

Operating Instructions

Included Installation Instructions

Ceiling Mount Bracket

(Heavy salt damage prevention applied)



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

The model number is abbreviated in some descriptions in this manual.



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Preface

This mount bracket is used for installing the color CCTV camera or network camera on a ceiling.

Refer to the catalog or operating instructions of the camera for further information about the compatible models.

About the user manuals

Due to product improvements, the illustrations, etc., appearing in this document may differ somewhat from the actual product, but not to the extent to affect its usage.

Precautions

Refer installation work to the dealer.

Installation work requires technique and experiences. Failure to observe this may cause fire, electric shock, injury, or damage to the product.

Be sure to consult the dealer.

Avoid installing this bracket in the locations where corrosive gas is produced.

Otherwise, the mounting portions will deteriorate and accidents such as a fall of this product may occur.

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

Loosening of mounting screws or bolts may cause a fall of the product resulting in injury or accidents.

Do not use this bracket except with suitable cameras

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

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.

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

Strong rubbing may cause injury.

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 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.

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 hang down from this product or use this product as a pedestal.

Failure to observe this may cause injury or accidents.

Do not install the product in a windy place.

Installation of the product in wind with a speed of 60 m/s or more may cause a drop resulting in accidents.

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 under eaves.

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.

The installation should comply with local electrical code.

Before start the installation/connection, check and prepare the required devices and cables. Before starting the connection, turn the power of the devices including the camera and the PC off.

Refer installation work to the dealer. Failure to observe this may cause fire, electric shock, injury, or damage to the product.

In order to prevent injury, the product must be securely mounted to a ceiling according to installation instruction.

Installation place

Salt damage prevention is applied to this product. However, it is not completely anti-corrosive. Therefore, consider a place for installation where direct splash of seawater can be avoided. Especially when installing this product in a seashore area or a place where a snow-melting agent is applied, and also where rainwater is avoided, it is recommended to regularly clean and rinse off salt with water. In case of installing this product in a seashore area, regularly check the status of equipment. (Replace the parts as required.)

Power supply

Use a power supply device equipped with the ON-OFF switch for servicing. When the power cord of the product is connected to the power supply device, the power will be supplied to the product. Make sure that the power cable is not connected to the main power supply.

Installation area for this product

Consult the dealer about the installation area to select a strong ceiling area.

The screws that secure this product are not supplied.
Considering the material and strength of the area where
the product is to be installed, prepare the screws
according to the total weight of the camera and peripheral environment. Use the corrosion-resistant screws, or
apply caulking to the screws to be used for fixing the
framework and the adapter box.

Recommended screw: M10 x 4 pcs.

Minimum pull-out strength (per 1 pc.): 1411 N {317 lbf}

 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.

Protection from lightning

When cables are used outdoors, there is a chance that they may be affected by lightning. In this case, install a lightning arrester close to the camera to prevent it from being

affected by lightning, and keep the length of the network cable between the lightning arrester and the camera as short as possible.

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 radiation, X-ray, intense radio wave, or strong magnetism is produced
- On the sea or locations where direct seawater splashes, and where corrosive gas may be produced
- Locations subject to sulfur gas, such as a hot spring area
- Locations where the temperature is not within the specified range (-50 °C to +55 °C {-58 °F to 131 °F})
- Locations subject to vibrations, such as on vehicles, marine vessels, or above product lines (This product is not designed for onvehicle use.)
- Locations subject to sudden changes in temperature, such as near the outdoor unit of an air conditioner (In case of installing the product in such locations, the dome cover may become foggy or condensation may be caused on the cover.)

Screw tightening

- The screws and bolts must be tightened with an appropriate tightening torque according to the material and strength of the installation area.
- Do not use an impact driver. Use of an impact driver may damage the screws or cause tightening excessively.
- When a screw is tightened, make the screw at a right angle to the surface. After tightening the screws or bolts, perform checks to ensure that the tightening is sufficient enough so that there is no movement or looseness.

The protection cover attached to the camera unit shall be removed after completion of the installation. (rain wash coating model)

Make sure to remove this product if it will no longer be used.

