



Installation Guide

Included Installation Instructions

Network Camera For professional use only

Model No. **WV-U2540LA** Outdoor use

WV-U2530LA Outdoor use

WV-U2140LA Indoor use

WV-U2130LA Indoor use



WV-U2540LA

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 manual website)**: Provides information about "Precautions for use" and "Detail specifications".
- **Operating Instructions (in the following manual website)**: Explains how to perform the settings and how to operate this camera. https://i-pro.com/global/en/surveillance/documentation_database



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

- 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/>

For Europe and other countries:

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

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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.

For U.S.A.

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: Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

Supplier's Declaration of conformity
Trade name : i-PRO
Model No. : WV-U2540LA, WV-U2530LA, WV-U2140LA, WV-U2130LA
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 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 network camera is only intended for a connection 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.
- Before attempting to connect or operate this product, please read these instructions carefully.

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 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

: For indoor use only

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.

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 install this product on a place that is greatly influenced by wind. U2540 U2530

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. U2540 U2530

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 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.

U2540

The functions with this notation are available when using the model WV-U2540LA (4M pixel model).

U2530

The functions with this notation are available when using the model WV-U2530LA (Full HD model).

U2140

The functions with this notation are available when using the model WV-U2140LA (4M pixel model).

U2130

The functions with this notation are available when using the model WV-U2130LA (Full HD 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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- All other trademarks identified herein are the property of their respective owners.

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.

■ This camera is designed to be used indoors U2140 U2130

This product is not operable outdoors. Do not expose this camera to direct sunlight for hours and do not install the product near a heater or an air conditioner. Otherwise, it may cause deformation, discoloration and malfunction. Keep this camera away from water and moisture.

■ This product is designed to be installed under eaves. U2540 U2530

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

■ 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 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 designed for on-vehicle use.)
- Locations where it may get directly wet from rain or water splash (including under the eaves, etc.) U2140 U2130
- Locations subject to moisture or dust U2140 U2130
- Locations subject to sudden changes in temperature such as near air discharge vents of air conditioners or air circulation inlet doors U2140 U2130
- Locations subject to condensation as the result of severe changes in temperature (In case of installing the product in such locations, the dome cover may become foggy or condensation may be caused on the cover.) U2540 U2530
- 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. 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.

■ Take notice of humidity

Install this product when the humidity is low. If installation is performed when it is raining or in very humid conditions, the inside may be affected by humidity, causing mist-over inside the dome cover.

■ Protection from lightning

When the cables brought from outdoors are used, 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 information.

Troubleshooting

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

Specifications* *For further information, refer to the Basic Information.

	WV-U2540LA/WV-U2530LA	WV-U2140LA/WV-U2130LA
Power source*1:	PoE (IEEE802.3af compliant)	
Power consumption*1:	PoE DC 48 V: 110 mA/Approx. 5.3W (Class 2 device) U2540 U2140 PoE DC 48 V: 100 mA/Approx. 4.8 W (Class 2 device) U2530 U2130	
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})	-10 °C to +50 °C (14 °F to 122 °F) (Power On range: 0 °C to 50 °C {32 °F to 122 °F})
Ambient operating humidity:	10 % to 100 % (no condensation)	10 % to 90 % (no condensation)
Storage environment		
Storage temperature:	-30 °C to +60 °C (-22 °F to +140 °F)	
Storage humidity:	10 % to 95 % (no condensation)	
Waterproof*2:	IP66 (IEC 60529), Type 4X (UL50E) NEMA 4X compliant	Not support
Shock resistance:	IK10 (IEC 62262)	Not support
Wind resistance:	Up to 40 m/s [approx. 89 mph]	Not support
Dimensions:	ø109 mm x 62 mm (H) [ø4-9/32 inches x 2-7/16 inches (H)] Dome radius 30.5 mm {1-3/16 inches}	
Mass:	Approx. 270 g {0.60 lbs}	Approx. 250 g {0.55 lbs}
Finish:	Main body: Aluminum die cast, i-PRO white Polycarbonate resin, i-PRO white Outer fixing screws: Stainless steel (Corrosion-resistant treatment) Dome cover: Polycarbonate resin, Clear	Main body: Aluminum die cast, i-PRO white Polycarbonate resin, i-PRO white Dome cover: Polycarbonate resin, Clear
Others:	Tamper-resistant enclosure*3	Not support

*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 water-proof treatment is performed.

