au plafond ou sur le mur.

- For U.S.A. This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: 1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

#### Caution:

- The DC power supply connected to the camera must be in the same building.
- to an ethernet or PoE network without routing to the
- outside plant This product has no power switch. Be sure to install disconnect devices such as a circuit breaker to shut down the main power of power supplying equipment
- to this product. Only connect 12 V DC Class 2 power supply (UL 1310/CSA 223) or limited power source (IEC/EN/ UL/CSA 60950-1 or IEC/EN/UL/CSA 62368-1
- Annex Q). (WV-X8571N) Before attempting to connect or operate this product, please read these instructions carefully.

- This product is not suitable for use in locations where
- children are likely to be present The network camera is only intended for a connection

  • Do not install this product in locations where ordinary
  - persons can easily reach.
  - This product is a professional equipment. • For information about screws and other parts required for installation, refer to the corresponding section of this document.

Direct current symbol

# **Precautions**

#### ■ 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 injury or accidents due to a fall of the product may occur.

## ■ Do not strike or give a strong shock to this product.

Failure to observe this may cause injury or fire.

Keep SD memory cards away from infants and children.

Otherwise, they may swallow the cards by mistake. In this case, consult a doctor immediately.

■ Do not hang down from this product or use this product as a pedestal.

## Failure to observe this may cause injury or accidents. ■ Do not damage the power cable. X8571

Do not damage, fabricate, twist, stretch, bundle, or forcibly bend the power cable. Do not place heavy objects on it, and keep it away from heat sources.

Use of a damaged power cable may cause electric shock, short circuit, or fire. Consult the dealer for repair.

## ■ Do not install this product on a place that is greatly influenced by wind.

Installation on a place where the wind speed is 60 m/s {approx. 134 mph} or more may cause a fall of the product

■ Do not sprinkle more water, exceeding the performance limit of waterproof with a high pressure cleaning machine, etc.

Fire or electrical shock may be caused by immersion.

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.

■ 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.

#### ■ Refer installation work to the dealer

Installation work requires technique and experience. Failure to observe this may cause fire, electric shock, injury, or damage to the product. Be sure to consult the dealer.

# ■ 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.

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.

■ The exclusively designed mount bracket shall be used.

#### Failure to observe this may cause a drop resulting in injury or accidents. Use the exclusively designed mount bracket for installation

■ Select an installation area that can support the total weight.

■ The screws and bolts must be tightened to the specified torque.

Failure to observe this may cause a drop resulting in injury or accidents.

■ 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

■ Install this product in a location high enough to avoid people and objects from bumping the product. Failure to observe this may cause injury

# ■ The measures of protection against a fall of this product shall be taken.

Failure to observe this may cause a drop resulting in injury. Be sure to install the safety wire.

■ 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.

# ■ Correctly perform all wiring.

Short circuits in the wiring or incorrect wiring may cause fire or electrical shock.

#### ■ The measures of protection against snowfall shall be taken. Weight of snow may cause a fall of the product resulting in injury or accidents

Protect the product against snowfall by installing it under eaves.

#### ■ Install the product securely on a wall or a ceiling in accordance with the installation instructions. Failure to observe this may cause injury or accidents

■ Turn the power off when cleaning this product.

Failure to observe this may cause injury.

■ Do not rub the edges of metal parts with your hand.

# Failure to observe this may cause injury.

# About notations

The following notations are used when describing the functions limited for specified models

The functions without the notations are supported by all models. The illustrations without any notation are of the

X8571): The functions with this notation are available when using the model WV-X8571N (4K model).

S8531): The functions with this notation are available when using the model WV-S8531N (2M pixel model).

# 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.
- For details concerning licensing and source code of open source software, click "Click here for OSS information" on "Support" page of the setup menu of this product and read the displayed content.
- Please note that we shall not respond to any inquiries regarding the contents of the source code

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## Precautions for installation

i-PRO Co., Ltd. assumes no responsibility for injuries or property damage resulting from failures arising out of improper installation or operation inconsistent with this documentation.