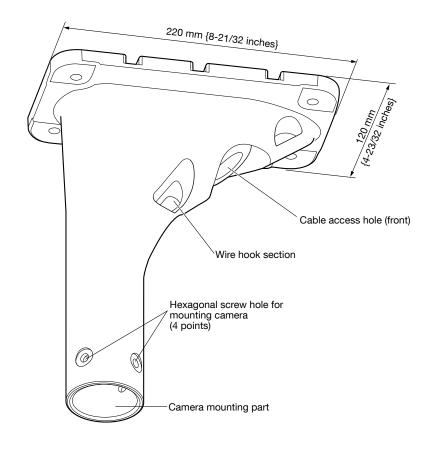
Take notice of humidity.

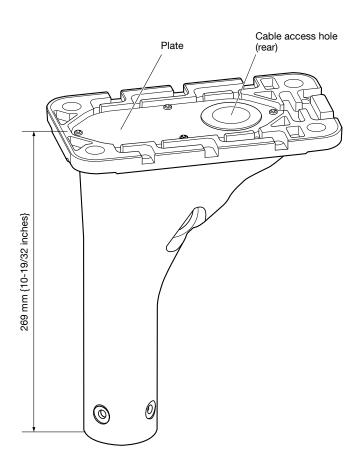
Install the camera when the humidity is low. If this product is installed during rainfall or at a high humidity, the inside may be exposed to moisture and the dome cover may become foqqy.

Check before installation

Compatibility of devices is restricted. Before installation, check the ratings and dimensions of the devices to be used. Contact your dealer for details.

Major operating controls





Installations/Connections

Be sure to read "Precautions" and "Precautions for installation" before installation.

Read the operating instructions for the camera to be installed as well. The Operating Instructions mainly describe for installing a network camera.

The basic flow of the installation operation is the same as the one for the color CCTV camera.

The flow of how to install the ceiling mount bracket is described as follows.

[1] How to detach the housing base (197 6 page)

Remove the housing base and attachment pipe from the camera body.

[2] Attaching the mount bracket (8 page)

- When laying cables through the cable access hole (front) (128 8 page)
- When laying cables after drilling a hole through the ceiling (☞ 10 page)

[3] Mounting of the camera body on the mount bracket (127 12 page)

Secure the camera body to the housing base.

[1] How to detach the housing base

Before attaching the camera to the ceiling mount bracket, detach the housing base and attachment pipe from the camera so that installation and connections can be performed.

Step 1

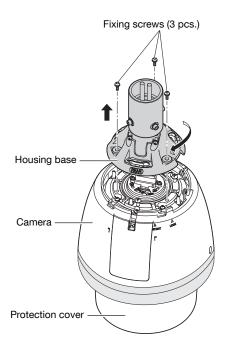
Remove the fixing screws (3 pcs.*) that are securing the housing base and the camera.

The removed screws will be required when attaching the camera to the housing base. Use caution not to lose these screws.

* Special screw (fixing screw): These screws are hexagon screws. Use an hexagon wrench.

There are 2 types of wrenches to be used; one is hexagonal wrench "for M5" and the other is hexagonal wrench "for M6".

Refer to the Operating Instructions of the camera for the wrench to be used, which depends on models.





IMPORTANT:

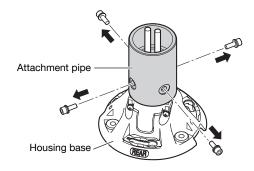
 The protection cover attached to the camera unit shall be removed after completion of the installation. (Only for rain-wash coating model)

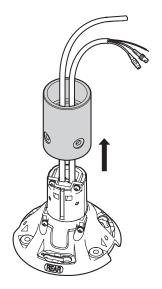
Step 2

To separate the housing base from the camera, turn the housing base to the direction of the arrow as illustrated. (Refer to the illustration in Step 1.)

Step 3

Remove the attachment pipe from the housing base by loosening 4 screws.





Go to "■ When laying cables through the cable access hole (front)" (☞ 8 page) or "■ When laying cables after drilling a hole through the ceiling" (☞ 10 page).

[2] Attaching the mount bracket

The installation of the ceiling mount bracket is roughly divided into 2 methods. Refer to the applicable description.

- When laying cables through the cable access hole (front) (127 8 page)
- When laying cables after drilling a hole through the ceiling (☞ 10 page)

■ When laying cables through the cable access hole (front)

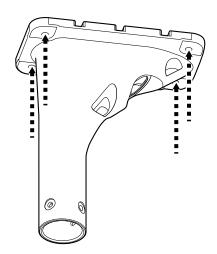
Step 1

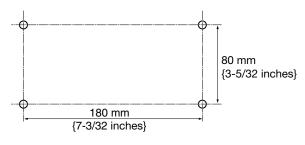
Decide the mounting position and drill a hole through the ceiling.