*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*1

Wall mount bracket: WV-QWL500-W (i-PRO white) / WV-QWL500-G (Light gray)

Ceiling mount bracket: WV-QCL100-W (ISO standard screw thread) / WV-QCL101-W (ANSI standard screw thread)

Dome cover (smoke): WV-QDC500S

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

Standard accessories

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

Template 1 pc.

Cable cover *2 1 pc.

U2140 U2130

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Cable for easy kitting*2 1 pc. RJ45 waterproof connector cover 1 pc.
RJ45 waterproof connector cap 1 pc.
Bit (Hex wrench, screw size 6.35 mm
{1/4 inches} T10) 1 pc.

*2 The cable for easy kitting and the cable cover are attached to the camera.

Other items that are needed (not included)

- Fixing screw

Installation method	Recommended screw*1	Minimum pull-out strength*2
Directly mount the camera onto the ceiling or wall.	M4 x 16 mm ^③ {5/8 inches} / 2 pcs.	196 N {44 lbf}
Mount the camera using the exclusively designed mount bracket (See "Optional accessories").	Refer to the operating instructions of each 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.

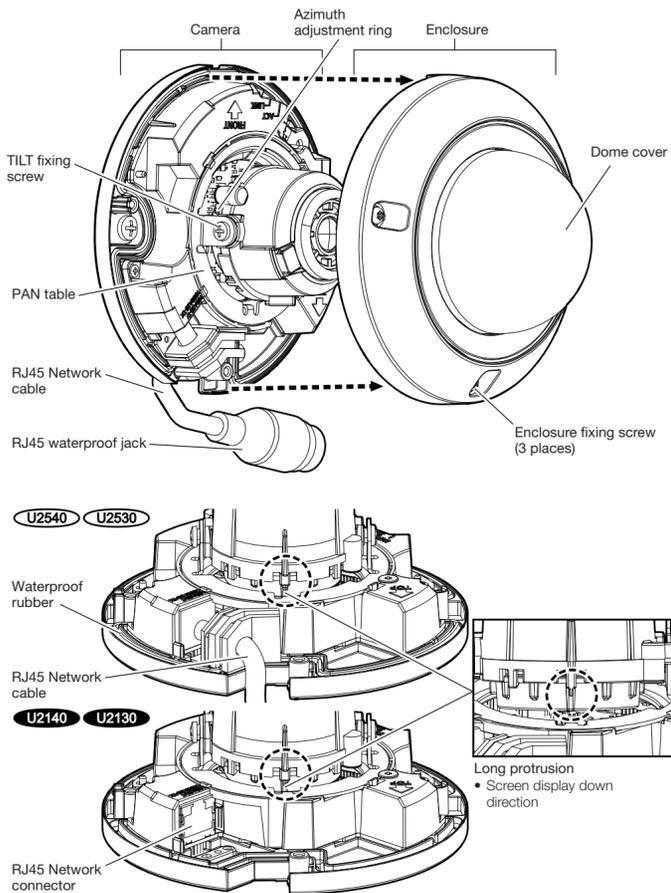
*2 This value indicates the minimum pull-out strength required value per screw. For information about the minimum pull-out strength, refer to our support website <Control No.: C0120>.

*3 The screw length is an example when installing the camera on a robust ceiling or wall with a thickness of 20 mm {25/32 inches} or more.

- RJ45plug, Ethernet cable (category 5e or better, straight, 4 pairs (8 pins))
- Tools

* 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.