■ In order to prevent injury, the product must be securely mounted to a ceiling or wall according to Installation Guide

## ■ Installation area for this product

- Select an appropriate place for the installation area (such as a strong wall or ceiling) in your particular environment.
- Make sure that the installation area is strong enough to hold this product, such as a concrete ceiling. • Install the camera in the foundation area of the architecture or where sufficient strength is assured.
- Do not mount the product on a plaster board or a wooden section because they are too weak. If the product is unavoidably mounted on such a section, the section shall be sufficiently reinforced.

### Mounting method for this product.

This product is designed to be used as a pendant mount camera. If the product is mounted on a desktop or at a slant, it may not work correctly and its lifetime may be shortened.

# ■ Do not place this product in the following places

- Locations where a chemical agent is used such as a swimming pool
- Locations subject to moisture or oil smoke such as a kitchen
- Locations that have a specific environment that is subject to an inflammable atmosphere or solvents • Locations where a radiation, an X-ray, a strong radio wave or a strong magnetic field is generated
- Locations near coasts directly subjected to sea breezes, or locations subject to corrosive gases such as from hot springs, volcanic regions, etc.

• Locations subject to vibrations, such as on vehicles, marine vessels, or above product lines (This product is not

- designed for on-vehicle use.) • Locations subject to condensation as the result of severe changes in temperature

• Locations where the temperature is not within the specified range

#### • Locations near rubber products (packing, rubber feet, etc.) Screw tightening

Do not use an impact driver. Use of an impact driver may damage the screws or cause tightening excessively.

# ■ Installing in low temperature environments X8571

This product may not function properly, if it is installed and operated in an environment where the temperature is below -25 °C {-13 °F}. In such a case, wait approximately 2 hours or more until the camera is warmed up. Then, turn on the power again.

As the camera warms up, snow or frost accumulated on the dome cover will melt. However, it may not be defrosted from the cover depending on the ambient temperature or weather condition.

# ■ Installing in low temperature environments S8531

This product is equipped with an internal heater unit for use in cold climates. The heater unit turns on automatically when the temperature inside the product drops below around 0°C (32 °F). When this product is installed and operated in low temperatures below -10 °C {14 °F}, it may require time to start up since the camera will wait to be warmed up internally by the internal heater right after the power is turned on. Also, the camera may not function properly, if it is installed and operated in an environment where the temperature is below -25 °C {-13 °F}. In such a case, wait approximately 2 hours or more until the camera is warmed up. Then, turn on the power again. As the camera warms up, snow or frost accumulated on the dome cover will melt. However, it may not be defrosted

#### from the cover depending on the ambient temperature or weather condition. ■ About reflection of light from outside or IR light

A ghost may appear on the screen depending on the incident angle of external light.

arrestor as short as possible to prevent the camera from being affected by lightning.

In the case of using the IR light, installation of a camera near a wall may cause reflection of infrared rays resulting in a part of the screen or the entire screen turning whitish.

• Refer to our support website <Control No.: C0109> for image examples and measures to take.

# Install this product when the humidity is low. If installation is performed when it is raining or in very humid conditions,

■ Take notice of humidity

the inside may be affected by humidity, causing mist-over inside the dome cover. ■ Protection from lightning

#### When cables are used outdoors, there is a chance that they may be affected by lightning. In such a case, install a lightning arrestor close to the camera, and make the length of the network cable between the camera and lightning

■ When noise disturbance may happen Noise may appear in video or audio near a strong electric field from a TV or radio antenna, motors and transformers, or a strong electric field/magnetic field from a power line (lamp line) of AC100 V or more. Conduct the power distribution work to keep 1 m {3.28 feet} away from them or conduct the electric conduit work using metal pipes.

#### (Be sure to make ground connection of the metal pipes.) ■ Make sure to remove this product if it will no longer be used.

■ This product has no power switch. When turning off the power, disconnect the power supply from the 12 V DC power supply (X8571) or the PoE+ device.

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.

■ Equipment classification and power source indication label Remove the rear cover of this product to refer to the indication label for the equipment classification, power source, and other information

# Troubleshooting

About the battery

Before requesting service, refer to "Troubleshooting" of Basic Information and Operating Instructions. Then, confirm the trouble.

