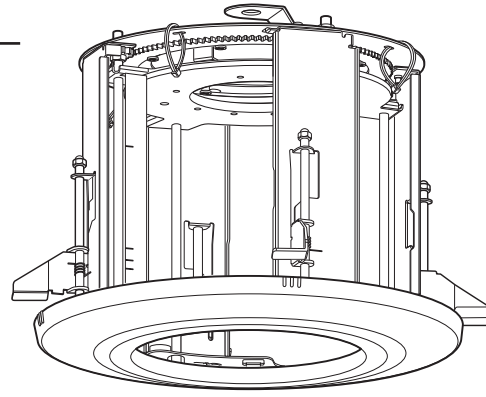


Operating Instructions

Included Installation Instructions

Ceiling Mount Bracket

Model No. **WV-QEM101**



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

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.

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



i-PRO Co., Ltd.

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

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Caution:
• 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.
• For information about screws and other parts required for installation, refer to the corresponding section of this document.

Precautions

- **Do not use this bracket except with suitable cameras.**
Failure to observe this may cause a drop resulting in injury or accidents.
- **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.
- **The measures of protection against a fall of this product shall be taken.**
Failure to observe this may cause a drop resulting in injury or accidents. Be sure to install the safety wire.
- **The screws and bolts must be tightened to the specified torque.**
Failure to observe this may cause a drop resulting in injury or accidents.
- **Install the product securely on 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.

When using this product, also read the "Precautions" described in the operating instructions for the camera to be attached.

Preface

This product is a ceiling embedded bracket that is designed to mount the network camera on a ceiling. This bracket can be used for an area with weak pull-out strength such as plasterboard in a double ceiling, and the embedded type makes the visible part of the camera smaller.

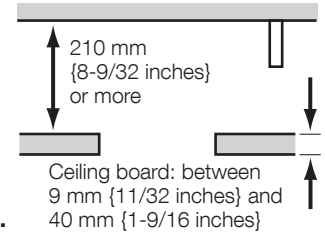
The latest information about the supported cameras
<Control No.:C0501>

Specifications

Ambient operating temperature:	-10 °C to +55 °C {14 °F to 131 °F}
Dimensions:	ø245 mm × 203 mm (H) {ø9-21/32 inches × 8 inches (H)} (including the decorative cover)
Mass:	Approx. 1.3 kg {2.87 lbs}
Finish:	Main body: Surface treatment steel sheet Decorative cover: ABS resin i-PRO white

Precautions for installation

- **In order to prevent injury, the product must be securely mounted to the ceiling according to the Installation Guide of this product.**
- **This product is designed to be used indoors.**
This product is not operable outdoors. Do not expose this product 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 product away from water and moisture.
- **Installation area for this product**
Make sure that the installation area is strong enough to hold the total weight of the camera assembly before installation. The installation area shall have 210 mm {8-9/32 inches} or more space behind the ceiling.
The thickness of the ceiling board for installation can range between 9 mm {11/32 inches} and 40 mm {1-9/16 inches}.
- **Make sure to remove this product if it will no longer be used.**



Standard Accessories

Operating Instructions (this document).....	1 pc.
The following are for installation	
Safety wire*	1 pc. Decorative covers (sub and main), i-PRO white
Safety wire angle*	1 pc. Screw (M4 × 8 mm).....
Template A	1 sheet 5 pcs. (of them, 1 for spare)
Template B	1 sheet Paper gauge.....
	1 sheet

* The product is shipped in a state where the safety wire is attached to the safety wire angle.

Other items that are needed (not included)