Procure 4 pieces of M10 screws and anchors to secure the this bracket on the ceiling.

For screws and anchors to be used, make sure that enough salt damage prevention is applied. The hole diameter shall be decided in accordance with the screws and anchors to be used.

A hole through the ceiling with a diameter of 30 mm {\\00091-3/16 inches} or less can be hidden with this bracket.

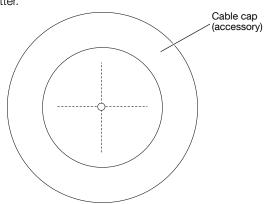




* The above measurement diagram shows the view when standing on the floor and looking up at the ceiling.

Step 2

Make a slit in the center of the cable cap (accessory) with a cutter.



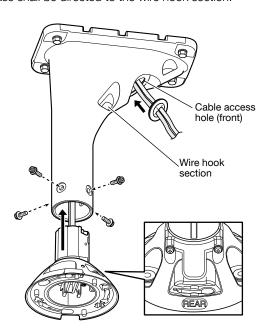
Step 3

Pass the cables from the housing base through this bracket, and mount the cable cap that has slit in Step 2 on the cable access hole (front).

Secure the housing base to the ceiling mount bracket.

Attach the housing base to this bracket using the 4 screws*

supplied with the camera. The "REAR" mark of the housing base shall be directed to the wire hook section.



* Refer to the Operating Instructions of the camera for the screws and the wrenches to be used, which depends on models.

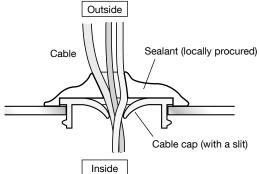
For the case of the camera with M5 screws being used: Use the screws supplied with the camera and a hexagonal wrench "for M5".

For the case of the camera with M6 screws being used: Use the screws supplied with the bracket and a hexagonal wrench "for M6".

(Recommended tightening torque (for common use in M5 and M6): $2.45 \text{ N} \cdot \text{m} \{1.81 \text{ lbf} \cdot \text{ft}\}\)$

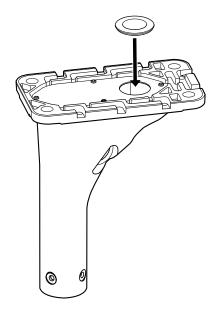
Step 4

Seal the slit of the cable cap for the prevention of water leakage.



Step 5

Mount another cable cap (accessory) on the rear plate.

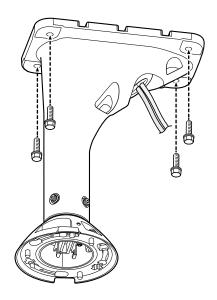


* The housing base is not shown in the illustration above.

Step 6

Mount the ceiling mount bracket on the ceiling with 4 screws (M10: locally procured).

Minimum pull-out strength: 1411 N {317 lbf}/per 1 pc.



Step 7

Connect the cables to the camera outside the cable access hole (front) of the WV-Q121B.

Connect the cables from the housing base with the cables on the ceiling.

After cable connection, seal the connecting portion with waterproof tape (locally procured).

IMPORTANT:

• These operations shall be performed in accordance with the electric installation engineering standards.

Perform sealing to prevent the connecting portion of the cables from being exposed.

Moisture may come into the camera from the gap among the cables and cause the inside of the dome cover to become foggy.

Go to "[3] Mounting of the camera body on the mount bracket" (12 page).

■ When laying cables after drilling a hole through the ceiling

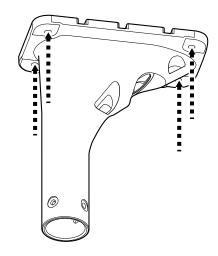
Step 1

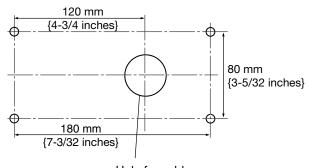
Decide the mounting position, and drill holes for screws or anchors and a hole for cable installation in the ceiling.

Procure 4 pieces of M10 screws and anchors to secure the this bracket on the ceiling.

For screws and anchors to be used, make sure that enough salt damage prevention is applied. The hole diameter shall be decided in accordance with the screws and anchors to be used.