Specifications* *For fur	ther information, refer to	the Basic Information.	
Power source *1:	DC 12 V *2 <b>X8571</b>	/ PoE+ (IEEE802.3at compliant)	
Power consumption *1:	X8571 DC 12 V *2: 1.2 A/Approx. 15 W PoE+ DC 54 V: 350 mA/Approx. 20 W (Class 4 device)  S8531 PoE+ DC 54 V: 390 mA/Approx. 22 W (Class 4 device)		
Operating environment	vironment		
Ambient operating temperature:	-40 °C to +60 °C {-40 °F to +140 °F} (Power On range: -20 °C to +60 °C {-4 °F to +140 °F})		
Ambient operating humidity:	10 % to 100 % (no condensation)		
	10 % to 95 % (no cond	densation)	
EXT I/O terminals *3:	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/ ALARM OUT/ AUX OUT) (x1)		
Audio input: X8571  For microphone input:	Recommended applica	ack (Audio input is stereo.)  able microphone: Plug-in power type  one: -48 dB±3 dB (0 dB=1 V/Pa, 1 kHz))  Approx. 2 kΩ (unbalanced)  2.4 V ±0.5 V	
For line input:	Input level:	Approx. –10 dBV	
Waterproof *4:	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:	ø230 mm × 232 mm (H Dome radius 80 mm {3 <b>When using attachm</b>	ent plate only: 	
Mass:	When using WV-QJB (optional base brack When using attachm		
Finish:		Aluminum die cast, i-PRO white Stainless steel (Corrosion-resistant treatment) Polycarbonate resin (with ClearSight coating), Clear	
Others:	Tamper-resistant enclo		
consumption information.		for further information about Power source and Power	

\*2 When used with DC 12 V power source, some functions to be added on update may sometimes be

unavailable. It is recommended to use with PoE+. \*3 Refer to the Operating Instructions for further information about the EXT I/O terminal settings.

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)

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) \*4 Only when installation work is properly performed according to the Installation Guide and appropriate

\*5 Component that has a structure on which the screws that are accessible after installation cannot be screwed or unscrewed using an ordinary screwdriver.

# Optional accessories\*1

waterproof treatment is performed.

-				
Ceiling mount bracket:	WV-Q105A*2	Mount bracket:	WV-QSR502A-W	
Ceiling mount bracket:	WV-QCL501-W	Pole mount bracket:	WV-QPL500-W	
Wall mount bracket:	WV-QWL501-W	Corner mount bracket:	WV-QCN500-W	
Attack and and alice a level set.	MALO ATECO MAL	Daga bugalisti	MAY O IDEOT MY	

\*1 Refer to our support website <Control No.: C0501, C0112> for further information about optional accessories.

\*2 This product can only be installed indoors when WV-Q105A is used to install it on the ceiling.

Standard accessories Installation Guide (this document). .. 1 pc. Code label\*

IMPORTANT SAFETY INSTRUCTIONS. 1 This label may be required for network management. Use caution not to lose this label.

The following parts are used during installation procedures. Attachment plate .. .. 1 pc. 4P alarm cable **X8571** Template A (for the attachment plate). Ferrite core X8571 Waterproof tape

...1 sheet 2P power cable X8571 . 1 pc. .. 1 pc. Wire lug plate 1 pc. .. 1 pc. Extended safety wire .. . 1 pc. RJ45 waterproof connector cover. .. 1 pc. Rain wash coating label... . 1 pc. RJ45 waterproof connector cap. .. 1 pc. Bit (Hex wrench, screw size 6.35 mm {1/4 inches} T20) ...

.. 1 pc.