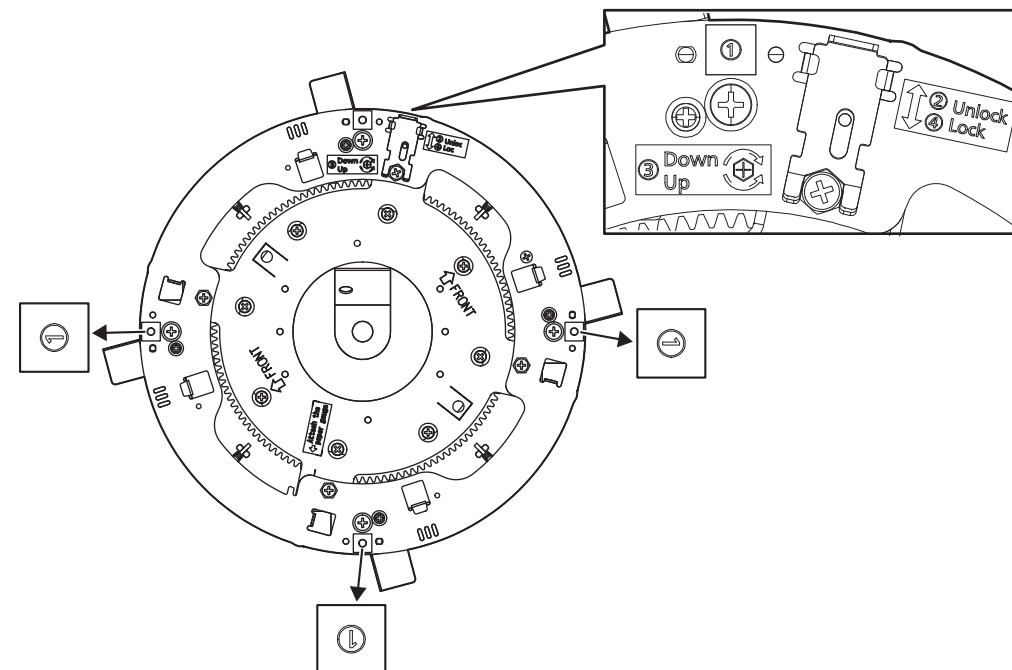
Anchor bolt (M10)*.....	2 pcs.	Nut (M10)	6 pcs.
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* One anchor is used for securing the mounting chassis, and the other anchor is used for connecting the safety wire. (See Step2)

IMPORTANT

- Prepare anchor bolts according to the material and strength of the area where the product is to be installed. The pull-out strength of the anchor bolt shall be more than 5 times of the total weight of the installed devices (including the camera body, ceiling mount bracket, anchor bolts, and all other parts).

■ **The mounting chassis of this product has the label used for the adjustment procedure as shown below.**

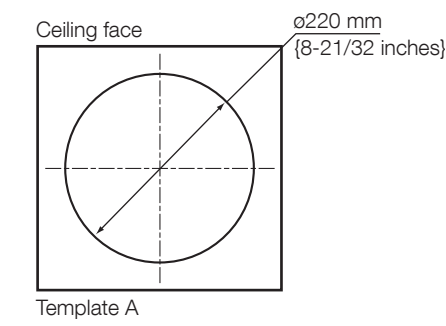


Installation

Refer to the operating instructions of the camera for details on the camera installation (including the camera mounting, cable connection and adjustment).

Step 1

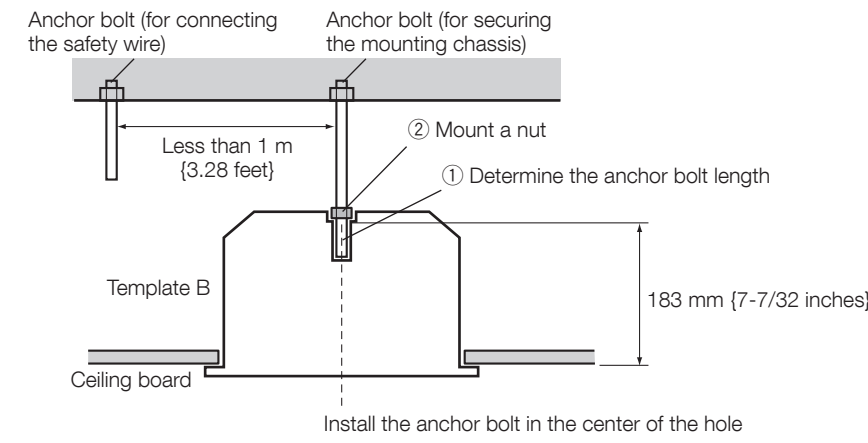
Put Template A (accessory) against the ceiling and make the ø220 mm {8-21/32 inches} hole.



Step 2 Install two anchor bolts (M10 recommended) into the ceiling.

One anchor is used for securing the mounting chassis, and the other anchor is used for connecting the safety wire.

- ① Determine the anchor bolt (for securing the mounting chassis) length by use of Template B (accessory).
- ② Position the nut by use of Template B (accessory) and mount the nut. (The distance between the bottom surfaces of the ceiling board and nut shall be 183 mm {7-7/32 inches}.)