Parts and functions The following are descriptions when using WV-U2540LA and WV-U2530LA.



Indicators

Note:

- 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, and set the LED to be solid off if necessary.

LINK indicator

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

ACT indicator

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

Buttons

INITIAL SET button (Initializing)

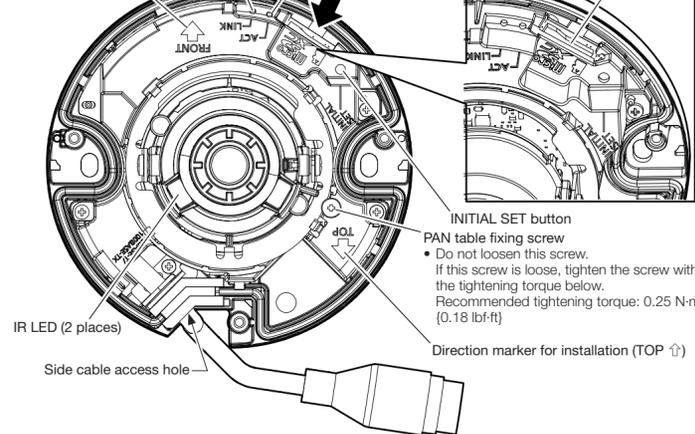
Follow the steps below to initialize the network camera. Retry if the camera does not start up normally.



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

Direction marker for installation (FRONT ↓)

- FRONT should face the camera front (the side of the i-PRO logo).

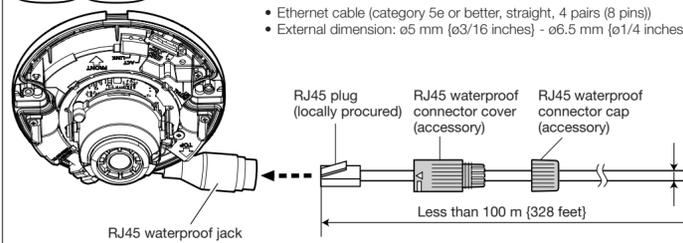


Step3 Making connections

IMPORTANT:

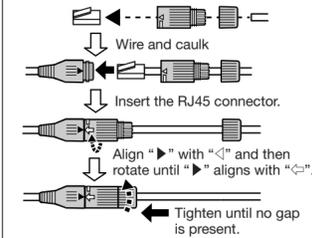
- Devices to which power can be supplied to this product are PoE hub and PoE power supplying equipment.
- Turn off each system's power supply before making a connection.

U2540 U2530



Ethernet cable

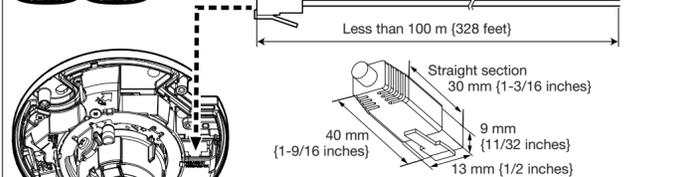
- Ethernet cable (category 5e or better, straight, 4 pairs (8 pins))
- External dimension: ø5 mm {ø3/16 inches} - ø6.5 mm {ø1/4 inches}



IMPORTANT:

- Do not install the camera where the RJ45 waterproof connector is exposed to constant rain or moisture.
- When removing the RJ45 waterproof connector, be sure to remove it with the reverse procedure of connection.
- 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.

U2140 U2130



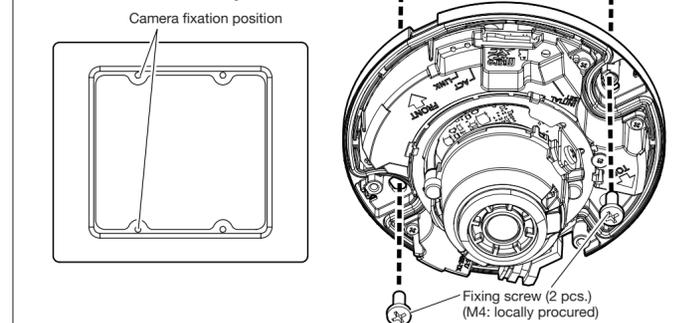
Note:
 • Since the connector storage section does not have a sufficient space, use an Ethernet cable that do not exceed the sizes described in the upper illustrations.