# Other items that are needed (not included)

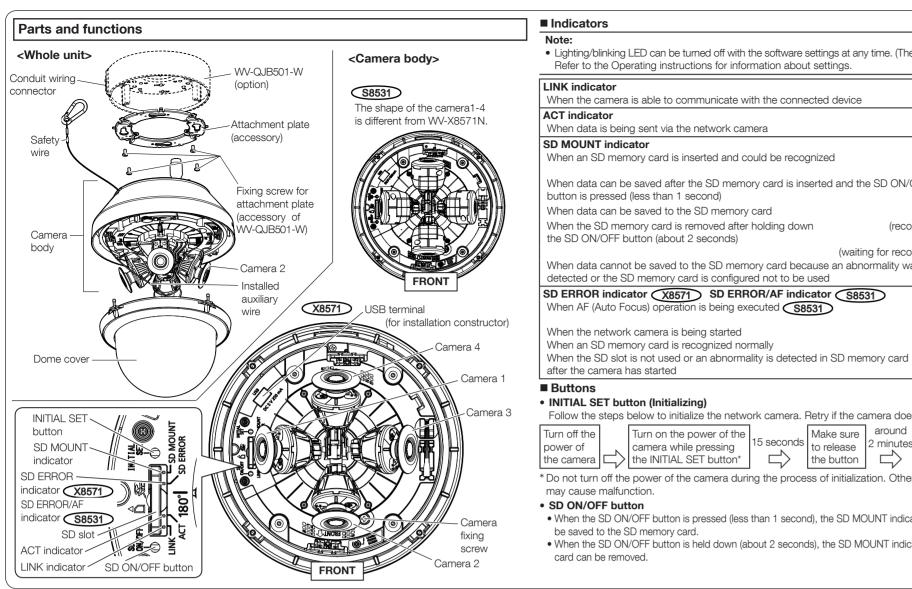
Fixing screw

Installation method	Recommended screw*1	Minimum pull-out strength*2
Junction box : Mount the camera on the two-gang junction box using the attachment plate		
Directly mount : Directly mount the camera onto the ceiling using the attachment plate	M4/ 4 pcs.	539 N {121 lbf}
QJB501 : Mount the camera onto the ceiling using WV-QJB501-W		
QSR502 : Mount the camera using WV-QSR502A-W (option),	Refer to the op	erating instructions

\*1 Select screws according to the material of the location that the camera will be mounted to. In this case, wood screws and nails should not be used.

\*2 For information about the minimum pull-out strength, refer to our support website <Control No.: C0120>. • RJ45plug, Ethernet cable (category 5e or better, straight, all 4 pairs (8 pins))

• As necessary, audio input cable, audio output cable, alarm I/O cables, power supply cable Tools



 Lighting/blinking LED can be turned off with the software settings at any time. (The initial state is lighting or blinking.) Refer to the Operating instructions for information about settings.

LINK indicator				
When the camera is able to communicate with the connected of	Lights orange			
ACT indicator				
When data is being sent via the network camera		Blinks green (accessing)		
SD MOUNT indicator				
When an SD memory card is inserted and could be recognized		Lights off $\rightarrow$ Blinks green $\rightarrow$ Lights off		
When data can be saved after the SD memory card is inserted button is pressed (less than 1 second)	and the SD ON/OFF	Lights off → Lights green		
When data can be saved to the SD memory card		Lights green		
When the SD memory card is removed after holding down	(recording)	Lights green →		
the SD ON/OFF button (about 2 seconds)		Blinks green → Lights off		
	(waiting for recording)	Lights green → Lights off		
When data cannot be saved to the SD memory card because a detected or the SD memory card is configured not to be used	an abnormality was	Lights off		
SD ERROR indicator X8571 SD ERROR/AF indicator S8531				

When AF (Auto Focus) operation is being executed \$8531 When the network camera is being started When an SD memory card is recognized normally

• INITIAL SET button (Initializing)

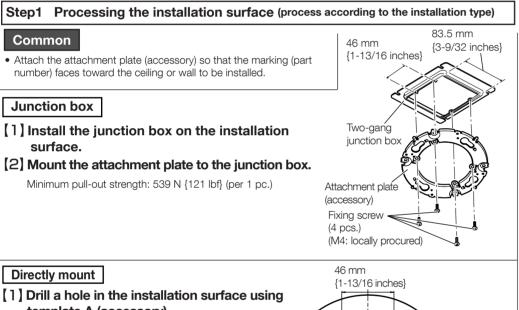
Follow the steps below to initialize the network camera. Retry if the camera does not start up normally.

Make sure Turn on the power of the 2 minutes settings including the network 15 seconds to release the button settings will be initialized

\* Do not turn off the power of the camera during the process of initialization. Otherwise, it may fail to initialize and

### SD ON/OFF button

- When the SD ON/OFF button is pressed (less than 1 second), the SD MOUNT indicator lights up in green and data can
- When the SD ON/OFF button is held down (about 2 seconds), the SD MOUNT indicator lights off and the SD memory



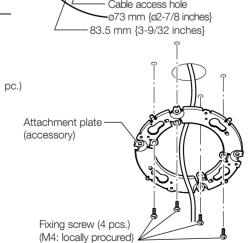
# template A (accessory). (4 screw holes / 2 cable access holes)

• Make a hole so as to face the UFRONT mark of the template to the front side of the camera (in the direction of i-PRO logo)

• If you want to be able to change the direction of the camera after installation, drill through a 73 mm {2-7/8 inches} diameter hole in the center. By doing so you can adjust the mounting direction of the camera in 90° increments.

