

# **Installation Guide**

Included Installation Instructions



Network Camera For professional use only

Model No. WV-U2542LA Outdoor use WV-U2532LA Outdoor use



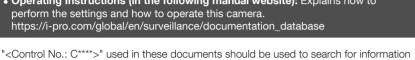
WV-U2542LA

#### About the user manuals

roduct 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 manual website): Provides information about
- "Precautions for use" and "Detail specifications".

   Operating Instructions (in the following manual website): Explains how to





- Before attempting to connect or operate this product, please read these instructions carefully and save this manual for future use.
- 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.

#### For U.S. and Canada:

i-PRO Americas Inc. https://www.i-pro.com/

Cambridgeshire CB23 6DP Authorised Representative in EU:

i-PRO EMEA B.V. UK Branch

1010 Cambourne Business Park,

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

For Europe and other countries:

i-PRO Co., Ltd. Fukuoka, Japan

i-PRO EMEA B.V. Laarderhoogtweg 25, 1101 EB Amsterdam, Netherlands

\* PGQX2467YA \*

expressly approved by the party responsible for com-

pliance could void the user's authority to operate the

Supplier's Declaration of conformity

WV-U2532LA

Support Contact: 1-800-513-5417

8550 Fallbrook Drive, Suite 200 Houston,

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

Ns0821-1042 Printed in China

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## **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.

equipment.

Trade name : i-PRO

Responsible Party:

i-PRO Americas Inc.

undesired operation.

Texas 77064

For U.S.A.

Model No.: WV-U2542LA

### 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 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.

-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)/NMR-3(A)

0A11 10E0 0(A)/11111 0(A)						
Méthode d'installation	Vis de fixation recommandée	La capacité de traction minimale requise				
Montez directement la caméra sur la surface d'installation à l'aide de la plaque de fixation.	M4 × 16 mm {5/8 pouces} / 4 él.*	196 N {44 lbf}				
Montez la caméra sur la surface d'installation à l'aide du support de base.						

\* La longueur de la vis est un exemple lors de l'installation de la caméra au plafond ou sur un mur robuste d'une épaisseur de 20 mm {25/32 pouces} ou plus.

#### Caution:

- The network camera is only intended for a connec-
- tion to an ethernet or PoE network without routing to the outside plant.
- disconnect devices such as a circuit breaker to shut down the main power of power supplying equipment to this product
- Before attempting to connect or operate this product, please read these instructions carefully.

- This product has no power switch. Be sure to install

# persons can easily reach.

Notice:

- This product is not suitable for use in locations where children are likely to be present Do not install this product in locations where ordinary
- 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 microSD memory cards away from infants and children.

Otherwise, they may swallow the cards by mistake.

n 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 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 resulting in injury or accidents.
- 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.

#### ■ 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.

### ■ 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.

■ 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.
- 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.
- 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
- Do not rub the edges of metal parts with your hand.
- Failure to observe this may cause injury.
- Do not touch the metal part of the bottom side of the product.

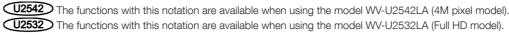
The metal part of the bottom side may become hot while the product is in use. Direct skin contact with high-temperature parts of the product may cause burns

#### ■ Turn the power off when cleaning this product. 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.

(U2542) The functions with this notation are available when using the model WV-U2542LA (4M 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 wall or ceiling 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.

# Install the product in areas that do not receive direct sunlight.

When the product is installed outside in areas that receive direct sunlight, such as on external walls, use the optional "Sun Shade WV-QSR500-W or WV-Q7118".

### ■ 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
- Locations where the temperature is not within the specified range
- Locations subject to vibrations, such as on vehicles, marine vessels, or above product lines (This product is not
- Locations subject to condensation as the result of severe changes in temperature
- 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.

### About reflection of light from outside or IR light

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

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

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.

### 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

springs, volcanic regions, etc.