A hole on the ceiling with a diameter of 30 mm $\{\emptyset\ 1-3/16\$ inches $\}$ or less for a screw or an anchor can be hidden with this bracket.



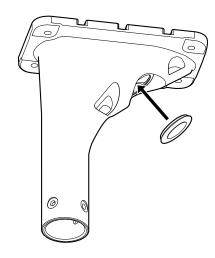


Hole for cable installation: ø38 mm {ø1-1/2 inches}

* The above measurement diagram shows the view when standing on the floor and looking up at the ceiling.

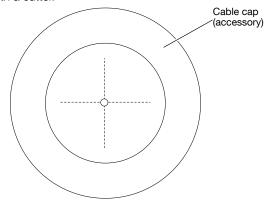
Step 2

Mount the cable cap (accessory) on the cable access hole (front)



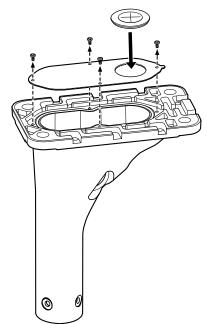
Step 3

Make a slit in the center of another cable cap (accessory) with a cutter.



Step 4

Remove the 4 screws from the rear side of the bracket, remove the plate, and mount the cable cap that was slit in Step 3.



Step 5

wrench "for M5".

Lay the cables from the housing base via this bracket into the slit cable cap.

Secure the housing base to the ceiling mount bracket.

Attach the housing base to the ceiling mount bracket using the 4 screws*

The "REAR" mark of the housing base shall be directed to the wire hook section.

* Refer to the Operating Instructions of the camera for the screws and the wrenches to be used, which depends on models.

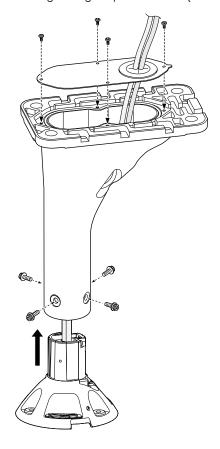
For the case of the camera with M5 screws being used: Use the screws supplied with the camera and a hexagonal

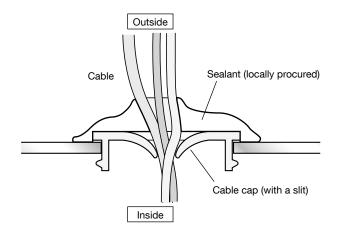
For the case of the camera with M6 screws being used: Use the screws supplied with the bracket and a hexagonal wrench "for M6".

(Recommended tightening torque (for common use in M5 and M6): 2.45 N·m {1.81 lbf·ft})

Secure the plate with the 4 screws removed in Step 4 on the rear side of the bracket, and seal the slit of the cable cap.

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





Step 6

Connect the cables above the ceiling.

Connect the cables from the housing base with the cables coming through the ceiling.

After cable connection, seal the connecting portion with waterproof tape (locally procured).

IMPORTANT:

• These operations shall be performed in accordance with the electric installation engineering standards.

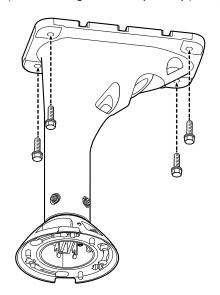
Perform sealing to prevent the connecting portion of the cables from being exposed.

Moisture may come into the camera from the gap among the cables and cause the inside of the dome cover to become foggy.

Step 7

Mount this bracket on the ceiling with 4 screws (M10: locally procured).

Minimum pull-out strength: 1411 N {317 lbf}/per 1 pc.



Go to "[3] Mounting of the camera body on the mount bracket" (12 page).

[3] Mounting of the camera body on the ceiling mount bracket

Step 1

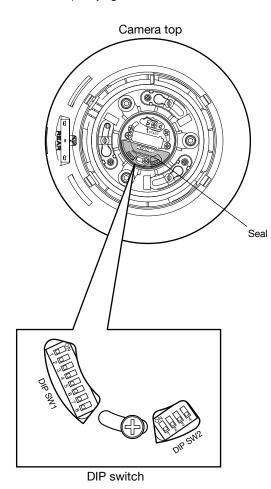
For the case of color CCTV camera, peel off the seal on the top of the camera, and specify the communication method and unit address using the DIP switches.