## (2) Install the attachment plate on the installation surface.

Minimum pull-out strength: 539 N {121 lbf} (per 1 pc.)



# ø25.4 mm (ø1 inch) - Cable access hole

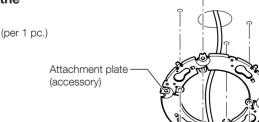
[1-25/32 inches]

- Cable access hole

–16.4 mm{21/32 inches}

-Cable access hole

ø25.4 mm {ø1 inch}



4×M4 عر

# QSR502

Install on a wall or celling by combining WV-QSR502A-W (optional mount bracket) with WV-QWL501-W (optional wall mount bracket) or WV-QCL501-W (optional ceiling mount bracket).

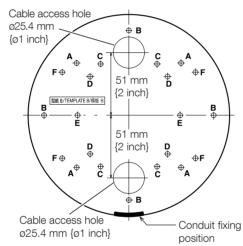
①Install the attachment plate (accessory) onto WV-QSR502A-W using the fixing screws for the attachment plate (4 pcs.) (accessory of WV-QSR502A-W). Recommended tightening torque: 0.78 N·m {0.58 lbf·ft}

②Fix at the installation place by combining each bracket.

Refer to the manual of each bracket for how to attach the bracket.

# QJB501

[1] Make a hole on the installation surface using template B (accessory of WV-QJB501-W). (Screw holes (M4:4 places) / Cable access hole (1 place))



pattern from the following table and make holes. 85 mm {3-11/32 inches} **A** 85 mm {3-11/32 inches} (85.7 mm {3-3/8 inches}) (85.7 mm {3-3/8 inches}) **B** 138 mm {5-7/16 inches} 138 mm {5-7/16 inches} 46 mm {1-13/16 inches} **C** 83.5 mm {3-9/32 inches} **D** 63 mm {2-15/32 inches} 63 mm {2-15/32 inches} **E** Do not use Position E. **F** 70 mm {2-3/4 inches} 108.5 mm {4-9/32 inches}

WV-QJB501-W

• The cable access hole is unnecessary when using a conduit.

Select either of the two cable access holes of template B

patterns of screw positions are available for fixation. Select a

• Depending on the condition of the ceiling surface, five

to proceed with the installation work.

Blinks red (Interval of

Lights red → Lights off

Lights red → Stays red

1 time/ second)

Lights red

## When using a conduit Remove the cap for the female thread for the conduit using a 5 mm {3/16 inches} hexagon Cap for the wrench and attach the conduit. female thread The female thread for conduit is compliant for the conduit with ANSI NPSM (parallel pipe threads) 3/4 or ISO 228-1 (parallel pipe threads) G3/4.

[2] Install WV-QJB501-W on the installation surface. Minimum pull-out strength: 539 N {121 lbf} (per 1 pc.)

(3) Mount the attachment plate onto the base bracket. Recommended tightening torque: 0.78 N·m {0.58 lbf·ft}

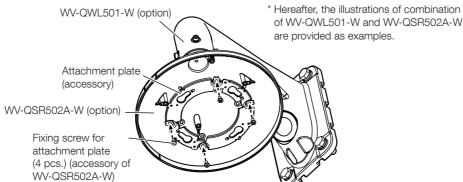
# IMPORTANT:

Installation work shall be such that there is no exposure to water into the architecture through the conduits having been joined.

If open wiring is conducted, be sure to use conduits and run the

cables inside the tubes to protect the cables from direct sunlight. Fixing screw (4 pcs.) (M4: locally procured) ' Attachment plate (accessory)

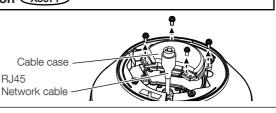
> (M4×8 mm {5/16 inches}: accessory of WV-QJB501-W) \* Hereafter, the illustrations of combination



Fixing screw for attachment plate (4 pcs.)