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

# arrestor as short as possible to prevent the camera from being affected by 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 PoE device.

### 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. 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

# Troubleshooting

information.

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

#### **Specifications**\* \*For further information, refer to the Basic Information. Power source \* PoE (IEEE802.3af compliant) Power consumption PoE DC 48 V : 150 mA/ Approx. 7.2 W (Class 0 device) (U2542) PoE DC 48 V : 140 mA/ Approx. 6.7 W (Class 0 device) (U2532) Operating environment Ambient operating temperature: | -30 °C to +50 °C {-22 °F to +122 °F} (Power On range: -20 °C to +50 °C (-4 °F to +122 °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) IP66 (IEC 60529), Type 4X (UL50E) Waterproof ' NEMA 4X compliant Shock resistance: IK10 (IEC 62262) Wind resistance: Up to 40 m/s {approx. 89 mph} Dimensions: ø154 mm × 103 mm (H) {ø6-1/16 inches × 4-1/16 inches (H)} Dome radius 42 mm {1-21/32 inches} Mass Approx. 1.0 kg {2.21 lbs} : Aluminum die cast/ PC resin, i-PRO white Finish: Main body Outer fixing screws: Stainless steel (Corrosion-resistant treatment) Dome cover : Polycarbonate resin, Clear Others: Tamper-resistant enclosure\*3

\*1 Refer to our support website <Control No.: C0106> for further information about Power source and Power consumption information

\*2 Only when installation work is properly performed according to the Installation Guide and appropriate waterproof treatment is performed.

WV-Q105A<sup>2</sup> Dome cover:

WV-CW7SN

. 1 pc

.. 1 pc.

. 1 pc.

1 pc.

1 pc.

\*3 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\*

Ceiling mount bracket

Dome cover (Smoke type):	WV-CW7S	(Smoke type with ClearSight coating)				
		Dome cover: (Clear type with ClearSight	WV-CW7CN coating)			
	<i-pro brackets="" white="">*3</i-pro>	<light brackets="" gray="">*3</light>	<fine brackets="" silver="">*3</fine>			
Sun shade*4:	WV-QSR500-W	WV-Q7118	-			
Base bracket:	WV-QJB501-W	WV-Q193	-			
Ceiling mount bracket:	WV-QEM500-W	-	WV-Q169A			
Ceiling mount bracket:	WV-QCL501-W	WV-Q178	WV-Q121B			
Wall mount bracket:	WV-QWL501-W	WV-Q185	WV-Q122A			
Mount bracket:	WV-QSR501-W	WV-Q186	WV-Q124			
Pole mount bracket:	WV-QPL500-W	WV-Q182	WV-Q188			
Corner mount bracket:	WV-QCN500-W	WV-Q183	WV-Q189			
Attachment Pipe Bracket:	WV-QAT500-W	WV-Q179	WV-Q123A			
*1 Refer to our support website <control c0501="" no.:=""> for further information about optional accessories.</control>						

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

\*3 Refer to our support website <Control No.: C0112> for further information about combinations of each bracket.

\*4 When using Sun shade (WV-QSR500-W or WV-Q7118), Base bracket (WV-QJB501-W or WV-Q193) is required

## Standard accessories

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

. 5 pcs. Bit (Hex wrench, screw

.. 1 pc. PAN table fixing screw.

(of them, 1 for spare) size 6.35 mm {1/4 inches} T20) ...

IMPORTANT SAFETY INSTRUCTIONS...... 1 pc

\*1 This label may be required for network management. Use caution not to lose this label. The following parts are used during installation procedures. . 1 pc. RJ45 waterproof connector cover .. Attachment plate. Fixing screws for attachment plate RJ45 waterproof connector cap ...

.1 sheet Attachment for the conduit .. Cable cover\*2 \*2 The cable cover is attached to the camera.

 $(M4 \times 8 \text{ mm } \{5/16 \text{ inches}\})$ .