Refer to the Operating Instructions of the color CCTV camera for how to set the DIP switch.

Put the seal back after specifying them.

Communication method: specifying with SW2

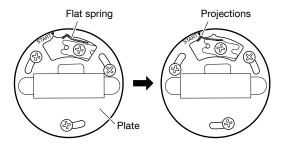
Unit address: specifying with SW1



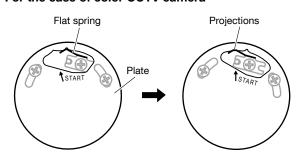
Step 2

Align the flat spring with the START position. If not, rotate the plate on the top of the camera clockwise to align it with the "START" position.

For the case of network camera

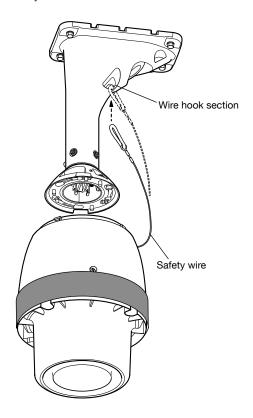


For the case of color CCTV camera



Step 3

Engage the safety wire with the wire hook section.



Step 4

When attaching the camera to the housing base, the positioning pin shall be on the "REAR" side.

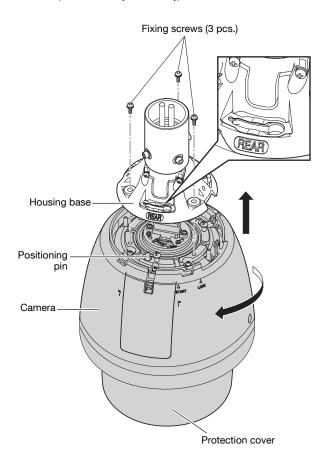
Make sure that the camera is securely attached to the mount bracket by turning the camera counterclockwise (seen from below).

Tighten them firmly with the 3 screws* that have been removed in Step 1 of "[1] How to detach the housing base".

* Special screw (fixing screw): These screws are hexagon screws. Use a hexagon wrench.

There are 2 types of wrenches to be used; one is hexagonal wrench "for M5" and the other is hexagonal wrench "for M6". Refer to the Operating Instructions of the camera for the wrench to be used, which depends on models.

(Recommended tightening torque (for common use in M5 and M6): 2.45 N·m $\{1.81 \text{ lbf·ft}\}$)



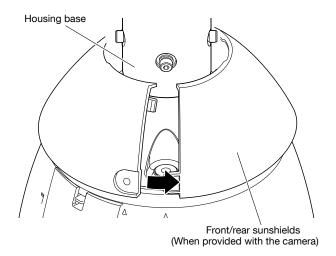
* The illustration above is provided for describing the top of the camera, and therefore, this bracket is omitted.

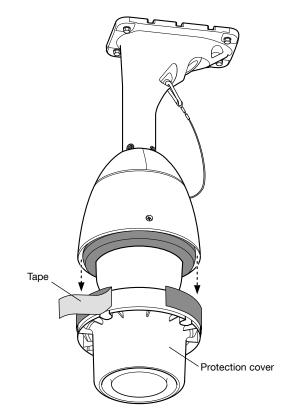
Step 5

Mount the front/rear sunshields*1, and then remove the protection cover*2.

Refer to the Operating Instructions of the camera for further information.

- *1 The front/rear sunshield may not be provided with the camera, depending on the model of the camera.
- *2 Removal of the protection cover is described only for rain wash coating model.





Specifications

Ambient operating temperature: -50 °C to +55 °C $\{-58$ °F to 131 °F $\}$ Dimensions: 120 mm (W) x 269 mm (H) x 220 mm (D)

{4-23/32 inches (W) x 10-19/32 inches (H) x 8-21/32 inches (D)}

Mass: Approx. 1.9 kg {4.19 lbs}

Finish: Aluminum die cast Heavy salt damage prevention coating Silver metallic

Others: Heavy salt damage prevention (ISO14993-compliant)

Weight and dimensions indicated are approximate. Specifications are subject to change without notice.

Standard accessories

Operating Instructions (this document)	1 se
The following are for installation	
Cable cap	2 pcs
Camera mounting screw (Hexagon screw (M6))	5 pcs. (of them, 1 for spare

For U.S. and Canada:

i-PRO Americas Inc.

For Europe and other countries:

i-PRO EMEA B.V.

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