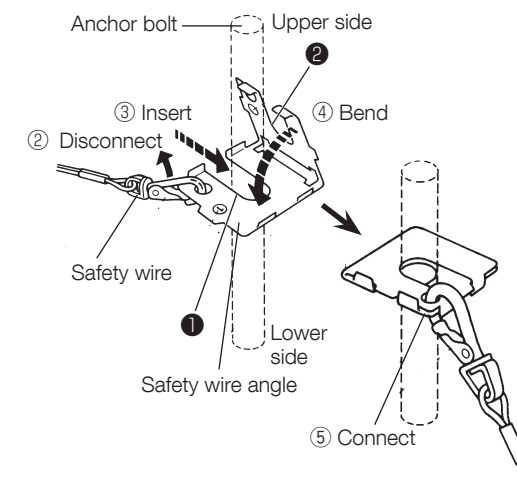


IMPORTANT:

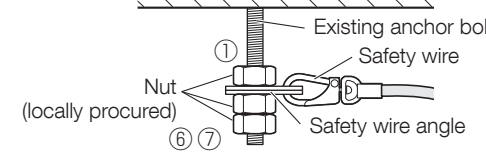
- The pull-out strength of the anchor bolt shall be more than 5 times of the total weight of the installed devices (including the camera body, ceiling mount bracket, anchor bolts, and all other parts).
- When the existing anchor bolt is used as an anchor bolt for connecting the safety wire, make sure that the distance between the anchor bolt and camera mounting position is 1 m {3.28 feet} or less.

Step 3 Secure the safety wire angle (accessory) to the anchor bolt (for connecting the safety wire), and connect the safety wire (accessory).

- ① Mount a nut so that the safety wire angle is secured on the anchor bolt.
- ② Disconnect the safety wire from the safety wire angle.
- ③ Insert the groove of the portion ① of the safety wire angle into the anchor bolt.
- ④ Close the safety wire angle while inserting the groove of the portion ② of the safety wire angle into the anchor bolt.
- ⑤ Connect the safety wire to the safety wire angle again.
- ⑥ Engage the nut from beneath, and secure the safety wire angle with top and bottom nuts.
- ⑦ Secure the nut that was engaged from beneath in ⑥ in a double nut fashion.

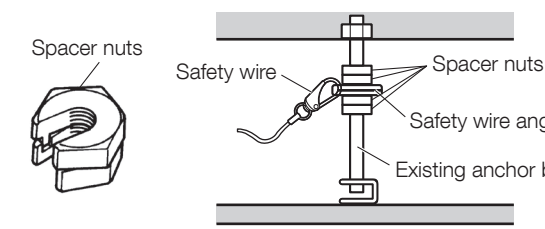


<Image of safety wire connection>



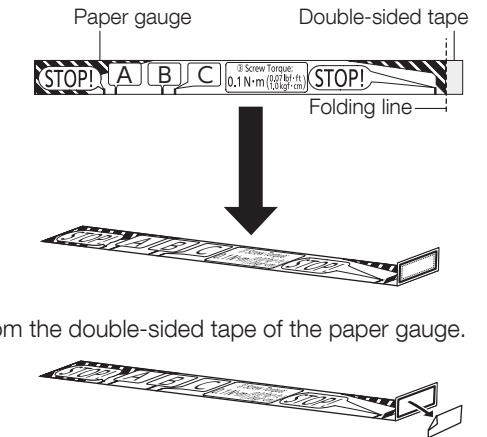
Note:

- When the existing anchor bolt that has been installed is used for connecting the safety wire, the use of 2 spacer nuts is helpful.



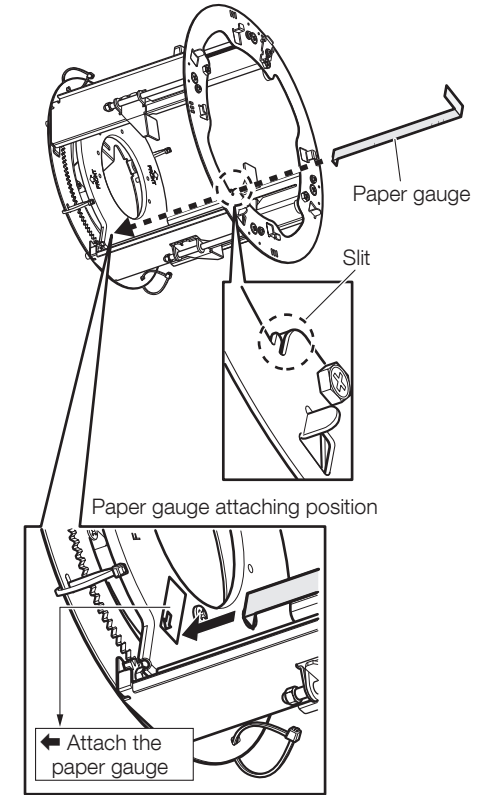
Step 4 Attach the paper gauge (accessory) to the camera mounting stage.

- ① Fold the double-sided tape side of the paper gauge at a right angle as shown in the drawing.