### Other items that are needed (not included)

Template.

Fixing screw		
Installation method	Recommended screw <sup>*1</sup>	Minimum pull- out strength <sup>2</sup>
Directly mount : Directly mount the camera onto the ceiling or wall.	M4 $\times$ 16 mm {5/8 inches} <sup>*3</sup> / 4pcs. M4 $\times$ 16 mm {5/8 inches} <sup>*3</sup> / 2pcs <sup>*4</sup> .	196 N {44 lbf}
Gangbox/ Junction box  : Mount the camera to a gangbox/ junction box.	M4 × 16 mm {5/8 inches} <sup>-3</sup> / 4pcs.	196 N {44 lbf}
Base bracket : Mount the camera using the WV-QJB501-W or WV-Q193.	M4 × 16 mm {5/8 inches} *3 / 4pcs.*5	196 N {44 lbf}
Mount the camera using the exclusively designed mount	Refer to the operating instruc	tions of each

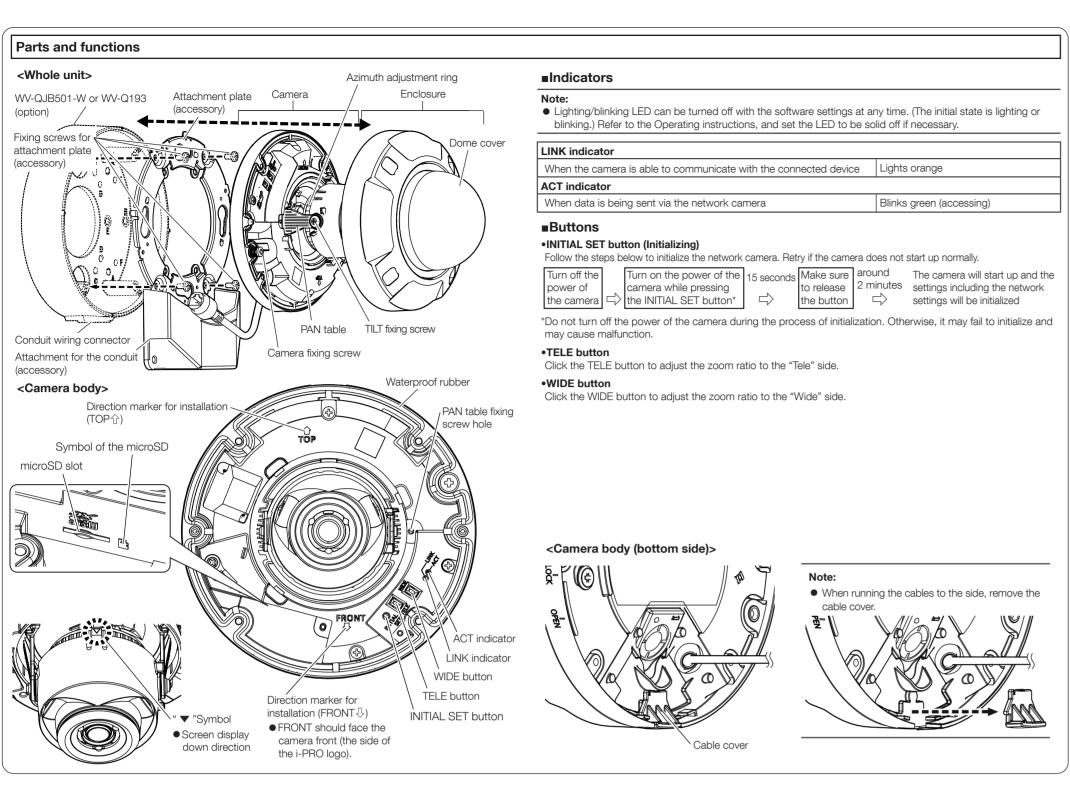
bracket (See "Optional accessories"). bracket \*1 Select screws according to the material of the location that the camera will be mounted to. In this case, wood screws and nails should not be used