# Step 2 Preparation for cable connection (X8571)

When using the power supply cable, the EXT I/C cable, or the audio input cable, remove the cable case fixed by 4 screws at the upper side of the camera and pull out the power supply cable, the EXT I/O cable, and the audio input cable stored



# IMPORTANT:

lug plate.

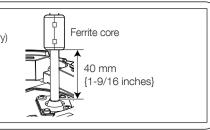
Wire lug plate

Hook for the

safety wire

(accessory)

 Alarm I/O cable / Audio input cable with the ferrite core (accessory) must be used for EMS (Electromagnetic Susceptibility). (Refer to the right illustration)



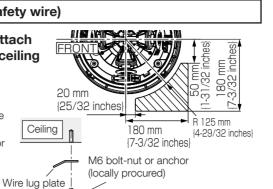
# Step 3 Fixing the brackets (Attach the safety wire)

[1] When using other than | QSR502 |, attach the wire lug plate (accessory) on the ceiling by following the instructions below.

(When using | QSR502 |, go to [2].) DBore a hole near the position where the camera is to be installed to fix the wire lug plate.

\* The illustration on the right shows the available range for fixing the wire lug plate for the camera installation. ②Fix the wire lug plate with an M6 bolt-nut or

anchor (locally procured). Minimum pull-out strength: 724 N {163 lbf}



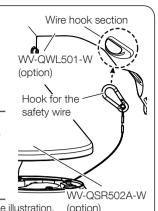
#### [2] Attach the safety wire to the wire lug plate. <When using other <When using QSR502</p> than QSR502 >

(When using WV-QWL501-W)> Attach the hook for the safety Attach the hook for the safety wire of the wire of the camera to the wire camera to the wire hook section of WV-QWL501-W (option).

When using WV-QCL501-W (option), use the extended safety wire (accessory). Refer to the Operating Instructions of WV-QSR502A-W (option) for further information.

IMPORTANT

• WV-QWL501-W is used as an example in the illustration. (option)



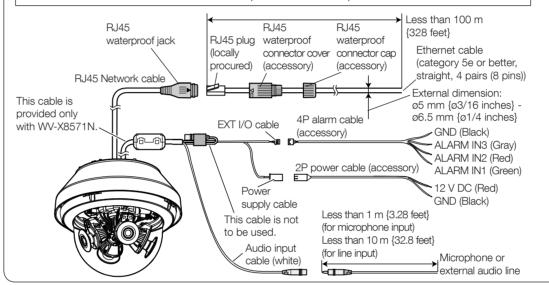
## Step 4 Making connections

 Devices to which power can be supplied to this product are PoE+ hub, PoE+ power supplying equipment and external 12 V DC power supply X8571

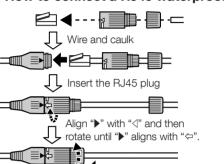
(accessory)

Turn off each system's power supply before making a connection

• Do not install the camera where the RJ45 waterproof connector is exposed to constant rain or moisture.



# ■ How to connect a RJ45 waterproof connector



## • When removing the RJ45 waterproof connector, be sure to remove it with the reverse procedure of connection. When connecting both the 12 V DC power supply and the PoE+ device for power supply, 12 V DC will be used for power supply. X8571

 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+ device.

Approx. 20 mm {25/32 inches}

Tighten until no gap is present

■ Waterproof treatment for EXT I/O cable, power supply cable, and audio input cable. (X8571)

the angle of view".

- Stretch the waterproof tape (accessory) by approx. twice its length and wind it tightly around the cable.
- At the start and end winding points, make the tape overlaps
- the external covering parts by approx. 20 mm {25/32 inches}. • For the above 3 types of cables, even if they are not
- used, waterproofing treatment must be performed on the connector parts.

[4] Shift camera 2 to the arrow direction by 2 scales

(30°) shown on the illustration on the right by

angle> on the back of the leaflet "How to adjust

• Refer to "Specifications" on the back for further information about each connector.

# Step 5 Mount the camera

[1] Align fixing screws for attachment plate (4 places) at the bottom of the camera with the holes in the attachment plate (accessory), and mount the camera.

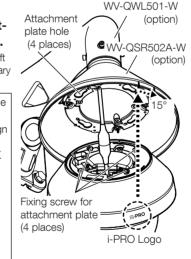
Align the center of the i-PRO logo on the camera with the "|" mark on the left side of the WV-QSR502A-W (option) and insert the camera. Then, temporary fix the camera by rotating it around 15° to the "|" mark on the right.