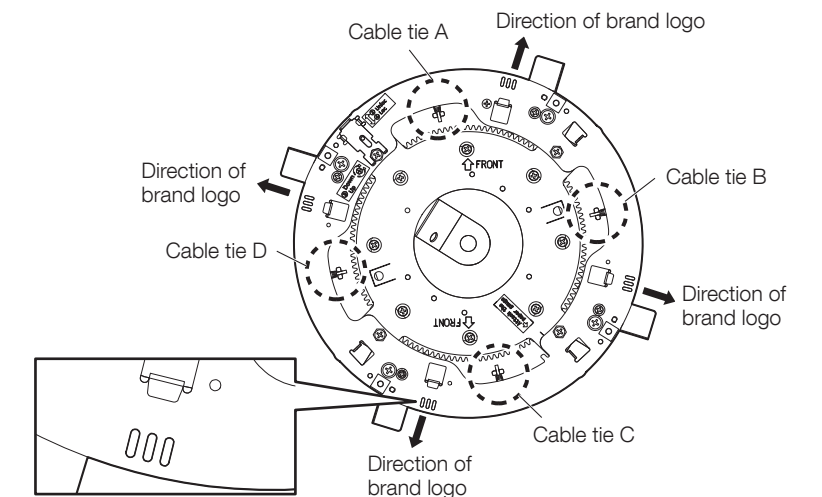
- ② Peel off the backing from the double-sided tape of the paper gauge.

- ③ Turn this bracket sideways as shown in the following drawing, and attach the paper gauge to the camera mounting stage. Attach the paper gauge so that it passes through the slit shown in the following drawing.

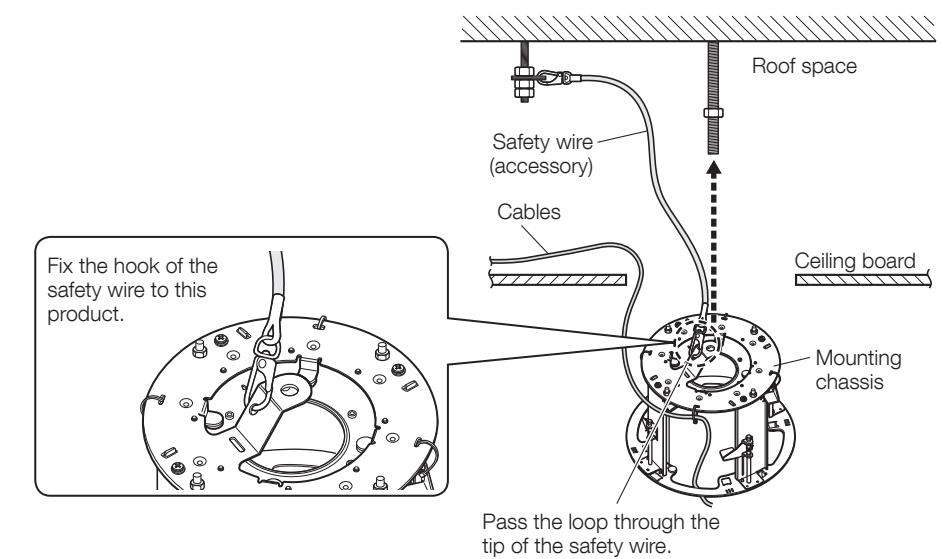


Step 5

- ① Pass the cables from the ceiling through the loop of the cable ties (4 places: A-D) attached to the mount bracket in advance. Cable ties used for passing the cables vary with the models. Select the cable tie according to the direction of the wiring connection of the camera to be installed.



- ② Attach the safety wire to the mounting chassis as shown in the following drawing. Insert the mounting chassis into the hole made in Step 1, and put them into the roof space. At this moment, the logo direction at mounting the decorative cover finally can be aligned with the III direction of the mounting chassis. Therefore, if you care about the brand logo direction, determine the direction using the III direction.



Step 6 Secure the mounting chassis to the ceiling board with the ceiling board fixing screws (4 places, screws with label ①).

- Engage the top of the mounting chassis with the anchor bolt (for securing the mounting chassis).
- Secure the mounting chassis by turning the ceiling board fixing screws clockwise when viewing it from beneath. Turning the ceiling board fixing screws clockwise provides ceiling board tightening between the bottom of the mounting chassis and ceiling board fixing bracket resulting in mounting chassis securing.