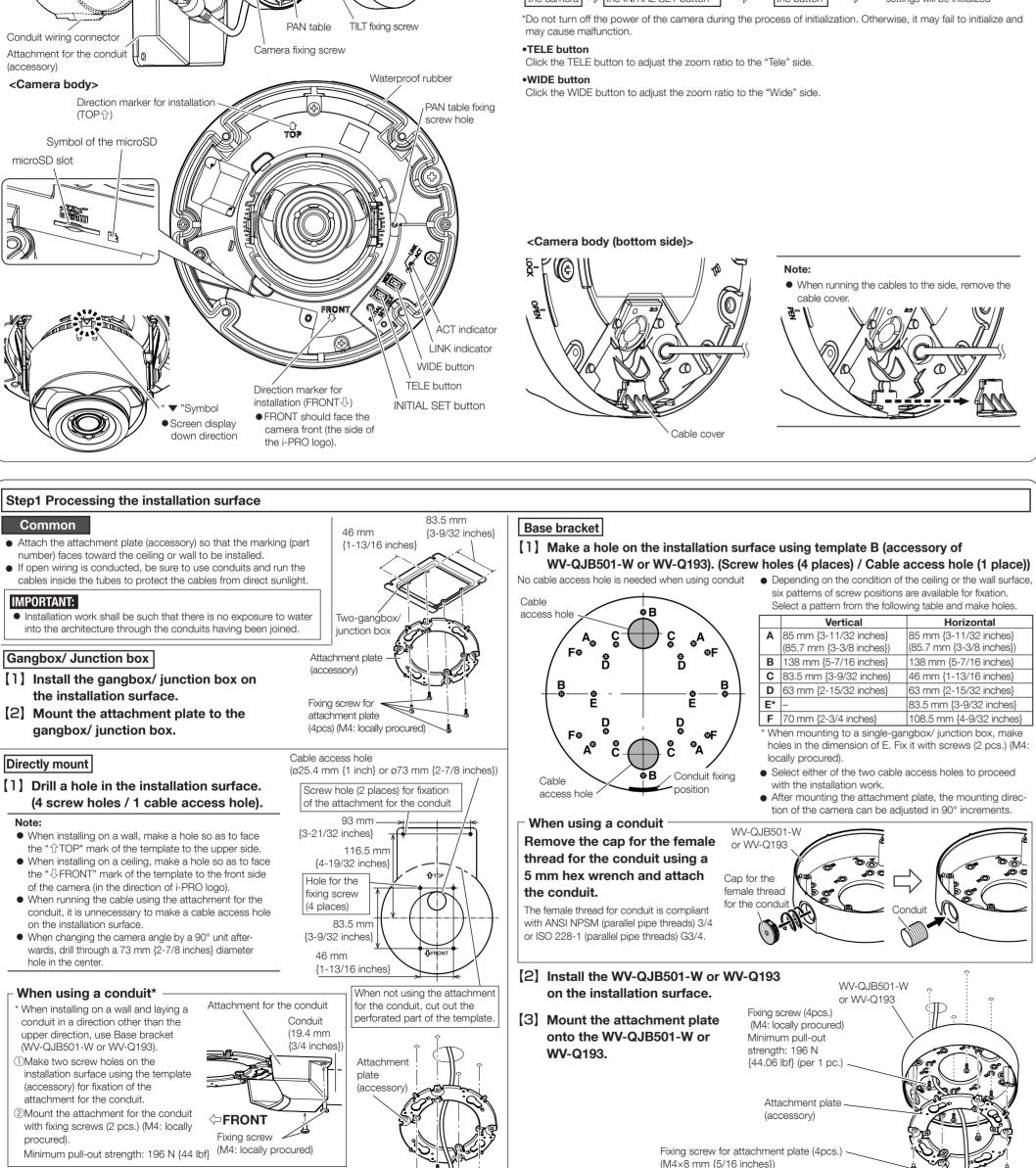
\*2 For information about the minimum pull-out strength, refer to our support website <Control No.: C0120>. \*3 The screw length is an example when installing the camera on a robust installation surface with a thick-

\*4 When using the attachment for the conduit. \*5 2 pcs. when mounting WV-QJB501-W or WV-Q193 to a single-gang gangbox/ junction box

ness of 20 mm {25/32 inches} or more.