Step4 Mount the camera

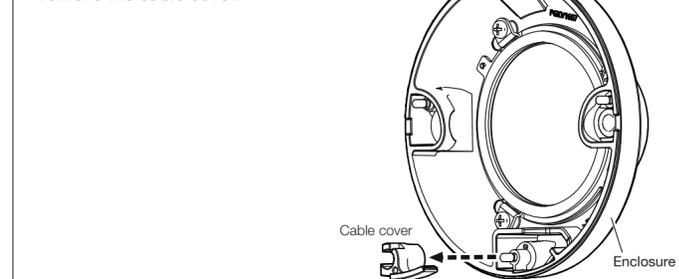
Mount the camera on a wall or a ceiling

Secure the camera with fixing screws (2 pcs.) (M4: locally procured). Minimum pull-out strength: 196 N [44 lbf]

Mount the camera to a junction box



When running the cables to the side, remove the cable cover.



Step1 Preparations

[1] Loosen enclosure fixing screws (3 places), and remove the enclosure from the camera.

Loosen the screws using the bit (accessory).
U2540 U2530

Loosen the screws using a Phillips screwdriver.
U2140 U2130

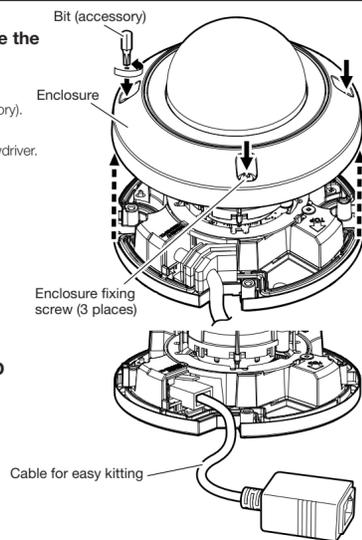
The right illustrations are examples of WV-U2540LA and WV-U2530LA.

[2] Remove the cable for easy kitting

Do not use for actual installation.
U2140 U2130

[3] Remove the packaging from the inside of the dome cover.

[4] If necessary, insert a microSD memory card by referring to "Insert/remove a microSD memory card".

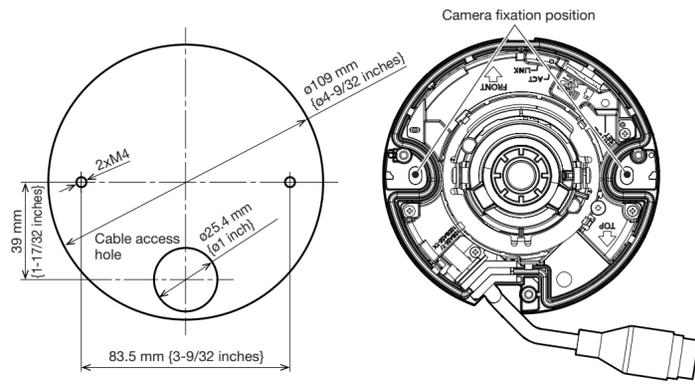


Step2 Processing the installation surface

Drill a hole in the installation surface. (2 screw holes / 1 cable access hole).

Note:

- When installing on a wall, make a hole so as to face the "↑TOP" mark of the template to the upper side.
- When installing on a ceiling, make a hole so as to face the "↓FRONT" mark of the template to the front side of the camera (in the direction of i-PRO logo).
- When running the cable using the side cable access hole of the camera, it is unnecessary to make a cable access hole on the installation surface.