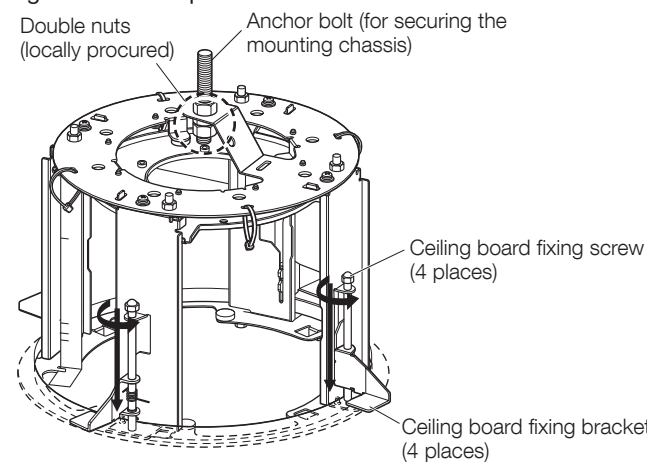
! Recommended tightening torque:
0.78 N·m (0.58 lbf·ft)

IMPORTANT:

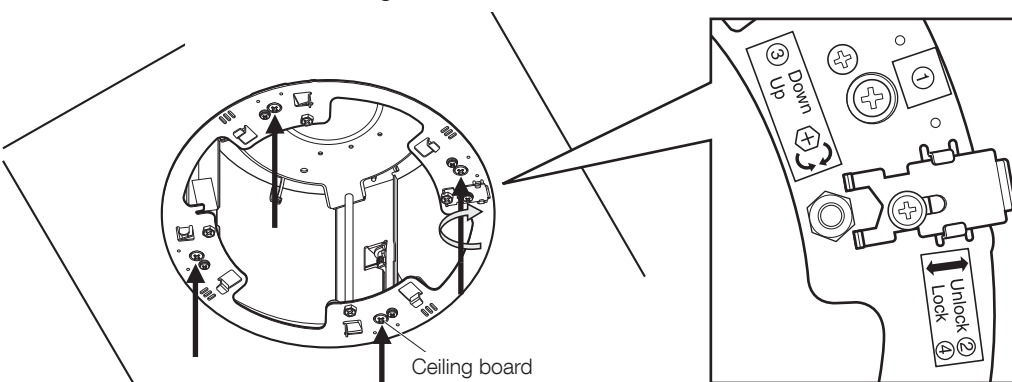
- When securing the mounting chassis on the ceiling, make sure that the 4 ceiling board fixing brackets are open as shown in the figure ③.

- Secure the top of the mounting chassis with double nuts (locally procured).

<Image of the roof space>



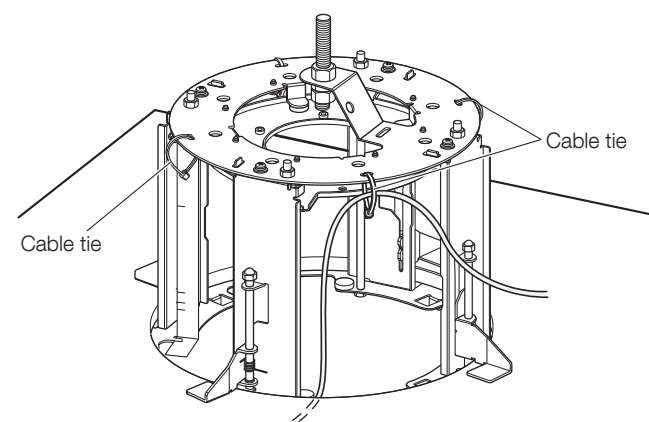
<Image from below>



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

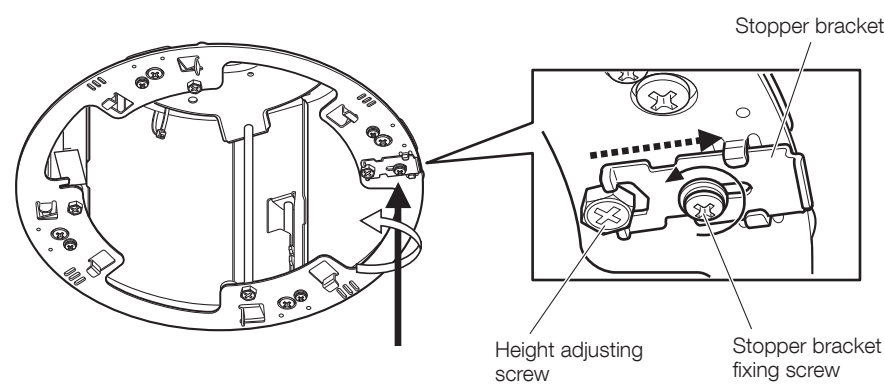
Step 7 Prepare the cables.

Run the cables from the space of the mounting chassis. The wiring image with the bracket mounted on the ceiling is described below. Be careful to prevent the cables from being caught on the ceiling board fixing bracket or others.