•RJ45 plug, Ethernet cable (category 5e or better, straight, all 4 pairs (8 pins))





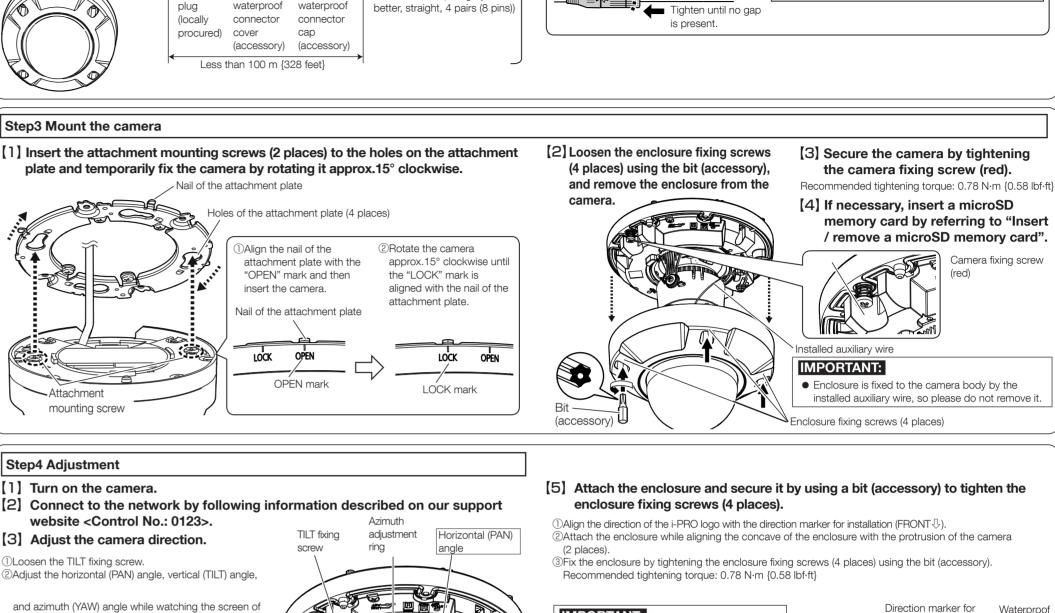
[2] Install the attachment plate on the installation Fixing screw

surface.

(M4: locally procured)

(Accessory)

Recommended tightening torque: 0.78 N·m {0.58 lbf·ft}



Insert the RJ45 connector.

Align " ▶ " with " < " and then

 $\bigcap$  rotate until "  $\blacktriangleright$  " aligns with " $\hookleftarrow$ ".

Wire and caulk

**IMPORTANT:** 

connection

Do not install the camera where the RJ45 waterproof

connector is exposed to constant rain or moisture.

• When removing the RJ45 waterproof connector, be

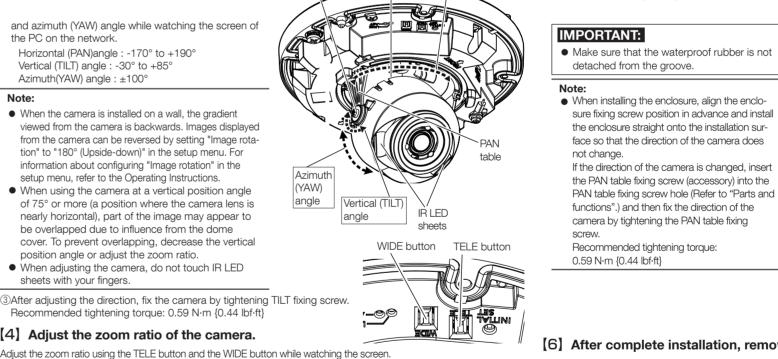
reconnect the cable after around 2 seconds. When