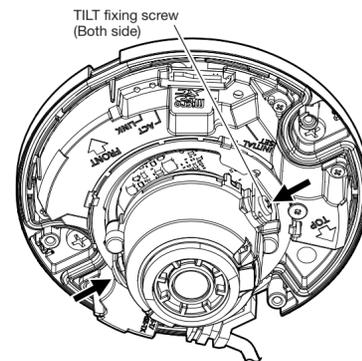
Step5 Adjustment

[1] Turn on the camera and remove the protection film from the lens.

[2] Download and launch the IP Setting Software and connect to the network by following information described on our support website <Control No.: 0123>.

[3] Adjust the camera direction.

Adjust the horizontal (PAN) angle, vertical (TILT) angle, and azimuth (YAW) angle while watching the screen of the PC on the network.
 Horizontal (PAN) angle : ±175°
 Vertical (TILT) angle : -30° to +80°
 Azimuth (YAW) angle : ±100°
 a) Hold the TILT fixing screw on the both sides of the camera with fingers and adjust the horizontal (PAN) angle. Rotate until the "Long protrusion" on the azimuth adjustment ring at the bottom of the camera part is turned at the opposite side of the image capturing direction.
 b) Incline the TILT angle largely once and then adjust the azimuth (YAW) angle. After adjusting the azimuth (YAW) angle, adjust the vertical (TILT) angle again.



Note:

- 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 rotation" to "180° (Upside-down)" in the setup menu. For information about configuring "Image rotation" in the setup menu, refer to the Operating Instructions.
- When the vertical angle is adjusted closer to level, a part of image may be seen double or a part of the camera may be seen on the screen or reflection of infrared ray may be seen on the screen during image capturing at night. In these cases, make the vertical angle smaller or adjust the zoom ratio.
- When adjusting the camera, do not touch IR LED sheets with your fingers.

[4] Attach the enclosure and secure it by tightening the enclosure fixing screws (3 places).

Adjust the direction of the enclosure so as to match the claw of the enclosure with the groove of the camera base.

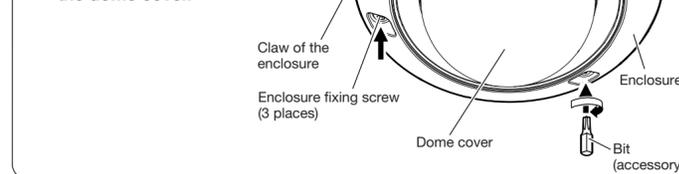
U2540 U2530

Tighten the screws using the bit (accessory). Recommended tightening torque: 0.70 N·m {0.52 lbf·ft}

U2140 U2130

Tighten the screws using a Phillips head screwdriver. Recommended tightening torque: 0.70 N·m {0.52 lbf·ft}

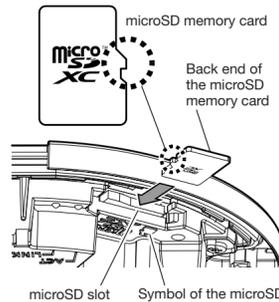
[5] After complete installation, remove the protection film from the dome cover.



Insert / remove a microSD memory card

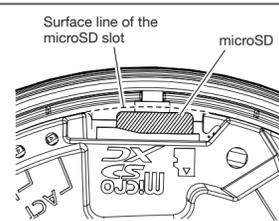
Insert a microSD memory card

- Remove the enclosure from the camera.
- Insert the microSD memory card into the end of the microSD slot and confirm that a clicking sound is made.



Note:

- Back end of the microSD memory card does not protrude over the surface line of the microSD slot.



- Attach the enclosure to the camera again.

Remove a microSD memory card

When removing a microSD memory card, reverse the procedure.

- Remove the enclosure from the camera.
- Push the microSD memory card until a click sound is heard and then remove it from the socket.
- When removing, hold it by pinching the both ends of the rear end of the card with fingers. At this point, be careful not to let the memory card pop out and drop.
- Attach the enclosure to the camera again.

IMPORTANT:

- 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.

Note:

- 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.