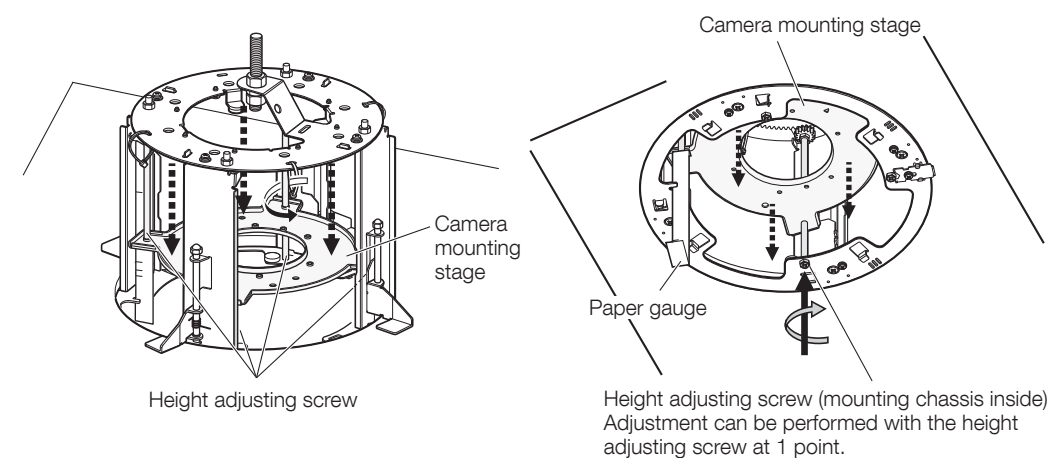
Step 8

Loosen the stopper bracket fixing screw, slide the stopper bracket toward the outside of this bracket (in the ② unlock direction of the label), and unlock the height adjusting screw.



Step 9

Rotate the height adjusting screw (one of 4 points) clockwise when viewing it from beneath (in the ③ down direction of the label), and move the camera mounting stage from the back to the front side. At this moment, the paper gauge attached to the camera mounting stage descends together. Be careful to prevent the cables from being caught between the mounting chassis and camera mounting stage.



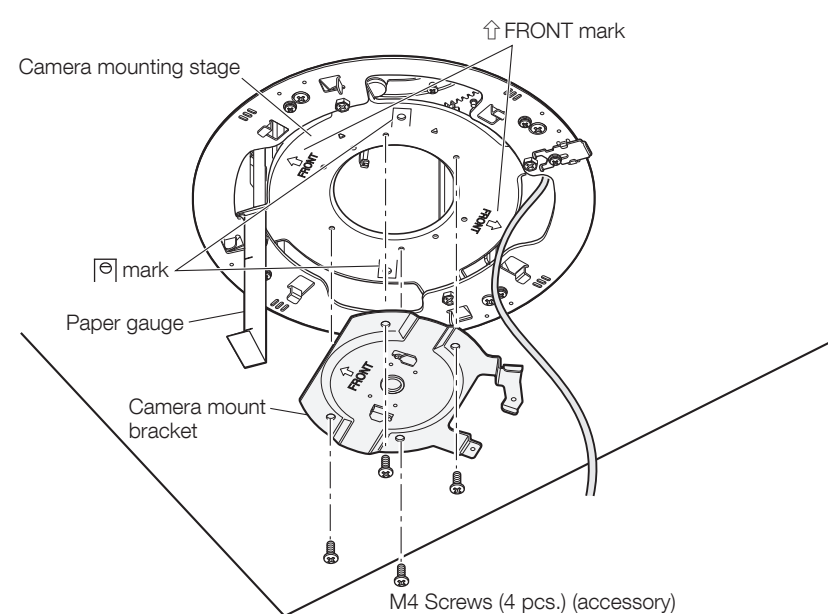
! Tightening torque: 0.1 N·m (0.07 lbf·ft)
* Do not apply equal to or more than 0.29 N·m (0.21 lbf·ft) of torque. Failure to observe this may cause damage.

Step 10 Mount the camera mount bracket (camera accessory) on the camera mounting stage.

Align the ↑FRONT mark of the camera mount bracket with the ↑FRONT mark in the direction in which the cables are not passed of the camera mounting stage. Use M4 screws (accessories) to secure the camera mount bracket at 4 places.

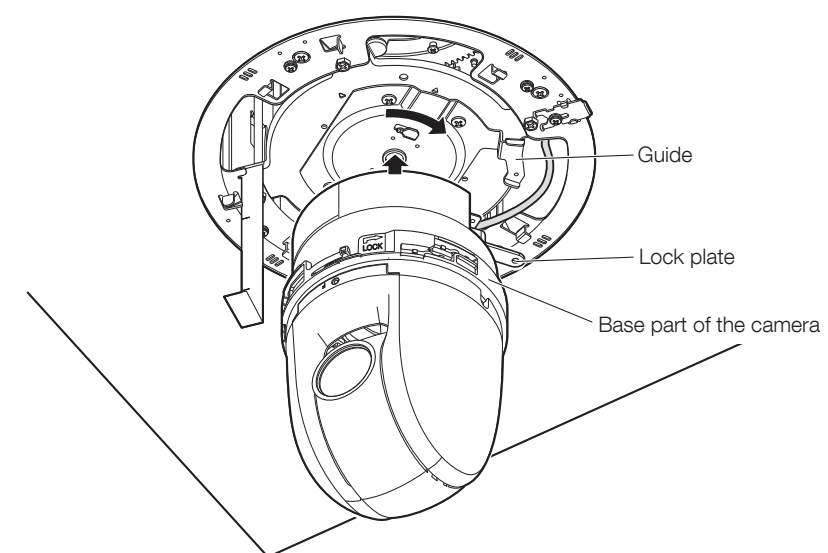
! Recommended tightening torque:
1.57 N·m (1.16 lbf·ft)