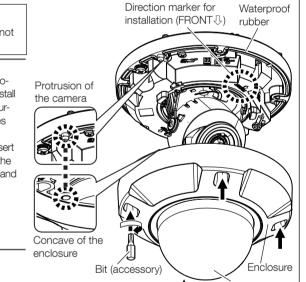
the cable is quickly reconnected, the power may

sure to remove it with the reverse procedure of

• When the Ethernet cable is disconnected once,

not be supplied from the PoE device





Enclosure fixing -

screw (4 places)

[6] After complete installation, remove the protection film from the dome cover.



Refer to our support website < Control No.: C0124> for further information.

### Insert a microSD memory card

Remove the enclosure from the camera.

Step2 Making connections

RJ45 Network cable

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

RJ45 waterproof jack

RJ45

• Devices to which power can be supplied to this product are PoE hub and PoE power supplying equipment.

RJ45

External dimension: ø5 mm {ø3/16 inches} -

ø6.5 mm {ø1/4 inches}

Ethernet cable (category 5e or

2 Insert the microSD memory card into the end of the microSD slot and confirm that a clicking sound is made.

the PC on the network

Horizontal (PAN)angle: -170° to +190°

When the camera is installed on a wall, the gradient

viewed from the camera is backwards. Images displayed

from the camera can be reversed by setting "Image rota-

tion" to "180° (Upside-down)" in the setup menu. For

information about configuring "Image rotation" in the

When using the camera at a vertical position angle

of 75° or more (a position where the camera lens is

nearly horizontal), part of the image may appear to

cover. To prevent overlapping, decrease the vertical

Recommended tightening torque: 0.59 N·m {0.44 lbf·ft}

• After approx. 3 seconds from releasing the TELE button or the WIDE button, the auto focus function will

In this case, execute the auto focus function from the setup menu after attaching the enclosure and removing the

• When the resolution is set to higher than 640×360, image quality may deteriorate depending on the zoom ratio.

automatically be executed. Do not touch the camera during execution of the auto focus function.

[4] Adjust the zoom ratio of the camera.

Attaching the enclosure may cause slight defocusing.

be overlapped due to influence from the dome

• When adjusting the camera, do not touch IR LED

position angle or adjust the zoom ratio

sheets with your fingers.

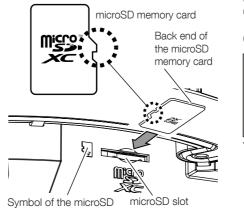
setup menu, refer to the Operating Instructions.

Vertical (TILT) angle: -30° to +85°

Azimuth(YAW) angle: ±100°

• Back end of the microSD memory card does not protrude over the surface of the microSD slot (the same surface as the symbol of the microSD).

3 Attach the enclosure to the camera again.



### Remove a microSD memory card

When removing a microSD memory card, reverse the procedure. (1) Remove the enclosure from the camera.

②Remove the microSD memory card by pushing it into until a click sound is heard while holding the card with a finger to prevent it from popping out.

(3)Attach the enclosure to the camera again.

• When removing a microSD memory card, make sure to set "SD memory card" to "Not use" on the [SD memory card] tab of the setup menu before removing the microSD memory card. After removing the memory card, set back the "SD memory card" to "Use". For information about the setup menu, refer to the Operating Instructions.

- When using a microSD memory card, format it using this product. Refer to the Operating Instructions for how to format a microSD memory card.
- Use the compatible microSD memory cards. Refer to our support website <Control No.: C0107> for latest information about the compatible microSD memory cards.