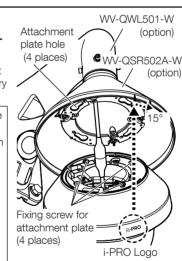
When directly mounting the camera on the installation surface using the attachment plate, align the OPEN mark with the nail of the attachment plate and insert. When attaching using the WV-QJB501-W (option), align the protruding part of the WV-QJB501-W with the OPEN mark and insert it and then temporary fix it by rotating it around 15° to the LOCK

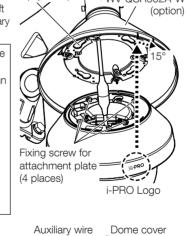
Protruding part of the WV-QJB501-W Nail of the attachment plate

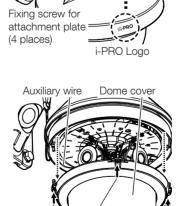
[2] Loosen 4 dome cover fixing screws using the bit (accessory), and remove the dome cover from the camera.

- Dome cover is fixed to the camera body by the installed auxiliary wire, so please do not remove it.
- The dome cover is not fixed temporarily. Take care not to hit the dome cover against periphery
- [3] Remove the protective packagings (2 pcs.) from the camera units.



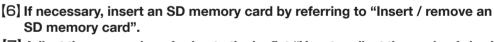






Dome cover fixing Bit(accessory)

**IMPORTANT:** • Be sure to tighten the camera fixing screw. Failure to observe this may cause camera trouble due to camera falling. Recommended tightening torque: 0.78 N·m {0.58 lbf·ft} SD memory card".



[7] Adjust the camera by referring to the leaflet "How to adjust the angle of view"

[8] Attach the dome cover and fix it by tighten the dome cover fixing screws (4 places) using the bit (accessory).

# **IMPORTANT:**

- Be sure to tighten the dome cover fixing screws in diagonal pattern Recommended tightening torque: 1.37 N·m {1.01 lbf·ft} Attach the dome cover straight to the camera main unit. When it is attached inclined, the inside of the dome cover may contact
- the camera unit and cause deviation of the set angle of view. Arrange the installed auxiliary wire so that it is not pinched when estalling the dome cover. Other mance may be compromised.
- Make sure that dirt or dust is not adhered to the lens of each camera unit and inside the dome cover.

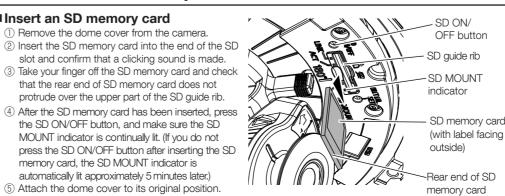
#### screw (4 places) [9] Remove the protection sheet from the dome cover.

[10] Connect to the network by following information described on our support website <Control No.: C0123>.

# Insert / remove an SD memory card

# ■ Insert an SD memory card

- Remove the dome cover from the camera ② Insert the SD memory card into the end of the SD slot and confirm that a clicking sound is made.
- that the rear end of SD memory card does not protrude over the upper part of the SD guide rib. 4 After the SD memory card has been inserted, press
- the SD ON/OFF button, and make sure the SD MOUNT indicator is continually lit. (If you do not press the SD ON/OFF button after inserting the SD memory card, the SD MOUNT indicator is automatically lit approximately 5 minutes later.) Attach the dome cover to its original position



screw (4 places)

# ■ Remove an SD memory card

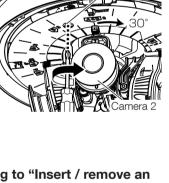
When removing an SD memory card, reverse the procedure for inserting an SD memory card. Press and hold the SD ON/OFF button for approx. 2 seconds, and then remove the SD memory card after checking that the SD MOUNT indicator has changed from blinking to off.

# IMPORTANT:

Before turning off the camera power switch, make sure that the SD MOUNT indicator is turned off.

• When using an SD memory card, format it using this product. Refer to the Operating Instructions for how to

- format an SD memory card.
- Use compatible SD memory cards. Refer to our support website <Control No.: C0107> for latest information about the compatible SD memory cards.





Dome cover fixing