Lay the cables between the mounting chassis and camera mounting stage, and leave the cables hanging down.



Step 11

Connect the cables to the camera, engage the camera with the camera mount bracket so that the bottom center of the camera is aligned with the center of the camera mount bracket as shown in the drawing below, align the lock plate with the guide, and rotate the camera clockwise by approx. 20 degrees when viewing it from beneath to temporarily secure the camera.
* Refer to the installation guide of the camera for details on how to install the camera.



IMPORTANT:

- Do not let the cables be caught during installation work.
- Be sure to mount it with holding the base part of the camera. Mounting the camera while holding the dome part may result in malfunction.

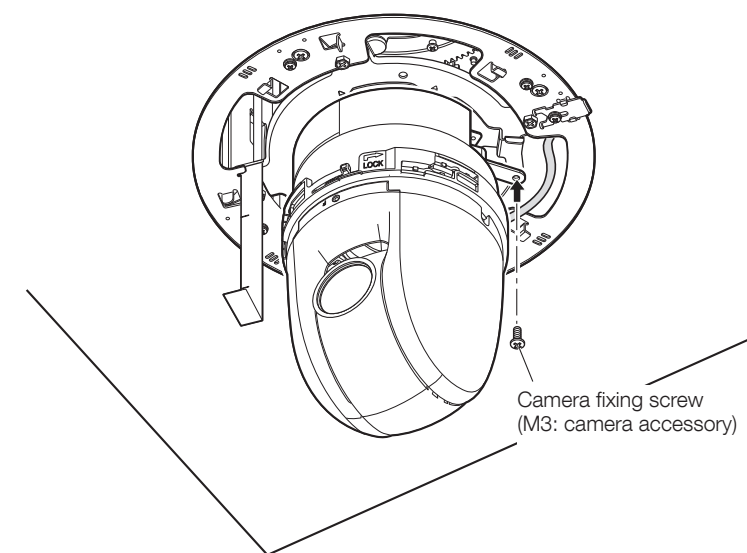
Step 12

Secure the camera to the camera mount bracket (camera accessory) using a piece of the camera fixing screw (M3: camera accessory).

! Recommended tightening torque:
0.68 N·m (0.50 lbf·ft)

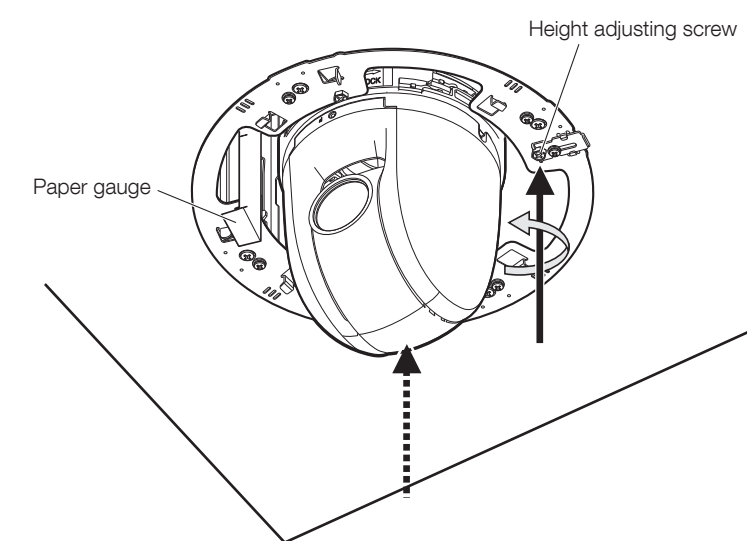
Note:

- When using the WV-QDC100 (dome cover), attach it after fixing the camera.



Step 13

Rotate the height adjusting screw (one of 4 points) counterclockwise (in the ③ up direction of the label) when viewing it from beneath, and raise the camera mounting stage to the position of A to C displayed on the paper gauge.



! Tightening torque: 0.1 N·m (0.07 lbf·ft)
* Do not apply equal to or more than 0.29 N·m (0.21 lbf·ft) of torque. Failure to observe this may cause damage.



Note:

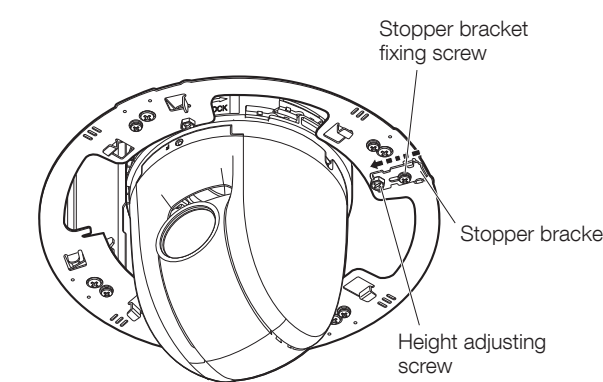
- A to C displayed on the paper gauge refer to the heights to be set when installing the following models.
For the compatible models, refer to the latest information about the supported cameras on our technical information website <Control No.: C0501>.
A: When using the camera with an optional dome cover attached
B: When installing a single camera
C: Auxiliary

After adjusting the camera height, remove the paper gauge from this bracket, and discard it.

Step 14

Push the stopper bracket (in the ④ Lock direction of the label), and lock the height adjusting screw. Secure the stopper bracket with the stopper bracket fixing screw.

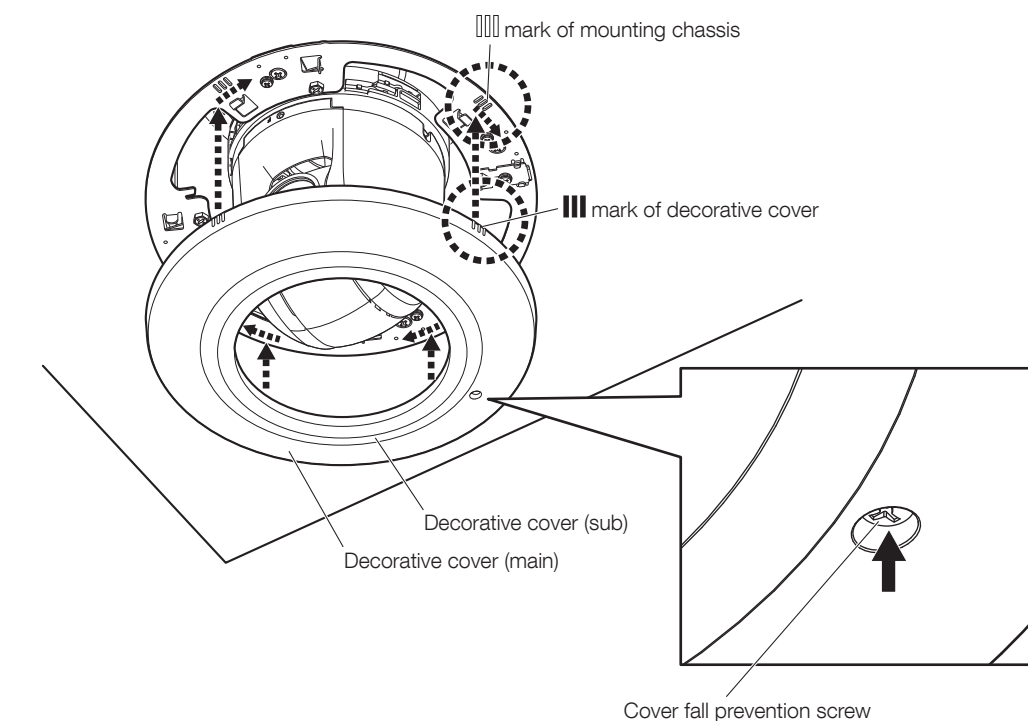
! Recommended tightening torque:
0.69 N·m (0.51 lbf·ft)



Step 15 Remove the protective sheet from the camera lens.

Step 16

- Align the III mark of the decorative cover supplied with this bracket with the III mark of the mounting chassis, press the decorative cover against the ceiling, and rotate the decorative cover clockwise when viewing it from beneath to fix it temporarily.
- Tighten the cover fall prevention screw to fix it.



! Recommended tightening torque:
1.6 N·m (1.18 lbf·ft)

Note:

- When the camera is embedded into the ceiling with use of this bracket, the decorative cover supplied with the camera is not used.
- When this bracket is installed with the WV-QDC100 (dome cover) mounted on WV-S61302-Z4, remove the decorative cover (sub) from the decorative cover (main) included in the package of the bracket.
For other cases, use this bracket with the decorative cover (sub) being attached to the decorative cover (main).

